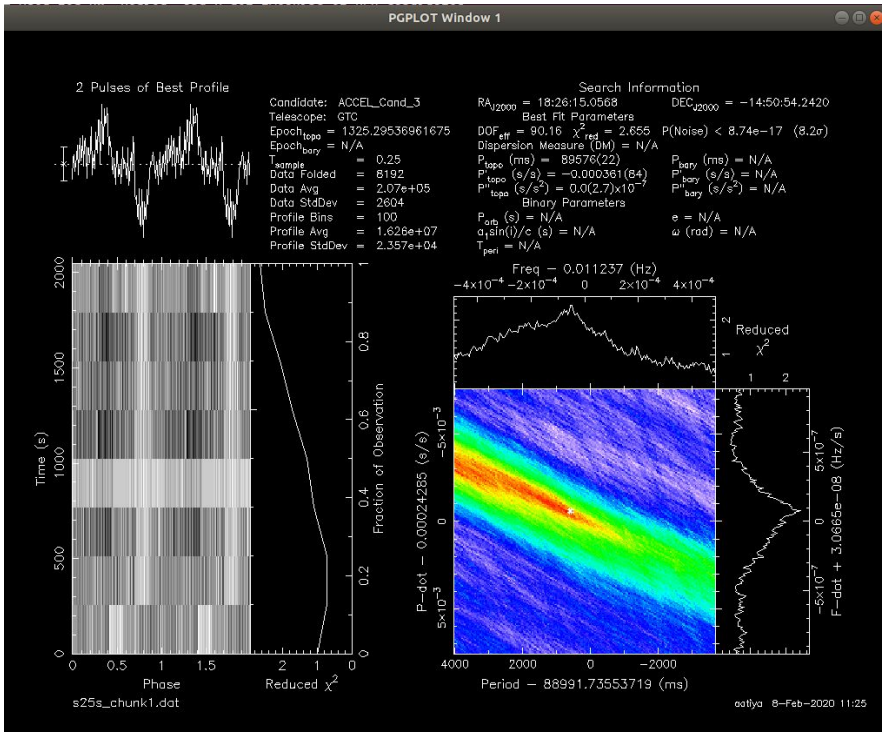
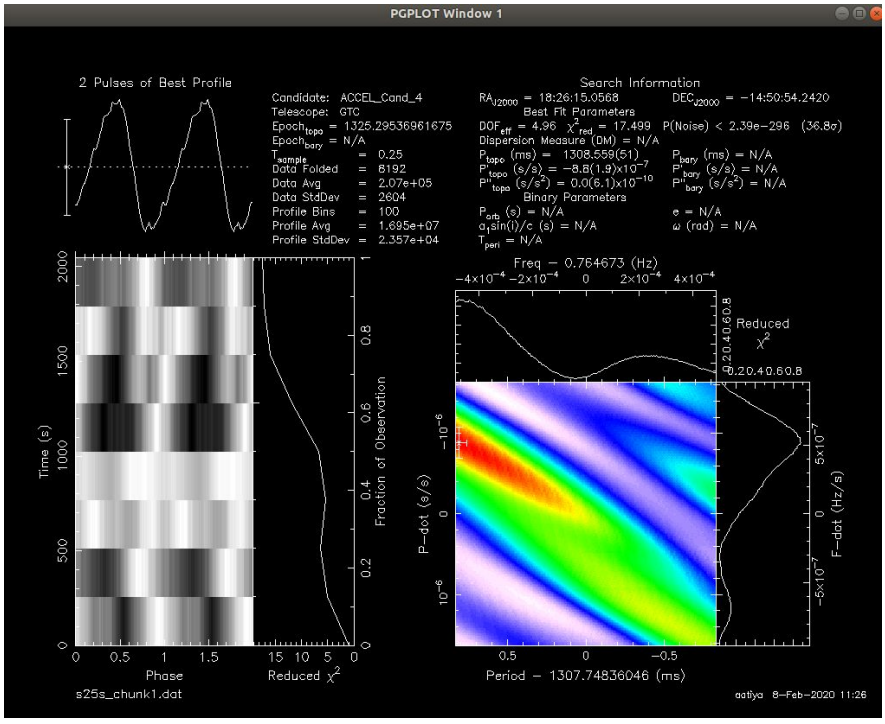
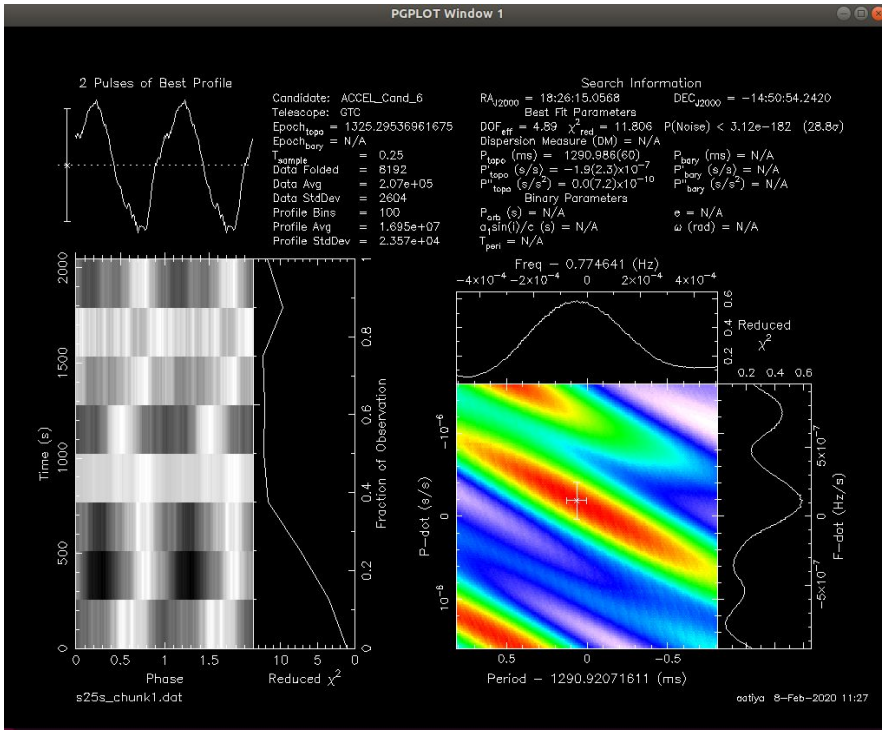
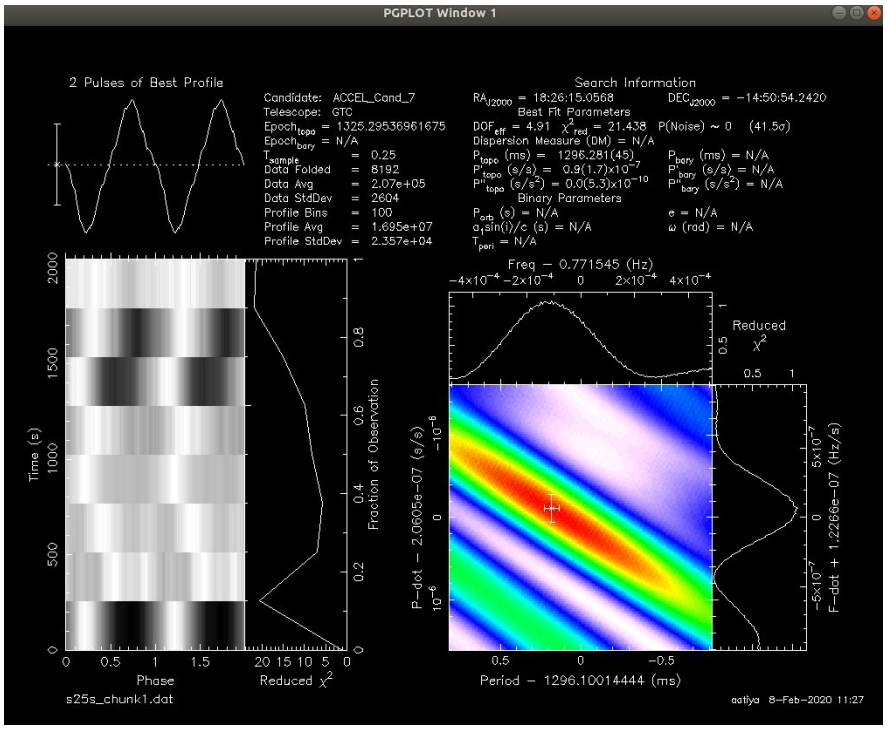
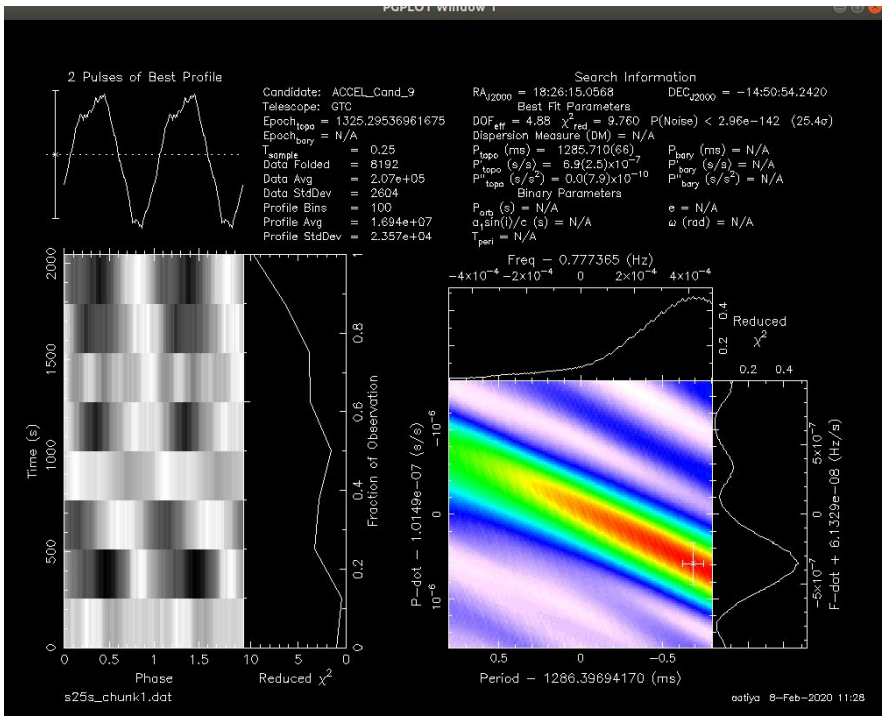
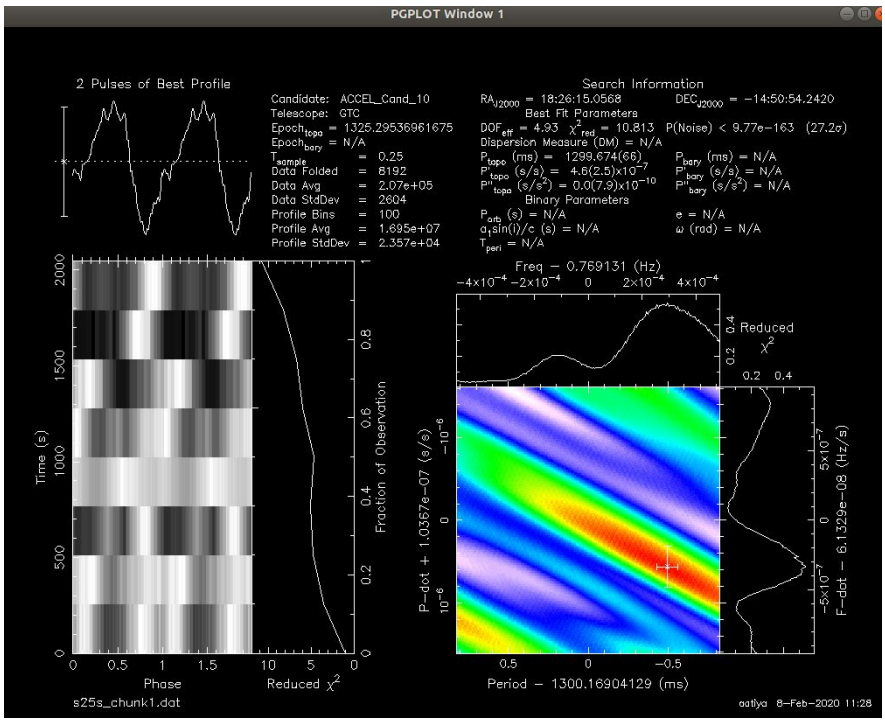
Chunk1 Candidate Number:	pgplot using parameters -p 260 (s) and -pd 0.0038 (s)
3	
4	

6	 PGPLOT Window 1 2 Pulses of Best Profile Candidate: ACCEL_Cand_6 Telescope: GTC Epoch_topo = 1325.29536961675 Epoch_bary = N/A T_sample = 0.25 Data Folded = 8192 Data Avg = 2.07e+05 Data StdDev = 2604 Profile Bins = 100 Profile Avg = 1.695e+07 Profile StdDev = 2.357e+04 Search Information RA_J2000 = 18:26:15.0568 DEC_J2000 = -14:50:54.2420 Best Fit Parameters DOF_eff = 4.89 χ²_red = 11.806 P(Noise) < 3.12e-182 (28.8σ) Dispersion Measure (DM) = N/A P_topo (ms) = 