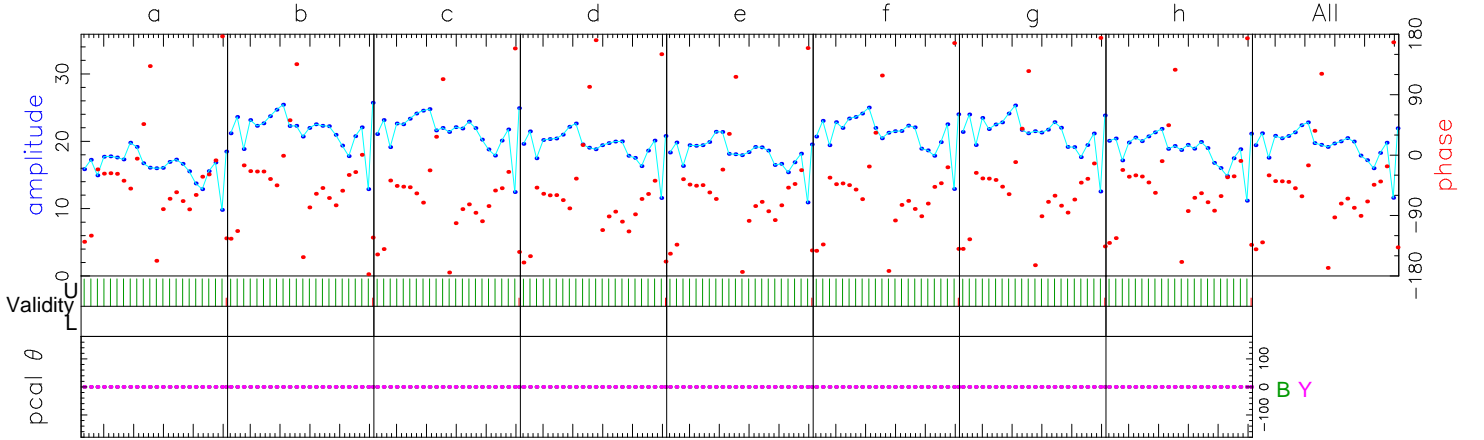


Fringe quality 4

SNR 390.8
Int time 285.318
Amp 11.966
Phase -62.7
PFD 0.0e+00
Delays (us)
SBD 0.002206
MBD 0.002033
Fringe rate (Hz)
-0.006444
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085225
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

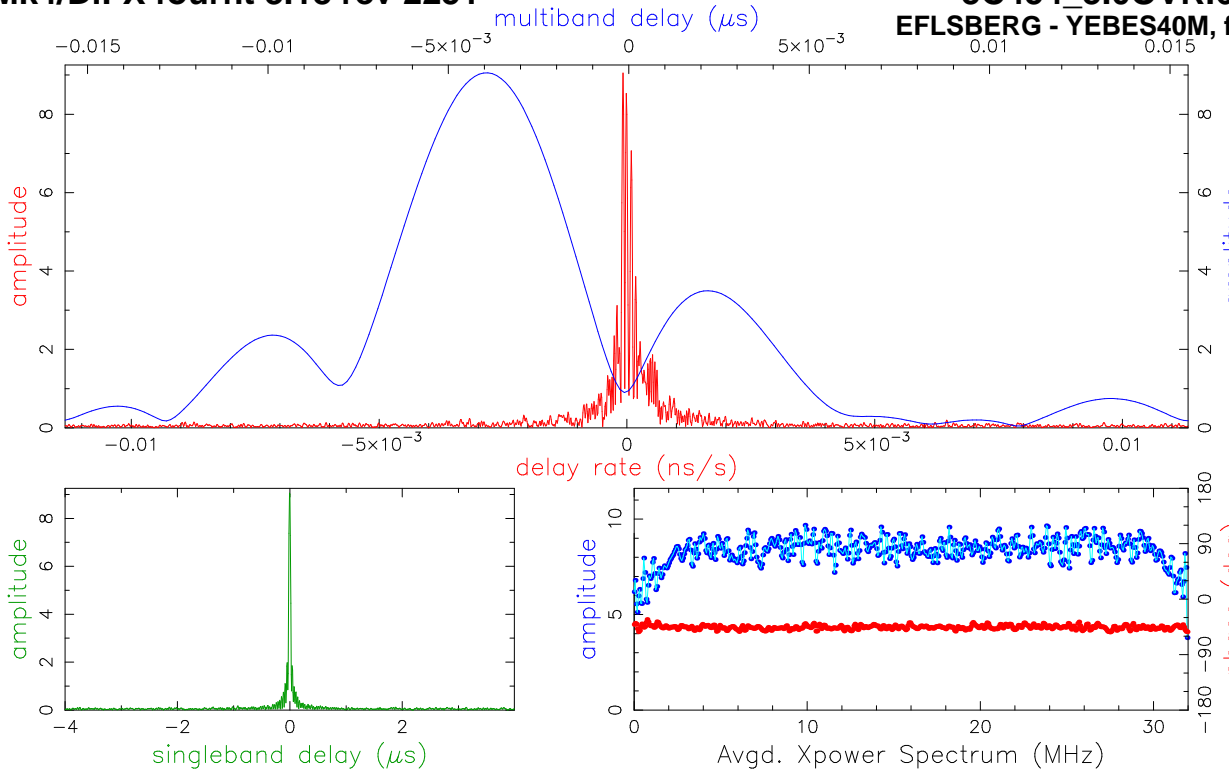


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-51.9	-47.7	-71.1	-82.4	-67.9	-65.4	-59.7	-55.1	Phase	-62.7
	10.0	13.2	13.1	11.8	11.1	13.0	12.9	11.4	Ampl.	12.1
	513.7	513.3	513.2	513.2	513.3	513.2	513.3	513.4	Sbd box	513.3
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.80467752465E+03		Apriori delay (usec)		-2.80467955760E+03		Resid mbdelay (usec)		2.03294E-03	+/- 5.6E-06
Sband delay (usec)	-2.80467735110E+03		Apriori clock (usec)		1.2879183E+01		Resid sbdelay (usec)		2.20650E-03	+/- 4.4E-05
Phase delay (usec)	-2.80467955962E+03		Apriori clockrate (us/s)		-2.3700001E-07		Resid phdelay (usec)		-2.02264E-06	+/- 9.5E-09
Delay rate (us/s)	2.87582785302E-03		Apriori rate (us/s)		2.87590266608E-03		Resid rate (us/s)		-7.48131E-08	+/- 5.7E-11
Total phase (deg)			Apriori accel (us/s/s)		1.88398071791E-05		Resid phase (deg)		-62.7	+/- 0.3

RMS Theor. Amplitude 11.966 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.9 0.7 Search (2048X32) 11.787 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 65.1 1.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 12.3 0.4 Inc. seg. avg. 19.396 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.2 0.7 Inc. frq. avg. 12.075 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 247.2 el 37.9 pa 37.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 7.171 1470.823 simultaneous interpolator

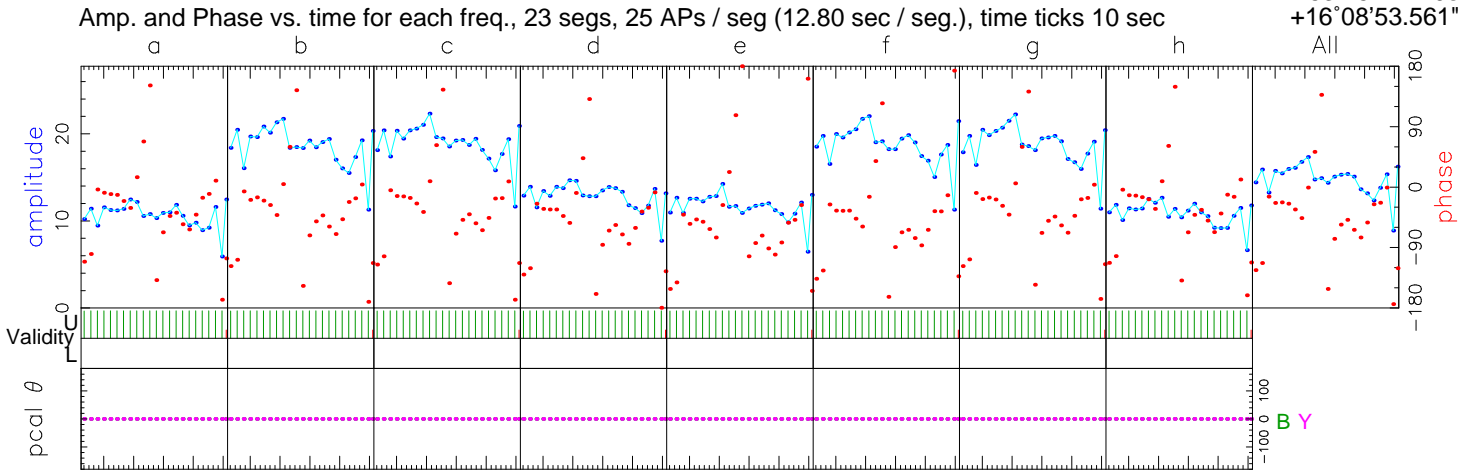
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//BY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//BY.W.10.0OVRI6



Fringe quality 3

SNR 302.3
Int time 285.318
Amp 9.257
Phase -46.8
PFD 0.0e+00
Delays (us)
SBD -0.004087
MBD -0.003857
Fringe rate (Hz)
-0.006404
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085232
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"

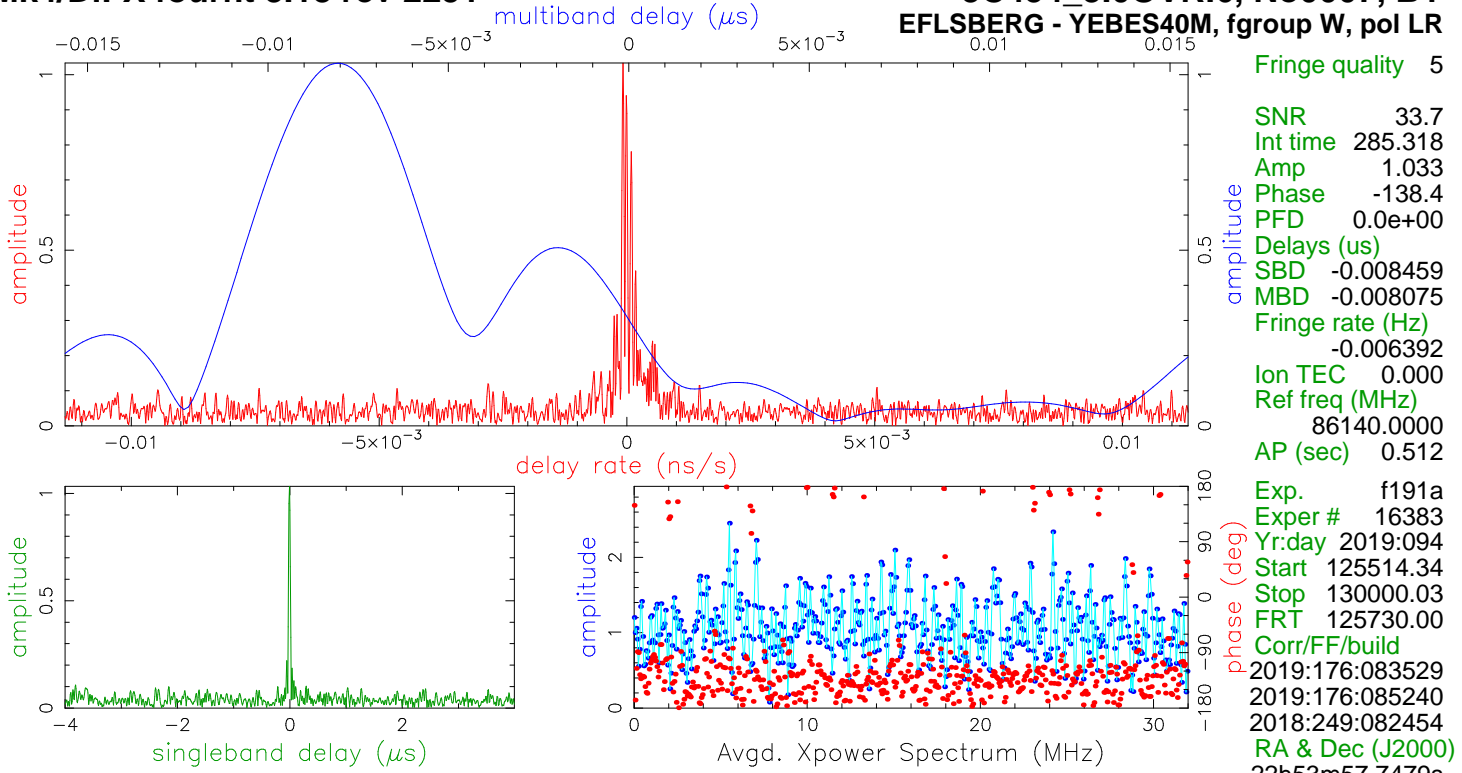


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
-34.6	-41.8	-37.9	-56.0	-73.2	-59.1	-40.2	-34.9	Phase	-46.8
6.5	11.3	11.5	8.0	7.2	11.4	11.6	6.6	Ampl.	9.3
512.4	512.9	512.6	511.9	512.7	512.6	512.8	512.6	Sbd box	512.5
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
B 0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	PC freqs	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
B W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.80468341422E+03		Apriori delay (usec)	-2.80467955760E+03		Resid mbdelay (usec)	-3.85662E-03	+/-	7.2E-06
Sband delay (usec)	-2.80468364410E+03		Apriori clock (usec)	1.2879183E+01		Resid sbdelay (usec)	-4.08650E-03	+/-	5.7E-05
Phase delay (usec)	-2.80467955911E+03		Apriori clockrate (us/s)	-2.3700001E-07		Resid phdelay (usec)	-1.51067E-06	+/-	1.2E-08
Delay rate (us/s)	2.87582831712E-03		Apriori rate (us/s)	2.87590266608E-03		Resid rate (us/s)	-7.43490E-08	+/-	7.4E-11
Total phase (deg)		-79.8	Apriori accel (us/s/s)	1.88398071791E-05		Resid phase (deg)	-46.8	+/-	0.4

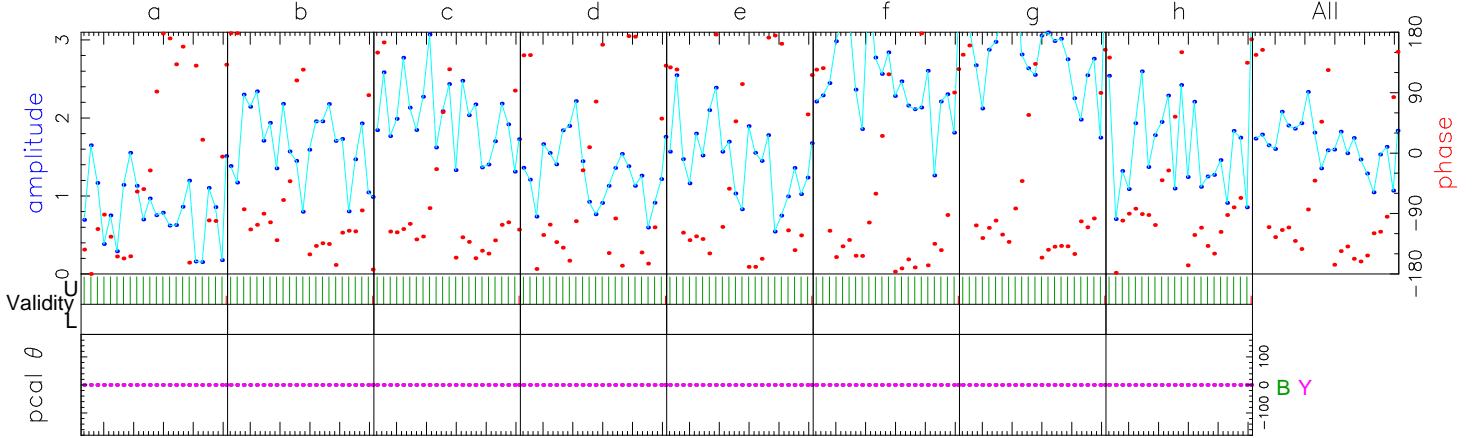
RMS Theor. Amplitude 9.257 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.5 0.9 Search (2048X32) 8.969 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 61.7 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.1 0.5 Inc. seg. avg. 14.705 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 24.1 0.9 Inc. frq. avg. 9.258 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 247.2 el 37.9 pa 37.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 7.171 1470.823 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//BY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//BY.W.28.0OVRI6

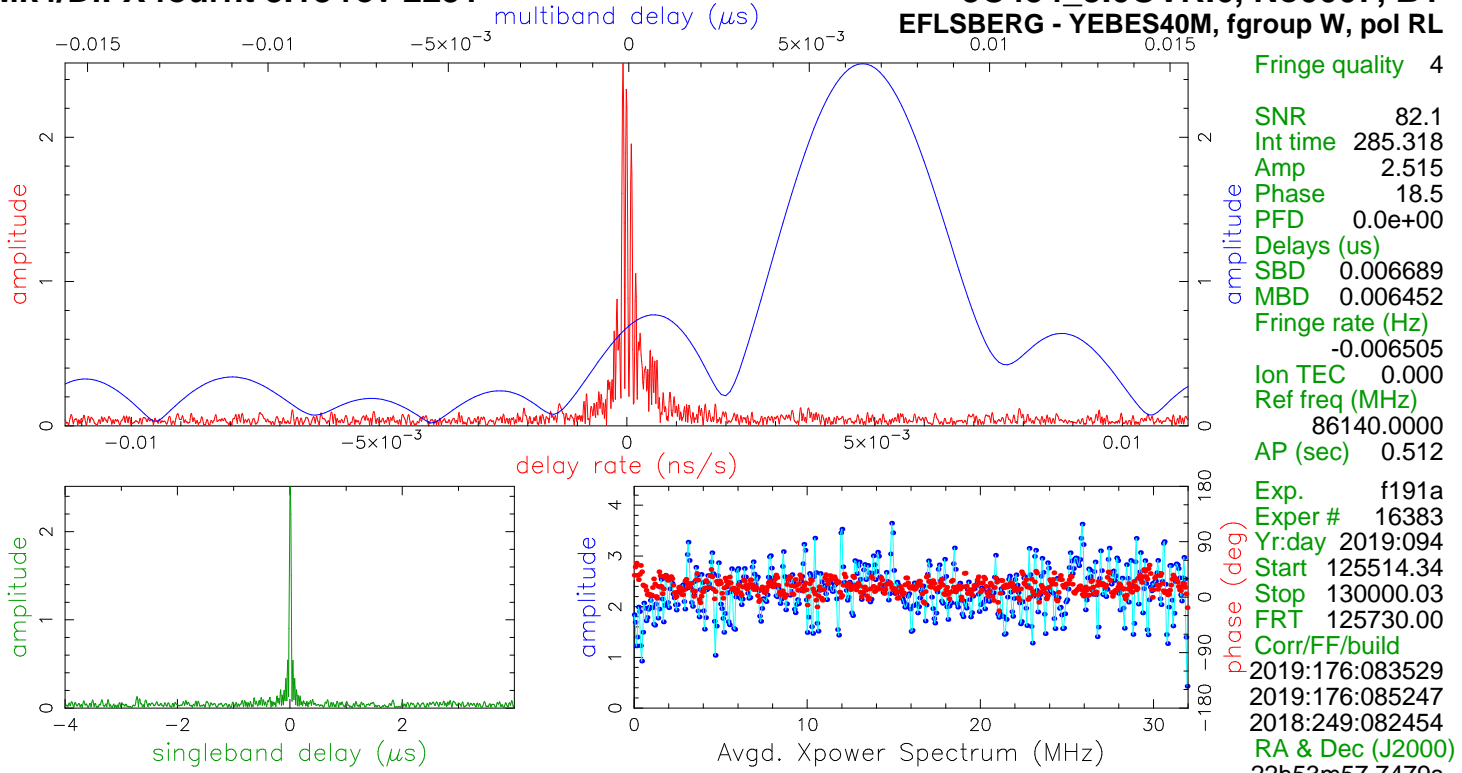


Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

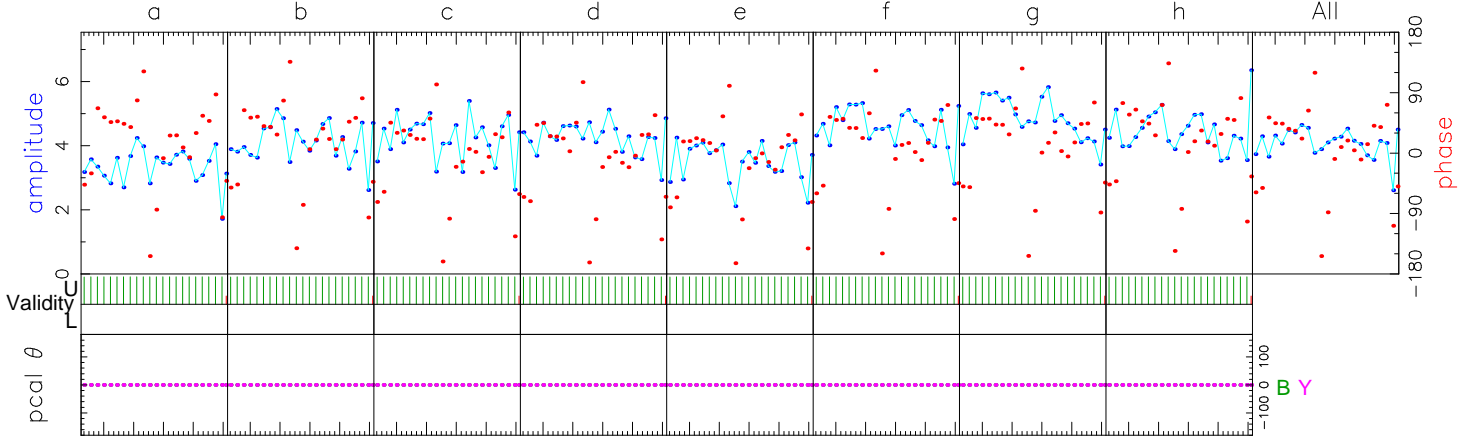


86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
-144.5	-121.3	-133.1	-149.0	-163.4	-156.5	-133.4	-111.9	Phase	-138.4
0.4	1.2	1.3	0.7	0.9	1.5	1.8	0.9	Ampl.	1.1
512.2	512.6	511.8	511.0	512.1	511.8	512.4	512.1	Sbd box	511.9
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
B 0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	PC freqs	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
B W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.80468763247E+03		Apriori delay (usec)	-2.80467955760E+03		Resid mbdelay (usec)	-8.07487E-03	+/-	6.4E-05
Sband delay (usec)	-2.80468801660E+03		Apriori clock (usec)	1.2879183E+01		Resid sbdelay (usec)	-8.45900E-03	+/-	5.1E-04
Phase delay (usec)	-2.80467956206E+03		Apriori clockrate (us/s)	-2.3700001E-07		Resid phdelay (usec)	-4.46276E-06	+/-	1.1E-07
Delay rate (us/s)	2.87582846450E-03		Apriori rate (us/s)	2.87590266608E-03		Resid rate (us/s)	-7.42016E-08	+/-	6.6E-10
Total phase (deg)		-171.3	Apriori accel (us/s/s)	1.88398071791E-05		Resid phase (deg)	-138.4	+/-	3.4

