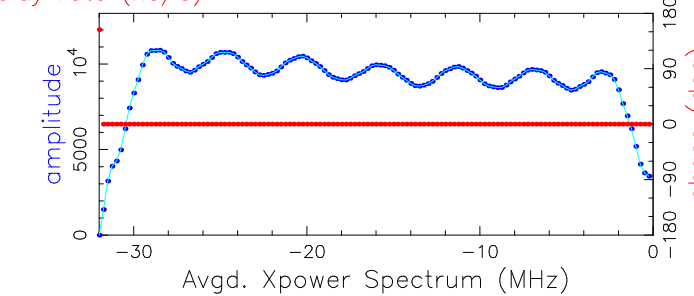
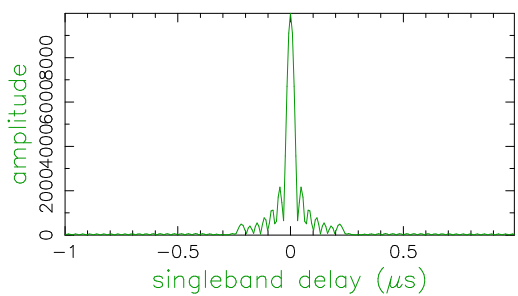
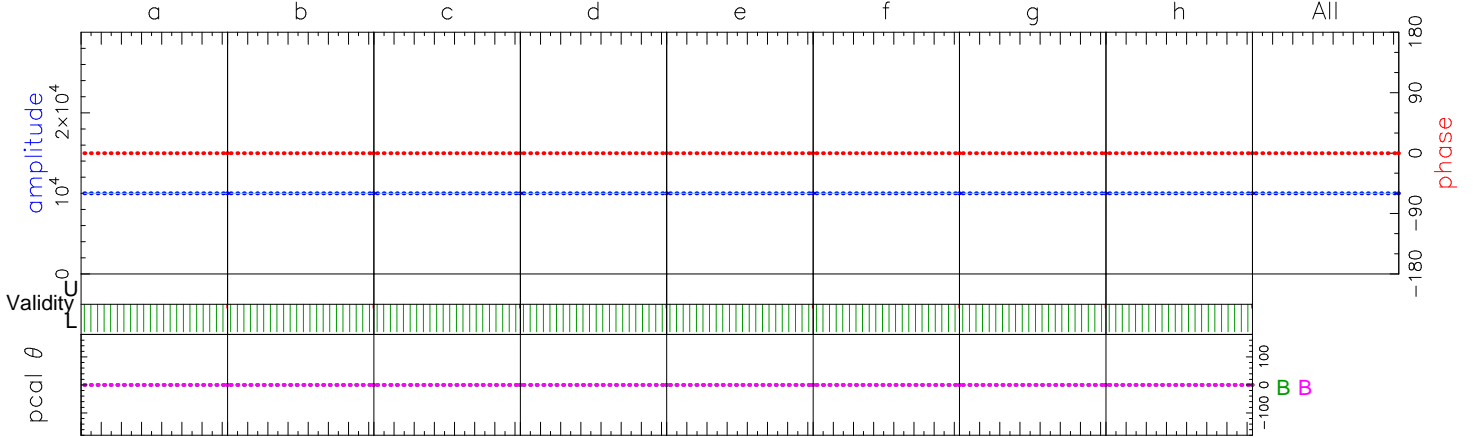


Fringe quality 9
 SNR 395962.0
 Int time 419.316
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105538
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



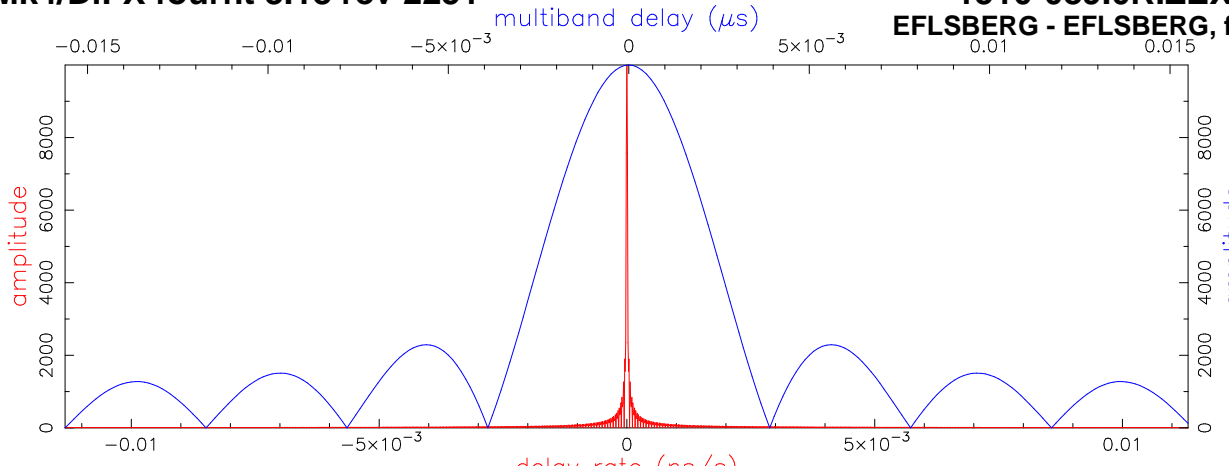
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	10000.0	0.0
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	10000.0	10000.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.0	129.0
B	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	0.0	0.0

	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00		
Group delay (usec)(sbd)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0000000000E+00	+/- 5.5E-09
Sband delay (usec)	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	0.0000000000E+00	+/- 4.4E-08
Phase delay (usec)	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	0.0000000000E+00	+/- 9.3E-12
Delay rate (us/s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0000000000E+00	+/- 3.9E-14
Total phase (deg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	+/- 0.0

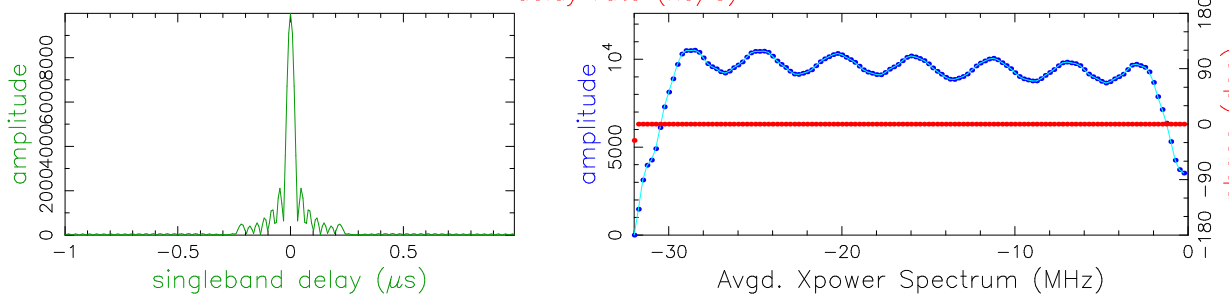
	RMS	Theor.	Amplitude	9999.999 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	0.0	0.0	Search (2048X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.999	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			



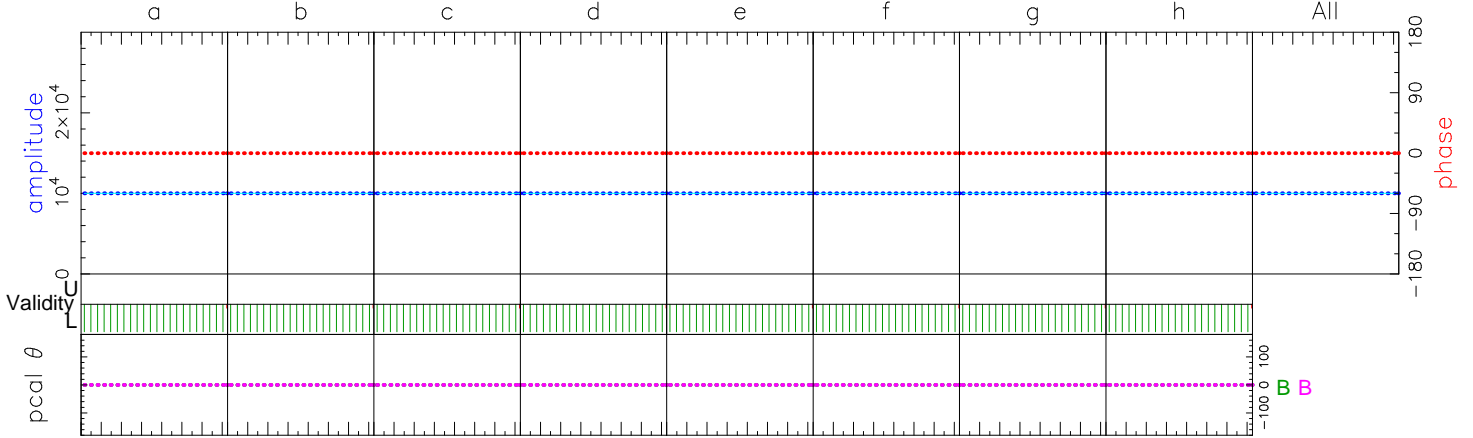
Fringe quality 9

SNR 395962.0
 Int time 419.316
 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. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105540
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



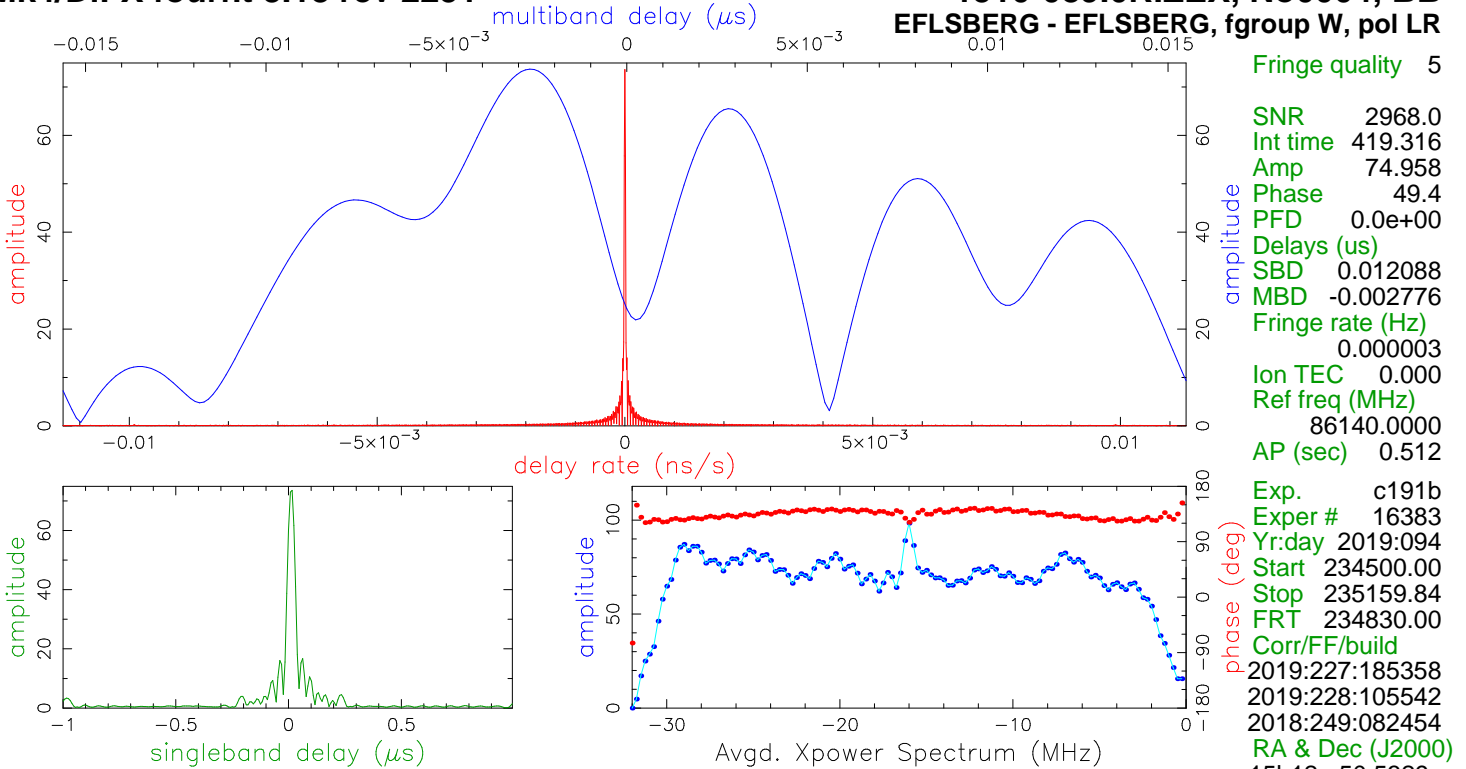
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



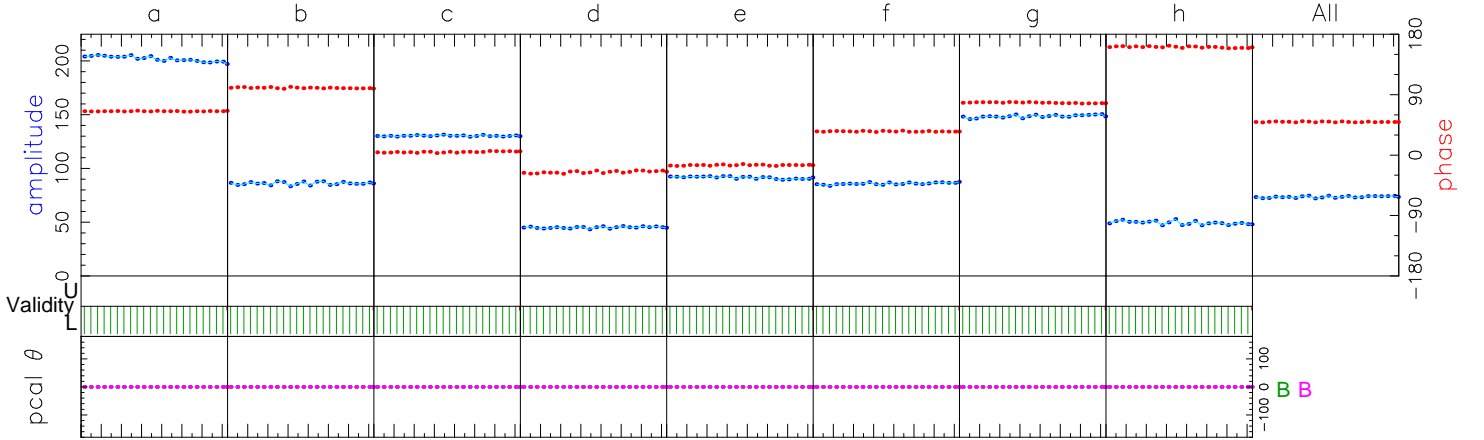
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	10000.0	0.0
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	10000.0	10000.0
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	129.0	129.0
B	1000	1000	1000	1000	1000	1000	1000	1000	0/820	0/820
B	1000	1000	1000	1000	1000	1000	1000	1000	0/820	0/820
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	0/820	0/820
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	0/820	0/820

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 5.5E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 4.4E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 9.3E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.9E-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 RMS Theor. Amplitude 9999.999 +/- 0.025 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) -1.000 1.000
 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: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 0.0 0.0 Inc. frq. avg. 9999.999 ion window (TEC) 0.00 0.00



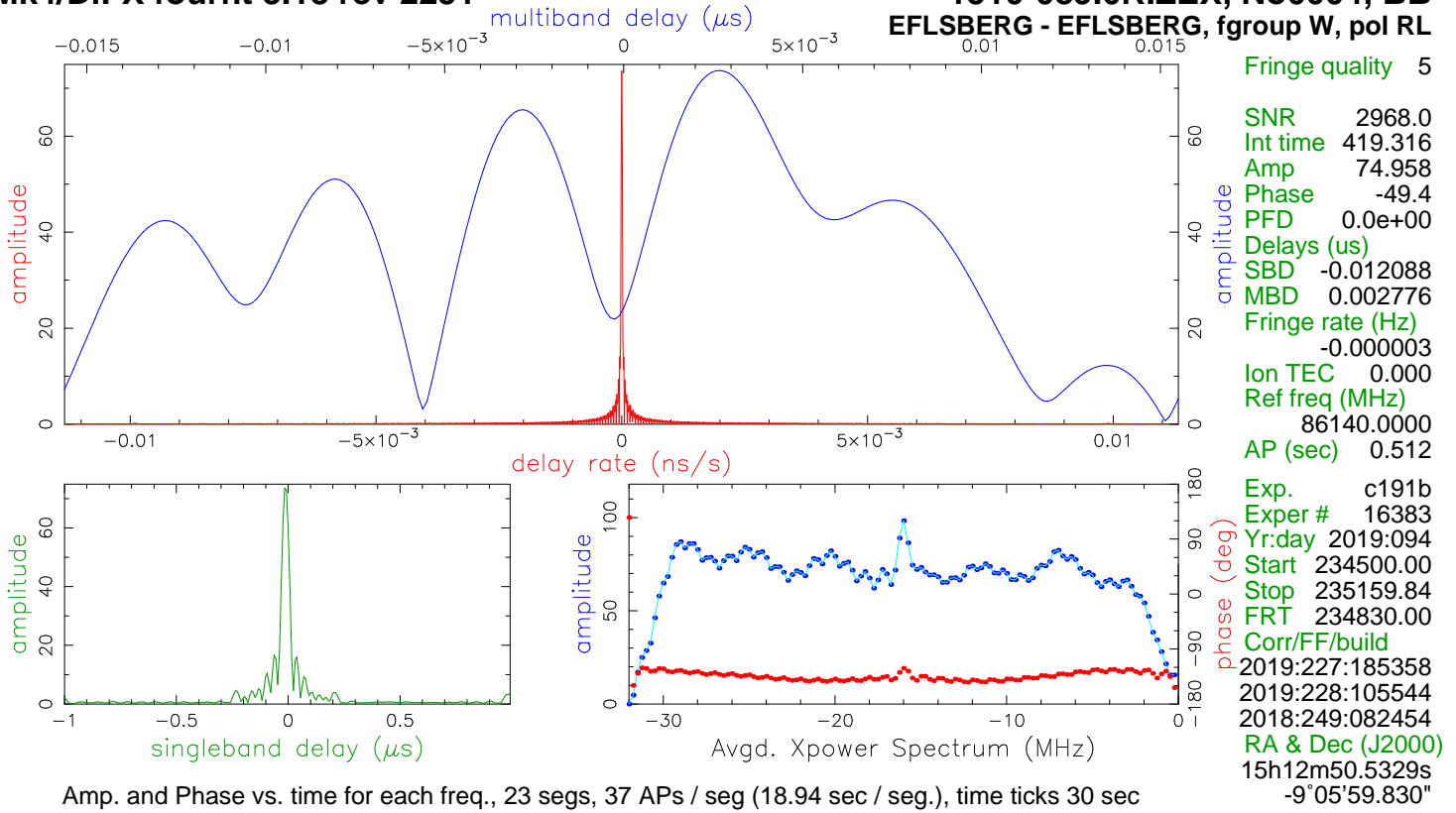
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



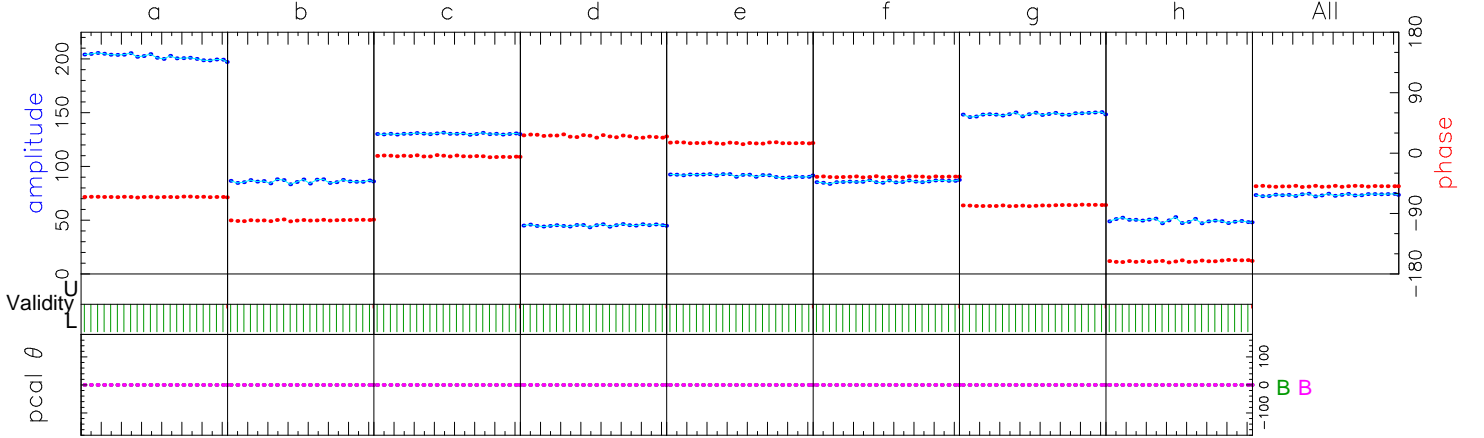
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
65.3	100.1	4.6	-25.2	-14.9	35.3	78.0	160.8	Phase	49.4
202.1	86.1	130.4	45.2	91.6	85.9	148.6	49.6	Ampl.	104.9
131.3	131.6	130.2	135.0	129.6	131.9	130.8	133.1	Sbd box	130.5
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	Chan ids	
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Chan ids	
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	Tracks	

Group delay (usec)(sbd)	-2.77581250000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-2.77581E-03	+/-	7.3E-07
Sband delay (usec)	1.20885000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.20885E-02	+/-	5.8E-06
Phase delay (usec)	1.59347750578E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	1.59348E-06	+/-	1.2E-09
Delay rate (us/s)	3.33022081205E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	3.33022E-11	+/-	5.1E-12
Total phase (deg)	49.4	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	49.4	+/-	0.0

ph/seg (deg)	0.5	Theor.	0.1	Amplitude	74.958 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	2.1		0.2	Search (2048X32)	73.163	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	68.3		0.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	77.1		0.1	Inc. seg. avg.	73.611	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
				Inc. frq. avg.	104.928	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00

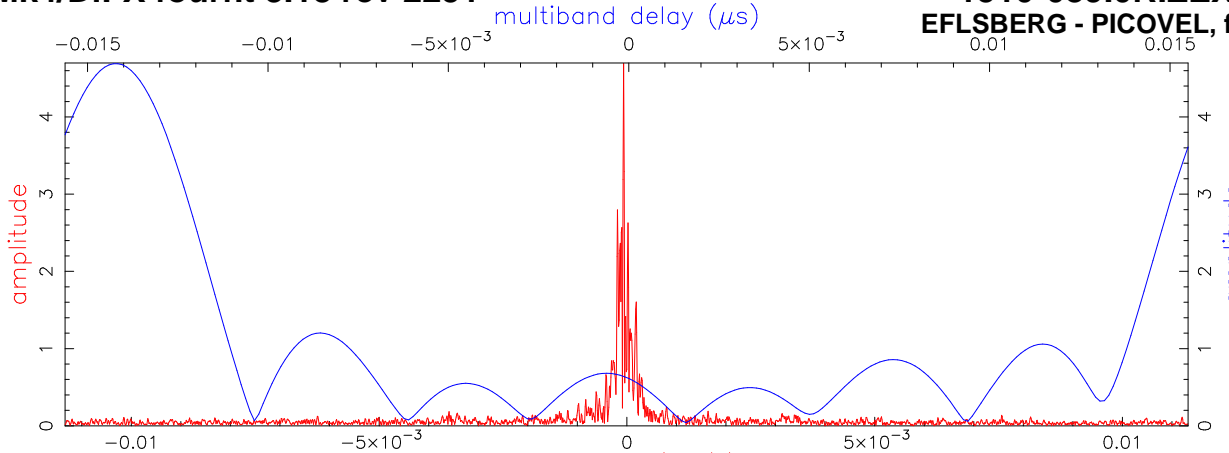


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

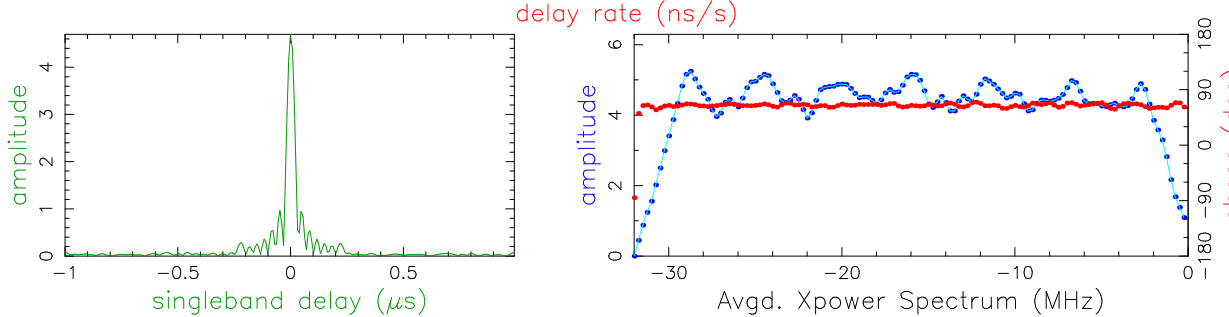


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-65.3	-100.1	-4.6	25.2	14.9	-35.3	-78.0	-160.8	Phase	-49.4
202.1	86.1	130.4	45.2	91.6	85.9	148.6	49.6	Ampl.	104.9
126.7	126.4	127.8	123.0	128.4	126.1	127.2	124.9	Sbd box	127.5
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:B 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:B 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	
B 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
B W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.77581250000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.77581E-03	+/-	7.3E-07		
Sband delay (usec)	-1.20885000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.20885E-02	+/-	5.8E-06		
Phase delay (usec)	-1.59347750577E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.59348E-06	+/-	1.2E-09		
Delay rate (us/s)	-3.33022081205E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.33022E-11	+/-	5.1E-12		
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-49.4	+/-	0.0		

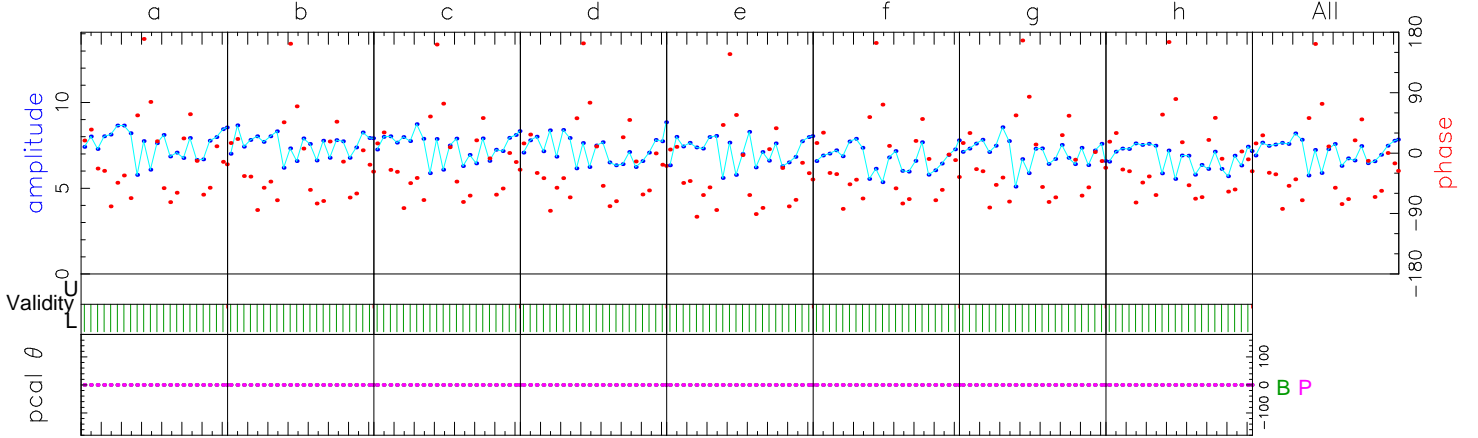
ph/seg (deg) 0.5 0.1 Theor. Amplitude 74.958 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 2.1 0.2 Search (2048X32) 73.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 68.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 77.1 0.1 Inc. seg. avg. 73.611 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 144.4 el 23.9 pa -22.0 B: az 144.4 el 23.9 pa -22.0 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BB..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BB.W.46.0RIZEX



Fringe quality 5
 SNR 185.7
 Int time 417.841
 Amp 4.699
 Phase -23.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001023
 MBD -0.014221
 Fringe rate (Hz)
 -0.005705
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

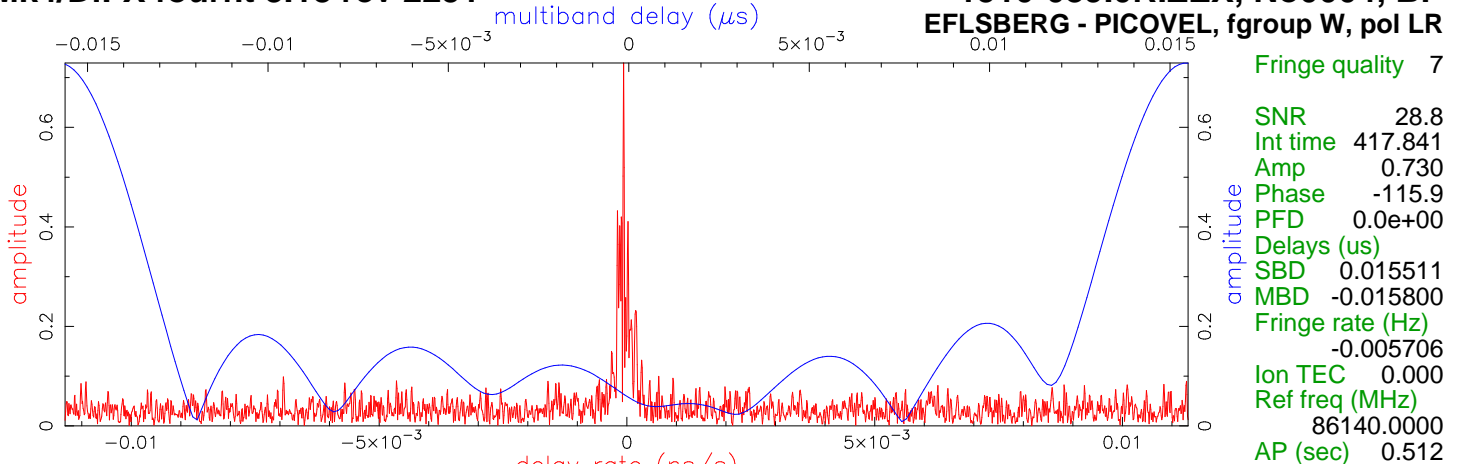


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-19.0	-24.7	-20.1	-23.1	-36.1	-22.0	-20.8	-18.5	Phase	-23.0
	4.9	5.0	4.9	4.7	4.7	4.4	4.6	4.5	Ampl.	4.7
	128.9	129.1	129.2	129.2	129.1	129.4	129.0	129.1	Sbd box	129.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.66514922443E+03		Apriori delay (usec)		-1.66513500312E+03		Resid mbdelay (usec)		-1.42213E-02	+/- 1.2E-05
Sband delay (usec)	-1.66513397962E+03		Apriori clock (usec)		2.0034914E+01		Resid sbdelay (usec)		1.02350E-03	+/- 9.3E-05
Phase delay (usec)	-1.66513500387E+03		Apriori clockrate (us/s)		-2.9999999E-08		Resid phdelay (usec)		-7.42434E-07	+/- 2.0E-08
Delay rate (us/s)	-3.05705303264E-01		Apriori rate (us/s)		-3.05705237036E-01		Resid rate (us/s)		-6.62282E-08	+/- 8.2E-11
Total phase (deg)	-83.9		Apriori accel (us/s/s)		5.92050427063E-06		Resid phase (deg)		-23.0	+/- 0.6

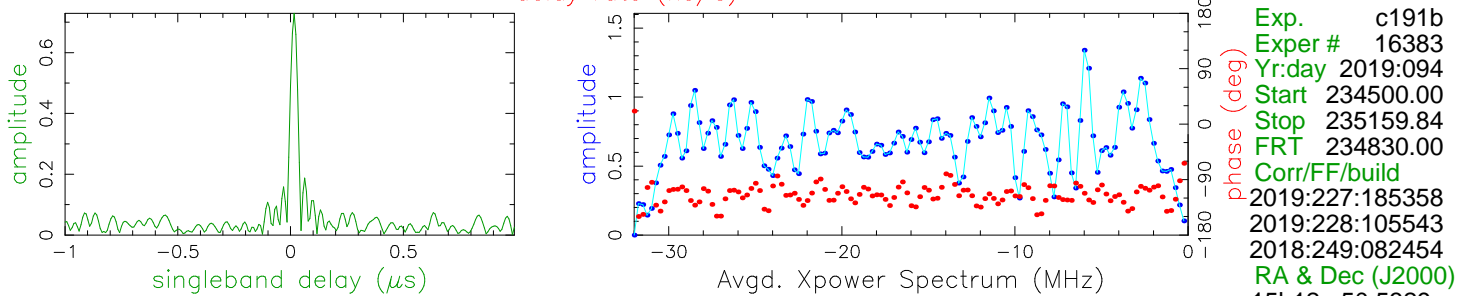
ph/seg (deg) 57.6 1.5 Theor. Amplitude 4.699 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.6 2.6 Search (2048X32) 4.584 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.1 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 4.1 1.5 Inc. seg. avg. 7.133 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 144.4 el 23.9 pa -22.0 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 1784.239 1406.877 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BP.W.20.0RIZEX simultaneous interpolator



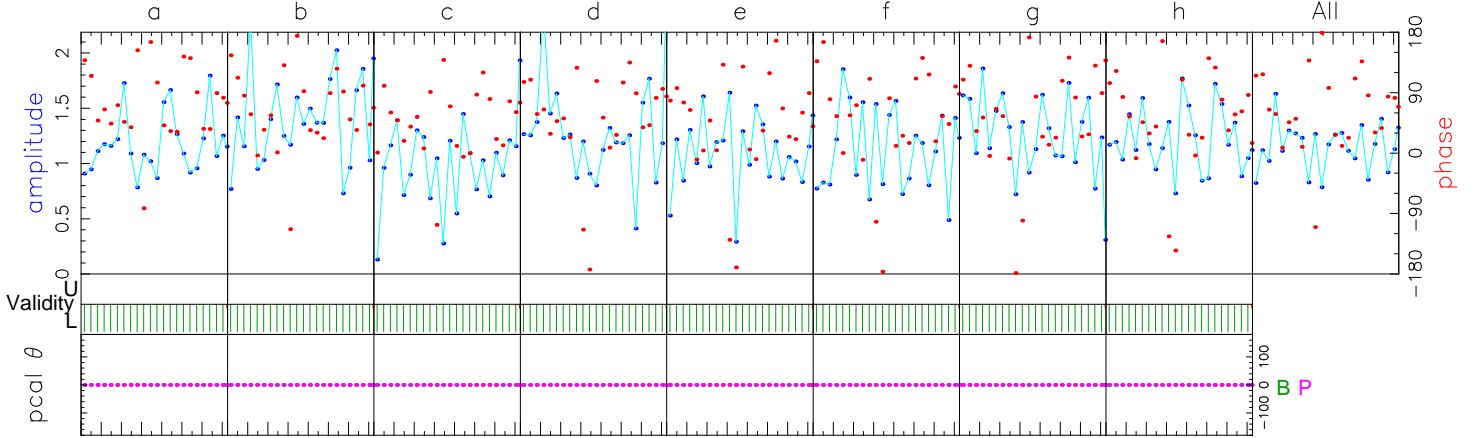
Fringe quality 7

SNR 28.8
 Int time 417.841
 Amp 0.730
 Phase -115.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.015511
 MBD -0.015800
 Fringe rate (Hz)
 -0.005706
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105543
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

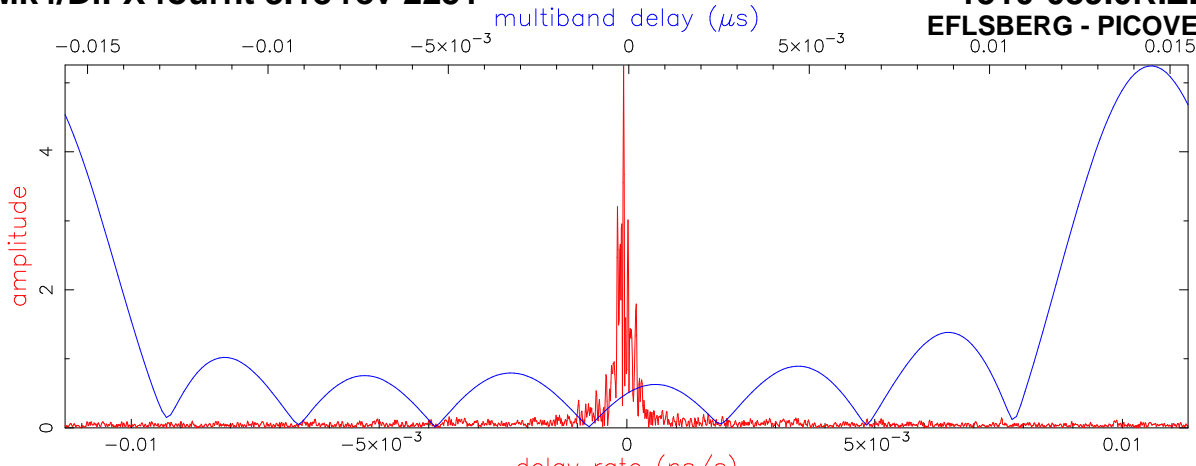


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	Phase	64.1
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	0.7
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	131.0
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.66511955281E+03		Apriori delay (usec)		-1.66513500312E+03		Resid mbdelay (usec)		-1.57997E-02	+/- 7.5E-05
Sband delay (usec)	-1.66511949212E+03		Apriori clock (usec)		2.0034914E+01		Resid sbdelay (usec)		1.55110E-02	+/- 6.0E-04
Phase delay (usec)	-1.66513500106E+03		Apriori clockrate (us/s)		-2.9999999E-08		Resid phdelay (usec)		2.06823E-06	+/- 1.3E-07
Delay rate (us/s)	-3.05705303276E-01		Apriori rate (us/s)		-3.05705237036E-01		Resid rate (us/s)		-6.62402E-08	+/- 5.3E-10
Total phase (deg)	-176.7		Apriori accel (us/s/s)		5.92050427063E-06		Resid phase (deg)		-115.9	+/- 4.0

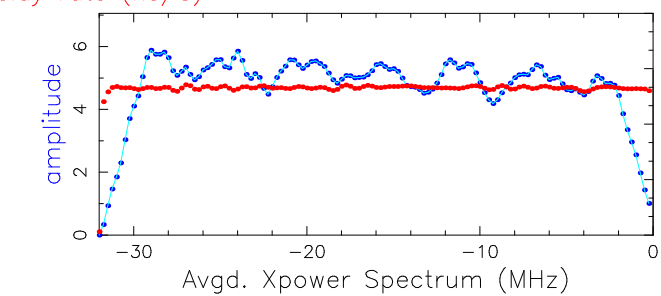
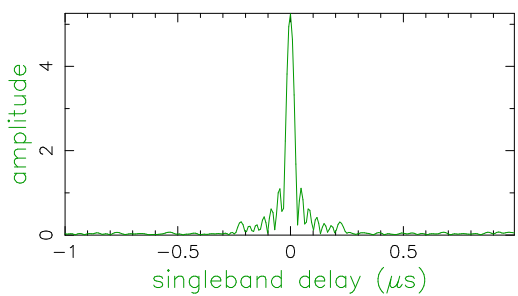
ph/seg (deg) 59.6 9.5 Theor. Amplitude 0.730 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.2 16.6 Search (2048X32) 0.726 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.8 5.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 15.3 9.8 Inc. seg. avg. 1.127 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 144.4 el 23.9 pa -22.0 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 1784.239 1406.877 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BP.W.35.0RIZEX simultaneous interpolator



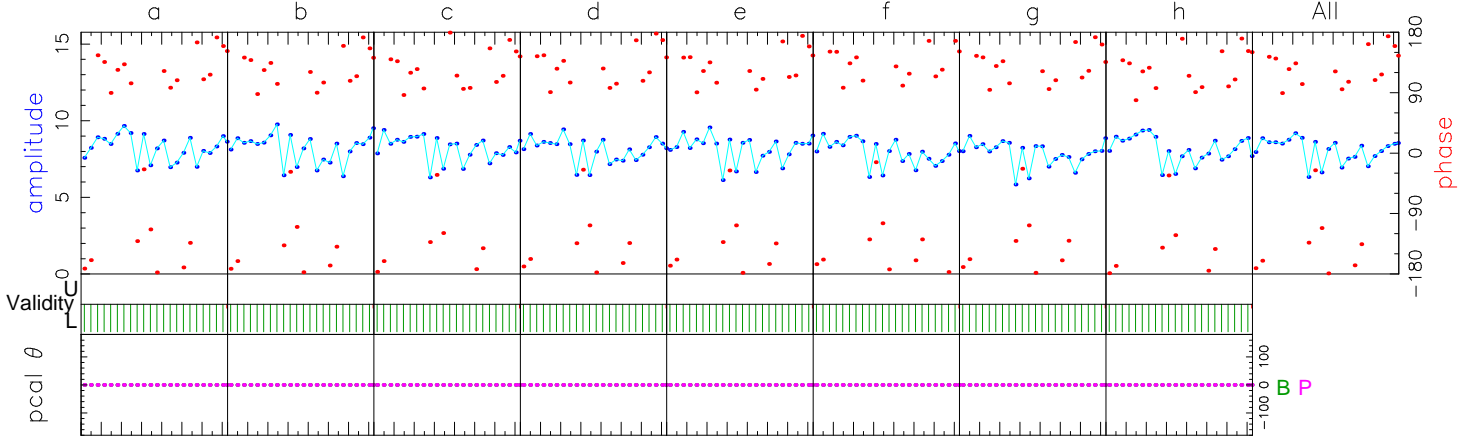
Fringe quality 5

SNR 207.8
 Int time 417.841
 Amp 5.259
 Phase 330.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001304
 MBD 0.014478
 Fringe rate (Hz)
 -0.005692
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



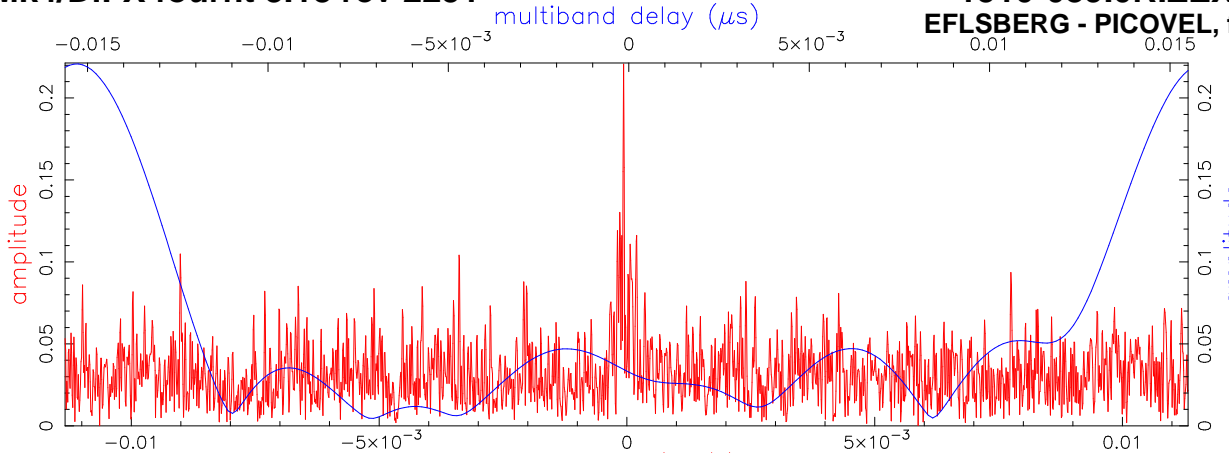
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	150.2	150.2
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	5.3	5.3
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	128.7	128.8
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	5.3	5.3
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	128.7	128.9
B	1000	1000	1000	1000	1000	1000	1000	1000	5.1	5.4
P	1000	1000	1000	1000	1000	1000	1000	1000	128.6	128.9
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	143.2	143.2
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	5.4	5.4

Group delay (usec)(sbd)	-1.66515177524E+03	Apriori delay (usec)	-1.66513500312E+03	Resid mbdelay (usec)	1.44779E-02	+/-	1.0E-05
Sband delay (usec)	-1.66513630712E+03	Apriori clock (usec)	2.0034914E+01	Resid sbdelay (usec)	-1.30400E-03	+/-	8.3E-05
Phase delay (usec)	-1.66513499828E+03	Apriori clockrate (us/s)	-2.9999999E-08	Resid phdelay (usec)	4.84226E-06	+/-	1.8E-08
Delay rate (us/s)	-3.05705303117E-01	Apriori rate (us/s)	-3.05705237036E-01	Resid rate (us/s)	-6.60815E-08	+/-	7.3E-11
Total phase (deg)	269.3	Apriori accel (us/s/s)	5.92050427063E-06	Resid phase (deg)	330.2	+/-	0.6

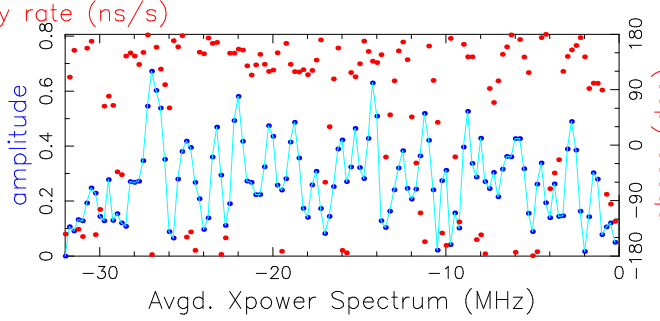
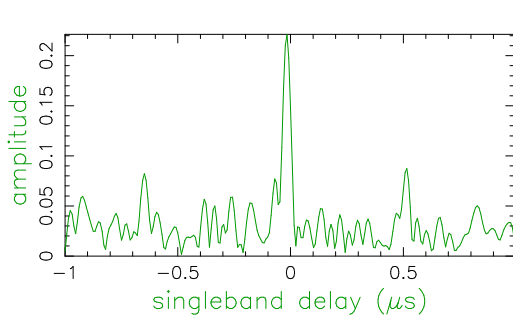
ph/seg (deg)	58.2	RMS	58.2	Theor.	1.3	Amplitude	5.259 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	55.6	Search (2048X32)	0.000	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000				
ph/frq (deg)	4.6	Inc. seg. avg.	8.078	Inc. frq. avg.	5.258	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016		
amp/frq (%)	1.5	Inc. frq. avg.	5.258	Sample rate (MSamp/s):	64	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite	ion window (TEC)	0.00	0.00

B: az 144.4 el 23.9 pa -22.0 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 1784.239 1406.877 simultaneous interpolator

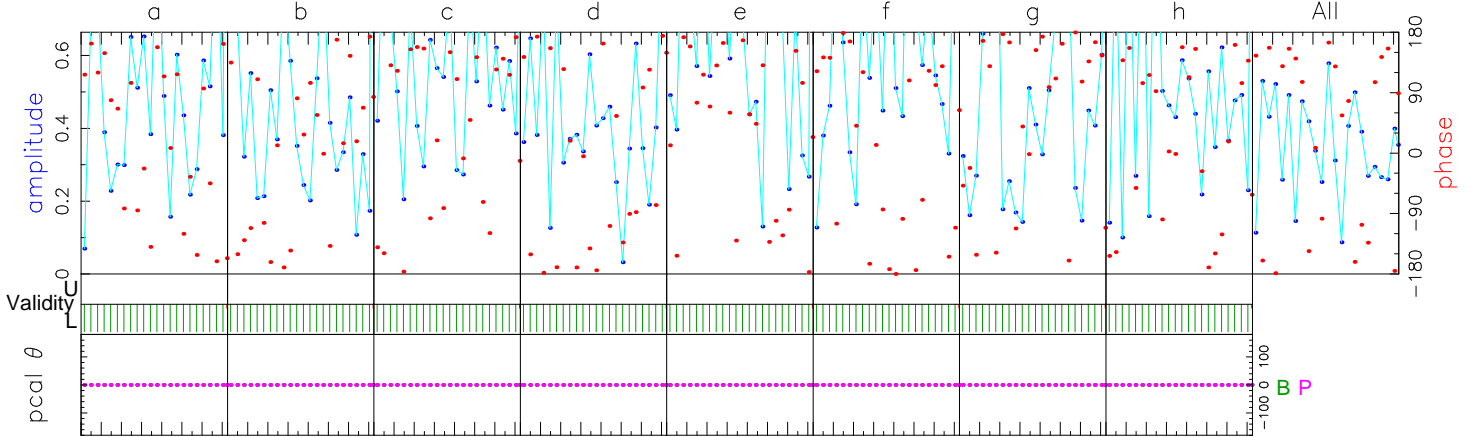
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BP.W.4.0RIZEX



Fringe quality 9
 SNR 8.7
 Int time 417.841
 Amp 0.221
 Phase 165.0
 PFD 4.0e-10
 Delays (us)
 SBD -0.017162
 MBD -0.015243
 Fringe rate (Hz)
 -0.005712
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105545
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



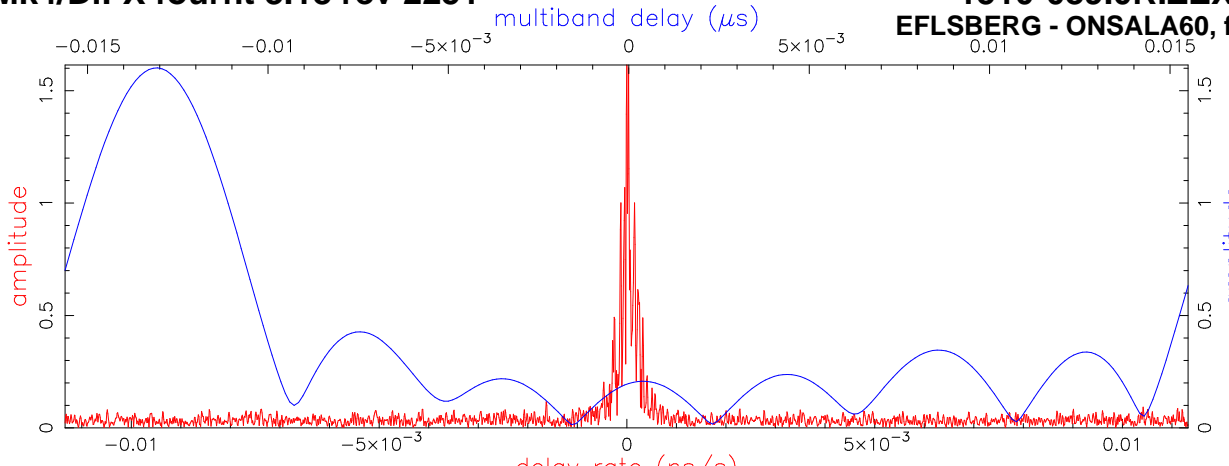
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



