

Flash flood history Thames

Hydrometric area	Rivers	Tributaries	Towns and Cities
37	Roding	Inglebourn, Beam	
38	Lee	Mimram, Bean, Rib, Ash, Stort, Turkey Brook	
39	Upper Thames Cherwell Ock Kennet Blackwater Wey Mole Colne Brent	Swill, Churn Coln, Leach, Ray, Cole, Windrush, Evenlode, Sor, Ray Childray Brook, Thame Og, Dun, Lambourn, Enbourne, Pang Loddon, Whitewater, Hart Tillingbourne Ver, Gade, Chess, Misbourne, Crane, Wandle	Swindon, Cirencester, Cricklade Witney Charlbury, Chipping Norton, Oxford Abingdon Hungerford, Newbury, Reading Basingstoke, Farnborough, Aldershot Petersfield, Farnham, Guildford, Woking, Chertsey Reigate, Dorking, Leatherhead

Date and sources

12 Jul 1233 Doe (2016) (Annals of Waverley, Luard 1865)

13 Aug 1604 Stow Annals Jones et al 1984

3 Jun 1661 Townshend's diary Jones et al 1984

25 Jun 1662 Evelyn Diaries

Rainfall

Doe notes that this is one of the earliest flash flood accounts to mention inundation levels and note economic loss.

Description

<Waverley> (Near Farnham): 'A terrible tempest beyond precedent raged. Stone bridges and walls were broken down and destroyed, rooms and all the offices were violently tumbled together and even at the new monastery there was flooding in several places to a height of 8 feet. Damage and inconvenience in the same house was such that in the buildings in which manifold things both interior and exterior were lost, no one is able or certain to value them'.

<London>: thunderstorm with great rain and hail caused many cellars to be flooded.

<London>: A great rain shower caused flooding in Colman Street and other places. The water rose 4 feet high.

<London>: So violent a tempest of hail and rain as no man in this age has seen, the hail being in some places 5 or 6 inches about

26 Jul 1666
Lamb 1964
31 May 1682
Meaden
Weather Sep
1979
31 Jul 1718
Stamford
mercury 7 Aug

26 Jun 1736
Caledonian
Mercury 13 Jul
Ipswich Jour 3
Jul
Derby Mercury
15 Jul

25 Jul 1738
Derby Mercury
3 Aug, Dr
Wintringham
and Dr Short in
Derby Mercury
1 Aug 1877
(Dr Short
Chronological
History)

Hail was from 5 to 9
inches in
circumference in
Herts, Wilts etc

Hail 'as big as walnuts' fell in <London> and on 27th on the <Suffolk> coast.

<Oxford>: Meaden quotes an extract from a first-hand account which describes an increase in level in a 'round and uniform vessel' which rose 2 feet during the storm.

<London>: Thunderstorm: Several buildings were set on fire and much damage was done to warehouses and cellars particularly in Westminster by the excessive rain which overflowed the streets. Various places were mentioned including St James's, Piccadilly, the road from <Uxbridge> to <London>. Injuries were sustained by lightning but not deaths were reported.

<Bisley> in <Surrey> on 26th the storm came with such rapidity that the waters rose so high in a few minutes in the lower end of the town that the inhabitants were obliged to take themselves to their chambers for safety. It also did great damage to corn in fields. Hail also fell at <Chudwell> in Wiltshire, several inches round, destroying almost all the corn. [Flood damage in the following weeks was widespread with severe flooding from the <<Severn>>, <<Trent>> and in <Oxford>. A bridge over the <<Avon>> at <Persore> was washed away].

<Owney> in <Bucks>: Two boys keeping cows in a field when lightning struck one of them dead and the other speechless. (Severe floods were experienced in Flanders).

<Oxfordshire>: Much damage was done by the late rains; the river seemed floating with haycocks. People had to be rescued by boats.

<Dunstable> <Beds>: A thunderstorm with hail caused a house to be shattered. The hailstones were as big as walnuts.

<Coney> nr <St Albans>: Hailstones fell, most as big as pigeon's eggs and some as big as hen's eggs; some measured 5 or 6 inches about. The hail broke windows and killed fowls.

<Uxbridge>: Thunderstorm with hail that broke many windows in the town and split tiles and wounded passengers (many with bloody hands and faces) and horses on the road; tearing large branches off the trees. Birds were struck dead in the air and fowls were killed. The storm continued for about a quarter of an hour and was felt for a mile and a half around. Some hailstones measured eight or nine inches round.

It was violent at <Islip> in <Oxfordshire> and also at <Marlborough> and <Newbury> whilst at Reading it caused much damage to houses and windows.

20 May 1739
 Gentleman's
 mag.
 15 Jul 1743
 Kearsley British
 Chronologist in
 Hull advertiser
 20 Jun 1834
 27 Apr 1749
 Gentlemans
 mag.
 15 May 1749
 Gentlemans
 Mag, Derby
 Mercury 17 Oct
 1877
 (Chronology)
 10 Jun 1750
 Ipswich Jour 16
 Jun
 11 Jul 1750
 The Scots
 Magazine 6 Jul
 24 Jun 1756
 Derby Mercury
 2 Jul
 24 Jan 1757
 Sussex
 Advertiser 14
 Feb
 29 Sep 1761

<Windsor>: A thunderstorm with hail and large flakes of ice 3 ½ inches long and 1 inch thick.

<Enfield>: Hailstones fell as big as nutmegs broke windows and laid corn for several miles around. A boy and two horses were struck dead by lightning

<Eve Elm> in Oxfordshire: A thunderstorm caused the earth on ploughed land to be carried away down to the gravel. Furniture was swept away in houses.

<Chesham> and <Amersham> (Bucks): There were such violent rains that both downs appeared like a sea. (Large hail occurred in Derbyshire killing birds etc.). The rains were so violent as to half fill the cellars.

<Westminster>: Several houses were struck and damaged by lightning.

<London>: In a thunderstorm with hail the streets were soon overflowed and many cellars filled with water. Many hailstones were 3 inches about but were flat in the Southwark area.

<Grove> <Herts>: Thunder lightning and hail broke windows in the seat of Lord Hyde at The Grove in Hertfordshire with great damage to his gardens. 'By the sudden floods coming down on that day the greatest quantity of eels were caught by the millers and fishermen ever known'. A church was damaged by lightning at <Sevenoaks> in <Kent>.

<Lambourn> (nr <Hungerford>), <Berks>: A prodigious flood was occasioned by a sudden thaw which came down in such a torrent that several houses were washed down and inhabitants escaped with difficulty. A malt house was borne down and three floors of malt washed away.

<Enfield>: In a hailstorm between 12.00 to 1.00 pm, but lasting only 3 minutes, some pieces of ice were 5

Derby mercury
24 Apr 1878
(Chronology)
19 Aug 1763
Webb et al
2001, Webb
and Elsom
(2016)
23 Jun 1764
Oxford Jour 30
Jun
Manchester
mercury 3 Jul

23 Jul 1768
Manchester
mercury 2 Aug

1 Sep 1768 Rain from 5 to 11 at
Derby Mercury night
9 Sep
Gentleman's
Mag.

inches round, several birds were killed and branches torn off trees and infinite damage done.

<Wateringbury><Nettlestead> (Kent) (<<River Medway>>): Hailstones of 80 mm diameter fell; tiles and windows were broken, bark removed from trees and walls battered. Severe hail effects were also noted at <Yalden> and <Barming> where 2000 acres of hops were destroyed.

<Tonbridge> <Maidstone>: There was a violent thunderstorm from 12.00 to 12.40 when Tonbridge was hit by flash flooding and hailstones of 40 mm diameter.

<Oxford>: The worst thunderstorm for many years occurred at 2.00 pm. There was a general inundation of the city with scarce a house not admitting the torrent and many of quadrangles of the colleges. The drains were soon flooded and in less than half an hour the water was half a foot deep. Cellars were filled to their ceilings through East Gate down George Lane, St Aldates, Magpye Lane there were such impetuous currents as to render them impassable.

Widespread thunderstorms were reported in Shropshire, Herefordshire, <Brentwood>. Hailstones at Tottenham weighed about 2 ounces each causing much damage to windows and a great number of hens, ducks and geese were struck and killed; bird's nests with young ones were beaten out of the trees and fruit trees stripped. Another report says the hailstones were as big as walnuts. At <Harlow> in <Essex> a man was killed and others injured by lightning. Also at <Baconfield> in Bucks to <Acton> in <Middlesex> hail broke all the windows facing west and destroyed fruit and vegetables. Similar accounts are from <Windsor> where it broke all the windows in the Duke of Cumberland's Lodge; some hailstones were 6 inches in diameter!

See also South Yorkshire and other Chronologies.

<Greenwich>: A man was struck dead by lightning and a woman at Old Bedlam.

<London>: The thunderstorm. Severe flooding was reported from several locations with 2 men drowned. Water poured down Highgate Hill with such velocity that the road could not be crossed in safety. The water came down in such torrents from Hampstead that the road and the fields about Bagnigge Wells were overflowed. Water rose 8 feet above the normal level of the drain. Two men sweeping out an outhouse were surprised by the flood and drowned. Walls were torn down and trees torn up by the roots. The flood was great on Saffron Hill. The Serpentine River in Hyde Park overflowed its banks and a great part of Knightsbridge was

15 Oct 1780

Northants

Chronicle

Saunders

Newsletter 14

Nov

20 Jun 1781

Oxford Journal

Dublin Evg Post

7 Jul

25 Jun 1783

Kentish Gaz 9

Jul

24 Aug 1783

Derby Mercury

28 Aug

Kentish Gaz 3

Sep Northants

Mercury 8 Sep

5 Jun 1784

Gilbert white

25 Sep 1797

Staffs

Advertiser 30

Sep

‘The storm was of the most continued violence of any we can remember’.

flooded. It filled houses to a depth of six or seven feet and washed down one house and drowned its occupant. <Windsor>: Persons and cattle were drowned.

<London>: Widespread thunderstorms were reported with many deaths and injuries by lightning A woman at <Lambeth> had a child killed in her arms. A horse, cows and sheep were killed. At <Hammersmith> the west end of a church was thrown down along with several houses in the same neighbourhood with 3 killed in the ruins. Houses were damaged at <Putney>. A man and his horse were killed sheltering under a tree near <Epping Forest>. A corn mill was destroyed on <Barnes Common>. Many large trees were torn down and hedges overturned. (No flooding was reported)

<Oxford>: In <Berkshire> at <Farringdon Hundred> great devastation occurred from a thunderstorm; the storm lasted from 2 till six in the evening and was accompanied by pieces of congealed ice shattering windows in houses in <Longcott>. On flat ground the surface was covered to a depth of 5 inches. It mainly affected country parts.

<Oxford>: In this city where we were visited only by the outskirts of the storm, the streets were suddenly inundated and few of the houses were proof against the sudden and heavy fall of water. Yet within a mile or two SE no thunder or rain were experienced.

<Witney>: a man and woman were killed by lightning. A horse was killed at Islip.

<London>: A thunderstorm continued for four hours in the night; vast damage was sustained in warehouses and cellars near the waterside. Among the slaughterhouses between Saffron Hill and Turnmill Street above 1000 lambs sheep, hogs and calves were afloat and were with difficulty saved from drowning. Buildings were damaged by lightning and trees destroyed. In the neighbourhood of Pimlico, the water rose amazingly so that part of Buckingham House was overflowed; the water rose 12 to 16 inches. Five horses were struck dead in East Barnet.

<Alton>: A violent thunderstorm with ‘hailstones 3 inches in girth’ and such torrents of rain that rocks weighing 2 cwt were torn out of the hollow land towards Alton.

<Windsor>: A thunderstorm with one of the heaviest rainfalls ever remembered caused the roads to become impassable. The Hope Public House at Frogmore was completely surrounded and the residents were unable to open the doors and so retreated upstairs.

**7 Jul 1801
Lancaster Gaz**

11 Jul

4 Jul 1805

Chester

Chronicle 5 Jul

24 Jul 1806

Morning

Advertiser 25

Jun

1 May 1815

Northampton

Mercury 13

May

26 Apr 1818

Stamford

Mercury 1 May

Hampshire

Chronicle 11

May

8 May 1818

Morning

Advertiser 12

May Kentish

weekly Post 12

May

8 Sep 1819

Windsor & Eton

<London>: A heavy thunderstorm in which The Strand resembled a canal. The storm raged with violence for half an hour. Chimneys were struck, people injured

<London>: A thunderstorm lasted about 20 minutes and deluged the streets and broke a number of windows.

<London>: The thunderstorm commenced at 2.30. The rain soon deluged the streets and overflowed the ground floor of every house in a low situation. It resembled the bursting of a waterspout; the spouts and gutters of houses were overpowered and the water entered the garrets of many houses. The storm continued nearly without intermission for nearly an hour.

<Oxford>: A thunderstorm with rain and hail continued for about two hours and deluged the streets making them impassable. A horse was killed by lightning.

A very severe thunderstorm was experienced in the neighbourhood of <Wantage> in <Berks>. It was accompanied by an inverted cone whirlwind ('waterspout') and hail 4 ½ inches in circumference. There was no reference to flooding. (Flooding occurred near Boston in E Anglia).

<Hampstead>: A severe thunderstorm was experienced at 11.00 at night, also at <Hendon>, <Dunstable Redburn>. More than 12 large trees were blown down at Hendon. The hailstones were so large as to break the church windows.

<London>: The heavy rain flooded Brixton from the Causeway to the Washway and lower parts of Kennington so that the area had the appearance of a large lake. The flood was so extremely rapid as far as the Kennington Oval that it swept away everything that interrupted its progress. The creek along the road from Brixton Causeway to the White Swan was like a rapid river. A man was drowned.

The reservoir at Hampstead burst and water flowed into Battlebridge inundating streets and about 200 houses from the Smallpox Hospital to the Northumberland Arms. Several people are reported drowned and others escaped by ladders from upstairs windows.

<Oxford>: In a thunderstorm many houses were flooded some to a depth of 2 feet. The rain continued nearly the whole night.

Exp 12 Sep

20 Jul 1820

Morning Post

22 Jul

<London>: A short sharp thunderstorm lasting only about half an hour caused serious flooding in various parts of <London> rendering streets impassable and more like rivers. Kitchens and cellars in Westminster and other parts of town were flooded and furniture destroyed. In Hampstead a building was swept away. The neighbourhood of Kennington and Brixton Washway suffered devastation with fences stiles and sheds destroyed. Roads were torn up.

16 Nov 1821

Hull Advertiser

23 Nov

Morning Post

24 Nov

<Windsor>: All the low grounds are inundated. The land flood from the Forest came into Sheetstreet Road so that horses and other animals were with difficulty saved and sheep must have been washed away. The storm extended many miles around the neighbourhood. (No thunder was mentioned). The Hope Inn between <Windsor> and Frogmore had 4 feet of water in it.

<Guildford>: A bridge across the junction Navigation between the <<Arun>> and the <<Wey>> between <Guildford> and Horsham was washed away and a man was drowned. At Kingston the Thames overflowed the turnpike road at Ditton.

14 Jul 1824 The

Scotsman 21 Jul

There was hardly a breath of wind during the storm.

<London>: A thunderstorm affected mainly <Enfield>, <Waltham Cross>, <Cheshunt>; it was accompanied by hail and lasted nearly two hours. Cattle were killed by lightning between <Banbury> and <London>. Some hailstones were 1½ inch in diameter and broke every window from Enfield Wash to <Hoddeston>. Several horses were killed.

Similar storms have been widely reported within 200 miles of the Metropolis.

29 Jun 1826

Hampshire

chronicle 3 Jul

Bells Weekly

Messenger 3

Jul

<Ware> <Herts>: A thunderstorm came on so rapidly that within a few minutes water ran down the streets like a river and flooded a great many cellars and houses. Hail destroyed much greenhouse glass and hail accumulated to a depth of 4 inches. Hailstones were an inch in circumference. Lightning damage included one woman killed at <Oakham> and several sheep and beasts at Gretton Woods, a church struck at <Duddington> where a pony and six sheep were also killed.

<London>: Hailstones caused havoc to skylights. Some hailstones measured 3 ½ to four inches in diameter.

<Bagshot>: Hail also did much damage with an estimated 60,000 panes destroyed. A cow was killed by lightning. The storm also affected <Eton>, <Windsor>, <Uxbridge> and <St Albans> where the hail was 3 inches in circumference.

3 Aug 1826

Bells Weekly

<London>: The thunderstorm lasted 3 to 4 hours. Kitchens and cellars were deeply flooded in the East end, some to a depth of five feet. A woman and two children at Stepney Fields were rescued when they found their

Messenger 6

Aug

8 Jul 1827

Evening Mail 9

Jul

7 July 1828

Western Times,

Morning Post

16 Jul, Luton

times and

Advertiser 24

Oct 1902

bed floating. At the north side of Lambeth Walk the flood ejected many people from their beds.

<London>: For nearly a quarter of an hour there was a remarkably heavy fall of rain mingled with hail but the storm continued for 3 hours. The water flowed in torrents along the streets; several houses were flooded in the Cowgate at the west end of the Grassmarket and at various other low lying places

<Aylesbury>: The storm continued nearly all night. The water rose several feet in a short time and ricks of hay surrounded to a depth of four feet or carried away. At <Quainton> rooks and smaller birds were struck down by very large hailstones, 4 ½ inches in circumference. At <Quainton> and <Ludgershall> hay was carried away by the flood when the water rose several feet in a short time.

<Claydons>, <Horwood> and <Nash> (near <Milton Keynes>: The storm continued for 2 hours; the drains were overcome and at Claydon House the cellars were filled in a few minutes. At <Bottle Claydon> the hailstones were 4 ½ inches round and broke windows.

<Windsor>: The neighbouring villages of The <Claydons>, <Horwood> and <Nash> had flooded cellars, broken windows and agricultural damage.

<Luton>: The thunderstorm occurred from 6 to 8 in the evening and then after a short interval started again. Water was running through houses and shops on London Road. The water was running the whole width of the road 6 or 7 inches deep. In the middle of Luton the cellars were all full and water ran through the parlours. The LT report gives the names of sufferers but not the street names but several shops were flooded to a depth of 2 feet 6 inches. The baker next to the Bell Inn was full of water. Some houses were undermined and partly destroyed. There was much damage on Chapel Street. After the storm the middle of the town was blocked up with mud and sand about 3 feet deep.

Flooding was also severe at <Stevenage>, (water up to horse's knees), <Guildford> etc with broken windows and animals killed. Persistent rain also affected Norfolk. At <Bampton> in <Oxfordshire> a thunderstorm lasting 2 hours caused streets to be flooded to a depth of 2 feet with many houses affected. Large pieces of ice broke windows.

<Reading>: The town was visited by a tremendous thunderstorm. Cellars were flooded in the low part of town and in the Forbury the water was a foot deep.

10 May 1829

Hampshire

Chronicle 25

May

30 Jul 1831

Oxford Uni

Herald 6 Aug

25 Sep 1831

Leamington

Spa Courier 8

Oct

16 Jun 1835

Oxford Jour

5 Jul 1836

Manchester

Times (from

Dumfries

Courier) 16 Jul

Inverness

courier 13 Jul

15 Aug 1836

Berkshire

Chronicle 20

Aug

14 May 1837

Coventry

Standard 19

May

26 Aug 1837

North Devon

Journal 31 Aug

<London>: The thunderstorm lasted above an hour. The heavy rain caused the principal streets to be flooded. At Hackney the roads were completely impassable and many cellars completely inundated. The hailstones were as big as gooseberries. A miller was killed by lightning at Edenbridge (near <Sevenoaks>) Kent.

<London>: A thunderstorm without intermission continued for 2 hours. The houses in the vicinity of Battle bridge were completely flooded with rain that rushed from Hampstead and Highgate Hills. Inhabitants were compelled to take shelter on first floors so sudden was the flood. Houses were struck by lightning.

<Moreton in the Marsh>: A severe thunderstorm with hail or rather large pieces of ice caused much damage to hothouses at <Sezincote>, <Bourton> on the hill and other places. The pieces of ice were nearly as large as walnuts.

<London> was also affected by thunderstorms where large hail or transparent ice the size of a large walnut, broke much glass. Two men and a girl were killed by lightning.

<Reading>: A thunderstorm for about an hour causing streets to be flooded in the lower part of town, with the water knee deep in several houses. The rainfall at the Philosophical Institution measured 1 ¼ inches. The rain was limited in extent. The storm also visited the south and east of <London> and a boy was killed by lightning. At <Ramsbury> the storm was accompanied by large hailstones which broke greenhouse glass and conservatories.

<London>: The storm broke at 15.15 with rain and hailstones of enormous magnitude which did great damage to green houses and blocked up gutters so that houses were soon inundated. The storm was particularly severe at Pentonville and Islington and a boy was killed by lightning at Pentonville.

<London>: The metropolis and several miles round was visited by a thunderstorm from shortly after 11.00 and continuing until 15.30, flooding the streets and rendering them nearly impassable. The storm travelled from southwest to northeast and was most severe at Hanwell, Ealing, Acton, Willesden, Harrow and Edgware. A bull

**Oxford Uni
Herald 2 Sep**

**6 Jul 1838 Lincs
Chronicle 13 Jul
23 Aug 1838
Kendal
Mercury 1 Sep
18 Jun 1839
Bells Weekly
Messenger 24
Jun
3 Jan 1841
Globe 4 Jan**

**2 May 1841
Stamford
mercury 7 May
18 Jun 1841
Morning post
22 Jun
20 Jul 1842
Reading
mercury 23 Jul
3 Aug 1842
Oxford
Chronicle 6 Aug**

and a horse were reported killed by lightning. Much damage was done to trees.

<Uxbridge>: Villages in the vicinity were much affected including Ruislip, Hillingdon and Eastcote where 2 people were killed by lightning. Other lightning damage was reported here but no flooding.

<London>: In a thunderstorm a man and his wife were struck by lightning in bed and killed in Kensington. There were no reports of flooding

<London>: The thunderstorm affected mainly the western suburbs. Although the rain was described as heavy there were no reports of flooding but only of lightning destroying trees and damaging buildings.

<London>: A thunderstorm with a very heavy fall of rain occurred in the western parts of the city including Pimlico, Eaton Square and Hyde Park corner. The ice was as fragments of ice a full inch in diameter. They did much damage to green houses. However it only lasted a quarter of an hour but the streets were soon deluged with the rain.

<London>: A morning thunderstorm lasted an hour and a half and was accompanied by hailstones of very large dimensions. Streatham Church was damaged by lightning and a subsequent fire. Spitalfields church was also damaged. Storms were also reported at <Windsor>, <Wallingford> and <Brighton> but there was no reference to flooding.

<London>: Two severe thunderstorms occurred during the day but neither lasted more than 20 minutes. Rain mingled with large hailstones fell in torrents in the second storm and serious damage was done to young plants and glass houses. In the eastern parts of the metropolis several houses were flooded.

<Hertford>: In a thunderstorm the hail poured down in torrents causing great damage to corn lands. Many head of cattle were found dead upon the land. Two cottages in <Biggleswade> were struck and burnt to the ground. A woman was killed by lightning at <Hatfield>. The town of <Hertford> was flooded for several hours

<Basingstoke>: A thunderstorm with hail continued for nearly two hours. Many houses in the lower part of Church Street were flooded, with the street having the appearance of a rapid river. Two cottages on Hatch Warren Farm were set alight and entirely consumed in less than half an hour. (The occupants were absent).

<High Wycombe>: The thunderstorm had pieces of ice above half an ounce in weight. Several hundred panes of glass were broken and in one house upwards of 2000 panes. In the town the principal damage is in Queen Square and High Street facing the northeast. The storm came on so suddenly that many houses were flooded

9 Aug 1843
Yorkshire
Gazette 19Aug,
Webb et al
2001, Oxford
times 24 Jul
1880, Webb
and Elsom
(2016)
15 Aug 1843
Bells Weekly
Messenger 21
Aug
6 Jul 1845
Bradford
Observer 10 Jul
Bristol Mercury
12 Jul
1 Aug 1846
Various papers,
BR 1917

Webb and Elsom suggest this is Britain's most severe hailstorm with 12 to 18 hours of thunderstorms across the Midlands. The devastation led to the launching of hail insurance which later became Norwich Union. The main hail swathe developed in the N Cotswolds over N Oxon

Sir J. Clark Boss records in his Antarctic Voyage (London, 1847) that on August 1st, 1846, above 4 inches of rain fell between 3.30 and 6.30 p.m. in London. This is possibly the same fall as another referred to by Dr. Buchan, who says that 3.12 in fell in 2 h 17 m at Camberwell on this day.

before the inhabitants became aware of it. It lasted about half an hour and did not extend more than 2 miles to the westward.

Thunderstorms were widespread in East Anglia and elsewhere but with general rain from 9 in the morning till 10 at night.

<Chipping Norton>: Hailstones were globular 2 ½ inches in diameter with evident signs of increase in size during their fall [presumably concentric layers?]. Banbury Guardian reported that 50,000 panes of glass were broken in 20 minutes and slates were also broken. The storm moved on towards Cambridgeshire.

<Enstone>, <Oxfordshire>: Welsh and Stonesfield roofing slates were 'pounded to pieces' (Webb). Hailstones had an average diameter of 47 mm with the largest 60 to 65 mm. Similar conditions prevailed at Great Tew and Sandford St martin accompanied by strong winds with all windows facing the storm smashed in

<Stow on the Wold>: Large jagged lumps of ice damaged windows and crops.

<London>: Torrents of rain and hail speedily flooded the whole of Clapham common as well as inflicting damage on hot houses. In many places in the vicinity horses drawing omnibuses were up to their knees in water. Much damage was done by the floods to houses on the Brixton and Clapham Roads.

Two men were killed by lightning at <Hungerford> in <Berkshire> and another near <Andover> along with three horses he was leading.

<London>: Thunderstorm with hail and heavy rain affected <London> and surrounding areas. Very large hailstones some weighing from an ounce to an ounce and a half were said to be as large as walnuts. The storm lasted 3 hours and 10 minutes. Public buildings which suffered from breaking of glass domes and skylights were Buckingham Palace, Somerset House, Burlington Arcade, Paddington and Euston Stations and Kew Gardens. All buildings having skylights were more or less injured. The Sun newspaper office on the Strand had 30 panes broken. Fleet Ditch overflowed and flooded many cellars and underground apartments. The Houses of Lords and Commons were flooded from the destruction of fan lights. At the Houses of Parliament upwards of 7000 panes were broken; 300 panes of glass were broken at Scotland Yard.

At Buckingham Palace the Royal Gallery is lighted by a skylight and there is a dome over the grand staircase and

the Ministry staircase. All these have been utterly destroyed and the ruthless torrent of rain and hail poured in with the force of a cataract making the various staircases so many waterfalls. Basement floors were completely flooded. The Picture Gallery was in some danger which was flooded to a depth of many inches. Pictures were removed to safety and none were apparently damaged. At the palace many thousand squares of glass are demolished with an estimate of £1800 to £2000 repair damages. The parade in front of the palace from Constitution Hill to James Street Buckingham Gate was one sheet of water so deep as to be impassable to pedestrians. The drain in Green Park burst and formed a river to St James's Park where it dismantled flower beds. Birdcage Walk was impassable to pedestrians.

On the Surrey side of the river flooding occurred from the choking of sewers in Bankside the space between the Thames and Upper and Lower Stamford Street, the York Road and even up Charlotte Street and the entire district known as Lambeth Marsh. In Princess street, Canterbury Street, Lower Hatfield Street and all the avenues abutting the Thames, houses were flooded and furniture afloat. Fleet Street became a complete river ten minutes after the storm commenced. Cellars of houses in Fleet Street, Farringdon Street, the Old Bailey were completely inundated. Furniture was seen emerging from the Fleet Ditch into the River Thames near Blackfriars Bridge. In Bull's Head Court off Peter Street the flood was 10 feet high, sweeping away horses, cattle and furniture Two houses were carried away in Brookhill.

Clerkenwell: Islington and the upper part of Clerkenwell suffered little damage as the water was carried off rapidly but there was great damage in the lower parts of Clerkenwell. The water began to rise rapidly in the streets between Brook Hill formerly Mutton Hill and Saffron Hill and the upper end of the new line of streets leading to Farringdon Street. In Bulls Head Court off Peter Street it rose nearly 10 feet high, sweeping horses and cattle and furniture.

The neighbourhood of Kings Cross was completely flooded including Bagnigge Road. The accumulated water from Pentonville rushed into the row of tenements opposite the police station as to drive the inmates to their attics. The hailstones were like irregular lumps of ice. Boys were floating on articles of furniture from the tenements.

The Botanic Gardens in Chelsea suffered badly from breakage of glass and the loss of florists in the neighbourhood has been very great. The nursery grounds within six to eight miles of the metropolis presented a fearful scene of devastation, with young trees torn up by the roots and many cottages unroofed. In Fulham and Chelsea, hailstones were 2 inches in circumference

6 Sep 1846
Morning
Advertiser 8
Sep, Globe 8
Sep
14 Jul 1848
Salisbury and
Winchester
Jour 22 Jul
31 Aug 1848
Reading
Mercury 2 Sep

3 May 1849
Hull Advertiser

In the neighbourhood of Brompton, Kensington and Hammersmith, the hailstones were not so big but in the lower part of Kensington and Brompton several houses were flooded from water descending like a torrent from Notting Hill

At <Greenwich> the amount of sand and gravel that has been washed from the Kentish Hills is astonishing leaving the high roads bare

The storm passed from <London> into Kent and caused damage at <Woolwich> and <Plumstead>.

<Windsor>: At Ditton Park upwards of 2000 panes of glass have been broken and hot and green houses totally demolished.

<Slough> and <Burnham>: Hail has done considerable damage, beating down corn and destroying gardens.

<Cirencester>: Two sheep and one ox were killed by lightning.

At places in the vicinity of <Oxford>, the lightning caused damage but there were no reports of flooding.

Various other descriptions follow of floods in the <London> area and beyond mostly from the hail and lightning at <Reading>, <Oxford>, <Newbury>, <Farringdon>, <Cirencester>, <Wantage> etc. 'Judging by the damage done the storm has been more severe than any that has occurred since the celebrated one in 1809'.

<London>, Plaistow: A hailstorm caused alarm with hailstones many inches in circumference, some 5 ¼ inches, and caused serious damage to windows and market gardens and even to the stuccoed front of the Abbey Arms. The storm also affected several areas of South <London> at Streatham, <Croydon>, Brixton and Clapham with the rain mingled with large hailstones but was localised.

<Oxford>: Rain and hail came down in torrents for nearly half an hour completely deluging the streets. A building was damaged by lightning.

<Buckingham>: The storm has done much damage and people were struck and injured by lightning. A vast quantity of glass was broken by the hail. Animals were killed and crops damaged.

<Oxford>: A thunderstorm with hail and heavy rain occurred at <Raousham>, <Dunstew>, <Steeple Aston> and a short distance around. It continued with unabated vigour for two hours. A park wall was washed down and several cottages were flooded. Some barley and other crops are ruined but the wheat is already harvested and stored.

<Farnborough>: Several hailstones taken up were 6 inches in length, thousands averaging 2 to 3 inches, of oblong shape. The hail lay from 8 to 12 inches deep. In dwelling houses the water rose 4 feet. The storm was

11 May

also experienced at <Cheltenham> and <Swindon> but flooding was not reported. At <Yately> a whole field of barley of 13 acres was swept away and the soil cut down to a depth of more than 2 feet. At <Newbury> the hailstones measured 4 ½ inches round and were of a curious shape.

4 Jun 1849

Northampton

mercury 9 Jun

Oxford Jour 9

Jun

<Banbury>: A thunderstorm from 11 pm to 3 in the morning caused great damage to gardens by hail; many thousands of panes of glass have been broken in hot houses and house windows in <Banbury> and Bloxham. Many hailstones were the size of pigeon's eggs. Water pipes have burst from their inability to take off the flood and several houses were flooded, many of them for the first time. An inch of rain fell in less than three quarters of an hour. A man was killed by lightning. The storm was said to extend to parts of Gloucestershire, Northamptonshire and Warwickshire. [Brief notice of the thunderstorm was given at Market Harborough, Kettering and Rugby without serious flooding or hail].

<Abingdon>: The most terrific hailstorm occurred than has been known for some years and much injury has been done to the wheat and bean crops especially in the parishes of <Drayton> and <Steventon> where it caused breakage of skylights and green houses.

<London>: (6th Jun): A hailstorm caused great damage to glass in Hammersmith and Turnham Green with many thousands of squares broken.

26 Jul 1849

Cambridge

Independent

Press 4 Aug

<London>: A thunderstorm overspread the whole of <London> and surrounding neighbourhood with some hail. Buildings were struck and damaged in several places. The torrents of rain completely overcharged the sewers and at <Charing Cross> where there is a junction of several sewers a vast body of water collected and rushed up sewer grating forming jets of water 10 to 20 feet high inundating the basements of adjoining houses, particularly Morley's Hotel, and Branch Post Office. On the water subsiding, the premises were covered by a thick black mud. Four people in various places were struck dead by lightning. Several houses in <Whitechapel> in North Street and West Street were destroyed by lightning.

12 Apr 1850

Hertford

Mercury 20 Apr

Bury & Norwich

Post 24 Apr

<Hoddesdon>: A thunderstorm with hail lasted upwards of an hour. The hail lay on the ground nearly a foot deep. Many of the houses became flooded, the drains being stopped, considerable damage being the result. The roofs and upper rooms were greatly injured [presumably by the hail]. Fruit trees and vegetation sustained much damage. The storm scarcely extended half a mile from the town in any direction.

<London>: The enormous hailstones that fell in the suburbs did considerable damage especially in <Kilburn>, <Deptford>, <Fulham>, <Camberwell> etc. Several cases of houses being overflowed and the inmates narrowly escaping occurred. The depth of water in some cottages was from 26 to 28 inches deep. A man was killed by

lightning at Lisson Grove.

[On this occasion there was the most remarkable hail storm in Dublin]

26 Jun 1850

Reading

Mercury 29 Jun

<Basingstoke>: A thunderstorm with hail and rain broke with appalling violence over the town. In a few seconds the streets especially in the lower part of town were flooded, the water reaching a depth of 2 feet, inundating cellars and houses and floating away furniture for some distance. The storm continued unabated for about half an hour. The windows in almost every house were broken as well as skylights and greenhouses. The destruction of fruit and garden crops was extensive. The hail lay on the ground in some places 18 inches deep and some of the stones measured upwards of 3 inches in circumference. It would seem the storm expended itself principally over the town.

16 Jul 1850

Bradford

Observer 25 Jul

In parallel with severe flash floods in Lancashire, storm effects were noted elsewhere in the country, mostly from lightning. At <Tilehurst> (W of <Reading>) a sawyer was struck dead in a field when lightning struck his saw which he was carrying.

<Chatham> and <Rochester>: The thunderstorm was accompanied by a heavy fall of hail and rain. Lightning damage to houses was reported but not flooding.

<Reading>: the thunderstorm lasted from 2 to 4 in the afternoon and caused several of the lower streets in the town to be flooded and impassable to pedestrians being nearly 1 foot deep.

A girl was killed by lightning at Worksop. The storm also was 'destructive in Scotland'

23 Jul 1851

Oxford

Chronicle 26 Jul

5 Jul 1852

Oxford Journal

10 Jul

<Abingdon>: the heavy rain fell for upwards of an hour and completely deluged the streets flooding all surface rooms and doing considerable damage in the cellars.

<Oxford>: It was one of the most destructive hailstorms know in this locality with the storm lasting more than 2 hours. Skylights and windows were smashed in various parts of the city. The drain along Merton Fields burst in several places. At <South Hinksey> there was a perfect inundation with one house flooded to a depth of 6 feet. The force of water was so great that it forced down some walls. The damage to glass and crops from hail extended to <Chipping Norton>, <Moreton>, <Bourton on the Water>, etc.

<Moreton in the Marsh>: Hailstones were pieces of ice more than an inch square and most were as large as walnuts. Almost all the windows on the front side of the street were broken.

<Abingdon>: The drains were totally inadequate to carry the flood that rushed down the street. At the junction of Broad Street with the Stert where there is a confluence of street drainage there were several feet of water

25 Jul 1852
Shipping and
Mercantile Gaz
25 Jul

on the road and occupants of houses there were obliged to retreat to their upper floors. A cow at Shippon was killed by lightning.

<London>: The thunderstorm started at 5.00 pm and continued for upwards of an hour, deluging the streets and flooding numerous houses in low-lying situations. It was most severe in Walworth and vicinity. Several houses were damaged by lightning. On the south bank of the Thames at Lambeth shop cellars were flooded by the overflowing of the drains. On the north side of the Thames Farringdon Street New-bridge Street and the lower end of Fleet Street were upwards of 12 inches under water. In <Spitalfields> the water rose in some places as high as 3 feet and flooded cellars and kitchens before inmates had the chance to remove furniture etc. In the vicinity of the General Post Office the roads were completely impassable on account of the great deth of water which accumulated so rapidly

8 Sep 1852
Herts Guardian
11 Sep

<Hertford>: The town was visited by an extremely violent shower and in a few minutes Fore Street in the vicinity of Salisbury Arms was quite flooded. Church Lane was the bed of a torrent and swept into offices. Opposite the gaol the road was impassable but the greatest stoppage was at The Wash near the site of the old Ford where the water was nearly knee deep. Flooding of houses also occurred at <Hertfordlingbury>

18 July 1853
Westmorland
Gazette 22 Jul
Manchester
Courier 23 Jul

Storms and floods were described for various parts of the Midlands and South. Of note is <Banbury> where the rain started at 6 pm and by 9 pm the banks of the <<Cherwell>> were overflowed carrying away hay from the meadows. A corn mill was inundated to an extent greater than known for 50 years. Skembridge was rendered impassable. There are also notes of thunderstorms and flooding in Leicester, Nottingham Wales and <Reading> but prolonged rain was the main cause. The <<Cherwell>> at <Banbury> was also overbank.

14 Jul 1855
Cheltenham
chronicle 17 Jul
Bucks Herald
21 Jul

<London>: Many of the small streets at the east end of <London> were flooded for several hours, market gardens were inundated and much damaged.

<Bucks>: Hail broke glass at many places in the county including <High Wycombe>, <Amersham>, <Missenden> where the Abbey had 2000 panes broken. The hailstones in many places were large than walnuts (4 ½ inches in circumference). Estimates at Missenden were of 3 ½ inches circumference.

23 Aug 1855
Liverpool
Mercury 28 Aug
21 Jun 1857
Oxford Jour 27

<London>: The thunderstorm was of several hours duration and the hail which fell with the rain were ½ inch in diameter. Damage was reported in the nursery grounds at Islington, Stoke Newington and Stamford Hill

<Wallingford>: A thunderstorm in which the rain lasted an hour deluged the whole town and filled many cellars and low buildings. Castle Street was flooded to a depth of 3 to 4 feet completely flooding houses. The Lamb

Jun

Hotel cellars were flooded to a depth of 4 feet. The water also got into houses in High Street and elsewhere where there is no recollection of a similar occurrence.

<Crowmarsh Gifford>: The parish church was flooded (Sunday) and the congregation had to get out on boards and stools. The whole street was inundated to a considerable depth.

<Banbury>: It was estimated that every acre of ground in <Banbury> received at least 300 hogsheads of rain! Cellars were flooded. A house was damaged by lightning at Sibford Ferris.

14 Aug 1857
Bells Weekly
Messenger 15
Aug Morning
Chronicle 17
Aug

<London>: Headline (BWM) – tremendous storm and enormous destruction of property. The storm affected both sides of the Thames and was the worst storm for many years. The hail, as large as ordinary sized nuts, fell with such fury that the city appeared like a winter morning. At Farringdon Street and Holborn Bridge in less than 10 minutes after the rain started the road was covered upwards of 6 inches. Great damage was done to fruit trees and nurseries.

In the suburban districts of <Homerton>, <Hackney>, <Old Ford>, <Kingsland>, <Bow>, <Haggerston> <Dalston>, <Shacklewell Green>, <Stoke Newington> and other eastern parts of the metropolis property was affected by the floods. The sewers in the district of <Stepney>, <St Georges> in the East and <Shadwell> in many places have forced up the brickwork and pavement. The warehouses situated at the waterside in <Wapping>, <Shadwell>, <Limehouse>, <Poplar>, <Blackwall>, <Rotherhythe>, <Bermondsey>, <Horsley Down>, <St Olaves>, <St Saviour's>, <Lambeth>, <Vauxhall>, <Battersea>, <Chelsea>, <Millbank> and <Westminster> were all more or less flooded by the heavy rain and wind. The effects were severe in Victoria Park, Bethnal Green (who are unfortunately almost without drainage) where there were large pools of dirty water.

The hailstones were unusually large and the destruction of glass in nurseries and hothouses has been extensive in the south and eastern suburbs

5 Jun 1858
Reading
Mercury 12 Jun
12 Jun 1858
Hereford Times
19 Jun

<London>: The storm lasted between 6 and 7 in the morning and was most seriously felt in the eastern part of the metropolis especially <Hackney>, <Homerston>, <Dalston>, <Kingsland>, <Old Ford>, <Bow> and <Stratford> and low lying places of Essex. Gardener's grounds were inundated and much damaged.

<Reading>: Hailstones were of large size some like square pieces of ice fell in torrents for 12 to 15 minutes; a vast number of panes of glass were broken. The gardens northward of <Reading> suffered badly from the hail which lay in places 6 inches deep. The storm was said to be the worst for 20 years.

<Caversham>: Much injury was caused by the hail to crops and windows.

16 Jun 1858

<Chipping Norton>: In a two hour storm during the night hail fell first turning to rain. The rain flooded some

Oxford Journal
19 Jun
12 Jun 1859
Herts Guardian
21 Jun
2 Jul 1859
Caledonian
Mercury 5 Jul

cottages at the entrance to the town. Several instances of windows being broken by the hail in the town and surrounding area were reported.

<Hemel Hempstead>: The storm lasted from 2.15 to 3.30 pm. The meadows were inundated and the lanes became impassable and the water from the surrounding hills rushed through the streets of the town and rolled onward to the Gade. Many houses were flooded

<London>: It was the severest thunderstorm that has occurred this season. A man was killed by lightning near <Ealing> and another at <Edgware>. The surface of the carriage drive and of Rotten Row in Hyde Park was washed away; many of the principal thoroughfares were overflowed to a depth of 2 feet and water rushed into basements and cellars. The River <<Wandle>> near the Wandsworth Rail Station became so swollen that it burst out from its usual channel and carried away part of an embankment flooding gardens. Cellars and kitchens in the lower part of south Lambeth and Wandsworth Road were flooded and at the Three Goats Heads tavern the water was 6 feet deep in the cellars. At the Royal Albert near the railway bridge furniture floated about in the building. Battersea, Kennington and Camberwell Parks were laid under water and received great damage. All the market gardens along the banks of the river as far as Kingston were flooded, destroying young crops. Sheep were killed on Ditton Common and several elsewhere, trees were shattered and buildings set alight.

<Chatham>, <Rochester> and <Gravesend>: These towns were also severely affected by the storm with lightning effects but no reports of flooding.

18 Jul 1859
Bradford
Observer 26 Jul

Thunderstorms occurred both in Yorkshire and south of England. The rain was accompanied by large hail and ice of sufficient size that cattle and sheep were reported to have been killed. Ice lay several inches thick in places in Berkshire; many windows were broken and geese had their wings broken. Many buildings were struck in the Bristol area and people injured.

20 July 1859
Webb et al
2009, London
Daily News 21
Jul, Bells
Weekly
Messenger 23

Devastating hailstorm on the N outskirts of <London> and adjoining areas of Hertfordshire and Essex, with widespread destruction of glasshouses, windows and tree bark in the <Enfield> area. There was also severe hail damage on 20th in mid Essex and between <Wokingham> and <Windsor>, Berks.

<Windsor>: large hailstones fell, 2 to 3 inches in circumference; large piles of ice were thrown up in the streets. Tiles and slates were swept from the roofs of houses and crops are beaten flat to the ground. Nearly all the glass in a westerly direction has been broken including upwards of 1000 panes in the Infantry Barracks and the

Jul

Military Church of the Holy Trinity. At the bottom of Castle Hill the flood forced its way into one of the military knight's houses and floated all the furniture. The draper's shop, Bird and Allens was inundated.

<Wokingham>: It is nearly 20 years since the neighbourhood of this town has been visited with such an awful thunderstorm. The rain for half an hour fell in torrents deluging the streets and carrying almost everything with it. Hail occurred but was not serious. In a district a few miles hence from southwest to east (from Binfield to Maidenhead Thicket) for several miles the storm exceeded the violence of the storm of 1840 (1839?). Large rough pieces of ice fell for half an hour; corn has been knocked down and the reapers had to find shelter. The ice lay several inches thick on the ground. Conservatories were smashed and windows extensively broken. Geese were bruised.

<Slough>: Houses were flooded and much damage done to the contents.

<Faringdon> (21st): The storm commenced at 4 pm and although of short duration its effects were more serious than for many years. The lower parts of the town speedily became flooded owing to the tremendous rush of water and the choking of the drains. Much damage was done to furniture. Sheep were killed and the corn beaten down.

The storm reached as far south as Jersey.

5 Jun 1861
Exeter Flying
Post 12 Jun

<London>: At 11 o'clock the storm burst over the northern and western suburbs. Two men were killed by lightning at <Holloway>. The hail fell as large as walnuts and lay in heaps for several hours. Great destruction was caused to flower gardens and conservatory windows. At Notting Hill and some parts of the eastern suburbs the sewers were insufficient to carry off the floods and basements were a foot and more deep in water. The central parts of <London> escaped. At Brompton near the Exhibition Building the roads were flooded
<Calne> <Market Lavington> (wilts): 0.39" fell in 6 minutes but at the same time a storm was raging at market Lavington 10 miles distant.

2 Sep 1862 BR

9 Sep 1863
Manchester
courier 12 Sep,
Hampshire

<London>: The city and for several miles around was visited by a thunderstorm and the rain came down without intermission for nearly 3 hours. Cows and a horse were killed by lightning. Victoria Park grounds were flooded and the lake overflowed the embankments.

<Reading>: The storm appears to have commenced at Ilsley in Berkshire and then proceeded northeast. At Compton 11 sheep were killed by lightning. The storm beat down growing crops of barley.

**Chronicle 12
Sep Windsor
and Eton
Express 12 Sep,
BR**

<Oxfordshire Hills>: Crops were damaged, windows broken and houses deluged. Hailstones were of enormous size and cartloads were heaped together and beans and oats were completely thrashed. Rabbits and birds were killed by the hail.

<Staines>: The streets were completely flooded. A heifer was killed by lightning and a building reported struck.

<Streathley (Berks): A devastating storm crosses over the upper end of the parish tearing leaves and bark off trees and threshing out all the standing corn. Partridges as well as smaller birds were found dead in numbers and a hare found in the middle of the road was killed in all probability by the hail. Twelve pigs were drowned in their sty and hedge banks were washed down in a mass. In one lane I found the water to have stood 3 feet in depth.

**15 May 1865
BR**

<Banbury>: Max. 82.8°. Upwards of an inch of rain and hail fell in 25 minutes during a thunderstorm

**22 May 1865
BR**

<Knockholt> (Kent): waterspout is believed to have burst about 5 a.m. on the high ground near the well-known Knockholt beeches, but rather to the west of them. Its channel, some 40 feet wide, was easily traced for more than two miles down to Brasted Park (between Sevenoaks and Westerham, in Kent) the residence of Mr. Tipping, which was flooded to the depth of 7 feet.

6 July 1865 BR

<Banbury> 2.25" fell from 4pm to 8pm. <Hitchin> 1.42" in 20-30 minutes.

Severe thunderstorms were noted in <Hertfordshire>. Reference to a waterspout which had torn up the rails on the Bedford to Cambridge railway. On this and a later occasion in the same month our little town was devastated by a flood which drove many poor people in the lower part of the town to their first floors. In the southwest

**8 Jul 1865
South Bucks
Free press 14
Jul**

<Cookham>: A short thunderstorm was accompanied by rain and hail for only 10 minutes, during which 0.51 inches fell. the water flooded the streets and poured into many houses.

**29 Jun 1866
Hull Herald 5
Jul, Devizes and
Wilts Gaz 5 Jul**

<Windsor>: Hailstones as large as marbles fell. Enormous hailstones at Cricklewood and at Edgware Road Station in <London> caused much breakage of glass. The effects were very localised.

<Banbury>, Kingston on Thames and Wimbledon: A thunderstorm with heavy hail was reported and the hail covered the streets.

<Binfield Park> Berks: Several thousand panes of glass were broken within a short distance of the church.

10 May 1867
Sheffield
Independent 13
May
Buckingham
Advertiser 18
May, London
Evg Standard
13 May,
Buckingham
Advertiser 2
Oct 1909
(history)

<Buckingham>: In a thunderstorm with hail the size of marbles and some the size of walnuts, the streets were flooded to a depth of 12 inches and dwelling in the low part of town flooded and some had water pouring through them like a deluge. All the windows with a westerly aspect were broken by the hail. A separate report recorded a hailstone 5 inches round and 2 inches across. The largest weighed 1 ounce but it had somewhat melted. Plants are riddled and destroyed. Small birds as well as thrushes and larger birds were found dead in all directions; a dog died of hail injuries. Another report says the hailstones were as large as marbles but lumps of clear solid ice were as large as bantam's eggs and with rough jagged lumps. Fruit trees have been entirely stripped of their fruit and rhubarb and cabbages torn apart. Small birds were found dead in all directions, struck by the hail. Lambs were cut on the head and bled profusely. Cellars in many instances were flooded to a considerable depth. Several thousand panes of glass were broken with many buildings with over 500 panes broken.

<Winslow>: The goods station was partially unroofed by the wind and hailstones measured by the county police(!) were 5 inches in circumference. Similar damage was done at Swanbourne and Claydon stations with garden property destroyed.

<Aylesbury>: The storm blew down trees and walls and flooded the streets. High Street and Castle street had windows and even window frames smashed.

<Wallingford>: Rain and hail descended in torrents and many underground apartments and cellars were flooded.

<Stratton Audley> (Oxon) : During the late hailstorms, 3 hailstones weighed a pound ! this perhaps refers to the storm of 10 May

21 May 1867
BR

5 Jul 1867 BR

Long Wittenham (Oxon)
1.08" in 30 m

24 Jul 1867

Hartlip (Kent) DR 4.78"
Deptford DR 3.98"
Crossness (E London) DR
3.30"

No evidence of thunder or intensity of rain.

26 Jul 1867 BR

Long Wittenham (Oxon)
1.26" in 2 h

2 Aug 1867

Buckingham

Express 3 Aug

<London>: In a fitful thunderstorm during the night many parts of the Thames embankment were flooded and the works in many parts of it entirely stopped.

19 Aug 1867
The Scotsman
21 Aug

<London>: A very prolonged thunderstorm occurred from 21.00 to 05.00 with little intermission of rain and thunder during that period and for a period by strong winds. Several buildings were struck and damaged by lightning. Market gardens were damaged by rain and hail. Scotsman does not report flooding.

Many of the streets became more like canals than paved and drained thoroughfares. Scores of basements in the neighbourhood of <Crystal Palace>, <Upper Norwood>, <Anerly> and <Penge> were flooded. The storm was also reported in Surrey, Sussex and Berkshire.

29 May 1868
Reynold's
Newspaper 31
May

A destructive thunderstorm on 28th in Wales Herefordshire, and Devon, passing on 29th across the midland, southern, and eastern counties, at an apparent rate of about 14 miles per hour. Several persons were killed, and property of very great value destroyed in various parts, especially in Surrey, Sussex, Kent, Middlesex, and Suffolk

<London>: Torrents of rain inundated the works of the Metropolitan Railway to a depth of 10 feet; so suddenly did the flood come on that workmen had to hasten leaving their tools behind. Market gardens were damaged and glass broken by hailstones. The main reports are with respect to lightning; two men were killed, sheep were killed and a horse at Wandsworth, the Parliament building was struck and a church at Southwark.

15 Jul 1868
Bucks Chronicle
18 Jul

<<Kennet>> Valley Berks: The Great Western Railway at <Theale> was flooded. A row of cottages near the Kennet Paper Company mill were struck by lightning. Hailstones of great size fell.

29 Sep 1869
Reading
Mercury 2 Oct

Possibly 30th as rain noted in Cirencester

<Faringdon>: A violent storm fortunately of short duration burst over the town between 9 and 10 in the evening. The houses in the lower part of the town were quickly flooded. Windows facing south were smashed by the hail and strong winds. Villages to the westward were even more severely affected including at <Compton> where sheep were killed by lightning and a barn blown down and at Ashbury where trees were snapped off and hurled a considerable distance.' It is the opinion of many that no storm of equal violence has visited this area since 1846'.

