



Team Hewish's Findings

Pulsar Search Collaboratory 2010



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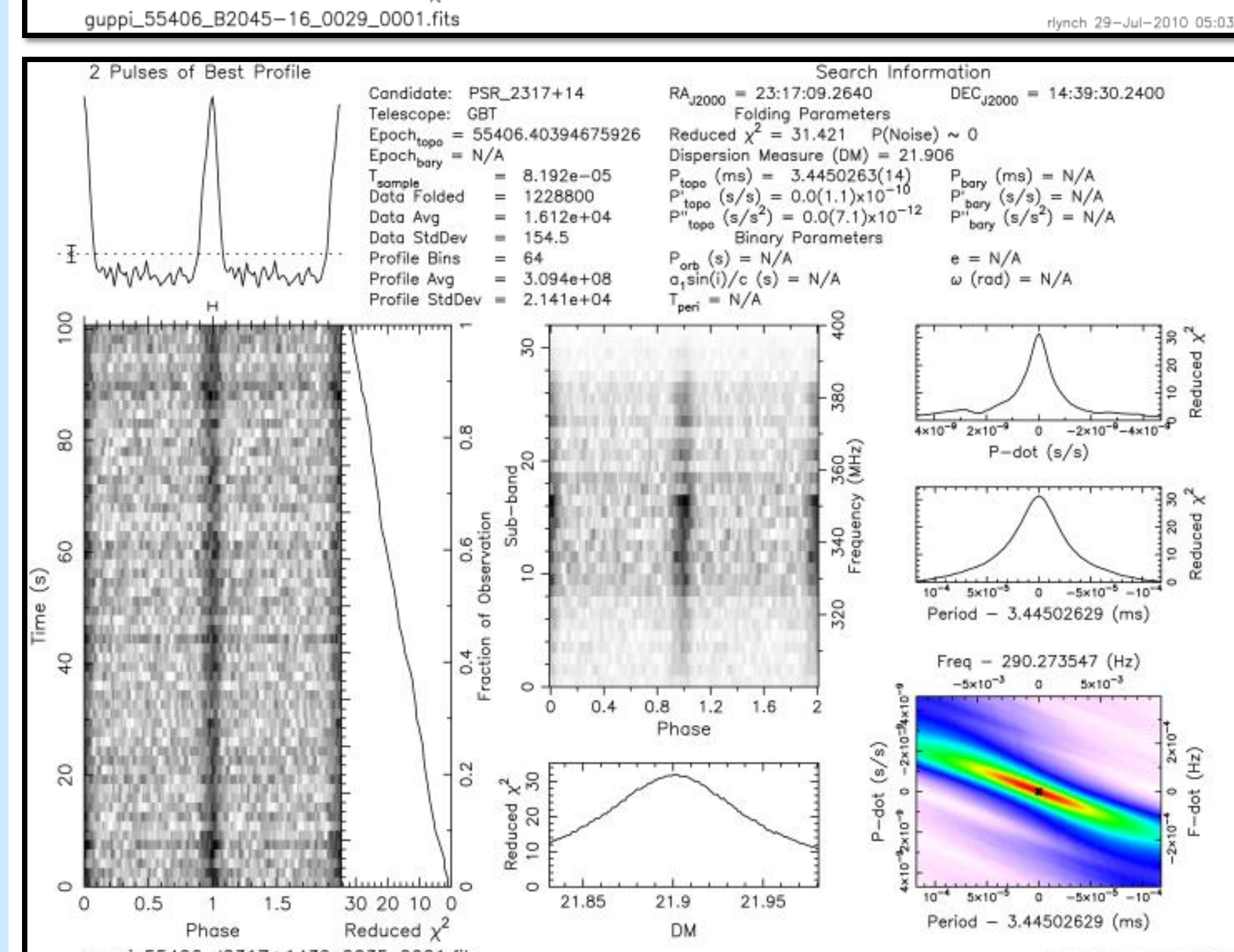
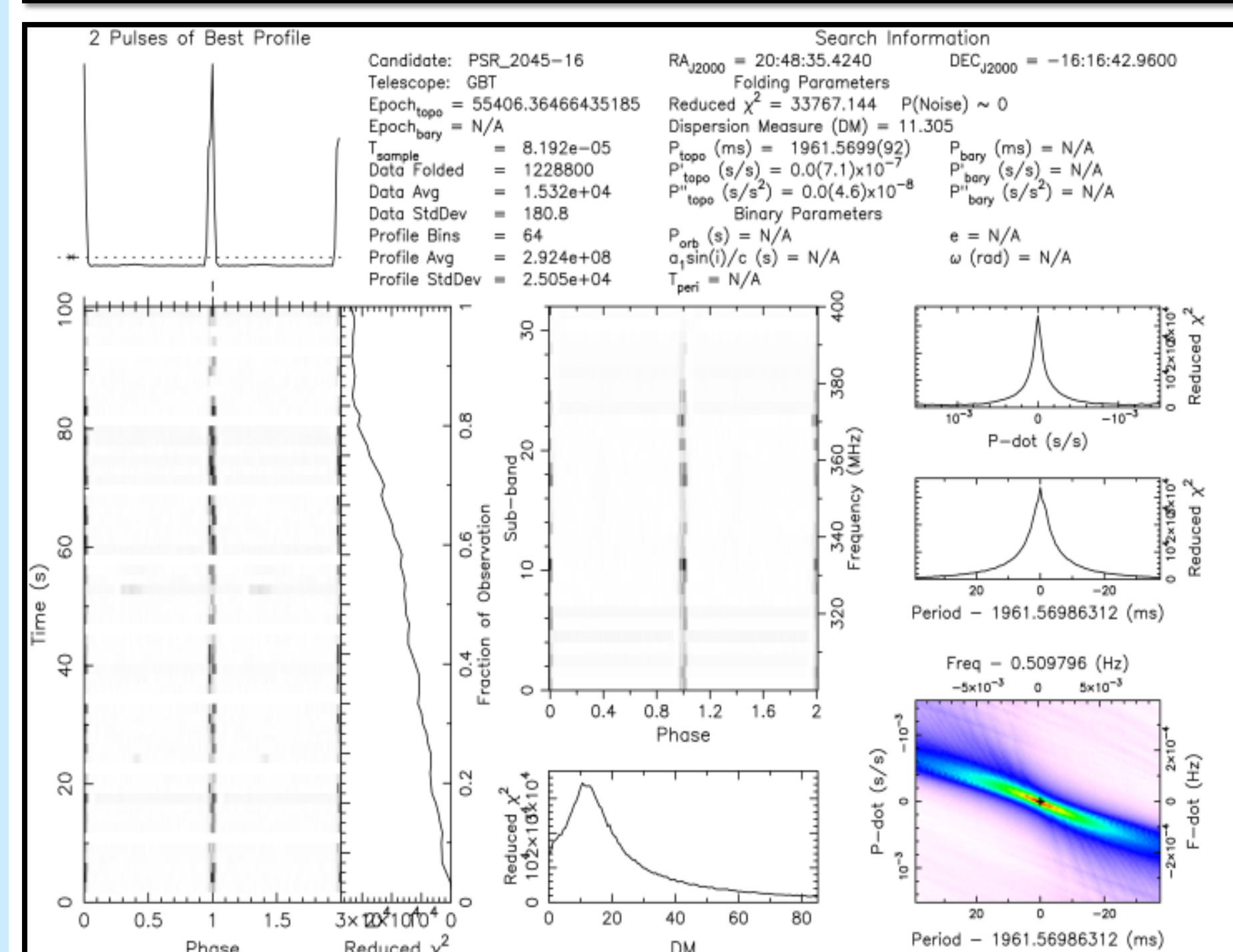
