#### SOUTHWEST ENGLAND A CHRONOLOGY OF FLASH FLOODING

#### Introduction

There is no agreed definition of a flash flood. For the purposes of this chronology and in line with the requirements of the SINATRA project to investigate 'flooding from intense rainfall', the following definition (Archer and Fowler in press) is used:

A flood resulting from intense short duration rainfall, usually convective, that exceeds drainage capacity in urban areas or infiltration capacity in rural areas and hence can flood land and property far from rivers. River response is rapid with possible near vertical wave fronts in river channels; river users and floodplain residents may be endangered by rapid rates of rise in river level which may be enhanced by failure of upstream structures or antecedent saturation of the catchment. Flash floods may cause serious erosion of hillsides and river channels and may carry heavy loads of floating debris and boulders which may be deposited in berms and terraces.

Hence the chronology includes flooding from surface water (pluvial flooding) and from rivers. An attempt has been made to identify any event during which such a flash flood did or might have occurred. In the early records, descriptions may only include information on thunder or severe hail but during which flooding may also have occurred. Such events have been retained in the chronology to provide a basis for a further search on that date which might confirm a flash flood occurrence.

On the basis of this definition not all river floods are included irrespective of their magnitude and indeed, whilst most annual maximum river floods occur in winter, most flash floods occur in summer. However, since the boundary between a flash flood and a 'normal' flood has not yet been clearly defined, some events are included which may not qualify as 'flash floods' but are retained to help establish a future boundary between flash and normal events.

The flood chronicle is presented with a summary text description of each event in a WORD document in a three-column table. The first column gives the date of the event with the source(s) of the information (including the newspaper date). The second column gives associated meteorological information mainly from British Rainfall and Climatological Observers Link but occasionally from other sources. Short period rainfall amounts are especially noted, but daily rainfall totals are also listed where these might have included short bursts of high intensity. The third column contains descriptive information, notably locations which have been flooded and the depth and extent of flooding.

Accompanying the WORD document is a summary EXCEL file with one line per event. For each event associated meteorological information is provided, including the occurrence of thunder, lightning or hail (and the size and severity of effects), and whether short period or daily rainfall information is available. Impacts of the event are indicated in terms of drowning and bridge failure and a code to indicate the overall regional extent and severity of flooding to property. Flooding is characterised as river or pluvial (or both) and as urban or rural (or both). The location of the flooding and the severity at individual locations is shown by a code for urban centres such as Exeter (1E to 3E) and Truro (1T to 3T). The location of the flood within main river catchments is shown. An indication is given as to the occurrence of rapid short-period rate of rise and whether geomorphological effects have been associated. Finally a summary note characterises the flood.

#### Sources of Information

An initial source for this study has been the BHS Chronology of British Hydrological Events (CBHE) which in turn derived much of its information from British Rainfall. Frank Law and others have added information from a variety of newspaper and other published accounts.

#### **Newspaper Sources**

The Lexis British Newspaper Archive has digitised large continuous runs of newspapers which have been accessed on the web. A search facility identifies all occurrences of given words or combinations of words, by newspaper, by county, by region and by date. The phrase 'flash flood' is a 20<sup>th</sup> century description, so alternative words were required to ensure that all potential flash flood events were identified, without producing an excessive number of irrelevant events. The words 'flood' and thunder' were adopted. The search facility includes within these words variants such as 'flooding' and 'thundering'. Up to 50% of the occurrences identified were of descriptions of 'floods of tears' or 'thundering speeches by politicians' but is likely to have produced a comprehensive set of flash flood events. All relevant information was extracted from the identified descriptions, such as location, associated meteorological conditions, the occurrence of hail, magnitude and extent of flooding, depth in buildings, fatalities from drowning or lightning, animal losses, bridges and buildings damaged by flood or lightning, severe channel erosion and descriptions of rapid rate of rise in level. Except where events were of very unusual magnitude, winter floods produced by long duration rainfall or snowmelt events were excluded. Only information which could be used to define the magnitude or severity of a historical flood in relation to a recent gauged flood has been included.

The following is a list of the newspapers that have been accessed on the British Newspaper Archive, with the dates currently available. It is noted that although some papers continue publication to the present, for copyright reasons the current archive extends only to 1900 or to 1950. Hence records are most comprehensive for the period from 1850 to 1900, but sufficient newspapers are archived up to 1950 to provide comprehensive data up to that date.

Newspaper	Place of Publication	Available dates
Cornishman	Penzance	1878-1950
Royal Cornwall Gazette	Truro	1811-1900
Western Times	Exeter	1827-1950
Exeter and Plymouth Gazette	Exeter	1827-1950
Western Morning News	Plymouth	1921-1950
North Devon Journal	Barnstable	1824-1950
Exeter Flying Post	Exeter	1800-1900

The period after 1950 required visits to Devon (Exeter) and Cornwall (Redruth) county record offices. Two main sets of information were inspected:

1. For periods extending from the late 1970s to 2005, the record offices took cuttings from local newspapers on the subject of storms and floods. All relevant material was extracted from these cuttings. (Photographs were taken and are stored in a separate folder). These records are often more comprehensive than those obtained from the British Newspaper Archive since extracts were taken from a large number of local as well as regional newspers

including: Camborne and Redruth Packet, Camelford and Delabole Post, Express and Echo, Falmouth Packet, West Briton, Helston Packet, Cornish Times, Cornish Guardian, St Ives Times and Echo and Post and Weekly News.

2. For the period from 1950 to 1980, unavailable from the cuttings, microfilm of limited newspaper sources was inspected, West Briton for Cornwall and Express and Echo for Devon. Dates previously identified from meteorological data when heavy rainfall had occurred were inspected. Not all these events yielded information on flooding but are retained in the WORD archive in the event that other local sources will identify a flood on those dates; they are excluded from the EXCEL archive. It is probable that some local but possibly severe local events are omitted.

Information on the period after 2000 was primarily obtained by internet searches. Newspaper accounts again provided the main source of information but BBC and other news reports added information and Environment Agency reports provided lists of floods for specific locations.

Early information was obtained from the monthly Gentlemans Magazine held as hardcopy in the British Library at St Pancras London. Editions from 1731 to 1800 were inspected. Each annual volume contains an index which provided a ready means of identifying 'floods' and 'storms'. The flood record is far from comprehensive but it provided a few additions to the information already held.

Occasionally, historic newspapers collated useful information on flood events at earlier dates. For example, Exeter Flying Post for 17 January 1866 gives a list of flood levels from 1800 to 1866 on the River Exe at Exeter but detailed location not given. With the exception of events in 1829 (which were not at a very high level) these high river levels occurred in winter. Thunderstorms and flash floods rarely generate extreme flood peaks on major catchments due to the limited area which they cover and possibly also due to the fact that in the summer at least some of the rainfall can be absorbed in dry soils. Some major events, such as that in 1800 were the result of snowmelt. The note states that these are 'some' of the highest floods in the present century. It is not clear, for example, whether all floods above 6 feet have been included.

The Exeter and Plymouth Gazette Daily Telegrams for 20 Jan 1881 gives a list of severe weather events from the 16<sup>th</sup> century which includes some thunderstorms mainly up to 1830.

#### Miscellaneous sources

Jones et al (1984) provided a source of early information on floods (and droughts) with the focus on the River Exe catchment and covering the period from 1588 to 1676. Information in turn has been taken from a variety of sources including chronicles, almanacs, parish registers and diaries. Reference has also been made to other published historical accounts including Bonacina (1946), Morris (1949), Oliver (1969) (with reference to Borlase diaries) and Whetter (1991). A paper by Brierley (1964) provides details of the extreme event in 1960 and previous occurrences of flooding on the River Exe.

# Associated meteorological information

The publication British Rainfall 1863 – 1968 (Symons British Rainfall from 1863 to 1900) was further inspected to identify potential flood dates and to ascertain the meteorological conditions associated with flooding – thaw, thaw with rain, frontal rainfall, convectional storms etc. As noted above, both short period rainfall and daily rainfall data have been

entered to the chronology. In addition, flood reports from rainfall observers often provide succinct descriptions of associated flooding.

The Climatological Observers Link (COL) from 1970 to the present has been used to fill out the later period for intense rainfall although the number of stations is small especially in the early years during the 1970s but is supplemented by observer's descriptions of events.

## River Peak flow data

HIFLOWS UK has been accessed to identify summer events which have appeared in the annual maximum series of each gauging station. Thus events are designated for example AMS1 AM25 which means that the event was the Rank 1 annual maximum (peak) discharge for the summer months April to September but only the Rank 25 annual maximum for winter and summer events combined. Only events of AMS Rank 1 to Rank 3 are identified. This analysis shows that summer events only rarely provide the annual maximum, and these events tend to be well down the annual maximum rank list. In fact for some stations out of 40 years of record there may only be 3 or fewer events which occurred during the summer. The HIFLOWS information is shown in pink colour as in the following examples for 6 September 2008:

Exe at Pixton 1966-2010 AMS Rank 2 AM 11 Creedy at Cowley 1964-2010 AMS Rank 1 AM 30 Withy Brook at Basstrat 1972-2010 AMS Rank 1 AM 1 De Lank at De Lank 1966-2010 AMS Rank 3 AM 15

## Rate of Rise stage data

The focus of the SINATRA project is on flash flood which by definition experience rapid rates of change over short periods. In order to investigate such rapid changes, the entire 15 minute river level and discharge series have been obtained from the Environment Agency for all stations in England and Wales. These data have then been subjected to analysis of rapid rates of change over 15, 30, 60 minute and 2 hour periods and collated as series of annual maximum and peaks over a threshold rates of change. At the time of writing this analysis is still at an early stage and reference is made only to the Rank 1 (maximum) annual maximum rates of change in stage for 15 minutes and 60 minutes. This information is shown in a light blue colour as in the following example for 16 August 2004:

East Dart at Bellever Rank 1 15 m RoR Ottery at Werrington Rank 1 15 and 60 m RoR Camel at Denby Rank 1 15 m RoR

Although the data for 16 August represent occurrences on the date of the severe Boscastle flood, on other occasions the maximum annual maximum rate of rise did not coincide with any recorded or reported flood incident; the rapid rate of rise was not followed by a high peak flood. Nevertheless for river users, such events can pose a separate threat to life from the effects of peak level or discharge.

HIGH WATERS IN THE EXE. W The following are some of the highest floods at Exeter pr which have occurred in the present century :cl 1800.—November 16.—The highest recorded flood caused by ye the melting of the snow on Exmoor, with thirty-AT six hours rain; the water rose thirteen feet above M the summer level. he 1807.—November 11.—A violent storm. The Enterprise 88 was driven from her moorings at the Quay and drifted he over Trew's Weir. ne 1809.—January 24.—The Island and St. Thomas covered by the flood. A great number of elm trees, which M formed the avenue at Cowick, were blown down. Cowley, Bickleigh, Ottery, and Fenny bridges were 88 washed away. 1810.-November 10.-A great flood; water thirteen feet three inches above the level. th 1811.—A great flood; water eleven feet. or 1818.-March 5.-Flood, with gale of wind; the greater ev part of St. Thomas under water. W 1823.—November 23.—A flood; much damage done on the br coast by a very violent storm. Great number of cattle drowned. £3,000 subscribed for the relief of T the sufferers. 1827.—October 9.—Water six feet above level; and on the 23rd December water six feet two inches above level. 1828.—January 13.—A violent storm; water six feet four inches. The General Palmer dismasted at the Quay. and much damage done. The water was also very high in July, August, and November. T le 1829.—In April, July, August, and September, the water was several times from three to five feet above level. 1830.—December 7.—Water six feet above level. 1831.—December 12.—Six feet one inch above level. 1832.—November 15.—Seven feet five inches above level. 1833.—There were several floods in this year. February 15 the water rose seven feet two inches; February 20, after a violent north-west storm, six feet; and December 18, six feet. 1835.—November 4.—Water rose six feet four inches. 1836.—November 28.—After a violent hurricane, the water rose six feet seven inches. 1838.—November 29.—Water rose nine feet two inches. 1841.—November 29.—Water rose nine feet.

1844.—In February the water rose seven feet six inches; and

1847.—December 18.—Water rose seven feet nine inches.

1860. - December 31. - Water eight feet ten inches. On the

the Exwick fields was washed away.

1849.— December 8.—Water seven feet four inches. 1853.—December 19.—Water six feet six inches.

1866.—January 13.—Water ten feet above the level.

1854.—January 8.—Water six feet eight inches.

and Okehampton streets flooded.

in November nine feet, when the railway bridge in

sudden breaking up of the frost, Exwick, Alphington

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### **Flood Chronology**

## Date and sources Rainfall

1286 Brierley (1960) re Izacke (1676) 1384 Brierley (1960) re Izacke (1676) ? 1449 CBHF

Sep 1586 Jones et al 1984 Wyots diary 20 Jan 1606 (1607?) Wood (1999)

Lewis (1831) A
Topographical
Dictionary of
England Vol 1 (of
4)
21 Jun 1607
Jones et al 1984

## Description

(Exe) A great part of Exbridge through foul weather and high water fell down and again soon repaired

(Exe) A great part of Exbridge by means of high waters fell down and sundry persons therewith destroyed

(Exe) "The old bridge over the Exe had twelve arches, and was built about 1250, by subscription; but Walter Gerves, who was the largest contributor, and left lands for its maintenance, was considered its founder. It was nearly swept away by a great flood in 1449, when an indulgence was granted by Bishop Lacy, in aid of its reparation. In 1769, an act of Parliament was obtained for building a new bridge, a little higher up the river, and for selling the bridgelands. The first stone was laid in 1770, and the work was in great forwardness in 1775, when it was destroyed by a flood. The work was recommenced, in 1776, by laying the first stone of the present EXE BRIDGE, which was opened in 1778, when the old one was pulled down. It is an elegant stone structure of three arches, and cost about £20,000, including the expense of the unfinished fabric, which was washed down in 1775. "

Very high flood in Barnstable in September Note another reference refers to a violent thunderstorm on 28 Aug

Wood mentions in passing the Great flood of 20 January 1606, 'a mighty storm and tempest' which killed many when the River Taw overflowed. Wood does not quote a specific source for this information but he is a well known historian and likely to have checked the reliability of the information.

30 Jan 1607 was the date of the great tidal wave in the Bristol Channel which killed more than 2000 mainly on the Welsh side of the Channel. There has been suggestion of a tsunamis but if the River Taw was also in flood (even though the date quoted is different (change of calendar?)) then a meteorological storm is more likely. Hardly a flash flood in the sense we have defined!

Thundershower at Colyton Devon

Wyots diary 1625 Brierley (1960) re Izacke (1676) 31 Oct 1638 Aug 1946

The thunderstorm with Bonacina Weather wind and hail swept the southwest from Plymouth to Bristol. Bonacina says there cannot be much doubt that Widecombe lav in the track of a genuine tornado.

(Exe) A tremendous flood swept through the valley causing great devastation. In the town of Tiverton alone 53 houses were destroyed.

<Widecombe on the Moor>: One of the most severe thunderstorms probably accompanied by a tornado struck Widecombe in the Moor on the eastern edge of Dartmoor when 4 people were killed and about 60 others injured when the roof and tower of a church were demolished during a church service. Heavy stones from the tower were carried a hundred yards or more.

<Plymouth>: The original account states that great hail fell near Plymouth with stones the size of turkey's eggs weighing 5, 6 and 7 ounces.

Similar destruction occurred at a church at Norton In somerset though not during a service.

A terrible thunderstorm occurred at Antony in East Cornwall [no effects noted]

24 May 1640 Whetter (1991) quoting from Baker (1932) 9 Sep 1648 Jones et al 1984 1692

Brierley (1960)

4 Oct 1694 Whetter (1991) from R Hoblyn's Diary Sep 1698 Morris (1949) from Diary of Celia Fiennes ? Oct 1706

CBHE/Devon **Quarter Sessions**  '7 days of rain and on 9 Sep a sad nighte of raine and such a flood as I never saw in these partes.. a sad tyme God help us for the weather'

(Exe) A wave of water 4-5 feet deep swept through West Exe Tiverton causing great damage to walls and houses.

Great rain with thunder and lightning [no effects noted]

Heavy rainfall occurred at Camelford. A mile beyond Launceston I crossed a stone bridge over a river and entered Devonshire; stony and dirty by reason of the rains that fell the night before.

(Exe) River Exe flooded St Thomas district of Exeter

20 Dec 1752 Gentleman's Magazine 12 Oct 1753 Gentleman's Magazine

27 Nov 1754 Oliver (1969) re Borlase 1757 Brierley (1960)

15 Jul 1758 Oliver (1969) re Borlase Weather Diary 1760 Brierley (1960)

28 Jul 1761
Oliver (1969) re
Borlase Weather
Diary
17/18 Mar 1765
Oliver (1969) re
Borlase Weather
Diary
17/18 Nov 1766
Oliver (1969) re
Borlase Weather
Diary

We had for two hours the most dreadful storm of hail thunder and lightning. At Gulval, 3 miles distant, a boy was killed in his house

At Honiton in Devonshire we had a violent storm of rain; it swelled the rivers to such a degree that they swept away several hayricks and a great number of cattle, also several bridges and houses and some people were drowned. Many that lived near the bridge were obliged to get out at the top of their houses. The damage done here and in the neighbourhood can't be less that £3000.

Very large hail half inch diameter occurred in Cornwall.

**(Exe)** As a result of extremely heavy overnight rain the Exe rose suddenly and swept away the Mill House at the end of West Exe Tiverton. Many bridges were destroyed or damaged throughout the Exe Valley

Hail covered the ground with the largest hail the size of a walnut.

(Exe) During the summer the Alphin Brook overflowed and demolished 20 houses in Alphington

Severe lightning damage occurred to Ludgevan church, west Cornwall.

1.90 inches rain occurred in 24 hours

2.15 inches rain occurred in a 36 hour period.

17 Aug 1768
Oliver (1969) re
Borlase Weather
Diary
? Sep 1768
<a href="http://booty.org">http://booty.org</a>
.uk/booty.
Weather/climate/
1800 1849.htm

18 Feb 1770 Manchester Merc 13 Mar 7 Aug 1770 Borlase (1771)

Clark (2001)

http://www. Boscastlecornwall .org.uk/flood/ BoscastleFlood .pdf Up to one inch of rain fell between 3 and 5 pm

No reference found to Devon or Cornwall in British Newspaper Archive (Is the date correct?)

Heavy rain at Bruton, Somerset led to severe flooding in the area on the 1st. The river rose very rapidly, completely destroying one of the stone bridges, with the force of water causing the breaking of house windows in the nearby village of Pitcombe. According to contemporary reports, a localised 'violent' storm (presumably adding to already high water levels - see below), caused the River Brue to "swell three feet perpendicular within 5 minutes", resulting in the severe flooding of numerous houses, destruction of the town bridge and demolition of walls throughout Bruton. (1768 was a notably wet year: the immediately preceding summer 1768 [ JJA ], was also wet using the EWP series, with June 1768 the second wettest June in the series, and the summer anomaly averaging out at over 175% of long-term)

A thunderstorm at St Keven in Cornwall tore the steeple of the church into pieces at the time of a service. The whole congregation were instantly struck senseless; many cloaths were burnt and watches melted.

At Ludvgan Borlase reports: 'On the 6<sup>th</sup> at 8 pm much lightning, violent about a quarter past nine with very rapid flashes and loud thunder till 2 am when it began to rain with a violent flood for a quarter of an hour; afterwards much rain but no more thunder and lightning' A man was killed by lightning near Fowey.

Chanter mentions a flood in 1769 [misprinted 1796 in Dobbie and Wolf and recently redated to 1770] (See 1796)

"The river at Lynmouth by the late rain rose to such a degree as was never known by the memory of any man now living, which brought down great rocks of several tons each, and choked up the harbour. And also carried away the foundation under the Kay on that side of the river six foot down and ninety foot long, and some places two foot under the Kay, which stands now in great danger of falling."

This flood that struck the South West (at Lynmouth (Devon) is thought to have had even heavier rainfall than the historic floods of 1952.

The storms / floods affecting many parts of the south of England from the 6th onwards (& parts of SE Wales)

http://booty.org .uk/booty. Weather/climate/ 1750 1799.htm

1775 Brierley (1964)

genuki.cs.ncl.ac.uk /DEV/Exeter

16 Jul 1782 Gentlemans Mag Jul 1783 Gentlemans Mag

5 Jun 1784
Kington J.
Climate and
Weather 2010
7 Jul 1784
Gentleman's Mag.
Horsham 2012b
In Foulds and
Macklin 2013
7 Oct 1786
Brierley (1964)

were notable. Severe thunderstorms broke out in west Cornwall on the 6th - extending across much of Cornwall, Devon & the West of England by the end of the 7th. A great flood occurred at Lynmouth (North Devon) - on a par with the event of August, 1952. The notably stormy weather, with high-intensity rainfall events, lightning / hail damage, violent thunder etc., extended across most southern areas by the 12th August. Deaths, both stock & humans were reported. Much loss of crops. (NB: the EWP value for this month was nothing special).

**(Exe)** The foundations and arches of the new Exe bridge were badly damaged. 'There was devastation throughout the valley and the poor suffered much distress'.

In 1769, an act of Parliament was obtained for building a new Exe bridge, a little higher up the river, and for selling the bridgelands. The first stone was laid in 1770, and the work was in great forwardness in 1775, when it was destroyed by a flood. The work was recommenced, in 1776, by laying the first stone of the present EXE BRIDGE, which was opened in 1778, when the old one was pulled down. It is an elegant stone structure of three arches, and cost about £20,000, including the expense of the unfinished fabric, which was washed down in 1775. "

Storm at Padstow from 1 to 9 am with thunder and lightning and the rain fell in torrents.

'There was no year on record when the lightning was so fatal'. Storms and deaths were reported in Cambridgeshire, Gloucester, Hereford Shropshire etc. Iddlefleigh Mills on the River Okemouth (sic) near Exeter was nearly burned to the ground with lightning.

Severe hailstorm in SW England broke windows and damaged crops with hail locally 2 feet deep in a belt 11 miles long and 2 miles wide east of Taunton. Severe flash floods occurred and ice up to 7.5 cm in girth fell. (Gilbert White Selborne)

In Plymouth there was a storm of thunder and lightning never equalled. The River Dart suddenly overflowed carrying away cottages, ricks of hay and everything moveable. Widespread storms and floods occurred elsewhere in England.

Bridge at Two Bridges destroyed

**(Exe)** Owing to the great fall of rain the rivers were swollen to an amazing degree and damage was sustained: the waters rushed through the streets of St Thomas with great rapidity carrying everything before them. At Elwick it made great devastation and at Stoke about 4 miles from the city it threw down 25 houses besides

20 Nov 1790 Kington 2010 1795 Brierley (1964) ?? 1796 Dobbie and Wolf (1953) Chanter (1907)

25 Jun 1797 Ipswich Jour 15 Jul

18 Aug 1797 Webb (1988) Norfolk chronicle 26 Aug

8/9 Nov 1800 Brierley (1964) barns etc. Several bridges have been thrown down

A report in Trewman's Exeter Flying Post states that on Saturday morning 7 oct 1786 there arose serious flooding from the river Exe in the St Thomas district reaching a depth of 5 feet. (The conditions described appear to be almost identical with those experienced in October 1960)

Thunderstorm; the church at Calstock Cornwall was destroyed

(Exe) Many bridges were damaged and Swines bridge at Tiverton was swept away.

(Lyn) "The most reliable book [Rev J.F. Chanter (1907) "A history of the parishes of Lynton and Countisbury", Commin] on the history of the area mentions a flood in 1796 during which 'the river at Limouth by the late rain rose to such a degree as was never known by the memory of any man now living, which brought down great rocks of several ton each...' (See notes for 1769/1770; almost certainly the wrong year – not added to EXCEL file)

Camelford Cornwall: A thunderstorm with hail continued without remission for 5 hours so that the lower part of the town and the neighbourhood for several miles round was deluged in a scene which exceeded anything that had previously been seen in those parts. So Immediate was the rise and the irresistible nature of the water that houses, household furniture, and hundreds of trees were swept before it. One man and his wife and 4 children were taken out of the roof of their house while the water was 6 feet high on the ground floor but no lives were lost the damage to roads is incredible; one chasm was 23 feet deep 84 feet long and 30 feet wide. Severe hailstorms were reported in Devon but localities were not specified. 'Windows were shivered into fine powder. Trees were broken and 'masses of hail were buried 1.5 metres into the ground' Plymouth: A severe thunderstorm was attended with rain and hail so that the streets in the lower part of town were overflowed in a few minutes.

[The storm at Plymouth was followed shortly afterwards by a sudden flux in the tide which rose 10 to 15 feet in a quarter of an hour, on three quarters ebb. It ran with such rapidity that vessels were torn from their moorings. Several boats that were out fishing were carried at 10 miles an hour by the tide. Flux and reflux continued for three quarters of an hour. There was a similar experience at Swanage but with an initial fall in water level which left boats quite dry. Within about ten minutes it rose again to its normal height. It continued in this way five or six times on the flood tide. All this seems very much like a tsunamis.]

**(Exe)** A prodigious flood such as the oldest person then living had never before witnessed occurred at Exeter and generally throughout the Kingdom. All the streets in St Thomas were inundated the water reaching up to the windows and these poorer class inhabitants were in great distress.

Trewman's Exeter Flying Post

Jan 1809 Warwickshire Advertiser 4Feb 1809

Trewman's Exeter Flying Post

1810 Brierley (1964)

Probably the Jan 1809 event

3 Oct 1811 R Cornwall Gaz 5 Oct

12 May 1813 Thunderstorm

According to the St Thomas parish church records there was severe flooding in 1800 and when the Vicarage was rebuilt in in 1804 the floor level (now 28.30 OD was kept above the flood level of 1800.

Detailed newspaper description of a damaging rain-on-lying-snow flood from the Exe basin. Almost a foot of snow had fallen on Thursday Nov 6, and was followed by a storm of rain and wind on the following Saturday and Sunday. The timing of the rise and fall of the flood is outlined, the peak being reached between 1700 and 1800 hrs on the 9th. It rose on the Exe island 'to a height of about six feet'. Passengers in a horse-drawn carriage were rescued with difficulty.

**(Exe)** At Exeter the flood was so great in the streets that the shops were shut and the inhabitants were obliged to betake themselves to their upper rooms. In the Town of Thorverton a brook of water rose in an unprecedented manner and broke down a cob wall, so that the house of Mr Anthony, surgeon was instantly overwhelmed. The family was assisted out of the house at midnight, one half of the dwelling house was washed away "

Detailed newspaper description of flood damage, rain and snow having been experienced "for some time past".... "At four o'clock this morning the water attained its greatest height, which appeared to be about two inches higher than the memorable inundation in the year 1800." "Fenniton Bridge, on the great road between this city and Honiton, (lately erected) is entirely carried away; the centre arch on the main river at Cowley Bridge is fallen in; and Bickleigh Bridge is so damaged as to render the road to Tiverton impassable." (Exe) There is a further record of a flood even more severe than 1800 which inundated the floor of the new vicarage to a depth of several inches. The river reached a great height and washed away the remains of Cowley Bridge. The whole of St Thomas and Exe Island were inundated, many walls and outhouses were washed down and considerable damage was done to cellars and foundations. The devastation was described as shocking and dismal in the extreme. Three vessels of large burthen were thrown completely on to Exeter Quay and in the road leading from Okehampton Street the water was 6 feet above the pavement and 5 feet deep in the houses. In the badly overcrowded Sherriff's Prison abutting Cowick Street and which still stands today the water was over 3 feet deep.

The heavy rains of the last few days have raised the two little rivers that flow through Truro to torrents and these meeting the spring tides at the Quay have combined to lay the lower streets two or three times under water. The lower rooms of many houses have been flooded. Boats and horses have been found necessary to ferry and ford the streets.

Chumleigh (Little Dart, Taw catchment): The village was affected by heavy rain with hail. The church and

Taunton courier 27 May 17 Jun 1815 R Cornwall Gaz. 23 Jun

8 Jul 1816 R Cornwall Gaz 3 Aug

20 Jul 1818 R Cornwall Gaz 1 Aug

25 Jul 1819 Morning post 10 Aug Thunderstorm

23 Nov 1821 R Cornwall Gaz. 1 Dec

30 Aug 1824 Public Ledger 7 Sep 10 Aug 1826 CBHE

**Exeter Flying Post** 

Thunderstorm with large hail at Lostwithiel

steeple suffered severe injury from lightning. The flood was so great and rapid that bridges, hay ricks, fences, etc were swept away. A man was drowned in attempting to cross at Newnham bridge.

Heavy rains have greatly retarded the hay harvest. The stream which flows under the West Bridge (Truro?) was completely filled and water flowed over the bank and made River Street impassable, flooding houses and floating the furniture. Although the parishes of St Enodor and St Dennis and part of the parish of St Colomb were completely inundated, in the parish of Mawgan no rain fell.

60 sheep were killed by lightning at Wringworthy Farm on the edge of Dartmoor. A total of about 400 sheep altogether were killed. A great number of trees were rooted up. Great damage has been done to gardens and orchards. [Widespread storms on the continent especially in Germany. The paper also remarks that there are currently many sunspots and describes these in detail].

The villages of Exmouth, Lympstone, Woodbury, Collaton Budleigh and Salterton were visited by a tremendous thunderstorm. Greenhouse glass was shattered [presumably by hail] and tan pits were flooded. Walls were thrown down and wooden bridges washed away and some roads were rendered impassable. [This followed a long period of dry weather].

The storm at Tavistock, St Germans Saltash was accompanied by hail or large pieces of ice and did much damage to glass in hothouses. At Liskeard, houses in the lower part of town were flooded and the torrents which rushed through the strees were sufficient to bear down a man. The storm did not reach further west than Truro. The storm continued for an hour and was preceded by oppressive heat. At Redruth a waterspout was observed but no damage was reported.

A storm generally affected the western part of England. A thunderstorm produced tremendous hailstones. At Dartmouth if produced jagged pieces of ice two and three inches long and one actually measured 4 ½ inches. Between 3500 and 4000 panes of glass were broken. At Tiverton a storm was the worst in the memory of man; it was only 3 miles in circumference and lasted an hour and a half. A bridge which crosses the Lowman was washed away. Several stone walls have been washed down and in many parts of the town the water came down with such violence that nothing could resist it. At Thorverton the damage is estimated at over £600. Bodmin, Liskeard and Lostwithiel: Hail was up to 2 inches in diameter. Eight cows and several horses were killed by lightning. No flooding was reported.

Severe thunderstorm lasting from 3pm to 7pm. The East Dart was most swollen. The clapper stones of the old bridge at Dartmeet were washed off. The river made a clear passage along the hollow on the east side of the new bridge, so any passing there was interrupted. General flooding occurred on this day at many places around Dartmoor, in particular Okehampton and Moreton.

R Cornwall Gaz 12 Aug Stanbrook (1994 and Hemery (1978) in Foulds and Manning 2013 31 Aug 1826

R Cornwall Gaz 9 Sep Taunton courier 13 Sep

28 Oct 1827

Journal of Thomas
Pope Resevear

21 Jun 1828 Exeter and Plymouth Gaz 5 Jul 20 Sep 1830 [Poor copy] Devon badly affected by thunderstorms with hail and ragged pieces of ice. Mountain streams overflowed their banks and spread desolation at Okehampton and Moreton.

Teignhead clapper bridge was also destroyed

A tremendous thunderstorm visited St Neot near Liskeard. The two rivers that flow near St Neot were swollen to such a degree as to carry everything before them. Part of St Neot bridge and a house were swept away. Inhabitants were obliged to break through the tiles on their roof till the flood subsided. The rush of water did not last above an hour but the damage done is very serious. Trees were uprooted, walls demolished and turnips were washed away. One mine was filled up but the workers escaped with difficulty. Very little rain fell at Liskeard.

The flood was seen approaching the village as an immense wave which in an instant carried away the bridge and overflowed all the houses in the lower part of the village. It entered Captain Sibley's house so suddenly that they were obliged to run upstairs. The river opened a new course below the Lampen Mine. The slate quarry was also flooded and men had to be rescued. The flood had very limited extent and little rain fell at Liskeard.

At Boscastle (Cornwall) it was reported: "One of the most awful days I ever experienced at Boscastle. It rained very heavily in the morning & whilst we were in the Chapel increasingly so - when about to leave the whole street was filled with a body of water rolling down & carrying all materials with - that devastation & ruin were its concomitants - by about 1 o'clock the rain ceased leaving the fine McAdamised road in complete ruin from Polrunny to Dunn Street. At Bridge teams of Wagon Horses were saved with difficulty. Pigs also belonging to the Cottagers were taken out of ye Roofs of Houses. Mr Langford & Cottagers the West side of the Bridge suffered much. But thro the goodness of God on the East River [Valency] the waters were raised but little & our property preserved in safety - I would mark the finger of Divine providence & acknowledge his loving kindness."

A thunderstorm in the Chulmleigh and Winkleigh area swelled the rivers that they overflowed their banks. A cart and horses was washed away in crossing a normally very small stream; the horses were drowned and the occupants rescued with difficulty.

Liskeard was visited by severe thunder and lightning. A horse was killed, cattle injured trees split. [More but

R Cornwall Gaz 25 Sep ? ? 1830
CBHE/Woodcock 7/8 Jun 1835 Ex and plym gaz 13 Jun
26 Nov 1838 Ex & Ply Gaz. 1 Dec

A long duration storm accompanied at times by thunder and lightning.

20 June 1839 Two in Western Times one ho 22 &29 Jun

Two inches of rain fell in one hour

not legible. I don't think there is a mention of flooding]

(Tavy) In the account of the July 1880 drowning tragedy at East Crebor Mine, below Tavistock, in the bottom of the Tavy valley, it says 'There was some disagreement among older residents over whether the record [flood] level of 1830, exactly fifty years before had been exceeded [on 13/7/1880]. The majority view was that it had.' A storm resembling the bursting of a waterspout fell above Tiverton overflowed ground and carried away and bridges and fences.

Torrington: Thunder with hail as large as marbles with houses inundated and many panes of glass broken (100 in one house)

Arlington Loxhore (NE of Barnstable) Thunderstorm; the flood rushed down the valley carrying away gates and fences. The roads were broken up and the meadows covered like a sea.

Landeau near Launceston: Storm with hail more resembling lumps of ice than common hail broke may windows.

A farmer was killed by lightning near Cowbridge Cornwall.

The Exe rose considerably in Exeter and the lower parts of the city with most of St Thomas's parish being flooded. In Okehampton Street the inhabitants had to use boats. Sheep and cattle are seen floating down the Exe.

The Teign and Dart were in flood, such as not seen for 30 years. The Teign rose with great rapidity covering all the fields and making roads impassable. The water was 4 ½ feet deep on the Cricket Ground. A new bridge at Crockham is damaged, at Knighton washed away with a man on it, and at New bridge damaged. A number of small parish bridges were blown up by the flood. Ashcombe the bridge is carried away. A man and horse were drowned near Ashton and another man near Teignbridge.

Exeter: Thunderstorm 'which exceeded any former visitation' lasting for upwards of two hours. Several grating were quickly choked and basement stories were quickly flooded. In new houses below Colleton Crescent the water rose to a height of several feet. Streams rushed down the whole length of Paris Street met others from Heavitree Road and Clifton Street. The water rose rapidly on the road to 4 or 5 feet and the Axminster inn and adjacent houses were flooded. The lower part of Magdalen Street was severely flooded.

Violent storms also affected Crediton, Honiton, Tiverton, Ottery, Sidmouth, Newton, Moreton and Bow. Many newly sown feilds have been washed down.

Stokeinham: 12 Hailstones collected weiged 15 ounces.

Teignmouth: the streets were flooded to 2 to 3 feet and the sudden rush flowed into most of the houses. Many windows were broken by the hail.

Mid Nov 1839
R Cornwall Gaz 22
Nov
? Aug 1840
ManningSaunders (1951)
in Foulds and
Macklin (2013)
17 Oct 1841
Trewman's Exeter
Flying Post
29 Nov 1841
R Cornwall Gaz
3 Dec

Western Times 4 Dec In a thunderstorm at Westgate in Exeter, a large sheet of ice four feet long and two inches thick fell in the street. There were widespread thunderstorms elsewhere in the country.

In consequence of the late heavy rains the lowlands of Devon are completely flooded, much stock destroyed, several small bridges damaged.

(River Dart) A wall of water rose up against the wedding party and washed the cart with the groom and the bride away to their deaths.

(Taw) "North Devon: The Late Flood: We understand the damage done was very considerable on the river Taw, which has not been so high since the 16th and 17th October 1841 (Reference back from 1854).

We had several days of very leavy rain during the last week and on 29<sup>th</sup> many parts of the town [Truro] were flooded in some places to several feet. The streams became rapidly swollen and on the bare roads and fields the waters rushed in torrents tearing up roadways and breaking down hedges and other fences. Damage was done by lightning. St Clements parsonage was flooded, rushing completely through the house and carrying the furniture afloat through the windows which were forced out.

Exeter: low lands completely flooded and brooks much swollen. In St Thomas's some houses were 2 to 3 feet deep.

Coryton Bridge near Lifton was washed away.

Crediton: The bourn of this town rose in an incredibly short space of time and although widened in recent years flooded many houses. The bridge over the Creedy on the Tiverton road has been partially washed away. At Sampford Courtnay part of the Inn house which adjoins a small brook was swept away.

Sandford: The Star Inn was inundated to 4 feet by the stream that supplies St Swithen's Shute where the water rose higher than ever known.

Jacobstowe: the River Oak rose higher than ever known and the bridge was washed away. A boy was drowned crossing a bridge.

Colebrooke: The River Colne has overflown its banks in many places. Such was the suddenness of the storm

that cattle were washed away. Four bridges have been swept away. In the village of Coleford seven or eight buildings are destroyed by the Coleford Water.

Zeal Monachorum: Three drowned whilst trying to cross a flooded bridge in a carriage.

Tiverton: The greater part of WestExe was flooded by the rush of water from the neighbouring hills and from the catholic chapel to the mills on the Exeter Road the streets for nearly a mile were 12 to 18 inches deep in water. This subsided then the River Loman rose to a greater height than remembered by the oldest inhabitant. Bridges at Swinebridge and Chattiscombe are washed away.

Cornwall: at Penryn the water on some roads was 4 feet deep. At Helston houses were washed away; a woman was drowned in her own parlour. At Goran, Mevagissy and Liskeard much property was destroyed.

**(Exe)** There was a flood greater than any since 1810 rising 2 feet over the rail lines at Cowley. Caused by melting snow on Exmoor, the water came solely from the Exe and the Lowman and Culm were not affected. Boscastle was visited by a tremendous thunderstorm which continued for about one hour. The waters rose higher than could be remembered in the last 20 years.

Stratton Bude and neighbouring areas were also affected by thunderstorms. Heavy floods have swept off fields of newly mown grass.

Looe and neighbourhood were hit by severe thunderstorms with heavy hail and rain. Lightning killed a farm worker and near St Austell two children were killed. At Falmouth such rain and large pieces of ice fell that boats had to be bailed to out to prevent sinking.

(Dart) Ashburton (date uncertain): Clouds appeared at about 11am, then heavy rain "like a waterspout" at noon. Rain lasted about an hour. Weather had previously been hot and sunny. After just a few minutes, the "long-dry water courses" could not carry the stream. The lower part of the town by the Shambles was flooded.

After a sultry and oppressive day on 23<sup>rd</sup> a thunderstorm of unusual violence affected the whole of the county. It began around 6 pm and reached a height about 8 pm with torrents of rain. It was nearly calm throughout. No flood damage was reported. A horse was killed by lightning at Tywardreath.

On 26 Jun a thunderstorm at Truro turned the streets into rivers, flooding cellars and underground kitchens. The raingauge at the Royal Institution registered 2.58 inches in not quite an hour whilst at Alveston to total amounted to nearly 3 inches.

**(Exe)** 'Floods were a frequent trouble on the Bristol and Exeter [railway line]. The line had hardly been open for six months when the Exe overflowed in November 1844 and submerged nearly two miles of it near Exeter, entirely stopping the traffic for several days and obliging the passengers to travel by road to and from the level

1842 Brierley (1964) 20 Jun 1842 R Cornwall Gaz 24 Jun

3 Sep 1842 Yorkshire Gazette 10 Sep 23/26 Jun 1844 CBHE/Exeter Flying Post

R Cornwall Gaz 28 Jun

? Nov 1844 MacDermot, E.T. (1931) 14 Jun 1845 Western times 21 Jun

20 Jun 1846 R Cornwall Gaz. 26 Jun 9 Jul 1846

CBHE

Annual Register ...of the year 1846 (1847) Chronicle section .Published F. and J. Rivington, London

Douch (1964)

Royal Cornwall Gazette 17 Jul crossing at Stoke Canon. After this the line seems to have been raised above flood level ...'

Crediton: Thunderstorm lasting about an hour and a half, like the bursting of a waterspout. The town burn quickly overflowed and the dirty water ran into several houses. The brook in the village of Westwood was swollen into a torrent and threatened total destruction of adjoining houses all of which were inundated. A field at Coombelancy appeared after the storm more like the bed of a large river diverted from its course and the water drove out hedges trees and bushes.

Ashburton: Thunderstorm exceeding anything for several years. The water ran through the streets like a river and low lying houses were flooded. Sheep were killed and a barn set on fire by lightning.

Ashburton was visited by a severe thunderstorm lastin an hour with the rain pouring in torrents. The streets were flooded.

(Fal/Gannel) "FEARFUL CATASTROPHE: THIRTY-NINE PERSONS DROWNED: During the storms caused by the overcharged atmosphere, the following fearful catastrophe occurred at the East Wheal Rose Silver and Lead Mine, about eight miles north of Truro, in consequence of a violent thunderstorm bursting over the mine and the immediate vicinity, the rain falling in torrents. The workings of the mine run north and south through the middle of a natural amphitheatre, with only one outlet, a narrow ravine at the north. The rain, which appeared to fall in almost solid masses, poured in on the basin in which the mine is situate from all the hills around, and the outlet was insufficient for the rapidly accumulated waters; the storm altogether lasted but little more than an hour, and was so partial as scarcely to extend beyond the limits of the hills which encircle the site of the mine; yet so great was the accumulation of water, that a complete torrent poured down the shaft of the mine, flooding the works. At the time, 200 miners, men and lads, were down below. The rush of air caused by the entry of the water, and its breaking down large portions of the mine, put out the lights; but the people in the higher levels groped their way to the bottom of the shaft, where every exertion was made to draw them up. In the evening there were still forty-three missing; four came up early next morning; the remaining thirty-nine were drowned, or buried under the earth which fell on the flood's washing away the supports of the galleries. The mine was 100 fathoms deep, and it was flooded to above the 50-fathom level." [R. Gannel headwater]; the thunderstorm lasted about an hour and a half from about 1p.m.and consequent surface flooding alone caused tailings erosion, washed timber down to Metha Bridge, and moved large boiler plates up several feet into a fence. A Coroner's inquest was held into the disaster below ground, which looked at issues such as diversion leat management Douch notes" It is impossible to conceive of the immense volume of water which all agreed was as nothing they had ever before seen. Naturally the Coroner asked if there had been no means of warning those underground as to what was happening. Ralph Richards replied that this could not have been done

1 Aug 1846 N Devon journal 6 Aug

Exeter 1.92" the highest daily total since records started in Dec 1829.

Western Times 8 Aug

8 Jul 1847 BR Henderson and Coates (1928)

R Cornwall Gaz. 16 Jul without endangering more lives and every effort, once the inundation began, was unavailing because the water poured over all the ground around. The first sign of acute danger was the iruption itself"].

A further detailed description of the setting is provided in Royal cornwall Gazette of 17 Jul. An observer said that from the high ground 2 miles north of the mine on the Perran Road he saw a waterspout. The flood also broke down a substantial bridge built two years previously on the new road westward to Zelah. The storm lasted an hour and a half but at Zelah which is 2 miles west there was no rain and at Mitchell about 1½ miles east the rain was slight.

Exeter had a tremendous thunderstorm which flooded streets and low lands near the city but otherwise no damage was reported

Truro and district also had a severe thunderstorm last about an hour. A young man was killed at Chacewater by lightning and animals were also killed.

Exeter: thunderstorm lasting several hours deluged the lower parts of the city and overflowed the low lands along the river. So heavy and violent a storm has not been known for many years.

Halberton: houses were inundated.

North Tawton: A great deal of property was damaged. Snell's New Inn was inundated.

Crediton: Very hot and oppressive before the storm. Rainfall was so intense that within a quarter of an hour the streets were flooded, sewers were choked and water ran into houses with irresistible force. The LitterBourne soon overflowed and ran into nearby houses.

Drayford: The river rose so rapidly that many villagers had to be taken out of their houses on horseback. A great number of cattle were carried off.

Honiton: Serious losses of animals by lightning but no mention of flooding.

(Tamar) North Tamerton bridge "...rebuilt after a flood in July 1847. The old bridge had 3 or 4 arches.

(Tamar/Inney)....Gimblett's Mill has a quaint bridge with six square openings, rebuilt after the flood of 1847. "
"River Inney....The latter [Trecarrel] was once a moorstone bridge but it was swept away in [the flood of] 1847.

"Trekenner Bridge below Trecarrel is now deserted....The three little arches (2 feet in span) were broken by the flood of 1847 but the piers, and cutwaters of the 16th century bridge remain. "Beals Mill Bridge, the lowest on the Inney, ....has had its 2 arches (13 feet span) rebuilt after the flood of '47...."

(Camel) "Gam Bridge, spanning the united streams [of the River Camel] is named in 1613, but the old bridge was swept away by the great flood in 1847 and has been rebuilt with 7 square openings instead of arches. On 16th July, 1847, a waterspout burst on Davidstow Moor, the watershed where the Camel and Inney (despite their opposite destinies) take their rise. The water collected in the valleys and forced a passage in two

directions, down the Inney and the Camel. A wall of water from 12 to 18 feet above the usual level of the river swept down the Camel Valley carrying everything before it. It was a hot sultry afternoon with a clear sky, and men working in the fields at Gam Bridge could hardly believe their senses when they saw the water approaching them. Gam Bridge stayed the flood for a moment but soon gave way and the infuriated water attacked Wenford Bridge with a regular bombardment of tree trunks and other things plundered from the meadows. A mineral train happened to be in the station at Wenford Bridge, and the driver with great presence of mind drove his engine at full speed down the valley shouting to the people to leave the riverside. He was not a moment too soon. Wenford Bridge broke beneath the strain and Poleys Bridge followed suit. Tresarret Bridge was swept away. Helland Bridge showed that the mediaeval bridge builders knew their business, for despite the depth and narrowness of the valley, the waters failed to break it, but rising above the parapet, swept on and brought their battery of trees and hayricks against the ancient bridge of Dunmeer. This was soon swept away together with the railway bridge by its side. A train was approaching the bridge at the moment of its destruction but the driver was able to bring it to a standstill. The lowest railway bridge at Pendevy floated gaily down stream and would have done much damage to Wadebridge had not men in boats secured it with ropes and chains. When the flood subsided, it was found that the valley from end to end had been devastated. All the bridges but Helland and Wadebridge (the two oldest) were in ruins, and for 12 months remained impassable. Many years later pieces of hay, straw and mud could be seen in the branches of trees at Dunmeer 20 feet above ordinary water level."

Rivers Camel, Inney and Allan. Rain fell in this area from 10am to 6pm (mostly in the morning). Dunmere village (below Bodmin) and the whole valley below Dunmere Hill were flooded. Dunmere Bridge washed away as was the new 40 foot high railway bridge. There was 6.25 feet of water in the kitchen of Mr Allen's mill at Dunmere. (Valency) Boscastle: "The village was previously hit by floods in 1847, 1957, 1958 and 1963...."

RCG reports Camelford; One of the most violent storms of thunder hail and rain in the last 50 years commencing 10 in the morning to 6 in the evening. The Camel rose to a great height, houses were flooded and inmates had to escape to upper floors. The bridge at the eastern entrance to the town survived. An immense body of water came down what is called the 'Outground River' which flows into the Camel just below the town and which is fed in turn by the Longcarn River and the Tiland River. The Longcarn branch flows over a bed of loose granite and on this occasion it tore up large blocks of stone 'impelling them onward with a roar list distant thunder'. One block upwards of 10 tons was torn from its site and forced onward for a considerable distance. The Tiland did not rise so high as the Longcarn but still carried everything in its progress. At Tregoodwill it carried away the bridge and the gable end of a house. Below the junction with the Camel it

Western Times 10
Jul
28 Aug 1848
CBHE/Exeter
Flying Post
28 Feb 1849
R Cornwall Gaz
2 Mar
9 Apr 1849
Ex & Ply Gaz.
14 Apr
5 May 1849

carried away every bridge to Wadebridge. No lives were lost but one young man was caught in the approaching flood and climbed a tree where he had to remain until the flood abated. The highways in the parishes of Lanteglos and Advent suffered severely; bridges were carried off with much loss of crops and agricultural implements. Wenford Inn and stables filled with water. It is supposed that the storm and flood was confined to within 5 miles of Camelford and only the Rivers Camel, Inney and Allan were affected. Three county bridges were destroyed on the river Inney.

Bodmin/Dunmeer: Dunmeer was under water and an observer reported 'the whole valley was a sea of roaring foaming turbid water' Dunmeer bridge was washed away as was the new railbridge downstream a one arch bridge 40 feet high, 10 minutes later. Only a small part of Holland Bridge was washed away and at Wenford bridge only the parapets were carried away. Allan's Mill at Dunmeer the water was 6 ½ feet in the kitchen and people were resuced from upstairs. Stones of many tons have been washed on to cornfields. In the neighbourhood of Bodmin there was no rain for the day except a shower or two. About 50 years ago a similar catastrophe occurred but the water was not so high by 4 or 5 feet (other reports of 3 feet) and no bridges were destroyed. The observer noted that the Camel is fed by the Allan as well as the upper Camel but only the latter was affected. 'The Allan had not a drop more than the ordinary'

A mill and house at Holland bridge were washed away and at Wadebridge an Inn which stands 20 feet above its general level was flooded to one foot depth. The wooden Ruthern bridge was carried downstream and laid on a hedge and the bridge at Polbrock was carried off three miles downriver.

The neighbouring county was visited by a violent thunderstorm. The flood carried away three bridges between Wadebridge and Bodmin. The bridge at Davidstow has been carried away.

(Dart) The River Dart rose higher on Monday night (28th August) than ever known during summer months. A flood came down from the Dartmoor hills with unusual rapidity. Water rose above 12 feet on the banks within a few minutes.

At Truro on 28<sup>th</sup> after heavy rain the lower part of Kenwyn Street, St Nicholas Street and River Street were flooded (as they were in December last). Many houses were flooded to a depth of some feet. Inhabitants were prepared and move furniture to upper rooms. The lower rooms of Queens Head were flooded.

Newlyn was visited by a very violent thunderstorm with hail mixed with rain lasting 2 ½ hours. Very localised – hardly extended 2 miles east or west of the village. Fears were expressed for the East Wheal Rose Mine but the new leat was sufficient to carry the flow.

Crediton: Sudden thunderstorm with hailstones some as large as marbles. Cellars were flooded and gutters

Exeter Flying Post 10 May 8 Sep 1849 N Devon Jour 13 Sep 7 Dec 1849 Ex & Ply Gaz 15 Dec

31 May 1850 Tavistock 1.3 inches in 1 N Devon Jour hour at Tavistock library

25 Jun 1850 N Devon Jour 4 Jul Ex & Ply gaz 29 Jun

6 Jun

Exeter Flying Post 3 Jul 2 Jul 1851 Ex & Ply Gaz 5 Jul 17 Jul 1851 changed into torrents and buds, blossom and fruit damage by the hail.

Hayle district had a thunderstorm. Buildings were struck and set alight and a cow killed.

Ottery St Mary: As a consequence of a sudden rise in the river Otter two bridges were destroyed. St Saviour's bridge adjacent to Newberry's Silk Works was totally destroyed. Tipton bridge 3 miles downstream was rendered impassable and will require considerable repairs. New weiring near Fenny bridges and river banks were also damaged.

Thunderstorm lasting more than 2 hours.

Tavistock streets were flooded; 1 foot deep in the Post Office. It was a sheet of water in the cattle market being level with the coping of the wall, erected from the Guildhall to the Abbey Bridge. A man sitting on the wall was washed over into the river which was low at the time – he survived.

After 3 or 4 days of oppressively warm weather a thunderstorm over Exeter flooded streets and low places in the neighbourhood. A storm is also reported for Tiverton, Teignmouth, Chard, Ottery St Mary etc. 15 sheep were killed by lightning at Ottery and some at Whimple.

North and South Molton: Thunderstorm with hail and pieces of ice 'as big as nutmegs' lasting 2 hours. The water rose 3 feet in South Street and many houses in the lower part of South Molton were under water. Much damage by hail to glass - some houses have 20 panes broken. The flood left much sand on the streets. It did extensive damage to growing crops. The hail in some places was 3 feet deep and a gig was stuck in one drift. At North Molton the roads leading to Exmoor are washed in many places from 4 to 5 feet deep. A school house in Fyldon was flooded and children had to get on tables to escape the flood. Pigs were drowned and much damage was done to hay and other corps. Bridges and poles across the River Mole are gone. One house on the river bank was deeply flooded.

Barnstable (?) Thunderstorm: many houses flooded but reportedly not as serious as in N and S Moulton.

Exeter: Thunderstorm more severe than for many years. The White Ball tunnel of the railway was flooded South Molton: Thunderstorm for 2 and ½ hours completely flooding the streets and underground cellars. Considerable damage was done to turnips and corn and hail broke glass. One house had 70 panes broken.

Thunderstorm localised at Exeter last half an hour with rain and hail stones of large size. Streets were flooded

Ex & Ply Gaz 19 Jul 30 Jul 1851 Ex & Ply Gaz 2 Aug 4 Oct 1851 EX Flying Post 9 Oct 6 Jul 1852 Western Times 10 Jul 19 Aug 1852 R Cornwall Gaz 27 Aug N Devon Jour 26 Aug **Western Times** 

26 Nov 1852

21 Aug

25 Dec 1852 CBHE/ Annual Register ... of the year 1852 (1853) Chronicle section. F. and J. Rivington, London ? ? 1854 Trewman's Exeter and gutters choked by hail

Newton Abbot: Thunderstorm with rain and hail such that the oldest inhabitant cannot remember. Many shops were flooded and in one drapers shop it was 4 ½ feet deep.

Barnstable: Thunderstorm with high winds for one hour. The streets and cellars were flooded. The Rivers Taw and Yeo rose rapidly and the country became deluged for several miles around

Crediton: Thunderstorm with heavy rain and the town was completely flooded – no further details.

Exeter area was visited by a severe thunderstorm. Heavy rain lasted nearly three hours. One man was killed by lightning. The storm was most violent between Exeter and the sea and the River Exe to Exmouth was flooded with hedges and trees washed down and corn destroyed.

Exeter: No comparable thunderstorm since 10 June 1826 (not previously noted - ?date). Storm lasted an hour and a half. Macadamised surface was torn up in many places. A 3 foot sewer was torn up at the bottom of Quay Lane. One man was killed by lightning at Double Lock. The rail line was flooded between the two stations. Cowick Street was completely flooded from the railway Arch to Cuckold's Bridge. The storm was also felt at Countessweir and less so at Exmouth but also at Whitsone and Haldon.

After heavy rain the river above St Blazey bridge overflowed several acres of land adjoining the reservoir that feeds the canal. The bridge gave way and caused a tremendous rush of water causing inhabitants to retreat upstairs. Three boats arrived from Par. Several families had the whole of their furniture swept away.

**(Exe)** 1852 December 25 [page 212] "At Exeter, the Exe and other small streams rose to a great height, and did much injury to the houses and the railway in the lower parts of the town."

(Teign) .....at Newton Abbots [sic] the Teign burst its banks, and carried off much property

(**Taw and Torridge**) North Devon: The Late Flood: We understand the damage done was very considerable on the river Taw, which has not been so high since the 16th and 17th October 1841. One industrious widow

Flying Post

26 Jul 1854

Western Times 29

Jul

R Cornwall Gaz

4 Aug

13 Jul 1855

Western Times 21

Jul

31 May 1857

Ex & Ply Gaz. 6 Jun

1 Jul 1857 CBHE/

Beardmore (1862)

Several thunderstorms

spread over several days

11 Jun 1858

Western Times 19

Jun

Exeter Flying Post

17 Jun

20 Jun 1858

Western Times 26

Jun

11 Aug 1858

R Cornwall Gaz 3

Sep

woman, Mrs Huxtable, who lives at Prousberry farm in Chittlehampton, lost 24 sheep, which were washed away."

Crediton: Thunderstorm for several hours; the streets were flooded and several houses inundated. One man was killed at Heavitree by lightning and 12 sheep similarly killed and a house struck by lightning and damaged at Shobrook.

A severe thunderstorm occurred in the Exeter area. A man was killed by lightning at Heavitree. Crediton had a thunderstorm for several hours. Streets were flooded and several houses inundated. Near Honiton 31 sheep were killed by lightning and 17 at Halberton near Cullompton.

Ashburton: Thunderstorm with ice half an inch in size and hailstones as big as marbles. The streets were like a river, running into houses. London Inn, Dukes Head Inn and a house opposite Kings bridge Street were flooded to a depth of nearly three feet.

Topsham: Thunderstorm; the drains became choked and most houses on the Strand were flooded along with many other houses.

**(Exe)** "At Huntsham Court, near Bampton in Devon, 3.87 inches fell between 3 and 7 p.m. on the 1st of July, 1857. [R. Batherm trib. of Exe]

Ashburton: Thunderstorm lasting 1 ½ hours. The streets were flooded and some of the houses near the Old Shambles were inundated. Sheep were killed by lightning and a house (Compston) was destroyed between Holne and Hexworthy. Sheep and a horse were also killed in the Barnstable area.

Hatherleigh: Houses were flooded and four horses killed

Kingsbridge: four bullocks killed in Brent Moor

Great Torrington: Horses killed by lightning and a house set alight.

Cullompton: A thunderstorm such has not happened here for 19 years. Some cattle were killed.

Camelford: 2 horses injured to render them useless.

[Severe flooding in West Yorkshire notably at Bradford]

Crediton: Short duration but intense and localised storm. Within a few minutes the rain carried everything with it. The streets, roads and lanes were flooded and several houses had water through them.

Thunderstorms occurred especially at Launceston where even at elevated places the flood was so great as to enter houses.

7 Jun 1859 N Devon Journal 16 Jun Thunderstorm

12 Jun 1859 Western Times 18 Jun Ex & Ply Gaz 18 Jun

Thunderstorm

N Devon Journal 7 Jul

2 Jul 1859

26 Oct 1859 Exeter Flying Post

3 Nov

Morthoe: Thunderstorm was accompanied by large hail, some 3 inches in circumference breaking every window in the village that faced northeast and causing great damage to crops and gardens. The storm lasted about an hour and extended over an area of 4 square miles. Thousands of tons of earth were washed into the sea. In one cottage water was up to window level and a grandmother and two children were rescued. Dartmoor: Severe thunderstorm. Near Chulmleigh a farmer had 30 sheep washed away by the flood. On Holne Moor and Hexworthy common sheep, horses and cattle were killed by lightning.

On 15 Jun the River Dart which runs into the river Taw between Eggesford and South Molton Rail stations became suddenly swollen to an unparallelled extent. At Dartridge Farm several animals were washed away and drowned. The Chawleigh Week Clapper Bridge was completely washed away and a bridge near the village of Chawleigh has sustained considerable damage. The flood lasted about an hour and a half and the water stood in a house 4 feet deep which stands well above the ordinary level of the river. Considerable damage was also done at Morthoe [this is possibly the same event as listed for 7 Jun].

Appledore: Thunderstorm with a severity not remembered before. Water poured down Meeting Street carrying sand and shingle that collected near the 'Tavern' and filled the houses adjacent to a depth of 2 to 3 feet. In New St a wall 20 feet high was completely washed away. The pews on the north side of St Mary's Church were filled with water.

Barnstable: Many houses especially those in the vicinity of the Square were flooded. The rising water level in the river blocked the outfalls.

The storm also badly affected the Bideford area where it occasioned much injury to house property. Great damage to land and crops occurred at Instow. Such heavy rain has not been known for years.

Ilfracombe: Two streams of water from High Street and Portland Street meeting at the top of Fore Street sent a stream of water down the hill like a river washing off the face of the road. Several houses were flooded at the top and the bottom of the hill and in neighbouring villages.

Torrington: Mill Street and Castle St were covered with water to a considerable depth.

Petrockstowe: 20 lambs killed by lightning

Extreme storm of prolonged wind and rain but no mention of thunder. Gale from ESE. There were numerous shipwrecks on north and south coasts. The Exe overflowed its banks. The valley of Clyst was submerged. All rail traffic between Exeter and Teignmouth was suspended for 4 days.

Chagford; The river rose hisher than for 30 years. Damage was done to the factory and other places.

Topsham; Tide rose higher than in the storm of Nov 1824 Houses on the Strand were flooded 1 to 2 feet deep.

Exmouth: All the houses in the lower part of the town and on the Quays were flooded.

28 Jul 1861 N Devon Journal 8

Aug

Thunder and lightning lasting 4 hours.

Ex & Ply Gaz 2 Aug

9 Jun 1862 Western Times 14 Jun Jun 12 1863 BR

8 Oct 1863 Western Times 13 Oct 22 Apr 1865 R Cornwall Gaz

6 Jul 1865 British Rainfall

28 apr

24 Aug 1865

Teignmouth: All the lower part of the town was flooded from the tide. The brook which divides the two parishes overflowed and flooded Teign St, Northumberland St, Wellington St, Station Road, and bank St to a depth of 3 to 5 feet. Such an inundation has not been known since 1824.

