Flash flood history Trent

Date and	Rainfall	Description
sources 27 Jul 1588 Various diaries Jones et al 1984 4 Sep 1618 Parish Register St	Insufficient information to indicate that this was a flash flood	<wistow>, Leics: Gret rain caused a flood. (also at <prestwold>). <derby>: In this year the Mary Bridge was broken and the mills carried away with the water. <coventry>: great flood in July. <northampton>: Great flood which 'reached almost to St John's Hospital. <wistow> (7 m SE of Leicester): The parish register reported that 'About six in the morning the waters so increased that they prevailed to carry the bier about the church and ran over the communion table'</wistow></northampton></coventry></derby></prestwold></wistow>
Wistan's 17 Jul 1719 Pue's Occurrences		<stone> in Staffs: Thunderstorm with rain that laid the corn flat and the hail had <mark>some of them 10 to 12 inches</mark> round and some larger than hen's eggs.</stone>
21 Jul 12 Jun 1724 Nichol's Leics Derby Mercury 6 Jun		<leicester>: Hailstones fell in amazing quantities and <mark>some measured 6 inches round</mark>. They lay in large quantities for five hours after the storm.</leicester>
1877 31 Jul 1735 Loughboroug h Parish Register, Derby Mercury 18		<loughborough>: A very great thunderstorm lasted two hours and then after a break returned with equal violence for 3 hours. On a sudden it occasioned so great an inundation in the northwest parts of the town as had never before been experienced. The water ran down the lower side of the Market Place knee-deep and filled the shops; and little lower than the middle of Swan Street it would float a horse. Near the cross in the Market Place the waters were more than a yard deep. Many families near the brook were confined in their upper storeys for some time.</loughborough>
Jul 1877 14 May 1739 Newcastle courant 9 Jun 28 Jul 1741 Gentleman's	The storm raged 10 miles in length and one mile broad.	<derby>: Four days of hot weather with thunderstorms. At <langley> two horses were killed by lightning. <stapleford> near Nottingham: Sudden heavy rains raised the water thereabouts; two horses were carried out of the meadows and drowned. Notts (Lincs and SE W Riding): In a violent thunderstorm, <mark>hailstones as large as musket balls/pigeon's eggs and broken icicles</mark> tore and cut up standing corn and killed birds and hares. The <mark>hail some of which were 3 inches</mark></stapleford></langley></derby>

Mag 18 Aug, Short's Chronology		long and one inch in diameter lay in heaps half a yard deep. <bawtry>: <mark>Hailstones were five to nine inches about.</mark></bawtry>
Aug 18 1742 Nichol's Leicestershire in Derby Mercury 5		<leicester>: In a thunderstorm lasting two hours pieces of ice 5 inches in length and hailstones 2 inches in circumference fell killing some hundreds of birds. The streets were so flooded that scarcely one house in ten but had its first floor filled. Some cellars were overflowed 6 feet deep. Many wagon loads of ice were to be seen the following morning.</leicester>
Sep 1877		
18 Aug 1743	Note: Same as above. Almost certainly 1843	<leicester>: A violent storm of rain and hail occurred and lasted two hours. Pieces of ice five inches in length</leicester>
Derby	Certainly 1843	<mark>and hailstones two and a half inches in circumference fell which killed some hundreds of birds</mark> that were found
Mercury 8		next morning in the gardens. The streets were so flooded that one house in ten had water so deep in the
Sep		houses that water was carried out in pails. Some cellars were overflowed six feet deep. Waggon loads of ice remained the following day.
1 Jun 1747		<loughborough>: In a storm of rain and hail, <mark>the stones measured 2 and a half inches round</mark> and did great</loughborough>
Parish		damage to fruit.
register of		
Loughboroug		
h		
23 Jul 1748		<mellor>, Derbyshire: A thunderstorm lasted four hours and the <<river grit="">> at Marple bridge was 22 feet</river></mellor>
Derby		above the common height; a wall 19 feet above the ordinary water level was washed away. The hailstones
Mercury 10		were up to 2 inches in circumference.
Oct 1877		
(Chronology)		
15 May 1749		<derbyshire<htps: <="" com="" commons.com="" td="" www.com=""></derbyshire<htps:>
Gentlemans		Nottinghamshire, Derbyshire, Leicestershire: Great hail storm with hail or large pieces of ice four inches in
Mag, Derby		circumference. At <donington park=""> it broke many windows and killed many rooks.</donington>
Mercury 17		
Oct 1877		
(Chronology)		

22 Aug 1749 Derby	<wolverhampton>: In a thunderstorm lasting 3 hours there was an inundation the like of which had not been known before (Thunderstorms were also reported at Bridgnorth, Drayton, Shropshire, and at Shrewsbury,</wolverhampton>
Mercury 17	Oxfordshire and Worcestershire and the extraordinary flood near Keswick)
Oct 1877 (Chronology)	
6 Jul 1755	<market harborough="">, <husbands bosworth="">, Leics: A severe thunderstorm with hail and rain caused great</husbands></market>
Manchester	damage to the parish church, with the steeple shattered the bells destroyed and the walls and interior
mercury 29	damaged.
Jul	
2 Jul 1759	<birmingham>: By the floods occasioned by the heavy rains great damage has been done in the neighbourhood</birmingham>
Aris's	to grass, standing and cut by being filled with sand and gravel. Two horses at Grete bridge in the Stratford Road
Birmingham	and one near <hartburn> were drowned. A man was drowned attempting to cross Stone Bridge near</hartburn>
Gaz 5 Jul 1858	<meriden>.</meriden>
(form Annual	
Register)	
14 Jun 1763	<leicester>: A thunderstorm caused damage to St Marys Steeple. Horses were killed by the lightning.</leicester>
Leeds	
Intelligencer	
28 Jun	
2 Aug 1765	<birmingham>: thunderstorm with heavy rain. A barn was set alight, a church was damage and a horse was</birmingham>
Oxford Jour	killed.
10 Aug Aug 1770	Floods occurred at several places during August including the < <severn>>, <<trent>> and <<bedford levels="">>.</bedford></trent></severn>
Gentleman's	Houses, mills and bridges were borne down. 70 people were drowned in <coventry> and <<bediord levels="">>.</bediord></coventry>
Mag	Some poor houses were filled from top to bottom.
IVIAG	
25 Jun 1783. 'Universal perturbations of nature' were reported throughout Europe'.Derby.Mercury 3 Jul.	There were widespread thunderstorms in England most notably in the Peterborough area. 'At <stilton> the rain was so violent that the <mark>water rose to the height of four feet perpendicular</mark> in some of the inn yards and great quantities of hay were carried away from the meadows'. At Leicester heavy rain was reported and ball lightning</stilton>

Cumberland Pacquet 15 July Manchester Mercury 15 Jul 23 Sep 1785 Gentlemans Mag		and hail lasting about half an hour. At <blaby>, hail broke all the windows facing southwest in Freer's house. Indeed scarcely a house escaped. At <fenny stanton=""> 15 houses were burnt down by lightning. At <wansford> 3 children were struck dead and many more injured. At <abbot rippon=""> a girl was struck dead in her house. Others were killed by lightning at <abbots ripton=""> in Huntingdonshire, a young man at <needingworth (two<br="">were killed in the Lake District at Windermere and Hawkshead).Many animals were reported killed in the <nottingham> area. <ashbourne> in Derbyshire: The river rose 7 to 8 feet in 4 hours and fell in little more than the same time.</ashbourne></nottingham></needingworth></abbots></abbot></wansford></fenny></blaby>
13 Apr 1792 Stamford Mercury 20 Apr Northants mercury 21 Apr 10 Aug 1793 Bath Chronicle 15 Aug Hampshire Chronicle 19 Aug 25 Aug 1799 the Observer	(Note severe thunderstorms at Bromsgrove) Thunderstorms were widespread including Herefordshire, Brecon, Essex Harwich, London. No flooding was reported.	 <leicester>: Many persons whose lands adjoin the river <<soar>> have sustained great loss; upwards of 60 sheep have been drowned.</soar></leicester> <burton>: Owing to the incessant fall of rain the <<river trent="">> rose higher than has been known for many years So rapid was the rise that many people were unable to secure their cattle and other property. Damage was done to malthouses and breweries and many sheep and pigs were drowned.</river></burton> <thornton>, Leicestershire: A thunderstorm with severe rain and hail lasted about a quarter of an hour. The stones or rather pieces of ice measured round from 4 and a half to 6 and a half inches. The windows facing south and southwest are completely destroyed and the gardens laid waste. The storm was accompanied by hail as big as pullet's eggs being 5 to 7 inches in circumference and carried destruction where they went. Some were round, some were flat with spikes, others consisted of irregular flakes of ice weighing three or four ounces. Every pane of glass having a S or SW aspect was broken; gardens were laid completely waste, birds and small animals were killed. It passed from south to north over Kirkby to Merry Lees, a distance of 14 miles and 1 mile wide.</thornton> The rise of the Trent was almost instantaneous; in the morning people were making hay and in the evening thousands of acres were inundated. A 12 year old boy was drowned at <catton>. The lower part of the town of</catton>
3 Jun 1802 Northampton Mercury 12		<ashbourne> was flooded. <melton mowbray=""> Leics: A thunderstorm with hail accompanied by a whirlwind from the Southwest which lasted for about 5 minutes, stripping houses of their coverings, chimneys broken down and windows shattered, loaded wagons were shifted. The deluge flooded many houses. A bullock was killed by lightning. Effects were</melton></ashbourne>

Jun		confined to M Mowbray and no effects were seen in the neighbouring country.
1 May 1807		<bakewell>: Violent hail fell for several minutes, many of the stones being from 2 to 4 inches round; one</bakewell>
Derby		considerably exceeded 5 inches. Many windows were broken.
Mercury 7		
May		
12 May 1811		Storms with hailstones were reported in Derbyshire at <ashbourne>, <wirksworth> etc where it was</wirksworth></ashbourne>
Manchester		accompanied by a whirlwind or tornado. Houses were unroofed and barns thrown down, hay and corn stacks
mercury 28		carried away, trees torn up by the roots. Effect was mainly in <ireton>, <cowlow> and <hopton> (tributary of R</hopton></cowlow></ireton>
May		< <derwent>>). Lumps of ice 9 to 12 inches in circumference occurred.</derwent>
		<wakefield>: severe storm of rain and hail consisting of transparent ice encrusted with snow and <mark>6 inches in</mark></wakefield>
		circumference. Gardens and hot houses have suffered severely.
27 May 1811	The storm took a NE direction	<birmingham>: By the overflowing of the <<river rea="">> much damage has been done in <digbeth> and</digbeth></river></birmingham>
Derby	commencing in Somerset then along the Severn	<deritend>. Saltey Bridge has been destroyed and also the bridges at Hockley and Aston in consequence of the</deritend>
Mercury 6 Jun	then along the severn	banks of the Soho Great Pool giving away.
		<birmingham>: Aston Bridge was swept away and Saltley bridge. On the <<river rea="">> at Newnham Bridge a</river></birmingham>
		cart was carried over a hedge. <bromyard> suffered unprecedented flooding.</bromyard>
8 Jun 1811		<stone>, Staffordshire: Two men were struck by lightning in a barn, one killed and the other much injured.</stone>
Bath		Another man was killed at Burton.
Chronicle 20		<birmingham>: There was a hailstorm that broke a vast quantity of glass.</birmingham>
Jun		
28 Jul 1816		<stafford> and neighbouring villages: A man was drowned at <shallowford> attempting to save some hay. At</shallowford></stafford>
Evening Mail		<stone> the houses were flooded to 4 feet deep. A small house was washed away but the inmates escaped.</stone>
		Several mills on the < <moddershall stream="">> were badly damaged. In the previous week, very heavy rain fell at</moddershall>
		<longdon> and <norton> near Litchfield. The heath was forced up by the roots, it cut up the roads and moved</norton></longdon>
		masses of earth in heaps. A man was killed by lightning.
17 Jul 1820		Staffordshire: The northern part of the county was affected by a thunderstorm causing a greater flood than has
Staffs		been known for some time, affecting <newcastle> and the <potteries>. The flood carried off hay from the</potteries></newcastle>
Advertiser 22		meadows and damaged a mill. A boy was carried through a culvert for 50 yards but rescued.
Jul		

20 May 1822 Bells Weekly Messenger 27 May 4 May 1828 Nottingham review 9 May 9 Jul 1828 Derby Daily Telegraph 23	Preceding temperature at Derby was 81F Derby: 3.59" in 19 h but July had 11.5" in the month	<mansfield>: Two people were killed by lightning. <derby>: A thunderstorm said to be the worst since 20 July 1803 with hailstones 2 inches in circumference. Glass in windows and greenhouses was broken. After the hail rain continued and flooding occurred in Dayson Lane as far as St Werburgh's church and flooded some houses. The storm was said to be very local. <nottingham>: The culverts were insufficient to carry the flow and the lower parts of the town were completely flooded. In Finkhill Street the fires were extinguished and dinners washed out of the oven. Furniture was floating about in kitchens. The recurrence can only be prevented by lowering the bed of the <leen>. <derby>: Hundreds of acres of hay were carried away</derby></leen></nottingham></derby></mansfield>
Aug 1922 26 Jul 1828 Leicester chronicle 2 Aug 8 Aug 1828 Bells Weekly		<ashby de="" la="" zouch="">: A thunderstorm was accompanied by heavy rain and hail which fell in such large pieces that it broke windows and hot house glass. The roads were inundated to a great depth and extent; the water poured down the adjoining closes into the highway in torrents. <melton mowbray=""> and <mountsorrel>: The water overflowed the streets and into houses. 'A boat might have sailed along the streets so great was the influx of water'. The flood on Ashby Road did great damage to the highway for more than a mile in extent. Several small bridges were forced down. The level on the turnpike road had been 5 to 6 feet deep. <nottingham>: Very heavy rain was succeeded by hail and in a few minutes the streets were under water. The market place was completely flooded.</nottingham></mountsorrel></melton></ashby>
Messenger 18 Aug 25 Jun 1830 Yorkshire Gazette 10 Jul Nottingham review 2 Jul Northampton		Widespread storms occurred from 25 th to 28 th Jun. The storm with large hailstones was also reported at <sandiacre> near Nottingham (where the cotton mill had 400 panes of glass broken), <ilkeston> with flooding at <trowell>, <nuttail>, <kimberley>, <eastwood> and all the way to <alfreton>. The hailstones were at least 3 inches in circumference (after lying all night). At <bagthorpe> some houses were flooded to such a depth that the occupants had to escape through the roof. Pigs and geese were drowned. The flood on the River <<trent>> had a more rapid rise than ever known; it rose</trent></bagthorpe></alfreton></eastwood></kimberley></nuttail></trowell></ilkeston></sandiacre>

Mercury 10	9 ½ feet above low water. So large a flood on the < <erewash>> was never known.</erewash>
Jul	<pinxton>: A miller found that the corn in his mill was floating therein.</pinxton>
	<newark>: Streets had the appearance of a river and most cellars were completely filled.</newark>
	<derby>: Brooks overflowed their boundaries and flooded houses in South Street, Curzon Street, Wardwick and</derby>
	Cheapside. The bottom of Sadlergate, The River < <derwent>> overflowed covering much agricultural land. Four</derwent>
	bridges on the < <amber>>, several bridges and weirs at <lumsdale> and bridges at <brailsford> and</brailsford></lumsdale></amber>
	<coxbench> have been either forced down or much injured.</coxbench>
	At <matlock>< Tansley> and <lea> great injury has been done to corn and grass, and vegetables have been torn</lea></matlock>
	up and carried away. The roads are impassable because of large holes made in them. At Lea the bridge over the
	brook there was washed away and rose four feet deep in a house there.
	<pleasley>: The water rose two feet higher than on any former occasion and caused much destruction of</pleasley>
	machinery at Pleasley Mills especially due to the suddenness of the flood.
	<leicester>: Severe and widespread flooding occurred from thunderstorms. Roads were impassable at</leicester>
	<loughborough> and <quorn>.</quorn></loughborough>
23 Apr 1833	<melton mowbray="">: A thunderstorm started with very heavy hail was then followed by rain. The rise of the</melton>
Stamford	brooks and rivers was so sudden that considerable loss of property must follow. Many gardens were
Mercury 26	overflowed and the lower part of the town near the road leading to Grantham houses was flooded to such a
Apr	height as to put out fires. At Wheatsheaf Inn pigs were drowned and there was damage in the brewhouse. The
	floodgates below the town were opened to allow the accumulating waters to escape.
12 Jun 1833	<loughborough>: A thunderstorm with very severe hail broke many windows. Scarcely a house escaped that</loughborough>
Leamington	had windows facing northwest. <mark>The hail measured a full five inches and weighed above an ounce</mark> . Fruit bushes
Spa Courier	had the fruit beaten off. (Fifty three years ago [1780] during the same week an even more violent storm hit
22 Jun	Loughborough)
29 Jul 1834	<birmingham>: The water in the <<river rea="">> rose so rapidly and to such an unusual height that damage was</river></birmingham>
Oxford Jour 2	done all down the banks. The valleys on the Warwick Road at <greet>, <haycock's green="">, and between</haycock's></greet>
Aug	<hatton hill=""> and <warwick> were almost impassable in consequence of the height to which the flood had</warwick></hatton>
Leamington	risen, reaching inside carriages. The fields were deluged and crops ruined. Near <radford> a crop of turnips was</radford>
spa Courier 2	washed into a neighbouring field.
Aug	At <saltley> pigs were washed away and drowned and great quantities of hay washed down the river. In low</saltley>

		lying streets near the <worcester> Wharf houses were filled with water.</worcester>
		[See also Severn chronology]
9 Jun 1835		<nottingham>: A severe thunderstorm was accompanied by hail or lumps of ice the size of horse beans to hazel</nottingham>
Nottingham		nuts and some as big as pigeons eggs. The storm continued for half an hour and the culverts were altogether
review 12 Jun		insufficient to carry off the water. Many cellars and low buildings were flooded and part of a wall was pushed
		down. Much glass in skylights and garden frames is broken, notably in <colwick>. Fruit trees were stripped and</colwick>
		vegetables beaten down.
		<leicester>: the torrents filled cellars in many houses before the occupants were aware</leicester>
11 Jun 1835		<leicester>: there was a heavy fall of large hail. The windows of St Georges Church are entirely destroyed and</leicester>
Derby		greenhouses are badly damaged.
Mercury 17		<melton mowbray="">: The rain descended in torrents with large hailstones so that the whole town, and the</melton>
Jun		surrounding country for 3 or 4 miles round was completely inundated. The rain was so heavy that the culverts
		could not take the water and several cellars were filled and houses and shops in the lower part of town were
		flooded. Some skylights were broken but fortunately the air was still so damage was limited.
25 Aug 1835	The storm occurred after a	<nottingham>: In a thunderstorm many streets were so flooded that great damage was done to flooded</nottingham>
Sheffield Iris	very long drought through July and August.	houses. Clumber Street, St Peter's Square, Hound's Gate, Lister Gate, Broad Marsh, Charlotte Street, Glass
1 Sep Derby	, 0	House Street, The Meadow Platts, Poplar and New Sneiton were affected. The Lion Hotel and neighbouring
Mercury 2		shops were flooded to several feet deep. The majority of cellars in Lister Gate were flooded. Broad Marsh was
Sep		covered with an immense sheet of water and the yards of Narrow Marsh did not escape. In Meadow Platts low
		lying houses were flooded and furniture was floating about. At the Sir Isaac Newton's Head Glasshouse Street
		the cellar was also flooded. A man was killed by lightning. At the Flaming Sword pub, barrels were afloat in the
		cellars and the ale was all spoiled; forty years previously the landlord of the same pub was ruined by a flood.
		Little rain fell two miles west of the town and there was little rain in West Bridgeford. A man was killed by
		lightning at <basford>. Families residing in low quarters in East Street and Tyler Street were flooded out to a</basford>
		depth of 3 or 4 feet by the bursting of a sough through which the River beck runs. The hail stones were not
		large but the really intense rainfall continued for a whole hour.
		In Peter's Square where the surplus water from the top of Derby Road and all the streets leading to the market
		place passes, the large sough under the Obelisk would not carry the water and the torrents flowed down

Wheeler gate and the whole square was flooded rising high enough to flow over on the Peter's church side. In

		the middle of the square carts were left axle deep in water and the flood extended several doors up
		Wheelergate, filling the cellars and kitchens.
14 Jun 1838		<duffield><wirksworth>: A thunderstorm was experienced in Sheffield but in Derbyshire at Duffield and</wirksworth></duffield>
Sheffield Iris		Wirksworth it was particularly severe. At Duffield the < <river ecclesbourn="">> rose with such rapidity that the</river>
20 Jun		free school was flooded several inches deeper than for at least 14 years. It was with great difficulty that cattle
		could be removed from fields adjacent to the river before the flood overspread the ground. Stone walls were
		washed down between <matlock> and <belper>. Many houses were flooded at <wirksworth>. Houses were</wirksworth></belper></matlock>
		also struck and damaged in Nottinghamshire. A farmer was killed by lightning at <bingham>. At <fritchley> and</fritchley></bingham>
		neighbourhood crops were damaged by hail.
20 Jun 1839		A thunderstorm lasted 2 hours and was accompanied by hailstones of immense size, several inches in
Leeds Times		circumference. Greenhouses were badly damaged; one farmer had 2000 panes broken. Poultry and small birds
29 Jun (from		were killed. Crops of wheat and barley were destroyed at <stone>, <chaddersley corbett="">, <belbroughton>,</belbroughton></chaddersley></stone>
Worcester		<harvington>, <shenstone>, and <elmsley>. Lambs were washed down to the bottom of a field in 4 feet of</elmsley></shenstone></harvington>
Journal)		water. Houses in <stone> were flooded, some to 5 feet deep. At <powick>, lightning struck the church causing</powick></stone>
		damage. A man on a pony was struck and killed (and the pony) near Worcester.
31 Jul 1839	Not clear if this was a	The flooding on the < <rea>> was higher than the great flood in 1795. Some of the lower parts of <birmingham></birmingham></rea>
Worcestershir	thunderstorm or flash flood	around <digbeth> were inundated by the bursting of the banks of the Worcester Canal.</digbeth>
e Chronicle 7		<derby>: The <<derwent>> is said to be at its highest level since 1795. Flooding occurred at Bold Lane, the</derwent></derby>
Aug		bottom of Sadlergate and St James's Lane. Several wooden bridges have been swept away. The < <amber>> and</amber>
Staffordshire		< <dove>> also overflowed. <loughborough> and <leicester> were also affected by flooding and St Margaret's</leicester></loughborough></dove>
Gaz. 3 Aug		Church was struck by lightning and caused considerable damage to the bell tower.
		<stafford>: The meadows surrounding the town were completely under water and some houses near the Green</stafford>
		bridge were flooded, a garden adjoining the railway was under water. On the way to the railway station the
		water was several feet deep on the road near the bridge. The railway near Norton Bridge was flooded.
		<market harborough="">: The flooding was greater than has been known for several years. The depth of water in</market>
		some parts of the street near the Sheep Market was little short of a yard and extended over 500 yards.
1 Apr 1842	After a few days of heavy	<derby>: Conway describes this as the Great flood of Derby and higher than the last great flood of 1795.</derby>
Conway, G.E.	rainfall particularly heavy showers fell the previous day	Conway provides a map of the flooded area and a list of locations. By 2 am water was rising through the soughs
(1993) A	worsening after midnight and	particularly in the streets near < <markeaton burn="">> and running toward the town centre. Even at this time</markeaton>

hydrological analysis of the Great Flood of Derby, 1842. East Midland. Geographer 16 (2), 3-16. (Derby Reporter 7 Apr, Derby Mercury 6 Apr) 3 Aug 1842 Morning Advertiser 12 Aug 5 Aug 1843 Coventry Herald 14 Aug	falling in 'unabated fury'. Conway does not mention thunder and BNA has no hits but rate of rise suggests a 'flash flood'.	water was flowing over the parapets of the bridges and was up to 2 feet deep in the streets near the centre. In less than 2 hours the water was 1.8 m deep in the Cornmarket and two rapid torrents had developed from the point where the open < <markeaton burn="">> at the west side of St Mary's Gate flows alongside the mill dam. The dam wall had given way under pressure and unable to follow its normal course under the culverted Victoria Stree the water divided into two torrents. One took a route along Cheapside and The Wardwick and the other along Willow row, Bold Lane and Sadler gate. Both torrents joined up in the Cornmarket from where they could discharge into the river <<derwent>> along the original open brook course (the present day Albert Street). Conway gives a long list of street locations, often adjacent to specific buildings such as pubs within Derby with the height of the flood above the pavement. The main river <<derwent>> though high did not actually go overbank but it was the local brooks which rose so rapidly s to render it impossible for the regular channels to convey the quantity of water. The Derby Mercury states that the <<markeaton brook="">> was running some 14 feet above its normal level and since there is 1 m between normal flow and overbank, the level among the tightly packed buildings was between 3.0 and 3.5 m deep. <leicester>: The storm burst about 1 o'clock and hail quickly covered the ground and the streets were entirely flooded. The hailstones were large, many as big as pigeon's eggs; some indeed were one inch to one inch and three quarter id diameter and weighed an ounce. The destruction of windows has been very great including one place in the Abbey Gardens where 2000 panes were broken. The storm was not of long continuance. [The storm was also reported in Essex and London but without reference to flooding]. <lichfield>: 11 lambs were struck and killed; buildings were damaged. No flooding was reported.</lichfield></leicester></markeaton></derwent></derwent></markeaton>
9 Aug 1843 Leicester Chronicle 12 Aug Cambridge Chronicle 19 Aug	Nottinghamshire <e retford="">. The rainfall was measured as 1.575 inches in 14 or 15 hours.</e>	<leicester>: The rain flooded cellars and kitchens in nearly every part of the town and the road leading out of town were quite impassable. The Abbey Meadow, Belgrave Road and the fields to the right were flooded. Two oxen were killed at Thurmaston. Rainfall measured at 2 .2 inches. In the course of an hour or less the culverts were all full to overflowing – the Humberstone gate, Gallowtree gate, High Street, the neighbourhood of the West bridge and Braunstone Gate, Granby Street and part of the London Road, together with other part of the town were flooded to depths from several inches to 2 feet deep. Conduit Street was like a river, not having any culvert outfall and poured through the houses even those with two steps and collected against a wall opposite</leicester>

the Railway Station to a depth of 4 to 5 feet. By the time the storm ceased the water had found its way into half the cellars and kitchens of the town in some cases to a depth of 3 to 4 feet. The water was rushing into culverts and rushing out again sometimes from hole which the water took the liberty of making itself. Hinkley and Ashby Roads were flooded knee deep and in some parts waist high. On the Swannington Railway the flood poured down from the neighbourhood of <Glenfield> as to prevent the trains from running and rose so much as to put out the engine fires.

<Rothley>: Here there was no rain during the day and inhabitants were unable to account for the sudden rising of the brooks until some returned from Leicester. The water had come mainly from <Glenfield> and <Grooby>. The lower end of the village was like a large river with posts and gates etc floating in all directions. Sheep were drowned.

<Hinckley>: The rain deluged streets, shops and cellars and some chimneys were struck by lightning. <Loughborough>: The rain fell in torrents and Church Gate, Baxter Gate, North Street leading to the Railway Station, Mill Street, The Rushes, Mill Hill and Regent Street were sheets of water. Water found its way into cellars in Swan Street.

<Nottingham>: The lower part of the town was flooded affecting cellar house and some shops. The cellars were flooded in so short a time that it was with difficulty that residents who had gone to bed were saved from drowning. In the neighbourhood barns have been struck and wheat and barley crops battered. <Nottingham>: The rain continued to pour down for more than an hour. The lower part of the town was flooded affecting cellar house and some shops. The cellars in Gedling Street, and Coldham Street were flooded and the cellars were flooded in so short a time that it was with difficulty that residents who had gone to bed were saved from drowning. The lower houses in Narrow Marsh and Meadow Plats were flooded. In the neighbourhood barns have been struck and wheat and barley crops battered. Individuals from <Bridgford>, <Carlton>, <Thurgarton>, <Lenton> and other places say that barns and other building have been overthrown and wheat and barley crops are battered down.

<Derby>: The storm was reported for lightning effects but with no notes on flooding.

