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* ISWI Newsletter - Vol. 18 No. 011 17 Nov 2026 *
* Editor: George Maeda, georgemaeda3[at]gmail.com
* Archive of back issues: ISWI Website https://iswi-secretariat.org/
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Dear ISWI Newsletter Subscriber:

Please be reminded that this newsletter has two versions:

[1] Email version -- this gets distributed via email
directly to you but does not have the attachments.
[2] Web version -- this is the full version with attachments.

To view the Web version, go to this web page:
https://iswi-secretariat.org/
and click on "NEWSLETTERS".

If you have space-weather-related news or announcements,
please send them to me and I will distribute your
material through the ISWI NEWSLETTER.

Cordially,
George Maeda
Editor of the "ISWI Newsletter", since 2009.

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[01]----------

Obituary of Professor Sandro Maria Radicella,
written by Dr. Yenca Migoya-Orué

See: SandroRadicella_Obituary_ISWI.pdf
001

[02]----------

"We would like to introduce two new software tools for
solar radio astronomy and space weather analysis:

[1] "e-CALLISTO FITS Analyzer," a desktop application
for processing e-CALLISTO solar radio observations
and analyzing coronal mass ejections, and

[2] "Solar Observer", a web platform integrating
multi-instrument solar imagery, radio spectra, and
real-time space weather data.

Please see the attached files."

Sahan S Liyanage
Arthur C. Clarke Institute for Modern Technologies, Sri Lanka
Astronomical and Space Science Unit, University of Colombo, Sri Lanka

See:
e-CALLISTO_FITS_Analyzer.pdf
002
Solar_Observer.pdf
003

[03]----------

FROM: Dr. Liwen Ren
DATE: 23 Oct 2026
TO: ISWI NEWSLETTER

Dear Dr. Maeda,

Could you please circulate the announcement below

about the IMCP 2027 Workshop and the Young Scientist Award to the ISWI community?

Thank you very much for your support.
Best,
Liwen

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IMCP 2027 Workshop
— Call for Abstracts and Young Scientist Award
1–5 March 2027 | Beijing, China

Dear Colleagues,

We invite you to the **2027 International Meridian Circle Program (IMCP) Workshop**, to be held in Beijing, China.

The workshop theme is *"Monitoring Geospace Disturbances from the Ground: Scientific Challenges, Observational Networks, and International Collaboration."*

The meeting will bring together researchers working on geospace and space weather, ground-based observational networks, data and AI, and international cooperation. It will also explore coordinated observations between ground-based facilities and space missions.

Abstract submissions and applications for the Young Scientist Award are now invited. We particularly encourage young scientists to participate and share their research. Please consult the Call for Abstracts and Call for Young Scientist Award on the workshop website for details and application instructions.

Important deadlines

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Young Scientist Award and financial support applications:	1 December 2026
Abstract submission:	10 December 2026
Early-bird registration:	15 January 2027

Workshop information and calls:
https://workshop2027.imcp.ac.cn/

We look forward to welcoming you to Beijing!
Dr. Liwen Ren
On behalf of IMCP 2027 Workshop SOC

[04]----------

FROM: Yekoye Asmare
DATE: 26 Oct 2026

Call for Abstracts

Conference Theme :

"AI-Assisted Space and Geospatia Technologies and Applications for Early Warning, Climate Change Resilience, and Sustainable Development"

The 4th International Space & Geospatial Annual Research Conference (S-ARC2027)

Thematic Tracks (Sub-themes) for Abstract Submission

Session A:

Space and Climate Sciences

Track 1: Astronomy and Astrophysics: From Stellar Systems to Society and the Cosmos
-Solar, Stellar, and Galactic Systems: Physics, evolution, and dynamics
-Astronomy in Society: Historical, cultural, astro-tourism, and observational perspectives
-Cosmology and the Universe at Large: Origin, structure, and fate of the cosmos

Track 2: Space Weather Impacts and Resilience — Monitoring, Modelling, and Mitigation
-Magnetospheric and ionospheric responses to geomagnetic storms
-Geomagnetic storm effects on satellites, power grids, and communications
-Space weather monitoring and early warning systems
-Modeling and prediction across the Sun–Earth environment

Track 3: Solar-Terrestrial Climate Linkage — Mechanisms, Variability, and Impacts
-El Niño and La Niña: ocean–atmosphere coupling, teleconnections, and modulation of solar-terrestrial climate signals
-Tropospheric and stratospheric linkages: solar variability, circulation, and climate
-Stratospheric ozone dynamics and solar UV forcing
-Atmospheric waves (gravity, planetary, and tidal) and their propagation
-Aerosol–cloud–radiation interactions and climate feedback
-Atmospheric electricity, lightning, and transient luminous events
-Coupling between the lower, middle, and upper atmosphere

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Session B:

