ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

ISWI

n|w University of Applied Sciences
Northwestern Switzerland

CALLISTO status report/newsletter #53

1st, 2nd and 3rd light from Callisto in Kigali, Rwanda:

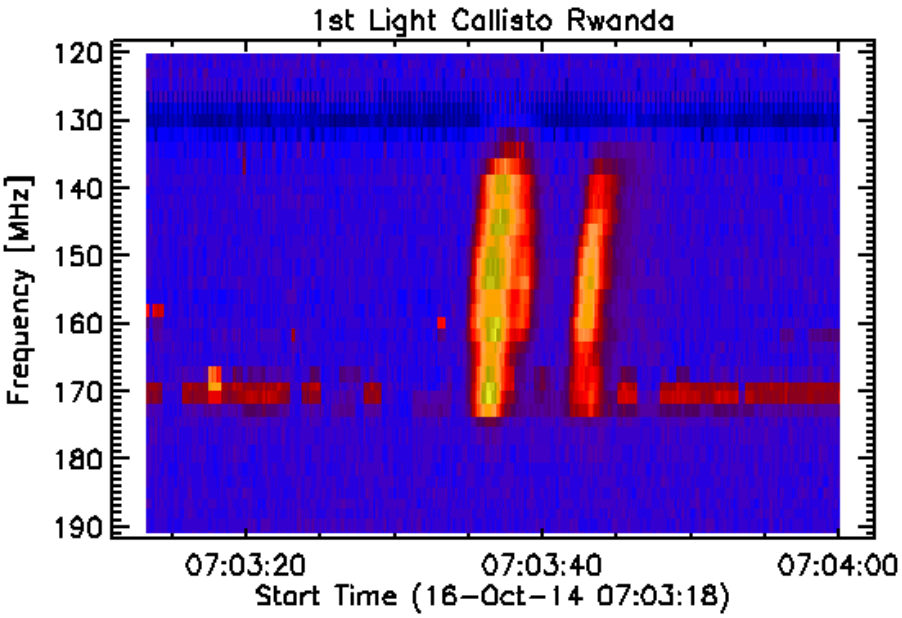

Fig. 1: 1st light Callisto Kigali, Rwanda with a vertical LPDA and Callisto. A pair of type III

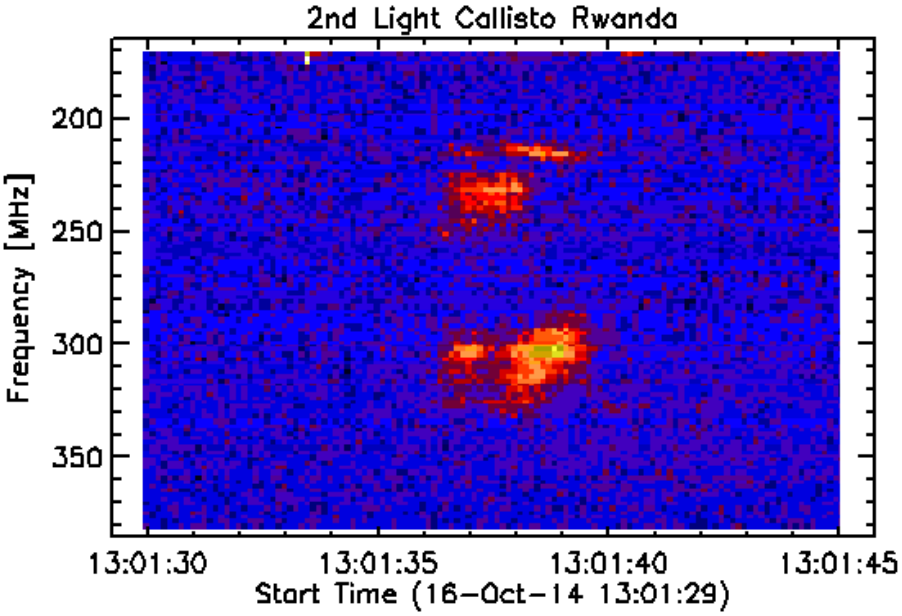

Fig. 2: 2nd light Callisto Kigali, Rwanda with a vertical LPDA and Callisto. Probably a type I (noise storm).

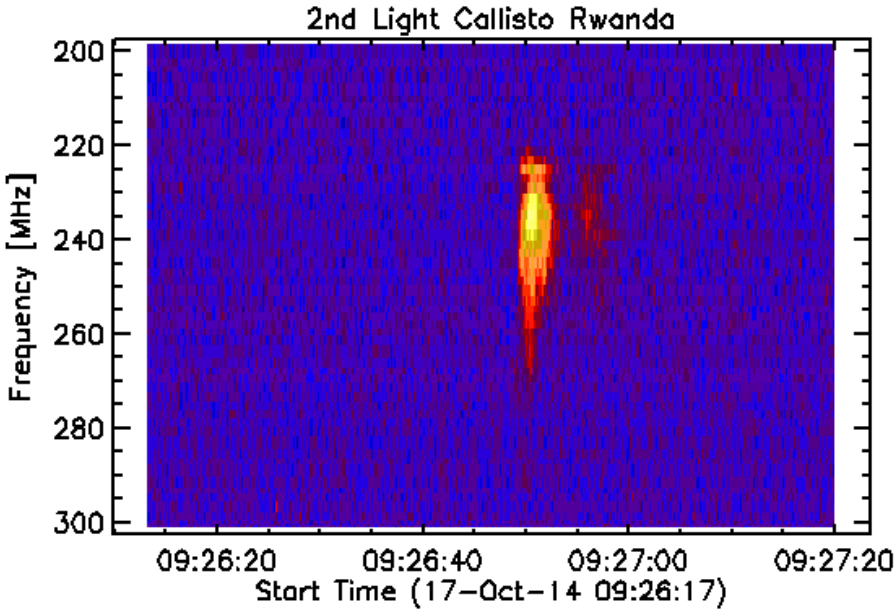

Fig. 3: 3rd light Callisto Kigali, Rwanda with a vertical LPDA and Callisto. A type III burst

Comparison FFT filter bank spectrometer Keysight M9703A with e-Callisto network:

