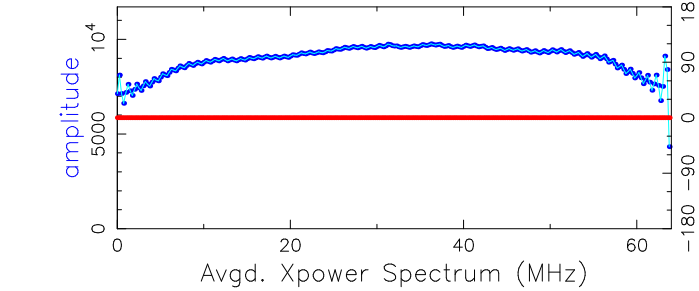
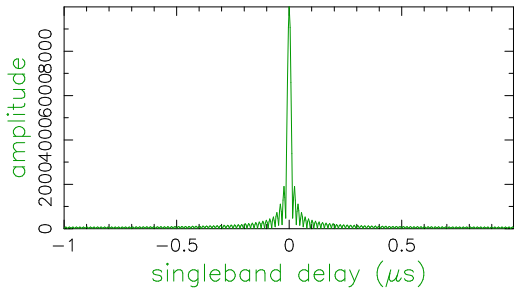
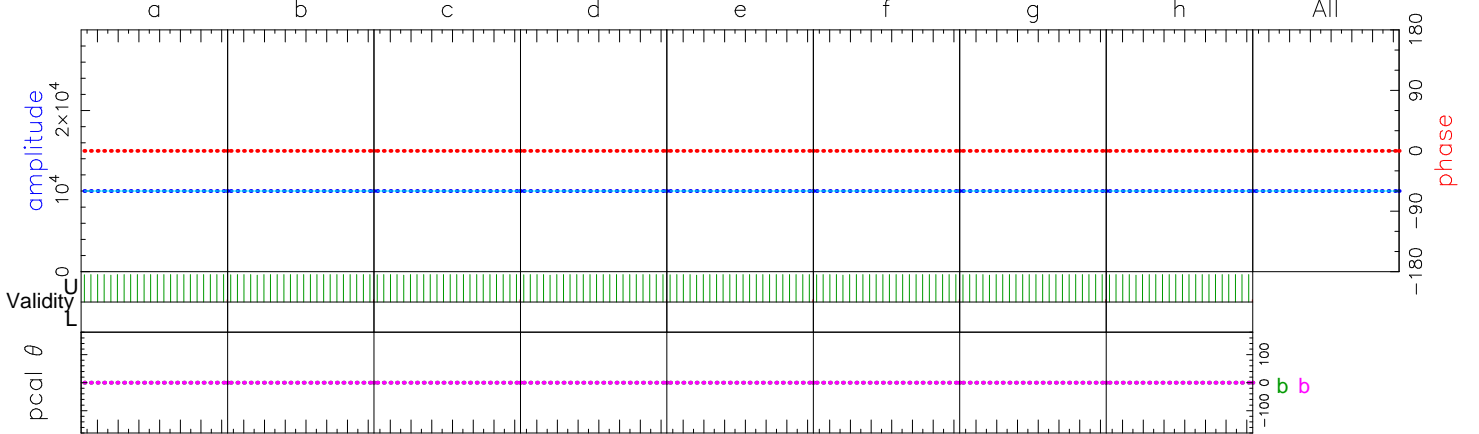


Fringe quality 9  
SNR 551374.9  
Int time 406.536  
Amp 9999.998  
Phase -0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Yr:day 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165548  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

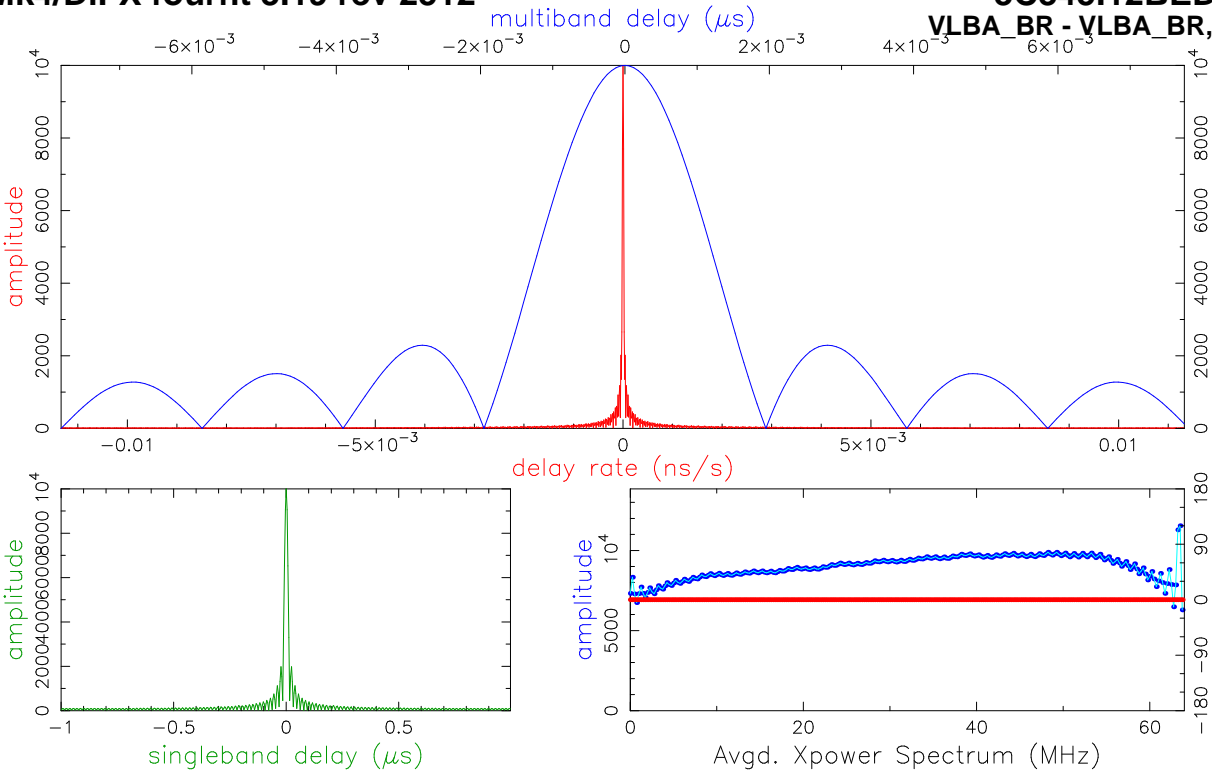


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	10000.0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
b:b	0:0	0:0	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	10000.0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.0E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.6E-08
Phase delay (usec)	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929246368E-20	-4.70929E-20	+/- 6.7E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.9E-14
Total phase (deg)			-0.0						-0.0	+/- 0.0

RMS Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 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. 9999.998 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 b: az 66.1 el 33.9 pa -52.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bb..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bb.W.15.12BED8

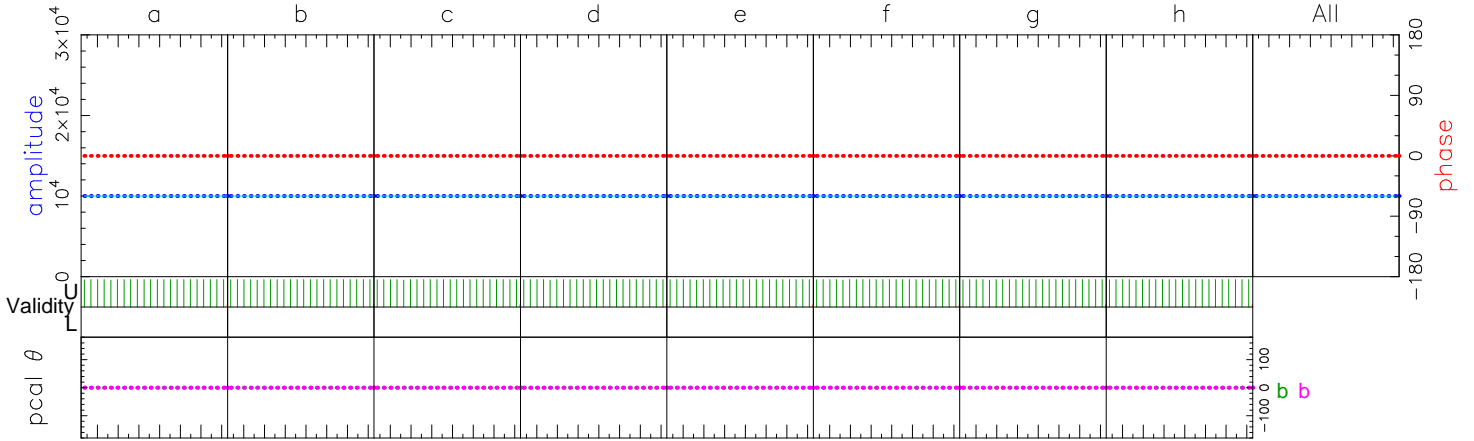


Fringe quality 9

SNR 551374.9  
Int time 406.536  
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 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165552  
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	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:b	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		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

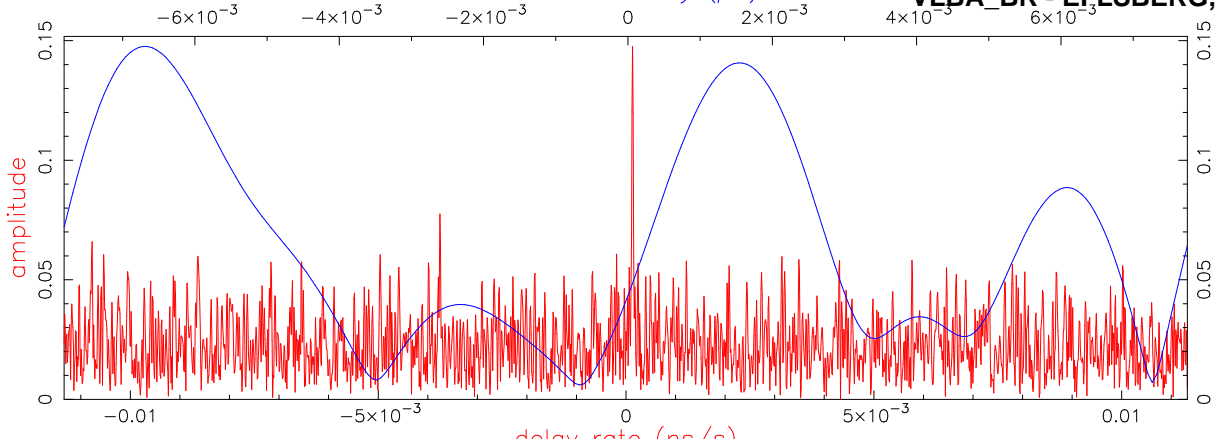
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	2.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.6E-08
Phase delay (usec)	-3.37326868910E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.37327E-20	+/-	6.7E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.9E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0		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		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0		0.0		0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128		dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	10000.000	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      b: az 66.1 el 33.9 pa -52.6      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c192a/v1\_PV/1234/No0001/bb..12BED8    Output file: /Exps/c192a/v1\_PV/1234/No0001/bb.W.35.12BED8

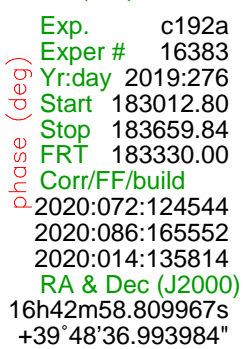
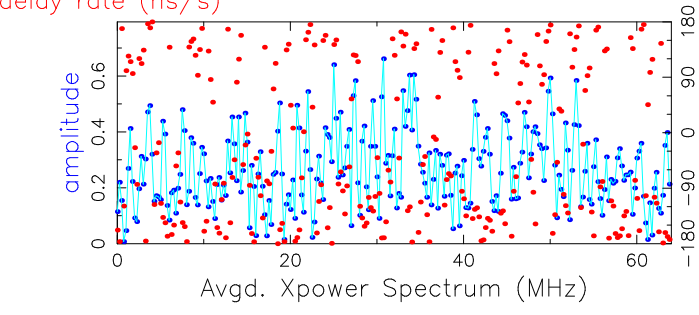
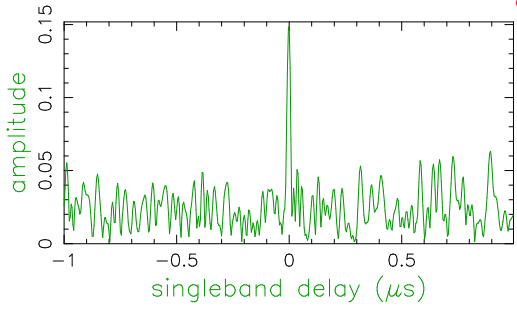
multiband delay ( $\mu\text{s}$ )



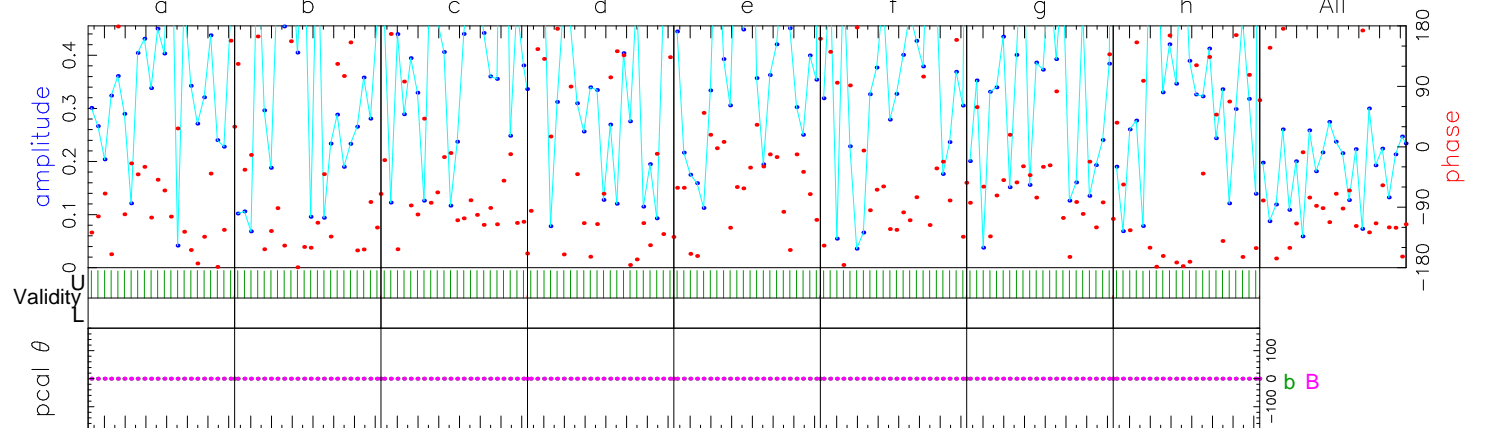
Fringe quality 9

SNR 8.4  
 Int time 406.536  
 Amp 0.152  
 Phase -111.2  
 PFD 2.1e-08  
 Delays (us)  
 SBD -0.001804  
 MBD -0.006654  
 Fringe rate (Hz) 0.011091  
 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  
 2020:086:165552  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

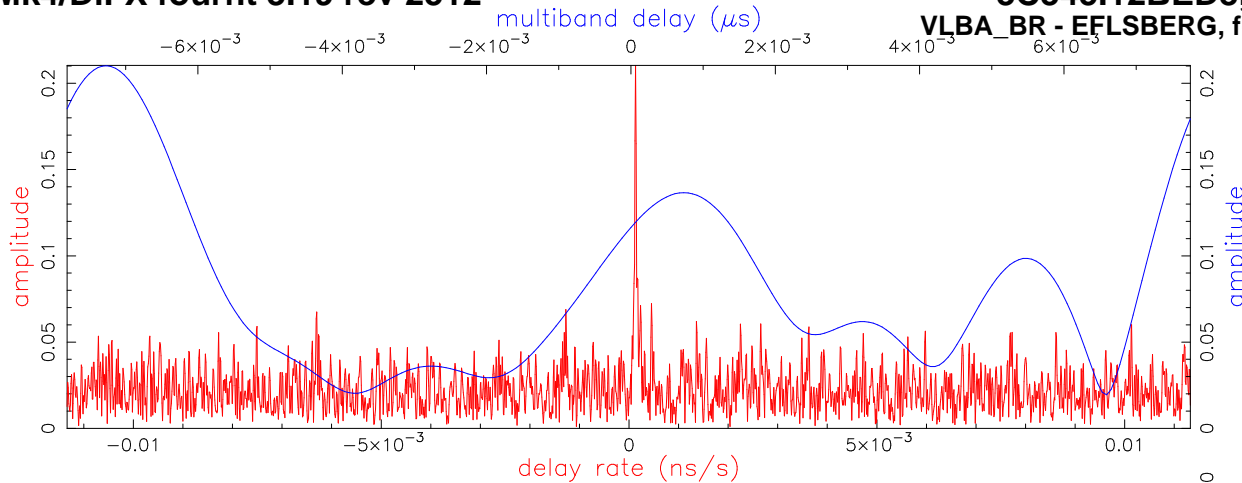


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



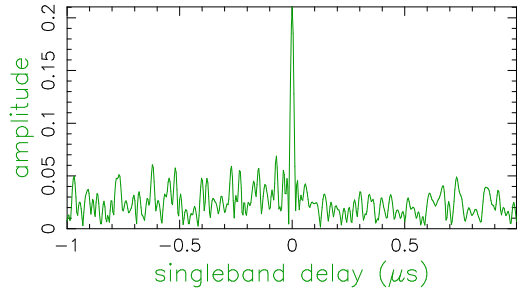
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-107.4	-151.3	-83.2	-175.3	-45.5	-113.9	-62.2	176.3	Phase	-111.2
	0.2	0.2	0.3	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	257.6	256.5	255.8	116.8	256.7	256.6	493.6	256.5	Sbd box	256.5
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.66420639501E+03		Apriori delay (usec)		-5.66419974077E+03		Resid mbdelay (usec)		-6.65424E-03	+/- 1.3E-04
Sband delay (usec)	-5.66420154477E+03		Apriori clock (usec)		-1.7451761E+01		Resid sbdelay (usec)		-1.80400E-03	+/- 1.0E-03
Phase delay (usec)	-5.66419974436E+03		Apriori clockrate (us/s)		-4.2395080E-08		Resid phdelay (usec)		-3.58520E-06	+/- 4.4E-07
Delay rate (us/s)	1.33643516045E+00		Apriori rate (us/s)		1.33643503169E+00		Resid rate (us/s)		1.28752E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.80562043911E-05		Resid phase (deg)		-111.2	+/- 13.7

ph/seg (deg) 47.6 32.8 Amplitude 0.152 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 50.4 57.3 Search (2048X32) 0.142 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 55.6 19.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.8 33.8 Inc. seg. avg. 0.162 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 b: az 66.1 el 33.9 pa -52.6 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 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/bB..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bB.W.37.12BED8 simultaneous interpolator

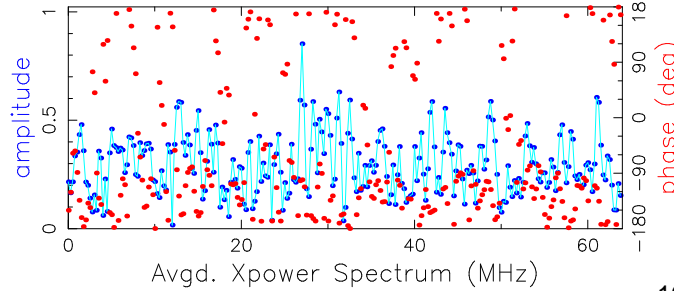


Fringe quality 9

SNR 11.6  
 Int time 406.536  
 Amp 0.210  
 Phase -59.9  
 PFD 2.0e-22  
 Delays (us)  
 SBD -0.000384  
 MBD -0.007285  
 Fringe rate (Hz)  
 0.011260  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

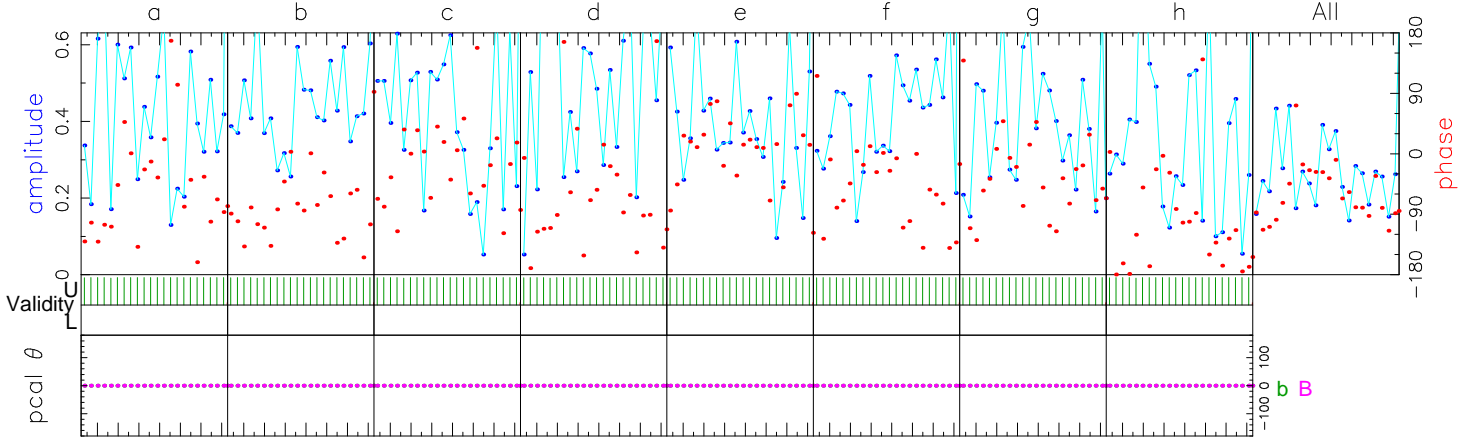


delay rate (ns/s)



Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165546  
 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

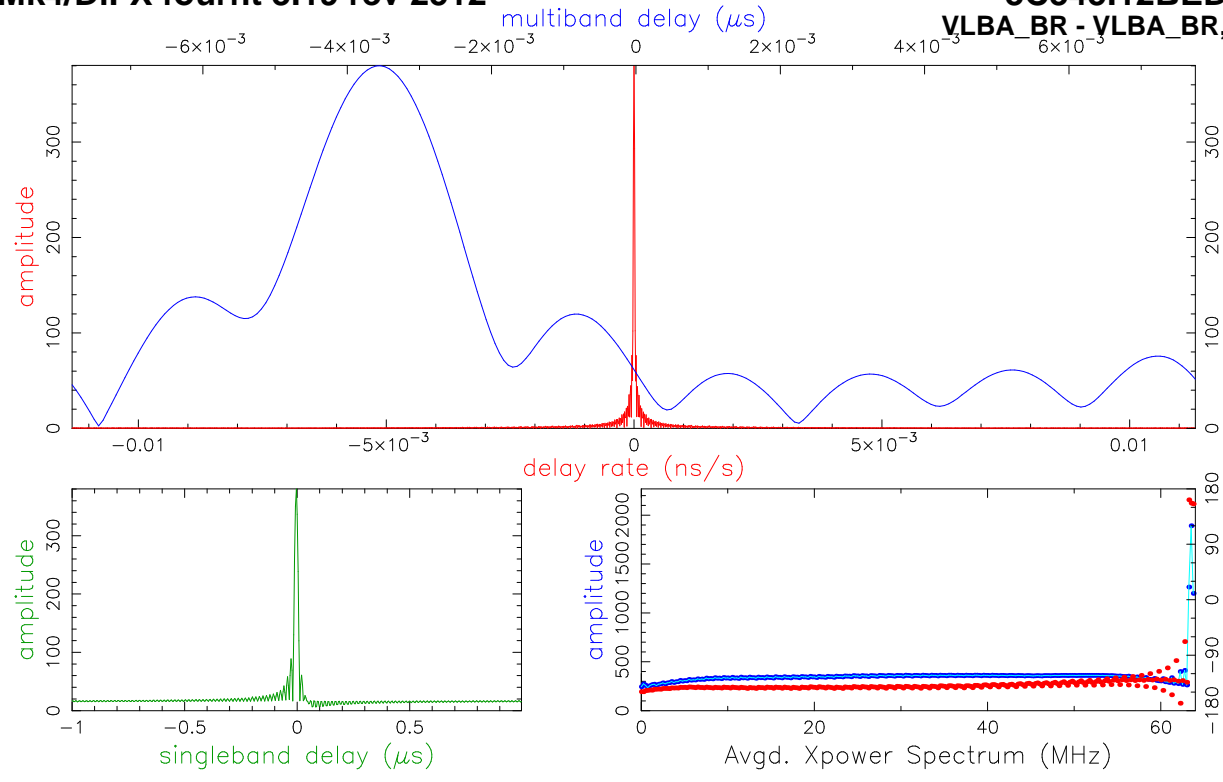


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.3	-88.5	-16.0	-96.2	10.0	-56.5	-36.5	-113.8	Phase	-59.9
	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.3
	255.8	257.1	257.0	256.7	256.3	256.2	255.8	255.9	Sbd box	256.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -5.66420702567E+03 Apriori delay (usec) -5.66419974077E+03 Resid mbdelay (usec) -7.28490E-03 +/- 9.4E-05  
 Sband delay (usec) -5.66420012477E+03 Apriori clock (usec) -1.7451761E+01 Resid sbdelay (usec) -3.84000E-04 +/- 7.4E-04  
 Phase delay (usec) -5.66419974270E+03 Apriori clockrate (us/s) -4.2395080E-08 Resid phdelay (usec) -1.93125E-06 +/- 3.2E-07  
 Delay rate (us/s) 1.33643516241E+00 Apriori rate (us/s) 1.33643503169E+00 Resid rate (us/s) 1.30717E-07 +/- 1.4E-09  
 Total phase (deg) -301.2 Apriori accel (us/s/s) 2.80562043911E-05 Resid phase (deg) -59.9 +/- 9.9

RMS Theor. Amplitude 0.210 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 42.9 23.7 Search (2048X32) 0.208 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 48.8 41.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 45.5 14.0 Inc. seg. avg. 0.243 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 35.4 24.4 Inc. frq. avg. 0.261 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 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bB..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bB.W.5.12BED8

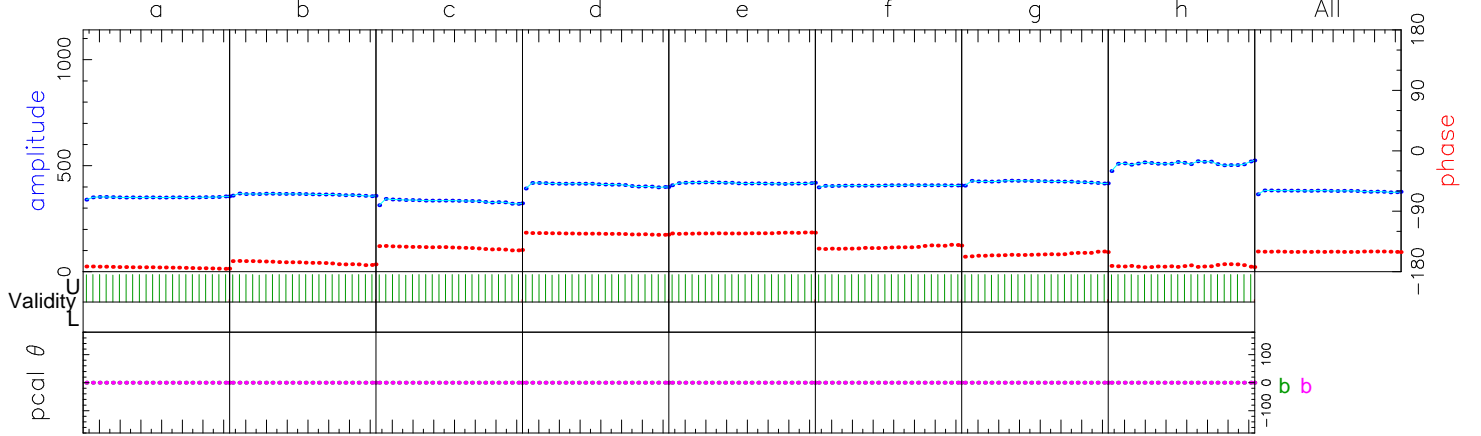


Fringe quality 8

SNR 20975.1  
Int time 406.536  
Amp 380.414  
Phase -150.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.004304  
MBD -0.003565  
Fringe rate (Hz) 0.000004  
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  
2020:086:165556  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

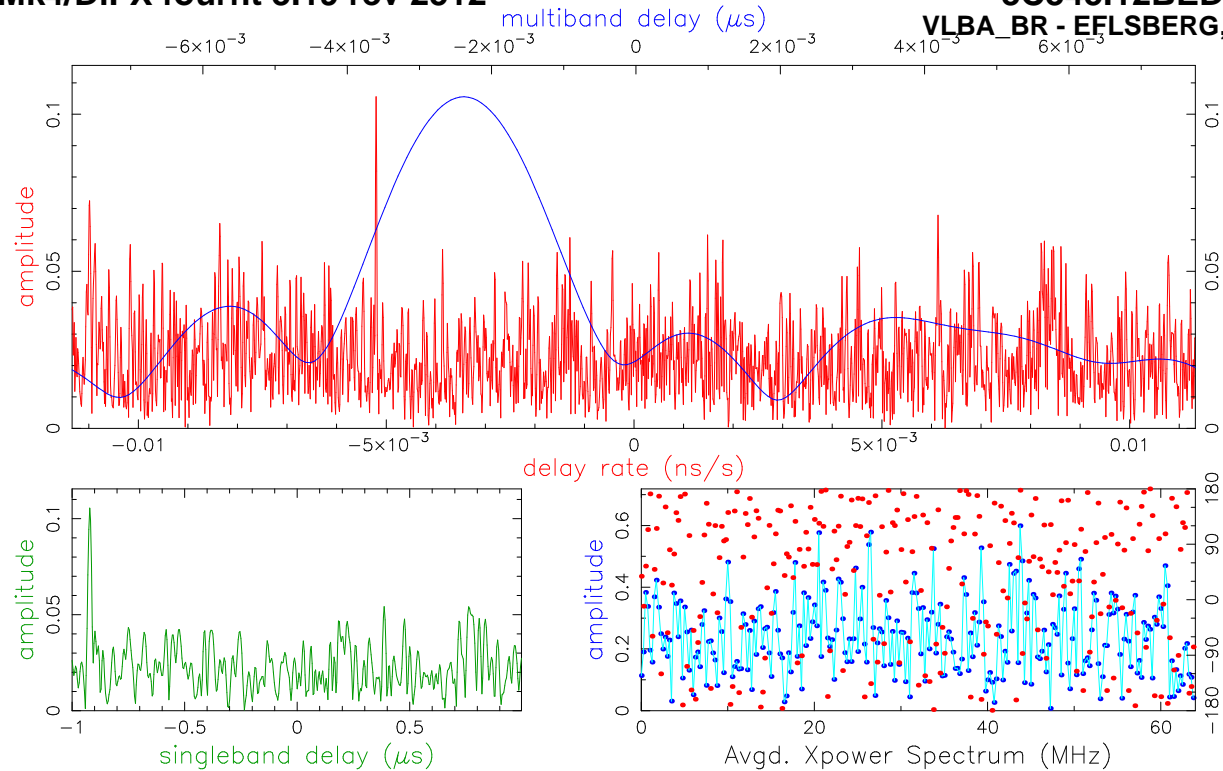
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-173.6	-166.5	-144.3	-123.5	-122.7	-143.6	-154.2	-171.5	Phase	-150.2
	350.7	364.3	332.3	409.9	417.5	406.4	424.4	509.6	Ampl.	401.9
	256.1	256.1	256.5	256.3	255.9	255.9	256.1	255.3	Sbd box	255.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.56503125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.56503E-03	+/- 5.2E-08
Sband delay (usec)	-4.30400000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.30400E-03	+/- 4.1E-07
Phase delay (usec)	-4.84253027874E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.84253E-06	+/- 1.8E-10
Delay rate (us/s)	5.03075909905E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.03076E-11	+/- 7.5E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-150.2	+/- 0.0

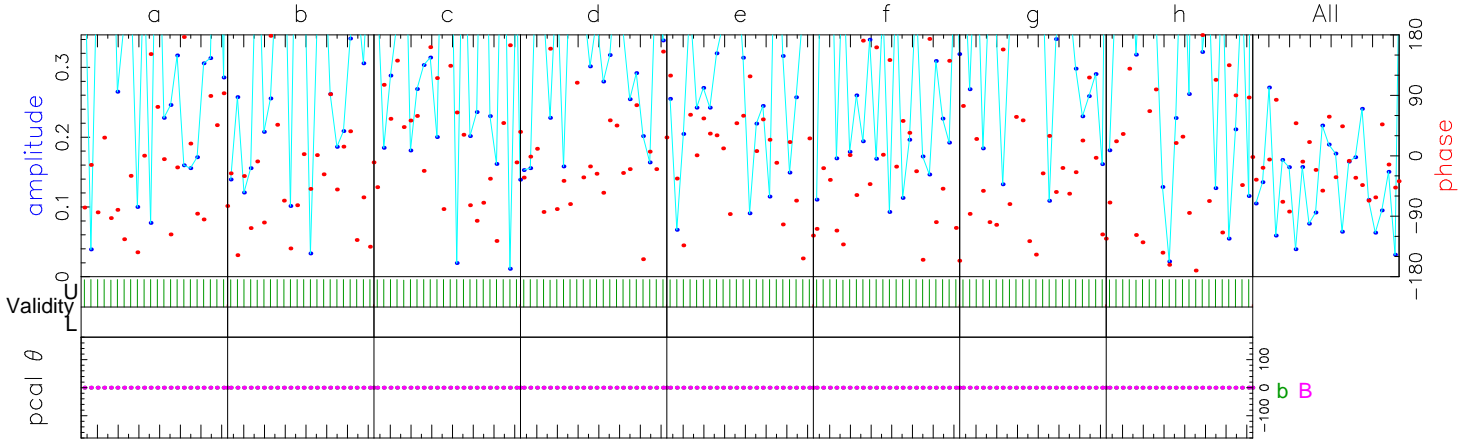
ph/seg (deg) 0.2 0.0 Theor. Amplitude 380.414 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 1.1 0.0 Search (2048X32) 376.821 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 14.7 0.0 Inc. seg. avg. 380.030 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 401.883 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 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bb..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bb.W.52.12BED8



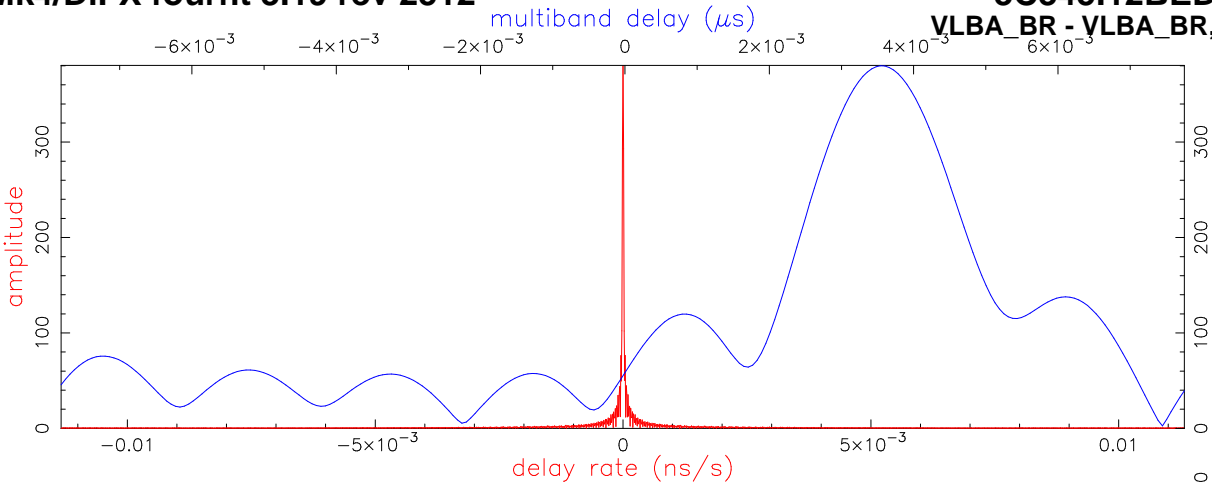
Fringe quality 0  
 SNR 5.8  
 Int time 406.536  
 Amp 0.116  
 Phase -22.3  
 PFD 7.5e-01  
 Delays (us)  
 SBD -0.921301  
 MBD -0.002375  
 Fringe rate (Hz)  
 -0.449147  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165557  
 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



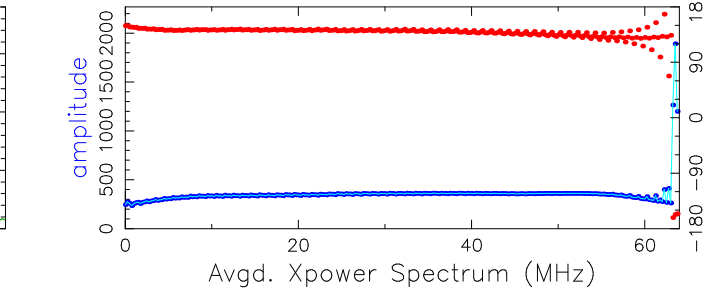
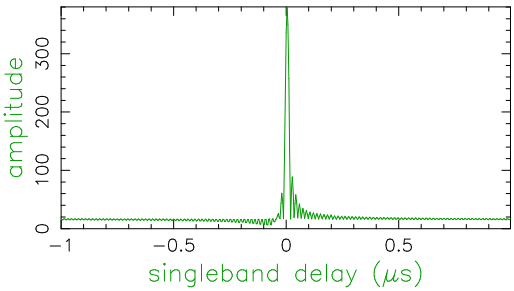
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.5	-44.1	12.7	-17.2	15.9	-53.9	-33.8	130.7	Phase	-22.3
	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1
	149.2	20.7	309.6	317.5	285.2	56.3	470.7	105.2	Sbd box	21.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.66512399115E+03		Apriori delay (usec)		-5.66419974077E+03		Resid mbdelay (usec)		-2.37538E-03	+/- 1.9E-04
Sband delay (usec)	-5.66512104177E+03		Apriori clock (usec)		-1.7451761E+01		Resid sbdelay (usec)		-9.21301E-01	+/- 1.5E-03
Phase delay (usec)	-5.66419974149E+03		Apriori clockrate (us/s)		-4.2395080E-08		Resid phdelay (usec)		-7.19694E-07	+/- 6.3E-07
Delay rate (us/s)	1.33642981754E+00		Apriori rate (us/s)		1.33643503169E+00		Resid rate (us/s)		-5.21416E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.80562043911E-05		Resid phase (deg)		-22.3	+/- 19.7

ph/seg (deg) 45.7 47.1 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.0 82.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 68.0 27.8 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.1 48.5 Inc. frq. avg. 0.116 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 B: az 269.2 el 56.7 pa 55.8 u,v (fr/asec) -9910.522 1769.593 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bB..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bB.W.55.12BED8



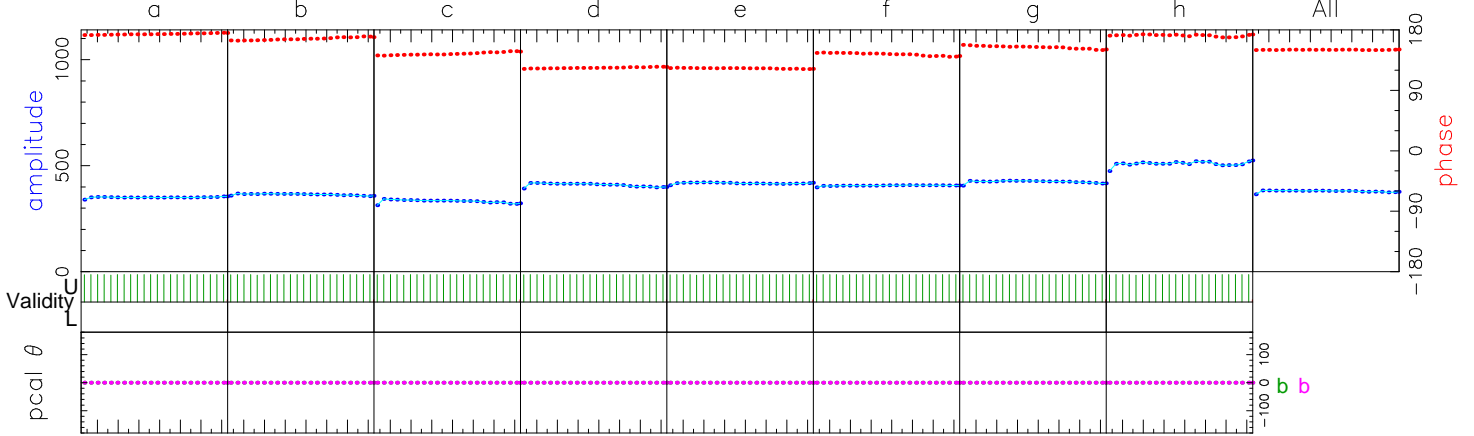
Fringe quality 8

SNR 20975.1  
Int time 406.536  
Amp 380.414  
Phase 150.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.004304  
MBD 0.003565  
Fringe rate (Hz)  
-0.000004  
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  
2020:086:165600  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