30 Sep 1869 BR
Cirencester 0.70" in 45 m
and 1.30" in 1 h

<Savernake> Station: The floods swept through the office like a river

The date of heaviest fall of the year in Gloucestershire, Herefordshire, and the south of Shropshire, but by no means a heavy fall, the largest amount (at Reevey Farm) being only 1.87"

16 Jun 1870 Southern Times 25 Jun	Thunderstorm with large hail widely reported but with little flooding	<London>: In south <London> the traffic was suspended and in a very short time the streets of <Lambeth> and <Vauxhall> were flooded
11 Jul 1870 BR	Dorking (Surrey) 0.77" in 35 m	
26 Jul 1870 Maidstone jour 1 Aug		<London>: In a heavy thunderstorm many parts of <London> were flooded. A church was struck and a pinnacle knocked off. Due to railway construction works the mouth of the Fleet ditch was partially blocked causing flooding of basement of houses in Farringdon Street and Newbridge Street
31 Jul 1870 BR	Cholesbury (Chilterns) 1.23" in 1 h	
13 Aug 1871 Cirencester Times 14 Aug, BR	Ashbury (Kent) 1.89" in 2 h	<Cirencester> (on R Churn a tributary of Thames): Two thunderstorms occurred during the day and rain and hail fell in deluging torrents. Many houses were flooded and church services had to be suspended.
18 Jun 1872 BR Herts Advertiser 22 Jun	Watford 1.42" in 100 m	<Watford>: The deluge of hail and rain completely flooded the place doing considerable damage to property and making the streets impassable. In a few minutes after the start water was rushing down streets drains were stopped and High Street was flooded to a depth of 2 feet 6 inches and houses to the same depth. Deep gutters were worn in country roads and in places they were covered in sand and mud. A high wall was washed down at Clay Hill <Bushey>, having rushed down the hills from <Bushey> and <Pinner>. Hailstones broke much glass at the Silk Mills. Watford Station was under water and impassable from the road.
24 Jun 1872 BR	Camden Sq (London) 0.53" in 23 m Riverhead Sevenoaks 0.46" in 25 m	
7 Jul 1872 Banbury Advertiser 11 Jul		<Banbury>: After a period of strong winds, heavy rain fell and in a few minutes the streets were flooded notably in Fish Street where it rushed along like a river. In the lower part of town numberless houses were flooded with the furniture floating. Lightning damage was reported at neighbouring villages. <London>: The storm was said to be the most severe of the season. It is feared much damage has been done.
13 Jul 1872 BR	Dartford 0.55" in 18 m and 1.00" in 20 m	
23 Jul 1872 Coventry		<London>: In a thunderstorm the lower level of the Metropolitan Railway was flooded and the traffic was stopped for some hours. There were serious floods in many streets and roads. Brixton church spire was injured

**Herald 26 Jul,
Ipswich Journal
30 Jul
25 Jul 1872
Wilts and
Gloucester
Standard 27 Jul**

by lightning. Lumps of ice as large as filberts were bounding on the pavements.

**7 Aug 1872 BR
29 Jun 1873
Huddersfield
Chronicle 1 Jul,
BR**

Woburn 1.25" in 1 h
Broughton (near Banbury)
1.45" in 35 m
Kings Sutton (nr
Banbury) 1.72" in 4 h

<Cirencester>: The country round about was deluged with rain and hail. Buildings were damaged and sheep and cattle killed by lightning and the hailstones were an inch in thickness [diameter?].

<Pool Keynes> (4 miles S of <Cirencester>): The hailstones were like large pieces of ice; 'the windows are nearly all broken'.

<Swindon>: Very large hailstones fell. At Lydiard Plain the hailstones were 3 ½ inches long and caused bruises on the heads of those on whom they fell.

<Faringdon>: The deluge of rain flooded most of the cellars in the lower part of the town

**13 Jul 1873 BR
24 Aug 1873
Nottingham
guardian 29
Aug, Reading
Mercury 30
Aug, BR**

Croydon 1.00" in 30 m
Dartford: 0.55 in 19 m

<Newbury>: A vast quantity of rain fell in a short time and in several parts of the town and neighbourhood the roads and houses were flooded and at the Great Western Railway station the booking office was flooded.

BR notes: It was heaviest in the Midland counties, and nearly equally severe in Northampton, Birmingham, and Burton-upon-Trent.

<London>: A thunderstorm lasting scarcely half an hour caused the streets to be flooded and sometimes impassable.

<Hungerford>: The rain poured down in torrents and the High Street and Charnham Street were seriously flooded.

**25 May 1874
BR
6 Jun 1874 BR**

Wantage (Oxon) 1.30" in 28 m
Sevenoaks 1.50" in 90 m
Lynnwood 1.63" in 2 h 30 m
Banbury (Oxon) 1.18" in 90 m

On this day (Whit Monday) several detached thunderstorms occurred, but they were mostly more remarkable for their electrical phenomena than for the amount of rainfall.

**10 Jul 1874 BR

11 Jul 1874
Exeter and
Plymouth**

Broughton 1.40" in 80 m
Greenwich 0.70" in 13 m
Pinner Hill (London) 1.02" in 30 m

<London>: A violent thunderstorm struck northeast districts, lasting an hour and a half. Hailstones fell as big as beans accompanied by a driving wind breaking windows and garden produce. The Northeast railway in some cuttings was under water and so high it was feared engine fires would be extinguished. The streets were like

Gazette 14 Jul	Lynwood (Surrey) 1.00" in 30 m Dartford 0.56" in 33 m Sevenoaks 1.82" in 1 h Deptford 1.07" in 1 h Tonbridge 3.00" in 2 h Upper Clapton (London) 1.70" in 2 h	<p>rivers and cellars were flooded to a depth of 2 feet. Tradesmen's goods at <Hackney>, <Bow>, <Kingsland>, and <Clapton> were destroyed to a great extent. The <<Lea>> and Regents Canal overflowed its banks. A man was killed by lightning at Victoria Park, a woman at Admonton, a man at Bow and two boys. Buildings were struck and damaged and trees split. At <Blackwall> not only were houses flooded but on the North London Railway the water was 4 feet deep between <Blackwall> and <Poplar> and traffic to Broad Street was suspended. BR notes: Severe thunderstorms producing local floods in Middlesex, Kent, and Herts. At Guildhall 1.31" fell, at Hackney there is no rain gauge, but judging from the floods the fall was much more. At Tottenham the heavy storm was preceded by wind, which swayed the trees heavily in every direction.</p>
17 Jun 1875 BR	Enfield 0.79" in 17 m	
7 Aug 1875	Forest Hill (S London) 1.48" in 1 h	
London Evening Standard 9 Aug	Bromley 1.25" in 1 h Croydon 1.13" in 1 h Blessington road (London) 2.37" in 90 m	<p><London>: A soldier was killed by lightning on Woolwich common. In the south-eastern districts of <Lee>, <Lewisham>, <Catford>, <Ladywell> and <Blackheath> the sewers suddenly overflowed, flooding basements of low lying houses in the main streets. So sudden was the inundation that people had barely time to get out of the rooms. Such was the pressure of water in the sewers that at one place the water rose through a grating to a height of 5 feet. In the small rivers that run through those villages, the <<Ravensbourn>> and <<Quaggy>>, the former having rarely more than 6 inches and the latter almost dry, the water rose 4 feet in 15 minutes. At <Blackheath> the water came down from the heath with such violence as to threaten the foundations of houses in the lower part of the village.</p> <p><Bicester>: In a thunderstorm the rain was so copious that houses were flooded from the surface and from water rising up from the drains. A cow was killed by lightning.</p>
15 Jul 1876		
Oxfordshire Telegraph 19 Jul		
23 Jul 1876	The storm did not last an hour	
Globe, BR	Tottenham 0.82" in 15 m	<p><London>: A thunderstorm mainly affected <New Barnet> but extended to <Finchley>, <Hornsey> and <Wood-Green>. Hailstones nearly as large as marbles covered the ground and there was terrible destruction of windows. Flooding was not reported.</p> <p><Tottenham>: The hailstorm was by far the most remarkable that has occurred here for many years (I can speak personally of 16 years). It commenced about 8.25 p.m., and lasted about 12 or 15 minutes. The hailstones were large (in the first minute or two of the fall about 0.25" but during the greater part of the storm from 0.5 to 0.75" in diameter for the most part nearly spherical, and breaking with a transparent fracture. I gathered handfuls about 0.6" diam. from the lawn, where they lay from 1 to 5 inches deep. Many were broken into two clear hemispheres by striking against the building. More than 150 panes of glass were broken on the west front of the house, and in one or two windows the sashes were also broken. The air during the storm did not seem violent, but the trees were in most violent agitation. The night following was close and warm, yet, after more</p>

than 12 hours, I picked up next morning stones still 0.5" diam., and more than 30 hours after the storm a tiny glacier of amalgamated hailstones, nearly 3 inches thick, lay under one of the faces of the house. As the papers shewed much injury was done to conservatories and to garden crops, but the area of damage was very limited, appearing confined pretty much between <Edmonton> and <Stamford Hill>. Lightning accompanied the storm, but this did not attract my attention so much as the air darkened as it was with hail and thousands of leaves cut off from their twigs. Ten or twelve birds were picked up on the premises the next morning —killed, no doubt, by the hail. The stones penetrated the vegetable marrows about two-thirds of the stones' diameter. The 0.82" of rain registered must be considered below the mark. The gauge must have been filled in a few minutes, and it is probable that one-third of the hailstones falling into it rebounded and were lost, but it was impossible to go out in such a storm of bullets. Still, registered as it was, a fall of -0.8" in 15 minutes is a very unusual phenomenon here.

16 Aug 1876 BR Long Wittenham (S Oxon)
1.00" in 20 m
19 Aug 1876 BR Purley (near Reading) 0.86"
in 40 m
23 Sep 1876 BR Kings Sutton (Northants)
1.01" in 90 m

4 Apr 1877
Shipping and
Mercantile
Gazette 5 Apr,
Morning Post 6
Apr, Hertford
mercury 7 Apr

11 Apr 1877
Windsor and
Eton Express 14
Apr
22 Apr 1877 BR

<London>: In a thunderstorm the hailstones were as large as hazelnuts. At Dalston Junction rail station the flood rose to a height of 3 feet above the ballast, having flowed along the line in both directions to the low point. In Tottenham and Edmonton the water rose so high that vehicular traffic was suspended. All the low lying lands were flooded to a depth of several feet. At Lea bridge and on the Marshes the water level rose rapidly and the lower parts of Kingsland and Stoke Newington were flooded. Large quantities of glass in hothouses and conservatories were broken and fruit trees stripped of their blossoms.

<Hitchin>: The rain came down in torrents and a few cellars were flooded. There was a sharp fall of hail and some stones picked up were nearly an inch through, though most were the size of marbles. Glass in several parts of town was broken.

<Staines>: Heavy showers of rain for several days and nights were followed by a thunderstorm on 11th. The earlier rain had caused a rapid rise in the Colne and Thames with the banks overtopped and neighbouring fields inundated. The afternoon thunderstorm was accompanied by large hailstones. Damage to building by lightning was reported but not flooding.

<Enfield> (London):. A very local thunderstorm, lasting from 4.45 to 5.10 p.m., passed about a mile to the S. ; was accompanied by violent hail, which, at Winchmore Hill, covered the ground to the depth of 2 in. to 4 in., and did **great damage to fruit trees, and also to greenhouses**. A second storm passed to the N.E., commencing at 5.10 p.m. and lasting till 5.30 p.m.

15 Aug 1877
Bedfordshire
mercury 18 Aug
3 Sep 1877 BR

Kensworth (Beds) 1.25" in 3 h

<Bicester>: In one of the severest thunderstorms for many years the streets and some of the houses were flooded. Corn crops were beaten down and sheep killed by lightning.

10/11 Apr 1878
BR

Heavy rainfall in North <London> with totals up to 4" in 24 hours (but not in the rainfall day) . Noted that no similar fall had occurred in the north <London> area in the last 100 years.

<London><Muswell Hill>: The daily total of 2.34" far exceeds any fall that has occurred in the 24 hours ending 9 a.m., since January, 1872. Hitherto 1.38" on July 14th, 1875, has been the maximum.

18 May 1878
Oxford journal
25 May
13 Jun 1878 BR

Farnham (Surrey) 0.68" in 30 m

<Oxford>: A thunderstorm lasted half an hour. The inhabitants in some parts of the city were inconvenienced by flood water inundating their dwellings to a slight extent. There was some overflow on the banks of the <<Isis>> and <<Cherwell>>. Half a dozen pigs were killed by lightning.

<Weston> <Bath>: A peculiar storm or waterspout occurred. A dark cloud appeared suspended for more than an hour, over Lansdown, which is north of this, about 5 p.m., lightning was followed by a heavy fall of rain and hail, which ran down the hill on the N.W. and S.W. sides, in sheets of water. It continued to fall for nearly an hour. My gauge on the outskirts registered 0.56", but in the immediate circle of the storm, which fell on about 4 square miles, the rain must have been several inches. The rain scarcely reached Bath, on the S.E. of Lansdown, but it caused a very deep flood in this village and very great damage.

23 Jun 1878 BR

Upper Clapton (London) 0.73" in 30 m
Mitcham (London) 1.83" in 2 h
Croydon 2.22" in 2 h 15 m
Addiscombe (Croydon) 1.41" in 12 h 36 m
Camden Sq 1.00" in 10 m and 3.28" in 58 m

<Sutton> (Surrey): In a hail shower, the stones weighing in many cases 1 ¼ oz. The storm was greater in a N.E. direction from Sutton, though even in Sutton scarcely a square of glass escaped being broken.

<Tanfield Lodge>< Croydon>: Heavy rain began about 2, and from then till 4 tremendous storms of rain and hail, the hailstones at times very large, some measuring seven-eighths of an inch in diameter, and being nearly spherical. Rainfall at 4 p, was 1.89".

24 Jun 1878
South Wales
Daily News 25
Jun, Sheffield
Independent 25
Jun

<London>: The thunderstorm lasted two hours; an immense amount of rain fell and then hail towards the end of the storm. Flooding occurred especially in the northern suburbs whilst in the southern area damage was done by lightning. In a short time the basements of many houses in Gloucester Gate, Regents park became flooded and in some of the bye streets leading out of the upper part of Hampstead Road the water accumulated to a serious extent. The Holloway Road from the Cook at Highbury to the Nags Head was so flooded as to get to the interior of tramcars. In one avenue near Tufnell Park two garden walls were swept away

causing flooding of houses. The water was 2 and a half feet deep on a road near Hornsey whilst the main street of the village was blocked by a torrent 20 to 30 yards broad, in some places 4 or 5 feet deep. Stroud Green Road was a river but the most serious was the flooding of the metropolitan line between Kings Cross and Farringdon Street where the line goes under the underground railway. The water was soon 9 feet deep and all traffic was stopped. The storm was local, no rain falling at <Windsor> or other places near <London>.

26 Jun 1878 BR Amwell (Herts) 0.62" in 20 m

28/29 Jun 1878
Bristol Mercury
2 Jul,
Oxfordshire
weekly News 3
Jul, Uxbridge
and West
Drayton
Gazette 6 Jul,
Worcester
journal 6 Jul,
Oxford Journal
6 Jul

<Abingdon>: Showers of hail occurred in a thunderstorm and some of the hailstones were the size of a walnut.

<Steeple Barton> nr <Chipping Norton>: The downpour of rain was such as had not been know here before and the roads were soon turned into rivers, houses were flooded and damage done to crops. The wind at the commencement of the storm blew a hurricane, trees were uprooted and chimneys blown down. The current was very strong and the water deep in the vicinity of Barton Vicarage.

<Rickmansworth>: The storm was similar to the one of the previous Wednesday but of longer duration. Roads in many parts of the parish were completely deluged and became almost impassable. The following day the River <<Colne>> rose rapidly, inundating low lying meadows and gardens near Batchworth bridge.

<Hatfield>: A thunderstorm occurred between 12.00 and 15.00 and the rain was so heavy that in less than 2 hours the lower part of town was submerged to a depth of 7 or 8 feet. Pryor's brewery and house and mill house were extensively flooded and much damage done. Casks of beer were carried away. The storm was so sudden that no precaution could be taken to save furniture etc.

<Chadlington>: The thunderstorm was accompanied by hail as large as beans. The wind rose to nearly a hurricane. The hail did damage to crops of swede and mangel.

<Wantage>: The rain came so swiftly that in less than 5 minutes the streets were like rushing rivers and in five more minutes the houses in the hollow of Grove Street were flooded to a depth of 2 feet. In these 10 minutes nearly an inch of rain fell.

30 Jun 1878 BR Winchmore Hill 1.08" in 14 m
 Addiscombe (Surrey) 0.51" in 20 m
 Eltham (SE London) 1.32" in 40 m
 Wimbledon 0.86" in 45 m
 Much Hadham (E Herts) 1.60" in 1 h
 Balham (London) 1.15" in 1 h
 Bayf ordbury (Herts) 1.85"

<Watford> (Wansford House): The flood occasioned by the fall (1.99") was higher than any for at least the last 80 years.

in 2 h 15 m
Watford 2.74" in 3 h 30 m
Bromley (SE London) 0.83"
in 1 h

26 Jul 1878 BR
3 Aug 1878
Reynolds
newspaper 4
Aug,
Manchester
Evening News 5
Aug, London
Daily News 5
Aug

<London>: The fall of rain and hail was very considerable. A main sewer near the Gloucester Road station of the district line burst and flooded the line causing injury to the permanent way. The water rose 2 feet and impeded traffic. The northern part of the city was severely affected by a succession of storms especially in the areas of <Hackney>, <Kingsland> and <Clapton> where serious damage has been done. Thousands of panes of glass in nurseries have been broken and plants destroyed by the hail. Scores of basements are inundated. Shacklewell Lane had the appearance of a rapid torrent. London Fields and Hackney Downs are covered with large pools of water. Three newly built houses skirting Hackney marshes came down with a loud crash. Grave fears are entertained for cottagers on the banks of the <<Lea>> from Lea Bridge to Tottenham. Horses and cows were struck and killed by lightning whilst sheltering under trees.

The storm was felt in West Middlesex, Berks, Bucks and Herts.

<Rickmansworth>: The town was affected and public highways were flooded.

<Chatham>: the hailstones were of immense size.

<Reading>: The storm lasted 2 hours and the streets were flooded and some of the houses in the lower part of town. The River <<Kennet>> rose rapidly

4 Aug 1878 BR
Winchmore Hill (London)
0.95" in 11 m
Broughton (N Oxon) 0.67"
in 13 m and 1.00" in 40 m

10 Aug 1878
Oxfordshire
telegraph 14
Aug, Luton
Reporter 17
Aug

<Buckingham>: Rain fell in such quantities as to overflow public drains and very many houses were flooded to a considerable depth. Water ran down the streets and yards in torrents. Sheep were killed by lightning. In some places the water was more than knee deep.

<Luton>: The streets assumed the appearance of a river rather than terra firma and several houses were flooded. Several chimneys were struck by lightning and knocked down.

14 Aug 1878
Luton Reporter
17 Aug

<Luton>: This storm was more severe than the previous week and the streets were again flooded. Farley Hill and Chapel Street and New Bedford Road near the railway bridge were worst affected.

24 Aug 1878
Morning Post
26 Aug, London
Evening
Seething Wells (S London)
2.50" in 3 h

<London>: the rain fell in torrents for half an hour and caused serious floods in many parts of south London, particularly at <Brixton> and <Camberwell>. Along the banks of the Surrey canal the water rose to such an extent that canal-side houses were generally flooded. At St George's and Gloucester Road at <Peckham> the sewers were insufficient to carry off the flow and they were choked within a few minutes and basements were

Standard 26
Aug, South
London Press
31 Aug

flooded with furniture floating about in about 4 feet of water. At <Brixton> and <Stockwell> the water collected in lakes and the inhabitants of many houses improvised plank bridges from their houses to the end of the street. In Loughborough Road Brixton the basements of many houses had water to a depth of several feet. Damage was especially caused in Treherne, Elliott and Akerman Roads. A house in Coldharbour Lane was flooded to a depth of 6 feet. <Camberwell> New Road near the Green was one sheet of water in a very short time after the commencement of the storm. Camberwell railway station was flooded to a depth of several feet. The Surrey Masonic Hall and the Post Office adjoining suffered much damage with water rushing up from the sewer. A billiard table was completely covered and spoiled. Several neighbouring houses were also flooded. The basements of a great number of houses in the neighbourhood of Church Street Camberwell and Peckham road and High Street. In the neighbourhood of Kennington and Brixton Roads several shops were flooded. The Police Station Kennington Lane was flooded to a depth of 3 feet and furniture was floating about in the rooms. nThe Kennington Vestry Hall, Kennington Green was also inundated. In and about Roupell and Collingwood Streets the downpour formed a perfect river within ten minutes. The area has not suffered so severely since the storm of 1 August 1846.

<Hackney>, <Dalston> and <Homerton> in the north of the city were flooded by the choking of sewers and by the overflow of the <<Lea>>. In Mare Street an enormous amount of water accumulated beneath the railway arch. Dwellers on the west bank of the <<Lea>> were flooded out.

The southeast district from Lee to Eltham suffered severely. From Middle Park to the Tiger at Lee Green a distance of a mile there was 3 feet of water. All along the Lee Road to Lewisham the houses were flooded. Opposite the Roebuck the water never reached above 2 feet. The overflowing of the Quaggy was the principal cause of the flooding but the flooding was not as severe as on 11 April (not a flash flood).

<Abingdon><Tubney>: A man was killed by lightning whilst crossing a field.

The South London Press reviewing the storm notes the effects of increasing urbanisation on increased volume of flow and therefore the adequacy of the sewers.

13 Jun 1879 BR Purley (near Reading) 0.65" in 45 m

2/3 Aug 1879 The thunderstorm in the west of London was said to be the worst for 50 years.

Webb et al

2009, Scotsman 'No more terrible storm has visited England since the memorable tempest of 1703'

4 Aug, Luton

times 8 Aug

Bicester Herald

The River <<Lea>> overflowed its banks and flooded large areas of low lying land and with the hail and rain doing more damage to hay and crops to that caused by the flood which visited a few days ago. [Not thunderstorms or flash flood].

Quotation from St Margaret's <Twickenham>: 'The storm commenced at 1.30 am... the most remarkable feature of the storm was the size of the hailstones some of them being over 5 inches. The velocity is indicated by the size of the indentations on the lawns which were 2 inches in diameter and 33 inches in depth [Should it

8 Aug, Reading
Mercury 9 Aug

be the other way round?]. In my vineries and flower houses I have counted over 900 broken panes of glass, the total number barely exceeding 1000. On the balcony of the house every pane of thick rough glass in the roof was destroyed and a stained glass staircase window shared the same fate’.

Westmorland Gazette 9 Aug: Five hailstones weighed one pound and were 3 to 5 inches in circumference. At Kew Gardens the winter house was completely demolished with 25,000 panes broken.

<London>: In <Twickenham>,< Richmond> and <Brentford> main hailstones were ‘as big as teacups’. Tiled roofs were ‘holed like bullets’ (Webb, 2001). Hailstones 38 mm diameter were measured at Kew Observatory. Tiled roofs were “holed like bullets”. (Symons, 1879). Large hailstones did great damage at Kew, Richmond, and Kingston where a policeman picked up stones 5 inches in circumference. Nurseries and conservatories at Kew were wrecked. At Richmond nearly every house in the town had windows broken including the Castle Hotel and the Orleans Club.

<Harrow>: Hailstones measured fully 1 ½ inches in diameter and their violence twisted boughs off trees and plants and vegetables were cut as if with a knife.

<Richmond> Hailstones measured from 3 to 5 inches in circumference and five of them together weighed a pound.

<Watford>: At nearby <Huntingbridge> houses and gardens were flooded due to the overflow of the canal.

<Oxford> Though the storm continued for nearly 4 hours little damage was done in the neighbourhood of Oxford , the most serious damage being on the Thame Railway which was damaged between that station and Bledlow.

<Maidenhead>: The water rose 5 feet in 6 hours and boats were swamped with the downfall. A considerable amount of damage has been done by the flooding of houses and cellars.

<Newbury>: The heavy rain flooded many houses and roads in all directions. There has been more water out than has been known for 30 years.

<High Wycombe>: The floods were through many of the houses on Oxford Road. People who had to go from the west end of the town to church had to be conveyed in vehicles. Much damage was done to property and furniture.

<Reading> The storm was compared in intensity with one in 1846 and even the hurricane of 1703. Hail fell at intervals with the rain after midnight and the stones were as large as pigeon's eggs. Roads were partially destroyed by the deluge and converted into miniature rivers. St Mary's Church was struck by lightning. In many parts of the town – not the lowest districts – cellars and basement rooms were quickly flooded in some cases to several feet. Chickens and dogs were drowned. The lake at Whiteknights rose rapidly and overflowed its northern embankment and a large volume of water swept over the carriage road. It descended into Tuns Lane flooding the road and endangering the foundations of a cottage near the outlet. Communication with the Parish Church was cut off. Failure of the dam was averted by prompt action. The lodge at the entrance to Eastern Avenue was completely flooded; the avenue here was under 2 feet of water.

<Wokingham>: Several houses in the lower end of the town were flooded to a depth of 2 to 3 inches.

<Cookham>: Rainfall during the storm was 2.7 inches and from 05.00 to noon the Thames rose 16 inches.

<Henley>: The watercourses could not carry off the water sufficiently fast and the streets resembled rivers. The water ran through houses and shops. The Thames later overflowed its banks.

<Luton>: It was said that a similar storm occurred in 1828 when the water came up George Street. There was serious flooding in the lower parts of the town. The water from Houghton, Lewsey and the marsh came down the Naps Lane like a sea; the water rose to a height of 3 feet swamping the Midland Terrace cottages. A mud house was washed down. The rush of water went under the Sundon railway arch and to the marsh and thence to Limbury and Biscot with roads and farmyards flooded, from thence to Bates's meadows adjoining the Bedford Road. At the Midland bridge it poured across the path a dozen yards wide. By the Moor gate there was a great depth of water extending far up towards the gas works; there was 6 feet of water in one house. In Bridge Street Willow Cottages were flooded. In Williamson Street the basements of new houses were flooded. In Mill Street all the cellars were swamped. The flood extended from the Crown and Anchor pub to beyond the

Midland bridge. Breweries were flooded to a depth of 4 feet with barrels floating about and much damage done. In Windsor Street and Wellington Street the cellars were soon filled and the water rose very rapidly. The wall of a kitchen fell down. On the London Road the metal was washed bare and at the top of Foundry Lane there were loads of drift. In Church Crescent the houses got 5 feet of water in their basements; window sashes were washed in and fireplaces loosened. The flood at a late stage affected the deodorising works. On the Farley Green a day after there was a lake of 300 to 400 yards. The Hitchin Road had deep channels washed in it. At Vigar's mill much damage was done to flour and other meal. On the Midland Railway just beyond <Toddington> there was a landslip in Chalton cutting.

< Markyate >: A stream of water came down the lane from <Whipsnade> and <Studham> into the lower end of the village and nearly all the houses there were flooded. It was with great difficulty that anyone could walk through the water. At the top of the village a garden wall was knocked over into the road. Further down garden walls and trees were taken down almost without exception. The Wesleyan old chapel and adjoining school were completely swamped and the forms thrown into confusion. The walls of the chapel yard had been knocked down. Such a storm has not been known for over 50 years. Considerable damage has also been done at <Studham>, <Whipsnade>, <Kensworth> and elsewhere.

<Aylesbury>: The storm (as elsewhere) started before midnight followed by a break of an hour and then returned with renewed violence from midnight till nearly 03.00. The canal and brooks overflowed inundating the meadows to a depth of several feet and covering the metals on several parts of the Great Western Railway and in one instance carrying the metals away. Some houses were inundated to a depth of 2 to 3 feet. New road was flooded and the cricket ground was like a lake; Hartwell Road was covered and water swelled across the Buckingham Road to a depth of a couple of feet. Some of the houses in <Walton> were flooded.

24 Sep 1879
Bristol Mercury
25 Sep

Thunder was not reported but gales were experienced in northern England.

25 Jun 1880 BR

Hackney (London) 2.28" in 3 h 10 m

14 Jul 1880
Hertford

<Edmonton>: the town was visited by an extraordinary flood caused by the overflow of the River Pym. The high road had the appearance of a river. Great damage was done to house property and furniture.

<London>: Several parts of South London were also flooded.

<Hertford> A violent thunderstorm had a heavy fall of hail mixed with rain. The storm lasted nearly 2 hours. The rain soon blocked the streets and entered houses in all directions causing considerable damage. The roads in

**mercury 17 Jul,
Gloucestershire
Chronicle 17 Jul**

**15 Jul 1880
London Daily
News 16 Jul**

**16 Jul 1880
Bicester Herald
23 Jul**

**29 Aug 1880
Bradford
Observer 31
Aug, Leighton
Buzzard**

**Observer 7 Sep
18 Sep 1880
Shipping and
mercantile
Gazette 20 Sep**

**5/6 Jul 1881
Daily Telegraph
7 Jul, Bicester
Herald 8 Jul**

**22 May 1882
Herts**

the immediate neighbourhood are covered with water and almost impossible for carriages. A bridge on the road leading from <Wormley> to Wormley church has fallen in. At <Hertford Heath> the pond overflowed and inundated all the immediate ground. Water accumulated at the Horns Mill and cottages there were shut off from the 'outer world'.

<Ware>: suffered rather severely also. The cottages at Spital Brook <Hoddesdon> were flooded and the same might be repeated all over the region.

<Cirencester>: The cellars of many houses were flooded and low lying streets resembled rivers.

<Banbury>: Several animals including horses and cattle were killed by lightning. The River Cherwell has overflowed its banks and meadows are underwater and the hay crop damaged.

<Bicester>: with the heavy rain the sewers were unable to carry off the water and many houses were flooded in some instances to a couple of feet. At <Brackley> nearby the windows of the Crown Hotel were smashed.

<Bicester>: Another thunderstorm occurred greater than the one on the previous day. Many of the residences were again flooded

<Aylesbury>: A severe thunderstorm lasting 2 hours passed over the town and several houses were flooded. The storm did much damage to standing and cut crops. Accompanying hailstones were of large size. Some of the tradesmen's cellars in the Market Square were also flooded

<Newbury>: A perfect deluge lasted about an hour and roads and buildings were flooded in many places.

<London> In a thunderstorm lasting from 11.00 pm to 4.00 am (6th) the heavy rain caused thoroughfares in east and west to soon become running streams of water.

<Aylesbury>: The thunderstorm lasted upwards of an hour with hail and rain and the roadways were flooded to a considerable depth (6 inches).

<Bicester>: In a thunderstorm the drains could not take the flow and underground kitchens and cellars etc were flooded.

<St Albans>: In half an hour the steep streets of the town turned into watercourses and the water accumulated to form a lake in the middle of St Peter Street. The water rushed with such violence down Fishpool Street and

**Advertiser 27
May**

the water covered the roadway downwards from the footway leading up to the Cock and Flowerpot Inn becoming a foaming torrent and carrying much gravel. At the bottom of the hill the rushing water was level with the raised pavement at the bottom of the hill. Houses on the left side were flooded (but the right side escaped). Pressure of water caused sewers to burst in three places.

<Hatfield>: Rain poured down in torrents and caused damage to grass and fruit trees. Many drains burst and houses were flooded.

<Rickmansworth>: Owing to the storm water blocking the drains various parts of the public highway in the eastern and western part of the town was extensively flooded and also several of the cottages of labourers. Various buildings were struck by lightning.

<Lilley>: Four cattle were killed by lightning.

3 Jun 1882 BR Crowthorne (Berks) 0.65" in
50 m

**10 Jul 1882
Oxford Journal
15 Jul**

9 Jun 1883 BR East Molesey 1.72" in 2 h
20 Jun 1883 BR

<Oxford>: In a thunderstorm the rain fell in torrents and before the storm ceased hail fell so that the streets were covered and much damage was caused to fruit flowers and gardens. The sewers were overcharged so that many parts of the town were flooded in several cases causing flooding to houses.

<Toot Baldon> (Oxon): Shortly before 1 p.m., rain and hail came down with great violence ; the road between the school and Yew Cottage was impassable for the water, which stood to a great depth, and overflowed the bank of the hedge into the neighbouring orchard ; the total fall for the day was 1.70" and 0.71 in. fell on following day.

21 Jun 1883 BR Woodstock (Oxon) 1.61" in
110 m

**25 Jun 1883
Manchester
Courier 26 Jun**

<Chatham>: The storm occurred between 12 and 1 o'clock when three people were killed by lightning in the dockyard area.

<Roehampton>: A public house and a chapel were destroyed by lightning and other damage done.

<Sittingbourne>: In several hop grounds plants were swept away and fruit trees denuded of fruit. The hailstones were as large as walnuts. One man lost a collection of valuable roses and on his premises the hail lay 1 foot deep in drifts 6 hours after the storm.

<Borden>: At a school 50 windows were smashed by hail of phenomenal size.

**30 Jun 1883
Oxford Times 7
Jul**

<Chipping Norton>: The storm was accompanied by hailstones or rugged pieces of ice of enormous size, 5 to 6 inches in circumference, destroying greenhouses, conservatories and garden produce. At Welford it broke 583 panes of window glass in one house. Rooks and other birds and a cat were killed by the hailstones.

3 Jul 1883
Globe 3 Jul,
Oxford Times 7
Jul

<<Kennett>> valley: A terrific downpour of rain and hail occurred flooding many dwellings and roads in low lying parts of the district.

<Banbury>: the thunderstorm occurred early in the morning and houses in Rag Row, the Warwick Road and other parts of town were flooded.

14 Jul 1883 BR

Camden Sq (London) 0.68" in 13 m and 0.85" in 30 m

31 Jul 1883 BR

Muswell Hill (London) 0.61" in 35 m

17 Sep 1883
Islington
Gazette 19 Sep

<London>: A thunderstorm raged with great violence in North London and for a time several main roads in Holloway were in a very short time under 2 to 3 feet of water. Within a few minutes of the start surface water traps became choked with debris. The water rose and reached right across the road from the Nag's Head to the Seven Sisters Road and to within a few feet of the Holloway railway arch, a distance of over a quarter of a mile. The water on the road reached above the horses' knees. Houses were flooded in Grove Road and in Byrett Road basements were flooded with damage to furniture. In the districts of Finsbury Park, Stroud Green, Crouch Hill and Hornsey Road the heavy rain did a vast amount of damage to private property. Traffic on the Midland railway from the City and south Tottenham was suspended for some hours. By the Crouch Hill station there was 6 feet of water on the line and the basements of many houses nearby were flooded. Garden walls and summer houses were carried bodily away.

12 May 1884
Shepton Mallet
Journal 16
May, BR

Datchworth (Herts) 0.40" in 20 m
Kensington 0.89" in 20 m

<London>: the thunderstorm was over an hour duration after a hot afternoon with temperature reaching 78F. Hail fell with rain in some places. The heavy rain was most severe in the NW district and in Kilburn several roads were flooded owing to the gullies becoming blocked. Two men were drowned when working in a sewer.

5 Jun 1884 BR

6 Jul 1884 BR

Rickmansworth 0.85" in 30 m

9 Jul 1884 BR

Camden Sq (London) 0.62" in 15 m
Hertford Heath (Herts) 0.55" in 23 m
Hitchin (Herts) 1.75" in 1 h

<Finchley> (London): Hailstones an inch and a half long; the heaviest fall of the year 1.73".

<Baldock> (Herts): The rain flooded the streets and lanes with rushing streams. For some time White Horse Street was one sheet of water, and quite impassable to pedestrians. The lower rooms of one house in this street were flooded, and a hole was sawn in the floor to get rid of the water. The low-lying houses in Norton-street were also flooded

10 Jul 1884
Nottingham
Journal 11 Jul
6 Aug 1885 BR

Leyton (London) 0.70" in 10 m

<London>: A heavy rain storm caused flooding of the Midland Railway at Crouch Hill for a distance of over 500 yards; it was converted into a temporary canal by the bursting of some drains in the vicinity.

<Tilbury><Horndon>: During a severe thunderstorm on the evening of August 6th, a waterspout was seen over

(Southeastern
Gazette 10
Aug)

21 May 1886
BR

Lansdowne Crescent
(London) 0.93" in 30 m

22 May 1886
Manchester
Evening News
24 May

2 Jun 1886 BR

Dunmow (Essex) 0.74" in 35
m

3 Sep 1886
Edinburgh
Evening news 4
Sep, BR

Kensington 0.50" in 30 m

16 Jul 1887 BR

Wallington (N Herts) 1.28"
in 90 m

17 Aug 1887
Manchester
Courier 18 Aug,
BR

Camden Sq (London) 0.50"
in 10 m and 0.79" in 30 m
and 1.24" in 1 h
Wimbledon 1.32" in 2 h
Lansdowne Cresc (London)
1.61" in 3 h 15 m

21 May 1888
BR

Upminster 0.54" in 15 m
Oxford 0.95" in 25 m

25 Jun 1888
Globe 25 Jun,
Oxfordshire
Telegraph 27
Jun

Bloxham (Oxon) 0.61" in 30
m

the Essex coast in the neighbourhood of Tilbury, and it burst over Horndon, doing considerable damage, and it is reported that a horse was killed.

<London>: The torrents of rain and hail caused considerable damage by flooding to basements of houses in various parts of the city especially in south London. Large pools of water were left on suburban roads. The steep incline on the District railway between West Brompton and Waltham Green was flooded to such an extent that traffic was suspended to Putney Bridge.

<Aylesbury>: Hail fell with the rain and 'the heat was very great'; gullies were blocked and the thoroughfares flooded.

<London>: A thunderstorm occurred here and very widely over Northwest, Midlands and South but very little flooding was reported as there had been drought for June and July. A large sewer burst between Baker Street and Portland Road Station Metropolitan railway was flooded to a depth of several feet and causing stoppage of traffic for several hours. Three people were killed in northwest London. One man was killed in Staffordshire. In Lincolnshire the rain was accompanied by large hailstones.

<Oxford>: Heavy rain and hail fell over Oxford and the streets are flooded and crops damaged.

<Aldershot>: The storm passed over the town and camp. The heavy rain washed immense quantities of gravel from the roads and flooded the parade grounds. The hailstones were of an altogether unusual size and caused great damage to fruit and crops. Property in cellars suffered severely.

<Dorking>: Three bullocks were struck by lightning and killed.

<Buckingham>: **Very large hailstones fell and broke hundreds of panes of glass** especially at <Thornborough> where the windows of the parish church were almost totally destroyed. **Hailstones were as large as walnuts.** In Buckingham houses and kitchens were flooded in some cases and faulty roofs and caused flooding of bedrooms and staircases. No such storm at Buckingham has been known since May last year when nearly every window facing westward was smashed by the hail. [Not included above].

26 Jun 1888 BR	Hendon (London) 1.25" in 45 m Sevenoaks 2.00" in 1 h Greenwich 0.93" in 1 h	<Rochester>: The drains were totally inadequate to carry off the extraordinary fall of rain. The cellars of business premises and the basements of private dwellings were flooded in all the low lying parts. The damage done is very great <Hitchin>: During the night a series of waterspouts seem to have occurred along the valley of the Mimram from Welwyn to Hexton. <Hexton> The greatest fall was at Hexton, on the watershed of the <<Lea>> and <<Ouse>>, where the chalk cliff was completely denuded, and two feet of water stood in the village. At Lord Ducie's at <Kimpton> the rain washed 20 yards of the park wall across the road, and carried whole fields of young turnips away with it, filling up one lane with soil so that it had to be dug out <Windsor>: About 1.30 p.m., heavy rain fell and, running from the Castle precincts, forced up the roadway near the Vicarage and flooded a portion of the Great Western Railway. <Little Wittenham> (Oxon): About 2.30 p.m. there was a heavy shower for about ten minutes; at 3 a sudden downpour began, and a little after 5 p.m. (about 2 hours and 20 minutes) the rain gauge was found to contain 2.95". Just above the rectory was a field of potatoes on the slope, and about an acre was completely washed away right over a clover field for about 150 yards, and against the hedge at the bottom were at least 50 cart loads of earth and stones.
6 Jul 1888 BR		
30 Jul 1888 BR	Kenley (Surrey) 0.97" in 25 m Upminster 1.07" in 30 m Keston (Surrey) 0.74" in 55 m Great Marlow (Bucks) 0.91" in 1 h Little Wittenham (Oxon) 2.95" in 2 h 20 m Ilford (E London) 1.85" in 3 h	
31 Jul 1888 BR	Long Wittenham (Oxon) 1.40" in 2 h East Horsley (Surrey) 2.50" in 3 h	<Horsley>: Violent thunderstorm causing the highest local flood remembered, the road to the station at E. Horsley being flooded and fish washed out of ponds in the park and caught in the road 500 yards below. Little <Little Ilford> The rain of 31 Jul and 1 Aug in two days (3-96 in.) caused a flood in the Biver <<Roding>>, which burst the embankments and swamped the lowlands for miles. Such a disaster had not occurred since 1824. <London>: In the vicinity of Deptford and New Cross the flooding was serious. The railway from Brockton to New Cross on the London to Brighton railway the rain flowed down the banks in a deep cutting and in places the water was 3 feet deep on the line. <Deptford> and <Greenwich>: Cellars and lower rooms were flooded. In some of the houses in Coldbath Street and Mill Lane the furniture was floating about in the streets. In Nightingale Lane a portion of the road subsided to a depth of about a foot. <Poplar><Isle of Dogs>: A fund was set up by the Lord Mayor for poor sufferers from the floods where houses were engulfed in a 'horrible black and evil smelling deposit of noisome mud and filth'. Furniture and clothing
1/2Aug 1888 Ipswich Journal 3 Aug, Daily Telegraph 3 Aug, BR	Rain for 7 hours accompanied at times with thunder. Greenwich daily rainfall >1.25 inches. Keston (S London) 0.90" in 1 h Sandhurst (Surrey) 3.00" in 2 h	

29 Aug 1888
Lloyd's List 30
aug

No thunder mentioned here but in N Herts where flooding was not reported.

17 May 1889
BR

Long wittenham (Oxon) 1.10" in 25 m

23 May 1889
Dundee
Advertiser 24
May, Western
Morning News

Temperature reached 82F only exceeded one in May in the last 18 years.
Upper Clapton 2.65" in 2 h

25 May, BR
25 May 1889
BR

6/7 Jun 1889
Dundee Courier
8 Jun, The
People 9 Jun,
BR

Bayfordbury (Herts) 1.65" in 45 m
Tunbridge (Kent) 2.60" in 1 h
Buntingford (E Herts) 1.05" in 1 h

12 Jul 1889 BR

Twickenham 0.61" in 20 m
Luton 3.16" in 70 m

24 Aug 1889
Lancashire
Evening Post 26
Aug
2 Sep 1889 BR
Globe 3 Sep

A very heavy and widespread rainfall in Essex and Kent around the mouth of the Thames.
Daily Rainfall N Ockenden and Upminster 4.45" and 4.32"
Dartford (Wilmington) DR

was rendered useless.

<Windsor>: The town experienced a very heavy thunderstorm so that the Thames rose 6 inches within an hour and a half and is now greatly swollen and discoloured.

<London>: In consequence of the heavy rain there have been renewed floods and many of the inhabitants of the Isle of Dogs, Plaistow and Stratford were again compelled to leave their homes. A great tract of grassland east of Stratford is again under water. Wanstead Flats are in parts impassable.

<London>: At South Tottenham, the floods invaded several thousand houses. The rainfall was very heavy in the region of Regent's Park and Lords Cricket Ground but very little rain fell in the West end. A man was killed by lightning at Walthamstow and in the same neighbourhood several houses were flooded and the cellars of numerous public houses. The Great Eastern Railway near Clapton Station was flooded from the bursting of a sewer. The Midland Railway at Crouch Hill was flooded to such a depth as to stop all traffic.

<Rochester>: An exceptionally severe thunderstorm; the rain did not last much more than half an hour, but did an immense amount of damage, and the hail which accompanied it broke some glass.

<London>: A heavy thunderstorm passed over Woolwich causing the work at the torpedo factory at Arsenal to be suspended. The roads and hundreds of houses were flooded. The railway was flooded at Bridport.

<Tunbridge> (Kent): Violent thunderstorm, with rain and hailstones of extraordinary size; 2.60 in. fell, chiefly hail, and the greater part in less than an hour.

<Windsor>: The storm lasted about a quarter of an hour and the hail beat with great severity on windows and skylights and after a few minutes the streets were flooded. The water ran out of the Royal Mews in St Alban's Street forming a stream down the hill past the Post Office into Sheet Street. The water settle at the corner of Park Street which became impassable for a time. Other parts of the town were also flooded.

<London>: Two thunderstorms passed over the city and in the low lying districts the streets were flooded and caused considerable damage to property.

<Sheerness> and <Isle Of Sheppey>: The thunderstorm lasted 4 hours and the streets were flooded.

<Farningham>: Hailstones half an inch in diameter fell thickly and a considerable quantity of glass was broken.

<Chatham> and <Rochester>: Heaps of road material 2 or 3 feet high were washed about by the volumes of water which rushed down from the higher ground around the forts. Many houses and business premises were

**17 Jul 1890 BR,
Western
morning News
18 Jul,
Uxbridge and
W Drayton
Gazette 26 Jul,
BR**

3.90"

The fall had two causes—one general, the other local.
A general rain prevailed over almost the whole of Southern England; it began in Devon and Cornwall on the 16th, It then travelled eastwards, and on the 17th extended to the Norfolk coast. Meanwhile thunderstorms had broken out in several districts, and in those localities further increased the total rainfall.

Slough 1.02" in 54 m.
Colne valley daily rainfall 1.83"
Finchley (London) 1.50" in 1 h
Seale (Surrey) 1.15" in 75 m
Stanmore (NW London) 1.72" in 105 m
Chobham (surrey) 0.99" in 105 m
Monk Sherborne (N Hants) 1.23" in 2 h
Guildford 2.61 in 2h 30 m
Langley (near slough) 1.01" in 3 h
Rickmansworth 4.19" in 4 h
Hillingdon The gauge which holds 4 inches, was found overflowing on morning of 18th

flooded.

North Ockenden (Near Upminster). Storm, with 4.45 in. of rain between 9 p.m. and 5.15 a.m. on 3rd

BR notes Heavy rainfall generally in the South and South Midlands centred east of Reading Flooding occurred at Brixton, Colne and West Drayton, Windsor, Maidenhead, Reading, Aldershot, Rickmansworth, Bark, Bury St Edmonds and on Dartmoor.

<London>: The thunderstorm was so heavy that the gutters could not carry it all away and streets were flooded. The storm was concentrated in the neighbourhood of Fleet Street and cellars and many buildings were flooded. At Brixton tram cars had to be stopped and several large shops were inundated, the water being 2 or 3 feet deep. Ludgate Circus was flooded. In the Woodberry Downs in Tottenham which is thickly populated with artisans the flood rose so rapidly that in thousands of cases people were unable to remove their belongings from lower floors. In three or four of the streets off Seven Sisters Road the water rose above the window ledges. Houses were flood off Spring Hill at Clapton and the Lea overflowed its banks right up to the foot of Stamford Hill. The railway line was blocked above Upper Holloway. Water was almost knee deep at Forest Hill.

<Kingston upon Thames>: Many houses and shops were flooded and tradesmen suffered considerable losses.

<Guildford>: Part of the railway line was flooded.

<Aldershot>: Several public houses and shops were flooded some to a depth of 8 feet. The officer's messes were rendered uninhabitable, the water rushing through the tents like mountain torrents.

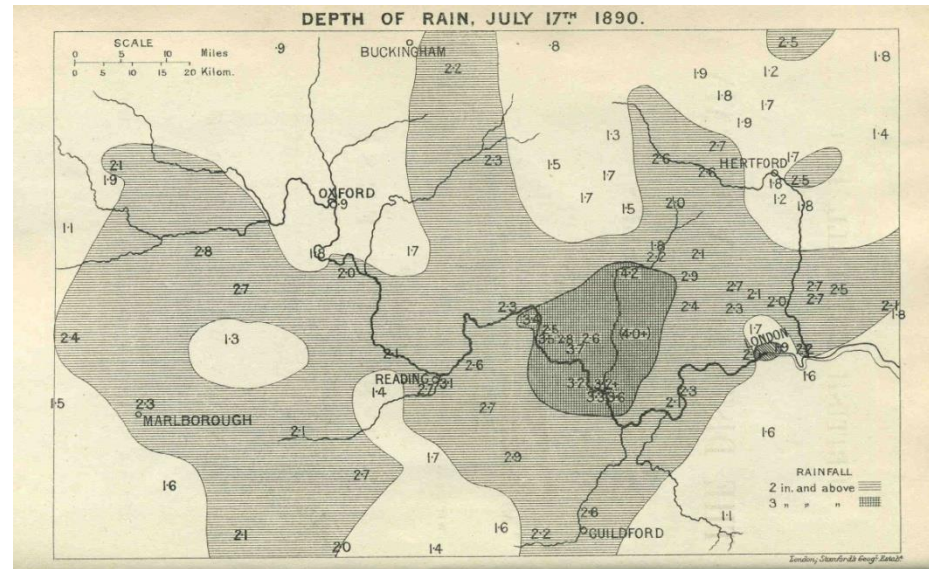
<Watford>: The River <<Colne>> overflowed its banks both above and below Watford with much hay being ruined.

<Guildford>: Many houses were flooded.

BR reports: At <Brixton> the water was in some parts 2 or 3 feet deep and the trams had to cease running. The Bon Marche and many other buildings flooded. The common room at Lincoln's Inn, and also a pinnacle at the Houses of Parliament were struck by lightning. The brook running from <Harrow> to <Hanwell> was suddenly converted into a series of lakes, the meadows on the sides being partly inundated. The <<Colne>> overflowed its banks at <West Drayton>, and part of <Hayes> was under water.

<Upper Holloway>: The train from Moorgate Street for South Tottenham at 8.45 p.m., was stopped by the line being flooded, and could not proceed until 3.20 a.m. on 18th. The low-lying streets near Woodberry Down were flooded, several of them 3 ft. deep.

Roy. Obs., <Greenwich> . Rain began at 2 p.m., was very heavy, with thunder from 6.30 to 7.30 p.m., and was continuous from 10.30 p.m. on 17th to 7 a.m. on 18th. yielding l -62 in. Much damage by rain in <Dulwich>, <Norwood>, <Brixton> and the S. of London generally



11 Aug 1890 BR Finchley (London) 1.44" in 2 h

<Tottenham>: Violent thunderstorm with several houses struck, one horse, and several sheep, killed. Considerable damage also produced by flooding.

<Billericay>: Very sudden heavy and disastrous rain, 2.18" The Crouch valley was badly flooded.

19 Aug 1890 BR Upminster (E London) 1.47" in 2 h

24 Aug 1890

Taunton

courier 27 Aug, BR

23 Sep 1890 BR Teddington 1.53" in 75 m

24 May 1891

Mansfield

Reporter 29

May

24 Jul 1891 BR

<London>: In the south side of London rain and large hail fell flooding the basements on the south side of the Thames. The Cowley Road was flooded to a depth of 8 inches and Camberwell Green was coated with hailstones. The thunderstorm was in S London shortly after 1 pm, with much hail, gulleys blocked by it, and by street refuse, produced local flooding. Cowley Road, Brixton, had nearly 8 inches deep of water in it;

<London>: there was a heavy and long continued thunderstorm with hail in certain parts of the southern suburbs. Scores of houses in Poplar, Canning Town, Plaistow, and West Ham were flooded. Great destruction was done by hail to fruit trees at East Ham and Barking.

<Rochester> A sSevere thunderstorm, with very large hail, only 0.03" fell here, whilst 21 miles off nearly 2.00" fell. The hail did much damage, cutting vegetation into shreds, besides breaking a great quantity of glass, and

5 Aug 1891 BR
28 Jun 1892
Yorkshire
Evening Post 29
Jun, BR

Leatherhead 0.70" in 35 m
Heavy rain was due to thunderstorms on the night of the 28th, and early morning of the 29th. They were heaviest in Kent, on the extreme coast of Suffolk, and in Lincolnshire, and along a tract running NE from South Staffs. all these districts from 2.1" to 4" of rain fell.
Broxbourne (Herts) 0.72 in 30 m
Kemsing (Kent) 2.12" in 1 h
Seale (Surrey) 1.01" in 1 h
Nutfield (Surrey) 1.75" in 105 m
Purleigh (Kent) 2.33" in 2 h
Keston (SE London) 1.57" in 3h 25 m

29 Jun 1892
London Evening
Standard 30
Jun

28 Aug 1892 BR

Walthamstow (London)
0.74" in 1 h

21 sep 1892 BR

Slough 0.49" in 21 m

10 Aug 1893 BR

Berkhampsted (Herts) 0.52" in 20 m

8 Sep 1893 BR

Hitchin (Herts) 0.59" in 20 m

29 Jul 1894

Banbury
Advertiser 2
Aug , BR

Leatherhead (Surrey) 0.60" in 20 m
Culham (Oxon) 0.85" in 45 m
Oxford 0.60" in 45 m
Strawberry Hill (London)

several objects were struck by lightning.

