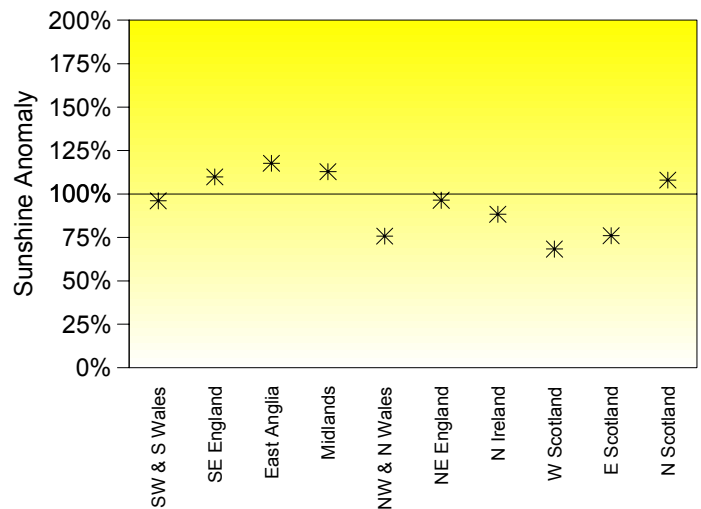
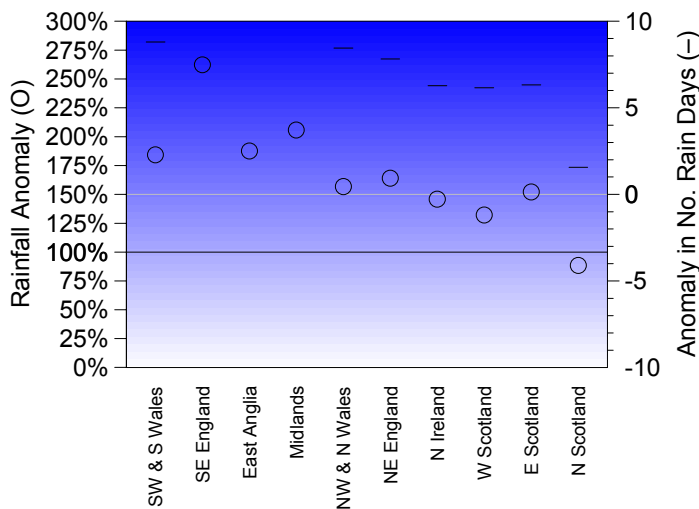


Extremes for January 2014	
Hottest:	14.0°C Bude, Cornwall, 5th
Coldest:	-6.0°C Katesbridge, County Down, 14th
Most Rain:	69.2mm Tyndrum No 3, Perthshire, 3rd
Most Sun:	7.9hrs Guernsey Airport, Channel Islands, 11th
Windiest:	82mph Mumbles Head, West Glamorgan, 3rd
Warmest:	8.8°C Scilly St. Mary's SAWS, Cornwall
Coolest:	2.2°C Dalwhinnie No 2, Tayside
Wettest:	411.8mm Tyndrum No 3, Perthshire
Driest:	18.8mm Mona, Gwynedd
Sunniest:	89.3hrs Wokingham, Berkshire
Dullest:	10.6hrs Eskdalemuir, Dumfries and Galloway



For much of the UK, January is the coldest and the snowiest month of the year - despite the lengthening days. It is also renowned for being the stormiest, and according to Lamb's calendar of singularities, especially so during the first fortnight. This year provided dramatic corroboration of this as a seemingly unbroken chain of depressions crossed our shores.

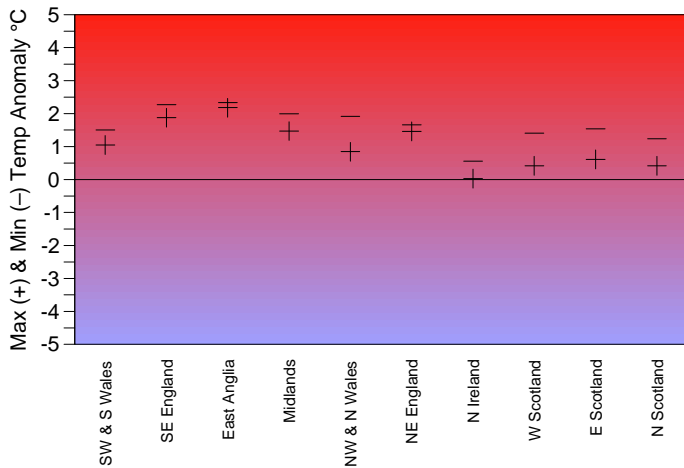
A wet New Year's Day was merely the prelude to a very wet and stormy first week, during which hail and thunder were also widespread. On the 3rd, Needles Old Battery (Isle of Wight), recorded a gust of 106mph. Such was the strength of the winds in combination with spring tides on the south coast that coastal landmarks such as Pom Pom rock near Portland (Dorset) were lost forever. Swells in the south western approaches reached 9m early on the 7th combined with gigantic waves. The sea front at Aberystwyth (Ceredigion) was extensively damaged and a section of the sea defences at Llanbedr (Gwynedd) was breached resulting in the inundation of 1000 acres of agricultural land. It remained unsettled, if a little less stormy, throughout the second week. By the 18th, pressure was building over Scandinavia but this merely slowed the frontal systems scudding across the UK and resulted in dull, damp and misty conditions. Fog was particularly widespread on the 21st. An active front moving south-east on the 25th brought hail, thunder and squalls before another very deep depression gave widespread rain and gales on the 26th with snow for parts of Scotland (12 cm at Kindrogan, Perthshire). The low then drifted south over the UK during the next few days, bringing further spells of rain. Colder air briefly incurred from the east on the 29th and 30th, but this was soon swept away and on the 31st a vigorous depression drove gales and rain eastwards.

By the month's end, many parts of the Somerset levels had been underwater for nearly four weeks and over 28,000 acres of land was flooded, cutting off homes and threatening the livelihoods of farmers. South-east England had its wettest ever January - and indeed its wettest ever calendar month - and for the UK overall it was the third wettest January in 100 years. Northern Scotland was out of the main firing line of the depressions and so was significantly drier than average. It was a mild month everywhere and, interestingly, sunshine was close to average despite the rain.

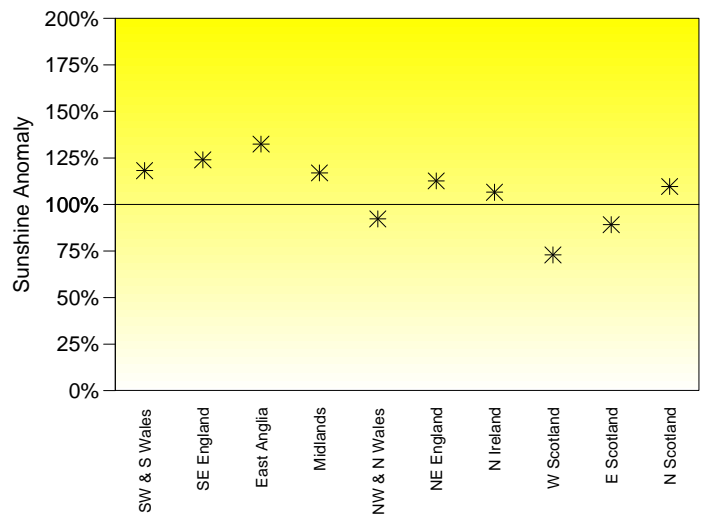
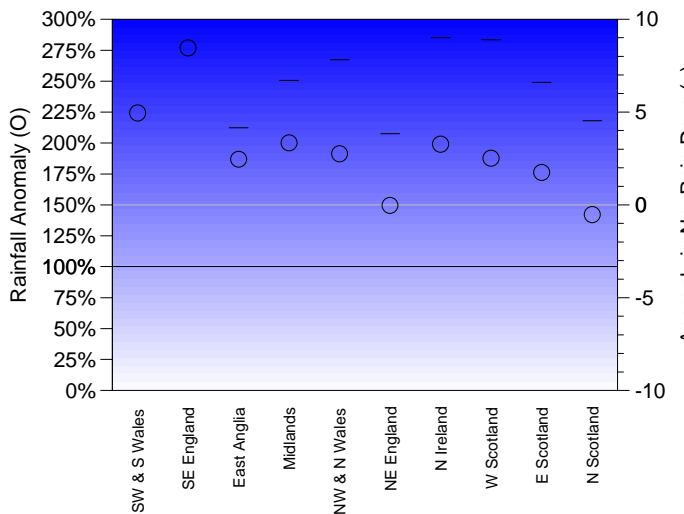
In Europe, a mild start to the year saw remarkable, balmy early morning temperatures in southern France on the 8th with 18°C (64°F) in Biarritz and 19°C (66°F) in Bustinche. However severe winter storms were soon to follow... Between 16th and 20th unusually heavy rain swamped the French Riviera, leaving thousands without electricity. Dozens of roads were impassable including in resort towns such as St-Tropez and villages in Provence. Nice recorded 146mm of rain 16th-19th (the normal monthly rainfall for the whole of January is 69 mm), while in surrounding hills up to 200mm was recorded. During the last week of January, a severe cold spell swept across central and eastern Europe. In Bulgaria, blizzards left dozens of villages in the eastern half of the country without electricity and water. The main Black Sea port of Varna was shut because of gales. Snow even fell on the central Adriatic coast in Croatia, closing schools in Sibenik.

Several waves of extreme winter weather affected North America. A snowstorm hit north-east states on the 3rd. Boxford, just north of Boston, received 53 cm of snow and parts of upstate New York 90cm. Long-standing records were shattered across the East and South USA on the 7th. The cold wave closed schools, froze pipes and caused significant flight delays. Numerous extreme lows were recorded including: -16°C (4°F) in New York City's Central Park and -22°C (-8°F) in Zanesville, Ohio. Just days after this arctic blast, severe thunderstorms and isolated tornadoes left a trail of damage, from eastern Alabama and the Florida Panhandle to North Carolina. Winds gusted to 86mph at the Raleigh-Durham International Airport, North Carolina. Snowfall overnight 24th-25th pushed the month's snowfall total in Detroit to 81cm, breaking the previous snowiest January record set in 1978 and Chicago had its third snowiest January on record with a total of 84cm. On the 29th a devastating ice storm turned Atlanta into a slippery mess, stranding thousands for hours on frozen roadways. This storm swept over a region largely unaccustomed to ice and snow - from Texas through Georgia and into the Carolinas. Meanwhile, much of the eastern USA was buried under yet another heavy snowstorm that brought as much as 40cm of snow on 23rd. Schools in Boston and Philadelphia were closed and 4,400 flights were cancelled.

On 11th-12th category five Cyclone Ian hit Tonga with gusts up to 180 mph. On the 15th days of heavy rainfall caused by a tropical low resulted in numerous mudslides and widespread flooding across the southern Philippines. 340,000 people were affected by flooding, 200,000 residents had to be evacuated and 42 were killed. Meanwhile heat and drought continued to affect Australia and culminated in raging bushfires. On the 3rd Moomba, South Australia hit 49.3°C (120°F) and on the 14th, soaring temperatures at the Australian Open tennis tournament halted matches as Melbourne sweltered in 42°C (108°F)



Extremes for February 2014	
Hottest:	14.9°C Heathrow, Greater London, 24th
Coldest:	-7.2°C Kinbrace, Highland, 17th
Most Rain:	64.8mm Kinlochewe, Highland, 13th
Most Sun:	9.8hrs Calthorpe, Norfolk, 26th
Windiest:	108mph Aberdaron SAWS, Gwynedd, 12th
Warmest:	8.5°C Jersey St Helier, Channel Islands
Coolest:	2.3°C Dalwhinnie No 2, Tayside
Wettest:	435.2mm Tyndrum No 3, Perthshire
Driest:	33.0mm Durham, Durham
Sunniest:	127.7hrs Jersey St Helier, Channel Islands
Dullest:	14.3hrs Eskdalemuir, Dumfries and Galloway



The 2nd of February or Candlemas Day marks the half-way point between the winter solstice and the spring equinox. It was traditionally seen as a time to light and bless candles - and to drive the darkness out. Certainly the hours of daylight start to increase markedly from this point, but it rarely means the end of winter weather. After the gales that characterise December and January, February is often rather drier and colder - but not this year...

