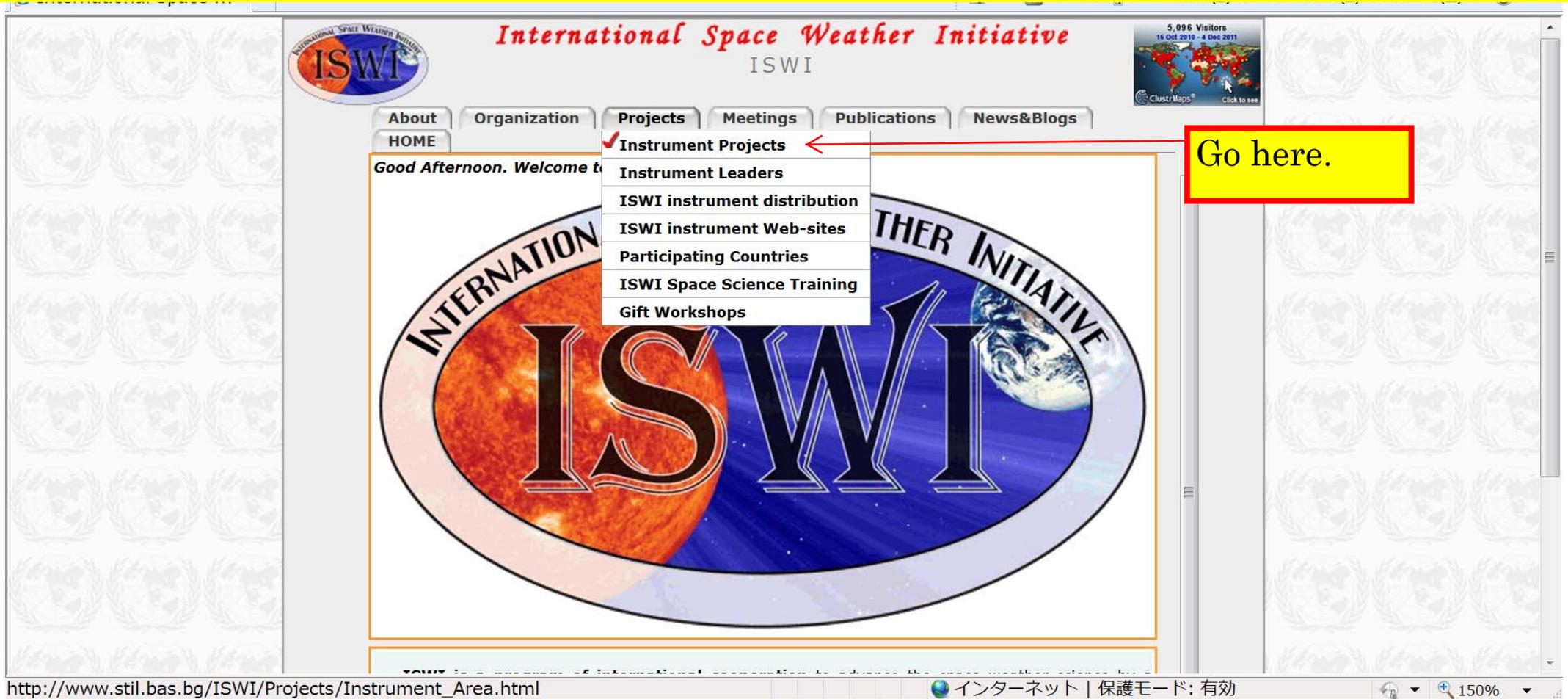


ISWI website: www.iswi-secretariat.org



The screenshot shows the ISWI website interface. At the top, the text "International Space Weather Initiative" and "ISWI" is displayed. A navigation menu includes "About", "Organization", "Projects", "Meetings", "Publications", and "News&Blogs". The "Projects" menu is expanded, showing a list of links: "Instrument Projects", "Instrument Leaders", "ISWI instrument distribution", "ISWI instrument Web-sites", "Participating Countries", "ISWI Space Science Training", and "Gift Workshops". A red arrow points from a yellow box containing the text "Go here." to the "Instrument Projects" link. The background features a repeating pattern of the United Nations logo. A visitor counter in the top right corner shows "5,096 Visitors" for the period "16 Oct 2010 - 4 Dec 2011". The browser address bar at the bottom shows the URL "http://www.stil.bas.bg/ISWI/Projects/Instrument_Area.html" and the status "インターネット | 保護モード: 有効".



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Principles of the Instrument Program

- The lead scientist or principle investigator funded by his/her country provides instrumentation (or fabrication plans) and data distribution
- The host country provides the workforce, facilities, and operational support typically at a local university.
- Host scientists become part of science team
- All data and data analysis activity are shared
- All scientists participate in publications and scientific meetings where possible

New instrument arrays are welcome. To propose new instrument array, please contact **Dr. Joseph M. Davila**, e-mail: Joseph.M.Davila@nasa.gov

Map of the geographical position of ISWI instruments can be found [here](#).