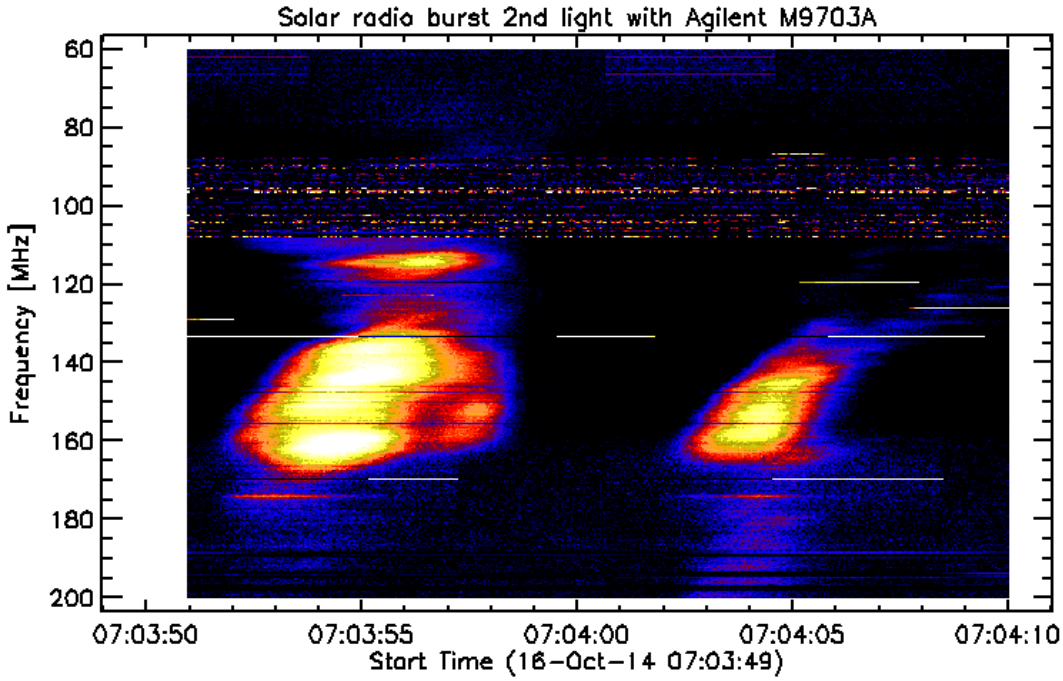

Fig. 4: FFT filter bank spectrometer from Keysight (ex. Agilent) M9703A connected to a LWA. No ghosts visible due to strong FM around 100 MHz. Strong FM does not produce cross-modulation given the high dynamic range of the ADC.

