Remarks on barometer observations published in newspapers

Ireland:

“**Birr**, 9th January – This town was visited on the night of Sunday and morning of Monday last by the most awful tempest that has, perhaps, ever occurred in Ireland. The wind blew during the hurricane S.W. by W., and the barometer, so early as seven o’clock in the evening, indicated the approaching convulsion. While I was at dinner my attention was drawn to this most useful philosophical instrument by some of my children, who asked me if we were going to have a storm as the quicksilver had suddenly sunk. Upon looking at an excellent mountain barometer, which, **in the middle of the day stood at 29.1** **inches, I found that I had descended to 28.65 inches**. It afterwards, as the wind sprung up fell to 28.5 inches, which was the lowest point I observed during the tempest. **It is remarkable that about six weeks ago the same barometer sunk so low as 28.1 when the gale was comparatively mild.** I cannot here avoid noticing the general inaccuracy of the indications of wheel barometer, which show a much greater descent of the quicksilver in inches than the common upright ones do. Of course the upright one gives the true height. From the hour of eleven to half past two in the morning the wind blew with terrific violence. […] About half-past two o’clock the barometer began to indicate a cessation of the hurricane. Its rise was so rapid that it could be almost seen ascending, and the wind soon after stopped its rapid career.”

Dublin Evening Post, 10 January 1839.

**Cove** (Co. Cork) – “Great storm on Sunday night. […] Cove, Monday, Jan. 7 […] Although the barometer is rising a little today […].

The Cork Southern Reporter, 8 January 1839.

**Dublin** - “The late storm. To the editor of the Evening Packet. Sir – As you have paid me the compliment to notice my “weather predictions” for Dublin, will you permit me to offer a few remarks on the high wind of Sunday night, the 6th instant? I had predicted “wind”, which was applicable to the 3rd, 4th, and 5th days, and was tolerably correct; but I did not foresee so violent wind, which I find was owing to my having omitted to note the sextile aspect of mercury to Herschel, which (as correctly stated in Moore’s Almanac) occurred on Sunday. The “wind” I mentioned I attributed to the planets Mercury and Saturn, being equally declined from the earth’s equator, and had I observed the aspect also to Herschel, I should have mentioned “high wind” on Sunday. The gale began to be violent when the moon rose about half-past 11 o’clock, and abated when the moon reached the meridian, at half-past five in the morning; having been at the maximum at three o’clock, when the moon formed a square aspect with Mercury, (90 deg. Distant). **The barometer had then fallen to 28.579, and immediately began to rise rapidly, which it has done all day today, notwithstanding some snow fell this evening. The fall of the barometer was extensive, having been 1,071 inches in 19 hours. The rise of the thermometer was still more remarkable. At 8 p.m., on the 5th, the external thermometer stood at 32 degrees, and at 8 p.m., on the 6th, it stood at 52 degrees, a rise of 20 degrees in 24 hours!** This bears out my prediction of “warmer air” which applies to the 6th day, as it was made from the moon going to the junction of Mars that morning, and the aspect of Venus to Jupiter also. […] I am, sir, your most obedient servant, R. J. Morrison, Lieut. R. N. Dublin, Jan. 7, 1839”.

Saunders's News-Letter, 9 January 1839.

**Dublin** - “Remarkable Aurora Borealis. At 5h. 45m, p.m., on the 19th of January, I observed three bright arches, extending from E. to W.N.W., and a few signs of streamers rising under the Great Bear. […] The wind at 11 0’clock freshened; and whenever a gust of wind arose, the electric action became more intense, the lights appearing to rise more vividly. The bar, 30,00, external thermometer, 39 […]. At midnight the wind increasing, air more hazy, Aurora still vivid. […] It is worthy of remark that the barometer had been extremely agitated for 36 hours previously to this phenomenon appearing. At 8 a.m., on the 18th, it was 30.300, and fell to 29.939, at 8 p.m. and to 29.600, at 8 a.m., on the morning of the 19th, there having fallen 0.24 of an inch of rain, during the night, with a fresh S.W. wind. At 8 p.m., it had risen t0 30.000 again, and reached 30.01 during the Aurora. The thermometer was stationary at 39 all the evening. The moon crossed the equator on the 20th morning, and a change occurred to gloomy, raw air, with a cold wind, west, and a small rain all day. […] R. J. Morrison.”

Warder and Dublin Weekly Mail, 26 January 1839.

