Summar of work done so far:

This is in reference to the steps mentioned in the one of the emails

- 1. Data reduction pprocess with PINTA.
- 2. Data visualization using PSRCHIVE commands (using PSRCHIVE's python interace). All the plots are included in the report.

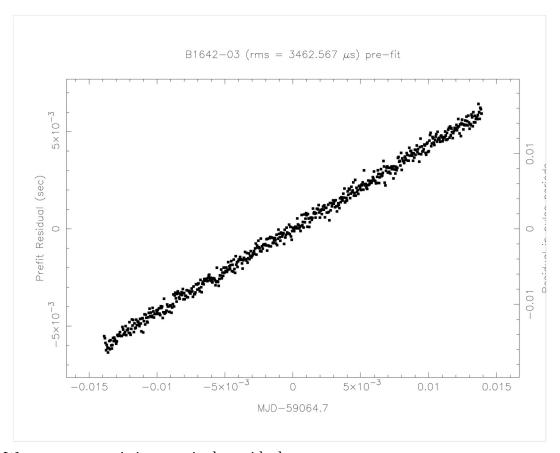
All the steps mentioned were completed.

- 3. Generating time of arrivals in tempo2 format using python interface again.
- 4. Obtaining Residuals.

Tried the above step with python interface, but was unsuccessful because of lack of documentation of the functions involved so switched back to Tempo2.

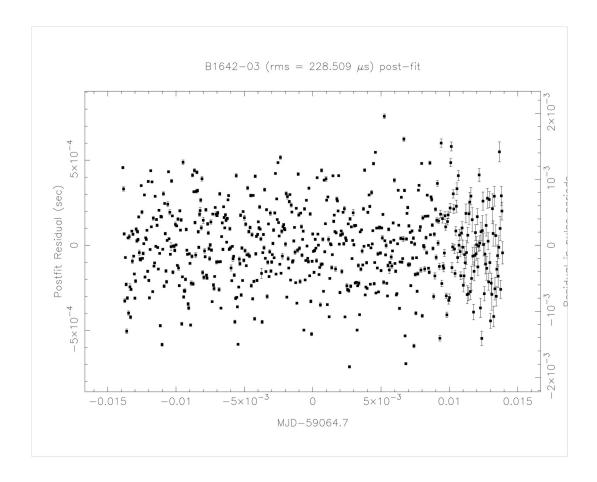
5. Tempo2 Analysis:

Succesfully plotted residuals of dedispersed data.



We see a systematic increase in the residuals.

After fitting for  $f_0$ , we get the following plot.



Following comment was displayed after fitting for f\_0: RMS pre-fit residual = 3462.567 (us), RMS post-fit residual = 228.509 (us)

Still exploring the Tempo2 analysis part.