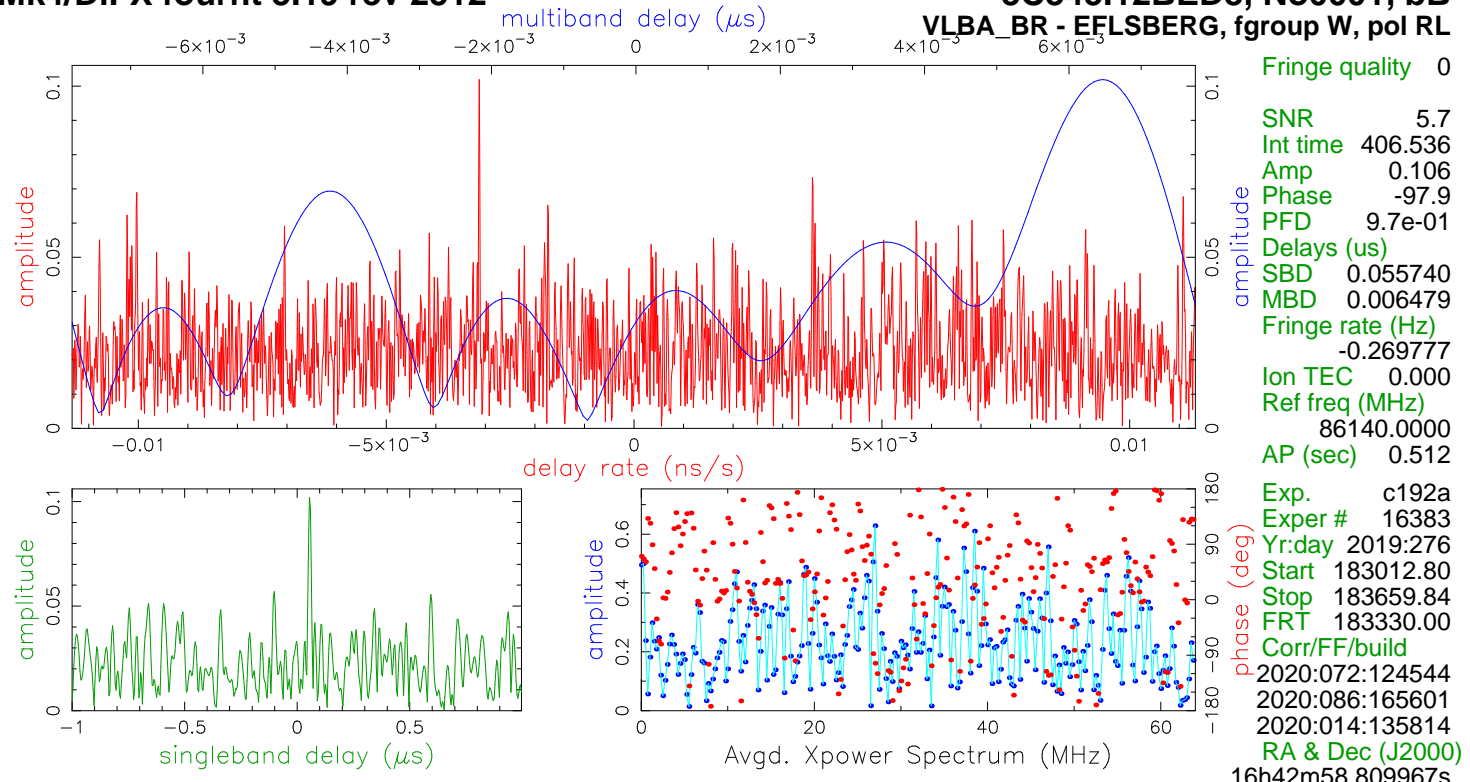
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



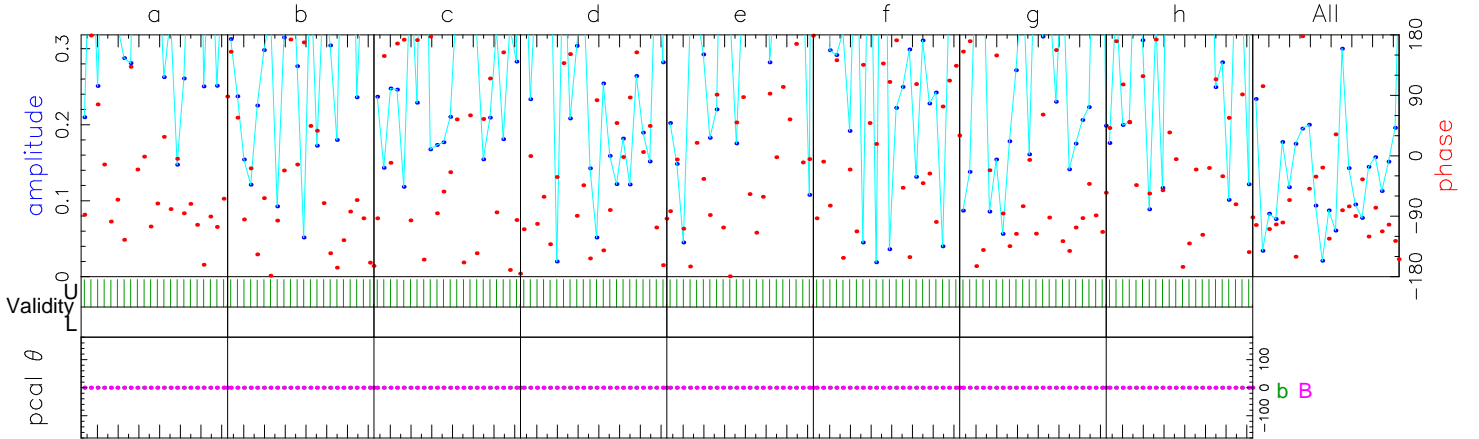
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	173.6	166.5	144.3	123.5	122.7	143.6	154.2	171.5	Phase	150.2
b	350.7	364.3	332.3	409.9	417.5	406.4	424.4	509.6	Ampl.	401.9
b	257.9	257.9	257.5	257.7	258.1	258.1	257.9	258.7	Sbd box	258.1
b	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	3.56503125000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.56503E-03	+/- 5.2E-08
Sband delay (usec)	4.30400000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		4.30400E-03	+/- 4.1E-07
Phase delay (usec)	4.84253027881E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.84253E-06	+/- 1.8E-10
Delay rate (us/s)	-5.03075909905E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.03076E-11	+/- 7.5E-13
Total phase (deg)	150.2		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		150.2	+/- 0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 380.414 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 1.1 0.0 Search (2048X32) 376.821 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 14.7 0.0 Inc. seg. avg. 380.030 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 401.883 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 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bb..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bb.W.72.12BED8



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



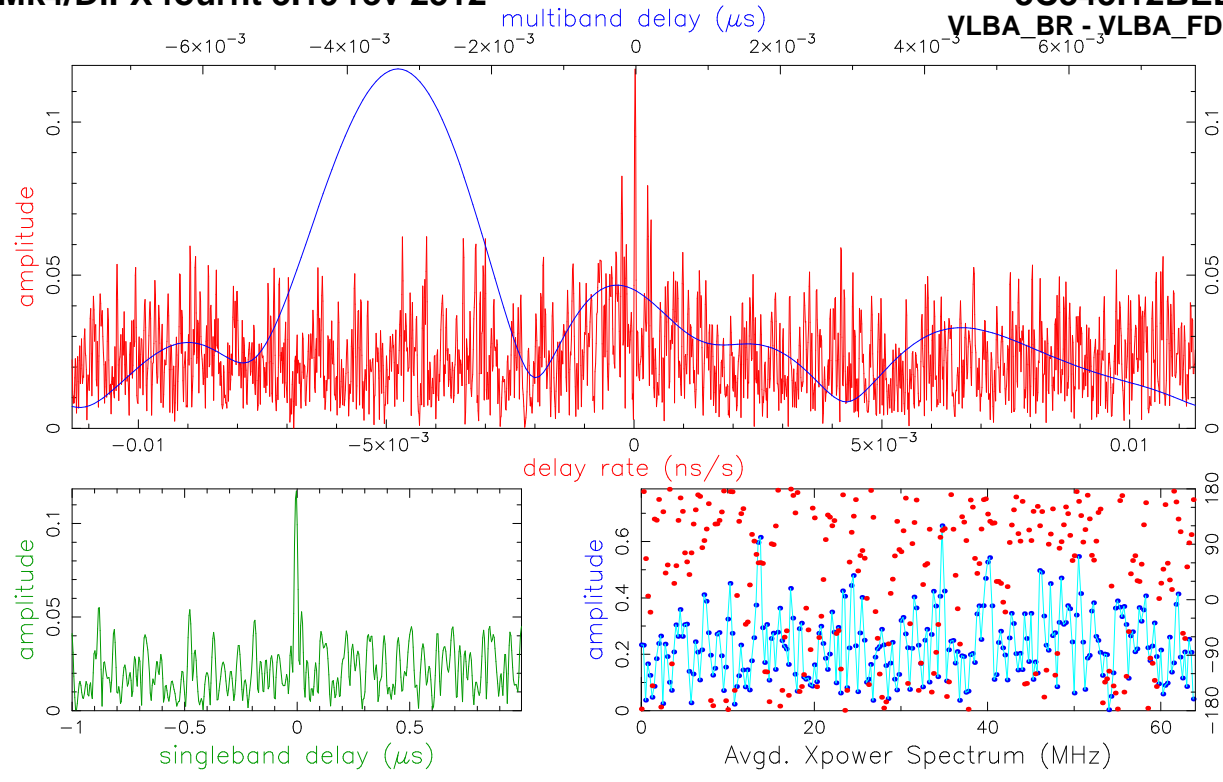
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-74.8	-107.7	-148.4	-105.8	-71.2	-121.6	-115.3	-19.8		Phase	-97.9
	0.2	0.1	0.1	0.1	0.1	0.0	0.2	0.1		Ampl.	0.1
	271.4	217.6	184.6	90.2	45.1	238.2	271.3	108.3		Sbd box	271.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
B	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
B	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Tracks	
Group delay (usec)(sbd)	-5.66414638667E+03		Apriori delay (usec)		-5.66419974077E+03		Resid mbdelay (usec)		6.47910E-03	+/-	1.9E-04
Sband delay (usec)	-5.66414400052E+03		Apriori clock (usec)		-1.7451761E+01		Resid sbdelay (usec)		5.57402E-02	+/-	1.5E-03
Phase delay (usec)	-5.66419974393E+03		Apriori clockrate (us/s)		-4.2395080E-08		Resid phdelay (usec)		-3.15548E-06	+/-	6.5E-07
Delay rate (us/s)	1.33643189985E+00		Apriori rate (us/s)		1.33643503169E+00		Resid rate (us/s)		-3.13185E-06	+/-	2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.80562043911E-05		Resid phase (deg)		-97.9	+/-	20.2

	RMS	Theor.	Amplitude	0.106 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.9	48.5	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	73.0	84.6	Inc. seg. avg.	0.102	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	42.6	28.6	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	62.5	49.9							

b: az 66.1 el 33.9 pa -52.6      B: az 269.2 el 56.7 pa 55.8      u,v (fr/asec) -9910.522 1769.593      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c192a/v1\_PV/1234/No0001/bB..12BED8      Output file: /Exps/c192a/v1\_PV/1234/No0001/bB.W.77.12BED8



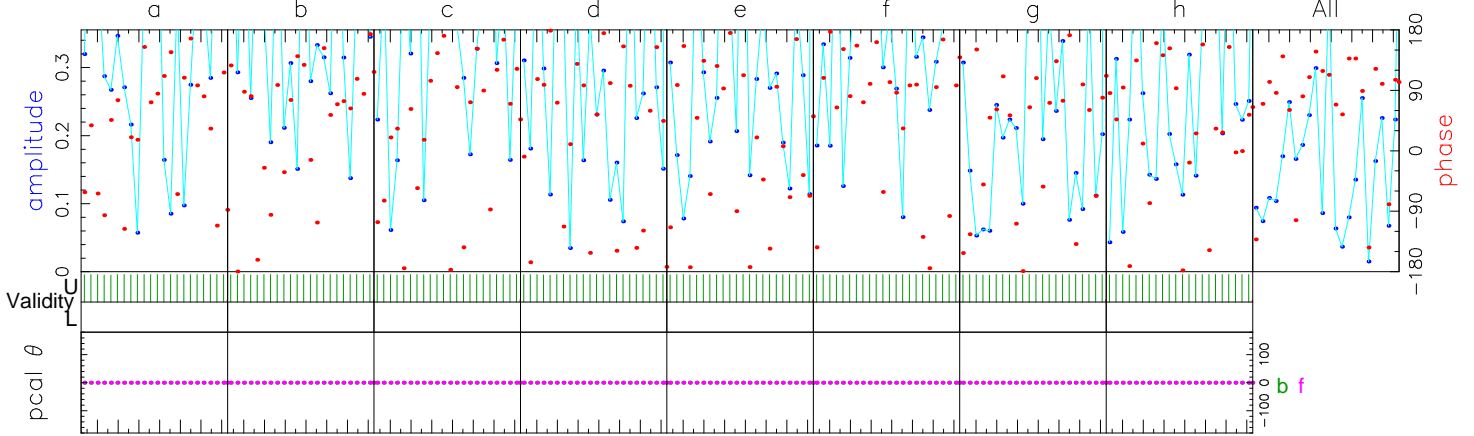


Fringe quality 0

SNR 6.5  
Int time 406.164  
Amp 0.119  
Phase 110.4  
PFD 1.8e-02  
Delays (us)  
SBD -0.005146  
MBD -0.003319  
Fringe rate (Hz)  
0.002299  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

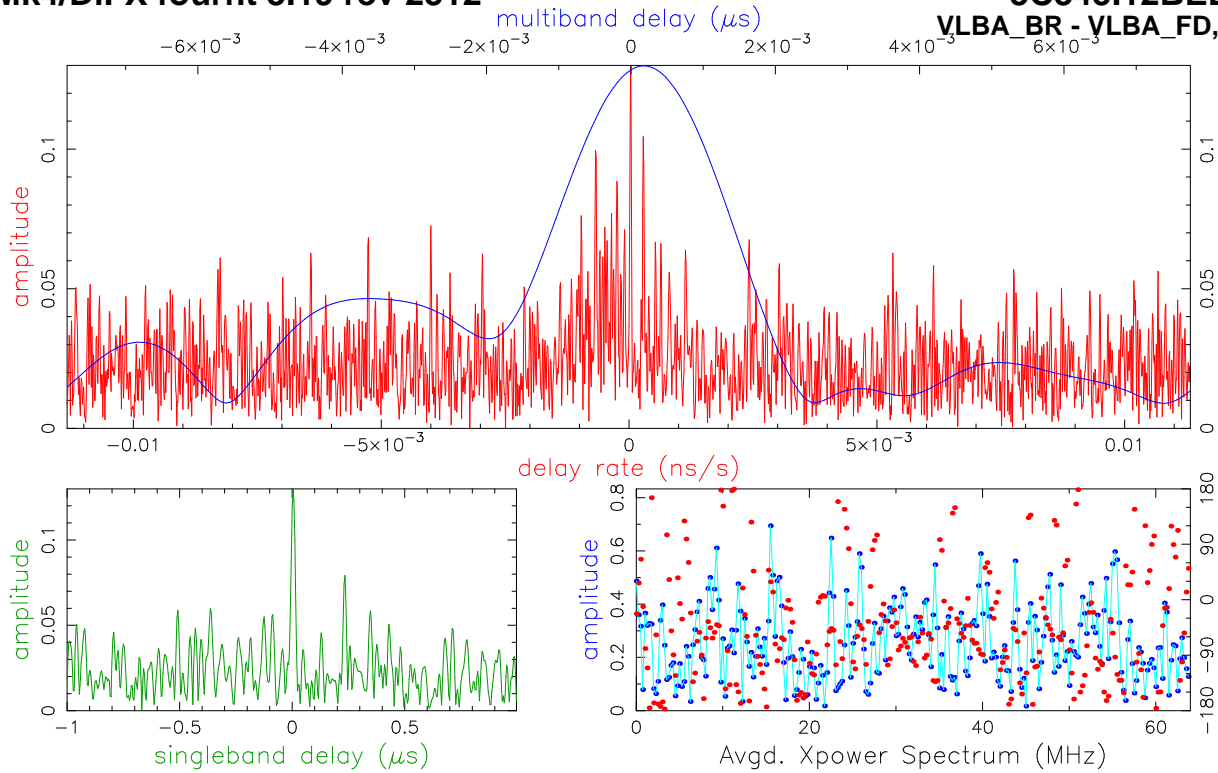
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165547  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
67.8	105.6	149.9	120.8	113.3	118.6	92.7	102.4	102.4	Phase	110.4
0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
476.3	255.8	317.4	134.0	252.0	208.1	466.5	74.5	74.5	Sbd box	255.7
U/L 795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	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	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.02685061015E+03		Apriori delay (usec)	-1.02684729122E+03	Resid mbdelay (usec)	-3.31892E-03	+/-	1.7E-04		
Sband delay (usec)	-1.02685243722E+03		Apriori clock (usec)	-1.0674781E+00	Resid sbdelay (usec)	-5.14600E-03	+/-	1.3E-03		
Phase delay (usec)	-1.02684728766E+03		Apriori clockrate (us/s)	-1.5144557E-07	Resid phdelay (usec)	3.56136E-06	+/-	5.7E-07		
Delay rate (us/s)	-1.40198796278E-01		Apriori rate (us/s)	-1.40198822967E-01	Resid rate (us/s)	2.66892E-08	+/-	2.4E-09		
Total phase (deg)		-129.4	Apriori accel (us/s/s)	2.24195151398E-05	Resid phase (deg)	110.4	+/-	17.5		

ph/seg (deg) 64.0 42.1 Search (2048X32) 0.114 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 89.2 73.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.7 24.8 Inc. seg. avg. 0.125 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.1 43.3 Inc. frq. avg. 0.114 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 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 1086.832 3053.430 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bf..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bf.W.13.12BED8

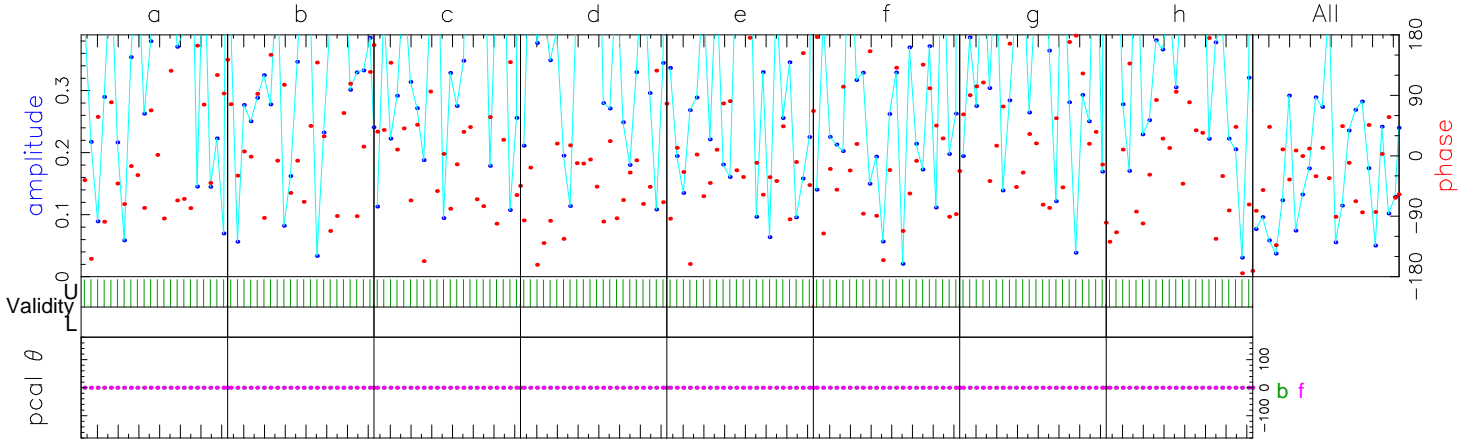


Fringe quality 0

SNR 7.2  
Int time 406.164  
Amp 0.130  
Phase -22.2  
PFD 2.4e-04  
Delays (us)  
SBD 0.004422  
MBD 0.000180  
Fringe rate (Hz) 0.002649  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

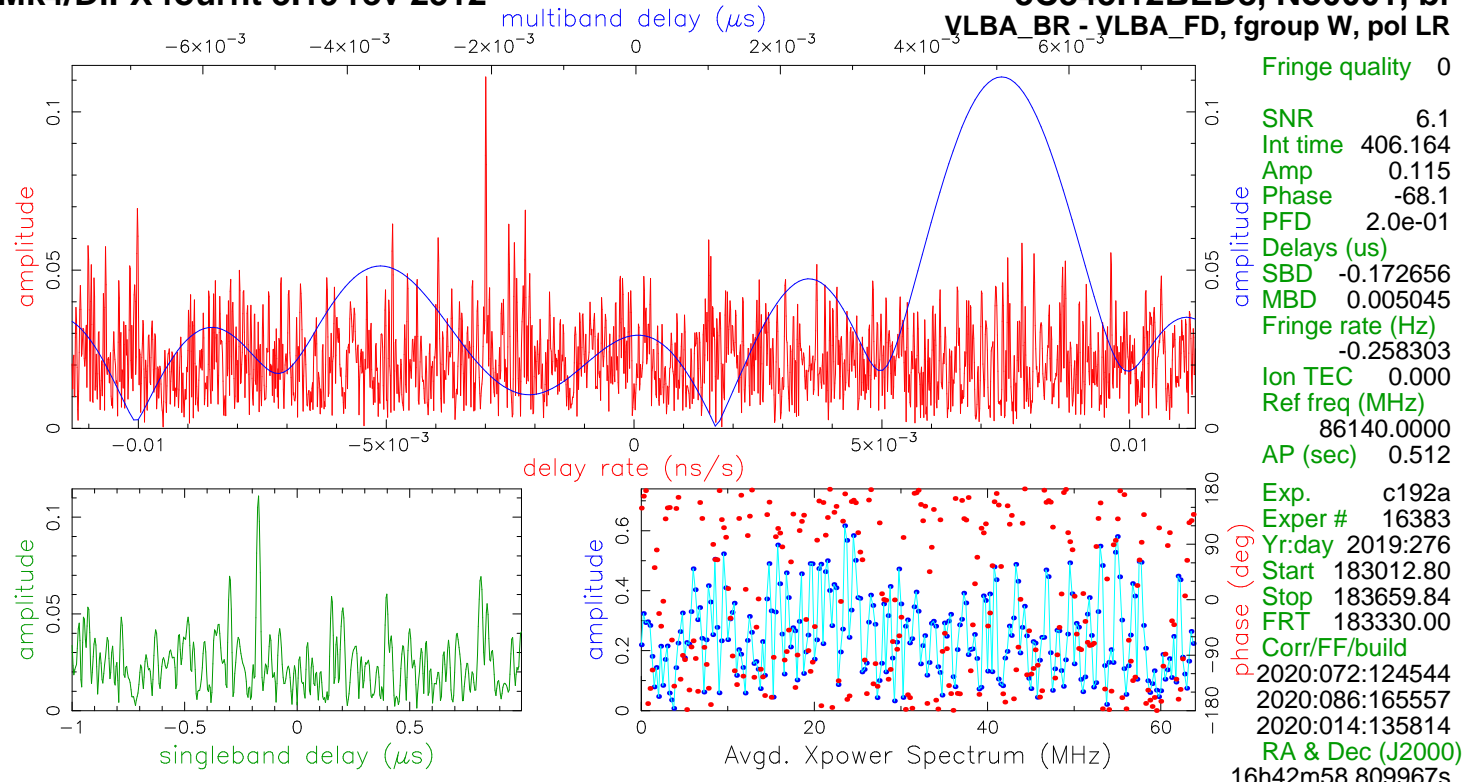
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165552  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-27.5	8.2	-8.4	-44.9	-34.3	-27.8	9.1	-31.2		Phase
	0.1	0.1	0.2	0.3	0.1	0.1	0.1	0.1		Ampl.
	328.0	164.8	257.8	258.3	419.9	141.1	236.5	21.9		Sbd box
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		258.1
b	1000	1000	1000	1000	1000	1000	1000	1000		APs used
f	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:f	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
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	-1.02684711128E+03		Apriori delay (usec)		-1.02684729122E+03		Resid mbdelay (usec)		1.79947E-04	+/- 1.5E-04
Sband delay (usec)	-1.02684286872E+03		Apriori clock (usec)		-1.0674781E+00		Resid sbdelay (usec)		4.42250E-03	+/- 1.2E-03
Phase delay (usec)	-1.02684729194E+03		Apriori clockrate (us/s)		-1.5144557E-07		Resid phdelay (usec)		-7.15008E-07	+/- 5.2E-07
Delay rate (us/s)	-1.40198792217E-01		Apriori rate (us/s)		-1.40198822967E-01		Resid rate (us/s)		3.07500E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		2.24195151398E-05		Resid phase (deg)		-22.2	+/- 16.0

ph/seg (deg) 51.3 38.4 Search (2048X32) 0.128 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 85.7 66.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.0 22.6 Inc. seg. avg. 0.139 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.4 39.5 Inc. frq. avg. 0.128 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 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 1086.832 3053.430 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bf..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bf.W.38.12BED8



Fringe quality 0

SNR 6.1

Int time 406.164

Amp 0.115

Phase -68.1

PFD 2.0e-01

Delays (us)

SBD -0.172656

MBD 0.005045

Fringe rate (Hz)

-0.258303

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

2020:086:165557

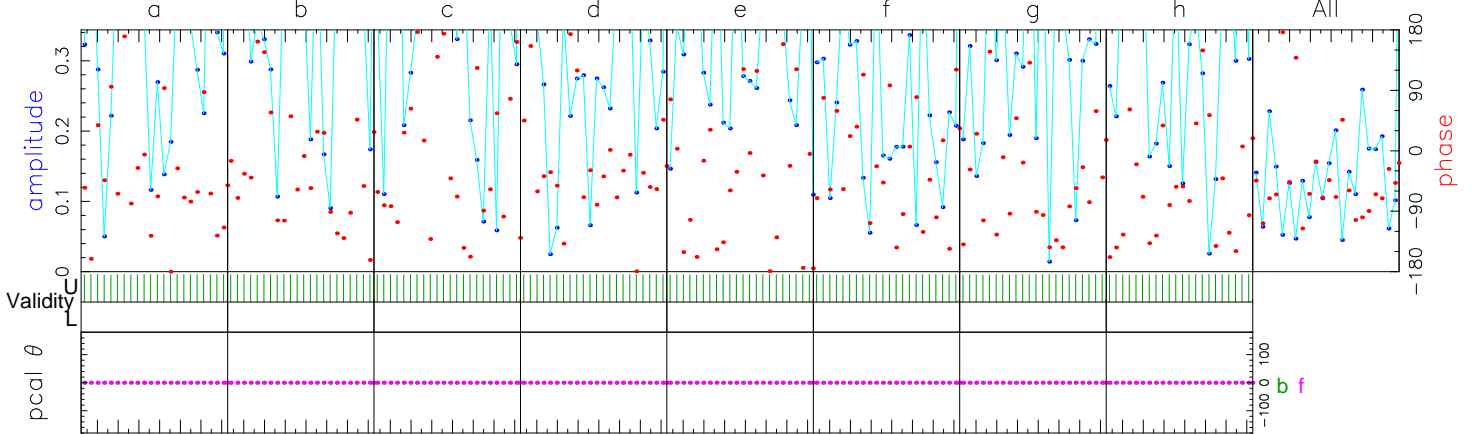
2020:014:135814

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
	-71.0	-52.5	-105.6	-41.3	-106.1	-27.1	-76.2	-67.9	Phase	-68.1
	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	55.9	276.1	362.6	199.7	101.3	240.2	425.3	295.3	Sbd box	212.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.02701412168E+03		Apriori delay (usec)		-1.02684729122E+03		Resid mbdelay (usec)		5.04455E-03	+/- 1.8E-04
Sband delay (usec)	-1.02701994697E+03		Apriori clock (usec)		-1.0674781E+00		Resid sbdelay (usec)		-1.72656E-01	+/- 1.4E-03
Phase delay (usec)	-1.02684729342E+03		Apriori clockrate (us/s)		-1.5144557E-07		Resid phdelay (usec)		-2.19546E-06	+/- 6.0E-07
Delay rate (us/s)	-1.40201821614E-01		Apriori rate (us/s)		-1.40198822967E-01		Resid rate (us/s)		-2.99865E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.24195151398E-05		Resid phase (deg)		-68.1	+/- 18.7

ph/seg (deg) 53.4 44.8 Amplitude 0.115 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

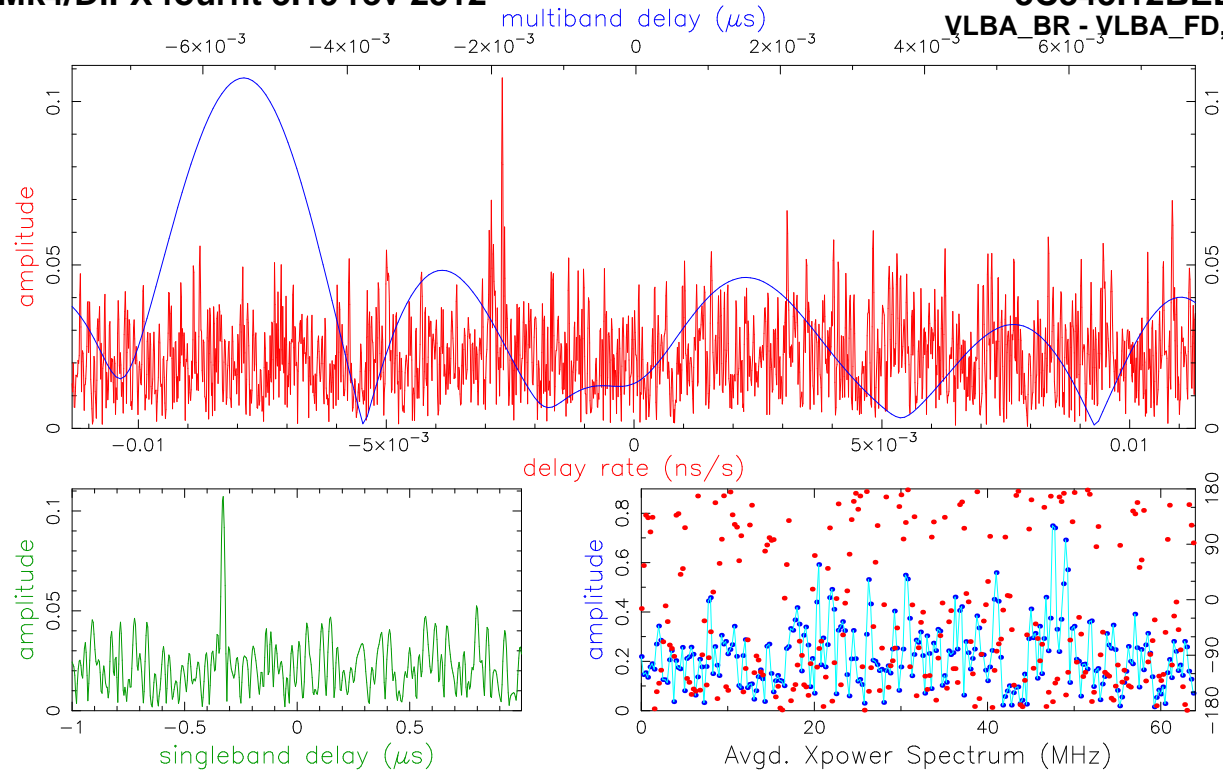
amp/seg (%) 60.4 78.1 Search (2048X32) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 30.4 26.4 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 31.9 46.1 Inc. frq. avg. 0.113 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 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 1086.832 3053.430 ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bf..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bf.W.58.12BED8 simultaneous interpolator

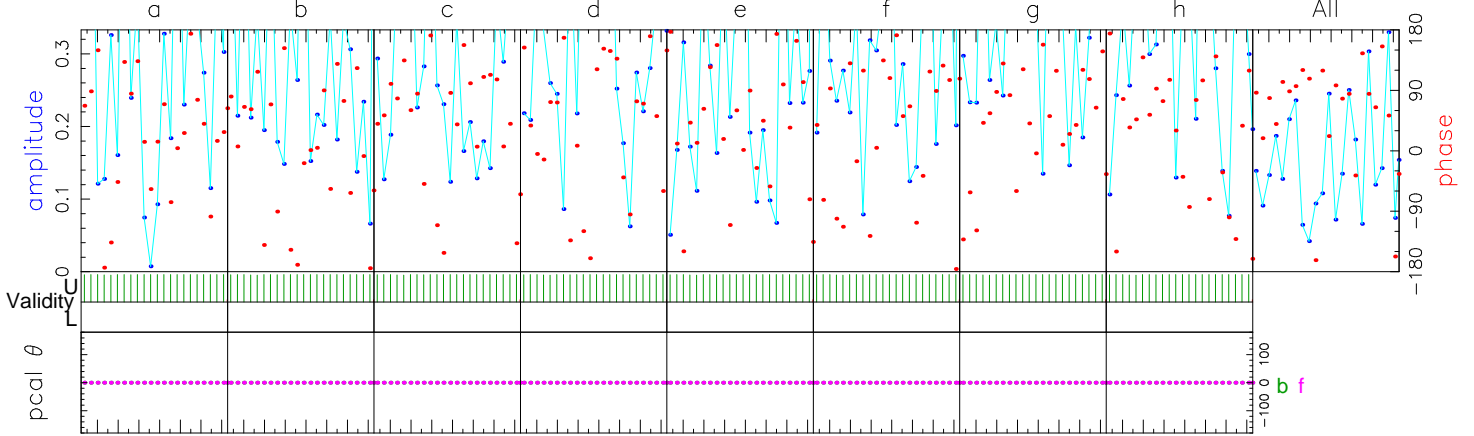


Fringe quality 0

SNR 6.0  
Int time 406.164  
Amp 0.111  
Phase 78.2  
PFD 4.3e-01  
Delays (us)  
SBD -0.329612  
MBD -0.005451  
Fringe rate (Hz)  
-0.228782  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

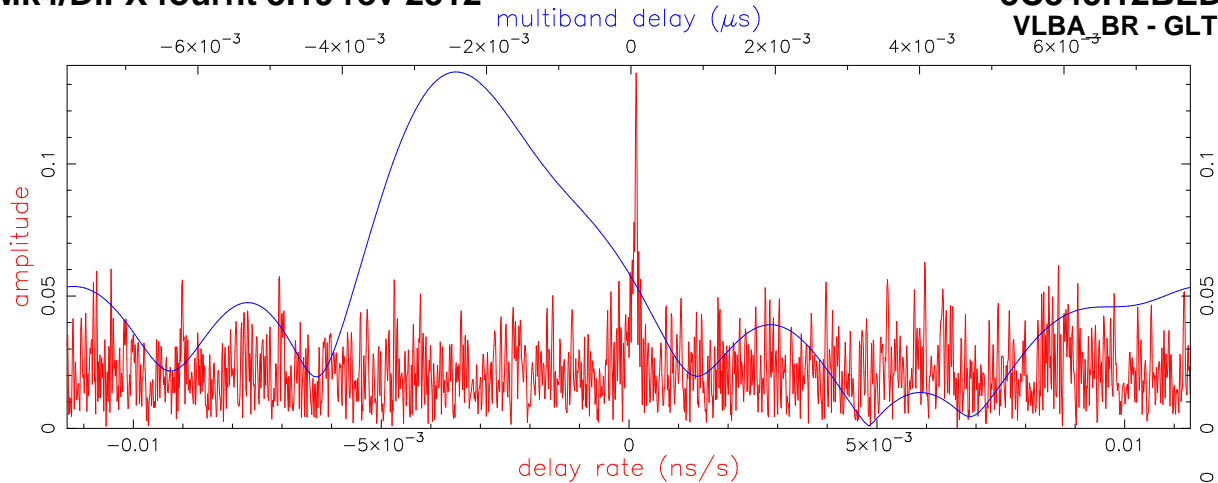
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165601  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

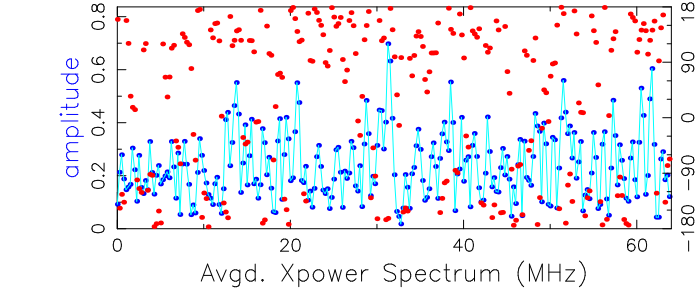
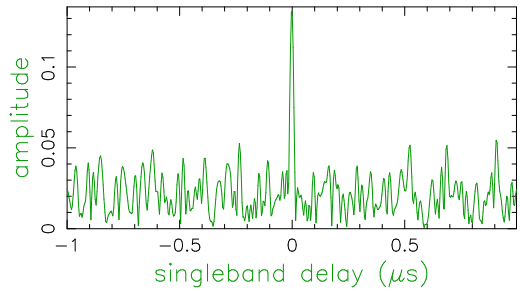


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	75.4	50.6	90.6	134.7	58.5	108.7	63.8	82.5	Ampl.	78.2
b	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
f	63.1	287.0	268.8	186.8	510.4	97.8	173.0	300.2	Sbd box	172.6
b:f	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b:f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.02718086687E+03		Apriori delay (usec)		-1.02684729122E+03		Resid mbdelay (usec)		-5.45064E-03	+/- 1.8E-04
Sband delay (usec)	-1.02717690372E+03		Apriori clock (usec)		-1.0674781E+00		Resid sbdelay (usec)		-3.29612E-01	+/- 1.4E-03
Phase delay (usec)	-1.02684728870E+03		Apriori clockrate (us/s)		-1.5144557E-07		Resid phdelay (usec)		2.52149E-06	+/- 6.2E-07
Delay rate (us/s)	-1.40201478894E-01		Apriori rate (us/s)		-1.40198822967E-01		Resid rate (us/s)		-2.65593E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.24195151398E-05		Resid phase (deg)		78.2	+/- 19.2

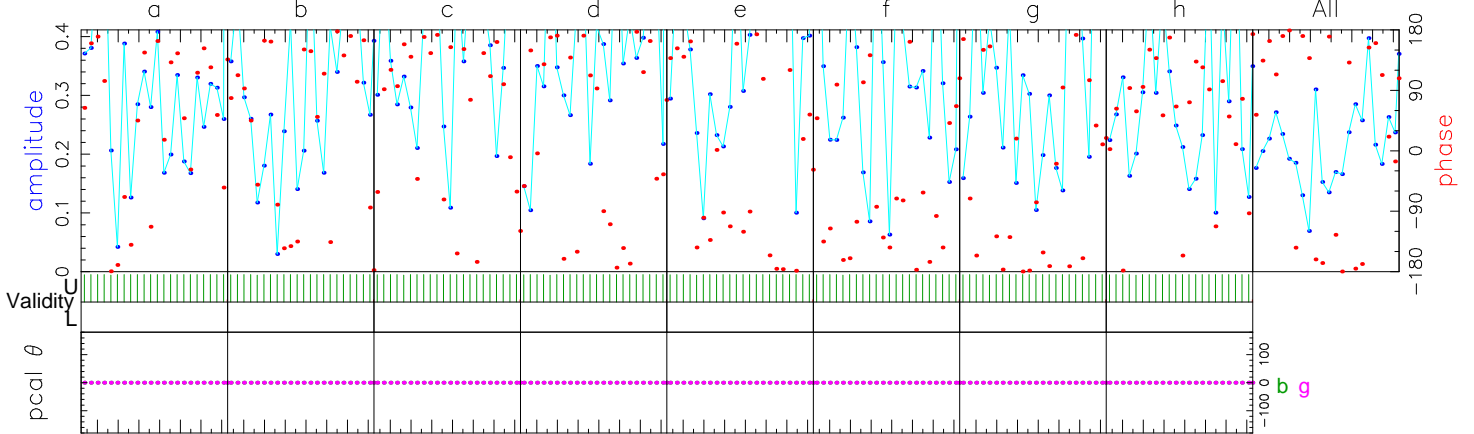
ph/seg (deg) 56.0 45.9 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.0 80.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.7 27.1 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.8 47.3 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  
 b: az 66.1 el 33.9 pa -52.6 f: az 61.0 el 37.1 pa -78.2 u,v (fr/asec) 1086.832 3053.430 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bf..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bf.W.75.12BED8



