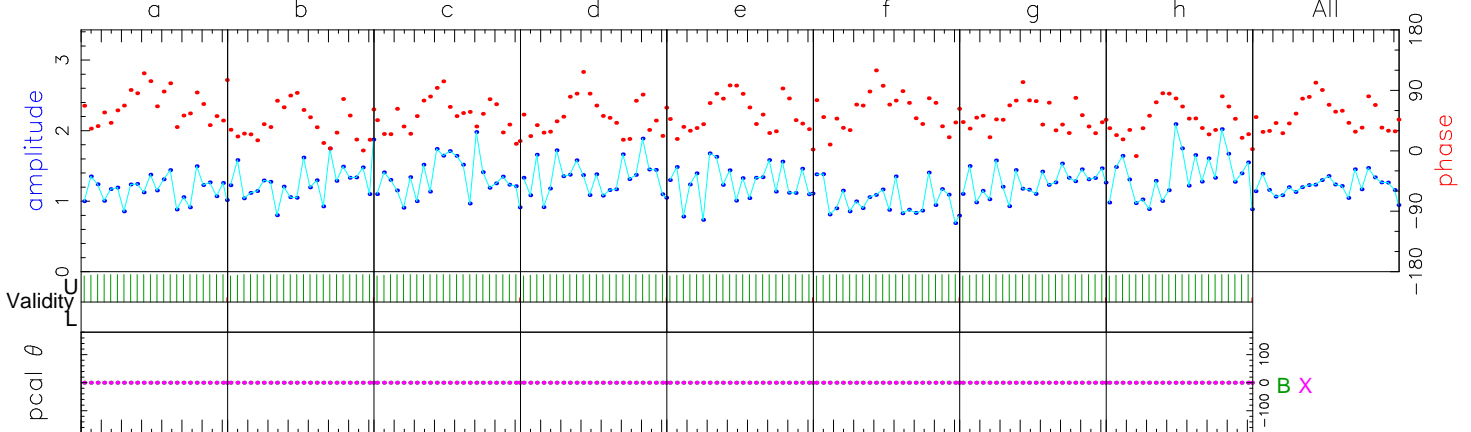


Fringe quality 8

SNR 63.9
Int time 418.306
Amp 1.143
Phase 52.6
PFD 0.0e+00
Delays (us)
SBD 0.016646
MBD 0.001083
Fringe rate (Hz) 0.006716
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165609
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

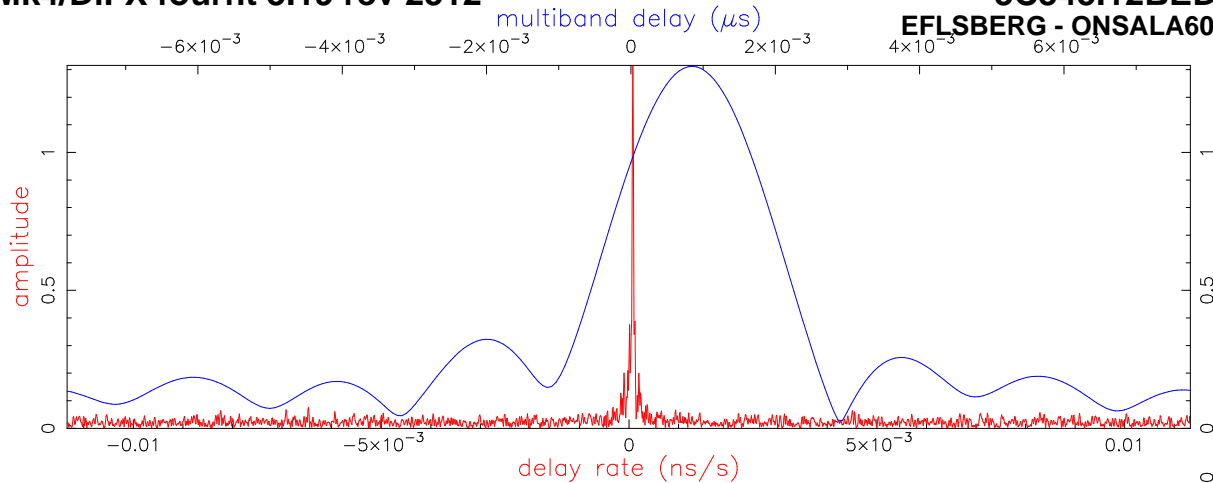


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	67.0	37.5	53.8	52.0	55.7	61.7	50.2	46.4	Phase	52.6
	1.1	1.1	1.2	1.2	1.1	0.9	1.2	1.3	Ampl.	1.1
	260.9	261.0	261.3	261.5	261.1	261.3	261.5	260.9	Sbd box	261.3
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 7.0270145554E+02 Apriori delay (usec) 7.02684747362E+02 Resid mbdelay (usec) 1.08319E-03 +/- 1.7E-05
 Sband delay (usec) 7.02701393362E+02 Apriori clock (usec) -1.5486191E+01 Resid sbdelay (usec) 1.66460E-02 +/- 1.3E-04
 Phase delay (usec) 7.02684749059E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) 1.69740E-06 +/- 5.8E-08
 Delay rate (us/s) -4.67303081421E-02 Apriori rate (us/s) -4.67303861104E-02 Resid rate (us/s) 7.79683E-08 +/- 2.4E-10
 Total phase (deg) 102.2 Apriori accel (us/s/s) -8.91911020584E-06 Resid phase (deg) 52.6 +/- 1.8

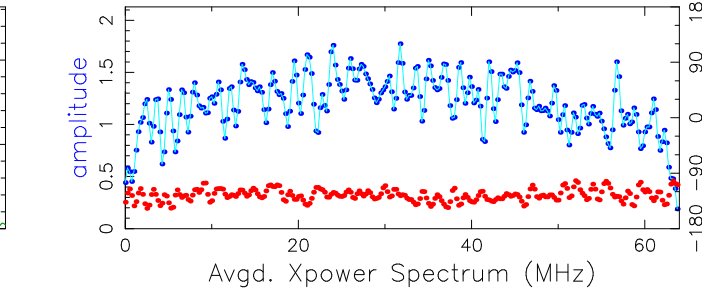
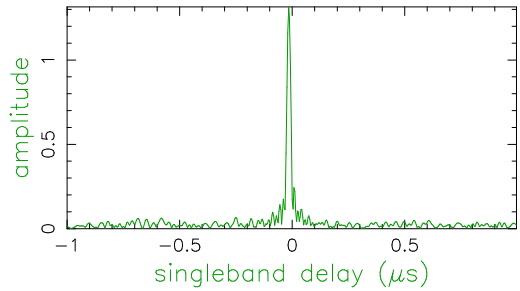
RMS Theor. Amplitude 1.143 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 22.4 4.3 Search (2048X32) 1.131 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 12.7 7.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 9.8 2.5 Inc. seg. avg. 1.227 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 8.8 4.4 Inc. frq. avg. 1.147 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BX.W.100.12BED8



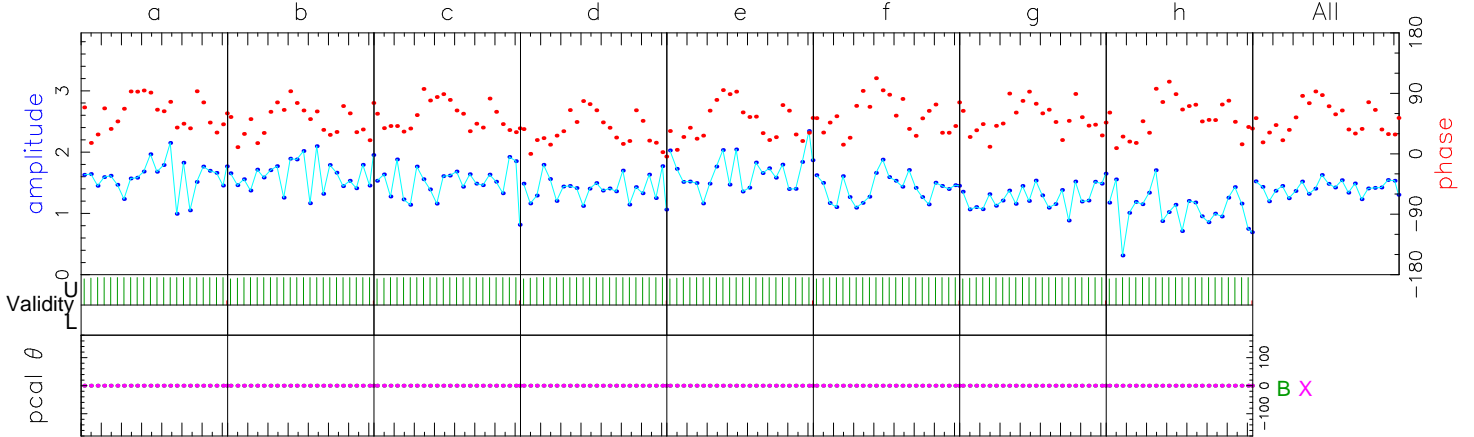
Fringe quality 8

SNR 73.6
Int time 418.306
Amp 1.315
Phase 51.6
PFD 0.0e+00
Delays (us)
SBD -0.014948
MBD 0.000862
Fringe rate (Hz)
0.006722
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165613
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

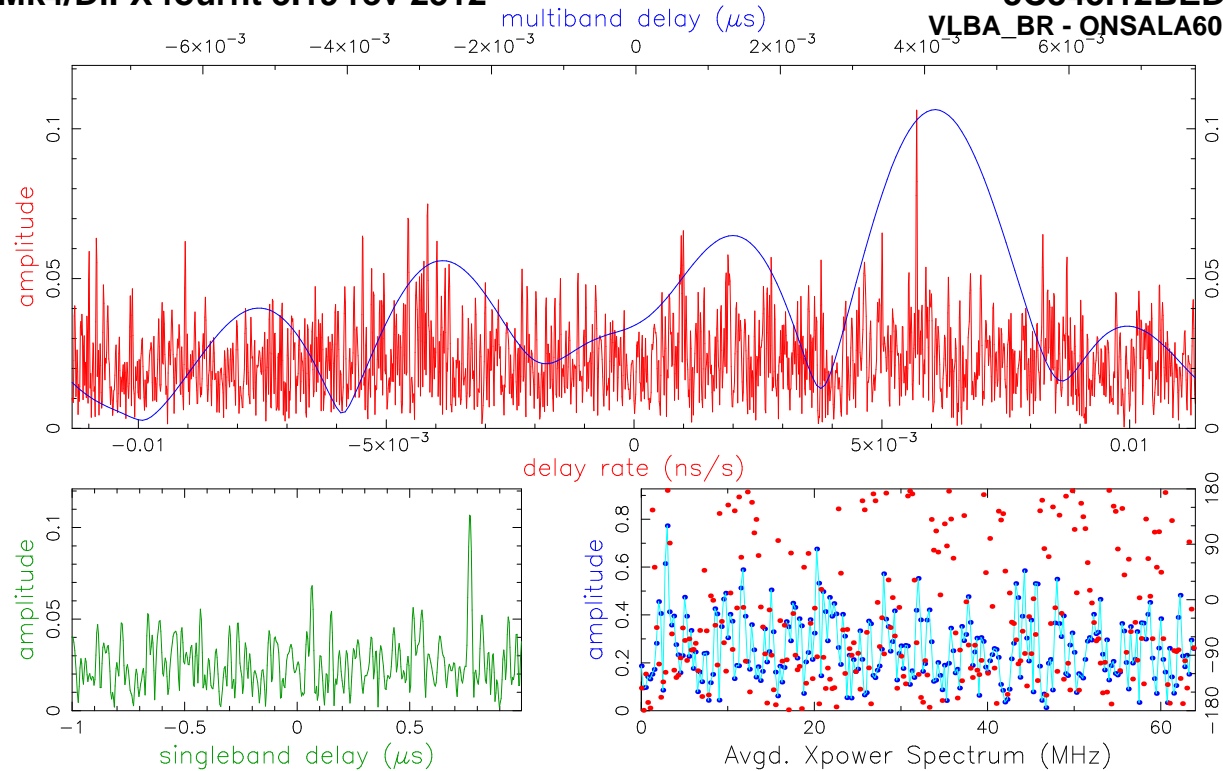


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	61.5	49.4	55.6	34.4	47.4	57.0	53.3	54.9	Phase	51.6
	1.5	1.5	1.4	1.3	1.5	1.3	1.2	1.0	Ampl.	1.3
	253.2	252.9	253.1	253.0	253.5	253.2	253.4	252.8	Sbd box	253.2
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs 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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 7.02669984023E+02 Apriori delay (usec) 7.02684747362E+02 Resid mbdelay (usec) 8.61661E-04 +/- 1.5E-05
 Sband delay (usec) 7.02669799862E+02 Apriori clock (usec) -1.5486191E+01 Resid sbdelay (usec) -1.49475E-02 +/- 1.2E-04
 Phase delay (usec) 7.02684749027E+02 Apriori clockrate (us/s) -7.2800002E-07 Resid phdelay (usec) 1.66528E-06 +/- 5.0E-08
 Delay rate (us/s) -4.67303080783E-02 Apriori rate (us/s) -4.67303861104E-02 Resid rate (us/s) 7.80320E-08 +/- 2.1E-10
 Total phase (deg) 101.2 Apriori accel (us/s/s) -8.91911020584E-06 Resid phase (deg) 51.6 +/- 1.6

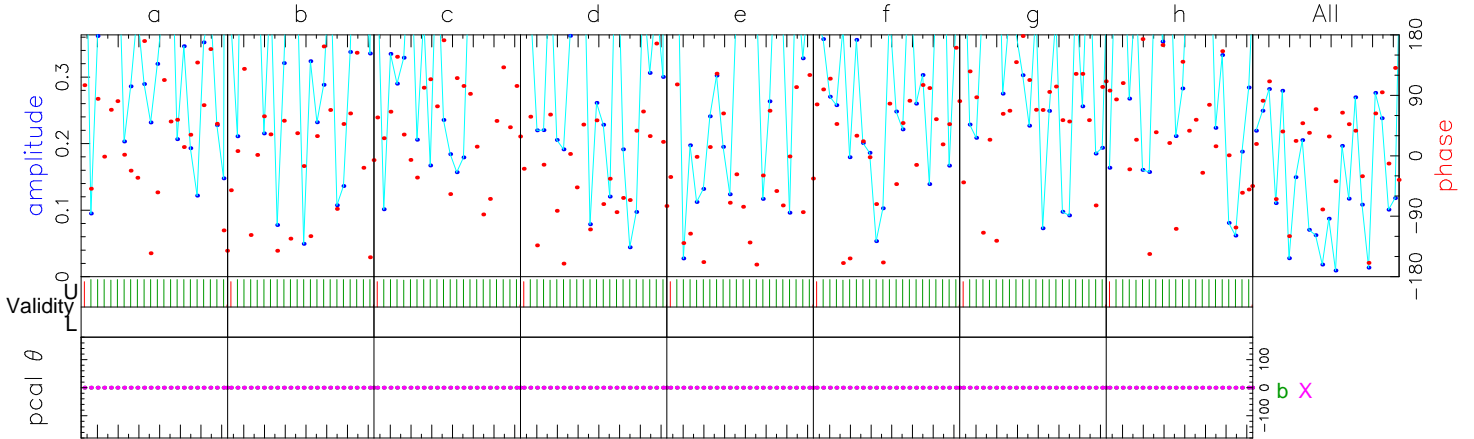
RMS Theor. Amplitude 1.315 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 22.5 3.7 Search (2048X32) 1.297 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 11.5 6.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 8.9 2.2 Inc. seg. avg. 1.418 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 13.5 3.8 Inc. frq. avg. 1.323 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BX.W.122.12BED8



Fringe quality 0
SNR 6.0
Int time 405.038
Amp 0.121
Phase 52.0
PFD 4.1e-01
Delays (us)
SBD 0.767483
MBD 0.004085
Fringe rate (Hz)
0.491852
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165549
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

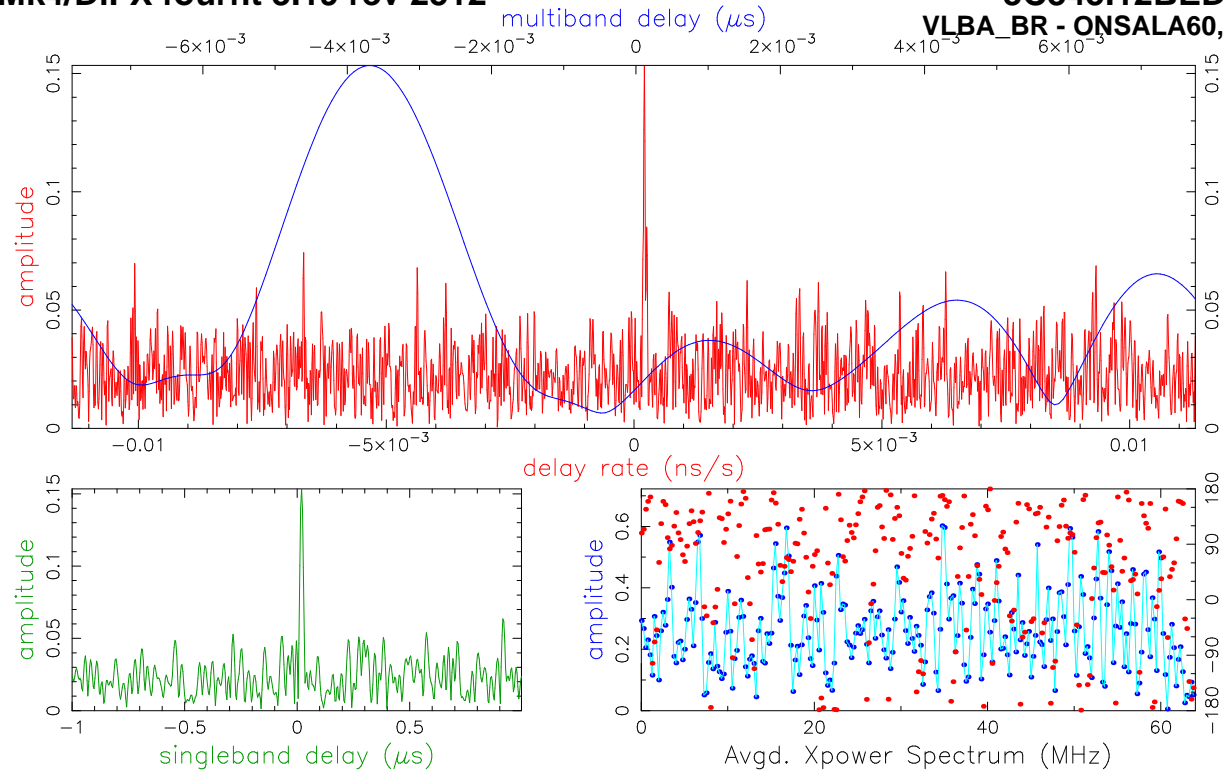


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.96074528388E+03	Apriori delay (usec)	-4.96151499341E+03	Resid mbdelay (usec)	4.08453E-03	+/-	1.8E-04
Sband delay (usec)	-4.96074751091E+03	Apriori clock (usec)	-3.2937950E+01	Resid sbdelay (usec)	7.67483E-01	+/-	1.4E-03
Phase delay (usec)	-4.96151499174E+03	Apriori clockrate (us/s)	-7.7039509E-07	Resid phdelay (usec)	1.67532E-06	+/-	6.2E-07
Delay rate (us/s)	1.28971035549E+00	Apriori rate (us/s)	1.28970464558E+00	Resid rate (us/s)	5.70991E-06	+/-	2.6E-09
Total phase (deg)	-139.7	Apriori accel (us/s/s)	1.91370941852E-05	Resid phase (deg)	52.0	+/-	19.1

ph/seg (deg)	73.3	Theor.	45.8	Amplitude	0.121 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	92.4		80.0	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	50.1		27.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	44.5		47.2	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bX.W.21.12BED8

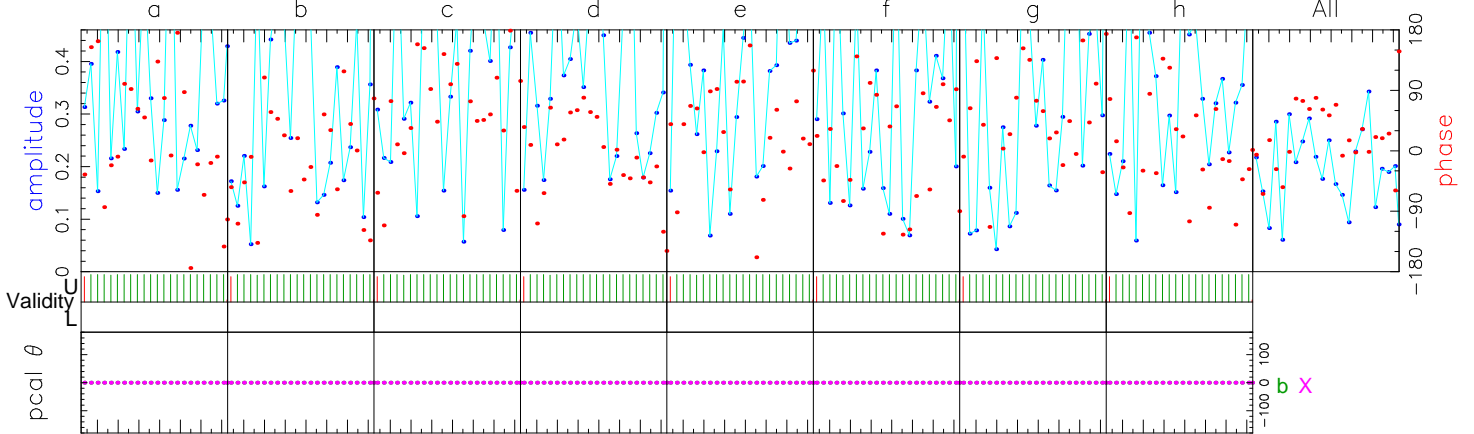


Fringe quality 9

SNR 8.4
Int time 405.038
Amp 0.153
Phase 21.8
PFD 1.1e-08
Delays (us)
SBD 0.019329
MBD -0.003697
Fringe rate (Hz) 0.018138
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

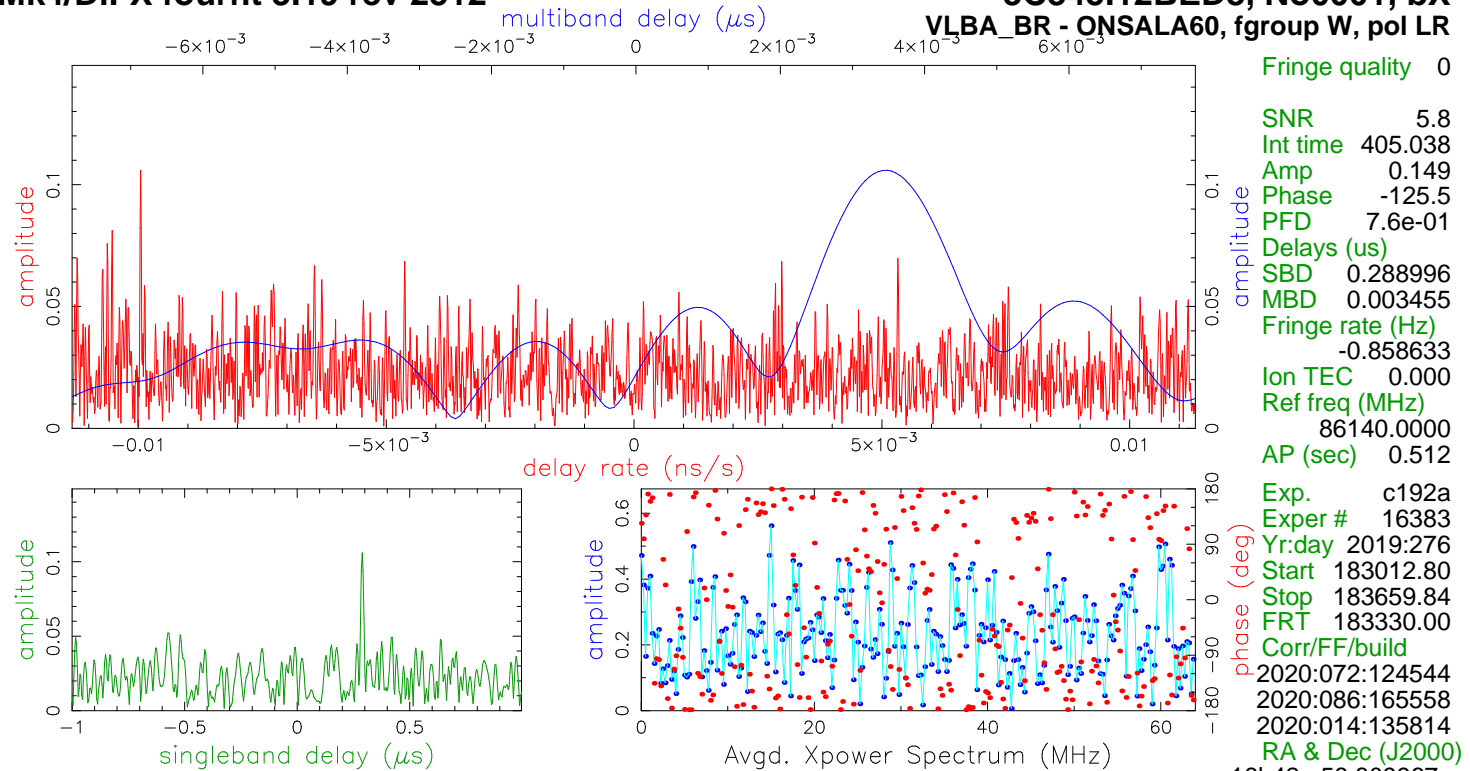
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183012.80
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165553
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

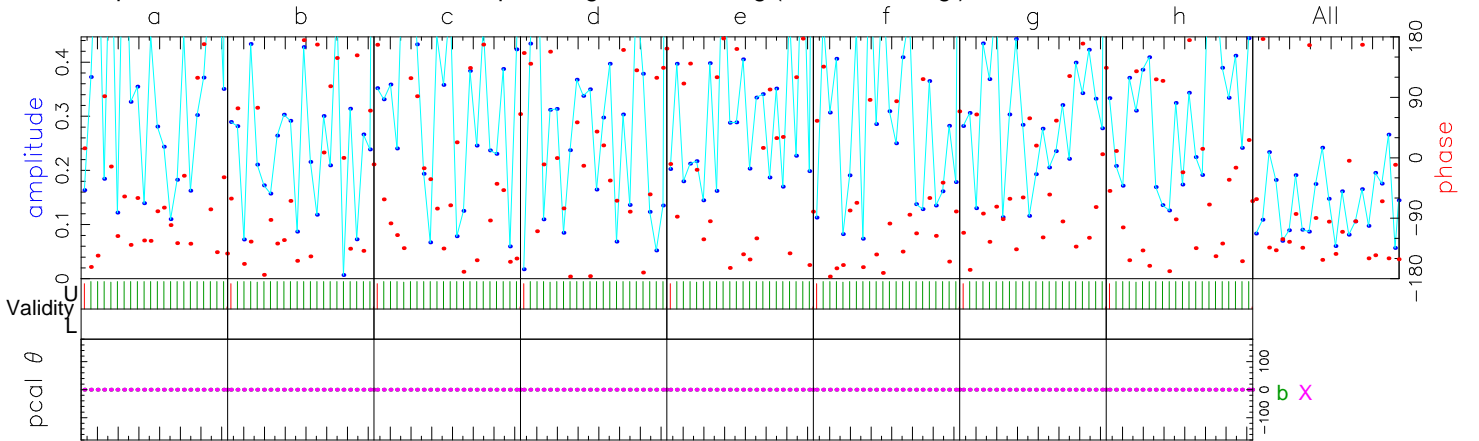


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	3.8	-7.4	69.5	5.9	32.1	37.4	45.5	-15.3		Phase 21.8
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2		Ampl. 0.2
	211.3	263.4	260.6	261.5	262.1	183.2	261.2	259.4		Sbd box 261.9
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		APs 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	-4.96150306542E+03		Apriori delay (usec)		-4.96151499341E+03		Resid mbdelay (usec)		-3.69701E-03	+/- 1.3E-04
Sband delay (usec)	-4.96149566391E+03		Apriori clock (usec)		-3.2937950E+01		Resid sbdelay (usec)		1.93295E-02	+/- 1.0E-03
Phase delay (usec)	-4.96151499271E+03		Apriori clockrate (us/s)		-7.7039509E-07		Resid phdelay (usec)		7.02511E-07	+/- 4.4E-07
Delay rate (us/s)	1.28970485615E+00		Apriori rate (us/s)		1.28970464558E+00		Resid rate (us/s)		2.10570E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		1.91370941852E-05		Resid phase (deg)		21.8	+/- 13.6

ph/seg (deg) 43.7 32.5 Search (2048X32) 0.150 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.8 56.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.6 19.2 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.7 33.5 Inc. frq. avg. 0.163 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bX.W.42.12BED8



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



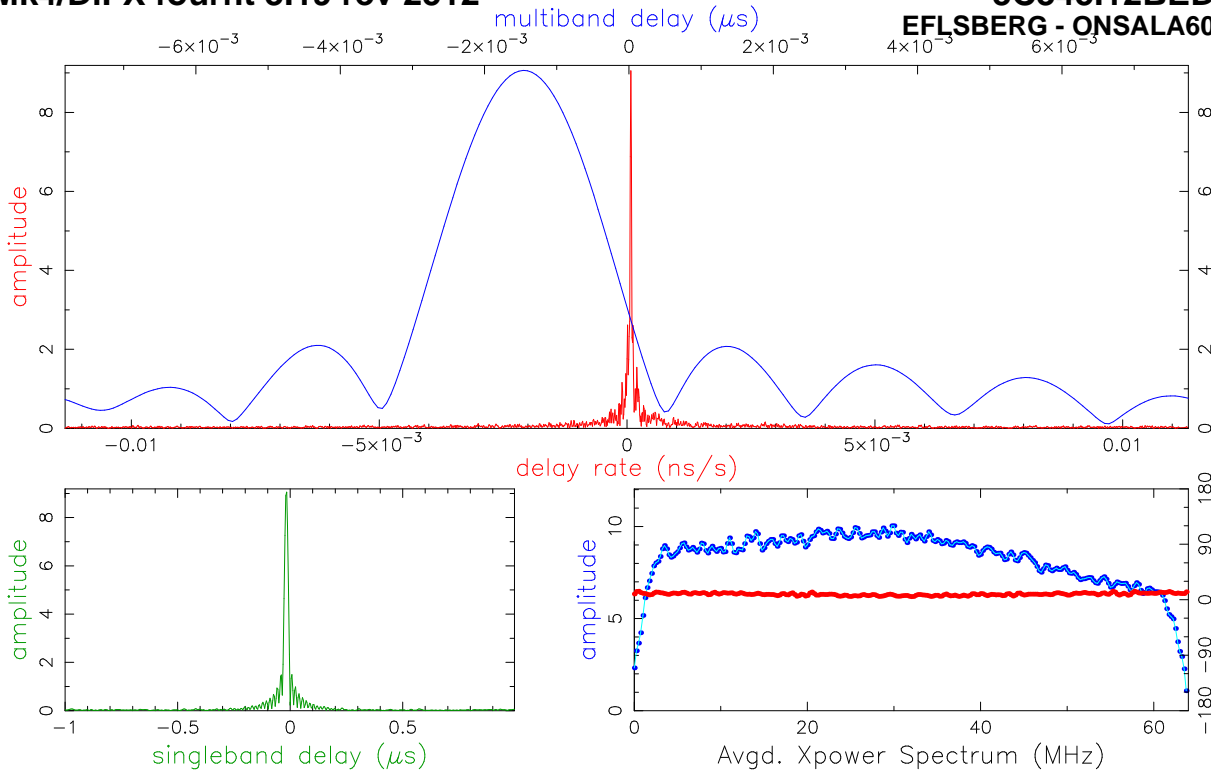
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.0	-155.1	-130.8	171.7	-161.2	-141.2	-101.0	-109.4	Phase	-125.5
	0.3	0.1	0.2	0.1	0.2	0.2	0.2	0.2	Ampl.	0.1
	330.6	45.2	239.8	124.3	398.8	300.1	96.6	436.2	Sbd box	331.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.96123028809E+03	Apriori delay (usec)	-4.96151499341E+03	Resid mbdelay (usec)	3.45532E-03	+/-	1.9E-04
Sband delay (usec)	-4.96122599716E+03	Apriori clock (usec)	-3.2937950E+01	Resid sbdelay (usec)	2.88996E-01	+/-	1.5E-03
Phase delay (usec)	-4.96151499746E+03	Apriori clockrate (us/s)	-7.7039509E-07	Resid phdelay (usec)	-4.04591E-06	+/-	6.3E-07
Delay rate (us/s)	1.28969467771E+00	Apriori rate (us/s)	1.28970464558E+00	Resid rate (us/s)	-9.96787E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	1.91370941852E-05	Resid phase (deg)	-125.5	+/-	19.7

ph/seg (deg)	50.3	Theor.	47.1	Amplitude	0.149 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.1		82.2	Search (2048X32)	0.102	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.6		27.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	42.3		48.5	Inc. seg. avg.	0.147	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.149	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

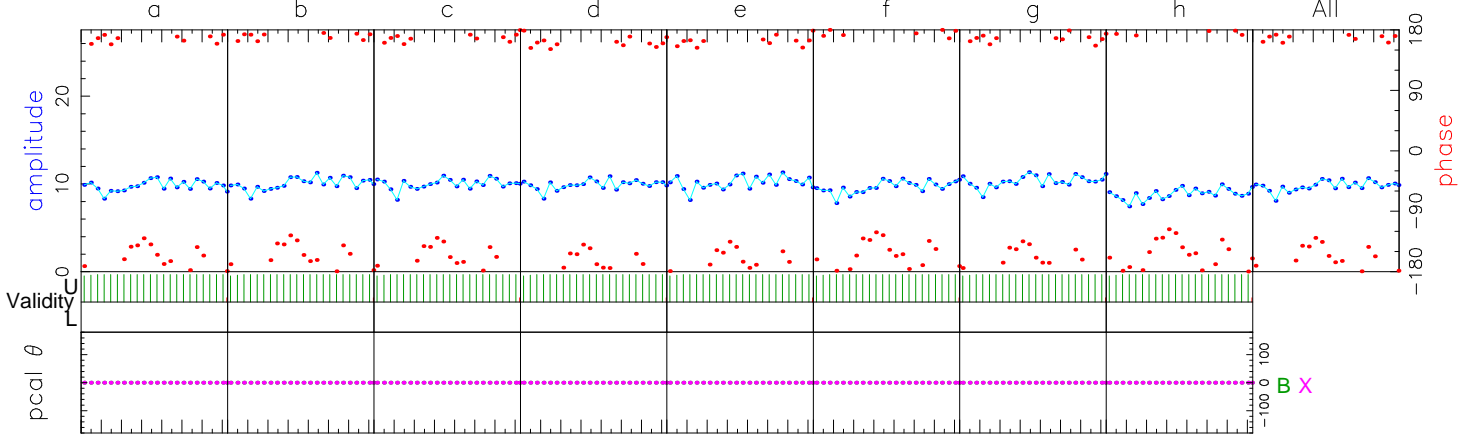
b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bX.W.59.12BED8



Fringe quality 8
 SNR 514.0
 Int time 418.306
 Amp 9.190
 Phase -171.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.017213
 MBD -0.001501
 Fringe rate (Hz) 0.006713
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165559
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



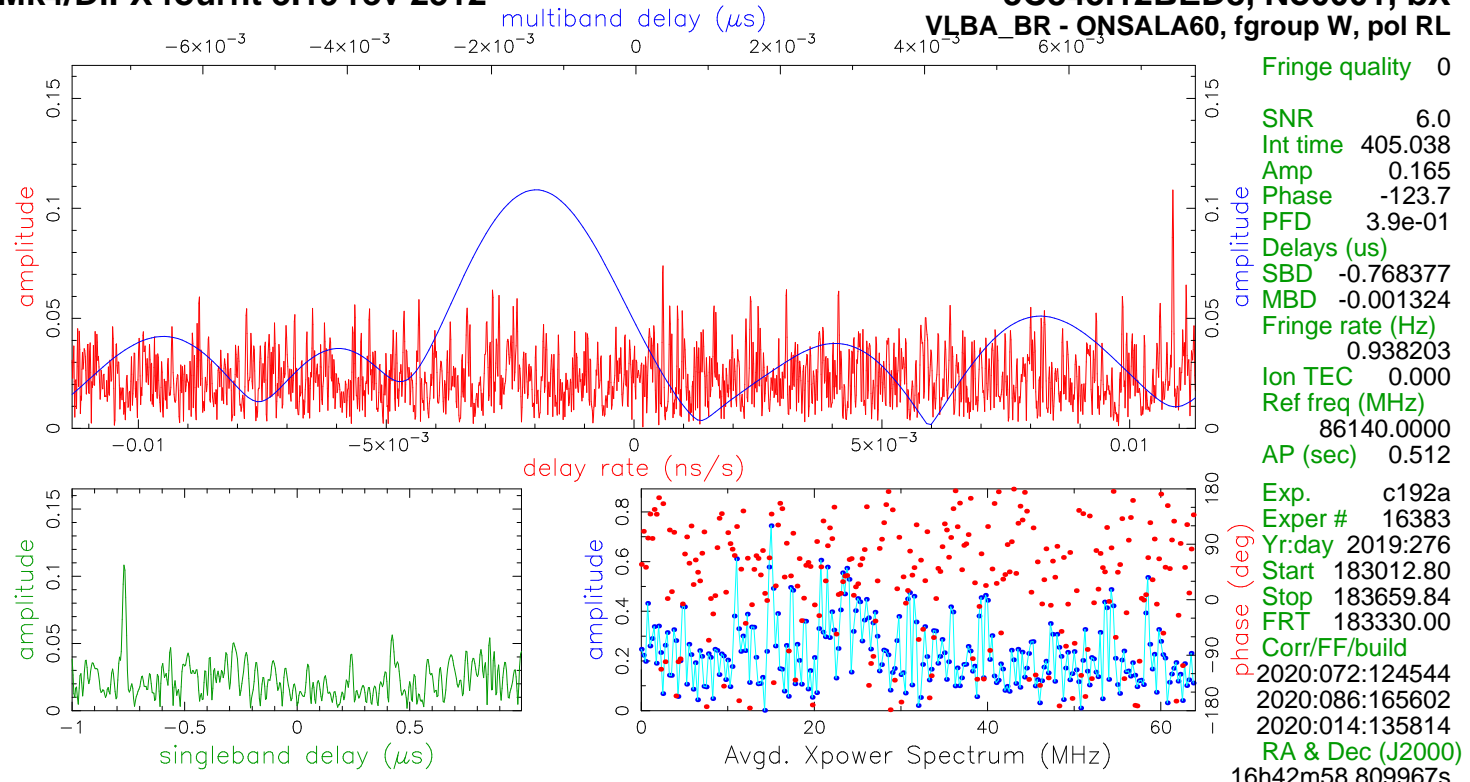
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-171.8	-168.9	-171.8	178.6	-178.6	-161.8	-173.8	-159.6	Phase	-171.2
	9.1	9.3	9.3	9.2	9.4	8.9	9.6	8.2	Ampl.	9.1
	252.7	252.3	252.7	252.5	252.8	252.6	252.8	252.0	Sbd box	252.6
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	PC amp	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.02667620898E+02		Apriori delay (usec)		7.02684747362E+02		Resid mbdelay (usec)		-1.50146E-03	+/- 2.1E-06
Sband delay (usec)	7.02667534112E+02		Apriori clock (usec)		-1.5486191E+01		Resid sbdelay (usec)		-1.72132E-02	+/- 1.7E-05
Phase delay (usec)	7.02684741840E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-5.52106E-06	+/- 7.2E-09
Delay rate (us/s)	-4.67303081747E-02		Apriori rate (us/s)		-4.67303861104E-02		Resid rate (us/s)		7.79357E-08	+/- 3.0E-11
Total phase (deg)			Apriori accel (us/s/s)		-8.91911020584E-06		Resid phase (deg)		-171.2	+/- 0.2

ph/seg (deg) 22.1 0.5 Search (2048X32) 9.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 8.9 0.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.1 0.3 Inc. seg. avg. 9.776 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 4.5 0.6 Inc. frq. avg. 9.121 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BX.W.65.12BED8

