
* ISWI Newsletter - Vol. 16 No. 009 12 September 2024 *

* Editor: George Maeda, georgemaeda3[at]gmail.com

* Archive of back issues: ISWI Website <https://iswi-secretariat.org/>

* Archive of all ISWI webinars:

* <https://www.youtube.com/playlist?list=PLaOqa4cng0GF3cKuj6Yz5kqG1BQ-Akkhr>

* Send subscription request to: iswisupport@bc.edu

Dear ISWI Newsletter Subscriber:

If you have announcements for the ISWI community, please send them to me. However, please do so far in advance (i.e., several weeks) of any relevant deadlines. This newsletter goes out only once per month.

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

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[02] A photo report about a recent visit to ISR of Boston College
. (by George Maeda)

[03] **THE NEXT ISWI WEBINAR:**

- . Title: Exploring the Middle Corona (the Second Coronal Transition Region)
- . Speaker: Matthew West, Southwest Research Institute
- . 25th Sept 2024.

[04] The photo report of COSPAR Capacity Building Workshop
. **“Coronal and Interplanetary Shocks: Analysis of SOHO,
STEREO, SDO, Wind, and Ground Ground-based Radio Data”;**
. August 19-30, 2024 Samarkand State University, Samarkand City, Uzbekistan

[01]-----

FROM: Christian Monstein
DATE: 14 August 2024
TO: Members of Callisto

Dear all

A new paper has been published with solar radio burst data from CALLISTO at Arecibo Observatory, Puerto Rico.

The Multifaceted M1.7 GOES-class Flare Event of 21 April 2023 in AR13283

Authors:

A. Elmhamdi · A. Marassi · P. Romano · L. Contarino · W. Al Shehri
· C. Monstein

Have fun

[02]-----

George Maeda, the editor of this newsletter, recently visited
ISR (Institute for Scientific Research) on the beautiful
Newton Campus of Boston College, Massachusetts.

He created this 16-page photo report of the visit.

See:

G Maeda visited ISR BC on 21-Aug-2024.pdf

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[03]-----

FROM: Maria Graciela Molina
TO: ISWI Newsletter
DATE: 4 Sept 2024

Dear colleagues,

We are pleased to announce the next ISWI Webinar by Dr Matthew West
scheduled for September 25th, 2024 at 3 PM Central European Time
(9 AM EDT; 6:30 PM IST).

To register for the virtual seminar, please send an email to:
iswisupport@bc.edu. Please include "ISWI Seminar Registration"
in the subject line. There is a limit of 300 participants,
so please register your interest as soon as possible.
The MS Teams link will be sent to registered participants
2 days before the event.

Please remember that the seminars will be recorded.
The playlist with the previous seminars, which will also
include future sessions, can be accessed through the following link:
https://www.unoosa.org/oosa/en/ourwork/psa/bssi/iswi_webinars.html

Looking forward to meeting you in the next ISWI seminar!
With kind regards,

Graciela Molina

on behalf of the ISWI Seminar Committee

<https://iswi-secretariat.org/home-page/organization/iswi-webinar-committee/>

Title: **Exploring the Middle Corona (the Second Coronal Transition Region)**

Speaker: Matthew West

Southwest Research Institute

Abstract:

The middle corona, the region roughly spanning heliocentric distances from 1.5 to 6 solar radii, encompasses almost all of the influential physical transitions and processes that govern the behavior of coronal outflow into the heliosphere. The solar wind, eruptions, and flows pass through the region, and they are shaped by it. Importantly, the region also modulates inflow from above that can drive dynamic changes at lower heights in the inner corona. Consequently, the middle corona is essential for comprehensively connecting the corona to the heliosphere and for developing corresponding global models. Nonetheless, because it is challenging to observe, the region has been poorly studied by both major solar remote-sensing and in-situ missions and instruments, extending back to the Solar and Heliospheric Observatory (SOHO) era. Thanks to recent advances in instrumentation, observational processing techniques, and a realization of the importance of the region, interest in the middle corona has increased. Although the region cannot be intrinsically separated from other regions of the solar atmosphere, there has emerged a need to define the region in terms of its location and extension in the solar atmosphere, its composition, the physical transitions that it covers, and the underlying physics believed to shape the region. In this presentation I will discuss how we currently observe the region, its importance for space weather and the heliosphere, efforts to model the region, and open questions that need to be addressed.

For those wanting to perform pre-reading:

<https://link.springer.com/article/10.1007/s11207-023-02170-1>

See the event flyer:

Sept abstract.pdf

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Dra. María Graciela Molina
Associate Professor FACET -UNT
Researcher CONICET
Associated researcher INGV

Av. Independencia 1800, Tucumán - Argentina

Tel: +54-381-4364093 (ext.7765)

gmolina@herrera.unt.edu.ar/

m.graciela.molina@gmail.com

[04]-----

Christian Monstein submitted this photo report to the ISWI
Newsletter. Kindly check it out!