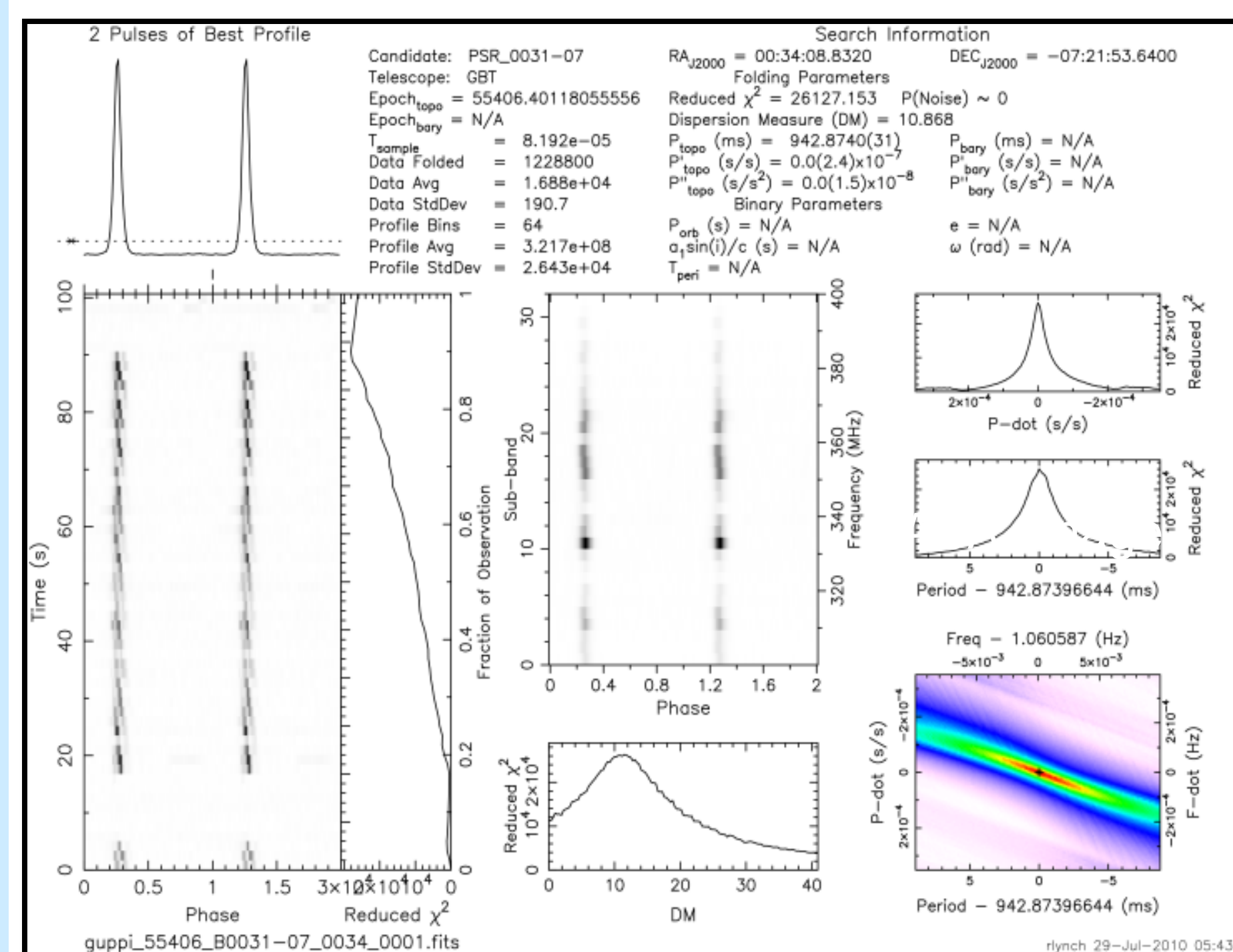
We got to use the Green Bank Telescope at 430 a.m. on July 29, 2010. We came with 6 candidates, but only 1 was a pulsar but it was already discovered. Through