COMMISSION 27 OF THE I. A. U. INFORMATION BULLETIN ON VARIABLE STARS

NUMBER 687

Konkoly Observatory Budapest 1972 June 20

MULTIWAVELENGTH PROGRAM FOR THE ACTIVE SOURCES 3C 120, BL Lac AND 0J 287

Three variable radio sources which are quite active at both radio and optical wavelengths are 3C 120, BL Lac, and OJ 287 (the approximate B magnitudes are 15, 16, and 13, respectively). Their long-term variations have been actively studied at many observatories for a number of years. Very little is known, however, about their variations on a time scale of less than a day except in the case of BL Lac, which has been found by Rene Racine to have flickering on a time scale of minutes. In an attempt to search for variations on a time scale of hours or shorter, I have organized an international multiwavelength cooperative program. BL Lac and 3C 120 were observed continuously during the first and second halves, respectively, of each of five consecutive nights in November 1971 and OJ 287 was observed all night long during five nights in February 1972. Observations were made in the United States, France, England, and Israel. Optical, infrared, and radio wavelengths were monitored.

R. and K. Hackney and R. Leacock at the University of Florida's Rosemary Hill Observatory found definite evidence—for intraday optical variability of BL Lac, thereby verifying the earlier results of Racine. OJ 287 data obtained by Tpstein at 3.5 mm with the NRAO 36-ft antenna at Kitt Peak strongly suggest intraday variability, a suggestion partially confirmed by 9-mm results obtained by B. Gary with JPL's 18-ft antenna at Table Mountain. In addition, the team of E. Becklin, C.G. Wynn-Williams, and G. Neugebauer, working in the infrared at 2 microns with the 100-in telescope at Mt. Wilson found definite intraday variability of OJ 287.

Two "campaigns" are being organized to observe these objects continuously all night on several consecutive nights in

late 1972 and in early 1973. Redundancy of data is most desirable, so widespread participation is being sought. Professional astronomers wishing to participate in these international "campaigns" should write directly to me.

June 6, 1972

EUGENE E. EPSTEIN
The Aerospace Corporation
Box 92957
Los Angeles, California 90009
U.S.A.

ERUPTIVE OBJECT IN URSA MAIOR

The eruptive object in Ursa Maior announced by B.V.Kukarkin and D.Ya.Martynov in IAU Circular 2408 was estimated on Sonneberg patrol plates (Tessar 71/250 mm):

1972 May 13.892 UT mpg = 11.1

June 7, 1972

H. HUTH

Deutsche Akademie der Wissenschaften Zentralinstitut für Astrophysik Sternwarte Sonneberg