

ISWI activities in Azerbaijan (national coordinator: Elchin Babayev)





Main organizations dealing with Astronomical and Space Researches/ Applications and Space Weather studies in Azerbaijan:

- Baku State University;
- Shamakhy Astrophysical Observatory (ShAO), Azerbaijan National Academy of Sciences;
- **Batabat Astrophysical** Observatory;
- AzerCosmos OJSC;
- National Aviation Academy;
- National Aero-Space Agency;
- Research Institutes of the Azerbaijan National Academy of Sciences - Physics, etc.
- Some departments of different universities, etc.

Among modern problems of astronomy and astrophysics we conduct studies on:

- Solar physics (theoretical and experimental);
- Helioseismology (theoretical), global solar oscillations;
- Solar-terrestrial physics interplanetary magnetic field, solar wind, large-scale magnetic fields on the Sun. etc.:
- Space weather effects' studies.

Space Weather Effects' Studies particularly cover some tasks of international programmes and projects, like:

- Impact on technologies (space-borne and on Earth):
- Public health problems;
- Environmental problems.

SW studies mainly were/are conducted in the:

- Department of Cosmic Plasma and Heliogeophysical Problems, Shamakhy Astrophysical Observatory;
- Department of Astrophysics, Baku State University;
- Other organizations;
- Scientists and specialists from different fields of science and technology astrophysicists, geophysicists, physiologists, engineers, etc.;
- Contacts, collaboration at regional as well as at international levels.

Activities:

- monitoring and analysis;
- theoretical and experimental studies of space weather effects;
- application of obtained results (industry, public health and security, etc.);
- preparation of young specialists (Ph.D. students, lectures);
- public awareness (mass-media, TV, radio, newspapers, web site).

Potential influence of space weather factors are studied in the following research areas:

- space weather influence on technical and engineering systems (electric power supply grids, oil production activity, functioning of long pipelines, etc.);
- space weather effects on human life and health (bioelectrical activity of human brain and its functional state, cardiovascular parameters, diseases, biologically active points of human body, traffic accidents, virus-epidemic diseases, influenza, etc.) and ecological systems (Caspian Sea level variations, climate changes, etc.);
- Distant investigation of propagation of very low frequency (VLF) electromagnetic waves in the Earth's ionosphere;
- Investigation of solar wind magnetic field distribution near the Earth;
- Study of relationship between the contrast of coronal holes on the Sun and parameters of the solar wind streams;
- other tasks, such as solar activity and comet's brightness, etc.

SCIENTIFIC PUBLICATIONS





REGULAR SEMINARS



AWESOME VLF RECEIVER



SUPERSID RECEIVER

PUBLIC AWARENESS EVENTS



RECENT INTERNATIONAL SCIENTIFIC EVENTS









BAKU STATE UNIVERSITY



BATABAT ASTROPHYSICAL **OBSERVATORY**