<Birmingham>: Fire engines were used to pump water out of houses. Severe thunderstorms were reported in Birmingham where streets were rendered almost impassable. Tradesmen have suffered great damage by the loss of goods notably at Smallbrook Street, Peckham Lane, Digbeth and other low lying parts where houses, inns and shops were flooded, some with upwards of three feet of water. (Two men were killed by lightning at

6 Jul 1845 Bradford Observer 10 Jul Bristol Mercury 12 Jul

	Hungerford in Berkshire and another near Andover along with three horses he was leading).
1 Aug 1846	<leicester>:: Very heavy rainfall caused the Welford Road to be flooded to a depth of 18 inches. The lightning</leicester>
Derby	struck the spire of St George's Church and severed it within 20 feet of the battlements and the clock works
Mercury 5	were destroyed. The deluge of rain far exceeded anything on record in Leicester. In less than 15 minutes most
Aug	of the culverts were choked up and the streets were flooded; water poured in at doorways and windows. The
Nottingham review 7 Aug	water in many houses was from 3 to 12 feet deep and some of the streets were impassable. In Humberstone
Staffordshire	Gate the water was 4 feet deep and persons going to the Bell Inn were obliged to enter through windows. A
Advertiser 15	building was struck and ignited in Shambles lane.
Aug	<derby>: The rain came down in torrents as though a cloud had burst and flooded the streets. Many kitchens</derby>
	and cellars were flooded in different parts of the town made worse by the accumulation of rubbish on gratings.
	<loughborough>: The torrents of rain soon caused the streets to be flooded and the water forced its way into</loughborough>
	houses shops and cellars to a depth of several inches. Two horses were killed by lightning at Blackbrook.
	<worksop>: A woman was struck dead by lightning and the house damaged.</worksop>
	[This was the day of extreme hail and rain in London]
6 Sep 1846	<cuckney> (between Worksop and Mansfield): A thunderstorm with violent rain and hail caused the flooding of</cuckney>
Nottinghams	houses that had never been flooded before.
hire Guardian	<rolleston> and <fiskerton>: The thunderstorm was accompanied by hail as big as marbles causing breakage of</fiskerton></rolleston>
11 Sep	windows (extent not specified).
	<dunham> (12 Km W of Lincoln): One of the heaviest falls of rain we have ever witnessed passed over this and</dunham>
	surrounding villages and flooded many houses to a depth of several inches.
4 Jun 1849	<loughborough>: The lower part of the town was much flooded; many of the houses on Nottingham road had 5</loughborough>
Morning Post	or 6 inches of water flowing through them and another row at the back of these. Shops and cellars in Swan
11 Jun	Street were also flooded and at the Unicorn Inn a child's cradle was found afloat
	<kingston soar="" upon="">: Much damage was done to the grassland by the sudden overflowing of the <<soar>>.</soar></kingston>
	<broughton>: Inhabitants were alarmed by the water coming into their houses.</broughton>
	<churchover>: Cattle and sheep were killed by lightning.</churchover>
	<knapton>: Extensive damage was done to glass in greenhouses and hardly a whole pane was left in houses in</knapton>
	the village. Many of the hailstones were of great size.
16/17 Jul	<melton>: The town was affected by a thunderstorm of hail and rain with some of the hailstones the size of a</melton>

1850 Nottingham shire Guardian 18/ 25 Jul, Derby Mercury 24 Jul		 small marble. It continued for more than half an hour. 17th <derby>: The storm rain fell for about 2 hours. Houses in York Street were struck and damaged by lightning.</derby> 18th <ollerton>: The thunderstorm was attended by hail and was the most terrific ever remembered. The streets and many of the houses were quite inundated. A horse was killed by lightning. The roads between <kneesall> and <ollerton> and also in <edwinstow> town resembled large torrents and were impassable.</edwinstow></ollerton></kneesall></ollerton> Hailstones and pieces of ice were in some instances 3 to 4 inches in circumference. Five sheep were found dead under a tree. <masbro'>: The rain commenced at 12.15 and continued until 2.45 pm. A horse was killed by lightning at Chamber's farm. A stream of water flowed along the rail line more like a river and the culvert under the bridge south of the platform was unable to take the flow and for a considerable distance the flood stood 5 to 7 feet</masbro'>
		deep. The storm seems to have been confined to the Masbro' and Rotherham area, extending about 3 miles beyond which there was no evidence of rainfall.
		<tuxford>: The rain flooded many houses.</tuxford>
20 Jun 1851	Thunderstorm was	<nottingham>: On South Parade the sewers were speedily filled and a broad stream rolled down Wheelergate</nottingham>
Yorkshire Gaz	widespread over the country especially Midlands	filling many lower rooms. <mark>Some hailstones were 4 to 5 inches in circumference and were like pieces of broken</mark>
28 Jun		ice and windows were broken. Buildings were struck and damaged. The rain and hail deluged the streets and
Worcestershir		swept everything before it. Water accumulated in Upper Parliament Street and swept down Sheep Lane into
e chronicle 2		the market place dislodging market stalls. The water then reached Wheeler gate filling the low kitchens on its
Jul, Webb et		course. The storm here lasted only 10 minutes and was followed by a fine evening.
al 2009, Notts		<southwell><upton>: A thunderstorm lasted about 2 hours. The hailstones were very large and have done</upton></southwell>
Guardian 26		great damage to gardens and crops. Glass windows were broken. A six year old child was blown down into the
Jun		water flowing down the street but was fortunately rescued. At Tickhill a cow was struck dead by lightning.
29 Jul 1851		<stapleford> nr Nottingham: A violent storm of rain and hail came on at 3.30 pm. Houses were flooded and the</stapleford>
Nottingham		inhabitants had to take refuge in others that were on higher ground. Potatoes and other vegetables were
review 1 Aug		washed up from the gardens. A cow was killed by lightning.
Derby		<long eaton="">: The thunderstorm continued almost without intermission for nearly an hour. With the rain and</long>
Mercury 6 Aug		hail the streets were filled with water from one to two feet deep. Many houses were flooded and furniture seriously damaged. Much damage has been done to growing crops. The storm also affected the villages of

		<sandiacre>, <brenston>, <sawley>, and <wilsthorpe>. Cattle were killed and houses damaged by lightning. Within a mile south of Long Eaton no rain was seen or felt. The water in the <<trent>> rose 3 feet during the</trent></wilsthorpe></sawley></brenston></sandiacre>
		storm but subsided to its former level soon after the storm had stopped.
13 Aug 1851		<east retford="">: Previous few days had been close and warm. The streets and the Market Place were flooded in</east>
Morning Post		every direction and several ground floors were completely under water. The storm has been general through
19 Aug		North Notts. A man was killed by lightning in <scaftworth>. Depth of rain during the storm 1.94 inches.</scaftworth>
Notts		<newark>: The streets were flooded. A man was killed by lightning at <hoveringham>.</hoveringham></newark>
guardian 21		
Aug		
5 Jul 1852		<derby>: In the thunderstorm rain was mixed with heavy hail and within a short time the streets and</derby>
Buxton		thoroughfares were converted into river courses. Property received injury in several cases. A cow was killed by
Herald 10 Jul		lightning at Smerrills
14 Jul 1852		<stafford>: A thunderstorm lasted an hour and a half with little intermission; a building was struck and a horse</stafford>
Stafford		killed. At nearby <haughton> much damage was done by the hail and rain and the roads were flooded and</haughton>
Advertiser 17		impassable. At <acton hill=""> 15 sheep were killed by lightning.</acton>
Jul		
18 July 1853	Storms and floods were described for various parts of	<nottingham>: The <<river beck="">> which is arched over burst out at several points and flooded houses in the</river></nottingham>
Westmorland	the Midlands and South.	Poplar district.
Gazette 22 Jul		<leicester>: the rain was persistent but the rise in water levels was rapid in the <<soar>> and tributaries</soar></leicester>
Manchester		flooding streets gardens and meadows. The water rose rapidly in Braunstone Gate and was soon 2 to 3 feet
Courier 23 Jul		deep. Inhabitants of houses in Great Holme Street, Watts Causeway etc were unable to descend from their
Carlisle Jour		bedrooms without stepping into water to the above depths. Houses in the Pingle were also flooded. Several
22 Jul		factories were invaded. {It was reported in 1855 that a new drainage scheme had been installed which
		appeared to have averted flooding in the Gallowtree Road Gate]
		<loughborough>: The Wood Brook overflowed and inundated the low lying part of the town.</loughborough>
1 Sep 1853		<newark>: In a thunderstorm the streets were flooded, cellars inundated and inhabitants obliged to live in</newark>
Notts		upper rooms but the damage was said to be not great. A house was struck and damaged by lightning at
Guardian 8		<middlegate>. Storms were also reported at <bingham> and <ollerton> but without reported flooding.</ollerton></bingham></middlegate>
Sep		

14 Jul 1855<Leicester>: The lower parts of the town were flooded but no serious damage was done by lightning. AnimalsDerbywere killed at <Countesthorpe>, Wibtoft>, <Wigston> and <Oadby>. Trees and buildings were struck. AtMercury 18<Stoughton> large pieces of ice fell and covered the ground and cut vegetables as if with a knife; similarJul, Nottsconditions occurred at <Billesdon> where some houses were 2 feet deep in water. Damage was done by hail toguardian 19glasshouses and windows. Hailstones as large as nuts fell at <Syston>. Cattle sheep and horses were killed atJulvarious places.<Hinkley>: Many of the cellars were inundated

<Nottingham>: Streets were deluged. In various streets originating from Poplar and from Meadow Platts including Fine Street and Gelding Street, flooding was serious. Traffic was stopped due to impassable roads. Low Lands between Nottingham and <Southwell> were completely flooded causing damage to crops. It was reported that an Inn on the Mansfield Road had been entirely swept away. Several walls in Bilbie Street and the Mapperley Plains and other places have been entirely swept away.

<Carlton>, <Nottingham>: Much damage was done in Carlton, the worst since July 1828, where the valley narrows. The water entered twenty houses in some of them 8 feet deep and in some of them the water rose so suddenly over the lower doors and windows that escape had to be made through upper windows and even in one house by making a hole in the roof. Many walls are thrown down and a culvert blown up and contents of shops and houses carried away.

<Arnold>, NE suburb of Nottingham: The thunderstorm continued for several hours in the early morning and many of the houses were 3 to 4 feet deep in water and in some parts it was 9 inches higher than in the great storm of 1828 {limited info above}, presumably from the <<Day Brook>> which flows into the <<River Leen>>. Hay has been swept away and damage done to gardens which were under 3 feet of water. The culvert running through the main street of the village was torn up and the water made its way into adjacent houses. Roads and footpaths have been torn up. At <Sherwood> the flood filled the cellars of a public house and undermined the foundations and was in danger of collapse. Much of the damage in Arnold is attributable to the poor state of the drainage, the rivulet which carried the water off being filled with weeds and filth.

<Southwell>, <Nottingham>: The streets were a perfect sea. Water forced its way into shops and cellars. Several bridges were carried away and much damage was done to gardens.

<Earnsfield> (should this be <Farnsfield> NE of Nottingham?): Houses were flooded and in one at the top of the town it was 18 inches deep.

	<newark>: not much rain occurred but a cow was killed whilst being milked and the cowgirl seriously injured.</newark>
23 Jul 1855	<tamworth>: In a thunderstorm the rain mixed with hail fell so heavily as to flood many houses. Several</tamworth>
Aris'	buildings were struck by lightning.
Birmingham	
Gaz.	
24 May 1856	<birmingham>: It was one of the severest hailstorms in many years affecting mainly the northern side of the</birmingham>
Birmingham	town. Houses were flooded, bricked yards torn up, drains rendered useless and gardens cleared of their
Journal 28	contents. Bed ridden women had to be carried out on the backs of policemen and poultry and pigs were
Мау	swimming all directions for their lives. Fruit trees were stripped of leaves and blossom. It was in the Sand Pits
	District and thence towards Hockley and Aston New Town that the damage was chiefly sustained with cellars
	flooded. A woman narrowly escaped drowning in Newtown Row; whilst walking along a flooded road with a
	cow she fell in a brook and was carried through a culvert under a road but was rescued. Several houses were
	struck and damaged by lightning. Hailstones of large size fell until they were 8 or 10 inches deep.
23 Jul 1856	<north staffordshire="">: A thunderstorm was accompanied by heavy hail. Almost instantly the streets were</north>
Staffs	flooded. The hailstones were lumps of solid ice, some star shaped and others spherical measured at 1 inch in
Sentinel 26	diameter. Much damage was done to glass in houses, factories and conservatories. The storm was felt chiefly at
Jul	<hanley fenton=""> and <stoke> with many houses flooded in the latter. <macclesfield> was equally affected.</macclesfield></stoke></hanley>
7 Aug 1856	<alton>, Derbyshire: In a few minutes the torrents on roads and lanes stopped the entrances to the sewers and</alton>
Derbyshire	the floods being thus obstructed flooded houses to a height of 2 to 3 feet. Hail and angular pieces of ice fell
Advertiser 15	doing much damage to vegetables. The storm was confined to a radius of about 2 miles. Two cattle were
Jul	reported killed.
14 Aug 1856	<matlock>: A thunderstorm occurred after 10 days of glorious sunshine but was at its height in the High Peak</matlock>
Derbyshire	district. Just before dusk the < <river derwent="">>, reduced in volume from the drought began rising rapidly, soon</river>
courier 15/16	filling and then overflowing its banks bringing down brushwood timber and sheep. About 10 the waters began
Aug	to subside. Two people were killed by lightning at <buxton>.</buxton>
	<derby>: The thunderstorm continued for upwards of two hours but the only reported incident was a lightning</derby>
	strike on a house.
1 Sep 1856	<derby>: The thunderstorm commenced at 7.30 pm and continued until 10 with rain and hail. It flooded the</derby>
Derby	streets and houses to a considerable extent. Some of the thoroughfares had the appearance of rapid rivers. The

corn crops have been greatly injured. No damage was reported from lightning.

Mercury 3

Sep

13/14 Aug 1857 Hull Packet 21 Aug Nottinghams hire Guardian 20 Aug, Nottingham Jour 21 Aug

Rain at Retford between 6th and 13th inclusive was 6.57 inches (167 mm). Two storms occurred on the evening of 12th and the other on the evening of 13th both of which produced flooding. Beeston Observatory 3 miles SW of Nottingham daily rf 13th 3.01 inches Cf previous summer daily rf 1843 Aug 9 1.09 1846 Jul 10 1.16 1847 May 9 1.64 1847 Sep 12 1.10 1848 May 29 1.03 1848 Jun 18 1.06 1848 Jul 2 1.16 1848 Aug 5 1.15 1848 Aug 10 1.14 1849 Sep 28 1.34 1849 Oct 7 1.01 1850 Jul 25 1.08 1851 Jul 24 1.16 1852 Jul 26 2.06 1852 Aug 11 1.12 1852 Sep 6 2.04 1853 Jun 19 1.07 1853 Aug 17 1.50 1855 Jul 14 1.06 1857 Jun 30 1.59 1857 Aug 8 1.04

1857 Aug 13 3.01 Detailed met observations are noted in Notts Jour 21 Aug

Only 2 winter rf > 1.00 were noted.

<Nottingham>: Following a preceding wet week with thunderstorms the storm broke with intense rainfall for nearly an hour flooding the streets and entirely choking the sewers and forcing its way down the narrow streets to the lower part of town. It stopped but recommenced for 2 hours in the evening. It flowed down Chapel Bar, Sheep Lane, Bell Yard into the Market Place and from there down Wheeler Gate to discharge on the Broad and Narrow Marsh. Many cellars were flooded and houses were flooded in Snenton. Many houses were flooded in Poplar. At the height of the storm Wheeler-gate, Lister-gate, at the foot of the Low Pavement, Shakespear Street, St Ann's Well Road Great Alfred Street and the Woodborough road were impassable for pedestrians and resembled inland rivers. The stone floor in Bells Inn in Angel Row fell into the cellar.

NJ (21) gives more details: Sewers burst and cellars were flooded in Melbourne Street and Wheeler Gate and Shakespeare street. Near the summit of Addison Street and on the slope of the Woodborough Road immense fissures were scooped out some to a depth of 3 feet exposing water and gas pipes. In Beck Street the water extended from the Beehive to the Admiral Dundas. Much damage was done to the Horse and Trumpet where cellars were filled. The greatest flow occurred here after the rain had ceased. On the <<Trent>> the water reached a peak of 12 feet 3 inches above its ordinary level and only 30 inches below its highest recorded level in November 1852. Many sheep were drowned on neighbouring farms. At <Oxton> a bridge was washed down. <Basford>: Many of the houses in Lincoln Street were more than 2 feet deep in water. A bleach works was flooded and damaged by mud. Mowbray's mill was flooded to a depth of 2 feet and 12 pigs swam away. The parochial office and neighbouring houses were flooded to a similar depth. The cellars of the Vernon Arms and Sir Robert Peel were full of water.

<Beeston>: Streets became rivulets and were impassable. Cellars and sewers were filled and fresh channels made by the force of the stream.

<Bingham>: The sewers were filled and threw up little fountains everywhere. The surface enclosed in the market place was completely inundated. Many of the dwellings in the Market Place, Church Street and Cherry Street were inundated. Water flowed over the rail line and washed out the ballast endangering the line.
<Wimeswold>: The streets had the appearance of rivers and holes were formed by the washing away of sand and gravel. Two strongly built bridges were washed away. Brook Street was entirely surrounded and the flood rose so rapidly that furniture and carpets became submerged to a depth of several feet.

<Harworth>: Many cellars were flooded.

<Misterton>: A youth of 16 was drowned in Bye Curdyke at Haxey Gate from a keel.

<Tuxford>: The premises in the low part of town especially near the front bridge were flooded to a considerable depth. The water rose so suddenly that one woman who was ironing clothes was overtaken by a flood which overturned her table and set a cradle with a child afloat. The fires under the gas retorts were flooded. Similar effects were noted at <Laxton>, <Weston> and <Egmanton>.

<Lenton>: The <<Leen>> which flows through <Old Lenton> rose with a rapidity which excited the most lively apprehensions. Many occupiers of houses near the <<Leen>> had water ankle deep in their houses at dawn but still rising rapidly. Gates were burst open by the force of the torrent and shops were flooded. The water reached to within a foot of the old church wall and many houses close by were deeply flooded with furniture floating. Pigs were taken upstairs to save them from floods.

<Wilford> etc: A brook at <Wysall> overflowed and caused a vast accumulation of water. Damage was mainly agricultural.

<Bunny>: The lower part of the hall and every part of this village were under water. At <Radcliffe on Trent> the water rose to threaten the vicarage and many other houses but most escaped.

<Carlton>: In a terrific thunderstorm several houses in the lower part of the district were completely flooded. A cow was killed by lightning.

<Lambley>: A great deal of damage was done to property and crops owing to the low situation of the village. Trees were seen floating down the streets and many houses were flooded. Some inmate had to make escape from the top windows of their houses. Damage was also caused at the village of <Woodborough>.

<Arnold>: The lower parts of the village were soon submerged compelling the inmates to retire to their upper chambers. Houses were flooded 4 feet deep in places.

<Calverton>: The water quickly began to rise and in an incredibly short time the vicarage house and garden resembled a lake; the cellars of the house were filled to a depth of 9 feet and overflowing into the rooms above. In many houses the water was 24 inches deep. A flour dealer lost much produce. Walls were washed down. <Cropwell Butler>: This was the greatest storm and flood for 29 years. The culvert burst in three places and houses were flooded to a depth of one foot.

<Southwell>: The thunderstorm was accompanied by large hail which lasted for half an hour. At <Easthorpe> the water rose very fast so that many of the houses and cellars were soon flooded. The Potwell dyke

overflowed and tore down the walls on each side of the bridge. The houses on the north side of the street commencing with the shoemaker were soon under several feet of water. A perfect stream ran down the street past the White Lion. People escaped from their windows or retired to upper rooms. The stream tore up soil and produce from gardens. Several shops and cellars in the Market Place and King Street were also inundated. The dyke at the bottom of Moor Lane overflowed and flooded houses and gardens. Several bridges were torn up. A tanner's yard was flooded carrying away hides and tools. The Greet bridge and Mill Bridge are much damaged. A man was drowned.

<Newark>: The damage in the town was limited. However the <<River Devon>> rose to an unprecedented height above recently installed embankments flooding crops and a brick works. In many neighbouring parishes most of the houses were flooded.

<Ollerton>: Several foot bridges were washed away including the White water Bridge and a house a Rockley was badly flooded. The damage was mainly from the flooding of agricultural land.

<Loughborough>: Only a few gardens and cellars were flooded and it was not as severe here as elsewhere. <Melton Mowbray>: Some parts of the town were flooded from the <<Sealford Brook>> and the hills around. <Mansfield>: Many cellars in the town were flooded and in some the water was 6 feet deep on the ground floor. Water from a fishpond in Westfield Lane fed by the Lady Brook bounded by a wall became so full that the water burst out and rushed down West Gate 3 feet deep. Several persons were thrown down by the force of the water and narrowly escaped drowning. All the roads were flooded knee deep. The main street of the village of <Shirebrook> has been washed away to a depth in places of more than a yard. Several sheep were killed by lightning. The villages of <Warcop>, <Cuckney>, <Norton> etc have similarly suffered.

<Gainsborough>: The streets were one vast sheet of water but there are no reports of particular property flooded. Great damage was done to growing crops and serious damage was done to rail lines. Upwards of 7 inches of rain fell from 6th to 13th.

<Ashlockton>: The <<River Smite>> overflowed its banks and the water rushed violently into the village. One house near the railroad was washed down and another seriously injured

<Retford>: the town was inundated with no parallel for 62 years. Many houses were flooded and in Spring Gardens and the locality near the railway station people were taken out of their houses in boats. Pelham Street was also severely flooded to a depth of 3 to 5 feet. The deluge swept through the Market Place and the centre of town and even invaded the churchyard which is higher up. Grove Street towards it eastern extremity was completely swamped and a culvert blew up with force in two places. The communication between Church Gate and Moor gate was cut off in the neighbourhood of Moorgate beck and several houses were deeply flooded. The street between Chapel Gate and Spittal Hill was under 2 feet of water. Much agricultural land in the neighbourhood was flooded. The valley of the <<Idle>> was a sheet of water as far as the eye could see from the church tower. The water in the street between Chapel gate and Spittal Hill was two feet deep. As proof that this was the highest flood for 62 years, the water made its way up Chancery Lane into The Square, an event unprecedented since 1795. The valley of the <<Idle>> was one uniform sheet of water. On the lowlands of <Elkesley> and <Gamston> there was a perfect sea for several miles and all the houses were 3 or 4 feet under water

Near <Carlton Station> between Newark and Retford the <<Trent>> overflowed the railway and raised the sleepers and rails and two trains were derailed and people thrown into the water although no deaths were reported.

<Southwell> : The storm lasted an hour and a half and large hailstones fell for about half an hour. The devastation was worst at <Easthorpe> where many houses were flooded. The Potwell Dike quickly overflowed, the bridge was damaged and houses on the north side were flooded. Several shops and cellars in the Market Place and King Street were inundated. Several small bridges were swept away. A man was drowned when washed away in the street. The railway line was washed away for a considerable length.

<Derby>: Houses on the Little Chester road about a mile from the centre were flooded and the turnpike for a mile was at least a yard deep. On the banks of the <<Trent>> and the <<Dove>> the damage to crops is very serious and sheep and other livestock have been swept away. Two Irish labourers were killed by lightning. North Staffs: Incessant rain from dawn to nightfall with thunder for several hours. The valley of the Trent is flooded for many miles as well as the lower lands in Stoke where cellars and potter's workshops were flooded. Great damage was done in the Vale of <Edale> and <Buxton> and <Bakewell>. Heavy floods poured into the valley from the sides of Kinder Scout. The solid rocky bed of the river has been lowered four feet and huge stones have been carried miles downstream.

<Eyam> and <Stoney Middleton>: The storm tagged with greatest fury there and didn't extend many miles beyond. The floods poured down the hills carrying fences and great masses of soil. The soil brought into Stoney Middleton will take a week to clear. Pieces of ice fell at one time and some measured 2 ½ to 3 ½ inches and windows and greenhouses are a great wreck. A mare was killed by lightning. Much damage was done to crops

10 Jun 1858 Manchester Courier 26 Jun Derbyshire Times 12 Jun

Thunderstorms in the Peak District of Derbyshire caused flooding which destroyed bridges, flooded mills and washed houses away notably at Hayfield in Goyt catchment (See Lancashire chronology) with potatoes and turnips washed out of the ground.

		At <chatsworth> the thunderstorm was accompanied by very large hailstones following a day when</chatsworth>
		temperatures reached 85F. Many pieces of ice were 6 inches in circumference and the general size of the larger
		pieces was from 1 to 1 ½ inches in diameter. Glass was broken in every direction; all the skylights in Chatsworth
		House were broken including the ground plate glass over the Sketch gallery, sheet glass over the staircase and
		where the sashes were doubled the ice broke through both. The Orangery is completely riddled and Camelia
		House Conservatory is much injured. Ridge and furrow roofs were less severely affected. The gardens and
		notably the vines were largely destroyed.
12 Jun 1858		<birmingham>: The main reports concern lightning damage to buildings. At New Street rail station a culvert</birmingham>
Aris		burst in Navigation Street and flooded a great part of the station. Many cellars were flooded at the end of
Birmingham		Worcester Street and neighbourhood. Walls were washed away at Cregoe Street and near St Luke's on the
Gaz 14 Jun,		Bristol Road. A terrace in the course of erection between Morville Street and Chester Street was partly
		demolished by the floods. At <digbeth> many cellars were flooded. The water near <<aston brook="">> was knee deep on the road. A culvert burst in Frederick Street <edgbaston> and flooded the road and also ran down</edgbaston></aston></digbeth>
		Francis Street with great velocity. Great injury was experienced in Sand Pits including the Sand Pits police
		station where the water was 3 feet deep in the garden; all the houses in the neighbourhood were filled with
		water, including Neson Street and St Vincent Street. In the neighbourhood of Coleshill Street many houses
		were also flooded. The rain rushing down Duke Street and Stafford Street into Cardigan Street flooded many
		houses
12 Aug 1858		<derby>: The rain began very gently but then very heavily between 4 and 5 pm and continuing until 8 pm. It</derby>
Derby		was accompanied by a remarkable wind which tore up trees by their roots. A horse and a cow were reported killed by lightning – and various other animals elsewhere.
Mercury 18		Cromford>: The thunderstorm commenced about 5 pm and continued until after 6. The drains were
Aug,		insufficient to carry off the large amount of rain that fell and many houses were flooded. Large stones and
Derbyshire		quantities of mud were deposited on floors. Several people were struck and injured by lightning and a man was
courier 21		killed at <tansley> (while sitting on his own sofa).</tansley>
Aug		<norton>: In the heavy rain the road drains could not contain the flood and the roads were like rivers. Stones</norton>
		gravel and soil were carried considerable distances and inclines such as Derbyshire Lane were stripped of their
		surface to rugged ganister by the rushing water. The storm was also reported at <matlock> and <smalley> but without reference to flooding.</smalley></matlock>
26 Jun 1859	The thunderstorm affected	Selper>: The streets of the town ran with streams of water and some portions of the road were washed up.
Derbyshire	the whole Midlands but most	There is no reference to property flooding.

Courier 2 Jul 16 Jun 1860 Derby Mercury 20 Jun	effects noted were from lightning	<bakewell>: The streets were soon flooded <coseley> (between Wolverhampton and Dudley): Cottagers found that their furniture was swimming about in the rain and some were rescued from bedroom windows. <belper>: The effects of the thunderstorm have not been exceeded for many years. The surface of the soil literally overflowed with the flood of water. The effects were even stronger to the southeast on Pinchem Hill from Ballamoor to Holbrook Lane. Several houses in Mill Lane were flooded and especially at the mill. For three quarters of an hour the stream rolled down; the road was washed down and very large stones were rolled with apparent ease down the hill with astonishing rapidity. <derby>: The thunderstorm was reported and the fields in the lower part of the district were flooded but there were no reports of flooding of streets or property.</derby></belper></coseley></bakewell>
13 Aug 1860 Sheffield independent 18 Aug		<birmingham>: Heavy rain occurred for upwards of an hour causing serious flooding at Digbeth. Very few shopkeepers have avoided the effects of the flood. Considerable damage was done at the bottom of The Parade with water from converging streets, Newhall Hill, Clement Street, Camden Street and Nelson Street so that cabs had water up to axles. Cellars being full, floated their contents out into the streets. The river <<rea>> rose in an incredibly short time and flooded buildings in Cheapside and cellars were filled with water. 'The storm was unattended by thunder'.</rea></birmingham>
20 Jun 1861 Birmingham Daily Post 21		<birmingham>: the rain fell heavily during the whole forenoon and the streets and roadways were converted to streams of water. A number of small fish, apparently minnows about an inch and a half in length fell in New Street! The sewers did not overflow so there was no property flooding reported.</birmingham>
Jun 23 Jun 1861 Wolverhampt on chronicle 26 Jun Shrewsbury Chronicle 28 Jun, Aris's Birmingham		<walsall>: Much rain accumulated at the railway station and trains were delayed. A few houses in the lower part of town were flooded. <birmingham>: Many of the streets were flooded and cellars of tradesmen were inundated. <birmingham> registered 0.92 in rainfall. Serious mischief was done at <digbeth> and <deritend>; the Three Tuns was flooded. The Horse and jockey in Allison Street suffered similarly and the Old Bulls Head was under water to a depth of 2 to 3 feet. The Nelson Inn and neighbouring houses in Deritend were flooded. Businesses were flooded in Rea Street, the lower part of Bradford Street, Moseley Street and Cheapside. Residents of The Parade suffered from water which rushed violently down Newhall Hill, Camden Street and Edward Street filling the cellars. A canal in</deritend></digbeth></birmingham></birmingham></walsall>

Gazette 29 Jun		Blews Street overflowed its banks and a wall was washed down. In new John Street several houses were under water with furniture floating in all directions. Cellars in Nelson Street West, Great Colmore Street and shops and cellars on the Bristol road were flooded. Houses under construction in Tonk Street were flooded. In the Aston Road and Duddeston and Neschells area there was severe flooding; in Vauxhall Grove water rushed violently into many buildings. Aston Road and Lawley Street were in some places under several feet of water. Lion Inn at the top of Lawley Street was severely damaged. Buildings were damaged by lightning.
7 Jul 1861 Staffordshire Advertiser 13 Jul		<trentham>: A party of excursionists to Trentham Park was affected by a thunderstorm with rain and hail and struck 14 people sheltering under a tree with one person killed and several seriously injured. There was no reference to flooding.</trentham>
26 Jul 1861		<laxton>: A thunderstorm flooded the lower part of the village and meadows and carried large quantities of</laxton>
Nottinghams		hay into the hedges and doing much damage in <ossington> and <laxton>.</laxton></ossington>
hire Guardian		<melton mowbray="">: The inhabitants of Thorpe End were much inconvenienced by the largest flood known for</melton>
1 Aug		some time. The water ran through some of the houses and a boat rowed along the public street. Burton End was one complete sheet of water and totally impassable on foot. Several cattle were killed by lightning.
7 May 1862		<nottingham>: At 5.15 pm the wind rose rapidly to a 'hurricane' and rain and hail fell in torrents, the hailstones</nottingham>
Nottingham		being as large as marbles. The streets were quickly flooded in all directions. All traffic in the streets was
Journal 8 May		suspended. In the Market Place the flood was so great as to cause considerable damage at one time
		endangering the foundations of neighbouring houses. The storm continued until aft 5.30. <southwell>: Pieces of ice 1 ½ inches in length and 1 ¼ inches in breath fell breaking windows and breaking</southwell>
		branches off trees. Very strong winds followed the hail, carrying away slates etc. All low places were inundated and for its short duration it surpassed the tremendous storm of August 1857
7 aug 1862 BR	Leek (Staffs) 0.80" in 18 m	
20 May 1864	West Retford Thrumpton	<birmingham>: A thunderstorm with large hailstones (larger than good sized peas) caused considerable damage</birmingham>
BR	3.10" in 2 h 15 m	to fruit blossoms and gardens. Several parts of the town were flooded and at Constitution Hill, the sewerage being insufficient to carry off the flow caused damage to a draper's and a butcher's shop.
8 Jul 1865 Birmingham Daily Post 10 Jul	Birmingham 1.53" in 2 hrs (Daily 1.88")	<birmingham>: It was the most severe storm since 26 Jun 1830 A woman was killed by lightning at <digbeth> and the newspaper editor cannot recollect any previous incident in the town of anyone killed by lightning. A number of cellars in the low parts of town were flooded. At the junction of Gooch street and Belgrave Street the water rose as high as the cab axles and also but less seriously at the junction of Longmore Street and Belgrave Street.</digbeth></birmingham>

13 Jul 1867 Birmingham Daily Gaz 15 Jul, Nottingham Guardian 19 Jul 20 Aug 1867 Birmingham Daily Post 21 Aug, Derby Mercury 21	. At Moseley 0.83" fell in half an hour Duffield (Derby) 2.34" in 3 h	 <wolverhampton>: A factory chimney was struck and damaged and several other buildings also affected by lightning.</wolverhampton> <birmingham>: The fine hot weather was brought to an end by a severe thunderstorm, with greatest violence over <edgbaston>, <moseley> and <balsall heath="">. At <kings heath=""> the water rushed down the main roads flooding the houses leading to the railway station to a depth of 3 to 4 feet at the Turnpike Junction. Hailstones of immense size were reported.</kings></balsall></moseley></edgbaston></birmingham> <nottingham>: In St Ann's Street the rain fell with such vehemence that the cellars of The Ancient Druid and Forester's Arms were flooded with several feet of water. In Howard Street the waster was estimated to be 7 feet deep. At the angles of Peel Street Clarendon Street and Waverley Street the water rushed with great fury and swept away the surface of the road.</nottingham> <birmingham>: A far greater quantity of rain fell on 20 Aug 1859 but less intense at its most fierce. Another correspondent says it was the most severe since the storm of 26 June 1830.</birmingham> <derby>: The storm commenced at 1.00 and continued for 3 hours; the rain measured 2.11", an amount only exceeded 3 times in27 years. Streets have been ploughed into ruts and sheep and other stock have been lost and railway traffic has been interrupted.</derby>
Aug, BR 3 Sep 1867 Manchester courier 5 Sep; Leeds mercury 5 Sep, Birmingham Daily Gaz 4 Sep		<duffield> (near Derby): At 1 a.m. a fearful thunderstorm which lasted about two hours; rain fell heavily, deluging the streets and houses for about three hours; 2.34" fell during that time. The crops are injured, but I have not heard of any loss of life. <birmingham>: The storm caused flooding at <aston>. The brook from Aston New Town to the Aston Road overflowed and inundated a large area including 'The Common'. Aston Road was covered from the bridge to Sutton Street. The water flowed into houses. Phillips Street residents were principal sufferers where pig stys were flooded and pigs had to be rescued. In Longmore Street and those on the banks of the <<rea>> water flooded a few cellars. In the vicinity of Ryland Road a large number of cellars were flooded. In Ryland Street North, Morville Street and the lower part of Wheeler Street water poured into cellars and yards.</rea></aston></birmingham></duffield>
11 Aug 1868 Bedfordshire Mercury 15 Aug		<nottingham>: Two brief thunderstorms occurred during the day. In the second of these 0.68" rain fell in 20 minutes. The streets were flooded, some of the sewers were burst and cab horses plied up to their knees in water. For four months previously there had been hardly a shower of rain.</nottingham>

14 Apr 1869 Wigston (Leics) 1.00" in <1 h

BR

DI		
25 May 1869 BR 14 Jun 1871 BR	There was a remarkable absence of really heavy falls during 1869. The amounts on this day were heaviest, both absolutely (1 .88") and relatively (7%), in Shropshire, and the fall extended across the country to the neighbourhood of Hull. Long Eaton (Notts)1.27" in 2 h Swanwick (Derbyshire) 0.55" in 12 m	<adderley> (N Shrops): 1.63" fell between 2.30 p.m. and 8 p.m; canal bank burst and meadows inundated near Market Drayton.</adderley>
15 Jun 1871	A thunderstorm on 14 th	<melton mowbray="">: It was one of the heaviest storms to visit Melton for many years and the rain was</melton>
Grantham	preceded a period of continued rain steadily all	accompanied by hail for a short time. Streets cellars and houses in various parts of the town were flooded. The
Journal 17	through the early morning	sewerage burst open in Leicester Street and water rushed out across the road.
Jun	hours of the 15th, and with	<burghley> by <oakham>: 3 sheep were killed by lightning.</oakham></burghley>
	only a slight respite until 7 or 8 p.m. on the 15th, thus making a nearly continuous fall for about twenty hours.	<leicester>: At Bradgate <mark>hailstones of an immense size fell, some as large as pigeon's eggs</mark> causing a roof to collapse</leicester>
18/20 Jun	Prior to the storm shade temperature reached 88F in B'ham. Total rf in the storm was 2.47"most of which fell in 45 minutes. London Regent Park also reached 88F but without rain. Leicester 1.00" in 75 m	<birmingham>: The rain was mixed with hail the size of marbles of compact ice as if chipped off a block. Some</birmingham>
1872		pieces of ice of irregular shape were an inch in length. The gutters were converted into streamlets and the
Birmingham		watercourses rapidly rose and overflowed their banks; streets were flooded and level lands became swamps
Daily Post 19		and houses in the lower part of town soon had their cellars filled with water. The hail fell for three quarters of
Jun, Coventry		an hour then the wind fell but the rain continued to descend with greater or less severity until 5 o'clock (from
Standard 21		one). Walls were washed down. Shops and cellars on Moseley Road corner of Balsall Heath were flooded. The
Jun, derby		< <rea>>, <<tame>> and <<aston brook="">> overflowed and the lands and houses bordering them were flooded.</aston></tame></rea>
Mercury 26		In Lawley Street there was a strong deep current and the water invaded the houses part way up their staircases.
Jun, BR		Workshops at the Midland Davy Lamp Co were flooded. At Deritend bridge articles of furniture, a couple of pigs
		etc were carried along the < <rea>>. In Longmore Street cellars were filled to 5 or6 feet and similarly in Wynn</rea>
		Street, Great Colmore Street, Bristol Street and the Horse Fair. A shop in Worcester Street was flooded. A large

quantity of water entered New Street Station but not sufficient to impede traffic. Between Smallbrook Street

and Pershore Street and Edgbaston Street the water was 2 feet deep. The damage done to conservatories is considerable as well as crops in neighbouring areas.

