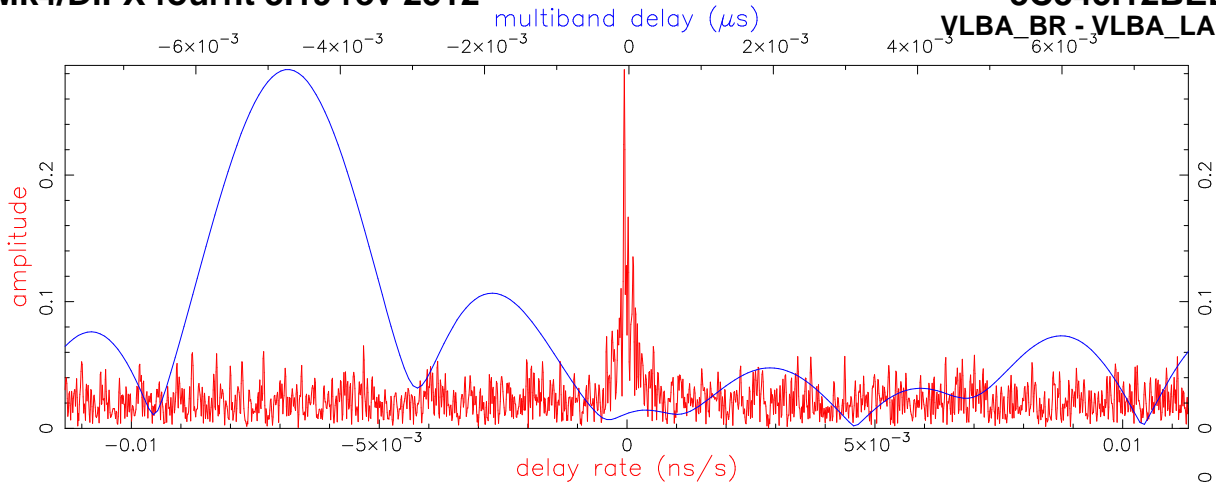


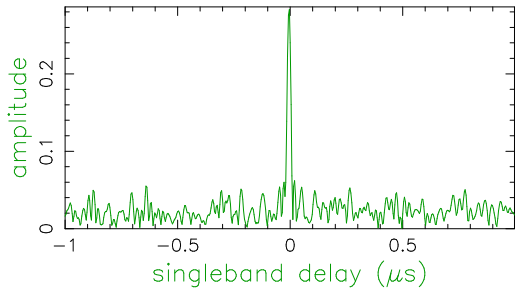
Mk4/DiFX fourfit 3.19 rev 2512

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

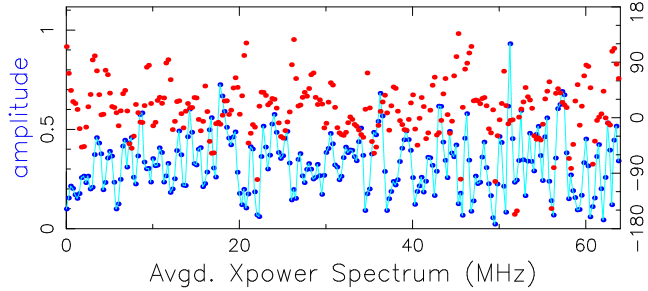


Fringe quality 9

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

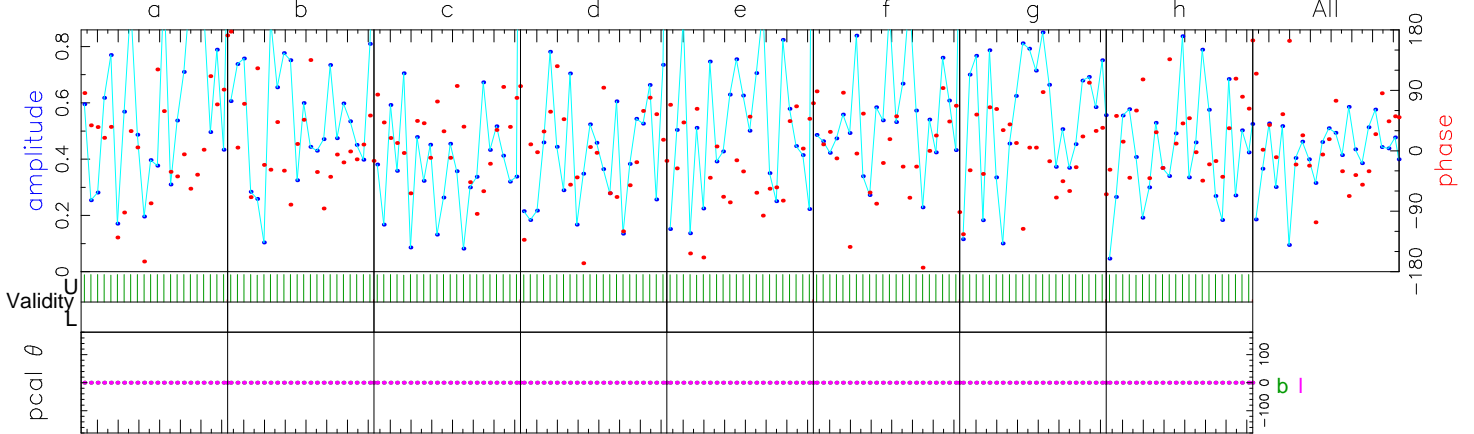


delay rate (ns/s)



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

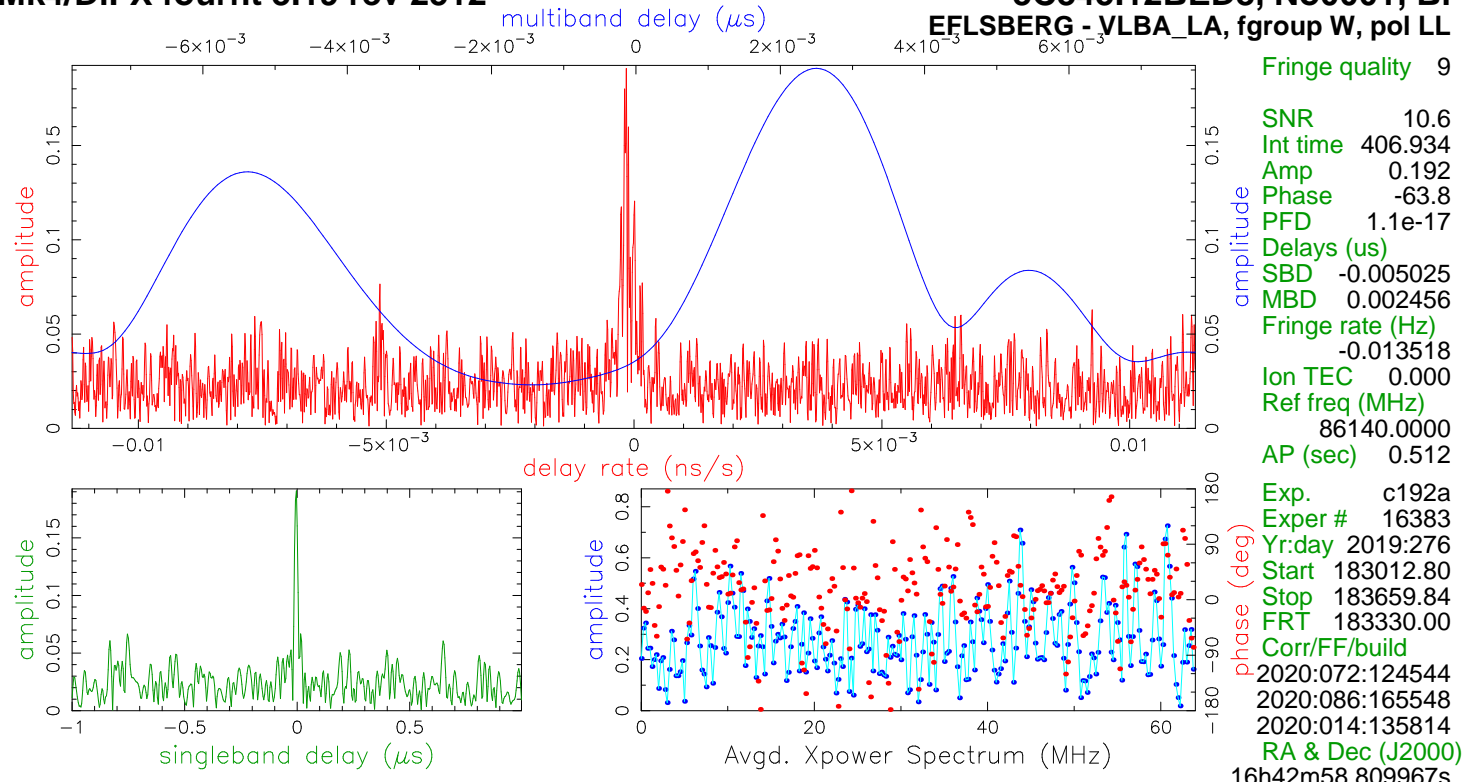


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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		

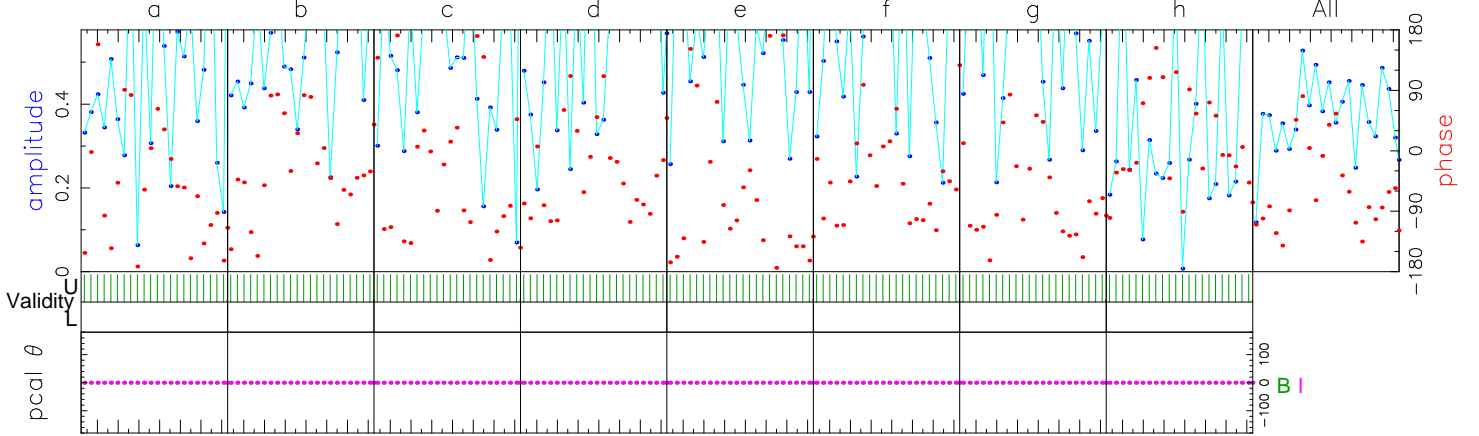
Group delay (usec)(sbd)	-1.21217233884E+03	Apriori delay (usec)	-1.21216758003E+03	Resid mbdelay (usec)	-4.75881E-03	+/-	6.9E-05
Sband delay (usec)	-1.21217288553E+03	Apriori clock (usec)	1.2755744E-01	Resid sbdelay (usec)	-5.30550E-03	+/-	5.5E-04
Phase delay (usec)	-1.21216757977E+03	Apriori clockrate (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



