University of Applied Sciences and Arts Northwestern Switzerland

Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

e-Callisto status report #38

1st time when 15 different instruments observed a type II burst at the same time:

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NOAA:
3130        0835    0838        0840   G15   5    XRA   1-8A        M1.7     2.0E-03
3130        0836    ////        0837   SVI   C    RSP   025-180     III/2
3130        0839    ////        0840   SVI   C    RSP   102-180     II/1     1179
```

Type II burst shows in most observations fundamental emission, harmonic emission with split band and herring bones structures.
Plots are presented in alphabetical order from Almaty to SWMC:

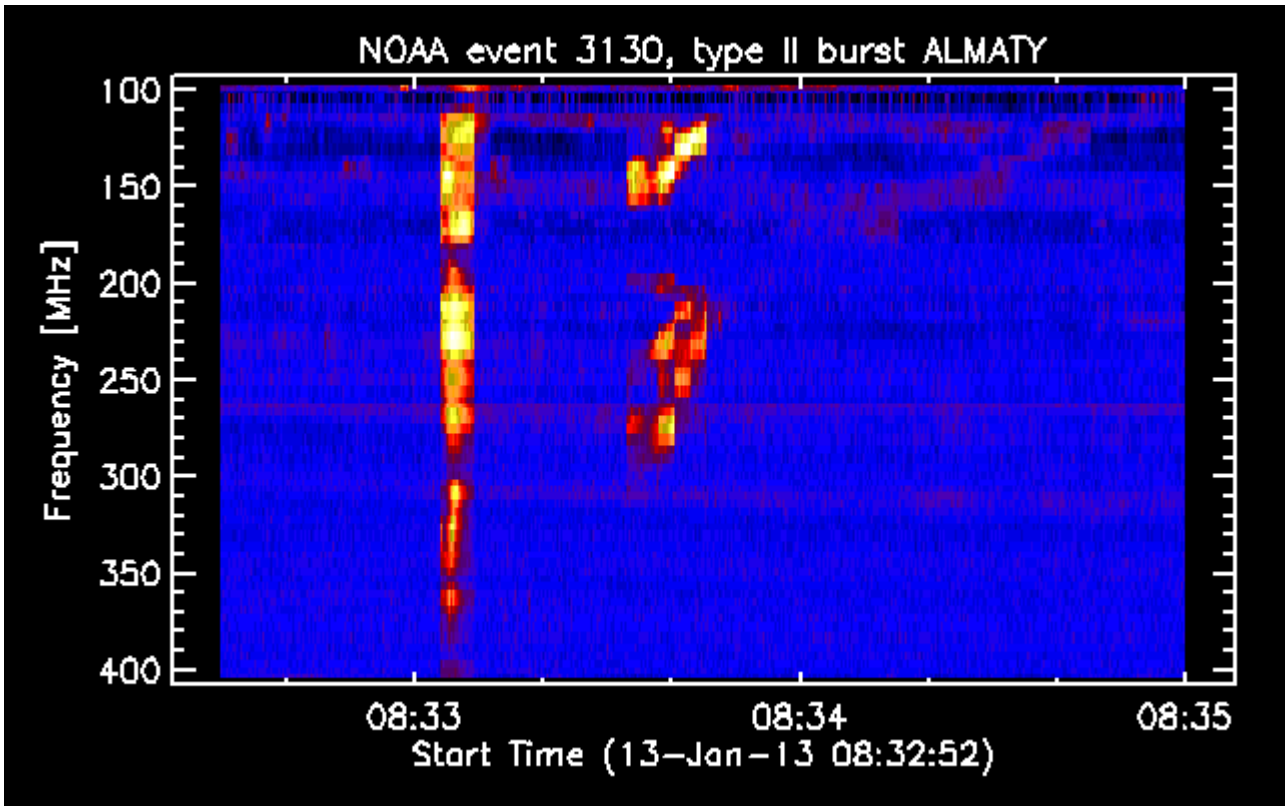

Figure 1: ALMATY, Kazakhstan. Antenna = LPDA pointing to the sun. Remark: X-axis timing-error. Frequency resolution: 4.1 MHz

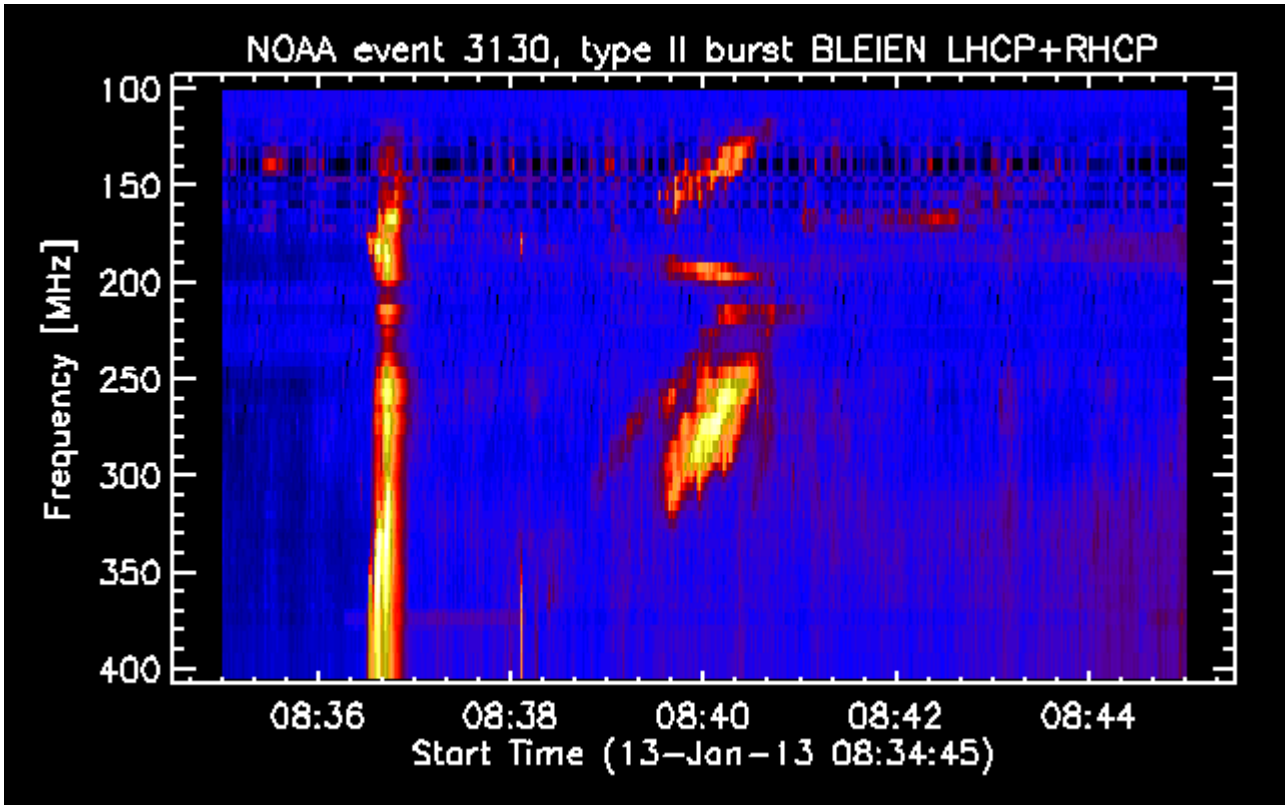

Figure 2: Bleien, Switzerland 7m dish pointing to the sun. I = LHCP + RHCP
Frequency resolution: 4.1 MHz

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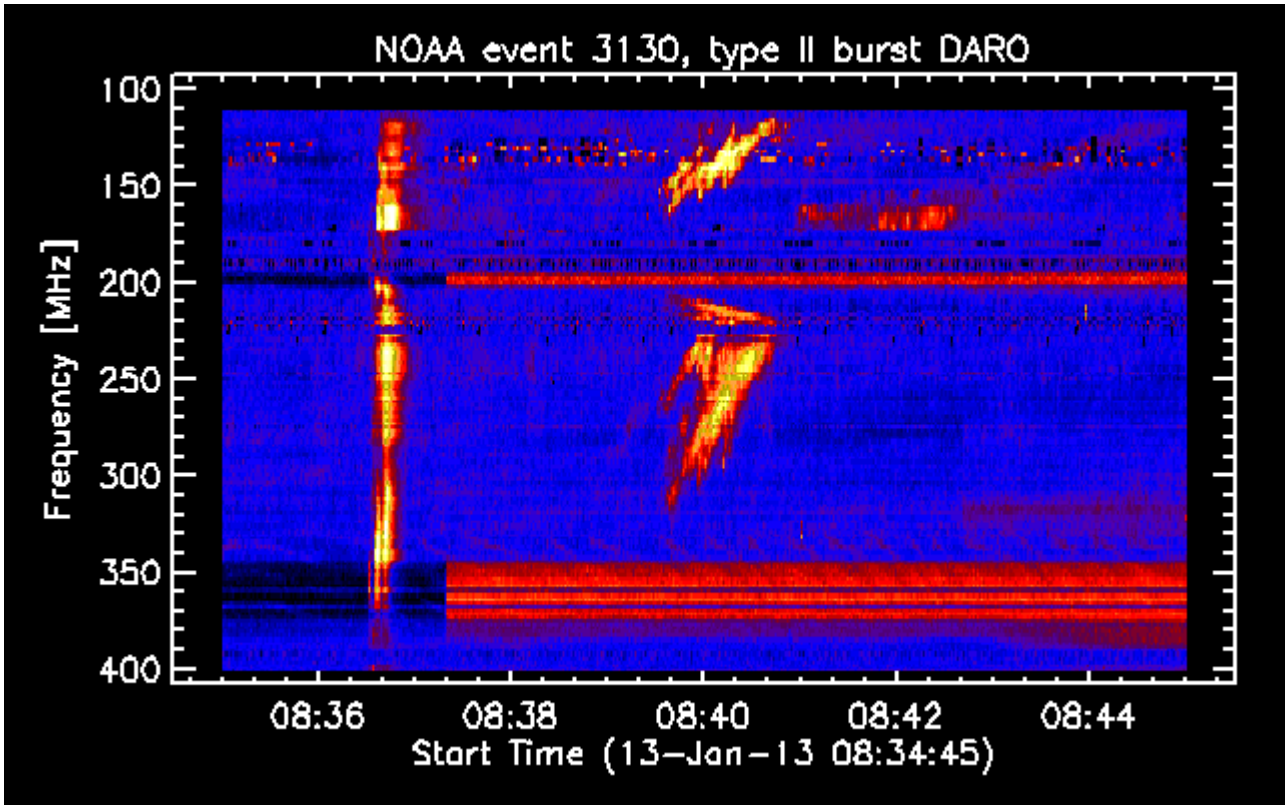

Figure 3: DARO Dingden Amateur Radio Observatory, Germany. Antenna LPDA pointing to the sun. Frequency resolution: 1.8 MHz

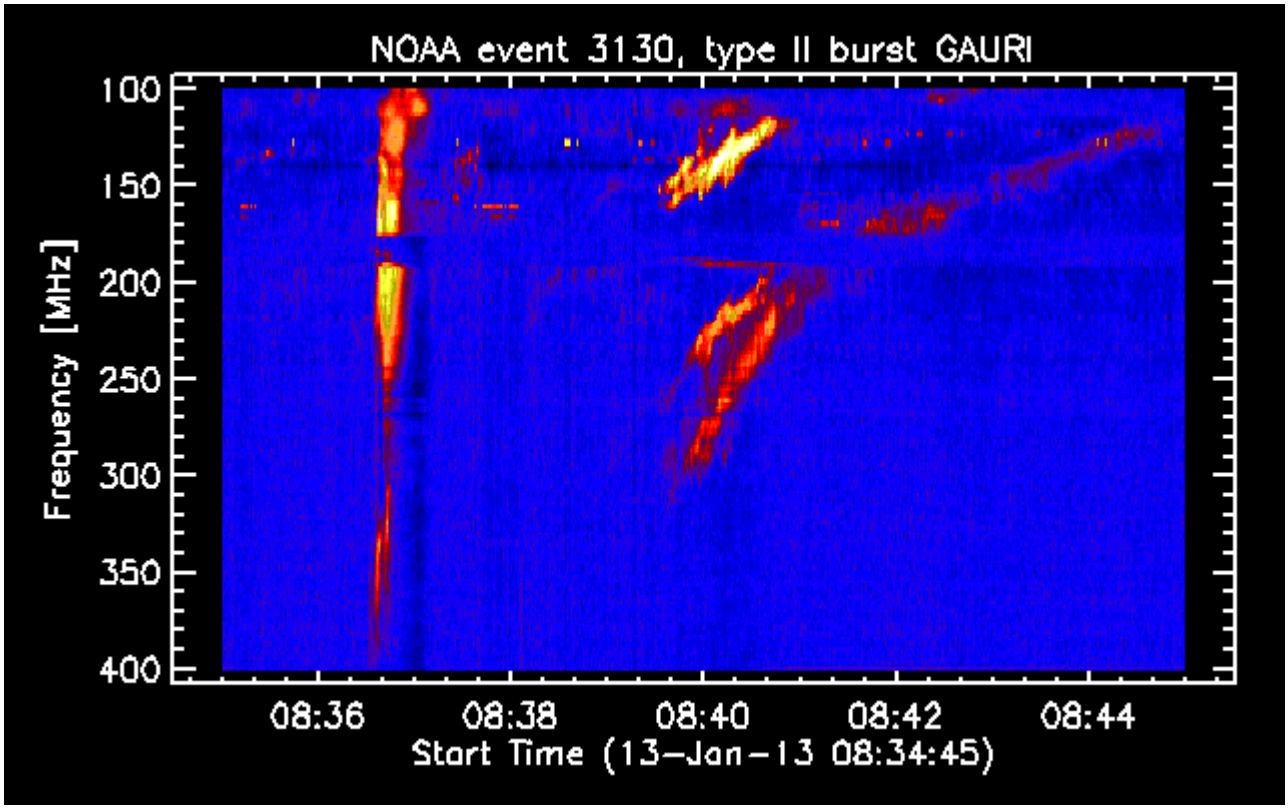

Figure 4: Gauribidanur, India. LPDA pointing to zenith.