Aerospace

Track 1: Satellite Systems, Engineering, and Applications
-Satellite and mission design, systems engineering, and platform operations
-Enabling technologies: propulsion, power, communications, and advanced payloads
-Launch systems, in-orbit servicing, and end-of-life management

-Applications-driven engineering for Earth observation,
communication, navigation, and telecommunications

Track 2: Aerospace Engineering and Emerging Technologies
-Rocket propulsion and space transportation systems
-Unmanned aerial systems (UAS) for remote sensing and disaster response
-Advanced materials and structures for space applications
-AI/ML for autonomous space systems and mission operations
-Emerging enabling technologies (SmallSats, CubeSats) developments

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Session C:
Geospatial

Track 1: Earth Dynamics and Process— Observations, Mechanisms, and Modeling
-Crustal deformation, fault mechanics, and earthquake cycle modeling
-GNSS, InSAR, and strain measurement for landslide precursor detection
-Geodetic constraints on seismic hazard assessment and early warning
-Transient signals, post-seismic relaxation, and impacts on slope stability
-Integrating geodetic data into physics-based models of earthquakes and landslides

Track 2: Remote Sensing Applications for Disaster
Risk Management and Early Warning Systems
-Observing and modeling floods, droughts, wildfires, and landslides
-Building community capacity with participatory GIS and local data
-Automating early warning and damage assessment with AI/ML and drones
-Deriving actionable insights from geospatial big data for disaster resilient planning
-Multi-hazard early warning systems and rapid response

Track 3: Earth Observations for Climate Change Adaptation and Food Security
-Earth observation for climate-smart agriculture
-Satellite-based water resource management
-Crop yield prediction and food security forecasting
-Climate change-resilient infrastructure planning

Track 4: Digital Technologies for Climate Change-Resilient Cities
-Urban landscape design and planning for climate change resilient cities
-Urban flood monitoring and early warning systems
-Urban Sprawl and and risk profiling
-Smart city digital twins and Internet of Things (IoT) integration
-Sustainable urban mobility and infrastructure planning
-Post-disaster recovery and reconstruction monitoring

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Session D:
Space Policy, Governance, Diplomacy, Innovation, and Economy

Track 1: Policy & Governance
-National space policies and legal frameworks

-Regulatory approaches for emerging space activities
-Space traffic management and orbital debris governance
-Licensing and spectrum allocation
-Ethics, equity, and inclusivity in space activities
-Space sustainability and long-term governance models
-Role of national space agencies and intergovernmental bodies

Track 2: Sovereignty & Data Governance
-Data governance, sovereignty, and sharing frameworks
-Open data policies and access to Earth observation archives
-Cross-border data flows and privacy in geospatial applications
-Standards, interoperability, and metadata harmonization
-Cybersecurity for space and geospatial infrastructure
-Trust, transparency, and accountability in geospatial data

Track 3: Diplomacy & International Cooperation
-International cooperation and space diplomacy
-Bilateral and multilateral space agreements
-Space as a tool of soft power and science diplomacy
-Governance of deep-space activities
-Conflict prevention and responsible behavior in outer space

Track 4: Public-Private Partnerships & Economy
-Public-private partnerships in space and geospatial sectors
-Commercialization of Earth observation and remote sensing
-New Space business models and market trends
-Financing models: venture capital, impact investment
-Cost-benefit analysis and socioeconomic returns of space programs
-Space economy indicators and measurement frameworks

Track 5: Innovation & Startup Ecosystems
-Startup ecosystems and venture opportunities
-Technology transfer and spin-offs from space to society
-Innovation hubs, incubators, and accelerators in the space sector
-AI, machine learning, and cloud computing in space applications
-Small satellites, cubesats, and constellation economics
-Downstream applications: agriculture, disaster, climate, urban planning
-Entrepreneurship in emerging space economies

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Abstract Submission Guidelines

1. Abstract Format:

Title: Clear and descriptive (max 25 words)

Authors & Affiliations: Include full names, institutions,
and email of presenting author

Length: 250–300 words, structured as:

- Background/Objectives
- Methodology
- Key Results/Findings
- Conclusion & Significance
- Keywords: 3–5 keywords
- Language: English

2. Presentation Formats:
* Oral Presentation (25-minute talk + 5-minute Q&A)
* Poster Presentation (displayed during dedicated sessions)

Parallel sessions
(Space and Climate Sciences, Aerospace, and Geospatial, Space Policy)

Technology Demo / Startup Pitch (for applied innovations and ventures)

Venue: Addis Ababa, Ethiopia

3. Submission Procedure:

Use Word/PDF with the file name:
Corresponding author's first name_session name.docx/.pdf

Submit via the Conference Website/Submission Portal: https://ssgi.gov.et/events

Select preferred presentation format (oral, poster, in-person or virtual) and thematic sessions.

Corresponding authors will receive acknowledgment and review updates.

