

XIII COLAGE PROGRAM

Monday, 28 th November 2022		
Begin	End	Activity
07:30	08:30	Transportation to INPE
08:30	08:45	REGISTRATION & OPEN CEREMONY
08:45	09:00	
09:00	09:15	
09:15	09:30	
SESSION 3: SOLAR PHYSICS, HELIOSPHERE, AND COSMIC RAYS		
09:30	09:45	<u>Invited:</u> Fadil Inceoglu , <i>Unveiling The Interplay Of Convection, Drift, And Diffusion On GCR Modulation In The Inner Heliosphere Using Light Gradients Boosting Machines</i> (Virtual Presentation)
09:45	10:00	
10:00	10:15	Rockenback et al. , <i>What Cosmic Rays Daily Variations Can Tell Us About The Solar-Terrestrial Environment?</i>
10:15	10:30	Gutierrez and Dasso , <i>Galactic Cosmic Ray Shielding By ICMEs And SIR: Superposed Epoch Analysis</i>
10:30	10:45	Coffee Break
10:45	11:00	
11:00	11:15	POSTER PRESENTATION - SESSIONS 1 & 3 -
11:15	11:30	
11:30	11:45	
11:45	12:00	
12:00	12:15	
12:15	12:30	
12:30	14:00	
Lunch Time		
SESSION 1: SPACE WEATHER		
14:00	14:15	<u>Invited:</u> Mamoru Ishii , <i>The Present And Future In Operational Space Weather International Cooperation</i> (Virtual Presentation)
14:15	14:30	
14:30	14:45	Collado-Vega et al. , <i>The Moon To Mars Space Weather Analysis Office; Mission, Goals And Concept Of Operations</i>
14:45	15:00	Molina et al. , <i>Machine Learning Based Ionospheric Forecasting: Towards Operative Implementation</i>
15:00	15:15	Yupanqui et al. , <i>Ensemble Forecasts Of Geomagnetic Indexes</i>
15:15	15:30	De la Torre et al. , <i>Computational Tools For Modeling The Chasqui A And Chasqui B Nanosatellite Missions In Space Weather Study</i>
15:30	15:45	Coffee Break
15:45	16:00	
SESSION 4: SOLAR WIND, MAGNETOSPHERE, AND GEOMAGNETISM		
16:00	16:15	<u>Invited:</u> David G. Sibeck and the Storm Team , <i>STORM: A Magnetospheric Imaging Mission</i>
16:15	16:30	
16:30	16:45	Cutait et al. , <i>Study Of The Solar Wind Energy Transfer To The Earth's Magnetosphere</i>
16:45	17:00	López and Gonzalez , <i>Magnetic Storm Intensity And The Dst Index</i>
17:00	17:15	Silveira et al. , <i>Continuously Tracking The Bow Shock And Magnetopause: Observations</i>
17:15	17:30	Valdivia et al. , <i>The Universality Of The Kinetic Regulation Of Plasma Turbulence And Thermally Induced Electromagnetic Fluctuations</i>
17:30	17:45	Ferreira et al. , <i>The ULF Waves’ Activity In The Inner Magnetosphere Under The Influence Of Low-Beta Supercritical Interplanetary Shock Waves</i>
17:45	18:00	Da Silva et al. , <i>The Role Of The Inner Radiation Belt Dynamic In The Generation Of Auroral-type Sporadic E-layers Over South American Magnetic Anomaly (SAMA)</i>
18:00	19:00	Transportation to Hotel

Tuesday, 29 th November 2022		
Begin	End	Activity
07:30	08:30	Transportation to INPE
SESSION 2: IONOSPHERE AND UPPER ATMOSPHERE		
08:30	08:45	<u>Invited:</u> Ângela M. Santos et al. , <i>An Overview Of The Intriguing Descending Layers Over The Brazilian Sector Based On Recent Finds</i>
08:45	09:00	
09:00	09:15	Brians et al. , <i>Modeling The Influence Of Upward Propagating Waves On Vertical Plasma Drift Based On The Whole Atmosphere Community Climate Model-Extended</i>
09:15	09:30	Aricoché et al. , <i>Modeling Ionograms With Deep Neural Networks And Electron Densities Forecasting: Recent Advances And Comparisons</i>
09:30	09:45	Klipp et al. , <i>Modeling Ionosphere Topside Density Profile In SUPIM-DAVS</i>
09:45	10:00	Rohr et al. , <i>TEC Forecasting Based On Seasonal Machine Learning Model</i>
10:00	10:15	Carmo et al. , <i>Evaluation Of Different Methods For Calculating The ROTI Index Over The Brazilian Sector</i>
10:15	10:30	Mesquita et al. , <i>Observing System Simulation Experiment And The EZIE mission</i>
10:30	10:45	Coffee Break
10:45	11:00	
11:00	11:15	
11:15	11:30	<u>Plenary:</u> R. Mesquita et al. , <i>The Electrojet Zeeman Imaging Explorer (EZIE) Mission: Science, Data Products, And Opportunities</i> AWARD Mario Acuña
11:30	11:45	
11:45	12:00	
12:00	12:15	
12:15	12:30	
12:30	14:00	Lunch Time
SESSION 3: SOLAR PHYSICS, HELIOSPHERE, AND COSMIC RAYS		
14:00	14:15	<u>Invited:</u> Maria C. de A. R. Soares , <i>Analysis Of Sunspots And Flares Using Solar Acoustic Models Which Propagate In The Solar Interior</i> (Virtual Presentation)
14:15	14:30	
14:30	14:45	Jafarzadeg et al. , <i>Wave Studies In The Lower Solar Atmosphere With Solar Orbiter</i>
14:45	15:00	Dasso et al. , <i>Analysis Of The Magnetic Twist Inside Magnetic Clouds</i>
15:00	15:15	Barroso et al. , <i>Sunspot Waves At High Resolution</i>
15:15	15:30	Da Silva et al. , <i>Statistical Analysis of the Onsets of Solar Flares in Xray Soft</i>
15:30	15:45	Coffee Break
15:45	16:00	
SESSION 5: SPACE PLASMA PHYSICS AND NONLINEAR PROCESSES IN SPACE GEOPHYSICS		
16:00	16:15	<u>Invited:</u> Breno Raphaldini , <i>Rossby Waves As An Organizing Mechanism For The Magnetic Activity Of The Sun</i> (Virtual Presentation)
16:15	16:30	
16:30	16:45	A. Chian , <i>Observation Of Coherent Structures In Solar Supergranular Turbulence</i>
16:45	17:00	Clark et al. , <i>Discharges In A Non-Local System: The Waiting Time Behavior</i>
17:00	17:15	Miranda et al. , <i>The Role Of Coherent Structures In Intermittent Magnetic Field Turbulence</i>
17:15	17:30	Eyelade et al. , <i>The Response Of The Ion And Electron Kappa Distribution Functions In The Inner Magnetosphere To Solar Wind Conditions</i>
17:30	17:45	Mendes et al. , <i>Comparison Of High And Low Latitude Magnetic Effects Related To HILDCAAs: Cases Studied</i>
17:45	18:00	P. Dmitruk , <i>Test Particle Energization Of Protons And Heavy Ions In Magnetohydrodynamic Turbulent Environments In Space Physics</i>
18:00	19:00	Transportation to Hotel