ph/seg (deg) 63.8 8.1 Search (2048X32) 1.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.7 14.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 18.9 4.8 Inc. seg. avg. 1.640 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 39.4 8.4 Inc. frq. avg. 1.069 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 247.2 el 37.9 pa 37.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 7.171 1470.823 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//BY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//BY.W.48.0OVRI6



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

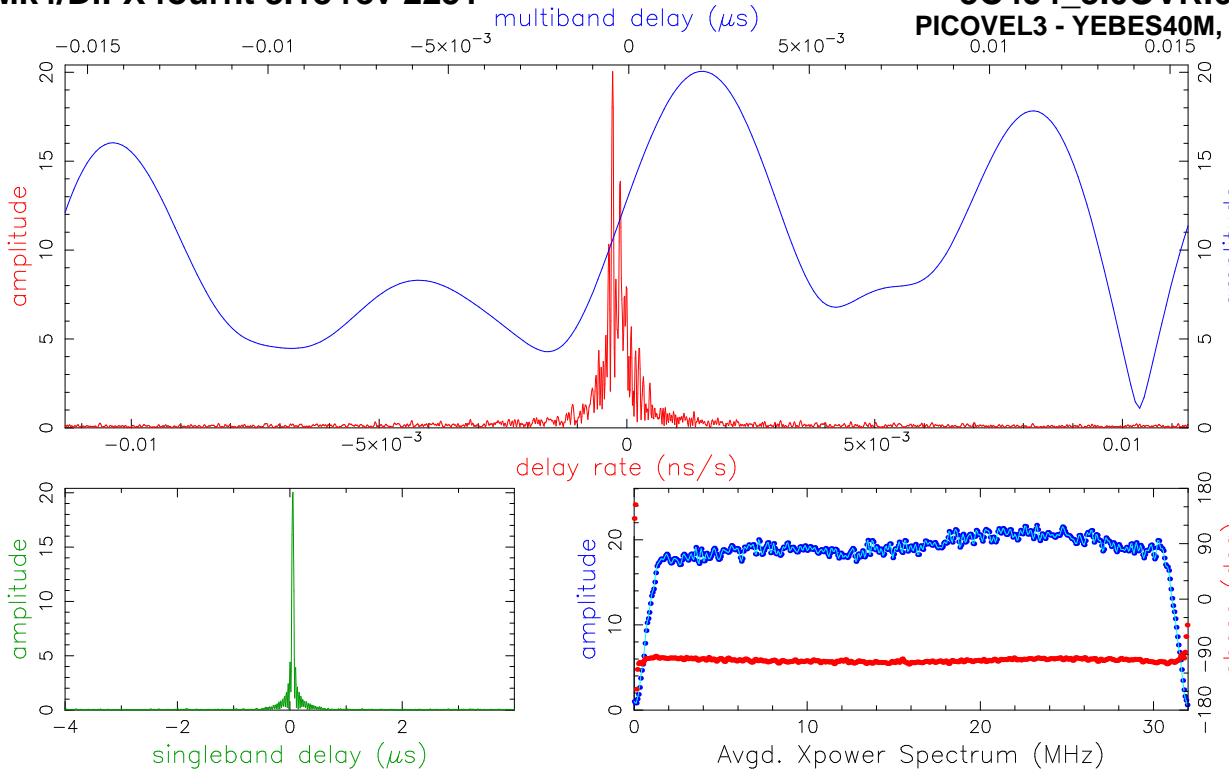


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	31.9	29.1	7.5	4.2	1.3	20.2	24.0	29.7	Phase	18.5
	2.1	2.5	2.7	2.5	2.3	2.8	3.0	2.6	Ampl.	2.6
	514.3	513.7	514.0	513.6	513.9	513.8	513.7	513.8	Sbd box	513.9
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.80467310540E+03		Apriori delay (usec)		-2.80467955760E+03		Resid mbdelay (usec)		6.45219E-03	+/- 2.6E-05
Sband delay (usec)	-2.80467286860E+03		Apriori clock (usec)		1.2879183E+01		Resid sbdelay (usec)		6.68900E-03	+/- 2.1E-04
Phase delay (usec)	-2.80467955700E+03		Apriori clockrate (us/s)		-2.3700001E-07		Resid phdelay (usec)		5.96818E-07	+/- 4.5E-08
Delay rate (us/s)	2.87582714942E-03		Apriori rate (us/s)		2.87590266608E-03		Resid rate (us/s)		-7.55167E-08	+/- 2.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.88398071791E-05		Resid phase (deg)		18.5	+/- 1.4

ph/seg (deg) 63.5 3.3 Theor. Amplitude 2.515 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 5.8 Search (2048X32) 2.468 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 13.4 2.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 11.2 3.4 Inc. seg. avg. 4.061 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 2.557 ion window (TEC) 0.00 0.00

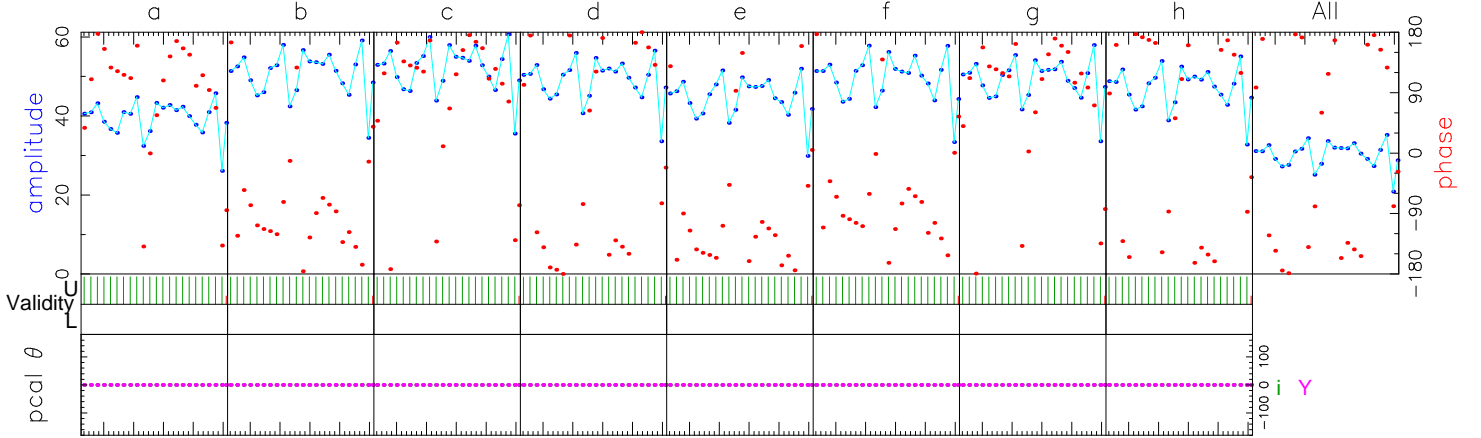
B: az 247.2 el 37.9 pa 37.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 7.171 1470.823 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//BY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//BY.W.67.0OVRI6



Fringe quality 1
 SNR 666.3
 Int time 285.318
 Amp 20.406
 Phase -175.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.051229
 MBD 0.001946
 Fringe rate (Hz)
 -0.025020
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085225
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	124.1	-109.0	133.5	-171.9	-144.4	-96.2	127.1	176.2	Phase	-175.9
	26.2	33.5	34.6	32.4	29.7	32.8	32.5	31.2	Ampl.	31.6
	521.4	520.4	519.9	519.8	519.7	519.7	519.7	519.9	Sbd box	519.6
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63127636507E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		1.94602E-03	+/- 3.3E-06
Sband delay (usec)	3.63114419985E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		5.12295E-02	+/- 2.6E-05
Phase delay (usec)	3.63063184812E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		-5.67261E-06	+/- 5.5E-09
Delay rate (us/s)	-3.15635779856E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.90460E-07	+/- 3.4E-11
Total phase (deg)			Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		-175.9	+/- 0.2

ph/seg (deg) 54.7 0.4
 amp/seg (%) 50.7 0.7
 ph/frq (deg) 59.6 0.2
 amp/frq (%) 56.2 0.4

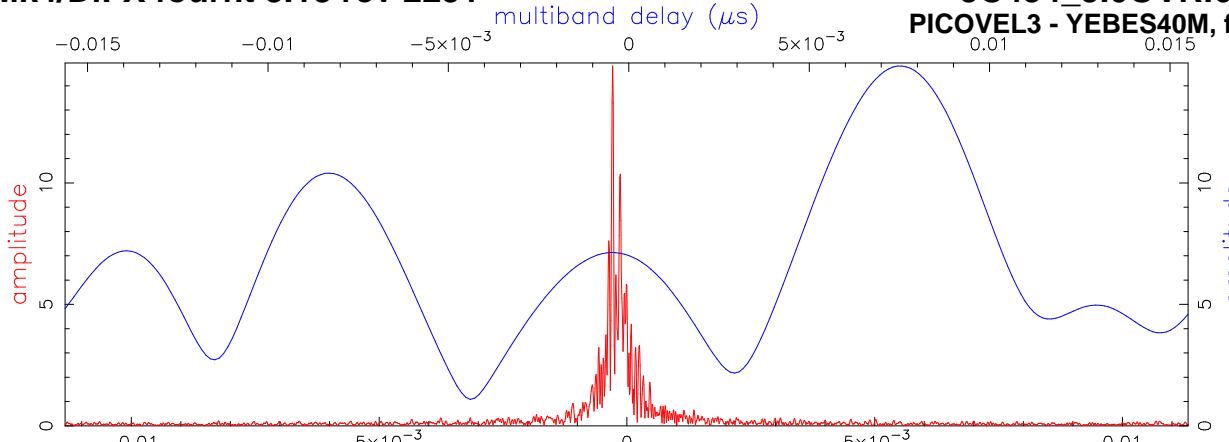
RMS Theor. Amplitude 20.406 +/- 0.031
 Search (2048X32) 19.874
 Interp. 0.000
 Inc. seg. avg. 30.251
 Inc. frq. avg. 31.614

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite

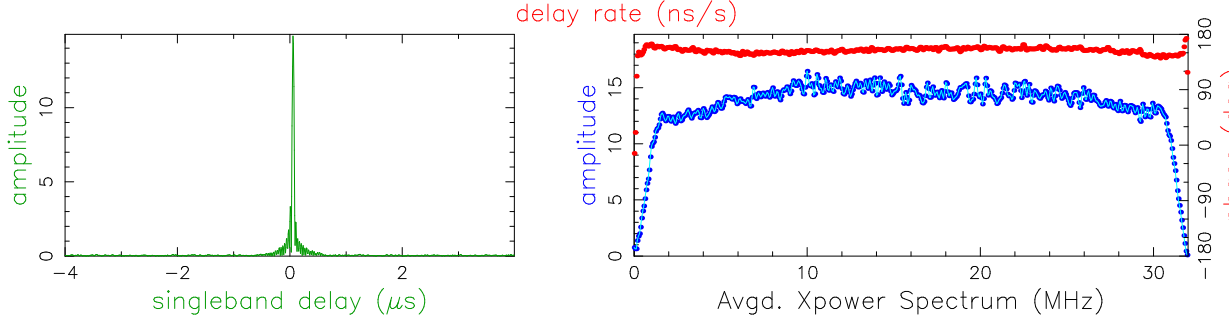
sb window (us) -4.000 4.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator

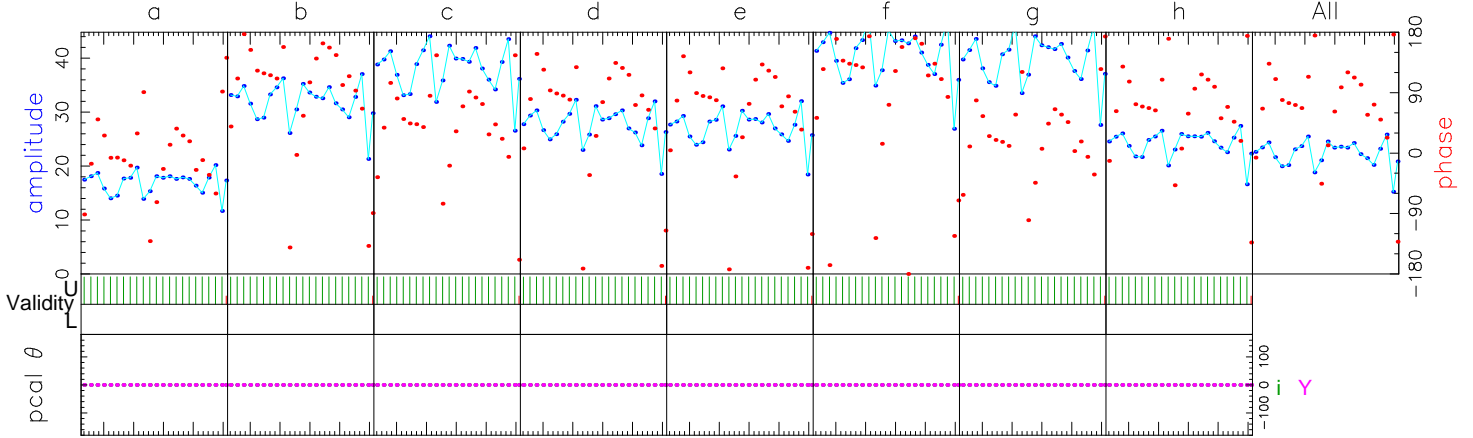
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.16.0OVRI6



Fringe quality 1
 SNR 487.9
 Int time 285.318
 Amp 14.941
 Phase 79.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.057032
 MBD 0.007546
 Fringe rate (Hz)
 -0.025024
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085233
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-4.6	122.5	50.3	93.1	90.4	138.9	24.0	75.0	Phase	79.1
	11.2	21.1	25.1	18.3	18.0	27.1	26.2	16.0	Ampl.	20.4
	522.2	521.7	520.9	520.0	520.5	520.4	520.8	520.6	Sbd box	520.3
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63133236007E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		7.54552E-03	+/- 4.4E-06
Sband delay (usec)	3.63120222485E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		5.70320E-02	+/- 3.5E-05
Phase delay (usec)	3.63063193035E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		2.54977E-06	+/- 7.6E-09
Delay rate (us/s)	-3.15635780310E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.90506E-07	+/- 4.6E-11
Total phase (deg)	161.3		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		79.1	+/- 0.2

ph/seg (deg) 54.7 0.6
 amp/seg (%) 52.0 1.0
 ph/frq (deg) 52.7 0.3
 amp/frq (%) 50.3 0.6

RMS Theor. Amplitude 14.941 +/- 0.031
 Search (2048X32) 14.629
 Interp. 0.000
 Inc. seg. avg. 22.346
 Inc. frq. avg. 20.381

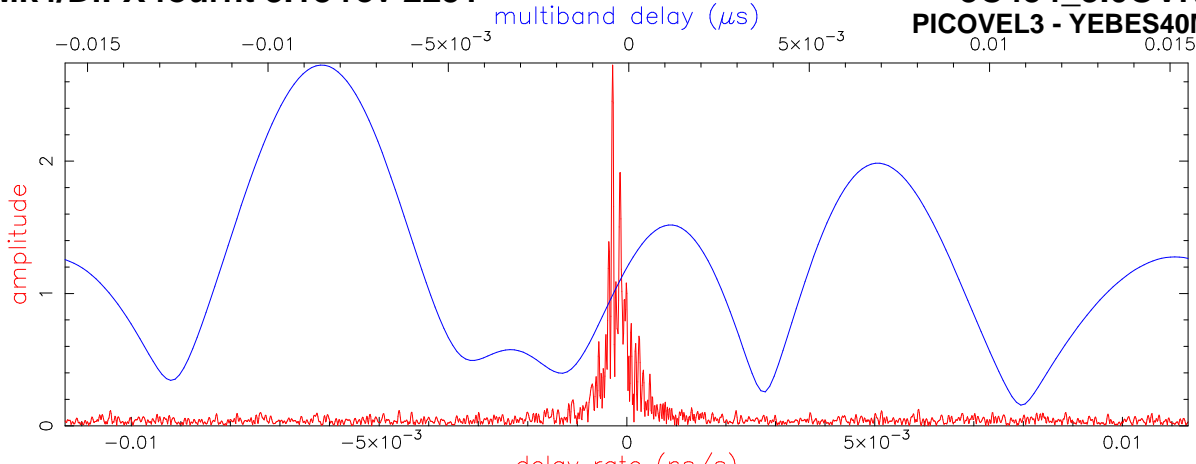
Group delay (usec)(sbd) 3.63133236007E+02
 Apriori delay (usec) 3.63063190485E+02
 Resid mbdelay (usec) 7.54552E-03 +/- 4.4E-06
 Sband delay (usec) 3.63120222485E+02
 Apriori clock (usec) -7.5829983E+00
 Resid sbdelay (usec) 5.70320E-02 +/- 3.5E-05
 Phase delay (usec) 3.63063193035E+02
 Apriori clockrate (us/s) -2.9000001E-07
 Resid phdelay (usec) 2.54977E-06 +/- 7.6E-09
 Delay rate (us/s) -3.15635780310E-02
 Apriori rate (us/s) -3.15632875252E-02
 Resid rate (us/s) -2.90506E-07 +/- 4.6E-11
 Total phase (deg) 161.3
 Apriori accel (us/s/s) -3.45006921952E-06
 Resid phase (deg) 79.1 +/- 0.2

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite

sb window (us) -4.000 4.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator