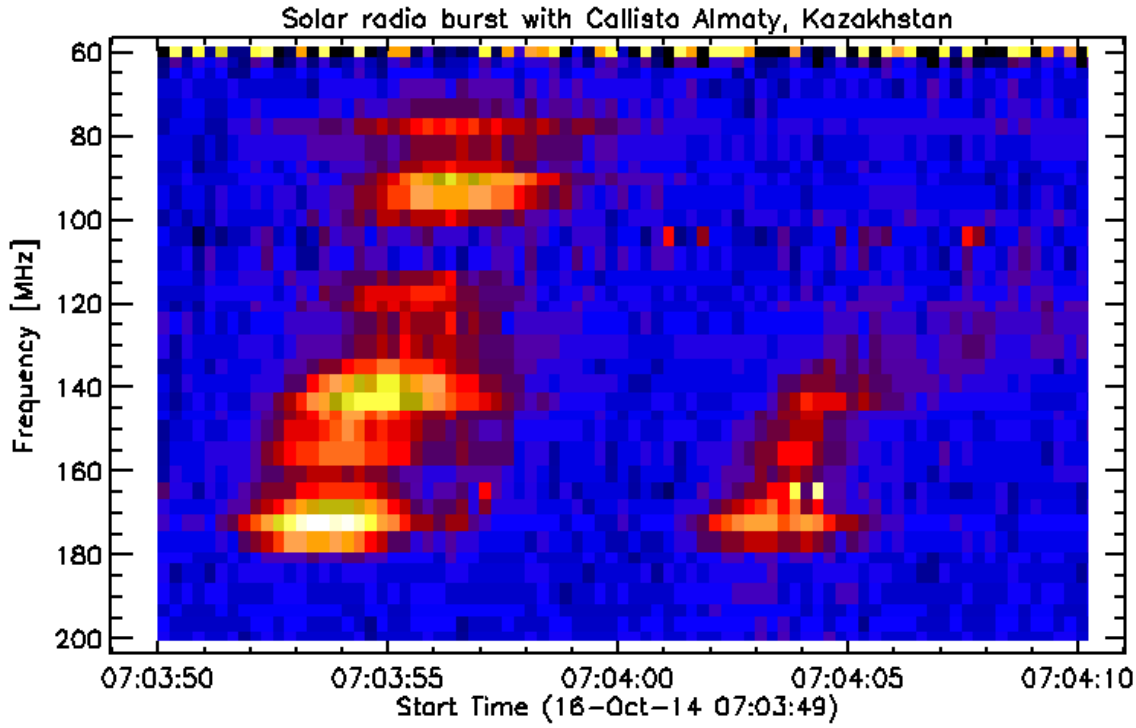

Fig. 5: Callisto and LPDA in Almaty, Kazakhstan

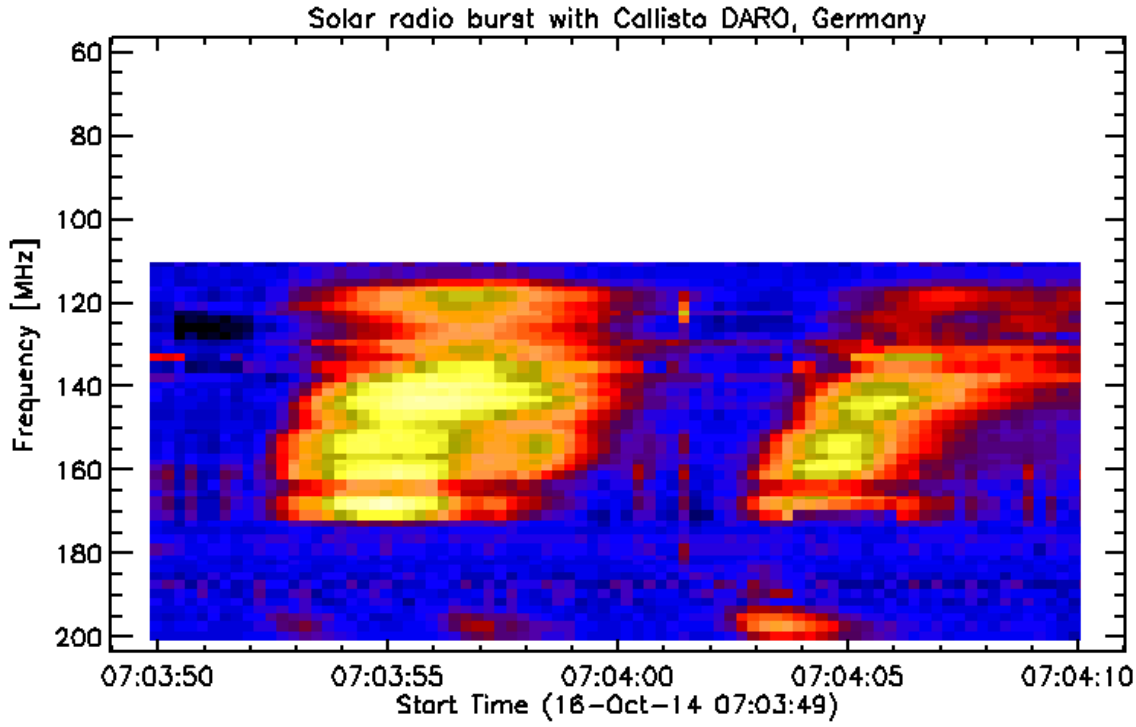

Fig. 6: Callisto and LPDA in DARO, Germany

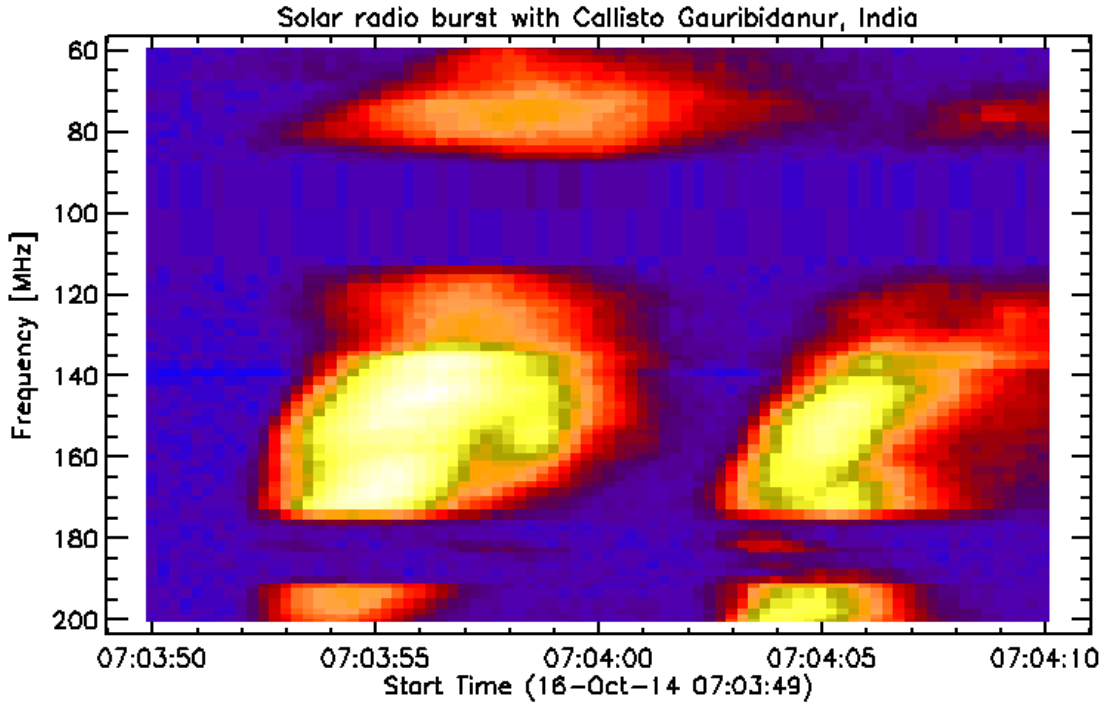

Fig. 7: Callisto and vertical LPDA in Gauribidanur, India. FM-notch around 100 MHz