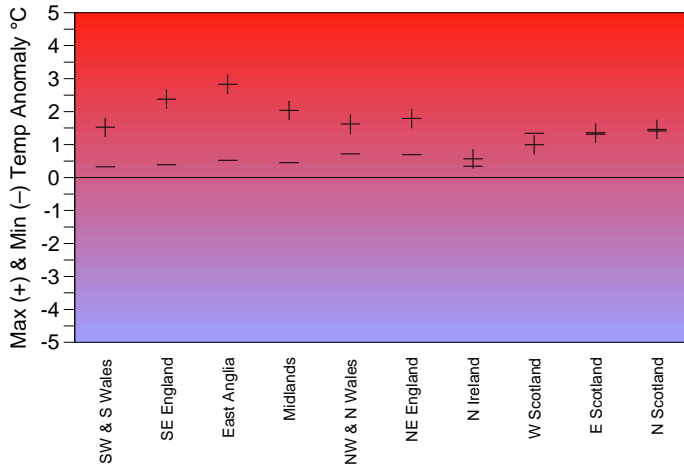
The very stormy weather of January continued relentlessly during the first half of February as a sequence of very deep depressions battered the UK. Parts of the Somerset levels remained under water for the entire month, with significant impacts on agricultural land and village communities that were left accessible only by boat. Parts of Oxfordshire, Berkshire and Surrey also experienced severe flooding as the Thames rose to its highest level for many years. The unbroken series of storms also caused damage to sea defences and coastlines in the south and west. Huge waves severed the rail link towards Cornwall at Dawlish (Devon) on the 5th - and just a week later on the 12th, another severe storm ("Tini") swept across England and Wales, felling many trees and leaving some 100,000 homes and businesses without power. On this occasion, damage was most extensive across north Wales and north-west England, but a further storm ("Ulla") blasted the south later on the 14th and early on the 15th. Needles Old Battery (Isle of Wight) recorded a gust of 109mph and a motorist was killed in central London after falling masonry struck a car. Scotland escaped the worst of the storms, but was sometimes in the colder air on the northern edge of fronts, resulting in heavy snow on high ground. 20cm was measured at Tulloch Bridge (Highland) at 0900 on the 12th - and snow fell extensively over the northern Pennines on the 14th. As temperatures rose, significant avalanches were experienced in the Scottish mountains throughout the second half of the month. After a day of blustery showers and easing winds on the 15th, a brighter, quieter day followed on the 16th. It remained unsettled, although rather less windy, for all of the final fortnight. There was very little wintry weather away from highest ground in the north and indeed, frosts were rare anywhere during the entire month. It became quite spring like for some on the 24th, courtesy of a southerly airstream, and 14.9°C (59°F) was logged at several sites in the Greater London area.

February as a whole was a mild month everywhere. For most of the UK, it was also very wet. A broad area covering Wales and southern England received twice its normal rainfall and some places nearly three times. It was rather drier in the north and east but over the UK as a whole, it was the 4th wettest February in more than 100 years and sealed the wettest winter since records began. Despite being so wet, south-east England had above average sunshine, but western districts were relatively dull.

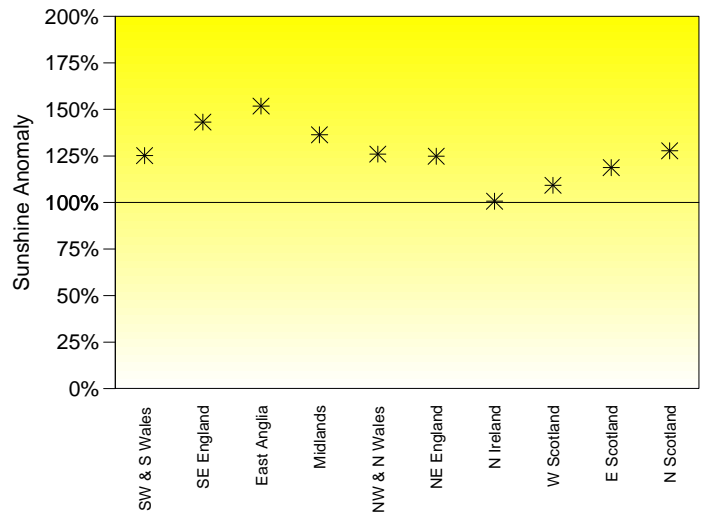
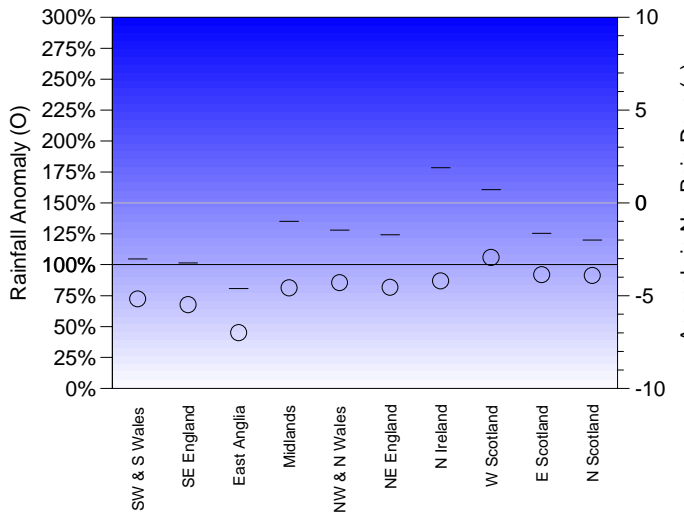
Around the northern hemisphere and despite the strengthening sun, winter showed it had not yet relinquished its bite... Torrential rain and storms brought chaos to western Europe from the 1st to the 3rd. In Ireland, Valentia Observatory recorded its wettest February in 148 years with 292.4mm - 236% of normal. On the 12th, Shannon airport recorded a gust of 99mph, the highest for February in more than 60 years. Hundreds of people were forced to evacuate their homes in the Italian city of Pisa as the River Arno burst its banks. Blizzards and devastating ice storms in Slovenia brought down electricity lines and trees, weighed down by tons of ice - and left one in four homes without power. In Croatia and Serbia, hundreds of people had to be rescued from snow drifts.

In the US, a huge snow storm wrought havoc in the southern states before blanketing the densely populated north-east on the 13th. Half a million homes and businesses lost power, and thousands of flights were cancelled. The weather system affected 22 states from Texas to Maine and caused a dozen deaths with the storm dumping more than 30cm of snow in the Washington DC region. Power lines were left coated in up to an inch of ice, there were numerous road accidents and residents were left marooned and shivering in their darkened homes. Thousands of vehicles were stranded and abandoned on snowbound motorways around Raleigh, North Carolina. Three days after the storm, 450,000 people remained without power. Ice coverage on Lake Superior reached 90% on the 13th - a record in recent history. Winter storms also affected Asia and the far east during February. Up to 2m of snow fall in northern Iran on the 5th left 480,000 homes without power and some towns and villages cut off. On the 6th, snowstorms in China disrupted railway transport and blocked roads while in Japan from the 14-17th, a massive storm dumped 1½m of level snow in some areas leaving thousands cut off and hundreds of cars and trucks stranded. 12 people died and at least 1000 were injured. Some areas in northern Japan remained cut off for several days and troops were employed to help dig out stranded cars and trucks.

On the 11th, a 20,000-hectare bushfire destroyed houses in suburbs north of Melbourne as south east Australia sweltered. Throughout the state of Victoria about 180,000 hectares were left ablaze.



Extremes for March 2014	
Hottest:	21.4°C Ebbw Vale, Gwent, 16th
Coldest:	-6.6°C Redesdale Camp, Northumberland, 24th
Most Rain:	63.6mm Cluanie Inn No 3, Ross & Cromarty, 20th
Most Sun:	12.0hrs Monifieth, Tayside, 24th
Windiest:	75mph Fair Isle, Shetland, 7th
Warmest:	10.1°C St James Park, Greater London
Coolest:	4.6°C Braemar No 2, Avon
Wettest:	358.6mm Cluanie Inn No 3, Ross & Cromarty
Driest:	14.0mm Charsfield, Suffolk
Sunniest:	190.8hrs Jersey St Helier, Channel Islands
Dullest:	69.4hrs Thomastown, County Fermanagh



March marks the beginning of the meteorological spring - yet is a notoriously fickle month. Last year saw snowfalls and Arctic winds - and temperatures more akin to January, whereas this year was warm - stimulating early growth in the garden and dramatic blooms. The days lengthen markedly through March - especially around the vernal equinox on the 21st.

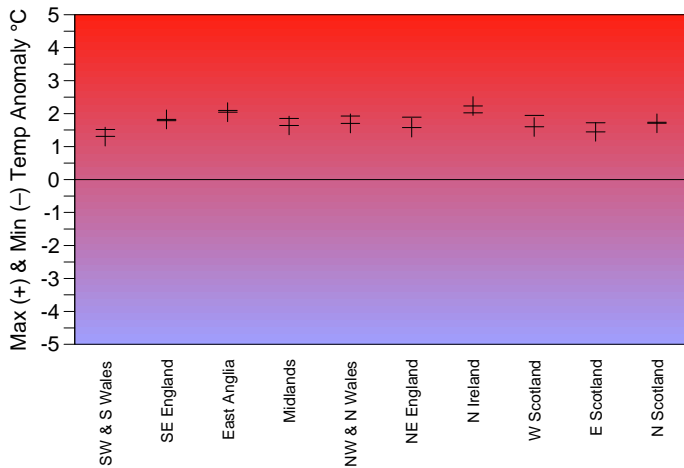
The month started unsettled, and a band of rain swept east on the 2nd, followed by widespread heavy showers. By the 5th, pressure was building across southern Britain and a long settled spell ensued, although fronts grazed north-western parts at times. By the 9th, it had become decidedly warm - with widespread maxima above 16°C (61°F). Nights however were chilly and misty. A north-easterly wind brought much cooler weather and more cloud on the 10th but it remained settled and dry. Fog was widespread on the mornings of the 12th, 13th and 14th, and the cause of some serious road traffic accidents. Winds turned westerly again on the 15th, and the south basked in warmth, although it was more unsettled further north. A rain band crossed the UK on the 20th and three showery days followed. Hail and thunder was widespread - and there was snow over northern hills. Spadeadam (Cumbria) woke up to 7cm of snow on the 22nd. The showers died out from the west on the 23rd as a ridge of high pressure approached and the following night temperatures plummeted. There was a hard frost countrywide and Redesdale Camp (Northumberland) recorded a minimum of -6.8°C (20°F). The 24th dawned fine but rain followed later in the day. By now, pressure was building over Scandinavia and this impeded fronts' eastward progress. Over the next few days heavy showers, often with hail and thunder, lingered in the sluggish air. There was also some sleet and snow - mainly over high ground in the east. The final three days saw a welcome return of warm and dry weather for most. St. James' Park (London) and Santon Downham (Suffolk) reached the magic 70°F (20.9°C) on the 31st but heavy showers and thunderstorms affected western areas.

For the month as a whole, daytime temperatures and sunshine were well above average everywhere and most especially in the south and east. Night time temperatures were only marginally above average, but this was sufficient to make frosts rare. Rainfall was similar to - or a little below average for the entire UK.

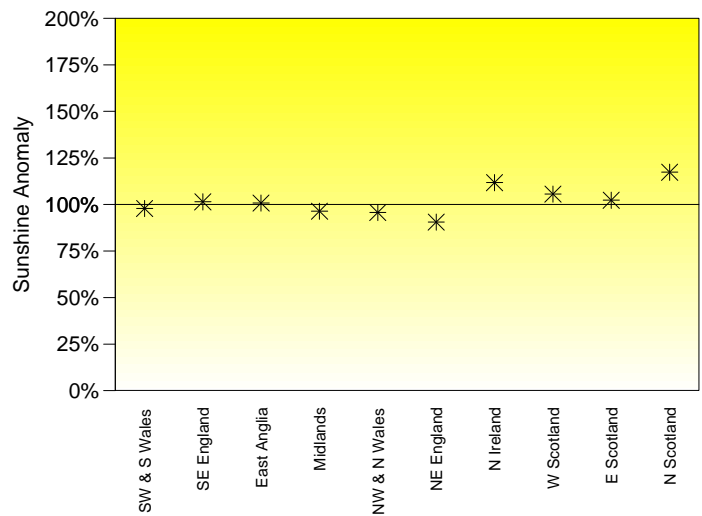
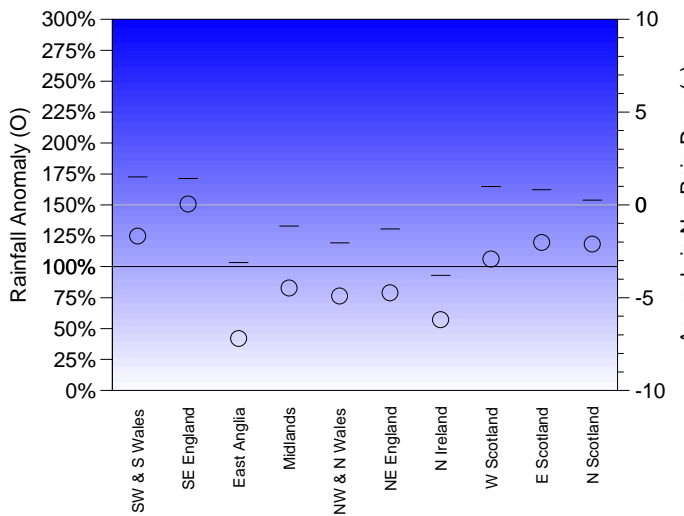
Unusual early Spring warmth embraced west and central Europe during the first three weeks of March. On the 9th, Germany recorded its highest ever temperatures for so early in the year with Lippstadt leading the way with 23.7°C (75°F). Daffodils and crocuses were in full bloom, even in the north of the country. Lugano, Switzerland reached 27°C (81°F) on the 18th - the second warmest March temperature ever measured in the city - while Aosta, Italy, in the lee of Mount Blanc (Europe's highest mountain), soared to an incredible 30°C (86°F) partly a result of a Fohn effect. Holland had its sunniest March on record with 205 hours at De Bilt.