[Further extensive descriptions of shipping losses and coastal damage]

River Culm: One of the most destructive storms ever remembered along the whole length of the river Culm. The storm began at Taunton and passed over the Black Down hills. At Uffculme the water rose 7 feet in 20 minutes. Hundreds of acres of hay were destroyed. At Hemyock half the churchyard walls fell in and two stone bridges at Dunsgreen and another were carried away. Houses and the New Inn were flooded. Culmstock shared similar disasters. At Uffculme the bridge at Craddock only built 3 or 4 years previously was washed away and a man standing on it was drowned. Animals were drowned including 2 horses. Hedges all the way to Cullompton have collected the hay from the flood.

At Hemiock, which is situated in a valley, a few minutes after the storm commenced, was completely deluged, with houses flooded. At New Inn visitors had to head upstairs. Stone bridges at Tuns Green and another were destroyed. Same info as above for Uffcombe. At Cullompton much land was flooded and two horses drowned. Crediton: Hail storm lasting nearly an hour accompanied by heavy rain. House gutters filled with hail and rain overflowed; many houses were flooded; into the cellars and under kitchens. The water rushed down the hills in torrents. The town has not been visited by such a hail storm for many years.

St Agnes observer notes 'on 12 Jun the rainfall here was 2.36" but it must have been still heavier in the neighbouring valley where barrows, empty in the evening were full in the morning. Allowing for their shelving sides it would probably need 4 inches to do this. [Not included in EXCEL]

Crediton: Thuderstorm with rain and hail with gutters filled and running over and hence some bedrooms flooded. However damage very limited.

A thunderstorm passed over Boscastle followed by such torrents of rain as had not been seen for the last 40 years. The streams were so overflown that the flood entered most of the houses in the lower part of the town. The water was 4 to 5 feet deep in some of the cottages. The rain began to descend about 1 oclock and was over a little after 2 oclock.

Holbrook Farm (east of Tiverton?) 'A remarkable rain fell at 5 pm 1.25" fell in 20 minutes. I never witnessed such rain in my life'. Other severe thunderstorms were noted in Hertforshire. Reference to a waterspout which had torn up the rails on the Bedford to Cambridge railway

Observer at Meshaw Rectory (Headwaters of Exe and Taw notes 'there was a very remarkable storm in this

British Rainfall		immediate locality approaching a waterspout in its effect; the rain 1.60" fell in about 5 hours. Heavy rain was reported the previous day in the southeast but mostly over a longer period. [Not included in EXCEL file]
13 Jan 1866 British Rainfall	Snowstorm and extreme gale on 10 Jan. Melt on 13 <sup>th</sup> Budleigh 2.00" (various other totals between1.5	Snowmelt floods across the south. A great flood was reported on the Exe with several persons drowned and scores of sheep washed away and hundreds of trees carried down (blown over on 10 <sup>th</sup> ). At Tiverton it was the greatest flood on the Exe for 20 years.  Also highest flood on Frome for 35 years, at Bath for 25 years, and also at Edmonton, Rickmansworth, Lewisham, Dartford (church flooded), Maidstone and Tunbridge.
Exeter flying Post	and 2.0")	Lewisham, Dartiord (Church Hooded), Maidstone and Tunbridge.
17 Jan	Snowmelt said to be the worst since 1841	Extensive description of hurricane winds and effects on the coast with wrecks in Tor Bay. Exe Culm and Creedy overflowed their banks. Such a flood has not been seen for 50 years. The lower part of Exeter and St Thomas was flooded from Saturday evening to Sunday afternoon. It was impossible to pass on foot in Okehampton St, Alphington St or Cowick St where houses were also flooded. From Cowley Bridge not an inch of land including the rail line could be seen above water from Stoke Canon Road to the Upton Pynes side and the railway at Cowley bridge was damaged.
		Exwick: the road was flooded to 4 feet and houses were equally flooded. Lloyds cottages became uninhabitable.
		Three people were drowned at different locations whilst travelling
		Dart Taw and Torridge were greatly swollen.
		At Bickleigh bridge the waters had risen 6 feet swamping the cottages and the mill
20 lun 1000	Thurs do not o mas	Stoke Canon the church had been separated from the people by a river running 18 inches deep
30 Jun 1866 North Devon	Thunderstorm	Ottery St Mary: Cellars and lower rooms in the town were flooded. Hailstones of 2 inches circumference fell. Sheep were killed by lightning and soil was washed off fields where the water was 4 to 5 feet deep.
Journal 5 Jul		[severe thunderstorms with large hail also in the London area].
Western times 6 Jul		Hatherleigh: Thunderstorm with rain at a distance. The river came down a flood carrying various items of property and sweeping away Croydon bridge Northlew. The oldest inhabitant had not in his life seen the water rise so quickly.  Ottery St Mary: thunderstorm with many houses flooded and furniture damaged. Sheep were killed by
		lightning.
28 Aug 1866	Thunderstorms Bodmin 28 Aug 3.16"	(Plym) Floods in Cornwall, Devon, Leicester and Nottingham. On Dartmoor considerable damage. The ancient and picturesque bridge over the Plym at Shaugh was swept away, also a mill. Corn is standing in water in many
British Rainfall	Altarnum 3.09"	places.

Treharrock 2.78"
Pencarrow 2.50"

NB 'The great downpour was chiefly in the midland Counties between Ipswich and Worcester and thence to Chester and to Louth. There was also very heavy rain for about 10 miles around Bodmin and other in Carmarthen'

**(Lew/Taw/Torridge)** "Severe thunder storm in Devon. Near Hatherleigh it washed away roads, crops, etc. A postman was drowned in a stream usually only ankle deep."

Thunderstorms
2 Sep very hot and close
(Max 73F Min 49F) Nearly

an inch fell in 2 hrs

(Exeter)

At Lee Moor on Dartmoor the floods were reported to be the greatest for 30 years. Generally thunderstorms and heavy rain were reported in the neighbourhood of the Bristol Channel and Somerset and Worcester. Widespread thunderstorms over southern England with notable descriptions from Newton Abbot and Great Torrington.

Exeter: the storm lasted one hour.

Bicton: Thunderstorm reported to be the worst since 1844

Dawlish: Many houses were inundated

Teignmouth: Brooke St, Bank St and French St were flooded. Shops were flooded in Bank St.

Torquay: Shops in the Strand Torwood St, Union St and the Royal hotel were flooded and road metal and gravel washed into cellars

Brixham: Houses were flooded up to 4 feet deep; hailstones fell as large as marbles

Kingsbridge: Very large hail broke glass in many windows; many houses were completely flooded in the lower part of town.

Dartmouth: Skylights were broken and greenhouses destroyed and hailstones 2 to 3 ounces fell. Birds were knocked off trees. Houses in the lower part of the town were flooded to several feet. One house had water bursting in the back door from the hills behind filling the room with tons of earth and water to 5 feet.

Exmouth: Flooding of houses to 18 inches depth; flooding in Parker's Place noted.

Crediton: Flooding also occurred

Bratton Fleming: A horse was killed by lightning.

South Molton: The thunderstorm lasted 2 hours but rain fell towards the end of the storm and no flooding was noted.

Various buildings were struck by lightning and animals were killed by lightning at various places.

# Western Times 6 Sep

3 Sep 1867

**British Rainfall** 

Ex & Ply Gaz 6 Sep

31 Jan 1868 CBHE/Web 18 Sep 1868 N Devon Journal 24 sep 30/31 Jan 1869 R Cornwall Gaz 2 Feb	Thunderstorm	Ashburton: The lower parts of East, West and North Street were completely flooded causing considerable damage.  Penzance: "Railway Viaduct washed away the second time. Stone viaduct constructed soon after."  Barnstable: Storm lasted nearly an hour and flooded numerous houses and sent a deluge of water through various streets. The damage was greatest in the vicinity of The Square. Some shops had 6 inches of water in them. Two bullocks were killed by lightning at Pilton.  The highest spring tide in 37 years occurred in Cornwall with severe coastal flooding. In Truro the lower parts of the town were under water for several hours. The lower part of Wadebridge was also flooded including the iron foundry. At Saltash the flood extended into Tamar Street and into the Battery. Many places were also flooded in Devon and there were shipwrecks at sea.
Exeter flying Post 3 Feb		In Devon strong winds caused serious damage and heavy rain caused flooding at various places. The Teign was in high flood. The Dart was in flood at Totnes and the Plains, New Walk, Warland, Bowling Green Town Marsh and Cellars with adjoining houses were flooded; Fore St was flooded. Flooding also occurred from high waves on the coast at Dawlish, Teignmouth, Kingsbridge, Salcombe, Plymouth and Devonport
27 May 1869 R Cornwall Gaz. 3 Jun 15 Dec 1869 Western times 21 Dec		Following heavy rainfall earlier in the month a thunderstorm occurred on parishes adjoining the estuary of the River Camel including St Issey, Little Petherick and Padstow. At St Minver 0.80 inches fell in 1 hour. It has washed away the soil from fields, overthrown hedges and torn up the roads. At Padstow the storm was far more destructive that at St Minver. The rainfall did not extend far to the east.  Reports of high river flows in various parts of Devon but no mention of thunder. One girl was drowned at Tavistock. The Taw overflowed its banks. At Bow the Bow Bridge was impassable for several hours. A weir was washed away at Okehampton.  Tiverton: the Exe and Lowman rose to a great height. The rail station was flooded and water too deep to bring

Andrews and Westexe.

second flood occurred there on 7<sup>th</sup>.

3 Aug 1870

Western times

BR

Launceston (Hexworthy)

Zeal Monachorum 3.45" in

2.99"

the engine in. The coal yards and adjacent houses were flooded as well as houses in the lower parts of St

Zeal Monachorum: Intense rain washed turnips and potatoes out of the ground and soil from fields. Hedges

were washed down and great furrows made in the roads. Houses were flooded and hail fell as big as marbles. A

3/12 Aug 2.5 hrs

7 Aug 1870 In a short space of one R Cornwall Gaz 13 hour, 1.84 inches had fallen

29 Jul 1871 CBHE

27/28 Mar 1872

BR

18 Jun 1872 R Cornwall Gaz 22 Jun

N Devon Jour 20 Jun

Very long duration thunderstorm from 8 pm to 6 am

inch in 1 hr

Barnstable 2.50 inches

Plymouth more than an

Western times 20 Jun Hatherleigh: After a drought heavy rain caused flooding of houses.

With one exception the stations between the two do not appear to have had any rain worth quoting. Thunderstorm and 'great flood' in Camborne. The rain started after 3 pm and within a few minutes the streets became impassable, houses were flooded and furniture was floating around in rooms. Union Street which is 40 feet wide was covered from side to side for its whole length and was torn up. The river which flows through Tuckingmill overflowed and the Wesleyan Sunday School building was flooded. The 'stream works' between Dolcoath Mine and Gwithian was seriously damaged. The flood does not appear to have extended more than 4 square miles.

**(Plym)** Rainfall observer at Plymouth (Navigation School) noted: "More than three-quarters of an inch fell in less than half-an-hour, being the heaviest shower I have ever witnessed; the whole of the lower part of the town was flooded."

Location	27	28	Tot	Location	27	28	Tot
	Mar 1872	Mar			Mar 1872	Mar 1872	
Brixham	1.28	1.27	2.55	Tavistock	1.16	1.57	2.73
Totnes	1.51	1.36	2.87	Pentille Cas	1.50	1.23	2.73
Holne	2.37	2.27	4.64	Hington Dn	2.38	1.15	3.53
Druid Ho	1.92	2.04	3.96	Callington	1.56	1.12	2.68
Dartmoor Pr	2.20	1.36	3.56	Altarnum	1.52	1.07	2.59
Islaington	1.11	1.18	2.29				

Very heavy and persistent rain around Dartmoor [Not added to EXCEL file]

Widespread thunderstorms throughout the country. In Devonshire nearly every town had some flooding but fortunately no injury to life or limb. The storm had expended its fury before reaching Cornwall although some thunderstorms occurred.

After a sultry day a thunderstorm broke over Barnstable with hail combined with rain. The streets were thoroughly washed and houses were flooded. Low lands adjacent to the Taw were flooded carrying off much hay. The cellars of the Royal and Fortescue Hotel were filled to 9 feet deep.

Widdicombe on the Moor: 20 lambs killed by lightning

Newton Abbot: Parts of the lower parts of the town were flooded including the booking office of the railway station.

Totnes: Heavy rain with large hailstones caused some flooding of houses and 6 bullocks were killed by lightning.

Witheridge: A house destroyed by lightning and fire.

Hatherleigh: the water ran through the streets like a river. At Black Torrington, two houses near the river were levelled. Inhabitants escaped through upstairs windows At Cookbury, a footbridge across the Torridge was

6/7 Jul 1872

BR

KILWORTHY HILL, TAVISTOCK.—
Thunderstorm with heavy rain through the night.

JACOBSTOWE.—An amount of rain unprecedented in this neighbourhood, fell in 24 hours, viz., 4.35.

SOUTH MOLTON.—9 a.m. to 4p.m. 6th 2.16; 4 p.m. to 9 a.m.

7th 1.61; total in the 24 hours, 3.77.

BERKELEY.—Total fall 2.14, of

Dividing the falls between 6th and 7th, the fall was almost wholly on the 6th in Devon and Cornwall, and its amount exceeding two inches at almost every station, exceeding three inches at several, and even exceeding four inches at Okehampton (4.38), Jacobstowe (4.35), and Castle Hill (4.15) in Devon.

which 1.77 fell in 2 hours.

N Devon Jour 18 Jul washed away.

The Torridge overflowed its banks at Beaford Mills and there was 3 feet of water on the roadway. Near Holsworthy some bridges were washed away by the flood and at Black Torrington two cottages were washed away by the current. At Whiteridge, two houses were struck by lightning and set alight. The inmates were rescued by a team of acrobats from a nearby circus who got on each others shoulders and handed down people from an upstairs bedroom.

Location	Rf Jul 6 1872	Location	Rf Jul 6 1872
Kilworthy Hill	2.18	Barnstaple	3.00
Coryton	2.16	Bratton Fleming	3.53
Okehampton	4.38	Ilfracombe	2.35
Clawton	2.38	Trevarna	2.60
Jacobstowe	4.35	Pentille Castle	2.47
Zeal Monachorum	3.54	Kingston Down	2.37
Gt Torrington	2.22	Bodmin Fore St	2.04
Meshaw	3.02	Wadebridge	1.74
South Molton	3.77	Altarnum	2.20
Buckish	2.36	Hexworthy	2.36
Northam	2.12	Wellington	2.03
Castle Hill	4.15		

M (annual maximum on that day) thickly studed the whole west coast of Britain from the Land's End to North Wales, and are found as far north as Glasgow. This is especially remarkable, considering that during the slow movement of the rain depositing cloud, it fell in Devon and Cornwall almost wholly on the 6th, in Herefordshire in nearly equal quantities on both days, and further north almost wholly on the 7th.

If we take the area as 125 miles from E. to W., and 200 from N. to S., or 25,000 square miles, and assign to it a mean rainfall of two inches. Yet even that would give some 750,000,000,000 gallons.

Beaford: A horse was killed by lightning. At Bondleigh a wooden bridge was washed away. At Coleridge houses were flooded and poultry drowned.

Burrington: Many houses were flooded; the brook that runs between Burrington parish and Ashreigny rose to a greater height than ever known before. At Bogford people were also taken out of their houses from upstairs windows. The water entered Abbotsmarsh House.

Thunderstorm for much of 6<sup>th</sup>; rain on 7<sup>th</sup> but without thunder. Lowlands in the Vale of Taw were flooded. The flow was such in the memory of the oldest inhabitant could not be paralleled (with the exception of the 1865

flood). The marshes about and above the village of Bishop Tawton were completly under water. The rail line was submerged for a distance of 560 yards. A bullock and sheep were drowned. In some parts of Okehampton the water was so high as to leave mud on table tops.

Torrington: On Sunday morning the River Torridge was rising rapidly and all the marshes along its course were flooded. The railway at Rothern bridge was impassable until late in the day.

Western times 9 Jul	
5 Jun 1873	Kilworthy 1.60" in 3 hr
R Cornwall Gaz 14	Rainfall of over three
Jun	inches in two hours was
N Devon Jour 12	reported at Gunnislake.
Jun	
12 Jul 1873	Thunderstorm localised
N Devon Jour	
17 Jul	
24 Aug 1873	Exeter Inst 2.08"
	Exeter Speke 1.83"
British Rainfall	S Molton 2.17"
Western Times 26	Bratton Fleming 2.04"
Aug	
Aug/Sep 1873	
Horsham (2012b)	
in Foulds and	
Macklin (2013)	
8 Jan 1874	Holne Vicarage 3.61"
CBHE/BR	Dartmoor Prison

2.35", 3.50" & 3.07" Ashburton 2.63" Tavistock 2.27" Ivybridge 2.43" River Exe was swollen to a great height. In North Devon, the rail line 3 miles south of Barnastable was under water and impassable

A violent thunderstorm occurred at Gunnislake in North Cornwall. Large quantities of earth were carried away from the fields whilst the roads became impassable watercourses. Three or four children were washed away by the current but were fortunately picked up by bystanders. Many houses were flooded; four men were struck by lightning but recovered. Four people were struck by lightning but all recovered.

Tavistock: Thunderstorm lasting 3 hours with 2 inches rain. The drains could not cope and a number of houses were flooded.

South Molton: Hail combined with rain the hail lying 2 to 3 inches deep for some hours. For about ten minutes the streets were flooded. Hardly any rain fell 2 miles out of town.

Exeter: St Thomas area was flooded. A large stream was running on each side of the roadway but at the peak it spread over the whole road to a depth of 5 inches. From the Vicarage down to the Militia depot the water ponded and formed a large lake over one foot in depth with adjacent houses flooded.

Exmouth: Houses were flooded in Johnson's Place, Lower Parade, Staples's Building, Market Street, The Cross, and other places; in some cases 2 feet deep.

Rivers Cowsic/Meavy: Clapper bridges washed away. One fatality

(Dart) [Not entered to EXCEL]

6 Oct 1874

Druid Ho 2.71" Pentille Cas 2.00" Dartmoor 3.00"

BR



31 Oct 1874 N Devon Jour 5 Nov

Western Times 6 Nov

1 Jan 1875 BR

27 May 1875 Western times 1 Jun

9 Jun 1875 Western times 10 Jun

Thunderstorm with rain and hail

Widespread rainfall on west of England and Wales from lake District to Dartmoor, from sustained rainfall [Not enetered to EXCEL1

Thunderstorm at Plymouth but more severe at Teignmouth where the lower parts of the town were flooded and Torquay where the storm lasted from 7 pm to midnight.

Newton: Very severe thunderstorm; nothing like it remembered here since the memorable storm of 1861. Rain was combined with hail and the river was swollen to a great height. At Kingsteignton, houses were flooded up to 3 to 4 feet deep. The bridge between Coombe and Shaldon was washed away. At Coombe in Teign Head the storm was disastrous. The water in the road rose four feet in height. Trees were washed out of the hedges and carried several hundred yards. Pigs were drowned in their styes. Stones, half a ton weight, were rolled off the road and into fields. There was scarcely a house in the village that did not have a disagreeable deposit. An old lady was rescued with difficulty from drowning in her bed.

Torquay: Streets were flooded. In Paignton Road cottages were completely swamped. Cellars were filled with water.

The most remarkable event was the great flood on New Year's Day when the whole valley below St Austell was flooded with roads impassable for several days with sediment from the clay works distributed downstream. Elsewhere the precipitation fell as snow.

Torquay: Heavy rain flooded several parts of the town. Swan Street and Abbey Place – cellars were flooded. Temperance Hotel in Fleet Street was flooded. At Pimlico at the bottom of Stentiford's Hill houses were flooded so that furniture was floating about.Lower Union St and the police cells under the Town Hall were flooded to 12-14 inches.

Exeter: thunderstorm; streets were flooded but the storm drains carried it off. Some houses and people were struck by lightning but not seriously.

14 Jul 1875 CBHE/BR	Holne Vicarage 3.93 Imber	Heavy rainfall occurred through the southwest Midlands and South Wales. An abstract of some of the flooding damage done is given in Met. Mag. Aug 1875 and in Proc ICE <i>The Floods of 1875</i> . These publications have not been consulted and newspapers have little flood information.
Cheltenham	Longthorns 3.18 Bingham.s Melcombe 3.58	been consumed and newspapers have notice nood information.
Chron Jul 20	Beaminster       3.65         Melbury       3.92         Ashmore       3.34         Kingsbridge       3.03         Holne Vicarage       3.93         Ashburton       3.10         Prineetown       4.15         3.75	Many parts of Devon, Cornwall and Gloucestershire are covered to several feet. (but descriptions of severe flooding on Thames, Severn Leicestershire and elsewhere) [not added to EXCEL file]
	Tavistock       3.03         Gittisham       3.40         Cricket, St. Thomas       3.02         Bath Lit. Inst       2.75         " Weston       2.77         Backwell       3.04	
22 Jul 1875	Thunderstorm	Very local rainfall. 'The Turnpike road resembled the bed of an Alpine torrent'.
BR	Sunnyside Trowbridge	More general flooding occurred from 14 July (Axe, Cherwell) to 23 July (Fen district, Thames)
	2.69" of which 2.53" fell in	[Trowbridge is near Bath and outside our area – not added to EXCEL file]
	1 hour.	
6 Aug 1875	Thunderstorms	Exeter: Storm damaged corn crops which are beaten down – nothing about the city
BR	Dunster 2.42"	Ottery St Mary: Animals killed by lightning
	Teignmouth	Crediton: Many houses were flooded. Public Rooms had 2 feet of water and mud. North Street also flooded.
N Devon Journal		Animals killed by lightning.
15 Aug		The storm also occurred at Bideford, Hartland, Withbridge, Newton St Cyres with lightning animal fatalities and houses struck and on fire but no reference to flooding.
9 Aug 1875		A severe thunderstorm At Exeter lasted two hours. It flooded the streets in many of the lowest parts of the city.
R Cornwall Gaz		WT mainly reports on the severity of lightning but little on flooding.
14 Aug		Crediton: houses were flooded and a horse and cow killed by lightning on 6 Aug. The Public Rooms were under two feet of water and mud. Houses in North ST were flooded.
Western Times 11		A thunderstorm also occurred over Cornwall in 8 <sup>th</sup> and animals were killed by lightning. No reports of flooding were found.
aug		At Truro the storm lasted about 3 hours. The corn crops are beaten down by the rain.
-		Severe thunderstorm but with no flooding reported occurred at Bradninch, Newton St Cyres, Torrington, South Molton, Bideford, Witheridge etc.
17 Sep 1875	Bodmin Fore St 2.74"	On Sep 19 at Tytherton Lucas 0.62" fell in 20 minutes

BR/CBHE	Druid Ho 1.16"
	Tavistock 1.33"
	Plymouth 1.25"
19 Oct 1875	Meshaw 3.14"
	Teignmouth 1.85"
CBHE	Exeter 3.26"
	Brampton Speke
	2.39"
	Tiverton Springfield 2.28"
	Witheredge 2.09"
R Cornwall Gaz 23	The Exeter Institution
R Cornwall Gaz 23 Oct	The Exeter Institution rainfall occurred in three
	rainfall occurred in three
	rainfall occurred in three hours.
	rainfall occurred in three hours. (Previous daily high totals
	rainfall occurred in three hours. (Previous daily high totals there were:
	rainfall occurred in three hours. (Previous daily high totals there were: 1823 Oct 2 2.00
	rainfall occurred in three hours. (Previous daily high totals there were: 1823 Oct 2 2.00 1838 Nov 28 1.86

Exeter: Thunderstorms. Some houses in St Thomas were flooded. Two houses were struck by lightning at Otterton and badly damaged and a horse was killed.

**(Exe)** Rainfall observer at Brampford Speke noted "The fall unprecedented since I have kept a register and the consequent floods most disastrous." Observer at Tiverton noted "Excessive rain in evening; great floods." Tiverton – a great flood.

(Teign) Rainfall observer at Teignmouth (Brookbank) noted "Max of month 1.85 in.; the rain began at 4 p.m., and from 6 to 8 p.m. it fell in torrents (with lightning and thunder), causing sudden floods which did great damage. "Observer at Teignmouth (Landscore) noted "1.81 in. fell in two hours, causing great flood in Teignmouth; Bank Street flooded 2 feet deep, and much damage done by washing away walls and buildings."

Heavy rainfall with thunder and lightning affected the area from Brixham to Exeter and whole tracts of country have been laid under water. At Dawlish the lower parts of the town were under water, two bridges were swept away and a man was drowned. The lower parts of Exeter were under water and the streets were impassable. At Teignmouth boats were rowing up and down the street and shops and houses were flooded. At Exeter a boy was washed away and drowned, houses were washed down, hundreds of sheep and cattle were washed down the Exe, and 130 sheep in one field alone. At Tiverton great losses were sustained and man and horse were washed away and drowned.

Exeter: Heavy rainfall on 18<sup>th</sup> for 2 hours and then on 19<sup>th</sup> thunderstorms in the evening for 2 hours with intense rain. St Thomas was quickly flooded affecting roads and houses including Okehampton St and Alphington St, then up to the bonded stores at the Quay. The Bonhay was completely under water. A house was completely washed away at Alphington and a man had to swim to save his children. At Woodbridges Flour Mill on the Quay the water was 2 feet deep. The flood came down Pensylvania Hill like a mountain torrent and Longbrook Street was a long brook. In very short time the space between eldon Place and park Place was 6 feet under water, forcing in the windows of some houses. In Waterloo Place and Rockfield some people had to be taken out of their houses by ladder. A granite wall near St James's Church was forced out. In Lion's Holt furniture was floating around. Also flooded were St James St, Union Road, Axminster Inn at the bottom of Paris St (1 foot of water in his house). Soil was washed down Heavitree Hill, Russell St and Newton. At Eldon Place the water had rused in so suddenly, in the front door and out the back as to leave no time for the removal of furniture. A wall which had ponded back the water in Barrack Road gave was and the water rushed against Barrack Road Houses, carrying away doors and windows. Also in Waterloo Place the water rose so suddenly

that people had to rush upstairs to await rescue; the side wall of No 38 collapsed. At the bottom of Waterloo Place the watermark shows a depth of 6 feet.

At St David's Station to Cullompton the water was under water reaching nearly to the fireboxes of engines. St Davids platform was at one time only 9 inches above the water level. Red Cow village was flooded and houses near the railway hotel had inmates removed by ladders. A cottage abbuting Elmfield Hotel is nearly demolished. Animals were seen floating. Water flowed over Cowley Bridge. Many houses were flooded at Heavitree Bridge.

Exwick: The village was almost entirely flooded and people were removed by carts. The iron bridge over the mill stream was partly destroyed.

Alphington: from the Cross nearly up to the church the turnpike road was flooded up to 6 feet. The bridge in the middle of the village was partly carried away; adjacent house walls fell down.

Ide: The water filled the valley and roads were impassable.

Exmouth: Storm lasted 2 hours on 13<sup>th</sup>. White Hart Inn, Fore Street and many houses in Chapel Street were flooded and various other parts of town had water 2 to 3 feet deep. In front of Alexandra Terrace the water was 5 feet deep.

Dawlish: The stream flowed high in The Lawn and Strand side. The water in the lower end of Lansdown Terrace was 3 feet deep and Brunswick Place was also cut off. Piermont Place was impassable. The iron footbridge across the centre of the Lawn was carried away and the stone bridge at Church St was partially destroyed. A man was drowned in Church Street. A house in Brook Street was washed away.

Teignmouth: A boat was rowed through the principal streets and many shops were flooded

Torquay: The storm lasted one hour. Houses in the lower part of the town were flooded to several feet, including George St, Swan St and Abbey Place.

Brixham: At Bolton Hotel the stables were flooded. Several houses were flooded in Spring Gardens. Parker's Mill was several feet deep. Bank Lane and King St and houses on the Quay were flooded.

Tiverton: Heavy rain occurred from 5 pm until 11 pm. Both Exe and Lowman Rivers rose to an unprecedented level. One man, a pensioner, was drowned. Mills in Chapel Street were badly hit.

Bideford: Water swept over the banks of the Torridge and carried away turnips, potatoes, trees. The valley of the Yeo was completely flooded.

Barnstable: The rain was not heavy in this neighbourhood.

Kennford: 40 to 50 homes were full of water reaching the bedrooms in some of the homes. Five houses were totally destroyed. A great many people took their pigs to upstairs rooms to save them from drowning. [Since 1795 there has been no such flood in Nottingham; floods reported through southern England and

13 Nov 1875 BR/CBHE Royal Cornwall Gazette 20 Nov 1875		Midlands] (Exe) Observer at Exford noted, "The Exe rose here to its highest point [of the year] on 13th November." (Teign) Rainfall observer at Teignmouth (Landscore) noted "1.50 in. of rain, and Teignmouth again flooded." (Fal/Kenwyn) "On 13th November 1875 'there was very heavy rain and the river rose so high that some houses in the lower part of town [Truro, were inundated' (. There is no mention of any tidal influence. Further flooding occurred on the following day, but this was associated with a high tide." (Taw/Torridge/Wilder) Rainfall observer at Ilfracombe noted "1 inch fell between 9 a.m. and 3 p.m.; about the latter hour, the Wilder Stream burst its banks, and flooded the lower part of the town."
N Devon Journal 24 Aug 1876		Report of Lynton water Company: The Directors report that the heavy floods of last November carried away the bridge at Lynmouth over which the mains of the company were laid. The bridge has since been rebuilt with the pipes in their former position
18 Aug 1876 Ex & Ply Gaz 25 Aug		Thunderstorms reported in various parts of the southwest. One lightning fatality in Cornwall noted and several houses struck but no mention of flooding.
17 Oct 1876 BR	Teignmouth Landscore 1"	Observer notes 'flooding lower streets of town' (presumably Teignmouth)
Western times 18 Oct		Exeter: Heavy rainfall but did not last long. Thunder and lightning reported but no flooding.
26 Dec 1876 BR/CBHE	Holne Vicarage 3.38" Druid Ho 2.97" (both Ashburton)	[not added to EXCEL]
15 Apr 1877 BR/CBHE	Holne Vicarage 3.16" Bodmin 2.29"	1877 April 15 Rainfall observer at Bodmin noted (p[13]) "Rainfall 2.29 in., being greatest in 24 hours in 16 years, except September 17th, 1875, when 2.74 in. fell."
5.4 65	Druid Ho 2.07" Babbacombe 1.94"	E Budleigh Observer noted 'Flooding on the River Otter – only the oldest people remember such a flood many years ago'.
	E Budleigh 2.79" in 20 hrs Exeter (Quarries) 3.65" Honiton 3.34"	Exeter, Dawlish, Topsham, Sidmouth, Torquay, Crediton etc suffered floods from rains on 15 <sup>th</sup> and 16 <sup>th</sup> .
2 Sep 1877 BR	Barnstable (Bratton Fleming) 3.80"	[Not added to EXCEL]
10 May 1878		In common with many parts of the country Cornwall was visited by thunderstorms with rain and hail. In

R Cornwall Gaz 17 May

13 May 1878 N devon Jour 16 May

16 Jun 1878

28 Jun 1878

22 Jul 1878

Thunderstorm

N Devon journal 4

Jul

BR

Western Times 26

Jul

3 Aug 1878

R Cornwall Gaz 9

Aug

23 Aug 1878 N Devon journal 28 Aug 10 Nov 1878 **BR/CBHE** 

30 Jun 1879

BR

Bere ferrers 2.11" Holne 2.94" Druid 2.35" Tavistock 2.17"

Kilworthy 2.15"

Bodmin some houses were flooded and cattle killed by lightning. Lostwithiel was severely affected with many houses flooded and much sand and gravel was washed into the town; stones were carried several hundredweight in weight and ground was ploughed into furrows several inches deep. Camelford Padstow and Fowey were similarly affected but the west and southwest of the county seem to have escaped the worst. Torrington: A heavy rainfall such as has not been known for years caused some houses to be flooded, especially lower Castle Street. Such was the rapidity by which the brooks and small streams became overflowed, that in a short time the bridges became impassable, especially at Jope's bridge leading to West Gifford. The River Torridge was not so much affected. Several peals of thunder were heard during the heavy rains. A thunderstorm was also reported at Barnstable on 12 May.

Week St Mary observer notes – A local storm at Bude 7 ½ miles away. The first indication was a downpour of water into the river channel. [Not added to EXCEL file]

A storm of great severity accompanied by rain and hail burst over nearly the whole of Devon and Cornwall. The rain at Camelford was not much but at Tintagel, Camelford and to the north of Camelford very heavy rain and hail fell. The River Camel rose 8 inches in half an hour. Horses and sheep were reported killed by lightning. Thunderstorms in various parts of the southwest. Sheep were killed by lightning and roofs damaged by sudden violent winds but little mention of flooding.

Torrington: Hail with large lumps of ice broke windows at nearby Taddiford.

A heavy thunderstorm approached Cornwall from the northeast. A farmer was killed by lightning at Lostwithiel. Flooding occurred at St Austell; the flow of water down Mennacuddle Street into Fore and Church Streets was more like a little river. Large stones and heaps of sand remained after the flood had passed. In South Street and Kiln Lane the water was 9 to 15 inches deep for a quarter hour. Cottages along the road were flooded. Barnstable: The full fury of the storm was on the surrounding hills rather than in the town. However, some streets, especially Bear street were flooded, the water coming down like a river and invading some houses. One pig was killed!

(Exe) Observer at Exford (Rectory) noted, "The year was chiefly remarkable for a heavy fall of snow at the end of March, sweeping storms in October and November; flood on November 10th, when the river Exe was higher than known for 10 years..." [Not added to EXCEL file]

[Not added to EXCEL file]

Islaington 2.24" Pentille Saltash 2.63" Arlington Court had 1.48" in 20 mins

2 Aug 1879

Taunton Cothelston 3.55"

Widespread thunderstorms in the southwest and the Midlands.

BR

Taunton Lydeard 3.21"

Torquay: Storm accompanied by strong winds. Two stream of water rushed down each side of Market Street quite a foot deep [At Twickenham much glass was broken by hail and ice. One was said to be 5 inches in diameter.

Western times 5 Aug

> Newton: Severe thunderstorm which choked the sewers and accumulated a load of filth in the lower part of Banks St. Many shops and stores were flooded. It was evident the storm was very local.

Kingsbridge: the lower part of the town was flooded but no mention of property. Witheridge: Hailstorm with large pieces of ice 1 ¼ inch in length and 1 inch wide.

18 Jun 1880

BR

Trowbridge (Holt) Thunderstorm 0.54" in 45 mins

[Not entered to EXCEL file]

26 Jun 1880

Western times 29

Jun

9 Jul 1880 Kilworthy Hill BR Thunderstorm

Exeter: Thunderstorm; rain fell heavily for 2 or 3 hours but the storm was more violent in the north and northwest of the county. In Trent, Somerset a man was killed by lightning. No reports of flooding. [Not entered to EXCEL file1

'River Tavy rose higher than ever known before' (see below) [Same event as listed below – Kilworthy Hill is in Tavistock]

13 Jul 1880 **CBHE** 

(Tavy) THE TRAGEDY AT EAST CREBOR MINE: "By one o'clock [in the afternoon] the deluge had begun. The Tavy, fed by innumerable streams on the moor and its fringes, became swollen and angry. In half an hour its

level rose by ten feet. In Parkwood Road and Mount Tavy Road [Tavistock] houses were flooded, property destroyed, and animals swept away....Vigo Bridge ...was threatened by the impact of the sudden arrival of bits of the bridge just up-river that had connected the two parts of the Pearce Iron Foundry.....There was some disagreement among older residents over whether the record level of 1830, exactly fifty years before had been exceeded. The majority view was that it had. A mile or so down-river from Abbey Bridge [Tavistock], off the road to Waldreddon, was the East Crebor Mine..." The sixty and seventy fathom levels of this re-opened mine were being worked by 6 miners. "An adit connected the [mine access] shaft to the river close by. Samuel Daniels, who had known the mine for thirty years, testified that he had never considered the possibility of this being a safety hazard, since he 'had never known a flow of water into the adit before from the river'. At about 4

Woodcock (1991)

o'clock the men on the lower level experienced the first inrush of water....Climbing the winze to what would have been the safety of the sixty fathom level, they were met by a tidal wave that filled the mine up to the sixty-two fathom mark.....Drainage began as soon as the river level had fallen below that of the adit. The pumping engine was, however, hardly up to the task, and ....it was 12.30 on the following afternoon when the [three] bodies were reached....." A memorial tombstone at Dolvin Road marks their accidental death by drowning, July 13th, 1880.

(Tavy) Tavistock: Thunderstorm in the afternoon. The flood rushed down the heights of Watts Road, along the plain of New Road, ploughing up gardens and submerging kitchens (to nearly two feet depth in one kitchen). Tavistock: Gardens adjacent to the River Tavy completely inundated, lower portions of buildings adjoining river covered in water. Parkwood Road and Newtake were transformed into a river bed. The water extended as far as the railway embankment. Mount Tavy Road was flooded. Gardens at back of Mt Tavy Rd covered in three feet of water. Pearce's moulding shops inundated. Dolvin Road submerged (waist high in one house). Lower rooms of houses near Vigo Bridge 2-3 feet deep, Messrs Smith & Son's workshop completely under water. Flood did not reach the gardens of Westbridge Cottages. Lower portions of houses on south side of Duke Street underwater. The railway line opposite Parkwood House was underwater.

Exeter: Thunderstorm for half an hour; gutters and sinks were choked; Fore Street Hill was a watercourse. The water rose to within a few inches of doorways. The river was not much affected.

Ide: three houses set alight by lightning.

Tavistock: The River Tavy rose from 10 to 12 feet in a very short time. A large extent of land and many houses in the town were flooded.

[Flooding also occurred in the Midlands and northern England]

Localised storm with Little Silver ¾ mile distant 1.97" and Torrington 2 miles west 1.00"

South Molton: Thunderstorm said to be one of the most severe in 30 years. Hailstones as large as marbles. Up to an hour the streets were like a stream. Barrels in Barnstable Street were carried off down South Street. In the middle of South Street the water rose 2 to 3 feet high and flooded adjacent houses. The hail did damage to glass and garden produce. On some farms 3 to 4 miles away haymaking continued without interruption. A bullock was killed at North Molton

Torrington: The storm continued for 2 hours. The storm extended in a SE direction and Healand, St Giles, Little Torrington and Beaford were affected causing many smaller streams to rise considerably. The Torridge was also bank high.

**Tavistock Gazette** 

Western times 16 Jul

17 Jul 1880 Stevenstone 3.05" in 3 BR hours
N Devon Journal

Western times 20

22 Jul

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22 Jul 1880 BR	Taunton Hovelands 1.41" in 1 hour Gillingham 1.15" in 1 hr
5 Oct 1880	Babbacombe 2.44" Ashburton Druid 1.83"
BR/CBHE	Polapit Tamar 2.11" Holsworthy 2.41"Zeal
Royal Cornwall	Monachorum 2.31"
Gazette	Bodmin 2.45" (2" in 5 hrs)
Oct 1880	South Molton 2.40" (most in 2 hrs) Bideford 1.95"
Henderson and	Glenthorne Lynmouth
Coates(1928)	3.22"
	Truro 3.00"
	Bodmin For St 2.67"
5 Jul 1881 R Cornwall Gaz 8 Jul	
21 Oct 1881	Teighmouth 2.06"
BR/CBHE	

South Molton: Storm said to be not equalled since July 1 1851. Rain was accompanied by large pieces of ice. which choked up the drains so that many houses were flooded. The ice was very destructive of conservatories and many thousands of panes of glass were broken and fowls killed in the unusual downfall. The storms did not extend more than a mile east and west of the town.

[Not entered to EXCEL file]

**(Exe)** Rainfall observer at Exford noted "Twice in October a fall of more than 2.30 in. in 24 hours was registered. On the latter of those occasions the river Exe rose to a greater height than had been known for at least 12 years."

(Fal/Kenwyn) "Eight inches (103mm) of rain fell during the 4th and 5th of October 1880; this was 'the greatest rainfall within human recollection'. Many houses in the city [Truro, River Kenwyn] were flooded'. Much of the flooding may have been due to surface drainage problems. A later edition of the newspaper (15/11/1894) says that 3.0 (76mm) inches fell in 24 hours."

(Inny) Observer at Altarnun (Vicarage) noted: "damaging floods about 5th and 6th; bridges washed away" [Inny headwater].

**(Fowey)** Palmers Bridge the infant stream is crossed by the highway from Launceston to Bodmin. This bridge once had 5 clapper openings, but a flood destroyed it on 4th October, 1880, and it has been rebuilt. "

A thunderstorm passed over much of the country most severely in Lancashire causing several deaths from lightning. In Cornwall it lasted for an hour and a half. In Callington the flood water entered shops and houses. Descriptions form various towns round Cornwall are mainly about the severity of the lightning. Sheep were killed and houses struck by lightning.

**(Exe)** "A waterspout burst, or at any rate an exceptional fall of water occurred, on the high ground (806 ft above sea level) known as Little Haldon, about 3 miles W. of Dawlish, and about the same distance N.W. of Teignmouth, Devonshire. The largest amount of rain actually measured was 2.06 in, at Lower Reservoir, Teignmouth ... and about 1.75 in. was measured at most stations in the neighbourhood. Very much more must have fallen on the hill, as the following extracts from the careful report prepared for the Meteorological Magazine by Mr G.W. Ormerod sufficiently prove:

'Lidwell Farm, distant, about two miles and a half from Teignmouth, and about the same distance from Dawlish, is situated on the highest level ground at the end of a deep narrow valley to the west of Dawlish, where it nestles in a nook at the foot of the abrupt hill-sides of Little Haldon. A small brook, commencing near the ruins of "Lidwell Chapel" runs to the west of the farm-house, and falls, just above the farm-yard, nearly at right angles into another brook, which, also coming from Little Haldon, passes in nearly a direct line through the farm-yard. Sheds and cart-houses stand on the right of the brook, and the house and the more important farm-buildings on the left. On the morning of Friday, October 21st, the fall of rain was moderate, until about 8 o'clock a.m., when a labourer, standing on a raised terrace that overlooked the farm-yard, saw it filled with water in the course of a few minutes. The pigs below him were saved with difficulty, and such was the case with a cow and a calf; a cart and horse ready to start were nearly washed away, but were saved by the farmer, who went through water that reached above his waist, and he is five feet eight inches in height. The only loss of life was of four fowls and one duck. Earth, sand, and stones were washed down in considerable quantity, and coloured marks on a cart-shed to the right of the brook show that the flood had risen about five feet above the ordinary height of the stream. The mass of water that caused this damage appears to have fallen suddenly on the upper part of the hill, and on the hill-sides to the west of Lidwell Farm: the hill-sides to the east and south are not injured. A neighbouring farmer in the same valley saw the water rolling down the hill-side, and rode home to prevent his farm being damaged by the flood. Smallcombe Farm, in the next valley to the north of Lidwell, stands near a brook that joins, a short distance lower down, the brook that runs by Lidwell. This farm-house is also at the foot of the hill-side; the water rushed down upon it from Little Haldon. Some of the fields were much cut up, and the flood got into the house, bringing stones, gravel, and mud in such quantities that the lowest floor was made uninhabitable, and the household had to remove upstairs. The road to Kingsteignton is, I am informed, greatly damaged, being torn up to the depth of 18 inches, and banks of stone, gravel, and rubbish deposited. Similar damage has taken place on the road descending to Ideford; the rush of water has made a hollow, about three feet deep, along the centre of parts of the road from Ideford to Luton and the foot-bridge at that place has been washed away.'

A violent storm visited the greater part of England affected Barnstable. On 27 the storm culminated in a thunderstorm with hail and rain. The description is mainly of the effects of the strong winds on shipping.

A gale with heavy rain affected many areas of the SW. The Clyst valley was like a lake with all meadows covered. The rail line between Mary Tavy and Lydford was covered.

Exeter: Prolonged rainfall with occasional hailstorms and thunder with a furious gale. Exe was again in high flood. In the neighbourhood of Tiverton and Cullompton, large areas of land are under water.

26/27 Nov 1881 N Devon Journal 1 Dec Western Times 28 Nov 19 Dec 1881 Western Times

23 Dec 15/16 Oct 1882 BR	Paignton 2.25" (most 08.00 to 09.00 on 16 <sup>th</sup> Crewkerne 2.69" (1" in 2 hrs)	[Flooding was reported in various other parts of England] [Not entered to EXCEL file]
24 Oct 1882 BR	Beaminster 1.95" Bincombe Ho 1.56	Observer reports 'town flooded' - Beaminster Note Bath observer reports highest flood for more than 40 years.
5	20011100111001100	Widespread rainstorm but with no report of thunder did serous damage in the southwest and south. Extensive
Yorkshire gaz. 28 Oct.		flooding of streets was reported in Tiverton by the river Exe. The upper and lower parts of the town of Trowbridge were divided by the river overflowing.
Ex & Ply Gaz 27 Oct		Low lying fields between Cowley and Exwick were under water up to 4 feet. Okehampton road beyond Mortimers brewery was flooded and passable only to high wheeled vehicles. All along the Quay was under
		water and reached the ferryhouse. Gardens were swamped near Exe bridge, the water reaching the arches. The Culm Valley line was flooded in parts. There was extensive flooding of streets in Tiverton by overflowing of the River Exe.
		A thunderstorm occurred over Axminster with serious flooding along the River Axe. Cattle were washed away. The rail bridge over the River Coly was damaged and a large bridge in Colyton was also much damaged. Houses in Ottery were flooded from the River Otter. Flooding also occurred at Sidmouth.
14 (?) Feb 1883 CBHE/Ingham, William (1897)	Exeter 1.84"	(Teign trib) "The maximum recorded flood discharge from the Trenchford area (961 acres) was on February 14th, 1883, when it reached 52 cubic feet per second per 1000 acres" [Not enetered to EXCEL file]
(2007)		Very wet January was followed by a persistent heavy rain which caused widespread flooding. In Exeter St
Ex & Ply Gaz 3 Feb 26 Jan 1884 Ex & Ply Gaz 28		Thomas has escaped. At Bideford the rain was accompanied by thunder. The main impact was on shipping. Prolonged rainfall with gale which caused the most damage. [not entered to EXCEL file]
Jan		[not entered to excel me]
3 Mar 1884	E. Budleigh 1.26" Crewkerne 2.05"	(Exe) Rf observer reported high flood in the River Otter with roads in the valley impassable
British Rainfall	Wincanton 1.20"	
27 Jun 1884 BR		<b>(Exe)</b> Rainfall observer at Tiverton (Ivy Place) noted, reviewing the year,: " Only twice did the daily fall exceed an inch - viz, on March 3rd, and June 27th - and on both occasions the fall occurred in the night, and on the

9 Sep 1885	Launceston 2.41"
	Torrington 2.61"

British Rainfall Bodmin 3.10" heaviest

ever

Western Weekly Langtree 2.82"

3 Sep 1886 Ex & Ply Gaz 10 Sep 7 Dec 1886

News

Ex & Ply Gaz 9 Dec

26 Dec 1886

**British Rainfall** 

following morning the Exe had risen so rapidly that the lower parts of Tiveron were flooded, the main sewers and drains being choked and unable to carry off the superabundant flow of water."

**(Torridge)** Widespread rainfall in the south and southwest (where generally >2"). Winsford Observer notes in the evening of the  $10^{th}$  and forenoon of  $11^{th}$  3.31" fell; the River Torridge was like a sea. Note this was later than the other observations.

(Camel) Bodmin (Fore Street) 3.10 in. 3.13 inches fell in 12 hours. The River Camel (near Bodmin) rose higher than for many years, overflowing both banks. Farmland was flooded. Mrs Lobb of Nanstallon had much corn carried off to the sea.

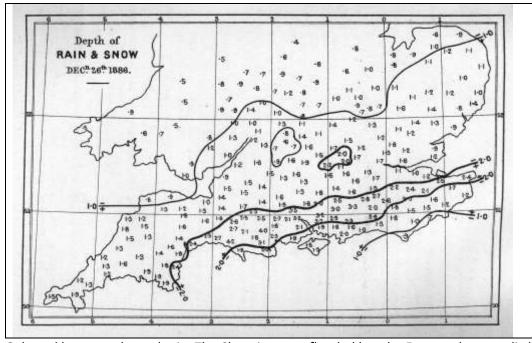
Barnstaple. Heavy rain such that streets were flooded. Dead birds were found on North Walk, having been washed out of the trees.

Thunderstorms in Whimple (where a horse was killed by lightning), South Molton and Crediton but no flooding reported. [Not entered to EXCEL file]

Prolonged rainfall and gale but with embedded thunderstorms and hail. Damage was reported to houses and shipping from the gale. [Not entered to EXCEL file]

[The E&P gives minimum baro readings from 1817]

**(Exe)** Widespread snow in the south but mainly rain in the SW with the heaviest belt extending from Tor Bay to Margate with totals up to 4.00". Map below. [Not entered to EXCEL file]



31 Oct 1887
Ex & Ply Gaz.2
Nov
6 Jul 1888
R Cornwall Gaz 12
Jul
N Devon Journal

12 Jul

Crediton – 'The oldest inhabitant cannot remember a more disastrous thunderstorm'

Gale and heavy prolonged rain. The Clyst river was flooded but the Exe rose but very little. Shipping losses were reported and coastal flooding. [Not entered to EXCEL file]

Thunderstorms widespread. In Devon the village of Shaldon near Teignmouth where lightning knocked down the tower of a school causing panic among the pupils. Parts of the village were flooded and damage done to crops and gardens.

Torquay: the storm was accompanied by very large hailstones and the lower part of the town was flooded. A rush of water occurred in Upton valley and at Avenue Road Torre. A cone like waterspout was observed over Warberry Hill. Torre station, Avenue Road and Upton valley were flooded though Torbay and Brixham and Cockington were unaffected. The rain at Torquay was very localised and on the road to Paignton there was no rain. At Aller vale the hailstones were an inch and a half in circumference. The flood from Milber down rushed over turnip fields and flooded the pottery works up to the kiln fires. Great damage was done to cottages at Coffinswell. At St Mary Church much glass was broken by hailstones and the water ran through houses.

Western Times 10 Jul Crediton: Hail and rain. Streets and houses were flooded. A strong flood came from George Hill and also from Park Hill, finding its way down High Street and behind Kiddecott to the Iwere end of the Green where the sand and mud acted as a barrier flooding houses to some feet. The schoolroom of the Bible Christians was flooded. The stream of water was big in High Street near the Green and got worse as it proceeded down. A large stream came down Bell Court and another from Park court. Adam's tanyard had water flowing down from the Peoples Park. Bullers Arms Coffee tavern was flooded to a foot depth. The water coming down Searle Street was joined by that coming down High Street and burst through the window of the Public Rooms. The water ran down Union Inn Hill, Parliament Street, North Street and Park Street causing flooding of houses at the bottom. At Bladderstone several people had to take shelter in upper rooms. There was a big flood in the Exeter road near the station.

Crediton: Hailstones accompanied rain. The damage done to cottages is considerable and to land in the neighbourhood immense. The flood came from George hill and Park Hill, down the High St and behind Kiddicott. At the lower end of the Green it went down Cock Well carrying a large amount of mud and sand which choked the drains and acted as a barrier. Doors were burst open and furniture floated. Water running down Searle Street was joined by that from High Street burst the window of the Public Rooms.

The debris in gratings accounts for long stretches of deep water in the town, notably in the middle of the high Street, Searle St, Kiddicott, North St, East St, Charlotte St and at the junction of Station Road and Exeter Road. At Chapple Downs the farmer had his swedes and mangolds carried away and also at West Sandford where the water was 6 feet deep in the stables. Several cottages were flooded at Westwood.

Uffcombe: More than one storm occurred in the week causing much damage to land and crops with lightning damage to trees.

Honiton: The river Gissage which runs through the western portions of the town suddenly rose to a tremendous height. Within a few minutes a large number of houses were completely inundated and even in High St and King St the water was several feet deep. The Iron Foundry and adjacent houses were flooded. The properties below the town as far as Stoney bridge where the Gissage joins the Otter also suffered severely. Combehayes Farm was flood to great depth. The Otter was much swollen with the water running over the bridges.

Newton: The lower part of the town was flooded.

Holsworthy: thunderstorm for one hour. The River Deer (Tamar) rose over its banks and flooded Lower Prewin Farm and washed away a hedge above Vineyard Gardens.

31 Jul/1 Aug 1888 R Cornwall Gaz 2 Aug	Thunderstorms with rain lasting 4 hours.	31 <sup>st</sup> In Penzance there was heavy rain. The streets for a time resembled turbulent rivers and a number of lowlying premises were flooded. A thunderstorm was also reported at Lostwithiel.
Western Times 3 Aug		1st Exeter: Storm started with hailstones as large as peas for 5 minutes then rain for several hours. St Thomas district was flooded worse than for several years. Okehampton St and Cowick St were like rivers carrying much debris but Alphington St escaped. The surface water was 3 feet deep in places. The only serious flooding of houses was the dairyman's house near the entrance to St Thomas Workhouse. Animal carcases were observed floating down the Exe.  Crediton: Another thunderstorm (see above) The Yeo and Creedy rose rapidly and were almost level with the
12 Oct 1888	E Budleigh 1.72"	banks at Dunscombe – but no urban flooding was reported. Said by the observer to cause the highest flood in the river Otter since 1851 [No added to EXCEL file]
British Rainfall 6 May 1889 Western times 8 May 25 May 1890 BR	Tiverton (Broomhill) 5.20" Tiverton (2) 4.85" Axminster 2.14"  'The storm lasted an hour	Thunderstorms Exmouth: Whitcombe church struck by lightning Budleigh Salterton: Some houses which had never been affected before were flooded (Exe) Thunderstorms in Dorset noted at Lyme Regis. Rainfall observer at Tiverton (Broomhill) noted, "Rain commenced at 2.15 p.m. and was followed by severe hail for 2 hours; the heavy rain and lightning lasted until 4.30 p.m., and rain fell at intervals till 10 p.m. Total 5.20 in." Tiverton (St. Peter's Street observer added "Between 2.15 p.m. and 5.15 p.m. 4.50 in. fell, and .35 in. more up to 9 a.m. on the 26th, making a total for 24 hours of 4.85 in." [see also Met. Mag., June 1890, p65].
Royal Cornwall Gaz 29 May  Western times 27	and a half at full force'  But 'Some villages in the district almost entirely escaped'	A thunderstorm lasting five hours was experienced in north Cornwall and Devon.  Holsworthy: the church spire was struck and damaged. Heavy rain was accompanied by large hailstones. An observer of the River Deer states that the river was low one minute and the next minute the whole valley a qarter of a mile wide was flooded. He saw the wave of water coming down the valley 2 to 3 feet high and two gunshots in width, sweeping all before it. Two bridges were washed away at Hollacombe. Cattle and pigs were washed away but escaped downstream. At Cole's Mill Bridge just below the station, the walls of the bridge were washed down. Residents note the only storm approaching this one was in 1858  Barnstable: A pinnacle of a church at Barnstable was also struck. Houses and shops were flooded in Queen
May		Street. Tiverton: Sudden thunderstorm. All surface drains were immediately blocked and the streets became angry

17 Jul 1890 CBHE/BR Widespread rainfall in South and south Midlands

Woodcock (1890)

**Tavistock Gazette** 

foaming rivers. Cellars were filled and houses and shops flooded. At the rail station it was 2 feet deep on the platforms. Iron fencing was knocked down, trees were uprooted, fowls drowned and garden vegetation swamped. Blocks of granite were carried down Exeter Hill. Chapel St and Elmore Schools were under 4 feet of water. Water flowed across the highway at Lowman Green. The water came not from the River Lowman which was little affected but by the Alsabrook, usually 4 feet across became a mighty torrent. Seats were swept off the station platforms. A short burst of hail broke windows and skylights. White Terrace at the Junction suffered severely. St Peters Church was flooded and water flowed around St pauls in a torrent. In St Andrews Street a man was taken out of his upper window.

The main roads to Cullompton, Uffculme, Bickleigh, and Bampton are completly denuded of their surface with shingle heaped up and gullies in the road. Ballast was washed from the railway. Collipriest suffered and the doors of Collipriest House stables were carried away and hoses stood in several feet of water. Flooding was reported at Brixton, Colne, West Drayton, Windsor, Maidenhead, Reading, Aldershot, Rickmansworth, Barking Bury St Edmonds and Dartmoor.

(Tavy, Dart) Rainfall observer at Tavistock (West Street) noted, "Severe thunderstorm, rain falling for some hours in sheets (2.04 in.); the river rose to a great height and carried away several bridges". Rainfall observer at Tavistock (Public Library) noted, p[17], "Heavy rain 2.00 in., of which at least three-fourths fell between 4 a.m. and 8 a.m. on 17th, causing the river Tavy to rise rapidly, overflowing its banks, and destroying bridges, dams and the Abbey weir, and causing great destruction of property". Page[104] comments "AA general rain prevailed over almost the whole of Southern England; it began in Devon and Cornwall on the 16th, and produced great floods on the river Tavy and other streams running off Dartmoor. It then travelled eastwards, and on the 17th extended to the Norfolk coast ..."

R.Tavy, Tavistock. Rain lasted from 3am for several hours. Mrs Davey's house on Dolvin Road submerged in 4 feet of water. 3 feet of water in the Bedford Post Office. 1 foot of water in houses on the south side of Brook Street. 5 feet of water in Sergeant Cole's apartments, and 3 feet of water in Golden Lion yard.

(Tavy, Walkham) During the night of Wednesday July 16th the rainfall in Tavistock, as measured by Richard Westington, the town librarian, was almost two inches. As day broke on the Thursday morning the intensity of the rain increased, and there was fierce thunder and lightning. At eight o'clock a resident of Mary Tavy....was alarmed by the sound of the river at Tavy Cleave 'roaring along its rocky channel and distinctly heard from miles away'...The village of Peter Tavy took the full force. Levels of water in some of the properties near the river were between four and eight feet....Six children of a family called Darke were rescued from an upstairs window of their home by a team of men, including the two sons of the rector, who had swum across a flooded meadow to reach them...Near Harford Bridge an eighty-four year old man called Cole took a walk to look at the

Exeter Flying Post 19 Jul

river. When he returned the end of his house had disappeared...The bridge itself was destroyed. Nearby a train on its way to Launceston had to stop when water reached the engine fire.... Parkwood Road and Mount Tavy Road [Tavistock] were the first areas of the town to suffer the tidal waves that roared mercilessly through the Tavy valley on that Thursday morning....At the Tavy Foundry in Mount Tavy Road a five-ton boiler was moved some distance and forty eight feet of an eighteen-inch thick wall was carried away...Next door [to 52 Vigo Bridge Road] ...there was four feet of water in the basement....In the same area was the Golden Lion, the proprietor of which found some of his poultry floating on some three feet of water in the yard....At Number 44 Thomas Truscott...had lost twenty feet of wall destroyed and a large elder tree uprooted.....Paull's Buildings, an area with a high density of population and a large concentration of old people, was badly flooded...... The flood-water that swept through so many riverside houses had a sludgy, oily texture. It must have been heartbreaking for Mrs Rebecca Davy to have four feet of the stuff in the ground floor of her Dolvin Road house....Near Abbey Bridge the post office was flooded, but the [stone] bridge withstood the battering...Beyond Abbey Bridge the weir [for Tavistock Canal, built 1804, was destroyed, some of the huge granite blocks being carried hundreds of yards down river...Beyond this the Meadows were flooded, leaving, after the recession, trout-filled pools....The Anderton road was under some feet of water. Meanwhile,...Horrabridge was suffering in a similar way from the attention of the Walkham..... "

EFP has 3 columns of description which partly repeats the above. Rain started at 5.00 and continued for almost 3 hours. By 8.00 streets of Tavistock were under several feet of water. Merivale Bridge, Harford Bridge and Peter Tavy Clam Bridge were swept away. Part of Vigo Bridge is broken down; in two adjoining cottages the water reached the ceiling of the lower floor. Abbey Bridge Weir was totally demolished. The oldest inhabitants declare that never before has a storm burst with so remarkable rapidity. By 9.00 scores of houses were flooded to several feet. Tavy foundry was deeply flooded. Mount Tavy road was impassable with water 3 feet deep. Shops in Brook street lost much produce. Dilvin Road was covered to several feet. The water reached Guildhall Square and entered the police station where the water reached 7 feet. One observer reports: 'I heard a tremendous noise as if there was something rolling along some distance away and it came nearer and nearer and on looking out of the window I saw the bridge give way and the water come rushing along as in a great sheet. I closed the front door thinking to keep the flood out but the force of water unhinged it. I then rushed upstairs. From the time I heard the noise of rushing water to the time I went upstairs was only five minutes during which 7 feet of water had poured into the kitchen.

Bovey Tracy: The river at Bovey was much swollen.

The Exe and the Lowman rose above their usual level but did not overflow.

9 Aug 1890 R Cornwall Gaz 14 Aug 3 July 1891 Western Times 7

Jul

12 Jul 1892 Western Times 14

Jul

BR

27 Aug 1892 Widespread rainfall

generally 2 to 3" often greatest in record

extending from Wilts to

Ashburton (Druid) 0.90" in

Thunderstorm at Crediton with heavy rain for 2

beyond Plymouth

hours

15 May 1893

**British Rainfall** 

25 mins

Western Times 16 May

Western Morning News 16 May

Generally the rain was greatly welcomed after the long drought.

Crediton: Lower parts of the streets were flooded with a rush of water down Park Lane and Landscore. The Public Rooms were again flooded to a considerable depth

Severe thunderstorm passed over Cornwall. A horse and cattle were killed near Truro and elsewhere. Thoroughfares were flooded in the lower part of Redruth. The river that flows through the Kennel valley was swollen and much corn is laid flat.

Torquay: Thunderstorm The rain poured down in a continual sheet and the main streets of the town though splendidly drained were converted into surging torrents. The stream from Ellacombe Green flowed down market St. At the junction with Union St the stream was joined by that which came down St Marychurch Road and made its way into shops and houses adjacent to the Town Hall.

Torrington: Thunderstorm In a very short time the streets were flooded. It is many years since we have had such a severe storm.

[Not added to EXCEL file]

The thunderstorm was again said to follow a severe drought and was welcomed.

