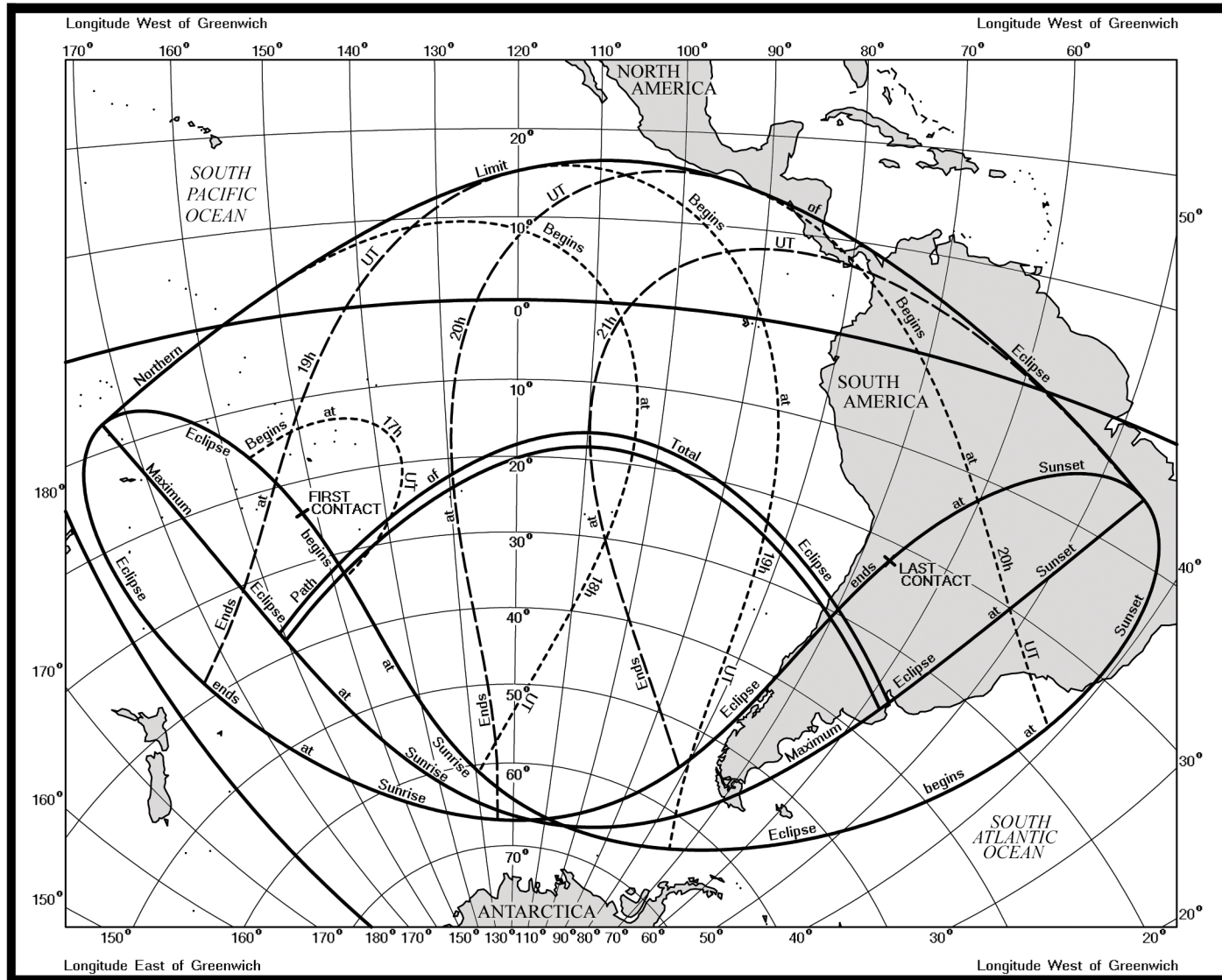


TOTAL SOLAR ECLIPSE OF 2019 JULY 2



ASTRONOMICAL APPLICATIONS DEPT.
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