

TESTS MADE TO ASCERTAIN THE CONDITIONS WERE THE
MOST SUITABLE FOR THE 72-INCH REFLECTOR.*

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The proposal to instal a powerful reflecting telescope six feet in diameter necessitated testing where the atmospheric conditions were most suitable, as such an instrument would require the very best conditions attainable. The following report treats of the tests made at different stations in Canada with that end in view.

It seemed natural that the meteorological reports which give the general climatic conditions such as temperature, precipitation, amount of clear sky, etc., would be of first importance in selecting in a general way where such favourable places might be found. What was desired of course was the place having the greatest percentage of clear nights and the best conditions of seeing on these nights. Naturally the greatest number of clear nights might be expected where the precipitation was not excessive; the transparency would depend in a measure upon the altitude above sea-level, while steadiness would depend upon many things. Upon the degree to which these conditions were fulfilled would depend the suitability of the place, considered from an astronomical standpoint. Proximity or easy access to a large city and suitable conditions for living would also be important considerations and should have due weight.

INFORMATION FROM METEOROLOGICAL REPORTS.

A compilation of meteorological data from places all over Canada was accordingly made. The available data were much more comprehensive from some places than from others, but the following table contains all that there is valuable in this connection. The preliminary table compiled

*Somewhat abridged from a report to the Director in January, 1911.