

Session 4 – PRESTO Pillar 3: Solar Activity and its Influence on Climate
 Conveners: Odele Coddington, Jie Jiang, Stergios Misios, Subramanian Gurubaran

Day 2: February 22, 2022

Day2-Time Slot 2 (D2-TS2): February 22, 2022 – GMT 0450 – 0640 IST 1020 – 1210		
Theme: Solar Magnetism		
Session Chair(s): Jie Jiang, Gurubaran Subramanian		
GMT	IST	Title of the Abstract
0450 – 0510	1020 – 1040	Abstract Id: STP15-ABS-170 Title: The Dynamo Basis of Decadal to Millennial Scale Variations in Solar Activity <i>Presenting Author: Dibyendu Nandi (invited)</i>
0510 – 0525	1040– 1055	Abstract Id: STP15-ABS-004 Title: Super-criticality of dynamo determines the memory of polar field <i>Presenting Author: Bidya Binay Karak</i>
0525 – 0540	1055 – 1110	Abstract Id: STP15-ABS-099 Title: A Babcock-Leighton Type Solar Dynamo Operating in the Bulk of the Convection Zone <i>Presenting Author: Zebin Zhang</i>
0540 – 0555	1110 – 1125	Abstract Id: STP15-ABS-197 Title: Impact of Anomalous Active Regions on the Large Scale Magnetic Fields of the Solar Cycle <i>Presenting Author: Shaonwita Pal</i>
0555 – 0610	1125 - 1140	Abstract Id: STP15-ABS-294 Title: Understanding the Global Coronal Magnetic Field Evolution using Data-constrained Magnetohydrodynamic Model <i>Presenting Author: Soumyaranjan Dash</i>
0610- 0640	1140 – 1210	Breakout Session

Day2-Time Slot 3 (D2-TS3): February 22, 2022 – GMT 1100 – 1250 IST 1630 – 1820		
Theme: Solar Magnetism and Solar Irradiance		
Session Chair(s): Jie Jiang, Gurubaran Subramanian		
GMT	IST	Title of the Abstract
1100 – 1110	1630 – 1640	Abstract Id: STP15-ABS-007 Title: Polar Precursor Method for Solar Cycle Prediction: Comparison of Predictors and Their Temporal Range <i>Presenting Author: Pawan Kumar</i>
1110 – 1120	1640 – 1650	Abstract Id: STP15-ABS-208 Title: Prediction of sunspot cycles with Hale cyclicity <i>Presenting Author: Timo Asikainen</i>
1120 – 1135	1650 – 1705	Abstract Id: STP15-ABS-307 Title: How solar magnetism will evolve? <i>Presenting Author: Quentin Noraz</i>
1135 – 1145	1705– 1715	Abstract Id: STP15-ABS-351

		Title: Comparison of Solar activity on spotless days during descending phases of solar cycle 23 and 24 <i>Presenting Author: Dipali Burud</i>
1145 – 1155	1715 – 1725	Abstract Id: STP15-ABS-336 Title: Decadal Long Decline of Solar Photospheric Magnetic Fields and a Prediction based on Solar Cycle Shape: Implications for the upcoming Solar Cycle 25 and beyond <i>Presenting Author: Susanta Bisoi</i>
1155 – 1205	1725 – 1735	Abstract Id: STP15-ABS-353 Title: Southern hemispheric dominance in the energy variation of periodicities in solar activity <i>Presenting Author: Jayalekshmi G L</i>
1205 – 1220	1735 – 1750	Abstract Id: STP15-ABS-160 Title: Solar irradiance variability in the chromospheric UV lines <i>Presenting Author: Sowmya Krishnamurthy</i>
1220- 1250	1750 – 1820	Breakout Session

Day 2-Time Slot5 (D2-TS5): February 22, 2022 – GMT 1440 – 1630 IST 2010 – 2200		
Theme: Solar Magnetism and Solar Irradiance		
Session Chair(s): Odele Coddington, Jie Jiang		
GMT	IST	Title of the Abstract
1440 – 1450	2010 – 2020	Abstract Id: STP15-ABS-285 Title: SDO/AIA 1600Å intensity depicts strong magnetic fields of plages. <i>Presenting Author: Ismo Tahtinen</i>
1450 – 1500	2020 – 2030	Abstract Id: STP15-ABS-235 Title: DigiSun: a software dedicated to scientific measurements of sunspots drawings <i>Presenting Author: Sabrina Bechet</i>
1500 – 1520	2030 – 2050	Abstract Id: STP15-ABS-039 Title: The TSIS-1 SIM Improvements and Advancements in Long-term Solar Spectral Irradiance Measurements: Comparisons to Other Measurements and Models <i>Presenting Author: Erik Richard (Invited)</i>
1520 – 1530	2050 – 2100	Abstract Id: STP15-ABS-023 Title: The Full Spectrum Extension to the TSIS-1 Hybrid Solar Reference Spectrum: Motivation, Results, & Comparisons to Independent Datasets <i>Presenting Author: Odele Coddington</i>
1530 – 1545	2100 – 2115	Abstract Id: STP15-ABS-345 Title: Solar irradiance variability on the Galileo Mission concept <i>Presenting Author: Franciele Carlesso</i>
1545 – 1600	2115 – 2130	Abstract Id: STP15-ABS-012 Title: Upper limit of the rise in solar brightness since the Maunder minimum <i>Presenting Author: Kok Leng Yeo</i>
1600 - 1630	2130 – 2200	Breakout Session