Ashburton: The storm lasted half an hour and houses were flooded.

Bow: the street was converted into a rivulet. Plants were washed out of sloping gardens and many domiciles were flooded.

Crediton: Thunderstorm with hail and rain; the water came down over the hills carrying everything with it; houses and shops on the higher side of High St were quickly flooded. Kiddicott and Cottwell were flooded with water and mud several feet deep. Parliament Street was also flooded and parts of High St were also flooded. Horse and Jockey was deluged with sediment; Old Sheaf Inn the water was more than 5 feet deep in the cellar and in the kitchen it reached as high as the clock. Houses in North St had several feet of water in them. The cellar at Crediton Inn was full. In Park Street where there are mostly cottages, considerable damage was done; in one case a cob wall fell down and in some houses the mud was 2 feet deep. The water was several feet deep at Westwood.Crops and soil were washed off and gullies are 2 feet deep and more than that wide. Water in Gimblett's (shoe?) factory was several feet deep

South Molton: A pony was killed by lightning. Tiverton: A house was damaged by lightning.

Princeton: A heavy storm of rain and hail occurred with hail as big as marbles. The rain was welcome as it was the first after the long drought from 1 March.

Launceston: Rain and hail occurred so that drains were blocked and several houses were flooded.

South Petherwyn: Hail as large as pigeon's eggs occurred and caused damage to the post office, strpped leaves off trees and killed 100 chickens.

West of Chagford much damage was done to crops with soil and crops washed off the fields and hail killed young poultry. The following day the hail remained 3 feet deep.

14 Jun 1893 BR	Bishops Canning 1.35" in 1 hr (1" in 30 mins Devizes 0.99" in 20 mins	Bridgenorth – flooding of streets and basements [outside the area – not added to Excel file]
4 Jul 1893		Widespread thunderstorms were reported after a period of drought. Only a few cases of flooding were noted.
Western Times		Generally considered good for agriculture.
5 Jul		Exmouth: One or two streets were completely flooded for a short time
		Crediton: Rainfall lasted 5 hours
11 Jul 1893	Bideford (Horwood) 2.57"	[No added to EXCEL file]
BR	(2.42" in 5 hrs)	
	Devizes 0.91 in 1 hr	
24/25 Jul 1893	Long Ashton	[Not added to EXCEL file]
BR	2.89"Ashburton (Druid)	
	2.65" of which 1.65" in 5	
12 Dec 1902	hrs	Cala and thunderstorms in various parts of Couthwest. Domaso was mostly through the wind and E ware
12 Dec 1893 Western Times 15		Gale and thunderstorms in various parts of Southwest. Damage was mostly through the wind and 5 were drowned when their boat capsized.
Dec		Crediton: the Rivers Yeo and Creedy were over their banks but the rain was much needed.
		Tiverton: Flooding occurred at several places. The Lowman overflowed its banks and flowed into the Prince
		Regent Inn and nearby houses. The Lowman was higher than it has been for several years although the bed had
		been lowered to alleviate flooding. Part of West Exe was flooded from the River Exe.
4 Jun 1894	Thunderstorm in Devon	Animals were killed at Helston by lightning. Cellars in the lower parts of St Ives were flooded. Houses were
Royal Cornwall	and Cornwall.	flooded at Marazion.
Gaz 7 Jun		Bude: the storm commenced at midnight and continued until daylight. (0.6 inches registered).
		Redruth: roads flooded.

N Devon Journal 7 Jun 25 Aug 1894 BR Royal Cornwall gaz. 30 Aug	Langton Herring 2.51" in 8 hrs. Thunderstorms: at Porthleven and Hayley lasting for 2 ½ hours.	Widespread thunderstorms S Petherton Bridge 2.32 in 1 D (3.49" in 2 D) 'Water rose 1½ inches higher in the Lodge than for the last 30 years (Somerset) Floods reported in several parts of Cornwall, a horse killed by lightning at Plymouth, cattle at Falmouth, Helston, Redruth and Honiton. Yeo and Frome in flood. At Looe a horse and mule were killed by lightning. Some houses were flooded by the choking of drains. The rains ploughed deep trenches in the road. Thunderstorms occurred at Fowey St Colomb, Lostwithiel where no damage was reported At Padstow and Redruth a few houses were flooded. Cattle were killed at Penryn.
Western Times 27		
Aug		Dart is in high flood. At Warland houses were flooded to a depth of about 1 foot.  River Culm is in flood  Crediton: All the rivers overflowed their banks and the streets appeared like a river
11/13 Nov 1894 Brierley (1964)	The fine weather at the beginning of October broke with a storm on 20	Thunderstorms were also reported at Tiverton, Uffculme, Honiton, Exmouth, and Honiton (Exe) During the early hours of Monday 13 November following a prolonged storm of rain and hail, the Exe rose within 9 inches of the October 1960 flood and Cowick St Alphington St Exe St Tudor St and Frog St were all mentioned as being flooded to various depths
CBHE/BR	Oct with thunder lightning and heavy rain. Since then rain has been registered every day with 12.33 in 2 weeks and 6.73 in one week at the royal institution (Truro?). No mention of thunder on 11-	(Dart) Much damage in S. Devon. A boy and 30 sheep drowned, four bridges washed away at Lanwet, also the Wesleyan Chapel at Ruthern"  (Tavy) Rainfall observer at Tavistock (Rose Villa) noted in reviewing the month: "Warm, damp, and very wet; rain was measured daily till the 16th amounting to 9.17 in. In the three days ending 9 a.m. on the 14th 5.49 in. fell A flood three feet higher than for at least 50 years occurred in the river Tamar about midnight on the 12th" November Rainfall observer at Empacombe, Devonport, noted "Exceptionally rainy. On 7th 1.08 in. fell; on 11th 1.90 in., and on 13th 1.25 in. These rains caused very disastrous floods. In the 26 days ending on 14th, 12.00 in. of rain fell".
Royal Cornwall Gazette 15 Nov 1894 and 22 Nov	13 Nov. Rain was accompanied by a gale of wind which varied from virtually every point of the compass.	Launceston (Cornwall): The driver of a waggon with three horses attempted to cross the Eary, they were all washed away and one horse was drowned."  (Fal/Kenwyn) 'During the week ending' 13th November 1894 ' 6.73 inches (171mm) fell' [at Truro, River Kenwyn]. Between 9.00 am on the 11th and 9.00 on the 12th 'the fall amounted to 2.36 inches' (60mm). Stressing the importance of wet antecedent conditions in causing floods on this catchment the article states

11 Nov
Kingsbridge 2.67"
Salcombe 2.70"
Paignton 2.55
Sheepstor 3.11"
Penzance St Clare 2.56"
St ives 2.93"
St Just 3.36"
Scilly 2.62"

Bere Ferrers 2.30 in 18 hr
Liskeard 2.92 in 24 hr (2
raindays)

Ashburton Druid 6.42" in 2 days

Crewkerne 4.92" in 3 days

Various other totals for 3 and 4 days

RCG 22 Nov gives details of preceding rainfall and wind changes at St ives. that; the October 1880 storm 'had not such disastrous effects as the present, as it was not preceded by so much rain'. By the 12th 'the streams had risen to such an extent that the houses at the east side of St Georges Road were inundated, the shops in River Street ... were almost knee deep through the stream having become choked and forced its way through the floors of houses'. It is not clear whether choked means with debris or just too much water. At Moresk road people were rescued from their houses by boat. At Grampound the Fal tributary overflowed its banks and people on the western side of the bridge had to be taken from their houses in carts.

November Rainfall observer at Penzance (Trevean) noted: "Rain 9.61 in., probably the heaviest in the century and causing such floods as were a new experience in West Cornwall." Rainfall observer at Redruth (Trewergie) noted "In the first 14 days, 8.25 in. of rain fell, and considerable damage was done by floods in the valleys." Scilly Isles: From 3 p.m., 11th, to 3 p.m., 12th, 4.03 in. of rain fell"

"Newlyn (Cornwall) The water in some of the houses was 4 ft., and in one 5 ft. 6 in. deep" Street An Nowan was converted into a river with flow so high boats could not proceed.

St Dennis: China clay Works drowned and Mineral railway stopped by collapse of the banks.

Perranport: The valley from Perranport to Bolingley was a complete lake, Bolingley Mill was swamped as were many houses.

St Colomb: River overflowed and houses flooded.

Redruth: two children had to be resuced out of St Agnes vicarage.

Wadebridge: St Breok church was flooded to the top of the pews. Polmoria House and the Bible Christian Chapel were flooded.

Mevagissey: The town was under water almost.

"St Just (Cornwall): Tremendous rain on the night of the 11th, and in the forenoon of the 12th. Houses flooded, bridges washed away, and the Levant mine flooded.

"Helston (Cornwall): serious flooding in many streets, the ground floors filled with water; the gas works inundated and the supply stopped".

"Truro (Cornwall): Scores of houses flooded, anfd boats used to remove residents."

"Penzance: Highest flood at 11 a.m., after 15 hours of continued rain. Very many houses flooded, and numerous small buildings carried away." Penzance daily rainfall 2.33 inches.

"Looe (Cornwall): A passenger train was stopped by a gate which had floated onto the line; this was removed, and the train proceeded, but in a few minutes the flood put out the engine fire."

(Camel/West Cornwall): " .. A culvert burst under the Cornwall railway near St Erth (R. Hayle), and as the line was under water the driver of a goods train could not see the broken track, and his train ran into it and was

upset."

"Bodmin (Cornwall): Train service with Wadebridge stopped; an omnibus with three horses was started to carry the passengers, but the road was so flooded that the horses got into a field, and , as well as the passengers, had to be removed by a boat, the omnibus being left behind."

"St Agnes (Cornwall): Two feet of water in the streets."

"St Breoke [sic] Church, Wadebridge (Cornwall): Flooded to the level of the top of the pews" [lower R. Camel tributary]

"Bude ( Cornwall): The school was flooded up to the level of the desks, and there was three feet of water in the Post Office..."

"St Ives (Cornwall): ...there is said to have been 6 ft. of water in Tregenna Place, and 9 ft. in the Stennack....Dr Nicholls reports a [rain]fall of 2.93 in., ...the full explanation of the disaster [graphically shown in a frontispiece] seems to be that the rainfall of the Rosewarne and Zennor collected in the reservoir for the old Consols mine, and that its bank gave way, the culvert below became obstructed by refuse placed on the bank of the stream, which, having been thus choked, was diverted on to the main road, down which it soon tore a gorge 5 ft. deep, and nearly as many in width, and when it reached the town, gas and water pipes were exposed and broken...." A perfect torrent broke away from half way up the Stennack close by Umbula Place and poured with a loud roar down the main streets which were in a moment flooded. At the Western hotel divide a portion went down Gabriel Street and the other down Chapel Street and into High Street to the sea. Huge rocks were carried to the lower streets. The water was perhaps deepest in Greencourt. All along the street occupants had to be moved by boats. In Chapel Street water was up to the higher windows. The roads are cut to a depth of four or five feet in places. At the Stennack houses were flooded half way up the lower rooms and one house had the front washed away leaving the front rooms hanging. The torrent came down Towednack Road and throughSt Ives Consols Mine where several bridges have been washed away. The photo of floding in St Ives is from St Ives Trust Archive Studies Centre and printed in Western Morning News Nov 16 2002.





Newlyn: from wWestern Morning News 30 Nov 1996 showing Rev Carah helping flood victims.

Padstow: Worst remembered flood even by 90 year olds. An old mill leat had burst open and water ran down Church Lane, Market Street and the Strand into the harbour. The old Manor Mill opposite Porthcuthan Bay was completely washed away. Bridges at Trenairn and Harlyn Bay and Trevone Bay were washed away.

Rumford St Ervan: The Wesleyan chapel was flooded and a portion of Rumford bridge carried away.

Ponsanooth: The Kennal valley from Stithians to Ponsanooth was completely under water and low lying houses flooded. At perranwharf the Turnpike Road was covered to a sufficient depth that a large boat could be used. Huge boulders were tossed along with thunderous sounds.

Carnon valley: Bissoe bridge, a historic structure, was washed away but the flood effect was made worse by the accumulation of mine debris which reduced the bridge opening.

St Austell river: Twenty years ago the river broke out in a similar way but the damage was trifling compared to the present. Springs burst out in the most extraordinary places, at high Cross Point, at Bullring, the White hart hotel etc. At three miles out of town the cemented floor of a cottage was heaved up in the centre and water came out up to a foot in depth.

Roche Road to St Austell flooded and houses and shops flooded.

Crowlas between Hayle and Penzance was flooded with houses flooded to 3 or 4 feet with water entering from front and back doors. At the PO the water reached the bottom of the safe where stamps are kept. At Ninnie's General Dealer the water reached the fourth stair.

Serious landslips occurred along the coast and int claypits.

(Okement) Okehampton: Gas Works flooded

Bissick Ladock: Flooding of houses worse than the oldest inhabitant can remember. Turnpike road flooded to 18 inches for more than a mile.

Western Times 14 Nov

Launceston Weekly News 17 Nov Clark (2005)

Exeter: No flood since 1866 so high in Exeter. Large areas of St Thomas were flooded; walls were laid low and
gardens washed out. The problems there are not solely from the river but from local darainage which can find
no outlet. At Buller's Bridge at the Exwick crossing the current touched the level of the roadway but got no
higher, never covering the road.

Very heavy rain fell at Boscastle on Monday and the lower part of the place literally flooded. The ground floors of the Wellington Hotel, coastguard station, and Bridge Mills were covered with water. The bridge at Boscastle was swamped and was impassable for foot passengers for some time.'

17 Apr 1895	Taunton 1.20" in 30 mins
BR	(2.12 in Day)

Great damage to roads and crops and cottages were flooded [Not added to Excel file]

21 Jul 1895 Western times 23 Taunton: Some streets were flooded by a thunderstorm to a depth of 2 feet [Outside area – not added to EXCEL file]

7 Sep 1895 N devon Journal

Jul

12 Sep

Wiveliscombe: Severe thunderstorm. Several horses and cattle killed by lightning.

Western times 7

Tiverton: After a thunderstorm the River Loman rose very rapidly and Prince Regent inn was flooded to 6 inches. Water from Lodge Estate rushed into the railway station, across the platform and on to the metals. Houses were hit by lightning.

Sep 5 Oct 1895 Barnstable Arlington 2.71"

Barnstable Arlington 2.71" [Not added to EXCEL file] Woolacombe 2.52"

Lynmouth (Glenthorne)

2.50"

Tavistock Rose Villa 1.05 in

Observer noted 'causing flood in the valleys'. [Not added to EXCEL file]

10 Nov 1895 Tavistock R BR 5hr 40 min

Brnstable Athanaeum

Barnstable: Several cases of flooding were reported in the low levels where drains had become choked. In the Square a few residences were flooded and also a few cellars.

0.52" in 45 mins

Western Times 9

7 Jun 1896

Jun

BR

2 Aug 1896 Tavistock Rose Villa 0.69" [Not a

[Not added to EXCEL file]

BR	in 31 mins Liskeard 0.40" in 30 mins	
28 Apr 1897	Liskeard 0.40 iii 30 iiiiiis	Crediton area: Thunderstorm for 1 hour and a half.
Ex & Ply Gaz 30		Bow: Rain fell at the rate of 1 inch an hour and communication between the railway station and the town was
Apr		stopped.
7 Jul 1897		Hatherleigh: Very large hailstones fell. A farmer was killed by lightning. Severe thunderstorm at Stratton. The roads were seriously damaged and houses in the lower part of the town
Cornishman 8 Jul		flooded to some feet. The children at the national school had to be taken away in carriages. A stone wall 40
		feet long was washed down at Townsend.
		2 Horses were killed by lightning at St Kew.
20 1.1. 1007	Taurana NAMA/ Claudhai ala	At Port Isaac the storm was accompanied by large hailstones (as big as marbles) which damaged the fruit crop.
20 July 1897 CBHE/BR	Torquay WW Chudleigh 3.02" of which 2.75" in 70	(Teign tributary Kate Brook) Torquay – 'the flood caused much damage' Bovey Tracey. Streets flooded by the same storm as hit Chudleigh, Teignmouth, Dawlish and other areas on the
CDITE/ DIX	mins	same day. CHUDLEIGH. Station Road and Dolphin Square flooded. Flood reached the lower windowsills of
Weekly Express	Polapit Tamar 0.84" in 45	Harris' Grocery Shop (now the Thatched Inn). PHOTOGRAPHS IN BOVEY TRACEY HERITAGE CENTRE
Chudleigh	mins; 1.29" in 2h 20 m	Bovey Tracey. Streets flooded by the same storm as hit Chudleigh, Teignmouth, Dawlish and other areas on the
		same day.
		Thunderstorm in many places in Devon and Cornwall. At Truro it lasted more than 2 hours where lowlying
Cornishman		portions of houses and warehouses were flooded. Two bullocks were killed by lightning near Bude.
30 Aug 1897	No rainfall given for Exeter	(Exe) "Very heavy rain at Exeter, causing floods at St. Thomas's"
BR/CBHE		
		Heavy rainfall totals mainly given around Bristol.
		Launceston: two cows killed by lightning
		Launceston: two cows killed by lightning Thunderstorms were also reported at Tavistock, Lostwithiel, Barnstable, Atherington, Simonsbath, Thorverton
28/29 Dec 1897	Buckfastleigh 3.18	Launceston: two cows killed by lightning
СВНЕ	Sheeptor 2.70 & 2.57	Launceston: two cows killed by lightning Thunderstorms were also reported at Tavistock, Lostwithiel, Barnstable, Atherington, Simonsbath, Thorverton (two men killed by lightning) and Ilfracombe. No flooding reported.  (Dart) Rainfall observer at Ashburton Holne (Vicarage) noted: "Rain 1.13 in. on 28th and 3.85 in. on 29th. The only other falls exceeding three inches since 1870 are: 3.61 in. (January 8th, 1874), 3.93 in. (July 14th, 1875),
	Sheeptor 2.70 & 2.57 Dartmoor Deancombe	Launceston: two cows killed by lightning Thunderstorms were also reported at Tavistock, Lostwithiel, Barnstable, Atherington, Simonsbath, Thorverton (two men killed by lightning) and Ilfracombe. No flooding reported.  (Dart) Rainfall observer at Ashburton Holne (Vicarage) noted: "Rain 1.13 in. on 28th and 3.85 in. on 29th. The
СВНЕ	Sheeptor 2.70 & 2.57 Dartmoor Deancombe 2.68	Launceston: two cows killed by lightning Thunderstorms were also reported at Tavistock, Lostwithiel, Barnstable, Atherington, Simonsbath, Thorverton (two men killed by lightning) and Ilfracombe. No flooding reported.  (Dart) Rainfall observer at Ashburton Holne (Vicarage) noted: "Rain 1.13 in. on 28th and 3.85 in. on 29th. The only other falls exceeding three inches since 1870 are: 3.61 in. (January 8th, 1874), 3.93 in. (July 14th, 1875),
СВНЕ	Sheeptor 2.70 & 2.57 Dartmoor Deancombe 2.68 Druid Ho 3.60	Launceston: two cows killed by lightning Thunderstorms were also reported at Tavistock, Lostwithiel, Barnstable, Atherington, Simonsbath, Thorverton (two men killed by lightning) and Ilfracombe. No flooding reported.  (Dart) Rainfall observer at Ashburton Holne (Vicarage) noted: "Rain 1.13 in. on 28th and 3.85 in. on 29th. The only other falls exceeding three inches since 1870 are: 3.61 in. (January 8th, 1874), 3.93 in. (July 14th, 1875),
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2 May 1898 BR	Torquay 2.14 Plymouth 1.13" Polapit Tamar 0.65" in 35 mins	<plymouth>: Thunderstorm with hail the size of marbles which broke many windows. Hail blocked vehicle movement; 0.93" fell in the first 25 mins 0.20 in the succeeding 20 mins. Walls were washed down and low lying houses flooded.  Thunderstom in Plymouth area lasting about an hour. Severe hail occurred over the city blocking up the drains and forming a huge drift at the end of Union street, Flooding Newport and Chapel Streets. The hailstones were as large as marbles. Roof gutters were blocked causing leakage through roofs. Houses and shops were flooded. At a warehouse in Old Town Street the water rose to a height of several feet. Flooding occurred at Millbay Station on the Great Western Line. Millbay station and many business premises were affected by flooding. Devonport: flooding of streets and houses and windows broken by hailstones. The storm water flooded the tunnel between the Devonport dockyard and Keyham factory. Most of the houses in Duck street Cawsand were flooded in some cases to a depth of 7 feet.  North and northeast Cornwall also suffered with flooding of houses in Torpoint and fruit trees stripped of their bloom. Streets and houses were flooded at Calstock. The storms were very local.</plymouth>
24 May 1898 Ex & Ply Gaz 27 May		Crewkerne: Thunderstorm; the streets were flooded and many low lying lands were covered Crediton: Houses and cellars were flooded especially in North St, Church St and Blagdon Place.
11 Jun 1898 Royal Cornwall Gaz 14/16 Jun 6 Aug 1898	Barnstable 'nearly an inch'	Thunderstorm in N Devon: Some low lying houses in Barnstable were flooded. Horses and cattle were killed by lightning.  Bideford: flood water rose over the pavements and one or two houses were flooded.  Combemartin: the rain flooded many houses.  Bideford: houses in low lying parts were flooded.  Crediton: Thunderstorm; various parts of the town were flooded mainly as the result of choked drains.
BR	Kingkerswell 1.62 Ashburton Druid 1.91 Tavistock whitchurch 1.90	Thunderstorms following a period of hot weather and accompanied by hailstones of exceptional size. Severe thunderstorm over Truro Launceston: Cattle killed by lightning.
Royal cornwall Gaz	Bovey Tracey 1.50 Lynmouth 1.50 Dartmoor Deanscombe Fm 2.55	Tavistock: two distinct thunderstorms, horse killed by lightning, streets flooded and water ran through houses Totnes: Houses in the lower part of the town were flooded. Lostwithiel: storm with large hailstones ¾ inch in diameter. Penzance: In a short time rainfall was 1.85 inches and after rain came irregular hailstones that seemed more

25 Aug Ex & Ply Gaz 20 Aug	Sheepstor Red Stone 2.61 Ivybridge 1.00 in 30 mins	like pieces of ice.  St Blazey: Cattle killed by lightning; large hailstones fell.  Callington: the lower part of the town was flooded.  Camelford; Several houses flooded; animals killed.  Moretonhampstead; Man killed by lightning  Thorverton: Two men killed and 12 sheep killed by lightning  Plymouth: Flooding in the lower part of the town especially in Cattledown  Chagford: A man killed by lightning  Ottery: a man killed by lightning
		[Severe thunderstorms also occurred in South Wales and in the Midlands]
15-17 Oct 1898	Torpoint (Anthony house) 3.45"	Three successive days with more than 1" on each day at several stations – but following a drought.  BR gives a description of a mini-tornado near Torquay accompanying the heavy rain on 17 Oct. At Cockington
British Rainfall	Bideford St Helens 2.94" & Gammerton WW 3.35" 3 D totals Kingkerswell 4.89 Druid 4.17 Chudleigh 5.83 Launceston 5.55	for nearly an hour the rain fell in torrents and low-lying parts of the town the streets were covered with water and houses flooded. The rainfall measured nearly 2 inches. The remaining description is the effect of the wind
28 Oct 1898 Royal Cornwall gaz. 3 Nov	Thunderstorm 1.5 inches of rain at Marazion	Several houses inundated at Marazion. Thunderstorms also occurred at St ives and Newlyn West.
20 Jan 1899 BR	Buckfastleigh 3.05" Ashburton Druid 2.78"	[Not entered to EXCEL file]
6 Feb 1899	Ashbuiton Druid 2.76	(Fal/Kenwyn) In the early hours of'6th February 1899 ' a heavy rainstorm burst over Truro and district
Royal Cornwall Gazette 9 Feb 1899		doing damage to property the street grates quickly became choked and water spread into the road and many houses in the lower part of the city were flooded'. This event was clearly dominated by poor surface drainage since 'the water rushed through the pottery yard to the river. The junction of water from Tregollis Road and St Clements Hill filled Trafalgar Square and the Union Hotel and houses in Tregollis Terrace to a depth of 2 to 3 feet. Furniture was floating and floors were covered with mud. Grover terrace was inundated by the overflow of Tregollis Pond.Nine pigs at Bucks Head were drowned.
22 Jul 1899	Kingsteignton 1.30" in 40	Thunderstorms over parts of Devon and Cornwall with many houses flooded at Exeter, Newton and Liskeard.

BR

mins thunderstorm

N Devon Journal 27 Jul

Western Times 25 Jul

5 Aug 1899 R Cornwall Gaz 10 Aug Churches at Exeter and Tintagel were damaged. Cellars of hotels were flooded in North street and High Street. Houses and streets all over the city were more or less flooded

In Liskeard the drains were insufficient to carry the rain and houses in low-lying parts of the town were flooded. The storm lasted just an hour. In Church St South the water poured through shops and rooms leaving a thicksediment of mud. Water rose in houses to 18 inches and at Pond Bridge Hill the water formed a lake three feet deep at the rear of the houses. Gut Lane cottages had water 3 feet deep. Walls were thrown down. Newton Abbot: At the railway station the drains overflowed and the platforms were flooded. Houses and shops near the station were flooded including Courtenay Street and Bank Street.

Teignmouth: Storm lasted 2 hours and the lower parts of the town were flooded especially Station road, Brunswick Street and Teign street where the water came in the front door and out the back.

At St Germans the rain was exceptionally heavy and stones were washed down the roads and created heaps. The Parish Church was flooded with mud in the porch preventing entry.

 $\label{thm:continuous} At \ \text{Callington houses were flooded in Fore Street} \ \text{and some of the lower parts of the town}.$ 

The storm did not extend to North Devon.

Exeter: Houses in lowlying parts of the city and district were deluged, notably at the bottom of Longbrook St, (water ran down from Pensylvania Hill), Paris St and Newton. The flood came on so suddenly that the sewer on Clifton St was unable to take the flow and water ran down both sides, deep enough to row a boat. Animals were killed by lightning or by fright. Inhabitants in Longbrook St have not had anything like this for 27 years when they had water up to their mantelshelves; this time it was about 3 feet high. Water from Heavitree Hill, Paris St, Russel St, Summerland St and Clifton Road drains towards low ground in front of Axminster Inn. The gulleys could not cope and the Inn was flooded to 4 feet. Adjacent houses and shops were flooded. The River Exe did not rise to any considerable degree. A shop opposite Newton Schools was submerged. Cellars in the Golden Lion Inn were flooded to 5 feet. Properties in Sidwell St were flooded.

Crediton: Large hailstones were reported and damage by lightning but no mention of flooding.

Topsham: The rain did damage in more or less every house and shopkeepers have lost much stock.

Alphington: the road between the bridge and the Post Office was covered by a couple of feet of water.

Cullompton: Houses flooded in the lower part of town and the church tower was struck by lightning.

Exminster: Many houses flooded and so quickly that it was impossible to move furniture.

Widespread thunderstorms in Wales and the Southwest but no serious flooding was reported..

At Penzance the thunderstorm was accompanied by large hail that much glass was broken in churches and greenhouses. At St Mary's 150 panes were broken. Hail similarly fell at Newlyn.

A horse was killed at St Keverne.

N Devon Journal

NDJ also reports severe lightning and animals killed but no reference to flooding. 10 Aug

Western times 8

Aug

8 Aug 1899

Western times

15 Aug 1899

Western Times 16

Aug

7 Sep 1899 Western times 8

Sep

30 Dec 1899 Western times 2

Jan

6 Jan 1900

BR Pentille Castle 2.50 15 Feb 1900 Tavistock Whitchurch 2.74" in 15 hr

CBHE/BR

Western times 25 May

12 Jun 1900

Cothelstone Ho 0.96" in 1 hr

Sheepstor Vic. 2.59

struck and animals killed but no flooding was reported.

Exmouth: Exeter Road was impassable

South Molton: this is the Third thunderstorm in about a week. Barnstable Fremlington, A house was set alight by lightning

Newton Poppleford: Storm lasted about 5 hours and was more severe than the storm on 5<sup>th</sup>. Houses in the lower part of the village were flooded. A stream which runs parallel to the village street was so swollen that nearly all the footbridges were carried away.

Thunderstorms in Sidmouth, Honiton and Newton Abbot, Bideford, Exmouth and Wellington. Buildings were

Thunderstorm but rainfall not so heavy in Exeter

Crediton: Storm accompanied by large hailstones. Homes in North St and other places were flooded. About a

mile northwards there was no rain.

Exeter: Storm lasted half an hour and some streets in Exeter and St Thomas were flooded. Okehampton St and

Road were flooded

Gale and heavy rain accompanied by some thunder. The Exe is much swollen and water is just about getting into Okehampton St. The marshes at Exwick were covered.

Tavistock: hailstones as large as marbles

Rivers Creedy and Yeo overflowed their banks from Crediton to Cowley Bridge.

Shipping damage was reported at torquay and elsewhere.

Rain accompanied by southerly gale [Not added to EXCEL file]

(Dart) Rainfall observer at Ashburton (Druid House) noted "rain 2.44 in. Great and very destructive floods."

A farmer at Widecombe lost 212 sheep from a field near Hood bridge and received compensation from a fund.

Thunderstorm [Not added to EXCEL file]

30 Jun 1901 N Devon Journal 4 Jul  Western Times 1 Jul 24 Jul 1901 Western times 25 Jul 25 Jul 1901 Western times 26 Jul	Thunderstorm with heavy rain for 30 minutes	Thunderstorms passed over the west of England. A church at Taunton was damaged. Bude: Lightning destroyed a property but no reports of flooding. Exeter and Ottery St Mary: severe lightning but no flooding reported. Barnstable: Flooding in the lower part of the town. Animals were killed by lightning.  Exeter: rainfall with varying intensity for 5 hours. Lightning damage to buildings Newton Abbot: In the lower part of the town the water entered shops and houses. At the station the water flooded down from the open space between it and the Park; the booking office etc was flooded and water reached the height of the rails between the platforms.  Exmouth: Houses at Exeter Road were flooded. [Joined with 24 Jul in EXCEL file]
27 Jul 1901 Western Times 29 Jul	Thunderstorm	Exeter: the storm was not to be compared with that a week or so ago. Houses at the bottom of Paris Street were flooded.  Exmouth: Sheppard's Row was flooded.  Kingsbridge: Streets at the bottom of the town were flooded in some places 2 feet deep and houses were flooded.  Crediton: Rain was accompanied by hail. Houses were flooded including North Street and Mill Street.  Devonport: A portion of the Corporation dwellings was flooded and many streets were flooded.  Newton Abbot: Lemon and Teign Rivers were swollen. Lightning damage to buildings and trees.
19/20 Jul 1902 BR	Liskeard 2.39 & 2.14	Rainfall from 15.00 on 19 <sup>th</sup> to 10.00 on 20 <sup>th</sup> . [Not added to EXCEL file]
17 Aug 1902 BR Western Times 22 Aug	Honiton 1.65	Widespread thunderstorms in southwest.  Teignmouth: flooding occurred in the low-lying parts of the town (property not mentioned).
6 Sep 1902 BR	St Wenn Vic. 1.70	Two downpours each of 30 minutes. [Not added to EXCEL file]
4 Mar 1903 Cornishman 4 May 1903	Gales with thunderstorm	Marazion: Rain and hail occurred during the day; drains were flooded and several houses had a narrow escape. Redruth St Agnes and Truro were also affected by the storm but little flooding was reported. One animal reported killed and the PO in Truro struck by lightning and damaged. Combe Martin: Several houses flooded

Ex & Ply gaz 8 May		Clawton: River Claw overflowed and children coming from school were endangered. Seeds were unearthed, roads cut up and most of the houses were flooded.  Cullompton: Many houses on flooding land were flooded.  Black Torrington: the principal street through Black Torrington was flooded and Hatherleigh, Sheepwash, Shebbear also suffered the rivers being greatly swollen. Some roads and footbridges were washed away and potatoes washed out of the ground.  Northlew: Rain with large hail; Roads became raging torrents; potatoes were washed out. No rain fell 2 miles away.  Winkleigh: Kings Arms Hotel was flooded.
28 May 1903	Coombe Raleigh 1.28" in 2	Budleigh Salterton: Storm lasted 20 minutes. A house was destroyed by lightning.
BR	hrs	Widespread thunderstorms in E Devon and Dorset bu not reports of flooding.
	Redruth Trewirgie 0.23 in	[Not added to EXCEL file]
Ex & Ply gaz 29	20 mins	
May	Crewkerne 1.13 in 1 hr 30	
	mins	
19 Jun 1903	Plymouth Freedom Field	Observer noted this was a local intense downpour [Not added to EXCEL file]
BR	2.56	
	Plymouth Drakes Resvr	
	2.58	
	Devonport Rowdens Resvr	
	2.60	
12 Jul 1903		Hot days and sultry nights in West Cornwall were followed by a thunderstorm. At Penryn the rush of water tore
Cornishman		up roads and low lying parts of the borough were flooded. Thunder and heavy rainfall also occurred at
19 Jul 1903	Combe Raleigh 1.72 in 2 hr	Falmouth and St Ives but there was no further reference to flooding. Thunderstorms
19 Jul 1905 BR	20 mins	Exeter: Buildings damaged by lightning and many houses inundated by the deluge of rain.
DIX	Helston 0.55" in 25 mins	Topsham: Some low lying houses were flooded; large hail was reported.
N Devon Journal	Ilton Vic. 0.53" in 30 mins	Brixham: The storm lasted 40 minutes and filled the streets to the level of the pavement
23 Jul	iltori vic. 0.33 ili 30 ililis	Cornwall: St Stephens, St Dennis and Roche had severe thunderstorms causing damage to the clayworks. Little
25 Jul		rain fell at St Austell.
		Honiton: Water rushed down New St and High St like a river and 2 cottages and some elsewhere in New St and
Ex & Ply Gaz 20 Jul		2 in West End were flooded. Houses near the bridge over the River Gissage were flooded to several inches.
2. Q 1 1y Guz 20 Jul		2 III West and were nooded. Houses hear the shage over the liver dissage were nooded to several littles.

20 Can 1002	Thundarstarms reported	Nowton Abbat: Partians of the lower part of town were fleeded. A bouse was struck by lightning and damaged
20 Sep 1903 Ex & Ply Gaz 21	Thunderstorms reported in several parts of Devon	Newton Abbot: Portions of the lower part of town were flooded. A house was struck by lightning and damaged.
Sep 25-28 Oct 1903 BR CBHE	Hartland Abbey, N. Devon, "Rain 1.95" Abbotsham 1.55" in 4 hrs Liskeard (Old park) 1.52" in 5 hrs Liskeard (Trevillis) 1.64 in 6 hr	(Tavy) Observer at Polapit Tamar [Launceston] noted for the month: "Gloomy and extraordinarily wet. Much damage was caused on 28th by the highest floods remembered. The rain was by far the greatest in one month for 23 years"  (Fal) Rainfall observer at St Austell (Trevarna) noted "between 9 a.m. and 11.30 a.m. 2 in. of rain fell. Great damage was done by floods and many bridges were washed away."  (Camel) Rainfall observer at Bude noted "The rain, 1.96 in. in a few hours, caused the heaviest flood ever known in at Bude, and the damage to property was estimated at over £1000."  Abbotsham observer noted that damage done to roads in the Bideford area alone was £4000.  Hartland Abbey observer noted heavy floods 'greater than known before'.
Western Times 28	Heavy and prolonged rain	6
Oct 25	on 25 <sup>th</sup> and 27th	Exeter: Flooding in St Thomas; water swept into Okehampton St where sewers were unable to cope, washing down several garden walls in Wooda road. The flood extended to hear the Okehampton Inn and the stables opposite were flooded.  Bude: Crescent, Strand and Falcon Terrace were covered with water with shops and houses flooded to the extent that some were rescued from bedroom windows in boats.  Crediton: Sandford; the lower part of the village was flooded; Mill Lane was like a river. Three houses by the mill leat near Crediton Station were flooded to 18" depth.  Fordton: River Yeo was in flood and at Culver Bridge the roadway was impassable.  Bideford: The bridge at the foot of Fairy Cross Hill in Alphington was broken down. A collar factory and a tannery in the Westcombe Valley were flooded in the former reaching 6 or 7 feet.  Launceston: Valley of Tamar and Kensey were flooded. Many houses in the new Tredyadare Road At St Thomas were flooded and also at Newport.  Plymouth: Houses and shops in the Octagon and Flora Road districts were flooded.  Stratton: Lower parts of the town were flooded; water was several feet deep in some that had not been flooded for many years.  Alwington: The water rose to a depth of 4 feet on the roadway at Ford bridge; a stone bridge at Ford Farm was
		washed down; the village schoolroom was flooded as was a timber yard.
Cornich and		[Descriptions are provided of various other places but generally not so serious]
Cornish and		

Devon Post 31 Oct Clark (2005)		At Boscastle the rain was unusually heavy and incessant, and many roads became flooded some places to a considerable depth. The lower part of Boscastle suffered severely. The tributaries of the Valency River soon overflowed, and the Manor men had great difficulty in keeping the water from entering the Wellington Hotel. Mrs Fred Scott fared very badly just below the hotel, the back kitchen being flooded to a depth of nearly two feet'
12 Dec 1903 BR	Sheeptor Red Stone 2.95 Dartmoor Leather Tor Farm 3.16 Okehampton Oaklands 2.92	[Not added to EXCEL file]
19 Jul 1904	Liskeard Trevillis 0.68" in 2	Thunderstorms were reported at Plymouth, Polapit Tamar and Liskeard.
BR Western times 26 Jul 15 Oct 1904 Cornishman 6 Dec 1904 Ex & Ply gaz 9 Dec 10 Mar 1905 BR	Buckfastleigh 2.63 Ashburton Holne 2.74 Ashburton Druid 2.60	Tropical weather prevailed for the last few weeks broken by a thunderstorm. Generally considered beneficial to agriculture. No flooding reported. [Not added to EXCEL file] Thunderstorm at Porthleven; Thomas Street was under water for a short time and also the Gue. The storm passed Helston and thence to Penryn and Falmouth, the roads being washed clean and in some places torn up. Crewkerne: Thunderstorm with rain and hail. Lowlying lands were flooded. A horse was killed at Northleigh. [Outside the area – not added to EXCEL file] Southwesterly gale has raged for nearly a week. Ships wrecked at sea including one at Lands End with 23 deaths. Most of the damage is from high winds.
Western Times 17 Mar 16 Jun 1905 BR	St Austell Bunney Mine 1.75" of which 1.25" fell in	Teignmouth: Rain fell with hail as large as bird's eggs- two inches in circumference and over 2 ounces in weight. Half an inch rain fell in 40 minutes. No flooding reported.  Exeter: the Exe rose very rapidly but no flooding was reported in St Thomas.(This is perhaps due to the fact that there are no longer any longer any large stone piers to interfere with flow under Exe Bridge.)  Shobrooke: Houses flooded.  North Devon: Rivers Yeo, Taw Culver and Creedy were in flood, the valley of the Creedy being in most parts flooded.  Crediton: The overflow of Four Mills leat resulted in flooding of 4 houses at Fordton, Crediton Southleigh: Hailstones as big as thrushes or pigeon's eggs, in some places a foot deep.  [Not added to EXCEL file]

30 Jun 1905 Western times 4 Jul	1 hr 35 mins Thunderstorm	Launceston: Cellars flooded and water in the front and out the back doors. There was much damage to road surfaces. The storm was isolated and the storm was not experienced a few miles distant from the town.
15 Aug 1905 BR	Starcross Cofton 3.98 falling after 9 pm Exmouth 2.47 in 8hr 30 m Okehampton 1.72 in 2 hr Dawlish 3.38 in 7 hr 20 m Exmouth Nidderdale 2.89 in 6 hr	Thunderstorms generally in Devon; cattle and horses killed and damage to buildings by lightning.  Exeter: storm for 6 to 7 hours; serious losses of cattle but no flooding reported  Sidmouth: Cottages in Ebdon's Court were flooded. Streets were not flooded as bad as formerly due to better drainage.  Dawlish: Although heavy rainfall no property flooding was reported.  Exmouth: Chapel St was flooded but not too badly. Squabmoor reservoir showed only 1.39".  Okehampton: Some parts of the town were knee deep in water, worst at the east end. From the rear of St James Chapel to the opposite side of Fore St the roadway was a huge lake. Various offices were flooded with water and mud 2 feet deep. Houses and shops were flooded in North St Including the Mills. The storm here
13 May 1906 N Devon Journal 17 May Western Times 14 May		lasted 1 hour. Thunderstorm over parts of Cornwall with main reference to lightning damage. 'The rainfall was of too short duration to cause much damage'. St Tudy: the storm lasted 3 to 4 hours and houses were flooded Crediton Thorverton and Shobrooke storm accompanied by hail as big as marbles which damaged fruit and garden produce.
23 Jun 1906 Western Times 26 Jun	Thunderstorms after a spell of sultry weather	Storms extending from Bristol to Cornwall. Cattle and sheep were reported killed by lightning at various places and buildings were set alight.  Sidmouth: Hailstones of exceptional size and in five minutes the streets were flooded; in Fore St it covered both road and pavement; some houses were feet deep in water. The Bedford Hotel kitchen had 3 feet of water. Numerous other locations had reports of thunderstorms but none of flooding.
6-9 Nov 1906 BR/CBHE 30 Jun 1907 Cornishman	Challacombe 2.67 Simonsbath 3.01	(Exe) Rainfall observer at Winsford noted "Rain commenced at 9 pm on 6th and continued all day on 7th and 8th, the amount measured for about 50 hours being 4.42 in. On 9th the Exe was overflowing and there was a high flood." [Not entered to EXCEL file]  Thunderstorm in West Cornwall: Devoran: heavy rain and hail for over 3 hours; the hail was like pieces of broken ice.  Rain and hail also occurred at Falmouth, Perranwell, Helston (also fragments of ice), where crops were damaged in the field and pigs killed or drowned,

21 Jul 1907 BR N Devon Journal 25 Jul	Market Lavington 2.55 in 3 hr 45 min	Thunderstorm mainly referring to lightning damage Parracombe: Rain with hailstones as large as marbles. Roads converted to rushing torrents. Outbuildings in the lower part of the village were flooded. The schoolroom was flooded to over 6 inches. However the storm was very localised and haymaking continued in surrounding areas.  In the Heddon Valley fishermen were taken aback when suddenly the river rose to a raging torrent tumbling over rocks like a cateract. It was curious and alarming for clear water to turn to a muddy torrent as they were out of the storm.  Exmouth: Storm lasted several hours. A house was struck and cattle killed.
26 Sep 1907 BR	Redruth Trewirgie 1.00 in 45 mins	[Not entered to EXCEL file]
16 Oct 1907 Philip Eden 2008	Kingsbridge Devon 123 mm	Downpours from Devon to Cornwall resulted in serious but short lived floods.
2 Nov 1907 BR	Truro WW 2.55	Observer notes local storm. [Not entered to EXCEL file]
16 Oct 1907 CBHE/BR	Kingsbridge Collapit Creek 3.04 Start Bay Slapton 2.75 Dartmouth 3.41 Brixton 2.70	(Dart) Rare daily rainfall of 4.86 inches at Kingsbridge, Westcombe South Devon. Rain accompanied by NE gale between 0900 on 15 <sup>th</sup> and 0500 on 16 <sup>th</sup> [Not entered to EXCEL file]
16 Jul 1908 BR	Challacombe 2.55 Simonsbath 2.53	[Not entered to EXCEL file]
28 Aug 1908 Cornishman Western times 1	Strong winds blew over trees but uncertain whether this was concurrent with the	Thunderstorm at Marazion; houses on the north side of Fore Street were flooded. Gardens were wrecked and shrubs stripped of their leaves. At Portscathro, Falmouth a whirlwind destroyed a house and did other damage. It also swept through the Breage area with scores of dismantled houses and uprooted trees.
Sep 20 Sep 1908 Western Times 22 Sep	thunderstorm.	Plymouth: Many streets were speedily flooded. (1.31 inches rain) Ottery: Thunderstorm; the gutters were insufficient to carry off the water and roads and several houses were flooded.
8 Mar 1909 CBHE/BR	Chudleigh 2.56 and 2.57 Moretonhampstead 2.90 and 2.74 Spreyton Vic. 2.46	(Torridge) Rainfall observer at Instow, N. Devon, noted: "Rain falling on frozen soil caused great floods." [Not entered to EXCEL file]

Chulmleigh 2.51 Instow 2.55 28/29 Sep 1909 Ilfracombe 2.18" in 45 (Taw/Torridge) Ilfracombe (Reservoir): About 2.50 inches fell in 45 minutes CBHE/BR (Lyn) Woolacombe recorded 3.13 inches on Sept 28<sup>th</sup> mins. Parracombe 2.54 Western Times 30 Bickleighscombe 2.95 Thunderstorms Honiton: Severe hailstorm last 15 minutes; houses and shops were flooded. Sep Widespread severe Ilfracombe: Many of the lower parts of the town are flooded. flooding in Wales and South warwick Challacombe 2.72 15 Oct 1909 [Not added to EXCEL file] BR Hawkridge (Liscombe) 2.70 Simonsbath 2.60 21/22 Dec 1909 Launceston Rapid thaw (Exe) Rainfall observer at Tiverton noted p[30] "Rain commenced at 7.30 p.m. on 21st and 1.39 in. fell in less from 4 pm with 1.58" rain **BR/CBHE** -rivers in flood Tiverton 1.39 in <12 hours Ashburton Druid 2.50 over 2 inches in Cornwall, Devon and Dorset...."

Western Times 29 Dec

Moretonhampstead 2.75,

Bodmin Polgwyn 2.61

Bodmin Castle Hill 2.61

2.87 and 2.68

than 12 hours. The Exe was in flood, and as the ground was frozen hard none of the rain could soak in until the thaw on the morning of 22nd." The area mainly affected was in the south-west of England....a similar belt [of rain exceeding 1 inch] ran along the south coast of England from Penzance to Deal, with a row of large splashes

Exeter: Residents in St Thomas were unaffected and thanked the new bridge (without stone piers) and the construction of a new embankment for their escape. There was temporary flooding of Okehampton St from local drainage rather than the river (no houses reported).

(Dart) Over 3 inches fell over 22 sq miles. Ashburton (Holne Vicarage) recorded 3.15 in. Rivers in Dorset particularly affected including Axe, Otter, Sid

Alphington: The biggest flood for 30 years (Alphington Brook is tributary of the Exe). With the sudden and tremendous downpour there was no warning and about 20 houses on both sides of the bridge, but worst on the Exeter side awoke to find up to 3 feet of water in their houses. (But is said rain lasted 8 hours). The postmaster said the water came up to his window ledge and with 5 minute checks it rose at 18 inches an hour. Tiverton: The Exe has risen higher at Cowley Bridge than for some time and has overflowed its banks for miles. Stoke Canon Paper Mills was flooded and the road from Stoke Canon stations was impassable.

Crediton: At Culvery, Fordton and Creed Bridges the water was several feet deep on the roadway. Duncombe

Farm had 30 sheep washed away.

Broadclyst: The water reached the level of the platform at the railway station.

Honiton: Many low lying houses were flooded. The River Sid rose to a tremendous height. The waters ran down Church Hill and debris accumulated at the base. A train was derailed by ballast washed on to the line.

Ottery: The river Otter rose higher than it has done for 25 years. The Gas Works was flooded. Water on the roads to Salston and Exeter had water up to the level of the hedges. Island farm was flooded. At Wiggaton some cottages and a shop in Silver Street were flooded.

Granery: the Otter burst its banks and the water was 8 feet deep reaching up to the ceilings of the few houses there.

Newton Poppleford: The Post Office (a lightly built structure) was entirely washed away.

Sidmouth: Two footbridges were washed away, one out to sea.

Tipton St John: Post office also flooded by the village brook and collapsed.

Withycombe: Houses flooded. Marpool Mill was flooded to a depth of 14 inches and water flowed over the bridge leading to the mill ('it is some 10 to 12 years since the mill was similarly affected, when it was 18 inches deep').

River Avon: has not been so high since 15 Feb 1900 when it reached the same height at Rock Bridge, being 18 inches over the bridge walls opposite Lydia Mill gate

Totnes: Houses in the lower part of the town were flooded, notably in Warland up to 18 inches in depth. River Dart was swollen and did much damage to the banks to both property and stock. Buckfastleigh was badly flooded with serious flood damage to Smith and Reed's Paper Mill at Kilbury.

Teignmouth: Houses were flooded. In Paradise Road the street was completely torn up. The water rused down Dawlish Road and Smuggler's Lane with great force and 2 shops were flooded.

Kingsteignton: Both the Lemon and Teigh overflowed and the latter united with the Canal. Several cottages in Kingstainton were flooded. The rail line between Buckfastleigh and Staverton was washed away by the river Dart.

An ice storm occurred in North Devon

[More detail in the newspapers]

Thunderstorms at Exeter, Crediton and Sidmouth, Torquay and Barnstable but no flooding was reported.

Seaton: Thunderstorm with large hailstones; houses in nearly every part of the town were flooded.

21 May 1910 Western Times 24 May 14 Aug 1910

BR

Polapit Tamar Ts 0.79

Liskeard Trevillis 0.70 in 35

Thunderstorm associated with strong winds over Dartmoor – no flooding reported.

Fire damage was reported near Barnstable and at Cullompton.

	mins	Crediton: Thunderstorm for 2 hours; several houses were flooded in the lower part of the town.
Western Times 16		Tavistock: storm for nearly 2 hours; several streets were quickly flooded. Houses in Exeter St were flooded and
Aug		the sorting room at the Post Office and the cellars of the New Market Hotel.
28 Aug 1910		A depression passed from N Ireland to Scotland and a secondary depression crossed the South of England
BR		causing heavy falls in SW England (mainly east of Exeter and >3" around Crewkerne. [Not added to EXCEL file]
11/12 Oct 1910	Penzance 1.06"	A depression moving up The Channel curving back westward with thunderstorms The highest rainfalls were
CBHE/BR	(no other totals given)	over 4" on Exmoor and the area with >3" was 419 square miles.
		(Exe) Rainfall observer at Winsford noted (p[24]) "The rain amounted to 3.63 in., and was accompanied by
		thunder and lightning on the evening of the 11th and a great gale on the night of the 12th. The River Exe was in
<del></del>		flood."
Western Times 18		
Oct 16 Oct 1910		House in Cowick St were flooded
		Exeter: Severe thunderstorm; with the exception of the St Thomas district the drains were sufficient to carry it off. In St Thomas, Cowick St Alphington St and Okehampton St were flooded. It was a foot deep on Cowick St.
Ex & Plym Gaz 17 Oct		The water rose so rapidly that efforts in houses to keep the flood out were futile. Many houses had a foot of
Oct		water in them and a few to 2 feet. Pellews Buildings Southwoods Buildings and Little Prospect Place were
Western times 18		flooded. In Okehampton St the water rose to the level of the footpath but owing to the higher level of the
Oct		houses none were flooded. In Alphington St the roadway in the neighbourhood of the Plymouth Inn was
		completely flooded whilst in Haven Road stables were flooded.
		(Reference is made to a storm the previous week)
		More than 16 years have elapsed since we have had so serious a flood in St Thomas but now not nearly so bad
		as in the past.
10 May 1911	Lynmouth Rock House	Thunderstorm [Not added to EXCEL file]
BR	1.34 in 3 hrs	
27 May 1911	Bere Alston Rumleigh 2.61	(Tamar and Tavy) Thunderstorm [Not added to EXCEL file]
BR	in 1.5 hrs	
1 Jun 1911	Launceston Landue 1.75"	(Tamar/Tavy) On May31 Launceston (Hexworthy) noted "Between 2 and 2.45 p.m. 1.01 in. of rain fell, causing
British Rainfall	in 2 hrs	serious floods but hardly and rain fell at Launceston 3 ½ miles away." And on June 1 Launceston (Hexworthy)
	Launceston Tamar Tce	noted "Severe thunderstorm and serious floods. Rain 1.61 in., most of which fell between 1.15 and 2.15 p.m."
20     4044	1.25"	TI
29 Jul 1911	Truro Killiow >1.00 in 1.5	Thunderstorm and dust storms widely reported. Very high temperatures over 90°F [Not added to EXCEL file]

BR

hr

	mins	
9 Nov 1911 North Devon Journal 17 Nov	5	Barnstable: thunderstorm with rain and hail exceeding 1 inch. The River Taw was in flood.
8 Jun 1912 BR	Liskeard Trevallis 0.61" in 35 minutes	[Not added to EXCEL file]
11 Jun 1912		Exeter: thunderstorm with heavy rain and hail.
Ex & Ply Gaz 12 Jun		Otterton church tower struck by lightning. A man from Stoke Gabriel killed by lightning.
14 Jul 1912 Ex & Ply gaz 15 Jul		Teignmouth: 0.75 inch of rain fell in 30 minutes (total=0.79"). There was a recurrence of flooding on Teign Street and Station Road
3-5 Aug 1912 BR	Princeton 2.74 Leusdon Vic. 2.71	Three deep depressions travelling northward or northeastward over the British Isles affected much of the country including the southwest.
	Liskeard 2.58	Cornwall storm on the 5 <sup>th</sup> was comparatively local. [not added to EXCEL file]
6 Aug 1912 BR/CBHE	No rainfall figures	(Fowey) Observer at Lostwithiel noted, "The River Fowey rose, flooding the town and low-lying meadows."
Western Times 8		Launceston: 1.5" in 24 hours. Tennis match postponed!
Aug		Exeter: Heavy rain but no thunder reported; fields flooded along Exe valley.
		(no property flooding reported)[Not added to EXCEL file]
24/25 Aug 1912	No rainfall figures for SW	(Exe) Observer at Tiverton noted, "River Exe in flood"
BR/CBHE		See special paper on the extreme storm and flood which affected East Anglia
	A summer and a month of	
North Devon Jour 29 Aug	very heavy rainfall but not necessarily thunderstorms	Never in living memory in August has the river Taw presented such a sight as witnessed last Saturday (24 <sup>th</sup> ) when the flood water raced through the arches of Barnstable Long bridge. Up to 21 <sup>st</sup> there had been 7 inches

of rainfall at Barnstable and by Saturday morning another 1  $\frac{1}{2}$  inches was recorded with 0.85 inches on the Friday (20<sup>th</sup>). The result was that the Taw already in flood rose rapidly over the banks in the lowlands above Newbridge and making this bridge impassable. The Yeo and other tributaries were also flooded to an

unprecedented extent for the summer season. At Landkey the railway was impassable for hours. The Bradiford Stream overflowed it banks for a long distance and houses in the vicinity of Bradiford Bridge were flooded to a depth of 2 feet. (Fourteen years ago in the winter the houses were also flooded but not to the extent of this

Antony Vicarage 1.00 in 15

Western Times 23 Aug		time). Fields of corn have been swept down by wind and rain.
27 Oct 1912 BR	Sheepstor Vic 2.84 Sheepstor Redstone 3.06 Sheepstor Burrator 2.75 Dartmoor Deancombe Fm 2.72	Continuous rain in the Exeter area wih much hay under water in the fields.  Bovey Tracy: thunderstorm but no flooding or lightining damage reported.  Buckfastleigh: Half Moon Hotel flooded; a man was drowned in the neighbourhood.  Cullompton: Land flooded between Cullompton and Exeter. No property reported flooded.
Western times 1 Nov	Dartmoor Leathertor Fm 2.74 South Brent Great Aish 2.51 Holne Vic. 2.60 Ashburton Druid 2.54 Princetown 3.57 and 3.21	
26 Apr 1913 BR	Princetown 2.78 Christow Laployd (Teign)2.60	[Not added to EXCEL file]
13 May 1913 Western Times 16 May		Exton: Exeter to Exmouth road flooded at Exton; at the junction with Station Road the water was rushing down like a river 2 feet deep and in Station road 4 feet deep.(nothing about rain or thunder)
30 Aug 1913 Ex & Plym Gaz 1 Sep		Widespread thunderstorms following a general drought. Totnes: The streets resembled rivers for half an hour.At Warland houses on both sides of the street were flooded.
3 Oct 1913 BR Western times 4 Oct	Crediton Okefield 1.45" in 1 hr	Crediton: Severe thunderstorm; houses were flooded in many places up to 3 feet deep.
27 Oct 1913 BR Ex& Ply Gaz 28 Oct	Exmouth 0.47 in 10 mins.	Thunderstorms reported at Torquay, Kenton, Exmouth (daily figures not given).  Exeter: Heavy rain in a few hours but only swept the streets and raised the river level.  Exmouth: Thunderstorm lasting just over 30 minutes; flooding of low-lying streets. Manhole covers were lifted at the entrance to the Gas Works. Flooding occurred in Chapel Street; Exeter Road was flooded near Mona Island; The Parade was like a big lake; properties were flooded even in High St.  Cullompton: thunderstorm said to be the worst in 25 years; large hailstones broke windows at the paper

Lympstone: Houses in low-lying areas were flooded; large hailstones occurred

factory and in a number of houses.

12 Feb 1914 Ex & Ply Gaz 13 Feb		Holsworthy: thunderstorm with strong winds; church tower struck by lightning and damaged. [Not added to EXCEL file]
14 Jun 1914 Western Times 19		Colyton: Worst thunderstorm since Whit Sunday 24 years ago (1890). Houses near the Bear Inn were flooded. Trees were struck by lightning and split.
Jun		Seaton: Station road main sewer overflowed and houses in Marine Crescent were flooded. Buildings were struck.
25 (?) Jun 1914 Ex & Ply gaz 26 Jun		Hemyock: Thunderstorm largely passed the town by but the flooded state of the R Culm was evidence of effects in the headwaters of Churchstanton and Clayhidon where horses and cattle were killed
1 Jul 1914	A break in the tropical	Thunderstorms in Exeter and elsewherebut no damage reported in the southwest.
Ex & Ply gaz 2 Jul	weather of the last few days	[Thunderstorms with more severe effects elsewhere in England][Not added to EXCEL file]
19 Jul 1914 BR		Steady rain occurred for about 16 hours and 150 stations had their maximum daily fall in the year. Highest rainfall occurred in Dorset and Somerset where rainfall over 3 inches fell on East Exmoor and the Blackdown Hills. Over Dartmoor rainfall over 2 inches fell. [Not added to EXCEL file]
15 Aug 1914 Western Times 17	Exeter city Waterwks 0.79 Exeter Institution over	Exeter: Very heavy rain for 35 minutes. Roads on the higher levels of the town were like rivers for example at the bottom of Blackboy Road. Cellars were flooded. St Thomas Streets were flooded and several houses were
Aug	0.50 in 20 mins	flooded. Water flowed down Dunsford Hill and along Cowick St to St Thomas Church where the water was 2 feet deep flowing into houses on the northern side. Alphington and Okehampton's streets were flooded but not houses.
		Teignmouth: prolonged thunderstorm with 0.75" rainfall.
		Ottery: Three cows killed
29 Nov 1914	Princetown 3.17"	[Not added to EXCEL file]
29 Dec 1914		Tiverton observer notes 'Owing to the flood putting out the boiler fires at Messrs Carr's new mills a large
BR 16 Feb 1915	Sheepstor Vic 3.27	number of hands were unable to work there this afternoon. (Note also high flood in Severn) Squally southwesterly winds blew over England and Wales.
BR	Sheepstor Redstone 3.05	Squally Southwesterly willus blew over Eligianu and wales .
DIX	Dartmoor Danscombe Farm 2.86	Buckfastleigh: About 3 inches of rain fell during the night and the river rose higher than for years and damage
Western Times	Buckfastleigh 2.98 Holne Vic. 3.44	was done to roads.
6 Mar	Ashburton West St 2.81	[Not added to EXCEL file]
	Ashburton Druid 2.95	

Ashburton Leusdon Vic 2.90 Princetown Huccaby Ho 2.95 St ives Penwyn 2.52

7 May 1915 Western Times 11 May 4 July 1915 N Devon Journal 8 Jul, Webb and Elsom (2016)

Western times 6 Jul

Webb (1993) J Meteorol

16 Jul 1915 BR

Western Times 20 Jul 25 Jul 1915 Western times 26 Jul 13 Aug 1915 Western times 17 Appledore: Thunderstorm flooded the lower part of the town. Part of Myrtle St and Marine Parade were impassable and Market St; water was up to 2 feet deep. In some houses furniture was floating.

Barnstable: the heaviest recorded rainfall for many years; water covered roadways to 6 inches depth.

Parts of North Devon were visited by a severe thunderstorm which caused much damage to crops and property. Hailstones both round and with ragged edges, weighing up to 2 ounces fell along with rain; also 1 ¼ inches in diameter. Elsewhere 12 hailstones weighed 2 lbs. Much damage was done to crops and to glasshouses and house windows especially at Ashford, Braunton and Heanton. Poultry were killed in scores by hailstones. Crops were washed out of the ground by torrential rain. Barnstable, Bideford and Torrington escaped the worst of the storm.

<Combe Martin> (N Devon): The hailstorm started off with flat pieces of ice then hailstones as big as hen's eggs. Roof slates were broken and windows smashed and many poultry killed.

There was no reference anywhere to flooding.

Cullompton: Thunderstrom with heavy rain and hailstones

Thunderstorms with very large hail affected the area from Appledore to Arlington and Combe Martin. The hailstones averaged pullet size 1 ½ to 2 oz and the largest weighing 4 oz. One 50 mm diameter hailstone was found embedded in a melon. Much damage was done to slated and tiled roofs. The storm also affected East Devon, Somerset, Avon and Gloucestershire.

Vary widespread rainfall over England and Wales . The BR map shows some totals in the SW(Dartmoor/Exmoor) >2 inches but no figures are listed for the SW. In the Midlands some totals were > 3".

South Molton: Heavy rainstorm without thunder lasting nearly one hour; footpaths and in some cases the basement of houses were flooded. Crop damage from beating down occurred.