fortuitous error the wrong coordinates were entered and we found a mysterious object, which Dr. Rachel Rosen and Ryan Lynch are exploring further.



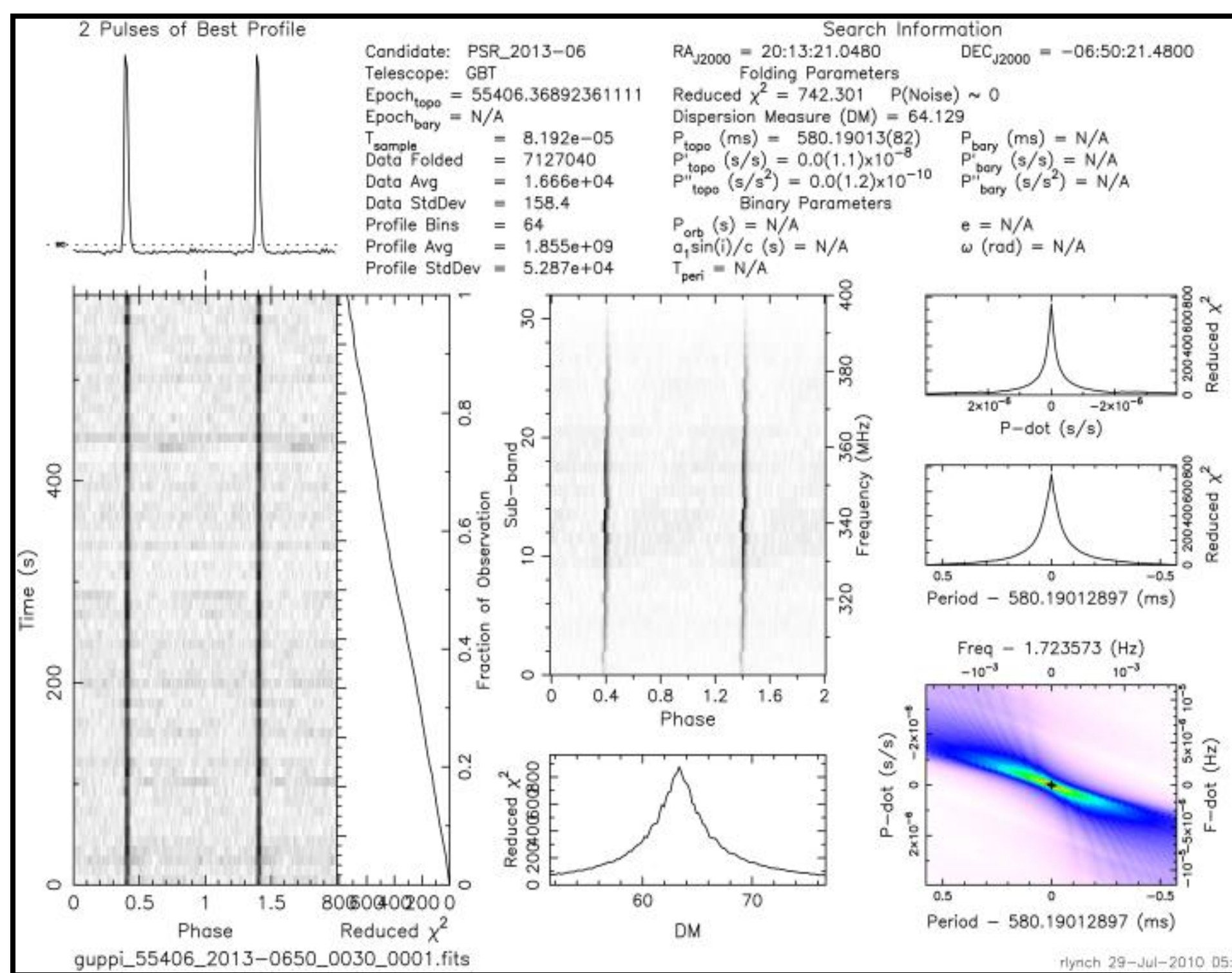