Wednesday, 30 th November 2022		
Begin	End	Activity
07:30	08:30	Transportation to INPE
SESSION 3: SOLAR PHYSICS, HELIOSPHERE, AND COSMIC RAYS		
08:30	08:45	<u>Invited:</u> Paulo Simões, <i>Exploring The TeraHertz Sun</i> (Virtual Presentation)
08:45	09:00	
09:00	09:15	Amaro et al., <i>Study On The Role Of The Gyroresonance Emission Mechanism In The Brightness Intensification At 17 GHz Of Solar Active Regions</i>
09:15	09:30	Santos and Castanheira, <i>Investigation of the motion of sunspots associated with the active region NOAA 12673 during its passage close to the solar disk center</i>
09:30	09:45	Oseni et al., <i>Observation Of Magnetic Flux Ropes In The Interplanetary Medium</i>
09:45	10:00	Jeunon et al., <i>Investigating The Effects Of Erosion In Magnetic Flux Ropes</i>
10:00	10:15	Silva et al., <i>A Genetic Algorithm To Model Solar Radio Active Regions From 3D Magnetic Field Extrapolations</i>
10:15	10:30	Justino et al., <i>Sunspots Detection And Analysis Using Artificial Intelligence And Big Data</i>
10:30	10:45	Coffee Break
10:45	11:00	
11:00	11:15	POSTER PRESENTATION - SESSION 2 -
11:15	11:30	
11:30	11:45	
11:45	12:00	
12:00	12:15	
12:15	12:30	
12:30	14:00	
Lunch Time		
SESSION 4: SOLAR WIND, MAGNETOSPHERE, AND GEOMAGNETISM		
14:00	14:15	<u>Invited:</u> Gelvam A. Hartmann, <i>Geomagnetic Field Fluctuations In South America For The Last Millennia</i> (Virtual Presentation)
14:15	14:30	
14:30	14:45	Espinosa et al., <i>GICs Modeling In The 525 kV Power Network Of North-Northeast Brazil Using A 3-D Earth Resistivity Model</i>
14:45	15:00	Jácome et al., <i>Jovian Decametric Radio Emissions Induced By Europa</i>
15:00	15:15	Echer et al., <i>ULF Waves At Venus: Venus Express Observations</i>
15:15	15:30	Franco et al., <i>A Statistical Study Of Wave Penetration Into The Martian Ionopause</i>
15:30	15:45	Coffee Break
15:45	16:00	
SESSION 2: IONOSPHERE AND UPPER ATMOSPHERE		
16:00	16:15	<u>Invited:</u> Fabiano Rodrigues et al., <i>On Ionospheric Scintillation And Total Electron Content Observations Made By Low-Cost GNSS-Based Radio Sensors</i>
16:15	16:30	
16:30	16:45	Scipion et al., <i>New Jicamarca Unattended Low Investigations Of The Atmosphere (JULIA) Using The New Mid-Power Solid-State Transmitters</i>
16:45	17:00	Adebayo and Pimenta, <i>Airglow Imaging Observations Of Some Evolutionary Aspects Of Plasma Blobs During Solar Minimum Over The Tropical Region</i>
17:00	17:15	Barros et al., <i>Effects Of Transequatorial Thermospheric Meridional Winds On The Equatorial Plasma Bubbles Development</i>
17:15	17:30	Das and Paul, <i>Occurrences Of Summer Night-time E-region FAIs Observed By CU-Radar</i>
17:30	17:45	Milla et al., <i>Incoherent Scatter Spectral Measurements With AMISR-14 At Jicamarca</i>
17:45	18:00	Tunde et al., <i>Long-Term Variation of Gravity Wave Parameters Over 60° and 30°W - 90°W Derived From the TIMED/SABER Measurements</i>
18:00	19:00	Transportation to Conference Dinner
19:00	22:00	Conference Dinner – Steakhouse “Boigalê”

