

# ISSI Team 373 Towards a unified solar forcing input to climate studies

## MEETING 1, 20-23 FEBRUARY 2017

Monday, 20 February

### Session 1: Get started

~~10:00 – 10:20~~ Maurizio Falanga *Welcome and introduction to ISSI (cancelled)*

10:20 – 10:40 Natasha Krivova *Introduction: Team, Goals, Topics, Schedule*

10:40 – 11:00 All *Questions, Suggestions + break*

### Session 2a: Contrasts of magnetic features

11:00 – 11:25 Romaric Gravet *Observed UV contrast of magnetic features and implications on solar irradiance models*

11:30 – 11:55 Alice Cristaldi *Atmosphere models of solar quiet and magnetic regions derived from high resolution spectro-polarimetric observations*

12:00 – 12:25 Yvonne Unruh *Facular contrasts from 3D MHD models*

12:30 – 14:00 *Lunch & Chat*

### Session 3: Climate model needs

~~14:00 – 14:30~~ Katja Matthes *CMIP-6 experience: requirements to the solar input time series, concerns about existing records, policy makers (Skype, cancelled)*

14:00 – 14:30 Will Ball *Solar forcing in climate models*

14:30 – 15:00 Eugene Rozanov *Sensitivity of ozone and temperature to the applied SSI data set*

15:00 – 15:30 All *Discussion + break*

### Session 2b: Contrasts and proxies of magnetic features

15:30 – 16:00 Sami Solanki *Contrasts of magnetic features observed by SUNRISE*

16:10 – 16:50 Marty Snow *Mg II index on long and short timescales*

16:50 – 17:00 All *Discussion, Summary of the day*

~~17:00 – 17:30~~ Welcome drink

Tuesday, 21 February

### **Session 3: Irradiance observations**

09:00 – 09:45	Greg Kopp	<i>Long-term solar variability based on the TSI-measurement record; New TSI composite and its uncertainties</i>
09:45 – 10:15	All	<i>Discussion on TSI</i>
10:15 – 10:45	All	<i>Chat and Refresh</i>
10:45 – 11:45	Marty Snow	<i>SORCE/SSI</i>
11:45 – 12:15	All	<i>Discussion on SSI</i>
<b>12:15 – 14:00</b>	<b>Lunch &amp; Chat</b>	
14:00 – 14:30	Matt DeLand	<i>OMI SSI, update of the SSI composite (Skype)</i>

### **Session 4a: Irradiance models: Empirical models (overview and parameters)**

14:30 – 15:10	Odele Coddington	<i>NRLSSI-2 / NRLTSI-2</i>
15:10 – 15:30	All	<i>Discussion</i>
15:30 – 15:50	All	<i>Chat and Refresh</i>
15:50 – 16:30	Kok Leng Yeo	<i>EMPIRE</i>
16:30 – 16:50	All	<i>Discussion</i>
17:00 –	All	<i>Discussion, Summary of the day</i>

Wednesday, 22 February

### **Session 4b: Irradiance models: Other models (overview and parameters)**

09:00 – 09:40	Kok Leng Yeo	<i>SATIRE</i>
09:40 – 10:00	All	<i>Discussion</i>
10:00 – 10:40	Sami Solanki	<i>SATIRE-3D</i>
09:40 – 10:00	All	<i>Discussion</i>
10:00 – 10:30	All	<i>Chat and Refresh</i>
10:30 – 11:00	Sasha Shapiro	<i>Spectral profiles of irradiance variability on different time scales</i>
11:00 – 11:20	All	<i>Discussion</i>
11:20 – 12:00	Eugene Rozanov	<i>Millennium scale reconstruction of SSI/TSI with CHRONOS model</i>
12:00 – 12:20	All	<i>Discussion</i>
<b>12:20 – 14:00</b>	<b><i>Lunch &amp; Chat</i></b>	

### **Session 5: Comparisons**

14:00 – 14:30	Odele Coddington	<i>NRL2, SATIRE and SORCE comparisons</i>
14:30 – 14:45	All	<i>Discussion</i>
14:45 – 15:15	Matthieu Kretschmar	<i>Comparing the NRLSSI2 and SATIRE-S models: an external view</i>
15:15 – 15:30	All	<i>Discussion</i>
15:30 – 16:00	All	<i>Chat and Refresh</i>

### **Session 6: CMIP-6 irradiance record. Discussion**

16:00 – 17:30	Natasha Krivova, Greg Kopp, Will Ball, All	
17:30 –	All	<i>Discussion, Summary of the day</i>

Thursday, 23 February

### **Session 7: Summary, Plans**

09:00 – 09:45	Matthieu Kretschmar	<i>SOLID SSI composite</i>
10:00 – 10:45	Sasha Shapiro	<i>Solar variability: Stellar perspective</i>
11:00 – 11:30	Natasha Krivova	<i>Centennial time-scales: A brief overview and update on sunspot records</i>
11:30 – 13:00	All	<i>Discussion, Summary, Plans, Finale</i>

## PARTICIPANTS

Will Ball

Odele Coddington

Alice Cristaldi

Romarc Gravet

Matthieu Kretzschmar

Greg Kopp

Natalie Krivova

Eugene Rozanov

Alexander Shapiro

Marty Snow

Sami Solanki

Yvonne Unruh

Kok Leng Yeo

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Ilaria Ermolli (skype)

Matt DeLand (skype)

Katja Matthes (skype)

Jeff Morrill –