



International Living With a Star



Austrian ILWS activities

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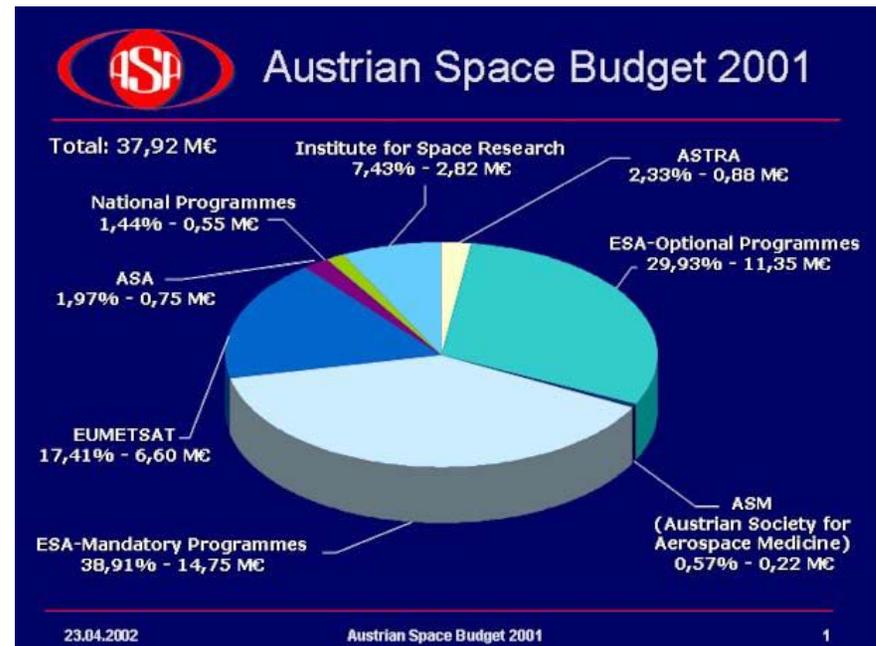


Austrian Funding for Space Activities



- The funding of the space activities is distributed through the Austrian Space Agency (ASA), Austrian Academy of Sciences (OEAW), and the Austrian Science Foundation (FWF).
- Other projects are carried out under ESA or EU contracts.

- A national space program (ASAP) was implemented in 2002 in the amount of 7 million Euro.





Austrian ILWS related Institutions



- **IWF/OEAW**

Space Research Institute of the Austrian Academy of Sciences
space mission, theory-modeling, ground-based observation

- **IGAM/KFU**

Institute for Geophysics, Astrophysics, and Meteorology of
the Karl-Franzens University of Graz
Ground based observation, theory

- **TUG**

Graz University of Technology
Rocket experiment, modeling



Austrian ILWS contributions (1) *in space*



ESA missions

- Cluster: magnetosphere/solar wind interaction by IWF (ASPOC, FGM, EDI, PEACE)
- Double Star: magnetosphere /solar wind interaction by IWF (ASPOC, FGM, PEACE)
- Venus Express : a sentinel at 0.72 AU by IWF (MAG)
- Mars Express (IWF contribution to MARSIS experiment)

NASA mission

- THEMIS: magnetospheric substorm by IWF (magnetometer)