Day 3: February 23, 2022

Day 3-Time Slot 1 (D3-TS1): February 23, 2022 – GMT 0300 – 0450 IST 0830 – 1020		
<i>Theme: Direct and indirect observations of solar variability</i>		
<i>Session Chair(s): Odele Coddington, Gurubaran Subramanian</i>		
GMT	IST	Title of the Abstract
0300 – 0315	0830 – 0845	Abstract Id: STP15-ABS-043 Title: Solar Cycle Signals in the Mesospheric Tracers as Observed by Microwave Limb Sounder <i>Presenting Author: Jae Lee</i>
0315 – 0330	0845 – 0900	Abstract Id: STP15-ABS-086 Title: Time Variations of Mesospheric Ozone During the Solar Eclipse Observed with AURA/MLS <i>Presenting Author: Tianliang Yang</i>
0330 – 0345	0900 – 0915	Abstract Id: STP15-ABS-169 Title: Variation of ozone in the stratosphere and mesosphere over Antarctica: a study using Microwave Limb Sounder and millimetre wave radiometer <i>Presenting Author: Sneha Yadav</i>
0345 – 0455	0915 – 0925	Abstract Id: STP15-ABS-126 Title: GOES High cadence Operational Total Irradiance (GHOTI) <i>Presenting Author: Martin Snow</i>
0455 – 0405	0925 – 0935	Abstract Id: STP15-ABS-024 Title: Short and Rieger Type Periodicities in Solar Microwave Emission Using Nobeyama Radio Polarimeters Data During Solar Cycle 20-24 <i>Presenting Author: Mahender Aroori</i>
0405 – 0420	0935 – 0950	Abstract Id: STP15-ABS-199 Title: Is there a relation between the heliospheric magnetic field, cosmic rays and atmospheric electricity? <i>Presenting Author: Jaroslav Chum</i>
0420- 0450	0950 – 1020	Breakout Session

Day3-Time Slot 2 (D3-TS2): February 23, 2022 – GMT 0450 – 0640 IST 1020 – 1210		
<i>Energetic Particles and Chemistry-Climate Impacts; Solar Forcing on Earth's Climate</i>		
<i>Session Chair(s): Gurubaran Subramanian</i>		
GMT	IST	Title of the Abstract
0450 – 0510	1020 – 1040	Abstract Id: STP15-ABS-082 Title: Enhanced downwelling of NOx in the Antarctic upper stratosphere and its effects on ozone in the 21st century <i>Presenting Author: Ville Maliniemi (Invited)</i>
0510 – 0525	1040 – 1055	Abstract Id: STP15-ABS-103 Title: The Heppa III intercomparison experiment on electron precipitation impacts

		<i>Presenting Author: Miriam Sinnhuber</i>
0525 – 0540	1055 – 1110	Abstract Id: STP15-ABS-216 Title: Planetary waves and the effect of energetic electron precipitation on polar vortex <i>Presenting Author: Antti Salminen</i>
0540 – 0550	1110 – 1120	Abstract Id: STP15-ABS-127 Title: Investigating the ozone-climate feedback induced by ultraviolet solar radiation and energetic particles using ICON-ART-LINOZ <i>Presenting Author: Maryam Ramezani Ziarani</i>
0550– 0600	1120– 1130	Abstract Id: STP15-ABS-093 Title: Impact of chlorine ion chemistry on the ozone loss during very large solar proton events <i>Presenting Author: Monali Borthakur</i>
0600 – 0610	1130– 1140	Abstract Id: STP15-ABS-022 Title: Similar patterns of tropical precipitation and circulation changes under solar and greenhouse gas forcing <i>Presenting Author: Stergios Misios</i>
0610- 0640	1140 – 1210	Breakout Session