Teignmouth: thunderstorm; the lower parts of the town were flooded

East Budleigh: thunderstorm for 1 ½ hours; so rapid was the rise of water that the whole village was flooded. Two thirds of the houses were flooded from 8 inches to 3 feet. One house was virtually destroyed. All the

Aug		wooden bridges across the brook are carried away and the roads are quite destroyed. The water which had
14 Dec 1915 BR	Sheepstor Burrator 3.15 Sheepstor Head weir 2.74 Princetown Prison 3.95 Princetown Two Bridges 2.97 Postbridge Redgate 2.90 Dousland Resvr. 3.00 South Brent Great Aish 2.91 South Brent Glazebrook 2.80	risen with unprecedented rapidity began to fall one hour after the storm stopped. [Not added to EXCEL file]
3 Feb 1916 BR	Princetown Prison 2.76	Only one station rainfall noted. [Not added to EXCEL file]
25 Aug 1916 BR	Exmouth 2.50	Only one station noted in the Southwest [Not added to EXCEL file]
29 Aug 1916 BR Ex & Ply Gaz	Dartmouth (Stoke Fleming) 3.33 Paignton (Queen's Park) 3.05 (Torquay Road) 3.12 (Summerlands) 3.29 Totnes (Rosabelle) 3.07	Rainfall affected the whole south of England from Devon to Norfolk. It was the wettest day in the western couties since 28 Aug 1910. The rainfall was quite patchy as shown by the accompanying BR map (Scanned as pdf).
29 aug	(Berry Pomeroy)3.20 (Broadhempston)2.67 Ipplepen Vicarage 2.66 Torquay (Princess Gdns 3.52 (Cary Green 3.88 (Merton Lodge) 3.40 (Kilmorie) 4.25 (Roby Hall) 3.39 (Stopdley Knowle) 3.88 Teignmouth (Den Gdns) 2.82 (Landscore Res.) 3.15 (Hazledown Res.)3.25 (Shaldon) 2.67 (Bonnicliff) 2.83 (The Shrubbery) 2.83 (Benton) 2.98 Dawlish (The Lawn) 2.75 Chudleigh (Ideford Rectory)	There was a general downpour and a little thunder but we are not as badly off as some other parts of the country.

2.79 Moretonhampstead (Bullaton) 2.54 (Mardon) 2.67 North Bovey (Manor House) 2.55 Moretonhampstead

(Blackingstone) 2.60 (Rectory) 2.61

Budleigh Salterton (Squabmoor) Exeter 1.20 inches (noted that

not so severe as a few weeks

2.55

ago)

26 Sep 1916 Western Times 28 Sep 29 May 1917

Western Times 30

May

28 Jun 1917 Western times 2 Jul 17 Aug 1917 Western Morning News 23 Jun 1938

Worth (1918) Acreman 1989 Exeter: Thunderstorm flooded the lower parts of the town; flood water was on Alphington Road near the railway arch.

Newton Abbot: Thunderstorm with rain, hail and strong wind; heavy rainfall for half an hour; considerable damage to houses and businesses in the lower part of town. At the end of the slopes leading to Torquay Road and East St streams carried stones and debris across the streets. Queen St was impassable and stationery, grocery and jewellers were flooded. East St, Bank St and Union St were flooded. It entered the County Court offices. Even Courtenay St at the junction with Union St was flooded with inches of water.

Barnstable and North Devon: Nearly 2 inches of rain during the night and the River Taw was swollen. Small water courses flowed on to roads. At Newbridge sheep were drowned by the rising water.

[Not added to EXCEL file]

A paper to the British Waterworks Association reported in detail in the WMN gave details of floods on Dartmoor by RH Worth in which he reports on a flood on this day which he himself observed in the valley of the West Ockment. Sheets of water flowed over the moor and tore up embedded stones. Fields were filled to the crest of the hedges. On an adjoining watershed a bridge failed. On the slope of Longstone Hill a gulley was cut in a mine track 206 feet in length, 15 to 17 feet 9 inches in depth and 30 feet wide. I searched in the library for a fuller version of this paper but did not find any. The report is copied as a jpg file 'Worth Floods on Dartmoor' [References found in Foulds and Macklin 2013 -added to references] Foulds and Macklin note that the flood affected Red-a-Ven Brook, Snipers Gulley, West Okement Fishcombe and Taw.

[This flood was not recorded in any of the newspapers at the time]

Acreman lists the event with an estimated peak discharge of 110.4 cumecs on a catchment area of 4.0 km<sup>2</sup> of the Red a Ven catchment on Dartmoor. The method of estimation by Worth is not stated and the value may be an overestimate.

1917 Brierley (1964) 20 May 1918 N Devon Journal	No rainfall reference in BR in Devon and Cornwall	(Exe) Serious flooding occurred at Exwick and in the Ex bridge area.  This may be from the edge of the great storm of 28 Jun 1917 which mainly affected eastern Exmoor.  South Molton: Houses and roads were flooded by a severe thunderstorm lasting about an hour. The rain was accompanied by hailstones although the air was oppressively hot. Water surged through the streets half a foot deep with the drains being blocked by hail.
22 Jul 1918 BR	Sheepstor Vic 2.50	[Not added to EXCEL file]
4 Nov 1918 BR	Holne Vic. 2.83	Although BR only notes one SW rainfall, it does indicate that more than 2" fell widely on Dartmoor (as well as parts of South Wales and SW Scotland) [Not added to EXCEL file]
7 Mar 1919 BR	Princetown Prison 3.04	[Not added to EXCEL file]
10 Mar 1919 BR	Chagford 2.56	[Not added to EXCEL file]
28 Aug 1919 BR	Moretonhampstead Rec 1.50" in 1 hr	{Not added to EXCEL file]
3 Oct 1920 BR	Princetown Prison 2.53	On 5 Oct severe flooding occurred at Camborne with scores of houses flooded following at thunderstorm. Worst affected was Centenary Street and lower parts of Tuckingwell. The storm lasted about an hour.
1920 Brierley (1964)	Possibly the 17 Oct event	(Exe) Serious flooding occurred at Exwick and in the Ex bridge area [Not added to EXCEL file]
17 Oct 1920	Newquay Mt Wise 1.19" in 1 hr 30 M (2.13" in 2 hr 30	(Gannel) A. P. Jenkin (Cornwall Rainfall Association) provided details of a local thunderstorm, summarised as "The rainfall was heaviest in a strip about 5 miles wide stretching from Newquay to the Lizard, where the
British Rainfall	m) Cadgwith Coastguard Stn 1.90" in 2 hr	total for the day reached 2 inThe storm began at Newquay about 16 h. G.M.T., and lasted until 19 h. During the first hour .93 in. fell and 1.19 in. in the succeeding hour and a half A great deal of damage was done by flooding. At Mullion a large culvert burst, hundreds of tons of stones and earth being carried into the harbour, whilst roads were rendered impassable. Floods of 2 or 3 ft. accumulated on roads near Perranporth". East of Liskeard there was little or no rain.
Cornishman		
		Mullion: Heavy thunderstorm with torrential rain from 7 to 10 pm. Houses and outlying hamlets were flooded with furniture floating about in rooms. At Mullion Cove hundreds of huge boulders were swept into the Michford, hedges were swept down. A bridge was swept away. 'Such a flood has not been experienced for 50 years'.
2 Dec 1920		Rivers Otter and Axe are over their banks and several acres in some cases right up to the railway banks are

Western Times 5 Dec		flooded. Much land is flooded around Exminster.  Exeter: Thunderstorm with heavy rain but no flooding or damage reported.  Cullompton: Recent heavy rains flooded several houses and also the Exeter Road near the Bell Inn.
11 Sep 1921 Ex & Ply Gaz 16 Sep		Dolton: thunderstorm; many houses were flooded
8 Aug 1922 Western Morning		Newton Abbot: Thunderstorm; many shops and houses were flooded with mud washed into the main street from the surrounding hills.
News 9 Aug		Tavistock: many houses flooded St Ives , Storm lasting about 3 hours
19 Dec 1922 Western Times 22		St Dennis: Heavy thunderstorms with hail Devon Rivers in flood after heavy rain and gale force winds River Exe rose rapidly and was level with the span of the Exe bridge.
Dec Dec		Dolton roads were flooded and many footbridges washed away.  Barnstable: River Taw was in flood; rainfall of 1.77" in 24 hrs; cottages on low lying lands had 2 feet of water in them
		Valleys of Clyst, Culm Creedy and Axe rivers were over their banks Tiverton: roads were flooded when River Loman overflowed its banks and riverside houses were flooded. Station Road was flooded near Old Blundell's
		Culm valley: Many houses flooded Crediton: Man Road near Downes flooded to be impassable
22 Dec 1922 Western times 29 Dec	Hailstorm and gale force winds Barnstable 1.77"	Teignmouth: Over 1 inch rain fell overnight; Station Rd, Wellington St, Den road and The Strand were flooded and impassable Ashburton Church was struck by lightning
	Sumstable 1177	Extensive floods in the Taw valley; a flock of chickens drowned  Totnes: The lower part of town flooded, notably Warland to a depth of 1 foot or more.  Okehampton: Roads are flooded too deep for pedestrians to pass
24 Dec 1922 BR	Princeton Huccaby Ho 2.56	[Not added to EXCEL file]
6/7 Feb 1923	Christow Smithacott 2.55	Over 2 inches fell over most of Devon and Cornwall and more than 3 inches on Dartmoor and other localised

BR	(of which 1.71 on 7th) Christow Laployd 2.50	sites. [Not added to Excel file]
7 Jul 1923	Strom preceded by	Very warm weather 5 <sup>th</sup> and 6 <sup>th</sup> followed by thunderstom on morning of 7 <sup>th</sup> lasting 2 hours. Max and min at
N Devon Journal	exceptionally hot weather	Barnstable 86 and 58 on 6 <sup>th</sup> . At Barnstable comparatively little damage by the storm and little rainfall. One
12 Jul	Widespread	horse killed by lightning. Houses struck and damaged at Braunton. At Bickington a house was damaged by
	thunderstorms in England	lightning and some cottages were flooded.
Western Morning	<ul> <li>3 killed by lightning.</li> </ul>	
News 9 Jul		Haytor: Moorland Hotel was struck by lightning.
		Fremlington: houses flooded
		Ashburton: Heavy rain fell for one hour and houses in the lower part of the town were flooded by the sudden
		rush of water.
13 Jul 1923		Combe Martin: thunderstorm over the town lasting about 1 ½ hours. 'The rain came down in torrents and
N Devon Journal		many of the houses were flooded'.
19 Jul		
15 Jul 1923		Exmoor: fatality due to lightning
Western Morning		Totnes: a man and his dog both killed by lightning.
News 16 Jul		Sandford near Crediton: 40 sheep killed by lightning
		South Zeal: Stream flowing through the village choked the bridge and many houses were flooded.
12/13 Nov 1923	Holne Church Park	Prolonged rainfall over the whole British Isles but only one station noted in the SW
BR	Cottage 2.72	[Not added to EXCEL file]
19 May 1924	Filleagh Castle Hill	Thunderstorms in the west of England. A cloudburst caused extraordinary damage in a very short time.
BR	Gardens (N Devon) 1.48"	Barnstable escaped the storm but it was severe in the district.
N Devon Jour 22	in 1 hr	South Molton: Charles: The storm lasted from 13.50 to 1600 and heavy damage was caused. Hail was nearly as
May		big as marbles. Grass Park Hill was converted to a river and houses high up were flooded to a foot deep. Water
		flowed through houses and ploughed up garden ground. Fruit blossom was destroyed. Soil was swept from
		fields and a stone bridge leading from Rock's head to Popham over Hole River was swept away. A wooden

seriously damaged and some closed.

Simonsbath: there was hardly any rain at Simonsbath but at Akland Common on the border of Exmoor heavy rainfall fell and the river Barle rose 6 or 7 feet carrying away flood gates and a footbridge. Sheep were lost presumed drowned.

footbridge suffered the same fate. Further up the valley a house was flooded and windows smashed by hailstones. A large area of land in the neighbourhood of Newton bridge was converted to a lake. Roads were

Devon & Exeter

Gaz 20 May

4 Jun 1924 Ex & Ply Gaz 6 Jun 21 Jun 1924 BR 21 Jul 1924 BR

Exeter Inst 1.13 (highest

since Jun 1901 – 1.56)

Cornwall 1.32" in 2 hr Bideford 0.97" in 30 mins

Falmouth The Crossways

St Mellion Rectory

Grampound 2.83 Bosahan 3.48

2.81

N Devon Journal 24 Jul

Western Morning

News 22 Jul

16 Aug 1924 Western Times 22 Filleigh: Main Road was 2 ½ feet deep.

Chittlehampton: Heavy rain with large hailstones caused flooding of houses in the eastern part of the parish. Ilfracombe: The severest thunderstorm since last July; many houses in the lower part of the town were flooded with water running in the streets like a mill race.

Lynton: severe rain and the East and West Lyns were raging torrents with a strong peaty smell.

Countisbury: At Rodney a huge block of soil of scores of tons slid bodily into the sea. Crops including potatoes were washed out of the ground. Roads were furrowed so deep they were well nigh impassable. Sheep were drowned in the West Lyn.

Exmouth: Floods in Exeter Road, the Parade, Market St and Chapel St and other low lying districts. Water ran through the Dolphin Hotel. In the garage on lower Parade, the water was 18 inches deep.

Exeter: Thunderstorm 30 minutes; flooding of streets in the lower part of the town

[Not added to EXCEL file]

Thunderstorms have swept the country during the week. Rain was heavy in Barnstable accompanied by hail as large as marbles and ice. No rain fell at Ilfracombe or Braunton. At Bideford some houses were flooded. In Barnstable St houses were flooded to a depth of 2 to 3 feet. The Torridge Inn and Kingsley Hotel were also flooded as were houses at the foot of Torridge Lane. Sheep were killed by lightning.

Thunderstorms in southern Devon and Cornwall; Penquite Farm Landrake struck by lightning and 4 cows killed. Plymouth: Roads and premises flooded; Rain 2.50 to 4.45 giving 1.63 inches at the Hoe. Streams from Albert Road and the two approaches to North road Station fed the hill at Pennycomequick; Treville St basements flooded; also Hotham Place, Stoke and the bottom of Wilton St water was forced up from the drains into houses.

Bideford: Houses on the Quay were flooded and in Branstable St some houses were flooded to 18 inches; rain and large hailstones fell.

Looe: The front street became flooded to a depth of 12 to 18 inches finding in its way into adjoining houses and shops. Houses on the side of the hill at West Looe were seriously flooded.

Falmouth: Market Strand was like a miniature lake; a brewers in Killigrew St was flooded Okehamption: thunderstorm causing flooding of cellars in one street.

Aug 20 Aug 1924 Ex & Plym gaz 21 Aug 7 Sep 1924 Ex & Ply Gaz 9 Sep

BR

13 Sep 1924 Challacombe 2.65
BR Bratton Fleming Rectory
2.59
7 Oct 1924 Frontal rainfall but with
thunderstorms
West Briton embedded.
9 Oct 1924 Bovey Tracey 2.83
Crowan Camborne WW 3.31

Bovey Tracey 2.83
Crowan Camborne WW 3.31
Hayle 3.30
Camborne 2.70
Redruth 3.02
Newquay Res 2.64
Newquay Mt Wise 2.56
Porthcurno 3.50
St keverne Lanarth 2.80
St Keverne 2.56
Helston 3.34
Constantine 3.62
Penzance Morrab Gdns 3.22

Teignmouth: thunderstorm causing flooding in the lower part of town; East Borrk and French Streets were flooded to several inches and a wokshop next to the station was flooded.

Lyme: 1 ½ inches rain fell in one hour (feared that the great Whit Sunday flood of 25 years ago would be repeated). Broad St had cascades up to 3 feet high and several houses inundated.

Worst between Lyme Regis and Uplyme. River Lym rose 12 inches in 20 minutes. Middle Mill Farm was flooded. Bampton: portions of the town were flooded – the worst for years. Shaterun Brook broke through the culvert in several places, flowing over roads and into houses. Roads were damaged in Old Tiverton Road and Barton Street. The main road at Ellans cottage was blocked by stones and debris.

Colyton: Because of blockageof the Town Leat at Ridgeway the water was diverted on to the roadway and some houses which were lower than the road were flooded some to 1 foot deep. On the road it was up to 3 feet deep.

East Budleigh: The stream which runs through the village overflowed on to the road and at Yettlington the road was also flooded.

Lynmouth daily rainfall 1.65". the two Lyns were in flood and did considerable damage Exe and Clyst overflowed their banks

**(Fal/Allen)** 'There was a torrential downpour of rain in Truro during' the night of 7/8th October 1924. 'Water flowed down the River Allen with such force that ... it rose over the banks and caused the flooding of premises'. There is no mention of flooding from the River Kenwyn.

St Keverne School Cornwall had 2.56" most of it occurring in 3 ho.

	Penzance Gulval 3.50 Falmouth Obs 3.27 Falmount Trefusis 3.20 Penryn 3.26 Falmouth Crossways 3.45 Gwenap 3.19 St Day Sch 3.19 Truro Tregolls 3.26 Truro WW 2.93 Grampound Creed 2.97 Altarnon Vic 2.55 Pendennis Castle 2.80	
1 Jan 1925 BR	Holne Church Park 3.39 Ashburton Orchard Mt 2.70 Ashburton Druid 2.83	Heavy falls of rain with strong gales covered the whole country. Most of the rain was associated with a warm front. Rainfall was also associated with a small secondary depression situated to the W of the Scilly Isles at 6pm and over Kent at 1 am next morning.
Western Times 2 Jan	Moretonhampstead 2.70 Chagford 2.90 Chagford Huish 2.75 NB Bideford 2.55 on 2nd	and over Kent at 1 am next morning.  Ashburton: The River Yeo overlowed at Kingsbridge Lane and the lower parts of town were flooded.  Abnormally heavy rainfall in North Devon causing many hundred acres of marsh land to be flooded.  Newbridge: Water across the main Exeter Barnstable Road. [Not added to EXCEL file]
21 Jul 1925 BR	Redruth Trewirgie 0.50" in 20 mins	[Not added to EXCEL file]
2 Aug 1925 BR	Plymouth Cattewater 0.40" in 10 mins	[Not added to EXCEL file]
6 Aug 1925 Western Morning News 7 Aug		Plymouth: 1" rain in 1 hour Elburton: A house struck by lightning and destroyed by fire. Plympton area: flooding occurred in most of the villages including Ridgeway and Colebrook.
12 Aug 1925 BR	Lee Moor clay Wks 2.72 S Brent Great Aish 2.79	[Not added to EXCEL file]
19 Aug 1925 BR	Ashburton Orchard Mount 1.50" in 45 mins Barnstable Westaway 1.81" in 2 hr 15 mins Tot= 2.56 Tiverton 0.51" in 30 mins	Lynmouth: Daily rainfall 1.46"; the twin streams became raging torrents. This was the highest daily rainfall since Sep 14 1924 when the total was 1.65".  Okehampton: thunderstorm for 2 hours and houses were flooded.
22 Aug 1925 Exeter & Ply Gaz 24 Aug		Exeter: thunderstorm on part of the city; some low-lying streets temporarily flooded. Portway (on a byroad reading to Craddock) (River Culm) a sudden inrush of water flooded the kitchen to a depth of 2 feet with furniture floating. Several houses in the town were also flooded.

22 Sep 1925 Western Morning News 23 Sep 29 Dec 1925 BR 17/18 Jul 1926 BR

Holne Church Pk 2.77
Bovey Tracey Hedgebarton 2.53
Seaton Pendeen 2.56 in 2 hr 30 min
Gwennap Trevince 1.80 in 50 min
Newquay Mt Wise 1.71 in 1 hr 50 mins

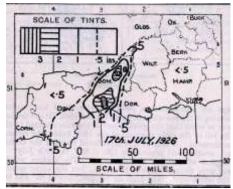
Wadebridge Byrn 1.59 in 2 hr

Exeter: torrential shower with temporary flooding(no reference to place extent or property) [Note generally a very hot and sunny year with record sunshine.] [Not added to EXCEL file]

As a result of heavy rain and melting snow from Exmoor the River Exe valley is flooded in places, particularly at Stoke Canon. The Exeter Honiton road was flooded. [Not added to EXCEL file]

Trevince near Redruth precipitation fell as rain and hail. 1000 panes of glass in greenhouses were broken. At Woolacombe in N Devon the hailstones were 4 to 5 inches in circumference. At Sidmouth in S Devon 2.66" fell in 5 hours and at Seaton the floods were 4 feet deep in places.

Heavy rainfall extended into Dorset where several stations around Lyme Regis had totals > 3.5" Severe storms also occurred in S Wales where one total over 6 inches was recorded.



Cornishman

Penzance: severe thunderstorm with large hail and rain. In Medrose terrace basements were flooded.the water came down Causewayhead in great volume. At Caldwells road the water went through houses from front to back; similarly at Queens Square. The road was flooded at Torver Place leaving a layer of mud. At North Parade there was 4 inches of water in the kitchen of one house. At the bottom of Bayview terrace at the back of Redinnick School there was 2 feet of water over the road; the houses at the end of the Terrace had a little water but the rest escaped. The stores on the Quay suffered considerably with water on the floor of Rank's store and the adjoining store. There was little rain at St ives or St Just and very limited flooding at Newlyn but the storm extended in places from Land's End to west Dorset.

At Chacewater rain and hail (as big as florins) fell breaking glass in greenhouses and flooding houses.

Seaton: Large pieces of ice fell 1 ¼ inches long and ¾ inches wide and weighing an ounce. The storm there

North Devon Journal 22 Jul

Western Times 23 Jul

Ex& Ply Gaz 19 Jul

Cornish and Devon Post 24 Jul Clark (2005) lasted 12 hours with thunder all the time and there was 4 feet of water in some houses. In West Dorset and at Banstable houses were struck and set on fire.

Following a week of terrific heat thunderstorms broke out on 18<sup>th</sup> with hailstones of enormous size both rounded and jagged, some at Saunton 4 ½ inches in circumference.

Barnstable: Three distinct thunderstorms occurred. Roads were flooded and buildings struck by lightning. Windows were broken by hail and a horse was killed by lightning. No flooding of houses was reported. Ilfracombe: Fore Street on a hill was like a river. At Broad Street and Chambercombe Road there was some flooding. Gale force winds were experience in Ilfracombe but they were very localised.

Woolacombe: Hail with strong winds broke windows some making clean holes through the glass. Instow: drains on the front were completely blocked (presumably by hail) and the streets resembled rivers. Clovelly: A storm 'not in the memory of the oldest inhabitant' Rain carried red earth from gardens through the houses into the streets thence decending in a raging torrent into the sea.

Lyme Regis: Thunderstorm lasting a remarkable nine hours, approaching from the sea, with hailstones larger than marbles causing broken windows (3/4 inch across or as big as large goosebetties). Streets were turned into rivers and when the sewer burst in Broad Street the pavement was ripped up and water spilled out. The Royal Lion Hotel, a furniture shop and other businesses were flooded. Many houses were flooded, Station road being the worst sufferers including trevett's Garage and adjacent houses, Clarence Hotel and houses on Marine Parade. (compared with storm of Whit Monday 1890). Berne Manor Farm Whitchurch was struck by lightning and burned down.

Beer: practically every house in the village was flooded within the space of a few minutes. Dolphin Hotel was flooded to several inches.

Axminster: Considerable damage was done to business premises. A sewer burst at the bottom of Castle Hill flooding several houses. Purze Crook another low lying district was also flooded.

Seaton: 1.78" in 6 hours with ice 1 ¼ inches long and ¾ inch wide. Many houses were flooded often to a depth of 4 feet.

Branscombe: Tons of earth and stones washed down from the hills and houses flooded; gullies were made in the roads.

A thunderstorm of unprecedented violence broke over Boscastle on Sunday. Distant thunder had been rumbling all the morning, but the climax was reached about 1.30 pm. then a sheet of rain and hail descended,

		which resembled a cloudburst many houses were flooded.
Webb (1993)		
		A swathe of storms affected the area from Torrington through Braunton, Georgehan, Woolacombe to
		Ilfracombe. At Saunton the hailstones wer 30-38 mm diameter and at Woolacombe they averaged 40 mm
		diameter and the largest 1 to 3 oz. At Braunton and Georgeham, much glass was broken. A further swathe of
		storms in Cornwall affected the area from Gwennap throught Trevince to Chacewater. One hailstone 100 mm x
		50mm x 25 mm was reported with much damage to greenhouses. Hail damage also occurred at Hartland.
8 Nov 1926	Teignmouth 2.80, 2.39, 2.36,	Rain occurred in the warm front associated with the passage of a depression along the English channel.
BR	2.45, 2.57	Thunder lightning and hail accompanied this disturbance in various districts.
<b>-</b>	Islington 2.84	
Western times 12	Dawlish The Lawn 3.09	Exeter: Gale force winds accompanied the rain but the main damage was from lightning on houses. 'No serious
Nov	Bovey tracey 2.50 Chudleigh 2.52	flooding occurred'
1404	Exmouth 2.30, 2.14 2.41, 2.38,	[Not added to EXCEL file]
	2.43, 2.57,2.35	[NOT added to EXCEL THE]
	Starcross 2.47	
	Lympstone 2.40	
	Topsham 2.37 2.20 Exeter 2.26, 2.61, 2.60	
	Rockbare Manor 2.40	
	Budleigh Salterton 2.29	
28 Jan 1927	South Brent 2.83	A very deep depression west of Ireland caused widespread gales.
BR	Holne Church Park cott 3.19	[Not added to EXCEL file]
	Ashburton Hele 2.92	
	Bovey tracey 2.52 Chagford 2.55	
	Moretonhampstead 2.55	
	Christow 2.55	
7.1.14027	Davidham Malhum Dagun 1 12 in	
7 Jul 1927	Parkham Melbury Resvr 1.12 in 15 mins	Puddington: The whole district between Woolfardisworthy and Morchard and Tiverton had torrents pouring
BR		down hill and dale
11 Jul 1927	Molland Green Cottage 1.42 in 1hr 45 mins	South Molton: Two hour thunderstorm with hailstones, many as wide as a halfpenny and lightning damage.
BR	1111 43 1111113	Roads were flooded but not property.
		Milverton (South Molton to Taunton road) road was seriously flooded and soil washed on to the road. Cottages

along the roadway were flooded.

Sticklepath: many houses flooded

Western times 15

Jul

14 Jul 1927 BR 27 Jul 1927 Western Times 29 Jul	Coryton 3.02 (2.50 in 2 hr 40 min)	Okehampton: thunderstorm with lightning damage Dolton: Storm for some hours; water on roads was several feet deep. In some places the water was unable to get through the arches of bridges and water flooded over the top. No property flooding was reported. At Coryton in S Devon the storm commenced at 13.20 after a very hot morning and brilliant sunshine. Rain in the nature of a cloudburst fell till 14.00 with just an occasional shower to 16.00 when the total was 2.50" Dartmoor: Thunderstorm: A cloudburst caused the water to rush washing away stones and earth on the Tavistock-Okehampton main road, making a hole 3 feet deep. The River Tavy was in flood at Tavistock.
5 Aug 1927 BR	Hartland Fosfelle 1.10 in 50 mins	[Not added to EXCEL file]
25 Aug 1927 Western times 26 Aug	Thunderstorm	Exmouth: streets flooded Teignmouth: Streets flooded Topsham: Lashed by a whirlwind
30 Aug 1927 BR	Lostwithiel 3.76	[Not added to EXCEL file]
4 Sep 1927 N Devon Journal 8 Sep		Following a day of intense heat, a thunderstom occurred in N Devon the following morning. At Barnstable the storm lasted 3 hours but little damage was caused at Barnstable. There were several losses of cattle and sheep to lightning strikes. Houses between Braunton and Saunton were flooded to several inches. Bideford: Innumerable private houses and shops were flooded in High street, Mill St Meddon Street and Torridge Hill. Manholes burst open. Houses were seriously damaged by lightning. Gravel and mud deposits were everywhere. Instow: 1 ½ inches of rain fell and Marine parade was flooded. Manhole covers were lifted off and many houses suffered badly.
Ex & Plym gaz 5 sep		A farmer was killed by lightning at Westdown between Barnstable and Ilfracombe.  Storm in North and West Devon and East Cornwall
23 Sep 1927 BR	Chagford Dartmoor S'torium 1.30" in 10 mins (Very rare)	Bideford: Shops flooded when drains were of inadequate capacity [Not added to EXCEL file]
1 Jan 1928 BR	Lee Moor clay Wks 2.75 South Brent 2.92 & 3.14 Holne Church Pk Cottage 3.04	Associated with an Atlantic depression [Not added to EXCEL file]

28 Jan 1928 BR 4 May 1928 Ex & Ply gaz 5 May	Lee Moor Clay Wks 2.57	'The heavy fall in Devon was associated with the development of an intense secondary depression near the mouth of the channel'. [Not added to EXCEL file] Honiton: severe thunderstorm lasting abouth half an hour; many houses flooded. Exmouth: Streets flooded and manhole covers lifted by the strom rain. Silverton: Within 20 minutes of the commencement of the storm the road to Silverton from the Exe valley Road was flooded to 9 inches.Much soil and stones were washed from fields. Hele: At nearby Sunniside the water rushed down the road, in at the front door and out the back of houses. The water swept along the road like a great wave and it was useless to try to keep it out. Potatoes were washed out of fields.
27 Aug 1928 BR	Witheredge 1.06 in 1 hr	[Not added to EXCEL file]
11 Oct 1928		Exeter: thunderstorm for half an hour; roads around the Park house Road estate were impassable. Water
Ex & Ply gaz. 12 oct		entered some houses in Prospect Place, Cowick Street.
10 Dec 1928 BR	Princetown (Wydemeet) 2.75 Bovey Tracey Hedgebarton) 2.70	[Not added to EXCEL file]
28 Dec 1928 Western Morning		Exeter: river Exe overflowed covering land between Cowley Bridge and Exwick.Okehampton St was flooded in two places.
News 29 Dec		At Hatherleigh bridge water level on the road reached 5 feet.
		Umberleigh: Water level on roads 3 feet deep
		River Taw reported to be in high flood [Not added to EXCEL file]
3 Aug 1929 BR	Bickley (Roborough Reservoir) 3.09 Lee Moor Clay Work 3.45	Rainfall was associated with unusually strong SW winds . Rain fell from 12.00 on $3^{rd}$ to 05.00 on $4^{th}$ . There was no thunder.
	Yelverton (Oakfield) 3.05 Sheepstor (Redstone) 395 Sheepstor (Burrator) 3.20 Sheepstor (Head Weir) 3.25 Dousland Reservoir 3.25	[Not added to EXCEL file]

Dartmoor (Lowery) 3.42 Whitchurch (Glenofen) 2.54 Whitchurch (Langstone) 2.99 Mary-Tavy (Blackdown) 2.9 South Brent (Badworthy) 3.28 Cornwood (Yealm Head 5.) 3.21
Princetown (H.M. Prison) 4.22
Postbridge (Archerton) 2.65
Molland (Green Cot) 2.62
Horrabridge (Furzetor) 2.95
South Brent (Beechfield) 2.5
Challacombe 2.88
Bolverton Vicarage 2.93

12 Sep 1929

Ex & Ply Gaz. 13

Sep

5 Oct 1929

BR

Brierley (1964)

Bleasdale (1957)

Lifton Kelly Ho 1.00 in 1 hr Bickley (Roborough Reservoir) 2.78

Lee Moor Clay Works 2.64

Yelverton (Oakfield) 2.73 Sheepstor (Red Stone) 3.88

Sheepstor (Burrator) 3.35

Sheepstor (Head Weir) 3.48

Dousland Reservoir 2.88

Dartmoor (Swincombe) 4.03

Dartmoor (Fox Tor) 3.69

Dartmoor (Lowery) 3.3

Dartmoor (Strane Valley)3.03 Whitchurch (Glenofen) 3

Whitchurch (Langstone) 3.13

Whitchurch (Langstone) 3.13 Whitchurch (Holwell) 3.4

Tavistock

3.54

Horrabridge (Furzetor)2.83

Tavistock (The Library) 3.3 Mary-Tavy (Blackdown) 3.63

Lifton (Kelly House) 3.01

Coryton Manor 3.41

Lydford (Naseby) 3.7 Lew Down (Coombe Trenchard)

3.1

Launceston (PolapitTamar) 2.6

Ashwater Rectory 2.53

Thunderstorm: Dartmoor, Tiverton, Cullompton, Broadclyst, Tavistock and Plymouth. Okehampton Some flooding of cellars of houses

(Exe) Serious flooding occurred at Exwick and in the Ex bridge area.

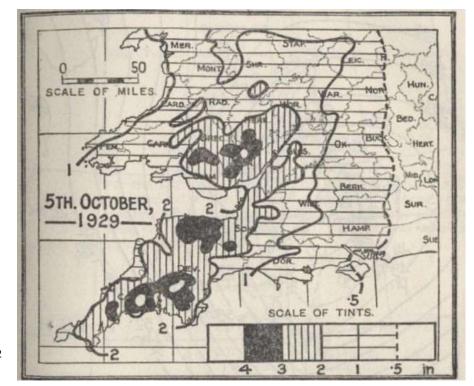
Heavy rainfall also occurred in Somerset, Gloucester, Herford, Worcester and S Wales

## Western Morning News 7 Oct

Holsworthy (Bodmeyric) 2.63 Ermington (Strode) 2.72 Ivybridge (Filham House) 2.58 South Brent (Badworthy) 3.6 South Brent (Beechfield)3.25 Totnes (Dundridge Gdns.) 2.58 Totnes (Staverton) 2.9 Dean Prior Vicarage 3.26 Home (Church Park Cot.)3.81 Ashburton (Hele House)3.55 Princetown (Huccaby Ho.)3.14 Princetown (Wydemeet) 3.86 Princetown (H.M. Prison) 4.4 Postbridge (Archerton) 3.69 Postbridge (Warren Ho.)3.54 Teignmouth (Bonnicliff) 2.65 Teignmouth (Hazeldown Reservoir) 2.54 Teignmouth (Shaldon Res.) 2.75 Teignmouth (Landscore Res.) 2.55 Ilsington 3.29 Dawlish (Luscombe Castle) 2.93 Bovey Tracey (Hedgebarton) 3.2 Chudleigh (Rock House)2.68 Hennock (Haziewood) 2.9 Moretonhampstead (Bullaton) 2.94

Moretonhampstead (Mardon) 3 North Bovey (Manor Hotel) 3.48 Christow (Kennick) No. 1 3.51 Christow (Kennick) No. 2 3.28 Chagford (Fernworthy) 4.39 Chagford (Metherall) 4.36 Christow (Smithacott) 2.65 Moretonhampstead (Stinhall) 3.22

Chagford (Thornworthy) 4.36 Chagford (Dartmoor San.) 3.54



Southwesterly gale accompanied in some places by thunder and hail.

Okehampton: River West Okement overflowed its banks at Lovers Leap and the Workhouse was flooded to a depth of 3 feet and 50 inmates had to be resuced through windows.

River East Ockment also overflowed and water ran through the sawmills. A bridge at Fatherford was washed away and another at Simmons park.

Totnes: several houses at Warland were flooded.

Exeter: Houses flooded to a depth of 1 foot in 7 houses in Cowick St and Prospect Place.

Seaton: 20 beach huts wrecked

Dawlish: roads impassable and some houses flooded in Park road.

Launceston Large stone and other buildings wrecked by gale winds. A man was drowned in the River Taw.

Starcross 2.81 Exeter (Hatfield Longdown) 3.14 Rockbeare Manor 3.15 Brampford Speke 2.77 Kentisbeare 2.82 Exminster (Trood House) 2.77 Tiverton (St.Aubyn's Park)2.58 Tiverton (Hartnolls) 2.64 Tiverton (Aistree, Halberton) 3.09 Tiverton (Lythecourt) 2.63 Tiverton (Blundell's Sch.)2.77 Hemvock (Windlehurst) 2.93 Bampton (Stuckeridge) 3 Bampton (Castle Grove) 2.76 Stockland (Reading Room) 2.58 East Anstey (Rhyll Manor)2.64 East Anstey Rectory2.82 Molland (Green Cot)3.3 Okehampton Grammar School 3.6 Okehampton (Uplands) 3.5 Parkham (Melbury Moor)3.21 High Bray Rectory 2.54 Parkham (Melbury Res.)3.64 Bideford (Gammaton Res..)2.7 Challacombe 2.93 Redruth (Trewirgie) 2.71 Bodwin (Polgwin) 2.86 Bodmin (Castle Hill House) 2.86 St. Keverne (Lanarth) 2.54 Camelford (Stannon Clay Works) 2.52 Falmouth Observatory 2.56 Penryn (Ashfield) 2.59 Gwennap (Trevince) 2.78

St. Day Council School 2.99

Chagford (Huish) 3.25

River Dart was considerably swollen.

Tavistock 3 ½ inches rain reported the highest ever recorded.

River Tavy overflowed and carried away two wooden footbridges.

Truro: The river overflowed the quay walls and premises were flooded in Victoria Square and in Old Bridge St there was a foot of water for some distance.

Truro (Tregolls) 2.7 3.05 Mevagissey Polperro 3.3 Fowey 2.95 St. Austell (Charlestown Old Vicarage) 2.69 St. Austell (Trevarna) 2.9 Menheniot (Coldrenick) 3.16 Liskeard (Penmilder) 4.53 Liskeard (St. Pinnock Rec.) 3.52 Bolventor Vicarage 2.92 Devonport (Empacombe) 2.51 Torpoint (Trethill House) 2.52 Saltash (Pentillie Castle) 3.41 Launceston (Hexworthy) 3.33 Launceston (Pendruccombe) 3.31 Albaston (Nanaimo House) 2.76

Sithney Council School 2.87 East Looe 3.33 Helston (Tenderah) 2.87

South Brent (Badworthy) 2.77

Princetown (H.M. Prison) 3.46 Postbridge (Archerton) 3.24

Postbridge (Warren Horse Inn)

3.59

18th

Chagford (Fernworthy) 3.41 Chagford (Metherall) 3.04 Chagford (Thornworthy) 3.2 Holne (Church Pk. Cottage 3.17

2.52 Challacombe

18/19 Nov 1929 BR

11 Nov 1929

BR

Whitchurch (Langstone) 2.65 2.56 Tavistock South Brent (Badworthy) 3.00 Ashburton (Hele House) 2.79 Princetown (Wydemeet) 2.88 Princetown (H.M. Prison) 3.86

Postbridge (Archerton) 3.29

[Not added to EXCEL file]

Rainfall was associated with a deep depression to the NW of Scotland with high pressure over the Bay of Biscay. Strong SW winds prevailed.

[Not added to EXCEL file]

24 Nov 1929 BR Western Mornin News 25 Nov Ex & Ply Gaz 29 Nov	Chagford (Fernworthy) 2.65 Chagford (Metherall) 3.05 Chagford (Thornworthy) 2.78 Home (Church Park Cot.)3.74 19 <sup>th</sup> Princetown (H.M. Prison)3.55 Postbridge (Archerton) 2.53 Postbridge (Warren Inn) 4.39 Membury (Green Down) 2.5 Lydford (Naseby) 2.52 Dartmoor (Swincombe) 2.66 Dartmoor (Fox Tor) 2.70 South Brent (Badworthy) 3.14 Dean Prior Vicarage 3.02 Ashburton (Hele House) 2.79 Princetown (H.M. Prison) 3.26 Postbridge (Archerton) 2.62 Postbridge (Warren Inn) 3.19 Ilsington 3.44 Bovey Tracy (Hedgebarton) 3.41 Bovey Tracy (Edymead) 2.57 Moretonhampstead (Bullaton) 3.01 Moretonhampstead (Mardon) 2.53 Christow (Kennick) No.1 2.68 Christow (Kennick) No.2 2.78 Chagford (Fernworthy) 2.6 Chagford (Metherall) 2.99 Christow (Laployd) 2.67 Chagford (Thornworthy) 2.62 Holne (Church Park Cottage) 3.15 Bickington (Higher Goodstone) 2.57 Lee Moor Clay Works 3.25 Yelverton (Oakfield) 2.56	Thunderstorms Flooding in many parts of the West country from Somerset to the eastern part of Cornwall. Exeter: Flooding reported in St Thomas's. Inhabitants were baling water or barricading their premises. Cowick St was inundated near Buller Hall.  Dartmouth: thunderstorm with large hail Bridestowe and Lydford: Springs rose under the floors of dwelling houses (which had never happened before).  Stockleigh Pomeroy: Much damage was done to roads by the storm. A thunderstorm occurred over Radon Hill; the water rushed down breaking up culverts, choking drains and threatening to flood houses down below
BR	Sheepstor (Burrator) 2.5 Dousland Reservoir 2.6	(>3 times normal) [Not added to EXCEL file]

	South Brent (Badworthy) 3.29 South Brent (Beechfield) 2.69 South Brent (DidworthySan.) 2.52 Saltash (Pentilie Castle) 2.50	
5-8 Dec 1929 N Devon Journal 12 Dec		Gale with 100 mph winds and a series of thunderstorms affected N Devon causing wrecks and loss of life off the N Devon coast. A steamer sank with the loss of all (21) hands. Another sank with loss of 4 crew from Appledore. The main damage in towns was from the gale but houses were flooded in Bradiford. There was much storm water in the Taw and Torridgeand Weare Gifford in the Torridge valley experienced flooding for the fifth time in 3 weeks. At Lynton the River Lyn was never know to rise so rapidly or to remain so high in flood for such a long time.  Princetown Gale force winds and thunderstorm
4 Apr 1930	Tiverton Lythecourt 2.50	Rainfall observer, Mr A.L.Sadler, at Tiverton (Lythecourt) noted "The 2.50 inches recorded on April 4th was the result of a cloudburst or abnormal storm, the centre of which was presumably about 1/4-mile from the gauge.
BR/CBHE		In a small valley above this house a trough was torn out of a grass field about 200 yards long, 6 feet deep and varying in width from 3 to 10 feetmost of the rain fell between 14.30 h. GMT and 18h.'
20 Aug 1930 BR 17 Sep 1930 BR	Lee Moor Clay Works 3.4 Holne (Church Park Cottage) 2.68 Dartmoor (Swincombe) 2.95 Princetown (Wydemeet) 3.00 Bovey Tracey (Hedgebarton) 2.5 Christow (Laployd) 2.53 Crowan (Boswyn Reservoir) 2.5 St. Ives (Cemetery) 3.04 St. Austell (Trevarna) 2.58 St. Keyne (Locrenton) 2.74 Liskeard (Penmilder) 2.68 Liskeard (Lewarne) 3.16 Lee Moor clay Works 2.65 Princetown Prison 2.72	[Not added to EXCEL file]
21 Nov 1930 Ex & Ply Gaz 24		Thunderstorm Broadclyst: Flood depth on roads reached 9 inches.
Nov 27 May 1931	Bampton Castle grove 3.93	Crediton and Tavistock: thunderstorms reported but no flooding  Also heavy rainfall over Exmoor, Somerset and in S Wales where many totals were > 4 inches and flooding
27 IVIAY 1331	zampton castic grove 5.55	Also neavy failitail over Exhibor, Somerset and it's wates where many totals were > 4 inches and hooding

BR

Morebath Manor 3.85 Launceston Landue 2.60

Yorks Post & Leeds Intell. 27 May

Plymouth 0.58" in 10 to 12 minutes

Western Morning News 28 May

Ex & Plym Gaz 29 May

5 Jun 1931

Woolacombe Hotel 2.72 Ilfracombe Slade WW 3.68 for 4<sup>th</sup> and 5th

North Devon Herald occurred. Thunderstorms

Note also an isolated rainfall of 2.94 on 31 May at Launceston North Hill.

Business at Plymouth was brought to a standstill because of a severe thunderstorm Half and inch of rain fell in 30 mins and water rose to a depth of 4 feet in main streets flooding several big shops. There was also lightning damage.

Exeter had heavy rain accompanied by large hail. Water poured from the hills and manholes were burst. Many roads in the Exe Valley as far up as Dulverton were flooded. Roads affected by flooding were Alphington St, Oakhampton Street and Road and Cowick Street. Shops and houses were flooded in Cowick St and logs and other debris were carried along the street. One house was flooded with water flowing from front to back and said by the occupant not to have occurred for 60 years. Cottages opposite Buller Hall were flooded to 2 feet. In Prospect Place the water reached the third stair in some houses. A rowing boat was used on Okehampton Road. At Pocombe Bridge horses were drowned on the ground floor and people had to be rescued for higher floors. The flood rose with great rapidity. A short distance away a car was carried out of a garage. At the Three Horse Shoes Inn on the Exeter Crediton Road the water entered the Inn from all sides to 2 feet depth. In the Lion's Holt district houses at the bottom of Devonshire Place and new buildings were inches deep in water. Houses in Eastview Terrace were also affected. Axminster inn near the Triangle was flooded.

Exwick: The village street was a rushing torrent from water flowing down Exwick Hill.

Crediton: Scores of houses were flooded and inmates took refuge in upstairs rooms. 1.25 inches of rain fell in half an hour.

Tiverton: Storm lasted 20 minutes but heavy rain continued; parts of Fore Street were flooded. Hailstones fell as large as hazel nuts. Glass was broken at Tiverton Lace factory. Several shops were flooded to several inches. Thorverton: Water rushed down from the hills and burst on to the road.

Oreston: Houses on the Quay front were flooded with water from the hills

Plymouth: Drainage system (designed to cope with an intensity of 1 inch per hour) was overwhelmed by the intensity of the rain at Pennycomequick

(Caen) Braunton, Cloudburst over Spreacombe led to floods which reached their highest at 11.30am. A 'wall of water' on the River Caen overflowed its banks at 9.30am. Adjoining fields flooded. Water rose to the level of Challoners Road. The Square was flooded and shops there flooded to 2-3 feet. Water waist-deep at the Cross Tree at the crossroads. Water several feet deep in Caen Street, South Street and the Square. Water several feet deep in the farmyard at Score Farm.

## North Devon Journal 11 Jun

The NDJ description is very extensive and included flooding mainly at Caen. A cloudburst occurred at Spreacombe near Georgeham and the River Caen overflowed its banks at Braunton with much flooding to property at Braunton, Saunton, Croyde and Georgeham.

Braunton: At one stage the Caen was already high when inhabitants were amazed to see a small bore nearly a foot high surging down the New Challoners Road. The rapid rise did not allow for remedial response and practically every building in the vicinity was flooded. The Square was entirely inundated and at the other end of the Main Street the water poured over the railway crossing carrying outbuildings. It poured down South Street like a stream. An observer noted: 'The water came from Heddon Mill like a tidal river, the streams having burst their banks were restrained in their progress by bridges over which the muddy torrent mounted. It was 28 years ago that Braunton had a serious flood but nothing like this one'. In Caen Street the water was 5 feet deep.

Gerogeham: The Rectory was flooded with a three feet watermark and gauged several feet deep at the entrance. Parts of the churchyard were demolished. A number of cottages in the centre of the village were completely swamped with houses full of mud, also at Vale cottages, Foot farm. People were swept off their feet by the current.

Croyde: Houses on either side of the main street had been flooded to a depth of 4 feet. The new Croyde bridge was completely submerged and houses nearby were flooded up to the ceiling. Walls were washed over. Saunton: A number of cottages suffered badly in the lower part of the town. A footbridge was hurled against the main bridge. Landslides occurred at the Instow-Bideford road.

Spreacombe: 'The trouble arose from a cloudburst on Roddaway. We had no warning whatever of the approach of the flood; before we knew where we were the raging torrent swept down upon us flooding everything in its path. My workmen and I could do nothing but run for our lives'. To escape the observer jumped on a large corn chest but within a few seconds it was floating around in the barn; he then scrambled for a high oak beam and made his way to the stable adjoining. Two cows ready for milking were swept away. Horses were up to their necks.

Instow: the storm came so suddenly that within a few minutes the whole area for a few miles around was transformed into big lakes and streams.

Woolacombe: Houses on the West Road Terrace were flooded. The water came in form the higher grounds on the back, roads were damaged and paths were gullied.

South Molton: hailstones as big as marbles fell as well as jagged pieces of ice.

At Northam, Bideford and Fremlington the rainfall was not significant and little damage was done at

**British Rainfall** 

## Barnstable.

River Caen overflowed at the iron railway bridge, off the new Challoner's Road, poured down the valley, over the allotments behind the school yard, and down over the slope of the yard in Caen Street. Flooding more serious than the floods 28 years previously. The flood rose to serious heights at 9.30am from Heddon Mill. "A foot of water surged down Challoners Road, it rose and rose, ran through the Square and over the railway crossing, and poured down South Street [this refers to the 2nd flood of the day in the later morning]. The deepest water was in Caen Street, where it reached five feet in the Post Office - level with the top of the counter." There was over a foot of water in the council schoolroom, even though it is on higher ground.

(Taw/Torridge/Croyde) Croyde (flood resulting from cloudburst over Spreacombe). Croyde Stream 4 feet deep in the morning and overflowed. Flooding from 9am until noon. 5 feet of water in Seacroft Cottage (now Croyde Weaver's Cottages) and adjoining house (high levels due to waters ponding up against the village wall). SUMMARY FROM THE NORTH DEVON JOURNAL. Flood mark on Seacroft Cottage estimated at 102cm. Georgeham (flooding as a result of the Spreacombe cloudburst). Water reached the top of a bus radiator at Forda Corner at 3pm. Water here was flowing from two directions at an estimated 45mph. Forda House and gardens flooded to a high level. The stream at the bottom of Rock Cottage's garden rose and destroyed the strawberries (covering them in mud) and raspberry canes there, and uprooted the gooseberry bushes. There was 3 feet of water at the Rectory.

**(Lyn)** At Ilfracombe (Slade Waterworks) 3.68 inches was recorded for June 4th and 5th. "Mr A. Leigh Barker, observer at Spreacombe Manor, some 4 miles to the S.S.W. of Ilfracombe and at an altitude of 340 feet noted: 'The floods around Woolacombe, Georgeham and Braunton, following on the thunderstorm of the early morning of the 5th, were of unprecedented severity in that district because of the havoc caused. Most of the rainfall measured at 9h. on the 5th, viz., 2.31 inches, fell between 06.30 and 08.00. The stream began to rise about 0700 and from 07.30 to 08.30 we experienced a flood which broke down fences and stone walls, uprooted trees, tore away river banks and covered the meadows with stones and debris.............The water streamed through Spreacombe to Braunton and down another valley through Georgham and Croyde, while some escaped seaward through Woolacombe. The flood water reached Braunton about 09.30. Springs which are usually dry from March till December rose during the following day and continued in force for over three weeks.'



Ex & Ply gaz 6 Jun/19 Jun

19 Jun 1931 Ex & Ply Gaz 20 Jun Exeter: reported that damage had been done to bridges in Alphington, Whitestone, ide, Dunchideok and that 4 footbridges had been washed away.

Appledore: several houses were flooded (but the storm did not touch Bideford).

Axminster: Many of the houses in the lower parts were flooded with furniture foating in water over 3 feet deep.

Morthoe: Houses were flooded and crops washed out of the gardens

Woolacombe: Water rused through houses from back to front, washing away part of a road.

Storm appeared to be centred on Torquay where 2 hotels were struck by lightning, a man was injured and the power supply failed.

Exeter: It was on the finge of the storm but still caused problems in Cowick St (No storm weather was experienced at Broadclyst). A cataract rushed down Redhills and inundated Okehampton Rd. Inhabitants used board and sacking to keep the water out. In Prospect Place the water receded before damage was done.

Newton Abbot: Flooding occurred at Baker's Park with water rushing from Woolborough Hill.

Torquay: Flooding occurred and Union St and Fleet St became impassable. Shops were flooded and stock damaged. At the rear of the Union Hotel barrels were floating in the yard. The Burlington Picure House was flooded. Abbey Road and Market St were like rushing rivers and at Shead's Corner water entered a bakers to several inches. Houses in Ellacombe were flooded.

Totnes: there was some flooding in the lower part of the town.

7 Jul 1931 BR	Ermington Strode 2.63	Thunderstorms reported elsewhere in the south on this day.
Ex & Ply Gaz 8 Jul		Exeter: Cowick Street was under water for a distance of 20 yards in the vicinity of Old Vicarage Road and traffic was held up.
		Cullompton: Storm for 3 hours and the street and several houses were flooded.  Newton Abbot: Torrential rain and hail; water ran down Highweek Hill and Exeter Road like raging torrents and through the houses on Wain Lane. In Highweek Street houses were flooded to 2 feet.
Western Morning		through the houses on wain take. In highweek street houses were housed to 2 feet.
News 8 Jul		Thunderstorm over South and Mid Devon. Large hailstones fell at Plymouth, Tavistock, Newton, Torquay and Paignton. Lightning caused building damage at Rewe near Exeter.
5 Aug 1931 BR/CBHE	Hexworthy 0.98 in 25 mins and 2.05 in 5 hr 30 mins Lydford Naseby 2.56	Newton: South Devon cricket club ground was flooded and a match abandoned. (Tamar) Rainfall observer, Mr R.B.Rogers, of Hexworthy, near Launceston, noted that three thunderstorms occurred the first during the night giving 0.85", the second giving 0.98" in 20 mins and a third storm gave 1.07", in all 2.90 inches fell in about 16 hours. (Lydford is W of Dartmoor)
		Isolated local thunderstorms reported in SE and SW England.
Ex&Ply Gas 6 Aug		Seaton and Beer: Steets of Seaton were flooded. At Beer water poured down the hillsides into the main thoroughfare.Little damage was done. No rain fell at Colyford a mile and a half away.
Hull Daily Mail 6 Aug		In Cornwall extensive damage was caused to crops and livestock. In the valley between Wadebridge and Camelford residents were forced to leave their houses because of the sudden rush of water and at Treharrick a farmer had to swim about his yard to rescue stock. An infantry camp near Okehampton was flooded and a house was surrounded there by 3 feet of water.
18 Aug 1931 BR	South Brent Badworthy 2.81 South Brent Didworthy 2.52	Tiverton: Rain fell throughout the day and the Rivers Exe and Lowman rose appreciably in a short period of time. In the evening it threatened to flood houses near Exe Bridge Tiverton [Not added to EXCEL file]
3 Nov 1931 CBHE/BR	Whitchurch (Langstone) 3.26 Tavistock 3.27 Tavistock (The Library) 3.25	(Dart) Princetown Prison, Dartmoor: " The amounts recorded at this station for the 2nd and 3rd were 0.80 in. and 5.59 inThe fall is remarkable because of the persistence of the heavy rain. The total duration of that day was 23 hours."
33.12, D.N	Mary-Tavy (Blackdown) 3.72 Lydford (Naseby) 3.35 South Brent (Badworthy) 3.1 Dartmoor (Fox Tor) 3.93	Over 2 inches was recorded over much of Devon and Cornwall, most of Wales and the Lake District. More than 4 inches was recorded over Dartmoor, South Wales, Snowdonia and the Lake District. Further details are given of the areas over which rainfall more than 3, 4 inches fell.

Dartmoor (Swincombe Valley) 3.16
Princetown (Wydemeet) 3.66
Princetown (H.M. Prison) 5.39
Postbridge (Archerton) 4.25
Postbridge (Warren House Inn)
5.17
Ilsington 3.51
Bovey Tracey (Hedgebarton) 3.9
Bovey Tracey (Edymead) 3.45
Moretonhampstead (Bullaton)
4.11
Moretonhampstead (Mardon)
3.03
North Bovey (Manor House)
3.71
Christow (Kennick) No. 1 3.35
Christow (Kennick) No. 2 3.62
Chagford (Fernworthy) 5.11
Chagford (Metherall) 5.49
Bovey Tracey (Whiddon) 3.45
Moretonhampstead (Stinhall)
4.12
Christow (Laployd) 4.24
Chagford (Thornworthy)
4.4
Chagford (Huish) 3.9
Parkham (Melbury Res.) 4.3
Holne 4.52
Okehampton (Grammar School)
3.00
Okehampton (Uplands) 3.30
St. Ives (Cemetery) 2.76
St. Ives (Liscoruah) 2.57
Truro W.W. (Lower Tregurrow)
2.5
Launceston (North Hill) 2.82
Launceston (Pendruccombe)

2.51

Western Morning

News 5 Nov

BR shows the synoptic chart for the day with an intense low off the NW coast of Scotland with trailing fronts and a strong southwesterly airstream.

Gale force winds with shipping difficulties reported.

Rosehill district: Ruan-Tregony road was flooded to a depth of several feet and rose to the level of the arch of Tregony bridge.

6 Dec 1931 Cornishman 10 Dec 9 Jan 1932 BR

Ex & Ply Gaz 15 Jan Bolventor Vicarage 3.56 Wendron (Ninemaidens) 2.65 Penzance rainfall only 0.58 inches but occurring in a very short time

Dartmoor (Swincombe) 2.56 South Brent (Badworthy) 2.84 Cornwood (Yealm Head) 2.74 Holne (Church Park Cott.) 4.15 Ashburton (Hele House) 2.93 Princetown (Huccaby Ho.) 2.55 Princetown (Wydemeet) 3.75 Princetown (H.M. Prison) 4.2 Postbridge (Warren House Inn)

3.78

Postbridge (Archerton) 3.42 Ilsington 2.85 Bovey Tracey (Hedgebarton) 3.05 Moretonhampstead (Bullaton)

3.26

Moretonhampstead (Mardon) 2.66

North Bovey (Manor House) 2.5 Christow (Kennick) No. 1 2.86 Chagford (Fernworthy) 3.3 Chagford (Metherall) 3.26 Moretonhampstead (Stinhall)

2.52

Chagford (Thornworthy) 3.49
Chagford (Dartmoor San.) 2.75
Chagford (Huish) 2.66
Okehampton (Uplands) 2.8
South Brent (Badworthy) 2.88
Holne (Church Park Cott.) 2.87
Princetown (H.M. Prison) 2.98
Sithney Council School 2.96

Christow (Laployd) 3.38

Penzance: The Town Council had just completed a new sewerage scheme and houses which previously flooded were no longer thought to be at risk. However a thunderstom brough heavy rain affecting St Mary Street, Medrose Terrace and Lannoweth road. The flooding was caused by water coming up out of the drains. Heavy rainfall had also occurred over Dartmoor on 5 January, up to 3 inches and over 1 inch on Exmoor

Ashburton: The council met to consider the flooding of the Town centre (no description)

Severe storm at Penzance on 14<sup>th</sup> with some accompanying thunder and lightning and very strong winds from the southwest. Flooding occurred at Medrose Terrace, Rosevean road, Gwavas Street, Penlee Street, The Arcade and other places. At Medrose Terrace it was a foot deep in the houses. The beach has been stripped of

12 Jan 1932 BR Cornishman 21 Jan
26 May 1932
Cornishman 2 Jun
3 Jun 1932
Cornishman

9 Jun

A heavy shower but no mention of thunder.

Western Times 10 Jun Western Morning News 4 Jun 29/30 Jun 1932 1 Jul BR CBHE

Roborough (Maristow G.) 2.85 Bickley (Roborough Res.) 2.59 Lee Moor House 3.27 Yelverton (Oakfield) 3.13 Sheepstor (Redstone) 3.4 Sheepstor (Burrator) 3.15 Sheepstor (Head Weir) 3.25 **Dousland Reservoir** 3.46 Dartmoor (Lowery) 2.75 Whitchurch (Grenofen) 2.74 Whitchurch (Langstone) 3.47 Tavistock 3.07 Horrabridge (Furzetor) 3.26 Tavistock (The Library) 2.81 Mary-Tavy (Blackdown) 2.82 Lydford (Naseby) 3.14 South Brent (Beechfield) 2.86 South Brent (Badworthy) 3.88 Cornwood (Yealm Head) 2.5 Waddleton Court Stoke Gabriel (Maisonette) 2.73 Totnes (Walrond House) 2.68 Holne (Church Park Cott.) 3.28 Ashburton (Hele House) 2.96 Princetown (Huccaby Ho.) 3.45

shingle in the storm and dropped several feet.

Penzance: Some house flooding occurred in Penlee Street and St Dominic St where the water rises from the drains into the houses. The problem may have been a collapsed sewer. [Not added to EXCEL file]

North Cornwall suffered more severely from the thunderstorm than West Cornwall. A house at Camelford was struck and put on fire. A Wesleyan Church was struck at Tregadillet, sheep were killed and one house was flooded at Delabole.

The area from Launceston the Wadebridge was affected. (No reports of flooding).

Camelford: many houses near the river at the bottom of Main Street were flooded with water and mud. Poultry were drowned.

(General Southwest) More than 2 inches was measured over a fairly large part of northern Dorset and southern Somerset and over an area of 1,015 square miles of South Devon and east Cornwall. More than 3 inches was recorded over a small area near Bodmin and over 190 square miles of Dartmoor. At Princetown (H.M.Prison) 5.00 inches was measured, the duration being 20.1 hours. This followed a fall of 1.75 inches in 8.8 hours on June 29th, making a total of 6.75 inches for the two days. Houses near Launceston and at Camelford were struck by lightning and at the latter were flooded."

Remarkably no reference was found to this event in any of the newspapers

Princetown (Wydemeet) 3.75 Princetown (H.M. Prison) 5.00 2.77 Ilsington Moretonhampstead (Bullaton) 2.8 Christow (Kennick) No. 1 2.65 Chagford (Fernworthy) 2.77 Chagford (Metherall) 3.35 Christow (Laployd) 2.85 Chagford (Thornworthy) 2.63 Ottery St. Mary (E. Hayes) 2.83 Membury (Green Down) 2.51 Stockland (Post Office) 3.05 Liskeard (Lewarne) Launceston (North Hill) 2.64 **Bolventor Vicarage** St. Mellion (Pentillie C.) 2.58 1 Jul Dartmoor (Fox Tor) Dartmoor (Swincombe) 3.76

11 Jul 1932 Western Morning news 12 Jul 16 Jul 1932 Western Morning

Ex & Ply gaz 22 Jul

News 18 Jul

Thunderstorms but not general

Thunderstorms; storm follows heatwave; [Only for other parts of England not SW] [Not added to EXCEL file]

Callington: Water entered houses in some parts of the town especially at Newport Princetown: Very heavy rain fell for three quarter of an hour.