1. African GPS Receivers for Equatorial Electrodynamics Studies (AGREES)

Lead Scientist: *Dr. Mark Moldwin* and *Dr. Endawoke Yizengaw* (UCLA) **United States**

Objective: Understand unique structures in equatorial ionosphere, low/mid latitude plasma production, effect of ionospheric and plasmaspheric irregularities on communications

(read [more](#))

2. African Dual Frequency GPS Network (AMMA)

Lead Scientist: *Dr. Christine Amory-Mazaudier* (CETP&CNRS) **France**

Objective: To increase the number of real-time dual-frequency GPS stations worldwide for the study of ionospheric variability, response of the ionospheric total electron content (TEC) during geomagnetic storms over the African sector.

(read [more](#))

3. African Meridian B-field Education and Research (AMBER)

Lead Scientist: *Dr. Mark Moldwin* and *Dr. Endawoke Yizengaw* (UCLA) **United States**

Objective: Understand low latitude electrodynamics, ULF pulsations, effect of Pc5 ULF on MeV electron population in inner radiation belts

(read [more](#))

4. Atmospheric Weather Education System for Observation and Modeling of Effects (AWESOME) and SID (Sudden Ionospheric Disturbance Monitor)

Lead Scientist: *Dr. Umran S. Inan*, *Dr. Morris Cohen* and *Dr. Deborah Scherrer* (Stanford) **United States**

Objective: Lightning, sprites, Elves, relation to terrestrial Gamma Ray flashes, whistler induced electron precipitation, conjugate studies

(read [more](#))

5. Compound Astronomical Low-cost Low-frequency Instrument for Spectroscopy and Transportable Observatory (CALLISTO)

Lead Scientist: *Dr. Arnold Otto Benz* and *Dr. Christian Andreas Monstein* (ETHZ) **Switzerland**

Objective: Study the magnetic activity of a wide range of astrophysical objects with emphasis on the Sun and cool stars

(read [more](#))

6. Continuous H-alpha Imaging Network (CHAIN)

Lead Scientist: *Dr. Kazunari Shibata* and *Dr. Satoru UeNo* (Kyoto U) **Japan**

Objective: Solar activity, flares, filaments, filament eruptions

(read [more](#))

7. Coherent Ionospheric Doppler Radar (CIDR)

Lead Scientist: *Prof. Ayman Mahrous* (Helwan University, Egypt) and *Dr. Trevor W. Garner* (U Tex) **United States**

Objective: To tomographically reconstruct the ionosphere and to provide input to Data Assimilation models

(read [more](#))

8. Global Muon Detector Network (GMDN)

Lead Scientist: *Dr. Kazuoki Munakata* (Shinsu U) **Japan**

Objective: To identify the precursory decrease of cosmic ray intensity that takes place more than one day prior to the Earth-arrival of shock driven by an interplanetary coronal mass ejection
(read [more](#))

9. **Magnetic Data Acquisition System (MAGDAS)**

Lead Scientist: *Dr. Kiyohumi Yumoto* (Kyushu U) **Japan**

Objective: Study of dynamics of geospace plasma changes during magnetic storms and auroral substorms, the electromagnetic response of iono-magnetosphere to various solar wind changes, and the penetration and propagation mechanisms of DP2-ULF range disturbances

(read [more](#))

10. **Optical Mesosphere Thermosphere Imager (OMTIs)**

Lead Scientist: *Dr. Kazuo Shiokawa* (Nagoya U) **Japan**

Objective: Dynamics of the upper atmosphere through nocturnal airglow emissions

(read [more](#))

11. **Remote Equatorial Nighttime Observatory for Ionospheric Regions (RENOIR)**

Lead Scientist: *Dr. Jonathan J. Makela* (U Illinois) **United States**

Objective: Study the equatorial/low-latitude ionosphere/thermosphere system, its response to storms, and the irregularities that can be present on a daily basis.

(read [more](#))

12. **South America Very Low frequency Network (SAVNET)**

Lead Scientist: *Dr. Jean-Pierre Raulin* (U Presbiteriana) **Brazil**

Objective: Study of the SAMA region at low ionospheric altitudes and its structure and dynamics during geomagnetic perturbations

(read [more](#))

Recently updated.

13. **Scintillation Network Decision Aid (SCINDA)**

Lead Scientist: *Dr. Keith Groves* (Hanscom AFRL) **United States**

Objective: Study equatorial ionospheric disturbances to aid in the specification and prediction of communications degradation due to ionospheric scintillation in the earth's equatorial region

(read [more](#))

14. **Space Environment Viewing and Analysis Network (SEVAN)**

Lead Scientist: *Dr. Ashot Chilingarian* (Aragats) **Armenia**

Objective: To improve short and long-term forecasts of dangerous consequences of space storms

(read [more](#))

15. **ULF/ELF/VLF network**

Lead Scientist: *Prof. Colin Price* (Tel Aviv University) **Israel**

Objective: To monitor geomagnetic storms, ionospheric Alfvén resonances, and ULF pulsations

(read [more](#))