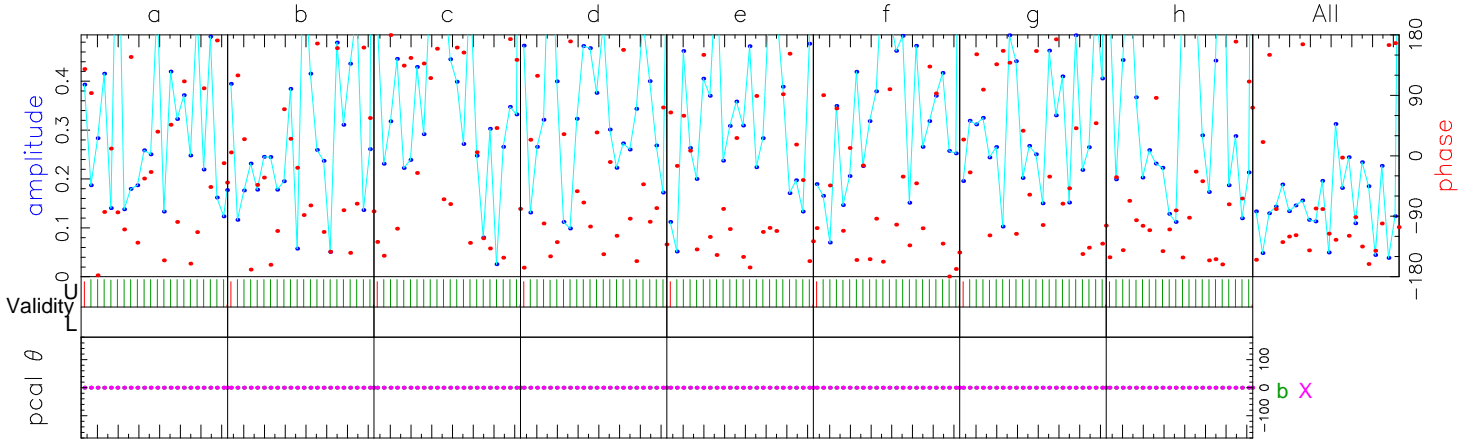
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bX

VLBA_BR - ONSALA60, fgroup W, pol RL



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

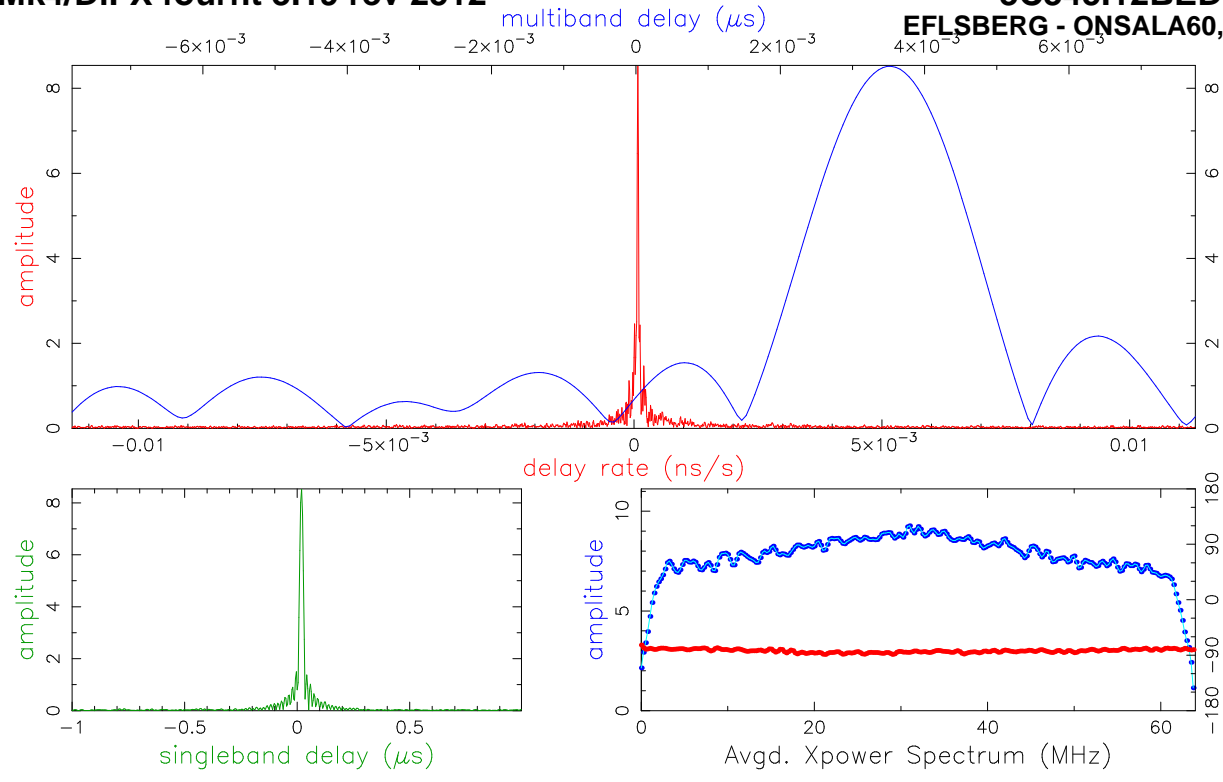


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.0	-91.5	-159.3	-110.7	-140.0	-135.1	-128.3	-117.3	Phase	-123.7
	0.1	0.1	0.2	0.3	0.2	0.1	0.0	0.3	Ampl.	0.2
	300.9	201.2	319.7	69.5	201.2	480.2	406.9	60.3	Sbd box	60.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-4.96228194255E+03		Apriori delay (usec)	-4.96151499341E+03	Resid mbdelay (usec)	-1.32413E-03	+/-	1.8E-04		
Sband delay (usec)	-4.96228336991E+03		Apriori clock (usec)	-3.2937950E+01	Resid sbdelay (usec)	-7.68377E-01	+/-	1.4E-03		
Phase delay (usec)	-4.96151499740E+03		Apriori clockrate (us/s)	-7.7039509E-07	Resid phdelay (usec)	-3.99027E-06	+/-	6.2E-07		
Delay rate (us/s)	1.28971553719E+00		Apriori rate (us/s)	1.28970464558E+00	Resid rate (us/s)	1.08916E-05	+/-	2.6E-09		
Total phase (deg)		-315.4	Apriori accel (us/s/s)	1.91370941852E-05	Resid phase (deg)	-123.7	+/-	19.1		

	RMS	Theor.	Amplitude	0.165 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	55.8	45.7	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	84.6	79.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	27.4	27.0	Inc. seg. avg.	0.173	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	51.5	47.1	Inc. frq. avg.	0.160	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/bX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/bX.W.78.12BED8

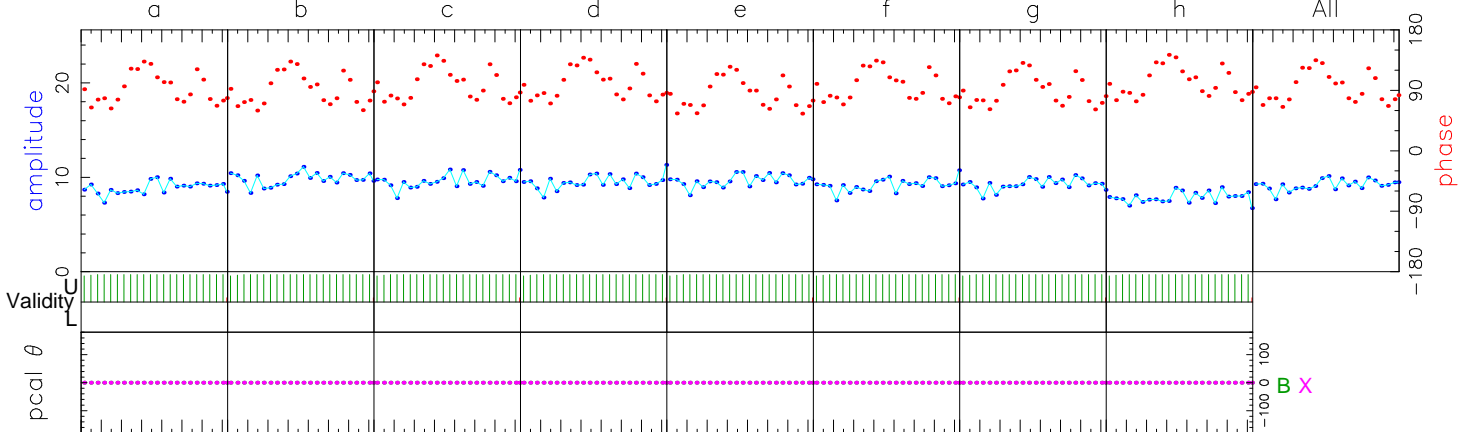


Fringe quality 8

SNR 477.6
Int time 418.306
Amp 8.540
Phase 94.3
PFD 0.0e+00
Delays (us)
SBD 0.018897
MBD 0.003497
Fringe rate (Hz) 0.006714
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Yr:day 16383
2020:072:124544
2020:086:165603
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	92.8	90.9	98.3	100.0	84.4	96.9	90.6	102.4	Phase	94.3
	8.3	9.1	8.8	8.8	8.9	8.5	8.6	7.4	Ampl.	8.6
	261.5	261.8	262.1	261.7	261.8	262.1	262.2	261.3	Sbd box	261.8
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.02703869523E+02		Apriori delay (usec)		7.02684747362E+02		Resid mbdelay (usec)		3.49716E-03	+/- 2.3E-06
Sband delay (usec)	7.02703644862E+02		Apriori clock (usec)		-1.5486191E+01		Resid sbdelay (usec)		1.88975E-02	+/- 1.8E-05
Phase delay (usec)	7.02684750404E+02		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		3.04243E-06	+/- 7.7E-09
Delay rate (us/s)	-4.67303081648E-02		Apriori rate (us/s)		-4.67303861104E-02		Resid rate (us/s)		7.79456E-08	+/- 3.2E-11
Total phase (deg)	143.9		Apriori accel (us/s/s)		-8.91911020584E-06		Resid phase (deg)		94.3	+/- 0.2

ph/seg (deg) 21.9 0.6
amp/seg (%) 9.9 1.0
ph/frq (deg) 6.4 0.3
amp/frq (%) 6.0 0.6

RMS Theor. Amplitude 8.540 +/- 0.018
Search (2048X32) 8.469
Interp. 0.000
Inc. seg. avg. 9.182
Inc. frq. avg. 8.559

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 128
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

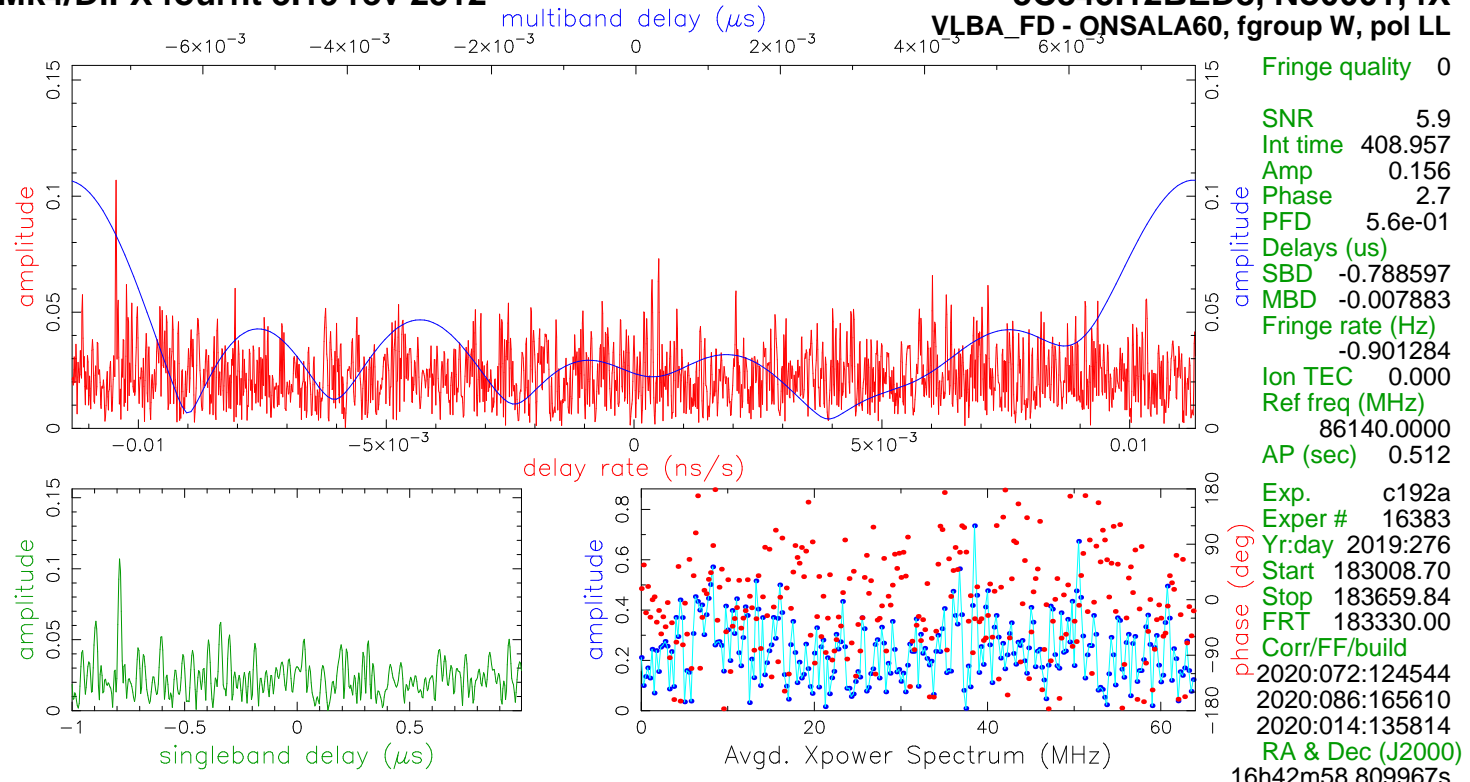
sb window (us) -1.000 1.000
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 331.785 -1068.483 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/BX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/BX.W.84.12BED8

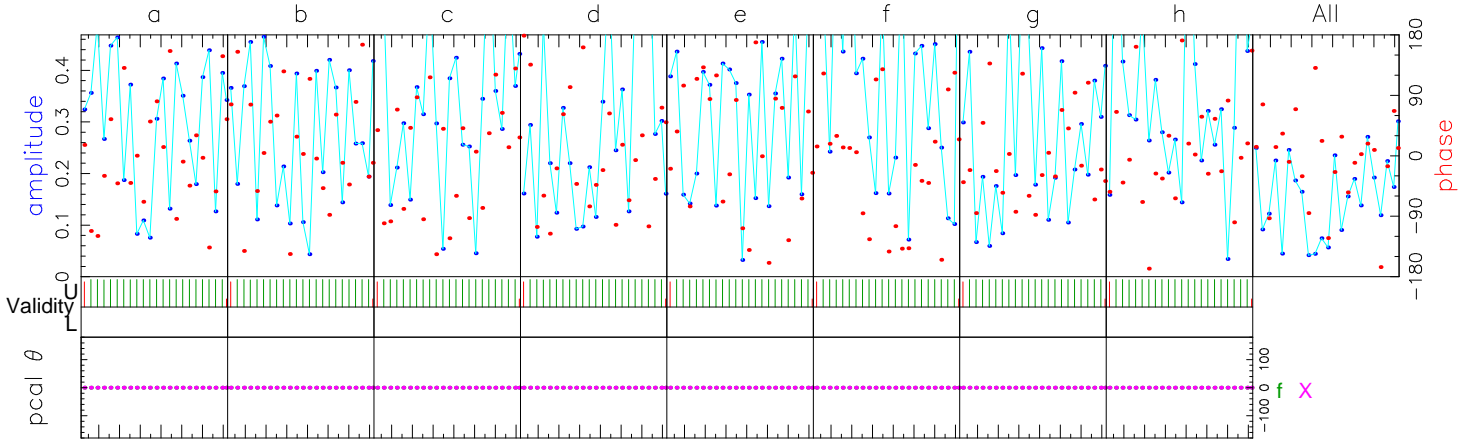
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, fX

VLBA_FD - ONSALA60, fgroup W, pol LL



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.7	25.0	15.5	-13.8	61.8	5.3	-12.2	-3.7		2.7
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.3		0.2
	264.1	97.9	344.9	313.8	248.2	387.6	65.9	55.7		55.1
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		-3.93545683559E+03				-3.93466770219E+03			Resid mbdelay (usec)	-7.88341E-03 +/- 1.8E-04
Sband delay (usec)		-3.93545629894E+03				-3.1870474E+01			Resid sbdelay (usec)	-7.88597E-01 +/- 1.5E-03
Phase delay (usec)		-3.93466770210E+03				-6.1894950E-07			Resid phdelay (usec)	8.77490E-08 +/- 6.2E-07
Delay rate (us/s)		1.42989300554E+00				1.42990346855E+00			Resid rate (us/s)	-1.04630E-05 +/- 2.6E-09
Total phase (deg)			-309.2			-3.28242095453E-06			Resid phase (deg)	2.7 +/- 19.4

ph/seg (deg) 66.9 81.3
 amp/seg (%) 81.3 81.0
 ph/frq (deg) 31.1 27.4
 amp/frq (%) 38.5 47.8

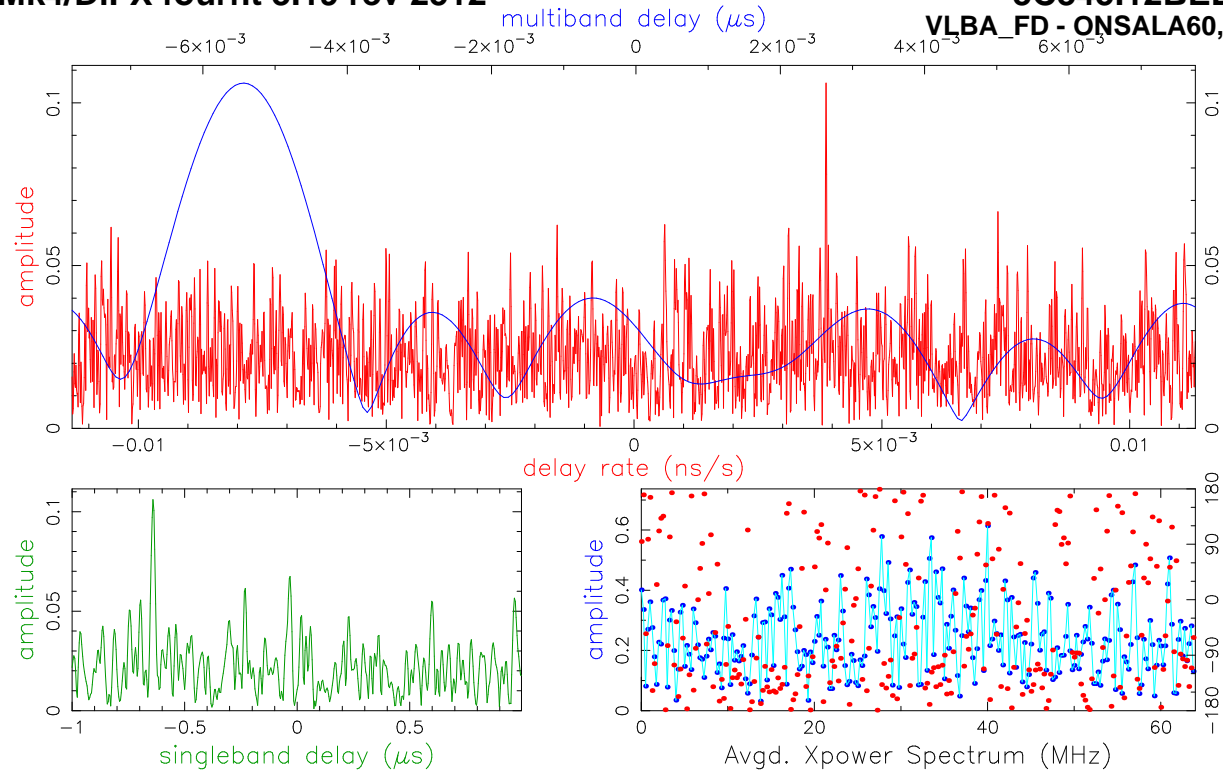
RMS Theor. Amplitude 0.156 +/- 0.026
 66.9 46.4 Search (2048X32) 0.106
 81.3 81.0 Interp. 0.000
 31.1 27.4 Inc. seg. avg. 0.169
 38.5 47.8 Inc. frq. avg. 0.154

f: az 61.0 el 37.1 pa -78.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fX.W.108.12BED8

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

simultaneous interpolator

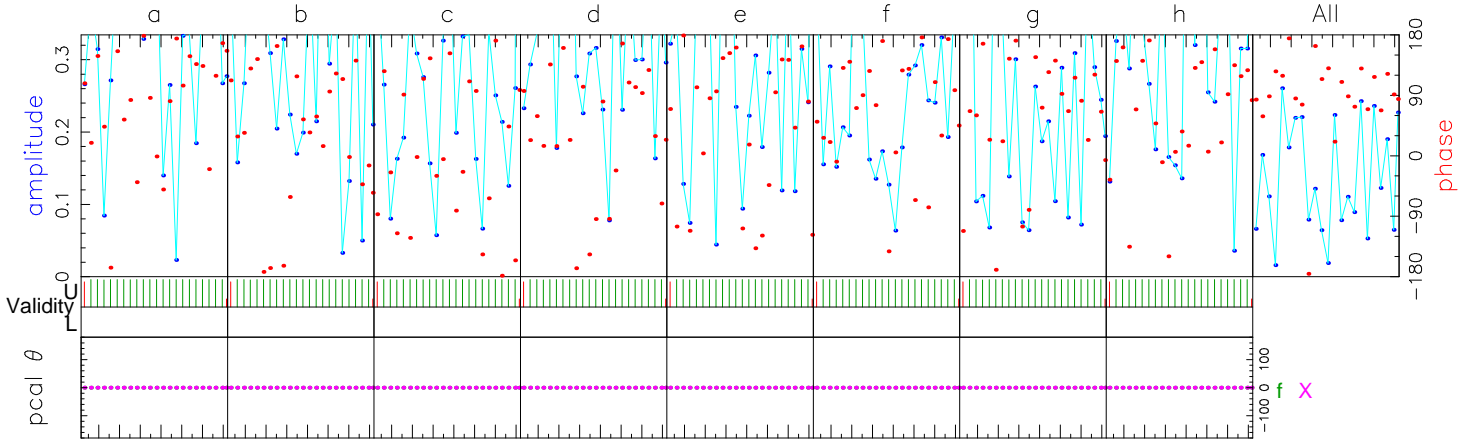


Fringe quality 0

SNR 5.9
 Int time 408.957
 Amp 0.111
 Phase 101.3
 PFD 6.7e-01
 Delays (us)
 SBD -0.640110
 MBD -0.005424
 Fringe rate (Hz)
 0.334604
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165615
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.93531375098E+03	Apriori delay (usec)	-3.93466770219E+03	Resid mbdelay (usec)	-5.42379E-03	+/-	1.8E-04
Sband delay (usec)	-3.93530781244E+03	Apriori clock (usec)	-3.1870474E+01	Resid sbdelay (usec)	-6.40110E-01	+/-	1.5E-03
Phase delay (usec)	-3.93466769892E+03	Apriori clockrate (us/s)	-6.1894950E-07	Resid phdelay (usec)	3.26606E-06	+/-	6.3E-07
Delay rate (us/s)	1.42990735297E+00	Apriori rate (us/s)	1.42990346855E+00	Resid rate (us/s)	3.88442E-06	+/-	2.7E-09
Total phase (deg)	-210.6	Apriori accel (us/s/s)	-3.28242095453E-06	Resid phase (deg)	101.3	+/-	19.5

ph/seg (deg)	RMS 38.3	Theor. 46.8	Amplitude Search (2048X32)	0.111 +/- 0.019	0.104	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	76.2	81.6	Interp.	0.000	0.104	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	28.7	27.6	Inc. seg. avg.	0.106	0.106	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	31.8	48.2	Inc. frq. avg.	0.105	0.105	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

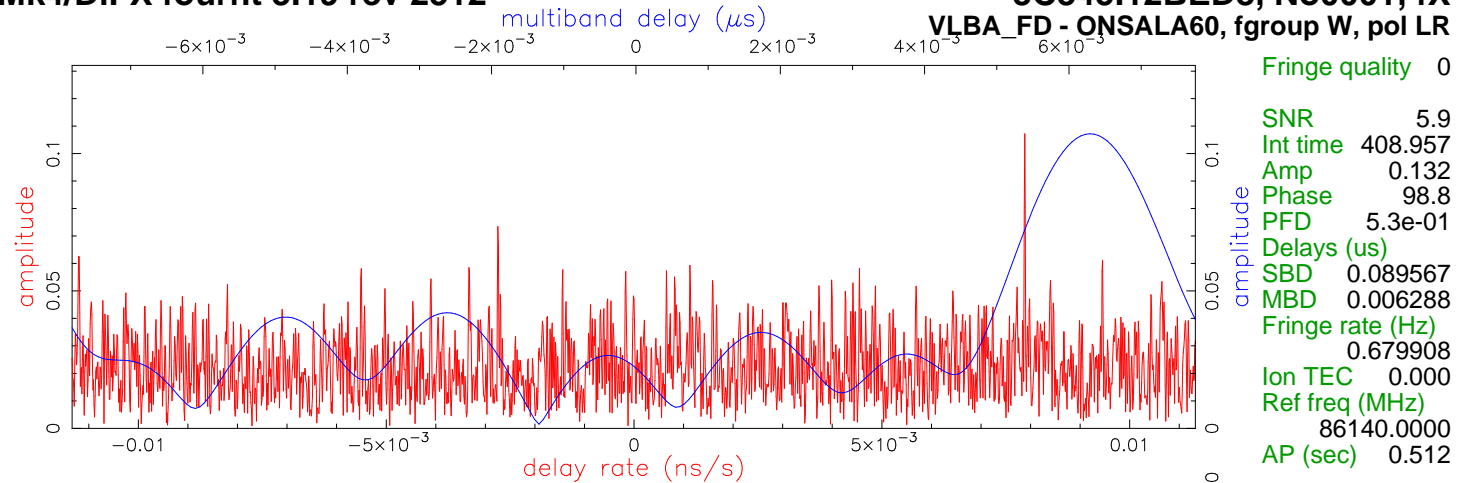
f: az 61.0 el 37.1 pa -78.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fX.W.131.12BED8

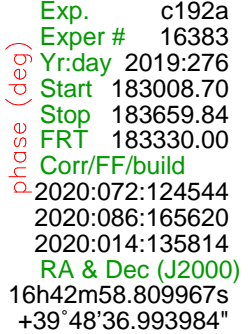
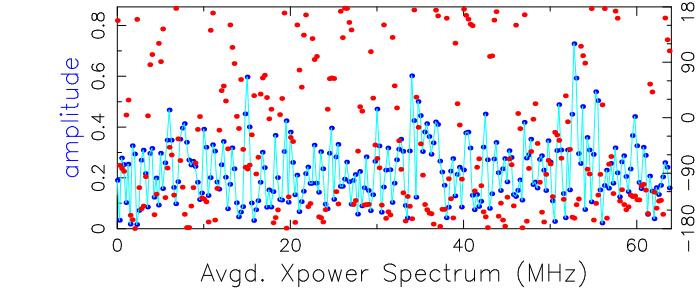
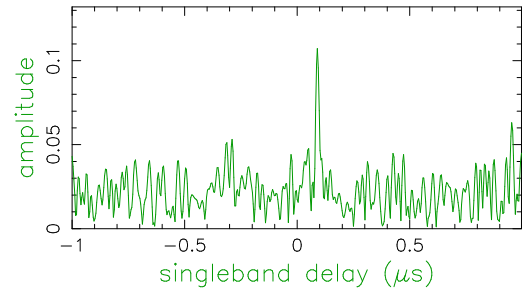
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, fX

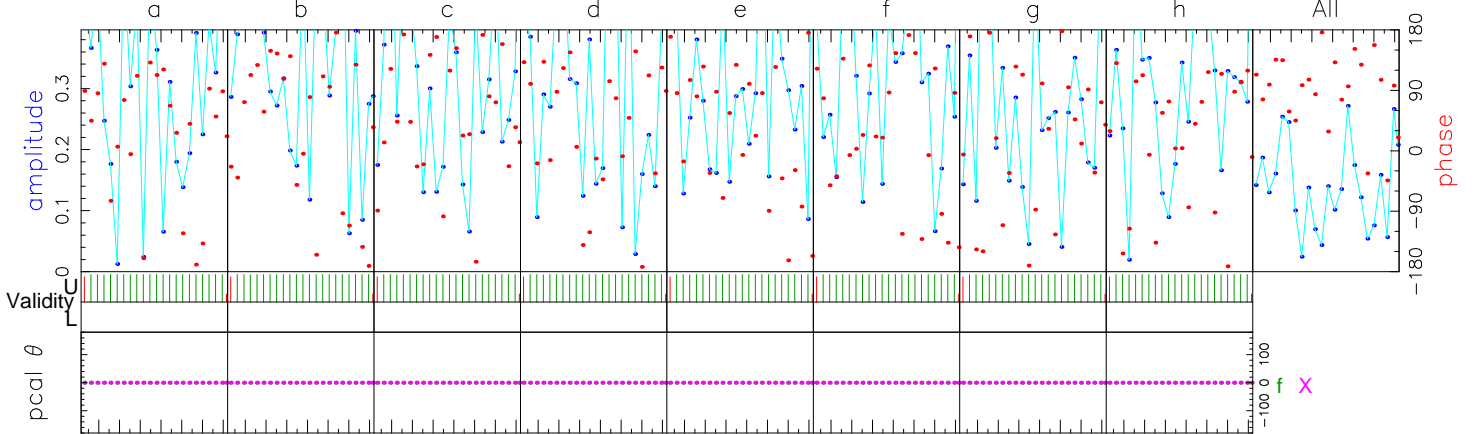
VLBA_FD - ONSALA60, fgroup W, pol LR



Fringe quality 0
 SNR 5.9
 Int time 408.957
 Amp 0.132
 Phase 98.8
 PFD 5.3e-01
 Delays (us)
 SBD 0.089567
 MBD 0.006288
 Fringe rate (Hz) 0.679908
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build 2020:072:124544
 2020:086:165620
 2020:014:135814
 RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"



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



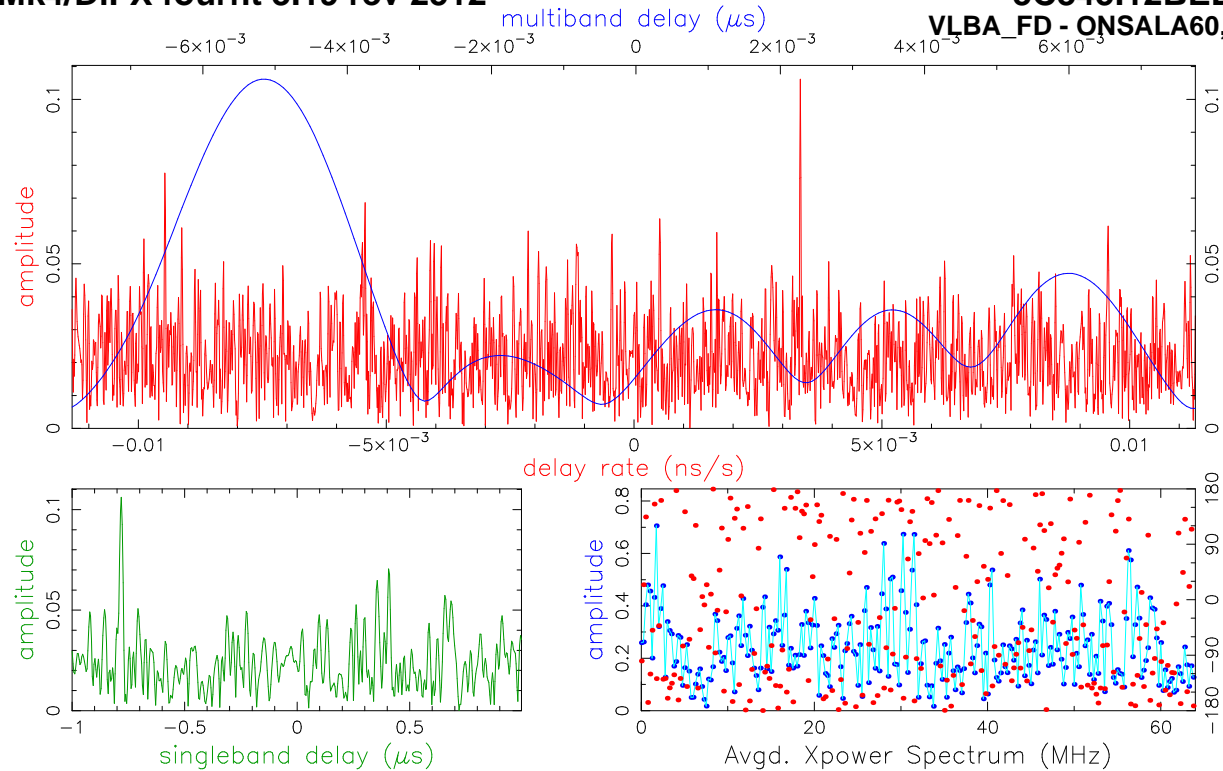
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.93458328882E+03									
Sband delay (usec)	-3.93457813494E+03									
Phase delay (usec)	-3.93466769900E+03									
Delay rate (us/s)	1.42991136161E+00									
Total phase (deg)			-213.1							
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)									98.8	+/- 19.3
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 55.2 46.3 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.8 80.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.9 27.3 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.8 47.7 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 f: az 61.0 el 37.1 pa -78.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fX.W.149.12BED8 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, fX

VLBA_FD - ONSALA60, fgroup W, pol RL

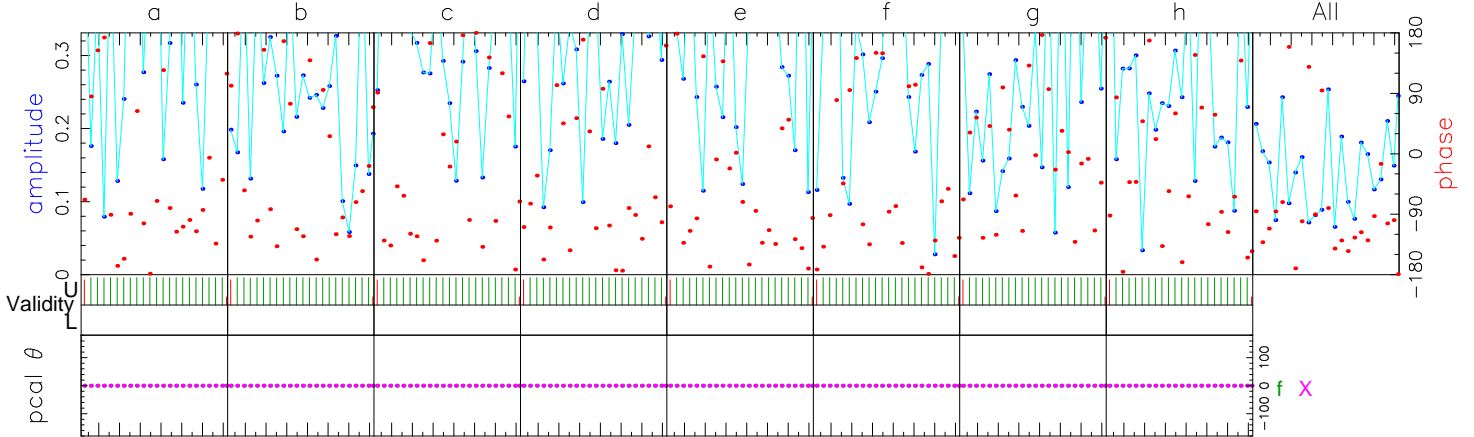


Fringe quality 0

SNR 5.9
 Int time 408.957
 Amp 0.110
 Phase -111.0
 PFD 6.4e-01
 Delays (us)
 SBD -0.781864
 MBD -0.005183
 Fringe rate (Hz)
 0.289053
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

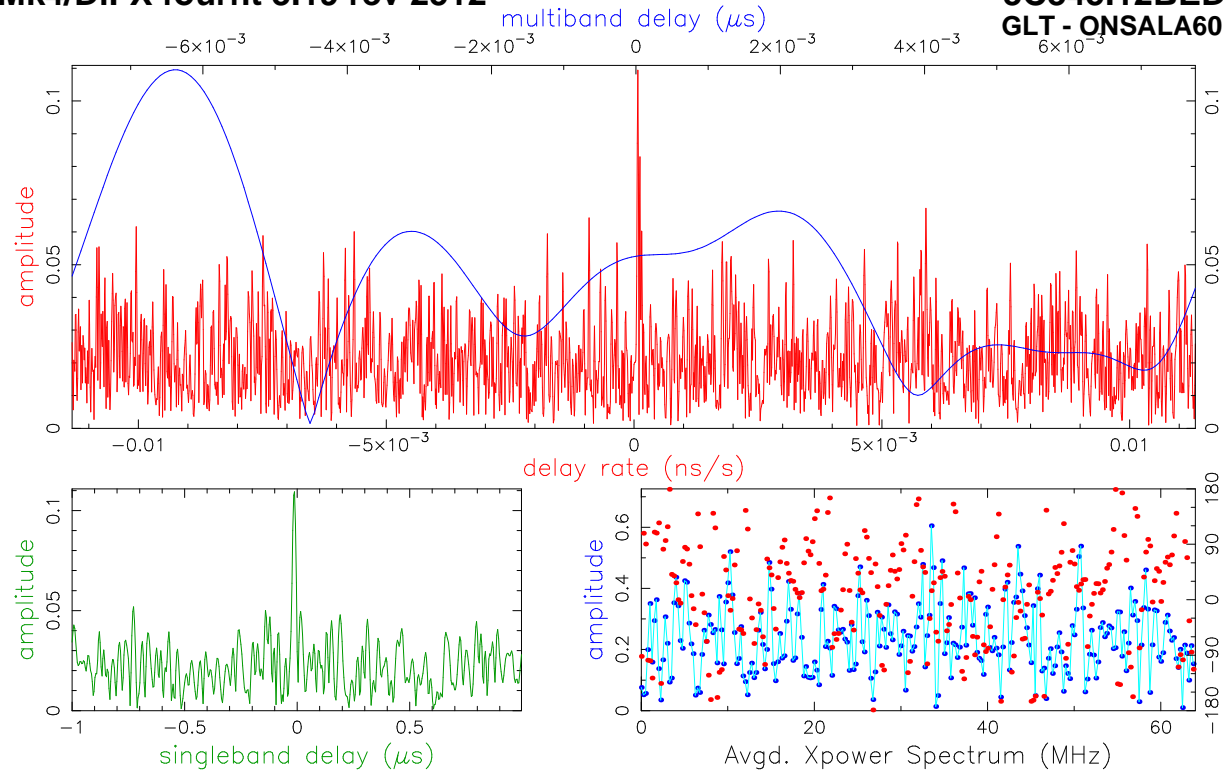
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165624
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



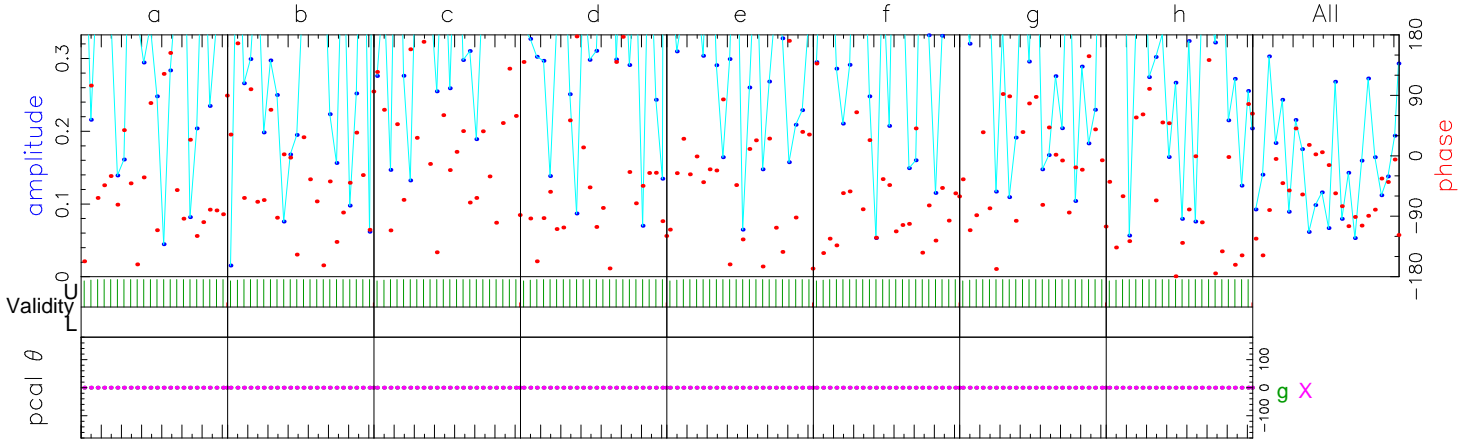
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-101.7	-113.9	-131.7	-96.1	-116.1	-136.5	-23.9	-108.8	Phase	-111.0
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	57.2	167.4	391.4	198.8	244.7	341.7	483.3	271.7	Sbd box	56.8
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.93545413531E+03		Apriori delay (usec)		-3.93466770219E+03		Resid mbdelay (usec)		-5.18313E-03	+/- 1.8E-04
Sband delay (usec)	-3.93544956619E+03		Apriori clock (usec)		-3.1870474E+01		Resid sbdelay (usec)		-7.81864E-01	+/- 1.5E-03
Phase delay (usec)	-3.93466770577E+03		Apriori clockrate (us/s)		-6.1894950E-07		Resid phdelay (usec)		-3.58068E-06	+/- 6.3E-07
Delay rate (us/s)	1.42990682417E+00		Apriori rate (us/s)		1.42990346855E+00		Resid rate (us/s)		3.35562E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.28242095453E-06		Resid phase (deg)		-111.0	+/- 19.5

ph/seg (deg) 55.6 46.7 Search (2048X32) 0.110 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.2 81.4 Interp. 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.8 27.5 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.5 48.1 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 61.0 el 37.1 pa -78.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10665.569 -2352.321 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/fX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/fX.W.166.12BED8



