



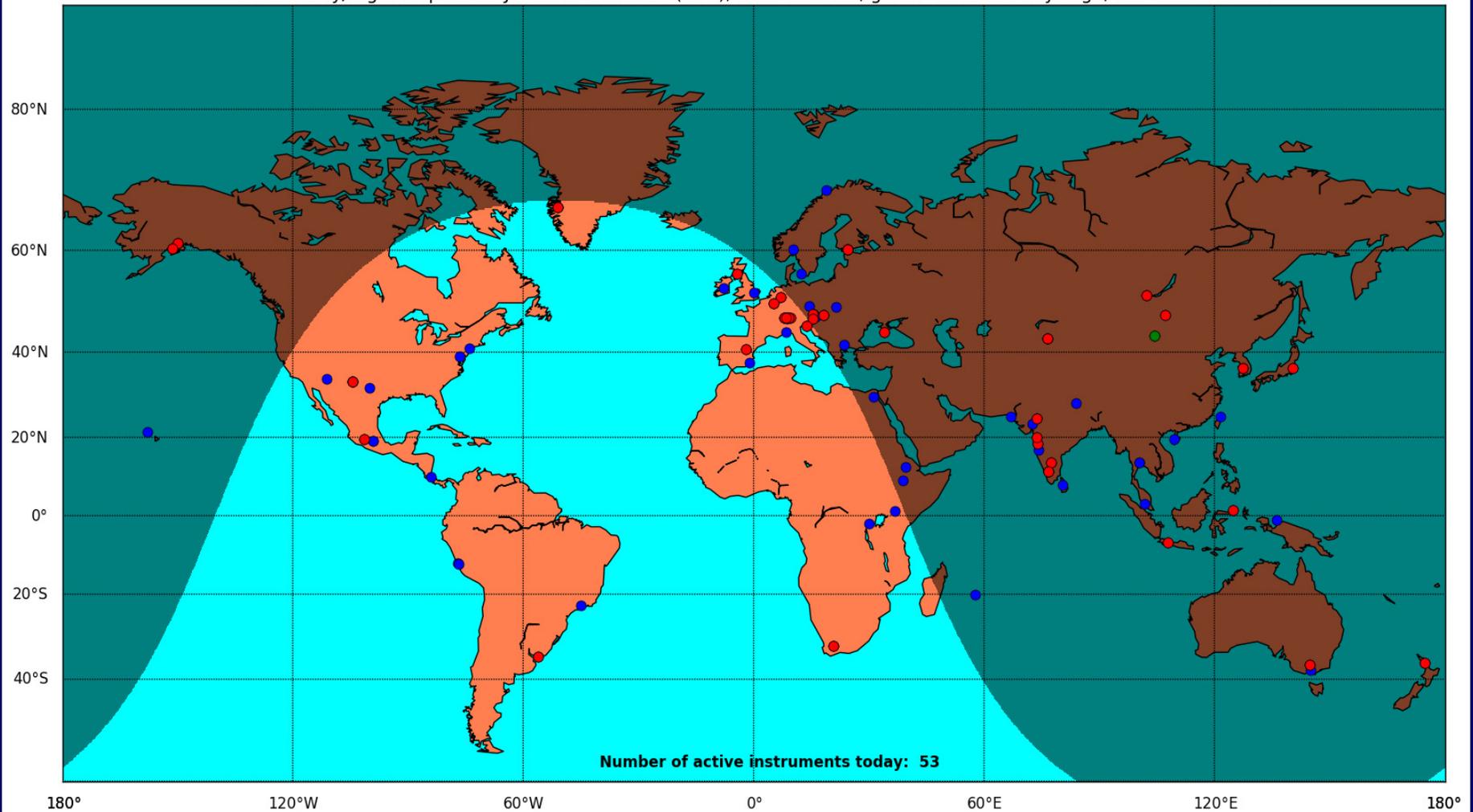
ISWI Progress Report „CALLISTO and The e-Callisto network“

