

# Stars of December

## CELESTIAL TIME TABLE

Dec. 2	8:00 am EST	Moon passes south of Saturn
3	2:00 am	Moon nearest, distance 228,320 miles
6	5:10 am	Moon in last quarter
11	3:40 am	Algol (variable star in Perseus) at minimum brightness
13	12:30 am	Algol at minimum
	11:25 am	New Moon (partial eclipse of sun)
16	9:20 pm	Algol at minimum
18	11:00 pm	Moon farthest, distance 251,750 miles
19	3:00 pm	Mercury behind sun
	6:10 pm	Algol at minimum
20	8:00 am	Moon passes north of Jupiter
21	2:43 pm	Moon in first quarter
22	1:00 am	Sun farthest south; winter begins in northern hemisphere
28	10:51 pm	Full Moon
29	2:00 pm	Moon passes south of Saturn
30	7:00 pm	Moon nearest, distance 224,790 miles

by James Stokley

On the morning of Dec. 13 residents of North America, except the extreme north-western part, will if it's clear see the first solar eclipse of 1974 visible in this part of the world.

This follows a total eclipse of the moon on Nov. 29, which was visible in its entirety in the area, including Alaska, where the December eclipse will not be seen. Then the full moon passed through the shadow of the earth. Now, two weeks later, the moon has moved half way in its orbit around the earth. The lunar shadow, or at least a large part of it, will fall on North America.

This will be the penumbra, the outer

part of the shadow, from which the disc of the moon only partially covers the sun. The umbra, the inner part where the moon completely hides the sun, misses earth so this eclipse is only partial, rather than total.

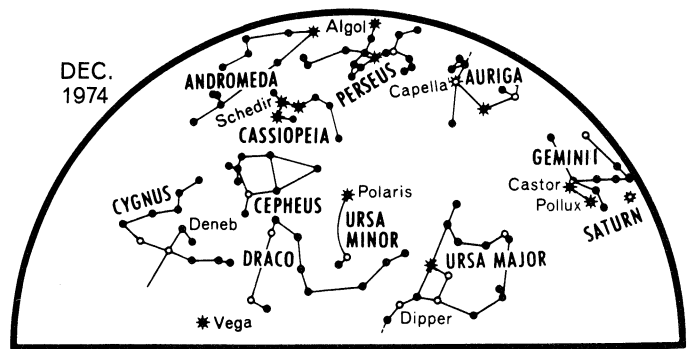
Baffin Island, in the Arctic, will experience the largest eclipse, with more than three-fourths of the sun hidden. The farther south you are the smaller will be the eclipse. The southern limit extends along the Pacific coast of Mexico and Central America and across the northernmost part of South America, including the Caribbean coast of Colombia and Venezuela.

In New England the first nick in the

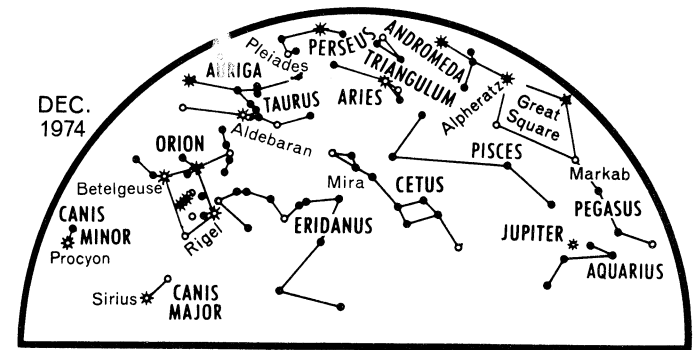
sun's edge will appear about 9:40 a.m., EST, with maximum eclipse about 11:05 a.m. The end will come about 12:40 p.m.

Along the Pacific coast the sun will rise partly eclipsed. In southern California the greatest eclipse will occur about sunrise. The moon will leave the sun about 7:50 a.m., PST, before it has risen very high. In northwestern Canada, like Alaska, the eclipse will end before sunrise.

Winter, in the northern hemisphere, begins with the solstice at 12:57 p.m., EST on Dec. 22. Our maps are drawn for 10:00 p.m. local standard time on the first and 8:00 p.m. on the 31st. □



WEST face north EAST



EAST face south WEST

☀ ☼ ○ ● Symbols for stars in order of brightness

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JS&A

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November 23, 1974

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