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



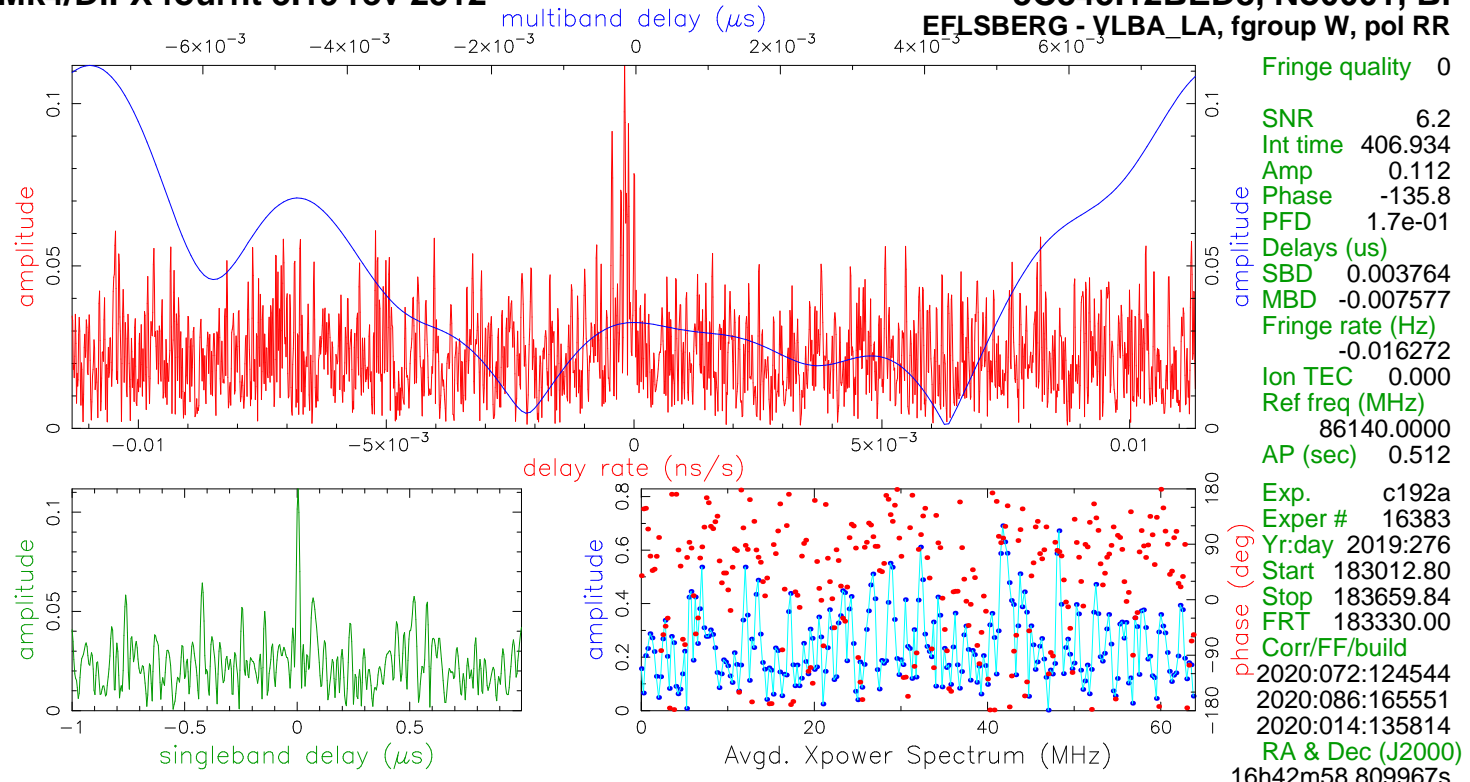
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.8	-25.3	-90.1	-44.1	-143.0	-52.0	-87.6	1.2	Phase	-63.8
	0.1	0.2	0.2	0.3	0.3	0.4	0.3	0.2	Ampl.	0.2
	464.8	255.1	256.9	256.5	257.0	255.9	256.4	257.3	Sbd box	255.7
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.45203461647E+03	Apriori delay (usec)	4.45203216074E+03	Resid mbdelay (usec)	2.45572E-03	+/-	1.0E-04
Sband delay (usec)	4.45202713624E+03	Apriori clock (usec)	1.7579317E+01	Resid sbdelay (usec)	-5.02450E-03	+/-	8.1E-04
Phase delay (usec)	4.45203215869E+03	Apriori clockrate (us/s)	1.5147200E-07	Resid phdelay (usec)	-2.05803E-06	+/-	3.5E-07
Delay rate (us/s)	-1.44025642883E+00	Apriori rate (us/s)	-1.44025627191E+00	Resid rate (us/s)	-1.56929E-07	+/-	1.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.00601945607E-05	Resid phase (deg)	-63.8	+/-	10.8

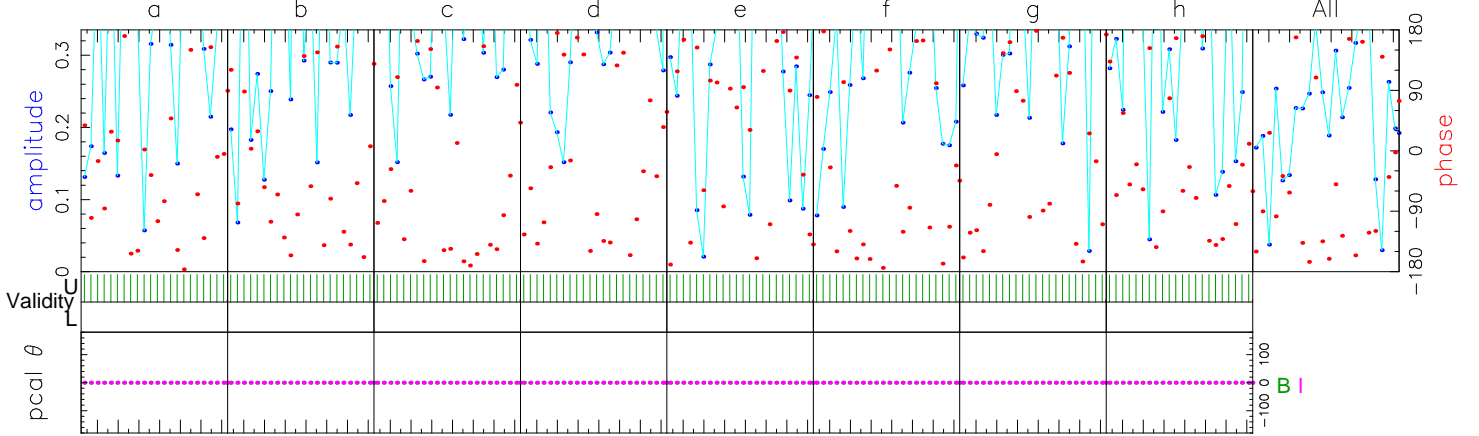
ph/seg (deg)	63.8	Theor.	25.9	Search (2048X32)	0.188	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	105.1		45.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	48.1		15.3	Inc. seg. avg.	0.339	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	50.9		26.6	Inc. frq. avg.	0.242	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/BI.12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/BI.W.14.12BED8



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

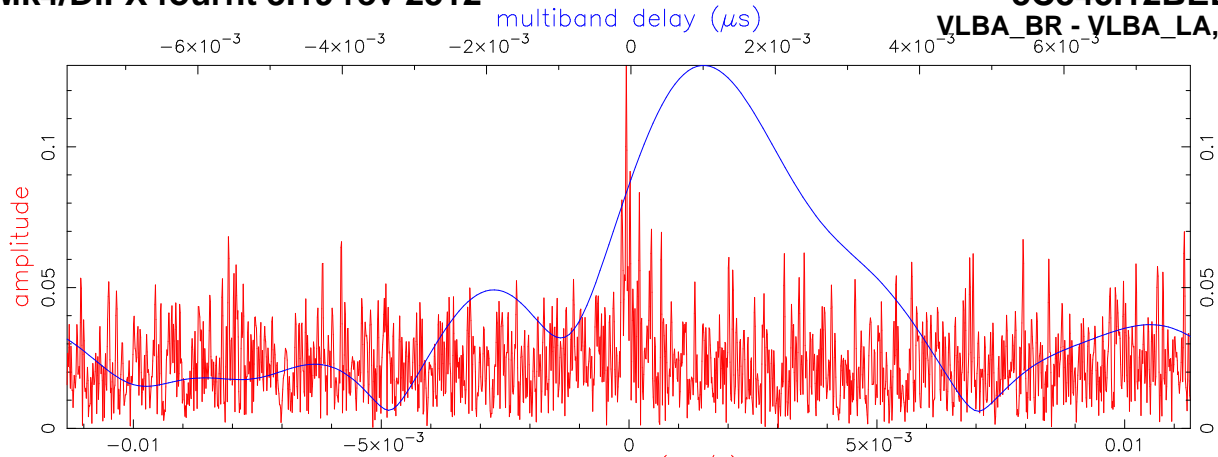


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.4	-106.8	-133.8	-148.0	162.3	-165.0	-150.3	-59.9	Phase	-135.8
	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1
	383.6	259.1	258.2	16.4	258.7	407.8	502.5	259.3	Sbd box	258.0
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)		4.45204020855E+03			Apriori delay (usec)	4.45203216074E+03		Resid mbdelay (usec)	-7.57719E-03	+/- 1.8E-04
Sband delay (usec)		4.45203592499E+03			Apriori clock (usec)	1.7579317E+01		Resid sbdelay (usec)	3.76425E-03	+/- 1.4E-03
Phase delay (usec)		4.45203215636E+03			Apriori clockrate (us/s)	1.5147200E-07		Resid phdelay (usec)	-4.37842E-06	+/- 6.0E-07
Delay rate (us/s)		-1.44025646080E+00			Apriori rate (us/s)	-1.44025627191E+00		Resid rate (us/s)	-1.88897E-07	+/- 2.6E-09
Total phase (deg)			-18.3		Apriori accel (us/s/s)	-1.00601945607E-05		Resid phase (deg)	-135.8	+/- 18.6

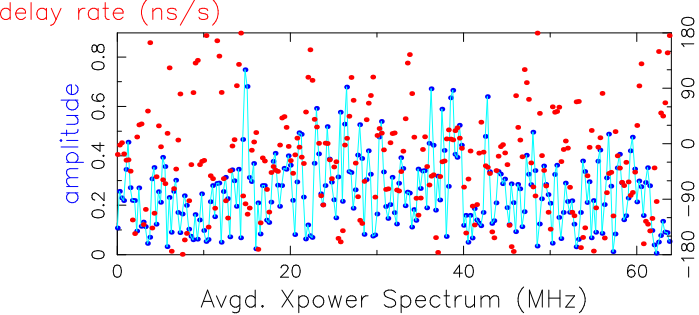
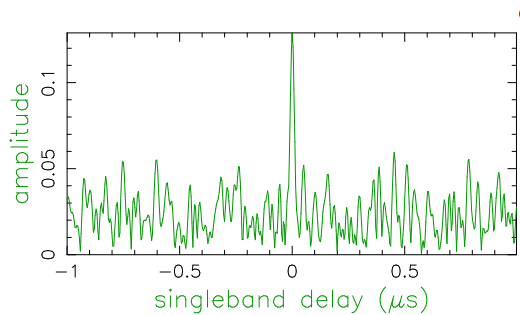
	RMS	Theor.	Amplitude	0.112 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	72.1	44.6	Search (2048X32)	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	126.5	77.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	46.1	26.3	Inc. seg. avg.	0.169	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	43.7	45.9	Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/BI.12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/BI.W.31.12BED8

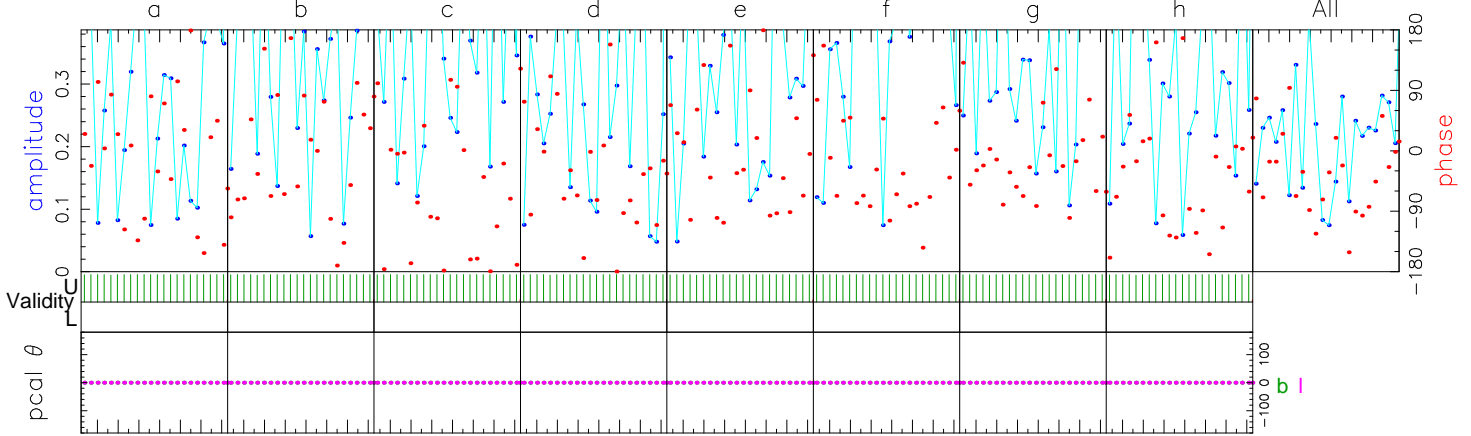


Fringe quality 0  
SNR 7.1  
Int time 406.536  
Amp 0.129  
Phase -42.5  
PFD 3.6e-04  
Delays (us)  
SBD 0.000161  
MBD 0.001011  
Fringe rate (Hz) -0.005038  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165551  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