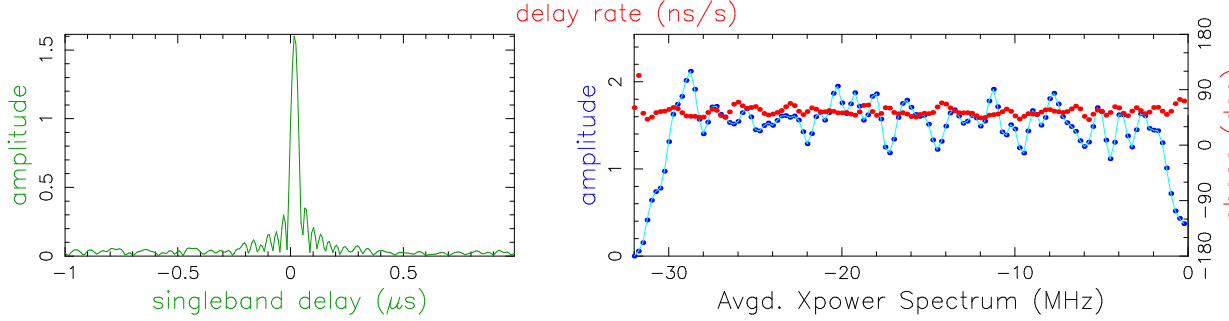
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	157.4	158.2	162.4	-168.9	158.6	173.8	163.5	147.4	Phase	165.0
	0.2	0.1	0.2	0.2	0.3	0.3	0.3	0.2	Ampl.	0.2
	225.2	29.9	128.8	96.8	126.4	125.8	126.8	126.2	Sbd box	126.8
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.66515024594E+03		Apriori delay (usec)		-1.66513500312E+03		Resid mbdelay (usec)		-1.52428E-02	+/- 2.5E-04
Sband delay (usec)	-1.66515216562E+03		Apriori clock (usec)		2.0034914E+01		Resid sbdelay (usec)		-1.71625E-02	+/- 2.0E-03
Phase delay (usec)	-1.66513499780E+03		Apriori clockrate (us/s)		-2.9999999E-08		Resid phdelay (usec)		5.32120E-06	+/- 4.2E-07
Delay rate (us/s)	-3.05705303343E-01		Apriori rate (us/s)		-3.05705237036E-01		Resid rate (us/s)		-6.63075E-08	+/- 1.7E-09
Total phase (deg)	104.1		Apriori accel (us/s/s)		5.92050427063E-06		Resid phase (deg)		165.0	+/- 13.1

RMS Theor. Amplitude 0.221 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 61.2 31.4 Search (2048X32) 0.218 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 84.7 54.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 14.3 18.5 Inc. seg. avg. 0.306 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.4 32.3 Inc. frq. avg. 0.215 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

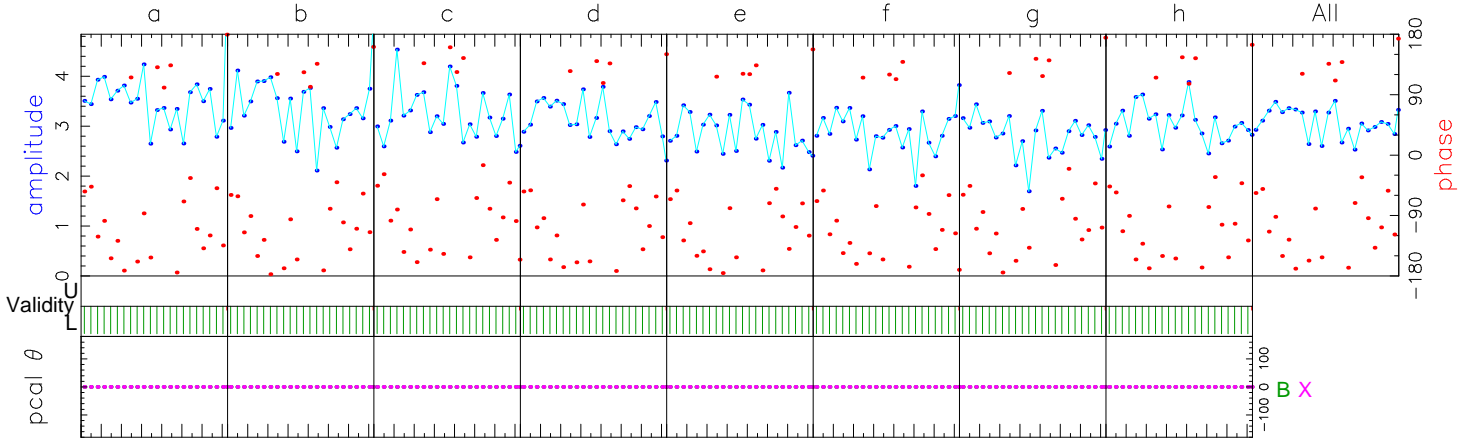
B: az 144.4 el 23.9 pa -22.0 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 1784.239 1406.877 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BP.W.50.0RIZEX



Fringe quality 5
 SNR 63.9
 Int time 419.288
 Amp 1.615
 Phase -304.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.017988
 MBD -0.013099
 Fringe rate (Hz) 0.002624
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105540
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



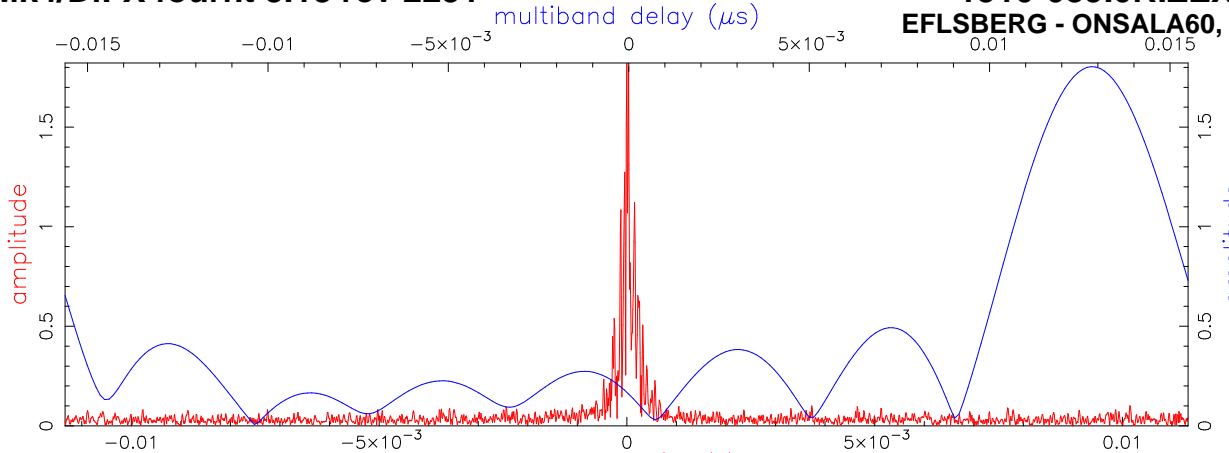
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-128.6	-128.4	-112.7	-123.1	-133.4	-123.5	-118.3	-129.2	Phase	-124.8
	1.8	1.8	1.6	1.7	1.5	1.5	1.4	1.5	Ampl.	1.6
	131.2	131.6	131.2	131.2	131.0	131.7	131.3	131.3	Sbd box	131.3
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.48733379859E+03		Apriori delay (usec)		1.48731564743E+03		Resid mbdelay (usec)		-1.30988E-02	+/- 3.4E-05
Sband delay (usec)	1.48733363593E+03		Apriori clock (usec)		-5.2288160E+00		Resid sbdelay (usec)		1.79885E-02	+/- 2.7E-04
Phase delay (usec)	1.48731564341E+03		Apriori clockrate (us/s)		-6.2399998E-07		Resid phdelay (usec)		-4.02338E-06	+/- 5.8E-08
Delay rate (us/s)	1.41183929637E-01		Apriori rate (us/s)		1.41183899172E-01		Resid rate (us/s)		3.04651E-08	+/- 2.4E-10
Total phase (deg)	8.4		Apriori accel (us/s/s)		-6.66604047157E-06		Resid phase (deg)		-304.8	+/- 1.8

RMS Theor. Amplitude 1.615 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.2 4.3 Search (2048X32) 1.541 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 91.8 7.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 7.2 2.5 Inc. seg. avg. 3.062 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 8.2 4.4 Inc. frq. avg. 1.610 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

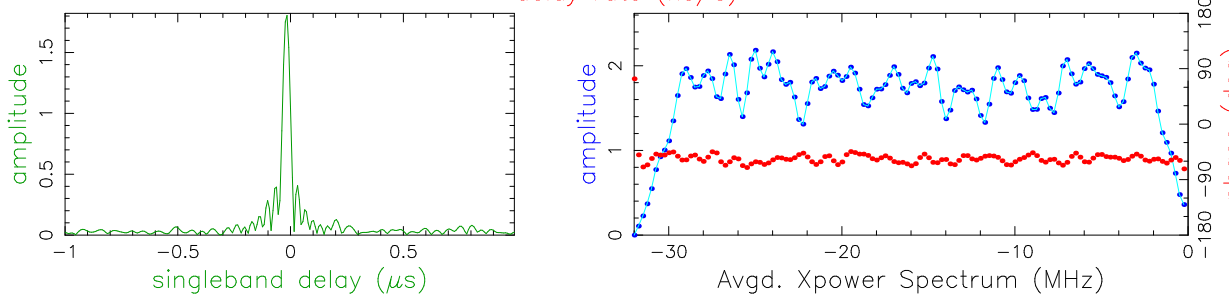
B: az 144.4 el 23.9 pa -22.0 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) -829.999 -534.914 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BX.W.18.0RIZEX



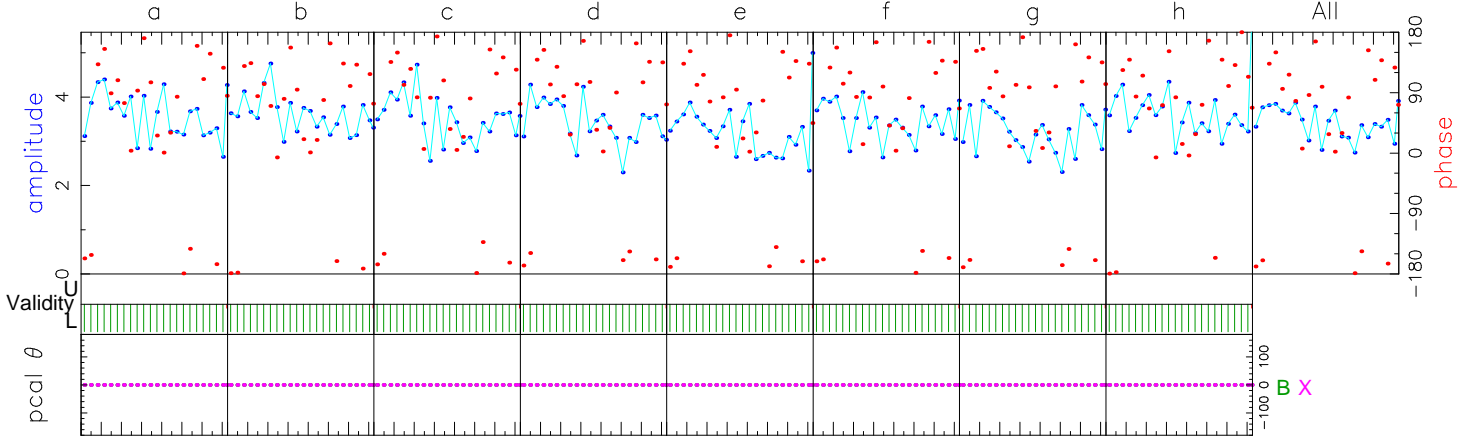
Fringe quality 5

SNR 72.1
Int time 419.288
Amp 1.822
Phase 302.4
PFD 0.0e+00
Delays (us)
SBD -0.018257
MBD 0.012857
Fringe rate (Hz) 0.002622
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234500.00
Stop 235159.84
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105538
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	124.6	111.6	126.5	128.5	122.8	127.1	128.3	111.7	Phase	122.4
	1.7	2.0	1.9	1.9	1.6	1.8	1.7	2.0	Ampl.	1.8
	126.5	126.6	126.7	126.7	126.5	127.0	126.6	126.8	Sbd box	126.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd) 1.48729725409E+03 Apriori delay (usec) 1.48731564743E+03 Resid mbdelay (usec) 1.28567E-02 +/- 3.0E-05

Sband delay (usec) 1.48729739043E+03 Apriori clock (usec) -5.2288160E+00 Resid sbdelay (usec) -1.82570E-02 +/- 2.4E-04

Phase delay (usec) 1.48731565138E+03 Apriori clockrate (us/s) -6.2399998E-07 Resid phdelay (usec) 3.94547E-06 +/- 5.1E-08

Delay rate (us/s) 1.41183929610E-01 Apriori rate (us/s) 1.41183899172E-01 Resid rate (us/s) 3.04382E-08 +/- 2.1E-10

Total phase (deg) 255.5 Apriori accel (us/s/s) -6.66604047157E-06 Resid phase (deg) 302.4 +/- 1.6

RMS Theor. Amplitude 1.822 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 61.6 3.8 Search (2048X32) 1.762 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

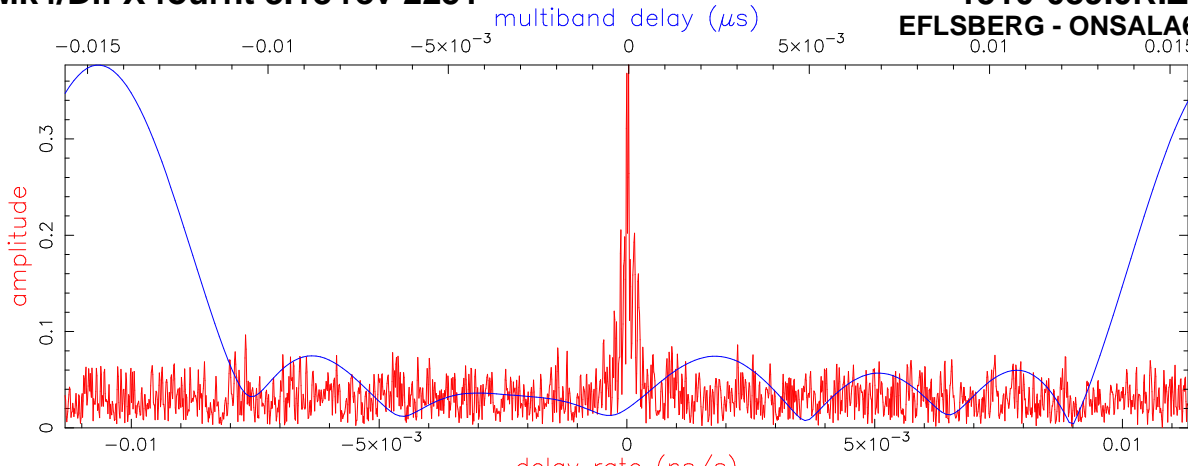
amp/seg (%) 88.7 6.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

ph/frq (deg) 7.6 2.2 Inc. seg. avg. 3.394 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

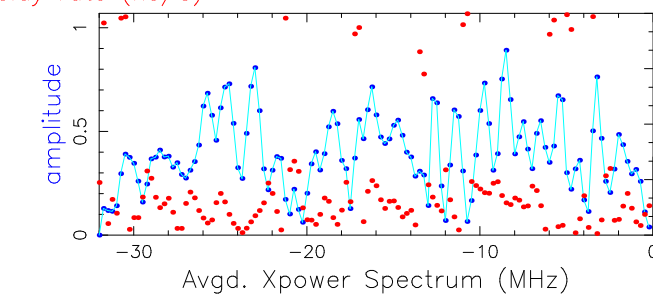
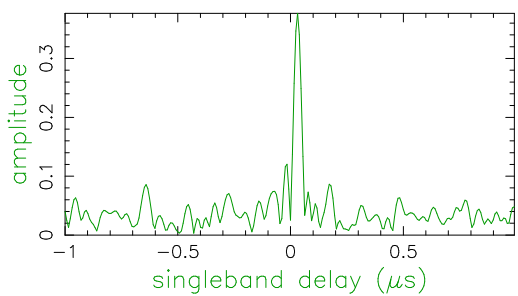
amp/frq (%) 7.7 3.9 Inc. frq. avg. 1.815 ion window (TEC) 0.00 0.00

B: az 144.4 el 23.9 pa -22.0 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) -829.999 -534.914 simultaneous interpolator

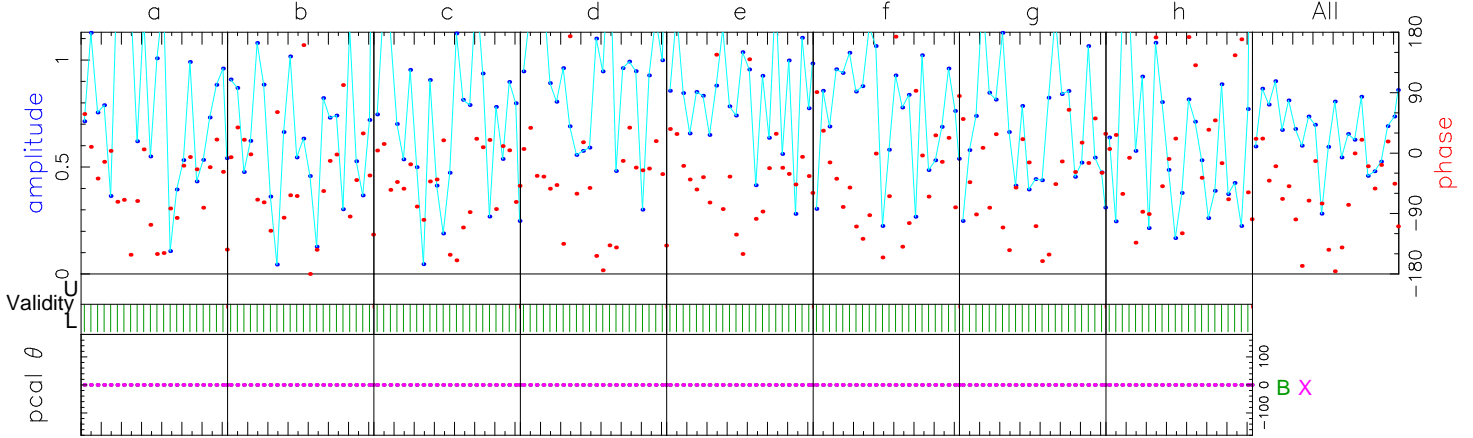
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BX.W.2.0RIZEX



Fringe quality 9
 SNR 14.9
 Int time 419.288
 Amp 0.377
 Phase -222.9
 PFD 7.9e-42
 Delays (us)
 SBD 0.030837
 MBD -0.014708
 Fringe rate (Hz) 0.002555
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105542
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



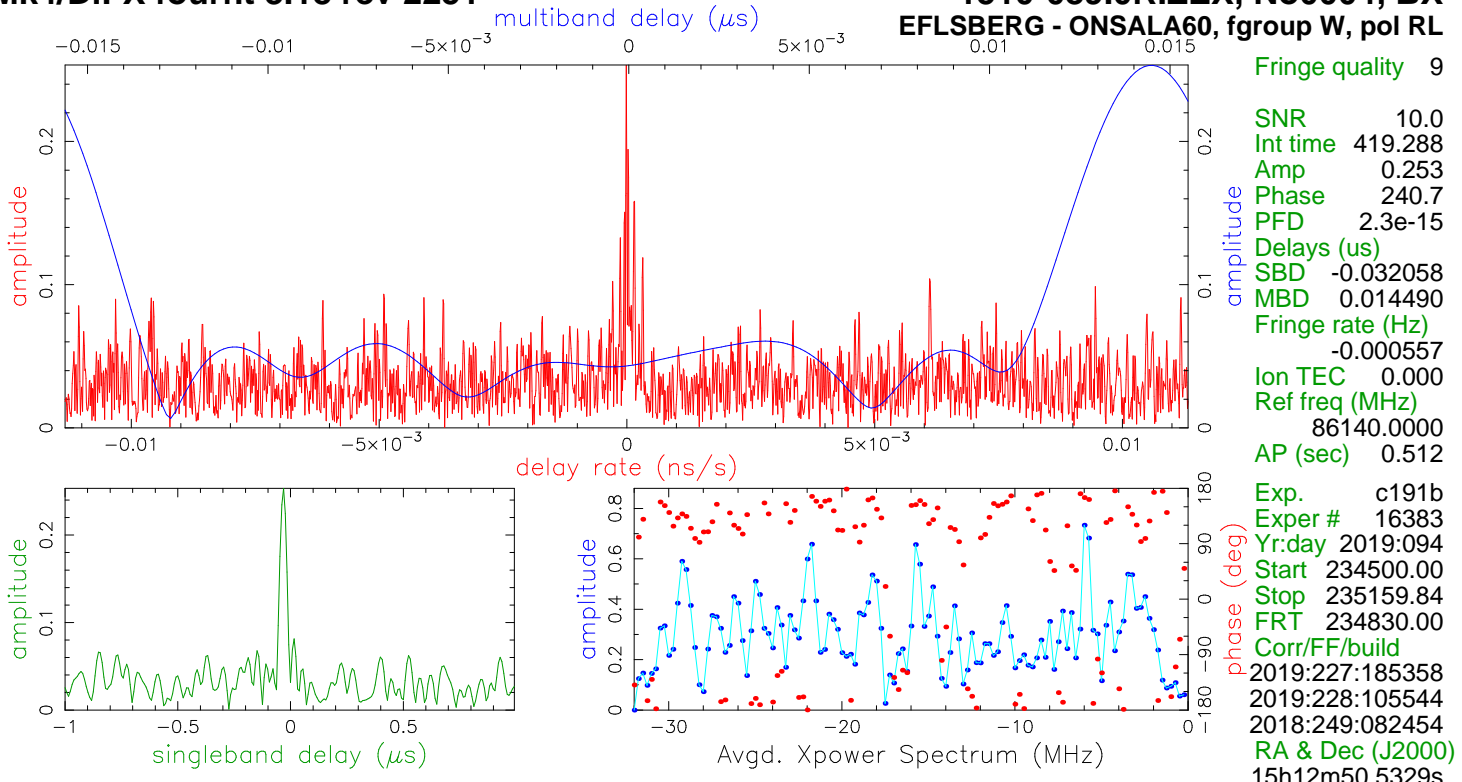
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



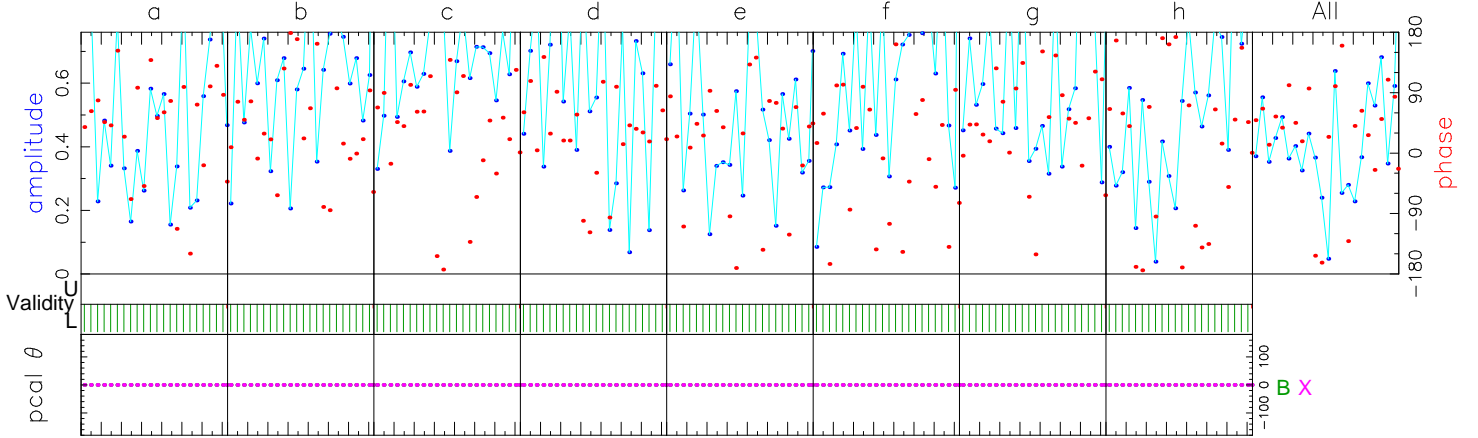
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-47.7	-47.2	-36.2	-40.4	-36.4	-53.9	-32.4	-56.3	Phase	-42.9
	0.4	0.4	0.5	0.4	0.4	0.4	0.4	0.2	Ampl.	0.4
	132.9	133.3	132.3	133.1	133.4	133.2	132.7	132.4	Sbd box	132.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	1.48733218921E+03	Apriori delay (usec)	1.48731564743E+03	Resid mbdelay (usec)	-1.47082E-02	+/-	1.5E-04
Sband delay (usec)	1.48734648443E+03	Apriori clock (usec)	-5.2288160E+00	Resid sbdelay (usec)	3.08370E-02	+/-	1.2E-03
Phase delay (usec)	1.48731564605E+03	Apriori clockrate (us/s)	-6.2399998E-07	Resid phdelay (usec)	-1.38451E-06	+/-	2.5E-07
Delay rate (us/s)	1.41183928827E-01	Apriori rate (us/s)	1.41183899172E-01	Resid rate (us/s)	2.96553E-08	+/-	1.0E-09
Total phase (deg)	90.2	Apriori accel (us/s/s)	-6.66604047157E-06	Resid phase (deg)	-222.9	+/-	7.7

ph/seg (deg)	60.4	RMS	18.4	Theor.	18.4	Amplitude	0.377 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	85.5	Search (2048X32)	0.363	Interp.	0.000	Apriori clockrate (us/s)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.016	0.016	
ph/frq (deg)	9.5	Inc. seg. avg.	0.631	Inc. frq. avg.	0.373	Apriori rate (us/s)	1.41183899172E-01	Bits/sample:	2x2	ion window (TEC)	0.00	0.00			
amp/frq (%)	18.6	Inc. frq. avg.	0.373	u,v (fr/asec)	-829.999 -534.914	Apriori accel (us/s/s)	-6.66604047157E-06	Sample rate(MSamp/s):	64	nlags:	128	t_cohere	infinite		



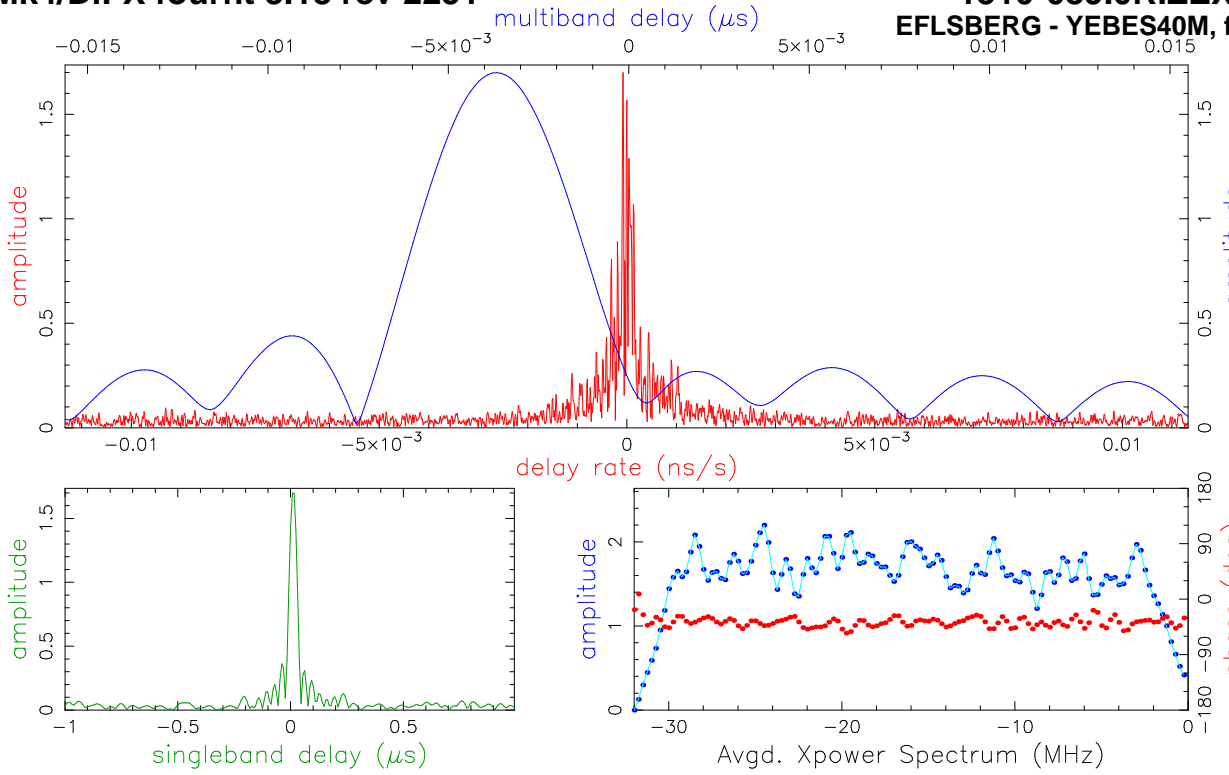
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	81.3	39.6	69.1	51.0	62.1	41.8	59.5	90.3	Phase	60.7
	0.3	0.3	0.3	0.4	0.2	0.2	0.3	0.1	Ampl.	0.3
	124.3	124.9	124.8	125.1	124.8	97.9	124.7	91.0	Sbd box	124.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		1.48729888755E+03		Apriori delay (usec)		1.48731564743E+03		Resid mbdelay (usec)	1.44901E-02	+/- 2.2E-04
Sband delay (usec)		1.48728358893E+03		Apriori clock (usec)		-5.2288160E+00		Resid sbdelay (usec)	-3.20585E-02	+/- 1.7E-03
Phase delay (usec)		1.48731564939E+03		Apriori clockrate (us/s)		-6.2399998E-07		Resid phdelay (usec)	1.95608E-06	+/- 3.7E-07
Delay rate (us/s)		1.41183892702E-01		Apriori rate (us/s)		1.41183899172E-01		Resid rate (us/s)	-6.46984E-09	+/- 1.5E-09
Total phase (deg)			193.8	Apriori accel (us/s/s)		-6.66604047157E-06		Resid phase (deg)	240.7	+/- 11.4

RMS Theor. Amplitude 0.253 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 67.9 27.4 Search (2048X32) 0.236 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 86.7 47.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 19.5 16.1 Inc. seg. avg. 0.366 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 26.4 28.2 Inc. frq. avg. 0.253 ion window (TEC) 0.00 0.00

B: az 144.4 el 23.9 pa -22.0 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) -829.999 -534.914 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BX.W.47.0RIZEX

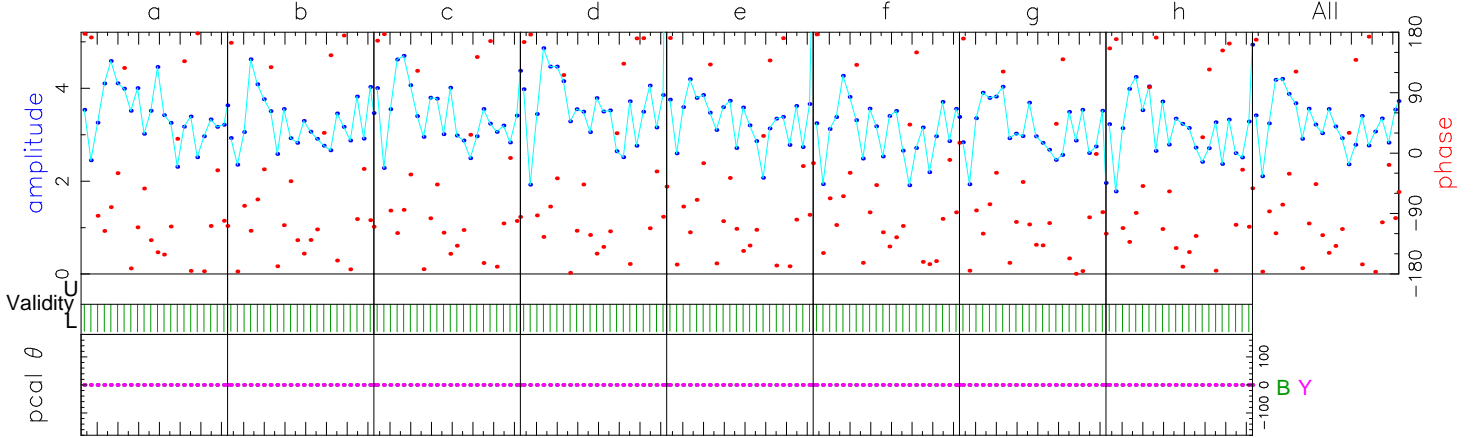


Fringe quality 5

SNR 67.6
Int time 405.372
Amp 1.736
Phase -126.3
PFD 0.0e+00
Delays (us)
SBD 0.011662
MBD -0.003651
Fringe rate (Hz)
-0.006421
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105540
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

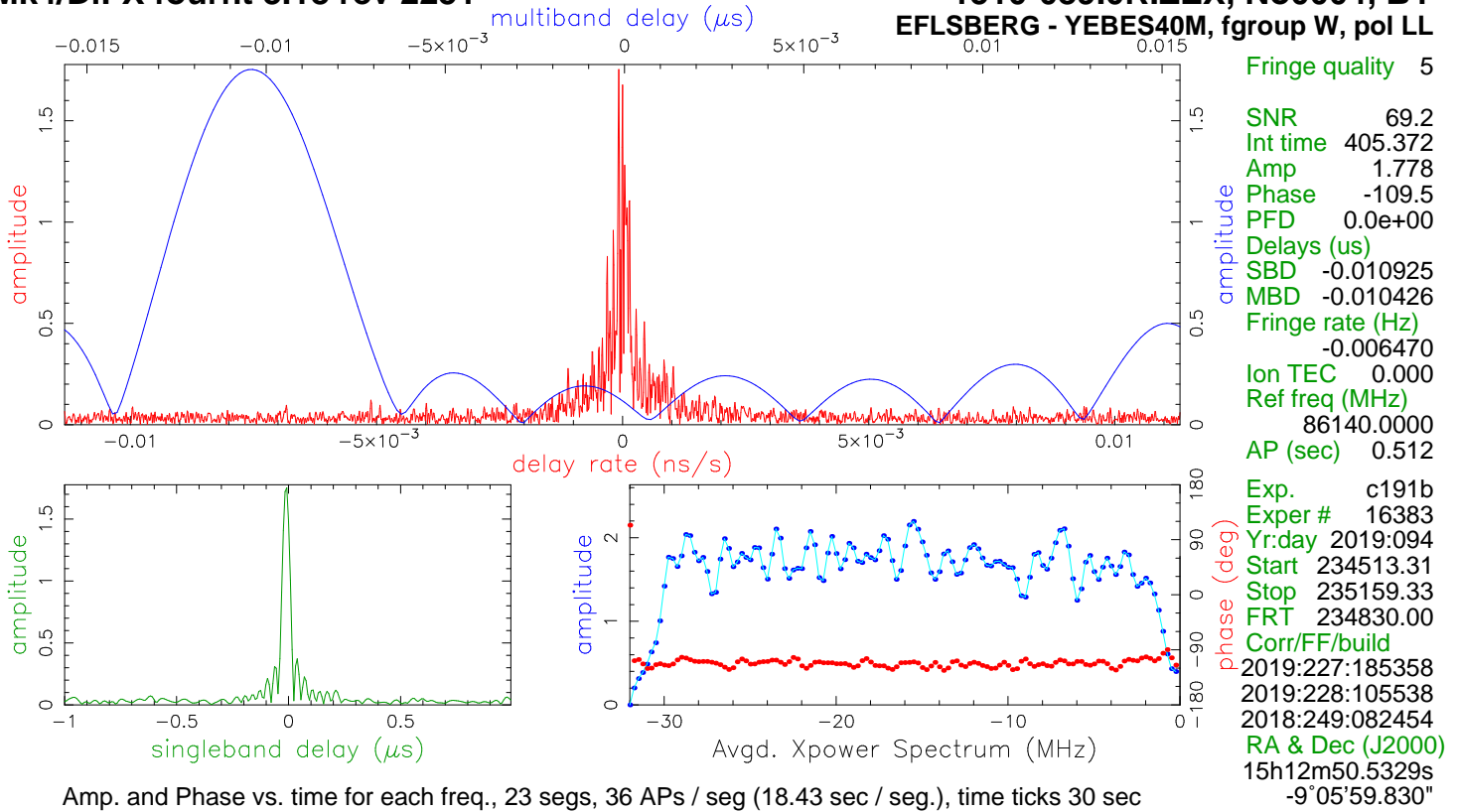
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



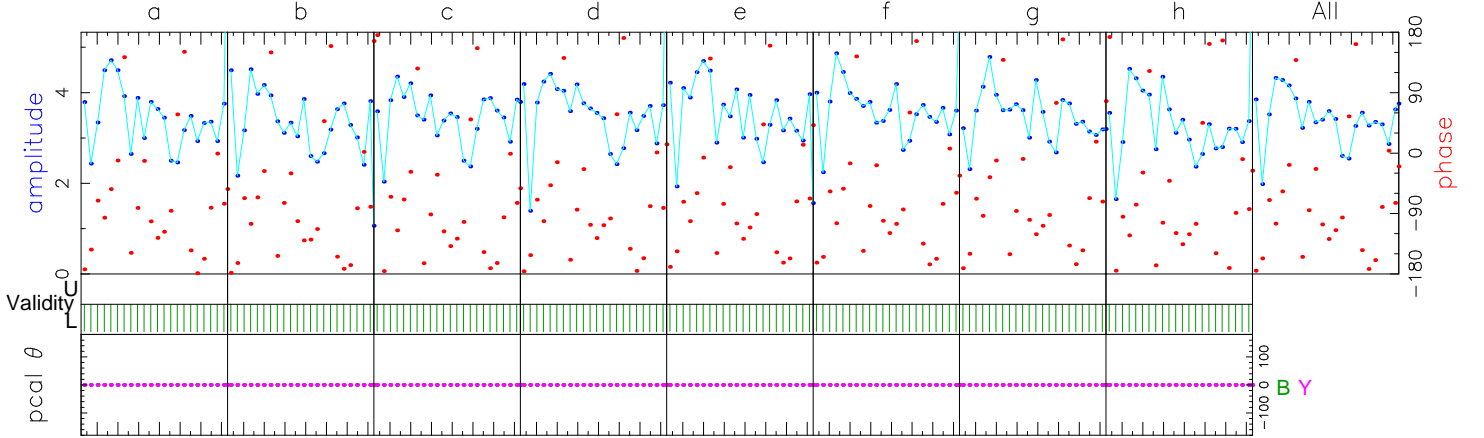
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-130.5	-123.3	-126.7	-129.3	-123.7	-113.3	-122.7	-141.7	Phase	-126.3
	1.9	1.7	1.8	1.8	1.7	1.7	1.6	1.5	Ampl.	1.7
	130.6	130.6	130.6	130.5	130.6	130.7	130.3	130.3	Sbd box	130.5
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.75640142894E+02		Apriori delay (usec)		-9.75636492358E+02		Resid mbdelay (usec)		-3.65054E-03	+/- 3.2E-05
Sband delay (usec)	-9.75624829858E+02		Apriori clock (usec)		1.2832932E+01		Resid sbdelay (usec)		1.16625E-02	+/- 2.5E-04
Phase delay (usec)	-9.75636496433E+02		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		-4.07427E-06	+/- 5.5E-08
Delay rate (us/s)	-2.62349685307E-01		Apriori rate (us/s)		-2.62349610771E-01		Resid rate (us/s)		-7.45360E-08	+/- 2.3E-10
Total phase (deg)			Apriori accel (us/s/s)		3.05855352525E-06		Resid phase (deg)		-126.3	+/- 1.7

RMS Theor. Amplitude 1.736 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.3 4.1 Search (2048X32) 1.657 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 91.2 7.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 8.8 2.4 Inc. seg. avg. 3.228 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 6.8 4.2 Inc. frq. avg. 1.712 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 144.4 el 23.9 pa -22.0 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 1527.786 1032.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BY.W.17.0RIZEX

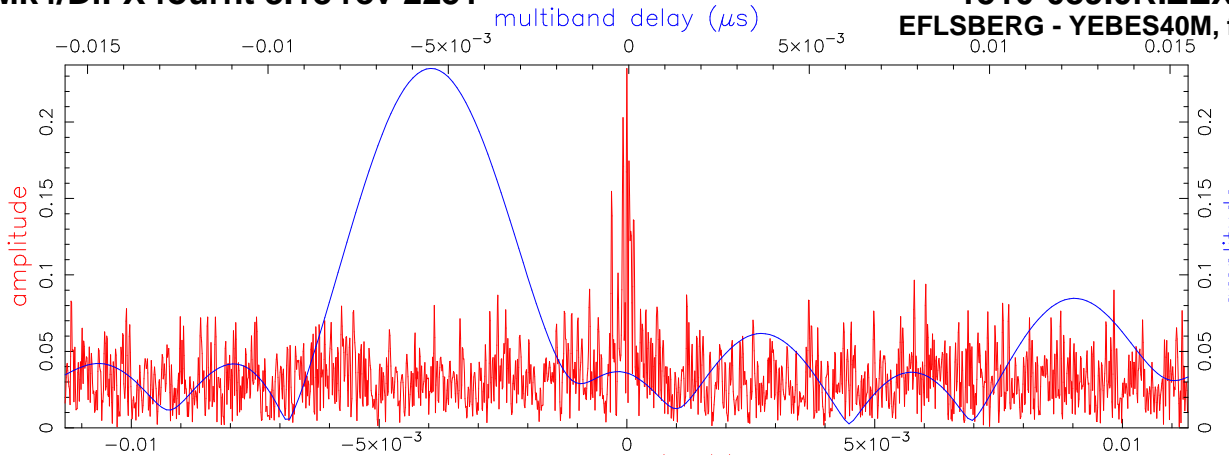


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

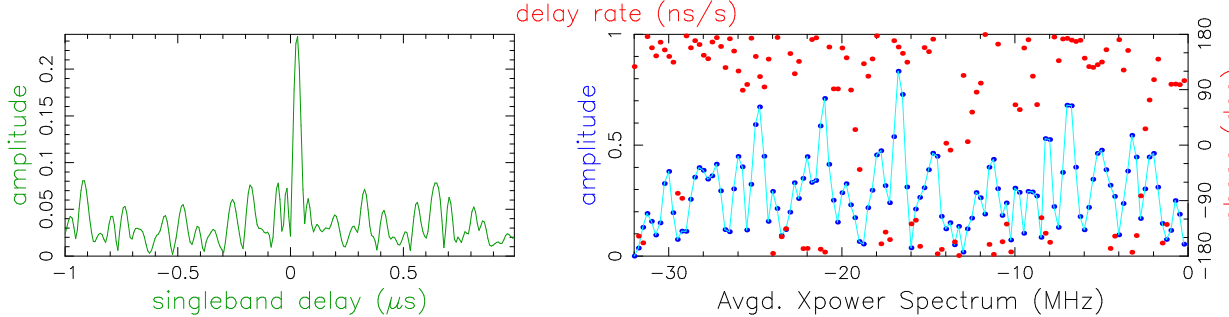


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-105.0	-116.7	-117.9	-106.6	-104.2	-102.6	-103.7	-120.2	Phase	-109.5	
	1.7	1.8	1.8	1.8	1.8	1.9	1.7	1.7	Ampl.	1.8	
	127.6	127.7	127.7	127.8	127.6	127.7	127.4	127.3	Sbd box	127.6	
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used		
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
									Tracks		
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
									Tracks		
Group delay (usec)(sbd)		-9.75646918394E+02		Apriori delay (usec)		-9.75636492358E+02		Resid mbdelay (usec)		-1.04260E-02 +/- 3.1E-05	
Sband delay (usec)		-9.75647417858E+02		Apriori clock (usec)		1.2832932E+01		Resid sbdelay (usec)		-1.09255E-02 +/- 2.5E-04	
Phase delay (usec)		-9.75636495890E+02		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		-3.53128E-06 +/- 5.3E-08	
Delay rate (us/s)		-2.62349685883E-01		Apriori rate (us/s)		-2.62349610771E-01		Resid rate (us/s)		-7.51121E-08 +/- 2.3E-10	
Total phase (deg)		-272.1		Apriori accel (us/s/s)		3.05855352525E-06		Resid phase (deg)		-109.5 +/- 1.7	

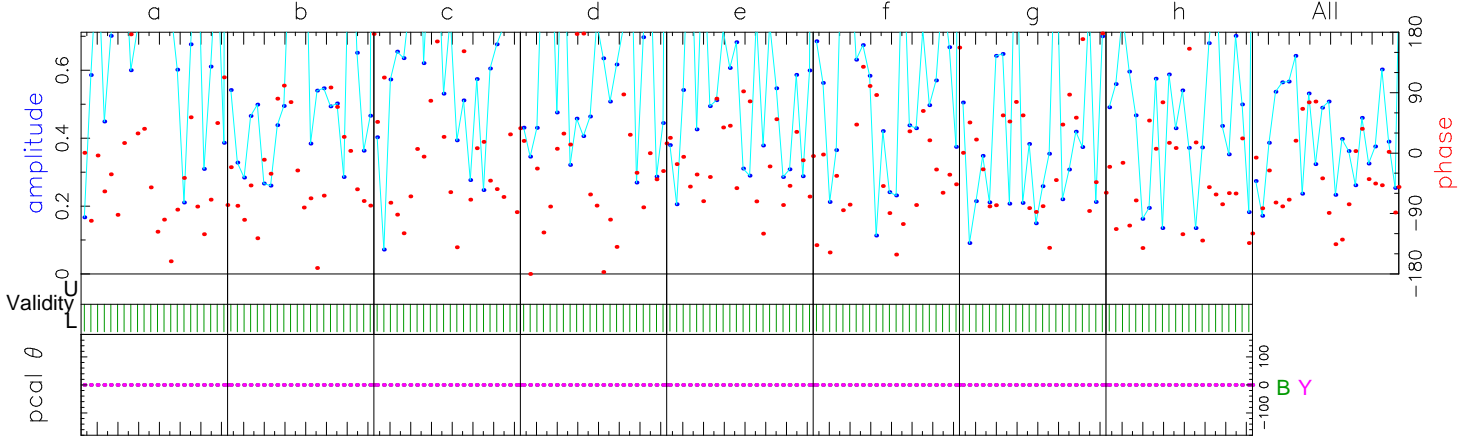
RMS Theor. Amplitude 1.778 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 67.4 4.0 Search (2048X32) 1.711 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 97.2 6.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 7.9 2.3 Inc. seg. avg. 3.408 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 3.5 4.1 Inc. frq. avg. 1.764 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 144.4 el 23.9 pa -22.0 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 1527.786 1032.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BY.W.3.0RIZEX



Fringe quality 9
SNR 9.2
Int time 405.372
Amp 0.237
Phase -218.7
PFD 4.9e-12
Delays (us)
SBD 0.028728
MBD -0.005485
Fringe rate (Hz)
-0.000089
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105542
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

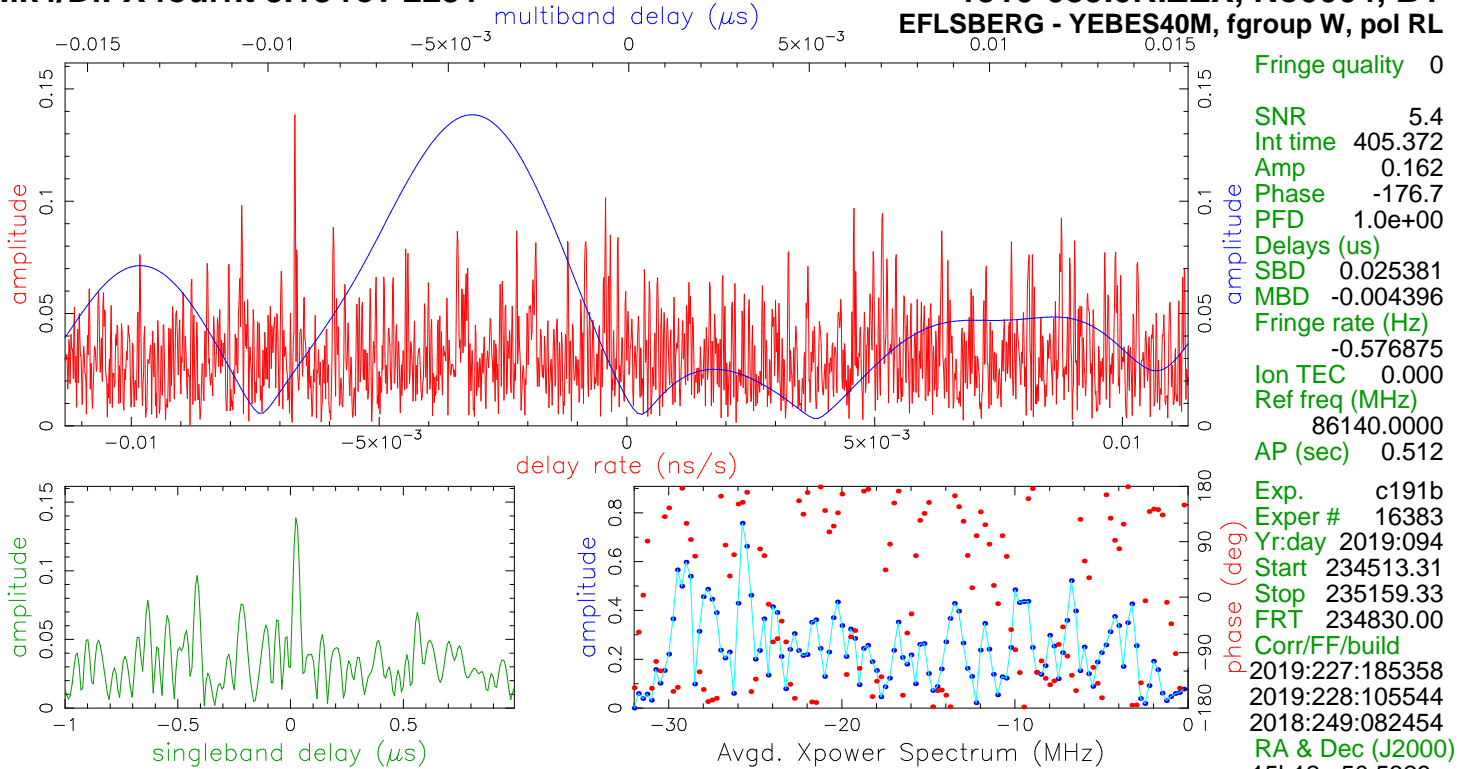


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-49.3	-31.9	-36.6	-46.0	-20.5	-49.5	-16.1	-51.7	Phase	-38.7
	0.3	0.2	0.3	0.2	0.3	0.2	0.1	0.3	Ampl.	0.2
	131.8	12.0	132.1	41.9	126.4	105.9	242.1	133.2	Sbd box	132.7
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.75610727046E+02		Apriori delay (usec)		-9.75636492358E+02		Resid mbdelay (usec)		-5.48469E-03	+/- 2.3E-04
Sband delay (usec)	-9.75607764358E+02		Apriori clock (usec)		1.2832932E+01		Resid sbdelay (usec)		2.87280E-02	+/- 1.9E-03
Phase delay (usec)	-9.75636493606E+02		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		-1.24746E-06	+/- 4.0E-07
Delay rate (us/s)	-2.62349611805E-01		Apriori rate (us/s)		-2.62349610771E-01		Resid rate (us/s)		-1.03449E-09	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		3.05855352525E-06		Resid phase (deg)		-218.7	+/- 12.4

