

International Global Explorer Campaign

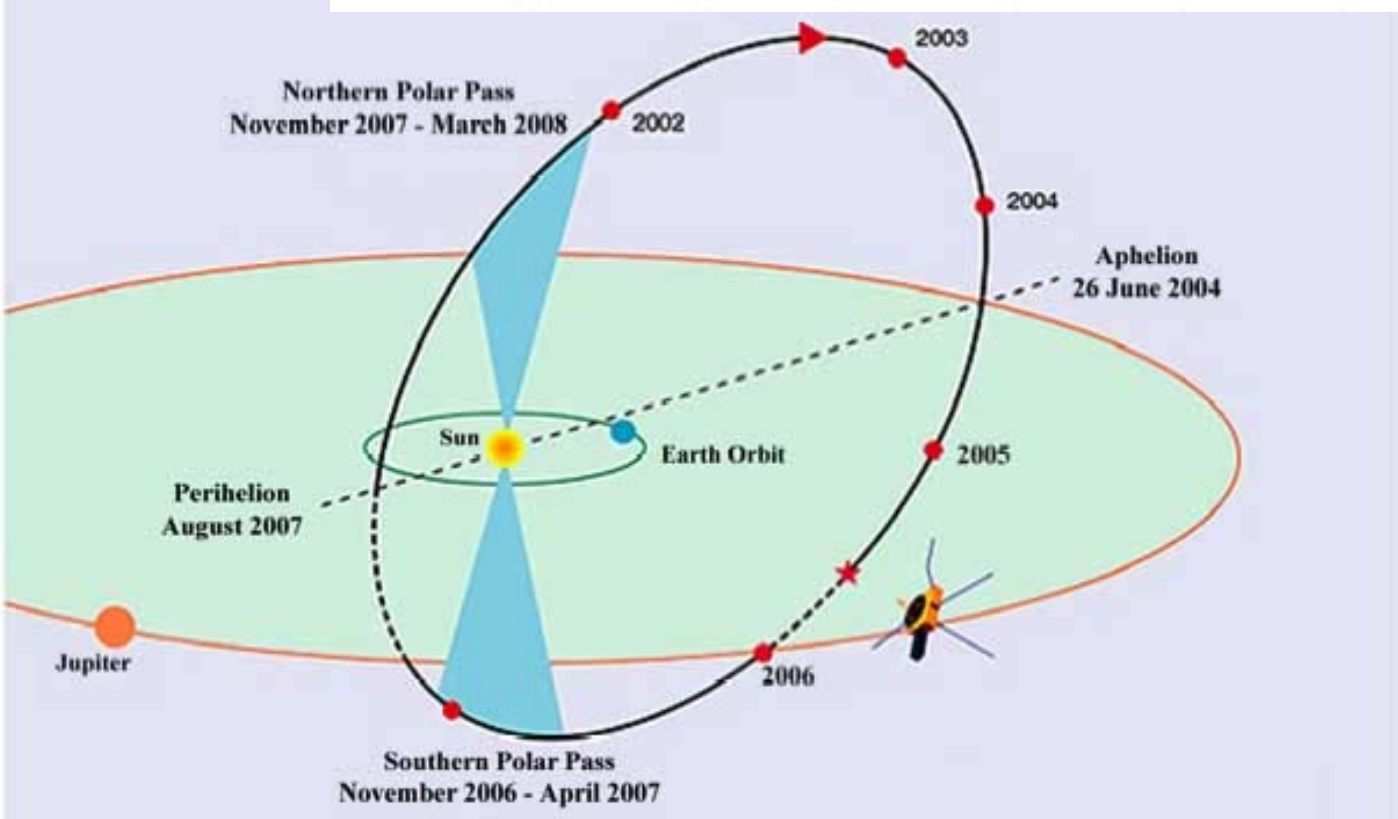
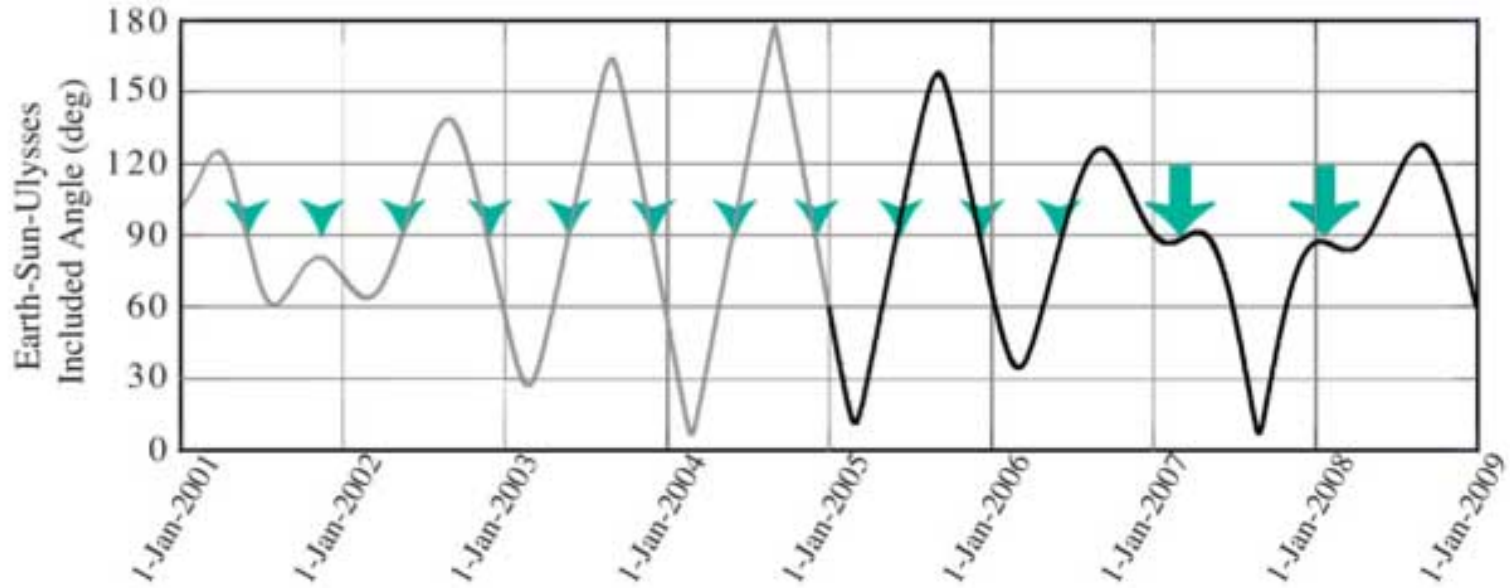
A Program of International Cooperation
during the International Heliophysical Year
2007-8