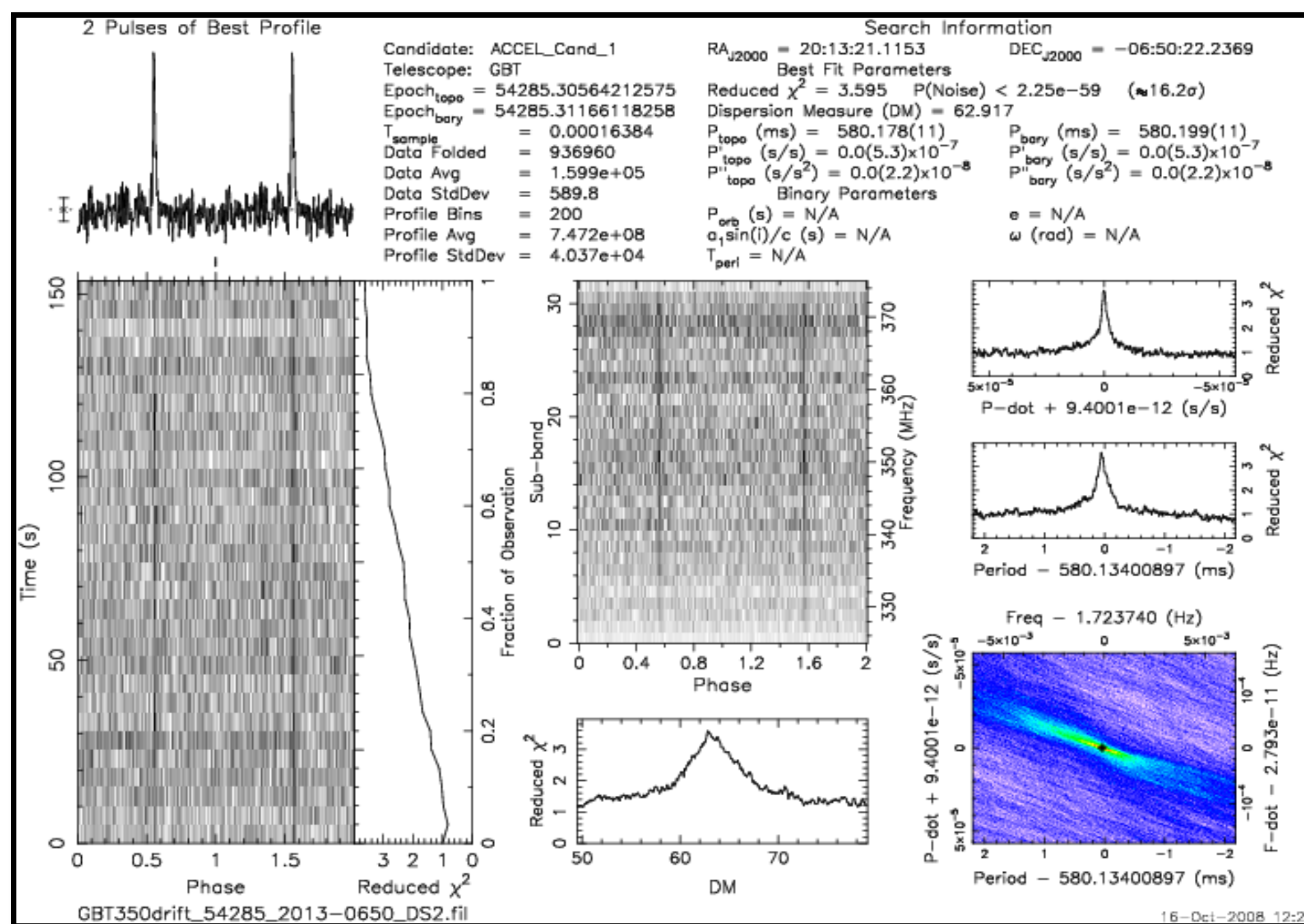
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Dr. Rosen gave us 3 known pulsars to look at and we have used them to help us learn more about pulsars.