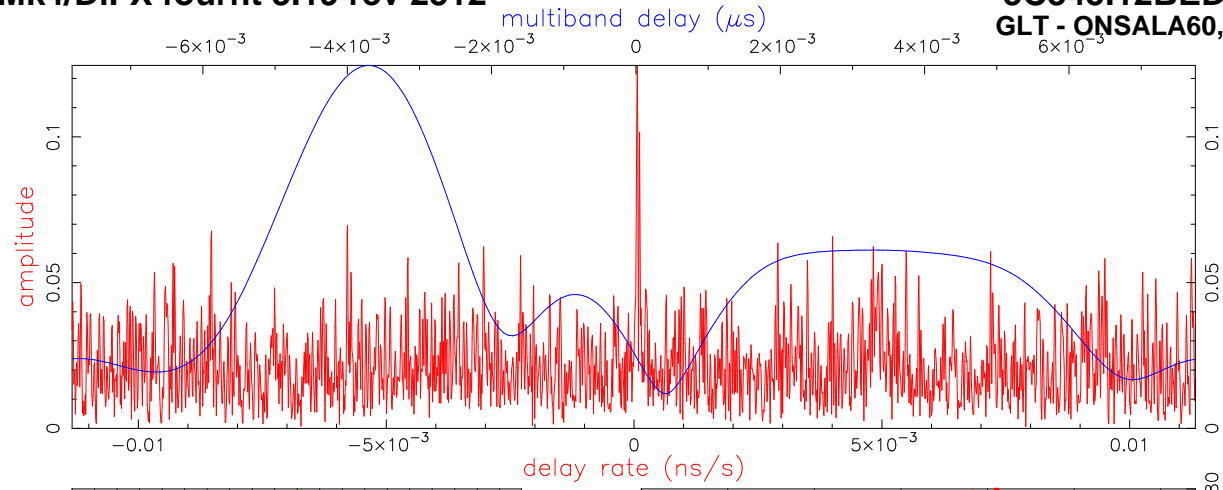
Fringe quality 0
SNR 6.2
Int time 418.177
Amp 0.111
Phase -54.5
PFD 1.4e-01
Delays (us)
SBD -0.013284
MBD -0.006444
Fringe rate (Hz) 0.006533
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165623
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.2	-56.5	22.3	-96.5	-27.4	-89.6	-9.5	-82.6	Phase	-54.5
	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1
	256.2	501.0	252.6	251.9	253.5	253.6	109.2	96.9	Sbd box	253.6
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.07592191035E+02		Apriori delay (usec)		-4.07585747477E+02		Resid mbdelay (usec)		-6.44356E-03	+/- 1.8E-04
Sband delay (usec)	-4.07599031477E+02		Apriori clock (usec)		-3.1029133E+01		Resid sbdelay (usec)		-1.32840E-02	+/- 1.4E-03
Phase delay (usec)	-4.07585749236E+02		Apriori clockrate (us/s)		-4.5300002E-07		Resid phdelay (usec)		-1.75854E-06	+/- 6.0E-07
Delay rate (us/s)	6.39660939740E-01		Apriori rate (us/s)		6.39660863900E-01		Resid rate (us/s)		7.58398E-08	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.14351425282E-05		Resid phase (deg)		-54.5	+/- 18.5

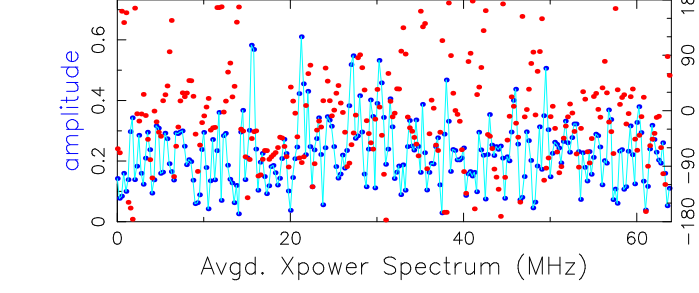
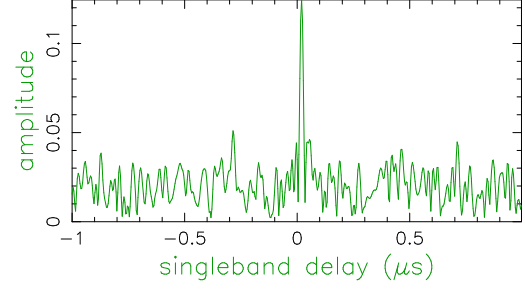
ph/seg (deg) 48.1 44.3 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.6 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.6 26.1 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 49.6 45.6 Inc. frq. avg. 0.129 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gX.W.164.12BED8



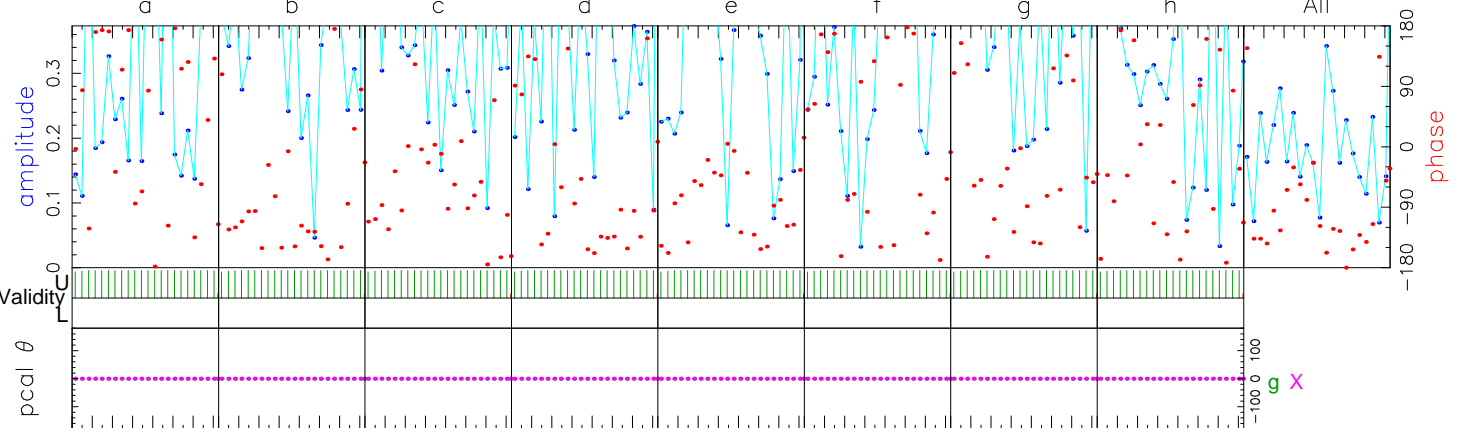
Fringe quality 0

SNR 7.0
Int time 418.221
Amp 0.124
Phase -117.8
PFD 1.0e-03
Delays (us)
SBD 0.019461
MBD -0.003704
Fringe rate (Hz)
0.006183
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165628
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

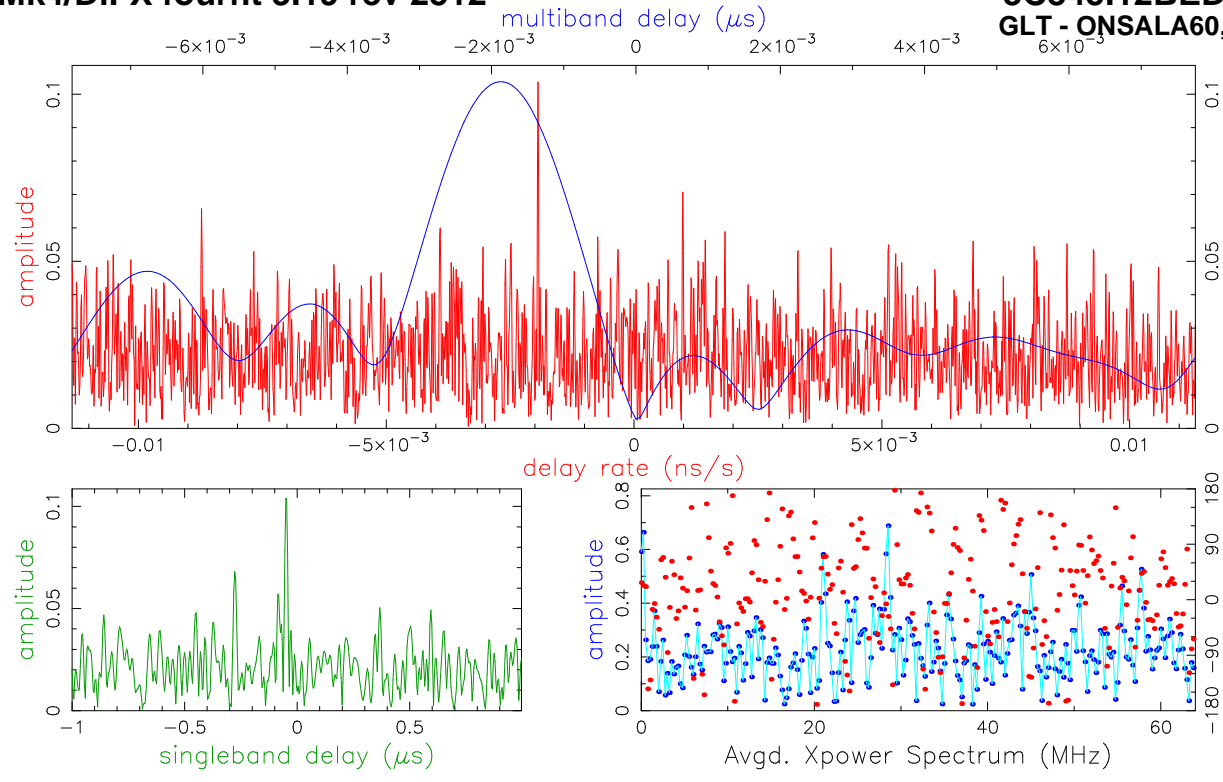


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



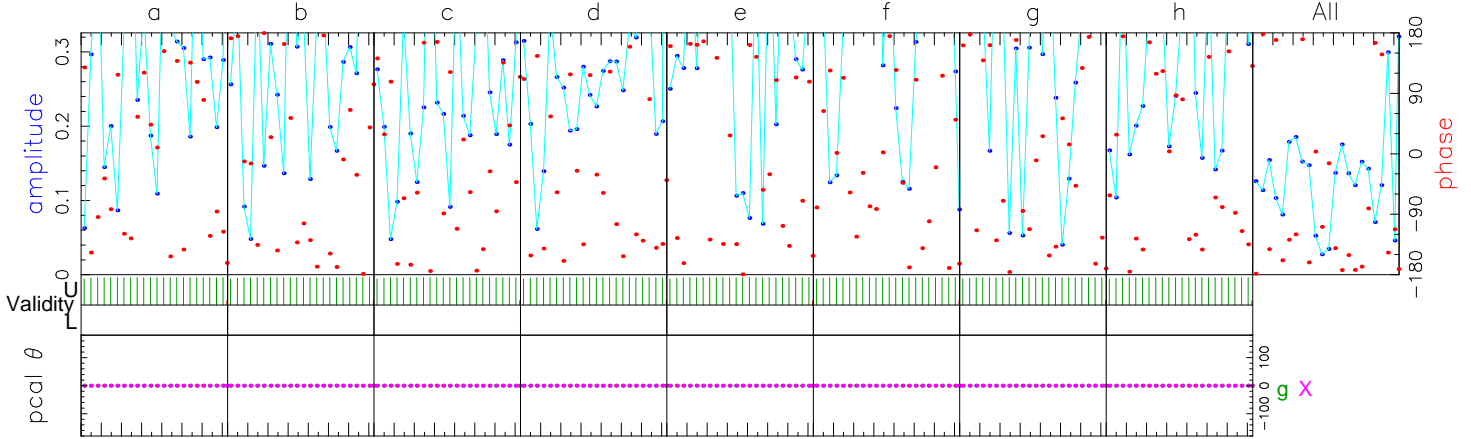
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-165.6	-123.9	-65.2	-135.7	-79.7	-173.9	-103.5	-119.6	Phase	-117.8
	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	113.9	260.9	262.6	478.9	261.0	260.0	168.1	280.5	Sbd box	262.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.07573826107E+02		Apriori delay (usec)		-4.07585747477E+02		Resid mbdelay (usec)		-3.70363E-03	+/- 1.6E-04
Sband delay (usec)	-4.07566285977E+02		Apriori clock (usec)		-3.1029133E+01		Resid sbdelay (usec)		1.94615E-02	+/- 1.2E-03
Phase delay (usec)	-4.07585751276E+02		Apriori clockrate (us/s)		-4.5300002E-07		Resid phdelay (usec)		-3.79803E-06	+/- 5.3E-07
Delay rate (us/s)	6.39660935684E-01		Apriori rate (us/s)		6.39660863900E-01		Resid rate (us/s)		7.17840E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.14351425282E-05		Resid phase (deg)		-117.8	+/- 16.5

ph/seg (deg) 52.2 39.4 Amplitude 0.124 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.1 68.8 Search (2048X32) 0.118 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.3 23.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.4 40.6 Inc. seg. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gX.W.178.12BED8 simultaneous interpolator



Fringe quality 0
SNR 6.0
Int time 418.177
Amp 0.109
Phase -155.4
PFD 4.0e-01
Delays (us)
SBD -0.048873
MBD -0.001924
Fringe rate (Hz)
-0.167009
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165632
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

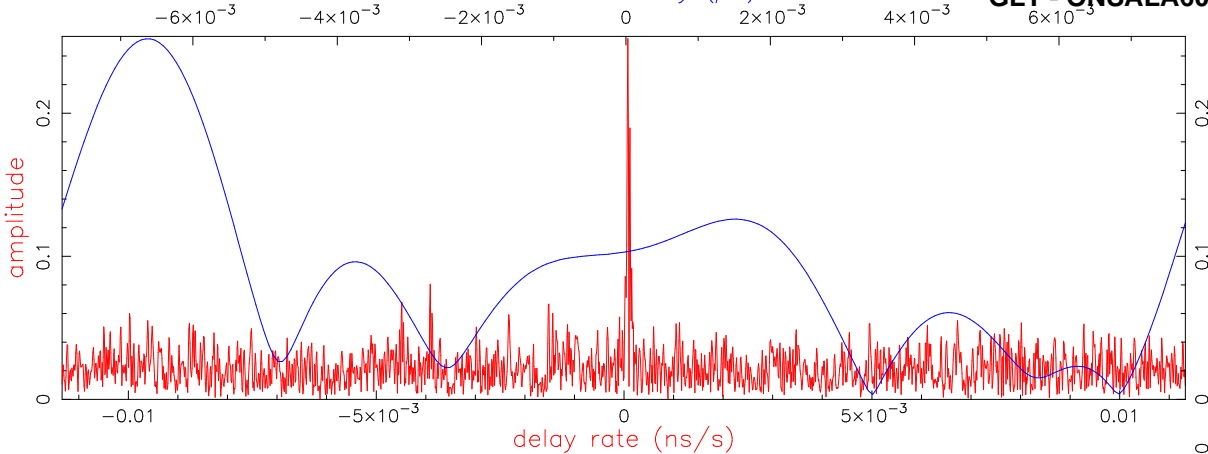
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-165.4	-172.5	-139.9	-152.7	-172.0	-91.6	-151.2	-169.8	Phase	-155.4
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	476.3	290.1	6.9	202.5	388.0	349.1	244.1	244.0	Sbd box	244.5
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.07634546505E+02		Apriori delay (usec)		-4.07585747477E+02		Resid mbdelay (usec)		-1.92403E-03	+/- 1.8E-04
Sband delay (usec)	-4.07634620227E+02		Apriori clock (usec)		-3.1029133E+01		Resid sbdelay (usec)		-4.88728E-02	+/- 1.4E-03
Phase delay (usec)	-4.07585752488E+02		Apriori clockrate (us/s)		-4.5300002E-07		Resid phdelay (usec)		-5.01002E-06	+/- 6.2E-07
Delay rate (us/s)	6.39658925093E-01		Apriori rate (us/s)		6.39660863900E-01		Resid rate (us/s)		-1.93881E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.14351425282E-05		Resid phase (deg)		-155.4	+/- 19.1

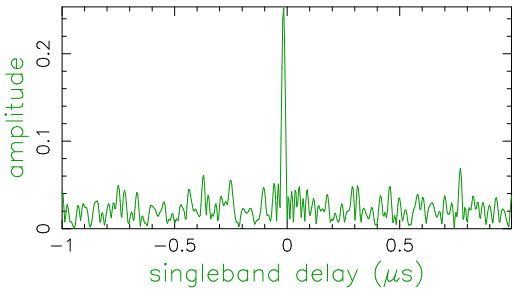
ph/seg (deg) 54.8 45.8 Amplitude 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.1 79.9 Interp. 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 29.5 27.0 Inc. seg. avg. 0.097 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 30.8 47.1 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/gX.W.199.12BED8

multiband delay (μ s)

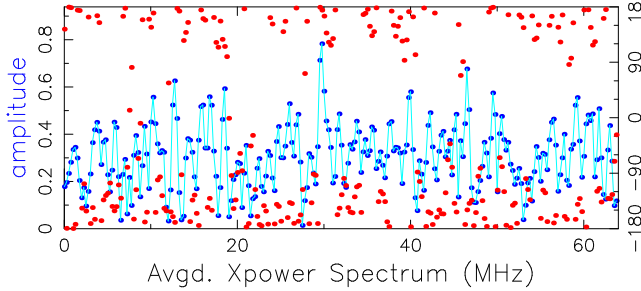


Fringe quality 8

SNR 14.2
Int time 418.221
Amp 0.254
Phase 77.2
PFD 6.9e-37
Delays (us)
SBD -0.016635
MBD -0.006650
Fringe rate (Hz)
0.006685
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

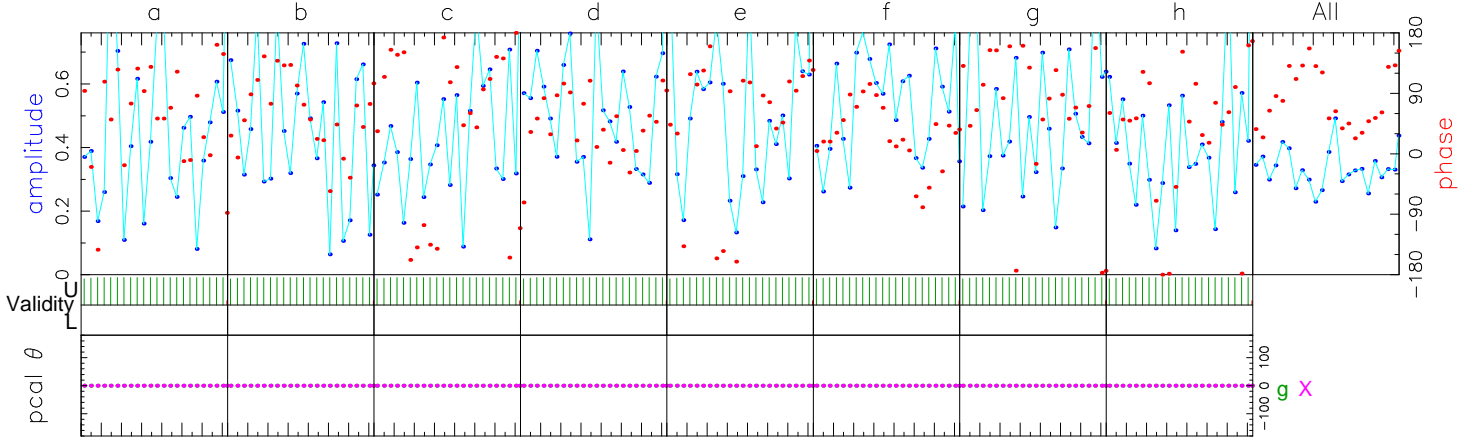


delay rate (ns/s)

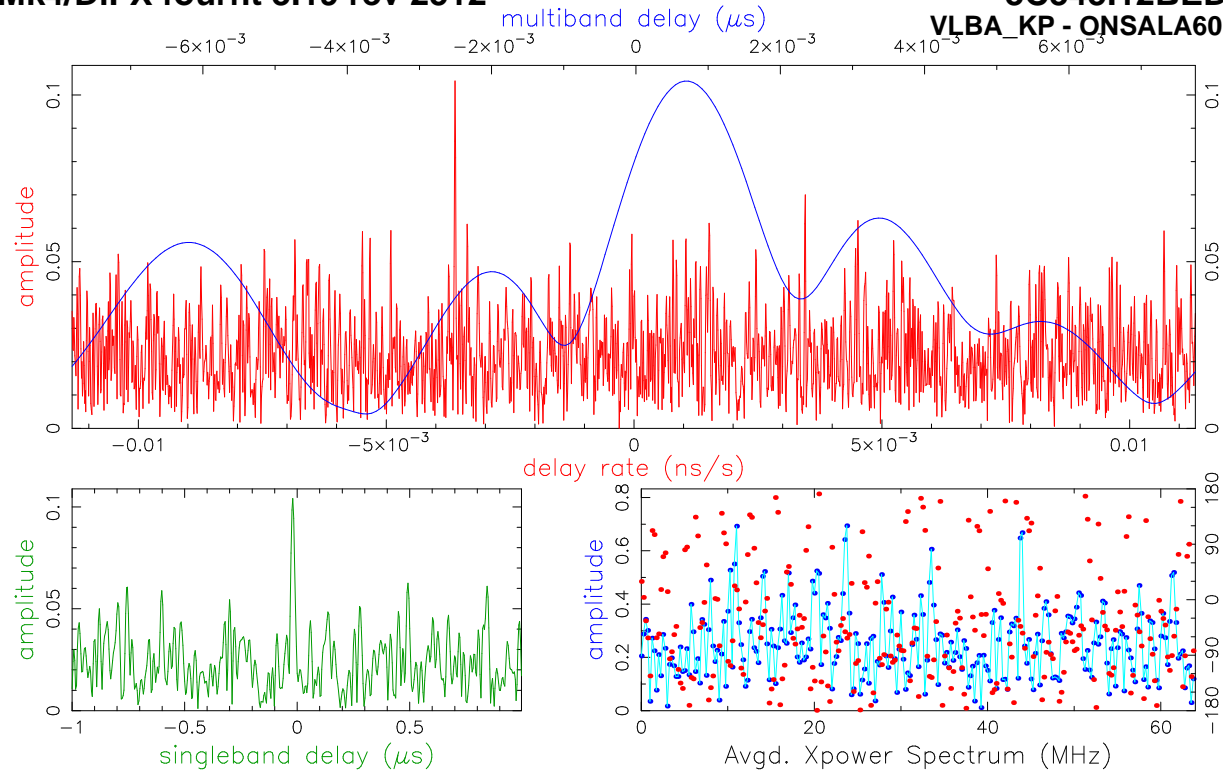


Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183000.00
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165637
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

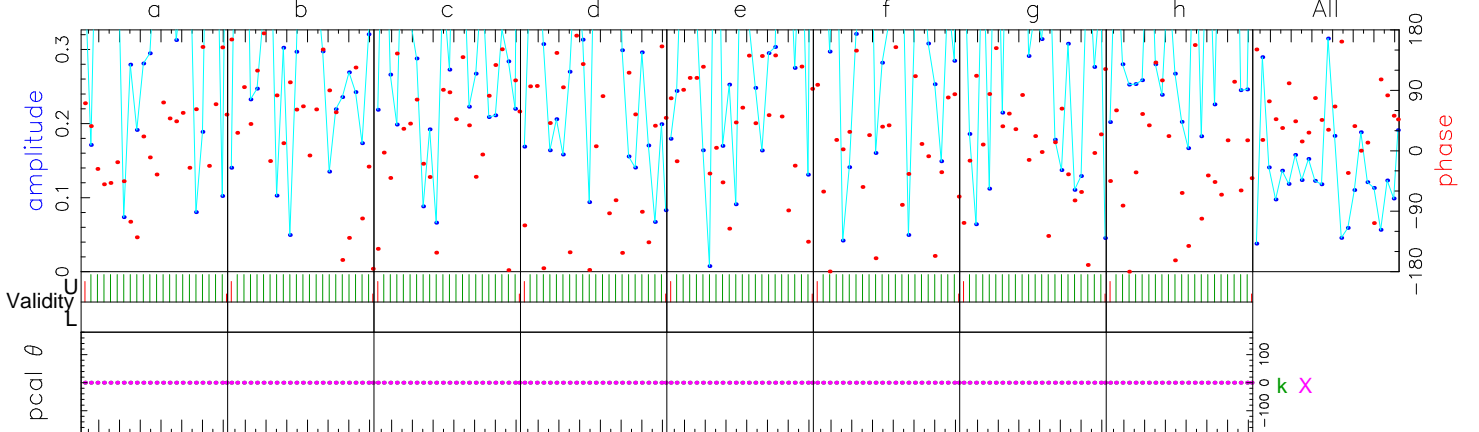


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
g	0	0	0	0	0	0	0	0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.07608022691E+02									
Sband delay (usec)	-4.07602382727E+02									
Phase delay (usec)	-4.07585744987E+02									
Delay rate (us/s)	6.39660941501E-01									
Total phase (deg)			-26.3							
Apriori delay (usec)					-4.07585747477E+02					
Apriori clock (usec)					-3.1029133E+01					
Apriori clockrate (us/s)					-4.5300002E-07					
Apriori rate (us/s)					6.39660863900E-01					
Apriori accel (us/s/s)					1.14351425282E-05					
Resid mbdelay (usec)									-6.65021E-03	+/- 7.7E-05
Resid sbdelay (usec)									-1.66353E-02	+/- 6.1E-04
Resid phdelay (usec)									2.49033E-06	+/- 2.6E-07
Resid rate (us/s)									7.76012E-08	+/- 1.1E-09
Resid phase (deg)									77.2	+/- 8.1
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/s):	128		dr window (ns/s)		-0.011		0.011			
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	
g	az 142.5 el 51.0 pa -10.6		X: az 263.7 el 53.3 pa 44.2		u,v (fr/asec) -4744.604 1695.387		simultaneous interpolator			



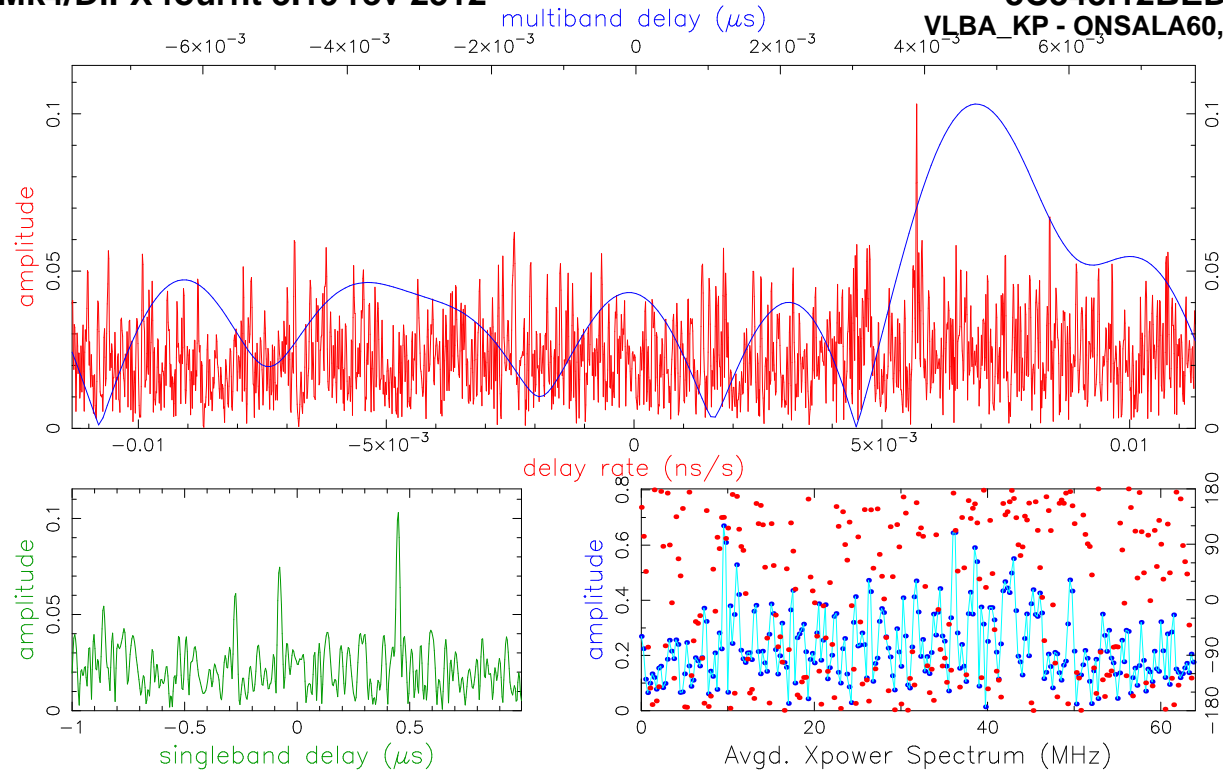
Fringe quality 0
SNR 5.8
Int time 406.235
Amp 0.109
Phase 40.8
PFD 8.9e-01
Delays (us)
SBD -0.020134
MBD 0.000701
Fringe rate (Hz)
-0.311780
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165628
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



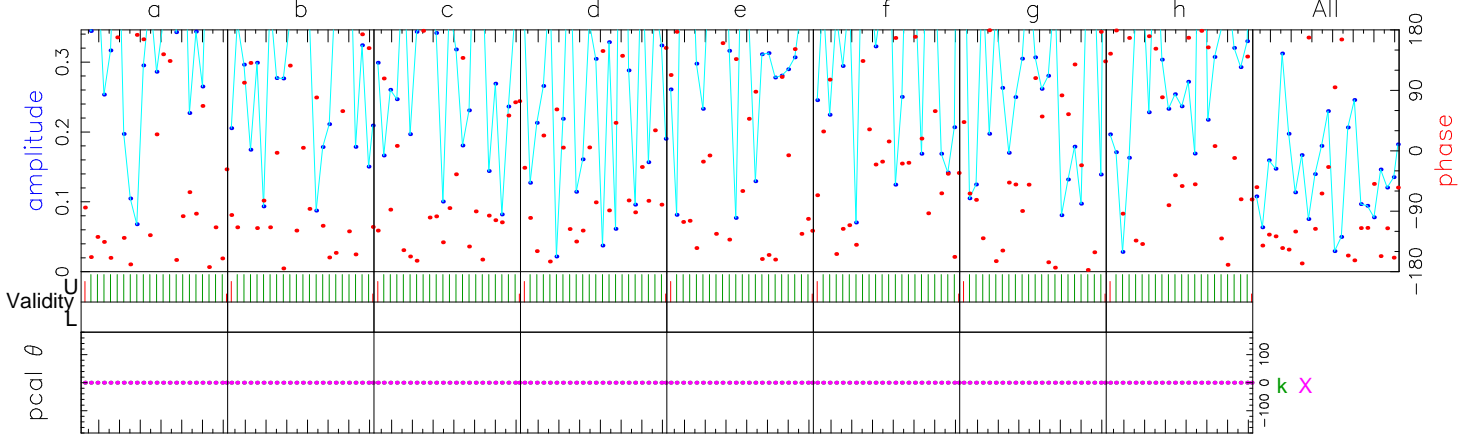
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.47610014023E+03								7.01178E-04	+/- 1.9E-04
Sband delay (usec)	-5.47610535065E+03								-2.01342E-02	+/- 1.5E-03
Phase delay (usec)	-5.47608521509E+03								1.31461E-06	+/- 6.4E-07
Delay rate (us/s)	1.46755537313E+00								-3.61946E-06	+/- 2.7E-09
Total phase (deg)			-154.0						40.8	+/- 19.9
Apriori delay (usec)					-5.47608521640E+03					
Apriori clock (usec)					-3.2727177E+01					
Apriori clockrate (us/s)					-7.2257901E-07					
Apriori rate (us/s)					1.46755899259E+00					
Apriori accel (us/s/s)					6.33219032822E-06					
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)										
Search (2048X32)										
Inc. seg. avg.										
Inc. frq. avg.										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kX.W.183.12BED8



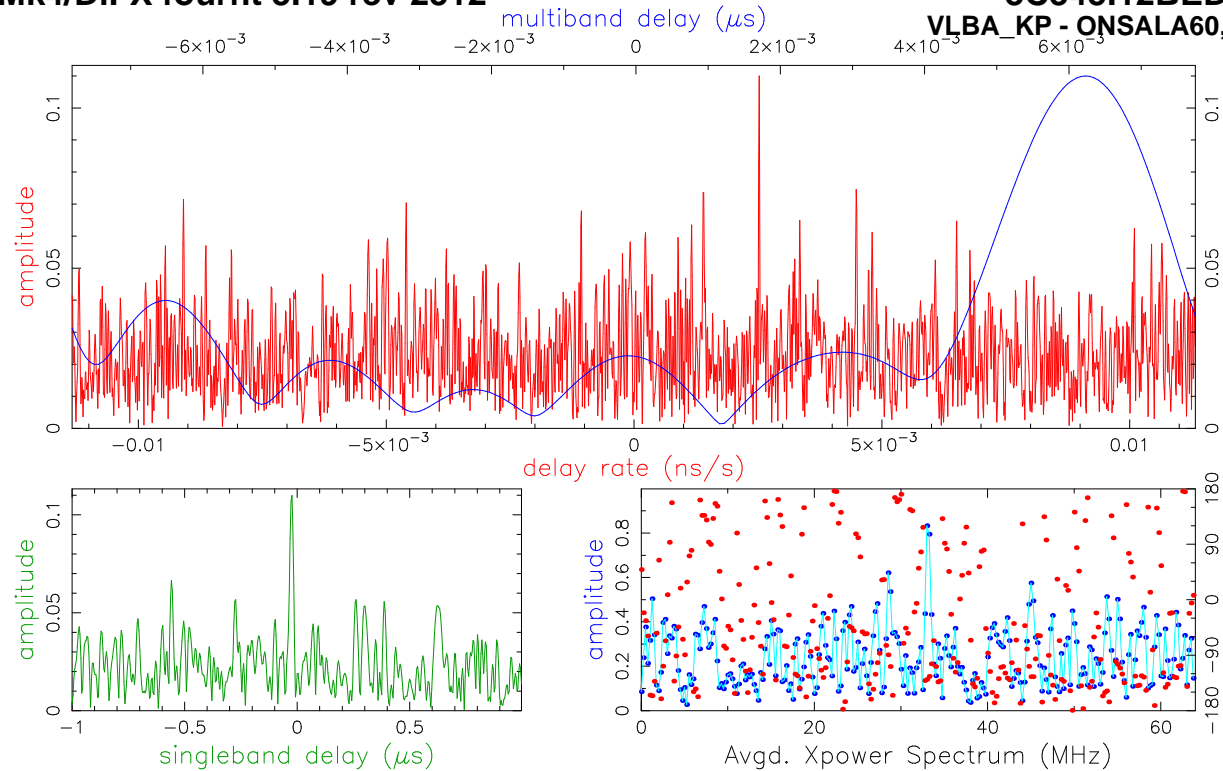
Fringe quality 0
SNR 5.7
Int time 406.235
Amp 0.115
Phase -129.8
PFD 9.3e-01
Delays (us)
SBD 0.448175
MBD 0.004702
Fringe rate (Hz)
0.491731
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165633
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



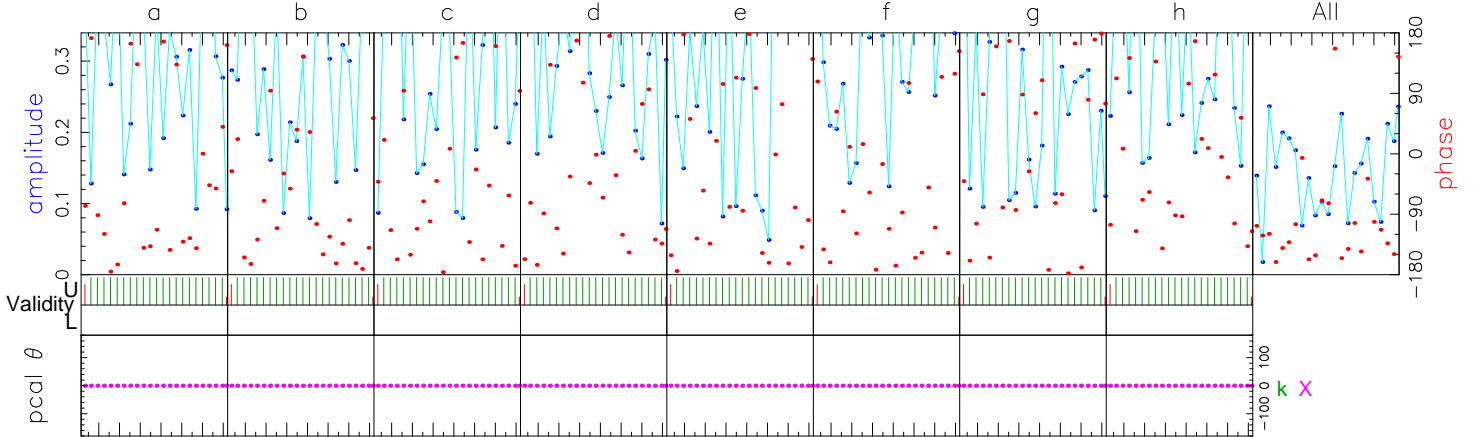
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-147.2	-136.5	-121.7	-79.2	-128.2	-24.2	-154.8	-157.2	Phase	-129.8
	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	371.5	176.3	27.1	57.8	159.0	100.1	335.7	106.0	Sbd box	371.7
U/L	800/0	800/0	800/0	800/0	800/0	800/0	801/0	801/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.47564301476E+03		Apriori delay (usec)		-5.47608521640E+03		Resid mbdelay (usec)		4.70165E-03	+/- 1.9E-04
Sband delay (usec)	-5.47563704140E+03		Apriori clock (usec)		-3.2727177E+01		Resid sbdelay (usec)		4.48175E-01	+/- 1.5E-03
Phase delay (usec)	-5.47608522059E+03		Apriori clockrate (us/s)		-7.2257901E-07		Resid phdelay (usec)		-4.18505E-06	+/- 6.5E-07
Delay rate (us/s)	1.46756470109E+00		Apriori rate (us/s)		1.46755899259E+00		Resid rate (us/s)		5.70850E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		6.33219032822E-06		Resid phase (deg)		-129.8	+/- 20.0

ph/seg (deg) 52.5 48.0 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.5 83.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.8 28.3 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.6 49.5 Inc. frq. avg. 0.124 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kX.W.208.12BED8



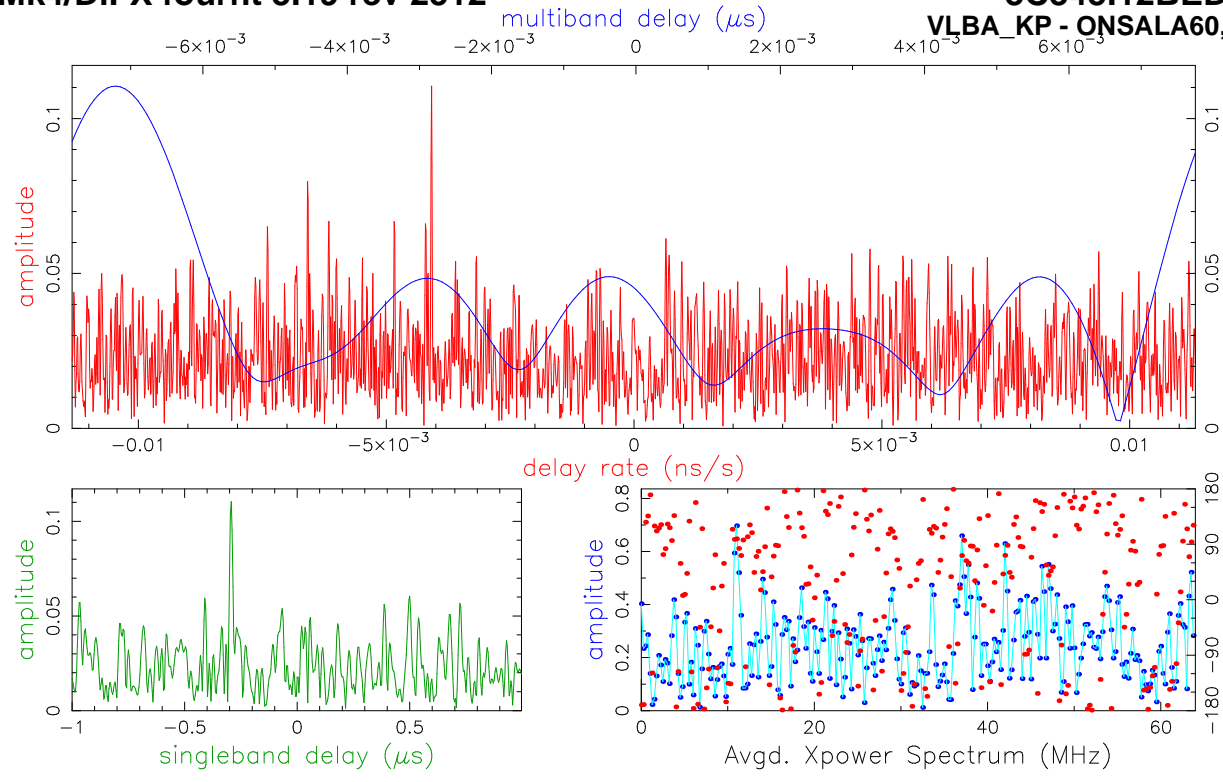
Fringe quality 0
SNR 6.1
Int time 406.235
Amp 0.113
Phase -128.7
PFD 2.2e-01
Delays (us)
SBD -0.024733
MBD 0.006249
Fringe rate (Hz) 0.217466
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165639
2020:014:135814
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