1290.986(60) P_bary (ms) = N/A P'_topo (s/s) = -1.9(2.3)x10⁻⁷ P'_bary (s/s) = N/A P''_topo (s/s²) = 0.0(7.2)x10⁻¹⁰ P''_bary (s/s²) = N/A Binary Parameters P_orb (s) = N/A e = N/A a₁sin(i)/c (s) = N/A ω (rad) = N/A T_peri = N/A Freq − 0.774641 (Hz) Reduced χ² Time (s) Fraction of Observation P−dot (s/s) F−dot (Hz/s) Phase Reduced χ² Period − 1290.92071611 (ms) s25s_chunk1.dat aatiya 8-Feb-2020 11:27
7	 PGPLOT Window 1 2 Pulses of Best Profile Candidate: ACCEL_Cand_7 Telescope: GTC Epoch_topo = 1325.29536961675 Epoch_bary = N/A T_sample = 0.25 Data Folded = 8192 Data Avg = 2.07e+05 Data StdDev = 2604 Profile Bins = 100 Profile Avg = 1.695e+07 Profile StdDev = 2.357e+04 Search Information RA_J2000 = 18:26:15.0568 DEC_J2000 = -14:50:54.2420 Best Fit Parameters DOF_eff = 4.91 χ²_red = 21.438 P(Noise) ~ 0 (41.5σ) Dispersion Measure (DM) = N/A P_topo (ms) = 1296.281(45) P_bary (ms) = N/A P'_topo (s/s) = 0.9(1.7)x10⁻⁷ P'_bary (s/s) = N/A P''_topo (s/s²) = 0.0(5.3)x10⁻¹⁰ P''_bary (s/s²) = N/A Binary Parameters P_orb (s) = N/A e = N/A a₁sin(i)/c (s) = N/A ω (rad) = N/A T_peri = N/A Freq − 0.771545 (Hz) Reduced χ² Time (s) Fraction of Observation P−dot − 2.0605e-07 (s/s) F−dot + 1.2266e-07 (Hz/s) Phase Reduced χ² Period − 1296.10014444 (ms) s25s_chunk1.dat aatiya 8-Feb-2020 11:27

9	
10	

PGPLOT Window 1
2 Pulses of Best Profile
Candidate: ACCEL_Cand_9
Telescope: GTC
Epoch_topo = 1325.29536961675
Epoch_bary = N/A
T_sample = 0.25
Data Folded = 8192
Data Avg = 2.07e+05
Data StdDev = 2604
Profile Bins = 100
Profile Avg = 1.694e+07
Profile StdDev = 2.357e+04
Search Information
RA_J2000 = 18:26:15.0568