Frequency resolution: 1.8 MHz

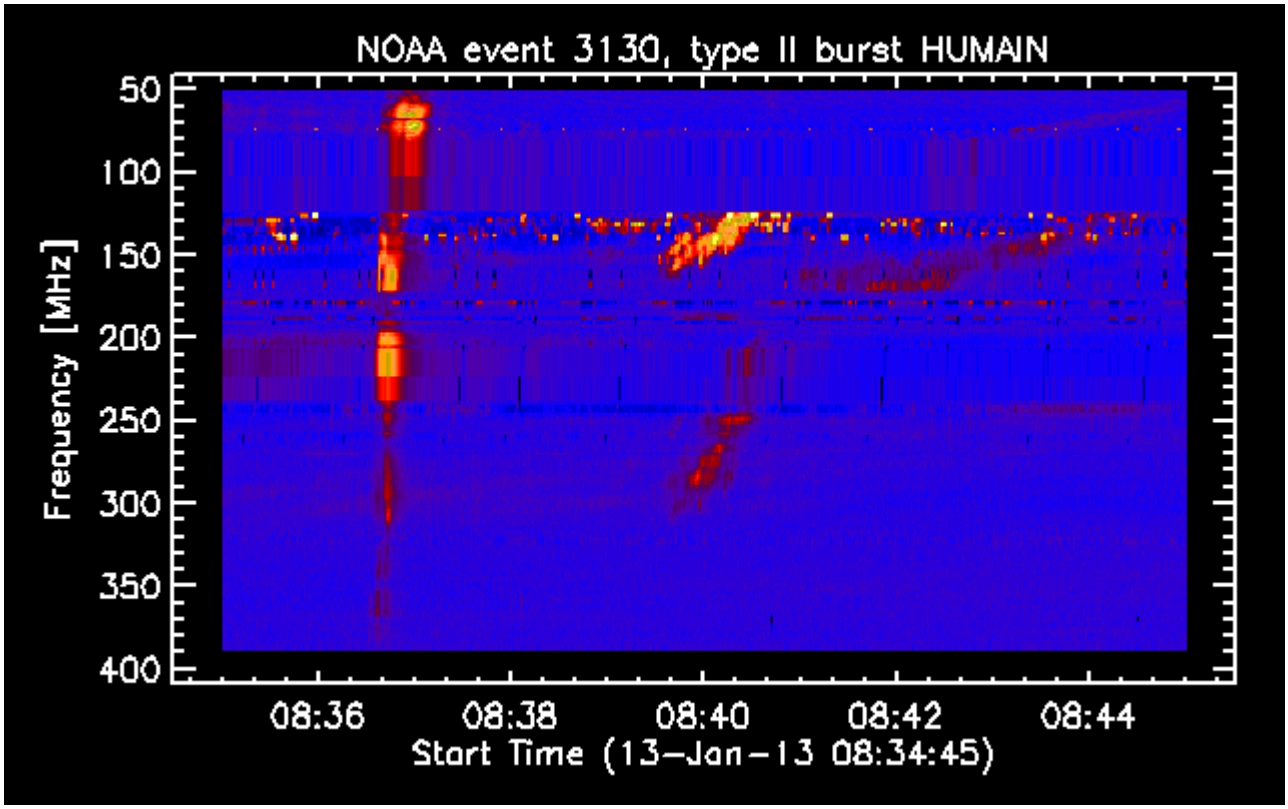

Figure 5: HUMAIN, Royal Observatory of Belgium. LPDA pointing to the sun.
Frequency resolution: 1.7 MHz

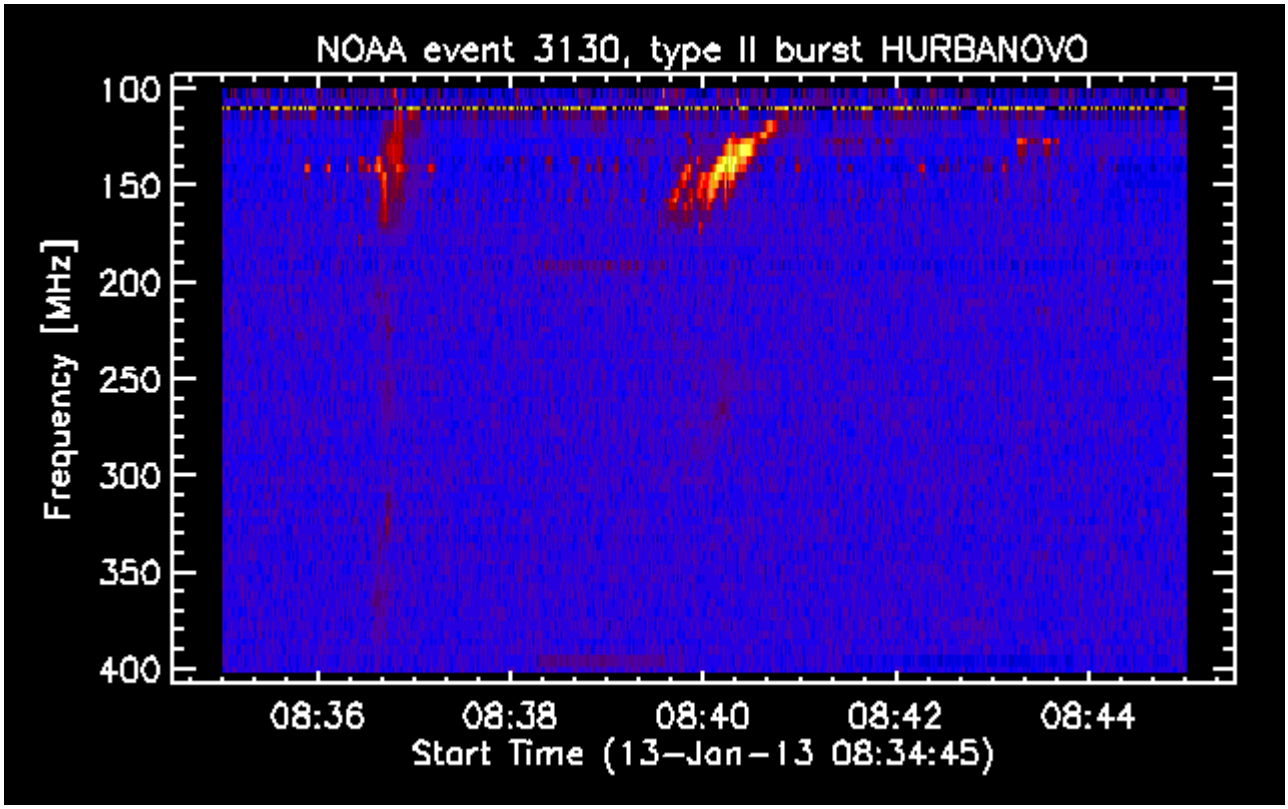

Figure 6: HURBANOVO, Slovakia. LPDA pointing to meridian transit.