Thursday, 1 st December 2022		
Begin	End	Activity
07:30	08:30	Transportation to INPE
SESSION 2: IONOSPHERE AND UPPER ATMOSPHERE		
08:30	08:45	<u>Invited:</u> Frederico Conte et al. , <i>MLT Studies Along The Andes Mountain Range Using Multistatic Meteor Radar Configurations</i> (Virtual Presentation)
08:45	09:00	
09:00	09:15	Andrioli et al. , <i>Fast Metallic Neutral Sporadic Layer A Case Study On 27/08/2019</i>
09:15	09:30	Suclupe et al. , <i>Climatology Of Tides And Quasi-Two-Days PWs In The MLT Region Over The Central Coast Of Peru (11.95°S, 76.87°W) And Comparison With WACCM-X Model</i>
09:30	09:45	Wrasse et al. , <i>Generation And Propagation Of Quasi-Monochromatic Gravity Waves Observed Over Southern Brazil From April 2017 To April 2022</i>
09:45	10:00	Afolabi et al. , <i>Study And Modelling Of The Brazilian Low Latitude Ionosphere Response To The Occurrence Of 22-23 2015 Geomagnetic Storm</i>
10:00	10:15	Sergeeva et al. , <i>Observation Of Solar Flare Effects Over Mexico</i>
10:15	10:30	Takahashi et al. , <i>Tonga Volcanic Eruption: What We Observed In The Ionosphere Over The South American Continent</i>
10:30	10:45	Coffee Break
10:45	11:00	
11:00	11:15	<u>Plenary:</u> Madhulika Guhathakurta , <i>Catalyzing Academic And Private Partnerships In The Use Of Big Data For Space Exploration And Human Benefit</i>
11:15	11:30	
11:30	11:45	
11:45	12:00	
12:00	12:15	AWARD Ruth Gall
12:15	12:30	
12:30	14:00	Lunch Time
SESSION 1: SPACE WEATHER		
14:00	14:15	<u>Invited:</u> Joaquim E. R. Costa and Embrace Team , <i>The Research And Service Plans Of EMBRACE Program</i>
14:15	14:30	
14:30	14:45	Santos et al. , <i>Space Weather R202R Activities Developed By LAMP</i>
14:45	15:00	Klipp et al. , <i>Evaluation Of Ionosphere Simulation Results Using EUVAC And SOLAR2000</i>
15:00	15:15	Gonzalez-Esparza et al. , <i>Monitoring Space Weather In Mexico During The Declining Phase And Minimum Of Solar Cycle 24</i>
15:15	15:30	Hsieh and Sibeck , <i>Ground-Based All-Sky Auroral Imaging For Space Weather Research</i>
15:30	15:45	Coffee Break
15:45	16:00	
16:00	16:15	<u>Panel:</u> <i>Latinxs in Space Geophysics: Discussing Gender Bias in ALAGE/COLAGE</i> Chair: Laysa Cristina Araújo Resende Panelist #1: Alessandra Abe Pacini Panelist #2: Vânia Fátima Andrioli Panelist #3: Maria Graciela Molina
16:15	16:30	
16:30	16:45	
16:45	17:00	
17:00	17:15	
17:15	17:30	
17:30	17:45	
17:45	18:00	
18:00	19:00	
Transportation to Hotel		

Friday, 2 nd December 2022		
Begin	End	Activity
07:30	08:30	Transportation to INPE
SESSION 1: SPACE WEATHER		
08:30	08:45	A. Dal Lago , <i>ICME High Intensity Sheath Magnetic Fields And Their Geoeffectiveness</i>
08:45	09:00	Romero-Corona et al. , <i>A Semi-Empirical Approach To The Dynamic Coupling Of CMEs And Solar Wind</i>
09:00	09:15	Nascimento et al. , <i>Convolutional Neural Network Applied In The Identification And Classification Of Shock Waves</i>
09:15	09:30	C. Bertucci , <i>Plasma Boundaries In Induced Magnetospheres</i>
09:30	09:45	Stepanova et al. , <i>The Influence Of The Solar Wind On The Inner Magnetosphere Plasma Pressure And The Geomagnetic Field Configuration</i>
09:45	10:00	Bolzan et al. , <i>Multifractality Observed In HILDCAAS Events</i>
10:00	10:15	Pinto et al. , <i>Forecasting Ground Magnetic Perturbations Using Deep Learning And Near Real-Time Data</i>
10:15	10:30	Stalder et al. , <i>Type III Solar Radio Bursts Observations By Paraguay CALLISTO Spectrometer: First Results</i>
10:30	10:45	Coffee Break
10:45	11:00	
11:00	11:15	POSTER PRESENTATION - SESSIONS 4 & 5 -
11:15	11:30	
11:30	11:45	
11:45	12:00	
12:00	12:15	
12:15	12:30	
12:30	14:00	Lunch Time
14:00	14:15	COLAGE Assembly
14:15	14:30	
14:30	14:45	
14:45	15:00	
15:00	15:15	
15:15	15:30	
15:30	15:45	Coffee Break
15:45	16:00	
16:00	16:15	AWARD Roberto Manzano COLAGE Assembly COLAGE Closing
16:15	16:30	
16:30	16:45	
16:45	17:00	
17:00	17:15	
17:15	17:30	
17:30	17:45	
17:45	18:00	
18:00	19:00	Transportation to Hotel

XIII COLAGE – Poster

SESSION 1: SPACE WEATHER

MSO: Americo Gonzalez Esparsa, UNAM, Mexico

Co-SO: Sergio Dasso, UBA, Argentina

Co-SO: Clezio Marcos De Nardin, INPE, Brazil

Serial Number	Authors	Title
S01_N01	P. K. Purohit and R. Ahmad	Investigation Of Annual And Semi-Annual Variation Of F2 Layer In The Two Hemispheres And Its Comparison With IRI Model
S01_N03	C. M. Denardini; G. A. S. Picanço; C. S. Carmo; S. S. Chen; J. Moro; L. C. A. Resende; R. P. Silva; P. F. Barbosa Neto; P. A. B. Nogueira; E. Romero-Hernández; J. F. B. Campelo; G. Stefani	On The Studies Of Magnetic Storms And Equatorial Plasma Bubbles Over The American Sector Based On Ionospheric And Magnetic Indices
S01_N05 WITHDRAW	D. Perez-Bello; M.P. Natali; A. Meza; L.P.O. Mendoza	Multi-Stec VTEC Forecasting With Neural Networks Over South America
S01_N06 WITHDRAW	D. Perez-Bello; M. P. Natali; A. Meza; L. P. O. Mendoza; J. M. Castaño	Applying Geostatistics And Depp Learning In Space Weather
S01_N07	V. H. De La Luz and S. Tinoco	The Interdisciplinary Laboratory Of Scientific Computing (LINCC)
S01_N08	E. L. B. C. Barros; M. J. A. Bolzan; P. F. Gomes	Fourier Analysis Of The One Decade Of H-Component Geomagnetic Field Observed At Jatai, Brazil
S01_N10	J. C. Mejia-Ambriz; E. Aguilar-Rodríguez; J. A. Gonzalez-Esparza; P. Villanueva Hernández; E. Andrade Mascote; G. Baron- Martínez; A. R. Espinosa Jiménez	Quasi Real-Time Remote Sensing Of Solar Wind Using The New Digital Back-End Of MEXART
S01_N11	R. L. C. Madeira; J. R. De Souza; C. R. De Aguiar; A. M. Dos Santos	TEC Map Generation Over The South American Sector Using Combined GNSS And Ionosonde Data
S01_N12	G. A. Mansilla and M. M. Zossi	Sub-Auroral Ionospheric Effects Of The April 14, 2022 Magnetic Storm
S01_N13	T. O. Osanyin; C. M. N. Candido; F. Becker-Guedes; Y. Migoya-Orue; S. F. Chingarandi	Study Of Ionospheric Response To Geomagnetic Disturbances Using TEC Regional Maps And The NeQuick 2 Model
S01_N14	M. M. Zossi and G. A. Mansilla	Changes On The Ozone With The Entry Of Energetic Protons In South Atlantic Anomaly Zone During Severe Geomagnetic Storms. Influence Of The QBO Sign
S01_N15	J. M. Castaño and A. M. Meza	Analysis Of Ionospheric Disturbances Produced By Solar Wind Variations Using Different Ionospheric Parameters
S01_N16	E. Huipe Domratcheva and V. De La Luz Rodriguez	Estimating D Region Absorption Radio Blackouts In The HF Range Over Mexico
S01_N17	G. González-González and V. M. Velasco-Herrera	Influence Of Space Weather Phenomena Periodicity (~1.7 Years) On Epilepsy Incidence