DEC_J2000 = -14:50:54.2420
Best Fit Parameters
DOF_eff = 4.88 χ²_red = 9.760 P(Noise) < 2.96e-142 (25.4σ)
Dispersion Measure (DM) = N/A
P_topo (ms) = 1285.710(66)
P_bary (ms) = N/A
P'_topo (s/s) = 6.9(2.5)x10^-7
P'_bary (s/s) = N/A
P''_topo (s/s²) = 0.0(7.9)x10^-10
P''_bary (s/s²) = N/A
Binary Parameters
P_orb (s) = N/A
e = N/A
a_1sin(i)/c (s) = N/A
ω (rad) = N/A
T_peri = N/A
Freq − 0.777365 (Hz)
Reduced χ²
Time (s)
Phase
Reduced χ²
Fraction of Observation
P-dot − 1.0149e-07 (s/s)
F-dot + 6.1329e-08 (Hz/s)
Period − 1286.39694170 (ms)
s25s_chunk1.dat
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PGPLOT Window 1
2 Pulses of Best Profile
Candidate: ACCEL_Cand_10
Telescope: GTC
Epoch_topo = 1325.29536961675
Epoch_bary = N/A
T_sample = 0.25
Data Folded = 8192
Data Avg = 2.07e+05
Data StdDev = 2604