**Enniskillen** - “The storm. Since the great storm in February, 1802, we have never visited in this part of the country with a hurricane so violent, nor one so extensive in its ravages as that which we experienced on Sunday night. **About nine o’clock the wind began to blow strongly, and the barometer indicated great storm, the index being below the stormy point.** The gale increased in violence until it became a perfect hurricane, unroofing houses, blowing down chimneys, prostrating boundary walls, and almost every thing that offered resistance, **the barometer still falling until it nearly reached inversely the point of “Set Fair”.** The fury with which the storm raged continued unabated until about seven o’clock next morning, when it subsided in a great degree, but did not entirely cease until one o’clock on Monday. […].

Enniskillen Chronicle and Erne Packet, 10 January 1839.

**Limerick** – “Limerick […] Sunday evening, between 4 and 5 o’clock, the temperature was quite mild, and the atmosphere, though cloudy, gave no evidence of the dreadful elementary conflict about to follow. **One glass, a faithful index of the weather, early that evening showed the quicksilver under the extreme lowest mark of the barometer**. At half-past eight the storm set in, blowing a rough gale from West-south-west, which increased in fury every hour until eleven and twelve o’clock, when it raged with all the horrors of a perfect hurricane, sweeping in violent gusts through the streets, […]. Limerick Chronicle.

Tuam Herald, 12 January 1939.

**Scotland**

**Aberdeen** – “Aberdeen. In the course of Sunday evening last, **the barometer exhibited a most remarkable depression here. It felt suddenly so low as 28, and before Monday morning, stood at 27.441 inches.** It was accompanied with an equally sudden change in the weather. Sunday had been calm, clear and frosty – but towards night it began to blow heavily from the NW and during the earlier hours on Monday morning the wind had increased to a hurricane accompanied with much rain. We believe that the barometer has not been observed to be so depressed as it was on this occasion, since the 1st of April 1813, the day on which the Oscar was wrecked at the Grey Hope. Its depression then was 28.15 – *Journal*”.

Caledonian Mercury, 12 January 1839.

**Caithness** – “Depression of the barometer in Caithness. **Lowest range of barometer on Monday morning, half-past seven o’clock a.m. 27.56 – the lowest fall upon record** […?] barometers were first introduced into this country.”

Inverness Courier, 16 January 1839.

**Dumfries** – “Dumfries – Terrific hurricane. […] The tide on Sunday rose to an unusual height long before the storm began, and from this circumstance, combined with the extraordinary oscillations of the barometer, we infer that aerial influences have been at work with the laws of which we are but little acquainted. **At half-past ten on Sunday morning the glass stood at 29 4½-10; at the same hour at night it was 28 6½ -10; and at a quarter past five on Monday morning it stood at 27 2-10**. From the appearance of the surface of the column at that hour, when it was again ascending, it must have been the tenth of an inch lower at least. On referring to the Register for December last, it will be found that the lowest point was 28 2-10, which at Liverpool was accounted very remarkable – Dumfries Courier.”

Inverness Courier, 16 January 1839.

**Edinburgh** – […] Between Sunday night and yesterday morning the mercury in the barometer again underwent a remarkable depression, such as we had lately occasion to notice, having fallen in the instrument **to one tenth of an inch below 28**. […] *Edinburgh Advertiser* of Tuesday.”

Sun (London), 10 January 1839.

**Forfar** – “Barometer. We have been favoured with the following observations made by a naval gentleman at Forfar, in a situation supposed to be elevated about 180 or 200 feet above the level of sea, and recorded on the instant:

January 6 1839 – Snow on the ground in considerable quantity (2 or 3 inches in depth) 9 a.m. thermometer 33½, **barometer 29.11 inches,** wind S.W, 3 p.m. Thermometer 33, barometer 29 0, very little wind.

January 7, 9 a.m. – Thermometer 37, **barometer 27.47,** strong westerly wind. Very stormy during the past night, with rain. The snow that was on the ground yesterday is nearly melted. The lowest depression of the quicksilver that I have seen; being greater by .34 of an inch than on the 29th day of November of last year, on which day it was here at 27.81 at 9 a.m. with the thermometer at 45½ and wind S.S.E, stormy, with rain. I may mention that on the 7th instant the barometer continued stationary for some hours at 27.47, after which the mercury was observed to rise gradually.

January 8th, 9 a.m. – Thermometer 33 degrees, **barometer 28.70,** wind W by N. The weather very tempestuous and cold, the wind blowing in gusts or squalls.

All the observations were made in an apartment in which there was no fire. In stating he quarter from which the wind blew, the *true* bearing not the magnetic, is always understood to be given.