S01_N21	N. Romanova; A. M. Inostroza; M. Stepanova; V. Pinto; E. E. Antonova	Behavior Of The Energetic Electron Fluxes And The Auroral Oval During 1 June 2013 Geomagnetic Storm
S01_N22	E. F. M. T. São Sabbas; Y. Y. Yair; J. M. Velarde; C. L. T. F. Oliveira; R. G. Negri; D.M. Uba; M. S. Custódio	2022 TLE Campaign With The Ground- Based South American Network LEONA And The Spaceborne Israeli Mission ILAN-ES
S01_N23	Oliveira, C. L. T. F; São Sabbas, E. F. M. T.; Custodio, M. S.	Life Cycle Of TLE-Producing Storms Detected By The LEONA Collaborative Network
S01_N24	J. R. Souza; R. L. Sá; R. L. C. Madeira; I. S. Batista; J. Riccobono; M. A. Migliozi; S. Kapali; B. Kerr; P. Dandenault; J. Noto; A. M. Santos	Thermospheric Neutral Winds Impact On The Ionosphere Over Cachoeira Paulista
S01_N25	R. Gutierrez-Zalapa; M. Rodriguez- Martinez; E. Aguilar-Rodriguez; J. Estevez-Delgado; J. A. Gonzalez-Esparza	Study Of The Dynamics Of An Asteroid When It Travels Through Earth's Atmosphere
S01_N26	J. Newton Bosch; L. X. González; S. Perea; J. F. Valdés; F. Monterde; Y. Muraki; Y. Matsubara; T. Sako; K. Watanabe; O. Musalem; A. Hurtado	Signatures Of Space Weather Events During Solar Cycle 24's Descending Phase On The Solar Neutron Telescope At Sierra Negra, Mexico
S01_N27 WITHDRAW	A. M. Vasquez; D. G. Lloveras; F.A. Nuevo; R.A. Frazin; N. Sachdeva; W.B. Manchester; B. Van Der Holst; P. Lamy; H. Gilardy	EUV And Visible Light Tomography As Validation Tool For 3D-MHD Coronal Models
S01_N28	Molina, M. G.; Bravo, M. A.; Ovalle, E.; J. Lopez; B. Urra; M. Nacud; J. Namour; S. Tarulli; M. Martinez-Ledesma; L. Pascuale	The Argentinian-Chilean Validated Ionospheric Database (ACVID)
S01_N30	A. R. Piassi; C. M. Denardini; S. S. Chen	Preliminary Analysis Of Sudden Commencement Morphology Of 4 November 2021 Geomagnetic Storm In The SAMA Region
S01_N32 WITHDRAW	R. Caraballo; J. A. González-Esparza; C. Ramírez Pacheco; P. Corona-Romero	New GIC Measurements And Estimates In The Mexican Power Grid
S01_N35	J. A. González-Esparza	Cataloging Space Weather Hazards. Defining Extreme Events
S01_N36	J. A. Gonzalez-Esparza; E. Aguilar- Rodriguez; M. A. Sergeeva; P. Corona-Romero; L.X. Gonzalez; J.C. Mejia-Ambriz; J.J. González-Aviles; E. Romero-Hernández; E. Perez- Tijerina; E. Sánchez-Garcia; R. Caraballo; M. Rodriguez; O. Chang- Martínez; J.C. Villagrán-Orihuela; V. Ontiveros-Hernandez	Monitoring Space Weather In Mexico During The Declining Phase And Minimum Of Solar Cycle 24
S01_N39	A. M. Inostroza; M. Stepanova; M. Martínez-Ledesma; N. Higashio; S. Kasahara; T. Mitani; V. Pinto; E. E. Antonova	Radiation Belt's Adiabatic Acceleration Of Electrons During Geomagnetic Storms
S01_N42	D. R. De La Torre; S. A. Sosa; S. E. Romero; S. R. Silva; S. Y. Vela; J. A. Marin; N. A. Rojas; C. J. Solano	Nanosatellite Proposal For Monitoring The South Atlantic Magnetic Anomaly And Plasmaspheric Hiss In Interplanetary Shocks
S01_N45	H. X. Alvarez-Bolom	Propagation Of Interplanetary Coronal Mass Ejections And Their Interaction With The Solar Wind

S01_N46	M. O. Fakomiti; O. E. Abe; W. N. Igboama; O. O. Akinola; O. Ogunmodimu; Y. O. Migoya-Orué	Statistical Analysis Of The Occurrences Rate Of Geomagnetic Storms During Solar Cycles 20-24
S01_N47	J. S. Hincapie Tarquino; B. Calvo Mozo; J. C. Martínez Oliveiros; J. L. Araque Quijano	Development Of A Multi-Element Phased Array Solar Radio Interferometer At 1.42 GHz
S01_N48 WITHDRAW	T. Young; V. Ledvina; E. MacDonald; L. Brandt; M. McCormack; S. Collins; W. Barkhouse	The North Dakota Dual Aurora Camera Version 2.0 (NoDDAC2.0), A Platform For Citizen Science And A Testbed For Implementing Best Practices In Open Data And Collaboration
S01_N49	P. C. Pesántez-Cabrera	The Strongest Solar Storms In Recorded History And Their Effects
S01_N51	J. F. Valdés-Galicia; E. Ortiz; M. Anzorena; R. García; L. X. Gonzalez; O. Musalem; A. Hurtado; R. Taylor	Solar Neutron Event Recorded by the Muon Telescope in Mexico City on November 4, 2003

