Pulsar Busy Week 10: A Quick Summary

Jason Hessels
on behalf of
Ken Anderson, Aris Noutsos, Aris Karastergiou, Ben Stappers, Anastasia Alexov, Vlad Kondratiev, Tom Hassall, Thijs Coenen, Sander ter Veen, Joeri van Leeuwen, Ashish Asgekar, Richard Fallows, and Jan David Mol

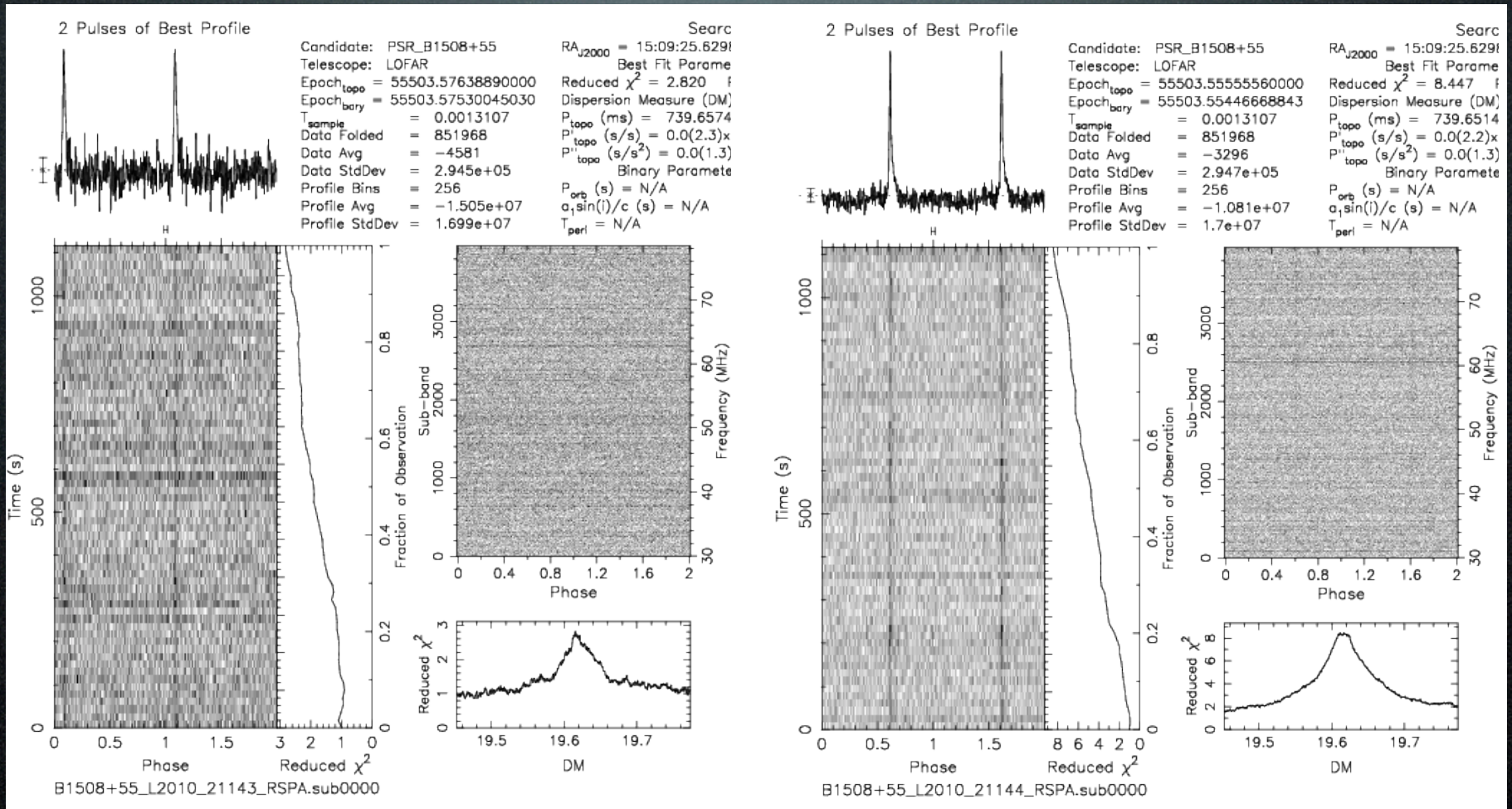
Pulsar Busy Week 10

- Aris K.: Effelsberg/Chilbolton single station observations
- Anastasia: Pipeline and MoM interaction
- Aris N.: Coherent dedispersion, pol., and voltage data
- Jason: Coordination, observing and analysis
- Joeri: Reference paper edits.
- Thijs, Vlad: Search pipeline
- Tom: Scattering data, analysis and pipeline support
- Ashish: beam-formed cookbook
- Jan David: online pipeline development
- Ken: pipeline framework
- Sander: triggerring, data format support
- Richard: Solar observations and processing
- Ben: Reference paper, installing pipeline on Hydra (Manchester)

Pulsar Busy Week 10

- LBA Station Calibration and related results
- LBA tracking issues or something else?
- Pulsar Survey Pipeline

LBA Station Calibration and related results



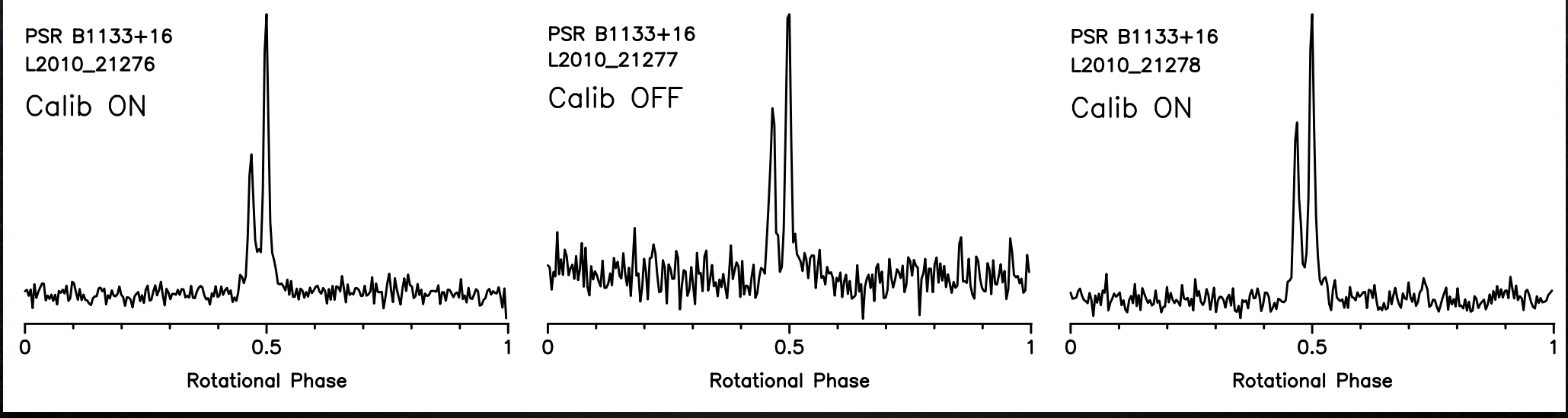
Before station calibration

After station calibration

Consecutive obs., roughly a factor of 3 increase in SNR!