Heliophysics Global Campaign Rationale

The optimal characterization of the 3-D interconnected Solar-Planetary-Heliosphere System, with the participation of all available observatories to obtain the most ideal measurements for the understanding and modeling of the system.




Proposed Interval: December 15 2007 - January 29 2008

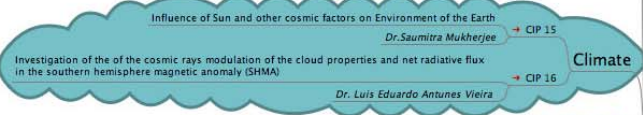
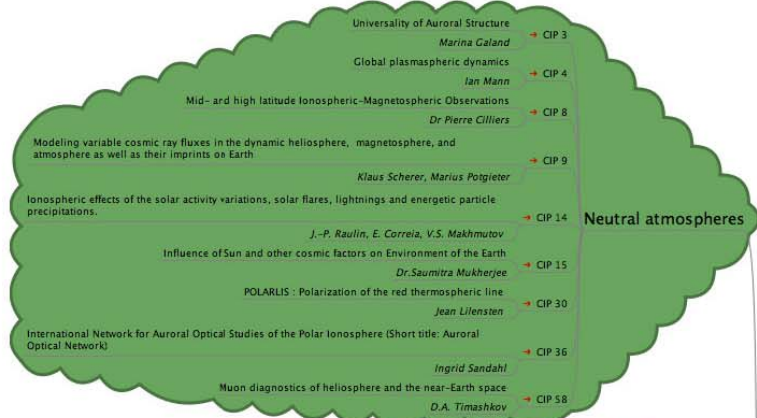
- Solar Minimum the “optimal” time period to study steady state structure and energy balance
- Ulysses will be completing its “fast latitude scan” and will be observing over the Northern solar pole for ideal 3-D connection
- After Fall 2007, the THEMIS and STEREO orbits are most suitable for the 3-D characterization studies
- Explorer I launch on January 28, 1958: *50 years of science in space!*



