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CALLISTO status report/newsletter #100

This report is number 100 after the 1st one on July 4th 2003 thus, this project is now running for 21 years and the network is still growing.

Several recent 1st lights

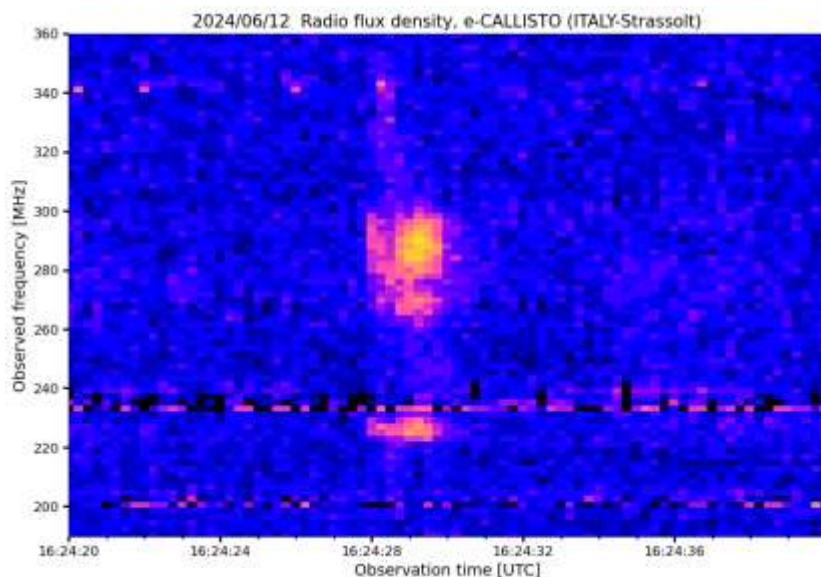


Fig. 1: 1st light from new station Strassolt in Italy
Contact: Alex Marassi
<alessandro.marassi(at)inaf.it>

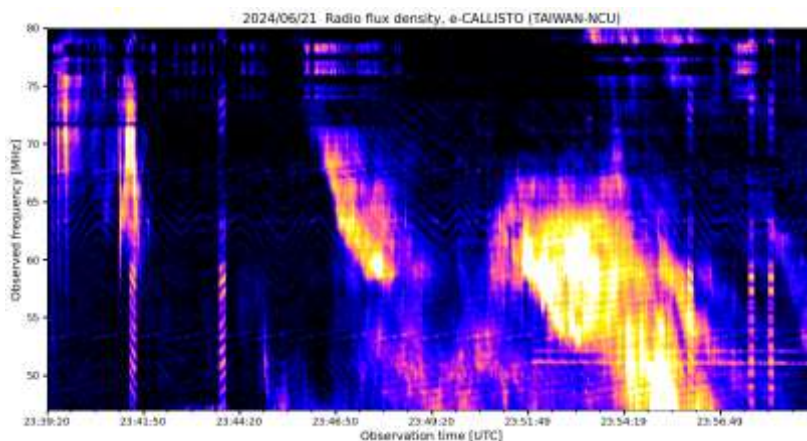


Fig. 2: 1st light from new station Taiwan-NCU
Contact: Ya-Hui Yang
<yhyang(at)jupiter.ss.ncu.edu.tw>



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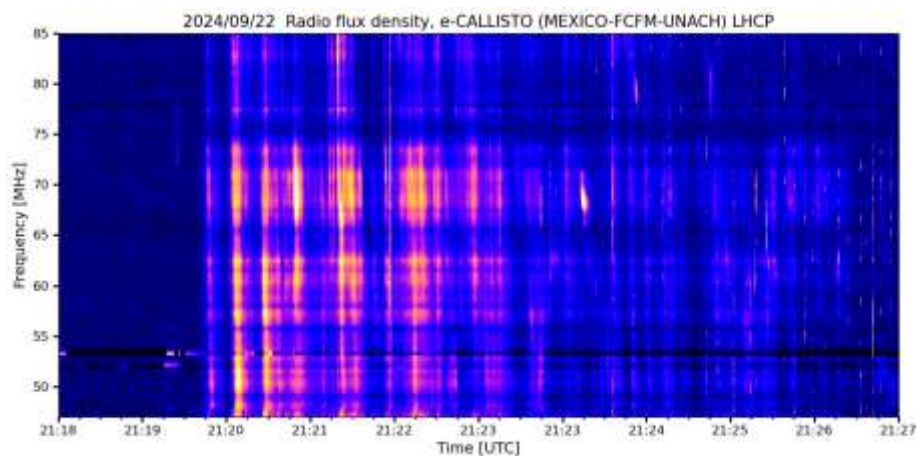