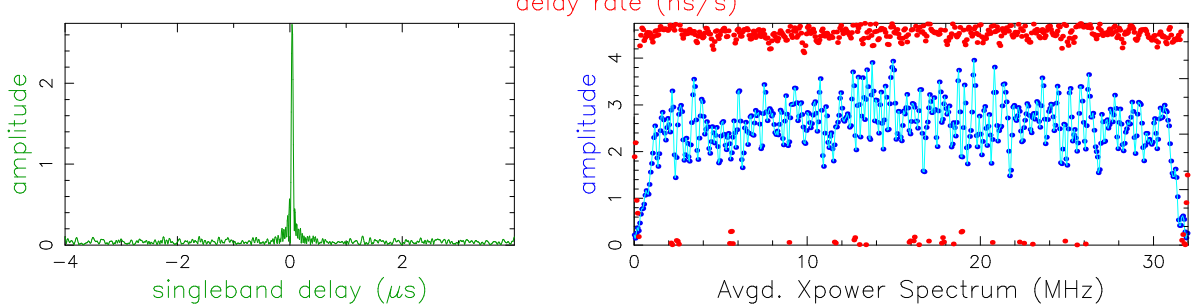
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.36.0OVRI6



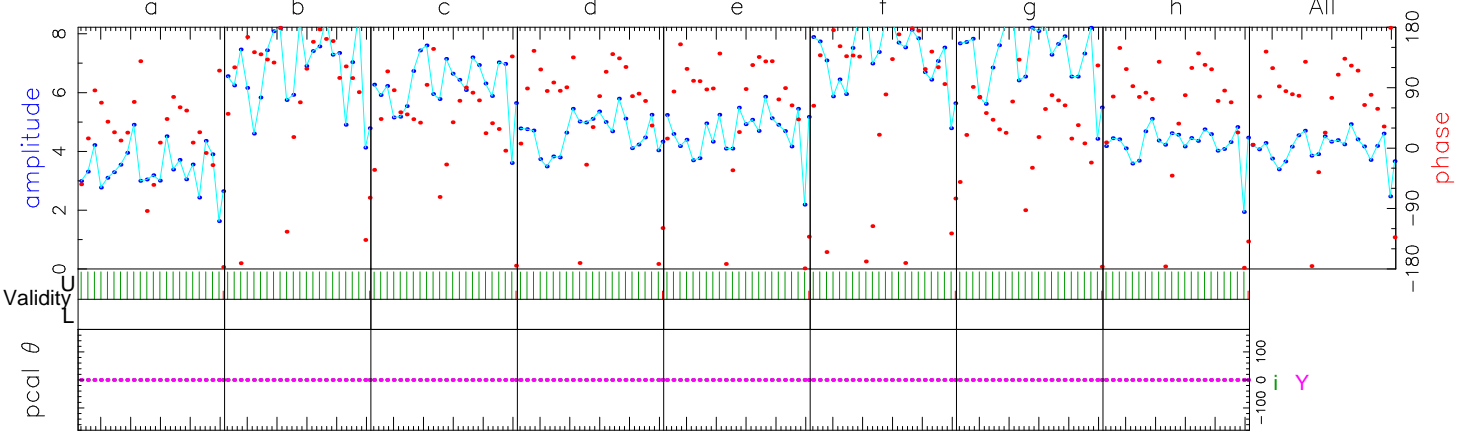
Fringe quality 1

SNR 89.5
Int time 285.318
Amp 2.742
Phase 90.1
PFD 0.0e+00
Delays (us)
SBD 0.040978
MBD -0.008487
Fringe rate (Hz)
-0.024930
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085241
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"

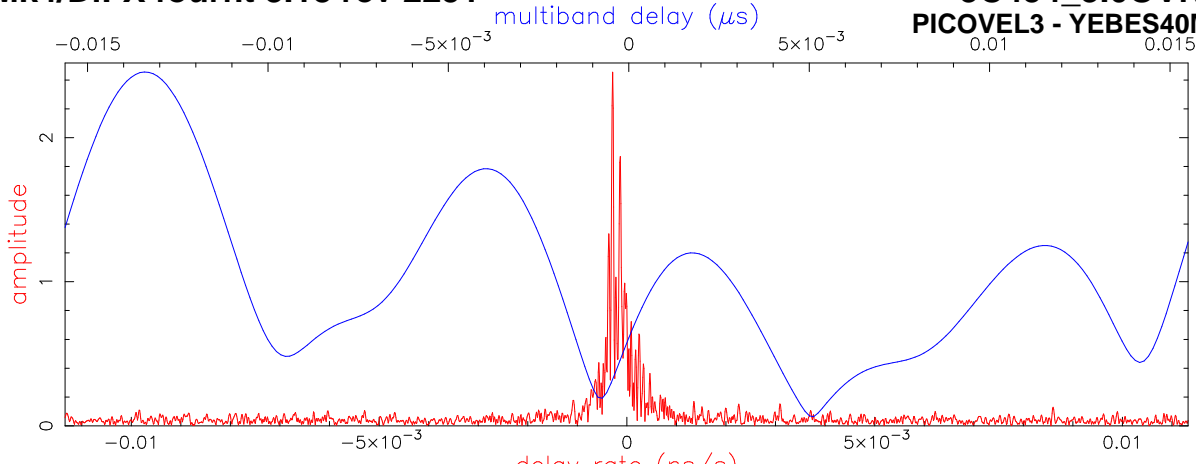


Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

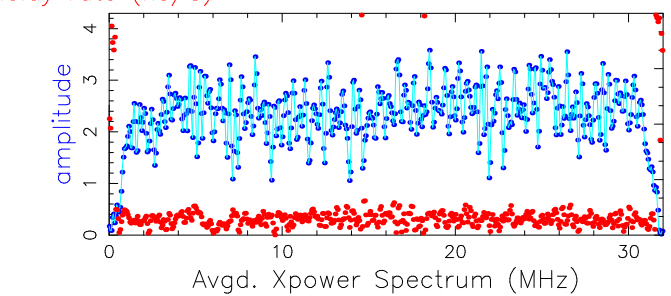
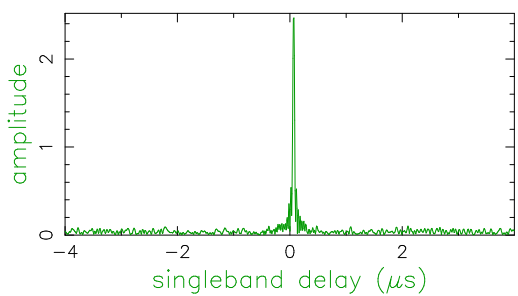


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	30.3	135.8	51.7	97.6	98.2	148.7	38.1	92.1	Phase	90.1
	2.2	4.6	4.2	3.0	3.1	4.8	4.8	2.8	Ampl.	3.7
	519.8	519.3	518.8	518.0	518.6	518.4	518.8	518.7	Sbd box	518.2
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
i	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
i	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63117203445E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		-8.48704E-03	+/- 2.4E-05
Sband delay (usec)	3.63104167985E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		4.09775E-02	+/- 1.9E-04
Phase delay (usec)	3.63063193390E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		2.90558E-06	+/- 4.1E-08
Delay rate (us/s)	-3.15635769419E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.89417E-07	+/- 2.5E-10
Total phase (deg)	172.3		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		90.1	+/- 1.3

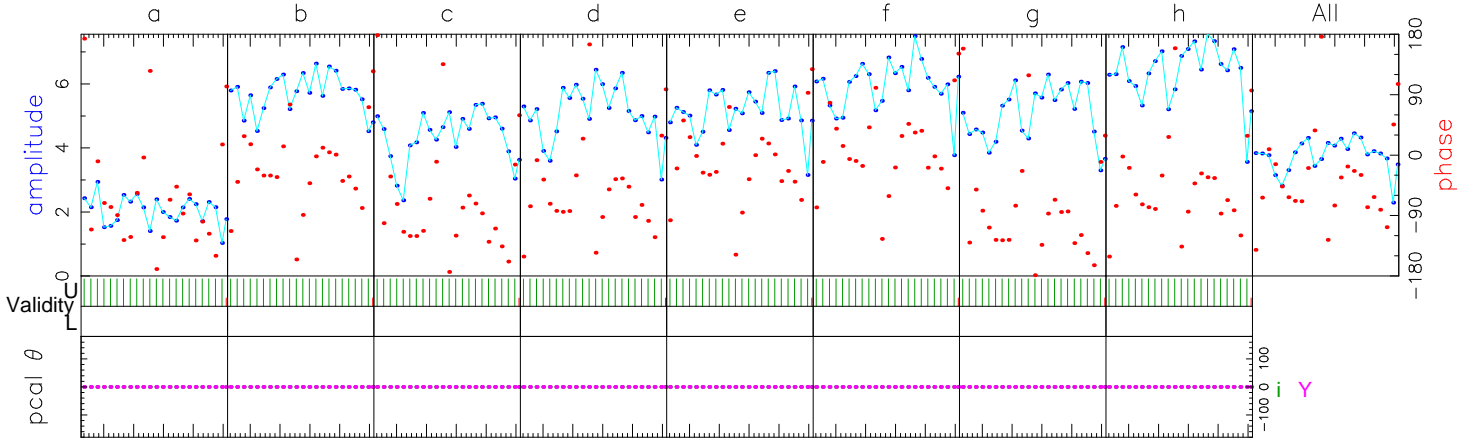
ph/seg (deg) 54.0 3.1 Theor. Amplitude 2.742 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.2 5.4 Search (2048X32) 2.691 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 47.2 1.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 48.9 3.2 Inc. seg. avg. 4.103 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 i: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//iY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//iY.W.55.0OVRI6



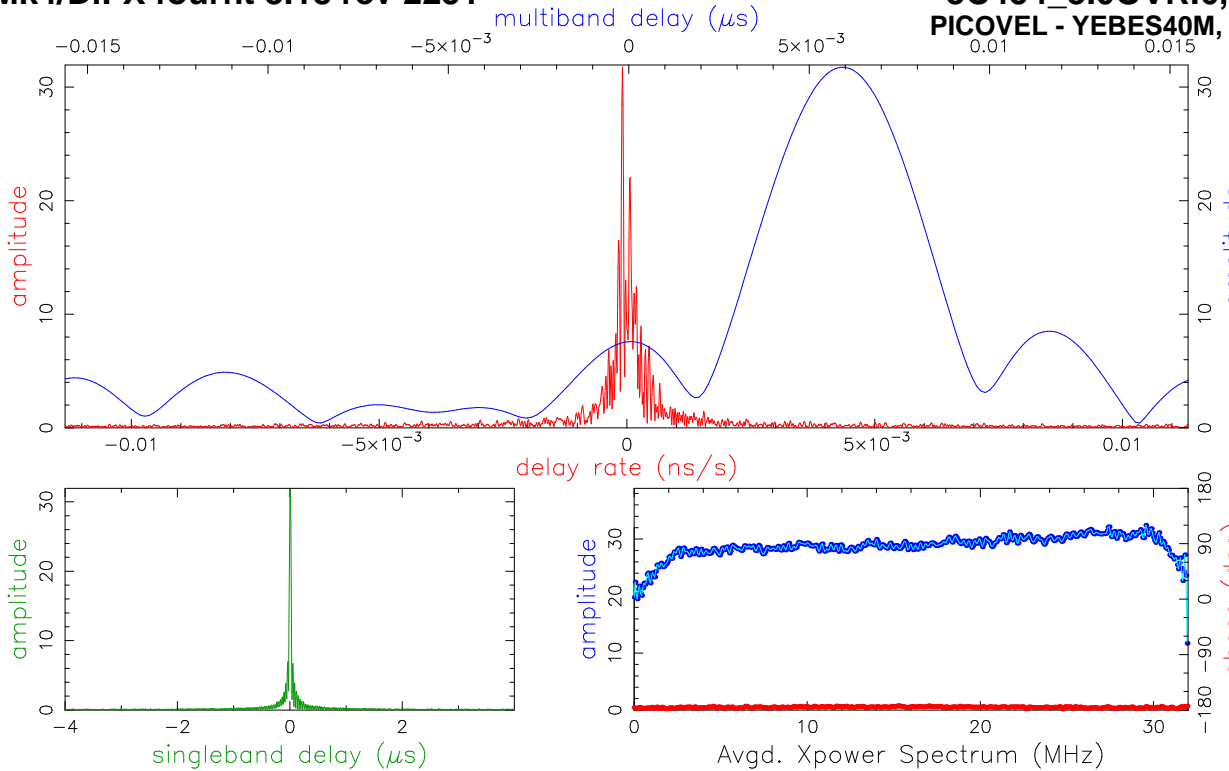
Fringe quality 1
 SNR 82.2
 Int time 285.318
 Amp 2.519
 Phase -53.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.066569
 MBD -0.013332
 Fringe rate (Hz)
 -0.024979
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085248
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

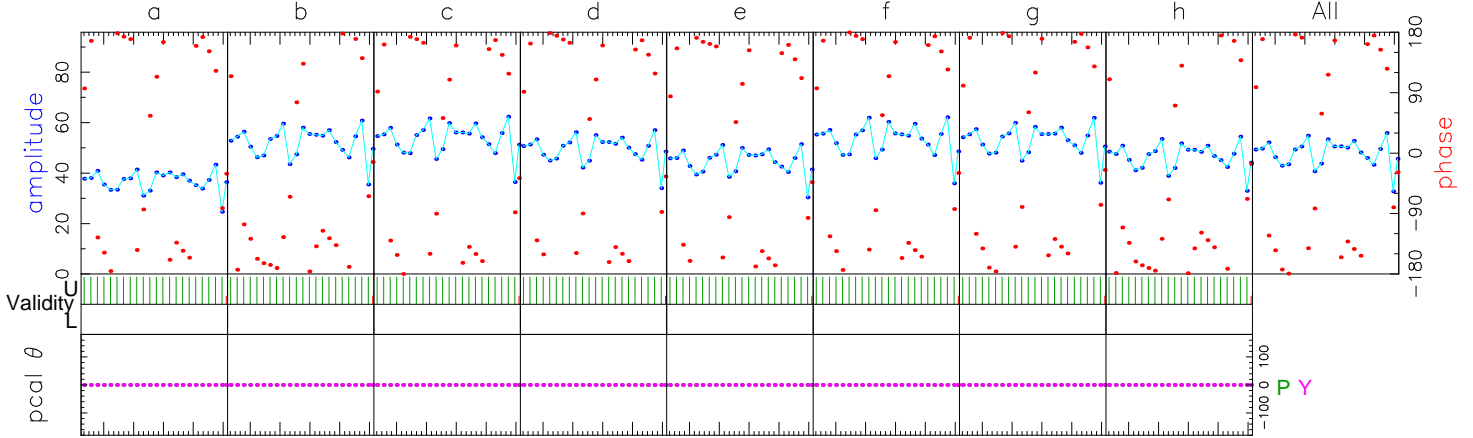


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All	
	-96.6	-22.1	-104.9	-70.2	-13.3	4.8	-111.5	-62.0	Phase	-53.7	
	1.2	3.8	2.8	3.3	3.4	3.4	3.4	4.2	Ampl.	3.2	
	524.3	522.1	522.2	521.8	521.5	521.8	522.1	521.8	Sbd box	521.5	
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used		
i	0	0	0	0	0	0	0	0	PC freqs		
Y	0	0	0	0	0	0	0	0	PC freqs		
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
i:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
i	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
i	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	3.63143608445E+02		Apriori delay (usec)		3.63063190485E+02		Resid mbdelay (usec)		-1.33320E-02	+/- 2.6E-05	
Sband delay (usec)	3.63129759485E+02		Apriori clock (usec)		-7.5829983E+00		Resid sbdelay (usec)		6.65690E-02	+/- 2.1E-04	
Phase delay (usec)	3.63063188753E+02		Apriori clockrate (us/s)		-2.9000001E-07		Resid phdelay (usec)		-1.73194E-06	+/- 4.5E-08	
Delay rate (us/s)	-3.15635775123E-02		Apriori rate (us/s)		-3.15632875252E-02		Resid rate (us/s)		-2.89987E-07	+/- 2.7E-10	
Total phase (deg)	28.5		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		-53.7	+/- 1.4	
	RMS	Theor.	Amplitude	2.519 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	56.3	3.3	Search (2048X32)	2.420		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	53.4	5.8	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	48.6	2.0	Inc. seg. avg.	3.759		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	44.8	3.4	Inc. frq. avg.	3.248		Data rate(Mb/s): 1024		nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
i: az 249.4 el 49.9 pa 51.2	Y: az 246.0 el 48.3 pa 46.5		u,v (fr/asec)		183.682 -478.490				simultaneous interpolator		



Fringe quality 5
 SNR 1038.2
 Int time 282.321
 Amp 31.954
 Phase -175.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.005890
 MBD 0.005881
 Fringe rate (Hz)
 -0.007833
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085223
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

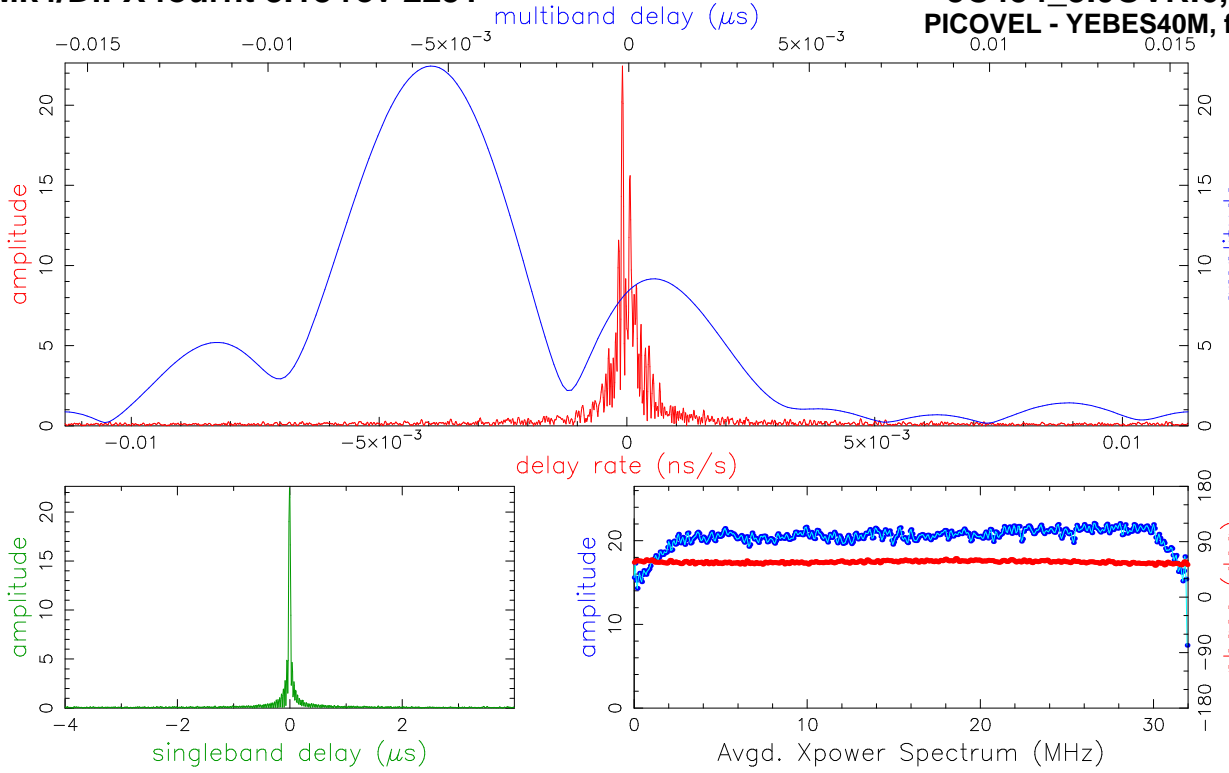


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-178.2	-159.4	176.8	177.1	170.3	-177.5	-172.8	-162.8	Phase	-175.6
	24.3	34.4	35.6	32.8	29.7	35.2	35.0	30.8	Ampl.	32.2
	514.2	513.7	513.8	513.6	513.7	513.8	513.8	514.0	Sbd box	513.8
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 3.63553381117E+02 Apriori delay (usec) 3.63547500485E+02 Resid mbdelay (usec) 5.88063E-03 +/- 2.1E-06
 Sband delay (usec) 3.63553389985E+02 Apriori clock (usec) -7.0986900E+00 Resid sbdelay (usec) 5.88950E-03 +/- 1.7E-05
 Phase delay (usec) 3.63547494821E+02 Apriori clockrate (us/s) -4.9000002E-07 Resid phdelay (usec) -5.66420E-06 +/- 3.6E-09
 Delay rate (us/s) -3.15635784537E-02 Apriori rate (us/s) -3.15634875252E-02 Resid rate (us/s) -9.09285E-08 +/- 2.2E-11
 Total phase (deg) 73.4 Apriori accel (us/s/s) -3.45006921952E-06 Resid phase (deg) -175.6 +/- 0.1

