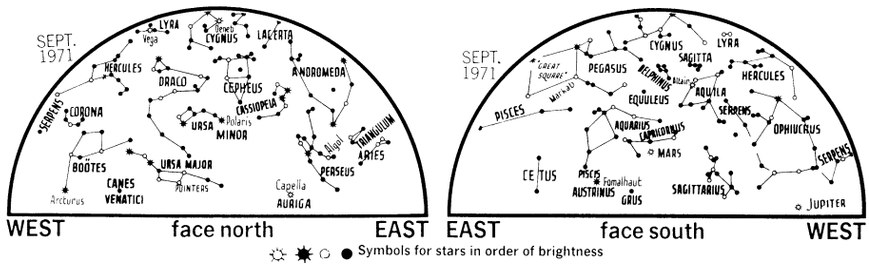
ASTRONOMY

The M13 globular cluster



by James Stokley

In the western sky is the constellation of Hercules, named after the strong man of mythology. It is divided on our maps—half in the northern section and half in the southern. Just below the northern part a little semicircle of stars forms Corona; lower is Boötes.

Directly under the E in the name Hercules the northern map shows the star eta Herculis. Zeta Herculis is to the left and a little lower. Between these (under the H in Hercules) a small x marks the location of an interesting celestial object: the globular cluster M13. It is not very bright so you won't be able to see it from a city, with its polluted air and glare of lights. But if you are at a place where the sky is really dark and clear you may see what looks like a faint, hazy star. Best viewing is through binoculars.

This hazy "star" is really a spherical cluster of perhaps 100,000 stars. Many are visible with a telescope of even moderate size. Its designation M13 is an abbreviation of Messier 13. Charles Messier was a French astronomer who, in 1771, published a catalogue of nebulous objects he had observed. The cluster in Hercules is the 13th in this catalogue.

M13 is about 25,000 light-years away from us. (One light-year is about six trillion miles, the distance that light travels in one year.) Its diameter is about 130 light-years. To have 100,000 stars in so relatively small a space means that they are about 10 times closer together than the stars in our part of the universe.

An observer on a planet revolving around a star near the center of M13 could see in his skies a total of nearly 6,000 stars of the first magnitude. From all parts of earth we can see only 23 of this brightness.

The maps depict the sky as it looks at 11 p.m., local daylight saving time, on Sept. 1. They appear similarly in mid-month at 10 p.m., and 9 p.m. as September ends. □

CELESTIAL TIMETABLE

Sept.	EDT	
3	3:00 a.m.	Moon passes north of Mars
5	12:03 a.m.	Full moon
6	1:00 a.m.	Moon nearest, distance 222,900 miles
10	8:00 p.m.	Moon passes north of Saturn
11	2:23 p.m.	Moon in last quarter
12	1:00 a.m.	Mercury farthest west of sun (visible for a few days low in east at dawn)
19	10:42 a.m.	New moon
21	2:00 a.m.	Moon farthest, distance 252,600 miles
23	12:45 p.m.	Autumnal equinox, autumn begins in Northern Hemisphere
25	2:00 a.m.	Moon passes south of Jupiter
27	1:17 p.m.	Moon in first quarter
30	5:00 p.m.	Moon passes north of Mars