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

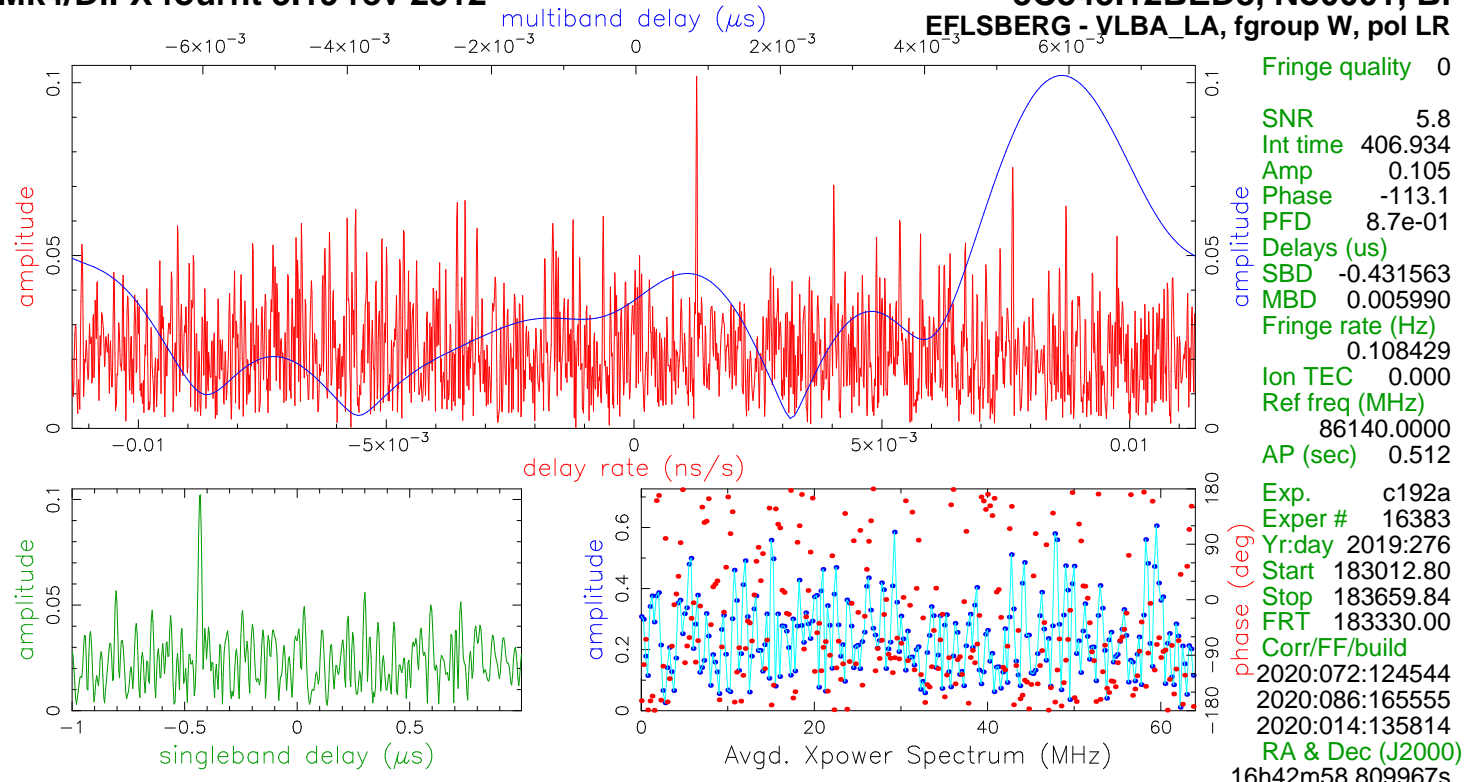


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

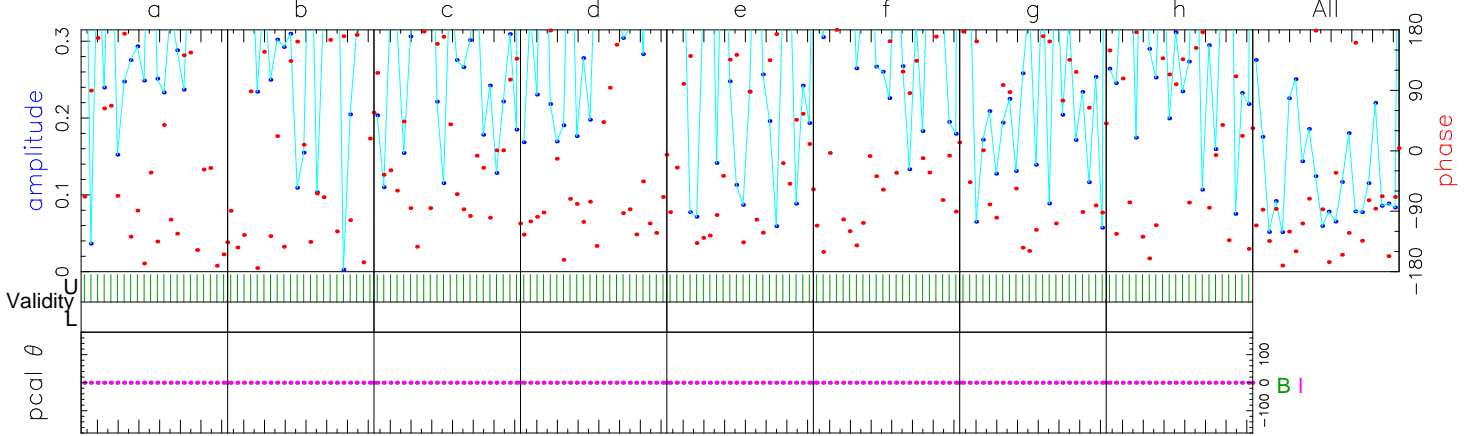
Group delay (usec)(sbd)	-1.21216656943E+03	Apriori delay (usec)	-1.21216758003E+03	Resid mbdelay (usec)	1.01060E-03	+/-	1.5E-04
Sband delay (usec)	-1.21216741853E+03	Apriori clock (usec)	1.2755744E-01	Resid sbdelay (usec)	1.61500E-04	+/-	1.2E-03
Phase delay (usec)	-1.21216758140E+03	Apriori clockrate (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)	-166.3	Apriori accel (us/s/s)	1.79960098304E-05	Resid phase (deg)	-42.5	+/-	16.1

ph/seg (deg)	61.7	Theor.	38.7	Amplitude	0.129 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	90.9	Search (2048X32)	0.126	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.7	Inc. seg. avg.	0.174	Inc. frq. avg.	0.130	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	53.3	Inc. frq. avg.	0.130			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 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.32.12BED8



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



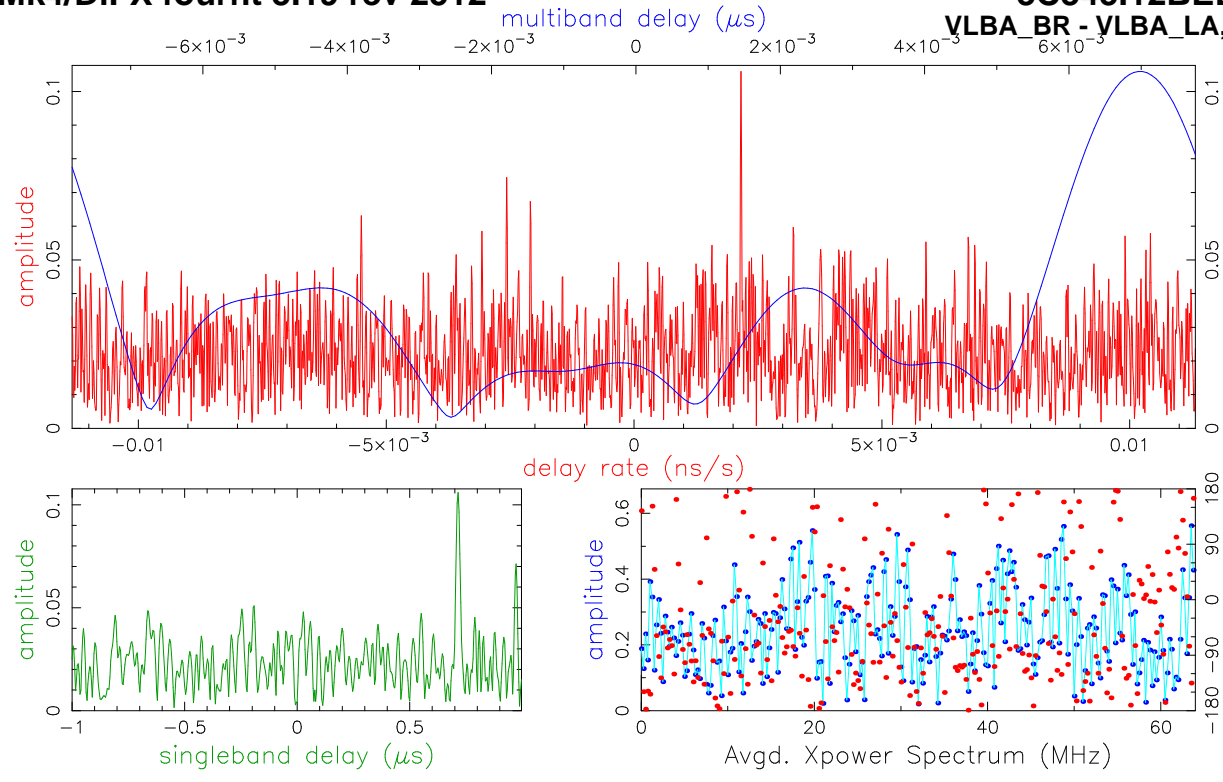
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.9	-144.0	-72.4	-99.9	-80.5	-81.7	-146.2	-165.2	Phase	-113.1
	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	284.9	82.5	443.9	146.3	403.3	165.3	450.1	462.7	Sbd box	146.5
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.45160065053E+03		Apriori delay (usec)	4.45203216074E+03	Resid mbdelay (usec)	5.98979E-03	+/-	1.9E-04		
Sband delay (usec)	4.45160059824E+03		Apriori clock (usec)	0.100	Resid sbdelay (usec)	-4.31563E-01	+/-	1.5E-03		
Phase delay (usec)	4.45203215710E+03		Apriori clockrate (us/s)	1.5147200E-07	Resid phdelay (usec)	-3.64655E-06	+/-	6.4E-07		
Delay rate (us/s)	-1.44025501315E+00		Apriori rate (us/s)	-1.44025627191E+00	Resid rate (us/s)	1.25875E-06	+/-	2.7E-09		
Total phase (deg)		4.4	Apriori accel (us/s/s)	-1.00601945607E-05	Resid phase (deg)	-113.1	+/-	19.9		

	RMS	Theor.	Amplitude	0.105 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.5	47.7	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	73.6	83.2	Interp.	0.000	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	38.2	28.1	Inc. seg. avg.	0.097	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.8	49.1	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/BI.12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/BI.W.47.12BED8



