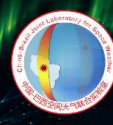


2026 SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



September 21-23, 2026

Theme: Focusing on the Space Environment of the South Atlantic Anomaly: Building an Integrated Space-Ground Based Monitoring System, Empowering Space Weather Support Services with Digital Intelligence, and jointly promote In-Depth China-Brazil Cooperation in Space Science.

DAY 1 : September 21, 2026 (Morning)

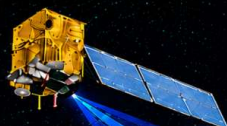
Time	Activities	Institution		Chair
09:00-9:30	Registration (LIT Auditorium : Fernando de Mendonça/INPE)			
09:30-09:40	Opening Ceremony	INPE	Antonio Miquel	Joaquim Eduardo Costa
		NSSC/CAS	Hui Li	
09:40-10:05	Current Status and Future Plans for Brazil’s Space Science Sector	AEB	Monica Oliveira	
10:05-10:30	Current Status and Future Plans for China’s Space Science Sector	NSSC/CAS	Hui Li	
10:30-11:00	Group Photo and Coffee Break			
11:00-11:25	EMBRACE Ground-Based Observations of the Brazilian Ionosphere and the South Atlantic Magnetic Anomaly: An Integrated Approach for Space Weather Monitoring and China–Brazil Cooperation	INPE	Joaquim Eduardo Costa	Cristiano Wrasse
11:25-11:50	Progress Report on the IMCP: A Vision for the Next Solar Cycle, and Beyond	NSSC/CAS	Qinhe Zhang / Jiyao Xu	
11:50-12:10	Discussion			
12:10-14:00	Lunch (ADC-Sports Club/Cafeteria)			

Parallel Session 1: Space-Based (Meeting room: Roger Honiat)

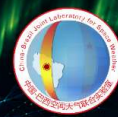
TOPICS: Synergistic Development of China-Brazil Satellite-Based Observations, Empowering Accurate Perception and Research of the Space Environment in the South Atlantic Anomaly.

DAY 1 : September 21, 2026 (Afternoon)

Time	Presentation (20 mins + 5mins Q&A)	Institution	Presenter	Chair
14:00-14:25	<i>Toward an Integrated Sun-to-Earth Heliophysics Observing System: Synergies between GSST and CBERS-5</i>	DIPHA/INPE	Luis Eduardo	Alisson Del Lago
14:25-14:50	<i>China's space origins exploration program</i>	NSSC/CAS	Hui Li	
14:50-15:15	<i>SMILE mission operation and preliminary observation</i>	NSSC/CAS	Yongcun Zhang	
15:15-15:45	Coffee Break and Posters			
15:45-16:10	<i>Advancing Space Weather Monitoring: The CBERS-5 Payload and Future Missions for In Situ Plasma and Radiation Observations</i>	INPE	Joaquim Eduardo Costa	Luis Eduardo
16:10-16:35	<i>Design Scheme of Space Weather Payloads for CBERS-5</i>	NSSC/CAS	Chao Liu	
16:35-17:00	<i>South Atlantic Anomaly Suite Detectors (SAMA-Suite): Plasma and Radiation Belt Environment Monitor</i>	INPE	Livia Ribeiro Alves	
17:00-17:30	<i>Discussing the Summary Report on Space-Based Issues</i>			
17:30-20:30	Conference dinner (Estância Churrascaria)			



2026 SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



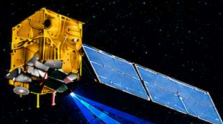
September 21-23, 2026

Parallel Session 2: Ground-Based (Auditorium LIT)

TOPICS: Innovation of Multi-Method Ground-Based Integrated Observation Technologies, Revealing the Dynamics and Physical Mechanisms of the Space Environment Associated with the South Atlantic Anomaly

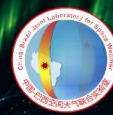
DAY 1 : September 21, 2026 (Afternoon)