BDP (20th) notes that the high areas of <Mosley> suffered from the torrents of water which rushed into shops and houses. The Birches Moseley was greatly damaged by deep floods. Towards <Sparkbrook> the flood washed down a 6 foot wall, uprooted several trees and carried garden seats a considerable distance. On Moseley Road shops the water reached the top of the counter. On the Bristol Road the water rushed out of the villas as to plough up footpaths in deep trenches. Extensive damage was caused in Smithfield Street. The inhabitants of Ryland Street North suffered considerably; the water rushed from Morville Street on one side and Chester Street on the other and the water rose from heights varying from one to three feet filling all the cellars between the above named streets. Inhabitants were unable to remove their goods in consequence of the suddenness of the inundation. Several cellars in Broad Street were also flooded. The waste land in the neighbourhood of the boundary brook at Burbury Street was covered with water by the overflow of a stream. The Witton Road was flooded between 2 and 3 feet deep and several cellars in Aston village were flooded. At <Erdington> sewers were burst open by the pressure of water flooding the streets; the windows of many inhabitants were broken by hailstones. The <<River Tame>> at Aston overflowed its banks inundating the adjacent fields

<Oswestry>: Cellars and roads were flooded.

<Cheshire>: A lace and silk manufacturers was extensively damaged, the windows washed out and the machinery much damaged.

<Kimberley>, Notts: The storm did great damage to crops and property. The hailstones were as large as a fair sized marble.

<Nottingham>: A fisherman was struck and killed by lightning.

<Pelsall> (Walsall): A woman and daughter were killed by lightning whilst standing at their door.

<Nuneaton>: The Coventry Canal overflowed and a large body of water came down Wash Lane and soon made its way into the Market Place and neighbouring streets and so suddenly there was no time to take remedial action. Several shops and houses were flooded.

<Buxton>: The streets became one sheet of surging water and did considerable damage to the Ornamental gardens and Terrace Walks. Several places behind the Crescent and in Spring Gardens were flooded. At <Hogshaw> a wooden bridge was washed away.

<Leicester> BR notes: A succession of thunderstorms passed over Leicestershire, June 19th, from the southwest. The lightning was very vivid, and the thunder exceedingly loud, while rain fell in torrents, placing low lying districts under water. In the southern parts of the county, the storm was accompanied by an exceedingly heavy downfall of large hailstones.

Leicester had 1.00" in 75 19 Jun 1872 <Birmingham>: The scenes of the previous day were re-enacted with torrents of rain in undiminished fury. BDP minutes notes that this storm was not as severe or destructive as the one the previous day. Not since the visit of the Leeds Bickenhill (near Sollihull) Queen in 1858 has there been a storm equal to those of the last 2 days. Several thousand pounds of damage Mercury 20 0.99" in 20 m has been done to houses in the lower parts of town and hundreds of gardens are reduced to shapeless masses Jun of earth gravel and uprooted vegetation. The macadamised roads have the appearance of dried up beds of Birmingham mountain torrents. The <<River Rea>> was greatly swollen and overflowed in the neighbourhood of Montague Daily post 20 Street. In Lawley Street and Garrison Lane there was again a flood 1 to 2 feet deep and many cellars were filled. Jun, BR <Derby>: Two thunderstorms occurred on two days with the main reference to lightning effects, However, the heavy rain caused the <<River Derwent>> to rise rapidly and overflow its banks and meadows. <Leicester>: As in other locations thunderstorms occurred on successive days. On 19th cellars were flooded in the lower parts of town. Tamworth (Staffs) 0.83" in 50 The country extending from Stafford nearly to Wolverhampton has been devastated. Trees have been uprooted 24 Jun 1872 m and riven by lightning and houses unroofed. Globe reports only lightning effects. York Herald

29 Jun, Globe

25 Jun, Staffs

Advertiser 29

Jun

N. Staffordshire: The <<River Blythe>> near <Uttoxeter> overflowed its banks. A culvert under the railway was insufficient to carry the flow and the water rose till it passed over the railway and flood much land in the vicinity. The train from Stoke to Derby approached the flood but did not stop in time and the engine fell down an embankment with one of the seven carriages in which the passengers suffered injuries. In the same area trees were uprooted by lightning and houses unroofed. Gardens have been destroyed by floods.

<Wolverhampton>: The storm was destructive in suburban areas; at <Tettenhall> the fields were submerged several feet deep in water; the houses in the Lower green there were swept by the torrent from the hills and furniture floated about in rooms. Furrows were made more than a foot deep. Low lying places and houses at <Wednesfield> were flooded. At <Penn> the roads and fields were cut up and swamped in many parts.

<Bilston>, S Staffs: A pub had its gable end torn away by the lightning. Many houses in the neighbourhood were

flooded. The neighbourhood of Bradley Bridge was flooded and furniture floated out of houses and the railways at Priestfields were under water.

<Stafford>: The storm travelled from Penkridge to Stafford and the turnpike road was impassable in many places due to the floods and limbs of trees. At Rising Brook a mile and a quarter from Stafford nine large poplars were blown over en masse, the brook at the same time overflowing the banks. Within a space of 300 yards 35 trees were torn up by the roots or broken down. Damage was mainly from the hurricane winds. The streets were covered with water and many houses were flooded. Down the Grey Friars and Foregate Street the water rushed in a stream about a foot in depth. On the Uttoxeter line the rain filled the <Grindley> tunnel to a depth of about 2 feet and up to the floor of the carriages.

<Uttoxeter>: The <<Hockley>> or <<Muckle burn>>, usually insignificant caused great injury. The brook invariably rises with great rapidity after rain and in this storm it swelled to the dimensions of a river. It carried away the ballast of the railway for a distance of 100 yards and left the rails hanging 2 to 3 feet above the ground. A train engine overturned down a steep bank but the whole train did not go over. The driver and stoker were shaken but uninjured. In the vicinity of <Hockley> all the houses for a long distance along Pinfold Lane and Spiceall Street were flooded to a depth of 3 feet. The flood swept over all the gardens on that side of the town destroying their produce. Some bridges were carried away. A shoe manufacturer's in Pinfold lane was severely flooded; sheds were swept down and skins carried away. The Union Inn at The Wharf was flooded. The Hockley tollgate was at the centre of a sea of water which flowed down from <Blounts Green>.

<Rugeley>: A deluge of water descended and flooded several of the streets and for a time rendered them impassable. Houses were flooded and large quantities of mud were deposited in the streets.

<Abbots Bromley>: Many villagers were almost washed out of their houses. Serious damage was done to the roads. A cow belonging to a poor widow was struck and killed by lightning.

<Cannock>: The rain fell in torrents, tearing up the roads till they were nearly impassable. Several houses were struck and one had a gable end knocked in.

<Tamworth>: The streets and roads appeared like rivers. The <<River Tame>> which had only just got within

bounds after last week's floods again overflowed its banks causing damage to the grass crops.

<Newcastle> and <the Potteries>: The rainfall was heavy but there was an absence of the strong winds reported elsewhere.

<Kidsgrove>: The greatest alarm was created in the houses near the railway crossing in Heathcote Street. In the rear of that street is a private road which slopes down from distant hills; the water ran in immense volumes down that road. Several cellars and houses were flooded and some inmates had to be assisted out of bedroom windows.

<Ashbourn>: The brook overflowed its banks and caused one of the greatest floods for years. The lower rooms and cellars of 100 houses were flooded.

7 Jul 1872 <Potteries>: The storm lasted an hour and a half. Considering the violence of the storm the accidents are wonderfully few. At <Etruria>, scores of houses were flooded. The lobbies of Bethesda Chapel at <Hanley> were Birmingham flooded and also some houses in Nelson Place and several other parts of the town. At <Bucknall> the water **Daily Post 9** rushed in great masses through the houses and the banks of the <<Trent>> overflowed. In Hanover Street Jul, Derby stones were torn up out of the road and into Hope Street. At the bottom of Hope Street there was a great flood where the water rushed into the cellars of the brewery. In several houses the water was a foot deep. The telegraph 29 Cauldon Place works was flooded. <Burslem> was heavily visited with lightning damage to buildings. At the bottom of Pleasant Street the water rushing from Enoch Street passed through the houses on the opposite side going in at the front door and out the back. At Martin's Hole the water poured into houses to a depth of 4 feet 6 inches. At <Longport> behind 'The Square' the water washed through every house and at the further side of the railway station the houses were flooded. At <Middleport> the canal overflowed. At <Tunstall> the water burst in at the police station and several private houses. At <Smallthorn> a number of houses were flooded and furniture was carried off. At <Dresden> many houses were flooded, with some nearly to the ceiling. The road at the end of the village was torn as if it had been ploughed for many yards and in some places was several feet deep in water. At <Fenton> scores of houses were 4 and 5 feet deep in water forcing the inhabitants upstairs. The roads under railway bridges were impassable. Several parts of <Longton> were deeply flooded. <Eckington>: There was a remarkable storm of hail and ice which stripped fruit trees and destroyed potatoes. The hail was the size of pigeon's eggs and of all shapes 9 Jul 1872

daily

Jul 1922

<Worksop>: In a thunderstorm a dam burst and flooded cellars in the neighbourhood, some to more than a foot deep, and the meadows. The cellars in the lower part of town were several feet deep in water and houses had

Nottingham Journal 12 Jul Derbyshire Courier 13 Jul		water a foot deep. The < <river ryton="">> was very much flooded. <farnsfield>: Rain came down for an hour in torrents and the main street was like a river. Sheep and cattle were killed by lightning.</farnsfield></river>
11 Jul 1872 Nottingham Journal 12 Jul,	Very severe storm in Sheffield Leicester 0.90" in 40 m	<leicester>: Low lying parts of the town were flooded and water was also into the cellars of those on much higher ground. <bakewell>: Huge streams of water poured down from the eastern and western hills. The stream of water by</bakewell></leicester>
Derby daily telegraph 29 Jul 1922		the church came down with a roar and carried pieces of stone weighing from 4 to 5 hundredweight. In a few minutes the streets were running with water 6 inches deep and two minutes later the depth in The Square was 12 inches. Great holes were washed in the streets.
12 Jul 1872 Nottingham Journal 13 Jul		<nottingham>: The thunderstorm was accompanied by a heavy fall of rain and hail. Culverts were damaged in Bottle lane and elsewhere and streets in some parts of the town were rendered impassable. A house in Poplar was flooded by the bursting of a sewer. Some houses and shops in Walnut Tree Lane were flooded. Several people were struck and injured by lightning. In the low lying Chesterfield Street water got into cellars and in Pump Street, the Lord Nelson the brewing cellar was flooded causing much damage. At Cross Street Meadow</nottingham>
		Platts the rain flooded the shop several inches high. The < <trent>> rose rapidly to a great height. <worksop>: The cellars in the lower part of town were several feet under water and in some cases ground floors were under one foot of water. The <<river ryton="">> was very much flooded.</river></worksop></trent>
25 Jul 1872 Birmingham Daily post 26 Jul , Derby Daily telegraph 29 Jul 1922		<birmingham>: A storm lasted about an hour from 8 to 9 in the morning but started again more fiercely at 6 in the evening but lasting less than half an hour and then again a third storm at 8.30 pm. Descriptions are mainly with respect to the effect of lightning on buildings and people injured. There was no reference to flooding. Walsall: the storm lasted 3 quarter of an hour from 5.45 pm. Water gathered quickly in the railway cutting beneath Park Street extending from the station platform towards Lyttleton Street and delaying trains. Water also accumulated in Station Street so that the water was ankle deep at the station entrance. The lower parts of the town were flooded and much damage done to dwellings and gardens. British Oak at Litchfield Street was flooded.</birmingham>
		<wolverhampton>: With the heavy rain an old sewer was burst and ten houses at the bottom of Darlington Street were flooded to a height of 4 feet. A man was killed by lightning in The Parade. A man was also killed at <pensnett>. <rugeley>: A pool near Fair Oak Colliery burst out and rushed through the streets with fearful rapidity. The</rugeley></pensnett></wolverhampton>

3 Jun 1873 Leicester Daily Post 1873 19 Aug 1873 BR	Coston (E Leics) 1.00 in 1 h	flood swept through Bow Street to the lower parts of the town where it inundated lower rooms and cellars. The roads were badly cut up. At Shugborough Hall the hail broke the whole of the glass in the gardens. <uttoxeter>: The thunderstorm was of long duration starting in the afternoon and continuing through the night. The North Stafford Line was flooded at the point where the station now stands (1922). <nottingham>: In a thunderstorm, hailstones 3 inches in circumference were measured at Highfield house breaking conservatory glass. The thunderstorm with large hailstones was also reported at <market harborough=""> and the storm at <leicester> but no flooding was reported.</leicester></market></nottingham></uttoxeter>
17 Jun 1875 Morning Post 18 Jun, Staffordshire Advertiser 19 Jun		<newcastle lyme="" under="">: Lower portions of the town were completely flooded and three houses were struck with lightning. The storm lasted 3 hours. A local newspaper office was so badly inundated that it was feared publication would not be possible. In the lower part of the town pigs were washed out of their stys. <birmingham>: the lower portions of the town were flooded. A woman was struck and killed by lightning and 17 sheep were killed.</birmingham></newcastle>
18 Jul 1875 Nuneaton Advertiser 24 Jul, Leicester chronicle 24 Jul	Mainly Initial persistent frontal rainfall followed by thunderstorms	<birmingham>: In a thunderstorm for 5 hours flooding occurred mainly at Aston where water was so high in some houses that beds were floating. Boundary walls of the Primitive Methodist Church were washed away and the school and chapel house were flooded. <west haddon="">: The principal streets were speedily flooded and The Green was 2 or 3 feet deep in a short time. Several houses were completely flooded. <winwick>: The street presented the appearance of a swift river carrying everything before it. One of the houses nearest to the water was flooded nearly to the ceiling. <brigstock>: A thunderstorm broke over the village and in an hour's time the lower parts were flooded to a depth of 4 feet. Culverts were forced open and wooden bridges were destroyed and part of the churchyard was swept away. Several sheep and cattle were drowned.</brigstock></winwick></west></birmingham>
20 Jul 1875 Sheffield Daily Telegraph 24 Jul, Leicester	Following widespread heavy rain from 17 to 20 th , thunderstorms occurred in some areas.	Swept away. Several sheep and cattle were drowned. <loughborough>: The market place in the town was flooded. Railway lines were flooded and the ballast washed out from under sleepers by the rising of the <<wreake>>. At <glenfield> 5 miles from Leicester, the brook rose so rapidly and with such force that a railway bridge was washed away. The flood carried away fences and all before it and sheep were drowned. Leicestershire: The flood was the highest known on <<soar>> and tributaries since November 1852 when the</soar></glenfield></wreake></loughborough>

viaduct at Crow Mills was washed down. A man was drowned near <Barrow-on-Soar>. On a railway journey it was observed that 'between <Blaby>, <Aylestone>, <Whetstone> and <Narborough> the country is described as like a sea, the water in some places rolling over hedge tops while hay and grass were seen floating in all directions.

<Kibworth Harcourt> (Leics): The low lying portion was completely submerged and the occupants of several dwellings betook themselves to their bedrooms as their homes were flooded. A house in the lordship of Kibworth Harcourt about a mile from the village was so immersed that the inmates repaired to upper rooms until a vehicle arrived for their transmission to more agreeable quarters.

<Leicester>: There was a thunderstorm on Tuesday between 1 an 2 pm and the storm lasted about an hour. The sewers were quite insufficient to carry off the water and the basements of many houses were filled to 5 to 6 feet deep and in some streets houses were flooded to a depth of several feet. Factories had to stop. The water rushed through Harris's factory in Braunstone Gate like a river. Turner's works and several others were flooded. At the West bridge many hundreds of people must have suffered much inconvenience witht eh water from 1 to 4 feet in depth with people carried home by vehicle and gaining access through windows. Thousands of houses near the Willow Brook, Humberstone road and in the neighbourhood of Abbey Meadow lane were inundated with furniture floating. The Humberstone road, the Pasture, the Abbey Meadow, the Belgrave road district and the West bridge district and the Rifle Grounds were nearly all complete sheets of water. A horse was drowned on the Abbey Meadows. In Gordon Street the elastic web factory was flooded and another factory on Queen Street. The water was nearly 3 feet high in Dorset Street and on the Belgrave Road near Harrison's field. In the neighbourhood of Bow bridge the inhabitants were inundated. The foundations of two new houses in Argyle street gave way. Men were wading about in Holme Street, Little Holme Street, Coventry Street and new Park Street. Coming into New Park Street it was difficult to keep horses on their legs, so great was the current. Emanuel Church was flooded to some depth. The floods in the Leicester area were generally reported to be the greatest since November 1852. BR observer from Dane Hills notes: Thunderstorm, heavy rain, floods in lower part of town 2 feet deep.

<Lutterworth>: It was said there has not been such a flood her for 22 years [1852].

<Ansty>: Water stood to a considerable depth in houses at the bottom end of the town.

<Dishley>: All sheds and outbuildings have been swept away

<Quorndon> (nr <Barrow on Soar>): A man was drowned when a wall at the White Swan Inn gave way and the

Daily Post 26 Jul, Leicester Chronicle Jul 24, Bury and Norwich Post

27 Jul, BR

water rushed in.

<Market Harborough>: the entire sheep market was inundated to a depth of 2 feet.

<Hugglescote>: The water was nearly 4 feet deep in the main road over the New Bridge and at donington the waster was certainly deeper. Considerabel damage has been done to gardens.

<Glenfield>: In the morning residents came down to find their houses already flooded several feet deep. People were carried to the Wesleyan chapel and vicarage at a higher level. A large number of animals were drowned. At its height in some places the water was 6 feet deep.

<Melton>: The <<Scalford Brook>> which runs to Melton and the river were swollen to an unsurpassed level. The road was submerged at Barton End and similarly at Thorpe end. Leicester Street was covered at the lower end and houses and cellars were filled with water. The rate of rise in water level at Thorpe End was so sudden that it gave no time for preparation. A wall next the brook in the Wheat Sheaf yard was washed down and the water rushed along the street like an avalanche causing houses and shops to be flooded. Serious damage was done in Melbourne Street and Sidney Street. The Scalford End was also flooded to a considerable extent with cellars and lower foom inundated. Across the line at the entrance to the Little Dalby and Burton Roads neither people no vehicles could pass. The occupants of houses at both sides of Burton end were kept prisoner for many hours. At the Harborough Hotel and nearly all the houses at that side of the street the cellars were filled and lower rooms flooded. The ballast on the railway line between <Ashfordby> and <Melton> was washed away to such an extent that a good train had wagons toppled.

<Loughborough>: The heavy rain caused a reservoir upstream from the town to threaten failure and the opening of sluices caused a surge of water downstream which caused additional flooding. Great damage occurred in the lower part of town with Mill Street, Swan Street and the rushes receiving the greatest damage but many other places had water feet deep in their basements. The hosiery factory was much damaged and a factory in Mill Street suffered much loss. In Swan Street a liquor merchant, a shoe manufacturer and the Green Man were submerged; in some the water was 4 feet deep. In the Rushes a large number of houses mainly occupied by poorer people were under many feet of water. The primitive Methodist chapel was inundated to a depth of 18 inches. The brook runs under the chapel and the water made its way through the boards rising in jets. The water penetrated into the lower part of Market Place and was 18 inches deep in the cattle market. The station yard was under water and the foundry and dyers were stopped for a time. Hill Street, Ashby street Swan Street, the Rushes and bridge Street were all impassable. The arch of the Brook was laid bare and it was feared

it might give way. Most of the houses in the locality were from 2 to 4 feet deep. Workshops in Mill Street were 18 inches deep. The Island house park was covered with water and the residents were completely isolated. <Nottingham>: Between Nottingham and Newark a great quantity of water is out. At Trent Bridge the waters continued to rise until midday 23 Jul at which time the flood level of 1869 was reached which was the highest since 1852.

21 Jul 1875 BR	Caverswall (S staffs)0.90" in 9 m	
7 Aug 1875		<buxton>: In a thunderstorm rain fell most of the day and caused the <<river wye="">> which runs through</river></buxton>
Derby		Buxton Gardens and town to overflow causing damage to property. In the gardens much damage has been
Mercury 11		done to lawns and walks. Some cellars of hotels were flooded and considerable damage done to stores. The
Aug		highway from the Dales was for some time impassable.
9 Aug 1875 Staffordshire Advertiser 14	Tamworth (Staffs) 0.60" in 20 m	<congleton>: The town had immunity from the storms which affected other locations until this date when it had a heavy thunder and hail storm. The water poured down some of the streets like a river and ran into some of the cellars.</congleton>
Aug		
19 Sep 1875		<hanley> (Potteries): A wall at the Recreation Ground was knocked down by the accumulation of water and on</hanley>
Staffordshire		release flooded houses in Mill Street. The rush of water in Well Street was tremendous and channels of
Sentinel 20		considerable depth have been made and large kerb stones moved. Similar effects were on Bucknall Road. The
Sep		road under the railway bridge at the bottom of Brook Street was under 1 to 2 feet of water.
		<stoke>: Many of the cellars and shops on London road were swamped.</stoke>
		Fenton: Many of the houses were filled to a depth of several inches and in one house the furniture floated.
		<burslem>: Many of the low lying streets were flooded.</burslem>
		<newcastle-u-lyme>: The Iron Market was impassable at the lower part. The drains are insufficient at the</newcastle-u-lyme>
		bottom of Liverpool Road and the causeway was flooded. In the lower part of town many houses were flooded.
22 Jul 1876	Storm lasted only 10 minutes	<mansfield>: A thunderstorm with rain and hail flooded cellars and houses in the lower part of the town. Many</mansfield>
Nottinghams	gave 0.61" ('and much of the hail would escape	shops were flooded; at the Swan Hotel the kitchen bar and parlour were 9 inches deep in water and at the
hire Guardian	measurement')	lower end of Church Street the cellars were filled. At the Eight Bells Inn barrels were floating at the top of the
28 Jul< BR		cellar. Various buildings were struck by lightning.
		<nottinghams: and<="" by="" cathedral="" catholic="" caused="" damage="" huildings="" including="" lightning="" th="" the="" thunderstorm="" to=""></nottinghams:>

<Nottingham>: The thunderstorm caused damage to buildings by lightning including the Catholic Cathedral and

4 Apr 1877 Derby Mercury 11 Apr	Widespread thunderstorms and high winds	seriously injured a railway worker. In some places the hail was as large as marbles. No flooding was reported. <belper>: Rain fell in torrents, speedily flooding a number of houses. <idrigehay>: A circular storm developed, breaking up a number of trees.</idrigehay></belper>
6 Jul 1877		<retford>: The streets were so completely flooded that it was impossible except by wading to enter some of</retford>
Nottinghamsh		the shops on the Square. A woman was injured and animals killed by lightning.
ire Guardian 13 Jul		
26 Jun 1878 BR	Findern (Derby) 1.08" in 1 h	
24 Jul 1878 BR	Arnesby (Leics) 1.08" in 90 m	
6 Aug 1878 Derbyshire Times 10 Aug, Derbyshire Courier 10 Aug, BR	The storm affected much of Derbyshire and South Yorkshire but flooding was reported only in some locations Matlock Bath 2.50" in 2 h	<cromford>: The storm lasted upwards of 3 hours. A number of houses were flooded and in one of the highest parts of the village, Mount Pleasant, a stream of water ran down the hill through the houses. <worksop>: Every road was flooded deeply and many houses flooded. Crops were laid in the fields by the weight of the downpour. <sutton> Notts: Several parts of the town were flooded, some streets being nearly a foot deep while the Brookside and neighbourhood were several feet deep. Many houses were also flooded to a d depth of 2, 3 and 4 feet. Garden crops in the west of the town are severely cut by hailstones, some of which were as large as walnuts. Many windows were also broken. Four houses were struck by lightning and badly damaged and several people slightly injured. <bol> <bol> <bol> <bol> Source: <rain all="" and="" at="" descended="" especially="" floated="" flooded="" furniture="" grates="" hail="" hockly="" houses="" in="" just="" no="" of="" one="" p="" sewage="" sheet="" streets="" the="" torrents="" until="" use="" water.="" were="" windows<=""></rain></bol></bol></bol></bol></sutton></worksop></cromford>
24 Aug 1878		 were smashed by pieces of ice. Pieces of ice were picked up, upwards of an inch square; crops of all kinds were damaged. The storm moved northeast towards <langwith>,< Scarcliffe>, <palterton> and <hardwick> and all that district suffered much.</hardwick></palterton></langwith> <dronfield>: The rain fell such that the streets resembled so many rivers. Much damage has been done to the roads and in some places gas and water pipes have been washed bare. Crops were more or less injured and in some places large quantities of soil have been washed from the fields.</dronfield> <alfreton>: Many roads in the neighbourhood were ploughed up and undermined by the torrents of water</alfreton> <nottingham>: A thunderstorm lasted more than 2 hours. The rain caused a number of cellars of pubs, grocers</nottingham>

Nottingham Journal 2 Sep 8 Sep 1878 Leicester chronicle 14 Sep		and private residences in the lower part of town to be flooded, sufficient for furniture to be floated. The worst case was in Wood Street facing the Cheinton (?) Market including Neap's public house where 10 to 12 houses were fearfully flooded after the bursting of a sewer. The Fire brigade also pumped out the Old English Gentleman pub and 5 grocer shops on Nile Street. <leek><staffordshire>: Two men were killed by lightning and a third seriously injured. <hinckley>: In a thunderstorm lasting 3 hours some low parts of the neighbourhood were flooded. The storm was also reported at market Harborough and Kettering but without reference to flooding.</hinckley></staffordshire></leek>
7 Jun 1879 Wiltshire and Trowbridge Advertiser 14 Jun 11 Jun 1879 BR	No thunder reported but a very severe flood Spondon (Derby): 1.24" in 40 m	<stoke>: There were serious floods between Stoke and Leek with water on fields and at rail line up to the metals. [Thunderstorms were reported at the same time in Rotherham]. <derby>: the heavy rains of the last week have produced disastrous effects in the Derby area. The River Derwent overflowed its banks and also the adjacent canal. Effects were notable at Spondon and Markeaton. <nottingham>: the Trent overflowed and flooded hundreds of houses in the area known as 'The Meadows'. A woman was found drowned in the river.</nottingham></derby></stoke>
3 Aug 1879 Alnwick Mercury 9 Aug Webb et al 2009, Staffordshire Sentinel 9 Aug	Rain in a deluge fell for 4 hours.	<leicester>: The lower part of Leicester was flooded; many cellars were several feet under water. People and animals were killed by lightning. Much damage was done to the Midland line by landslips and the washing away of ballast. The valley of the Soar is one sheet of water for miles. Several streets were submerged to a considerable depth. In Belgrave Road a tram car was carried away by the flood. <birmingham>: the damage done by the storm was mainly due to the floods. The streams overflowed their banks and flooded the low lying parts of the town. Serious damage was done to houses and gardens in Edgbaston. In Chad Valley the gardens were swept as if by a tornado. <lichfield>: The thunderstorm continued for several hours and caused flooding of cellars and lower basements of houses.</lichfield></birmingham></leicester>
16 Aug 1879 Globe 18 aug 9 Jun 1880 BR	Findern (Derbyshire) 0.65″ in	<stafford>: The rivers <<dow>> and <<trent>> burst their banks. At Stafford half the streets are under water and houses flooded in some parts. Access from one part of the town to another is by boats and carts.</trent></dow></stafford>

22/23 Jun 1880 Manchester Evening News 23 Jun, Leicester Journal 25 Jun	30 m Thunderstorms were reported in various parts of the Midlands but generally isolated. Loughborough (Leics) 0.84" in 1 h	<nottingham> : A thunderstorm was accompanied by heavy rain and hail. The lower parts of the town were flooded and several tradesmen suffered loss of stock. Two people were killed by lightning. <leicester>: Lightning struck and set alight St Matthews Church but the fire was extinguished. No flooding was reported. <melton mowbray="">: the thunderstorm lasted an hour and a half and very soon yards, houses and streets were greatly flooded, especially Thorpe-end. The hailstones were of incredible size (as large as marbles) and lay 9 inches deep. The drains being incapable of carrying off the flow, the air was soon charged with an offensive odour. A heifer was killed by lightning.</melton></leicester></nottingham>
1 Jul 1880 Nottinghams hire guardian 2 Jul	Widespread thunderstorms	<radcliffe on="" trent="">: Two bullocks were killed by lightning. No flooding was reported. <derbyshire>: Hailstones nearly an inch in diameter fell and the roads were like sheets of water.</derbyshire></radcliffe>
13 Jul 1880 BR	Findern (Derbyshire) 1.05" in 1 h	
14 Jul 1880 BR, Leicester Chronicle 17 Jul	Market Harborough DR 3.10 Leicester DR 1.21"	<leicester>: A heavy thunderstorm broke over the city at 4 in the morning and rain fell in torrents for more than an hour. Floods assumed alarming proportion in Humberstone road, Belgrave Road and the adjoining streets. Many houses in Martin, Bardolph, Catherine and Dorset Streets were invaded by the water and the last named thoroughfare assumed the appearance of a river. At 9.00 pm on the 14th the water had subsided in Dorset Street but the relief was short-lived.</leicester>
15 Jul 1880 BR, Leicester Chronicle 17 Jul, Sheffield daily Telegraph 16/19 Jul, Grantham Journal 17 Jul, Falkirk herald 22 Jul,	Intense thunderstorms were reported on successive days in Leicester Trent College 1.07" in 30 m	<leicester>: About the same time as the previous day another storm hit the city but with even greater intensity. It rained from 4 am to 8.45 accompanied by thunder. A view from the top of the Museum Buildings showed floods extending along the Soar valley. The floods started again in Dorset street until the whole road was a sheet of water from end to end. By 9.30 a rapid torrent crossing Belgrave Road and passing into the allotments precluded foot traffic. Another stream came down Argyle Street; Gresham Street and Syston Street were also affected [house flooding was not mentioned]. In the New Humberstone district much damage was done; the Willow Brook overflowed its banks and flooded for many miles above Humberstone bridge with damage mainly to crops and gardens. The water rose to a maximum height of 5 feet on the road adjacent to the Humberstone bridge. Some drainage works had been done in the West end which were thought to have prevented some of the flooding However, in Hinckley road the gardens were damaged by the overflowing of a brook running alongside Carlisle Street and the cellars of houses in that street and those adjoining had several feet of water in</leicester>

Stamford Mercury 23 Jul,

them. The Fosse Road near the railway was also under water. The dye works on the banks of the canal were flooded to a depth of several feet. In Braunstone gate and Dunn's Lane the lower apartments of houses were swimming. From Potter and Wass foundry in Braunstone Gate a black stream issued and also affected Harris's Factory. Great Holme Street was impassable and inhabitants took to their upper rooms. At the King Richard's road at the end of the street the water was higher than the window sills of their living rooms. West Bridge Street was, if possible, even worse. Emanuel Church was surrounded but it is erected too high for the water to enter. At the West bridge the canal overflowed and lifted boats on to the towing path. The small streets in the neighbourhood of Bath Lane were also under water and the public bath was also flooded. Inhabitants agreed that the waters were higher than ever before but would have been worse but for the flood scheme partially carried out. The whole area between Soar Lane Wharf and West bridge was a mass of water and the warehouses were flooded. Wood gate was under water from a point just past Abbey Lane to the tramway terminus. Along Aylestone Road meadows between the Gas works and St Mary's Mills were under several feet of water and stood like an island in the ocean. Three railway bridges have been thrown down by the floods, that at Thurmaston being the most serious. [The paper does not say where the other two were]. <Kilby>: The floods were out extensively at Kilby Bridge and a man on a dray was swept into a ditch and he had a narrow escape. <Oadby>: the houses in the lower part of the village were flooded to a considerable depth.

