TABLE III.

Göt. Mean Time.	Dry Thermometer.	Wet Thermometer.
2 ^h 45 ^m	66°	60°
3 0	64	59
3 15	62	57·5
3 30	61	56·6
3 45	60	57
3 50	57·8	55·5
4 10	57	55
4 30	58·5	56
4 45	60	57
4 55	62·3	59·5
5 5	62	58·5
5 30	61	57·5

2. On the Total Solar Eclipse of July 28, 1851, as seen on the west coast of Norway. By Professor C. Piazzzi Smyth.

The author, who was in the party of Dr Robinson, Mr Alan Stevenson, and others, mentioned the very kind manner in which the Hydrographical Department had not only lent its instruments, but even caused them to be altered and adapted for the occasion, and also spoke of the liberal conduct of the Board of Northern Lights in conveying the observers to the station selected. This was on the Bue island, on the western coast of Norway, in lat. 61° 9' 42", and long. E. 27^m 0^s.

The arrangements were, however, defeated in a great measure by the cloudy state of the sky, which prevented any thing being seen of the sun or moon during or after the totality.

The instant of the commencement of the phenomenon was, however, observed, as well as an interesting case of an apparent repetition of it; and a good idea was obtained of the amount of personal and instrumental equation affecting the optical part only of the observations, and reaching, in this instance, the large quantity of 1^m and 50^s.

The darkness which came on at the same moment, was much more intense than would otherwise have been the case had the sky been clear. The heavens appeared all cloudy and black, except a small strip on the north horizon, which became of a lurid-red

colour. Except in that quarter, where some very distant mountain tops were visible out of the range of the moon's shadow, the land and sea were of a dark olive-green hue ; and the awful aspect of the whole was felt to be quite capable of producing those effects on ignorant men which history records ; while the Norse peasants about confirmed such a conclusion by their sudden and terrified flight.

3. On the Nature of the Red Prominences observed during a Total Solar Eclipse. By Professor C. Piazzì Smyth.

The author remarked, that the various observers who had seen the eclipse of 1842, gave such generally similar testimony of the place and the size of the red prominences as satisfactorily established them to be some celestial phenomenon. Then as to the question, whether they belong to the sun or the moon, the observers themselves were unanimous in the former view, and the red points then became flaming masses of fire some 40,000 miles in height.

The author, however, was by no means satisfied with the exactness of the proofs alleged ; he had tried experiments, suggested by Mr Nasmyth, for making the red points appear, if real, but without success ; and he further alluded to the different shapes given by the various observers to the same prominence, as rather militating against the idea of its being a large body at the distance of the sun.

On the other hand, if the red points be merely the light of the sun diffracted somehow at the moon's edge, the difference amongst observers at small distances on the earth's surface would be much more easily explained ; and he found that by introducing a small ball into the telescope when directed to the sun, and making it act similarly to the moon during the total eclipse, that very similar-looking points and tongues of pink flame could be produced.

He had not, however, yet been able to make the eclipsing-ball *occult* the artificial pink prominences, and, therefore, would only attempt to establish that the solar existence of the points is only probable ; and that those who hold it to be proved, should contrive some means by which they may shew the said things in real being, without getting some moon, natural as in the eclipse, or artificial, as in the experiment, to stand in front of the sun, and act on its light by diffraction or otherwise.