

# SUMMARY of the OBSERVATIONS made at the STATIONS included in the DAILY and WEEKLY WEATHER REPORTS, for the CALENDAR MONTH,

## NOVEMBER 1888.

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**General Summary.**—Weather of November was stormy and wet, the barometer was low, and the thermometer high generally. Rainfall was excessive at most stations, but the falls were very unequally distributed. Gales were frequent, especially in the extreme north and west.

**Pressure.**—*Mean for the Month at 8 a.m.* was below 29·90 ins. everywhere, and the distribution differed materially from the average\* conditions, the isobars running from south-west to north-east, instead of from west to east. Readings ranged from 29·512 ins. at Stornoway to 29·849 in Jersey. It was about a quarter of an inch below the average in the Hebrides and in the west of Ireland, and the deficit gradually diminished in a southerly direction to less than 0·1 in. at the Channel stations. *Highest* readings occurred at the beginning of the month in the extreme north (30·24 ins. at Sumburgh Head on the 6th), later in the Channel (30·23 ins. at Prawle Point on the 16th, and 30·38 ins., the absolute maximum, at Scilly on the 23rd). *Lowest* at various dates. At Sumburgh Head 28·65 ins. was recorded on the 16th, 28·83 ins. on the 19th, and 28·40 on the 26th. At Spurn Head 28·87 ins. was registered on the 27th, while the lowest in Ireland was 29·10 ins. at Valencia on the 12th. *Range* was greatest in the north, nearly reaching 2 ins., owing to the low reading of 28·40 ins. reported from the Shetlands on the 26th. In the south the range did not much exceed an inch.

**Depressions** were numerous and some of them very erratic in their movements. Several passed outside the Shetland Islands towards and over Norway. One was formed over Belgium on the 1st, and travelled for two days *due westwards* along the Channel. Between the 5th and the 12th three separate systems travelled from south to north outside the south-west coast of Ireland, and finally, at the end of the month, one moved across northern England to the Baltic near Gothland.

**Anticyclones**—None of these systems were central over the United Kingdom during the month. Between the 3rd to the 16th a large one moved very slowly from the west coast of Norway over the Baltic to central and southern Europe, and on the 18th a new one appeared in the south-west and advanced over the Bay of Biscay, where readings at the centre reached 30·6 ins. at Rochefort on the 23rd. This system gradually retreated southwards, and during the last week no anticyclonic conditions appeared near these Islands.

**Wind** was variable in direction at most stations; there was a general absence of Northerly winds except in the Shetlands, the dominant winds were South-easterly and North-westerly. The force was great, gales being very numerous. In the Orkney Islands at Swanbister the extraordinary average velocity of 31 miles an hour was maintained *throughout the month*. In the first week or so the gales were Easterly, and drew into South-east along the east coast of Scotland, under the influence of the Scandinavian anti-cyclone, and to South at Belmullet on the 10th. A very heavy gale passed over the western and northern districts on the 16th, and another on the 20th, and force 10 was reached more than once during the month. Both at Spurn Head and at Mullaghmore gale force was reported on 22 days.

**Temperature.**—*Mean at sea level* varied from 52°·7 in Jersey to 41°·2 at Lairg. It was much above the average\* generally, as much as 5° in the southern counties of England and 2° at Valencia. In southern Scotland the difference was about 4°, but in the Shetlands temperature was normal. *Highest* readings at almost all stations occurred on the 15th or 16th, 62°·0 was recorded at Geldeston and Llandudno, and 61°·0 at York, Bawtry, Loughborough, and Cambridge. *Lowest* were noted at various dates, principally between the 26th and 29th, but in the south and south-east of England on the 7th or 8th. At most stations the temperature fell below the freezing point, and at Braemar the absolute minimum, 21°·0, occurred. *Range* was greatest in Scotland, where it exceeded 30° at several northern stations. It was less than half that amount (14°) at Scilly. *Vapour Tension* was high in the south, where 0·326 in. was the figure for Scilly and 0·337 for Hurst Castle, for Sumburgh Head it was only 0·220 in. *Relative Humidity* reached 99 per cent. at Hawes Junction, and 97 at Stornoway. Over southern and eastern England it exceeded 90. The lowest values were 84 at Valencia and 81 at Aberdeen.

**Rainfall** was most irregularly distributed. It was on the whole much above the average.\* It varied from 12·00 ins. at Glencarron, 11·55 ins. at Hawes Junction, 10·18 ins. at Glenlee, and 10·09 ins. at Arlington Court, to 2·32 ins. at Parsonstown and 1·84 ins. at Spurn Head. Local differences were very remarkable. At Roche's Point over 9 ins. fell, more than double the average, while at Valencia the quantity was 2 ins. short, and at several other Irish stations there was a deficit. Falls of over an inch were frequent, and on the 12th an inch was exceeded at 14 stations!

**Bright Sunshine** was deficient, as might be expected. The greatest per-centages of possible duration attained were 27 at Stornoway and 24 at Falmouth. At 9 stations the amount did not reach 10 per cent. In London it was only 7, at Glasgow 6, and at Braemar 3.

\* The averages employed are—*Pressure* and *Temperature* for 20 years, 1861–80; *Rainfall* for 20 years, 1866–85.