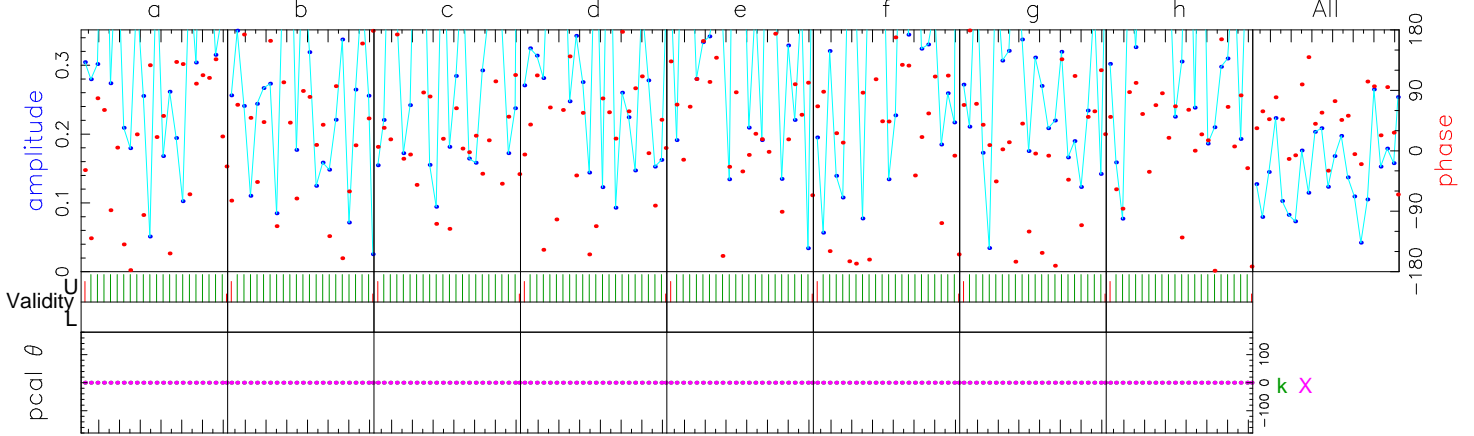
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-126.0	-132.3	-121.8	-129.5	-111.5	-146.9	-157.1	-87.7	Phase	-128.7
	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	354.2	249.6	15.3	262.2	438.9	471.7	88.9	450.2	Sbd box	250.7
U/L	801/0	801/0	801/0	801/0	801/0	801/0	801/0	801/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.47611021734E+03		Apriori delay (usec)		-5.47608521640E+03		Resid mbdelay (usec)		6.24907E-03	+/- 1.8E-04
Sband delay (usec)	-5.47610994965E+03		Apriori clock (usec)		-3.2727177E+01		Resid sbdelay (usec)		-2.47332E-02	+/- 1.4E-03
Phase delay (usec)	-5.47608522055E+03		Apriori clockrate (us/s)		-7.2257901E-07		Resid phdelay (usec)		-4.15142E-06	+/- 6.0E-07
Delay rate (us/s)	1.46756151716E+00		Apriori rate (us/s)		1.46755899259E+00		Resid rate (us/s)		2.52457E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		6.33219032822E-06		Resid phase (deg)		-128.7	+/- 18.7

ph/seg (deg) 45.0 44.9 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 59.8 78.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 23.0 26.5 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 28.2 46.2 Inc. frq. avg. 0.106 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kX.W.232.12BED8



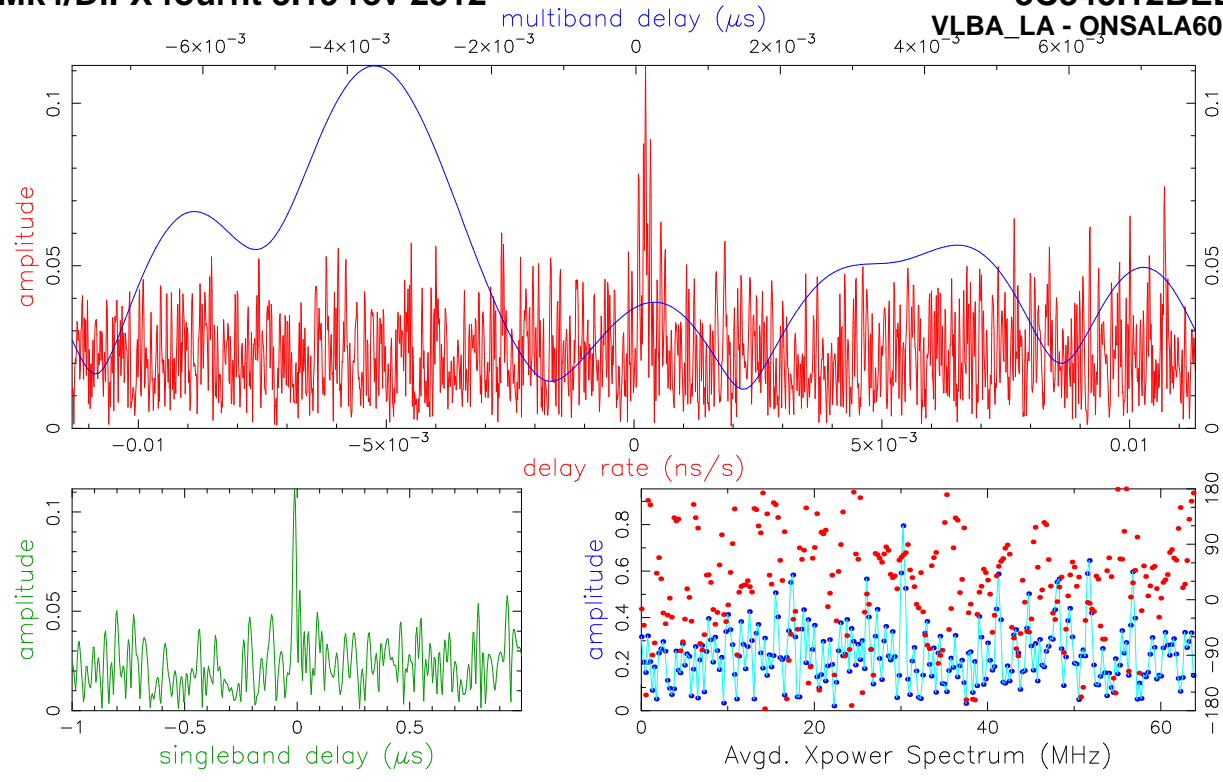
Fringe quality 0
 SNR 6.1
 Int time 406.235
 Amp 0.117
 Phase 54.5
 PFD 2.2e-01
 Delays (us)
 SBD -0.293788
 MBD -0.007229
 Fringe rate (Hz)
 -0.352901
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165643
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



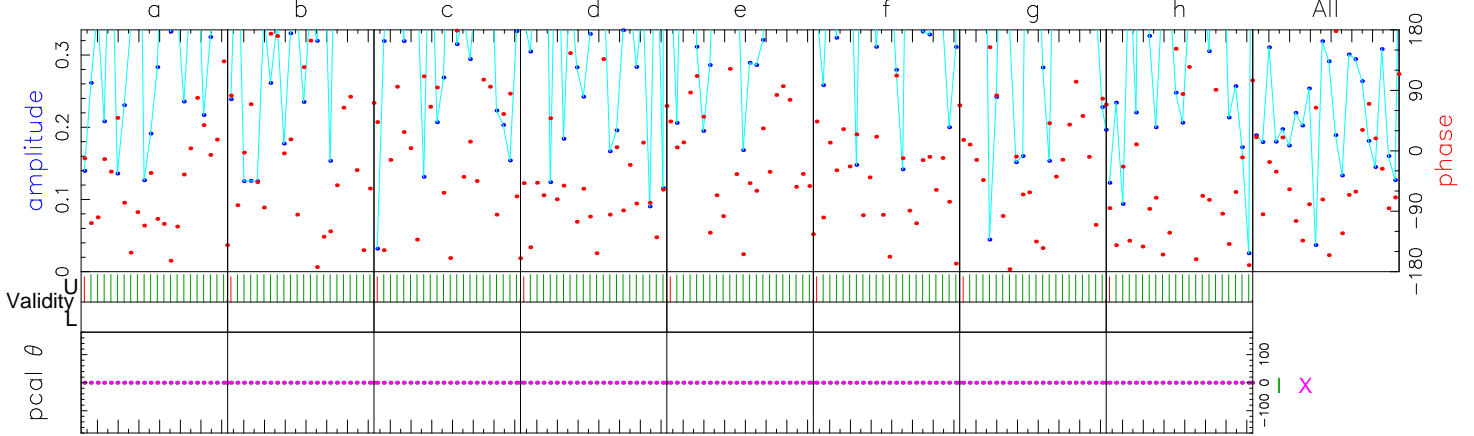
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	800/0	800/0	800/0	800/0	800/0	800/0	801/0	801/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-5.47637369543E+03								Resid mbdelay (usec)	-7.22903E-03 +/- 1.8E-04
Sband delay (usec)	-5.47637900490E+03								Resid sbdelay (usec)	-2.93788E-01 +/- 1.4E-03
Phase delay (usec)	-5.47608521464E+03								Resid phdelay (usec)	1.75898E-06 +/- 6.0E-07
Delay rate (us/s)	1.46755489576E+00								Resid rate (us/s)	-4.09683E-06 +/- 2.6E-09
Total phase (deg)			-140.2						Resid phase (deg)	54.5 +/- 18.7
	RMS	Theor.	Amplitude	0.117 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.1	44.8	Search (2048X32)	0.109					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	58.9	78.3	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	33.1	26.5	Inc. seg. avg.	0.118					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.3	46.2	Inc. frq. avg.	0.118					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 60.1 el 32.1 pa -73.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10929.367 -1586.074 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/kX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/kX.W.249.12BED8



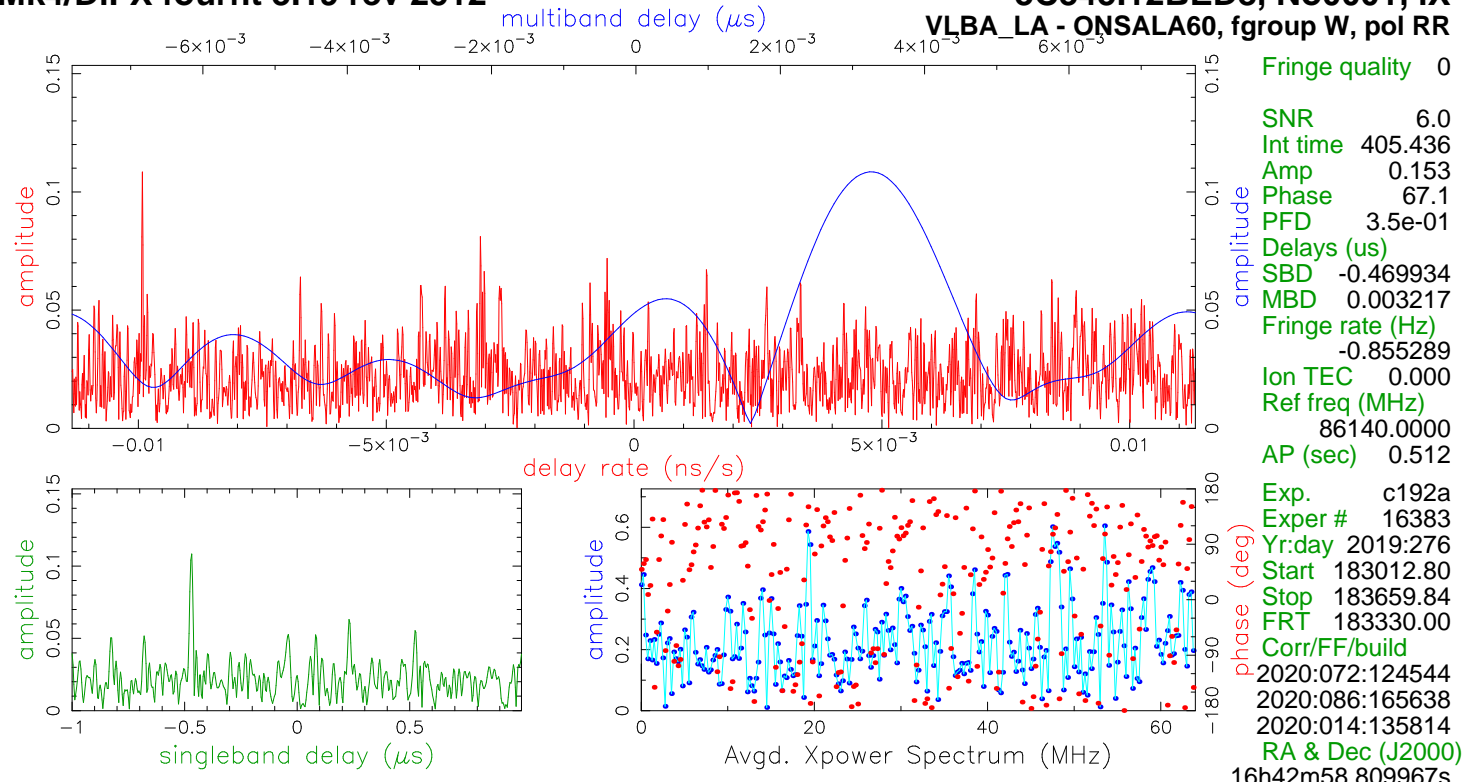
Fringe quality 0
 SNR 6.1
 Int time 405.436
 Amp 0.112
 Phase -56.9
 PFD 1.9e-01
 Delays (us)
 SBD -0.011247
 MBD -0.003587
 Fringe rate (Hz) 0.020407
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183012.80
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165633
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

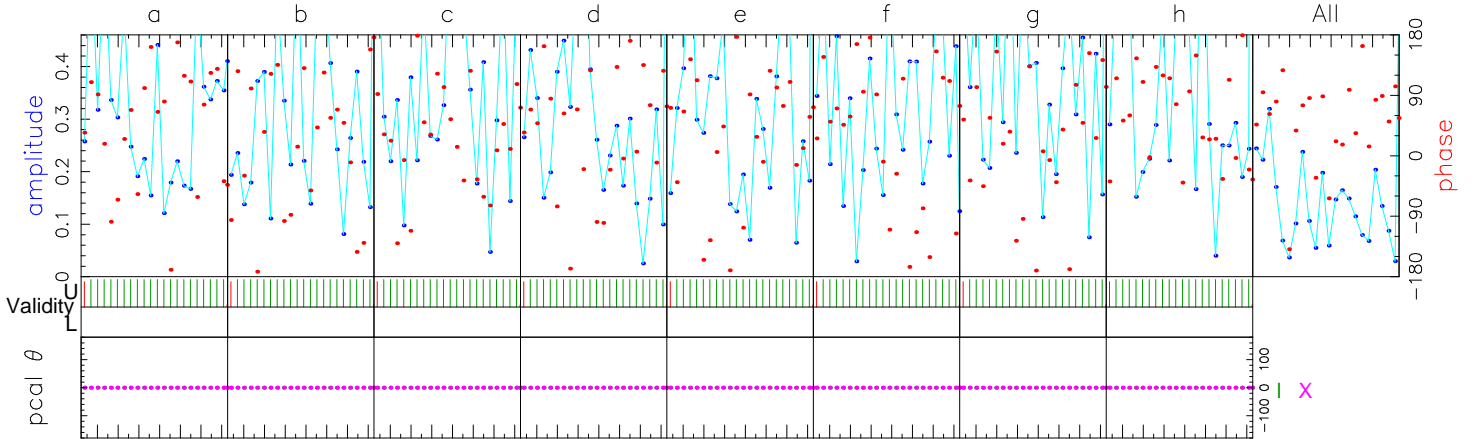


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-70.0	-88.3	34.2	-78.1	-8.9	-47.2	-30.9	-127.4	Phase	-56.9
	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1
	391.2	509.7	313.4	254.2	252.0	253.3	254.3	251.8	Sbd box	254.1
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.74935099997E+03		Apriori delay (usec)		-3.74934741338E+03		Resid mbdelay (usec)		-3.58659E-03	+/- 1.8E-04
Sband delay (usec)	-3.74935866088E+03		Apriori clock (usec)		-3.3065510E+01		Resid sbdelay (usec)		-1.12475E-02	+/- 1.4E-03
Phase delay (usec)	-3.74934741522E+03		Apriori clockrate (us/s)		-8.7947201E-07		Resid phdelay (usec)		-1.83637E-06	+/- 6.0E-07
Delay rate (us/s)	1.39352612270E+00		Apriori rate (us/s)		1.39352588580E+00		Resid rate (us/s)		2.36909E-07	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.14108435483E-06		Resid phase (deg)		-56.9	+/- 18.6

RMS Theor. Amplitude 0.112 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 68.0 44.7 Search (2048X32) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 111.4 78.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 54.7 26.4 Inc. seg. avg. 0.163 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 54.6 46.0 Inc. frq. avg. 0.130 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/IX.W.205.12BED8



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



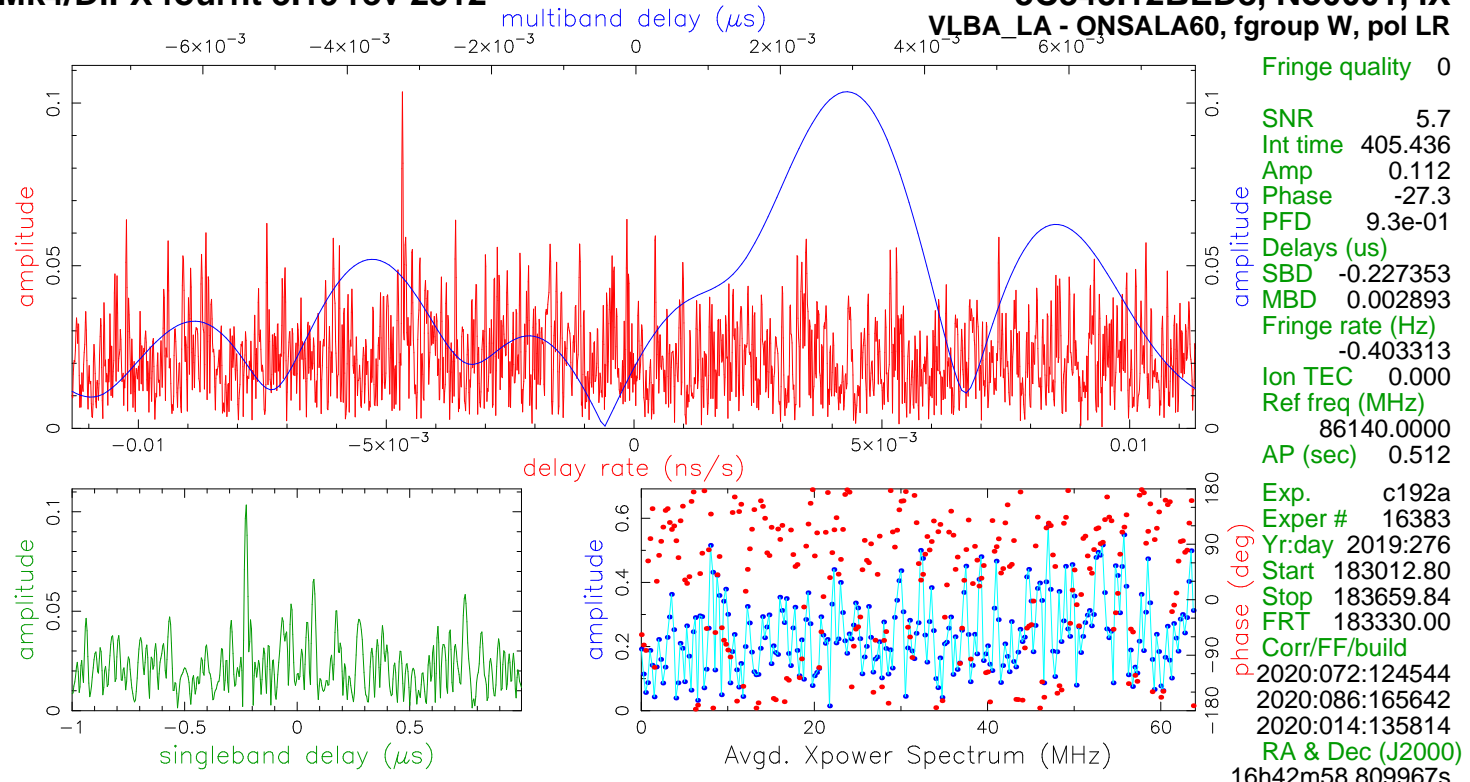
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.74981294590E+03	Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	3.21749E-03	+/-	1.8E-04
Sband delay (usec)	-3.74981734763E+03	Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-4.69934E-01	+/-	1.4E-03
Phase delay (usec)	-3.74934741122E+03	Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	2.16453E-06	+/-	6.1E-07
Delay rate (us/s)	1.39351595673E+00	Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	-9.92906E-06	+/-	2.6E-09
Total phase (deg)	-0.8	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	67.1	+/-	19.0

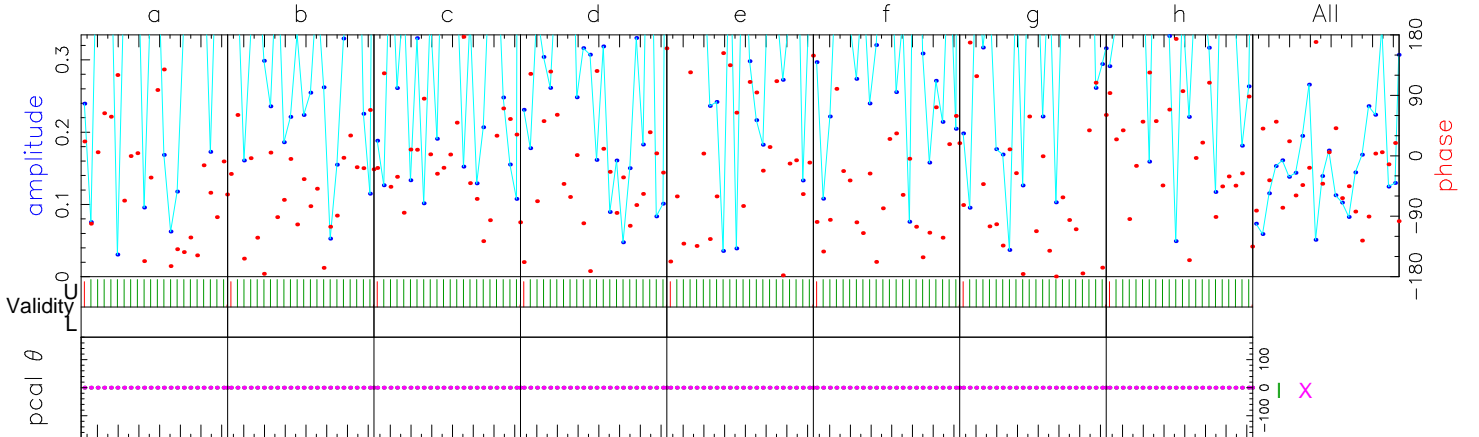
ph/seg (deg)	59.7	Theor.	45.6	Amplitude	0.153 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.8		79.5	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	36.6		26.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.0		46.9	Inc. seg. avg.	0.146	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/IX.W.225.12BED8



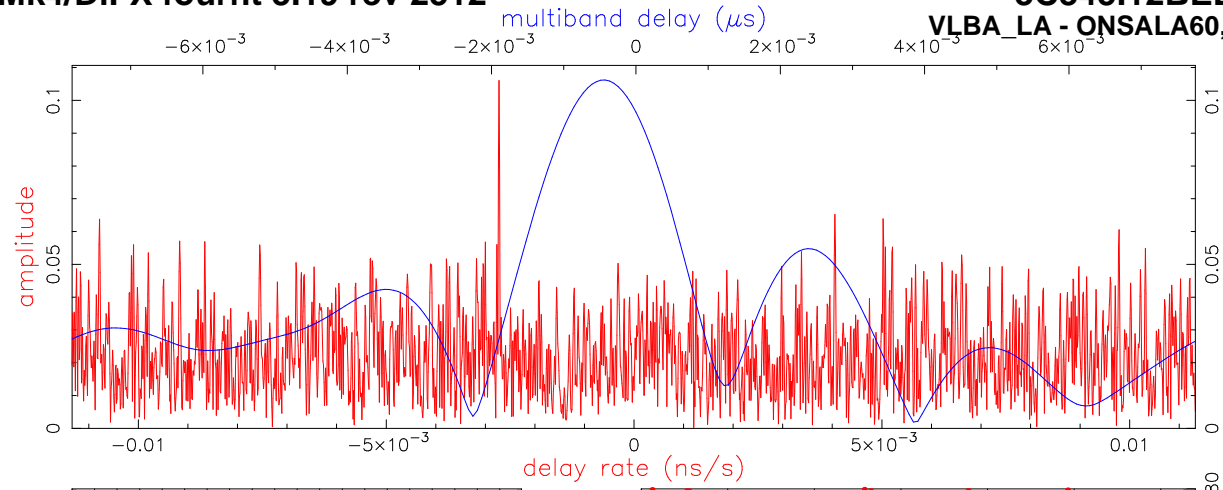
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



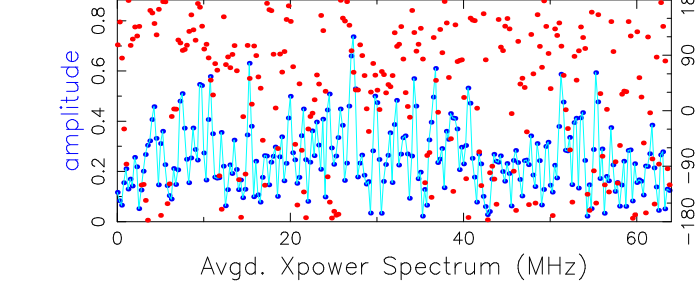
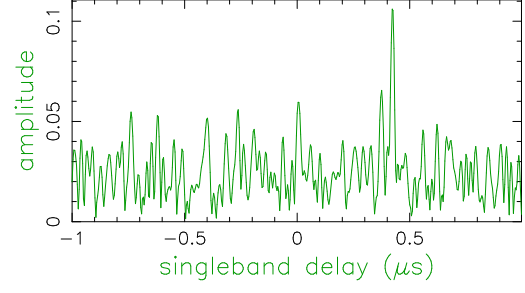
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Phase	-14.1	-41.1	-14.0	-26.3	-54.8	-62.9	-97.4	16.2		-27.3
Ampl.	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.2		0.1
Sbd box	176.0	198.8	198.7	105.0	340.4	211.9	65.4	199.0		198.8
APs used	U/L 794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
PC freqs	I 1000	1000	1000	1000	1000	1000	1000	1000		
PC phase	X 1000	1000	1000	1000	1000	1000	1000	1000		
Mani PC	I:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
PC amp	I 1000	1000	1000	1000	1000	1000	1000	1000		
Chan ids	X 1000	1000	1000	1000	1000	1000	1000	1000		
Tracks	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Chan ids	X W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Tracks										

Group delay (usec)(sbd)	-3.74957889513E+03	Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	2.89325E-03	+/-	1.9E-04
Sband delay (usec)	-3.74957476688E+03	Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-2.27353E-01	+/-	1.5E-03
Phase delay (usec)	-3.74934741426E+03	Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-8.81940E-07	+/-	6.5E-07
Delay rate (us/s)	1.39352120373E+00	Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	-4.68206E-06	+/-	2.8E-09
Total phase (deg)	-95.3	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-27.3	+/-	20.0

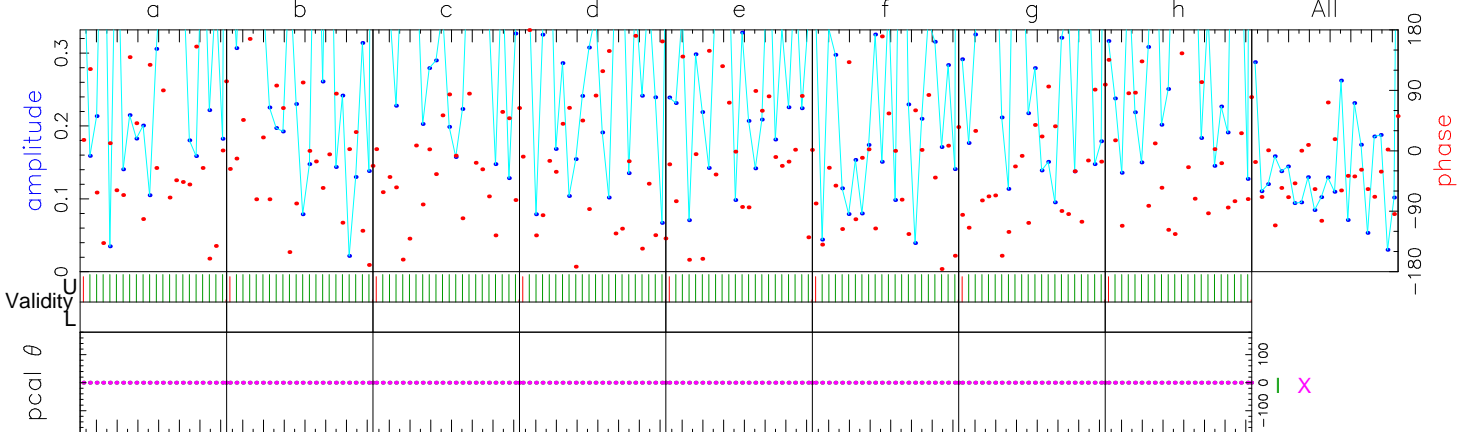
ph/seg (deg)	58.6	Theor.	48.0	Amplitude	0.112 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.0	Search (2048X32)	0.102	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.5	Inc. seg. avg.	0.121	Inc. frq. avg.	0.115	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.9	Inc. frq. avg.	0.115			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
						nlags:	256	t_cohere	infinite	



Fringe quality 0
 SNR 5.9
 Int time 405.436
 Amp 0.111
 Phase -40.1
 PFD 5.0e-01
 Delays (us)
 SBD 0.423687
 MBD -0.000383
 Fringe rate (Hz)
 -0.234765
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183012.80
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165649
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

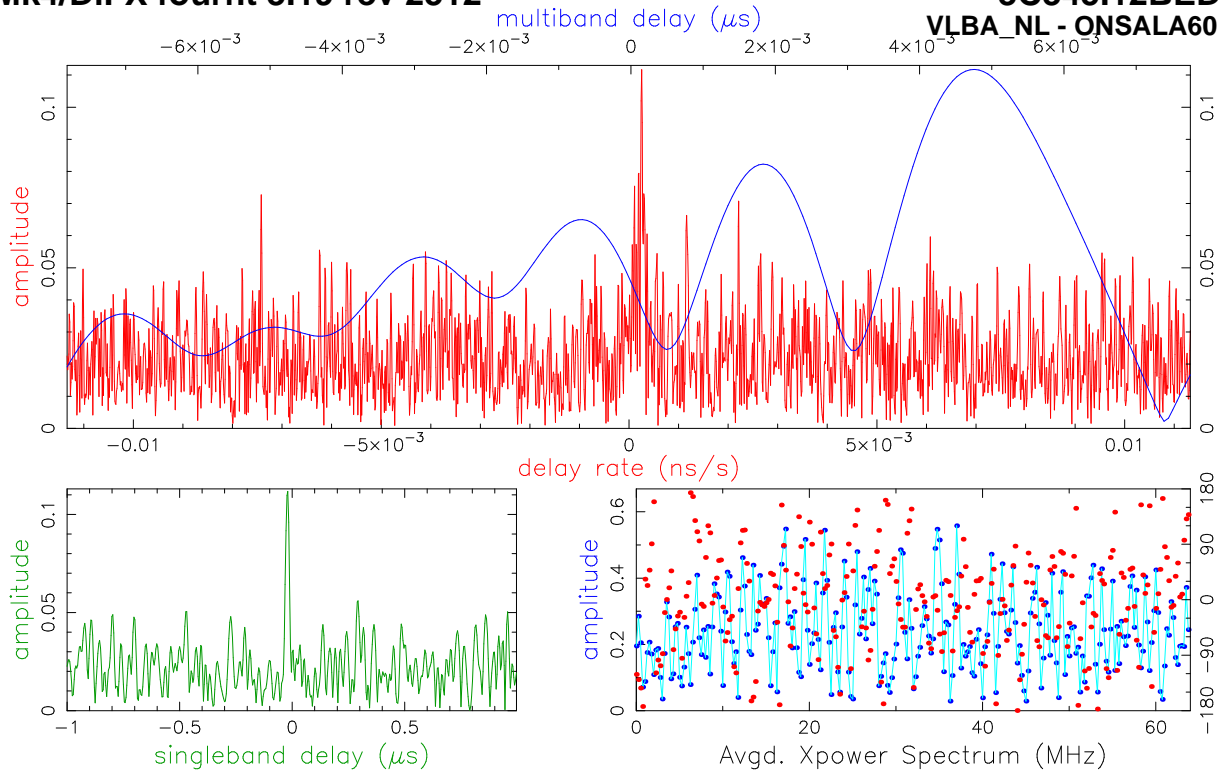


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-57.6	-23.5	-23.5	-85.7	14.2	-50.4	-50.8	-47.9	Phase	-40.1
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	58.3	139.8	303.0	503.1	407.7	337.2	365.2	359.0	Sbd box	365.5
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.74892592101E+03		Apriori delay (usec)		-3.74934741338E+03		Resid mbdelay (usec)		-3.82631E-04	+/- 1.8E-04
Sband delay (usec)	-3.74892372688E+03		Apriori clock (usec)		-3.3065510E+01		Resid sbdelay (usec)		4.23687E-01	+/- 1.4E-03
Phase delay (usec)	-3.74934741468E+03		Apriori clockrate (us/s)		-8.7947201E-07		Resid phdelay (usec)		-1.29431E-06	+/- 6.2E-07
Delay rate (us/s)	1.39352316040E+00		Apriori rate (us/s)		1.39352588580E+00		Resid rate (us/s)		-2.72539E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.14108435483E-06		Resid phase (deg)		-40.1	+/- 19.3

ph/seg (deg) 42.8 46.2 Amplitude 0.111 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.5 80.6 Search (2048X32) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.1 27.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.0 47.5 Inc. seg. avg. 0.107 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.106 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/IX.W.275.12BED8

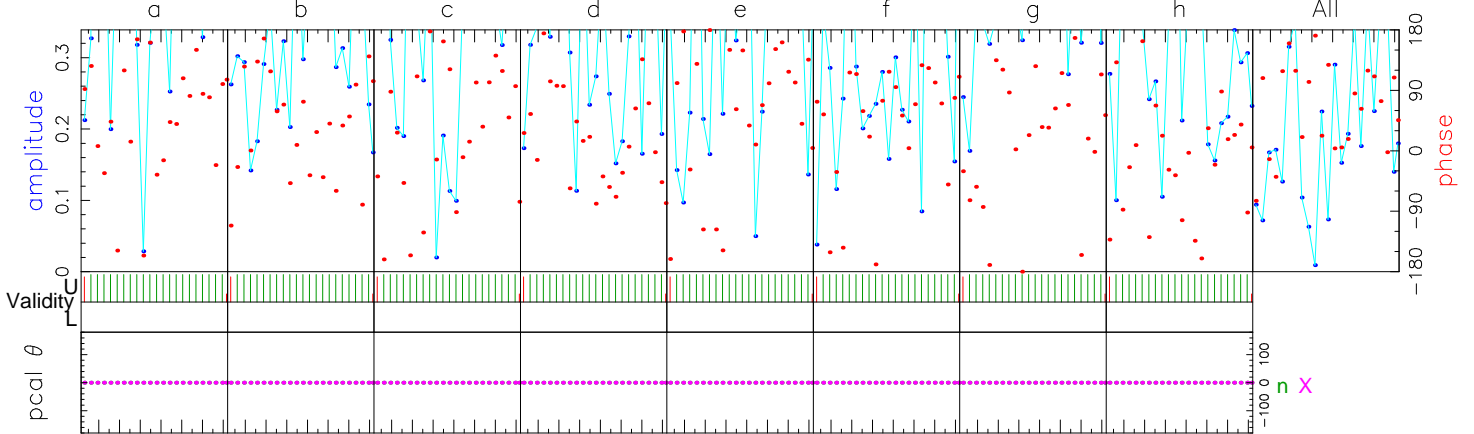


Fringe quality 0

SNR 6.3
Int time 409.325
Amp 0.113
Phase 67.2
PFD 1.0e-01
Delays (us)
SBD -0.021007
MBD 0.004715
Fringe rate (Hz) 0.022305
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165646
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

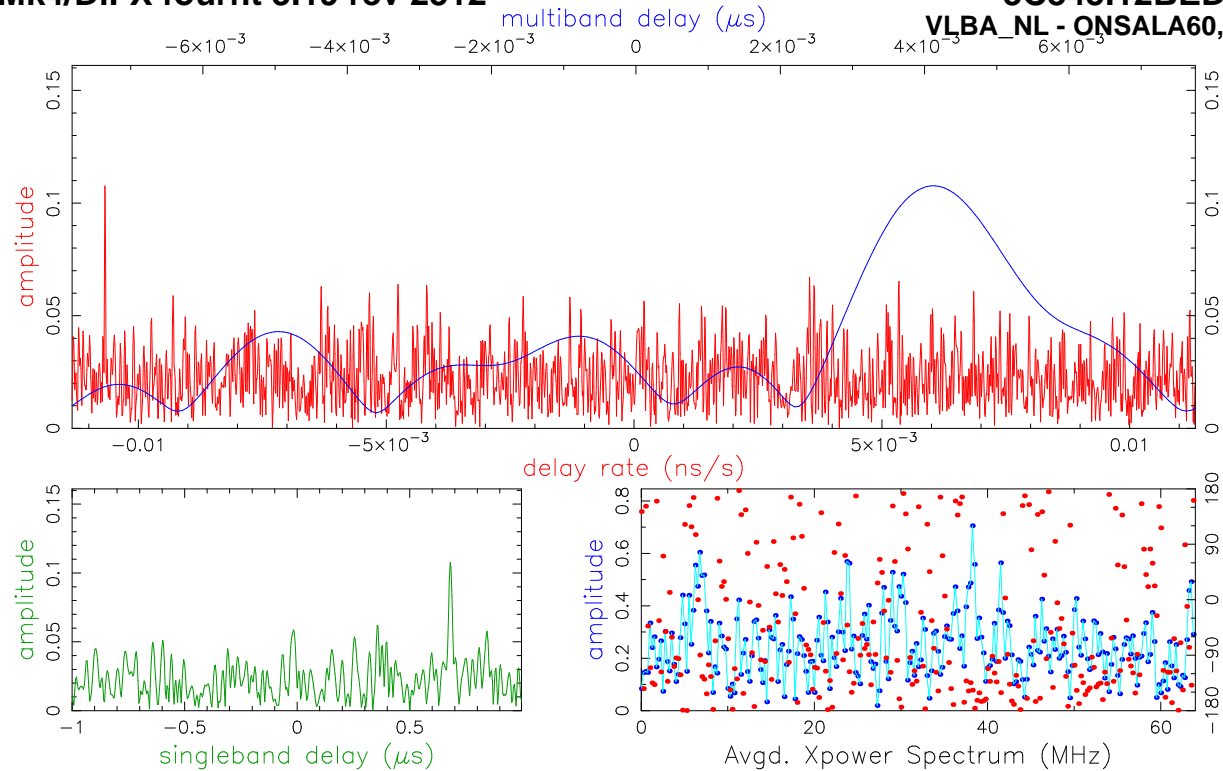
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-3.61992470809E+02								4.71479E-03	+/- 1.7E-04
Sband delay (usec)	-3.61986942345E+02								-2.10067E-02	+/- 1.4E-03
Phase delay (usec)	-3.61965933429E+02								2.16615E-06	+/- 5.9E-07
Delay rate (us/s)	1.20558341176E+00								2.58942E-07	+/- 2.5E-09
Total phase (deg)			-182.0						67.2	+/- 18.3
Apriori delay (usec)					-3.61965935595E+02				Resid mbdelay (usec)	
Apriori clock (usec)					-5.8499165E+00				Resid sbdelay (usec)	
Apriori clockrate (us/s)					-3.9377651E-07				Resid phdelay (usec)	
Apriori rate (us/s)					1.20558315282E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					-1.08508500335E-05				Resid phase (deg)	
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/s):	128		dr window (ns/s)		-0.011		0.011			
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	

n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/nX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/nX.W.263.12BED8