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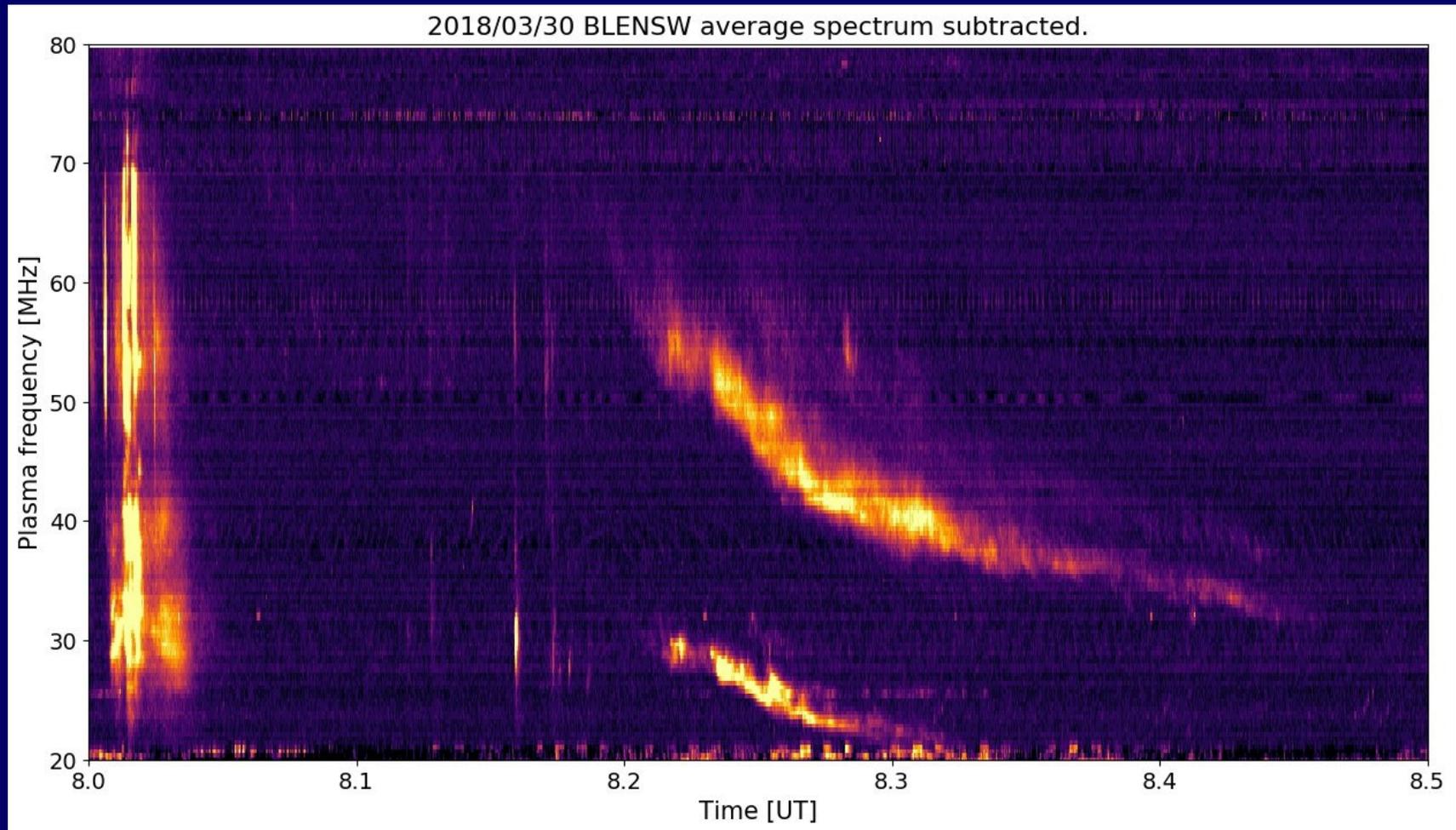
Current coverage, Instrument status

