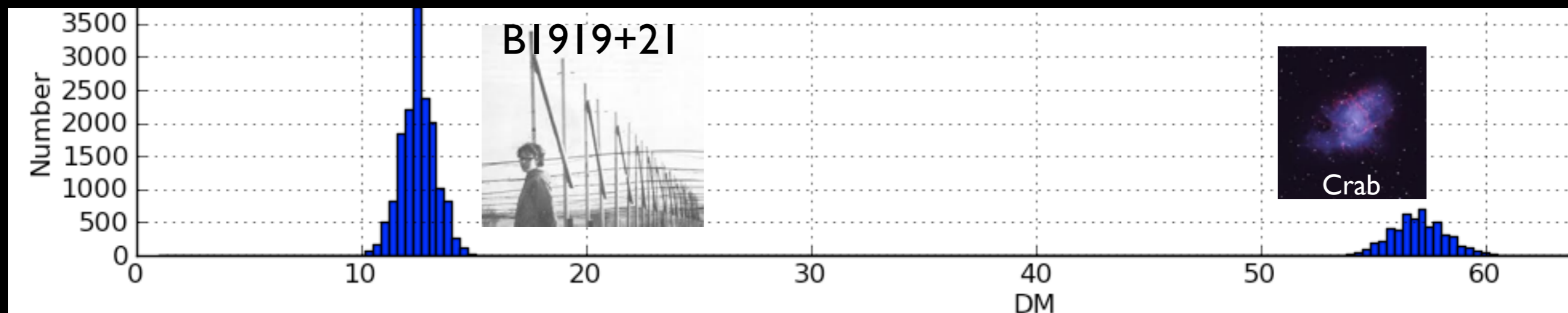
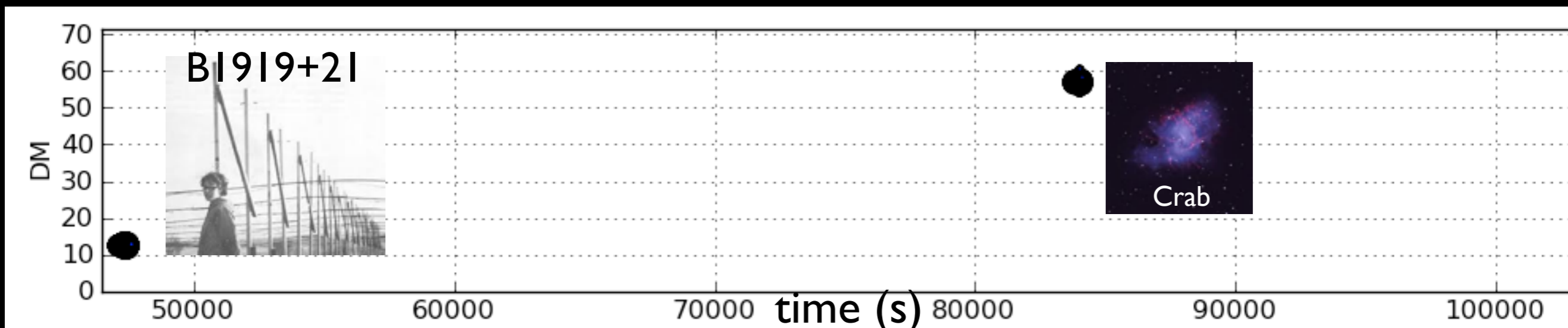
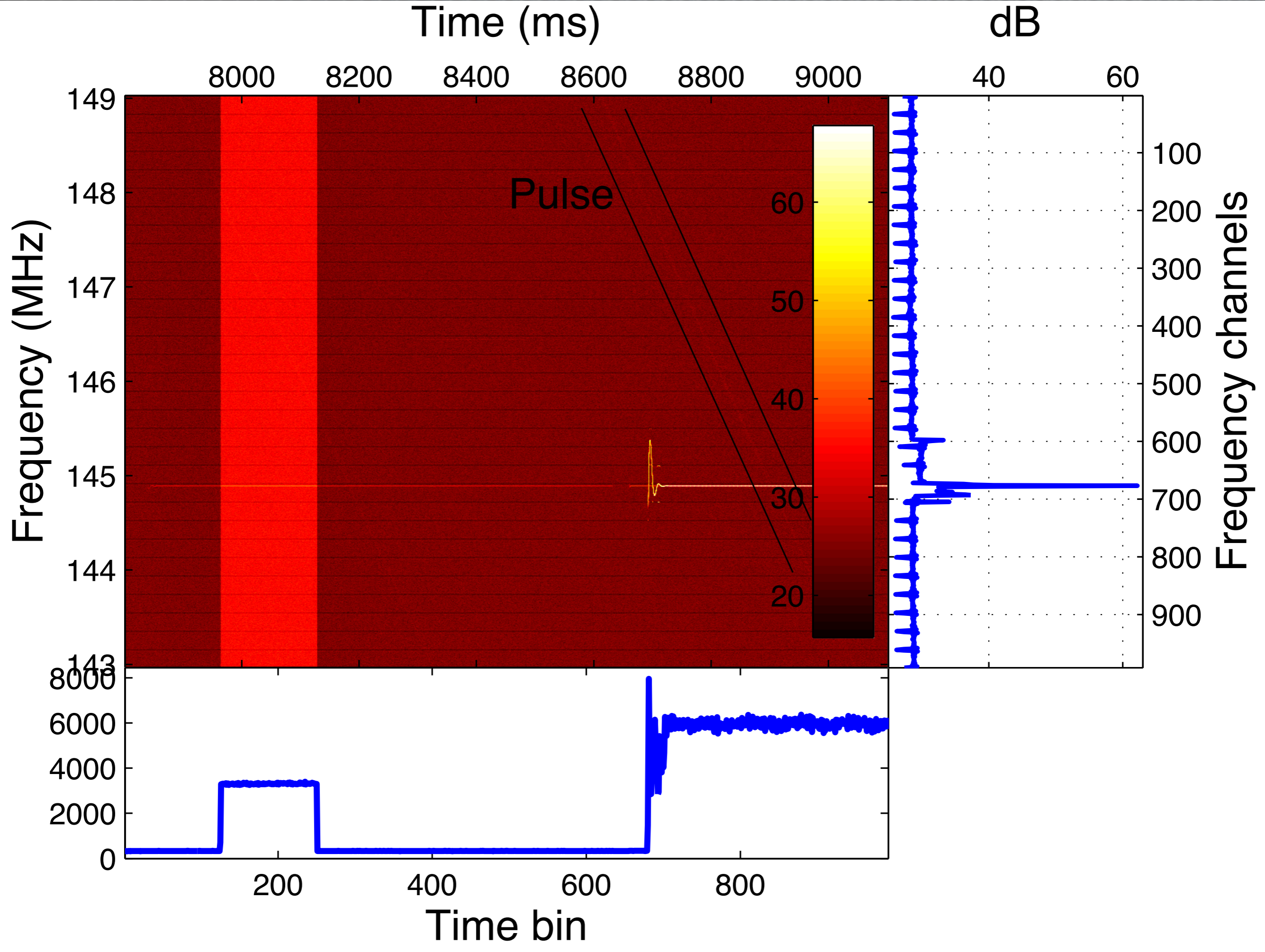