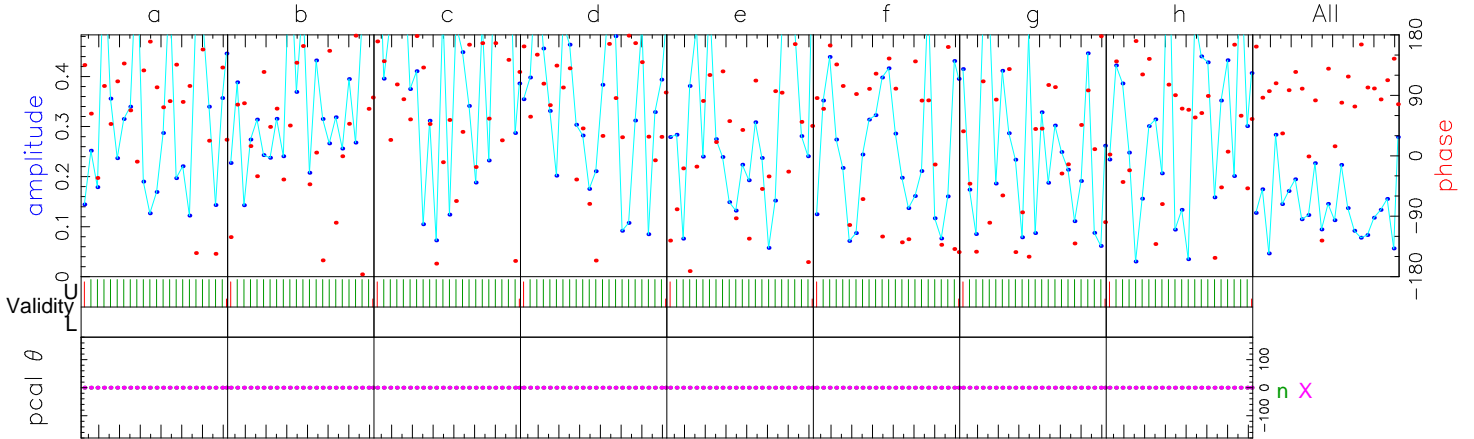


Fringe quality 0

SNR 6.0
 Int time 409.325
 Amp 0.161
 Phase 97.0
 PFD 4.1e-01
 Delays (us)
 SBD 0.680820
 MBD 0.004179
 Fringe rate (Hz)
 -0.921033
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165650
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

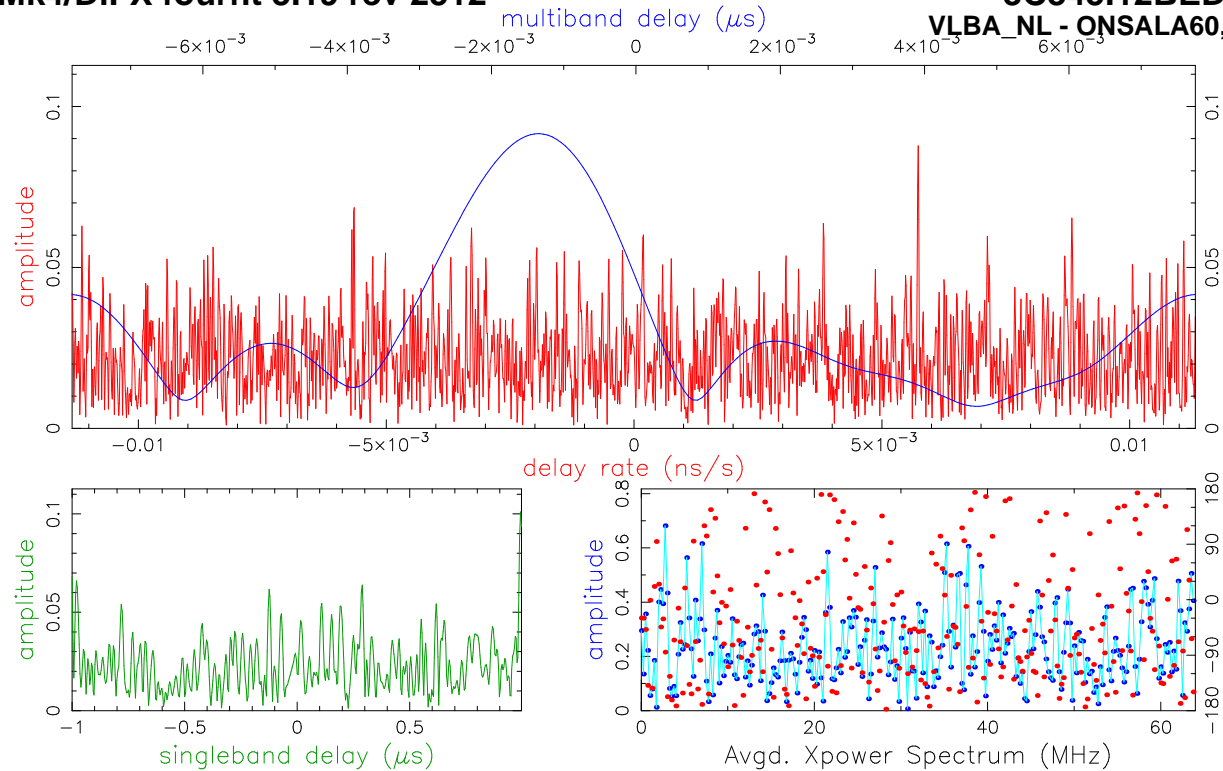
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.61289881895E+02									
Sband delay (usec)	-3.61285115345E+02									
Phase delay (usec)	-3.61965932468E+02									
Delay rate (us/s)	1.20557246054E+00									
Total phase (deg)			-152.2							
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)									97.0	+/- 19.1
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
nlags:	256									
t_cohere:	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

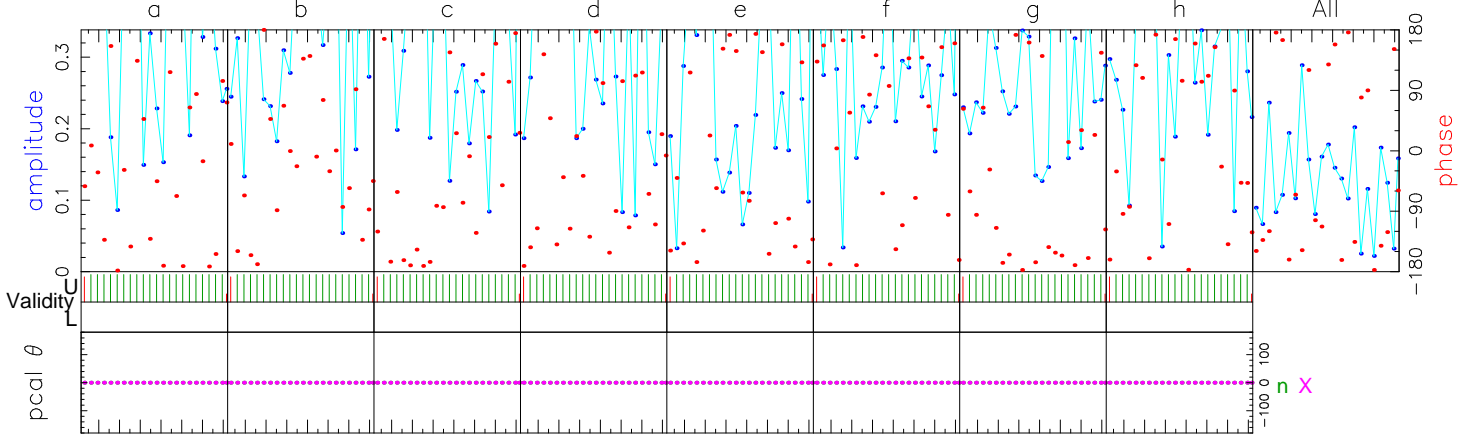
n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/nX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/nX.W.286.12BED8



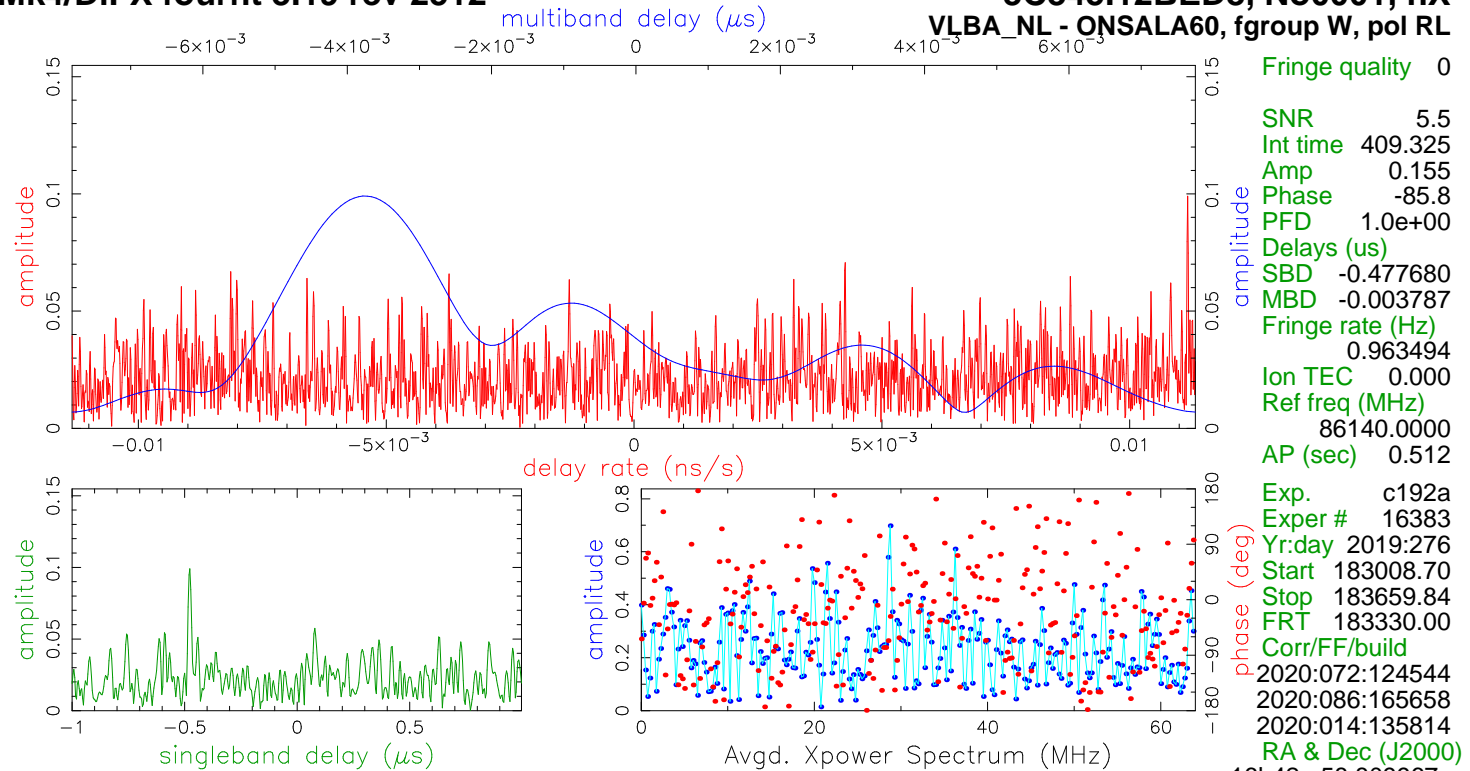
Fringe quality 0
SNR 5.6
Int time 409.325
Amp 0.113
Phase -157.6
PFD 9.9e-01
Delays (us)
SBD 0.992717
MBD -0.000979
Fringe rate (Hz)
0.494942
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165654
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

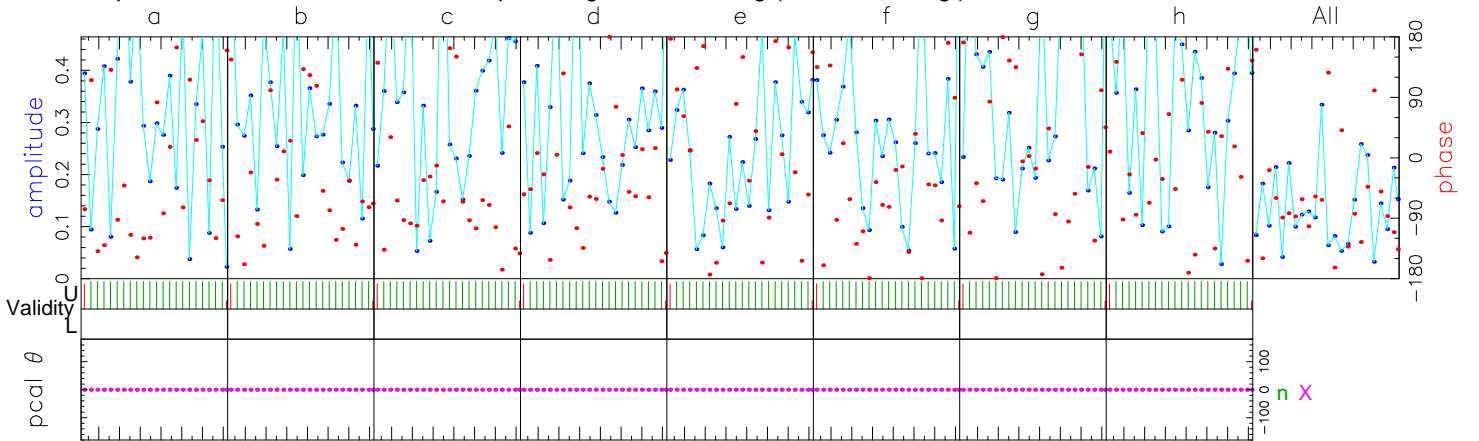


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.60966914709E+02									
Sband delay (usec)	-3.60973218595E+02									
Phase delay (usec)	-3.61965940678E+02									
Delay rate (us/s)	1.20558889860E+00									
Total phase (deg)			-46.8							
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)										

ph/seg (deg) 55.5 49.0 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.6 85.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.4 28.9 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.2 50.5 Inc. frq. avg. 0.103 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/nX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/nX.W.306.12BED8 simultaneous interpolator



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

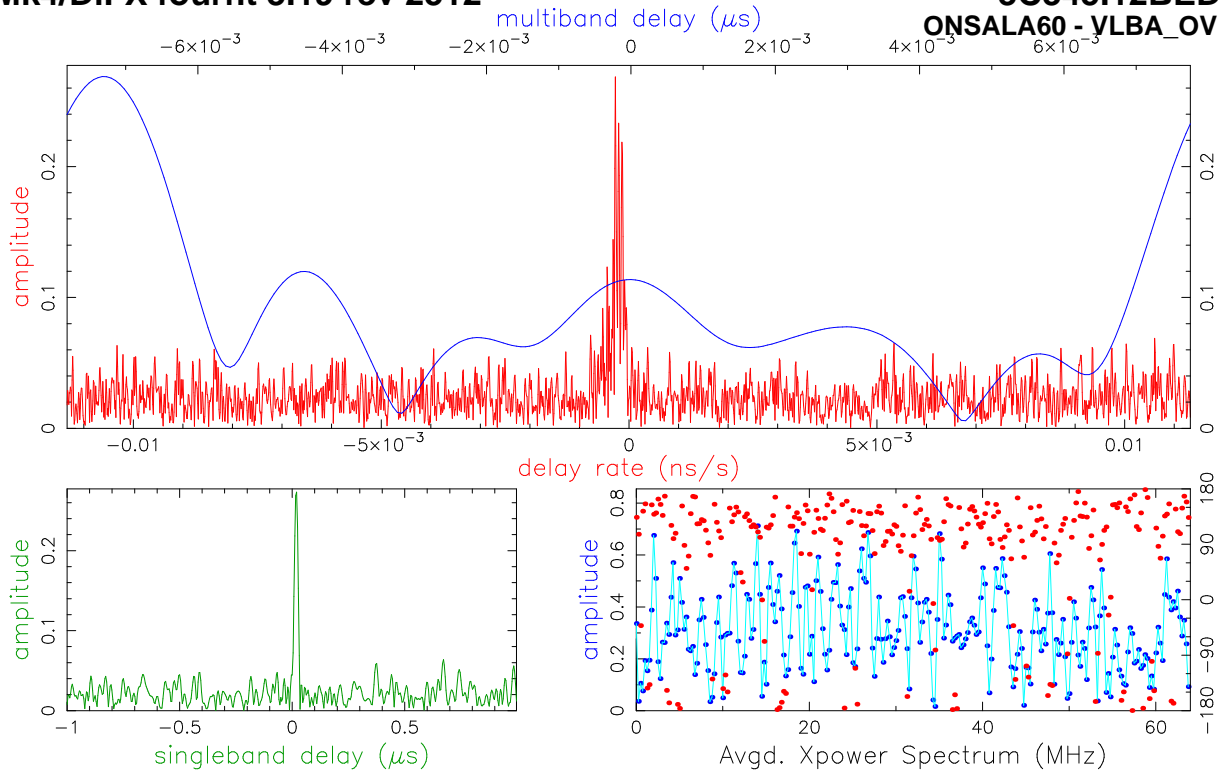


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-90.3	-102.1	-84.8	-51.0	-174.1	-92.7	-118.4	-53.1	Phase	-85.8
	0.2	0.2	0.3	0.2	0.0	0.1	0.1	0.1	Ampl.	0.1
	133.5	143.7	134.4	304.0	207.9	13.1	464.9	366.0	Sbd box	134.7
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.62438472737E+02		Apriori delay (usec)		-3.61965935595E+02		Resid mbdelay (usec)		-3.78714E-03	+/- 2.0E-04
Sband delay (usec)	-3.62443615345E+02		Apriori clock (usec)		-5.8499165E+00		Resid sbdelay (usec)		-4.77680E-01	+/- 1.6E-03
Phase delay (usec)	-3.61965938360E+02		Apriori clockrate (us/s)		-3.9377651E-07		Resid phdelay (usec)		-2.76531E-06	+/- 6.7E-07
Delay rate (us/s)	1.20559433803E+00		Apriori rate (us/s)		1.20558315282E+00		Resid rate (us/s)		1.11852E-05	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.08508500335E-05		Resid phase (deg)		-85.8	+/- 20.7

	RMS	Theor.	Amplitude	0.155 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.9	49.7	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	86.8	86.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	43.8	29.3	Inc. seg. avg.	0.157	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.0	51.2	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

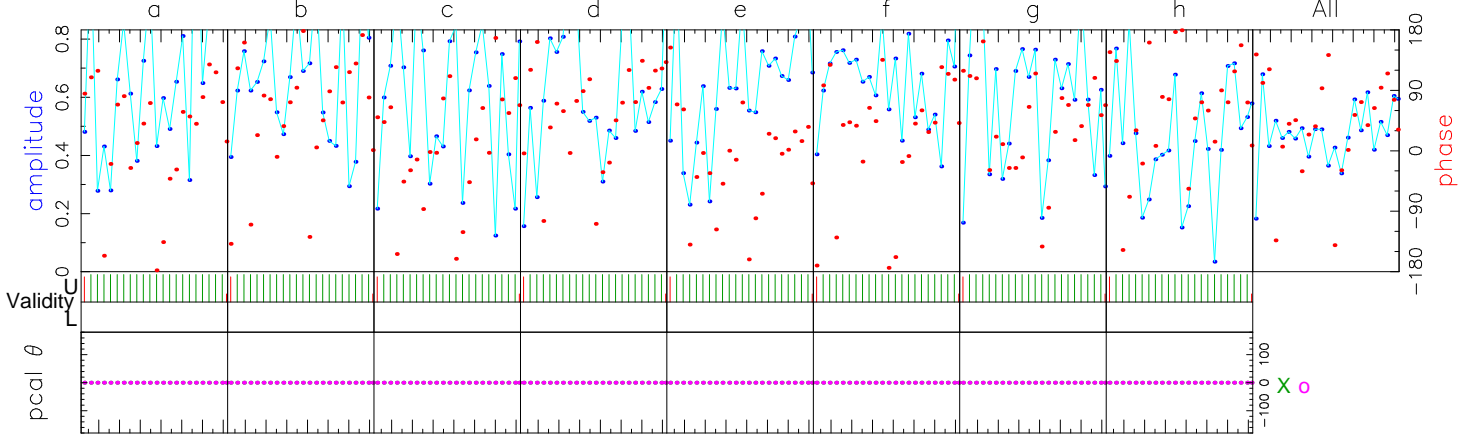
n: az 74.7 el 50.6 pa -69.4 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9004.546 -1802.418 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/nX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/nX.W.322.12BED8



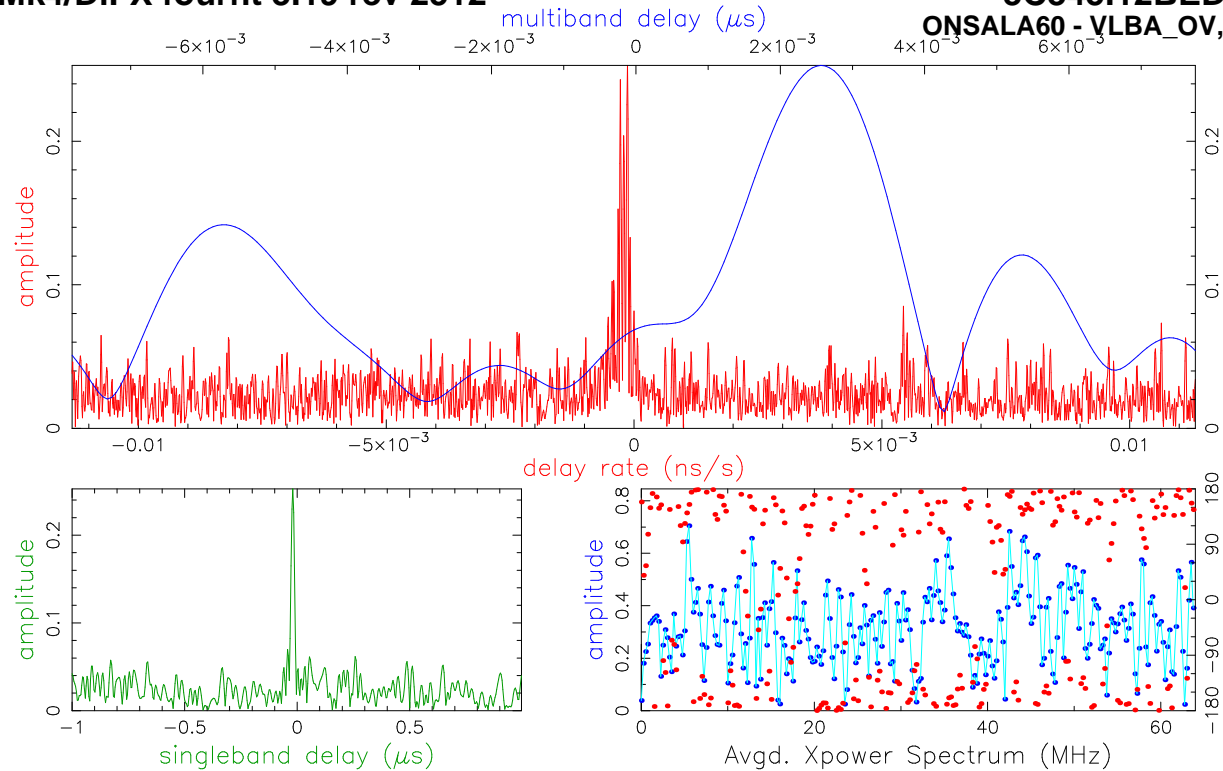
Fringe quality 8
SNR 15.3
Int time 409.331
Amp 0.277
Phase 61.7
PFD 2.8e-44
Delays (us)
SBD 0.017943
MBD -0.007255
Fringe rate (Hz)
-0.023469
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165650
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.5	91.1	23.7	78.4	4.2	70.6	56.7	92.6	Phase	61.7
	0.4	0.3	0.2	0.4	0.4	0.3	0.3	0.2	Ampl.	0.3
	262.0	261.9	262.3	262.1	261.8	261.8	261.3	263.2	Sbd box	261.6
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.16186708174E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		-7.25483E-03	+/- 7.1E-05
Sband delay (usec)	6.16186103007E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		1.79435E-02	+/- 5.6E-04
Phase delay (usec)	6.16184308856E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		1.98981E-06	+/- 2.4E-07
Delay rate (us/s)	-1.43643817301E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-2.72454E-07	+/- 1.0E-09
Total phase (deg)	233.6		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		61.7	+/- 7.5

ph/seg (deg) 67.8 17.9 Search (2048X32) 0.255 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.8 31.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.2 10.6 Inc. seg. avg. 0.452 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.9 18.4 Inc. frq. avg. 0.301 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.285.12BED8

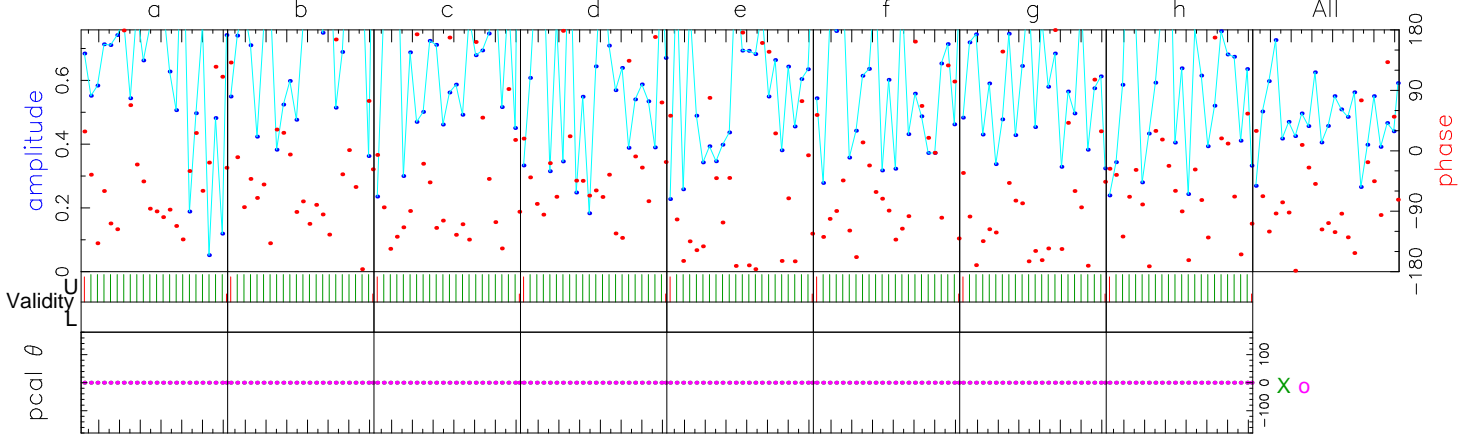


Fringe quality 9

SNR 14.0
Int time 409.331
Amp 0.253
Phase -85.8
PFD 1.1e-35
Delays (us)
SBD -0.019704
MBD 0.002560
Fringe rate (Hz)
-0.011037
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

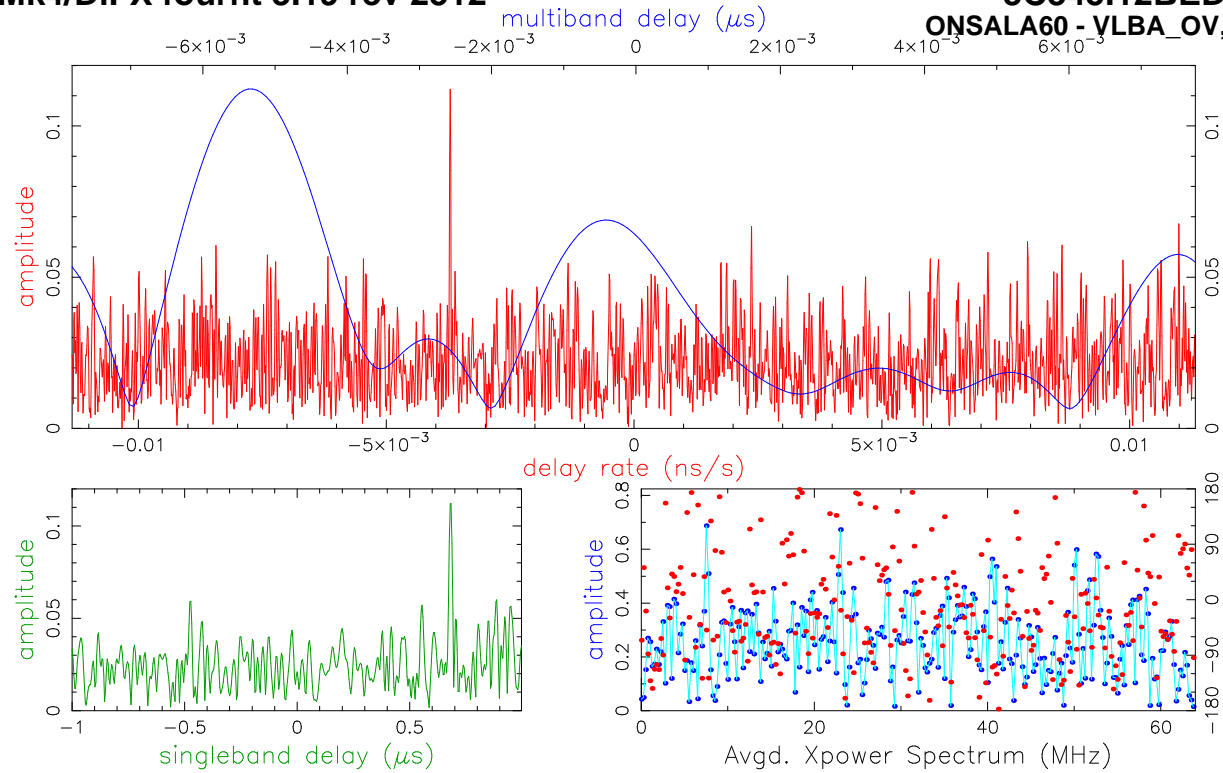
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165654
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.6	-69.9	-111.7	-53.1	-152.9	-81.4	-125.0	-43.6	Phase	-85.8
	0.3	0.4	0.3	0.3	0.2	0.2	0.3	0.3	Ampl.	0.3
	252.0	251.9	252.5	251.9	253.1	345.4	252.4	252.1	Sbd box	252.0
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.16183002177E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		2.56020E-03	+/- 7.8E-05
Sband delay (usec)	6.16182338282E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		-1.97037E-02	+/- 6.2E-04
Phase delay (usec)	6.16184308381E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		-2.76721E-06	+/- 2.6E-07
Delay rate (us/s)	-1.43643802868E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-1.28129E-07	+/- 1.1E-09
Total phase (deg)	86.1		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		-85.8	+/- 8.2

ph/seg (deg) 72.5 19.6 Search (2048X32) 0.246 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.0 34.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 40.5 11.6 Inc. seg. avg. 0.452 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 28.0 20.2 Inc. frq. avg. 0.292 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.304.12BED8

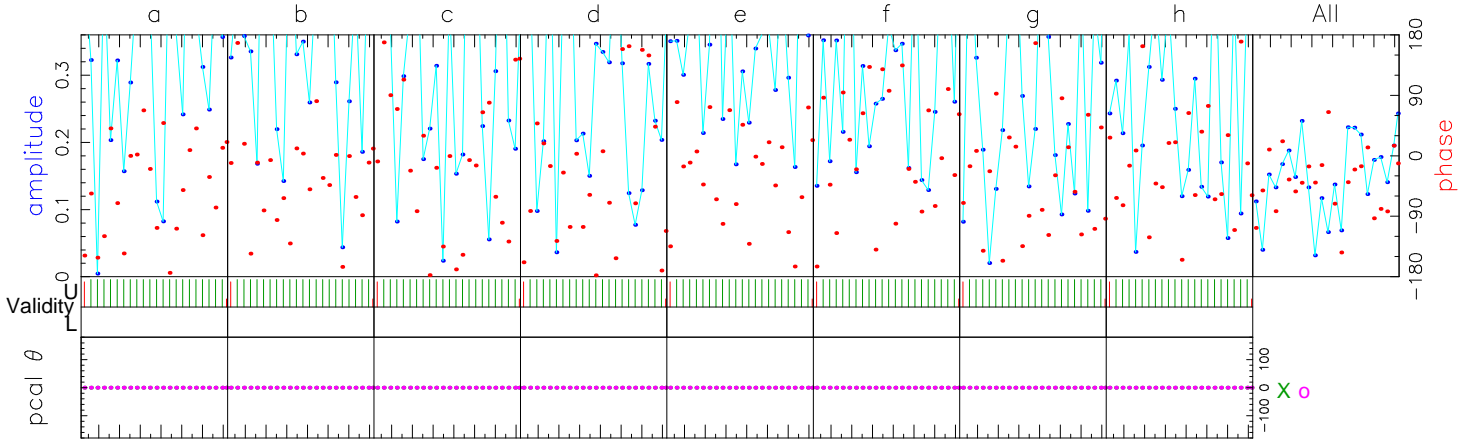


Fringe quality 0

SNR 6.4
Int time 409.331
Amp 0.120
Phase -35.5
PFD 5.7e-02
Delays (us)
SBD 0.681711
MBD -0.005381
Fringe rate (Hz)
-0.320307
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183008.70
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165659
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

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

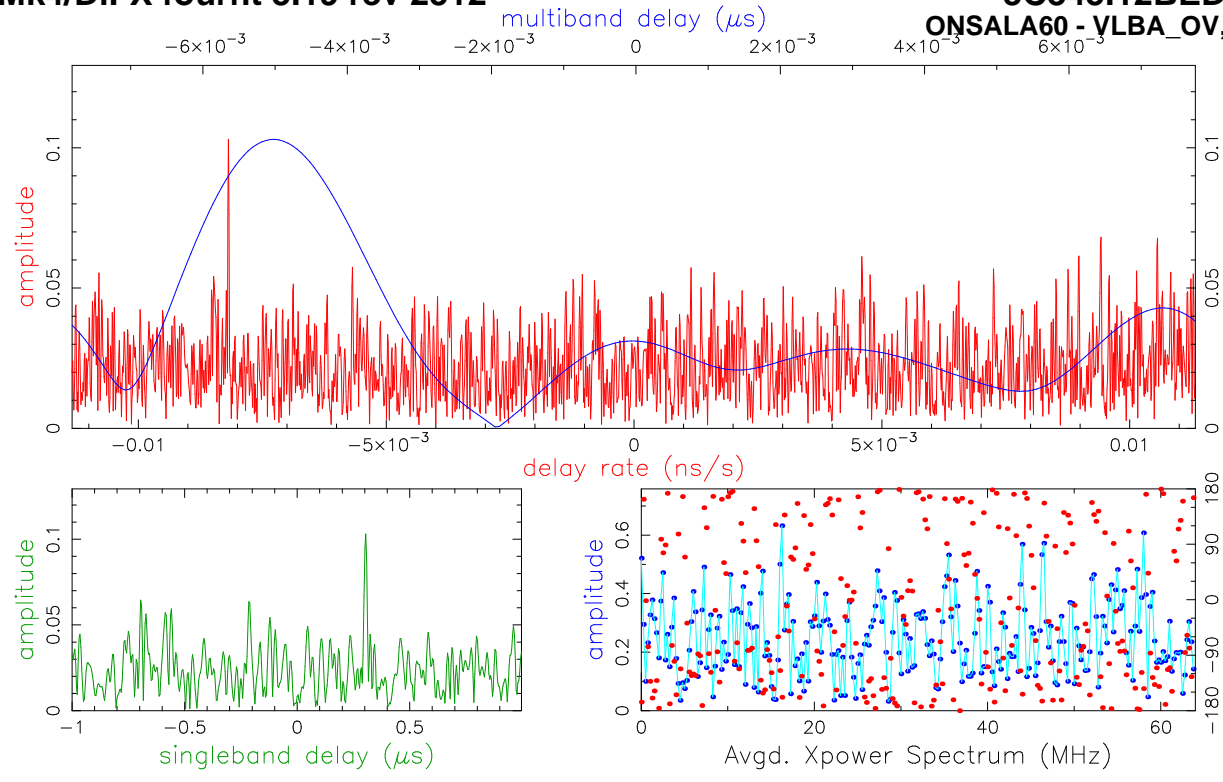


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.0	-36.4	-29.3	-103.6	-13.4	32.8	-52.9	-41.1	Phase	-35.5
	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	131.9	432.2	123.7	220.3	137.4	338.3	475.1	29.9	Sbd box	431.5
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.16252520547E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		-5.38110E-03	+/- 1.7E-04
Sband delay (usec)	6.16252479757E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		6.81711E-01	+/- 1.4E-03
Phase delay (usec)	6.16184308543E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		-1.14544E-06	+/- 5.8E-07
Delay rate (us/s)	-1.43644161900E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-3.71844E-06	+/- 2.5E-09
Total phase (deg)	136.4		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		-35.5	+/- 18.0

ph/seg (deg) 47.4 43.2 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.9 75.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.2 25.5 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.7 44.5 Inc. frq. avg. 0.122 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 10680.502 472.193 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.323.12BED8

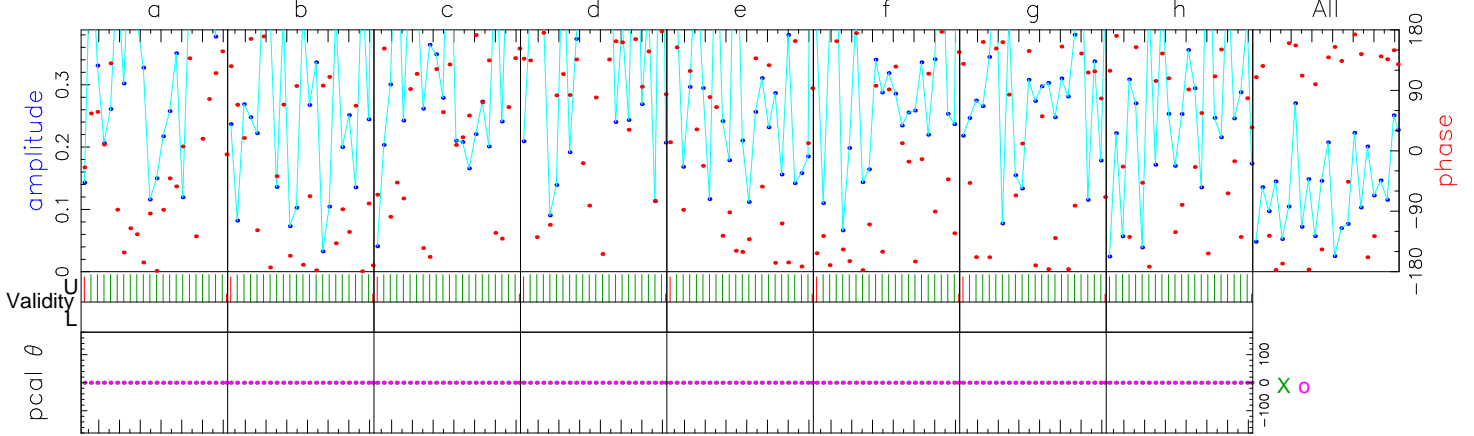
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, Xo
 ONSALA60 - VLBA_OV, fgroup W, pol RL



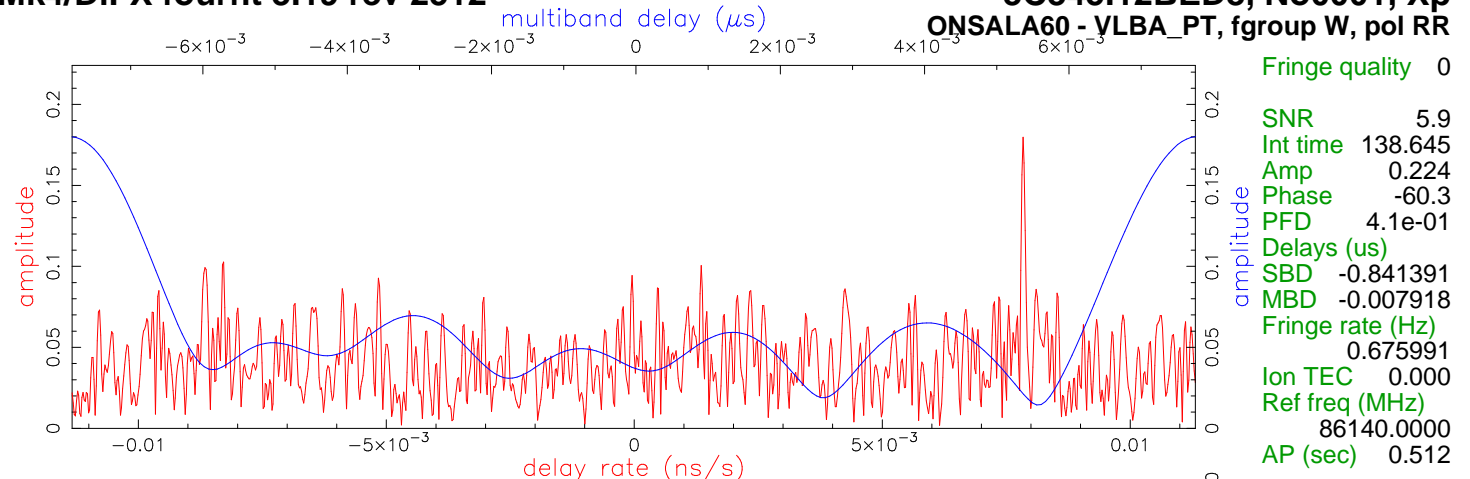
Fringe quality 0
 SNR 5.7
 Int time 409.331
 Amp 0.129
 Phase 163.7
 PFD 9.3e-01
 Delays (us)
 SBD 0.304054
 MBD -0.005029
 Fringe rate (Hz)
 -0.705587
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183008.70
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165702
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