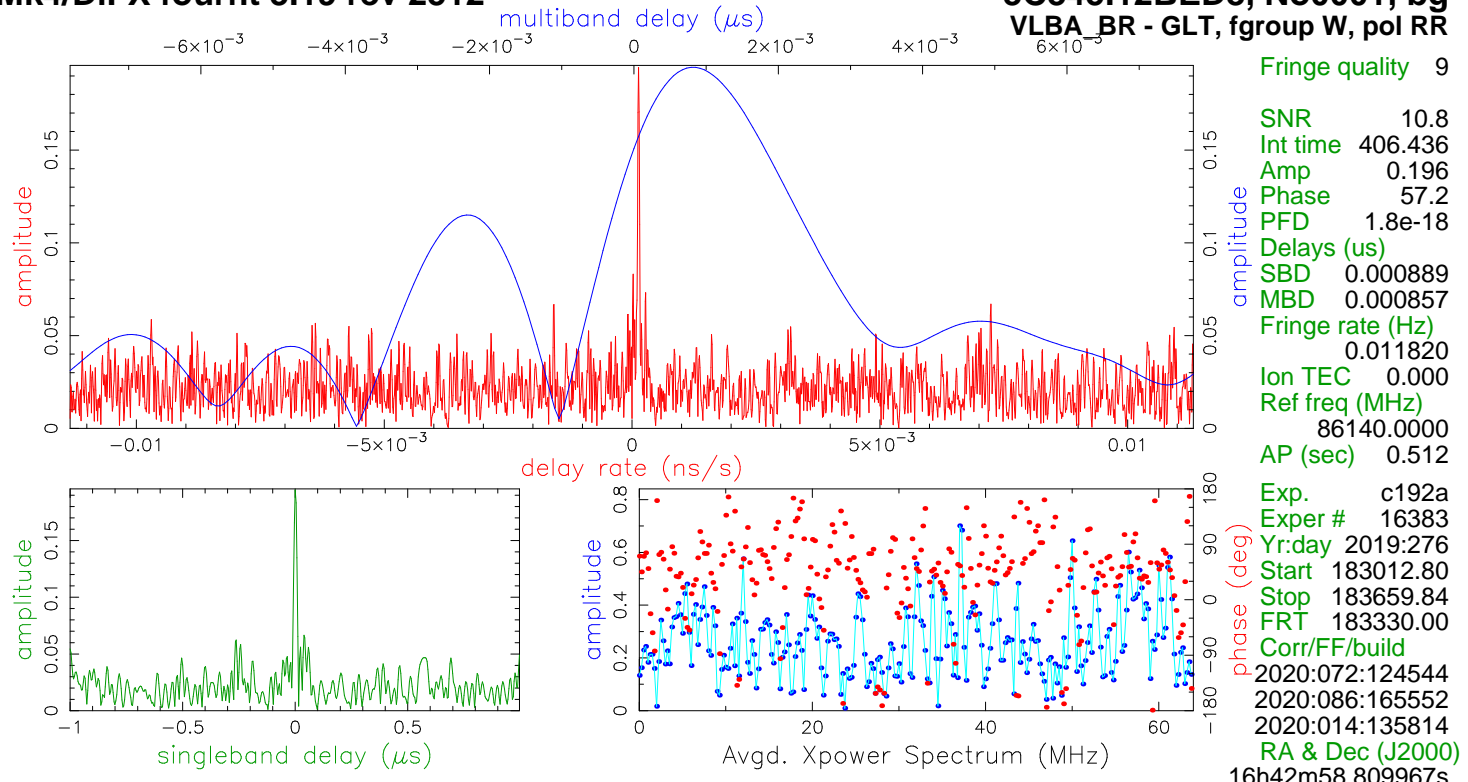
Fringe quality 9  
SNR 7.6  
Int time 406.395  
Amp 0.137  
Phase 161.6  
PFD 1.3e-05  
Delays (us)  
SBD -0.001905  
MBD -0.002523  
Fringe rate (Hz)  
0.012010  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165547  
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	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
g	0	0	0	0	0	0	0	0			
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:g	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			
g	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	-4.55393176878E+03				-4.55392924593E+03				-2.52284E-03	+/- 1.4E-04	
Sband delay (usec)	-4.55393115118E+03				-1.9088186E+00				-1.90525E-03	+/- 1.1E-03	
Phase delay (usec)	-4.55392924072E+03				-3.1739506E-07				5.21027E-06	+/- 4.9E-07	
Delay rate (us/s)	6.50043921105E-01				6.50043781683E-01				1.39421E-07	+/- 2.1E-09	
Total phase (deg)			73.5		7.70195165707E-06				161.6	+/- 15.1	
	RMS	Theor.	Amplitude	0.137 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	61.3	36.3	Search (2048X32)	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	75.4	63.4	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	46.5	21.4	Inc. seg. avg.	0.178	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	30.0	37.4	Inc. frq. avg.	0.157	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00	
b: az 66.1 el 33.9 pa -52.6			g: az 142.5 el 51.0 pa -10.6		u,v (fr/asec) -4834.133 -994.278					simultaneous interpolator	



Fringe quality 9

SNR 10.8

Int time 406.436

Amplitude 0.196

Phase 57.2

PFD 1.8e-18

Delays (us)

SBD 0.000889

MBD 0.000857

Fringe rate (Hz)

0.011820

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

2020:086:165552

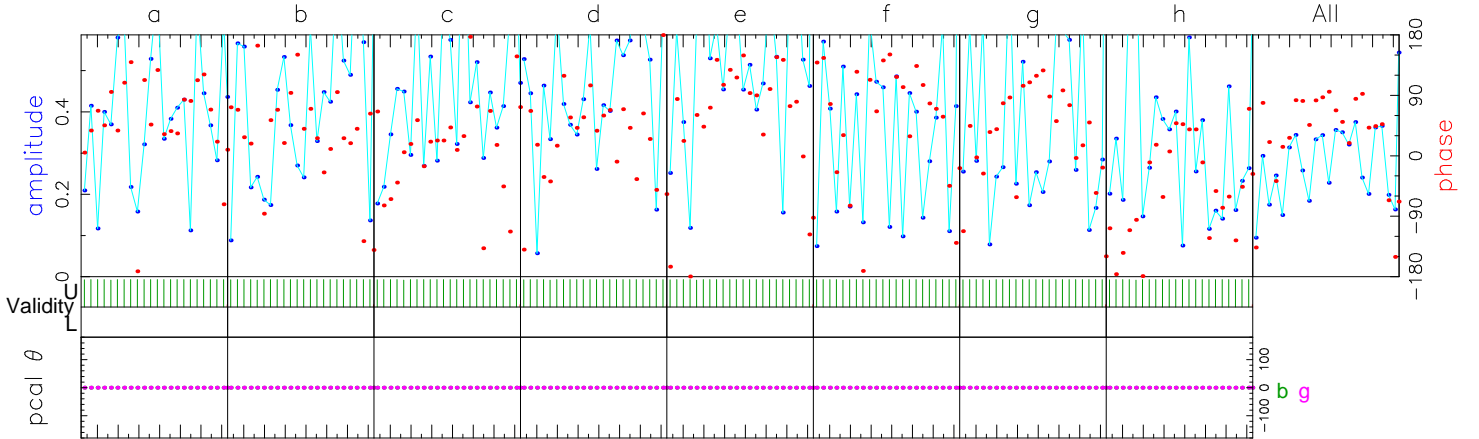
2020:014:135814

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
	72.1	46.3	22.2	40.8	90.9	95.8	52.9	-45.3	Phase	57.2
	0.3	0.3	0.2	0.2	0.4	0.2	0.2	0.1	Ampl.	0.2
	256.0	257.7	257.7	257.5	256.6	256.8	256.4	254.7	Sbd box	257.2
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.55392838896E+03		Apriori delay (usec)		-4.55392924593E+03		Resid mbdelay (usec)		8.56977E-04	+/- 1.0E-04
Sband delay (usec)	-4.55392835693E+03		Apriori clock (usec)		-1.9088186E+00		Resid sbdelay (usec)		8.89000E-04	+/- 8.0E-04
Phase delay (usec)	-4.55392924409E+03		Apriori clockrate (us/s)		-3.1739506E-07		Resid phdelay (usec)		1.84457E-06	+/- 3.4E-07
Delay rate (us/s)	6.50043918898E-01		Apriori rate (us/s)		6.50043781683E-01		Resid rate (us/s)		1.37215E-07	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.70195165707E-06		Resid phase (deg)		57.2	+/- 10.6

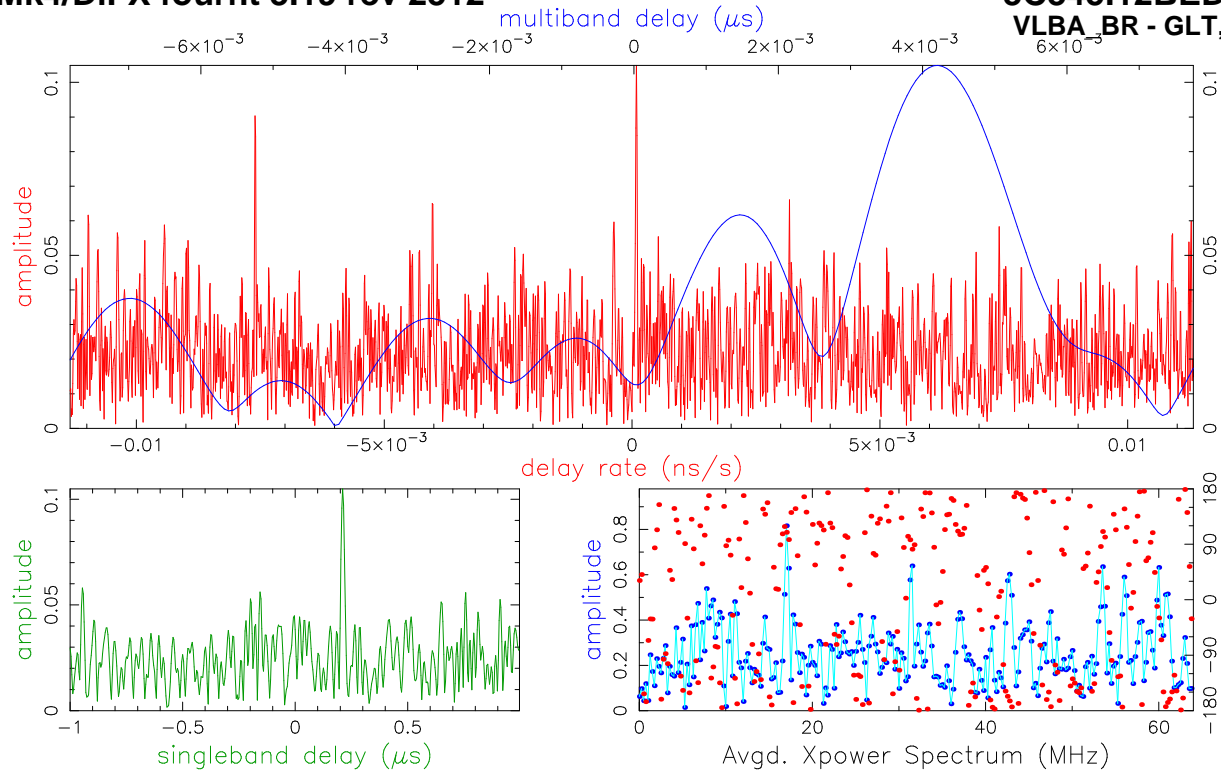
ph/seg (deg) 63.6 25.5 Search (2048X32) 0.189 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 57.0 44.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 50.0 15.0 Inc. seg. avg. 0.245 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 36.5 26.2 Inc. frq. avg. 0.228 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 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 ion window (TEC) 0.00 0.00 simultaneous interpolator

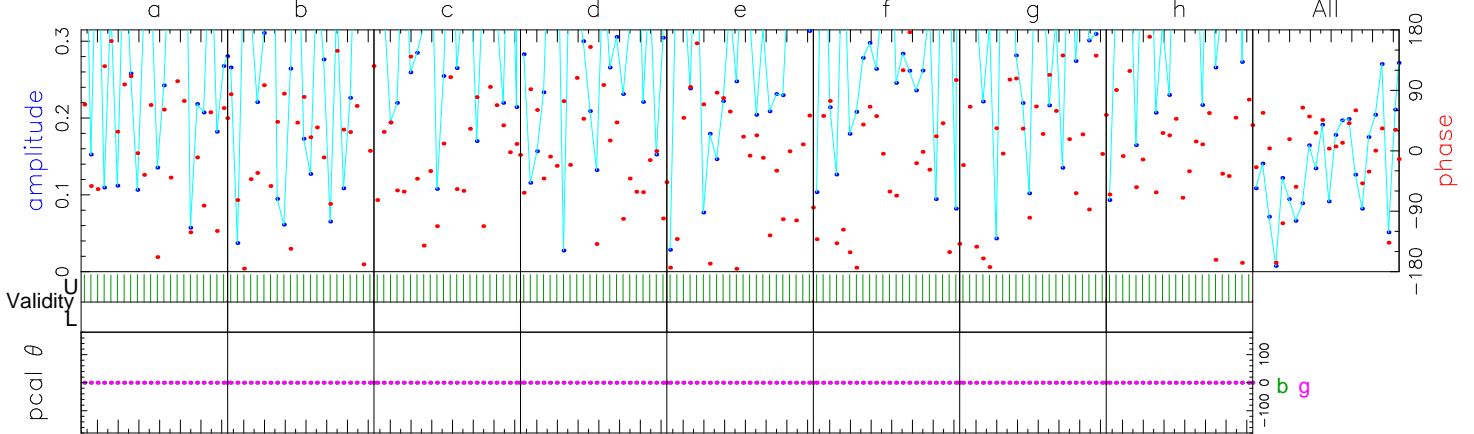


Fringe quality 0

SNR 5.8  
Int time 406.437  
Amp 0.105  
Phase 18.0  
PFD 8.4e-01  
Delays (us)  
SBD 0.211068  
MBD 0.004203  
Fringe rate (Hz)  
0.007668  
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  
2020:086:165558  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

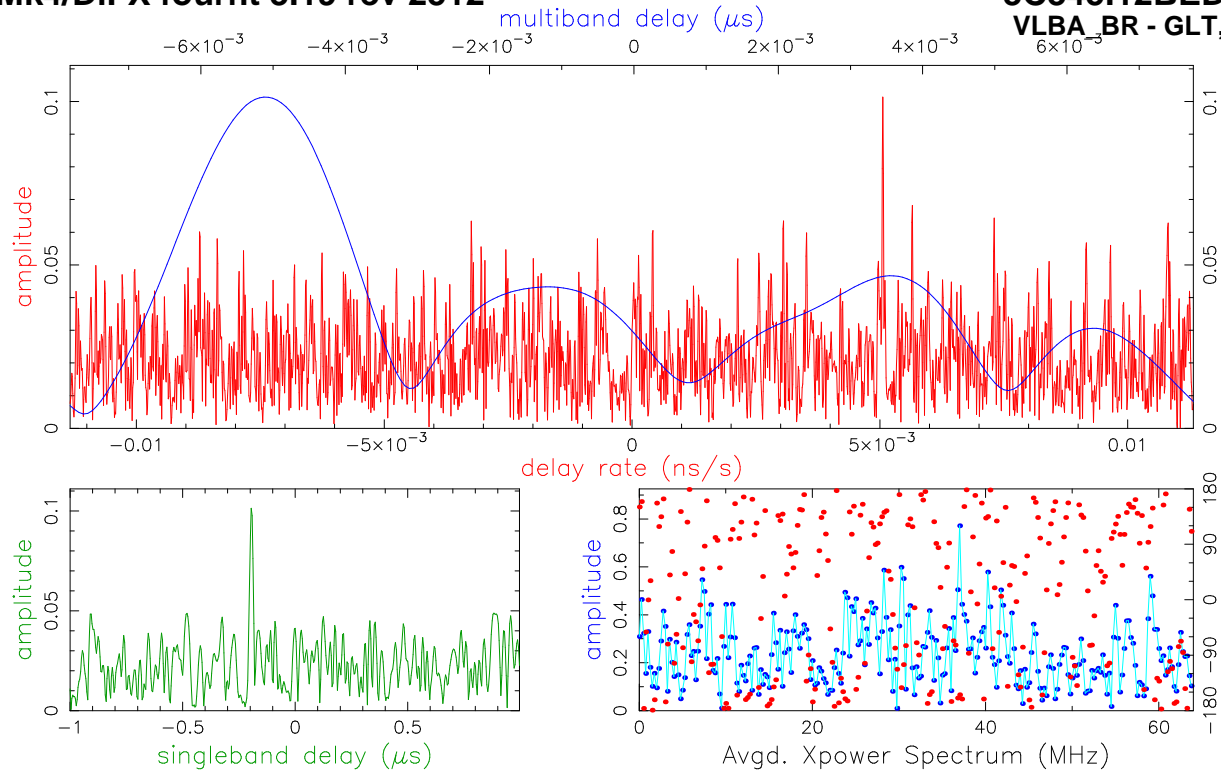
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	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		
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.55372191780E+03								4.20313E-03	+/- 1.9E-04
Sband delay (usec)	-4.55371817743E+03								2.11068E-01	+/- 1.5E-03
Phase delay (usec)	-4.55392924535E+03								5.80032E-07	+/- 6.4E-07
Delay rate (us/s)	6.50043870704E-01								8.90203E-08	+/- 2.7E-09
Total phase (deg)			-70.1						18.0	+/- 19.8
	RMS	Theor.	Amplitude	0.105 +/- 0.018						
ph/seg (deg)	65.1	47.5	Search (2048X32)	0.102						
amp/seg (%)	66.8	82.9	Interp.	0.000						
ph/frq (deg)	26.4	28.0	Inc. seg. avg.	0.101						
amp/frq (%)	36.5	48.9	Inc. frq. avg.	0.103						
b: az 66.1 el 33.9 pa -52.6			g: az 142.5 el 51.0 pa -10.6							
			u,v (fr/asec) -4834.133 -994.278							

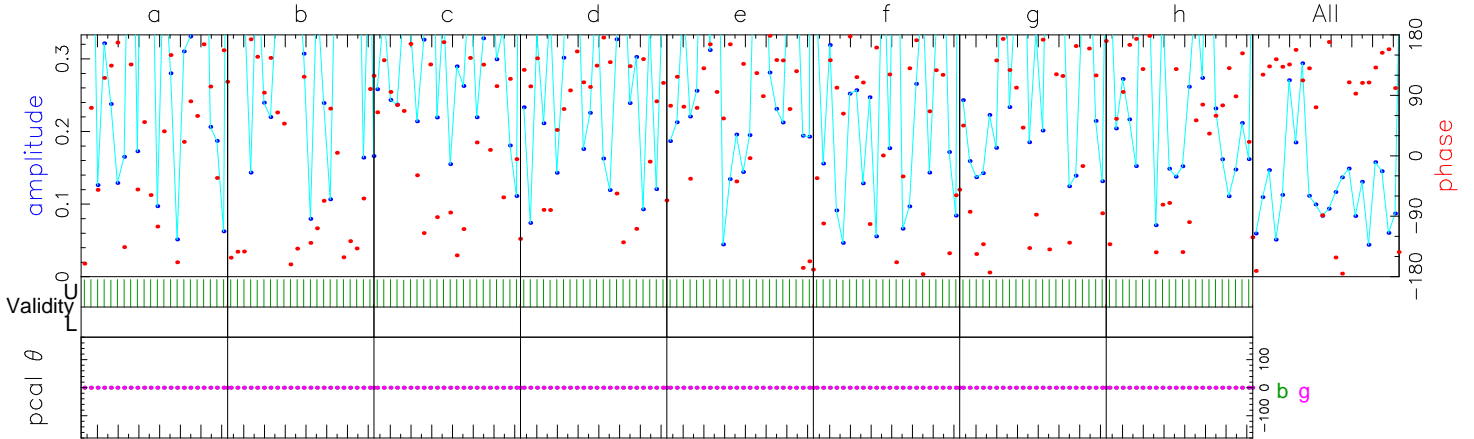
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bg.W.60.12BED8

simultaneous interpolator



Fringe quality 0  
SNR 5.6  
Int time 406.395  
Amp 0.111  
Phase 136.3  
PFD 9.9e-01  
Delays (us)  
SBD -0.194155  
MBD -0.005128  
Fringe rate (Hz)  
0.436065  
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  
2020:086:165602  
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



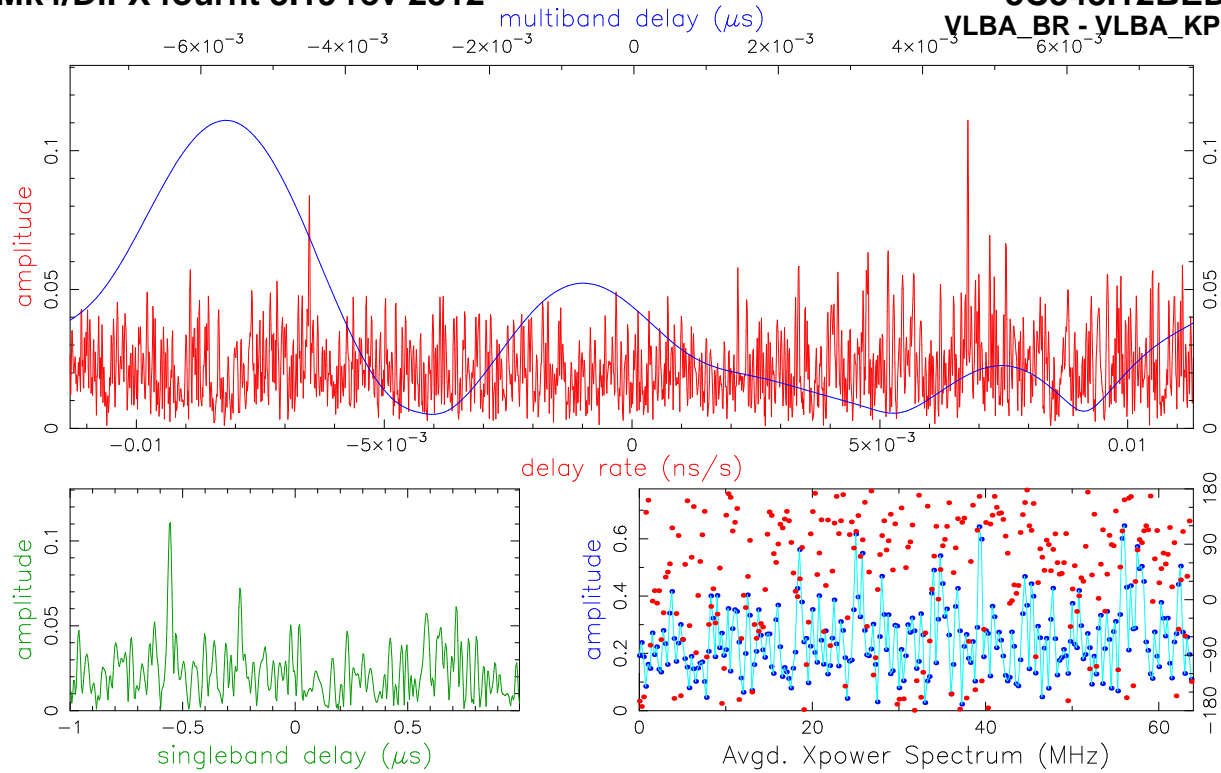
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.55412187430E+03				-4.55392924593E+03				-5.12837E-03	+/- 1.9E-04
Sband delay (usec)	-4.55412340093E+03				-1.9088186E+00				-1.94155E-01	+/- 1.5E-03
Phase delay (usec)	-4.55392924154E+03				-3.1739506E-07				4.39462E-06	+/- 6.6E-07
Delay rate (us/s)	6.50048843968E-01				6.50043781683E-01				5.06228E-06	+/- 2.8E-09
Total phase (deg)			48.2		7.70195165707E-06				136.3	+/- 20.3
	RMS	Theor.	Amplitude	0.111 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	43.6	48.8	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)		-1.000	1.000	
amp/seg (%)	65.7	85.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	35.2	28.8	Inc. seg. avg.	0.100	Sample rate(MISamp/s): 128	dr window (ns/s)		-0.011	0.011	
amp/frq (%)	43.5	50.2	Inc. frq. avg.	0.115	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 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bg.W.79.12BED8



Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bk  
VLBA\_BR - VLBA\_KP, fgroup W, pol LL

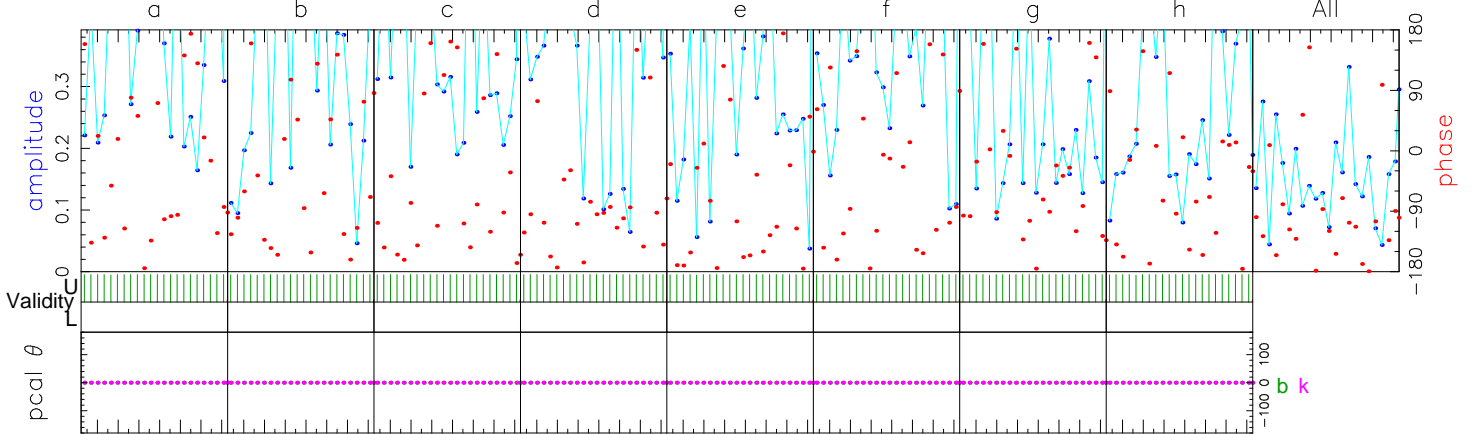


Fringe quality 0

SNR 6.2  
Int time 406.536  
Amp 0.131  
Phase -126.4  
PFD 1.5e-01  
Delays (us)  
SBD -0.556303  
MBD -0.005688  
Fringe rate (Hz) 0.584659  
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  
2020:086:165547  
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



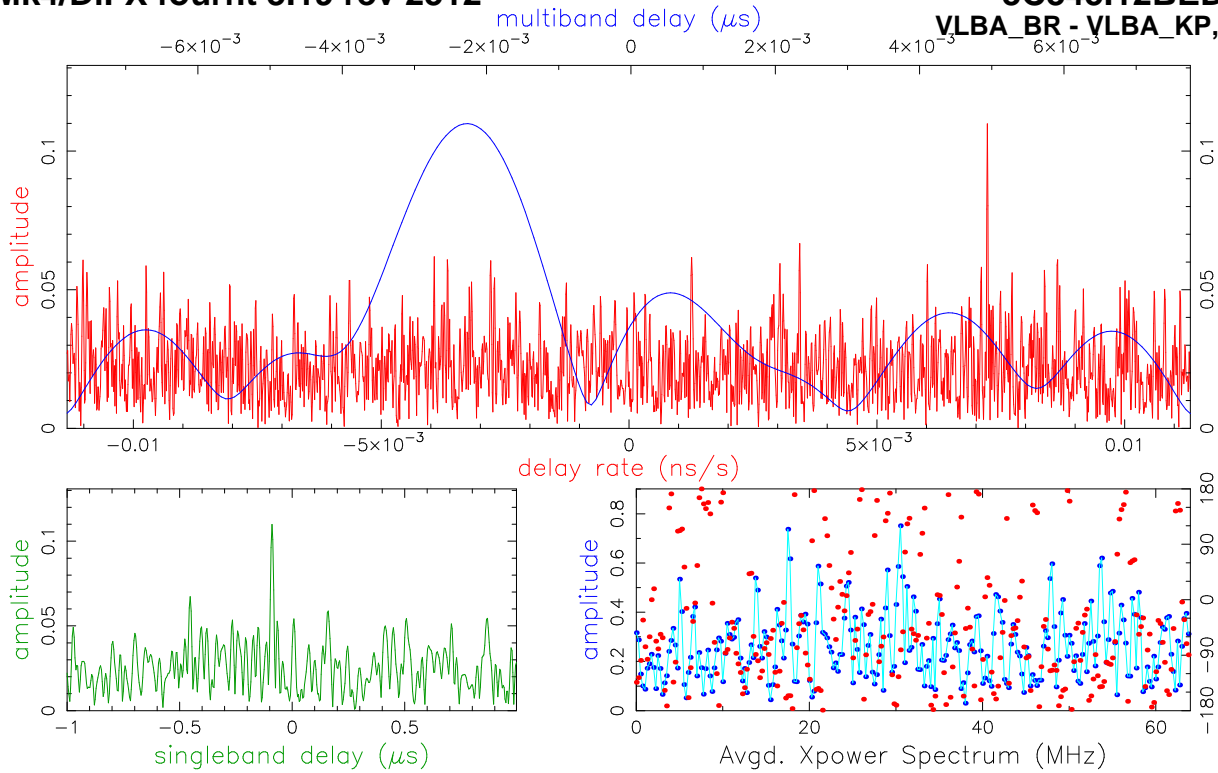
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.14017659863E+02			5.14570222991E+02				Resid mbdelay (usec)	-5.68813E-03 +/- 1.8E-04
Sband delay (usec)		5.14013919741E+02			-2.1077624E-01				Resid sbdelay (usec)	-5.56303E-01 +/- 1.4E-03
Phase delay (usec)		5.14570218915E+02			-4.7816091E-08				Resid phdelay (usec)	-4.07641E-06 +/- 6.0E-07
Delay rate (us/s)		-1.77847559692E-01			-1.77854347007E-01				Resid rate (us/s)	6.78732E-06 +/- 2.5E-09
Total phase (deg)			-123.4		1.28049038570E-05				Resid phase (deg)	-126.4 +/- 18.5
ph/seg (deg)	65.4	44.4		0.131 +/- 0.021					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	73.2	77.5		0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	32.2	26.2		0.137					Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	45.1	45.7		0.129					Sample rate(MISamp/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

b: az 66.1 el 33.9 pa -52.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bk.W.11.12BED8

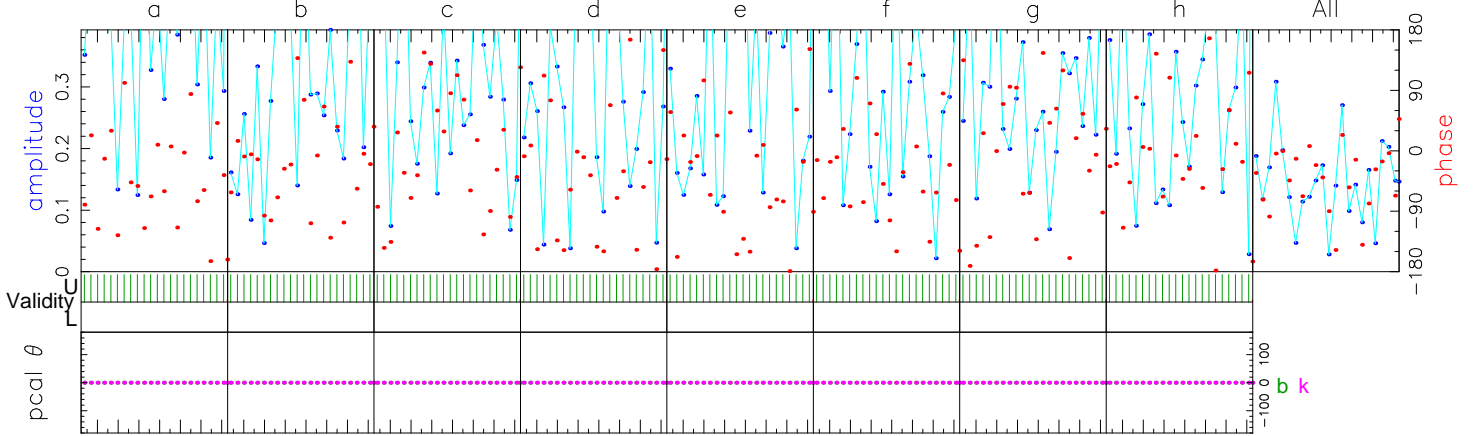
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bk  
VLBA\_BR - VLBA\_KP, fgroup W, pol RR



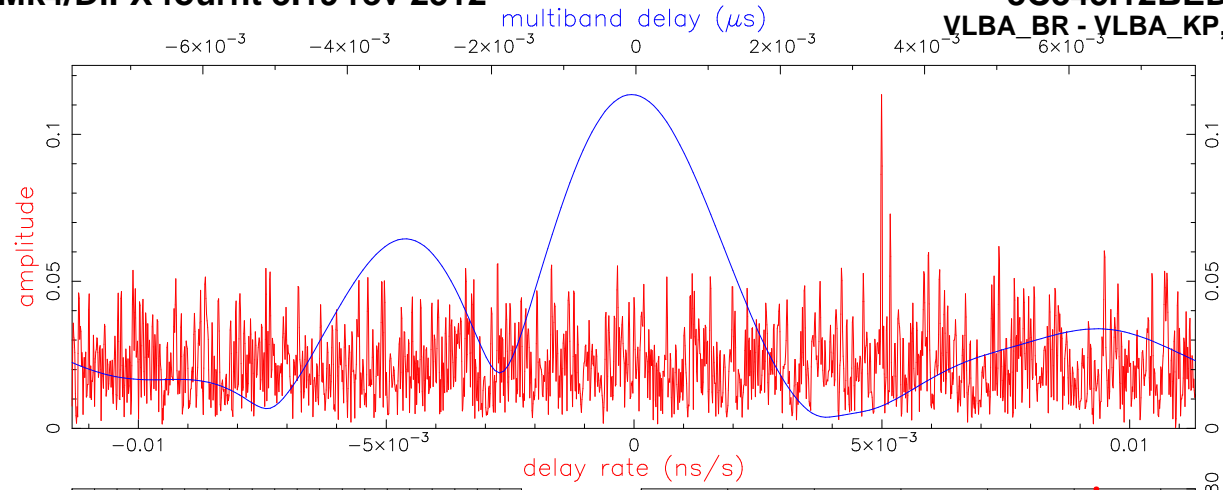
Fringe quality 0  
SNR 6.1  
Int time 406.536  
Amp 0.131  
Phase -32.3  
PFD 2.9e-01  
Delays (us)  
SBD -0.089398  
MBD -0.002247  
Fringe rate (Hz) 0.623666  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165552  
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

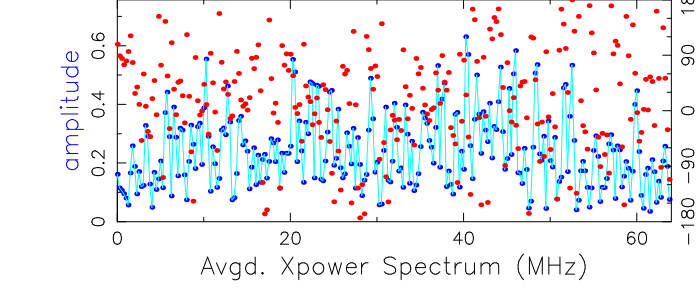
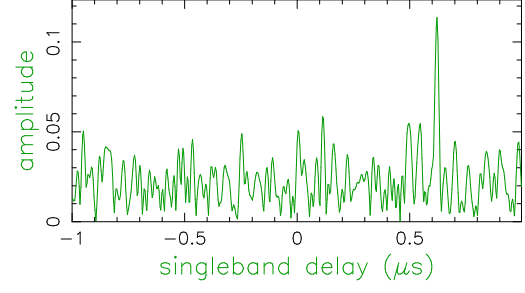


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.2	-25.2	-21.9	-28.4	-73.8	-45.0	17.1	-23.4	Phase	-32.3
	0.2	0.2	0.1	0.1	0.1	0.2	0.0	0.1	Ampl.	0.1
	233.7	328.7	151.6	140.3	299.3	253.2	510.3	170.6	Sbd box	234.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.14474226322E+02		Apriori delay (usec)		5.14570222991E+02		Resid mbdelay (usec)		-2.24667E-03	+/- 1.8E-04
Sband delay (usec)	5.14480825241E+02		Apriori clock (usec)		-2.1077624E-01		Resid sbdelay (usec)		-8.93978E-02	+/- 1.4E-03
Phase delay (usec)	5.14570221949E+02		Apriori clockrate (us/s)		-4.7816091E-08		Resid phdelay (usec)		-1.04262E-06	+/- 6.1E-07
Delay rate (us/s)	-1.77847106868E-01		Apriori rate (us/s)		-1.77854347007E-01		Resid rate (us/s)		7.24014E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.28049038570E-05		Resid phase (deg)		-32.3	+/- 18.9

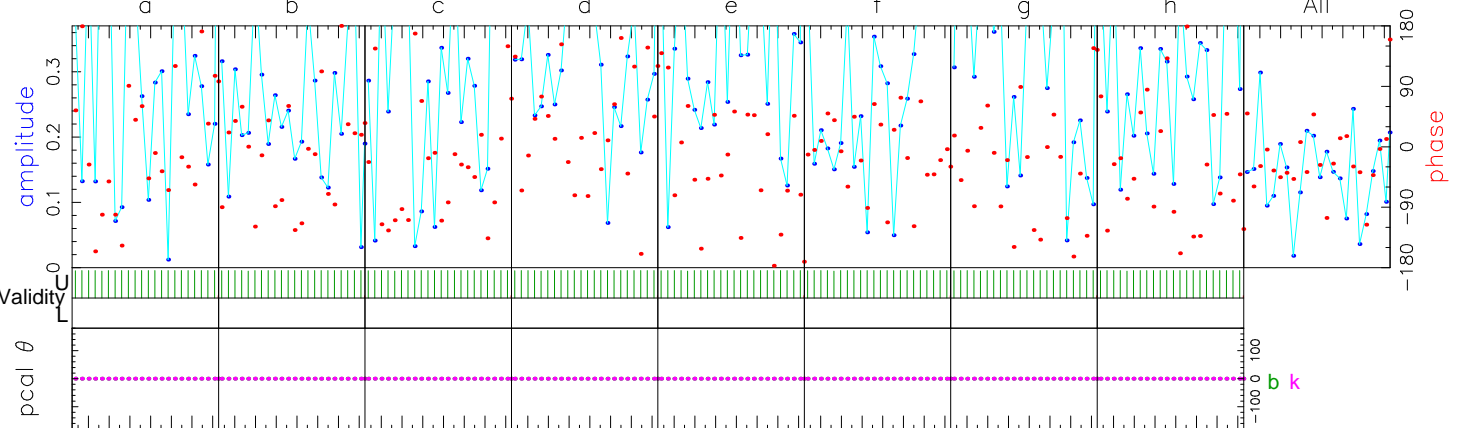
ph/seg (deg) 46.8 45.3 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.5 79.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.7 26.7 Inc. seg. avg. 0.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.1 46.6 Inc. frq. avg. 0.124 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bk.W.34.12BED8



Fringe quality 0  
SNR 6.3  
Int time 406.536  
Amp 0.123  
Phase -23.1  
PFD 9.1e-02  
Delays (us)  
SBD 0.620443  
MBD -0.000063  
Fringe rate (Hz) 0.431018  
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  
2020:086:165556  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

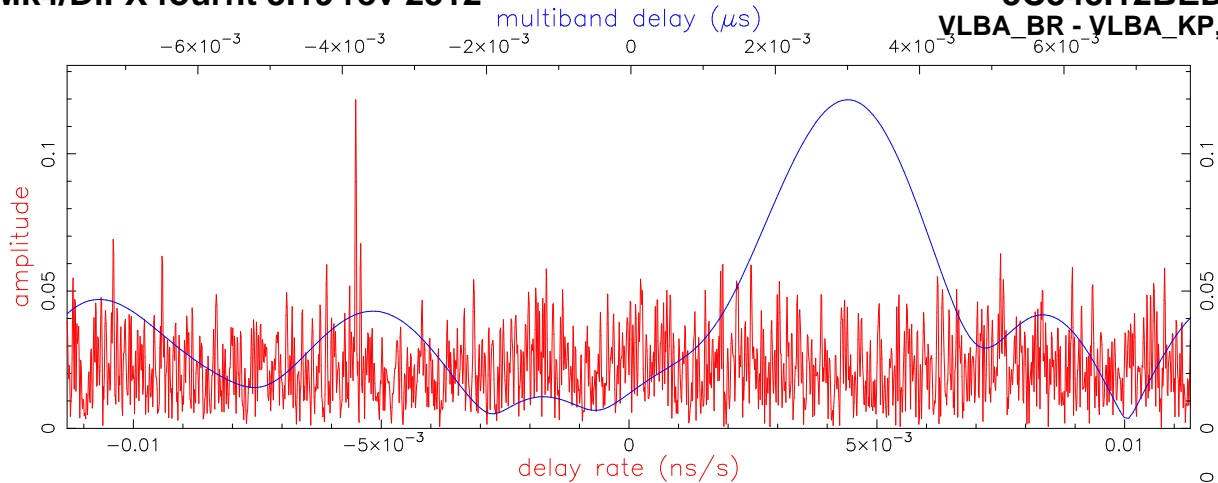


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



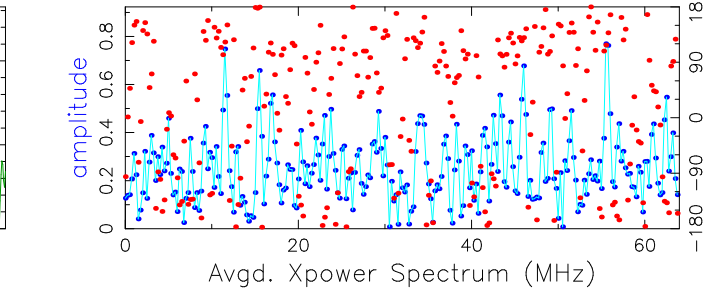
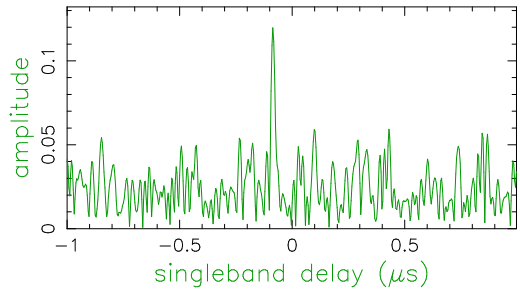
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-2.2	-20.9	-71.8	9.3	-6.5	-7.4	-28.9	-48.2		Phase
	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1		Ampl.
	396.5	13.1	122.2	249.5	15.2	415.7	197.0	192.2		Sbd box
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		APs used
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:k	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
k	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Tracks
Group delay (usec)(sbd)	5.15195159911E+02		Apriori delay (usec)		5.14570222991E+02		Resid mbdelay (usec)		-6.30802E-05	+/- 1.7E-04
Sband delay (usec)	5.15190666241E+02		Apriori clock (usec)		-2.1077624E-01		Resid sbdelay (usec)		6.20443E-01	+/- 1.4E-03
Phase delay (usec)	5.14570222245E+02		Apriori clockrate (us/s)		-4.7816091E-08		Resid phdelay (usec)		-7.45945E-07	+/- 5.9E-07
Delay rate (us/s)	-1.77849343317E-01		Apriori rate (us/s)		-1.77854347007E-01		Resid rate (us/s)		5.00369E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.28049038570E-05		Resid phase (deg)		-23.1	+/- 18.3

ph/seg (deg) 41.4 43.8 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 62.3 76.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 29.0 25.8 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 41.5 45.1 Inc. frq. avg. 0.125 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bk.W.53.12BED8