Other program

- Rocket experiment: electron density profile, by TUG and IWF



Austrian ILWS contributions

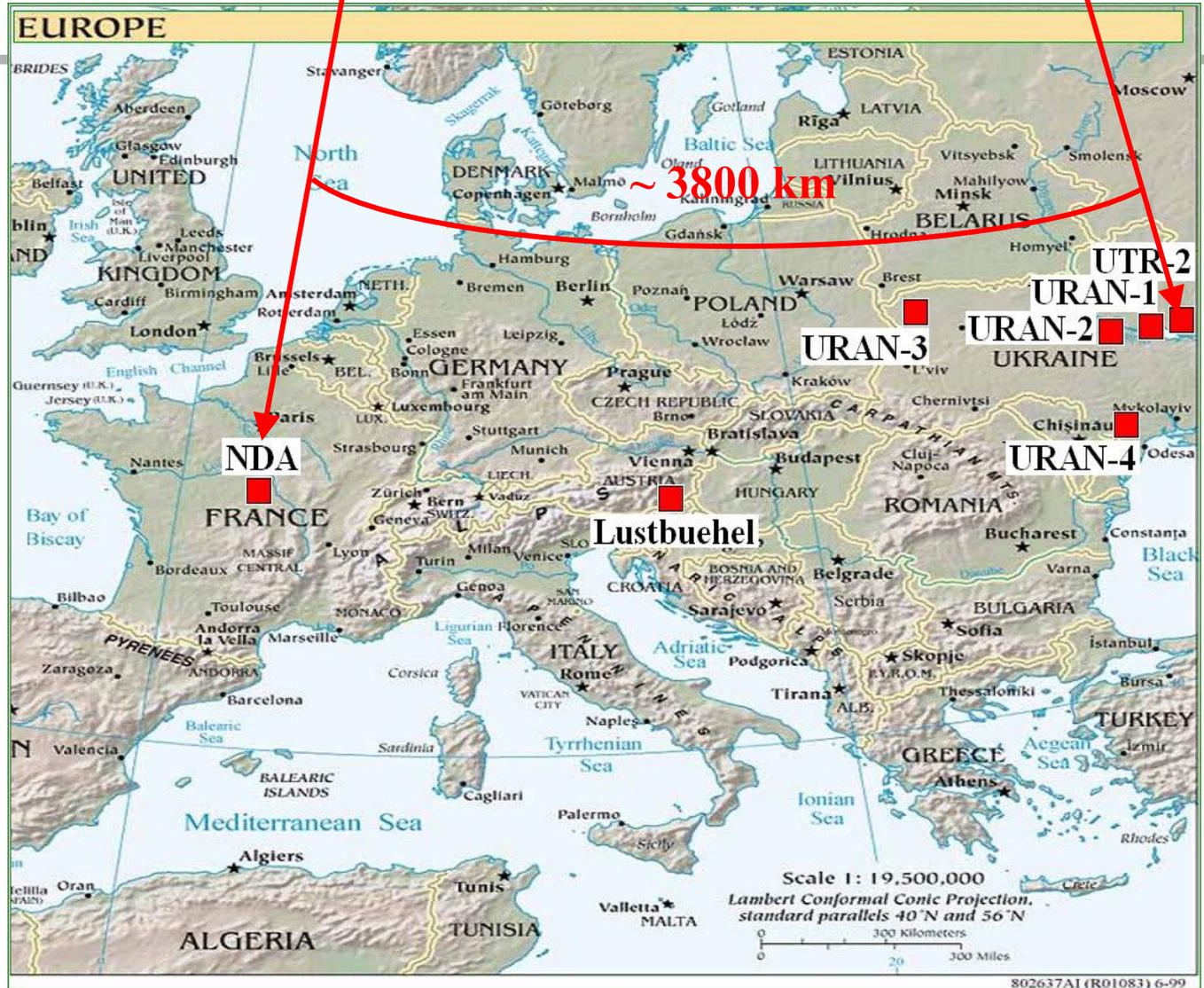
(2) ground based



- CHIMAG (IWF):
magnetometer array in China
together with Chinese Academy of Sciences, UCLA,
Universita dell'Aquila, Hungarian Academy of Sciences
- Kanzelhöhe Solar Observatory (KFU):
Solar activity monitoring,
part of the Global H α Observing Network
- Lustbühel Observatory (KFU, IWF):
Total electron content (TEC) using satellite beacons,
Solar radio emission observation
(European radio station network Nancay, Graz, Kharkov)