RMS Theor. Amplitude 31.954 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.6 0.3 Search (2048X32) 31.577 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 52.7 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 11.2 0.2 Inc. seg. avg. 47.986 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 11.3 0.3 Inc. frq. avg. 32.222 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//PY..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//PY.W.1.0OVR16

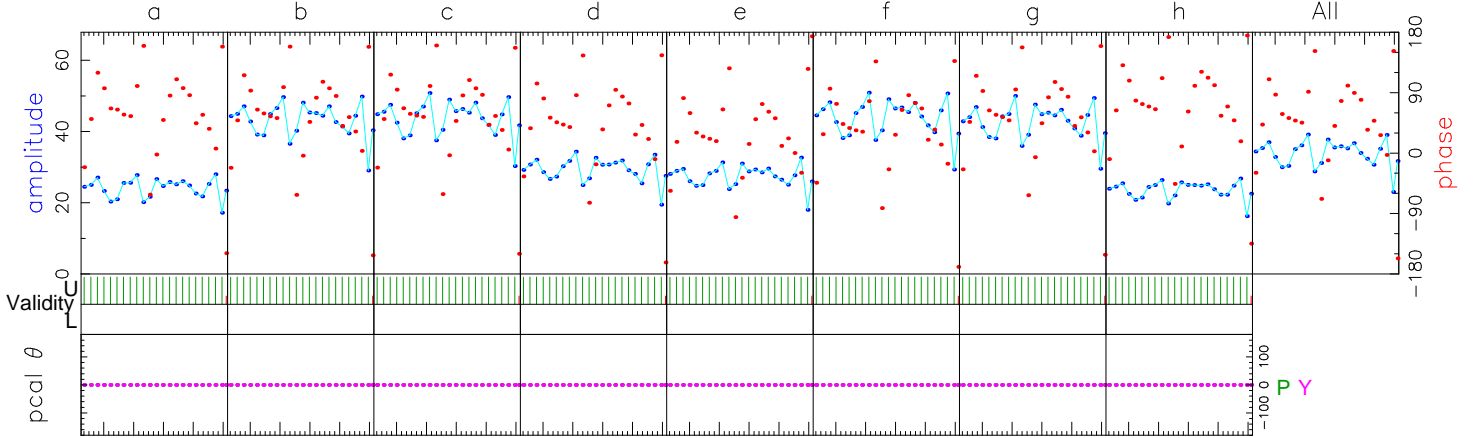


Fringe quality 3

SNR 735.3
 Int time 282.321
 Amp 22.631
 Phase 56.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.005497
 MBD -0.005417
 Fringe rate (Hz)
 -0.007835
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512

Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085231
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	66.2	62.7	64.6	51.0	29.7	42.7	61.6	77.7	Phase	56.8
	16.0	28.7	28.9	19.5	18.2	29.2	28.2	15.5	Ampl.	23.0
	511.8	512.7	512.4	511.8	512.4	512.3	512.7	512.8	Sbd box	512.3
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63542083304E+02		Apriori delay (usec)		3.63547500485E+02		Resid mbdelay (usec)		-5.41718E-03	+/- 3.0E-06
Sband delay (usec)	3.63542003985E+02		Apriori clock (usec)		-7.0986900E+00		Resid sbdelay (usec)		-5.49650E-03	+/- 2.3E-05
Phase delay (usec)	3.63547502316E+02		Apriori clockrate (us/s)		-4.9000002E-07		Resid phdelay (usec)		1.83171E-06	+/- 5.0E-09
Delay rate (us/s)	-3.15635784785E-02		Apriori rate (us/s)		-3.15634875252E-02		Resid rate (us/s)		-9.09533E-08	+/- 3.0E-11
Total phase (deg)	305.8		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		56.8	+/- 0.2

ph/seg (deg) 54.6 0.4
 amp/seg (%) 52.2 0.7
 ph/frq (deg) 16.4 0.2
 amp/frq (%) 25.9 0.4

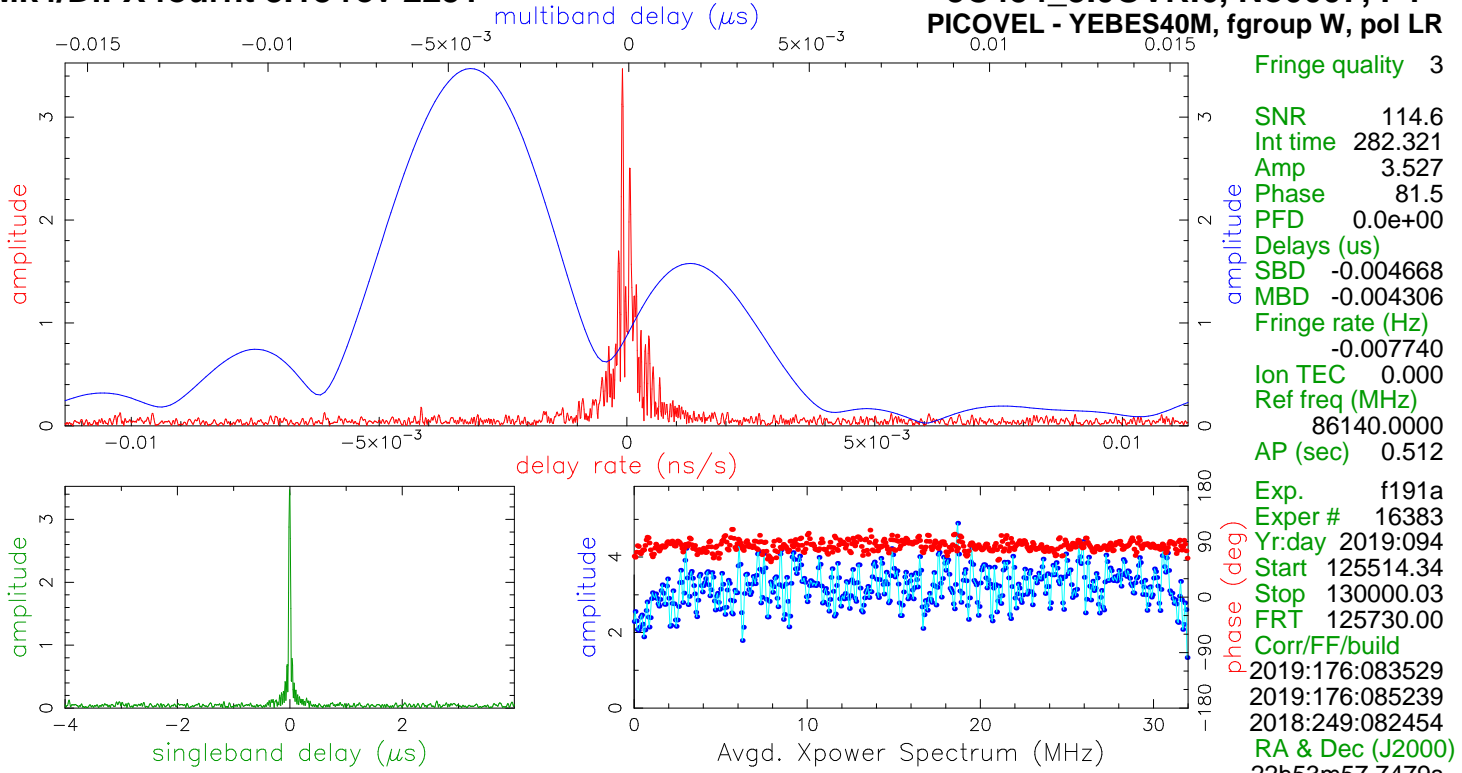
RMS Theor. Amplitude 22.631 +/- 0.031
 Search (2048X32) 21.993
 Interp. 0.000
 Inc. seg. avg. 33.865
 Inc. frq. avg. 23.026

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MSamp/s): 64
 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite

sb window (us) -4.000 4.000
 mb window (us) -0.016 0.016
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

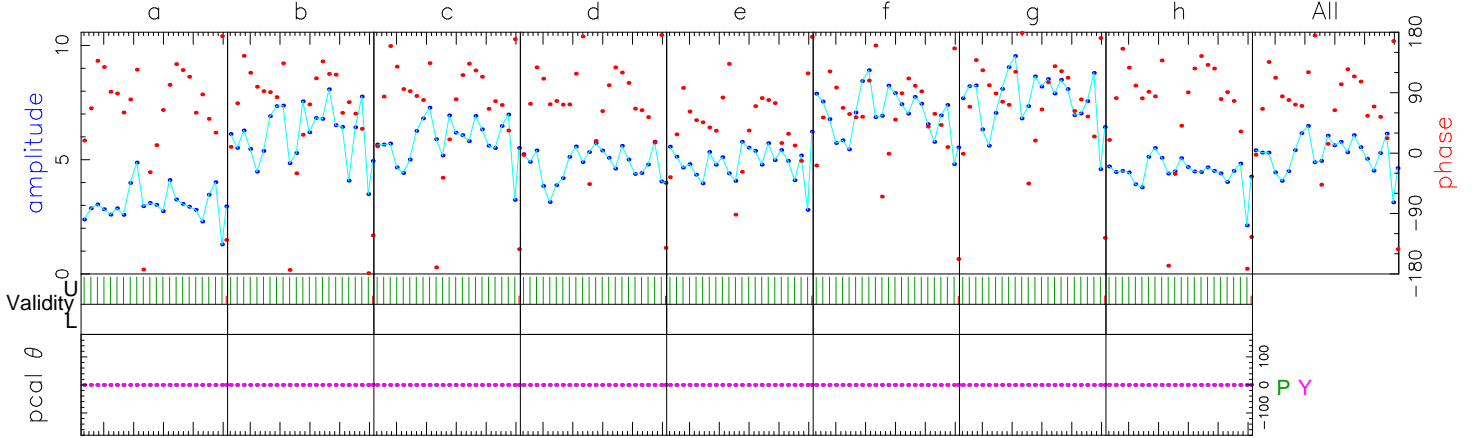
P: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//PY..0VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//PY.W.23.0OVRI6



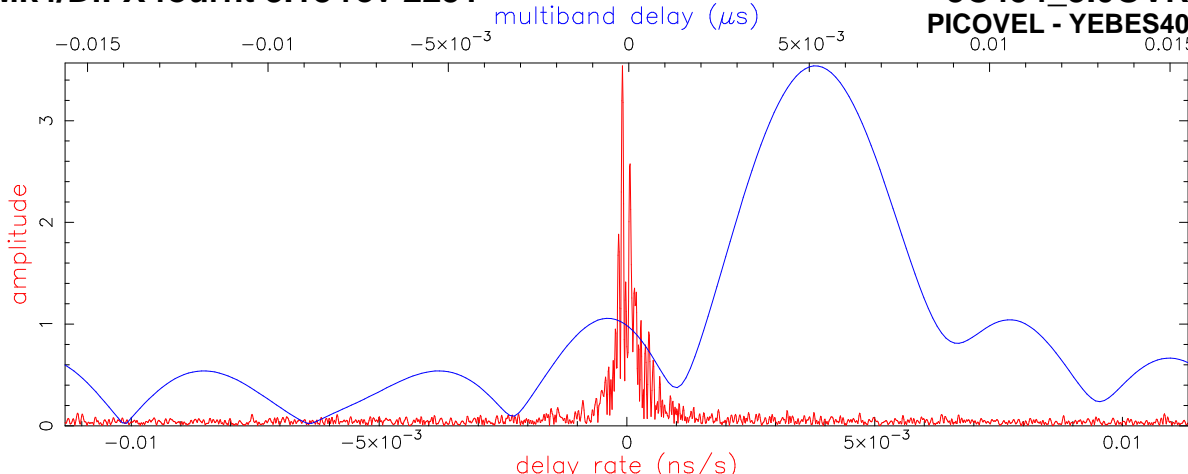
Fringe quality 3
 SNR 114.6
 Int time 282.321
 Amp 3.527
 Phase 81.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.004668
 MBD -0.004306
 Fringe rate (Hz)
 -0.007740
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085239
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	87.5	91.1	94.1	81.5	44.4	67.0	86.8	99.6	Phase	81.5
	2.0	4.1	3.9	3.1	3.3	4.5	5.0	3.0	Ampl.	3.6
	512.6	512.7	512.6	511.8	512.5	512.7	512.9	512.8	Sbd box	512.4
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.63543194679E+02		Apriori delay (usec)		3.63547500485E+02		Resid mbdelay (usec)		-4.30581E-03	+/- 1.9E-05
Sband delay (usec)	3.63542832985E+02		Apriori clock (usec)		-7.0986900E+00		Resid sbdelay (usec)		-4.66750E-03	+/- 1.5E-04
Phase delay (usec)	3.63547503114E+02		Apriori clockrate (us/s)		-4.9000002E-07		Resid phdelay (usec)		2.62922E-06	+/- 3.2E-08
Delay rate (us/s)	-3.15635773738E-02		Apriori rate (us/s)		-3.15634875252E-02		Resid rate (us/s)		-8.98486E-08	+/- 2.0E-10
Total phase (deg)	330.6		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		81.5	+/- 1.0

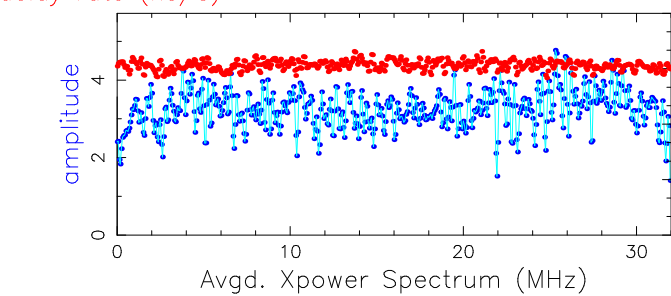
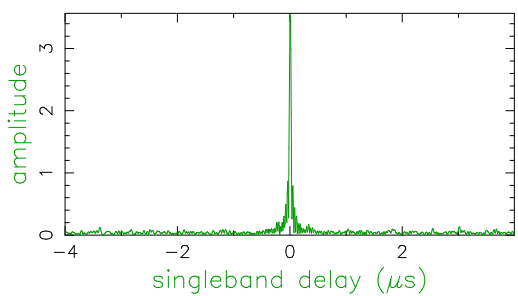
RMS Theor. Amplitude 3.527 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.0 2.4 Search (2048X32) 3.393 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 53.2 4.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 19.3 1.4 Inc. seg. avg. 5.237 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.8 2.5 Inc. frq. avg. 3.612 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00
 P: az 249.4 el 49.9 pa 51.2 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 183.682 -478.490 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//PY..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//PY.W.43.0OVR16



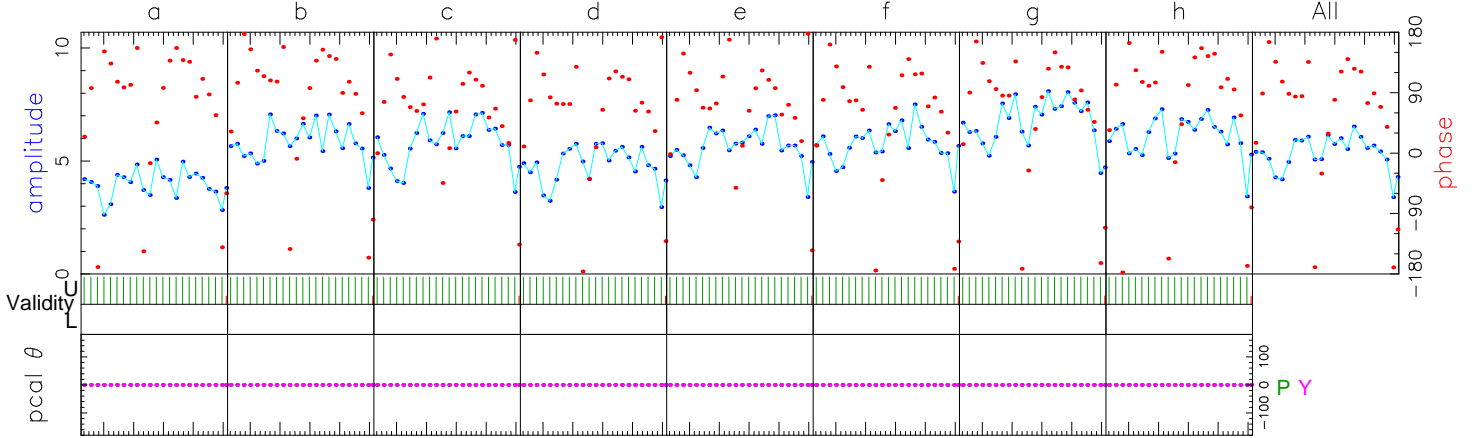
Fringe quality 4

SNR 115.9
Int time 282.321
Amp 3.567
Phase 98.6
PFD 0.0e+00
Delays (us)
SBD 0.005621
MBD 0.005120
Fringe rate (Hz)
-0.007741
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

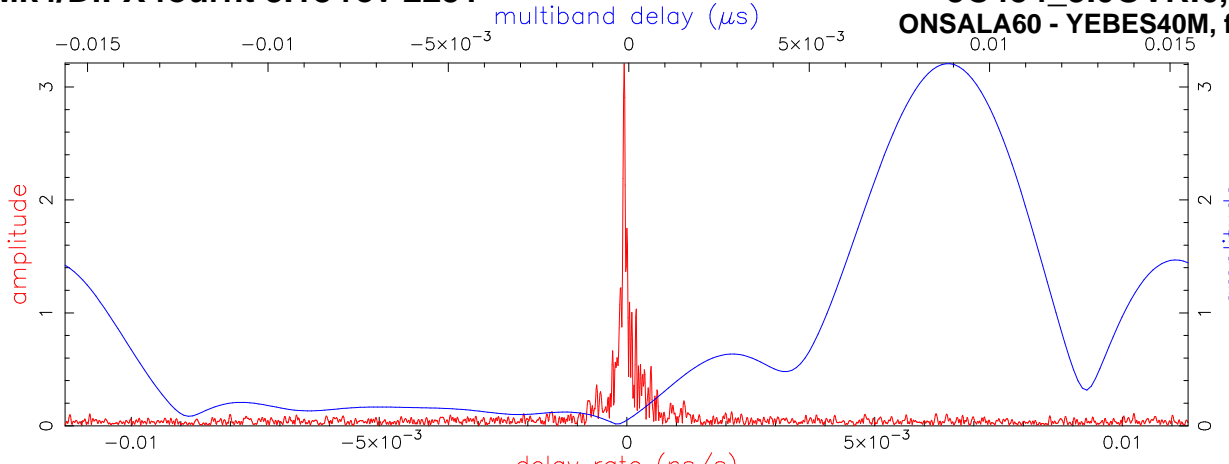
Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085246
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All	
	113.5	117.3	76.7	86.1	82.3	91.6	102.4	118.7	Phase	98.6	
	2.5	3.9	3.8	3.2	3.7	3.7	4.5	4.1	Ampl.	3.7	
	513.5	513.5	513.5	513.9	513.3	513.9	513.7	514.1	Sbd box	513.7	
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used		
P	0	0	0	0	0	0	0	0	PC freqs		
Y	0	0	0	0	0	0	0	0	PC freqs		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	3.63552620679E+02		Apriori delay (usec)		3.63547500485E+02		Resid mbdelay (usec)		5.12019E-03	+/- 1.9E-05	
Sband delay (usec)	3.63553121985E+02		Apriori clock (usec)		-7.0986900E+00		Resid sbdelay (usec)		5.62150E-03	+/- 1.5E-04	
Phase delay (usec)	3.63547503663E+02		Apriori clockrate (us/s)		-4.9000002E-07		Resid phdelay (usec)		3.17835E-06	+/- 3.2E-08	
Delay rate (us/s)	-3.15635773908E-02		Apriori rate (us/s)		-3.15634875252E-02		Resid rate (us/s)		-8.98657E-08	+/- 1.9E-10	
Total phase (deg)	347.6		Apriori accel (us/s/s)		-3.45006921952E-06		Resid phase (deg)		98.6	+/- 1.0	
RMS	55.4	2.4	Amplitude	3.567 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	55.4	2.4	Search (2048X32)	3.499		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-4.000	4.000	
amp/seg (%)	54.6	4.1	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	18.0	1.4	Inc. seg. avg.	5.371		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	16.2	2.4	Inc. frq. avg.	3.672		Data rate(Mb/s): 1024		nlags: 512 t_cohere infinite	ion window (TEC)	0.00	0.00
P: az 249.4 el 49.9 pa 51.2	Y: az 246.0 el 48.3 pa 46.5		u,v (fr/asec)		183.682 -478.490				simultaneous interpolator		