See:
COSPAR2024-Capacity-Building-Workshop-Impressions.pdf
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*****[End of this issue of the ISWI Newsletter]*****

George Maeda (Editor of the ISWI Newsletter) paid ISR a courtesy call on 21 August 2024

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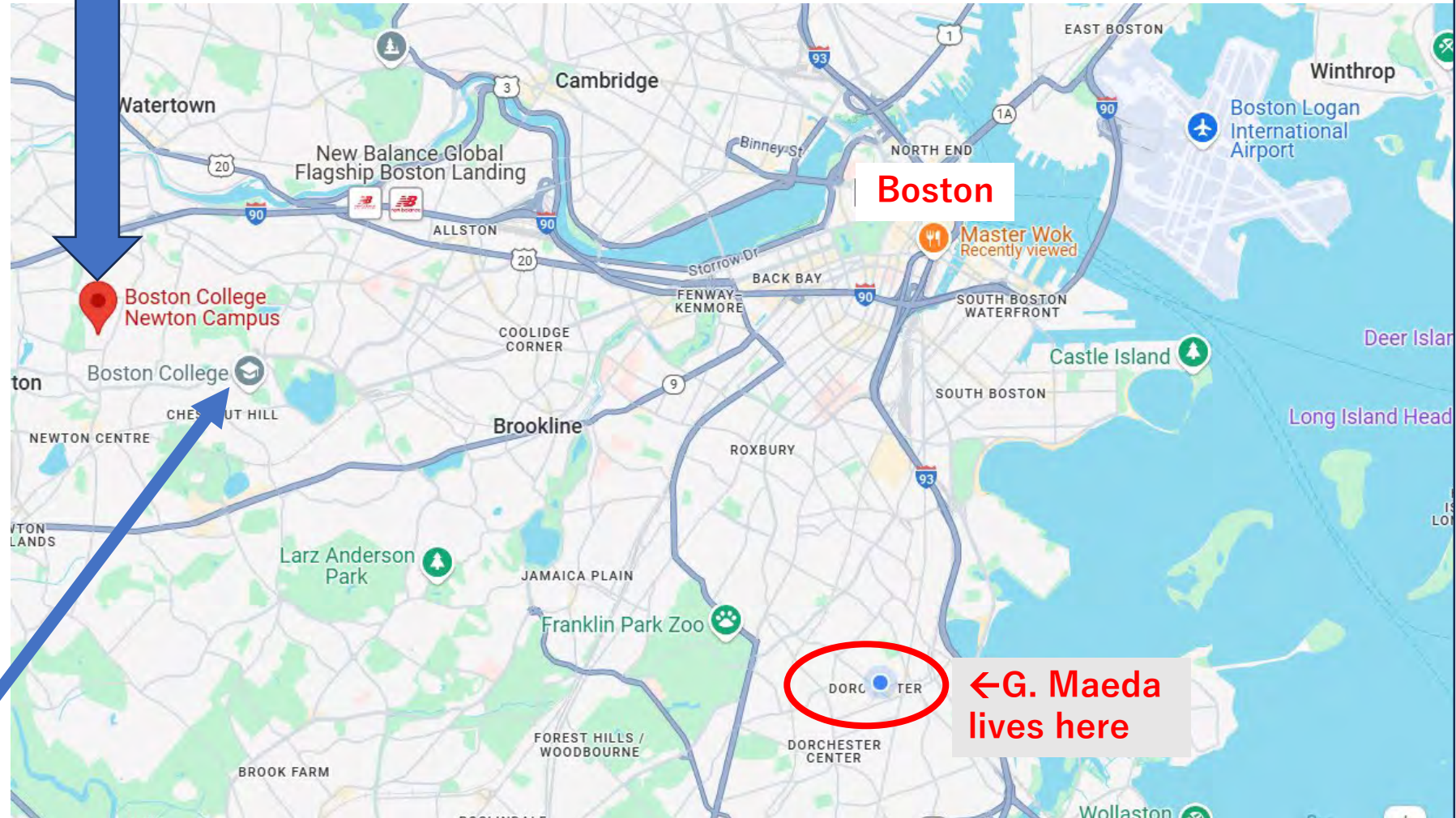


This document prepared by G. Maeda on 4 Sept 2024.

