



CALLISTO status report/newsletter #96

New instrument in Mexico

A new Callisto system has recently been installed in Mexico.

Name: MEXICO-FCFM-UANL

Position: 24.75° N ; -99.89° W (UANL Astronomical Observatory)

Operated by: Dra. Esmeralda Romero Hernández

Catedrático, Universidad Autónoma de Nuevo León

Centro de Investigación en Ciencias Físico-Matemáticas, departamento de Astrofísica

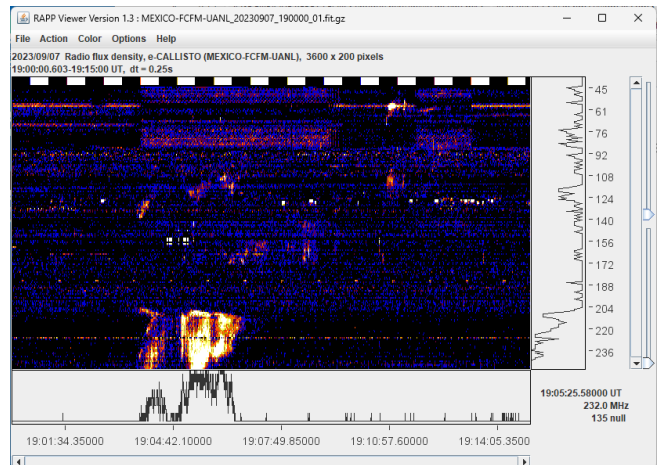


Fig. 1:
Left: LPDA and frontend (LNA)
Right: 1st light with start frequency of a type II burst

Welcome MEXICO-FCFM-UANL on board of the e-Callisto international instrument network!

And GREENLAND is back on-line, many thanks to the Danish team!



