

Session 5: Space Weather Prediction and Implementation

Conveners: Kyung-Suk Cho, Peter Pilewskie, Pravata Mohanty

Day 3: February 23, 2022

Day 3-Time Slot3 (D3-TS3): February 23, 2022 – GMT 1100 – 1250 IST 1630 – 1820		
<i>Session Chair(s): Kyung Suk Cho, Peter Pilewskie</i>		
GMT	IST	Title of the Abstract
1100 – 1130	1630 – 1700	Abstract ID: STP15-ABS-279 Title: Physics-based prediction of large solar flares <i>Presenting Author: Kanya Kusano (Invited)</i>
1130 – 1145	1700 – 1715	Abstract ID: STP15-ABS-274 Title: Prediction of earthbound coronal mass ejections <i>Presenting Author: Sanchita Pal</i>
1145 – 1200	1715 – 1730	Abstract ID: STP15-ABS-282 Title: A Physics-Based Prototype Predictive Chain for Solar Energetic Particle Acceleration and Transport Forecasting in the Inner Heliosphere <i>Presenting Author: Kamen Kozarev</i>
1200 – 1210	1730 – 1740	Abstract ID: STP15-ABS-302 Title: A comparative study of various machine learning algorithms for forecasting solar flares <i>Presenting Author: Suvadip Sinha</i>
1210 – 1220	1740 – 1750	Abstract ID: STP15-ABS-253 Title: The First Release of Accurate AI-generated Solar Farside Magnetograms <i>Presenting Author: Hyun-Jin Jeong</i>
1220 – 1250	1750 – 1820	Breakout Session

Day 3-Time Slot5 (D3-TS5): February 23, 2022 – GMT 1440 – 1630 IST 2010 – 2200		
<i>Session Chair(s): Pravata Mohanty, Kyung Suk Cho</i>		
GMT	IST	Title of the Abstract
1440 – 1510	2010 – 2040	Abstract ID: STP15-ABS-238 Title: Advancing our Prediction Capabilities of the Outer Radiation Belt Dynamics <i>Presenting Author: Ioannis Daglis (Invited)</i>
1510 – 1525	2040 – 2055	Abstract ID: STP15-ABS-212 Title: Development of Space Environment Customized Risk Estimation for Satellite (SECURES) <i>Presenting Author: Tsutomu Nagatsuma</i>
1525 – 1540	2055 – 2110	Abstract ID: STP15-ABS-131 Title: On the influence of interacting solar wind disturbances <i>Presenting Author: Nataly Shlyk</i>
1540 – 1550	2110 – 2120	Abstract ID: STP15-ABS-190

		Title: 72-hour Forecasting of Relativistic Electron Fluxes at Geostationary Orbit by Deep Learning <i>Presenting Author: Jihyeon Son</i>
1550 – 1600	2120 – 2130	Abstract ID: STP15-ABS-148 Title: A synthetic test of ensemble forecasting of the energetic particle fluxes at geosynchronous orbit <i>Presenting Author: Ruotong Liu</i>
1600 – 1630	2130 – 2200	Breakout Session

Day 4: 24 February 2022

Day 4 - Time Slot1 (D4-TS1): February 24, 2022 – GMT 0300 – 0450 IST 0830 – 1020		
<i>Session Chair(s): Kyung Suk Cho, Peter Pilewskie</i>		
GMT	IST	Title of the Abstract
0300 – 0315	0830 – 0845	Abstract ID: STP15-ABS-132 Title: Mid-term Research Plan of NICT Space Weather Monitoring and Forecast <i>Presenting Author: Mamoru Ishii</i>
0315 – 0330	0845 – 0900	Abstract ID: STP15-ABS-254 Title: Visual explanation of a deep learning flare forecast model and its physical implications <i>Presenting Author: Kangwoo Yi</i>
0330 – 0345	0900 – 0915	Abstract ID: STP15-ABS-256 Title: Unsupervised machine learning algorithm for optimal placement of GNSS receivers over Indian region for space weather studies <i>Presenting Author: Babu Sree Harsha P</i>
0345 – 0400	0915 – 0930	Abstract ID: STP15-ABS-281 Title: Global IGS-3D electron density (Ne) model by Deep Learning <i>Presenting Author: Eun-Young Ji</i>
0400 – 0410	0930 – 0940	Abstract ID: STP15-ABS-252 Title: 3-day Forecasting of Global TEC Maps Using a set of Deep Learning Models <i>Presenting Author: Jinkoo Yim</i>
0410 – 0420	0940 – 0950	Abstract ID: STP15-ABS-312 Title: Conjugate hemisphere ionospheric asymmetry in the South Asian sector around 95°E <i>Presenting Author: Prantika Nath</i>
0420 – 0510	0950 – 1020	Breakout Session