European
Decameter
Radio Telescope
Network

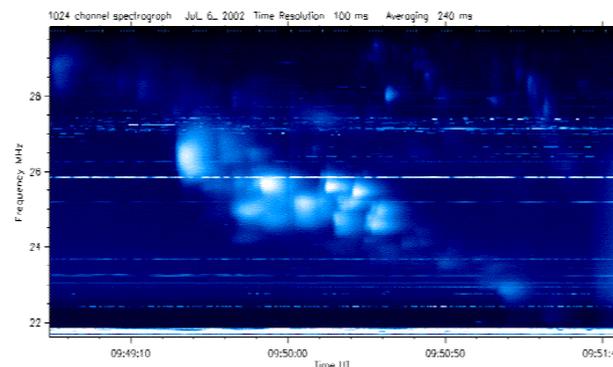
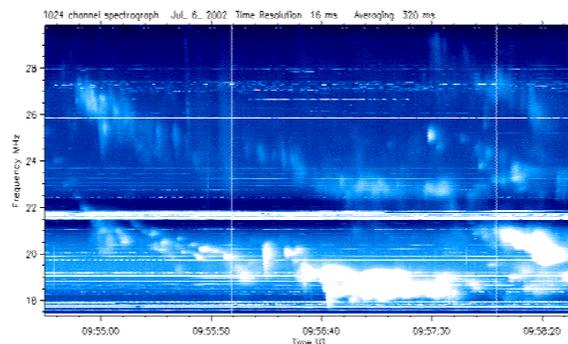
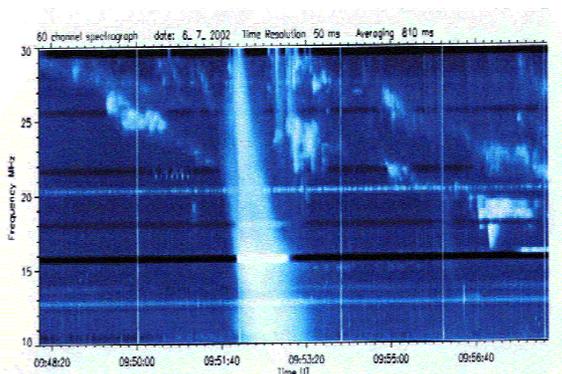




Austrian ILWS contributions (2) ground based



Joint radio telescope operations Nancay – Graz – Kharkov:
Type II studies in connection with CMEs, shock propagation





Austrian ILWS contributions

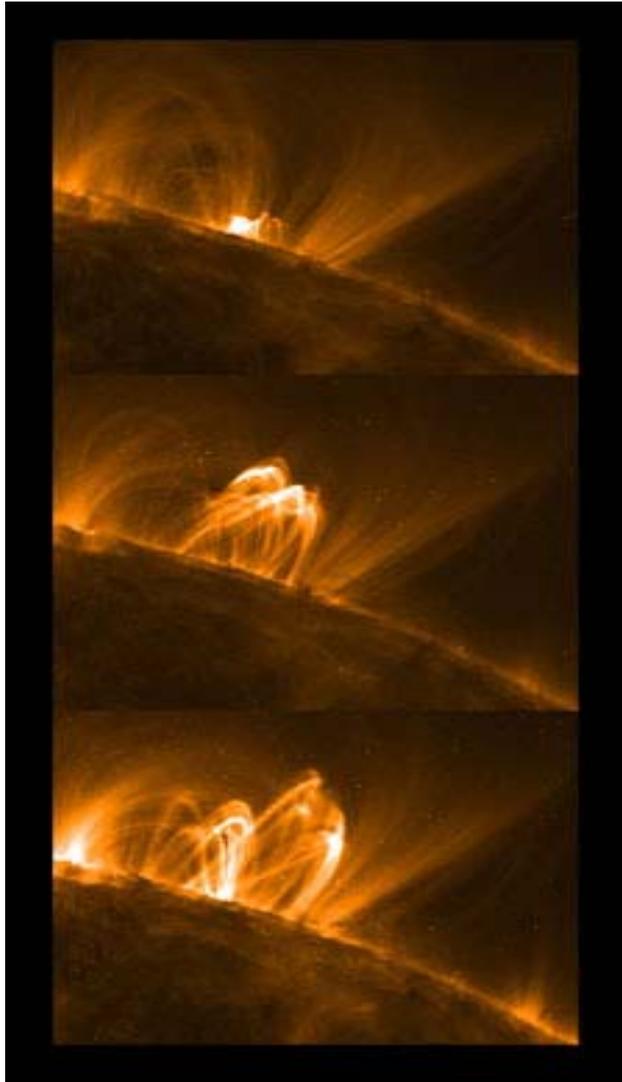
(3) modeling, theory



- Magnetosphere (IWF):
bowshock, magnetosheath, magnetopause,
magnetotail, substorm physics
- Ionosphere, Upper atmosphere (TUG, IWF, KFU):
modeling of the electron density profile
- Solar flares, CMEs (KFU, IWF)



Austrian ILWS contributions *(3) modeling, theory*



Preparational work for

- STEREO/ SWAVES
- Solar Orbiter/ RPW