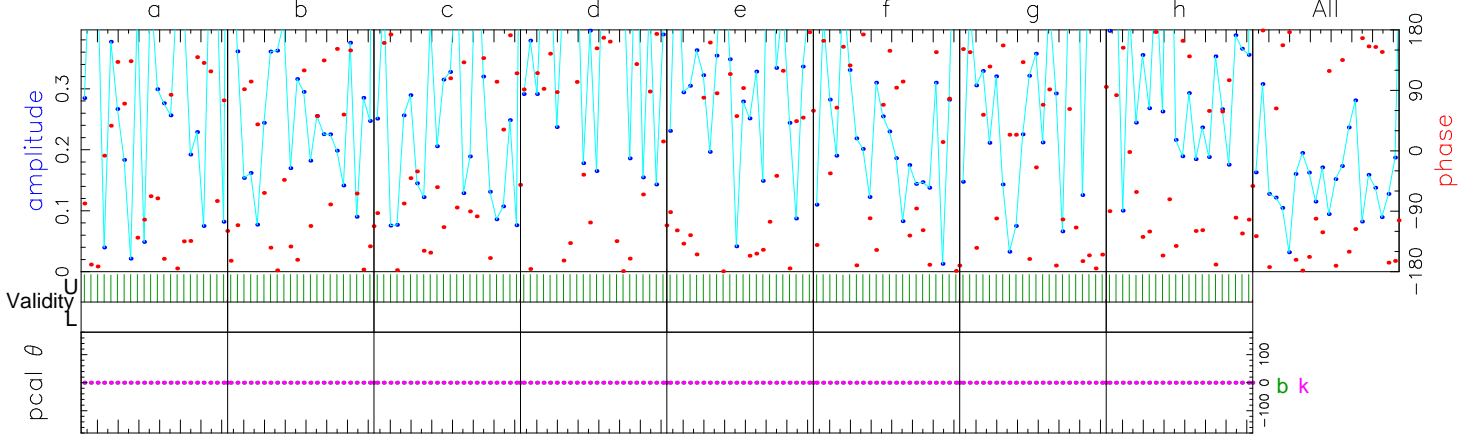
Fringe quality 0

SNR 6.6  
Int time 406.536  
Amp 0.132  
Phase -169.5  
PFD 1.2e-02  
Delays (us)  
SBD -0.085770  
MBD 0.003005  
Fringe rate (Hz)  
-0.475183  
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  
2020:086:165600  
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
	-156.4	-161.5	-127.8	157.0	-169.3	164.6	179.0	-122.1	Phase	-169.5
	0.1	0.1	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	422.0	368.2	266.1	233.9	107.0	468.4	315.1	302.3	Sbd box	235.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 5.14479478179E+02 Apriori delay (usec) 5.14570222991E+02 Resid mbdelay (usec) 3.00519E-03 +/- 1.6E-04  
 Sband delay (usec) 5.14484453241E+02 Apriori clock (usec) -2.1077624E-01 Resid sbdelay (usec) -8.57698E-02 +/- 1.3E-03  
 Phase delay (usec) 5.14570217524E+02 Apriori clockrate (us/s) -4.7816091E-08 Resid phdelay (usec) -5.46690E-06 +/- 5.6E-07  
 Delay rate (us/s) -1.77859863411E-01 Apriori rate (us/s) -1.77854347007E-01 Resid rate (us/s) -5.51640E-06 +/- 2.4E-09  
 Total phase (deg) -166.5 Apriori accel (us/s/s) 1.28049038570E-05 Resid phase (deg) -169.5 +/- 17.4

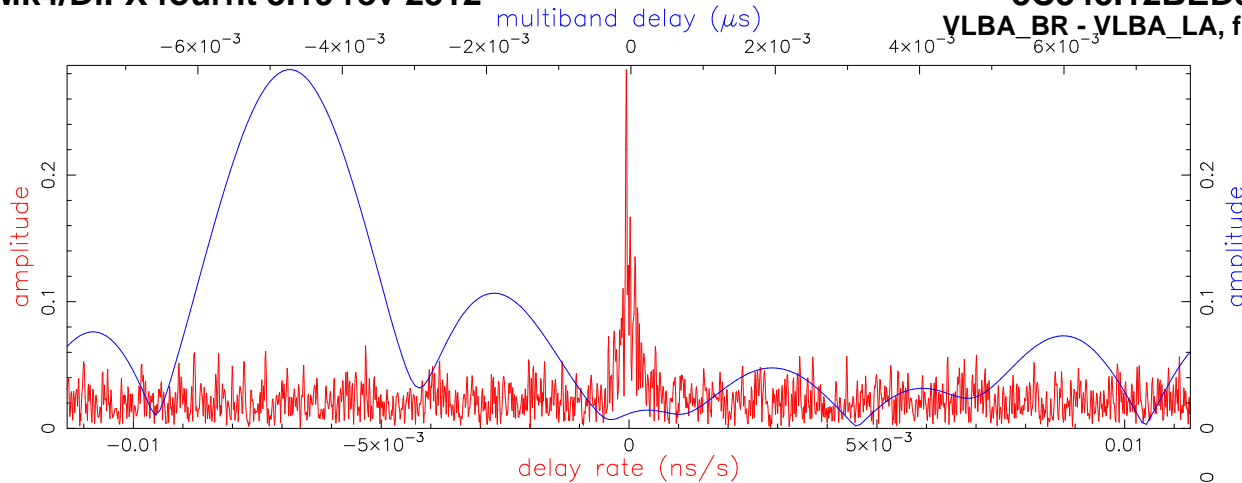
RMS Theor. Amplitude 0.132 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 44.5 41.6 Search (2048X32) 0.116 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 61.4 72.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 32.0 24.6 Inc. seg. avg. 0.135 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 30.6 42.9 Inc. frq. avg. 0.137 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 1350.630 2287.184 simultaneous interpolator

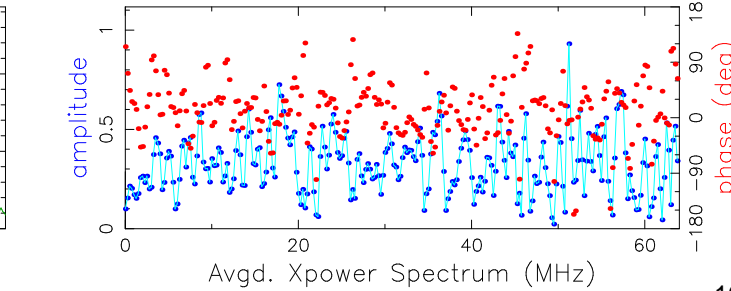
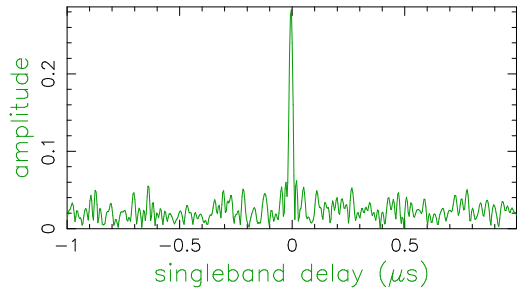
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bk.W.71.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bl  
VLBA\_BR - VLBA\_LA, fgroup W, pol LL

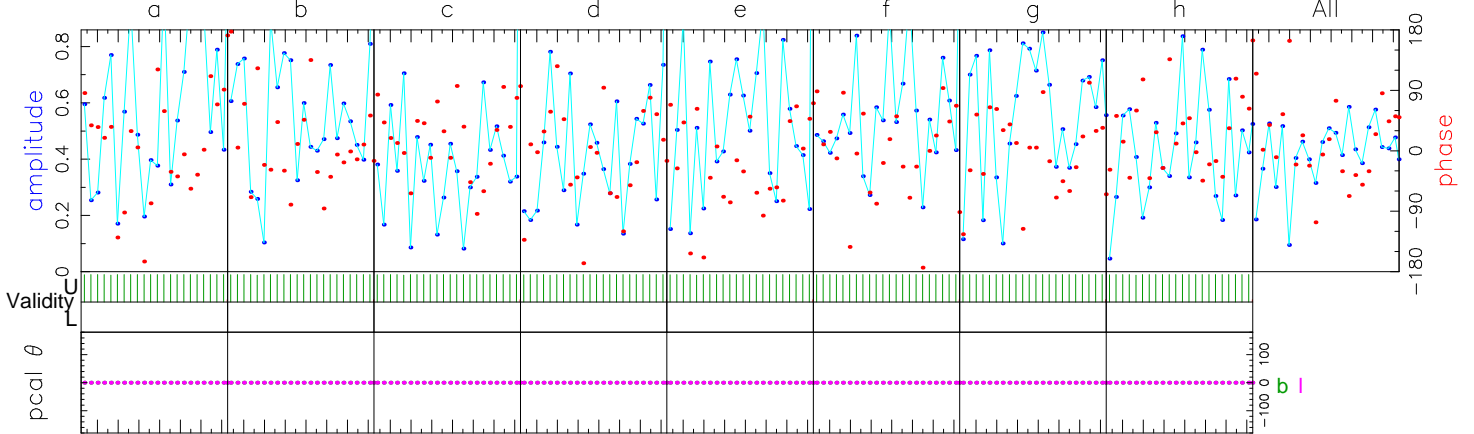


Fringe quality 9  
SNR 15.8  
Int time 406.536  
Amp 0.287  
Phase 8.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.005305  
MBD -0.004759  
Fringe rate (Hz)  
-0.005181  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165547  
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

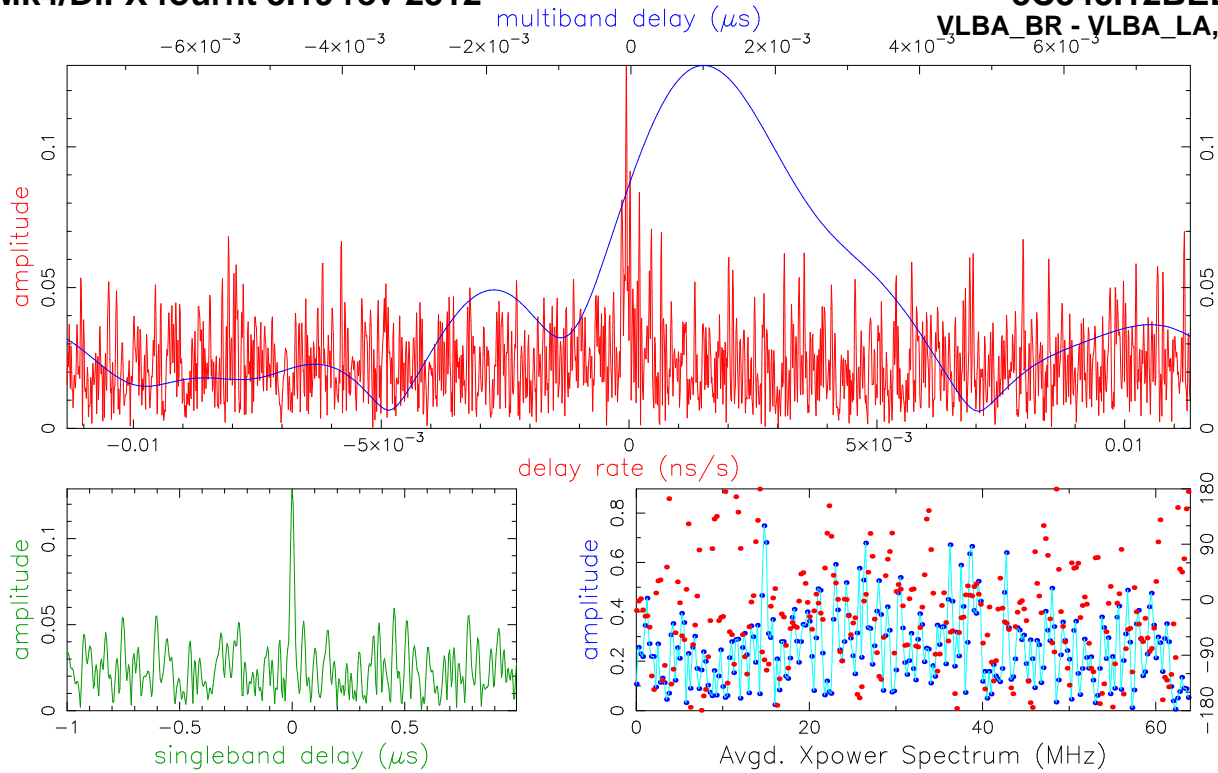


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.21217233884E+03	Apriori delay (usec)	-1.21216758003E+03	Resid mbdelay (usec)	-4.75881E-03	+/-	6.9E-05
Sband delay (usec)	-1.21217288553E+03	Apriori clock (usec)	1.2755744E-01	Resid sbdelay (usec)	-5.30550E-03	+/-	5.5E-04
Phase delay (usec)	-1.21216757977E+03	Apriori clockrate (us/s)	1.0907692E-07	Resid phdelay (usec)	2.61189E-07	+/-	2.3E-07
Delay rate (us/s)	-1.03821300356E-01	Apriori rate (us/s)	-1.03821240212E-01	Resid rate (us/s)	-6.01445E-08	+/-	1.0E-09
Total phase (deg)	-115.7	Apriori accel (us/s/s)	1.79960098304E-05	Resid phase (deg)	8.1	+/-	7.3

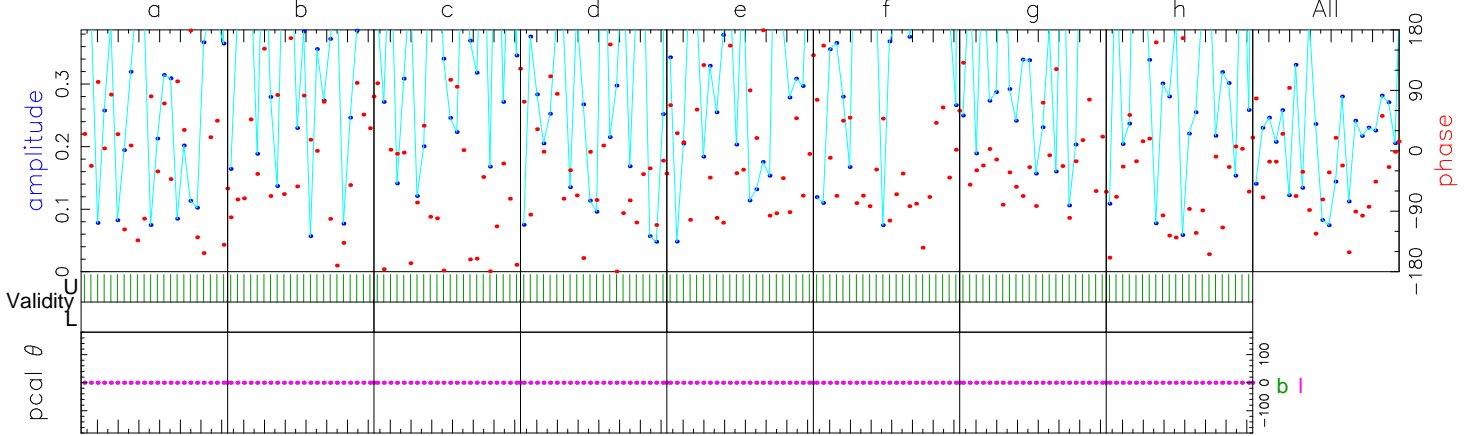
ph/seg (deg)	61.0	Theor.	17.4	Search (2048X32)	0.266	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.3		30.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	15.2		10.3	Inc. seg. avg.	0.404	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	13.2		17.9	Inc. frq. avg.	0.286	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 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bl.W.10.12BED8



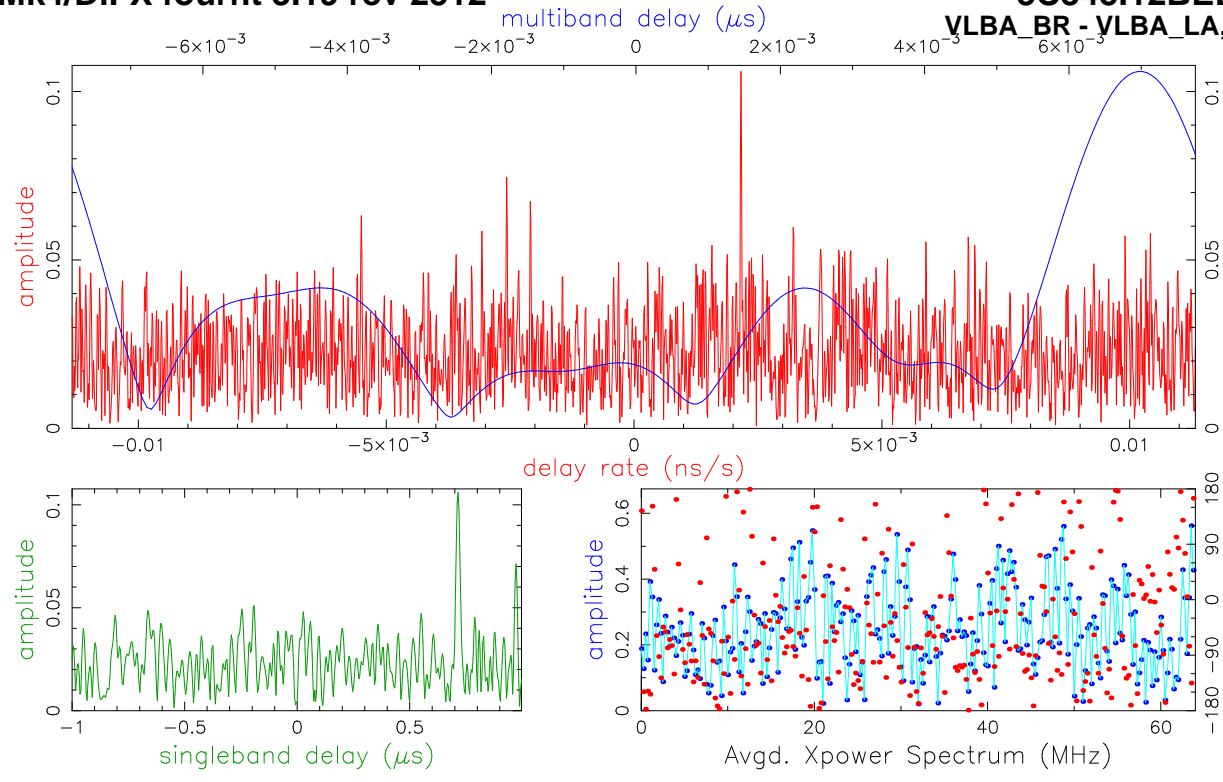
Fringe quality 0  
SNR 7.1  
Int time 406.536  
Amp 0.129  
Phase -42.5  
PFD 3.6e-04  
Delays (us)  
SBD 0.000161  
MBD 0.001011  
Fringe rate (Hz) -0.005038  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165551  
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
	-8.6	-5.3	-95.4	-50.7	-48.7	-47.4	-20.7	-52.6	Phase	-42.5
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
	384.6	452.3	258.8	505.5	395.3	256.0	256.7	258.5	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.21216656943E+03		Apriori delay (usec)		-1.21216758003E+03		Resid mbdelay (usec)		1.01060E-03	+/- 1.5E-04
Sband delay (usec)	-1.21216741853E+03		Apriori clock (usec)		0.126		Resid sbdelay (usec)		1.61500E-04	+/- 1.2E-03
Phase delay (usec)	-1.21216758140E+03		Apriori clockrate (us/s)		1.0907692E-07		Resid phdelay (usec)		-1.37138E-06	+/- 5.2E-07
Delay rate (us/s)	-1.03821298694E-01		Apriori rate (us/s)		-1.03821240212E-01		Resid rate (us/s)		-5.84822E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.79960098304E-05		Resid phase (deg)		-42.5	+/- 16.1

ph/seg (deg) 61.7 38.7 Amplitude 0.129 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 90.9 67.5 Search (2048X32) 0.126 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.7 22.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.3 39.8 Inc. seg. avg. 0.174 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 b: az 66.1 el 33.9 pa -52.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 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/bl.12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bl.W.32.12BED8 simultaneous interpolator

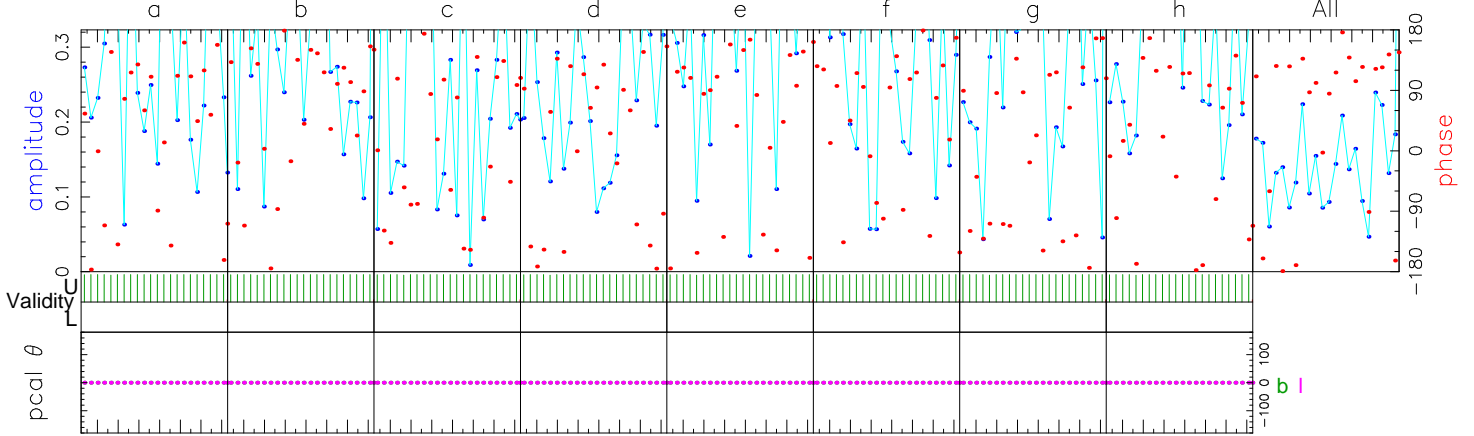


Fringe quality 0

SNR 5.9  
Int time 406.536  
Amp 0.108  
Phase 137.5  
PFD 7.1e-01  
Delays (us)  
SBD 0.714193  
MBD 0.006952  
Fringe rate (Hz)  
0.186618  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

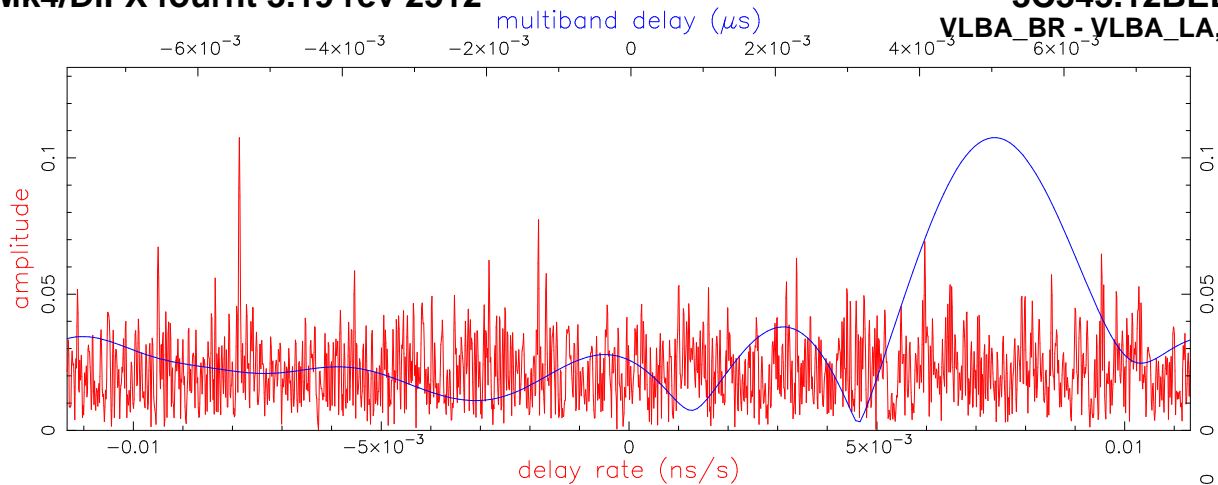
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165556  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



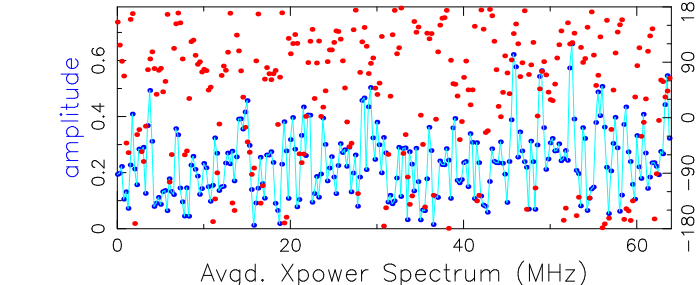
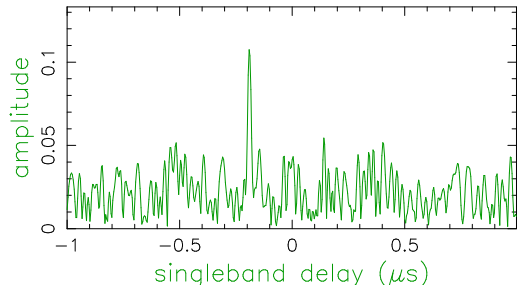
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
125.2	132.9	-154.9	143.8	128.5	132.4	177.3	129.5	129.5	Phase	137.5
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
244.4	263.7	499.5	234.6	439.5	450.1	244.4	401.4	401.4	Sbd box	439.8
U/L 795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l 0:0	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	1000	PC amp	
l 1000	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.21145750304E+03		Apriori delay (usec)		-1.21216758003E+03		Resid mbdelay (usec)		6.95198E-03	+/- 1.9E-04
Sband delay (usec)	-1.21145338728E+03		Apriori clock (usec)		1.2755744E-01		Resid sbdelay (usec)		7.14193E-01	+/- 1.5E-03
Phase delay (usec)	-1.21216757560E+03		Apriori clockrate (us/s)		1.0907692E-07		Resid phdelay (usec)		4.43371E-06	+/- 6.3E-07
Delay rate (us/s)	-1.03819073765E-01		Apriori rate (us/s)		-1.03821240212E-01		Resid rate (us/s)		2.16645E-06	+/- 2.7E-09
Total phase (deg)	13.7		Apriori accel (us/s/s)		1.79960098304E-05		Resid phase (deg)		137.5	+/- 19.6

ph/seg (deg) 62.7 47.0 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.8 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.0 27.7 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.4 48.3 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  
 b: az 66.1 el 33.9 pa -52.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 806.994 2256.689 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bl.W.50.12BED8



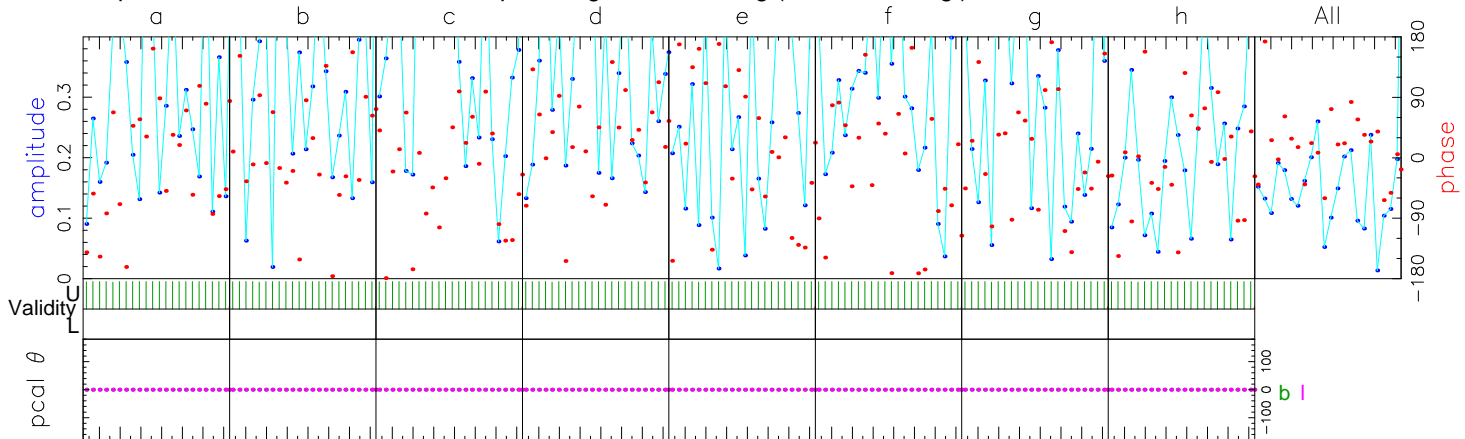
Fringe quality 0

SNR 6.0  
 Int time 406.536  
 Amp 0.133  
 Phase 16.0  
 PFD 4.5e-01  
 Delays (us)  
 SBD -0.190211  
 MBD 0.005040  
 Fringe rate (Hz)  
 -0.677707  
 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  
 2020:086:165601  
 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

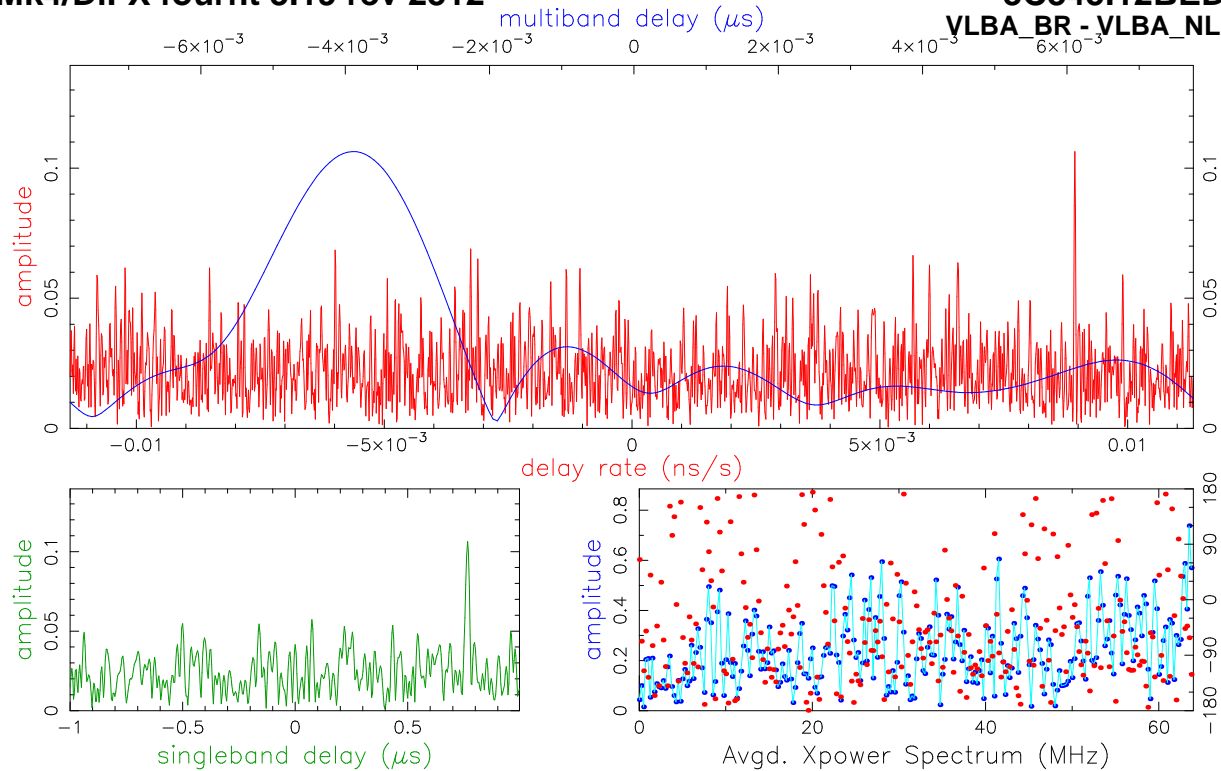


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.21235003989E+03	Apriori delay (usec)	-1.21216758003E+03	Resid mbdelay (usec)	5.04014E-03	+/-	1.8E-04
Sband delay (usec)	-1.21235779128E+03	Apriori clock (usec)	1.2755744E-01	Resid sbdelay (usec)	-1.90211E-01	+/-	1.4E-03
Phase delay (usec)	-1.21216757951E+03	Apriori clockrate (us/s)	1.0907692E-07	Resid phdelay (usec)	5.16809E-07	+/-	6.2E-07
Delay rate (us/s)	-1.03829107721E-01	Apriori rate (us/s)	-1.03821240212E-01	Resid rate (us/s)	-7.86751E-06	+/-	2.6E-09
Total phase (deg)	-107.7	Apriori accel (us/s/s)	1.79960098304E-05	Resid phase (deg)	16.0	+/-	19.2

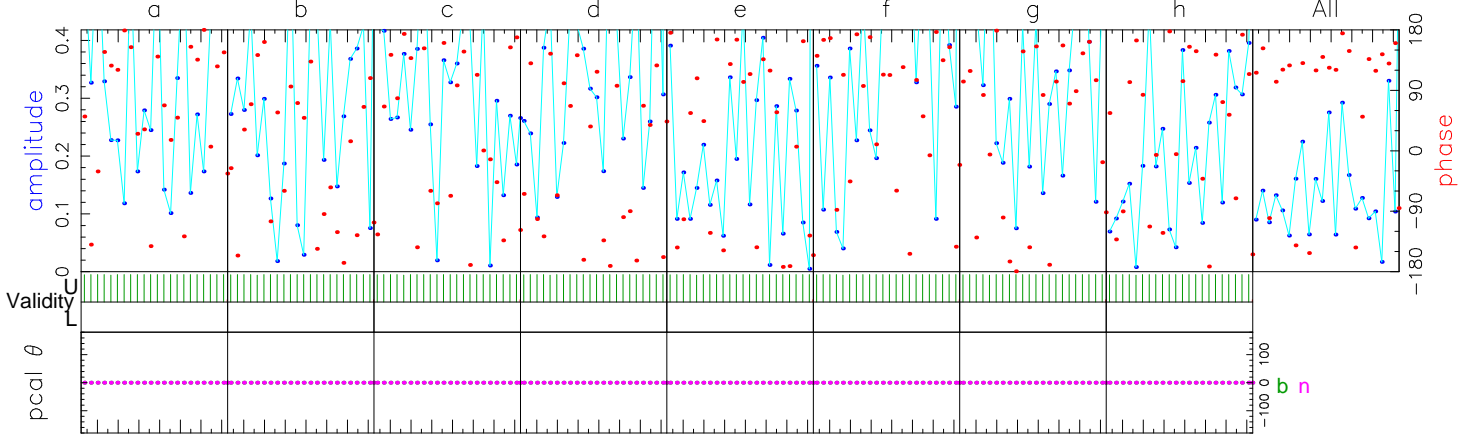
ph/seg (deg)	52.5	RMS	46.0	Theor.	46.0	Amplitude	0.133 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.3	Search (2048X32)	0.102	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	17.2	Inc. seg. avg.	0.137	Inc. frq. avg.	0.124	Bits/sample:	2x2	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	40.4	Inc. frq. avg.	0.124	u,v (fr/asec)	806.994 2256.689	Data rate(Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00





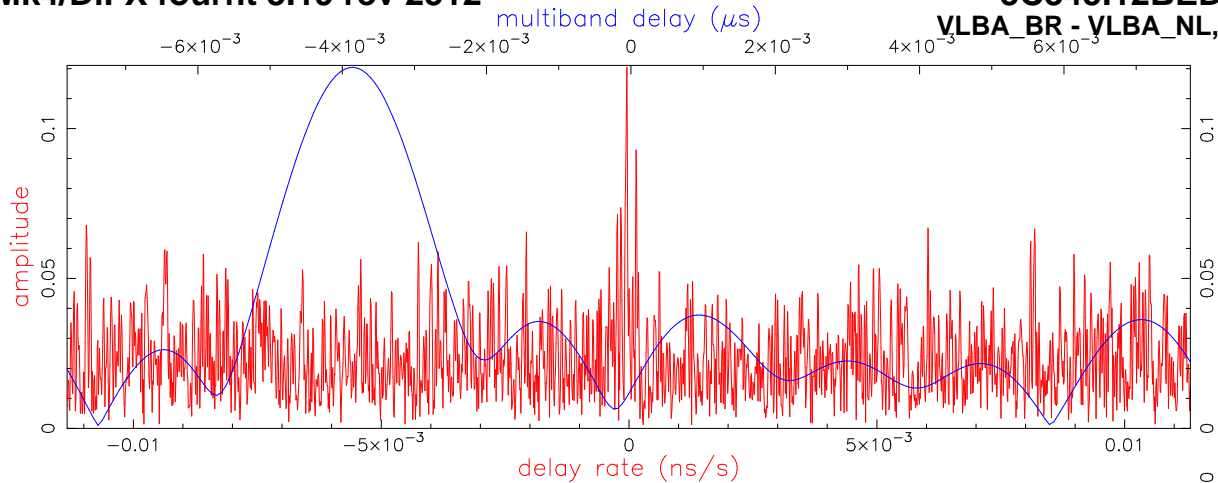
Fringe quality 0  
SNR 5.9  
Int time 406.536  
Amp 0.139  
Phase 142.6  
PFD 6.7e-01  
Delays (us)  
SBD 0.765955  
MBD -0.003879  
Fringe rate (Hz) 0.770439  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165548  
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



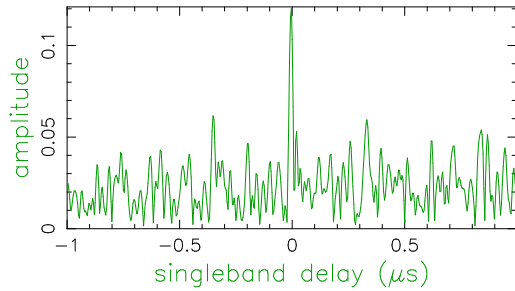
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.59878731133E+03									
Sband delay (usec)	-4.59878310307E+03									
Phase delay (usec)	-4.59954905322E+03									
Delay rate (us/s)	8.41304367956E-02									
Total phase (deg)			-159.9							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

b: az 66.1 el 33.9 pa -52.6 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -574.191 2503.528  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bn.W.17.12BED8

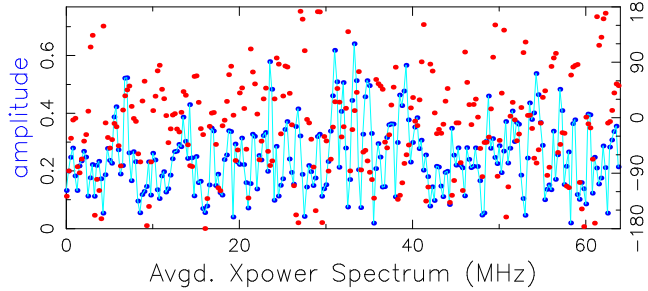


Fringe quality 0

SNR 6.7  
Int time 406.536  
Amp 0.121  
Phase -22.0  
PFD 7.1e-03  
Delays (us)  
SBD -0.004876  
MBD -0.003897  
Fringe rate (Hz)  
-0.004173  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

