SOFIA SKY ARCHIVE DATA CENTER

MILCHO TSVETKOV

Institute of Astronomy, Bulgarian Academy of Sciences

Abstract. The Sofia Sky Archive Data Center (SSADC) is developed on the base of the Wide-Field Plate Database (WFPDB) as a project of the Working Group on Sky Surveys, Commission 9 of the IAU. The data center is situated in the former Computer Center of Physics of the Bulgarian Academy of Sciences and will operate in the frame of the Institute of Astronomy. It is equipped with 5 Personal Pentium computers (from 133 to 450 MHz), HP 712/80 and Sun10 workstations, 4 PC-486 workplaces and some local terminals and peripherals. The Virtual Local Network of the Sofia SADC created in 1998 is the first one in the Campus of the Physics Institutes and is established on the basis of the WFPDB local network created since 1994. The PDS-1010 microdensitometer of the SSDAC was donated to the SSADC in 1998 from the European Southern Observatory and this Summer passed successfully the local tests. This very precise digitizer will be in a regular operation in Spring 2000. The PDS microdensitometer transferred from Garching (near Muenchen) to Sofia with the support of the Alexander von Humboldt Stiftung (Germany) was supplied this Summer with the new logarithmic amplifier with the help of the Deutsche Forschung Gemeinschaft (DFG, Germany) and the Muenster University. Last month it was already used for the digitization of the first images of the Solar corona during the Total Solar Eclipse '99 observed in the North-East part of Bulgaria. Main field of operation of the new datacenter will be the continuation of the wide-field plate archives development, wide-field plates digitization, and their image processing for the studies of different astronomical tasks. In our work we keep contacts with more than 200 astronomical institutes and observatories all over the world and especially with the European Southern Observatory, "Centre de Donnés astronomiques de Strasbourg" (CDS) and the IAU Center of Minor Planets in Harvard. The SSADC plans to provide a support for the wide-field plates digitization and processing in all region of South- and East Europe and first of all for the neighbor countries. Close relationship in this direction already exists with astronomers with the Astronomical Institute of Romania (bilateral agreement), the Belgrade Astronomical Observatory, astronomers from the National Astronomical Observatory of Athens, etc. The Sofia Astronomical Data Center has a close cooperation with the German astronomical institutes and observatories: Astrophysical Institute in Potsdam, Muenster University Computer Center, Observatories in Sonneberg, Tautenburg, Bamberg, etc. On other side development of the Computer Center is mainly supported from the Alexander von Humboldt Stiftung, DFG (Germany), the European Southern Observatory and with a contract F-650 of the Bulgarian Science Foundation. The WFPDB has been installed in CDS in Strasbourg since August 1994 and is accessible via VizieR on site via the VizieR catalogue browser in CDS - Strasbourg at http://vizier.u-strasbg.fr/cats/V1.htx - catalogue number VI/90. Developed practically only last 5 years the WFPDB is among the first 100 most used astronomical catalogues. A new home page of the Data Center will be available soon on site www.skyarchive.org.