Meanwhile the Atlantic US remained locked in winter. On the 3rd, a heavy snowstorm once again created travel chaos on the East Coast. Schools were closed across the region, and Washington government offices were shut. Rapidly accumulating snow clogged up motorways and local roads while in the mid-Western states 30,000 homes and businesses in Memphis, Tennessee, lost power. On the 12th and 13th, further snowstorms swept the mid-western and north-eastern states. 15cm of snow fell on Chicago bringing the winter aggregate total snowfall to 170cm. A cocktail of blizzards and violent thunderstorms tracking from Illinois to Maine left tens of thousands of people without power. Severe blizzards also affected upstate New York and New England - and caused widespread flight disruptions. In contrast, on the west coast, thunderstorms broke weeks of drought and triggered bush fires in California on the 1st. The potent mix of fire and torrential rain sent mudslides surging through foothill communities, flooding roadways and opening up sinkholes. The storm's eastward move on the 2nd finally broke a 70-day draught in the Phoenix area of Arizona. Los Angeles logged 110mm of rain from the second of two severe thunderstorms.

In the southern hemisphere, a 'once-in-a-century' storm forced the evacuation of homes, caused landslips and cut power to thousands of homes across Canterbury, New Zealand on the 4th. Ferry crossings were suspended because of huge waves through the Cook Strait. Wellington was buffeted with gusts reaching 75mph and 160mm of rain fell in Lyttelton.



Extremes for April 2014	
Hottest:	22.1°C Leigh-on-Sea 2, Essex, 30th
Coldest:	-5.2°C Aboyne, Grampian, 20th
Most Rain:	38.8mm Resallach, Highland, 9th
Most Sun:	14.2hrs Monifieth, Tayside, 18th
Windiest:	97mph Cairngorm, Highland, 17th
Warmest:	12.6°C St James Park, Greater London
Coolest:	6.5°C Braemar No 2, Avon
Wettest:	202.6mm Cluanie Inn No 3, Ross & Cromarty
Driest:	2.4mm Charsfield, Suffolk
Sunniest:	192.3hrs Manston, Kent
Dullest:	102.6hrs Lerwick, Shetland



'A warming sun to soften winter's scourge,
 Yet still the nip of frost to greet the dawn,
 Snow too is cloaking northern hills
 But the swelling bud foretells a longer day.' (Bowker April)

This verse suggests that April weather can be very variable - with winter, spring and summer all possible in one day. You are more likely to see a white Easter than a white Christmas, despite the fact that Easter can fall quite late in the month. Temperatures of 21°C (70°F) become increasingly common as the month progresses and the sun climbs rapidly higher in the sky with each day.

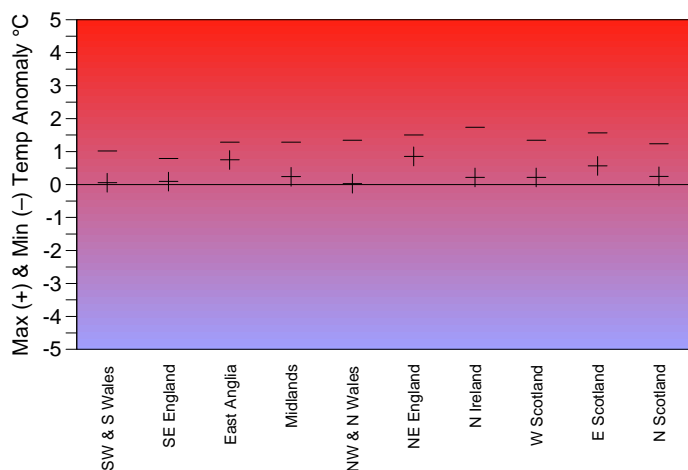
April this year commenced with four days of very poor air quality over southern and eastern England. This arose as a result of an unusual circulation; fine Saharan dust was carried in on a southerly airstream aloft, and this combined with industrial pollutants from the near-Continent which in turn mixed with our own home-grown pollution. Such was the situation that health warnings were issued for asthmatics and those with heart and lung conditions. It was not until the 4th that Atlantic fronts brought fresher air, but they also heralded an unsettled spell. The 6th and 7th saw widespread rain and Capel Curig (Gwynedd) recorded a gust of 67mph on the 6th. The 8th was brighter with a peppering of light showers, and the following 5 days saw fronts racing across northern England giving further rain to Scotland, but relatively high pressure further south - making it much drier here. It was windy in the north on the 12th and the following day Blackford Hill, Edinburgh recorded a gust of 53mph. The 14th dawned bright and crisp, but was followed by a chilly night. High pressure then maintained the generally fine weather into the Easter weekend. A raw north-east wind had developed across southern England by the 19th, and the following day (Easter Sunday) saw a change in fortunes as developing low pressure over northern France brought outbreaks of rain. Dunkeswell (Devon) notched up 30.8mm, and scattered thunderstorms affected the Home Counties on the afternoon of the 21st. The weather then stayed unsettled until month end - with the 26th a particularly wet and windy day. Slack gradients meant that heavy showers and thunderstorms were slow-moving on the 28th and 29th, but it did become warmer with a positively summery 22.0°C (72°F) at Aviemore (Inverness-shire) on the 28th.

April was warmer than normal for all of the UK, continuing the trend of mild recent months. Night times were especially mild and frosts rare. Sunshine was very close to average nationwide, but rainfall totals were extremely variable owing to the showery character of much of the rain. Thus while parts of East Anglia were very dry, totals were well above normal over some parts of southern England.

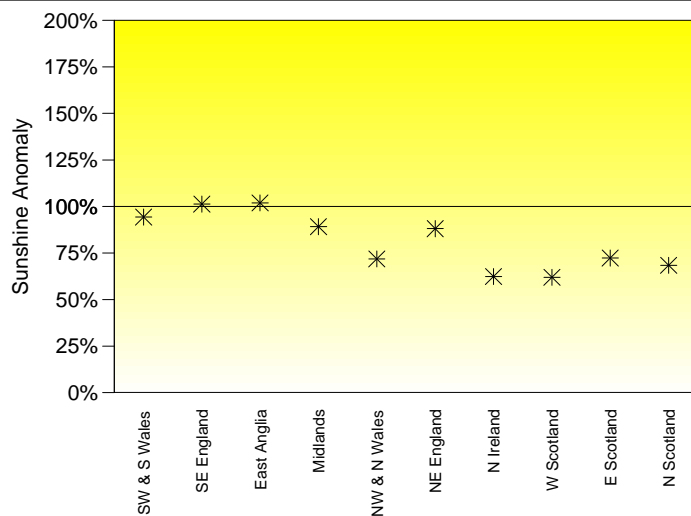
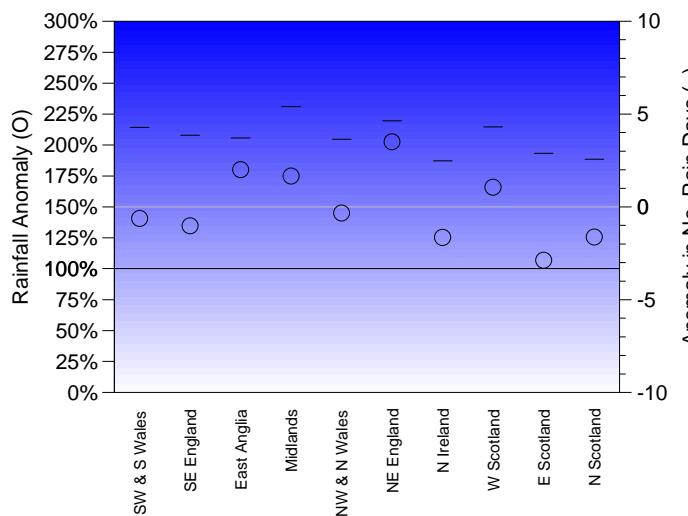
In North America, severe thunderstorms and tornadoes exploded across Kansas and Missouri 3rd-4th before sweeping across Arkansas. Over 70,000 homes were left without electricity. Eight tornadoes were reported on the 3rd, spanning from northeast Texas to southern Illinois. On the 27th, at least 17 people were killed by tornadoes as a huge thunderstorm system containing super cells swept across the central and southern United States. Sixteen of the victims were in suburbs of Little Rock in Arkansas. Tornadoes then struck in Nebraska, Kansas, Iowa, Missouri, Alabama and Mississippi on the 28th. There were several more fatalities - the result of flattened buildings and overturned vehicles. The Florida Panhandle and Alabama Gulf Coast were hit with widespread flooding on the 30th with residents stranded in their cars and homes waiting for rescuers to find a way around impassable roads. Boats and jet skis were moved from the beaches to the streets, helicopters employed and the National Guard deployed in high-wheeled vehicles. A remarkable 500mm of rain fell in Pensacola within 24 hours.

In South America, an abnormally strong storm system brought rounds of heavy rain and severe weather to parts of central and northern Argentina on the 7th and 8th. More than 50 mm of rain in less than 6 hours fell in the Buenos Aires area, leading to flash flooding. Rosario, to the northwest of Buenos Aires, reported severe thunderstorms with wind gusts to 70 mph along with hail. Farther to the southwest, Neuquen airport received a record 250 mm rain in the first eight days of April, well above the annual average of 175 mm! The storms were responsible for at least 3 deaths.

Residents of the Solomon Islands were hit by disastrous flooding on the 4th which killed over a dozen people and left thousands more homeless. Over 600mm of rain fell in 4 days between the 2nd and 5th around the capital Honiara leaving water supplies and sewer systems overwhelmed. The flooding was reported to be the most catastrophic in the country's history and led to 52,000 people losing their homes. Entire riverside communities and bridges were washed away when the Matanikau River in Honiara broke its banks. Category-five Tropical Cyclone Ita made landfall in Queensland, Australia on the 10th. The storm contained sustained winds of up to 105 mph at the time of landfall, and Cooktown recorded 165 mm of rain in 24 hours 11th-12th.



Extremes for May 2014	
Hottest:	26.3°C Heathrow, Greater London, 19th
Coldest:	-4.3°C Altnaharra SAWS, Highland, 2nd
Most Rain:	52.3mm Capel Curig SAWS, Gwynedd, 10th
Most Sun:	15.2hrs Ronaldsway Airport, Isle of Man, 21st
Windiest:	63mph Mumbles Head, West Glamorgan, 10th
Warmest:	14.2°C St James Park, Greater London
Coolest:	8.5°C Fair Isle, Shetland
Wettest:	160.4mm Dunstaffnage, Strathclyde
Driest:	38.8mm Balmoral, Grampian
Sunniest:	262.0hrs Jersey St Helier, Channel Islands
Dullest:	69.6hrs Bala, Clwyd



May is the month when the evenings draw out noticeably and the sun climbs ever higher in the sky - yet it is a notoriously tricky month for farmers and growers. Sudden hailstorms are not uncommon, while sharp frosts remain a distinct possibility, even in the south, and these may prove disastrous for an apple crop. The Atlantic circulation tends to be at its weakest in May in a meandering jet stream, so gales become less likely, with spells of fine and warm weather hinting at summer just around the corner. Equally though, this may mean that depressions can be quite slow-moving with prolonged grey and soggy weather, as happened at the month's end this year.