5 stations summed: CS007,024,030,032,RS106

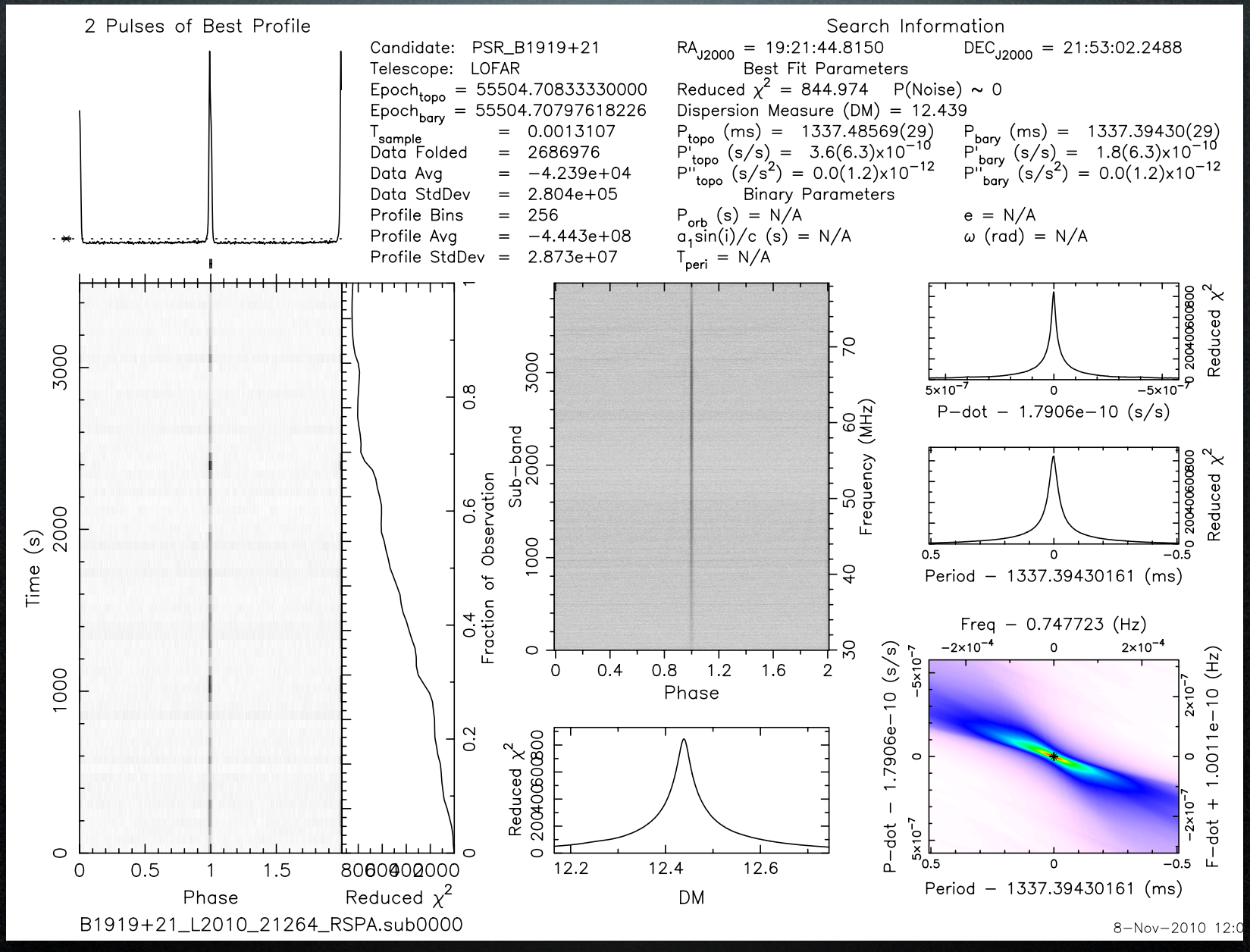
LBA Station Calibration and related results



Again, consecutive observations
Roughly a factor of 3 increase in SNR!