Frequency resolution: 4.1 MHz

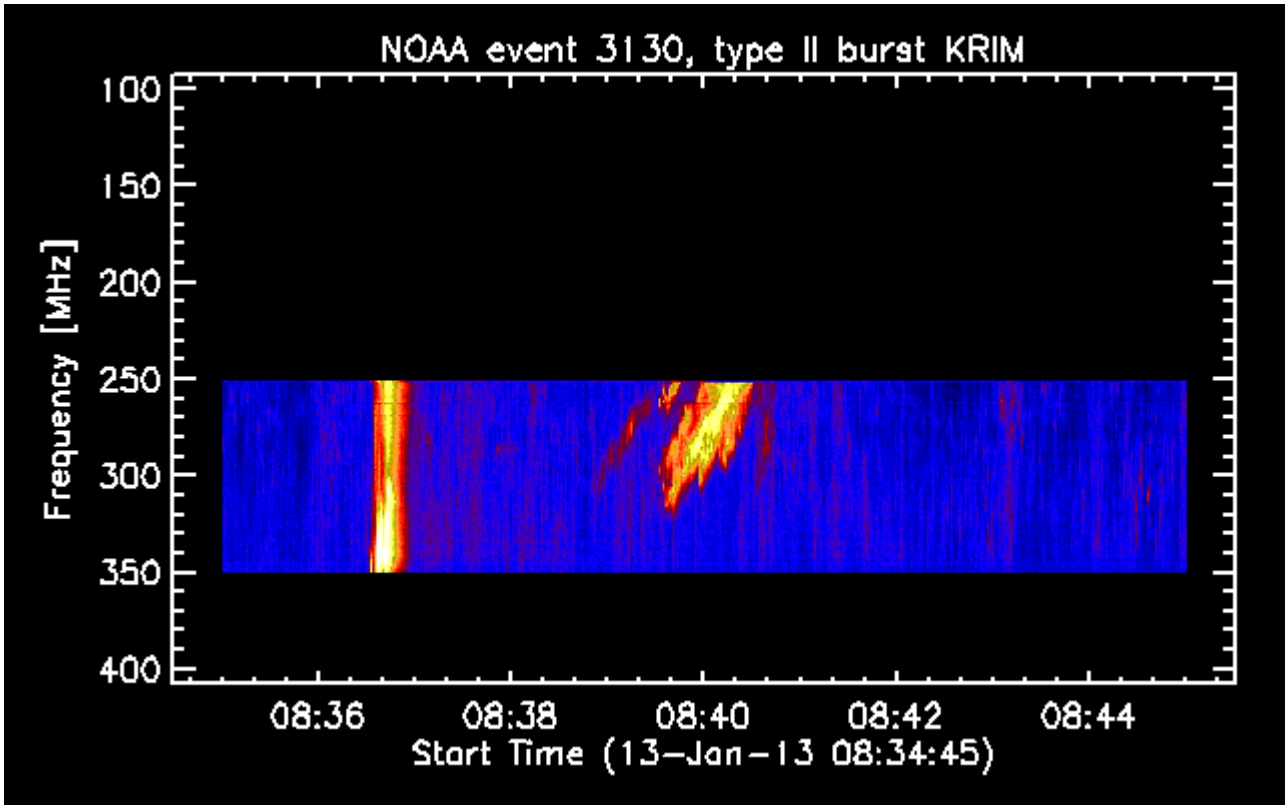

Figure 7: KRIM, Ukraine. 16-element array pointing to the sun.