4. **Important Dates:**
- Abstract Submission Opens: October 01, 2026
- Abstract Submission Deadline: December 31, 2026
- Notification of Acceptance: January 15, 2027
- Conference Dates: January 28–29, 2027

Contact Information
For inquiries regarding abstract submission or conference program:

Scientific Committee Chair: **Dr. Teshome Dugassa**
Email: pgr.office.ssgi@gmail.com

Conference Secretariat: **Yekoye Asmare**
Email: yekoye2000@gmail.com

[05]----------

RE: First Announcement:
XV COLAGE - XV Latin American Conference on Space Geophysics 2027

FROM: Maria Graciela Molina
Date: Oct 26, 2026

Dear ISWI Colleagues,

The *Asociación Latinoamericana de Geofísica Espacial (ALAGE)* and the *Instituto Geofísico del Perú (IGP)* invite the scientific community to participate in **COLAGE XV:**

XV COLAGE - XV Latin American Conference on Space Geophysics
https://www.igp.gob.pe/conferencias/colage/2027/

Arequipa, Peru; 6-10 September 2027

The system is open for pre-registration and abstract submissions.

Important Deadlines

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Web page open for abstract submission: 16 October 2026
Deadline for abstract submission: 15 December 2026

As is customary, the International School on Space Science (ISSS) will be held for students in Lima immediately before COLAGE, which takes place from September 1 to 4, 2027.

Please visit the website regularly to stay up to date with the latest updates.

Esmeralda Romero Hernandez
Information Secretary

[06]----------

Download the October 2026 edition of
the **AGS (African Geophysical Society) Newsletter:**

https://mcusercontent.com/b14cdf00ad22fff1badfcb2b2/files/da7e8383-b748-73fb-af67-521b1e17b979/agsnewsletter1123_Anglais.01.pdf

(Received 24 Oct 2026 at the ISWI Newsletter)

[07]----------

Next joint ISWI - SCOSTEP/COURSE online seminar

FROM: Dr Geetashree Kakoti
Date: 17 Nov 2026

Dear ISWI/SCOSTEP colleagues,

We are pleased to announce the next joint ISWI - SCOSTEP/COURSE online seminars of 2026. In this case, we will have two special talks by SCOSTEP Distinguished Scientists awardees of 2026, Prof. Michael Lockwood (UK) (Distinguished Scientist) on November 25th, 2026 ***and*** Dr. Dai Koshin (Japan) (Distinguished Young Scientist) on November 30th, 2026, both at 14:00 UTC.

To attend the Webinars, please register here:
https://iswi-secretariat.org/home-page/meetings/iswi-webinars/iswi-webinar-registration/

The MS Teams link will be sent to registered participants 2 days before the event. Please register at least 48 hours before the first webinar (November 23rd) to ensure timely processing.

For your reference, past Webinars can be found here :
(https://cdaw.gsfc.nasa.gov/webinars/ISWI/)

and SCOSTEP seminars can be found here
(https://cicr.isee.nagoya-u.ac.jp/site1/info_e/scostep_seminar.html).

With kind regards,
on behalf of the ISWI - SCOSTEP/COURSE online seminars Committee
- Graciela Molina (on behalf of the ISWI Webinar committee)
- Geetashree Kakoti (on behalf SCOSTEP/COURSE online seminar)

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November 25, 2026, 14:00 UTC

Title: Quantifying solar wind-magnetosphere coupling on a range of timescales

Speaker: Prof. Mike Lockwood, University of Reading, UK

Abstract:

A wide variety of magnetosphere-ionosphere “coupling functions” have been proposed and have generated considerable debate over many years. Much of this has arisen because the predictive performance of proposed combinations of parameters of near-Earth interplanetary space has been evaluated using different indices quantifying the response of Earth’s coupled magnetosphere-ionosphere-thermosphere system. However, there is no “universal” formulation that can predict all activity indices. Furthermore, the optimum formulation depends strongly on the timescale considered. A key factor is that magnetospheric dynamics is dominated by magnetic reconnection in the dayside magnetopause and in the cross-tail current sheet and although indices and measurements of the coupled terrestrial system respond to some extent to both, the ratios of the sensitivities vary such that, for example, the coupling function that best predicts transpolar voltage is considerably different to that which best predicts a geomagnetic index – and the latter varies greatly with the details of the derivation of that index. There are a number of

unavoidable difficulties in the use of coupling functions, such as propagation lags and spatial structure in the near-Earth heliosphere, but there are also common mistakes and pitfalls in their use. Some key ones are associated with the way temporal averaging is deployed and some coupling functions do not account for the effects of Universal Time and Time-of-Year on both the magnetopause and tail reconnection rates and on other aspects of the terrestrial response. These are induced by the tilt of the Earth's magnetic dipole axis which, even when allowed for, is usually approximated to be geocentric whereas, in reality, it is eccentric which adds Universal Time and longitudinal variations to the response. These dipole tilt effects can be averaged out using annual timescales, for which the broad distributions of some of the interplanetary parameters at high time resolution collapse down to near-constant values. The optimum coupling functions therefore become much simpler as a result and they have been used to study long term changes in the solar-terrestrial system, giving us insights into space climate as well as space weather.