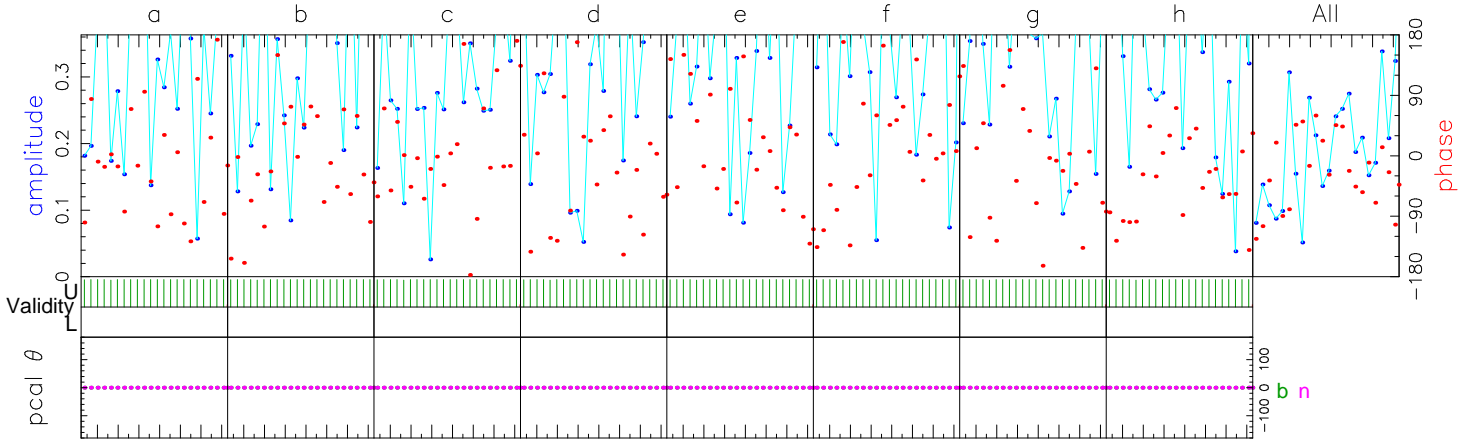


delay rate (ns/s)



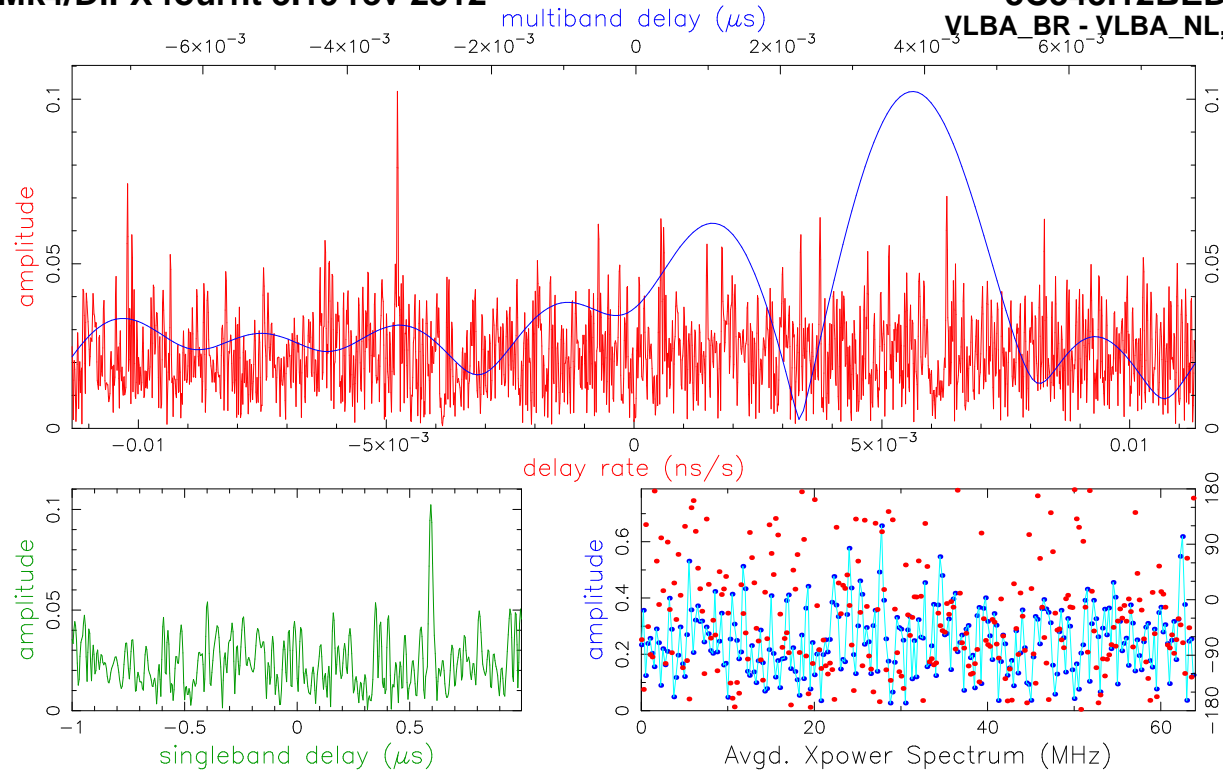
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165552  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



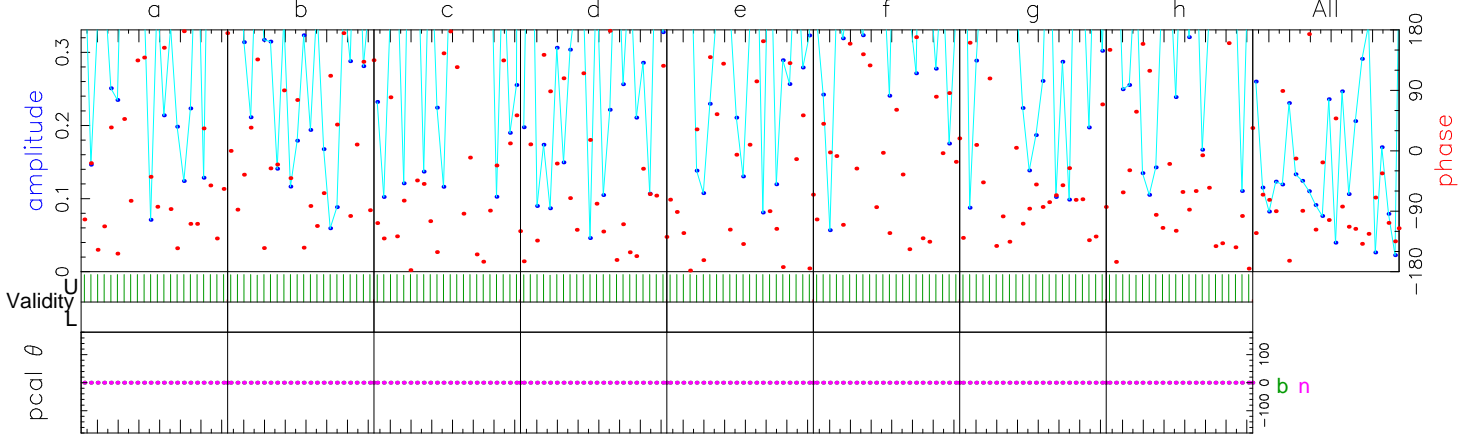
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-37.5	-36.3	-5.4	-10.9	-14.9	-0.4	-35.6	-29.4	Phase	-22.0
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	471.4	341.0	3.0	167.4	227.4	89.7	239.0	256.3	Sbd box	255.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.59955295441E+03		Apriori delay (usec)		-4.59954905782E+03		Resid mbdelay (usec)		-3.89660E-03	+/- 1.6E-04
Sband delay (usec)	-4.59955393432E+03		Apriori clock (usec)		-2.7088036E+01		Resid sbdelay (usec)		-4.87650E-03	+/- 1.3E-03
Phase delay (usec)	-4.59954905853E+03		Apriori clockrate (us/s)		-3.7661858E-07		Resid phdelay (usec)		-7.10602E-07	+/- 5.5E-07
Delay rate (us/s)	8.41214443251E-02		Apriori rate (us/s)		8.41214927678E-02		Resid rate (us/s)		-4.84427E-08	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.99879442187E-05		Resid phase (deg)		-22.0	+/- 17.2

ph/seg (deg) 54.8 41.2 Search (2048X32) 0.117 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 88.5 71.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.3 24.3 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.6 42.4 Inc. frq. avg. 0.114 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -574.191 2503.528 ion window (TEC) 0.00 0.00  
 simultaneous interpolator



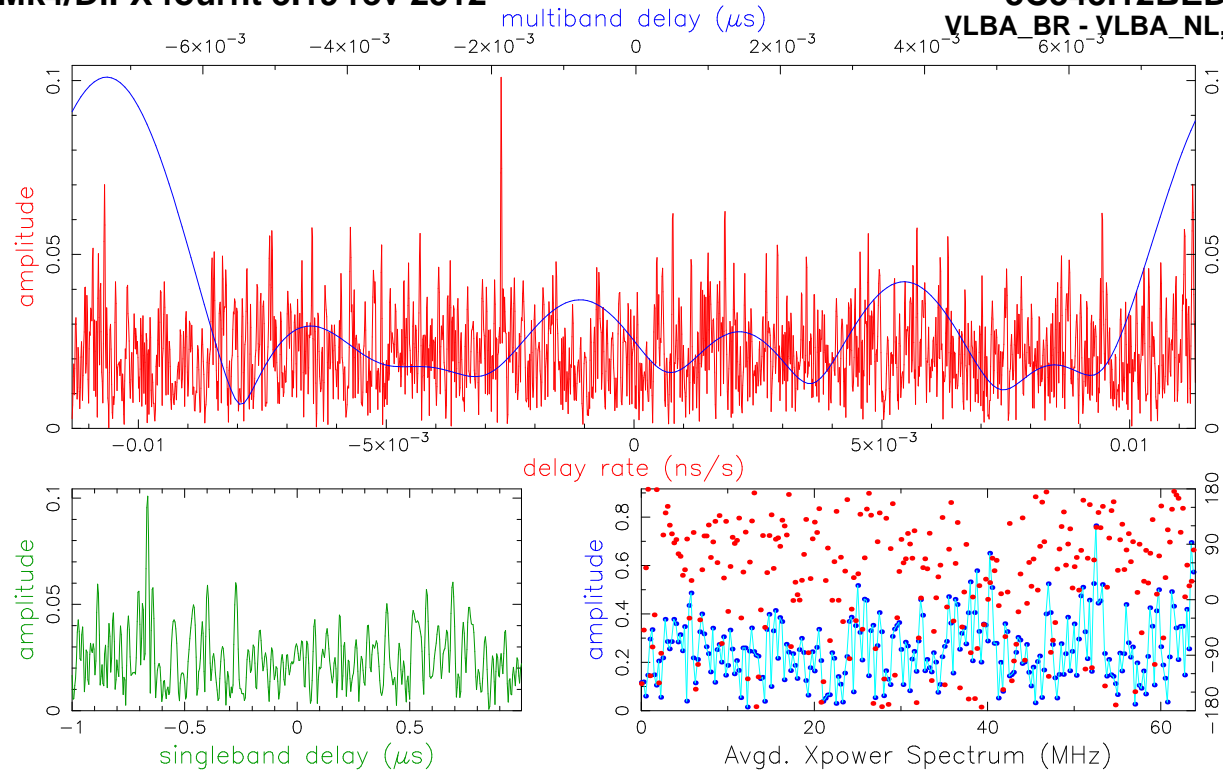
Fringe quality 0  
SNR 5.6  
Int time 406.536  
Amp 0.110  
Phase -107.2  
PFD 9.8e-01  
Delays (us)  
SBD 0.593586  
MBD 0.003828  
Fringe rate (Hz)  
-0.411960  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165557  
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
	-100.3	-70.5	-135.7	-112.8	-137.7	-65.2	-90.6	-121.0	Phase	-107.2
	0.2	0.1	0.2	0.1	0.1	0.0	0.2	0.2	Ampl.	0.1
	441.2	468.4	410.3	263.3	360.8	300.9	408.8	433.0	Sbd box	409.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.59895147978E+03		Apriori delay (usec)		-4.59954905782E+03		Resid mbdelay (usec)		3.82803E-03	+/- 1.9E-04
Sband delay (usec)	-4.59895547157E+03		Apriori clock (usec)		-2.7088036E+01		Resid sbdelay (usec)		5.93586E-01	+/- 1.5E-03
Phase delay (usec)	-4.59954906127E+03		Apriori clockrate (us/s)		-3.7661858E-07		Resid phdelay (usec)		-3.45812E-06	+/- 6.5E-07
Delay rate (us/s)	8.41167103149E-02		Apriori rate (us/s)		8.41214927678E-02		Resid rate (us/s)		-4.78245E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.99879442187E-05		Resid phase (deg)		-107.2	+/- 20.3

ph/seg (deg) 64.1 48.7 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 96.0 85.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 30.0 28.7 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 52.8 50.1 Inc. frq. avg. 0.105 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -574.191 2503.528 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bn.W.56.12BED8

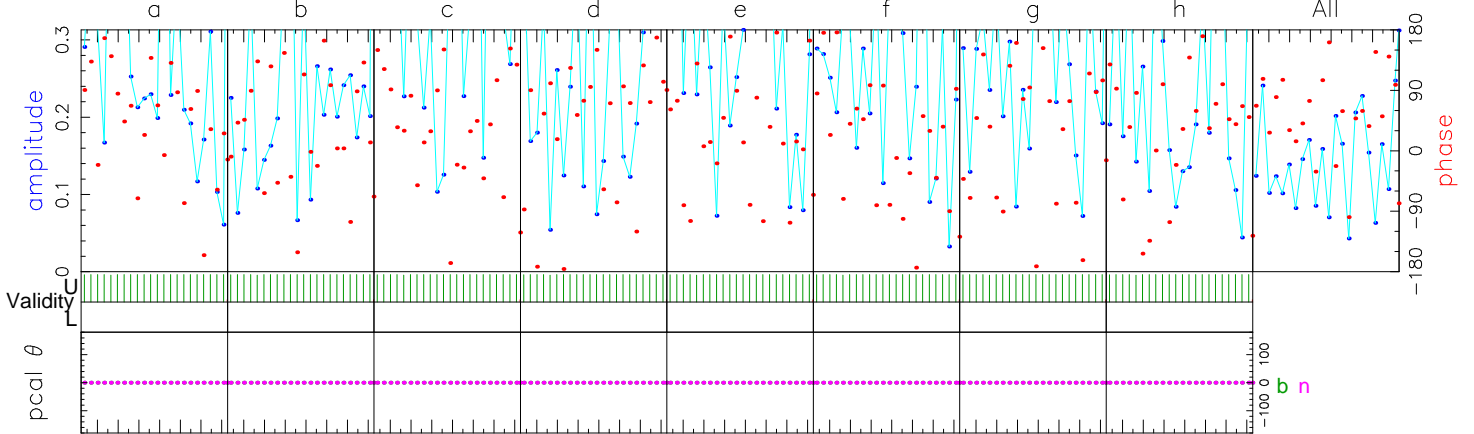


Fringe quality 0

SNR 5.6  
Int time 406.536  
Amp 0.104  
Phase 64.3  
PFD 9.9e-01  
Delays (us)  
SBD -0.665186  
MBD -0.007374  
Fringe rate (Hz)  
-0.230663  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

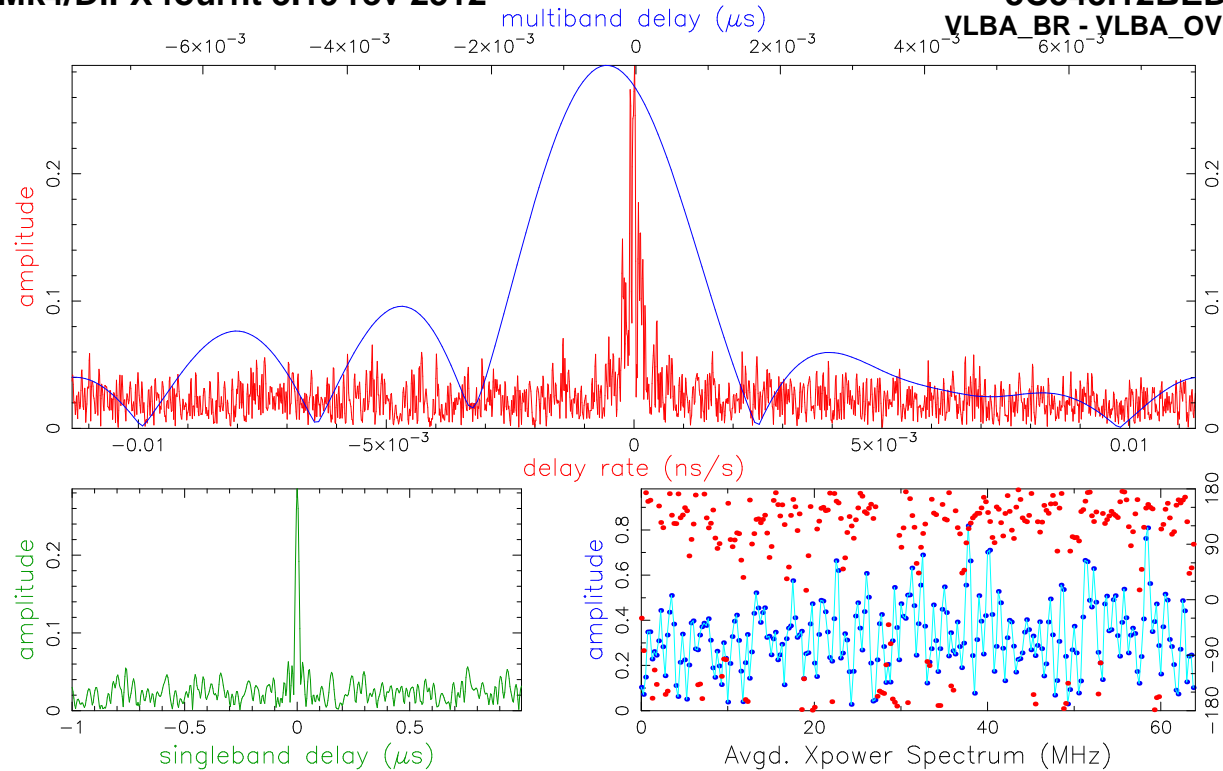
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165601  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.60021268210E+03									
Sband delay (usec)	-4.60021424332E+03									
Phase delay (usec)	-4.59954905574E+03									
Delay rate (us/s)	8.41188150003E-02									
Total phase (deg)			-238.2							
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)									64.3	+/- 20.4
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) 60.4 48.9 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.3 85.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.9 28.8 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.2 50.3 Inc. frq. avg. 0.099 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -574.191 2503.528 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/bn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bn.W.76.12BED8 simultaneous interpolator

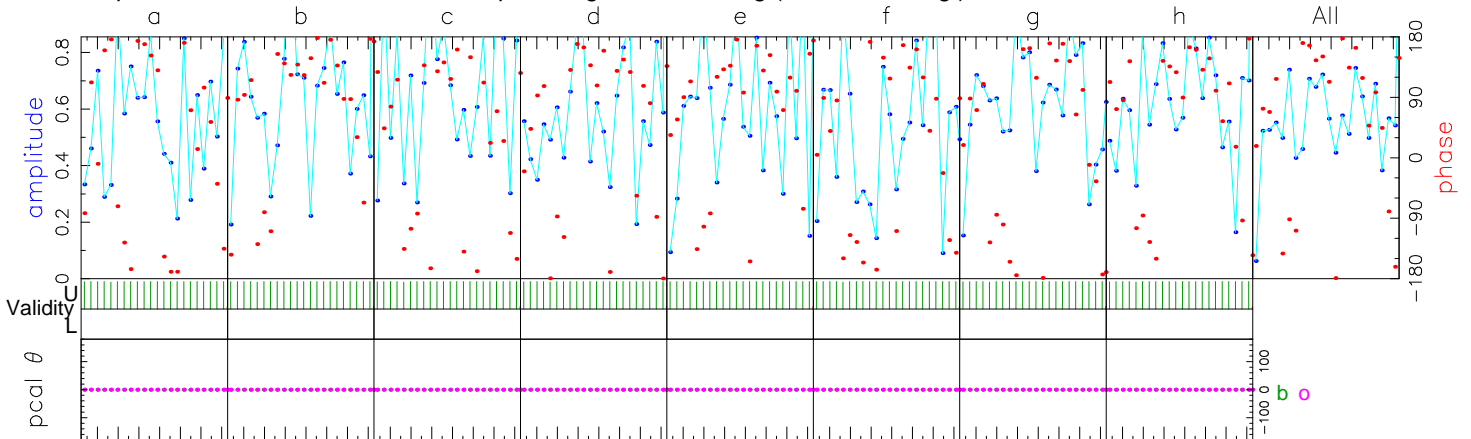


Fringe quality 9

SNR 15.7  
Int time 406.536  
Amp 0.285  
Phase 147.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000035  
MBD -0.000402  
Fringe rate (Hz) 0.001361  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

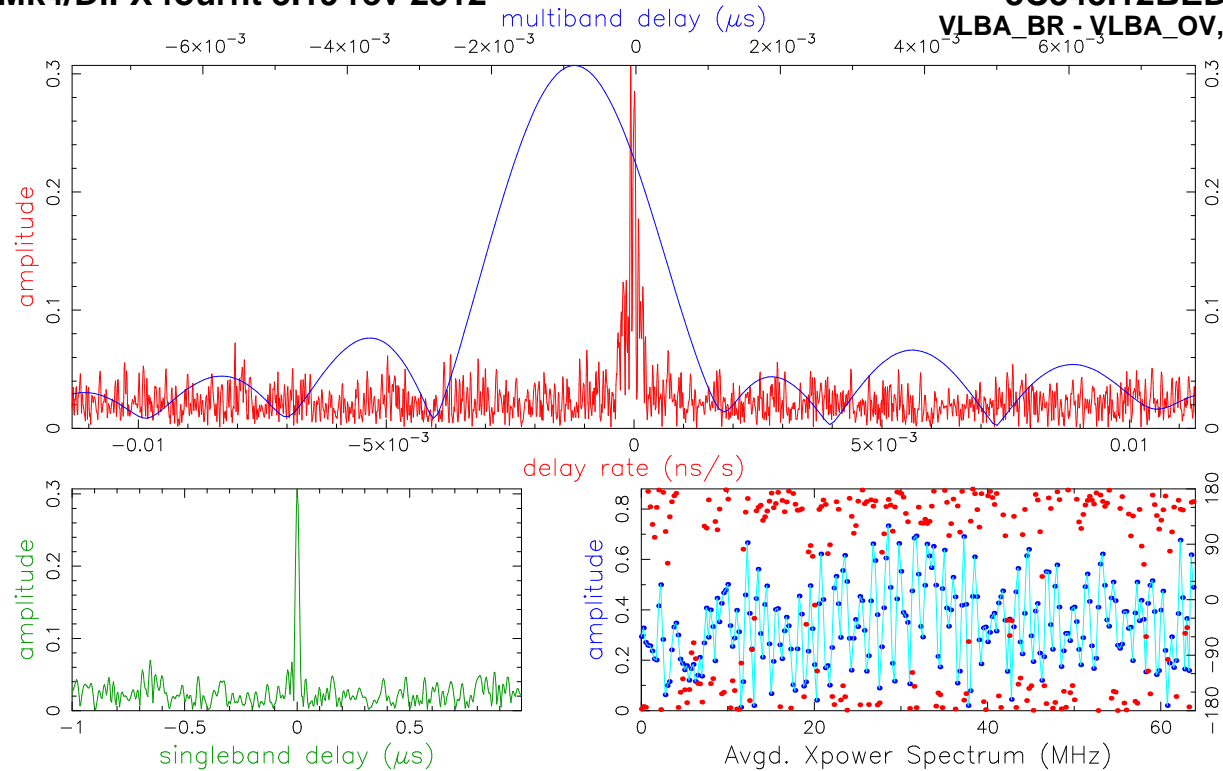
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165548  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-178.0	134.7	136.8	147.4	150.5	145.9	153.5	147.4	Phase	147.7
	0.2	0.4	0.3	0.3	0.3	0.2	0.3	0.3	Ampl.	0.3
	257.4	257.4	257.0	256.6	257.3	257.3	256.8	256.8	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	1.20032769122E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-4.01945E-04	+/- 6.9E-05
Sband delay (usec)	1.20032812791E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		3.47500E-05	+/- 5.5E-04
Phase delay (usec)	1.20032809793E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		4.76364E-06	+/- 2.4E-07
Delay rate (us/s)	-1.46733239170E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		1.57980E-08	+/- 1.0E-09
Total phase (deg)	127.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		147.7	+/- 7.3

ph/seg (deg) 70.1 17.5 Search (2048X32) 0.279 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 107.6 30.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 15.8 10.3 Inc. seg. avg. 0.527 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 20.0 18.0 Inc. frq. avg. 0.287 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bo.W.16.12BED8

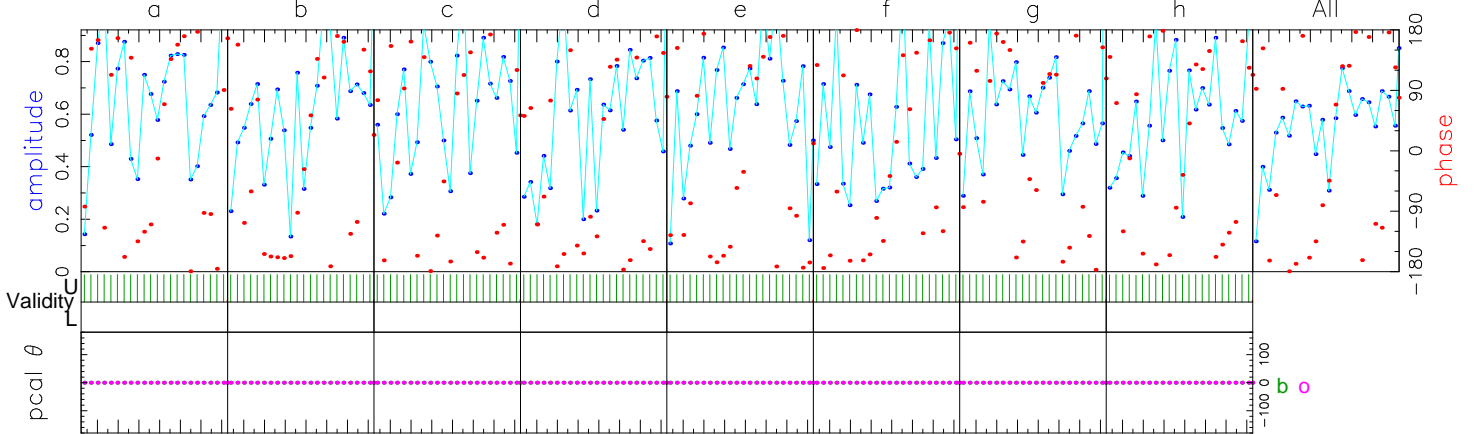


Fringe quality 9

SNR 16.9  
Int time 406.536  
Amp 0.307  
Phase 179.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000189  
MBD -0.000849  
Fringe rate (Hz) -0.005655  
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  
2020:086:165551  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

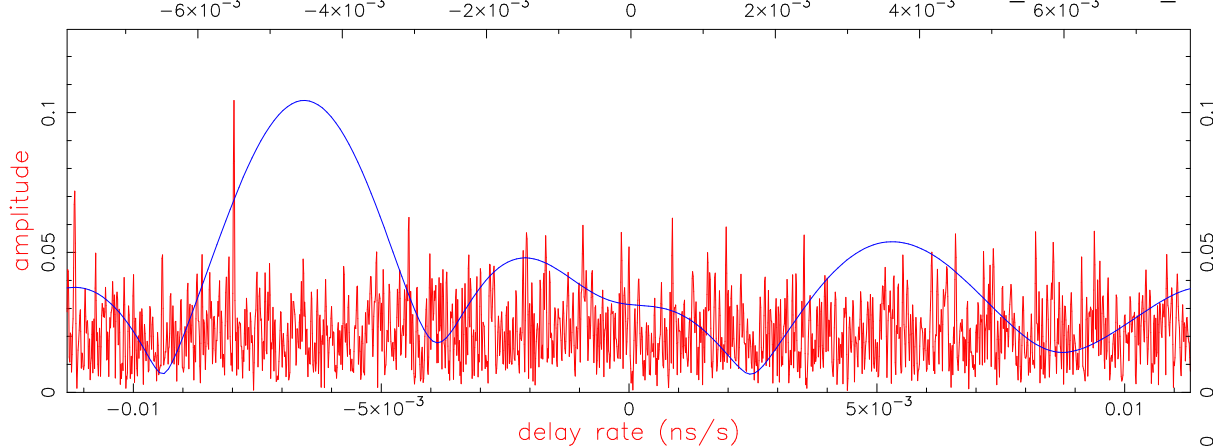
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.9	179.6	170.2	-177.6	-173.7	-167.8	170.1	175.6	Phase	179.7
	0.3	0.3	0.3	0.3	0.4	0.3	0.3	0.3	Ampl.	0.3
	257.4	256.9	257.6	257.1	256.7	257.1	257.6	256.7	Sbd box	257.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20032724386E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-8.49301E-04	+/- 6.4E-05
Sband delay (usec)	1.20032828241E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		1.89250E-04	+/- 5.1E-04
Phase delay (usec)	1.20032809896E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		5.79410E-06	+/- 2.2E-07
Delay rate (us/s)	-1.46733320615E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-6.56464E-08	+/- 9.3E-10
Total phase (deg)	159.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		179.7	+/- 6.8

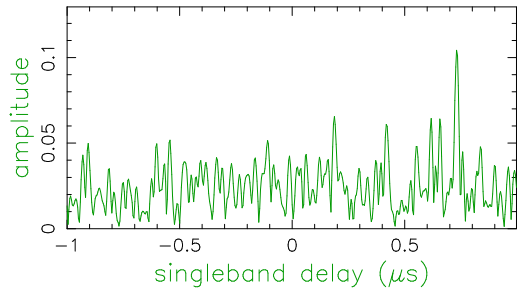
ph/seg (deg) 64.6 16.2 Search (2048X32) 0.303 PCAL mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 93.5 28.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 8.2 9.6 Inc. seg. avg. 0.531 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 9.4 16.7 Inc. frq. avg. 0.305 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bo.W.33.12BED8

multiband delay ( $\mu$ s)

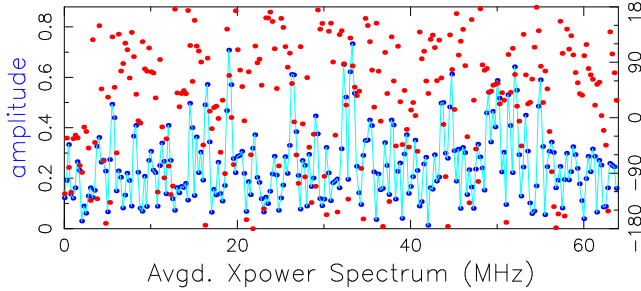


Fringe quality 0

SNR 5.8  
Int time 406.536  
Amp 0.130  
Phase -81.3  
PFD 8.5e-01  
Delays (us)  
SBD 0.731531  
MBD -0.004534  
Fringe rate (Hz)  
-0.687736  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

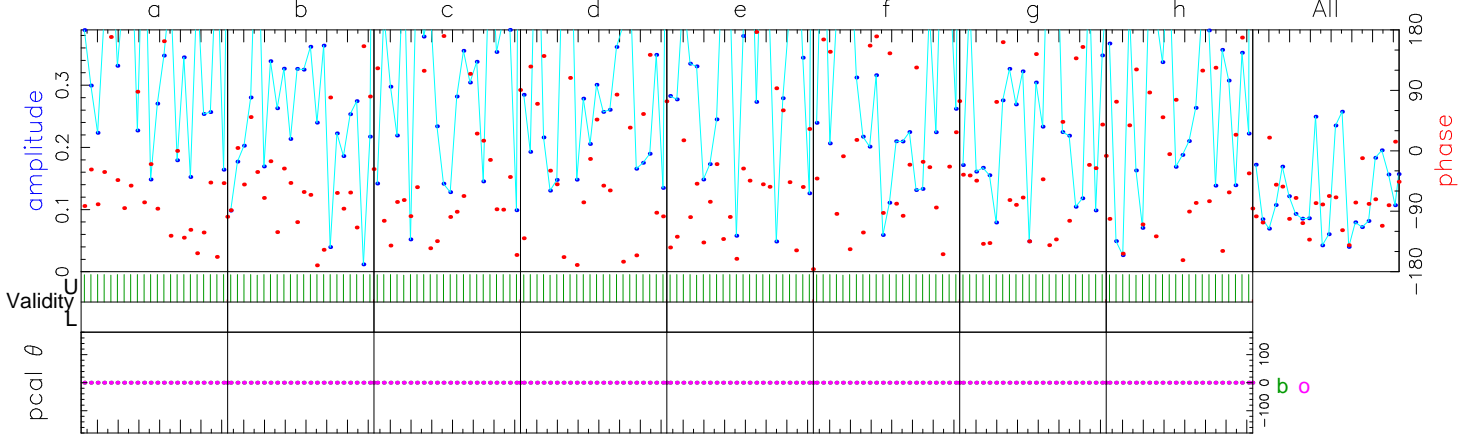


delay rate (ns/s)



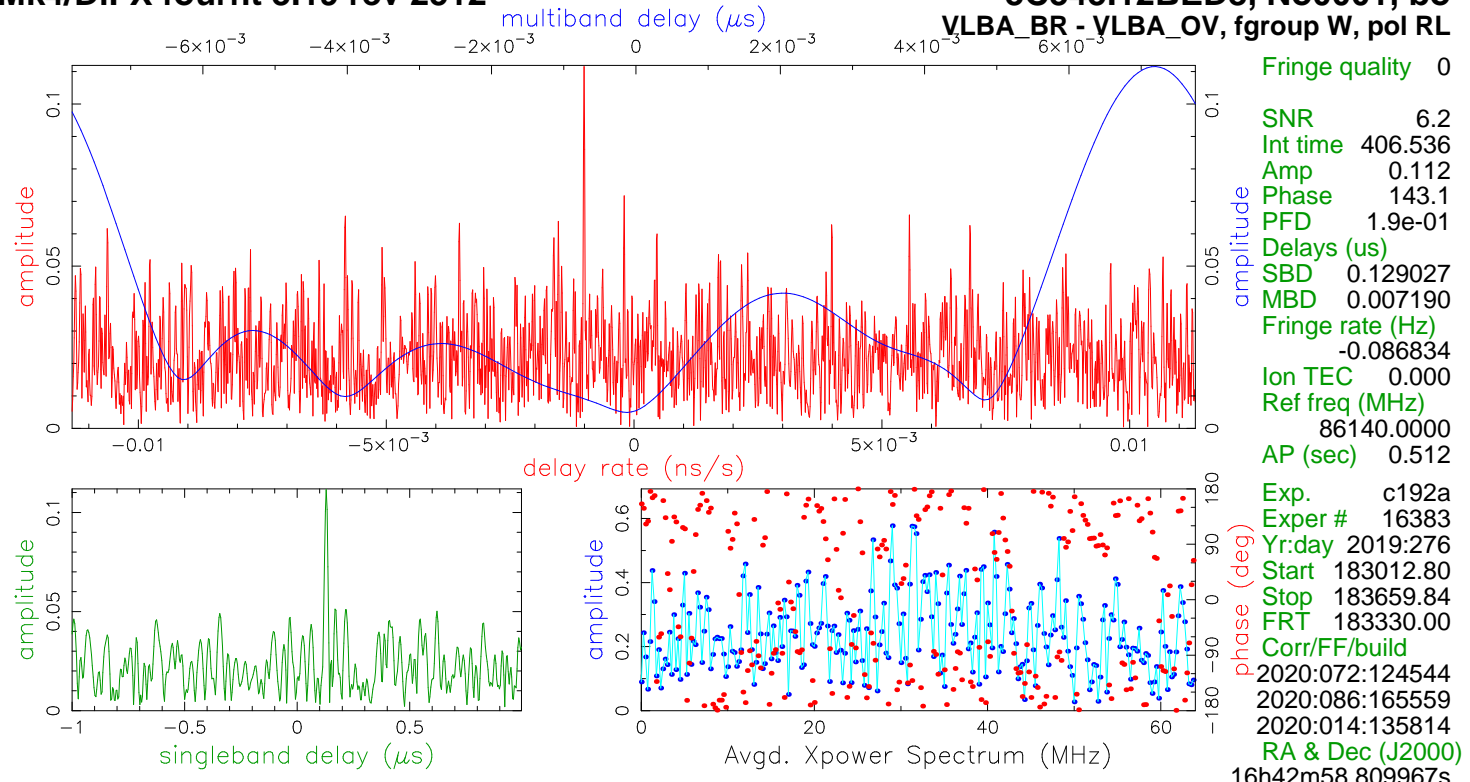
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165555  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

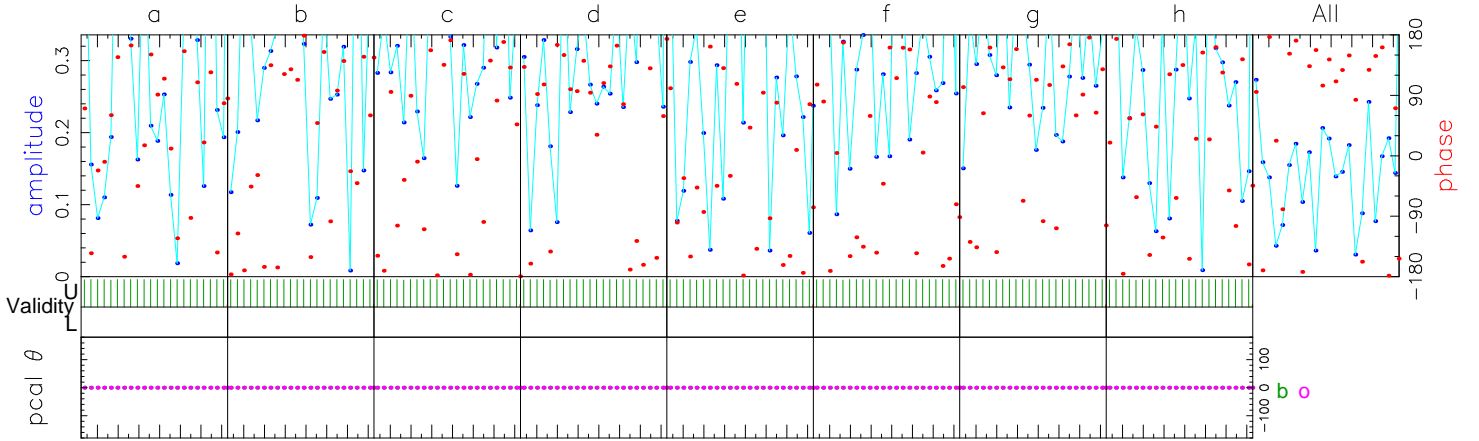


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.6	-61.2	-81.2	112.9	-73.7	-95.2	-86.4	-69.8	Phase	-81.3
	0.2	0.2	0.2	0.0	0.2	0.1	0.1	0.0	Ampl.	0.1
	443.3	86.8	425.8	308.0	299.0	214.7	223.7	262.3	Sbd box	444.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.20105793374E+03		Apriori delay (usec)		1.20032809316E+03		Resid mbdelay (usec)		-4.53442E-03	+/- 1.9E-04
Sband delay (usec)	1.20105962416E+03		Apriori clock (usec)		-1.7242477E+01		Resid sbdelay (usec)		7.31531E-01	+/- 1.5E-03
Phase delay (usec)	1.20032809054E+03		Apriori clockrate (us/s)		-2.4337607E-07		Resid phdelay (usec)		-2.62017E-06	+/- 6.4E-07
Delay rate (us/s)	-1.46741238902E-01		Apriori rate (us/s)		-1.46733254968E-01		Resid rate (us/s)		-7.98393E-06	+/- 2.7E-09
Total phase (deg)	258.9		Apriori accel (us/s/s)		3.60575885645E-06		Resid phase (deg)		-81.3	+/- 19.8

ph/seg (deg) 40.9 47.5 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.9 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 68.9 28.0 Inc. seg. avg. 0.115 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 59.8 48.9 Inc. frq. avg. 0.127 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bo.W.49.12BED8



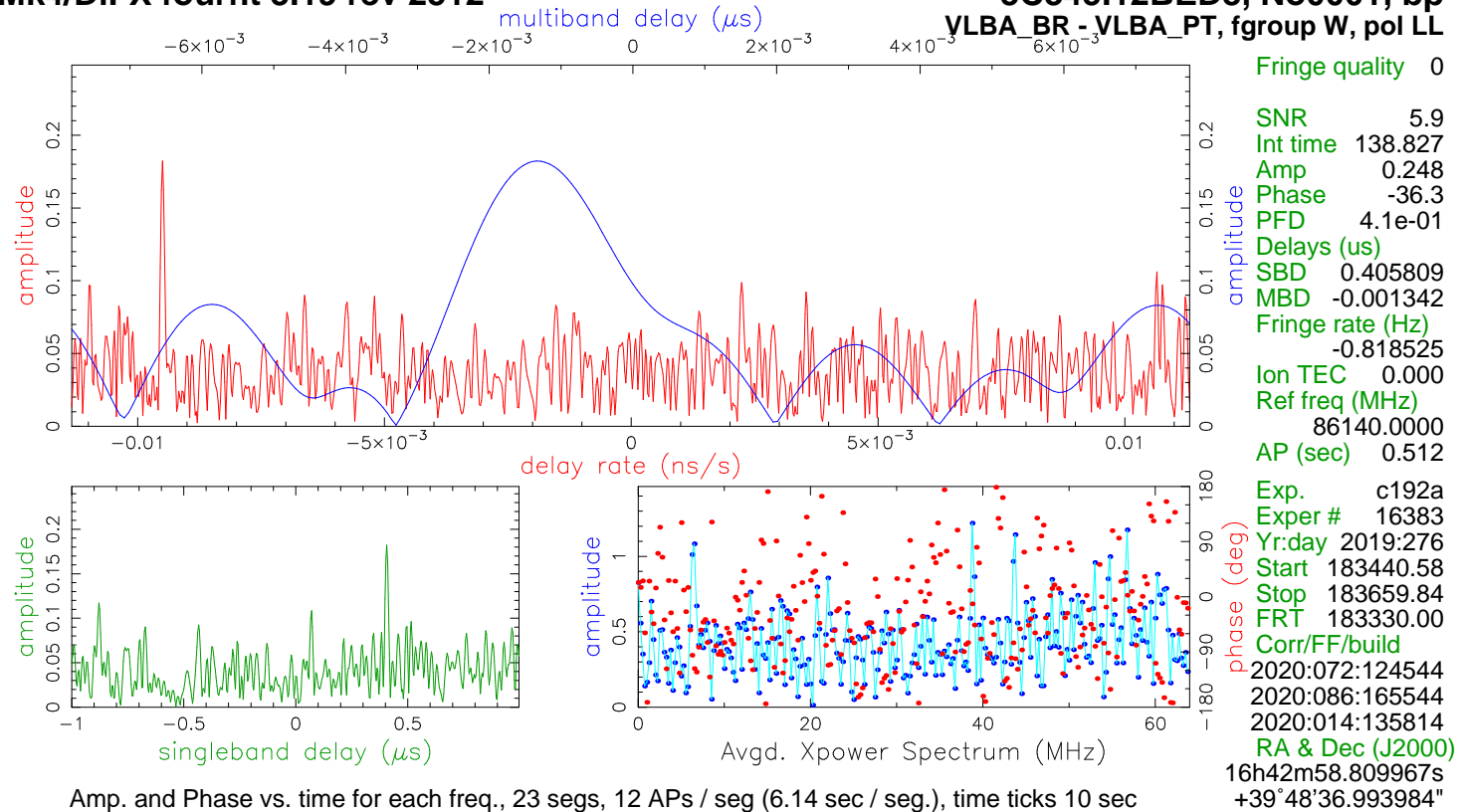
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