<London>: The thunderstorm started before 9.00 pm and continued until 3.00 am. Many thoroughfares were ankle deep in water. Flooding was severe in northern areas including Upper Holloway, Highgate and Hampstead.

<Luton>: Crops suffered considerably and a number of houses were flooded.

<Sevenoaks>: Tremendous thunderstorm, with torrents of rain (2'38 in.) from 9 p.m. to 2 a.m. on 29th, doing great damage, many tons of heavy material being washed from the roads.

<Rochester>: Violent thunderstorm, commencing about 8.45 pm; in less than seven hours 2.72" of rain fell. During the whole time the thunder and lightning scarcely ceased; several trees were struck by lightning, and the rain caused much damage to the roads,

<Dunstable>: The thunderstorm lasted 5 hours virtually without intermission. **At one point hailstones as large as walnuts fell and broke windows in all directions.** The streets were completely flooded.

A number of sheep and cattle were killed near <Hatfield> and <St Alban's>.

<Watford>: Rain flooded several of the streets.

<Kingston upon Thames>: In a heavy downpour the street gratings were insufficient to carry the flow and as a result many streets were flooded to a depth of several inches. In some cases water rushed into basements of shops and houses. Richmond road where it slopes into a hollow at the railway bridge became a lake 2 feet deep.

<Teddington>: All low lying thoroughfares were quickly flooded particularly at The Causeway which is situated

	2.00" in 90 m	at the foot of some rising ground. The water overflowed the pavement and found its way into some shops. A number of business premises under the Town Hall were flooded to a depth of 2 feet. Damage was also done in Carmelite lane, Trinity Street, Regent Quay and West North Street where it was mainly cellars that were flooded.
25 Aug 1894 BR 23 Sep 1894 South Bucks Standard 28 Sep	Hitchin (Herts) 1.58" in 3 h High Wycombe 2.75" in 90 m	<Wycombe>: The storm travelled from a northerly direction and the storm continued for 2 hours. A large part of Oxford Street, Queens Square and Church Street, the Desborough road end of Bridge Street, Bowdery's Lane, Bull Lane and st Mary's Street were completely flooded. The water had poured into hundreds of houses. There were also floods in High Street, Newland, Easton Street and London road. The worst was in st mary's street which was impassable for several hours. In many houses the water rose nearly a foot high and in plenty of cellars several feet. Businesses flooded included Mullets of the Ash Mill Oxford Road, a business in west Wycombe road, Clarks of the Half Moon Oxford Street, and the Bridge Mill in St Mary's Street. The rooms of the house and mill were turned into ponds. In Newland it invaded the Police Station and swilled out the Guard Room. Gathering in force and volume down Amersham Hill the tide swept down the narrow Crendon Street carrying the macadam virtually the whole way and deposited in the High Street. Houses were flooded in Easton Street and at the Coach and Horses Inn lower down absorbed four feet of water. The storm passed on to <Wycombe Marsh>, <Flackwell Heath> and <Wooburn> the two former places being severely visited. The Marsh farmhouse was flooded. Large masses of sand and stone were driven down Marlow Hill towards Wycombe. <Stokenchurch>, <West Wycombe> and <Downley> felt the force of the elements before Wycombe. Hail fell at these places and formed drifts over a foot deep. No such storm has been experienced here since August 1879 but it is estimated that much more rain fell on this occasion and there was even more flooding of the streets. <Amersham>: A horse and a cow were killed by lightning but flooding was not reported.
BR 17 Nov 1894	.Not a flash flood – not investigated. The largest flood on the Thames on record.	Widespread prolonged rainfall in south and west Thames in extreme flood; on 17 th 13" higher at peak at Slough than 1876 and 4" above 1852. 18 Nov 2 ½ inches below the 1821 mark.
24 May 1895 BR	Cirencester 0.79" in 70 m	<Ashton Keynes> (Wilts): A heifer was killed, and large hail fell. The G. W. E. between <Minety> and <Kemble> was flooded to a depth of 2 feet.
26 Jun 1895 Swindon advertiser 29 Jun, BR	Boar's Hill (Oxon) 1.30" in 1 h	<Marlborough>: the streets presented the appearance of rivers and basements of houses in lowlying districts were quickly flooded, drain pipes were burst and much damage done. The fire engine was called to pump the water out of many houses especially on Corporation Row. The storm lasted over an hour. <Aylesbury>: Hailstones of great size fell and the streets were flooded, the drains being insufficient to carry off the surplus water.

**21 Jul 1895
Bedfordshire
Times 27 Jul**

Bedfordshire rainfall in 5 ½ months Feb to mid Jul was 3.72"

**10 Aug 1895
Pall Mall
gazette 12 Aug,
Worthing
Gazette 14 Aug,
BR**

The storm lasted half an hour.
Camden Square 0.60" in 30 m

21 Aug 1895 BR

Kempsford (Gloucs) 0.80" in 20 m

**22 Aug 1895
Portsmouth
Evening News
23 Aug, South
Bucks Standard
23 Aug, London
Evening
Standard 23
Aug, Surrey
comet 24 Aug,
BR**

Ealing 0.90" in 1 h

<Luton>: A thunderstorm with large hailstones broke over <Luton> and <Dunstable>. For nearly an hour the streets were deluged. The underground kitchens of several houses were flooded out. The damage to the corn crops is considerable

<London>: In Walworth road and Newington Butts costermongers had their goods literally washed out of their barrows. Crouch Hill railway station lies very low and the water rose over the platforms and into the waiting rooms rising 18 bricks high. In the East end where the water supply has recently been deficient the rain was initially welcomed but later scores of houses were flooded to a considerable extent. A newly made up road on Primrose Hill was partially destroyed.

<Hampton> (Middlesex): A man was killed by lightning.

<Luton>: At The Hide over 1200 panes of glass were broken by hailstones.

<High Wycombe>: the storm raged for about an hour and hail descended in large sized stones. The water flooded St Mary's Street, Queen Square, Oxford Street and part of High Street and various parts of Newland but was not as bad as the storm of September last year. Part of the problem was from gratings being blocked but given the experience of last year people were quick to respond. In St Mary's Street the water rose over the pavement on the Abbey side and flooded houses. Bridge Mill escaped this year. The water came with a rush from Cemetery Hill through Church Street and flooded shops in Queen Square. The Half Moon Inn on Oxford Street was inundated along with other places on the same side of the road.

<West Wycombe>: The rain washed all before it and some of the houses in the village were flooded. Afterwards came a heavy fall of hailstones and in one house 37 panes were broken. Some hailstones were larger than a marble.

<Chesham>: Windows were broken by hailstones.

<Harpenden>: Hailstones and pieces of ice were as big as bantam's eggs and damaged greenhouses.

<Kingston>: Many low lying parts of the district were flooded and roads almost impassable. This was particularly the case in Elm road, Shortland's Road and the upper part of Acre road and Richmond Park Road. Portland House in Portland Road received a large deposit of water and sewage in the basement and other large houses in the neighbourhood suffered similarly. Cellars were flooded in Surbiton Park terrace to a depth of 2 to 3 feet.

<Esher>: Several houses were flooded in their basements and much damage was done to the roads.

<Richmond>: In George street and Kew road the surface water drains were totally inadequate and the roadway was under water with a flowing stream towards the station. Several shops on the left hand side (!) of George

6 Sep 1895 BR

7 Sep 1895

Sheffield Daily

Telegraph 9

Sep, Globe 7

Sep, London

Evening

Standard 9 Sep,

Taunton

courier 11 Sep,

Reading

Observer 14

Sep, Berkshire

Chronicle 14

Sep, BR

Dorking (surrey) 0.53" in 30
m

Banbury (Oxon) 0.75" in 1 h
Windlesham (Surrey) 1.53"
in 2 h

Street were flooded.

<Teddington>: Flooding occurred in the lower parts of the parish. The whole of Wolsey road was covered with water in some parts to a depth of 1 foot.

<London>: In all parts cellars were flooded, deep channels worn in macadamised roads and many windows were broken by hailstones. A large area around Crouch end was flooded. Train traffic was stopped. At Dalston Junction the water was nearly up to the platform. Houses were struck and damaged and horses killed. The storm lasted about an hour after 4 in the morning. Some tenements in south London were flooded as well as a portion of the underground railway in the West End. In several parts of the East End families had to leave their homes as their downstairs rooms were flooded. It occurred so rapidly that there was no time to save possessions. On the North London railway flooding occurred at Dalston Junction, Bow, Old Ford, South Bromley and Poplar. From Old Ford to Poplar the rain ran down the line like a river. On the great Eastern Railway several stations and goods yards are under water. At <Millwall> the lines are completely covered with a foot of water. At Crouch end a considerable area was flooded. In Southwood Lane, Highgate, 4 or 5 houses are badly damaged by water. Hackney Marshes are entirely under water and the fields in the neighbourhood of Lea Bridge are covered to a considerable depth; the houses here suffered severely with the water running down Mare Street like a mill stream for almost its entire length. The water rose high over the pavements and flooded the houses on both sides. The basement of the police station was flooded to a depth of 3 feet. In Sandringham road most of the houses had 3 to 4 feet of water in their basements. Flooding of an extensive scale also took place in Clifton road, Lower Clapton, and Dundas and Medina Roads. In <Bermondsey>, <Wapping> and <Shadwell> tenements were inundated. In the neighbourhood of the Isle of Dogs houses by the score were flooded to a depth of several feet. A 2 year old baby was left lying in a cradle on the ground floor of one of the houses which was flooded. So rapidly did the water rise that before the parents realised the danger the cradle was carried through an open window and it was sometime before the child was rescued, still asleep. Low lying parts of Bayswater, and the Kensal Road some flooding also occurred.

<Hatfield><:Luton> and <Hertford>: Hailstones of enormous size fell with the rain and much damage has been done to fruit crops. Several low lying main roads were rendered impassable.

<Bromley> and <Beckenham>: Many houses in spite of the favourable condition of the ground were flooded.

<Bracknell>: The high Street presented the appearance of a river, the drains being insufficient to carry away the

water. Several houses were flooded and damage was caused to the roads.

<Goring Heath> and <Woodcote> The heavy rain caused severe ruts in the roads. At Hill Bottom the Sun public house was flooded.

3 Jun 1896 BR Camden Sq (London) 0.70" in 30 m
10 Jun 1896 BR Upminster (London) 1.38" in 45 m
Alton (Hants 1.37" in 90 m
24 Jun 1896 BR Capel (Surrey) 1.95" in 80 m
25 Jun 1896 BR Seale (Surrey) 0.53" in 30 m
7 Jul 1896 Wilts and Gloucestershire Standard 11 Jul Oxford 0.88" in 1 h

<Cirencester>: A violent hail and thunderstorm affected Cirencester and surrounding villages including <South Cerney>, <Preston>, <Harnhill>, <Ampney Crucis> and other places, a visitation which has not occurred in the memory of the oldest inhabitant. The hail did much damage to garden and agricultural crops.

<South Cerney>: Hailstones lay several inches deep and much glass was broken in greenhouses and cottage windows. Much glass was also broken at Preston House.

<Ampney Crucis>: Many of the hailstones were larger than marbles and one was an inch in length; a large one was weighed at 14 drams! The roads became like rivers and the fields lakes. The storm lasted about 45 minutes. A great many of the houses were flooded especially those on a slight decline.

<Northleach>: The rain and hail caused considerable inconvenience to inhabitants in the lower part of town where the sudden rush of water invaded cellars and basements. Several sheep were killed by lightning.

<Highworth>: The drains proved inadequate with the result that a number of houses were invaded, a state of affairs quite unusual in Highworth.

<Cricklade>: Houses having the higher ground at the back were flooded, the water pouring through into the street like a river.

<Purton> near <Swindon>: The storm lasted nearly an hour and a half. Several instances of pigs swimming in their sties was reported. Great damage has been done to the roads with holes a foot deep and elsewhere heaps of stones and mud.

26 Jul 1896 BR Haslemere (Surrey) 1.16" in 30 m
8 Aug 1896 BR Alton (Hants) 3.03" in 2 h 40 m
27 Apr 1897 BR Clapham Park (London) 1.18" in 1 h
6 Jun 1897 Morning post 7 7th—8th.—Serious flooding occurred through

<Beckenham>: The thunderstorm was accompanied with a hurricane of exceptional fury. Several roads, acres of land and hundreds of houses were flooded. The main road leading to Penge was impassable for several hours

**Jun, London
Evening
Standard 7 Jun,
BR**

thunderstorm rains,
notably at **Faringdon**,
Leicester, Grantham, Rhyl,
Cork and Dublin. Great loss
of life and property by
lightning.

Bickley (SE London) 1.00" in
20 m

Sidcup (SE London) 1.23" in
30 m

Bromley 1.10" in 30 m

Chislehurst (SE London)
1.53" in 45 m

London Shade

temperatures reached 90F
the highest since August 18

Aug 1893. Met conditions
suggest a 'Spanish Plume'.

Luton 1.65" in 20 m

Marlow (S Bucks) 1.40" in
20 m

Maidenhead 0.98" in 30 m

Pirbright (Surrey) 0.93" in
30 m

Weybridge 1.65" in 35 m

Trent park (London) 1.09" in
35 m

Perivale (London) 1.78" in 1
h

Ealing 1.40" in 1 h

Weybridge (Surrey) 2.40" in
90 m

Harrow Weald 1.84" in 90
m

Surbiton (Surrey) 1.96" in
105 m

East Molesey (Surrey) 1.55" in
2 h

Swindon rf 1.16"

**24 Jun 1897
Webb et al
2001, Lamb
1964, Globe 25
Jun, London
evening
standard 25
Jun, BR, Webb
and Elsom
(2016)**

**28 Jun 1897
Swindon**

and residents on both sides were imprisoned upstairs. Several sewers burst. Hundreds of chickens were drowned and two horses were swept from a field into a river but were rescued. Hail damaged fruit and played havoc with glasshouses. Pubs had their cellars flooded and beer destroyed. In the valley of Beckenham town some youths organised a tub race.

<Sidcup>: A school was struck by lightning and damaged but no one was injured.

<Norwood>: On the Norwood side of Tulse Hill and the exceptionally heavy rain flooded the neighbourhood.

<Chislehurst>: The early part of the day was very warm and sultry; between 3 and 4 p.m. it became almost dark; rain and hail then commenced in torrents, and within three-quarters of an hour 1.53" had fallen. All low-lying places were flooded, as no drains could carry off the water as fast as it descended. A fine oak was struck by lightning, the trunk being stripped of bark and split in twain.

<London>: Hail damaged Diamond Jubilee decorations in and around London.

<South Wimbledon>: A man was killed by lightning.

<Little Kingshall><Bucks>: A farmer was killed by lightning.

<Marlow>: For 20 minutes the thunderstorm was accompanied by rain and hailstones larger than marbles but shaped like broken pieces of thick glass. The streets were flooded and the water was 2 feet deep in the lower part of High Street. Trees were blown down in all directions and parts of roofs of houses were blown off. Two pinnacles of the church were blown off and one fell through the roof; church windows were blown in.

<Beckenham> and <Penge>: **Hailstones were more than an inch in length** and the low lying parts of the district were flooded including houses where furniture was floating about. Damage was done by the hail with a large quantity of glass broken and Jubilee decorations destroyed.

<Kingston>: A thunderstorm lasted over 2 hours and houses in low lying parts were flooded. The river rose rapidly. At <Thames Ditton> the road was impassable and large tracts of land were submerged.

<Luton>: The intense rain caused much damage to crops and flooding streets and houses in the town.

<Wealdstone> (London): **Hailstones weighed over one ounce (c38 mm diameter).**

<Swindon>: A thunderstorm lasted upwards of an hour and was accompanied by a great downpour of rain. In parts of Old and New Swindon cellars were flooded to a depth of several feet including in hotels where barrels

Advertiser 3 Jul

20 Jul 1897 BR

21 Jul 1897

London

evening

Standard 22

Jul, BR

Oxford 1.14" in 1h

Farringdon (London) 1.20"
in 55 m

Crouch end (London) 1.90"
in 2 h and 2.00" in 3 h

Finsbury Park 2.10" in 2 h
30 m

Stoke Newington DR 3.18"

were floating.

<London>: North London was affected by a thunderstorm principally in Stroud Green, Crouch End and vicinity. The rain fell so heavily that omnibuses were stopped. The Tottenham and Hampstead Railway which runs in a cutting most of the way was flooded so that traffic stopped within half an hour. The platform at Crouch End was submerged and eventually rose 3 feet 6 inches above it or 7 or 8 feet from the rails. Other stations were flooded including <Dalston>, <Haringay> and <Holloway>. Mud on the line remained over a foot deep. Most of the roadways in Clapton and Hackney were soon flooded and water poured out of Hackney churchyard like a stream and the road opposite Hackney Police Station was covered to a depth of several feet for a distance of 50 to 60 yards. Several shops were flooded. In the Clissold Park district rain and hail played havoc in gardens. In Milton road, south Hornsey and Albion road Stoke Newington, water rose in basements to a height of 3 feet. Hailstones as large as cherries fell and many windows were broken. At Church End <Finchley> hailstones were larger than marbles and windows were broken..

<Kempsford> (Gloucs); in a remarkable hail storm lasting half-an-hour; the hail stones were nearly as big as walnuts

<London>: A heavy rainstorm with thunder struck parts of London including Edmonton where a number of roads were flooded to more than 2 feet and up to the floor of tramcars.

26 Jul 1897

Evening Star 27

Jul, BR

5 Aug 1897

South Bucks

Standard 6

Aug, Luton

times and

Advertiser 6

Aug

Southgate (London) 2.50"
in 90 m

Very high temperatures 87F
in London

<Wycombe>: For half and hour rain and hail fell in torrents. The roads were ploughed up a great deal and in some places notably Desborough and Oxford Roads almost impassable to pedestrians.

<Marlow>: The storm was of brief duration but the streets were flooded especially in front of the The Crown and The George and Dragon where the drains failed to carry off the water.

<Tring>: A young man and his recently married wife at an Agricultural Show were struck by lightning and both killed.

<West Wycombe>: Hailstones as large as marble fell causing much damage to gardens and lightning killed two cows.

<Luton>: For twenty minutes the downpour was furious and as usual the low lying parts of the town were flooded. This was particularly the case in Church Street and in the neighbourhood of St Mary's Hall where afterwards the pavement was covered with mud 2 inches thick. At nearly ever house women were sweeping water out of their front door. At Guildford Street in proximity to the Great Northern Bridge the same site was witnessed. Manchester Street at the bottom of Inkerman Street was also inundated. Hailstones as large as marbles fell with great force. Several cuttings on the Midland Railway were flooded.

25 Aug 1897 St

Acton (London) 1.11" in 1 h

<London>: the thunderstorm lasted over an hour and the hailstones were as large as hazel nuts. Hammersmith

James Gazette
26 Aug, BR

Broadway Station was completely flooded. At Acton hail fell some as large as walnuts breaking many window panes and glasshouses. The streets were flooded and for a time impassable. At Chiswick the main sewer became blocked up with the result that along the High Road the cellars of over 50 shops were flooded to a depth of 3 to 5 feet. The Duke's Avenue leading to the Duke's Estate at Chiswick House was flooded for its full length of 300 yards. The basement of the police station in Chiswick was flooded. At Ealing all the shops in the High Street were flooded. At Brentford the whole of the front of Brentford gas company premises was under water. BR reports: Hammersmith Broadway Station was flooded, also the basements of two shops in Chiswick High Road, and the Chiswick Police Station. At Acton many windows and greenhouses were broken by the hail, which covered the ground.

<Richmond>: The storm did considerable damage to cellars and scores of panes of glass were smashed by the hailstones.

<Acton>In a severe hail storm lasting half-an hour, the stones measured from 2 to 2 ¾ inches round, and caused great damage to vegetation and glass and caused flooding in houses and shops. Heaps of H stones lay for hours, and presented a very wintry appearance.

<London>: A thunderstorm occurred with rain and hail, the hailstones being as large as hazel nuts.

<Ilford> the <<River Roding>> overflowed its banks and flooded the rifle range. The storm caused great damage in orchards and hops. In East Ham and Forest Gate numbers of cellars were flooded

31 Aug 1897
Lloyd's List 1
Sep

23 May 1898
BR

Chipping Norton 1.47" in 30 m

31 May 1898
London Daily
News 1 Jun

27 Jul 1898 BR

Slough 1.37" in 45 m

6 Aug 1898 BR

Oxford 0.75" in 15 m

Woburn 1.05" in 30 m

Addington (Bucks) 0.95" in 40 m

15 Aug 1898
Glasgow Herald
17 Aug

28 Jun 1899 St
James Gazette
29 Jun, Daily
Telegraph 29

Farnham (Surrey) 0.95" in 30 m

Horsell (Surrey) 1.50" in 1 h

Farnham 2.27" in 3 h

<London>: A thunderstorm occurred between 11.00 and noon with accompanying hail. In the clerkenwell district a number of cellars were flooded including basements of tradesmen's shops.

<Aldershot>: A thunderstorm continued for over an hour and the lower portion of the town was flooded. An army camp was flooded.

<London>: There was a hailstorm at Hampstead along with torrents of rain at its height for half an hour.

<Aldershot>: the roads in places were washed up to a depth of 2 to 3 feet and undermined. Ground floors on the Wellington Lines were flooded. The Cranbrook Road in South Camp was torn up in places to a depth of several feet and sand and gravel were washed down the hills and piled in heaps at lower levels. In the town

Jun

whole streets of houses were under water for an hour.

<Farnham> (Surrey): Very severe thunderstorm with heavy hail, the stones being about the size of marbles. 0.89" was measured, but much of the hail is believed to have bounded out of the gauge At nearby Dippen Hall from 5 to 7 p.m. In less than 3 hours 2.27" fell.

23 Jul 1899 BR

Godalming (Surrey) 0.75" in 30 m
Sheppey 0.60" in 30 m
Riverhead (Kent) 1.48" in 70 m

<Guildford>: The drive was washed into deep ruts, and the gravel carried over plantations and lawn, the latter being covered with water. Roads in places were washed so as to be very bad travelling all the summer.

24 Jul 1899 BR

Horsley 1.58" in 45 m

15 Aug 1899

Reading

mercury 19 Aug

Knebworth (Herts) 0.80" in 19 m
Datchworth (Herts) 0.76" in 20 m
Watlington (Oxon) 1.58" in 45 m
Long Wittenham (Oxon) 1.75" in 50 m
Stow on the Wold 1.15" in 65 m
Wantage (Oxon) 2.25 in 3 h
Wimbledon 0.82" in 15 m
Leyton (London) 0.70" in 18 m
Sevenoaks 0.96" in 20 m
Bickley (SE London) 0.72" in 25 m
London strand 0.98" in 30 m

<Faringdon>: The heavy rain flooded the streets and the Corn Market. Hailstones fell of unusual size.

<Wantage>: the storm lasted 2 or 3 hours. Three sheep were killed by lightning in a field.

<Wallingford>: Rain and hail fell in torrents and flooded roads and low lying land and also many of the houses and cottages in the town.

6 Sep 1899

Morning Post 7

Sep, BR

<London>: In many parts of the city sewers were choked and thoroughfares flooded. Houses were struck by lightning and a few warehouses flooded. At Islington horses had to wade knee deep at the junction of streets. Horse Guards parade was converted into a huge lake. Westminster Hall suffered slightly from an inflow from New Palace Yard. In Falcon Road Clapham Junction water rushed out of a sewer and flooded the roadway for several hundred feet and entered several houses. Bishopgate Station was flooded and traffic delayed; a sewer on the Aldgate side of the station overflowed. Waiting room and office at Holborn Viaduct Station were flooded to a depth of several inches. The Crouch Hill Station was also flooded. Many houses in Stroud Green, Hornsey and Fortis Green were flooded.

<Edenbridge>: A number of houses were flooded.

<High Wycombe>: In a thunderstorm the village of West Wycombe was found after the storm to be covered with young frogs and pedestrians found it impossible to get along without crushing them!

7 Sep 1899 BR

Cirencester 1.23 in 35 m
Haslemere (Surrey) 1.50" in 1 h

<Haslemere>: Thunderstorm from 1 p.m. to 4 p.m. Total fall 1.70". Hail the size of walnuts; holes 3 feet deep were washed out in walks; turnips were brought down from a field a third-of-a-mile away. Water collected in a sloping meadow and poured over a wall 3 feet high in a cataract.

29 Sep 1899 BR

Grays (London) 1.29" in 2 h

1 Oct 1899
Oxford Journal
7 Oct, witney
Gazette 7 Oct

12 Jun 1900
Banbury
Guardian 14
Jun, Berkshire
chronicle 16
Jun, BR

3 Jul 1900
Sevenoaks
Chronicle 6 Jul
16 Jul 1900
Hampshire
Advertiser 18
Jul, Luton times

The path of the storm in
Bedfordshire seems to be
from the vicinity of
Leighton across Houghton,
Sundon, Streatley, Barton,

<Woodstock>: In a thunderstorm lasting nearly an hour the rain was followed by a downpour of hail of unusually large dimensions which caused gutters to be blocked so that for a time streets were converted into rivers with depths up to the knees. Several houses were flooded and sustained considerable damage. In three quarters of an hour 1.16" fell.

<Eynsham>: Rain with hail fell in large quantities and the streets were soon running with water. Many of the houses were flooded some to a great depth. Some of the hailstones were very large.

<Thorpe Mandeville> near <Banbury>: 2 ½ inches of rain fell in a very short time.

<Swalcliffe>: **Hailstones fell as large as 1 ½ inches in diameter**. There were similar reports from <Edgehill> and <Wroxton>. One farmer lost 7 sheep and a bullock from lightning.

<Upper Boddington>: The hailstones were very large and several windows were broken. In a few minutes drains were blocked and houses were flooded in all directions. Some cottages were flooded to a depth of 2 feet. Great damage has been done to fields and allotments and in some cases potatoes were swilled out. Tons of stones and gravel were swilled out on the roads.

<Hook Norton>: The **hailstones were generally the size of nuts but some were as big as pigeons' eggs or walnuts**. The storm was so sudden that drains were blocked and houses were flooded before people had time to prepare for the invasion. The water flowed through some houses and furniture floated in their rooms. The hail did great damage to gardens and orchards. The hail in some places was driven into ridges up to 4 feet deep.

<Abingdon>: **Some of the hailstones picked up weighed several ounces and were 5 to 6 inches round**. The streets and many houses were flooded.

<Hungerford> (Berks) About 3 p.m. a terrific thunderstorm broke over this neighbourhood with hurricane wind from WSW., and rain in torrents, such as never was seen in this district before. The area affected measured six miles by four with Hungerford as centre; Hungerford and <Kintbury> suffering especially. **The hail stones were as large as pullets' eggs**, some weighing eight oz.; the fall smashed glass and conservatories and damaged trees and crops

<Swerford> (Oxon): in a thunderstorm **hail fell as large as walnuts**. The worst storm in the neighbourhood since the great hail storm in August, 1843.

<Sevenoaks>: the storm did not last long but did much damage. Hail of exceptional size fell for 10 minutes affecting mainly the St John's district, the ground for a time being covered with ice. The hail damaged crops and gardens. Several houses in riverhead were flooded.

<Aylesbury>: Rain descended in torrents and partially flooded the streets.

<Wycombe>: A violent thunderstorm lasted just 15 minutes but the streets of the town became like rivers and were for a time impassable. The storm was preceded by a hurricane wind which eddied through windows. Water poured down from the hillsides and into the streets. St Mary's Street which is somewhat low was

**20 Jul, South
Bucks Standard
20 Jul,
Bedfordshire
mercury 20 Jul,
Bedfordshire
times 20 Jul, BR**

Higham and Henlow with
the most serious effects at
Streatley.
Berkhampsted (Herts) 1.14"
in 16 m and 1.00 in 30 m
Hitchin 1.00" in 30 m

converted into a lake in a few minutes. In Queen's Square, the water flowed from Priory Hill and rushed over the pavement like a river and ran into the shop doors. The rush of water was severely felt at the foot of Amersham Hill, where the brewery yard was flooded. At Sunnybank cottages on the West Wycombe Road the water came in the back and out of the front doors. The river <<Wye>> rose several inches with amazing rapidity. Thick black mud was left after the storm. Volumes flowed down Crendon Street and into the Abbey grounds. In church Street the water flooded the entire breadth of the road and also in white Hart Street especially near the National schools. Cottagers at Newland had to bail out their ground floors. Between the Golden Fleece and Mendy Street, a narrow portion of Desborough Road the water was 6 inches deep. Desborough Road from Bridge Street to the new bank was flooded but here the drains worked effectively. The middle part of Victoria Street was a quagmire. Water rushed through Sunnybank Cottages. The row of cottages between Victoria Street and the Bird in Hand fared little better. Trees were uprooted or had limbs removed. <Leighton Buzzard>: Hailstones did much damage to glass in conservatories. Hailstones in some cases measured 2 inches square. The River Wye is reported to have risen 10 inches in as many minutes. <West Wycombe>: The water came down Church Lane with terrific force bringing large stones with it. In Swan Yard and Square the water was over a foot deep in places and many of the villagers had water in their houses several inches deep. <Frieth>: The thunderstorm was accompanied by wind, hail and torrents of rain of the nature of a tornado. Several houses on the hillside were quickly swamped with water and mud. It is nearly 20 years ago that the village was visited with a storm of such violence (also on July 16th). The wind has done more damage than the lightning. <Amersham>: Among the effects of the storm a butcher's shop in High Street was filled with water. <Dunstable>: the storm only lasted just over half an hour but in that time all the houses in the lower part of the town were flooded and many in the High Street where in some parts it reached over 2 ½ feet. Hailstones of immense size fell smashing windows wholesale and doing immense damage to fruit and garden produce. Hailstones the size of walnuts were picked up but the majority were the size of marbles. Heavy losses were sustained to goods stored in basements. A cow was struck dead by lightning. <Toddington>: First there was a hurricane for a few minutes with a whirlwind of dust followed by a hailstorm with stones the size of walnuts. One hailstone was measured at 1 ½ inches in length. All the windows facing the storm were smashed. <Eaton Bray>: In the hailstorm large quantities of prunes and plums could be swept up and apples were cut in two. Most people suffered broken windows. <Markyate>: the drains in almost every house were blocked and houses and cellars were inundated with rushing water.

17 Aug 1900 BR Denmark Hill (London) 0.96" in 40 m
Clapham 1.50" in 1 h

20 Aug 1900 BR Betchworth (Surrey) 0.62" in 20 m
Caterham (Surrey) 2.30" in 45 m

23 Aug 1900 Brilliant weather for 13 days before the storm occurred

Bristol Mercury

24 Aug

29 May 1901

Cheltenham

<Clophill>: The schools were partially flooded and also many cottages.

<Silsoe>: First came the rain in sheets followed by hail as large as walnuts. Great damage has been done to windows and glass houses. Old residents say that no such storm has occurred for over forty years when there was one very similar.

<Streatley>: All the windows facing west were broken including 600 diamond panes in Streatley church, the lead even having been cut through in places. The hailstones were as large as pullet's eggs. Some pheasants were killed by the hailstones.

<Flitwick>: Hailstones fell of various sizes and shapes and some as large as walnuts or pigeon's eggs. Houses and premises were flooded. Windows were smashed and fruit trees injured and turkey chicks killed. One old resident remembers a similar storm which occurred 57 years ago on August 9th.

<Biggleswade>: The drains were soon overpowered and the streets became running streams. The Market Place, Hitchin Street, Cowfairlands, Fairfield lane, and Shortmead street were impassable and many houses in the town were flooded.

<Clifton>: After a deluge of rain and hail in a short time the roads were impassable with the water rushing through houses.

<Woburn>: Several houses and business premises in Chapel Street were flooded. Hailstones were as large as cherries.

<Chesham>: Many houses and businesses were flooded out. Germain Street, waterside, Market Square, Church Street, High Street, Broad Street, Berkhamstead Road, Townsend Road presented the appearance of flowing rivers. Houses and businesses were flooded in Church Street and Market Square. Many cottages in Waterside were flooded. The Moor was flooded and the river though it did not overflow its banks reached a very high level. Shops in High Street and broad Street were most severely affected.

<Wallington> (Surrey): Terrific thunderstorm between 4.10 and 5.10 p.m. Water collected to a depth of more than three feet under the railway bridge, and roads were washed bare

<London>: A deluge broke out over the greater part of the Metropolis. Many of the drains became choked and the streets flooded. The cellars of many houses in low lying neighbourhoods were flooded.

<Chipping Norton>: A thunderstorm was accompanied by large hailstones which riddled the leaves of trees. Although the storm was of short duration the streets were flooded and large ruts were cut where the water

**chronicle 1 Jun
2 Jul 1901 BR**

Haslemere (S Surrey) 1.00"
in 1 h

**12 Jul 1901
Nottingham
Evening Post 13
Jul, Herts
Advertiser 20
Jul, BR**

Tropical heat was reported
before the storm with
deaths from sunstroke. The
temperature in London
reached 88 F.
Maidenhead 3.63" in 1 h
BR Notes: July 12th was the
day of the great rain at
Maidenhead, and
thunderstorms were
general over the upper
watershed of the Thames,
but appear to have been
limited to that area.

**25 Jul 1901
Phillip Eden
Great British
Weather
Disasters,
Reading
Mercury 27 Jul,
London Evening
Standard 26
Jul, BR**

Oxford 0.85" in 20 m
Camden Sq 0.83" in 20 m
and 1.34" in 20 m and 2.20"
in 55 m and 2.43" in 90 m
and 2.66" in 2 h 30 m
Farnham (Surrey) 3.23" in 2
h

flowed down sloping streets.

<Maidenhead>: In a thunderstorm which lasted several hours the streets were flooded and some parts rendered impassable. The basements of many of the shops and houses were flooded to a depth of 2 feet. Daily rainfall at several stations was over 3 inches and at one station 4.24"

<Wycombe>: In a thunderstorm lasting barely half an hour the rain was sufficient to flood the low lying streets and several places of business were inundated.

<Watford>: A hailstorm caused extensive damage to crops. The hailstones were as large as walnuts and with jagged edges whilst others were the size and shape of marbles. The roads became like flowing rivers. At the lowest lying portions of Queen's Road there was 2 to 3 feet of water. The water flowed over the pavement into houses on the lower side of the road. In numbers 143 to 147 there was quickly between 5 and 6 feet of water in the underground rooms causing much damage to furniture and tools. The Junction Station did not escape with the water rushing down towards it; offices were flooded to a depth of 2 feet. Tradesmen's cellars in High Street were flooded.

<London>: A thunderstorm with hailstones, 2 cm across, struck London. 300 people sought shelter in KX station because their homes were flooded. The Underground was severely disrupted for 48 hours. Many low lying parts of London were quickly flooded. Westminster Hall was flooded to 12 inches with large quantities of water in the Palace Yard. Rainfall of 2.66 inches fell in an hour and a half. On the metropolitan Railway the tunnels between Farringdon Road and KX Station were flooded, stopping traffic for several hours. At one point inundations were reported to be 4 feet deep nearly reaching the engines but later 10foot depths were reported. Schools were set aside to house homeless people from the flood. In the Westminster area, there was 4 to 6 inches of water within half an hour on roadways flanking the Embankment and the Strand was in a similar condition. In the neighbourhood of the Houses of Parliament and Westminster Abbey the main roads including the Broad Sanctuary and Victoria Street were almost impassable. The Horse Guards parade was quickly converted to an expanse of almost liquid mud. The Imperial Theatre in Westminster was also flooded. BR Notes: The actual centre of intensity seems to have been very near Camden Square, and the rain rushing down the natural slope of the streets towards King's Cross flooded a section of the underground railway and did much damage to dwelling houses. Some of the hailstones measured more than half-an-inch in diameter
<Oxford>: On both days 24th and 25th basements were flooded all about the town.

29 Jul 1901 BR

Watlington (S Oxon) 2.10 in
53 m

**30 Jun 1902
Sevenoaks
Chronicle 4 Jul
1 Jul 1902 BR**

At Sevenoaks the storm
was said to be the worst
since Jun1892

Welwyn 1.01" in 90 m
Hitchin (N Herts) 1.20" in 2
h

**10 Sep 1902
Derby daily
Telegraph 11
Sep, Surrey
comet 13 Sep,
BR**

Gardens hops and fruit ,
gardens and roads widely
reported damaged
ingston 1.51" in 1 ½ hours
Surbiton 2.00" in 30 m
Weybridge 3.10 in 90 m
and 3.18" in 5 h
Thames Ditton (Surrey)
2.20" in 2 h
Norwood (London) 2.72" in
3 h 30 m

<Sevenoaks>: Rain fell in torrents for upwards of half an hour. Drains were inadequate and the streets resembled miniature rivers. Much damage was done to the surfaces of the roads. Manholes were forced up at various points and basements flooded.

<Sydenham>: considerable damage was done in the lower part of town with streets flooded in some cases of sufficient depth for a boat to be rowed on them. Articles of furniture were washed out of houses into the streets.

<Kingston>: Two men were struck and killed by lightning. At Kingston it was said to be the most severe for 40 years and the streets were flooded to a depth of 2 feet and many shops and basements were flooded; an organ grinder there was struck by lightning and killed. Water washed down from the Ashdown road and inundated the Three compasses. In Clarence and Thames Streets basement or several businesses were flooded. In the meadows of Oil Mill Lane the water reached half way up some haystacks. The basement of the Royal county Theatre was flooded. Much damage was done to the Queen's Promenade. There was a depth of 3 or 4 feet of water under the railway bridge on the Richmond Road.

<Surbiton>: the storm lasted about an hour and a half. The hailstones were thicker than peas. Brighton road shops were flooded with considerable damage to stock and furniture and at the junction with Victoria Road it was like a canal. Damage was done on roadways at the Waggon and horses Hill, Corkran road, Avenue elmers, and Ewell road where gravel and mud were carried down and deposited at the foot with deep channels cut in the metalled roadway.

<New Malden>: It was the worst that people could remember. In a very few moments many of the thoroughfares were flooded. Below the railway arch on the main road it flowed like a river and at one time was close to 10 (?) feet in depth. The water was also very deep under the bridge in Kingston Road.

<Hampton Wick>: A man was killed by lightning. Cellars and basements became flooded and some cottages off Park road were flooded to a depth of 3 to 4 inches.

<Teddington>: There was scarcely a road that was not flooded but those that suffered most were The Causeway (where the water rose to shop entrances), Manor Road (from the Recreation ground to Ferry road), Sandy Lane, Park Lane, Kingston Lane and Anlaby road.

		<p><Hampton Hill>: Between 2.45 and 3.00 the intensity of rainfall was 5 inches per hour. A serious slip on a railway embankment occurred by the side of Eastbank Road. The cutting was submerged for a considerable length from Fulwell Station to the Uxbridge Road Bridge. High Street from the Post Office to Paine's was under water flooding the Brewery Tap.</p> <p><East Molesey>: The storm lasted upwards of 2 hours and many of the roads were rendered impassable. The water entered several shops in Walton Road. No such storm has occurred here for 30 years. Daily rainfall was 3.57".</p> <p><Sunbury>: Many roads were flooded to a depth of several inches as well as many cellars.</p> <p><Esher and the Dittons>: The hailstones were of exceptional size some as large as cherries causing great damage to fruit and vegetables. The main Portsmouth road was converted into a mighty torrent and several houses in the village were flooded. At <Somersby> several houses were flooded. At <Thames Ditton> the commons were covered and at Windows bridge the water which ran down Ditton Hill was over 2 feet in places. BR observer reports: Weston Green Heavy thunderstorm with hail which was composed of lumps of clear ice of angular shape of and a diameter of half an inch, did great damage to vegetation and houses, blocking the gutters and pipes; roads badly damaged by rush of water.</p> <p><Woking>: Low lying roads were quickly converted to swift torrents through which people waded knee deep.</p> <p><Wallington>: Thunder at 4p.m., heavy rain 4.30 to 7p.m. Water 4ft. deep under the railway bridge. Rain 1.70"</p> <p><Haslemere>: Rain commenced at 2.30 a.m. and continued for 14 hours, amounting to 1.41 in. Very extensive floods in Godalming and other low-lying districts of the river Wey. The roads were under water at Chiddingfold, Dunsfold and neighbourhood in the evening.</p>
3 May 1903 BR	Probably not a flash flood	<p><<Upper Thames>>: In many places the stream has overflowed its banks invading the lawns of riverside houses and flooding meadows.</p> <p><Windsor>: An immense volume of water is running under Windsor Bridge and the river is 7 inches above high water mark. Under the arch on the Eton side the bed has been scoured and concrete blocks which protect the buttresses were dislodged.</p> <p><Oxford>: Low lying lands bordering the Thames and Cherwell are flooded. College cricket grounds are under water.</p>
5 May 1903 Weston Mercury 9 May	The thunderstorm in the Upper Thames Valley followed 10 days of rainfall	<p><London>: the rain came down in a perfect deluge for about an hour. In many places including the Euston Road the drains were unable to cope and places became quickly flooded. Crouch Hill station on the Midland Railway was flooded to above the height of the platform. A short section of the metropolitan Railway between Praed Street and Bayswater was also flooded and traffic stopped for half an hour. In Walworth and Camberwell many</p>
9 May 1903 Sunday Times 10 May, BR		

28 May 1903
South Bucks
Standard 29
May, Berks and
Oxon
advertiser 29
May, Daily
Telegraph 1
Jun, Phillip
Eden Great
British Weather
Disasters

Wandsworth common 1.5" in 2 hours.
Beddington Surrey 93 mm rain and hail fell including 89 mm in 55 minutes.

people found it impossible to stem the flow into their houses.

<Windsor>: The Thames rose 1 foot above the high water mark. Near the Bells of Ouseley the old Windsor Road was covered with flowing water.

<High Wycombe>: For half an hour torrents descended and soon large volumes were rolling down the hills into the low lying streets which speedily became flooded. At the foot of the hills there were collection of gravel and stones. Streets flooded included Oxford Street, St Mary's Street, and Frogmore. Hailstones remained in heaps.

<London>: The whole of the metropolitan area was affected but most severely in some of the suburbs. Low lying parts of the railway were flooded. In south <Croydon> huge volumes of water like streams from bursting reservoirs ran down from the hills and two deaths from lightning occurred there. Hailstones of extraordinary size fell. The basements of several shops in Shepherd's Bush were flooded.

<Brixton>: A deluge of rain fell choking the sewers and flooding the main roads

<Oxford>: The thunderstorm continued for upwards of an hour with the rain accompanied by hail. Several streets in low lying parts were flooded.

<Wallingford> the hailstones were collected to a depth of a foot. The hail tore the foliage from trees and plants and broke windows and skylights. With the rain the streets were submerged from kerb to kerb. The storm only lasted half an hour but in that time 1.02" was registered at the Castle grounds. The gutters were choked with the hailstones so that the great majority of houses were flooded the hailstones remained 6 inches deep in the upper part of St Martin's Street between the Market Place and High Street. The lower part of High Street was completely flooded. To this point the water rushed down from the Bridge, from Thames street and Castle Lane. It flowed into both entrances of the Town Arms Hotel and in the road reached almost to the horses' knees. The water then poured down towards the Canal Wharf and emptied into the river, tearing away 20 feet of the wall at the Wharf. Crops and gardens were damaged or destroyed by the hail. The hailstones were as large as marbles.

<Richmond>: About two feet of water collected on the rail line at Richmond Station.

<Newbury>: The thunderstorms started in the early morning and continued in places until midday. Many low lying roads and premises were flooded.

<Bodicote>: Rain and hail came down in torrents and the hailstones were as large as marbles. The streets very quickly became impassable and houses were flooded from a depth of a few inches to 2 to 3 feet.

<Bloxham>: Many places were flooded the drainage being insufficient to carry off the water. Some of the hailstones measured an inch in length and ¾ inch in breadth .

<Shutford>: Rain and hail fell for a considerable time so that deep channels were washed across some of the gardens and potatoes were washed up. Several houses were flooded in neighbouring <Swalcliffe>.

30 May 1903
London
evening
Standard 1 Jun,
Willesden
chronicle 5 Jun,
West
Middlesex
Gazette 6 Jun,
Croydon
guardian and
Surrey County
Gazette 6 Jun,
BR

Croydon/Malden 0.5" in 20 mins.
'The storm did not go Beckenham or Caterham way; cricket matches were played to their finish'
Croydon 0.80" in 15 m and 1.76" in 105 m
Beddington (Croydon) 3.50" in 1 h
Wallington 2.77" in 65 m and 3.02" in 2 h 10 m
Wimbledon 1.58" in 80 m

<London>: Further storms occurred mainly in the southwest of the city. Many low lying parts were flooded including basements. Hailstones were as big as nuts. The District Railway at Hammersmith from Broadway towards Ravenscourt park was flooded to a depth of over 2 feet. A further storm occurred early on 31st but no damage was reported.

<Marlow>: Half an inch of rain fell in 20 mins. The streets were flooded.

<Croydon>: Before the deluge the temperature was the highest so far in the year but afterwards it fell rapidly. The ground was covered in hailstones half an inch in diameter falling with sufficient force to break glass. Much damage was caused by the flooding of houses and furniture. South End and Pitlake which is always a sufferer in abnormal rainfall were badly affected. Rain poured along High Street and suspended business. In North end various businesses were flooded. In South Croydon the Swan and sugar Loaf was flooded. From Pitlake and Handcroft Road many basements were reported flooded for the water swept in a flood down Parsons Mead and Derby and Clarendon roads from London Road and down the bridge itself until the district was the centre of a swirling pool. In one house the water reached the level of the mantel shelf. Several houses and a greengrocer's on Handcroft Road were flooded. Sumner road was a raging torrent as was also Croydon Grove in spite of a new surface water drain. In South Croydon a bourne which flows every few years and attempts were made to convey this intermittent flow in culverts and sewers but these could not cope with the enormous amount of water. Down St Peter's Road the water poured in a spate; the roads disappeared and lakes sprang into existence. Some of the licensed houses were the chief sufferers with barrels floating in cellars, including the Swan and Sugar Loaf. The engine room of the Grand Theatre was flooded. The basement houses of Wellesley road were all more or less flooded with water forced up the drains from the sewer, especially in Wellesley Villas. A large volume of water collected in Whitehorse Road between the Gloster Tavern and Arundel Road. At Addiscombe there was no hail but the water came down from Windmill Bridge and at the junction of Lower Addiscombe and Cherry Orchard roads there was a deep impassable lake with water flowing into houses. <Thornton Heath> near <Croydon>: Two men were killed by lightning.

<Oxford> A man was killed by lightning.

<Bicester>: A man was killed by lightning.

<Uxbridge>: Estimates of the size of hailstones varied from marbles to walnuts. The Moor district seems to have suffered most with glasshouses serious damaged. An electricity supply company building was flooded.

<Greenford>: The road round Coston's Lane from Betham School to the Brent was impassable. Much damage was done to Greenford Hill and Brent Hill where portions resembled a pebbly seashore.

<Hayes>: The storm which lasted from midday to 3.00 pm was accompanied by hailstones of enormous size which blocked all the drains and the roads became flooded and impassable, in some places to 2 to 3 feet. Hayes Town and Freeman's Lane had quite a large number of houses flooded. The lake at Lake House was swollen and

**16 Jun 1903
Coventry
Evening
Telegraph 17
Jun**

Persistent rainfall followed by a thunderstorm. Flooding due mainly to persistent rainfall

**18 Jul 1903
Manchester
courier 20 Jul,
London Evening
Standard 20
Jul, Chichester
Observer 22
Jul, BR**

Following 27 days with a total rainfall of 0.07" in a few hours before 8 am on 18th Wandsworth common measured 1.61" and Tulse hill 1.31"
St Pancras 0.87" in 17 m
Henley 1.02" in 40 m
Cirencester 0.72" in 40 m
Bisham 2.24" in 2 h 45 m

**19 Jul 1903
Bucks Herald
25 Jul,
Faringdon
Advertiser 25
Jul, BR**

Alton (Hants) 1.68" in 30 m and 3.21" in 90 m
Nutfield (Surrey) 1.00" in 1 h
Tonbridge 2.50" in 2 h

23 Jul 1903 BR

Buckhurst Hill (Essex) 1.57"

swept into the road by the Cross and then went on an met the stream near <Holmbury> . The pond near the church as well as one by the Adam and Eve nearly covered the surrounding roads whilst water rushed down the aisles of the church. At Wood End Green three cottages were flooded. The cricket field was a sheet of water. Morgan's Lane was under water. The effect on fruit flowers and vegetables was disastrous in the extreme. Glasshouses and conservatories as well as house window were broken. Chickens were drowned.
<Wallington>: The storm did an immense amount of damage, many cellars being filled and roads practically washed away.

<Bishops Stortford>: Houses in the vicinity of the river Stort were flooded and children were taken to school in carts. In one street 120 people were living in upper rooms without a fireplace. In one house it was 8 feet deep. A farmer at Parndon had 120 sheep drowned. Similar effects in neighbouring E Anglia rivers

<London>: A thunderstorm caused serious flooding in many places. The District Railway was swamped near Earl's Court, the water covering the axle boxes. At Crouch Hill Station the water was up to the platforms. Portions of Clapham common resembled a large lake. Many houses in Stroud Green and the lower part of Hornsey were flooded. Manholes at Finsbury Park were forced up. At Forest Gate, Manor Park, Ilford, Leytonstone and Barking within half an hour the basements of tradesmen's houses were flooded. Large hailstones fell at Dagenham and Hornchurch. At Leyton, Lea Bridge Road in 28 ½ minutes 0.58" fell. The drains could not carry the water and roads and gardens were flooded and trains were stopped.

<Tonbridge>: Heavy rain fell for two hours flooding houses and streets in the lower part of town. The railway goods yard and the police station were under water and people in some of the houses were obliged to take to their upper rooms.

<High Wycombe>: Heavy rain fell accompanied by hailstones of abnormal size for about an hour. The rush of water was so great that on the hillside streets the road metalling was displaced with grooves 5 inches deep. Debris was deposited in large heaps at the base of the hills. The centre of the town was deeply flooded.

<Hillesden> and <Gawcott> S of< Buckingham>: the great volume of water caused the roadways and several of the houses to be flooded.

<Buckingham> rain fell in torrents and converted to roads into miniature brooks.

<Longcott>: the rain was accompanied by pieces of ice and several houses were flooded.

<Isley>: One man was killed by lightning whilst engaged thatching a rick.

<Tonbridge>: During a heavy thunderstorm 2.80 in. of rain fell between 1 and 4.30 p.m. Nothing approaching this has occurred since July 11th 1874, when 3 inches fell in 2 hours.

<p>24 Aug 1903 Buckingham Advertiser 29 Aug 4 sep 1903 BR</p>	<p>in 1 h</p>	<p><Buckingham>: The heavy rain was accompanied by hail causing many drains to be blocked and many houses flooded. The rivers in the neighbourhood are full to overflowing and many meadows are flooded and crops have been beaten down by the heavy rains.</p>
<p>24 sep 1903 BR 8 Oct 1903 BR</p>	<p>Ealing 1.61" in 90 m</p>	<p><Fulham>: Very heavy thunderstorm with torrents of rain from about 6.45 to 10 p.m. Trains on the District Railway were much retarded by the flooding of parts of the line.</p>
<p>27 May 1904 Nottingham evening post 28 May, BR</p>	<p>Cirencester 0.82" in 19 m Botley Hill (S of Croydon) 1.05" in 1 h This was a day of severe thunderstorms in the south of England, accompanying a depression which passed close along the whole south coast from the Lizard to the North Foreland and thence northward. There was also much rain in Yorkshire.</p>	<p><Botley Hill>: Between 6.30 and 7.30p.m. about 1.05 in. of rain fell. All the drainpipes overflowed and many houses were flooded. <Maidenhead>: Rain fell with torrential force flooding the streets and rendering some of them impassable. Basements of shops in Queen Street were flooded and sand and debris from the hills washed down into High Street.</p>
<p>25 Jul 1904 Birmingham Daily gazette, BR</p>	<p>Guildford 1.17" in 2 h London 0.50" in 11 minutes: nearly n inch between 6.46 and 7.30 (prior July total rainfall 0.23"). The thunderstorms were widespread in England. St Pancras 0.99" in 45 m Watford 2.03" in 1 h Hampstead 1.50" in 3 h</p>	<p><London>: After a day with light rain a thunderstorm struck at 7.00 pm. Westminster Hall was flooded making its way almost to the steps leading to the House of Commons caused by the inability of the sewers in the palace yard. The bursting of a sewer in Craven Hill Bayswater caused serious flooding to the Metropolitan Line between Queen's road Bayswater and Praed Street where traffic was suspended for 2 hours. Passengers were led to safety through the tunnels. During a thunderstorm the tunnel of the Metropolitan Railway between Queen's Road and Praed Street was flooded and the fire of the engine drawing a passenger train was extinguished. Two engines were sent in, but had their fires put out also, and the water rose to the seats of the carriages. In an hour the flood subsided, and two more engines rescued the train. A youth, aged seventeen, was struck by ightning and killed at Blackfriars. <Hitchin>: Daily rainfall of 2.71". This was the heaviest fall since July 9th, 1884, when 2.76"fell. The flood was extraordinary and tore up the ground considerably.</p>
<p>26 Jul 1904 BR 27 Jul 1904 BR</p>	<p>Welwyn 1.20" in 1 h Cooling (Near Rochester) 2.66" in 45 m</p>	<p><Cooling> (Kent):In a very severe hail storm, and 2.66" fell in 45 minutes. Leaves were stripped off and apples so bruised as to be nearly useless. The extent of the storm was only about 500 yards by 300 yards and it</p>

**22 Aug 1904
London Evening
standard 23**

Aug

**30 May 1905
BR**

12 Jun 1905 BR

17 Jun 1905 BR

9 Jul 1905

Edinburgh

Evening News

10 Jul, Philip

Eden Great

British Weather

Disasters,

Luton times 14

Jul, Hendon

and Finchley

Times 14 Jul ,

BR

Reading 1.00" in 80 m
Broxbourne (Herts) 1.34" in
3 h
Haslemere (Surrey) 1.75" in
65 m and 2.00" in 2 h
Witney (Oxon) 0.81" in 25
m
London 75 mm rain
Luton Residents recalled
the storm of June 1897 and
a storm in August 1878
Ponders end (London) 1.05"
in 19 m and 1.69" in 45 m
Buckhurst Hill (Essex) 1.20"
in 30 m
Harrow Weald 1.03" in 1 h

fortunately did not affect any corn fields.