SESSION 2: IONOSPHERE AND UPPER ATMOSPHERE

MSO: Marco Milla, PUCP, Peru

Co-SO: Ana Paulino, UEPB, Brazil

Co-SO: Christiano Brum, Arecibo, USA

Co-SO: Láysa Cristina Araújo Resende, INPE - CBJLSW, Brazil

Co-SO: Maria Graciela Molina, UNT, Argentina

Serial Number	Authors	Title
S02_N01	R. De Jesus; I. S. Batista; C. M. Denardin; E. A. Kherani; A. M. Santos; C. A. O. B. Figueiredo; K. Venkatesh; L. C. A. Resende; A. J. De Abreu; D. Barros; O. F. Jonah; P. R. Fagundes; S. S. Chen	Ionospheric Response To The Patrick's 2013 And 2015 Events Over The South American Sector
S02_N02	G. A. S. Picanço; C. M. Denardini; A. M. Meza; L. P. O. Mendoza; M. P. Natali; P. A. B. Nogueira; L. C. A. Resende; C. S. Carmo; S. S. Chen	Assessment Of The DIX Responses To Equatorial Plasma Bubbles Using Multi- GNSS Data Over South America
S02_N03	J. Moro; J. Xu; C. M. Denardini; G. Stefani; L. C. A. Resende; R. P. Silva; L. A. Da Silva; C. S. Carmo; S. S. Chen; G. A. S. Picanço; J. A. Carrasco; H. Li; Z. Liu; C. Wang; N. J. Schuch	Occurrences Of Es _b Layers Over Santa Maria, A Transition Station From Low To Middle Latitude In Brazil
S02_N04	A. J. De Abreu; E. Correia; R. De Jesus; K. Venkatesh; E. P. Macho; M. Roberto; P. R. Fagundes	Statistical Response Of The High- And Mid-Latitudes Ionosphere In The Southern Hemisphere During 70 Geomagnetic Storms Occurred In The Period Of Two Decades
S02_N08	Y. S. Carvalho; R. C. De Araújo; Â. M. Dos Santos; I. S. Batista; Y. M. Briglia	Study Of Intermediate Descending Layers Over Boa Vista - Roraima During Periods Of Maximum And Minimum Solar Activity
S02_N09	F. S. Chingarandi; C. M. N. Candido; F. Becker-Guedes; O. F. Jonah; O. O. Taiwo; S. P. Moraes-Santos	Influence Of A Moderate Geomagnetic Storm On The Post-Sunset Ionosphere Over South America
S02_N10	M. V. M. Cabrera; W. J. Marais; E. W. Eloranta; I. I. Razenkov; J. P. Garcia; R. E. Holz	Quantifying Stratospheric Aerosol Optical Properties Over South-East Asia Via High Spectral Resolution Lidar Measurements
S02_N12	R. P. Silva; C. M. Denardini; M. S. Marques; L. C. A. Resende; J. Moro; G. A. A. Picanço; G. L. Borba; M. A. F. Santos	HILDCAA Disturbances Effects In The Total Electron Content
S02_N13	A. M. Casanova and J. S. G. Rodríguez	Advances In The Repair And Maintenance Of The Habana Station, International Code CD923

S02_N16	D. E. Scipion; A. C. Castro; K. Kuyeng	Estimation Of MLT Winds From Non-Specular Meteors: Operational Mode At Jicamarca
S02_N17 WITHDRAW	K. Luyo; M. Milla; E. Rojas	Estimating Electron Densities In The Valley Region: 20 Years Of 150 km JULIA Data
S02_N18	Da Silva, K.S.; Franco, A. M. De S.; Bolzan, M. J. A.	Multifractality Observed In The Virtual Hight Layer Ionosphere Over Brazil
S02_N19	Y. M. Briglia; Y. S. Carvalho; R. C. De Araújo; Â. M. Dos Santos; I. S. Batista	Occurrence Of Spread F Over Boa Vista Roraima - BR
S02_N20	J. F. B. Campelo; C. M. Denardini; R. P. Silva; L. C. A. Resende; J. Moro; S. S. Chen; G. A. S. Picanço; P. F. Barbosa Neto	TEC Responses To Geomagnetic Storm And HILDCAA Disturbances During The Descending Phase Of 24th Solar Cycle Over The Brazilian Region
S02_N23	E. Romero-Hernandez; F. Salinas-Samaniego; A. Salas-Navarro; J. Gamezcastro; C. M. Wrasse; G. A. S. Picanço; L.C.A. Resende; P. F. Barbosa Neto; S. S. Chen; R. P. Silva; C. S. Carmo; J. C. Mejia-Ambriz; J. Moro; C.M. Denardini; E. Aguilar-Rodriguez; E. Pérez-Tijerina; J. A. González-Esparza	Analysis Of Plasma Irregularities In The Ionosphere Using The Instruments Of LANCE In Mexico
S02_N24	S. A. Sanchez; E. A. Kherani; E. Astafyeva; E. R. De Paula	Rapid Development Of Co-Seismic TEC Ionospheric Disturbances During Earthquakes In South America
S02_N25	S. L. Palacios and M. A. Milla	Automatic Classification Of Range-Time-Intensity Maps Of Equatorial Spread-F
S02_N26	P. H. Gomes; J. V. Bageston; J. Moro	Nighttime Sky Conditions For Observation Of Airglow And Types Of Atmospheric Gravity Waves Observed At The Southern Space Observatory Between 2017 And 2020
S02_N27	M. A. L. Dias; P. R. Fagundes; K. Venkatesh; B. A. G. Ribeiro; V. G. Pillat	Variations Of Equatorial Ionization Anomaly (EIA) Over The Brazilian Sector Using GPS-TEC Network And IRI Model
S02_N30	A. R. Paulino; W. B. Lima; I. Paulino; P. P. Batista; R. A. Buriti	Determination Of The Lunar Semidiurnal Tide In The Concentration Of Meteors
S02_N31	I. Paulino; E. B. Carvalho; C. M. Wrasse	Statistical Study On Mesospheric Fronts Over The Brazilian Equatorial Region
S02_N32	B. H. La Rosa; E. Rojas; M. Milla	Revisiting Langevin Modeling For ISR Spectra: Final Results For A Higher-Order Stochastic Algorithm Approach
S02_N34	L. C. A. Resende; Y. Zhu; C. Arras; C. Denardini; J. Moro; S. S. Chen; R. A. J. Chagas; L. A. Da Silva; V. F. Andrioli; J. P. Marchezi; A. J. Carrasco; C. Wang; H. Li; Z. Liu	Analysis Of The Sporadic-E Layer Behavior In Different Latitude Stations During The Space Weather Events
S02_N35	Honda. R. H.; Takahashi, H.; Figueiredo, C. A. O. B.; Barros, D.; Wrasse, C. M.; Giongo, G. A.; Vital, L. F. R.; Resende, L. C. A.; Nyassor, P. K.; Ayorind, T. T.; Carmo, C. S.; Padua, M. B.	Atmospheric Lamb Wave Propagation Over South America Generated By Tonga Volcanic Eruption

