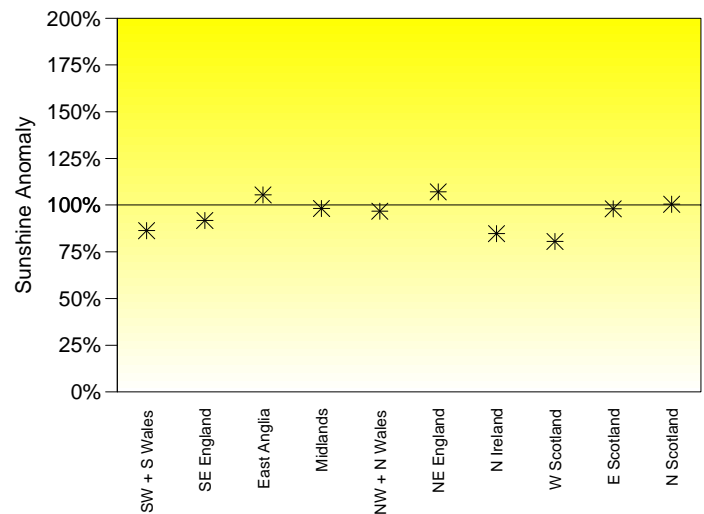
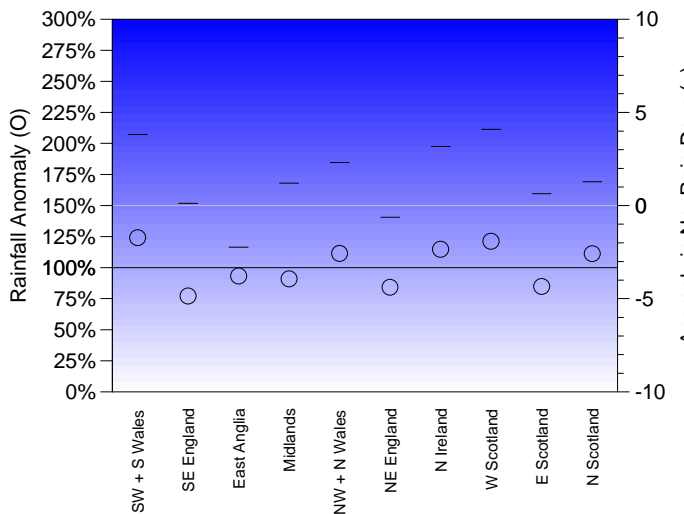


Extremes for September 2016		
Hottest:	34.4°C	Gravesend Broadness SAMOS, Kent, 13th
Coldest:	0.0°C	Sennybridge, Powys, 4th
Most Rain:	92.4mm	Skye, Inverness-shire, 11th
Most Sun:	12.3hrs	East Malling, Kent, 11th
Windiest:	71mph	Loch Glascarnoch, Highland, 27th
Warmest:	18.5°C	St James Park, Greater London
Coolest:	11.8°C	Dalwhinnie No 2, Tayside
Wettest:	303.2mm	Achnagart, Highland
Driest:	11.0mm	Frittenden, Kent
Sunniest:	188.2hrs	Jersey St Helier, Channel Islands
Dullest:	60.5hrs	Eskdalemuir, Dumfries and Galloway



September can see a late resurgence of summer. High pressure over Scandinavia is often well placed to stave off Atlantic lows that have yet to build much vigour. Here probably lies the origin of the "old-wives summer" - three supposed fine dry periods 7th-10th, 16th-21st, 30th (which in turn are reputedly followed by wet stormy days)