Callisto Day/Night Map for 09 Jan 2019 15:28:15 (UTC), blue=no data, green=data two days ago, red=current data



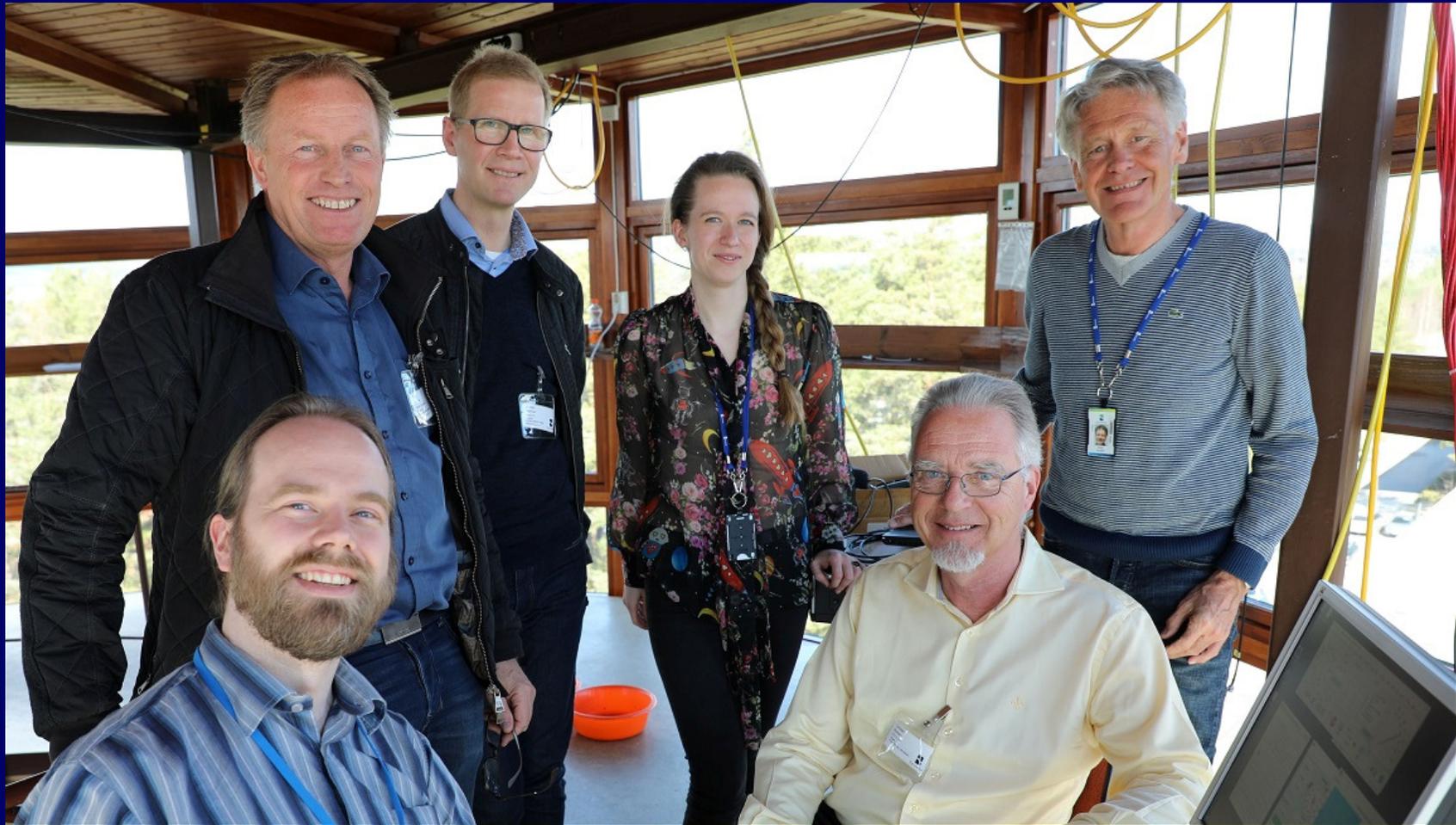


The one and only nice burst in 2018





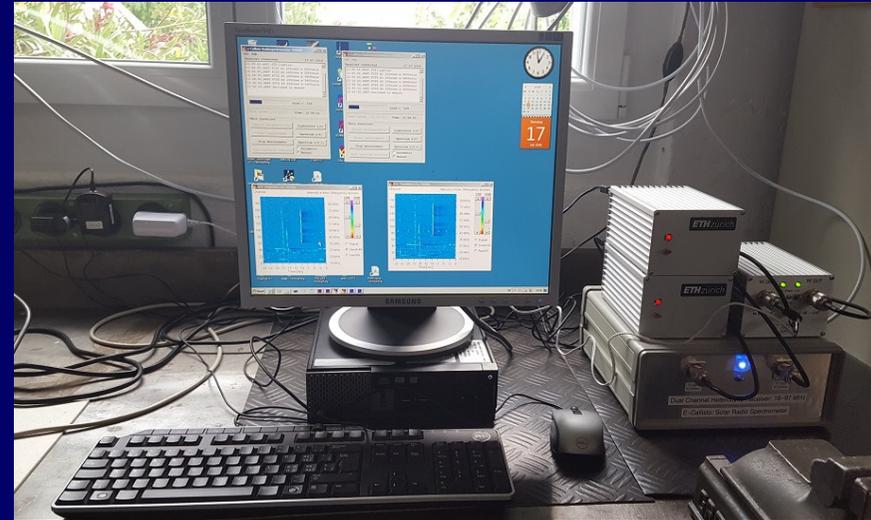
New Instruments 2018



2 new instruments for Norwegian Space Centre in Ny-Ålesund and Randaberg



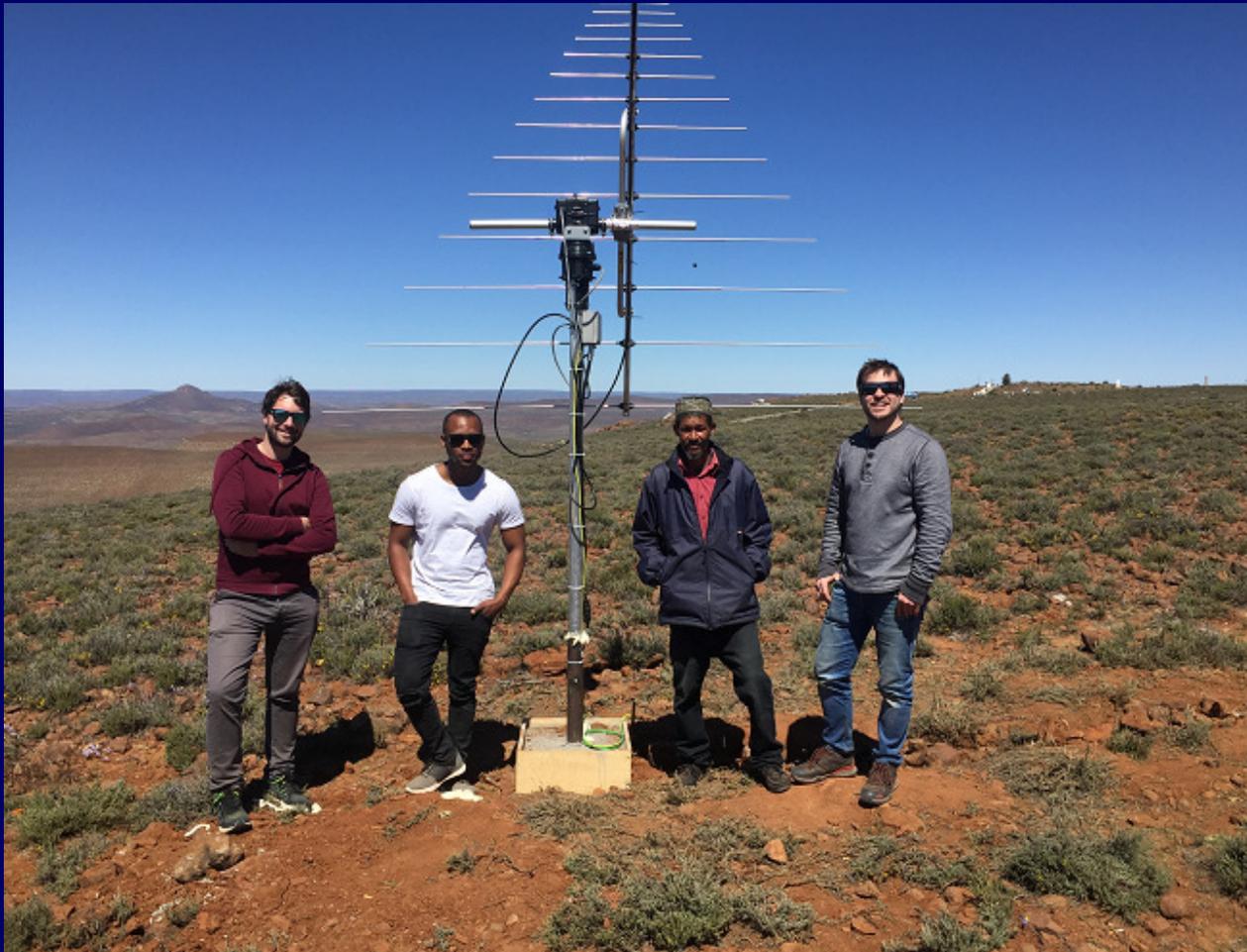
New Instruments 2018