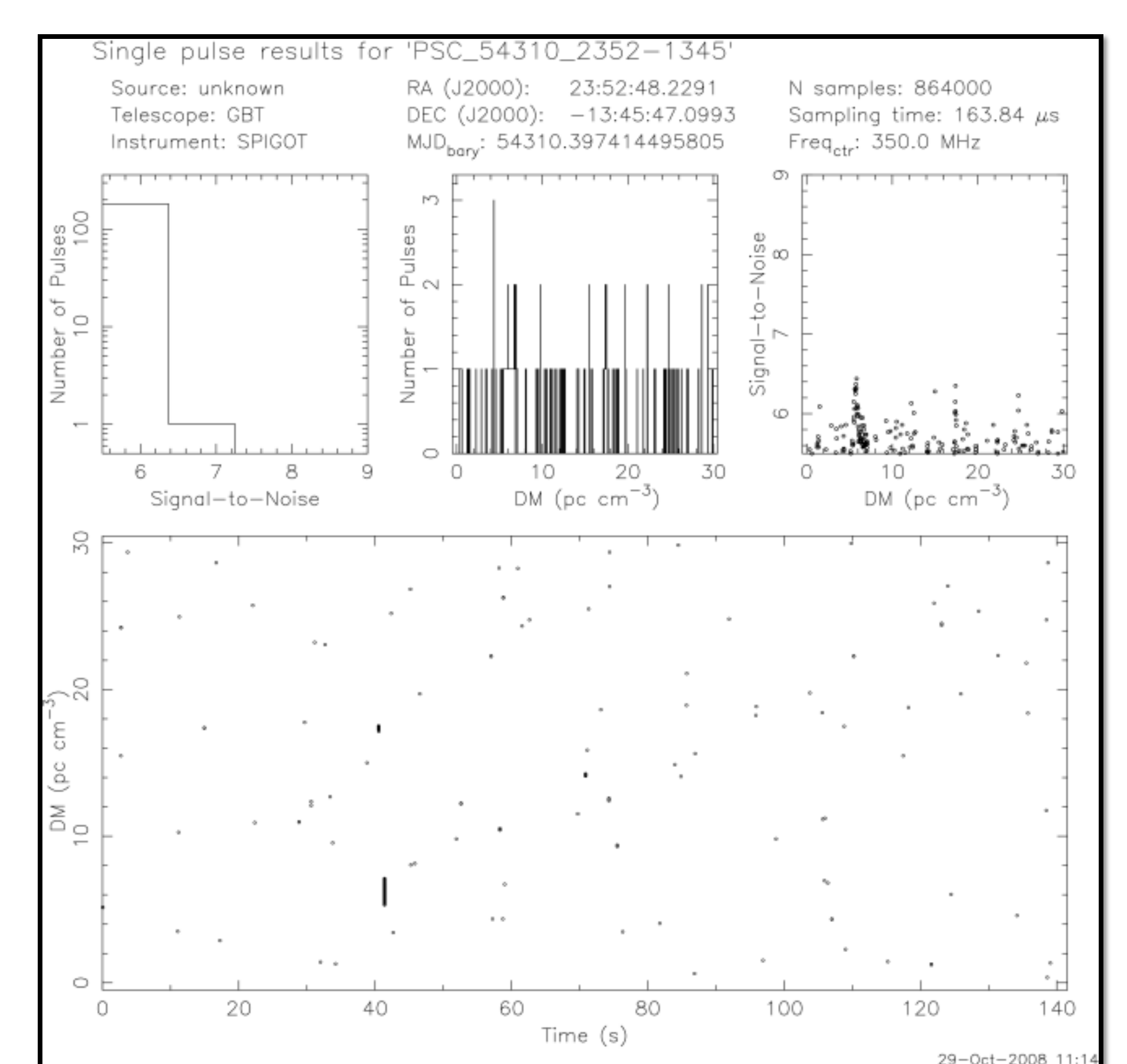
These are the three pulsars Dr. Rosen gave us



J2013-0650



A candidate

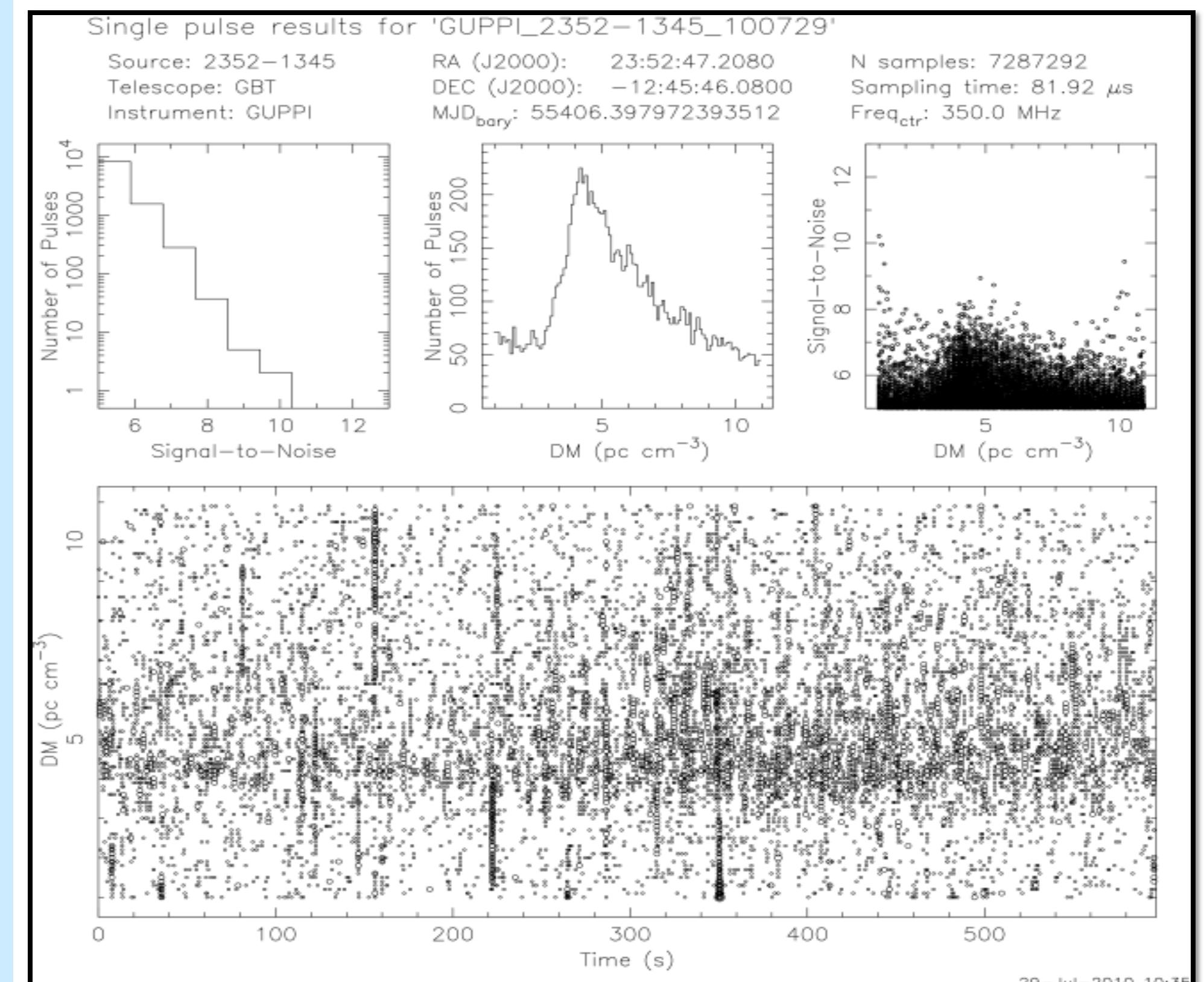


Pulsar name	DM (pc/cc)	Period (ms)	Age (Myr)	Radius of light cylinder (miles)	Distance (LY)