Heliophysics Global Campaign Logistics

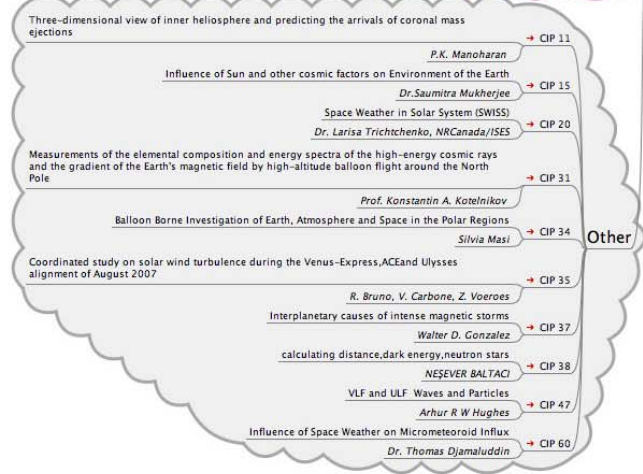
- CIPs are the basic building block of IHY science: Many CIPs will be conducted during the Global Campaign
- Hundreds of IHY Instruments will be ready to participate (this will be the largest coordinated space science activity ever?)
- All IHY instruments participate. Although the major missions will be popular for IHY CIPs, many of the participating smaller or less-known observatories will not be as eagerly recruited for CIPs. All IHY instruments are welcome and necessary for success.

 <p>John J. McCarthy Observatory</p>	<p>Coronado Instruments Helios I Solar Telescope</p>	<p>Amy ZIFFER</p>
 <p>Kanzelhoehe Solar Observatory</p>	<p>Vacuum Telescope, H alpha, Photoheliograph and Magnetograph</p>	
 <p>Kharkov Astronomical Observatory</p>	<p>Radiophysical Telescope</p>	<p>Oleg F. TYRNOV</p>
<p>King Abdul Aziz University Astronomy Observatory</p>	<p>Astronomical Observatory</p>	<p>Yaseen ALMLEAKY</p>
<p>Kuwait Muon Telescope</p>	<p>Muon Telescope</p>	<p>Ismail SABBAH</p>
<p>L'observatoire d'Alger (CRAAG)</p>	<p>Solar Refractor with H alpha and Ca</p>	<p>Samir NAITAMOR</p>

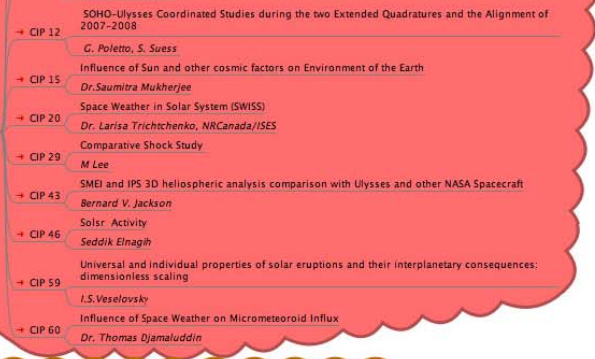


Astrobiology/Space Medicine

IHY Science



Other

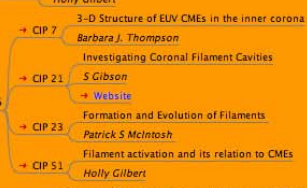


Solar

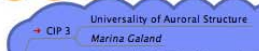
CMEs



Filaments



Other



Solar

Filaments

- CIP 35 Coordinated study on solar wind turbulence during the Venus-Express, ACE and Ulysses alignment of August 2007
R. Bruno, V. Carbone, Z. Voerens
- CIP 51 Filament activation and its relation to CMEs
Holly Gilbert
- CIP 7 3-D Structure of EUV CMEs in the inner corona
Barbara J. Thompson
- CIP 21 Investigating Coronal Filament Cavities
S Gibson
→ Website
- CIP 23 Formation and Evolution of Filaments
Patrick S McIntosh
- CIP 51 Filament activation and its relation to CMEs
Holly Gilbert