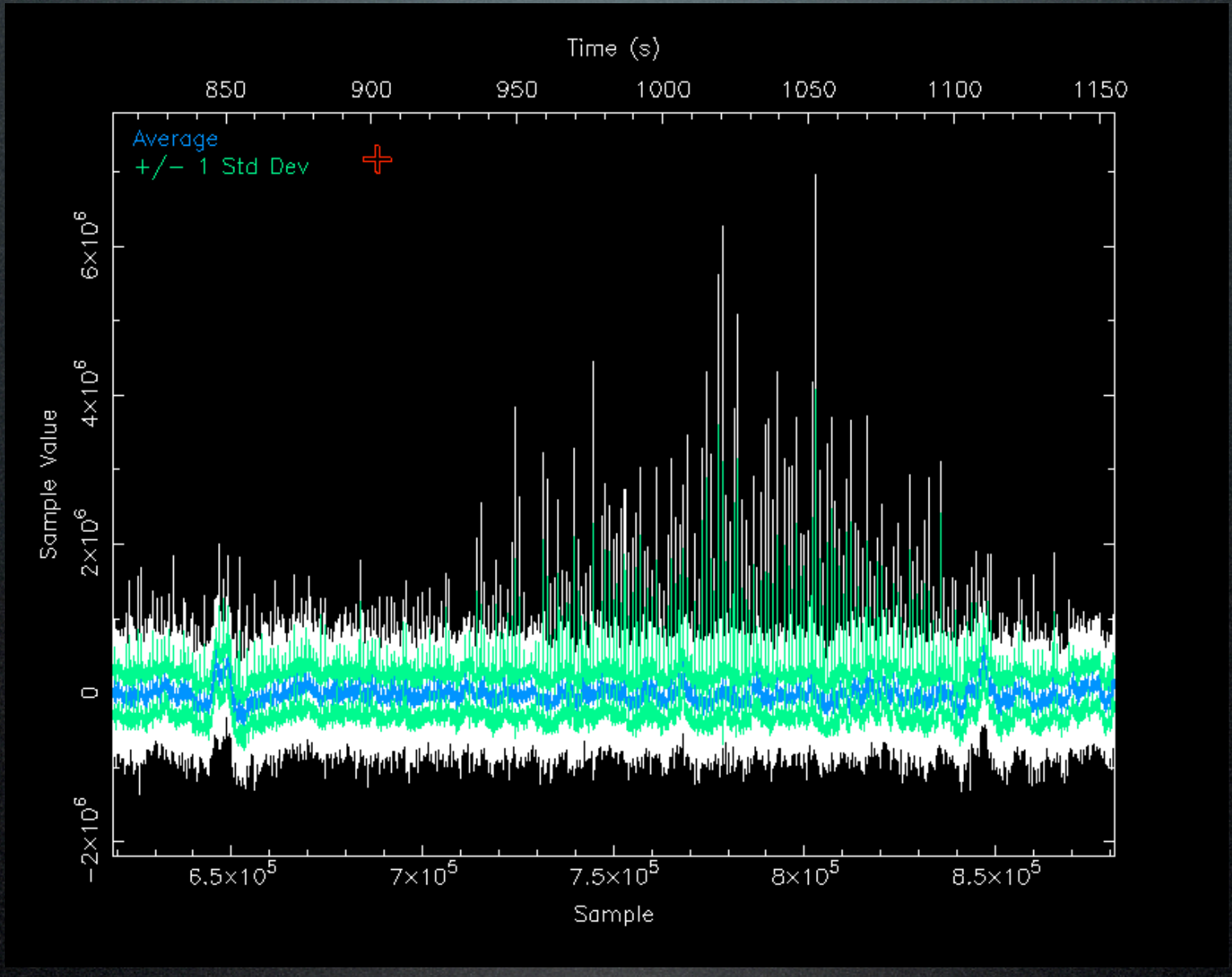
5 stations summed: CS007,024,030,032,RS106

LBA Station Calibration and related results



All-time best LBA detection of any PSR - Next try at 10-30MHz!

LBA Station Calibration and related results

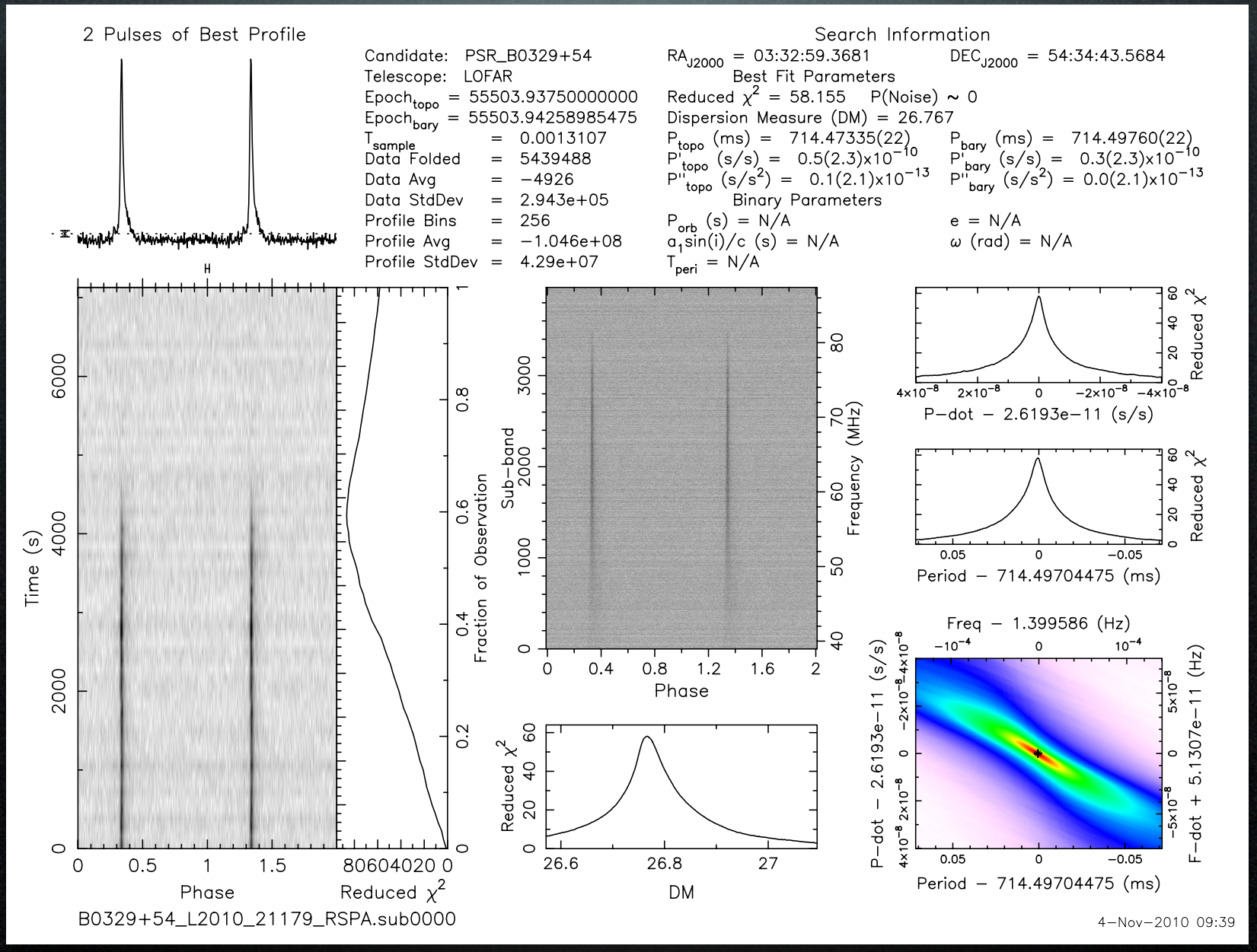


Periods with bright single pulses.