A new dual circular polarization low frequency instrument in Muhen, Switzerland. Antenna is home made by Peter Hirt, Muhen.



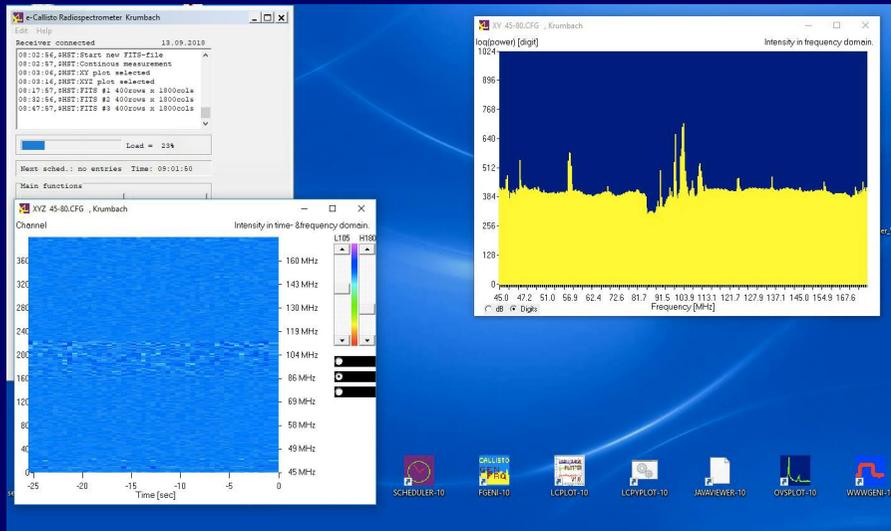
New Instruments 2018



A new instrument in Sutherland, South Africa, operated by SANSA..



New Instruments 2018



A new instrument Krumbach, Austria, operated by private person.



New Instruments 2018



A new instrument in Nashik, India, operated by V. S. Kale and D. B. Patil, KTHM college



New Instruments 2018



A new instrument at Udaipur Solar Observatory, Udaipur India, operated by Bhuwan Joshi.



New Instruments 2018



A new instrument at Tribhuvan University in Pokhara, Nepal,
operated by Suman Gautam



New Instruments 2018



A new instrument at University de Alcalá de Henares in Sigüenza, Spain, operated by Javier Bussons.