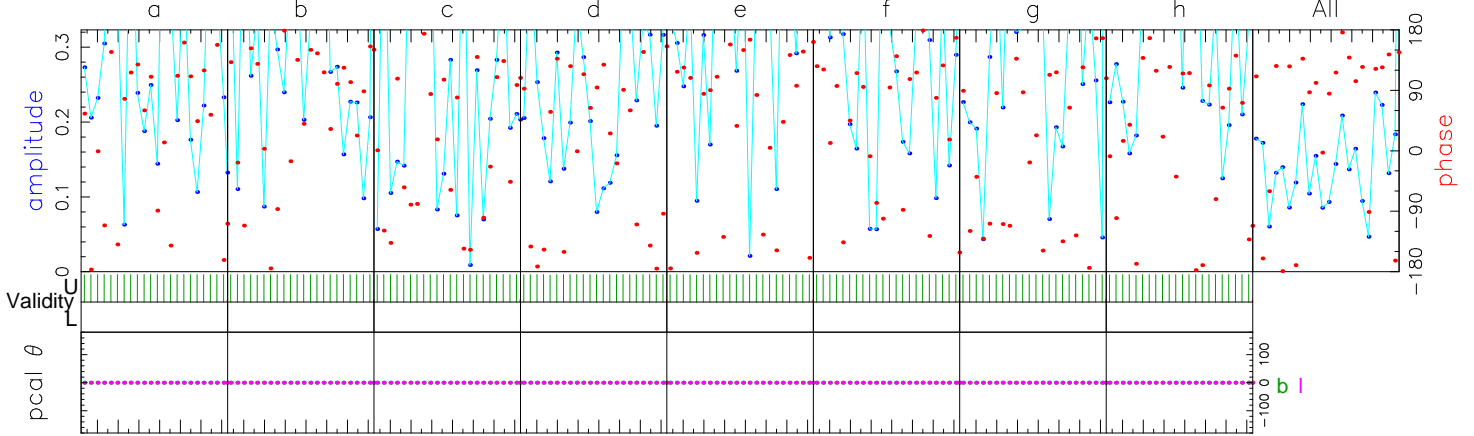


Fringe quality 0

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

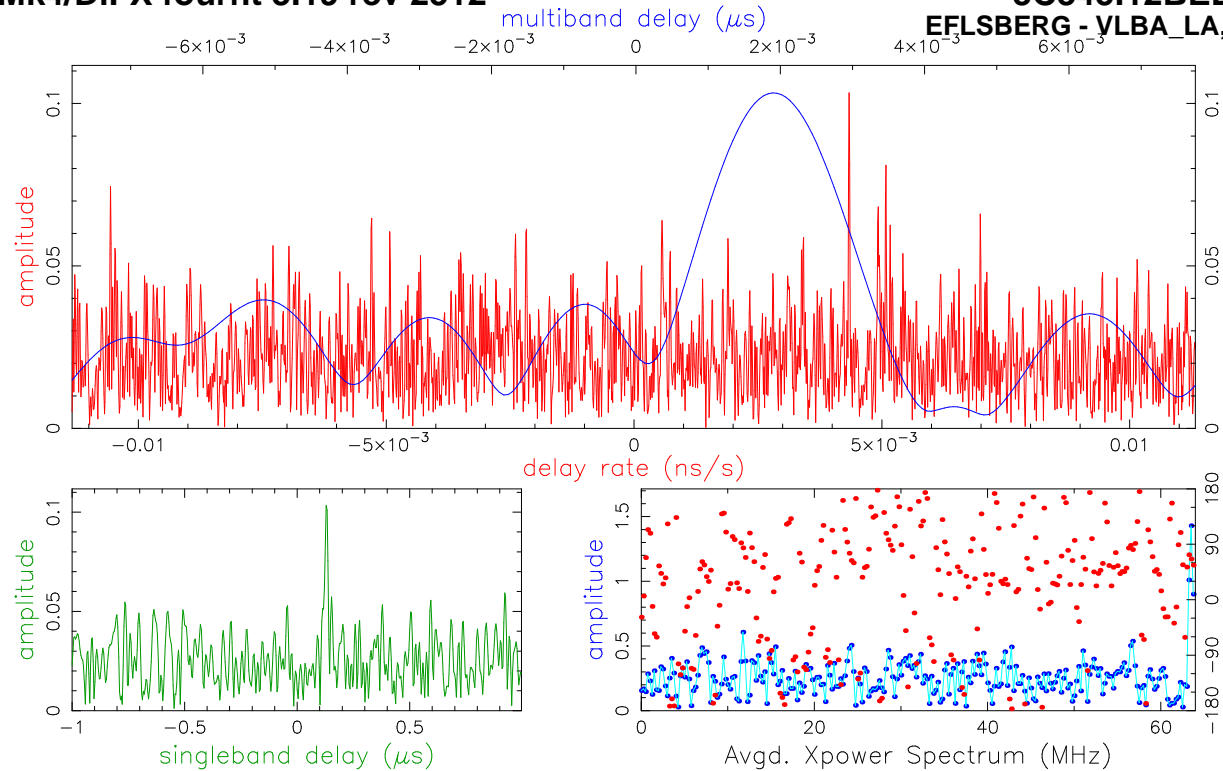
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165556  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



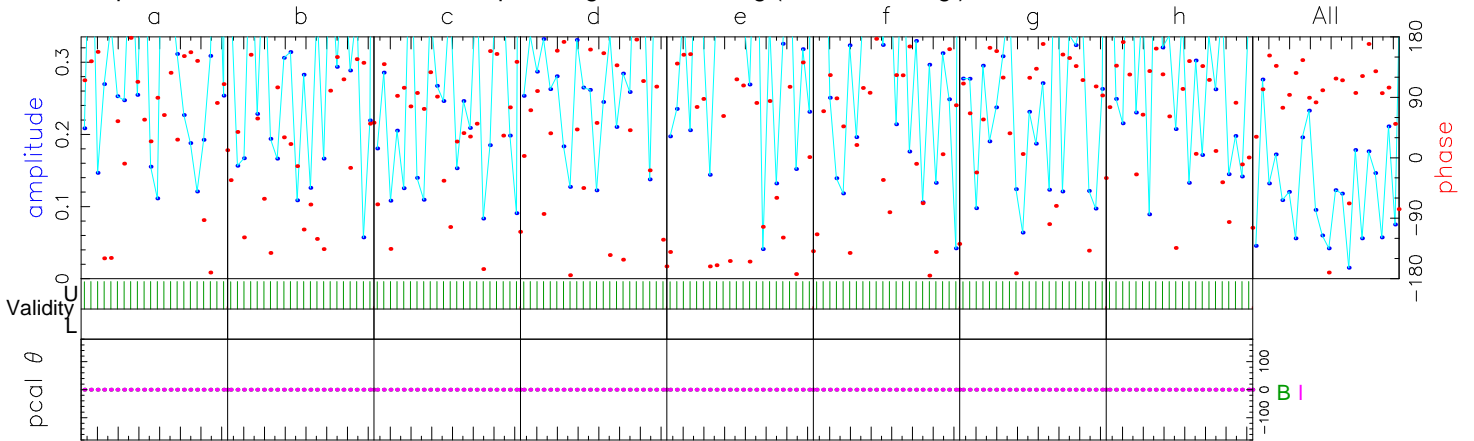
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
125.2	132.9	-154.9	143.8	128.5	132.4	177.3	129.5	129.5	Phase	137.5
0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
244.4	263.7	499.5	234.6	439.5	450.1	244.4	401.4	401.4	Sbd box	439.8
U/L 795/0	795/0	795/0	795/0	795/0	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	
									Chan ids	
									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)	0.100		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 5.8  
Int time 406.934  
Amp 0.112  
Phase 113.0  
PFD 8.2e-01  
Delays (us)  
SBD 0.130481  
MBD 0.001904  
Fringe rate (Hz)  
0.374573  
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	112.1	89.0	86.3	134.5	128.8	125.3	120.2	91.2	Phase	113.0
B	0.2	0.0	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
I	108.4	144.8	299.0	451.9	290.6	390.5	275.0	61.9	Sbd box	290.4
B	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:I	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	
I	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

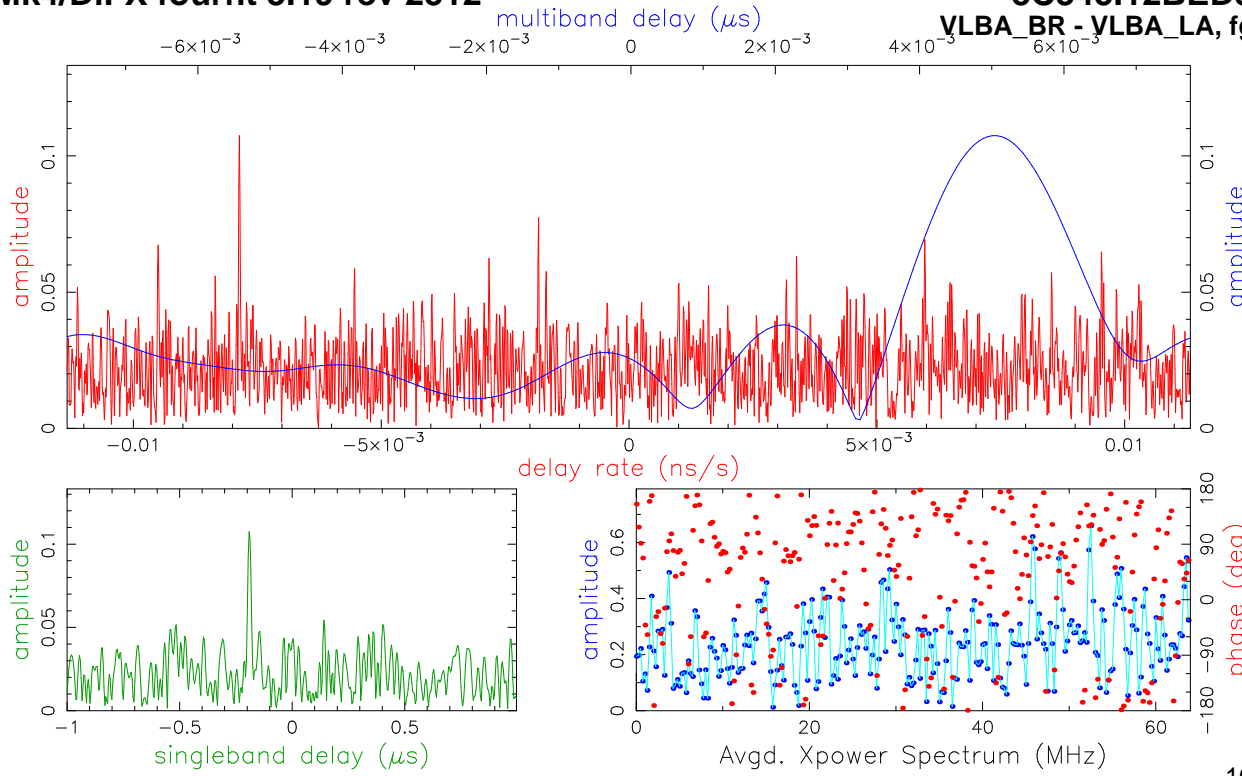
Group delay (usec)(sbd)	4.45215906436E+03	Apriori delay (usec)	4.45203216074E+03	Resid mbdelay (usec)	1.90362E-03	+/-	1.9E-04
Sband delay (usec)	4.45216264174E+03	Apriori clock (usec)	1.7579317E+01	Resid sbdelay (usec)	1.30481E-01	+/-	1.5E-03
Phase delay (usec)	4.45203216439E+03	Apriori clockrate (us/s)	1.5147200E-07	Resid phdelay (usec)	3.64371E-06	+/-	6.4E-07
Delay rate (us/s)	-1.44025192348E+00	Apriori rate (us/s)	-1.44025627191E+00	Resid rate (us/s)	4.34843E-06	+/-	2.7E-09
Total phase (deg)	230.5	Apriori accel (us/s/s)	-1.00601945607E-05	Resid phase (deg)	113.0	+/-	19.8

ph/seg (deg)	53.0	Theor.	47.4	Amplitude	0.112 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	68.3		82.7	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	21.1		28.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	42.3		48.8	Inc. seg. avg.	0.098	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.103	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

B: az 269.2 el 56.7 pa 55.8 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 10717.516 487.096 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/BI.12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/BI.W.69.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

