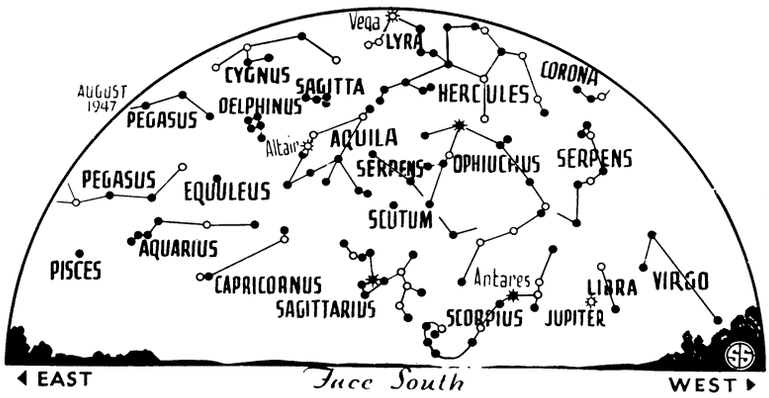
earth's orbit intersects that of the meteors at the place we occupy in August, and that is why the meteors are seen at this time. Of course, the sky must be dark to observe them best. Since the moon is at last quarter this month on Aug. 9, it will rise late on the 12th during the early morning hours, and will hardly be bright enough to interfere seriously, though its light will cut out some of the fainter meteors.

Astronomers appreciate the help of amateurs in observing meteors. A simple but useful task is to count the total number that you see during half hourly intervals, as from midnight to 12:30, 12:30 to 1:00, etc. Such counts may be sent to Dr. Charles P. Olivier, at the Flower Observatory, Upper Darby, Pa., or in Canada to Dr. Millman, at the Dominion Observatory, Ottawa.

As noted in the first part of this article, it is possible to see a faint patch of light in the constellation of Hercules (indicated by a cross on the map), which is a great globular cluster of stars, at least 100,000 in number. This object is at a distance so great that its light (at the speed of 186,000 miles per second) takes 35,000 years to reach us. At such a distance our sun would be invisible with even the most powerful telescope.

About a hundred of these globular clusters are known, and the work of Dr. Harlow Shapley, of the Harvard College Observatory, has shown that they form the skeleton of the huge system of stars called the galaxy of which the sun is a member. Most of the stars are in a flat, grindstone shaped disk. However, the hundred globular clusters form a system that is spherical in form, but sharing the same center as the main galaxy itself.

Centuries ago men thought that the earth was in the center of the universe, but then it was shown that the earth is but one of the planets revolving around the sun. Later, as the idea of the galactic system was formed, it was thought that the sun, and our solar system with it, was near the center of the grindstone, but the work on the globular clusters demonstrated that this was wrong. It was observed that most of these clusters are in one half of the sky, but if we were at the center they would be more uniformly distributed in all directions. Actually, we are tens of thousands of light years away from the center of the galaxy, which lies toward the constellation of Sagittarius, the archer, now visible in the southern sky.



☼ ✸ ○ • SYMBOLS FOR STARS IN ORDER OF BRIGHTNESS

Celestial Time Table for August

August	EST		
1	8:50	p. m.	Full moon
3	3:00	p. m.	Mercury farthest west of sun
5	1:00	p. m.	Saturn and sun in line
9	3:22	p. m.	Moon in last quarter
12	early morning		Perseid meteors
	4:47	p.m.	Moon passes Mars
15	3:00	a. m.	Moon nearest, distance 223,-300 miles
	5:09	a. m.	Moon passes Mercury
16	6:12	a. m.	New moon
22	12:47	p. m.	Moon passes Jupiter
23	7:40	a. m.	Moon in first quarter
27	11:00	a. m.	Moon farthest, distance 251,-900 miles
31	11:34	a. m.	Full moon

Subtract one hour for CST, two hours for MST, and three for PST.

Add one hour for the corresponding Daylight Saving Time.

Science News Letter, July 26, 1947

GEOGRAPHY

Importance of Greece

➤ TROUBLED GREECE, now bolstered by American dollars and threatened by alleged Red sympathizers on the north, is a tiny nation as nations go but it happens to occupy a strategically important spot far out of proportion to its size.

In area it is smaller than Alabama, and in population a million or so less than New York City. But it and its thousands of islands are so situated that Greece is in a position to dominate the eastern Mediterranean, the Adriatic with its ports that serve much of Central Europe, and the Aegean sea which in turn controls the shipping lanes to the Dardanelles and the Black sea.

In shape, it is somewhat like a broad-bladed sickle with its narrow handle separating Bulgaria and Yugoslavia from the Aegean. The end of the handle is against Turkey-in-Europe. Albania is at the butt of the blade, and the blade itself projects into the Mediterranean between the Adriatic and the Aegean. A broken-off point of the blade is the Greek island of Crete that limits entrance to the Aegean to relatively narrow shipping lanes on its west and east.

Another factor in Greece's position is that it is the only non-satellite nation in Europe east of the Soviet line of control which now extends from the Russian-occupied area of Germany on the Baltic sea south to the Adriatic. Control of Greece would give the Soviet Union control of shipping ports to the Mediterranean, and make it easier for it to gain control of the waterway from the Black sea through the Bosporus, Sea of Marmara, and the Dardanelles.

Albania, Yugoslavia and Bulgaria, all to the north of Greece, have reasons of their own for wanting to control all or parts of Greece. Bulgaria and Yugoslavia want to extend to the Aegean. Albania wants to extend its border. Yugoslavia has ports on its west coast but for many reasons wants ports to the east. Bulgaria's only present ports are on the Black Sea.

Another factor in the situation is the desire of the Macedonians to be an independent nation again. The territorial claims of these people of very ancient stock is the part of Greece on the north shores of the Aegean, and parts of what are now Bulgaria and Yugoslavia. A committee of Macedonians, made up of citizens of the United States and Canada, are urging an "autonomous Macedonia."

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