Fig. 3: 1st light from station MEXICO-FCFM-UNACH

Contact: Ernesto Aguilar Rodríguez<Ernesto(at)igeofisica.unam.mx>

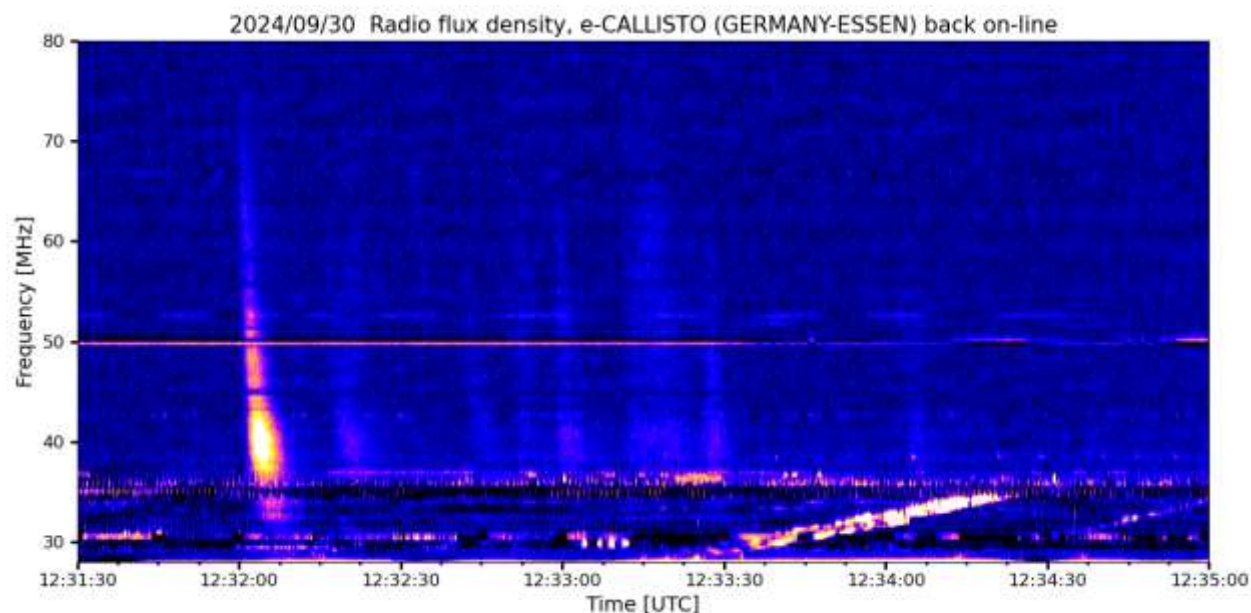


Fig. 4: 1st light from station ESSEN in Germany after years of maintenance break. Antenna biconical.
Contact: Jochen Plessmann <do1jpa(at)gmx.de>



Fig. 5: Group photo with LWA in Chiapas, Mexico. Contact: Ernesto Aguilar Rodríguez <Ernesto(at)igeofisica.unam.mx>



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Fig. 5: Logarithmic periodic dipole array (LPDA) including front-end box containing low noise amplifier. Antenna with tracking system. Station: Croatia-Visnjan
Contact: Marko Radolović <[mradolovic\(at\)gmail.com](mailto:mradolovic(at)gmail.com)>



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e-Callisto burst statistics October 2024