RMS 60.5 Theor. 29.7 Amplitude 0.237 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 60.5 29.7 Search (2048X32) 0.231 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 90.2 51.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 15.0 17.5 Inc. seg. avg. 0.356 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.7 30.6 Inc. frq. avg. 0.230 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00
 B: az 144.4 el 23.9 pa -22.0 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 1527.786 1032.825 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BY.W.32.0RIZEX



Fringe quality 0

SNR 5.4

Int time 405.372

Amp 0.162

Phase -176.7

PFD 1.0e+00

Delays (us)

SBD 0.025381

MBD -0.004396

Fringe rate (Hz)

-0.576875

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:094

Start 234513.31

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105544

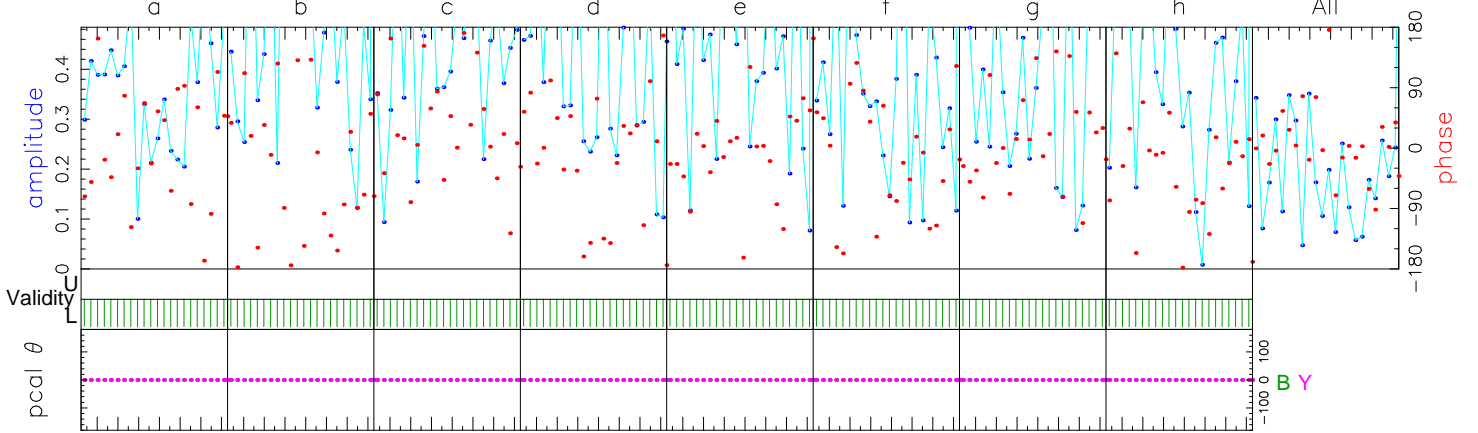
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-4.9	-99.1	26.1	29.6	-8.1	8.5	13.0	-8.1	Phase	3.3
	0.1	0.1	0.2	0.2	0.3	0.1	0.3	0.2	Ampl.	0.2
	158.6	101.9	47.3	199.9	132.8	66.3	126.2	116.8	Sbd box	132.2
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.75609638326E+02		Apriori delay (usec)		-9.75636492358E+02		Resid mbdelay (usec)		-4.39597E-03	+/- 4.0E-04
Sband delay (usec)	-9.75611110858E+02		Apriori clock (usec)		1.2832932E+01		Resid sbdelay (usec)		2.53815E-02	+/- 3.2E-03
Phase delay (usec)	-9.75636492251E+02		Apriori clockrate (us/s)		-3.6700000E-07		Resid phdelay (usec)		1.07550E-07	+/- 6.8E-07
Delay rate (us/s)	-2.62356307722E-01		Apriori rate (us/s)		-2.62349610771E-01		Resid rate (us/s)		-6.69695E-06	+/- 2.9E-09
Total phase (deg)	-339.3		Apriori accel (us/s/s)		3.05855352525E-06		Resid phase (deg)		-176.7	+/- 21.1

ph/seg (deg) 55.0 50.7 Search (2048X32) 0.137 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

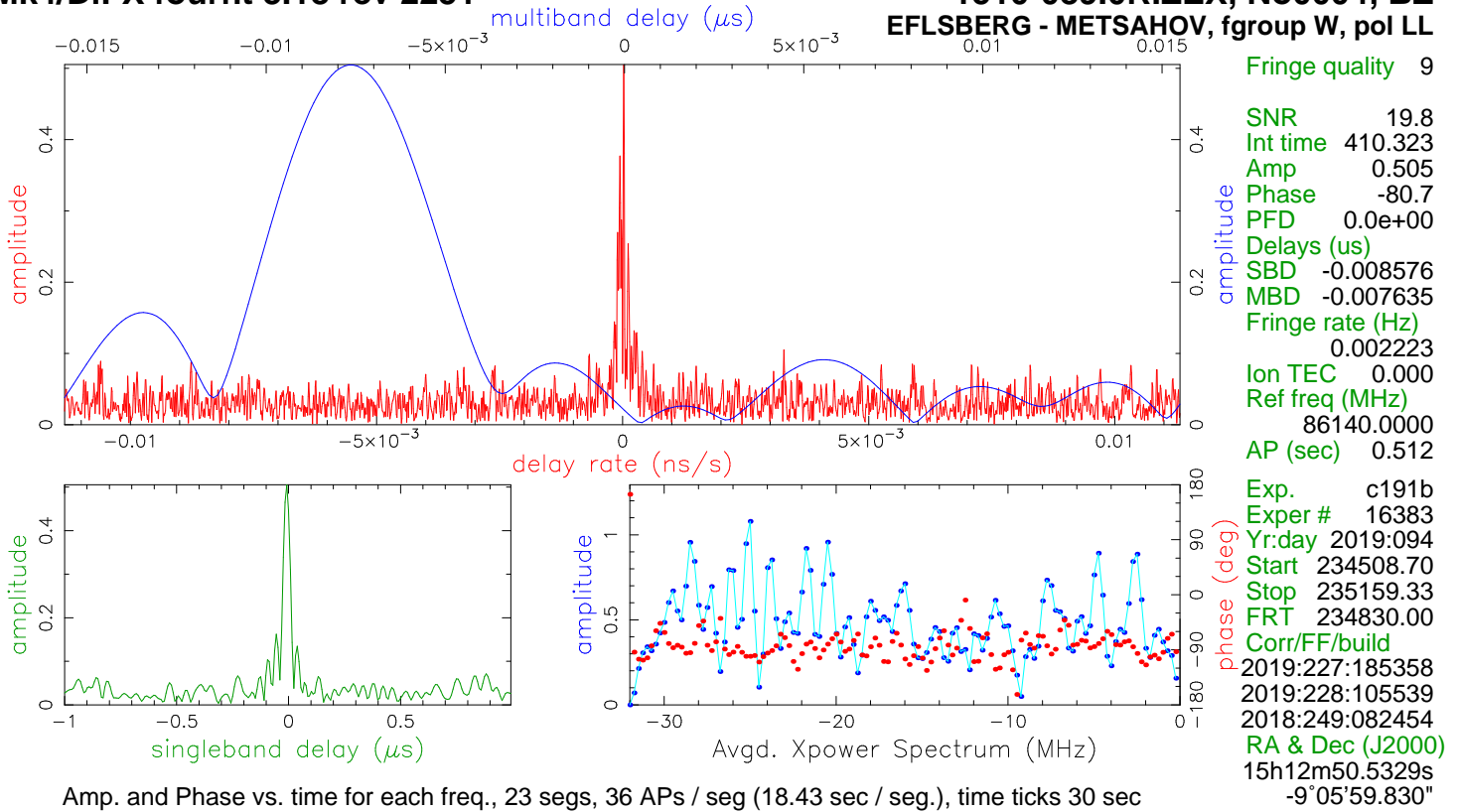
amp/seg (%) 78.5 88.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 45.0 29.9 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

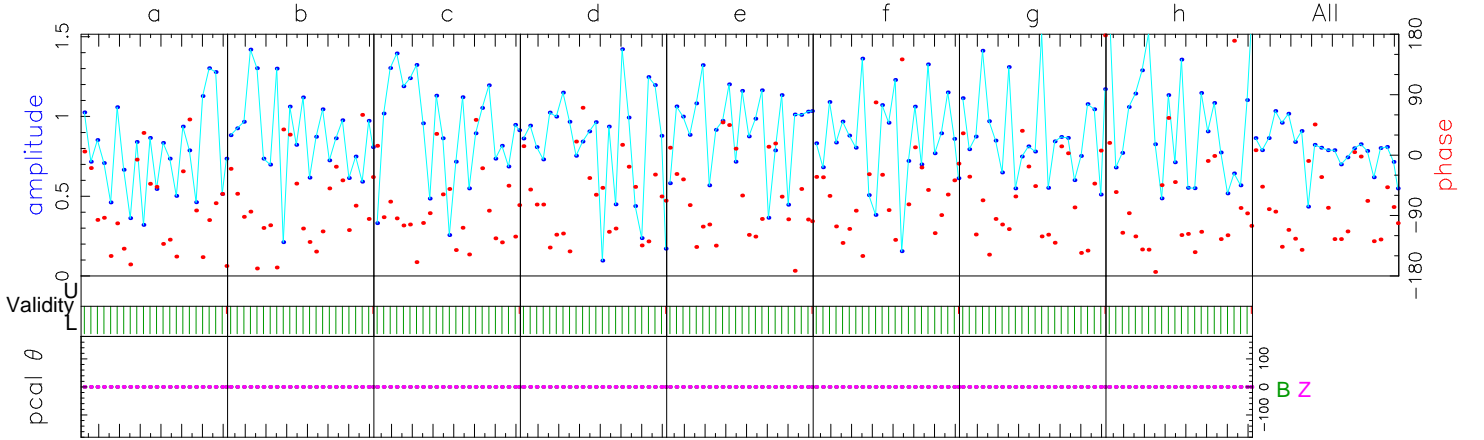
amp/frq (%) 55.1 52.2 Inc. frq. avg. 0.159 Data rate (Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

B: az 144.4 el 23.9 pa -22.0 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 1527.786 1032.825 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BY.W.48.0RIZEX simultaneous interpolator



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

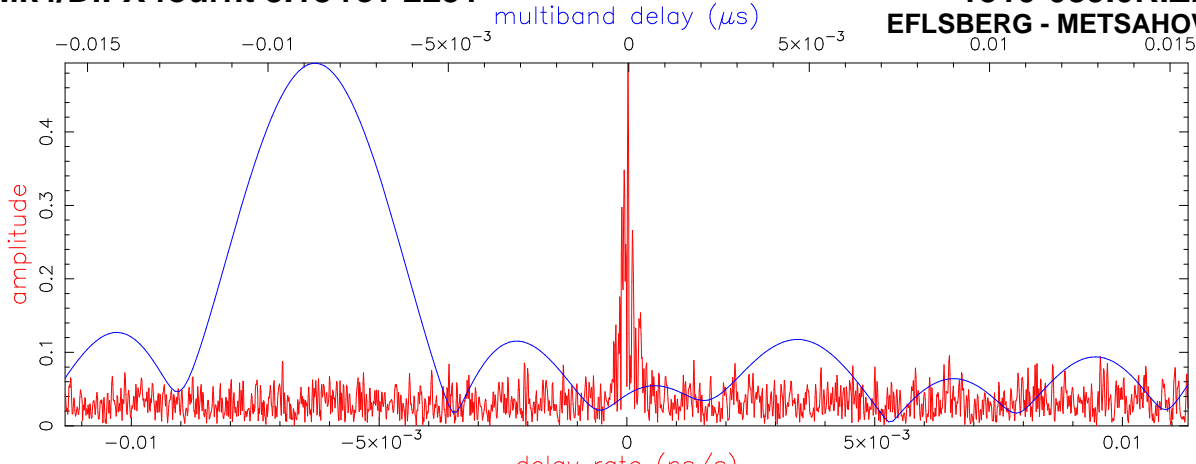


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-81.1	-86.5	-91.4	-66.0	-71.8	-72.0	-78.3	-97.5	Phase	-80.7
	0.4	0.5	0.6	0.5	0.5	0.6	0.5	0.5	Ampl.	0.5
	127.4	127.4	128.2	128.6	127.3	128.3	128.1	128.0	Sbd box	127.9
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.60795647967E+03		Apriori delay (usec)		1.60796411428E+03		Resid mbdelay (usec)		-7.63461E-03	+/- 1.1E-04
Sband delay (usec)	1.60795553828E+03		Apriori clock (usec)		1.9726494E+01		Resid sbdelay (usec)		-8.57600E-03	+/- 8.7E-04
Phase delay (usec)	1.60796411168E+03		Apriori clockrate (us/s)		-1.7400000E-07		Resid phdelay (usec)		-2.60274E-06	+/- 1.9E-07
Delay rate (us/s)	3.25358625874E-01		Apriori rate (us/s)		3.25358600072E-01		Resid rate (us/s)		2.58021E-08	+/- 7.9E-10
Total phase (deg)	208.8		Apriori accel (us/s/s)		-6.71467593099E-06		Resid phase (deg)		-80.7	+/- 5.8

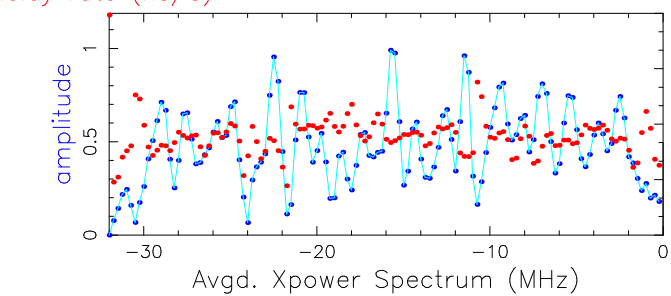
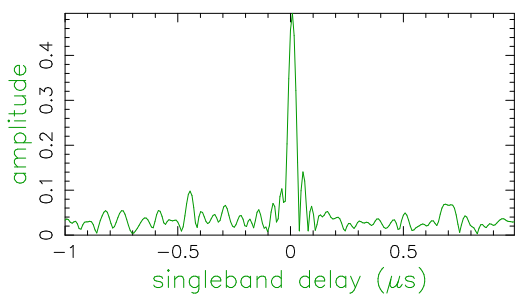
RMS Theor. Amplitude 0.505 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.4 13.9 Search (2048X32) 0.487 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 63.9 24.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 11.6 8.2 Inc. seg. avg. 0.780 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 11.5 14.3 Inc. frq. avg. 0.508 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 144.4 el 23.9 pa -22.0 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) -1898.546 -760.027 simultaneous interpolator

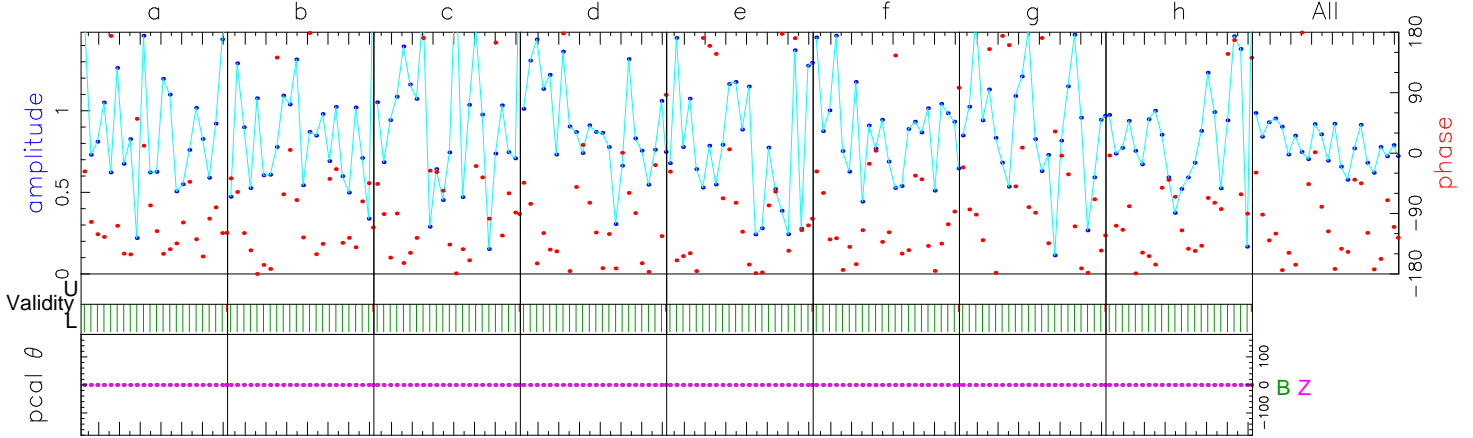
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BZ.W.12.0RIZEX



Fringe quality 9
 SNR 19.3
 Int time 410.323
 Amp 0.494
 Phase -294.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.007255
 MBD -0.008699
 Fringe rate (Hz) 0.002107
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



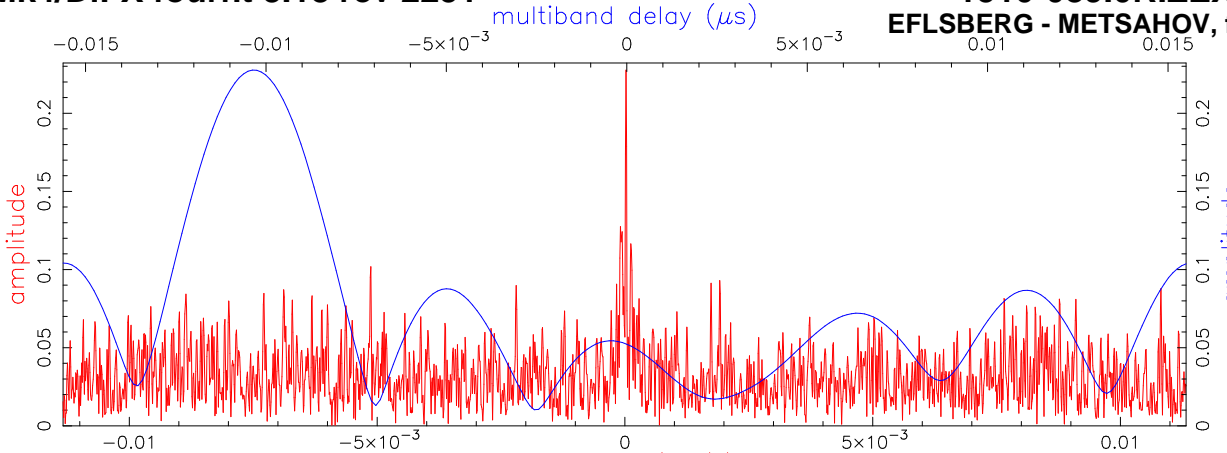
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



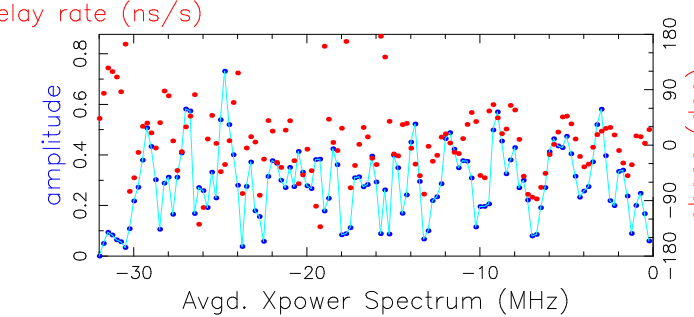
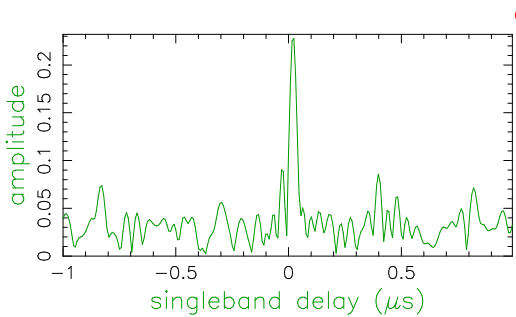
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-110.4	-107.5	-120.7	-114.9	-135.7	-110.6	-102.9	-114.5	Phase	-114.5
	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	Ampl.	0.5
	129.4	130.3	129.8	130.1	129.6	130.4	130.1	129.7	Sbd box	129.9
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.60798666505E+03		Apriori delay (usec)		1.60796411428E+03		Resid mbdelay (usec)		-8.69924E-03	+/- 1.1E-04
Sband delay (usec)	1.60797136928E+03		Apriori clock (usec)		1.9726494E+01		Resid sbdelay (usec)		7.25500E-03	+/- 8.9E-04
Phase delay (usec)	1.60796411059E+03		Apriori clockrate (us/s)		-1.7400000E-07		Resid phdelay (usec)		-3.69141E-06	+/- 1.9E-07
Delay rate (us/s)	3.25358624538E-01		Apriori rate (us/s)		3.25358600072E-01		Resid rate (us/s)		2.44658E-08	+/- 8.1E-10
Total phase (deg)			Apriori accel (us/s/s)		-6.71467593099E-06		Resid phase (deg)		-294.5	+/- 5.9

RMS Theor. Amplitude 0.494 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 52.8 14.2 Search (2048X32) 0.487 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 65.4 24.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 10.8 8.4 Inc. seg. avg. 0.773 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 10.7 14.6 Inc. frq. avg. 0.494 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 144.4 el 23.9 pa -22.0 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) -1898.546 -760.027 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BZ.W.27.0RIZEX

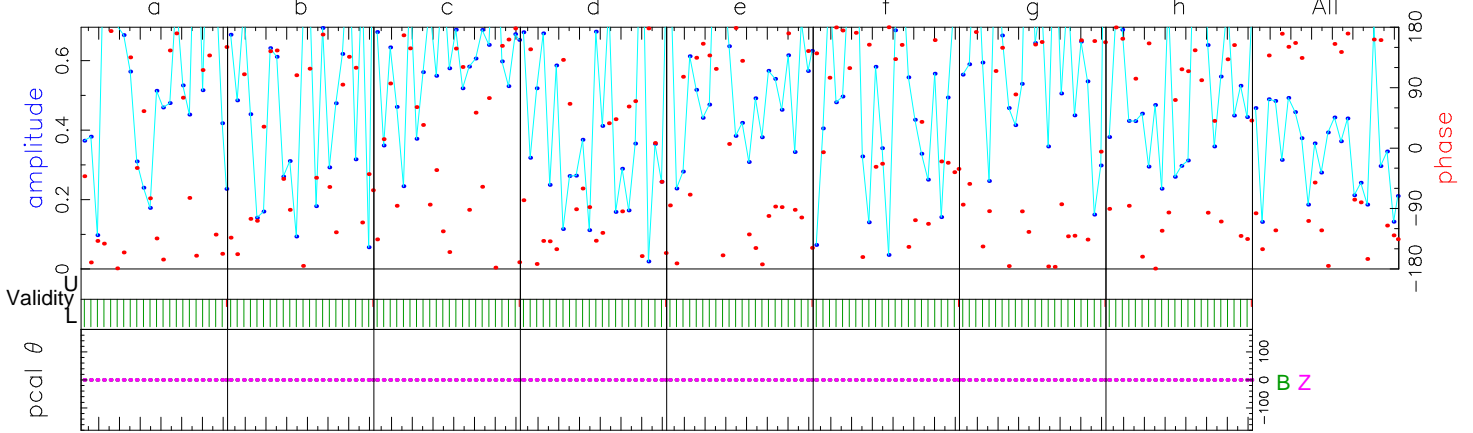


Fringe quality 9
SNR 9.1
Int time 410.323
Amp 0.232
Phase -351.7
PFD 1.9e-11
Delays (us)
SBD 0.019855
MBD -0.010351
Fringe rate (Hz)
0.001942
Ion TEC 0.000
Ref freq (MHz)
86140.000
AP (sec) 0.512



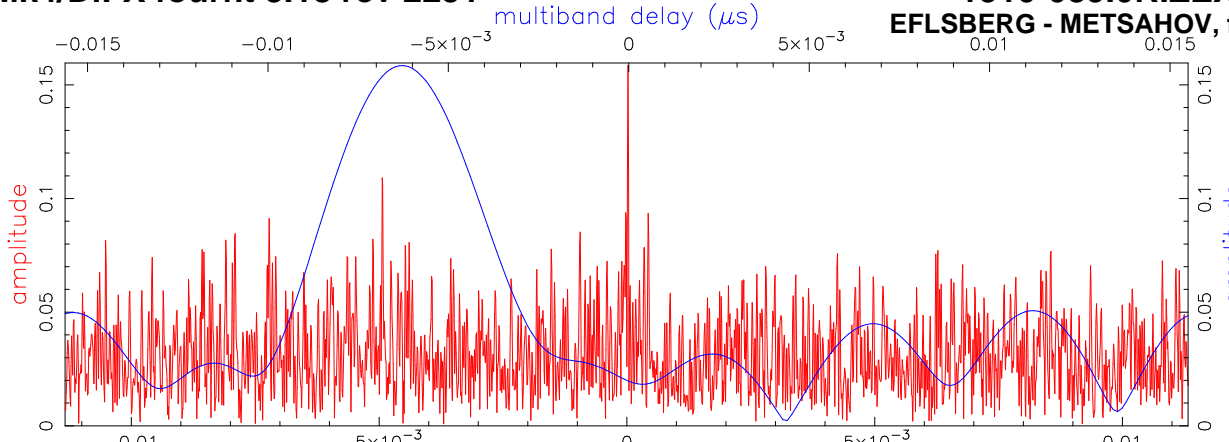
Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234508.70
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105543
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

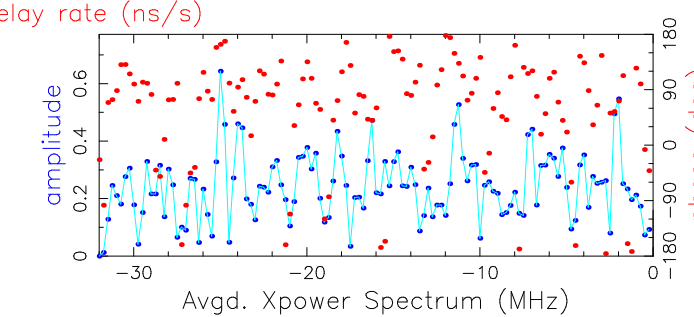
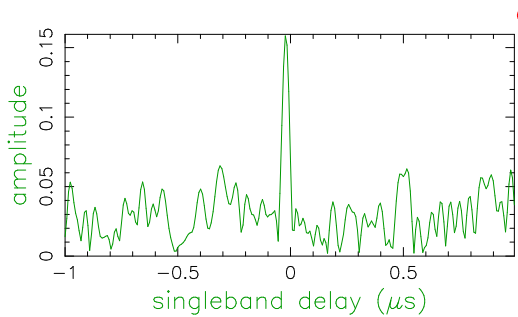


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-174.2	175.4	179.4	-132.0	-157.1	163.0	-162.8	173.3	Phase	-171.7
0.4	0.2	0.2	0.1	0.2	0.1	0.4	0.2	Ampl.	0.2
131.5	132.6	1.7	49.4	131.0	99.0	131.9	131.7	Sbd box	131.5
U/L 0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z 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	
Z 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Z W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.60798501317E+03		Apriori delay (usec)	1.60796411428E+03		Resid mbdelay (usec)	-1.03511E-02	+/-	2.4E-04
Sband delay (usec)	1.60798396928E+03		Apriori clock (usec)	1.9726494E+01		Resid sbdelay (usec)	1.98550E-02	+/-	1.9E-03
Phase delay (usec)	1.60796410875E+03		Apriori clockrate (us/s)	-1.7400000E-07		Resid phdelay (usec)	-5.53583E-06	+/-	4.1E-07
Delay rate (us/s)	3.25358622617E-01		Apriori rate (us/s)	3.25358600072E-01		Resid rate (us/s)	2.25456E-08	+/-	1.7E-09
Total phase (deg)		-62.2	Apriori accel (us/s/s)	-6.71467593099E-06		Resid phase (deg)	-351.7	+/-	12.6

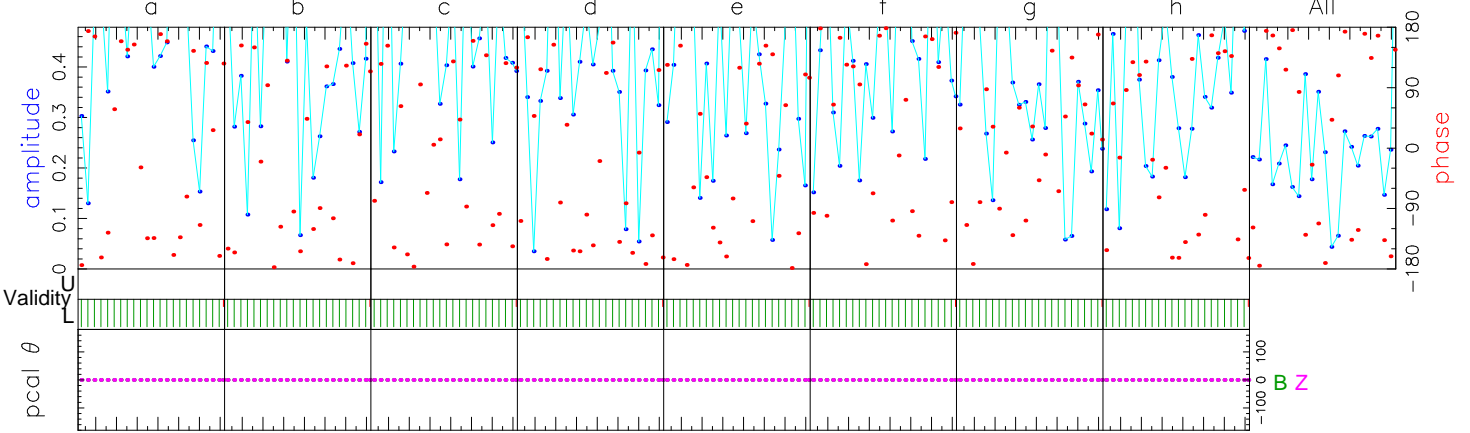
ph/seg (deg) 54.1 30.2 Theor. Amplitude 0.232 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.2 52.7 Search (2048X32) 0.223 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.3 17.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 37.1 31.1 Inc. seg. avg. 0.309 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 144.4 el 23.9 pa -22.0 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) -1898.546 -760.027 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BZ.W.41.0RIZEX simultaneous interpolator



Fringe quality 0
SNR 6.3
Int time 410.323
Amp 0.160
Phase -173.7
PFD 5.3e-02
Delays (us)
SBD -0.021284
MBD -0.006300
Fringe rate (Hz) 0.001903
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234508.70
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105545
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

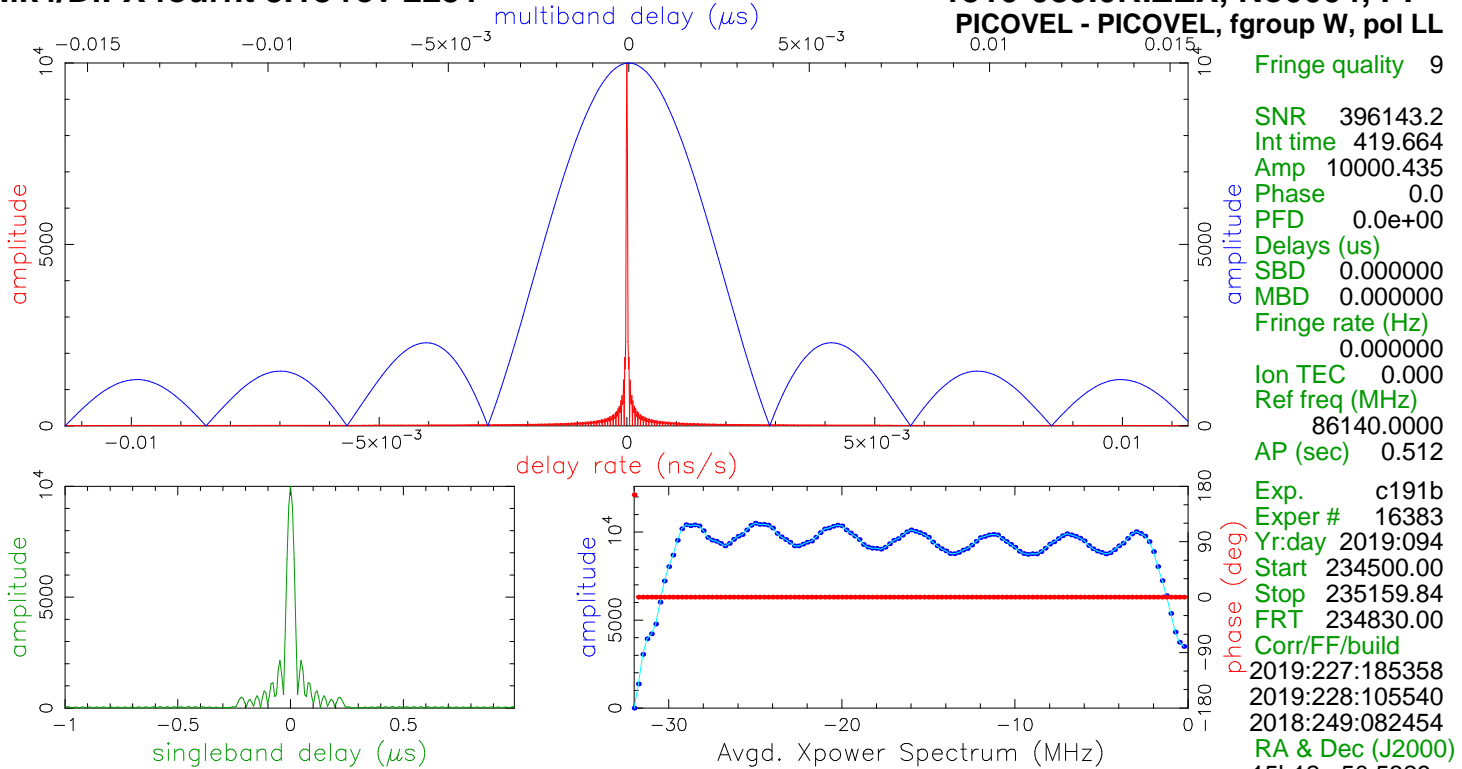


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-174.2	177.1	-167.3	-168.7	-172.8	-179.0	-93.8	173.3	Phase	-173.7
0.3	0.2	0.2	0.2	0.1	0.2	0.0	0.1	Ampl.	0.1
125.8	56.6	190.7	94.7	101.4	49.3	193.1	244.4	Sbd box	126.3
U/L 0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:Z 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	
Z 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Z W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	1.60795781380E+03	Apriori delay (usec)	1.60796411428E+03	Resid mbdelay (usec)	-6.30049E-03	+/-	3.5E-04		
Sband delay (usec)	1.60794283028E+03	Apriori clock (usec)	1.9726494E+01	Resid sbdelay (usec)	-2.12840E-02	+/-	2.8E-03		
Phase delay (usec)	1.60796410868E+03	Apriori clockrate (us/s)	-1.7400000E-07	Resid phdelay (usec)	-5.60034E-06	+/-	5.9E-07		
Delay rate (us/s)	3.25358622165E-01	Apriori rate (us/s)	3.25358600072E-01	Resid rate (us/s)	2.20935E-08	+/-	2.5E-09		
Total phase (deg)	115.8	Apriori accel (us/s/s)	-6.71467593099E-06	Resid phase (deg)	-173.7	+/-	18.3		

ph/seg (deg) 61.7 43.9 Search (2048X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.0 76.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.5 25.9 Inc. seg. avg. 0.178 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
amp/frq (%) 35.9 45.2 Inc. frq. avg. 0.149 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
B: az 144.4 el 23.9 pa -22.0 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) -1898.546 -760.027 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/BZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/BZ.W.56.0RIZEX simultaneous interpolator



Fringe quality 9

SNR 396143.2

Int time 419.664

Amp 10000.435

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. c191b

Exper # 16383

Yr:day 2019:094

Start 234500.00

Stop 235159.84

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105540

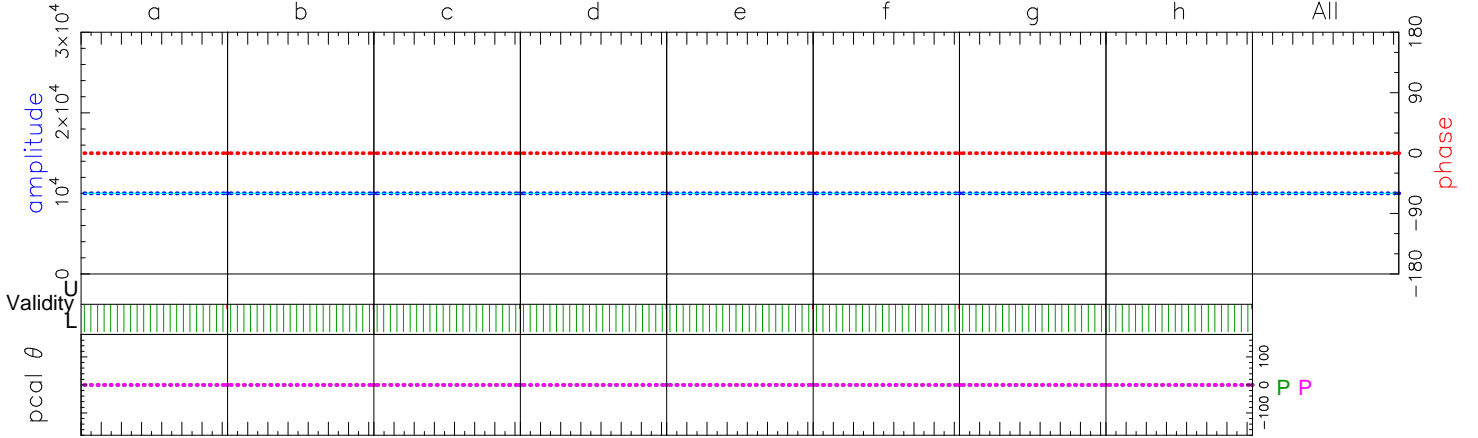
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
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	Ampl.	10000.4
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P 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	
P 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

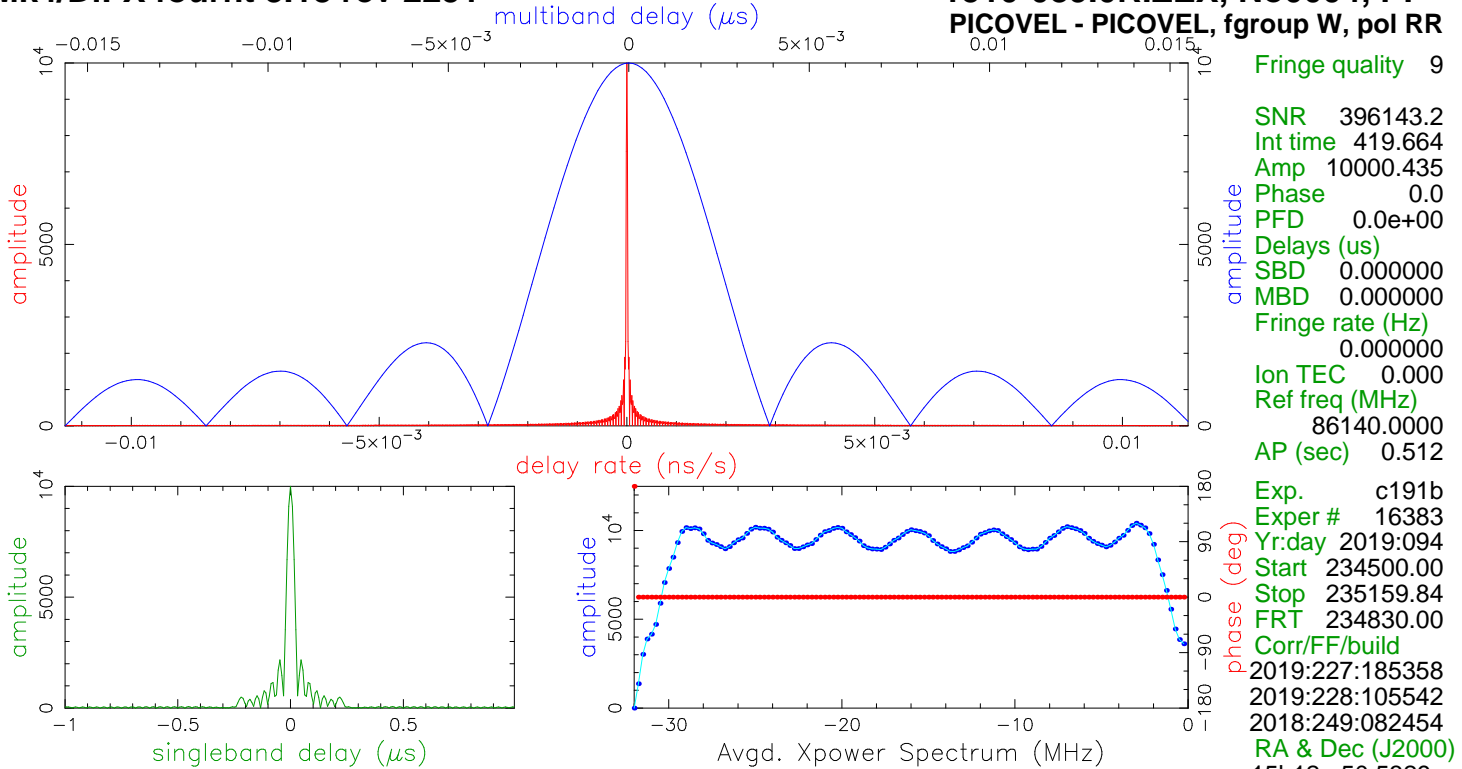
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.436 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.435 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

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 dr window (ns/s) -0.011 0.011

amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.436 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 9

SNR 396143.2

Int time 419.664

Amp 10000.435

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. c191b

Exper # 16383

Yr:day 2019:094

Start 234500.00

Stop 235159.84

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105542

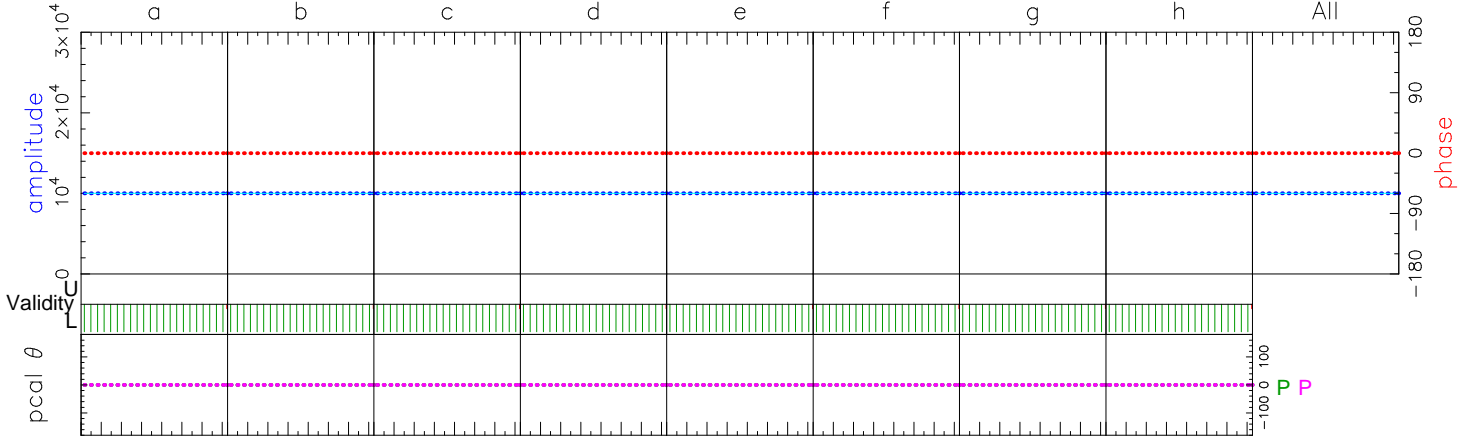
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
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	Ampl.	10000.4
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P 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	
P 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.3E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.8E-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 RMS Theor. Amplitude 10000.436 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.435 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

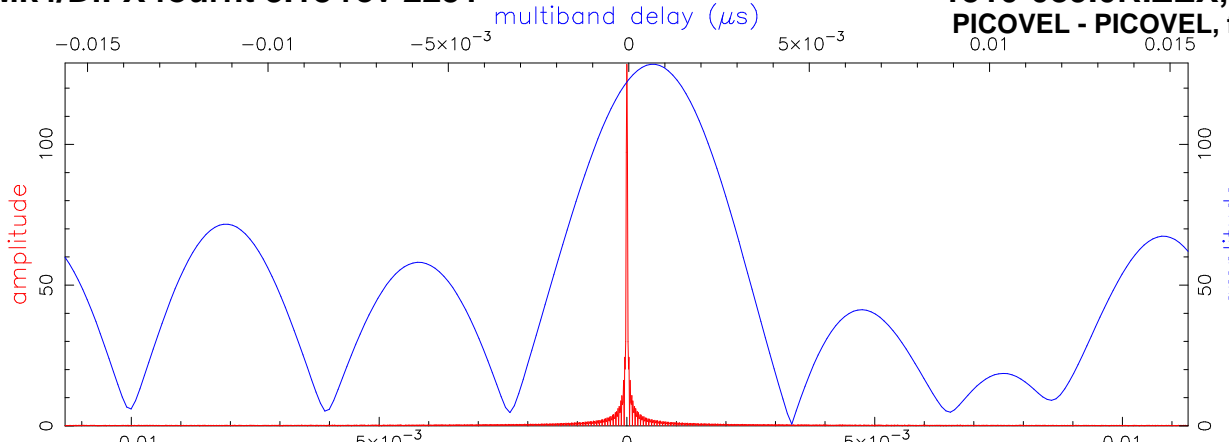
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

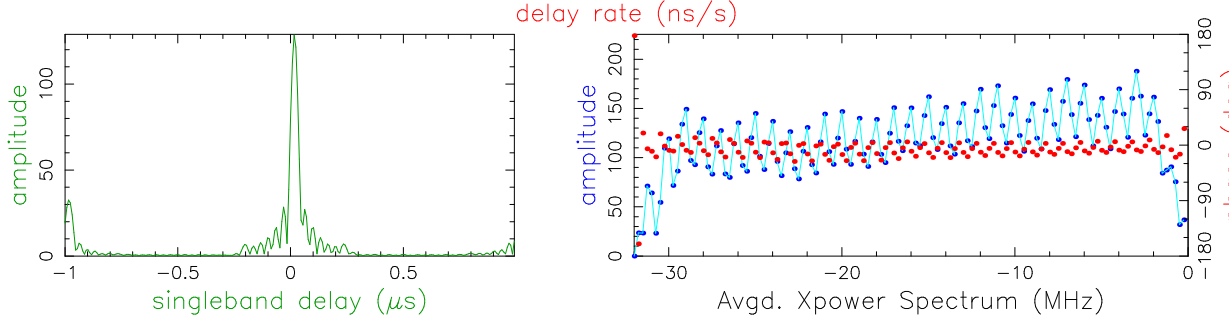
amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.436 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 130.0 el 28.8 pa -37.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

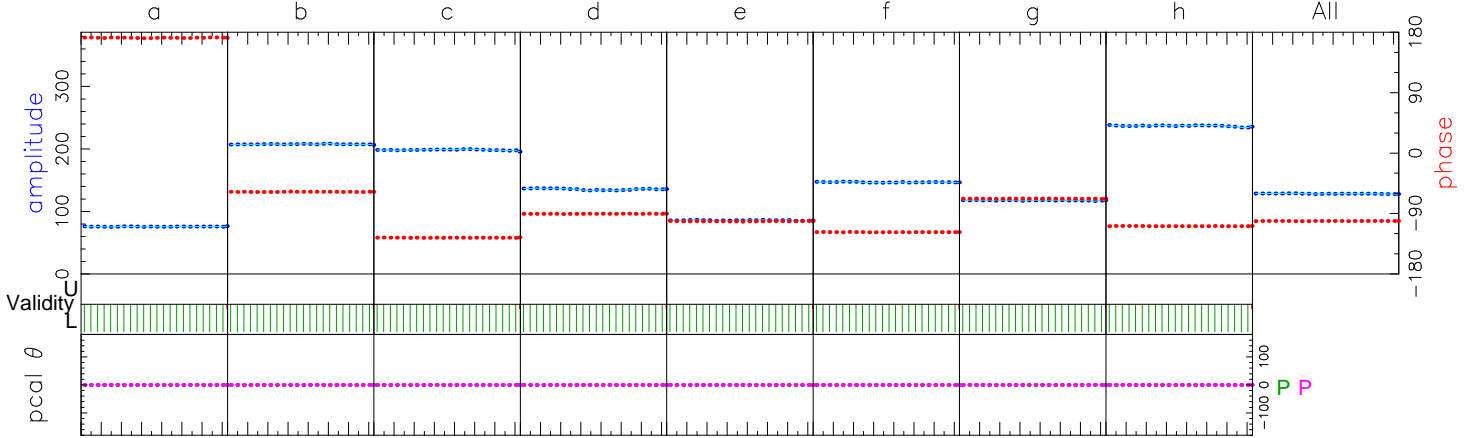
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PP..0RIZEX Output file: /Exps/c191b/v1/1234/No0004/PP.W.28.0RIZEX