November 30, 2026, 14:00 UTC

Title: Analyzing the global dynamics of the MLT using modeling and data assimilation

Speaker: Dr. Dai Koshin, Kyushu University, Japan.

Abstract:

The transition between the middle atmosphere and the thermosphere plays an important role in the coupling processes from the Earth's neutral atmosphere to the wide region of geospace. In particular, tides, planetary waves, and gravity waves contribute to the circulation and large dynamical variability in the MLT. Significant progress has been made in describing and understanding the dynamics of the MLT. In this talk, I will introduce JAWARA, a new whole neutral atmosphere reanalysis, and its applications to middle atmosphere phenomena, such as interhemispheric coupling through general circulation. Further advancing these studies, I will also present results from the lower thermospheric circulation analysis study.

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Geetashree Kakoti, PhD,
Division for Ionospheric and Magnetospheric Research,
Institute for Space-Earth Environmental Research (ISEE),
Nagoya University,
1 Furo-cho, Chikusa-ku, Nagoya, Japan, 464-8601

**********[End of this issue of the ISWI Newsletter]**********

In Memoriam



Prof. Sandro Maria Radicella
(1937-2026)

The international space weather and ionospheric community mourns the loss of one of their most extraordinary figures: *Professor Sandro Maria Radicella*, a scientific pioneer, father of operational ionospheric models, and indefatigable advocate for global scientific inclusion. Across a scientific journey that spanned more than six decades, Sandro transformed how modern satellite navigation accounts for the ionosphere, while simultaneously building an international scientific family that reaches across Latin America, Africa, Asia, and Europe.

Radicella's scientific path began in Tucumán, Argentina. Recognized early as a natural leader and visionary researcher, he went on to build pivotal space physics groups across the country. As a Principal Researcher for Argentina's National Scientific and Technical Research Council (CONICET), he organized and directed the National Program of Radiopropagation (PRONARP) for two decades. His early research into D-region aeronomy and low-latitude satellite scintillation laid the groundwork for a lifetime of innovation in radiopropagation.

Sandro became world-renowned for developing analytical ionospheric profilers that bridged theoretical physics and operational satellite navigation. In the 1990s, Radicella

introduced the DGR profiler, which represented the ionosphere analytically as a sum of Epstein layers using anchor points routinely scaled from ionograms. Working with international colleagues from the University of Graz, he developed the “Trieste-Graz” family of electron-density models, being the NeQuick among them. His work achieved global operational impact when the European Space Agency (ESA) officially integrated his profilers into EGNOS and adopted NeQuick for real-time ionospheric corrections in the Galileo GNSS constellation.
Joining the Abdus Salam International Centre for Theoretical Physics (ICTP) in Trieste in 1989, he founded the Aeronomy and Radiopropagation Laboratory, later evolving into the Telecommunications/ICT for Development Laboratory (T/ICT4D), and spent three decades organizing workshops for scientists from developing nations. Following the 1993 International Reference Ionosphere (IRI) Workshop, he initiated, together with Dieter Bilitza, the annual IRI Task Force Activity (ITFA) meetings at ICTP, leading them through 2004 and driving major enhancements to the IRI electron density profile formulations.

In 2009, following a landmark ICTP workshop on satellite navigation, Sandro partnered with Pat Doherty of Boston College to establish an enduring collaboration. Together, they deployed ionospheric monitoring stations, hosted training workshops across Africa and Trieste, and helped build university graduate curricula in ionospheric physics, space weather and radio science across the continent. Since then, grateful colleagues affectionately call him *"Papa Africa".*

In 2019, ICTP honoured Radicella with the prestigious *Spirit of Salam Award,* celebrating his lifetime of aligning scientific excellence with human solidarity. He was also awarded three Honoris Causa Doctorates: from the University of Bucharest (2001), Obafemi Awolowo University in Nigeria (2005), and from his alma mater, the Universidad Nacional de Tucumán (2019). Following his tenure at ICTP, he continued guiding young minds as a Visiting Scholar at Boston College and as a Lifetime Honorary Professor at the Universidad Complutense de Madrid. In his later years, he continued pushing frontiers, advocating for ionospheric physics as a complex chaotic system and the use of machine learning techniques for TEC forecasting.

Prof. Radicella’s will be deeply missed in our community but his spirit lives on in the hearts of generations of scientists who call him mentor, father, and friend.