<Lutterworth>: A tremendous storm burst over the town at 4.30 am continuing in torrents for nearly an hour, flooding the cellars and rushing down the streets with incredible fury. The river at the bottom of the town rapidly rose and overflowed submerging the meadows and carrying away hay. It is seven years since a similar flood occurred.

<Wigston>: The lower part of the village was flooded.

<Hoby>: The road from Hoby to Brooksby Station was completely immersed for 100 to 200 yards and was very deep in places. A boy of 16 was drowned when trying to ride through a flooded brook.

<Syston>: A great stream of water suddenly burst on the village, houses were wrecked, walls thrown down and the whole place inundated. Hundreds took refuge in their bedrooms and many were rescued from bedroom windows. Chapel Lane and brook street were impassable. Houses standing near the brook were flooded and inhabitants took to their upper rooms. At Harrison's cottages which stand near the line to Perterborough the

water was 3 feet high. A grocer's shop was inundated a bags of flour completely spoiled. A block of houses on the Leicester Road were also flooded. At Wanlip the river looks like a sea; a party in a trap on the way to Radcliffe when the horse stumbled and was carried away with the trap whilst the party climbed a treeto escape the flood.

<Barkby>: The brook overflowed and many of the houses in the village had several feet of water in the kitchen. The wall which surrounds 'the Hall' was carried away.

<Market Harborough>: The sheep market was completely covered up to 6 feet deep and a boat was commissioned to carry pedestrians. The flood extended from the church to the Peacock hotel. Many cellars contained quantities of water. The flood also stood to a considerable depth from Lubbenham Lane to the Northampton Bridge and the shopkeepers in the vicinity have sustained heavy losses.

At <Langton>, <Melton> and <Bowden> destructive flooding has occurred and in <Leicester> many miles of streets are under water from one to four feet in depth. A tramcar was washed off the rails. Martin, Bardolph, Catherine and Dorset Streets were worst affected with many houses flooded. The storm came on again the following day for 5 hours and the depth was even greater. The water came up to the window sills. It covered Belgrave Road and rushed into the cricket ground. (further details in SDT 19 Jul).

<Ratcliff on Wreake >: The water burst on the mill and part of the walls fell down.

<Kibworth> (Leics): Water was in all parts of the village and it was reported that 'never in the recollection of the oldest inhabitant has the village been visited by any approaching this deluge'. Houses in the area known as 'the city' were flooded to a depth of 2 feet. On the road connecting Kibworth Harcourt with the turnpike the water rose over the hedges. At the station the water rushed between the platforms with great force. At the road bridge the ballast was so washed from under the lines as to stop rail traffic. The overflow of the canal sent an immense flood of water into the meadows creating a great lake such as had not been seen since the canal embankment gave way some years ago [date not specified]. At Little End houses were flooded and two unoccupied premises collapsed. People who had lived high and dry in their houses for 40 years had their hearths submerged.

<Kilby>: The floods were out very extensively and covered the road to such an extent that a man in a dray had a near escape from drowning when the dray was swept from the road into the ditch.

<Wigston>: Flooding was reported in the lower part of the town.

<Syston>: A viaduct carries the railway over a small brook; it fell with a loud crash into the river 30 feet below

just after a train had passed

<Blaby> and <Warborough> are mostly under water.

<Great Glen> (Leics) The Greyhound Inn which stands near the confluence of the River Sence and the Burton Brook had 6 feet of water in the rooms and pillars at the entrance to the hall were thrown down.
<Melton Mowbray>: A man was drowned in the principal street. The water rose to a considerable height in the lower part of the town. Valuable horses in a stable had to be removed when the water depth was 3 feet. Several houses were injured and the bridge at Thorpe end was destroyed. SM reports: For a short time walls and other impediments confined the water to the northeast part of the town. Thirty yards of walls at the Wheatsheaf premises were the first to give way then others followed and then the bridge over the brook at Thorpe-End. The water flowed into Burton Street where it quickly became 5 feet deep. Two men were carried off but rescued. The porter's house at the railways station gave way and furniture floated from upper rooms into the flood. A man was drowned nearby.

The whole valley of the <<Soar>> from Leicester to Loughborough is described as an inland sea <Bottesford>: The town was visited by thunderstorms on three successive days. In neighbouring <Normanton> with a storm of rain and hail the streets were flooded to a depth of 4 feet. On 15th the thunderstorm was embedded in a longer spell of rain. The <<River Devon>> overflowed; the ford near the church was like a sea and the footbridge was lost to view. It later was washed away with the gas pipe. Then the <<Winterbeck>> overflowed and the flood swept over the west end of the village. Houses and workshops were flooded. The approach to the new station was cut off by the flood. All access to The Green was cut off and the water reached the level of the high bridge which is 7 or 8 feet above the bed. The present flood is the greatest one known here since the memorable one in 1828. A lead plate on the stone bridge notes the level in July 1828. This one was 2 feet lower. Much damage was also done at a mill at <Easthorpe>.

<Twyford>: The thunderstorm lasted several hours. Fords and bridges speedily became impassable. The flood was greater than recollected by the oldest inhabitant. Many of the bridges were broken or much damaged. The flood rose with terrible rapidity. One farmer had 20 dairy cows washed out of his yard (but they were saved). The same farmer lost several pigs. Some houses were almost cleared of their contents. In the village one hundred yards of a wall were washed down and a part of the main bridge with it.

<Loughborough>: The storm commenced soon after midnight and lasted till nearly 9 o'clock. Thunderstorms and very high floods; some bridges on the Midland Railway washed down, and traffic temporarily suspended.

Many tons of hay floated away and great damage done to property. Traders coming to the market through<Cotes> had water up to the horse's flanks and similarly at <Stanford> there was one sheet of water stretching towards Moor Lane and the railway station. A seven year old child was drowned when he fell into the rushing stream. Near the station the water flowed into Railway Terrace at the foot of the railway bridge on Nottingham Road and began to flow into the station itself and along the line. Ballast and sleepers floated down and trains were stopped. The water rushed through the station between the platforms reaching 4 feet deep. The flood extended across the line covering the recreation Ground and Hughes Ironworks. Cartwright and Warner's Mill was gradually submerged. The duke of York Inn, the cellars and the skittle alley were filled. All the houses in Railway Terrace were flooded. The Upper Mill in Loughborough has been flooded for the first time. The flood far exceed the dimensions of the flood 5 years ago and never since 1852 has such a flood been witnessed.

<Quorn>: the stream which flows through the village green overflowed and houses in the vicinity including the White Horse were so flooded that occupants had to take up residence upstairs.

<Trentham>: At this suburb of <Stoke on Trent>, forty sheep were killed by lightning in one field and in other districts smaller numbers of sheep have been killed. Trees have been destroyed in every district of North Staffordshire.

<Melton Mowbray>: Another thunderstorm with hail and rain visited MM but without reported flooding.
However, a man and a boy were killed by lightning at hose whilst sheltering under a tree.
The storm was also reported at |Leicester and Nottingham but without reports of flooding.
<Desford>: In another thunderstorm Desford was inundated and the houses filled to a depth of 5 feet. The water flowed over the Burton branch of the Midland Railway interrupting the traffic. The rails at <Rothy> were also under 6 feet of water. Hail did considerable damage.
<Cosby>: Although the elevated position of the town usually prevents accumulation in the streets but the drains were unable to carry off the water which flooded down Stockwell Head and Bond street into the Borough where it was over a foot deep.
<Leicester>: Rain again fell heavily and highways were under water to 2 to 3 feet at <Barrow on Soar>, <Quarndon>, <Rothley>.

17 Jul 1880 Dundee Advertiser 20 Jul, Staffordshire Sentinel 24 Jul 26 Jul 1880 Leicester Journal 30 Jul 27 Jul 1880 Worcester chronicle 31 Jul, COL Aug 1980,

Thunderstorms with severe

lightning was reported over

nearly all the towns of Stoke

flooding reported

and the Potteries but with no

6 Aug 1880 Worcester

Journal 7 Aug 27 Aug 1880 BR		< Oakamoor> (N Staffs): An appalling and peculiarly local thunderstorm visited the < <churnet>> Valley at Oakamoor, nothing like it having taken place for a number of years. Considerable consternation was exhibited by the villagers. 1.72" fell in an hour. At Cheadle, 3 miles distant, only a few drops fell, and but little rain comparatively fell in the other parts of the valley adjacent.</churnet>
30 Aug 1880 BR	Ashby Magna (Leics) 1.72" in 2 h	
19/20 Sep 1880 Staffordshire Sentinel 20 Sep		<leicester>: In very severe thunderstorms the valley of the <<river soar="">> for about 15 miles is flooded several feet deep. Roads are impassable at Crossington, Blaby, Barrow and Quorndon. <new mills=""> (N Derbyshire): Accompanying a thunderstorm on Whitle bank above Watford Villa a rush of wind 50 yards wide and half a mile long uprooted six large trees; cottages were struck and slates hurled from their roofs.</new></river></leicester>
23 Aug 1881 Leicester Journal 26 Aug,		<buxton> A horse was killed by lightning. <ashby de="" la="" zouch="">: In a thunderstorm there was a heavy fall of rain and hail which lasted nearly an hour. The floods were very great in Upper and Lower Church street. Several other parts of the town were inundated and roads were impassable. Under the railway bridge on the Tamworth road there was a great quantity of water. A brick causeway was washed away in St Helen's Churchyard. There was much damage to corn in the</ashby></buxton>
Nottinghams hire guardian 26 Aug		neighbourhood. <nottingham>: During the night persistent rain fell and continued at intervals until about midday. Shortly before 2 o'clock a thunderstorm broke out and the heavy rain continued for about an hour and the culverts of many of the streets were unable to carry the water. Many cellars were flooded to several feet on St Ann's Well road (a persistent flood problem). Low lying houses in Beck Street were also flooded. The canal overflowed its banks. Damage to crops was reported at <bingham> and <radcliffe on="" trent=""> and <colwick>. The <<trent>> and <<soar>> did not overflow their banks but many of the local streams rose so rapidly that several fields were converted to swamps. <mansfield>: A number of houses were flooded.</mansfield></soar></trent></colwick></radcliffe></bingham></nottingham>
23 May 1882 Birmingham daily Post 24 May		<walsall>; The flood descended in such volumes as to flood the streets and was accompanied by hailstones as large as marbles. There was considerable loss to stallholders in the market place. [The storm was also reported in Wolverhampton, Coventry, Stafford etc with lightning effects but no reference to flooding].</walsall>
2 Jul 1882 Taunton courier 5 Jul		<walsall>: The storm rainfall was the heaviest of the season and lasted 3 quarter of an hour. The rain exceeded the capacity of the drains to carry it away and the station was flooded.</walsall>

9 Jul 1882 Globe 10 Jul		<nottingham>: Rain and hail fell heavily and in some low lying parts of the borough houses were flooded.</nottingham>
25 Jun 1883 Newcastle courant 29		<new mills=""> north <derbyshire>: At the Midland Station the line was blocked by debris washed from the roads. Many houses and mills were flooded and great damage was done to the roads.</derbyshire></new>
Jun 29/30 Jun 1883 Birmingham daily Post 2 Jul, Leicester chronicle 7 Jul, BR	Nottingham 0.49" in 25 m	<birmingham>: A violent downpour of rain continued for one hour. In Steward Street a row of nine houses were badly damaged some of them seriously. The cottages are near the Board School and 50 yards from the road. Underneath the buildings runs a deep sewer which became choked by the heavy rain so that first the floor of the second house was forced up and the water boiled madly from the culvert and in a few minutes the kitchen was several feet deep in water. A young man had to escape from a upstairs window as the door was blocked by the flood. The other houses were similarly affected. A second sewer burst in the gardens and pigs had to be rescued. It is only about 18 months since the houses were similarly flooded. Hailstones which fell were large and of irregular shape causing great damage to conservatories. The storm was also reported at Wolverhampton, North Staffordshire and Dudley but without reference to flooding. <alcester>: The thunderstorm was accompanied by large hailstones nearly as large as ordinary marbles. Numbers of windows were broken in the neighbouring parish of <coughton>and a horse was killed by lightning. <hinckley>: Although Hinckley was only on the edge of the storm the rain flooded streets in the lower part of the town. Hailstones ½ inch in diameter fell but to the north and west hailstones of enormous size fell in <stoke golding="">, <shenton> and <market bosworth="">. The storm came from the south and windows facing that direction were shattered. Some of the hailstones measured 4 inches in circumference and after the storm had ceased weighed 3 oz.</market></shenton></stoke></hinckley></coughton></alcester></birmingham>
3 Jul 1883	East Stoke (Notts) 1.45" in 30 m	Castle Donington>. Windows were similarly broken by masses of ice of integular shape.
8 Jul 1884 Tamworth		<birmingham>: Hailstones were of immense size and the force of the downfall was sufficient to break glass in several parts of the town.</birmingham>
herald 12 Jul, grantham		<castle bromwich=""> and <washwood heath="">: Torrential rainfall caused roads to be inundated and almost impassable.</washwood></castle>
Journal 12 Jul		 <crewe>: A boy was killed by lightning.</crewe> <melton mowbray="">: Heavy rainfall occurred but because of the work done to watercourses around the town</melton> 'the risk of floods is now greatly reduced'. At <little dalby=""> much damage was done by the hail.</little>
9 Jul 1884	Three days of thunderstorms but in Derbyshire more	<matlock bath="">: the rain descended from the hillsides on the Parade carrying with it tons of soil and gravel,</matlock>

Buxton Advertiser 12 Jul, BR	severe on 9 th Thrumpton (Notts) 0.70" in 15 m Hodsock (Notts) 1.34" in 80 m	thus blocking traffic. Several shops and the Royal Hotel were flooded. At <ible> nearby, 4 cows were killed by lightning and 7 cattle between <elton> and <winster>. At many other places cattle and sheep were killed but there is little reference to flooding. <hayfield>: So great was the downfall of rain that the rivers <<kinder>> and <<sett>> from Kinder Scout brought down great quantities of sand and debris and many fields were flooded</sett></kinder></hayfield></winster></elton></ible>
13 Jul 1884 BR	Mansfield (Notts) 0.69" in 30 m	
9 Aug 1884 BR	Duffield (Derbyshire) 1.75" in 27 m Milford (Derbyshire) 1.30" in 35 m Longton (Stoke on Trent) 1.63" in 2 h 30 m Cropwell Grove (Notts) 1.57" in 4 h	<duffield> (Derbyshire): About 4 p.m. in less than half an hour 1.75"of rain fell. Large hail stones, some about the size of a pigeon's egg, fell during the storm.</duffield>
15 May 1886 Aberdeen press and Journal 17 May	Flooding was widespread in England and Scotland. Not a flash flood. No thunder was reported	<nottingham>: The overflow of the <<trent>> caused the inundation of the southern part of the town comprising 3000 houses.</trent></nottingham>
7 Jul 1886 BR 13 Aug 1886 Stamford mercury 20 Aug	Leicester 0.57 in 23 m Severe flooding was reported at Bolton with inmates escaping from upstairs windows	<derby>: So great was the deluge that considerable flooding occurred in various parts of the town, notably at the Midland Station where the sunken hotel passage was submerged.</derby>
4 Sep 1886 Glasgow Herald 7 Sep	Thunderstorms were widely reported with lightning damage but few reports of flooding	<hanley>: A heavy rainstorm caused the embankment of the Trent and Mersey Canal to give way with the water carrying immense stones and trees into the Trent.</hanley>
9 Jun 1888 Sheffield Evening Telegraph 9 Jun	° 0	<worksop>: The rain was of short duration, a mere half hour but it deluged everything. In less than a quarter of an hour from the start streets in all parts of the town were impassable, Bridge Street, Eastgate, Victoria Square, New Road End and the crossroads near the Abbey Gateway where the water rushed along with great speed. Scarcely a tradesman in the town escaped damage; in some of the houses the water was 3 feet deep and extinguished the fires. Most of the cellars were flooded. The gardens have all experienced serious damage. <bilby>: A waterspout was seen in the neighbourhood moving in a northerly direction towards Worksop and</bilby></worksop>

28 Aug 1888 Herts and Cambs Reporter 31 Aug		Darfoulds which might explain the exceptionally heavy rainfall in Worksop. <derby>: A storm of unusual severity occurred for several hours. <mark>The River Derwent rose some feet in the</mark> course of a few minutes sweeping away quantities of hay.</derby>
5 May 1889 Birmingham Daily Post 6 May, BR 7 May 1889 Leicester Journal 10 May	Widespread thunderstorms occurred in the Midlands and elsewhere but with limited reports of flooding. Uttoxeter (Staffs) 1.39" in 3 h	<walsall>: A thunderstorm was accompanied by hail the stones being as large as horse beans or small marbles. <rugeley>: A thunderstorm visited the Cannock chase area including the villages of <hazel slade="">, <the Ridwares>, <colwich>, <colton>, and the valley of the Trent. The streets were flooded in the towns and where the drains were inadequate houses were flooded. The brooks from the Chase were swollen and the Trent was rising rapidly. At <hednesford> and <cannock> the culvert openings were blocked with sand and gravel washed from the roads and in some places the banks were completely demolished. In higher levels of the railway notably at Rugeley Town Station the ballast was washed into the roadway beneath. <brereton>: Six houses in Talbot Road were flooded. <melton mowbray="">: A thunderstorm with rain and hail caused flooding in houses at Thorpe End as well as the primitive Methodist Schoolroom through the overflowing of the drains.</melton></brereton></cannock></hednesford></colton></colwich></the </hazel></rugeley></walsall>
24 May 1889 Sheffield Daily Telegraph 25 May 29 May 1889 Derbyshire Times 1 Jun 2 Jun 1889 Birmingham Daily Post 3 Jun, Staffordshire Sentinel 3 Jun,	'Four severe thunderstorms have occurred in the last 30 hours'. Reports are mainly from S Yorks	 <tideswell>: The rain descended in torrents and many houses and cellars were flooded and the streets were for some time totally impassable. It is 8 years since we have had a similar flood.</tideswell> <codnor>: A woman was killed by lightning in her house.</codnor> <newark>: Five bullocks were killed by lightning.</newark> <coston> (Leics): A young man was killed by lightning leaving a 14-year old widow.</coston> <langwith>: In a thunderstorm, most of the houses were flooded several inches deep and much damage was done to crops trees and property.</langwith> Birmingham: there were two thunderstorms during the day. In the morning storm suburban streets were flooded owing to the rapidity of the downpour. <lichfield>: Rain fell in torrents and the hailstones were of remarkable size.</lichfield> <stafford>: the neighbourhood was visited by two thunderstorms with hail the size of which has not been experienced for some years. The hailstones were the size of marbles and some were larger and after the storm lay to a depth of a couple of inches. One was picked up which measured 5 inches in length. Houses in the streets of Eastgate were riddled. In the main street of the town many windows were broken and water getting</stafford>

Staffordshire		into stores and shops invaded the stocks. The county asylum lost 1000 panes and SC lists a large number of
Chronicle 8		buildings which lost large numbers of panes.
Jun		<stone>: Some of the pieces of ice were 2 inches across causing great loss of glass.</stone>
		<sandon>: The turnips on some of the farms were washed out of the ground. The breakage of glass was not so severe here.</sandon>
		<great haywood="">: there were two severe thunderstorms. In the first storm in the morning scores of houses were flooded with the washing up of roadways and the undermining of walls. The latter storm with hail was very destructive of fruit trees and windows.</great>
		<penkridge>: The hailstones were as large as walnuts and some even measured 5 and 6 inches round. Nearly every window was broken on the side exposed to the wind.</penkridge>
		Weston under Lyelard>: there was very little hail but four deer were killed by lightning in Weston Park and cattle and a horse were killed.
		<church eaton="">: Rain fell copiously flooding the village in many places, the drain pipes being too small to carry the flow away.</church>
		<burslem>: many low lying places were flooded and several houses were struck and damaged by lightning. <alsager>: the Arms Hotel was completely deluged by the current of water from the main road. Lightning struck and damaged buildings and a horse was killed.</alsager></burslem>
		<cheshire>: There was a dense shower of solid lumps of ice some of which measured 1½ inches in diameter. Scores of hailstones 2 and 3 inches in circumference and nearly as large as hen's eggs were picked up.</cheshire>
28 aug 1890 Hoa BR ^{40 n}	ar Cross (S Staffs) 0.76" in m	
	dern (Derbyshire) 1.37" in m	
15 Jun 1891 Retf BR	ford 0.83" in 25 m	
	despread damage and aths from lightning	<loughborough>: There was extremely heavy rain for about ¾ hour with nearly 2 inches being registered between 4.30 and 6.00. The cellars of a textile factory were flooded as well as numerous private cellars especially in the Rushes and Cherry Orchard areas. The Derby Road was covered with 3 feet of water and the adjoining public houses found their barrels of beer disturbed by the water. On the other side of the market Place the water ran 2 or 3 yards wide. At the junction of Meadow Street and Clarence Street the water spread widely. In the cherry orchard district the streams from Hulme Street and Cobden Street met at Peel Street</loughborough>

which lying somewhat low was soon under 4 feet of water. Here and in freehold Street the water got into cellars and also in some cases in through the front door. On the Nottingham Road near Clarence Street, there

was similar flooding, including houses opposite the Greyhound Hotel. The Liberal Club was slightly flooded. A furniture business was flooded in Derby Square.

<Hathern>: A severe thunderstorm affected the village and caused floods in several parts of the parish. The water rushed down the dyke from the fields on Shepshed Hills and rushed through the gardens and house of Poplar House. Near the Anchor Inn the water covered the road 2 feet deep and flooded a grocer's, a tanyard and other shops. The Green and neighbouring houses were soon covered with water. Houses in Hawke's Yard were flooded to a depth of 2 feet. Large holes have been washed in the roads.

Street and Union Street were flooded. In Bass' brewery yard the water was from 12 to 18 inches deep.

<Burton on Trent>: The rain descended in such volumes that the lower parts of the borough notably in Guild

<Rugeley> (Staffs): Much damage was caused by the storm and most of the streets were flooded owing to the brook which flows from Cannock Chase through Hagley Park to the town overflowing in the Sheep Fair. A watercourse a few inches deep formed in the roadway and most of the tradesmen suffered severely from the flooding of cellars. Fish were seen floating about in Market Square.

<Burton on Trent>: The storm was very disastrous on life and property. A man was killed by lightning at Barton. <Hoar Cross> (E Staffs): Thunderstorm with very heavy rain (3.00"), which flooded many houses. <Belper> (Derbyshire). An unprecedented rain of 3.53 in. The river <<Derwent>> was flooded from 9.30 a.m. on

29th, but it was not a great flood

<Walsall>: The thunderstorm was accompanied by large stones and the thoroughfares were almost flooded. Hailstones were measured at nearby <Bloxwich> at 7/8 inch in circumference. As elsewhere the storm was welcomed after a long drought.

		١
25 Jun 1891 Birmingham Daily Post 26 Jun	Widespread thunderstorms with lightning damage but with only limited accounts of flooding Willington (Derbyshire) 1.20" in 1 h Findern (Derbyshire) 0.80" in 1 h Loughborough 2.00" in 90 m Burton 1.50" in 2 h Elvaston (Derbyshire) 1.50" in 2 h	
1 Jul 1891 BR 8 Jul 1891 BR 28/29 Jun 1892 Birmingham Daily Post 30 Jun, BR	Nottingham 1.10" in 90 m Thurcaston (Leics) 0.51" in 5 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.	
17 May 1893 BR	Findern (S Derbyshire) 0.86" in 2 h	
14 Jun 1893 Walsall advertiser 17	Brewood (S Staffs) 2.38" in 2 h	< \

Jun 2/3 Jul 1893 Lincolnshire Chronicle 7 Jul, BR, Birmingham Daily Post 4 Jul, BR	Widespread thunderstorms Tipton Staffs rainfall estimated at 4 to 4.5" Normanton-on- Wolds (Notts) 0.55" in 32 m	<leicester>: A young man was killed by lightning. <hanley>: One man was killed and four injured by lightning. The storm resulted in two fatal accidents and several injuries at Stoke on Trent. There were no reports of flooding</hanley></leicester>
3 Aug 1893 BR	Rotherby (Leics) 1.47" in 90 m Waltham on the Wolds (Leics) 1.60" in 2 h 10 m	
10 Apr 1894 Derby Mercury 11 Apr 10 Aug 1894 BR 26 Aug 1894 BR	Averham (Notts) 1.30" in 22 m Findern (S of Derby) 0.57" in 30 m	<alfreton>: Heavy rain was accompanied by hail and several houses were flooded in the lower part of King Street. In one or two instances the flood reached a depth of several feet and furniture was floating about. The storm lasted an hour and a half.</alfreton>
26 Jun 1895 Southern Echo 27 Jun, Lichfield Mercury 28 Jun, Tamworth herald 29 Jun, Stamford mercury 5 Jul 22 Aug 1895 Portsmouth		<crewe>: Hailstones as large as marbles fell. <burton on="" trent="">: A deluge of rain flooded many of the principal streets <tamworth>: The rain was accompanied by hailstones as large as marbles and the streets were quickly flooded. At Aldergate the water was over a foot deep and found its way into a shop. At the Bell Inn there were several feet of water in the cellar. Fowls were drowned by the rain. Bolebridge Street and Lichfield Street and other low lying thoroughfares were flooded. Forty years ago a similar storm struck and on that occasion Aldergate was also flooded. <burton on="" trent="">: A thunderstorm caused flooding of many of the principal streets. Numerous buildings were struck and several people injured. <loughborough> A horse rider was killed by lightning and his horse.</loughborough></burton></tamworth></burton></crewe>

the hail lay several inches deep. The entire crop of fruit is destroyed. At Cresswell Eyre's millers dam burst and the houses and streets were flooded. <chapel en="" frith="" le="">: The storm was accompanied by hailstones of immense size and pieces of ice. For half an hour the streets were deluged the sewers being unable to discharge the large volume of water. Several houses in Back lane were flooded. <staveley>: The much need rain fell in torrents and caused the culverts and drains to speedily overflow. Many low lying places were flooded. <alfreton>: The nail did damage to gardens some of the hailstones being half an inch in diameter. At <blackwell> a number of houses were flooded. <mansfield>: In Mansfield sewers were burst and the pavement lifted up. Houses were flooded from the River Mann. Storms also affected <langwith>. <scarcliffe>: The streets were flooded and the water rushed into houses.</scarcliffe></langwith></mansfield></blackwell></alfreton></staveley></chapel>	in ses ny
28 Apr 1897 Salt (Staffs) 1.04" in 1 h BR 21 Jul 1897 21 Jul 1897 <birmingham><aston>: The storm affected Aston and outlying districts of Warwickshire. The road near Kynoch and Co Ammunition works were speedily flooded several feet deep and the hundreds of employees found their egress to the works blocked which extended across the intervening country to the river. Many houses in the</aston></birmingham>	heir

Standard 22 Jul		< <tame>> Valley were flooded.</tame>
5 Aug 1897 Staffordshire		<potteries> : There was a tremendous storm of thunder lightning and rain, which exceeded anything that has occurred since Wakes Wednesday about 25 years ago.</potteries>
Advertiser 7 Aug		<hanley>: the downfall of rain was heaviest and torrents of water ran down the streets and washed the roads and pavements. It was accompanied by hail.</hanley>
		<burslem>: The water found its way on to the railway and threatened to do serious damage. <brindley ford="">: A woman was killed by lightning.</brindley></burslem>
26 Jun 1898 BR	Nottingham 1.08" in 2 h	
19 Aug 1898 Morning Post 20 Aug, BR	Many cases of heat apoplexy occurred mainly in London. Leicester 1.05" in 35 m	<leicester>: The rain and hail fell in such torrents that several parts of the town were speedily flooded. Houses were inundated and cellars flooded.</leicester>
20 May 1899 Dundee Advertiser 22		<tamworth>: Delays were caused to the London and North Western Railway by a thunderstorm which washed up a portion of the permanent way near Tamworth. A goods train was derailed near Atherstone [but it is not clear whether this was caused by the flood].</tamworth>
May 14 Jul 1899 Leicester Chronicle 15		<enderby>: It was one of the worst storms for many years. The rain was accompanied by a good sized hail and fields orchards and gardens were damaged. Some of the streets and houses were flooded. At the Liberal club the water washed in the back way.</enderby>
Jul 11 Jun 1900		Stoney Stanton>: The grates were inadequate to carry off the current so that many houses were flooded. At Howe's factory in a valley on the south side of the village the stock was much damaged from the flood. Tamworth>: Many houses in the lower part of the town were flooded and the river (Tame?) overflowed its
Birmingham		banks. Large hailstones fell and damage was done to young crops and market gardens.
daily Post 12/13 Jun,		Hailstones up to about 60 mm were observed in Leicestershire on 11th when both the east and west of the county were affected by separate swaths of damage.
Gloucester		<birmingham>: Hail as large as marbles fell and flooding of streets and cellars did some damage. New Street</birmingham>
citizen 13 Jun, western		was flooded at one place nearly a foot deep. In Heath Mill Lane and Montgomery Street the pressure burst the drains and tore up the streets. In all parts cellars were flooded. In Newtown Row, Aston High Street and
Chronicle 15 Jun, Leicester		neighbouring thoroughfares the water swept from higher areas in torrents which carried into houses with mud and sand.
Chronicle 16 Jun, BR		<walsall>: the streets in some parts of the town were flooded. <hawick>: the streets were flooded.</hawick></walsall>

<Newcastle under Lyne>: Many houses in the town were flooded to a depth of 2 to 3 feet. It was said to be the most violent thunderstorm there for 50 years.

