

## CALLISTO status report/newsletter #67

### New Callisto commissioned in Montevideo, Uruguay

Two weeks ago, during a business meeting a new instrument was set into operation at Observatorio Astronómico Los Molino (OALM) in Montevideo, Uruguay. This after installation of a LPDA by Santiago Roland. The spectrometer itself was already delivered in 2013 but it took some time to get additional funding for antenna, cables and internet connection. Now the system is almost complete, only the low noise amplifier (LNA) needs to be mounted into a waterproof box and fixed on the antenna tracking system.



Fig. 1: Astro group at OALM, Santiago Roland most right. Image: Mike Peel, INPE. Antenna LPDA 45MHz – 85 MHz. German parallactic mount to position the antenna along the Sun path.

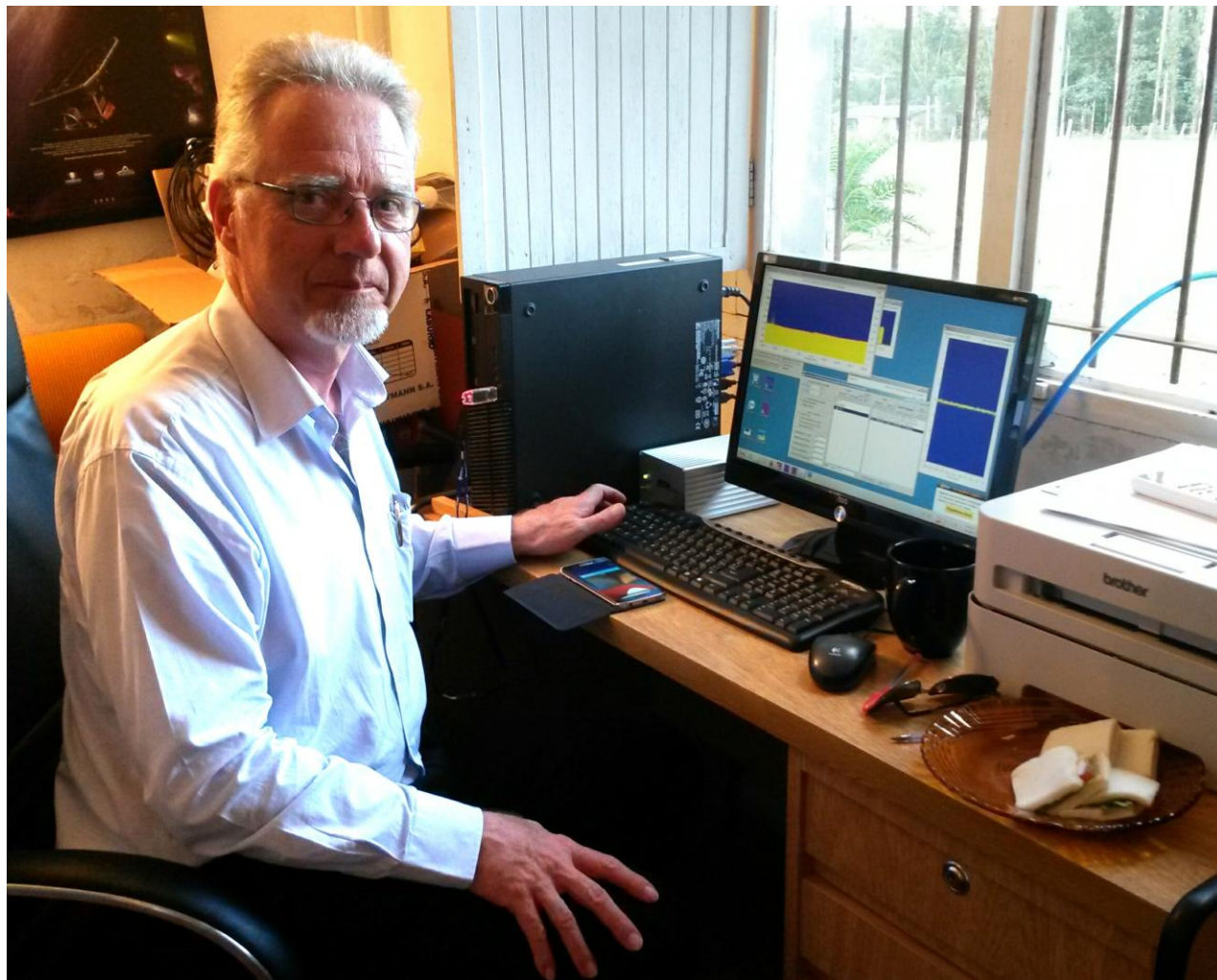


Fig. 2: The author during software installation and configuration at OALM. First test data were already sent to the central server in Switzerland.



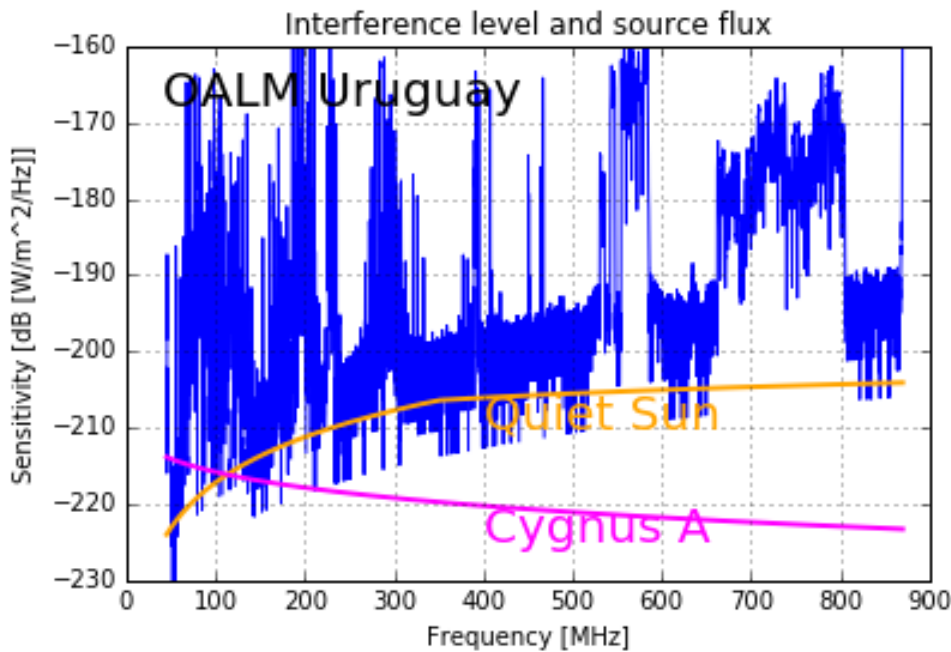


Fig. 3: Spectral overview taken without low noise amplifier. There is a lot of broad band interference in the whole band of the Callisto frequency range. We hope that we can get solar burst below 80 MHz.