Exmouth: thunderstorm for an hour and a half; worst flooding for many years with many houses and businesses flooded. The Parade had 1 foot of water with water in shops and houses on the lower side of the Parade including Staples buildings in three houses to a depth of 2 feet and the Arcadia Garage. There was also flooding in Chapel Street and high Street.

Exeter: 1 ½ inches rain fell in two hours Water from the Redhills flowed into Okehampton Road where the water was a couple of inches deep. Some flooding of shops occurred at the bottom of Paris Street.Road flooding occurred at Broadclyst. On Old Vicarage Road and Parkhouse estate there was no flooding, thanks to the resewering of St Thomas, recently carried out. The Newtown district suffered the full force of the storm and shops and houses were flooded up to three feet. The water rushed from surrounding streets to the lower levels at Clifton St and the Triangle. The Axminster Inn at the bottom of Paris St had water up to 3 feet; floor

boards were forced upward. ('Newton district is suffering what has been remedied at St Thomas'). At Polsloe Bridge manholes were lifted by overflowing drains and the road was flooded to 18 inches. Dog Village Broadclyst; four feet of water in one cottage was reported. Moretonhampstead: Torrential rain with a foot of water on the road near the station At Budleigh Salterton hardly any rain fell.



21 Aug 1932	Morebath Manor 2.64	
BR	Littleham (Orleigh Court) 2.78	
	Dolton (Hilliers) 2.52	
7 Oct 1932	Princetown (Wydemeet) 2.54	
BR	Princetown (H.M. Prison) 2.74	
2 Jan 1933	Holne Church Pk Cottage 2.55	
BR	Princetown Prison 2.89	
25/26 Feb 1933	Rain thunder hail and melting	
Western morning	snow	
News 27 feb		

Thunderstorm

3 May 1933

Probably thunderstorms [Not added to EXCEL file]

[Not added to EXCEL file]

[Not added to EXCEL file]

There was flooding in East Devon but most inconvenience was caused by the snow. [Not added to EXCEL file]

Exeter: houses struck by lightning. For the first time since the new drains were put in, the Old Vicarage road

Western morning News 5 May		and Parkhouse Estates were partially flooded.
22 Jun 1933 BR	Poltimore Rectory 2.25 in 45 mins Tot=3.23	Poltimore Observer notes that 'the storm fell also on Pinhoe but there was no rain 2 miles further on in Exeter; no inhabitant here remembers such a deluge, all roads out of the village for a time impassable.
Western Morning News 23 Jun	Thunderstorm with rain and hail	Pinhoe: Houses were flooded causing great damage to 3 cottages (Bridge Cottages); inhabitants escaped from upper windows. In some parts of the village the water was waist high and rose so suddenly that villagers were marooned. The water rushed down from the hills and within five minutes had reached the doorsteps of houses near the railway bridge on the main road. The water washed sleepers from underneath the rails of Southern Railway. All the houses on the lower side of the Main Road were flooded in some up to the fifth step of the stairs. 'Worst in the village in 35 years of residence'.  Poltimore: Houses and the Post Office were flooded to 6 inches deep. Hail as large as marbles fell.  Exmouth: Flooding occurred in the lower parts – Exeter road, Hartopp Road and Lyndhurst Road but not the main part of the town.
15 Jul 1933 BR Western Morning News 17 Jul	Liskeard Penmilder 1.15 in 35 mins	Noted that it was St Swithin's Day!  Newquay: Streets were flooded and at the northern entrance to the town the water was 1 foot deep.  Truro: thunderstorm; several places flooded in the lower part of the city and flowed into many houses.
11 Aug 1933 BR Western Morning	Chagford (Thornworthy) 3.05 Chagford (Dartmoor San.) 3.98 Chagford (Huish) 3.45 Wendron (Ninemaidens) 2.65	The heavy rain was associated with the passage of a shallow depression off NW Spain to the northeast causing thunderstorms over the southern half of England. At Chagford the thunderstorm started about noon and continued intermittently until the end of the day but roughly 3 inches fell between 11.00 and 13.00.
News 12 Aug  Western Morning news 23 Jun 1938		In a paper by RH Worth to British Waterworks Association the following was reported on the river Dart. 'A bore took 25 minutes from Dartsmeet to Newbridge a distance of 4 ¼ miles – a rate of 10.2 miles per hour (4.6 m/sec)
		Cornwall and the Plymouth area seem to have suffered most. North Devon and parts of South Devon escaped lightly. Lightning damage to buildings and trees. After the storm the heatwave returned.  Looe: thunderstorm for 3 hours; Water swept through houses. Water swept down Barbican Hill, East Looe so

that it was impossible to walk against it. One man who had lived there for 50 years had water in his house for

the first time. Water rushed down Shutta Hill and houses near the Great Western Railway Station were flooded and Blight's Dairy and a grocery. Water was a foot deep in the Globe Inn. In West Looe, water from Bass Hill entered several shops in Fore St and houses in Church St.

Redruth: Many houses were flooded in the lower part of the town including Station Hill. Gas Lane was flooded to 4 feet.

Fowey: Houses in the lower level near the Town Quay were flooded.

Camborne: Many parts of the town and district were under water.

Torpoint: Houses were flooded and manholes lifted.

Exeter: High St was flooded from kerb to kerb. In Cowick St people were wading knee deep and shops were flooded opposite St Thomas's Church. In Okehampton Road the water rose level with the footpath.

Crediton: Residents in a number of Crediton districts have had to take refuge in their bedrooms. Houses in North St, church St, Parliament St and Exeter road were flooded to a depth of several feet; similarly in Kiddicott.

Tavistock: The storm caused a rapid rise in the River Tavy where a new fish pass was being constructed.

Devonport: Streets were flooded

Plymouth: very severe thunderstorm; two fireballs fell and destroyed houses.

Exmouth: Pieces of ice the side of half crowns fell out of an apparently cloudless sky before the storm started. Within a few minutes Lower Parade, Chapel St and Market St were flooded and shops flooded. In Lower Parade

buses were wheel deep.

Princetown (H.M. Prison) 2.92 Rain was associated with a deep depression centred to the S of Iceland. At the same time an associated Chagford (Fernworthy) 2.78 secondary depression moved rapidly across the country in a northeasterly direction with strong winds or gales Chagford (Metherall) 2.7 in many areas. Rainfall was widespread but biggest totals in Wales.

> [Not added to EXCEL file] [Not added to EXCEL file]

Paignton: one man killed by lightning.

Dartmoor: Roads were flooded by water up to 2 feet deep, notably around Burrator and Postbridge.

Roborough (nr Plymouth) road flooded to 2 feet and traffic held up

Thunderstorm but no references in the press [Not added to EXCEL file]

14 Aug 1933 Western Morning News 14 Aug

Said to be the worst in living memory. There were many cases of lightning injuries to people and damage to houses but little flooding reported.

11 Oct 1933 BR Ilfracombe (Reservoir) 2.51

Hartland (Fosfelle) 2.61 St Keyne Locrenton 2.62

only a few minutes

22 Jul 1934 Yelverton Oakfield 2.00 in 2 hr In most cases the storm lasted

Western Morning News 23 Jul

1 Dec 1933

BR

Parkham Melbury Moor 1.28 in 1 Aug 1934 2 hr BR

5 Aug 1934 BR 1 Dec 1934 BR	Dousland resvr 2.63 South brent Brent Moor 2.52 St Kenye Locrenton 2.69 Whitchurch (Langstone) 2.6 South Brent (Badworthy) 2.97 South Brent (Brent Moor) 3.1 South Brent (Didworthy San.) 3.35 South Brent (Brentmoor House) 2.75 Dartmoor (Fox Tor) 2.89 Princetown (H.M. Prison) 2.76	The rainfall of 5 <sup>th</sup> was more widespread and of longer duration than on 2 <sup>nd</sup> which was of the thunderstorm type. At Princetown Prison the total rainfall for 5 <sup>th</sup> was 2.08 and the duration 14.6 hours.  [Not added to EXCEL file]  Although December was the wettest on record in much of SW England there were few heavy falls. At Princetown Prison the total duration of measureable rainfall was 307 hours or 10 hours per day.  [Not added to EXCEL file]
13 Jun 1935 Western morning news 14 Jul 25 Jun 1935 N Devon Journal 27 Jun Western Morning News 25 Jun	Wendron (Ninemaidens) 2.65  Heatwave continued – Plymouth's hottest day since 1921	Dartmouth: cloudburst with rain for over 2 hours; Victoria Road was affected with many houses flooded; the Seale Arms hotel and the Constitution club were worst affected. The leat at Ford Cross overflowed and Lake Street became a lake. Roads were strewn with debris and mud. Lynmouth: One of the most terrific thunderstorms on record occurred at Lynton and Lynmouth. Many houses were flooded with one to two feet of water. Debris several feet in height was piled up at the foot of Lynmouth Hill. The handrails on the Watersmeet bridge were torn down on the Lynton parish side of the bridge  Chagford: heavy intermittent rain for nearly an hour; properties struck by lightning.  Moretonhampstead: Streets ran like rivers flooding a number of houses.  Port Isaac: Worst storm for many years; no flooding reported
8 Aug 1935 Western Morning News 9 Aug 22 Sep 1935 Western morning news 2 Sep 6 Oct 1935 Western morning	High temperatures in the southwest There was little thunder  Rain fell though 5 <sup>th</sup> evening and 6 <sup>th</sup> morning sometimes accompanied by lightning	Dartmoor: thunderstorm; the storm was severe in Moretonhampstead and also at Princeton and Yelverton. The River Dart at Two bridges was flooded. The River Dart was flooded from low flow in half an hour.  South Molton: thunderstorm which flooded hotels, garages, houses and shops. In some houses there was nearly a foot of water. Other places suffering were Bishop's Nympton, Molland, Withypool, North Molton and Brayford.  Principal problems in North Devon and Taw and Torridge were in flood.  Lifton: River Thrushel rose and flooded houses including in Old Tinhay where the water was several feet deep.

News 7 Oct  16 Nov 1935 Western Morning	More than 12 hours of continuous rain	It was reported that this river had not risen so high for 40 years. The bridge across the Lyd at Leat Lifton was partially washed away.  Hayne near Stowford: the top of the bridge was under water.  Calstock: houses flooded to 3 feet and animals drowned.  Coryton: Record rainfall of 3.28 inches  Torrington: Severe thunderstorm; River Torridge overflowed its banks. The river rose several feet at surprising speed. Buckingham Arms Hotel was flooded to several feet. Several houses in Taddiport were flooded.  Occupants of the Toll House had to be evacuated by lorry. Old Kennels was flooded. It was over 40 years ago that the Torridge rose to such a height. Cattle were drowned.  Friars Hele: Water was 3 to 4 feet deep at the bridge; the Torrington road to Hatherleigh was under 2 feet of water. A farmer lost 30 sheep washed away.  Hatherleigh: Said to be the heaviest flood experienced in half a century.  Tamar Valley: River overflowed and carried away sheep with houses flooded at Gunnislake  High river levels and meadows flooded in Clyst valley, east Devon, Somerset and Dorset  [Not added to EXCEL file]
news 18 Nov	Crawon (Bossam Bosomair) 2.00	
10 Feb 1936 BR	Crowan (Boswyn Reservoir) 3.08 Lelant 2.51 Wendron (Ninemaidens) 2.6 Tresco Abbey 2.7	[Not added to EXCEL file]
18 Feb 1936 BR	Dartmoor (Swincombe) 2.6 Bovey Tracey (Hedgebarton) 2.55	[Not added to EXCEL file]
19 Jun 1936 Cornishman 25 Jun	Main damage in Devon from lightning with buildings struck.	A thunderstorm in many parts of Cornwall and also in some parts of Devon. At Falmouth the storm lasted 3 hours with over ¾ inch rain falling. At its height Berkeley Vale, the Moor and Market Strand were like a river in flood. (Amounts were less at Penzance and the Lizard). Houses at the bottom of the village of Grampound were flooded, one to a depth of 2 feet.
Western Times 26		
Jun		Exmouth: the main thoroaughfare was flooded; Exeter road, The Parade and Chapel St were affected; a wooden bungalow was burnt down.  Torquay: A foot of water on the Newton Road at the foot of Woods Hill; manhole covers were blown off at Watcombe
21 Jun 1936	Launceston Pendruccombe 0.75	[Not added to EXCEL file]

BR	in 25 mins	
24 Jun 1936 BR	Mary Tavy Blackdown 0.84 in 35 mins	Waterspouts were seen on the same day near Princetown and near Sheepstor. [Not added to EXCEL file]
29 Jun 1936 BR	Bodmin Castle Hill Ho 2.98 in 1 hr Tot=3.12 Exeter Countesswear 1.67 in 70 mins	Many houses were flooded and several buildings struck by lightning (at Bodmin). At the same time farmers at Washaway a little over a mile from the town were carrying hay in fine weather.  At Bodmin the total for the four days June 29 <sup>th</sup> to Jul 2 was 5.73 inches.
Western morning	111113	
news 30 Jun		Bodmin: Several buildings struck by lightning and houses flooded to 4 feet. Storm lasted over an hour and one could hardly see from one side of the street to another. The station yard was flooded to 5-6 feet. People in Railway Terrace 6 houses were trapped in their houses. The back gardens of Orange Terrace were flooded to 5 feet. Torrents from Priory Avenue, Church Street, and Castle Street made Church Square a lake The town leat was of insufficient capacity under these houses and the surface of the road was torn up. Floor boards were torn up in many houses and shops.  Galford: A severe storm flooding the road from Beechcombe to Lewmill Exeter: 2 Houses flooded at Cross park Heavitree. Storm for about one hour.
30 Jun 1936	Kilkhampton 2.00 in 2 hr	Kilkhampton is near Bude.
BR N Devon Journal 2 Jul	Bratton Fleming Daily 2.29" most of which fell between 1500 and 1600 on 29 <sup>th</sup> in a thunderstorm	There was a sharp thunderstorm at Barnstable accompanied by heavy rain. It was particularly heavy at South Moulton and at Swimbridge. At Bratton Fleming on 29 <sup>th</sup> the village was a raging torrent and many houses were flooded. Numerous cattle have been killed by lightning including at Bideford.
1 Jul 1936 BR	Parkham (Melbury Moor) 2.66 Parkham (Melbury Res.) 2.67 Hartland (Fosfelle) 2.52	[Not added to EXCEL file]
15 Jul 1936 BR	Holne 0.60 in 30 mins	[Not added to EXCEL file]
15 Sep 1936 Ex & ply Gaz 18 Sep	Thunderstorms with hail	Exmouth: parts were flooded; the sewer at the gas works again overflowed and water poured down Margaret Street and flooded Chapel St and The Parade. A part of Exeter Road was also under water. Crediton: Within 10 minutes half an inch fell. Flooding occurred in North Street, Church Street, East St and at Kiddicott and Cockwell.  Teignmouth; thunderstorm; water on the roads and at one time up to the doors of shops.
13 Dec 1936 BR	Manaton (Heathercombe)2.67 Chagford (Fernworthy) 2.69 Chagford (Metherall) 2.58	Heavy rainfall also occurred in Wales and the Lake District [Not added to EXCEL file]

17 Dec 1936 BR 12 Jan 1937 BR	Chagford (Thornworthy) 3.26 South Brent (Brent Moor) 3.38 South Brent (Brentmoor Ho.) 3.58 Holne (Church Park Cottage) 3.55 Princetown (H.M. Prison) 2.65 Manaton (Heathercombe) 3.11 Chagford (Fernworthy) 2.8 Chagford (Thornworthy) 2.95 Holne (Church Park Cottage) 2.5 Princetown (H.M. Prison) 2.73	[Not added to EXCEL file]
2 Feb 1937 BR 9 May 1937	South Brent (Brent M.) 3.00 South Brent (Brentmoor Ho.)3 Holne (Church Park Cottage) 3.25 Dartmoor (Fox Tor) 2.82 Princetown (H.M. Prison) 2.75 Newton Poppleford Haymans	Long continued rainfall caused flooding in various parts of the country including the Thames.  [Not added to EXCEL file]  [Not added to EXCEL file]
BR 22 Jun 1937 Cornishman 24 Jun Western Times 25 Jun	(Sidmouth )1.29 in 1hr 30 mins Torquay Abbey Park 0.66 in 12 mins  Very localised storm; even at Paignton there was limited rain although there were less serious thundershowers as far away as Plymouth	Torquay: Shops in the main street were flooded during a thunderstorm with some customers seeking shelter upstairs. A cinema was flooded and 200 people asked to leave because the generator was flooded. In Union St a manhole cover was thrown 20 feet into the air. The Recreation Ground was flooded and there was more than a foot of water on Rathmore Road adjacent to Torquay Station. Floods swept down Union St and Fleet St. A 'wall of water' 3 or 4 feet high burst into the Union Hotel. The children's pond at King's Garden was flooded the water feeding into a culvert near the bowling green so preventing the flooding of Torbay road. The section of Hoxton Road between Ellacombe Church Road and Smeardon's Corner was flooded and water flowed freely down Ellacombe Church Road. Water poured into basement flats (of which there are many) and knocked over two 6 feet walls on Hoxton Road.
15 Jul 1937 Western Morning news 16 Jul Ex& Ply Gaz 16 Jul	Newton Poppleford: 1.46 in 1 hr Ottery St Mary: 1.47 in <2 hrs	[NB: Western Morning News 23 Jun has a photo of floding in Fleet St Torquay] Exmouth: three hour thunderstorm in which 1.25 inches fell. Water ran through Chapel St and flooded a portion of The Parade but not seriously. Seaton: Sidmouth Street shop and houses flooded to 2 feet; Station Road was flooded; Trevetts Garage was waterlogged; the basements of shops in Marine Place were also flooded. Houses were flooded in Queen St and Fore St and Eyewell Green.

17 Aug 1937 Western Morning

News 23 Jun 1938 re paper by Worth

18 Sep 1937

BR

Western Morning

News

N Devon Journal

23 Sep

1 Aug 1938 Cornishman At Penzance 0.83 inch fell between 10.00 and 1800 mainly between 12 and 2 pm.

N Devon Journal

4 Aug

Western Morning News 2 Aug Talaton: A farm struck by lightning and set alight.

Beer: several cottages and houses flooded.

[Severe flooding also at Weymouth]

Paper by RH Worth on Floods on Dartmoor to British Waterworks Association.

Valley of Redaven tributary of the West Ockment the river cut a new channel and carried boulders a ton weight and deposited them 8 feet above the original channel

[There are no contemporaty reports of this flood in newspapers]

The paper by Foulds and Macklin (2013) puts this flood in August 1938 (quoting from Worth (1939) and Hemery (1978) This paper notes 'A great storm lashed the Moor. Two more bridges claimed. Greatest flood for 30 years. Daily fall of 62mm at Princetown on 3<sup>rd</sup>. However, since the report in WMN was in June 1938 the occurrence of the event in 1937 must be correct.

'North Devon and parts of north and mid-Cornwall were visited by a thunderstorm of considerable violence on Saturday night. The storm was at its height about 21 h when hundreds of persons leaving a fete at Barnstable Market had to drive through several inches of water on parts of the road.

In North Devon the storm extended inland from the Bristol Channel coast to South Molton. Some roads in Barnstable were flooded and some shops in the High Street were flooded. Some houses in Bickington were also flooded to a depth of inches. Three sheep were killed by lightning.

Barnstable: some business premeises in High Street were flooded.

Severe flooding on the August bank Holiday (Monday 1 Aug).

St ives: A cloudburst on St ives beach set holidaymakers running for shelter and shops in the town were flooded (Tregennal Place). 'Scenes reminiscent of the flood in 1894 were witnessed in the town'. The PO was flooded and cars were moved by the flood water on the street. Water was 4 feet deep in a house in The Terrace.

St Levant: two bullocks killed by lightning

Newlyn: A drain burst into Boase Street and flooded houses in Art Gallery Terrrace and Tolcarne Terrace.

Braunton: Thunderstorm caused much damage. Houses and shops in the Square and Caen St and Heanton Street were flooded.

Barnstable: Litchdon Street (4 inches deep) and some parts of Derby were flooded. The Imperial Hotel was slightly flooded. The Coop on High St was flooded to 3 inches.

Bideford: Low lying streets were flooded and traffic was held up at Westward Ho by flooding.

4 Aug 1938 CBHE/BR

Tinn (1946) COL Aug 1975 and 4.25 in 108 mins; 2.25 in 56 mins Paignton 2.71 in 45 mins Clennon valley Paignton 2.08 in 95 mins Hedgebarton (15 mls NW of Torquay)5.86 in 3 hr 45 mins Islington 5.35 in 5 hr 15 mins Stoke Gabriel 1.41 in 20 mins Holne 1.10 in 20 mins S Brent 1.00 in 45 mins Culmstock The Knap 1.00 in 1 hr Honiton Cotleigh Ho 1.91 in 90 mins Budleigh Salterton 1.44 in 115 mins Ashburton Melrose 1.28 in 2 hr Daily totals 3rd Coryton Manor 2.65 Lifton (Tulip Trees) 3.09 Ashwater (Bn. Pk. Bung.) 2.76 Waddeton Court 3.26 Stoke Gabriel (Maisonette) 5.08 Totnes (Dundridge Gardens) 2.91 Paignton (Victoria Park) 3.63 Totnes (Waldron Ho.) 3.23 Totnes (Berry Pomeroy Vic.) 3.7 Totnes (Dartington Hall) 3.9 Totnes (Staverton) 3.33 Broadhempston (Sneydshurst) 5.06

Torquay 5.72 in 5 hrs 10 mins

Appledore: The whole of the lower part was flooded and at the car park at the marine parade, the water reached the floor boards of cars. Many houses were flooded. Water rushed down Dark Lane and little bystreets.

Exmoor: Motorists experience an extreme hailstorm with hail the size of marbles

Weare Giffard: 33 lambs killed and a hay rick set on fire by lightning

(**Teign headwater**) Fernworthy Dam construction, East Dartmoor:" ...on 4th August,1938, following a storm during which 3.47 inches of rain fell in 8 hours, the [cut-off]trench became completely flooded...."
(**Dart**) "Another great storm, in August 1938, claimed two more bridges"

In contrast with the rains of June and July, which were mainly of the orographical type, the heaviest rains of August were mainly of the thunderstorm type. There is also an article on the "Thunderstorms of August, 1938" in the Meteorological Magazine, 1938, pp. 195-202, which includes the following statement. "Really spectacular night storms are always preceded by great heat at no great distance. As a rule the air is maritime tropical in origin and is heated for a few days over land. In some cases prolonged continued heating over the land seems to be the cause of the great heat. In the case of the storms of August it is impossible from the information at present available to trace the air back previous to the appearance of very high temperatures over south Russia on July 23rd, with an east wind. Since thunderstorm frequency is high in eastern Europe, it is evident that the moisture is often there, and its occasional westward transport presents no difficulty."

The distribution of heavy rain has some resemblance to that which prevailed on 17 Jul 1926 and on August 15<sup>th</sup> 1905 although in these cases the heavy rain was further east and the totals not nearly so large as in Aug 1938.

The distribution of the rainfall of August 3rd and 4th is shown in the diagram.

The storm lasted almost unbroken for 9 hours. It began in the early morning and continued past the daily reading. Torquay was the focus of this deluge where 160 mm was recorded. The recording was made by an unnamed Torquay observer who was at his gauge at 06.30 and had to wade through water knee-deep to reach it. At St Marychurch hailstones the size of large lumps of sugar fell to a depth of 4 inches on the ground.

High temperatures over France and very warm air over Britain increased the severity of the storm which is often the case in these situations. Tinn's book also contains reports of weather events in 1911, 1921 and 1940 etc.

Ipplepen Vicarage 3.3 Ashburton (Melrose) 3.79 Dartmoor (Swincombe) 2.68 Torquay (Mid-Lincombe Road) 4.5 Torquay (Abbey Park) Newton A. (Seale Hayne Col.) 4.35 Ilsington (Silver Birches) 5.35 Bovey Tracey (Whiddon) 3.02 Bovey Tracey (Hedgebarton) 5.86 Manaton (Heathercombe) 4.35 Lustleigh (Sum Hill) North Bovey (Manor Ho.) 3.68 Chagford (Fernworthy) 2.94 Chagford (Metherall) 2.89 Moretonhampstead 3.19 Chagford (Thornworthy) 3.53 Chagford (Teignworthy) 2.59 Chagford (Huish) 3.6 Lostwithiel (The Tce.) 2.5 Gunnislake (Drakewalls) 2.6 Daily totals 4th Woodbury (Oakhayes) 2.44 Exeter (Countess Wear) 2.34

Chittlehamholt

2.75

Cornishman 4 Aug

Ex & Ply Gaz 5 Aug

The storm on 4<sup>th</sup> exceeded that on 2<sup>nd</sup>. The low lying districts of Gulval and Marazion are reported to have been flooded. Eight cattle and three horses were killed and a hay rick burned down. At Marazion the storm lasted 4 hours during the night. Several houses in Fore Street were flooded. Water was across the road in the West End. The Vicarage at Gulval was flooded and covered with mud. Crops and soil were washed down the roads. The area bounded by Marazion, St Ives, Zennor, Newmills and Gulval seems to have suffered most. Rain was mingled with hail at times with some as large as marbles and at Newmill some 1½ inches in length were found. Some glass was broken.

Torquay: streets were converted into rivers At Hoxton Road the water was 9 feet deep. Part of the rail embankment was washed away. Cars were stranded everywhere and Fleet Street, belgrave Road and Avenue road in Torquay resembled raging riveres and in the Upton area of the town buses were submetged to their rooftops. Many shops in Torquay and Paignton were flooded.

<Kingkerswell>: Residents of a row of cottages used planks to walk from their bedrooms to the station platform Bideford Torrential rain fell for more than 7 hours.

Ashburton: Water was up to the level of the platform at the station.

Newton Abbot: Shops were flooded and the main railway bridge weakened so that trains had to be diverted. Exeter: Cowick St was under 1 foot of water between Old Vicarage Rd and St Thomas church; the street was torn up with dislodged wooden blocks. Houses were flooded in Southwood's Buildings and Prospect Place. Houses at the bottom of Longbrook St were flooded. Shop assistants on Old Tiverton Road and Sidwell St had to bale out their premises. The bowling green on Barnfield Road was flooded. Flooding also occurred by Polsloe Bridge, topsham Road and Chard Road Heavitree where houses were flooded. Axminster Inn at the bottom of Paris St and adjoining Russell St was flooded to 33 inches in a space of 5 minutes ('Trays on the counter were swept off'). Eaton cottages were flooded. The Post office was flooded up to the sorting benches. [More detail in Ex &Ply Gaz with interviews].

Torquay: Hail with large lumps of ice smashed windows over a large area. Avenue Road, Fleet Street and Belgrave road were like big rivers and the sea for half a mile out was red with the mud of Devon. At the railway station water was half way up the platform. Some houses in Hoxton Road were flooded to 9 feet. Gardens in Devon Rosary were flooded to 6 or 7 feet. In Chelston it was necessary to break holes in front and rear of buildings to let the water through to avoid washing houses down. Part of the railway embankment south of Torre station was washed awayblocking the line.

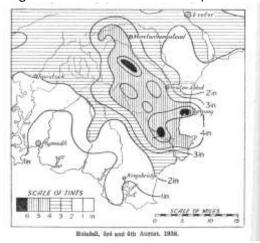
Newton Abbot: The Grove, Market St and Bank St had a foot of water with houses flooded. The River Lemon which flows at the back of Queen St overflowed at the back of Bank St and the water rused through side roads

North Devon journal 11 Aug into Queen St, Bank St and Courtenay St where it reached several feet. Not a single business premise on these streets escaped. Lemon St and Albany Street were flooded. People were marooned in their cottages at Bacca Bridge near Kingkerswell station and they escaped over planks to the railway station from bedroom windows. Three bridges over the River <<Lemon>> at Newhouse, Knighton Mill and Lemonford in the parish of Bickington were swept away.

Okehampton: Water oozed under the door of the Carlton Cinema and covered the floor to a few inches. Exmouth: The Parade was covered in several feet of water (though buses could pass!). Grudge's Lane and the footpath outside Staples Buildings was flooded to several feet. Chapel St and Market St were also flooded. Ashburton: Water reached platform level at the Station.

<Haytor>: Large boulders were displaced by the flood while at Becky Falls, <Manaton> large trees were uprooted by the raging torrents which carried away wooden bridges like matchsticks.

Tavistock: Ballast was washed from under railway lines and trucks overturned at Pitts Cleave Quarry; an iron bridge was reduced to a skeleton. (Western Morning News 6 Aug has photo of River Tavy in flood)



A very general description of destruction in Devon given in the Cornishman but without real detail.

In North Devon the storm started at 4.30 am and continued for many hours.

Barnstable: one of the largest stores on the High St was flooded to several inches and many other business

premises were flooded.	Rainfall 1.85 inches	(elsewhere in neigh	hbouring areas	just over 2 inches).
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S Moulton: a barn set on fire by lightning

Newton Abbot: Shops were flooded and people were rescued by boat. Two fires broke out.

Clovelly: Water poured down the Garage path to the High Street and entered many houses.

Spreacombe: A fireball fell and caused serious damage to a house and its occupants.

8 Aug 1938 N Devon Jour 11 Aug

Northam Chope Barton 1.82 in

A return of freak storm conditions at Ilfracombe. Thunder and lightning were accompanied by tropical rain and within minutes drains were choked and shops and houses flooded. The flow of water down the High Street was like a river. The Arcade was flooded and the Collingwood Hotel. Throughout the town large patch of macadam were ripped up and stones and gravel accumulated on main roads. Lightning struck the same hotel twice at Morte-hoe.

9 Aug 1938 BR

Western Morning News 10 Aug

Further thunderstorms

Tavistock: Houses flooded from storm lasting 1 hour. The storm was so sudden that within a few minutes rivers were running down Dacre St, Bannawell St, King St and Market St to flood the basements of houses and the strongroom of a bank. Silt choked the drains and manhole covers were blown off. Newmarket Hotel and Union Hotel were flooded. The Square itself was not flooded. Houses were flooded in Canal Road.

Plymstock: Storm lasting 30 minutes. Main street converted to a river.

Delabole: Torrents 3 to 5 feet swept through the town. Many cars were marooned in the High St. Chicken houses and kennels were washed away. Rockland Garage was flooded to 18 inches and the water outside was 3 feet deep. One man in High St who lived there 40 years said he had never had water in his house before. Water came over the bridge at Millpool.

11 Aug 1938 BR

Moretonhampstead 0.91 in 20 mins

45 mins

Crediton Kinross 1.13 in 40 mins

25 Nov 1938

BR

Yealmpton (Torre) 2.7 Ermington (Stoode) 2.86 South Brent (Beachfield) 2.65 Stoke Gabriel (Maisonette) 2.67 Totnes (Dundridge Gardens) 3.07

Totnes (Waldron Ho.) 2.96 Totnes (Berry Pomeroy V.) 2.99 Totnes (Dartington Hall) 2.91

Crediton: Hit by a third storm in 8 days; some houses in New Cut were flooded with water 2 to 3 feet deep.

A feature of the weather of 25<sup>th</sup> to 28<sup>th</sup> was the development of a secondary depression in maritime polar air accompanied by heavy rain in the south. Thunderstorms occurred early on 25<sup>th</sup> both in SW England and in Brittany.

16 Jan 1939 N Devon Journal 19 Jan	Main damage from the gale but also thunderstorms	SouthMolton: thunderstorm. The River Mole is overflowing its banks in some places. In other parts of N Devon the storm was less severe.
Western Morning news 16 Jan		Ashburton: Short duration cloudburst; within a few minutes lowlying parts of St Lawrence Lane, West St, and the Bull Ring were under water
6 Jul 1939 BR	S. Brent (Millswood) 2.56 S. Brent (Brent Moor) 3.06 Holne (Church Park Cot.) 2.86 Princetown (H.M. Prison) 2.79	Complex depression – no reference to thunderstorms. [Not added to EXCEL file]
15 Jul 1939 Western Morning News 17 Jul	7ccc (1 1.130.1) 2.173	Exeter, Callington and St Austell streets under a foot of water.  Exeter: Cowick St had water in the street and traffic caused waves into a dozen houses with furniture floating in some. There was 250 yards of the road under water. Okehampton St was impassable to cars. Flooding also occurred at the bottom of East Wonford Hill Heavitree and at Polsloe bridge
		Dulverton: A cloudburst occurred; Caernarvon Arms Hotel was flooded at Dulverton Station to a considerable depth.  Callington: A deluge swamped many houses and shops; shops in High St were flooded to nearly a foot.  Newport: Houses also flooded including Church St. Water rushed down Kit Hill and washed potatoes out of the ground.
21 Jul 1939 BR	Teignmouth Woodlands 2.38 in 1 hr Teignmouth Den Gardens 1.82 in 90 mins	St Austell: Storm drains overflowed and filled the whole of South St ankle deep.  The observer notes that the heaviest fall occurred on the slopes of Haldon about 1½ miles northwest of the town. Many roads became rivers and the lower part of the town became flooded to a depth of 2 or 3 feet. At the railway station the water level rose to an inch or two of the platform. The rain was very local. Newton Abbot six miles west had none, Dawlish 3 miles northeast had very little.
		Teignmouth: The main thoroughfares in the town were affected by flooding several feet deep. Customers were marooned on shop counters for hours. Manholes were forced out. The torrent arrived with such suddenness that no remedial action could be taken. A wall near the railway line collapsed from the pressure of water and the water flowed into the station reaching the edges of the platforms. Rowing boats appeared on the streets. Newton Abbot had no rain.
20 Aug 1939 BR	Exmouth (Filters, S'ton Rd.) 2.52 Exmouth (Littleham) 2.60 Exmouth (Filters, Capel L.) 2.51 Budleigh S'ton (Tidwell Ho.) 2.54	There was a warm spell of thundery weather between 19 <sup>th</sup> and 21 <sup>st</sup> when a depression over France drifted northwards. At Bryanston near Blandford 4.66 fell in just over 6 hours Starcross: a house destroyed by lightning and fire.

22 Aug 1020	Thunderstorms	Okehampton, Holsworthy and North Tawton were much affected with roads awash; At Haytor the rain was especially heavy.  Dartmouth: Heavy rain for half an hour; lowlying areas around the centre of town were flooded to a few inches with some shops affected. Flooding occurred in Victoria Road, Duke St, The Quay, and Fairfax Place, Coronation Park and Coombe Road.  Exmouth: Flooding occurred at Lyndhurst Road from the overflowing of the Withycombe Stream Cawsand: Houses flooded including Half Way House which was flooded to 2 feet and the Ship Inn and the Smuggler's Cafe.  Millbrook: flooding occurred at the bottom of West St and the lower parts of the village including Devon and Cornwall Hotel and shops on West St  Truro: One man killed by lightning; flooding occurred in parts of the city.
22 Aug 1939 Western Morning	munucistomis	Camborne: Businesses and hundreds of houses were flooded, some to a depth of several feet. At Rosewarne
News 23 Aug		Road there was 5 feet of water in houses.
		Northlew: River Lew overflowed its banks; there were hailstones as big as peas and in some places ice formed. The bridge at Northlew and roads nearby were flooded to 4 feet. Less than a mile distant there was no rain. Callington: A number of premises in Fore St were flooded. Amongst other Barclays bank was flooded with inches of mud in the basement.  Tipton St John: Cottages near the railway station were flooded.
2 Sep 1939 BR	Culmstock the Knap 0.90 in 40 mins	[Not added to EXCEL file]
4 Oct 1939 BR	Dartmoor Swincombe 2.50 Bovey Tracey Hedgebarton 2.53	A depression moved from SW of the Scilly Is to northern Ireland and rain fell generally with local thunderstorms. [Not added to EXCEL file]
7 Dec 1939 BR	S. Brent (Brent Moor) 2.53 Wendron (Ninemaidens) 3.85	A vigorous secondary depression crossed the British Isles. [Not added to EXCEL file]
27 Apr 1940 BR	Ashburton 1.12 in 75 mins	The River Yeo came down from the moors in flood before the storm commenced in the town.
12/13 Jul 1940 BR	Padstow Cross St 1.00 in 30 mins Challacombe 2.59 Little Petherick 2.63	

There were areas with more than 3 inches on Exmoor and Dartmoor [Not added to EXCEL file]

2 Nov 1940

Manaton (Heathercombe) 3.37

3.02

Challacombe

BR

26 Feb 1941 BR	Holne (Church Park Cottage) 2.55 Dartmoor (Swincombe) 2.83	[Not added to EXCEL file]
31 Mar 1941 BR	South Brent (Brent Moor) 2.6 Chagford (Fernworthy) 2.59 Chagford (Metherall) 2.55	[Not added to EXCEL file]
7 Jun 1941 BR	Torquay 0.88 in 1 hr 35 mins	
3 Jul 1942 BR	Princetown (H.M. Prison) 2.78	[Not added to EXCEL file]
10 Dec 1942 BR	Dartmoor (Swincombe) 3.23 Princetown (H.M. Prison) 3.54	
12-14 Sep 1943 BR	12 <sup>th</sup> Stoke Canon Rewe 0.75 in 15 mins Tiverton St Aubyns Pk 0.77 in 28	A depression off NW Spain moved NNE over the country. At S Brent there were hailstones the size of mothballs. At Rewe near Exeter there was a sudden change of wind from light easterly to gusts almost gale force accompanied by vivid lightning and torrential rain
Ex & Ply Gaz. 15 Oct	mins S Brent Beechfield 1.69 in 30	Thunderstorm accompanied by hail and high wind and much damage was done.
	mins S Brent Millwood 1.65 in 30 mins 13 <sup>th</sup>	
	Lelant 1.17 in 1 hr St Ives Halsetown Vic 2.95 Porthcurno 2.53 Westward Ho! 2.64	
	14 <sup>th</sup> Padstow Cross St 1.32 in 75 mins	
20 Oct 1943 Western Morning	Torquay Abbey Pk 1.43 in 2 hr	Thunderstorm caused great damage at Torpoint, notably at Clarence Place and Fore St. Sewer covers were lifted and water flowed into properties at the bottom of the hill.
News 30 Oct 3 Sep 1944 BR	Challacombe 3.05	[Not added to EXCEL file]
16/17 Nov 1944	<b>16</b> <sup>th</sup> Kingsbridge (Senior School) 2.93	Rainfall was associated with a warm front. Severe flooding was reported in southern counties from Kent to

BR	South Brent (Didworth San.) 3.12	Cornwall
Foulds and Macklin (2013) from Worth (1945)	South Brent (Brent Moor) 4.29 Waddeton Court 2.86 Stoke Gabriel (Mazonet) 3.42 Totnes (Dundrigde Gardens) 3.06	155mm of rain fell in 36 h. The River Avon was higher than in living memory and boulders weighing several tonnes were moved considerable distances. 7 day total of 318mm at Princetown.
	Holne (Church Park Cottage) 3.6 Ashburton (West Street) 2.91 Ashburton (The Vicarage) 2.91	
	Ashburton (Place) 2.9 Princetown (H.M. Prison) 3.16	
	Princetown (Huccaby House) 2.97	
	Widecombe-in-the-Moor 3.4 Bovey Tracey (Hedgebarton)	
	3.14 Lustleigh (Sun Hill) 2.95	
	Chagford (Fernworthy) 2.76 Chagford (Thornworthy) 3.6 17 <sup>th</sup>	
	South Brent (Beechfield) 2.63 South Brent (Didworthy San.) 2.57	
	South Brent (Brent Moor) 2.86 Holne (Church Park Cottage)	
	3.05 Princetown (H.M. Prison) 3.01	
16 Dec 1944 BR	South Brent (Brent Moor) 2.86 Holne (Church Park Cottage) 2.84	Troughs of low pressure moved east across the British Isles. Local gales occurred. [Not added to EXCEL file]
	Princetown (H.M. Prison) 3.35 Lustleigh (Sun Hill) 2.95	
5 Jun 1945 BR	South Brent (Brent Moor) 2.95 Princetown (H.M. Prison) 2.95	[Not added to EXCEL file]
15 Jul 1945	Crowan (Boswyn Reservoir)2.8	'Thundery rain broke out'
BR	Zelah (Chyverton) 3.01 Wendron (Nine Maidens) 2.97	[Not added to EXCEL file]

20 Oct 1945 BR	Sheepstor (Redstone) 2.84 Sheepstor (Head Weir) 2.73 South Brent (Badworthy) 2.91 South Brent (Didworthy San.) 2.88 South Brent (Brent Moor) 3 Princetown (H.M. Prison) 2.86	On 20 <sup>th</sup> a quasi stationary front travelled northwards across SW England and Wales At some places in SW England it rained continuously for more than 24 hours. [Not added to EXCEL file]
7 May 1946 BR	Widecombe-in-the-Moor (Bonehill) 2.73 Lustleigh (Sunhill)3.05	During the 16th and 17th a depression over the northern half of the North Sea drifted south-south-westwards to the mouth of the English Channel. This depression was associated with rather widespread thunderstorms and heavy local rain in the south. [Not added to EXCEL file]
23 Jun 1946 BR / CBHE	Cullompton 2.35 in 45 mins	(Exe) From Cullompton [Devon] observer wrote: 'In the lower part of the town flooding was 3 ft. deep in houses. In one garden and house alone £1,000 worth of damage was done. The area of the storm was about 3 square miles. I hear of no heavy falls in the surrounding district "[R. Culm tributary of River Exe]
Ex & Plym Gaz 28 Jun		Cullompton: rainfall 2.35 inches in three quarter of an hour; flooded roads and houses in Exeter road, Duke St and Fore St and the Higher Bullring. The Police Station was flooded in the Higher Bullring. Houses at the bottom of Exeter hill received the full force from the Tannery Canal. Landslides occurred at Newts Hill and Cullompton Cemetery.  Border villages of Upottery, Dunkeswell, Luppitt, and Dumpton were affected with lanes transformed into rushing torrents, boulders dislodged and banks washed away. The River Otter overflowed its banks and many valley roads were impassable.
26 Jul 1946 Western Times 2 Aug	Rain with some thunder	South Molton: Low lying houses were flooded; large tracts of corn are broken down.
3 Sep 1946 BR	Lee Moor House 2.5 Princetown (H.M. Prison) 2.98 Widecombe-in-the-Moor 2.82 Bovey Tracey (Hedge Barton) 2.98 Chagford (Fernworthy) 2.58 Chagford (Metherall) 2.56 Honiton (Cotleigh House)	A depression off the SW coast of Ireland on 3 <sup>rd</sup> drifted slowly over the British Isles remaining over them until 8 <sup>th</sup> . Rain or showers fell over a wide area and thunderstorms were reported. Reports of floods and damage to crops came from all parts of Britain.

2.52 4<sup>th</sup>

8 Sep 1946 Western Morning News 9 Sep Dartmoor (Swincombe) 3.28 Lustleigh Sunhill 2.95 Guardian reports: Exeter 2.2 ins Falmouth 2.18 ins

Ex & Ply Gaz 13 Sep

Express & Echo 119 Jul 1956 re 8 Sep 46 Manchester

Guardian 9 Sep

23 Nov 1946 CBHE/BR

Sheepstor (Redstone) 3.36
Sheepstor (Head Weir)3.54
Dousland Reservoir 3.89
Yelverton (Yarrow-Dousland)
3.22
Dartmoor (Lowery) 3.65
Dartmoor (N. Hessary Tor)
3.45
Mary Tavy (Blackdown)3.75
Coryton Manor 3.36
South Brent (Millswood) 3.37
South Brent (Badworthy)

Dartmoor (Fox Tor) 2.63

3.1

Lee Moor House

Honiton: Devon town swept by floods after a night of incessant rain. A stream of water flowed into houses in the lower part of King Street near the Gas Works and into the River Gissage. It was five feet deep in Bognor Cottages and flowed to High Street West with water in houses up to the fourth Stair. Houses on the Exeter Road were also flooded including the Almshouses where elderly inmates were rescued. The River Otter overflowed at Fennybridges into houses at Brookside.

Broad Clyst: At the railway station the water was up to platform level. Farms were isolated in the area. Sidbury: Houses were flooded when the River Sid overflowed.

Whimple: Shops and houses were flooded and a 10 foot high wall was swept away.

Kennford: Houses flooded to 15"

The River Tavy at Denham Bridge near Yelverton overflowed for the first time in the memory of local inhabitants.

E & E 1956 noted that the previous highest short period rainfall in Exeter was on 8 Sep 1946 when 2.5" fell most in 2 hours.

Disruption occurred on the railway with a tree blown on the line between Seaton Junction and Honiton. At Broad Clyst the water was up to the level of the platform. Roads were impassable in the Axe Valley in East Devon with much land flooded. Scores of houses were flooded in Honiton up to a depth of 4 feet.

A trough of low pressure associated with an intense depression to the W of Ireland moved NE across the british Isles. The front remained almost stationary over Wales and SW England. Amounts exceeding 3 inches [of rain] were confined to Dartmoor and South Wales, where locally 6 inches was recorded. High winds and gales were widespread with local flooding. "

Dartmoor (Swincombe) 4.67 Princetown (H.M. Prison) 6.83 Widecombe-in-the-Moor 4.77 Bovey Tracey (Hedge Barton) 3.36 Bovey Tracey (Whiddon) 3.07 Chagford (Fernworthy) 4.81 Chagford (Metherall) 4.79 Chagford (Thornworthy) 5.13 Chagford (Denshams) 3.72 Chagford (Huish) 3.02 Okehampton (Waterwor 3.05 South Brent (Millswood) South Brent (Didworthy San.) 2.53 Totnes (Dunbridge Gardens) 2.95 Totnes (Walrond House) 2.66 Ashburton (West St.) 3.13 Ashburton (Hele House) 2.96 Ashburton (Place) 2.77 Dartmoor (Fox Tor) 2.56 Dartmoor (Swincombe) 3.3 Princetown (H.M. Prison)

27 Nov 1946

BR

South Brent (Didworthy San.)

Ashburton (Hele House) 4.04

Ashburton (Place)

4.29

4.40

Conditions remained very unsettled until the end of the month and disastrous flooding occurred widely in all parts of Britain.

	3.28 Widecombe-in-the-Moor 3.23 Bovey Tracey (Hedge Barton) 2.71	
4 Jun 1947 Western Morning news 5 Jun	Lightning hail end heatwave	Appledore: Flooding occurred from a thunderstorm
11 May 1948 BR Manchester		On a day when heavy thunderstorm rainfall occurred in the Midlands and west of England a girl was struck by lightning at Newton Abbot. It was not raining at the time. Guardian notes one girl was killed and 2 injured at Newton Abbot.
Guardian 12 May		Newton Abbot: Rain lasting an hour flooded shops and homes reached a depth of 5 inches at the bottom of Bank St Courtenay St and Queen St and outside the Newton Abbot Railway station.
30 Jul 1948 BR	Hawkchurch Castle Ho 0.78 in 20 mins	Note that a very severe thunderstorm occurred on the Quantock Hills of Somerset on 28 Jul. [Not added to EXCEL file]
2 Dec 1948 BR	Dartmoor (Swincombe) 2.95 Princetown (H.M. Prison 2.62	[Not added to EXCEL file]
9 Dec 1948 Western Morning News 10 Dec	Some thunder at Penzance	Bude: Residents were marooned in their houses when the River Strat overflowed following torrential overnight rain. Water reached right up the valley from Bude to Hele bridge. The Crescent Bude had water several feet deep. Falcon Terrace was flooded. Heavy flooding near the Canal bridge caused the primary school to be closed. The Bude Fire Station was flooded. [WMN shows a dramatic picure of flooding near Hele bridge] River Tamar flooded houses in the Launceston area. At Yeolmbridge the water was said to be higher than known for 36 years.  Stratton: Kings Arms Hotel was flooded. In Bridge St houses had water 4 feet deep.
14 May 1949 BR	Horrabridge 1.51 in 2 hrs	[Not added to EXCEL file]
16 Jul 1949 BR	Cheriton Bishop (Horslake) 2.51 Crediton (Okefield) 2.6	Severe storms extended either side of a line drawn from Land's End to the Wash. Well over 2 inches of rain fell in places as widely separated as Crediton and Norfolk.
Western Morning		Newquay: Over and inch of rain in 35 minutes; manhole covers were forced up; roads hotels garages and

News 18 Jul

kitchens were flooded

Exeter; some flooding in the city but only road flooding reported.

Tiverton: Heavy rainfall caused a landslip on the railway on the outskirts of Tiverton

25/26 Aug 1949 BR Okehampton Uplands 1.01 in 1 hr (25th)

Exeter Airport 1.36 in 40

mins

Totnes Dartington Hall 2.50

Storms were renewed on 26<sup>th</sup> in Devon. The observer at Mary Tavy reported that no rain fell there although thunder was rolling all around for an hour. At Totnes the town was flooded; many poultry were killed by hailstones and even cattle were slightly injured. A 'remarkable' fall was recorded at Exeter Airport. The Western morning news reports that Totnes and Topsham were the worst sufferers. Many streets became torrents and at the latter place lightning started two fires. No rain fell in Exeter and only distant thunder was heard though the airport to the east and Topsham to the south both had heavy falls.

Western Morning News 27 Aug Totnes: Water swept down the steep main street well above the pavements; many shops and houses in the lower part of the town were flooded. Paynsford Mill at Halbertonford was struck by lightning and set alight. At Warland a number of cottages were flooded.

Topsham: A cloudburst flooded streets and houses. 'For nearly half an hour the rainfall was torrential'. Fore St and High St were flooded, 12 inches deep from Denver road to Station Road. Water ran from Station Road to Follett Road and thence to Ferry Road where it reached 2 feet deep in some houses. 'It all occurred in a matter of minutes'. Houses in Majorfield Road were flooded.

Tiverton/Ivybridge: Hailstorm; entrance and basement and corridors of Ivybridge Hospital were flooded.

Although torrential rain fell in Tiverton, at Gypsy Hill half a mile away it was dry.

Oakhampton: Rainfall at the Filter Station was 3.8 inches but 500 yards nearer the town centre it was only 1.01 inches.

Bradninch: Torrential rain for 2 hours. At Westfield several houses were flooded and at Ladder Park houses were flooded to 2 feet.

6 Sep 1949 BR

20 Sep 1949

BR

Delabole Cornwall 1.95 in 75

mins

South Brent (Brent Moor)

2.77

Dartmoor (Strane Valley)

2.57

[Not added to EXCEL file]

	Dartmoor (Swincombe) 4.39	
22 Sep 1949 BR Express &Echo 22	Cullompton 2.40 in 75 mins Tot=2.50	The Exeter Express and Echo states that at Cullompton a cloudburst turned the main street of the town into a rushing river of muddy water. In some of the houses water reached a height of a couple of feet and did much damage to furnishings.
Sep		
7 Oct 1949 BR	Bovey Tracey (Hedge Barton) 3.12 Chagford 3.02 Drewsteignton (Newton Barton) 2.63	Fair weather during the first four days of October gave way to a series of autumn gales associated with the passage of Atlantic depressions and the concurrent advection of cold unstable air which caused many thunderstorms.  [Not added to EXCEL file]
18 Oct 1949 Western Times 21 Oct	Continuous heavy rain	Exeter: 24 hour rainfall 1.15"; Cowick street and some houses were flooded [Not added to EXCEL file]
25 Oct 1949 BR	Dartmoor (North Hessary Tor) 3.12 Princetown (H.M. Prison) 3.63 Chagford (Thornworthy) 2.64 Camelford (Advent) 2.64	[Not added to EXCEL file]
1950 Brierley (1964)	No indication in BR of any rainfall or flooding on the Exe in 1950	<b>(Exe)</b> Serious flooding occurred at Exwick, Cowick St and the Ex bridge area. In order to alleviate any future flooding at Exwick a viaduct was constructed under Station Road and additional supports inserted under the existing bridge were removed. These were inserted during the war to increase the carrying capacity of the bridge. [Not added to EXCEL file]
2 Feb 1950 Western Morning news 3 feb 28 Aug 1950	Very heavy monthly rainfall	Heavy rain combined with a southwesterly gale. The main flooding seems to have been from wave and tide. Truro: the gale combined with a spring tide combined to produce Truro's worst flood for 50 years (?). Houses and shops were flooded in the eastern part of the town between Old Bridge Street and The Green Car park Widespread thunder with damage by lightning. A bridge near High Bickington was swept away.
N Devon Journal 31 Aug.		A30 road between Launceston and Bodmin was flooded to nearly a foot. Isolated heavy thundershowers

			occurred in Devon and Comwan.
Western	Morning		
News 29	) Aug		Swimbridge: Cobb Cottage flooded with 3 feet of water discovered by the owner after returning from a shopping trip.
30 Aug 1	1950	No reference in BR to heavy rainfall either in short periods or	(Camel) referring back from 1957: "previous floods at Camelford, in particular that of August 30, 1950, which was much more serious than the 1957 flood though the rainfall was very much less"
CBHE/BI (1957)	easdale	over a day for 30 Aug	Flood mark recorded on wall in the yard at Wenfordbridge Pottery (formerly the Inn)near St Breward: 37cm Camelford, River Camel. A cloudburst resulted in flooding in Fore Street. SUMMARY FROM 'MY CAMELFORD' by H.LANE. Flood height in Fore Street estimated at 125cm (using photograph in 'My Camelford' and measurements by P.Bailey).
			The remarkable feature of this flood at Boscastle, Camelford and Bude (Cornwall) was the torrential rain, the
Lane (Da	ate?)		heaviest in living memory, and the rapidity with which the Valency river rose and burst its banks. Trees 6m
•	oding at		(20ft) high were ripped up along the valley and carried along the river, passed through the road bridge but then
Bude 12 1993'	•		piled up against the lower bridge forming a dam that then caused the waters to back up into the village.
			The most remarkable sight at Boscastle were the trees which the Valency River had uprooted from its banks in
Cornish	and		flooding further up the valleyTrees 20 feet high and more, mostly ash, had been ripped up, and the river was
Devon P Clark (20	ost 2 Sep 005)		carrying them away, roots and all. The next edition of the same newspaper showed a photograph of this flood event
27 Nov 1 BR	1950	S.Brent (Badworthy) 2.62 S.Brent (Didworthy San.)2.83 Dartmoor (Swincombe) 2.56 Princetown (H.M. Prison)2.68	BR notes: 'The heavy falls on 27th were more limited in duration and area and did not lead to any appreciable flooding (This was in contrast to the period from 18 to 22 when rainfall and widespread flooding occurred in S Wales the Midlands and the Bristol area)'.  [Not added to the EXCEL file]
22 Jul 19	951	Kenton Vic 1.09 in 35 mins	There were widespread thunderstorms in the south and it is likely that more intense local storms have been
BR		Tot=2.89	missed. At Kenton Devon earth and vegetables were swept into the centre of the village following the collapse
		Kenton Warborough Ho 2.62	of a bank in a field. The observer noted that this occurrence aggravated the failure of the drains so that the
		Thunderstorms rolled around Devon all day – the grand finale of the heat wave. Lighting	streets affected became raging torrents. According to local inhabitants it was the heaviest rainfall in so short a period since about 1899.
Express	& Echo 23	disrupted power supplies and 12	Tiverton: One shop was flooded from the River Exe on Lowman Green.
Jul	2. 200 20	sheep were killed on Dartmoor.	Kenton: Streets were 1 foot deep in water which lifted manholes and swept into houses and shops in Church

Street, Manhead Road and The Triangle. Flooding also occurred at Southtown, Warboro House, the Vicarage,	
Court House Hotel and the school	

West Briton 26 Jul	
1951	

Ashburton West St 2.62 5 Aug 1951 BR

Thunderstorm 2 Jul 1952

Manchester Guardian

Longstone Barrow e 9.00 15 Aug 1952 Challacombe 7.58

Honeymead Simonbath 7.35 CBHE/BR

Bleasdale and Douglas (1952) A severe thunderstorm in West Cornwall caused severe flooding in the Helston district and telephone and electricity systems were put out of commission. Rainfall of 2.6" was recorded at Helston WW. A horse and a bull were killed by lightning and builidings damaged by lightning. Torrential rain continued for nearly 2 hours. A cottage at Porkellis was flooded and the water rose with such rapidity it soon reached the third stair. There was flooding of houses at Lostwithiel and Par.

Rainfall in August was mainly due to depressions rather than thunderstorms.

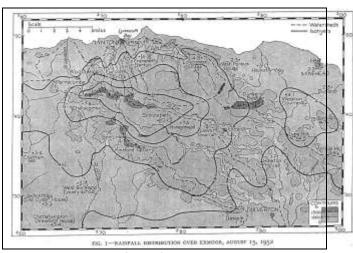
[Not added to EXCEL file]

A beach patrolman was killed by lightning at Bude.

The outbreak of thunderstorms was the culmination of a four-month period with a high incidence of heavy thunderstorms starting April 16<sup>th</sup>. An Atlantic depression with trailing warm and cold fronts moved east up the English channel. The main outbreak of rain reached Plymouth before 07.00 and moved slowly northward and by 15.00 it was mostly confined to north Devon and the Bristol channel area. To the west of the belt of heavy thundery rain there was a fairly large area of non-thundery rain and to the east there were many more or less separate thunderstorms. Over most of Cornwall and Devon the rain lasted all day and well into the night and by midnight it had spread across Wales and the west Midlands. Bleasdale and Douglas provide a detailed analysis of the synoptic situation and photographs of the erosional effects on river channels

(Lyn) The Lynmouth Flood disaster, taken by the NERC Flood Studies Report (1975) as an example of a Probable Maximum Flood for a small catchment: "The effects in this area were catastrophic; more than 30 people lost their lives, much of the town of Lynmouth was literally swept away, and a great deal of other damage was done to roads and bridges. [Accompanying isohyetal map shows rainday rainfall contours exceeding 4 inches over 250 sq miles but with a maximum that 'may have been in the neighbourhood of 11 inches, [although] the largest actual measurement was 9.00 inches at Longstone Barrow, Exmoor'] .....the major part of the rainfallday total was concentrated within a period of about 7 hours extending from the late afternoon to nearly midnight.....the floods reached their peak in total darkness, a circumstance which, combined with the sudden effects of the surges sweeping down the steep valleys, added much to the fearful nature of the events....". There is strong evidence for a 'awall of water' sweeping down the East and West Lyn

Although the greatest effect was at Lynmouth, very heav rainfall covered the upper Exe catchment and its tributary the River Barle.



21 Jun 1953	Dartmoor (Fox Tor)	3.84
BR	Dartmoor (Strane Valley)	2.60
Express & Echo		

South Brent 2.54 11 Jul 1953 2.54 Princetown BR

23 Aug 1953

22-24 Jun

BR

West Briton 24/27

Aug

E & E 24/25 Aug

21 Sep 1953 Widecombe-in-the-Moor 2.73 Chagford (Metherall)

Nearly all the heavy falls of June were associated with thundery weather.

E & E reports that there was continous rain from morning to evening. There were no reports of flooding but power failures occurred in the Teignmouth and Dawlish areas.

[Not added to the EXCEL file]

Rainfall resulted from a major Atlantic disturbance rather than a thunderstorm

[Not added to the EXCEL file]

Many west country towns were flooded and the rivers of Exmoor were reported to have reached their highest levels since the Lynmouth disaster the previous year.

WB has no reference to flooding.

E & E has no reference to heavy rainfall or flooding.

[Not added to EXCEL file]

A deep depression affected western districts. 'Anxious attention was directed to the situation in Lynmouth and

BR	Challacombe Exford (lower Thorne)	2.65 3.85	other
16 Oct 1953 BR	Seaton Marlpit Lane Colyton Colyford	2.21 3.01	[Not a
25 Jul 1954 BR	Lee Moor House Dartmoor (North Hessar	2.72 ry Tor) 2.53	'July v sumn
	Wrangaton (Moorhaven Hospital) South Brent (Badworthy South Brent (Bala Brook Princetown (H.M. Prison	3.16 ) 2.77 ) 2.74	[Not a
22 Aug 1954 BR	Exeter Airport 1.19 in 68	3 mins	[Not a
25-30 Nov 1954 BR/CBHE			Truro
West Briton 29 Nov 2 Dec			WB re

other parts of Exmoor'.

[Not added to EXCEL file]

[Not added to EXCEL file]

'July was another month in which depressions followed tracks far to the south of the route usually taken in the summer'

[Not added to EXCEL file]

[Not added to EXCEL file]

Truro: "Storms across Cornwall. Flooding from Kenwyn and Allen."

WB reports 'By comparison with localities in East Cornwall and elsewhere in the south of the country, Truro escaped lightly. Storm winds combined with heavy rainfall and caused loss of shipping. The week's rainfall at Truro was 4.96 inches. This was the wettest week since Nov 1944.

In Truro the flooding was the worst for several years; houses in St George's Rd, Moresk and Old Bridge Street were affected when both Allen and Kenwyn overflowed. Water poured along St George's Road, Frances Street, Little Castle St and Kenwyn St before returning to the river through the drains in Victoria Place. A dozen houses in the lower part of St George's villas were affected; Hendra PO (3" deep), Truro garages and some houses on St George's Road were flooded. One resident who lived there for 14 years said she had never known the water so high. The River Allen overflowed at Moresk by the old isolation hospital; two cottages were flooded to a depth of about 2 feet. Flooding occured later on Old Bridge Street. Water did not enter St Mary's Hall next to Truro Cathedral.

In the following days a great gale ravaged the Helston District and at Hayle with reference to damage to roofs but no mention of flooding.

Lostwithiel. Flooding occurred from the River Fowey but storm water in Tanhouse Lane flooded houses in Queen St, The Parade, Quay St, Park Road and the lower part of Fore St and North Street up to the churchyard wall. Monmouth and Globe Inns and Kellok's surgery were surrounded by water 2 feet deep. Skeltons and Pearce's Garages were flooded.