<London>: the hailstones were so large that numerous panes of glass were broken. Though the storm did not last long the rain and hail was sufficient to choke the sewers and several streets on an incline were completely covered.

<Witney>: Rain flooded the High Street to a depth of 18 inches.

<London>: A man and his four year old daughter were struck by lightning and killed on Parliament Hill. The man had an artificial leg and the lightning struck the metal in it. At <Tottenham> and <Edmonton> the deluge of rain flooded the roads

Several were killed by lightning including 3 on Hampstead Heath. In Leyton and Walthamstow, hailstones of great size fell.

<Banbury>: Rain fell with torrential violence for half an hour. At times the wind was high and boughs were torn from trees. The drains became blocked and low lying parts of the town and other localities which had never before flooded in living memory were submerged. In fish Street near Christ Church the water covered the whole roadway to a depth of several inches flooding the house of the verger of Christ Church. Basements of houses and Stone's Works in Gatteridge Street were also flooded. A horse was killed by lightning.

<Drayton>: Water poured in a stream through Drayton Church nestling in the hollow between the high road and Wroxton park.

<Tysoe>: the rain was accompanied by hail. Rain fell heavily for upwards of an hour causing great floods in the village. Corn and bean crops badly suffered.

<Hornton>: Several houses in the village were flooded.

<Luton>: The paper notes that the town now has a good storm water sewer system so that places formerly flooded were not affected this time. However basements were still flooded. The rain was accompanied by hailstones almost as large as marbles. At the bottom of Ashton road the water was rushing up through the culverts several feet high. Large quantities of silt and pebbles were washed down the street. In Dunstable Road from the Gasworks to Ivy cottages the whole road and paths were covered ; Hitchin road was similarly affected.

27 Jul 1905
Sevenoaks
Chronicle 4
Aug, BR
28 Aug 1905
East Anglia
Daily Times 29
Aug
29 Aug 1905
Buckingham
examiner 1 Sep
8 May 1906 BR

28 Jun 1906
Aberdeen press
and Journal 30
Jul, Philip Eden
Great British
Weather
Disasters, COL

Sevenoaks 1.29" in 1 h and
 1.66 in 40 m

 Hampstead 1.08" in 32 m
 Henley on Thames DR 2.24"

 Not a flash flood

Inundated cellars were pretty general and few places escaped and some new houses in Park Road had their cellars filled. A horse was killed by lightning and several buildings struck and damaged.

<Finchley>: The rain was accompanied by hailstones of extraordinary size which blocked gutters and had rain streaming down and into buildings. The cellars of some tradesmen in the High Street North Finchley were flooded whilst others in church end and East Finchley suffered similarly. <<Dollis Brook>> was quickly turned into a raging torrent and the water rose several feet above its normal height. Damage to nursery glass was done by the hail. At North Finchley much glass was broken and plants damaged. At Whetstone, one mile from here, a florist suffered to the extent of over £1000.

Trent Park (New Barnet) Exceptionally heavy Thunderstorm, accompanied by 2.42" of rain and the largest hailstones ever remembered ; this did great damage to all crops, spoiling hardy fruits and cutting young shoots clean off.

<Sevenoaks>: After a glorious month of sunshine a thunderstorm broke on 27th with torrential rain and hail and the damage done by the enormous rush of water was very great. Walls were forced down, basements flooded and building materials floated down the hills and the roads were torn up.

<Tonbridge>: A woman was killed by lightning whilst sheltering under a tree.

<Rickmansworth>: A heavy deluge of rain and hail flooded the streets and in some cases found its way into houses.

BR notes: A prolonged thunderstorm in the middle valley of the Thames brought some large falls.

<London>: The rainfall was persistent for at least 12 hours with daily totals of over 2 inches. However no thunder was reported.

Eden reports an overnight downpour for c 12 hours gave 50-80 mm over a large area of SE England bounded by London Oxford and Cambridge causing widespread surface water flooding.

<Luton>: 88 mm fell in the day and remains the highest on record.

Jun 1993

27 Jul 1906 BR

Erith (SE London) 1.00" in 30 m

Northwood 1.40" in 43 m

Watford 1.32" in 55 m

2 Aug 1906

Eastern

Evening News 3

Aug,

Independent 2

Aug 2009, BR

(Surrey Times)

Haslemere 1.46 inches in 15 minutes

Guildford: 0.89" in 8 m

Godalming 0.77" in 8 m

Haslemere 1.46" in 15 m

Grayshott 1.17" in 15 m

<London>: In the House of Commons the entrance hall and cloak room were flooded . Fortunately the torrent only lasted 10 minutes!

<Guildford>: Huge elm and pine trees were brought down, one gouging a hole in the town's bridge, chimneys were knocked over and shop fronts were wrecked. In places whole roofs were lifted off. BR reports: On the night of August 2nd a thunderstorm of tremendous violence broke over the town and district, and two lives were lost by falling trees. After a very hot day thick black clouds came up from the west, and by eight o'clock it seemed certain that Guildford would be visited by a heavy storm. By 8.15 the whole district was covered by the dense clouds. Although a few spots of rain fell earlier, it was not until about 8.30 that it began to rain in any quantity, and then it soon fell in great volume. The rain was followed by hail which came down with great violence, the hailstones being as big as marbles. In various parts of the town masses of the hail were actually found as late as 9 and 10 o'clock next morning. The wind, which accompanied the rain and hail, was terrific in its violence, and it was impossible to stand against it. It rose suddenly, and abated almost as suddenly. But in the few minutes during which the hurricane lasted it was almost impossible to hear the thunder, so great was the roar of the wind and the rattle of the hailstones. It was this tornado of wind which unquestionably wrought the greatest damage throughout Guildford and the neighbourhood. Chimney stacks were hurled down on to the roofs of houses, in some cases crashing through them and in others ripping off the roofs and falling into the street. Trees innumerable were uprooted or broken off, telegraph poles fell, roofs of sheds were lifted right off and carried yards away, plate-glass windows were smashed, and tiles and slates flew in all directions. With all this the streets became flooded, for it was quite impossible for the surface water drains to carry off anything like the vast amount of water which descended in a few minutes, in addition to which rubbish and dirt was washed down and stopped up the gratings. In some of the lower streets the water was a foot deep, while cellars and, in not a few cases, the ground floor rooms of houses were flooded. It was about 9 o'clock that the violence of the storm ceased, the rain quickly stopped and the wind dropped."—Surrey Times,

<Witley>: Terrific storm of hail and wind, accompanied by thunder and vivid lightning. The storm began at 7.30 p.m., and from 8.15 to 8.40 p.m. the wind and hail were remarkable. Lawns were covered two inches deep with what looked like lumps of sugar.

<Oxford>: Hail fell in irregularly shaped pieces from ¼ to ½ inch diameter, and nearly covered the ground for a few minutes. It was accompanied by one flash of lightning.

8 Apr 1907 BR

**1 Jun 1907 Pall
Mall Gazette 3
Jun, Bicester
Herald 7 Jun,
BR**

Oxford 1.10" in 20 m
Epsom 0.80" in 20 m
Sevenoaks 1.03" in 1 h

<Surbiton>: Water descended a sloping thoroughfare leading to the railway station in such volume that it invaded the down platform and poured on to the rails reaching above the metals.

<Rochester>: Low lying districts were flooded.

<Chatham>: Fair Row was flooded several feet deep and a boat was used to take people from their houses.

<Oxford>: So large a quantity of water fell that the drains were unable to carry it off so that the streets in many parts were flooded and water found its way into cellars and basements. Accompanying hailstones were as large as marbles. The gentle slope of New Inn Hall street and George Street was transformed into a heavy stream. Dust and mud were deposited at the lower end of George Street beneath a foot of water. Oliver the printer had several feet of water in their basement. At the end of Hythe Bridge Street and opposite the London and north Western Station the road was almost completely submerged to a depth of 1 foot. The hollow on the Botley Road beneath the Great Western Railway bridge was soon submerged to a depth of 2 to 3 feet. The village of <Botley> which was submerged in June storms 2 to 3 years ago was happily free from flooding this time.

Taphouse's Music Room in Magdalen Street had water covering the floor. BR Observer notes: On Banbury Road A severe thunderstorm commencing at about 4 p.m. T

In 20 minutes 1.10" fell, and St. Giles and Banbury Road had water over the footway and up to the tram-lines most of the way. At one time the water stood level with a bank about 9 inches high on the lawn. Half an hour after the rain had ceased hail stones were still lying on the grass.

<London>: Low Lying parts of Battersea were flooded. Residents in all the flooded streets were seen baling out water. Vehicles were used to convey persons across the streets. One man was killed by lightning at Woolwich. The low lying parts of Latchmere Road and Falcon Terrace were transformed into lakes where tenements were flooded to a depth of 2 feet 6 inches. Considerable damage has been done to the highways by the washing away of the surfaces.

<Oxford>: A man was killed by lightning.

<London>: The streets everywhere were quickly flooded by the torrential deluge. In <Hampstead> burst drains caused flooding and in Islington basements of shops and houses were flooded.

<Newbury>: The town and neighbourhood were flooded with much damage done.

**29 Jun 1907
Western
Morning News
1 Jul, Morning
post 1 Jul**

In London suburbs 2.5" rain
was measured.

**10 Jul 1907
Chard and
Ilminster news
13 Jul
21 Jul 1907
Nottingham
evening Post 22
Jul**

**22 Jul 1907
Morning post**

Abingdon (Oxon) 1.32" in 1
h and 1.43" in 2 h
Finchley 2.18" in 2 h 15 m

<Watford>: The High street for hundreds of yards was under water in some places 2 feet deep. Cellars and basements were flooded. The London and Northwestern railway station approach resembled a lake and the

23 Jul, BR

Cothill (Abingdon) 2.92" in 3 h
Mill Hill (London) 2.15" in 3 h 30 m
Muswell Hill (London) 1.95" in 3 h 40 m
Witney (Oxon) 1.93" in 4 h

subway was impassable. In a thunderstorm with hail rainfall of 2.65 in. was measured, nearly all of which fell between 3 and 5 p.m. This fall has only once been exceeded here in the last 30 years.

<Wycombe>: Rain inundated low lying parts of the town

11 Oct 1907

Daily Telegraph

12 Oct

End April

beginning May

1908 BR

Not a flash flood but thunderstorms followed in some parts of England later

4 Jun 1908

Portsmouth

evening News 5

Jun, Morning

post 5 Jun,

Croydon

Guardian 6 Jun,

BR

Leyton (London) 0.83" in 20 m
Epsom 0.90" in 41 m
3rd or 4th being the hottest day of the month, with temperatures exceeding 80° in most parts of England.

<London>: The storm hit some parts of the city but others were unaffected. In the City the storm was severe at the Mansion House where the roads were converted to channels of running water.

<Bromley>: Hail was followed by a deluge of rain and the hail or pieces of ice covered the roads and fields to a depth of 1 or 2 inches. Although the storm was short, cellars ere flooded

Thaw and flood on the Thames. At great Marlow the Thames rose 3' 1" above its normal summer level and caused floods. At Maidenhead the Thames exceeded the level in December 1907 and equalled that in Jun 1903.

At Buckingham the flood was unequalled for half a century with 4 pubs flooded and the gasworks flooded.

<London>: In <Dulwich> and <Crystal Palace> the rain was preceded by a dust storm, almost blinding in its severity. Then torrential rain fell for an hour and the thoroughfares in many low lying parts resembled lakes. At <Edmonton> and <Tottenham> a hailstorm did immense damage to crops and glass. Many of the stones were larger than marbles and trees and buses were denuded of their fruit and leaves. Thousands of windows in houses and glasshouses were smashed. At <Clapham junction> an inch of rain fell in half an hour and hailstones half an inch in diameter accompanied it. Streets in the lower part of <Battersea> were under water. In less than a quarter hour the drains were hopelessly choked and water poured into a large number of basement and ground floor dwellings. Some of the streets off Falcon Road were flooded to a depth of 2 feet. Grant Road was also flooded.

<Kingston>: The thunderstorm flooded roads, houses and businesses in the low lying parts of the town. The roadway under the railway bridge on Richmond Road was flooded to a depth of 4 feet .

<Beckenham>: Roads in many parts of the town were flooded and water entered houses and shops. The drains burst in several places forcing up huge blocks of concrete and tarred macadam. The roads at the station were submerged and the cricket grounds between Shortlands and Catford were a vast lake.

<Chatham><Gillingham>: Hailstones as large as sixpences descended and much damage was done by flooding.

<Sheerness>: Some of the low lying streets were flooded.

<Leavesden><West Herts>: Hail and heavy rain caused flooding of several villages and at Leavesden the roads were covered in some places to a depth of 2 feet.

<Croydon>: Many districts were completely flooded with the ground floors in hundreds of houses being under water within 20 minutes of the start of the storm. The ground was torn up by the violence of the rain and

4 Jul 1908
Sunday times 5
Jul
28 Aug 1908
London Evening
Standard 29
Aug,
Gloucestershire
echo 29 Aug
18 Aug 1909
London
evening
Standard 19
Aug, Eastern
Evening News
19 Aug, BR
25 Aug 1909
Nottingham
evening Post 26
Aug
17 Sep 1909

Cookham (Berks) 2.50 in 1 h
 45 m
 Maidenhead 2.69" in 2 h

Thunderstorms affected

Addiscombe Road ,for example, was left covered to several inches with sand and mud washed down from higher ground to the south. Many business thoroughfares were also flooded notable Whitehorse road near the Gloucester where the water extended across the road right up to the shop doors.

<South Norwood>: It suffered severely from the inadequacy of the drainage arrangements with 20 manhole covers forced up by the pressure of storm water and sewage making geysers of mud and filth several feet high. The flood invaded many houses in the streets leading from Portland Road. Alfred, Cresswell, Addison and Harrington roads were among the worst to suffer. Station Road cellars were flooded and at Norwood Junction the subway was flooded to a depth of 18 inches. The water came down Auckland Road and swept into the grounds of the Norwood Club submerging tennis courts and cricket ground. The <<Selhurst Brook>>, an open surface water drain overflowed into the fields and Selhurst Road converting it into a canal. Many basements and cellars were flooded on London Road.

<Mitcham>: Much damage was done to glass houses and nurseries by the hail.

<Marlow>: A thunderstorm struck the upper Thames valley. An inch of rain fell in less than an hour and the streets of the town were flooded. Hailstones of unusual size also fell causing much damage to gardens and fruit crops.

<Farnham>: The streets in the lower part of town were flooded after 0.75 inch of rain fell in 2 hours. Trains entering the station dashed through a stream of water 15 inches deep. Roads were scoured and tons of debris were carried away.

<London>: There were two hailstorms, comparatively short but severe and hailstones lay in the streets for several hours after the first storm to a depth of several inches. Many suburban streets were flooded particularly in the southwest and Southeast of the city

<Maidenhead>: the storm lasted from 7.30 to 9.00 causing the town to be flooded and business suspended. Hundreds of houses had their basements inundated some to within a few inches of their ceilings and breakfast and furniture were flooding. 'It is calculated that 3 to 4 inches of rain fell in an hour' (elsewhere 'more than an inch'). Tons of soil, sand and gravel were washed down from the higher west end of the town blocking the drains and watercourses. The high street was like a miniature torrent being flooded from side to side to a depth of 6 inches.

<London><Plumstead>: The rainfall was so heavy that the basements of several houses at the foot of Bostal Hill were flooded and trains were stopped with sand washed down the hills on to the line.

<Bloxham>: Rain fell in torrents and the drains were soon filled to overflowing.

**Banbury
Advertiser 23
Sep, BR**

Bucks, Berks, Oxfordshire. S
Warwick , Hants and Surrey
but with few references to
flooding
Oxford: 1.19" in 35 m
Buckingham 1.15" in 40 m
Byfleet (Surrey) 1.66" in 1
h
Frimley (Surrey) 1.26" in 2 h

16 Apr 1910 BR

Betchworth (Surrey) 1.20"
in 1 h

**16 Apr 1910
Hull Daily Mail
18 Apr,
Coventry daily
Telegraph 18
Apr, BR**

**7 Jun 1910
Cheltenham
Chronicle 11
Jun, BR, Webb
(2016) (Henley
Standard)**

Upton Grey (Hants) 2.02" in
1 h
Mapledurwell (Hants) 1.50"
in 1 h
Hayes (SE London) 2.00" in
75 m
Old Windsor 2.27" in 90 m
Wraysbury (nr Slough) 2.00
in 2 h 30 m
Stow on the Wold 90 mm in

<Oxford>: Some of the streets were covered with hailstones of abnormally large size and remained unmelted for several hours. Numerous houses were flooded. BR observer notes: At 3 p.m rain began to fall, but slightly at first. Suddenly the storm burst with dense hail. The noise and excitement of the hail were the most striking features. At 3.35 p.m. the rain measured 1.19" and there were still hailstones in the funnel. The drains were all choked, the hail having brought down leaves and twigs, besides the volume of water being too great for them, and many houses were flooded. The scene was most wintry, the grass and parts of the roads being covered with H, which in places was from 2 to 4 inches deep. The stones were not abnormally large, the largest being about the size of a marble.

<Reading>: The surface drains were quite unable to carry away the water and miniature floodes were seen in several thoroughfares.

<London>: A severe thunderstorm caused a heavy but very local fall in the north of London where this was the wettest day of the year at a good many stations. . The area over which the heavy rain extended was very small.

<London>: Snow fell, then hail then a downpour of rain in a thunderstorm. The streets were quickly flooded and houses inundated. In South London the rain fell for 6 hours and many trains were held up. Several buildings were struck and damaged by lightning. In Lower Tottenham two miles of streets were submerged and the water flowed right through many houses. Outside the White hart Lane Station the water was so deep that the station had to be closed. From Finsbury Park to Wood Green the main thoroughfare of Green Lanes was under water to a depth varying from a few inches to 4 feet. The Great Eastern line at stoke Newington was under water and trains could not get through. The booking office at Noel Park station was flooded and the platforms rendered inaccessible.

<Wood Green> (N London): Snow fell first, followed by a thunderstorm. The district was flooded in all low lying places, traffic being completely disorganized.

<Marlborough>: A man was struck dead by lightning.

< Cirencester>: the storm continued from 9.00 pm till after midnight. Several houses were flooded.

<Fairford>: It rained and hailed incessantly for 2 hours. Some business houses and private residences were flooded. Water rushed down Milton Road and London road adjacent to the River <<Coln>> like a miniature river. One warehouse was flooded 18 inches deep and serious damage caused.

<Bledington>: The flood rose at such a rapid rate that roads soon became impassable. The water rushed into many houses. At rectory Farm cattle had to be rescued from pens where the water was 4 feet deep. Pigs sheep and chickens were drowned.

<Chipping Norton>: many houses were flooded from the rush of water from the roads. Sheep and cattle were

**9 Jun 1910
Shepton Mallet
Journal 10 Jun,
Henley and S
Oxford
Standard 10
Jun, Philip Eden
Great British
Weather
Disasters 2008
Western
gazette 10 Jun,
Lamb 1964,
Reading
Observer 11
Jun, Oxford
Times 18 Jun,
BR**

c 2 h
Chipping Norton DR
108mm

Windsor Great Park 2.66" in 2 hours. Large hailstones lay in heaps 2-3 feet deep between Wales and Surrey. Reading Forbery Gardens 2.27"
People and animals were killed by lightning and houses struck over a wide area.
Wheatley and Kidmore End unofficial gauges measured 140mm
BR expresses doubt. (The figures are mentioned here because they have been referred to in the press, and may be cited in the future when the unsatisfactoriness of the particular rain gauges has been forgotten. At Kidmore End School, near Caversham, the measurement after one hour's rain was 4.90" and at Wheatley School, Oxfordshire, after 58 minutes' rain, 4.33". It would be rash to say that these amounts could not possibly have fallen in the time stated, for the fall of rain and hail on June 9th

killed by lightning.

<Shipton under Wychwood>: the road to the station was flooded to a depth of 2 feet the morning after the storm.

<Stow on the Wold>: In nearby valleys 'houses were flooded to the top of doors on ground floors. The evenlode Vale was reported to be in flood for miles

<Worplesdon>:<Surrey>: the parish church was flooded to a depth of 2 to 3 inches. Country lanes were flooded 3 feet deep.

<Farnham>: Houses were flooded.

<West Ealing>: There was a heavy hail storm which did much damage to greenhouses.

<Southall>: The approach to the Great Western Railway station was flooded.

<Henley>: the storm occurred between 12.30 and 3.30 pm. Harpsden church had 1 foot of water in it whilst the roadway alongside was impassable. Bell Street was practically impassable; it resembled a swift running river and the water flowed into several shops and houses. Reading Road suffered heavily with water rising to 2 feet on some parts of the sides of the road. St mark's Road and St Andrew's Road helped to flood the Reading Road as streams poured down these two thoroughfares carrying stones and gravel. Outside Dr Wainwright's and the Wheatsheaf Hotel the roads and footpaths were completely covered to a depth of several inches. The corner of Duke Street and Greys Road was completely submerged and entered the Queen's Head and the houses opposite. The river quickly rose several inches but subsided in a few hours.

<Stonor>: Greenhouses were struck and damaged by large hailstones.

<Reading>: Hailstones were as large as hazel nuts and lay in heaps 2 to 3 inches in depth. After the hail heavy rain fell and the surface water drains were quite unable to carry off the water with the result that many streets were flooded. Plants and flowers were razed to the ground. The water flowed in torrent down Prospect Street, raced across Oxford road into George Street where it resembled a river. It continued its course down the incline into Great Knollye Street. Under Oxford Road railway bridge the water accumulated to a depth of 2 or 3 feet and extended from the Bridge Mission Hall to within a few feet of the Salisbury road. Tramcars were unable to go through it. Towards the west end of the town streets were also flooded. In Scours Lane the water was 2 to 3 feet deep and between Scours Lane and Tilehurst Station the water was 4 feet in depth. Allotments on the Oxford road have suffered severe losses

<Caversham>: At Berry's Corner two cottages were flooded to several inches. Some hailstones measured nearly an inch square. The water ran down from the heights with irresistible force so that at Berry's Corner the road at the commencement of Church Street was soon impassable. Shops and houses were flooded to upwards of a foot. Roads were damaged by deposits of gravel. Cherry trees were utterly destroyed and chickens and ducklings were drowned. BR reports: Rain began to fall in torrents at 12.15, and at 13.25 it changed to heavy

was so exceptional as quite possibly to be unprecedented, but the figures are so very remarkable that they could only be accepted if recorded by a rain gauge of approved pattern and in unexceptionable conditions of exposure).

Henley on Thames 2.93" in 90 m

Cranleigh (Surrey) 1.30" in 15 m

Steventon (Oxon) 1.00" in 30 m

Watlington (Oxon) 0.80" in 30 m

Potters Bar 1.13" in 40 m

Aldermaston (Berks) 1.33" in 45 m

Assendon (Oxon) 1.90" in 1 h

Caversham 2.50" in 70 m

Hassobury (Herts) 1.52" in 2 h

hail. For 35 minutes hailstones, varying in size from a marble to a large walnut, fell so that the ground was white with them. At 13.25 when the rain temporarily ceased, the fall measured 2.50". Many low-lying places were flooded to a depth of from 9 inches to 3 feet.

<Newbury>: A few low lying houses were flooded.

<Slough>: Many of the sewers became blocked and streets in various parts of the town were flooded.

< Oxford>: Thunderstorms caused much flooding.

<Wheatley>: Six miles from Oxford seemed to be the centre of the storm. Hailstones as large as marbles fell with the rain but melted on reaching the ground. At the school the gauge was read and emptied at 9.00 am; at 12.42 the storm broke and the gauge when emptied at 1.20 pm recorded 2.68". Twenty minutes later a further 1.66" was recorded while at 6.00 pm a further 0.86 was added. The total for the 24 hours to the next 9.00 am reading was 5.49". (~4 ¼ inches in 1 hour). The culvert through the main street was (obviously) unable to take the flow and at the western end of the village a wall was washed down. A torrent some 3 feet deep swept through the heart of the village carrying furniture. The depth in the Post office was 2 feet 6 inches. In one low lying house on Crown Street the water reached a depth of nearly 6 feet, the housewife making her escape through a bedroom window. In a farmhouse a rick weighing nearly 2 tons was bodily transported and numerous geese and ducks were drowned. The storm came from an eastward direction and seemed to circle round the town several times. The half mile length of High Street was flooded and nearly every house to depths up to 4 feet and in some cases the water streamed through lower windows. The Oxford Illustrated Journal showed photographs of tide marks in Crown Street at 180 cm

<Waterstock>: A hailstorm did severe damage and blocked the railway line for some time. There was nearly 4 inches of hail on open ground and in drifts against walls up to 4 feet deep. The hailstones were of great size. Garden produce and flowers were completely destroyed. The stones being as large as walnuts. The fall lasted an hour and did great damage. The total rain was 3.95".

<Thame>: The heavy rain completely inundated the streets and at Ford the river overflowed its banks and the roads became impassable.

<Goring>: The hailstones were as large as filbert nuts. The drains were unable to carry the flow and the streets were running ankle deep in water while several houses were flooded.

<Tiddington>: The hail came down with considerable violence and the deluge swept all before it. Gardens were destroyed.

<Stadhampton>: The streets were flooded and a kind gentleman carried children through the flood to school.

<Ambrosden>: Half an inch of rain was measure in less than an hour.

BR notes: In the Oxford area the thunderstorm that broke at noon was more terrifying, and the hail worked worse havoc, than in the Reading area. The great focus of destruction seems to have been between Wheatley

		and Waterstock, about six miles east of Oxford.
		<Kidmore End> (N of Reading): The roads were flooded in an incredibly short time, roots were washed out of the ground, and in two fields on a slope the soil was washed into the valleys. The water made a track several yards wide through a cornfield where no water had ever been known to flow before.
		<Assendon> (Oxon) In a thunderstorm with great destruction by hail which with rain amounted to 1.90" between 1.15 and 2.15 pm, some hailstones were half an ounce in weight and lay in places a foot deep. They froze compact and it was two days before all disappeared.
		<Stanton St. John>: Fearful storm, flooding houses, destroying young partridges, and doing much damage in the neighbourhood.
12 Jun 1910 BR	Abingdon 0.75" in 20 m Botley Hill (Surrey) 0.90" in 25 m	
4 Aug 1910 BR	Tring (Herts) 1.00" in 1 h	
5 Aug 1910 BR	Saunderton (Bucks) 1.00" in 30 m Northwood (London) 1.50" in 80 m	<Rickmansworth>: In little more than 2 hours the rain amounted to 1.98", and caused great damage to the roads.
10 May 1911	Epping (11 th) 1.30" in 1 h	<Speen> (Bucks): Heavy hail storm. About 1.00" fell in half an hour and caused enormous damage to gardens. Green stuff was torn up by the hail stones which were still lying in places 30 hours after the storm.
Salisbury and		<Gillingham>: So much rain fell that in a very short time houses in several parts were flooded.
Winchester		<Faringdon>: The storm approached from the White Horse Hills and soon rain and hail fell the size of marbles. The storm only lasted 30 minutes but the drains were inadequate in the low parts of the town and in the neighbourhood of the Corn Market the flood must have been 2 feet deep. Several cellars and underground kitchens were flooded and in many instances the water rushed in at the back door and out the front door like a millstream. Storm rainfall was 0.74".
Journal 13		<Waltham Cross>: The main street was flooded to a depth of 2 feet stopping all traffic except horsed vehicles. A pinnacle of Holy Cross Church was struck and destroyed.
May, Faringdon		<Hitchin>: The rainfall was so great that shortly after it began business had to be suspended in some parts of Nightingale Road while at the foot of Tilehouse Street, in Sun Street and in Bridge Street the water rose to a height of 2 to 3 feet. It affected the telephone exchange. Between Hitchin and <Walsworth> the road was covered in places to a depth of 2 feet. Many cellars in the lower part of Hitchin were flooded. Hail also fell and has done some injury to fruit trees. The storm did not last more than an hour. The worst storm in Hitchin in the last 80 years was in July 1884.
Advertiser 13		
May, Stamford		
Mercury 19		
May,		
Biggleswade		
Chronicle 19		
May, BR		
13 May 1911	Broxbourne (Herts) 1.37" in 90 m	
BR		
31 May 1911	Eden reports At Banstead in	<Luton> Overpowering heat of the last few days culminated in a violent storm which broke over Luton and

**Luton reporter
1 Jun,
Lincolnshire
Echo 1 Jun,
West London
Observer 2 Jun,
Surrey Mirror 2
Jun, Philip Eden
Great British
Weather
Disasters 2008,
BR**

Surrey 92 mm fell in 3 hours with 80 mm in 45 minutes.
Hadlow Place (Kent) 1.15" in 45 m
Epsom 2.44" in 50 m
Potters Bar (Herts) 1.29" in H
Lewisham 1.25" in 1 h
Southwark Pk 1.24" in 1h
Betchworth (Surrey) 1.15" in 1 h
Watford 1.59" in 90 m
Banstead (Surrey) 1.75" in 105 m and 3.54" in 2 h 45 m
Bletchingley (Surrey) 1.94" in 2 h
Sutton (S London) 1.75" in 2 h and 2.39 in 2 h 30 m
Harrow (N London) 3.19" in 2 h 30 m
Epsom 2.86" in 2 h 40 m

Dunstable. A hailstorm lasted only 10 minutes but the hailstones were as large as walnuts. The countryside was covered in a mantle of white before the rain came. Skylights and windows were broken. Fruit trees were destroyed. The rain which followed flooded gardens and fields and transformed thoroughfares into miniature lakes. The water burst down Ashton Road Hill in a cascade. Dunstable road was flooded from the American Skating rink almost all the way to the Leagrave corner.

<Dunstable>: the water rushed down High Street but could find no outlet and under the L & NWR bridge the water was up to the girth of horses. Near the station a few houses were flooded.

<London>: It was said to be the severest storm in London since August 1906. City streets were flooded and the gullies were inadequate to carry the flow. Half an inch of rain fell in half an hour. At <Acton> the main line of the Great western Railway was flooded to a depth of 2 feet or more and trains were brought to a standstill. Acton station and the goods yard to the rear were flooded to a depth of 3 feet. A man was killed by lightning at Acton and also a woman in another incident. Two men were washed away in a deep cutting near Acton but were rescued. A landslide occurred on at Merstham on the South Eastern Line. Two men were killed and 6 injured on Banstead Downs; they were race goers from Epsom; a boy of 16 was killed at <Epsom> by lightning. A police constable was killed at <Morden> and another constable was killed at Merton. The storm broke over Hammersmith at 3.20 at a time when the Broadway was thronged with people waiting for the Derby results. In an incredibly short time the Broadway and King Street were deserted as people headed to doorways for shelter. Hailstones fell the size of small marbles. The basements of many premises were flooded. At Becklow Road Shepherd's Bush the water was 2 feet deep. The main thoroughfare was flooded in Chiswick and water flowed into the basements of houses. BR notes: We have been somewhat surprised at the small amount of flooding which is stated to have taken place. In the west of London the Great Western and District Railways were inundated, and considerable delay to traffic resulted. The Metropolitan Railway was also flooded in places, and in the City flood water, unable to escape by the over-charged sewers, found its way into the basements of houses. Near St. Paul's Station a temporary lake formed, and foot traffic became impossible for a time. More serious results were landslips which occurred near Park Royal on the Great Western, and near Merstham on the South Eastern Railway, which made it necessary to close these sections temporarily. The most severe part of the storm fell just as the Derby race meeting was coming to a close, and the enormous crowds who were finding their way from Epsom Downs were exposed to its full fury. Thousands of racegoers had no means of obtaining shelter, and so flooded were the roads that even those fortunate enough to procure vehicles found progress a matter of great difficulty. The damage done by lightning was great, several persons losing their lives either from being struck or from falling masonry.

<Lewisham>: the rain and hail flooded cellars and basements to a depth of almost 4 feet.

<Godstone>: In a heavy hailstorm the hail lay 6 inches deep over fields and gardens. A mill pond burst flooding

28 Jul 1911 Birmingham Daily Gazette 29 Jul	Birmingham registered 87.7F and Wolverhampton 88.3F. Deaths from heat stroke were reported. Burford (Oxon) 2.26" in 1 h Ponders end (N London) 2.75" in 115 m	adjacent house and stables. Some hailstones were quite as large as walnuts and greenhouse glass was broken Eden reports Derby Day storm affected racing at Epsom. In the London area 17 people were killed. Severe flooding occurred.
21 Aug 1911 BR	Beenham Ho (W of Reading) 1.94" in 40 m Englefield green (Surrey) 1.95" in 1 h Wroughton (Wilts) 1.59" in 1 h	<London>: The storm began with a sudden wind from the NE (officially 54 mph) and then the deluge of hail and rain; the hailstones were as large as cherries breaking a considerable amount of glass. Within 15 minutes 1.1" of rain fell; the total rainfall was 1.22" in the storm duration of 30 minutes. The temperature fell during the storm from 87F to 67F and rose quickly again afterwards. The rush of water down Ludgate Hill was terrific; the water in the right hand gutter rose to the height of a foot and flooded the pavement. Windows in Fetter Lane and Fleet Street which had been opened outward in view of the heat were struck by hail and smashed. In many parts of the City trees were uprooted or branches torn off. Streets were flooded at <Waltham Abbey>. The abnormal downpour caused the bursting of a pipe near Bakerloo Station in Piccadilly circus flooding that section of the tube to a depth of 1 foot. Between Edgware Road Station and Baker Street station the line dips and the water was level with the platforms at the west end of Baker Street station. Traffic was suspended. Water rushed into Westminster Hall which was covered to a depth of 1 inch.
21 Sep 1911 BR		<Woolwich>: The streets were flooded and the rush of water was so strong that it blew up the manhole covers in Lee Road.
9 Jun 1912 Henley and S oxford Standard 14 Jun		<Maidenhead>: Rain and hail fell heavily for nearly an hour flooding many streets in the lower part of the town.
12 Jun 1912 BR	Grays (Essex) 1.50" in 1 h	
23 Jul 1912 BR	Colney (London) 1.00" in 15 m and 2.33" in 2 h 30 m St Albans 1.40" in 1 h 30 m Barnet 2.81" in 2 h 12 m Hitchin DR 3.07"	<Hitchin>: The neighbourhood of Hitchin experienced what is described as the severest storm for 75 years, and a number of the entries in the table refer to that occasion. Severe flooding occurred BR notes: A day of very local thunderstorms affecting chiefly the east midland counties of England. The most prominent feature of the rainfall on this day was a well defined strip of heavy rainfall stretching in a due north to south direction from Lincolnshire almost to London.
6 Aug 1912	It was said to be the wettest summer since 1903	<Cricklade>: The thunderstorm was accompanied by large hailstones and the downpour was so rapid that

**Wilts and
Gloucester
Standard 10
Aug, Daily
Herald 12 Aug
29 Apr 1913
Lincolnshire
Chronicle 2
May, BR**

and the rivers are full.

Oxford 1.42" in 2 h
Abingdon storm rainfall
2.00"

**27 May 1913
Northampton
chronicle 28
May,
Oxfordshire
weekly News 4
Jun**

After several days of
tropical heat
thunderstorms with large
hailstones hit many parts of
England

**30 May 1913
Sheffield
Evening
Telegraph 31
May, Kent and
Sussex courier
6 Jun**

No hail accompanied this
storm.

houses were inundated, the open drains being entirely inadequate to receive the rush of water and the roads were flooded.

<Maidenhead>: The narrow High Street was transformed into a canal, the water pouring into cellars and basements of shops. Over an inch of rain fell in less than half an hour.

<Reading>: A portion of the Oxford Road was flooded to nearly a foot.

<London>: Water rushed down Ludgate Hill but little damage was caused. In High Holborn the water was 4 inches deep at the Peth(?).

<Reading>: In a thunderstorm the rain fell so heavily that several thoroughfares were flooded.

<Abingdon>: The water ran through the town with the force of a millstream. BR notes: The storm is said to have caused a flood unprecedented in memory.

<Reading>: Surface drains failed to carry the water away and many streets and public institutions were flooded.

In Oxford Road tramcars were held up whilst the approach to West Reading Station was rendered impassable.

Hail and rain fell from 2.00 to 3.45 in an area extending from Henley to Goring.

<South Oxfordshire>: Great havoc was done in the cherry growing districts by the hail.

<Sheerness>: Rain and hail swept over the area and a number of private houses were flooded.

<Tunbridge Wells>: Parts of the Pantiles became flooded to a depth of 10 feet with much damage to trader's stocks and household furniture. Tradesmen waded knee deep in the water to save their goods. Cottages in the lower part of town had water up to their window sills and thousands of chickens were drowned. The outfall sewer from the Pantiles through Eridge road has been damaged in several places. The excessive swill of water tore up macadam. 'We had much more water than in the last big storm in 1908' with a rainfall of 3.25 inches. The exceptional severity was local because at the Waterworks at Pembury the rainfall was only 0.87". This is much in excess of other measurements with the highest at Ravensdale of 1.40". The water poured into Nevil Street Sub station, flooding it out and causing a failure of all the lights in the neighbourhood of the Pantiles. The street works carried out in the London road area no doubt saved the Castle Hotel from flooding this time [presumably flooded in 1908] and there was no accumulation at the foot of Mount Pleasant. However, the boarding houses in Vale Royal again suffered as much as the shops in the Pantiles which included an antique shop. The invading flood poured off the Common and down London Road. Cottagers along the Eridge road had

vegetable gardens torn up and poultry drowned in their coops. Basements in Cumberland Walk, cellars of the GPO, Vale Royal Boarding houses, Cottages in High Street Rusthall, cottages at Norman Road, villas in Lansdowne Road, St James' Road, Auckland Road and Dorking Road were all affected though separated by some distance.,

17 Jun 1913 BR Libury Hall (Herts) 1.04" in 1 h

2 Oct 1913 BR New Malden (SW London) 1.20" in 24 m
Hedsor (Bucks) 1.08" in 1 h

7 May 1914
Portsmouth
evening news 8
May

14 Jun 1914 Thunderstorms stretched from east Berkshire to south London with 94 mm at Richmond Park in less than 3 hours and 88 mm at Staines in 5 hours. Seven deaths were noted from lightning strikes and there was much local flooding. The storm extended from Hastings to Teignmouth. Richmond Park: 1.8" in 45 min; 2.7" in 1.5 hr; 3.2" in 2 hr; 3.6" in 2.5 hr and 3.7" in 2 h 45 m
Englefield Green (Surrey) 1.75" in 1 h and 2.77" in 4 h
Wimbledon 1.82" in 90 m and 2.64" in 3 h
Roehampton (SW London) 2.94" in 3 h
New Maldon (Kingston) 1.75" in 3 h 12 m
Egham (nr Slough) 2.81" in

Philip Eden
Great British
Weather
Disasters 2008
Sheffield
Independent 15
Jun, The
Scotsman 15
Jun,
Birmingham
daily Gazette
15 Jun, BR (the
thunderstorm
of June 14th and
The rainfields
of the

<<Kennett valley>>: A thunderstorm prevailed in this area and many places were flooded (the paper was not specific).

<Northwest Kent>: Streets were flooded and houses inundated (PEN does not specify where).

<London>: 11 people were struck by lightning whilst sheltering under a tree, 6 being killed on the spot and three further in hospital. Hailstones as large as marbles were reported. Many streets and a number of houses were flooded. At Tooting Junction Station there was 5 feet of water and at the Streatham end of the Furzedown Road there was a stretch of water a mile long and half a mile wide. There was 8 feet of water in Tooting congregational Church. So much water entered the Central Hall that services had to be abandoned. Owing to the depth of water on the streets trams between tooting and Balham had to cease running. In the low lying districts of Wandsworth and Earlsfield The <<River Wandle>> overflowed speedily flooding acres of land and the working class houses which abound on the banks were flooded. Riverside houses in garrett Lane and Bendon valley had 2 feet of water in them. The new powerhouse which the London and South West railway were erecting near Earlsfield station had 10 feet of water in it.

Outside Kingston station the water was 4 feet deep

<Beckenham>: There was a fall of hailstones as large as large walnuts. Windows in houses and glasshouses were broken especially those in the neighbourhood of Clock House. In one portion of the High Street water poured through shops from front to back.

<Croydon>: At Norbury and Thornton Heath hundreds of cellars and basements were flooded and whole streets were under water. The <<Norbury Brook>> overflowed and flooded the adjoining golf links. The sewage pumping station was submerged to the roof.

The storm was severe at West Norwood, Gypsy Hill and Dulwich where much damage was done to gardens by the hail while the cellars of many houses were flooded. Hundreds of panes of glass in conservatories were

thunderstorm)	3 h 30 m Staines 3.48" in 5 h	broken. BR notes: Rain fell along the whole of the south coast of England, except possibly between Brighton and Littlehampton. The areas with as much as half-an-inch were, however, comparatively limited, the largest stretching from the south-eastern borders of Exmoor to the Isle of Wight. But the heaviest cell was over London.
18 Jun 1914 Derby Daily Telegraph 19 Jun	Hounslow: Storm rainfall 1.77" Oxford 1.50" in 1 h	<Swindon>: Heavy rain caused many streets to be flooded. <London><Isleworth>: St John's road and neighbouring thoroughfares were flooded by the overflowing of the watercourse. The water rose until the Brewery Meadow and the recreation ground were covered to a depth of several inches. <Hounslow> High Street was almost submerged. Water collected under the bridge on the main road at Isleworth Station to a depth of 3 feet. <Tilbury>: Streets of houses were flooded and Grays and Purfleet were also affected.
6 May 1915 Sheffield Independent 7 May, Philip Eden Great British Weather Disasters 2008, BR	Clerkenwell 3.12" in 90 m	<London>: there was a heavy thunderstorm with a deluge of rain and hail which caused much flooding in low lying parts of the city. The basements of some establishments in the central part of the city were rapidly inundated while street traffic continued with some difficulty. Eden reports: Thunderstorms occurred over London, heaviest between KX and City with 79 mm at Finsbury in 90 minutes. Hundreds of properties were flooded and the Underground was suspended for several hours. It is probable that more than 2 inches fell within the oval bounded on the west by Piccadilly Circus, on the east by Shoreditch, on the south by the Strand, and on the north by Euston Rad. More than 3 inches of rain possibly fell on -an area, perhaps half a mile wide and a mile and a half long, between the City and King's Cross.
4 Jul 1915 Bicester Herald 9 Jul, BR	Woodstock had 74 mm in 65 minutes. and 1.14" in 20 m Oxford 0.99" in 35 m Hampton Poyle (Oxon) 2.91 in 65 m	<Bicester>: Hail the size of moorhen's eggs caused untold damage to windows especially when accompanied by a strong wind; it raged for over half an hour. The Causeway was under water and only a short time after the storm began the water was coursing down the narrow street and several low lying houses were swamped with water well over a foot deep. The YMCA suffered badly and several other buildings in the same area where muddy sediment was left on the floor. A grocery shop and a boot shop were flooded. On the Market Square residences were swamped. Sheep Street was flooded from the Crown Hotel down to the George corner including several houses. Even those occupying elevated positions did not escape, for example Henley gardens. The occupants of 'Tin Town' Banbury Road suffered considerably – as these have no upstairs. North street and St John's Street had similar experience to the Causeway with low lying houses swamped. The water whirled round the Star corner and ran into several cottages with furniture floated out into the street. Great damage was caused to gardens. <Bucknell>: Practically every house in the village was flooded. In the school house the sitting room was turned

24 Jul 1915
Banbury
advertiser 29
Jul

3 aug 1915 BR

10 Aug 1915 BR

17 Aug 1915 BR

30 May 1916
BR

24 Jun 1916

Bicester Herald

30 Jun, BR

5 Jul 1916 BR

17 Aug 1916 BR

26 Aug 1916
Buckinghamshi
re examiner 1
Sep

Dartford 1.00" in 20 m

Wimbledon 1.03" in 20 m

Warlingham Surrey) 1.44"
in 40 m

Lewisham 1.12" in 50 m
Bromley 1.12" in 1 h

Oving 1.00" in 50 m

Tilbury 1.07" in 1 h

Wareside (Herts) 1.27" in
2h

Cheshunt (Herts) 3.51" in 2
h 30 m

into a lake. Hailstones were the size of walnuts.

<Ambrosden>: Drains and sewers were blocked by the heavy rain and inhabitants spent efforts trying to protect their houses from flooding. A raingauge measure 1.4" during the storm.

<Fringford>: 1 ½ Inches of rain fell in less than 2 hours and several houses in the village were flooded.

<Steeple Claydon>: Hailstones were 3 inches in circumference.

<Brill>: some hailstones were the size of hen's eggs and conservatories and windows were broken. The south side of Waterloo Square was flooded and water entered the post Office and adjacent houses.

<Winslow>: Hailstones as large as walnuts fell. Avenue Road acted as a drain for that end of the town, the water being knee deep and running with considerable force into the houses. In Horn Street the water from the churchyard rushed through houses and accumulated in front of the Congregational church.

<Oxford>: the roads were flooded but the city did not suffer as much as other locations. Damage was done to glass and vegetables in allotments

<Deddington>: The drains were instantly blocked by the deluge of hail and rain converting the streets into turbulent watercourses carrying all loose material from the roads and adding to the partial blockage by the hail. Thus a number of houses were flooded in some instances to a depth of 6 inches.

<Bicester>: The thunderstorm was accompanied by hail and the rain was so heavy that water flowed off roofs and down the sides of houses. Large streams of water flowed down Sheep Street. However only a few houses were flooded.

<Buckingham>: the downpour of rain and hail was torrential. Flooded roads were commonplace and mud adorned the pavement in Market Square, Broadway, Waterside, etc. as evidence that the drains could not cope with the flow. Shops were flooded in Market Square so quickly that no remedial action could be taken. It penetrated the old Mechanics Institute. Shops were flooded in Broadway and in parts of Newton water flowed

21 May 1917 Heywood Advertiser 25 May, BR	Bishops Stortford 1.96" in 2 h 30 m	<p>in the back door and out the front. Sand and gravel from the hills was deposited in Blucher Street from Park road and Chartridge Lane. In Waterside the water flowed down Gas house Hill causing flooding of houses. Rainfall was registered as half an inch in half an hour.</p> <p><Bishops Stortford>: A thunderstorm over the <<Stort>> valley lasted four hours. Much damage was done to crops and seed potatoes and onions were washed out of the ground and scores of houses were flooded.</p>
29 May 1917 Hull daily Mail 30 May, BR	Seale (Surrey) 1.50" in 30 m and 1.83" in 90 m Feltham (London) 1.24" in 39 m Leyton (London) 1.92" in 1 h	<p><London>: Accompanying hailstones were as large as hazelnuts and at <Brentwood> and other places windows were broken. Near <Ongar>, roads were flooded due to the rising of the River <<Roding>>. At <Leyton> within a few minutes of the storm breaking a half mile stretch of the Leytonstone Road was submerged to a depth of 10 to 12 inches. The main Richmond Road at <Kingston upon Thames> was flooded to 6 feet under the railway bridge.</p>
12 Jun 1917 BR	Godalming 1.81" in 35 m	
16/17 Jun 1917 BR, Heywood Advertiser 22 Jun	Maximum temperature before the storm was 89F in London St Pancras 1.18" in 56 m and 1.56" in 1 h and 2.75" in 113 m and 2.86" in 2 h 15 m Hammersmith 2.75" in 90 m and 3.10" in 2 h Finsbury Park 1.89" in 2 h Barnes Common 1.86" in 2 h Richmond Green 1.75" in 2 h Campden Hill 4.65 in 2 h 30 m Hampstead 1.90" in 3 h S Kensington 1.02" in 40 m Slough 2.30" in 2 h	<p><London>: Very localised thunderstorm occurred in the north London area well covered by raingauges. BR speculates whether similar rainfall intensity and amount may have occurred in districts but was not measured with limited raingauge cover. A total of 4.65" was measured at Campden Hill in 2 hr 30 mins. Considerable damage was done by flooding and heavy hail. This was the largest daily total for the London area, the previous largest being 3.90 on April 10 1878. In the Shepherds Bush area water flowed into the tube station and stopped the traffic. The bursting of mains threw up sections of roadway. A bear in the zoo was killed by lightning whilst holding its cage bars. At <Roehampton> the large hailstones weighed one ounce and were nearly an inch across. Four of the underground railways were so flooded that trains could not run – District, Central, Bakerloo and Metropolitan. BR Notes: In parts of the district most severely visited considerable damage was done by flooding and heavy hail was reported in places.</p>
29 Jun 1917 BR		
18 Jun 1917 Pall Mall	Kingston STW 1.21" in 25 m Hammersmith 0.80" in 25 m	<p><Richmond> and <Hammersmith>: The rain fell in torrents for 20 minutes and all the main roads were rendered impassable. Houses market gardens and allotments were flooded in all directions.</p>

gazette 18 Jun

Weybridge 0.68" in 29 m
Richmond Green 0.90" in
30 m

17 May 1918
Buckinghamshire
Examiner 31
May 1929

Hildenborough (Kent) 1.19"
in 75 m

<Chesham>: During a cloudburst a volume of water rushed down from the hills and flooded the lower portion of Chesham

16/17 Jul 1918

Philip Eden

Great British

Weather

Disasters 2008,

Webb et al

2009, Surrey

Mirror 19 Jul,

BR

Most BR readings are for
17th but the severest hail
was on 16th
Purley (Croydon) 1.10" in
11 m
Hackney 1.00" in 22 m and
1.35" in 35 m
Poplar (London) 1.18" in 23
m and 1.34" in 40 m
Shad Thames Pumping stn
2.07" in 30 m and 2.32" in 1
h 50 m
Sutton (Surrey) 1.35" in 30
m
Lewisham 1.02 in 42 m
Bexleyheath (London) 1.23
in 50 m
S Norwood (London) 1.19"
in 1 h
Victoria Park 1.25 in 75 m
Croydon 1.18 in 75 m
Tilbury 1.50" in 90 m

Thunderstorms affected Surrey. At Purley 28 mm fell in 11 minutes and some hailstones were 6 cm across and smashed glasshouses. Nothing else found in newspapers.

The southern outskirts of London were affected along the 35 km swath of this H6 storm; hail up to 60 mm across was measured. (Clark, 1920). Webb 2009 dates this to the 16th.

<Buckland>: A hailstorm was preceded by a loud roaring noise occasioned by the hammering on the earth of the hailstones; windows were smashed and cucumber frames and glasshouses riddled and garden crops were cut to pieces. The hailstones were like large walnuts many being 1 ½ inches in diameter. The storm was confined to a strip about 800 yards wide and in this all crops were destroyed.

<Betchworth>: The storm was violent here and at Broome Park< Grange park, Sandhills and Fryleigh. Some hailstones were picked up here as large as hen's eggs. In Sandy-lane channels several inches deep had been made by the water.

<Purley>: The storm burst with great fury over <Purley>, <Kenley> and <Sanderstead>. The main feature again was the extraordinary deluge of hailstones. Greenhouses and conservatories were badly damaged as well as window glass. The Boys secondary School at Kenley had most of its windows smashed to atoms. Schools were also flooded.