Fringe quality 4

SNR 104.9

Int time 285.318

Ampl 3.213

Phase 127.6

PFD 0.0e+00

Delays (us)

SBD -0.022359

MBD 0.008875

Fringe rate (Hz)

-0.004712

Ion TEC 0.000

Ref freq (MHz)

86140.000

AP (sec) 0.512

Exp. f191a

Exper # 16383

Yr:day 2019:094

Start 125514.34

Stop 130000.03

FRT 125730.00

Corr/FF/build

2019:176:083529

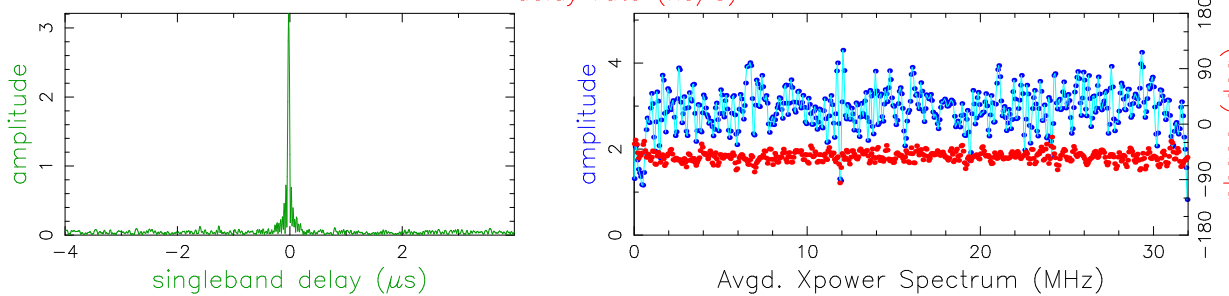
2019:176:085231

2018:249:082454

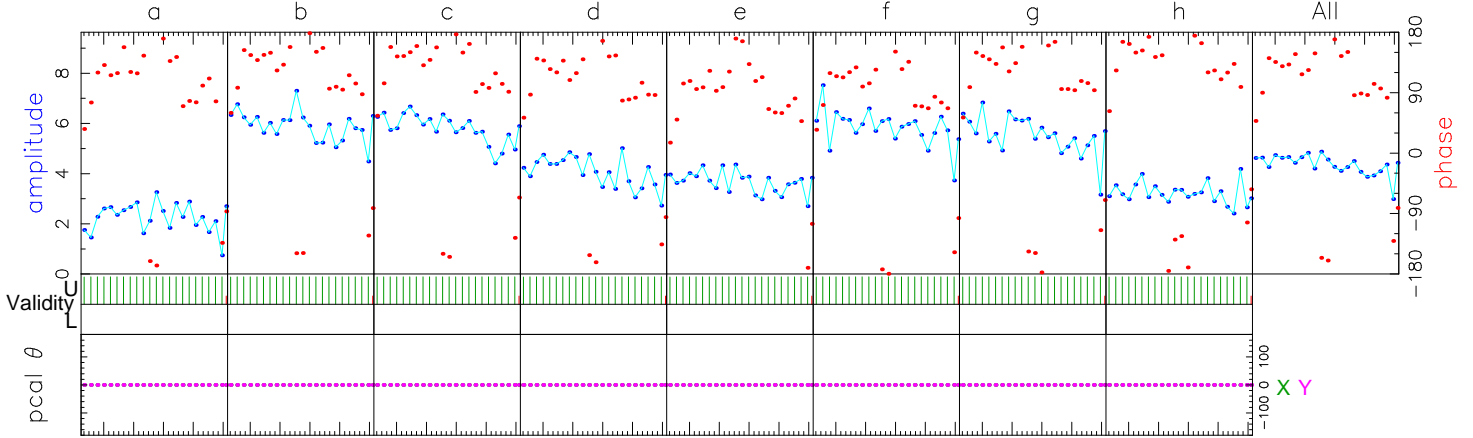
RA & Dec (J2000)

22h53m57.7479s

+16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
123.2	136.9	140.4	123.4	97.5	107.8	136.0	152.3	Phase	127.6
1.7	4.3	4.3	3.0	2.7	4.4	4.0	2.3	Ampl.	3.3
511.3	510.6	510.3	509.8	510.2	510.0	510.7	510.2	Sbd box	510.1
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
X 0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	PC freqs	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
X W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-4.42166318290E+03		Apriori delay (usec)	-4.42164080740E+03		Resid mbdelay (usec)	8.87450E-03	+/-	2.1E-05
Sband delay (usec)	-4.42166316640E+03		Apriori clock (usec)	1.8047026E+01		Resid sbdelay (usec)	-2.23590E-02	+/-	1.6E-04
Phase delay (usec)	-4.42164080329E+03		Apriori clockrate (us/s)	5.8699996E-07		Resid phdelay (usec)	4.11483E-06	+/-	3.5E-08
Delay rate (us/s)	7.06486383406E-02		Apriori rate (us/s)	7.06486930427E-02		Resid rate (us/s)	-5.47021E-08	+/-	2.1E-10
Total phase (deg)		73.7	Apriori accel (us/s/s)	2.96955604669E-05		Resid phase (deg)	127.6	+/-	1.1

ph/seg (deg) 46.6 2.6 Search (2048X32) 3.204 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

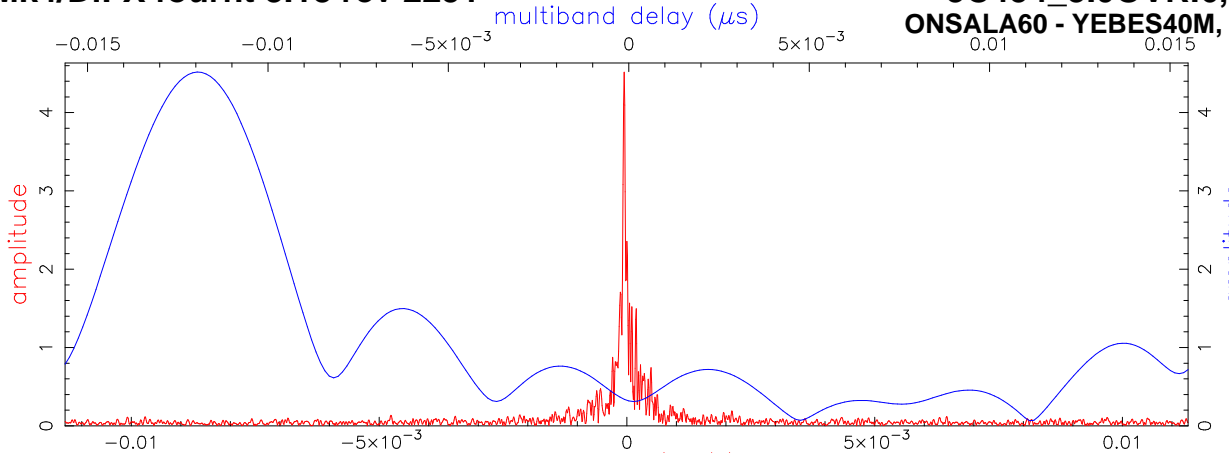
amp/seg (%) 37.5 4.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000

ph/frq (deg) 19.4 1.5 Inc. seg. avg. 4.342 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 30.8 2.7 Inc. frq. avg. 3.338 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011

X: az 247.6 el 32.5 pa 31.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -383.023 2322.219 simultaneous interpolator

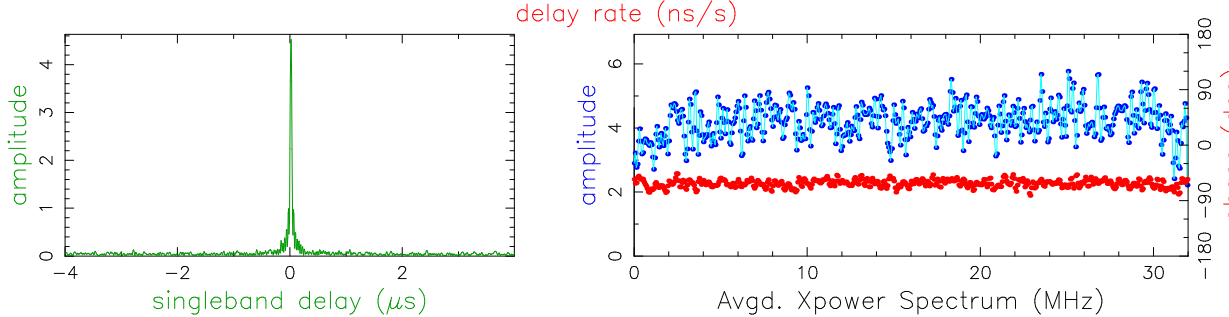
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//XY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//XY.W.22.0OVRI6



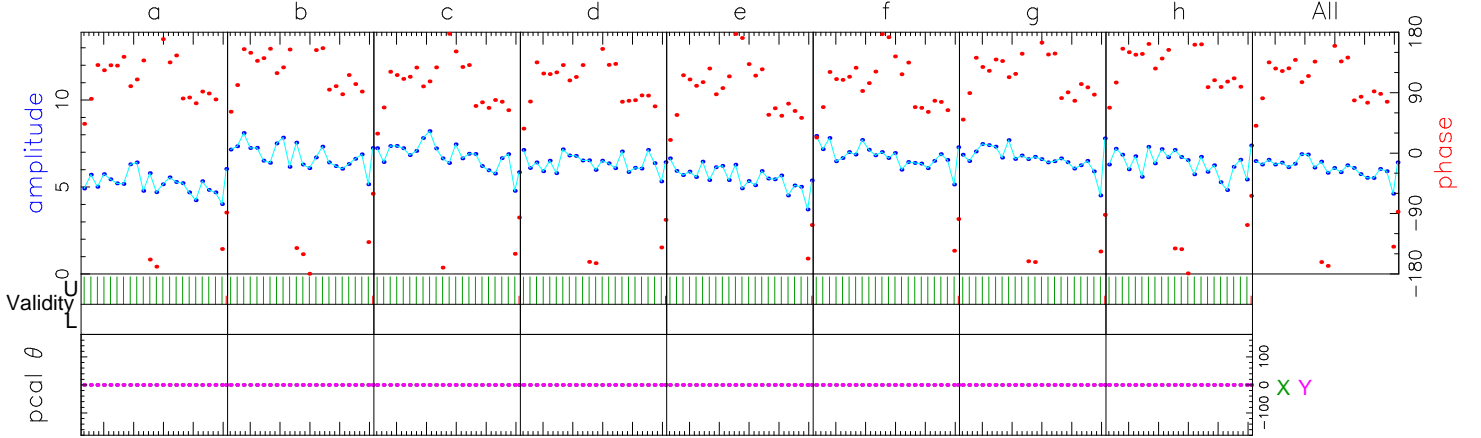
Fringe quality 5

SNR 151.4
Int time 285.318
Amp 4.634
Phase 119.0
PFD 0.0e+00
Delays (us)
SBD 0.019451
MBD -0.012026
Fringe rate (Hz)
-0.004732
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085224
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



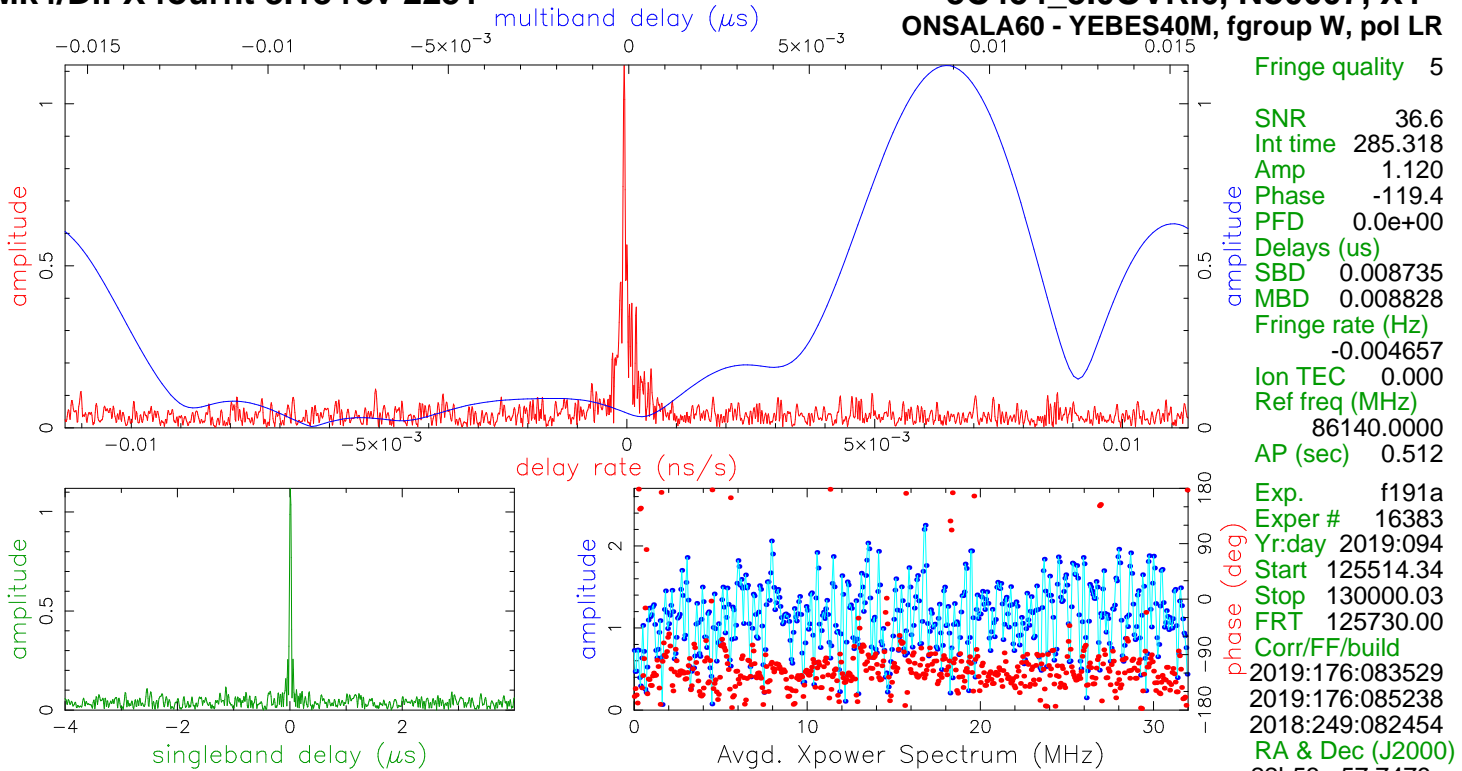
Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



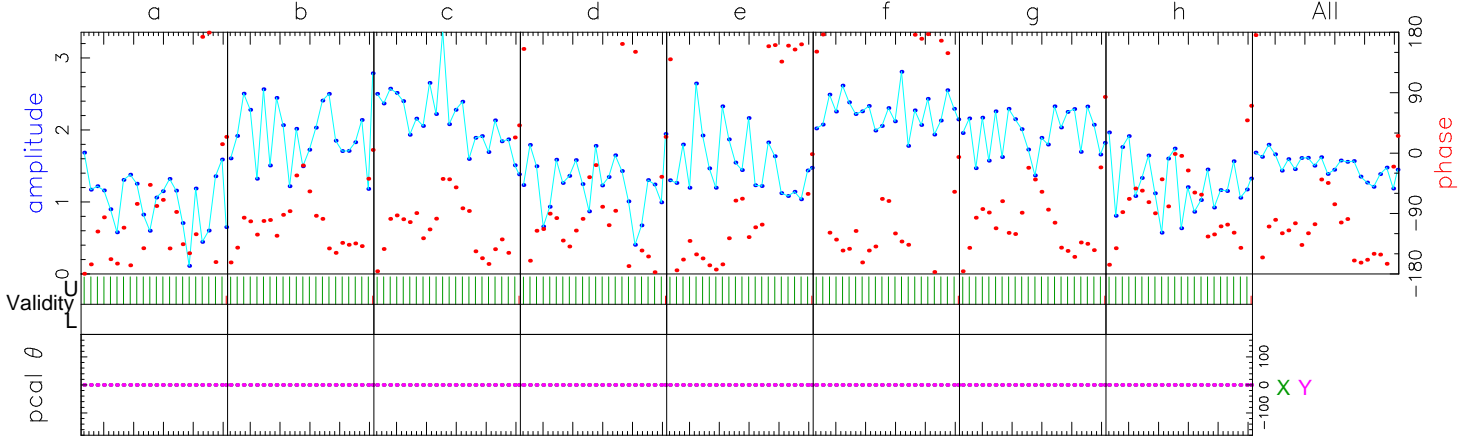
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	120.3	135.8	108.7	114.6	98.0	104.8	125.7	142.7	Phase	119.0
	3.8	5.0	5.1	4.7	4.1	5.0	5.0	4.6	Ampl.	4.7
	515.5	515.5	515.4	515.6	515.3	515.5	515.7	515.5	Sbd box	515.5
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.42162158390E+03		Apriori delay (usec)		-4.42164080740E+03		Resid mbdelay (usec)		-1.20265E-02	+/- 1.4E-05
Sband delay (usec)	-4.42162135690E+03		Apriori clock (usec)		1.8047026E+01		Resid sbdelay (usec)		1.94505E-02	+/- 1.1E-04
Phase delay (usec)	-4.42164080356E+03		Apriori clockrate (us/s)		5.8699996E-07		Resid phdelay (usec)		3.83899E-06	+/- 2.4E-08
Delay rate (us/s)	7.06486381146E-02		Apriori rate (us/s)		7.06486930427E-02		Resid rate (us/s)		-5.49281E-08	+/- 1.5E-10
Total phase (deg)	65.2		Apriori accel (us/s/s)		2.96955604669E-05		Resid phase (deg)		119.0	+/- 0.8

RMS Theor. Amplitude 4.634 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 46.7 1.8 Search (2048X32) 4.493 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 33.5 3.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 16.6 1.1 Inc. seg. avg. 6.108 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.7 1.9 Inc. frq. avg. 4.659 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 247.6 el 32.5 pa 31.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -383.023 2322.219 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//XY..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//XY.W.3.0OVR16



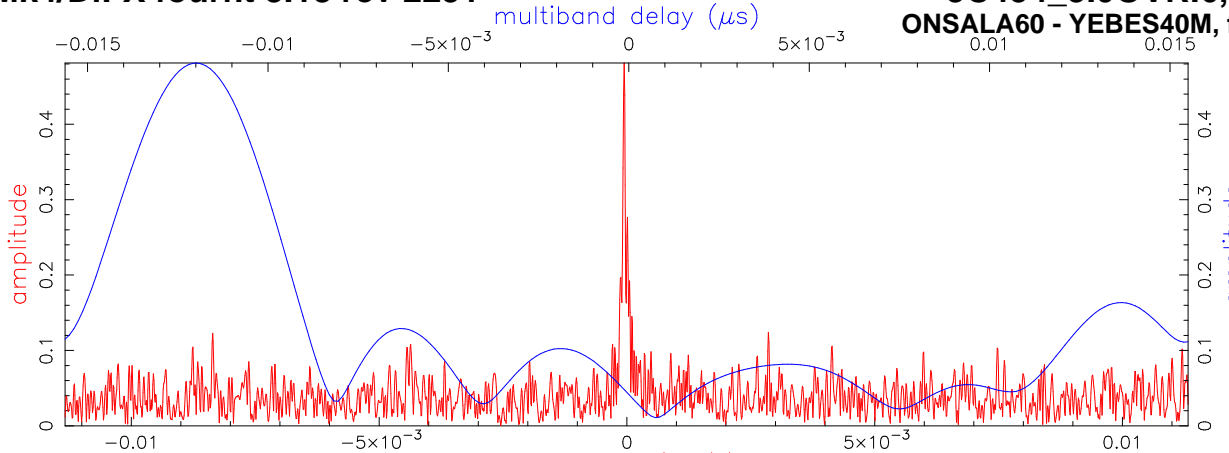
Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