13? Jan 1955 CBHE Acreman (1989)	Blow (Rosehill) Bideford (Gammaton Re 2.69	2.54 servoir)
6 Jun 1955 BR	Chagford Yeallam Cott. 0 25 mins Kenton Vic. 0.97 in 33 m	
12 Jul 1955 BR	Culmstock Woodgate Fn	n. 1.11
17/18 Jul 1955 BR	Hemyock Culm Davy Ho 1.13 in 1 hr Paignton Victoria Pk 0.63 in 22 mins	
	Exeter Heavitree 1.34 in Bovey Tracey (Yarner W	-
West Briton 18 Jul	, , ,	3.5
	Beer (Windyridge) Seaton (Marlpit Lane)	3.4 3.22
	Seaton (Millmead)	3.41
	Lyme Regis (Pinhay)	3.1
Express & Echo 18	Colyton (Colyford)	3.25

Jul

At the height of the storm a whirlwind swept across the Exe Valley Rewe. Potatoes and other crops were flattened.

At Probus, Laddock and Grampound the river overflowed. 'Higher Cottages' were flooded. Golden Mill Cotttage at Probus was flooded.

Truro: "Serious flooding from Kenwyn. Channel and tunnel [sic] capacities exceeded. " [Not added to EXCEL file]

Observer at Kenton noted an even greater intensity of 0.55 in13 mins. [Not added to EXCEL file]

[Not added to EXCEL file]

The many intense falls in July occurred in the period 11 to  $18^{th}$  During this period temperatures rose above  $80^{\circ}$  F almost daily at many places and thunderstorms though widely scattered were often severe. This culminated on  $18^{th}$  when the greatest amount in one rainfall day at Martinstown in Dorset of 11 inches was recorded.

'Falmouth Deluge' Manhole covers were forced up and water surged 2-3 feet deep in parts of Falmouth where it was described as one of the heaviest downpours in living memory. Shops on The Strand and Killigrew St were flooded including the Prince of Wales Hotel and fruit shop and the Baker's Oven. At Penryn it was just a heavy shower.

A thunderstorm affected Exeter. the water rose within minutes and about 50 houses were flooded in different parts of the city, notably in Paris St, Okehampton St, Larkbear, Alphington St, Longbrook St, Pavilion Place (Magdalen St) (several cottages to 5 feet depth) and Commins Buildings, Wonford (3'deep in adjoining cottages). In the dip where Holloway Street joins Topsham Road water entered the house for the first time in 22 years. Floods from the street ran through the gratings into the cellar, rose through the cellar steps and came out into the rooms. At Whipton on a new council housing estate a house at 2 Laypark Crescent was flooded to 3 to 4 inches. Basements were flooded in houses in Old Tiverton Road. In Paris St 4-5 feet of water swirled through the Axminster Inn and adjoining houses and shops.

The village of Dog near Broad Clyst had 3 adjoining cottages flooded to 3 feet when a brook overflowed. Water pressure pushed the front door in. Farmhouse buildings in nearby Lake Farm were flooded – but not the farmhouse.

Okehampton: Torrential rain for 4 hours disrupted electricity – but no reference to flooding. Lightning disrupted power to many parts of the county.

Plympton Little Woodford 1.19 in 1 hr	[Not added to EXCEL file]
Stoke Fleming Windward 2.75	[Not added to EXCEL file]
South Brent (Badworthy) 2.57 South Brent (Bala Brook) 2.81 Princetown (H.M. Prison) 2.9	[Not added to EXCEL file]
16 <sup>th</sup> Crediton Okefield 0.93 in 30 mins 18 <sup>th</sup> Exeter Arpt. 0.80 in 30 mins 19 <sup>th</sup> Beer (Set Fair) 1.29 in 30 mins	The approach of a trough of low pressure from the southwest aggravated the thundery conditions on 18 <sup>th</sup> and thunderstorm heavy rain developed over most parts of England and Wales.  The observer at Beer said that an inch probably fell in the first 15 minutes. There was some flooding and damage in the village and it was said to be the first time in 30 years that this has happened. At Liskeard Treventon in a violent thunderstorm telephone and electricity supplies were interrupted and roads and houses flooded. Heavy hail caused extensive damage to cherry crops in the Tamar valley.
Tot=3.21 Liskeard Treventon 2.43 in 2 hr Tot=2.80	WB makes no reference to heavy rain or flooding.
	E & E noted that Exeter had its heaviest storm for many years and refers back to 8 Sep 1946 for previous short period totals but notes there was 'no serious flooding'.
Launceston Landue 1.40 in 45 mins	
	WB makes no reference to heavy rain or flooding. [Not added to EXCEL file]
Gwennap Trevince Cornwall 2.87	Thunderstorms were reported from Camborne in Cornwall where a factory was badly damaged by lightning.
Rainfall was accompanied by some hail.	At Redruth the lower part of the town was flooded. Streets became rivers as drains were inadequate and many properties were flooded. Druid's House Hotel in Penryn Street had 3-4 feet pf water in its basement. Gas Cottage was flooded from the Leat to more then 1 foot depth. Rooms were flooded in Back Lane and also in Cross Street.  Properties were flooded in St Day.  Mevagissey: torrential rain occurred and Fore Street was almost impassable. The Ship Hotel was flooded to 6
	in 1 hr  Stoke Fleming Windward 2.75  South Brent (Badworthy) 2.57  South Brent (Bala Brook) 2.81  Princetown (H.M. Prison) 2.9  16 <sup>th</sup> Crediton Okefield 0.93 in 30  mins  18 <sup>th</sup> Exeter Arpt. 0.80 in 30 mins  19 <sup>th</sup> Beer (Set Fair) 1.29 in 30 mins  Liskeard Penmilder 3.04 in 2 hr  Tot=3.21  Liskeard Treventon 2.43 in 2 hr  Tot=2.80  Launceston Landue 1.40 in 45  mins  Gwennap Trevince Cornwall  2.87  Rainfall was accompanied by

5 Sep 1956 Western Morning	Paignton 1.57"	inches depth. A cellar in Tregony Hall was flooded to 2 feet.  'Downpour over the west' Slight flooding was reported of the main roads through Hayle and Marzion
News 6 Sep 27 Sep 1956 BR	Dartmoor (North Hessary Tor) 2.54 Sheepstor (Burrator) 2.51 Sheepstor (Redstone) 2.5 Princetown (H.M. Prison)3.52 Chagford (Thornworthy) 2.5 Challacombe (Chase Terrace) 2.54	A complex depression crossed Scotland bringing widespread and heavy rain particularly over Wales and southwest England. [Not added to EXCEL file]
? 24 or 27 Dec 1956 CBHE Acreman (1989)	24 <sup>th</sup> Dartmoor (Fox Tor) 2.69 Dartmoor (Swincombe) 2.66 27th Dartmoor (Fox Tor) 2.67	Truro: "Flooding at St George's Villas."
31 Jan 1957 BR	South Brent (Bala Brook) 3.14 Ashburton (Hele House) 2.7 Chagford (Metherall) new site 4.1 Chagford (Thornworthy) 3.27 Chagford (Teignworthy) 2.84 Ashburton (West Street) 3.35	[Not added to EXCEL file]
6/7 Feb 1957 BR	Princetown (H.M. Prison)3.43 Dartmoor (Fox Tor) 2.86 Dartmoor (Shane Valley) 2.81 Dartmoor (Swincombe) 2.99 Chagford (Metherall) old site 2.63 Chagford (Metherall) new site 3.11	[Not added to EXCEL file]
8 Jun 1957	Chagford (Thornworthy) 2.68 Princetown (H.M. Prison) 2.57 Camelford Roughtor View 5.48 in 3 hrs Tot=c8.00	(Camel) Camelford (Roughtor View) measured 5.48 inches of rain in 3 hrs. In the same North Cornwall storm Camelford (Advent) measured approximately 5.0 inches and Delabole about 4.0 inches, both in 3 hrs. "The
CBHE/BR	Camelford Advent c 5.00 in 3 hrs Tot=6.33	rainfall measured on the morning of the 9th at Camelford (Roughtor View) was 7.09 in., but very little of the

Met Mag 86 339-343 Delabole c 4.00 in 3 hrs
Tot=c6.00
Bossiney 2.69
gth
Penryn resvr 3.70

2.61

St Austell Poltair Gdns

Memories of Boscastle & Tintagel, an illustrated booklet The rainfall measured at Roughtor View was 7.09 but very little of the heavy hail was retained in the gauge so theconservative estimate of 8.00 inches is made. The gauge at Delabole overflowed and the total of 6.00 is also an estimate.

Bleasdale (1957)

heavy hail was retained by the gauge and it is conservatively estimated that the total fall for the 8th must have been 8.00 in....The gauge at Delabole overflowed on the 8th and the total of 6.00 in. quoted for this station .... is also an estimate." Camelford (Advent) measured 6.33 in. and Bossiney 2.69 inches on June 8th in the same storm.

Boscastle: "In 1957 (wrong year!?) there was a terrible flood. There had been continuous torrential rain which came down the Valency River from the moors and hills. The power of the water damaged the top bridge [in Boscastle] and flooded surrounding cottages and shops. People were trapped and had to be rescued from their homes. Charlie Berryman, the local bandmaster, drowned when he fell in trying to retrieve a chair.....The building on the left in the picture [of the upper bridge damage] belonged to Mr Pearn and was demolished when the bridge was rebuilt and the road widened following the floods." Another photo looking down on the village upstream of that bridge shows the flood flow aftermath. Its caption reads "The first warning was given by Mrs Elizabeth Whitehouse who was riding her horse up the valley, saw the rivers coming and galloped to give advance warning. It came with such a rush, like a huge wave, that no-one had a chance to get furniture out of their rooms. Miss Rachel Beadon was in the call box at the end of the bridge ringing Norman Webber to ask for help, the flood came on so fast that she could not get out...and two of the young fishermen crawled across on the parapet of the bridge with a rope and rescued her. The river overflowed into the whole of the Valency Valley, over the lawns and into cottages, shops and garage, many household items and furniture were washed into the sea."

Fig 1 in Bleasdale (1957) is a storm isohyetal map for 8 June 1957 showing the tributary area covered by over 6 inches of rain. "A full account of the rainfall and flooding has been received [at the Met. Office] from Mr C.H. Archer of Wooton Courtenay near Minehead, who visited the area twice.....masses of hailstones, some of them congealed into large blocks, were washed about by the flood waters. The photograph facing p 336 shows the result in one place in Camelford, the inn yard, where the hail was piled almost knee deep..." "The four bridges [over the River Camel] marked c, d, e and f in Fig 1 were either destroyed or damaged. The photographs between pp 336 - 337 show two views taken from opposite directions of Tregoodwell bridge at d after the main flood had subsided. Though the bridge was still passable the damage was severe -- ' one of its main members, a rectangular granite block measuring 9 ft. by 3 ft. by 1 ft. was lifted up, torn from its railing, and hurled transversely across the stream.' But the bridges at a and b were not damaged, as the flood from the upper Camel valley was much less violent. Trecarne bridge at g and others downstream of this point were also not damaged. The very rapid decrease of rainfall to the south-east was further confirmed by the lack of significant flooding on the tributary which joins the Camel at Trecarne after flowing past Devil's Jump. At Camelford there were two floods separated by about 3.5 hr. The first was due to the intense rain at midday in

West Briton 13 Jun 1957

Camelford and Delabole Post 15 Jun Camelford and the near neighbourhood. It reached its peak within an hour and this was followed after 1330 G.M.T. by a substantial fall. During this flood, water flowing down the main road from the north-west, with a depth of 3 to 6 in. right across the road, flowed over Camelford bridge and into the houses beyond. The second flood came down the River Camel from the upper valley, with a peak corresponding to the maximum rainfall intensity between 1700 and 1800 G.M.T. in that area...."

Flood mark recorded on wall in the yard at Wenfordbridge Pottery (formerly the Inn) near St Breward: 114cm.

### 'Whitsun Deluge in Cornwall'

Camelford: 5 ½ inches rain fell between 1 and 4 pm flooding homes shops and an inn, damaging bridges and cutting off electricity. Firement pumped water out of homes but when the River Camel burst its banks the low-lying part of the town was flooded again.

Although Truro had 1.96", Penzance 1.38" and Falmouth 2.39 but most of the rain was absorbed by the parched land and even those who live in the St George's road area of Truro were unaffected.

Penryn: houses were flooded in the lower part of the town including commercial Road and The Praze. The storm water frm the surrounding hills converges into one old mill stream. Houses at the bottom of Truro Lane and in The Praze were flooded.

Scorrier: The Plume and Feathers was flooded to a depth of 7 inches.

Helston: Many streets were flooded. In CoinageHall St surcharging drains forced up granite paving slabs. The bar of the Beehive was flooded to a depth of 6 inches. The tarmac in Church St was torn up and houses were flooded in Meneage St and Lower Road.

Homes were struck by lightning.

Camelford: Almost seven years after a similar ordeal (?), Camelford had a freak storm with hailstones as big as ping pong balls. Houses shops, cafes and and inn were flooded to 2 to 3 feet. The hailstones formed themselves into icefloes, choking drains and building up reservoirs for the flood water inundating the lower reaches of the town. Torrential rain and hail fell between 1.30 and 2.30 pm. Water poured down Victoria Road and over the Camel Bridge. Water was pumped out of houses and drains cleared but then the Camel overflowed and swept through the lower parts of the town, worse than before. The Camel carried trees boulders and overtopped the Camel bridge. The water reached its peak at 6 pm. At a wedding reception at the WI Hall guests stood on chairs and the bride on a table as water swept through the hall. A farm at Outground was flooded from a tributary of the River Camel. Residents said they had learned from the previous flood in Aug 1950 that they should remove their goods to a higher floor. 'This was a more severe storm but the damage was not so great'. 'The hailstorm

			was fantastic in its intensity'. The Council Surveyor confirmed that road bridges had been damaged but were passable but several footbridges had been swept away.
18 Jun 1957		Kenton Vic. 0.76 in 18 mins with	There were floods to a depth of 3-4 feet at Stoke in Teignhead and one of 2 feet in parts of Teignmouth.
	BR	large hailstones. Cotleigh 2.67" (2" in 2 hours)	MD has reference and the lightwise according to the Town Course Treatment Made but well as a reference to
	West Briton 20		WB has reference only to lightning paralysing the Truro Sewage Treatment Works but makes no reference to flooding.
	Jun		nooding.
Express 7 Echo 19 Jun	•		Stoke in Teignhead between Shaldon and Newton Abbot had water and mud sweeping off the hillside and surging through the Main Street like 'a tidal bore', sweeping through houses to a depth of 3 feet. Condon's Farm had mud several inches deep. Basements were flooded inCoombe Vale Avenue. Manholes were lifted Powderham, Blackheath: the old Tollhouse was flooded.  Beer: A shop was struck by lightning.
			(on 20 Jun 2 houses and a police station were struck by lightning in West Somerset and 20 sheep killed).
	3 Jul 1957 BR	Plymouth Mountbatten 2.56 in 77 mins Tot=2.66	BR notes that 'it is believed even heavier rain fell just to the west of the city. Numerous fires were started in Plymouth by lightning and there was extensive damage by flooding although there was a fairly rapid subsidence of water after the storm had moved away to the north'.
	West Briton 3 Jul		WB refers to lightning striking Cubert and Grade Parish Church where one pinnacle fell and a horse killed by
			lightning, but makes no reference to flooding.
	E & E 3 Jul		E. C.
			E & E refers to heavy and continuous rain in S Devon with cereal crops beaten flat and power failures. A Beer hotel was damaged by lightning and also one in Sidmouth. No property flooding was reported
	16 Mar 1958	Falmount Constantine	Rainfall occurred in association with a trough of low pressure which approached from the Atlantic becoming
	BR	2.83	slow moving over southwest England. [Not added to EXCEL file]
	3 Jun 1958	1958 is correct!	(Valency/Camel) "Further storms occurred on the 3rd, particularly in Cornwall where, with heavy rain over the
	CDUE /DD		north Cornwall Moors, the River Valency rose 15ft. in 20 minutes and there was damage to property in
	CBHE/BR		Boscastle as the river overflowed its banks. Similarly the River Camel rose rapidly and overflowed, flooding Camelford and Wadebridge; the lower parts of the towns were 3ft. under water."
	http://www.		Camenord and Wadebridge, the lower parts of the towns were sit. under water.
	Boscastlecornwall		3rd June 1958 Boscastle (Cornwall) The Valency river is estimated to have risen 4½m (15ft) above its normal
	.org.uk/flood/		level in the short space of 20 minutes after a cloudburst on the high ground around the village. This was the

BoscastleFlood

worst flood in living memory. Tragically the flood claimed the life of 45 year old Mr Berryman, the Bandmaster

#### .pdf

Cornish and Devon Post, 7 Jun Cornish Guardian 5 Jun Clark (2005)

6 Jun 1958 BR	Shillingford Rec.1.39 in 2 hr
19 Aug 1958 CBHE/BR	Liskeard Minions 1.90 in 1 hr Tot=2.83
22 Aug 1958	Truro WW Lake Tregurrow 1.25 in 65 mins Chagford Thornworthy 1.20 in 2
25 Aug 1958	hrs

of Boscastle Silver Band, who helping neighbours, was washed off his feet, down the river and into the harbour where he drowned. [Note: the above statement also attributed to the flood of 1957]

The first warning was given by Mrs Elizabeth Whitehouse who was riding her horse up the valley, saw the rivers coming and galloped to give advance warning. It came with such a rush, like a huge wave, that no one had a chance to get furniture out of their rooms. The river overflowed into the whole of the Valency Valley'. (Anon, nd). 'The water rose 12 to 15 feet in a matter of seconds, and hit the solid stone bridge...When the flood subsided it left a high water mark over waist-high on the interior walls of Mr Norman Webber's garage. Said Mr. Frederick Pearn, aged 64, a local builder: 'This is the fourth serious flooding I have seen here in my lifetime and it is by far the worst. (Same info as for 1957 – an error somewhere)
[Not added to EXCEL file]

(General Cornwall) "Torrential rain in Devon and Cornwall on the 19th closed many roads and caused damage to property over a wide area, the Cornwall County Fire Brigade receiving calls for assistance from flooded householders in St Austell, Bude, Truro, Liskeard, Lostwithiel and Saltash. The most seriously affected area was along the Cornwall-Devon border, bounded by Bude, Holsworthy and Clovelly. At Derrill, near Holsworthy, a cottage was flooded to a depth of several feet and one wall partly demolished by the weight of flood water...."

(Umber) " ... A timber and asbestos shop was washed away and 70 houses were flooded when a tributary of the River Umber burst its banks at Coombe Martin, North Devon."

The River Strat overflowed at Stratton drowning farm animals, washing away furniture and flooding the low lying parts of the village..." "

# 22 August

..The River Strat burst its banks for the second time in four days, inundating a holiday hotel at Stratton. More than forty houses in the village were also flooded, some to a depth of 5 feet. Nearby Bude was also flooded as was the village of Bridgerule, the lower part of which was under 4 feet of water for several hours."."

25 August

Camworthy near Bude was flooded for the third time in six days: the usually quite stream which runs through the village was turned into a raging torrent by the exceptionally heavy rain and at one time the Main Street was 3 ½ feet deep

In spite of the heavy rain in Devon and Cornwall, only one 'noteworthy' fall was recorded for the two counties at Truro where there was some flooding on the western side of the city.

# West Briton 21 Aug 1958

Falmouth: In 15 minutes 0.60 inches rain fell and within a few minutes the whole town was swamped. Manhole covers were thrown up. There was flooding in the Market Strand area where water reached over 3 feet deep and other parts of the town. Business premises affected included a fruit shop, a butcher's shop and the Bakers Oven, Wyman's and True Form. Sea View Inn was also flooded.

Redruth: Flooding occurred in a few shops at the bottom of Fore Street and at Butler's Arms Hotel and at 3 cottages below the main road at Blowinghouse, Redruth where water flowed through from back to front. Penryn escaped completely. A later note adds a dozen houses in St Austell, St Trafalgar Sq and Tregolis Rd and James Place. Water entered 3 gardens at St George's Villas. The flood was not as widespread or serious as in January 1955 when many shops and homes were flooded. In the Lord Nelson Hotel in Trafalgar Square the water was 4 inches deep.

Truro: Water accumulated at Trafalgar Square and entered several houses. Parked cars in St Austell Street stood axle deep in water. Residents at St George's Villas were alarmed when the Kenwyn River rose rapidly but the water fell back without causing flooding.

Tresillian near Truro: The thatched Wheel Inn was flooded to a depth of 6 inches in the dining room. The blacksmith at the bridge end of the village was flooded.

Grampound: Seven houses were flooded, some to a depth of 15 inches. Trevillick Farm was also flooded.

24 Sep 1958 Hiflows UK 3 Oct 1958 BR 5 Jan 1959

BR

BR

Shillingford Rec 1.45 in c 2 hr

Camelford (Advent) 2.54

16/17 Jan 1959

16th Dartmoor (Strane Valley) 2.78

> South Brent (Badworthy) 2.6 South Brent (Didworthy Sanatorium) South Brent (Bala Brook) 3.29

Exe at Thorverton 1956-2010 AMS Rank 2 AM 34 (Is this out by 1 month?)

[Not added to EXCEL file] [Not added to EXCEL file]

[Not added to EXCEL file]

21 May 1959 Thunderstorms were fairly widespread in southern England and South Wales on 21st, some severe damage to property being caused at Tiverton during the evening. BR West Briton 21-28 WB has no reference to heavy rain or flooding. May E&E 21/22 May E & E refers to 'last night's thunderstorm' but does not report flooding. A factory was struck by lightning at Tiverton. [Not added to EXCEL file] 11 Jul 1959 Dawlish Luscombe 1.04 in c 75 [Not added to EXCEL file] mins BR 10 Aug 1959 Liskeard Treventon 1.80 in 2 hrs (Dart) "...and in a number of Dartmoor villages boulders rolled down the main streets with the rush of St Mawgan Airfield 1.71 in 105 water...." CBHE/BR mins (commencing 14.45) (Fowey) A 'very rare' fall was reported from Fowey during prolonged heavy rain [3.65 in.] which lasted from St Mawgan Airfield 1.72 in 2 hr 12.15 to 16.40 without a break." At St Austell several fire brigades were called to pump water from flooded (commencing 21.35) houses and streets while at nearby Par the main street was under 3 feet of water. Plymouth Mountbatten 1.31 in 2 hrs In Cornwall, over 4 in. fell within an area extending from St. Mawgan, St. Brides, St. Austell to St Agnes, and Shillingford Rec 0.95 in c 55 mins over 2 in. within an area bounded by a line drawn from Plymouth to Padstow in the north and from Portreath, Fowey 3.65 in 4 hr 45 mins Redruth to St Mawes in the south"."[ see isohyetal map] Padstow Barry's Lane 1.36 in 2 (Gannel) Torrential rain during thunderstorms caused considerable damage in Cornwall on the 10th. At hr 15 mins Newquay, during a 'very rare' fall when 2.69 in. of rain fell in 75 minutes; concrete walls, 9 in. thick, supporting Hennock (Hazelwood 2.8 cliff faces collapsed and were washed away, whilst a channel 5 feet deep was washed into the beach sand" "A Chagford (Metherall) 2.56 serious landslide was also reported from Bude" Rockbeare Manor 3.19 (Taw/Torridge) At Porlock, Nutscale Reservoir, a fall of 5.06 in. occurred. Places as far away as Hawbridge, Morebath Manor 3.2 Winsford and Timberslake recorded over 4 in." [see isohyetal map] East Anstey (Barton House2.8 West Buckland School 3.26 (Lyn) "About 3 in. was recorded over most of Exmoor, the heaviest fall probably being at Porlock Hacketty Way, St. Mawgan Airfield 4.78 where there was some evidence, thought unfortunately of a very doubtful nature, that there may have been a Wadebridge (Trevanson) 2.91 fall of as much as 10 in. Padstow (Barry's Lane) 2.81 (Exe) 'On Exmoor the River Exe was at danger level' St. Mawes (Lawn Bank) 2.58 Portmellon 3.37 Truro W.W: (Lower Tregurrow) August 1959, Perranporth, Truro and St Blazey were flooded. 3.10 http://cdn. Ladock (Pumping Station)4.18

**Environment-**

agency.gov.uk

Fowey

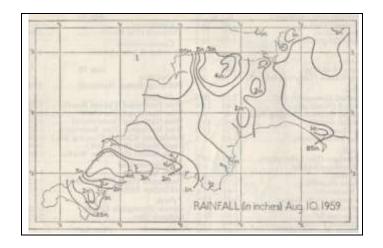
St. Stephen (Hendra Pumping

/flho1211bvmh Stn.) 4.77 St. Austell (Poltair Public -e-e.pdf Gardens) 4.39 St. Austell (Trethurgy) 4.15 Lerryn (Fore Street) 3.75 Looe (Polteana) 2.84 Liskeard (Penmilder) 2.64 Liskeard (Treventon) 2.7

Porlock Nutscale Res

5.06

West Briton 13 Aug



Flooding occurred at Wadebridge, Par, Newquay, St Austell, St Colomb, Padstow, Perranporth and St Agnes. — all sundried by the long summer. Five calves and a pony were killed by lightning at one farm at Summercourt. Over the St Austell Par Fowey area the storm raged for more than 3 hours. At St Austell 4.39 inches fell in 24 hours. At Fowey water cascaded down the steep narrow streets; at Fore St the water swept in the back door of shops and out the front. The King of Prussia Hotel was flooded. At Par roads were flooded near Par Harbour outside Clyde's Stores and Apple Tree Cottage, And the Golf Clubhouse Carylon Bay and in Moorland road, St Austell. Water poured down South Street and West Hill and met in Moorland Road and flooded cottages. White river burst its banks and flooded Montgomery Road at London Apprentice.

Newquay: Water poured down from Mount Wise and manhole covers were raised. It swept across Killacourt Field and ended in a 40 foot waterfall over the cliff. The door of Yolande Cafe was burst open by soil and rock. A channel was cut down South Quay Hill to a depth of 8 feet. The Fire Brigade received calls from 13 flooded shops and 2 from houses hit by lightning. At Newquay 4.6 inches fell in 24 hours.

Perranporth: Several shops and hotels were flooded; the Tywarnhayle Hotel had nearly a foot in the dining room. Low lying houses in Eureka Vale were flooded.

Truro: Slight flooding occurred at businesses in James Place, Victoria Square, Ferris Town and Boscawen street. Daily rainfall was 3.10 inches, the highest since records started in 1927.

Padstow: Daily rainfall was 2.10 inches, the highest daily fall there since 1913.

Flooding at Camborne and redruth was not serious.

9 Oct 1959 BR	Looe Polteana	3.01
25 Nov 1959 BR	Roborough (Maristow (	Gardens) 2.52
DIC	Sheepstor (Redstone)	2.68
	Sheepstor (Burrator)	2.71
	Sheepstor (Head Weir)	2.65
	Dartmoor (Lowery)	2.67
	Dartmoor (North Hessa	ry Tor)
		2.68
	Sourton (Prewley Treat	ment
	Works)	2.79
	Liskeard (Minions)	2.79
14 Aug 1960 BR	Braunton Knowle 0.65 i mins	in 10
22 Aug 1960	Chivenor Airfield 1.11 in mins	n 100
BR		
27 to 30 Sep (22 Oct 1960)	1 <sup>st</sup> Rousdon Charton Barn	2.36 in 2
BR	hrs	
	27 <sup>th</sup> Cornwall Trevone	
Priorlay (1064)		•
Brierley (1964)	(	.76
	rorumenon 2	.70
Hiflows UK	29th Cornwall	
	Crowan (Boswyn Reser	voir) 2.9
	29 <sup>th</sup> Devon	voii) 2.3
West Briton 29	South Brent (Didworth)	,
	` '	2.65
Sep	· · · · · · · · · · · · · · · · · ·	3.68
Lancs Evg News 28	Dartmoor (Strane Valle	
Aug	Princetown (H.M. Priso	• •
-	Hennock (Hazelwood) 3	•
	Christow (Kennick)	3.08
	North Tawton	2.55

Subsidence affected rail traffic between Burngullow and Grampound road A small depression moving across the country gave rain in most districts on 9<sup>th</sup> to 12<sup>th</sup> [Not added to EXCEL file]

Waves moving northeast along a quasi stationary cold front gave heavy rain in South Wales and Southwest England.

[Not added to EXCEL file]

[Not added to EXCEL file]

[Not added to EXCEL file]

(Menathyl) "The first reports of West Country flooding, however, came from St. Columb Major and St. Mawgan in Cornwall where the storm struck at 2 am on 28<sup>th</sup>. Higher Denazill farm was flooded. Fire Brigade returning from Higher Denalzill found the roadbridge over the River Menalhyl two feet deep in water but within minutes it had risen by 4 feet and flooded almost all the houses in the hamlet. One family had water up to the top of the kitchen door and the children were rescued by boats from upstairs windows. 'The river must have risen about 12 or 13 feet in about half an hour' The poultry processing factory at Bridge was flooded. At St Mawgan the village school was under 3 feet of water. Within minutes a stream running throughSt Columb and St Mawgan rose between 4 and 6 feet and poured into houses and cottages; children were rescued from about 20 houses

At London Apprentice on the road to Mevagissey a farmer lost 14 young pigs. The sub-postmaster at London Aprentice said it was the worst of four floods they had had in the last 5 years. At Mevagissey houses were flooded in Chapel Street, Fore Street, Church Street and Tregony Hill. At Tregorrick the water was several feet deep on the road. At Polgooth two cottages were flooded to a depth of 4 feet.

At St Merryn cottages were flooded to a depth of 8 feet and the Fire Brigade was blocked by water 4 feet deep at Trenairn and 6 feet at Harlyn bridge.

At Padstow a cafe and houses in Lower Broad Street were flooded to several inches.

30 <sup>th</sup> Devon	
Ashburton (Place) 2.	61
Dartmoor (Swincombe) 2	.5
Bovey Tracey (Yarner Wood	(k
3.00	
Lustleigh (Tottiford) 2.	.83
Christow (Kennick) 2.	81
Chagford (Metherall) 2.	.57
Chagford (Yellam Cottage)	2.6
Exmouth Filters (Salterton I	Road)
2.54	
Exton (Whinfield House	2.7
Shillingford Rectory	2.99
Exminster (Trood House)	2.94
Topsham (Newcourt Road)	2.64
Exceter (Heavitree)	3.07
Pinhoe (Redhayes)	2.7
Hemyock (Mountshayne)	2.93
Beer (Windyridge)	2.7
Lyme Regis (Pinhay)	2.6
Colyton (Colyford)	3.89
Seaton Junction	3.5
Kilmington (Springfield)	2.54
Honiton (Copper Castle	
Reservoir)	3.3
North Tawton	2.66
Okehampton (Waterworks)	2.72

East Devon SFRA Mid Devon SFRA At St Austell manhole covers were forced up on the main street and the worst flooding was around Pondhu. The river in the low part of town burst ist banks and flooded the Farm Industries store causing much damage.

(Exe) 2.75" fell in East Devon on 30 Sep in 12 hours with a peak intensity of 0.63" in 1 hour. Flooding occurred from local streams overflowing and from exceeding the capacity of urban sewers.

Further flooding occurred on 6 Oct with 1.13" in 30 minutes. Between Ide and Alphington the water was 6 feet deep over the floodplain and 119 houses were flooded in Alphington and Marsh Barton Trading Estate was flooded to 2 feet 10 inches. Lympstone, East Budeigh Kenton and Kennford were inundated with parts of Crediton, Yeoford, Axmouth and Colyford. At Exmouth the Withycombe Brook rose rapidly and overflowed at 3 or 4 places. About 500 houses were flooded up to 5 feet.

There was widespread flooding on the Taw, Torridge, Exe and Culm. In the Taw valley and in other parts of North Devon the River Lyn was running at a high level. On Haldon an embankment carrying the Exeter to Newton Abbot road was threatened by a huge lake which had formed following the blockage of culverts...



BR The heaviest rain was first experienced in Cornwall on 27<sup>th</sup> but by 29<sup>th</sup> exceptionally heavy rain had spread to Devon. The next day heavy rain was still falling in Devon. Maps are reproduced from Met Mag Apr 1961 90 no 1065

Exmouth 900 properties affected Lympstone 102 properties affected

Serious and unexpected damage was reported from Crediton and the neighbouring hamlet of Fordton, where several cottages collapsed." Devon Flood Story (p. 2, 1960) In Fordton, "flood water reached a depth of five

#### feet

On 7, 8 and 9 Oct the Exe overflowed at Exwick and Exe bridge and covered the floodplain and adjoining roads Further flooding occurred on 22 Oct. Rainfall was 0.83" on 20<sup>th</sup> and 1.67 on 21<sup>st</sup>. Flooding occurred at Ottery St Mary, Tipton St John, Alphington and Crediton.

Western Morning News 30 Sep 1985

Acreman (1989) based on Brierley (1965) At Exeter 22.09 inches fell in 10 weeks, causing saturation of the ground and high runoff coefficients. The first indications of flooding were on Sep 28 at St Mawgan and St Columb Major and some in Plymouth but Cornwall largely escaped the later floods. On 30<sup>th</sup> nearly 3 inches fell in 12 hours. A thatched church was destroyed at Exton. The next day in East Devon another 3 inches fell in 90 minutes. Water surged through Axmouth and 2 policemen had to cling to railings to avoid being carried away. And so it went on at various points through October up to Dec 5 – the WMN report gives further details.

Dart at Austins Bridge 1958-2010 AMS Rank 1 AM 3

Taw at Umberleigh 1958-2010 AMS Rank 1 AM 15

Acreman (1989) lists flow of 59.5 cumecs on a catchment area of 7.2 km<sup>2</sup> on the Alfin Brook, Exeter.

6 Oct 1960 The Guardian 7 Oct

Floods swept Devon causing landslides, swamping roads and railways and flooding homes. Thunder was reported

<Exmouth>: Large areas of the town which had 1.41" in 24 hours were cut off by flood water at least 2 feet deeper than those which caused devastation in 700 homes at the weekend. The same houses were again swamped. The main road out of Exmouth to Exeter was 3 feet deep. Houses at the lower level were swamped to a depth of 5 to 6 feet. The floods weremuch more widespread than those of last week.

<Exeter>: Four roads in th Exeter area were closed owing to the flooding. The Exeter to Crediton Road was under water in places to a depth of 8 feet; Exeter to Moretonhampstead, Bovey Tracy to Moreton Hampstead and Exeter to Newton Abbot. A school bus got stuck in floods at <Fordton Hamlet> and the driver carried all the children to a hedge; they were later carried home in a lorry.

<Newton Abbot>: A section of the road at <Rushycombe Corner>> was undermined by flood water when a culvert was blocked by asmall landslide. The lake formed was said to be 60 feet deep in places and 2 acres in extent. An 8 mile stretch of the road was closed.

26 Oct 1960 BR Holsworthy (Pyworthy Rectory) 2.63 Holsworthy (Bodmeyric) On the 24<sup>th</sup> the main depression was centred over the Bristol Channel bringing heavy rain to South Wales. The depression later became established over southern England, rain becoming heavy in Somerset, Devon and Cornwall

Hemyock (Mountshayne) East Devon SFRA Stoodleigh (Court Gardens) **Express and Echo** 2.54 28 Oct Chumleigh (Middle Garland) East Anstey (Barton House) Boyton (Ditchen) 2.86 Chagford (Metherall) 3 Dec 1960 3.16 BR Chagford (Thornworthy) **Express and Echo** Chagford (Teignworthy) 5 Dec 2.72 Chagford (Yellam Cottage) 2.55 East Anstey (Barton House) Challacombe (Chase Terrace) 3.26 Somerset Dulverton (The Cottage) 2.95 Dulverton (Secondary School) 2.7 Dulverton (Council Offices) 2.95 Hawbridge (Liscombe) 3.83 Winsford

3.45

4.6

Exford (Lower Thorne)

2.68

Exmouth 100 properties affected.

Then again in 24 hours on 25/26 Oct an average of 1.96" fell over the whole Exe catchment and 1000 properties were flooded in Exeter up to 6 feet deep.

Photo in E & E shows floodwater up to the platform level at Hele and Bradninch station.

Cullompton: A factory was flooded and the railway house to 3 feet.

Bickleigh: Little Dart and Exe combined to flood Fisherman's Cottage, Trout Inn and Bickleigh Cottage Guest House.

Tiverton: houses and shops on Lowman Green and Blundell's road were flooded to 3 feet; water swept through the sawmill.

Further and final flooding occurred on 4 December, with a flood similar to that on 25/26 October.

Brierley shows photos of the flooding in and around Exeter.

Exeter: 1700 hoes were flooded including Okehampton St, Cowick St and Alphington Street.

Tiverton: 500 houses were flooded some to a depth of 8 feet; areas included were Leat street, Westexe North and Westexe South and Walronds Housing Estate. The West Exe rose 12 feet in one hour. [Does this imply a 'wall of water' at sme point during the hour?]

Bideford: >50 houses were flooded in the Chanter's Lane area.

Towns and villages along the Taw and Torridge were generally affected.

Umberleigh: a dozen houses were flooded.

	Exford (New Rectory) 4.38 Simonsbath (Honeymead) 4.05 Simonsbath (Lodge) 4.23 Pinkworthy Farm 4.26	
1 Aug 1961 BR	Bradninch Westfield 0.88 in 30 mins	On 1 <sup>st</sup> August a depression travelling along the English Channel brought heavy rain and thunderstorms to southern England. [Not added to EXCEL file]
10 Aug 1961 BR	Whinfield House 2.5 Pinhoe 2.44 Redhay 2.57 Kenwick 2.6 Tottiford 2.71	Winds SE thundery; depression moved along the Channel. [Not added to EXCEL file]
14 Jul 1962 BR	Exford Lower Thorne 1.17 in 20 mins	Winds variable; depression, frontal, thundery: partly occluded and filling depression moving east across southern England. [Not added to EXCEL file]
6 Aug 1962 BR	Wayford Manor 2.14 Cricket St. Thomas 2.35 Great Vintcombe, Lower 2.68 Simonsbath Lodge 2.83 Honeymead 2.65	Winds variable; depression, frontal; deepening frontal depression moving northeast across southeast England. [Not added to EXCEL file]
29 Sep 1962 CBHE/BR	Honiton, Copper Castle 2.17 Exeter Institution 2.08 Shillingford St. George 2.00 Yellam Cottage 2.06	Frontal depression gave notable rain over Dartmoor and further afield, with the highest recorded value of 3.59 inches at Swincombe.
West Briton 1 Oct	Yellam Cottage 2.06 Kennick 3.02 Tottiford 2.83 Yarner Wood 2.1	Truro downpour was the heaviest for 3 years with 1.72" in 24 hours; flooding occurred in New Bridge Street on the road only but shops were flooded in St Nicholas street and Victoria Square.
Hiflows UK	Bovey Tracey 2.33 Swincombe 3.59 Ashburton Place 2.22 Ashburton , West 2.55 Maristow Gardens 2.25 Bastreet, North Hill, new site 2.42 De Lank Filters 2.44	Dart at Austins Bridge 1958-2010 AMS Rank 3 AM 18 Lyd at Lifton Br 1962-2010 AMS Rank 3 AM 21 Fowey at Restormel 1961-2010 AMS Rank 1 AM 16

4/5 Feb 1963 BR	Postbridge Murchington	3.83 2	Frontal; occluding frontal system approaching from the west then moving slowly east
BIX.	Yellam Cottage Postbridge	2.07 4.57	[Not added to EXCEL file]
10 Jun 1963 BR	Camelford Roughtor View 1.10 in 45 mins		[Not added to EXCEL file]
1963 No date given			After 24 hours of heavy rainfall the Wellington hotel area was flooded.
Wikipedia Cornish Guardian 16 Jan 2003			CG has a (v poor) undated photo of flooding at Boscastle from the River Valency in 1963
3- 5 Jul 1963 BR Shaw Weather	Hemyock 3.21 in 8 Hemyock Windwa in 95 mins		<b>(Exe)</b> A downpour at Hemyock in Devon produced 1 inches of rain in 15 minutes and 3.1 inches in 1.25 hours." [R.Culm tributary of River Exe].
Oct 1963	3 <sup>rd</sup>		WB has no reference to heavy rainfall or flooding.
	Delabole No 1	2.35	
West Briton 4-11 Jul	5 <sup>th</sup> Hemyock in 15 m, 2" in 45 n	3.33 With 1" n and 3" in 80	At Hemyock the village pub and a butcher's shop were flooded to 2 feet. The Parish and Baptist churches and a house on High Street and Clare's Garage were also flooded. At the Sawmill timber was floating in 3 feet of water. Water was 1 foot deep in Station Road but the centre of the village was flooded to 4 feet as water ran
E & E 6 Jul	m Culm Davy Ho	2.11	down the hill. Considerable flooding resulted from the rapid runoff which was particularly concentrated on the roads leading downhill from the uplands to the south. Hail was reported by none of outstanding size.
3 Aug 1963 BR	Broadhempston	3.41	Frontal; thundery; small frontal depression over northeast France moving northeast.
E & E 3/5 Aug			E & E refers only to bad weather but not flooding. [Not added to EXCEL file]
6 Nov 1963 BR	Pinhoe Pinhoe, Catmead	2.07 2.59	Complex low pressure system covering England and Wales; thundery [Not added to EXCEL file
18 Nov 1963 BR	Simonsbath Thorn	imead 2.62	[Not added to EXCEL file]
16 Mar 1964 BR	Stenalees Hendra P. Sta.	61.7 51.6	Almost stationary occlusion [Not added to EXCEL file]
14 Jul 1964 BR	Maristow Gardens Little Trethew Bussow Moor	5 55.9 53.1 57.9	Slow moving cold front with wave. [Not added to EXCEL file]

20 Aug 1964 BR	Yellam Cott Chagford 25.7 in 1 hr	[Not added to EXCEL file]
E & E 20/22 Aug 12 Dec 1964	Exford Rectory 64.0	E & E refers only to rain during the past week and effect on the harvest but no reference to flooding.  Orographic, warm front moving east followed by cold front with deepening wave moving southeast with
BR	Simonsbath, Thornmead 68.8	widespread heavy rainfall especially in Wales and Welsh borders. [Not added to EXCEL file]
14 Jun 1965		Wadebridge, 140mm of rain fell in 220 minutes. Polmorla and Wadebridge suffered from fluvial flooding, with numerous properties flooded.
http://cdn.		
Environment-		
agency.gov.uk		
/flho1211bvmh		
-e-e.pdf		
11 Jul 1965	Halwell 57.7 Hazelwood House 50.5	Depression with slow moving cold front over southern England, thundery over Scotland; frontal over southern
BR	Lower Moor 63.5	England
	Stannon Wks 64.3	[Not added to EXCEL file]
	De Lank Filters 62.2	
	Shebbear 50.5 Ashbury Sta. 54.9	
	Ashbury Sta. 54.9 Filleigh 53.8	
	Gunn 52.3	
14 Jul 1965 BR	Blisland (Cornwall) 42.9 in 1 hr Trelights (Cornwall) 69.1 in 105	Depression, frontal, thundery. Shallow depression with associated cold front moving south.
Tonkin (2001)	mins Tot=95.0 Wadebridge 76.2 in 2 hr	<wadebridge>: During a heavy thunderstorm 5 ½ inches of rain fell in 3 h 40 minutes. Cloudburst in</wadebridge>
, ,	Trevanson 139.4	Wadebridge where homes and shops were flooded.
West Briton 15-22	Delabole No 1 65.8	·
Jul		WB has no reference to heavy rainfall or flooding.
19 Jul 1965		Redruth: Some of the worst floods in living memory struck Redruth after less than one hour of torrential rain;
		houses and shops were flooded, barrels floated from Redruth Brewery, in one shop water was 5 feet 3 inches
West Briton 22 Jul		deep. Within minutes of starting at 6.30 roads leading to the foot of the town at Chapel Street, Foundry Row

and New Portreath St became rivers. Manhole covers were lifted all over town. The steep Fore Street was completely covered with fast moving water. Many houses and shops were flooded. At Redruth (Devenish)

Brewery water 6" deep gushed into the bottling store and beer cellar. Empty barrels drifted into the yard where the water was 3 to 4 feet deep. Possibly worst hit was Sunnyside Stores in New Portreath Street where the warer was 5 ½ feet deep. 'Water seemed to be coming from all the surrounding slopes' and 'the house was flooded in not more than 20 minutes after the rain started'.

At Portreath small bridges from the main road to Tregen Terrace were under water. On the beach the torrent cut a 15 feet wide channel in the sand. At Illorgan the Stores were flooded to a depth of 1 foot and grocieries were ruined.

At Newquay water was nearly 3 feet deep at Trevember and one foot deep at the bottom of Trenance Hill. The cellars of the Blue Lagoon Ballroom, Helson's restaurant and Butler's Brewery store.

Orographic, thundery; unstable air mass

[Not added to EXCEL file]

Depression, frontal thundery; depression filling and moving eastward across England and Wales; associated warm and cold fronts occluding with minor wave depression on cold front.

Lyd at Lifton Br 1962-2010 AMS Rank 2 AM 12

WB has no reference to heavy rainfall or flooding.

E & E refers to flooding at Hatherleigh where several houses were flooded in Bridge Street. A man was trapped in chicken house at Hatherleigh surrounded by 5 feet of water. The Holsworthy road was impassable. Calves were drowned affected by the River Lew.

Farmland was flooded in the Taw valley.

Frontal; occlusion with following warm and cold fronts moving north

[Not added to EXCEL file]

Frontal, thundery; cold front moving southwards becoming almost stationary with waves.

24 Jul 1965	Delabole No 1	68.6
BR		
2 Aug 1965	Bossiney	57.4
BR Hiflows UK	July was sid to be the for many years.	ne wettest

Aug E & E 2/3 Aug

West Briton 2/5

E & E 2/3 Aug

16 Nov 1965	Longdown (D)	51.6
BR	Yellam Cottage	54.1
DIX	N Hessary Tor (C)	79.0
17/18 Dec 1965	17 <sup>th</sup>	
BR	Lower Thorne (D)	65.5
DIX	Simonsbath Lodge	74.2
	Simonsbath, Thori	nmead
	74.9	
	18 <sup>th</sup>	
	Lower Thorne	83.3

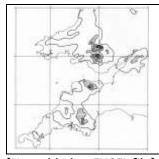
Exford Rectory

Honeymead

66.5

87.6

Simonsbath, Thor 101.9	nmeac
Throwleigh	51.8
Lower Hookney	67.1
Venford Res.	81.3
Buckfastleigh	66.5
Avon Dam	88.4
Didworthy	74.9



[Not added to EXCEL file]
Frontal; occlusion moving slowly east
[Not added toe EXCEL file]

LO Jan 1966	Clyst St Lawrence	57.1
3R	Exeter	57
	Ide	61.2
	Shillingford St Geo	rge
	52.1	
	Yellam Cottage	53.6
	Clifford Bridge Fari	m53.6
	Fursdon, Moretonl	hampst

Fursdon, Moretonhampstead 67.8 Clifford Bridge Farm (D) 52.3

[Not added to EXCEL file]

BR Stenalees (C) 60.5 16 Apr 1966 Hittlsleigh (D) 37.9 in 1 hr

24 Jan 1966

3 Aug 1966

BR

[Not added to EXCEL file]

[Not added to EXCEL file]

BR
10 Jun 1966 Trengwainton Ho (C) 22.6 in 30
BR mins

Throwleigh (D)

2 high short period totals in Somerset on same day

57.9

55.6

55.1

Depression, thundery frontal. Depression and associated occlusion moving northeast over northern England to

east of Scotland with trough affecting southwest England.

[Not added to EXCEL file]

Frontal; occlusion moving slowly southeast

[Not added to EXCEL file]

 $\begin{array}{lll} \text{4 Oct 1966} & \text{Stoodleigh Court (D)} \text{51.1} \\ \text{BR} & \text{Templeton} & 59.7 \\ \text{Lapford Cross} & 53.3 \\ \text{14 Oct 1966} & \text{Hendra P. Sta. (C)} & 50 \\ \text{BR} & \text{St Michael's Mount 60.5} \\ \end{array}$ 

Gulval

Penzance

Frontal; northward moving wave depression developing on a cold front and becoming slow moving over southwest England.

Tonkin (2001)	Trengwainton House 61.7	Tonkin records 1.87" in the day.
	Drift W. Wks 57.4 Trewidden 60.7 Bussow Moor 61 St Ives, Halsetown Vicar	Not added to EXCEL file]
	65 Rosewarne 60.2	2
28 Dec 1966 BR	Caradon Hill 67.3	
27 Feb 1967 BR	Buckfastleigh 71.9 Totnes 50.5 Halwell 50.8	England and Wales.
3 May 1967 BR	Forde Abbey 54.4 Hawkchurch 50 Halwell 57.1	Frontal; warm and cold fronts moving east  [Not added to EXCEL file]
6 May 1967 Tonkin (2001)	Thunderstorm	Rain and hail 3.15 to 5.00 pm [Not added to EXCEL file]
13 Jun 1967 BR	Cheldon Barton (D) 29.9	Not added to EXCEL file]
22 Jul 1967 BR	Bradninch 65.5 in 4 hr Metherall 97.3 in 6 hr 1 Throwleigh 91.4 in 16	rs
Hiflows UK	Forde Abbey 57.7 Wambrook 59.4 Yarcombe 54.6	East Dart at Bellever 1964-2010 AMS Rank 1 AM 3
West Briton 24/27 Jul	Axe Fish Trap 53.3 Colyford 69.8	B
	Up-Ottery 71.1 Broadhembury 59.2	F. O. F. notos tlanding at Taignmouth whore shops and businesses were tlanded
E & E 22/25 Jul	Clyst St Lawrence 54.1 Westcombe 55.9 Dunkeswell 65 Kentisbeare 53.3 Bradninch 82 Shobrooke Park 74.2 Horwell Barton 66.5	Shaldon: flooding occurred along The Strand, Ringmore Road and Albion Street.  (3 houses were struck at Yeovil and burned out)

Barnstaple Cross	64
Shobrooke House	68.6
Newton St Cyres	56.9
Holcombe	53.6
Teignmouth, Portla	and Avenue
50.3	
Teignmouth	54.4
Throwleigh	91.4
Metherall	97.3
Thornworthy	96
Murchington	89.7
Yellam Cottage	90.7
Newton Barton	80.8
Clifford Bridge Farr	m 56.6
Kennick	62.2
Tottiford	57.1
Trusham	59.2
Lower Hookney	76.7
Fursdon,	
Moretonhampstea	d84.8
Heatree	75.2
Halwell	60.5
Dartmouth, Public	Gardens 61.2
Kingswear	57.9
Dartmouth, Dean's	Lodge 62.0
Slapton	58.7
Okehampton W. W.	/ks 64.5
South Tawton	61.7
Yarnscombe Bucks	Mill 41.0 in 1
hr	

9 Aug 1967

hr BR Ilfracombe 52.3 West Briton 10/14 WB has reference only to effect of rainfall on sporting fixtures. [Not added to EXCEL file] Aug 11 Sep 1967 Condolden Farm (C) 52.8 Frontal; depression with associated occlusion. BR [Not added to EXCEL file] 8 Jan 1968 Axe Fish Trap 50.8 Depression, frontal; warm sector depression northwest of Ireland occluding and moving southeast. Stoodleigh Court 57 [Not added to EXCEL file] BR Templeton 52.2

Depression, thundery; slack area of low pressure.

Kennerleigh	65.8	
Throwleigh	55	
Roborough	54.9	
Bow	57.1	
Lapford Cross	57.3	
Eggesford	61.8	
Horseford Lodge	55	
Cheldon Barton	56.4	
South Molton	50.2	
East Anstey, Barto	on House	
54.9		
Yeo Mill	51.3	
Molland Sta.	55	
Ash Mill	55.4	
Brayford	56.1	
Filleigh	63.8	
Stowford House	55.5	
Yarnscombe, Bucl	k's Mill	
56.6		
Swimbridge	54	
Exeter 20.0 in 25	mins	Tonkin
Woodgate Fm 30.	.0 in 45 mins	

Tonkin notes rain and hail in Truro on 23<sup>rd</sup>.

BR Tonkin (2001)

21 Apr 1968

West Briton 22/25

Apr

E & E 22/23 Apr

WB has no reference to either heavy rainfall or flooding.

Wellington district: Houses shops and a pub were flooded to 3 feet. Mud was 2 feet deep on the A361 Taunton to Barnstable road.

Milverton and Holywell lane were worst affected. In Milverton centre water was 3 to 4 feet deep. Sand St had 18" mud. The white hart Inn was flooded and 4 houses in Creedwell Orchard.

Hollywell Lane village: water was 3 feet deep. In 2 cottages it was 2 feet deep and in the Holywell Inn 6" deep. Houses and farms were also affected at Langford, Budville, Beam Bridge, Whitehall and Wellington.

[Not added to EXCEL file as just outside Devon]

27 Jun 1968 Halwell (D) 59.8 BR Slade (C) 53.6

Depression, frontal; wave depression moving east northeast over southwest England.

Dart at Austins Bridge 1958-2010 AMS Rank 2 AM 12

5" of rain in 7 days was reported Yealm at Puslinch 1962-2010 AMS Rank 1 AM 3

E & E 27/29 Jun

in Devon with 1.5 inches overnight.

1 Jul 1968 Webpage

BR

Stoodleigh Court 16.5 in 10 mins Goosemoor 23.1 in 40 mins

Webb (1993) J Meteorol

West Briton 4 Jul

'Devon Rivers burst banks' after a night of continuous rain – Otter Axe and Culm are bankfull. The only flooding of houses reported was at Wrangaton on the A38 affected by vehicle wash,

Extreme hailstorms were reported around the country on 1 and 2 July. This included Cornwall St Stephen and St Dennis near St Austell where hailstones were 50 mm diameter and up to 2 oz. Windows and Perspex roofs were broken. (At Huddersfield on the same day hail with a diameter of 1 ½ to 1 ½ inches gave 28mm water equivalent in 10 minutes. This storm stretched from Manchester to Teesside.

Exebridge – hailstones the size of tennis balls were reported and at Minehead they were up to 50-60 mm in diameter

West Cornwall was affected by a freak summer storm, hailstones the size of golf balls shattered windows, a ball of lightning started a fire which destroyed a house and cars were set floating by flood water.

Redruth: Rivers 18 inches deep surged through the town causing a boiling flood in lower areas in places 5 feet deep. Almost every shop in the lower part of the town was flooded including Knight's drapery and furnishing store at the corner of Penryn and fore Street. Properties in Back Lane West were badly affected. Along Falmouth Road most of the houses on the eastern side of the street were flooded. Similar effects were noted at Plain —an-Gwarry, North Street, Blight's Row and at Vauxhall near the Redruth Brewery where flood water carried barrels away. The water pushed up manhole covers and stripped tarmac of roads and piled debris two to three feet high. The area around the town from Four Lanes to Portreath was also badly hit.

Carnkie: Two houses beside Carnkie Wesley church were flooded and in one the door was ripped from its hinges.

Houses were also flooded at Barncoose, Bridge, Porthtowan

Helston was flooded in Church Street where shopkeepers spent the day baling out water. The Tradesmen's Arms Pool was flooded as water surged under the front door.

St Agnes: Low lying areas were flooded to a depth of 2 feet; several people were marooned in their homes. Ladders were use to convey htot drinks to upstairs windows. Quay was closed to traffic when a stream overflowed.

Large hailstones were reported at St Dennis (as big as half crowns) and St Columb. (Newquay had no hail) and shattered scores of windows. *(Some names were not clear on the photocopies)* 

Depression, orographic, thundery; complex depression over the UK deepening in the north of England. No high daily totals noted in SW England on either day.

2 Jul 1968 BR Exeter 15.0 in 9 mins
Launceston Western Rd 21.6 in
9 mins

Webb (1993) J Meteorol	Rain was accompanied by heavy hail.	A swathe of thunderstorms occurred from Start Point through Slapton to Newton Abbot. At Slapton the hailstones were 50 mm diameter or more and up to 4 oz. Roof tiles were broken and brick walls were pitted and corrugated iron pierced.
E & E 2/3 Jul		10 minute thunderstorm in Exmouth caused flooding of The Parade, Market street, Chapel Street and Exeter road. Shops and houses in the vicinity of All Saints church were flooded. The Exeter-Exmouth road at Topsham flats was impassable and water entered a house to a depth of 1 foot at Fore Street. The bar of Exmouth Arms was flooded.
		Teignmouth: The town suffered its worst flooding since 1939 as water poured into shops and houses and left a coating of mud on pavements. Station Road was flooded.
		Shaldon: School Lane was flooded to 2 feet but other parts of the village escaped.
		Honiton: The River Gissage which runs under the main road surmounted the four foot bridge railings and
		cascaded into houses and shops. Cars were carried away. In West End Bakery the water was 4 feet deep. An 80
		year old man who had lived there all his life said that the floods were the worst that he had ever seen. Children
		were taken by ladder out of upstairs windows
		An ancient Clapper Lane Bridge was half demolished and completely blocked by a fallen tree and the new Tracey Bridge had its footings swept away and was later closed.
		Tiverton: River Lowman burst is banks and within 15 minutes houses in Lowman Green, Station Road, and
		Blundells Road were flooded. A hastily constructed sandbag barrier protected 300 Tiverton homes.
		Exton: a stream burst its banks and trapped a group of pensioners in a church hall.
		Sidbury: a woman was drowned in 3 ½ feet of water in her home.
		Hele Water Wiggins Teape paper Mill was flooded to a depth of 2 to 3 feet.
7 Jul 1968	Newton Abbot 55.9	Cold front moving southwards; thundery.
BR		[Not added to EXCEL file]
10 Jul 1968	Feniton Court 40.6 in 3 hrs	Depression, frontal, thundery; warm sector depression occluding slowly and moving eastnortheast over
BR	Roborough 41.9 in 3 hrs Cricket St Thomas 50	souther part of England. Widespread very heavy rainfall in flooding over much of England and Wales with many
	Yarcombe (D) 78.1	totals in Somerset over 100 mm.
E &E 10-12 Jul	Kilmington 51.2	
	Wilmington 80 Colyford 50	'Worst summer floods since 1952 hit West'
	Beer, Set Fair 51.3	NFU say the triangle Honiton, Exeter, Sidmouth is the worst affected area. Many cattle were washed away.
	Sidbury 68.6	Fenny Bridges on the A30 and at Marsh on the A303 is being rebuilt by army engineers (others in Somerset). Compton, S Devon: storm lashed the village for 4 hours with > 2" rain. Flood water 2 feet deep left 2" of mud
	Chelson 97.3 Sidmouth, Primley Gardens 64.0	on house floors of the village store and three other properties.
	Sidificatil, Filliney Gardens 64.0	on house hours of the vinage store and three other properties.

Hiflows UK

Sidmouth 65.4 **Up-Ottery** 111 90.2 Honiton, Copper Castle Dotton P. Sta. 53.7 Exmouth 53.6 Lower Thorne 65.8 Clayhanger 68 Huritsham 54.8 Westcombe 99.3 Dunkeswell 54.4 Hockworthy 82.8 Tiverton Junction 54.8 Cheriton Fitzpaine 58.4 Teignmouth, Portland Avenue 52.6 Teignmouth 52.8 57.1 Throwleigh

55.6

Tavistock (C)

Crediton: The High Street was flooded to 2 feet in places.

Colyton: One home was washed away whilst a row of detached houses was undermined. 30 to 40 premises were affected.

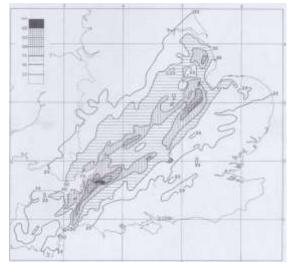
Newton Poppleford: two were trapped in a flooded house

Exe at Stoodleigh 1960-2010 AMS Rank 2 AM 13

Culm at Woodmill 1962-2010 AMS Rank 1 AM 1

Doniford Stream at Swill Br 1967-2010 AMS Rank 1 AM 1 (N Somerset)

Axe at Whitford Max 60 min rate of rise



East Devon SFRA

Sidmouth, Sidbury, Sidford 250 properties flooded

Severe flooding: Honiton, Ottery St Mary, Seaton, Sidmouth, Axminster, beer, Colyton, Fenny Bridges, Tipton St John, Newton Poppleford and several other villages.

Fenny Bridges: bridge and weir collapse

Tipton: Bridge collapse.

[In Somerset three died in floods, one washed from home into a churchyard and 3 drowned when their car was washed into the River Chew.

West Briton 11-18

13/14 Sep 1968 BR	14 <sup>th</sup> Ide 50.7 in 1 hr 5 mins 13 <sup>th</sup>	WB refers only a WI party as victims of a thunderstorm at Trevithick.  Depression, frontal thundery; deepening depression off southwest England with associated trough moving north.
E & E 14 Sep	Topsham, Red Rock62.2 Ide 50.7 Kenton 52.3 Mamhead 54.3 Dawlish, Beach House 54.9 14 <sup>th</sup>	Exmouth: torrential thunderstorm with a whirlwind which smashed beach huts on the Esplanade and caused damage to house roofs. Flooding occurred in Withycombe Road, Montpelier road, Withycombe village, Hutham Road, Phillips Avenue and Langstone Drive.  Budleigh Salterton: Flooding occurred at Fore Street and Meadow Road.  Reports of flooding were mostly of roads rather than of property.
14 Oct 1968 BR	Torridge 59.9 Horrabridge (C) 18.5 in 20 mins	BR has no high daily totals on this day but notes 'thundery unstable airstream' for 12 <sup>th</sup> and 13 <sup>th</sup> . [Not added to EXCEL file]
24 Dec 1968 BR	Pyeworthy Rectory 54.9 Ditchen (C) 50 Camelford, Roughtor View (C) 63 Burrington (D) 54.6 Ash Mill 52.1 Yarnscombe, Bucks Mill 50.5	Depression, frontal; stationary warm front with wave depression moving southeast over area. [Not added to EXCEL file]
28/29 Jul 1969 Bridge (1969) Hiflows UK Tonkin (2001)	Swimbridge 52 Mountbatten 29.3 in 80 mins Bridge has a list of 64 daily rainfall stations, 35 with over 100 mm.	Dry weather during July was followed on 28 <sup>th</sup> by persistent intense rainfall through to 08.00 on 29 <sup>th</sup> . Totals for 24 hours were generally over 80 mm for the whole of Devon and Cornwall and reached 140mm to the west and southwest of Dartmoor. A fairly shallow wave depression deepened as it reached the Western Approaches, continuing through the English Channel with a warm front making slow progress over southern England and the cold front accelerating eastward over France. In the early hours the frontal cloud became more unstable which in conjunction with probable orographic lift, led to the formation of scattered thunderstorms over and to

the south of Dartmoor.