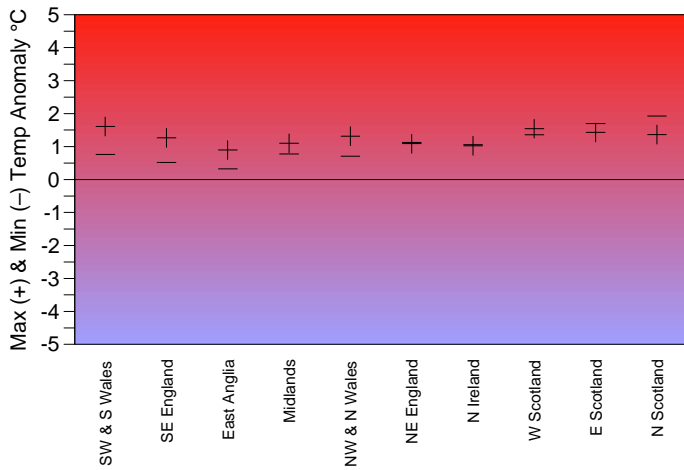
After a cool, wet opening day in the south, fortunes changed for the early Bank Holiday weekend. There was a good deal of dry and fine weather - but mornings were decidedly nippy with a frost on the 2nd confined to the north reaching to include central and southern England on the 3rd. Fronts approached western areas on the 5th and a windy, unsettled spell followed with bands of rain interspersed with brighter, showery weather. The weekend of the 10th/11th was particularly breezy and changeable as low pressure moved out into the North Sea. A wind gust of 67mph was recorded at Needles Old Battery (Isle of Wight) on the 10th, and by the morning of the 11th, Capel Curig (Conwy) had notched up 57.4mm of rain in 24 hours. There was some disruption to road transport in South Wales owing to the strong winds. Two more days of sunshine and showers with local hail and thunder followed before pressure began to build across the south on the 14th, killing off the showers and ushering in a much warmer and more settled spell. Daytime temperatures climbed steadily with 21-25°C (70-75°F) widely achieved after the 17th. On the 19th, Heathrow reached 26.3°C (79°F) - the month's highest maximum temperature. Fronts continued to affect the far north and as pressure fell generally during the 20th/21st, it became changeable once more. The 22nd saw widespread thundery showers across the Midlands and south-east with lightning striking the Shard Tower in central London. On the same day, a cold north-easterly on the other side of the depression meant that temperatures struggled to rise above single figures Celsius over most of northern and eastern Scotland. The late Bank Holiday saw cool, damp and disappointing weather for most. Western Scotland saw the best of any brightness. Low pressure sneaking in from the continent ensured that cool, cloudy conditions with spells of rain persisted over much of England and Wales 27th - 29th, but rising pressure during the final two days gave a drier, brighter and warmer finish.

Mean temperatures were above average nationwide, although this was a consequence of some mild nights under overcast skies, rather than any exceptional warmth. Sunshine totals were below normal everywhere, with Scotland and Northern Ireland experiencing a particularly dull month. Rainfall was above average everywhere, with the north-east of England experiencing its wettest May since 1979.

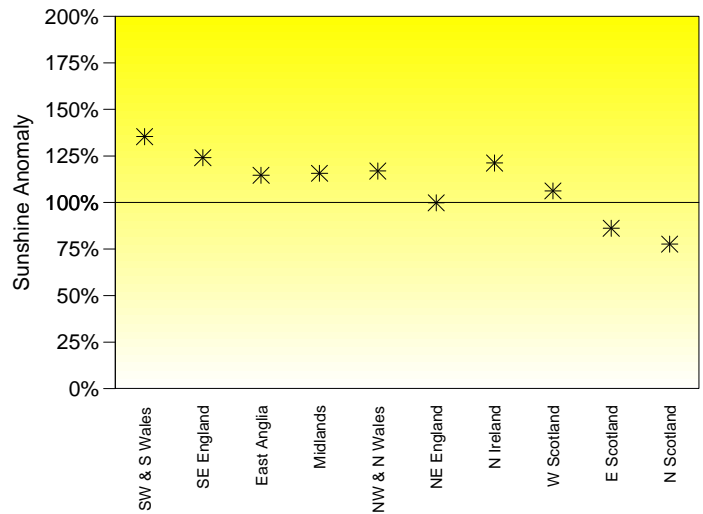
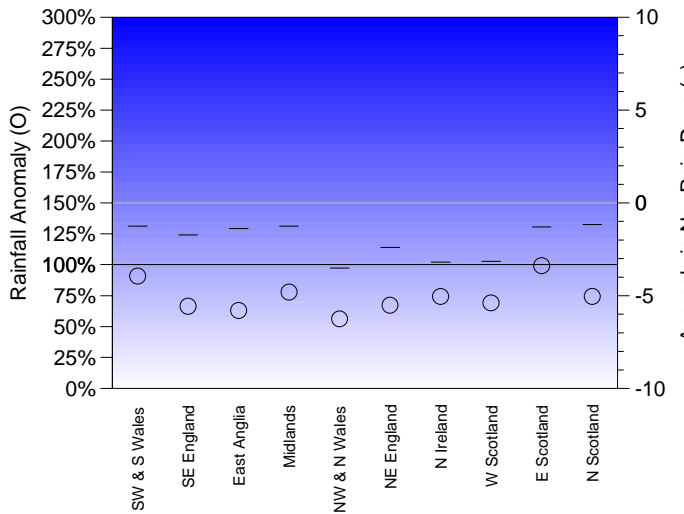
In Europe, exceptional rainfall affected the Balkan countries of Serbia, Bosnia and Croatia on the 14th-15th. Daily rainfall totals for the 15th broke all time records in the Serbian cities of Belgrade (108mm) Valjevo (108mm) and Loznica (129mm). In Belgrade, 205 mm of rain fell in just 48 hours, more than the normal rainfall for all of April, May and June combined! Rapidly rising rivers surged into homes, forcing people to go upstairs or to climb onto rooftops and await rescue. Tens of thousands of people were forced to abandon their homes which had also been left without electricity or drinking water. The overflowing rivers closed roads and caused hundreds of mudslides across the region, leading to 37 deaths. Obrenovac, Serbia, was swamped with 3m of floodwater. Meanwhile northeast Europe experienced an equally remarkable early heat wave. Estonia notched up a new record high for May on the 19th with 33.1°C (92°F) measured in Kunda. Tallin also broke its May record with 31.4 °C (88°F). On the same day St. Petersburg, Russia (where measurements have been ongoing since 1881), experienced a new record high for May of 33.0°C (91°F) and Arkhangelsk on the Arctic Ocean peaked at a remarkable 31.7 °C (89°F)

Fierce heat and wildfires raged across California on 14th-15th. Los Angeles reached 37°C (99°F) on the 14th. A major fire engulfed the coastal town of Carlsbad, north of San Diego, scorching several buildings and forcing an amusement park to close. 20,000 people were evacuated in the area and a local University campus was shut. A mid month deluge affected eastern China on the 15th-16th. Eighteen people died after a wall collapsed following torrential rain in Qingdao. Taishan, located just west of Hong Kong, received a colossal 419mm of rain in 24 hours on the 15th. In India, a prolonged heat wave in Odisha state saw temperatures reach 44.6°C (112°F) in Banda on the 3rd with 43°C (109°F) at Churu.

A late-autumn hailstorm left parts of Sao Paulo, Brazil, covered in white on the 18th. Enough ice accumulated that children were seen playing in yards and streets across the city, even making "snowmen." In Australia, Adelaide recorded its coldest start to May on record with a high of just 11.9°C (53°F) on the 2nd. Meanwhile Antarctic sea ice continued to wax - reaching its highest ever recorded extent for May by month end.



Extremes for June 2014		
Hottest:	26.5°C	Strathallan Airfield SAWS, Tayside, 18th
Coldest:	0.9°C	Altnaharra SAWS, Highland, 26th
Most Rain:	35.8mm	Astwood Bank, Hereford and Worcester, 4th
Most Sun:	16.4hrs	Stornoway, Western Isles, 26th
Windiest:	53mph	Sule Skerry MAWS, Orkney, 10th
Warmest:	17.4°C	St James Park, Greater London
Coolest:	11.1°C	Fair Isle, Shetland
Wettest:	100.8mm	Cardinham (Bodmin) SAWS, Cornwall
Driest:	7.0mm	Frittenden, Kent
Sunniest:	267.9hrs	Bude, Cornwall
Dullest:	67.6hrs	Lerwick, Shetland



June is the month of the summer solstice, as well as events such as Glastonbury and Wimbledon. Despite the sun being at its zenith, the hottest day of the year occurs during June only around 1 year in 4. June weather is notoriously capricious - especially during the latter half. Heat waves can occur - yet snow is far from unknown.

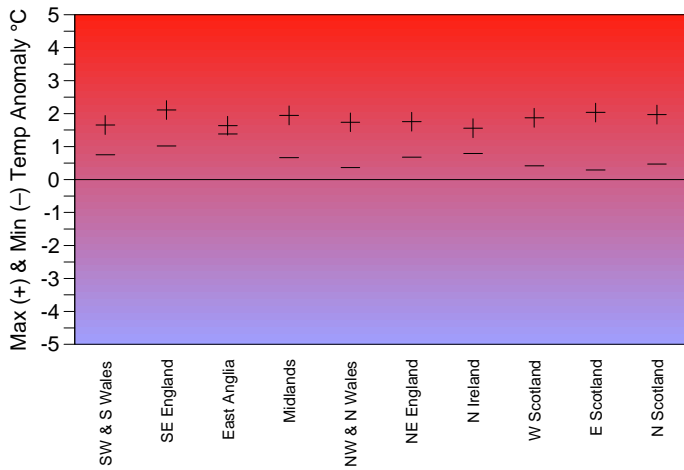
In contrast to the cool and soggy weather of late May, most places were dry and warm on the opening day but fronts encroached from the 2nd leading immediately to a cooler and more changeable spell. Rainfall was persistent in the north-east on the 4th/5th and Nunraw Abbey (East Lothian) recorded 56mm (a months normal rainfall!) in just 24 hours. Thunderstorms spread northwards to affect many areas on the 7th before pressure began to build. By the 11th it was fine and warm nationwide and an anticyclone, centred just to the north-west of the UK, remained dominant for the following fortnight. Eastern parts were prone to cloud and weak fronts blown in on north-easterly winds but most places enjoyed a good deal of warm sunshine and a welcome taste of summer. There were occasional interruptions, such as the night of 13th/14th when thunderstorms erupted in central and Southern England leaving many hundreds of homes in the Thames Valley without power. Scotland became very warm and Cupar (Fife) recorded 27°C (81°F) on the 18th. Heavy showers broke out on the 23rd and 24th in northern eastern England and 30mm of rain fell within a single hour at Skegness (East Yorks) causing localised flooding. A general break-down began on the 26th, with the final four days seeing heavy and thundery showers. A waterspout was seen off Hove (East Sussex) on the 29th, and a mixed bag of weather greeted the Glastonbury Festival. Lightning interrupted the shows on the evening of the 27th and heavy showers brought the usual mud (about which Dolly Parton invented a rap-song!) but the sun came out to grace the final day of festivities.

For the month as a whole, temperatures were a degree or more above average nationwide. Rainfall was below normal everywhere except for eastern Scotland. In terms of sunshine, the south and west fared much better than the north and east. Much of England and Wales enjoyed 25% or more sunshine hours than usual whilst northern and eastern Scotland was dull to a similar degree. Lerwick (Shetland) had its lowest June sunshine total in at least 82-years!

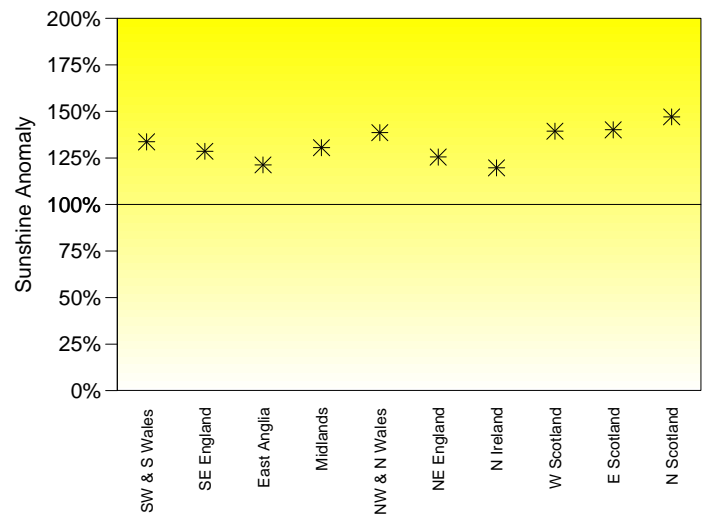
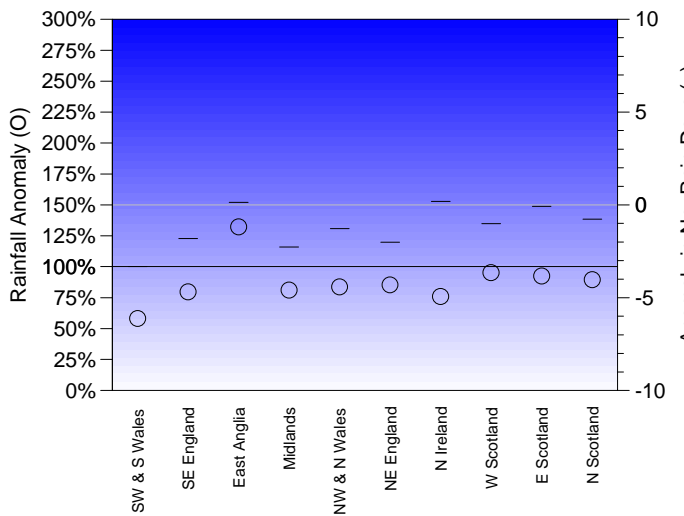
Outside of the UK, contrasting weather extremes affected the far north. Kangerlussuaq in Greenland recorded 23.3°C (74°F) on the 15th, the highest June temperature ever recorded in Greenland, whilst Kilpisjärvi in Finland reported a minimum temperature of -6.2°C (21°F) on the 17th, close to the Finnish cold record for June of -7°C (19°F) set in 1962. In Norway, Oslo was drenched on by 73mm of rain on the 26th - a record amount for any day there since at least 1937. Torrential rains and floods hit Bulgaria on the 19th, killing at least 10 people, cutting off electricity, blocking roads and sparking evacuations. Germany experienced a heat wave. Berlin reached 34.1°C (93°F), on the 8th, and the following day Rheinau peaked at 37.7 °C (100°F) - the highest temperature ever measured in Germany for this early in the year. France was nearly as warm and Strasbourg hit 37°C (99°F) on the 8th before severe thunderstorms developed and spread into Belgium, the Netherlands and northwest Germany on the 9th-10th. These storms packed damaging winds, hail and blinding downpours. Squalls felled trees and baseball (75mm) sized hail fell near Brussels - as well as across the French countryside. Almost 1,000 hectares of vines were pulverised by hail in the Bordeaux vineyards in two nights of storms - including 680 hectares in the village of Blaignan alone.