Profile Bins = 100
Profile Avg = 1.695e+07
Profile StdDev = 2.357e+04
Search Information
RA_J2000 = 18:26:15.0568
DEC_J2000 = -14:50:54.2420
Best Fit Parameters
DOF_eff = 4.93 χ²_red = 10.813 P(Noise) < 9.77e-163 (27.2σ)
Dispersion Measure (DM) = N/A
P_topo (ms) = 1299.674(66)
P_bary (ms) = N/A
P'_topo (s/s) = 4.6(2.5)x10^-7
P'_bary (s/s) = N/A
P''_topo (s/s²) = 0.0(7.9)x10^-10
P''_bary (s/s²) = N/A
Binary Parameters
P_orb (s) = N/A
e = N/A
a_1sin(i)/c (s) = N/A
ω (rad) = N/A
T_peri = N/A
Freq − 0.769131 (Hz)
Reduced χ²
Time (s)
Phase
Reduced χ²
Fraction of Observation
P-dot + 1.0367e-07 (s/s)
F-dot − 6.1329e-08 (Hz/s)
Period − 1300.16904129 (ms)
s25s_chunk1.dat
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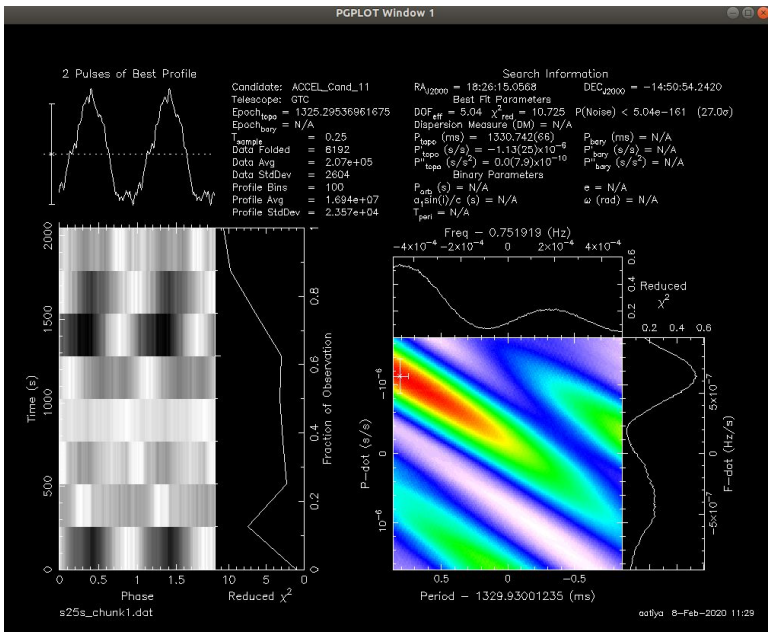
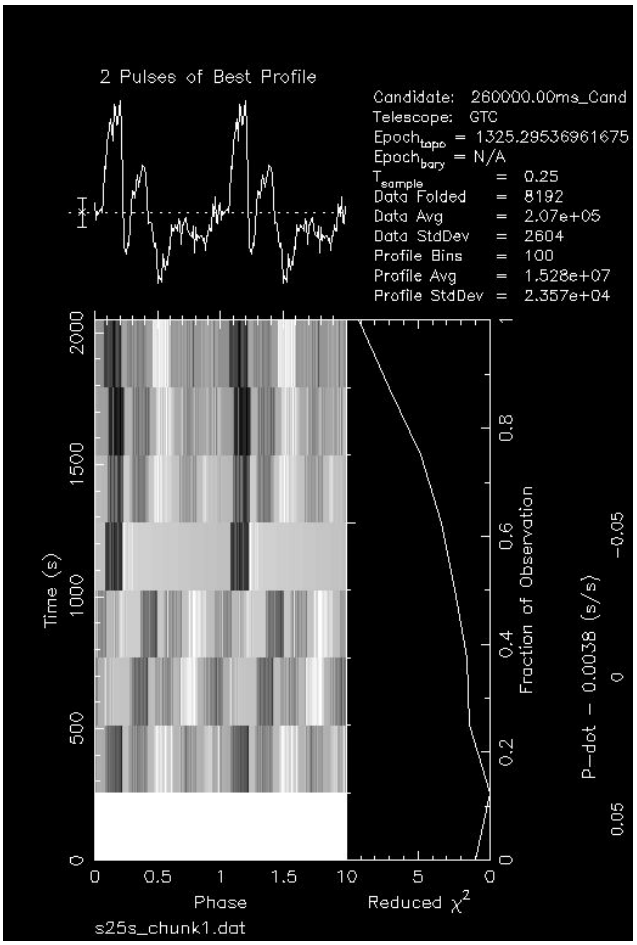
11	
	p-pdot graph:
	

	Command used:
Number of bins: 16152	nano ls5039_s25s.inf
Chunked to s25s_chunk1.dat	dd if=ls5039_s25s.dat of=s25s_chunk1.dat bs=4 count=28266 ● 28266 from (16152*7)/4
Copied to .inf file	cp ls5039_s25s.inf s25s_chunk1.inf
New fft file	realfft s25s_chunk1.dat
Searching for candidates	accelsearch -numharm 8 -zmax 2 -flo 0.00001 s25s_chunk1.fft
	Candidates [3-11] had good sigma values (around 9-20)
Getting -p -pd values from non-chunked prepfold	prepfold -slow -npart 8 -accelfile ls5039_s25s_ACCEL_2.cand -accelcand 1 ls5039_s25s.dat
	Output: ● -p 260 (s) ● -pd 0.0038 (s)
Prepfold on chunk1 candidates [using p-pdot]:	prepfold -slow -npart 8 -p 0 -pd 0.0038 s25s_chunk1.dat
Prepfold on chunk1 candidates:	prepfold - slow -npart 8 -accelfile s25s_chunk1_ACCEL_2.cand -accelcand 1 s25s_chunk1.dat