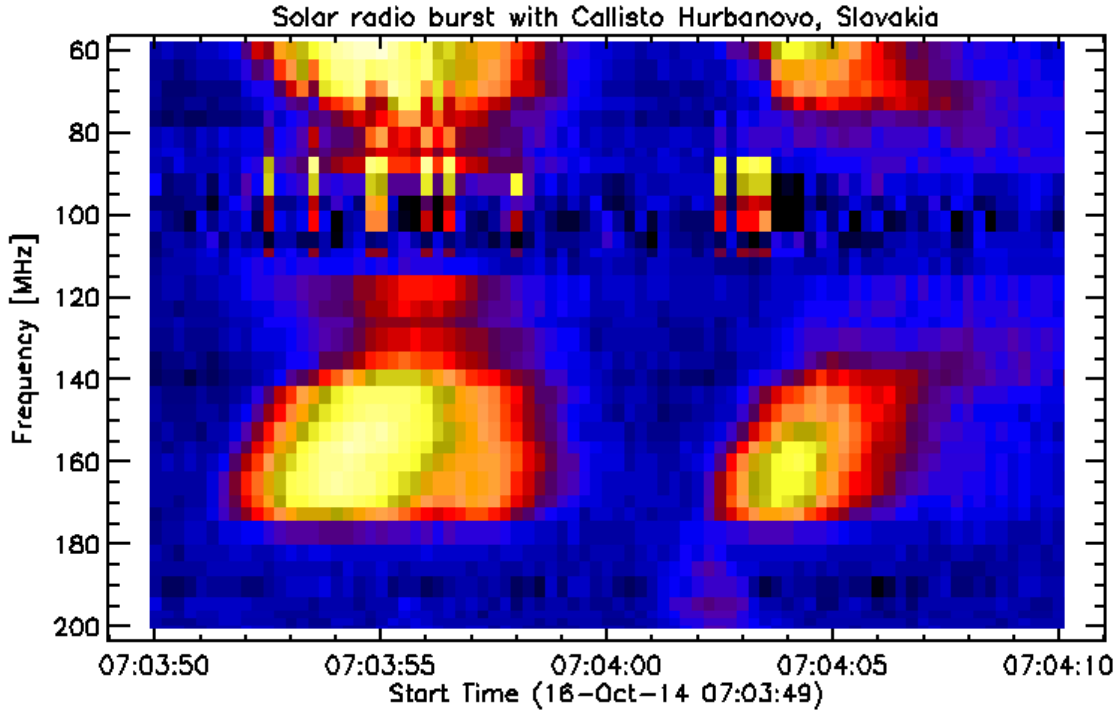

Fig. 8: Callisto and tracking LPDA in Hurbanovo, Slovakia. Strong FM around 100 MHz, therefore ghosts below 100 MHz.

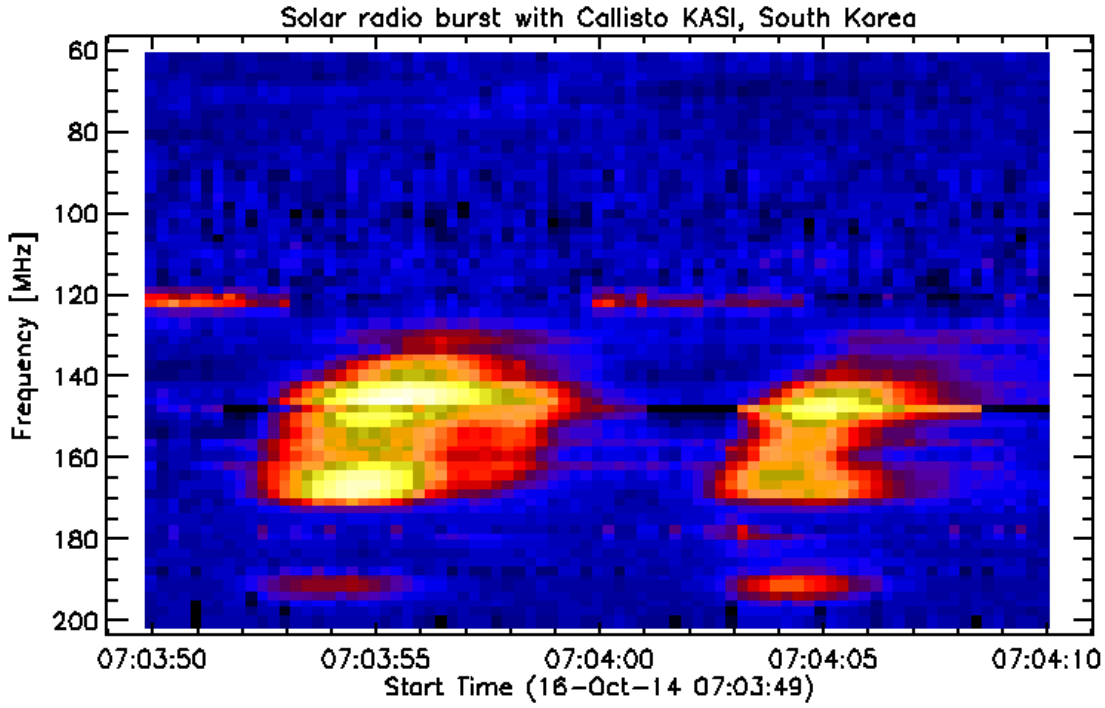

Fig. 9: Callisto and tracking LPDA at KASI in Daejeon, South Korea.

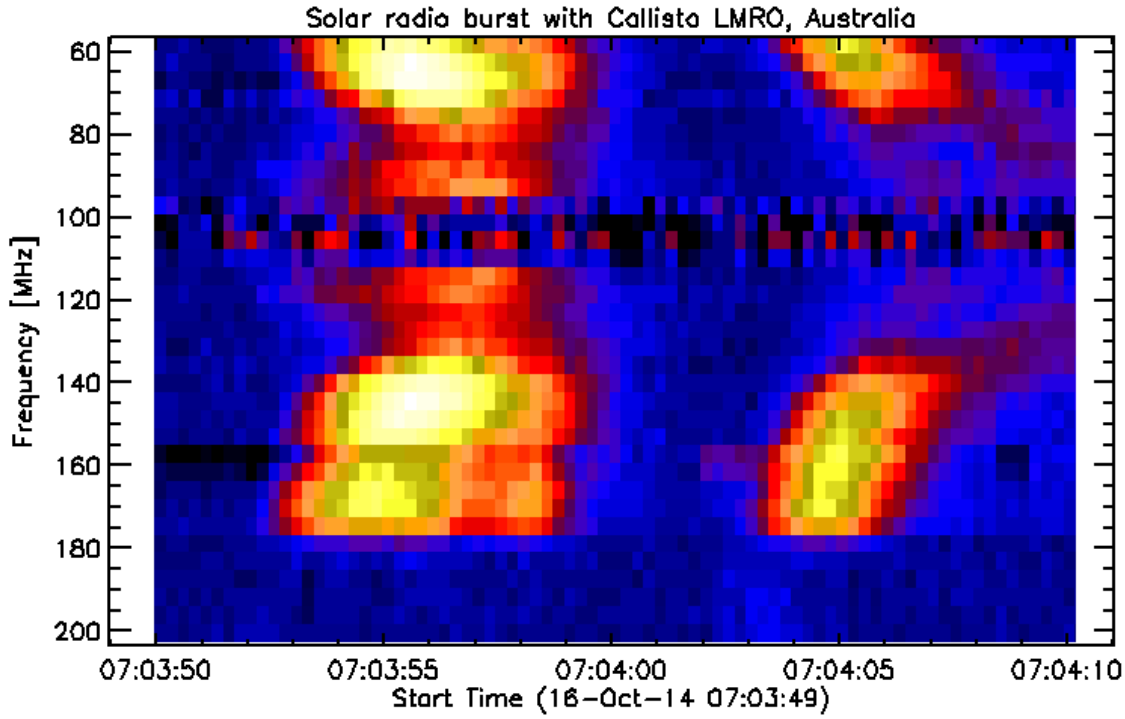

Fig. 10: Callisto and fixed LPDA at LMRO, Australia. Strong FM produces ghosts below 100 MHz

