Main astronomical observatory of NAS of Ukraine

Kiev, Golosiiv
science

• modeling the chemical evolution of irregular and disk galaxies of late types, processes of origin and evolution of giant shells of neutral hydrogen in galaxies of different types of the formation and evolution of galaxies, the analysis of stellar spectra considering deviations from LTE and determining the evolutionary changes of the chemical composition of stars of late spectral classes, study evolution and physical characteristics of stars of different types;

• photographic astrometry and stellar astronomy, fundamental astrometry, astrometry of the solar system, the Moon selenodeziya and dynamics;

• study the theory of Earth's rotation; create Earth and celestial reference systems;

• study of physical and evolutionary properties of blue dwarf galaxies according to observations at the best astronomical instruments in the world: BTA (SAO RAS), a space telescope named. Hubble, NMT-telescope in Arizona (USA), etc.;

• rapid small-scale study of the variability of stars, according to the particular parallel observations with the help of spaced optical telescopes;
science

• the study of physics and optical properties of the atmospheres and surfaces of planets and their satellites, radiation transfer theory and astronomical instrumentation;
• development of equipment and methods of optical monitoring planetary atmospheres, including the Earth atmosphere.
• research on the physics of cosmic rays and their interaction with interplanetary environment;
• creating new models of the impulsive energy release and transformation in solar flares; construction of the theory of generation of electromagnetic radiation in the solar atmosphere and magnetosphere of the Earth; study of plasma instabilities on the Sun, the solar wind and the magnetosphere of the Earth;
• physics of comets and infrared astronomy;
• study of active solar formations (prominences, flares etc.) and quiet photosphere;
The structure

Administration

Divisions

1  2  3  4
Division 1

Dept. for Astrometry & Space Geodynamics
Dept. for Physics of Stars & Galaxies
Dept. for Space Plasma Physics
Dept. for Physics of Minor Celestial Bodies
Dept. for Physics of Planetary Systems
Dept. for Solar Physics
Division 2

LABORATORY FOR TRANSIENT PHENOMENA IN VARIABLE STARS

Laboratory for atmosphere optics

Laboratory for Instrumentation
Instruments

AZT-2
MAC
TPL-1
ACU-5
Dept. for Astrometry & Space Geodynamics
science

theoretical and methodological problems of global geodynamics research and construction of reference frame (terrestrial & celestial);

determining the parameters of the Earth's rotation and the creation of coordinate systems by VLBI, GNSS and SLR observations;

Coordination of the participation of institutions of Ukraine in international programs to study the Earth's rotation and the construction of the reference systems;

The coordination of the network stations Ukrainian space geodesy and geodynamics (GNSS & SLR).

Catalogues of the stars, planets, asteroids and satellites of the planets
GNSS network
«Київ/Голосіїв» (GLSV)
Results
Earth X and Y pole by Lageos 1 observations.
LS2151
total passes
from October 1, 2014 through September 30, 2015
Golosiiv, Ukraine 1824

Pass average LAGEOS normal point rms

ave 35.90 ± 44.99 max 725.65 min 0.30 for 878 data points
Statistics for 6 years
THE END IS NEAR

THE END