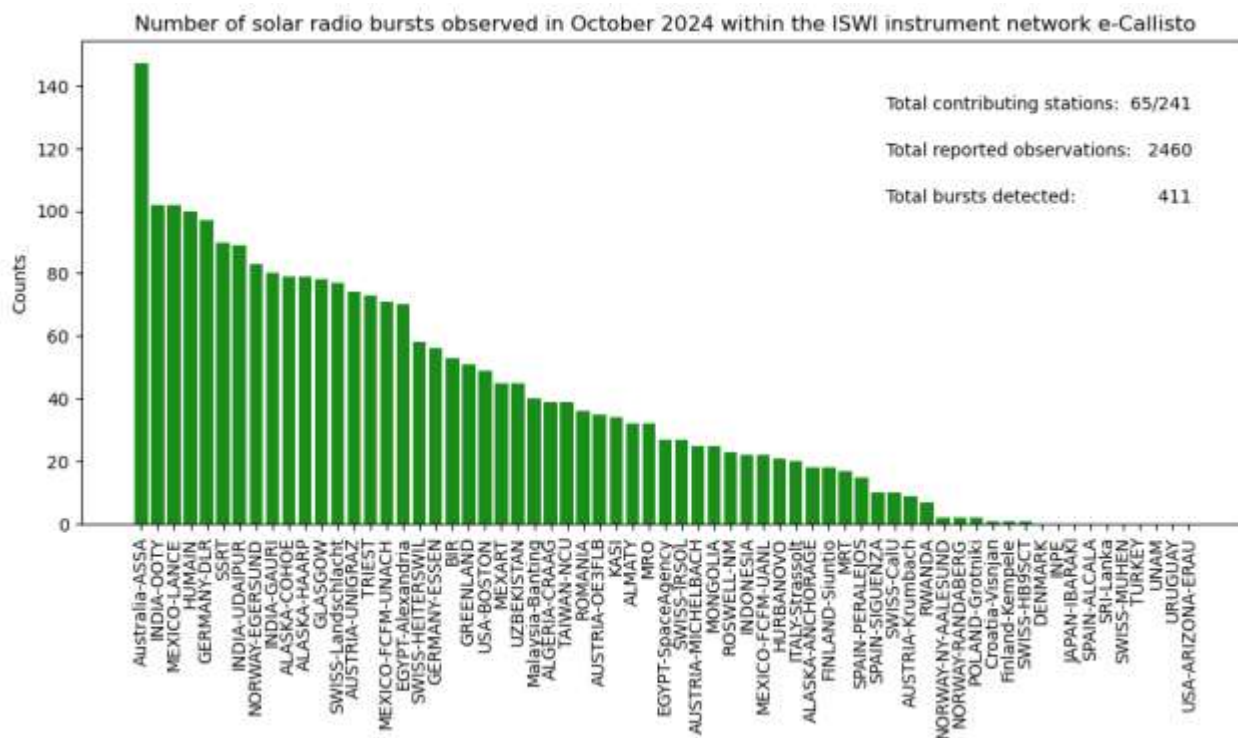


Fig. 6: Compilation of all visually detected bursts from all Callisto-stations which provide data to the e-Callisto network. There are clear ‘winners’ of the May-‘competition’, Australia-ASSA. Still eagerly looking for an AI-solution to automatically generate a burst-list and to save many hours day by day to perform this rather boring job, visual inspection of thousands of FIT-files.

Last 4 burst-plots are always available here: <https://e-callisto.org/Data/data.html>



CESRA NEWS

Data Release of Solar Radio Bursts observed by CBSm at the metric wavelength
by Yao Chen et al.

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3773>

Energetics of compressive waves in the solar corona
by Francesco Azzollini et al

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3783>

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3809>

The angular and frequency dependence of solar radio burst rise and decay times using multi-spacecraft observations

by Nicolina Chrysaphi et al.

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3852>

Time-Profile Study of Type III Solar Radio Bursts Using Parker Solar Probe
by Tulsi Thapa and Yihua Yan

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3848>

Periods and frequency drifts of groups of narrowband decimetric spikes
by M. Karlický, J. Dudík and J. Rybák

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3860>

Generation of Series of Meter/Decimeter III type Bursts During Thermal Phase of Solar Flare
by Meshalkina and Altyntsev

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3884>



Recent papers

Drone-Based Antenna Beam Calibration in the High Arctic

<https://arxiv.org/html/2407.00856v1>

Regarding "Radio signature of the strong compression between a streamer and a coronal hole boundary"
by Aguilar-Rodriguez et al

DOI: 10.3847/2041-8213/ad631b

The Astrophysical Journal Letters ad631b

Observation of an Extraordinary Type V Solar Radio Burst:

Nonlinear Evolution of the Electron Two-Stream Instability

Arnold O. Benz · Clemens R. Huber · Vincenzo Timmel · Christian Monstein

<https://doi.org/10.1007/s11207-024-02395-8>

AOB

- If you have some stuff to present to the Callisto community, please let me know
- CALLISTO or Callisto denotes to the spectrometer itself while e-Callisto denotes to the worldwide network.
- General information and data access here: <https://e-callisto.org/>
- e-Callisto data are hosted at University of Applied Sciences, Institute for Data Science FHNW in Brugg/Windisch, Switzerland. Additionally, data are available at ESA site here: ESA Space Weather Portal (<https://swe.ssa.esa.int/>).
- University of Alcalá in Spain is also hosting e-Callisto data here: <http://212.128.70.189/>
From now on Bussons Gordo Javier javier.bussons@uah.es from Alcalá is the new Co-PI and will support my activities related to CALLISTO instrument and e-Callisto network.
- In case you (as the responsible person for operating and maintenance of Callisto) are leaving the institute or, if you are retiring, please send me name and email address of the successor.
- New product available, a calibration unit for antennas with direct access to the dipoles, such as CLP-5130. Calibration only for frequencies below 900 MHz (due to low cost components)





More information here (see bottom of this page): <https://e-callisto.org/Products/Products.html>



Fig. 7: Calibration unit containing semiconductor switch and a noise source. Unit will be supplied with a calibration table and free Python script to control the unit as well as to calibrate FIT-files from CALLISTO.

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Respond instead directly to me at: [cmonstein\(at\)swissonline.ch](mailto:cmonstein@swissonline.ch) or to the new Co-PI [javier.bussons\(at\)uah.es](mailto:javier.bussons@uah.es)

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