ISR is located on the beautiful campus of Newton Campus of Boston College



The main campus of Boston College is [here](#)



Boston College Newton Campus in detail

IS R



The previous occupant
of this building



Boston College Law School
(my daughter is a 1st Year law student here)



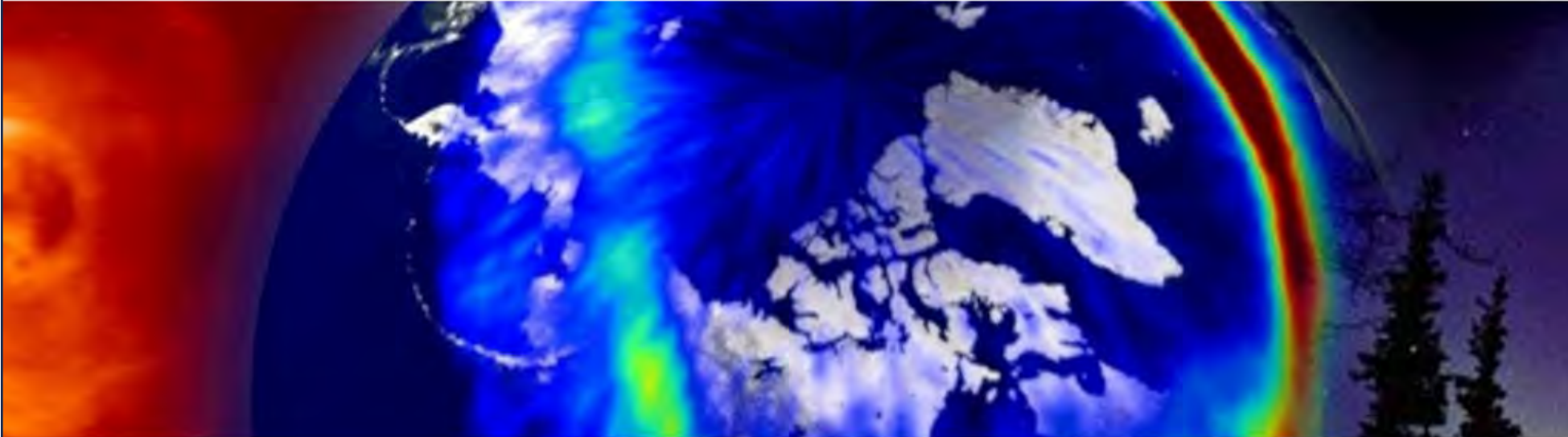


Some of the buildings of Newton Campus of Boston College



ISR offices are in here

Institute for Scientific Research

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Formed in 1954, the Institute for Scientific Research (ISR) is the largest sponsored research center at Boston College. Our highly skilled team of scientists, engineers, mathematicians, and research associates uses its expertise for theoretical and experimental studies that include space physics, space chemistry, solar-terrestrial research, space weather, and astrophysical studies. Our current projects include heavenly explorations—for example, observing the celestial sky to interpret the changes in infrared emissions in space—and earthbound pursuits, such as defining the effects of solar storms on space-based communication and navigation systems. The ISR is currently the host site for the Secretariat Office of SCOSTEP, the Scientific Committee on Solar-Terrestrial Physics.



<https://www.bc.edu/bc-web/research/sites/institute-for-scientific-research.html>

← Main website for ISR; for access use the link below



The Editor of the ISWI Newsletter (George Maeda) enjoyed lunch on 21 August 2024 with these members of ISR:

- ① Dr. Keith Groves, far left
- ② George Maeda
- ③ Dr. Kathleen Kraemer
- ④ Dr. Ted Beach



During the summer of 2017, ISR hosted this UN event:

The United Nations/United States of America Workshop on the International Space Weather Initiative:

The Decade after the International Heliophysical Year 2007
31 July – 4 August, 2017 Boston College, Boston, MA



On the following slides, photos of this workshop are presented.



WELCOME RECEPTION The Gasson Hall

The Scientific Organizing Committee



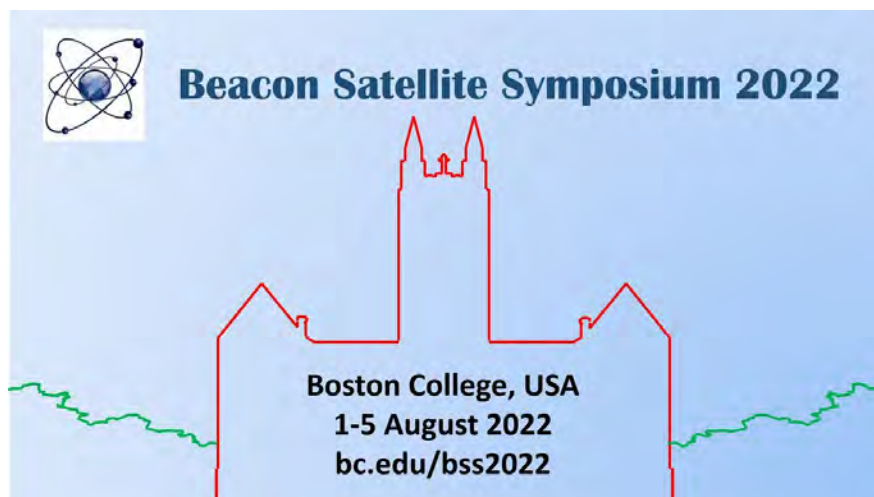
The United Nations/United States of America Workshop on ISWI
Participants



