



International Living With a Star



Austrian ILWS activities

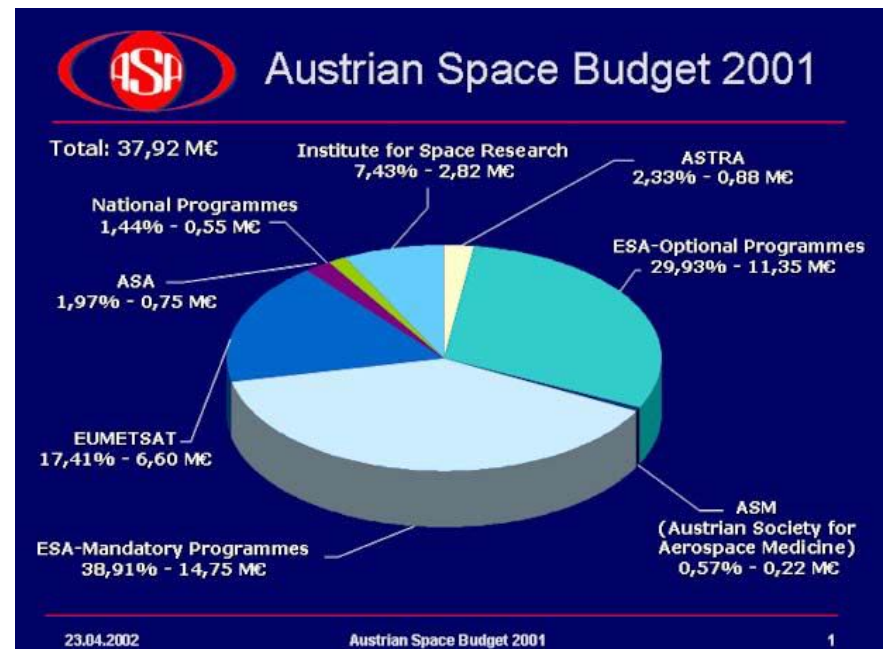
H.O.Rucker
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Austrian Academy of Sciences