In the USA savage storms blasted the Great Plains on the 3rd and 4th leaving a trail of damage. 135mm of rain fell within 24 hours in Omaha, Nebraska, accompanied by baseball-sized hail and 100mph winds. More storms followed on the 16th-17th. A tornado caused catastrophic damage to the town of Pilger, Nebraska, on the 16th, and a massive rain-wrapped tornado swept through Coleridge 24 hours later - resulting in two fatalities. June was an exceptionally wet month in the American Midwest, where Sioux City, Iowa recorded a total of 422 mm, obliterating the old monthly rainfall record of 223 mm set in 1967.

In Asia, a dust storm demolished numerous trees and power lines on the 2nd and left at least four people dead in Tehran, Iran. Temperatures plunged from 33°C (91°F) to 19°C (66°F) in just an hour. Japan was unusually hot, especially in the north and Sapporo (Hokkaido) recorded 33.7°C (93°F) on the 4th smashing the old June record of 31.9 °C set in 1877. The same day, Asahikawa hit 35.9°C (97°F). This was still cool when compared to India, where temperatures soared to 47.8°C (118°F) in Delhi on the 8th - making it the hottest day in 62 years. In southern China, at least eight people were killed and over 3,000 homes damaged by heavy monsoon rains. The deluge struck 33 counties in Guizhou province, affecting one million people - more than 337,000 of whom had to be evacuated. Luzhai County in Guangxi Zhuang Region reported 345 mm of rain on the 4th-5th. The flooding and landslides claimed at least 26 lives.



Extremes for July 2014		
Hottest:	32.3°C	Gravesend Broadness SAMOS, Kent, 18th
Coldest:	1.3°C	Aboyne, Grampian, 6th
Most Rain:	78.4mm	Westonbirt, Gloucestershire, 19th
Most Sun:	16.1hrs	Glasgow Bishopton, Strathclyde, 9th
Windiest:	59mph	Warcop Range SAWS, Cumbria, 18th
Warmest:	20.6°C	St James Park, Greater London
Coolest:	12.9°C	Fair Isle, Shetland
Wettest:	132.2mm	Achnagart, Highland
Driest:	12.3mm	Benson, Oxfordshire
Sunniest:	284.7hrs	St. Athan, South Glamorgan
Dullest:	99.3hrs	Lerwick, Shetland



July is most usually our warmest month and nearly half of the time, boasts the hottest day of the year. Several recent Julys such as 2006 and 2013 have featured notable heat waves and an abundance of sunshine is good news for our wine growers who have enjoyed a number of excellent vintages this millennium.

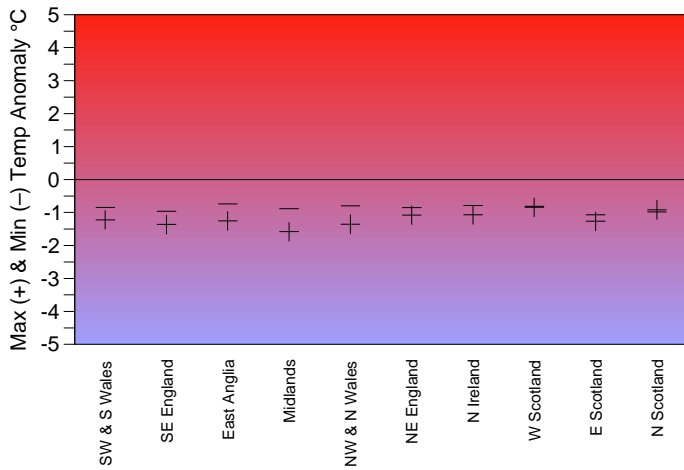
The month started fine and warm over much of England and Wales. Scotland and Northern Ireland were more changeable, and rain spread south-east to most places by the end of the 4th. The east coast had persistent rain for much of the day on the 6th, and another band of rain affected eastern areas from Humberside to Kent on the 10th with very subdued temperatures for mid-July of no more than 15-16°C (59-61°F). Elsewhere it was a showery period and thunderstorms on the 7th - and particularly the 8th caused localised flooding from Shropshire to Sussex. From the 11th to 16th, weak fronts affected the UK at times giving some cloud and occasional rain, but pressure was relatively high and it became warmer everywhere. Hot weather began in earnest from the 17th, and the following day, Gravesend (Kent) recorded 32.3°C (90°F) - the warmest day of the year so far. The atmosphere, however, remained very volatile and there were widespread thunderstorms across the south on the nights of 17th/18th and 18th/19th. A notable storm over the Midlands during the late afternoon of the 19th dropped cherry sized hail over Oxfordshire and walnut sized hail over Buckinghamshire. Temperatures were a little lower on the 20th, but it remained thundery in the east. A colossal downpour at Norwich delivered 49mm (a months average rainfall) of which 46mm fell in single hour! High pressure over Scandinavia led to a fine and very warm spell 22nd - 26th. Ideal conditions graced the Opening Ceremony of the Commonwealth Games in Glasgow on the 23rd although the easterly flow generated some low cloud down the east coast, notably on the 24th. From the 27th, the weather became more unsettled and thundery showers again reared their anvil heads - especially in south-east England from the 27th-29th. Flash flooding caused disruption to road and rail transport in Sussex early on the 28th.

July marked the eighth consecutive month with above average temperatures for the UK. Although not as warm as July 2013, temperatures were still 1°-2°C above normal nationwide. Rainfall was variable, reflecting the localised, showery nature of the rain, and so while it was relatively dry in the south-west, parts of East Anglia had a very wet month. Sunshine was above normal everywhere and it was the sixth sunniest July since 1929. The warm weather has not been good news for all, since unusually large numbers of insects and garden slugs have been reported, with mosquitoes particularly numerous across southern England.

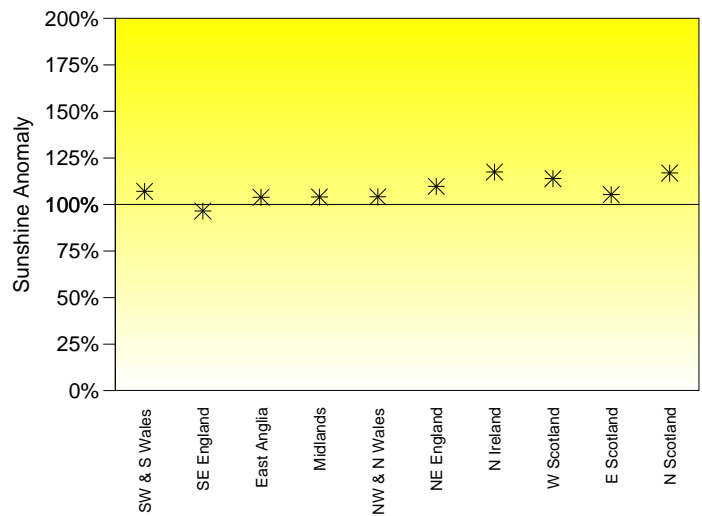
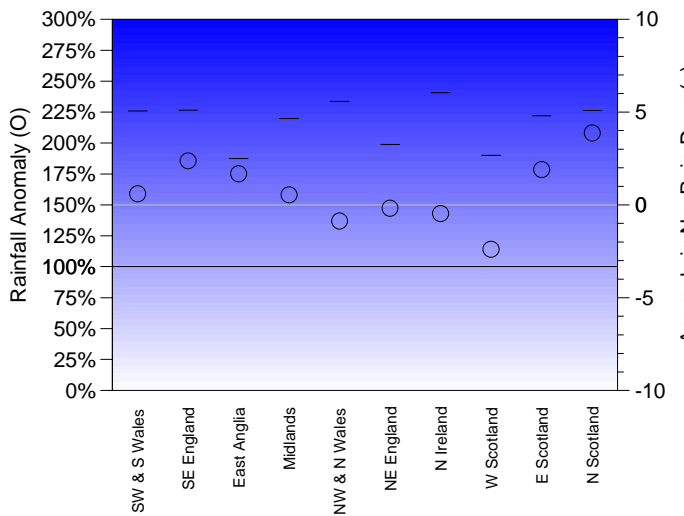
Heat and storms also featured in European weather during July. On the 2nd, 35cm of hail fell in 45 minutes in Almazan, Spain, astonishing locals and damaging 70% of the houses in the town. Germany and the Netherlands were affected by extremely heavy rain on the 28th. Deelen in Holland received 132mm in 24 hours, including 76mm in a single hour! Meanwhile Scandinavia experienced a prolonged heat wave. At Balnak (inside the Arctic Circle) in Norway, the temperature reached 32.6°C (91°F) on the 3rd. A little further south, Gulsvik, recorded 34.5 °C (94°F). Even warmer was Novosibirsk in Russia's Siberia region, which hit a remarkable 37°C (99°F) on the 12th. That afternoon, bathers cooling by the river Ob were startled by a powerful thunderstorm which unleashed heavy rain, damaging winds and a bombardment of hailstones 25mm across. In contrast, that same day Zlatoust in Russia's South Urals experienced a snow blizzard, the first ever to occur in that region during mid summer, with snow laying 10cm deep.

In the US, Hurricane Arthur, the first of the Atlantic season, smashed into the North Carolina coast overnight 3rd-4th packing winds of 96-110mph. The Outer Banks islands were pummelled with fierce winds and heavy rains, which knocked out power, ripped apart trees and caused flash flooding. Arthur then battered south-east Canada on the 6th leaving more than 200,000 homes and businesses without power in Nova Scotia and New Brunswick. On the 4th, baseball-sized hail battered Wilber in Nebraska, leaving vehicles and homes damaged. In Missouri Valley, Iowa, an eyewitness captured the moment when 90mph winds ripped the roof off a petrol station. On the 29th, the Boston-area city of Revere was hit by a rare tornado that knocked out power and damaged homes and buildings.

On the 9th, Typhoon Neoguri crossed Japan's southern Okinawa island chain. Gusts of up to 120mph left a trail of damage. In the Okinawan capital of Naha, trees were split, signboards scattered and a restaurant was destroyed. Schools were closed, air and sea traffic ground to a halt and 70,000 households lost power. Typhoon Rammasun battered southern China and Vietnam 18th - 20th, killing 44 people and destroying tens of thousands of homes. Worst hit was the island province of Hainan, where the storm made its first landfall. By the 21st, 51,000 houses and 40,600ha (100,300 acres) of crops had been destroyed. A few days later, on 24th / 25th, Typhoon Matmo brought torrential rainfall to China and Taiwan. The hardest-hit areas were in the mountains of eastern Taiwan which received more than 650mm of rain.



Extremes for August 2014	
Hottest:	27.2°C St James Park, Greater London, 7th
Coldest:	-1.9°C Braemar No 2, Avon, 25th
Most Rain:	136.9mm Fair Isle, Shetland, 9th
Most Sun:	14.4hrs Dyce, Grampian, 5th
Windiest:	62mph Tain Range SAWS, Highland, 11th
Warmest:	17.5°C St James Park, Greater London
Coolest:	10.7°C Dalwhinnie No 2, Tayside
Wettest:	339.2mm Cluanie Inn No 3, Ross & Cromarty
Driest:	56.2mm Whitechurch, Dyfed
Sunniest:	257.8hrs Jersey St Helier, Channel Islands
Dullest:	108.5hrs Bala, Clwyd



August marks the period of school holidays and high summer. Record warmth is the preserve of August. However (and like this year) the month frequently disappoints - with resurgent westerly's bringing unsettled weather and bouts of wind and rain. The evenings draw in noticeably from the final fortnight and ground frosts are not uncommon especially for northern Britain.

