## THE ROYAL SOCIETY OF CANADA

able for measurement. Similarly in the  $\lambda$  4250 region besides the 10 lines selected for measurement by the committee 5 other lines, embracing those found by Adams to give systematic deviations were included.

30. The following table contains the mean residuals in metres per second grouped according to latitude, obtained from Plaskett's measures of about 14 plates and from DeLury's measures of 16 plates at  $\lambda$  5600. The first three columns contain the wave-length and the source and intensity of the lines measured. The next seven columns contain the mean residuals, taking account of the signs, at the seven different latitudes observed. Each of these is the mean of the residuals from 14 or 16 plates. The separate residuals are not given on account of the space that would be required. The last column but one is the mean of all the residuals without regard to sign or the average residual. while in the last column the sign is taken into account, and we have the mean algebraic residual. At the foot of the columns the mean probable errors of measurement of a single line at each latitude are given.

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