LBA tracking issues or something else?

These data with new Beam Server

Transit

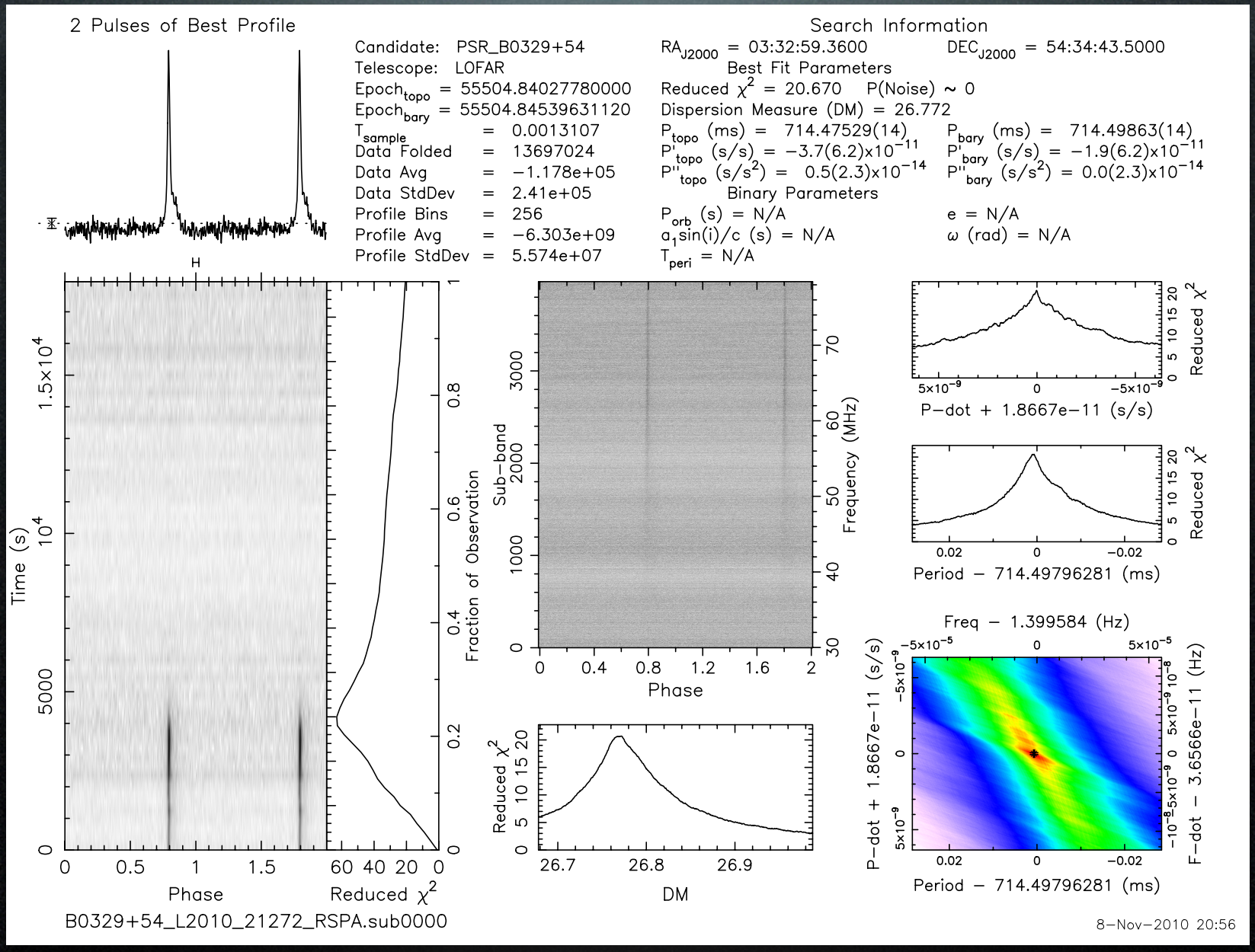


Still some weird issues however (also saw with old BeamServer)

LBA tracking issues or something else?

These data with new Beam Server

Transit??

