



## CALLISTO status report/newsletter #87

The Sun went active on again on Mai 5<sup>th</sup> 2020 after a long period of silence. Below a few (new) isolated solar radio burst of type III. It is obvious, that the antenna plays an important role in the observed burst quality. Antennas which are tracking the Sun provide much better quality than just antenna which are fixed in sky-position. I again wanted to mention, that some stations provide wrong time stamps. Please check your PC-timing at least four times a year and synchronise your system with an internet time server. Correct timing is essential! We got first light from ASSA in Australia <https://www.assa.org.au/>

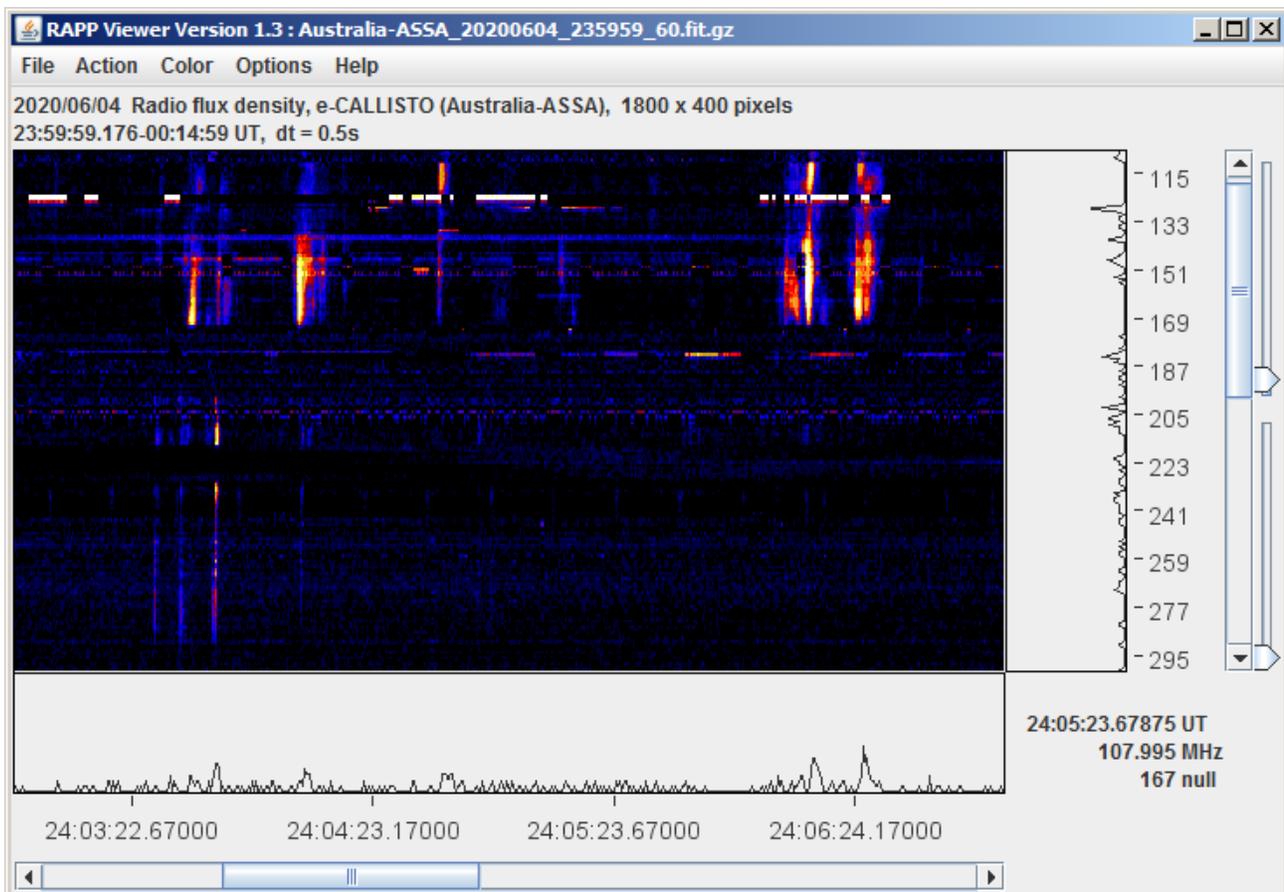


Fig. 1: 1<sup>st</sup> light from Callisto at ASSA, Australia, congratulations!