The Local Organizing
Committee
Patricia Doherty (Chair)
Daneille Berzinis
Andrea Murphy
Keith Groves
Kathleen Kraemer
Sean O'Connell
David Webb
Susan Delay
Endawoke Yizengaw



In recent years,
ISR also hosted
this event →



21st International Beacon Satellite Symposium August 1 - 5, 2022

Hosted by:
The Institute for Scientific Research
Boston College
Chestnut Hill, Massachusetts, USA



A triennial event organized by the Beacon Satellite Studies Group of the International Union of Radio Scientists (URSI) Commission G; an interdisciplinary group servicing science, research applications and engineering aspects of satellite signals observed from the ground and in space.



Local Organizing Committee

We thank Boston College for their gracious and generous support as hosts of this workshop.

We specifically thank the Local Organizing Committee for their tireless efforts:

Patricia Doherty
Keith Groves
Kathleen Kraemer
Thomas Kuchar
Andrea Murphy
Sean O'Connell
Teddy Surco
Vadym Paznukhov
Theodore Beach

And the entire Institute for Scientific Research!



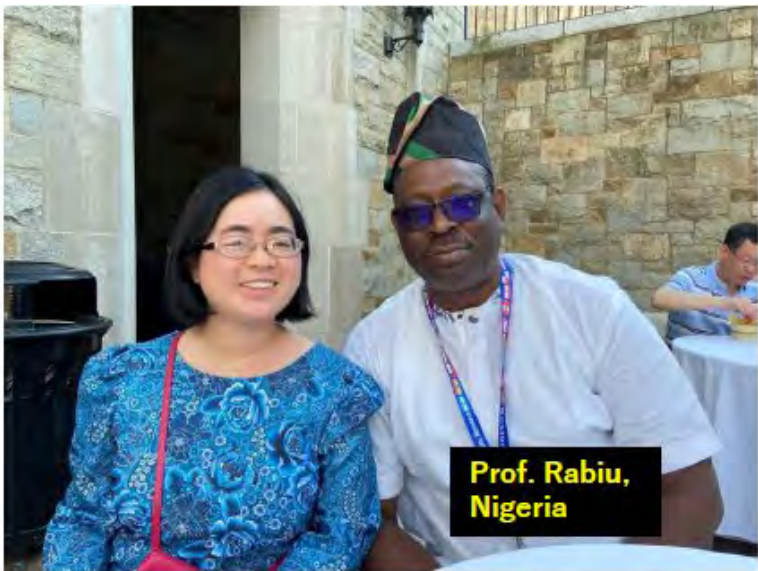
Beacon Satellite
SYMPOSIUM 2022

Boston College, USA
1-5 August 2022

Scientific Organizing Committee

This workshop was designed and organized by an international group of radio scientists:

Patricia Doherty	Boston College, USA
Lucilla Alfonsi	National Inst. Of Geophysics and Volcanology (INGV), Italy
Anthea Coster	MIT Haystack Observatory, USA
Eurico de Paula	National Institute for Space Research (INPE), Brazil
Keith Groves	Boston College, USA
Andrzej Krankowski	University of Warmia and Mazury, Poland
Zishen Li	Chinese Academy of Science (CAS), China
Bruno Nava	Abdus Salam International Centre for Theoretical Physics, IT
Manuel Hernández-Pajares	Universitat Politecnica de Catalunya (UPC), Spain
Ashik Paul	University of Calcutta, India
Babatunde Rabi	National Space Research and Development Agency, Nigeria