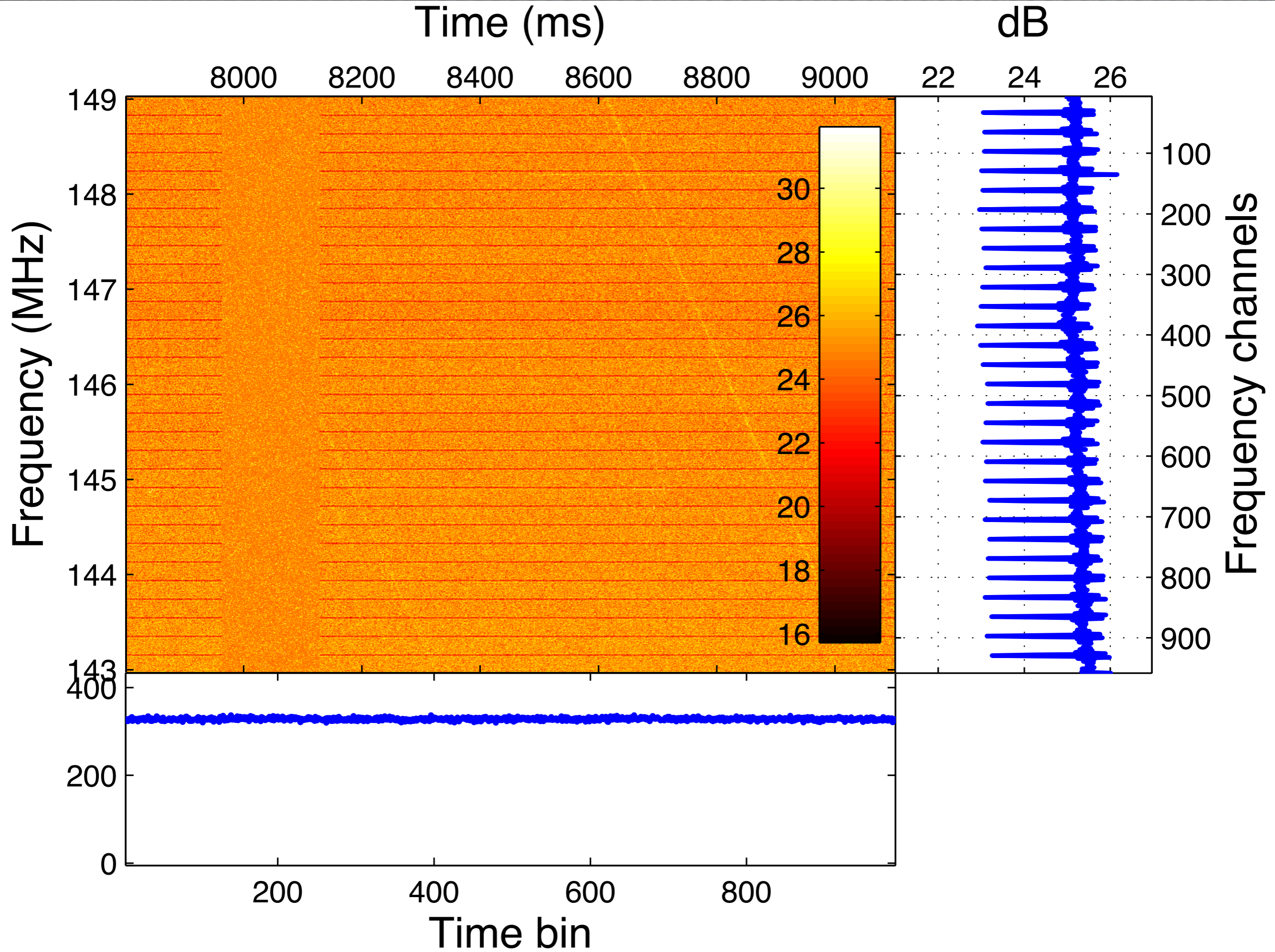
ARTEMIS survey I

- 1000 h of observations
- 8 beams on Greenwich meridian
- 143 - 149 MHz
- ~2000 x 3.05 kHz channels
- ~30 Jy (at 6σ) over 2ms integrations
- $DM_{\max} = 150 \text{ pc} / \text{cm}^3$
- Sampling local Galactic population (really?)

Real time detection system which would easily detect RRATs and Lorimer burst as they happened.