The preceding register shows a difference of 1.04 inches in the elevation of the mercury in the barometer, within the brief space of twenty-four hours”

Caledonian Mercury, 26 January 1839.

**Glasgow** – “Glasgow. […] With regard to the barometer, a very singular occurrence took place on Sunday morning, at which time it was hovering about rain. In the afternoon it suddenly sunk to much rain and to stormy. **At a quarter before four yesterday morning, it pointed right over in the centre of set far, which is greater than the extraordinary fall on the 30th of November last**”.

Inverness Courier, 16 January 1839.

“The late hurricane. […] **The barometer appears to have been fully lower in this quarter and to the northward, where the gale had moderated, than in the south 27 9-12ths having been the minimum observed here, at Glasgow, and at Aberdeen.**”

Perthshire Courier, 24 January 1839.

**Kirkaldy** - “Kirkaldy. On Friday evening a fall of snow commenced and continued with slight intervals all Saturday. Owing to the drift, the roads in the vicinity, particularly the cross ones, were rendered nearly impassable. On Sunday night the thaw commenced with a violent southerly wind, and early on Monday morning **the barometer stood beneath 27 inches,** lower, indeed, than the oldest inhabitant of the Langtown ever remarked it before; the snow was rapidly disappearing […].

Fife Herald, 10 January 1839.

**Perth** - “The weather. […] A thaw commenced on Sunday evening, and during the night a gale of wind of unexampled violence in this quarter, set in from the southwest, before which the snow rapidly disappeared; and on Monday morning only a few traces of the late storm were to be seen. The hurricane, during its continuance, shifted occasionally from west to east, **the barometer falling a few tenths of an inch lower than even during the high wind in November, having been at twenty-seven two-twelfth [27 2. 12th] inches, a degree of depression never before experienced here**. […]”.

Perthshire Courier, 10 January 1939.

“Extraordinary depression of the barometer. At the close of the meeting of the Royal Society on Monday the 7th, it was stated, that a member had made **continuous observations of the state of the barometer, from three p.m. to a quarter past six, and that he had found that the greatest depression (27.66) had been taken place at half-past five, after which the mercury began to rise quickly.** A wish was expressed that persons in different places, who may have had opportunities of observing the period of greatest depression, would communicate heir observations to the Society, by this means some idea might be formed of the nature and progress of the storm, which appears to have been very unequal in its effects at different localities.”

Caledonian Mercury, 17 January 1839

“Scotland (from the Glasgow Chronicle of Monday). Snow storm and flood in the Clyde. […] This (Monday) morning the snow had nearly disappeared, but the rain continued, **with the barometer at 27 9-10th inches**; a lower mark than it has indicated for twenty-five years, with one exception.”

Sun (London), 10 January 1839.

England

**Burnley** – “The hurricane commenced here about two, and raged with great fury until seven, having done considerable damage in Burnley and the neighbourhood. No lives have been lost, though several persons have sustained more or less injury. **The mercury was down at the very lowest point in the barometer**”.

Sun (London), 10 January 1839.

**Durham** – “Dreadful and destructive hurricane. A hurricane, unequalled in violence by any which has occurred within the recollection of the oldest person in this neighbourhood, commenced about 3 a.m., and continued without intermission, till 3 p.m. on Monday last, the 7th January. **It was preceded by a very rapid and portentous fall of the barometer on the evening of Sunday; and the mercury, which on the previous day had been 29.7, had sunk to 28.2 on Monday morning having probably been lower during the night.** It was also observed that the wind, which had commenced in the S., gradually veered during the tempest to the N.W. The wind was accompanied by a fall of sleet and rain. […]”

Durham County Advertiser, 11 January 1839.

**Leeds** – “The late hurricane (from the Leeds Mercury) […] The depression of the barometer was great. **In Leeds, between eight and nine o’clock on Monday morning, the mercury stood at 28 inches 3-100ths.** It is worthy of the attention of philosophers, whether the still greater and almost unprecedented fall of the barometer some weeks since, was not the evidence of an extraordinary disturbance of the atmosphere in some remote part of the world, greater than was experienced here at the time, and with the recent gale may also be connected. The rapid fluctuation of the barometer within these few weeks favours the conjecture. **Between nine o’clock a.m. on Monday, and ten o’clock p.m., the barometer rose a full inch**. […]”

Morning Chronicle, 14 January 1839.