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



Fringe quality 0

SNR 6.0

Int time 406.536

Ampl 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

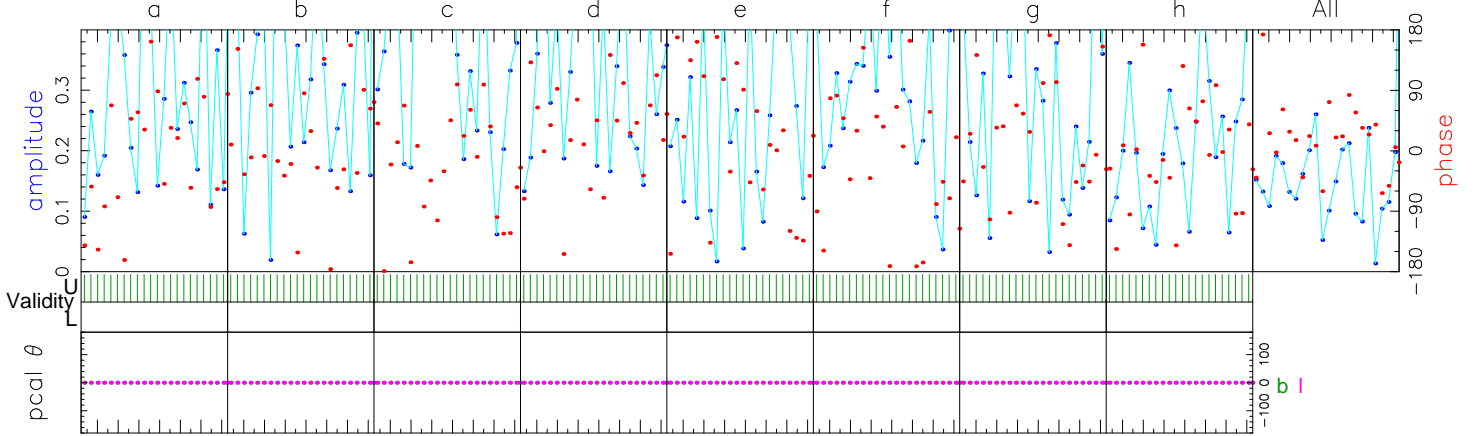
2020:014:135814

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

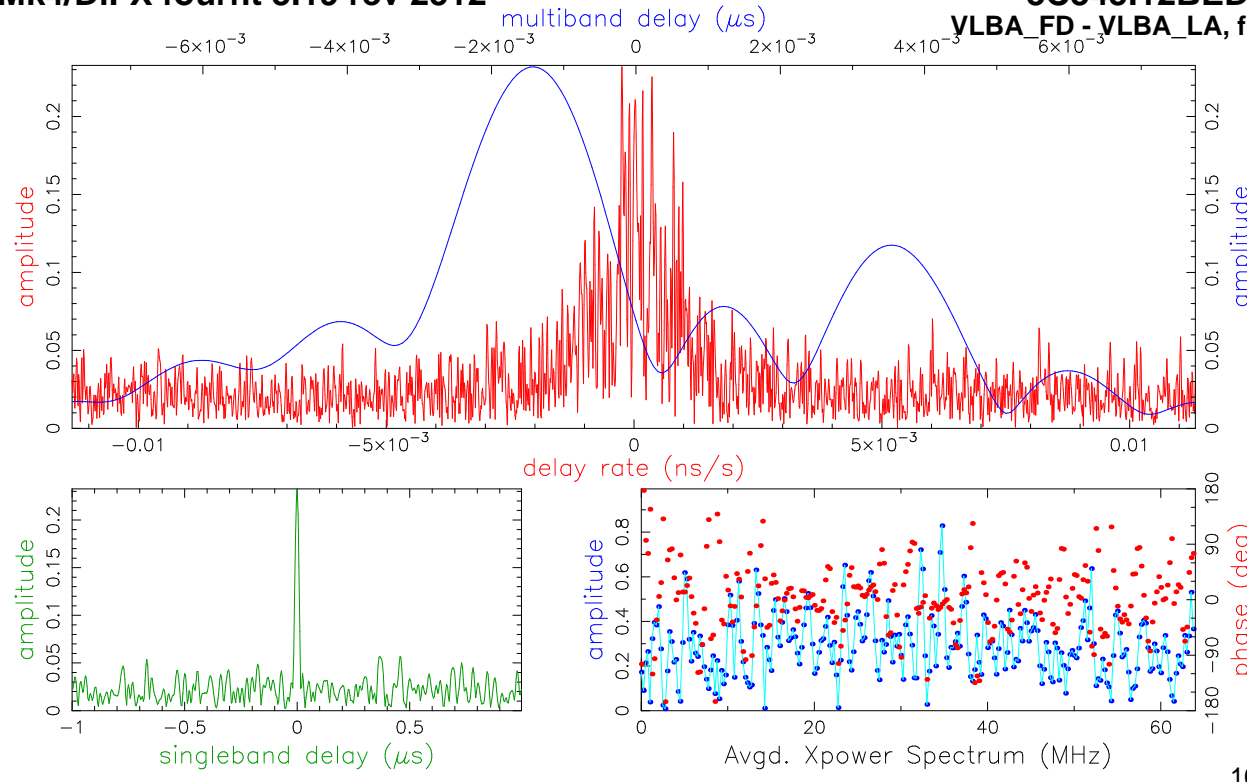


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	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		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.21235003989E+03								5.04014E-03	+/- 1.8E-04
Sband delay (usec)	-1.21235779128E+03								-1.90211E-01	+/- 1.4E-03
Phase delay (usec)	-1.21216757951E+03								5.16809E-07	+/- 6.2E-07
Delay rate (us/s)	-1.03829107721E-01								-7.86751E-06	+/- 2.6E-09
Total phase (deg)			-107.7						16.0	+/- 19.2
	RMS	Theor.	Amplitude	0.133 +/- 0.022					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.5	46.0	Search (2048X32)	0.102					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	70.3	80.3	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	17.2	27.1	Inc. seg. avg.	0.137					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.4	47.3	Inc. frq. avg.	0.124					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    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.74.12BED8



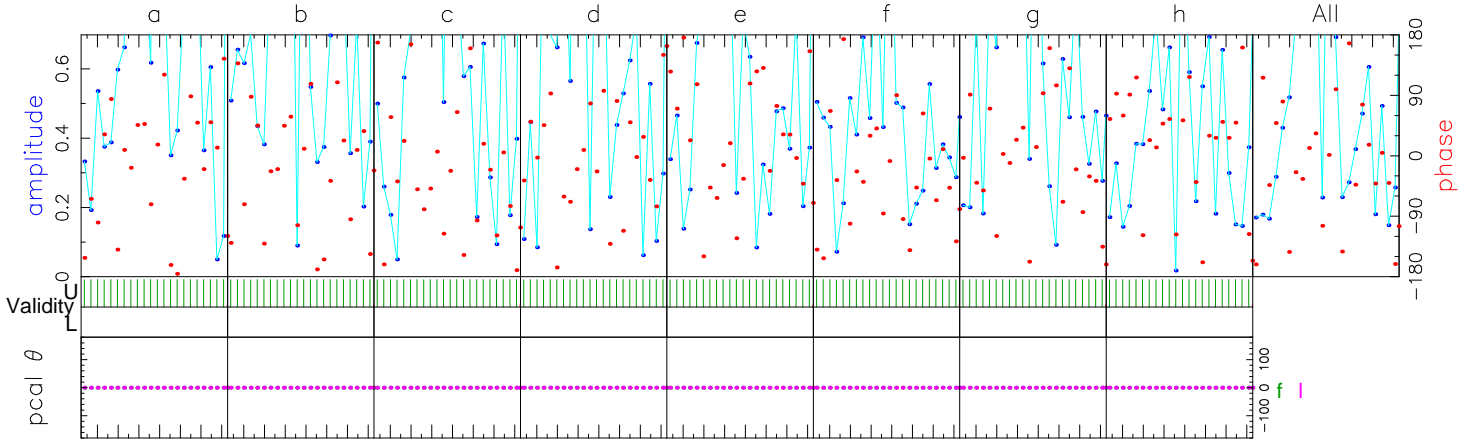


Fringe quality 9

SNR 12.8  
Int time 406.562  
Amp 0.233  
Phase 8.6  
PFD 6.1e-29  
Delays (us)  
SBD -0.000830  
MBD -0.001437  
Fringe rate (Hz)  
-0.020710  
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  
2020:086:165609  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

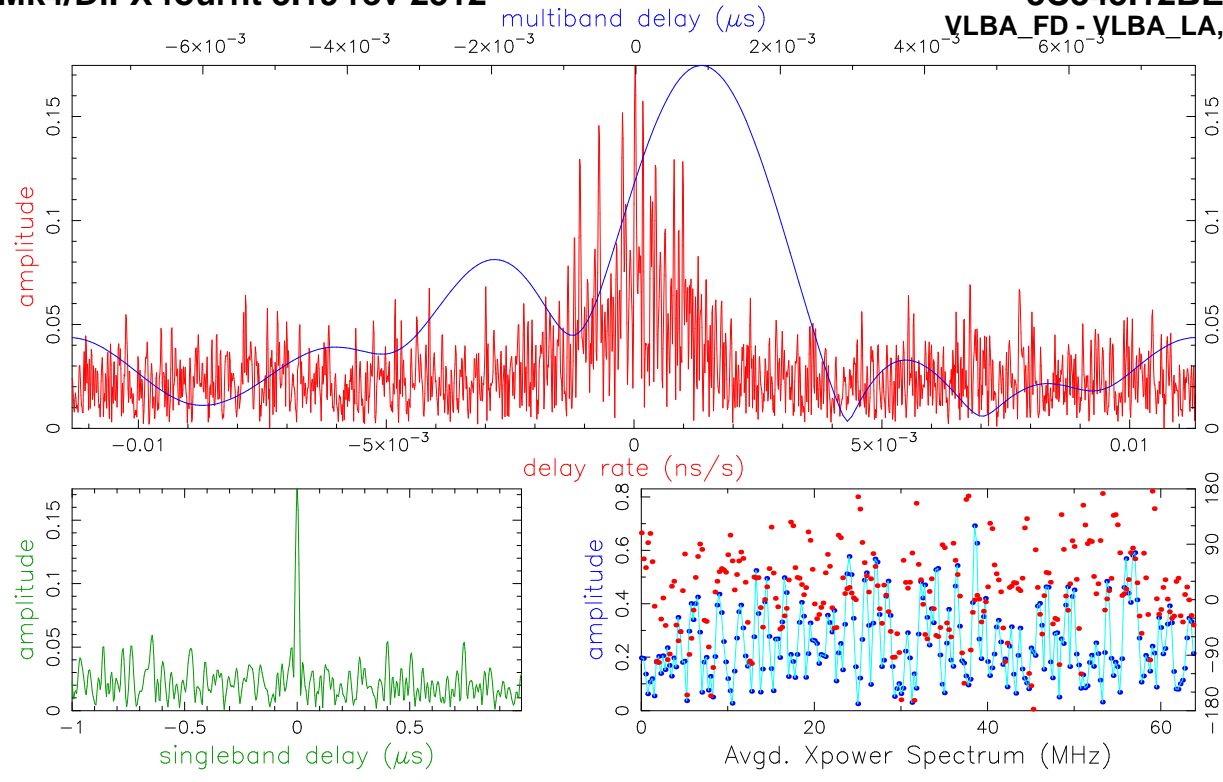
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		256.8
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.85321725836E+02								Resid mbdelay (usec)	-1.43703E-03 +/- 8.5E-05
Sband delay (usec)	-1.85321118805E+02								Resid sbdelay (usec)	-8.30000E-04 +/- 6.7E-04
Phase delay (usec)	-1.85320288527E+02								Resid phdelay (usec)	-2.77834E-07 +/- 2.9E-07
Delay rate (us/s)	3.63773423369E-02								Resid rate (us/s)	-2.40419E-07 +/- 1.2E-09
Total phase (deg)			-235.3						Resid phase (deg)	8.6 +/- 8.9
	RMS	Theor.	Amplitude	0.233 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	92.2	21.4	Search (2048X32)	0.228					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	176.1	37.4	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	30.2	12.6	Inc. seg. avg.	0.452					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	24.9	22.0	Inc. frq. avg.	0.249					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

f: az 61.0 el 37.1 pa -78.2 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -279.838 -796.742 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/fl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/fl.W.102.12BED8

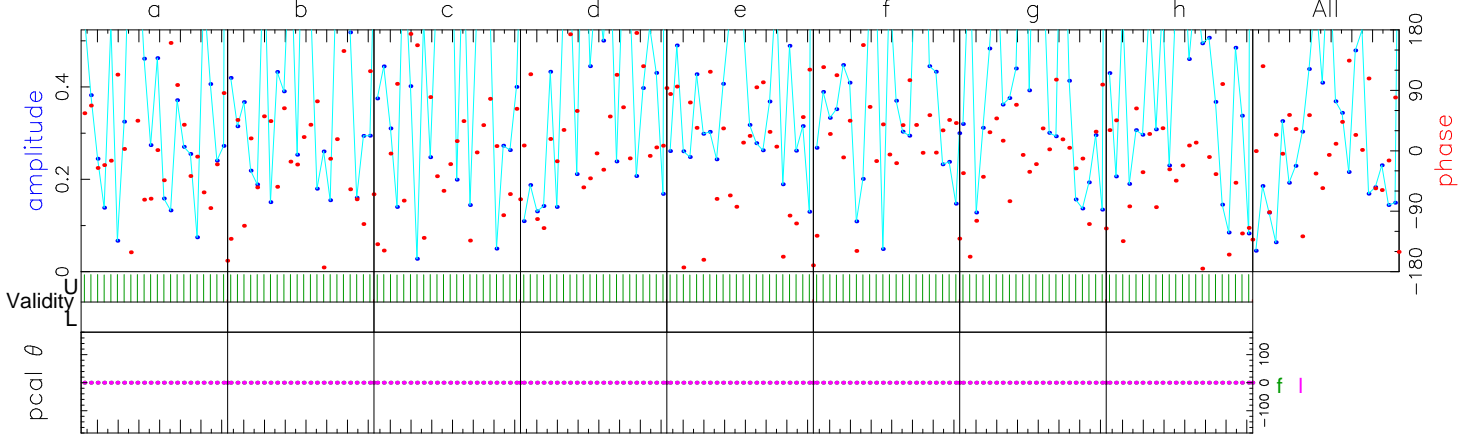


Fringe quality 9

SNR 9.6  
Int time 406.563  
Amp 0.175  
Phase 3.1  
PFD 2.5e-13  
Delays (us)  
SBD -0.000217  
MBD 0.000901  
Fringe rate (Hz) 0.001674  
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  
2020:086:165614  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