Affordable and scalable hardware







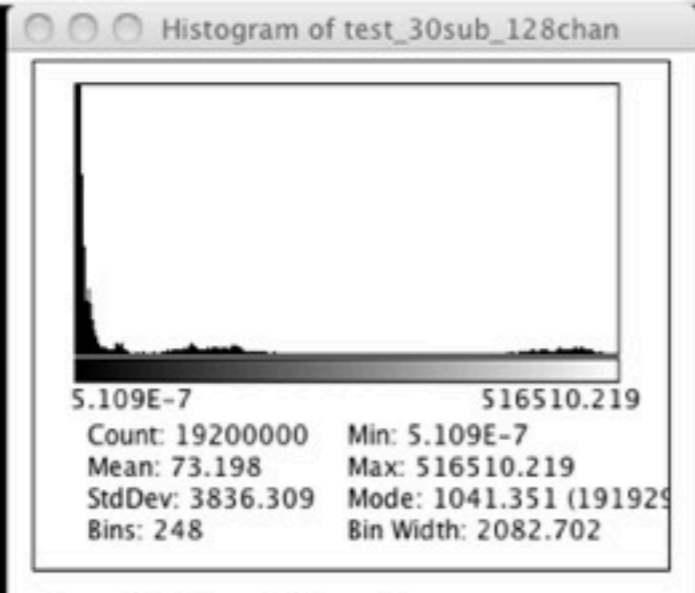
dB

Frequency (MHz)

Frequency channels

Time (ms)

Time bin

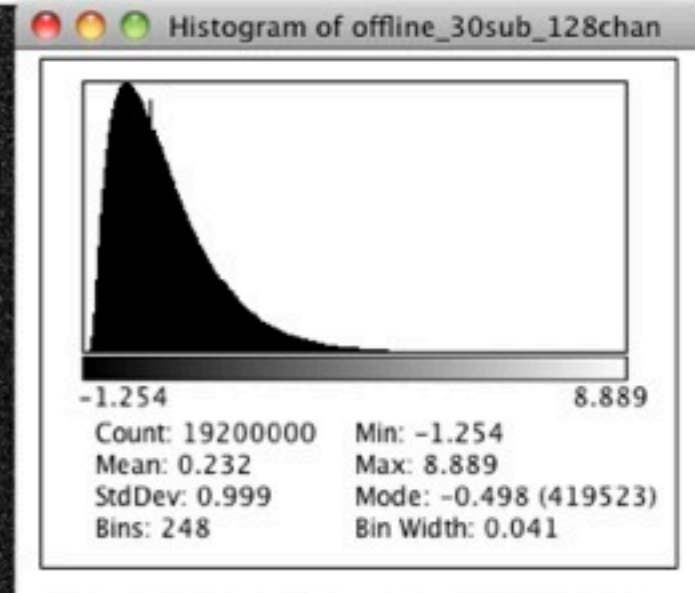


filterbank noise pre-filtering

dynamic noise modelling

→

for effective RFI removal and transient detection



filterbank noise post-filtering

