

WHI Second Workshop Agenda

TUESDAY, NOVEMBER 10, 2009

Meeting starts at 9:00 AM

Invited talks ~20 minutes talk, 10 minutes discussion

Chair: Schroeder

1. **Overview of WHI** (Webb)
2. **Solar interior/dynamo context for the current minimum** (Miesch)
3. **WHI/current minimum in historical context** (Svalgaard)

Break (10:30-11:00)

Plenary discussion (with contributions from audience, 1-3 slides)

Moderators: Bisi and Gibson

WHI -- representative of solar minimum?

- *How well does WHI illustrate the current solar minimum? (do we need other periods of focus to “span” the minimum?)*
- *How does WHI and this minimum compare to prior minima?*

Lunch (12:30-1:30)

Plenary discussion (with contributions from audience, 1-3 slides)

Moderators: Petrie and Riley

WHI -- representative of solar minimum? Continued...

Break (3:00-3:30)

Parallel working group breakouts

A. Origin of solar variability

Moderators: de Toma and Haber

- *Observations: New results from “inside” and “outside” the Sun*
- *How to include observations into solar models?*
- *Can models explain this long minimum?*

B. Data-model comparison Sun to Earth (non-transient)

Moderator: Gibson

- *End-to-end comparison of data and models during WHI - Completing Carrington map/time-series project*
- *Beyond WHI -- plotting observables Sun to Earth from 2007-2009*

Meeting ends at 5:30 PM

WEDNESDAY, NOVEMBER 11, 2009

Meeting starts at 9:00 AM

Invited talks ~20 minutes talk, 10 minutes discussion

Chair: de Toma

1. **Magnetogram boundary conditions on models** (Bertello)
2. **Photospheric Magnetic Tracking of ARs 10987-9** (Welsch)

Plenary discussion (with contributions from audience, 1-3 slides)

Moderators: Jackson and Webb

Evolution and activity around WHI

- *How do ARs and CMEs fit in the global context of the WHI period?*
- *How does the evolution in the rotations surrounding WHI affect activity and heliospheric structure?*

Break (10:30-11:00)

Working group (earlier groups may reconvene in parallel)

C. Magnetogram boundary conditions on models

Moderator: Riley

Lunch (12:30 – 1:30)

Working group (earlier groups may reconvene in parallel)

D. Evolutionary context of CMEs and ARs

Moderators: Webb and Petrie

- *Complete the WHI CME catalog*
- *CME sources in the context of pseudo-streamers, streamers, coronal holes, and solar wind, i.e. the Mosaic*
- *Relation of sub-surface flows to transient activity*
- *Characterize WHI active regions*

Break (3:00-3:30)

Continuation of working group(s)

Meeting ends at 5:30

THURSDAY, NOVEMBER 12, 2009

Meeting begins at 9:00

Invited talks ~20 minutes talk, 10 minutes discussion

Chair: Gibson

1. **End-to-end model of WHI** (Wiltberger/Riley)
2. **Earth impacts -- radiation belts** (Baker)
3. **Earth impacts -- thermosphere** (Solomon)

Break (10:30-11:00)

Plenary discussion (with contributions from audience, 1-3 slides):

Moderators: Haberreiter and Burns

WHI: End to End – Part 1: irradiance origins/impacts

- *What was the irradiance during WHI?*
- *How can we understand its affect on the Earth*

Lunch (12:30-1:30)

Plenary discussion (with contributions from audience, 1-3 slides):

Moderators: Strachan and Simunac

WHI: End to End – Part 2: solar wind origins/impacts

- *What was the source of the high-speed streams?*
- *How do they appear in the heliosphere and how do they relate to what happens on the Sun?*
- *What are impacts at Earth and how does this relate to what happens at the Sun (geo-effectiveness)?*

Coffee break (3:00-3:30)

Working group (earlier groups may reconvene in parallel)

E. Irradiance

Moderator: Woods

- *Can we model a lower solar irradiance and its effects on geospace?*
- *Can surface features alone explain lower irradiance levels? Can the low-latitude coronal holes explain the 15% lower solar EUV irradiance during this minimum?*
- *What level of solar irradiance is expected from Earth's atmospheric data during this minimum? How much of these upper atmospheric changes are due to lower solar irradiance versus long-term climate change?*

Meeting ends 5:30

CONFERENCE DINNER: 6:30 PM - Trattoria on Pearl (sign up by Tuesday 3:00 PM!)

FRIDAY, NOVEMBER 13, 2009

Meeting starts 9:00

Working group reports

Coffee break (10:30-11:00)

Plenary Discussion

Moderators: Gibson/Bisi

Beyond WHI

- *WHI 2 and 3*
- *IAU comparative solar minima WG plans (e.g. 2011 symposium)*
- *WHI publications (JD16, special journal issue, journal, timeline)*

Meeting adjourns at noon.