BR Notes: The storm appears to have affected, at any rate destructively, only a ribbon-like tract from half a mile to a mile wide, stretching from near Leith Hill, a mile west of Holmwood railway station, to North Bromley, a distance of 22 miles, passing through Betchworth, Buckland, Chipstead and Purley. The district affected being densely populated and intensely cultivated, great damage to property, especially glass and growing crops, resulted, the cost to the former being estimated at £2,000, and to the latter at even more. The chief centres of destruction were Buckland, Coulsdon (particularly Cane Hill Asylum, where glass and crops were destroyed to the value of over £1,000), Purley and Sanderstead. A curious feature of the storm was the unusual and irregular shape of many of the hailstones, some of which were measured as 2 ½ in by 2 in. by 1 ½ in at Purley, whereas at

Cane Hill they were probably larger. These were lumps of hard clear ice, with opaque lenticular cores, and marked by a number of protuberances about an inch long and a quarter of an inch thick, clearly part of the original stone.

5 Sep 1918 BR	East Grinstead 0.79" in 20 m Bromley 0.60" in 20 m Purley 1.63" in 45 m	
9 Apr 1920 BR	Bodicote (Oxon) 1.50" in 3 h	
26 May 1920 Sheffield Independent 27 May	Nettlebed (Oxon) 1.72" in 45 m Slough 1.25" in 1 h Barnes (London) 2.56" in 70 m	<p><London>: The thunderstorm mainly occurred over the <Putney> and <Fulham> districts of London. So heavy was the deluge that it quickly choked the gullies and flooded roads. Later the storm broke over <Brentford> and <Isleworth> where London Road was flooded. Kew Bridge Station was flooded and the train service between <Waterloo> and <Hounslow> was interrupted. The booking office at <Hammersmith> underground station was flooded and numerous basements in the district. Near Hammersmith Bridge the wood pavement was lifted up. <Barnes> and <Mortlake> also suffered and cars were stopped when the water reached their engines.</p> <p>[Note: In Paris a hailstorm occurred with hail the size of hen's eggs]</p> <p><Croydon>: Hailstones nearly an inch in diameter fell.</p> <p><Guildford>: The high Street was converted into a river.</p> <p><Caterham>: Hundreds of acres of land were flooded and several roads were impassable in the Caterham valley.</p> <p><Chertsey>: A many was killed by lightning whilst sheltering under a tree.</p>
12 Jun 1920 Western Times 15 Jun		
17 Jun 1920 BR 4 Jul 1920 BR	Reading 1.03" in 45 m Felbridge (Surrey) 1.00" in 48 m	
21 Sep 1920 Lancashire Evening Post 22 Sep		<Faversham>: A very heavy thunderstorm affected the districts of Faversham and Green Street flooding the streets to a depth of several inches. Large hailstones fell and the storm lasted three quarters of an hour.
14 Oct 1920 Lincolnshire Echo 15 Oct 27 Apr 1921 Lancashire		<p><Caterham>: A deluge of rain and hail washed the surface off the hillside and caused great damage. The main road in the valley was like a raging torrent for some time.</p> <p><Reading>: In a thunderstorm with hail a number of streets and basement houses ere flooded and fruit trees were damaged.</p>

Evening post 28

Apr

23 Aug 1921

Shepton Mallet

Journal 26 Aug

21 May 1922

Philip Eden

Great British

Weather

Disasters 2008

Yorkshire Post

23 May, BR

(Gardener's

Chronicle 3 Jun)

25 May 1922

Gloucestershire

Echo 26 May

Portsmouth

Evening News

26 May

Towards the end of May England suffered from a heat-wave; temperatures of 88 F. being recorded on the 22nd.

Harpenden (Rothampsted) 0.22" in 7 m

The storm was confined to east and southeast England with the heaviest rainfall in the London area. There were several deaths resulting from the heat. On 23 May 88F was registered in London and Margate.

<London>: In just over an hour in the afternoon seven tenths of an inch of rain fell at Kensington, railways streets and houses being flooded. There has been more rain in London than in the four months past.

Damaging hailstorms occurred in Kent and Surrey damaging hundreds of glasshouses. The storm in the north extended from Scunthorpe to Blackpool and affected much of Yorkshire. (See Yorkshire Chronology).

<Croydon>: From the Gardeners' Chronicle, we learn that on May 25th 200 panes of glass were broken by hail at Coombe House Gardens, Croydon, and no less than 400 at Hall Place, Tonbridge.

<Sevenoaks>: Rain rendered streets impassable and flowing like rivers. Large hailstones did considerable damage to growing crops. In the Shortlands Valley of Kent the road was flooded to a depth of 2 feet. The London road at the foot of Bromley Hill resembled a lake.

<Beckenham>: There was an exceptional downfall of rain and hail. The storm lasted about half an hour and at its close many places were white with hailstones. Gardens and roads were flooded and large quantities of flowers and foliage were stripped from trees.

<St Albans>: A torrential downpour of rain was followed by hail and many of the stones were as large as halfpennies and bounded several feet above hard roadways. Fruit trees were severely damaged.

<London>: The expansive roof of Crystal Palace had many cracked and broken panes of glass caused by the hail. Lightning damage was reported from many parts of London.

<Tunbridge Wells>: Hail 50 mm diameter fell at Mildenhall (Suffolk) and in the Tunbridge Wells area of Kent (Meteorol Mag 1922). (Webb 2009). Water rushed down hills into low lying streets until a torrent 5 feet deep was formed. Thousands of panes of glass were broken, shops were flooded and window blinds were riddled as if by bullets. Water rushed like a cataract over the bridge into the South Eastern station. A later report notes that a hailstorm with hail as big as pigeon's eggs panicked horses and caused flooding to shops. Trees were stripped of their foliage. Gutters were soon unable to cope and at Weekes the water flooded the shop. At Central Station the water soon covered the rails.

<Whitstable>: A severe wind and hailstorm lasted a quarter of an hour.

<East Herts>: Hailstones measured 1 ¼ inches in diameter.

9/10 Jul 1923
Sheffield Daily
Telegraph 11
May, Surrey
Mirror 13 Jul,
Yorkshire post
11 Jul,
Middlesex
County times
14 Jul, BR

Hampstead: 66 mm in 5 h
Preceding temperature in
London reached 91F
Bexley Heath, 0.61" in 20 m
from 00.45 to 01.05 on the
10th.

<London>: was affected by severe thunderstorms. Eton College Chapel was destroyed by fire after a lightning strike. Flooding occurred in parts of London. London had 1.92 inches in 5 ¾ hours. It was said to benefit farmers after recent dry and hot weather. Several buildings in London were struck by lightning and there was local flooding of roads.

<Redhill> and <Reigate>: At <Hooley> some houses were said to be washed into the brook. Hatchlands road was flooded and water reached a depth of one foot. Heavy stones were transported and at Linkfield Street there was a considerable deposit. A rainfall of 2.46" was recorded. A landslide occurred at Garlands road Redhill. St Matthew's Infants' School was flooded. A houses in Charman Road Redhill was flooded to a depth of 1 foot.

<Oxted>: The road leading from Oxted to <Limpsfield> had the appearance of a rushing torrent. The water which in places was over a foot deep carried large quantities of sand and gravel which was piled up outside the Council offices. Seven bullocks and two horses were killed by lightning in the neighbourhood.

<Caterham>: Torrents of rain and hail fell causing the hillside roads to be badly damaged with surface material washed down into the valley where there was a good deal of flooding notably at the railway station and at the deep outside the Police Station in Timber Hill Road. Caterham rainfall on the hill was 2.10" and in the valley 1.80"

<Ealing>: There was a prolonged thunderstorm lasting 9 ½ hours with extensive damage to buildings and trees from lightning but little reference to flooding. Elers Road resembled a large lake and the water covered the gardens in the neighbourhood of St Paul's Vicarage and flooded cellars to a depth of 1 foot. Some houses in Eaton Rise suffered severely with kitchens and sculleries under water. Basements of shops in Broadway were flooded and all the basements of the shops in Bond Street had water to a depth of 6 inches to 1 foot.

<Hanwell>: The sudden rush of water was unable to get away and there was a good deal of flooding in the lower part of the district. The cellar of Fox Hotel was filled and the hotel garden flooded. Several houses in Green Lane and St Margaret's Road had several inches of water on their ground floors and the laundry was badly flooded.

12 Jul 1923 BR

Bourton on the Water 0.95"
in 35 m

24 Aug 1923
Hartlepool
Daily Mail 25
Aug
14 May 1924
Gloucester

Kew and Croydon 0.62" in 1
h

<isle of Thanet>: There was a torrential downpour of rain and hail with some of the hailstones as large as hazel nuts. In a few minutes the streets were ankle deep in water. At the market place where the three main streets of the town meet the water was nearly 2 feet deep. Scores of houses and businesses had their basements and lower floors flooded. The storm lasted about an hour.

<London>: The city was visited by a terrific thunderstorm.

<Surrey>: Rain and hail caused much damage to fruit trees; many hillside roads were damaged and valleys were

**Citizen 14 May,
The Scotsman**

15 May

20 May 1924

Coventry

evening

Telegraph 21

May,

BRBirmingham

daily Gazette

21 May, Berks

and Oxford

Advertiser 23

May

29 May 1924

Nottingham

evening Post 30

May, BR

12 Jun 1924

Western daily

Press 13 Jun,

Sheffield Daily

telegraph 13

Jun

22 Jul 1924

Philip Eden

Great British

Weather

Disasters 2008

Yorkshire Post

23 Jul,

Kew: hottest day of the year so far 75F
Wallingford 0.98" in 1 h
Benson (Oxford) 1.05" in 18 m
Berkhampsted (Herts) 1.34" in 35 m
Lambourn (Berks (18th) 0.82 in 40 m
Offley (Herts) 0.94" in 45 m
Ellesborough (Bucks) 1.94" in 2 h
Oving House (Bucks) 1.00" in 50 m
Farnham (Surrey) 0.30" in 10 m

Wisley gardens 103 mm
South Kensington 1.20 inches was recorded in 20 minutes and 0.39 inches in 3 minutes.
Hampstead Observatory had an inch in just over a quarter hour. Half an inch was measured in 5 minutes.
S. Farnborough: 1.25" rain and Cb extended to 23000

flooded.

<Aylesbury>: Floods with rain and hail held up rail traffic. At <Cheddington> there was a landslide which destroyed signal connections. Cottages in low lying districts were inundated by the torrents sweeping down the hillsides. Furniture was floated out of the houses. Men in boats retrieved furniture. Many cattle in the fields were killed by lightning. In some of the villages in the Aylesbury district the water had risen as far as the first floor of many cottages.

<Weston Turville><Bucks>: A thunderstorm lasted 2 hours and caused flooding of fields and roads and the ground floor of houses. Several branch rail lines were flooded.

<Wallingford>: The streets soon resembled rivers rushing along. The drains were unable to cope and many shop cellars were flooded to an alarming extent. Many houses were also flooded with water passing right through from front door to back.

<Farnham>: A torrent of water several inches deep flooded Old Downing Street

<Maidenhead>: In 46 minutes so heavy was the rain that the streets and basements of shops and houses were flooded to a depth of several feet. Manholes burst causing a series of fountains. Cherry country suffered severely.

<Reading>: In a thunderstorm the **hailstones were as large as cob nuts** and caused much damage of garden produce.

<London>: The city and Surrey were affected by thunderstorms. A hailstorm was followed by rain which lasted about one hour. Bedford Street, Southampton Street and other streets leading into The Strand became like rivers. In The Strand the Adelphi Theatre had water up to the door and over the pavement. Westminster Hall was flooded from the Palace Yard. Harrow Road was flooded. Several basements of offices in The Temple were flooded. There were delays on the Underground from flooded tracks. Aldgate East Station on the district line was flooded and large areas of Waterloo Station were also flooded. There was no hail at <Hampstead> but many houses and cellars were flooded. Portland Road <South Norwood> was flooded to a depth of 6 inches and

**Freeman's
Journal 23 Jul,
BR**

feet
Wisley 2.03 in 40 m and
4.07" in 2 h
Guildford 2.39" in 57 m
Crawley 1.17" in 15 m
Weybridge 1.02" in 30 m
Cobham 0.75" in 30 m
South Kensington 0.39 in 3
m and 1.26" in 25 m
Hampstead 0.98" in 16 m
Hoddesdon (Herts) 2.33" in
2 h

**29 Jul 1924 The
Scotsman 30
Jul, West
London
Observer 1
Aug, BR
9 Sep 1924
Birmingham
Daily Gazette
10 Sep
1 May 1925 BR**

Wembley 20 mm in 55
minutes
Hampstead: 2.03" in 4.75
hours
St Pancras 0.37" in 6 m

**10 May 1925
BR
18 May 1925
BR
3 Jul 1925
Banbury
Guardian 9 Jul**

Godalming (Surrey) 0.60" in
5 m
Witley (Surrey) 1.77" in 65
m

gardens on either side were flooded. Streets at <Crawley> were flooded and the station subway was filled to the level of the road. Hailstones were as large as marbles and in some cases were flat discs the size of a shilling. Temperature dropped from 74F to 56F in a few minutes.

<Aldershot>: Rainfall flooded the lower portions of the borough to a depth of 18 inches. Roads were impassable and cellars and basements flooded.

<London>: A deluge of rain was mixed with squalls of hail. In a few minutes streets in the City were converted to rivers. The Underground at Kings Cross was affected by flooding at the Metropolitan platform. Heavy rain flooded the tunnel at St Mary's Station. The tunnel between Farringdon Street and King's Cross was flooded and no trains were able to run. No district trains were running past The Monument. In <Fulham> several houses and businesses were flooded. BR notes: In the afternoon a second thunderstorm caused flooding of the Underground Railway near Aldgate.

<Tonbridge>: Hop plantations were damaged being swept down by heavy rain. Scores of birds were killed by hailstones which also bruised growing apples.

<Windsor>: During a terrific hail storm which lasted from 15 h. to 16 h. the greater part of 1.61 in. recorded for the day occurred at the Royal Gardens, Windsor.

<Godalming>: The storm was accompanied by a few violent claps of thunder and heavy hail. The temperature rose to 57° just before the storm, fell to 44°, and rose again as soon as the storm was over, to 54°.

<Bicester>: There was a deluge of hailstones lasting 20 minutes averaging from half an inch to an inch. They quickly blocked the drains and when the hail was succeeded by a downpour of rain the floods covered the streets and invaded houses. From 2 ½ to 3 inches of rain was said to have fallen in an hour. In many shops and houses furniture and stock floated about whilst goods displayed outside shops were carried away. The Council chamber of the Urban District Council was flooded and a meeting was held elsewhere. Many windows were broken and some greenhouses were completely smashed. Plants and fruit trees were damaged.

22 Jul 1925
Banbury
Guardian 23
Jul, BR

The heaviest rain occurred in a broad band running in a straight line from north-west to south-east from Londonderry to Hastings and crossing the Snowdon, Birmingham and London areas. The heaviest falls, just exceeding 2" occurred in two small areas only, one immediately east of Birmingham, the other round about Aylesbury in Buckinghamshire. At many places in the eastern, midland, south-eastern and north-western districts of England the day was the warmest day of the year, with shade temperatures reaching 90°F. in many places.
St Pancras 0.53" in 15 m
Bierton (Bucks) DR 2.07"
Quainton (Bucks) DR 2.10"
Temperature reached 89F

24 Jul 1925
Shields Daily
News 25 Jul,
Sheffield Daily
Telegraph 23
Jul, Philip Eden
Great British
Weather
Disasters 2008,
Webb 2009,

<Rousham>: The village was quickly inundated with meadows and houses flooded to a depth of 6 inches.

<Banbury>: There were two thunderstorms, the first brief with 0.70" rain; the second was prolonged from 19.30 to 01.00 (23rd) with 1.79" rain. Floods were rising at the time of reporting.

<London>: The 22nd was memorable for the extensive damage caused by hailstones, in the Woolwich and Plumstead districts of London (BR).

BR reports for 22nd: The following details of the storm in the Woolwich and Plumstead areas are reprinted from the Meteorological Magazine for August, 1925, p. 169.

Shortly after 17h rain and hail began to fall, the hailstones increasing in size till within five minutes several were as large as a man's fist and weighed over 8 ounces. These large pieces of hail consisted of a white opaque centre surrounded by jagged ice crystals. The fall of hail lasted for 12 minutes and was followed by torrential rain until 17h. 30m. when the storm temporarily ceased. Thunder and lightning, accompanied by heavy rain, continued at intervals for several hours, but no more hail fell. Some of the lower roads were flooded and the water reached a depth of 3 feet in one of the roads adjoining the Plumstead Marshes.

<London>: Torrents of rain and hail caused flooding of streets. The water reached to the axles of trams in <East Ham>. Some hailstones measure 1 ¾ inch in diameter and broke more than 200 windows in East Ham; the face of the town clock was smashed. In <Woolwich> hailstones fell and solid lumps of ice some 3 inches in diameter and hundreds of windows were shattered. At <Belvedere> hailstones as large as tennis balls fell in a period of 5 minutes. In some streets in <Plumstead> scarcely one house escaped without a broken window.

<Southend>: Hailstones as big as florins covered the ground inches deep.

<Dartford>: The town also experience the hailstorm and many houses were flooded.

<Sittingbourne>: A whirlwind swept through the town and uprooted trees in a track 30 yards wide. A man was killed in his car by a falling tree.

Webb reports: London Kent and Essex were affected by thunderstorms with hailstones 6 inches in diameter damaging windows and glasshouses. Swath 20 km long, 12 km wide, affecting either side of the Thames

Estuary. There was much destruction of windows and glasshouses with slate roofs holed. (Met Mag 60,168–169).

<Reading>: In a thunderstorm the lower rooms of houses were flooded.

**11 Aug 1925
Birmingham
Daily Gazette**

12 Aug

23 Aug 1925 BR

**23 May 1926
BR**

**11 Aug 1926
Lancashire
Evening Post 12**

Aug

**30/31 Aug 1926
BR**

Godalming 1.33" in ~ 30 m
Abingdon (Berks) 1.32" in 2
h

<London>: Low lying districts in the city were flooded. At Woolwich Market Street the police station was flooded a foot deep.

Croydon 1.31" in 75 m
E Grinstead 1.80" in 90 m
Haywards Heath 1.45" in 90
m
S Godstone (Surrey) 1.35"
in 90 m
Oxted 2.20" in 100 m
Manor Park Cemy 1.50 in
105 m
Dormans park (Surrey)
1.66" in 108 m
Lingfield (Surrey) 1.68" in 2
h

1 Sep 1926 BR

Tatsfield (Surrey) 1.62 in 2
h

10 Jul 1927 BR

Cirencester 0.50" in 11 m

11 Jul 1927

Yorkshire Post

12 Jul, Philip

Eden Great

British Weather

Disasters 2008,

87 mm in less than 45
minutes at Holland house
Kensington.
Hampstead 0.67" in 10
minutes. The downpour
was practically confined to
1 hour.

<London>: In London houses and businesses were flooded; a baby was drowned in her home at Munster Road <Fulham> in 4 feet of water. The Holland Park district was badly flooded especially in Addison Crescent and Holland Villas. Many buildings were struck and damaged by lightning. In Latchmere Road <Battersea> there was a lake 6 feet deep. Water ran between the houses in Northcote road a market street in <Battersea> like a 2 foot deep river and vegetable and fruit boxes floated on the surface. In New Kings Road at the junction with Wandsworth Bridge road the main sewer burst forcing up the roadway and scattering wooden blocks. Six

**Hendon and
Finchley Times
15 Jul,
Buckinghamshi
re Examiner 15
Jul, BR**

There were three separate zones of very intense rain, viz., Kensington to Hammersmith, near Balham and at Hanwell.

Lambeth (Brockwell Park) 0.18" in 5 m
Chelsea (Western P. Stn.) 0.50" in 12 m
Stoke Newington 0.50" in 12 m
Battersea 0.75" in 15 m
Hampstead 0.85" in 24 m
Highgate 1.00" in 30 m
Hammersmith P. Stn 2.00" in 36 m
Kensington (Campden Hill) 2.00" in 38 m
Wormwood Scrubbs 1.80" in 45 m
Mitcham (Lower Green) 1.57" in 50 m
Bermondsey 1.50 in 114 m
Hendon STW 1.18 on 1 h
Reading 1.30" in 50 m
Kensington 3.35" in 75 m
Frimley Green (Surrey) 1.12" in 105 m
Camberley (Surrey) 1.93" in 2 h
Wellington College (Berks) 1.25" in 2 h
Balham High Rd 1.50" in 18 m
Kew 1.00" in 1 h

**31 May 1929
Buckinghamshi
re Examiner 31
May**

Schools in the neighbourhood of <Balham>, <Fulham> and <Hammersmith> were flooded in some cases to a depth of 2 feet. Sections of the main road from Balham Station to Tooting Broadway, a distance of more than a mile resembled rushing rivers. In Upper Tooting Road the water rose to a height of 2 feet for 300 yards. A number of shops were flooded in Mitcham road <Tooting> including a draper's and furnisher's shop which was flooded to a depth of 1 foot; chairs and carpets floated down the road. At Isleworth where the main road was under 3 feet of water parents waded knee deep to take their infant children home from school. Many <Isleworth> and <Hounslow> houses were flooded. There was serious flooding on the Central London railway and all the stations between Queens park and Wood Lane were closed. Trains were also cancelled because of flooding at <Dalston>. At <Acton> there was a downfall of huge hailstones which immediately whitened the road; this was followed by torrential rain and the water rose 6 feet under the LM &S railway bridge in Acton Lane and along the roads for 200 yards. Manholes in Acton were forced up in all directions and wooden paving blocks in some cases were 2 feet above their normal level. There were six calls to the Acton fire brigade to pump out factories and shop basements and the fire station itself was flooded. Flooding caused considerable damage at Pascall's chocolate factory, Hatfield's varnish works and the Mitcham gas works. Finchley road Hampstead and Golders Green Road were practically impassable. Many houses and churches were struck and damaged by lightning. The <<River Wandle>> overflowed its banks at Beddington and the water entered several houses. Many shops in <Hendon> were flooded with Brent Street particularly suffering; the vaults of Barclays Bank were flooded; Church Road presented the appearance of a river. The water rushing down Brent Street gathered in a deep pool all over the road to a depth of 18 inches. The cellars of Brent Bridge Hotel were flooded <Shepperton>: the area had been sweltering in the heat and then suffered a hailstorm with hailstones as big as walnuts. Hail broke skylights and houses were flooded out.

<Reading>: It experienced the full force of the storm and many streets were flooded.

<Chesham>: The rain washed surfaces off hill roads and deposited a tremendous amount of gravel in Chesham and flooded some houses. Premises in Blucher Street, High Street flooded. The water ran through The George yard like a river. In all the villages flooding was reported both in large and small houses.

<Chesham>: Chesham Main Street resembled a river with a rush of water sand silt and stones down the hills into the valley but the damage was not as severe as in 1918. The road at Chalfont Bottom was flooded. In Chalfont St Giles the water ran into some cottages.

<Wycombe>: The main road was more like a river than a road. Houses in the Oxford Road area experienced

**20 Jul 1929 BR
(Willesden
chronicle)**

Willesden (Middlesex)
1.00" in 30 m
Barnet (Herts) 1.03" in 55
m
Hampstead 2.02" in 1 h
Pinner 1.31 in 1 h
Rickmansworth 1.00" in 1 h
Kew 1.41" in 66 m

**24 May 1930
BR**

Kings Langley (Herts) 2.00"
in 45 m
Broadmoor (Berks) 2.03" in
90 m

**26 May 1930
Yorkshire post
27 May**

**2 Jun 1930 BR
13 Jun 1930 BR**

St Pancras 1.36" in 114 m
Cirencester 0.78" in 30 m

**17/18 Jun 1930
Philip Eden
Great British
Weather
Disasters 2008
Sheffield
Independent 18
Jun, BR**

Widespread thunderstorms
from N Wales to SE England
Surbiton (Surrey) 1.60" in
45 m
Hoddesdon (Herts) 2.18" in
1 h
Ealing 1.23" in 70 m
Manor Pk (Cemy) 1.60" in
75 m
Willesden green (17th)
1.46" in 2 h
Kensington Palace 1.24" in
106 m

flooding. The experienced flooding of streets and houses and the bowling green resembled a lake
<Chorley Wood>: The storm lasted from 17.00 to 19.00 and many low places were soon flooded including
Chorley Wood Bottom, Lower road and the main road near the Gate Inn. Solesbridge Lane at the bottom was
piled high with sand and great stones.

<Rickmansworth>: The temperature fell from 81.5° F. at 19.30 to 65.5° F. by 19.45, the roads nearby were
flooded 3-4 ft. deep.

<Willesden>: Coming, as it did, at one of the busiest hours of a Saturday, between 18 h and 19 h when
thousands of people were out of doors, and in the lightest and most summerlike attire, the storm caused great
discomfort, and hundreds got wet through before they could reach shelter. A large number of persons were
overcome by the combined effects of heat and storm. Many trams, buses and motors were held up by the
accumulated water, and on account of the many wood blocks which became loosened. Many parts of Kilburn,
Edgware and Willesden were flooded.

<London><Eltham>: Flakes of snow as large as half crowns heralded a violent storm. The High Street became
impassable, manholes were forced up and in Well Hall road the water was 1 foot deep. In the Archery road
district road surface material was washed away.

<London>: Water accumulated in front of Buckingham Palace. Wooden road blocks were forced up around the
Victoria Memorial. Parts of the road in Picadilly were flooded to a depth of a foot. A manhole in Ludgate circus
was thrown 20 feet in the air. Acton Sewage Pumping Station was flooded and water rushed like a river through
shops in the High Street. The subway at Acton Station was flooded. Harrow Road Willesden was flooded to a
depth of 3 feet and wooden road blocks were forced up. Several rooms in the House of Commons were
flooded. Flooding occurred on the line between Bow and South Bromley when the line was covered by 3 feet of
water. Serious flooding occurred in the Isle of Dogs and other parts of London as a result of intense rain of the
afternoons of both the 17th and 18th. BR notes: A heavy storm broke over the central and northern parts of
London shortly after 16h on the 17th. The Times reports that the District Railway lines between Turnham Green
and Gunnersbury were flooded and the services to and from Richmond had to be suspended for about an hour.
The downpour was so great at the Houses of Parliament that in Westminster Hall the water rose about 5 inches
in places and several rooms in the House were flooded. Parts of the roadway in Piccadilly were flooded to a

depth of nearly a foot. On 18th the total rainfall for the day exceeded two inches over a large area stretching from Lewisham to Bow and including the Isle of Dogs. At Greenwich Observatory as much as 2.66 inches were recorded. The rain following on the heavy falls on the previous day caused further severe flooding and serious dislocation of traffic.

<Ascot>: The racecourse was flooded and there were several deaths from lightning including a bookmaker. For the first time in the record the racing was abandoned. The total for the day at Ascot (Heatherwood Hospital) was 2.74".

29 aug 1930 BR Eltham (London) 0.90" in 14 m
Leatherhead 0.64" in 15 m

19 Jun 1931 BR

<Rickmansworth>: A severe thunderstorm, accompanied by hail of unusual intensity, occurred in the Rickmansworth and Chorley Wood district of Hertfordshire. The chief fall at Rickmansworth consisted of **spheroidal hailstones, mostly from 0.5 inch to 0.7 inch in diameter**, and lasted from 15.28 to 15.40. During these 12 minutes the whole country-side became as white as after a winter snowfall; the ground was covered rather more than an inch deep, on the average, and three or four inches deep in places. Several small birds were reported to have been killed by hail in the neighbourhood.

7 Jul 1931 The Scotsman 8 Jul 4 Aug 1931 BR

Berkhamsted 1.00" in 20 m
Little Kimble (Bucks) 2.12 in 95m

5 Aug 1931 Yorkshire Post 6 Aug, BR

Kingsway London: >1.00" in 30 minutes
Wimbledon 1.02" in 22 m
Merton Park (Surrey) 0.88 in 25 m
Surbiton 1.90" in 45 m
Wimbledon 1.48" in 45 m
Tottenham 2.10" in 50 m
Lewisham 1.50 in 55 m
Esher (Surrey) 1.92" in 60 m
Bromley (Kent) 1.30 in 60 m
Richmond (Kew) 1.00 in 33m

<Hitchin><Herts>: Many streets resembled rivers. Bridge Street, the principal entrance to the town was impassable for some time. [There were no reports of flooding of property].

<London>: The thunderstorm lasted 3 hours the longest for many years. Many houses were struck by lightning, many streets were flooded and tram and bus services disorganised. At Kings Cross owing to the flooding of a tunnel all main line and suburban traffic was at a standstill for a time. A teashop at Ludgate Circus near the culverted <<Fleet River>> was flooded through the water being forced up by pressure from the sewer. At the foot of Belmont Hill a large area of woodblock paving was forced up. Many houses and premises in London were struck by lightning.

<Kingston>: Six feet of water collected under the railway bridge in Richmond road. Thurston road <Lewisham> was under water

<Caterham>: There were deluges of rain and hail and the cellars of several shops were filled with water and in some houses furniture floated about. The police station in Timberhill road was cut off by floods nearly 2 feet deep.

8 Aug 1931 The Scotsman 10

Aug

14 Aug 1931

Taunton

courier 19 Aug, BR

1 May 1932 BR

11/12 Jul 1932

Edinburgh

Evening News

12 Jul

26 Jul 1932 BR

1 Aug 1932 BR

12 Aug 1932

Nottingham

Evening post 12

Aug, Yorkshire

Post 12 Aug, BR

Eltham (London) 1.12" in 60 m

Thunderstorms caused flooding in Wiltshire, Oxfordshire, Gloucestershire to Shropshire.

Shinfield (Berks) 1.34" in 40 m

Chadlington (Oxford) 1.75" in 1 h

Lewisham (London) 1.06" in 1 h

Beare green (Surrey) 1.20" in 30 m

Leyton (NE London) 1.26" in 20 m

Widespread thunderstorms followed 3 days hot weather. Thunderstorms with large hailstones were widespread especially in the south.

Rickmansworth 2.24" in 45 m (possibly greater due to hail

Park street (Hertford) 1.05" in 50 m

<Bromley>: Roads were flooded in places to a depth of several feet and there was 6 feet of water at the foot of Swan Hill on the main road from Bromley to Beckenham. Floods were also experienced at <hayes> and <West Wickham>.

<London>: The torrential rain caused extensive flooding in North London. The area around Lordship Lane, Westbury Avenue and Cambridge road, Wood Green North was completely under water to a depth of 1 foot. Eight houses in Grainger road Wood Green were flooded with depths from 6 inches to 2 feet.

<Mitcham><Surrey>: A thunderstorm raged for 3 hours and the Southern railway Station was flooded to within an inch of the top of the platform with 3 feet of water between the platforms.

<Tooting><Streatham>: At these stations there was a foot of water between the platforms.

<Bicester>: More than 2 inches was recorded over a small area in Oxfordshire to the west of Bicester.

<London>: A cloudburst over <Willesden> caused a good deal of flooding with water up to the steps of tramcars. High Street <Harlesden> became a river and shopkeepers closed their doors in an attempt to stem the flood.

<Reading>: The streets were flooded to a depth of several inches and water entered houses in the low lying parts of town.

<Chesham><Bucks>: the streets were flooded by torrential rain.

<Hoddesdon>: Hailstones the size of pigeon's eggs fell.

<Rickmansworth>: Heavy rain fell and in a few minutes the roads were running like rivers. The rain was followed by a hail storm. BR reports: For the second time within three weeks, the Rickmansworth and Chorley Wood district of Hertfordshire was visited by a thunderstorm of unusual severity.

After about 05.02 the deluge was accompanied by nearly continuous hail. The stones were spheroidal, and appeared to average half an inch in diameter, but were in some instances amalgamated into masses approximately the size of a golf ball. At 05.30 the hail ceased abruptly, and there was a progressive slackening of the rain. The adjoining country road, in common with most of Rickmansworth town, were flooded to varying depths, and a great deal of damage was done locally in this way. Throughout the morning fire engines were at

work pumping water out of the ground floors of houses in the main street."

<Waltham Abbey>: Thunderstorms occurred with hail as big as golf balls. 100,000 panes of glass were broken in 180 houses. One picked up at random weighed close on an ounce. There has been no parallel in the extent of damage since 1897 when there was a storm of similar severity.

<Cheshunt>: Half a million square feet of glass was broken in a nursery.

<Watford>: Roads were flooded, crops damaged and Watford Junction station yard and subways were flooded.

<Uxbridge>: the High Street was flooded to a considerable depth including business premises. Many windows were smashed by the hailstones.

14 Aug 1932 BR Little Kimble (Bucks) 1.83"
in 110 m

20 aug 1932 BR
(Luton News)

The Luton News for September 8th reports that the bulk of the 2.18 inches of rain at Luton, fell in about two hours and that as a result the river <<Lea>> rose five and a half feet in a very short time and that the sewage works were flooded out.

23 May 1933 Brookwood (Surrey) 2.45"
Berks and in 3.5 h
Oxford
Advertiser 26
May

<Wallingford>: After the hottest may day since 1929 a thunderstorm struck Wallingford. There was a fall of hailstones which were unusually large and did considerable damage. Then came the rain and the streets resembled rivers and houses and businesses were affected to a considerable extent. There was deep water near the railway arch. Water poured into the cellars of the Cross Keys Inn. Much havoc was wrought in gardens and fruit trees suffered. Some windows were broken. Benson and other villages were immune from the hail storm but had all the discomforts of the deluge of rain.

<Brookwood>: The observer noted that in spite of being on high sandy soil, everything was a swamp in a very short time.

19 Jun 1933
Cornishman 22
Jun

<London>: There was a violent thunderstorm at <Twickenham><Richmond><Teddington> and other parts of the Thames valley with a heavy fall of hailstones the size of large peas. Three men were killed by lightning.

21 Jun 1933
Western
gazette 23 Jun
22 Jun 1933
Western
Morning news
23 Jun

Dartford (Kent) 1.68" in 65
m

<London><Sheen>: Rain flooded many roads and children returning from school were drenched in a few seconds. At <Putney>: Upper Richmond road was flooded to a depth of 4 inches.

<Amersham>: Lloyds bank was flooded and staff bailed out water.

24 Jun 1933 BR	Silchester Ho (near Reading) 2.50" in 20 m Manor Park (Cemy) 1.50" in 20 m	
20/21 Jul 1933 Gloucester Citizen 21 Jul	Chatham 2.11" in 30 m	<Rochester><Chatham: the storm continued for 4 hours and half an inch of rain fell in 2 ½ hours. At Hoo near Rochester a woman was killed picking potatoes. The main road from Strood to Maidstone was flooded to a depth of 16 inches.
25 Jun 1934 BR	Rickmansworth 1.23" in 22 m	<Rickmansworth>: Two houses near-by were struck, and the local telephone service was put out of action. Measurements gave the rainfall as 0.50 inch for the seven minutes 1.44 to 12.51 and 1.23 inches for the 22 minutes 12.44 when the downpour ceased quite suddenly. There was no hail. The road running along the bottom of the valley was flooded—nine or ten inches deep in places. So rapid was the infiltration of the water through the surface layers of the soil (sand and gravel over chalk), parched as they were by the long spell of droughty weather, that by 15.00 there was no trace of " sponginess " about the lawn. During the storm the thermograph showed a fall of temperature of 13° F from 68° F to 55° F within five minutes.
18 Jul 1934 Dundee courier 19 Jul		<London>: the torrential rain forced up road blocks in the Strand, Pall Mall and regent Street.
22 Jul 1934 BR	West Wickham (Kent) 4.55" in 100 m Wandsworth 1.50" in 30 m Bromley (Kent) 1.20" in 35 m	<West Wickham>: The observer reports that 4.55 inches of rain and hail fell there from 18.50 to 20.30. About 19.05 the rain this suddenly changed to a sheet of hail driven by a fierce squall from the north, but within five minutes the hail turned to rain, which fell with an even greater intensity. This continued till 20.15 when it lessened and at 20.30 it was only normal heavy rain. Although on top of the hill, water poured over the lawns and ran round the house in torrents, and water up to 2 feet in depth swept down certain roads." Another observer in West Wickham reports: I recorded 3.75 inches. However the centre of the rain seemed to be to the south or south-east of us, clear sky being observed to the south-west, and often to the north-east, north and north-west. The damage done was not large, however, and rumours of fireballs proved difficult to analyse. The Engineer to the West Kent Main Sewerage Board states that the storm of July 22nd did not affect Bexley, Crayford or Dartford.
24 Jul 1934 Hull Daily Mail 24 Jul, Eden (2008)	A thunderstorm with hail led to flooding in NW Kent and NE Surrey: 116 mm fell in 100 minutes at West Wickham near Bromley. Sudbury 1.26" in 90 m S Kensington 0.85" in 40 m	<London>: The storm was particularly severe in southwest London. Over a quarter of a mile of the Uxbridge Road was severely damaged with wood blocks forced up. Ealing shops were flooded. Storms were also reported at <Croydon>, <Lympne> and <Upper Heyford> (Oxon).

15 Sep 1934
The Scotsman
17 Sep, Hendon
and Finchley
times 21 Sep

Three men were killed by lightning in separate incidents, one in St Albans and one near Bedford.

<London>: The storm resulted in the disorganisation of nearly the whole of the Railway network. Tunnels and tracks on many lines were flooded to a depth of several feet. The main line stations affected were St Pancras, Kings cross and Euston. On the underground Baker Street. Trains between Aldgate and south Kensington and Finsbury Park and Moorgate. In Hampstead and district the basements of houses were flooded in some cases to a depth of 2 feet. Hailstones the size of moth balls fell and a number of windows were broken. At the bus terminus on West end Lane Hampstead there was flood 2 or 3 feet deep. A sewer burst at Camden road Station water and sewage rose to axle level. A number of shops in Park Street Camden town were flooded. <Finchley> was badly hit; the rain flooded gardens and forced up wood paving in the roads. Flooded basements were reported in Lichfield Grove and elsewhere. Huge Rivers raced down the Great North Road and in Squires Lane between Long Lane and the swimming baths the road was flooded with several feet of water; garages were also flooded. In Hendon hailstones the size of walnuts fell. At the Brent Bridge cross roads the water reached over the axles of cars. Some of the bye-roads between golders Green and Temple fortune were also flooded. The stream at the bottom of Clitterhouse plying fieldsrose from 2 inches deep to more than 5 feet. Hailstones fell as big as half crowns. The waterfalls at brent Bridge and Finchley Lane flowed as had not been seen in years. Several shops in Brent street were flooded.

14 Apr 1935
Shepton Mallet
Journal 19 Apr
25 Jun 1935
Eden (2008)
The Guardian
23 Jun 1993
(Bob Prichard),
Western Daily
Press 26 Jun,
BR

A large part of southern Britain was affected by intense rain with thunder and lightning. BR reports intense rains qualifying for inclusion have been received from London, Berkshire, Hampshire, Oxford, Wiltshire, Gloucester, Hereford, Northampton, Leicester, Rutland, Warwick, Monmouth and Carmarthen.
Ewell 3.25" in 2 h
Sutton of 2.10" in 40 m
Dorking 1.59" in 1 h
Knap Hill (near Woking), 0.85" in 45 m

<London>: Several inches of water flooded basements in Capel Road, Forest Gate and at Wanstead. Motorists were forced to stop and take shelter in houses. Some roads were submerged in 10 inches of water. Several houses in the east end of London were struck by lightning.

<Ewell> (Surrey): 80 mm fell in 2 hours with some **jagged pieces of ice, some of them an inch long.**

<Hounslow>: Lumps of ice as big as almonds accompanied the storm cutting small apples off trees, whipping flowers to ribbons and washing fresh planted roots out of the ground.

<Steventon>: The observer reports that " it commenced to rain at 13.05; the intensity increased, with hailstones, about the size of cobnuts, accompanied by a wild wind.

Upper Heyford (near
Bicester) 1.00" in 30 m
Oxford 1.35" in 40 m
Steventon (Berks) 2.03" in
50 m
Didcot 1.30 in 1 h
Henley 1.18 in 1 h
Kintbury (Berks) 1.00" in 1
h
Devizes 1.87 in 80 m
Reigate 1.36 in 2 h
Guildford 1.52 in 45 m

2 Jul 1935 BR
11 Jul 1935 BR
8 aug 1935 BR
25 Aug 1935 BR

1 Sep 1935
Thanet
Advertiser 3
Sep
22 Sep 1935
Tewkesbury
Register 28
Sep, BR , Webb
and Elsom
(2016)

Sibford Ferris (Oxon) 30
mm in 25 m

<Margate>: the basements of several houses in King Street, the lowest lying part of older Margate were flooded. The thunderstorm caused the failure of electricity supply to Broadstairs, Margate, Westgate and Birchington.

<Notgrove><Cold Aston> (Cotswolds): Greenhouse glass was smashed by hailstones and the Turkdean to Notgrove road was blocked by huge hail drifts.

<Chipping Norton>: In a very severe hailstorm the big windows of the Town Hall were broken and greenhouses and windows were widely broken.

<Great Rollright>: Only a few houses had unbroken windows.

<Chadlington>: The Baptist manse suffered much broken glass.

Many panes of glass were broken at <Shipton>, <Milton>, <Kingham>, <Bloxham>, <Hook Norton>. In most of the houses windows facing west were broken and the flying glass and hailstones struck people on the far side of the rooms. The hailstones were as large as golf balls. Dead partridges were picked up. Trees were blown down.

<Banbury>: Trees were blown down and roads rendered impassable. Windows were smashed by the hail including those at Horton Hospital. Many houses were flooded and at one point there was a big block of hailstones as big as a truss of hay.

<Sibford Ferris> (near Banbury): The observer reports: About 0100 there was continuous lightning, and the storm approached from the S.S.W. At 03.10rain began and at 03.15increased to a deluge. At the same moment a gale sprang up from W.N.W. and huge hailstones smashed many hundreds of panes of glass in this village. In my own house about 70 panes were broken. Within two minutes the hail had passed, but rain continued until

4 Oct 1935
daily Herald 5
Oct

6 May 1936 BR

At Houghton Regis, about a mile north of Dunstable town, the rainfall, as measured by the Manager of the Dunstable Cement Works, was 2.08 in. between 16h. 55m. and 17h. 40m. G.M.T. The total for the day was 2.12 in.

17 May 1936
BR

Shere (Surrey) 1.25" in 30 m
Wokingham 2.00 in 75 m

03.35 and then ceased, the storm moving away E.N.E. In this short time 1.18 inches of rain was recorded even though all the hailstones had bounced out of the gauge. Probably 1.50 inches was about the correct amount. Many of the hailstones were as large as small walnuts, while some measured 1 ½ across and ¾ inch thick. Birds were killed and root crops and fruit greatly damaged. The hail track had a width of about 2 miles.
<Hook Norton> (Oxon): Golf ball sized hailstones broke windows and struck the opposite sides of rooms
<London>: Thunderstorms with hail were experienced locally with flooding in several parts, in some places 5 feet deep with traffic diverted. Scores of roads in <Enfield>, <Ponder's End> and <Tottenham> were under water.
<Dunstable>: Many basements were flooded out, and considerable damage was done to gardens and fruit trees. The hailstones were in some instances fully an inch in diameter. Locally the floods in the streets reached a depth of 4 ft. 6 in. The Plough Inn, on the Icknield Way, just below Dunstable Downs, suffered severely. Many pigs were drowned in mud washed from the hillside fields by torrential rain. At <Edlesborough>, about 3 miles westsouthwest of Dunstable, measurements gave seven eighths of an inch as the diameter of some of the hailstones. Great damage was done to greenhouses in the track of the storm, and also to Waterlow's, the printers, of Dunstable. At Whipsnade Zoological Park 0.25 in. of rain was registered. The hail there was extremely local: some fell at the Tiger Pit, but none at the Lion Pit, a short distance away. Ivinghoe, on the southwest margin of the storm area, had only a little rain."

<Forest Row>: (Charlwood Farm) the thunderstorm gave 2.10 inches in about an hour. The observer, Mr. A. Hoare, writes : " The river (Medway) 4 miles or so from its source rose 4 or 5 feet. The rain struck me as the heaviest I had ever known except once about the year 1866 but that storm did not last long, perhaps 20 or 25 minutes."

<West Wycombe>: There was considerable flooding with resultant delay to traffic in West Wycombe owing to the heavy rain of the 17th. Mr. R. E. Belsham, the headmaster at West Wycombe, writes "I have a raingauge in my garden, which is about 50 yards from the village street which was submerged and this gave 1.8 inches between 15h and 18h. In my opinion there were places in the immediate vicinity where the amount of rain which fell was much greater."

<Great Missenden>: At Hampden House, near Great Missenden, the amount recorded for the 17th was 1.66 inches and the heavy rain is reported to have fallen between 15h and 17h and to have been less intense than that at West Wycombe. The amount recorded at West Clandon Pumping Station, near Woking, was .61 inch

20 Jun 1936 BR

Farnborough 0.79 in 26 m
and 0.94 in 48 m

between 15h. 50m. and 16h. 50m.

<Farnborough> (Hants): Two distinct thunderstorms occurred on each of the three days 18th to 20th of which the last was the most outstanding. On the 20th a thunderstorm occurred from 14.05 to 14.26 and was accompanied by squalls up to 30 miles per hour, temperature fell from 85.5°F to 70.0°F in 28 minutes but the rainfall only amounted to 0.07 inch. The climax occurred in a spectacular thunderstorm from S.S.E. lasting from 21.10 to 22.20 on the 20th while the Aldershot Tattoo was in progress. The wind rose from about 5 miles per hour to at least 48 miles per hour. Hailstones were generally described as 'the size of cherries' or 'blackbird's eggs' and did considerable damage to plants. Stout branches were broken off trees and visibility was reduced to 50 yards during hail. The noise of the hail against windows resembled machine-gun bullets rattling on a sheet of metal. Low lying portions of the road were still flooded to a depth of 10 inches at 07.00 the following morning."

21 Jun 1936

Sheffield

Independent 22

Jun, Webb et al

2009,

Buckinghamshi

re Examiner 26

Jun, BR, Webb

(2016)

12 severe hailstorms were reported on these two days which were the peak of a 5-day thundery spell. Harpenden (Herts) 1.50 in 30 m (DR 80 mm)

<London> <East Barnet>: Streets and houses were flooded and families were rescued from bedroom windows by firemen. One man was killed by lightning and several were injured. Trains between London and Scotland were delayed by flooding of the line at New Barnet. Two horses were killed in the street. Hailstones did great damage to plants and many panes of glass were smashed.

<St Albans>: The water was knee deep in Market Square and shop basements and houses in low lying areas were flooded. The Abbey was struck twice by lightning. BR reports: "The thunderstorm which centred round St. Albans on the afternoon of the 21st is probably the worst in the district within living memory. The only fall of comparable magnitude during a similar storm occurred on August 2nd 1879 . . . The storm began about 14h and was concentrated mainly in two periods, each of about half an hour's duration, and accompanied by almost continuous thunder. During the first period, from 14h. to 14.30m. 0.9 inch of rain fell. Thereafter the wind changed in direction from northeast to northwest and remained fairly calm until 18h. In the next half hour 1.5 inches of rain fell and a gust of wind at 40 m.p.h. recorded. In the middle of this period there was an intensely heavy fall of hailstones, some of which were nearly an inch in diameter. Severe flooding occurred in the basements of several shops and the fire brigade was called out to pump the water away. Great damage was done to market garden crops by the hail, the leaves being completely riddled, but cereal crops on the farm stood up fairly well to the storm.

<Rickmansworth>: "Rickmansworth was on the edge of the storm, .27 inch occurring between 14:14. and 14:19J. The hailstones were in many instances half an inch in diameter. The thermometer fell rapidly, within 6

7 Jul 1936 BR Ware (Herts) 1.47" in 1 h

10 Aug 1936 BR Leatherhead 2.68" in 1 h
Coulsdon 2.20" in 1 h
Goring (Oxon) 2.88 in 2 h

**10 Jun 1937
Western Daily
Press 11 Jun** Following a heatwave
torrential storms with high
winds swept across the
south from the Lizard to the
Thames estuary

15 Jul 1937 BR Hitchin (Herts) 1.49" in 45
m
Enfield 1.37 in 45 m

18 Jul 1937 BR Lingfield 1.03" in 12 ½ m

**19 Jul 1937 BR
(Surrey
Advertiser 24
Jul)** Edenbridge (Kent) 1.40 in
25 m
Essendon (Herts) 1.25" in
40 m
Dorking 1.72" in 65 m
Dorking (2) 1.87 in 75 m

**13 Aug 1937
Western Mail** Acton recording gauge gave
0.5" in 5 m, 1.00" in 10 m.,
1.40" in 15 m, 1.80" in 20
m., 2.05" in 30 m, 2.20" in
45 m, and 2.25" in 1h.

14 Aug,
<https://www.b> Isleworth Mogden STW

minutes after 14h. 14m. from 86°F to 65°F. The storm was local there being no hail at Redbourn, two miles to the southwest of Rothamsted.

<Berkhamsted>: Large hailstones were swept along like petals in a millstream. Torrents cascaded over the kerbs and entered a number of shops and houses. A shop in the High Street almost opposite Swing Gate Lane was flooded to a foot in depth and a window was blown in at the height of the storm. The <<River Bulborne>> overflowed in many places spreading over the water cress beds at the foot of St John's well Lane and completely submerged the footbridge connecting with the canal tow path. Stones and silt were washed down the High Street accumulating at the foot of Three Close Lane as well as elsewhere.

<London>: The Government whip's office in the House of Commons was flooded. The rain forced up blocks on the road near St Pancras Station.

<Lingfield> (Surrey): The observer reports: As I left the house to take the measurement a flash of lightning struck and scored a tall Wellingtonia from top to bottom less than 30 feet from me. This fall qualifies for inclusion as "remarkable."

<Dorking>: Considerable flooding was caused in the Dorking district by a severe thunderstorm. Rain which was unusually heavy fell for about an hour and was accompanied by thunder and lightning. The fire brigade was called out to deal with the flooding which in the lowest parts of the town was one foot deep. A large amount of debris was floating down the streets as if on a river, and it was not until the next day that the streets were cleared of water and debris.

<London>: After several days of torrid heat thunderstorms wreaked havoc in many areas. Basements of West End stores were flooded. At the French Embassy in Knightsbridge basements and ground floors were flooded. From Hyde Park corner to Knightsbridge the roads were miniature lakes. Wooden blocks in the roads were forced up. London had over 2 inches of rain. At Acton a woman had to be rescued from a basement in Goldsmith Road and a baby in its cot at Colville Road. Employees at Acton factories had to wade through water

[uzzfeed.com/matthewtucker/extraordinary-vintage-photos-of-uk,](http://uzzfeed.com/matthewtucker/extraordinary-vintage-photos-of-uk)

**Birmingham
Daily Gazette
14 Aug, West
London
Observer 20
Aug, BR (Daily
Herald 14 Aug)**

1.82" in 2 h
Sevenoaks 2.09" in < 2 h
Haringay 2.53" in 2 h
Crouch end 2.50 in 2 h
Kingston Grammar sch 2.15
in 2 h
Hampstead Obs 1.18" in 1 h

when leaving for home. Water from the roadway flowed into the pit of the Capitol Cinema, Wembley and the organist in the interlude played surrounded by water 6 inches deep. At Willesden Green High road wood blocks were forced up. At Brondesbury Park Queen's Park 5 manhole covers were thrown off and fountains spouted up to a height of 2 or 3 feet. Turnpike Lane Tube station was again flooded and exits to the station were flooded to a depth of 2 feet. High road wood Green and other parts of Haringay and Turnpike Lane Hornsey were flooded to a depth of 2 feet. The Twickenham floods at Cross Deep held up the traffic in a 2 mile queue. Brentford High Street and Uxbridge road at North Ealing rose a foot before the eyes of shoppers sheltering from the rain. A council worker said he saw the <<River Brent>> rise 3 feet. The storm was severe in Kilburn and the floods rushed down Shoot-up Hill, pouring into Kilburn High road and sweeping into side roads. The cellars of the Lord Palmerston Hotel in Kilburn High Street were flooded to 5 feet. Netherwood Street and Iverson road were badly flooded with basements flooded to a depth of 4 feet. Nearly 50 basements in Palmerston road were flooded and altogether 120 families were driven from their basement homes. The Mayor of Acton set up a Relief Fund.

<Kingston>: Girls in bathing costumes swam in the roadway which was 3 feet deep in places. Edgware road Colindale was flooded for 150 yards and vehicles were held up near Kingsbury Road. Water came up to the windows of some cars. Water poured into Barnet Fire Station and the Great North Road which passes through the centre of the town was flooded. Altogether 7 sections of railway totalling 40 miles were completely stopped

<Croydon>: Parts of the airport were a foot deep in water. In Old Oak road wood blocks were forced up by the torrent. The large street island outside the Savoy Cinema at the junction of Old Oak road, Old Oak Common Lane, Westway and Western Avenue was covered to a depth of 3 feet, only the tops of bushes being visible. The accumulated water under the railway arches at Kingston station and at Norbiton stopped many cars.

<Dorking>: Many shops and houses were flooded. The surrounding roads were transformed into torrential rivers and shopkeepers were forced to take desperate measures to save their stocks; manholes were burst open.