<Kidsgrove>: The heavy rain was accompanied by huge hailstones. The water rain down the main street like a swollen river; a culvert burst near the Harecastle Hotel which was flooded along with the Roebuck Hotel. The water swept down the main road to Pooley's Foundry at Harding Wood. A colliery dynamite store was struck by lightning and exploded causing much damage to windows of surrounding buildings.

<Leicester>: many streets in the lower part of the town were inundated especially in the Blegrave district. Manholes and drains were quickly flooded and water ejected into the streets. The residents from Checkett's road, Melton road and Flax road appear to have suffered most.

<Ashby Magna>: Hailstones were like lumps of ice some measuring 6 ½ inches round causing much damage to glass.

<Ashby de la Zouch> (Leics): Terrific hail storm and 1.73" of rain. Every bit of glass about was smashed.

<Hallaton>: 'I can vouch for a hailstone 7 ½ inches and weighing 6 ½ oz. One man told me he measured one 9 inches round'.

<Broughton Astley>: Hailstones were larger than walnuts. Some were measured at 2 ½ inch diameter, longest way of oval. It lasted fully a quarter of an hour and many panes of glass were broken.

<Ratby>: the village streets were flooded over one foot. Many windows were broken by hail.

<Enderby>: Hailstones were quite as large as hen's eggs. The stones were of various shapes and one picked up was somewhat flat and measured 7 inches round. As elsewhere much glass was broken.

<Kegworth>: Many houses especially in Borough Street were flooded.

<Belton><Rutland>: Hailstones were of large size, some of them measuring 7 inches in diameter [I think they mean circumference}. Hardly a house escaped having windows broken. Four stones brought to Uppingham, a distance of 5 miles, and weighed 1 lb.

<Somerby><Leics>: Hailstones were so large that they could not be put into a tumbler (another account a beer glass). Some of them weighed 3 oz. Enormous damage was done to growing crops and fruit trees. Many Leicestershire farmers lost sheep and cattle and greenhouse were damaged by heavy hailstones. <Northwich>: The streets were flooded.

Ashbourne 1.58" in 90 m 12 Jul 1900

BR 20 Jul 1900 London evening standard 21

<Leicester>: A thunderstorm lasting 4 hours broke over Leicester causing floods in several parts of the city while hailstones of abnormal size fell doing damage to property and working havoc on fruit trees. Many houses in the low lying district of Belgrave and Humberstone were flooded.

Jul, Leicester Chronicle 28 Jul 23 Aug 1900 Birmingham daily Post 24 Aug		<west bromwich=""><oldbury><smethwick> and adjoining parts of the <black country="">: A violent thunderstorm occurred with a downpour of hail and rain. In many parts of West Bromwich the streets were flooded, the sewers being unable to carry the flow. Considerable damage was done to the roads. <walsall>: there was a remarkable hailstorm with hailstones of exceptional size. The centre of the town was white over.</walsall></black></smethwick></oldbury></west>
14 Aug 1902 BR	Kings Heath (Birmingham) 0.80″ in 40 m	
5 May 1903 Gloucester Citizen 6 May, St James Gazette 6 May, Lichfield Mercury 8 May		<lichfield>: Rain fell in torrents, the streets were flooded and many houses inundated. Over ¾ inch of rain fell and the inhabitants of beacon Street were put to much inconvenience by the flooding at the nearby foundry where the water was 2 feet deep. Wheel lane was also rendered impassable. <newark>: Streets were flooded owing to the drains being unable to carry off the tremendous rush of water. Hail did enormous damage to fruit trees. <norton><leics>: A perfect deluge broke out causing considerable damage from the floods <desford><syston>: Sheep and cattle were killed by lightning. <winkburn>: Eight sheep were drowned before a rescue could be attempted. The flood rose so rapidly they soon resembled canals and water poured into shops and dwellings.</winkburn></syston></desford></leics></norton></newark></lichfield>
11 Jul 1903 Leeds mercury 13 Jul, Derby Daily Telegraph 13 Jul, Grantham Journal 18 Jul, BR	Temperatures of 84F were recorded in London with deaths from sunstroke	<matlock>: The temperature fell from 79F to 60F in a thunder and hail storm. Torrents came rushing down from the hills and made Bath Parade into a river, flooding shops and houses and doing great damage. <alfreton>: Streets and houses were flooded where large hailstones broke windows. Large hailstones also occurred at <wingfield> and <newthorpe>. <leicester>: Hailstones as large as walnuts fell and a woman was killed by lightning. <sutton ashfield="" in="">: Many houses were flooded and rain accompanied by large hailstones fell for half an hour. The streets were transformed into a running stream. Four houses were struck by lightning. <newark>: A hurricane of hailstones broke the windows of houses. They were hurled by a northerly gale with great force. The ice was from half an inch to an inch and a half square and with jagged edges. The drains being unequal to the demands upon them the roads were speedily flooded. The storm of ice lasted about a quarter of an hour. The roads were inches thick in ice blocks. In nearly every shop and house facing north the windows</newark></sutton></leicester></newthorpe></wingfield></alfreton></matlock>

were shattered; it also affected churches, chapels and public buildings. 3800 diamond panes in the

		Perpendicular parish church were broken. Gardens and fruit were destroyed.
		<neivark>: In a severe hail storm in whole streets not one house escaped broken windows.</neivark>
		<darley hall="">: The storm only just touched this place. In half-an-hour 0.45" of rain fell, with <mark>hail stones three-</mark></darley>
		quarters of an inch in diameter. It was very bad in Matlock and <bonsall>.</bonsall>
18 Jul 1903, Bromyard news 23 Jul	Betley (SE Crewe)2.53" in 50 m	<buxton>: In the Spring gardens and the lower part of town the grids failed to take away the volume of water and in consequence several shops were flooded and damage done to goods. At the new Opera House the water made its way through the roof and did much internal damage.</buxton>
2 Sep 1903 Belper News 4 Sep	Peak District was visited by a severe thunderstorm	<buxton>: The <<river wye="">> overflowed its banks and damage was done in many places. A main burst in front of Buxton Post Office. The roads are washed up in all directions.</river></buxton>
27 May 1904 Nottingham Evening Post		<bolsover>: A severe hailstorm passed over East Derbyshire and the hailstones were of exceptionally large size. The storm lasted nearly half an hour and fruit crops are practically ruined in <scarcliffe>, <heath> and <glapwell>.</glapwell></heath></scarcliffe></bolsover>
28 May		A number of cattle were also reported killed in Leicestershire.
		<nuneaton>: The thunderstorm occurred around midnight and flooded a number of thoroughfares including the main road to Coventry at Collycroft.</nuneaton>
25 Jul 1904 Birmingham		<northwich><cheshire>: many of the streets especially in the centre of town were flooded. At the corner of Cross Street the water was 2 feet deep and shops and offices were flooded.</cheshire></northwich>
Daily gazette		Whitchurch>: The High Street was like a river and in many houses the water was knee deep.
		<birmingham>: The storm was especially severe in the <handsworth> district where the roads were like rivers.</handsworth></birmingham>
22 Aug 1904 BR	In a series of thunderstorms, which commenced on the previous day, and continued into the next, associated with a depression which passed eastward across the south of Ireland and of England. DR Newton Harcourt 2.09 Blaby 2.12 Glen Parva 1.71 Leicester 2.17 Humberstone 2.30 Thornton Reservoir 2.11 Thurcaston Rectory 2.08	

27 Jun 1905 BR	Salt (Staffs) 1.52" in 1 h	
9 Jul 1905 BR	Hoar Cross (Burton on Trent) 1.52" in 1 h Ashbourne (Derbys) 1.14" in 1 h and 1.66 in 4 h 12 m Lichfield 1.63" in 90 m	
28 Aug 1906 BR	Burton on Stather 0.84" in 20 m	
8 May 1906 Sheffield Daily Telegraph 9		<buxton>: Rain never fell so heavily before and the thunder was terrifying for 20 minutes. Thoroughfares were quickly rendered impassable. Houses were flooded in Dale Road and in some instances furniture was floating about. The road gave way at the foot of Manchester road. The storm was also severe at <chinley><new mills="">, <chapel en="" frith="" le=""> and <hayfield>.</hayfield></chapel></new></chinley></buxton>
May		<newton>: lies near the border of Lancashire, Cheshire and Derbyshire and seems to have received the force of the cloudburst. The water stood in the streets within a few minutes and reached 2 to 3 feet deep and held much earth from the surrounding slopes. Mud poured into the cellars of cottages. The leather factory was flooded. Traces of the rain extended along the railway from Dinting to Godley Junction.</newton>
29 Jun 1907		Stoke on Trent>: The storm caused a flood beneath the railway bridges at the end of Liverpool Road.
Derby Daily		<crewe>: The rain has played havoc with the crops; potatoes are washed out of the ground. The streams have</crewe>
telegraph 1		overflowed their banks and some roads are impassable.
Jun		<hanley>: Torrential Rain flooded the streets to a depth of 4 feet.</hanley>
21 Jul 1907 Nottingham evening Post 22 Jul		<new mills="">: Many houses were flooded on the Buxton Road.</new>
17 Oct 1907		< <amber>> valley: the bridge over the Amber carrying the road from Overton Hall was not able to</amber>
Derby daily		accommodate the flood and the water crossed an adjacent pasture over the road and through a wall and then
telegraph 22		pouring much water into the swollen Derwent at Ambergate.
Oct, Lichfield		<matlock>: Many villages to the northeast of <matlock> have been isolated and communication by road is</matlock></matlock>
Mercury 25		impossible. For the first time in 50 years Two Dales 3 or 4 miles from <matlock> have been flooded. Crown</matlock>
Oct		Square in Matlock Bath was flooded. A boy was found drowned in the < <derwent>>.</derwent>
		West Bromwich>,<smethwick>,<oldbury>, <rowley>, <halesowen>: the heavy downpour of rain was followed by one of the most severe hailstorms for many years. The sewers were quite inadequate to carry the volume of</halesowen></rowley></oldbury></smethwick>

19 Oct 1907 Derby daily telegraph 22		water and the streets presented a river like appearance. Much damage was done to the roads and footpaths <stretton>: In an unusual October thunderstorm the surface of the road was washed away at several places on the way to the station and in the town hail fell as large as filberts smashing a good deal of glass.</stretton>
Oct 3 May 1908 Tamworth Herald 9 May		<tamworth>: the thunderstorm had the effect of renewing the floods of the previous week. the levels in the <<tame>> and <<anker>> rose rapidly and the area of the flood exceeded anything that has occurred since 31 December 1900. There was a great depth of water on the Fazeley and Bonehill roads. The bowling Green at the Jolly sailor was flooded. Lichfield Street was flooded from Park Street to Moor Lane. There was a large overflow of water at Coton and the road was blocked.</anker></tame></tamworth>
13 May 1908 Faringdon Advertiser 16		<nottingham>: Streets were flooded in low lying parts. Hail must have caused serious damage to fruit crops.</nottingham>
May 3 Jun 1908 Birmingham Daily Gazette 5 Jun		<grindon>: serious damage was done by the storms in northeast Staffordshire including the railway running through the Manifold Valley. A Grindon a railway embankment collapsed and the embankment was washed away over 20 yards leaving the line suspended over a chasm. Damage to the line was also done at Wetton Mill. The River <<hamps>> overflowed and flooded the country to a depth of 2 feet; cottages and gardens in the neighbourhood were flooded. No such floods were said to have occurred there for a century.</hamps></grindon>
30 May 1912 Nottingham Evening Post 30 May, BR	Mansfield (Notts) 1.26" in 40 m and 1.54" in 1 h	<ilkeston>: A severe thunderstorm was said to have been the worst for 30 years. The rain came down in torrents for 20 minutes and the bottom of Bath Street had the appearance of a river. All the cellars in the low lying parts of the town were flooded. BR notes: Observer at Mansfield (West bank) reported a cloudburst when causing severe flooding. No such</ilkeston>
		storm has occurred here since 1858 when similar floods were reported. Two other stations reported 1.43 and 1.46" in 55 minutes. At Mansfield many shops and businesses were flooded In Church Street the water tore up the pavement and near the parish church the water was 18" deep over the full width of the road.
19 Jun 1912 BR	Claypole (Lincs) 0.71" in 17 m	
12 Jul 1912 Derby Daily Telegraph 13 Jul, BR	Baslow (Derbyshire) 2.20" in 40 m	<derby>: After a very hot day when temperature reached 83.6F in Derby a thunderstorm with torrential rain flooded the streets and considerable damage done to property (but perhaps this was done by lightning). <staveley>: The hailstorm was said to be the worst for 12 years. Pieces of ice fell from the size of a sixpence to the size of a shilling. Flooding was not reported. <buxton>: The country was covered in hailstones an inch deep, some being an inch long. No flooding was</buxton></staveley></derby>

reported.

<Calver>: Branches were torn off trees in the high winds that accompanied the storm. Many houses were flooded and crops were severely damaged.

22 Jul 1912 BR	Wirksworth (Derbyshire) 1.00" in 10 m	
27 Jul 1912		<matlock>: The Midland Railway, Manchester to London line was blocked by debris washed on to the line near</matlock>
Gloucester		Haddon Hall Tunnel where the mud was 2 feet deep and all the rail traffic had to be diverted. Part of the
Citizen 29 Jul		Haddon Hall grounds was flooded.
		<bakewell>: the water rushed down from Chatsworth Woods, passed through a railway arch and flooded the workhouse.</bakewell>
		<stanton>: Stone walls were washed away by the rush of water.</stanton>
10 Aug 1912		<melbourne>: A terrific hailstorm with heavy rain flooded many houses and caused extensive damage to crops</melbourne>
Derby Daily		by the hail. Vegetables were stripped of their foliage. In some parts the hail lay 6 inches deep.
Telegraph 12		
aug		
29 May 1913		<burton on="" trent="">: The Shobnall suburb was inundated, the water reaching a height of 3 feet. Gardens</burton>
Lincolnshire		allotments and roads were washed away.
chronicle 2		
May		
17 Jun 1913 BR	Belvoir castle (Lincs) 0.84" in 25 m	
10 Jul 1913 BR	Lewisham (London) 0.72" in 27 m	
8 Oct 1913 BR	Waltham on the Wold (Near Melton Mowbray) 2.15" in 2 h 35 m	
18 Jun 1914 Derby daily		<kidsgrove>: Here and in neighbouring hamlets rain descended in torrents, roads were impassable and water entered houses. In some cases residents retreated to bedrooms and were rescued from windows.</kidsgrove>
telegraph 19 Jun		<cannock chase="">: Several houses were struck by lightning and many parts of the district were flooded. <ashby de="" la="" zouch="">: The storm was said to be the worst for nearly half a century. Some portions of the town were impassable and furniture floated about in a number of houses. The Royal Hotel was struck and damaged by lightning. A landslide occurred at Silverdale on the North Staffordshire Railway.</ashby></cannock>

		<biddulph>: A man was killed by lightning</biddulph>
20 Jun 1914 BR	Ipstones (Staffs) 1.11" in 45 m Clifton (Notts) 1.00" in 45 m	
1 Jul 2014 Gloucestershi re Echo 2 Jul, BR	Ashbourne 1.24" in 90 m	<alfreton>: Houses were flooded through the bursting of sewers.</alfreton>
7 May 1915 BR	Leek (Staffs) 1.78" in 1 h	
30 Jun 1915 Philip Eden Great British Weather Disasters 2008, Webb et al 2001, BR	Littleover (Derby) 1.75" in 2 h	<buxton> and <burton> There had also been storms on 30 Jun which caused flooding in Derbyshire –. The river Trent rose and fell 1 foot in 2 hours.</burton></buxton>
4 Jul 1915 Western Daily Press 5 Jul		<leicester>: Streets in the lower part of town were flooded and a 40 foot wall was washed away.</leicester>
16 Jul 1915, Philip Eden Great British Weather Disasters 2008	No hits for 'flood' 'thunder' on BNA. Probably not a flash flood	Staffordshire and Derbyshire: Rainfall 50-100 mm fell over this and neighbouring areas causing flooding. Loughborough had 101 mm.
28 Jun 1916 Loughboroug h Echo 30 Jun		<loughborough>: The thunderstorm caused severe floods in several of the streets through the blocking of grates. The storm was in two parts, the first of half an hour and the second of 20 minutes. The lower end of Rendell Street was covered for about two thirds of its length and the water was right over the kerbs on either side just reaching the brickwork of the houses. The water was up to the entrance of Rendell Street school. The corner of Meadow Lane and Clarence Street was also covered as was Charles Street and Herbert Street while the end of Bridge Street and the Derby Road and the Rushes was flooded to a depth of about 12 inches. The</loughborough>

		water entered some cellars in the town.
		<hathern>: The schools were partially flooded. Hailstones of great size fell.</hathern>
3 Sep 1916		<nottingham>: Rain studded with hailstones as large as walnuts fell for 15 minutes. Fields of uncut wheat were</nottingham>
Driffield		ruined, trees were uprooted and the lowlands flooded. Many windows were smashed and trains were held up
Times 9 Sep		by the floods.
29 May 1917 BR	Alderwasley (Derbyshire) 1.22" in 75 m	
16 Jun 1917		<south derbyshire="">: Large hail fell causing extensive damage to greenhouses and breaking many house</south>
Pall Mall		windows. Damage was also done to fruit trees and growing crops. Cattle were killed and trees split by lightning.
Gazette 18		
Jun		
12 Aug 1917		<mansfield>: the thunderstorm was accompanied by hail and the thoroughfares in the borough were flooded</mansfield>
Mansfield		notably Chesterfield Road where Norfolk Drive joins it.
reporter 17		<littleworth>: Water poured down the steep incline like a river. Crops were damaged.</littleworth>
Aug		
14 Aug 1917		<mansfield>: In some districts more damage was done that in the storm 2 days ago. The bottom end of church</mansfield>
Mansfield		Street was flooded. The open sewer which runs alongside the post Office could not carry the storm water away.
Reporter 17		The street was flooded in the vicinity of the Reporter office.
Aug		
17 May 1918	Stafford 2.27" in 1 h	
BR		
21 May 1918	Nottingham 1.02" in 20 m	
BR		
20 Jul 1918 BR	Worksop 1.79" in 88 m and 2.50" in 4 h and 2.96 in 4 h 30 m	
17 Aug 1921 BR	Radcliffe on Wreake 1.04" in 1 h	
21 May 1922		<scunthorpe>: After a day of oppressive heat a thunderstorm broke after 7 pm. A hailstorm followed heavy rain</scunthorpe>
Sheffield		with <mark>the hailstones as big as marbles and some were 1 ½ inches in diameter</mark> . Considerable damage has been
Daily		done to fruit trees and gardens, greenhouses were wrecked and the windows at the rail station were broken.
telegraph 22		Some of the streets were flooded.

iviay		
7 Aug 1922 BR Yorkshire Post 8 Aug, BR, Leicester Chronicle 12 Aug	Severe flooding in Yorkshire and at Grantham in Lincolnshire. Hodsock (nr Worksop) 1.97" in 2 h 15 m Melton Mowbray 4.75" in 14 h	 <worksop>: Severe storm in the area with > 5 inches in 28 hours (but 2" in 3 hr on 7 Aug). Most of the streets of the town were flooded such as Central and Newcastle Avenues. Practically every cellar in the town was flooded. The reported rain at Hodsock Priory was the intense portion of a continuous fall of nearly 28 hours during which 5.06 inches were recorded. (BR has autographic record reproduced)</worksop> <melton mowbray="">: The rainfall caused floods which were said to be far worse than the one that occurred 42 years ago [1880?] The Leicester Daily Mercury opened a relief fund for those who had suffered in the flood especially at Melton Mowbray.</melton> <blaby>: The lower part of Blaby was flooded and newspaper photograph shows water of a considerable depth in Sycamore Street.</blaby> <great glen=""> (Leics): A photo in the Illustrated Leicester Chronicle shows water surrounding the Greyhound Inn in Great Glen to a considerable depth probably from a combination of the effects of the River <<sence>> and its tributary the <<burton brook="">>.</burton></sence></great> <quorn>: Water entered several houses in Meeting Street.</quorn> <lutterworth>: At Barrow Flats a Boy Scouts camp was flooded to a depth of about 2 feet and all their kit was lost.</lutterworth> Severe flooding was also reported at <retford> and villages in Leicestershire including , <kirkby muxloe="">, <thurmaston>, <hugglescote>, and in <birmingham> and <nottingham>.</nottingham></birmingham></hugglescote></thurmaston></kirkby></retford>
14 Jul 1923 BR	Rugeley (Staffs) 4.16 in 270 m Erdington (Birmingham) >3.00 in storm but gauge overflowing	
31 Jul 1923 BR	Whaley Bridge (Derbyshire) 1.10" in 30 m	
31 May 1924 Philip Eden	There was a 24 hour down pour over many parts of the country followed by a	Heavy rain caused serious flooding in northwest Midlands, Cheshire and northeast Wales. Hanmer Flintshire recorded 135 mm.
Great British	thunderstorm with hail on 2	< <river tame="">>: Three farmers were drowned</river>
Weather	Jun. The initial flooding was caused by persistent rather	<worcester>: the river rose 22 feet over 3 days.</worcester>
Disasters		River Frome >: Floods in the valley of the Frome are said to be the worst since 1866. Houses were inundated

May

Disasters

than intense rainfall.

<<River Frome>>: Floods in the valley of the Frome are said to be the worst since 1866. Houses were inundated

2008, Sheffield daily Telegraph 3 Jun 2 Jun 1924 Sheffield Daily Telegraph 3 Jun	Ludlow 123 mm Cheltenham Rainfall nearly continuous for 36 hours	with furniture floating about in rooms. Twenty five sheep were drowned. <atherstone>: Many people were compelled to live upstairs. <burton on="" trent="">: The <<river trent="">> overflowed its banks after more than 2 inches of persistent rain. <tamworth> <staffs>: the town is isolated on 3 sides. Further details are not included. <tamworth>: A man was drowned when his horse boted into a river after a flash of lightning.</tamworth></staffs></tamworth></river></burton></atherstone>
22 Jul 1924 Hartlepool Northern Daily Mail 23 Jul		<matlock bath="">: A thunderstorm hit the Peak District considered the severest for half a century (!). Rivers flowed down the Parade at Matlock Bath and people were unable to move because of the floods. Hailstones fell the size of marbles.</matlock>
5 Sep 1924 BR	Crewe 1.80" in 45 m	
18 May 1925		<ashby de="" la="" zouch="">: Flooding occurred at Ashby de la Zouch where the manhole covers were thrown up into</ashby>
Nottingham		the air. A cloudburst occurred in the direction of Smisby. Many tradesmen whose shops fronted the Main Street
Journal 20		suffered severe losses from the floods. Poorer classes living in The Green had their furniture destroyed in the
May		water 3 to 4 feet deep. The Bath Grounds are completely submerged nd only the pavilion peeps out of the water. The walls of the police station yard were flung to the ground and the police Superintendent's house was flooded 4 feet deep. The police cells were flooded 6 feet deep. Gaps were torn in the streets by the torrent.
19 May 1925 Derby Daily	Derby: 1.64" in 60 m Barkby Hall (Leics) 1.20" in 90 m	<derby>: Rain and hail quickly proved too heavy for the drains with the result that houses in all parts of Derby were flooded, roads in the lower part of town became impassable and people wishing to leave work were</derby>
Telegraph 20	Spondon Hall (Derbyshire)	imprisoned for half an hour. A landslide on Mansfield Road stopped traffic to the north. Businesses were
May,	Most of the 2.43 in., measured next morning,	flooded in the centre of town. The Midland Drapery Company has a cascade through the basement. Others
Tamworth	fell in the evening between	affected were Woolworths, White Hall Company and Gregory on St James Street. Water found its way into the
Herald 23	17 h. and 20 h	Market Hall. Steeper streets were turned into miniature watercourses including Green Lane and Babington

May, BR

Lane. Even in the higher parts of town the top of Belper Road became a miniature lake too deep to be crossed by pedestrians for an hour. A platform at Derby Railway Station became flooded. Browns Foundry on

Nottingham Road had an inrush of 2 feet of water. Towards <Mickleover> a trickle became a raging torrent and houses in Farm Street were flooded very early followed by Boyer Street and Woods Lane. In Brookside Cottage in Woods Lane the water rose to the fireplace. Fowls and fowl houses were carried away. In Abbey Street and Willow row the water ran in the front and out the back of houses. The environs of All Saints Church within the walls were converted to a pond and the water rushed over the wall into the road. In St Helen's Street a wall collapsed from the pressure of water. At Osmaston the road was flooded from a point past Gresham road to Nightingale road and a butcher's shop had his cellar completely filled. Colour manufacturers at Spondon suffered severe damage; a canal overflowed into the works and water extinguished the furnaces. At Spondon Station the water was a few inches below the level of the platforms. At the Kedelston road a small brook which runs down the side of Newton's Walk suddenly became flooded and the culvert was unable to take the flow; water poured down Bromley Street like a raging torrent and householders made ineffectual attempts to keep it out of their houses. Kedelston Road was flooded to nearly 2 feet. The <<Markeaton Brook>> overflowed and flooded the allotments with furrows a yard deep. At Chaddesden a woman was swept off her feet by rush of water at her gate; two rescuers were also carried off their feet but all were carried to higher ground and survived. Houses were flooded at Littleover and at one point the Burton Road was flooded right over. Cows were widely killed by lightning. BR notes: Considerable damage by flooding was caused to the Royal Infirmary at Derby where 1.64" is reported to have fallen in an hour.

<Repton>: A stream was stated to have risen 10 feet arising from the bursting of a mill dam. It submerged the main streets and carried away gardens and di great damage to the Congregational church and many houses near the river where the water was 2 feet deep in the houses. Pigs and poultry were carried downstream. <Croxall> and <Clifton Campville> in the <Edingale> district: Owing to the torrential rains in the Ashby district the <<River Mease>> overflowed into adjoining fields. At Clifton Mill the <<Mease>> in a hour and a half rose from its ordinary height to enter the house and mill where it reached 2 feet deep, the worst flood for at least 20 years. A long stretch of the road between <Harlaston< and <Edingale> was under water. Croxall station was surrounded by the flood.

<Hinckley>: There were three thunderstorms within 24 hours and acres of land were submerged. <Maltby>: A thunderstorm with little rain.

