

Dunsink towards the end of August, the preparation of Part II. of *Observations of Nebulae* having been completed for sending into the Royal Dublin Society, and the observations for Part III., which completes the work, having been carried on as long as was deemed necessary before closing the series.

As I was leaving home in July last, with little hope of returning to reside there for a year or more, I was unable to take steps for engaging in any new line of work, and except for taking the 9 A.M. and 9 P.M. meteorological readings, the Observatory remains closed for the present.

The 12.45 P.M. G.M.T. "Synchronous" meteorological observations have been discontinued.

Colonel Tomline's Observatory, Orwell Park.

The past year having been on the whole unfavourable to equatoreal observation, the opportunity has been taken to complete the reduction of arrears of all kinds. The cometary observations of 1877 have been fully reduced and the results have been sent to the Editor of the *Astronomische Nachrichten* for publication in that journal.

The longitude of the Observatory has been determined by the method of the Moon and culminators, and the result, $4^m 57^s.75$ E., exceeds by nearly two seconds that inferred from the Ordnance Survey. This result is scarcely definitive, as other observations exist for which the corresponding ones at Greenwich are not yet published; but, depending as it does on an equal number of observations (11) of either limb of the Moon, it is not anticipated that any sensible alteration will require to be made.

A great number of transit observations of stars have likewise been reduced, which are expected to yield some interesting results bearing on proper motion.

Tempel's comet has been looked for on several occasions, but, owing to persistent cloud and haziness near the horizon, has not been seen. The like ill success in the case of Swift's comet is explained by the unfortunate misinterpretation of the telegram announcing its discovery.

The transit of *Mercury* on May 6 was very fairly observed, and afforded gratifying proof of the excellence of definition of the object glass.

It was found necessary in September to dismount the telescope in consequence of some particles of rust having found their way into the bearing of the declination axis, almost entirely preventing the movement. The rust was removed by Mr. Simms, and since that time the working of the instrument has been quite satisfactory.