Yenca Migoya-Orué

e-CALLISTO FITS Analyzer

002

Solar radio analysis for research and education

Sahan S Liyanage
Arthur C. Clarke Institute for Modern Technologies, Sri Lanka
Astronomical and Space Science Unit, University of Colombo, Sri Lanka
sahanslst@gmail.com

The e-CALLISTO FITS Analyzer is a free, open-source desktop application for exploring solar radio observations and measuring radio bursts. It brings data preparation, quantitative analysis and solar-event context into a graphical interface, making it useful for researchers, station operators and students in the International Space Weather Initiative (ISWI) community. The software runs on Windows, macOS and Linux, with self-contained installers that do not require a separate Python installation.

Working with solar radio spectra

A dynamic spectrum shows how radio intensity varies with time and frequency. Solar bursts appear as structures within this spectrum, but receiver background and radio-frequency interference can obscure them. The Analyzer opens compressed or uncompressed CALLISTO FITS files and combines observations across time and frequency. Users can subtract a mean or median background, adjust the display and clean interference before selecting an emission feature for closer study.

A built-in downloader retrieves observations from the e-CALLISTO archive and provides access to the Monstein burst list. Multi-station comparison helps users examine the same event from different observing sites. These tools provide a practical starting point for investigating whether an apparent feature is consistent across independent observations.

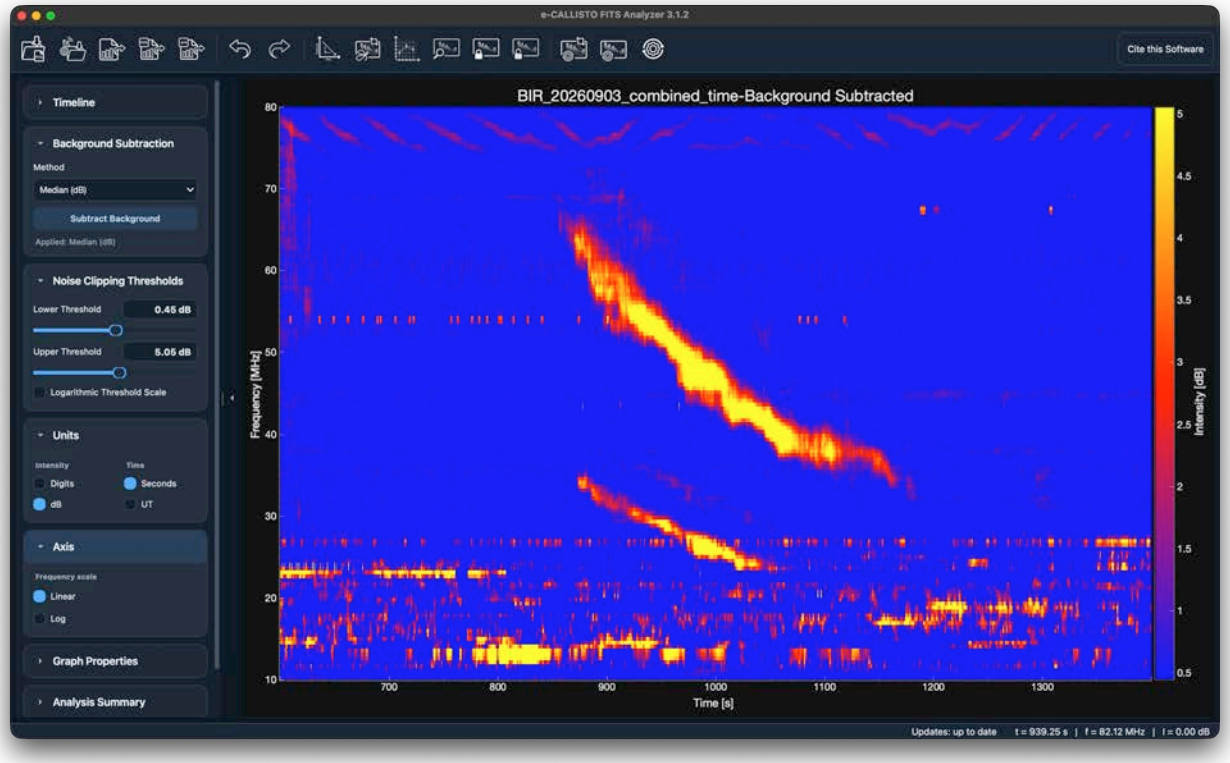


Figure 1. Dynamic spectrum of a Type II solar radio burst observed by BIR on 03/09/2026, after background subtraction and interference treatment. Time is in UTC and frequency in MHz.

For a student exercise, the same observation can be examined before and after processing. Comparing those views helps explain how display choices and interference removal affect the features selected for measurement.

Measuring Type II bursts

Dedicated tools isolate a Type II burst, extract its intensity maxima or track its ridge automatically, and fit the emission lane to determine its frequency drift rate. The observed frequency evolution can then be converted into estimates of shock height and speed using five coronal electron-density models. A comparison of the model results helps users assess how their assumptions influence the inferred kinematics.