New Instruments 2018



A new instrument in Hildesheim, Germany, operated by Fred Espey



New Instruments 2018

- A new instrument at Institute of Astronomy & Geophysics, Mongolian Academy of Sciences in Ulaan Baatar, Mongolia, operated by Munkhmanlai Davaasambuu {no photos yet}
- A new instrument at Institute for Radio Astronomy & Space Research (IRASR) School of Engineering, Computer and Mathematical Sciences Auckland University of Technology, New Zealand. Operated by Stuart Weston and Tim Natusch {no photos yet}
- Upgrade dual circular polarization, low frequency instrument in Anchorage, Alaska by Witham Reeve
- Instruments in Greenland have been moved away from Kellyville to Kangerlussuaq
- Two new instruments in Thailand are waiting to be commissioned



New Features 2018

- Daily light curves per instrument from frequencies which have some international protection by ITU
- Daily spectral overview per instrument
- Callisto data are now also hosted at ESA
Space Situational Awareness (SWE) as a Space Weather Service



Plans 2019

- Design, delivery, installation, configuration, testing and training of dual circular polarization low frequency radio spectrometer at Arecibo observatory in Puerto Rico.
- Delivery of 2 additional Callisto spectrometer to Janaka Adassuriya Astronomy Division, Arthur C Clarke Institute, Katubedda, Moratuwa Sri Lanka
- ...



Workshops, Training 2018

- May 21 - June 1, 2018 Physics Department, Mekelle University, Mekelle, Tigray, Ethiopia, COSPAR Capacity-Building Workshop "Coronal and Interplanetary Shocks: Analysis of Data from SOHO, Wind, and e-CALLISTO"
- Aug. 22-24: Practical instrument 3-day workshop at Addis Ababa University, Ethiopia
- Aug. 20-21: Python workshop at Ethiopian Space Science and Technology Institute (ESSTI)
Entoto Observatory Research Center (EORC)
Space Science and Application Research
Development, Addis Ababa, Ethiopia



Callisto related papers 2018

- Journal: The Astrophysical Journal Letters, 863:L39 (6pp), 2018 August 20
Title: Extreme Kinematics of the 2017 September 10 Solar Eruption and the Spectral Characteristics of the Associated Energetic Particles
Authors: N. Gopalswamy , S. Yashiro , P. Mäkelä , H. Xie, S. Akiyama , and C. Monstein
- Journal: JSWSC, J. Space Weather Space Clim. 2018, 8, A42, <https://doi.org/10.1051/swsc/2018029>
Title: Solar radio emission as a disturbance of aeronautical radionavigation
Authors: Christophe Marqué*, Karl-Ludwig Klein, Christian Monstein, Hermann Opgenoorth, Antti Pulkkinen, Stephan Buchert, Säm Krucker, Rudiger Van Hoof, and Peter Thulesen
- Journal: Sol Phys (2018) 293: 143. <https://doi.org/10.1007/s11207-018-1367-5>
Title: Fourier Power Spectra of Solar Noise Storms
Authors: Karlický, M., Rybák, J. & Monstein
- Journal: Ann. Geophys., 36, 1347–1360, 2018, <https://doi.org/10.5194/angeo-36-1347-2018>
Title: First joint observations of space weather events over Mexico
Authors: Victor De la Luz, J. Americo Gonzalez-Esparza, Maria A. Sergeeva, Pedro Corona-Romero, L Xavier González, Julio C. Mejia-Ambriz, Jose F. Valdés-Galicia, Ernesto Aguilar-Rodriguez, Mario Rodriguez-Martinez, Esmeralda Romero-Hernandez, Ernesto Andrade, Pablo Villanueva, Elizandro Huipe-Domratcheva, Gerardo Cifuentes, Esteban Hernandez, and Christian Monstein



Additional information:

<http://e-callisto.org>



Callisto is no more an ETH activity...

The PI Christian Monstein has retired.
But all Callisto related activities will be
continued by Christian as a private
person, even without funding...