

Eclipse in 1970

by James Stokley

The chief astronomical event of 1970 will be a total eclipse of the sun, on Saturday, March 7 (SN: 5/17, p. 484). It will be the first seen in the United States since July 1963, and the last until February 1979.

The path of totality of the solar eclipse is the path traced out by the moon's shadow as it sweeps across the earth. It starts in the Pacific Ocean near the equator and curves northeastward over Mexico and the Gulf of Mexico. Then it crosses northern Florida and passes along the coast of Georgia, South Carolina and North Carolina. It goes out to sea, but reaches land again as it passes over the eastern parts of Nova Scotia and Newfoundland. All the rest of North America, except Alaska, will see a partial eclipse.

On the morning of May 9 there will be a transit of Mercury as the planet crosses the face of the sun. It will be partially visible from the United States,

but to see it you will need telescopic aid—properly equipped for safe observation of the sun.

The sun has now reached the height of its cycle of activity, which takes an average of about 11 years. During 1970 it will still be quite active and there should be some good displays of the northern lights—the aurora borealis. These are caused by solar activity. People in the northern parts of the United States and in Canada will be most likely to see them.

The maps show the sky as it looks about 10:00 p.m., local standard time, on Jan. 1. Their appearance is similar an hour earlier at midmonth and two hours earlier when February arrives.

During January Jupiter will be visible after midnight, in the southeast. By mid-April it will rise soon after sunset and remain visible all night. It will still be prominent during the summer, but will depart from the evening sky in October. □

CELESTIAL TIMETABLE

Jan. EST	
1	Earth nearest sun, distance 91,405,000 miles
2 3:00 P.M.	Moon passes south of Jupiter
7 3:36 P.M.	New moon
8 5:00 A.M.	Moon nearest, distance 222,000 miles
11 4:40 A.M.	Algol (variable star in Perseus) at minimum brightness
11:00 P.M.	Moon passes north of Mars
13 4:00 A.M.	Mercury between earth and sun
14 1:30 A.M.	Algol at minimum
8:18 A.M.	Moon in first quarter
15 4:00 A.M.	Moon passes north of Saturn
16 10:20 P.M.	Algol at minimum
19 7:10 P.M.	Algol at minimum
22 7:55 A.M.	Full moon
3:00 P.M.	Moon farthest, distance 252,500 miles
24 3:00 P.M.	Venus behind sun
30 4:00 A.M.	Moon passes south of Jupiter
9:39 A.M.	Moon in last quarter

december 27, 1969

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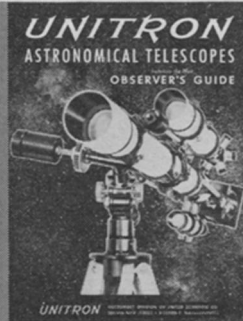
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