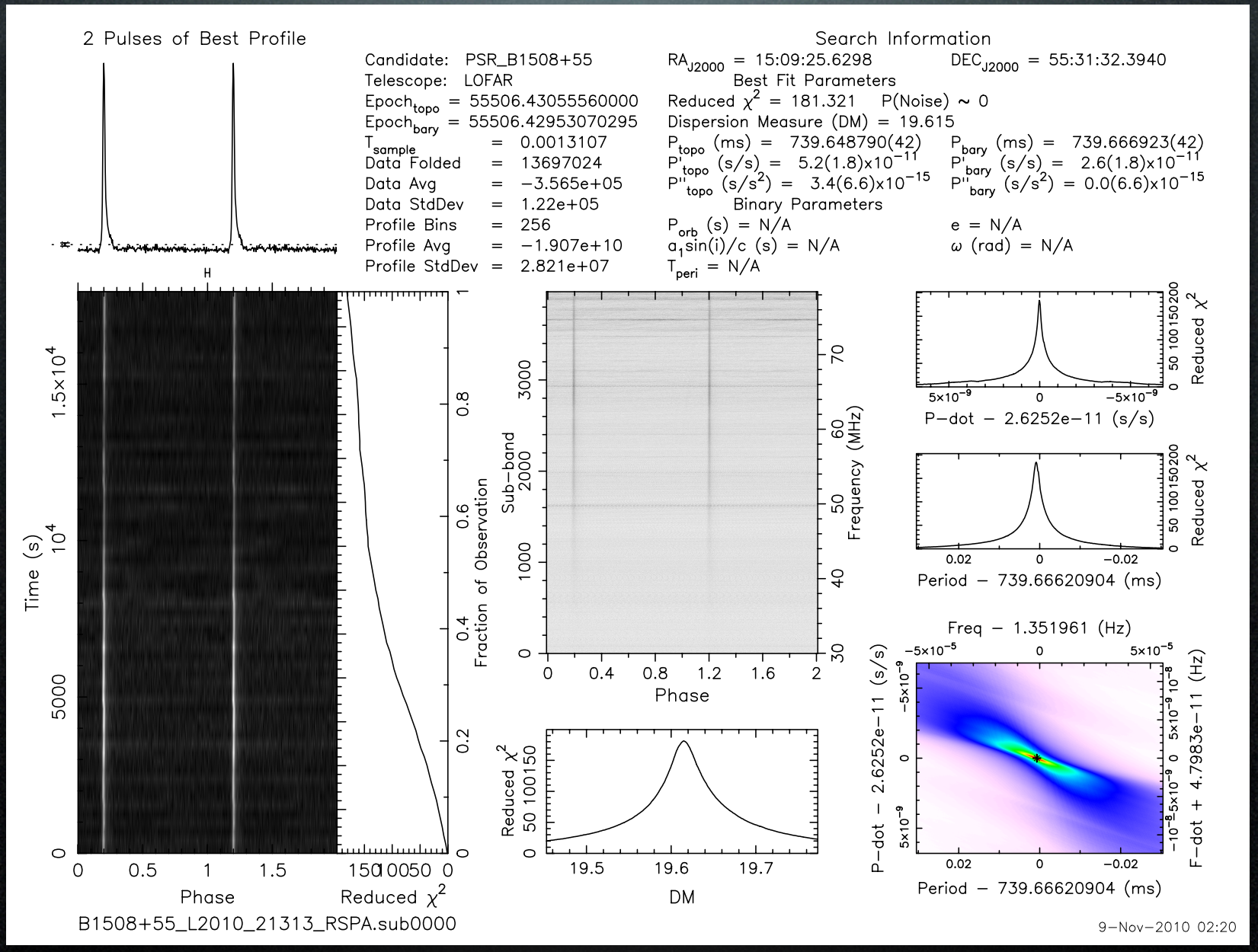


Again disappears after ~5000s AND well before transit?!

LBA tracking issues or something else?

These data with new Beam Server

Transit

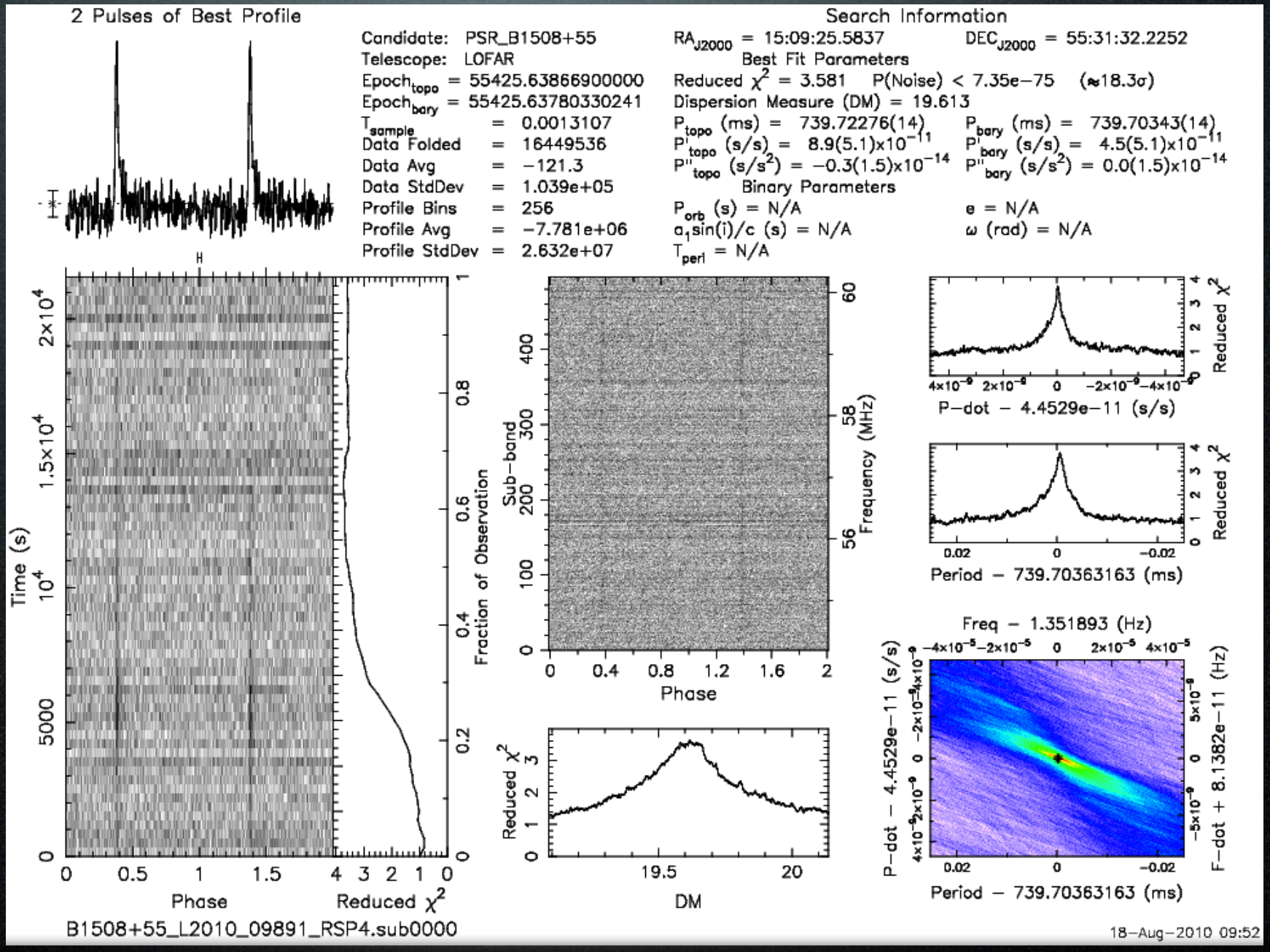


This observation looks fine however.

LBA tracking issues or something else?