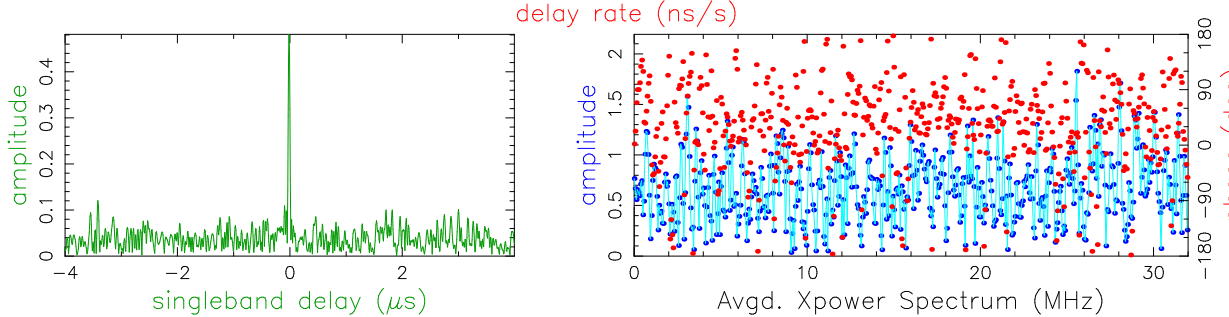
	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-125.6	-107.0	-106.2	-119.4	-154.2	-146.9	-109.6	-81.9	Phase	-119.4
	0.7	1.5	1.6	0.8	1.1	1.6	1.5	0.8	Ampl.	1.2
	513.8	514.7	514.1	514.0	514.6	514.2	514.6	514.2	Sbd box	514.1
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.42163197965E+03		Apriori delay (usec)		-4.42164080740E+03		Resid mbdelay (usec)	8.82775E-03	+/-	5.9E-05
Sband delay (usec)	-4.42163207240E+03		Apriori clock (usec)		1.8047026E+01		Resid sbdelay (usec)	8.73500E-03	+/-	4.7E-04
Phase delay (usec)	-4.42164081125E+03		Apriori clockrate (us/s)		5.8699996E-07		Resid phdelay (usec)	-3.85119E-06	+/-	1.0E-07
Delay rate (us/s)	7.06486389811E-02		Apriori rate (us/s)		7.06486930427E-02		Resid rate (us/s)	-5.40615E-08	+/-	6.1E-10
Total phase (deg)		-173.3	Apriori accel (us/s/s)		2.96955604669E-05		Resid phase (deg)	-119.4	+/-	3.1

	RMS	Theor.	Amplitude	1.120 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-4.000	4.000
ph/seg (deg)	45.7	7.5	Search (2048X32)	1.116	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	36.7	13.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.3	4.4	Inc. seg. avg.	1.488	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	34.2	7.7	Inc. frq. avg.	1.197	Data rate(Mb/s): 1024	nlags: 512 t_cohere infinite			

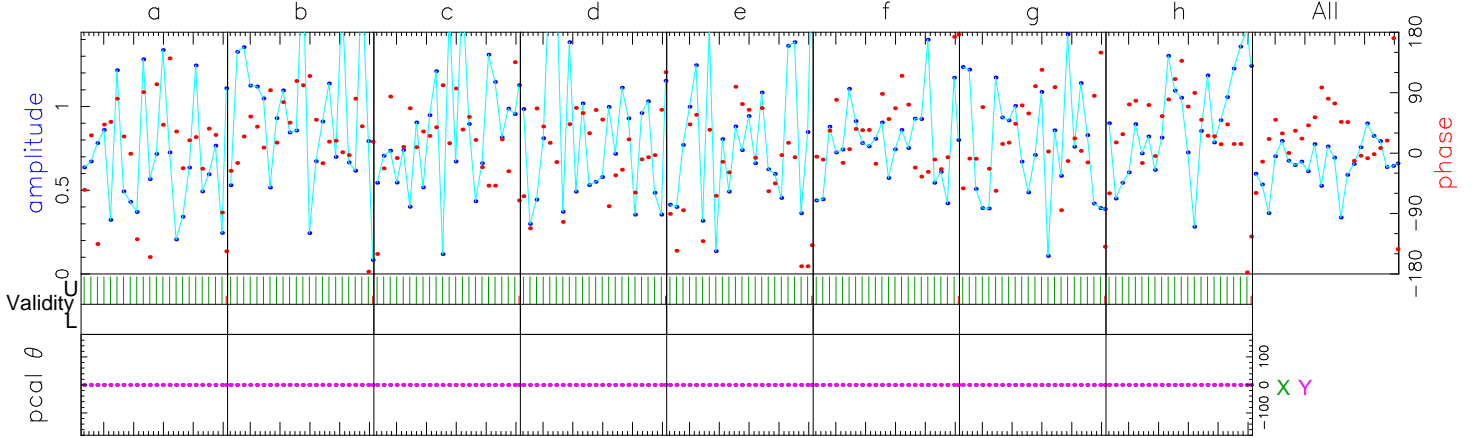
X: az 247.6 el 32.5 pa 31.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -383.023 2322.219 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//XY..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//XY.W.42.0OVR16



Fringe quality 9
 SNR 15.7
 Int time 285.318
 Amp 0.481
 Phase 25.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.015318
 MBD -0.011991
 Fringe rate (Hz)
 -0.004766
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085246
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

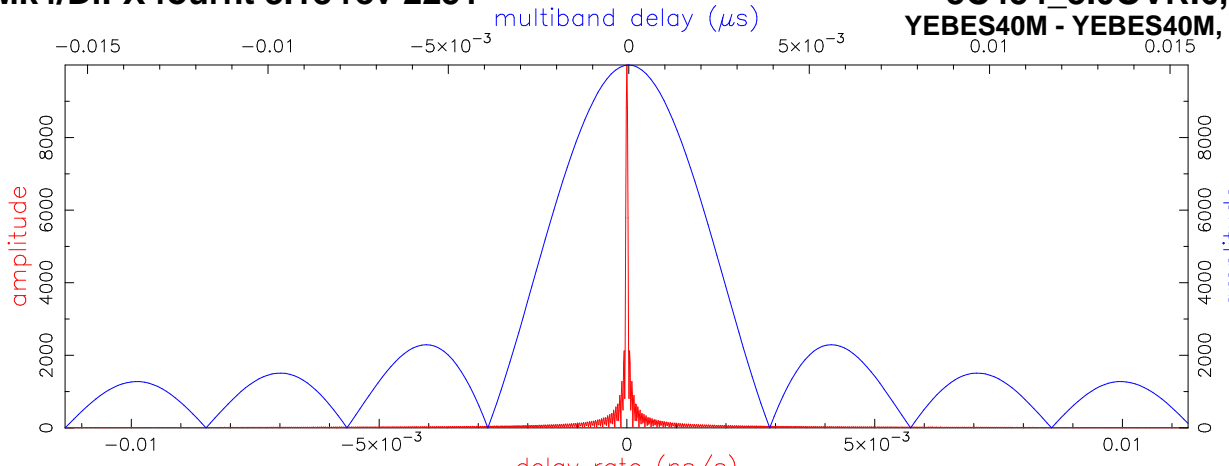


Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

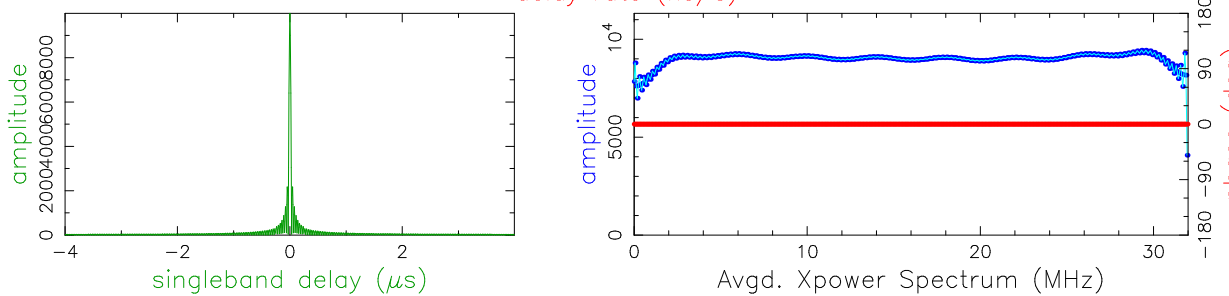


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	42.7	37.3	15.6	6.6	17.6	21.9	14.6	48.3	Phase	25.6
	0.3	0.7	0.6	0.6	0.3	0.5	0.4	0.5	Ampl.	0.5
	511.8	510.5	511.0	511.2	511.7	510.6	510.8	511.3	Sbd box	511.0
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.42165279865E+03		Apriori delay (usec)		-4.42164080740E+03		Resid mbdelay (usec)		-1.19912E-02	+/- 1.4E-04
Sband delay (usec)	-4.42165612540E+03		Apriori clock (usec)		1.8047026E+01		Resid sbdelay (usec)		-1.53180E-02	+/- 1.1E-03
Phase delay (usec)	-4.42164080658E+03		Apriori clockrate (us/s)		5.8699996E-07		Resid phdelay (usec)		8.26450E-07	+/- 2.4E-07
Delay rate (us/s)	7.06486377149E-02		Apriori rate (us/s)		7.06486930427E-02		Resid rate (us/s)		-5.53277E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.96955604669E-05		Resid phase (deg)		25.6	+/- 7.3

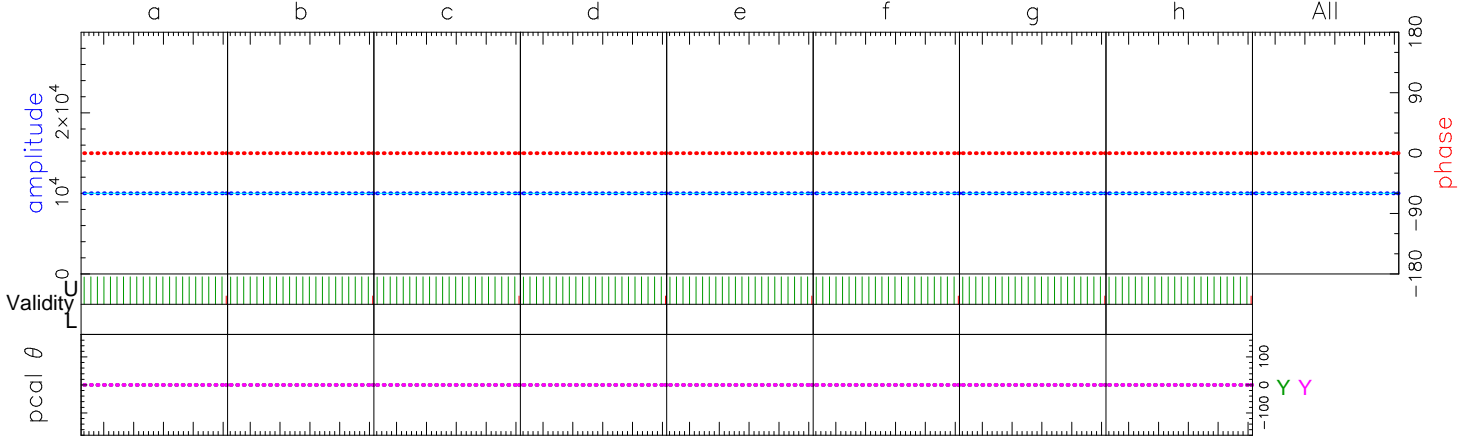
RMS Theor. Amplitude 0.481 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 50.4 17.5 Search (2048X32) 0.477 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 46.2 30.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 16.3 10.3 Inc. seg. avg. 0.630 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 24.7 18.0 Inc. frq. avg. 0.489 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 9
 SNR 326625.3
 Int time 285.322
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085224
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

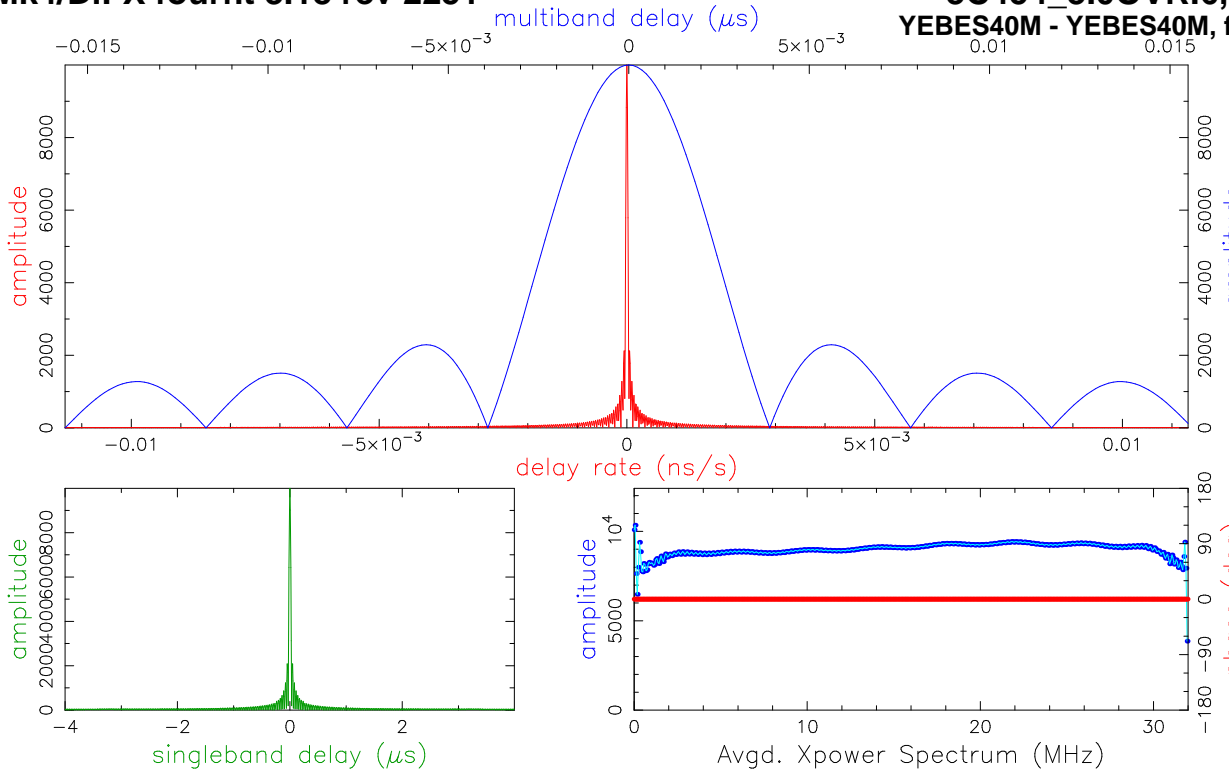


Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0
513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used
Y 0	0	0	0	0	0	0	0	0	0	PC freqs
Y 0	0	0	0	0	0	0	0	0	0	PC freqs
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			Chan ids
Y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		0.00000E+00	+/- 6.6E-09
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		0.00000E+00	+/- 5.3E-08
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		0.00000E+00	+/- 1.1E-11
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		0.00000E+00	+/- 6.9E-14
Total phase (deg)	0.0		Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Y: az 246.0 el 48.3 pa 46.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//YY..0OVR16 Output file: /Exps2/f191a/FRINGE/5555/No0007//YY.W.2.0OVR16

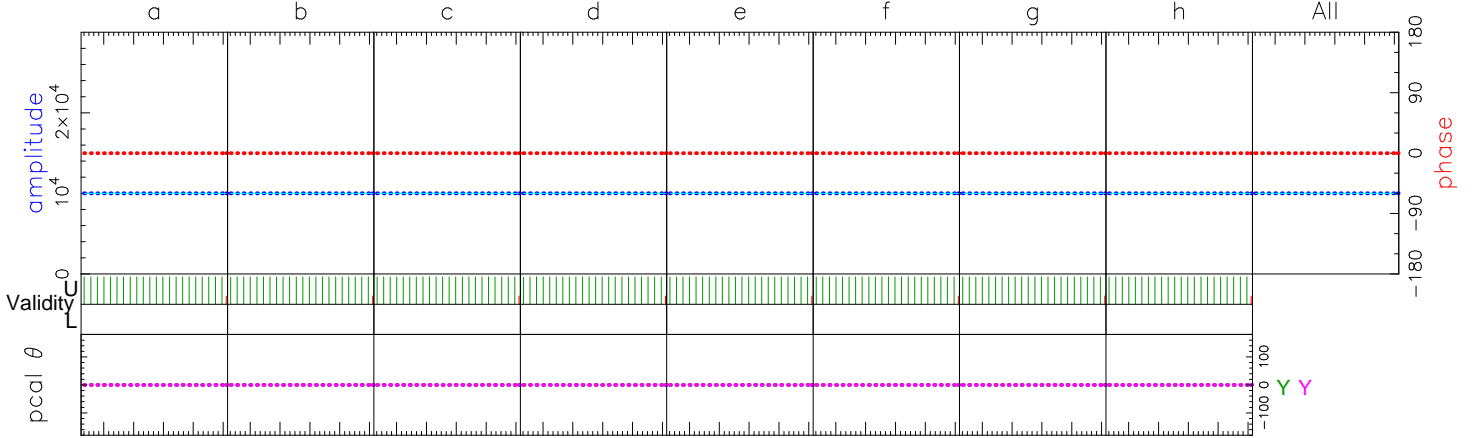


Fringe quality 9

SNR 326625.3
Int time 285.322
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

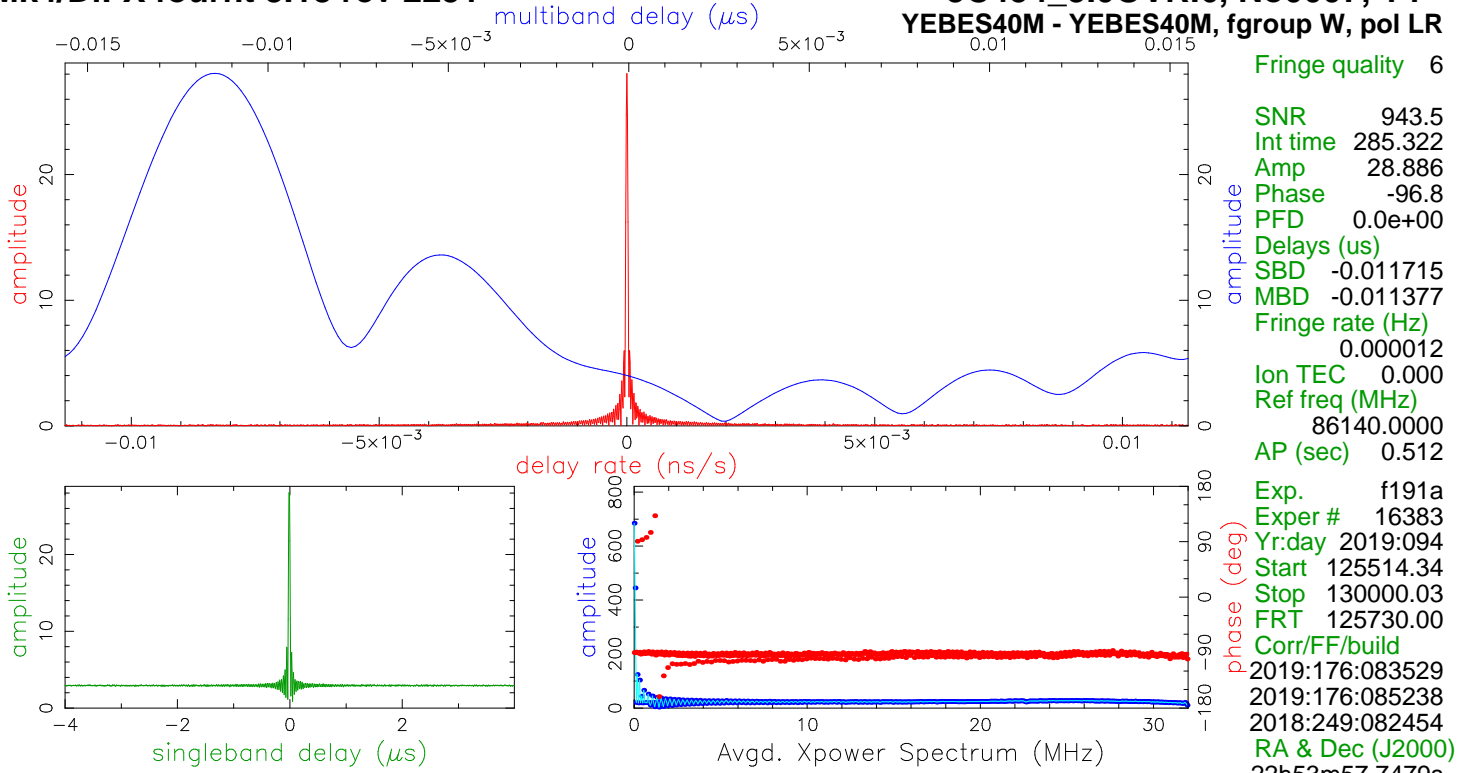
Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085231
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	513.0	Sbd box	513.0
U/L 558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Y 0	0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	0	PC freqs	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
Y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00		Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	6.6E-09		
Sband delay (usec)	0.0000000000E+00		Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	5.3E-08		
Phase delay (usec)	0.0000000000E+00		Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.1E-11		
Delay rate (us/s)	0.0000000000E+00		Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	6.9E-14		
Total phase (deg)	0.0		Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Y: az 246.0 el 48.3 pa 46.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//YY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//YY.W.21.0OVRI6