Day 4 - Time Slot 2 (D4-TS2): February 24, 2022 – GMT 0450 – 0640 IST 1020 – 1210		
<i>Session Chair(s): Pravata Mohanty, Peter Pilewskie</i>		
GMT	IST	Title of the Abstract
0450 – 0505	1020 – 1035	Abstract ID: STP15-ABS-192 Title: Long-term solar activity dependence of cosmic ray muon flux observed by the GRAPES-3 muon telescope <i>Presenting Author: Meeran Zuberi</i>
0505 – 0520	1035 – 1050	Abstract ID: STP15-ABS-218 Title: Association of large GIC events with geomagnetic storms and corresponding solar wind and IMF <i>Presenting Author: Balan Nanan</i>
0520 – 0535	1050 – 1105	Abstract ID: STP15-ABS-074 Title: Observation of Interplanetary magnetic fields using ground-based cosmic ray detector. <i>Presenting Author: Arun Babu Kollam parambil Paul</i>
0535 – 0550	1105 – 1120	Abstract ID: STP15-ABS-135 Title: Local Time Behaviour of IRI-2016 Bottomside Ionospheric Profile Parameters (B0 and B1) from FORMOSAT-7/ COSMIC-2 GNSS Radio Occultations <i>Presenting Author : Arun Singh</i>
0550 – 0600	1120 – 1130	Abstract ID: STP15-ABS-191 Title: Probing solar storms with GRAPES-3 scintillator detectors <i>Presenting Author: Hari Haran Balakrishnan</i>
0600 – 0610	1130 – 1140	Abstract ID: STP15-ABS-207 Title: Multi-model predictability assessment of TEC and F2 layer parameters during geomagnetic storm days around 100°E <i>Presenting Author: Angkita Hazarika</i>
0610 – 0620	1140 – 1450	Abstract ID: STP15-ABS-183 Title: Forecasting geomagnetic activity (Dst Index) using the Ensemble Kalman filter <i>Presenting Author: Nilam Bhosale</i>
0620 – 0650	1150 – 1220	Breakout Session

Day 4 -Time Slot 3 (D4-TS3): February 24, 2022 – GMT 1100 – 1250 IST 1630 – 1820		
<i>Session Chair(s): Peter Pilewskie, Pravata Mohanty</i>		
GMT	IST	Title of the Abstract
1100 – 1115	1630 – 1645	Abstract ID: STP15-ABS-309 Title: Real-time modelling and forecasting of solar wind disturbances from Sun to Earth <i>Presenting Author: Rui Pinto</i>
1115 – 1130	1645 – 1700	Abstract ID: STP15-ABS-230 Title: Integration and optimization of the coronal model Wind-Predict for the Virtual Space Weather Modeling Center

		<i>Presenting Author: Barbara Perri</i>
1130 – 1145	1700 – 1715	Abstract ID: STP15-ABS-154 Title: Solar wind driven TEC forecast using reconstruction via historical CME and CIR <i>Presenting Author: Erik Schmölder</i>
1145 – 1155	1715 – 1725	Abstract ID: STP15-ABS-305 Title: Impact of the geomagnetic storms of 2012 and 2015 solstice on TEC around 100°E longitude sector <i>Presenting Author: Mayur Choudhary</i>
1155 – 1205	1725 – 1735	Abstract ID: STP15-ABS-046 Title: Observations of GICs in the main transmission line "Northern Transit" in Russia during intense substorms: case study <i>Presenting Author: Pavel Setsko</i>
1205 – 1215	1735 – 1745	Abstract ID: STP15-ABS-085 (<i>Pre-recorded</i>) Title: Prediction of 11-year solar cycle strength with Hemispheric Sunspot Numbers <i>Presenting Author: Shantanu Jain</i>
1215 – 1245	1745 – 1815	Breakout Session