These data with old BeamServer

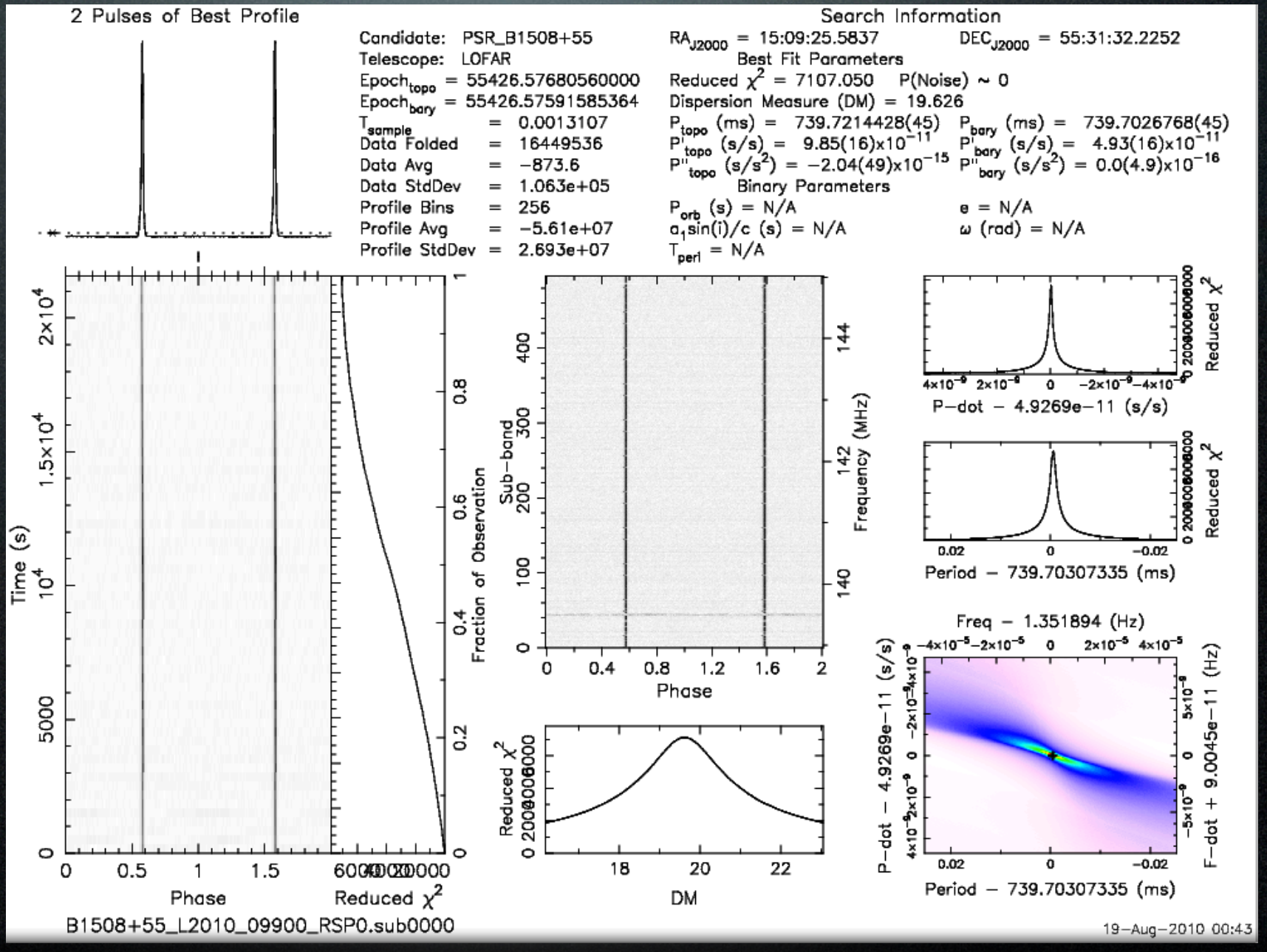
Transit



HBA tracking is fine

These data with old BeamServer

Transit

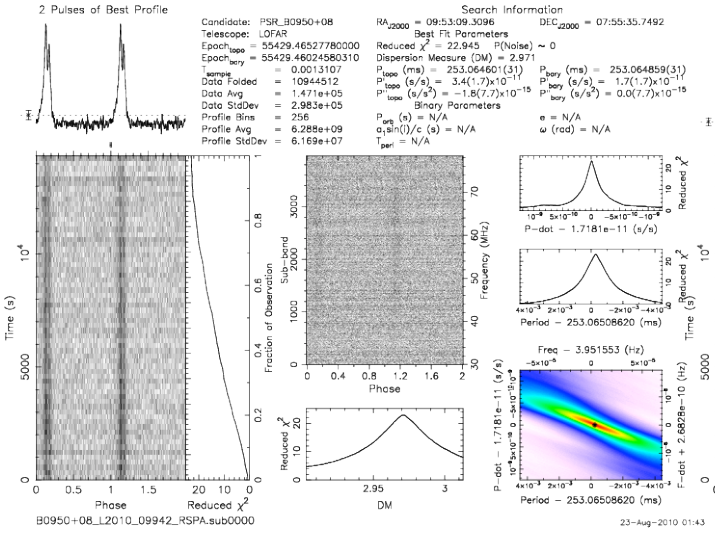


These data with old BeamServer

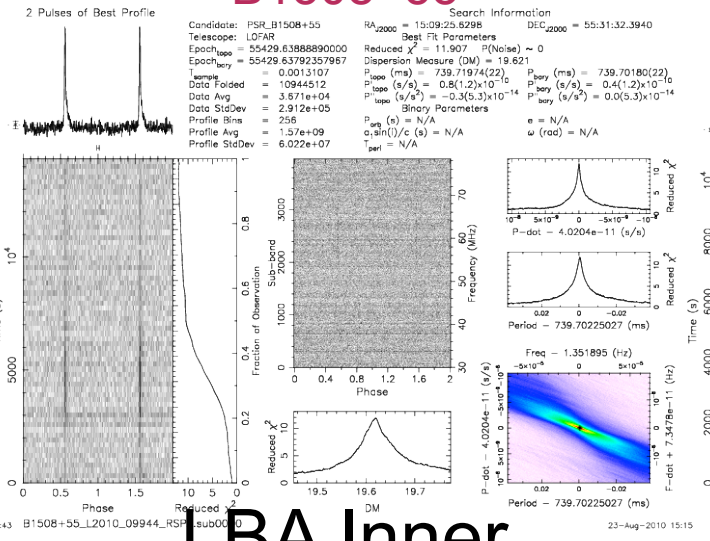
LBA tracking issues or something else?

