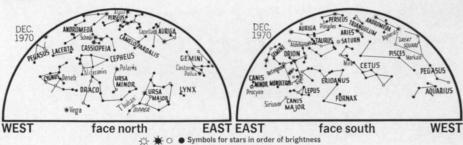
ASTRONOMY



Stars of winter

by James Stokley

With the arrival of December one can see in the southeastern evening sky the stars that will shine so brilliantly in the coming winter months. This year there is an added attraction: the planet Saturn joins them in the south. It is brighter than all but one of the stars-Sirius.

Sirius is low in the southeast in the constellation of Canis Major. Because it is so low, absorption of its light by the earth's atmosphere dims it somewhat, but it is still very conspicuous.

These are shown on the accompanying maps, which depict the sky as it looks on Dec. 1 about 10 p.m., local standard time. They look the same about 9 at mid-month, and about 8 on the 31st.

Most prominent of the December star groups is Orion in the southeast. You can easily recognize it by the three stars in a row that form its belt. Brilliant Betelgeuse is a little higher and to the left of the three stars; Rigel is lower and to the right.

Above Orion stands Taurus. Its brightest star is Aldebaran. And just to the right of Taurus, in Aries, is Saturn, shining with a steady light quite different from that of the scintillating stars. Canis Major is in the east, to the left of the bottom of Orion. Its bright star is Procyon.

Higher, you see Gemini, who's brightest star is Pollux,

Near the northwestern horizon, and also dimmed by atmospheric absorption of the light, is Vega in Lyra. Above and to the left is Cygnus with Deneb, similarly dimmed.

Overhead stands Perseus. This constellation contains Algol, a famous variable star, which is really two stars, one much brighter than the other. Every 2 days 21 hours the faint star passes in front of the bright one, dimming its total light to about twothirds of its maximum brilliance.

CELESTIAL TIMETABLE

Dec.	ES	T	
4	1:40	a.m.	Algol at minimum
5	1:00	a.m.	Moon nearest, dis- tance 230,100 miles
	3:36	p.m.	Moon in first quarter
6	10:30	p.m.	Algol at minimum
10	9:00	a.m.	Moon passes north of Saturn
12	4:03	p.m.	Full moon
	9:00		Venus at greatest brilliancy
19	10:00	a.m.	Moon farthest, dis- tance 251,300 miles
22	1:36	p.m.	Sun farthest south, winter begins in Northern Hemis- phere
24	8:00	a.m.	Moon passes south of Mars
25	10:00	a.m.	Moon passes south of Jupiter
28	5:43	a.m.	New moon
	9:00	a.m.	Mercury between sun and earth
31	5:00	a.m.	Moon nearest, dis- tance 227,300 miles



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