**Prof. Rabi,
Nigeria**

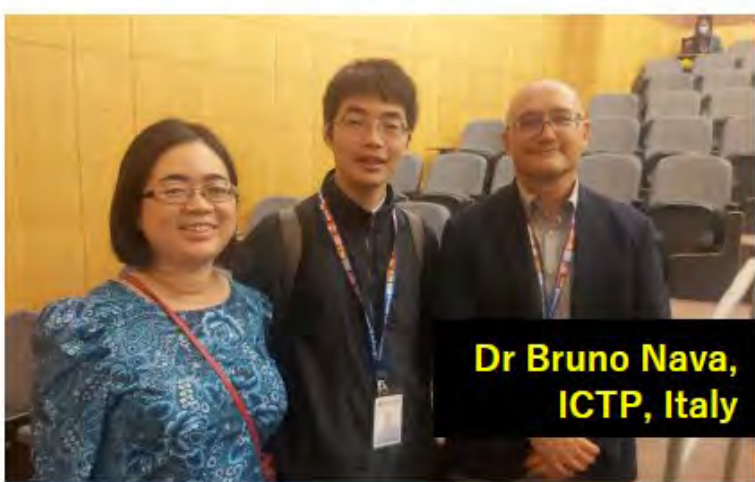


**Dr Endawoke,
Ethiopia**

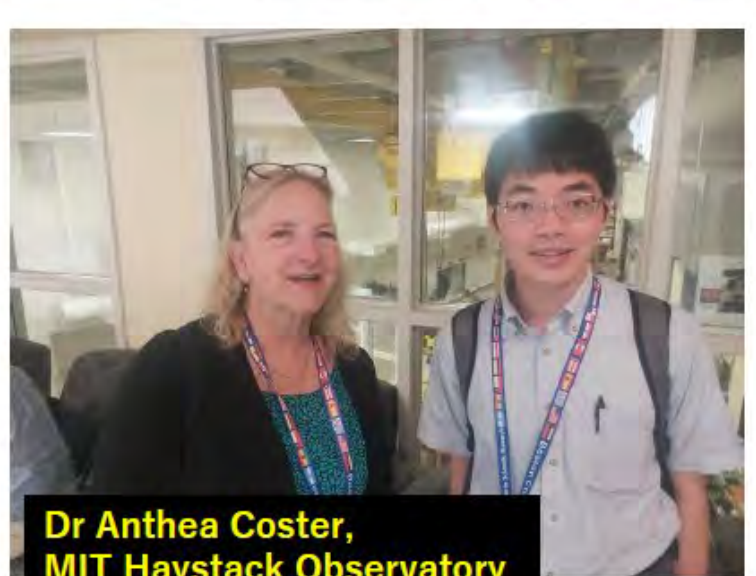


研二

**Sandro Radicella,
Boston College**



**Dr Bruno Nava,
ICTP, Italy**



**Dr Anthea Coster,
MIT Haystack Observatory**



Beacon Satellite
SYMPOSIUM 2022

Boston College, USA
1-5 August 2022



Dr Endawoke Yizengaw, *The Aerospace Corporation.*



Prof Rabi, Nigerian Space Agency.



Ms. Shafa Gadimova, UNOOSA. GNSS expert at the UN.



Dr Keith Groves, now Boston College.



Beacon Satellite
SYMPOSIUM 2022

Boston College, USA
1-5 August 2022

End of this document



Dr. Matthew West

Southwest Research
Institute

Exploring the Middle Corona (the Second Coronal Transition Region)

The middle corona, the region roughly spanning heliocentric distances from 1.5 to 6 solar radii, encompasses almost all of the influential physical transitions and processes that govern the behavior of coronal outflow into the heliosphere. The solar wind, eruptions, and flows pass through the region, and they are shaped by it. Importantly, the region also modulates inflow from above that can drive dynamic changes at lower heights in the inner corona. Consequently, the middle corona is essential for comprehensively connecting the corona to the heliosphere and for developing corresponding global models. Nonetheless, because it is challenging to observe, the region has been poorly studied by both major solar remote-sensing and in-situ missions and instruments, extending back to the Solar and Heliospheric Observatory (SOHO) era. Thanks to recent advances in instrumentation, observational processing techniques, and a realization of the importance of the region, interest in the middle corona has increased. Although the region cannot be intrinsically separated from other regions of the solar atmosphere, there has emerged a need to define the region in terms of its location and extension in the solar atmosphere, its composition, the physical transitions that it covers, and the underlying physics believed to shape the region. In this presentation I will discuss how we currently observe the region, its importance for space weather and the heliosphere, efforts to model the region, and open questions that need to be addressed.



← Abstract for the Sept 2024 ISWI Webinar

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COSPAR Capacity Building Workshop

“Coronal and Interplanetary Shocks: Analysis of SOHO, STEREO, SDO, Wind, and Ground-based Radio Data”

August 19 - 30, 2024 Samarkand State University, Samarkand City, Uzbekistan



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Image by
Diyorbek

The main objective of the COSPAR Capacity-Building Workshops was to encourage the scientific use of space data by scientists in developing countries. In particular, in view of the large number of extensive archives of data from past and current space missions, and the ready access to these and the associated analysis software via the internet, the typical workshop aims to provide a highly practical training in the use of one or more of these, based on current missions.

- 1 student from Algeria
- 1 student from Egypt
- 1 student from Nigeria
- 4 students from India
- 1 student from Kazakhstan
- 1 student from Malaysia
- 1 student from Sri Lanka
- 4 students from Tajikistan
- 2 students from Turkey
- 21 students from Uzbekistan

