

thick, they could not cause the observed brightening at opposition.

Celestial Time Table for August

| AUG. | EDT | |
|------|------------|--|
| 5 | 5:31 a.m. | Full moon |
| | 7:00 p.m. | Moon passes south of Saturn |
| 9 | 10:00 p.m. | Moon passes south of Jupiter |
| 10 | 8:00 p.m. | Moon nearest, distance 229,500 miles |
| 12 | early a.m. | Meteors visible apparently radiating from constellation Perseus |
| | 2:22 a.m. | Moon in last quarter |
| 13 | 2:00 a.m. | Saturn in opposition with sun and nearest earth, distance from earth 823,600,000 miles |
| 19 | 3:35 a.m. | New moon |
| 21 | 5:00 a.m. | Moon passes north of Mercury |
| 23 | 1:00 a.m. | Moon passes north of Mars |
| 24 | 6:00 a.m. | Mercury farthest east of sun |
| 25 | 2:00 p.m. | Moon farthest, distance 251,300 miles |
| 27 | 2:54 a.m. | Moon in first quarter |
| 29 | 9:00 p.m. | Venus behind sun |

Subtract one hour for CDT, two hours for MDT, and three hours for PDT.

• Science News Letter, 84:58 July 27, 1963

ASTRONOMY

Second Study of Galaxies Ready for Observatories

► THE CALIFORNIA Institute of Technology has issued the second volume of a catalogue concerning the 40,000 galaxies in the known universe.

It is a part of a catalogue on galaxies and galactic clusters being issued in a series of six volumes. The catalogue is based on a survey that took more than seven years to complete and covers the entire sky.

The reference work is being compiled by Drs. Fritz Zwicky and Emil R. Herzog of Mt. Wilson and Palomar Observatories at Pasadena, Calif. The six volumes will contain the positions, magnitudes and configurations of the individual galaxies and of galactic clusters.

• Science News Letter, 84:59 July 27, 1963

Do You Know?

A six-inch subsonic arc *tunnel* has been developed to evaluate the performance of ablation materials under simulated conditions of reentry from space.

A 500-year *chronology* for the famous Casas Grandes archaeological site at Chihuahua, Mexico, has been established using the tree-ring method.

The world's largest *elevator* with a platform 48 feet long and a capacity of 75,000 pounds has been installed in Boston's War Memorial Auditorium.

Rubber makes *asphalt* flexible, tough and tenacious.

• Science News Letter, 84:59 July 27, 1963

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