Time	Presentation (15 mins + 5mins Q&A)	Institution	Presenter	Chair
14:00-14:20	<i>Lidar and Airglow Observations of Gravity Wave Propagation Characteristics in the Mesospheric Region</i>	NSSC/CAS	Jiyao Xu	Rodolfo de Jesus & Edith Tueros
14:20-14:40	<i>From Extraterrestrial Material to the VLEO Environment: A Multi-Instrument Observational Framework for Investigating Atmospheric Coupling Driven by Near-Earth Objects</i>	INPE	Alexandre Pimenta	
14:40-15:00	<i>The recent developing progress and observations of the metastable helium Lidars in China</i>	University of Science and Technology of China	Ruocan Zhao	
15:00-15:20	<i>Recent Advances in Mesospheric Sodium and Potassium Layers Responses to Geomagnetic Disturbances Associated with the SAMA Region</i>	INPE	Vânia Fatima Andrioli	
15:20-15:50	Coffee Break and Posters			
15:50-16:10	<i>Lidar study metal Ca ions in ionospheric E-F region</i>	NSSC/CAS	Guotao Yang	Vânia Andrioli & Daniele Medeiros
16:10-16:30	<i>589-nm Doppler wind lidar for the troposphere, stratosphere, and mesosphere</i>	Innovation Academy of Precision Measurement Science and Technology, CAS	Yong Yang	
16:30-16:50	<i>Composite years morphology of mesospheric sodium and potassium layers over the Brazilian low-latitude sector</i>	CBJLSW/INPE	Rodolfo de Jesus	
16:50-17:10	<i>New aspects of ionospheric irregularities based on joint observations by lidar and radar</i>	Institute of Geology and Geophysics, CAS	Wenjie Sun	
17:10-17:30	<i>Discussing the Summary Report on Ground-Based Issues</i>			
17:30-20:30	Conference dinner (Estância Churrascaria)			



2026

SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



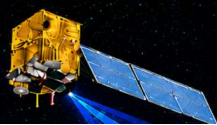
September 21-23, 2026

Parallel Session 1: Space-Based (Meeting room: Roger Honiat)

TOPICS: Synergistic Development of China-Brazil Satellite-Based Observations, Empowering Accurate Perception and Research of the Space Environment in the South Atlantic Anomaly.

DAY 2: September 22, 2026 (Morning)

Time	Presentation (20 mins + 5mins Q&A)	Institution	Presenter	Chair
09:00-09:25	<i>The Status of SAA in the Last 10 years Recorded by CSES Satellite</i>	NSSC/CAS	Xuhui Shen (On-line)	Joaquim Eduardo Costa
09:25-09:50	<i>PARTICLES Probes Mission - PPM</i>	INPE	Ligia Alves da Silva (On-line)	
09:50-10:15	Concept for a China–Brazil Ionospheric Satellite Constellation Cooperation : Discussion Draft	NSSC/CAS	Maosheng He	
10:15-10:45	Coffee Break and Posters			
10:45-11:10	<i>ISCOPE: A CubeSat Constellation for Investigating Ionospheric Plasma Dynamics over the Brazilian Sector</i>	INPE	Laysa Resende Chagas	Ronan Arraes Jardim Chagas
11:10-11:35	<i>The Solar Polar-orbit Observatory (SPO) mission</i>	PKU	Hui Tian (On-line)	
11:35-12:00	<i>Solar Irradiance Measurements for the GSST Mission</i>	INPE	Franciele Carlesso	
12:00-12:30	<i>Discussing the Summary Report on Space-Based Issues</i>			
12:30-14:00	Lunch: Center Vale Shopping			



2026

SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



September 21-23, 2026

Parallel Session 2: Ground-Based (Auditorium LIT)

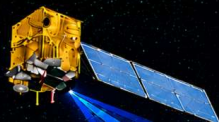
TOPICS: Innovation of Multi-Method Ground-Based Integrated Observation Technologies, Revealing the Dynamics and Physical Mechanisms of the Space Environment Associated with the South Atlantic Anomaly

DAY 2 : September 22, 2026 (Morning)