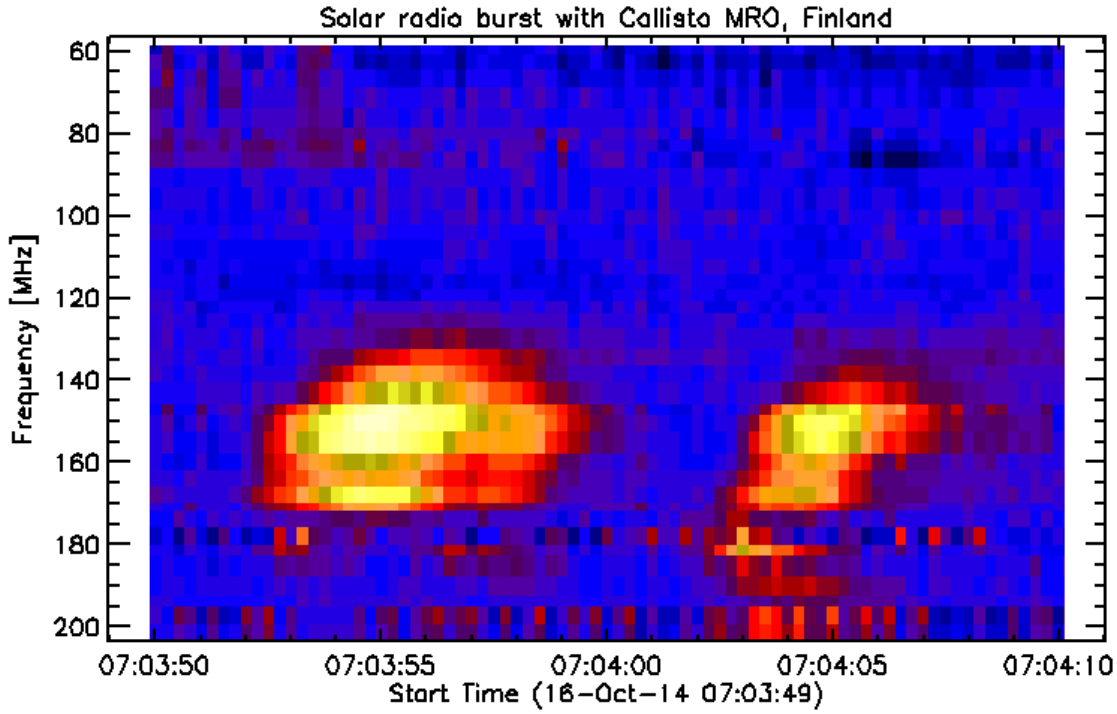

Fig. 11: Callisto and tracking LPDA at Metsähovi observatory, Finland.

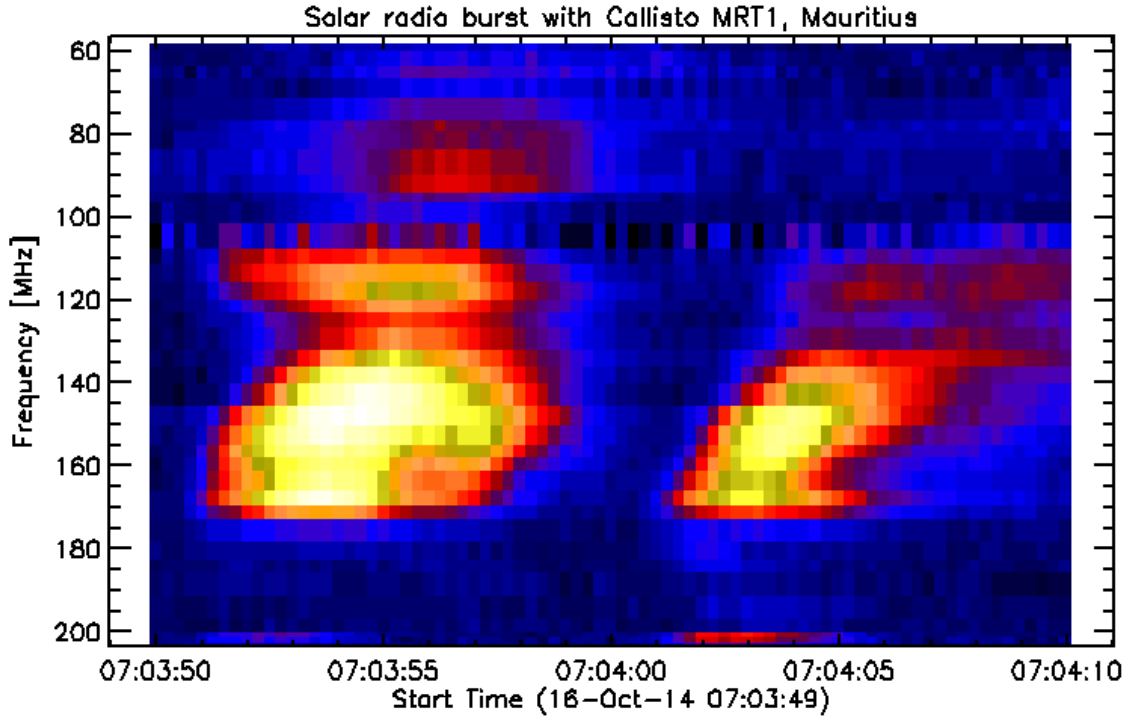

Fig. 12: Callisto and fixed LPDA linear 1, Mauritius.