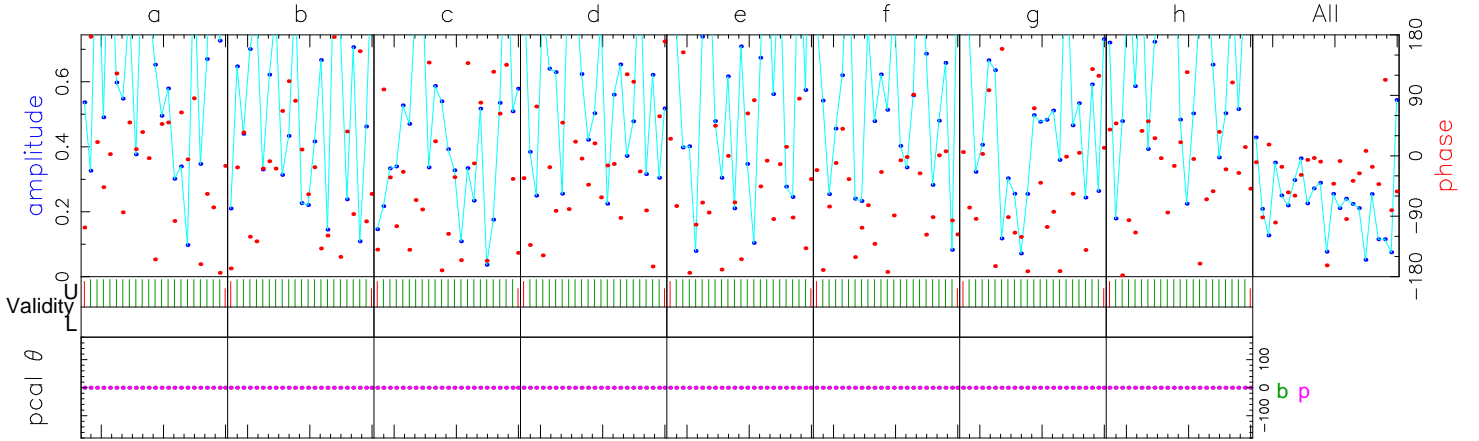
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
126.8	154.3	154.3	141.8	104.8	152.3	138.7	127.5	127.5	Phase	143.1
0.1	0.1	0.2	0.2	0.0	0.0	0.1	0.0	0.0	Ampl.	0.1
161.9	1.4	388.8	288.8	511.4	364.5	229.4	338.4	338.4	Sbd box	290.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	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)	1.20046028353E+03		Apriori delay (usec)	1.20032809316E+03	Resid mbdelay (usec)	7.19036E-03	+/-	1.8E-04		
Sband delay (usec)	1.20045712041E+03		Apriori clock (usec)	-1.7242477E+01	Resid sbdelay (usec)	1.29027E-01	+/-	1.4E-03		
Phase delay (usec)	1.20032809778E+03		Apriori clockrate (us/s)	-2.4337607E-07	Resid phdelay (usec)	4.61574E-06	+/-	6.0E-07		
Delay rate (us/s)	-1.46734263029E-01		Apriori rate (us/s)	-1.46733254968E-01	Resid rate (us/s)	-1.00806E-06	+/-	2.6E-09		
Total phase (deg)		123.3	Apriori accel (us/s/s)	3.60575885645E-06	Resid phase (deg)	143.1	+/-	18.6		

ph/seg (deg) 51.9 44.7 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.9 78.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.7 26.3 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.6 46.0 Inc. frq. avg. 0.104 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 1101.765 1173.303 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bo.W.68.12BED8





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

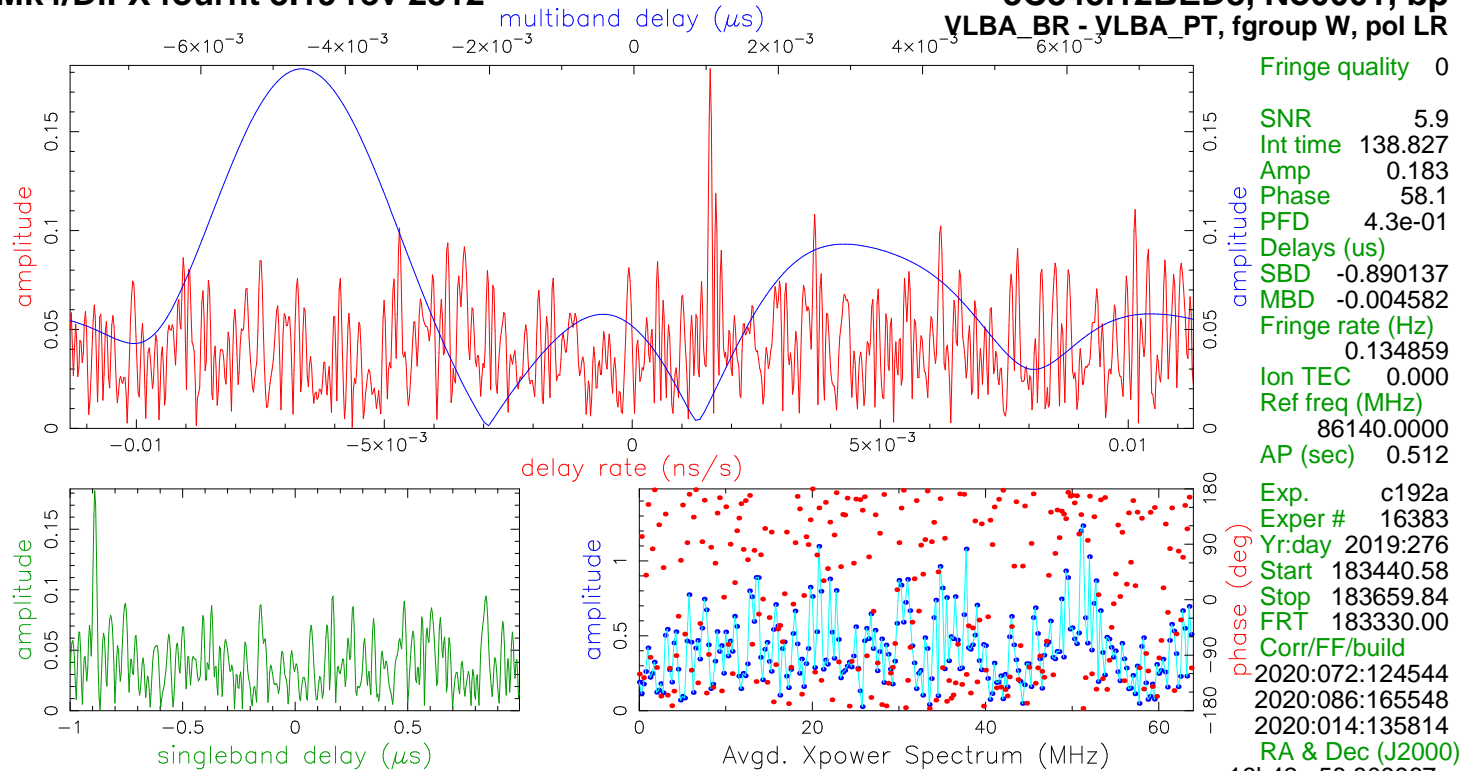


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	1.6	-75.5	-92.1	-42.5	-40.5	-51.1	-39.3	-15.7		Phase	-36.3
	0.3	0.2	0.1	0.3	0.3	0.4	0.2	0.4		Ampl.	0.2
	307.1	481.5	410.6	383.7	25.5	401.3	274.1	32.3		Sbd box	360.9
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Chan ids	
										Tracks	
Group delay (usec)(sbd)	-6.26221358731E+02		Apriori delay (usec)		-6.26626267228E+02		Resid mbdelay (usec)		-1.34150E-03	+/-	1.8E-04
Sband delay (usec)	-6.26220457728E+02		Apriori clock (usec)		-1.2518601E+01		Resid sbdelay (usec)		4.05809E-01	+/-	1.5E-03
Phase delay (usec)	-6.26626268399E+02		Apriori clockrate (us/s)		-4.4628166E-07		Resid phdelay (usec)		-1.17164E-06	+/-	6.3E-07
Delay rate (us/s)	-1.32321778630E-01		Apriori rate (us/s)		-1.32312276362E-01		Resid rate (us/s)		-9.50227E-06	+/-	7.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.63326638069E-05		Resid phase (deg)		-36.3	+/-	19.5

	RMS	Theor.	Amplitude	0.248 +/- 0.042	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.2	46.7	Search (1024X32)	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	64.7	81.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	33.6	27.6	Inc. seg. avg.	0.235	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.5	48.1	Inc. frq. avg.	0.242	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 256	t_cohere infinite

b: az 66.1 el 33.9 pa -52.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 1016.773 2288.498 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bp.W.1.12BED8



Fringe quality 0

SNR 5.9

Int time 138.827

Amp 0.183

Phase 58.1

PFD 4.3e-01

Delays (us)

SBD -0.890137

MBD -0.004582

Fringe rate (Hz)

0.134859

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

2020:086:165548

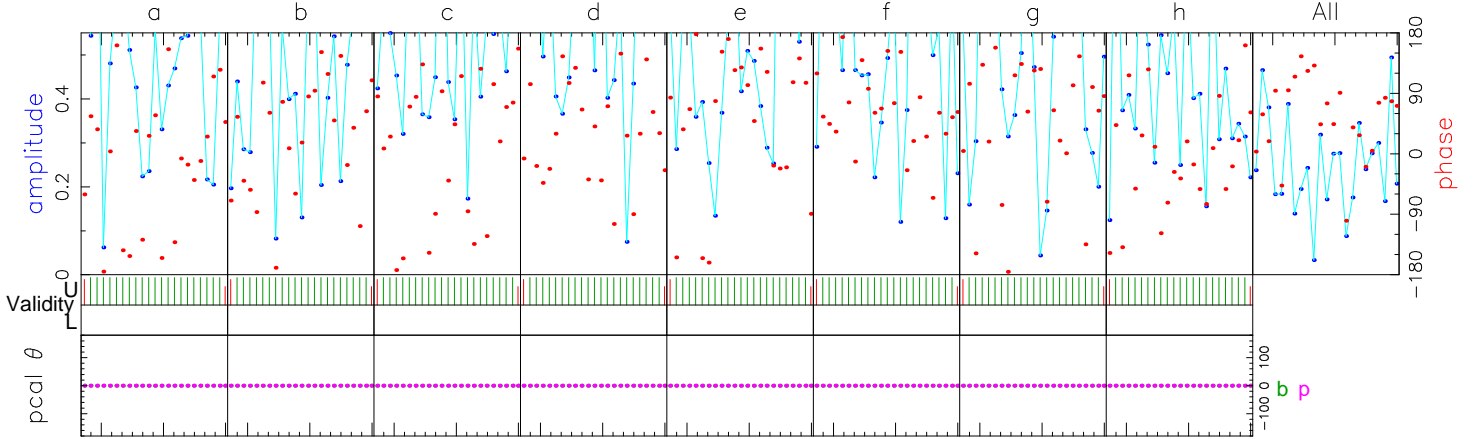
2020:014:135814

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
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-6.27521473834E+02				-6.26626267228E+02				-4.58161E-03	+/- 1.9E-04
Sband delay (usec)	-6.27516404478E+02				-1.2518601E+01				-8.90137E-01	+/- 1.5E-03
Phase delay (usec)	-6.26626265354E+02				-4.4628166E-07				1.87411E-06	+/- 6.3E-07
Delay rate (us/s)	-1.32310710777E-01				-1.32312276362E-01				1.56558E-06	+/- 7.8E-09
Total phase (deg)			-179.1		1.63326638069E-05				58.1	+/- 19.5
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										
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) 58.2 46.8 Search (1024X32) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 72.1 81.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 44.4 27.6 Inc. seg. avg. 0.191 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

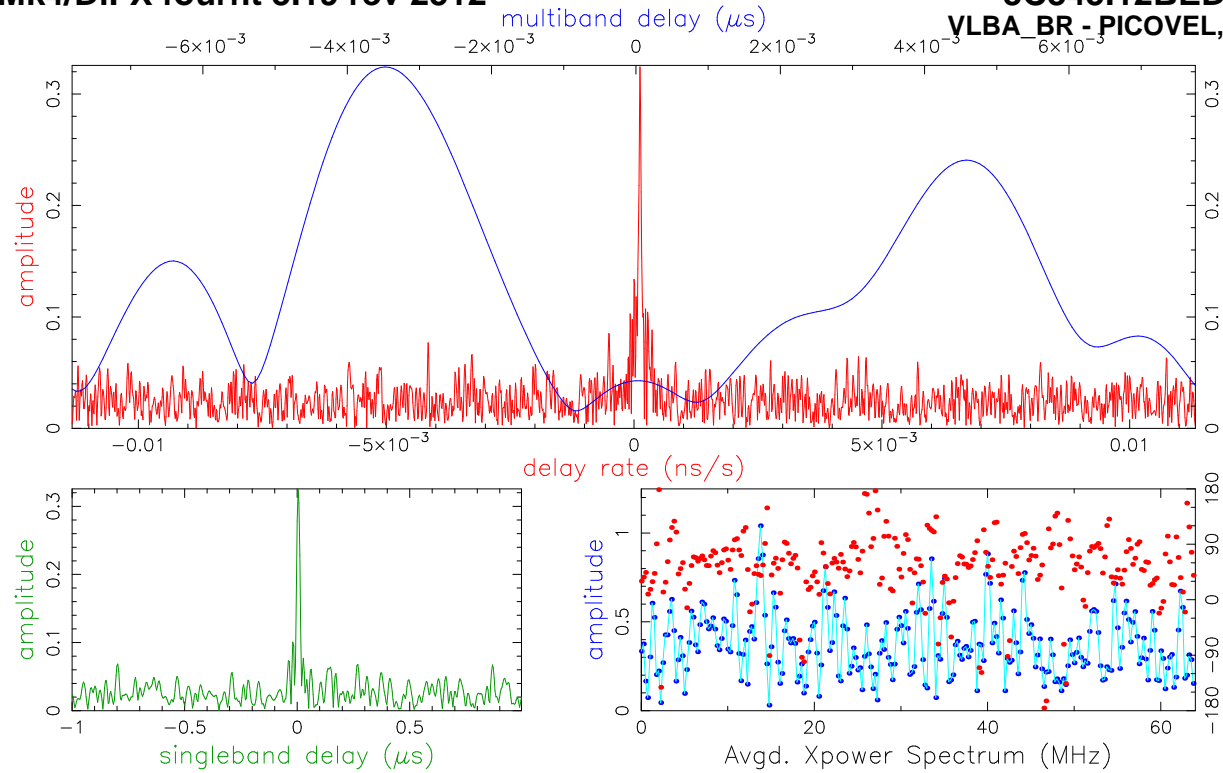
amp/frq (%) 44.6 48.2 Inc. frq. avg. 0.202 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

b: az 66.1 el 33.9 pa -52.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 1016.773 2288.498 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/bp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bp.W.18.12BED8 simultaneous interpolator

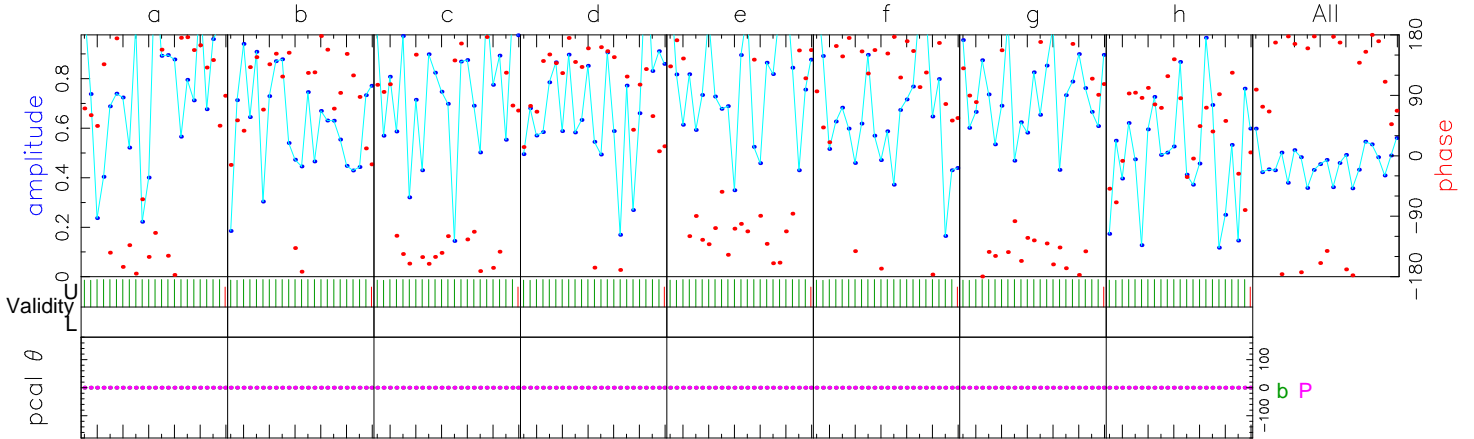
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bP  
VLBA\_BR - PICOVEL, fgroup W, pol RR



Fringe quality 8  
SNR 16.3  
Int time 336.362  
Amp 0.326  
Phase 156.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.004708  
MBD -0.003450  
Fringe rate (Hz) 0.010324  
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  
2020:086:165550  
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

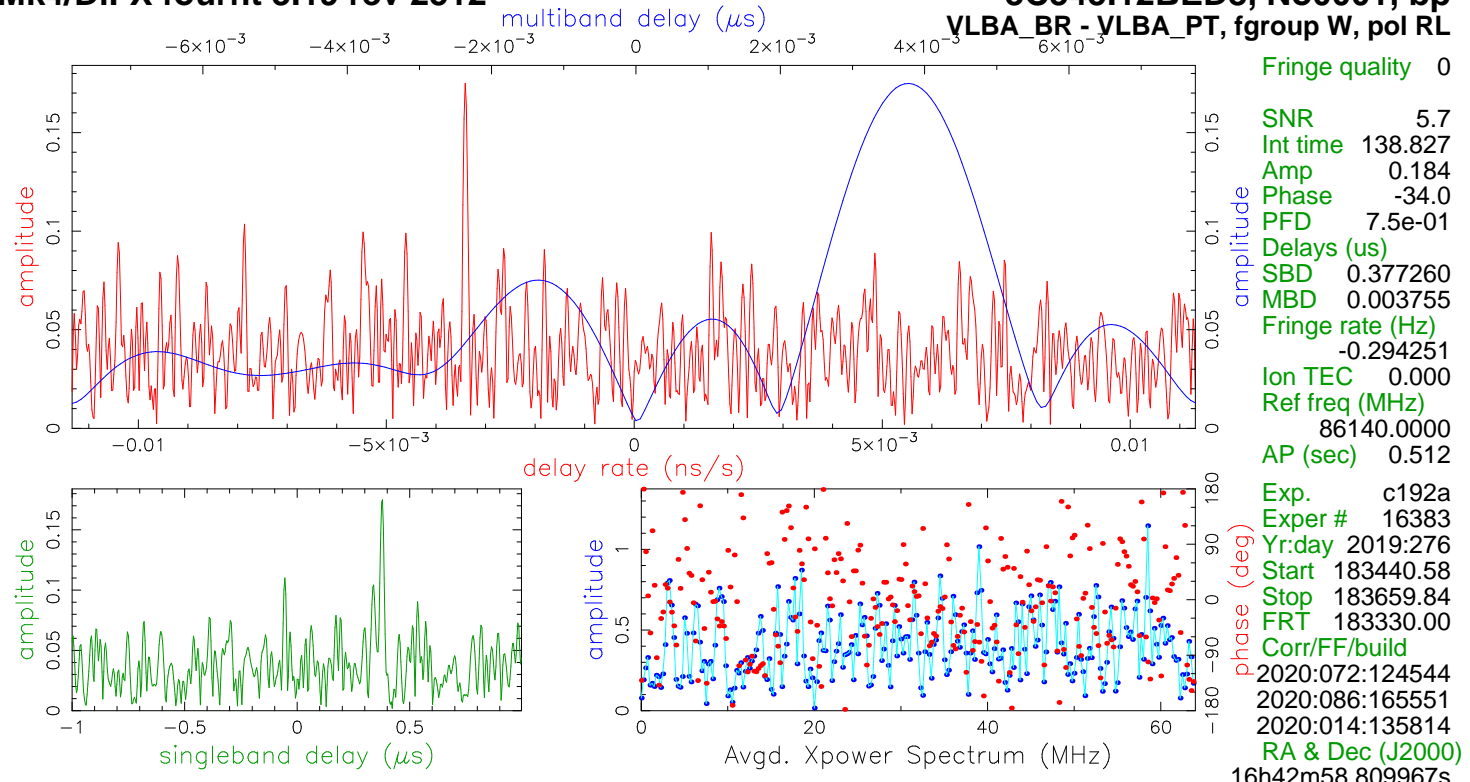


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	162.7	117.2	-179.0	122.9	-140.8	134.9	-175.9	62.8	Phase	156.7
	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.3	Ampl.	0.4
	257.1	257.1	257.8	257.1	257.3	257.2	257.3	255.2	Sbd box	258.2
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.72448747228E+03		Apriori delay (usec)		-6.72449964713E+03		Resid mbdelay (usec)		-3.45015E-03	+/- 6.6E-05
Sband delay (usec)	-6.72449493888E+03		Apriori clock (usec)		-5.2272862E-01		Resid sbdelay (usec)		4.70825E-03	+/- 5.3E-04
Phase delay (usec)	-6.72449964208E+03		Apriori clockrate (us/s)		1.1060491E-07		Resid phdelay (usec)		5.05399E-06	+/- 2.3E-07
Delay rate (us/s)	1.34872449070E+00		Apriori rate (us/s)		1.34872437085E+00		Resid rate (us/s)		1.19857E-07	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		4.59892593383E-05		Resid phase (deg)		156.7	+/- 7.0

ph/seg (deg) 47.1 16.8 Search (2048X32) 0.322 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 45.5 29.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 53.6 9.9 Inc. seg. avg. 0.441 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 39.9 17.3 Inc. frq. avg. 0.424 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 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -9968.663 4094.485 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bP.W.27.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bp  
VLBA\_BR - VLBA\_PT, fgroup W, pol RL



Fringe quality 0

SNR 5.7

Int time 138.827

Amp 0.184

Phase -34.0

PFD 7.5e-01

Delays (us)

SBD 0.377260

MBD 0.003755

Fringe rate (Hz)

-0.294251

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

2020:086:165551

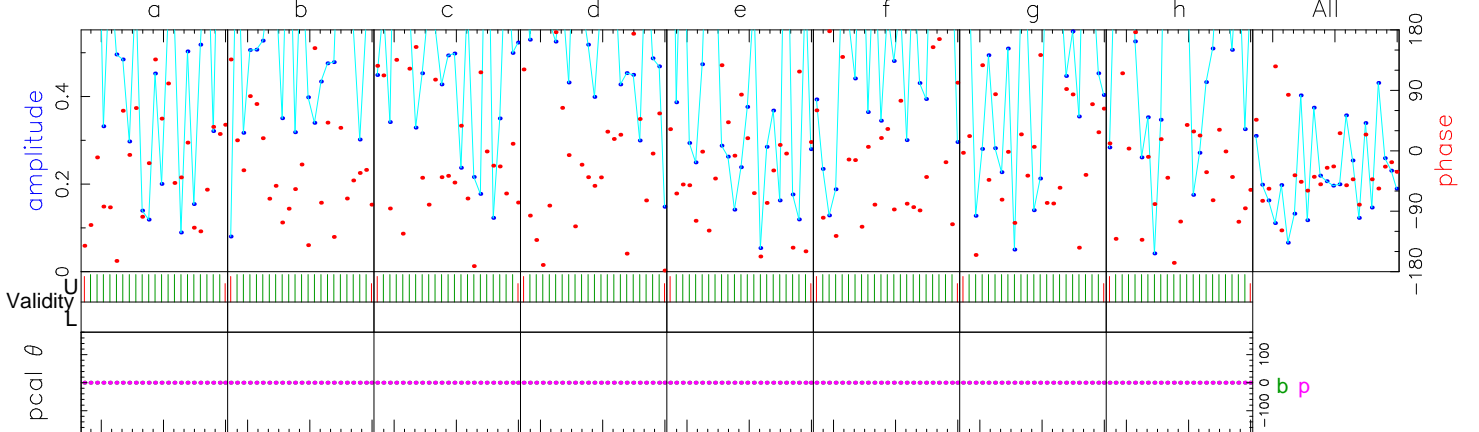
2020:014:135814

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
	-27.0	-36.2	-36.4	-43.7	-31.5	-72.4	-8.0	-40.0	Phase	-34.0
	0.2	0.3	0.1	0.1	0.2	0.1	0.3	0.2	Ampl.	0.2
	79.2	486.4	507.7	366.7	367.1	148.2	352.0	396.2	Sbd box	353.6
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.26247512039E+02		Apriori delay (usec)		-6.26626267228E+02		Resid mbdelay (usec)		3.75519E-03	+/- 1.9E-04
Sband delay (usec)	-6.26249007478E+02		Apriori clock (usec)		-1.2518601E+01		Resid sbdelay (usec)		3.77260E-01	+/- 1.5E-03
Phase delay (usec)	-6.26626268326E+02		Apriori clockrate (us/s)		-4.4628166E-07		Resid phdelay (usec)		-1.09791E-06	+/- 6.5E-07
Delay rate (us/s)	-1.32315692323E-01		Apriori rate (us/s)		-1.32312276362E-01		Resid rate (us/s)		-3.41596E-06	+/- 8.0E-09
Total phase (deg)			Apriori accel (us/s/s)		1.63326638069E-05		Resid phase (deg)		-34.0	+/- 20.1

ph/seg (deg) 54.2 48.1 Amplitude 0.184 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 62.3 84.0 Search (1024X32) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 19.8 28.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

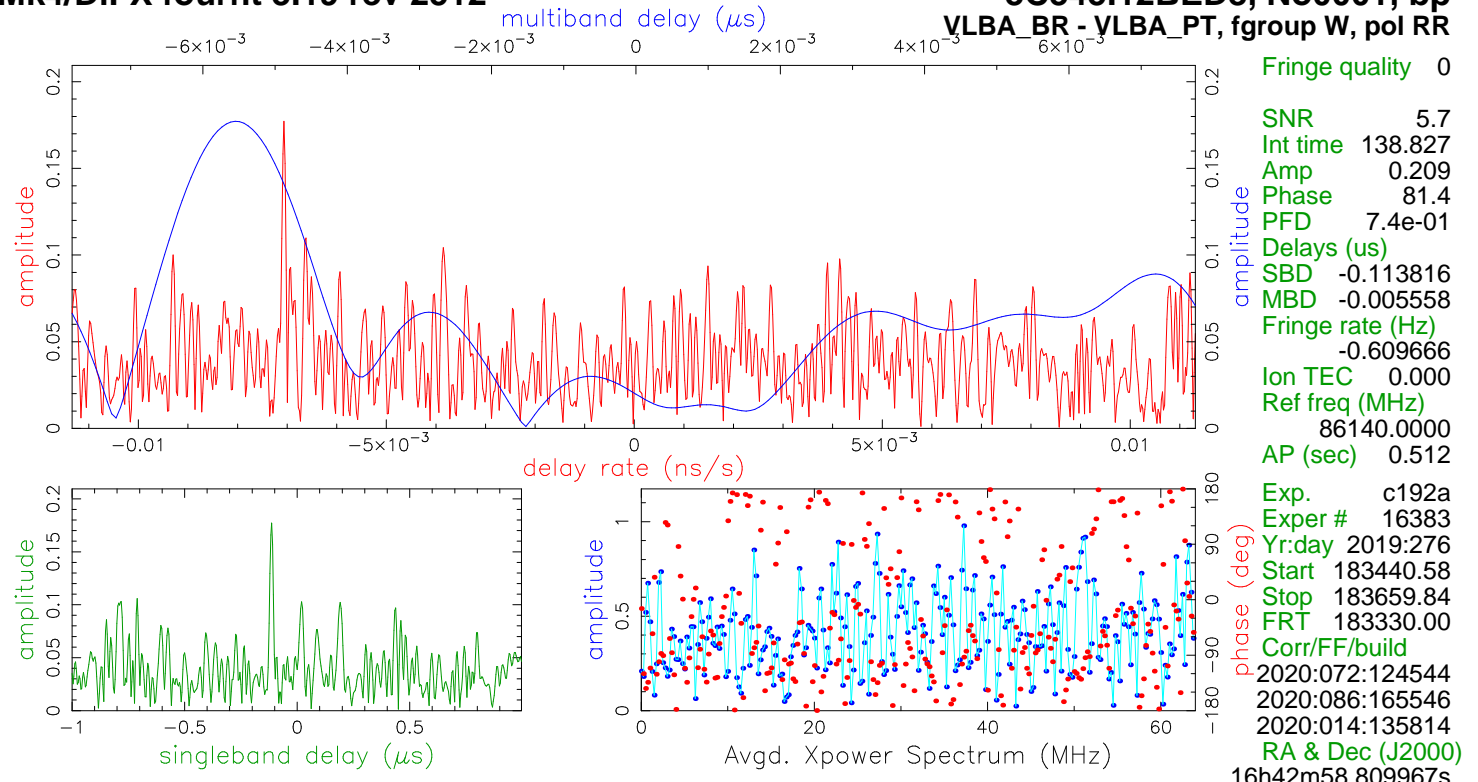
amp/frq (%) 34.4 49.5 Inc. seg. avg. 0.175 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

b: az 66.1 el 33.9 pa -52.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 1016.773 2288.498 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

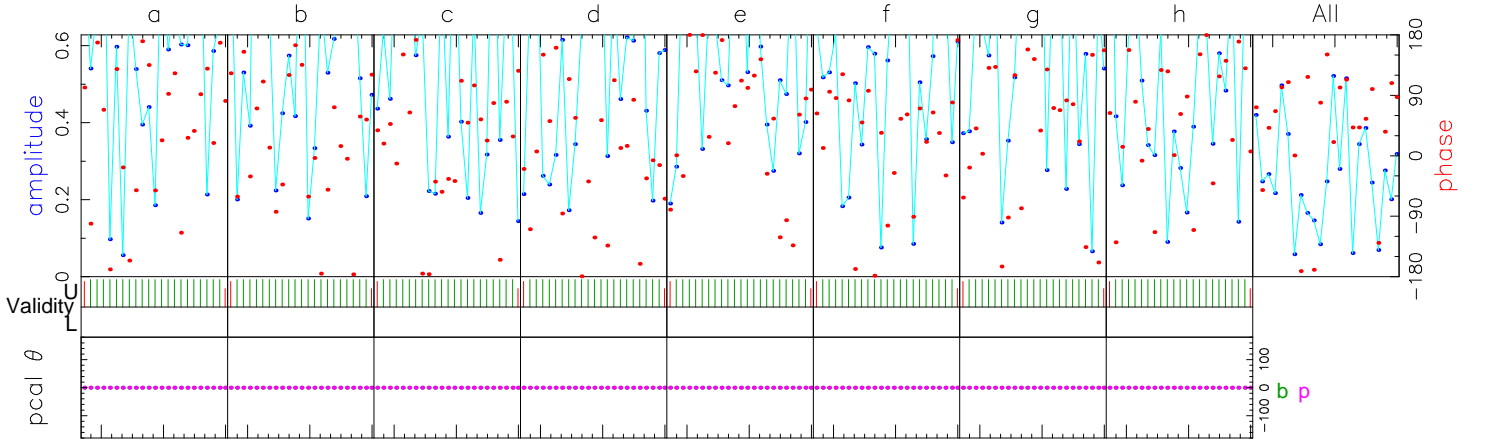
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bp.W.29.12BED8 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bp  
VLBA\_BR - VLBA\_PT, fgroup W, pol RR

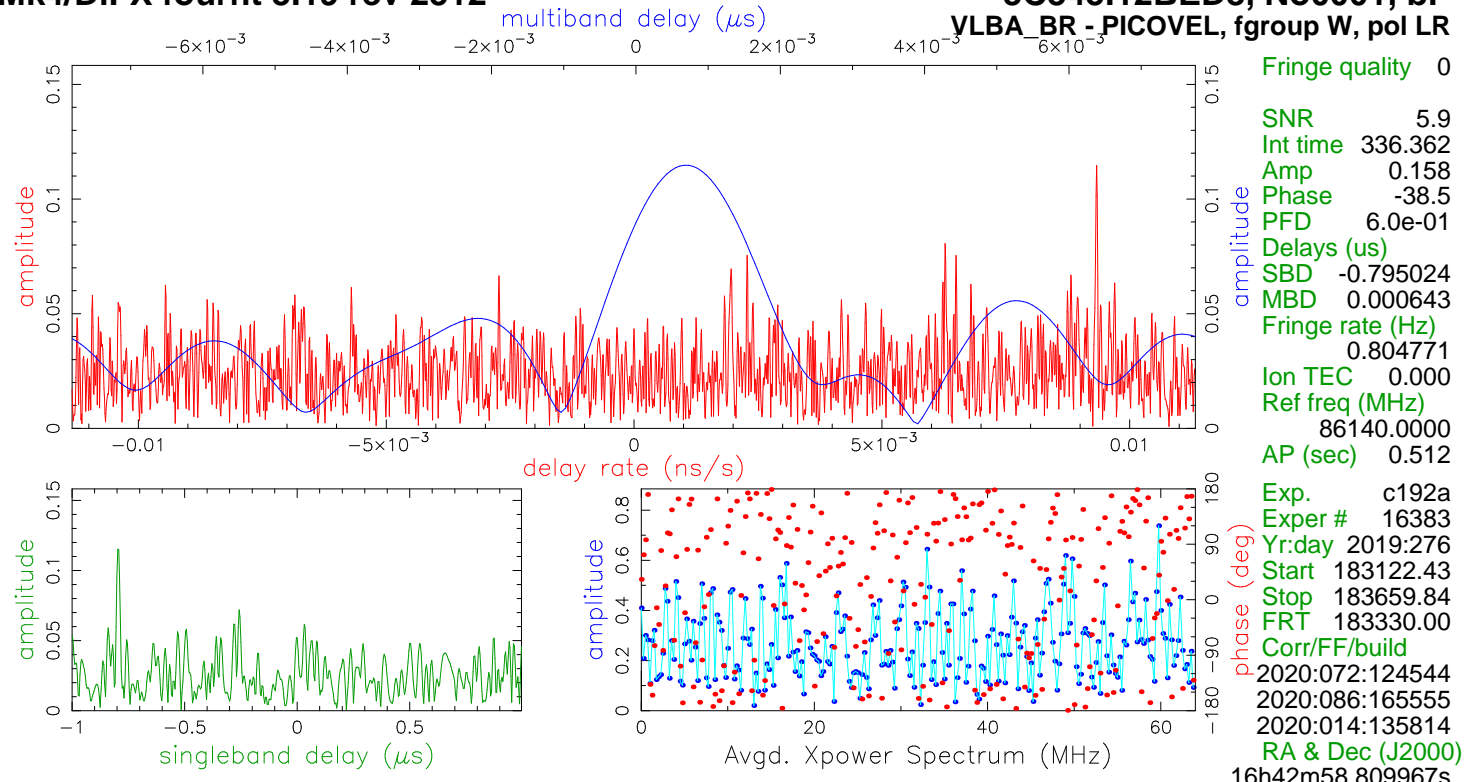


Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

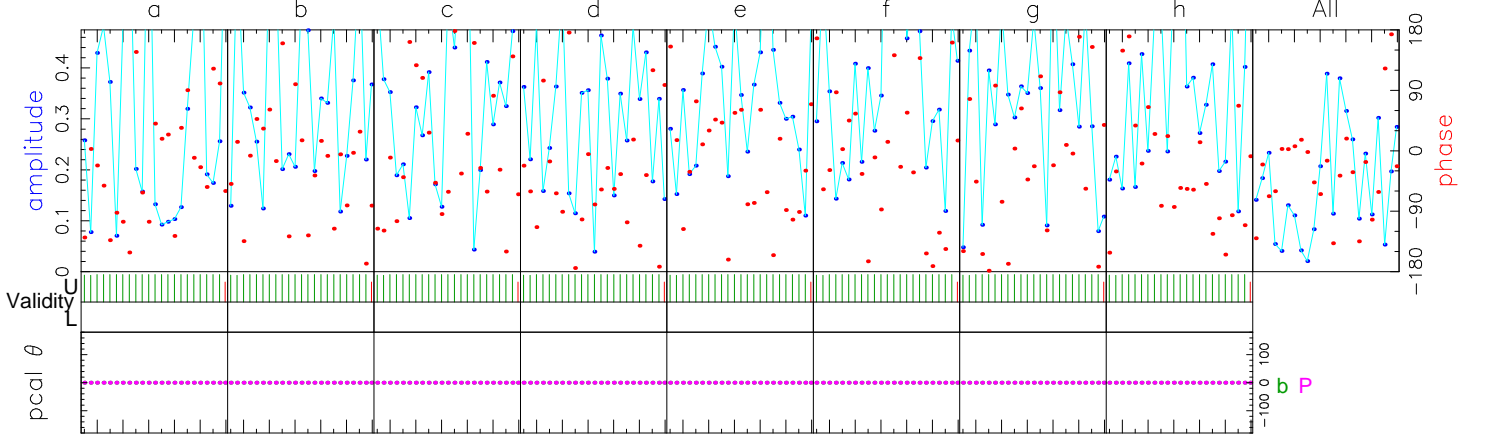


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
96.7	85.5	51.1	-27.6	112.5	57.0	96.4	90.2	90.2	Phase	81.4
0.3	0.2	0.2	0.1	0.3	0.3	0.2	0.2	0.2	Ampl.	0.2
504.9	133.1	511.3	325.0	54.1	415.9	152.9	64.3	64.3	Sbd box	227.9
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.26741200405E+02		Apriori delay (usec)	-6.26626267228E+02	Resid mbdelay (usec)	-5.55818E-03	+/-	1.9E-04		
Sband delay (usec)	-6.26740082728E+02		Apriori clock (usec)	-1.2518601E+01	Resid sbdelay (usec)	-1.13816E-01	+/-	1.5E-03		
Phase delay (usec)	-6.26626264604E+02		Apriori clockrate (us/s)	-4.4628166E-07	Resid phdelay (usec)	2.62387E-06	+/-	6.5E-07		
Delay rate (us/s)	-1.32319353977E-01		Apriori rate (us/s)	-1.32312276362E-01	Resid rate (us/s)	-7.07762E-06	+/-	8.0E-09		
Total phase (deg)		-155.9	Apriori accel (us/s/s)	1.63326638069E-05	Resid phase (deg)	81.4	+/-	20.0		

ph/seg (deg) 63.4 48.1 Search (1024X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 92.3 83.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 49.8 28.3 Inc. seg. avg. 0.232 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.1 49.5 Inc. frq. avg. 0.210 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 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 1016.773 2288.498 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bp.W.3.12BED8