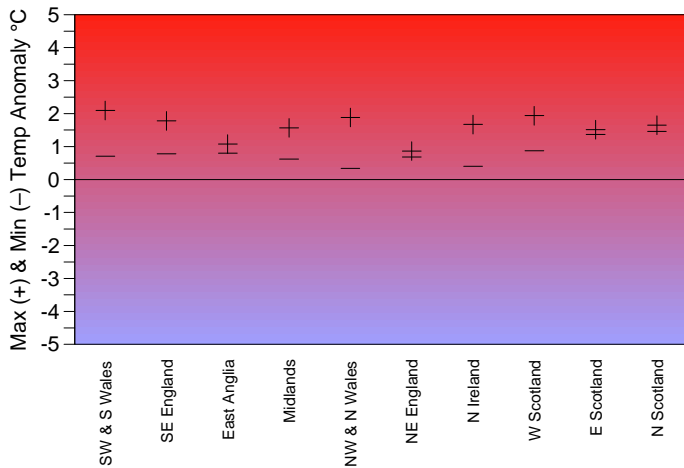
In contrast to the warm and dry weather of late July, the first three days of August were governed by an area of low pressure which gave showers or longer periods of heavy and thundery rain. It was also unusually windy for the time of year along Irish Sea coasts. Conditions became quieter on the 4th and the following six days were the month's warmest - with maxima in the south widely 22-25°C (72-77°F) and sunny spells on most days. A depression from the south brought heavy rain to southern and eastern Britain overnight on the 8th/9th. The 10th was a very wet day nationwide and Fair Isle in Shetland received a colossal 132.6mm in 24 hours - almost double its full-month average for August! An even more vigorous low containing the remnants of tropical storm "Bertha" then swept northwards on the 10th and 11th and brought more heavy rain and strong winds. Lossiemouth (Moray) received 100mm in 24 hours and there were numerous incidents of flooding and disruption to transport across north-east Scotland. In the aftermath of "Bertha" it turned unseasonably cool giving a decidedly autumnal feel. From the 12th to 24th winds were often north-westerly and a showery regime prevailed in polar maritime air. Some of the showers were heavy with hail and thunder, while early risers would have noticed a definite nip in the air around dawn, with local ground and even air frosts in the north. Early on the 24th, the mercury sank to -1.9°C (29°F) at Katesbridge (N. Ireland) and -2.1°C (28°F) was recorded at Braemar (Aberdeenshire) around dawn the following day. Bank Holiday Monday (25th) was very wet for England and Wales but it was a dry and sunny day in Scotland. It became a little milder during the final week as winds veered south-westerly but conditions remained very unsettled.

August ended the series of eight consecutive warmer than average months. Indeed it was the coolest August in 20 years with average temperatures 1-2°C below normal nationwide. It was also wet - notably so in northern Scotland - which had its wettest August in 100 years. Interestingly, sunshine was marginally above normal, especially in the north and west, reflecting the showery character of much of the rain.

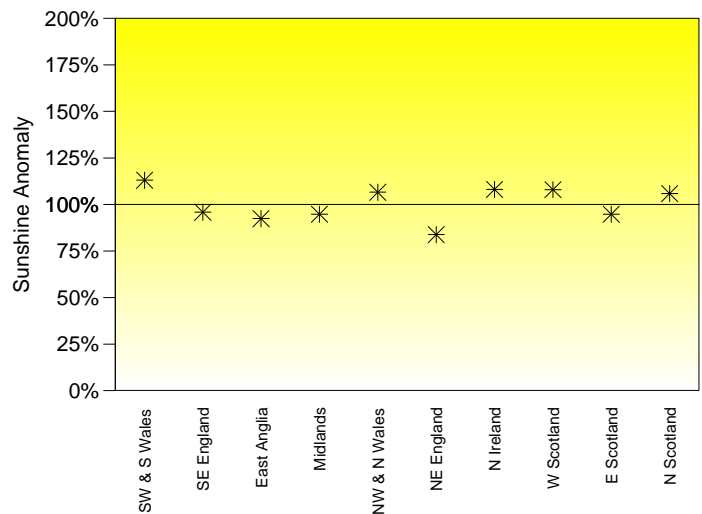
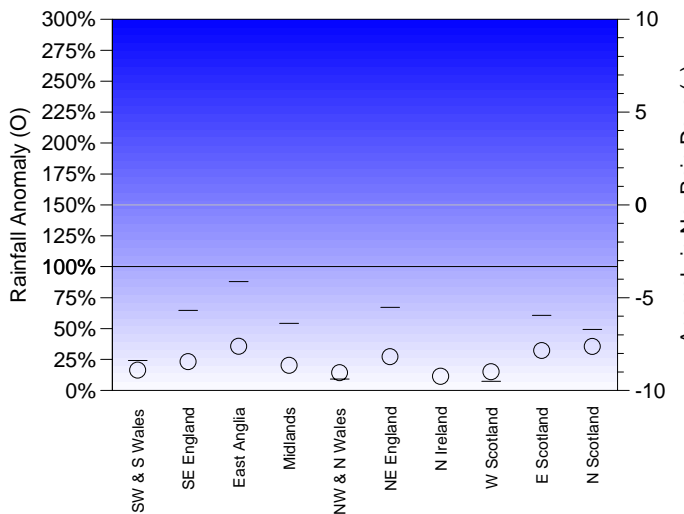
In eastern Europe, August opened with extreme heat from Belarus to the Baltic. Several high temperatures records were set, including for Latvia where Ventspils recorded 36.7°C (98°F) on the 3rd and then 37.8°C (100°F) on the 4th. Sweden also sweltered e.g. 34.7°C (95°F) in Sala on the 5th, and the heat triggered the country's largest wildfire in 40 years which blackened 37,000 acres. In Italy, four people were killed and 20 others injured after a flash flood, triggered by a sudden cloudburst, tore through a festival at Refrontolo, north of Venice on the 2nd. Other villages in the area suffered landslides caused by the deluge. The remnants of former Hurricane "Bertha" were also felt in Western Europe on the 10th and 11th and tornadoes were reported across France and Belgium. One near Marbay, Belgium on the 10th injured dozens of people when a structure collapsed at a flea market and another in the municipality of Thuin damaged roofs and uprooted trees. Istanbul, Turkey was struck by heavy rain and thunderstorms on the 3rd. A waterspout which turned into a tornado as it moved inland caused damage across the Golden Horn and Eminonu districts of the city.

On the other side of the Atlantic, New York commuters woke to widespread flash flooding on the 11-12th after intense thunderstorms dumped 330mm of rain. On the 17th a prolonged and intense thunderstorm left several feet deep in parts of Mexico City. City tunnels and roadways became impassable and emergency workers were drafted with heavy equipment usually reserved for dealing with blizzards.

In Asia, Typhoon "Halong" generated record rainfall amounts for Japan 8th-11th. Halong made its first landfall near the city of Aki, on the island of Shikoku, with sustained winds of 75mph. Later, the Pacific coastal observatory at Cape Muroto recorded 94mph sustained winds - with gusts to 117mph! The maximum rainfall occurred in Yanase, Kochi Prefecture, on Shikoku. The site recorded an astonishing 1,081mm of rain in the 72-hour period ending at noon on the 10th, including a remarkable 862mm of rain in 24 hours. In Australia on the 27th three flood rescues were carried out in northern New South Wales as rainstorms inundated the region and caused flash flooding which cut off communities. Toormina, near Coffs Harbour, recorded 110mm of rain in 24 hours.



Extremes for September 2014	
Hottest:	27.0°C Jersey St Helier, Channel Islands, 16th
Coldest:	0.0°C Katesbridge, County Down, 8th
Most Rain:	41.2mm Exeter, Devon, 19th
Most Sun:	12.3hrs Ronaldsway Airport, Isle of Man, 7th
Windiest:	61mph Lerwick, Shetland, 26th
Warmest:	18.5°C Jersey St Helier, Channel Islands
Coolest:	11.8°C Braemar No 2, Avon
Wettest:	120.6mm Lerwick, Shetland
Driest:	1.8mm Stormont Castle, County Down
Sunniest:	274.4hrs Jersey St Helier, Channel Islands
Dullest:	80.6hrs Kirkwall, Orkney



September marks the start of Autumn - and storms certainly become more frequent as the Atlantic circulation gains in mobility. However, the month can also be remarkably warm (e.g. 2006) and dry (e.g. 2002) and settled. 2014 was an outstanding example of a September that was both dry and very warm - with temperatures that would have been respectable even in high summer.

Weak fronts gave a little light rain over England and Wales on the 1st, but high pressure then dominated until the 17th. Days were often fine and warm with light winds, and maxima above 21°C (70°F) were commonplace - culminating in the month's highest of 26.3°C (79°F) at Wigginholt (West Sussex) on the 18th. As is typical with autumn anticyclones, north eastern coasts were often masked overnight by low cloud, which was then slow to burn off next morning. The phenomena is known as "Haar" and was especially evident 14th - 19th. By the 17th, pressure was still high over Scandinavia but low pressure over Biscay was struggling valiantly to exert an influence. A very humid and thundery spell ensued over England and Wales 18th - 20th and there were some notable downpours; e.g. 47.8mm in the 24 hours ending 0900 on the 19th at Linkenholt (Hampshire). Much cooler and fresher weather extended to all areas by the end of the 21st. During the next week, pressure remained high in the south, where it remained largely settled and dry, but weak fronts affected northern areas, bringing cloud and a little rain. The 26th was very windy for a time across northern Scotland with a gust of 66mph recorded at Sella Ness (Shetland). England and Wales basked in very warm sunshine again over the final weekend of the 27th/28th before showers spread north on the 29th and temperatures began to fall.

It was the persistent warmth, rather than individual outstanding temperatures, that stamped the character of the month, and this was the fourth warmest September for the UK in 100 years. Remarkably, the UK mean temperature exceeded that of August, a very unusual (though not unprecedented) event. For the UK as a whole, it was also the driest September ever recorded - and the driest calendar month since August 1995. This belies the fact that a few locations which caught localised thundery downpours had monthly totals close to or above normal! Interestingly, despite its warmth and its aridity, sunshine was much closer to normal than might be expected owing to the preponderance of morning mist and low cloud. Western areas fared best in the sunshine stakes.

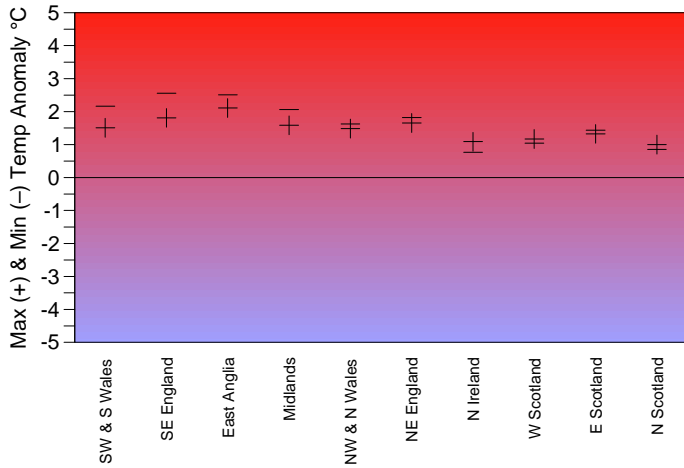
Parts of northwest Europe also experienced an exceptionally dry September. Malin Head on the North Atlantic coast of Ireland experienced its driest September for 81 years. In sharp contrast, flooding occurred in southwest Europe on the 29th. Montpellier, France recorded 300mm for the day - the majority falling in just three hours!

Remnants of hurricane Norbert brought record-breaking rainfall to the Southwest USA on 8th/9th creating havoc for early-morning commuters in Phoenix, Arizona. Further powerful storms swept through the Southwest on the 27 th-28th, ravaging local infrastructures with destructive winds and deluges. At Phoenix Airport, 40 flights had to be diverted as winds roared up to 67mph and tore apart the airport's roof, littering debris across the runway.