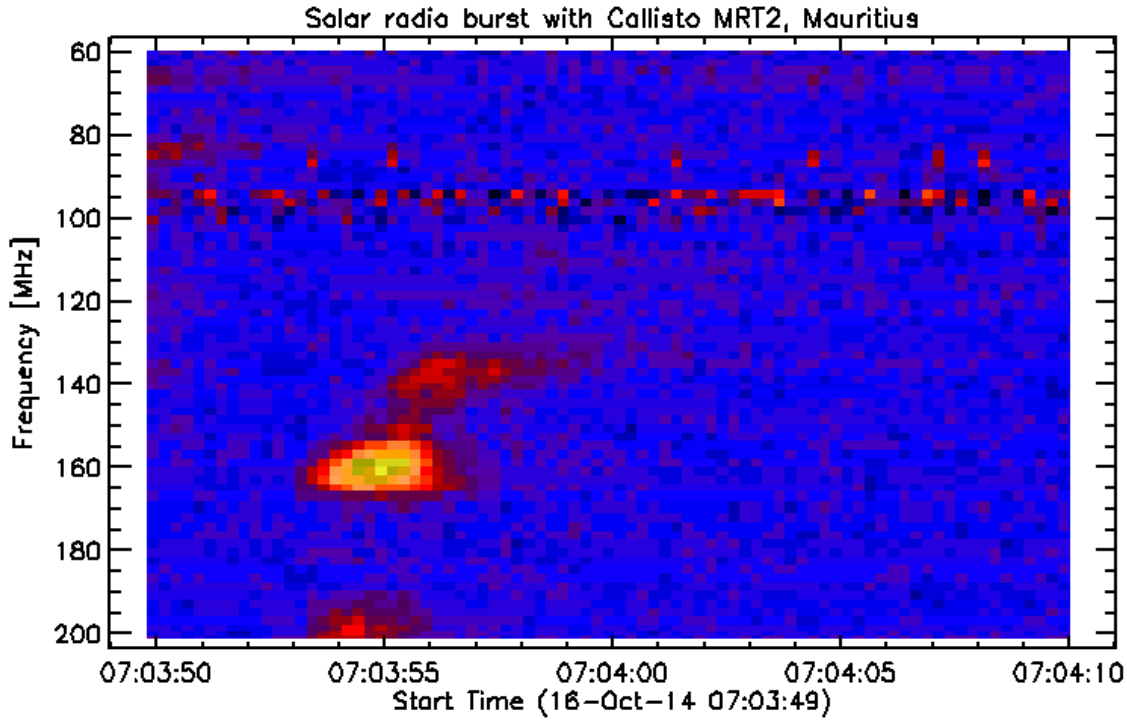

Fig. 13: Callisto and fixed LPDA linear 2, Mauritius.

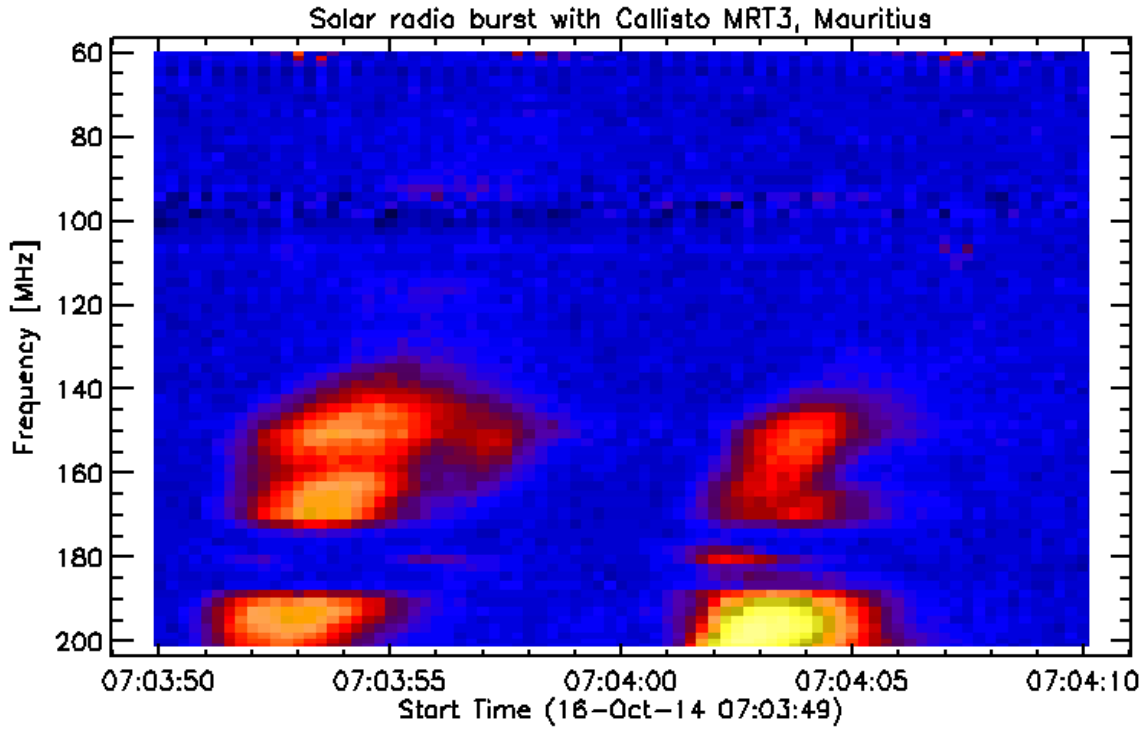

Fig. 14: Callisto and fixed LPDA linear 3, Mauritius.