Time	Presentation (15 mins + 5mins Q&A)	Institution	Presenter	Chair
09:00-09:20	<i>Wind Measurements by A DCOI Network of Meridian Project II</i>	NSSC/CAS	Yajun Zhu	Alexandre Pimenta & Rodolfo de Jesus
09:20-09:40	<i>Generation and Propagation of Quasi-Monochromatic Gravity Waves Observed over Southern Brazil</i>	INPE	Cristiano Wrasse	
09:40-10:00	<i>Extreme Concentric Gravity Waves Observed in the Mesosphere and Thermosphere Regions Over Southern Brazil Associated with Fast-Moving Severe Thunderstorms</i>	NSSC/CAS	Qinzeng Li	
10:00-10:20	<i>Probing thunderstorm-driven near-Earth space disturbances through broadband magnetic field measurements and multi-source observations</i>	University of Science and Technology of China	Gaopeng Lu	
10:20-10:50	Coffee Break and Posters			
10:50-11:10	<i>Exploring the Distinctive Space Weather Response of the South American Magnetic Anomaly Through Multi-Instrument Ground-Based Observations</i>	INPE	Juliano Moro	Carolina do Carmo & Daniele Medeiros
11:10-11:30	<i>Using the ionosonde to study the influence of lightning activity on disturbances in the upper ionosphere</i>	NSSC/CAS	Zhengwei Cheng	
11:30-11:50	<i>Multi-day Ionospheric Perturbation during 2025 Sudden Stratospheric Warming</i>	CBJLSW/INPE	Luiz Fillip	
11:50-12:10	<i>Event Analysis and Physical Processes of the Impact of Low-Latitude Intense Convection Activities on Ionospheric Irregularities</i>	NSSC/CAS	Sheping Shang	
12:10-12:30	<i>Ionospheric Observations and Dynamics: Insights from the Hainan Fuke Digisonde</i>	NSSC/CAS	Guojun Wang	
12:30-14:30	Lunch (Center Vale Shopping)			

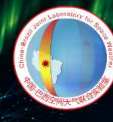
DAY 2: September 22, 2026 (Afternoon)

Time	Presentation (15 mins + 5mins Q&A)	Institution	Presenter	Chair
14:30-14:50	<i>Super Equatorial Plasma Bubble Dynamics during the 10 May and 10 October 2024 Geomagnetic Storms in the American Sector</i>	CBJLSW/INPE	Carolina do Carmo	Cristiano Wrasse & Luiz Fillip
14:50-15:10	<i>The preliminary research progress on the polar cap Es layers</i>	Shandong University	Yong Wang	
15:10-15:30	<i>Ground-based diagnostics of the South Atlantic Magnetic Anomaly</i>	UPM	Jean Pierre	
15:30-15:50	<i>Peculiar Features Observed in the Equatorial and Low-Latitude Ionosphere over the Brazilian Sector in the South American Magnetic Anomaly (SAMA) Region During Geomagnetic Storms</i>	INPE	Angela Machado Santos	
15:50-16:10	<i>Detection of Atypical Sporadic E Layers Associated with Anomalous Ionization During Magnetic Storms over the South American Magnetic Anomaly</i>	INPE	Laysa Resende Chagas	
16:10-16:30	Coffee Break and Posters			
16:30-16:50	<i>Overview of the geomagnetic disturbances in the South American Magnetic Anomaly</i>	INPE	Sony Su Chen	Jean Pierre & Edith Tueros
16:50-17:10	<i>Magnetic Field Modeling of Solar Active Region for Space Weather Prediction</i>	NSSC/CAS	Xiaoshuai Zhu	
17:10-17:30	<i>Modeled Kp Index: A Case Study of the St. Patrick's Day Geomagnetic Storm</i>	CBJLSW/INPE	Daniele Medeiros	
17:30-17:50	<i>Formation mechanism of short-period quasi-periodic pulsations in radio bursts</i>	NSSC/CAS	Minghui Zhang	
17:50-18:10	<i>Discussing the Summary Report on Ground-Based Issues</i>			



2026

SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



September 21-23, 2026

DAY 3 : September 23, 2026 (IAI Auditorium: Sérgio Sobral/INPE)