The band-splitting tools also estimate shock compression, Alfvén speed and coronal magnetic-field strength under the adopted physical interpretation. These quantities are model-dependent estimates. A reproducible analysis should report the selected emission mode, density model and multiplier, time origin, and processing settings alongside the measurements.

Connecting radio observations with solar images

The package includes a Solar Image Analyzer for observations from SDO, SOHO and STEREO. It supports difference images, CME tracking and height–time measurements, together with potential-field source-surface (PFSS) magnetic-field overlays. A Graduated Cylindrical Shell (GCS) workspace fits a shared three-dimensional CME model to coronagraph images from multiple viewpoints, with separate shock-fitting tools. GOES X-ray and particle data, CME catalogs and geomagnetic indices provide additional event context.

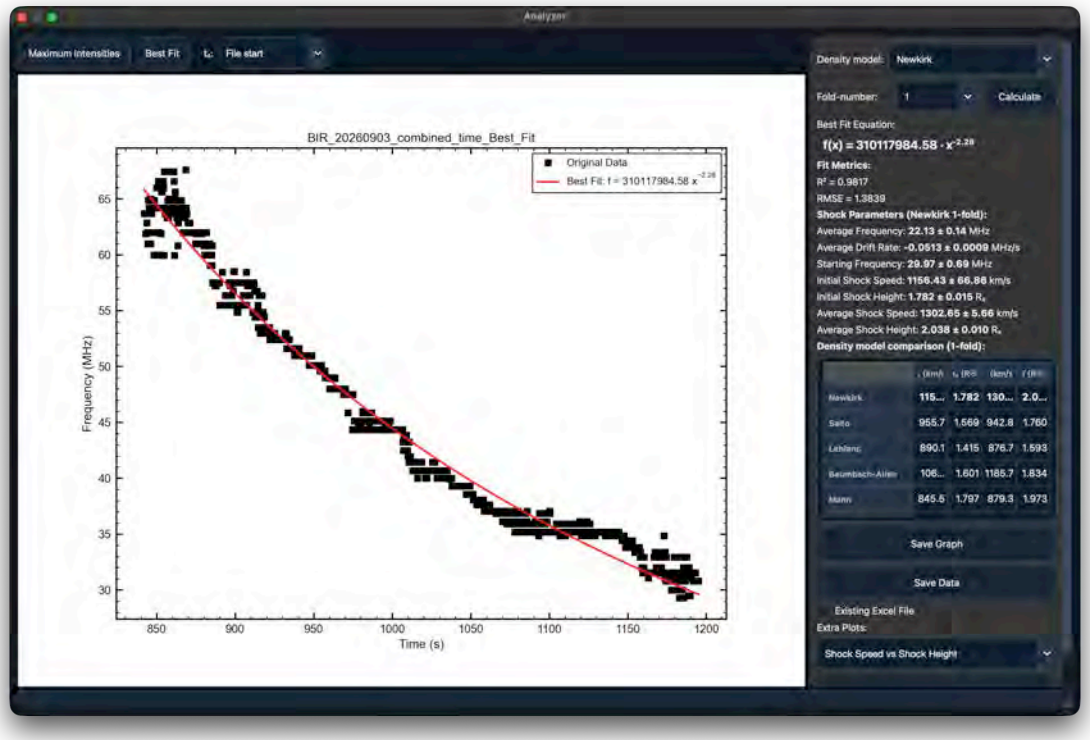


Figure 2. Frequency–time fit to the Type II burst in Figure 1 and comparison of shock parameters obtained with the available coronal density models.

Access and participation

The website provides installers, an illustrated user guide, tutorials and the source code under the MIT license. Users can export figures and numerical results and save projects for later work. ISWI readers are invited to try the software with observations from their own stations and share questions, bug reports or suggestions through the project community. Research users should cite the software paper and acknowledge the original data providers.

Website ecallistoanalyzer.org

User guide ecallistoanalyzer.org/guide

Software reference Liyanage, G. L. S. S., Adassuriya, J., Jayaratne, K. P. S. C., Monstein, C., and Manoharan, P. K. (2026). e-CALLISTO FITS analyzer: a software framework for CALLISTO solar radio data. RAS Techniques and Instruments, 5, rzag056. doi:10.1093/rasti/rzag056

Solar Observer

003

A browser workspace for solar activity and space weather

Sahan S Liyanage
Arthur C. Clarke Institute for Modern Technologies, Sri Lanka
Astronomical and Space Science Unit, University of Colombo, Sri Lanka
sahanslst@gmail.com

Solar Observer is a web platform that brings solar observations and space weather measurements into one browser workspace. It combines e-CALLISTO radio spectra with solar images, GOES measurements, solar-wind data and geomagnetic indices. For readers of the International Space Weather Initiative (ISWI) Newsletter, it offers a convenient way to place ground-based radio observations alongside measurements from space and to introduce students to the relationships between these data.