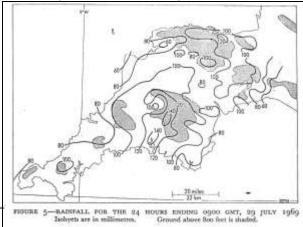
If it had not been for the dry state of the ground at the onset of the rainfall widespread flooding would have occurred.

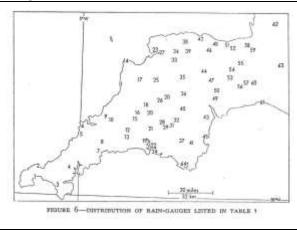
Culm at Woodmill 1962-2010 AMS Rank 2 AM 6

Location number*	Location	Rainfall
number-	Penzance	B8-1
	St Ives	
2		83-8
3	Culdrose	86-4
4	Gwennap	101.8
5	St Mawgan	71-1
	Constantine Bay	67-8
7	St Austell	93.7
270	Bugle	74-9
. 9	Delabole	88-9
10	Camelford	95'3
11	Bude	72-9
13	St Cleer	100-3
13	Liskcard	99-1
14	Hartland Point	58-9
15	Bastreet	114.3
16	Launceston	113.3
17	Milton Damerel	95-8
18	Virginstow	138-4
19	Ellbridge	145-0
20	Eastcott	98-9
2.1	Tavistock	125.7
22	Plymouth Hoe	120.1
23	Chivenor	70-6
24	Mount Batten	113.2
25	Bury	106-6
26	Southcott	142.7
27	Barnstaple	58-4
28	North Hessary Tor	144.4
29	Princetown Prison	129.5
30	Okehampton	113.3
91	Burrator	114.8
32	Post Bridge	113.3

Torridge at Torrington 1960-2010 AMS Rank 2 AM 11 West Okment at Vellake 1967-2010 AMS Rank 3 AM 7 East Dart at Bellever 1964-2010 AMS Rank 2 AM 4 Lynher at Pillation Mill 1961-2010 AMS Rank 3 AM 18

Tonkin reports 3.68" of steady rain but with thunder at night.





West Briton 31 Jul

E & E 29 Jul

The heavy widespread and continuous rain followed a period of 20 days with virtually no rainfall. WB refers mainly to the effect on campers, who rain-sodden were put up in local guesthouses but there was limited reference to flooding of property. Worst affected were Penzance, Looe, Polperro, St ives and St Blazey.

Exeter: Crown Wallpaper shop in Fore Street was flooded

East Budleigh: A home at the Cooperative Buildings was flooded for the fourth time in three years.

Hatherleigh: 30 sheep were washed away by the River Lew; a house was flooded nearby.

ocation number	Location	Rainfall
	FF1 NT	mm
33	Kings Nympton	100-4
34	Brayford	82.4
35	Cheldon Barton	103.0
36	Hillerton	113.0
37	Avonwick	111-6
38	Blackpits Gate	115-1
39	Winstitchen	85-9
40	Yellam	108-4
41	Dartington Hall	105.7
42	Porlock	94'5
43	Newhouse Park	110-0
44	Stoodleigh	106-6
45	Torquay	Bo-4
46	Leigh Farm	98-3
47	Tiverton	101-8
48	Withycombe	123-2
49	Exeter Airport	101-6
50	Clyst St Lawrence	105-9
51	West Quantoxhead	97-8
52	Crowcombe	106-9
53	Hemyock	113-5
54	Wellington	106.7
55	Taunton	99.3
56	Coran	101-6
57	Yarcombe	100.3
58	Wembdon	105'4
59	Bridgwater	94.0
60	Chard	88-1
61	Morecombelake	45.0
62	Priddy	95-8
63	Yeovilton	62.7
64	Salcombe	72-4

Jun 1970 Faoulds and Macklin (2013) from Horsham (2012)

18 Jun 1971 Hiflows UK

E & E 19 Jun

27 Jul 1971

Women and children escaped death yesterday when the River Plym was swept by a wall of floodwater following a cloudburst. The drought-stricken river was transformed into a deathtrap as thousands of tonnes of muddy water roared down the valley.

Rain was accompanied by gales which brought down trees.

Avon at Loddeswell 1971-2010 AMS Rank 2 AM 27 Thrushel at Tinhay 1969-2010 AMS Rank 2 AM 11

Dart at Austins Bridge Rank 1 60 RoR ??

'Devon dry rivers stop flood peril' The low level of the rivers after a long dry spell saved areas from flooding at South Molton when 2 inches of rain fell in 10 hours. The rivers Bray and Mole rose high and in some areas farmers took their stock to higher levels including in the Taw valley at Newbridge where several hundred acres were flooded.

Lynher at Pilaton Rank 1 60 RoR

West Briton 29 Jul

2 Aug

E & E 27/29 Jul 14 Aug 1971 Hiflows UK 13 Oct 1971

19 Oct 1971

E & E 19/20 Oct

7 Jun 1972 Hiflows UK 18/19 Jul 1972 Eden (2008), Bevan and Carling

(1989) Chapter 5

12 Oct 1973

Eden (2008)

27 Sep 1974

Hiflows UK

More than an inch of rain fell in North Devon during the night

Two inches of rain fell on Exmoor

No reports of flooding were found but lightning affected St Agnes, Stithians, Portreath and St Just.

E & E has no reference to heavy rainfall or flooding. Plym at Carnwood 1971-2010 AMS Rank 2 AM 20

[Not added to EXCEL file]

Tiddy at Tideford Rank 1 60 m RoR Exe at Thorverton Rank 1 60 m RoR

E & E has no reference to heavy rainfall or flooding. Avon at Loddeswell 1971-2010 AMS Rank 3 AM 28

[Not added to EXCEL file]

Thunderstorm with heavy hail affected Devon. In the Exeter area houses were damaged by lightning and at Exeter Airport 90 mm fell in 130 minutes. Parts of the city were flooded.

<<Pin Brook>>It.appears to have an overly large [channel] capacity in both rural and urban reaches. This is undoubtedly the result of a flood estimated to have a recurrence interval in excess of 30 years which occurred in July 1972, four years before the field study was undertaken.

Five sites around Penzance received 90 to 100 mm rain.

From HiFlows UK

Exe at Thorverton 1956-2010 Highest Summer annual max (Rank AMS1); AM10

Exe at Stoodleigh 1960-2010 AMS Rank 1 AM8 Exe at Pixton 1966-2010 AMS Rank 1 AM 10

Torridge at Torrington 1960-2010 AMS Rank 1 AM 5 Mole at Woodleigh 1965-2010 AMS Rank 1 AM 7 Okment at Jacobstowe 1973-2010 AMS Rank 1 AM 2 West Dart at Dunnabridge 1972-2010 AMS Rank 1 AM 9 Tamar at Gunnislake 1956-2010 AMS Rank 1 AM 8 Ottery at Werrington Pk 1961-2010 AMS Rank 2 AM 7 Thrushel at Tinhay 1969-2010 AMS Rank 1 AM 2

Fowey at Trekeevesteps 1958-2010 AMS Rank 1 AM 5

Camel at Denby 1964-2010 AMS Rank 2 AM 5

West Briton 26 Sep to 3 Oct

E & E 27/28 Sep

7 Jul 1975 COL

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

E & E 8 Jul

8 Aug 1975 CBHE/Acreman (1989)

COL Sep 1975 Tonkin (2001) ? Sep 1975 De Lank at De Lank 1966-2010 AMS Rank 2 AM 2 Horner Water at W Luccombe 1973-2010 AMS Rank 3 AM 12 Lyd at Lifton Bridge 1962-2010 AMS Rank 1 AM 9 Walkham at Horrabridge 1974-2010 AMS Rank 3 AM20

WB has no reports of heavy rainfall or flooding.

Ilfracombe: At School View an undergoround stream burst out and flooded houses.

Barnstable: Several houses were flooded at Shrubbery Closeafter a stream overflowed.

At Snapper between Barnstable and Bratton Fleming a bridge collapsed, and the A19 road was flooded at several places.

Exwick: the metal bridge collapsed after being undermined by floodwater which undermined the bank upstream. The bridge had survived the 1960 floods. Virtually no flooding of houses was reportedin Exwick. West Cornwall experienced its most severe storm for many years and in some places the worst in living memory – this written by the Met observer at Stithians. The situation was similar over most of Cornwall and Devon and much need rain fell everywhere. One or two places in north and east Cornwall recorded no rain at all in June and water situations were becoming quite desperate. Tamar Lake on the River Tamar had only 2 days water supply left; Burrator reservoir on S Dartmoor was not much better but this had one of the heaviest falls (about 55 mm) in the region.

There was flooding due to sewer overload in Pool, flooding 20 properties, and also due to breaching of a leat in St Austell.

Seaton at Trebrownbridge Rank 1 60 RoR

Following a long dry spell the thunderstorm was welcomed by farmers for the most part. Two houses were destroyed in Taunton by fire caused by lightning and hay was set alight on a farm in Tiverton.

Truro: "Thunderstorm. Surface water."

Constantine observer notes 'Thunderstorms within audible range for 11 hours. Five houses were struck by lightning, five of them fired three of which were in Truro alone. At Mullion on the Lizard peninsula electricity supplies were cut off for 36 hours'

Tonkin notes violent thunderstorm with 1.77" rainfall at Truro.

There was flooding at Polgooth, where the stream burst its banks and also at Lanjeth, Sticker and Nanpean, in

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf 27 Jun 1976 COL

E & E 28/29 Jun

24 Sep 1976 COL Hiflows UK RNAS Culdrose had its heaviest

station was opened (when?) 1"

rainfall in 1 hour since the

in 1 hour.

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

West Briton 27/30 Sep the St Austell area. Properties also flooded in Truro on the same day.

Later in September 1975, Penzance and Marazion suffered from flooding due to the sewerage system becoming overloaded in heavy rainfall.

Parts of Ashburton on East Dartmoor were flooded when 7.8 mm fell during a thunderstorm. Other Cornwall and Devon stations of COL had virtually no rainfall during the month.

'As Devon swelters, Ashburton floods'. A thunderstorm starting at 15.30 lasting 2.5 hours caused flooding in the Ashburton area. It flooded the old school building at Ashburton and Buckfastleigh Comp (not the new building). In Eastern road the water was 4" deep and some houses in Home Park were flooded. At neighbouring Bickington there were only a few spots of rain and at Buckfastleigh there was only a short hold up in a cricket match.

A fall of 125 mm in 2 hours was reported in the Polperro area late 24th early 25th prior to the flood disaster which damaged the village and swept one man to his death. Stithians Cornwall had 28.6 mm on 26<sup>th</sup>. Over 90 mm in the day was reported for parts of Exmoor on 21<sup>st</sup>.

Inny at Bealsmill 1976-2010 AMS Rank 3 AM 27 St Neot at Craigshill Wood Rank 1 60 m RoR

Flooding was widespread across Cornwall at the end on September 1976 due to severe storms. The main communities affected included Bude, Wadebridge, Camborne, Pool, Redruth area, St Ives, Penzance, Helston, Falmouth, Truro, St Austell, Par and St Blazey, Lostwithiel and Bodmin. In Polperro there was one fatality and 83 properties flooded.

Polperro: A raging torrent up to 10 feet deep raced through the village, flinging cars aside and sweeping an 81 year old man to his death. He was swept away from the window of Mill House Hotel as he grasped for a lifeline thrown by rescuers. 'The water came down in a tidal wave down the hill. One moment there was nothing and suddenly it was 6 feet deep' 'A solid wall of water came rushing through the village towards the harbour; in a mater of minutes my car was completely submerged'

Falmouth: Rainwater at least 2 feet deep swept through the main part of the town causing damage to a garage and several shops. Water swept down Berkeley Vale Killigrew Street and Trelawney Road to the town centre. Arwenack PO, Tesco stores, the Salamander Cafe and houses on Trelawney Road and Windsor Terrace were

E & E 25 Sep

Cornish Times 1 Oct 1976

2 May 1977 COL

28 Jun 1977 COL Ashburton 34.8
Teignmouth 31.3
Hemyock 30.5
Exeter 19 mm in less than 1
hour

Rainfall was accompanied by

affected. There was also flooding in parts of Penryn and Mylor.

St Ives: Water swept into the town centre, threatening shops. Cottages in The Warren near the seafront were flooded as were houses in Carbis Bay.

Redruth: Thunderstorm hit the lower part of Redruth with dozens of homes and shops flooded. Back Lane West became a 75 yard long lake, up to 4 feet deep with a foot of water in shops and cellars. St Day and Lanner were also affected. The stream through Portreath burst its banks flooding several properties. There was also flooding at Pool down to and beyond Trevenson Church.

Camborne: Lightning struck at least 2 properties – Woolworth's and International Stores were flooded. The town's car park was flooded.

Helston: A doctor's house was flooded from water forced up through drains. The water came down from Church Street. At St John's in the lower part of town was also flooded. A cottage at Melrose near Culdrose was flooded to 8".

Polperro: The thunderstorm sent a 4' of floodwater surging through the village. Classrooms of the village school were wrecked. The car park of the Crumplehorn Inn was strewn with wrecked cars.

East Looe: Globe pub was flooded; surface water rushed down the hills on both sides and swept over the window sills.

About 150 properties in Lansallos Street, Saxon Bridge and Mill Hill were flooded and cars were bobbing around like corks; about 50 were damaged. One Mini in a locked garage was found with its roof mangled against the beams of the ceiling. Crumplehorn Mill leisure centre was virtually destroyed and the next door school as flooded to 2 feet. The model village behind Sutton's Gift Shop. The Old Forge was reduced within minutes to matchwood.

Pelynt: The River Shute which flows into the Pol flooded areas in the village centre.

Fowey: Flooding occurred and a cow was washed down to the jetty.

Lostwithiel: Large parts of Coulson Park and The Moor were flooded and houses in the lower part of town. Devon escaped lightly; the only flooding reported was on the Exeter to Moretonhampstead road near Bridford.

Scattered thunderstorms [Not added to EXCEL file]

On 28 Jun thundery activity began in Exeter in the late morning. The storms moved up from the southwest and were heavy with occasional lightning and thunder. At about 12.30 GMT very heavy rain began and the lightning was almost overhead. After the main storm the observer saw a funnel cloud ahead which then passed directly

hail- some the size of marbles.

over me causing the car to be buffeted in all directions by the wind and this was immediately followed by a torrential hailstorm. Just a few 100 metres further south the sun was shining brightly. At Plymouth there was no thunder at all. According to the local paper the floods caused thousands of pounds of damage. Houses shops and cinemas were flooded. Many vegetables in gardens and allotments were ruined.

E & E 28 Jun

Roads were flooded to a depth of 2' 6" at Polsloe bridge, the Paris St roundabout, Heavitree bridge and East Wonford Hill. At Vincent Thompson High School pupils were sent home because of flooded corridors. Debenham's basement was flooded to 3", Littlewoods to 2". Thatched house Inn at Exwick was flooded with water 6" deep.

? Jul 1977 http://cdn. **Environment**agency.gov.uk /flho1211bvmh

Okehampton: Jaeger factory floor was flooded. Water was as high as 18" in Mill St. Tide-locking of sewers resulted in major flooding at Mevagissey with 25 properties flooded.

-e-e.pdf 23 Aug 1977

**Environment-**

agency.gov.uk /flho1211bvmh

-e-e.pdf

Penzance 71.5 Penryn 56.5

COL Plymouth 39.0 http://cdn.

In August 1977, heavy rainfall led to surface runoff flooding in St Austell and in the Camborne and Redruth area.

Later in August 1977 similar flooding was recorded around Penzance, St Ives and Hayle, in St Austell, Par, St Blazey and Mevagissey and in Truro.

E & E 23/25 Aug

E & E refers only to the effects of rain on crops; there is no reference to flooding.

24 Aug 1977 Hiflows UK West Briton 25 Aug/ 1 Sep

Ganel at Gwills 1969-2010 AMS Rank 3 AM 31

WB reported a 'freak storm' but only minimal flooding was reported.

WB later reported a couple escaped when they tried to ford a stream in flood. The car stalled and the car was swept downstream at Colan near Newguay.

Truro: A shop in river Street Truro which backs on to Kenwyn street was flooded to 1 foot. 'Most of the water

came from roofs of surrounding shops and by blocked drains'.

Rainfall much lighter over the Devon Stations

Falmouth 92.7 **CBHE Acreman** Truro: "Heavy rain. Surface water." Stithians 72.1

Newguay 84.2

Penzance 84.2

Penrvn 85.3

Denbury 60.6

5/6 Oct 1977

COL

COL

Flooding at

1993'

Porthleven 9 June

(1989)

No reference to thunder. E & E has no reference to heavy rainfall or to flooding.

E & E 5/7 Oct 31 Jul 1978 Hemyock 57.7 Heavy rain stretching along the S coast with the heaviest rain on the I of W.

COL [Not added to EXCEL file]

16 Aug 1979 Penryn 23.1 Col reported that some stations in the SW reported more than 25 mm in 2 hr. Stithians 27.7

Denbury 25.4 E & E refers to torrential rain and accompanying gale and the effects on the Fastnet Yacht Race but makes no Hemyock 23.4

reference to flooding. [Not added to EXCEL file] E & e 16/18 Aug

Plymouth Mountbatten 20 mm 16 Oct 1979 Thunderstorm

in 15 mins COL [Not added to EXCEL file]

22 Oct 1979 Penryn 42.6 Frontal rainfall Stithians 36.3 COL [Not added to EXCEL file]

Penrvn 42.1 27/28 Dec 1979 Persistent heavy rain and flooding in Wales and the west country

Stithians 57.3 Truro: "Flooding of River Allen." COL

**CBHE Acreman** Exeter Uni 41.2 (1989)Heavy rainfall affected Helebridge

NRA 'Flooding at Bude 12 June 24 hours continuous rainfall resulted in the flooding of 2 houses, a garage and a highway at Porthleven.

1993 ' and

Perranporth; Ponsmere River overflowed and flooded Perranporth. A dozen houses at Bollingley were flooded Cornish Guardian up to 1 foot deep. New road was turned into a second river. Flooding of houses occurred at the junction of St 3 Jan 1980 Piran's Road and Station Road and Eureka Vale where the water was 2 feet deep. At the other end of the town the Tywarnhayle Square had been under water since early morning but then the Perrancombe river overflowed

at 6 pm flooding the whole of the area at the bottom of St George's Hill and turning the Green Parrot car park

into a lake. Tywarnhayle Hotel had 1 foot of water in it for most of the day. A 50 year resident said he had only once seen flooding as bad. 'It wasn't as bad as the flood in 1974 [no date] but it is something new for the Perrancombe river to flood. We have never had that before' The water came up so quickly there was little time to remove belongings.

St Columb Minor: The former manor house at Rialton Priory was flooded to 2 feet. The family had lived there since 1958 and never seen it so bad.

Launceston: CFMP notes flooding at Launceston in December 1979 without giving details. One photo shows

**EA Tamar CFMP** 

(CFMP)

13 Jun 1980 COL

Denbury 31.0 Exeter Uni 37.4

Exeter Uni 41.5

Tot=31.4

began in 1974

Penryn 19.4 mm in 22 mins

Wettest Sept since records

21 Sep 1980 Hiflows UK

http://cdn. **Environment**agency.gov.uk /flho1211bvmh

-e-e.pdf

E & E 22/24 Sep

5 Aug 1981 COL

19 Sep 1981 Hiflows UK E & E 19/21 Sep

24 Sep 1981

COL

E & E 24/26 Sep ? Jun 1982

Stithians 17.0

Tamar at Crowford bridge 1972-2010 AMS Rank 3 AM 5 De Lank at de Lank 1966-2010 AMS Rank 1 AM 1

E & E has no reference to heavy rainfall or flooding.

Other COL stations in Devon and Cornwall recorded less than 10 mm

road flooding from the River Kensey at Newport in Launceston.

'Thundery rain reached southwest England during the evening'

[Not added to EXCEL file]

[Not added to EXCEL file]

East Dart at Bellever 1964-2010 AMS Rank 3 AM 5 Walkham at Horrabridge 1974-2010 AMS Rank 1 AM 12

E & E refers to heavy rain affecting traffic but nothing on flooding. [Not added to EXCEL file]

In September 1980, heavy rains caused flooding in Launceston, Altarnun, Bude and St Dennis.

E & E has no reference to heavy rainfall or flooding.

[Not added to EXCEL file]

Padstow was affected by surface water, fluvial and tidal flooding in June 1982.

http://cdn. **Environment**agency.gov.uk /flho1211bvmh -e-e.pdf 12 Jul 1982

Burrington devon 91 mm

E & E 12/15 Jul Eden (2008) Acreman (1989) (quoting Whiter (1982)

Taw at Taw Bridge Rank 1 60 m RoR Exe at Stoodleigh Rank 1 15 m RoR Exe at Thorverton Rank 1 60 RoR 1980-2014

'Fierce storms hit Devon'. The A 377 road from Exeter to Barnstable was blocked

South Molton: Lightning struck and damaged a house.

Chumleigh: A flash flood demolished a house with what was described as a 15 foot wall of water. The family narrowly escaped with their lives. As they crossed to safety, the swollen stream burst over a bridge sending a massive tidal wave towards their home. 'The building exploded in front of our eyes'. Acreman lists 3 flood discharges of Chulmleigh, 68.0 cumecs on an area of 1.7 km<sup>2</sup>, 39.0 cumecs on an area of 1.2 km<sup>2</sup> and 51.7 cumecs on an area of 1.4 km<sup>2</sup>.

North Tawton: several cottages in Fore Street and the White Hart pub.

Coleton Mills: Firemen rescued a family from 4 feet of water.

Chenson near Chawleigh: flooding at Chapelton Mills near the Portsmouth Arms.

East Budleigh: isolated storm flood a cottage. The cottage is alongside a brook but the water came sweeping down from surrounding farmland, 'like a river coming down the lane' and there was a waterfall cascading down the steps from the Church Hall.

About 20 houses were flooded in various places.

Exmouth water 18" deep blocked routes in Bradham Lane

Bruton: A flash flood caused extensive damage with 113 mm rain at Upton Noble in 16 hours In August 1982 inadequate drainage resulted in flooding in Launceston, Bude, Camelford and Bodmin.

? Aug 1982 http://cdn. **Environment**agency.gov.uk /flho1211bvmh -e-e.pdf

24 Sep 1982

Walkham at Horrabridge Rank 1 60 RoR and 15 m RoR

E & E 24/27 Sep		'Storm havoc lashes west'. The main reference is to power cuts due to strong winds. Manhole covers were forced up by storm water in Exeter and Sidmouth.  Exeter: Top Shop on High Street was affected by flash floods. Blocked drains and gulleys caused flooding at Heavitree Bridge.
? Jul 1983 http://cdn. Environment- agency.gov.uk /flho1211bvmh -e-e.pdf		Honiton: 5" of mud washed across the road near the rail bridge on Station road.  Surface water flooding caused problems in Penzance and St Just in July 1983 with 29 properties affected in St Just and 14 in Penzance, as an area of low pressure brought thundery rain as it moved north from Biscay into very warm air over the UK.  West Okement at Vellake Rank 1 60 RoR (17 Jul)
21/24 Aug 1983 COL	Chivenor 22.0 in 1 hr on 21 <sup>st</sup> And 25.0 mm in 1 hr on 24th	[Not added to EXCEL file]
22 May 1984 COL	Penzance 47.5 Four Lanes 33.5	[Not added to EXCEL file]
3 Aug 1984 24 Apr 1985	Penryn 27.6 Denbury 23 mm in 1 hr Tot=43.3	[Not added to EXCEL file] St Neot at Craigshill Wood Rank 1 15 m RoR
E & E 24/25 Apr 20 Jun 1985 COL	Four Lanes (C) 40.9 Penryn (C) 36.4 Fowey (C) 34.3	E & E has no reference to rainfall or flooding [No added to EXCEL file]
11 Aug 1985 Hiflows UK 6 Oct 1985		Seaton at Trebrownbridge 1972-2010 AMS Rank 3 AM 30 [Not added to EXCEL file] Tavy at Ludbrook Rank 1 60 m RoR
E & E 7/8 Oct 20/21 Jun 1986 COL Hiflows UK	Penzance 54.0 Newquay 55.1 Fowey 51.7 Gwennap 34.9	E & E has no reference to rainfall or flooding Parts of the west and southwest were visited by thunderstorms for the last 9 days of the month. The Fowey observer reports that Fowey had 6 days with thunder. On 20 <sup>th</sup> 13 mm fell in 45 minutes. On 21 <sup>st</sup> the storm caused serious damage in St Austell. The Cornish Guardian reported up to 7 inches of water in two stores and a mass of water surging down the steep streets. Two ceilings collapsed and most stores closed for the afternoon. 30 mm fell between 19.00 and 22.15. Power cuts lated up to 30 hours.

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

E & E 24/26 Jun 11 Aug 1986

E & E 11/12 Aug Acreman (1989)(re Horrocks 1986) 15 Aug 1986 Hiflows UK 25 Aug 1986 Hiflows UK

E & E 25/27 Aug

5 Jun 1987 Gwennap 35.5

Storms returned on 27<sup>th</sup> and were centred over the Truro/Newquay area where many telephone cables were burned out. A bungalow near Fowey was destroyed by lightning and subsequent fire on 28<sup>th</sup>.

Fal at Tregony 1961-2010 AMS Rank 1 AM 31 Ganel at Gwills 1969-2010 AMS Rank 1 AM 7 Gannel at Gwills 15 m Rank 1 RoR and 60 m RoR

In June 1986 Newlyn and Penzance were flooded due to surcharging of the surface water systems. Over the following week, further heavy rainfall led to surface water flooding at Wadebridge, Newquay and Crantock, Grampound, Mevagissey, Bugle, St Austell, St Blazey and Tywardreath, Fowey, Lostwithiel and East Looe.

E & E refers to lightning strikes in Exmouth but nothing on flooding.

Taw at Umberleigh Rank 1 15m and 60 RoR

Mole at Woodleigh Rank 2 60 m

E & E refers to an isolated thunderstorm at Witheridge when 2" of rain fell causing flooding. At Oakford Bridge near Bampton 2 houses were flooded.

Acreman refers to a flood on the <<Crooked Oak>>near <Knowstone> SE of south Molton in which a discharge of 80.0 cumecs was listed on a catchment area of 17.0 km<sup>2</sup>.

Seaton at Trebrownbridge 1972-2010 AMS Rank 1 AM 15

[Not added to EXCEL file]

Taw at Taw Bridge 1973-2010 AMS Rank 1 AM 34
Erme at Ermington 1973-2010 AMS Rank 3 AM 10
Tavy at Ludbrook 1981-2010 AM" Rank 3 AM 15
Lynher at Pillaton Bridge 1961-2010 AMS Rank 1 AM 9
Tiddy at Tideford 1969-2010 AMS Rank 1 AM 26
Withy Brook at Basstrat 1972-2010 AMS Rank 3 AM 7
Warleggan at Trengoffe 1969-2010 AMS Rank 2 AM 11
Seaton at Trebrownbridge 1972-2010 AMS Rank 1 AM 15
Axe at Whitford Rank 1 80-2014 60 m RoR

E & E refers mainly to delays to holidaymakers due to rainfall although 3" rain was reported in less than 24 hours. Parts of the Axe reached their highest recorded levels and the Otter broke its banks at Fenny Bridges. A complex low with multiple frontal systems crossed the UK during the first 6 days of June.

COL	Stithians Fowey Denbury	37.2 27.8 33.7	[Not added to EXCEL file]
16/17 Jul 1987	Start Bay (D)	88.5	On 14 Jul a low pressure area over France moved northward to give southern England and South Wales the first
COL MO Rainfall	Slapton Ley FS Restormel WT	• •	real rainfall of the month. Outbreaks of rain with isolated thunderstorms spread from the southwest into Wales becoming persistent and at times heavier in eastern areas of England on 16 <sup>th</sup> . A deep depression over the North Sea on 17 <sup>th</sup> moved across the British Isles and brought wet weather with some heavy rain to most of the British Isles and thunderstorms in the southeast.
E & E 17/18 Jul			E & E makes no reference to heavy rainfall or flooding. [Not added to EXCEL file]
28 Jan 1988			Houses shops, flats and offices were flooded as the river Kenwyn overflowed. Several people were trapped by
Western Morning			the rapidly rising flood water. One young woman was swept off her feet at Calenick and into the entrance to a
News 4 Feb			culvert where she was caught in some wire and rescued by 3 men. Also at Calenick where the river burst its
			banks a woman in her eighties was rescued from 3 feet of water. A wall in St George's road collapsed and sent
Acreman (1990)			water into a basement flat up to 3 feet from the ceiling and a woman was rescued. In Victoria Square
			shopkeepers retreated to upper floors as water in the square reached 5 feet deep. In the lift shaft at Barchlays
			Bank the water was 8 feet deep.
			St Columb: Bankkside Talskiddy near St Columb was flooded.
			Acreman – 15 residential and 50 city centre commercial properties were flooded. An initial assessment of 350
			years return period was reconsidered on the occurrence of an even bigger flood In October 1988 (below). Using FSR and historical information, the revised estimate of return period for the January flood was 50 years and for
			the October flood of 100 years.
30/31 Aug 1988	30 <sup>th</sup>		Further fronts associated with Atlantic depressions moving eastward gave heavy rain on 30 <sup>th</sup> and 31 <sup>st</sup> .
COL	Dartmouth Gd	ns 75.7	randret from associated with relative depressions moving eastward gave nearly rain on so and si
MO Rainfall	31 <sup>st</sup> Denbury	35.9	Erme at Ermington 1973-2010 AMS Rank 2 AM 3
Hiflows UK	Stithians (C)	33.7	Tavy at Ludbrook 1981-2010 AMS Rank 2 AM 14
	(2)		Yealm at Puslinch 1961-2010 AMS Rank 3 AM 14
			Thrushel at Hayne bridge 1988-2010 AMS Rank 2 AM 20
			Walkham at Horrabridge 1974-2010 AMS Rank 2 AM 13
			[Not added to EXCEL file]
26 Sep 1988			Northlew at Norley bridge 1988-2010 AMS Rank 2 AM 22
			for a little magnetic following the first state of

{Not added to EXCEL file]

Thunderstorms were reported

Hiflows

8 Oct 1988

Denbury (D)

Stithians (C)

39.8

37.3

COL 11 Oct 1988 COL Acreman (1989) Acreman (1990)

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

West Briton 13 Oct

## [Not added to EXCEL file]

Truro city centre flooded to a depth of 6 feet (second time in 9 months). No rainfall totals noted but this may refer to rainfall on 8<sup>th</sup>. (Note Acreman also refers to flooding at Truro in January 1988).

On 11 October 1988 another severe thunderstorm hit Mid- Cornwall. This affected St Newlyn East, Bolingey, Perranporth and St Agnes, Chacewater, Calenick and Truro, Pentewan and St Austell. In Perranporth 16 homes were flooded, but Truro was most affected with many homes and businesses under floodwater. The website has a photo of flooded Vicroria Square Truro.

Homes shops and offices were flooded at Truro, St Agnes, Calenick, Perranporth and Bolingley and other hamlets (258 days after a similar flood – mid Jan? 1988). Firemen rescued scores of trapped people. A poor photo shows flooding in Victoria Square, Truro. In mid afternoon the water rushed into Victoria Square to a depth of 3 to 4 feet. Fountains of water rused up through drains. One resident said: 'I saw a huge wave of water rushing into the square, it flowed over everywhere and before long our shop was waist deep in water. Photos also show shops flooded in River Street and St George's Road. Coosebean House and St George's Villa's were flooded. Fifty commercial and 20 residential properties were flooded.



Kenwyn at Truro Rank 1 15 m RoR

[Western Morning News 27 June 1991 reports the completion of flood defences at Truro consisting of a flood storage dam at New Mill just upstream from the town and improvements to a culvert under River Street, nearly doubling its capacity through the centre of Truro.

Thunderstorm hit the Devon power system but no flooding was reported.

7 Jul 1989 Lightning strikes caused 3 small

Express & Echo 7 Jul	fires in Exmouth, Exeter and Kenton.  Teignmouth 33 mm  More than 12 mm in 15 minutes		South Devon (Torbay) was most affected and 29 properties were flooded including a hotel and a restaurant. Castle Inn was flooded with sewage. The Borough engineer remarked that the £10 million scheme completed less than 5 years before seemed to have prevented more serious damage.  [Yeovil town centre was flooded after 2 ½ inches of rain]
Western Morning news 8 Jul			
11 Sep 1989 MO Rainfall Eden (2008)	Holsome (D) Slapton Ley FS Avonwick Black Hall	123.5 98.2 109.4	Low pressure became established over the continent and then drifted slowly northwards. No reference to thunderstorms for these stations but in neighbouring Dorset. [Not added to EXCEL file] Eden notes that the event triggered severe local flooding but information in not specific.
14 Sep 1989 COL	Stithians (C) Denbury (D)	45.9 38.4	Thundery weather occurred between 12th and 14 <sup>th</sup> .  [Not added to EXCEL file]
20 Oct 1989 COL	Stithians (C) Denbury (D)	37.6 42.5	A series of wave disturbances crossed the area. [Not added to EXCEL file]
18 Dec 1989 Western Morning News Dec 18			Dawlish: Town Centre shops were flooded. 'It happened so quickly – one minute there was no water and the next it was flowing straight through the shop'. Dawlish Warren camps were under 4 feet of water. Churston village: houses were flooded Torquay: Teignmouth road was flooded from water pouring off the King George V playing fields. Paignton: Littlegate Road was flooded.  Newton Abbot: Vehicles in the area were abandoned due to flooded roads. However, Newton Abbot was assumed to have escaped flooding as the result of the construction of a flood storage dam (Holbeam Dam) which diverts water from the River Lemon. The scheme was built after a major flood in December 1978 when 700 properties were flooded.
21 Dec 1989 Western Morning News 21 Dec			'Thunderstorms leave the West under water'.  Sidmouth was virtually cut off. Floodwater 5 feet deep cascaded from fields on to approach roads. More than 12 properties were flooded.  Newton Poppleford: Houses were flooded to more than 1 foot.  Lightning strikes cut off electricity supplies in Kingsbridge and Prowle.
23 Jun 1991 COL Hiflows UK	Denbury	49.6	A small wave running east along latitude 49 early on 23 <sup>rd</sup> deepened as it turned northeast across southern counties of England bringing heavy rain mainly to the Southwest.  Erme at Ermington 1973-2010 AMS Rank 1 AM 2  Avon at Loddeswell 1971-2010 AMS Rank 1 AM 9

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

Western Morning News 24 Jun 2 Jul 1991 27/28 Sep 1991

COL

Denbury (D) 47.0 Lapford (D) 35.6

of rain in 45 minutes

Local paper reported 1.7 inches

29 May 1992 http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

St Ives Times and Echo 15 Aug 1997

Yealm at Puslinch 1962-2010 AMS Rank 2 AM 12 Cober at Trenear Intake 1988-2010 AMS Rank 3 AM 20

In June 1991 torrential rain caused flooding at Newquay, Falmouth, the Glyn Valley and Looe.

Scores of homes were inundated in Plymouth and in Torquay shops were flooded to 3 feet in the Fleet Walk complex. In Cornwall Falmouth was worst hit but there was also flooding in Lostwithiel and East Looe. Lyd at Lifton Park Rank 1 15 RoR

Between 26<sup>th</sup> and 28<sup>th</sup> many places especially in southern England and neighbouring Somerset had very high daily totals over 70mm in thunderstorms with flash flooding. Tivington in west Somerset had 73.5 mm. But observer notes only small localised flooding.

Fal at Tregony Rank 1 60 m RoR 1980-2014

In May 1992 a short cloudburst resulted in major surface water flooding at Carbis Bay and St Ives, with 60 properties flooded.

St Ives: Water cascaded down the steps at Tregenna Terrace causing damage of many thousands of pounds. . Flooding was later reported as worse than Aug 1997 flooding (in which the photo below appeared of St Andrew's Street in May 1992).



13 Aug 1992 Hiflows UK 22 Aug 1992 Hiflows UK 29 Aug 1992 COL Hiflows UK http://cdn. Environment- agency.gov.uk /flho1211bvmh -e-e.pdf	Denbury	41.5	Taw at Taw Bridge 1973-2010 AMS Rank 2 AM 36 [Not added to EXCEL file] Hayle at St Erth 1957-2010 AMS Rank 2 AM 53 [Not added to EXCEL file] During 28 <sup>th</sup> another low left Newfoundland under a 150 knot jet stream. It turned northward on 29 <sup>th</sup> and deepened to 974 mb as it tracked across Ireland. Occluding fronts drove heavy rain across Ireland and Wales overnight. Tiddy at Tinford 1969-2010 AMS Rank 2 AM 40 Over one week at the end of August 1992 severe storms coinciding with high tides led to flooding across Cornwall. Affected communities include Wadebridge, Hayle and Lelant, Newlyn, Penzance and Long Rock, Helston, Falmouth and Penryn, Perranarworthal, Truro, Pentewan, Bugle, St Blazey and Tywardreath, the Glyn Valley and East Taphouse.
29 Nov 1992 Western Morning News 1 Dec	Continuous rain Bastreet (near Bodmin Moor) just over 2" Camborne 2.5"		Ashburton: houses flooded due to blocked drains
25 May 1993 COL	Trelissick (C) Stithians Falmouth Fowey Crediton Denbury (D)	46.9 44.1 33.3 33.0 32.0 25.1	Trelissick reported extensive flooding. The town of Mevagissy suffered flash floods  The period 22 <sup>nd</sup> to 28 <sup>th</sup> was dominated by an upper trough in the west and an upper ridge in the east of Britain.  A cold front moved north across Ireland on 24/25 <sup>th</sup> , giving heavy rain in the west. The trough in the west generated further bands of thundery rain. It was the most thundery month in mid Cornwall since June 1986 with widespread power cuts and flooding with widespread damage across Cornwall and Devon including the Exeter area. Cloud tops were at a height of 48,000 feet.
http://cdn. Environment- agency.gov.uk /flho1211bvmh -e-e.pdf			In May 1993 severe storms caused fluvial and surface water flooding affecting Altarnun, Rumford and Mawgan Porth, Fraddon, Roche, Polmassick, Goran Haven and Mevagissey, Polgooth, Trewoon, St Austell and Par, Pantersbridge and Trewidland near Liskeard and Hessenford. In Mevagissey 13 properties were flooded.
Western Morning News 26 May			Mevagissey: Flash floods transformed a street into a 4 foot deep river affecting Church Street, Chapel Street and more than 12 houses.
2 Jun 1993			St Neot at Craigshill Wood Rank 1 60 m RoR (1980-2014) Torridge Rockhay Bridge 1988-2010 AMS Rank 2 AM 6

Hiflows

8 Jun 1993 COL

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf Thunderstorms

Stithians

hour.

Gillan (nr Falmouth) 59.5

Culdrose (C) 125 mm in 12

hours: 91.7 in 2 hrs: 59.1 in 1

35.7

NRA 'Flooding at Porthleven 9 June 1993' and 'Flooding at Helston 9 June 1993'

West Briton

## [Not added to EXCEL file]

Areas of thundery rain developed ahead of a cold front moving north across Southwest England causing exceptionally heavy rain in parts of Cornwall early on 9<sup>th</sup>. Heavy rain occurred in N Wales on 10<sup>th</sup> with over 5 inches at Llandudno with landslides on the Great Orme and 1000 homes flooded.

On 9 June 1993 torrential rainfall caused major flooding in Helston. The intensity of rainfall measured at RNAS Culdrose recorded 125mm of rain in the 9 hours to 0900 as a thundery low moved north from Biscay, 92mm of this in the 2 hours to 0800. Flooding on this day also hit Penzance, Porthleven, St Just and Yeolmbridge.

At Porthleven up to 60 properties were flooded up to 2.5 m in depth from surface runoff; 7 residential and 8 commercial properties were flooded from Porthleven Stream including Rosewarne's Garage and Porthleven Supermarket. There were no previous alleviation works there. Homes were flooded in the Thomas St and Thomas Terrace area (colour photo showing flood mark) and Almshouse Hill.

At Helston flooding occurred from an unnamed tributary of the River Cober; 50 properties were flooded up to 2 metres. Several had to be rescued from their houses. The stream is culverted over much of its length and some work had been completed in October 1989 on the tunnel prior to which Helston suffered flooding on average once every 5 years with 15 properties affected but in severe events (unspecified) up to 90 properties to 1 m depth. Residents in Gibson Way were concerned about water building up on farmland behind their homes.







Porthleven 9 June 1993



Photo from West Briton (undated) of

Helston



Helston June 1993 Upstream from Tankard Lane.

12 Jun 1993 Hiflows UK Davidstow Moor 130 mm in 24 hours Chivenor 60.4 mm

Inny at Bealsmill 1976-2010 AMS Rank 1 AM 1 Tamar at Gunnislake 1956-2010 AMS Rank 2 AM 12 Tamar at Crowford bridge 1972-2010 AMS Rank 1 AM 2 Ottery at Werrington Park 1961-2010 AMS Rank 1 AM 3 Camel at Denby 1964-2010 AMS Rank 1 AM 1

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

NRA 'Flooding at Bude 12 June 1993

Camelford and

On 12 June 1993 here was major damage caused by fluvial and surface water flooding due to severe storms across north east Cornwall. Areas affected included Bude and Helebridge, Boyton, North Petherwin, Yeolmbridge and Werrington, Tremail and Tresparrett near Davidstow, Slaughterbridge, Camelford and eight other locations on the Camel between Camelford and Blisland, St Tudy, Helland, Bodmin and area, Sladesbridge and Wadebridge, and eight locations along the River Allen between Delabole and Wadebridge. A few days later flooding affected Newquay, Porthleven, Helston and Porkellis, and Goran Haven and Mevagissey, In Helston 50 properties were flooded, 60 were flooded in Porthleven and 19 in Sladebridge. Two men were drowned in the River Camel at Wadebridge when their dinghy overturned in turbulent waters.

On 12 June, 71 properties were flooded in Bude from the River Neet and 12 directly from the Bude canal, All existing flood defences at Bude were overtopped. At Helebridge 9 properties were flooded, 7 in Camelford and

Delabole Post 14 Jul 1994

Camelford and Delabole Post 11 Jun 1998

Cornish Guardian 17 Jun 20 in Sladesbridge.

At Bude 30 stranded people had to be rescued from their homes in The Strand and the Crescent by RNLI inshore lifeboat.

The C & D Post reports the completion of a flood alleviation scheme in response to the 1993 flood including lowering of the bed at Nanny Moore's bridge to increase flood capacity of the River Neet and a new adjustable weir.



Severe floods hit north Cornwall.

St Tudy: Redvale Barn was flooded and 50 sheep had to be resued by firemen.

Bodmin: Homes at Treningle View suffered from floods originating from the Beacon.

Dunmere, St Anne's Chapel: Houses were flooded.

Camelford: Homes at Marshgate near Otterham Station were flooded.

Bude lifeboat men rescued at least 30 people from homes in Hele bridge, Marhamchurch and the waterfront properties in Bude.

Camelford: Residents fled from their riverside homes as Enfield Park was under water for the first time since the mid-1950s. Several shops in Fore Street were flooded. Post and Weekly News suggests flood protection works carried out at Camelford in the 1950s probably saved it from disaster; the old bridge then became clogged but the new bridge coped.

13 Aug 1993 Hiflows UK 23 Aug 1993 12 Sep 1993 COL	Culdrose Stithians Denbury	62.6 52.4 53.3
29 Sep 1993 COL 1 Jan 1994 Western Morning News 6 Jan	Bastreet (C)	52.0

Cornish Times 7

Jan

Launcells: St Swithin's Church was flooded
West Dart at Dunnabridge 1972-2010 AMS Rank 3 AM 27
[Not added to EXCEL file]
Exe at Pixton Rank 1 15m and 60 m RoR
The remnants of Tropical Storm Floyd affected Uk over the following few days

West Okment at Vellake 1967-2010 AMS Rank 2 AM 5
Okment at Jacobstowe 1973-2010 AMS Rank 2 AM 8
[Not added to EXCEL file]
[Not added to EXCEL file]

Polperro: a devastating flood said to be worse than the one in 1976 occurred. 100 tons of rocks and debris were pushed through the village by a wall of water to the harbour causing damage estimated at £1 million. The water was 2.4 metres deep in places with the worst damage in the Mill House Hotel area. Many villagers lost all their furniture. Photo 1 shows firemen in the rising flood in Lansallos Street. Cars were swept into the river. The River Pol again failed to contain the floodwater. Two Volvo vehicles were swept into the river and created an artificial dam which backed the water up. Collapsed walls also caused a problem. Proposals for a scheme after the 1976 flooding had been turned down by the council given that the event then was said to be a 1000 year return period but a renewed call was now made to the NRA. Photo 2 Shows Crouch's Great store with rising water and Photo 3 turbulent water in the main shopping area. A later report notes that 100 properties





ere damaged and the image was estimated at imillion (compared with properties damaged in 176)

9 Aug 1994 Stithians 60.8

Thundery rain came north across The Channel giving heavy rain in the southwest

COL 13 Sep 1994 COL	Denbury Okehampton	55.6 70.0	[Not added to EXCEL file] Thunder not noted.
Cornish times 16 Sep			Polperro: River Pol rose quickly and burst its banks near the Crumplehorn but flooded only public toilets and some garages. [Work by the NRA in a £1.5 m scheme in response to the New Year flood was due to start in January].
30 Oct 1994	Denbury	62.9	A wave developed on a cold front moving north across England
COL	Okehampton	45.9	Okehampton observer notes very heavy continuous rainfall. Railway services cancelled between Exeter and Taunton due to flooded lines. [Not added to EXCEL file]
18/19 May 1996	18 <sup>th</sup>		Frontal rainfall; no reference to thunder
COL	Stithians Denbury 19 <sup>th</sup>	33.6 28.2	[Not added to EXCEL file]
	Bodmin Shillingford Abbot	41.7 25.0	
24 May 1996 Hiflows UK			Torridge at Rockhay Bridge 1988-2010 AMS Rank 3 AM 19
5 Jun 1996			May 1996 Clyst St Mary 50 properties affected [Day not given not sure whether on 18 or 26 May]  Axe at Whitford Rank 1 15 m RoR
6 Aug 1996	Bodmin	26.8	Report from the observer at Denbury Devon:
COL			A cold front moved down the Severn Estuary and formed a squall line then met strong sw winds off the Cornish coast. A thundery front off the North Cornwall coast began approximately 09.30 then finally moved to Somerset before dying out.
			In the morning a bungalow was hit by lightning at Hatt Cornwall and the town centre of Bodmin was flooded and a tree fell down at Trebrethick. 50 mph winds at Newquay; 28 mm of rain in 105 minutes at Cardinham; 1200 homes without electricity at St mellion and Carkeel in SE Cornwall; some flooding at Liskeard, Launceston, Wadebridge and Saltash.
			In the morning 400 passengers on a boat at Torquay were unable to leave; an 85 mph wind was reported at Plymouth; some flooding at Cullompton town centre. Denbury rf 1.5 mm!

Cadgwith: Three feet of flood water swept through homes in the village. The torrent swept away much of the beach, scouring a 5 foot deep crater. Water swept through the Cadgwith Hotel. Flow of water in the small

5 Mar 1997

Western Morning

News 5 Mar

Helston Packet 6

Mar

5 Jun 1997

COL

Hiflows UK

South West Water said that an inch of rain fell in one hour.

50.0

Stithians

Falmouth Packet

12 Jun

West Briton 12 Jun

27 Jun 1997 Hiflows UK

3 Aug 1997 Stithians 131.8
COL Culdrose 79.6
Hiflows UK Bodmin 46.8

stream through the village was blocked by dead elm trees causing the stream to overflow. In one cottage the water rose 3 feet in 30 minutes. It was the first time the stream had flooded in more than 20 years. Helston Packet 6 Mar has photos of the village but of the aftermath of cleaning up rather than the flood.

During 5<sup>th</sup> the trough over Fance became more active with a small low forming near Brest and moving NNW across Cornwall into Ireland. Showery outbreaks of rainin the south becme more widespread. Observer reports no thunder but Falmouth observer reports flooding on 5<sup>th</sup>.

Kenwyn at Truro 1968 -2010 Ams Rank 1 AM 32 (No other summer AMAX)

Falmouth: Market Strand was flooded with sewage coming up through the drains and poured into pubs and shops. The Prince of Wales pub was flooded for the second time in 6 months. 'The flooding all happened in the space of 10 minutes; the water just gushed in'. Photo from Falmouth Packet 12 Jun.



Truro: torrential rain and high tides caused flood damage estimated at thousands of pounds. The flooded sites were not specified but the EA noted there was no flooding from the river.

[There was no flooding in Helston where a scheme had been carried out.]

Doniford Stream at Swill Bridge AMS Rank 2 AM 7

Horner water at West Luccombe AMS Rank 1 AM 10

Washford at Beggearn Huish 1966-2010 AMS Rank 1 AM 20

[Not added to EXCEL file]

A cold front became slow moving across the English Channel and remained linked to a shallow low that moved toward the Celtic Sea bringhing heavy rain to SW England and South Wales on 3<sup>rd</sup>.

Penzance reported a severe thunderstorm and 140 mm in 48 hours 3<sup>rd</sup> to 5<sup>th</sup>.

Cober at Trenear Intake 1988-2010 AMS Rank 2 AM 17

[Not added to EXCEL file]

6/7 <sup>th</sup> Aug 1997 COL	6 <sup>th</sup> Bradninch (D) 52.0 mm in 18 hrs 7 <sup>th</sup>	Thunderstorms caused flooding in Sidmouth, Ottery St Mary and Cullompton.
Mid Devon SFRA Mid Devon DC (2006)	Bradninch (mid Devon) 25 mm in 10 mins; 42.6 in 5 hours	The car park of the Culm Valley Sports Centre in Cullompton flooded from the Crow Green Stream
Western Morning News 19 Oct 2000		[In the 15 months after the major flood in August 1997 Ottery St Mary suffered in a further five occasions but flood alleviation work was not yet under way in Oct 2000]. Flanking the town is the 800 foot slope of East Hill where water gathers and flows into the River Otter which is culverted through Ottery main road. The culvert has been surcharged and water runs down the street and also has damaged the culvert.
9 Aug 1997 COL	Penzance 49.0	Helston reported 140 mm in 12 hrs and severe flooding.
12 Aug 1997 Cornish Guardian 21 Aug	Heavy rain fell between 8 and 11 pm Thunder was reported in St Ives	Flooding occurred on Bodmin's Honey Street – a shopping street. Sand bags etc were deployed but several shops were flooded including Wickers World, the Bike Shop. One resident identified the problem as 'The Church Square area is collecting water from Priory Road, St Nicholas Street, Turf Street, Honey Street and Castle Street and it cannot disperse quickly enough'.
St Ives Times and Echo 15 Aug		St Ives: Sustained rainfall at the beginning of the month was followed by a deluge on 12 <sup>th</sup> , flooding businesses and holiday flats in St Andrew's Street. The pipe carrying water from the Stennack River under dozens of premises was unable to cope with the volume. It was nowhere near as severe as the flood of 29 May 1992. Water at Coasters Tea Shop at St Andrews Street 2 feet deep but the property had reliable barriers. Other shops were not so fortunate.
26 Aug 1997 Cornish Guardian 4 Sep	No thunder was reported	Bodmin: Honey Street was again flooded with the same premises affected including those noted above and Vickers Bookmakers, The Band Club, and Amor restaurant. The drains in Honey street were said to be blocked by debris.
Falmouth Packet 28 Aug		Falmouth: Flash flooding caused manhole covers to pop up and sewage poured into the roadway. The water gushed down Quarry Hill, KilligrewStreet and Kimberley Park Road past the Moor into Market Strand. In some parts the water was a foot deep and sandbags were put outside some properties but there were no reports of property flooded. Lightning caused widespread phone problems and there was some loss of electricity in Porkellis and Troon and elsewhere.
26 Sep 1997		Falmouth: water was several feet deep around the Prince of Wales Pier.

Western Morning News 27 Sep

8 Nov 1997

26 Nov 1997 Cornish Guardian Jan 18 2001 Thunderstorms
More than 1 inch fell in 4 hours.

Western Morning News 27 Nov Heavy morning rain was followed by a major thunderstorm.

EA spokesman said the problem was with surface water rather than with river flow.

Cornish Guardian 4 Dec

Western Morning News 25 Mar 2003 Bodmin: Storms made Church Square impassable to traffic. Two streets in the town were flooded. A bookmaker's in Honey Street had several inches of water on their floor and an antique shop in Turf Street was also flooded.

Truro: Traffic was at a standstill.

Mousehole: Water cascaded down Mount Pleasant spreading to several shopping streets. One house had 2 feet of water and the Lobster Pot Hotel was flooded and Kelgwin Manor.

[27 Aug 1998 a flood alleviation scheme for Mousehole was proposed]

The worst affected areas were mid-Cornwall and southwest Devon.

Pentewan: The CG report from 2001 says that in the flood of November 1997, 1.5 inches fell in 17 minutes leaving the village Post Office and the Ship Inn under 5 feet of water and dozens of houses deluged.

Homes schools and roads were flooded up to a depth of 8 feet. In southwest Devon homes were flooded at Kingston between Modbury and Kingsbridge; the fire station was flooded.

St Austell: At one time all roads to the town were cut off. In Pondhu Junior School water poured down corridors.

Pentewan: Parts were under 6 feet of water and coastguards from Mevagissey were called to rescue trapped residents. Some people were trapped in cars by the floodwater; it was up to the bonnets in the main square and boats were used in the street (photo). Scores of properties were affected. The Post Office had its back door ripped off its hinges and it was almost 7 feet deep. Walls were pushed out by the flood. At the ship Inn water with sewage was almost to the ceiling. 'We had no warning; I noticed water rising in the road so I bolted our door but within 10 minutes it was flooded'.

Polgooth: About 30 people were forced to leave their homes; the post office was also flooded. A road bridge was damaged. Nine houses at Tyshute Lane polgooth were flooded.

Also affected were St Just and London Apprentice.

St Just, Tregeseal: properties including a gallery were flooded.





4 May 1998 13 May 1998 COL

31 Oct 1998 C & D Post 5 Nov Thunderstorm with hail

[WMN 25 Mar 2003 reports on the completion of a flood alleviations scheme in Pentewan with a larger culvert through the town and flood defence walls upstream of the village square].

Newlyn: Blocked drains caused flooding in the Market and Jew Street.

Severe thunderstorms were reported mainly for Somerset and Dorset but severe thunder also reported for Tiverton. At Bruton (Somerset) a mudslide damaged cars and property.

[Not added to EXCEL file]

Bridestowe near Okehampton: A pensioner was drowned when swept off a bridge at Ebsford.

Holsworthy: A woman was rescued from her stranded car by firefighters at Dipper Mill between Shebbear and Bradford where the water was over the bridge and came up to the steering wheel level.

Pancrasweek: Weekstone cottage was flooded to a depth of 6 inches.

Launceston: The road from Werrington to Bridgetown was flooded to 4 feet and at Polson River bridge Bridgerule (photo below) was impassable and Crackington Haven and Stratton.

Flooding incidents occurred at Dunn Street, Boscastle and at Worthyvale Manor at Slaughterbridge and Davidstow.

Helebridge: A cottage, Marhamchurch was flooded to about 4 inches.

Bude was not affected!



16 Apr 1999 West Briton 22 Apr 27/29 May 1999 COL 3 inches of hail fell on Redruth in less than half an hour

The weight of hail with melt water on a flat school roof brought the roof down and flooded the Trewirgie Junior school.

[Not added to EXCEL file]

Thunderstorms reported widely in Devon and Cornwall. About 50 incidents of minor flooding were reported from South Devon on 27th.

Lapford 18.4 in 30 mins Bradninch 18.8 in 2 hrs Denbury 15.2 mm/hr. Tot = 34.7

West Dart at Dunnabridge Rank 1 15 m RoR (27<sup>th</sup>)
Thrushel at Tinhay Rank 1 15 m RoR (28<sup>th</sup>) and 60 m (1980-2014)

Tot = Tavy at Ludbrook Rank 1 15 m RoR

29th

 $27^{th}$ 

Penzance 14 mm in 1 hr Tot = 32.3

East village (D) 26.6 in 3 hrs Bradninch 21.6 in 3 hours Denbury Tot = 33.0

Torrential rainstorm No mention of thunder Redruth: Cottages in Redruth Coombe near St Uny Church after water swept down the road and into houses, with the drains unable to cope.

9 Jun 1999 Camborne and Redruth Packet 9 Jun 8 Aug 1999

Camelford and

Thunderstorms

Flash floods hit the Bude area. Two homes and a garage were flooded at Stratton in the Bridge Street/Union Hill area (1") and a cottage between Markhamchurch and Bridgerule (6") were flooded during torrential

Delabole Post 12

Aug

25 Sep 1999

COL

23/24 Oct 1999

Western Morning News 25 Oct

COL

North Hessary Tor

Other reports said 40 mm in 6 hours.

53.0

downpours. At Bradworthy the Rose Tea Room in the Square and a cottage in North Road were flooded to 4 inches.

Thundery showers were widespread.

[Not added to EXCEL file]

More than 30 mm fell in 6 hours overnight resulting in heavy flooding in the centre of Torquay.

Many town centre businesses in Torquay were closed. 'It is worse than the flooding in May'. Heavy rain combined with high tides which prevented flood water from getting away. Torquay Rugby pitch was under nearly 5 feet of water.

Paignton: Homes were flooded in Dartmouth road

Brixton: the town centre was also affected.

The rainfall was localised and affected villages such as Ideford, Luton and Littlehempston to suffer some flooding but the main rivers such as Dart Teign and Bovy did not reach danger levels.

18 Dec 1999 Cornish Guardian 23 Dec Polmoria near Wadebridge: The worst flood in living memory affected terraced cottages up to a metre deep. The flow was so strong people had difficulty keeping their feet. Polmoria River is a tributary of the Camel. EA said the problem appeared to have been backing up of water from Wadebridge in very heavy rainfall. St Kew Highway: The Red Lion pub and Ippingstone Cottage were flooded.

Newquay: Persistent rain drenched the county. Quintrell Downs and Goss Moor were badly affected and in the latter the water was 2 feet deep in a house, the first flooding for 22 years since drains were improved.

At Coswarth near Colan a vehicle was washed away.

Pentewan was not flooded although residents were anticipating it.

Lostwithiel: The flooding was siad to be the worst for 20 years (Christmas Eve 1979) when the River Fowey overflowed its banks. Leslie Terrace (1 foot) and the Moors (3 feet) bore the brunt of the flood. 'The speed at which the water spread into houses astounded residents'. Three large trees swept down the Fowey were lodged in the Tudor bridge threatening severe flooding in North St and the Parade. The water level was over the bridge road level. At its peak the water reached half way up North St and a woman had to be rescued by boat from a house in Park Road. An antique shop in Quay St was under 6 inches of water. Floodwater made a canal alongside Monmouth Hotel.

Golant: Minor flooding occurred of a few houses and resulted from rain off the hills rather than from the river. Gunnislake: Dozens of houses along the River Tamar were washed out in the worst flood for 20 years. Houses in Bealswood Road were worst hit and at its peak one house on an island between the Tamar and the Tamar

Post & Weekly News 23 Dec Canal had only its roof showing – worse than in 1979. Nearly 100 people were evacuated.

Launceston: firefighters rescued 14 people from a stranded minibus in water waist deep at Polson, said to be the worst in 20 years. St Leonards Equestrian centre was severely flooded including holiday cottages. A house at Yeolmbridge was flooded to 3 feet. Occupants said they did not know it was coming till the water was nearly at their front door. They were also flooded 6 and ahalf years previously.

Gunnislake: Six houses were flooded when the River Tamar overflowed in the Weirhead area of Bealswood Road. Dinghies were used to evacuate residents. One house was flooded to a depth of 15 feet.

Umberleigh in the Taw Valley: Taw burst its banks and flooded 20 homes and Umberleigh Stores and the Post Office, some to 4 feet deep. A resident said: 'the Taw breaks its banks over 1 ½ miles and there is nothing you can do about it!'

Davidstow: The Old Post Office was flooded.

Camelford: the Mason's Arms was flooded and firefighters attended 6 other properties.

Bude: Photo shows road flooding at Vicarage Road/Falcon Terrace but property does not appear to be affected (not inserted).

Fal at Tregony Rank 1 15 m RoR

Thunderstorms on 10<sup>th</sup> at Penzance with severe flooding at Mousehole; weather exceptionally warm and humid.

Warleggan at Trengoffe Rank 1 15 m RoR Lynher at Pilaton Mill Rank 1 15 m RoR

Withey Brook at Bastreet Rank 1 15 and 60 m RoR (4th)

Torrential downpours resulted in flooding at Exmouth, Budleigh Salterton and Powderham. Parts of Exmouth suffered flooding to a depth of 18 inches although this was not widespread.

Extensive lightning damage was reported.

Padstow: town centre streets turned into a knee-deep river of water and mud; manhole covers were swept away.

Flooding also occurred at Mawgan Porth and at St Columb near Newquay, Bodmin, Wadebridge and an area between Praze and Camborne and St Marys in Scilly Is.

Lostwithiel: 25 properties were flooded in the Queen Street area. 5 cattle were killed by lightning in the area. Lightning also caused damage in the Bodmin area.

A sudden downpour around Exeter caused road flooding and a series of accidents.