 13 Jul 1925
 Hodsock Priory (Notts) 1.35"

 Sheffield
 in 2 h (1.09" in 50 m)

 Daily
 Image: Construct of the second seco

<Oldcotes>: near <Maltby>: Heavy rain with hailstones flooded houses, some to a depth of 2 to 3 feet. <Hodsock Priory> (E of Worksop): Hailstones up to three-quarters of an inch in diameter fell in this storm and a

telegraph 14 Jul , BR 11 Jul 1926 Dundee Courier 12 Jul 23 Aug 1925 BR	Belper 1.65" in 3 h	few miles away to the northwest rather severe damage was done, while within five miles to the south-east there was no rain at all. <melton mowbray=""><ashfordby>: A thunderstorm turned the streets into rivers. Hailstones as large as gooseberries fell. damage was done to cereal crops and sheep were killed by lightning. <chatsworth>: Four cattle were killed by lightning.</chatsworth></ashfordby></melton>
11 Jul 1927 Yorkshire Post 12 Jul, Philip Eden Great British Weather Disasters 2008, Staffordshire Sentinel 15 Jul 1987	102 mm fell at Wolverhampton, 100 mm at West Bromwich Uttoxeter 2.00 in 75 m	<birmingham>: Railway lines were damaged at Smethwick and the Cofton Tunnel near Birmingham collapsed. The Rivers <<tame>> and <<rea>> rose with alarming rapidity and the <<rea>> at <king's norton=""> flooded and area 200 yards wide Hundreds of houses in Sturchley, ? Norton, Northfield and Aston were flooded. At West Bromwich a baby was drowned in her pram when the water rushed in at a terrific rate. North Staffordshire also suffered and on the railway from Stoke to Leek , a footbridge and an embankment were washed away near <endon> where cottages were also flooded . <endon>: The SS 1987 letter recalls that Stanley Pool burst its banks and the railway line was washed away. The writer notes that he was taken home in a horse drawn wagon via the Black Horse hotel because the bridge across the brook had been washed away and then having to climb in through a bedroom window because the ground floor was under 3 feet of water. <derby>: there was a 'waterspout' between Derby and <alfreton> and the whole area was submerged in an incredibly short time. <stafford>: Heavy rain and hail passed over the town and district and the streets were quickly flooded.</stafford></alfreton></derby></endon></endon></king's></rea></rea></tame></birmingham>
12 Aug 1928 BR	Market Harborough 1.49 in 1 h	
27 Aug 1928 The Scotsman 28 Aug 26 May 1930 Derby daily telegraph 26 May	Thunderstorms were widespread but the rainfall totals small.	<moira> (Leics): Hailstones weighing more than an ounce did great damage to fruit crops and smashed greenhouses. <derby>: More than an inch of rain (1.02") fell in an hour. Roads and cellars were flooded in some parts of <derby>: Stones of unusual size fell in some parts of the city. In some places thunder and lightning continued for an hour and a half before rain fell. Osmaston Road was flooded from the railway bridge to Nightingale Road with the water 6 inches deep in places. St Thomas Road was flooded and water poured into several cellars in the neighbourhood. The Celanese Works at Spondon were flooded by the gutters overflowing and the water getting into the works causing serious damage. <ripley>: Rain and hail caused flooding of Butterley Hill and Derby road and water washed into low lying houses from the wheels of passing cars. Two manholes in Butterley Hill were forced up.</ripley></derby></derby></moira>

17/18 Jun 1930 Philip Eden Great British Weather Disasters 2008 Sheffield Independent 18 Jun, Yorkshire Post 19 Jun	Widespread thunderstorms occurred but worst in Nottinghamshire and Derbyshire with 104 mm at Glossop. Langold (Notts) 2.02" in 35 m Welbeck Abbey (Notts) (17 th) 2.78" in 1 h Harworth colliery (Notts) (17 th) 1.37" in 1 h	<new mills=""><peak district="">: A cloudburst flooded the valley so rapidly that 3 men were drowned. One man was swept away from his own window and another was trapped in a rope mill. Many houses were flooded in the lower part of New Mills and children had to be rescued by ladders from bedroom windows. An iron girder bridge leading to a foundry was washed away with a portion of the offices and another bridge further downstream had its parapet damaged. [This should be in Lancs chronology] <leicester>: Over an inch of rain fell in half an hour and many houses in low lying parts were flooded</leicester></peak></new>
29 Aug 1930 BR	Retford (Notts) 0.90" in 20 m	
5 Jun 1931 BR 8 Jun 1931 Lichfield mercury 12 Jun 14 Jun 1931	Bereton (Staffs) 1.34" in 90 m Walsall 1.80" in 50 m	<stafford>: The thunderstorm raged for fully an hour and the roads were quickly turned into miniature rivers while many houses in low lying parts of the town were flooded. <wednesbury>: A man was killed by lightning</wednesbury></stafford>
BR	Cannock STW 2.35" in 35 m Bromfield (Shrops) 1.50" in 2 h	
7 Jul 1931		<nottingham>: Streets became like rivers and at one place the road was forced up into a hump in Milton Street.</nottingham>
Sheffield		An inch of rain was registered in 20 minutes.
Independent		<melton mowbray="">: A man was killed by lightning.</melton>
8 Jul, Western daily Press 8 Jul		
14 Jul 1931 BR	Harworth Colliery 1.66" in 50 m	

8 Aug 1931 BR, The People 9 aug		The heavy rainfall of August 8th, 1931, was confined mainly to the neighbourhood of the Wash. More than 2 inches was recorded at Leicester, Kettering, near Ely between Cromer and N. Walsham. <glenfield>: the village was flooded to a depth of 2 feet.</glenfield>
15 Aug 1931 Birmingham Daily gazette 17 Aug		<burton>: In Station Street blocks were forced up by the force of the water. Near <swadlincote> LMS station the permanent way was damaged and rain traffic had to be diverted. Hundreds of acres of lowlands and many miles of country roads are under water. On the road from <tattenhill> to <barton> only the tops of hedges could be seen. <croxall> railway station was completely cut off. The floods were severe at <barton under<br="">Needwood>. At <yoxall> a pub was flooded knee deep by the overflow of the <<river swarborne="">>. <pinxton>: Houses were flooded owing to the overflow of the <<river erewash="">>.</river></pinxton></river></yoxall></barton></croxall></barton></tattenhill></swadlincote></burton>
4 Sep 1931 BR	Lutterworth 0.81" in 14 m	<lutterworth>: 3.28 inches fell in 73 hours ; about 1.18 inches of this fell in 5 minutes in a heavy storm which caused flooding just after 16h on the 3rd, and 0.81 inch fell in 14 minutes just after 17h on the 4th (nearly all of which occurred in 9 minutes).</lutterworth>
21/22 May 1932 Hull Daily Mail 23 May, Leicester Chronicle 28 May	Persistent rainfall No 'hits' in BNA; hence probably not a flash flood. But definitely so at Ashby (LC) where at thunderstorm followed persisten rainfall on the previous 2 days	 Widespread persistent rain with some thunder occurred. There were three deaths by drowning, a man retrieving wood at Nuneaton in the Market Place, a nine year old boy in the River Cole at Birmingham and a 13 year old boy in the River Rea in Birmingham. Derby: the flooding was unprecedented with shopping streets compared to rivers, smashing through plate glass windows and in basements. Hundreds of shops, the electricity station, the police station and the fire station were all flooded. <ashby de="" la="" zouch="">: At about 2 am lightning was aboserved and there was a cloudburst with great volumes of water flooding the streets. \one man ran from his front door to rouse occupants of the area who made frantic efforts to save their furniture. Barricading of doors became useless as the torrents of water swept aside obstacles like cardboard. Within a few minutes the water was 3 to 4 feet deep in houses in The Green, Union Passage, North Street, Claridge Place, Brook Street and other low lying streets. Some householder who had not been warned came downstairs to find furniture floating in rooms. Thick high walls were swept away and plate</ashby>
		glass windows were smashed and stocks of many tradesmen ruined. Furniture, pets, barrels and debris floated down the streets in towns and villages, cars had to be abandoned and many people trapped in their upper rooms received supplies from tradesmen in boats. The Derby Road at Ashby was closed to traffic and underneath the railway bridge was a hole big enough to bury several cars. Leicestershire: In addition to Ashby similar stories of distress poured in from <melton>, <hinckley>, <market< th=""></market<></hinckley></melton>

Harborough>, <Rugby>, <Asfordby>,<Anstey>, <Nuneaton>, <Quorn>, <Thurcaston>, <Rothley>, <Shenton>,

		<croft>, <overseal>, and <broughton astley="">. Amongst the villages which were entirely cut off were, Rothley., <quorn>, <barrow on="" soar=""> and <sileby>. A train from Burton on Trent to Leicester was held up by floods, gas works were flooded and put out of action and electricity was cut off. <leicester>:. In the saffron Lane district many downstairs rooms were flooded and furniture floated about. Probably the worst flooded was Cromwell Road off the Saffron Lane. About 200 homes were affected to a depth of 3 to 4 feet. The gardens and a field facing the Aylestone Gas Works were extensively flooded. Coalpit Lane was deeply covered with water and a few houses were isolated. The Leicester Canal overflowed its banks and covered the towing path. The Bedehouse open air swimming pool was full to the brim and water covered the grass and pavilions. In the Uppingham Road area several streets were flooded and in freeman Road N the water rose to a considerable height and threatened to inundate houses. In the outskirts of the city the worst cases were at <evington> and <braunstone> Estate where pumps were needed to cope with the floods. <loughborough>: The town was cut off by floods in all directions and the scen was unprecedented since the great flood of July 1875. The water in <<woodbrook>> rose several feet in 15 minutes and flooded Swan Street, the Rushes, Mill Street and Devonshire Square to a depth of 3 feet. Houses shops and pubs and banks in the area of forest Road, Granby Street, Packe Street, Ashby Square, Mid Street, Swan Street and Bridge Street were flooded. The Theatre royal dressing rooms and part of the auditorium had several feet of water in them.</woodbrook></loughborough></braunstone></evington></leicester></sileby></barrow></quorn></broughton></overseal></croft>
11 Jun 1932 BR	Barkby Hall (Leicester) 1.00" in 30 m	
28 Jun 1932 Daily Herald 29 Jun	Widespread thunderstorms followed a heat wave (82F in London).	<west bromwich="">: A number of shops were flooded to a depth of 3 feet. <birmingham>: A man was killed by lightning at Rowley Regis</birmingham></west>
20 Jun 1933 BR	Derby 0.90" in 30 m	
22 Jun 1933 Western Morning News 23 Jun		<leicester>: Whilst the city itself baked in June sunshine, villages all around were struck by hailstorms with hailstones as big as beans.</leicester>
28 Jun 1934 Western Daily		<hanley><potteries>: Widespread damage was caused by a thunderstorm and four families in Hanley were rendered homeless by the floods.</potteries></hanley>

Press 29 Jun 18 Jul 1934 Dundee Courier 19 Jul, BR	Lutterworth 1.05" in 31 m	<elton> nr <newark>: A man was killed by lightning and others injured. <ranskill> nr <retford>: A man working in a field was struck and killed by lightning. <lutterworth>: The observer reports: It was a wild storm. Most of the precipitation occurred in 20½ minutes. Large transparent hailstones, 0.7 inch in diameter, swept before a strong out-blowing wind (force6-7) from S. by W., and these were driven northward where, two miles away, some still lay next morning.</lutterworth></retford></ranskill></newark></elton>
2 Aug 1934	Worksop (Notts) 1.53" in 1 h	
BR 8 Aug 1935 BR	Aldridge (Staffs) 1.50" in 45 m	
21 Jun 1936 BR	Lichfield 1.50" in 60 m Market Bosworth 2.47" in 2 h Yarlet Hall 1.36" in 2 h	
25 Jun 1936 BR	Hognaston vicarage (Derby) 2.33" in 90 m	
9 Jul 1936 BR	Sutton Bonnington (Notts) 1.26" in 1 h	
15 Jul 1937 BR	Intense rainfall and flooding from Somerset to Lincoln Southwell (Notts) 1.44" in 1 h Ashfordby Hill (Leics) 3.50 in 2 h Melton Mowbray 2.11" in 2 h	
13 Sep 1937 Western Morning News 14 Sep		<birmingham>: Some streets were flooded to a depth of 3 or 4 feet. In the Aston district people who could not get along the water covered roads climbed railway embankments. A factory was badly flooded.</birmingham>
17 Sep 1937 BR	Derby 0.92" in 15 m	
1 Jul 1938 BR (Met Magazine, 1938, p. 178)	Market Harborough 1.95" in 115 m Derby 1.47" in 105 m	<market harborough="">: The observer reports: From 16h. 20m. to 18h. 15m., two thunderstorms were more or less simultaneously in progress here, accompanied by intense rainfall. from the east-north-east, by some ten or twelve minutes, and the former was virtually overhead from 17h. 20m. to 17h. 25m., while the nearest approach of the later storm was about 1 mile away to the east at about 17h. 55m. Hailstones of moderate size, diameter 1.0 to 1.5 cm fell for several minutes during the maximum period. The garden was damaged and across a sloping portion of the kitchen-garden channels 3 or 4 inches deep and several yards in length were cut</market>

11 Aug 1938 The Scotsman 12 Aug, Coventry Evening Telegraph 12 Aug		 by the rushing streams. The storm was localised and about three-quarters of a mile westwards, at the rainfall was 0.75". Nottingham: A 15 year old girl was killed by lightning whilst sheltering under a tree whilst another girl was rendered unconscious. <tugby><leics>: A man was killed by lightning.</leics></tugby> <coventry>: The northern part of the city received the full force of the storm with the Ansty area the chief sufferer from lightning effects on houses.</coventry> <bedworth>: The storm lasted just over an hour and many houses and shops were flooded. Newtown road shops were the worst affected but at the new Wootton Street Estate – known as Swannee river – the floods were deep enough for children to swim in.</bedworth>
12 Aug 1938 Coventry Evening Telegraph 12 Aug	Stoke GEC 0.42" in 10 minutes.	<stoke>: The storm was severe in the GEC and Biggin Hall Crescent areas. Rain was followed by hail as big as marbles. The water on Telephone Road was a foot deep.</stoke>
5 Oct 1938 Nottingham Evening Post 5 Oct		<nottingham>: The drains became choked with leaves and in no time the low lying roads were flooded. At the roundabout at the end of Thackeray's Lane, Woodthorpe one side of the road was impassable for pedestrians while Mansfield road from Thackeray's Lane to Valley Road was similarly flooded. But the worst was on Mansfield road Carrington between Hucknall road and Gregory Boulevard where the water was over the pavement.</nottingham>
19 Jul 1939 Nottingham Journal 20 Jul	Sherwood: 0.68" in 35 minutes.	Nottingham>: At Aspley Lane the road was flooded for over half a mile reaching a depth of over 18 inches. The thoroughfares in Bulwell and Cinderhill were flooded to a depth of 2 feet. Nuthall Road near the Three Ponds Public house was impassable. In Main Street <bulwell> the water rose above the steps leading into the Methodist Chapel. There was a depth of 2 feet near the old National Schools. Cellars were flooded. There was some flooding of the road in the Thackeray's Lane district of Daybrook. Part of the road near the Wensley Road island was flooded as was also the Mansfield Road near The Cedars Hospital.</bulwell>
20/21 Jul 1939 Derbyshire times 28 Jul,	Ruddington (21 st): 0.80 in 15 m	<kimberley>: The main Nottingham Ripley road passing through Kimberley was flooded to a depth of several feet at the LMS railway bridge. Manhole covers were lifted out of their seatings. Houses were flooded in several parts of the village. <dronfield>: The town was flooded and the hail and rain ruined many flower gardens. All the works in the town were flooded in some instances causing serious dislocation whilst along the course of the <<river drone="">> usually low and dry a raging torrent flooded adjoining houses and land to a depth of 2 feet. Birchett farm was flooded and it became necessary to rescue cattle and pigs owing to the farm buildings becoming flooded. Areas</river></dronfield></kimberley>

BR 1939 29 Aug 1939 Eden (2008)	Taxal: 1.17 in 100 m	near wreakes Lane were under water causing a long stoppage of traffic. Lower down Dronfield Forge became flooded. Dronfield foundry, Biggin's Midland Works, and houses and shops on the main road were completely flooded. Houses and cellars in Mill Lane and Chesterfield Road were flooded. On the LMS railway between Dronfield and Dore and Totley there were delays owing to water from Twentywell rushing down the embankment and flooding the line on the Dore and Totley side of the tunnel. <milford> (Staffordshire): recorded 102 mm and the LMS railway was flooded to over 1 m.</milford>
12 Jul 1941 BR 1941 20 Apr 1945 Lichfield Mercury 27 Apr	Frolesworth: 0.85" in 10 m	<frolesworth>: A high wind was associated with the storm at Frolesworth where 2.37 inches fell within a period of 24 hours on the 12th and 13th. <lichfield>: Torrential rain and hail caused flooding in many low lying districts. In bird Street and the Old Birmingham road the roadway was flooded and orchards were damaged by the hailstorm.</lichfield></frolesworth>
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. 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)
5 Aug 1945 Derby Daily Telegraph 6 Aug		<derby>: Buildings including banks, private houses and the new Municipal Buildings had their basements flooded with several inches of water. In some parts ot the town up to an inch of rain fell. the streets were transformed into rushing rivers with water 2 or 3 inches deep. The municipal Buildings had a foot of water in their basement, there was flooding of the boiler room at the bus station and at the Westminster Bank at Normanton road.</derby>
23 Jun 1946 COL 1946	Sutton Coldfield 1: 2.85 in 60 m Sutton Coldfield 2: 2.74 in 85 m	<sutton coldfield="">: One observer recorded 2.85" of rain in an hour. Surface drains could not cope with the flood water and all the bathing and boating lakes overflowed their banks. Six houses, widely separated, were struck by lightning and in two cases fire broke out.</sutton>
26 Jul 1946 Eden (2008) Yorkshire Post 27 Jul		<hayfield> <derbyshire>: The <<river sett="">> rose 6 inches in 15 minutes and at New Mills where the River Sett joins the <<rowarth brook="">>, the Watford Engraving Works were flooded and the water was going over both the road bridge and the works bridge. <crewe>Landslips in the area almost washed away 200 yards of line at <madeley> whilst line flooding occurred</madeley></crewe></rowarth></river></derbyshire></hayfield>

Manchester Guardian 27 Jul		at <woodley> in Cheshire.</woodley>
13 Jul 1949 BR 1949	On July 13 began a period of country-wide thunderstorms which lasted till the 17th. Elmdon Apt: 1.38 in 35 m	<elmdon>: The storm was very localised. At <stechford>, 3 miles north-west of Elmdon, 2.04 in. fell but no details of the times of this fall are available. At Balsall, only 6 miles to the south-east, there was no rain. During this storm a farm worker was killed by lightning while using a scythe.</stechford></elmdon>
14 Jul 1949		<leicester>: The Times reported torrential rain and hail in a storm at Leicester, streets being flooded to a depth</leicester>
BR 1949		of 4 ft. in places.
15 Jul 1949 BR	Violent thunderstorms recurred in the Midlands on July 15. Barkby: 0.98 in 45 m Ulverscroft: 1.75 in 75 m	An observer at <ulverscroft> (Between Leicester and Coalville), reported the heaviest daily fall since he commenced observations in 1928; 1.75 in. fell in 75 minutes.</ulverscroft>
9 Aug 1951 Manchester Guardian 10 Aug	Heavy thunderstorms occurred in the Northwest, the Midlands and the south	<market bosworth="">: Several people were injured when lightning struck a mobile police station and a tent at Market Bosworth Leicestershire agricultural show.</market>
18 May 1952 Birmingham Daily gazette 19 May, Daily	The storm shattered a little heat wave. Shawbury reached 82F.	<birmingham>: 11 houses were struck by lightning and there was flooding in some areas. At Coventry Road on the bridge over the <<river cole="">> the water was 9 inches deep. <tibshelf> (Notts): More than 100 homes were badly damaged when a hurricane swept over the area; people were swept off their feet and sheds vanished.</tibshelf></river></birmingham>
Mail 20 May 1 Jul 1952 Manchester Guardian 2 Jul, BR	Nottingham: 1.23 in 15 m Ilkeston: 1.72 in 30 m Hucknall: 1.56 in 30 m Morley Hall: 1.49 in 30 m Derby: 1.43 in 35 m Birmingham 1.11 in 45 m Wirksworth: 1.10 in 45 m Watnall: 1.19 in 18 m (1.00 in 11 m and 0.80 in 8 m and 0.60 in 6 m) Burbage: 1.08 in 30 m	<birmingham>: An 8-year old boy was killed by lightning whilst sheltering in a thatched shelter. 0.83 inches rain fell in the vicinity. <matlock>: Torrential rain with thunder transformed the moorland above Matlock into lakes. The flow tore up road surfaces and flooded the main London to Manchester Road and the Matlock to Nottingham road. Manholes were displaced and the contents of sewers flowed into low lying houses. BR reports: At <aspley> 2 miles northwest of Nottingham, the observer reported that the storm commenced there at 19.25. The air temperature fell from 76°F to 67° and the wind increased from force 2 from west to force 6 to 7 from north and decreased after the storm to force 2 from north.</aspley></matlock></birmingham>

26 Jun 1953 BR	Hanley: 0.91 in 45 m Keele 10.8 in 50 m Nottingham: 1.74 in 100 m Melton Mowbray 1.98 in 75 m Caldecott resvr 1.16 in 30 m	Thunderstorms were widespread in England Wales and Scotland from 25 th to 30 Jun. Two of the "remarkable" falls which occurred on the 26th were the heaviest on record in the county of Leicestershire for a duration greater than 35 minutes—except for the "very rare" fall of 3.50 inches in 2 hours on July 15, 1937, at Asfordby Hill (Ironworks). These are the entries of 1.63 inches in 58 minutes at Market Harborough and 1.98 inches in 75 minutes at Melton Mowbray (East Anglia chronology). Severe flooding in both towns was reported.
12 May 1954 Northern Whig 13 May	Thunderstorms after a heatwave when temperatures in London reached 82F	<melbourne> <derbyshire>: The storm created damage to crops worth thousands of pounds washing away young plants. A cricket umpire was killed by lightning.</derbyshire></melbourne>
21 Aug 1954 BR	Hanley STW 1.05 in 50 m	<stoke on="" trent="">: During the heavy storm recorded at Hanley Sewage Works, a water-main was split open by lightning and sixteen houses were flooded to a depth of 3 feet.</stoke>
12 Jul 1955 BR	Congleton 1.20 in 30 m	<congleton>: The intense rainfall here was the only one reported in BR for 1955 in the Northwest</congleton>
16 Jul 1956 BR	Leicester 1.05 in 60 m	<leicester>: A thunderstorm caused much flooding in the city; the storm was very localized, however, and the remainder of the county largely escaped the heavy rain.</leicester>
6 Jul 1957 BR	Church Gresley 2.79 in 90 m Newport (Shrops) 1.50 in 60 m Chilcote 3.36 in 85 m Market Drayton 2.53 in 2 h Keele 0.84 in 37 m	<chilcote> ((Leicestershire): In spite of the very heavy fall little flooding or damage was reported. <church gresley=""> (Derbyshire): After a very heavy fall Water Engineer to the Swadlincote U.D.C., reported that there was severe flooding at <swadlincote>, a little more than a mile to the east-north-east of Church Gresley. "Much damage was done, even to the extent of floating a large gasometer which was under repair and tipping it about 7 degrees". <newport>: The storm gave rise to widespread flooding in low lying areas and there was damage to com and other crops.</newport></swadlincote></church></chilcote>
5/6 Aug 1957 Eden (2008), BR, Acreman (1989)	Rodsley 5.97 in 8 h 20 m Further heavy falls and floods were reported on the 6th from Warwickshire, West Riding, Nottinghamshire and Lincolnshire, Retford 1.19 in 60 m	 <ashbourne>: The Engineer to the Trent River Board reported that the worst affected area lay within the triangle Ashbourne, <sudbury>, <egginton>. Flood water of the <<henmore brook="">> caused damage to roads and to property in Ashbourne, where further flooding occurred when the storm-water sewers were no longer able to handle the extremely heavy rain.</henmore></egginton></sudbury></ashbourne> < Rodsley> At the Pumping Station a total of 5.97 in. fell in two storms between 11 p.m. on the 5th and about 7.30 a.m. on the 6th. This total is the greatest amount recorded in a rainfall day in Derbyshire, although it is believed that even heavier rain fell over Darley Moor, about 2 miles to the west of the pumping station. Extensive flooding developed as six streams within this area overflowed. <foston>: Three cottages at were flooded to a depth of more than 6 ft. and the bridge on the main Derby to Uttoxeter road was partly demolished by the overflowing <<foston brook="">>. Acreman lists a peak discharge of</foston></foston>

200.4 cumecs on an area of 27.4 km² on the Foston Brook.

		Scropton> and <halton>: Further downstream 25 houses in Scropton and 293 houses in Halton - nearly all the</halton>
		houses in the village – were flooded to depths of between 6 in. and 18 in.
		<hilton>: Many roads and houses in Hilton were flooded by the overflowing <<hilton brook="">>.</hilton></hilton>
		<snelston>: Flood waters of the <<snelston brook="">> overturned tractors and <mark>rose to ceiling height in a number</mark></snelston></snelston>
		<mark>of cottages in Snelston village in less than an hour.</mark> Acreman lists a discharge of 39,1 cumecs on a catchment
		area of 3.6 km ² on the Snelston Brook.
		<scunthorpe>: At Scunthorpe, sections of the Redbourne steelworks were brought to a standstill by flooding</scunthorpe>
		from < <bottesford beck="">> which submerged a pump house to a depth of 15 ft. In spite of the wide area</bottesford>
		affected by the storms there was only one notable fall, that at Retford, Nottinghamshire.
11 Aug 1957 BR		<clifton>: This and other Derbyshire villages were flooded for the second time within a few days.</clifton>
2 Jul 1958	Floods sweep across the	<cannock>: In Staffordshire, the A5 road was under 5 feet near Cannock.</cannock>
Lancs Evg	country from Essex to Shropshire but Yorkshire was	In Notts 20 vehicles were trapped in 3 feet of water on the Nottingham to Doncaster Road.
Post 2 Jul, BR	one of the counties worst hit	Livestock were drowned and there was widespread damage to houses and business premises by flooding over a
	(See S Yorks Chronology). Burbage 1.33 in 54 m	wide area of Derbyshire, particularly in the north, where the rainfall pattern followed that of the West Riding -
		more than 2 inches in many places on the 1 st with heavy thunderstorms late in the day.
		<hathersage <poolsbrook=""> and the <sheepbridge> and <whittington>(areas of Chesterfield): These were the</whittington></sheepbridge></hathersage>
		most seriously affected areas.
10 Aug 1958	Breaston 0.84 in 25 m Nottingham 0.93 in 45 m	
BR	Beeston 1.11 in 60 m	
	Newport (Shrops) 1.96 in 2h Keele 0,70 in 15 m	
12 Jun 1964	Gayton WW 35.6 in 40 m	
BR		
17 Jul 1964	Bracebridge STW 27.9 in 10 m	
10 Apr 1966		<cannock>: there was 18 inches of water on the Cannock Stafford road following a thunderstorm.</cannock>
Birmingham		
Daily Post 11		

Apr 15 Jun 1966 BR	Finningley 19.6 in 18 m	
17 Jul 1966 Birmingham Daily Post 18 Jul	Willenhall STW 41.4 in 40 m	<birmingham>: Homes in Anderton Street, Ladywood were flooded and in one it was knee deep. There were no reports of serious road flooding.</birmingham>
20/21 Aug 1966 Eden (2008)		Thunderstorms triggered flooding in Gloucestershire and Staffordshire.
11 May 1967 Birmingham Daily Post 12 May	Hottest day since Aug 66 reaching 77F in Birmingham	<solihull>: A 20 minute hailstorm with huge hailstones occurred. <birmingham>: Cellars were flooded in many parts of the city. Flooding was worst in the Sparkbrook, Highgate, small Heath, Stirchley and Nachells areas</birmingham></solihull>
26 May 1967 Birmingham Daily Post 27 May		<birmingham>: An hour long thunderstorm caused flooding in Shutlock Lane Moseley, Stoney Lane Stechford and Pope's Lane Kings Norton. <hinckley>: The storm brought 4 inches of hail which took hours to melt.</hinckley></birmingham>
18 Jul 1967 BR	Hanley STW 27.7 in 45 m	
10 Aug 1967 Lancs Evg Post 10 Aug, Long Eaton	Ilkeston 28.0 in 50 m Wilford Hill Res 67.6 in 60 m Cotgrave res 47.0 in 60 m Nottingham 49.0 in 60 m Bramcote res 40.6 in 2 h	<birmingham>: Severe flooding was reported in the <erdington>, <aston> and <bordesley green=""> areas where the Fire Brigade pumped out houses flooded up to a depth of 1½ feet. Water was 1 foot deep in Saltley High Street. In Summer Road Erdington people had to be rescued from their cars. Houses were struck by lightning which felled chimney pots.</bordesley></aston></erdington></birmingham>
advertiser 18 Aug	Lade bank Bridge 38.1 in 2 h	<long eaton="">: It received 1.07" in 50 minutes. The worst flooding was around the Tamworth Road bridge at Sawley Junction and Nottingham Road bridge. A new sewerage system seems to have prevented flooding at the Market Place. <beeston>: It was said to be the worst flood since 1947 (when the Trent overflowed).</beeston></long>
26 May 1968 Birmingham Post 27 May	Edgbaston DR 0.92"	<beeston?: (when="" 1947="" be="" hood="" it="" overhowed).<="" p="" said="" since="" the="" to="" trent="" was="" worst=""> <birmingham>: Flooding was 10 feet deep at the Bridgeman Street subway, Darlaston Road, <bloxwich>. Flooding occurred at <quinton> when the <<welsh brook="" house="">> burst its banks flooding houses in Blandford Road and Welsh House Farm road to a depth of one foot.</welsh></quinton></bloxwich></birmingham></beeston?:>

		<hurst green="">(near Halesowen): Water poured down the M5 embankment during a thunderstorm. About 20 houses were affected. Householders waded through 18 inches of muddy water in their homes. Houses in Merryfield Road and Lansdowne Road were also seriously affected. <hagley>: The gardens of Hall Meadow were flooded as water poured down Hagley Hill and from the wooded slopes of Hagley Park. <belbroughton>: The landlord of the Holly Bush at Hollies Hill near Belbroughton said the water had been 2 feet deep in the bar. 'We have been flooded here before but never as badly as this'.</belbroughton></hagley></hurst>
14 Jul 1968 BR, Birmingham daily Post 13 Jul	Sutton in Ashfield STW 30.0 in 60 m	There were widespread floods in the West Midlands on 12/13 July but there was no mention of thunder or of intense rainfall (preceding the rainfall at Sutton).
14 Sep 1968 BR	Great Wyrley 39.6 in 90 m	
30 May 1969 Weather Nov 1970 (Pritchard A Cheshire thunderstorm	The storm extended from Oswestry in the southwest to near Knutsford in the north with the worst affected area around Crewe and Nantwich. Pritchard map shows daily rain totals: Cranage 2.47" Alsager 2.14" Nantwich 1.45" Threapwood 1.65" Ellesmere 1.70"	<keele>: A heavy burst of rain and hail first hit Keele village but not the University half a mile to the east. Then from 17.30 to 18.10 there was a violent rain and hail storm with ¾ inch rain and the university campus suffered minor flooding. The hail measured 10 mm diameter although some stones were larger. <knutsford> There was considerable flooding and a landslip blocked part of the southbound carriageway of the M6 between Knutsford and Holmes Chapel <crewe> and <nantwich>: Water was 2 of more feet deep in many streets in both towns. At Crewe part of the roof of a maternity hospital collapsed under the weight of water.</nantwich></crewe></knutsford></keele>
16 Jun 1969 Birmingham Daily Post 16 Jun	Thunderstorms with torrential rain caused flooding in many parts of the Midlands. A talented boxer was killed by lightning	<birmingham>: There was flooding in Metchley Drive, <harborne> and on the A5 at <gailey> and on the West Bromwich to Wednesbury Road.</gailey></harborne></birmingham>
11 Aug 1969 Birmingham	Lightning damage was reported at several places.	<lichfield>: Homes were flooded and pumped out by the fire Brigade at Slade Road, Chase Terrace and Chorley Road, Burntwood.</lichfield>

Daily Post 12 aug 4 Jul 1971	Newtown Linford: 0.83" in 15	
COL	m Newark: 1.81 in 105 m Littleover: 1.03" in 62 m	
23 Jul 1972		<nottingham>: The AA reported that 'cars were very literally washed away.</nottingham>
Coventry		<shrewsbury>: The AA also reported flooding here</shrewsbury>
evening		
telegraph 24		
Jul		
24 Jun 1973 Col	Leicester 0.73 in 60 m (after daily 1.91 on 19 th	<leicester>: there was widespread flooding in the area and damage to crops.</leicester>
16 Jul 1973	Derwent and Howden Dam 1.53 in a thunderstorm with total 2 day rainfall of 6.68	
16 Jun 1974	····	<birmingham>: Thunderstorms covered an area 1200 square miles. The worst hit areas were <rednal>,</rednal></birmingham>
Birmingham		<bourneville> and <northfield>. Some lightning damage was reported.</northfield></bourneville>
daily Post 17		
Jun		
14 Jul 1975	Hail over 50 mm diameter.	There was extensive damage to greenhouses, house windows, vehicles, also roof tiles (especially <mansfield>)</mansfield>
Webb et al (2009), COL	(Stanier and Fellowes,1976). 105 km long hail swath across the Midlands	in Staffordshire, south Derbyshire, Nottinghamshire. <mark>Some hail in the <burton-on-trent> area measured 50–55</burton-on-trent></mark> <mark>mm diameter</mark> .
		<mickleover>: Hailstorms produced drifts of 12 inches of hail against a house.</mickleover>
		<etwall> (Derbyshire): An early morning thunderstorm gave hailstones a good half inch across. The local paper</etwall>
		described them as golf balls. Many greenhouses in the district were smashed. Lightning cut off electricity to
		2500 houses.
		<isle axholme="" of="">: 26 mm fell in 30 m</isle>
		<scunthorpe>: 11 mm fell in 15 m and there was flooding of the shopping precinct which damaged carpets and</scunthorpe>
		clothing and shoes were floating round like miniature boats.
17 Jul 1975	Flooding and lightning	<nuneaton>: Flooding was reported (unspecified)</nuneaton>

Coventry Evening telegraph 18 Jul 8 May 1976 COL	damage occurred especially in the Rugby area	<bulwell> (Notts): Hail caused serious damage to crops and allotments and <mark>many glasshouse panes were</mark> smashed; holes were punched in felt roofs and plastic sheeting panels. The storm occurred at 2.30 am but stones thickly covered the ground in the morning.</bulwell>
1 Jun 1978 COL	Temperatures widely reached 27 to 28C. Storms occurred in SE Wales through central England to East Anglia Braunstone 20.6 in 15 m	
30 May 1979 COL	The rain was caused by a small depression moving up from the Bay of Biscay. Thunderstorms spread from Devon and Dorset across Somerset Avon and Wiltshire and up into the Severn and Midlands	<stretton><burton on="" trent="">: Massive amounts of runoff turned local lanes into rivers. Some roads were flooded for the first time in my memory (c 25 years). <rolleston>: The village was badly hit by flash flooding of the brook which flows through it and said to be at its highest level for at least 50 years cutting off the village from Stretton.</rolleston></burton></stretton>
26 Jul 1980 COL, Eden (2008) Pike (1993)	Severe thunderstorm at Northampton	Thunderstorms causing flooding were also reported in Leicestershire at <burbage> near Hinkley and 12 cattle were killed by lightning at <knaptoft> and a house was damaged at Wigston. Pike (1993) notes that a small area of Northamptonshire received 100 mm described by Waterfall (1982).</knaptoft></burbage>
14/15 Aug 1980 COL	Heavy rainfall caused widespread flooding throughout Nottinghamshire.	<cosby>: the village centre was flooded to a depth of 2 feet during thunderstorms. <kettering>: More than half the monthly rainfall fell between 20.00 on 14th and 04.00 on 15th. <nottingham>: 32.7 mm fell between 21.00 and 09.00 and caused a good deal of flooding in the locality. <carlton> (Notts): The A1 between North Muskham and Balderton was closed due to flooding and at Little Carlton the A 616 had 10 cm of water on it. At Carlton a local stream burst its banks and flooded houses in Stoke Lane Gedling area for the fourth time in the last 12 years. Water and sewage was pumped from houses. Train travel was also disrupted. <moulton park=""> (Northants> Daily rainfall of 66.2 mm was reported</moulton></carlton></nottingham></kettering></cosby>

9 Jul 1981 COL		<littleover> (Derby): In a thunderstorm between 14.30 and 15.40 gave 80.0 mm. The road was covered and flowing like a river and the paths between bungalows were rushing torrents. <stretton><burton on="" trent="">: The storm occurred here but with only 10.4 mm rainfall. Heavy falls were reported at <melbourne> (Derbyshire) and at <ashby de="" la="" zouch="">.</ashby></melbourne></burton></stretton></littleover>
4 Jun 1982 COL	Cosby 66.8 in 3 h 10 m	
5 Jun 1982		Newcastle under Lyme>: 25 mm fell in 20 minutes between 18.55 and 19.15. This was accompanied by <mark>hail up</mark>
COL		to 3 cm in diameter and a blast front of wind which was estimated to reach Force 10. Many gardens and houses suffered flooding and there was much damage by lightning.
23 Jun 1982 COL		<blaby> and <whetstone>: A small tornado swept through the two villages and caused damage to trees houses and grennhouses in 3 streets.</whetstone></blaby>
25 Jun 1982 COL		<stoke on="" trent="">: A wall collapsed due to floodwater.</stoke>
26 Jun 1982 COL		<newcastle lyme="" under="">: Severe flooding again occurred with 18.0 mm rain and hail fell in 15 minutes (after 21 mm in the previous 24 hours).</newcastle>
22 Apr 1983 COL,	April was a very wet month but with prolonged rain rather than convective storms	<nottingham><oxton>: The storm moved from south to north and there was torrential rain and hail which caused widespread local flooding. Small streams overflowed and quantities of mud were washed on to roads.</oxton></nottingham>
J.Boardman and D.Spivey	(except this one)	Oxton village was completely cut off for a time and 20 cm of mud still covered the road the following day. The roundabout on the A 614 near the White Post Inn <farnsfield> was completely submerged causing traffic to</farnsfield>
(1987) "Flooding and		come to a halt. The back road between Farnsfield and <eskring> was still impassable on 23rd. On the A 612 rubble and mud covered the raod between <burton joyce=""> and <lowdham>. Flooding also occurred on Arnold</lowdham></burton></eskring>
erosion in		Lane, <tadling>, Burton road, <burton joyce="">, Gedling Road <mapperley>, Clipstone Lane, <cotgrave>. On the</cotgrave></mapperley></burton></tadling>
west		A46 near Bingham and in the north of the county near Blyth serious flooding on the A1 reduced the dual
Derbyshire, April 1983"		carriageway to half a lane in both directions. <mark>Hail was 3 to 4 mm diameter but reached 10 cm deep in drifts.</mark> <ashford in="" the="" water=""> (Derbyshire): the town situated on the north bank of the River <<wye>>. Flooding</wye></ashford>
East Midlands		began on the evening of 22 April in response to heavy rainfall, and was repeated on the 25 and 26 April and in
Geographer		each instance large quantities of silt were deposited on roads, and in gardens and housesLow-lying properties
Vol 10, p 36 - 44		on the floodplain of the Wye were inundated by up to 20 cm of 'sludge'The[Derbyshire Times] reports suggest that in excess of 100 tons of mud were removed from roads and properties.