Fringe quality 5
 SNR 5107.9
 Int time 419.664
 Amp 128.947
 Phase -281.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.017176
 MBD 0.000656
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105543
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

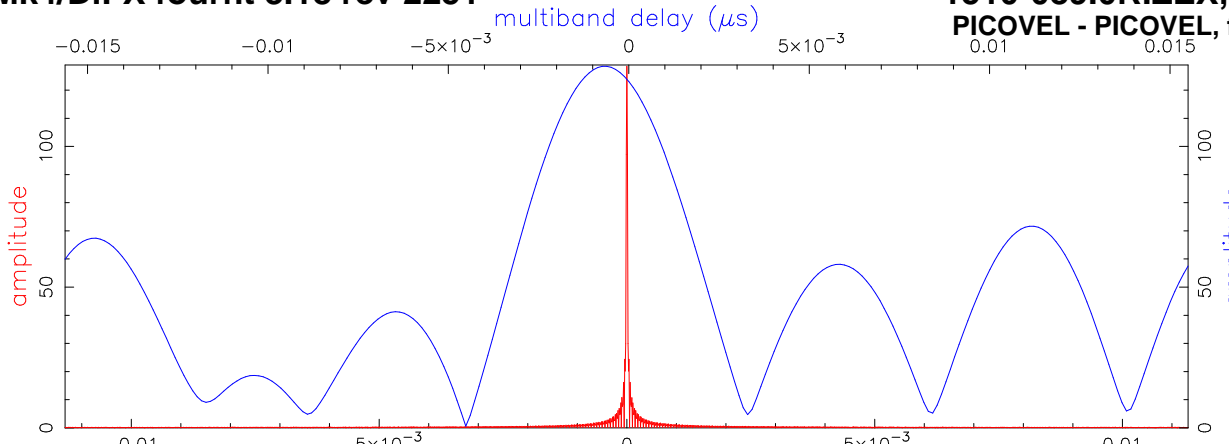


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

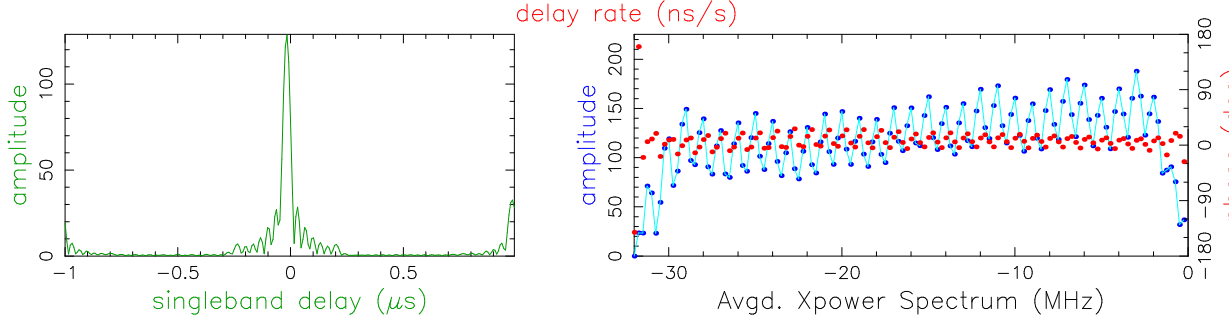


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
171.7	-57.7	-126.0	-90.4	-101.5	-117.7	-67.8	-108.6	Phase	-101.1
75.9	207.6	198.5	135.6	85.9	146.9	117.7	236.9	Ampl.	150.6
129.3	130.3	131.3	131.4	130.6	131.1	131.0	130.8	Sbd box	131.2
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P 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	
P 1000	1000	1000	1000	1000	1000	1000	1000		
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	3.19059375000E-02	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	6.55937E-04	+/-	4.2E-07		
Sband delay (usec)	1.71765000000E-02	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	1.71765E-02	+/-	3.4E-06		
Phase delay (usec)	-3.26081066637E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.26081E-06	+/-	7.2E-10		
Delay rate (us/s)	-1.06283642938E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.06284E-11	+/-	3.0E-12		
Total phase (deg)	-281.1	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-281.1	+/-	0.0		

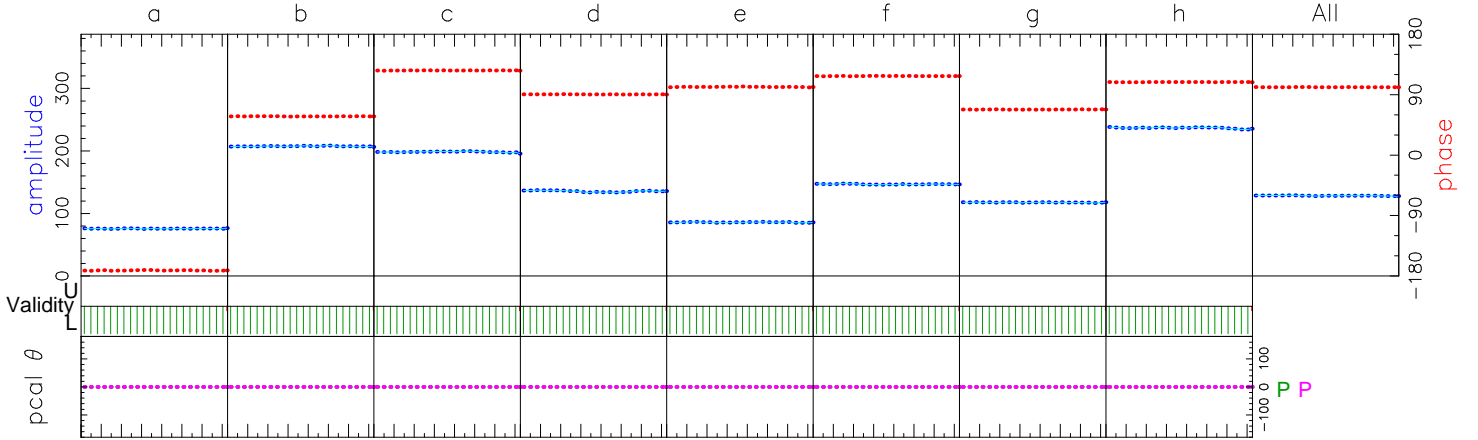
ph/seg (deg) 0.1 0.1
 amp/seg (%) 0.4 0.1
 ph/frq (deg) 44.1 0.0
 amp/frq (%) 45.8 0.1
 P: az 130.0 el 28.8 pa -37.9
 P: az 130.0 el 28.8 pa -37.9
 u,v (fr/asec) 0.000 0.000
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/PP.W.42.0RIZEX



Fringe quality 5
 SNR 5107.9
 Int time 419.664
 Amp 128.947
 Phase 281.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.017176
 MBD -0.000656
 Fringe rate (Hz) 0.000001
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105546
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

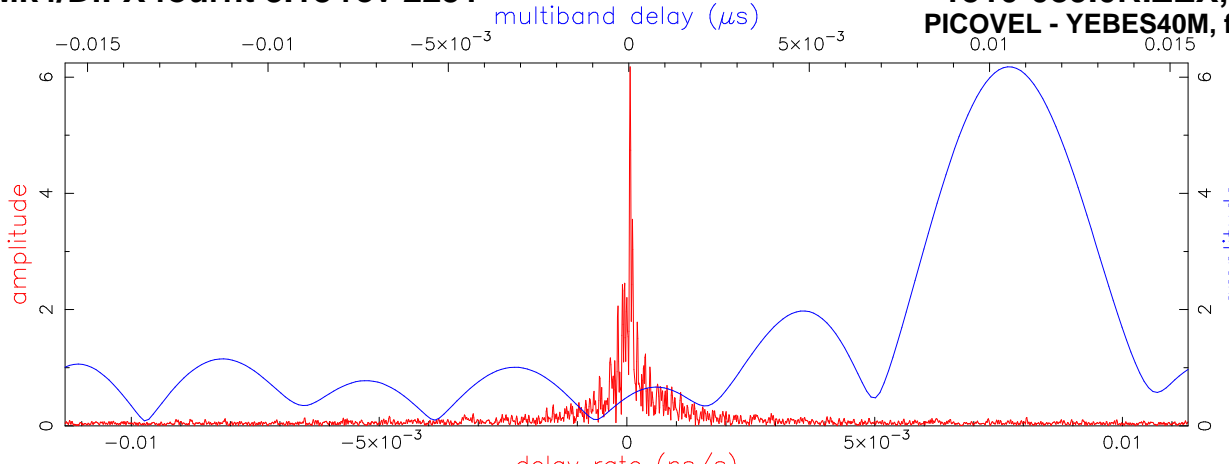


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

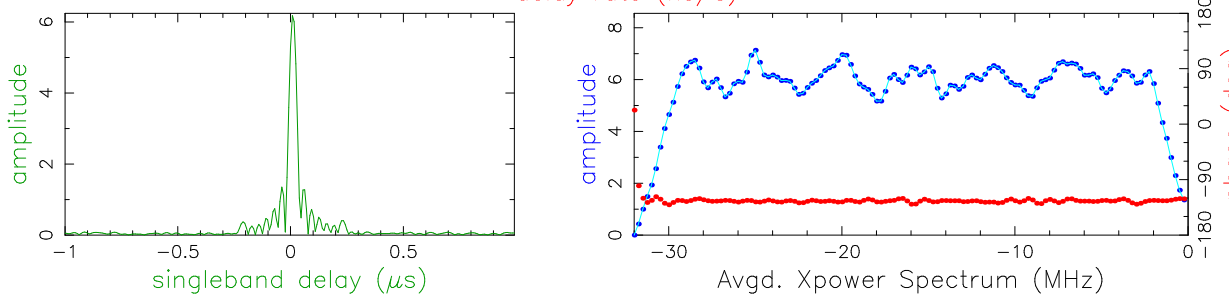


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
-171.7	57.7	126.0	90.4	101.5	117.7	67.8	108.6	101.1	Phase
75.9	207.6	198.5	135.6	85.9	146.9	117.7	236.9	150.6	Ampl.
128.7	127.7	126.7	126.6	127.4	126.9	127.0	127.2	126.8	Sbd box
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs
P:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
P:P 0:0	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	1000	PC amp
P 1000	1000	1000	1000	1000	1000	1000	1000	1000	
P W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Chan ids
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Tracks
									Tracks
Group delay (usec)(sbd)	-3.19059375000E-02		Apriori delay (usec)	0.00000000000E+00		Resid mbdelay (usec)	-6.55937E-04	+/- 4.2E-07	
Sband delay (usec)	-1.71765000000E-02		Apriori clock (usec)	127.297		Resid sbdelay (usec)	-1.71765E-02	+/- 3.4E-06	
Phase delay (usec)	3.26081066659E-06		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	3.26081E-06	+/- 7.2E-10	
Delay rate (us/s)	1.06283642938E-11		Apriori rate (us/s)	0.00000000000E+00		Resid rate (us/s)	1.06284E-11	+/- 3.0E-12	
Total phase (deg)		281.1	Apriori accel (us/s/s)	0.00000000000E+00		Resid phase (deg)	281.1	+/- 0.0	

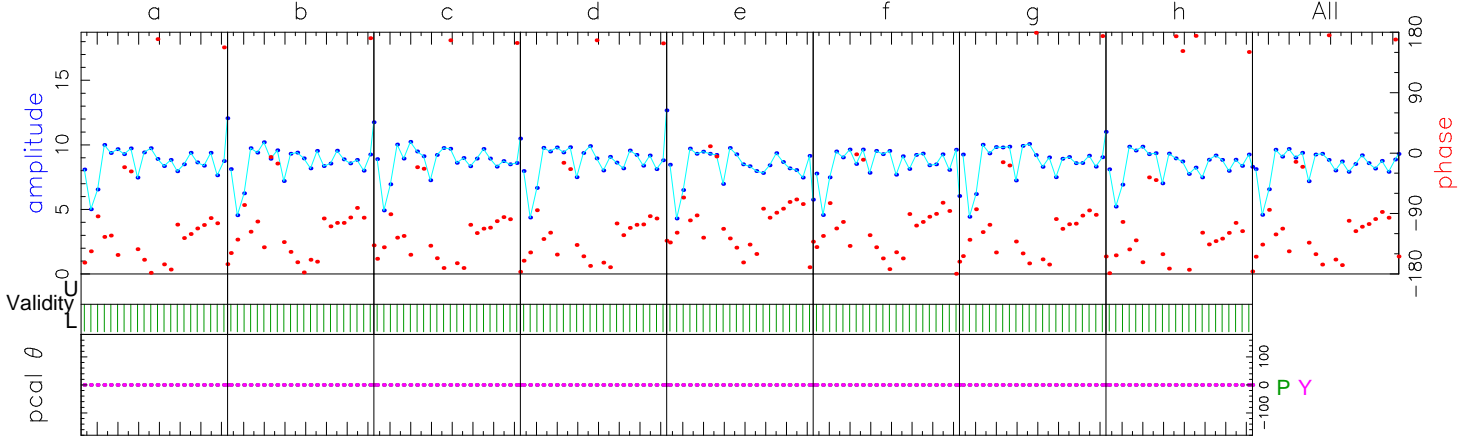
ph/seg (deg) 0.1 0.1 Theor. Amplitude 128.947 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.4 0.1 Search (2048X32) 127.297 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 45.8 0.1 Inc. seg. avg. 128.481 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 P: az 130.0 el 28.8 pa -37.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/PP.W.59.0RIZEX



Fringe quality 5
 SNR 242.6
 Int time 403.946
 Amp 6.244
 Phase -124.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.010496
 MBD 0.010552
 Fringe rate (Hz) 0.005736
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234513.31
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

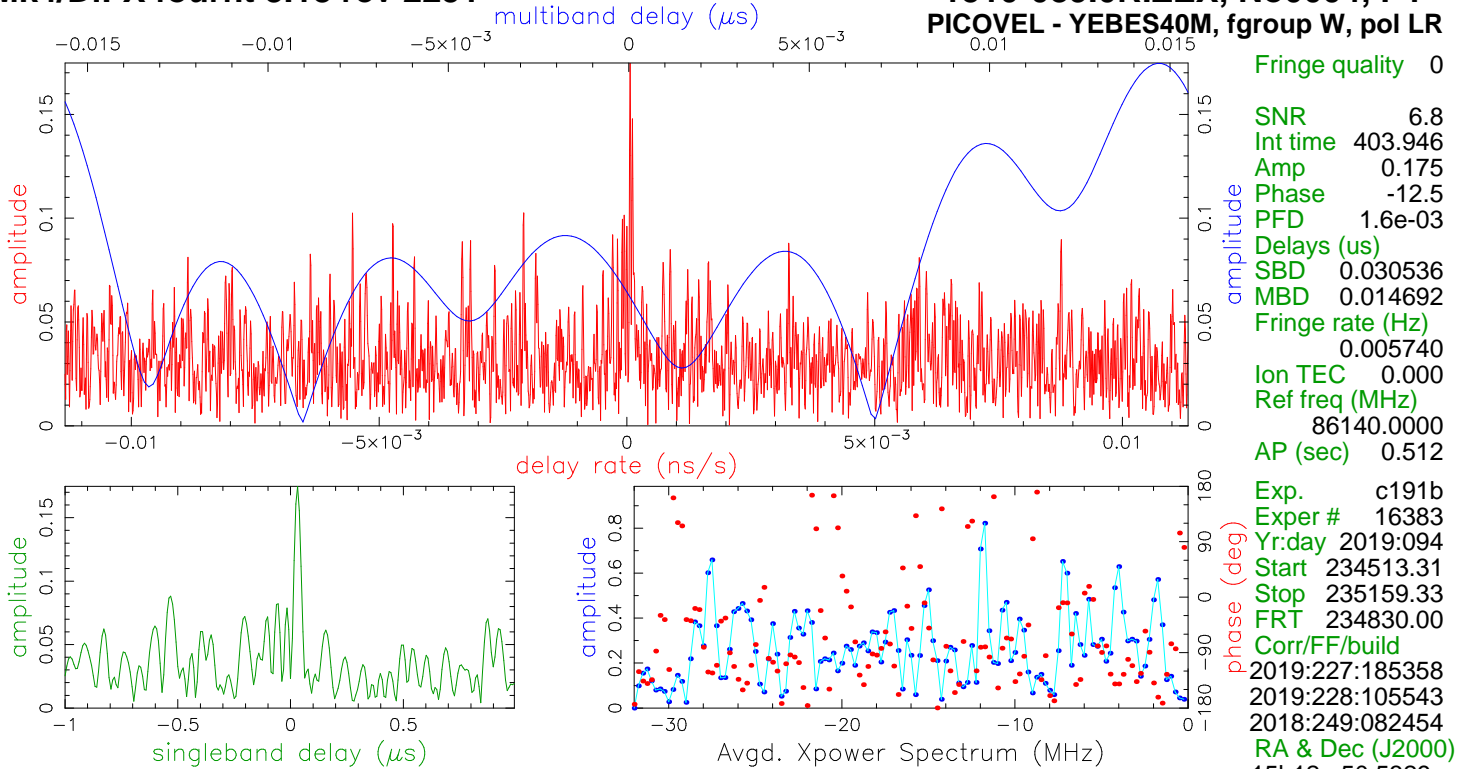


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

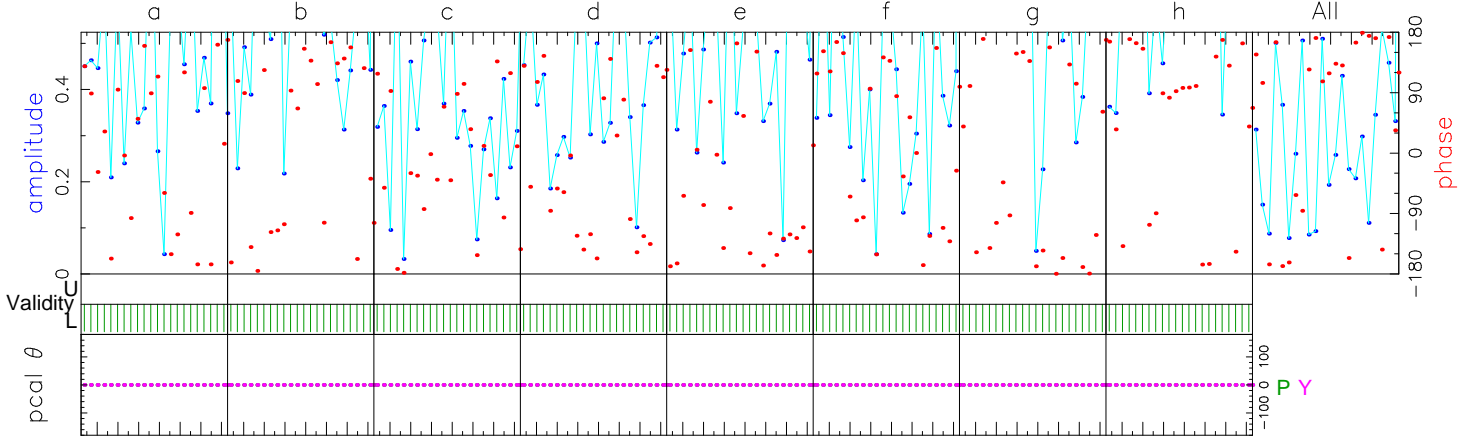


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-132.5	-120.2	-129.7	-128.4	-103.5	-114.4	-122.0	-143.2	Phase	-124.3
	6.3	6.3	6.4	6.3	6.2	6.4	6.3	6.2	Ampl.	6.3
	130.6	130.6	130.3	130.3	130.5	130.2	130.2	130.2	Sbd box	130.3
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.89509063126E+02		Apriori delay (usec)		6.89498510765E+02		Resid mbdelay (usec)		1.05524E-02	+/- 8.9E-06
Sband delay (usec)	6.89509006765E+02		Apriori clock (usec)		-7.2019825E+00		Resid sbdelay (usec)		1.04960E-02	+/- 7.1E-05
Phase delay (usec)	6.89498506758E+02		Apriori clockrate (us/s)		-3.3699999E-07		Resid phdelay (usec)		-4.00730E-06	+/- 1.5E-08
Delay rate (us/s)	4.33556928488E-02		Apriori rate (us/s)		4.33556262649E-02		Resid rate (us/s)		6.65839E-08	+/- 6.5E-11
Total phase (deg)	134.0		Apriori accel (us/s/s)		-2.86195074539E-06		Resid phase (deg)		-124.3	+/- 0.5

ph/seg (deg) 44.7 1.1 Theor. Amplitude 6.244 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.3 2.0 Search (2048X32) 6.135 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.0 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 1.5 1.2 Inc. seg. avg. 8.423 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 P: az 130.0 el 28.8 pa -37.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) -256.453 -374.052 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/PY.W.23.0RIZEX simultaneous interpolator



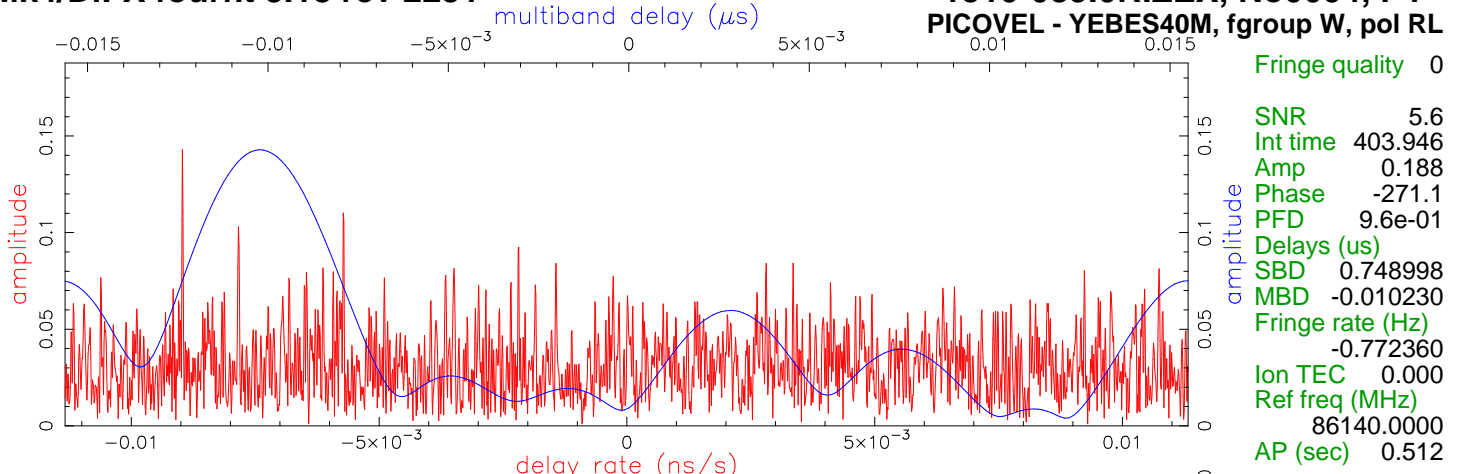
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

Group delay (usec)(sbd)	6.89544453064E+02	Apriori delay (usec)	6.89498510765E+02	Resid mbdelay (usec)	1.46923E-02	+/-	3.2E-04
Sband delay (usec)	6.89529046265E+02	Apriori clock (usec)	-7.2019825E+00	Resid sbdelay (usec)	3.05355E-02	+/-	2.5E-03
Phase delay (usec)	6.89498516168E+02	Apriori clockrate (us/s)	-3.3699999E-07	Resid phdelay (usec)	5.40241E-06	+/-	5.4E-07
Delay rate (us/s)	4.33556929062E-02	Apriori rate (us/s)	4.3355626249E-02	Resid rate (us/s)	6.66413E-08	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.86195074539E-06	Resid phase (deg)	-12.5	+/-	16.9

ph/seg (deg)	55.3	Theor.	40.5	Amplitude	0.175 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	110.3	Search (2048X32)	0.174	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	76.2	Interp.	0.000	Inc. seg. avg.	0.232	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	67.4	Inc. frq. avg.	0.208	Inc. frq. avg.	0.208	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	t_cohere	infinite
								ion window (TEC)	0.00 0.00



Fringe quality 0

SNR 5.6

Int time 403.946

Amp 0.188

Phase -271.1

PFD 9.6e-01

Delays (us)

SBD 0.748998

MBD -0.010230

Fringe rate (Hz)

-0.772360

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:094

Start 234513.31

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

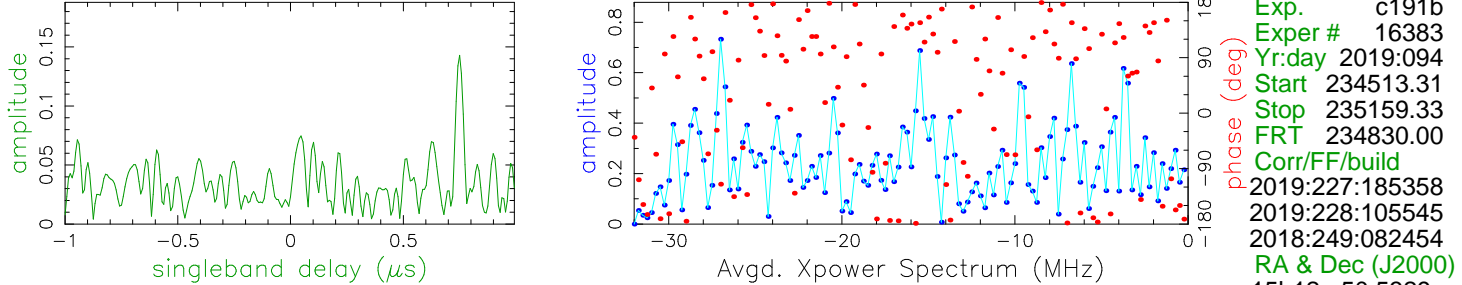
2019:228:105545

2018:249:082454

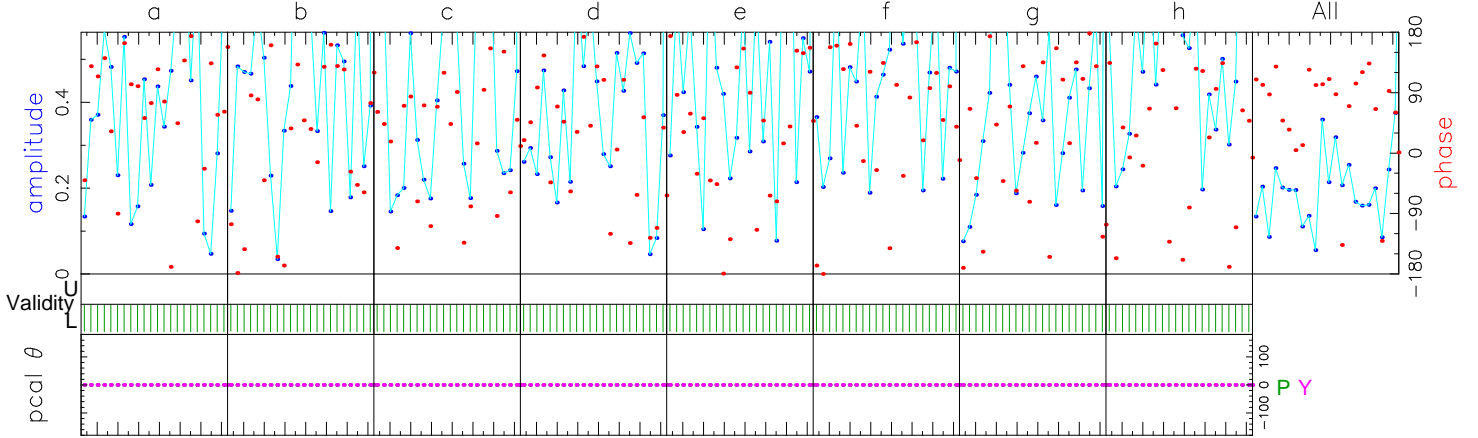
RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
111.4	95.9	70.6	54.5	53.9	109.4	108.4	90.5	Phase	88.9
0.2	0.2	0.3	0.2	0.1	0.3	0.1	0.2	Ampl.	0.2
115.6	113.1	24.7	134.1	212.7	156.3	78.7	6.3	Sbd box	224.9
U/L 0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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 W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
								Tracks	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
								Tracks	
Group delay (usec)(sbd)	6.90238280663E+02	Apriori delay (usec)	6.89498510765E+02	Resid mbdelay (usec)	-1.02301E-02	+/-	3.9E-04		
Sband delay (usec)	6.90247508765E+02	Apriori clock (usec)	-7.2019825E+00	Resid sbdelay (usec)	7.48998E-01	+/-	3.1E-03		
Phase delay (usec)	6.89498513634E+02	Apriori clockrate (us/s)	-3.3699999E-07	Resid phdelay (usec)	2.86833E-06	+/-	6.6E-07		
Delay rate (us/s)	4.33466599345E-02	Apriori rate (us/s)	4.33556262649E-02	Resid rate (us/s)	-8.96633E-06	+/-	2.8E-09		
Total phase (deg)	-12.8	Apriori accel (us/s/s)	-2.86195074539E-06	Resid phase (deg)	-271.1	+/-	20.6		

ph/seg (deg) 54.2 49.4 Search (2048X32) 0.139 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

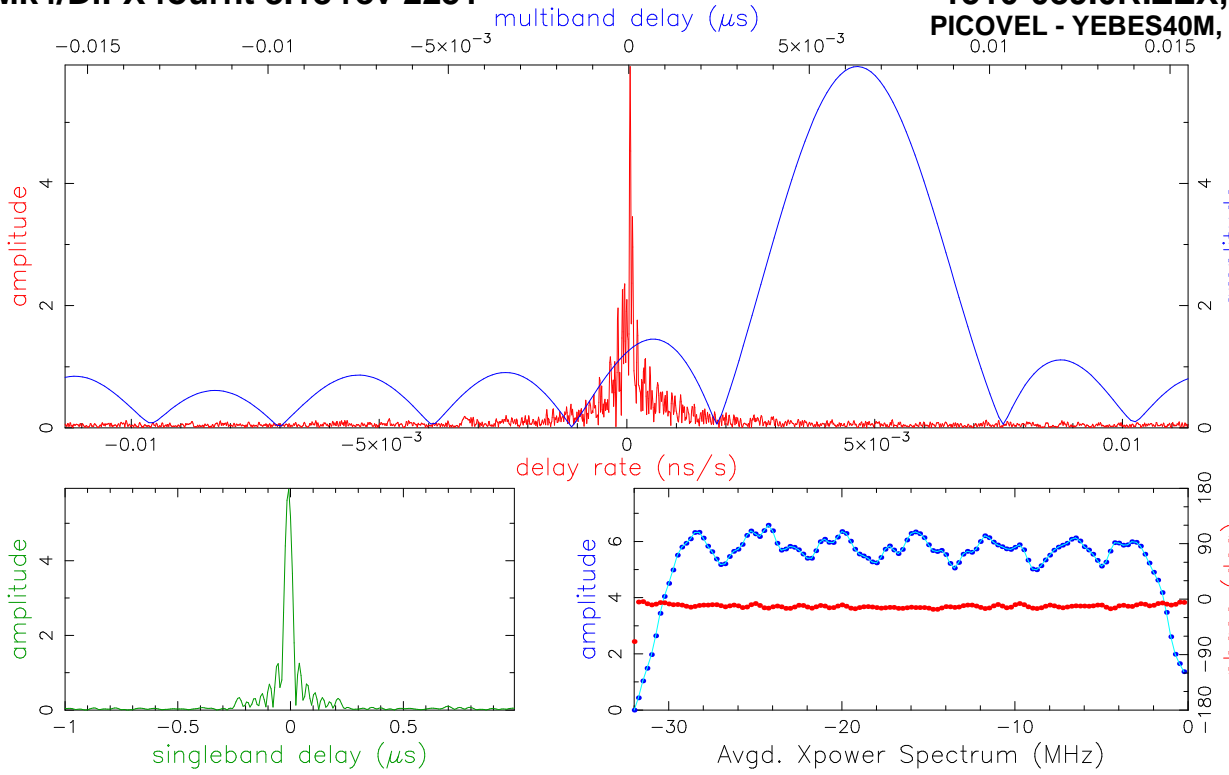
amp/seg (%) 68.8 86.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 26.2 29.1 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 36.2 50.9 Inc. frq. avg. 0.178 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

P: az 130.0 el 28.8 pa -37.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) -256.453 -374.052 ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/PY.W.52.0RIZEX simultaneous interpolator

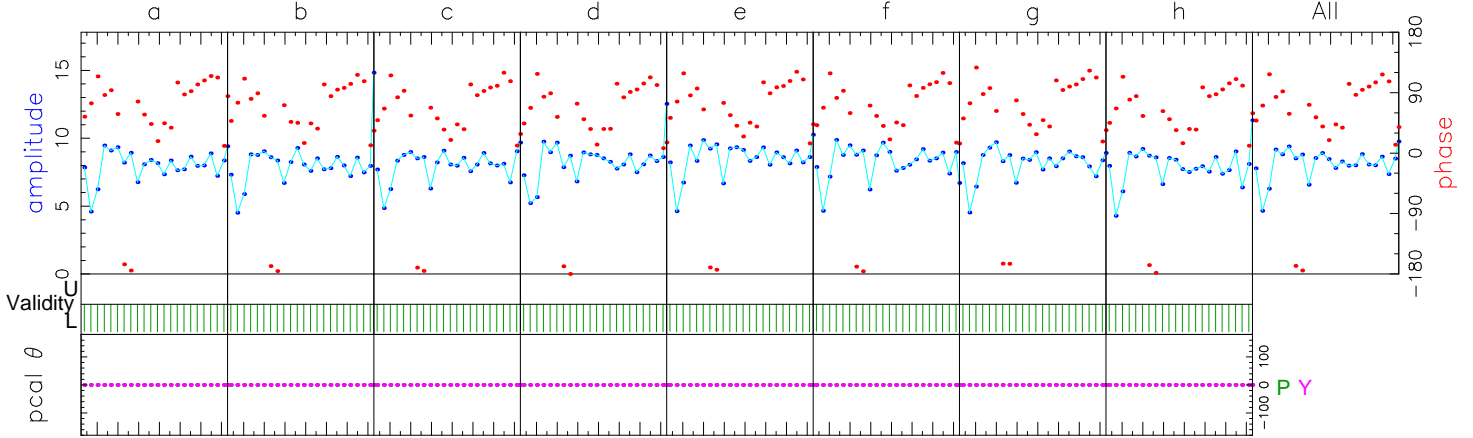


Fringe quality 6

SNR 230.8
 Int time 403.946
 Amp 5.939
 Phase 259.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.009514
 MBD 0.006331
 Fringe rate (Hz) 0.005735
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

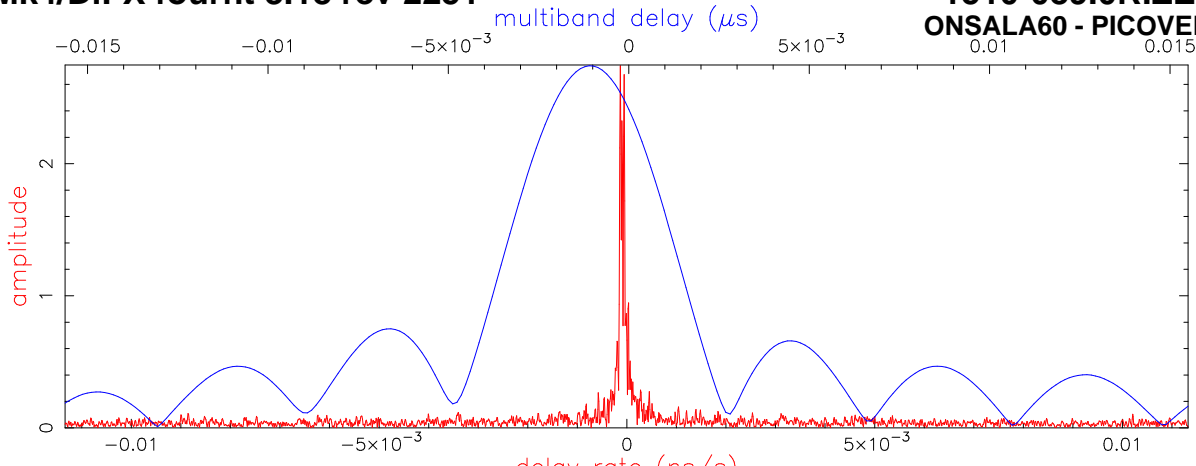
Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234513.31
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

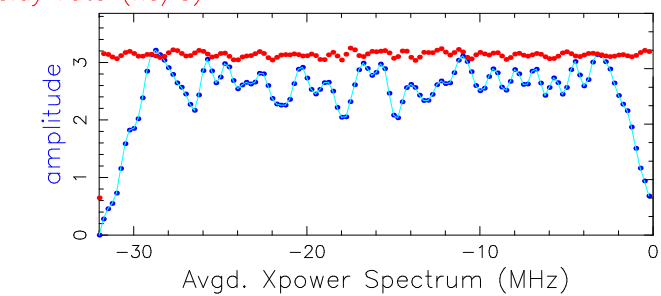
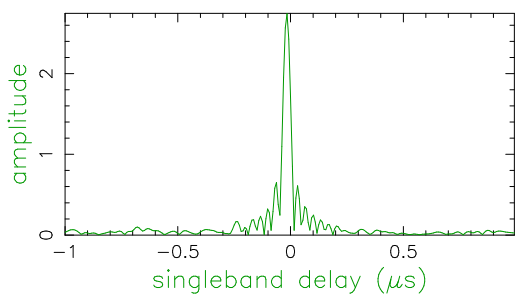


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	81.7	78.1	77.6	75.8	83.2	80.2	84.3	75.1	Phase	79.6
	5.9	5.8	5.8	6.0	6.2	6.1	5.9	5.7	Ampl.	5.9
	127.8	128.0	127.8	127.8	127.8	127.8	127.8	127.4	Sbd box	127.8
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.89473591501E+02		Apriori delay (usec)		6.89498510765E+02		Resid mbdelay (usec)		6.33074E-03	+/- 9.4E-06
Sband delay (usec)	6.89488996765E+02		Apriori clock (usec)		-7.2019825E+00		Resid sbdelay (usec)		-9.51400E-03	+/- 7.5E-05
Phase delay (usec)	6.89498513331E+02		Apriori clockrate (us/s)		-3.3699999E-07		Resid phdelay (usec)		2.56539E-06	+/- 1.6E-08
Delay rate (us/s)	4.33556928382E-02		Apriori rate (us/s)		4.3355626249E-02		Resid rate (us/s)		6.65732E-08	+/- 6.8E-11
Total phase (deg)	157.8		Apriori accel (us/s/s)		-2.86195074539E-06		Resid phase (deg)		259.6	+/- 0.5

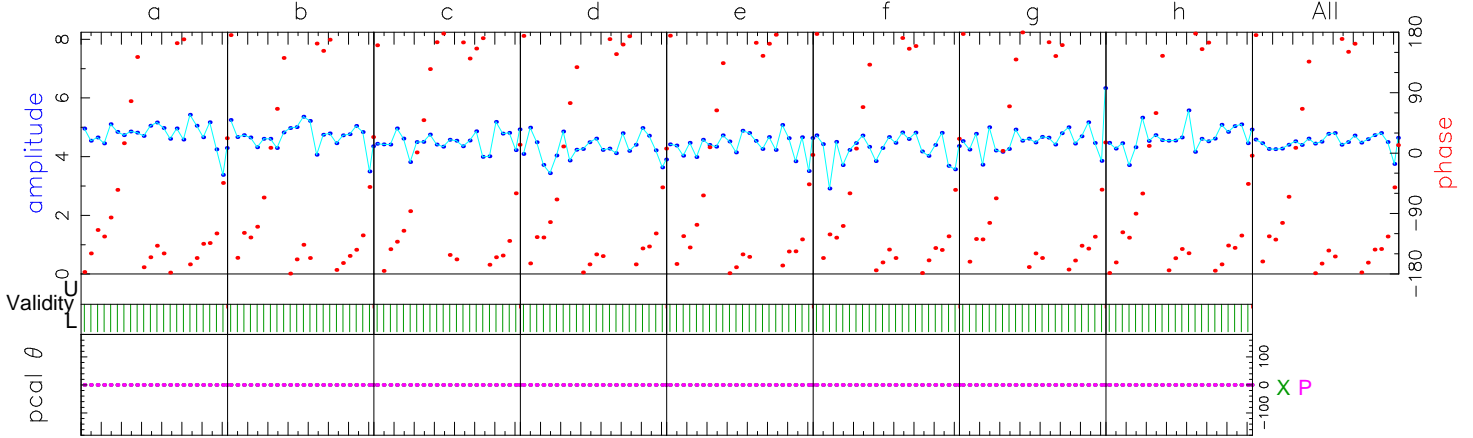
ph/seg (deg) 45.0 1.2 Theor. Amplitude 5.939 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.0 2.1 Search (2048X32) 5.770 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 3.7 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 2.9 1.2 Inc. seg. avg. 8.066 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 P: az 130.0 el 28.8 pa -37.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) -256.453 -374.052 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/PY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/PY.W.8.0RIZEX simultaneous interpolator



Fringe quality 5
 SNR 108.6
 Int time 417.841
 Amp 2.748
 Phase 23.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.016741
 MBD -0.001067
 Fringe rate (Hz)
 -0.011558
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

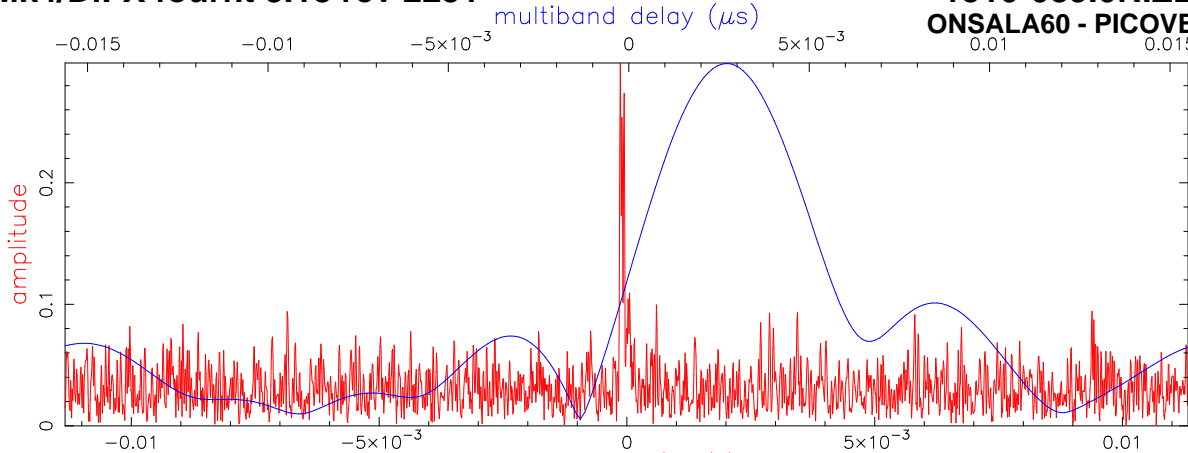


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-149.0	-155.7	-166.3	-158.5	-161.4	-157.8	-157.6	-150.4	Phase	-156.9
	3.0	3.0	2.7	2.6	2.7	2.6	2.8	2.7	Ampl.	2.8
	126.9	126.6	126.9	127.0	127.0	126.8	126.7	127.0	Sbd box	126.9
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	

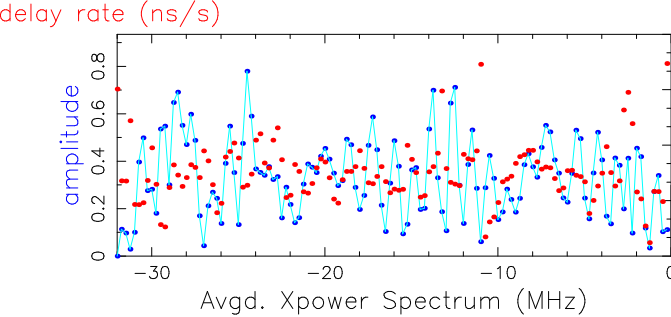
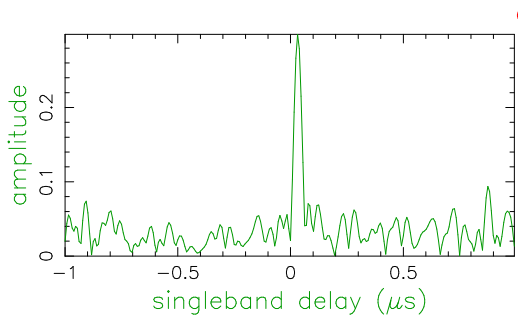
Group delay (usec)(sbd)	-3.15248296730E+03	Apriori delay (usec)	-3.15245065056E+03	Resid mbdelay (usec)	-1.06674E-03	+/-	2.0E-05
Sband delay (usec)	-3.15246739206E+03	Apriori clock (usec)	2.5263729E+01	Resid sbdelay (usec)	-1.67415E-02	+/-	1.6E-04
Phase delay (usec)	-3.15245065562E+03	Apriori clockrate (us/s)	5.9400000E-07	Resid phdelay (usec)	-5.06075E-06	+/-	3.4E-08
Delay rate (us/s)	-4.46889270390E-01	Apriori rate (us/s)	-4.46889136208E-01	Resid rate (us/s)	-1.34182E-07	+/-	1.4E-10
Total phase (deg)	9.0	Apriori accel (us/s/s)	1.25865447422E-05	Resid phase (deg)	23.1	+/-	1.1

ph/seg (deg)	62.9	RMS	2.5	Theor.	2.718	Amplitude	2.748 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	64.0		4.4		0.000	Search (2048X32)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	6.0		1.5		4.487	Interp.	4.487	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	5.1		2.6		2.753	Inc. seg. avg.	2.753	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Inc. frq. avg.		Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
										ion window (TEC)	0.00 0.00

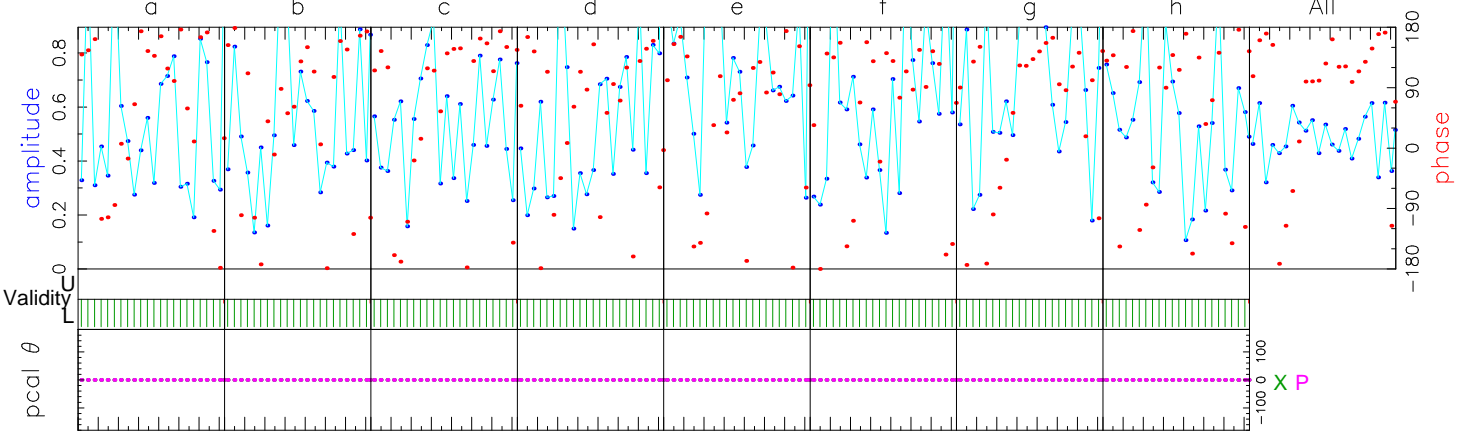
X: az 151.0 el 19.7 pa -14.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 2614.237 1941.792 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XP.W.21.0RIZEX



Fringe quality 9
 SNR 11.8
 Int time 417.841
 Amp 0.299
 Phase -41.2
 PFD 9.6e-24
 Delays (us)
 SBD 0.032270
 MBD 0.002710
 Fringe rate (Hz)
 -0.011367
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105543
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