Frequency resolution: 0.49 MHz

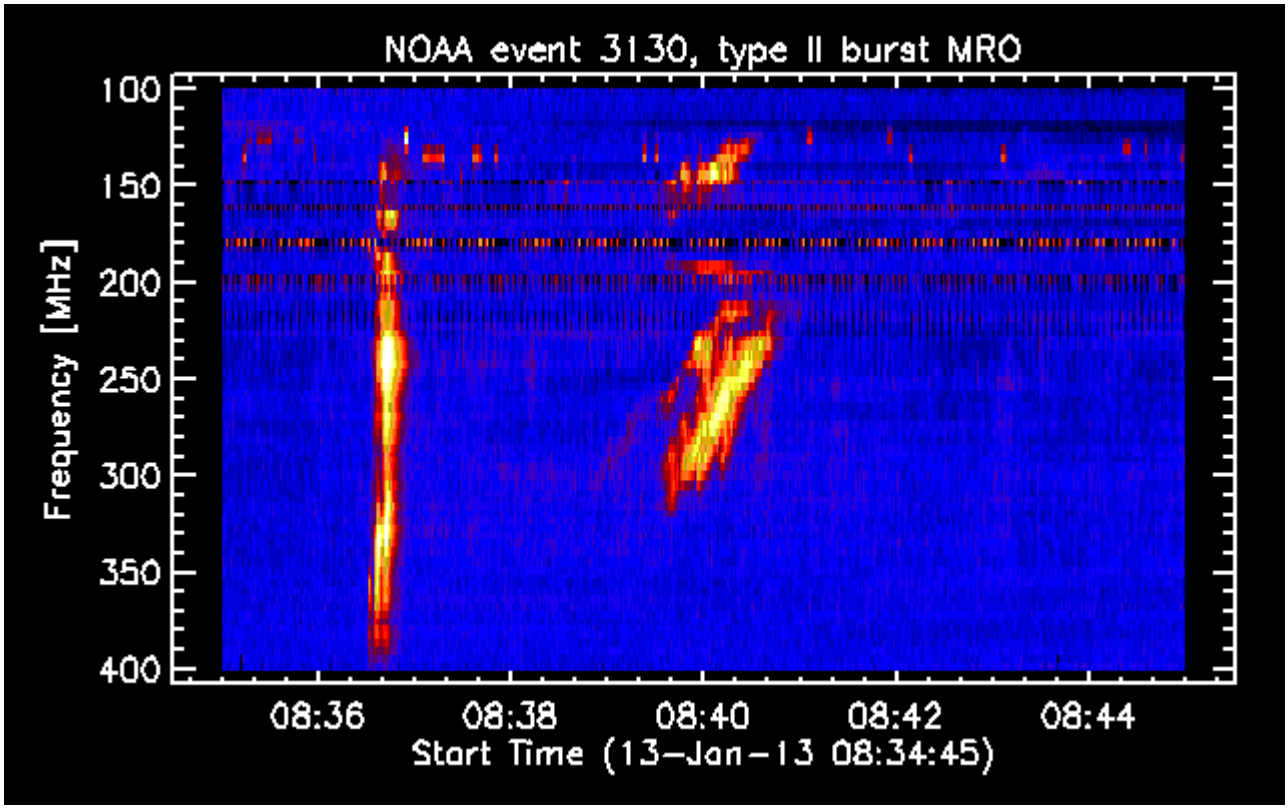

Figure 8: MRO, Finland. LPDA pointing to the sun
Frequency resolution: 3.9 MHz

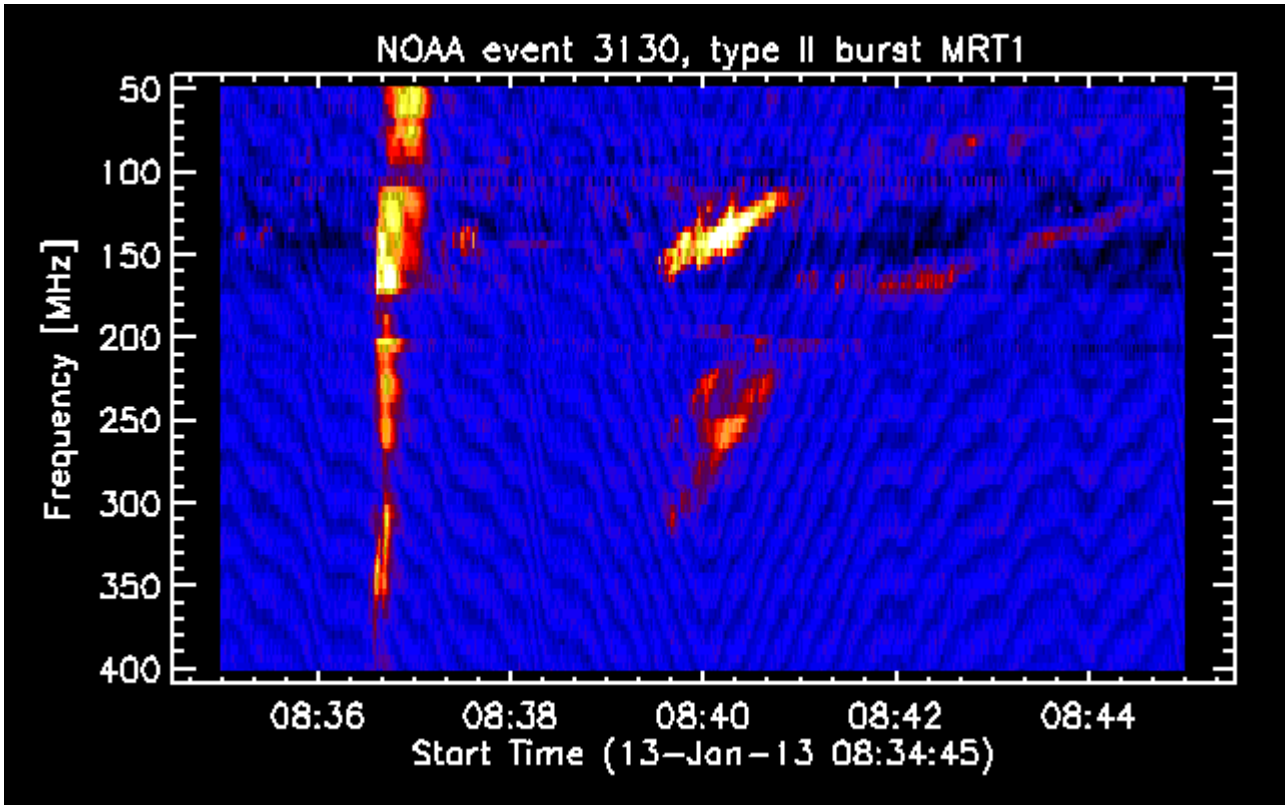

Figure 9: MRT1, Mauritius. LPDA linear 1 pointing to zenith.