S02_N38	C. A. Castillo Rivera; M. A. Bravo; E. Ovalle	Traveling Ionospheric Disturbances In The Near And Far Field Induced By Earthquakes/Tsunamis
S02_N39	B. Urra; M. Bravo; E. Ovalle; M. Martinez-Ledesma; J. Marín; L. Tamblay; P. Veja-Jorquera; P. R. Muñoz; et al.	Characterization Of Ionospheric Disturbed Currents During Two Geomagnetic Storms In South America
S02_N40	C. U. Villalobos; M. A. Bravo; C. A. Castillo Rivera; A. J. Foppiano; G. Concha; E. M. Ovalle	Seasonal Evolution Of The Ionospheric Summer Evening And Weddell Anomalies: Antarctic Peninsula Area
S02_N41	M. A. Bravo; J. R. De Souza; M. Martinez-Ledesma	SUPIM-INPE Prediction Of Ionospheric Impacts By The Annular Solar Eclipse On October 14, 2023
S02_N45 WITHDRAW	G. De L. González	Storm-Time Variability Of Ionospheric Irregularities Over South America
S02_N48	Vieira F.; Fagundes P. R.; Pillat V. G.; Agyei-Yeboah E.; Arcanjo M. O.	Ionospheric Disturbances Over The American And African Sectors Due To Two Major Sudden Stratospheric Warming Under Low Solar Activity Conditions
S02_N51	J. J. D'aquino; V. De La Luz; M. Chavez-Dagostino; J. A. Gonzales-Esparza	AzTEC: TEC Maps Near To Real-Time On México
S02_N52	C. Mauricio; J. Suclupe; M. Milla; K. Kuyeng; J. L. Chau; R. Rodríguez; D. Scipión	Predictability Of The Winds In The MLT Region Over The Central Coast Of Peru Using Machine Learning Algorithms - Preliminary Results
S02_N56	L. M. Lima; A. R. Paulino; L. R. de Araújo; P. P. Batista	Tropical Mesospheric Dynamics Response To Antarctic Stratospheric Warming Of 2019
S02_N57	G. A. Giongo; J. V. Bageston; C. M. Wrasse; C. A. O. B. Figueiredo; H. Kam; Y. H. Kim	A Case Study Of Gravity Waves Observed By An All-Sky Imager Over The Antarctic Peninsula
S02_N58	C. S. Yamashita; M. P. S. Echer; E. Echer; C. G. M. Brum	Long-Term Trends Of F2 Peak's Parameters For The South American Sector Equatorial-And-Low-Latitudes
S02_N59	R. L. Sa; J. R. Souza; I. S. Batista	The Ionospheric Vertical Drift And Its Effects On TEC Variability Over The South American Sector
S02_N60	P. Terra; C. G. M. Brum; F. Vargas	A Qualitative Analysis Of MSTIDs Observed Over Puerto Rico During The Minimum Solar Activity Using Multi- Instruments
S02_N61	Vital, L. F. R.; Barros, D. S.; Takahashi, H.; Wrasse, C. M.; Figueiredo, C. A. O. B.	Ionospheric F-Layer Pre-Reversal Enhancement And The Occurrence Of Equatorial Plasma Bubbles
S02_N62	P. A. Fontes; M. T. A. H. Muella; L. C. A. Resende	Es Layers Modulated By The Terdiurnal Tide In The Brazilian Sector
S02_N63	D. R. De La Torre; E. Rojas	Ionosphere Plasma Density Estimation By Ray Tracing Optimization
S02_N64 WITHDRAW	E. E. Pacheco; J. P. Velasquez; G. Fajardo; L. Condori; R. Flores; K. Kuyeng; D. Scipion; M. Milla; R. Rojas; C. De La Jara; J. Suclupe; P. Condor; I. Manay	Ionospheric Effects Of The Tonga Volcanic Eruption Over The Peruvian Sector
S02_N65	L. Otiniano; A. Arriola; J. Vega; J. Samanes; M. Milla	Development Of A VLF Receiver Based On RedPitaya Board For Space Weather Studies

S02_N66	O. R. Idolor; A. O. Akala; O. S. Bolaji	African And American Equatorial Ionization Anomaly (EIA) Responses To 2013 SSW Event
S02_N67	J. Sánchez. G.; S. Vargas. D.; C. Triana.; R. Joya.; D. Bonaccini. C.	Implementation Of A Portable Site- Testing Instrument For Solar Observations
S02_N68	Araújo, P. S and Bolzan, M. J. A.	Air Emission Variances Observed In Meteor Spectrometry In Relation To Metallic Density
S02_N69	Araújo, P. S; Da Silva, K. S.; Honório, D. C.; Da Silva, D. M.; Martins, A.; Bolzan, M. J. A.	Results From The Launch Of An Atmospheric Prob Developed In Brazil
S02_N70	A. G. F. M. Paines; J. V. Bageston; et al.	Review Of Upper Atmosphere Dynamics And Airglow Observations At Southern Space Observatory - SSO (29.4° S, 53.8° W) In São Martinho Da Serra, RS, Brazil