		<ednaston> (8 km NW of Derby)In the valley of Brailsford Brook, a minor tributary of Sutton Brook. On 22 April 1983 runoff from a field [of potatoes] to the north-west of the Yew Tree Inn flooded the inn and adjacent cottages. Water and soil left the field via a gate at the lowest point in the field. Flooding affected the properties on three occasions in April.</ednaston>
14 May 1983		<cosby>: It was the worst hailstorm there since records began 24 years ago. The storm commenced at 13.55</cosby>
COL		and within 3 minutes the village was white with <mark>hailstones up to 16 mm diameter</mark> and lad to a depth of 6 cm.
		The storm lasted 17 minutes causing most of the trees to lose all their blossom. Crops were badly damaged.
20 May 1983		<leicester>: Rain and hail caused havoc in the city during the afternoon when 34 mm rain fell in 3 hours.</leicester>
COL		Manhole covers were blown off and road surfaces cracked as drainage systems failed to cope. Many roads were
		flooded and traffic brought to a standstill. Flood water flowed into the basement of the Museum in New Walk
		and art treasures were taken to safety. Snow lay 3 inches deep on the Narborough Road. The storm only
		affected the city area.
8 Jun 1983		<hartington> (Derbyshire): Windows of a hall were smashed by hail.</hartington>
The Guardian		
9 Jun		
20 Jun 1984		<hinckley>: Many of the town's hosiery and dry cleaning firms were flooded including Sketchley Dry Cleaners to</hinckley>
COL		a depth of over 1 metre.33.7 mm fell in 1 hour and 22.6 in 30 minutes.
2 Aug 1984		<gedling> (Notts): In a thunderstorm 70.0 mm was recorded (time not known). On the same day a whirlwind at</gedling>
COL		Gotham nearby caused much damage.
		<littleover>: 23.5 mm in 20 minutes in a thunderstorm</littleover>
21 Sep 1984		<loughborough>: Heavy hail gave accumulations up to 4 cm deep.</loughborough>
COL		<harriseahead> (N of Stoke): Large hail up to 15 mm diameter from 14.00 to 14.35 caused damage to fruit and</harriseahead>
		vegetables. Drifts were several inches deep.
5 Jul 1985		<buxton>: 23 mm rainfall recorded in 15 minutes. <mark>Hailstones up to 40 mm</mark> observed at a point 3 miles away.</buxton>
COL		Much damage was done to crops and property.
19/20 May	In the pre dawn period on 20 th severe thunderstorms affected chiefly the Midlands Daily (presumably storm) rainfalls were:	<derbyshire>: severe flash floods occurred in the Derby area.</derbyshire>
1986 COL		<burton on="" trent="">: 27.2 mm in 5 to 6 hours. Deep flooding occurred in the Stepenhill district due to a broken</burton>
		culvert, and mudslides caused damage on a new housing estate.
		<mickleover>: Local lanes were inundated by overflowing drains and the A38 was flooded at Findern.</mickleover>

	Littleover 55.3mm (24.8mm in 1 h 15m) Markeaton Park 49.8mm Mickleover 36.4mm	The < <dove>> and <<trent>> rose rapidly but did not overflow but smaller brooks and streams overflowed.</trent></dove>
25/26 Aug 1986 COL 17 Jul 1987 COL	Hurricane Charley brought heavy persistent rain over a large area	<loughborough>: 65.0 mm fell between 13.00 on 25th and 17.00 on 26th. Hulland: 72.0 on 25th. <nottingham>: there were heavy localised downpours with attendant flooding. In the ,Dunkirk>, <lenton> and <west bridgford=""> areas and parts of Nottingham city centre where a number of roads and basements were flooded</west></lenton></nottingham></loughborough>
23 Aug 1987 Eden (2008), COL , Acreman (1989) (re Pirt and Karle 1987), Staffordshire Sentinel 24 Aug	Widespread thunderstorms with local flooding. Newcastle under Lyme: 80.0 mm from 07.00 to 17.00 with occasional thunder and lightning,	 Blithfield reservoir> (Staffs): had 115 mm. Severe flash flooding occurred particularly in the villages of Yoxall>, <barton needwood="" under="">, <alrewas> <fradley>, <marchington> and <blythe>. Streams overflowed and the river <<trent>> and Mersey Canal also contributed. The A38 was flooded at 3 points between Burton and Lichfield.</trent></blythe></marchington></fradley></alrewas></barton> <forsbrook>: The Staffs Sentinel has several photos of the village square (3 feet)and other locations under 3 water.</forsbrook> <burslem>: Ford Green Hall (a 16th century Tudor house) was under 7 feet of water despite the recent installation of a submersible pumping system (Photo in SS).</burslem> <denford>: At the Hollybush drinkers were stranded as the Caldon Canal burst its banks and joined up with the <<river churnet="">> flooding the pub and 6 cottgages to a depth of 6 feet.</river></denford> <henford>: The Island and nearby filling station were flooded as the Trent burst its banks closing the A34.</henford> <milton> <baddeley green=""><carmountside>: Homes businesses and pubs were 'under siege'.</carmountside></baddeley></milton> <longton>: It suffered extensive damage at Sterndale Drive Blurton where the roadway was churned up and a home awash. The A530 Meir to Stone road was blocked.</longton> <bucknall>: Ruxley Court Old People's home was evacuated. At Finney Gardens a waste skip was washed away and lodged under a bridge causing floodwater to build up on the main road to Leek making it impassable. The hospital X-ray department was flooded.</bucknall> <bentilee>: Pensioner's homes at Uffington Parade were threatened by a stream which burst its banks and a Jaguar car at the scene was immersed in 2 feet of water.</bentilee> <kidsgrove>: Worst hit areas were Newchapel Road where waer flowed into homes and the Red Bull traffic lights which were closed to traffic. In the town centre water cascaded off Heathcote Street bridge. The Tavern pub was flooded.</kidsgrove> <stone>: High Street was flooded and 20 shops were under water. Cars were totally submerged in a town</stone>

21/22 Jul 1988 COL		 centre car park. The Fire Service rescued an elderly woman from a top floor window on a canalside cafe. <biddulph>: It was described as 'like an island' with roads blocked. The boiler house at the high School was flooded and the main Biddulph road through <brindley ford=""> was closed and vehicles abandoned.</brindley></biddulph> <cheadle>: Homes and roads were flooded around <draycott>, <haleshall boundary="">, <kingsley>, <tean>, and</tean></kingsley></haleshall></draycott></cheadle> <fulford>. A man was rescued after being washed through a culvert in Cheadle in Brookhouse Road.</fulford> <newcastle lyme="" under="">: Sneyd Avenue, Westlands, Boyles Hall Road, Bignall end, London Road, Chesterton and Brook Road were all under water and closed for a time. Flood water running down Basford Bank put the carriageway of the A 500 under more than 2 feet of water.</newcastle> <alsager>: severe flooding occurred to 12 homes in Ivy Lane with 12 inches of water in the homes from water running off the nearby golf course.</alsager> <rode heath="">: Homes were under 6 inches of water.</rode> <stoke on="" trent=""> and <stone>: Flooding was severe in parts. A man in a wheelchair was rescued from his home in Seven Arches Way and a row of pensioner's bungalows off Old Mill Street were evacuated. The main Manchester to London railway through the city looked like a canal and services were disrupted for 2 days between Stoke and Uttoxeter. A rough estimate of the damage to date is about £3 million. Acreman (1989) lists a flood discharge of 50.0 cumecs on a catchment area of 53.2 km² for the<<t rent="">> at <stoke on="" trent=""><li< th=""></li<></stoke></t></stone></stoke>
24 May 1989 Eden (2008) The Guardian 26 May 1993 Davis (1991) 27 Jun 1990 COL 6/7 Jun 1991 COL	Rainfall 60 to 70 mm occurred in thunderstorms in several places in central England.	<wildboarclough>: A flash flood tore through the village of Wildboarclough on the Cheshire Derbyshire border. <norringham>: In an evening thunderstorm more than 37 mm fell in less than an hour. <nottingham<mark>>: Golf ball sized hailstones fell for 10 minutes causing thousands of pounds worth of damage at <ollerton> and <tuxford>. Cars, greenhouses and porches were damaged. <derby>: A localised intense thunderstorm occurred with 34.0 mm at Derby and 33.9 mm at Littleover (durations not noted).</derby></tuxford></ollerton></nottingham<mark></norringham></wildboarclough>
6 Jul 1991 COL 13 Jul 1991	Loughborough 31 mm in 40 m Loughborough 21.0 mm in 30 m	(durations not noted). <loughborough>: Parts of the town and outlying urban areas were affected by flooding and power failure <loughborough>: flooding again occurred</loughborough></loughborough>

31 May 1992 COL There was a widespread thundry preof from 23th. <loughborough>: A thunderstorm caused local flooding and lightning damage. 1 Jun 1992 <derby>: There was flooding of city centre roads. COL <newcastle lyme="" under="">: 28.0 mm fell in less than 40 m. 9 Jun 1992 The storm extended from north of Lietester to Long Eaton <long eaton=""> (Derbyshire): Torrential rain caused flash flooding causing damage to homes shops and schools. COL The storm was noted for the severity of thunder but rainfail was not excessive. Derby storm rainfail was not excessive. COL <long eaton=""> (Derbyshire): Torrential rain caused flooding to properties in <stapenhill>. COL <usuftable< td=""> <long eaton=""> (Derbyshire): Torrential rain caused flooding to properties in surrounding area. COL <usuftable< td=""> <long eaton=""> (Derbyshire): Torrential rain caused flooding to properties in surrounding area. COL <usuftable< td=""> <long eaton=""> (Notts): Over 3000 homes affected by power cuts in surrounding area. COL <usuftable< td=""> <lowdnam> (Notts): Dely rainfail 46 mm. Local flooding occurred but very limited thunder. Col <usuftable< td=""> <tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes wer</eccleshall></rugeley></tamworth></usuftable<></lowdnam></usuftable<></long></usuftable<></long></usuftable<></long></usuftable<></stapenhill></long></long></newcastle></derby></loughborough>	COL		
COL9 Jun 1992<	-	thundery period from 23rd	<loughborough>: A thunderstorm caused local flooding and lightning damage.</loughborough>
9 Jun 1992 COL 30 Jun 1992 COL	1 Jun 1992	-	<derby>: There was flooding of city centre roads.</derby>
COLCOLCol30 Jun 1992 COLThe storm extended from path of Leicester to Long Eaton-Cong Eaton > (Derbyshire): Torrential rain caused flash flooding causing damage to homes shops and schools. The fire brigade had to call for help from surrounding areas. - Cosby> (Leics): 25.9 mm in 90 m20 Jul 1992 COLThe storm was noted for the severity of thunder but rainfail was not excessive. Derby storm rainfall 36.7-Surron Trent>: the storm caused flooding to properties in <stapenhill>. - Lowdnam> (Notts): Over 3000 homes affected by power cuts in surrounding area. - Keyworth> (Notts): Daily rainfall 46 mm. Local flooding occurred but very limited thunder. - Oerby>: there was no thunder but flash flooding on St Albans Road and Brayfield Road, <littleover>.10 May 1993 COL- Tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and -Hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: (Staffs): The main road was closed due to the torrential rain buckling the road surface <lowdnam> (Notts): 28.1 mm fell in 30 minutes.10 Jun 1993 COL-</br></lowdnam></little></great></weston></sandon></eccleshall></rugeley></littleover></stapenhill>	COL		<newcastle lyme="" under="">: 28.0 mm fell in less than 40 m.</newcastle>
30 Jun 1992 COL 20 Jul 1992 COLThe storm extended from north of Leicester to Long Eaton <long eaton=""> (Derbyshire): Torrential rain caused flash flooding causing damage to homes shops and schools. The fire brigade had to call for help from surrounding areas. <cosby> (Leics): 25.9 mm in 90 m9 Jul 1992 COL 9 Jul 1992 COL 9 Jul 1992 COL 9 Jul 1992 COLThe storm was noted for th severity of thunder but rainfall was not excessive. Derby storm rainfall 36.7<burton on="" trent="">: the storm caused flooding to properties in <stapenhill>. <lowdnam> (Notts): Over 3000 homes affected by power cuts in surrounding area. <lowdnam> (Notts): Daily rainfall 46 mm. Local flooding occurred but very limited thunder. <derby>: there was no thunder but flash flooding on St Albans Road and Brayfield Road, <littleover>.10 May 1993 COL<tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <store>(Staffs): The main road was closed due to the torrential rain buckling the road surface <lowdnam> (Notts): 28.1 mm fell in 30 minutes.10 May 1993 COL</lowdnam></store></little></great></hixon></weston></sandon></eccleshall></rugeley></tamworth></littleover></derby></lowdnam></lowdnam></stapenhill></burton></cosby></long>	9 Jun 1992		<nottingham>: Torrential rain and flooding occurred to the east of the city</nottingham>
COL north of Leicester to Long Eaton The fire brigade had to call for help from surrounding areas. 20 Jul 1992 The storm was noted for the severity of thunder but rainfall was not excessive. Derby storm rainfall 36.7 Surton on Trent>: the storm caused flooding to properties in <stapenhill>. 10 May 1993 COL Surrou on Trent>: the storm caused flooding occurred but very limited thunder. COL Col Surrou on Trent>: the storm caused flooding occurred but very limited thunder. COL Col Surrou on Trent>: the storm caused flooding occurred but very limited thunder. COL Col Col (Notts): Over 3000 homes affected by power cuts in surrounding area. 10 May 1993 Col Col (Surrou on Trent>: the storm caused flooding on St Albans Road and Brayfield Road, <littleover>. 10 May 1993 Col CTamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand Col Col Col (Staffs): Floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding. Great Haywood> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. Little haywood>: A family trapped upstairs was rescued by firemen. Store> (St</hixon></weston></sandon></rugeley></littleover></stapenhill>	COL		
Col Eaton Infer the brigade had to call for help from surrounding areas. 20 Jul 1992 <cosby> (Leics): 25.9 mm in 90 m Col 9 Jul 1992 Col The storm was noted for the severity of thunder but rainfall was not excessive. Derby storm rainfall 36.7 <button on="" trent="">: the storm caused flooding to properties in <stapenhill>. 10 May 1993 < <cosby> (Leics): 25.9 mm in 90 m <lowdnam> (Notts): Over 3000 homes affected by power cuts in surrounding area. 10 May 1993 <surdnam> (Notts): Daily rainfall 46 mm. Local flooding occurred but very limited thunder. Col <tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshalls: 3="" 4000="" <sandon="" a51.="" by="" estate="" floodwater="" for="" hixon="" homes="" hours.="" industrial="" leaving="" marooned="" nearly="" on="" power="" the="" were="" without="" workers=""><weston> and <hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface 10 Jun 1993 <lowdnam> (Notts): 28.1 mm fell in 30 minutes.</lowdnam></stone></little></great></hixon></weston></eccleshalls:></rugeley></tamworth></surdnam></lowdnam></cosby></stapenhill></button></cosby>	30 Jun 1992		<long eaton=""> (Derbyshire): Torrential rain caused flash flooding causing damage to homes shops and schools.</long>
COL 9 Jul 1992 COL The storm was noted for the severity of thunder but rainfall was not excessive. Derby storm rainfall 36.7 <burton on="" trent="">: the storm caused flooding to properties in <stapenhill>. 10 May 1993 <burton on="" trent="">: the storm was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand COL <tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand COL <cale 3="" 4000="" <sandon="" a51.="" by="" closestally:="" estate="" floodwater="" for="" hixon="" homes="" hours.="" industrial="" leaving="" marooned="" nearly="" on="" power="" the="" were="" without="" workers=""><weston> and <hixon> were more or less cut off by the A51 flooding. Great Haywood> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. Little haywood>: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface Lowdham> (Notts): 28.1 mm fell in 30 minutes.</stone></hixon></weston></cale></rugeley></tamworth></rugeley></burton></stapenhill></burton>	COL		The fire brigade had to call for help from surrounding areas.
9 Jul 1992 COL rainfall was not excessive. Derby storm rainfall 36.7 <th>20 Jul 1992</th> <th></th> <th><cosby> (Leics): 25.9 mm in 90 m</cosby></th>	20 Jul 1992		<cosby> (Leics): 25.9 mm in 90 m</cosby>
Solution of the field of t	COL		
rainfall was not excessive. > Derby storm rainfall 36.7 200wdriam's (Notts): Deily rainfall 46 mm. Local flooding occurred but very limited thunder. <derby:< td=""> 200 May 1993 COL 200 May 1993 2</derby:<>	9 Jul 1992 COL		<burton on="" trent="">: the storm caused flooding to properties in <stapenhill>.</stapenhill></burton>
Solution of the second seco		-	<lowdnam> (Notts): Over 3000 homes affected by power cuts in surrounding area.</lowdnam>
10 May 1993 <tamworth>: there was flash flooding here and at <rugeley> and a bus was disabled in floods. At Rugeley COL people tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface <lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham></stone></little></great></hixon></weston></sandon></eccleshall></rugeley></tamworth>		Derby storm rainfall 36.7	<keyworth> (Notts): Daily rainfall 46 mm. Local flooding occurred but very limited thunder.</keyworth>
COLpeople tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface10 Jun 1993 COL<lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham></stone></little></great></br></hixon></weston></sandon></eccleshall>			<derby>: there was no thunder but flash flooding on St Albans Road and Brayfield Road, <littleover>.</littleover></derby>
COLpeople tried unsuccessfully to stop their homes from being flooded by filling carrier bags with sand <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding. <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface10 Jun 1993 COL<lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham></stone></little></great></hixon></weston></sandon></eccleshall>			
 <eccleshall>: 4000 homes were without power for nearly 3 hours. Workers leaving Hixon Industrial Estate were marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51 flooding.</hixon></weston></sandon></eccleshall> <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road.</great> <little haywood="">: A family trapped upstairs was rescued by firemen.</little> <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface</stone> Lowdham> (Notts): 28.1 mm fell in 30 minutes. 	-		
marooned by floodwater on the A51. <sandon><weston> and <hixon> were more or less cut off by the A51flooding.<great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes hadfront doors forced in by the force of water. Cars got carried away along the road.<little haywood="">: A family trapped upstairs was rescued by firemen.<stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface10 Jun 1993<lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham></stone></little></great></hixon></weston></sandon>	COL		
flooding. <pre> <pre> </pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> flooding. </pre> <pre> flooding. </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> </pre> <pre> flooding. </pre> <pre> <th></th><th></th><th></th></pre>			
 <great haywood=""> (Staffs): Floodwater was up to thigh level and inside houses 3 feet deep. At least 2 homes had front doors forced in by the force of water. Cars got carried away along the road.</great> <little haywood="">: A family trapped upstairs was rescued by firemen.</little> <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface</stone> 10 Jun 1993 <col< li=""> </col<>			
front doors forced in by the force of water. Cars got carried away along the road. <little haywood="">: A family trapped upstairs was rescued by firemen. <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface <lowdham> (Notts): 28.1 mm fell in 30 minutes. COL</lowdham></stone></little>			
 <little haywood="">: A family trapped upstairs was rescued by firemen.</little> <stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface</stone> 10 Jun 1993 <lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham> 			
<pre><stone> (Staffs): The main road was closed due to the torrential rain buckling the road surface 10 Jun 1993 </stone></pre> <pre><col< pre=""></col<></pre>			
10 Jun 1993 <lowdham> (Notts): 28.1 mm fell in 30 minutes. COL</lowdham>			
COL			
			<lowdham> (Notts): 28.1 mm fell in 30 minutes.</lowdham>
11 Jun 1993 <loughborough>: severe local flooding was reported.</loughborough>	11 Jun 1993		<loughborough>: severe local flooding was reported.</loughborough>

COL	<cosby>: Severe flooding occurred in the Soar Valley after 66.3 mm fell in 36 hours. Thunder was reported from</cosby>
	04.05 to 06.15.
	<north nottingham="">: Central and North Nottinghamshire took the brunt of the storm with <mansfield>,</mansfield></north>
	<kirkby>, <southwell> and <newark> particularly affected by flash flooding.</newark></southwell></kirkby>
24 Jun 1994	<anslow><burton on="" trent="">: the majority of the 27.3 mm rain fell in 29 minutes causing much local flooding of</burton></anslow>
COL	gardens and roads.
4 Jul 1994 COL	Some flooding was reported in <wollton>, <arnold>, <carlton> and <gedling> areas.</gedling></carlton></arnold></wollton>
24 Jul 1994	Thunderstorms in W Wales and Staffordshire where <denstone> recorded 74 mm in a few hours.</denstone>
Eden (2008),	Loughborough>: A heavy thunderstorm caused flooding of roads and buildings. Hail accompanied the storm for
Webb et al	4 to 6 minutes.
(2009)	<hinckley>: 24.6 mm in 45 m</hinckley>
	<melton mowbray="">: In a violent thunderstorm golf ball hailstones cut a ½ mile swath ; 3000 acres of crops were</melton>
	affected and holes cut in a shed roof
16 Jul 1995	<derby>: 25.7 mm rain fell in 50 minutes during a thunderstorm</derby>
COL	<mickleover> had a total of 29.7 mm</mickleover>
29 Jul 1996	<derby>: 20.7 mm in just over 30 minutes in a very localised storm.</derby>
COL	
6 Aug 1996	<newcastle lyme="" under="">: Serious flooding brought roads to a standstill and damaged shops and property. The</newcastle>
COL	observer reported 34 mm rain at his site but 43mm at Keele University but both sites were marginal to the main storm centre which lay 3 km to the SE.
20 Aug 1996	<cosby>: In a severe thunderstorm from 19.25 to 20.15, 25.6 mm fell in 30 minutes.</cosby>
COL	<loughborough>: there was a heavy thunderstorm from 20.00 to 21.00 with local flooding and power lost for 90 minutes.</loughborough>
	Keyworth> (Notts): 14.5 mm fell in 15 minutes with numerous reports of local flooding. There was heavier rain to the NE of the station.
28 Jun 1997	<newark on="" trent="">: Flash flooding occurred in a thunderstorm with a spectacular funnel cloud.</newark>
COL	<notts border="" lincs="">: A tornado occurred in rural areas with torrential downpours and flooding closing the A1 in N Notts.</notts>

9 Jul 1997 COL		<nottingham>: A severe thunderstorm affected southwest areas out to <long eaton=""> over a 2 hour period with</long></nottingham>
		drain covers up on <wollaton vale="">.</wollaton>
13 Aug 1997		<lowdnam> (Notts): Localised torrential rain with a daily total of 22.6 mm with reported flash flooding in</lowdnam>
COL		<arnold> and <daybrook> (NE Nottingham)</daybrook></arnold>
31 Aug 1997		<stoke on="" trent="">: serious local flooding</stoke>
COL		<newcastle lyme="" under="">: Storm rainfall 28.2 mm.</newcastle>
		<harrishead> (Staffs): Several successive storms passed over with a total rainfall of 42.1 mm most of which fell</harrishead>
		in about 90 minutes and caused considerable local flooding.
		<anslow> (Staffs): 19.8 mm rain most of which fell in 1 hour with considerable local flooding</anslow>
		<stretton> (Staffs): Total rainfall 27.0 with local flash flooding.</stretton>
		<middleton> (Derbyshire): Daily total 44.3 mm of which 43 mm fell in a thunderstorm</middleton>
31 Jul 1998	The worst of the storm was	Flash flooding was reported in the areas listed and houses and gardens flooded and some places a metre deep.
COL	over N and NE Nottingham, Arnold, Carlton, Daybrook, ,	<carlton>: the Fire Station was flooded.</carlton>
	Woodthorpe, Burton Joyce, Gedling and Netherfield. Arnold 43 mm in 2 hours	<woodthorpe>: It had 3 feet of water.</woodthorpe>
23 Aug 1998		<newcastle lyme="" under=""> (Staffs): There was a slow moving front followed by a thunderstorm giving a daily total</newcastle>
COL		of 46.7 mm. In spite of the large total there were few reports of flooding.
30 Sep 1998		<anslow> (Staffs): Of a daily total of 29.8 mm the large portion fell in 1 hour in the afternoon; there was local</anslow>
COL		flooding.
2 Jun 1998		<loughborough> (Leics): Basements were flooded in the town centre from a heavy thunderstorm from 17.00 to</loughborough>
COL		18.00 with a total rainfall of 26.0 mm.
4 Jun 1999		<nottingham>: Hail 20 mm in diameter was observed.</nottingham>
COL		
26 Sep 1998	Malvern Link 32.1 mm	<harborne s=""> (W Midlands): The total thunderstorm rainfall was 43.1 mm. The normally small <<bournbrook< th=""></bournbrook<></harborne>
COL, CBHE (I.	Tenbury wells 29.5 mm	Stream>> was in flood with the water level with a footbridge and houses alongside flooded including the
D. Phillips		Barnes Hill road.
(2003), Birmingham		<warstock> Birmingham): A total of 52 mm fell in a 2 hour period but most of it in 40 minutes. Overflowing</warstock>
Birmingham Post 28 Sep		drains flooded a supermarket in nearby <shirley>.</shirley>

		<birmingham>: The south-western suburbs of Birmingham were affected by four major flood events during 1998-2000, the worst-hit areas being <frankley>, <northfield> and <longbridge>. Birmingham City Council identified 41 specific flooding locations within this area, all of which are located in the small River <<rea>> catchment. The first event occurred on the evening of 26 September 1998The worst-hit area was south Birmingham, with press reports listing flooded buildings in the suburbs of <rubery>, <northfield>, <harborne>, <moseley>, <king's heath="">,<billesley>, <hall green=""> and <shirley>. The only reported instance of flooding in north Birmingham was in Summer Road, <erdington>. Hourly data for Winterbourne show that 33.1 mm fell between 1800 and 1900 GMT; the rain [tabled for 8 sites, peaking at 50.3 mm at the Birmingham university Winterbourne station] lasted for a total of 2h 42 min and had ceased by 2000 GMT."</erdington></shirley></hall></billesley></king's></moseley></harborne></northfield></rubery></rea></longbridge></northfield></frankley></birmingham>
2 Jul 1999 COL		<anslow> (Staffs): 28.7 mm mostly from 02.00 to 02.25 on 3rd. There was widespread local flooding. <thurgarton> (Notts): A storm total of 23.8 mm mostly in 12 to 15 minutes caused local flooding. There was also a mini tornado with rain and hail. Branches were torn off trees. <derby>: Dozens of businesses in the city suffered flood damage on 3rd following a storm in the early morning. <wirksworth>: 19.4 mm fell mostly in 15 minutes.</wirksworth></derby></thurgarton></anslow>
5 Jul 1999 COL		 <burton on="" trent="">: Flash flooding was reported at Forest Hall (Snobnall area). A hospital, hotel, pub, town hall, garden centre and newspaper offices were flooded.</burton> <anslow> (Staffs): There were power cuts and hundreds of homes flooded. Some roads in East Staffordshire were impassable. Total rainfall was 54.8 mm.</anslow> <tatenhill> (Staffs): flooding was reported.</tatenhill> <newcastle lyme="" under=""> (Staffs): In a thunderstorm 20.4 mm fell mostly within 5 minutes. Hail was up to 2 cm in diameter. There was severe localised flash flooding.</newcastle>
1 Aug 1999 COL 2 Aug 1999		<shropshire>: More than 40 mm rain was reported with large hail. <sutton coldfield="">: Local flash floods occurred in a storm from 17.00 to 18.30 with 31.0 mm rain.</sutton></shropshire>
COL 8 Aug 1999 COL	Heavy thundery rain was reported in central and eastern England. There was widespread flooding across the W Midlands.	<sutton coldfield="">: 50.6 mm daily rainfall</sutton>