Frequency resolution: 4.1 MHz

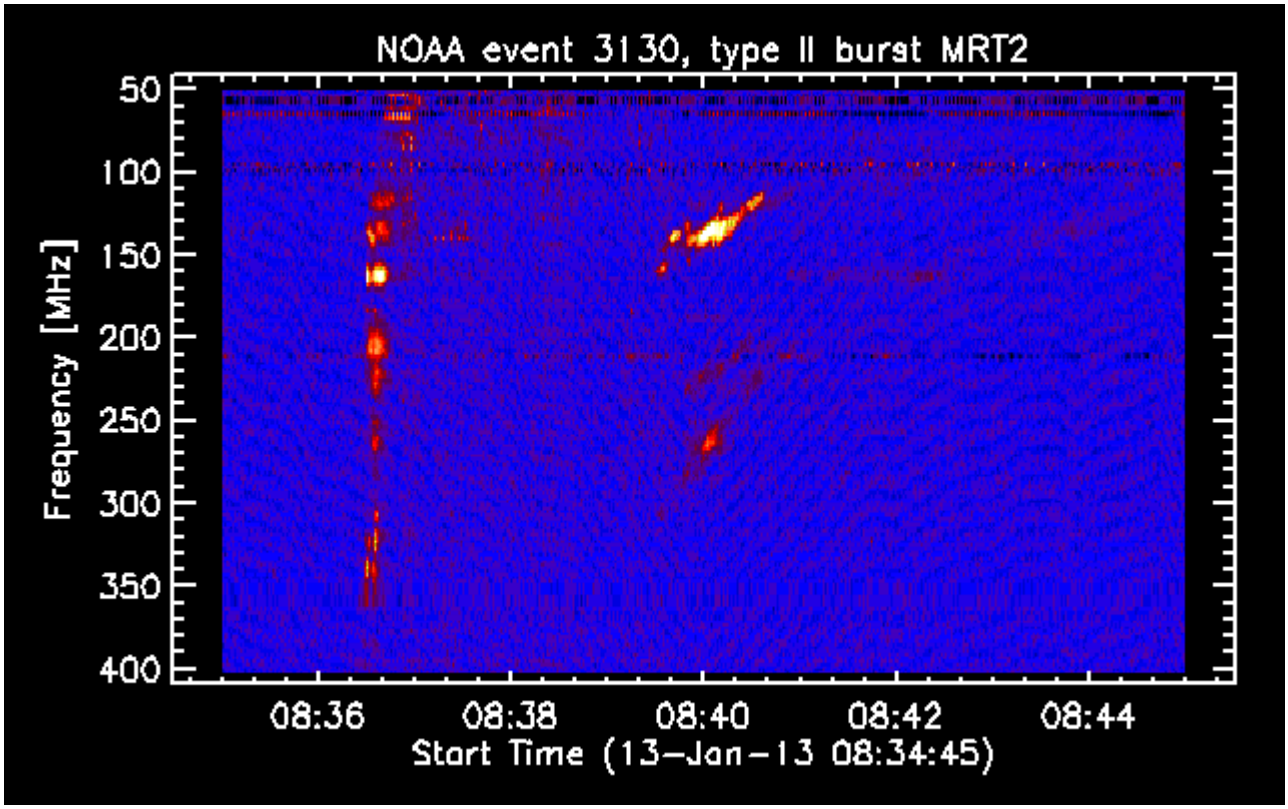

Figure 10: MRT2, Mauritius. LPDA linear 2 pointing to zenith
Frequency resolution: 2.0 MHz

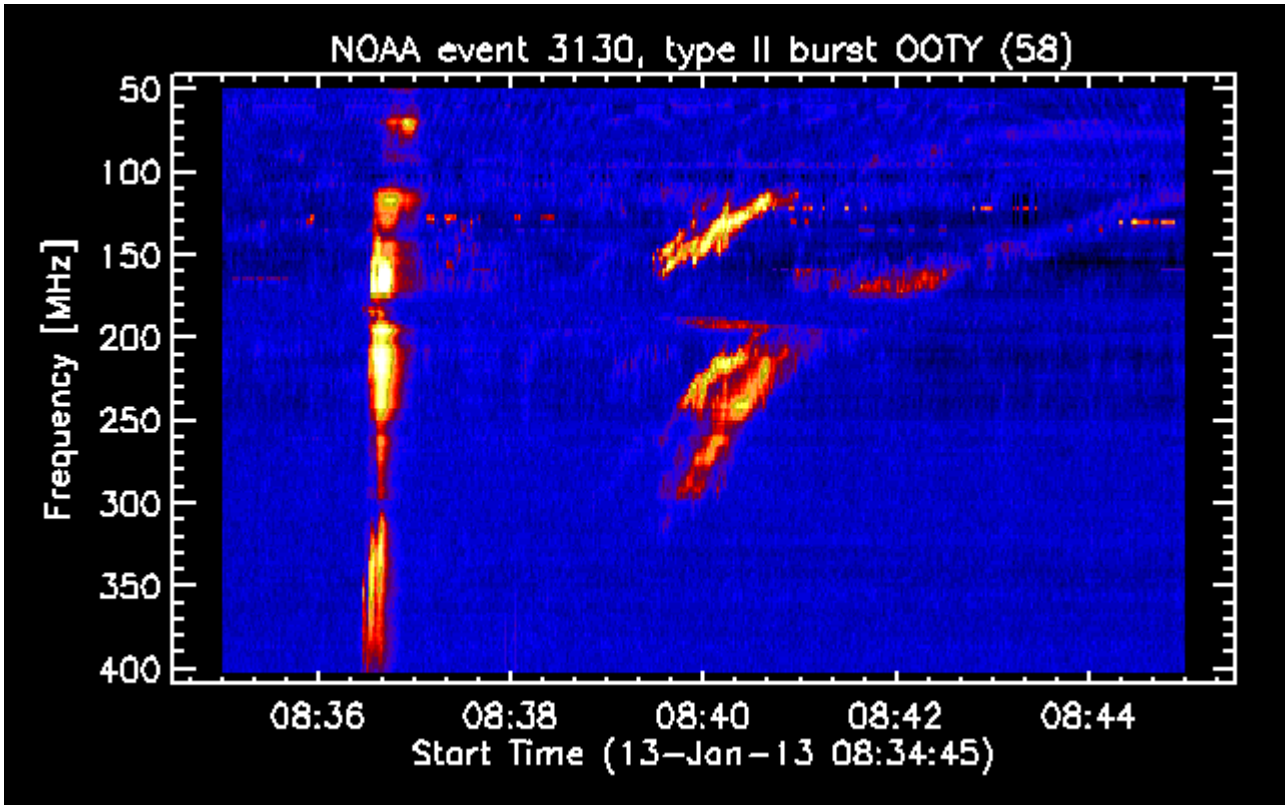

Figure 11: OOTY, India. LPDA 1 pointing to zenith
Frequency resolution: 1.9 MHz

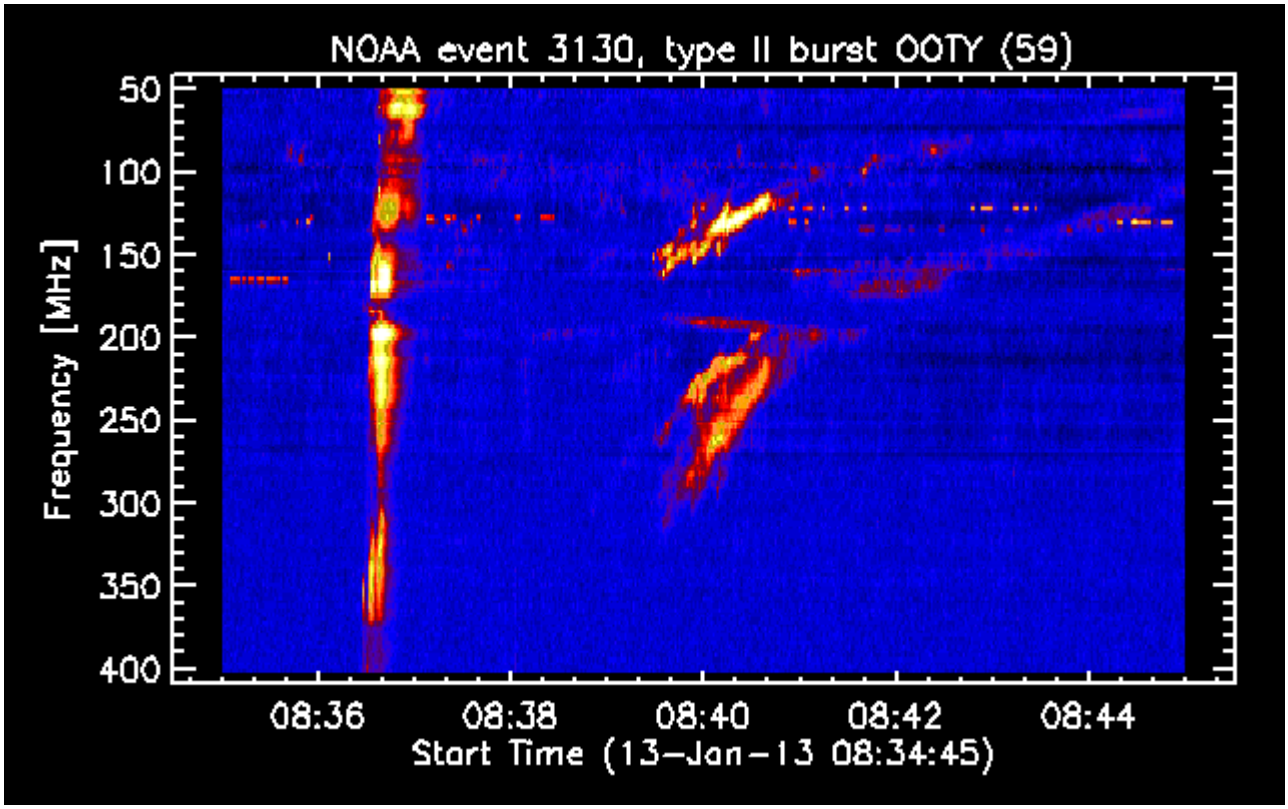