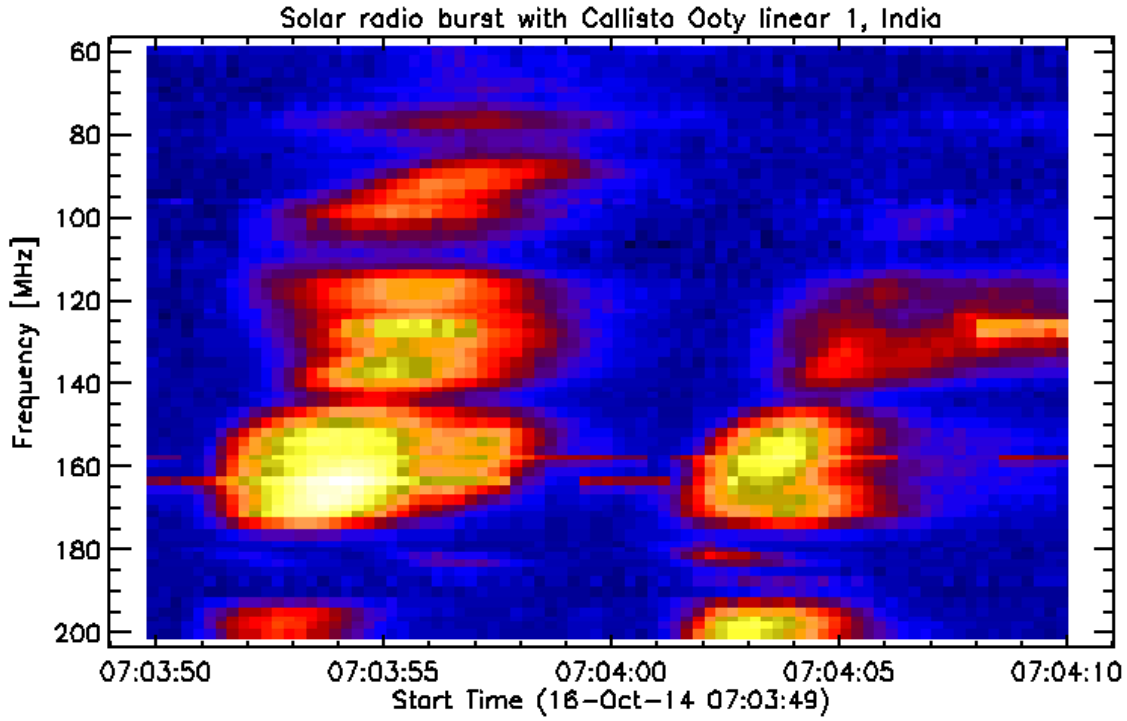

Fig. 15: Callisto and fixed LPDA linear 1, Ooty, India.

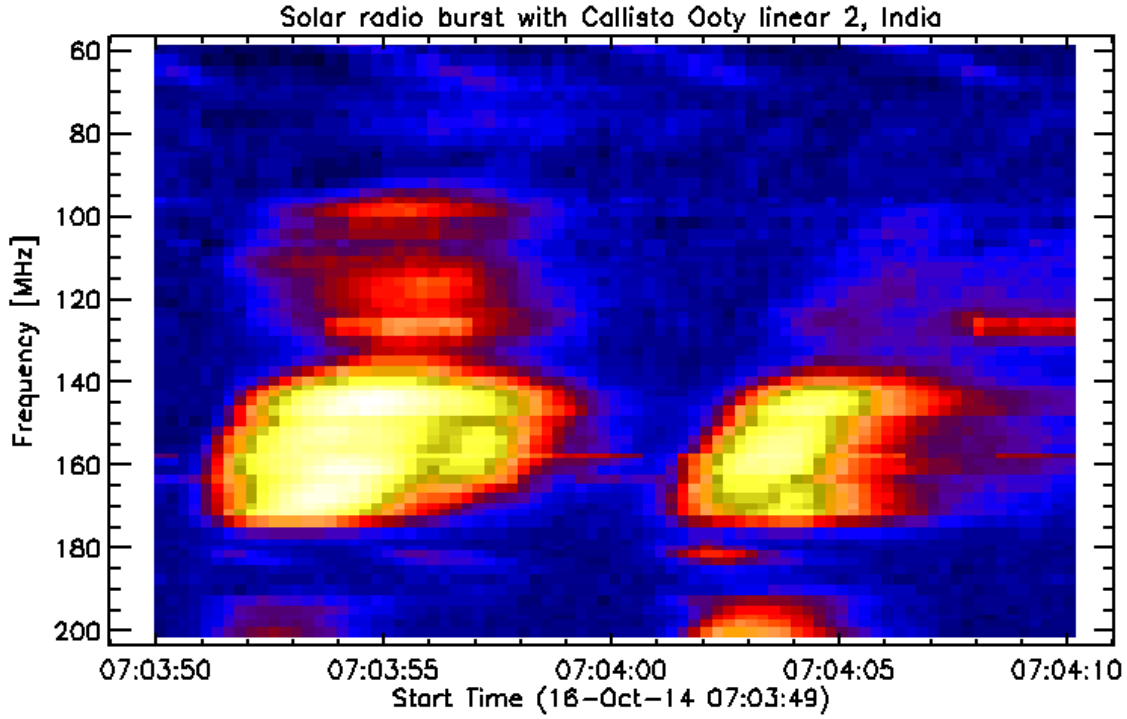

Fig. 16: Callisto and fixed LPDA linear 2, Ooty, India.

