

Potential Hungarian contributions to ILWS

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Space activities in Hungary

Coordinated by the Hungarian Space Office since 1992

ESA: not a member yet, but involved earlier in Prodex, now in PECS programmes. Ultimate goal: to become an ESA member.

EU 6: proposal - Integrating Space Radiation Sensing Infrastructures (ISRSI), joint research activity: SMARTNES (Survey and Modelling of Ambient Radiation and Transients in Near Earth Space)

NASA: general cooperation agreement (2001)

Dosimeter PILLE flown aboard Space Shuttle

Past experience in science related to ILWS

Space

Hardware experience: onboard data acquisition systems, ground support equipment

SOHO – energetic particles: COSTEP, image analysis: MIDI, EIT, CDS Cluster – data bank (Hungarian Data Centre)

energetic particles: RAPID

magnetometer: Cluster MAG

data analysis and theoretical work on solar energetic particle acceleration by CMEs, propagation, turbulence; solar wind plasma-CME MHD simulations

Ground-based

Continuous monitoring at geomagnetic observatories (Nagyecenk, Tihany – members of INTERMAGNET), cooperation with USGS

Future space missions

STEREO IMPACT involvement in theoretical modeling including simulation of energetic particle propagation from the Sun to Earth

Institutions involved

KFKI Research Institute for Particle and Nuclear Physics, Budapest

KFKI Atomic Energy Research Institute, Budapest

Astronomical Institute, Budapest – Debrecen

Eötvös Loránd University, Budapest

Technical University, Budapest

Eötvös Loránd Geophysical Institute, Budapest

Geodetic and Geophysical Research Institute, Sopron