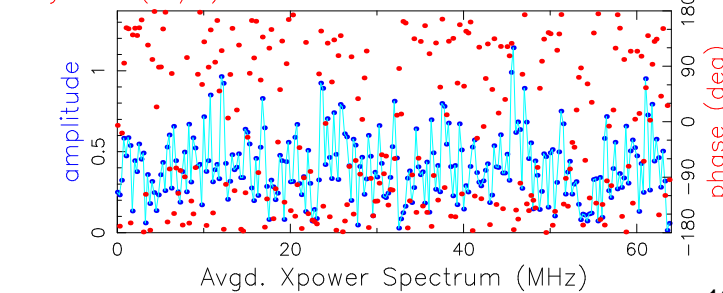
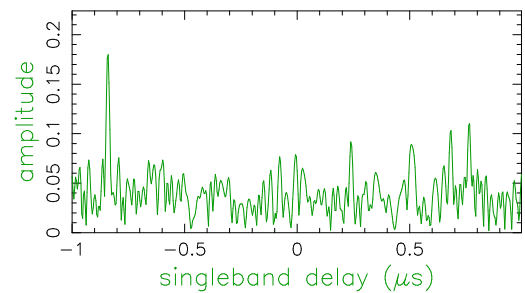


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-163.4	-170.1	129.3	148.6	158.6	-177.2	160.9	173.9	Phase	163.7	
	0.0	0.1	0.1	0.3	0.1	0.2	0.2	0.1	Ampl.	0.1	
	67.1	243.4	98.1	333.7	56.6	285.4	474.3	340.1	Sbd box	334.8	
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
X:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	6.16215055748E+03		Apriori delay (usec)		6.16184308657E+03		Resid mbdelay (usec)		-5.02909E-03	+/- 1.9E-04	
Sband delay (usec)	6.16214714057E+03		Apriori clock (usec)		1.5695475E+01		Resid sbdelay (usec)		3.04054E-01	+/- 1.5E-03	
Phase delay (usec)	6.16184309185E+03		Apriori clockrate (us/s)		5.2701902E-07		Resid phdelay (usec)		5.27777E-06	+/- 6.5E-07	
Delay rate (us/s)	-1.43644609172E+00		Apriori rate (us/s)		-1.43643790055E+00		Resid rate (us/s)		-8.19117E-06	+/- 2.7E-09	
Total phase (deg)	335.5		Apriori accel (us/s/s)		-1.55313353288E-05		Resid phase (deg)		163.7	+/- 20.0	
RMS	48.7	48.0	Amplitude	0.129 +/- 0.023		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	69.4	83.8	Search (2048X32)	0.102		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	24.8	28.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	52.2	49.5	Inc. seg. avg.	0.120		Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048		dr window (ns/s)	-0.011 0.011
amp/frq (%)			Inc. frq. avg.	0.122		nlags: 256		t_cohere infinite		ion window (TEC)	0.00 0.00
X: az 263.7 el 53.3 pa 44.2	o: az 60.7 el 29.9 pa -64.6		u, v (fr/asec)		10680.502 472.193				simultaneous interpolator		

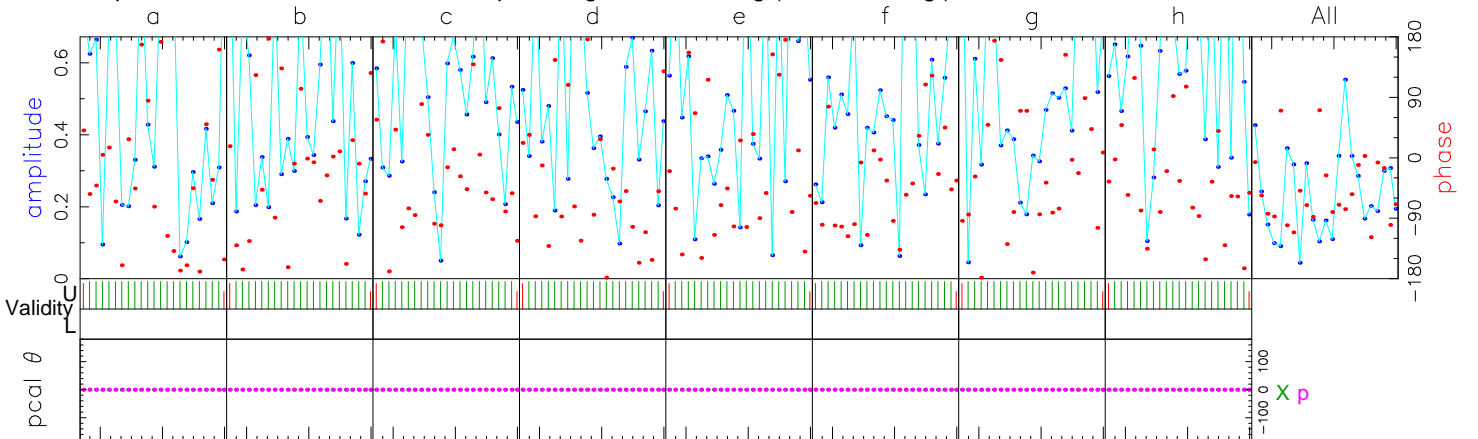
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xo..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xo.W.339.12BED8



Fringe quality 0
 SNR 5.9
 Int time 138.645
 Amp 0.224
 Phase -60.3
 PFD 4.1e-01
 Delays (us)
 SBD -0.841391
 MBD -0.007918
 Fringe rate (Hz) 0.675991
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183440.58
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165649
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

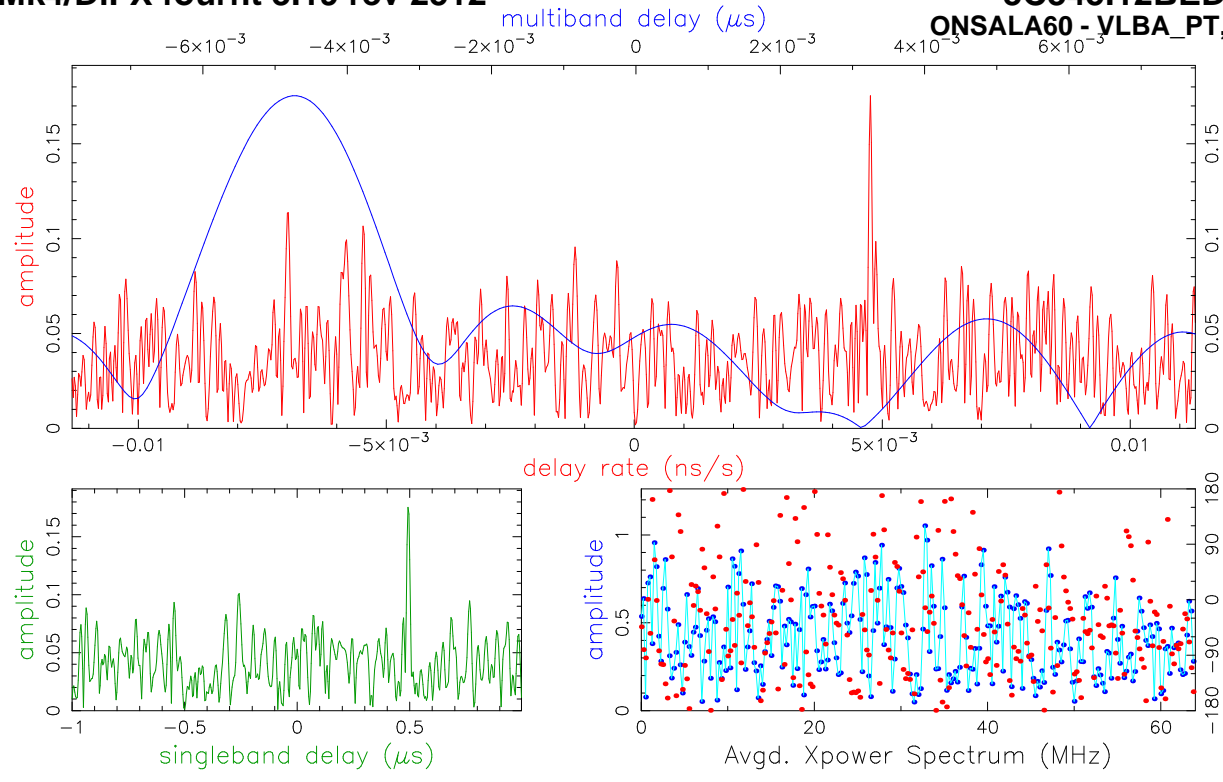


Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.5	-23.9	-25.4	-95.4	-89.9	-47.6	-40.6	-54.3	Phase	-60.3
	0.2	0.2	0.3	0.3	0.3	0.3	0.1	0.4	Ampl.	0.2
	472.2	361.4	163.7	79.8	511.6	510.6	395.3	43.9	Sbd box	41.6
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	4.33405268290E+03		Apriori delay (usec)		4.33488872618E+03		Resid mbdelay (usec)		-7.91828E-03	+/- 1.8E-04
Sband delay (usec)	4.33404733518E+03		Apriori clock (usec)		2.0419350E+01		Resid sbdelay (usec)		-8.41391E-01	+/- 1.5E-03
Phase delay (usec)	4.33488872424E+03		Apriori clockrate (us/s)		3.2411343E-07		Resid phdelay (usec)		-1.94409E-06	+/- 6.3E-07
Delay rate (us/s)	-1.42200907436E+00		Apriori rate (us/s)		-1.42201692195E+00		Resid rate (us/s)		7.84759E-06	+/- 7.8E-09
Total phase (deg)	254.2		Apriori accel (us/s/s)		-2.80443037835E-06		Resid phase (deg)		-60.3	+/- 19.5

ph/seg (deg) 52.2 46.8 Search (1024X32) 0.175 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.4 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.4 27.6 Inc. seg. avg. 0.219 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.2 48.1 Inc. frq. avg. 0.224 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xp.W.277.12BED8

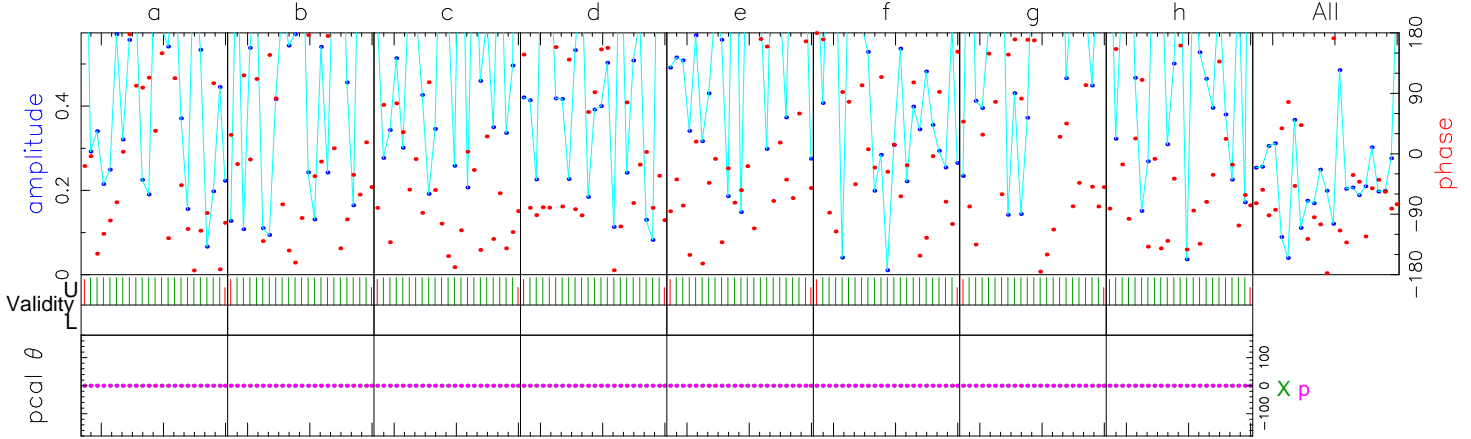


Fringe quality 0

SNR 5.7
Int time 138.645
Amp 0.191
Phase -80.9
PFD 7.3e-01
Delays (us)
SBD 0.493553
MBD -0.004702
Fringe rate (Hz) 0.410588
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165651
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

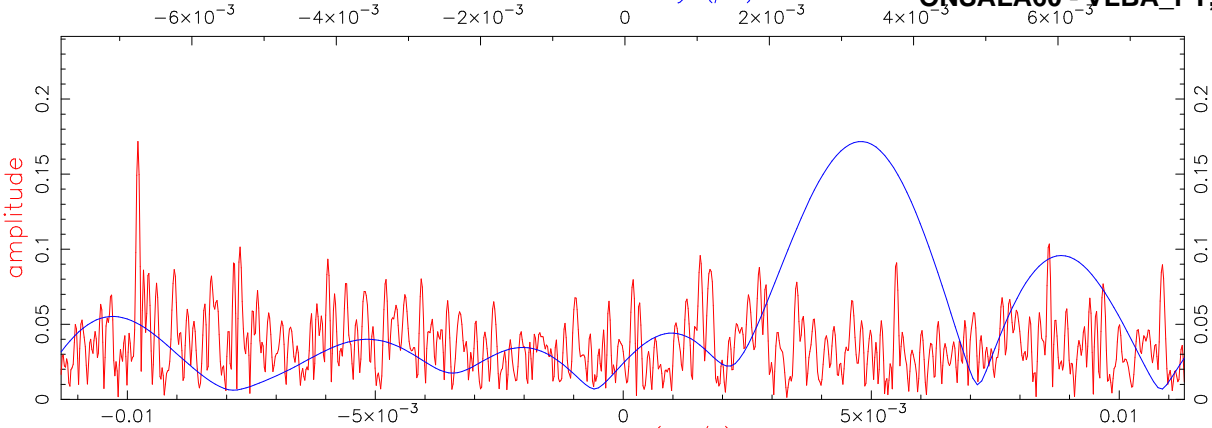
Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-158.2	-61.7	-80.7	-86.6	-60.5	-96.6	-95.0	-84.1	Phase	-80.9
	0.1	0.2	0.3	0.2	0.3	0.1	0.2	0.3	Ampl.	0.2
	279.9	489.8	56.8	385.0	466.2	433.1	195.7	287.1	Sbd box	383.3
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		4.33538402370E+03			4.33488872618E+03				Resid mbdelay (usec)	-4.70249E-03 +/- 1.9E-04
Sband delay (usec)		4.33538227893E+03			2.0419350E+01				Resid sbdelay (usec)	4.93553E-01 +/- 1.5E-03
Phase delay (usec)		4.33488872358E+03			3.2411343E-07				Resid phdelay (usec)	-2.60861E-06 +/- 6.5E-07
Delay rate (us/s)		-1.42201215543E+00			Apriori rate (us/s)				Resid rate (us/s)	4.76652E-06 +/- 8.0E-09
Total phase (deg)			233.6		Apriori accel (us/s/s)				Resid phase (deg)	-80.9 +/- 20.0

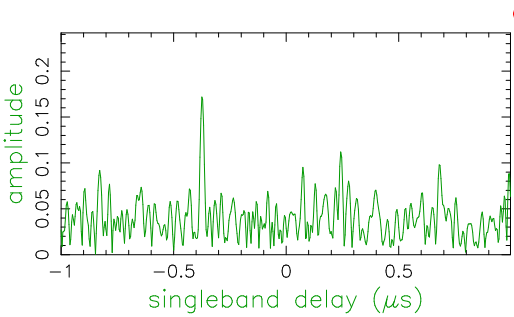
ph/seg (deg) 64.1 48.0 Search (1024X32) 0.173 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.7 83.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.7 28.3 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.6 49.4 Inc. frq. avg. 0.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xp.W.289.12BED8

multiband delay (μs)



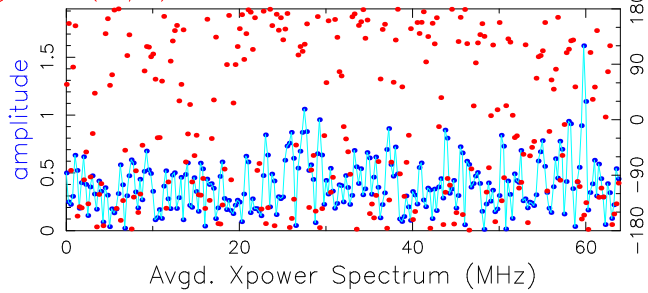
Fringe quality 0

SNR 5.6
Int time 138.645
Amp 0.242
Phase 162.9
PFD 9.3e-01
Delays (us)
SBD -0.373464
MBD 0.003278
Fringe rate (Hz)
-0.844950
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



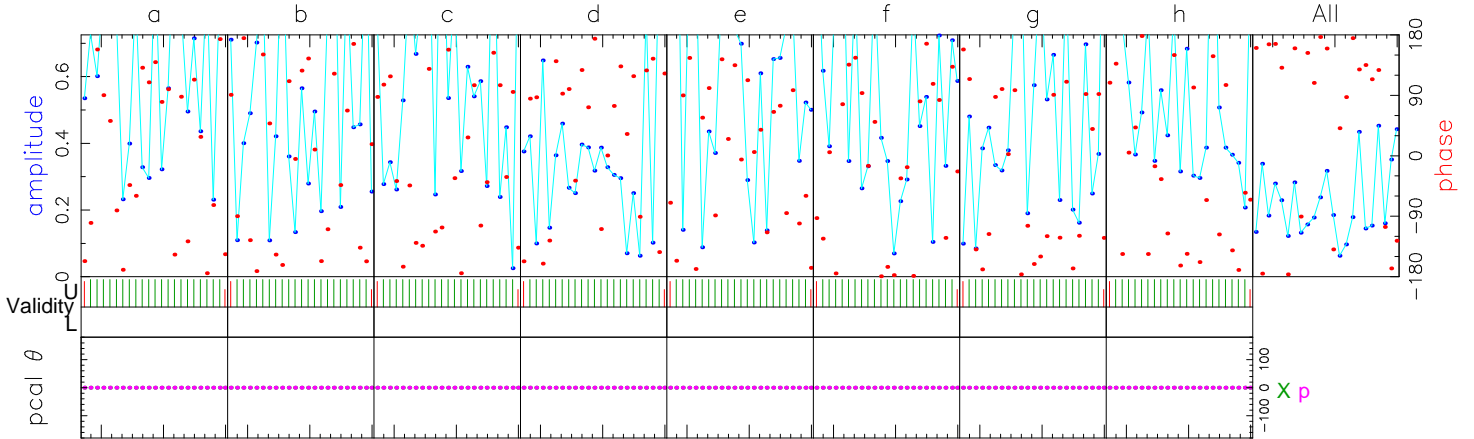
singleband delay (μs)

delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183440.58
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165653
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



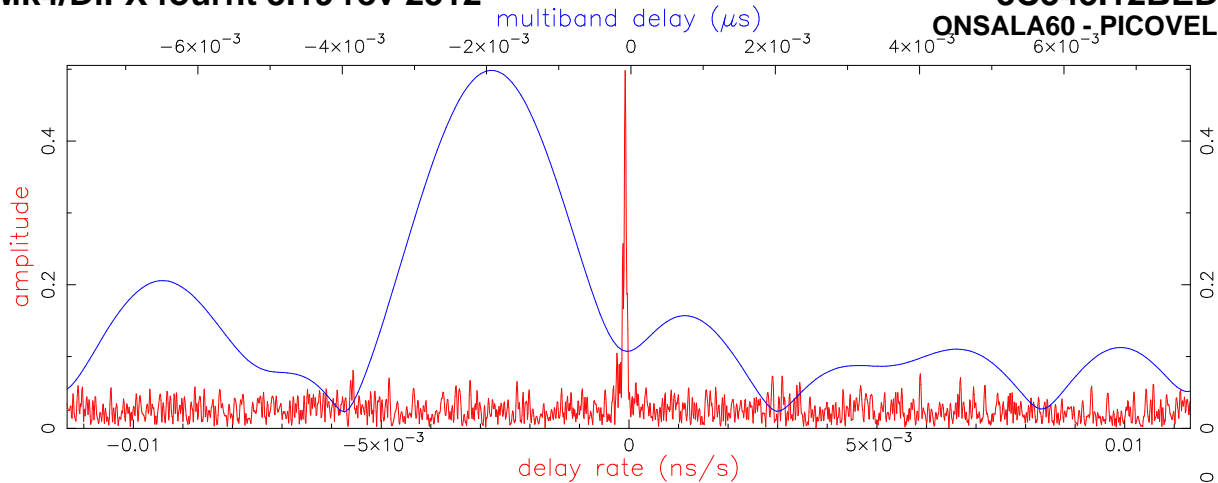
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	160.5	166.2	-151.9	142.2	140.6	137.8	158.4	-176.5	Phase	162.9
	0.3	0.4	0.2	0.2	0.1	0.2	0.3	0.3	Ampl.	0.2
	275.6	510.4	430.7	355.6	36.1	382.9	162.7	156.6	Sbd box	161.4
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.33451700420E+03	Apriori delay (usec)	4.33488872618E+03	Resid mbdelay (usec)	3.27802E-03	+/-	1.9E-04
Sband delay (usec)	4.33451526268E+03	Apriori clock (usec)	2.0419350E+01	Resid sbdelay (usec)	-3.73464E-01	+/-	1.5E-03
Phase delay (usec)	4.33488873144E+03	Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	5.25402E-06	+/-	6.6E-07
Delay rate (us/s)	-1.42202673098E+00	Apriori rate (us/s)	-1.42201692195E+00	Resid rate (us/s)	-9.80903E-06	+/-	8.2E-09
Total phase (deg)	117.4	Apriori accel (us/s/s)	-2.80443037835E-06	Resid phase (deg)	162.9	+/-	20.5

ph/seg (deg)	51.0	Theor.	49.1	Search (1024X32)	0.169	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.2		85.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	26.0		28.9	Inc. seg. avg.	0.229	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.7		50.5	Inc. frq. avg.	0.226	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

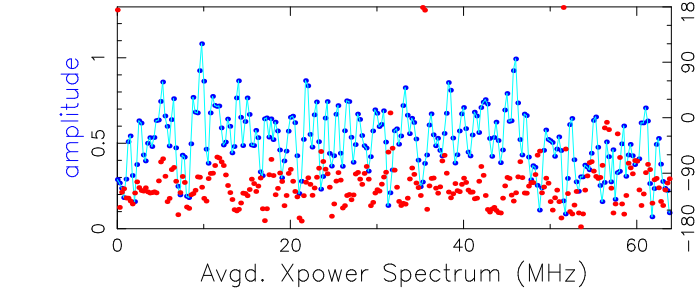
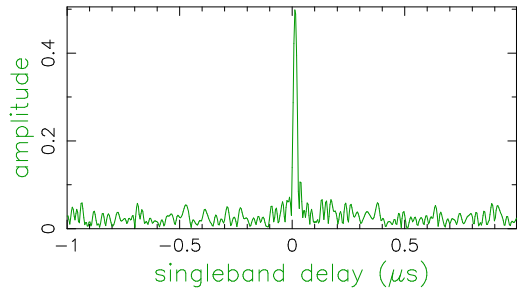
X: az 263.7 el 53.3 pa 44.2 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 10595.510 1587.388 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/Xp..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/Xp.W.299.12BED8



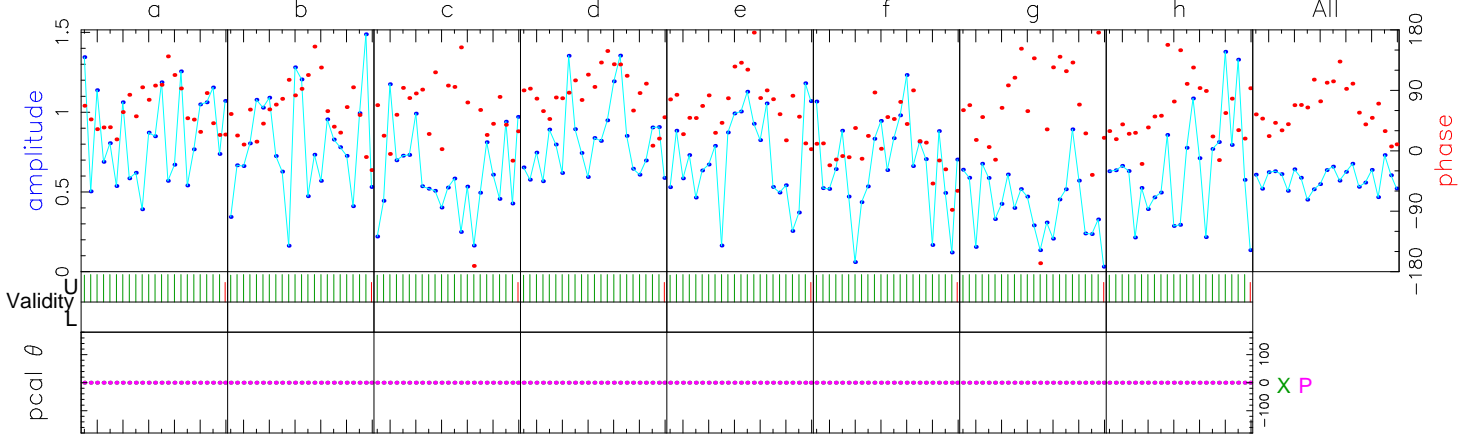
Fringe quality 7

SNR 25.4
Int time 336.556
Amp 0.505
Phase 61.2
PFD 0.0e+00
Delays (us)
SBD 0.013285
MBD -0.001885
Fringe rate (Hz)
-0.007127
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183122.43
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165653
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



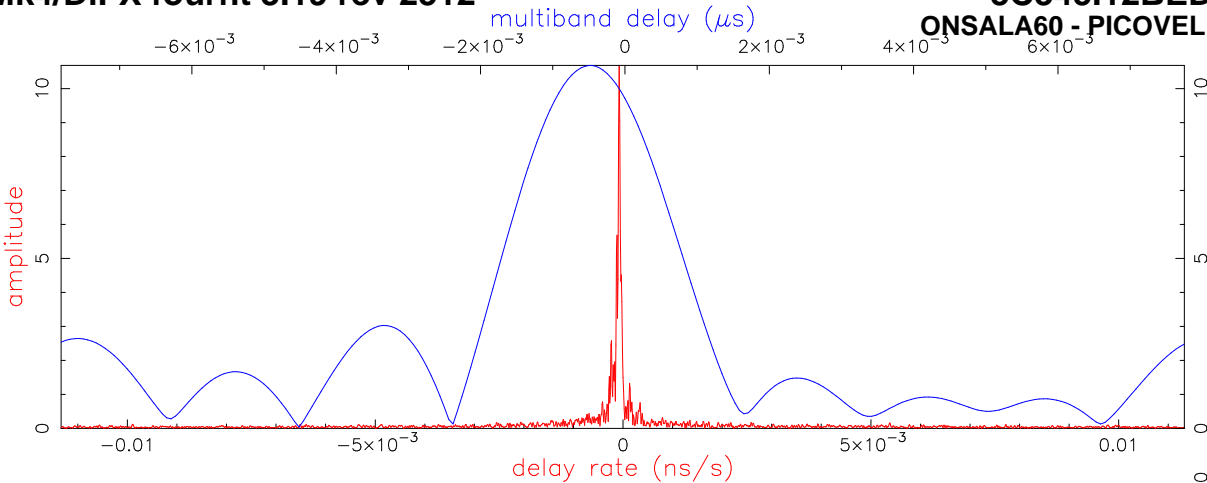
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.76297091399E+03	Apriori delay (usec)	-1.76298465372E+03	Resid mbdelay (usec)	-1.88527E-03	+/-	4.3E-05
Sband delay (usec)	-1.76297136872E+03	Apriori clock (usec)	3.2415222E+01	Resid sbdelay (usec)	1.32850E-02	+/-	3.4E-04
Phase delay (usec)	-1.76298465175E+03	Apriori clockrate (us/s)	8.8100003E-07	Resid phdelay (usec)	1.97433E-06	+/-	1.5E-07
Delay rate (us/s)	5.90196425273E-02	Apriori rate (us/s)	5.90197252620E-02	Resid rate (us/s)	-8.27347E-08	+/-	7.5E-10
Total phase (deg)	35.5	Apriori accel (us/s/s)	2.68521651531E-05	Resid phase (deg)	61.2	+/-	4.5

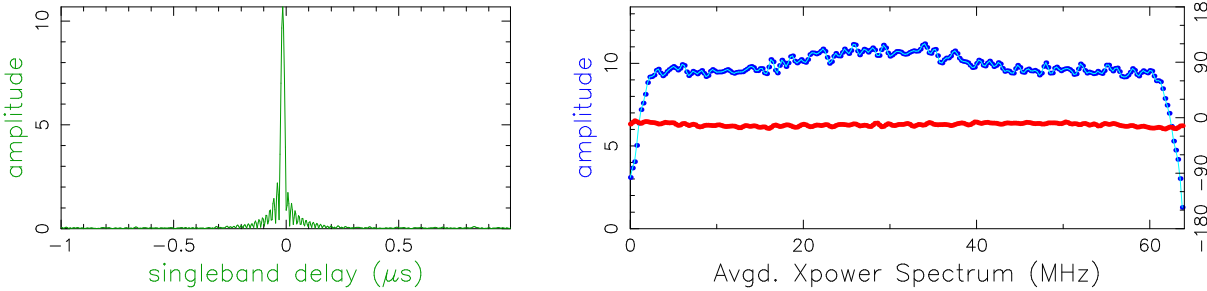
ph/seg (deg)	32.2	Theor.	10.8	Amplitude	0.505 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	21.0		18.9	Search (2048X32)	0.479	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	24.2		6.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.1		11.2	Inc. seg. avg.	0.577	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.529	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 263.7 el 53.3 pa 44.2 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator

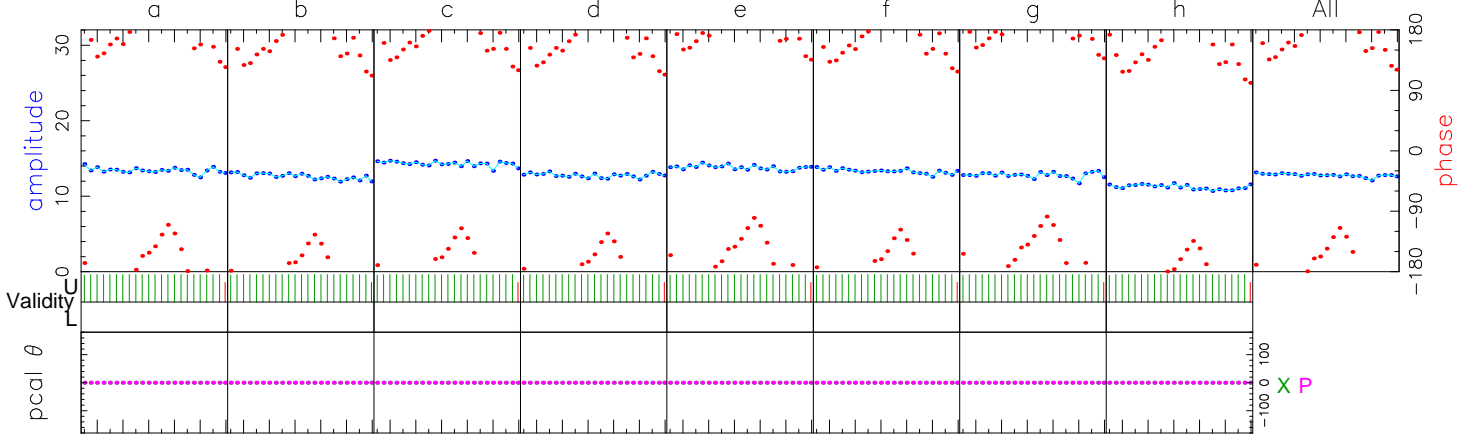
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XP.W.301.12BED8



Fringe quality 6
SNR 535.9
Int time 336.556
Amp 10.682
Phase 175.2
PFD 0.0e+00
Delays (us)
SBD -0.015529
MBD -0.000479
Fringe rate (Hz)
-0.007061
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183122.43
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165658
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"



Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

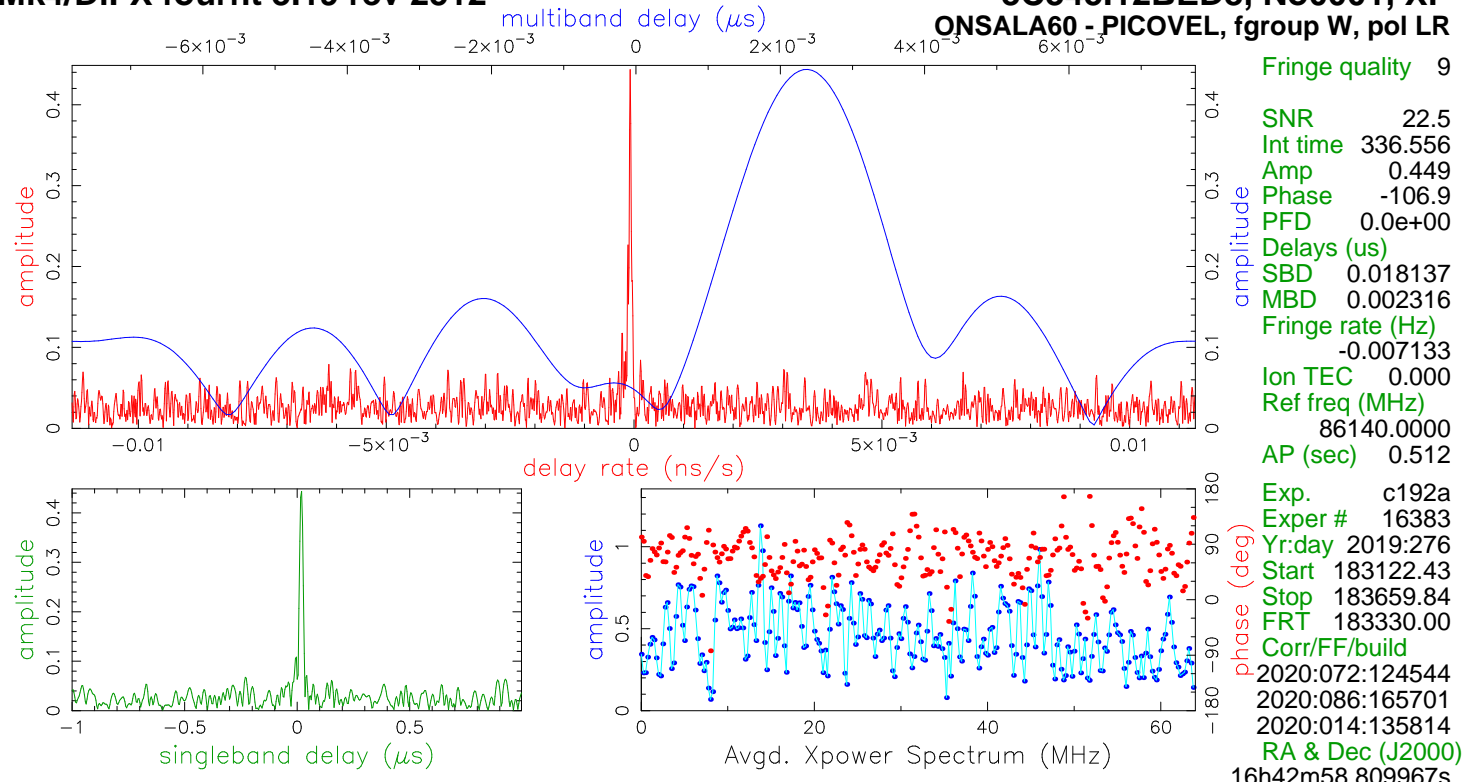


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10.9
P	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	253.0
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	-1.76300075784E+03	Apriori delay (usec)	-1.76298465372E+03	Resid mbdelay (usec)	-4.79116E-04	+/-	2.0E-06
Sband delay (usec)	-1.76300018222E+03	Apriori clock (usec)	3.2415222E+01	Resid sbdelay (usec)	-1.55285E-02	+/-	1.6E-05
Phase delay (usec)	-1.76298464807E+03	Apriori clockrate (us/s)	8.8100003E-07	Resid phdelay (usec)	5.64844E-06	+/-	6.9E-09
Delay rate (us/s)	5.90196432911E-02	Apriori rate (us/s)	5.90197252620E-02	Resid rate (us/s)	-8.19709E-08	+/-	3.5E-11
Total phase (deg)	149.4	Apriori accel (us/s/s)	2.68521651531E-05	Resid phase (deg)	175.2	+/-	0.2

ph/seg (deg)	34.0	RMS	10.682 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	19.9	Theor.	10.373	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	13.1	Search (2048X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	7.3	Interp.	12.794	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	10.885	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.		nlags:	256	t_cohere	infinite	

X: az 263.7 el 53.3 pa 44.2 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XP.W.320.12BED8



Fringe quality 9

SNR 22.5

Int time 336.556

Amp 0.449

Phase -106.9

PFD 0.0e+00

Delays (us)

SBD 0.018137

MBD 0.002316

Fringe rate (Hz)

-0.007133

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183122.43

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165701

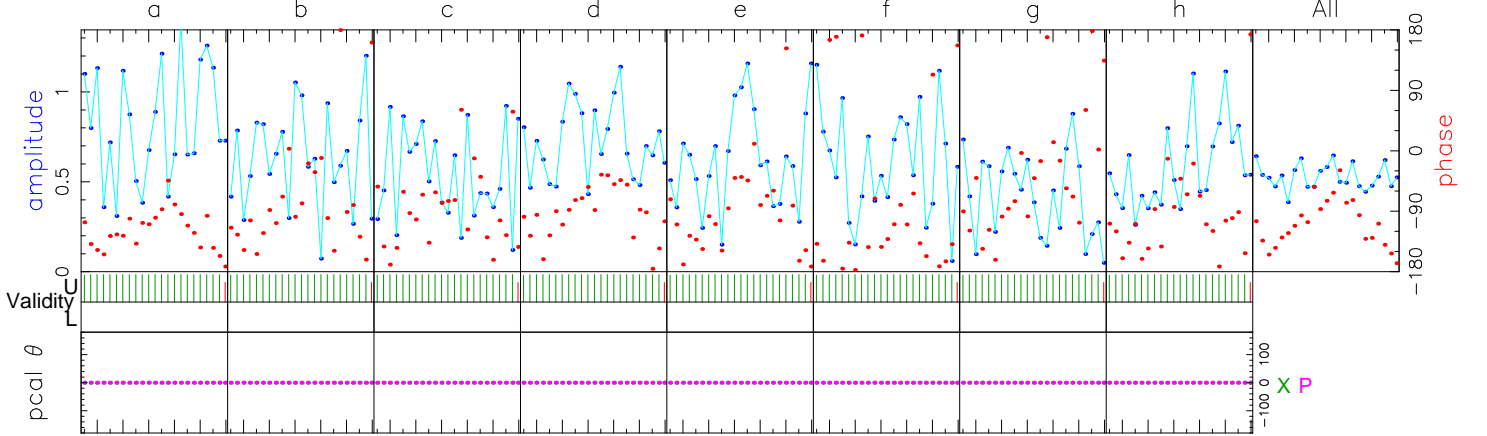
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.1	-109.2	-100.7	-87.3	-93.8	-147.6	-81.3	-103.8	Phase	-106.9
	0.7	0.5	0.4	0.6	0.4	0.5	0.3	0.4	Ampl.	0.5
	262.3	260.7	261.3	261.7	261.2	260.7	263.0	261.1	Sbd box	261.6
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.76296671246E+03		Apriori delay (usec)		-1.76298465372E+03		Resid mbdelay (usec)		2.31626E-03	+/- 4.8E-05
Sband delay (usec)	-1.76296651622E+03		Apriori clock (usec)		3.2415222E+01		Resid sbdelay (usec)		1.81375E-02	+/- 3.8E-04
Phase delay (usec)	-1.76298465717E+03		Apriori clockrate (us/s)		8.8100003E-07		Resid phdelay (usec)		-3.44728E-06	+/- 1.6E-07
Delay rate (us/s)	5.90196424557E-02		Apriori rate (us/s)		5.90197252620E-02		Resid rate (us/s)		-8.28063E-08	+/- 8.4E-10
Total phase (deg)			Apriori accel (us/s/s)		2.68521651531E-05		Resid phase (deg)		-106.9	+/- 5.1

