

**NOVEMBER STATISTICS RECORDED
AT LERWICK OBSERVATORY**

	November 2009	Averages 1971-2000
Mean maximum temperature	8.4°C	7.6°C
Mean minimum temperature	6.2°C	3.6°C
Daily mean temperature	7.2°C	5.1°C
Mean sea-level pressure	991.9 hPa (mb)	1006.5 hPa (mb)
Total rainfall	216.4 mm	152.4 mm
Wet days => 1 mm	23 days	21.5 days
Sunshine (electronic sensor)	32.9 hours	33.0 hours
Air frosts	1 day	3.5 days
Ground frosts	3 days	10.5 days
Snow/sleet	4 days	6.8 days
Days with gale	4 days	5.5 days
Maximum daily mean temp.	9.9°C on 20th	
Minimum daily mean temp.	1.1°C on 29th	
Highest maximum	11.1°C on 19th	
Lowest day maximum	2.0°C on 29th	
Highest night minimum	9.4°C on 20th	
Lowest minimum	-0.8°C on 29th	
Lowest grass minimum	-2.6°C on 30th	
Wettest day	32.0 mm on 1st	
Sunniest day	5.3 hours on 18th	
Highest mean hourly wind	39 knots on 1st	Direction E'ly
Highest gust	56 knots on 3rd	Direction SE'ly

MILD AND WET WITH AVERAGE SUNSHINE

A very cyclonic and unsettled month, as very deep Atlantic depressions affected the British Isles. With pressure low across the Atlantic, a predominantly SW'ly airflow resulted in mean temperatures well above normal values.

November was a wet month – with record-breaking totals in places - and some 40% above normal rainfall for the Northern Isles.

Sunshine totals, generally well below-normal across much of Scotland, were up to 30% above in parts of the drier north-east. With near-normal values, Shetland was less sunny than Fair Isle (+15%) and Orkney (+24%).

The 1st was a mild, wet day. As a vigorous low in the Southwest Approaches tracked northeast over the UK, light S'ly winds backed SE and quickly strengthened strong to gale and later E'ly gale to severe gale, with gusts to 66mph in Lerwick and 76mph on Fair Isle, Heavy rain continued overnight but, as the low continued north past Shetland, gales eased and winds became strong NE'ly.

As the low moved away, the 2nd was brighter with a few showers and moderate W'ly winds. Winds backed SE'ly and strengthened gale-force by the 3rd, ahead of a front pushed north over the Northern Isles by a low slipping southeast from Iceland. Outbreaks of rain turned heavy overnight as the front became slow-moving close to Shetland. With a frontal trough extending southeast from Faeroe, the 4th was a cloudy day with outbreaks of light showery rain and strong SE'ly winds. Similar conditions persisted through the 5th and 6th.

After the clearance of heavy overnight rain, the 7th was much brighter with sunny periods and some showers. As the remains of the Icelandic low drifted southeast over northern Scotland, strong SE'ly winds fell light and variable for a time. Though a little rain returned overnight, the 8th was mainly dry and bright with light winds, as Scandinavian high pressure built towards Shetland.

The ridge declined on the 9th, with light S'ly winds increasing strong by evening, ahead of a front driven east by another depression near Iceland. Dry and bright for much of the day, outbreaks of rain edged into Shetland overnight.

The 10th - with the front slow-moving near Shetland was cloudy with outbreaks of occasionally heavy rain and strong S'ly winds. As the front weakened, the rain became lighter and patchy, dying out on the 11th, with sunny

periods developing as winds fell light. Later in the day, as the high to the northeast declined, SE'ly winds again strengthened, ahead of the next front driven northeast by a deep mid-Atlantic depression. This brought outbreaks of rain accompanied by strong SE winds on the 12th, followed by heavy overnight rain as a secondary low tracked north to the west of Scotland.

With Shetland sandwiched between fronts, heavy rain and strong SE'ly winds persisted through the 13th. Early on the 14th, SE to E'ly winds increased gale-force for a short while, as a vigorous low moved north between Shetland and Faeroe. Brighter showery conditions followed for the afternoon as easing winds veered fresh SW'ly. The 15th was a mild day, with sunshine and showers accompanied by strong SW'ly winds.

The 16th was cloudy but mainly dry, with a fresh S'ly wind backing strong SE'ly later with rain overnight, as a small low centre tracked north over western Britain. The rain turned showery later on 17th and strong winds – backing NE'ly – eased, as the low moved north to the east of Shetland. Showers died out overnight as light winds backed NW'ly.

The 18th was a sunny, cooler day with light winds as a ridge declined east. A wide-spread grass frost occurred during the evening, before cloud thickened and temperatures began to rise. Rain followed overnight, as a large Atlantic depression pushed a front east. A wave-low, running north along the front, resulted in a wet day on the 19th, accompanied by very mild SW'ly winds. Overnight rain was followed on the 20th by cooler conditions, with strong SW to W'ly winds, sunny spells and showers, some heavy with hail.

Easing W'ly winds backed S'ly, with the 21st mostly dry. However, rain accompanied by strong SE'ly winds extended northeast by evening, becoming heavy overnight as the next deep Atlantic depression pushed fronts across the Northern Isles. These cleared north and, despite the depression spiralling in off the Atlantic to cross mainland Scotland, the 22nd and 23rd were reasonable days in the Northern Isles, with lighter winds and a few scattered showers.

A ridge, between the receding depression and the next one approaching Scotland from the Atlantic, declined early on the 24th. After a sunny morning, winds increased strong SE'ly through the afternoon, as heavy rain spread from the southwest. The rain turned showery overnight as winds veered S'ly. The 25th was a cloudy day, with blustery showers and a strong to gale S'ly wind easing and veering W'ly, as a very deep – though filling - depression drifted northeast. The 26th was generally cloudy, with frequent showers and fresh W'ly winds easing light NE'ly later, as the low - now an innocuous feature - transferred northeast across Shetland.

As the low moved away up the Norwegian coast and pressure built over Iceland, the 27th was a cooler showery day with a fresh N to NE'ly wind. Showers, though less frequent, turned wintry on the 28th, as fresh N'ly winds carried cold arctic air towards Shetland. With a fresh N'ly wind and temperatures just 2° Celsius in Lerwick, the 29th was a cold day. Scattered wintry showers became more frequent later, giving a thin patchy snow-cover in places by evening. With pressure remaining low to the east and high to the west, the 30th was yet another cold day and – despite the sunshine – the ground remained frozen all day. Fresh N'ly winds slowly eased and backed SW'ly by evening as a ridge moved east.

Dave Wheeler

Initial Statistical details for Scotland as a whole (1961-1990 average) for November :

Mean Temperature – 5.5°C (0.8°C above average)

Rainfall – 256.7 mm (155% of average).

Sunshine – 51.0 hours (106% of average).

Data from the UK Met Office