LBA Outer

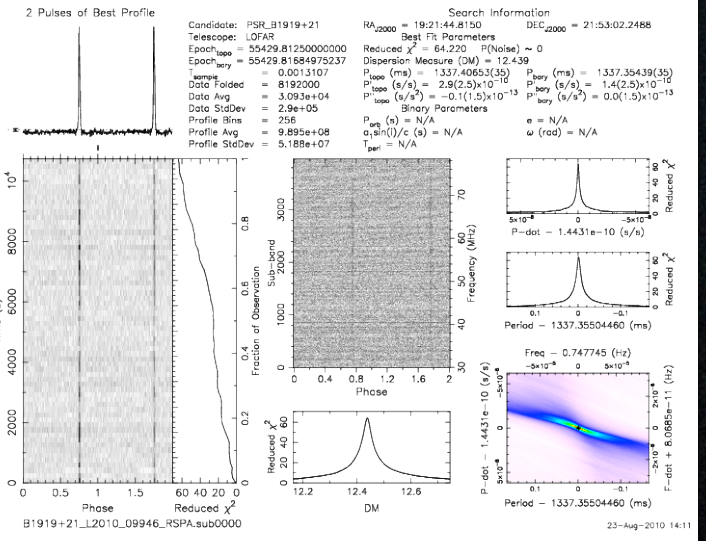
B0950+08



B1508+55

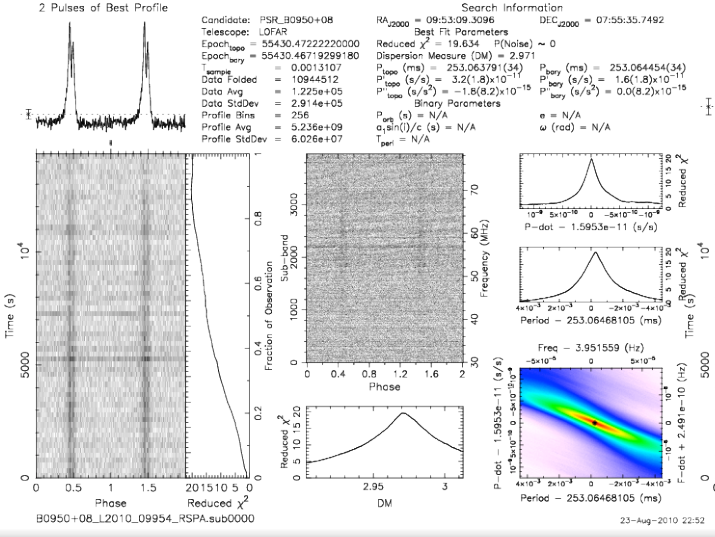


B1919+21



LBA Inner

B0950+08



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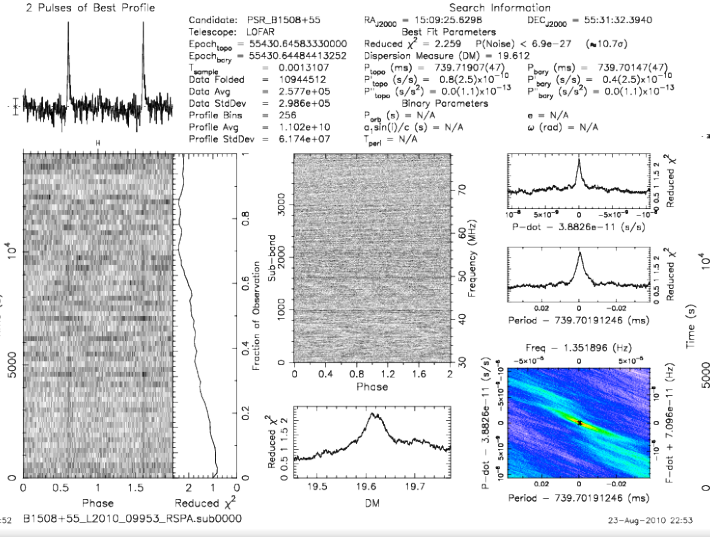

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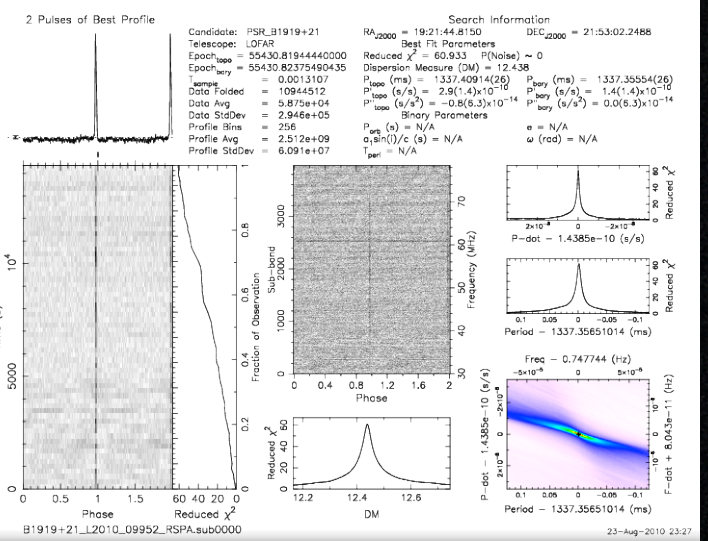
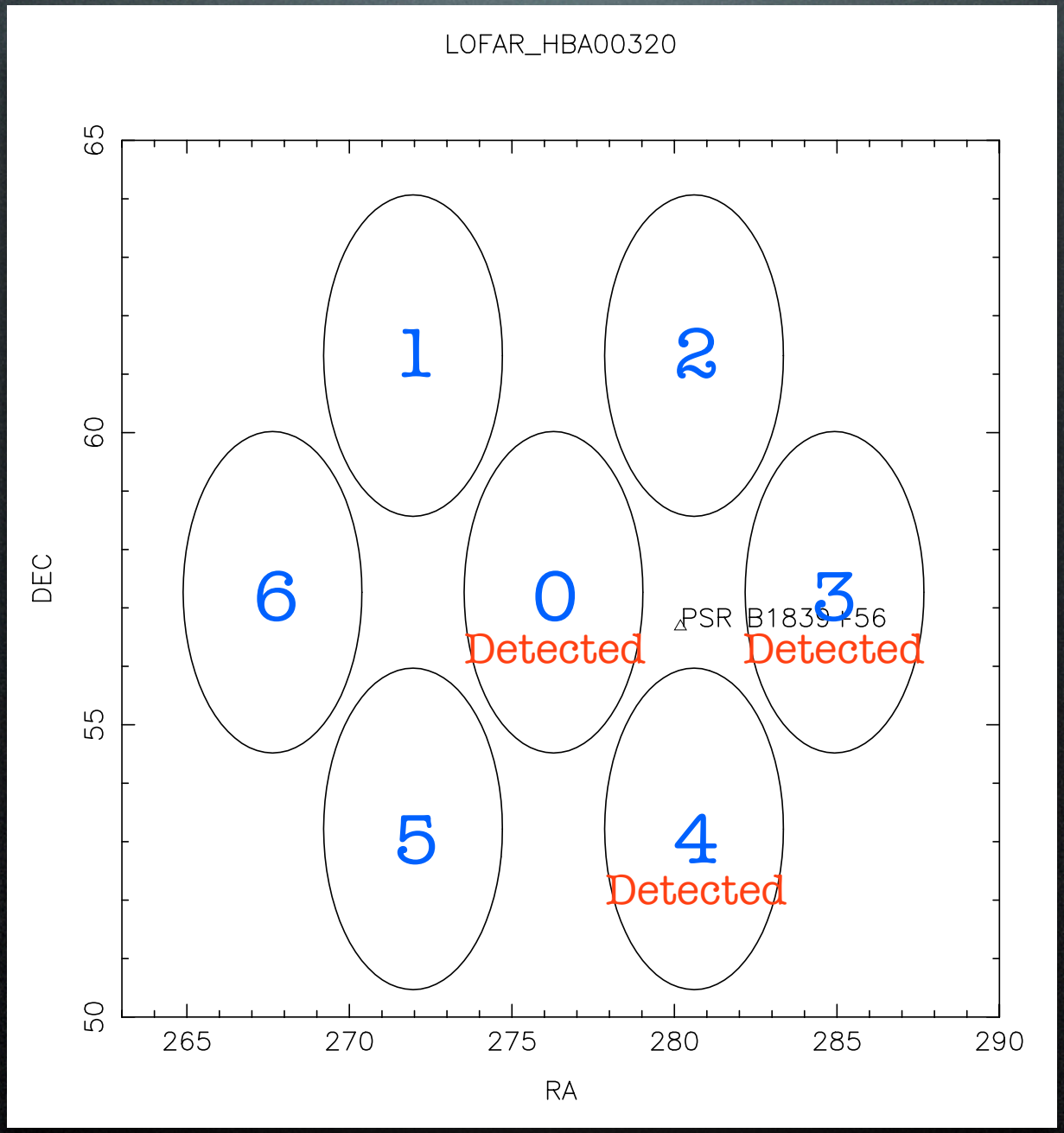


