

ASTRONOMY

Mars Made Close Approach to Earth

MARS MADE a close approach to earth, relatively speaking, when it passed within less than 45,500,000 miles on Nov. 8.

This month the "red" planet is better placed for observation than at any other time until 1971.

Because observations of Mars during the very favorable approach of 1956 were hampered by a great yellow cloud that obscured many surface features, intensive studies of the planet are being made this

One Navy-financed project is to take a look at Martian surface features using a large telescope mounted on a balloon floating 80,000 feet above the earth's surface. In this first attempt to use a telescope for scanning another planet, scientists hope also to discover whether Mars has enough water to support life.

Another plan is to observe Mars with an up-to-date spectroscope attached to the world's largest telescope, the 200-inch Hale reflector atop Mt. Palomar in California. At the time of the 1956 approach, Dr. William M. Sinton of Lowell Observatory, Flagstaff, Ariz., found new evidence for some sort of primitive life form on Mars.

These observations are being checked this month, aimed at confirming evidence of an absorption in the infrared rays reflected from Mars believed caused only by organic molecules.

A new system for naming Martian features has now been adopted by astronomers around the world. Its main novelty is that small details are to be known not by names but by their approximate longitudes and latitudes.

To speed up use of the new nomenclature, the International Astronomical Union has compiled a catalogue of the 128 adopted names and a chart identifying them. The charts are reproduced in Sky and Telescope (Nov.), a monthly publication for persons interested in astronomy.

Mars is now most conspicuous in the southeastern evening sky. It shines with a brilliant reddish color, and is in the constellation of Taurus, the bull. (See SNL, June 30, 1956, p. 407.)

When Mars and the sun are in opposite directions in the sky, astronomers call this opposition. Mars reaches it on Nov. 16.

Science News Letter, November 15, 1958

PHYSIOLOGY

Beam of Protons Halts Cell Growth of Brain

➤ A NARROW beam of high-energy protons, the cores of hydrogen atoms, can be used to injure or destroy cells in specific, limited regions of the brain or central nervous system.

This finding, so far applicable only to animals, could mean that proton beams can halt the growth of cancers or other unwanted growths of the central nervous system in man in the future. Studies of long-term effects of such irradiation on the brain are in progress, six Swedish scientists report in Nature (Nov. 1).

Advantage of the narrow proton beam is that it produces sharply defined and limited lesions at the desired spot, with little or no effect on surrounding tissues. The observations apply only to lesions in their relatively early stages, the scientists stress.

The six are Drs. Borje Larsson, Lars

Leksell, Bror Rexed, Patrick Sourander, William Mair and Bengt Andersson of the Gustaf Werner Institute of Nuclear Chemistry, and Institute of Anatomy, University of Upsala.

Science News Letter, November 15, 1958

SCIENCE NEWS LETTER

VOL. 74 NOVEMBER 15, 1958 NO. 20

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington 6, D. C., NOrth 7-2255. Cable Address: SCIENSERVC.

Subscription rates: 1 yr., \$5,50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage.

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Printed in U.S.A. Entered as second class matter at the post office at Washington, D. C., under the act of March 3, 1897. Acceptance for mailing at the special rate of postage provided for by Sec. 34.40 P. L. and R., 1948 Edition, paragraph (d) (act of February 28, 1950, Established in mimeograph form March 13, 1922. Title registered as trademark, U.S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member Audit Bureau of Circulation.



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