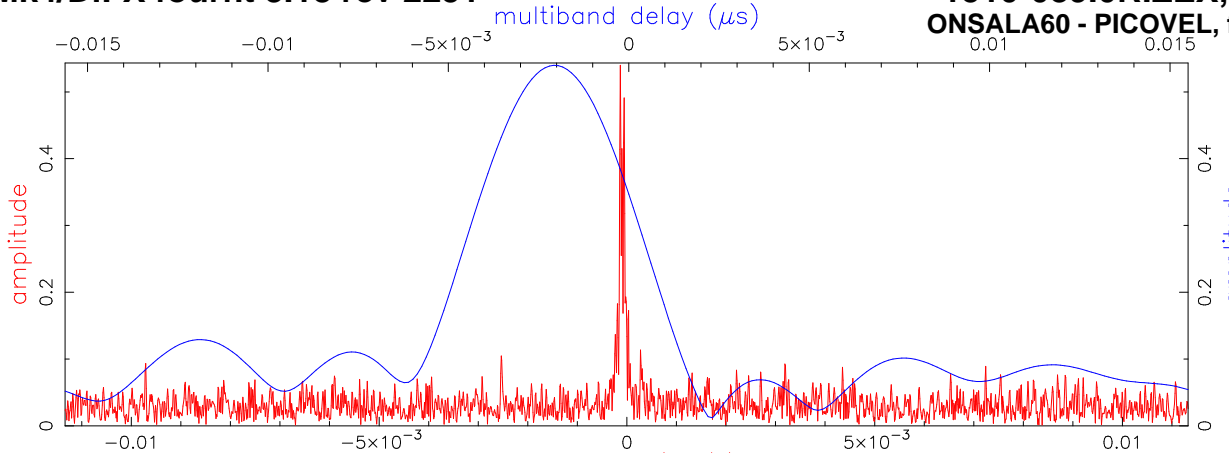


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	159.1	136.8	141.3	112.6	123.7	138.0	137.9	159.1	Phase	138.8
	0.2	0.3	0.3	0.1	0.4	0.4	0.4	0.3	Ampl.	0.3
	6.9	132.2	132.9	160.1	133.1	133.0	133.8	132.8	Sbd box	133.1
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.15241669024E+03		Apriori delay (usec)		-3.15245065056E+03		Resid mbdelay (usec)		2.71032E-03	+/- 1.8E-04
Sband delay (usec)	-3.15241838056E+03		Apriori clock (usec)		2.5263729E+01		Resid sbdelay (usec)		3.22700E-02	+/- 1.5E-03
Phase delay (usec)	-3.15245064608E+03		Apriori clockrate (us/s)		5.9400000E-07		Resid phdelay (usec)		4.47571E-06	+/- 3.1E-07
Delay rate (us/s)	-4.46889268173E-01		Apriori rate (us/s)		-4.46889136208E-01		Resid rate (us/s)		-1.31965E-07	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		1.25865447422E-05		Resid phase (deg)		-41.2	+/- 9.7

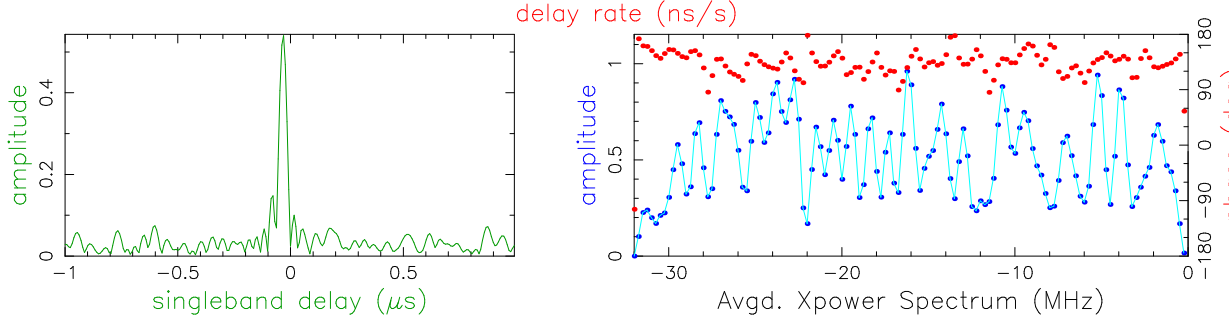
ph/seg (deg) 60.1 23.3 Search (2048X32) 0.295 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.5 40.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.1 13.7 Inc. seg. avg. 0.450 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 30.6 24.0 Inc. frq. avg. 0.297 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 151.0 el 19.7 pa -14.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 2614.237 1941.792 ion window (TEC) 0.00 0.00



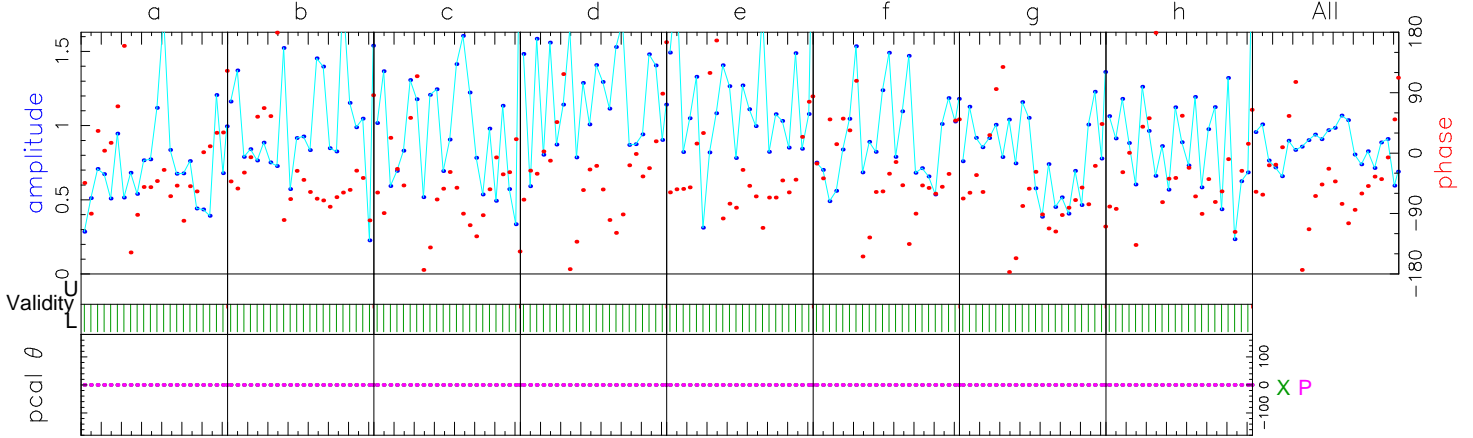
Fringe quality 9

SNR 21.5
Int time 417.841
Amp 0.543
Phase 134.0
PFD 0.0e+00
Delays (us)
SBD -0.033310
MBD -0.002054
Fringe rate (Hz)
-0.011468
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234500.00
Stop 235159.84
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105545
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



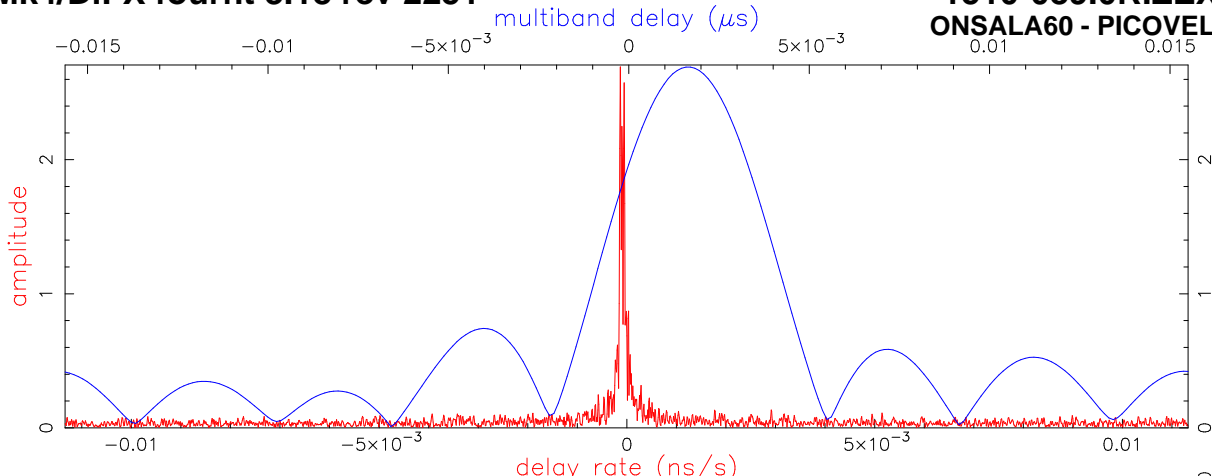
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



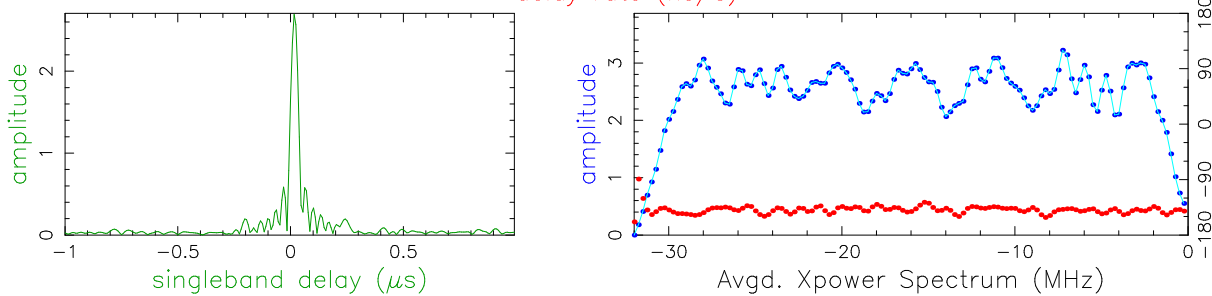
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-27.5	-48.6	-62.9	-40.7	-53.5	-34.1	-63.3	-34.2	Phase	-46.0
	0.4	0.7	0.5	0.6	0.7	0.5	0.4	0.5	Ampl.	0.5
	124.7	124.9	125.0	124.8	124.8	124.6	124.3	124.6	Sbd box	124.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.15248395436E+03		Apriori delay (usec)		-3.15245065056E+03		Resid mbdelay (usec)		-2.05380E-03	+/- 1.0E-04
Sband delay (usec)	-3.15248396056E+03		Apriori clock (usec)		2.5263729E+01		Resid sbdelay (usec)		-3.33100E-02	+/- 8.0E-04
Phase delay (usec)	-3.15245065204E+03		Apriori clockrate (us/s)		5.9400000E-07		Resid phdelay (usec)		-1.48382E-06	+/- 1.7E-07
Delay rate (us/s)	-4.46889269337E-01		Apriori rate (us/s)		-4.46889136208E-01		Resid rate (us/s)		-1.33129E-07	+/- 7.1E-10
Total phase (deg)	120.0		Apriori accel (us/s/s)		1.25865447422E-05		Resid phase (deg)		134.0	+/- 5.3

ph/seg (deg) 60.3 12.8 Theor. Amplitude 0.543 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.9 22.3 Search (2048X32) 0.537 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.7 7.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 21.1 13.2 Inc. seg. avg. 0.841 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.547 ion window (TEC) 0.00 0.00

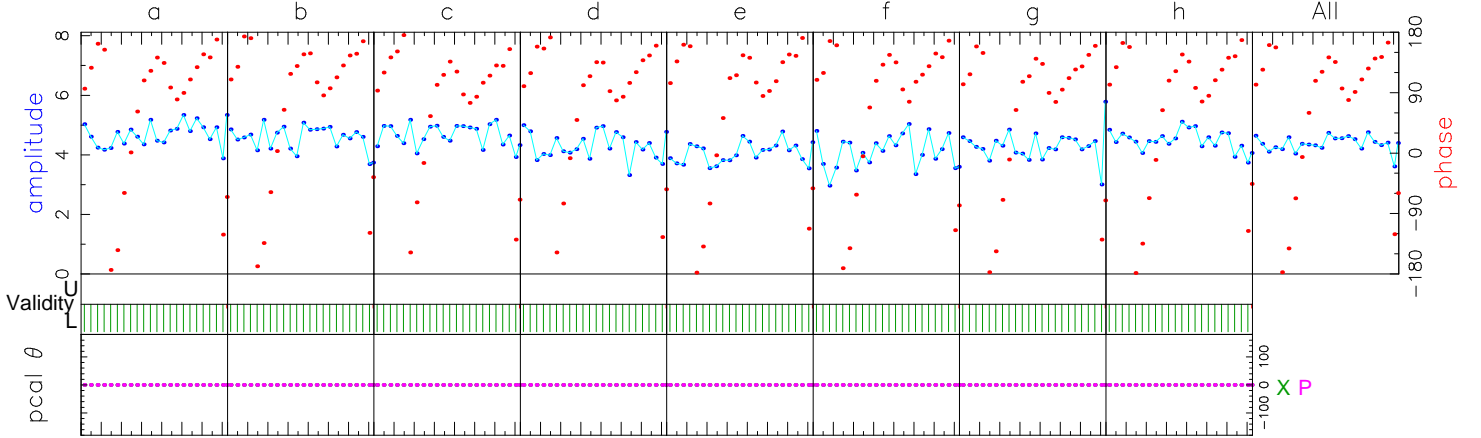
X: az 151.0 el 19.7 pa -14.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 2614.237 1941.792 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XP.W.54.0RIZEX



Fringe quality 5
 SNR 107.0
 Int time 417.841
 Amp 2.707
 Phase -50.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.017494
 MBD 0.001635
 Fringe rate (Hz)
 -0.011551
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

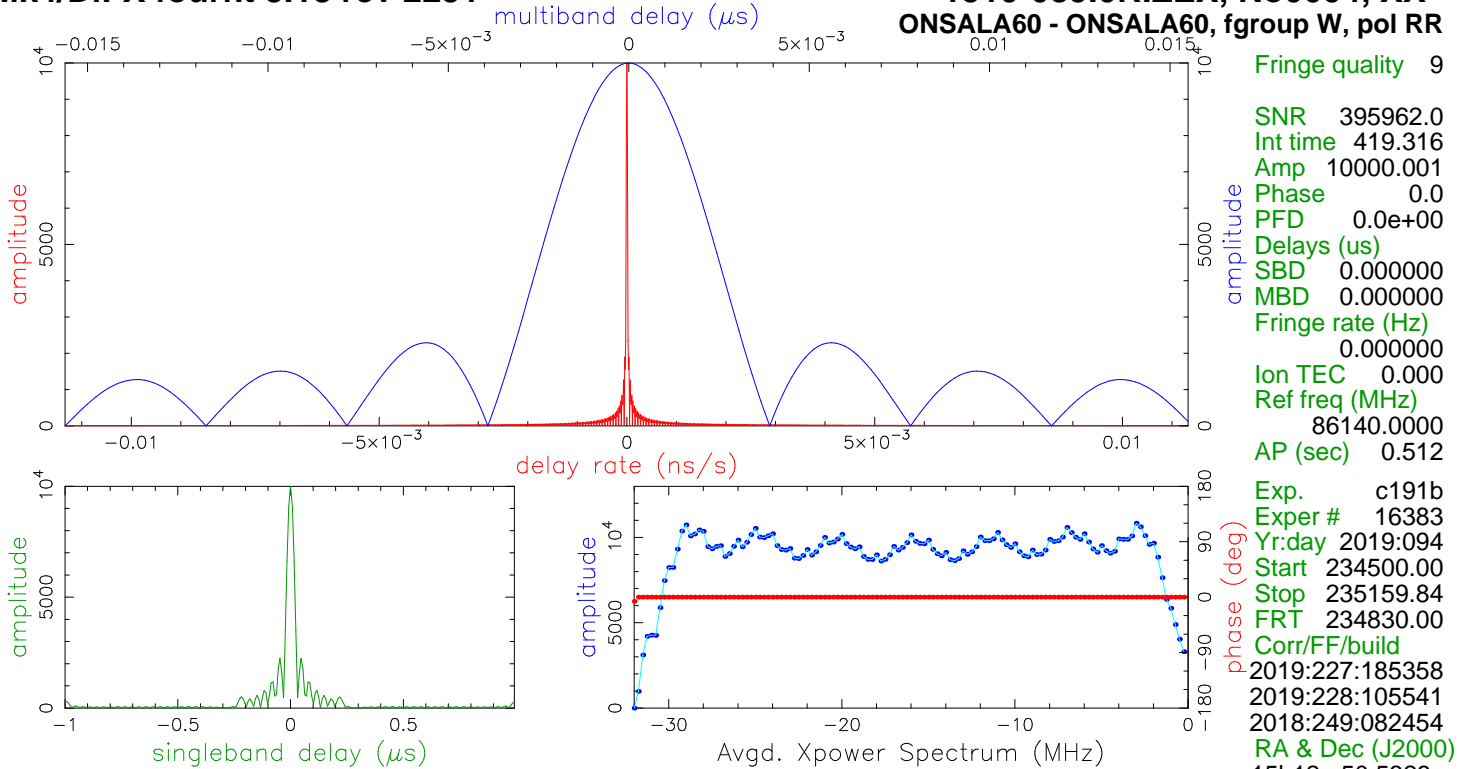


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	-3.15241776530E+03								1.63526E-03	+/- 2.0E-05
Sband delay (usec)	-3.15243315606E+03								1.74945E-02	+/- 1.6E-04
Phase delay (usec)	-3.15245064638E+03								4.17782E-06	+/- 3.5E-08
Delay rate (us/s)	-4.46889270305E-01								-1.34097E-07	+/- 1.4E-10
Total phase (deg)			-64.5						-50.4	+/- 1.1
RMS	62.7	2.6								
Theor.	2.6									
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
PCal period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
nlags: 128 t_cohere infinite										
simultaneous interpolator										

X: az 151.0 el 19.7 pa -14.9 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 2614.237 1941.792
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XP.W.6.0RIZEX

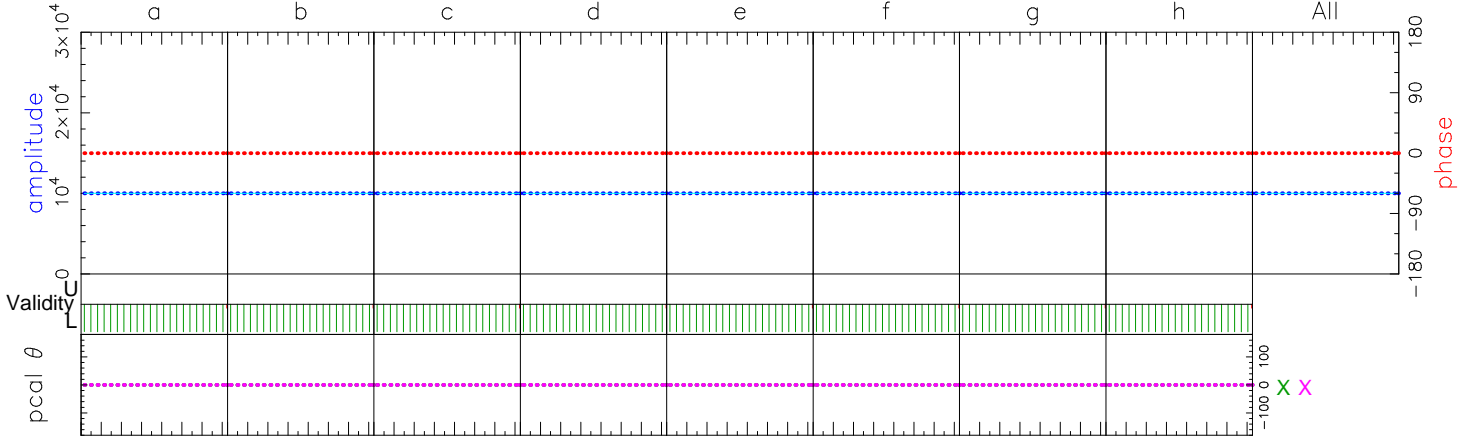


Fringe quality 9

SNR 395962.0
Int time 419.316
Amp 10000.001
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. c191b
Exper # 16383
Yr:day 2019:094
Start 234500.00
Stop 235159.84
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105541
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

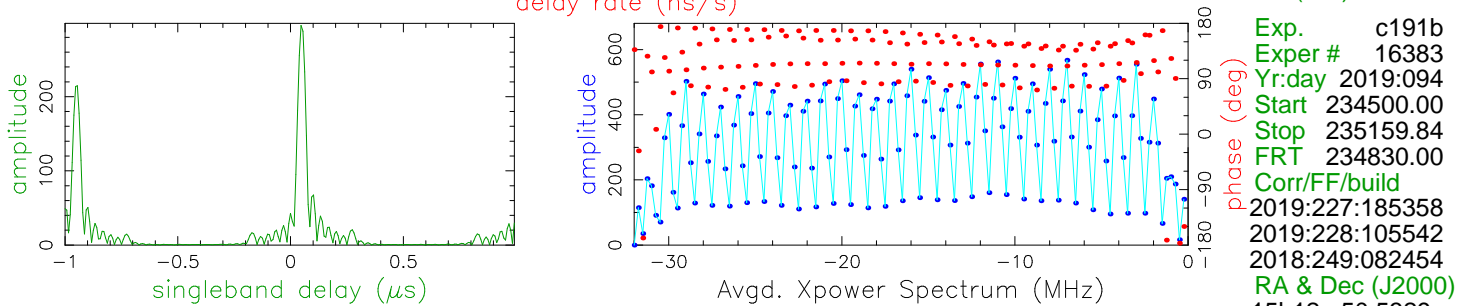
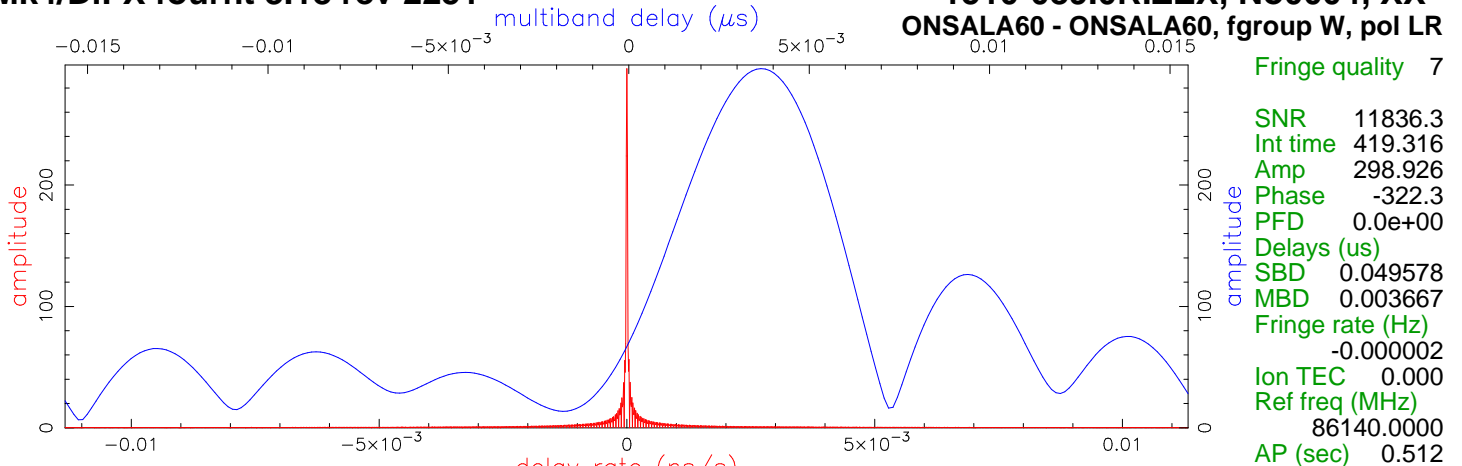


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.4E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.9E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

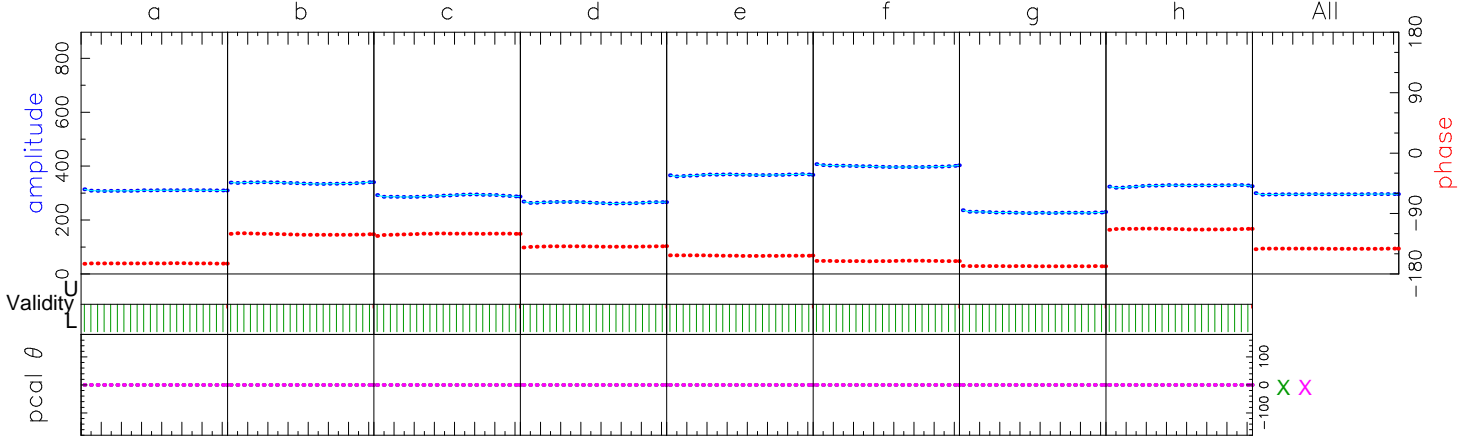
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 151.0 el 19.7 pa -14.9 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XX..0RIZEX Output file: /Exps/c191b/v1/1234/No0004/XX.W.19.0RIZEX

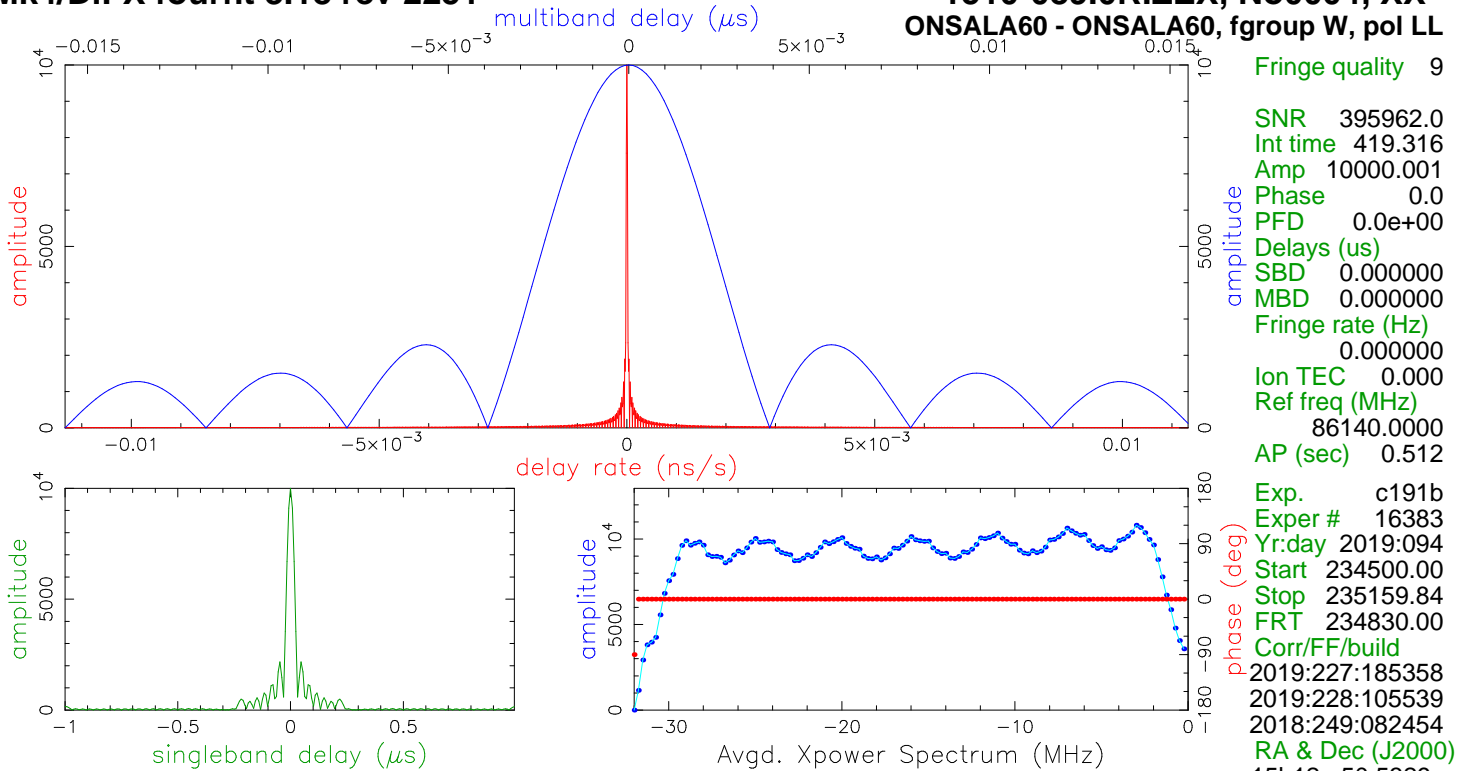


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-164.2	-120.8	-120.4	-139.1	-152.6	-160.6	-168.3	-113.1	Phase	-142.3
	310.1	337.5	290.1	265.1	367.5	399.5	228.2	327.2	Ampl.	315.6
	135.7	135.7	135.0	135.1	135.0	135.0	135.5	135.4	Sbd box	135.3
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.49170000000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.66700E-03	+/- 1.8E-07
Sband delay (usec)	4.95780000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		4.95780E-02	+/- 1.5E-06
Phase delay (usec)	-4.58869992420E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.58870E-06	+/- 3.1E-10
Delay rate (us/s)	-2.19652862071E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-2.19653E-11	+/- 1.3E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-322.3	+/- 0.0

	RMS	Theor.	Amplitude	298.926 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.2	0.0	Search (2048X32)	294.262	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)
amp/seg (%)	1.1	0.0	Interp.	0.000	Bits/sample: 2x2	mb window (us)
ph/frq (deg)	23.8	0.0	Inc. seg. avg.	295.922	Sample rate(MSamp/s): 64	dr window (ns/s)
amp/frq (%)	18.1	0.0	Inc. frq. avg.	315.646	Data rate(Mb/s): 1024	ion window (TEC)



Fringe quality 9

SNR 395962.0

Int time 419.316

Amp 10000.001

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. c191b

Exper # 16383

Yr:day 2019:094

Start 234500.00

Stop 235159.84

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105539

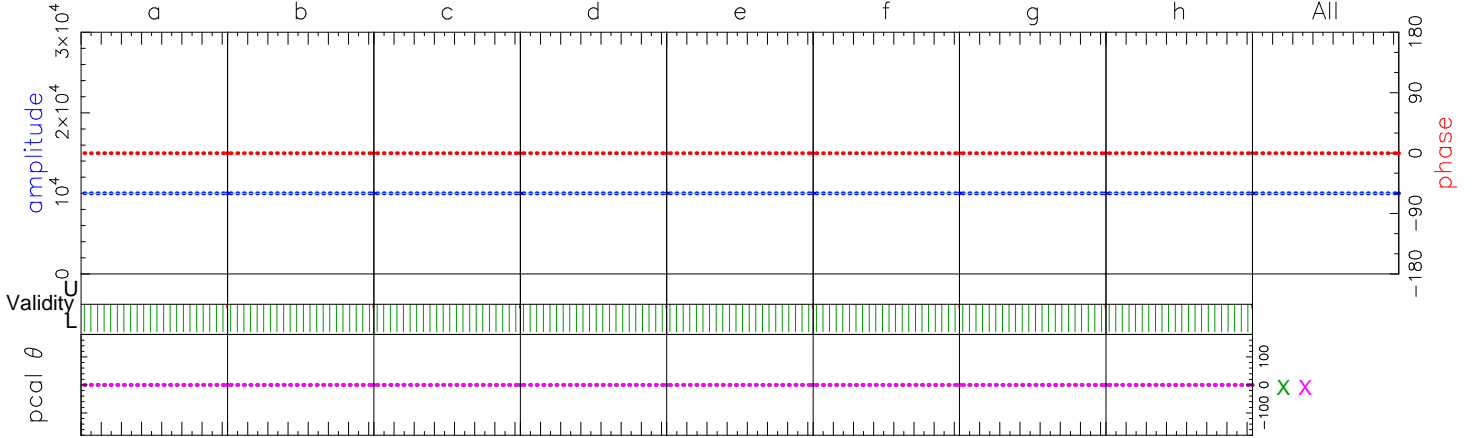
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
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	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.4E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.3E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.9E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

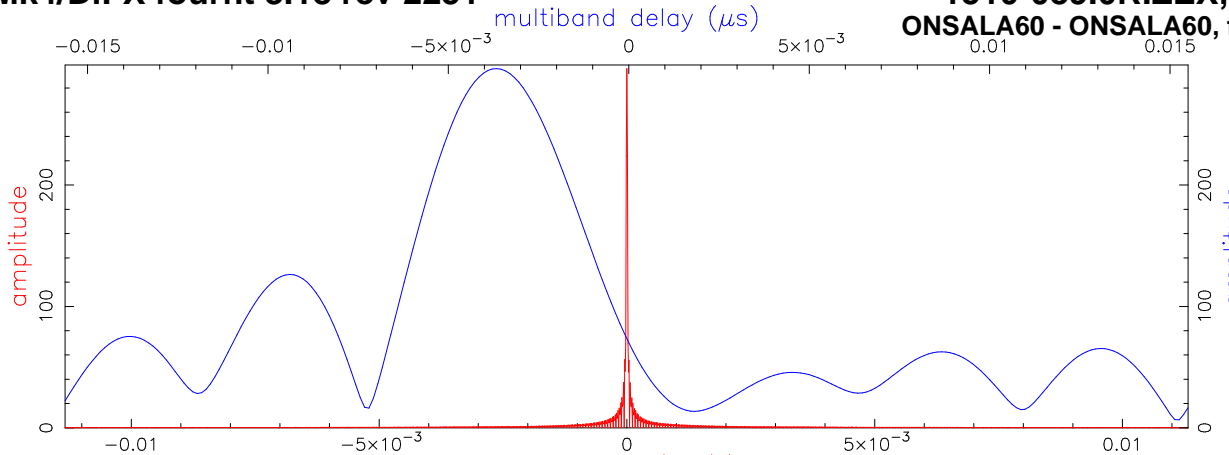
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 0.0 0.0 Search (2048X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

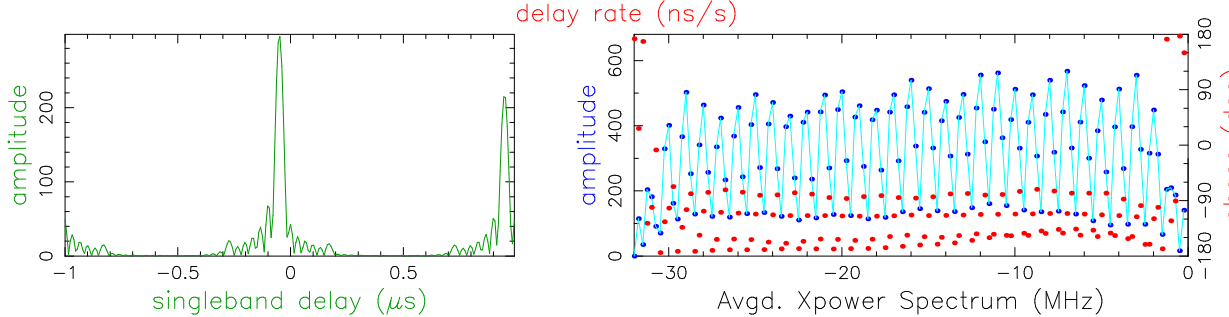
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011

amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00



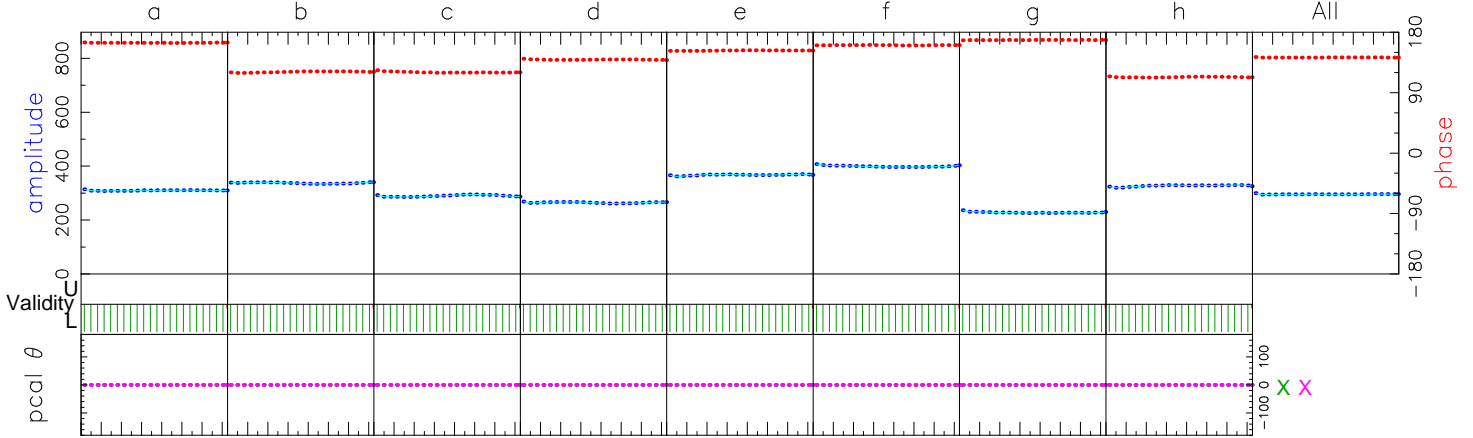
Fringe quality 7

SNR 11836.3
 Int time 419.316
 Amp 298.926
 Phase 322.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.049578
 MBD -0.003667
 Fringe rate (Hz)
 0.000002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



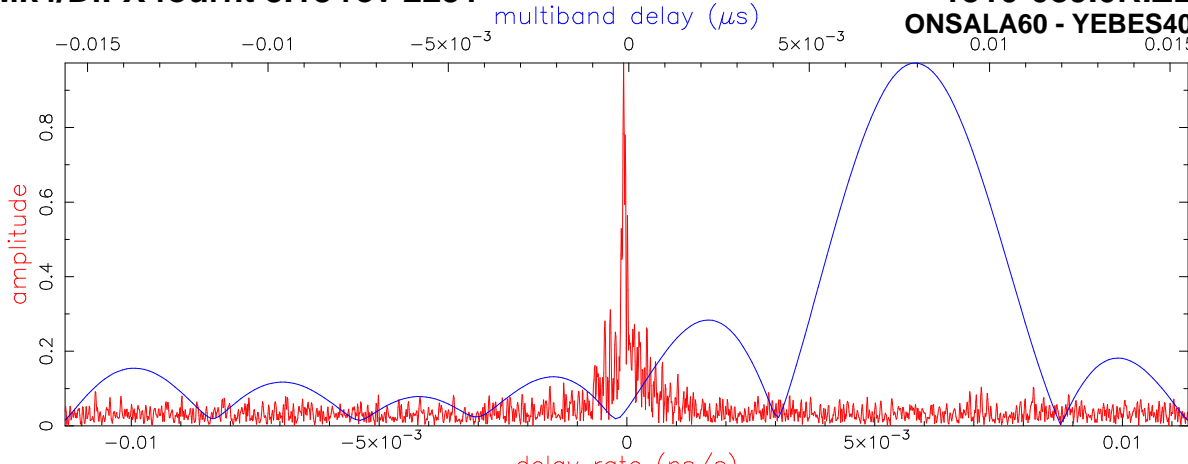
Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234500.00
 Stop 235159.84
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105545
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	164.2	120.8	120.4	139.1	152.6	160.6	168.3	113.1	Phase	142.3
	310.1	337.5	290.1	265.1	367.5	399.5	228.2	327.2	Ampl.	315.6
	122.3	122.3	123.0	122.9	123.0	123.0	122.5	122.6	Sbd box	122.7
U/L	0/820	0/820	0/820	0/820	0/820	0/820	0/820	0/820	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.49170000000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.66700E-03	+/- 1.8E-07
Sband delay (usec)	-4.95780000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.95780E-02	+/- 1.5E-06
Phase delay (usec)	4.58869992402E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.58870E-06	+/- 3.1E-10
Delay rate (us/s)	2.19652862071E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		2.19653E-11	+/- 1.3E-12
Total phase (deg)	322.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		322.3	+/- 0.0

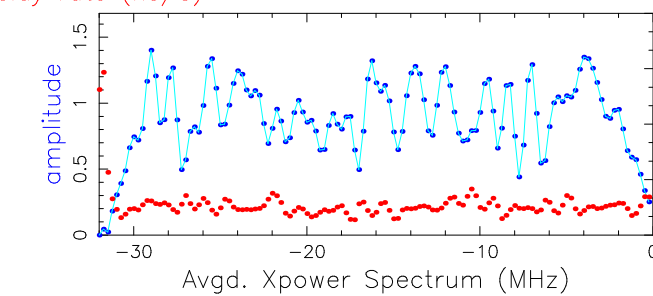
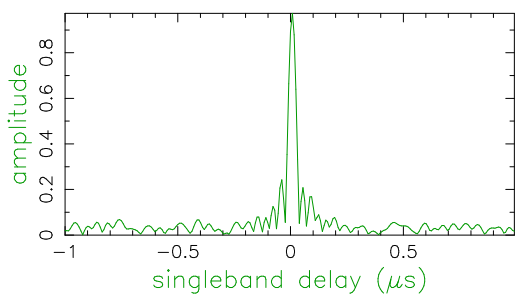
ph/seg (deg) 0.2 0.0 Theor. Amplitude 298.926 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Search (2048X32) 294.262 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.8 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 18.1 0.0 Inc. seg. avg. 295.922 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 151.0 el 19.7 pa -14.9 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XX.W.51.0RIZEX



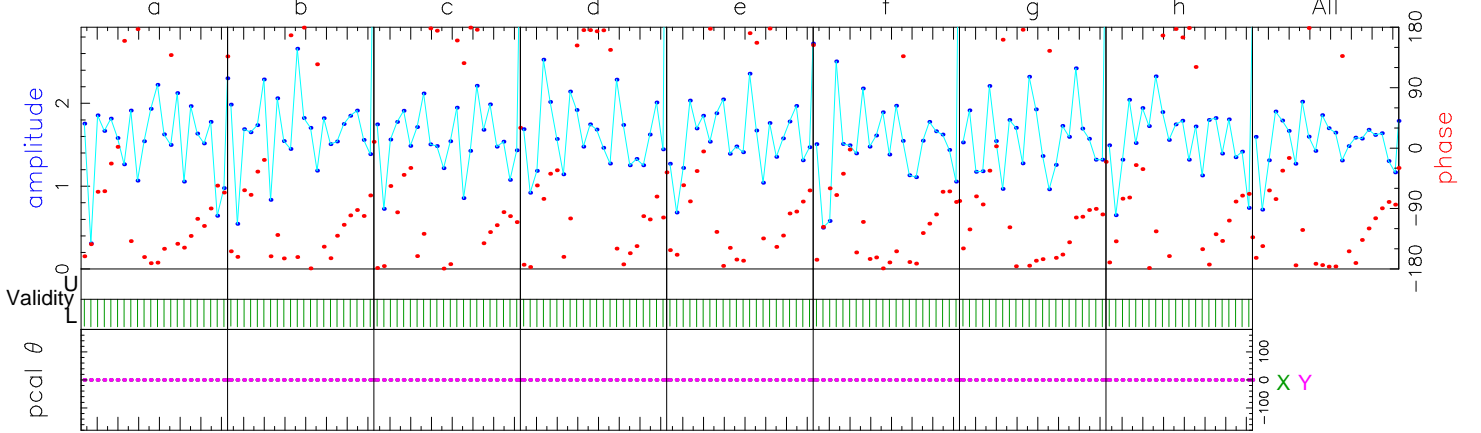
Fringe quality 7

SNR 37.9
Int time 405.372
Amp 0.973
Phase -132.0
PFD 0.0e+00
Delays (us)
SBD 0.007465
MBD 0.007937
Fringe rate (Hz)
-0.005620
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105539
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

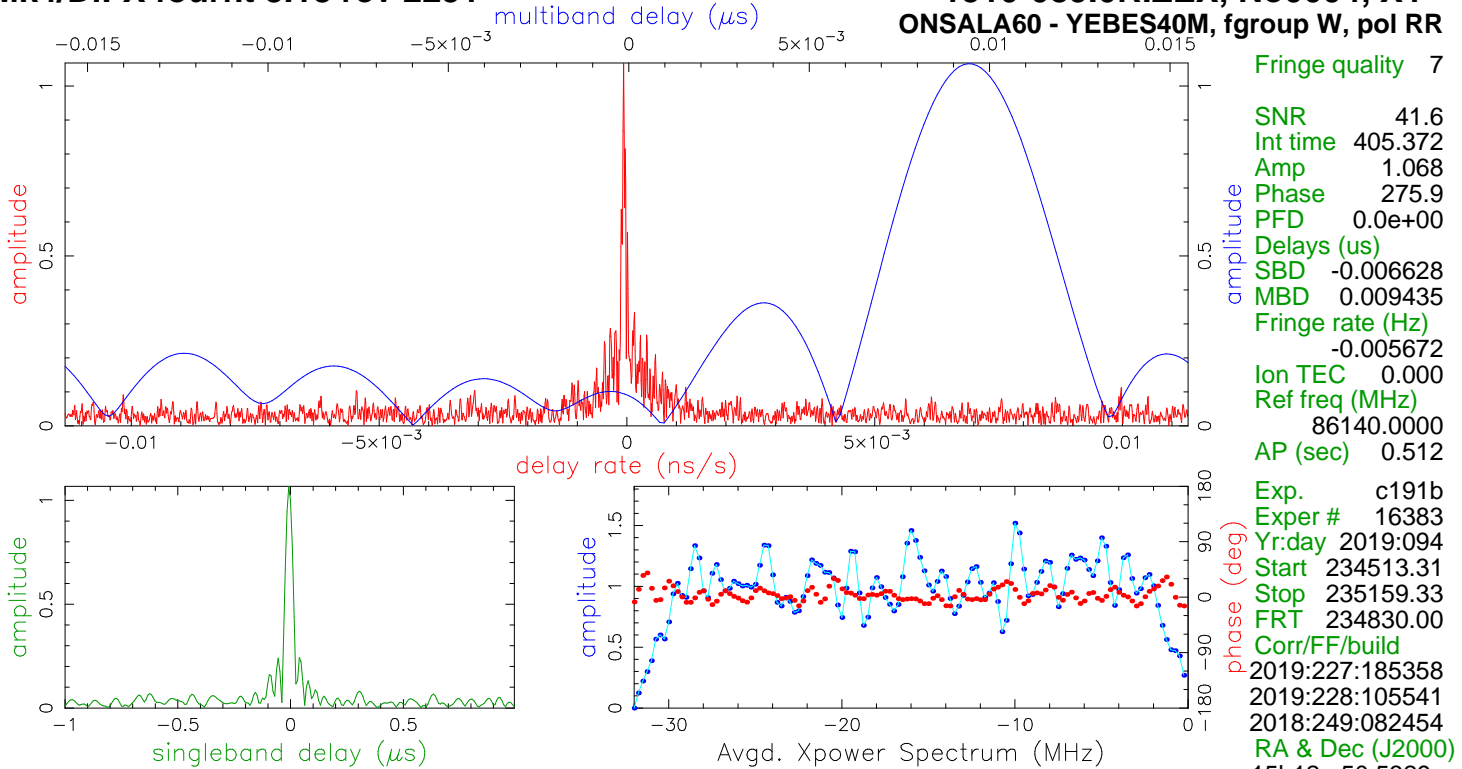


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-129.7	-127.2	-141.7	-136.0	-131.5	-124.1	-129.3	-136.4	Phase	-132.0
0.9	1.0	1.0	1.0	1.0	1.0	1.0	0.9	Ampl.	1.0
130.0	130.0	130.0	130.1	130.2	129.7	130.1	129.5	Sbd box	130.0
U/L 0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-2.46294420309E+03	Apriori delay (usec)	-2.46295213979E+03	Resid mbdelay (usec)	7.93670E-03	+/-	5.7E-05		
Sband delay (usec)	-2.46294467529E+03	Apriori clock (usec)	1.8061749E+01	Resid sbdelay (usec)	7.46450E-03	+/-	4.5E-04		
Phase delay (usec)	-2.46295214405E+03	Apriori clockrate (us/s)	2.5699999E-07	Resid phdelay (usec)	-4.25593E-06	+/-	9.8E-08		
Delay rate (us/s)	-4.03533575190E-01	Apriori rate (us/s)	-4.03533509943E-01	Resid rate (us/s)	-6.52468E-08	+/-	4.2E-10		
Total phase (deg)	-247.8	Apriori accel (us/s/s)	9.72459399681E-06	Resid phase (deg)	-132.0	+/-	3.0		

ph/seg (deg) 53.2 7.3 Theor. Amplitude 0.973 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.8 12.7 Search (2048X32) 0.967 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.1 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 5.1 7.5 Inc. seg. avg. 1.527 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 151.0 el 19.7 pa -14.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 2357.784 1567.740 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XY.W.10.0RIZEX simultaneous interpolator



Fringe quality 7

SNR 41.6

Int time 405.372

Amp 1.068

Phase 275.9

PFD 0.0e+00

Delays (us)

SBD -0.006628

MBD 0.009435

Fringe rate (Hz)

-0.005672

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:094

Start 234513.31

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105541

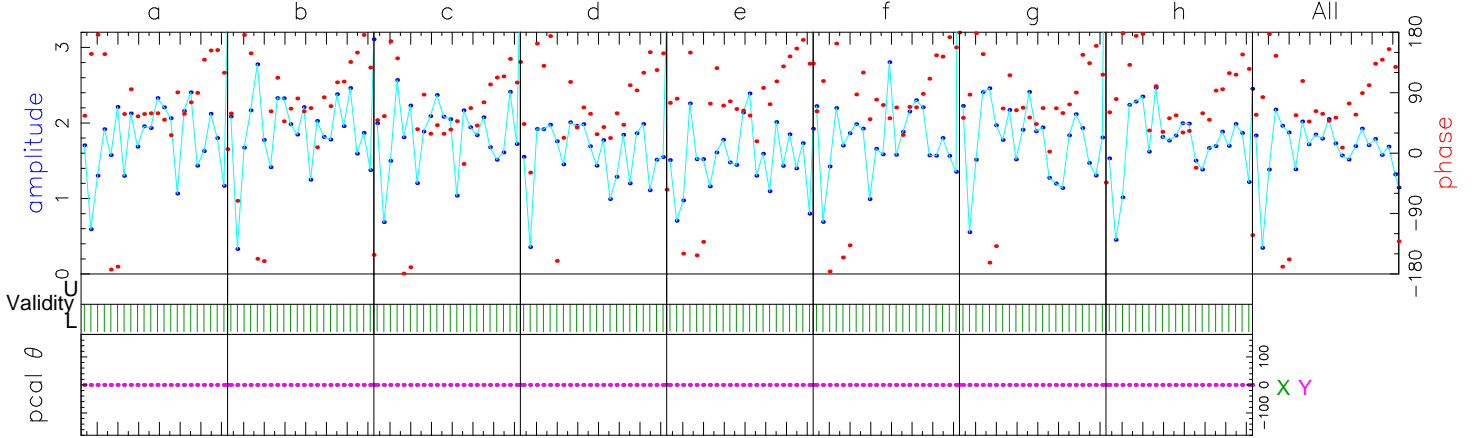
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