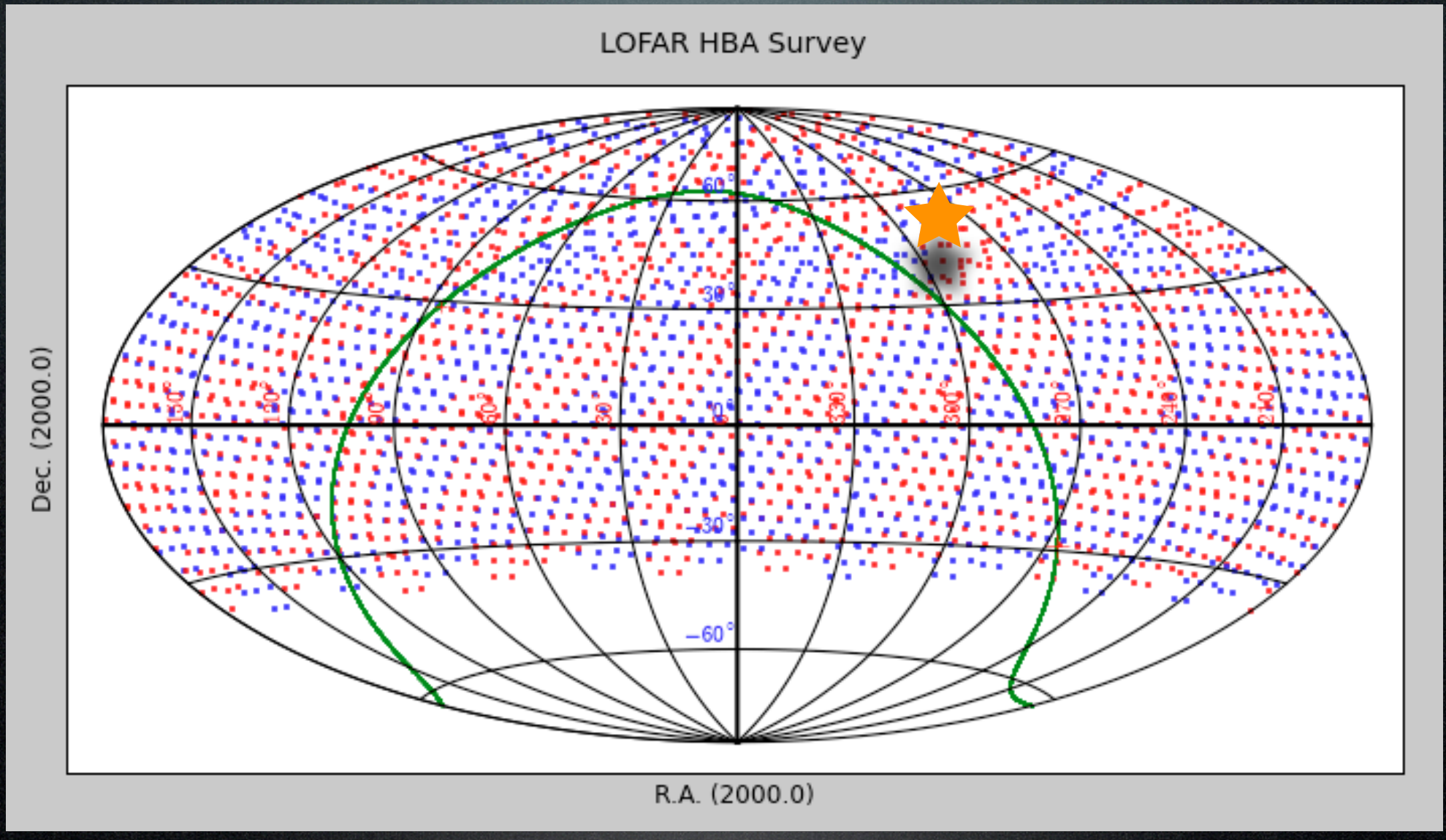
Pulsar Survey Pipeline



7-beam HBA grid covers 166 sq deg!!!

NB: beams are 2x wider than shown here.

Pulsar Survey Pipeline



~400 7-beam pointings > -35 deg DEC

Pulsar Survey Pipeline