B0031-07	10.86	942.87	36.5	29266	1304
B2045-16	11.30	1961.57	2.83	6084	1986
J2317+1439	21.90	3.45	1420	108118	9784
J2013-0650	64.12	580.19	N/A	N/A	N/A

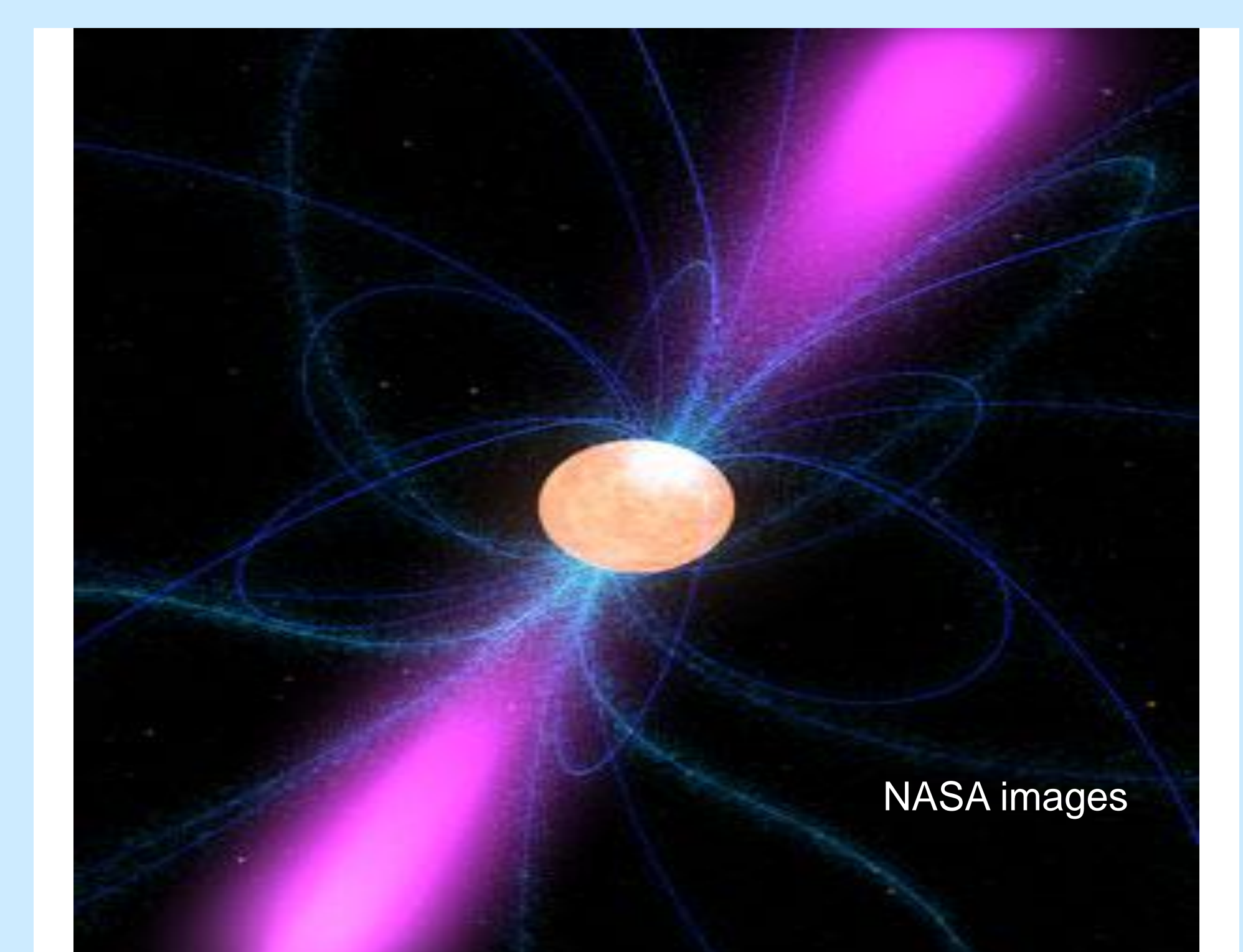