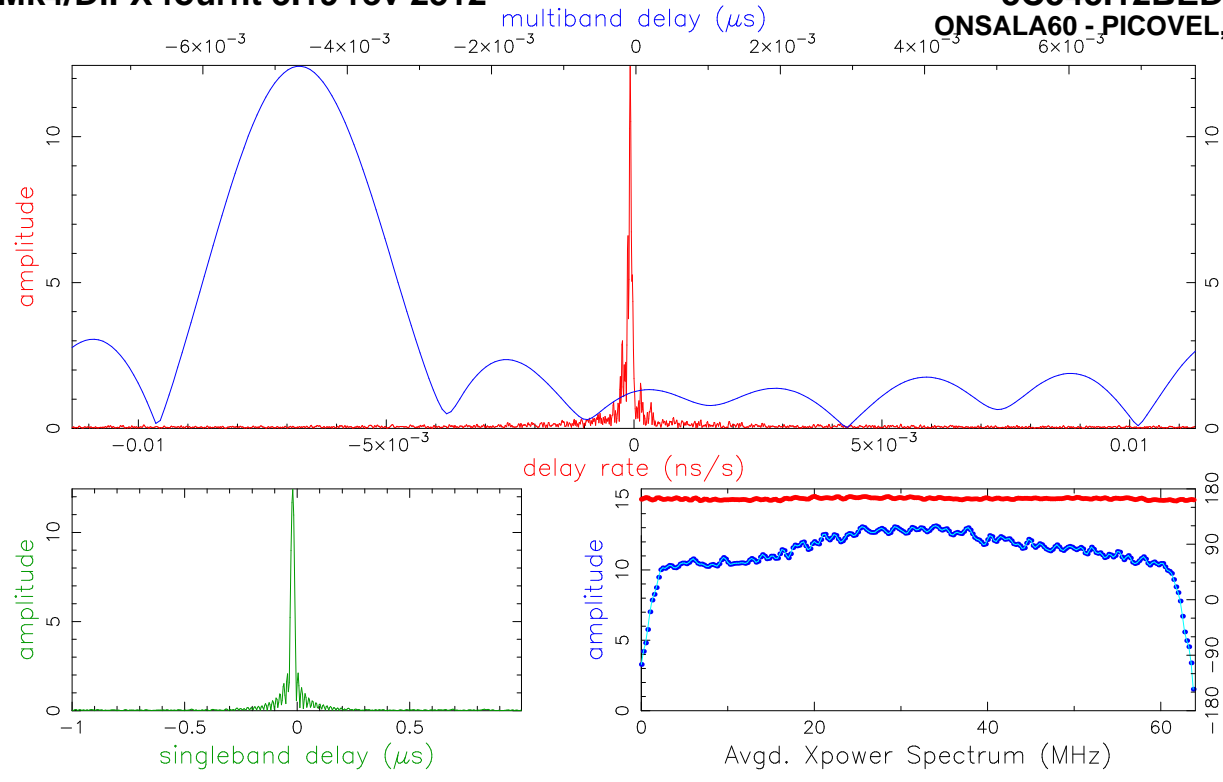
	RMS	Theor.	Amplitude	0.449 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	34.2	12.2	Search (2048X32)	0.426	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	23.7	21.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	22.5	7.2	Inc. seg. avg.	0.518	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	29.3	12.6	Inc. frq. avg.	0.465	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -389.926 3393.376 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XP.W.337.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, XP
ONSALA60 - PICOVEL, fgroup W, pol RL

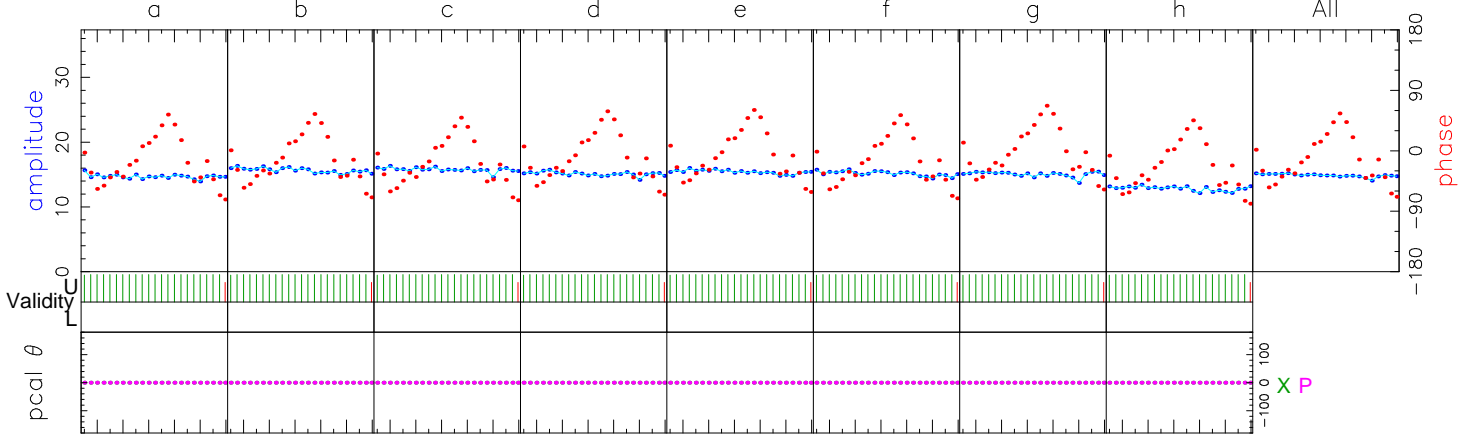


Fringe quality 7

SNR 624.4
Int time 336.556
Amp 12.446
Phase -14.3
PFD 0.0e+00
Delays (us)
SBD -0.020172
MBD -0.004685
Fringe rate (Hz)
-0.007061
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183122.43
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165705
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-17.6	-14.4	-20.1	-11.8	-8.2	-16.8	-2.9	-24.1	Phase	-14.3
	12.3	13.1	13.2	12.6	12.9	12.6	12.5	10.7	Ampl.	12.5
	251.8	251.8	251.8	251.7	252.0	251.8	251.8	251.2	Sbd box	251.8
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	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	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.76300496327E+03		Apriori delay (usec)		-1.76298465372E+03		Resid mbdelay (usec)		-4.68455E-03	+/- 1.7E-06
Sband delay (usec)	-1.76300482522E+03		Apriori clock (usec)		3.2415222E+01		Resid sbdelay (usec)		-2.01715E-02	+/- 1.4E-05
Phase delay (usec)	-1.76298465418E+03		Apriori clockrate (us/s)		8.8100003E-07		Resid phdelay (usec)		-4.62427E-07	+/- 5.9E-09
Delay rate (us/s)	5.90196432904E-02		Apriori rate (us/s)		5.90197252620E-02		Resid rate (us/s)		-8.19716E-08	+/- 3.0E-11
Total phase (deg)			Apriori accel (us/s/s)		2.68521651531E-05		Resid phase (deg)		-14.3	+/- 0.2

ph/seg (deg) 34.1 0.4
amp/seg (%) 19.6 0.8
ph/frq (deg) 7.3 0.3
amp/frq (%) 6.0 0.5

RMS Theor. Amplitude 12.446 +/- 0.020
Search (2048X32) 11.803
Interp. 0.000
Inc. seg. avg. 14.873
Inc. frq. avg. 12.489

U/L 659/0
X 1000
P 1000
X:P 0:0
X:P 0:0
X 1000
P 1000
X W00UR
P W00UL

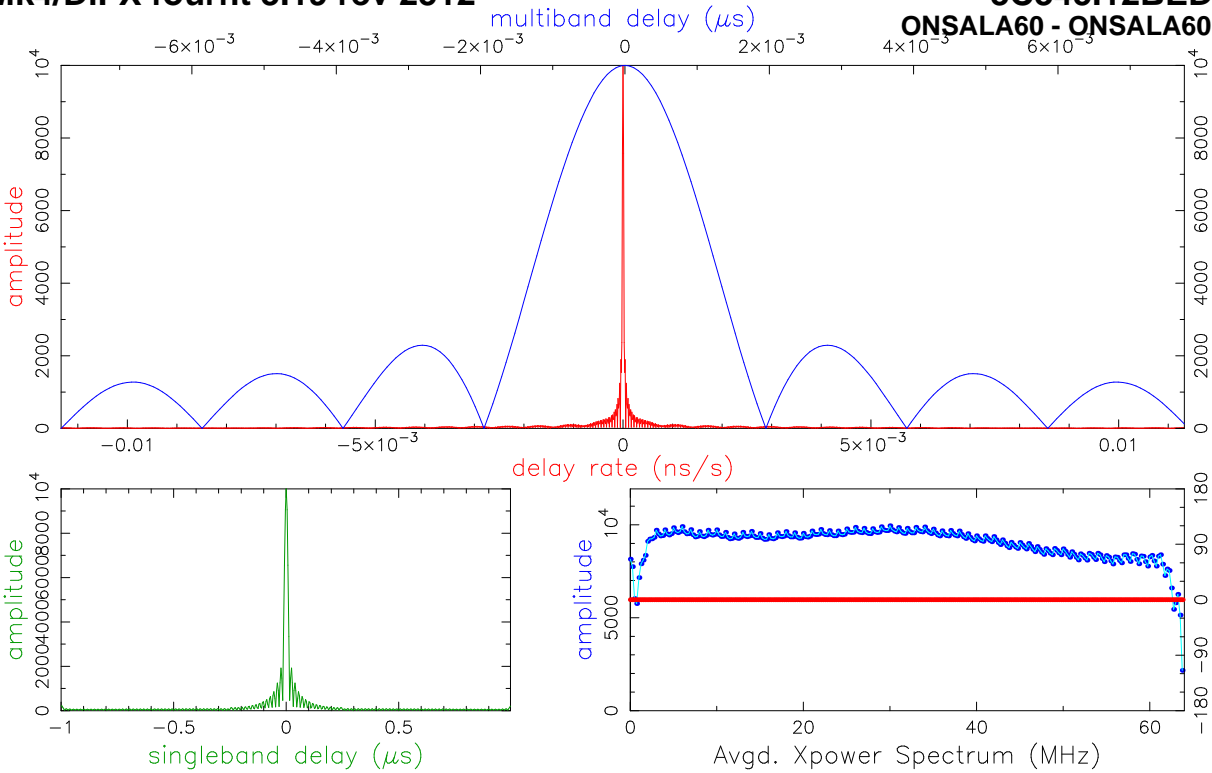
PCal mode: MANUAL, MANUAL
PCal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2
Sample rate(MISamp/s): 128
Data rate(Mb/s): 2048
nlags: 256
t_cohere infinite

PC period (AP's) 5, 5
sb window (us) -1.000 1.000
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2
P: az 286.6 el 62.3 pa 84.7
u,v (fr/asec) -389.926 3393.376

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XP..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XP.W.347.12BED8

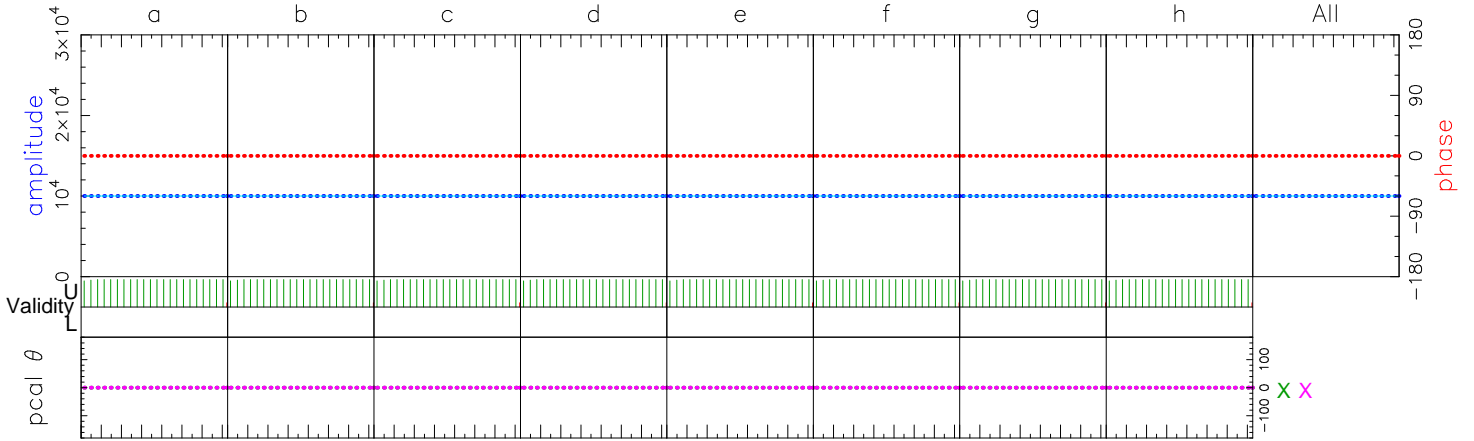


Fringe quality 9

SNR 559309.2
 Int time 418.320
 Amp 10000.000
 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. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165656
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

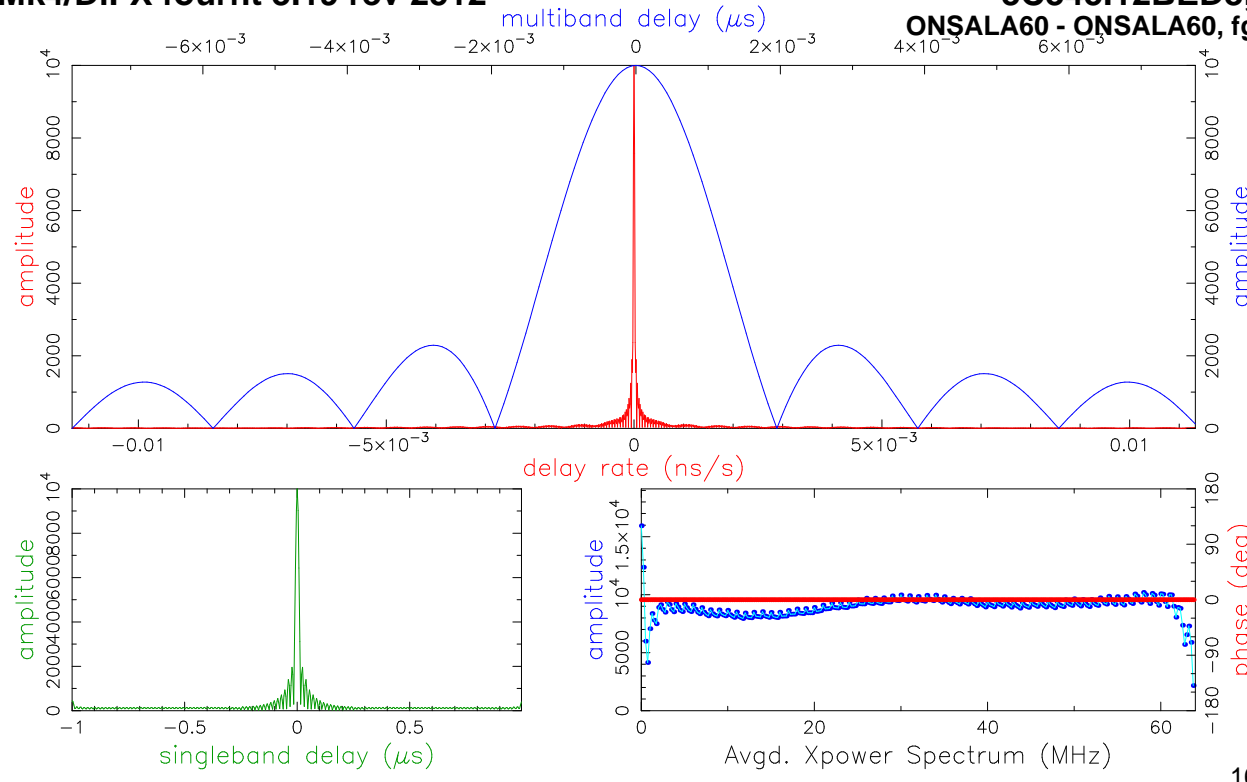
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	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
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-9.21446698696E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-9.21447E-20	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.7E-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 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 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) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XX.W.312.12BED8 simultaneous interpolator

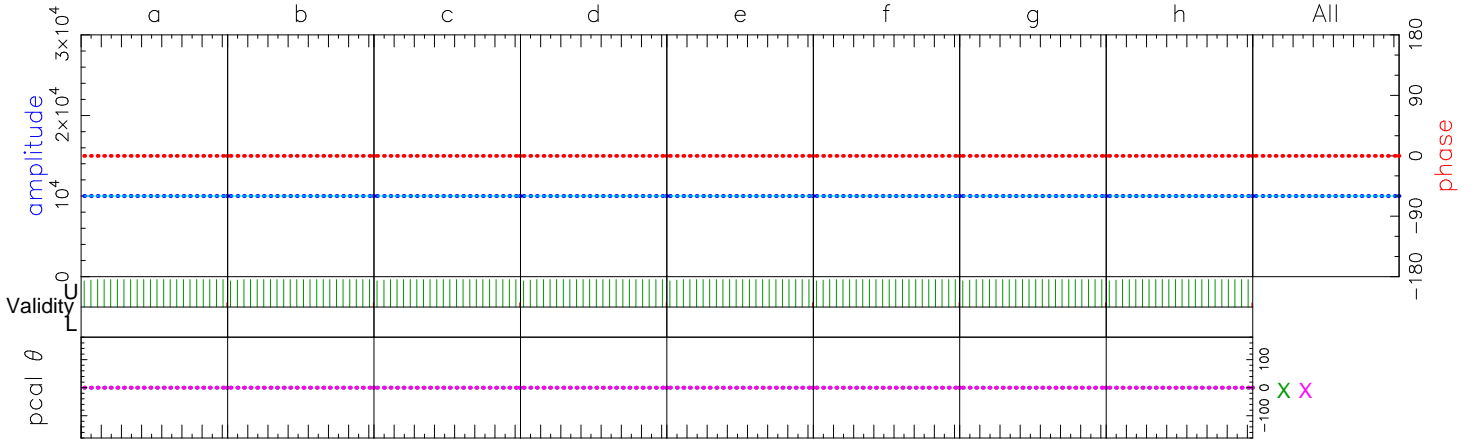


Fringe quality 9

SNR 559309.2
 Int time 418.320
 Amp 10000.000
 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. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165700
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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

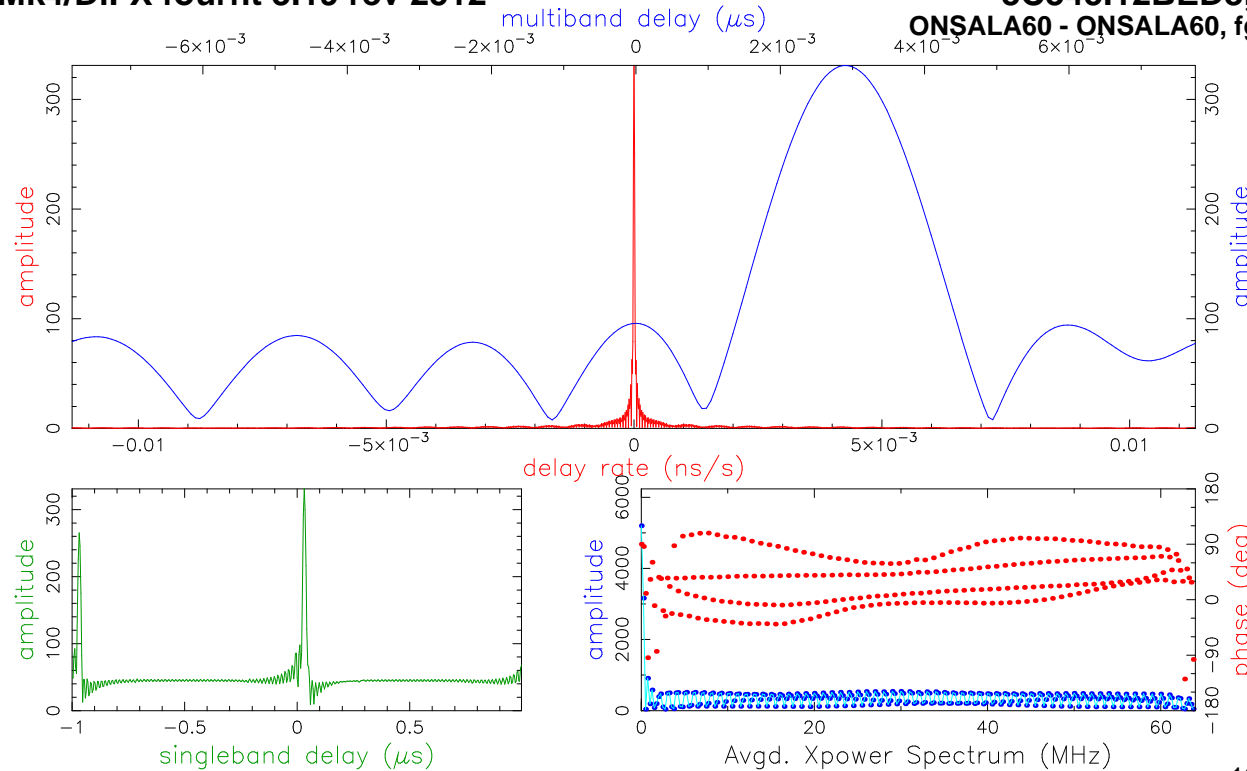


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-0.0	-0.0	0.0	0.0	-0.0	-0.0	-0.0	-0.0	Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	-6.51842203822E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-6.51842E-20	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.7E-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 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 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) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

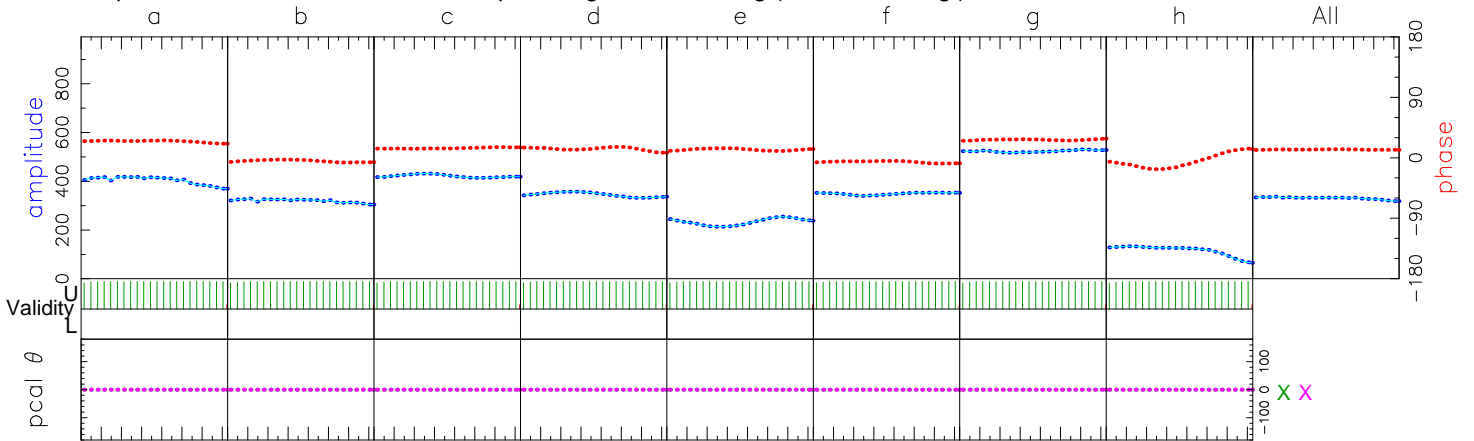


Fringe quality 7

SNR 18512.4
 Int time 418.320
 Amp 330.987
 Phase 12.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.031447
 MBD 0.002915
 Fringe rate (Hz)
 -0.000011
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

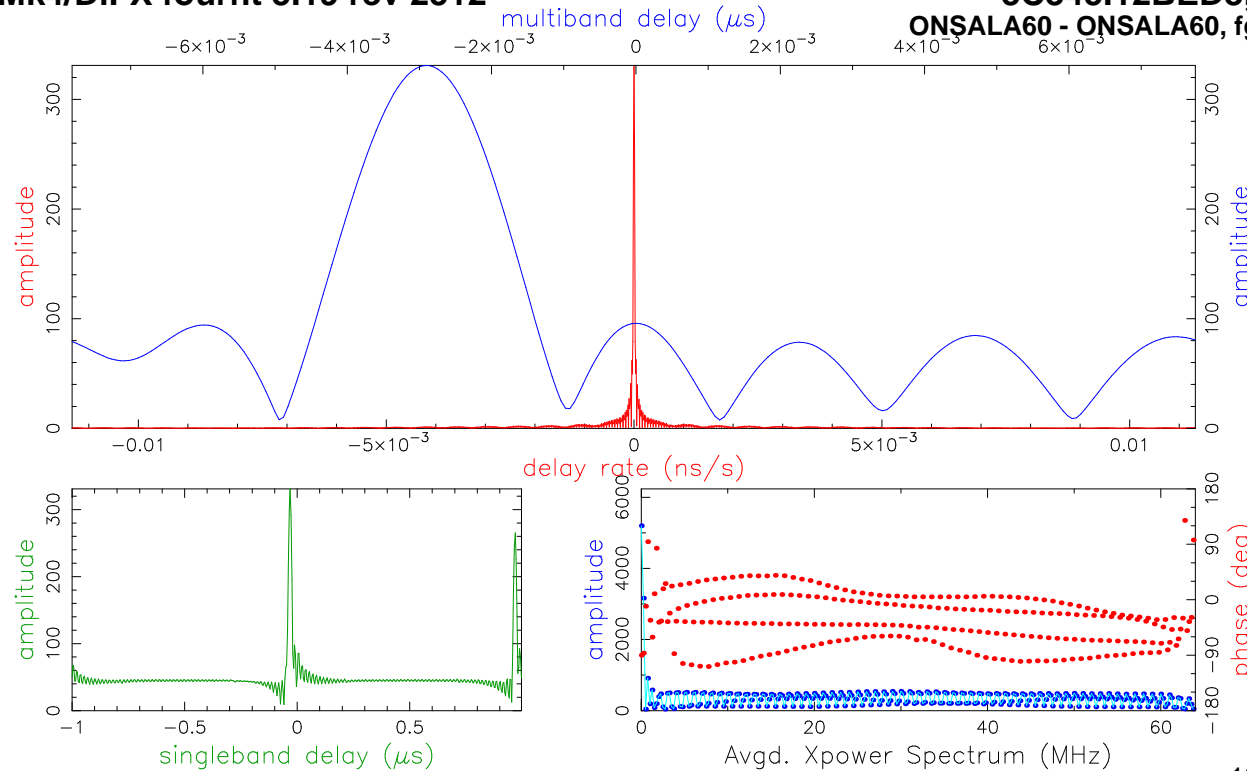
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165703
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	24.5	-4.8	14.4	13.2	12.1	-6.2	26.7	-6.6	Phase	12.2
	404.0	319.9	421.5	345.1	233.6	349.0	523.5	114.9	Ampl.	338.9
	265.2	265.6	265.8	265.4	265.8	265.7	8.9	11.8	Sbd box	265.1
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.41653750000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.91537E-03	+/- 5.9E-08
Sband delay (usec)	3.14470000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.14470E-02	+/- 4.7E-07
Phase delay (usec)	3.92581383908E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.92581E-07	+/- 2.0E-10
Delay rate (us/s)	-1.25414698666E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.25415E-10	+/- 8.2E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		12.2	+/- 0.0

ph/seg (deg) 0.3 0.0 Amplitude 330.987 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.4 0.0 Search (2048X32) 330.813 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.0 0.0 Inc. seg. avg. 330.901 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

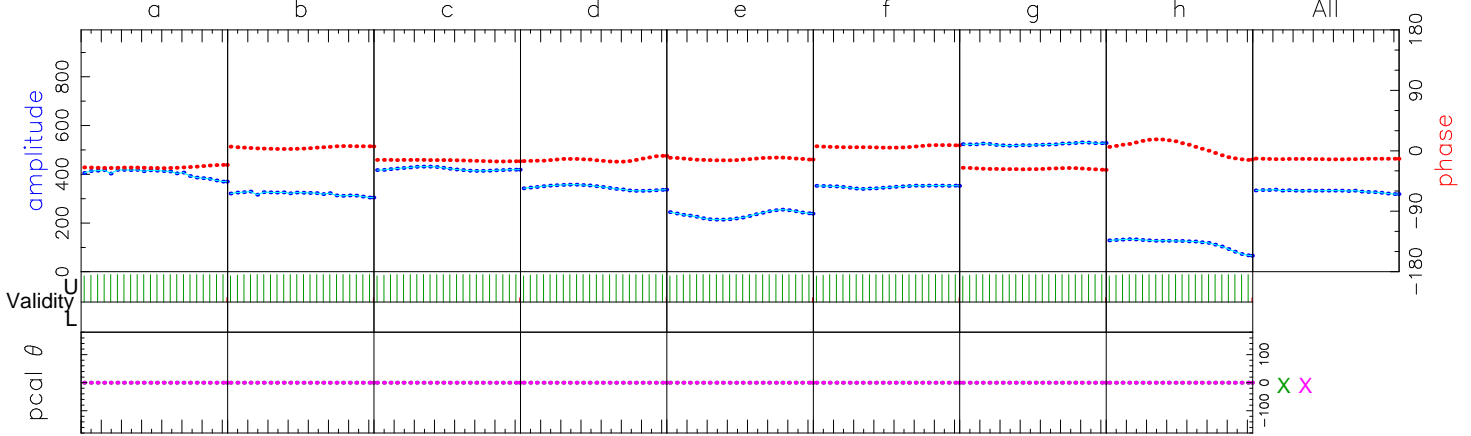


Fringe quality 7

SNR 18512.4
 Int time 418.320
 Amp 330.987
 Phase -12.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.031447
 MBD -0.002915
 Fringe rate (Hz)
 0.000011
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

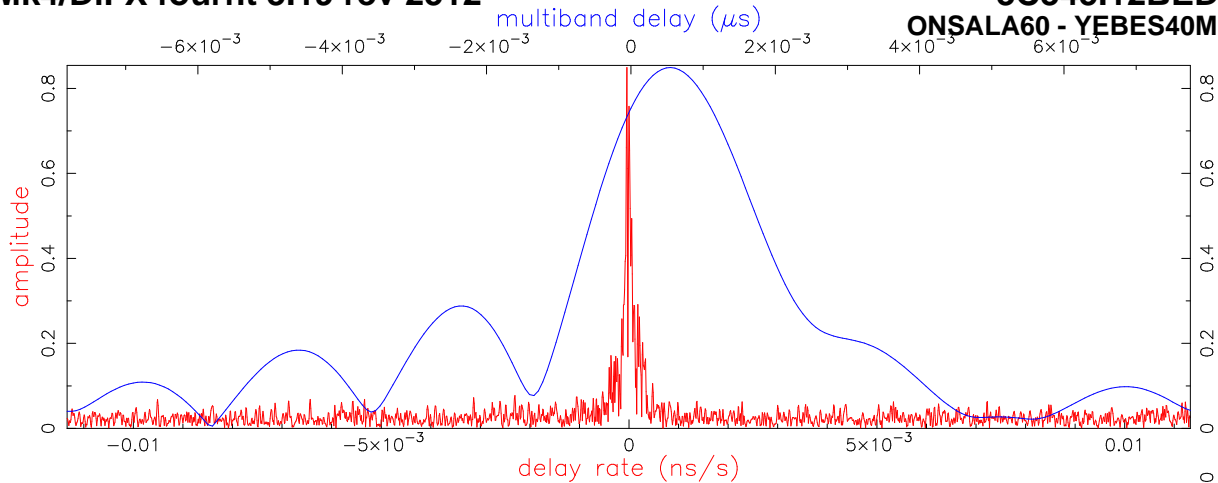
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165706
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



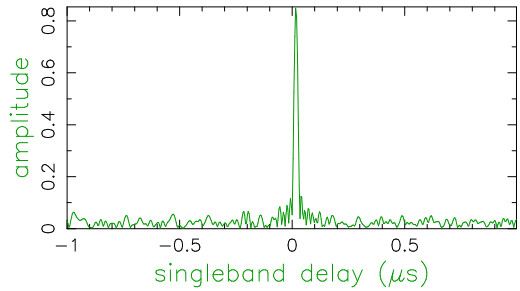
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.5	4.8	-14.4	-13.2	-12.1	6.2	-26.7	6.6	Phase	-12.2
	404.0	319.9	421.5	345.1	233.6	349.0	523.5	114.9	Ampl.	338.9
	248.8	248.4	248.2	248.6	248.2	248.3	505.1	502.2	Sbd box	248.9
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.41653750000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.91537E-03	+/- 5.9E-08
Sband delay (usec)	-3.14470000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.14470E-02	+/- 4.7E-07
Phase delay (usec)	-3.92581383896E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.92581E-07	+/- 2.0E-10
Delay rate (us/s)	1.25414698666E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.25415E-10	+/- 8.2E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-12.2	+/- 0.0

ph/seg (deg) 0.3 0.0 Search (2048X32) 330.813 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.4 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.0 0.0 Inc. seg. avg. 330.901 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.0 0.0 Inc. frq. avg. 338.926 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00 simultaneous interpolator

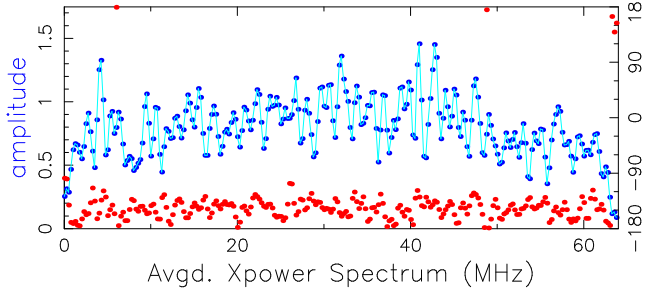


Fringe quality 5

SNR 46.7
Int time 400.155
Amp 0.854
Phase 37.4
PFD 0.0e+00
Delays (us)
SBD 0.016662
MBD 0.000567
Fringe rate (Hz)
-0.003742
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

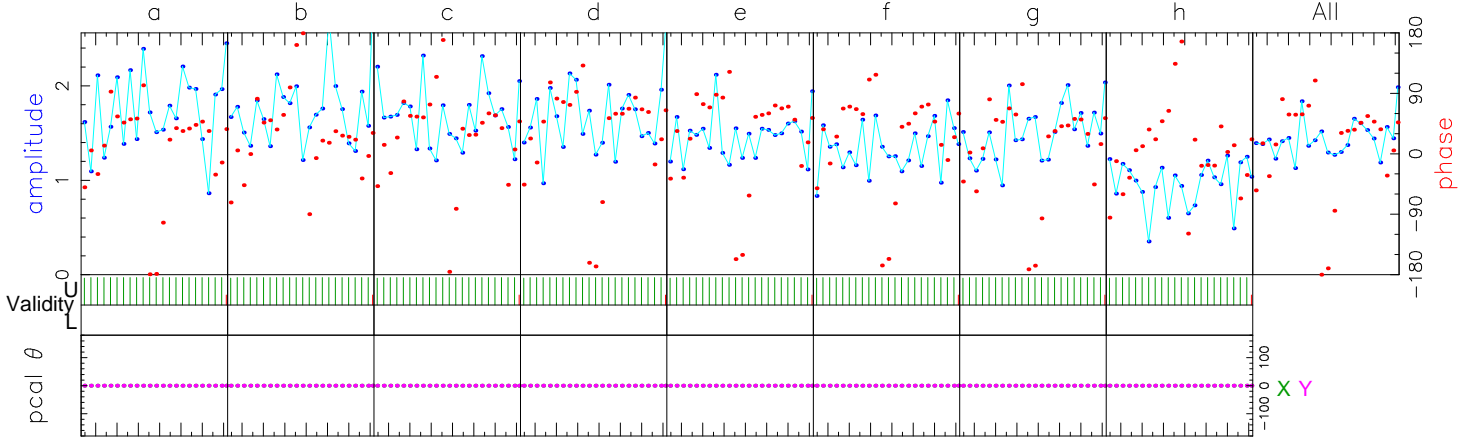


delay rate (ns/s)



Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183018.95
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165657
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec

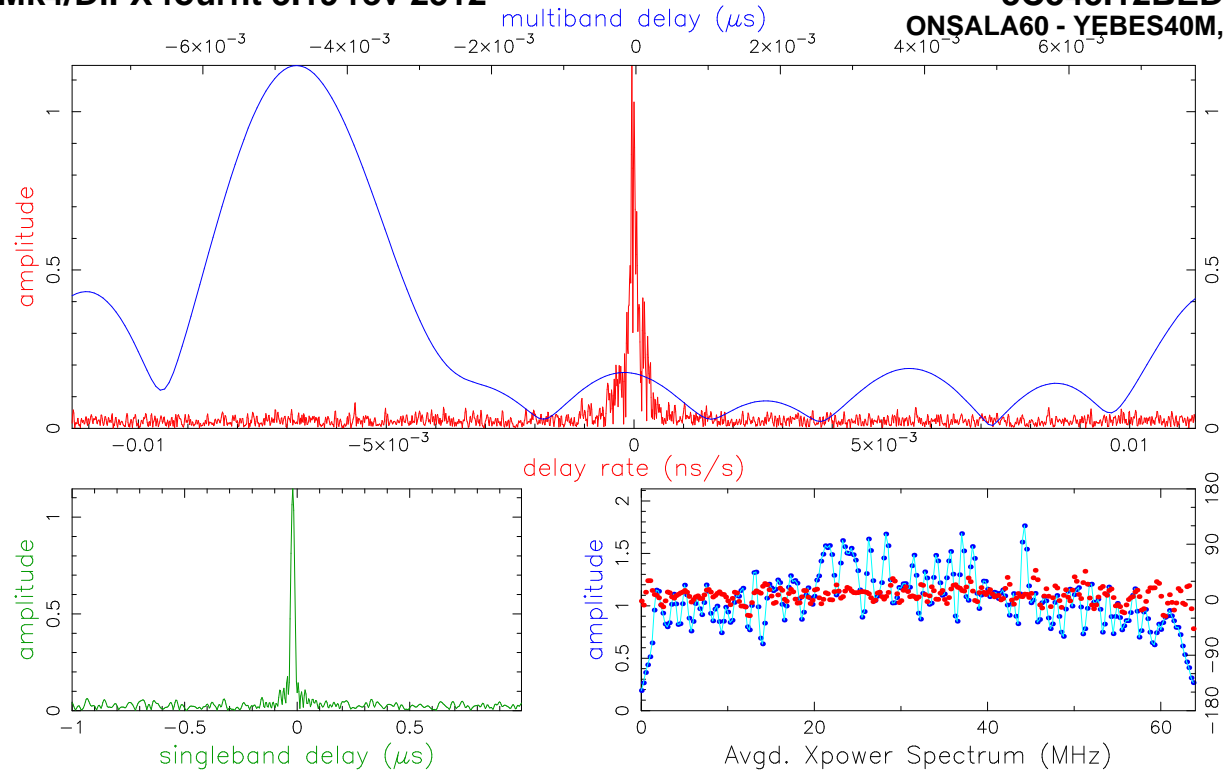


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.86896485938E+03	Apriori delay (usec)	-1.86898105175E+03	Resid mbdelay (usec)	5.67363E-04	+/-	2.3E-05
Sband delay (usec)	-1.86896439000E+03	Apriori clock (usec)	2.2673275E+01	Resid sbdelay (usec)	1.66618E-02	+/-	1.8E-04
Phase delay (usec)	-1.86898105054E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	1.20611E-06	+/-	7.9E-08
Delay rate (us/s)	3.61590755292E-02	Apriori rate (us/s)	3.61591189695E-02	Resid rate (us/s)	-4.34403E-08	+/-	3.4E-10
Total phase (deg)	-249.7	Apriori accel (us/s/s)	2.39811778223E-05	Resid phase (deg)	37.4	+/-	2.5

ph/seg (deg)	63.0	Theor.	5.9	Search (2048X32)	0.845	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.3		10.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.9		3.5	Inc. seg. avg.	1.422	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	18.4		6.1	Inc. frq. avg.	0.892	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -225.260 2884.494 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XY.W.317.12BED8

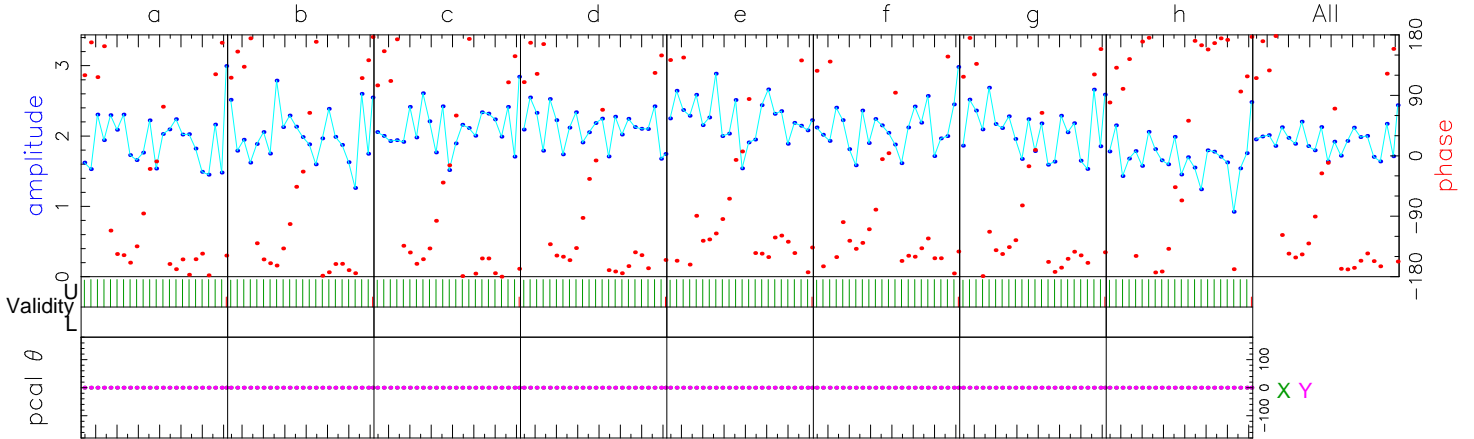


Fringe quality 4

SNR 62.7
Int time 400.155
Amp 1.146
Phase -166.0
PFD 0.0e+00
Delays (us)
SBD -0.019822
MBD -0.004712
Fringe rate (Hz)
-0.003713
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