SESSION 3: SOLAR PHYSICS, HELIOSPHERE, COSMIC RAYS

MSO: Jean Carlo Santos, UTFPR, Brazil

Co-SO: Alessandra Abe Pacini, CU-CIRES/NOAA-NCEI, USA

Serial Number	Authors	Title
S03_N02 WITHDRAW	V. I. Angeles Romero and V. M. Velasco Herrera	Wildfires In Mexico
S03_N03	F. M. López and C. G. Giménez De Castro	Study Of The 30 THz Atmospheric Optical Depth At El Leoncito
S03_N08	W. Portugal; E. Echer; M. P. D. S. Echer; A. A. Pacini	A Statistical Study On The Latitudinal Effects Of Forbush Decrease Events On Surface Temperature
S03_N09	N. A. Santos; S. Dasso; A. M. Gulisano; O. Areso; M. Pereira; L. Rubinstein; for the LAGO Collaboration	Atmospheric Effects And Solar Anisotropies Of The Cosmic Ray Flux Observed With A Water Cherenkov Detector In The Antarctic Peninsula
S03_N10	V. Muñoz and E. Flández	Complex Network Study Of Solar Magnetograms
S03_N11	F. Monterde-Andrade; L. X. González; J. F. Valdés-Galicia; O. G. Morales-Olivares; Y. Muraki; Y. Matsubara; T. Sako; K. Watanabe; S. Shibata; M.A. Sergeeva; A. Hurtado; O. Musalem; J. Newton Bosch; S. Perea-Contreras	Simulation Of Solar Neutron Flux In The Earth's Atmosphere For Three Selected Flares
S03_N12	A. J. R. S. Diogo	Estimates Of The Solar Magnetic Field In Region AR11967 Using Inversion Methods
S03_N14	M. S. Echer; M. Domingues; C. Yamashita; E. Echer; C. Brum; O. Mendes; et al.	Multiscale Aspects Of The Solar Indices MgII, F10.7 And Sunspot Number
S03_N15	M. A. Kychenthal and L. F. Morales	Build Up And Release Of Energy In An Avalanche Model For Solar Flares
S03_N16 WITHDRAW	Manini F.; Cremades H.; López F. M.	Tracking Of An Earth Earth-Directed Coronal Mass Ejection Through The Inner Heliosphere
S03_N17 WITHDRAW	Manini F.; Cremades H.; López F. M.	A Comprehensive List Of Kilometric Type II Emissions Detected By Wind/WAVES TNR
S03_N19	T. Zurita-Valencia and V. Muñoz	Analyzing The Solar Activity Using The Horizontal Visibility Graph Method
S03_N22	F. O. Tavares; L. E. A. Vieira; I. De Oliveira; F. L. Guarnieri	Characterization Of Narrow Band Filter For Solar Spectropolarimetry Based On Volume Holographic Gratings - Angular Selectivity Analysis
S03_N23	I. R. Winkelman; E. F. M. T. São Sabbas; X. Bertou	Energetic Terrestrial Gamma-Ray Flashes (TGFs) And/Or Other Lightning Created Emissions Possibly Detected By The Pierre Auger Observatory Tanks
S03_N24	F. Carlesso; A. R. Barbosa; A. K. R. Souza; E. A. De Almeida; A. M. E. Santo; L. E. A. Vieira	TSI Scientific Requirements For Future Missions And Technical Challenges Of The Instruments

S03_N28	B. Mamani and M. A. Subieta Vasquez	Study Of The Stability Of A CHERENKOV Water Detector Within The Framework Of The LAGO Collaboration
S03_N30	G. Baron; E. Aguilar-Rodriguez; J. Mejia-Ambriz; O. Chang; J. A. Gonzalez-Esparza	An Updated Catalog Of IPS Radio Sources Observed By MEXART
S03_N31 WITHDRAW	A. M. Vasquez; F. A. Nuevo; F. Frassati; A. Bemporad; R. A. Frazin; N. Sachdeva; W. B. Manchester IV; B. Van der Holst; M. Romoli	Tomographic Reconstruction Of The 3D Solar Wind Speed With Solar Orbiter/Metis: Simulations
S03_N32	M.A. Rojas-Quesada; N. Labrosse; C. Osborne	Filament Cloud-Modeling For SST Observations In The Ca II (8542 Å) Line
S03_N34	J. J. González-Avilés; P. Riley; M. Ben-Hun; J. A. González-Esparza; Et Al.	Study Of The Propagation Of The Solar Wind And Coronal Mass Ejections: Numerical MHD Simulations And The Comparison With Observations
S03_N36	A. R. Barbosa; F. Carlesso; L. E. A. Vieira	sCMOs Commercial Camera Feasibility For GSST Proof-Of-Concept Spectropolarimeter
S03_N37	F. Da Silva; L. Da Silva; R. A. R. Oliveira; M. W. S. Oliveira	Characterization Of Magnetic Clouds Through Machine Learning
S03_N40	L. Di Lorenzo; H. Cremades; L. A. Balmaceda	Evolution Of A Coronal Mass Ejection Of The Streamer Blowout Type
S03_N41	B. O. Felício and G. C. C. Lopes	Cosmic Rays: Do We Need To Be Afraid?