<Richmond>: A hailstorm with stones as big as threepenny bits was followed by torrential rain. Kew road was flooded over the kerbstones and some side roads were flooded 2 feet deep.

<Brentford>: BR reports: There was a mile and a half traffic jam on the Great West Road near Brentford; Brentford War Memorial was flooded to a depth of seven feet."



Traffic moves through flood waters in a Knightsbridge street.

<London>: There was further flooding at <Harlesden> when five feet of water held up trains on Bakerloo and LMS lines. The stations at Harlesden and Stonebridge Park were closed.

14 Aug 1937

West London

Observer 20

Aug

30 Aug 1937

The Scotsman

**31 Aug, BR (The
tMes)**

Bromley 1.65" in 82 m
and 1.36" in 30 m

Hildenborough (Kent) 1.09
in 35 m

<London>: Flooding on the southern Railway line at Maze Hill delayed trains and the booking hall and subway at Hither Green Station were flooded a foot deep. The outpatients department of London Jewish Hospital at Stepney Green was flooded. BR reports The Times " In some parts of London heavy rain, accompanied by hail and violent thunder, lasted an hour. The Wallington and Carshalton fire brigade was called to Croydon Aerodrome to pump away flood water which had gathered near the main building. A pilot arriving from France said that on the whole of the route from the south coast the ground appeared to be covered with hailstones

13 Sep 1937
Western
Morning News
14 Sep
8 Aug 1938 BR

11 Aug 1938
Coventry
Evening
Telegraph 12
Aug, Western
Morning News
13 Aug,
Uxbridge & W
Drayton
Gazette 19 Aug,
BR

Purley 0.95" in 32 m
Knap Hill (Surrey) 1.00" in 40 m
Wembley 2.17" in 90 m
Sudbury 1.39" in 90 m
Edenbridge (Kent) 2.09 in 2 h
Palmers green (Middlesex) 1.07 in 20 m
Isleworth 0.93 in 35 m

12 Aug 1938 BR

Sudbury (near Wembley) 1.39" in 90 m fell
Stonebridge Park 1.48" fell in 115 m

1 Aug 1939
Birmingham

<Wallington> nr <Croydon>: Hailstones up to ¾ inch diameter fell for half an hour
<Marlow>: A terrific downpour flooded many streets and basements. The Wesleyan church was struck by lightning

<Beddington> (Surrey): water was 3 feet deep in some gardens and approached the live rails on the southern Railway.

<Denham>: In a cloudburst within two minutes the roads were flooded and Denham High Street was like a river.

<Croydon>: The town had the worst thunderstorm for several years and soon all low lying parts of the town were under water. Basements of shops in the centre of town and cellars and first floors of houses on the outskirts were flooded. The main Selhurst Road at South Norwood was so flooded that all traffic came to a standstill.

<Eastcote>: Roads were flooded. Several roads off field End road were affected including North view Abbotsbury and Lowlands Road.

<Harrow>: Many houses were flooded and roads became running streams, the surface drains being unable to cope. Hailstones fell as big as peas.

<Uxbridge>: The drainage system was inadequate and there was flooding in various parts of the town. Water collected at the bottom of Belmont Road. Cowley road and the lower part of Uxbridge Moor were also under water.

<Northwood Hills>: the storm flooded basements in Broadway; four or five shops at the corner of Briardale Drive were affected and one of them had a foot of water. Parts of Joel Street were flooded and there was a lake in Broadway by Windsor close.

<Wembley>: A severe storm lasted from 17h to 18.30 when 2.5" inches of rain fell. Some of the roads became rivers. Motorists were stranded, the carburettors of their cars being flooded, and trolleybuses were put out of action. Certain roads became miniature lakes 3 feet deep and most of the cinemas were flooded. Owing to the flooding and lightning striking cables there was a big telephone breakdown.

<Mill Hill> A heavy storm occurred in the afternoon at Mill Hill and Hendon (which adjoins Wembley) and there was extensive flooding. A house was struck by lightning. Hailstones the size of moth balls fell and leaves of water lilies in a fishpond at Moat Mount Golf Club were pierced. In some parts the rain gauges recorded 1.5", while other areas in the district had no rain at all. A

<London>: Trains suffered almost as much delay as road traffic. Cellars and basements were flooded.

mail 2 Aug

20/21 Aug 1939

Eden (2008)

Yorkshire post

22 Aug,

Buckinghamshi

re Examiner 25

Aug, BR 1939

Sutton STW: 1.00" in 30 m
Sutton 2: 2.20" in 75 m
Old Malden: 1.00" in 30 m
East sheen: 1.00" in 37 m
Finchley 1: 1.15 in 40 m
Finchley 2: 1.81" in 40 m
New Malden: 1.00" in 54 m
Worcester Park: 1.00" in 18 m
Wheatley: 2.45" in 90 m
Guildford: 1.58" in 90 m
Ealing: 1.95" in 120 m

<London>: In Victoria District a 10 minute cloudburst caused extensive flooding and several buildings were struck by lightning. Shops were flooded in Church Road Hendon. Edgware road West Hendon was flooded to a depth of 2 feet for nearly 100 yards. Wembley fire Brigade received hundreds of calls to pump water from shops, cinemas and factories. At <Southall> hailstones fell the size of acorns. The hail and rain caused a recurrence of flooding which occurred two weeks ago at Lyndhurst Avenue to a depth of 18 inches.

<East Ham>: It experienced very heavy hail. High Street North was flooded and in Barking road traffic was held up by wood blocks being forced up.

<Prestwood>: In a thunderstorm the hailstones were the size of marbles which rattled windows but did not break them but caused damage to vegetables and fruit trees. Hailstones impeded the drainage and roads were flooded to a depth of six inches.

<Sutton><East Sheen>< Worcester Park>< Old Maiden> and <New Maiden> recorded exceptional short period rainfall. Additionally at Sutton the observer reported that the storm started at 15.30 2.20" were measured by 16.45 although possibly some of the hail escaped measurement. Streets were flooded, houses struck by lightning and flowers flattened.

<Ealing>: During the thunderstorm 1.95" fell almost entirely between 15h and 17h., over 1" occurring in half an hour. The hailstones were between 1/4 and 3/8 inch in diameter. Several basements and ground floors were flooded to a depth of 6 inches or more and business was interfered with in some of the shops.

<Ilford>: A sudden thunderstorm gave a fall of 0.85" in 30 minutes. A number of people sought shelter in a corrugated iron hut, which was struck by lightning, seven being killed and nineteen injured.

<Finchley>: Houses and roads were flooded ; traffic was brought to a standstill and hundreds of wood blocks were displaced in the worst storm for years.

27 Apr 1940 BR
1940

Reigate: 0.88" in 30 m

9 Jun 1940 BR
1940

West Wickham: 1.40" in 25 m
Newbury 1: 0.93 in 40 m
Newbury 2: 1.70" in 35 m
Basingstoke: 0.94" in 30 m
Dormansland: 0.95 in 33 m
Tadworth: 0.88 n 40 m

<West Wickham>: The observer reports that the intense rainfall was mostly in the form of hail.

<London><Tooting Bec>: A man sheltering under a tree was killed by lightning.

7 Jun 1941 BR
1941

<Dormansland>, <Tadworth> and <Basingstoke>: Thunder intense rainfall and flooding occurred.

12 Jul 1941
West London
Observer 18
Jul, BR 1941

Heavy falls in Hertfordshire, Worcestershire and south Lancashire were emarkable for their Thunderstorms over London and the Home Counties caused roads to become impassable, houses damaged, trains delayed, telephones put out of order and low-lying areas flooded.

Kensington Palace: 1.96" in 72 m

Camden Square: 1.41 in 2 h

Chorleywood: 1.66 in 45 m

Tring: 1.47 in 45 m

Northwood: 1.00 in 45 m

Tadworth PS: 1.06 in 60 m

Batchworth PS: 1.81 in 105 m

Leatherhead STW: 1.00 in 60 m

13 Jul 1941 BR
1941

Storms occurred at locations in Brighton, Worcester and Northampton.

Oxford: 1.70 in 35 m

Bray (Berks): 1.36 in 40 m

Radnage: 3.54 in 100 m

Penn: 3.15 in 100 m

High Wycombe: 2.62 in 2 h

Upper Heyford: 0.98 in 24 m

Eton: 1.37 in 2 h

Englefield green: 1.10 in 17 m

Addlestone: 1.45 in 2 h

Royston: 1.38 in 60 m

14 Jun 1942 BR
1942

<London>: During a severe thunderstorm a baby which had been left sleeping in a basement at Addison Avenue, Kensington was drowned by water getting in from the sewers.

BR notes: At Sunninghill, near Ascot, most of the 2.10 inches measured for the 12th fell in 3 hours. A girl at Windsor was killed by lightning.

<Radnage>: The falls at Radnage and Penn (Buckinghamshire) rank as "very rare."

<Eton>: 1.11 inch is said to have fallen in 36 minutes, and 0.63 inch in 12 minutes.

<High Wycombe>: Near High Wycombe cattle and sheep were killed by lightning in the open fields.

<Bray>: The storm was accompanied by gale force winds.

30 Jun 1942
Eden (2008)
Yorkshire Post
11 Jul, Daily
Herald 11 Jul,
BR 1942

The storm followed an 18 days drought in some areas.
Worcester Pk: 2.15 in 90 m
New Malden: 1.82 in 2 h
Epsom: 1.73 in 2 h
New Malden: 2.16 in 33 m
Surbiton: 1.33 in 39 m
Kew: 1.22 in 75 m
East Sheen: 2.13 in 98 m
Woking: 2.02 in 105 m
Old Malden: 2.80 in 2 h
Sutton: 1.34 in 2 h
Morden: 1.23 in 2 h

<London>: Thunderstorms with large hail hit west and south London. At New Malden in Surrey 55 mm rain fell in 33 minutes. Several lightning deaths were reported. In some districts houses and gardens were flooded. A lion was killed in Surrey Zoo. Putney Barnes and Sheen had large hailstones as big as sugar lumps and at East Sheen **the hail took the form of spears of ice 3 to 4 inches long.**

<London>: Hundreds of houses and businesses were flooded when a freakish storm struck London. Dozens of buildings were struck by lightning. Surrey fire brigade had 100 calls for flooding and putting out lightning fires. A lion was killed in Surrey Zoo. South and southwest London suffered most severely. <East Sheen> had hailstones like little spears of ice 3 to 4 inches long. Southern trains from Waterloo were stopped at Richmond with water on the conductor rails. Roads were flooded at the Hounslow, Staines and Twickenham areas.

29 Aug 1942 BR
1942

Oxford: 1.00" in 15 m
Burford: 1.50" in 30 m

<Swindon>: there was damage by flooding.

31 Jul 1943 BR
1943
12 Sep 1943 BR
1943

Weybridge: 1.00 in 30 m
New Eltham: 0.88 in 40 m
Barnet: 0.48 in 6 m
Kew: 0.63 in 15 m
East Sheen: 0.90 in 24 m
Kingston STW: 0.84 in 24 m
Epsom STW: 0.95 in 48 m

<Thames Valley>: Violent winds preceded torrential rain

Thunderstorms were widespread from 12 to 14 September

11 May 1945
Eden (2008),
Webb et al
(2009)

Thunderstorms with hailstones 3-4 cm across were widely reported in Leicestershire, Northamptonshire, Oxfordshire and Buckingham . Hailstones 70 mm diameter were measured near Bicester (Oxon). An aircraft was severely damaged in flight, while on the ground there was extensive damage to greenhouses with hail ripping clean through corrugated iron roofing. Also, hail up to around 40 mm across fell in a 35 km swath across south Leics. (Meteorol Mag-typescript 1945)

23 Jun 1946 BR
1946

3 Jul 1946 BR
1946

S Farnborough: 0.91 in 25 m
Lympne: 0.83 in 35 m
Kew Observatory recorded

<Bovingdon> (Hertfordshire): It had its worst flood in living memory. Several families were rendered homeless and there were some narrow escapes from drowning.

<Farnham>: In the early hours of July 3, hail stones measuring up to 1 ¼ inch in diameter caused much damage to property and destroyed at least two thirds of the promised fruit and vegetable crops.

26 Jul 1946

<London>: Kings Cross station came to a complete standstill and Paddington station platform was flooded ankle

Eden (2008)
Yorkshire Post
27 Jul
Manchester
Guardian 27
Jul, BR 1946

50 mm in 35 minutes.
Kensington Palace: 1.04" in 45 minutes (7.5 mm in 6 minutes).
Lingfield: 0.67 in 10 m
Haslemere: 0.95 in 25 m
Hoddesdon: 1.56 in 60 m
Reigate: 1.63 in 70 m
Guildford: 0.60 in 9 m
St Pancras: 0.77 in 15 m
Deptford PS: 1.00 in 30 m
Kew: 1.97 in 35 m
Weybridge: 1.67 in 48 m
E Sheen: 1.61 in 87 m
Burgate nr Godalming: 1.03 in 17 m

deep and many underground services were disrupted. At Acton a trolley bus had to be pulled out of water six feet deep and completely submerged one small car. Vehicles were stranded on the North Circular Road at Stonebridge. BR reports: Many of London's Underground services were disorganized by floods and some services had to be suspended for several hours.

<East Croydon> The GPO main sorting office at the station was flooded to a depth of 4 feet

9 Aug 1946 BR
1946

<Burgate>: The storm was accompanied by large hailstones.

8 Sep 1946
Manchester
Guardian 9 Sep
27 Jun 1947 BR
1947

Purley: 1.00 in 10 m
Ware: 1.00 in 20 m
Reigate: 0.87 in 35 m
Braughing: 1.57 in 45 m
Hoddesdon: 1.25 in 60 m
Sevenoaks 1.16 in 60 m
Caterham: 1.17 in 60 m
Windsor 1.04 in 60 m
Croydon: 0.80 in 6 m and 1.00 in 18 m
West malling: 0.85 in 8 m
Palmers green: 0.75 in 10 m
Camden Square: 0.92 in 15 m
St James park: 0.70 in 15 m
Wembley: 1.32 in 60 m

<London>: Transport, both road and rail, was disrupted.

BR reports: On the 27th severe storms, following one of the warmest nights on record, developed by midday over south-east and east England. Squally winds accompanied the heavy rain in most cases, adding to the damage caused by floods and lightning. The stormy period continued over the 28th and 29th and a few further noteworthy falls occurred.

9 Jul 1947 BR
1947

Chipping Norton: 0.98 in 30 m

<Chipping Norton>: After the severe afternoon storm the observer's "lawns were white with hail for two hours and garden produce perforated by it". The storm was practically confined to the town area, neighbouring

**14 Jul 1947 BR
1947**

N Newington: 1.50 in 30 m
Weybridge: 1.40 in 60 m
Ovington (Hants): 1.80 in
90 m

**16-19 Jul 1947
Eden (2008),
Webb et al
(2009) , BR
1947**

Weybridge 2: 1.45 in 48 m
On the 16th heavy rains fell
in many parts of England
and in eastern Scotland.
The storm was particularly
severe at Wisley, Surrey,
where a "very rare" fall of
4.00 inches in 75 minutes
was recorded at the Royal
Horticultural Society's
gardens.
Higham: (19th): 1.47 in 15 m
N Newington (18th): 0.64 in
15 m
Chobham (18th) 0.86 in 20
m
Steeple Aston (18th): 1.87 in
60 m
Wisley (16th): 4.00 in 75 m
Potters Bar (19th): 2.30 in
105 m
Wittersham (17th): 3.60 in 2
h
Twyford: (18th): 1.50 in 2 h
Woodstock (18th): 3.50 in
105 m
August 1947 was the driest
August on record over
England and Wales
generally. On the 23rd
however, after a severe
evening thunderstorm
confined to a limited area
in north-west London.
Wembley: 1.22 in 100 m

villages having very little rain.

On the 14th storms of unusual severity occurred in the Thames Valley and falls of " remarkable" intensity were recorded at Weybridge, Ovington, North Newington (Oxford) and Tewkesbury.

<Wisley>: RHS Gardens: had 128 mm on 16th most of which fell in 75 minutes. Much damage was done to plants and fruit, and two torrents cut deep channels across the grounds.

On 17th <Wittersham>, Kent had 91 mm and

On 18th. At Sandford St. Martin, near <Woodstock>, Oxfordshire, 3.50 inches fell in 1 hour 45 minutes, and caused considerable flooding.

<London>: floods affected most parts of London.

23 Aug 1947 BR

<Sudbury> (Middlesex): The observer measured 3.32 inches of rain, the result of only an hour and a half's downpour. A noteworthy but less heavy fall was recorded at about the same time at Wembley Town Hall.

11 May 1948 Manchester Guardian 12 May, BR 1948	No hits on BNA	<London>: Hundreds of houses and shops were flooded. The districts worst affected were Swiss Cottage, Belsize Park, Kentish Town, Hampstead and Kilburn. Rail and bus services were disrupted. BR reports: In one hour, from 8 to 9 p.m., the London Fire Brigade dealt with 300 calls to flooded premises, the main areas affected being Hampstead, Camden Town and Holloway.
10 Jun 1948 BR 1948	Heavy thunderstorms broke over south-east England and the Midlands on the morning of the 10 th . Uxbridge: 1.13 in 90 m Feltham: 1.18 in 72 m	<London>: At London Airport an assistant was killed by lightning, trees were struck in Windsor Forest and houses damaged at Watford. At <Luton>, hundreds of basements were flooded and at Northolt Airport the water on the tarmac was 2 feet deep in places. At Batchford Heath in Hertfordshire 2.15 inches of rain fell between 8.40 and 11.10 a.m. in a series of thunderstorms.
14 Jun 1948 BR 1948	East Ham: 1.66 in 45 m West Ham: 1.38 in 75 m West Malling: 2.04 in 2 h (0.98 in 30 m)	<London>: Storms at <East Ham> and <West Mailing> were of "remarkable" intensity. At the latter place there were actually two storms separated by an interval of 40 minutes in which there was very little rain. The intensities in one storm is shown separately. The Chief Engineer to the London County Council reported that the storm was particularly severe in the <Silvertown> district where there was considerable flooding. (Flooding also occurred at many other places in the south of England and as far north as Whitby).
2 Aug 1948 Eden (2008), BR 1948	Heavy storms occurred over a wide area during the afternoon of Bank Holiday, August 2. Considerable flooding occurred in the Thames Valley and over much of the Midlands. Ipsden: 1.02 in 60 m Swindon: 1.39 in 40 m	<London>: The rainfall affected the Olympic Games where 80,000 packed Wembley Stadium. Road flooding was reported in Oxfordshire, Berkshire and Essex. <Silchester> (N of Basingstoke) 2 inches fell in 35 minutes, a fall of "very rare" intensity. <Swindon>, There was a "remarkable" fall.
13 Dec 1948 BR	December 13 was a day of thunderstorms in the southern half of England with widespread flooding. Sibford Ferris: 0.75 in 20 m N. Newington: 1.01 in 30 m	
16/17 Jul 1949 BR 1949	Claygate: 0.83 in 18 m Chipping Norton: 2.44 in 2 h East Sheen: 1.22 in 39 m High Wycombe (17 th): 1.28 in 30 m	<London>: Considerable damage to property resulted from flooding, crops were flattened and several fatal casualties occurred. In the London area two boys were killed by lightning, at Plumstead and two men at Walthamstow; on the same day the Tower Bridge was struck by lightning.
26 Aug 1949 BR	Heavy thunderstorms were	<Farnham>: In thunderstorm at Farnham nearly an inch of rain is said to have fallen in thirty minutes. The

22 Sep 1949 BR	reported at many places in Sussex and in the London area on the 31st Aug.	Surrey Times says "It was a purely local cloudburst which turned roads into rivers, surcharged sewers and lifted manhole covers and paving stones".
21 May 1950 BR	The storm was confined to Gloucestershire, Wiltshire, Oxfordshire, Buckinghamshire, Bedfordshire, and Huntingdonshire. On this day tornadoes developed near the northern edge of the Chiltern Hills and travelled towards the Wash. Ipsden: 1.63 in 20 m Benson: 1.48 in 36 m Ipsden2: 1.94 in 45 m	<Chadlington> (Oxford): Extensive and disastrous flooding was reported in many places. The observer wrote: "The greatest rain I ever witnessed began about 7.30 p.m. and continued until after midnight. It was heaviest from about 8 p.m. till 9.30 p.m. There was thunder and lightning at 9 a.m. on the 23rd when I measured 3.52 inches". Altogether three tornadoes left trails of damage. The bulk of the damage, estimated at over £50,000, occurred between Wendover and Ely. Details are given in an article on " Tornadoes of May 21, 1950 " in the Meteorological Magazine, Vol. 79, 1950, pp 245-256, including a rainfall map of May 21. This rainfall map shows two belts of heavy rain corresponding with the tracks of the two main tornadoes. The cooling produced by the heavy rain along the path of the thunderstorm undoubtedly influenced the development of the tornado with which it was associated. <Ipsden>: The hailstones were about half an inch in diameter and they remained for almost 24 hours where they had drifted into heaps. Potatoes were washed out of the drills and stacked bales of straw floated away on the local flood water. <Benson>: further north, the Meteorological Officer reported that the hailstones there were mainly half-an-inch in diameter and that the hailstones on Ewelme Downs gave the appearance of complete snow cover. There was no indication of a tornado at Benson. <Watlington>: A similar fall was experienced in Watlington (5 miles to the north-east) with a time lag of half an hour, and streets normally well above flood level were covered to car axle depth. Thunderstorms occurred widely over the south-east of England on the 2nd. A man was killed at <Kempton Park> races when torrential rain and hail occurred towards the end of the meeting. <Enfield>: A local storm at Enfield caused structural damage to houses, with local flooding. Intense rainfall occurred at <Little Rissington> (Gloucs), < South Farnborough>, and <Slough>. <Aldershot>: The worst storm for many years broke over Aldershot and district on the morning of the 28th and flooded roads, paths and cellars. The rain fell so heavily that within a few minutes storm sewers were overflowing and manhole covers lifted. <Slough>: At the height of the storm at Slough two houses were struck by lightning and badly damaged <Reading>: The fire brigade received six calls in less than half an hour to pump out flooded premises.
2 Jun 1950 BR	Hampton on Thames: 2.33 in 72 m	
7 Jun 1950 BR		
28 Aug 1950 BR	Slough: 0.60 in 12 m S Farnborough: 0.90 in 40 m	
22 Jun 1951 BR	Reading Uni: 1.36 in 2 h	

(Reading
Mercury) 30
Jun

**22 Jul 1951
Eden (2008), BR**

Bromley: 1.20 in 15 m
Purley: 0.96 in 42 m
Farnham: 1.29 in 60 m
Croydon: 0.76 in 16 m
Beddington Pk: 0.80 in 30 m
Sutton: 0.78 in 30 m

<Farnham>: Short live thunderstorms were widely reported on 22nd and for the following 10 days. Farnham had 76 mm on 22nd. Large hail was reported from many places and 3 people were killed by lightning whilst local floods were reported as widely as Belfast, Aberdeen, Scarborough and Brighton during the period to 31 Jul. BR notes: Flooding occurred in the streets of many towns ranging from Manchester in the north to Bridgwater in the south. In country districts both rain and hail damaged crops. Two features of the day's storms were firstly that the heaviest falls were often very local, and secondly that in many places there were two or more separate storms; for example at Farnham there were storms at about 1 lh.30m., 19h. and 20h. GMT.

31 Jul 1951 BR

Camberley: 0.60 in 12 m
Cranleigh: 1.00 in 30 m

**9 Aug 1951
Manchester
Guardian 10
Aug, BR**

Heavy thunderstorms occurred in the Northwest, the Midlands and the south

<Stevenage>: The main road through Stevenage was flooded to more than a foot. A house was damaged by lightning at Wheathampstead in Herts. BR notes: Heavy rain occurred on the 9th, though the intense falls observed on that day were restricted to Lancashire and Hertfordshire.

**7 Sep 1951 BR,
CBHE
(C.G.Smith
(1952) Weather
vol 7, p 163-
169)**

Oxford: 2.62 in 86 m
Benson: 1.03 in 18 m

<Oxford Radcliffe Met>: Of the storm total, 0.52 inch fell in 9 minutes, with a further 0.26 inch in a period of 4 minutes about 50 minutes later. The storm was restricted to the Chilterns and the Oxford area. "The severe thunderstorm at Oxford during the early morning of the 7th produced the largest amount for a rainfall day [3.34 inches] which has ever been recorded at Radcliffe Meteorological Station since records began there in 1815." "...in the villages of Cumnor and Eaton a very heavy fall occurred. Local flooding was caused, and at Cumnor it was reported as being the worst storm in living memory. A small brook, the <<Osse>>, which rises in Cumnor and flows westwards, flooded the road at Eaton for some hours, an event hardly known to the oldest inhabitant.In fields sloping down to the Thames there were signs of intensive runoff, and corn sheaves were carried down to the river. The only rain gauge in this local area of heavy rain recorded 3.45 in.

**18/19 May
1952 Eden
(2008)
Yorkshire post**

Thunderstorms occurred in Devon, Oxfordshire, Berkshire and Surrey with large hail. The thunder belt stretched from the outskirts of London to

<Winnersh> near <Reading>: It recorded 73 mm.

<Richmond>: District railway services were suspended because of flooding of the track near <Chiswick>

<Old Malden> (Surrey): The following estimates of intensity of the rain were made from the autographic record from the time the heavy rain started:—

**19 May, BR,
Daily Mail 20
May**

Bristol.
BR notes:
During the day pressure was almost uniform at about 1018 mb. over the British Isles. The air was moderately dry above 3,000 ft., but in the south of England was very moist at low levels. The air mass became unstable when surface temperatures reached 74°F. and this temperature was attained in many places away from the coast (see Meteorological Magazine, Vol. 81, 1952, p. 249).

Hampton Poyle: 0.90 in 45 m
Kidlington: 2.30 in 75 m
East Sheen (14th): 1.15 in 24 m
Barley(13th) 2.06 in 2 h

**13/14 Jun 1952
BR**

**6 Aug 1952
Eden (2008), BR**

Willesden: 1.25 in 60 m
Lechlade: 1.12 in 60 m
Northwood: 2.80 in 70 m
Oxford: 1.72 in 70m
Rayners Lane: 2.74 in 105 m
Harrow: 2.20 in 2 h
Hayes: 1.75 in 2 h
Wembley: 2.00 in 30 m

0.40 in. in 3 min.; 0.60 in. in 4 min.; 0.80 in. in 6 min.; 1.00 in. in 8 min.; 1.34 in. in 12 min.; 1.60 in. in 36 min.; 2.00 in. in 45 min.; 2.20 in. in 57 min.; 2.30 in. in 63 min. Water poured into the town council offices flooding the boiler house to a depth of 6 feet. The town was cut off from neighbouring Kingston because there was 4 feet of water under a railway bridge

The storm water disrupted traffic, flooded houses, shops and offices and put some 2,000 telephones out of action.

<North Mimms>(Hertfordshire): A storm occurred late in the evening, giving 2.06 in. in 57 minutes, of which 1.72 in fell in 37 minutes.

<East Sheen>: The storm at East Sheen gave 1.23 in in 72 minutes.

<Borehamwood>: Thunderstorms occurred in London and S Hertfordshire with 123 mm mostly in 2 hours at Borehamwood.

<London>: Flooding was severe in the London area where the storm aroused great interest because of the very severe test which it provided of the efficacy of storm-water sewers. Among the effects of the floods was the disruption of the electric train service on the Bakerloo line because of the great depth of water covering the track in a cutting north of Willesden Junction. One train was held up in the flooded section for four hours during the night before the 400 passengers could all be taken off, and it was necessary to pump throughout the next day before normal service could be resumed in the early evening.

BR reports: For the intense thunderstorm centred over Boreham Wood, the observer considers that 3.25 in must have fallen between 18h and 20h. Such an intense fall is not expected to occur, at any one station, more than once in two or three centuries (see Meteorological Magazine, Vol. 81, 1952, pp. 302-305)

12 May 1954 BR (Berkshire Chronicle)	Widespread thunderstorms on these days brought to an end a spell of warm weather associated with a southerly airstream. Fulham: 1.81 in 45 m Princes Risborough 1.37 in 2 h Reading 1.11 in 51 m	<London>: Floods and damage were reported from many parts of London, particularly at Fulham where a "remarkable" fall was recorded at Bishop's Park. <Reading>: Considerable damage was done to electrical installations in the storm at Reading on <Marlow>: A transformer was blown-up and at Play Hatch an 11,000-volt overhead line was struck by lightning and fell down. <Bicester>: A fall of 1.75 inch in 65 minutes from a non-standard gauge was reported, with local flooding and damage.
13 Jun 1954 BR	Kensington Palace: 0.72 in 22 m Hertford STW 1.98 in 36 m	<Hertford>: The storm caused much damage in surrounding districts. Overhead electric cables were struck, causing current failure over a wide area and putting telephone exchanges out of action for 20 minutes.
6 Aug 1954 BR	Thunderstorms were reported on many days and were particularly severe from the 6th to the 9th. Hampton WW 0.79 in 17 m	<London>: A flooded railway tunnel at Potters Bar caused a suspension of services for a time. <London>: Damage was caused by flooding at many places in London and more than a dozen houses were struck by lightning. Storms were severe in the Midlands and Yorkshire
20?21 Aug 1954 BR	Widespread and severe thunderstorms were associated with a depression centred in the North Sea.	<Bisley> (Surrey): The observer gives some details of a storm over a very small area at Bisley. He believes from various accounts of buckets which were empty when the storm began and almost full when it was over, that four inches or more of rain must have fallen; the local stream rose 3 ½ to 4 feet and, unusually, there was a noticeable rise in temperature after the storm had died out.
14 Jul 1955 BR	Purley 1.19 in 20 m Northwood 0.96 in 25 m Reigate 1.60 in 55 m Caterham 0.60 in 12 m Croydon 0.79 in 15 m Coulsdon 0.79 in 30 m	<Purley>: The observer said that within 5 or 10 minutes of the start of the storm, roads in the centre of Purley became rivers. There was two or three feet of water in many places. One woman was killed and 46 other people injured when lightning struck a closely packed crowd at the Royal Ascot race meeting.
17/18 Jul 1955 Birmingham Daily Post 18 Jul	It was the hottest day of the year reaching 87F at Poole and 84F in London. On the night of the 17th-18th widespread thunderstorms occurred in Kent.	<Maidstone>: Kent Fire brigade received 40 calls to respond to flooding and the same number in <Tunbridge Wells>. One part of the A20 near Maidstone was flooded to a depth of 3 feet and a long line of cars returning from the coast where held up with engines flooded. <Ramsgate>: Falls of more than 3 inches occurred at many places but for the most part the storms were of longer duration than two hours. The only "noteworthy" fall reported was at Ramsgate but it seems likely that falls of at least "noteworthy" intensity must have been attained in many of the other storms of longer duration.

12 Jun 1956
Lancs Evg Post
12 Jun

Ramsgate 1.30 in 2 h

Many thousands of pounds worth of damage was done to fruit trees and hop vines.

<London>: Water was pumped from hundreds of homes. Roads were flooded to more than 1 foot deep. In <East Ham> there were 3 flooded pubs, a cinema and a block of flats. At <West Ham> a hospital was flooded (St Mary's Plaistow). Shops and factories were flooded in <Welwyn Garden City>, <Baldock> and <Cheshunt>.

9 Jul 1956 BR

In the early hours of the 9th storms broke out in an area covering Gloucestershire, Wiltshire and Dorset, and spread quickly east-north-eastwards over southern England, the south and east Midlands and parts of East Anglia. London, the Home Counties and north Kent suffered most from these storms which reached the capital around dawn and cleared the east coast by noon.

Epsom 1.19 in 64 m

Tadsworth 2.43 in 2 h

Tooting Bec 2.12 in 2 h

Kew 0.81 in 15 m

St Pancras 1.56 in 2 h

Mitcham 1.53 in 2 h

Wimbledon 1.48 in 2 h

Hampstead Obs 1.45 in 2 h

Southgate 1.37 in 2 h

Kew DR 60.5 mm

18 Jul 1956
Eden (2008), BR

Thunderstorms occurred in SW London with 109 mm at Harmondsworth and 98 mm at Staines.

Harmondsworth 3.87 in 114 m

Horton Kirby (Kent) 2.40 in 30 m

Bushey Heath 1.06 in 45 m

<London>: At the height of the storm in London, water gushed from the manholes of surcharged sewers on some of the roads, and the flooding of railway lines and signalling systems interrupted several train services. One of the worst affected areas was around <Earlsfield>, where sewers overflowed and the <<River Wandle>> topped its banks

<London>: Large hailstones marooned passengers on incoming aircraft at London Airport, where flood water rose to 2 or 3 feet in one of the airport tunnels. Immediately beyond the north-west perimeter of the airport, little more than 1 mile from the rain-gauge where 1.15 in. was measured.

"Noteworthy" falls were reported from the adjoining county of Hertfordshire, at <Bushey Heath> and <Oxhey>.

<Dartford>: Widespread damage was caused by violent thunderstorms in the Dartford rural area, Kent, on the evening of the 18th, notably at Horton Kirby.

	Oxhey 0.89 in 45 m London Airport 1.15 in 80 m	<Swanley>: Houses were flooded to a depth of 4 feet in 20 minutes. A number of buildings in Dartford were flooded, and also at <Farningham>, where a land-slide held up miles of traffic.
19 Jul 1956 BR	Worcester Pk STW 1.00 in 24 m Lingfield STW 0.86 in 24 m	<London>: Flooding was again reported from many places, particularly in the south-east, where the<< river Wandle>> overflowed, for the second time within the month.
28 Jul 1956 Lancs Evg Post 28 Jul		<London>< Cheswick>: The fire service received 250 calls to pump out buildings. One man was killed by lightning. Rail travel from Kings Cross was disrupted by deep water on the line.
6 Aug 1956 Eden (2008), Lamb (1964)	It was August Bank Holiday and in London it was the coldest Aug Bank Holiday since 1880.	<Tunbridge Wells>: A prolonged thunderstorm with hailstones carried into the town causing piles of ice 1 to 1.5 m high. There was flooding and disruption of traffic. Cars and buses were unable to move. Hop blinds in the main street were hanging in tatters. It took 4 hours to clear a route through the hailstones which were piled 6 feet high on the sides of the road. Some flooding was reported in London. Swanage (Dorset): Rainfall of 2 ½ inches in 1 hour caused flooding of houses.
19 Jul 1957 BR	There was flooding in many urban areas of Kent. Anstey 2.88 in 110 m Meesden 3.14 in 103 m	<Bromley>: Flood water reaching a depth of 3 ft in Bromley. Buntingford> and <Meesden>"Very rare" falls were recorded within a distance of about 4 miles in Hertfordshire with some flooding in the former area.
12/13 Aug 1957 BR	Heavy rains affected the London area on 12 th the date of all the rainfall totals below. Borehamwood 0.80 in 15 m Oxford 1.08 in 20 m Worcester Park STW 0.74 in 20 m Stanmore 0.71 in 20 m Kingston 1.00 in 25 m New Malden 1.53 in 2 h Fulham 1.53 in 85 m	<London>: Parts of the London area, mainly to the south of the Thames, had further thunderstorms in the early hours of the 13th. Floods in the <Wandsworth><Earlsfield> area associated with the first storms had hardly begun to subside before further floods undid the clearance work of the previous evening. The total rainfall in these storms exceeded 3 in. in a number of places.
10 Jun 1958 BR	Tunbridge Wells 1.07 in 45 m	<Tunbridge Wells:
3 Jul 1958 BR	Wendover 1.31 in 55 m	
16 Jul 1958 BR	Lingfield STW 1.10 in 22 m	Remarkable falls were reported in Surrey, Kent and Hertfordshire. but from reports of purely local flooding and

22 Aug 1958 BR	Cooling 2.18 in 71 m Royston 1.70 in 60 m Torrential rain and thunderstorms were again reported from many parts of England and Wales. Bishops Stortford 0.90 in 35 m	damage to standing crops, the storms appear to have affected only a very limited area. <London>: Scores of houses were struck by lightning and there was much flooding, fire brigades receiving some 300 calls for assistance. Counties to the south of London were also affected. A landslip at Blackheath, following heavy rain, blocked railway lines and traffic was diverted for several hours. <Bishops Stortford>: The storms of the London area also affected the adjacent counties of Middlesex and Hertfordshire where, in the latter county a "noteworthy" fall was recorded at Bishops Stortford. Very heavy rain fell in parts of Buckinghamshire, particularly severe at Brill.
6-9 Sep 1958 Eden (2008), Webb et al (2001, 2009), Birmingham daily Post 6 Sep, COL May 1997 (See Southeast Chronology)	Severe thunderstorms affected SE England. Storms moved north eastwards across much of Sussex into Kent and Essex (thus skirting the eastern and southern suburbs of Greater London)	<Snodland> and <Hailing> Medway villages in Kent were flooded in places to a depth of 2 feet. <London>: A <Harrow> recorder picked up 1470 lightning flashes in 1 hour. At <East Ham> a cinema was flooded and at the London Jewish Hospital at Stepney Green water ran through the building 3 inches deep. Roads were flooded to a depth of 9 inches at Dartford, 4 feet at Beckenham and 5 feet at West Wickham. Many roads in Strood, Rochester, Chatham and Gillingham were flooded waist deep. COL observer recalls for 5 Sep: <Bromley>: 62 mm fell most of it in under an hour. <Knockholt>: 125 mm was recorded. <Coulsdon>: The observer noted that his school has suffered from a landslide which breached a wall and flooded the school. The COL observer notes that the London evening Standard referred to 'the storm of the century' with a photo of a double decker bus stranded at <Wickford> (Essex)
22 May 1959 BR	Southgate 1.11 in 78 m Hatfield 0.90 in 45 m	<Hatfield> and <Southgate>: Noteworthy falls were recorded at Southgate and at Hatfield where some flooding occurred.
24 Jun 1959 BR	Reigate 0.70 in 18 m Merstham 1.56 in 60 m Radnage 1.14 in 90 m	
25 Jun 1959 BR	Caversham 1.05 in 30 m Sonning 1.97 in 35 m Inkpen 1.22 in 35 m	Thunderstorms were widespread and BR notes that flooding occurred at many places.
29 Jun 1959 BR		<Orsett> (near Tilbury): A big Electricity Board sub-station was set on fire by lightning. <Guildford>: A 20-minute storm halted traffic, flooding the bus station and some roads to a depth of about 2 ft. < Kirdford> (Surrey): After a storm at, hailstones lay 2 in. deep with drifts up to 6 in. deep in places.

9 Jul 1959 BR

Thunderstorms followed a period of exceptionally high temperatures up to >30C. Violent thunderstorms hit the south coast giving many noteworthy falls accompanied by local flooding. A feature of the storms was the frequency of hail and the abnormal size of some of the hailstones. This hailstorm covered a track 220 km long from Hampshire to Suffolk with a swath width of 10–15 km. In East Berkshire where the largest hailstones, 38–50 mm across were observed (Browning and Ludlam, 1962).

Silchester 23 mm in 15 m
Watford 0.75 in 10 m
Meesden 0.81 in 20 m
Anstey 0.79 in 22 m
Knebworth 1.24 in 60 m
Bovingdon 0.60 in 11 m
Hemel Hempstead 0.68 in 20 m

**10-11 Jul 1959
Eden (2008),
Harrow
Observer 18
Jul, BR**

Renewed and widespread thunderstorms caused considerable damage and much local flooding in southern England on the night of the 10th/11th. 11th
Boreham Wood 0.72 in 10 m
Batchworth Heath 2.00 in 60 m
Harmondsworth 1.60 in 50

< Wokingham> and <Winnersh> (Berkshire): One of the worst storms occurred here, where hailstones some 2 in. in diameter caused many hundreds of pounds worth of damage to glass-houses in the neighbourhood. Glasshouses were extensively damaged, car fabric roofs were shredded and windscreens shattered with hailstones 5 cm across at Wokingham.

The main Basingstoke-Southampton road was flooded for some time in many places with rain and melting hailstones.

<Maidenhead>: Houses were flooded during a noteworthy fall of more than half an inch in under 10 minutes.
<Arborfield> (5 m Se of Reading): 3000 panes of glass broken in glasshouses. Hailstones were described to be 'as big as hen's eggs'. Before the glass could be repaired the greenhouses were flooded by further thunderstorms.

"Remarkable" falls occurred at a number of places that night including one at Portsmouth, where many roads were under water, one at Maidenhead, where 1.66 in. fell in 82 minutes and one at London Airport which had 2.31 in. in 101 minutes.

Harrow>: Two thunderstorms occurred during the day with a rainfall of 1.65 inches at Wealdstone. The <<River Pinn>> overflowed and caused flooding at Hatch end and Pinner. Some Hatch End shops were flooded (some for the fourth time in 9 months) with depths of 4 to 8 inches of water. Trains were stopped because of flooding on the line from Uxbridge and restrictions were placed on the LMR line from Queens Park. There was also flooding to shops in Wealdstone and in central Harrow and at Wealdstone the roadway was damaged under the

	m Oxhey 1.42 in 52 m Maidenhead 1.66 in 82 m London airport 2.31 in 101 m Northolt Apt 2.29 in 2 h Camberley STW 1.98 in 2 h Ruislip 1.97 in 2 h Batchworth Heath 2.00 in 2 h 9 th Woodstock (Oxon) 1.80 in 45 m 10 th Godalming 0.90 in 10 m Isle of Dogs 1.64 in 50 m Cranleigh 0.89 in 45 m	Headstone Drive railway bridge.
9/10 Aug 1959 BR		
11 Aug 1959 BR 21/22 Aug 1959 BR, The Observer 23 Aug	Scattered thunderstorms, locally very heavy, occurred in southern England between Lincolnshire and the southern fringe of London 21 st Kingsbury 0.80 in 15 m Finsbury 1.95 in 45 m Bermondsey 1.81 in 90 m Bethnal green 2.38 in 95 m Erith STW 1.75 in 75 m 22 nd Tooting Bec 0.65 in 15 m Wimbledon 0.66 in 18 m Raynes Park PS 0.70 in 20 m Kenley 1.25 in 23 m	<Newbury> (Berks): A storm lasting about 40 minutes flooded some roads up to a depth of three feet. <London> Very intense rainfall occurred at Hackney, Finsbury, Bermondsey and Bethnal Green In Kent, floods stopped trains, and road traffic, inundated houses and caused a minor landslide on the railway at <Erith>. In the London area, the Eastern Region time-table for suburban services from King's Cross was completely disorganized owing to flood-water in tunnels, and at Liverpool Street Station only two trains ran between 4.30 and 7 p.m., the peak rush-hour period. Liverpool street was flooded for the second day running. A man was killed by lightning in regent park On 22 nd After another close day in London, with afternoon temperatures about 80°F. (26°C.), thunderstorms again broke out during the evening of the 22nd. Liverpool Street Station was flooded for the second day running and electric trains had to be diverted into Fenchurch Street. <Wimbledon>: Many parts of the town were flooded; low lying areas suffered most with water pouring down the hill and in some streets water was 2 ft. deep.
22-23 Jun 1960 Eden (2008) Lancs Evg News 23 Jun, BR	Thunderstorms caused flooding in Oxfordshire and Berkshire. Near Oxford 101 mm fell in 5 hours. 23 rd	<Abingdon> and <Cowley>: 2 factories in Abingdon and Cowley were closed down because of flooding. At least 2 people were killed by lightning. The people killed were at Bristol and Biggleswade. BR Notes: The main storm, began shortly before midnight on the 22nd and continued for about 12 hours; it moved on a curved track from Dorset and eastern Hampshire, through Wiltshire, Oxfordshire and east Midland

**7 Aug 1960 BR,
Liverpool Echo
8 Aug**

Oxford 2.50 in 2 h
Abingdon 0.59 in 10 m
Little Rissington 1.26 in 108 m
Grimsbury 1.55 in 2 h
Oxford Radcliffe 3.20 in 3 h 40 m
Duns Tew (Oxon) 101mm in 5 h

Thunderstorms being particularly severe in south-east England and the Midlands. Very rare falls were recorded, in Surrey, Middlesex, Shropshire and Oxfordshire.

Rayners Lane 0.90 in 45 m
Buckingham Pal 1.09 in 90 m
Chipping Norton 3.00 in 2 h
Acton 3.00 in 50 m
Hammersmith PS 0.93 in 50 m
Western PS 1.30 in 60 m
Hogmill Valley PS 1.00 in 60 m
Guildford 1.10 in 75 m
Kensington Pal 1.34 in 100 m

Tunbridge Wells 1.19" in 2 h

**26 Aug 1960
Liverpool Echo
26 Aug
1 Sep 1960 BR**

Rain was widespread in central and southern England, as a trough of low pressure moved slowly north-east across the country; the rain was heavy at times with thunderstorms in the

counties into Suffolk. The storm left a trail of damaged homes and crops, flooded roads and buildings and interrupted public services. Two people were killed by lightning, one near Nuneaton and the other near Biggleswade. Because of flooding in the area 5,000 men were sent home from a car body factory at Cowley. At Abingdon, work at the M.G. car factory was abandoned for the day. Remarkable falls occurred in Hampshire, Berkshire and Oxfordshire.

<London>: The city was particularly badly hit. At <Harrow> there was considerable damage to property both by Flood water and lightning. A woman was killed by lightning while exercising her dog in <Stanmore>. Several cricketers were also hurled to the ground. A factory in the <Warple Way> area, a branch of British Light Steel Pressings, had part of their works flooded to a depth of 3 to 4 ft. Roads were like streams; trolley buses were held up; fire-stations at <Acton> and <Heston> were placed on a day-night alert answering emergency flood-calls. Landslides at Acton Lane and Gunnersbury Lane caused many trains to be delayed. Flooding, due to heavy rain and swollen rivers, was reported from many other parts of the country. Underground services between Kensington road and south Edgware were suspended. In <Battersea>, Silverthorne Road furniture was afloat in homes. Cars were marooned in 3 feet of water on the Kingston by-pass.

<Rochester><<Chatham><Gillingham>: Streets were flooded.

<London>: Torrential rain caused flooding of streets a few inches deep within minutes.

<London>: In the London area exceptionally heavy downpours flooded houses, shops and other premises made roads impassable and interrupted railway and tube services. <Kensington>, <Hammersmith>, <Shepherds Bush> and <Notting Hill> were the areas most badly affected, and by nightfall London fire brigades had answered more than 200 calls to pump flood-water.

Severn and Thames Valleys.
Kensington Pal 1.21 in 2 h

**4 May 1961 BR,
Daily Mail 5
May**

Caterham 1.10 in 60 m
Croydon 1.20 in 60 m
Beddington Park 1.15 in 65 m
Coulsdon 1.14 in 70 m
Kenley (R.D.W.) 1.26 in 72 m
Deptford PS 1.22 in 74 m
Greenwich 1.26 in 78 m

Thunderstorms accompanying the movement of a depression north-eastwards across the country from a position south of Ireland. It was one of the unusually few falls of intense rain in 1961. No flooding was reported. in BR for the year

Daily Mail reported that hundreds of homes were inundated and cars were abandoned including 100 on the A21 south of <Sevenoaks>. Manhole covers were thrown 2 feet in the air as sewers overflowed.

<Beckenham>: A train on its way to Charing Cross was marooned at Clock House Station where water lapped over the platform. At nearby <Shortlands> a house was severely damaged by floods

1 Aug 1961 BR

Wimbledon 1.31 in 95 m
Mitcham 1.49 in 100 m

26 Jul 1962 BR

Pirbright Inst 1.00 in 30 m
Bracknell MO 1.27 in 2 h

7 Jun 1963

**Eden (2008),
BR, Weather
July 1964**

Buckingham Pal 0.94 in 25 m
Batchworth PS 1.16 in 55 m
Kingsbury 2.13 in 2 h
Kensington Pal 2.25 in 35 m
Mill Hill Cemy 1.20 in 90 m
and 2.45 in c 2 h
Barnet STW 1.48 in c 2 h

No flooding was reported in BR for the year and there were again few occurrence of intense rainfall.

<London>, <Mill Hill>: This site had 94 mm in less than 2 hours with serious local flooding. [This amount not noted in BR]. Weather July 1964 shows photos of road flooding in northwest London and provides the meteorological background.

28 May 1964

BR

Little Chalfont 25.4 in 20 m
Fulmer 33.8 in 45 m
East Ham 26.9 in 60 m
East Ham 2 36.8 in 85 m
Dagenham 29.0 in 50 m
Slough 59.7 in 70 m

12 Jun 1964 BR

Windsor 26.4 in 30 m
Luton 12.2 in 7 m

21 Jul 1964 BR

Mogden STW 18.8 in 18 m
Hammersmith 24.4 in 20 m
Kew 28.2 in 34 m
Muswell Hill 51.8 in 50 m
Holmbury St Mary 31.7 in

	55 m Bushey Lane 39.9 in 60 m Broomfield Pk 46.7 in 90 m Lr Greatmoor Fm 25.4 in 26 m Bovingdon 36.8 in 51 m North Mimms 43.2 in 2 h	
26 Jul 1964 BR	East Ham 68.6 in 60 m Barking PS 48.5 in 60 m	
21 Jun 1965 BR	Rochester 32.8 in 60 m Hartley 35.1 in 2 h	
20 Jul 1965 BR, Daily Mail 21 Jul, Liverpool Echo 20 Jul	Stansted 29.3 in 18 m Kensington Pal 40.6 in 45 m Muswell Hill 30.7 in 80 m East Ham PS 20.6 in 10 m East Horsley 59.4 in 90 m	<p><London>: In <Edmonton> a dip in the road in Silver Street became seriously flooded and a car, van and bus became stuck. Marylebone grammar school was closes as water poured down chimneys and even flooded the headmaster's study. At Harrods a staff hall opposite the store was flooded. Westminster Hall was flooded. At <Knightsbridge> 3 inches of water caused a jam that blocked the Hyde Park Underpass. Hailstones as big as marbles peppered the West End. The main court room at the Northeast London Quarter sessions was flooded as were Whiteleys in Queensway <Bayswater>. Floods closed booking offices as Waterloo and Victoria main stations. At Victoria the clerks were up to their knees. Part of the concourse of Paddington Station was flooded and tunnel flooding stopped all trains in and out of Kings Cross. Hyde Park and baker Street stations were also affected.</p> <p><Tonbridge>: Wallace and Tiernan paint shop in Tudeley Lane was flooded when a nearby stream overflowed. <<Woodlands Stream>> which backs on to Darwin Drive flood houses in the North End of the town. Houses in Postern Lane were also flooded. Flooding of roads was also reported on Trench road, Elmhurst gardens, Salisbury Road, Priory Road, The Ridgeway, Willow Lea and Tudeley Lane.</p> <p><Yalding>: the local river rose 6 feet; small streams affected but <<Medway>> not affected.</p> <p><Tonbridge Wells>: The water at Ferndale was 2 feet 6 inches deep and some houses there were flooded to 3 feet. Other trouble spots were Birling Road, Bayhall Road and Farmcombe Road.</p> <p><Cowley> in <Oxford>: The BMC car factory was flooded up to 2 feet deep and 2500 workers laid off.</p>
30 Jun 1967 Kent and Sussex courier 30 Jun	Thunderstorm Southborough DR 1.53"	
13/14 Jul 1967 Eden (2008), Webb et al (2009) 22/23 Jul 1967	90 km long hail swath from the Mendips across NW Wiltshire to S Glos. Headington 67.0 in 2 h	Extensive flooding occurred in SE England with 100 mm at West Byfleet Surrey. Heavy rain also occurred in

Eden (2008)

3 Jun 1968 BR

Broadmoor 40.9 in 40 m
Broomin green 61.0 in 90 m
Oxford 14.0 in 8 m

10 Jul 1968 BR

14 Jul 1968 BR

Bishops Stortford 34.0 in 60 m

14 Sep 1968

BR, CBHE (G.

Collyer and

D.Rose (1998)

Images of

Guildford.

Breedon

Publishing,

Derby p 130-39

Floods and

Storms, the

People 15 Sep,

Daily Mirror 16

Sep, Kent and

Sussex Courier

20 Sep

Devon (See SW chronology).

BR 1968 shows a map of the distribution of rainfall in a 2 day period from 09.00 14 Sep showing some totals over 200 mm north of London and a belt over 100 mm extending from Hampshire to Essex.

<Guildford> On Saturday night, 14 September 1968, it began raining. There was a torrential downpour throughout Sunday and, by the Monday, the River <<Wey>> had burst its banks and the bottom of the High Street was under six feet of water. Another photo of the old town mill in Millbrook shows water about 4 inches above the bottom window panels. The level the water reached in 1968 is recorded on St Nicolas Church and the Yvonne Arnaud theatre, and there are photos of that flood available online! At

<http://www.surrey.ac.uk/Chaplains/CFIS/tour/townbridge.html>.

<Purfleet>: Flooding near the Dartford Tunnel reached nearly the car handles. The approach to the Blackwell tunnel was under 2 feet of water.

<Longfield > (Kent): Homes were flooded as water poured off surrounding fields.