In total 37 students whereas 70% male and 30% female

University Building and Inauguration at SSU



Dinner with Nat, Seiji, Perti and Carlos



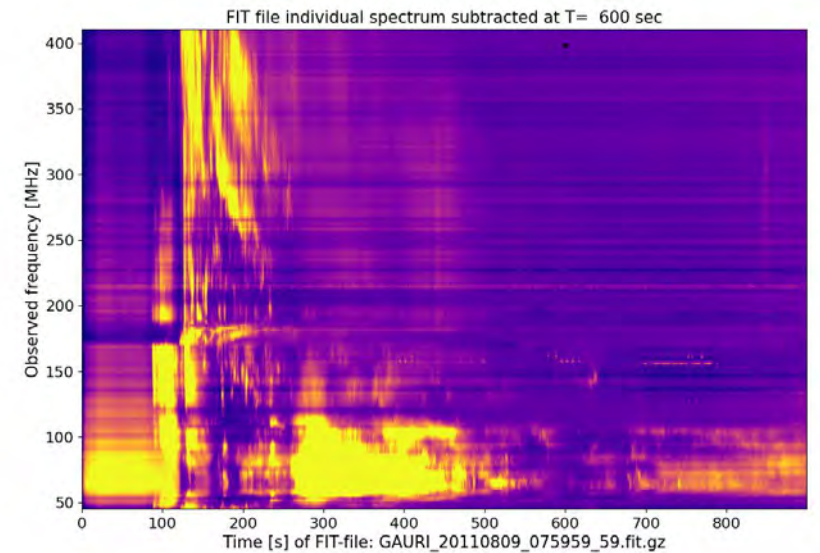
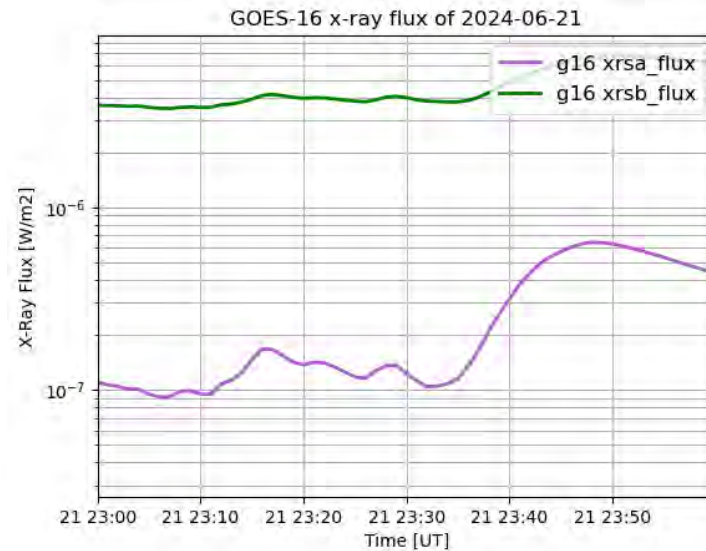