SESSION 4: SOLAR WIND, MAGNETOSPHERE AND GEOMAGNETISM

MSO: Marcos Vinicius Dias Silveira, Independent Contractor, Brazil

Co-SO: Ramón Caraballo, UNAM, Mexico

Serial Number	Authors	Title
S04_N01	F. C. M. Hermes; G. S. Souza; L. C. C. Benyosef	Seasonality in daily variation on oceanic islands around the South American continent
S04_N02	D. G. Sibeck and the STORM Team	Science Applications For Soft X-Ray Imaging Missions
S04_N03	L. M. Guizelli; C. M. Denardini; S. S. Chen; L. C. A. Resende; J. Moro	Similarities And Differences Observed Evolution Of The Kp And Ksa Indices During Selected Geomagnetic Storms
S04_N05	H. R. P. Jácome; M. S. Marques; P. Zarka; E. Echer; L. Lamy; C. K. Louis	Jovian Decametric Radio Emissions Induced By Europa
S04_N08	L. V. Zanfolim; F. R. Cardoso; M. V. D. Silveira; V. M. C. S. Souza; A. C. G. Ilha; R. G. Cutait	Study Of Earth's Magnetopause
S04_N10	J. C. M. Castro Neto; E. Echer; A. M. S. Franco	Identification Of Venus Plasma Boundaries
S04_N11	C. Paniagua; G. Menesse; J. Molina; T. Rolon; D. Stalder	A Low-Cost Geomagnetic Field Station
S04_N13	A. C. G. Ilha; F. R. Cardoso; L. V. Zanfolim; M. V. D. Silveira; R. G. Cutait	Study Of Earth's Bow Shock
S04_N15	E. F. F. Doca; M. A. R. Vasconcelos; J. Da C. Batista; A. C. L. Santos-Matos	Geoelectric Characterization Of Impact Structure: Santa Marta - Piauí, Brazil
S04_N16	S. De La Maza and V. Muñoz	Community Structure Of Satellite Measurements Of The Earth's Magnetic Field
S04_N17	D. M. Schaefer; L. R. Alves; L. A. Da Silva	Monitoring ULF Waves In Radiation Belts During TheHILDCAAs Events
S04_N18	Jauer, P. R.; Wang, C.; Echer, E.; Souza, V. M.; Loesch, C.; Alves, M. V.; Alves, L. R.; Marchezi, J. P.; Liu, Z.; Hui, L.; Da Silva, L. A.; Vieira, L. E. A.; Rockenback, M.; Gonzalez, W. D.; Denardini, C. M.; Medeiros, C.; Costa, J. E. R.	Study Of The Response Of The Inner And Global Magnetosphere Due To The Interaction Of 3 Types Of Alfvénic Solar Wind Fluctuations Using Global MHD Modeling
S04_N19	V. Deggeroni; L. A. Da Silva; M. Rockenbach; J. P. Marchezi	The Role Of The Whistler-Mode Chorus Waves In The Relativistic Electron Flux Variability Of The Outer Radiation Belt Under The Influence Of High-Speed Stream: A Case Study
S04_N20	D. S. F. Medeiros; L. E. A. Vieira; V. M. C. S. Souza	Magnetic Reconnection At The Dayside Magnetopause
S04_N22	C. Medeiros; V. M. Souza; L. A. Da Silva; L. R. Alves; G. B. D. Silva; P. R. Jauer; M. Rockenbach; R. Bhanu; A. Halford; D. G. Sibeck	Electromagnetic Ion Cyclotron Waves (EMIC) - A Review

S04_N24	J. M. Espinoza. A.; M. Stepanova; R. López; E. Antonova	Self-Consistent Solution Of Geomagnetic Field Disturbances And Plasma Pressure Distribution For Strong Geomagnetic Storms
S04_N26	S. S. Chen; L. C. A. Resende; C. M. Denardini; R. A. J. Chagas; L. A. Da Silva; J. P. Marchezi; J. Moro; P. A. B. Nogueira; A. M. Santos; P. R. Jauer; C. S. Carmo; G. A. S. Picanço; R. P. Silva	The 14 December 2020 Total Solar Eclipse Effects On Geomagnetic Field Variations Over South America
S04_N27 WITHDRAW	C. Barbosa; R. Caraballo; G.A. Hartmann; J. A. Gonzalez-Esparza	Application Of The Tsallis Statistics To Assess Extreme GIC Events In The Mexican Power Network
S04_N28	G. B. D. Silva; L. R. Alves; A. L. Padilha; J. E. R. Costa	Evaluation Of db/dt Amplitudes And Sources Over Brazil During Geomagnetic Storms Of The 2021-2022 Biennium
S04_N29	E. Camacho; L. Benyosef; O. Mendes; M. Domingues	Pc5-Pulsations In Conjugate Stations To Investigate The South Atlantic Magnetic Anomaly Effects: Case Study
S04_N31	W. Kabata; A. L. Padilha; M. J. Barbosa	Measuring Temperature Effects In Fluxgates Magnetometers To Generate Compensation Parameters
S04_N32	Y.-S. Castillo-Rosales; M.-A. Pais; J. Fernandes; F. Pinheiro; A. Morozova; P. Ribeiro	Temporal Variability Of 27 Day-Averaged Space Weather Related Parameters: Connecting Solar, Interplanetary Medium And Geomagnetic Activity Indices
S04_N35 WITHDRAW	Ashna. V. M.; Ankush Bhaskar; G. Manju; Sini. R.	Solar Cycle Dependence Of The Solar Wind-Magnetosphere-Ionosphere Coupling During Geomagnetic Storms Of 23-24 Solar Cycles
S04_N36	J. L. R. Vanegas and V. H. D. la L. Rodriguez	Distributed System For Near Real-Time Recording Of The Electromagnetic Spectrum Over Mexico

**SESSION 5: SPACE PLASMA PHYSICS AND
NONLINEAR PROCESSES IN SPACE GEOPHYSICS**

MSO: Juan Alejandro Valdivia, UCHILE, Chile

Co-SO: Abraham Chian, Un. Adelaide, Australia

Co-SO: Daniel Gomez, UBA, Argentina

Serial Number	Authors	Title
S05_N03	V. Fernández; V. Muñoz; G. Nigro; V. Carbone	Statistical Study Of A Magnetized Plasma Under Fractal Forcing
S05_N05	V. Muñoz and A. Zamorano	2D Sandpiles In Networks With Variable Topology As A Model For Geomagnetic Activity
S05_N06	A. L. Piragibe; R. A. Miranda; A. B. Schelin; J. L. Ferreira	Lagrangian Chaotic Mixing In Numerical Simulations Of Resistive Drift-Wave Turbulence In Plasmas
S05_N07	L. S. Cassara; M. M. Lopes; O. Mendes; R. Deiterding; M. O. Domingues	Effects Of Magnetic Divergence Control In Numerical MHD Modeling Of Instabilities
S05_N08	H. A. Carril; J. A. Gidi; R. E. Navarro; J. A. Araneda	Formation Of Multiple BGK-Like Structures In The Time-Asymptotic State Of Collisionless Vlasov-Poisson Plasmas
S05_N09	S. G. S. P. Costa; R. A. Miranda; A. B. Schelin	Spectral Entropy Of Numerical Simulations Of Resistive Drift-Wave Turbulence In Plasmas During A Transition To Zonal Flows
S05_N10	E. F. D. Evangelista; O. Mendes; M. O. Domingues	Simulating The Interactions Of A Rigid Body And Of A Source Of Ions With A Flow Of Plasma Using AMROC
S05_N14	P. K. Nyassor; C. M. Wrasse; I. Paulino; E. F. M. T. São Sabbas; J. V. Bageston; D. Gobbi; P. K. Naccarato; T. T. Ayorinde; H. Takahashi; C. A. O. B. Figueiredo; D. Barros	Sources Of Concentric Gravity Waves Generated By A Moving Mesoscale Convective System In São Martinho Da Serra
S05_N15	M. Kychenthal; L. Morales; V. Muñoz; A. Zamorano	Solar Flare Analysis Using Complex Networks