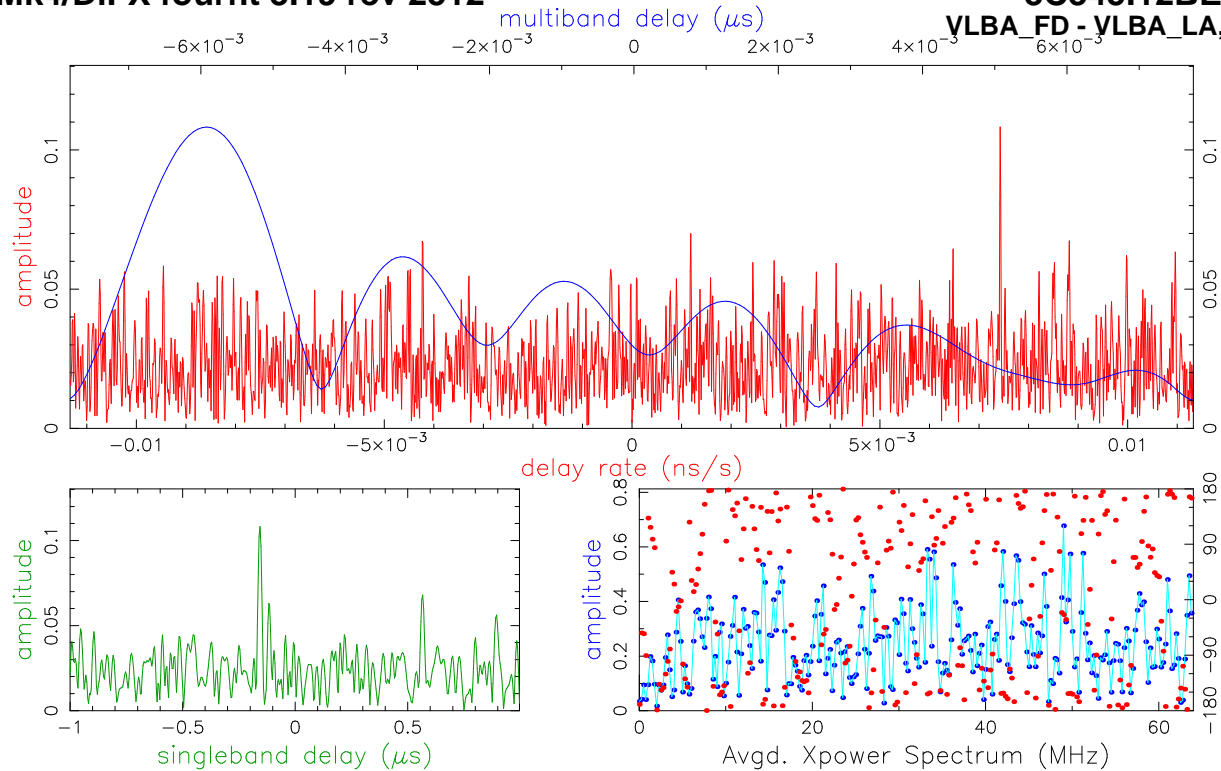
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		256.9
f	1000	1000	1000	1000	1000	1000	1000	1000		1000
l	1000	1000	1000	1000	1000	1000	1000	1000		1000
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		0:0
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		0:0
f	1000	1000	1000	1000	1000	1000	1000	1000		1000
l	1000	1000	1000	1000	1000	1000	1000	1000		1000
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	-1.85319387757E+02								9.01048E-04	+/- 1.1E-04
Sband delay (usec)	-1.85320505805E+02								-2.17000E-04	+/- 8.9E-04
Phase delay (usec)	-1.85320288705E+02								9.97735E-08	+/- 3.8E-07
Delay rate (us/s)	3.63776021933E-02								1.94379E-08	+/- 1.6E-09
Total phase (deg)			-240.9						3.1	+/- 11.9
				Apriori delay (usec)	-1.85320288805E+02				Resid mbdelay (usec)	
				Apriori clock (usec)	1.1950355E+00				Resid sbdelay (usec)	
				Apriori clockrate (us/s)	2.6052251E-07				Resid phdelay (usec)	
				Apriori rate (us/s)	3.63775827554E-02				Resid rate (us/s)	
				Apriori accel (us/s/s)	-4.42350530936E-06				Resid phase (deg)	
ph/seg (deg)	66.5	28.5		Search (2048X32)	0.173				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	122.4	49.8		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	19.5	16.8		Inc. seg. avg.	0.263				Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	35.7	29.4		Inc. frq. avg.	0.175				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
										ion window (TEC) 0.00 0.00

f: az 61.0 el 37.1 pa -78.2 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -279.838 -796.742 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/fl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/fl.W.123.12BED8

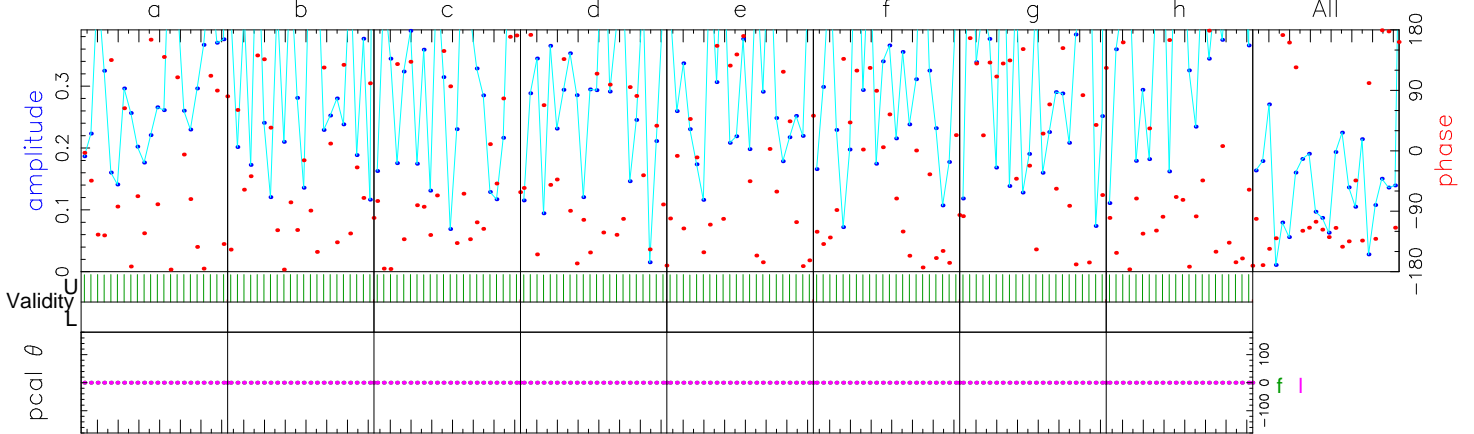


Fringe quality 0

SNR 6.0  
Int time 406.562  
Amp 0.130  
Phase -139.9  
PFD 4.3e-01  
Delays (us)  
SBD -0.156959  
MBD -0.005936  
Fringe rate (Hz)  
0.640639  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

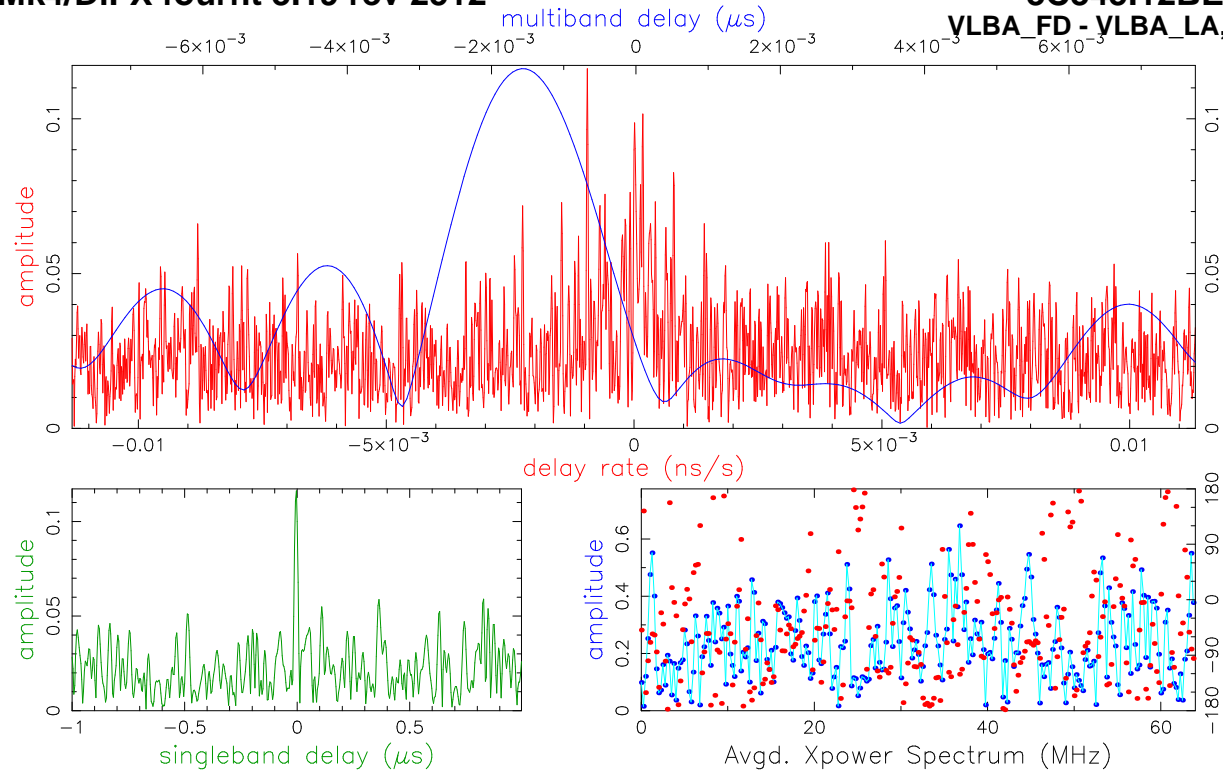
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165619  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



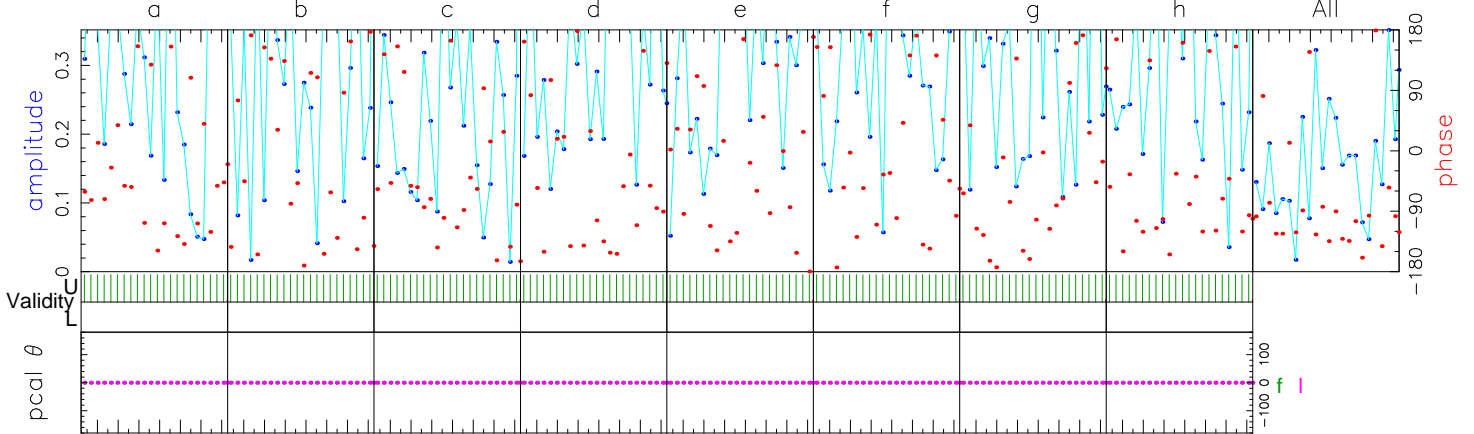
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-172.5	-119.9	-139.3	-121.7	-129.2	-167.8	152.6	-124.1	Phase	-139.9
	0.1	0.2	0.2	0.1	0.1	0.0	0.1	0.3	Ampl.	0.1
	176.3	404.1	215.6	159.1	134.7	298.8	6.8	216.6	Sbd box	216.8
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	-1.85482474476E+02		Apriori delay (usec)		-1.85320288805E+02		Resid mbdelay (usec)		-5.93567E-03	+/- 1.8E-04
Sband delay (usec)	-1.85477248055E+02		Apriori clock (usec)		1.1950355E+00		Resid sbdelay (usec)		-1.56959E-01	+/- 1.4E-03
Phase delay (usec)	-1.85320293316E+02		Apriori clockrate (us/s)		2.6052251E-07		Resid phdelay (usec)		-4.51150E-06	+/- 6.2E-07
Delay rate (us/s)	3.63850199427E-02		Apriori rate (us/s)		3.63775827554E-02		Resid rate (us/s)		7.43719E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.42350530936E-06		Resid phase (deg)		-139.9	+/- 19.2

ph/seg (deg) 47.1 45.9 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 69.0 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) 35.3 27.1 Inc. seg. avg. 0.125 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.7 47.3 Inc. frq. avg. 0.131 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 61.0 el 37.1 pa -78.2 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -279.838 -796.742 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/fl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/fl.W.144.12BED8 simultaneous interpolator