5 Apr 2000

9/10 May 2000 COL

Liskeard Redgate 19.0 mm in 10

Exmouth 25.3 mm in 30 mins

mins on 9th

Tot = 43.0

5 Jul 2000

28 Jul 2000

COL

Western Morning News 28 Jul

Express & Echo 29 Jul

Western Morning News 28 Jul

Exmouth: The storm occurred over a 2 hour period and Lindhurst Road was under 18" of water.

13 Aug 2000 COL	Liskeard 20.7 in 2.25 hrs and 25.3 in 2 hrs 55 mins Penzance 40 mm in 12 hrs Fowey 64.0 mm in 11 hours Lapford 38.2 mm in 12 hours	[Not added to EXCEL file]
19 Aug 2000 COL	Uplyme (D) 41.4	Torrential rain in Torquay caused some local flooding
25 Aug 2000 COL		Penzance observer notes a severe storm at Sennen cove (1 mile from Land's End) with 2.5 cm diameter hail which smashed car windows on 25 <sup>th</sup>
15 Sep 2000 COL	Penzance 62.0 mm in 11 hours Liskeard 17.5 mm in 2 hrs; 35.3 mm in 6 hours Scilly and Camborne both around 45 mm Fowey 51.1 mm in 13 hours	A slow moving low accompanied by troughs and fronts brought heavy rain to southern England. The Penzance observer notes that the rain was never really torrential and that no flooding was reported in the Penzance area.  [Not added to EXCEL file]
12 Oct 2000 COL	Fowey 40.6	(Totals of over 100 mm were reported in Sussex with flooding) [Not added to EXCEL file]
29 Oct 2000 COL	Lapford 46.9	
Hiflows UK		Bradnich observer notes that the river Culm was at a 30 year high on 30th. East Village also reports flooding. Rain accompanied by very strong winds. Exe at Thorverton 1956-2010 AM Rank 3 Exe at Stoodleigh 1960-2010 AM Rank 3 Exe at Pixton 1966-2010 AM Rank 1 Taw at Umberleigh 1958-2010 AM Rank 1 Torridge at Torrington 1960-2010 AM Rank 2 Mole at Woodleigh 1965-2010 AM Rank 2 Taw at Taw Bridge 1973-2010 AM Rank 1 Torridge at Rockhay Bridge 1988-2010 AM Rank 3 Inny at Belasmill 1976-2010 AM Rank 2 Tamar at Crawford Br 1972-2010 AM Rank 3

Lyd at Lifton 1962-2010 AM Rank 3 Thrushel at Tinhay 1969-2010 AM Rank 2 Thrushel at Hayne Br 1988-2010 AM Rank 2 Homer W at W Luscombe 1973-2010 AM Rank 1

"Flooding closed the A396 at Bickleigh and between Bampton and Tiverton."

Express & Echo 30/31 Oct

Seven people were rescued from flooded cottages in Bolham. A family were rescued from their flooded farm in Bickleigh.

Cornish Guardian 2 Nov

Launceston: The road at Polson was again flooded and the St Leonards Equestrian Centre to 3 feet deep . Bude: flooding occurred from water coming off the land rather than from the River Neet. Properties at Hallet Way and Quarry Close were flooded to a few inches. Edward's garage was flooded to 2 feet.

The Cornishman 16 Nov

Whitecross: 2 houses at Gilly Lane, Whitecross were flooded. A resident remarked that the culvert capacity under the road was insufficient. Photos show the property still flooded on November 6.

4 Jul 2001 WMN 3 Aug East Dart at Bellever Rank 1 60 m (1980-2014) RoR Tiddy at Tideford Rank 1 60 (1980-2014) RoR

[Not added to EXCEL file]

2 Aug 2001 Liskeard 21.4 mm in 36 mins

Tot = 30.6
Falmouth

28.0

Reference back to previous flooding on 4 July in the report on the Aug 2 Flood.

Thunderstorms were reported in the SW in the late morning and early afternoon. A rapid temperature rise sparked off a thunderstorm in Falmouth and some town centre shops were flooded to a depth of 4 to 5 feet. Liskeard observer notes flooding in Saltash and Calstock.

http://cdn. Environment-

Lightning strikes in Roseland blew up a transformer.

Flash flooding in July and August 2001 saw roads and properties flooded in Bodmin and businesses flooded in Falmouth and in Looe.

agency.gov.uk /flho1211bvmh -e-e.pdf

Falmouth: Water was several feet deep in the Market Strand area (photo). A publican at the Prince of Wales Pub noted he had been flooded twice this year – previously on July 4. 'I have had steel doors installed but this happens in minutes'. Many shops were flooded and residents trapped.

Western Morning News 3 Aug.

One man who ran cruises from the Prince of Wales pier said that he had never seen anything like it in 30 years.



Falmouth Packet 3 Aug

Western Morning News 11 Aug 21 Sep 2001

17 May 2002 East Village
COL East Village
Lapford
Exmouth

17/18 Aug 2002 Fowey
COL
12/13 Oct 2002 12<sup>th</sup>

Water cascaded into the town from upper Killigrew St and Kimberley Park Road over the newly laid Moor and into Webber Street and Market Street.Levels rose 4 feet in just 10 minutes. At the foot of the High Street cars were lifted up and moved around. Manhole covers were lifed and the road surface damaged. Among the shops Tescos was flooded. The water disappeared as quickly as it had come. [The Packet has several photos of flooding through Falmouth].

Reference to repeated flash flooding at Harbertonford near Totnes where the River Harborne meets two other streams.

Halbertonford: A report stated that there had been 9 floods since December 1998, with 40 properties flooded each time including the Maltster's Arms. A scheme was proposed to lower the bed of the River Harborne which was said to be the cause of the flooding.

[Not added to EXCEL file]

During the afternoon there were thunderstorms in SW England. Lapford had a severe thunderstorm for 55

37.0 minutes.

30.3 [Not added to EXCEL file]

38.1 Heavy thundery showers [Not added to EXCEL file

At Penzance 55mm fell in the twelve hours beginning 0200GMT. The fire brigade was called to several

COL	Penzance 13 <sup>th</sup>	29.5	
West Briton 24 Oct 2002	East Village Bradninch Fowey Lapford	64.6 52.4 47.8 41.7	
	Exeter Denbury Penzance	38.6 30.0 27.2	
15 Nov 2002	Hayle W cornwall	83.0	
Western Morning	Culdrose	45.0	
News 14/15/16	Dunkeswell Devon	46.0	
Nov	Camborne had more than 30 mm between midday and		
Guardian 15 Nov	midnight.		

properties flooded in Penzance, Newlyn, and St Ives. No thunder reported

Lanner: (probably this date) One home was flooded to a depth of 2 feet and others were affected. Drains and Gullies in a neighbouring unadopted lane became blocked with debris.

River Exe rose rapidly overnight after heavy rain. Sheep had to be rescued when stranded. Road and rail traffic was disrupted. River Axe was also high.

St Ives: River Stennack breached its banks. In two pubs the water reached 1.5 m. 'The water came down with such a speed'. Locals said it was the worst flooding in a century. The Edward Hain Hospital was affected and some patients transferred. The entire ground floor was flooded including the kitchens. The inshore lifeboat was used to evacuate more than a dozen people from homes. The photo shows Tregenna Place in St ives. WMN shows a photo of a previous major flood in 1894 Nov 12.



Also affected were St Erth, Newquay, Padstow, Hayle and Newlyn.

St Erth: One family had 2 feet of water in their house. The A 30 between Crowlas and St Erth was closed by flooding.

Crowlas (between Hayle and Penzance): Water reached the level of letter boxes.

On 13 November 2002 heavy rainfall resulted in fluvial flooding in West Cornwall at Gwithian, St Erth, Lelant,

Cornwall Council PFRA ANNEX 5 – Chronology of

Major Flood		Carbis Bay and St Ives, Nancledra, Newlyn, Penzance and Heamoor and at Marazion, Ludgvan and Crowlas. At
<b>Events in Cornwall</b>		Crowlas 20 properties flooded and 6 at Chyandour. 39 properties flooded at St Ives and 9 at St Erth.
(2011)		
27 Nov 2002	Culdrose had 19 mm in 2 hours	Much of Cornwall was hit by floods. Roads were affected at Crowlas, Portreath, Launceston, Calenick near
Cornish Guardian		Truro and Wadebridge, Helston and Perranporth
		St Columb: Rialton Priory was flooded to 3 feet.
Western Morning		Crowlas: In the second flooding incident in a month this deluge sent inches of silt and mud into businesses as
News 29 Nov		the main road turned into a river. The council engineer said the flooding had been the result of runoff from
		fields.
		Lanner: A morning deluge lasting 3 hours caused flooding in a number of properties in the square. One family
		said they had been flooded 3 times in the last month.
1 Jan 2003		Angarrack: A three foot torrent of water swept through the village after a storm drain cover was blown off.
Cornishman 9 Jan		Three homes and a garden were flooded. 'Parts of the village have flooded 6 times in the last 25 years but this
		is definitely the worst'.
Western Morning		Pengersick Castle was flooded to a depth of 2 feet and ancient manuscripts were damaged.
News 4 Jan		Crowlas: In the early hours of New Year's Day the town was flooded for the eighth time in seven weeks. The
		excessive frequency of flooding was ascribed to changes in farming practices and the removal of hedgerows.
		choose in equation of the account of the second of the sec
		Heavy rainfall on New Year's Eve/Day 2002-2003 resulted in fluvial and surface water flooding, mainly centred
		on West Cornwall. Affected locations include Fexbury/Bude, Redruth, Lanner and the Portreath Valley, Carnkie,
		Carn Brea, Illogan and Camborne, Angarrack and Hayle, Relubbus and St Erth, Sennen Cove, Lamorna and
		Mousehole, Marazion, Praa Sands, Breage and Porthleven, Helston, Gweek, Constantine, Porkellis, Burras and
		Wendron on the Cober, Budock Water and Falmouth, Tresillian, Goran Haven, St
		Austell, Par and Luxulyan, Herodsfoot, Pilaton and Lowley Bridge near Launceston. In Helston 20 properties
		flooded and 8 flooded at Gweek. 7 flooded in Redruth and 10 in Lanner.
16 Jul 2003	Lanteglos by Fowey 27.2	Penzance reported a really major storm during the morning, which lasted from 0430h to 0730h; around 26mm
COL	, ,	of rain fell in this period, but some parts of W may have got substantially more. At Penzance
601		from 0600h to 0700h the thunder was some of the most intense the observer had ever experienced.
		Lanteglos-by-Fowey: Torrential rain and thunder on the 16 <sup>th</sup> (27.2mm), and torrential rain on 25th (27.4mm)
		[Not added to EXCEL file]
http://cdn.		[NOT BUILD TO EXCEL THE]
Environment-		At the end of July 2003 heavy rainfall caused fluvial and surface water flooding in Bodmin and Lanivet, Lanner,
LIVIIOIIIICIIC		The title cha of July 2005 heavy familian caused haviar and surface water hooding in bouillin and canivet, canner,

agency.gov.uk /flho1211bvmh -e-e.pdf 25 Jul 2003 West Briton 31 Jul

and Helston, Tywardreath and Common Moor on the River Fowey. [This probably refers to the event on 25 July]

Redruth, Gilbert's Coombe: Floodwater swept through an industrial unit to a depth of 4 feet. One proprietor said his premises had been flooded 4 times since last December. A 12 high wall was demolished by the force of the water.

Redruth, Pool, Carn Brea and the Portreath Valley, Newlyn and Mousehole, Crowlas and Whitecross, Breage

Lanner: A huge quantity of water flowed down an unmade lane in Lanner Green and flooded houses and businessesin Lanner Square. The Lanner Green track was scarred with trenches 3 to 4 feet deep and littered with large rocks. [Reference was found to flooding in Lanner on 14 Dec 2000 (no property) and 28 Nov 2002] Camborne: At Roseworthy water poured off fields and into the road and flooded a house where the residents said it was the worst in 13 years they had lived there. A photo shows flooding of a road between Praze and Beeble and Carnhell Green.

Carnbrea, Whitcross Hill: A house was flooded by runoff from adjoining fields, only the second time in 20 years (the first on New Years day – not a flash flood)

Camel at Denby Rank 1 60 m RoR

On 12 August 2004, surface water problems following heavy rainfall affected Pelynt, Liskeard, Common Moor and Minions on Bodmin Moor (2 properties flooded) in the south east of Cornwall and also tidal flooding impacted on Saltash.

MO: Oustide Truro towns had little rain with 1.2 mm in Camborne and Redruth area and hardly a drop at Helston.

60.0

50.7

Haytor

**Bovey Tracey** 

In SE Cornwall 73 mm fell between 9 pm and 1 am, as remnants of Hurricane Alex.

Beer: 50 houses were damaged in Beer when 3 feet of water swept through the fishing village. Streets were turned into rivers as water flowed down from the surrounding hills. The flood moved cars burst through doors and gouged out a channel 30 feet deep through the pebbles on the beach. Water poured down Park Road and flooded houses to more than 3 feet. The water came through the new cemetery and damaged several graves. Nothing like this could be remembered for 30 years. Seven properties on Barton Road were flooded. Crediton: One manhole popped up on the High Street but only road flooding was reported.

Truro: 'Flash floods cause city centre chaos'. A succession of streets was swamped and one pub flooded to 2

12 Aug 2004 COL http://cdn. **Environment**agency.gov.uk /flho1211bvmh -e-e.pdf Express & Echo 13

Aug

West Briton 19 Aug

16 Aug 2004 COL Otterham 200.4 Trevalic Lesnewth 184.9 Trevalec Lesnewth (TBR) 155.8 Creddacott 123.0 Slaughterbridge 76.5 Bude 46.7 (TBR = Tipping Bucket Rain gauge – These understate intense rainfalls. Even so the Lesnewth raingauge recorded 24mm in just 15 minutes ending 1545GMT.)

feet – the Chicago Rock Cafe in Calenick Street. Subways at Morlaix Avenue were flooded to 18 inches. The floods were said to be the worst in Truro for 16 years. Floodwater affected Victoria Square, Kenwyn Street, Back Quay, Treyew Road, Cathedral Lane, Tregolls Road, Fairmantle Street and Tabernacle Street. Reference was made back to flood in 1988 (11 Oct).

August storms in Cornwall, 16 August 2004

This major storm was associated with convergence along the north Cornwall coast as the sea breeze set in after an increasingly warm and humid morning. The storms ran up the coast from just east of the Camel estuary to as far as north Devon, much of the afternoon. The really intense rain was concentrated in a narrow strip, running parallel with, and just inland from, the coast from Boscastle/Crackington Haven. It may be that the change in aspect of the coast at Tintagel, from WNW to NNW had a part to play, tending to make the sea breeze converge upon itself as well as against the SSW gradient wind. Just 10 miles SE of the line of storms many places had under 1mm rain. In fact much of Cornwall had a pleasant day, something that may come as a surprise after the media reports. At my home in Penzance it was a basically a dry and fairly sunny day until late afternoon. The maximum temperature was a pleasant 22.6C and with light southerly winds and some strong sunshine the beaches were busy.

The Boscastle flood was a major event by any standards. Around 100 cars were washed through the village, into the harbour, and some out to sea. Buildings were destroyed, 130 people were rescued from roofs and trees by 7 helicopters from Brixham, Chivenor, Culdrose (Helston) and St. Mawgan. (Newquay). 2 lifeboats searched for anybody washed out to sea. All the boats in the harbour were destroyed. As far as all the businesses in the Boscastle area are concerned this year's tourist season is well and truly over. The famous Witchcraft museum was devastated, whilst the owner, a local coastguard, was busy helping to rescue people from the devastation. The Harbour Lights, the oldest building in Boscastle and dating from the end of the 16th century, was simply washed into the sea despite being built of granite. It's sad to think that Boscastle will never look the same, but it is incredible that no one was killed. At nearby Crackington Haven conditions were just as bad. Cars & caravans were washed into the sea. The owner of the Beach Cafe, his wife, and 2 staff were washed out of the windows and plucked from the sea by lifeguards. Many small villages and hamlets just inland may not have attracted media interest, but still suffered severe flooding. Early media statements of 2 inches of rain where clearly ludicrous, given the scale of what happened. This area, effectively where Bodmin Moor meets the Atlantic, is prone to heavy rainfalls, and 2 inches would not be exceptional. The Environment Agency recorded 200.4mm in 24 hours at Otterham, just inland from Boscastle. 7 inches was reported from an unofficial site in Crackington Haven.

A further 40 properties were flooded in Canworthy Water, Bude, Helebridge and Crackington Haven with severe flooding at Otterham, Week St Mary, Marshgate, Millook and Camelford.

There is no doubt the shape and position of the SW peninsula plays a large part in the number of intense rainfall events in north Cornwall, north Devon and Somerset. A line of cloud up the peninsula is a normal event in summer, as the sea breeze convergence sets in. I have some photos on my website at www.easterling.freeserve.co.uk/wpage6.html.

In July 1987 I was at Porthcothan, on the north coast just west of Padstow, where it was sunny all day. Around midday the sea breeze kicked in, and by 1300h thunderstorms had broken out in a line parallel with the coast around 4-8 miles inland, and these continued running NE along this line all afternoon. There was severe flooding near Bodmin. Sometimes the line of showery rain set off by this convergence continues northeastwards well into central England, as indeed happened on the afternoon of 23 August. In 1957 there was an event of almost identical intensity in the same general area. Camelford recorded 203.2mm, but much of the fall was in form of large hail that was not retained in the rain gauge. The gauge at Delabole overflowed, and the figure of 6 inches quoted was an estimate. The descriptions of the flood were very similar, a wall of water coming down the valley into Boscastle. Possessions were washed out of properties down into the sea. The main difference in 1957 being that there were not dozens of vehicles being washed through the village, and hence less structural damage to buildings.

According to the Met. Office other similar serious flooding events that have occurred in the past include: June 1917 Bruton, Somerset (242.8mm in 24 hours)

August 1924 Cannington, Somerset (238.8mm in 24 hours)

August 1952 Lynmouth, Devon (229.5mm in 24 hours)

June 1957 Camelford, Cornwall (203.2mm in 24 hours)

On 16 August 2004 the well known Boscastle event occurred. Though less well documented than for Boscastle, flash floods also hit Crackington Haven at the same time. From 16 to 18 August, flooding impacted on Bude, Canworthy Water and Ottersham, Slaughterbridge, Camelford and Tintagel, in North East Cornwall, and also Perranporth, Redruth and Portreath, Camborne and Praze-an-Beeble, Hayle, St Erth, Carbis Bay and St Ives, Crowlas, Marazion, Relubbus and Goldsithney, Helston, Mullion, and Penryn in the west of Cornwall. In Boscastle 60 properties flooded, 5 in Helebridge and many also flooded in Crackington Haven. At Praze-an-

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

Beeble 9 properties flooded.	
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			beeste 3 properties nooded.
West Briton 19			
Aug			Camborne: Tons of mud were washed into Roseworthy affecting houses, from a nearby field.
			Lanner near Redruth: A river of water came down the main road and affected some houses.
			East Dart at Bellever Rank 1 15 m RoR
			Ottery at Werrington Rank 1 15 and 60 m RoR
			Camel at Denby Rank 1 15 m RoR
17 Aug 2004	Camborne	67.6	17th August – Storms and flooding – West Cornwall
COL	Penzance	41.4	A major storm moved north over west Cornwall, fortunately not really affecting Boscastle. 64mm fell at
			Camborne, 58mm in 3 hours to 2100h. This would normally sound an impressive figure, but after Boscastle,
			when over 3 times that fell, it sounds almost ordinary! In Penzance I recorded 40.1mm between 1600h on 17th
			and 0900h on 18th, of which at least 30mm fell between 1830h and 2130h.
			However I was well west of the heaviest rain, which occurred in a north/south line from Hayle to St Erth to
			Perranuthnoe (just east of Marazion). There was considerable flooding in this area. The River Hayle burst its
			banks, and 1 lightning flash killed 15 cows!
			Graham Easterling Penzance
			Hayle at St Erth 1957-2010 AMS 1 AM13
			Tamar at Gunnislake Rank 1 15 m and 60 m RoR
			Hayle at St Erth Rank 1 15 and 60 m RoR
23 Aug 2004			West Okment at Vellake 1967-2010 AMS rank 1 AM 2
			West Okement at Vellake Rank 1 15 m RoR
Hiflows UK			
3/4 Oct 2004	Denbury	56.2	[Not added to EXCEL file]
COL	Penzance Camborne	49.5 38.2	
	4 <sup>th</sup>	36.2	
	Haytor	45.9	
	<b>Bovey Tracey</b>	39.6	
23 Oct 2004			Flooding of roads occurred widely to disrupt traffic in the Redruth and Camborne areas, notably at Rosewarne
West Briton			near the entrance to Duchy College (9").
28 Oct			
29 Oct 2004			Creedy at Cowley Rank 1 15 m RoR
29 Jun 2005	No COL high rainfa	lls noted in	Thunderstorm at St Merryn, near Padstow, 29 June 2005

During the four hours from around 1130GMT to 1530GMT there was an exceptionally severe 'Boscastle' type storm over St. Merryn (just west of Padstow). Motorists were trapped in their cars as roads became impassable between St. Merryn and Morgan Porth (just north of Newquay). Many properties in St Merryn, and villages just to the south, were flooded. Staff at a surf shop in St Merryn had to recover surfboards which floated down the street. Fire crews from Padstow helped to pump out flooded properties. The morning had been very warm with sunny periods and a light southerly gradient wind. I'd spent it walking along the west side of the Camel estuary and was lucky enough to see dolphins. There were at least 10 swimming up and down the mouth of the estuary.

The speed the storm developed was amazing. Inland it was mainly clear, with a line of cumulus on the sea breeze front, which at that time was just offshore. During the half hour it took me to get the ferry across to Rock, on the east side of the estuary, the sea breeze front had moved just inland, and the cloud had grown at an alarming rate. I had lunch at the Blue Tomato cafe in Rock, which faces west across the Camel estuary towards Padstow and I had a grandstand view of events. The photo was taken looking west towards Padstow at 1152GMT. The darkest area marks the sea-breeze limit (sea to the right). Within 10 minutes of this photo being taken the flag in the foreground was blowing just as hard in the opposite direction. The cloud looked so threatening I was fully expecting to see a tornado. I am sure the rapid development of the storm was due to a northerly sea breeze moving up the river at the same time as a westerly sea breeze moved in from west of Trevose head. This led to a sort of 3-way convergence with the southerly gradient wind. This is much what happened at Boscastle storm in 2004, and is typical of many north coast events. Storms form just east of a north coast headlands, where the aspect of the coast changes from west to north. In this case Trevose Head, in the case of last years Boscastle storm, Tintagel. It looks like around 75-100mm fell in 4 hours in the St Merryn area (76mm according to BBC News); Padstow had a rather lucky escape. The intense rain fell on the sandy farmland just behind the town. After a dry June it could absorb a lot of water. If the storm was 1 mile to the east the water would have flooded down a deep valley into Padstow. **Graham Easterling Penzance** 



23/24 Jul 2005 COL Combpyne 43.2

**Bovey Tracey** 

40.2

Lanteglos-by-Fowey

36.1 East Village 26.7 Denbury 26.3 24<sup>th</sup> Haytor

tor 42.8

11 Oct 2005

18 Oct 2005 East Village COL 50.1

50.1 Lapford 30.1 During the 23rd low pressure developed to the SW of the British Isles and frontal rain affected S and Cent Ireland, Wales and SW England by midnight. At Valentia 23mm of rain fell in the period 0600-1800GMT. [Not added to EXCEL file]

Dart at Austins Bridge Rank 1 15 m and 60 m (1980-2014) RoR

Erme at Ermington Rank 1 15 m RoR

West Dart at Dunnabridge Rank 1 60 m (1980-2014) RoR

A notable exception was SW England, with some heavier rain later in the day in Devon caused some local flooding.

East Village: An unexpected deluge throughout the evening of the 18th made that day the third wettest of any month in a 19-year record.

Exminster Hilltop: 19th - A brief thunderstorm in the morning resulted in a peak rainfall rate of 111mm/h at about 0500GMT.

No thunder reported. [Not added to EXCEL file]

23 Oct 2005 19 May 2006 25/26 Jun 2006 COL

25<sup>th</sup> East Village 35.7 Okehampton

okenampton

35.1

Exminster, Hilltop

31.8 Kerswell 29.7

Llanteglos-by-Fowey

28.6 Bovey Tracey 27.9 Dorchester 27.5 26<sup>th</sup> Penzance 78.9

Trengwainton Gdns (Penzance)

76.2

Haytor 44.7 Bradninch 44.0 Torquay, Great Hill 36.6

Otter Valley, Feniton

34.1 18<sup>th</sup>

17/18 Aug 2006

Torquay, Great Hill 41.8

Erme at Ermington 60 m RoR
Exe at Thorverton Rank 1 15m RoR

from 28 May to 24 June.

At Penzance 82.1mm of rain fell in 24 hours starting 0600GMT, with 78.9mm in the 24 hours starting at 0900GMT – the second highest daily fall in the station record back to 1992. Flooding occurred in large parts of the town as a result - 19mm fell in the 45 minutes ending 1800GMT with 15mm during 0900-1000GMT. Also in Penzance at Trengwainton Gardens, 76.2mm fell in the 24 hours to 0900GMT. From 9pm on the 24th to 12 noon on the 26th a total of 44mm fell in Bradninch (mid-Devon); this followed just 8mm

26th: Slight thunder reported from Cornwall and the Channel Islands.

West Cornwall – Thunderstorms and funnelclouds 17 August 2006

After a brief thunderstorm around 0600GMT most of the day was warm and sunny, with a maximum temperature of 22.3C. There were however large cumulus inland. Around 1500GMT a band of showers approached from the south. These invigorated rapidly as they hit land. A heavy shower around 1540GMT dropped 3mm of rain in 5 minutes. This was quickly followed by a thunderstorm 1615- 1700GMT. This dropped a further 12.6mm, most in around 15 minutes 1630-1645GMT. The thunder passed overhead, giving around 6 very close flashes. A funnel cloud occurred over northern Penzance, passing virtually over my house, and I managed to miss it! The rainfall was much more intense nearby. There was flooding at Gulval, 1 mile east of Penzance, where flash flooding washed mud through houses. There was also flooding at Drift, 2

miles to the west. At Gulval there was also large hail.

## Funnel Cloud 18 August

The 18th was another warm and fairly sunny day in Mount's Bay, the maximum temperature being 22.7C, not far off the warmest place in the UK. It was fairly still and humid. These temperatures resulted in huge cumulonimbus clouds developing just inland. In particular a virtually stationary, small but intense shower/thunderstorm idled just inland from the west coast of the Lizard peninsula all afternoon. This August 2006 23 was almost certainly due to a 3 way sea breeze convergence. A south westerly onshore breeze on the west coast of the Lizard, south-easterly on the east coast, and a north-westerly breeze blowing in from Hayle on the north coast. In Penzance there was prolonged sunshine, but thunder was audible at times. At 1455GMT there was a clear funnel cloud near the southern edge of this storm, just to the north of Helston. I dashed home to get the camera, but too late. This was widely reported as a tornado, but it appears not to have reached the ground. This photograph was taken near Helston. It appeared to drift slowly north before dissipating.

**Graham Easterling Penzance** 



Flooding at Gulval (above) and Penzance funnel cloud (below),

Thundery conditions before dawn in Cornwall spread rapidly towards Cumbria and Kent by midday with heavy rain, local flooding and lightning strikes resulting. Two people were taken to hospital after lightning struck three homes near Gunnislake in Cornwall. There were also lightning strikes in Crediton, Devon. Flash flooding closed streets in the Keyham and Devonport areas of Plymouth. Elsewhere in Devon, Tavistock, Okehampton and Barnstaple were also affected by flooding. A lightning strike in Kidlington cut power to 200 homes.

Tiddy at Tideford Rank 1 15 m RoR St Austell:

11 Oct 2006 COL Haytor

56.4

19/20 Jun 2007

## COL

26 Jul 2007

Hiflows UK 14 Aug 2007

14-16 May 2008

COL

COL

Haytor 46.5

14th Newton abbot 57.0

15th Haytor 46.0

16<sup>th</sup> Newton Abbot

28.7

Possible funnel cloud sighted (photographically) at 2134GMT. 20th - Rain from 1610GMT with flash floods on local roads - water ejected out of drains and manhole covers being lifted.

Newquay: 19th - torrential rain 1230-1245GMT with much surface water on the roads.

Exminster Hilltop: On 19th a violent shower gave 13.5mm in one hour, which included - 2.8mm in 1 minute at 1434GMT (168mm/hr), peak intensity on VP system of 288mm/h. There were several days with violent (over 50mm/h) rainfall.

Okehampton: 1st-10th 0.2mm of rain, 11th-30th 174.8mm. The wettest spell was the period 24th-30th when 88.2mm fell - almost the equivalent of a normal months' rainfall. By the 29th, both the E and W Okement rivers were raging torrents.

Newton Abbot: Exceptional rainfall accompanied the thunderstorm on 23rd. Over a 3-minute period to June 2007 8 1025GMT, approximately 3mm of rain was caught (a probable under-reading, due to splash-out) and the hourly total was 11.7mm during 1000- 1100GMT, falling in about 25 minutes. The maximum fall in 60 minutes also occurred on 23rd, 14.4mm falling in the hour to 1028GMT.

Boscastle: Villagers mopped up after a deluge on 21 June 2007. The main road was closed and some shops and properties in the centre were under about 3ft of water after Thursday's torrential downpours.

However, the new flood defence system helped save the village from the fast-flowing water and the higher than usual river levels.

Washford at Beggearn Huish 1966-2010 AMS Rank 2 AM 24

[Not added to EXCEL file]

Frontal system with strong winds. No thunder reported.

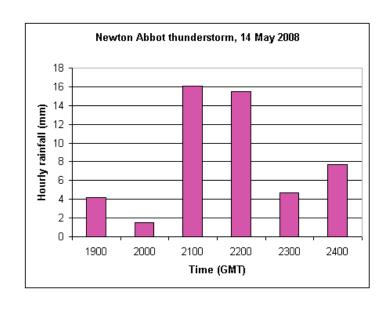
[Not added to EXCEL file]

14<sup>th</sup> There were a few showers in parts of S England later in the day while in the evening some heavy frontal rain fell across the Channel Islands and Cornwall.

15th A frontal system affected S parts of England and Wales with some heavy falls of rain in SW England before dawn; St Mawgan reported 40mm in the 12 hours ending 0600GMT.

16<sup>th</sup> The heaviest rain tended to be in the south - there was some localised flooding in Cornwall.

Newton Abbot 14th: A notable fall of rain, accompanied by nearcontinuous thunder for the first 4 hours, occurred on 14th with 49.7mm falling 1815-2400GMT. For the first two hours, the thunder was severe and several houses were struck by lightning locally. Hourly rainfall rates reached 16.5mm/h 2115-2215 GMT.



29 May 2008 Shillingford Abbot COL 49.6

Eden (2008) Exminster Hilltop

41.7

5/6 Jul 2008 5<sup>th</sup>
COL Haytor 50.7
Hiflows UK 6<sup>th</sup>
Haytor 33.6

8/9 Jul 2008

Combpyne 42.8 Penzance 26.8 Avon at Loddiswell Rank 1 15 m RoR

A complex area of low pressure formed over the Midlands for a while during the 28th leading to a wet day across much of England and Wales, and a rather cloudy day everywhere. According to the Met Office some torrential rain affected parts of S England and the Midlands early in the morning.

Exminster: 29th - 41.7mm makes this the wettest day since 18.12.2004 (49.9mm) and the fourth wettest day in the last 10 years in this area. On 29th, 27.7mm fell in one hour 2030-2130GMT. This is the highest hourly fall in the last 10 years.

Some 70 to 80 mm rain fell in 4 hours and caused serious flooding in Torbay, Illminster and Bruton.

Culm at Wood Mill Rank 1 15 m and 60 m RoR

West Dart at Dunnabridge 1972-2010 AMS Rank 2 AM 12

[Not added to EXCEL file]

Torridge at Torrington AMS Rank 3 AM 24

http://cdn. Environmentagency.gov.uk /flho1211bvmh	9 <sup>th</sup> Haytor	43.4	Torridge at Rockhay Bridge AMS Rank 2 AM 5 Inny at Bleasmill 1976-2010 AMS Rank 2 AM 10 Tavy at Ludbrook 1981-2010 AMS Rank 1 AM 10 Lynher at Pillaton Mill 1961-2010 AMS Rank 2 AM 15 Plym at Carnwood 1971-2010 AMS Rank 1 AM 7 Fowey at Trekeevesteps 1958-2010 AMS Rank 2 AM 6 Warleggan at Trengoffe 1969-2010 AMS Rank 3 AM 12 Fowey at Restormel 1961-2010 AMS Rank 2 AM 21 Camel at Denby AMS rank 3 AM 11 Tamar at Crowford Bridge 1972-2010 AMS Rank 2 AM 4  In July 2008, heavy rainfall caused flooding at Minions , Canworthy Water, Polson Bridge, Otterham and
-e-e.pdf 29 Jul 2008 7 Aug 2008 Hiflows			Yeolmbridge in East Cornwall Torridge at Torrington Rank 1 15 m RoR Lew at Gribbleford Bridge 1988-2010 AMS Rank 1 AM 7 North Lew at Norley bridge 1988-2010 AMS Rank 1 AM 3 [Not added to EXCEL file]
11 Aug 2008 COL Hiflows UK	Penzance Exminster Hilltop	31.8 28.6	Penzance: 11th - Torrential rain 2200-2400h.  Okehampton: 9th-13th - 70.3mm of rain, this caused the cancellation of the Okehampton Show for the second year running. 12th - Okement rivers in full flow.  12 <sup>th</sup>
			Seaton at Trebrownbridge 1972-2010 AMS Rank 2 AM 18 Fal at Tregorny 1961-2010 AMS Rank 2 AM 37 Kennal at Ponsanooth 1968-2010 AMS Rank 1 AM 30 Seaton at trebrownbridge 1972-2010 AMS Rank 2 AM 18 Cober at Trenear Intake 1988-2010 AMS Rank 1 AM 14 13 <sup>th</sup> Okment at Jacobstowe 1973-2010 AMS Rank 3 AM 9 Tamar at Gunnislake 1956-2010 AMS Rank 3 AM 36 Ottery at Werrington Pk 1961-2010 AMS Rank 3 AM 9 Thrushel at Tinhay 1969-2010 AMS Rank 3 AM 21 Thrushel at Hayne Bridge 1988-2010 AMS Rank 1 AM 10

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf 5/6 Sep 2008 COL

Haytor 57.1 East Village 39.1 Shillingford Abbot 27.6

Hiflows UK

30 Oct 2008 COL

www.metoffice.go v.uk/learning/lear n-about-theweather/weatherphenomena/casestudies/ottery-hail

Express and Echo 31 Oct and 1 Nov

Otter V Feniton 70.8 (up to 15 mm in 15 mins some falling as hail).

A Met Office spokesman stated that the storm was very localised over just 3 ml<sup>2</sup> in east Devon.

Kings School, Ottery recorded 187mm in the 27 hour period between 0900 on 29 and 1200 on the 30 October. Met Office analysis of this data suggests that in the 3 hours between 0000 and 0300 160mm fell. The hail fell from around 2330 and persisted until around 0300.

## Wolf at Germansweek 1991-2010 AMS Rank 1 AM 12

In August 2008 heavy rain led to flooding of roads and properties in St Austell, Falmouth, Penryn, Polbathic, St Germans, Herodsfoot and Canworthy Water. In Lostwithiel the Tanhouse Stream broke its banks flooding 4 properties.

During the early hours of the 4th rain fell from N Devon to NE England, with some outbreaks of locally very heavy rain which led to flooding in places.

East Village: 39.1mm of rain on the 5th was the highest September day total in the 22-year record, while 55.1mm over the 4th-5th was the fourth highest two day total for any month and resulted in flash flooding at 1700GMT on the 5th.

See northeast Flood History

Exe at Pixton 1966-2010 AMS Rank 2 AM 11
Creedy at Cowley 1964-2010 AMS Rank 1 AM 30
Withy Brook at Basstrat 1972-2010 AMS Rank 1 AM 1
De Lank at De Lank 1966-2010 AMS Rank 3 AM 15

The low centred pushed into France early on the 30th and a N'ly flow became established across the British Isles; embedded troughs gave bands of precipitation to many areas during the day. Shortly after midnight there were localised and intense thunderstorms over parts of E Devon. Devon and Somerset Fire Service described the situation after 30cm of hail fell in the Ottery St Mary area as "absolute chaos". Floodwater rose up to 1.2m. Some people in remote houses were airlifted to safety. Devon and Somerset Fire and Rescue Service said 25 people were rescued from flooded homes in Ottery St Mary and Feniton. Susanne Reed, from the fire control centre, said it was the worst flooding she had seen in 25 years. "It got worse and worse and one crew got stuck in a 6ft [hail] drift," she said. During the morning and afternoon the precipitation in the SW moved away S (giving some thunder in the Channel Islands) to leave a mainly cloudy day.

The falling hail was funnelled down the Otter valley and led to flash flooding and erosion of river banks. The hailstones were fairly small and of a low density and were transported to the lowest parts of Ottery. Large amounts of hail helped to block watercourses and drains too. With blocked drains the hail was unable to drain away. When the hail melted it caused further flooding.

Otter at Fenny Bridges Rank 1 15m and 60 m RoR

Ottery: At least 2 feet of hail fell and became consolidated as ice. In some places the ice on the ground was 3 to 4 feet deep and up to car roofs. (Photos). In Victoria Terrace half the residents were flooded. People became stranded in vehicles in water waist deep. Photos show the depth of consolidated hail 1 showing shovelling from a driveway, 2 showing some cars covered nearly to the rooftop and 3 deep hail on the roadway.







Feniton: Streets were flooded and St Andrew's Church in Feniton Old Village was under 2 feet of water. Water three feet deep was running through the streets. Phto below shows Feniton flooding.



Tipton St John: Tipton garage was flooded with 3 feet of muddy water. Water was 18" deep at Island Farm. Budleigh Salterton: the cricket ground and the clubhouse were badly flooded.

Newton Poppleford: Flooding also occurred.

Rain also spread into SW England later in the day, where it turned thundery with Camborne reporting thunder after 1800GMT.

24 Apr 2009	Penzance	65.2
COL	Camborne	34.0
COL	Mawnan Smith	30.4

http://cdn. Environmentagency.gov.uk /flho1211bvmh -e-e.pdf

West Briton 27 Apr

 6 Jun 2009
 Exmninster Hilltop
 61.0

 COL
 East Village
 59.1

 Hiflows UK
 Teignmouth
 47.1

 Otter Valley, Feniton
 38.7

 Lapford
 33.7

 Haytor
 31.6

**Bovey Tracey** 

27.6

27 Jun 2009 2 Jul 2009 http://cdn. EnvironmentPenzance: 24th/25th - The rainfall recorded in Penzance between 2300GMT on 24th and 0900GMT on 25<sup>th</sup> was 65.2mm. A further 22.9mm fell in the following 12 hours. An analysis based on the rainfall radar indicates the area west of St Ives had typically about 170mm with a maximum of 193mm about 4km SW of the town. Zennor had 136mm, where sadly there were 3 fatalities.

St Ives: There was extensive flooding in St Ives, where several shops and properties were severely damaged. The flooding occurred just 3 weeks after a £10 million flood scheme was completed. Worst hit was Tregenna Place where shopkeepers said they would withhold council tax. EA said the scheme had prevented the R Stennack from overflowing but the flooding was the result of surface water.

On 24 April 2009 a severe storm affected West Cornwall. The worst hit areas were Zennor and St Ives, with many streets and properties under water. At Poniou near Zennor there were 3 fatalities when a car was washed off a small bridge. On the Coastal Path 7 footbridges were washed away. Two hotels, the St Ives Bay and Chy an Albany were flooded and the Primrose Valley was also affected.

Zennor: At Tinners Arms water burst through the doors and carried stones and debris

During the 6th an area of low pressure became established across S England and the English Channel. A band of heavy rain became established across SE Wales, the S Midlands and across to N England overnight. During the morning thunderstorms and torrential rain broke out over the Exeter area, with 27.2mm recorded in one hour (at the 0900h observation) according to the Met Office. Heavy and thundery rain then developed across parts of S Wales and the SW Midlands, with 93mm falling at Exeter between 0700h and 2000h.

Kenton: 6th - A thunderstorm 0700-0800h gave 13.5mm of rain. The rain stopped until 1100h, and then it rained constantly and heavily until the early evening. The total fall at 1900h was 84.2mm, a 12-hour total of 97.7mm. This was by far the wettest 24 hours I've recorded at two sites in Devon in over 20 years. Exminster Hilltop: On 6th, daytime maximum temperature of only 10C! The temperature was actually near 8C during early afternoon. 78mm of rain in about 12 hours 0600- 1800GMT, only 61mm credited to 6th but it was still easily the wettest day in this area for at least 11 years. Continuous heavy rain just kept on coming, the area

Horner Water at West Luccombe 1973-2010 AMS Rank 2 AM 11 [Not added to EXCEL file]

Mole at Woodleigh Rank 1 15 m RoR

around Exeter seems to have been worst hit.

On 2 July 2009 Truro was affected by localised heavy rainfall. The railway station was closed after torrential rain caused the roof to cave in above the ticket office. Part of an isolation ward at Royal Cornwall Hospital Treliske was also closed after water seeped through the roof. Two shops on Victoria Square were forced to

agency.gov.uk /flho1211bvmh -e-e.pdf			close after 0.3 m of water washed into their premises
16 Jul 2009 COL Hiflows UK	Penzance Lapford	51.8 26.8	It was a relatively cool day in parts of SW England in the wet conditions. Both main roads into Cornwall were closed later in the evening after flooding and a crash. Flooding and a landslip closed the A38 near Bodmin. Heavy rain had also caused flooding around Lostwithiel.
28/29 Jul 2009 COL Hiflows UK	28 <sup>th</sup> Camborne 29 <sup>th</sup> Haytor Lapford East Village Otter Valley, Feniton Okehampton	35.2 34.6 34.1 29.3 28.3 27.9	Fowey at Trekeevesteps 1958-2010 AMS Rank 3 AM 8 Warleggan at Trengoffe 1969-2010 AMS Rank 1 AM 5 Withy Brook at Basstrat 1972-2010 AMS Rank 2 AM 5 Frontal cloud early on the 28th spread rain to Ireland, SW Scotland, Wales and other parts of W Britain by dawn. E Britain remained mainly dry overnight before precipitation became widespread N of a line Exeter to Hull. Across Wales and N parts of England there were some heavy falls during the day. No thunder was reported E parts of Ireland, Wales, W England and much of mainland Scotland was wet overnight into the 29th.  Ganel at Gwills 1969-2010 AMS Rank 2 AM 14 Mole at Woodleigh 1965-2010 AMS Rank 2 AM 25 Avon at Loddiswell Rank1 15 m RoR
22 Jul 2010 23 Sep 2010 COL	Haytor Otter Valley, Feniton	37.6 32.8	Seaton at Trebrownbridge Rank 1 15 m RoR  During the 23 <sup>rd</sup> a small area of low pressure was slow-moving over N Britain and, with several fronts over the British Isles, it was a rather wet day in many places. Parts of S England had some heavy rain during the early morning. Much of N Scotland and W areas of Ireland Scotland had a mainly dry day - elsewhere, there were falls of heavy rain during the day, often showery and thundery in nature.  [Not added to EXCEL file]
17 Nov 2010 BBC News Met Office website	Cardinham, Bodmin recorded an hourly total of 18.8 mm, while Heligan recorded consecutive hourly totals of 24.0 mm and 21.0 mm - to give 45.0 mm in 2 hours. 12-hour rainfall totals from 2100 GMT on 16 November to 0900 GMT on 17		Altarnun: The village was flooded by water running off Bodmin Moor to the west. A bridge over the strem through the village was blocked and water spilled out flooding 12 homes.  Lostwithiel: Also a blocked bridge sent water into the town.  The worst affected places were St Blazey, St Austell, Mevagissey and Lostwithiel. More than 100 properties were flooded with significant damage to houses and businesses. Roads were closed (including both the A30 across Bodmin Moor and the A38 for several hours) and motorists were stranded by floodwaters. The mainline railway between London and Penzance was closed due to landslides. A number of schools across Cornwall were

November, include 60.8 mm at Heligan, 55.0 mm at St Clether and 50.2 mm at Cardinham, Bodmin. The highest daily total was 78.6 mm at Restormel (between Bodmin and Lostwithiel). It is likely that most of this rain fell within a few hours.

closed for the day and the Eden Project was badly affected by flooding. The very intense rainfall resulted in rapid surface water run-off, overwhelming drainage systems and rapidly increasing river flows, for example in the River Fowey.

Flooding affected St Austell, Par and St Blazey (more then 50 properties), Altarnun, Lostwithiel (40 properties), Mevagissey (100 properties) and Pentewan (15 properties). Many properties were flooded to a depth of 1.5 m. There were major concerns over the stability of the historic bridge at Lostwithiel and the A38 and mainline railway in the Glynn Valley had to be closed following a landslip

Channel 4 News

27 Nov 2010 7 Jul 2012

5 Aug 2012

Met office

Slow moving, torrential downpours with some of them thundery with hail and

People couldn't believe how a trickle of water in the street - perhaps a couple of inches - could become a couple of feet so quickly, wrote Alex Thomson in Cornwall. But overhead the night's sky was delivering the same deluge as Boscastle. We are talking phenomenal rainfall here. Two inches at least in as many hours. Astonishing levels of rainfall coming into an area where the hillsides are steep, the land already saturated, and in that situation small country lanes can become canals delivering hundreds of tonnes of water as they converge down to villages and towns in this part of the world. So apart from the flooded river and the odd pool of muddy water there is relatively little sign of what has happening here in the early hours. Local people are telling me that although they had warnings of heavy rain, the culvert and drains were blocked in some cases by the autumn debris of leaves and vegetation. They say that in at least one incident Environment Agency flood pumps were not turned on until about 6am, by which time much of the damage was done.

De Lank at De Lank Rank 1 15 m and 60 m RoR

Fowey at Trekievisteps Rank 1 15 and 60 m RoR

Many parts of Dorset experienced the worst flooding for over ten years in the period from 6th to 13th July 2012. Heavy and prolonged rainfall over the weekend of the 6th and 7th of July also affected many parts of East Devon as a large depression circulated slowly around South-West England. A number of rain gauges registered over 100mm on the Friday and Saturday (four times the month's average). Between April and June more than double the average rainfall had been recorded and the rain therefore fell on already saturated ground.

[Not added to EXCEL file]

Flooding was reported at Launceston, Bideford and Holsworthy and at Chudleigh and Kingsteignton, Devon where flood water seeped into homes.

COL

strong winds.

Flooding occurred at properties in Bugle, St Austell, Penzance and in the Camborne and Redruth areas.

Newton Abbot: A total of 68.3 mm of rain fell between 2100GM T on 4th and 2100 GMT on 5th, 9.2 mm of this falling in 10 minutes from 0750 GMT on 5th. This amounted to 32% of the month's total.

Yealm at Puslinch Rank 1 60 m RoR

produced 21mm of rain in around 5 hours and caused

some local flooding.

Paignton: 5th - heavy showers in the morning

17 Aug 2012

24 Sep 2012 You tube

20-27 Nov 2012

23 Dec 2012 **BBC News** 

In the morning, two bands of rain swept across Cornwall causing surface water flooding problems mainly affecting roads. A section of the A38 in the Glynn Valley between Bodmin and Liskeard was closed for around 2 hours due to flooding. In Truro, businesses in Bridge Street were inundated by surface water coming off the highway.

Flooding video of Falmouth

Torridge at Torrington Rank 1 60 m RoR

Flooding occurred across Cornwall during this event. Notably river levels on the Hayle, Gannel and Seaton Rivers were the highest in over 40 years of recording. Across Cornwall an estimated 260 properties flooded. Many of these were isolated incidents.

Stoke Canon: About 30 homes have been flooded in a Devon village as heavy rain continues to cause problems in the South West. Twenty-five people were led to safety by emergency services in the village of Stoke Canon, Exeter, after the River Exe burst its banks.

Lostwithiel: Overnight, 12 people were taken to a rescue centre by RNLI lifeboat.

Umberleigh, Devon, a woman was rescued from a river after she was swept away from her car in flood water. A police helicopter, using thermal imaging equipment, found her clinging to a tree on the banks of the swollen River Taw, shortly after 03:00 GMT.

8 Jun 2013 COL	Thundery activity clipped south Cornwall on its way westwards between 6 a.m. and 8 a.m	Helston, Cornwall: dozens of homes were flooded when the River Cober broke its banks on Saturday. Elsewhere, four people and two dogs trapped in two flooded properties in Bishops Tawton, near Barnstaple, were rescued overnight by a fire crew and RNLI in-shore boat. In Braunton the clean-up operation has started after about 30 homes and 20 businesses were flooded by more than a metre of water. Collard bridge in Snapper near Goodleigh was destroyed. < Mullion> and <st mawes="">: Flooding resulted from the thunderstorms. Thousands of homes in Falmouth and Penryn suffered power cuts after lightning struck electricity transformers at Redruth.</st>
5 Aug 2013 COL		<romansleigh> (N Devon): Torrential downpour 1215-1255 GMT, with 23.7 mm recorded in the 5 inch gauge.</romansleigh>
6 Aug 2013		Torrential rain caused flash flooding in Cornwall and parts of North Devon.
		Newquay Community Hospital said flooding had severely damaged two of its three treatment rooms, making it
BBC News		unsafe to continue operations.
		Crantock: Two pubs and the post office were flooded and there were reports of deep standing water affecting a number of roads.
		Helston, Perranporth, Camborne, Newquay and Truro experienced flooding.
		North Devon Council said it had received reports of some localised flooding in parts of Ilfracombe where the Lidl supermarket was closed, and Braunton. The Environment Agency reported flooding Combe Martin, Berrynarbor and Watermouth Cove
6 Sep 2013 COL		<falmouth>: A hailstorm has left part of Falmouth in Cornwall looking like a winter's scene. The hail storm,</falmouth>
		which left cars sliding on roads, occurred at about 1600 GMT (lasting for about 20 minutes).
22 Apr 2014 COL		<east village="">: 18.5 mm of rain fell in less than an hour, whilst Crediton just 8 km away had no rainfall.</east>
19 Sep 2014 COL		<exeter> and <dawlish>: Flooding was reported.</dawlish></exeter>
13 Sep 2016 COL		<redruth: 20="" 30="" area.<="" at="" caused="" considerable="" flooding="" in="" minutes="" mm="" redruth="" td="" the=""></redruth:>
		<penzance>:During the afternoon a brief thunderstorm moved up from the south, reaching Penzance around</penzance>
		15:30 h. There were brief bursts of heavy rain, though much more just to the east, especially near Helston. The
		storm caused flooding around <truro>. In Penzance, and much of Cornwall, a second storm was far more</truro>
		severe. The first thunder was at about 18:00 h, and over the 30 minutes 19:00 h to 19:30 h it was virtually

19:00-19:40.

continuous. The rain really set in around 19:00 h and was briefly torrential. Around 15mm fell in the 40 minutes

< Falmouth><Redruth> area was severely hit by this storm. 30 mm in approximately 20 minutes was recorded

18 Jul 2017
http://www.cor
nwalllive.com/
coverack-flashfloods-then-andnow-one-weeklaterin-picturesat-flood--struckvillage-incornwall/story30456110-detail
/story.html

Heavy rain commenced 14.30 and stopped 17.30. Total for the period at nearest raingauge St Keverne was105 mm in 3 hr but estimate from radar at storm centre at Coverack was initially 177 mm corrected to 200 mm in 3 hr (allowing for a hail correction) (Fig 1). The estimated maximum in 15 minutes was 40 mm at 15.15. Golf ball sized hailstones fell from 15.30 and broke windows.

at Redruth and near Portreath. This caused some severe flooding in Falmouth, Camborne and Redruth, and in the narrow valleys running towards the north Cornish coast. I visited the Cornish Gold site, between Portreath and Redruth on Thursday 16th, and was surprised to see the extent of the damage done by a stream which is normally a trickle. The stream rose from being a trickle, to a height not seen since the complex was built several decades ago, in under 20 minutes. This gave no time to move stock and belongings. This ties in with the reports of over 30 mm of rainfalling just upstream in a similar time. The effect of the three distinct thunderstorms on the river level is striking.

<Coverack> (Lizard Pen.): The storm area was highly localised and centred on the village. A CEH raingauge 7km west of Coverack only recorded 0.1mm. The main flooding was from surface water before entering a watercourse but two small catchments with a combined area of 3 km² contributed. Stream beds became choked with cobbles and boulders and the steep road into Coverack became the main watercourse (Fig 2). 50 properties were affected by flooding but there was no loss of life. The flood water rose in one of the houses up to neck level within an hour. Minutes after the rain stopped, an elderly couple had to be airlifted from the roof of their house by a coastguard helicopter. A woman got swept out of her home and would have drowned if she was not caught by her neighbours. The tarmac road descending to Coverack harbour had 2-3 foot holes cut revealing underground wires and pipes and water poured over the seawall like a waterfall (Fig 3). A double decker bus got caught in the flood and was in danger of being washed away and was pounded by boulders (Fig 4).

<Penzance>: It had no rain.

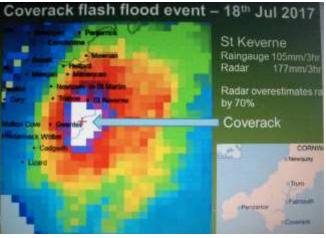


Fig 1. Radar image of Coverack flood

Fig 2. Damage to the steep road into Cpverack



Fig 3. The water poured over the seawall

Fig 4 The bus was caught in the flood water

<Okehampton>: A static convergence line on the north side of Dartmoor produced torrential showers just to the south of here. Only 15.6 mm recorded here, but well in excess of this only a short distance away. The force of the water rendered one of the bridges in Simmons Park (in the town) unstable and it was closed. (Editor – 79 mm of rain was recorded at East Okement farm in 8 hours, including 40 mm in 2 hours.)

30 Jul 2017 COL

7 Jun 2019 COL 10 Jun 2019 COL	Other site records show 10 <sup>th</sup> as a period of persistent rainfall but with a few peals of thunder in some places	<wembury> (S of Plymouth): The rain was torrential for half an hour at 1800 h, turning the roads to rivers and causing water to fountain out of manholes. <newton abbot="">: 9th and 10th - falls of hail (both of large hail) were the first instances on which I have recorded any hail in June (2005). The thunderstorm, then rain of 10th brought the largest June daily fall (40.6 mm) in my record (2007).</newton></wembury>
9 Sep 2019 East		<ottery mary="" st="">: Ottery St Mary in Devon has been battered with heavy rain and thunderstorms over the past</ottery>
Devon News 9 Sep		day. Flash floods have turned streets into rivers. Mill Street remains closed by the factory while Devon and Somerset Fire and Rescue Service pump out water. Devon and Cornwall Police said there were localised road closures due to flooding at Salston Corner, Exeter Road-Daisymount into Ottery, and Mill Street. Ottery St Mary flooded after drain pipe was filled with concrete. The company says it is as confident as it can be that the new diversion pipe will protect homes from future floods. They say they have had to live with the constant fear of flooding for more than 20 years because of poor drainage. It has emerged that Monday's flooding was caused by a blocked pipe. South West Water say a 'third party' damaged the relief pipe and filled it with concrete.
23 Sep 2019 COL		<penzance><bosullow>: Thunderstorm just before midnight, passed just to the NW. The overnight rainfall at Bosullow was 27 mm, with 40 mm for the 24 hours to 0900 h on 24th, compared to 11 mm and 26 mm respectively for Penzance.</bosullow></penzance>
18 Oct 2019 COL		<newquay>: 20-25 m diameter hail fell at Newquay,</newquay>

## References

Acreman, M.C. (1989) "Hydrological Analysis of the Truro floods of January and October 1988" Hydrological Data UK 1988 p 32 NERC.

Acreman M.C. (1989a) Extreme historical UK floods and maximum flood estimation. Journal of the instn Water end environmental Management, 3 (4), 404-412.

Acreman, M.C. & Horrocks, R.J. (1990) Flood frequency analysis for the 1988 Truro floods, J.I.W.E.S. 4(1) 62-69.

Baker, J.L.N. (1932) The climate of England in the 17<sup>th</sup> century, QJRMS LVIII p431.

Beardmore, N. (1862) Manual of Hydrology Waterlow and Sons, London p 295

Bleasdale, A. (1957) Rainfall at Camelford, Cornwall, on June 8, 1957, Meteorological Magazine 86, p 336 -343.

Bleasdale, A & Douglas, C.K.M. (1952) Storm over Exmoor on August 15 1952, Met. Mag. 81, 353-367.

Bonacina, L.C.W. (1946) The Widecombe calamity of 1638 Weather 1, 123-126.

Borlase, Wm (1753) Of a storm of thunder and lightning near Ludgvan in Cornwall, Phil Trans 48, p 86.

Bridge, G. C. (1969) The record breaking rainfall in south-west England on 28-29 July 1969, Met. Mag., 98, 364-370.

Brierley, J. (1964) Flooding in the Exe Valley, 1960, Journal Institution of Civil Engineers, Paper 6753 p151-170.

Chanter, J.F. (1907) A history of the parishes of Lynton and Countisbury, Commin.

Clark, C. (2001) "Great storms and floods over southern England, August 1770" Weather vol 56, No. 10, p 327-337

Devon Flood Story (1960) Fifth Edition with Exeter and Taunton. David and Charles, Dawlish

Devon Quarter Sessions rolls (box 126), Devon Record Office, Exeter

Dobbie , C.H. and Wolf, P.O. (1953) "The Lynmouth Flood of August 1952" Proc. Inst. Civil Engineers, Part III, p 541

Douch, H.L. (1964). East Wheal Rose: the history of Cornwall's greatest lead mine. D Bradford Barton, Ltd, Truro,

Hemery E. (1978) High Dartmoor: Land and People. Robert Hale: London.

Horrocks, R. (1986) Report on the Knowlstone Floods 11 Aug 1986, Internal Report Soutwest Water.

Horsham R. (2012b) Record of summer thunderstorms and floods on Dartmoor. Dartmoor 108: 56.

Ingham, William (1897) "The Torquay Waterworks" Trans. British Association of Waterworks Engineers Vol II, p 131 ff

Izake, R. (1676) Antiquities of the city of Exeter

Kington, J. (2010) *Climate and Weather*, Collins 484pp.

Harrison, A.J.M. (1961) The 1960 Exmouth floods, Surveyor, London, 120, 127-132.

Henderson, C. and Coates, H. (1928) Old Cornish Bridges and Streams.

Lane, H. (Date?) My Camelford (available in Camelford Public Library).

Lewis, S. (1831) A Topographical Dictionary of England, S Lewis, London.

MacDermot, E.T. (1931) History of the Great Western Railway Vol II p232 published by Great Western Railway Company.

Manning-Saunders R. (1951) The River Dart. Westaway Books: London.

Morris C. 1949) The journeys of Celia Fiennes, p 255-256.

Oliver, J. (1969) William Borlase's contribution to eighteenth century meteorology and climatology, Annals of Science, 25 (4), 275-317.

Stanbrook E. (1994) Dartmoor Forest Farms: A Social History from Enclosure to Abandonment. Halsgrove: Wellington.

Tinn, A. B. (1946) This Weather of Ours, George Allen & Unwin, Ltd.

Tonkin, R.E. (2001) Weather Eye Open some notes concerning weather observation in Truro, includes weather diary for Truro 1964 to 1980, RonETon.

Travis, J. (1997) Lynton and Lynmouth: Glimpses of the Past Breedon Books, Derby

Trewman's Exeter Flying Post (Exeter, England), Thursday, November 13, 1800

Wheeler, D. and Mayes, J. (1997) Regional Climates of the British Isles, Routledge, London.

Woodcock, G. (1990) Tavistock's Yesterdays: episodes from her history. (Vol 6, Chapter 5 "The Great Flood of 1890" p 31-34 including photograph captioned 'Aftermath of the flood. The reconstruction of the weir' [looking upstream to Abbey Bridge, Tavistock])

Author/Title? Journal of Meteorology vol 29 No. 293, November 2004--Boscastle flood issue

Webb, J.D.C. (1988) Hailstorms and intense local rainfalls in the British Isles, J. Meteorology 13 (129) Proc of second TORRO Conference on Tornadoes and Storms.

Webb, J.D.C. (1993) Britain's severest hailstorms and 'hailstorm outbreaks' 1893 – 1992, Journal of Meteorology 18, 193, 313-327

Whetter, J. (1991) Cornish weather and Cornish people in the 17<sup>th</sup> century. Lyfrow and Trelyspan, St Austell.

Whiter, NE (1982) Report on the chulmleigh floods 12 July 1982, Internal report South west Water 1982

Wood, M. (1999) In Search of England; journeys into the English Past, Penguin Books, London.

Worth RH. 1918. Thirty-sixth report (3rd series) of the committee on the climate of Devon: The thunderstorm of August 14th. Reports and Transactions of the Devonshire Association 50: 234–242.

Worth RH. 1924. Forty-second report (3rd series) of the committee on the climate of Devon. Reports and Transactions of the Devonshire Association 56: 153–169.

Worth RH. 1930. Forty-eight report (3rd series) of the committee on the climate of Devon. Reports and Transactions of the Devonshire Association 62: 135–152.

Worth RH. 1931. Forty-ninth report (3rd series) of the committee on the climate of Devon. Reports and Transactions of the Devonshire Association 63: 105–121.

Worth RH. 1939. Fifty-seventh report (3rd series) of the committee on the climate of Devon. Reports and Transactions of the Devonshire Association 71: 91–108.

Worth RH. 1945. Sixty-third report (3rd series) of the committee on the climate of Devon. Reports and Transactions of the Devonshire Association 77: 69–86.

Worth RH. 1971. Worth's Dartmoor: Compiled from the Published Works of the Late R. Hansford Worth. David & Charles: Newton Abbott.