Time	Activities	Chair
09:00-09:05	Closing Ceremony	Joaquim Eduardo Costa
09:05-09:30	Summary Report on Space-Based Issues Speakers: Luis Eduardo and Hui Li	
09:30-10:10	Summary Report on Ground-Based Issues Speakers: Vânia and Cristiano	
10:10-10:30	Coffee Break	
10:30-11:40	Opening Discussions: In-Depth Cooperation in Space Science between China and Brazil	
11:40-12:00	Summary and Plan for Seminar Joaquim and Hui Li	
12:00-14:00	Lunch	
14:00-17:30	INPE Cachoeira Paulista (Limited to 50 participants) or Visit to the LIT, LASER and EMBRACE	

INPE Campus Map



Nsse

IMCP



2026 SYMPOSIUM ON SPACE AND GROUND BASED
INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT
IN THE SOUTH ATLANTIC ANOMALY

2026 SYMPOSIUM ON SPACE AND GROUND BASED
INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT
IN THE SOUTH ATLANTIC ANOMALY

- 1 INPE Main Gate
- 2 Secondary Gate
- 3 2026 SAA Symposium- (LIT/Tower A)- 2nd floor
- 4 2026 SAA Symposium- (IAI Auditorium)
- 5 CEA 2/ EMBRACE/ CBJLSW
- 6 ADC- Sports Club/ Cafeteria



MINISTÉRIO DA
CIÊNCIA, TECNOLOGIA
E INOVAÇÕES





2026

SYMPOSIUM ON SPACE AND GROUND BASED INTEGRATED OBSERVATIONS OF THE SPACE ENVIRONMENT IN THE SOUTH ATLANTIC ANOMALY



September 21-23, 2026

Poster list

Poster	Presenter	Poster Title
P01	Weijia Zhan	Longitudinal Differences in Equatorial Plasma Bubbles in the American Sector Observed by GOLD
P02	Karen Júlia Coldebella Ferreira	Storm-Time Particle Precipitation over the South Atlantic Magnetic Anomaly
P03	Yuxiao Li	Storm-Time Postmidnight F Region Irregularities Around the Meridian 120°E/60°W During 29-30 September 2025
P04	Lianhuan Hu	Comparative Analysis of EPB Characteristics over the Asia–Western Pacific and America–Atlantic Sectors During the January 2026 Magnetic Storm
P05	Cesar Augusto Huanca Condori	Response of high-altitude particle detectors to geomagnetic storms in the South Atlantic Anomaly
P06	Gang Chen	Meteoroids as a Source of Metal Ion Clouds in Earth’s Upper Thermosphere
P07	Oladayo Olayiwola Afolabi	Anomalous Magnetic Signature of Disturbance Dynamo over the South Atlantic Magnetic Anomaly
P08	Faquan Li	LIDAR Detection of the Near-Space Atmospheric Environment
P09	Shaohua Gong	Mie–Rayleigh–Raman–Doppler Lidar System Designed for Multiple Atmospheric Parameter Measurements in the Troposphere and Lower Stratosphere at Haikou (19.9°N, 110.3°E)
P10	Femi Olajide-Owoyomi	Meteor Trail Observations in the Mesosphere and Lower Thermosphere Using Dual-Beam Na-K Resonance LIDAR at INPE, Brazil
P11	Lifang Du	Research on the Atmospheric Metal Layers Detection Technology by All-Solid-State Optical Parametric Oscillator (OPO) Lidar
P12	Jixin Guo	Calcium Ion Lidar Observations of Sporadic E Irregularities
P13	Gowher Rather	Exploiting Spatial Correlations for Scintillation Nowcasting in Brazil: A Graph Neural Network Approach
P14	Xiaolei Xue	Observation and Formation Mechanism Research of the Thermosphere-Ionosphere Calcium Ion Layer over Beijing
P15	Mauricio Josué Romero Ferreira	Autonomous Two-Axis Solar Tracking for the Paraguayan e-CALLISTO Station
P16	Chunxiao Yan	Ionospheric Irregularities Research Based on Fuke VHF Radar
P17	Thiago Moeda Sant Anna	Modeling the Variability of Relativistic Electron Flux in the Outer Radiation Belt Using Machine Learning Methods
P18	Xizhen Wang	Lightweight Deep Learning for Identification and Suppression of Subway Interference in Geomagnetic Observations
P19	Siyin Liu	A Rapid and High-Precision Iterative Algorithm for Sodium Lidar Temperature and Wind Retrieval in the MLT Region