September began unsettled and the 3rd was very wet - especially for south west England and Wales, with flash flooding reported in Devon, Rhondda, Neath, Swansea Bay and Camarthenshire. It became milder from the 5th - and the 7th was warm and sunny nationwide with temperatures reaching 25°C (77°F) as far north as Aberdeenshire. Atlantic influences re-asserted over following days, bringing spells of rain especially to the north and west. Skye recorded 92.4mm on the 11th and a Red Bull cliff diving event was cancelled due to high winds at the Blue Lagoon, Pembrokeshire. To the east, high pressure over Scandinavia kept the westerly's at bay and a plume of very hot and humid southerly air, heralded a brief but spectacular heat wave. Temperatures culminated in 34.4°C (93.9°F) at Gravesend, Kent on the 13th - the warmest September day since 1911 and the hottest day this year (the first time this has fallen in September since 1991) Temperatures at night were no less remarkable - and a lowest of 20.7°C (69.3°F) at Manston on the 14th was within 1°C of the September record. The heat and humidity triggered spectacular thunderstorms which ranged across the entire western half of England. These caused significant disruption and damage, notably across West Cornwall (Penzance, Redruth & Truro) - and in Manchester - where 'City's Champions League fixture had to be postponed, the Town Hall and Arndale shopping centre were flooded and the M56 closed for a time. It remained very warm in the south and east through the 14th and 15th, before more thunderstorms ended the heat wave here. Flooding caused major delays on the M25, M4 and M40 and rail transport was thrown into chaos by power and signal failures, inundated stations and blocked tracks. The second half of September, was rather less dramatic. Brief fine interludes were interspersed with frequent rain bearing frontal systems - but temperatures remained above the seasonal average - especially in the east. The first gale of the autumn occurred on the 27th - as a deep depression passed just north of Scotland. Gusts reached 70mph in the Northern Isles and exceeded 100mph on Scottish mountain tops. Ferry and rail transport was disrupted and 500 properties lost power.

The notable heat wave, an abundance of sultry nights, and an entire absence of frosts, made September exceptionally mild. Mean UK temperatures were 2°C above normal, ranking it the (equal) 2nd warmest in a century, and for Central England the 5th warmest since 1659. Despite this, most places away from North Sea coasts were a little duller than average - south western England and south western Scotland markedly so. September was relatively dry in the east - and especially the south east - but wet along Atlantic coasts, and for the UK as a whole rainfall was close to normal. Thunderstorms however produced a good degree of local contrast.

The heat wave experienced by the UK during September also extended into Europe. Aicirits, Aquitaine reached 38.1°C (101°F) on the 12th and Montgivray in central France 37.1°C (99°F) on the 13th. Greece experienced torrential rain and flash flooding on the 7th. 140mm of rain fell in a single hour around the Peloponnese city of Kalamata forming a torrent that destroyed homes and swept cars out to sea.

In the USA, Kempsville, Virginia received 342mm of rain in 72 hours 20th-21st causing flooding that inundated homes and swamped roads. In the Gulf of Mexico, a disturbance that had originated from a tropical wave off Africa on the 22nd developed into a tropical storm as it approached the Windward islands on the 28th. It was named Matthew...

The Eastern Pacific was battered by a series of typhoons during September. Meranti reached peak intensity on the 13th with sustained wind speeds of 140mph and gusts to 190mph. It caused damage to over 18,000 homes, at least 30 fatalities and damage estimated at \$2.63B across the Philippines, Taiwan, China and the Korean peninsula. Hot on the heels and only slightly less intense (but with a more easterly track resulting in less landfall) was Malakas on the 15th. Finally, Megi brought 100mph winds and up to 1m of rain to Taiwan on the 27th before making a second landfall across southeast China, close to Putian. Almost three million homes and businesses lost power, there were 24 confirmed fatalities and \$945M of damage.

In the mid Pacific, Samoa witnessed a hail storm so rare that it was believed to be a hoax by many of the island's inhabitants! The unprecedented storm struck on the 16th on the eastern side of Savai'i, peppering the island with hail stones the size of cherries. One of the most extreme weather systems in decades cut power to the entire state of South Australia 28th-29th. Torrential rain, thunder and lightning were followed by intense low pressure and winds of up to 87mph, which felled trees and blew down houses. There was widespread flooding, and in the Barossa valley, a dam burst. Storm surges and huge waves also inundated communities along the Spencer and St Vincent gulf coasts with Port Pirie, Port Broughton and Moonta worst affected.