Figure 12: OOTY, India. LPDA linear 2 pointing to zenith.
Frequency resolution: 1.9 MHz

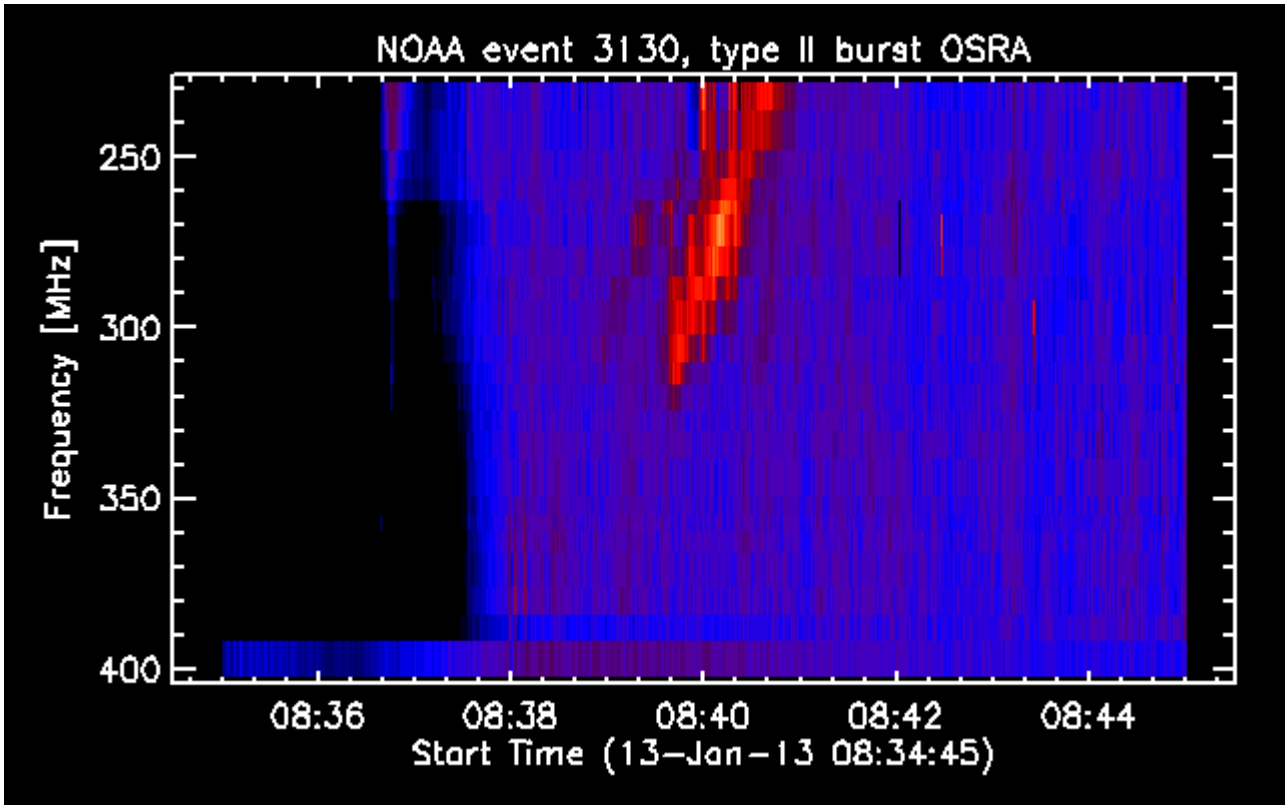

Figure 13: OSRA, Ondrejov, Czech Republic. 7m dish pointing to the sun
Frequency resolution: 7.1 MHz

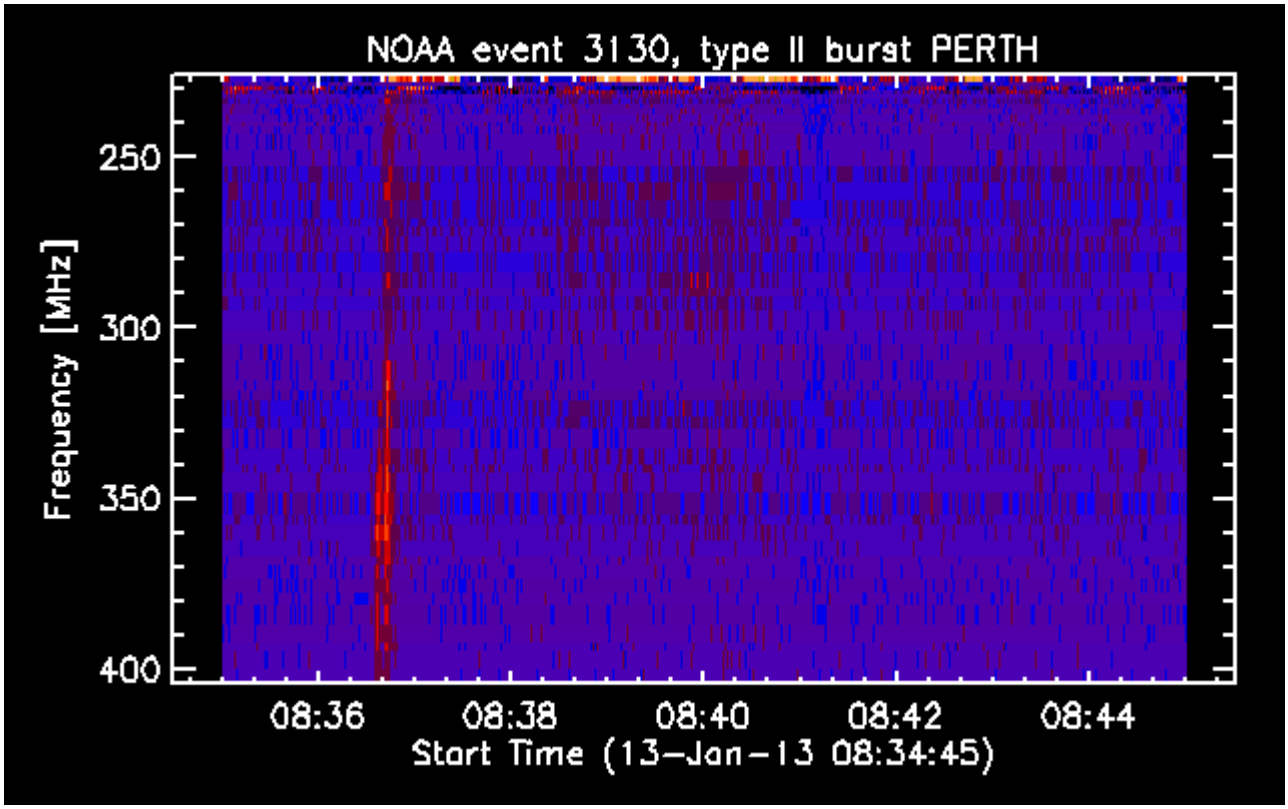

Figure 14: PERTH, Australia. LPDA pointing to the sun