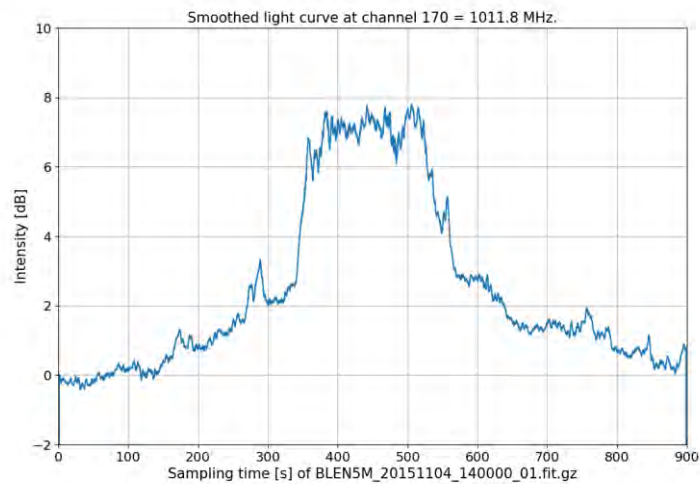
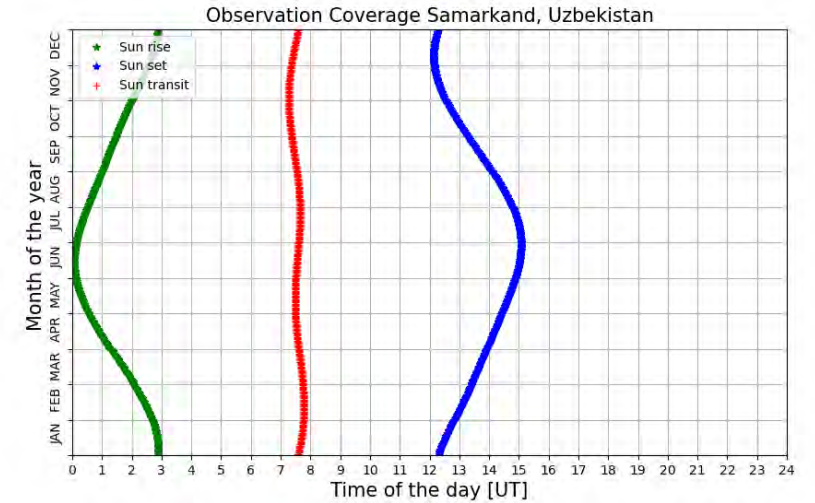
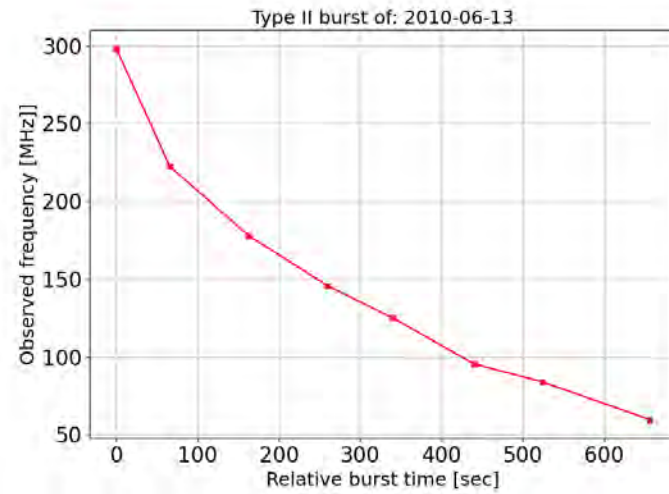
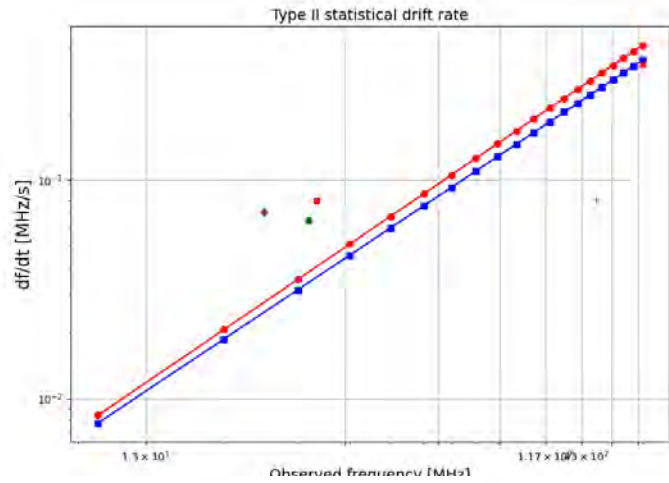
Preparation antenna installation for CALLISTO