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

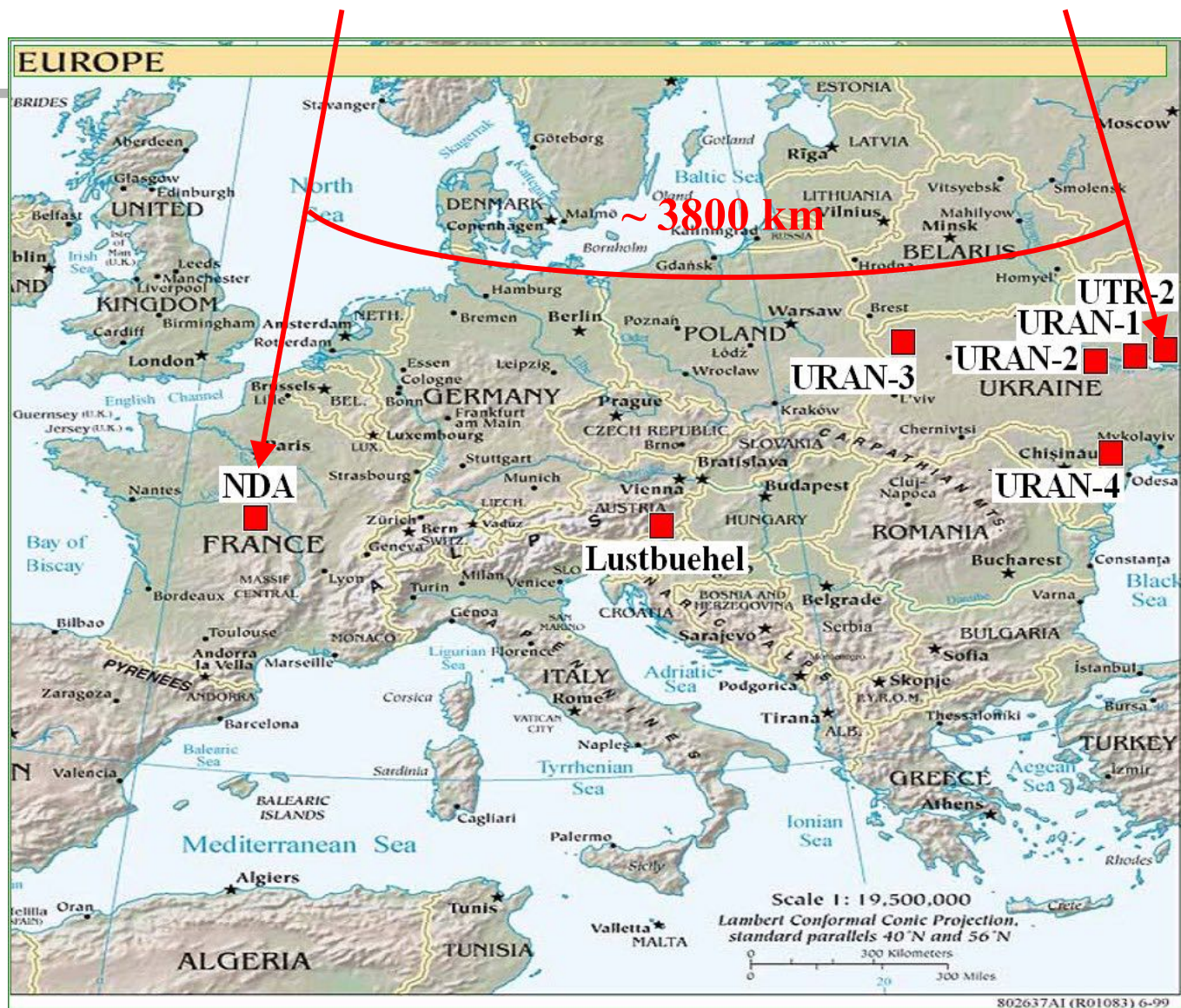
(2) ground based



- 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

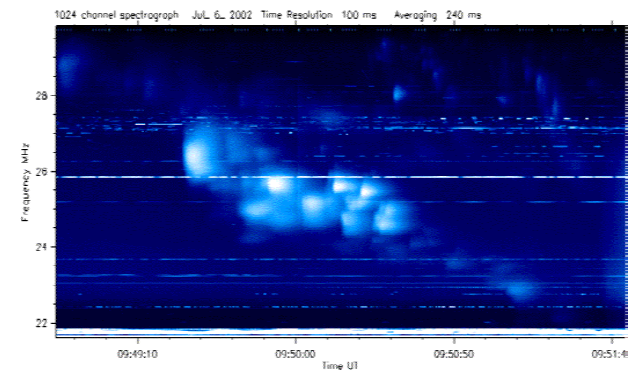
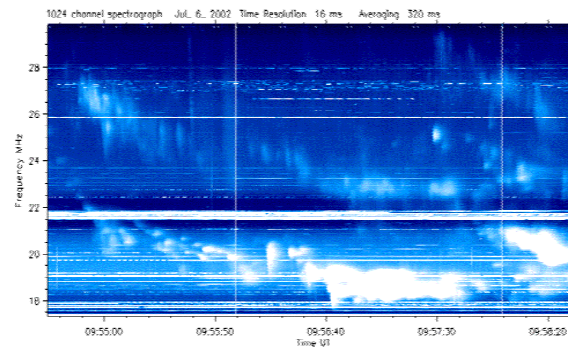
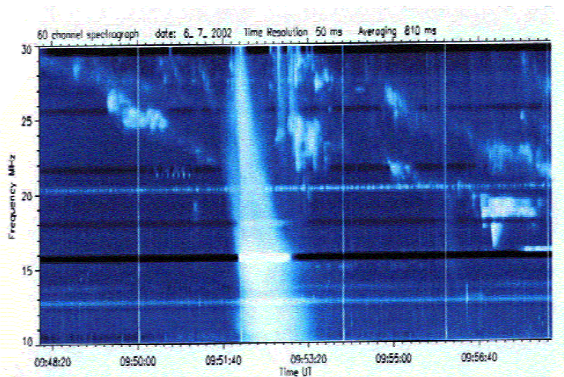




Austrian ILWS contributions (2) *ground based*



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





Austrian ILWS contributions

(3) modeling, theory

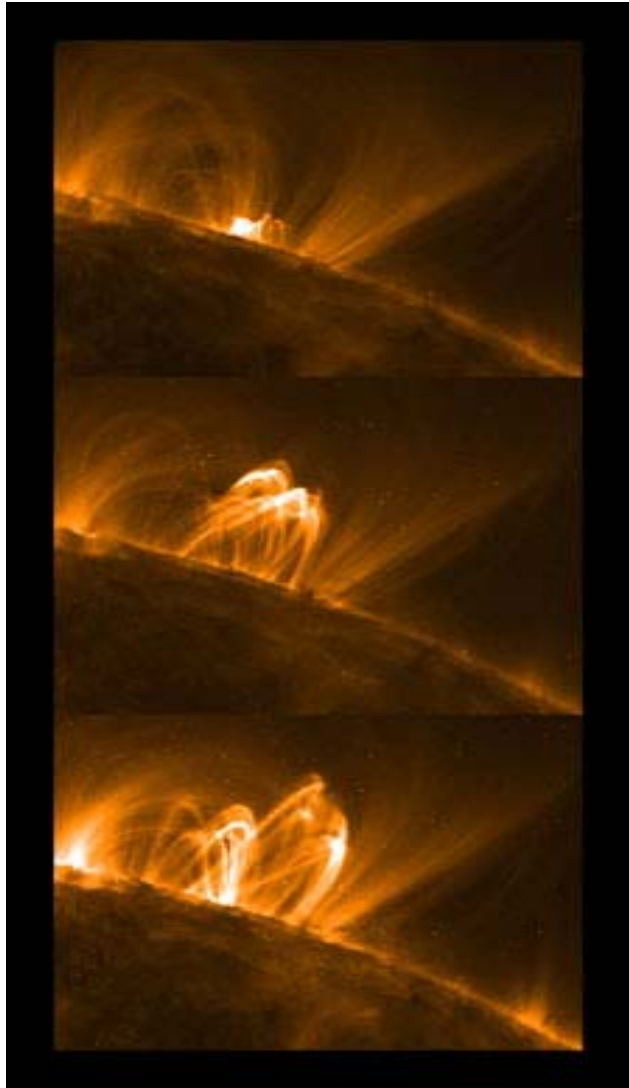


- Magnetosphere (IWF):
bowshock, magnetosheath, magnetopause,
magnetotail, substorm physics
- Ionosphere, Upper atmosphere (TUG, IWF, KFU):
modeling of the electron density profile
- Solar flares, CMEs (KFU, IWF)



Austrian ILWS contributions

(3) modeling, theory



Preparational work for

- STEREO/ SWAVES
- Solar Orbiter/ RPW