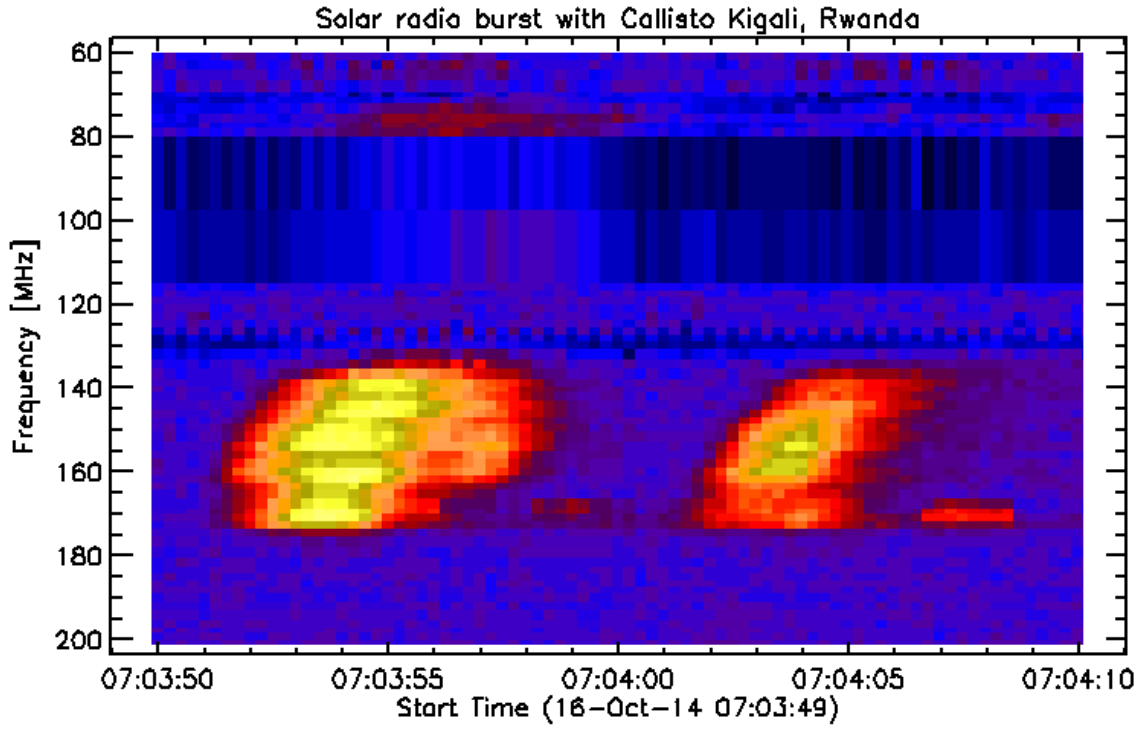

Fig. 17: Callisto and fixed LPDA in Kigali, Rwanda. Observation gap around FM-range.

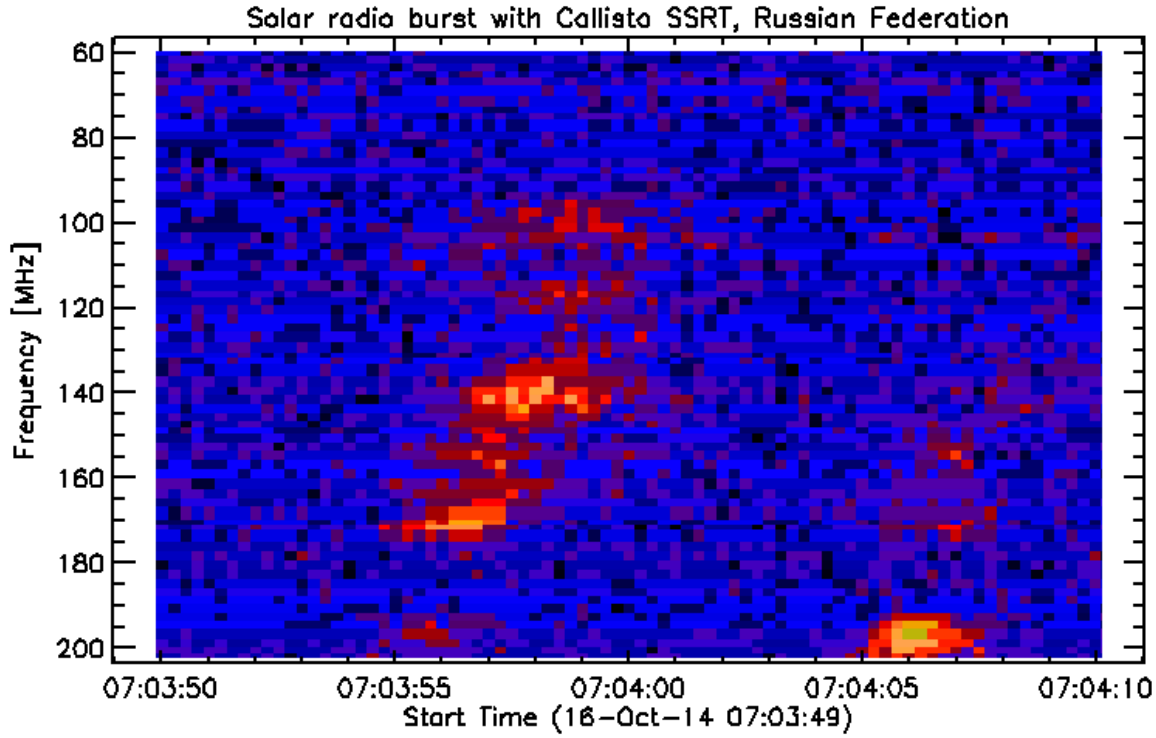

Fig. 18: Callisto and tracking LPDA at SSRT in Badary, Russian Federation.

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United Nations / Japan Workshop on Space Weather
"Science and Data Products from ISWI Instruments"
Fukuoka, Japan, 2-6 March 2015

The *International Center for Space Weather Science and Education* (**ICSWSE**, pronounced *ikusei*) of Kyushu University is pleased to announce that it will host, on behalf of the Government of Japan, the aforementioned United Nations Workshop. The Workshop will be held in Fukuoka, Japan, from 2 to 6 March 2015.

The objective of the Workshop is to provide a global forum for participants to discuss capacity building, global observation, and science/education on space weather, building on the achievements of the International Space Weather Initiative (ISWI).

The Workshop Programme will consist of a series of Sessions with technical presentations, panel discussions and working group meetings. Sessions will cover:

- Space weather instrumentation: (a) Space-based, (b) Ground-based (ISWI)
- Solar weather
- Solar wind and inter-planetary medium
- Magnetosphere
- Ionosphere
- Atmosphere
- Coupling processes
- Sun-to-Earth space weather modeling
- Space weather impact

Applications to participate in the Workshop will be accepted starting 01 September 2014. For the latest information please frequently check:

http://www.unoosa.org/oosa/en/SAP/act2015/japan/index.html.

On a competitive basis limited support (e.g. air-ticket, accommodation) will be available for qualified applicants from developing countries to attend the Workshop.

The Workshop is co-sponsored by the following organizations: National Institute of Information and Communications Technology (NICT), Japan Society for the Promotion of Science (JSPS), Tohoku University, and Fukuoka City.

This workshop will be conducted in parallel with other workshops, the primary one being the **2015 Workshop of AOSWA (Asia Oceania Space Weather Alliance).**

AOB:

- Hardware to translate two linear polarizations into two circular polarizations (RHCP and LHCP) for the Long Wavelength Antenna (LWA) is available here: http://www.reeve.com/RadioScience/Antennas/ActiveCrossed-Dipole/LWA_PowerCoupler.htm

- 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/

- Callisto software does operate also under Win 8.1

- e-Callisto data are hosted at Fachhochschule Nordwestschweiz (University of applied sciences FHNW) in Brugg/Windisch, Switzerland. Process control, user communication and scripts are conducted at institute for Astronomy, ETH Zurich.

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On the other hand if you think someone else might be interested in this kind of info, please let me know his/her email-address to be added to the data base.

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