Every day 90 minutes of Python lectures

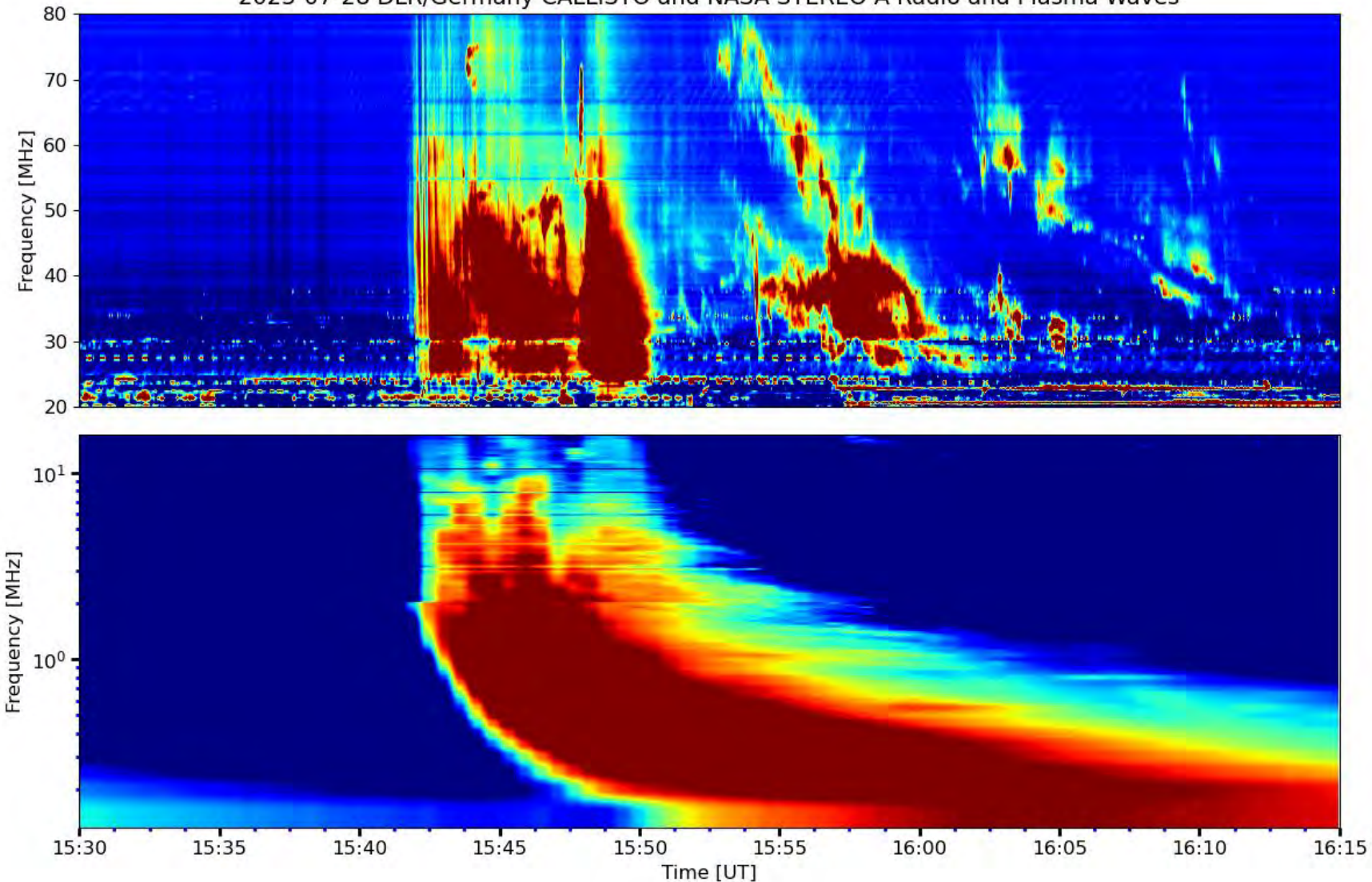


Some results from Python lectures



Results from Python lectures, combined observations

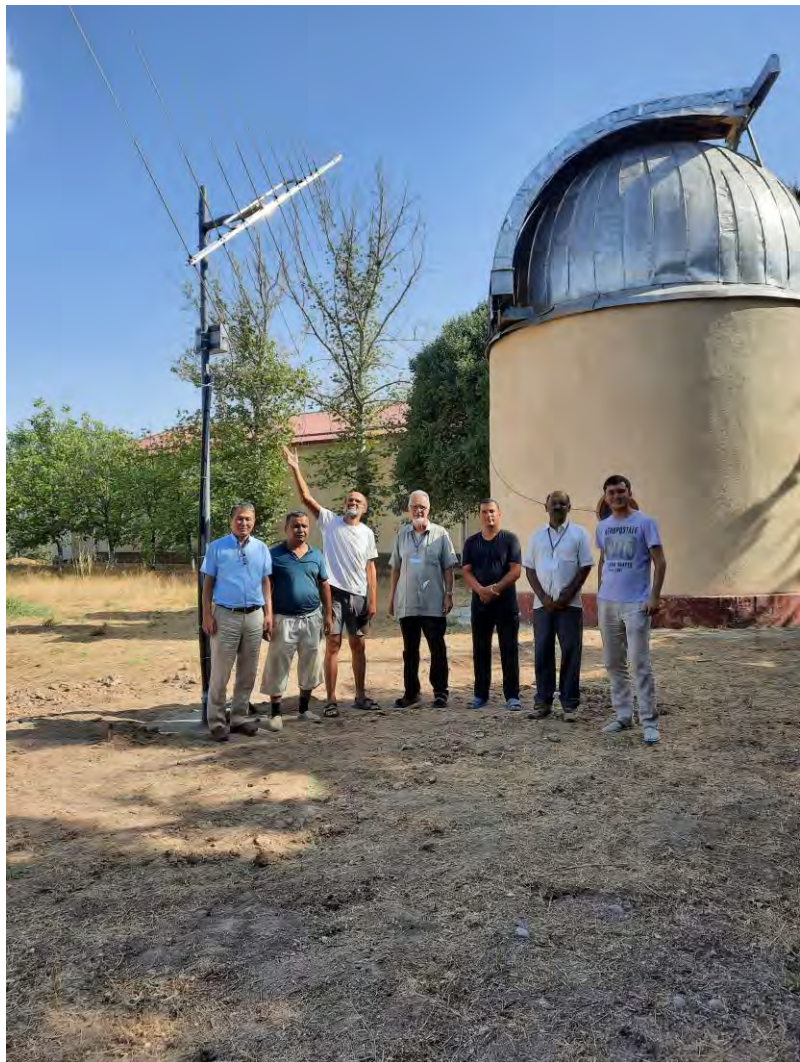
2023-07-28 DLR/Germany CALLISTO and NASA STEREO A Radio and Plasma Waves



Mounting antenna and low noise amplifier



Antenna finalized, instructions about software



Visiting Kitab International Latitude station



Birth place of King Amir Temur in Shakrisabz Oq Saroy



Working groups #1-3 with Kathir, Perti and Wageesha



Working group #5 with Seiji Yashiro



Working group #6 with Nandity Srivastava



Python support and girls power



Handover of workshop certificates



Excursion to Olugh Beg Observatory and Shaki-Zinda Necropolis