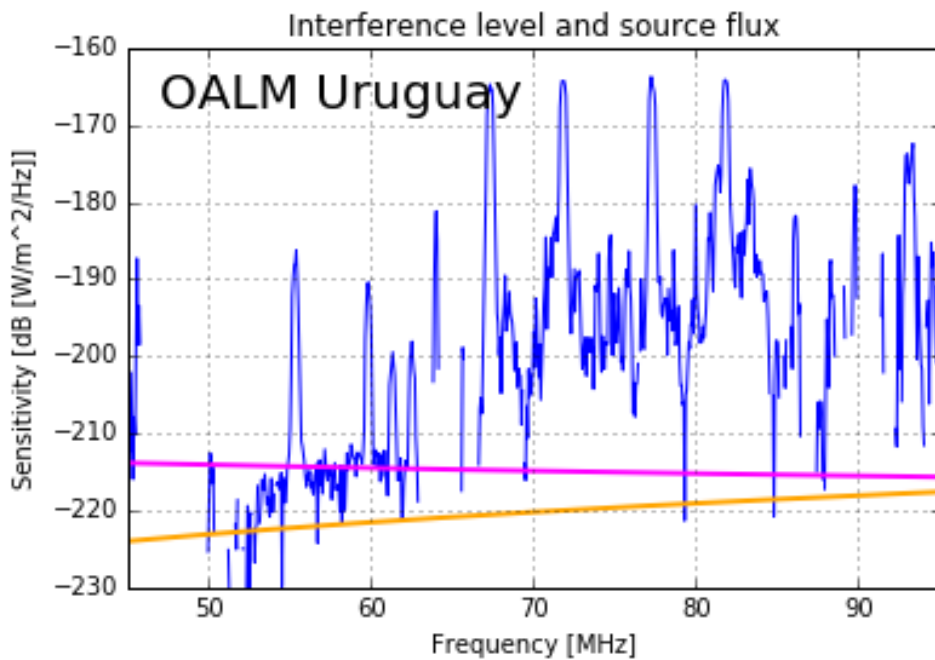


Fig. 4: Spectral overview taken without low noise amplifier, zoomed below 100 MHz. Observations up to 70 or 80 MHz seem to be feasible.

## Callisto Malaysia reloaded

After many month of silence, Malaysia managed to connect to the internet and to send data to the central server in Switzerland.



Fig. 4: The joint research group from Universiti Teknologi MARA (UiTM), Shah Alam, Selangor and Universiti Sultan Zainal Abidin (UniSZA), Kuala Nerus, Terengganu . Images by: Asnor Nadirah Ishak

## Callisto SWMC, Cairo Egypt reloaded

After several issues with electrical power, internet and antenna the system was re-activated by Khaled Ali Elden, member of Space Weather Monitor Centre (SWMC) at Helwan University, Egypt.



Fig. 5: The LPDA on the roof of Helwan university (left) and Khaled Ali Elden at the spectrometer backend watching the real-time displays.

## Progress report Callisto University of Cartagena, Spain



Fig. 5: *Report by José Gomez:* We are setting up Callisto, and one of our students, Javier Díaz is in charge of this. Above a picture of the logperiodic antenna (LPDA) installed together with the parabolic dish to use the same positioning / tracking system.

Now he is ready to install the amplifiers and to receive the first signals.

The bad news is that we still don't have a permanent location for the instruments.



## CESRA news

The Community of European Solar Radio Astronomers (*CESRA*), currently represented by Eduard Kontar of University of Glasgow provides highlights of the solar community, called 'nuggets'. Here a few recent examples:

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Solar Science with the Atacama Large Millimeter/Submillimeter Array — A New View of Our Sun  
by S. Wedemeyer  
<http://cesra.net/?p=1221>

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Some people might find it useful that the CESRA highlights can be followed, discussed etc  
via Twitter and Facebook  
[https://twitter.com/CESRA\\_community](https://twitter.com/CESRA_community)  
<https://www.facebook.com/solarcesra/>  
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## CALLISTO news

Now we have also a Facebook group-account about Callisto here:  
<https://www.facebook.com/groups/788389237975335/>





## AOB

- Status Callisto in Japan, Kenya, Costa Rica, Bulgaria, Malaysia unknown. Any information very welcome. It would be nice if these countries could provide solar data again to the network.
- Links for LPDA design:
  - <http://www.changpuak.ch/electronics/lpda.php>
  - <http://www.stroobandt.com/lpda/en/index.html>
- In case you plan to publish a paper based on e-Callisto data, please invite the observer and me as the PI of the network for co-authorship. This, according to the UN/ISWI resolution about data policy, addressed during the last UN/Japan workshop at Fukuoka University.
- 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 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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