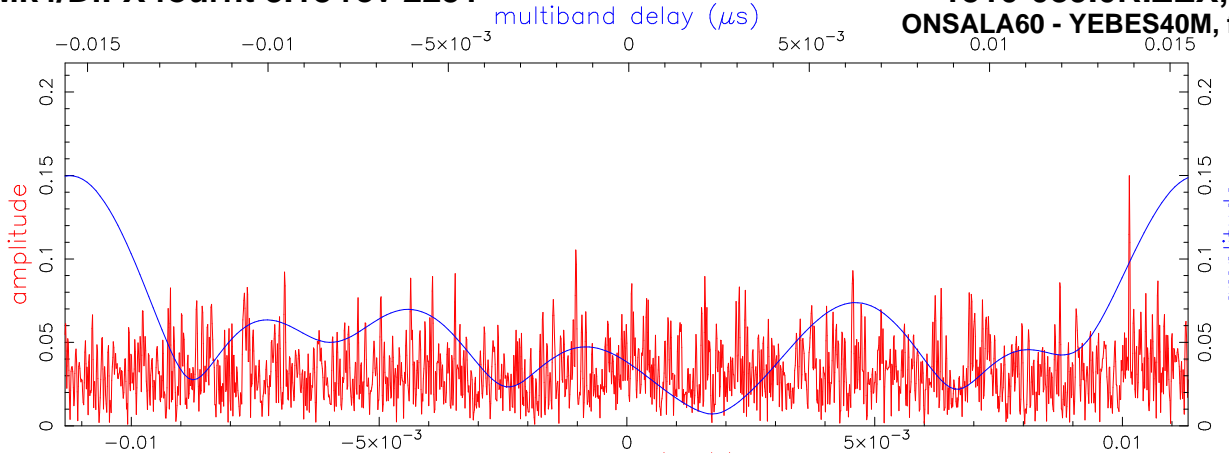


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	94.0	105.6	80.6	90.3	108.0	103.2	97.2	88.6	Phase	95.9
	1.2	1.2	1.1	1.0	1.0	1.1	1.1	1.1	Ampl.	1.1
	128.2	128.0	128.3	128.3	128.3	128.0	128.0	128.4	Sbd box	128.2
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.46297395490E+03		Apriori delay (usec)		-2.46295213979E+03		Resid mbdelay (usec)		9.43489E-03	+/- 5.2E-05
Sband delay (usec)	-2.46295876779E+03		Apriori clock (usec)		1.8061749E+01		Resid sbdelay (usec)		-6.62800E-03	+/- 4.1E-04
Phase delay (usec)	-2.46295213670E+03		Apriori clockrate (us/s)		2.56999999E-07		Resid phdelay (usec)		3.09312E-06	+/- 8.9E-08
Delay rate (us/s)	-4.03533575786E-01		Apriori rate (us/s)		-4.03533509943E-01		Resid rate (us/s)		-6.58427E-08	+/- 3.8E-10
Total phase (deg)	160.1		Apriori accel (us/s/s)		9.72459399681E-06		Resid phase (deg)		275.9	+/- 2.8

	RMS	Theor.	Amplitude	1.068 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	52.0	6.6	Search (2048X32)	1.051	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	66.5	11.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
ph/frq (deg)	10.1	3.9	Inc. seg. avg.	1.666	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.011 0.011
amp/frq (%)	6.4	6.8	Inc. frq. avg.	1.076	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 151.0 el 19.7 pa -14.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 2357.784 1567.740 simultaneous interpolator

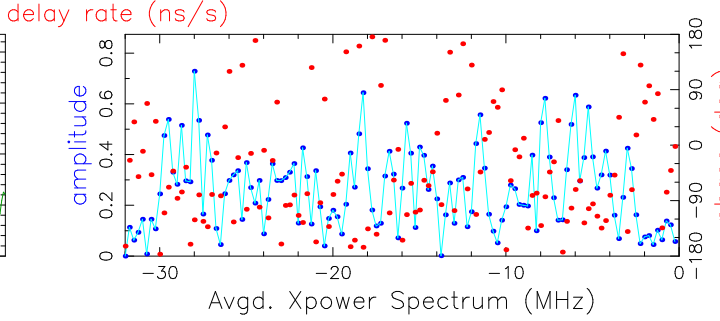
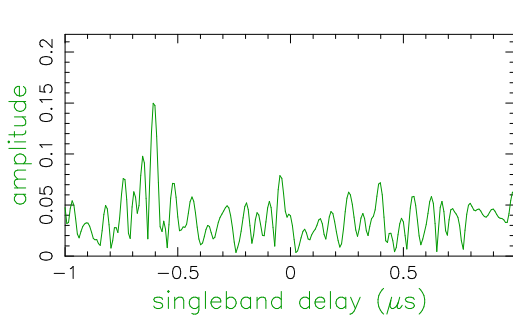
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XY.W.24.0RIZEX



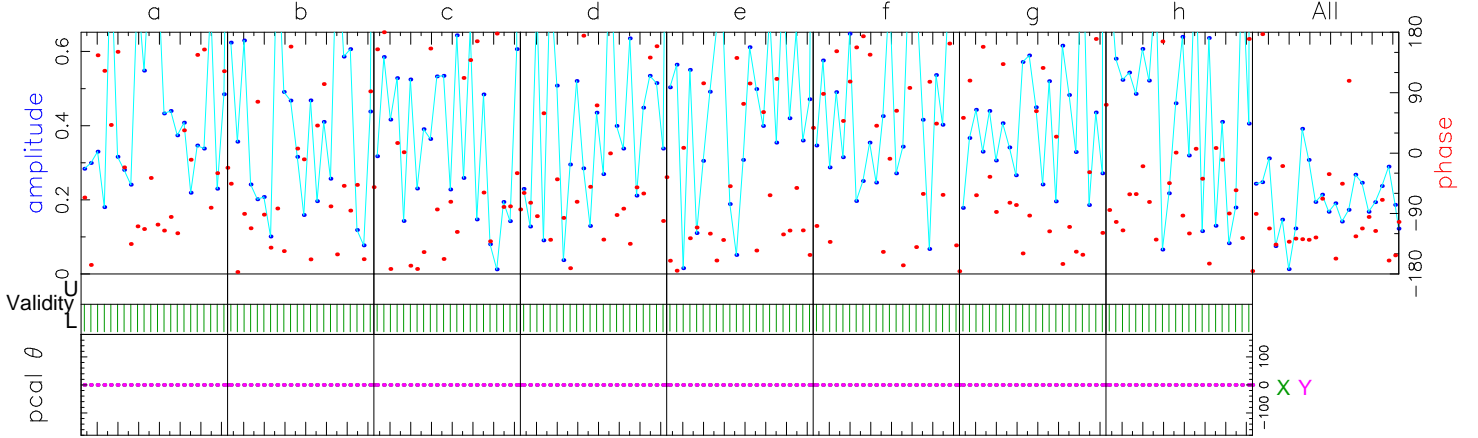
Fringe quality 0

SNR 5.9
Int time 405.372
Amp 0.217
Phase 242.6
PFD 3.0e-01
Delays (us)
SBD -0.606095
MBD 0.015726
Fringe rate (Hz)
0.873502
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105543
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

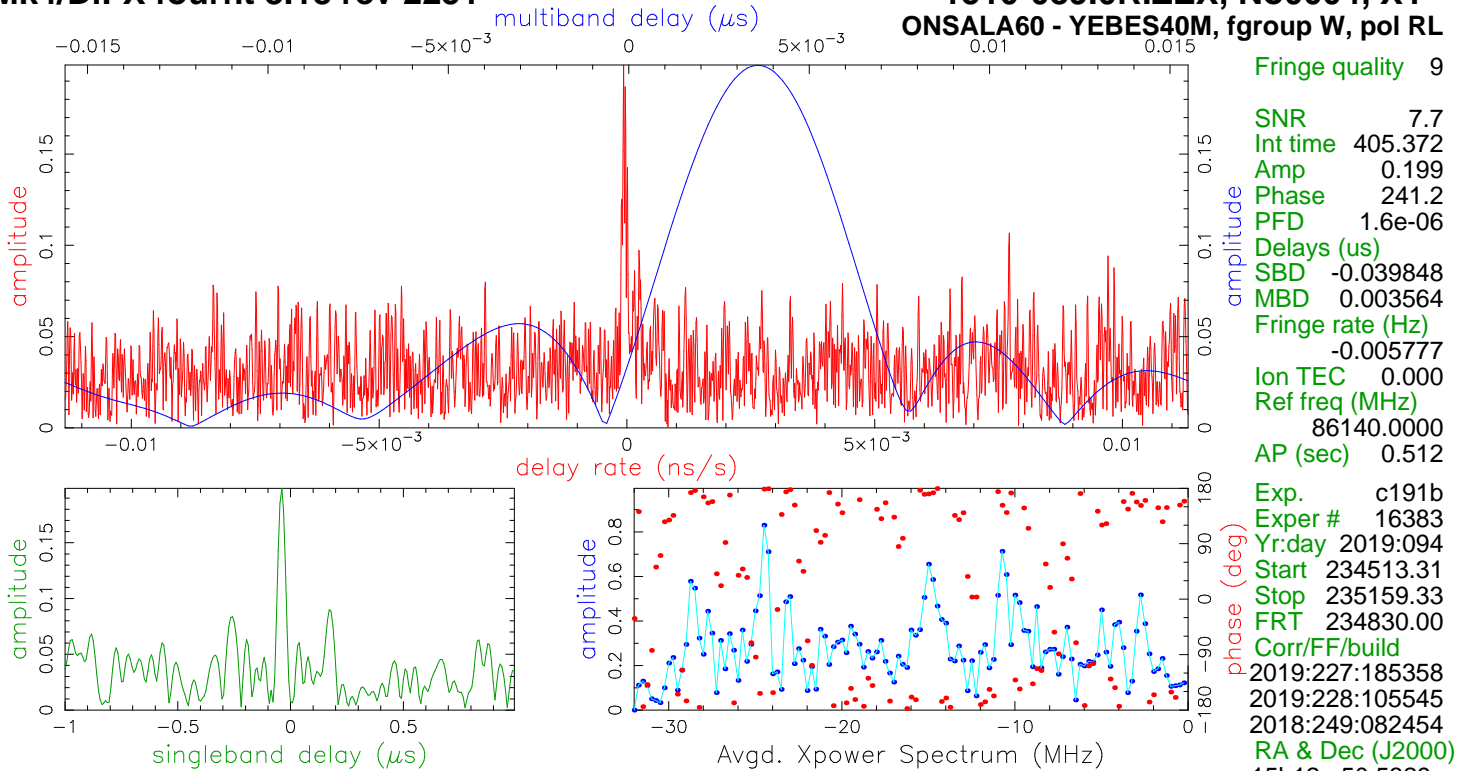


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-98.0	-106.1	-143.6	-96.5	-137.3	153.3	-133.7	-82.3	Phase	-117.4
0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.4	Ampl.	0.2
141.3	101.8	1.8	160.7	102.2	192.0	52.9	52.6	Sbd box	51.4
U/L 0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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 W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.46356141342E+03		Apriori delay (usec)	-2.46295213979E+03		Resid mbdelay (usec)	1.57264E-02	+/-	3.7E-04
Sband delay (usec)	-2.46355823529E+03		Apriori clock (usec)	1.8061749E+01		Resid sbdelay (usec)	-6.06095E-01	+/-	2.9E-03
Phase delay (usec)	-2.46295214358E+03		Apriori clockrate (us/s)	2.5699999E-07		Resid phdelay (usec)	-3.78568E-06	+/-	6.2E-07
Delay rate (us/s)	-4.03523369454E-01		Apriori rate (us/s)	-4.03533509943E-01		Resid rate (us/s)	1.01405E-05	+/-	2.7E-09
Total phase (deg)		126.8	Apriori accel (us/s/s)	9.72459399681E-06		Resid phase (deg)	242.6	+/-	19.3

ph/seg (deg) 50.6 46.2 Search (2048X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.8 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.8 27.3 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 35.1 47.6 Inc. frq. avg. 0.228 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 151.0 el 19.7 pa -14.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 2357.784 1567.740 ion window (TEC) 0.00 0.00

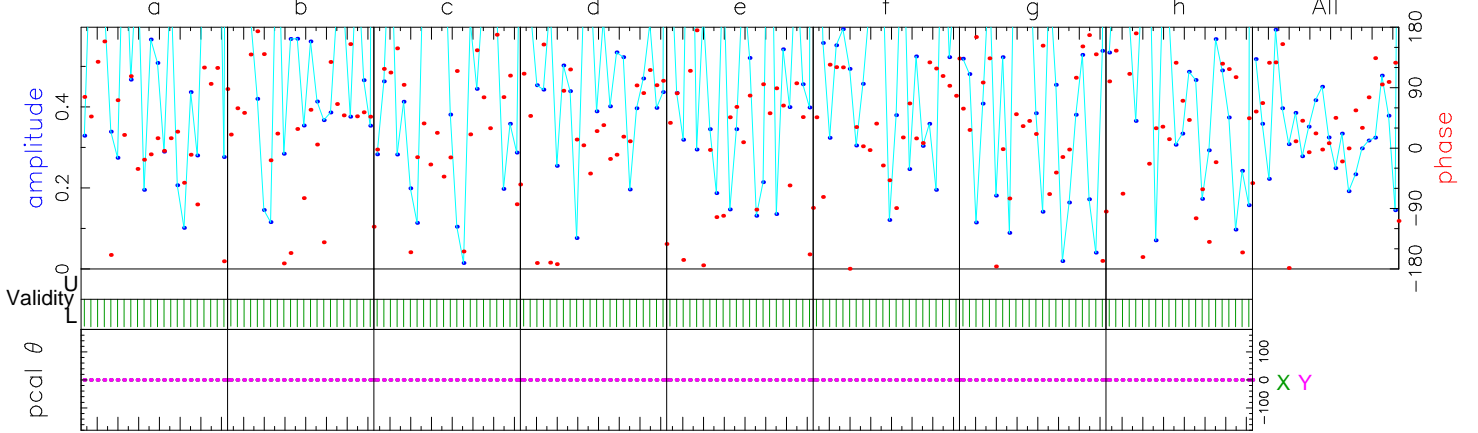


Fringe quality 9

SNR 7.7
 Int time 405.372
 Amp 0.199
 Phase 241.2
 PFD 1.6e-06
 Delays (us)
 SBD -0.039848
 MBD 0.003564
 Fringe rate (Hz)
 -0.005777
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

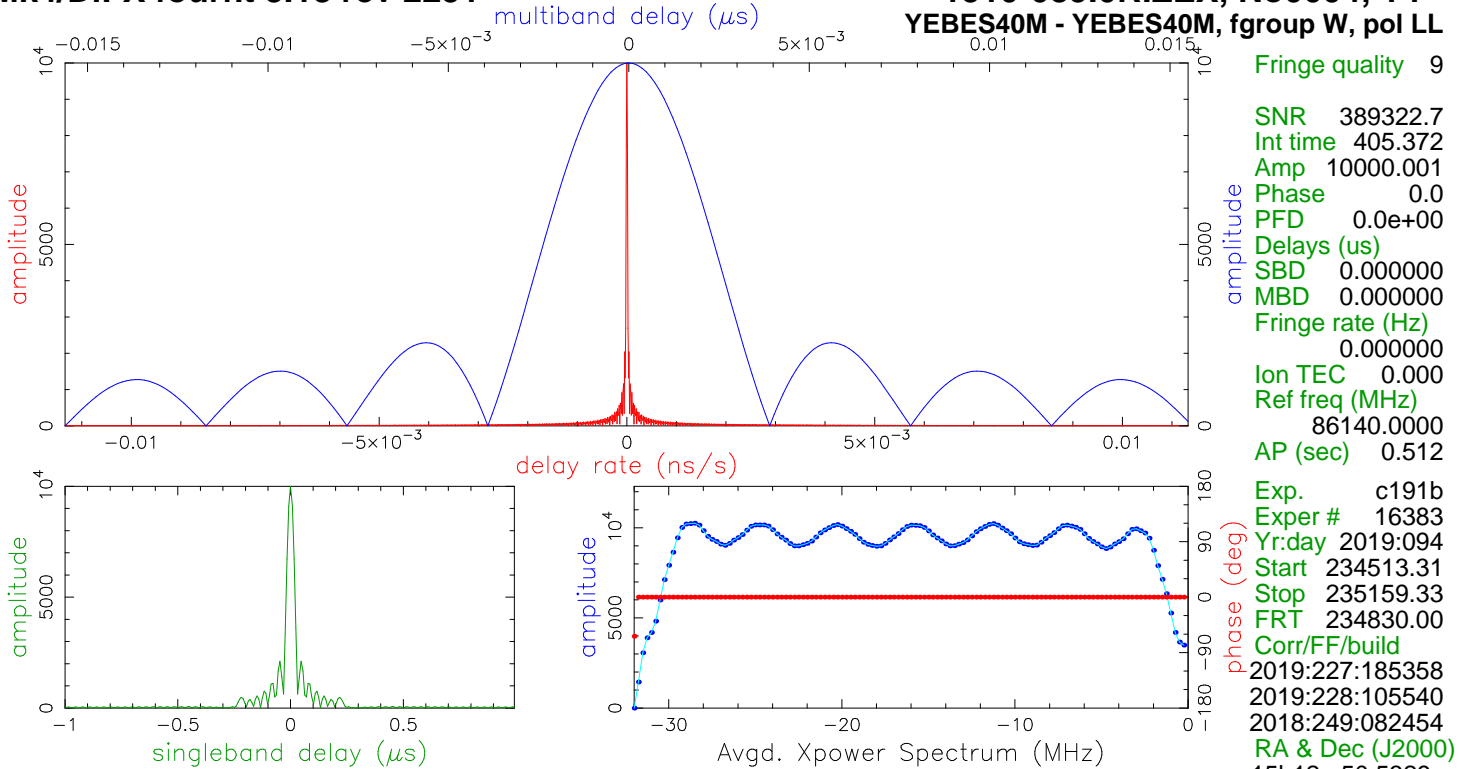
Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234513.31
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105545
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	62.0	60.0	52.7	67.8	74.9	51.5	54.4	80.3	Phase	61.2
	0.2	0.3	0.2	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
	123.8	123.2	48.2	95.8	146.0	10.1	166.4	52.3	Sbd box	123.9
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.46297982572E+03		Apriori delay (usec)		-2.46295213979E+03		Resid mbdelay (usec)		3.56408E-03	+/- 2.8E-04
Sband delay (usec)	-2.46299198829E+03		Apriori clock (usec)		1.8061749E+01		Resid sbdelay (usec)		-3.98485E-02	+/- 2.2E-03
Phase delay (usec)	-2.46295213782E+03		Apriori clockrate (us/s)		2.5699999E-07		Resid phdelay (usec)		1.97388E-06	+/- 4.8E-07
Delay rate (us/s)	-4.03533577011E-01		Apriori rate (us/s)		-4.03533509943E-01		Resid rate (us/s)		-6.70678E-08	+/- 2.0E-09
Total phase (deg)	125.4		Apriori accel (us/s/s)		9.72459399681E-06		Resid phase (deg)		241.2	+/- 14.8

ph/seg (deg) 57.4 35.5 Search (2048X32) 0.196 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 91.2 61.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.6 20.9 Inc. seg. avg. 0.288 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 28.5 36.5 Inc. frq. avg. 0.188 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 151.0 el 19.7 pa -14.9 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 2357.784 1567.740 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/XY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/XY.W.53.0RIZEX simultaneous interpolator



Fringe quality 9

SNR 389322.7

Int time 405.372

Amp 10000.001

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. c191b

Exper # 16383

Yr:day 2019:094

Start 234513.31

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105540

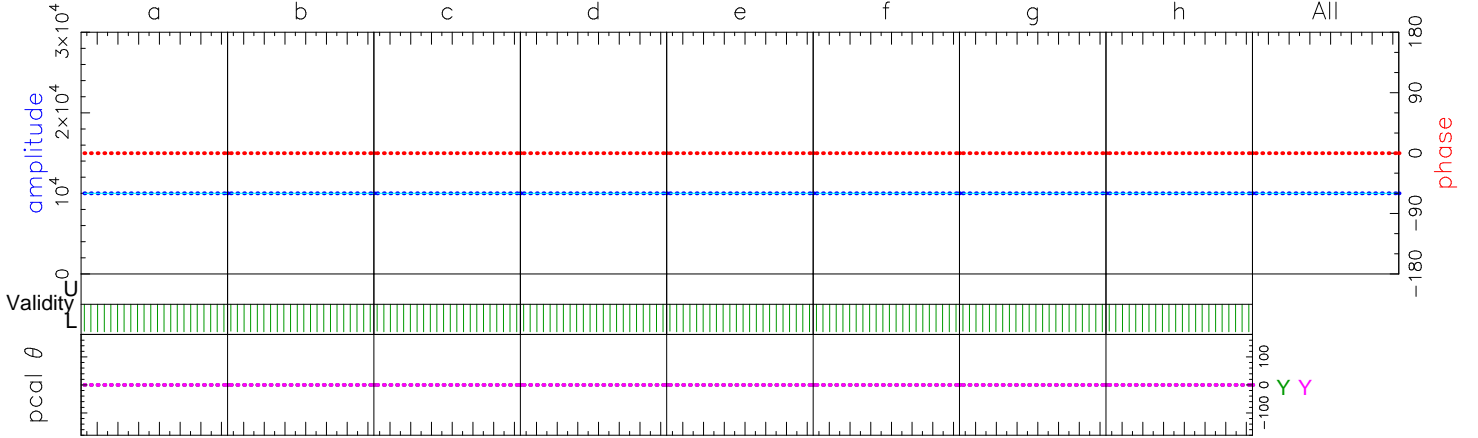
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	Ampl.	10000.0
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	129.0
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
Y	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	PC amp	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 5.6E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 4.4E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 9.5E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 4.0E-14
Total phase (deg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Resid phase (deg)	0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

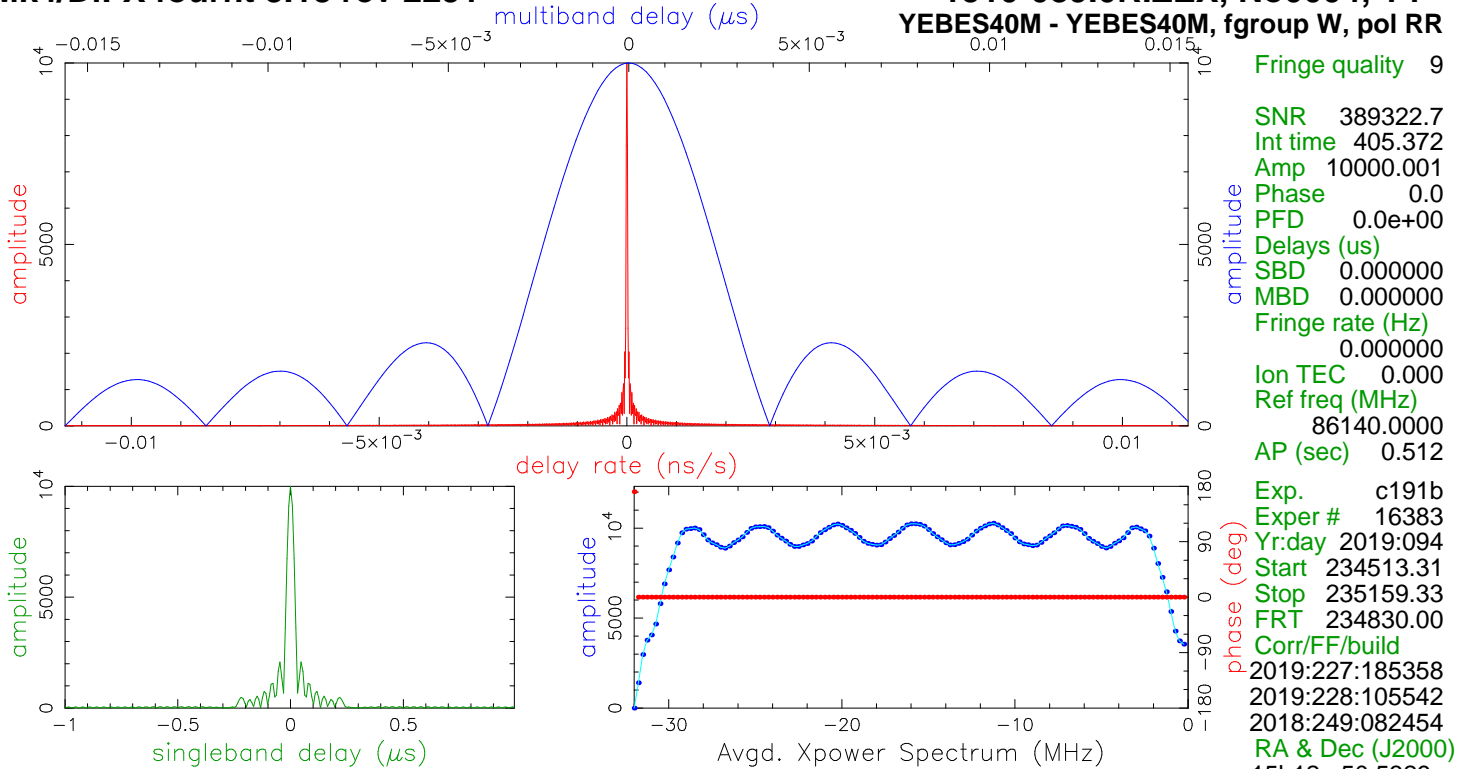
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

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: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

Y: az 131.6 el 26.7 pa -34.7 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/YY..0RIZEX Output file: /Exps/c191b/v1/1234/No0004/YY.W.15.0RIZEX



Fringe quality 9

SNR 389322.7

Int time 405.372

Amp 10000.001

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. c191b

Exper # 16383

Yr:day 2019:094

Start 234513.31

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105542

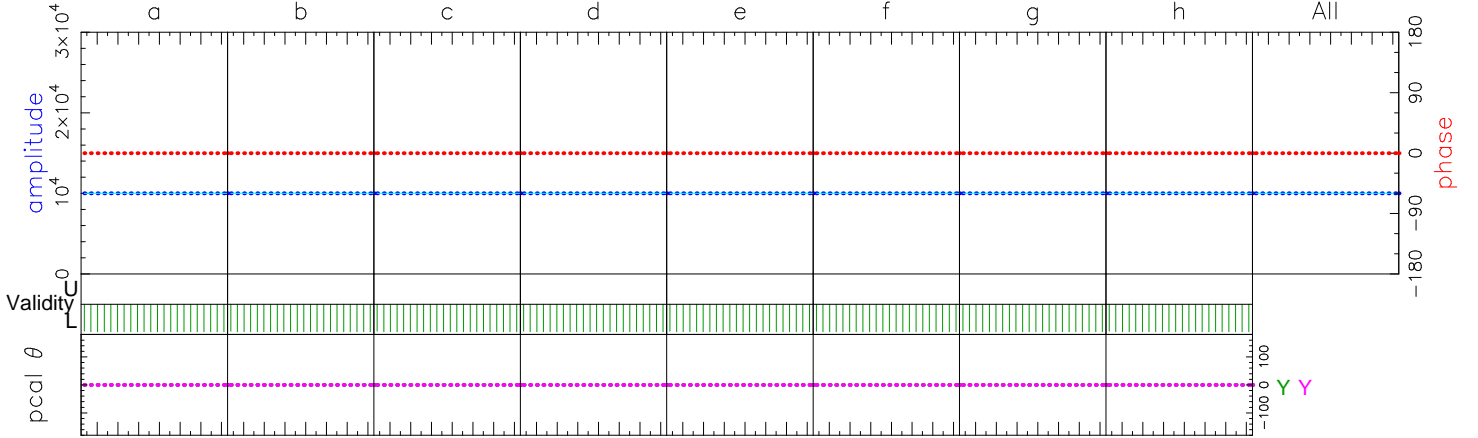
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
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	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	ManI PC	
Y 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.6E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.4E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.5E-12		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.0E-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 10000.001 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

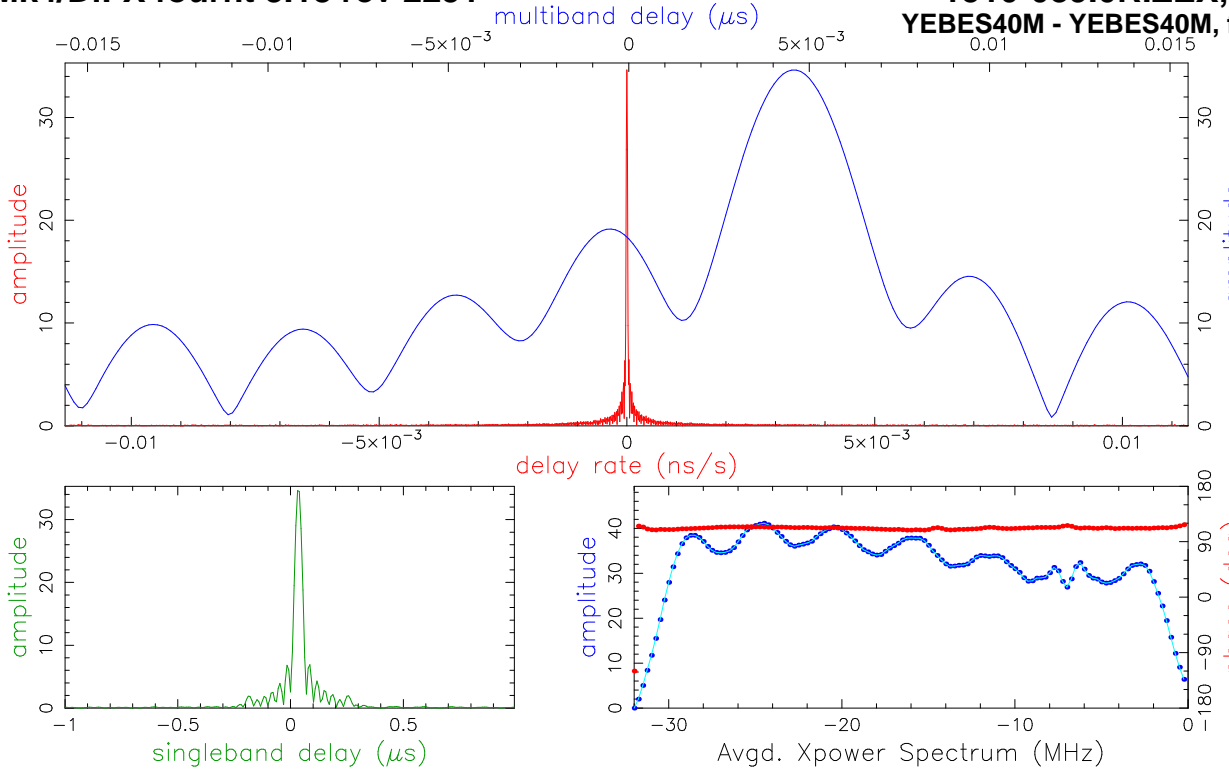
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

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: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

Y: az 131.6 el 26.7 pa -34.7 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/YY..0RIZEX Output file: /Exps/c191b/v1/1234/No0004/YY.W.29.0RIZEX

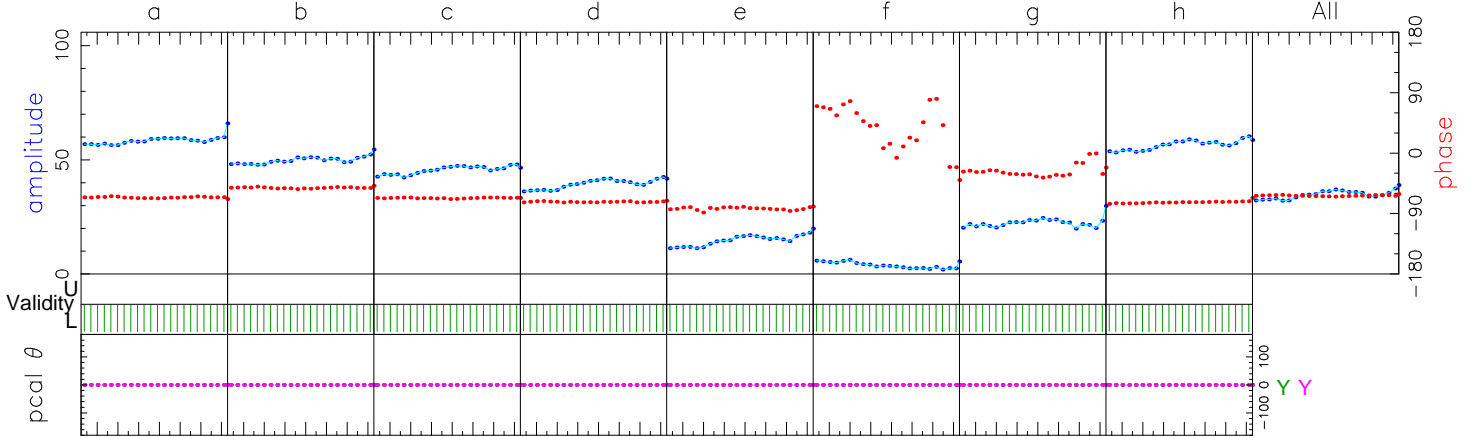


Fringe quality 5

SNR 1374.5
Int time 405.372
Amp 35.305
Phase -243.4
PFD 0.0e+00
Delays (us)
SBD 0.034940
MBD 0.004598
Fringe rate (Hz)
-0.000037
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

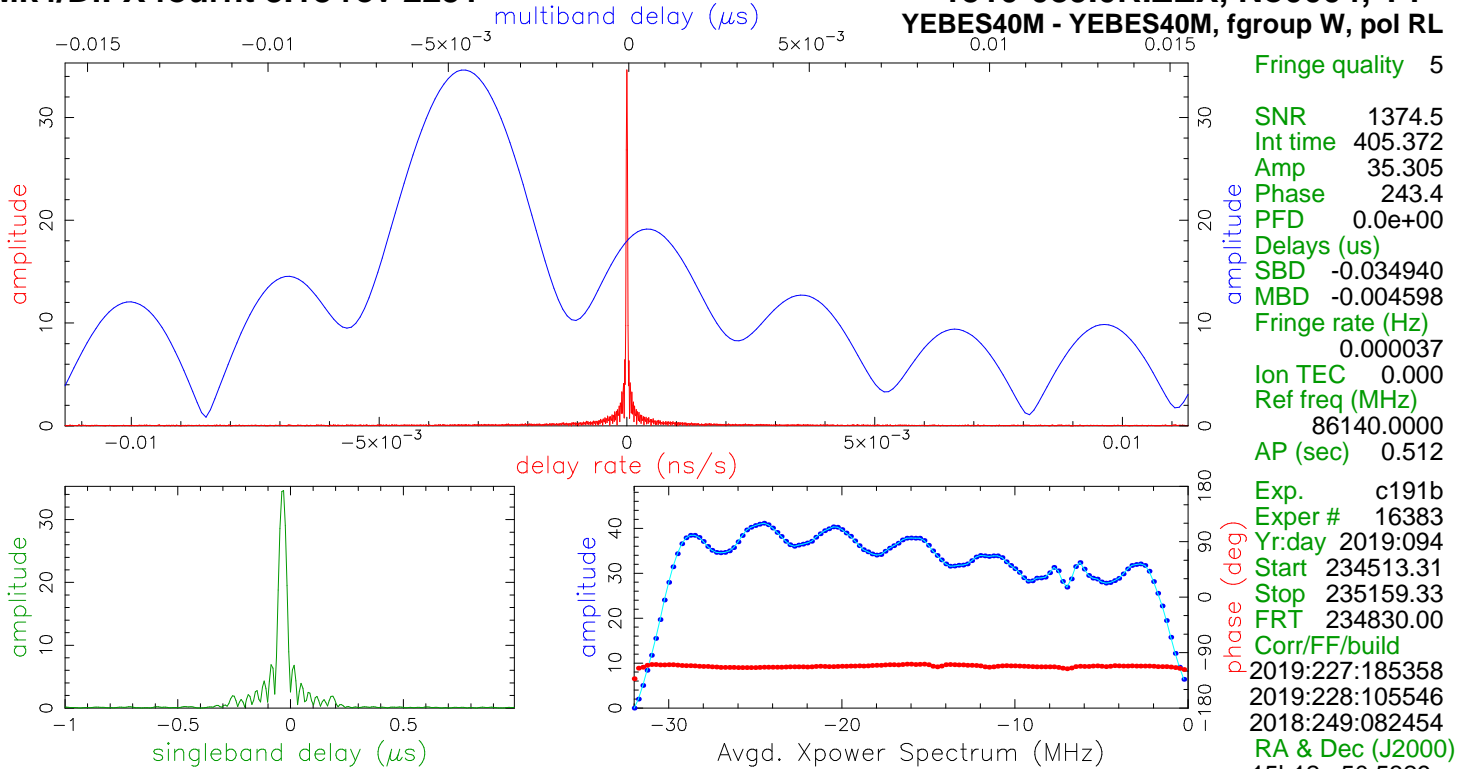
Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105544
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-65.9	-51.7	-66.9	-72.6	-82.6	46.6	-26.9	-73.4	Phase	-63.4
	58.2	49.7	45.5	39.4	14.6	3.3	21.8	56.5	Ampl.	36.1
	133.7	133.6	134.0	133.0	133.6	137.3	132.1	133.0	Sbd box	133.5
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.58477500000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		4.59775E-03	+/- 1.6E-06
Sband delay (usec)	3.49400000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.49400E-02	+/- 1.3E-05
Phase delay (usec)	-2.04432409146E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.04432E-06	+/- 2.7E-09
Delay rate (us/s)	-4.27968802229E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-4.27969E-10	+/- 1.1E-11
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-243.4	+/- 0.1

ph/seg (deg) 0.7 0.2 Theor. Amplitude 35.305 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 5.0 0.3 Search (2048X32) 34.184 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.6 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.2 0.2 Inc. seg. avg. 34.631 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Y: az 131.6 el 26.7 pa -34.7 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/YY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/YY.W.44.0RIZEX

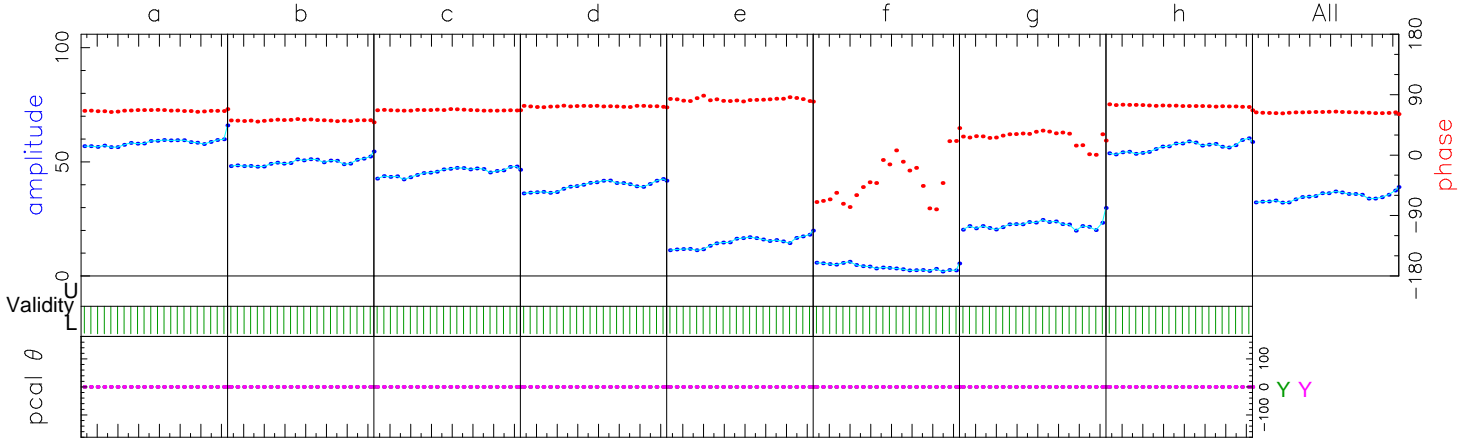


Fringe quality 5

SNR 1374.5
Int time 405.372
Amp 35.305
Phase 243.4
PFD 0.0e+00
Delays (us)
SBD -0.034940
MBD -0.004598
Fringe rate (Hz) 0.000037
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

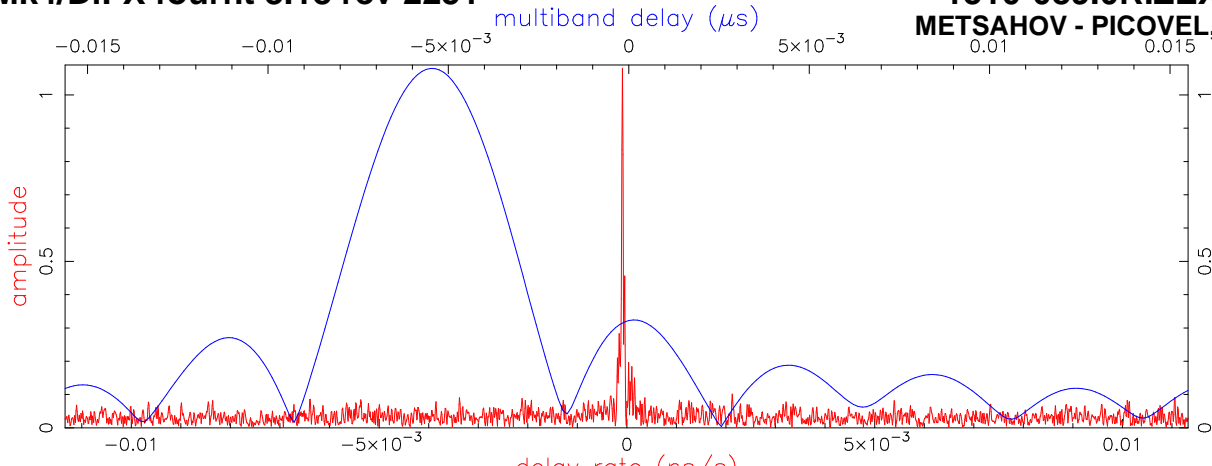
Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105546
2018:249:082454
RA & Dec (J2000) 15h12m50.5329s -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

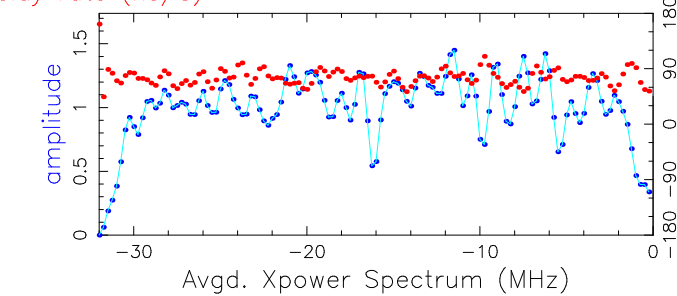
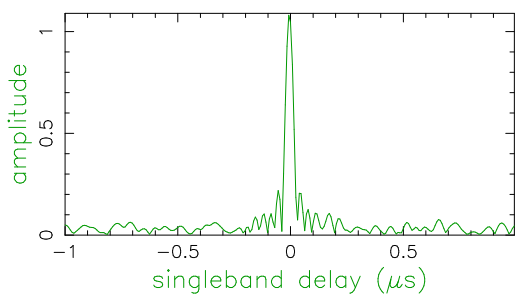


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793		
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)		-3.58477500000E-02				0.00000000000E+00			-4.59775E-03	+/- 1.6E-06
Sband delay (usec)		-3.49400000000E-02				0.0000000E+00			-3.49400E-02	+/- 1.3E-05
Phase delay (usec)		2.04432409092E-06				0.0000000E+00			2.04432E-06	+/- 2.7E-09
Delay rate (us/s)		4.27968802229E-10				0.00000000000E+00			4.27969E-10	+/- 1.1E-11
Total phase (deg)			243.4						243.4	+/- 0.1
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.016	0.016								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
nlags:	128									
t_cohere	infinite									

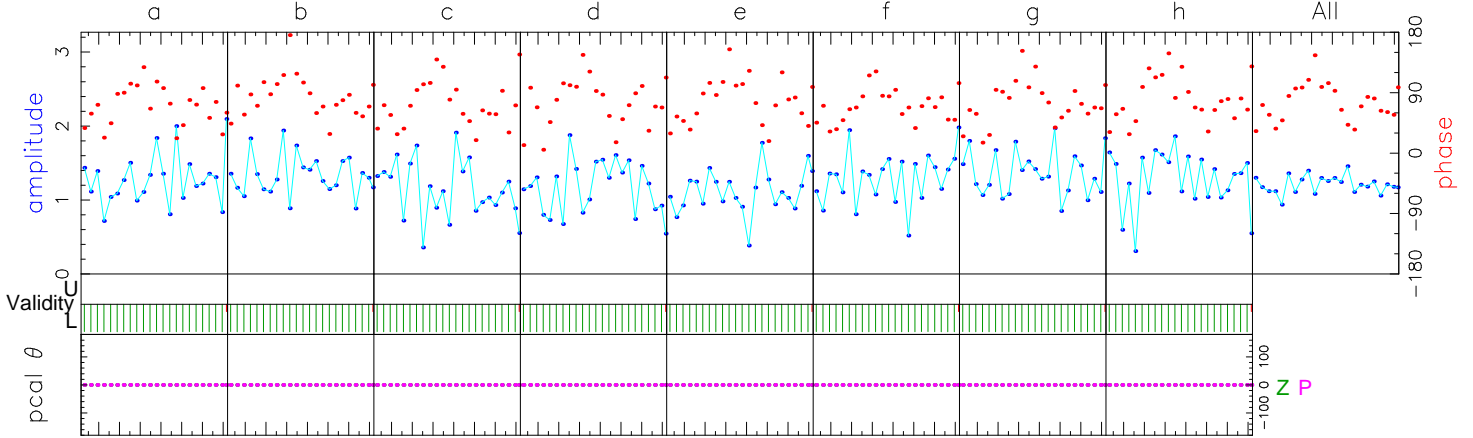
ph/seg (deg) 0.7 0.2 Search (2048X32) 35.305 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 5.0 0.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.6 0.1 Inc. seg. avg. 34.631 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 54.2 0.2 Inc. frq. avg. 36.141 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Y: az 131.6 el 26.7 pa -34.7 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/YY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/YY.W.58.0RIZEX



Fringe quality 8
 SNR 42.6
 Int time 408.880
 Amp 1.090
 Phase 74.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.005299
 MBD -0.005462
 Fringe rate (Hz)
 -0.007912
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

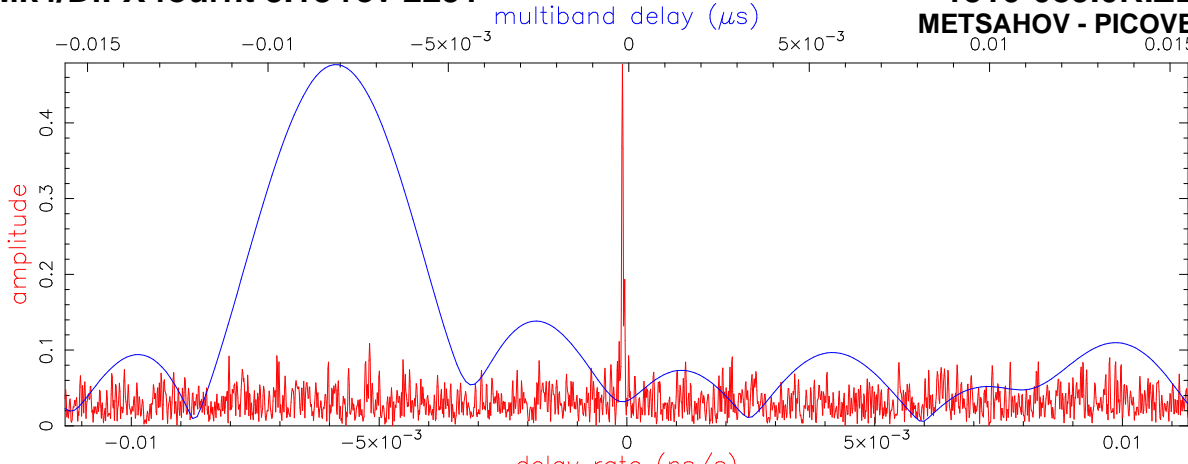


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

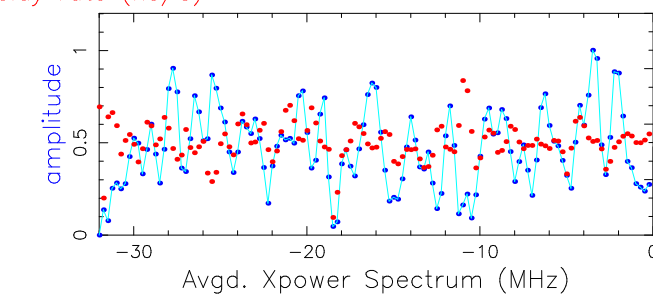
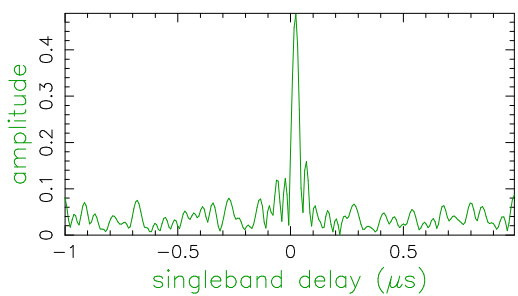
Group delay (usec)(sbd)	-3.27310457959E+03	Apriori delay (usec)	-3.27309911740E+03	Resid mbdelay (usec)	-5.46218E-03	+/-	5.1E-05
Sband delay (usec)	-3.27310441640E+03	Apriori clock (usec)	3.0842018E-01	Resid sbdelay (usec)	-5.29900E-03	+/-	4.0E-04
Phase delay (usec)	-3.27309911500E+03	Apriori clockrate (us/s)	1.4400001E-07	Resid phdelay (usec)	2.40122E-06	+/-	8.7E-08
Delay rate (us/s)	-6.31063928958E-01	Apriori rate (us/s)	-6.31063837107E-01	Resid rate (us/s)	-9.18503E-08	+/-	3.7E-10
Total phase (deg)	-275.9	Apriori accel (us/s/s)	1.26351802016E-05	Resid phase (deg)	74.5	+/-	2.7

ph/seg (deg)	27.6	Theor.	6.4	Amplitude	1.090 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	15.4	Search (2048X32)	1.034	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	5.6	Interp.	0.000	Inc. seg. avg.	1.203	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	8.1	Inc. frq. avg.	1.082	Inc. frq. avg.	1.082	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016