Fringe quality 6

SNR 943.5

Int time 285.322

Amp 28.886

Phase -96.8

PFD 0.0e+00

Delays (us)

SBD -0.011715

MBD -0.011377

Fringe rate (Hz) 0.000012

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. f191a

Exper # 16383

Yr:day 2019:094

Start 125514.34

Stop 130000.03

FRT 125730.00

Corr/FF/build

2019:176:083529

2019:176:085238

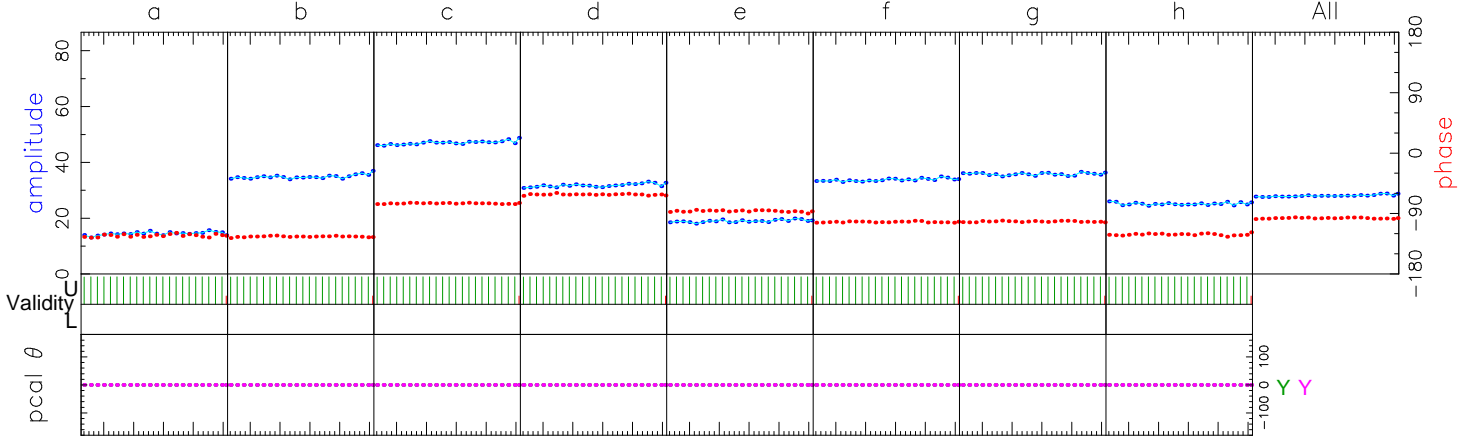
2018:249:082454

RA & Dec (J2000)

22h53m57.7479s

+16°08'53.561"

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-122.8	-124.2	-74.9	-61.6	-86.4	-102.5	-101.8	-121.2	Phase	-96.8
	14.5	34.8	47.0	31.8	19.0	33.7	35.8	25.2	Ampl.	30.2
	512.3	512.3	511.8	511.2	511.4	511.4	511.8	511.2	Sbd box	511.5
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.13774375000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.13774E-02	+/- 2.3E-06
Sband delay (usec)	-1.17150000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.17150E-02	+/- 1.8E-05
Phase delay (usec)	-3.12169298549E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.12169E-06	+/- 3.9E-09
Delay rate (us/s)	1.42420081536E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.42420E-10	+/- 2.4E-11
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-96.8	+/- 0.1

ph/seg (deg) 0.7 0.3 Theor. Amplitude 28.886 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

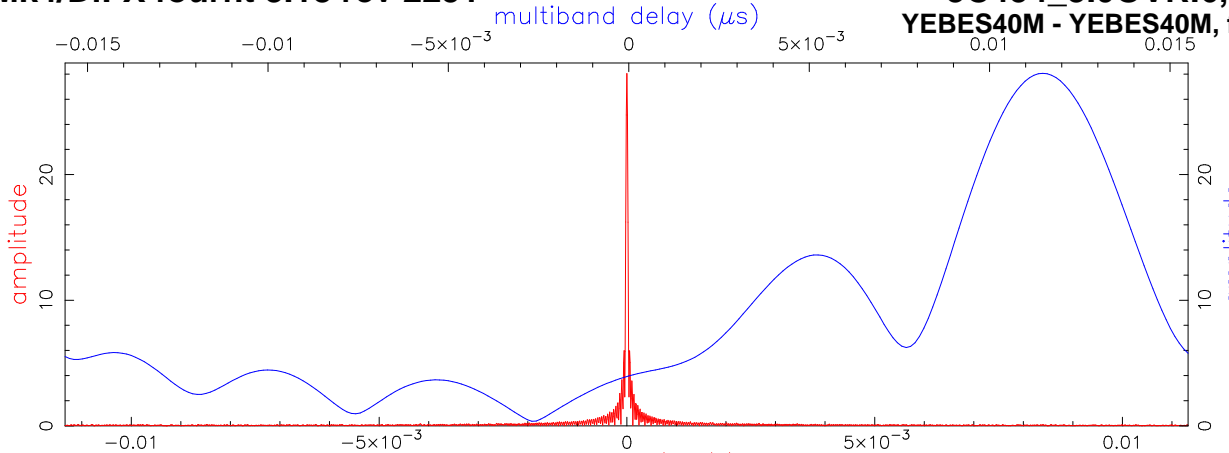
amp/seg (%) 3.1 0.5 Search (2048X32) 27.913 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000

ph/frq (deg) 25.5 0.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 33.8 0.3 Inc. seg. avg. 28.042 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011

Y: az 246.0 el 48.3 pa 46.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

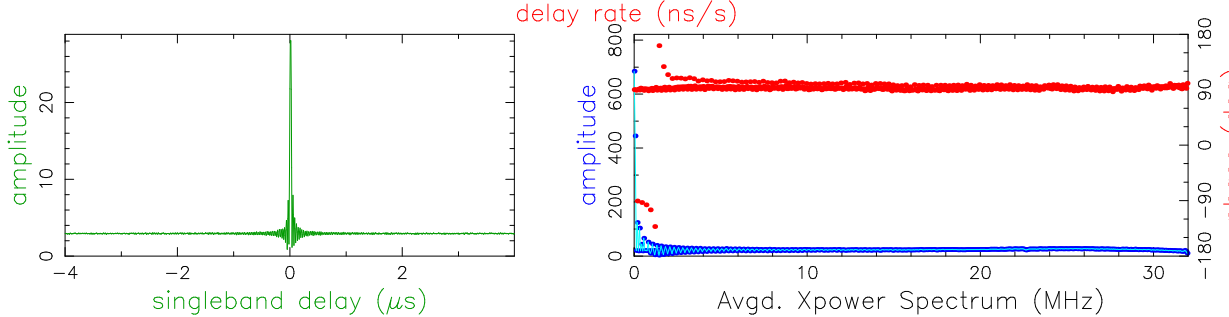
Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//YY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//YY.W.41.0OVRI6



Fringe quality 6

SNR 943.5
 Int time 285.322
 Amp 28.886
 Phase 96.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.011715
 MBD 0.011377
 Fringe rate (Hz)
 -0.000012
 Ion TEC 0.000
 Ref freq (MHz)
 86140.000
 AP (sec) 0.512

Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085245
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"

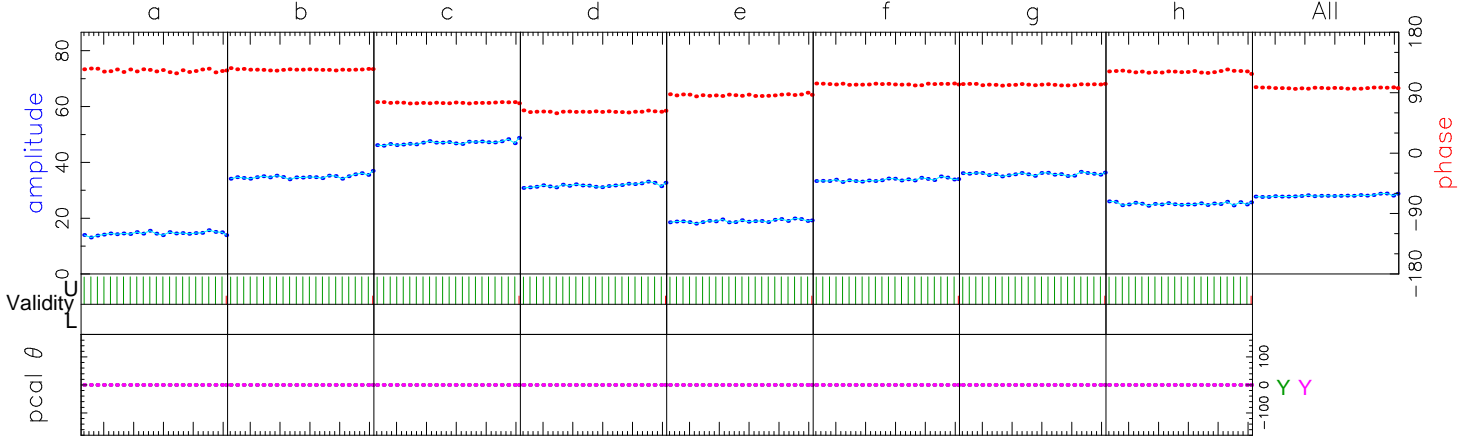


Avgd. Xpower Spectrum (MHz)

amplitude

phase (deg)

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

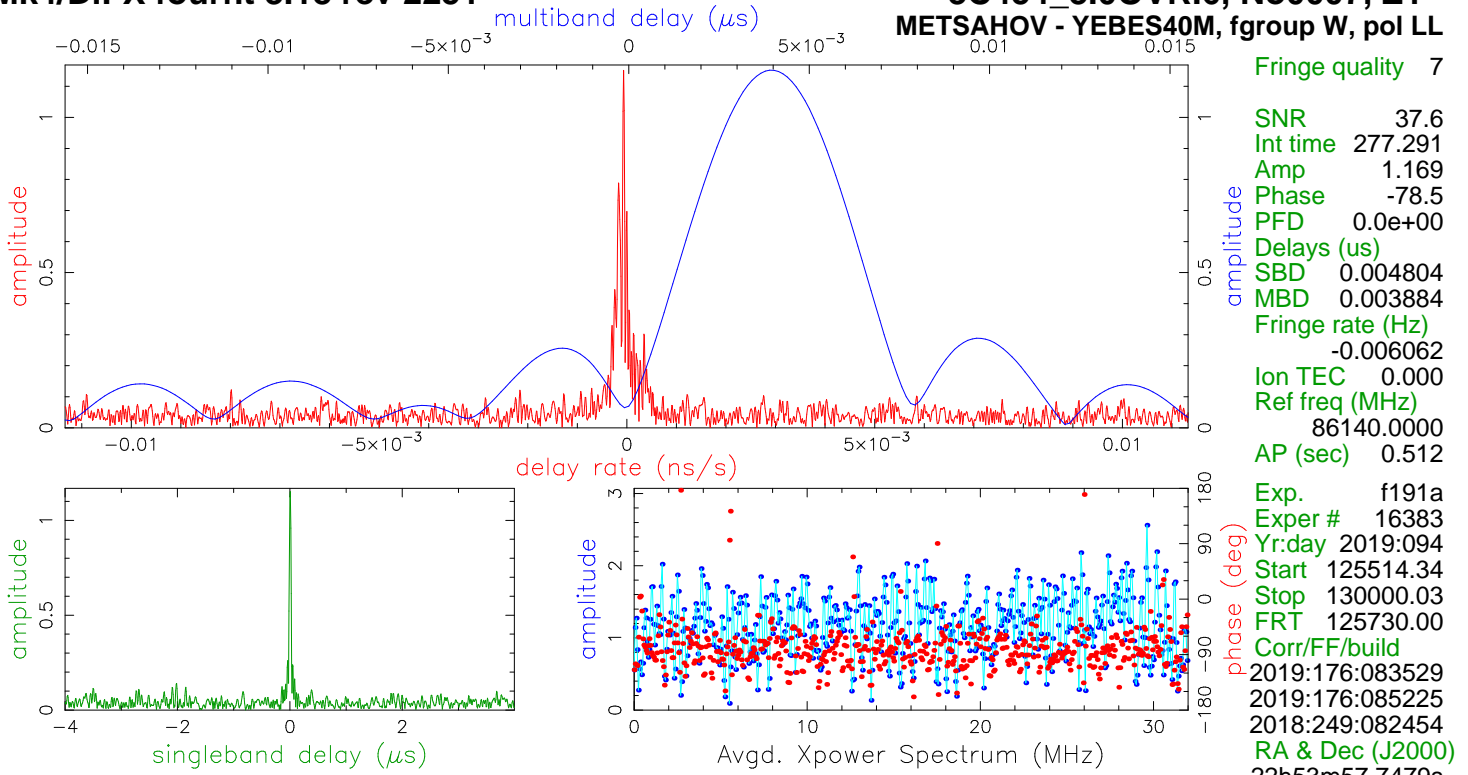


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	122.8	124.2	74.9	61.6	86.4	102.5	101.8	121.2	Phase	96.8
	14.5	34.8	47.0	31.8	19.0	33.7	35.8	25.2	Ampl.	30.2
	513.7	513.7	514.2	514.8	514.6	514.6	514.2	514.8	Sbd box	514.5
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

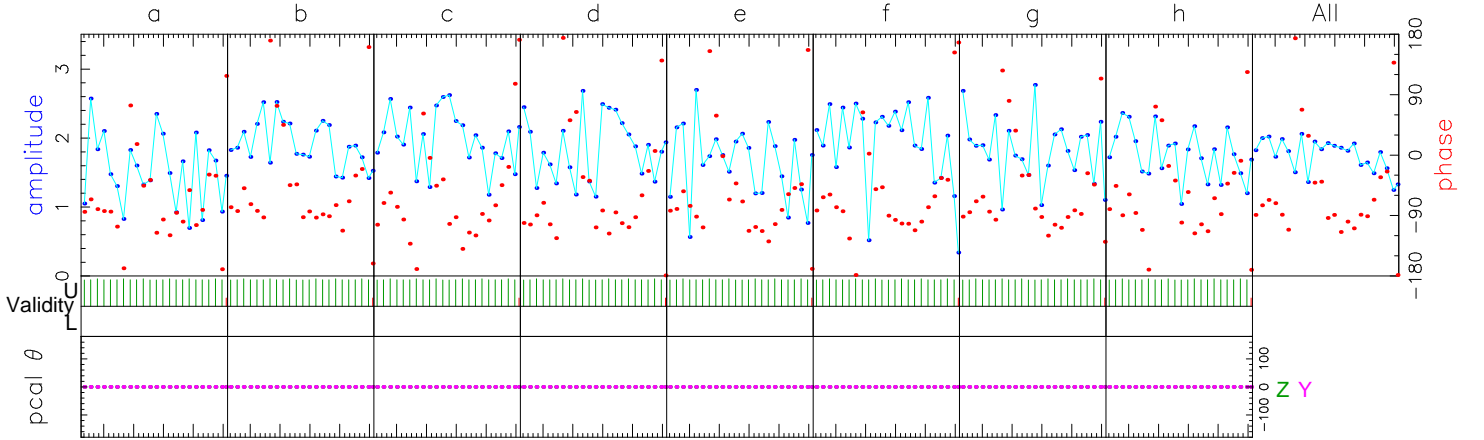
Group delay (usec)(sbd) 1.13774375000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.13774E-02 +/- 2.3E-06
 Sband delay (usec) 1.17150000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.17150E-02 +/- 1.8E-05
 Phase delay (usec) 3.12169298560E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.12169E-06 +/- 3.9E-09
 Delay rate (us/s) -1.42420081536E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -1.42420E-10 +/- 2.4E-11
 Total phase (deg) 96.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 96.8 +/- 0.1

RMS Theor. Amplitude 28.886 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.7 0.3 Search (2048X32) 27.913 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 amp/seg (%) 3.1 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 25.5 0.2 Inc. seg. avg. 28.042 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.8 0.3 Inc. frq. avg. 30.222 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

Y: az 246.0 el 48.3 pa 46.5 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//YY..0OVRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//YY.W.60.0OVRI6



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-78.6	-72.4	-82.7	-87.6	-81.3	-81.4	-76.3	-66.3	Phase	-78.5
	1.0	1.2	1.3	1.1	1.1	1.4	1.1	1.0	Ampl.	1.2
	513.0	513.7	513.4	513.6	513.5	513.6	513.8	513.8	Sbd box	513.6
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.72549471886E+03		Apriori delay (usec)	-6.72549860299E+03		Resid mbdelay (usec)	3.88413E-03	+/-	5.8E-05	
Sband delay (usec)	-6.72549379849E+03		Apriori clock (usec)	-6.8747673E+00		Resid sbdelay (usec)	4.80450E-03	+/-	4.6E-04	
Phase delay (usec)	-6.72549860552E+03		Apriori clockrate (us/s)	3.5699999E-07		Resid phdelay (usec)	-2.53231E-06	+/-	9.8E-08	
Delay rate (us/s)	4.49835472215E-02		Apriori rate (us/s)	4.49836175961E-02		Resid rate (us/s)	-7.03747E-08	+/-	6.0E-10	
Total phase (deg)		-316.7	Apriori accel (us/s/s)	4.26216030664E-05		Resid phase (deg)	-78.5	+/-	3.0	

ph/seg (deg) 60.2 7.3 Theor. Amplitude 1.169 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