Fringe quality 0  
SNR 6.4  
Int time 406.563  
Amp 0.117  
Phase -109.1  
PFD 3.1e-02  
Delays (us)  
SBD -0.004899  
MBD -0.001585  
Fringe rate (Hz)  
-0.080962  
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  
2020:086:165622  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

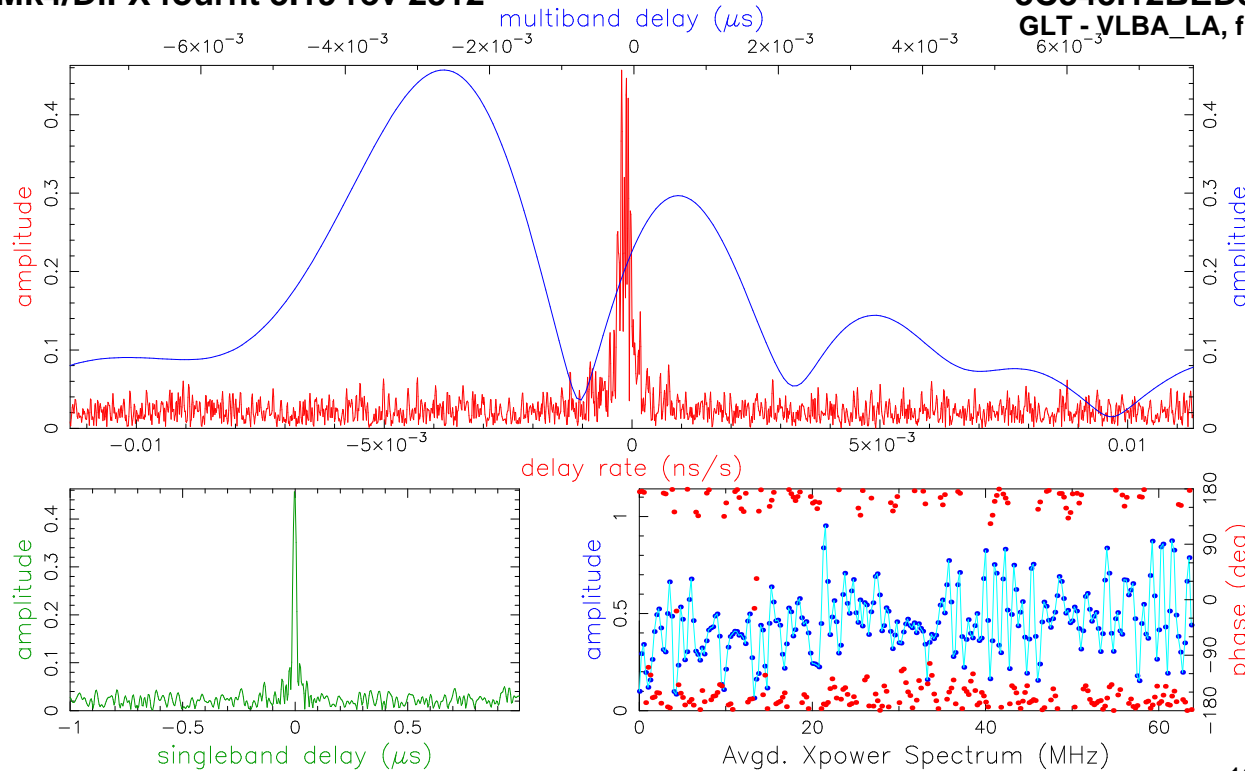
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.85321873796E+02	Apriori delay (usec)	-1.85320288805E+02	Resid mbdelay (usec)	-1.58499E-03	+/-	1.7E-04
Sband delay (usec)	-1.85325187305E+02	Apriori clock (usec)	1.1950355E+00	Resid sbdelay (usec)	-4.89850E-03	+/-	1.3E-03
Phase delay (usec)	-1.85320292322E+02	Apriori clockrate (us/s)	2.6052251E-07	Resid phdelay (usec)	-3.51728E-06	+/-	5.7E-07
Delay rate (us/s)	3.63766428700E-02	Apriori rate (us/s)	3.63775827554E-02	Resid rate (us/s)	-9.39885E-07	+/-	2.4E-09
Total phase (deg)	-353.0	Apriori accel (us/s/s)	-4.42350530936E-06	Resid phase (deg)	-109.1	+/-	17.8

ph/seg (deg)	56.8	Theor.	42.6	Amplitude	0.117 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.4		74.4	Search (2048X32)	0.115	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	23.6		25.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	25.3		43.9	Inc. seg. avg.	0.123	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.114	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
f: az 61.0 el 37.1 pa -78.2		l: az 63.9 el 37.8 pa -72.0		u,v (fr/asec)	-279.838 -796.742					simultaneous interpolator	

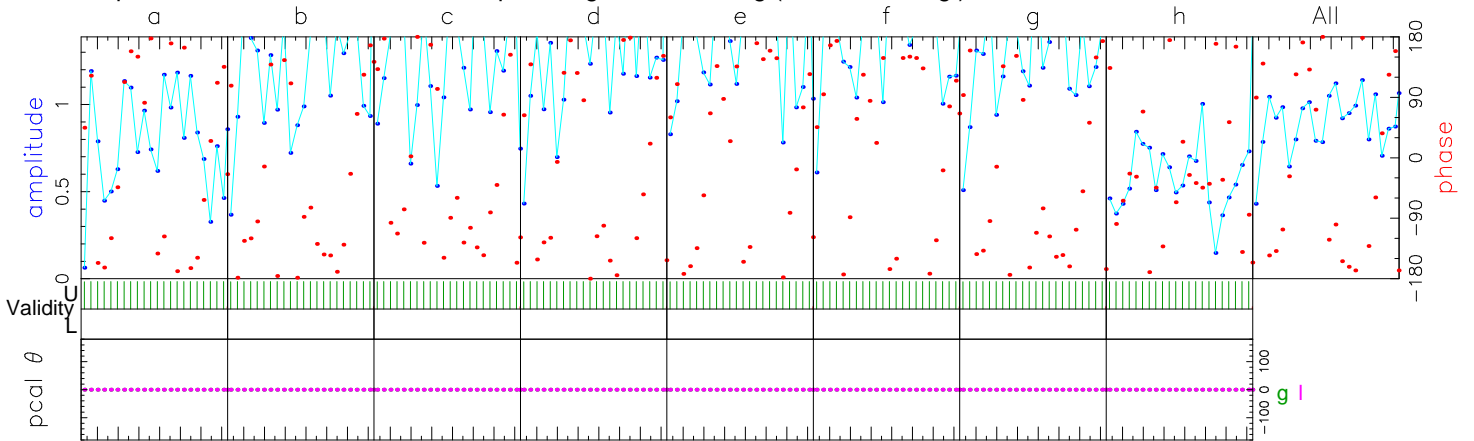


Fringe quality 6

SNR 25.5  
Int time 406.794  
Amp 0.463  
Phase -167.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.002468  
MBD -0.002589  
Fringe rate (Hz)  
-0.018220  
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  
2020:086:165610  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

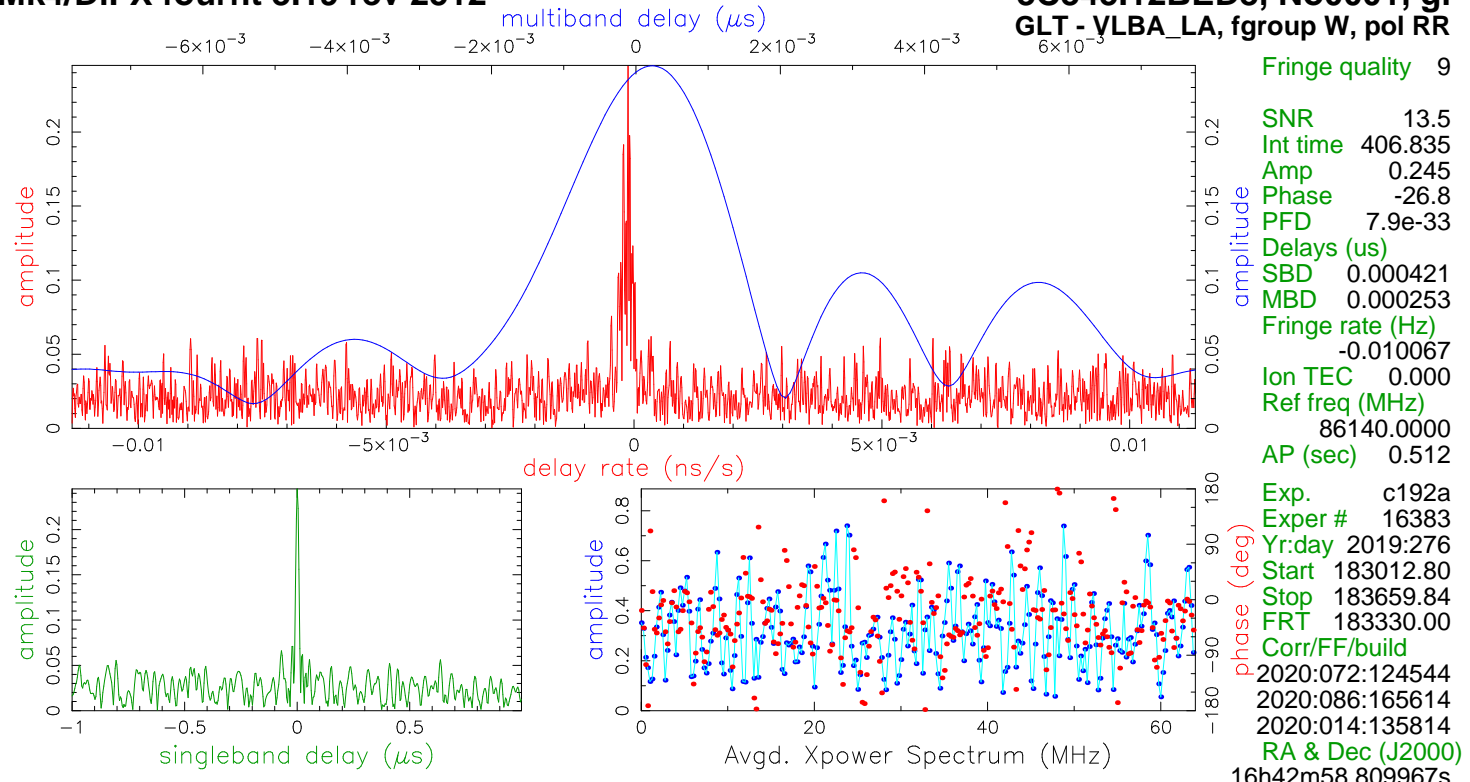
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



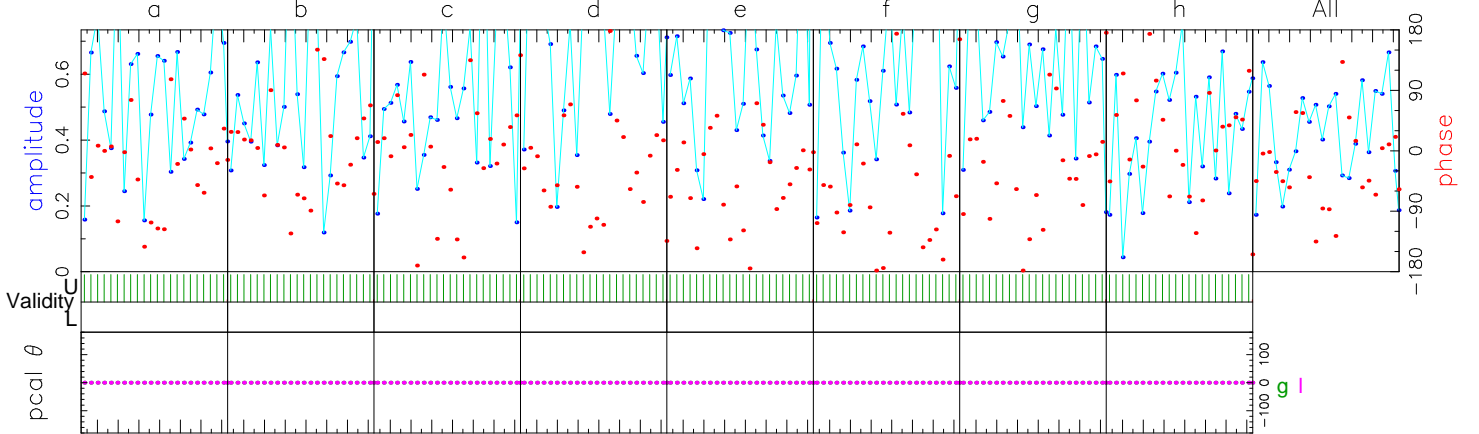
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	174.0	-150.9	-126.9	-172.0	156.7	146.5	-150.1	-62.4	Phase	-167.6
g	0.5	0.6	0.7	0.6	0.6	0.7	0.7	0.2	Ampl.	0.6
l	257.7	256.4	256.0	256.0	256.3	256.5	257.0	258.9	Sbd box	256.4
g	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
g:l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.34175907682E+03		Apriori delay (usec)		3.34176166590E+03		Resid mbdelay (usec)		-2.58908E-03	+/- 4.3E-05
Sband delay (usec)	3.34175919765E+03		Apriori clock (usec)		2.0363760E+00		Resid sbdelay (usec)		-2.46825E-03	+/- 3.4E-04
Phase delay (usec)	3.34176166050E+03		Apriori clockrate (us/s)		4.2647201E-07		Resid phdelay (usec)		-5.40610E-06	+/- 1.4E-07
Delay rate (us/s)	-7.53865233414E-01		Apriori rate (us/s)		-7.53865021895E-01		Resid rate (us/s)		-2.11519E-07	+/- 6.2E-10
Total phase (deg)	156.7		Apriori accel (us/s/s)		1.02940581733E-05		Resid phase (deg)		-167.6	+/- 4.5

ph/seg (deg) 71.2 10.8 Search (2048X32) 0.450 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 99.8 18.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 53.3 6.3 Inc. seg. avg. 0.879 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.2 11.1 Inc. frq. avg. 0.557 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 ion window (TEC) 0.00 0.00 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.106.12BED8