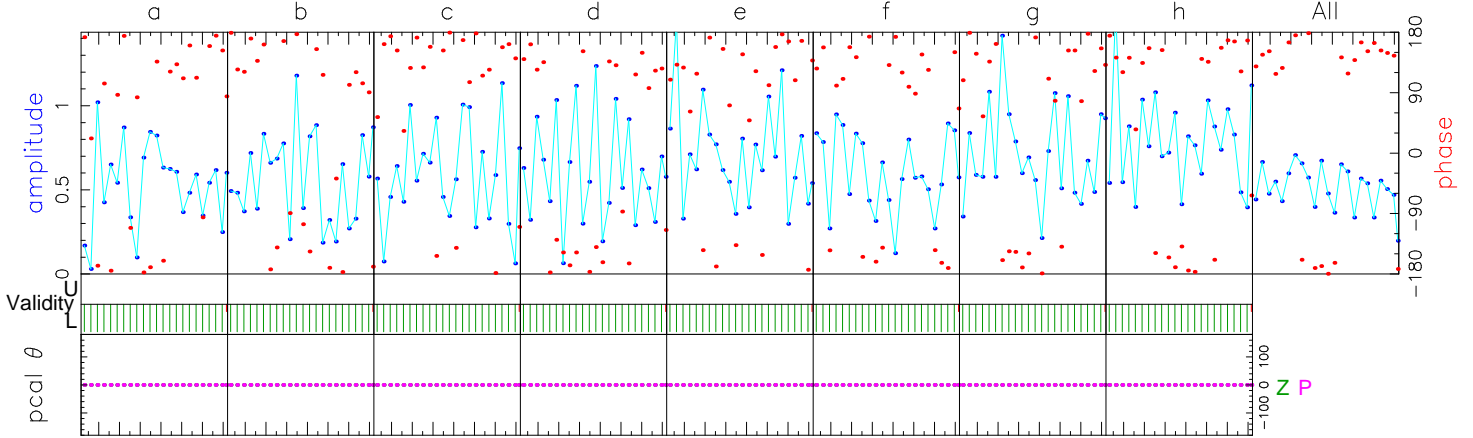
Z: az 164.2 el 19.6 pa -7.4 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 3682.785 2166.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZP.W.25.0RIZEX



Fringe quality 9
 SNR 18.7
 Int time 408.880
 Amp 0.479
 Phase -21.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.021830
 MBD -0.008102
 Fringe rate (Hz)
 -0.008009
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105543
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

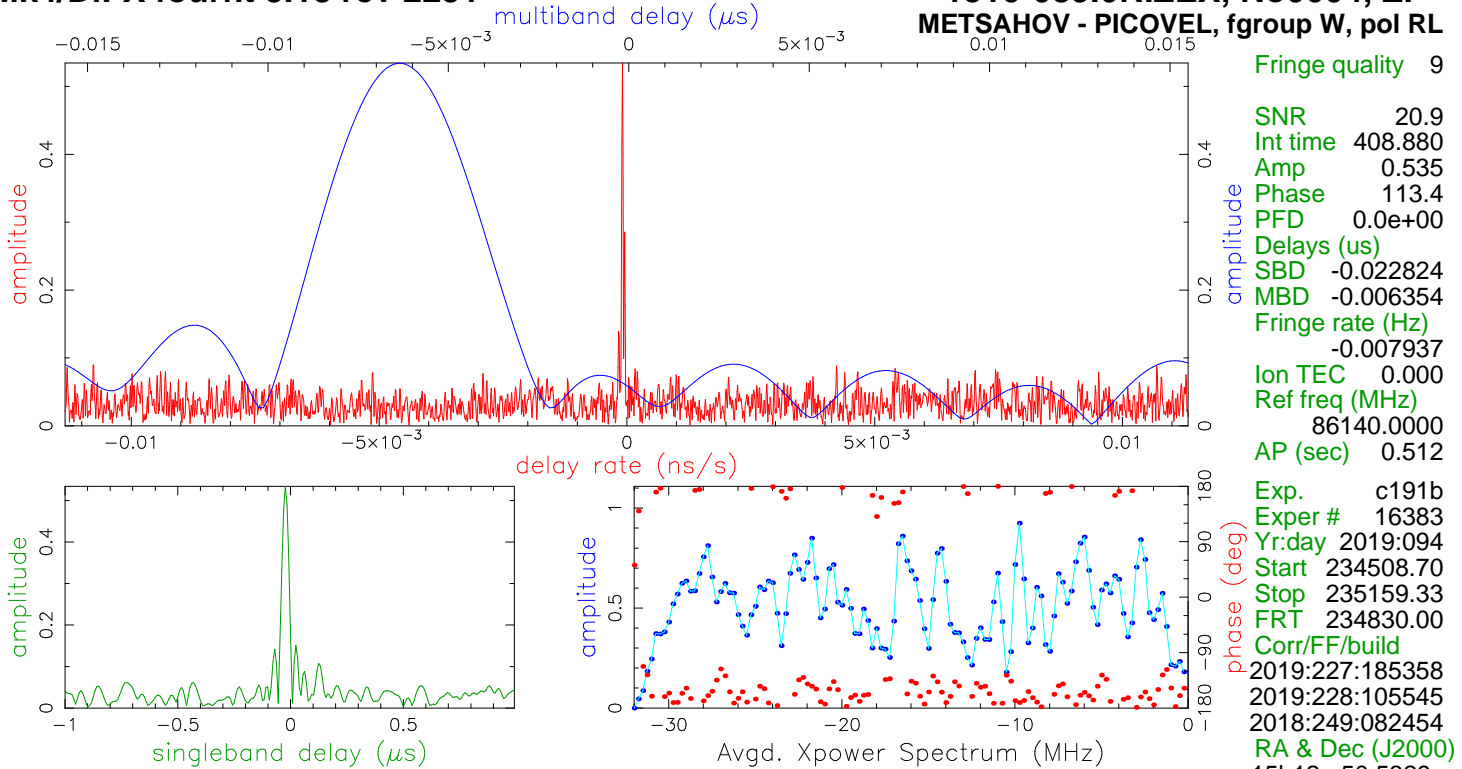


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	-3.27307596896E+03	Apriori delay (usec)	-3.27309911740E+03	Resid mbdelay (usec)	-8.10156E-03	+/-	1.2E-04
Sband delay (usec)	-3.27307728690E+03	Apriori clock (usec)	3.0842018E-01	Resid sbdelay (usec)	2.18305E-02	+/-	9.2E-04
Phase delay (usec)	-3.27309911229E+03	Apriori clockrate (us/s)	1.4400001E-07	Resid phdelay (usec)	5.11164E-06	+/-	2.0E-07
Delay rate (us/s)	-6.31063930079E-01	Apriori rate (us/s)	-6.31063837107E-01	Resid rate (us/s)	-9.29720E-08	+/-	8.3E-10
Total phase (deg)	-11.9	Apriori accel (us/s/s)	1.26351802016E-05	Resid phase (deg)	-21.5	+/-	6.1

ph/seg (deg)	24.3	Theor.	14.7	Amplitude	0.479 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	25.6	Search (2048X32)	0.454	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	9.7	Interp.	0.000	Inc. seg. avg.	0.506	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	15.5	Inc. frq. avg.	0.477	Inc. frq. avg.	0.477	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

Z: az 164.2 el 19.6 pa -7.4 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 3682.785 2166.905 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZP.W.40.0RIZEX



Fringe quality 9

SNR 20.9

Int time 408.880

Amp 0.535

Phase 113.4

PFD 0.0e+00

Delays (us)

SBD -0.022824

MBD -0.006354

Fringe rate (Hz)

-0.007937

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c191b

Exper # 16383

Yr:day 2019:094

Start 234508.70

Stop 235159.33

FRT 234830.00

Corr/FF/build

2019:227:185358

2019:228:105545

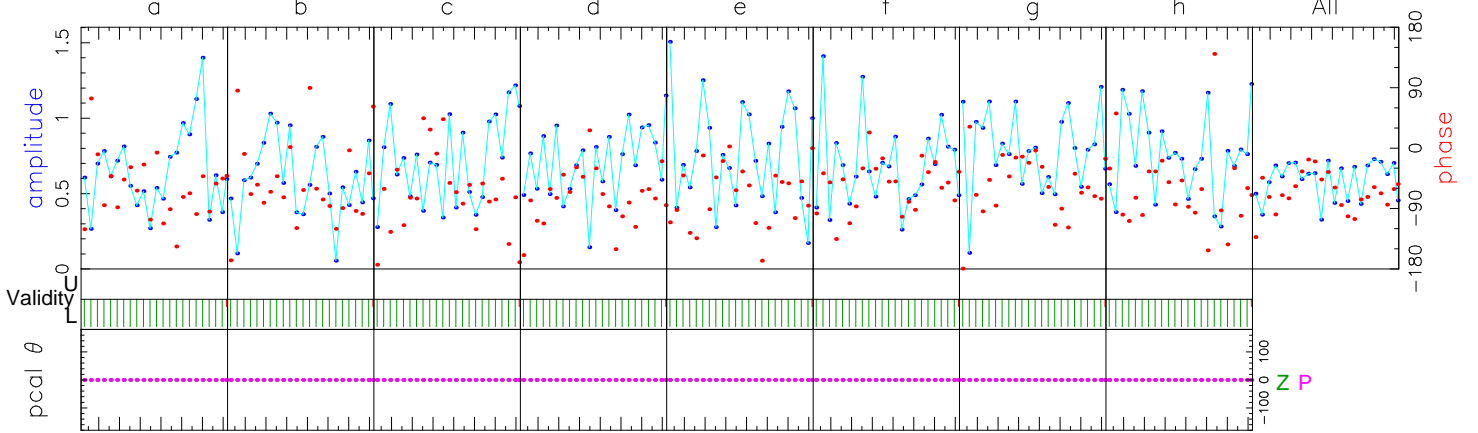
2018:249:082454

RA & Dec (J2000)

15h12m50.5329s

-9°05'59.830"

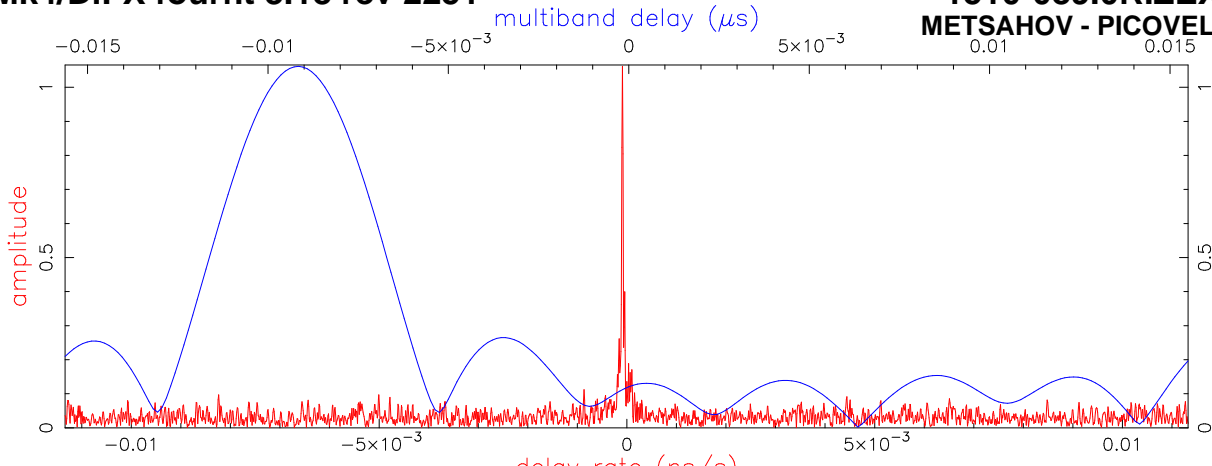
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



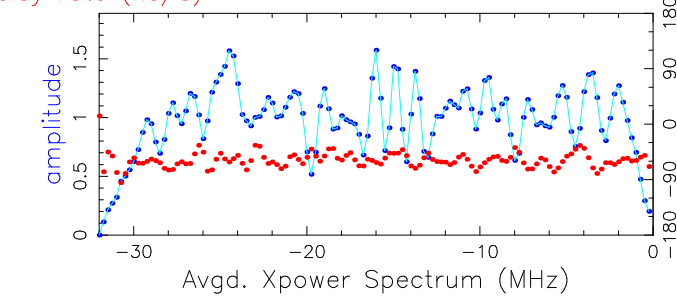
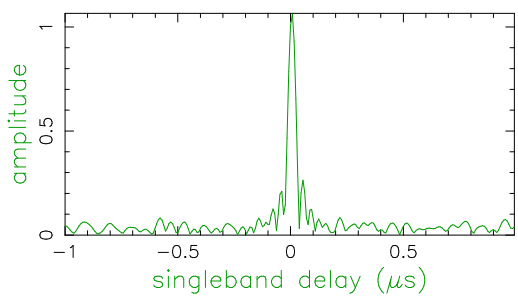
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-66.7	-60.1	-73.0	-74.2	-69.4	-51.3	-60.0	-78.0	Phase	-66.6
0.5	0.4	0.5	0.6	0.6	0.6	0.6	0.5	Ampl.	0.5
126.4	125.9	126.0	126.2	126.2	125.6	126.0	126.4	Sbd box	126.1
U/L 0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P 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	
P 1000	1000	1000	1000	1000	1000	1000	1000		
Z W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	-3.27313672109E+03	Apriori delay (usec)	-3.27309911740E+03	Resid mbdelay (usec)	-6.35368E-03	+/-	1.0E-04
Sband delay (usec)	-3.27312194190E+03	Apriori clock (usec)	3.0842018E-01	Resid sbdelay (usec)	-2.28245E-02	+/-	8.2E-04
Phase delay (usec)	-3.27309911955E+03	Apriori clockrate (us/s)	1.4400001E-07	Resid phdelay (usec)	-2.14676E-06	+/-	1.8E-07
Delay rate (us/s)	-6.31063929253E-01	Apriori rate (us/s)	-6.31063837107E-01	Resid rate (us/s)	-9.21451E-08	+/-	7.5E-10
Total phase (deg)	123.1	Apriori accel (us/s/s)	1.26351802016E-05	Resid phase (deg)	113.4	+/-	5.5

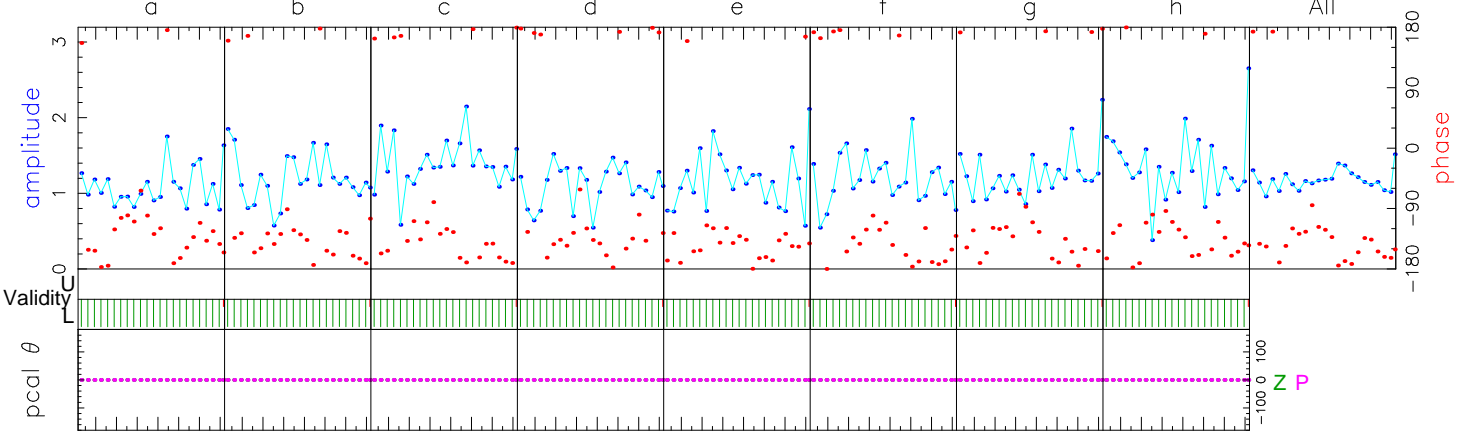
ph/seg (deg)	27.5	Theor.	13.1	Amplitude	0.535 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	25.6	Search (2048X32)	0.508	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	9.6	Interp.	0.000	Inc. seg. avg.	0.582	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	9.4	Inc. frq. avg.	0.535	Inc. frq. avg.	0.535	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
Z: az 164.2 el 19.6 pa -7.4	P: az 130.0 el 28.8 pa -37.9	u,v (fr/asec)	3682.785 2166.905	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite



Fringe quality 8
 SNR 41.7
 Int time 408.880
 Amp 1.066
 Phase -147.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.006210
 MBD -0.009158
 Fringe rate (Hz)
 -0.007883
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

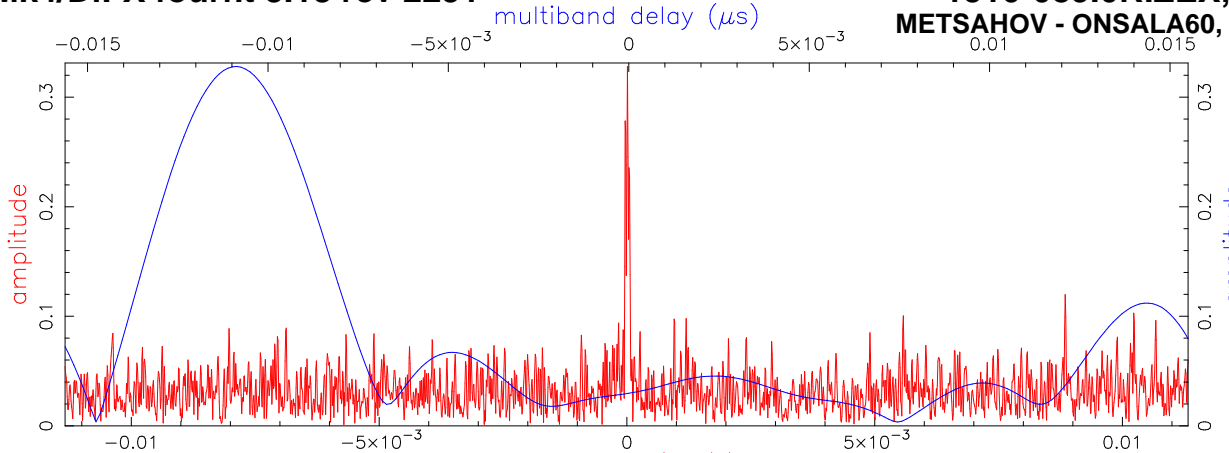


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

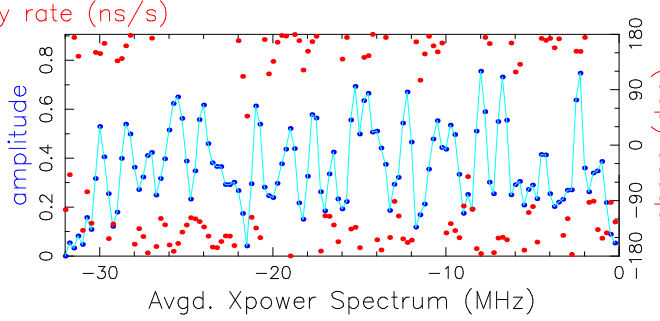
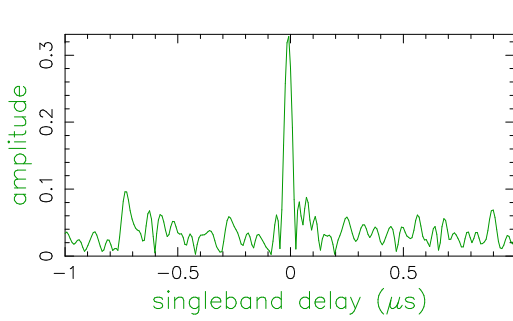


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-140.2	-147.2	-150.9	-149.7	-148.5	-155.5	-147.1	-141.6	Phase	-147.7
	0.9	1.1	1.2	0.9	1.1	1.1	1.1	1.2	Ampl.	1.1
	129.7	129.5	129.9	129.7	130.0	129.8	129.7	130.0	Sbd box	129.8
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.27310827552E+03		Apriori delay (usec)		-3.27309911740E+03		Resid mbdelay (usec)		-9.15812E-03	+/- 5.2E-05
Sband delay (usec)	-3.27309290740E+03		Apriori clock (usec)		3.0842018E-01		Resid sbdelay (usec)		6.21000E-03	+/- 4.1E-04
Phase delay (usec)	-3.27309912217E+03		Apriori clockrate (us/s)		1.4400001E-07		Resid phdelay (usec)		-4.76202E-06	+/- 8.9E-08
Delay rate (us/s)	-6.31063928623E-01		Apriori rate (us/s)		-6.31063837107E-01		Resid rate (us/s)		-9.15159E-08	+/- 3.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.26351802016E-05		Resid phase (deg)		-147.7	+/- 2.8

ph/seg (deg) 24.8 6.6 Theor. Amplitude 1.066 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 14.4 11.5 Search (2048X32) 1.025 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.3 3.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 9.5 6.8 Inc. seg. avg. 1.160 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 164.2 el 19.6 pa -7.4 P: az 130.0 el 28.8 pa -37.9 u,v (fr/asec) 3682.785 2166.905 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZP..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZP.W.7.0RIZEX simultaneous interpolator

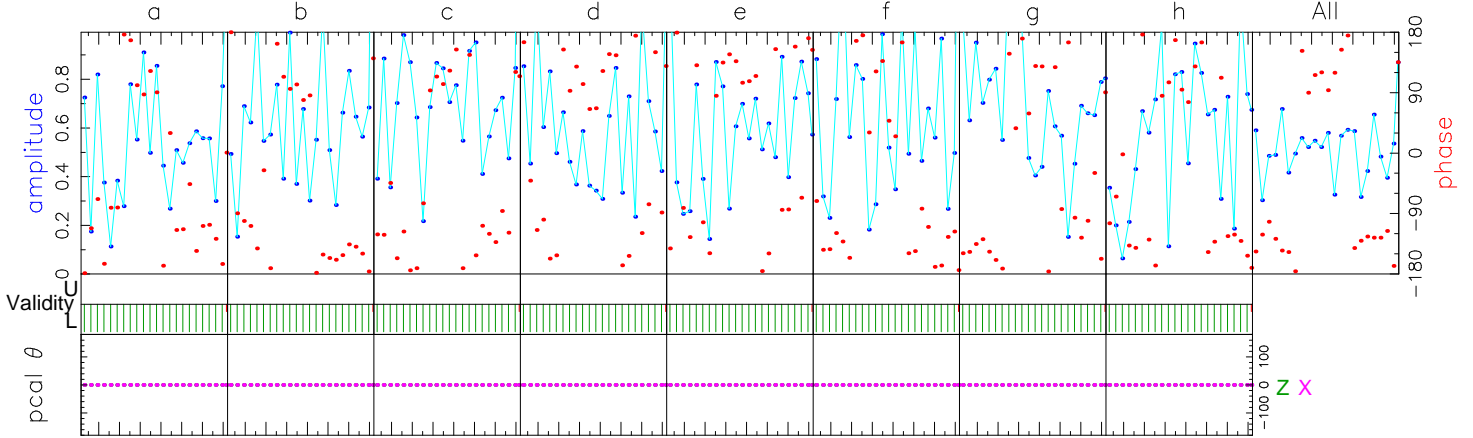


Fringe quality 9
 SNR 13.0
 Int time 410.323
 Amp 0.331
 Phase -169.0
 PFD 4.7e-30
 Delays (us)
 SBD -0.010398
 MBD -0.010882
 Fringe rate (Hz) 0.000578
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

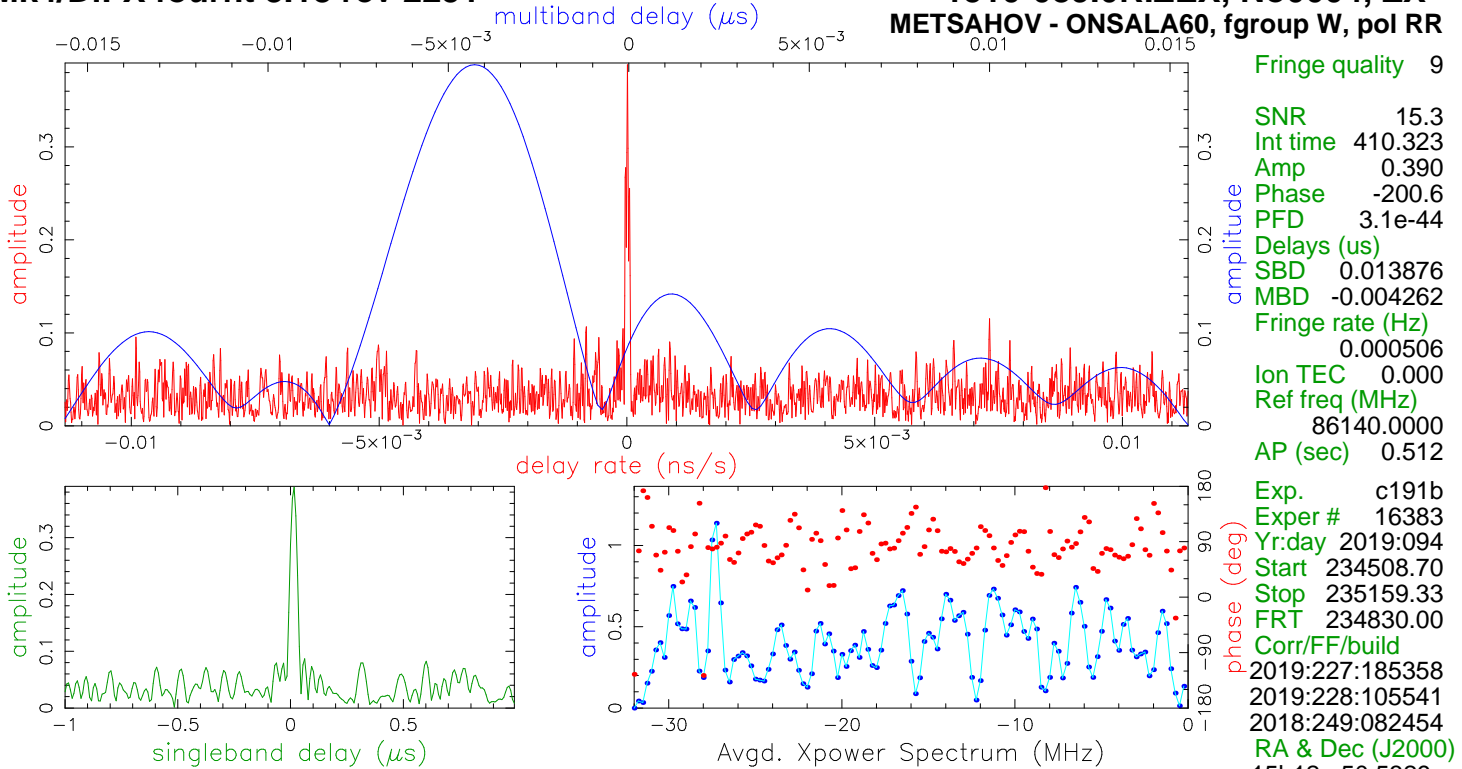


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-156.1	-168.5	-173.6	-172.5	171.5	-155.2	-162.2	-175.8	Phase	-169.0
	0.2	0.4	0.4	0.3	0.3	0.4	0.4	0.3	Ampl.	0.3
	5.9	127.9	127.5	127.7	126.8	127.9	127.0	128.4	Sbd box	127.7
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	-1.20659348872E+02	Apriori delay (usec)	-1.20648466848E+02	Resid mbdelay (usec)	-1.08820E-02	+/-	1.7E-04
Sband delay (usec)	-1.20658864848E+02	Apriori clock (usec)	-2.4955311E+01	Resid sbdelay (usec)	-1.03980E-02	+/-	1.3E-03
Phase delay (usec)	-1.20648472297E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	-5.44941E-06	+/-	2.8E-07
Delay rate (us/s)	-1.84174694184E-01	Apriori rate (us/s)	-1.84174700900E-01	Resid rate (us/s)	6.71571E-09	+/-	1.2E-09
Total phase (deg)	-145.3	Apriori accel (us/s/s)	4.86354594293E-08	Resid phase (deg)	-169.0	+/-	8.8

ph/seg (deg)	52.1	Theor.	21.2	Amplitude	0.331 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	62.5	Search (2048X32)	0.312	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	12.0	Interp.	0.000	Inc. seg. avg.	0.475	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	20.6	Inc. frq. avg.	0.325	Inc. frq. avg.	0.325	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

Z: az 164.2 el 19.6 pa -7.4 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) 1068.548 225.113 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZX.W.11.0RIZEX

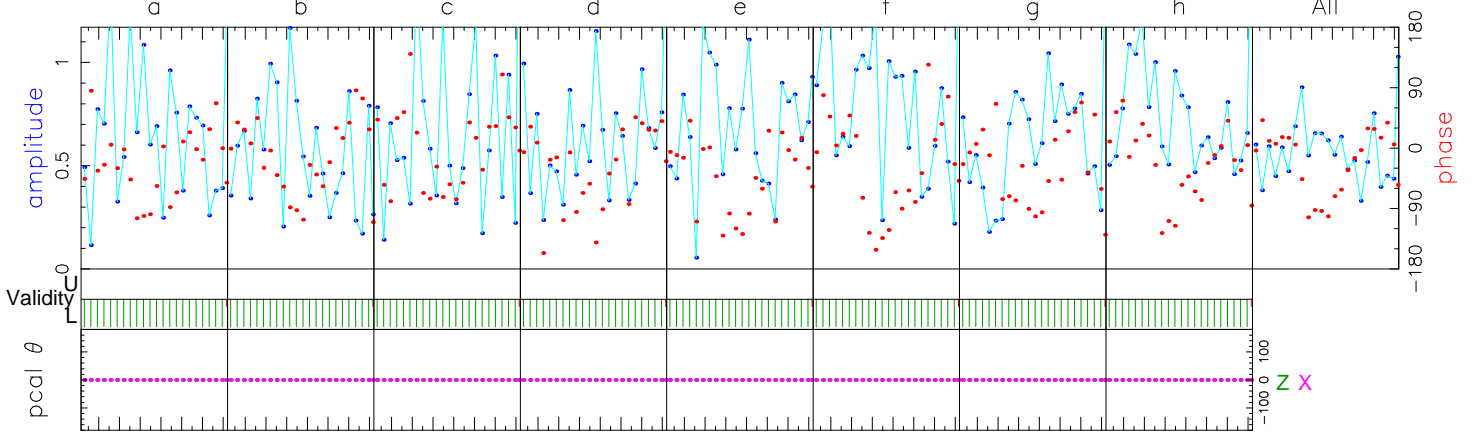


Fringe quality 9

SNR 15.3
 Int time 410.323
 Amp 0.390
 Phase -200.6
 PFD 3.1e-44
 Delays (us)
 SBD 0.013876
 MBD -0.004262
 Fringe rate (Hz) 0.000506
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512

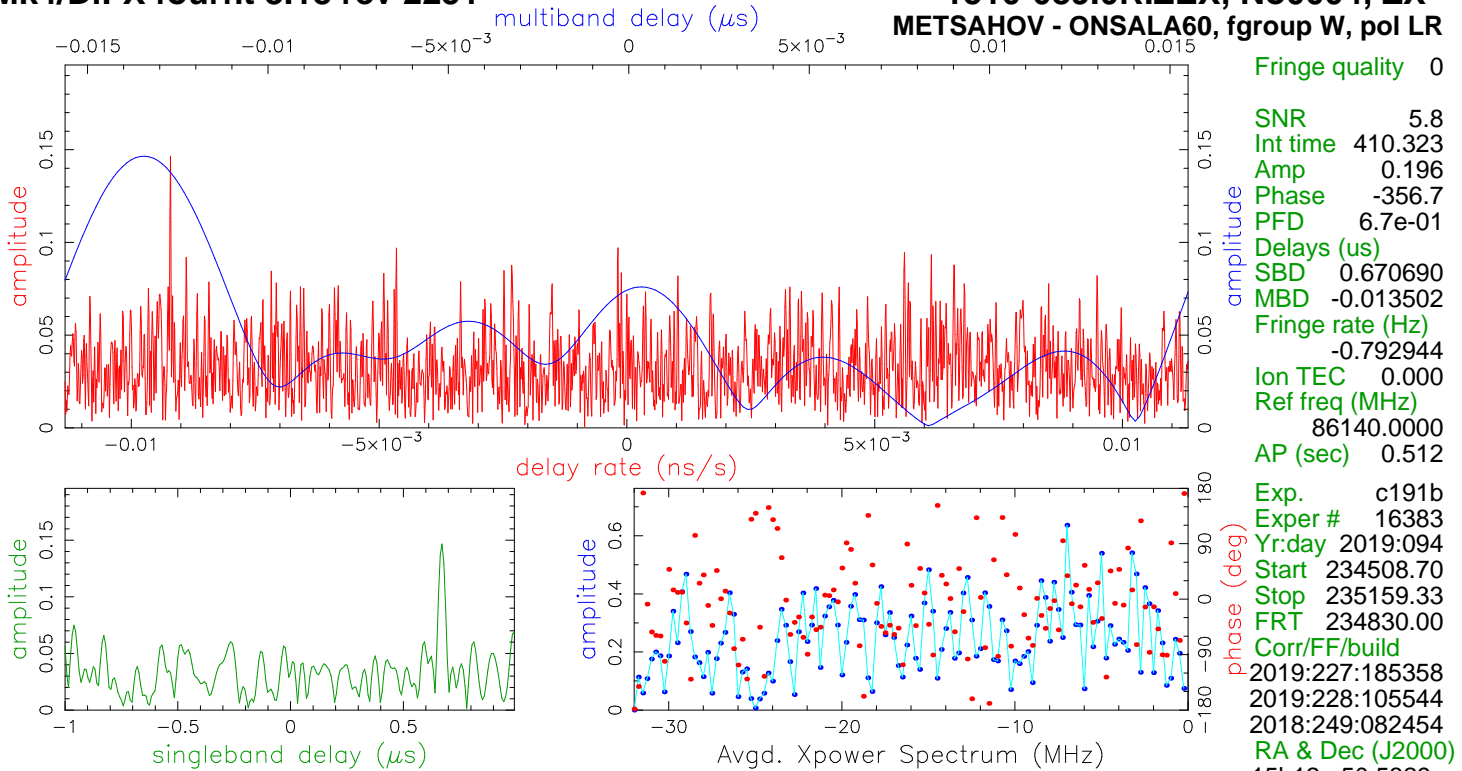
Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

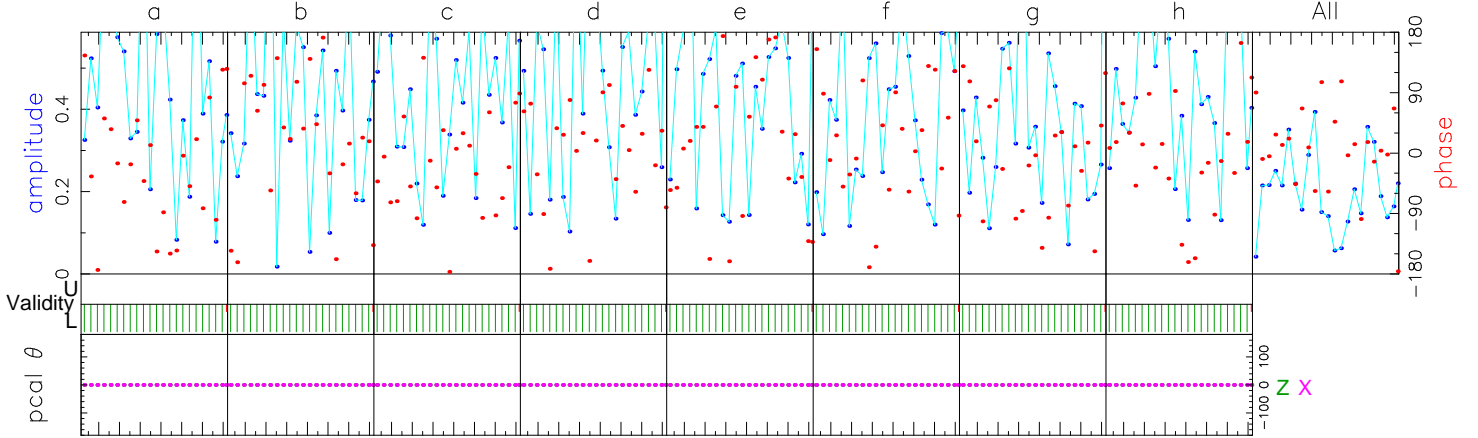


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-35.1	-12.8	1.6	-15.0	-30.9	-27.7	-27.7	-16.1	Phase	-20.6
	0.5	0.4	0.4	0.4	0.4	0.3	0.4	0.5	Ampl.	0.4
	130.9	131.1	130.9	130.6	130.3	131.0	130.1	131.2	Sbd box	130.8
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.20621478559E+02		Apriori delay (usec)		-1.20648466848E+02		Resid mbdelay (usec)		-4.26171E-03	+/- 1.4E-04
Sband delay (usec)	-1.20634590348E+02		Apriori clock (usec)		-2.4955311E+01		Resid sbdelay (usec)		1.38765E-02	+/- 1.1E-03
Phase delay (usec)	-1.20648467514E+02		Apriori clockrate (us/s)		-4.4999998E-07		Resid phdelay (usec)		-6.65904E-07	+/- 2.4E-07
Delay rate (us/s)	-1.84174695026E-01		Apriori rate (us/s)		-1.84174700900E-01		Resid rate (us/s)		5.87323E-09	+/- 1.0E-09
Total phase (deg)			Apriori accel (us/s/s)		4.86354594293E-08		Resid phase (deg)		-200.6	+/- 7.5

ph/seg (deg) 46.9 18.0 Theor. Amplitude 0.390 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.2 31.4 Search (2048X32) 0.361 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 13.0 10.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 17.0 18.5 Inc. seg. avg. 0.536 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 164.2 el 19.6 pa -7.4 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) 1068.548 225.113 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZX.W.26.0RIZEX



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-14.6	51.5	-28.9	19.1	35.6	9.8	-12.2	3.1	Phase	3.3
0.2	0.2	0.3	0.3	0.1	0.2	0.1	0.3	Ampl.	0.2
210.2	69.2	214.6	213.8	194.5	88.9	141.1	216.2	Sbd box	214.8
U/L 0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X 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	
X 1000	1000	1000	1000	1000	1000	1000	1000		
Z W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.19974468639E+02		Apriori delay (usec)	-1.20648466848E+02		Resid mbdelay (usec)	-1.35018E-02	+/-	3.8E-04
Sband delay (usec)	-1.19977776348E+02		Apriori clock (usec)	-2.4955311E+01		Resid sbdelay (usec)	6.70690E-01	+/-	3.0E-03
Phase delay (usec)	-1.20648466742E+02		Apriori clockrate (us/s)	-4.4999998E-07		Resid phdelay (usec)	1.05679E-07	+/-	6.4E-07
Delay rate (us/s)	-1.84183906195E-01		Apriori rate (us/s)	-1.84174700900E-01		Resid rate (us/s)	-9.20530E-06	+/-	2.7E-09
Total phase (deg)		-333.1	Apriori accel (us/s/s)	4.86354594293E-08		Resid phase (deg)	-356.7	+/-	19.9

ph/seg (deg) 55.6 Theor. 47.8 Amplitude 0.196 +/- 0.034 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

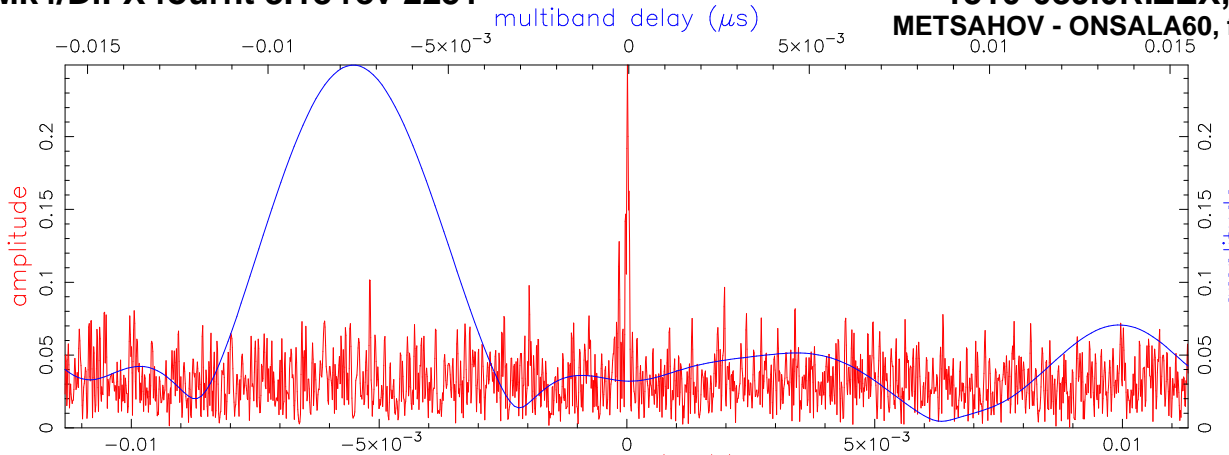
amp/seg (%) 73.8 83.4 Search (2048X32) 0.137 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 29.6 28.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

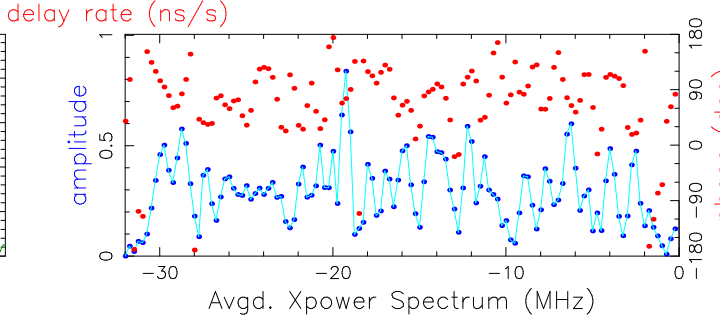
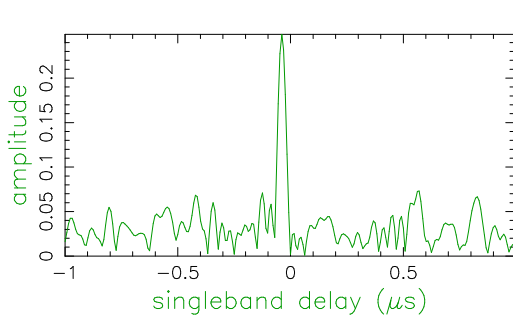
amp/frq (%) 39.9 49.2 Inc. seg. avg. 0.198 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011

Z: az 164.2 el 19.6 pa -7.4 X: az 151.0 el 19.7 pa -14.9 u,v (fr/asec) 1068.548 225.113 ion window (TEC) 0.00 0.00

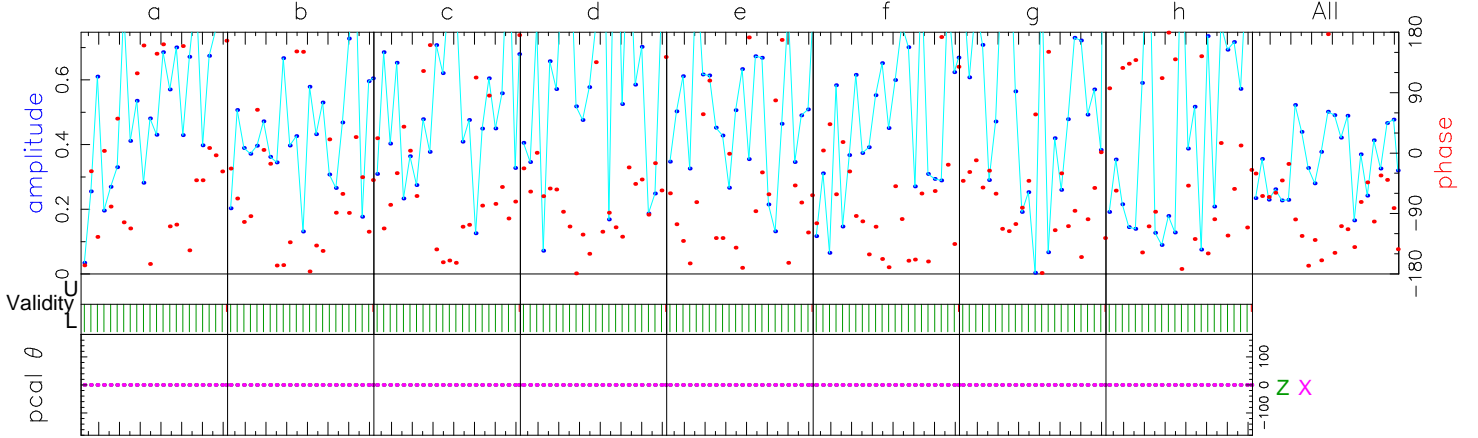
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZX..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZX.W.43.0RIZEX simultaneous interpolator



Fringe quality 9
 SNR 9.8
 Int time 410.323
 Amp 0.249
 Phase 82.4
 PFD 3.4e-14
 Delays (us)
 SBD -0.038660
 MBD -0.007634
 Fringe rate (Hz) 0.000791
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105545
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



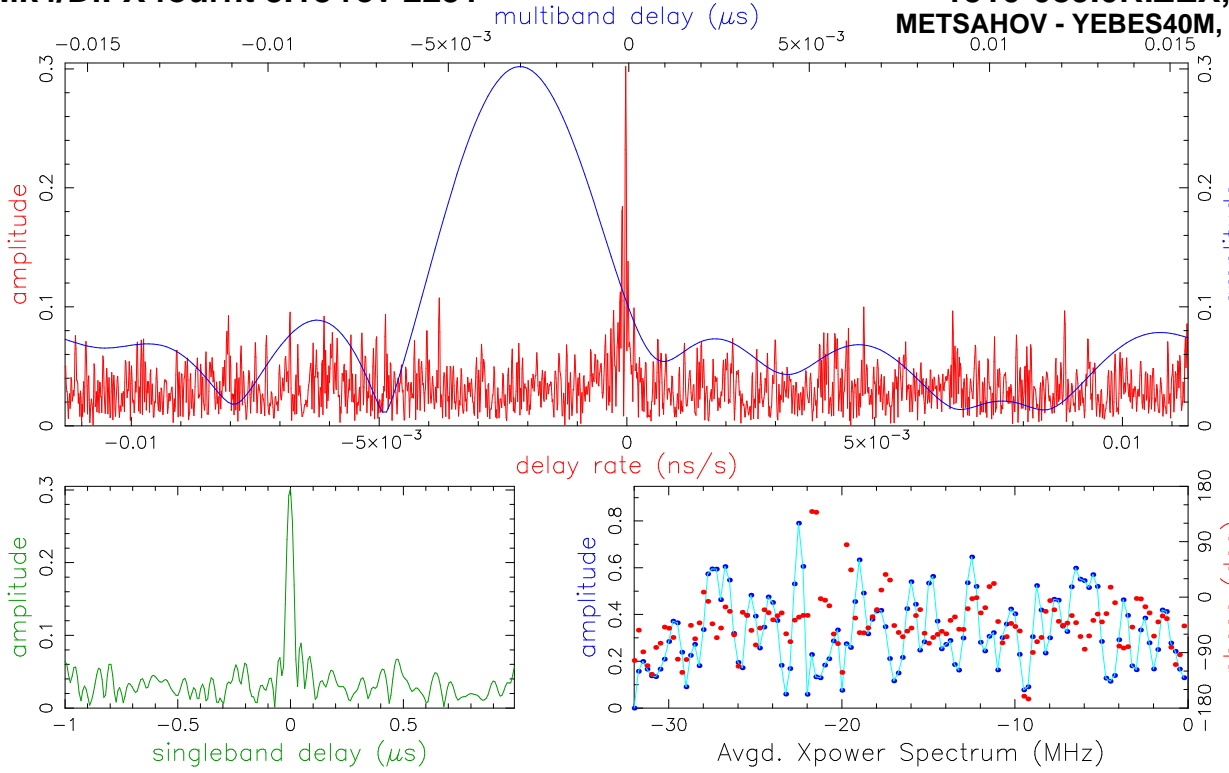
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-96.3	-96.9	-112.9	-83.2	-114.2	-99.0	-84.0	-113.3	Phase	-97.6
0.2	0.2	0.2	0.4	0.2	0.3	0.4	0.2	Ampl.	0.2
94.3	83.5	124.5	124.3	108.4	123.6	124.5	122.8	Sbd box	124.1
U/L 0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X 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	
X 1000	1000	1000	1000	1000	1000	1000	1000		
Z W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	-1.20687350934E+02	Apriori delay (usec)	-1.20648466848E+02	Resid mbdelay (usec)	-7.63409E-03	+/-	2.2E-04
Sband delay (usec)	-1.20687126848E+02	Apriori clock (usec)	-2.4955311E+01	Resid sbdelay (usec)	-3.86600E-02	+/-	1.8E-03
Phase delay (usec)	-1.20648469996E+02	Apriori clockrate (us/s)	-4.4999998E-07	Resid phdelay (usec)	-3.14784E-06	+/-	3.8E-07
Delay rate (us/s)	-1.84174691717E-01	Apriori rate (us/s)	-1.84174700900E-01	Resid rate (us/s)	9.18291E-09	+/-	1.6E-09
Total phase (deg)	106.1	Apriori accel (us/s/s)	4.86354594293E-08	Resid phase (deg)	82.4	+/-	11.7

ph/seg (deg)	48.5	Theor.	28.1	Amplitude	0.249 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	60.9	Search (2048X32)	0.247	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	13.8	Interp.	0.000	Inc. seg. avg.	0.318	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	33.3	Inc. frq. avg.	0.245	Inc. frq. avg.	0.245	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
Z: az 164.2 el 19.6 pa -7.4	X: az 151.0 el 19.7 pa -14.9	u,v (fr/asec)	1068.548 225.113	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite

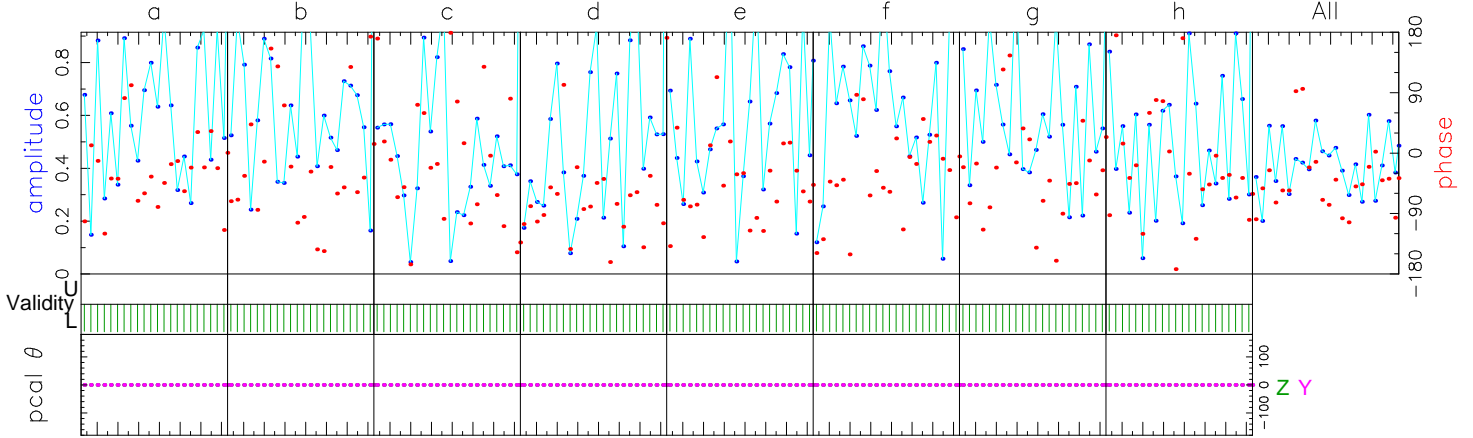


Fringe quality 9

SNR 11.9
Int time 405.324
Amp 0.305
Phase -46.3
PFD 4.1e-24
Delays (us)
SBD -0.002530
MBD -0.003035
Fringe rate (Hz)
-0.002221
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105540
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



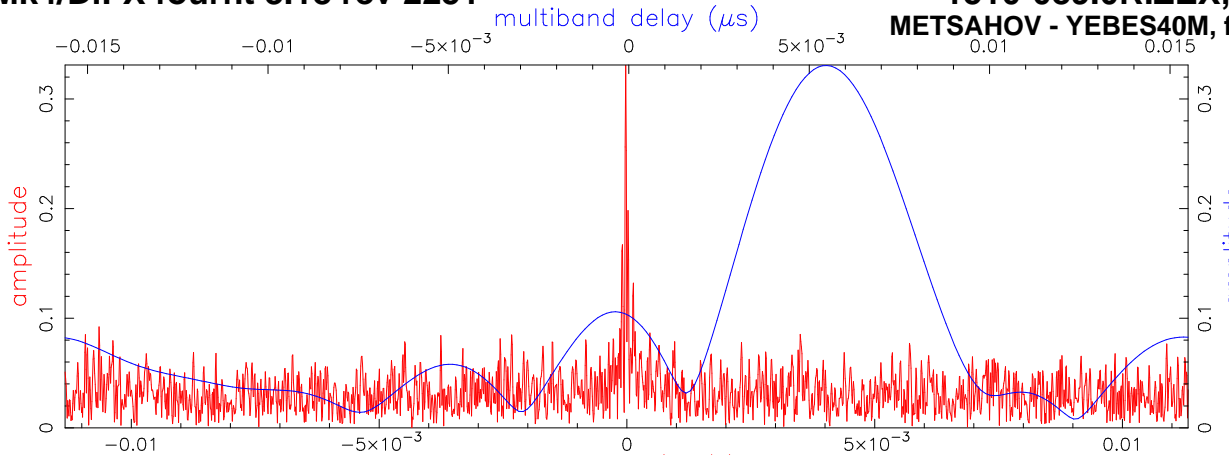
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-29.0	-60.8	-33.0	-72.5	-48.5	-34.9	-45.6	-38.7	Phase	-46.3
	0.4	0.3	0.2	0.4	0.3	0.4	0.3	0.2	Ampl.	0.3
	129.0	128.5	152.8	128.1	128.6	129.3	128.7	129.5	Sbd box	128.7
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	

Group delay (usec)(sbd)	-2.58360364193E+03	Apriori delay (usec)	-2.5836006664E+03	Resid mbdelay (usec)	-3.03529E-03	+/-	1.8E-04
Sband delay (usec)	-2.58360313664E+03	Apriori clock (usec)	-6.8935623E+00	Resid sbdelay (usec)	-2.53000E-03	+/-	1.5E-03
Phase delay (usec)	-2.58360060813E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	-1.49379E-06	+/-	3.1E-07
Delay rate (us/s)	-5.87708236628E-01	Apriori rate (us/s)	-5.87708210843E-01	Resid rate (us/s)	-2.57858E-08	+/-	1.3E-09
Total phase (deg)	-138.5	Apriori accel (us/s/s)	9.77322945624E-06	Resid phase (deg)	-46.3	+/-	9.7

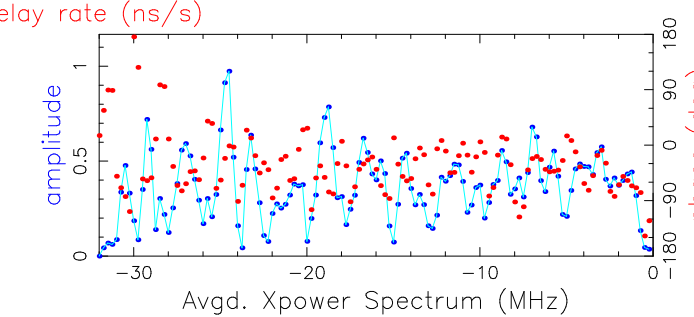
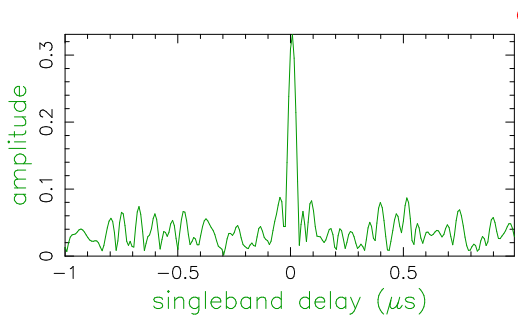
ph/seg (deg)	51.4	Theor.	23.1	Amplitude	0.305 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	51.4	Search (2048X32)	0.293	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	16.2	Interp.	0.000	Inc. seg. avg.	0.387	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	24.7	Inc. frq. avg.	0.303	Inc. frq. avg.	0.303	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

Z: az 164.2 el 19.6 pa -7.4 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 3426.332 1792.852 simultaneous interpolator

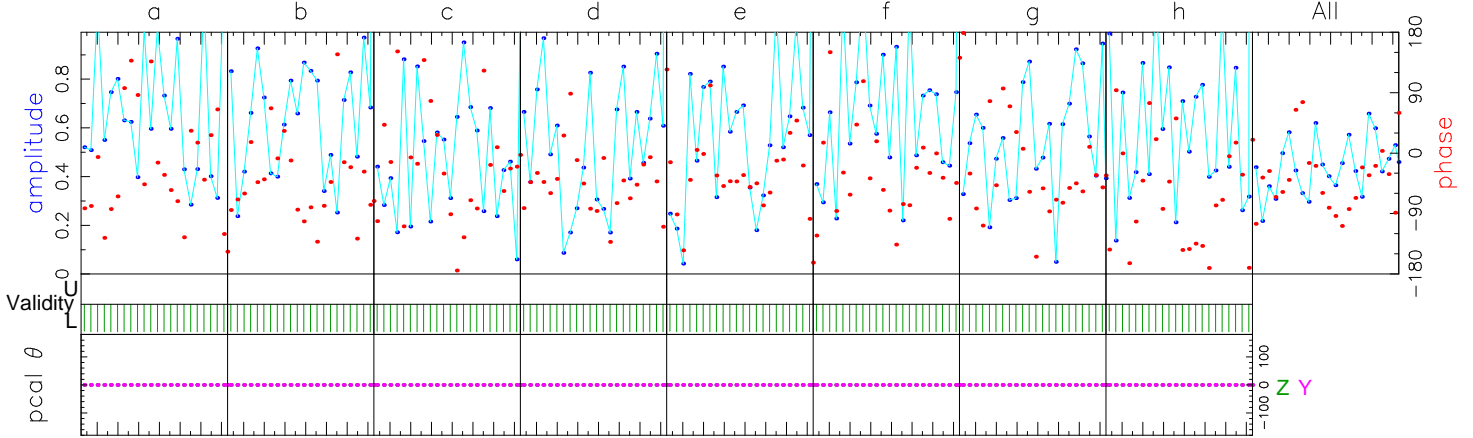
Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZY.W.14.0RIZEX



Fringe quality 9
 SNR 12.9
 Int time 405.324
 Amp 0.331
 Phase -46.8
 PFD 1.5e-29
 Delays (us)
 SBD 0.006870
 MBD 0.005477
 Fringe rate (Hz)
 -0.002105
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234513.31
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105542
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

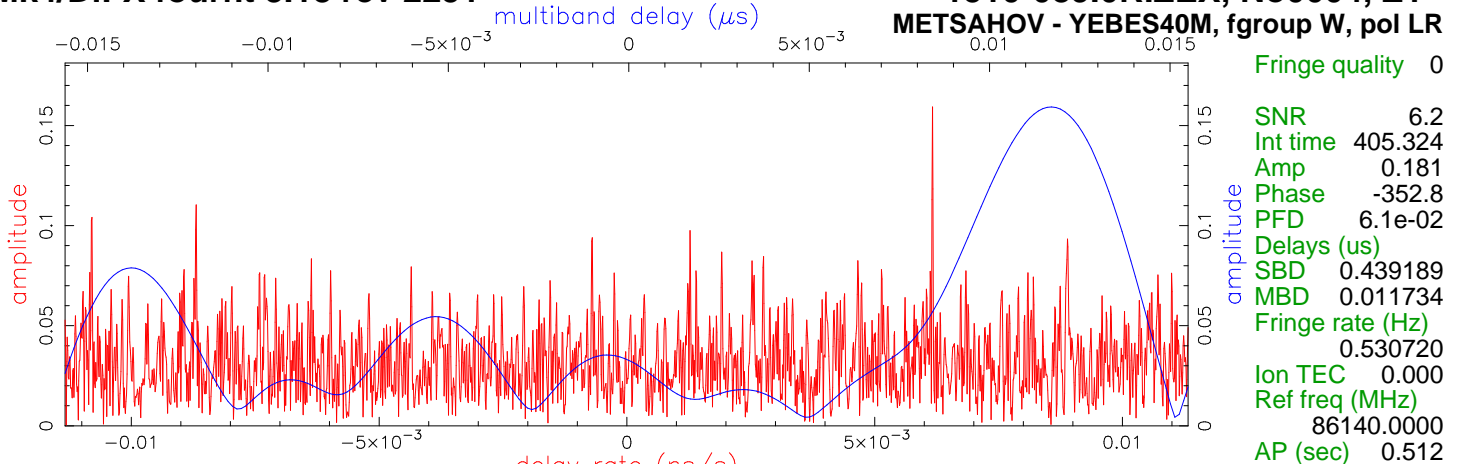


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-50.3	-50.3	-57.8	-50.1	-21.0	-38.9	-48.9	-72.3	Phase	-46.8
	0.3	0.4	0.2	0.4	0.4	0.3	0.4	0.2	Ampl.	0.3
	129.7	129.9	24.2	129.4	129.5	130.2	129.8	130.8	Sbd box	129.9
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	-2.58359512980E+03	Apriori delay (usec)	-2.5836006664E+03	Resid mbdelay (usec)	5.47684E-03	+/-	1.7E-04
Sband delay (usec)	-2.58359373714E+03	Apriori clock (usec)	-6.8935623E+00	Resid sbdelay (usec)	6.86950E-03	+/-	1.3E-03
Phase delay (usec)	-2.58360060815E+03	Apriori clockrate (us/s)	-1.9299999E-07	Resid phdelay (usec)	-1.51005E-06	+/-	2.9E-07
Delay rate (us/s)	-5.87708235279E-01	Apriori rate (us/s)	-5.87708210843E-01	Resid rate (us/s)	-2.44360E-08	+/-	1.2E-09
Total phase (deg)	-139.0	Apriori accel (us/s/s)	9.77322945624E-06	Resid phase (deg)	-46.8	+/-	8.9

ph/seg (deg)	47.2	Theor.	21.3	Amplitude	0.331 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	48.1		37.2	Search (2048X32)	0.321	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	16.0		12.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	25.5		22.0	Inc. seg. avg.	0.414	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
				Inc. frq. avg.	0.332	Data rate(Mb/s):	1024	dr window (ns/s)	-0.011 0.011
						nlags:	128	ion window (TEC)	0.00 0.00

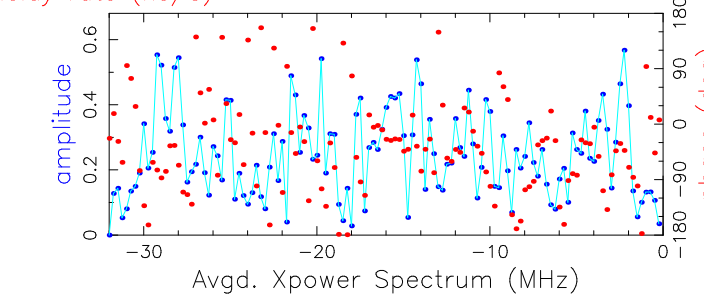
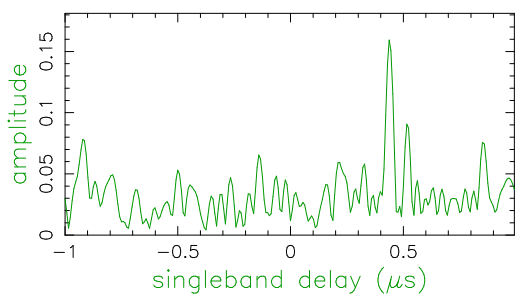
Z: az 164.2 el 19.6 pa -7.4 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 3426.332 1792.852 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZY.W.30.0RIZEX



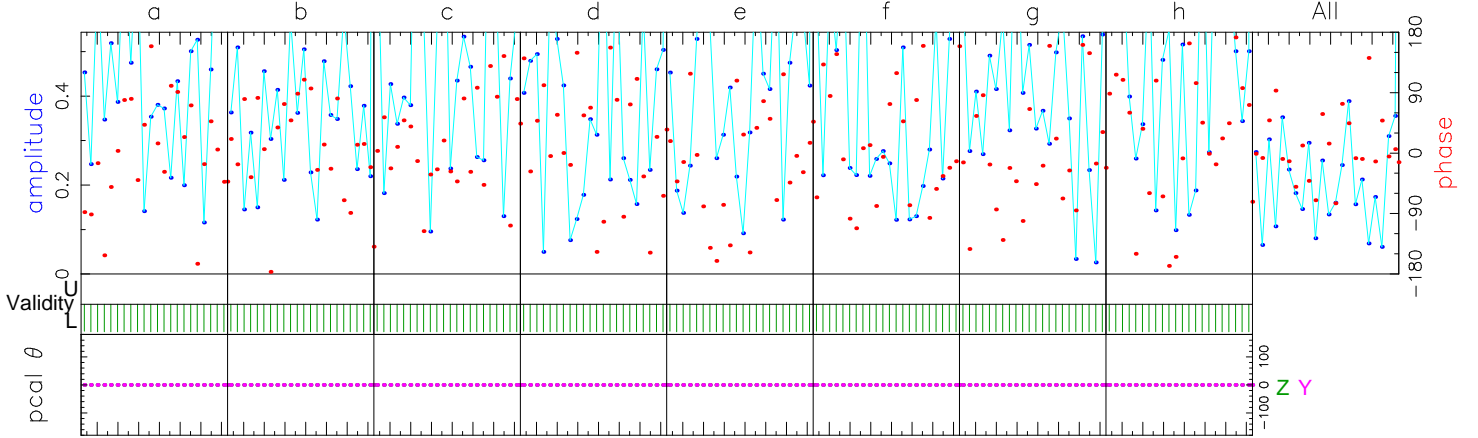
Fringe quality 0

SNR 6.2
Int time 405.324
Amp 0.181
Phase -352.8
PFD 6.1e-02
Delays (us)
SBD 0.439189
MBD 0.011734
Fringe rate (Hz) 0.530720
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c191b
Exper # 16383
Yr:day 2019:094
Start 234513.31
Stop 235159.33
FRT 234830.00
Corr/FF/build
2019:227:185358
2019:228:105544
2018:249:082454
RA & Dec (J2000)
15h12m50.5329s
-9°05'59.830"



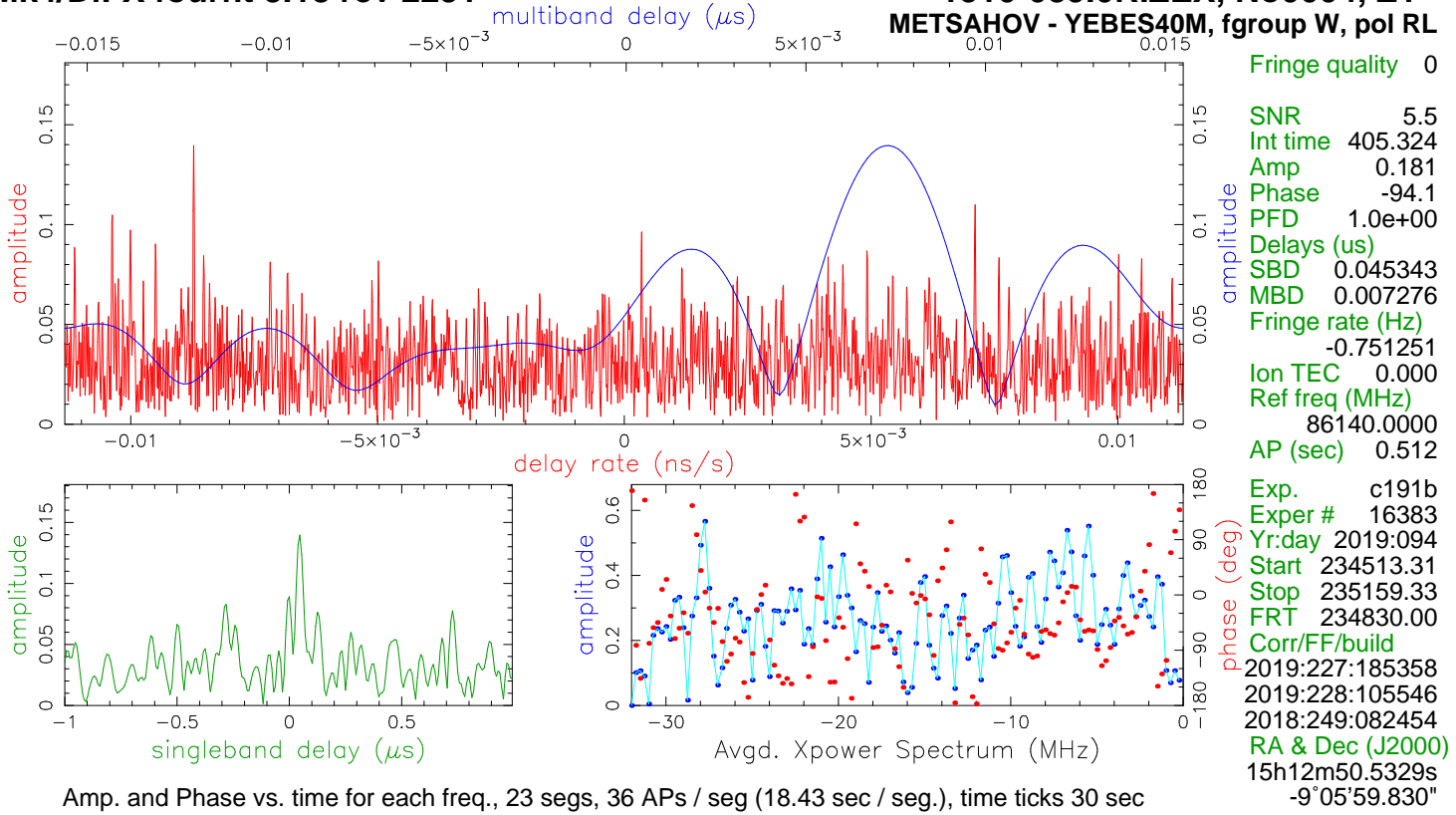
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



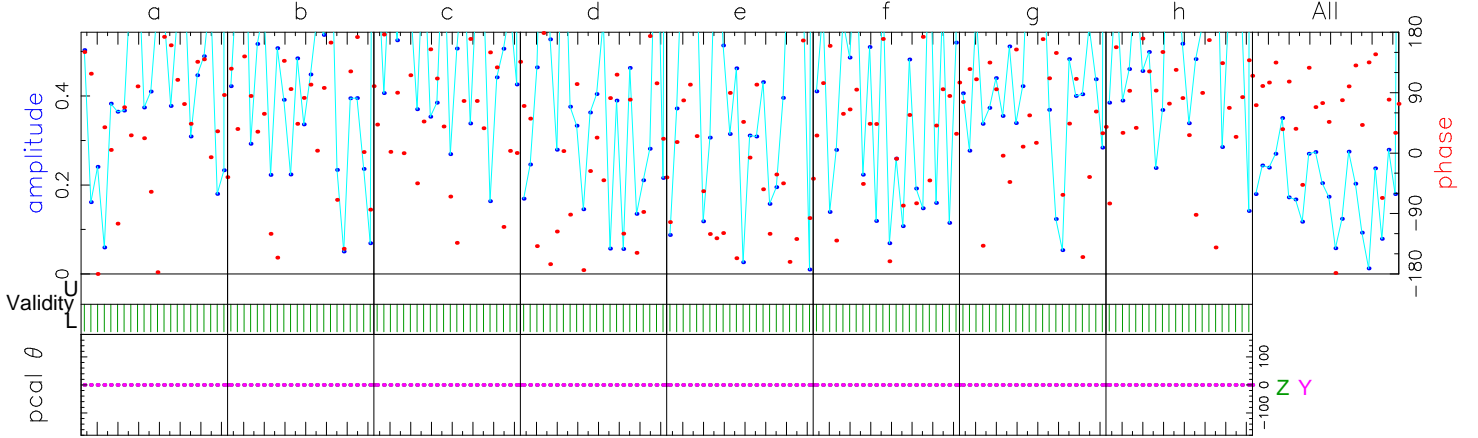
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86348.00	All
U/L	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	185.2
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
Z:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)		-2.58315137255E+03				-2.58360060664E+03			1.17341E-02	+/- 3.5E-04
Sband delay (usec)		-2.58316141714E+03				-6.8935623E+00			4.39189E-01	+/- 2.8E-03
Phase delay (usec)		-2.58360060641E+03				-1.9299999E-07			2.33259E-07	+/- 5.9E-07
Delay rate (us/s)		-5.87702049715E-01				-5.87708210843E-01			6.16113E-06	+/- 2.5E-09
Total phase (deg)			-84.9			9.77322945624E-06			-352.8	+/- 18.4
Apriori delay (usec)				0.145						
Apriori clock (usec)				0.145						
Apriori clockrate (us/s)				0.000						
Apriori rate (us/s)				0.182						
Apriori accel (us/s/s)				0.179						
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MSamp/s):	64									
Data rate(Mb/s):	1024									
nlags:	128									
t_cohere:	infinite									
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.016	0.016								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

Z: az 164.2 el 19.6 pa -7.4 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 3426.332 1792.852 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZY.W.45.0RIZEX

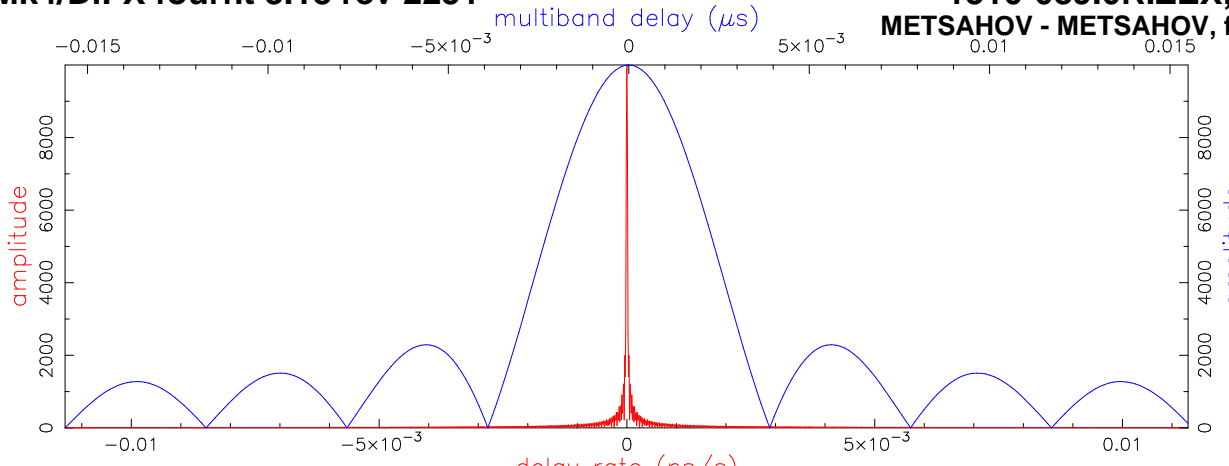


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

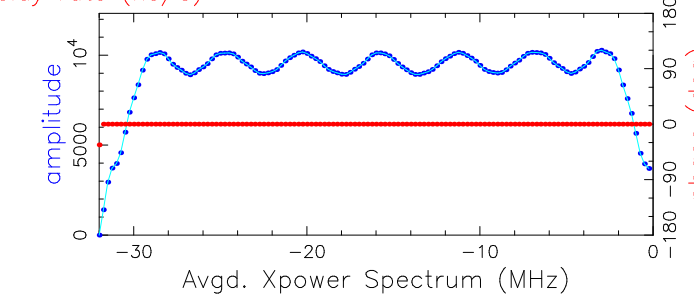
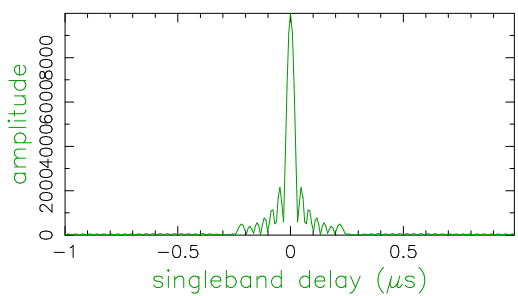


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
95.3	101.1	55.2	120.3	-141.5	61.4	70.8	103.2	Phase	85.9
0.2	0.3	0.3	0.1	0.1	0.2	0.2	0.3	Ampl.	0.2
121.8	145.9	135.2	63.4	207.9	252.6	160.9	134.4	Sbd box	134.8
U/L 0/793	0/793	0/793	0/793	0/793	0/793	0/793	0/793	APs used	
Z -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	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 W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.58356208021E+03		Apriori delay (usec)	-2.58360060664E+03		Resid mbdelay (usec)	7.27643E-03	+/-	4.0E-04
Sband delay (usec)	-2.58355526364E+03		Apriori clock (usec)	-6.8935623E+00		Resid sbdelay (usec)	4.53430E-02	+/-	3.2E-03
Phase delay (usec)	-2.58360060387E+03		Apriori clockrate (us/s)	-1.9299999E-07		Resid phdelay (usec)	2.76972E-06	+/-	6.8E-07
Delay rate (us/s)	-5.87716932121E-01		Apriori rate (us/s)	-5.87708210843E-01		Resid rate (us/s)	-8.72128E-06	+/-	2.9E-09
Total phase (deg)		-186.2	Apriori accel (us/s/s)	9.77322945624E-06		Resid phase (deg)	-94.1	+/-	21.0

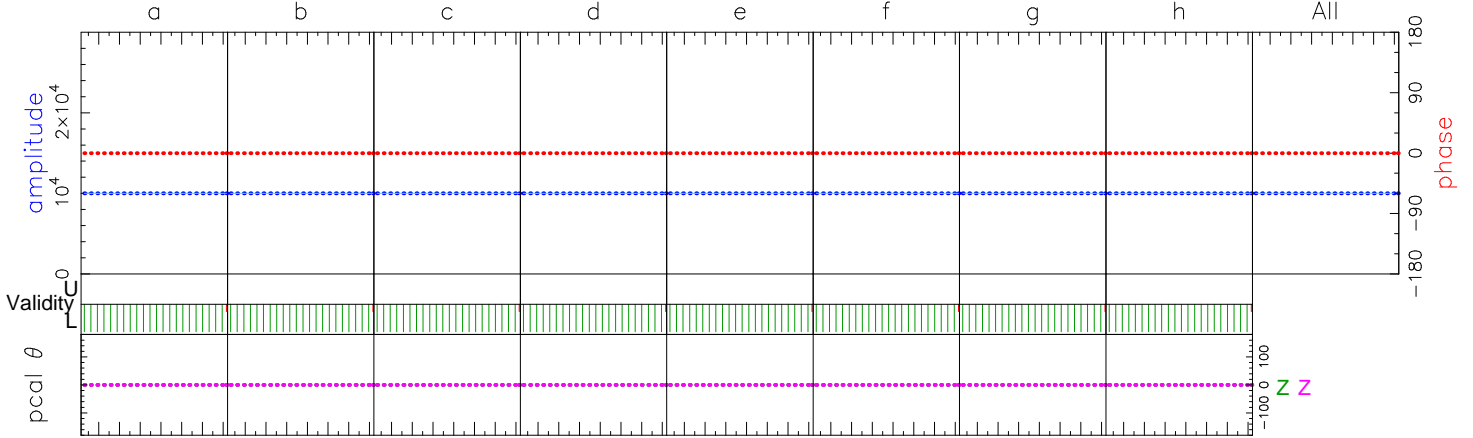
ph/seg (deg) 58.7 50.4 Search (2048X32) 0.136 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.9 87.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.4 29.7 Inc. seg. avg. 0.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 52.1 51.9 Inc. frq. avg. 0.188 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 164.2 el 19.6 pa -7.4 Y: az 131.6 el 26.7 pa -34.7 u,v (fr/asec) 3426.332 1792.852 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZY..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZY.W.60.0RIZEX simultaneous interpolator



Fringe quality 9
 SNR 391693.6
 Int time 410.325
 Amp 9999.998
 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. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105541
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



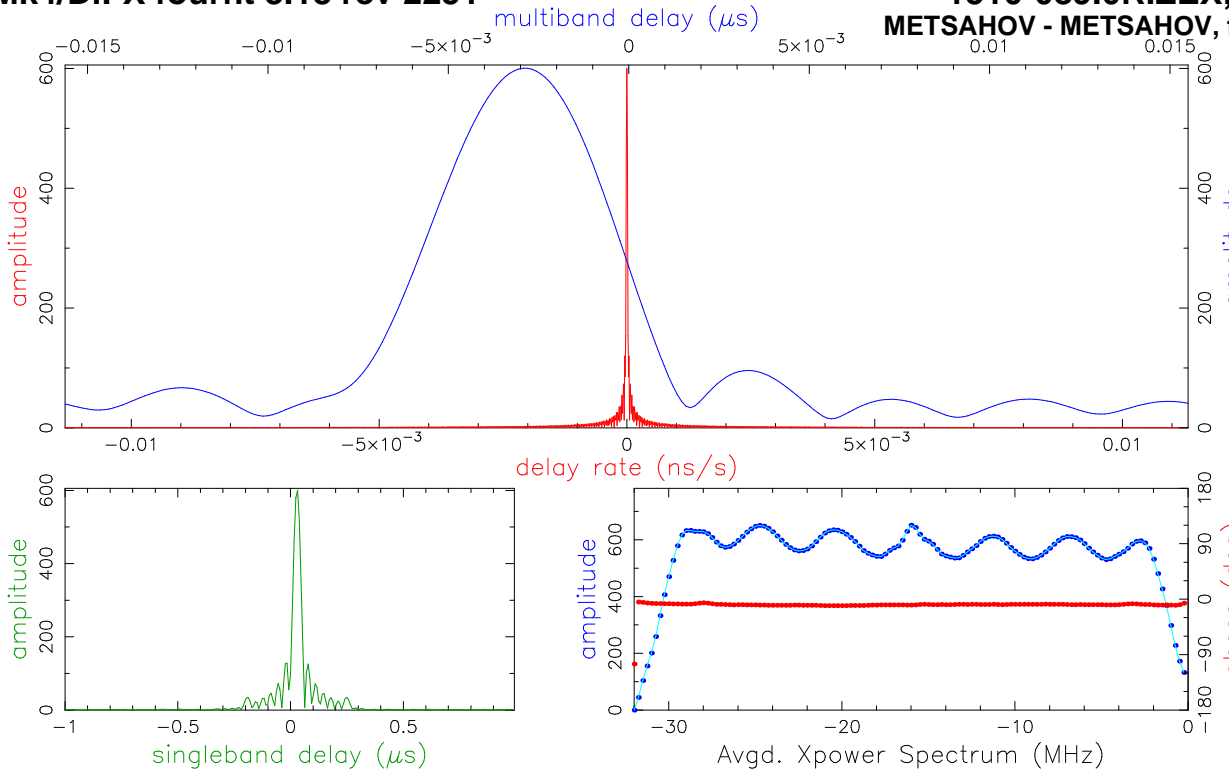
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802		
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		

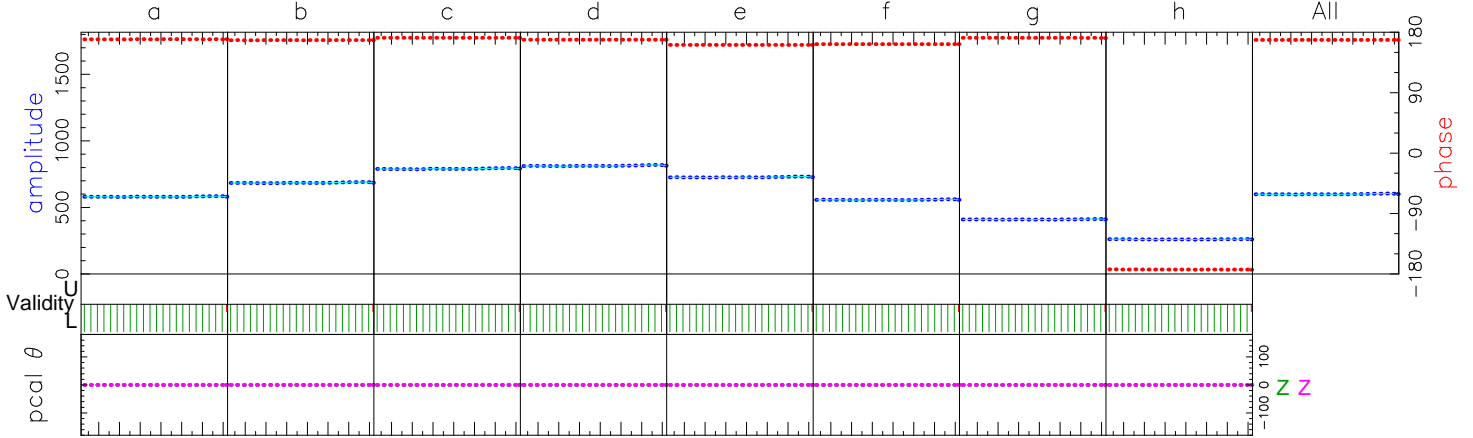
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.4E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.4E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.0E-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	RMS	0.0	Theor.	0.0	Amplitude	9999.998 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X32)	0.000	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.997	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Bits/sample:	2x2	Sample rate(MSamp/s):	64	Data rate(Mb/s):	1024	nlags:	128	t_cohere	infinite
amp/frq (%)	0.0	ion window (TEC)	0.00	0.00	0.00	0.00	0.00	simultaneous interpolator			



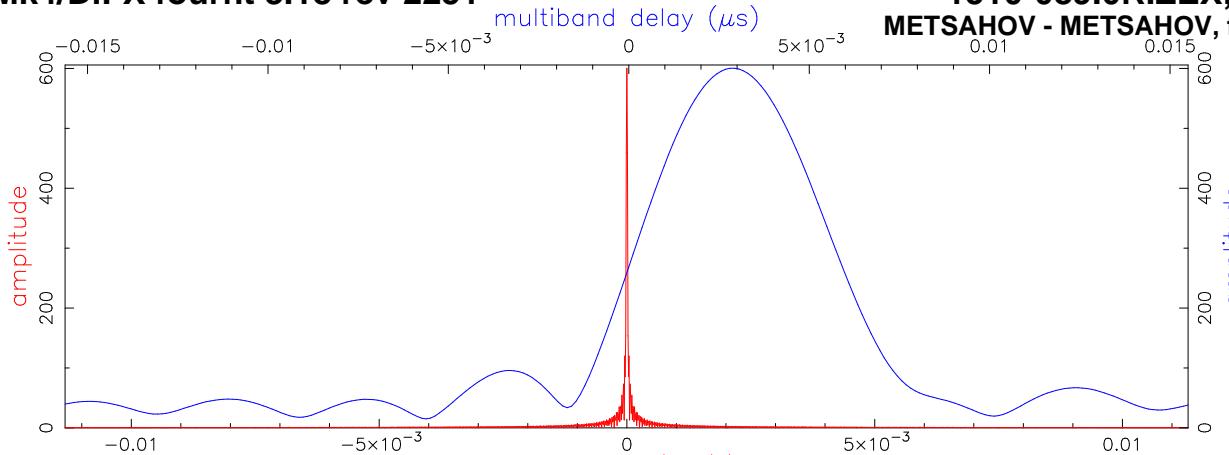
Fringe quality 8
 SNR 23723.3
 Int time 410.325
 Amp 605.660
 Phase -11.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.028801
 MBD -0.002907
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105543
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

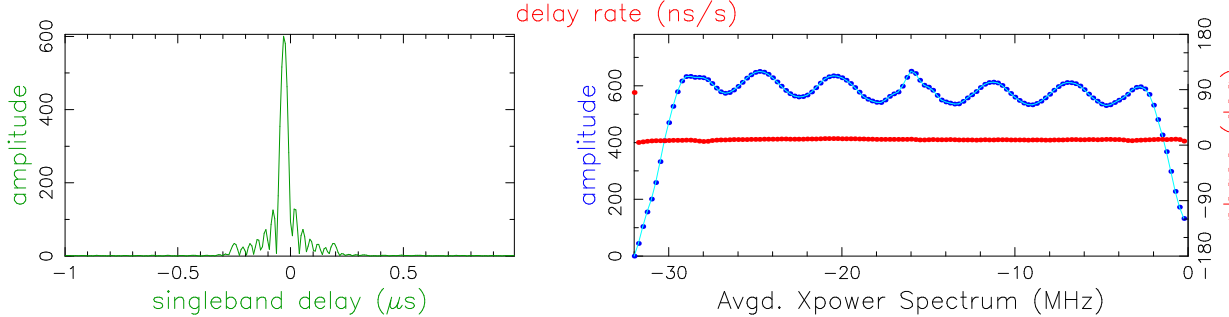


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	169.4	168.1	171.6	168.7	161.0	162.2	171.5	-173.3	Phase	168.5
	581.1	685.7	790.8	813.4	727.4	557.8	410.3	260.6	Ampl.	603.4
	132.7	132.8	132.5	132.7	132.6	132.7	132.7	133.5	Sbd box	132.7
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.83425625000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.90744E-03	+/- 9.1E-08
Sband delay (usec)	2.88010000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.88010E-02	+/- 7.3E-07
Phase delay (usec)	5.43259583381E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.43260E-06	+/- 1.6E-10
Delay rate (us/s)	9.91980667418E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		9.91981E-12	+/- 6.6E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-11.5	+/- 0.0

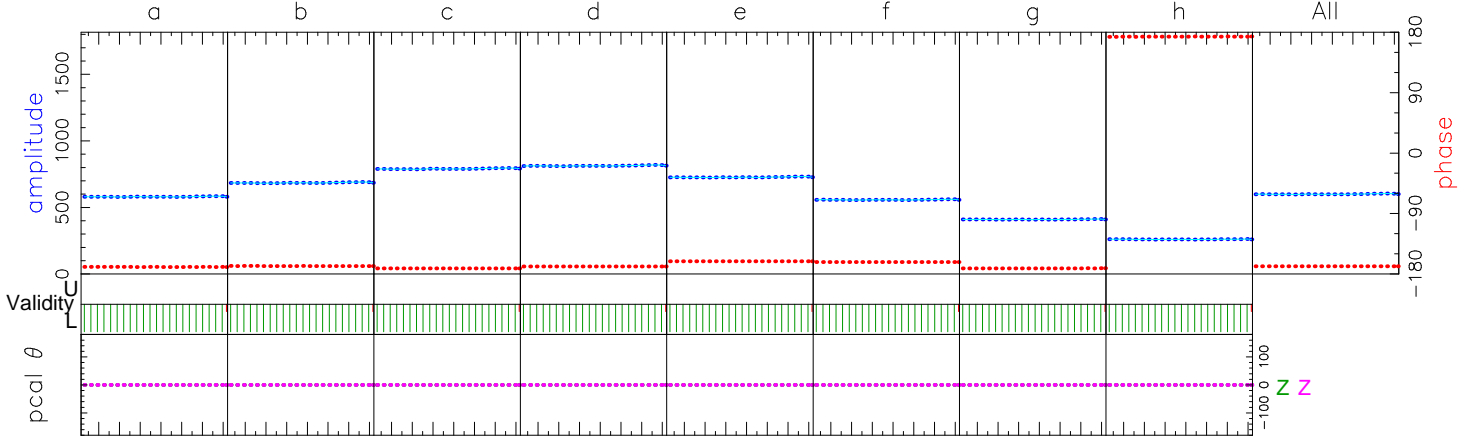
ph/seg (deg) 0.0 0.0 Theor. Amplitude 605.660 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.9 0.0 Search (2048X32) 600.261 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 amp/frq (%) 29.7 0.0 Inc. seg. avg. 600.348 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 164.2 el 19.6 pa -7.4 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZZ.W.36.0RIZEX



Fringe quality 8
 SNR 23723.3
 Int time 410.325
 Amp 605.660
 Phase 11.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.028801
 MBD 0.002907
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105544
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

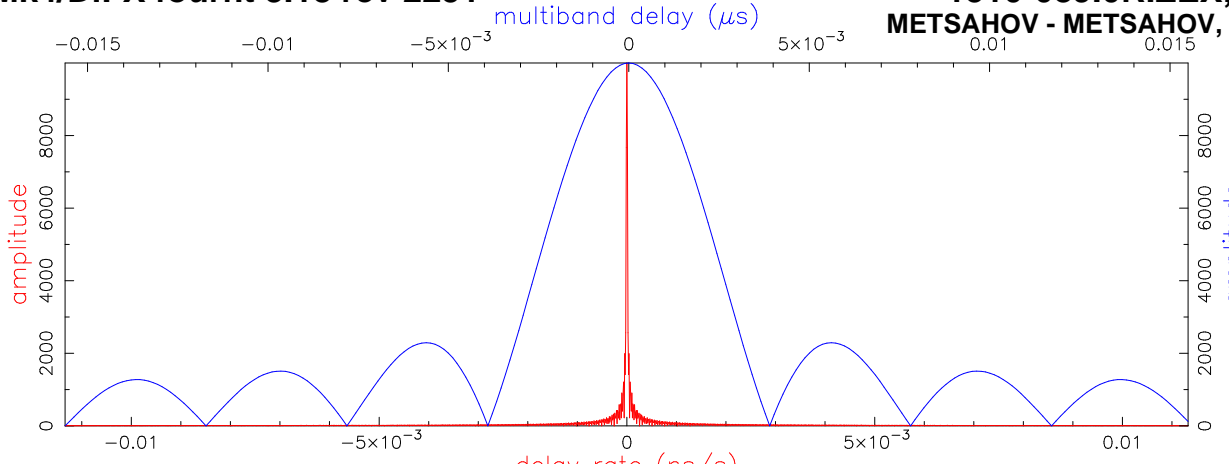


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-169.4	-168.1	-171.6	-168.7	-161.0	-162.2	-171.5	173.3	Phase	-168.5
	581.1	685.7	790.8	813.4	727.4	557.8	410.3	260.6	Ampl.	603.4
	125.3	125.2	125.5	125.3	125.4	125.3	125.3	124.5	Sbd box	125.3
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	APs used	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Z									Chan ids	
Z									Tracks	

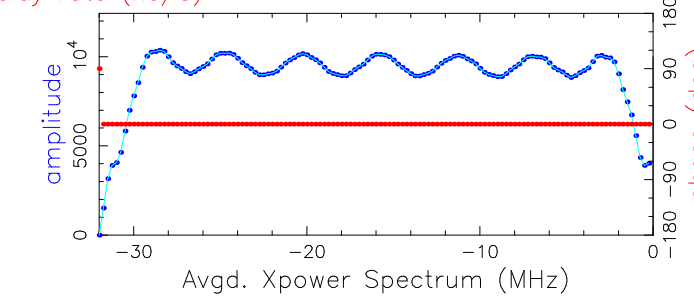
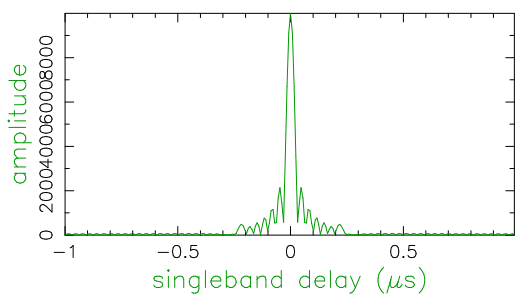
Group delay (usec)(sbd) -2.83425625000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 2.90744E-03 +/- 9.1E-08
 Sband delay (usec) -2.88010000000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.88010E-02 +/- 7.3E-07
 Phase delay (usec) -5.43259583388E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.43260E-06 +/- 1.6E-10
 Delay rate (us/s) -9.91980667418E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -9.91981E-12 +/- 6.6E-13
 Total phase (deg) 11.5 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 11.5 +/- 0.0

RMS Theor. Amplitude 605.660 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 600.261 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.9 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016
 ph/frq (deg) 8.6 0.0 Inc. seg. avg. 600.348 Sample rate(MSamp/s): 64 dr window (ns/s) -0.011 0.011
 amp/frq (%) 29.7 0.0 Inc. frq. avg. 603.404 Data rate(Mb/s): 1024 nlags: 128 t_cohere infinite ion window (TEC) 0.00 0.00

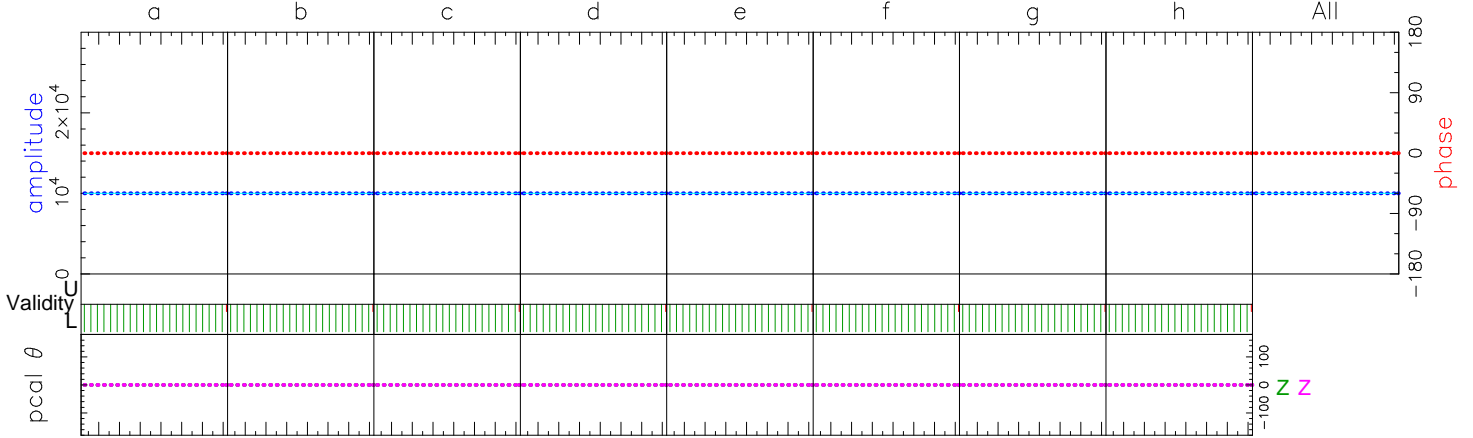
Z: az 164.2 el 19.6 pa -7.4 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZZ.W.49.0RIZEX



Fringe quality 9
 SNR 391693.6
 Int time 410.325
 Amp 9999.998
 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. c191b
 Exper # 16383
 Yr:day 2019:094
 Start 234508.70
 Stop 235159.33
 FRT 234830.00
 Corr/FF/build
 2019:227:185358
 2019:228:105539
 2018:249:082454
 RA & Dec (J2000)
 15h12m50.5329s
 -9°05'59.830"



Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/802	0/802	0/802	0/802	0/802	0/802	0/802	0/802	10000.0	10000.0
Z	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	10000.0	10000.0
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
Z:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Z	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Z	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.5E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	4.4E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	9.4E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	4.0E-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	RMS	0.0	Theor.	0.0	Amplitude	9999.998 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X32)	9999.997	Interp.	0.000	Apriori clockrate (us/s)	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	9999.997	Apriori rate (us/s)	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	Inc. frq. avg.	9999.997	Inc. frq. avg.	9999.997	Apriori accel (us/s/s)	0.000	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016

Z: az 164.2 el 19.6 pa -7.4 Z: az 164.2 el 19.6 pa -7.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c191b/v1/1234/No0004/ZZ..RIZEX Output file: /Exps/c191b/v1/1234/No0004/ZZ.W.9.0RIZEX