Eclipses of 1972

by James Stokley

January will bring the first two of four eclipses of 1972, but only one will be visible from the United States. This is a total eclipse of the moon in the early morning of Jan. 30. It will be visible throughout North and South America, where weather permits.

The eastern edge of the moon will enter the shadow at 4:12 a.m. EST. Then if it's clear, for an hour and 24 minutes you will be able to see the edge of the shadow creeping across the face of the moon. The moon will be totally in the shadow from 5:36 a.m. to 6:12 a.m. EST (subtract one hour for CST, two for MST and three for PST). After the total eclipse, the moon will emerge from the shadow in a similar period. By the end, the moon will have set for people in the eastern parts of the United States and Canada.

January also brings an annular eclipse of the sun, visible only from an area around the South Pole.

The year's third and fourth eclipses will come in July. During the night of July 25 there will be a partial eclipse of the moon.

More spectacular, where it is visible, will be the total eclipse of the sun July 10. The path where it will be visible starts in the Kamchatka Peninsula of eastern Siberia, crosses the Bering Strait, then traverses Alaska and Canada from the Yukon to Nova Scotia and extends out into the Atlantic Ocean. Over the rest of Canada and Alaska, all of the United States and the eastern parts of Central America, a partial eclipse will be visible.

Three bright planets, as well as the usual array of nine first-magnitude stars, will make the January evening skies particularly brilliant.

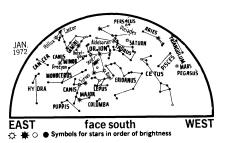
The accompanying maps show the skies as they look around 10 p.m., local standard time, on New Year's Day. They appear similarly about 9 p.m. on the 15th and 8 p.m. as January comes to a close.

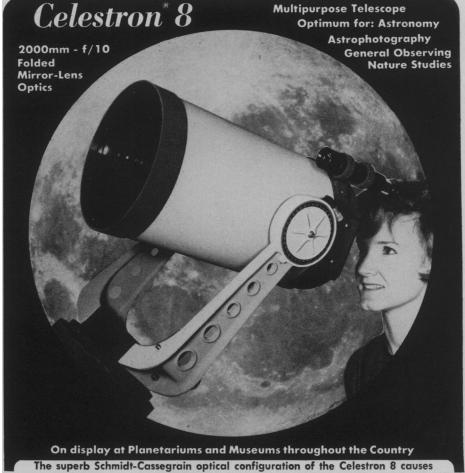
Venus, the brightest planet, is not shown because it sets before the time of our maps.

Mars is in the west, in Pisces. Saturn is the third planet, high in the south in

The brightest star is Sirius which is in the southeast in Canis Major.







faint celestial objects to appear 500 times brighter than to the unaided eye with magnification of 50 to 500 power. Imagine the thrill to your scientifically oriented youngster when he can swing this large observatory telescope across the heavens and bring into sharp focus the: twirling moons and belt structure of Jupiter, fascinating rings of Saturn, infinite variety of craterlets and rills of the Moon, thousands of stars of a Globular Cluster, or intricate filamentary detail of a remote deep-sky nebula. These and many more are easy objects for the Celestron 8 multipurpose telescope.

Celestron Techniques — a periodical containing much useful information on observing and telephoto techniques. The current issue presents articles on Solar, Lunar, deep sky, and terrestrial photography as well as many full color Celestron 8 photographs of these subjects. Published quarterly. \$2 for 4 issues. Free to Celestron telescope owners.

Optically the Celestron 8 is a large telescope suitable for observatory and research assignments. Yet the folded optical system permits the packaging of this instrument in a super light weight (25#) compact portability. The basic instrument includes an electric drive system for compensating for the Earth's rotation and accurate setting circles.

Celestron 8 base price \$850.00 — terms. For Celestron Pacific 2430 Amsler, Torrance, California 90505

Circle No. 121 on Readers Service Card

CELESTIAL TIMETABLE

Jan

412

Jan	. E31.	
1	9:00 am	Mercury farthest west of sun, visible low in east just before sun-
3		rise for a few days Earth nearest sun, dis- tance 91,377,000 miles
	6:30 pm	Algol (variable star in Perseus) at minimum brightness
6	2:00 pm	Mercury passes north of Jupiter
8	8:31 am	Moon in last quarter
·	11:00 pm	Moon farthest, dis-
	11.00 pm	tance 251,300 miles
1.4	2.00	
14	3:00 pm	Moon passes south of
16	5.52	Mercury
10	5:52 am	New moon, annular
		eclipse of sun visible
		from Antarctica
20	11:30 pm	Algol at minimum
21	11:30 pm midnight	Moon nearest, distance
		229,950 miles
23	4:29 am	Moon in first quarter
	8:20 am	Algol at minimum
25	5:00 am	
23	3.00 am	Moon passes north of
-		Saturn
26	5:10 pm	Algol at minimum
30	5:58 am	Full moon; total
		eclipse of moon visi-
		ble through North and
		South America

science news, vol. 100