<Tilbury>: It was said to be completely flooded.

<Tonbridge>: Shops factories and farms have suffered great losses. About 500 properties, private and business were flooded. Shops between the Big Bridge and Avebury Avenue where plate glass windows burst and contents were swept away. Among the debris washes through Tonbridge were 2000 carcasses of poultry, cattle and sheep. Cannon Lane bridge was demolished taking with it a gas main and a smaller bridge at The Postern was put out of commission. The tow path from the Town Lock to the A21 disappeared. The water at Tonbridge Rugby Club bar was within 6 inches of the bar top. Baptist and Congregational Churches were flooded. The worst areas of Tonbridge were those close to the <<Pen Stream>> where the water rose so rapidly on the Sunday morning that some houses were swamped so quickly before there was time to move furniture upstairs. The Pen usually flows under Salisbury road but on this occasion it was 3 feet above it. People were rescued by boat from Darwin road. Cornwallis Avenue was flooded. Many factories were flooded including Rowland Stagg, Baltic Saw Mill where timber was washed down the river, Maylams corn merchants where a fish was found on

7 Jul 1969
Reading
Evening post 7
Jul

Thunderstorms in Kent and
Essex.

the floor, Darby's workshop where the water was 5 feet deep in the workshop and 2 feet deep in the showroom, Berkefeld filters where the water was 6 feet deep, Wright's building store was flooded by up to 4 feet of water. Whitefriars Press in Medway Wharf Road was 'indescribably' flooded whereas over the past 50 years it had only ever been flooded to a depth of a few inches.

<Hadlow>: The village centre was under 4 feet of water with shops and houses flooded. Elderly people were trapped in the bedroom of cottages.

<Hildenborough>: Gough Cooper Estate was badly flooded and had been built on flood prone land. Some houses were flooded more than 4 feet deep. An observer in Powder Mill Lane described a sight from his window: 'rushing towards this and two nearby bungalows was a four foot wall of water'. It smashed through the homes carrying away a shed and flattening walls and sweeping cars down their driveways.

<Leigh>: The deepest water was near the Plough at Powder Mill Lane where it was 8 feet deep in places, the worst at the Plough in 40 years of residency.

<Penshurst>: Low lying houses and cottages were flooded.

<Shipbourne>: A car was trapped at the bottom of School Hill with the occupants standing on the roof; they were rescued by boat.

<East Peckham>: Water set up by traffic lapped high on the walls of the Rose and Crown, its ground floor already under water. Residents at Medway Avenue retreated upstairs.

<Edenbridge>: A family were marooned at their shop Bridge Stores as it was being torn to pieces by raging waters. A rescue boat was launched but overturned and threw the occupants into the water but they were rescued. The centre of the town was drowned. The <<River Eden>> reached a width of 400 yards and went crashing through the town hurling tree trunks, barrels, oil drums and refuse from factories through shop windows. Water covered the High Street from Grinstead Motors to the Crown Inn and many houses in church Street, Lingfield Road and Hever Road were flooded. Bridge Stores was eventually demolished. The Henry VIII pub, the church and the school were cut off. The Castle and Tudor Village were flooded to the first floor and inhabitants had to be evacuated.

<Gravesend>: Flooding was reported (roads or houses?).

<London>: basements of houses near Lewisham were flooded. Flooding was also reported at <Orpington>, <Farnborough>, <Pettswood> and <Keston> in Kent.

2 Aug 1969
Eden (2008),
Weather Mar
1970 (Finch
Two torrents in
a week),
Sunday Mirror
3 Aug

Widespread thunderstorms caused flooding in west and south London, in East Berkshire, Norwich and south Warwickshire. Little Bookham (Surrey) 26.2 in 50 m DR Guildford 68.6 mm Teddington 48.0 mm Heathrow 57.2 mm Kew 55.1 mm

7 Aug 1970
Daily Mail 8
Aug, Acton
Gazette 13 Aug

<Kempton>: Surrey had 102 mm (and Southam Warwickshire had 127 mm).
<Little Bookham> (Surrey): After a daily fall of 46.0 mm in 28/29 July, there was a daily fall of 70.5 mm on 2 August. There were reports of flooding in nearby Horsley.
<Beckenham>: Water 3 feet deep was reported and roads were also flooded at <Kingston>, <Reigate>, <Wokingham> and <Leatherhead>.

<London>: Two theatres and a cinema were evacuated last night when a thunderstorm swamped London. Thousands of homes, shops and offices were flooded and trains and road traffic were thrown into chaos when 1.7 inches of rain fell in half an hour. In the Duchess Theatre in The Strand the audience was showered with water through the second act. Victoria Palace and the Garrick Theatre were also flooded as was the Odeon Cinema in Edgware Road. Many roads were flooded to a depth of 2 feet; <Knightsbridge> was awash trapping people in restaurants and houses. At Waterloo Station passengers paddled through a foot of water pouring across the platforms. At Charlton Lane (SE) cars floated in 8 feet of water in garages in a new block of flats. The underpass at Hanger Lane Ealing was closed when several feet of water built up and cars were abandoned along the side of Western Avenue. Train services were disorganised at Kensington, Acton, Ealing, Rayners Lane, Hammersmith and Wesbourne Park.

The Piccadilly service from Acton Town to Rayners Lane was suspended and the District Line from Ealing Common to Ealing Broadway stopped early in the evening. One of the worst spots for flooding in Acton is the part of Victoria Road, North Acton which dips down under the railway bridge where there was a couple of feet of water.

<Rickmansworth>: Hailstones reached a diameter of 14 mm

19 Aug 1971
COL
27/28 Apr 1972
COL
23 Jul 1972
Coventry

Thunderstorm

<Sidcup>: Severe but short lived thunderstorms brought large hail.

<Banbury>: People in Castle Street were clearing up after their second serious flood in 5 days with 20 houses affected as they had been 5 days before. Furniture and carpets were spread out on lawns to dry. The Three

**Evening
Telegraph 24
Jul**

26 Jun 1973 Sutton >1.00 in 30 m
COL (Aug)

6 Jul 1973 Eden A thunderstorm in SW
(2008), COL London and NW Surrey
caused serious flooding.

1 Aug 1973 Reading 0.68 in 21 m

COL, Daily Mail

2 Aug

27 Aug 1973
Daily Mail 28
aug

24 May 1974
COL

16 Jun 1974 Widespread thunderstorms
Eden (2008) in the Midlands with
serious flooding occurred in
Bristol and Oxford areas.

31 Jul 1975 COL Henley on Thames 58.0 in
60 m

14 August 1975 Reading 18.8 in 10 m
Eden (2008) Torrential rain ended a long
spell of dry weather with
floods up to 7 feet deep.
The Guardian The storm was so localised

Pigeons pub had water in its cellars. In some houses the water was 4 feet deep.

<Chessington>: had 117 mm rain in less than 5 hours. COL notes that 4.68" fell in 2 hours at an unofficial gauge.

<London>: Dozens of families were forced to leave their homes after a freak thunderstorm in south London with the worst affected areas in <Balham> and <Tooting>. An emergency centre was set up at Battersea town Hall to provide accommodation but by 01.00am the water had subsided and residents returned home. The storm disrupted rush hour traffic with trains delayed and tube stations closed. At Victoria delayed southern Region trains blocked all the platforms. Scores of calls were made to the fire Brigade following the flooding in <Clapham>, <Wimbledon>, < Wandsworth>, <Kingston>, <Sutton> and <Mitcham>. Wimbledon theatre cancelled the performance when the water reached stage level.

<London>: The storm broke out after 8 pm with the worst affected area the City of London. At the Mermaid Theatre flood water poured into the building and the stage disappeared under water. <Tottenham> was reported to have major floods and roads were blocked at <Camberley> and <Frimley> in Surrey. <Dulwich> village was flooded to over 2 feet in parts and many motorists were marooned. In southwark families on the ground floor of a 7 storey block were flooded when water spilled out from blocked drains.

<Sidcup>: Hailstones half an inch across were measured here.

<Ambrosden> (Oxfordshire): received 96 mm.

<London>: The 'Hampstead' storm in north London brought 171 mm rainfall nearly all in 150 minutes. Golders Hill Park had 131 mm and four other gauges had over 100 mm. Major roads and thousands of houses were flooded and the Underground was seriously affected. One man was drowned. Teams of residents in <Kilburn>,

**15 August,
Daily Mail 15
Aug, Keers and
Wescott
Weather Jan
1976**

that at the London Weather Centre only 5 mm fell. Keers and Wescott show a map of the rainfall distribution and intensity and a list of 24 hour totals. Serious flooding from outlying districts must have been associated with 50 or even 25 mm total of relatively short duration

<Hampstead>, <Islington>, <Willesden>, and <Wembley> formed squads to rescue furniture from flooded homes. In west end Lane Hampstead firemen strung ropes across the road and along pavements as handrails to help pedestrians caught in 3 feet deep fast flowing water. In the West Hampstead area people were evacuated from their flooded homes and were sleeping in church halls and public buildings. All trains from Euston and St Pancras were halted as the stations were flooded. Work at the Royal Free Hospital in Hampstead was disrupted when flood water gushed into the ground floor operating theatre. In west Hampstead an 8 foot wall served as a dam at Holmdale Mansions; it collapsed and **a six foot wave roared through the flats** flooding the ground floor to the ceiling. Seven feet of water was measured at one spot in West end Lane and even the local fire station was under 4 feet of water. [Daily Mail has good photos of Chalk from road Camden, Harrow and Kilburn Gate] Centres for families driven from their homes were set up in Kentish Town. Flood water rose above the height of cars after Hampstead Pond overflowed affecting lower parts of Kentish Town. The worst hit area was Hampstead where 4 feet of water was running in the streets. Police at Highbury Vale said the water was washing downhill towards them. The Weather Centre said the storms were sporadic and little rain was measured at Holborn. **Hailstones the size of marbles fell in the west of London.** COL observer notes: In London NW2 2.27 inches of rain fell in just over 2 hours. **Hailstones were 2 to 3 inches in diameter.**

Keers and Westcott (1976) described the storm. Keers, J.F. and Westcott, P. (1976) The Hampstead storm – 14 August 1975, Weather, 31, 2-10.

**8 May 1976
COL, J.
Meteorol. June
1976**

<London>: The southeast of the city experienced heavy thunderstorms with totals but no durations: 43.8 at Brockwell Park, 42.0 at telegraph Hill, 33.0 at Ruskin Park, 19 mm at Deptford and 18.3 at West Dulwich (with hail ½ to 1 cm in diameter. At Caterham 7.2 mm fell in 15 minutes. The storm lasted from 16.30 to 18.30 and was centred over the Lambeth and Camberwell districts and was extremely localised. Some local flooding incidents occurred in the Deptford area.

16 Jul 1976 COL Great Gaddesden 40.6 in several overnight thunderstorms
20 Jul 1976 COL Sidcup 20.3 in c 12 m
12/13 Jun 1977 COL, Reading Late on 12th thunderstorms broke out over S England and these plus non-thunderly rain
Evening post 14

<Great Gaddesden>: The storm caused flooding of roads some to a depth of 18 inches with several cars broken down in the floods. Gravel was washed down the hills and piled on the sides of roads.

Several parts of E Anglia and inland Kent reached 25-26°C while only 100 km further inland the inland maxima were only 10-14°. That night some of the most spectacular thunderstorms for maybe 20 years affected SE England. During the early morning the storms moved northwards becoming less intense.

Jun

gave up to 40 mm rain in the region during the night. Most of England was cloudy and cold but the eastern side of the country lay on the edge of very hot continental air. Sidcup 33.4 in 1 h 40 m

16/17 Aug 1977
COL, Haggett
Weather Jan
1980, Reading
Evening Post 17
Aug

Heavy rain was accompanied in places by thunder. A frontal storm with substantial convective activity as a series of cells moving along the occluding front
Ruislip Manor Park (SE Rickmansworth) 114.6
Overton 19.0 in 20 m
Sidcup 28.8 in 55 m

27 Aug 1977
COL

There were outbreaks of rain and thunderstorms southeast of a line from

<Acton> (W London): Total rainfall was 19.1 mm but the storm caused widespread surface flooding, disruption of rain and road links and damage to trees.

<London>: the Fire Brigade had to deal with 150 flood calls.

<Sevenoaks>: The A21 was flooded with 8 inches of water.

<Radley>: the road from Kennington was under 2 feet of water.

<Reading>: In Rylstone road some residents were marooned in their houses as a foot of water flooded the road. [Seems no reference to flooding of houses].

<London>: To the north and west of the city falls exceeding 60 mm occurred in some places where floodwater was 2 metres deep. Haggett notes: The storm gave rise to widespread flooding principally in the Brent and Crane catchments in northwest London. Some 1100 houses, 20 factories, 20 shops and several schools and churches, many trunk and residential roads and several railways were flooded to depths of up to 5 feet. Telecommunications were disrupted with over 40000 users disconnected and there were lengthy traffic delays caused by flooded roads and inoperative traffic signals. Haggett shows maps of a surface chart and a daily and hourly isohyetal maps and hyetographs at hourly intervals for Ruislip and Lyle Park Silvertown with hourly totals of 20 mm embedded in the longer period of rain. Reading Evening post says that many underground stations were out of action while floodwaters were pumped out.

<Didcot>: The rail subway was flooded. There were also floods in Marsh road Didcot.

<Sunninghill>: In School Road water was seeping under front doors.

<Rickmansworth>: The storms passed slightly to the south of the observer here with 5 storm cells in succession. Total rainfall at <Maple Cross> was 112.8 mm. Flooding occurred on the Metropolitan line at <Northwood>. Disruptions were widely reported in the press (See Times 18 Aug).

<Epsom>: The storm built up from the northeast and developed violently as it approached the North Downs, flooding the Kingston By-pass and inundating Epsom town with what the local newspaper described as 75 mm in an hour. The floodwater rose so rapidly that a minicab driver was caught by rising water under a railway bridge and had to be rescued by the Fire brigade.

<Slough>: 17 pensioners were taken from their bungalows in Winvale, <Chalvey> near Slough as water threatened to come into their homes.

<London>: Heavy storms developed in places particularly east and south of London. 80.0 mm fell at Bromley and 86.9 at Orpington in less than 5 hours. Some of the worst flooding was reported to have occurred in the

1 Jun 1978 COL	Hampshire to Norfolk Temperatures widely reached 27 to 28C. Storms occurred in SE Wales through central England to East Anglia	Sidcup area although only 17.1 mm was measured there <Great Gaddesdan> (nr Hemel Hempstead): IN the storm hailstones 2 cm in diameter fell <Oxfordshire>: 82 mm rain fell and hail accumulated to a depth of 45 cm
4 Jun 1978 COL	Temperatures reached 26 to 28C . Hail occurred in places and 11 people were struck by lightning. Rainfall totals were widely 25 to 40 mm Dartford 17.5 in 28 m	
31 Jul 1978 COL	Wallington (S London) 50.1 in 6 h	<London> <Wallington>: Heavy rain caused local flooding. The rain pulsated with heavy bursts throughout the afternoon. The river <<Wandle>> overflowed its banks and homes and cars were damaged and gardens ruined.the main London road was closed in two places as the normally tranquil Wandle overflowed <Wokingham>: A thunderstorm lasted from 16.25 to 17.30 with rainfall totals of 31.6 and 38.3 at 2 stations with the majority falling in 30 minutes. Roads and gardens were awash and drains could not cope. The <<Emm>> burst its banks at 18.15 and reached its greatest depth at 19.30. <London><Edgware>: An estimate 15 mm fell in 15 minutes. <London>: A thunderstorm produced hailstones 25 mm in diameter and a cat was killed by hail only a few hundred metres from Buckingham Palace.
30 May 1979 COL, the Guardian 31 May	Freak rainstorms lashed southern England – mainly in the southwest	
9 Aug 1979 COL	Eastern counties remained cloudy with heavy rain in places thunderstorms and hail	
24 Jun 1980 COL		<Coulsdon> The observer noted piles of hail 10 cm deep with severe damage to plants and shrubs.
25 Jun 1980 COL	June 1980 was a month of widespread thunderstorms over England. Stations typically recorded between 4 and 8 days with thunder. Thunderstorms with hail occurred in Hampshire, Wilts, Devon East Anglia up to Southern Scotland	<Sevenoaks>: On 25 Jun Sevenoaks was hit by a very intense localised storm. Between 16.15 and 18.00 my station a mile north east of the centre of the town recorded 52.8 mm. At what was obviously the epicentre of the storm Sevenoaks School recorded 116 mm in the same period? Hail lowered the screen temperature from 15.6 to 6.7° during the storm and so heavy was the hail that some of it remained the following morning. The High Street resembled mid winter with ice several inches thick. Some indication of how localised the storm was is shown by the fact that at Cramptons Road Pumping Station a mile further on from Sevenoaks School had only 20 mm. Preliminary indications are that this is one of the three or four most intense short term rainstorms ever

<p>14/15 Aug 1980 COL</p>		<p>recorded in the UK. PETER ROGERS (Sevenoaks) Local press estimate the damage from the storm as between £750,000 and £1 million. Because the hail was very localised some farms around Sevenoaks Maidstone and Marden were affected while others remained untouched. Crop damage occurred along a track only 2 ½ miles in length. Sevenoaks being a hilly town flooding was magnified at the bottom of the hill and water a metre deep covered on road there. The railway was badly affected with water half a metre deep on the tracks. Extensive banks of hail were still to be seen 3 hour later. <Luton> (Bedfordshire): The 14th, with 54.1 mm, was the wettest day since 15 September 1968 (57.1mm) and the wettest August day since 1939. Furthermore, approximately 40mm fell between 2100 and 2145 GMT and at the height of the storm visibility was reduced to 300 metres by the rain. Flooding in Luton was severe with many shops in the town-centre inundated; night-workers sent home from Vauxhall Motors, and a sewer under the A505 Collapsing, necessitating the closure of that road for several weeks. <Great Gaddesden>: 59% of the monthly rainfall fell on 14th</p>
<p>20 Sep 1980 COL</p>	<p>Thunderstorms with heavy rain occurred between Worthing and Oxford.</p>	<p><Bracknell>: One station recorded 45.8 mm and reported slight flooding in parts of Bracknell. A second station reported that 50 mm fell in 2 hours (20.30 to 22.30). <Wokingham>: 52 mm fell in 1 hr 50 m.</p>
<p>7 Oct 1980 COL</p>		<p><Bracknell>: At one station hail only lasted 10 minutes but completely covered the ground; at another station hailstones were 1.2 cm in diameter with damage to crops reported. <Wokingham>: Hailstones up to 1.5 cm diameter fell (but mostly 5 to 8 mm) causing drifts of up to 9 cm <London>: Sewers at <Southall> and <Hanwell> collapsed.</p>
<p>2 Jun 1981 COL, the Guardian 3 Jun</p>		<p><Bracknell><Bullbrook>: Two thunderstorms occurred with a total rain period of 2 hours 50 minutes and a rainfall of 59.2 mm. Many houses in Bullbrook were flooded and drainage systems could not cope north of Bracknell. Minor roads north of the town were flooded with small rivers bursting their banks. The Met Office HQ 1 km NW of the observers station was also flooded. Flooding occurred at the Western Industrial Estate basement of Dorothy Perkins warehouse. The Head office in Wokingham road was under 3 feet of water. Four houses in Bull Lane were flooded.</p>
<p>9 Jul 1981 Eden (2008),</p>		<p><Wokingham>: Two thunderstorms also occurred here but with much less rain totalling 18.8 mm but there was local rural flooding SE of the town. Trains from Wokingham to Bracknell were stopped due to a landslide. Thunderstorms occurred across southern England. Heronsgate (near Brentford?) recorded 104 mm. A woman was killed by lightning in Somerset.</p>

**Newcastle
Journal 10 Jul**

**6 Aug 1981 COL
Daily Mail 7
Aug**

Severe thunderstorms occurred in many parts of the country on 5th and 6th August.
London Weather centre had storm rainfall of 46.5 mm, Edgware 30.8 mm

<London>: Torrential rain flooded tunnels outside Kings Cross station delaying trains for 4 ½ hours. The Fire Brigade dealt with 100 calls for help.

<London>: Three violent storms followed each other within a few hours. Several stretches of the underground were flooded and some roads were flooded to a depth of 3 feet. One carriageway of the Blackwall tunnel had to be closed and the other kept open by pumping out water. At Heathrow the radar system was put out of order causing diversions and severe delays

<Epsom> and <Coulsdon> (Surrey) Several stations around these towns had totals around 60mm (70mm at <Burgh>). In low lying parts of Coulsdon flooding was severe and a woman was struck by lightning nearby. The heaviest fall in these storms was at BurghHeath with a total of 70 mm.

<Caterham>: the school recorded 59.4 mm as a daily total.

<London>: the line from Purley to Kings Cross was flooded with trains terminating at Finsbury Park.

<Sanderstead> (Surrey): 29.5 mm fell in 50 minutes.

2 Jun 1982 COL

4 Jun 1982 COL

June was a thundery month with thunder reported somewhere in the UK on 22 days.

<London>: The road was flooded along Cricklewood Broadway and at Brondesbury station water was 9 inches deep with water pouring on to the road from a sewer which had forced up a paving slab.

Highest rainfalls reported were at Cheshunt in Herts (92mm), Loughton in Essex (78.9 mm; 68.6 in 70 mins).

<Loughton>: The Loughton storm was said to be the worst since 5 Sep 1958. Flooding was more severe in Loughton than at neighbouring Waltham Cross where the rainfall was higher (92.3 mm; 82.4 between 15.50 and 17.00) where the terrain is more level. In some lower parts of Loughton some houses were flooded up to ground floor ceiling level. Some 200 houses and shops were flooded and 12 struck by lightning. A car was lifted by the flood water and hurled into the side of a house.

<Waltham Cross>: The storm at was earlier than the one at Loughton. The writer notes that the Loughton storm appeared to develop when the downdraught from the Waltham Cross storm forced the hot air over Loughton rapidly upward.

**26 Jun 1982
COL**

14 Jul 1982

Thunderstorm with

<Edgware>: 40.0 mm fell in about 2 and a half hours. The local stream was swollen to an unprecedented depth and ferocity. Three children were swept away to their deaths.

<Guildford>: Many homes were flooded and many people had to wade to their cars.

**Reading
Evening Post 14**

Jul

6 Jul 1983 COL,

Webb et al

(2009),

Buckinghamshi

re Examiner 8

Jul

lightning effects but liited
flooding.

<Kew Gardens>: COL provides a report on a severe thunderstorm reported on that date at Kew Gardens. Large areas of the Gardens were flooded to a depth of 3 to 5 inches. His raingauge some distance away only reported 28.4 mm but another thunderstorm was reported at in which 94.8 mm was reported at <Idle Hill> near Sevenoaks.

<Heath end> (nr Aldershot): 77.8 mm in 1 ½ hours.

<Chesham>: The thunderstorm after a heat wave turned roads into rivers with cars abandoned and hailstones hacking down vegetation. A workshop at Vale Road was flooded up to the wheels of cars. But not far awy the road was dry. Slight flooding occurred at the Black Horse pub. Flooding from Broad Street made its way down the ramp under the arches of the Uplands courts Flats swirling around the garages.

<Ashley Green>: A bungalow was badly flooded; the Post Office was also flooded. Hailstones did much damage in gardens.

<Guildford>: The A25 road was closed due to flooding.

23 Jul 1983

Reading

Evening Post 23

Jul

Thunderstorm causing
power failures and lightning
strikes on homes but no
reports of property flooding

23 Aug 1983

COL

Bracknell 39 mm in 2 h 15
m

17 Jun 1984

COL, Daily Mail

18 Jun

<Luton>: 59.9 mm in thunderstorm rainfall in 3 and ½ hours. Luton town centre was closed to traffic. There was also torrential rainfall in St Albans and north London.

<London>: Parts of North and West London were particularly badly hit and Firemen pumped water from a number of homes. Some drivers abandoned their cars in 3 feet of water.

<Maidenhead>: 14 mm hail fell in a thunderstorm.

<Bracknell> (Berkshire): The surrounding area was hit by a thunderstorm giving 30-40 mm of rain in 40-45 minutes, accompanied by large hail locally. Although the precipitation accompanying the storm caused considerable havoc, the thunder and lightning was not especially severe.

<Crowthorne>: One side of the town remained dry with only a few large drops of rain seen to fall whilst across

22 Jul 1984 COL

23 Jul 1984

COL, Eden

(2008)

The day had been hot and
sunny: my maximum was
26.4o, reached at 1400
GMT.

the other side of the town roads became blocked with floodwater. Less than 3 km to the west of Beaufort Park – where 43.4 mm fell there was little if any rain at all.

The storm left a wake of flooded homes, from <Yateley> through <Sandhurst> and <Crowthorne> to <Bracknell>. The run-off was very rapid both from urban areas and from the dry, baked ground - only 12mm of rain had fallen in the previous four weeks, three-quarters of that on 12-13 July - and surface drainage systems were obviously unable to cope with the sudden volume of water.

The storm had its beginnings in north-east Hampshire about 1435 GMT. After producing what was probably a heavy shower, another cell developed on its north-east flank just over an hour later, and at 1600 it was raining hard in <Farnborough>. The cell continued to develop and move north. A few large drops of rain began to fall here at 1615 GMT, but at 1619 the heavens opened. During the next 41 minutes I (or rather, my recording gauge) recorded 30.8mm: the rain stopped almost as suddenly as it had begun at 1700. The rain was heaviest here about 1635, at which time the visibility was reduced to 300m. The radar indicated that the rainfall rate in the cell responsible reached its maximum at about 1635 slightly north of here, and this is confirmed by the rainfall record from the meteorological Office Experimental Site at Beaufort Park, which is 4500m north of my station. Rain began to fall there at 1632: in the following 44 minutes 43.2mm fell (the day's total being made up to 43.4mm by a further 0.2mm which fell 1727-35). This is the highest 'daily' total yet to hand from an official gauge in the area, although one unofficial gauge in the Bracknell suburb of <Wildridings> recorded about 45mm. At Broadmoor hospital in <Crowthorne>, almost midway between my site and Beaufort Park, 35.5 mm fell. The gradients on the edge of the storm were very sharp indeed; in Camberley (Surrey) only 14.6 mm fell yet 35.5mm was recorded at College Town (Sandhurst) only 1800 m northwest.

As outstanding as the very sharp rainfall gradients were the reports of large hail. The first reports, of stones 10-20 mm in diameter, came from Yateley, 2km south-west of Sandhurst over the Hampshire border. At my station in Sandhurst there was a scattering of stones about 10mm across from 1639-47, but less than a kilometre away there were none. In Crowthorne stones up to 20mm across were reported at about the same time, together with the first instances of plant and vegetable damage. Hail 10-15 mm across fell over the whole of Bracknell except for the extreme eastern suburbs shortly afterwards in sufficient quantity to cover the ground for a period over a small area just south-west of the town centre. The worst hail of all fell in Wokingham where all but the extreme western and southwestern suburbs had stones up to 20 mm in diameter. Fortunately the stones were fairly isolated over most of the area (two gauges in Wokingham had 2.1mm and 2.8mm precipitation in all) but

an area roughly 1 km square slightly to the north-east of the town centre received a concentrated deluge of large hail lasting for some 20 minutes, and here damage was severe. Almost every leaf bud flower and vegetable in the area was completely stripped; beans and courgettes were destroyed, lettuces pulped, and even apples brought down from the trees. There were some accounts - as yet unsubstantiated - of car windscreens being broken in the area, and even of surface damage to caravans.

The hail appeared to die out not far north of Bracknell and Wokingham but the storm rainfall was still sufficiently intense to halt traffic on the M4 motorway between Reading and Maidenhead around 1730 GMT. With so many Meteorological Office staff living in the area, the storm was more closely observed than most and an investigation (particularly into the distribution of hail and the sharp rainfall gradients) is now under way.

S.D. BURT

<Brize Norton> (Oxon): Of the daily total of 58.1 mm, 51.3 fell in a two hour period from 19.22.

<Newbury>: Villages in the Berkshire Downs north and west of Newbury were worst hit including flooding of a thatched cottage at West Isley. Berkshire Fire Brigade attended 31 flooded homes throughout the county.

<Wantage>: Flooding also occurred.

<Henley>: A pub and a hotel were flooded and a power loss added to the chaos. At the Three Tuns in market Place a bucket chain was formed to empty a foot of water from the cellar; the Bear Hotel had 3 feet of water in the cellar. Bell Street also flooded.

<Wimbledon>: The tennis championships were flooded.

<Epping><North Weald>: A thunderstorm caused considerable flooding to a depth of 4 feet in places.

<Maidenhead>: A hailstorm had hail up to 2.5 cm diameter destroyed crops in nearly <Little Marlow> and <Wooburn Green>

<Epping><Thornwood>: 53mm fell in 21 minutes (between 13.45 and 14.06 BST). Further rain gave a combined total of 63 mm in about 2 hours. Six miles to the southwest at Loughton only 2.5 mm fell).

<North Weald>: The storm resulted in a flash flood here. The village had suffered a similar inundation on 5 Jul 1985 and was badly flooded twice in the summer of 1982. The storm continued southeast from Epping and a mile south of North Weald airstrip at Mount Farm 68.4 mm was recorded in 1 ¼ hours or less. North Weald was flooded to a greater extent than 1985 because of the greater intensity. All the brooks in the area quickly

20 May 1985

COL

6 Jun 1985

Reading

Evening Post 6

Jul

5 Jul 1985

Pritchard

(2016)

3 Aug 1985 COL

29 Jul 1987 COL

This storm developed ahead of the main band of showers which had been moving east across the south Midlands and west London during the late morning
Maidenhead 19.5 mm in

	11.5 m	swelled. <<Cobbin's Brook>> rose 2 metres in 30 minutes. At North Farm half the rape crop was destroyed by hail with hail ½ inch diameter. Half a mile away another farmer lost all his rape crop and had to rescue his wife and family from upstairs using a ladder. All routes north and east of Epping were blocked and standing traffic on the M11; there was reported to be 4 feet of water on some roads. On the A414 water reached to roof of a Transit van. Rivers burst their banks and damaged crops but little property.
8/9 May 1988 Eden (2008), COL	Thunderstorms affected London and the Thames Valley.	<Tonbridge>: had 24.6 mm at least 20 mm having fallen within an hour. The <<Hilden Brook>> burst its banks with minor flooding of surrounding hills. <Ruislip>: The town had 89 mm in 2 separate storms. There were heavy localised rains in the SE with 63.5 at <Uxbridge>, 60.7 at <Bushey>, 48.7 at <Northwood> and 46.0 at London NW2. <Northwood>: the 48.5 mm occurred in 3 hours. A second storm later in the day gave 23 mm in 1 hour. <Hayes end>: 42.5 mm in early hours of 8 th . Very severe local flooding was reported in press and national TV. <Maidenhead> Two thunderstorms gave 20.7 between 04.00 and 06.00 and 20.7 between 16.00 and 17.10. There was golf ball sized hail and widespread flooding in nearby <Cookham> Davis (1991) reports on rainfall in storms in the Thames valley where the most violent rain occurred in restricted areas and showed strong topographic control by the North Downs. Ten stations had daily totals of over 50 mm (with the maximum at 68.5 mm) but the three recording rainfall sites show that the rainfall occurred within a 2 hour period and at. Davis gives no information on flooding (which no doubt occurred). <Bracknell> (Roman wood): 40 mm rain fell in about an hour causing flooding of houses and roads. Hailstone 23 mm diameter fell in the vicinity. <Coulsdon> (Surrey): 62 mm fell in 1 hour at nearby Juniper Hall. <Easthampstead>: 45.6 mm fell in a thunderstorm whilst nearby Wokingham had only 7.8 mm. <Pyrford> (Surrey): After 23 days 21th only 1 mm of rain, in a 2 ½ hour storm 58.2 mm of rain and hail fell. <Guildford>: A thunderstorm with hail over a 3 hour period gave 35 mm. <Oxford>: Hail 10 to 20 mm diameter fell to the east of the city <London><Wanstead>: Heavy hail lay on the ground not melting until the next day. A man was killed by lightning.
24 May 1989 Eden (2008) The Guardian 26 May 1993 Davis (Met Magazine Jan 1991, the storms of 24 may 1989), COL	Rainfall 60 to 70 mm occurred in thunderstorms in several places in central England. South Farnborough 60.2 mm in 1 hour 15 minutes. Sandford on Thames (Oxon) 68.5 mm in ~2 h Chineham (near Baingstoke) DR 68.5 mm	<Gillingham> (Kent): the centre of the hailstorm was at Hampstead south of Gillingham where up to 5 inches of pea sized hail fell. There was also 35 mm of rain in about half an hour followed by another 10 mm in the next 1
1 Jun 1989 COL		
6 Jun 1989 COL		

8 Jul 1989 COL		<p>½ hours.</p> <p><Coulsdon> (Surrey): A brief deluge gave 18 mm in 10 minutes. There was flooding in the valley below whilst localities only 2 ½ km distant remained dry.</p> <p><Camberley> (Surrey): 18.7 mm fell in 20 minutes.</p>
12 Sep 1989 COL		<p><Wokingham>: A heavy thunderstorm did some damage locally with 25.6 mm at the station but 44mm within 2 miles to the south.</p> <p><Gillingham>(Kent): Nearly 2 inches of rain fell in 4 hours.</p> <p><Orpington> (Kent): Hail damaged garden produce and gave 3 inch drifts against the fence.</p>
10 May 1990 COL		
30 Jul 1991 COL	Kenley 11.0 mm in 5 m	<p><Guildford>: the High Street was bombarded by golf ball sized hailstones and many shops were flooded.</p> <p><Croydon>: Floods swept Croydon's streets</p>
1 Aug 1991 The Guardian 2 Aug, COL	Pyrford Surrey 22.0 in 30 m	<p><Plaxtol><Tonbridge>: The village was flooded. Heavy caused road flooding in parts of Kent including the M25 and parts of the M26, M20 and M25 were under water 9 inches deep. A woman was killed by lightning in Sevenoaks. Another man was injured at Brentwood in Essex.</p>
24 May 1992 COL	There was a widespread thundery period from 23rd culminating on 29th.	<p><Bracknell>: 22.9 mm most of it in 1 hour.</p> <p><Wantage> (Oxon): Persistent thunder but only 2 mm rain. But local flooding affected areas to the west and north.</p>
29/31 May 1992 Eden (2008) The Guardian 23 Dec, COL, Hayes and Harlington Gazette 3 Jun	<p>Widespread thunderstorms caused flooding in Hertfordshire, Bedfordshire, Buckinghamshire and London. There were storms somewhere in the country in each of the first 1 days of June.</p> <p>Northwood London Total 53.9 but most intense in 30 m</p> <p>Hayes end 47.5 in ~2 h</p> <p>Northolt 51 mm</p> <p>Heathrow 44 mm</p>	<p><Chorleywood><Rickmansworth>: had 133 mm in 110 minutes on 31st and water rose to a depth of 6 feet in some houses. The railway was closed from 29th May to 2 Jun (there were landslips on roads and railways).</p> <p><London>: An open section of the London Underground was affected by a landslide. South Ruislip underground station booking hall was flooded.</p> <p><West drayton>: At Holloway Lane cars were stuck in water on the road.</p> <p>Daily totals over 50.0 mm were:</p> <p>Hitchin 112.7 mm</p> <p>Luton 74.8 mm</p> <p>Rickmansworth 68.9 mm</p> <p>Ickleford 55.2 mm</p> <p>Hayes end 61.9 mm</p>

Ickleford Herts Total 73.7 of which 40.5 in ~2 h
Luton Total 74.8 mm

Borehamwood 57.7 mm
Heath end 57.2 mm
Northwood 53.9 mm
Barnehurst school 50.0 mm

**9 June 1992 The
Guardian 23
Dec, COL**

<London> <Lewisham>: 70 mm rain fell in little more than an hour. Lightning damage and flooding affected rail services in north Kent. <Forest Hill> 60.3 mm fell in 90 minutes with flooding of roads and gardens. In SE London from <Eltham> to <Orpington> the rainfall was heavy enough to lift storm drain covers off and flood roads to a depth of 1 foot.

20 Jul 1992 COL

Thunderstorms affected southern and eastern England storm rainfall totals were:
Sevenoaks 43.0
Guildford 28.9
Plaxtol 34.0
Orpington 28.0
Tonbridge 31.1
Ashford 37.9
Northwood 33.0 in 1 hour
Acton had 3.25 inches of rain in about 2 hours

**7 Aug 1992 The
Guardian 26
Aug**

**22/23 Sep 1992
Pike (1993),
Times 24 Sep,
COL,
Independent 24
Sep**

The heavy rainfall followed a drought with high initial soil moisture deficits. Heavy persistent rainfall with initial and embedded thunderstorms occurred over much of southeast England with 36 daily totals reported as exceeding 70mm. 50 mm or more fell over 1160 km² and more than 75 mm over 125 km². The heaviest rain was over modestly rising ground to

London>: Firemen dealt with nearly 600 flood related calls
<Edgware>: Times carried pictures of people in Edgware (where the <<Silkstream>> overflowed) being rowed to safety in boats where streets were flooded with 'up to 4 feet of water'. Edgware General Hospital was flooded 2 inches deep. Flooding in the Fenland lasted several days.
<South Oxhey>: Hertfordshire fire services dealt with 175 flood related calls here and in <Hemel Hempstead>, <Bovingdon>, <Harpenden> and <Borehamwood> areas.
Daily totals
<Risley> (Beds): 106 mm
<Thurleigh> (Beds): 90 mm
<Harrow Weald> (London): 80.3 mm

the west of the Fens.
Large areas of S England
and the midlands had 25 to
75 mm with some flooding
especially in the
Bedfordshire area. The
rainfall was heavy but not
usually intense lasting 4 to
5 hours or even more.

<Rickmansworth> 79.3 mm

<Royston> 78.1 mm

<Northwood> 75.1 mm

<London NW2>: 74.2 mm

<Borehamwood>: 66.8 mm caused much local flooding

<Wokingham>: 62.2 mm. Despite the rainfall there was very little flooding and the local stream (The<<Emm>>
just overflowed its banks.

Maidenhead 59.0 mm

20 Oct 1992
COL

<Caterham>: A thunderstorm lasting 4 hours gave 52.2 mm. The Harestone valley road was flooded up to the
wheel arches <Warlingham> just to the north had 50.0 mm but amounts fell away rapidly westward.

<Coulsdon> had 30.8 mm.

<Wilmington><Dartford>: A prolonged thunderstorm gave a total of 59.1 mm

<Oxfordshire>: Evening storms occurred widely over the county with the storm centred over the
Headington/Cowley area

West Berkshire and Oxfordshire were affected by thunderstorms with 129 mm at <Uffington> mostly in 3 hours.
Two other sites recorded over 100 mm.

<Faringdon> (near Swindon): A severe storm produced an estimated 50 mm in 3 hours with damaging floods up
to 3 feet deep depositing thick mud in the town. A bus with school children became trapped in floods.

<Fernham> (Oxon): 89 mm in 4 hours

<Uffington>: Many houses were flooded with 140 mm rain in 4 hours

<Woolstone>: Seven houses and a pub were flooded when 105.2 mm fell in 3 hours. Two mill ponds burst their
banks and fish were swimming in the roads

<Wokingham>: 10 mm fell in 5 minutes and 14 mm in 14 minutes. There were reports of minor flooding in the
area.

9 Jun 1993 COL

10/11 Jun 1993 North Weald (Essex) 121
Eden (2008) The mm in 3 h 56 mm in 30 m
Guardian 29

Essex: Storms brought 121 mm to <North Weald> and 92 mm to <Thornwood Common> most falling in 150
minutes. Severe flooding occurred in <Harlow>, <Epping> and <Ongar>. (See also East Anglia chronology).

<Luton>: 62.7 mm fell in two storms. This was the wettest day since 28 Jun 1906 when 88 mm fell.

Sep Cardiff
Weather Centre
in Met Mag,
COL , Pritchard
(2016)
7 Sep 1993 COL

22 Sep 1993
COL

24 Jun 1994
COL, Daily Mail
25 Jun

Thunderstorms moved NNE
with the heaviest rainfalls
across Berkshire Sussex,
Essex and Kent,
Temperatures reached 27C
in London.
Daily totals as follows:
East Malling 49.0
Boughton Monchelsea 41.0
with 13.2 in first 12 m
Sevenoaks 38.1 in c 2 h
Tonbridge 27.7
Gravesend 27.5
Lower Shiplake 31.6

24 Jul 1994 COL

10/11 Aug 1994
COL

Heavy rain and flash floods
occurred in parts of
Oxfordshire.
Daily rainfall 10th
London Holland park 80.0
Sidcup NW 42.1
Borehamwood 36.5
Loughton 30.7
Daily rainfall 11 th

<Guildford>: In a thunderstorm from 19.55 to 22.00 with many buildings struck by lightning in the Ewest surrey area. Riverside Fish Bar was flooded and surface water escaped through the back door into the River <<Wey>>. A garage premises on Woodbridge Road was flooded to a depth of 6 inches and a Sports Centre was flooded. Flooding was reported at <Millbrook> where the water outside a pub was 9 inches deep with water cascading down deep hills, and in <Shalford> (A281), <Fairlands> (A323) and <Worplesdon>, Box Road.

<Morden> (Surrey): A thunderstorm produced 45 mm rain and hail. The rain was between pea and marble size and covered all horizontal surfaces and did considerable damage to tree and plant foliage.

<Wokingham>: 27 mm in 11 minutes, 32 mm in 18 minutes, 38 mm in 30 minutes with a storm total of 43 mm accompanied by hail 1 cm in diameter.

Mail reports: London, Surrey and Hampshire fire brigades were inundated with calls from homeowners trying to mop up flood water.

[A girl was killed by lightning at Brownhills West midlands]

<Oxford>: Hailstones of at least ½ inch diameter were observed. At Radcliffe Observatory out of a daily total of 35.5 mm 18.4 mm was recorded in 15 minutes

<Warlingham> (Surrey): 23.0 mm rain fell mostly in a 30 minute period with a further storm the next day with 21.6 mm rainfall.

<Wigmore>: Over 1 inch of rain fell in 2 hour. Manhole covers were forced up in neighbouring Medway towns.

<Folkestone>: A severe storm with 1.26 inches of rain

London NW2 67.0
Sidcup Royal Pk Sch 58.0
Great gaddesden 40.0
Sevenoaks 31.5
Caterham Sch 30.6

31 Aug 1994

COL

30 May 1995

COL

30 Jul 1995 COL

15 Sep 1995

COL

18 Sep 1995

COL

**7 Jun 1996 Eden
(2008), Webb et
al (2009),**

http://booty.org.uk/booty.weather/climate/1975_1999.htm,

COL

After a short heat wave
thunderstorms with giant
hail affected Dorset, Wilts
to Cambridgeshire and
Norfolk.

<Sidcup> NW: A thunderstorm from 08.00 to 09.30 caused local flooding.

<London> (Oval Cricket ground): It was assessed that 1.5 inches of rain fell in 30 minutes.

<Boughton Monchelsea> (near Maidstone): Of a daily rainfall of 119.2 mm most of the heavy rainfall was in thunderstorms in the early hours of 1 Sep. Numerous roads were flooded.

<Great Gaddesden> (Herts): Heavy rain in which 23.5 mm fell mostly in 15 to 20 minutes with some pea-sized hail.

<Guildford>: In a half hour thunderstorm 29.3 mm fell affecting the city centre and the west of the city with side roads flooded and manholes lifted.

<Coulsdon> (Surrey): 25.5 mm fell during a thunderstorm. Flash flooding occurred in the nearby <<Chipstead Valley>> where vehicles were swamped and the road closed.

<Wigmore> (Kent): Daily total of 51.3 of which 30 mm fell in under one hour.

<Chipping Norton> (Oxfordshire): Two thunderstorms gave 45.5 mm rainfall, the first with 16.5 mm in less than an hour in the afternoon and the second in the evening giving 29.0 mm. The storms were very localised.

<Wantage> had 74 mm rain.

Hailstones were 2 to 4 cm across causing damage to glasshouses and cars. Dozens of homes were struck by lightning.

There were eight hail swaths, including six storms of H3 intensity or more and two others of H2 level. There were two swaths well over 100 km from SW–NE: 165 km long from the Dorset coast to Oxfordshire (hail 45–50 mm across in Dorset), and 180 km from NW Hampshire to south Cambridgeshire. Hail 45 mm or larger diameter was measured in the <Luton> area. (Webb and Pike, 1998a,b)

From a 'Journal of Meteorology' article, 73.9mm of RAIN fell during the evening of the 7th at Kitford Gardens, near Lockinge on the Oxfordshire/Berkshire border. TORRO report that this was the most widespread occurrence of 'giant hail' in a single outbreak since 1983 (also on 7th June.) [giant hail>=30mm diameter.] Large hail fell over: Dorset, Somerset, Wiltshire, Buckinghamshire, Bedfordshire, Cambridgeshire and Suffolk. Lesser diameter hail from: Berkshire, Oxfordshire, Norfolk. The combination of hail and lightning and localised intense rainfall caused severe (but irregular) damage to buildings and crops, together with loss of power supplies etc.

		<p>The rainfall totals exceeding 30mm occurred in a narrow swathe from just inland of Weymouth, Dorset, NNE'wards across Wiltshire - through west Berkshire and culminating in the heaviest rainfall (~ 74mm) over south Oxfordshire - near Wantage. (based on radar analysis, which showed rainfall rates of 72mm in 2hr. This is judged to have occurred just southeast of Wantage.)</p> <p><Luton>: Col reports: After a day with temperature reaching 30.8C, huge lumps of ice fell with the rain. They looked snowball sized but shattered on impact. The consisted of clusters of stones 50 mm long altogether with a knobbly appearance. Other reports were of tangerine sized stones. It caused great damage to greenhouses and damaged cars. Total measured rainfall was only 6.5 mm.</p>
6 Jul 1996 COL	Heavy thunderstorms but brief reported but with very limited rain at most stations	<p><Coulsdon>: A thunderstorm with hail like a plague of locusts cutting flowers and leaves, 3 km south.</p> <p><Redhill>: 28 mm rain and quite a bit of flooding.</p> <p><Chipstead Valley> (Surrey): Flooding was reported in a heavy thunderstorm with cars abandoned in flood water.</p>
23 Jul 1996 COL		<p><Royston> (Herts): Thunderstorm from 17.00 to 19.45 with 28.6 mm rain</p> <p><Ickleford > (Herts): 20.6 mm in 1 hour.</p>
29 Jul 1996 COL		<p><Reading>: With 6.5 mm in a few minutes there was local flooding in Basingstoke Road with office basements flooded.</p> <p><Loughton> (Essex): 40 mm rain in 70 minutes in the early evening</p>
19 Aug 1996 Eden (2008)		<p>Floods and mudslips affected NW London, SW Hertfordshire and Buckinghamshire. <Chorleywood> had 114 mm in 100 minutes</p>
27 Aug 1996 COL		<p><Reigate>: 28 mm rain fell but very little in the surrounding area.</p>
17 May 1997 Webb and Elsom (2016)	Destructive hailstorms occurred from Southern England to SE Midlands	<p><Thame> (Oxon): Hailstones up to 45 mm diameter (golf ball size) broke greenhouse glass. Similar hail storms occurred at North Weston, Chearsley, Hoddenham, Ashendon and Long Crendon (Bucks)</p>
16 Jun 1997 COL		<p><Morden> (Surrey): 26.8 mm in 40 minutes.</p> <p><Warlingham> (Surrey): No rain at station but heavy thunderstorm 2 miles SSE with minor flooding.</p> <p><Stevenage> (Herts) 25 mm in 30 minutes (but no rain at Ickleford)</p>
8 Jul 1997 COL		<p><Leatherhead>: The centre of the storm was here with a storm total of 54.4 mm but with 25 mm in 5 minutes.</p>

<p>6 Aug 1997 COL</p>	<p>In a very wet month many periods of prolonged rain some with thunder.</p>	<p><Caterham>: 39.4 mm fell in 70 minutes. Large slabs of concrete were washed away by the force of the water. There was some flooding in Caterham Town centre with shops flooded with up to 3 inches of water. The track was flooded between Croydon and Purley and trains delayed for 90 minutes.</p> <p><Warlingham> Surrey): About 21 mm fell in 30 to 40 minutes. Nearby <Addiscombe> had serious flooding.</p> <p><London>: In the <Crystal Palace> and <Penge> areas local flooding disrupted traffic.</p> <p><Caterham>: Daily total 42.1 mm</p> <p><Wallington>: Daily total 37.8 mm</p> <p><Warlingham>: 33.6 mm in 3 hours with much thunder</p> <p><Dorking>: 10.9 mm in 15 minutes of daily total of 38.9 mm</p> <p><Tamworth> (Surrey): Daily rainfall 64.6 mm.</p> <p><Epsom downs>: Daily rainfall 60.5 mm</p> <p><Chipstead Valley>: Flood water in houses and vehicles.</p>
<p>12/13 Aug 1997 COL</p>		<p><Rochester>: In a series of overnight thunderstorms flooding occurred in the town and a house was destroyed by lightning and there were 40 strikes on pylons.</p>
<p>19 Aug 1997 COL</p>		<p><Rickmansworth> (Herts): 87.6 mm fell in 90 minutes with hail under 5 mm. Meadow Way was under water due to the failure of the main trunk sewer. Ebury roundabout was under 75 cm of water and closed. There was a land slip on the railway line between Rickmansworth and Chorleywood. Shops in Chorleywood were flooded.</p>
<p>26 May 1998 COL</p>		<p>There was flooding on the M 25. Uxbridge 8 miles away was totally dry.</p> <p><Charlton><Wantage> (Oxon): 35.8 mm fell in four hours (18.00 to 22.00)</p>
<p>13 Jun 1998 COL</p>	<p>A very wet month but mainly due to persistent rainfall</p>	<p><Reading>: At Donnington Gardens of the daily total of 41 mm, 30 mm fell in 30 minutes.</p>
<p>17 Jun 1998 COL</p>		<p><Warlingham> (Surrey): 18 mm rain fell in 55 minutes but no thunder was observed.</p>
<p>31 Jul 1998 COL</p>		<p><Chesham> (Bucks): A severe storm in the evening gave 29.9 mm in 2 hours.</p>
<p>1 Aug 1998 COL</p>	<p>Many roads in the SE were flooded and traffic halted.</p>	<p><Beckenham>: It was reported to have had 50 mm in 1 hour of a total of 68 mm.</p>
	<p>Beckenham Daily rainfall 68.0 mm</p>	<p><Gatwick airport>: It was at a standstill for 2 hours in the afternoon.</p>
	<p>Bromley 38.0 mm</p>	<p><Darenth> and <Lowfield> (Dartford): two feet of flood water was reported making driving difficult.</p>
	<p>Charlbury (Oxon) 37.0 mm</p>	<p><Dartford>: The Tunnel was flooded and some lanes on the M25.</p> <p><Wallington> (Surrey): 31.0 mm fell in 3 hours.</p>

		<p><East Horsley> (Surrey): 27.4 mm fell between 14.25 and 16.35 with the first 30 minutes torrential.</p> <p><Bromley><Hayes> (Kent): 38.1 mm in 3 hours.</p> <p><Tonbridge>: A thunderstorm with hail >5 mm caused flooding of Shore Street where the water ran down like a river .</p> <p><Charlbury> (Oxon): Of a total of 37 mm, 21 mm fell in 30 minutes.</p> <p><Chalgrove> (Oxon): A boy of 12 was struck and killed by lightning on a playing field.</p>
27 Sep 1998 COL	Brize Norton (Oxon) DR 55.4 mm	<p><Bramingham> <Luton>: In a period of 18 hours 57.9 mm fell heavy at first in the morning but thunder not reported here. The A6 was closed and under deep water and also Luton town centre.</p> <p><High Wycombe> (Bucks): Local flooding was reported in a thunderstorm with a total of 28.8 mm and 11 mm in 30 minutes.</p>
14 May 1999 COL	Thunderstorms started in the SW in the evening of 13th	<p><Great Gaddesden> (Herts): A thunderstorm from 09.30 to 11.00 with 25 mm rain mostly in 1 hour.</p> <p><Dunstable>: Rivers of water were reported to be running down roads but in Luton there was little rain.</p>
19 May 1999 COL		<p><Thatcham>(Berks): 30 mm fell in a thunderstorm.</p> <p><Crowthorne> (Berks): 26.3 mm fell in 45 minutes with some large damaging hail,</p> <p><Coulsdon> (Surrey): A storm caused flooding on the east side of Coulsdon with hail 10 mm diameter.</p>
29 May 1999 COL		<p><Dartford> (Kent): 11 mm rain fell in 13 minutes with hail 15 to 20 mm diameter</p> <p><London><Forest Hill>: Hail up to 7 mm diameter.</p>
1 Jun 1999 COL		<p><Tamworth> Surrey): 25.4 mm storm total.</p> <p><Guildford> (Surrey): Of a daily rainfall of 39.5 mm, 35.5 mm fell in several bursts between 23.00 and 06.00.</p> <p><London><Northwood>: 44.3 mm fell during the night, the most in June for >40 years.</p> <p><Watford> (Herts): Overnight rainfall of 41.7 mm starting 02.12 on 2nd.</p>
2 Jun 1999 COL		<p><Rickmansworth>(Herts): Overnight rain of 37.0 mm.</p> <p><London>: several underground stations were flooded.</p>
5 Jul 1999 COL		<p><Guildford>: Heavy rainfall and flooding was reported at <Shere> but only 7 mm at the observer's station.</p>
6 Jul 1999 COL		<p><Royston>: 24.9 mm fell in an evening thunderstorm of which 15.6 mm fell in 10 minutes.</p>
31 Jul 1999 COL		<p><Benson> (Oxon): 27.6 mm fell in 1 hour.</p>
3 Aug 1999 Hammersmith & Shepherds		<p><London><Fulham>: the thunderstorm was accompanied by torrents of rain and hail. Several houses and businesses suffered from the flood, the drains being insufficient to carry off the sudden deluge.</p>

Bush Gazette 6
Aug
8/9 Aug 1999
Eden (2008),
COL

5 Sep 1999 COL

After hot weather
thunderstorms crossed SE
and Central S England. A
temperature fall of 8C was
observed.