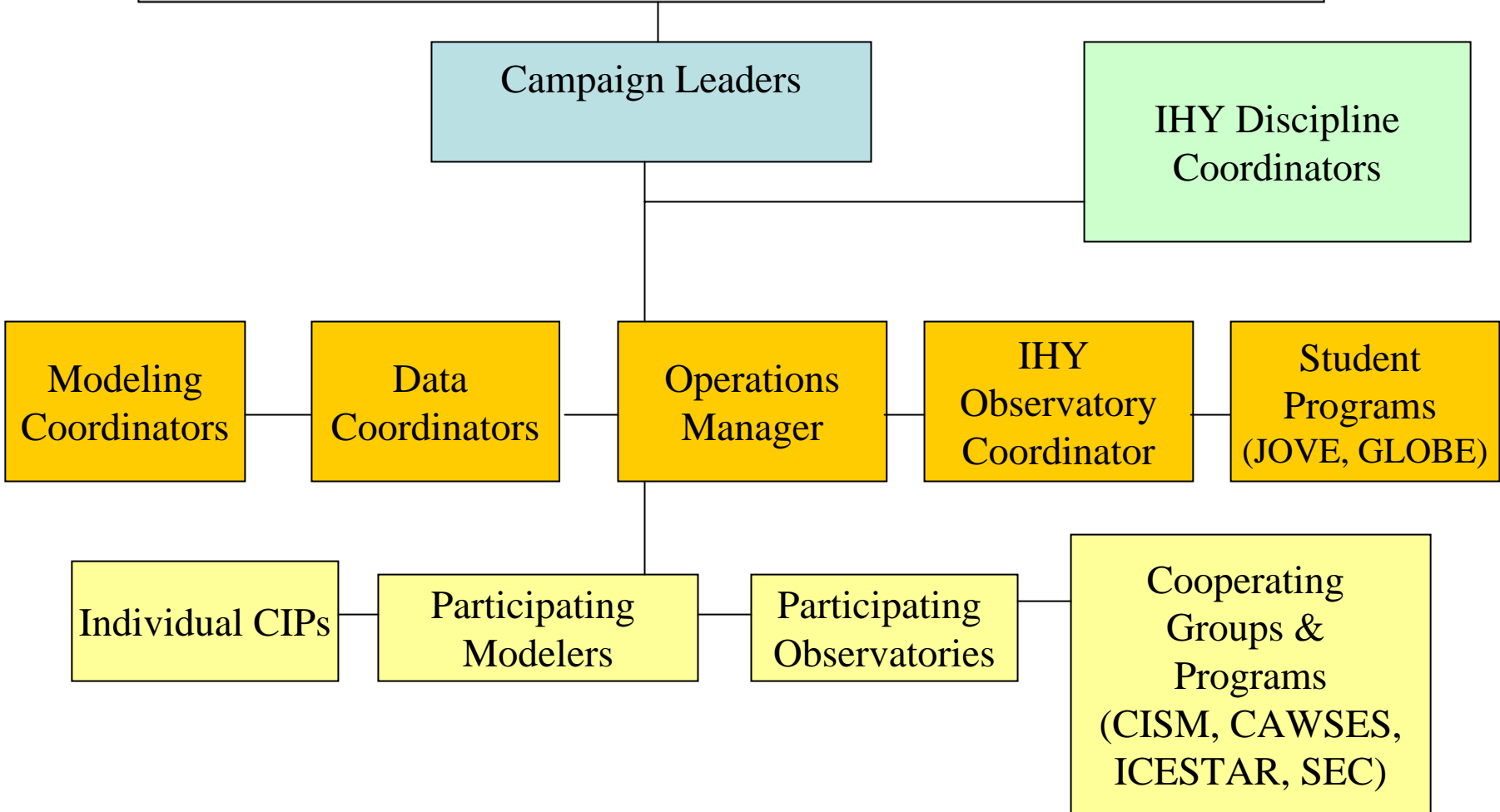
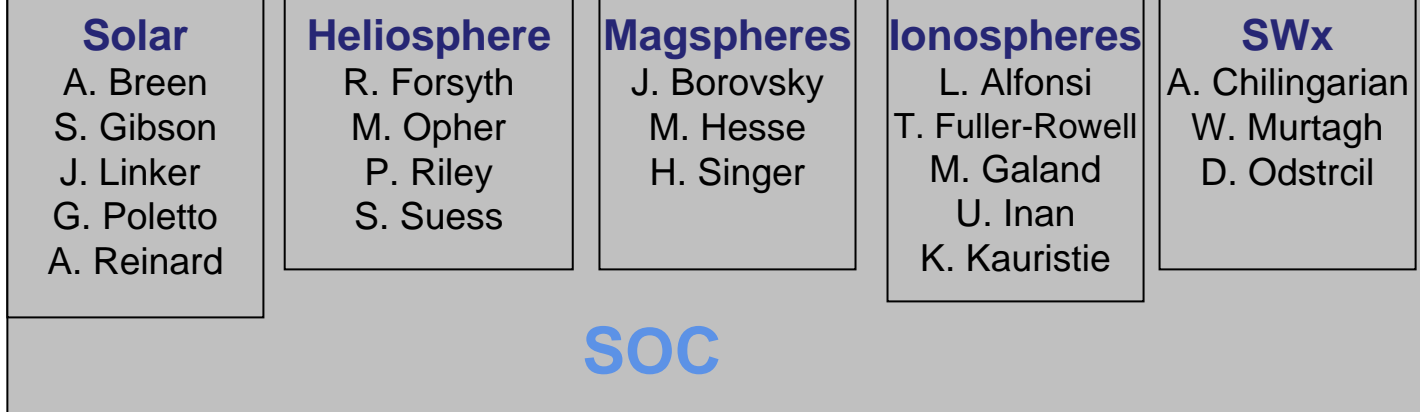
Other