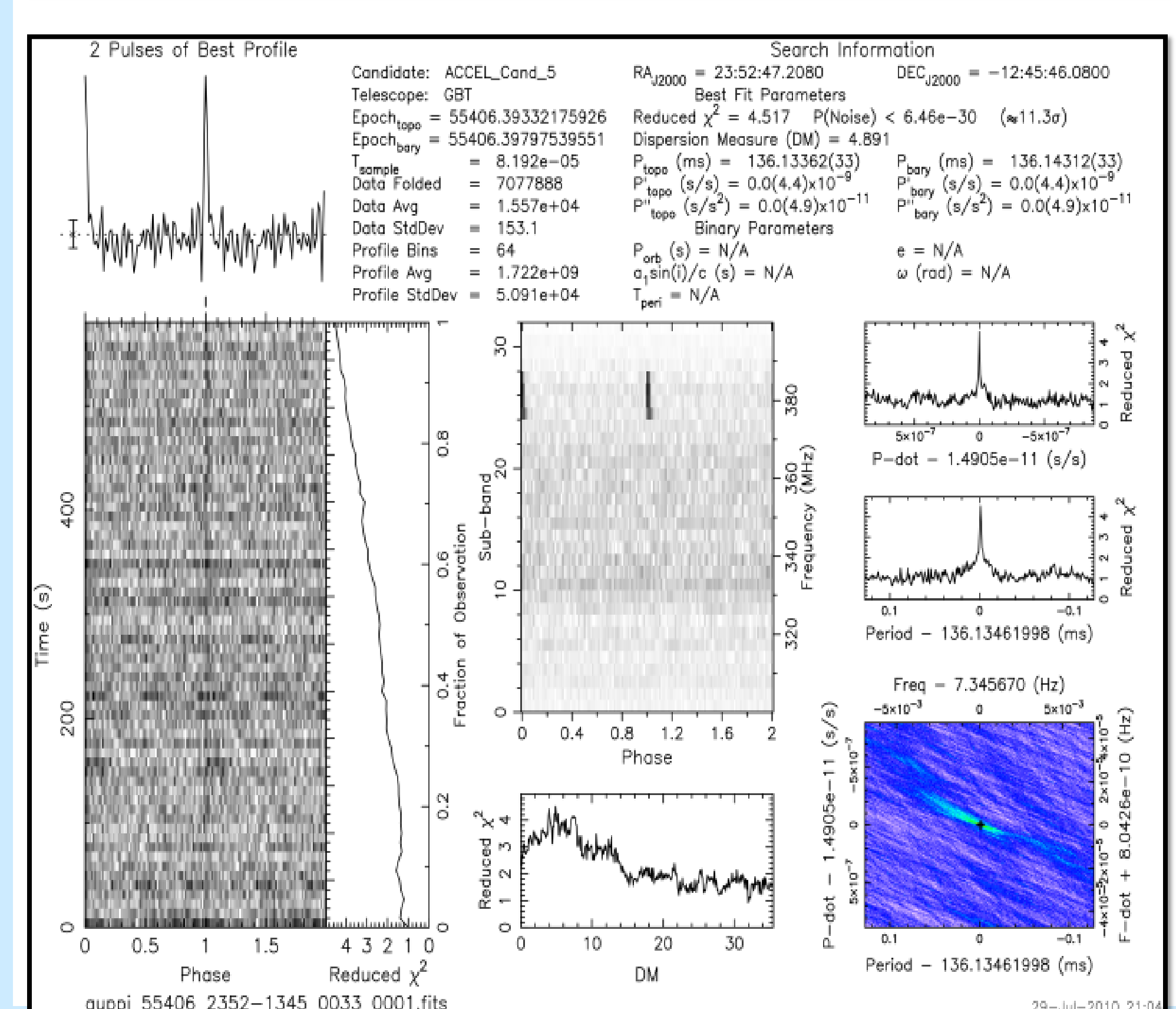
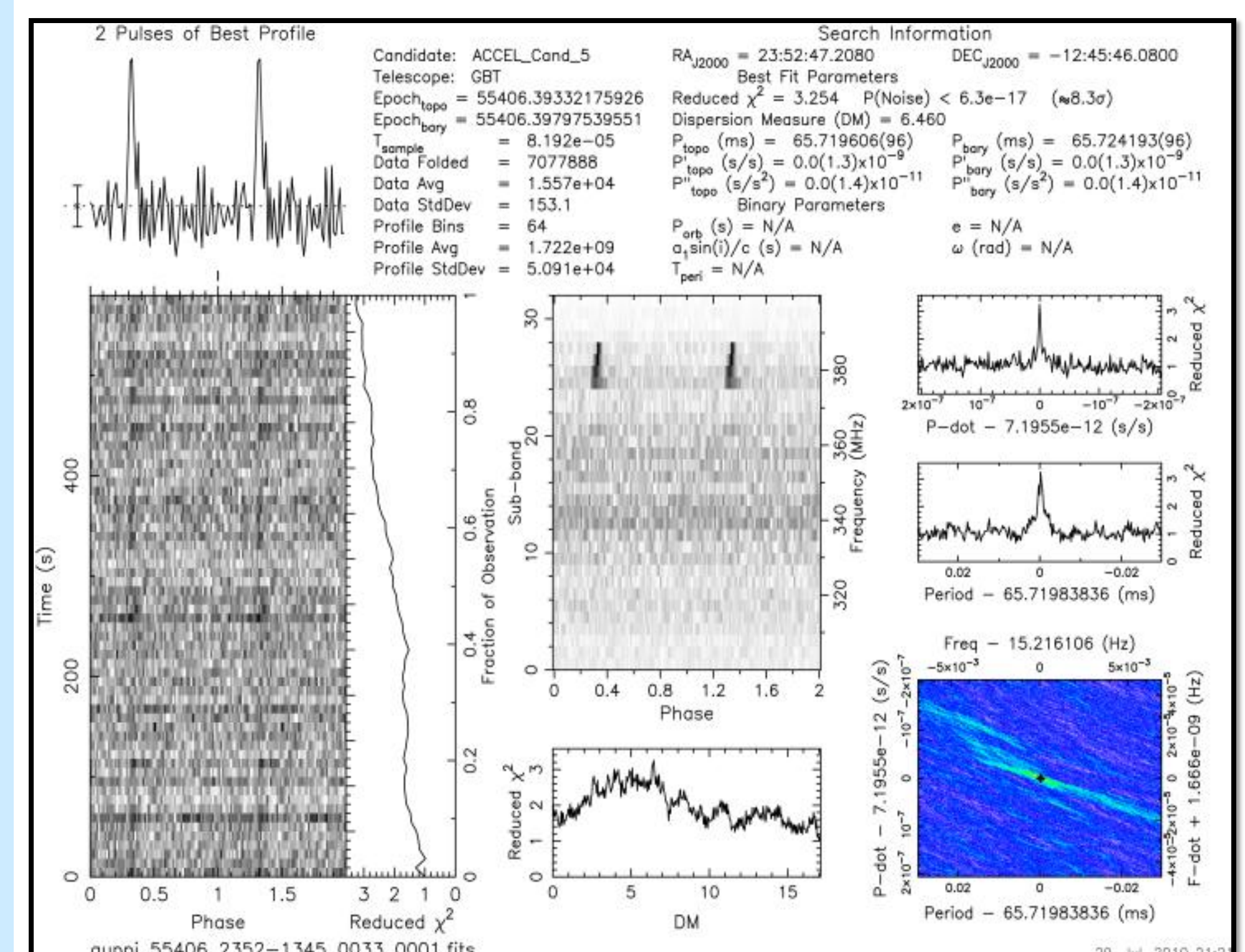
Thanks to Dr. Rachel Rosen, Sue Ann Heatherly, Ryan Lynch, Andrew, Joe, Joey, Chelen, Carolyn and NRAO for this fun week at camp

In our database we found a *mysterious object*. Its apparent DM is ~ 5 pc/cc³. After our initial GBT observation it was determined that this object merited further observation.

The single pulse plot from GBT observations 7/29/10.



Subsequent Prep-Fold Plots



NASA images