18 Aug 1999 COL 27 May 2000 COL 2 Jul 2000 COL	Two thunderstorms moved north between 16.00 and 21.30 gave 30mm over the western half of Nottingham with some flooding	<loughborough> (Leics): There was a heavy thunderstorm in the afternoon with flash floods in the town centre. A community hall was struck and damaged by lightning. <anslow><burton on="" trent="">: A hailstorm with hail diameter 8-10 mm affected the centre of Burton. Drifts of up to 10 cm deep were formed. <weston coyney=""> (Stoke) A 12 hour toal of 44.7 mm was recorded. <chaddesden> (Derbyshire): Of a daily total of 64 mm, 55 mm fell in 1 hour. The fire service was called to pump out premises in Chaddesden and <oakwood>. <watnall>: 31.8 mm fell in 1 hour <buxton>: Daily rainfall was 59 mm</buxton></watnall></oakwood></chaddesden></weston></burton></anslow></loughborough>
27 Jul 2000 COL		<newcastle lyme="" under="">: A violent storm caused local flooding accompanied by squally winds.</newcastle>
30 Sep 2000 COL	Keyworth 12.4 mm in 30 m	<nottingham>: A slow moving thunderstorm developed SE of Nottingham and extended slowly NW; there was torrential rain especially in the Vale of Belvoir and East Nottingham with flooding reported.</nottingham>
24 Apr 2001 COL 15 May 2001 COL		<ruddington> (Notts): 20 mm precipitation fell in 20 minutes accompanied by small hail <nottingham>: Torrential <mark>rain with hail 10 mm diameter</mark> caused flash flooding in the suburbs of W Nottingham. <bloxwich> (nr Walsall): A severe thunderstorm in Bloxwich caused some local flooding. <nottingham>: Three separate thunderstorms moving northeast led to power cuts and flooding in the city</nottingham></bloxwich></nottingham></ruddington>
20 Jul 2002 COL	Widespread thunderstorms affected N England and the Midlands during the afternoon and evening	centre. <keyworth> (Notts): In the 24 hours ending 2100GMT Keyworth (Nottingham) had 47.3mm of rain in at least 3 torrential bursts, with thunder and hail at 1700GMT Many parts of the east of Nottinghamshire suffered flash flooding twice during the day. 50.9mm fell at Penistone in the 24 hours.</keyworth>
29 Jul 2002 COL (from Nottingham Evening Press)	London reported maximum temperatures of 32.6C	<nottingham>: Almost 200 properties were affected by flash flooding as water depths exceeded a metre in some streets after the <<river leen="">> burst its banks during the evening. The worst areas affected in Nottingham were <bulwell>, <old basford=""> and <hucknall> with more than 300 calls being made to the Nottinghamshire Fire and Rescue Service. Trains were cancelled between Nottingham and Mansfield. 8500 homes in Nottinghamshire and Derbyshire were left without power because of lightning strikes. Damage from large hail was reported from Hucknall where two large holes were punctured in the roof of a car port in</hucknall></old></bulwell></river></nottingham>

30 Jul 2002 COL		Nottingham Road. An observer said the hail was as 'big as golf balls'. In Bulwell nearly 40 holes were made in the roof of a conservatory. (Reports taken from Nottingham Evening Post.) Flash floods closed roads and swamped some homes in Nottingham during the evening; roads in the <old basford=""> area of the city were under four feet of water in places and part of Arnold Way was reported to have collapsed. <desford>: Following the warmest day in July (28.7C) came thunderstorms with 30 mm in 1 hour between 14.00 and 15.00 A dry interlude between 1500GMT and 1630GMT was the only respite before the period 1630-1735GMT gave a further 35mm by which time the garden was underwater, water having cascaded off the house roof on to already waterlogged ground. The next hour gave a further 7mm followed by 9mm between 1930-2035GMT, by which time wading in bare feet down the garden was the only practical way to empty the full raingauge. Further heavy bursts or rain during the night up to 0800GMT next morning deposited a further 8mm. This remarkable rain event(s) totalled 89mm.</desford></old>
17 Jul 2003 COL		<middleton by="" wirksworth="">: A severe thunderstorm affected the station between 0110h and 0345hwith 63.2 mm falling. This fall was very localised, a gauge about 900m from my own recorded 52mm, Wirksworth had 36mm. Further storms during the afternoon of the 17th gave another 15mm. <gringley-on-the-hill>: Thunderstorm at 0530GMT gave 15mm in 11 minutes with 18.8mm in total for the storm.</gringley-on-the-hill></middleton>
9 Aug 2004 COL	Nearly every fire engine in the Nottinghamshire was reportedly out on call during the evening dealing with calls from the public. Between 1700GMT and 2300GMT Nottinghamshire and Rescue Service dealt with nearly 200 cases of flooding resulting from the	<retford> and <newark>: These areas were especially badly hit with Newark fire station receiving nearly 50 calls. <sherwood> (Nottingham): There were reports of wheelie bins floating down Winchester Street and further up the A60, in Daybrook, traffic ground to a halt in the atrocious conditions. <loughborough>: The combination of prolonged heavy rain from 1700h/9th and a thunderstorm at 1000h/10th August 2004 caused severe flooding to private and commercial properties in parts of the town.</loughborough></sherwood></newark></retford>
12 Aug 2004 COL 16 Aug 2004 COL	torrential rain. Other thunderstorms (other than at Boscastle) resulted in heavy falls over Yorkshire and	<ashover>: Thunderstorm with torrential rain, 26.6mm in 18 minutes 2000-2018GMT <stone> (Staffordshire): severe flooding occurred following an evening thunderstorm, with what many described as a small twister accounting for debris and the uprooted trees.</stone></ashover>
	heavy fails over forksille and	

	East Anglia during the afternoon and evening	
18 Aug 2004		<shepshed> (near Loughborough): A significant hail event occurred with stones 10-15mm in diameter and much</shepshed>
COL		damage was done to conservatories, greenhouses and other outbuildings as the hail measured 5cm deep in
		places.
		<mountsorrel> (near shepshed): 14 mm fell in 35 minutes.</mountsorrel>
		<calverton> (NE of Nottingham): Hailstorm caused damage to a roof. Hailstones were oval in shape measuring</calverton>
		up to 25mm x 18mm x 8mm.
19 Aug 2005		<mountsorrel>: Heavy storms brought 30mm to Mountsorrel but at <newtown linford=""> (3 miles to the</newtown></mountsorrel>
COL		SW) 61mm was recorded during the storms making this the highest individual total for one day for the UK for
		August .
		<gringley-on-the-hill>: Heavy rain with 41.3mm falling, 25mm falling in one hour without thunder.</gringley-on-the-hill>
		<keyworth>: After a hot day heavy rain became torrential overnight with 33.9mm falling in 4 hours and lightning</keyworth>
		lit up the sky in the early hours, local flooding also occurred.
9 Sep 2005		<gringley-on-the-hill>: Torrential downpour, with a total fall of 40.3mm. 35mm of this fell in a 70-minute period</gringley-on-the-hill>
COL		without any thunder.
2 Jul 2006		<middleton> (Derbyshire): Severe thunderstorm on the evening of the 2nd gave 41.6mm in about two hours, the</middleton>
COL		largest fall in July and the largest in a thunderstorm since 16.7.2003.
17 Jul 2006		<mountsorrel>: A severe thunderstorm gave 21mm in one hour, 1300-1400GMT; lightning struck several homes</mountsorrel>
COL		in Leicestershire.
11 Sep 2006		<derby>: Maximum temperature 27.4C (at that stage the highest September temperature for six years). Cloud</derby>
COL		trapped the heat and it was still 25C in the fading evening light. There was then a fierce thunderstorm 1825-
		1910 GMT giving 19.5mm of rain and a 3mb pressure kick.
		Ashover>: A thunderstorm 1830-1930GMT gave 15.8mm of rain in 26 minutes (1852-1918GMT).
15 Jun 2007		<loughborough>: A heavy thunderstorm (1535-1630h) produced flooding in the town centre; lightning caused</loughborough>
COL		damage to three buildings including a school, and a fire in one. From 0900h/14th to 1630h/15th 50.5mm of rain
		<mountsorrel>: extremely violent storm with a rainfall rate reaching 400mm/h; total fall 36.2mm.</mountsorrel>
22 Jun 2007		<lowdham> (Notts): Heavy rain resulted in flash flooding of several villages including <lambley>, <lowdham>,</lowdham></lambley></lowdham>
COL		<woodborough> and <burton joyce=""></burton></woodborough>

24 Jun 2007 COL	<southwell> (Notts): Severe thunderstorm and torrential downpour was slow-moving over the area. Southwell racecourse was very badly affected by flood damage to the value of several millions of pounds and is unlikely to re-open before November 2007. <southwell>: 24th-25th - Prolonged heavy or torrential rain. Southwell was almost cut off by flooded roads; some houses were inundated and some schools closed.</southwell></southwell>
26 Jul 2007 COL	 Some nouses were multilated and some schools closed.
12 Apr 2008 COL	<desford>: Thunderstorm with large hail first heard at 1405GMT, hail falling 1425-1440GMT, completely covering the ground. Largest hailstones measured up to 1cm with most measuring 5mm in diameter. 27th - Thunderstorm at 1528GMT, followed by another thunderstorm with large hail mixed with heavy rain between 1655 and 1730GMT. Hailstones measured 5mm in diameter.</desford>
27 Apr 2008 COL	<middleton>: <mark>Thunderstorm in late afternoon gave hail of 10-18mm diameter</mark>, estimated 10mm rain fell in less than 10 minutes. <wirksworth>: Thunderstorm in late afternoon gave <mark>hail of 10-12mm diameter</mark>.</wirksworth></middleton>
9 Sep 2008 CBHE (http://www. thisisderbyshi re.co.uk/new s/)	Ashbourne: " In a matter of hours, dirty water from the nearby River < <henmore>> came flooding into his house in Mayfield Road and despite Mr Stanley's frantic efforts to block the flow with anything he could find quickly began to fill all downstairs rooms. He said: "It was just was terrifying. I was woken up at about 3.30am on Saturday by my daughter, whocould hear water running down stairs. I got up and went down to see the water seeping through the doors and it rising outside the house it was just below the windowsill at one point. I had also bought a new car on Monday and that was filled with water"Ashbourne was one of the worst-hit areas of the county and a number of residents were evacuated or forced upstairs after the <<henmore>>, which runs through the town, burst its banks. Firefighters helped pump out the cellar of the Berrisford Arms, in King Edward Street, along with properties in Green Lane. Car parks at Sainsbury's and Homebase were left covered in mud as flood water receded. The high water levels made the A52 at Mayfield and the A515 at the Sturston Road</henmore></henmore>

	and Belper Road junction almost impassablenearby residents in Coopers Gardens were escorted out of their homes amid fears that they would be trapped by the rising water. Derbyshire Fire and Rescue Service received more than 60 calls reporting flooding over the weekend. The busiest period was from midnight on Friday until lunchtime on Saturday. Police were forced to close major routes across the county, including the A38 at <burnaston>. Residents of <egginton> found themselves cut off as flood water blocked all routes into and out of the village. People in <mickleover> spent Friday night piling up sandbags in front of their homes in a desperate attempt to stop water from getting in. Water from fields behind Paul and Caroline Hibbitt's house in Morrfield, <matlock>, flooded their garden and conservatory. Mr Hibbit, 34, said: "We were up until about 5am Saturday morning. It is the second time we have flooded. The first time was last June. Villagers in <parwich>, near Ashbourne, recorded 39mm in just eight hours on Friday night compared with the 31mm recorded in Derby on the same day."</parwich></matlock></mickleover></egginton></burnaston>
28 Apr 2009	<enderby>: There were reports of heavy storms, flash floods, with hail and lightning.</enderby>
COL	<desford>: A severe thunderstorm with large hail just east of the Desford site 1600-1730GMT. Only 5mm of rain</desford>
	fell at Desford with plenty of thunder and lightning seen. However there were reports of flash flooding and large
	hail up to 2cm in diameter which fell with such ferocity that visibility was reduced to just metres at the height of
	the storm. The hail accumulated on level surfaces up to 10cm deep and remained well into the next morning.
	The hail stripped foliage and blossom from trees and plants causing significant damage to gardens in the SW area of Leicester.
10 Jun 2009	<ashover>: Flash flooding of properties occurred in the village with thunder, lightning and hail. 36mm in 36</ashover>
COL	minutes at the height of the storm 1554-1630GMT out of a day's total of 56.8mm made this the wettest June day on record (1966).
7 Jul 2009	<loughborough>: A heavy thunderstorm with hail produced 37.0mm in 40 minutes - a house in the nearby town</loughborough>
COL	of <shepshed> was damaged by lightning.</shepshed>
	<derby>:34.4mm of rain, the most in July for seven years.</derby>
29 Jul 2009 COL	<loughborough>: Torrential rain flooded some houses in the town, with water and raw sewage.</loughborough>
5 Jun 2010	<mountsorrel> (Leicestershire): A heavy storm was reported whilst in the Nottingham area flash flooding was</mountsorrel>
COL	reported at <lambley> and a retaining wall collapsed on Loughborough Road, <sneinton>, damaging houses</sneinton></lambley>

which had to be evacuated.

<Calverton> (Nottingham): Heavy rain on the 5th into the 6th totalled 47.2mm. It was heavy enough to wash topsoil of fields at the top of the village into culverts which broke the banks of the brook at the bottom end of the village depositing the soil over roads and paths.

<Loughborough>: A localised, torrential shower (1230-1315h) produced 22.0mm of rain and turned many roads and around the town into fastflowing 'rivers'. Probably around 16mm fell 3km NE of the town centre. <Mountsorrel>: Severe storm had 16.4mm of rain in 30 minutes. Rainfall rate peaked at 180mm/h at times.

<Coton-in-the-Elms> (south Derbyshire): A violent thunderstorm produced 45mm of rain in 40 minutes, with large hail, leading to flash flooding which, reportedly, damaged many properties. According to the local paper, flash flooding damaged many properties and cars in the area were rendered inoperable. Rosliston station, only 1 mile north from Coton; received around 19mm, while the Stanton station only managed a light shower producing 1.2mm. The storm hardly touched any other surrounding villages. The thunderstorm, which struck during 1200-1300GMT, caused the village to become a torrent of water. Up to 10 houses were badly water damaged, cars were left abandoned in the streets after engines cut-out due to the substantial amount of water, and the village pub suffered £2,000 of damage. Peter Cherry, who runs a bed and breakfast business from his Fern Cottage home, in Mill Street, said: "It was astonishing and amazing how it was only our village that caught it. The hail would have hurt you if you were out in it. I had to rescue an elderly chap who was out in it on his bike. The village is known for flooding, but none of us has ever seen anything like it. It was strange to see ice from the hail floating on the water in the middle of summer." It was quite astonishing to observe how localised this storm was. Caldwell and Stanton, both within 3km of Rosliston, measured less than 2mm. <Rosliston>: Rainfall total 19.2mm during 1300-1400h, with large hail and torrential rain for a time. <Rosliston>: 1600-1700GMT - severe storm, lightning, hail and thunder. Torrential rain, reaching a rate of 41mm/hr. Total fall 32.5mm, making this the wettest day of the year so far. <Loughborough>: There was a notable storm north of Leicester in the late afternoon and early evening: thunder was heard almost continuously for 40 minutes at Loughborough, there were hailstones of 15-20mm diameter at <Shepshed> (Leicestershire), and a notable hailstorm ('a mix of clear and opague ice') at nearby <Birstall> and estimated to be at least 1cm in diameter if not slightly more. The hail continued for about 10-15 minutes, occurring in waves. Hardly any rain fell at this time, just large hailstones. The temperature fell from 25C to 12C

9 Jun 2009 COL 16 Jul 2010 COL 22 Jul 2010 COL

23 Sep 2010 COL 23 Apr 2011 COL

12 Apr 2012 COL

28 Jun 2012 COL, Webb and Elsom (2016)

Bands of heavy rain and thunderstorms moved northeast across much of the country, except southeastern districts. The continual generation of new ensured that it took all day for this complex to clear the country. Torrential rain caused flooding in various districts from Hereford and Worcester to Lincolnshire. Rainfall totals for 28th included Coalville 52 mm, Loughbough Nanpanton 42 mm and Mountsorrel 27 mm. W&E note that very large hail fell in a single 'supwercell' thunderstorm in a 110 km swathe from Coventry to Sleaford with hail >50 mm diameter (H6).

within the storm. Travelling out of the storm westwards it soon became dry in under half a mile and the temperature had recovered to 19C, upon reaching home (Desford 8 miles later) it was still 24C, dry. <Middleton> (Derbyshire): A thunderstorm on the evening of the 12th tracked 1-2 km north/north east of this station and gave a brief period of 6 mm diameter hail. However at the centre of the storm there was a narrow band of intense hail which completely whitened the ground. In the village of Cromford, 2 km north east of here, the hail was between 7 and 10 cm deep and lasted until the middle of the 13th before thawing. <Loughborough>: in Leicestershire, 35 mm fell in 25 minutes at Loughborough in the late morning. There was severe flash flooding across <Coalville>, Loughborough and surrounding villages.

<Cosby>: 31 mm fell in 20 minutes (with a reported 'instant' rainfall rate of 406 mm/h!). In mid-afternoon. Large – even giant – hail also fell in various parts of the county. Stones measured up to 4 cm in diameter, often combining to form large blocks of ice that damaged property and trees; hundreds of cars were damaged and windows were broken. One fire-fighter reported finding one conglomerate stone measuring 9 cm across and 4 cm long. Two East Midlands ambulances had their windscreens smashed by giant hailstones as they took patients to hospital. Trees also fell as a result of the squally winds that were doubtless generated by the violent temperature contrasts within and around the storms.

<Hinckley>: Giant hail of a least golf ball size affected Hinckley and <Burbage> causing extensive damage to cars and conservatories. Extensive damage was done in <Queniborough> as golf ball hail smashed into cars breaking windows and damaging panels with up to 30 pits in the roof of some vehicles. In a Braunstone school roof panels were dislodged by the high winds and rain came pouring in to classrooms.

<Bablake>: Thunder was frequent from 1018 h, continuous during 1245-1300 h accompanied by 43mm hailstones.

<Newbold Verdon>: A tornado tracked from Newbold Verdon to Newtown Linford in the late morning <Leicester>: Lightning struck a primary school in Leicester: after a check, the head teacher made the tricky decision that it was safer to stay inside the damaged building until the storm abated. Leicestershire Fire and Rescue were called out to about 200 incidents in under four hours. Some people were injured by falling tiles and there was an injury through electric shock from a computer when lightning struck a building in Ibstock. Leicester City was extensively flooded by a 20-minute deluge that produced up to 30 mm in some places. These storms were the worst since 4.6.1982 in terms of rainfall and electrical activity but never has this size hail been recorded to fall in this county before.

	<radcliffe on="" trent="">: Some local flash flooding in parts of Nottinghamshire with train services disrupted</radcliffe>
	between Nottingham and Lincoln when the line became flooded at Radcliffe-on-Trent.
29 Aug 2012	<harriseahead> (N of Stoke on Trent): Very heavy rainfall associated with a thunderstorm around 12h on 29th</harriseahead>
COL	gave around 30 mm in about an hour resulting in local flooding.
	<newcastle-under-lyme>: After 5 sharp claps of thunder directly overhead, torrential rain fell from 1205 GMT</newcastle-under-lyme>
	To 1225 GMT - about 25 mm fell in that period, causing much flash flooding in the local area. After a similar
	event in June 1982, I built a raised mound across my drive to prevent water entering the house. It was not
	needed again until this day, when a stream, 3 metres wide and 20 cm deep in the centre, emerged on the field
	25 m away and flowed down our street. Those with no defence had their garages and gardens flooded. There
	was traffic chaos for a period in Newcastle-under-Lyme and Stoke-on-Trent due to flooding. Strangely, once the
	torrential rain started there was no further thunder.
23 Jul 2013	<nottingham>: A thunderstorm complex in the area northeast of Nottingham gave a reported 92.8 mm in 75</nottingham>
<u>http://booty.</u>	minutes at <southwell> and 107.6 mm just to the south in the same period. (COL, Eden /Weatherlog, 'Weather'</southwell>
org.uk/booty.	/ November 2014). There were numerous reports of flooding and lightning damage on this day. A particularly
weather/clim	violent storm affected the Nottingham area, bringing rain (as noted)in the early evening, large hailstones and
<u>ate/2000_on.</u>	squally wind with severe flooding in Nottingham town centre. At Southwell, 93 mm was reported in 75 minutes
<u>htm</u> , COL	[COL contrasted with the booty report].
	A further COL report notes: The storm started properly at 1830 h and lasted for 75 minutes. In that time 92.8
	mm of rain fell here in Southwell causing severe but short-lived flooding with many houses and shops being
	affected. The total rainfall for the period 0900-2100 GMT on the 23 rd was 92.8 mm + 9.0 mm = 101.8 mm with
	7.3 mm falling from another thunderstorm during the previous evening and night. I have detailed temperature
	and rainfall records for Nottinghamshire and the East Midlands back over 300 years - and this breaks those
	records by a wide margin. <jim nottingham).<="" rothwell,="" southwell,="" th=""></jim>
	Philip Eden's column in the Sunday Telegraph on 28 July noted that at nearby <watnall> 1.61 inches fell in just</watnall>
	over an hour that evening, but that as much as 4 inches may have fallen at the centre of the storm as suggested
	by the radar network, in which case it seems likely that Southwell was very close to its centre.
	<mountsorrel>: Stormy rainfall as three thunderstorms gave 41 mm.</mountsorrel>

<North Muskham> (Near Newark): In 35 years of recording rainfall at various locations, the 23rd was the wettest day I have ever recorded with 83.7 mm of rain. The majority of the rain fell during one torrential storm

	 between 1815 GMT and 2030 GMT. Between 1830 GMT and 1915 GMT, 50.2 mm of rain fell and the maximum rain rate was 250 mm per hour. A further 20.0 mm then fell between 1915 GMT and 2030 GMT. Many local roads flooded, despite just 1.7 mm of rain in the previous 20 days. <newark>: The 23rd was a day with 66.9 mm of rain- there has been only one wetter day on record. The main event was a violent storm from 1820 GMT-1945 GMT. 32.0 mm fell during the first hour, when there were violent wind squalls.</newark> <lowdham> (NE of Nottingham): 65.2mm was the highest daily fall for any month on station record (1991). This is the highest 24 hour total recorded for any month at Lowdham and at my previous station at Carlton since starting in 1972.</lowdham>
	 <calverton> (NE of Nottingham): During the afternoon of the 23rd, rain began falling at 1630 GMT. In the first 15 minutes 0.8 mm fell, then the torrential rain began, accompanied by large hail stones and thunder. Between 1745 GMT and 1800 GMT, 26.8 mm of rain fell (over an inch in 15 minutes), and from 1800 GMT to 1815 GMT a further 9.6 mm fell. In 30 minutes a total of 36.4 mm was recorded. Local roads were closed due to flooding and shops and homes were flooded. Drain covers lifted with the pressure of water.</calverton> <tideswell>: Maximum rainfall rates between bucket tips of 175 mm/h around 0530 GMT caused some minor flooding in some properties in the village.</tideswell> <ashover: 0400="" 15="" 1537="" 18.7="" 43.0="" during="" falling="" gmt="" gmt-1700="" gmt-1900="" gmt.<="" hours="" in="" li="" mm="" produced="" rainfall="" with=""> </ashover:>
Some stations reprted rain but no thunder	 <newcastle-under-lyme>: The 24 hour rainfall total from 1700 GMT on 27th was 62.3mm, the sum of an evening and night of thundery rain where 43.6 mm fell, then a short lived but torrential thunderstorm which developed overhead on the 28th in which 18.7 mm fell in about 30 minutes. Even the 43.6 mm that fell during the official recording day for the 27th was highest total on record for July (1977).</newcastle-under-lyme> <mountsorrel>: Extreme rainfall 2000 h - midnight totalled 36.8mm. <at bosworth="" market=""> (Leicestershire) they recorded 65mm.</at></mountsorrel> <desford>: The rain heavy and steady for about four hours leading to an accumulation of 36 mm.</desford> <derby>: Heavy rain and thunderstorms began at about 1850 GMT, with heavy rain falling into the night. 74.1 mm fell in total, the wettest 24 hours since 9.7.1981 at <littleover>, with flash flooding in some localities nearby. The village of <egginton> (in the <<dove valley="">>) was badly affected from a flooded brook.</dove></egginton></littleover></derby> <middleton>: 64.9 mm of rain was the largest daily fall in July since this record began in 1977.</middleton> <rosliston>:Rain set in around 1900 GMT and soon became torrential, with 30 mm being collected by 2100</rosliston>
	•

	GMT. The rain continued overnight, and the total reached 61.2 mm by 10am on the 28th. <ashover>: Rainfall of 42.2 mm falling from 1900 GMT on the 27th to 0500 GMT on the 28th, of which 20.8 mm</ashover>
	fell 0000 GMT-0130 GMT.
5 Aug 2013 COL	<cosby>: Severe thunderstorms produced 34.3 mm of rain in two hours.</cosby>
22 May 2014 COL	<cosby>: Heavy spells of rain and a thunderstorm produced 38.4 mm.</cosby>
9 Jun 2014	<north muskham="">: A violent thunderstorm began at 1435 GMT, lasting for 20 minutes and producing 14.6 mm</north>
COL	of rain. The maximum rain rate was 192 mm/h. Other parts of north Nottinghamshire and North LincoInshire had even more intense rainfall with numerous reports of flash flooding.
19 Jul 2014 COL	<mountsorrel>: Severe thunderstorms on the19th produced 18.4 mm during the day and some local flash flooding.</mountsorrel>
	<north muskham="">: A thunderstorm at 1730 GMT lasted 15 minutes and produced 16.2 mm of rain, with a maximum rain rate of 281 mm/h.</north>
	<arnold>: It was very hot and humid with heavy rain at times. A heavy thunderstorm at 16.45 GMT -17.15 GMT blocked all my drains up with soil (having previously been cleared out) and water came into the garage. Much local flooding in the Arnold area; some shops flooded on the main shopping street.</arnold>
	<derby>: 19.2 mm fell from periods of heavy rain and an afternoon thunderstorm. At locations east of Derby more than 50 mm fell in places and flash flooding occurred.</derby>
29 Sep 2014	<harriseahead>: : A thunderstorm during the evening of the 29th resulted in very heavy short duration precipitation of 8.6 mm in ten minutes. This resulted in significant flooding locally as a result of overcharging drains and sewers, after a prolonged period of dry weather.</harriseahead>
	<weston coyney=""> (E of Stoke): A very heavy thundery shower with torrential rain at times from 1950 GMT produced 23.4 mm of rain in less than an hour.</weston>
24 Aug 2015 COL	<north muskham="">: A heavy thundery spell between 1430 and 1515 GMT produced 20.8 mm of rain and a maximum rain rate of 101 mm/h. Villages 16 km south of here such as <long bennington=""> in Lincolnshire experienced more rainfall than this with reports of extensive flooding.</long></north>
26 Apr 2016 COL	<wolstanton><newcastle lyme="" under="">: After an afternoon of sunny intervals an increasingly squally showers of hail, sleet and snow, a thunderstorm occurred between 1645 and 1705 GMT on Tuesday 26th April 2016, right over the COL station, with some very bright lightning, low over the house, and torrential soft hail, then snow. Some of the hail was up to 2 cm in its long axis and over 1 cm on the shorter axes. The hail drove in from the west smashing against the windows of the house. Only 500 metres from the COL station a tornado roared</newcastle></wolstanton>
	through parts of Wolstanton and May Bank (suburbs of the town). It took at NNW - SSE track, touching down at

10 Jun 2016 COL 20 Jul 2016 COL		 various points along a length of around 1.1 km. Severe damage was caused to roofs and a 2 metre high brick wall was blown over. <cosby>: Thunderstorms produced 27.9 mm in 30 minutes (1610 to 1640 GMT).</cosby> <middleton>:. Approximately 20 mm of rain fell in 20 minutes during a thunderstorm.</middleton> <newchapel> (Stoke): At the Observatory a lively thunderstorm occurred between 1440 - 1515 GMT with continuous thunder for a short time but lightning was hidden from view. It developed northwest, passed near to/or over the area before drifting toward the east. There was a brief deluge, up to 190 mm/h with hail, at least 1 cm in size, and quite a few, interestingly, in the form of transparent, flat, hexagonal plates, something I've not come across before.</newchapel>
27 Aug 2016 COL		<cosby>: A severe thunderstorms all afternoon when 27.9 mm of rain fell in two hours. <desford>: Thunderstorms lasted for approximately two hours with some heavy rain at times mid to late afternoon. Lots of cloud to cloud lightning with generally calm and humid conditions all day.</desford></cosby>
2 Jun 2018 COL 20 Sep 2018	Thunder not reported and	<newark>: 27.4 mm rain was the wettest August day since 2010. It contributed nearly half of the monthly total. <north muskham="">: Two distinct thunderstorm episodes produced 40 mm of rain- the first storm from 0930 - 1030 GMT produced 16.4 mm, whilst the second storm at 1545-1645 GMT produced 23.6 mm. <middleton>: 74.3 mm was the largestdaily fall on record for the month, the previous record being 71.4 mm on</middleton></north></newark>
COL	rainfall persistent	14.09.1994. It was also the third largest daily fall on record in any month and resulted in localised flooding in the area as drains were unable to cope with the run off. Matlock>: Torrential rain causing floods in the town centre and some footpath damage.
24 Jul 2019 COL	The storm was reported elsewhere as violent but with little reference to rainfall amounts	<harriseahead> (N of Stoke): One of the more intense thunderstorms of recent years occurred early on 24th between 0030h and 0145h with frequent lightning and torrential rain. <desford>: Thunderstorms during the early hours, following a hot day when 30.8C was recorded. <arnold>:. There was a thunderstorm with spectacular lightning at 0230 to 0300 GMT on the 24th. This produced 9.9 mm of rain. Large jump of around 5 mb on the barograph chart at 0230 GMT on the 24th.</arnold></desford></harriseahead>
29-31 Jul 2019 COL	A serious incident but probably not a flash flood unless the dam had burst!	«Whaley Bridge> and <toddbrook reservoir="">: Some rainfall statistics relating to the serious flooding, and problems at Toddbrook reservoir, in north-west Derbyshire at the end of July 2019. Graham Smith, an obse in Whaley Bridge, recorded 247 mm of rain during the 25th-31st of July and 276 mm during the 24th-31st, including 104 mm on the 28th and 87 mm on the 31st. He noted a peak rainfall rate of 50 mm/h on the 28th and 215 mm/h on the 31st. These readings are for 0900-0900 GMT from a Davis Vantage Vue recorder but a manual gauge used as a check gauge. The increase in rainfall moving in a general northerly direction towa Whaley Bridge, recorded 201.4 mm from the 25th-31st July including 69.4 mm on the 28th and 76.6 mm on 31st. These readings are for 0400-0400 GMT but give a general idea of the difference in amount over a few</toddbrook>

km. Buxton, 10 km south-east of Whaley Bridge, and 5 km east of the Cat and Fiddle, recorded 168.0 mm during the final seven days of July including 25.7 mm on the 28th and 67.0 mm on the 30th (0900-0900 GMT readings) . At the southern end of the Peak District at Middleton, 28 km SE of Buxton and 38 km SE of Whaley Bridge. I recorded just 89.9 mm during the final seven days of the month, and I thought that was wet!

References

Acreman, MC (1989) Extreme historical UK floods and maximum flood estimation , J, IWEM 3 (4), 404-412

J.Boardman and D.Spivey (1987) Flooding and erosion in west Derbyshire, April 1983 East Midlands Geographer Vol 10, p 36 – 44.

Pirt, J and Karle, M (1987) Summary of hydrological events in the Trent basin 22 to 25 August 1987, Internal Report Severn Trent water.