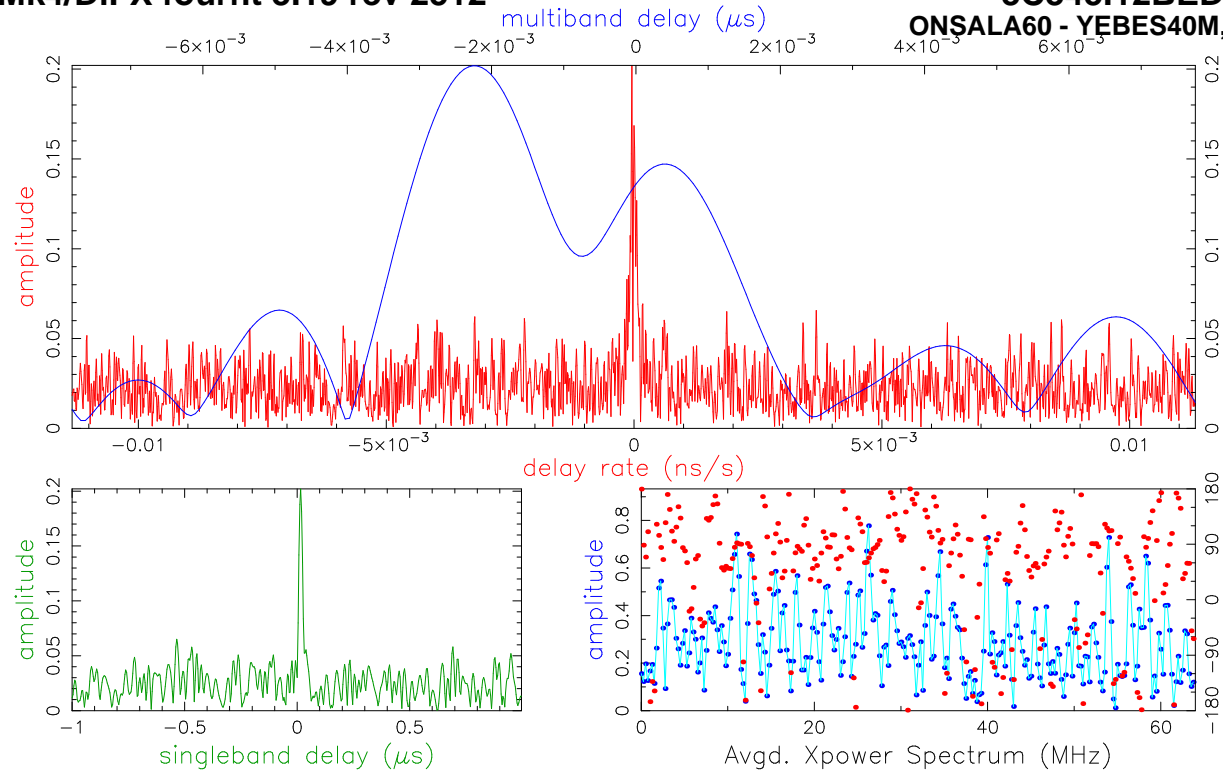
Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183018.95
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165701
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	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		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.86900138866E+03	-1.86900087375E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03		
Sband delay (usec)	-1.86900087375E+03	-1.86900087375E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03		
Phase delay (usec)	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03	-1.86898105710E+03		
Delay rate (us/s)	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02	3.61590758672E-02		
Total phase (deg)			-93.1							
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 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 62.7 4.4 Search (2048X32) 1.124 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.3 7.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.0 2.6 Inc. seg. avg. 1.927 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.7 4.5 Inc. frq. avg. 1.198 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -225.260 2884.494 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XY.W.334.12BED8

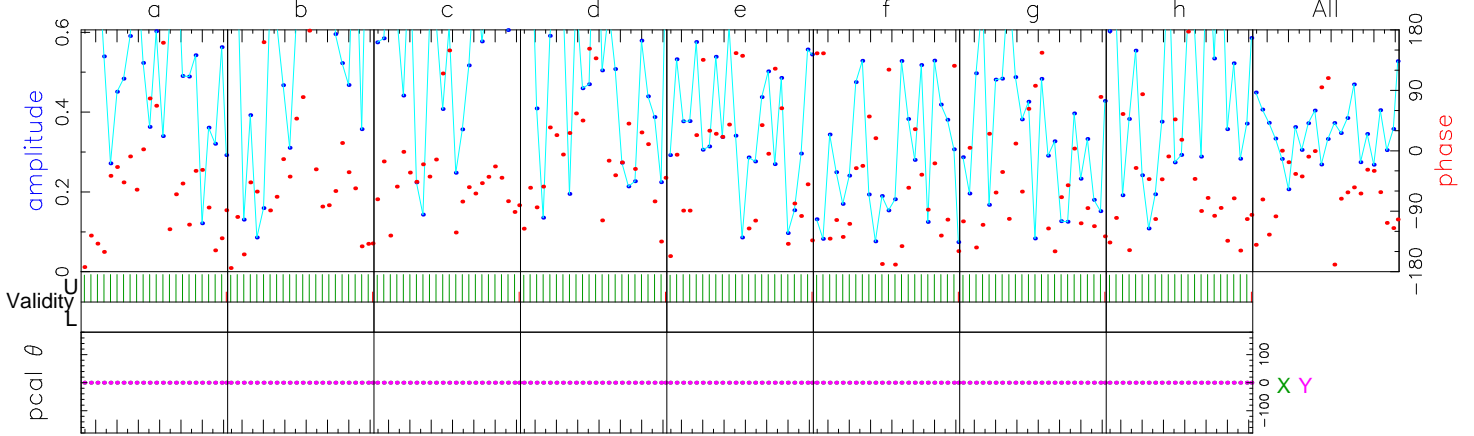


Fringe quality 9

SNR 11.1
Int time 400.155
Amp 0.202
Phase -64.1
PFD 9.8e-20
Delays (us)
SBD 0.015228
MBD -0.002246
Fringe rate (Hz)
-0.003759
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183018.95
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165704
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"

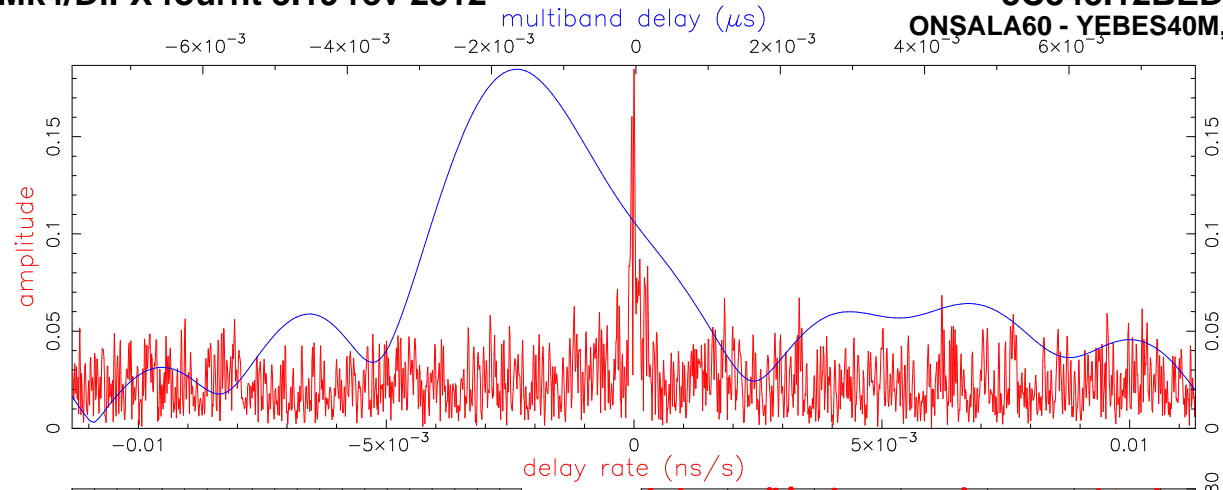
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.4	-85.0	-54.2	-12.9	-1.1	-79.3	-81.2	-79.7	Phase	-64.1
	0.3	0.3	0.4	0.2	0.1	0.1	0.2	0.3	Ampl.	0.2
	260.9	260.7	260.8	261.0	367.6	311.3	394.2	261.7	Sbd box	260.9
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	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	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.86896767229E+03	Apriori delay (usec)	-1.86898105175E+03	Resid mbdelay (usec)	-2.24554E-03	+/-	9.8E-05
Sband delay (usec)	-1.86896582350E+03	Apriori clock (usec)	2.2673275E+01	Resid sbdelay (usec)	1.52283E-02	+/-	7.8E-04
Phase delay (usec)	-1.86898105381E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	-2.06783E-06	+/-	3.3E-07
Delay rate (us/s)	3.61590753273E-02	Apriori rate (us/s)	3.61591189695E-02	Resid rate (us/s)	-4.36422E-08	+/-	1.4E-09
Total phase (deg)		Apriori accel (us/s/s)	2.39811778223E-05	Resid phase (deg)	-64.1	+/-	10.4

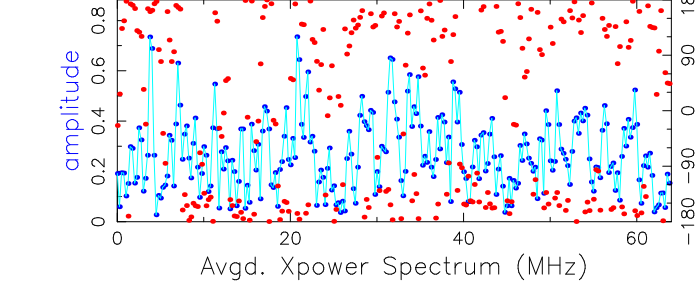
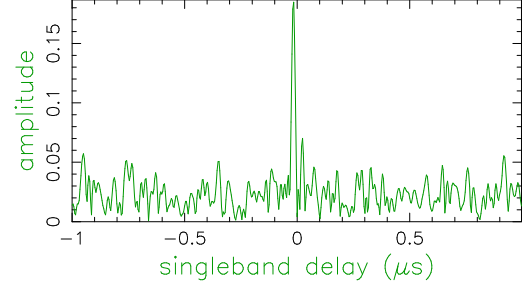
ph/seg (deg)	66.5	Theor.	24.9	Amplitude	0.202 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.9	Search (2048X32)	0.197	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	37.3	Inc. seg. avg.	0.319	Inc. seg. avg.	0.319	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	49.5	Inc. frq. avg.	0.220	Inc. frq. avg.	0.220	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
X: az 263.7 el 53.3 pa 44.2		Y: az 280.2 el 62.9 pa 76.6		u, v (fr/asec)	-225.260 2884.494	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00



Fringe quality 9

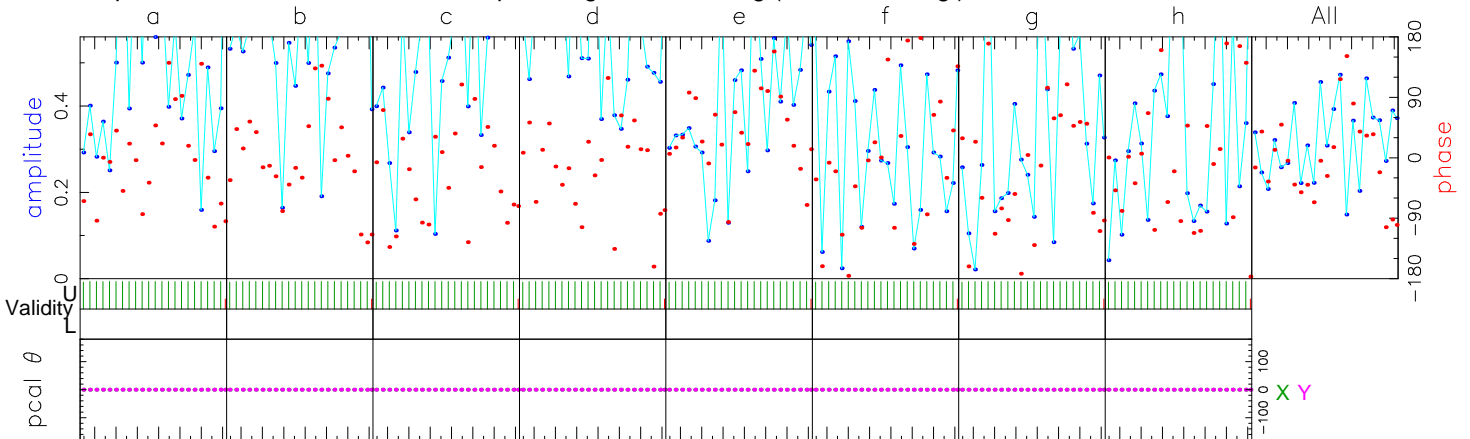
SNR 10.2
Int time 400.155
Amp 0.187
Phase -2.6
PFD 7.6e-16
Delays (us)
SBD -0.016935
MBD -0.001685
Fringe rate (Hz) 0.000029
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c192a
Exper # 16383
Yr:day 2019:276
Start 183018.95
Stop 183659.84
FRT 183330.00
Corr/FF/build
2020:072:124544
2020:086:165708
2020:014:135814
RA & Dec (J2000)
16h42m58.809967s
+39°48'36.993984"



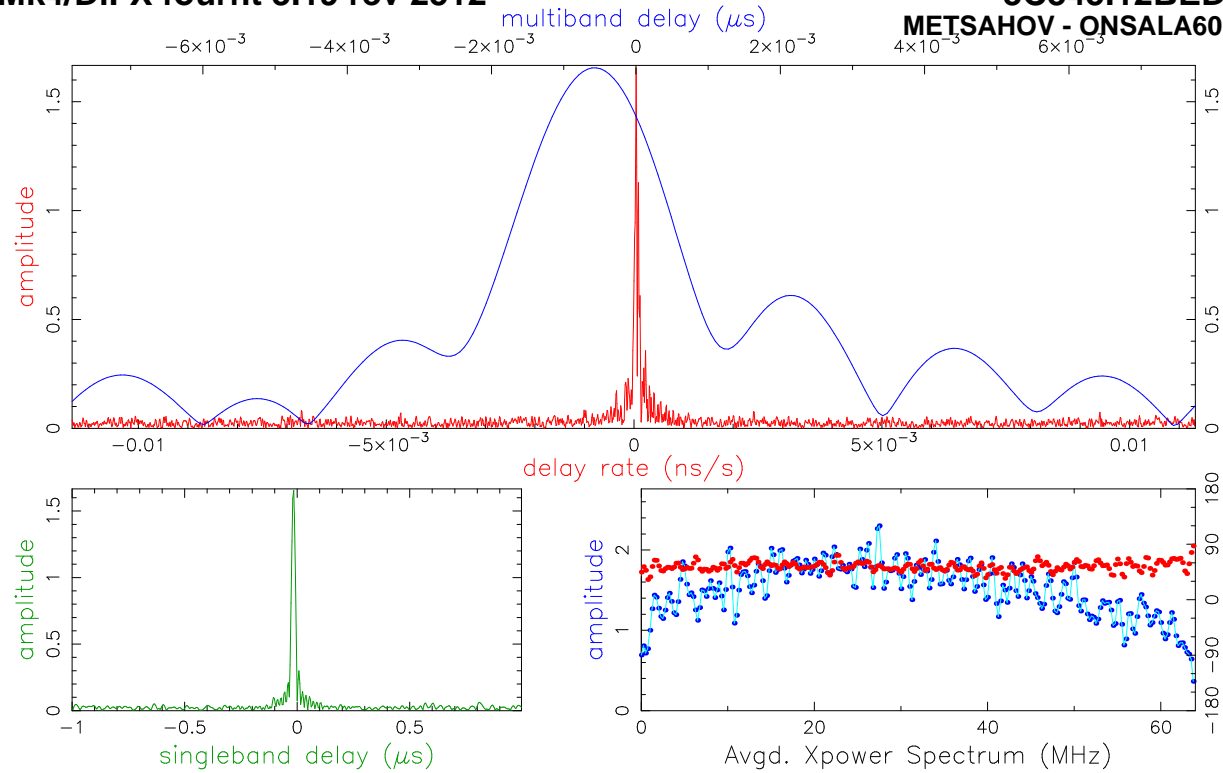
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-8.3	-2.5	-24.3	-5.3	52.6	-10.2	42.0	-47.9	Phase	-2.6
	0.3	0.3	0.2	0.3	0.2	0.1	0.1	0.1	Ampl.	0.2
	252.8	252.1	252.7	252.1	253.1	137.0	143.2	100.7	Sbd box	252.7
U/L	783/0	783/0	783/0	783/0	783/0	783/0	783/0	783/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.86899836200E+03		Apriori delay (usec)		-1.86898105175E+03		Resid mbdelay (usec)		-1.68525E-03	+/- 1.1E-04
Sband delay (usec)	-1.86899798725E+03		Apriori clock (usec)		2.2673275E+01		Resid sbdelay (usec)		-1.69355E-02	+/- 8.4E-04
Phase delay (usec)	-1.86898105183E+03		Apriori clockrate (us/s)		3.0800002E-07		Resid phdelay (usec)		-8.23238E-08	+/- 3.6E-07
Delay rate (us/s)	3.61591193081E-02		Apriori rate (us/s)		3.61591189695E-02		Resid rate (us/s)		3.38691E-10	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.39811778223E-05		Resid phase (deg)		-2.6	+/- 11.2

ph/seg (deg) 62.5 26.9 Search (2048X32) 0.183 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 85.7 47.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 35.7 15.9 Inc. seg. avg. 0.288 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 50.6 27.7 Inc. frq. avg. 0.199 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
X: az 263.7 el 53.3 pa 44.2 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -225.260 2884.494 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/XY..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/XY.W.356.12BED8

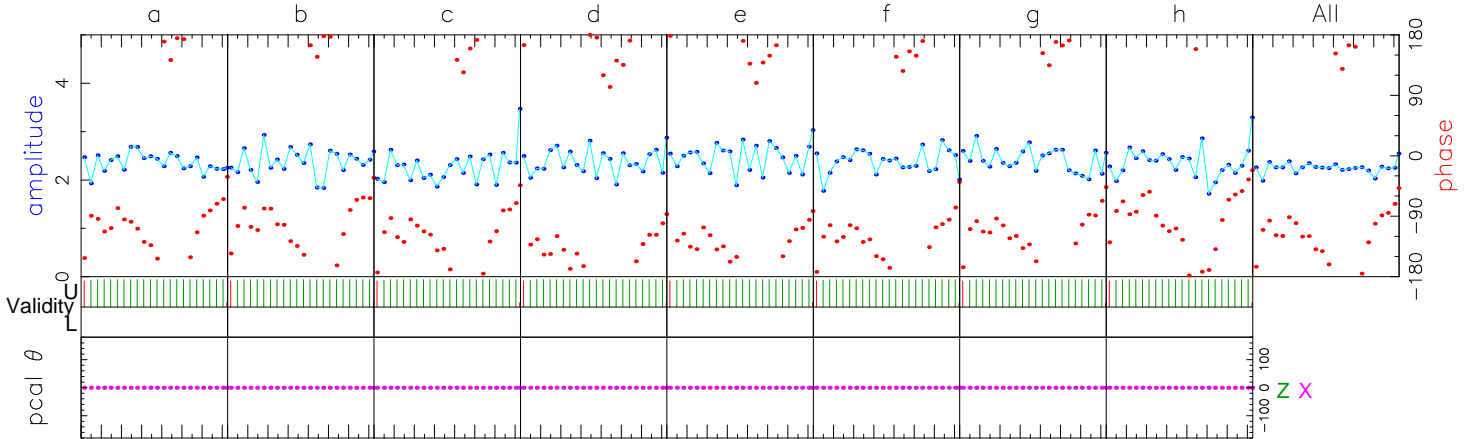


Fringe quality 5

SNR 93.2
 Int time 417.864
 Amp 1.667
 Phase -131.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.016713
 MBD -0.000596
 Fringe rate (Hz)
 0.003717
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

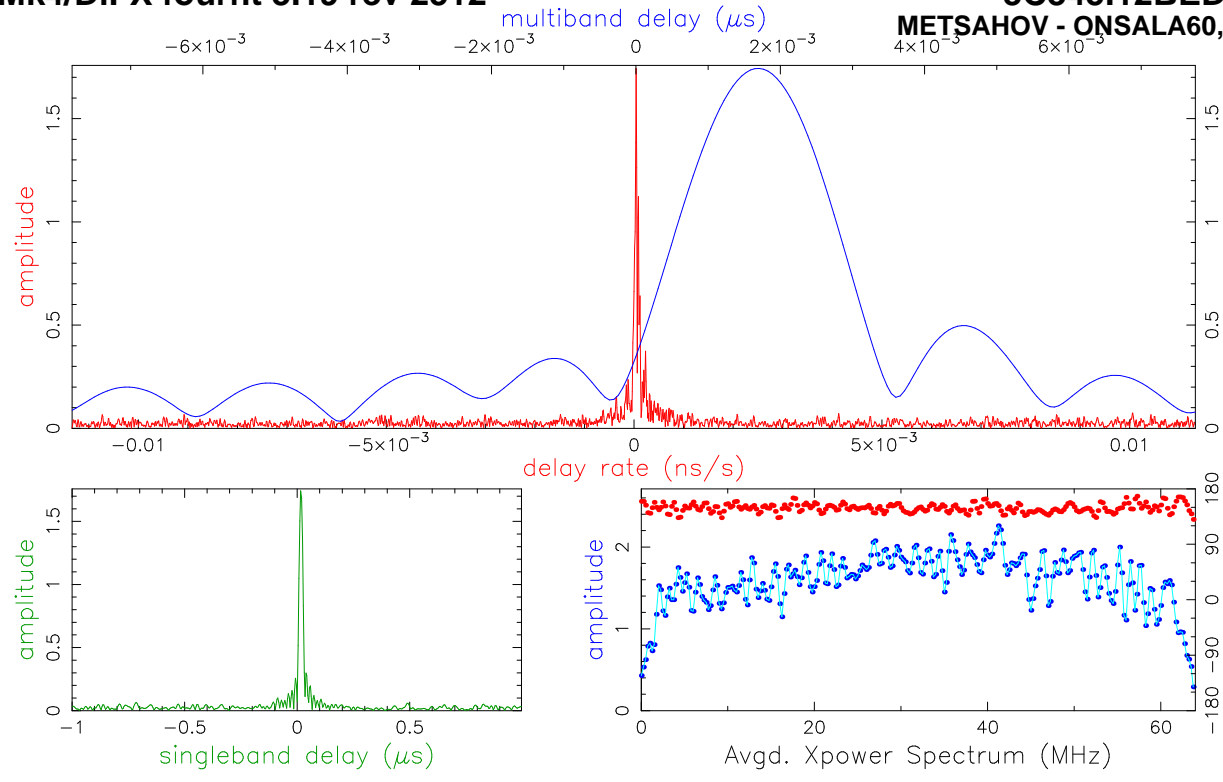
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165659
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.1	-115.4	-131.2	-160.3	-150.7	-139.1	-131.4	-97.9	Phase	-131.1
	1.8	1.7	1.6	1.8	1.8	1.8	1.8	1.7	Ampl.	1.7
	252.6	252.6	252.6	252.7	253.1	252.7	253.3	253.1	Sbd box	252.7
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60923267262E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		-5.95868E-04 +/- 1.2E-05	
Sband delay (usec)	-1.60923316475E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		-1.67130E-02 +/- 9.2E-05	
Phase delay (usec)	-1.60921645598E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-4.22822E-06 +/- 4.0E-08	
Delay rate (us/s)	-2.93338143038E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31526E-08 +/- 1.6E-10	
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-131.1 +/- 1.2	

ph/seg (deg) 44.0 2.9 Search (2048X32) 1.643 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 35.1 5.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.5 1.7 Inc. seg. avg. 2.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.2 3.0 Inc. frq. avg. 1.745 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.324.12BED8

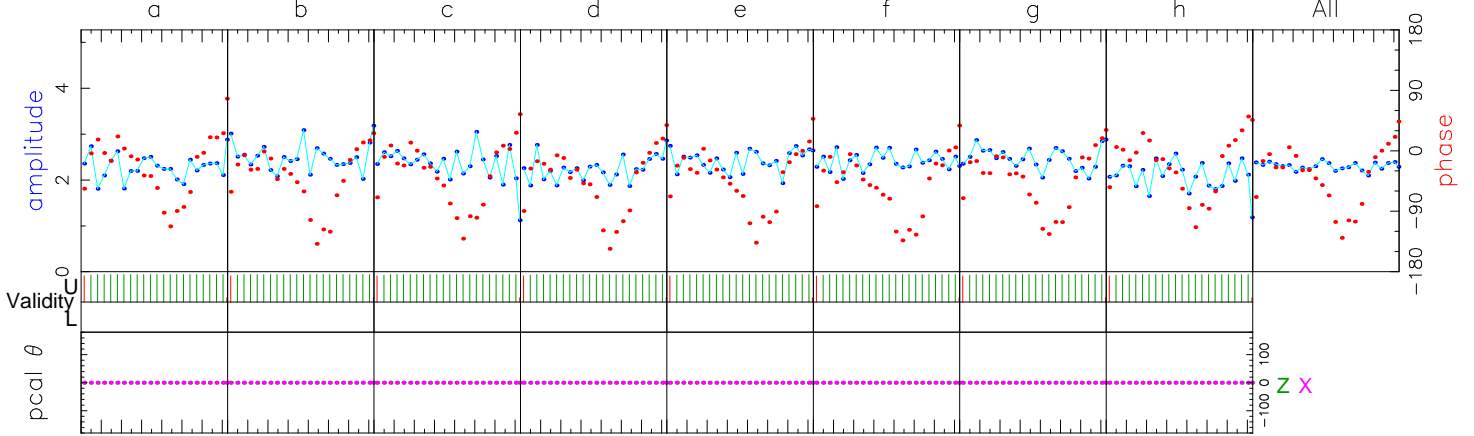


Fringe quality 5

SNR 98.3
 Int time 417.864
 Amp 1.758
 Phase -37.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.016842
 MBD 0.001722
 Fringe rate (Hz) 0.003713
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

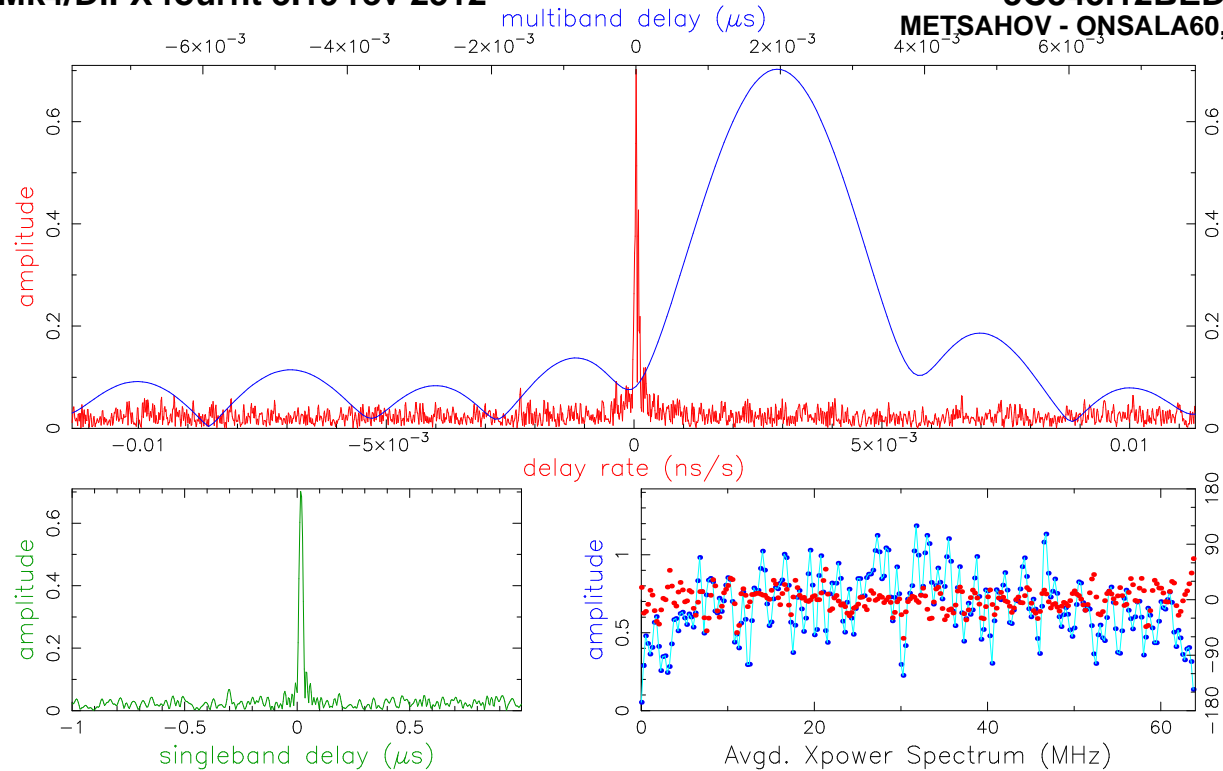
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165702
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-22.7	-39.0	-35.4	-41.1	-42.3	-51.1	-42.8	-19.1	Phase	-37.0
	1.7	1.9	1.8	1.6	1.8	1.8	1.9	1.6	Ampl.	1.8
	260.9	261.1	261.2	261.4	261.4	261.4	261.8	261.8	Sbd box	261.3
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.60919910499E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		1.72176E-03	+/- 1.1E-05
Sband delay (usec)	-1.60919961000E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		1.68418E-02	+/- 8.8E-05
Phase delay (usec)	-1.60921645294E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-1.19444E-06	+/- 3.8E-08
Delay rate (us/s)	-2.93338143491E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31072E-08	+/- 1.6E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-37.0	+/- 1.2

ph/seg (deg) 42.3 2.8 Search (2048X32) 1.702 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.4 4.9 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 1.6 Inc. seg. avg. 2.301 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.8 2.9 Inc. frq. avg. 1.768 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.340.12BED8

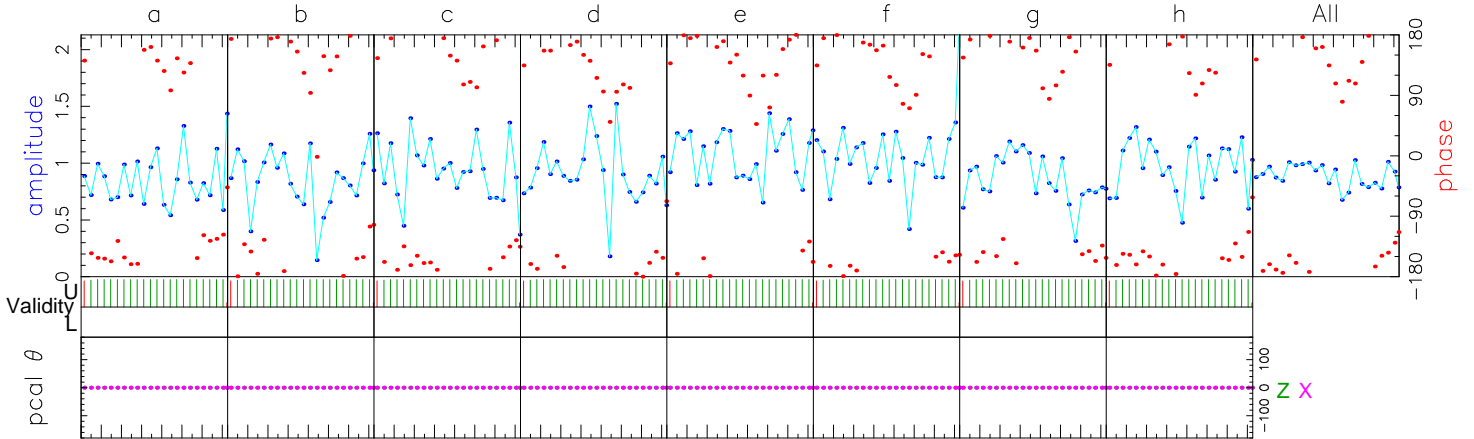


Fringe quality 7

SNR 39.7
 Int time 417.864
 Amp 0.710
 Phase 173.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.017025
 MBD 0.001992
 Fringe rate (Hz)
 0.003714
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

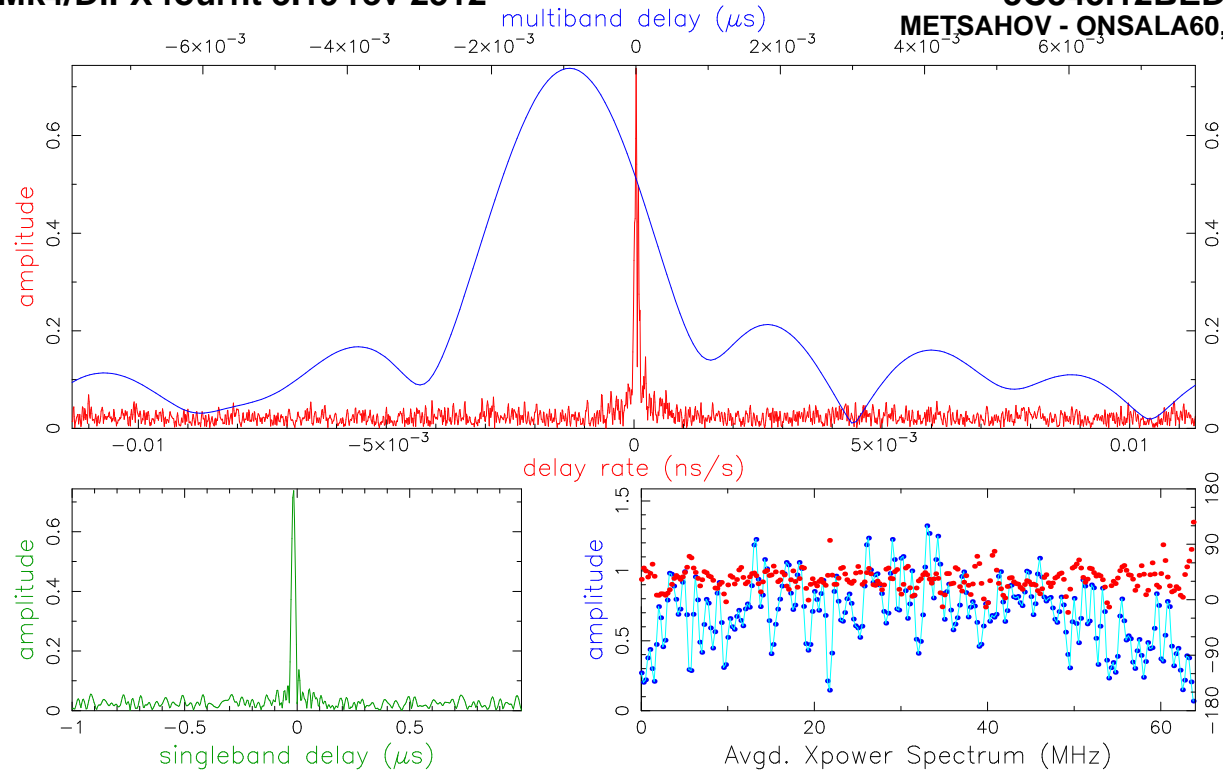
Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165706
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



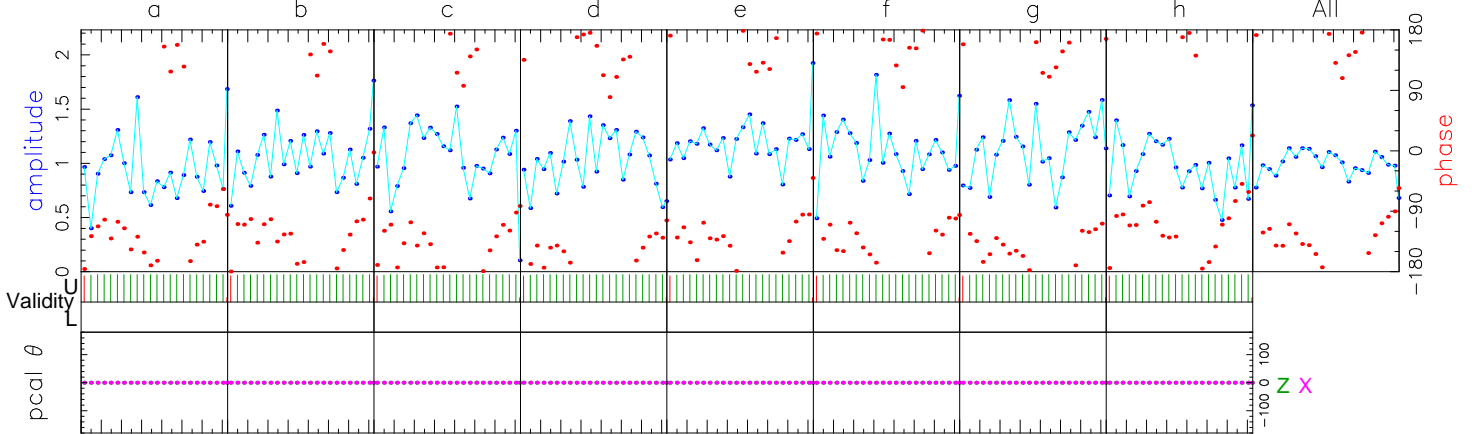
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-174.0	-177.9	178.5	158.0	158.7	165.0	177.4	-175.2		173.2
	0.6	0.7	0.8	0.7	0.8	0.7	0.8	0.7		0.7
	261.0	261.1	261.2	261.4	261.2	261.7	262.0	261.7		261.4
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		APs used
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	-1.60919883446E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		1.99229E-03	+/- 2.7E-05
Sband delay (usec)	-1.60919942675E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		1.70250E-02	+/- 2.2E-04
Phase delay (usec)	-1.60921644616E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		5.58656E-06	+/- 9.3E-08
Delay rate (us/s)	-2.93338143378E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.31186E-08	+/- 3.8E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		173.2	+/- 2.9

ph/seg (deg) 40.7 6.9 Search (2048X32) 0.700 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 29.6 12.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.5 4.1 Inc. seg. avg. 0.890 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.3 7.1 Inc. frq. avg. 0.713 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.351.12BED8



Fringe quality 7
 SNR 41.6
 Int time 417.864
 Amp 0.744
 Phase -149.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.016822
 MBD -0.000944
 Fringe rate (Hz) 0.003635
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c192a
 Exper # 16383
 Yr:day 2019:276
 Start 183000.00
 Stop 183659.84
 FRT 183330.00
 Corr/FF/build
 2020:072:124544
 2020:086:165709
 2020:014:135814
 RA & Dec (J2000)
 16h42m58.809967s
 +39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.3	-139.7	-151.4	178.6	-152.9	-153.3	-159.6	-117.0	Phase	-149.9
	0.7	0.7	0.8	0.8	0.8	0.8	0.9	0.7	Ampl.	0.8
	252.8	252.3	252.5	252.8	252.9	252.8	253.2	252.6	Sbd box	252.7
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60923302106E+03		Apriori delay (usec)		-1.60921645175E+03		Resid mbdelay (usec)		-9.44305E-04	+/- 2.6E-05
Sband delay (usec)	-1.60923327400E+03		Apriori clock (usec)		-3.2143044E+01		Resid sbdelay (usec)		-1.68223E-02	+/- 2.1E-04
Phase delay (usec)	-1.60921645658E+03		Apriori clockrate (us/s)		-5.1170721E-07		Resid phdelay (usec)		-4.83312E-06	+/- 8.9E-08
Delay rate (us/s)	-2.93338152553E-02		Apriori rate (us/s)		-2.93338574563E-02		Resid rate (us/s)		4.22010E-08	+/- 3.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.02337931143E-05		Resid phase (deg)		-149.9	+/- 2.8

ph/seg (deg) 44.8 6.6 Search (2048X32) 0.729 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.1 11.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.2 3.9 Inc. seg. avg. 0.995 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.7 6.8 Inc. frq. avg. 0.769 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 271.4 el 46.7 pa 40.3 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) 236.508 840.741 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c192a/v1_PV/1234/No0001/ZX..12BED8 Output file: /Exps/c192a/v1_PV/1234/No0001/ZX.W.360.12BED8