Frequency resolution: 4.3 MHz

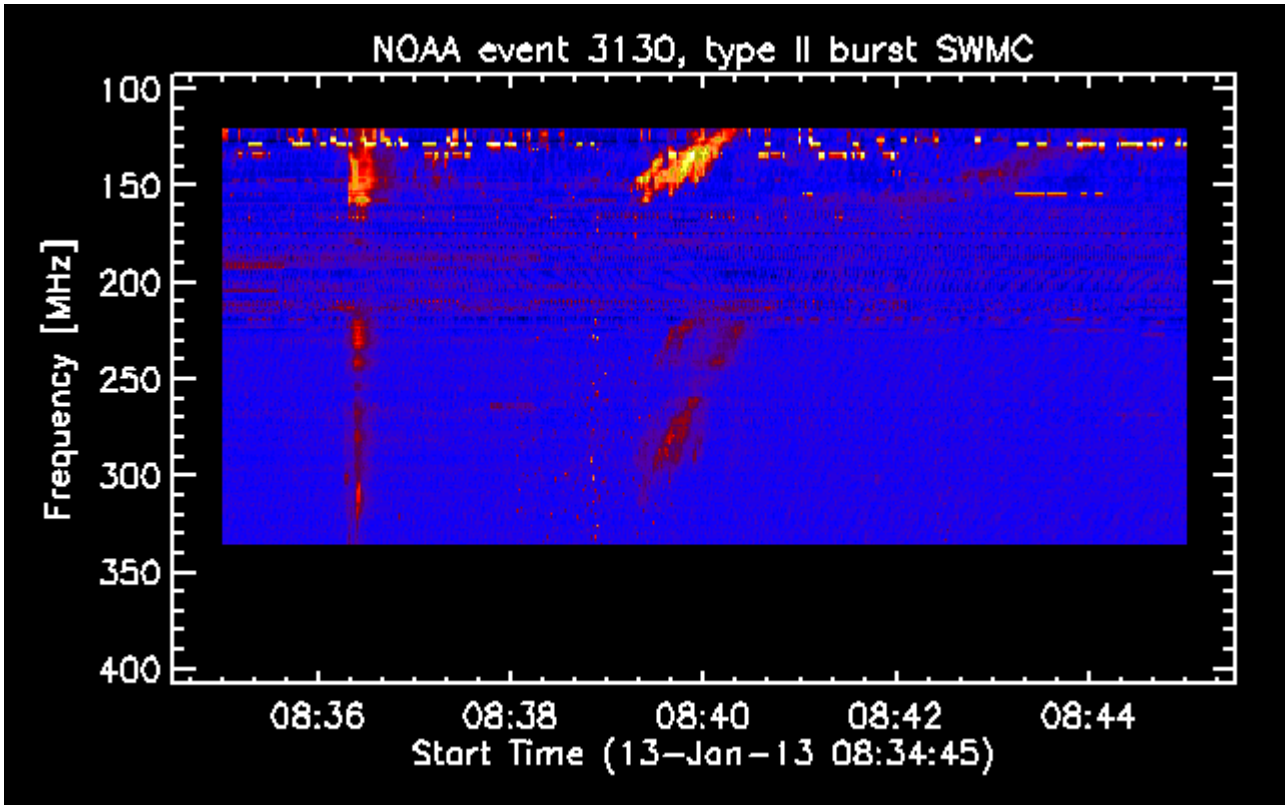

Figure 15: SWMC, Space Weather Monitoring Center, Helwan, Egypt, LPDA pointing to zenith.
Frequency resolution: 1.1 MHz

To remember:

CALLISTO or Callisto denotes to the spectrometer itself while
e-Callisto denotes to the worldwide network.