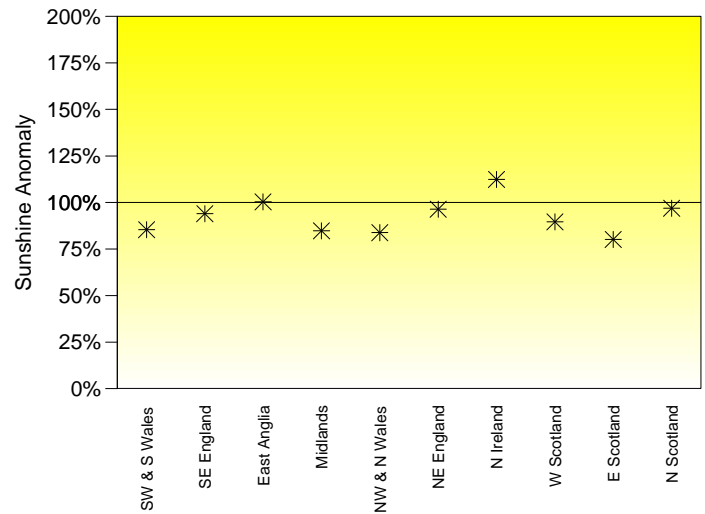
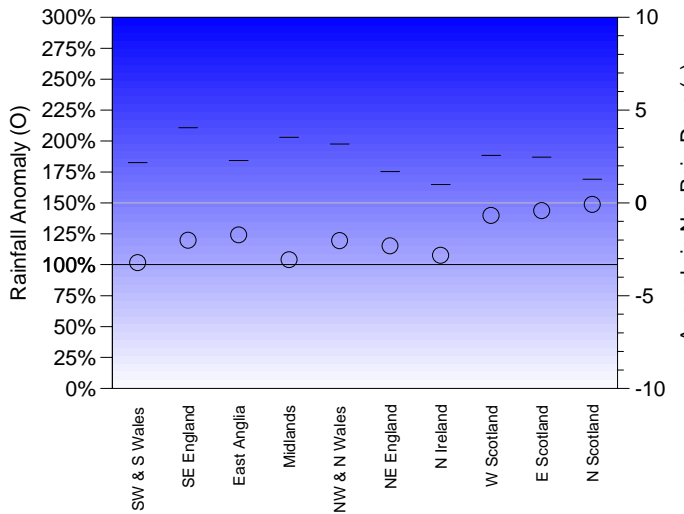
In Alberta, Canada, September was aptly referred to as "Snowtember", as unseasonable, heavy snow fell across the Calgary region, bringing down trees and power lines, and causing chaos to transport. The spectacular cold front on the morning of the 8th dumped 12cm of snow at the airport. Temperatures struggled to rise above freezing through the afternoon, an amazing contrast to the summery 25°C (77°F) recorded the previous day! Another round of snow struck the city on 9th-10th and thousands of trees, still in full leaf, collapsed under its weight, cutting power to 30,000 homes and leading to major traffic disruption. Blizzards also swept the US states of Montana, Wyoming and the Dakotas. By the 11th, 20cm had accumulated on the Black Hills in South Dakota.

On the 15th, Hurricane Odile hammered Mexico's Baja California Peninsula with maximum sustained winds of 109mph. The storm, which made landfall as a Category 3 hurricane, toppled trees, power poles and road signs along the main highway, which was also swamped by surging floodwaters.

21st - 25th Typhoon Fung-wong brought torrential rain, flooding and mudslides to the Philippines, China, Taiwan and South Korea after the storm first made landfall in north-eastern Luzon Island. After flooding the northern Philippines, Fung-wong turned north and buffeted Taiwan. The storm affected more than one million people across its track, 206,000 people were evacuated and more than 2,000 homes destroyed. In 48 hours, the capital Manila recorded 194mm of rain, whilst nearby Quezon City, recorded 410mm and Baguio to the north, 500mm. Winds peaked at 90mph in Pengjiayu, just to the north of mainland Taiwan.



Extremes for October 2014	
Hottest:	23.6°C Gravesend Broadness SAMOS, Kent, 31st
Coldest:	-3.2°C Altnaharra SAWS, Highland, 13th
Most Rain:	103.0mm Kinlochewe, Highland, 26th
Most Sun:	10.4hrs Valley, Gwynedd, 2nd
Windiest:	84mph South Uist Range, Western Isles, 6th
Warmest:	15.8°C Jersey St Helier, Channel Islands
Coolest:	8.1°C Braemar No 2, Avon
Wettest:	580.6mm Achnagart, Highland
Driest:	34.4mm Linton-on-Ouse, North Yorkshire
Sunniest:	113.9hrs Wattisham, Suffolk
Dullest:	43.0hrs Aviemore, Highland



October marks the start of autumn proper; ground frosts become common and the first snow may whiten our northern hills. It can also be a windy month, and often the remnants of an Atlantic hurricane or tropical storm can get caught up in a depression, giving it an extra punch and adding to the impact of the wind and rain.

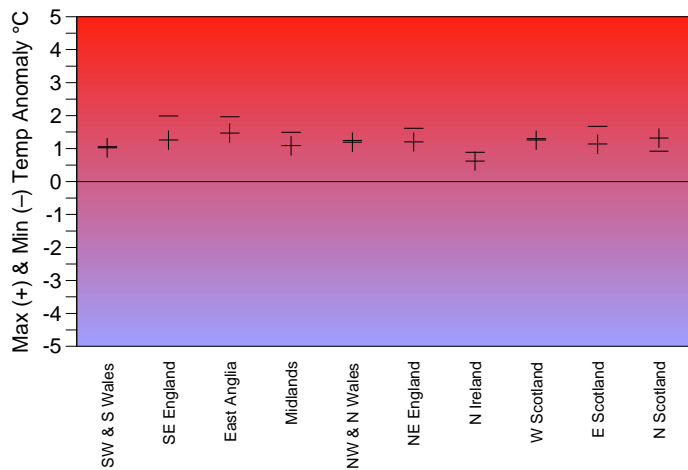
The month began with three warm days as the late September heat persisted but on the 4th there was a dramatic change as a cold front ushered in rain and a sharp temperature drop. A colossal 96.1mm fell at Drumburgh (Cumbria), and snow fell on the highest Scottish peaks. The 5th then saw early ground frost and a bright, crisp day before wet and stormy weather arrived on the 6th. A gust of 84mph was recorded at South Uist (Western Isles). The following 5 days were governed by a slow-moving depression over the northern UK which delivered a bombardment of heavy, squally and sometimes thundery showers, with longer spells of heavy rain in Scotland. It was mild and 16°C (61°F) was regularly exceeded in the south. Fog and low cloud became extensive overnight on 11th/12th as the gradient slackened but more heavy rain affected England and Wales on the 13th/14th. Western Scotland and N. Ireland were much brighter, but further Atlantic depressions soon dominated giving a very unsettled but also very mild second half of the month. The remnants of tropical storm Gonzalo swept rain and gales across the country overnight on the 20th/21st. Many trees were still in leaf and so were easily toppled. There was extensive disruption to railway services and a woman was killed by a falling tree in Knightsbridge, London. The final week saw the main thrust of wind and rain across northern and western areas while the south and east often experienced warm, mellow days and a taste of Indian summer. Persistent frontal rainfall in western Scotland over a three day period beginning on the 25th led to 200mm being recorded in some places and numerous landslides. October bowed out on a very balmy note, with spectacular warmth in southerly breezes on the 31st. 23.6°C (75°F) was reached at Gravesend (Kent) and Kew Gardens (Greater London), making this the warmest Halloween on record for the UK.

It was another warm month overall especially in the south with daytime temperatures typically 1.5°C or more above the average. Rainfall totals were generally above normal, especially so over Scotland and Cumbria with some places recording double their usual October totals. Sunshine was a little below average everywhere except for N. Ireland.

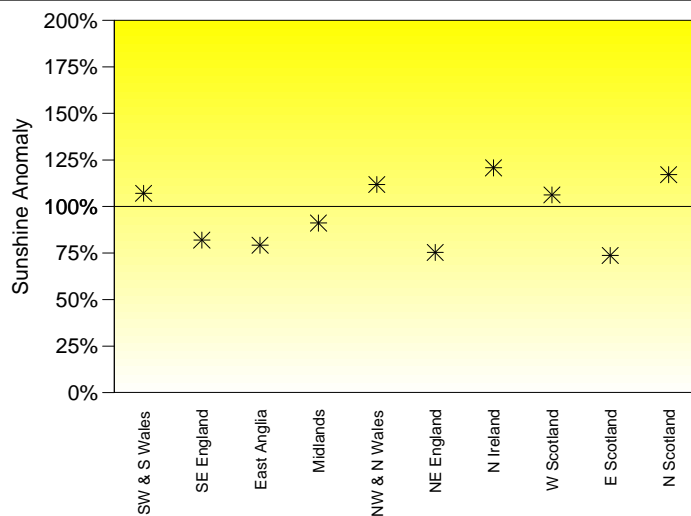
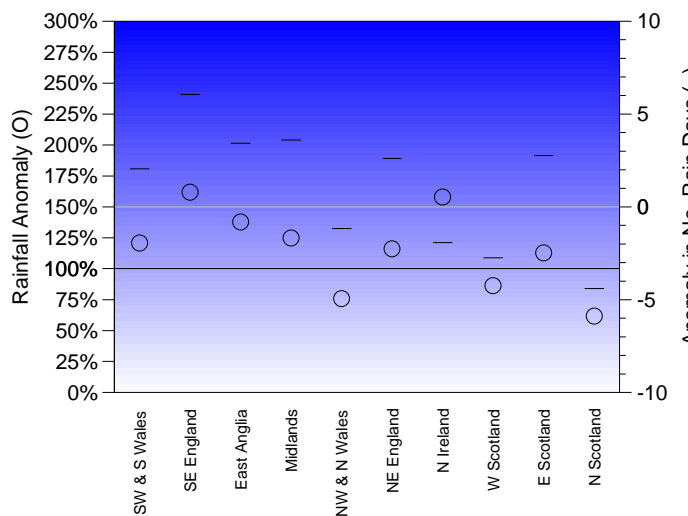
Europe also experienced warm but unsettled weather during October. In Spain, Malaga Airport recorded a maximum of 36.4°C (98°F) on the 22nd - a new October all time record. The remnants of Hurricane Gonzalo caused havoc elsewhere in Europe 21st-26th. On the 22nd, homes and streets were swamped in the Slovenian capital of Ljubljana where 137mm of rain fell in under six hours. The following night, 100mm of rain fell across southwest Romania, Serbia, Kosovo and Montenegro. The storm system then drifted through Greece and the Balkans 24th-26th. Significant flooding affected Athens with more than 60mm falling in northern suburbs. Torrential rain and snow brought travel chaos to Bulgaria on the 26th as nearly 125 mm fell in the city of Burgas. Numerous vehicles were swept down streets and piled onto one another - courtesy of the ferocious force of the flood waters. Up to 20cm of snow fell in Pamporovo. Violent thunderstorms dumped up to 100 mm rain across the Canary Islands 19th-20th causing floodwater to surge through streets.

In the USA, a violent microburst with 100mph winds slammed Easthampton, Massachusetts, early on the 8th, flattening trees and battering homes over a mile long swathe. During the following two days a 'nor'easter' storm struck New England. 44,000 customers lost power across Connecticut, New York, Maine and Massachusetts. Winds of over 60mph sent trees crashing throughout the region and blocked roadways across Massachusetts. Several airports (including New York's JFK) suffered extensive delays. Hurricane Gonzalo grew into a major category 3 storm approaching Bermuda on the 14th with sustained winds of 115mph. In South America, the Brazilian capital of Brasilia experienced record October heat as the temperature soared to 36.0°C (97°F) on the 15th.

On the 5th, typhoon Phanfone lashed southern Japan. On Kyushu island, winds of 90mph grounded flights, knocked out power to 10,000 homes and caused several injuries. In the Pacific, unseasonably heavy rain hit the island of Vanuatu with Port Vila receiving 271mm in 24 hours on the 7th. Tropical Cyclone Hudhud brought devastation to India 12th-14th. It made landfall near Visakhapatnam, one of the largest cities on India's eastern coast, drenching the city with 150mm of rainfall and blasting it with 130mph winds. The heavy rain led to flooding across eastern India and many trees were felled. 400,000 people were evacuated from the coastal areas of Andhra Pradesh and Orissa states. On the 14th severe thunderstorms swept Sydney, Australia. Winds reached 70mph at Sydney Airport and rainfall averaged 75-150 mm south and west of the city. Nearby hills were blanketed by snow.



Extremes for November 2014	
Hottest:	19.0°C Oban Airport, Strathclyde, 4th
Coldest:	-4.3°C Loch Glascarnoch, Highland, 10th
Most Rain:	65.6mm Port Ellen SAMOS, Strathclyde, 6th
Most Sun:	7.8hrs Valley, Gwynedd, 18th
Windiest:	75mph Mumbles Head, West Glamorgan, 13th
Warmest:	11.9°C Jersey St Helier, Channel Islands
Coollest:	5.1°C Braemar No 2, Avon
Wettest:	194.8mm Lough Fea Waterworks, County Fermanagh
Driest:	53.2mm Rostherne, Cheshire
Sunniest:	88.0hrs Valley, Gwynedd
Dullest:	26.5hrs Aviemore, Highland



Damp leaves, dwindling daylight, misty days interspersed with bouts of wet and windy weather - these are typical characteristics of UK November weather. Snow is still a rarity at low levels but becomes increasingly likely over higher ground, while mild and sunny weather may still remind us of early autumn days. According to folklore, this is especially likely around 15th-21st, a period known as St. Martin's Summer which has some reliability in the weather records.