Following activity across several observations

The overview page brings together GOES X-ray and proton flux, Kp and Dst indices, solar-wind speed and interplanetary magnetic-field measurements. Recent SDO images and SOHO/LASCO coronagraph movies provide a view of activity on the Sun and in the outer corona. Dedicated pages allow closer inspection of individual measurements, while sunspot number and F10.7 radio flux place current activity within the longer solar-cycle record.

All times are presented in UTC, helping users compare observations from different instruments. An event timeline brings together radio bursts, X-ray flares, proton events, coronal mass ejections and geomagnetic storms. Archive tools support searches by date, making the platform useful for reviewing an earlier event as well as following recent activity.

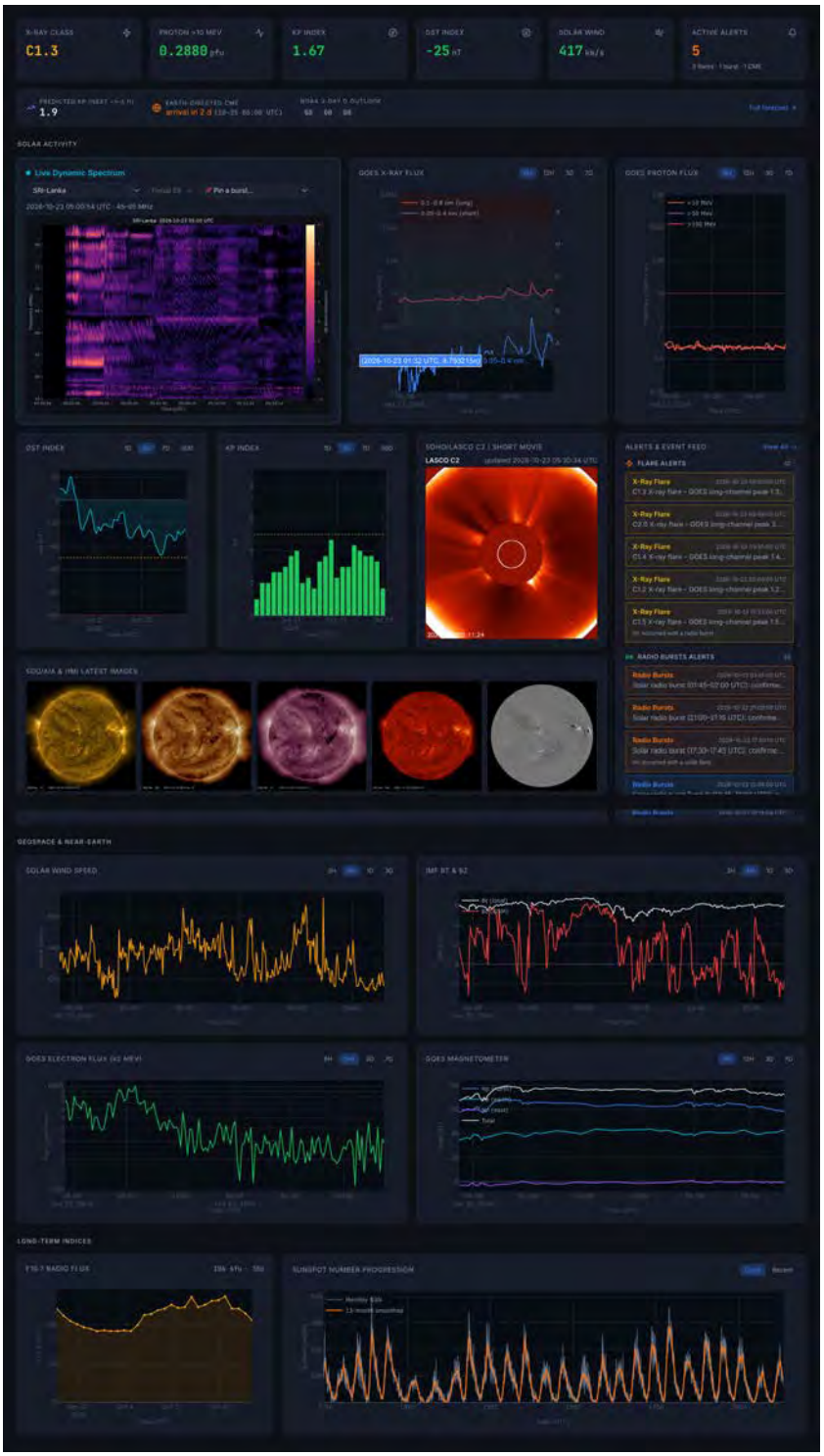


Figure 1. Solar Observer view comparing an e-CALLISTO dynamic spectrum from SRI-Lanka with GOES soft X-ray flux. The shared UTC time axis supports comparison of the radio and X-ray signatures. Data credit: NOAA, e-CALLISTO, NASA.

A useful teaching exercise is to follow one eruption across these views: identify its radio emission, compare the timing with an X-ray flare, and inspect the corresponding images. Any later solar-wind or geomagnetic response should be examined with attention to propagation time and event association.