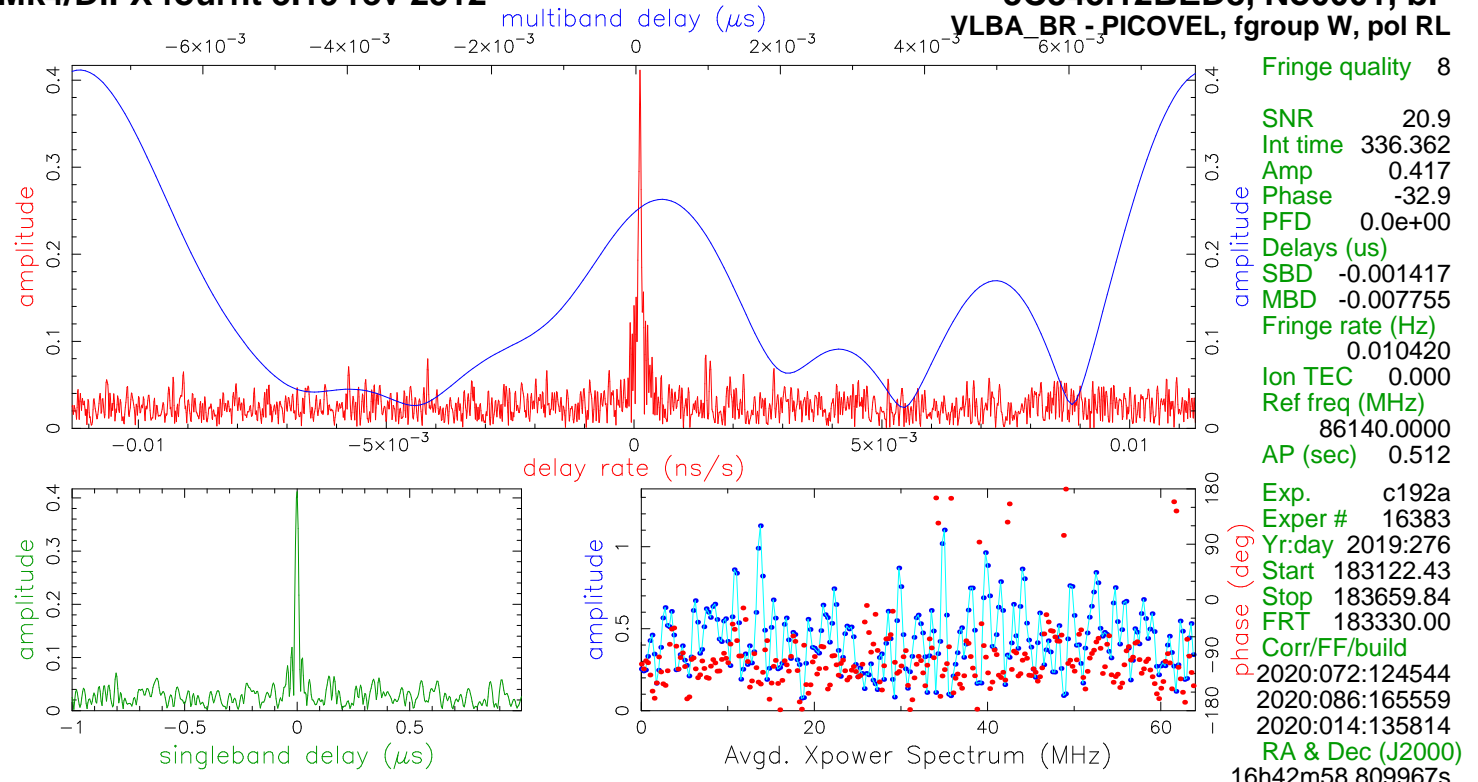
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



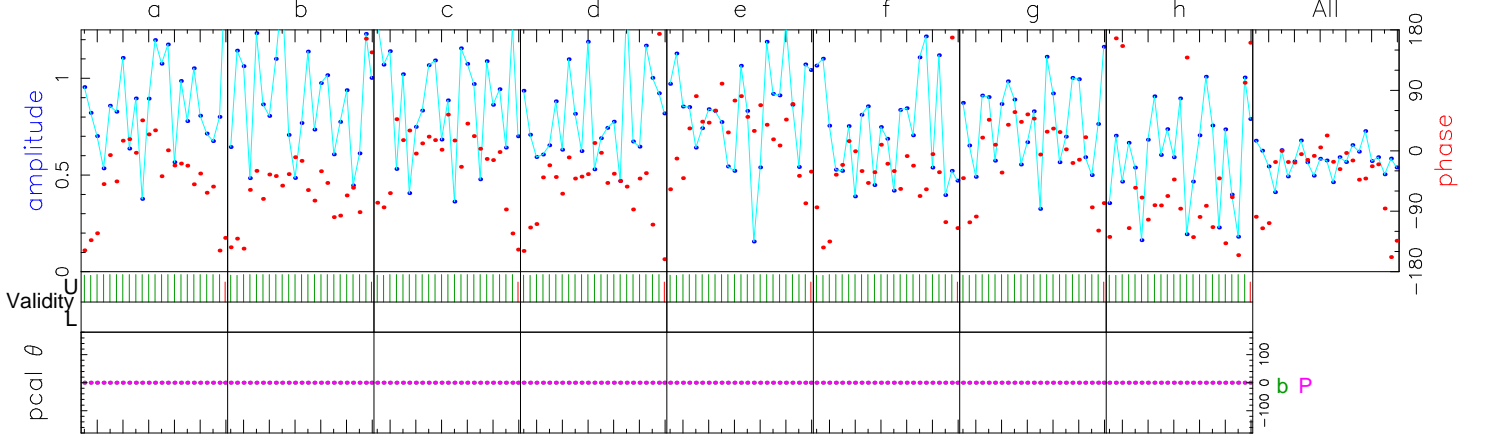
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-69.8	-9.4	-51.8	-63.4	-0.6	-10.3	-8.4	-58.2	Phase	-38.5
	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.3	Ampl.	0.2
	42.9	410.0	502.6	279.4	306.4	189.6	384.5	185.3	Sbd box	53.5
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	-6.72529587939E+03		Apriori delay (usec)		-6.72449964713E+03		Resid mbdelay (usec)		6.42742E-04	+/- 1.8E-04
Sband delay (usec)	-6.72529467138E+03		Apriori clock (usec)		-5.2272862E-01		Resid sbdelay (usec)		-7.95024E-01	+/- 1.5E-03
Phase delay (usec)	-6.72449964837E+03		Apriori clockrate (us/s)		1.1060491E-07		Resid phdelay (usec)		-1.24141E-06	+/- 6.3E-07
Delay rate (us/s)	1.34873371343E+00		Apriori rate (us/s)		1.34872437085E+00		Resid rate (us/s)		9.34259E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		4.59892593383E-05		Resid phase (deg)		-38.5	+/- 19.4

	RMS	Theor.	Amplitude	0.158 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	65.2	46.6	Search (2048X32)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	102.9	81.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	32.0	27.5	Inc. seg. avg.	0.174	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	31.9	47.9	Inc. frq. avg.	0.155	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 66.1 el 33.9 pa -52.6 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -9968.663 4094.485 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bP.W.46.12BED8



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

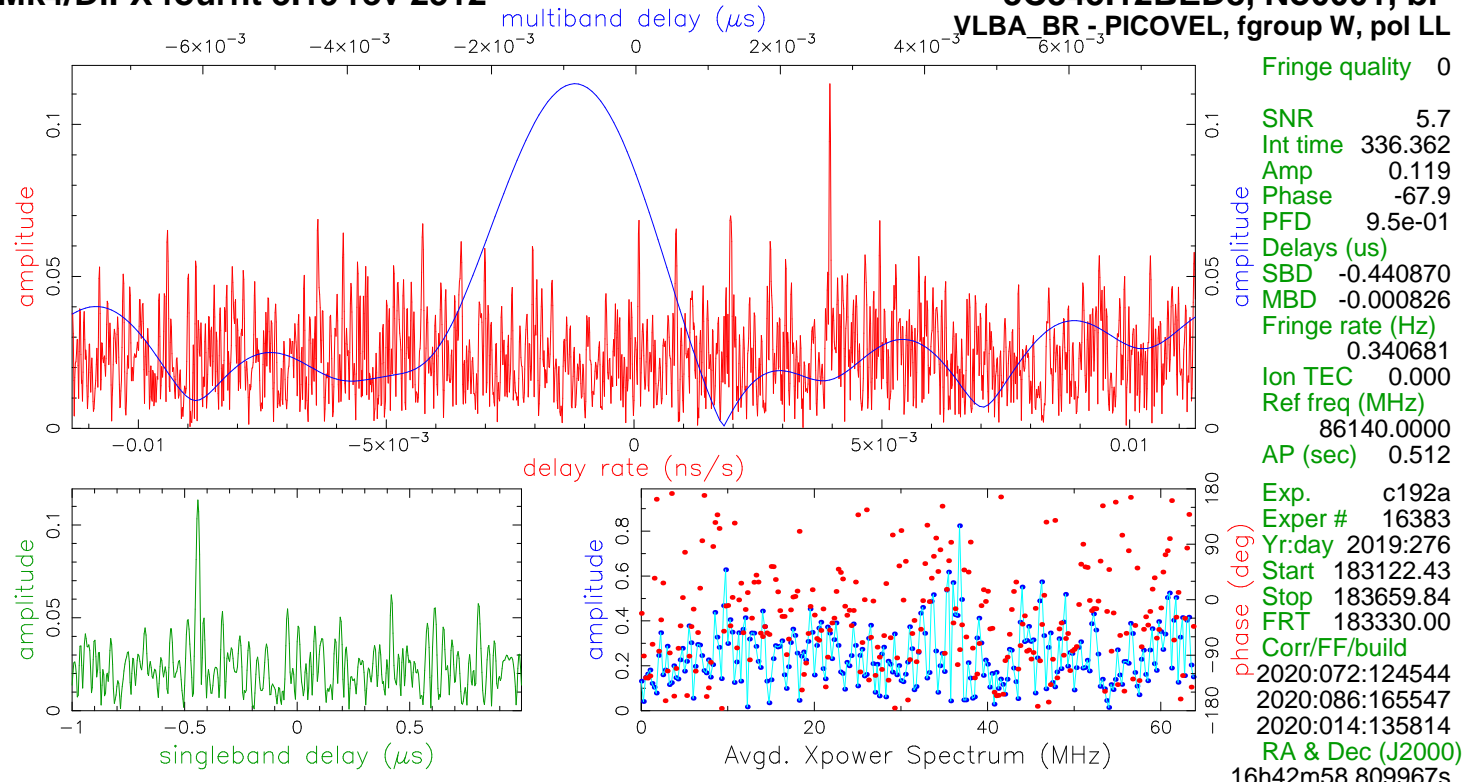


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-33.0	-68.9	-11.7	-55.4	28.7	-47.0	4.0	-105.6		Phase
	0.5	0.6	0.6	0.6	0.6	0.5	0.5	0.4		Ampl.
	256.0	256.4	256.5	256.0	256.3	256.3	255.9	254.6		Sbd box
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		APs used
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
P	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
P	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
b	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)	-6.72450740263E+03		Apriori delay (usec)		-6.72449964713E+03		Resid mbdelay (usec)		-7.75550E-03	+/- 5.2E-05
Sband delay (usec)	-6.72450106438E+03		Apriori clock (usec)		-5.2272862E-01		Resid sbdelay (usec)		-1.41725E-03	+/- 4.1E-04
Phase delay (usec)	-6.72449964819E+03		Apriori clockrate (us/s)		1.1060491E-07		Resid phdelay (usec)		-1.06227E-06	+/- 1.8E-07
Delay rate (us/s)	1.34872449181E+00		Apriori rate (us/s)		1.34872437085E+00		Resid rate (us/s)		1.20968E-07	+/- 9.1E-10
Total phase (deg)			Apriori accel (us/s/s)		4.59892593383E-05		Resid phase (deg)		-32.9	+/- 5.5

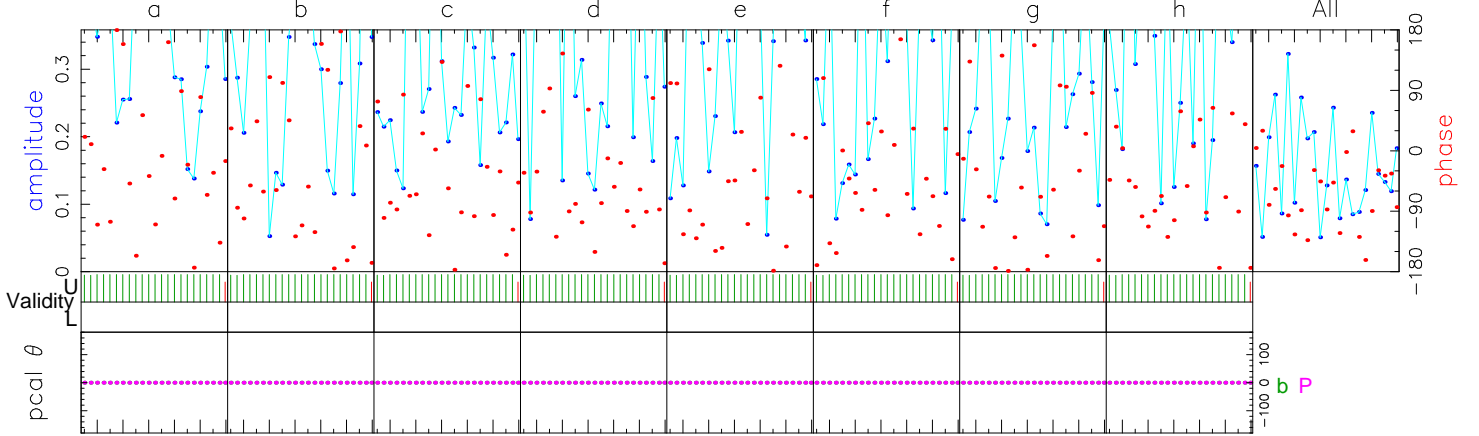
	RMS	Theor.	Amplitude	0.417 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	48.0	13.1	Search (2048X32)	0.409	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	42.2	22.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	46.3	7.8	Inc. seg. avg.	0.563	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	29.2	13.5	Inc. frq. avg.	0.514	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 66.1 el 33.9 pa -52.6 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -9968.663 4094.485 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bP.W.66.12BED8



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



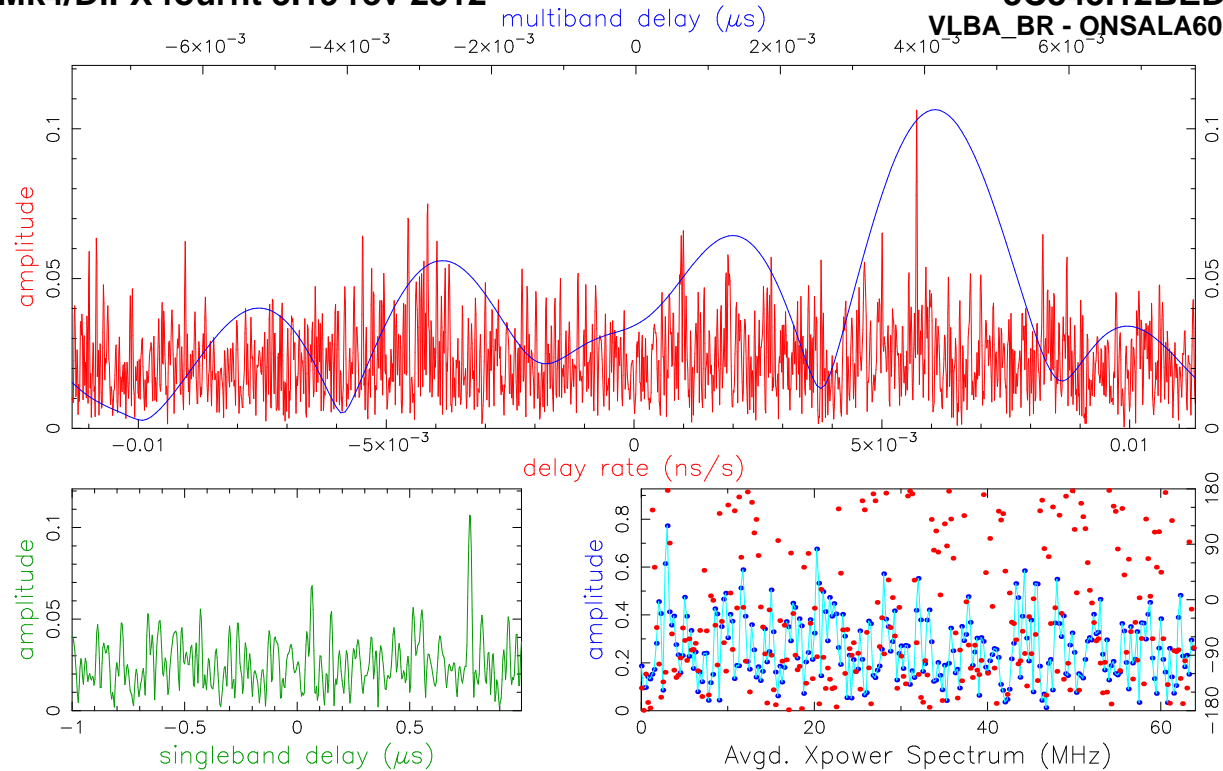
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-62.7	-62.6	-62.2	-66.9	-85.3	-76.2	-106.8	-50.5	Phase	-67.9
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	441.1	402.7	221.7	144.6	276.8	141.9	462.3	360.5	Sbd box	144.1
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.72493797354E+03		Apriori delay (usec)		-6.724499647135E+03		Resid mbdelay (usec)		-8.26403E-04	+/- 1.9E-04
Sband delay (usec)	-6.72494051738E+03		Apriori clock (usec)		-5.2272862E-01		Resid sbdelay (usec)		-4.40870E-01	+/- 1.5E-03
Phase delay (usec)	-6.72449964932E+03		Apriori clockrate (us/s)		1.1060491E-07		Resid phdelay (usec)		-2.18862E-06	+/- 6.5E-07
Delay rate (us/s)	1.34872832582E+00		Apriori rate (us/s)		1.34872437085E+00		Resid rate (us/s)		3.95497E-06	+/- 3.3E-09
Total phase (deg)			Apriori accel (us/s/s)		4.59892593383E-05		Resid phase (deg)		-67.9	+/- 20.1

	RMS	Theor.	Amplitude	0.119 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	52.2	48.3	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	74.0	84.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	19.5	28.5	Inc. seg. avg.	0.121	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	43.4	49.7	Inc. frq. avg.	0.109	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 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -9968.663 4094.485 simultaneous interpolator

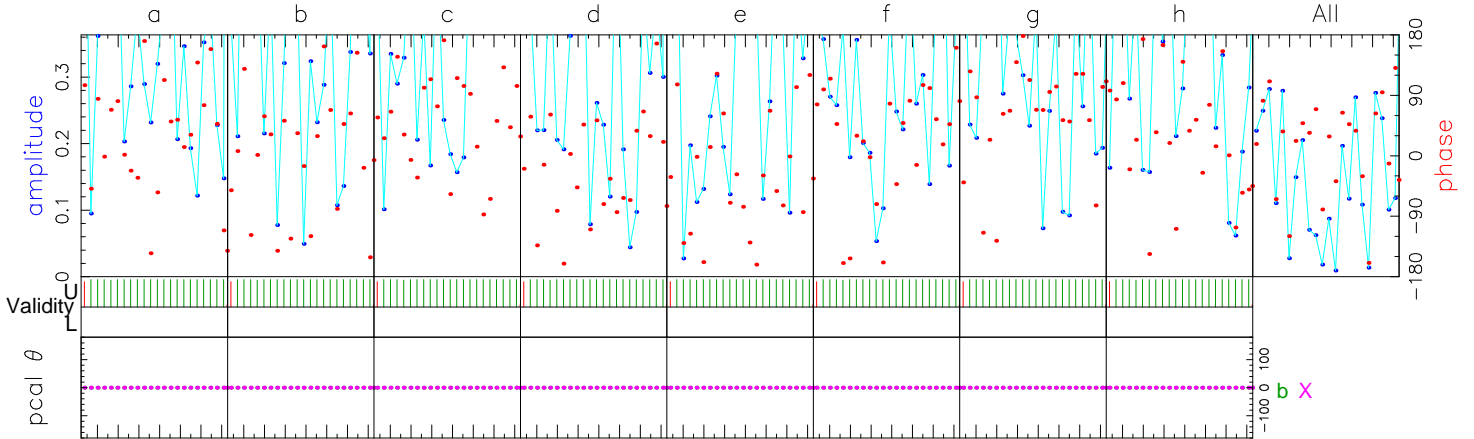
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bP.W.7.12BED8





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

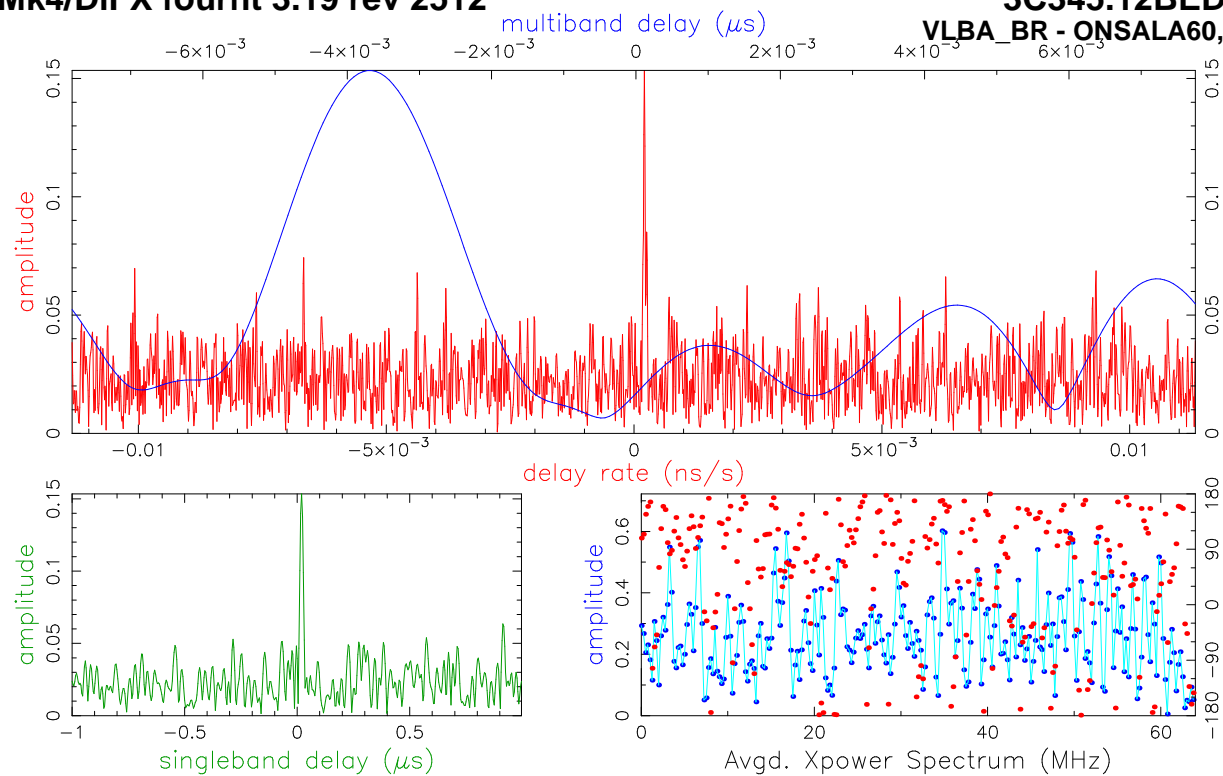


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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

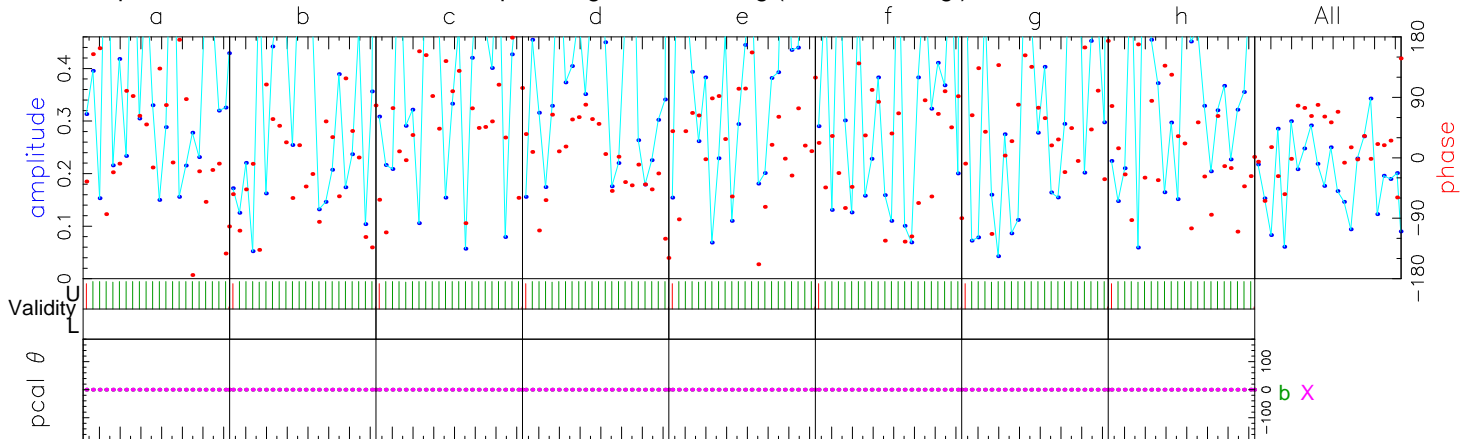
ph/seg (deg)	73.3	Theor.	45.8	Amplitude	0.121 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	92.4		80.0	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	50.1		27.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq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



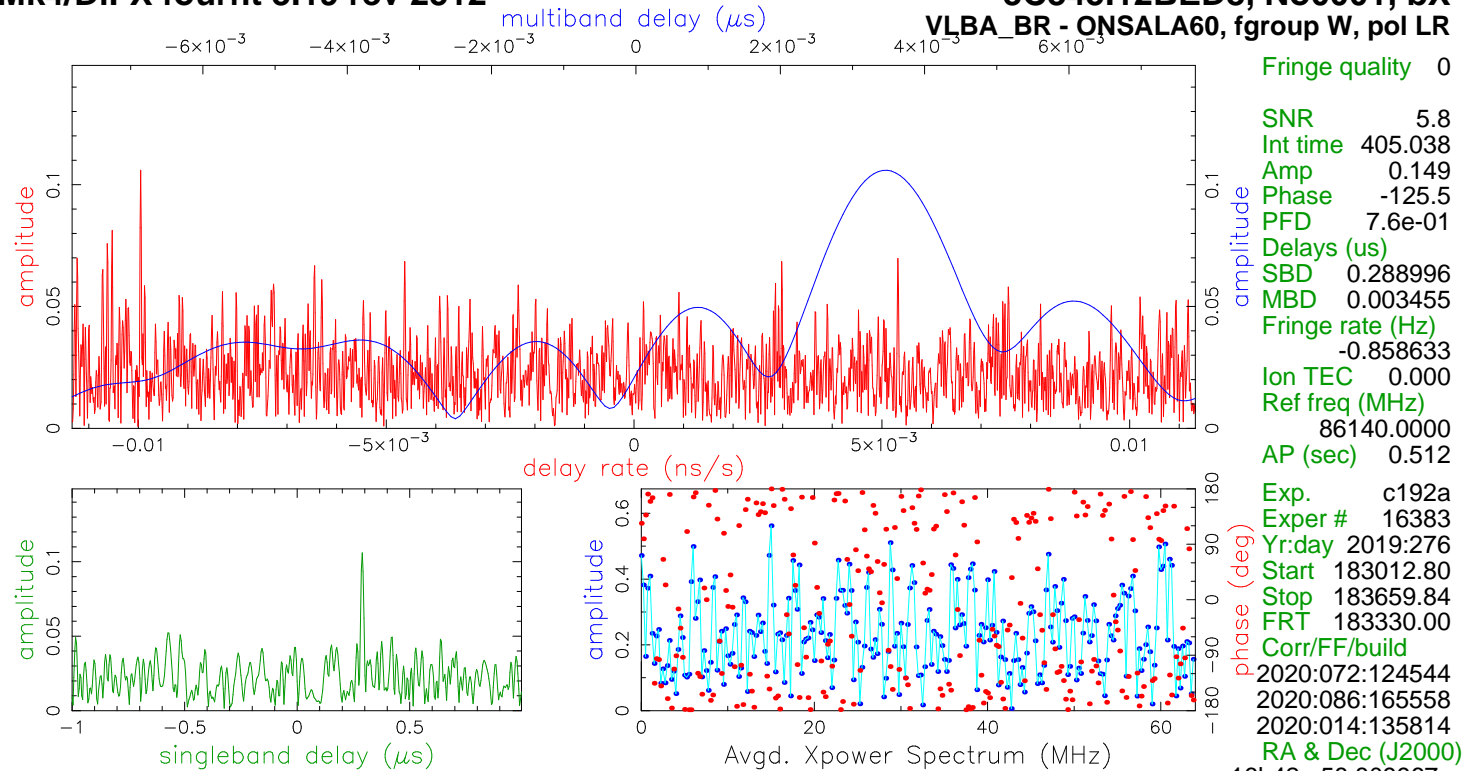
Fringe quality 9  
 SNR 8.4  
 Int time 405.038  
 Amp 0.153  
 Phase 21.8  
 PFD 1.1e-08  
 Delays (us)  
 SBD 0.019329  
 MBD -0.003697  
 Fringe rate (Hz)  
 0.018138  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 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

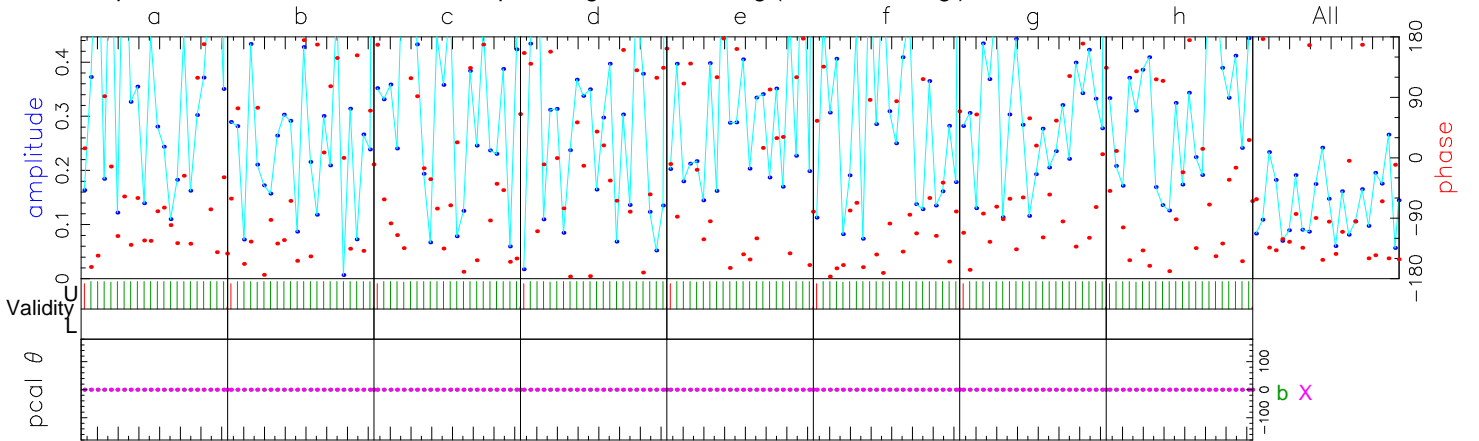


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	3.8	-7.4	69.5	5.9	32.1	37.4	45.5	-15.3		Phase 21.8
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2		Ampl. 0.2
	211.3	263.4	260.6	261.5	262.1	183.2	261.2	259.4		Sbd box 261.9
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		APs 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



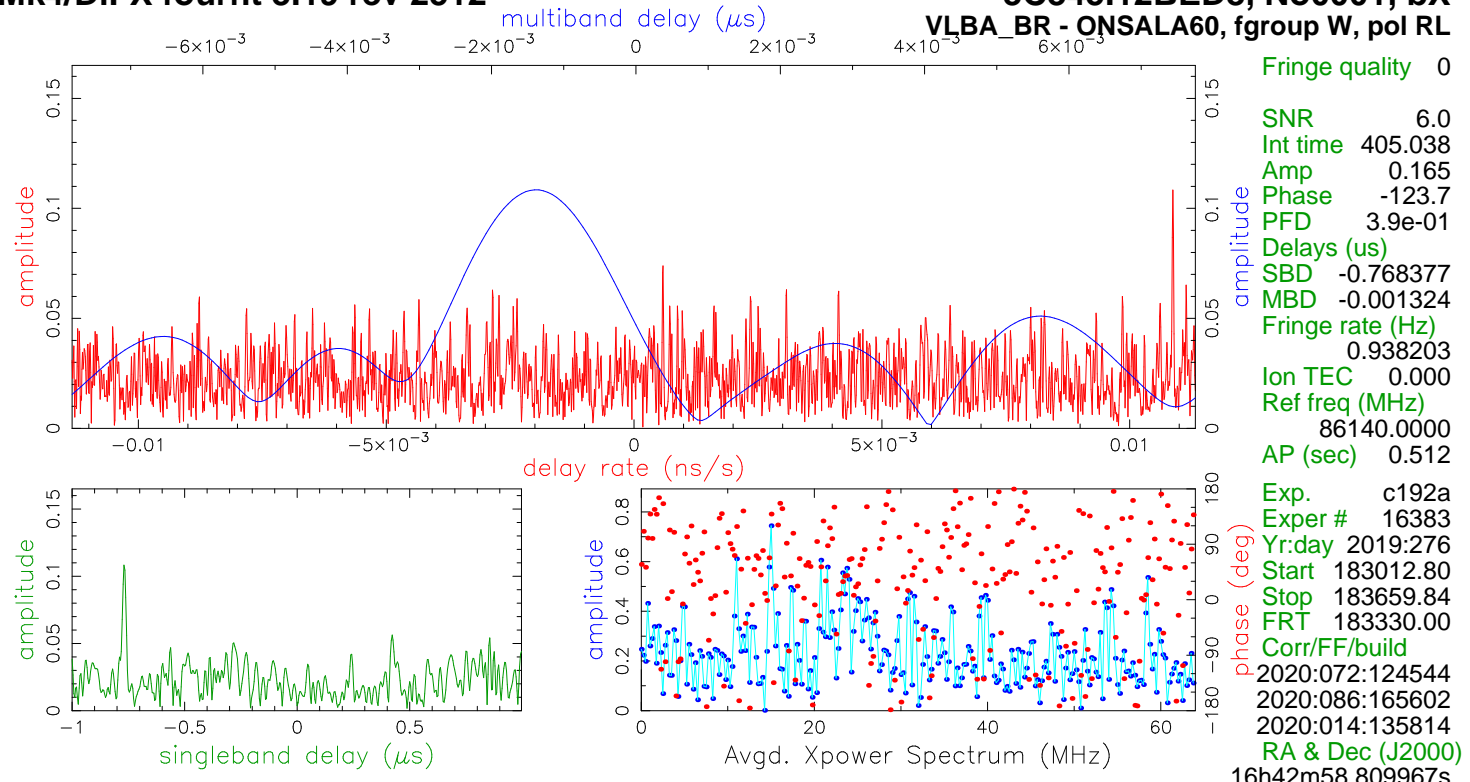
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

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

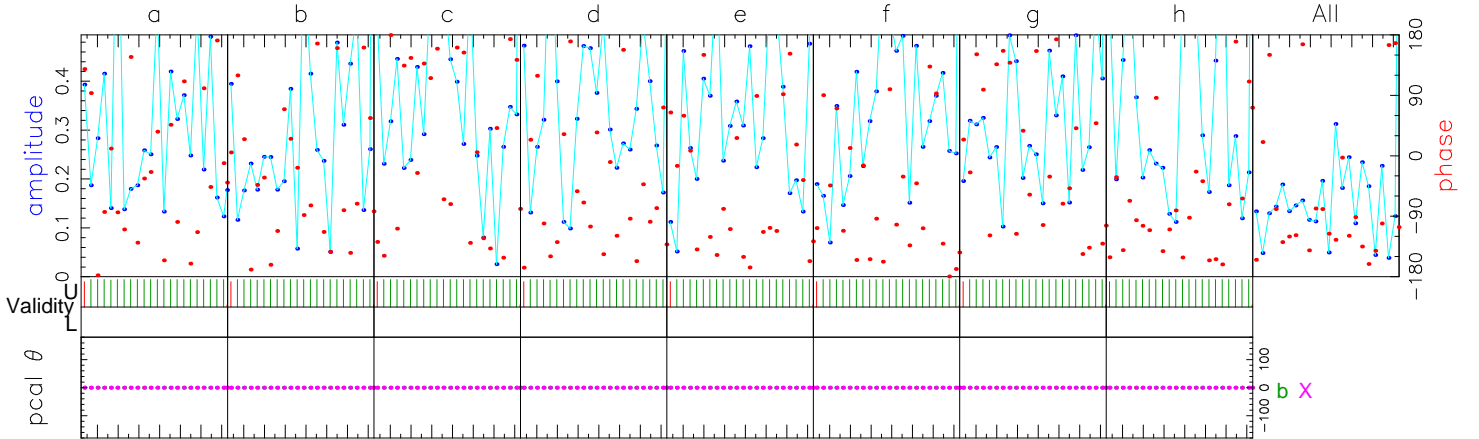
ph/seg (deg)	50.3	Theor.	47.1	Amplitude	0.149 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	66.1		82.2	Search (2048X32)	0.102	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	36.6		27.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb 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



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

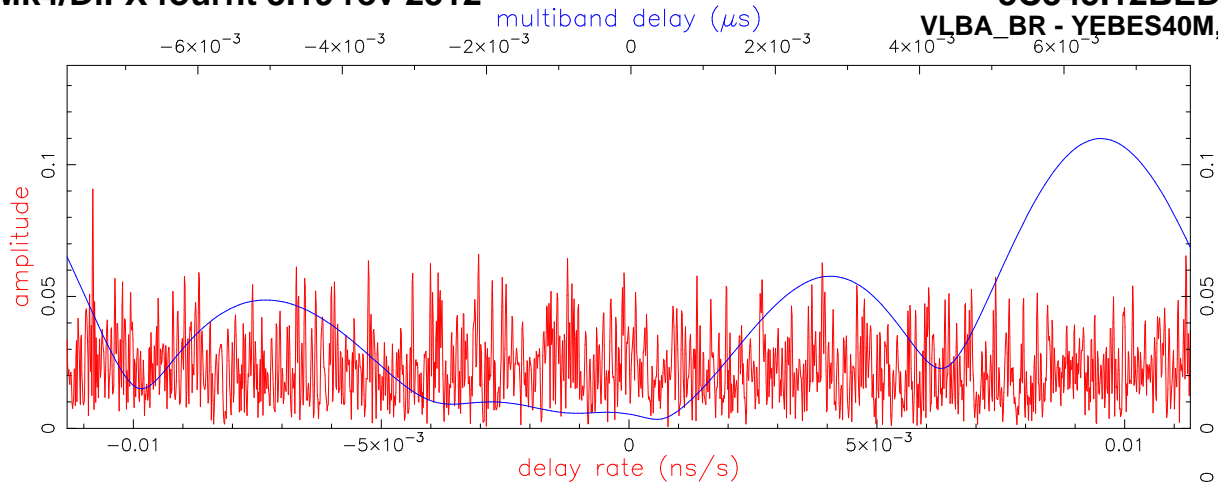


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.0	-91.5	-159.3	-110.7	-140.0	-135.1	-128.3	-117.3	Phase	-123.7
	0.1	0.1	0.2	0.3	0.2	0.1	0.0	0.3	Ampl.	0.2
	300.9	201.2	319.7	69.5	201.2	480.2	406.9	60.3	Sbd box	60.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	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 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									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

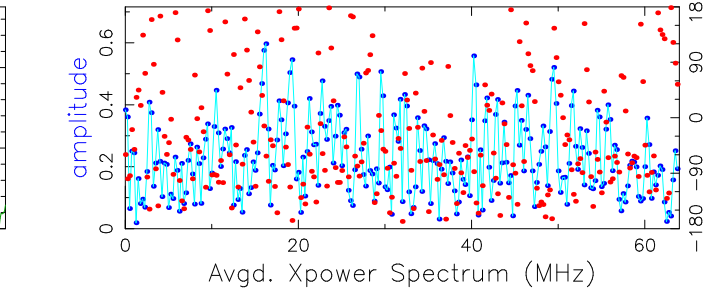
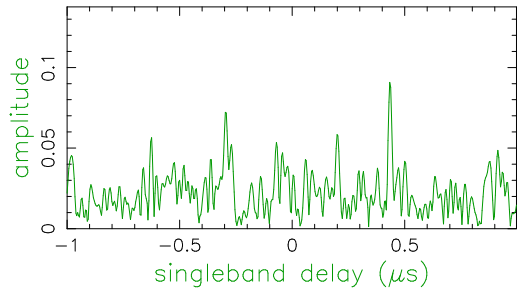
b: az 66.1 el 33.9 pa -52.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -9578.737 701.110 simultaneous interpolator