Day3-Time Slot 3 (D3-TS3): February 23, 2022 – GMT 1100 – 1250 IST 1630 – 1820		
<i>Theme: Solar forcing on the Earth's climate, Energetic Particles and Chemistry-Climate pacts</i>		
<i>Session Chair(s): Stergios Misios, Subramanian Gurubaran</i>		
GMT	IST	Title of the Abstract
1100 – 1115	1630 – 1645	Abstract Id: STP15-ABS-325 Title: Simulated signatures of solar activity over the North Atlantic: detection, timing, seasonality, and sensitivity to the forcing amplitude <i>Presenting Author: Paula Gonzalez</i>
1115 – 1125	1645– 1655	Abstract Id: STP15-ABS-241 Title: The Earth's climate variations during 17-24 solar cycles <i>Presenting Author: Lilia Biktash</i>
1125 – 1135	1655 – 1705	Abstract Id: STP15-ABS-066 Title: Climate Implications of the Sun transition to high Activity mode <i>Presenting Author: Tatiana Egorova</i>
1135 – 1145	1705– 1715	Abstract Id: STP15-ABS-315 Title: Influence of solar irradiance on future climate <i>Presenting Author: Jan Sedlacek</i>
1145 – 1155	1715– 1725	Abstract Id: STP15-ABS-161 Title: Long-term prediction of Sudden Stratospheric Warmings <i>Presenting Author: Mikhail Vokhmianin</i>
1155 – 1210	1725 – 1740	Abstract Id: STP15-ABS-123 Title: The impact of extreme solar events in the atmosphere <i>Presenting Author: Thomas Reddmann</i>
1210 – 1220	1740 – 1750	Abstract Id: STP15-ABS-009 Title: Massively enhanced atmospheric effects of strong

		solar proton events during geomagnetic reversals <i>Presenting Author: Pavle Arsenovic</i>
1220- 1250	1750 – 1820	Breakout Session

Day3-Time Slot 5 (D3-TS5): February 23, 2022 – GMT 1440 – 1630 IST 2010 – 2200		
Theme: Solar Forcing on the Earth's climate		
Session Chair(s): Stergios Misios, Odele Coddington		
GMT	IST	Title of the Abstract
1440 – 1455	2010 – 2025	Abstract Id: STP15-ABS-014 Title: Phase-locking Impact of the 11-year Solar Cycle on Tropical Pacific Decadal Variability <i>Presenting Author: Wenjuan Huo</i>
1455 – 1510	2025 – 2040	Abstract Id: STP15-ABS-342 Title: The 11-year solar cycle UV irradiance effect and its dependency on the Pacific Decadal Oscillation <i>Presenting Author: Sigmund Guttu</i>
1510 – 1525	2040 – 2055	Abstract Id: STP15-ABS-159 (Withdrawn) Title: The sensitivity of the tropical Pacific decadal climate variability to anthropogenic and solar forcing in a chemistry-climate model ensemble <i>Presenting Author: Tobias Spiegl</i>
1525 – 1540	2055– 2110	Abstract Id: STP15-ABS-130 Title: Revisiting the Influence of Solar Variability on North Atlantic Winter Climate <i>Presenting Author: Gabriel Chiodo</i>
1540 – 1600	2110 – 2130	Abstract Id: STP15-ABS-088 Title: The Sun's Role for Decadal Climate Predictability in the North Atlantic <i>Presenting Author: Annika Drews (Invited)</i>
1600 - 1630	2130 – 2200	Breakout Session

Day 4: February 24, 2022

Day4-Time Slot 1 (D4-TS1): February 23, 2022 – GMT 0300 – 0450 IST 0830 – 1020		
Theme: Direct and Indirect Observations of Solar Variability; Solar Forcing on the Earth's climate		
Session Chair(s): Odele Coddington, Stergios Misios		
GMT	IST	Title of the Abstract
0300 – 0310	0830 – 0840	Abstract Id: STP15-ABS-016 Title: An analysis of the Tropical Cyclones and Atlantic Hurricanes during 1979 to 2018 with the variation of Sunspot number and the influence of solar flux F10.7 and other solar activities <i>Presenting Author: Dhruva Banerjee</i>
0310 – 0320	0840 – 0850	Abstract Id: STP15-ABS-341 Title: In Search of Solar Cycle Signatures in the Earth's Middle Atmosphere: Observations vs. Model Simulations

		<i>Presenting Author: Karanam Kishore Kumar</i>
0320 – 0330	0850 – 0900	Abstract Id: STP15-ABS-259 Title: Trend analysis of total column ozone for three solar cycles over India. <i>Presenting Author: Swapnil Potdar</i>
0330 – 0340	0900 – 0910	Abstract Id: STP15-ABS-040 Title: Association between sunspot number and Indian summer monsoon rainfall: An exploration through artificial neural network <i>Presenting Author: Surajit Chattopadhyay</i>
0340 – 0350	0910– 0920	Abstract Id: STP15-ABS-036 Title: Response of the East Asian monsoon to 11-yr solar cycle <i>Presenting Author: Liang Zhao</i>
0350 – 0400	0920– 0930	Abstract Id: STP15-ABS-187 Title: Study of planetary wave activity in the mesopause region based on OH (6-2) emission observations at Maimaga station <i>Presenting Author: Vera Sivtseva</i>
0400 – 0410	0930 – 0940	Abstract Id: STP15-ABS-141 Title: Transient Extratropical Response to Solar Ultraviolet Radiation in the Northern Hemisphere Winter <i>Presenting Author: Chaim Garfinkel</i>
0420- 0450	0950 – 1020	Breakout Session