- CIP 15 Influence of Sun and other cosmic factors on Environment of the Earth
Dr. Saumitra Mukherjee
- CIP 24 Effective Temperature of the Quiet Sun
P Fox
- CIP 32 Decameter Investigation Of The Sun Activity
Brazhenko Anatoly Ivanovich
- CIP 43 SMEI and IPS 3D heliospheric analysis comparison with Ulysses and other NASA Spacecraft
Bernard V. Jackson
- CIP 46 Solar Activity
Seddik Elnagih
- CIP 57 Solar Minimum Watching with Italian SINERGIES and More
Dr. Marisa Storini
- CIP 59 Universal and individual properties of solar eruptions and their interplanetary consequences: dimensionless scaling
I.S. Veselovsky
- CIP 60 Influence of Space Weather on Micrometeoroid Influx
Dr. Thomas Djameluddin

- CIP 3 Universality of Auroral Structure
Marina Galand

Heliophysics Global Campaign Logistics

- Approximately six weeks: one “heliospheric rotation” (solar rotation + solar wind transit time to Ulysses orbit)
 - Planning sessions to occur at upcoming meetings (SHINE, SPD, GEM, CEDAR)
 - Modelers play a major role in the planning of this campaign in order to obtain ideal information to improve our understanding of the system (Whole Sun Month model: CCMC, CISM, SEC, GEM)
 - IHY Data System Interface to track and report observations and make the data easily available
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- *The initial focus is on obtaining the most scientifically useful collection of data.*



What is Needed

- People to serve on the SOC (including at least one person from the appropriate programs: STEREO, GEM, SHINE, CEDAR, CAWSES, SEC, CISM, ICESTAR, JOVE)
 - Observing Proposals: SOHO & STEREO, VLA, HST
 - Individual CIP leaders (break the campaign up into manageable chunks)
 - Observatory contacts for each participating instrument
 - A name! WHIM FISH CLICHE SIGH
 - Next generation Sarah & Doug
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- First Coordination Telecon: 6 April 2007
 - IHY wiki: ihy2007.org/wiki/