Radio bursts and interactive analysis

Solar Observer includes a live e-CALLISTO radio page that prioritizes observations from the Sri Lankan ACCIMT station. Its burst-detection workspace applies machine-learning models to daily e-CALLISTO spectrograms. Users can select stations and a date, review candidate events and export the results. The interface distinguishes raw model detections from events meeting its corroboration criteria across independent stations. Candidate detections provide a starting point for visual inspection and comparison with other instruments.

A browser-based e-CALLISTO FITS viewer provides background subtraction, color-map controls, interference filtering, statistics and export. This gives users a way to inspect a radio observation within the same platform used for the wider event overview. For more detailed Type II measurements and CME reconstruction, the separate e-CALLISTO FITS Analyzer desktop application is available through its own project website.

Exploring solar images

The image-analysis workspace uses SunPy-based tools to load observations, adjust image displays and examine changes over time. Running and base differences can reveal moving or evolving structures. Composite views can overlay HMI magnetic-field contours on AIA images, helping relate coronal features to the photospheric field. Active-region tools and movie generation support closer inspection of an image sequence.

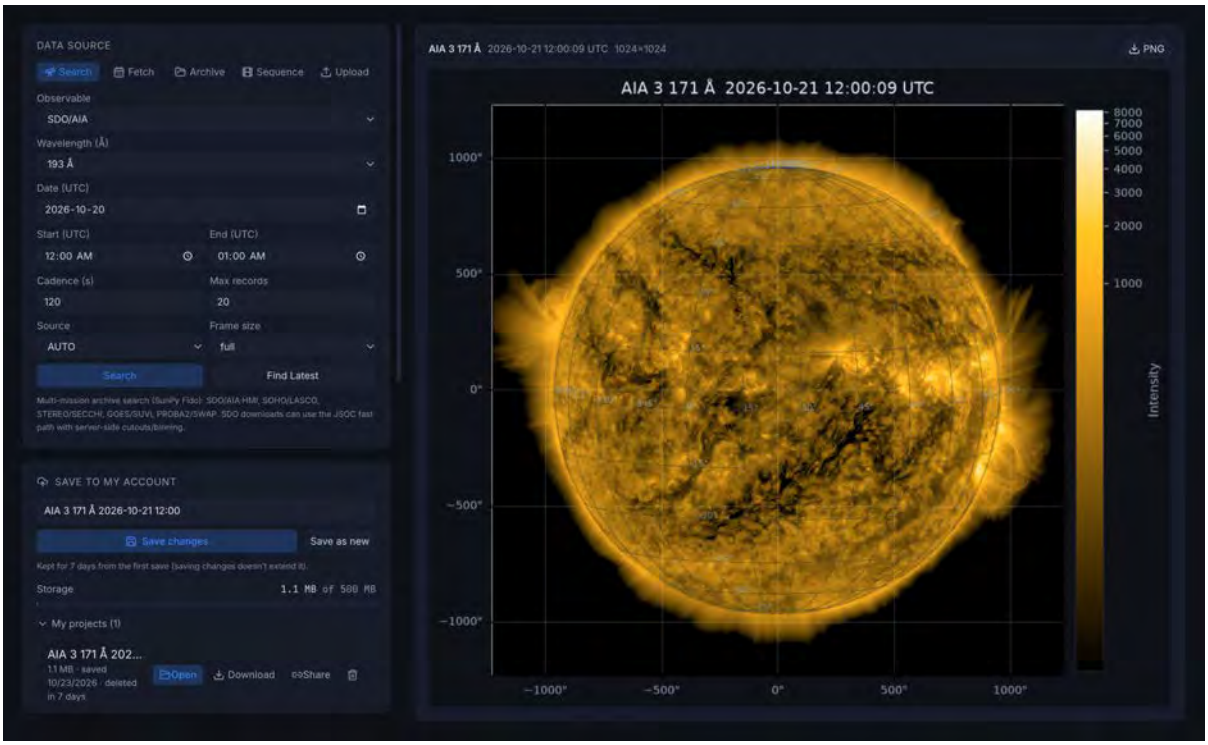


Figure 2. SDO/AIA 171 observations. Image credit: NASA/SDO and the AIA science team.

Using the platform

Forecast and alert pages display space weather outlooks and event information alongside the observations. Users should check each product's source and time stamp, since update intervals and data availability differ. The searchable user guide and science reference explain the instruments, parameters and methods used throughout the platform.

ISWI educators and observers are invited to explore Solar Observer with an event of interest and use its linked views in demonstrations or student projects. The platform draws on data from e-CALLISTO, NOAA and NASA, ESA/NASA SOHO, and geomagnetic data services including Kyoto. Figures and research products prepared using these observations should acknowledge the original providers.

Website solarobserver.org **User guide** solarobserver.org/user-guide