22 Sep 1999 COL

Thunder widely reported

24 Sep 1999

Thunder widely reported

COL

29 Sep 1999

Thunderstorms reported
locally.

COL

7 May 2000 COL

8 May 2000 COL

Thunderstorm brought 117 mm rainfall at <Windsor> and severe local flooding.

<Reading> (Donnington gardens): Daily rainfall was 50.8 mm.

<Maidenhead W>: Daily rainfall was 48.8 mm.

<Watford> (Herts): On the 8th of a daily total of 37.9 mm, 13.3 mm fell in 12 minutes in one burst and 12.4 mm in 12 minutes in another burst. This was followed on the 9th by a daily total of 51.3 mm of which 20.3 mm fell in 1 hour.

<Charlbury> (Oxon): Of a total rainfall of 47.0 35.0 mm fell in 1.5 hours.

<Surbiton> (Surrey): After a maximum temperature of 28.1C a thunderstorm produce hail 22 mm in diameter. Severe damage was caused to plants and packed hailstones were up to 3 inches deep. The rainfall in 45 minutes was 33.5 mm. Local flooding was bad for a time.

<Cheam>: 2 cm diameter hail was observed.

<London>: Two girls were killed by lightning in Hyde Park.

<Guildford>: Many roads were flooded notably in <Onslow> where the water was 10-12 cm deep

<Watford>: 18.8 mm fell in 1 hour with 9.8 mm in 12 minutes

<Bracknell>: A severe thunderstorm occurred from 18.45 to 20.45 with hail falling for 25 minutes up to 15 mm diameter. There are unofficial reports of 82 mm falling in a suburb with flooding and Back Lake at South Hill Park burst its banks causing ornamental fish to be seen in the car park. 47.1 mm fell in 100 minutes and affected the southern side of Bracknell with flooding of low lying residential estates.

<Wokingham>: 60 mm rain fell causing the <<River Emm>> to burst its banks on 8th leading to the closure of Emmbrook School. Only 3.8 fell at the met site.

<Crowthorne>: The thunderstorm gave 44.4 mm in 95 minutes

<Sevenoaks>: 30 mm fell in one hour

<Tonbridge>: It experienced heavy flooding after a heavy thunderstorm.

<Leigh>: Flash flooding was extensive here and in the Bough Beech and four Elms areas of Kent.

<West Kent>: In a 3 hour thunderstorm widespread flooding occurred, submerging car bonnets in some areas. Sections of the M25 and M23 were badly hit.

13 May 2000

COL

<Redhill>: 20 mm rain fell in 1 hour.

6 Jul 2000 COL

Very heavy persistent rainfall on 4th gave daily totals of over 100 mm in parts of Southeast England

<Reading><Tilehurst>: In a thunderstorm 2 inches of rain fell in 2 hours.

28 Jul 2000 COL

<Knaphill> (Surrey): 45 mm fell in about 1 hour.

<Guildford>: A storm rainfall total of 33 mm was reported.

14 May 2001

COL

<London>: A thunderstorm at Brookman's Park near <Potters bar> gave 23 mm in 40 minutes and caused some local flooding.

15 May 2001

COL

<Luton>: Hail up to 3 cm in diameter fell causing damage to plants and glass roofs.

26 May 2001

COL

15 Jun 2001 COL

<Luton>: North of the town hail up to 3 cm in diameter fell causing damage to plants and glass roofs.

16 Jun 2001 COL

<High Wycombe>: Daily rainfall on a thundery day 47 mm

26 Jun 2001 COL

<Dartford>: Storms in Kent produced hail about 20 mm in diameter at about midnight (but also chunks of ice up to 40 mm x10 mm in <South Darenth> near Dartford. It hailed for 14 minutes. Glasshouses were smashed to smithereens and car roofs were dented. The raingauge was damaged and only registered 6 mm at Sutton at Hone

9 Aug 2001 COL

A large area of rain moved E across S England giving heavy falls in short period and accompanied by thunder and hail. Several waterspouts were observed.

<Tunbridge Wells> Hail was generally about the size of marbles but with some the size of golf balls.

<London>: Three underground stations were flooded

3 Aug 2002 COL

<Wandsworth Common>: Heavy rain, mainly after dark, gave 35.9mm, of which 18.9mm fell in 44 minutes from 2324GMT. Maximum intensity 54mm/h at 2344GMT and 2358GMT.

6 Aug 2002 COL

<Roehampton> : A thunderstorm affected the University of Surrey campus and poured into a cutting of the District Line leading to its closure. The storm was very localised with no rain 2 km to the West.

**7 Aug 2002
Eden (2008),
COL**

It was a warm and humid day in SE England, and as showers moved E across England and Wales they turned heavy and thundery in the late afternoon and evening in E England, the Midlands and Cent S England.

<London> <Hampstead>: Large parts of the Underground were suspended and main line railways stations were affected. At Hampstead the 24-hour fall was 71.5mm, of which 59.6mm fell in the hour ending 1700GMT.
<Olney> (near Milton Keynes), 63mm fell in about an hour and with over 25mm falling in 30 minutes.
<Crowthorne> (Near Bracknell): 26.1 mm fell in less than an hour.
<Watford>: Torrential rain gave 35.1 mm in 1 hour including 18.9 mm in 12 minutes

9 Aug 2002 COL

<Stratfield Mortimer> (West Berkshire): 21.4mm fell in 30 minutes commencing 1738GMT. This is the highest Four consecutive minutes commencing 1747GMT reached 120mm/h or more, the highest 1 minute intensity (at 1750GMT) being 144mm/h.

**20 Aug 2002
COL**

<Bromley><Hayes>: The daily total was 41.8 mm with two convective cells crossing the area 15.46 to 16.45 and 17.05 to 18.00. <Beckenham> and <West Wickham> high streets were flooded. Beckenham had 25 mm from the earlier cell. No thunder was reported!

**27 Apr 2004
COL**

The late afternoon and evening brought thunderstorms to East Anglia, Cent S and SE England.

<London>: At Forest Hill (SE London) 25.9mm of precipitation fell during 1600-1800GMT during a prolonged thunderstorm; around 1710GMT 10mm diameter hail fell – which caused local damage to trees with young leaves - there was also local flooding and severe disruption to some train services in SE London. In London parts of the Underground were closed due to flooding as the rush hour approached.

17 Jul 2004 COL

Sferics were reported from the Isle of Wight to Norfolk in late morning, and these moved E (reaching Kent by mid-afternoon) as the day progressed. Severe thunderstorms occurred across the SE England and East Anglia;

<London>: Marble-sized hail was reported in Crystal Palace and the hail cracked a windscreen in East Thurrock.

3 Aug 2004 COL

<London>: Heavy rain caused localised flooding around W London, and heavy rain also fell in other areas as the storms made progress NW'wards in the evening. As storms drains overflowed into the Thames in London, the storms were also blamed for the death of hundreds of fish.

<High Wycombe>: 42.4mm of rain was measured in 38 minutes.

<Rickmansworth>: The heavens opened around 1900h and an estimated 25mm of rain fell in the next 30 minutes. There were huge puddles on roads and some were impassable for a short period.

23 Aug 2004

COL

25 Apr 2005

COL

Low pressure over N France brought sferics to the London area around dawn. The Met Office reported 25mm across parts of SE England.

<Dorking>: 21 mm fell in 15 minutes and caused considerable local flooding.

<St Albans>: It recorded 36.8mm of rain in the morning.

28 Jun 2005

COL

<Bramingham> (Luton): From 1950GMT to 2050GMT 28.8mm had fallen by then. Even by this time a second storm was following from SE, arriving at 2105GMT. Rain was more variable but added another 15mm. It ended quite suddenly at 2205GMT although distant lightning, especially from north, continued. There were reports of flooding locally due not to streams but to sheer quantity of water on hard surfaces. Water cascaded off main road into forecourt of Luton and Dunstable Hospital (Luton) and then into A+E where it joined water coming through the roof. Ambulances were diverted to hospitals in other towns. The fire service received 150 calls in less than 2 hours including requests to rescue people from flooded cars. Total rainfall was 44.3mm in just over 2 hours.

<Great Gaddesden> (Herts): The first significant thunderstorm since 3.7.1999 occurred on the 28th. The heavy rain peaked between 0820GMT and 0830GMT when 9.8mm fell. The 10-minute period 0940-0950GMT recorded 7.0mm. Overall the storm lasted almost three hours.

<Luton>: The highest 24-hour total was on the 28-29th at Runley Wood when 38.8 mm of rainfall was recorded, in fact most of the rain fell in a two hour period between 10-11 p.m. 9 properties suffered internal flooding. Initial investigations suggest a depth of water over 6 inches entered properties through front rear points of entry. The properties affected were in The Hedgerows, <Luton> alongside the <<Houghton Brook>>, a main river tributary of the River <<Lee>>. The property is shown as at risk on our Flood Map but there is no significant history of flooding, however, the foundations of these properties were reported as flooded during construction in 1995 by our River Inspector related to an adjacent footbridge with low soffit level, combined with trash/debris which dammed the river resulting in water levels backing up.

25 Aug 2005

COL

<Bracknell> (Tawfield): had thunder during 1440- 1530GMT, which was accompanied by hail; 6-8mm initially, then becoming 8-15mm for a short time (maximum irregular diameter) 20mm. The hail was white/opaque/soft-coated - mostly spherical, but the largest stones were conical.

<Wokingham>: It reported and photographed stones up to 25mm diameter). There was much damage to plants

		<p>etc., in people's gardens, but no reports of more substantial damage - presumably due to the rather 'squishy' icy-water coating which cushioned the stones.</p> <p><Crowthorne>: A thunderstorm gave hail for about 10 minutes. Stones, bouncing up to 50cm off ground, had maximum diameters of over 20mm for spherical stones and lengths over 26mm for irregularly-shaped ones. This was only the fourth time hail has been observed here in July-August (record from 1973).</p> <p><London>: Some very heavy rain led to flooding. Parts of the A3 road were flooded along with other roads, and in Roehampton some trees were blown over. The storm caused flooding over <Wimbledon> and <Hammersmith> and several underground railway stations were closed for a while.</p>
9 Sep 2005 COL	The afternoon brought thunderstorms to the East Anglia, SE Midlands and SE England	
10 Sep 2005 Eden (2008), COL	<p>There were some heavy falls of frontal rain in places, with thundery outbreaks over Somerset, SE Wales, the S parts of the Midlands and East Anglia, and SE England.</p> <p>Claygate 25 mm in 10 m and 39.9 mm in 75 m</p>	<p><Chieveley>: In a thunderstorm at Chieveley in Berkshire 87 mm fell in 2 hours.</p> <p><London>: Flooding was reported in the evening in parts of north London, Surrey and W Kent, and near Newbury.</p> <p><Bexley> (Kent): Rain occurred 1730h-2115h. There was much local flooding and 28.9mm was recorded. Local papers reported that rainwater poured into homes across Bexley and Greenwich and in some places flooding reached 3ft (due to blocked drain and unconfirmed reports that a local pumping station had failed). The Environment Agency quoted that approximately 50mm of rain had fallen in one and quarter hours and at least 60 homes had been flooded, with the local Fire Service reporting that in some instances there was at least 3 inches of water inside people's homes.</p> <p><East Horsley>: A sudden deluge at 1800GMT after a fine, mostly sunny day. By 1905GMT I had recorded 37.7 mm, the heaviest rain falling in the first 40 minutes. The next morning I noticed considerable mud and gravel deposits on nearby roads as evidence of flooding and run-off.</p> <p><Claygate>: 9th and 10th is my first observation of 25.4mm in 24 hours on two consecutive days since 14-15.9.1968 (Leigh-on-Sea). On 9th, 16.6mm fell from 1700-1800GMT; on 10th, 33.3mm from 1900-2000GMT - with 25mm during 1925-1935GMT, the most intense short-period rainfall event I have ever observed. Visibility was reduced to 300m for a time.</p> <p><Swanley>: Severe thunderstorm on evening of 10th. Thunder started rumbling around 1800h No rain until 1830h when very large drops started to fall. Torrential rain followed until 1930h giving 34mm in my garden in Swanley accompanied by very frequent lightning discharges. Intermittent heavy downpours followed with less frequent thunder and lightning finally ceasing around 2100h. Total rainfall in my garden in Swanley 47mm,</p>

flooding of houses occurred in lower lying parts of eastern Swanley.

<Wigmore>: At 2015GMT large spots of rain started to fall and became intense - 14mm by 2030GMT, 23mm by 2045GMT. Rain ceased suddenly at 2101GMT - a total fall of 24.4mm in 46 minutes

10 May 2006
COL

<Marlborough>: During the evening a violent storm struck Marlborough commencing at 18.02h. rain fell in torrents accompanied by hail, a selection were put in the freezer and then later measured and were up to 15mm in diameter. Leaves were broken off Acers and complete flower buds were ripped off apple trees. The temperature dropped 8C in the first 30 minute period and 11.9mm of rainfall was measured. If the hailstones had remained in the rain gauge this total would have been greater. The storm continued until 2032h.

<Thatcham>: It reported a very intense thunderstorm from 1715h which lasted 2 hours. Hail (about 7mm diameter) fell and the temperature dropped from 24C to 14C in less than an hour with 12mm of rain falling in the same period.

<Sindlesham>: A thunderstorm 1545-1725h with 20mm diameter hail, possibly larger. Measurements of the hail were taken some 20 minutes after it had fallen and could have been as much as 30mm. Temperature fell 4.9C during storm in 30 minutes. Localised flooding occurred; 7.3mm fell in 15 minutes, with hail blocking drainage systems.

<Wokingham>: Thunderstorms in vicinity occurred much of the afternoon with 1.5cm diameter hail 1647-1654GMT.

<Stratfield Mortimer>: There was a torrential thunderstorm 1545-1615GMT only a short distance north-west of here, with large hail. At Ufton Nervet (4.5 km NW) hail generally 4- 10mm in diameter fell, but with some agglomerations up to 20mm. Local roads were awash owing to heavy rainfall accompanying the storm.

<Reading>: Hail 2 cm in diameter was reported south of the city.

13 Jun 2006
COL

<London>: Storms were especially heavy to the E of London with flooding on parts of the London Underground and in the Dartford Tunnel.

<Epping>: Thunderstorm in late afternoon on 13th gave 31.5mm of rain in 70 minutes. Most notable convective downpour for June since 1993. Total of 40.6mm midnight-midnight on the 13th. The 13th with 37.4mm (0900-0900GMT) was the wettest June day since records began here in 1979.

4 Jul 2006 COL

<Luton>: Severe thunderstorm 1600-1620h at Luton with 10-12mm hail and violent squalls causing serious damage to gardens; 26mm of rain fell in 20 minutes. Last of the hail in back gardens survived until the morning of the 5th.

		<p><Bramingham>: After a maximum temperature of 29.3C at 1500-1600GMT, a storm came across with rainfall of 26.7mm in one hour, which is the highest single fall of rain in July since at least 1981. The rain was accompanied at large parts of N Luton, by remarkable hail. One and a half hours after the storm the observer returned home to find melting drifts of hail like elliptical glass beads up to 10cm deep in patches 5cm deep. Individual stones were still 2cm across. Luton & Dunstable Hospital A+E closed as skylights were broken and flooding occurred inside. Wind reached 35mph. The local placid River Lea burst banks at Limbury, NW Luton.</p>
6 Jul 2006 CBHE		<p><Swindon>: A combination of heavy rain and thunderstorms resulted in 44mm of rainfall between 03.00 hrs and 08.00hrs on the <<Ray>> Catchment. This resulted in flooding to 19 properties, of which 17 were flooded by sources other than fluvial.</p>
13 Jul 2006 CBHE	Chobham 81.2 mm in 4 ½ hours	<p><Chobham> (N of Woking): A band of rain crossed Thames Region on the morning of the 13th. Over the course of the afternoon, thunderstorms developed and merged into a continuous band of heavy rainfall. In total 176 properties were flooded externally (gardens and out buildings), 80 properties were flooded internally, and 6 commercial properties were flooded.</p>
27 Jul 2006 COL		<p><Claygate> (Near Kingston upon Thames): A thunderstorm on the afternoon of the 27th 1645-1815; 44.1mm, with 30mm between 1705 and 1735. Temperature fell from 30C at 1500h to 17C at 1730h.</p> <p><London><Twickenham>: 36.4mm rain on 27th fell in 3 hours from 1700h during a violent thunderstorm. The storm ceased abruptly at 2020h leaving streets and gardens as lakes which only cleared during the next day. Many people did not get home from work until near midnight and in this low-lying area, many houses and shops were flooded.</p> <p><Borehamwood>: During a thunderstorm 18mm fell in 30 minutes.</p> <p><Epping>: 74% of monthly rainfall total fell in two and a half hours in the afternoon.</p>
13 Aug 2006 Eden (2008),COL , (Surrey Advertiser)	Thunderstorms were reported from Leicestershire to Kent, and as far W as Berkshire.	<p><Virginia Water>: Serious flooding occurred in West Surrey and Berks and Hampshire in thunderstorms with 118 mm measured. According to Philip Eden, a severe thunderstorm in W Surrey led to falls of 111mm at Bagshot and 102mm at Ash (www.climateuk.com/page2.html). Local reports from Virginia Water/Wentworth down to <Chobham>, <Guildford> etc., spoke of 'torrential' rain in the late afternoon/early evening, with two reports of over 100mm in three to four hours leading to much flooding of roads, properties etc., which was still causing problems for traffic the following morning.</p> <p><Bagshot>: Approximately a 3-hour rainfall period including a thunderstorm produced 32.6mm of rainfall at Bagshot, and local furniture store in Chobham now has a flood sale!</p>

<Caterham on the Hill>: Heavy rain led to a flash flood at 1700h during a thunderstorm.

<Guildford>: An ominous area of black clouds and vivid lightning that something more notable was happening. On the A322 we first hit floodwater at <Worplesdon> after which we crawled through in semi-darkness and with torrents of rain, through <Brookwood>, <Bisley> and <West End> to <Lightwater>, with the road completely flooded at frequent intervals. With streams and rains overflowing and embankments collapsing, the damage to properties was all too predictable. According to the local press several railway lines had to be closed and one of these, between Brookwood and Ash Vale, did not re-open for several days. I gather that Ash, Chobham and <Pirbright> were other places also badly affected by flooding. A few miles further on, the A322 was dry at the Berkshire.

According to the Environment Agency 'more than 80mm - roughly double the total monthly average - fell on the area in just a few hours on 13 August, causing flooding in the Chobham, Windlesham, West End and Ash areas. Current reports suggest that at least 60 properties were flooded, while a number of road and rail closures caused chaos to morning commuters'. The Surrey Advertiser noted that heavy rain fell, 'causing the <<Hoe Stream>> and <<Blackwater River>> to burst their banks. The average for Ash is 55mm for the whole of August. The storms triggered a landslide near the railway line between Ash Vale and Brookwood, closing the main Waterloo to Alton line for four days.'

<Edenbridge>: Torrential rainstorm on 13th 2320-2330h giving 10.6mm and a peak rainfall rate of 162.2mm/h. 61% of rain fell on two days 29mm/13th and 17.2mm/22nd. Otherwise quite a dry month, with a wetter last week.

22 Sep 2006
COL

<Guildford>: At Park Barn an afternoon thunderstorm gave 28.2mm of rain and reports indicated some flooding in Guildford town centre and at Ladymead.

Rickmansworth: The heavy rain caused some local flooding in Rickmansworth town centre with some high street shops forced to close. I do not remember a similar incident in 32 years of living in the town.

24 Sep 2006
COL

<Maidenhead>: Over 26mm of rain fell in an hour during a thundery downpour.

29 Sep 2006
COL

<Chipping Norton>: Two torrential thunderstorms gave a total of 60mm in ten hours with substantial flooding in home and shops in and around the town, and of the local primary school which was closed from midmorning onwards.

1 Oct 2006 COL

<south Darenth> (Kent): There was a fall of flat disc-shaped hailstones, up to 2cm diameter, in a thunderstorm

**19 Jun 2007
COL**

There was flooding across parts of Kent, Sussex and Berkshire, and also in the Midlands.

3 Jul 2007 COL

**15 Jul 2007 COL
19/20 Jul 2007
COL, CBHE
(Wallingford
Herald 2 Aug,
EA (2007)
Lower
Cotswolds
Floods Review)**

at about 133GMT; the stones did not have the usual onion structure and appeared to have been partly melted and re-frozen.

<Wokingham>: Severe thunderstorm with torrential rain, 1723-1840GMT. 27.0mm fell, most of it in about 11 minutes. Rainfall rates between 300 and 500mm/h were measured.

<Lymington>: 12.2mm of rain in one hour ending 1630GMT with about 10mm during 1610-1625GMT.

<London>: Parts of south London were hit by flash floods following a massive storm that swept across SE England. The storm broke out at about 1600GMT in this part of London and lasted about 20 minutes.

Eyewitnesses reported seeing the sky suddenly turn dark before the torrential downpour of rain and hailstones began. Emergency services were inundated with calls after several areas including <South Wimbledon>, <Putney>, <Clapham> and <Brixton> were hit. The hailstones "were really large pieces of hail the size of 20 pence pieces which tore through the sky, ripping leaves from the trees and flowers from plants. I have never seen anything like it."

<Minster><Isle of Sheppey>: It had cars and properties damaged by the sudden deluge. Parts of the A12 in Suffolk were left submerged by flash flooding, leaving rush hour traffic grid-locked, while four people were injured by lightning strikes.

<Haywards Heath>: In a thunderstorm at Haywards Heath over 20 houses were damaged by lightning.

<London>: It experienced 18mm of rain in 15 minutes, accompanied large hail.

<Maidenhead>: The fall of rain on the 20th (spread across the 19th-20th rainfall days) totalled 98.6mm in 8.5h and included a fall of 50mm in 60 minutes (the heaviest hourly fall locally since 1901).

<Bracknell>: The combined rainfall 19th/20th was 68.3mm; nearly all of this fell during 6 hours on the morning of the 20th.

<Sindlesham>: The rainfall event on the 19th/20th produced a significant amount rainfall in a short period, and far greater than I have ever recorded in the past 25 years (Bracknell/Sindlesham sites), for 2 to 6 hour periods, which were as follows: 2 hours 47.2mm commencing 1015h, 3 hours 57.5mm commencing at 0815h, 4 hours 67.1mm commencing at 0745h and 6 hours 75.5mm commencing at 0600h. Significant flooding occurred on the 20th from the rainfall, with many roads properties flooded locally. Further flooding took place on the 21st and 22nd as the river <<Loddon>> burst its banks closing the A329 Reading Road at Winnersh, together with extensive flooding to local properties and businesses. The local DIY store evacuated staff on a fork lift truck, as the river rose so quickly.

<Abingdon>: 'The two main rivers, the Thames and the Ock, were not the only ones to feature in the floods--the lesser known River Stort played its part, bringing misery to residents in north Abingdon. The Stort flows into the town from the north and disappears underground for almost a mile, running beneath Stort Street before resurfacing to join the Thames near the Nags Head pub. Farm Road, Hillview Road and Sellwood Road were flooded.

<Bourton on the Water>: 113 mm rain over 27 hours (1 in 125 year event) at Bourton-on-the-Water on previously wet land led to a damaging flood all down the <<Windrush>> through <Naunton>, <Lower Slaughter>, Bourton and <Burford>. 160 properties were affected.

<Wokingham>: 63.7mm of rain between 0200GMT and 1200GMT, with 50.2mm in the four hours to midday. A peak rain rate of 177mm/h was recorded at 1103GMT. Local rivers and streams burst their banks, and the local secondary school had 62 ground floor classrooms flooded. The extreme rain event spanned two rainfall days, and the total is third highest for any two day period since before 1976.

<Crowthorne>: 80mm fell between 2220h on 19th and 1120h on 20th, most of it after 0600h. This was the largest 24-hour fall in my records (1973) (next largest 65mm on 20-21.9.1980). New records were also set for 2, 3, 4 and 5 days rainfall totals.

<Stratfield Mortimer>: Exceptional rainstorm 19/20th, 81.1mm in 15 hours from 2130GMT on 19 July. Rainfall intensities were the highest observed at this site in 20-year records for all periods from 30 minutes to 24 hours. The fall was split across two rainfall days (19 July, 25.8mm: 20 July, 55.3mm) and the combined two day total (81.1mm) has been exceeded only once since local daily records began in 1910, viz. 14-15 September 1968 when 91.0mm was recorded. On this latter occasion the rainfall, although very heavy and persistent, was distributed over a period of 36-48 hours rather than the 15 hours on 19/20 July 2007. It is therefore highly likely that the rainfall of 81.1mm recorded within a 24-hour period on 19/20 July 2007 represented the highest 24 hour total in this area within the last 100 years or more. The peak occurred shortly before 1100GMT, when 21.0mm fell in 30 minutes commencing 1035GMT: 30.2mm fell in the 60 minutes commencing 1005GMT. In the 4 hours commencing 0730GMT 64.3mm fell. The Foudry Brook reached its highest level in 20 years observations, and significant flooding resulted in Stratfield Mortimer from the failure of a major culvert at the bottom of The Street during the storm. There was also extensive floodplain inundation on the Loddon, the Kennett and the Thames as a result of the heavy rainfall. During the violent storms on 20th, global solar radiation averaged only 10-11 W/m² 08-11h, falling to just 4 W/m² at 0834, 0909 and 1030 UTC, less than 1%

of normal insolation levels and below the 'day darkness' threshold. The month's highest maximum (23.6C on 19th) was lower than April's highest maximum (24.4C on 15th). This is the first time this has occurred on local records back to 1917 – the nearest being in 1939 (April maximum 23.9C, July 25.0C). The highest maximum in July averages 9C above April's value.

<Caterham>: 34mm of rain fell in 80 minutes.

<Warlingham> (Surrey): Torrential rain in the morning from about 0830GMT, ceasing around 1100GMT. Some thunder but very little given the rainfall amount. Very dark; camera exposure 1/15th, f/2, ISO400, about 0.4% of normal daylight. A few houses in the road were flooded, almost entirely with run-off from a neighbouring field. This is very rare; it was the wettest July day on record (1983).

<Bromley>< Hayes>: Almost all the 25.3mm of rain on the 20th fell in 40 minutes starting 1030GMT during a severe thunderstorm.

<Twickenham>: The two hottest days on 19th and 20th were at 24.5C and coincided with thunderstorms and heavy rain. The wettest day saw a fall 47.8mm on 20th. Total rainfall over the two days was 55.5mm.

<Teddington>: was badly affected as the main street gets the run-off from higher ground and motorists would not slow down, forcing water into flooded shop premises. Local papers later in the week had many incendiary letters on this and related subjects. There were the usual flood warnings regarding high water from Chertsey to Teddington Lock which after the tides turned, led to warnings down to Putney as the vast head of water rushed downstream. Fields, gardens and buildings were flooded to an extent not seen for some years.

<Watford>: On the 20th very heavy rain fell after 1110GMT with 10.8mm in 12 minutes from 1112GMT and 22.8mm in 36 minutes from the same time.

<Borehamwood>: 22.4mm of rain fell within half an hour around 1300h.

<Charlton>< Wantage>: Torrential rain gave 103mm, plus 15.6mm previous night, makes 118.6mm for the total fall. Records were consequently set for daily and monthly rainfalls in July (172mm).

<Charlbury>: The total rainfall of 70.2mm on the 20th is the second highest amount for a single day in any month on record (1990). The River <<Evenlode>> which runs along the W edge of Charlbury rose about 6m by the 21st, totally submerging the road bridge of the B4437 which suffered significant damage.

<Thatcham> and <Pangbourne>: Floods occurred.

<Thatcham>: Studies showed the rain fell at over 25mm per hour 0950-1210GMT and the peak hourly rate was 34.9mm/h at 1130GMT. The total rain for the 00-24 day was 97.3mm with a rolling 24-hour period maximum of

100.4mm from 1410GMT on the 19th. To put these numbers into context, in the last 5 years my maximum daily rainfall was 35.0mm (May2007), but it also fell constantly over the 24 hour period. The drains could not cope, and no wonder streams that had been put into pipes once again found there natural course causing homes including bungalows where they appear to have lost everything considering the amount of furniture still stood in front gardens in August. Quite a lot of Thatcham suffered. The A4 just south of here had emergency service sirens blasting out for around 6 hours. That afternoon I attempted to reach the centre of Thatcham one mile away, but roads were blocked by floods, abandoned cars on now wet roads or impassable.

28 Jul 2008 COL

<Brockham> (near Dorking): Heavy rain on 28th, 15mm in 30 minutes starting 2040h and 10mm in 30 minutes starting 2250h. 30.8mm fell in total.

31 Aug 2008

COL

<London>< Hampstead>: It had a severe thunderstorm between 1530GMT and 1550GMT; 32.3mm of rain fell in less than 20 minutes; a weak funnel cloud was observed.

15 Jun 2009

COL

<Rochester>: The Wigmore observer wrote that there was a large thunderstorm cell to the NW of Wigmore from 1100GMT to about 1145GMT; Rochester was reported to have been flooded (just 3km distant) - the local paper said 12mm had fallen in 20 minutes. I visited the area one day later and saw gardens pitted by small hail and evidence of mud on the roads. Also a large pile of builder's sand had been washed down the roadway and was being retrieved by the owner, suggesting more rain than was reported. At Wigmore a trace fell.

27 Jun 2009

COL

<Dartford>: Dartford was reported to have been 'white with hail' after a thunderstorm in the early evening, with minor damage to foliage and greenhouses. At Sutton-at-Hone there was a vicious hailstorm 1800-1900GMT. Dartford Heath was completely white with hail and radiation fog caused by melting hail. There was constant lightning, and the hailstorm lasted for at least 40 minutes. The hail was marble-sized.

<Claygate> (Near Esher, Surrey): 18mm in 25 minutes around 1600GMT. A local development ending in an ice-fall: a steady clatter of about 10mm diameter hard and painful hailstones out of the very edge of the anvil. Temperature fell from a maximum of 26C to 17C (and did not recover thereafter).

<Wilmington> (Swanley): Torrential downpour between 1800GMT and 1900GMT with thunder and lightning and large hail. Ground covered in large hail at Wilmington with conservatories peppered with holes and flooding of buildings with flat roofs. Total rainfall 40mm.

<Watford>: 42.9mm of rain fell between 1725GMT and about 1900GMT - most of which fell in the first hour, causing local flooding. This is the largest one day fall in June in my records (1960). Large hail also fell giving a partial covering on the grass. The air temperature fell 9C in the hour after 1800GMT and the soil temperature at

7 Jul 2009 COL		<p>20cm fell 1.8C in 2 hours after 1900GMT.</p> <p><London>: A number of London Underground stations were closed in the evening after a series of thunderstorms led to floods. Victoria, Paddington and Hyde Park Corner Tube stations were shut at about 1630GMT after torrential rain hit central London with hail and lightning.</p> <p><East Horsley>: Very heavy rain from a series of thunderstorms led to the wettest July day (43.0mm) in 13 years.</p>
22 Jul 2010 COL		<p><Wokingham> (Berkshire): Violent rain and 1cm diameter hail was reported.</p>
4 Aug 2010 COL	<p>As a broad trough of low pressure crossed the area, a crop of thunderstorms developed over much of southeastern England in the afternoon, with some lively storms, very heavy rain and hail in various districts.</p>	<p><Warlingham>: Brief thunderstorm starting 1400GMT. Torrential rain for 5 minutes with gusts to force 7 from NW. Total rainfall 15.4mm, nearly all of it in 10 minutes.</p>
17 Aug 2010 COL		<p><Borehamwood>: Downpours produced 21mm in the half-hour around 2130h and a further 10mm in the half-hour around 2300h</p>
2 Oct 2010 COL		<p><Claygate> (Surrey): 35mm of rain fell in three hours (1900-2200GMT) on 2nd; probably the wettest October day locally for 10 years.</p>
7 May 2012 COL	<p>Widespread thundery showers affected Ireland during the afternoon and evening, with isolated thundery showers along the north coast of the Solway Firth. Associated with a pre cold-frontal trough, a thundery outbreak moved northeast from the southwest peninsula across the south and east Midlands in the late</p>	<p><Surbiton>: 41.6mm of rai was the greatest October daily fall since 29.10.2000.</p> <p><Morden>: 32.7mm of rain, the wettest October day for 10 years.</p> <p><Bicester>: The storm was particularly lively between about <Witney> and Bicester (Oxon), along which track it included a tornado, heavy hail (with stones up to about 15 mm in diameter, and covering roads) and torrential rain.</p>

28 May 2012 COL	afternoon. Thunderstorms developed along a track through parts of Leicestershire, Northamptonshire, Bedfordshire, Essex and Kent in the afternoon.	<Wigmore> (Kent): Around 25 mm of rain fell in 30 minutes. The roads were awash. Gusty winds and small hail accompanied the torrents. Thunder was frequent, although not spectacular, but it was the ferocity of the rain that was extraordinary for this part of the country.
30 May 2012 COL		<Epping> (Essex): Violent shower with large hail and thunder 1700-1730 h. 19.1 mm of rain fell in 20 minutes 1700-1720h.
11 Jul 2012 COL		<Edenbridge>: In an afternoon of 'near continuous' thundery activity at Edenbridge, 21mm of rain, accompanied by large hail, fell in the first 15 minutes of the storms. <Epsom Downs>: Large hail (up to 17mm across) left jagged holes in vegetation at Epsom Downs in the early evening. <Coulsdon>: Hailstones measured 15 mm in diameter and did some damage to plants in garden making holes in hydrangea leaves. Hail lay some six hours after the storm a couple of miles from station.
17 Jul 2013 COL	Showers and thunderstorms broke out along a narrow convergence zone from west Norfolk to north Hampshire in the late afternoon. Storms were shortlived but quite sharp in places	<Bracknell>: 24mm of rain fell in 40 minutes in the early evening at Bracknell, with hail for a time.
29 Jul 2013 COL	There were widespread thundery showers, with hail in places, from late morning to mid-evening,	<Swindon>: There was serious flooding in Swindon.
29 Apr 2014 COL		<Bracknell>: Torrential rain during a thunderstorm gave the wettest April day since 2000. Of the 24.6 mm measured, all but 1 mm or so fell between 1100 and 1200 GMT. <East Horsley>: After a dry day in London with spells of hazy sunshine, I returned home to find 19.3 mm of rain in the raingauge. There had been torrential bursts of large hail (which beheaded some of my tulips) and a lightning strike which caused a 30-second power cut to the village shops.

22 May 2014 COL	An extensive area of heavy showers and thunderstorms moved north across southern Britain during the late morning and afternoon.	<Claygate> (Surrey): Large hail (some stones of 2 cm diameter fell at Claygate) and squally winds accompanied some of them.
13 Jun 2014 COL	From 1900h, a major thunderstorm outbreak affected the counties of Gloucester, Wiltshire, Oxford, Hampshire and Berkshire.	<p><Swindon> <Oxford> and <Reading>: were amongst those hit by very heavy rain and frequent thunder and lightning. Movement was slow, the storm lasting for at least two hours in many places. Many homes lost their electricity after lightning strikes across Berkshire and Oxfordshire. Royal Berkshire Fire & Rescue Service said it was called to about 50 storm related incidents. Crews dealt with two roof fires caused by lightning strikes in Wokingham, which took about three hours to put out. A property in Calcot, Reading, was also hit. Firefighters rescued a number of drivers who broke down in floods. In Oxfordshire, three buildings in Chilton, Goring and Oxford were set on fire by lightning strikes. Trains between Didcot Parkway and Reading were delayed after the signalling equipment was damaged.</p> <p><Bracknell> (Priestwood): 40.4 mm made it the wettest day of any month since at least 2007 caused by an overnight thunderstorm.</p> <p><Wokingham>: Prolonged thunderstorm commenced at 2308 GMT, heavy for a time, gave a rain rate of 252 mm/h, and a total of 38.2 mm in under 6 hours, including 15.7 mm in one hour. There was local flooding and reports of house fires caused by lightning.</p> <p><Guildford>: Exceptional rainfall during thunderstorm on night of 13th/14th between about 0200 h and 0330 h - 37.8 mm fell. A25 flooded close to River <<Wey>> (from blocked drains).</p>
19 Jul 2014 COL		<p>Hail and torrential rain wreaked havoc on crops just before they were due to be harvested as a storm cut a swathe across Berkshire, Buckinghamshire, Oxfordshire and Northamptonshire. Oilseed rape, wheat and winter barley crops were the worst affected.</p>
25 Jul 2014 COL	An upper trough extended southwestwards across southeastern Britain with thunderstorms	<p>< New Malden> and <Norbiton> (Surrey): The storms were severe with gusty winds: there was flooding in These villages and the Farnborough area was also badly hit (16.1 mm rainfall).</p> <p><Redbridge>: Roads close to Redbridge Roundabout, were like torrents, the rain was so intense for a short period.</p>
28 Jul 2014 COL		<p><London>: There were intense downpours over northwest London: 44mm fell in less than two hours at <Northolt>, and there was flooding at <Hillingdon>. As the cold pool moved on, there was a steady weakening of the storms in mid-morning and the whole system retreated southwards.</p> <p><East Horsley>: Thunderstorm brought torrential rain 0620-0650 GMT with all the gutters around the house</p>

29 Jul 2014
Manchester
Evening News
29 Jul 2014 COL

overflowing. Thereafter less intense rainfall continued until 0915 GMT. By 0900 GMT 30.6 mm had fallen with less than 1.4 mm in the remaining period.

Hail and thunderstorms brought travel disruption to parts of Britain especially in the southeast. Firefighters rescued people from homes and cars hit by floods. The lightning hit an electricity sub-station near Hove in Sussex, causing power to the coastal rail route to be cut, according to a Network Rail spokeswoman. London Fire Brigade rescued two women from a car which got stuck in flood water. Another two people were rescued from a stranded car in Harrow, the fire service said.

10 Aug 2014
COL

The remnants of ex-hurricane Bertha affected the British Isles on the 10th, the low centre travelling from the SW. Thunder affected many parts of England and Wales during the morning or early afternoon.

<Wisley> (Surrey): 18.4mm fell between 0800 and 0900 GMT

<Stratfield Mortimer> (SW of Reading): Thunder was heard on four days in five 10th-14th. The remnants of hurricane Bertha on 10th featured thunder at both the warm front passage (around 0800 GMT) and at the cold front (around 1230 GMT), the latter also accompanied by 2 minutes of heavy hail, with some stones 7 mm in diameter. Hail in August is very rare: only four previous occurrences are known in the last 40 years, and since at least 1978 none has included hailstones larger than 5 mm.

14 Aug 2014
COL

<London>: Flooding was reported from parts of south London in thunderstorms.

<Forest Hill> (S London): The thunderstorm on 14th lasted from 1300-1415 h and gave torrential rain totalling 24.7mm, most of which fell in about 15 minutes from 1310 h. I also recorded slight hail at 1320 h, only the second occasion I have noted hail in August in 40 years (the other occasion was 5th in 2012).

19 Sep 2014
COL
29 May 2015
COL

<London>: There was a thunderstorm over central and east London in mid-afternoon, with hail and flooding in the <Dalston>-<Hackney>-<Stratford> corridor, and storms over Hertfordshire in the later afternoon.

<Morden> (S London): Early evening hail up to 12 mm in diameter. This was the largest (hard) hail recorded at this site (1988). The hail was completely round hail, like marbles.

<Woking>: Reports of a major hailstorm at about 1400 GMT with 10 mm diameter hail, the hail covering the ground and giving slush on windscreens. Thunder and lightning also observed. Hail affected Guildford town centre at about 1330 GMT.

17 Jul 2015 COL Intense lightning storm over many parts of Herts during the 17th.

<Great Gaddesden> (near Hemel Hempstead Large hail was reported in Baldock. Very frequent lightning between 0000 and 0100GMT towards the east/north-east.

<Rothamsted> (Herts): recorded 52.8 mm. This is located only about 9 km north-east from Gaddesden. Areas just to the north-west of here no rain fell at all

24 Aug 2015
COL

<Brockham>: 72.2 mm was the highest daily rainfall since I started recording in this area from 1971. This total has been estimated from an AWS since I was on holiday at the time. An estimated 28.3 mm fell in the hour commencing 1250 h. There was flooding in Brockham and the nearby town of <Dorking>. The local paper

**26 Aug 2015
COL**

There was a little thunder and, more significantly, torrential rain in a narrow zone from near Fareham to northwest London around the middle of the day.

3 sep 2015 COL

**3 Apr 2016 COL
7 Jun 2016 COL**

reported rainfall totals of 30 mm so this particularly heavy fall was extremely localised.

<Edenbridge>: Torrential rain with continuous thunder 1400-1630 h. Rainfall for the day 48 mm.

<Farnborough>: Visibility fell to 500 metres in the downpour at Farnborough. Flooding disrupted rail services at Farnborough and, in northwest London, at Kenton. Big thunderstorm 1130-1230 GMT, with intense rain. Daily total 34.9 mm, most falling in 90 minutes. Some local flooding on streets.

<Heathrow>: received 48 mm, much of it in two hours.

<Crowthorne> (Berks) : Rainfall in 24 hours from 0715 h of 42.1 mm was the largest of record (1973) for August and sixth largest for any month. Heaviest rain from 0930-1300 h (31 mm) including 22 mm in 70 minutes from 1010 h, with substantial falls (about 5 mm each) around 0720 h on 26th and 0600 h on 27th.

<Forest Hill> (S London): A heavy shower was recorded on the evening when 15.5 mm rain fell in around 40 minutes, with thunder and 7-8mm hail at 1835 GMT.

<Maidstone>: Thunder and heavy rain 1800-1945 GMT gave some surface water flooding on roads.

<London>: Amongst instances of flooding resulting from thunderstorms, a man had to be snatched from his car as it was submerged by a flash flood under the bridge at Wallington rail station (south London).

<Warlingham>: Thunderstorm 1245-1430 h with heavy rain and frequent thunder and lightning. Rainfall 22.8 mm but 48 mm at <Kenley> (2.5 km WSW).

<Bramingham> <Luton>: A major thunderstorm affected Luton and Dunstable from 1500 to about 1720 GMT with serious flooding and several houses struck by lightning. The main Luton – Dunstable road was under several feet of water under the Busway Bridge in Dunstable with driver's pictured standing on their car roofs awaiting rescue. Major flood prevention works took place here some years ago. A brand new flood prevention scheme on Icknield Way Luton, involving 300 m of new lagoon and piping, failed and flooded adjacent properties. Rather than use the maximum rainfall rate as shown on the auto raingauge, I measured 12.2 mm in the ten minutes from 1520 GMT; the next ten minutes added 6.4 mm. The former figure equates to a rate of 73.2 mm/hr. The total fall in the storm was 35.8 mm, not exceptional this month across the country, but locals said they have never seen rain like it, which even came bubbling up from garden soakaways. The storm was the highest single-event rainfall in June since 1985.

**8 Jun 2016 COL
10 Jun 2016
COL**

<London>: Flooding again affected parts of London.

<Crowthorne> (SW of Bracknell): Thunderstorm gave 37.6 mm in an hour from 1650 to 1750 h, an hourly fall rivalled in my record (1973) only in the Bracknell storm of 7 May 2000. About 34 mm fell in 45 minutes from 1704 h, including 10 mm in 8 minutes from 1707 h and 12 mm in 7 minutes from 1731 h. The fall of 37.8 mm in 24 hours from 0800 h was largest of record (1973) for June (next 35.8 mm in 1974).

23 Jun 2016

Severe thunderstorms and

<Guildford>: The worst of storms appears to have developed to the northeast of Guildford and tracked north-

COL

torrential rain affected much of southeast England and Essex during the early hours.

eastwards across northwest Surrey, south and east London and southwest Essex during the next two to three hours. Including lesser earlier and later outbreaks of thundery rain, 50-80 mm of rain was recorded in many places along this track, and there was lightning damage and considerable flooding.

<Farnborough> Heavy thunderstorm in the early hours (first thunder before midnight) with torrential rain 0100-0200 GMT and then heavy rain persisting until 0600 GMT. 39.5 mm in total, 40% of the month's rain.

<Bromley> <Hayes>: The 38.5 mm of rain that fell in four hours over night 22nd-23rd accompanying a violent thunderstorm was the heaviest days' rainfall in June since 2012.

<Sidcup>: Overnight 22nd/23rd there was very heavy rain with 38.5 mm by 0800 h on the 23rd. Another 1 mm fell later in the day. Flooding closed the Blackwall Tunnel which delayed my journey into work and I arrived at my work to find the premises also flooded.

<Wanstead> (E London): The month also saw the record broken for highest daily rainfall in a 24-hour period. A multi-cell thunderstorm in the early hours of the 23rd saw 60.8 mm fall, most of it in two hours, bringing flash floods to the surrounding area.

<Calthorpe>: On the evening of the 23rd a thunderstorm gave 40.6 mm in about two hours of which 30 mm fell in the hour commencing 1745 GMT. Our street looked like a river with brown water rushing past the whole width of the road.

<Newbury> <Reading>: Serious flooding occurred in Berkshire (including Newbury and Reading) and Oxfordshire (including Didcot), and rail travel was disrupted in places.

<Maidenhead>: 73 mm of rain was recorded. (with 1 cm diameter hail).

<Wokingham> 66.8 mm in a rainfall day, second highest for September and any month in the past 113 years. Rainfall rate exceeded 500 mm/h at 1644 GMT in a thunderstorm with hailstones up to 1.5 cm diameter, and which gave 34.8 mm in 20 minutes.

<Sindlesham>: A maximum temperature of 28.6C occurred at 1420 h. Sunshine weakened quickly by thickening cloud, jet black to north at 1640 h with frequent thunder and lightning, torrential/violent rain from 1645 h with large hail up to 35 mm diameter (see photograph). Rain and hail continued until 1708 h. Air temperature fell 6.4 degC in 10 minutes. 26.2 mm of rain fell in 21 minutes.

<Stratfield Mortimer>: A severe thunderstorm 1704-50 GMT on 15th exceeded all previous rainfall depth-duration records at this site (29 years records) for periods between 15 minutes and 1 hour, including a fall of 29.6 mm in 30 minutes commencing 1710 GMT. The rainfall rate exceeded 180 mm/h for four minutes commencing 1719 GMT, reaching a 10 s maximum rate of 215 mm/h at 1719 GMT. No hail fell at this site, although large hail fell not far to the east and north-east of here. Further heavy rain fell in association with more thunderstorms overnight 15th/16th, boosting the 24 hour 0900-0900 UTC rainfall total to 55.4 mm. This has been exceeded only once in September since daily local rainfall records commenced in 1910 - viz. 15

15/16 Sep 2016
COL

September 1968, when 57.7 mm fell at nearby Heckfield, over a longer duration than the case here.

<Guildford NW>: Thunder first heard around 2130 h on 15th probably to the north of Guildford. Lightning and thunder were noted 'still going' at 2315 h. . Storm 'overhead' 0010-0025 h. Possibly finished at 0115 h. More activity reported at around 4 a.m. Rain measured at usual observation time as 46.2 mm when light to moderate rain was still falling.

Great Gaddesden (Near Hemel Hempstead): Great Gaddesden: Torrential rain and thunder on the 16th resulted in flooding and some road disruption. More than 50 mm fell, most recorded in a half hour period between 0520 and 0550 GMT.

<Brookmans Park> (near Potters Bar): The total rainfall in the 24 hours to 1000 GMT on the 16th was 55.5 mm which was the wettest 'rain day' since my records commenced in 2001. The Times on Saturday 17th said the wettest place in the UK was Santon Downham with 55 mm in the 24 h to 5pm on Friday. Therefore, it appears that Brookmans Park was wetter than any other site reporting in this station list – but the falls at some stations Berkshire were actually even larger. There was flooding on local roads and the M25 was closed near Watford, around 10 miles away, for part of the day. There was also a landslip near Watford Junction, which resulted in some significant disruption to the West Coast Mainline. The heavy rain followed some exceptionally high temperatures earlier in the week.

29 May 2017

COL

2 Jun 2017 COL

<Bromley> <Hayes>: A violent thunderstorm lasting about 90 minutes in the early hours of the 29th produced 28.4 mm, making this May's wettest day.

<Warlingham>: Short burst of large hail (10-12 mm) with thunder and brief torrential rain. 12.7 mm fell in 7 min.

<Coulsdon>: Intense thunderstorm around 1600 h on 2nd with frequent lightning and very loud thunder giving 16.2 mm of rain in under half an hour.

<Reading>: Torrential rain fell through the centre of the system, with 42 mm recorded at Reading University at 2100 GMT.

<Wokingham>: A notable heavy thunderstorm with a rainfall rate of 185 mm/h. 29.6 mm fell between 1900 and 2100 GMT with some local flood damage reported.

Sindlesham: 44.2 mm fell on 18th with a fall of 39.4 mm in 1 hour, which caused significant flooding in the area and a maximum rainfall rate of 257 mm/h.

Stratfield Mortimer: An intense thunderstorm on 18th gave 41.7 mm - most within an hour, setting new 30 year depth-duration records for 15-60 minute periods).

18 Jul 2017 COL

On the date of the Coverack storm in Cornwall the system moved across Hampshire, and thence over Berkshire, Buckinghamshire and Hertfordshire, with development on its eastern boundary (off the North Downs of Surrey) extending it across London around midnight.

18 Aug 2017
COL

<Wokingham>: A notable thunderstorm with hail and a gust of 41 mph gave a rainfall rate of 227 mm/h at 1331 GMT and produced some local flooding.

24 May 2018
COL

<Sindlesham>: There was a maximum rainfall rate of 15 mm/h (1340 h) and caused localised flooding.

26 May 2018
COL

<Stratfield Mortimer>: A thunderstorm on 24th gave 20.2 mm rainfall in the 50 minutes commencing 1625 GMT: the daily total was 23.2 mm, although only 3.8 mm fell at the university,

<Bromley>< Hayes>: The wettest May day in my 23-year record. 35.7 mm fell in just over two hours, 2145-2350 GMT, accompanied by a spectacular display of almost continuous lightning and thunder with bursts of hail and torrential rain.

27 May 2018
COL

<London>: The London Fire Brigade said it had taken 505 weather-related calls, mostly as a result of flooding.

31 May 2018
COL

<Charlbury> (W Oxfordshire): Multiple thunderstorms during the late afternoon and evening produced a total rainfall of 65.0 mm. Most of the rain fell between 1830 and 2100 h, with 40.3 mm accumulating during one hour.

5 Jul 2018 COL

< Tunbridge Wells>: There were thundery showers over parts of Kent and East Sussex in the afternoon. 20 mm was reported to have fallen in under 15 minutes at Tunbridge Wells, causing local flooding.

13 Jul 2018 COL

< Charlwood> (Surrey): Slow-moving, heavy and locally thundery showers affected areas across central southern and parts of southeast England and London during the afternoon and early evening. 29 mm fell in a late afternoon storm at Charlwood (Surrey), and flooding disrupted London Underground's Metropolitan Line at Neasden in the evening.

<Borehamwood>: A thunderstorm on the 13th (mid-evening) mainly went just to the S and W of us. We had thunder but hardly any rain. Just to the SW of us, up to 50 mm fell in about 1.5 h! Such is the local nature of these events.

12 Aug 2019
COL

<Warlingham>: Moderate thunderstorm starting 1215 GMT with thunder and lightning for 25 minutes with some heavy rain. Total fall 19.1 mm.

24 Sep 2019
COL

<London>: St James's Park had 22 mm in an hour

1 Oct 2019 COL

<Oxford>: 22 mm of rain fell in 30 minutes on the northern outskirts of Oxford, where a primary school suffered serious flooding, as did another near <Bicester>. There were also storms from east Berkshire across London into Essex and Suffolk. This latter area of thunder bore many similarities with the outbreak of exactly a week previously; this time at St James's Park 13 mm fell in an hour.