Università della Svizzera italiana



n|w University of Applied Sciences Northwestern Switzerland

e-Callisto burst statistics August 2023

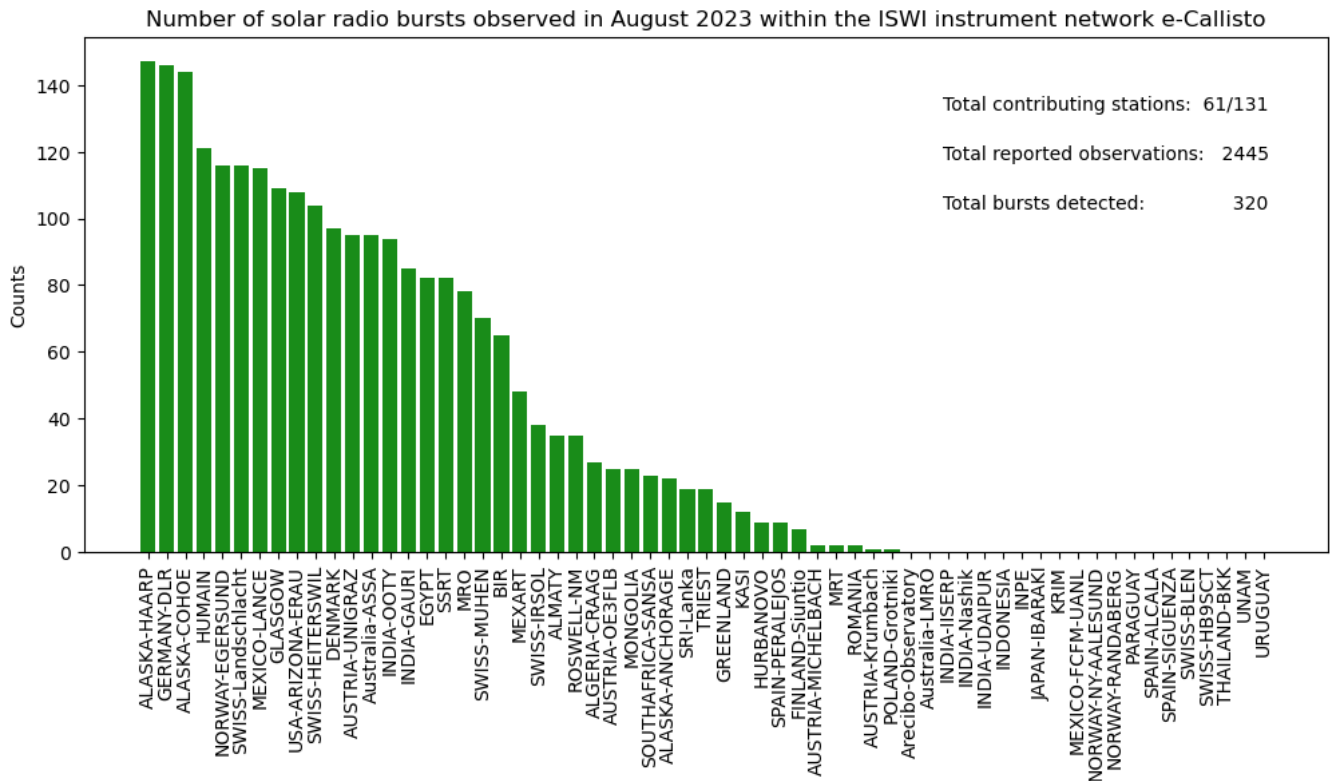


Fig. 7: Compilation of all visually detected bursts from all Callisto-stations which provide data to the e-Callisto network. There are clear ‘winners’ of the ‘competition’, ALASKA-HAARP and GERMANY-DLR in Neustrelitz; congratulations!

Volunteer required:

Starting from September 16th until October 8th, I’ll not be able to generate the burst-lists due to vacation. Generating the burst-list by visual inspection takes 3...4 hours per day. I still hope that one or the other team is able to produce an automatic burst-list, generated based on AI or cross-correlation.

Example for latest visual burst-list here:

http://soleil.i4ds.ch/solarradio/data/BurstLists/2010-yyyy_Monstein/2023/e-CALLISTO_2023_09.txt

In case any volunteer is able to produce such a list, he/she can send it to me such that I can append it to the existing one and upload it to the website.



Papers:

Automatic Burst Detection in Solar Radio Spectrograms Using Deep Learning: deARCE Method
Javier Bussons Gordo, Mario Fernández Ruiz, Manuel Prieto Mateo, Jorge Alvarado Díaz, Francisco Chávez de la O, J. Ignacio Hidalgo & Christian Monstein

<https://link.springer.com/article/10.1007/s11207-023-02171-0>

CESRA NEWS

Electron acceleration efficiency during the impulsive phase of a solar flare: X-ray and microwave observations

by Kontar et al

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3538>

Imaging preflare broadband pulsations in the decimetric-metric wavelengths

by Lv et al

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3562>

Data-constrained Solar Modeling with GX Simulator

by G. Nita et al

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3579>

Solar electron beam velocities that grow Langmuir waves in the inner heliosphere

by Y. Camille et al.

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3590>

Two-element interferometer for millimeter-wave solar flare observations,

by Yu et al.

<https://www.astro.gla.ac.uk/users/eduard/cesra/?p=3598>

AOB

- If you have some stuff to present to the Callisto community, please let me know
- IRSOL is meant as the new core-station of the e-Callisto network





- To avoid strange issues with Windows computers, disable disc caching. Otherwise configurations files might not be updated in Callisto with the latest information
- Another access to Callisto data here: <https://vwo.nasa.gov/>
- On September 5th we had for the first time since 2006 80 active stations, providing data to the e-Callisto network.
- CALLISTO or Callisto denotes to the spectrometer itself while e-Callisto denotes to the worldwide network.
- General information and data access here: <http://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: SSA Space Weather Portal (<http://swe.ssa.esa.int/>).
- 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.

Please do NOT respond to the email-address of the list-server where you have got this document from, it is a computer/robot. This computer will not give you any useful answer...

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