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



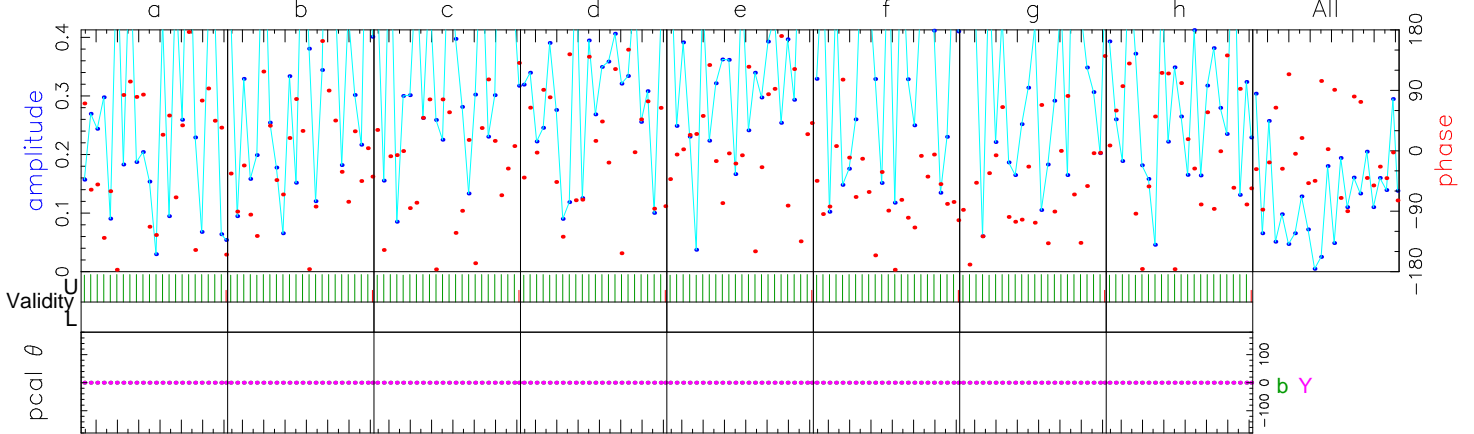
Fringe quality 0

SNR 5.0  
Int time 400.941  
Amp 0.138  
Phase -17.8  
PFD 1.0e+00  
Delays (us)  
SBD 0.434772  
MBD -0.008301  
Fringe rate (Hz)  
-0.933508  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183017.92  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165612  
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



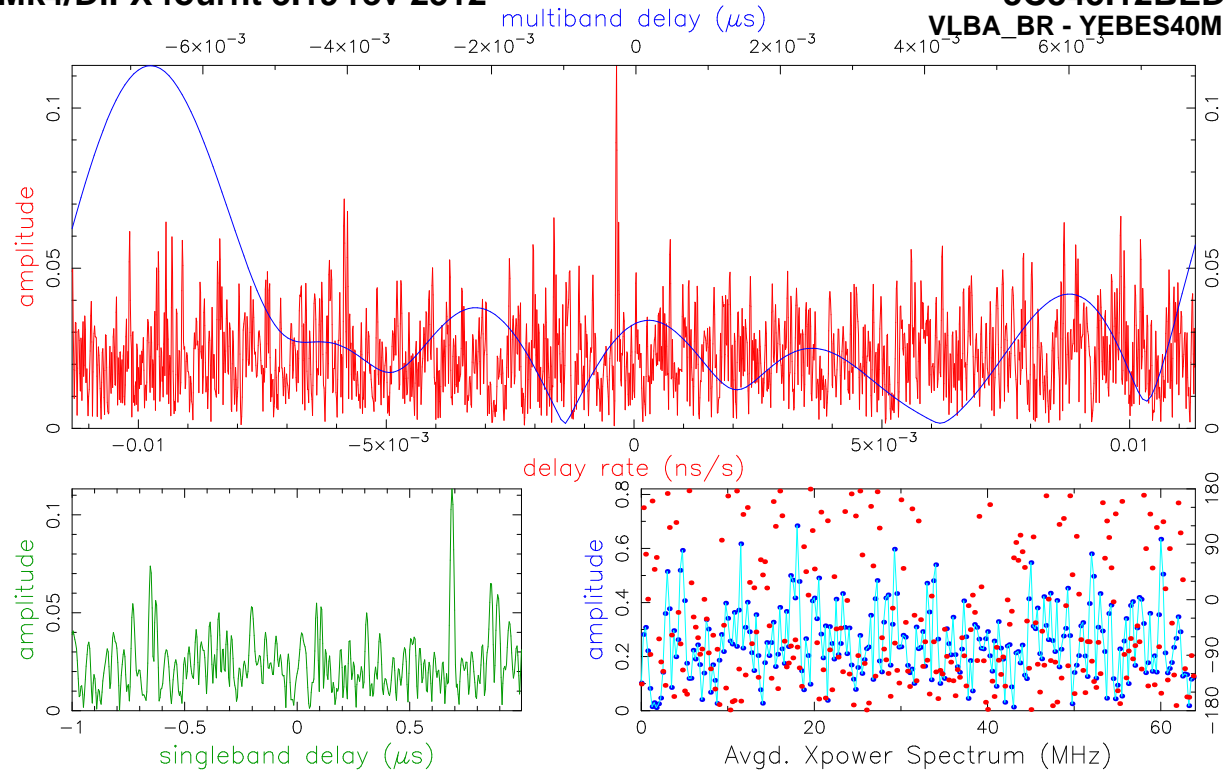
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.83006684594E+03	Apriori delay (usec)	-6.83049604516E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.2E-04
Sband delay (usec)	-6.83006127341E+03	Apriori clock (usec)	-1.0264677E+01	Resid sbdelay (usec)	4.34772E-01	+/-	1.7E-03
Phase delay (usec)	-6.83049604573E+03	Apriori clockrate (us/s)	-4.6239510E-07	Resid phdelay (usec)	-5.75474E-07	+/-	7.4E-07
Delay rate (us/s)	1.32585292745E+00	Apriori rate (us/s)	1.32586376455E+00	Resid rate (us/s)	-1.08371E-05	+/-	3.2E-09
Total phase (deg)	-136.6	Apriori accel (us/s/s)	4.31182720075E-05	Resid phase (deg)	-17.8	+/-	22.9

ph/seg (deg)	63.1	Theor.	54.9	Amplitude	0.138 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	98.0	Search (2048X32)	0.107	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	62.7	Inc. seg. avg.	0.134	Inc. frq. avg.	0.160	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	81.5	Inc. frq. avg.	0.160			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 0.00

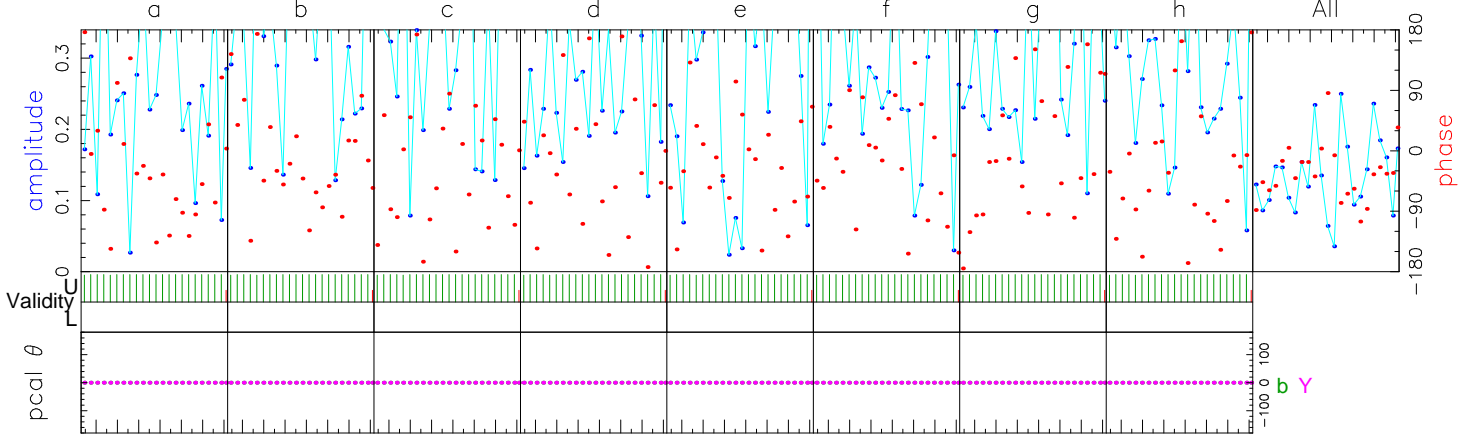
b: az 66.1 el 33.9 pa -52.6 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -9803.997 3585.603 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bY.W.114.12BED8



Fringe quality 0  
SNR 6.2  
Int time 400.941  
Amp 0.113  
Phase -40.8  
PFD 1.4e-01  
Delays (us)  
SBD 0.687777  
MBD -0.006720  
Fringe rate (Hz)  
-0.030841  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Yr:day 16383  
Exp# 2020:072:124544  
Start 183017.92  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165558  
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

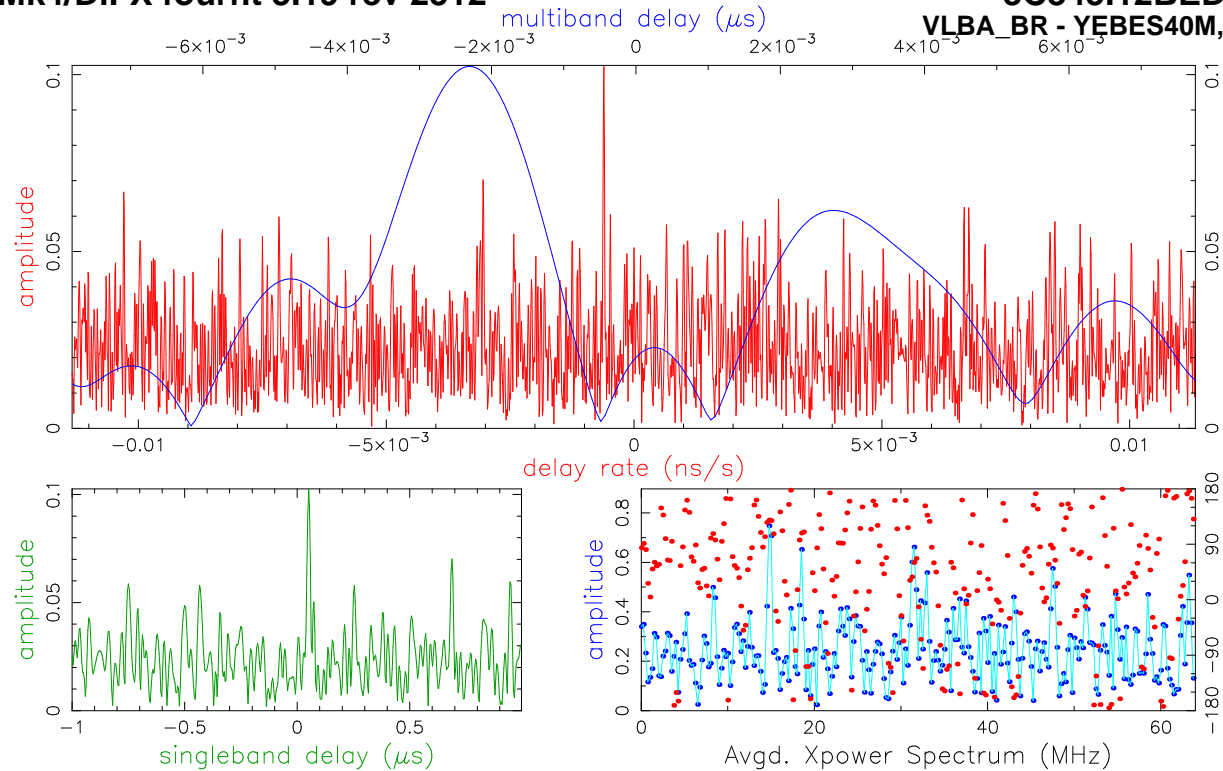


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.1	-22.4	-53.0	-23.7	-28.0	-17.5	-44.6	-72.1	Phase	-40.8
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	431.4	56.1	165.7	117.1	278.8	45.9	52.0	293.2	Sbd box	433.1
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.82981526509E+03	Apriori delay (usec)	-6.83049604516E+03	Resid mbdelay (usec)	-6.71993E-03	+/-	1.8E-04
Sband delay (usec)	-6.82980826866E+03	Apriori clock (usec)	-1.0264677E+01	Resid sbdelay (usec)	6.87777E-01	+/-	1.4E-03
Phase delay (usec)	-6.83049604647E+03	Apriori clockrate (us/s)	-4.6239510E-07	Resid phdelay (usec)	-1.31490E-06	+/-	6.0E-07
Delay rate (us/s)	1.32586340651E+00	Apriori rate (us/s)	1.32586376455E+00	Resid rate (us/s)	-3.58038E-07	+/-	2.6E-09
Total phase (deg)	-159.6	Apriori accel (us/s/s)	4.31182720075E-05	Resid phase (deg)	-40.8	+/-	18.5

ph/seg (deg)	40.6	Theor.	44.3	Search (2048X32)	0.107	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	52.4		77.3	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)	22.8		26.1	Inc. seg. avg.	0.104	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.2		45.6	Inc. frq. avg.	0.109	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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -9803.997 3585.603 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bY.W.64.12BED8

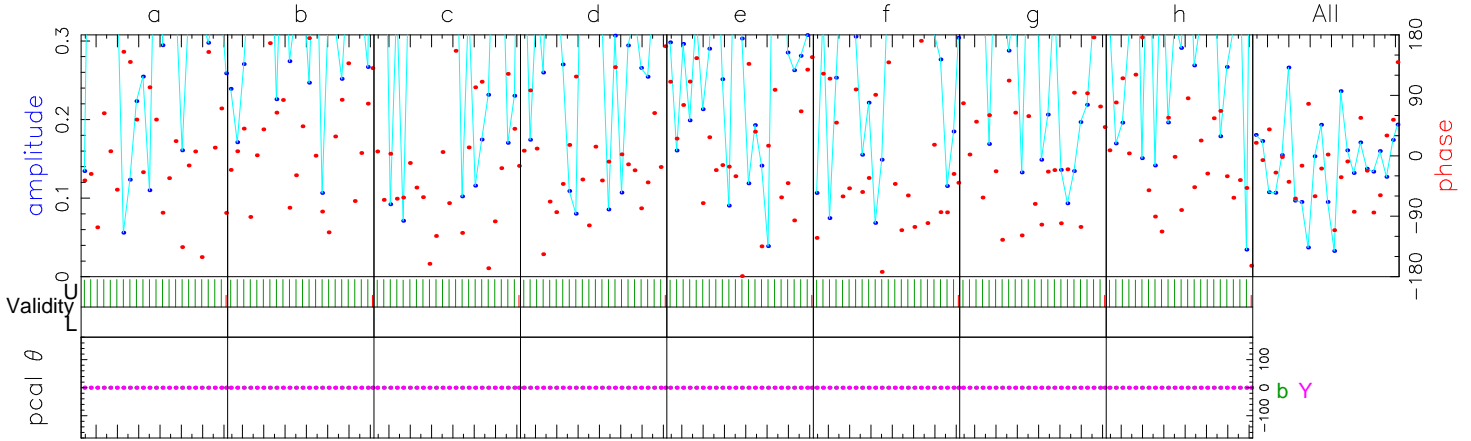


Fringe quality 0

SNR 5.6  
Int time 400.941  
Amp 0.103  
Phase -15.4  
PFD 9.9e-01  
Delays (us)  
SBD 0.051309  
MBD -0.002272  
Fringe rate (Hz)  
-0.052118  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183017.92  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165602  
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

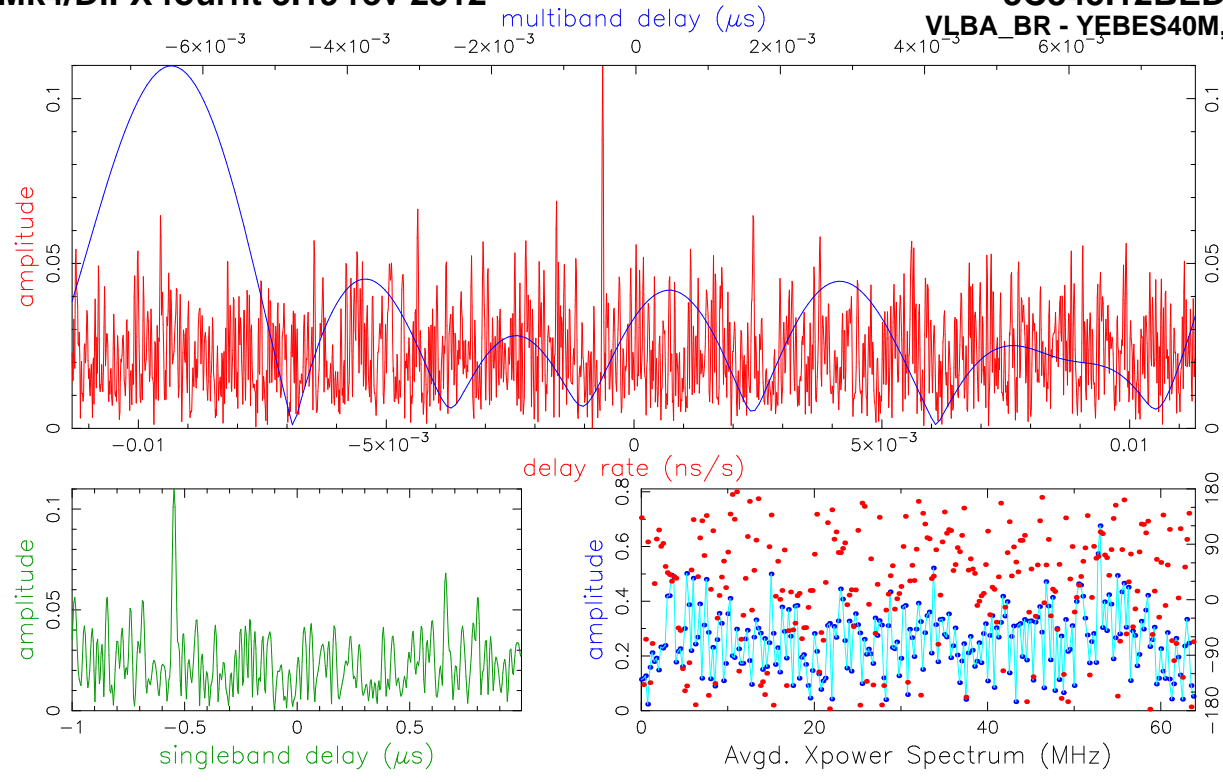


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-5.1	25.8	-53.9	-30.1	40.4	-67.2	14.0	-5.2		Phase	-15.4
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1		Ampl.	0.1
	270.7	170.7	333.9	193.3	414.8	248.7	452.8	145.3		Sbd box	270.1
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
										Chan ids	
										Tracks	
Group delay (usec)(sbd)	-6.83045144234E+03		Apriori delay (usec)		-6.83049604516E+03		Resid mbdelay (usec)		-2.27218E-03	+/-	1.9E-04
Sband delay (usec)	-6.83044473591E+03		Apriori clock (usec)		-1.0264677E+01		Resid sbdelay (usec)		5.13093E-02	+/-	1.5E-03
Phase delay (usec)	-6.83049604566E+03		Apriori clockrate (us/s)		-4.6239510E-07		Resid phdelay (usec)		-4.97152E-07	+/-	6.6E-07
Delay rate (us/s)	1.32586315951E+00		Apriori rate (us/s)		1.32586376455E+00		Resid rate (us/s)		-6.05043E-07	+/-	2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		4.31182720075E-05		Resid phase (deg)		-15.4	+/-	20.4

	RMS	Theor.	Amplitude	0.103 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.3	49.0	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	65.9	85.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	41.4	28.9	Inc. seg. avg.	0.105	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	40.6	50.4	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 66.1 el 33.9 pa -52.6 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -9803.997 3585.603 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bY.W.82.12BED8

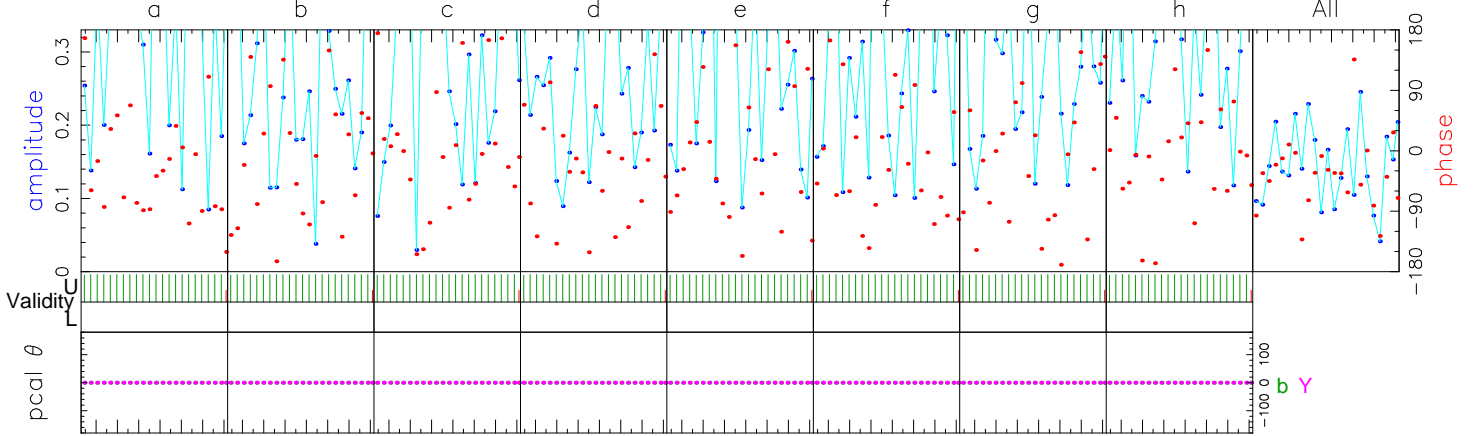


Fringe quality 0

SNR 6.0  
 Int time 400.941  
 Amp 0.110  
 Phase -37.1  
 PFD 3.7e-01  
 Delays (us)  
 SBD -0.546894  
 MBD -0.006438  
 Fringe rate (Hz)  
 -0.054539  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183017.92  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165607  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

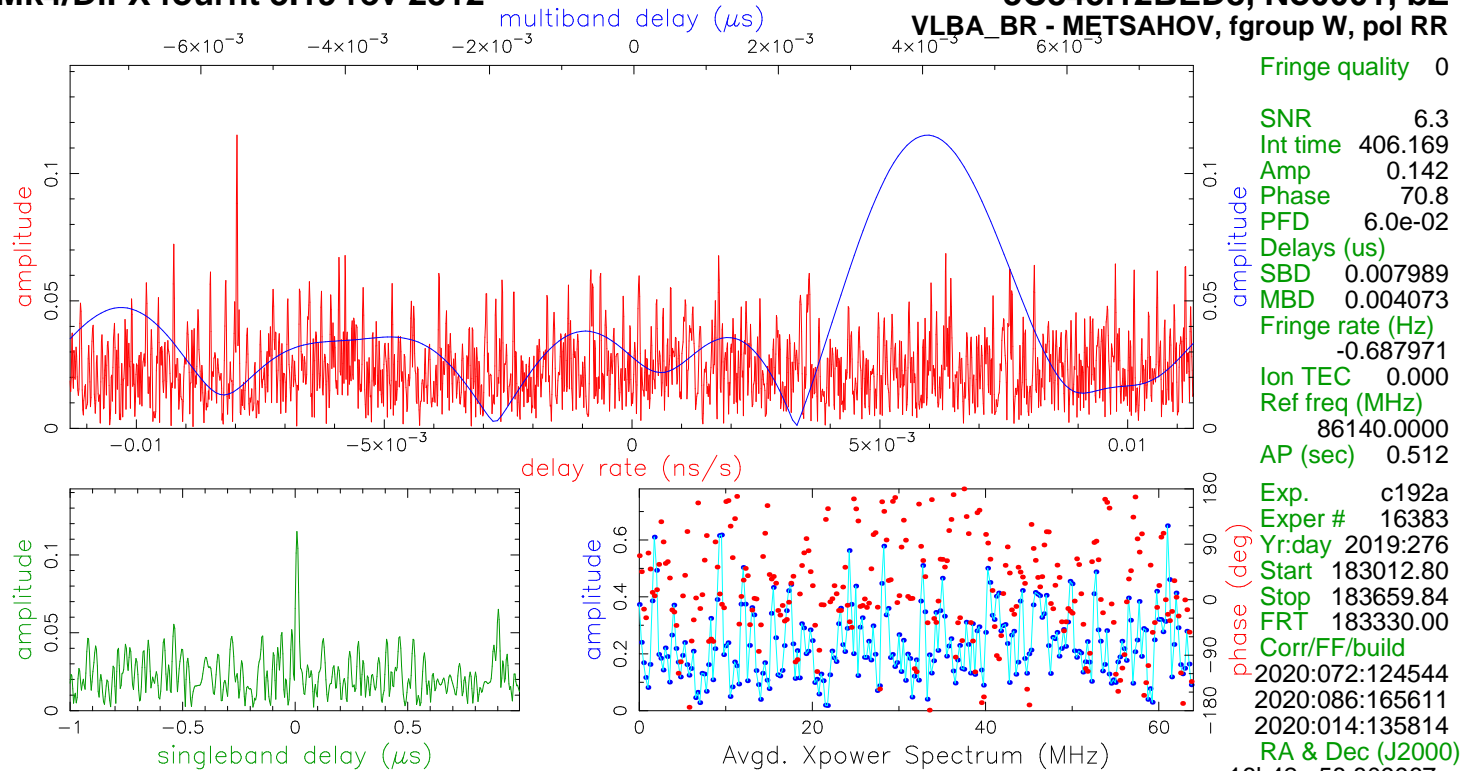
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



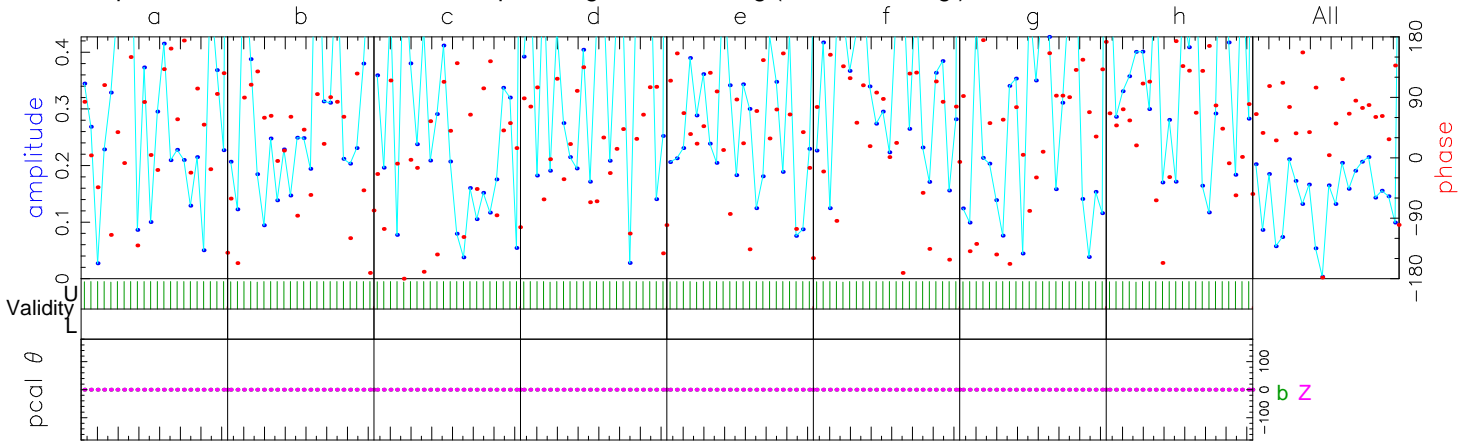
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.8	-28.8	-28.8	-18.1	-30.3	-53.0	-75.3	-14.2	Phase	-37.1
	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	115.5	67.7	404.8	242.2	400.5	427.3	120.0	34.4	Sbd box	117.0
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.83104935812E+03		Apriori delay (usec)		-6.83049604516E+03		Resid mbdelay (usec)		-6.43796E-03	+/- 1.8E-04
Sband delay (usec)	-6.83104293941E+03		Apriori clock (usec)		-1.0264677E+01		Resid sbdelay (usec)		-5.46894E-01	+/- 1.4E-03
Phase delay (usec)	-6.83049604636E+03		Apriori clockrate (us/s)		-4.6239510E-07		Resid phdelay (usec)		-1.19797E-06	+/- 6.1E-07
Delay rate (us/s)	1.32586313141E+00		Apriori rate (us/s)		1.32586376455E+00		Resid rate (us/s)		-6.33139E-07	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.31182720075E-05		Resid phase (deg)		-37.1	+/- 19.0

ph/seg (deg) 54.2 45.6 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 58.0 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 21.7 26.9 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.0 47.0 Inc. frq. avg. 0.104 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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -9803.997 3585.603 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bY.W.89.12BED8





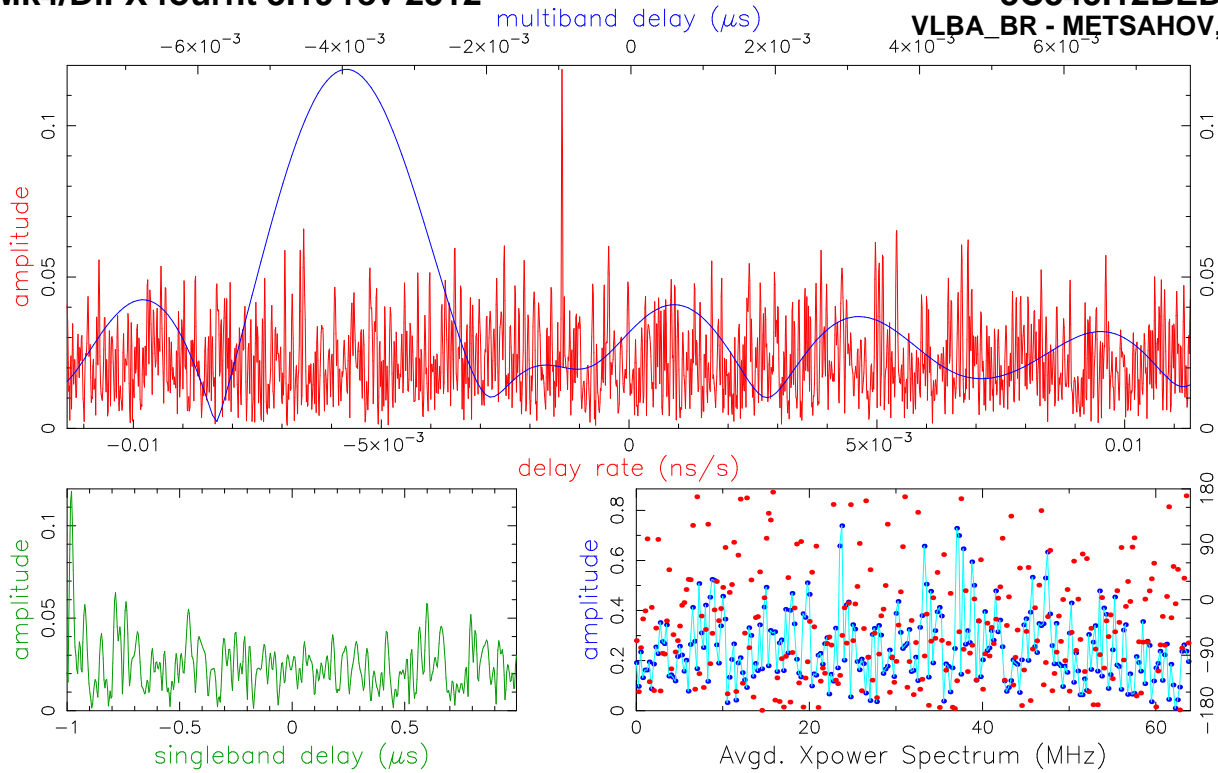
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.35229446864E+03					-3.35229854166E+03			4.07302E-03	+/- 1.7E-04
Sband delay (usec)	-3.35229055241E+03					-7.9490691E-01			7.98925E-03	+/- 1.4E-03
Phase delay (usec)	-3.35229853938E+03					-2.5868787E-07			2.28368E-06	+/- 5.8E-07
Delay rate (us/s)	1.31903051638E+00					1.31903850304E+00			-7.98666E-06	+/- 2.5E-09
Total phase (deg)			-65.5			8.90330107089E-06			70.8	+/- 18.1
	RMS	Theor.	Amplitude	0.142 +/- 0.022		PCal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	45.4	43.3	Search (2048X32)	0.107		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	64.1	75.6	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	26.2	25.6	Inc. seg. avg.	0.140		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	40.5	44.6	Inc. frq. avg.	0.138		Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite
b: az 66.1 el 33.9 pa -52.6		Z: az 271.4 el 46.7 pa 40.3		u, v (fr/asec) -9815.245 -139.631					ion window (TEC)	0.00 0.00

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, bZ  
VLBA\_BR - METSAHOV, fgroup W, pol LR

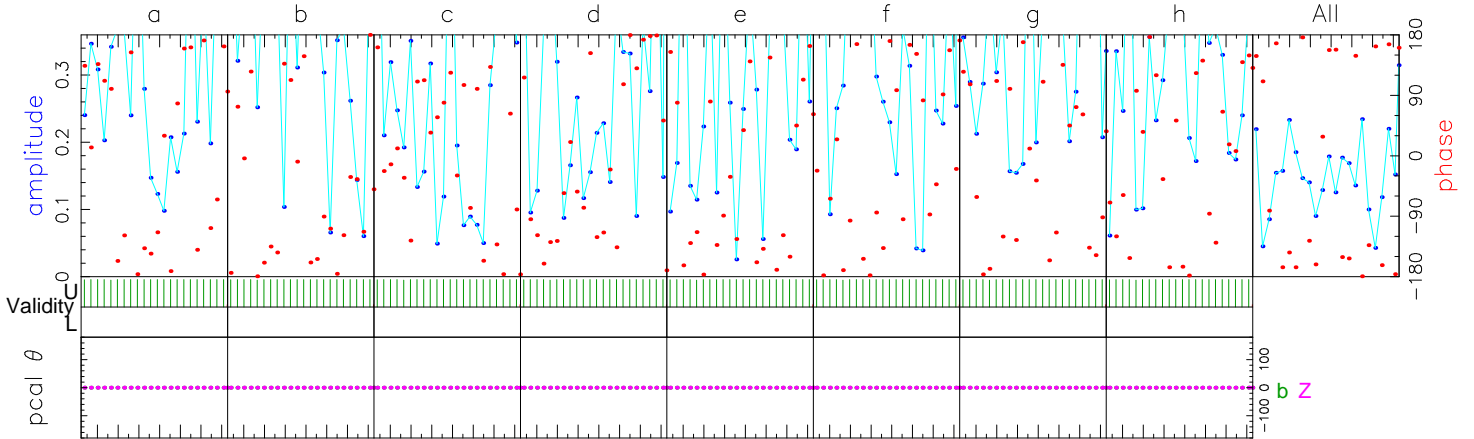


Fringe quality 0

SNR 6.6  
Int time 406.169  
Amp 0.120  
Phase -175.4  
PFD 1.4e-02  
Delays (us)  
SBD -0.981407  
MBD -0.003969  
Fringe rate (Hz)  
-0.116788  
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  
2020:086:165615  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

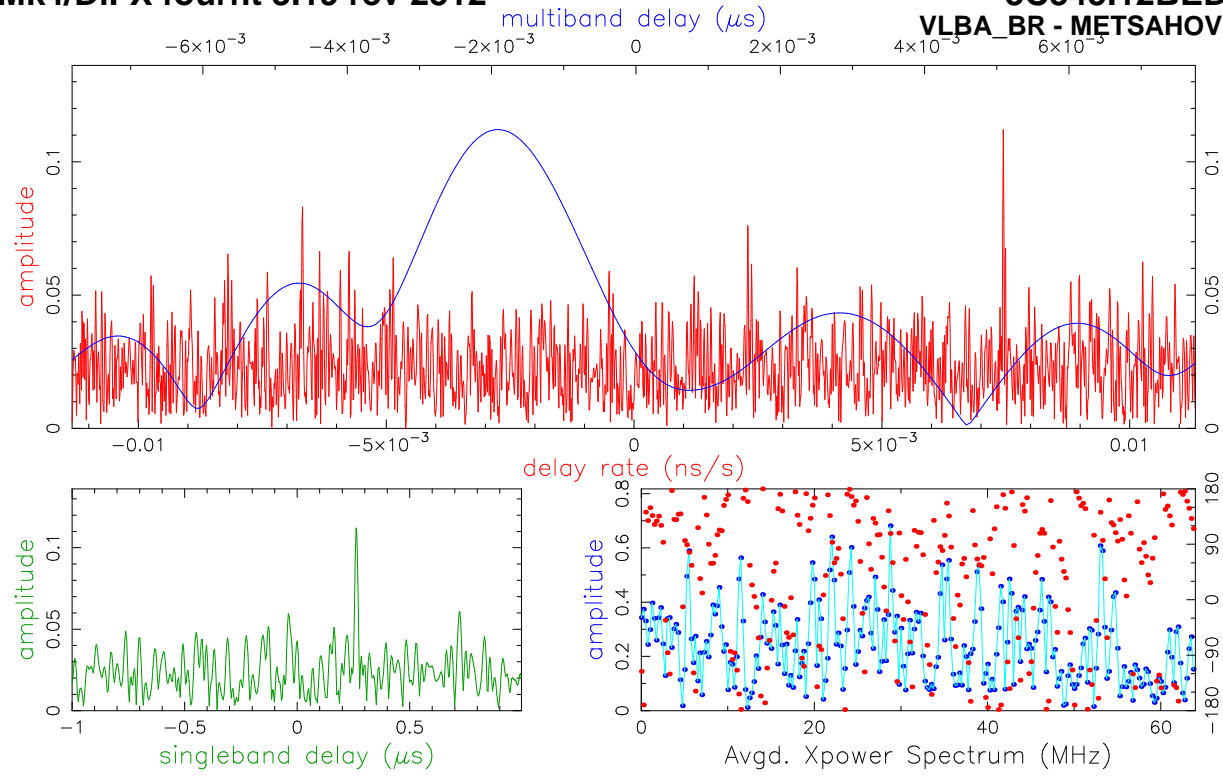
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	177.5	-169.3	133.9	-162.8	176.6	-143.6	170.7	173.0	Phase	-175.4
b	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
Z	55.5	40.3	465.3	329.0	8.0	491.6	460.7	209.2	Sbd box	5.8
b:Z	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b:Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-3.35328688561E+03		Apriori delay (usec)		-3.35229854166E+03		Resid mbdelay (usec)		-3.96895E-03	+/- 1.7E-04
Sband delay (usec)	-3.35327994891E+03		Apriori clock (usec)		-7.9490691E-01		Resid sbdelay (usec)		-9.81407E-01	+/- 1.3E-03
Phase delay (usec)	-3.35229854732E+03		Apriori clockrate (us/s)		-2.5868787E-07		Resid phdelay (usec)		-5.65613E-06	+/- 5.6E-07
Delay rate (us/s)	1.31903714725E+00		Apriori rate (us/s)		1.31903850304E+00		Resid rate (us/s)		-1.35579E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		8.90330107089E-06		Resid phase (deg)		-175.4	+/- 17.4

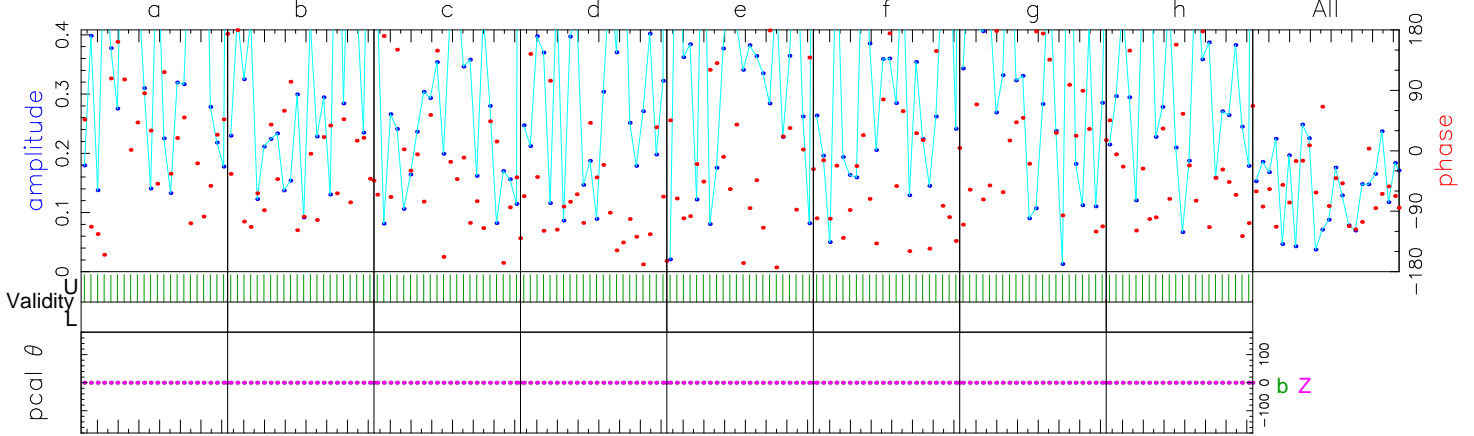
ph/seg (deg) 48.0 41.8 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 51.2 73.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.5 24.7 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 31.8 43.1 Inc. frq. avg. 0.115 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -9815.245 -139.631 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bZ.W.127.12BED8





Fringe quality 0  
SNR 6.2  
Int time 406.169  
Amp 0.136  
Phase -59.3  
PFD 1.1e-01  
Delays (us)  
SBD 0.262890  
MBD -0.001881  
Fringe rate (Hz) 0.642689  
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  
2020:086:165606  
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	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.35203479732E+03									
Sband delay (usec)	-3.35203565191E+03									
Phase delay (usec)	-3.35229854357E+03									
Delay rate (us/s)	1.31904596403E+00									
Total phase (deg)			-195.6							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

b: az 66.1 el 33.9 pa -52.6      Z: az 271.4 el 46.7 pa 40.3      u,v (fr/asec) -9815.245 -139.631  
Control file: cf\_1234\_gmva    Input file: /Exps/c192a/v1\_PV/1234/No0001/bZ..12BED8    Output file: /Exps/c192a/v1\_PV/1234/No0001/bZ.W.88.12BED8