**Liverpool –** “Liverpool, Jan 7. This town and neighbourhood were visited last night by the most dreadful hurricane ever known. […] The wind, which during the day had been blowing strongly from the S.E., veered round about S.W. at eleven o’clock, **the barometer falling rapidly**, and at one o’clock it blew a hurricane from the west”.

Globe, 8 January 1839.

**Liverpool** – “[…] barometer in the Underwriters’ room […]. At three o’clock [Sunday], the barometer stood a 29 […]. By this hour it was half-past twelve, nearly ten hours from the time we had examined the barometer. **On examining it again, it had, we found, fallen, in the interval, from 29, at which it stood at three o’clock, to 28; a very extreme depression, being a fall of an inch, almost as great as the depression it had undergone on Wednesday, November 28, 1838, when the mercury fell, between Tuesday and that day, from 29 to 28 2-10**”.

Liverpool Albion, 15 January 1839.

**London?** - “**Horticultural Society**. […] **The meteorological register kept at the gardens** from Dec. 4, to Jan. 15, gave – barometer, highest, Dec. 31, 30.601 in., lowest Jan. 7, 29.096; thermometer, highest, Jan. 6, 53 deg. F., lowest, Jan. 9, 21 deg. F.; and quantity of rain, 1.61 inches”.

Morning Herald (London), 16 January 1839.

**Manchester?** - “[…] **The morning of Sunday was frosty, and the mercury in the barometer stood at 29.1**. The frost disappeared in the forenoon, and there were some showers of rain and hail in the afternoon and evening. Soon after eight o’clock the rapid fall of the mercury in the barometer attracted notice, and it is said to have fallen half an inch before mid-night. A short time after twelve o’clock the wind, which had veered from south-east to south-west, began to rise, and continued to increase in violence until about half-past two. Its force abated considerably about three o’clock, but about fours it again increased, and from that time until seven o’clock, with short intervals of comparative calm, its fury could be linked only to that of a tropical tornado. The storm was most violent between the hours of half-past five and half-past six. The sky was clear the greater part of the time, and the moon shone brightly. **At about four o’clock, the mercury in two excellent barometers, as noticed by two of the most accurate observers in the town, stood at 28.2** At Birmingham, at the same hour, and until seven o’clock, Mr. Osler’s anemometer indicated a pressure of 29½ lbs. per square foot. […]”

Manchester Courier and Lancashire General Advertiser, 12 January 1839.

**Minsteracres** – “[…] It is very remarkable, that the **barometer during the early part of the morning of the 7th, stood at 27¼ inc. this is lower considerably than it was in the storm of Nov. 29th, 1838**, when it was said that there was no record of the barometer ever having been lower than it was on that day”.

Newcastle Courant, 18 January 1839.

**Rochdale** - “[…] The storm began about two in the morning, and appeared to be at its greatest height from four to six. **About five o’clock the barometer was observed to stand at 27.80**”.

Sun (London), 10 January 1839.

**Worcester** – “Worcester. This city and country experienced a frightful gale of wind in the night of Sunday last. There was a slight frost in the morning, with a dark cloudy sky: the thermometer at eight a.m. stood at 36 and the **barometer at 29.55, the wind from SE. About 11 am a few particles of snow fell, and from one to two pm there was a considerable fall of snow; it then turned to rain, and rained all the evening. After three pm the barometer began to fall suddenly. By about nine pm a brisk gale of wind commenced from SE he barometer having fallen to 29.5.** The wind then gradually went round to the south, and at midnight it blew a perfect hurricane, with rain. The roar of the elements was now tremendous, shaking buildings to their foundations – trees were prostrated in every direction; the wind in the course of a few hours went round westward, and about four am it veered a point or two to the north of west, and at this time the hurricane appeared to be at its greatest height; tiles and slates flew about and many chimneys were blown down. At daylight on Monday morning the barometer stood at 28.85 and the gall still continued. […]”

Caledonian Mercury, 14 January 1839.

**Wykeham, near Scarbro** – “On Monday last, this part of the country was visited by one of the most dreadful storms ever recollected, except by a few octogenarians, who say they remember a new year’s eve storm, about sixty years ago, somewhat similar. […] **During the height of the storm, the barometer was observed to stand as low as 27.95 inches**, but afterward gradually ascended; thermometer 40 deg.”

Leeds Times, 12 January 1839.

“The late hurricane. […] The barometer appears to have been fully lower in this quarter and to the northward, where the gale had moderated, than in the south – **27 8-12ths**”

Shipping and Mercantile Gazette, 26 January 1839.