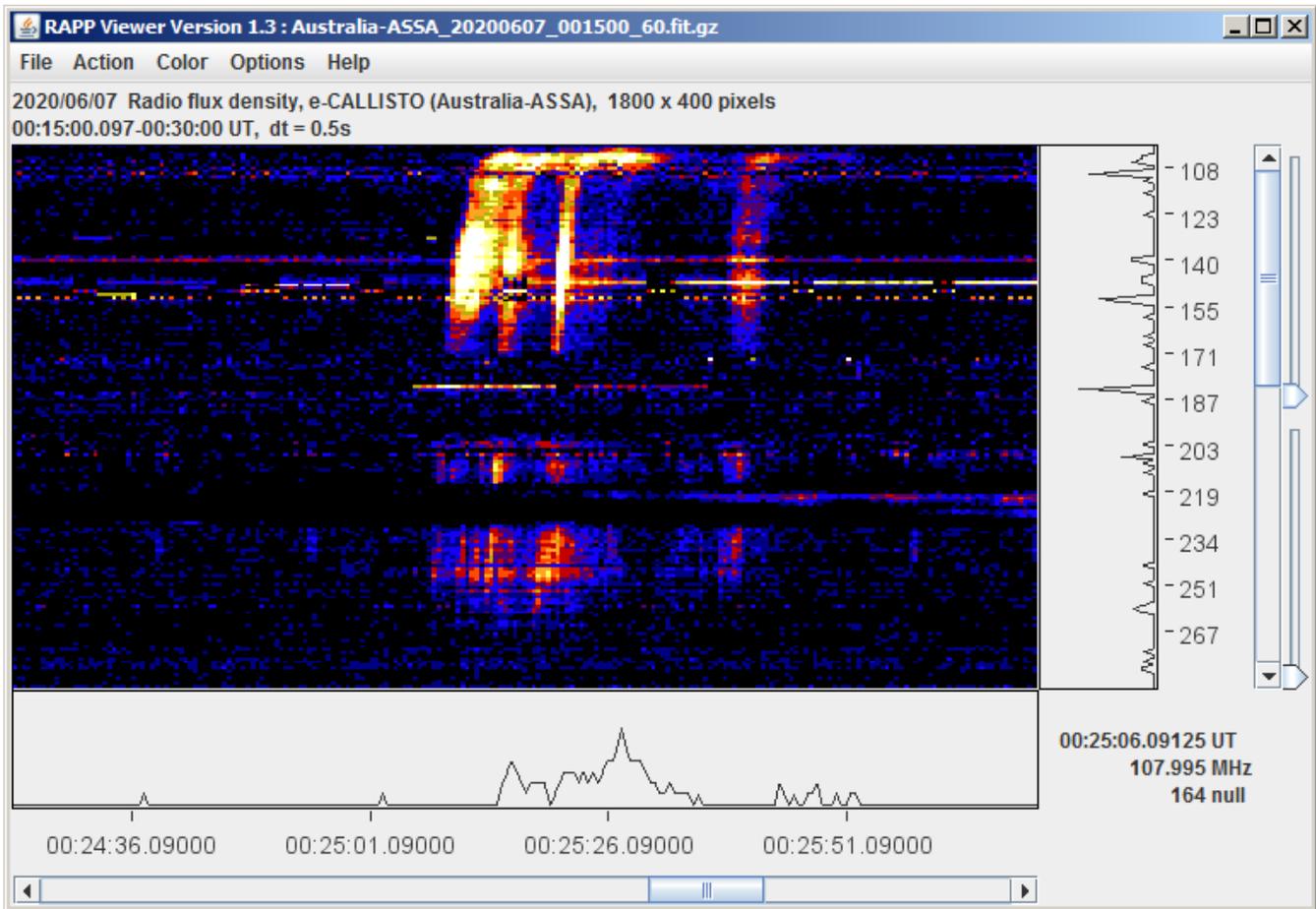


Fig. 2: 2nd light from Callisto at ASSA, Australia, congratulations!

