MARCH STATISTICS RECORDED AT LERWICK OBSERVATORY

	March	Averages
	2008	1971-2000
Mean maximum temperature	5.8°C	6.3°C
Mean minimum temperature	1.6°C	1.9°C
Daily mean temperature	3.5°C	4.1°C
Mean sea-level pressure	996.7 hPa (mb)	1008.3 hPa (mb)
Total rainfall	116.9 mm	122.3 mm
Wet days $\Rightarrow 1 \text{ mm}$	22 days	19.0 days
Sunshine	136.1 hours	85.6 hours
Air frosts	9 days	6.5 days
Ground frosts	16 days	14 days
Snow/sleet	15 days	12.9 days
Days with gale	3 days	5.6 days
Maximum daily mean temp.	6.6° C on 30^{th}	
Minimum daily mean temp.	-1.9°C on 24 th	
Highest maximum	8.6°C on 31 st	
Lowest day maximum	0.1° C on 24^{th}	
Highest night minimum	5.3° C on 30^{th}	
Lowest minimum	-3.4° C on 24^{th}	
Lowest grass minimum	-4.9° C on 4^{th}	
Wettest day	15.6 mm on 19 th	
Sunniest day	9.9 hours on 29 th	
Highest mean hourly wind	42 knots 21 st	
Highest gust	63 knots on 21 st	

Cool, dry and very sunny

In fact this month was Lerwick's sunniest March, beating the previous highest of 135.7 hours in 1931, the year that records began.

From the 1st to the 15th of the month, with high pressure sitting to the south or southwest of the UK, depressions tracking east to the north of Scotland brought an unsettled W'ly or NW'ly airflow to the Northern Isles.

A brief anticyclonic period occurred shortly after mid-month when - between the 16th and 19th - the East Greenland High, ridging south across Iceland, spawned an off-shoot anticyclone that then drifted south to the west of the British Isles.

A cold N'ly airflow followed, bringing a wintry spell between the 20th and 27th, as high pressure to the west relaxed and a low, moving east from Iceland, slipped south between Shetland and Norway into the North Sea. The 24th was a particularly chilly day, with an average temperature for the 24 hours of -1.9° Celsius. (On March 28th 1985 a daytime <u>maximum</u> of -1.6° Celsius was recorded at Lerwick). Between the 28th and 31st a complex area of low pressure to the west and north of Scotland then became the dominant feature with milder SW'ly winds.

Strong to gale N to NW'ly winds carried frequent showers – some with hail – across the Isles on the 1st. These turned more wintry overnight before dying out on 2nd as winds eased, when a deep low over southern Norway/Sweden moved east and a complex area of low pressure developed to the west of Scotland. This transferred east over the Northern Isles, with strong N to NE'ly winds then bringing frequent wintry showers on the 3rd, with many places seeing a patchy snow cover by evening. Temperatures fell further on the 4th as winds backed NW'ly and the airflow became Arctic in origin. However this cold snap was short-lived, with a developing low - moving east from Iceland - bringing heavy rain, drizzle and mist accompanied by strong to gale SW'ly winds as it trailed fronts across Shetland on the 5th.

The strong winds veered NW'ly by the 6th, bringing brighter conditions as the low moved into the Norwegian Sea, but quickly eased as a ridge followed. This soon declined, with SW'ly winds strengthening ahead of more fronts driven east by the next depression moving east from Iceland. The fronts cleared overnight, leaving a showery SW'ly airflow across the area on the 7th.

This persisted through the 8th, before backing S'ly on the 9th as a deep Atlantic depression ran quickly east. By 06GMT on the 10th this was 950mb just west of Ireland, While it was bringing stormy conditions to the Southwest, winds were just a fresh SE'ly over northeast Scotland. However these did increase strong for a time on the 11th and heavy rain crossed the area as the filling low, drifting east across the British Isles into the southern North Sea, pushed fronts north over Shetland.

The next few days were reasonably sunny, with scattered showers and light Sly winds on the 12th as a complex, shallow area of low pressure developed over northern Scotland. Winds freshened W'ly for the 13th and 14th, with further scattered showers affecting the Northern Isles as low pressure drifted north.

Winds had veered NW'ly by the 15th as the low moved away into the Norwegian Sea. The East Greenland High then ridged south across Iceland, producing a cold Arctic airflow down across Shetland by the 16th. Cold N'ly winds persisted through the 17th and 18th. Milder NW'ly winds, flowing around the northern flank of a small breakaway anticyclone - developing over Iceland and drifting south to the west of the British Isles - followed on the 19th. These backed S or SE'ly, with heavy rain affecting Shetland early on the 20th when a low - moving east from Iceland - pushed fronts east across northern Scotland. As fronts cleared, a showery SW to W'ly followed, this then veering to a cooler NW'ly later. Low pressure, slipping south to the east of Shetland on the 21st, resulted in a chilly and strong to severe gale N to NE'ly wind, with Lerwick recording a gust of 72 mph.

An anticyclone then built to the west on the 22nd with a cold N'ly airflow developing over northeast Scotland. By the end of the day most places had a covering of snow. This persisted through to the 28th, with the remnants of deep drifts lingering for several days longer. Showery troughs, moving south over the islands, brought snow showers or longer periods of snow, with quite a lot of drifting in the strong N'ly winds. The 24th was a very cold day, with a strong N'ly wind and the maximum at Lerwick rising to just 0.1°C Celsius above freezing. By the 25th the snow on Fair Isle was 11cms deep. N'ly winds eased on the 26th as a slack area of low pressure developed over northern Scotland.

On the 27th SE'ly winds freshened as a depression moved east towards northern Scotland. Associated fronts crossed the area on the 28th, the rain and milder temperatures finally removing much of the remaining snow cover. Despite a complex area of low pressure slow-moving across the area, the 28th to 31st were relatively fine days with light S to SW'ly winds and an average of some 7 hours of sunshine each day.

Dave Wheeler

Initial Statistical details for Scotland as a whole (1961-1990 average) for March: Mean Temperature – 3.6°C (0.1°C above average). Rainfall – 163.2 mm (127% of average). Sunshine – 109.0 hours (117% of average). (These figures may be revised as late data becomes available)

Data from the UK Met Office