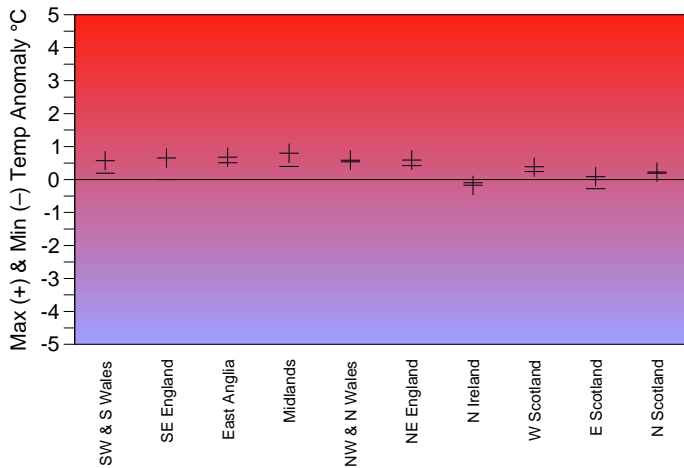
The month opened with a bright and fairly warm day as a legacy of the late October heat and the mercury reached a respectable 18.7°C (65°F) at Writtle (Essex). Rain hurried in from the south-west overnight and a cold front brought a drop in temperature on the 2nd. There were squally winds and an unconfirmed report of a tornado in Leicestershire. Low pressure dominated over the next two days, but the gradient slackened by the 5th, giving a quiet, crisp Bonfire Night on which mist and fog formed readily. Rain and strengthening winds advanced from the west the next day and only cleared from eastern areas on the 7th. The 8th was another wet and windy day but bright conditions graced the Remembrance Sunday parades for most places - although showers peppered western and southern coasts. For much of the following week, pressure building over Scandinavia caused fronts to slow over the UK - and these gave prolonged rainfall. A little localised flooding arose in some places in south-west England and south Wales and a gust of 93mph was recorded at Berry Head (Devon) on the 13th. From the 18th, the Scandinavian high exerted greater influence, but the net result was quiet, cloudy weather with relatively high temperatures since eastern Europe was not particularly cold. Indeed, it became balmy over England and Wales on the 22nd in southerly winds before a cold front brought a sharp drop in temperature the next day and an overnight frost. The following four days were characterised by very light winds, widespread mist and fog. Winds picked up on the 28th, lifting the fog, and the final weekend saw dry, bright weather with spring-like temperatures.

It was a very mild month overall with few air frosts; in fact, frogs spawn has even been sighted in Cornwall! Despite the fact that November 2011 was warmer, this was the fifth warmest in a series from 1910. Rainfall was above average generally - and especially so in parts of Northern Ireland, eastern Scotland and southern England. Western areas fared best in the sunshine stakes, with eastern areas duller than normal reflecting persistent low cloud.

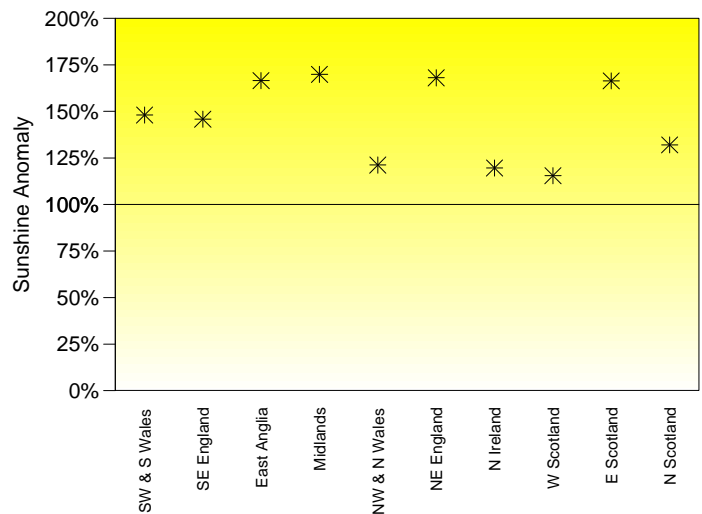
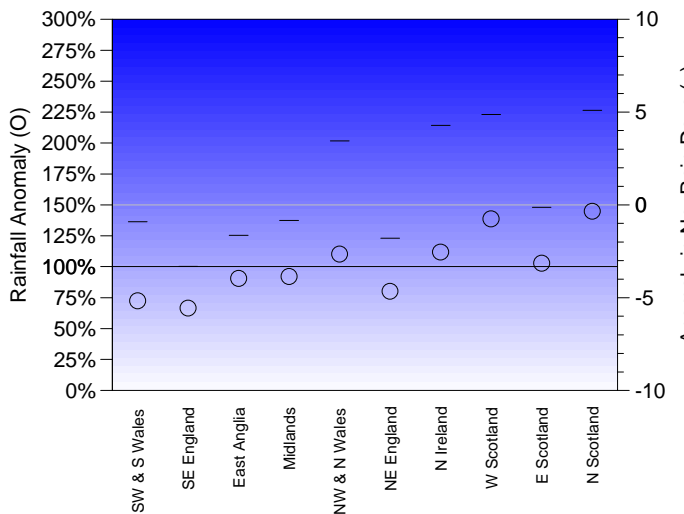
Exceptional rainstorms lashed southern Europe 4th - 17th. Rainfall in excess of 175mm inundated Nice, France on the 4th-5th. Kotschach, Austria, recorded more than 300mm in the same 48 hours and Cevio, Switzerland, 265mm. 90cm of snow buried the higher elevations of the Alps at Andermatt. In Italy's provinces of Tuscany and Liguria, boats and helicopters were used to rescue dozens of residents trapped in their homes by flood waters and evacuations were ordered in the coastal regions. For the fortnight ending 17th, rainfall exceeded 250mm in a wide belt extending from southeast France into northern Italy and southern Switzerland. Nice, France collected 420mm for the period and Genoa, Italy, a remarkable 600mm. A cloudburst over southern France on the 30th dumped a further 125mm rain on Perpignan and 169.5mm on Cap Bear - of which 80mm fell in just two hours! The deluge forced 3,000 people to leave their homes near the Agly river.

In Russia, on the 25th, passengers on a flight taking off from Igarka, helped push a plane down the runway after it became frozen in temperatures of -50°C (-58°F). Across the Atlantic, the eastern USA experienced an extreme roller coaster of November weather - but with winter hazards predominant. On the 1st, 25cm of snow fell over the southern Appalachians, setting a new record for early season snowfall. Further north, up to 53cm of snow settled across Maine and left 70,000 residents without power. On the 20th snow fell continuously for 24 hours over upstate New York - the result of extremely cold arctic air sweeping over a moist and warm Lake Erie. A surge of warmth then saw temperatures exceed 20°C (68°F) on the 24th, but winter returned with a vengeance for the Thanksgiving Holiday (26th - 28th) as a powerful snowstorm cut electricity to 160,000 residents of New Hampshire.

In the southern hemisphere, severe thunderstorms battered Brisbane, Australia on the 19th. 50mm of rain falling within an hour caused flash flooding which knocked out electricity and left many roadways impassable. However, this was merely a prelude to an epic storm on the 27th which was accompanied by hailstones the size of golf balls and winds of 85mph which brought down trees and power lines. Commuters were left stranded after rail services were suspended across Brisbane, 90,000 homes lost electricity and the cost of damage was estimated at >£50M. The force of the storm ripped roofing from homes and businesses, and tipped over light planes at Brisbane's Archerfield Airport where over 60mm of rain fell in 20 minutes.



Extremes for December 2014	
Hottest:	15.3°C Credenhill, Hereford and Worcester, 18th
Coldest:	-9.0°C Katesbridge, County Down, 29th
Most Rain:	50.6mm Cluanie Inn No 3, Ross & Cromarty, 9th
Most Sun:	7.4hrs Camborne, Cornwall, 3rd
Windiest:	82mph South Uist Range, Western Isles, 10th
Warmest:	9.5°C Scilly St. Mary's SAWS, Cornwall
Coolest:	1.5°C Braemar No 2, Avon
Wettest:	366.7mm Capel Curig SAWS, Gwynedd
Driest:	30.9mm Linton-on-Ouse, North Yorkshire
Sunniest:	87.9hrs Wittering, Cambridgeshire
Dullest:	13.3hrs Lerwick, Shetland



December is the darkest but rarely the coldest of our winter months, since the seas around our shores are still relatively warm. In some years, conditions are more closely akin to those of late autumn - and "White Christmases" are rare away from the Scottish mountains. Rather more common are umbrellas turned inside-out and waves battering our western coasts in very stormy weather - a notable feature of the last two Decembers.

December began on a quiet, cold and cloudy note under high pressure. A cold front moving south-east overnight 4th/5th introduced a much more vigorous westerly airflow and rain overnight on the 6th/7th was followed by cold air, wintry showers and thunder in the north. A ridge brought overnight frost on the 8th/9th before more wind and rain hurried in from the North Atlantic. The 10th was cold and very stormy in the north. 30,000 homes lost power in the Western Isles, and early in the day winds were gusting to 100mph on Cairngorm summit in a temperature of -5°C (23°F)! It was the south's turn to take a battering early on the 12th and - the very exposed - Needles Old Battery (Isle of Wight) recorded a gust of 88mph. The unsettled westerly regime persisted in the run-up to Christmas. A feature of the weather during this period was brilliantly sunny days (notably 13th, 16th and 19th) interspersed with mild, cloudy 'warm sector' weather where temperatures widely exceeded 13°C (55°F). A spring-like 16°C (61°F) was achieved at Prestatyn (Denbighshire) on the 22nd. Snow was conspicuous by its absence except for on northern hills. By Christmas Day, drier, brighter and colder conditions were becoming more prevalent. Rain crossing England and Wales on Boxing Day turned to snow on its northern edge, giving Christmas card scenery in parts of the north Midlands, Wales and northern England but creating some transport problems. Sheffield was particularly badly hit. The closing days of 2014 saw the chill becoming more widespread with hard night frosts, icy roads and scattered wintry showers in eastern areas. The mercury dropped to -7.6°C (18°F) at Benson (Oxfordshire) early on the 29th, but by New Year's Eve, milder air had reasserted for most.

Temperatures were a little above normal nationwide during December, crowning a year of record warmth for the UK. It was a wet month in the north and west of Scotland, but many east-coast counties and southern England were drier than normal. Sunshine was well above average for most, reflecting the mobility of the weather systems. Interestingly, Lerwick (Shetland) reported six days of thunder and Stornoway (Western Isles) a remarkable seven days - making December 2014 the most thundery month in 100 years of records! The cause was likely the vigorous convection resulting from frequent bouts of cold, polar maritime air encountering seas which have retained much of their warmth following the mild autumn.

In Europe's Czech Republic during December, thick freezing fog, followed by freezing rain, resulted in widespread icing on the 2nd. The Czech transportation infrastructure suffered widespread disruption as power lines collapsed - and over 100,000 passengers across the country experienced delays and cancellations. Unusual winter storms also hit North Africa. In Setif, Algeria, snow on the 10th caused the closing of many arterial and trunk roads, leading to the isolation of mountainside villages. In Morocco, the national route linking Midelt with Azrou was blocked by snow in Timhdit, a village in Ifrane. Even heavier falls blanketed the Atlas Mountains on the 31st with Sétif recording 35cm.

Pollution, combined with stagnant air across northern India and Pakistan, led to widespread fog and smog 18th - 22nd. Very dense fog enveloped the capital, Delhi, and other parts of northern India, causing massive travel chaos. Visibility at the airport runways in Delhi dropped to below 50m and many flights were delayed. Dozens of trains were also cancelled and road traffic was reduced to a crawl. Several cold-related deaths were reported. Srinagar City recorded a minimum temperature of -1.8°C (29°F) on the 21st.

In Japan, severe blizzards 17th-18th resulted in at least eleven fatalities. More than 2m of snow accumulated in some areas - blocking roads and throwing public transport into chaos. Avalanches presented a further hazard. Winds gusting to 90mph caused a tidal surge.

In South America, over 60mm of rain poured over Montevideo (Uruguay) in less than half an hour on the 26th, making this the worst storm registered there in the last 50 years. The storm pulled down trees and power-lines and flooded streets of the capital - forcing the evacuation of residents.