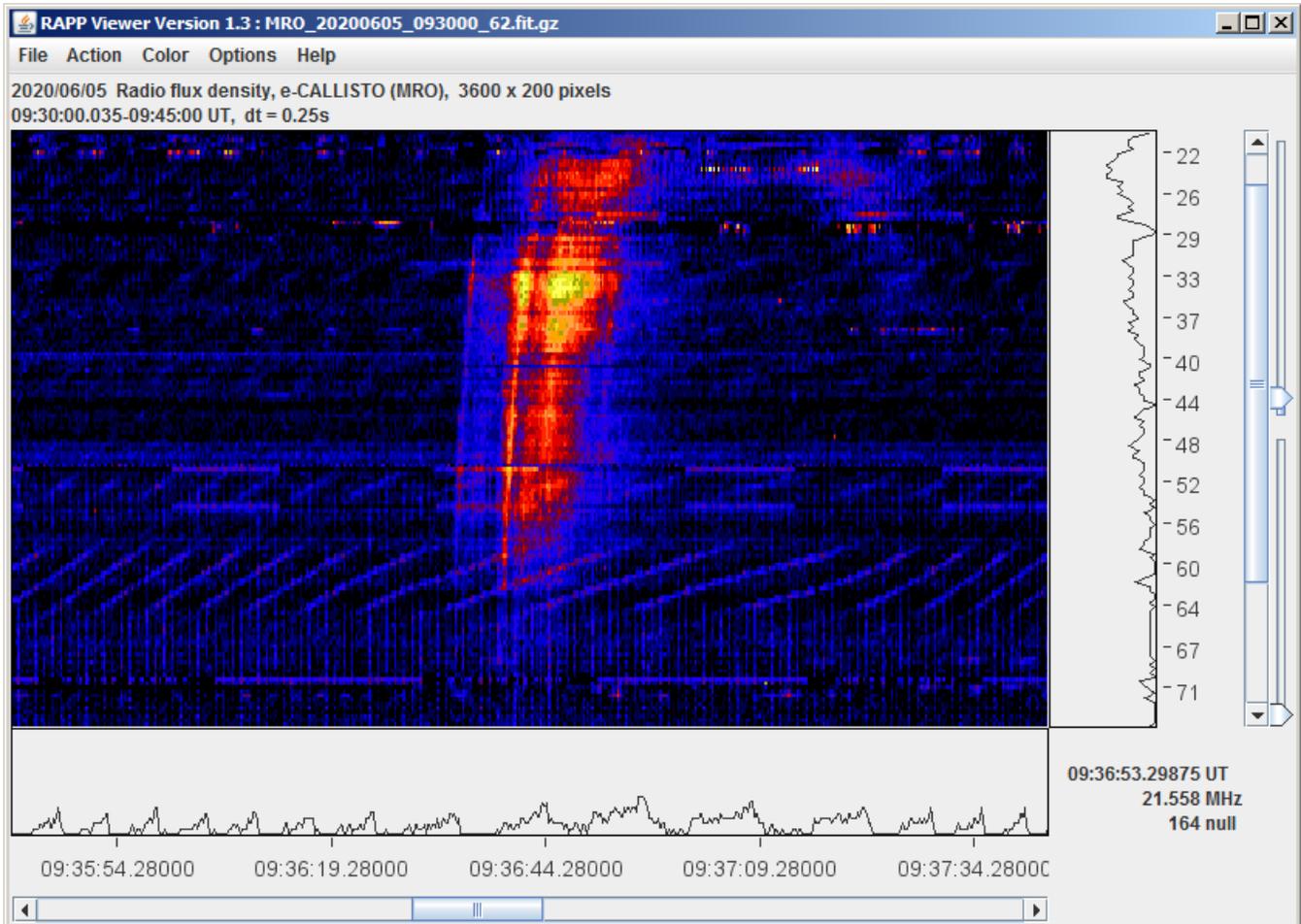


Fig. 3: Probably the first observation of a burst with Callisto, heterodyne up-converter and LWA at Metsähovi Radio Observatory (MRO) in Finland.



## New instrument at Polytechnics school (EPS) in Alcalá, Spain

Recently a new Callisto has been set into operation in Alcalá, Spain



Fig. 4: Yagi antennas on a two axis antenna rotator, tracking the Sun

**Welcome on board of the e-Callisto network!**



Fig. 5: Control monitor with Callisto application and rotor control application.



Fig. 6: Colleagues from Alcala University, performing rfi-monitoring in Peralejos, Spain.



## New L-band antenna at Trieste observatory, Italy



Fig. 7: Antenna farm with new L-band antenna to observe 1.0-1.6 GHz



Fig. 8: Detail of L-band antenna 1.0 - 1.6 GHz (LPDA).

Welcome again on board of the e-Callisto network!



## CESRA NEWS

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Fast reconnection in turbulent media

by A. Lazarian

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2520>

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Density Fluctuations in the Solar Wind Based on Type III Radio Bursts Observed by Parker Solar Probe

by V. Krupar et al.\*

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2535>

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Observing onset of turbulent fast magnetic reconnection in solar microflares

by L. P. Chitta and A. Lazarian

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2539>

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Solar polarization observations at 3 and 13 mm

by J. Kallunki and M. Tornikoski

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2549>

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Loss-cone instability modulation due to a magnetohydrodynamic sausage mode oscillation in the solar corona

by E. P. Carley et al.\*

<http://cesra.net/?p=2559>

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First observation of a transitioning Type II solar radio burst using the Low-Frequency Array (LOFAR)

by Nicolina Chrysaphi et al

<http://www.astro.gla.ac.uk/users/eduard/cesra/?p=2579>

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## AOB

- IRSOL is meant as the new core-station of the e-Callisto network, once the instruments at ETH Zurich will be shut down due to retirement of the PI. .
- Burst catalogue has got new entries about HAARP signals, photo voltaic power plant and meteor signals, see here: <http://www.e-callisto.org/GeneralDocuments/BurstCatalog.pdf>
- 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.



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