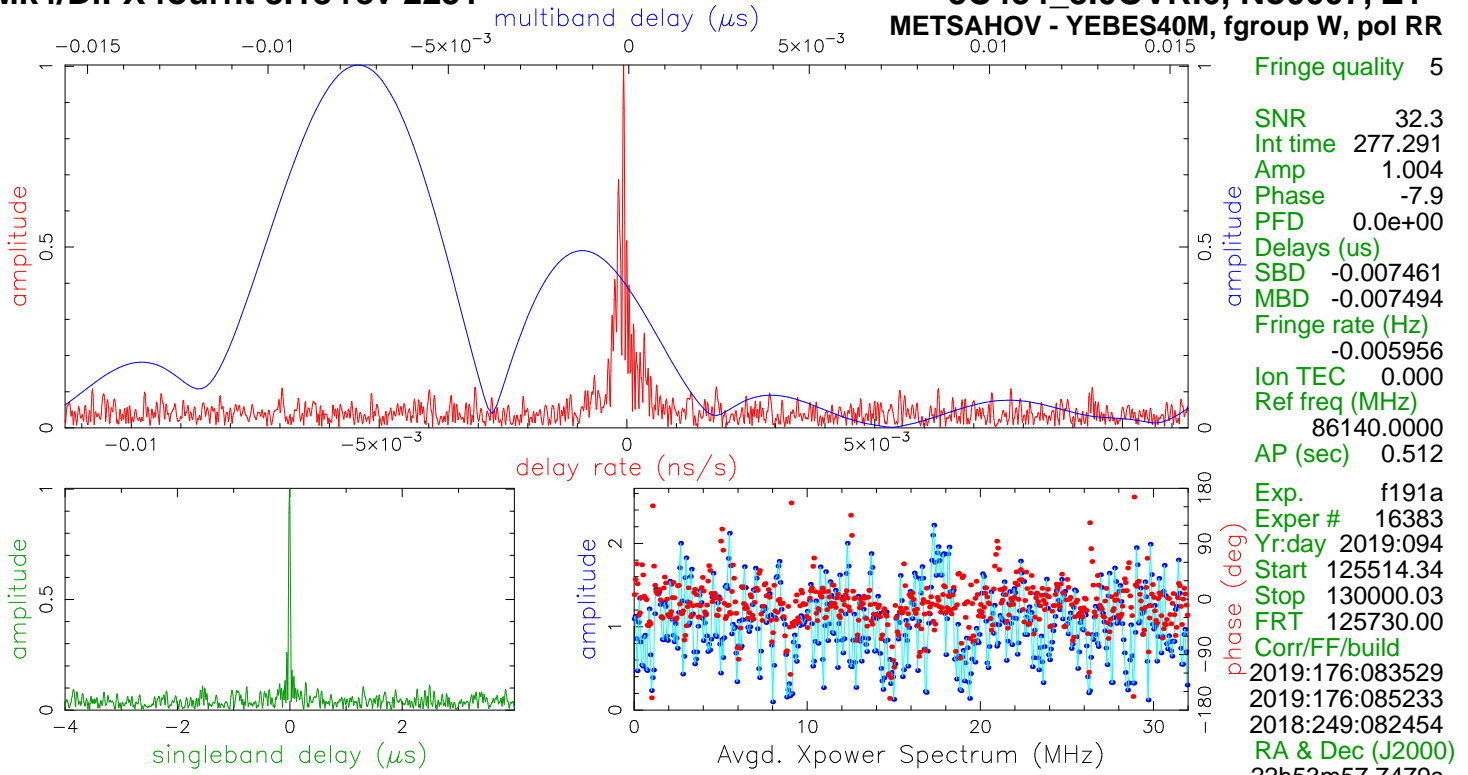
amp/seg (%) 54.0 12.7 Search (2048X32) 1.135 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000

ph/frq (deg) 7.2 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

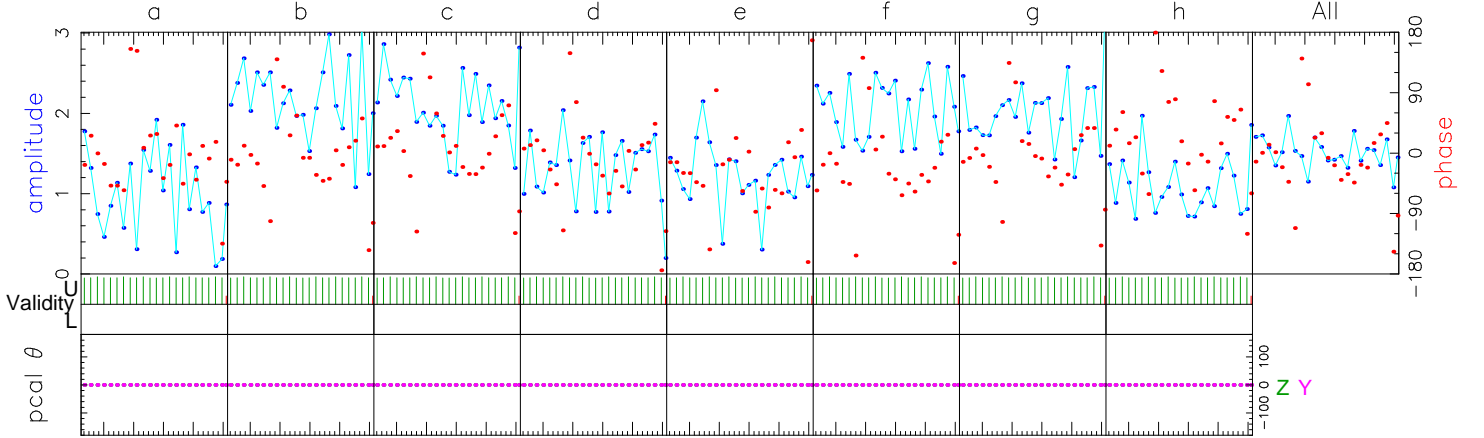
amp/frq (%) 9.9 7.5 Inc. seg. avg. 1.746 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011

Z: az 257.8 el 25.5 pa 30.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -213.535 2835.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//ZY..00VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//ZY.W.13.00VRI6

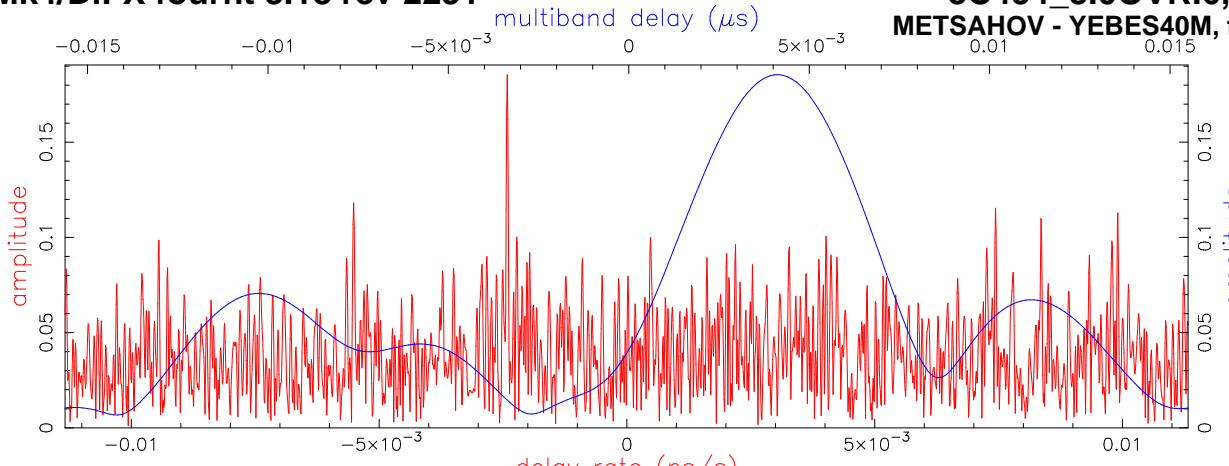


Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	-10.7	-5.8	7.8	-8.8	-32.4	-26.3	-6.9	23.4	Phase	-7.9
	0.7	1.4	1.3	0.9	0.7	1.3	1.3	0.6	Ampl.	1.0
	512.7	512.3	512.3	511.7	511.6	512.1	512.5	512.4	Sbd box	512.0
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.72550609723E+03		Apriori delay (usec)	-6.72549860299E+03	Resid mbdelay (usec)	-7.49424E-03	+/-	6.7E-05		
Sband delay (usec)	-6.72550606349E+03		Apriori clock (usec)	-6.8747673E+00	Resid sbdelay (usec)	-7.46050E-03	+/-	5.3E-04		
Phase delay (usec)	-6.72549860325E+03		Apriori clockrate (us/s)	3.5699999E-07	Resid phdelay (usec)	-2.56299E-07	+/-	1.1E-07		
Delay rate (us/s)	4.49835484515E-02		Apriori rate (us/s)	4.49836175961E-02	Resid rate (us/s)	-6.91446E-08	+/-	6.9E-10		
Total phase (deg)		-246.1	Apriori accel (us/s/s)	4.26216030664E-05	Resid phase (deg)	-7.9	+/-	3.5		

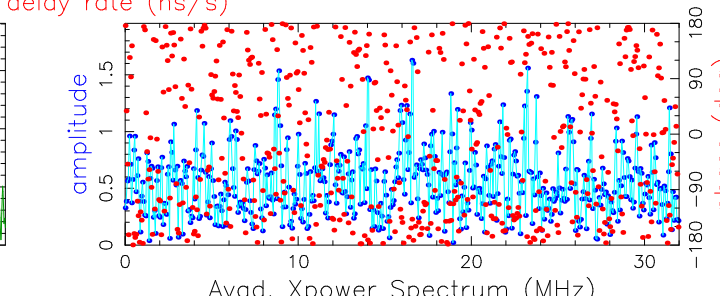
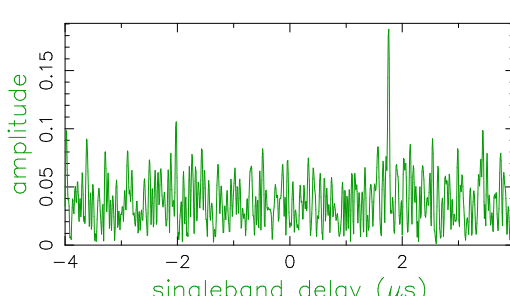
ph/seg (deg) 59.4 8.5 Theor. Amplitude 1.004 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.5 14.8 Search (2048X32) 0.986 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 19.1 5.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.0 8.8 Inc. seg. avg. 1.497 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 257.8 el 25.5 pa 30.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -213.535 2835.037 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007//ZY..00VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007//ZY.W.35.00VRI6



Fringe quality 0

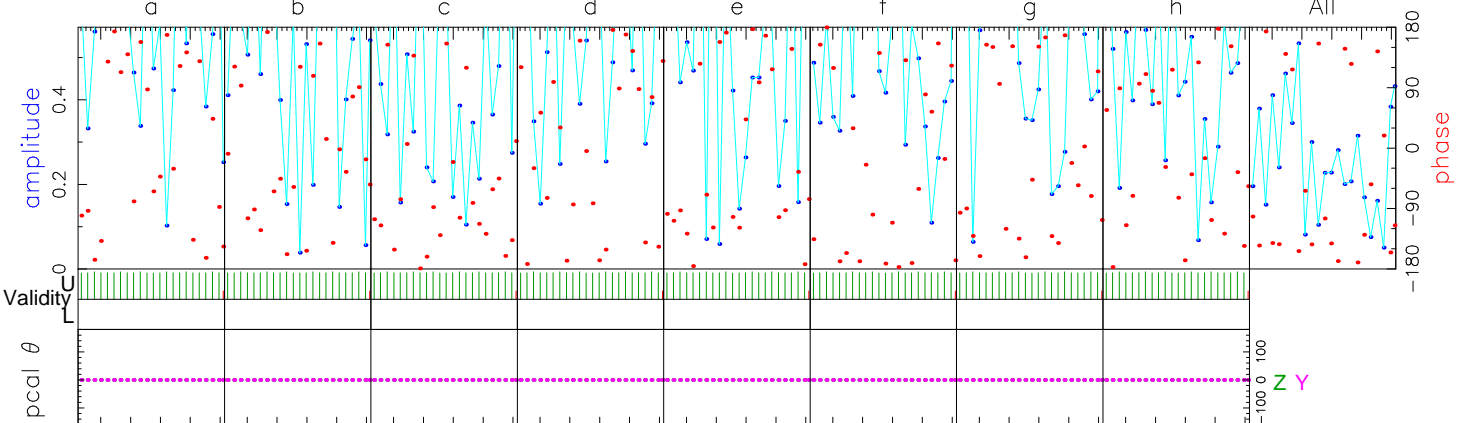
SNR 6.0
Int time 277.291
Amp 0.191
Phase -163.4
PFD 5.9e-01
Delays (us)
SBD 1.755414
MBD 0.004083
Fringe rate (Hz)
-0.208121
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512

Exp. f191a
Exper # 16383
Yr:day 2019:094
Start 125514.34
Stop 130000.03
FRT 125730.00
Corr/FF/build
2019:176:083529
2019:176:085240
2018:249:082454
RA & Dec (J2000)
22h53m57.7479s
+16°08'53.561"



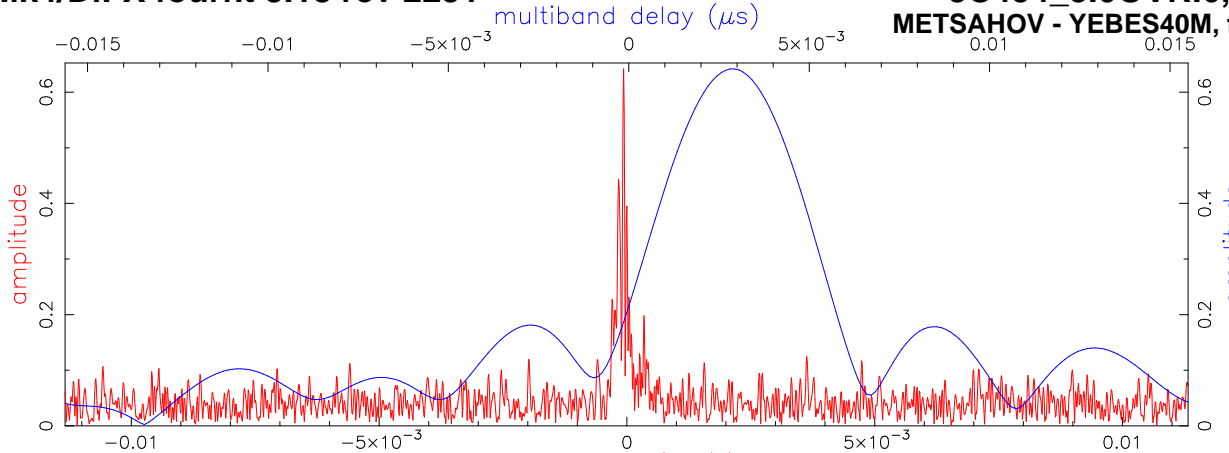
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

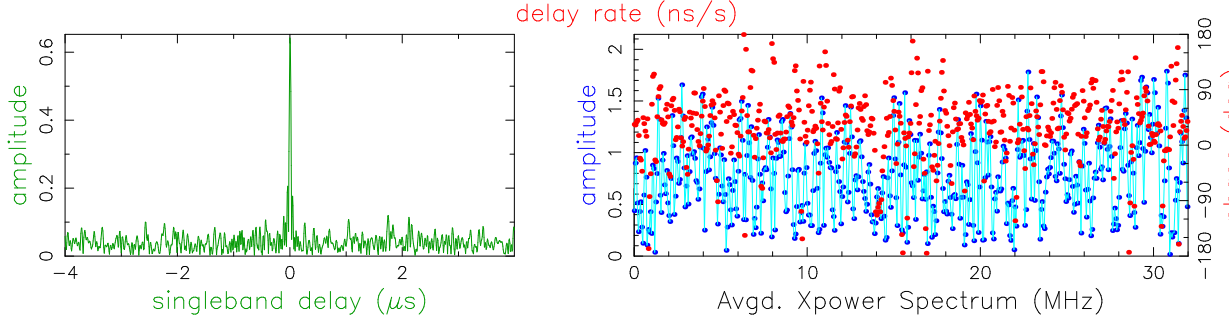


	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	176.1	-141.5	-135.3	159.9	-160.4	-163.0	-143.2	134.3	Phase	-163.4
	0.2	0.1	0.3	0.2	0.3	0.3	0.2	0.1	Ampl.	0.2
	837.2	544.6	836.7	584.4	736.9	244.0	980.6	631.3	Sbd box	737.7
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.72374452005E+03		Apriori delay (usec)		-6.72549860299E+03		Resid mbdelay (usec)		4.08294E-03	+/- 3.6E-04
Sband delay (usec)	-6.72374318849E+03		Apriori clock (usec)		-6.8747673E+00		Resid sbdelay (usec)		1.75541E+00	+/- 2.9E-03
Phase delay (usec)	-6.72549860826E+03		Apriori clockrate (us/s)		3.5699999E-07		Resid phdelay (usec)		-5.26859E-06	+/- 6.1E-07
Delay rate (us/s)	4.49812015145E-02		Apriori rate (us/s)		4.49836175961E-02		Resid rate (us/s)		-2.41608E-06	+/- 3.7E-09
Total phase (deg)			Apriori accel (us/s/s)		4.26216030664E-05		Resid phase (deg)		-163.4	+/- 19.0

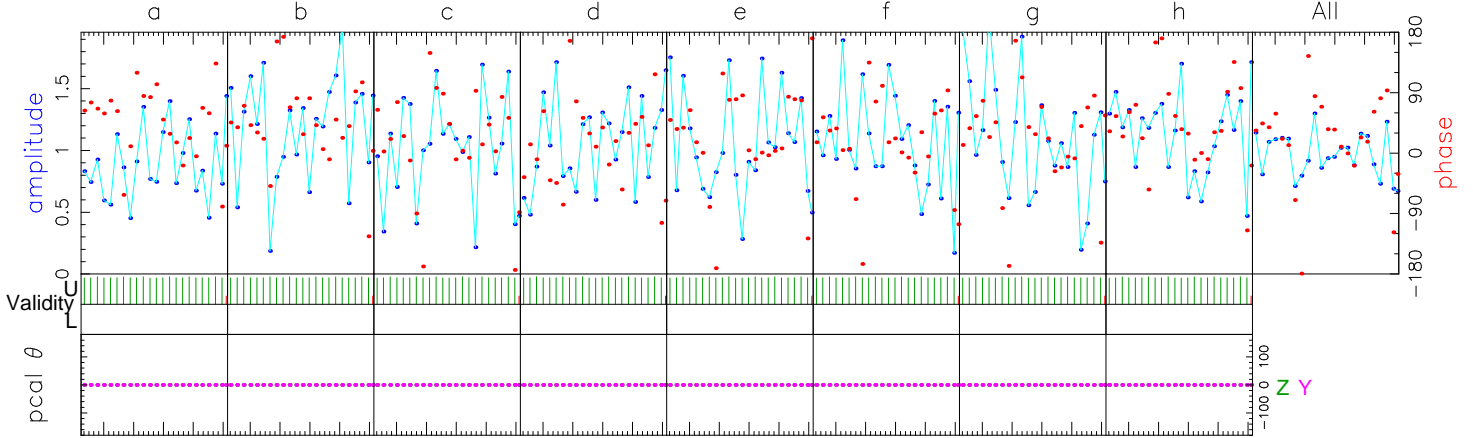
ph/seg (deg) 62.7 45.6 Theor. Amplitude 0.191 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.8 79.6 Search (2048X32) 0.180 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -4.000 4.000
 ph/frq (deg) 35.0 26.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 44.8 47.0 Inc. seg. avg. 0.195 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 512 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 257.8 el 25.5 pa 30.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -213.535 2835.037 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007/ZY..00VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007/ZY.W.53.00VRI6



Fringe quality 9
 SNR 21.0
 Int time 277.291
 Amp 0.653
 Phase 39.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.003050
 MBD 0.002940
 Fringe rate (Hz)
 -0.006029
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. f191a
 Exper # 16383
 Yr:day 2019:094
 Start 125514.34
 Stop 130000.03
 FRT 125730.00
 Corr/FF/build
 2019:176:083529
 2019:176:085248
 2018:249:082454
 RA & Dec (J2000)
 22h53m57.7479s
 +16°08'53.561"



Amp. and Phase vs. time for each freq., 23 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



	86012.00	86044.00	86076.00	86108.00	86140.00	86172.00	86204.00	86236.00	Freq (MHz)	All
	52.4	48.0	40.6	10.5	41.2	30.0	38.7	51.3	Phase	39.8
	0.6	0.8	0.6	0.6	0.7	0.6	0.6	0.7	Ampl.	0.7
	514.4	512.9	513.5	513.7	512.8	514.0	513.6	513.2	Sbd box	513.4
U/L	558/0	558/0	558/0	558/0	558/0	558/0	558/0	558/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.72549566330E+03	Apriori delay (usec)	-6.72549860299E+03	Resid mbdelay (usec)	2.93969E-03	+/-	1.0E-04
Sband delay (usec)	-6.72549555349E+03	Apriori clock (usec)	-6.8747673E+00	Resid sbdelay (usec)	3.04950E-03	+/-	8.2E-04
Phase delay (usec)	-6.72549860171E+03	Apriori clockrate (us/s)	3.5699999E-07	Resid phdelay (usec)	1.28262E-06	+/-	1.8E-07
Delay rate (us/s)	4.49835476041E-02	Apriori rate (us/s)	4.49836175961E-02	Resid rate (us/s)	-6.99920E-08	+/-	1.1E-09
Total phase (deg)	-198.4	Apriori accel (us/s/s)	4.26216030664E-05	Resid phase (deg)	39.8	+/-	5.5

ph/seg (deg)	61.8	Theor.	13.1	Amplitude	0.653 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	55.8	Search (2048X32)	0.634	Apriori clock (usec)	0.634	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-4.000 4.000
ph/frq (deg)	14.8	Interp.	0.000	Apriori clockrate (us/s)	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	11.5	Inc. seg. avg.	0.950	Apriori rate (us/s)	4.49836175961E-02	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
		Inc. frq. avg.	0.651	Apriori accel (us/s/s)	4.26216030664E-05	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	512	ion window (TEC)	0.00 0.00

Z: az 257.8 el 25.5 pa 30.4 Y: az 246.0 el 48.3 pa 46.5 u,v (fr/asec) -213.535 2835.037 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps2/f191a/FRINGE/5555/No0007/ZY..00VRI6 Output file: /Exps2/f191a/FRINGE/5555/No0007/ZY.W.70.00VRI6