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

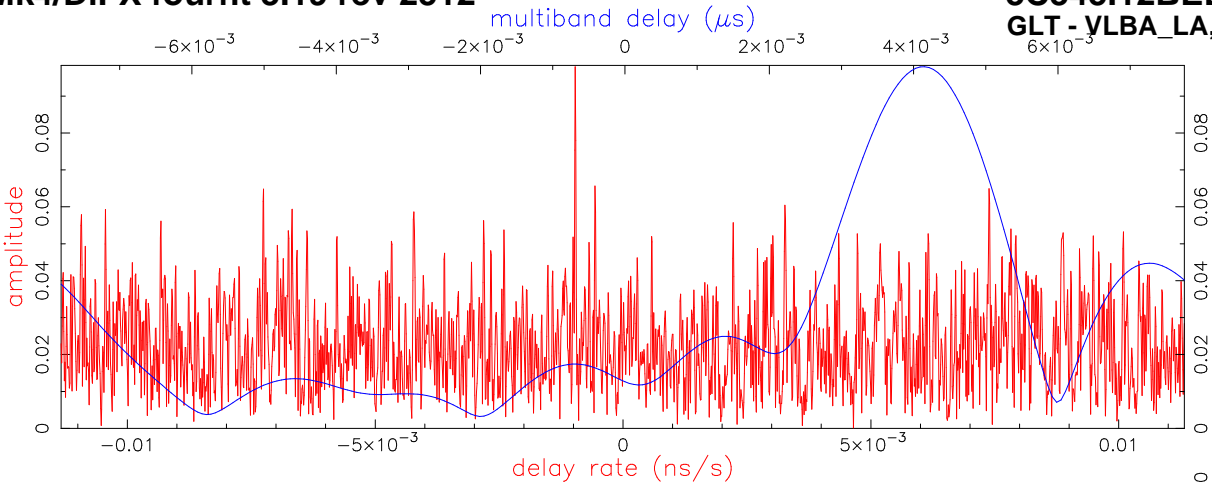


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.6	-14.4	3.6	-33.5	-31.7	-85.3	-27.5	31.4	Phase	-26.8
	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.2	Ampl.	0.3
	258.6	257.4	255.9	257.3	256.7	256.6	257.3	259.3	Sbd box	257.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.34176191929E+03		Apriori delay (usec)		3.34176166590E+03		Resid mbdelay (usec)		2.53390E-04	+/- 8.0E-05
Sband delay (usec)	3.34176208665E+03		Apriori clock (usec)		2.0363760E+00		Resid sbdelay (usec)		4.20750E-04	+/- 6.4E-04
Phase delay (usec)	3.34176166504E+03		Apriori clockrate (us/s)		4.2647201E-07		Resid phdelay (usec)		-8.65795E-07	+/- 2.7E-07
Delay rate (us/s)	-7.53865138768E-01		Apriori rate (us/s)		-7.53865021895E-01		Resid rate (us/s)		-1.16873E-07	+/- 1.2E-09
Total phase (deg)	297.5		Apriori accel (us/s/s)		1.02940581733E-05		Resid phase (deg)		-26.8	+/- 8.5

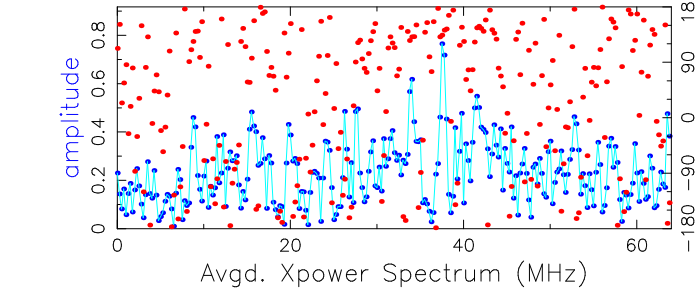
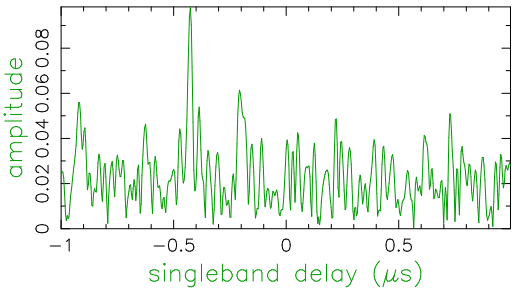
	RMS	Theor.	Amplitude	0.245 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	62.3	20.3	Search (2048X32)	0.223	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	94.1	35.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	36.4	12.0	Inc. seg. avg.	0.405	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	24.1	20.9	Inc. frq. avg.	0.274	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 simultaneous interpolator

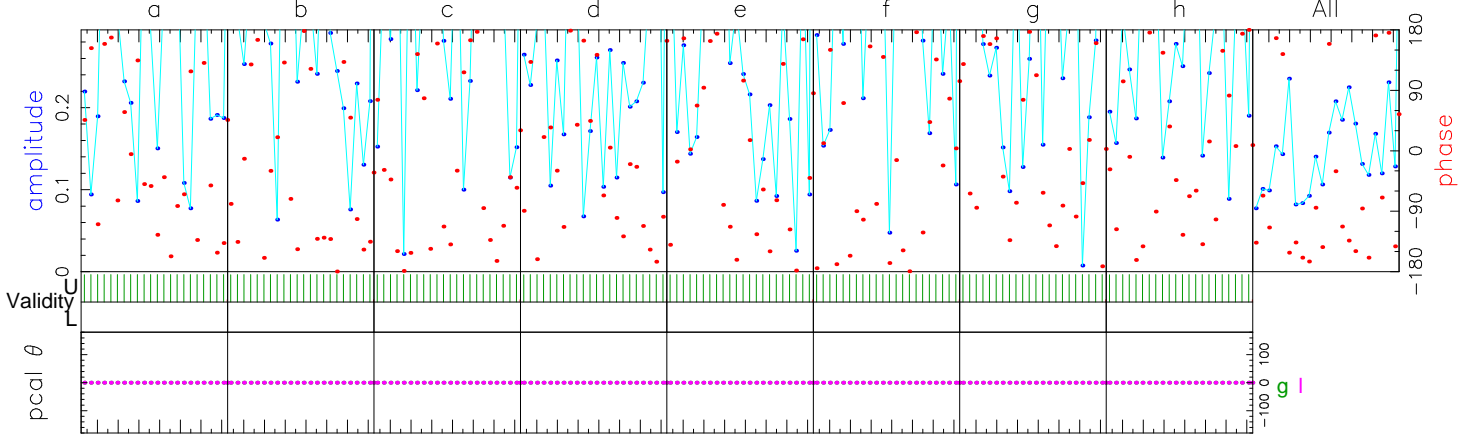
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.126.12BED8



Fringe quality 0  
SNR 5.4  
Int time 406.794  
Amp 0.098  
Phase -142.8  
PFD 1.0e+00  
Delays (us)  
SBD -0.426239  
MBD 0.004118  
Fringe rate (Hz)  
-0.083034  
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  
2020:086:165619  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



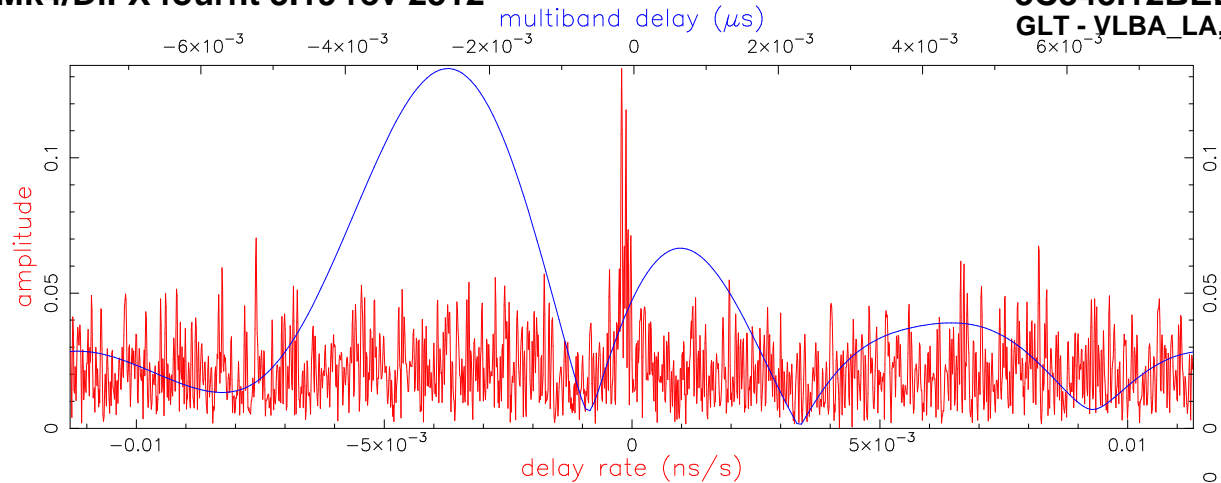
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.5	-151.2	-141.8	-131.6	-165.9	-171.0	-133.9	-108.8	Phase	-142.8
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	27.2	319.0	147.3	345.0	89.9	211.5	146.2	254.0	Sbd box	147.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	3.34132828349E+03		Apriori delay (usec)		3.34176166590E+03		Resid mbdelay (usec)		4.11759E-03	+/- 2.0E-04
Sband delay (usec)	3.34133542690E+03		Apriori clock (usec)		2.0363760E+00		Resid sbdelay (usec)		-4.26239E-01	+/- 1.6E-03
Phase delay (usec)	3.34176166130E+03		Apriori clockrate (us/s)		4.2647201E-07		Resid phdelay (usec)		-4.60623E-06	+/- 6.8E-07
Delay rate (us/s)	-7.53865985842E-01		Apriori rate (us/s)		-7.53865021895E-01		Resid rate (us/s)		-9.63947E-07	+/- 2.9E-09
Total phase (deg)	181.5		Apriori accel (us/s/s)		1.02940581733E-05		Resid phase (deg)		-142.8	+/- 21.2

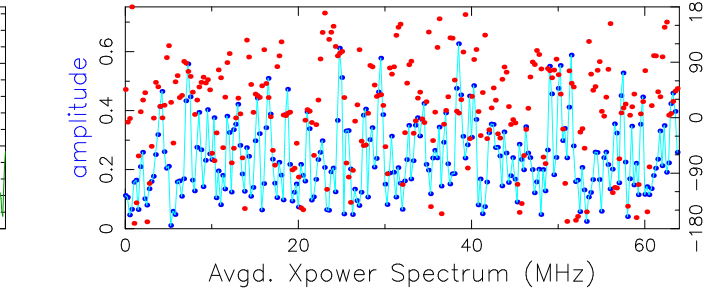
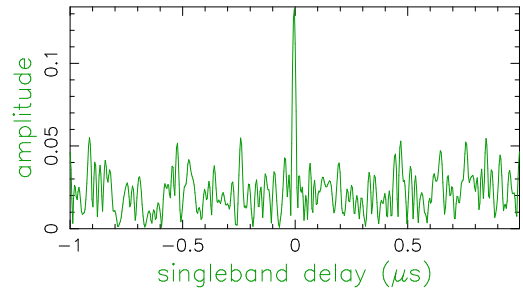
	RMS	Theor.	Amplitude	0.098 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	47.9	50.8	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	72.0	88.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	23.3	30.0	Inc. seg. avg.	0.105	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	30.8	52.3	Inc. frq. avg.	0.091	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.145.12BED8



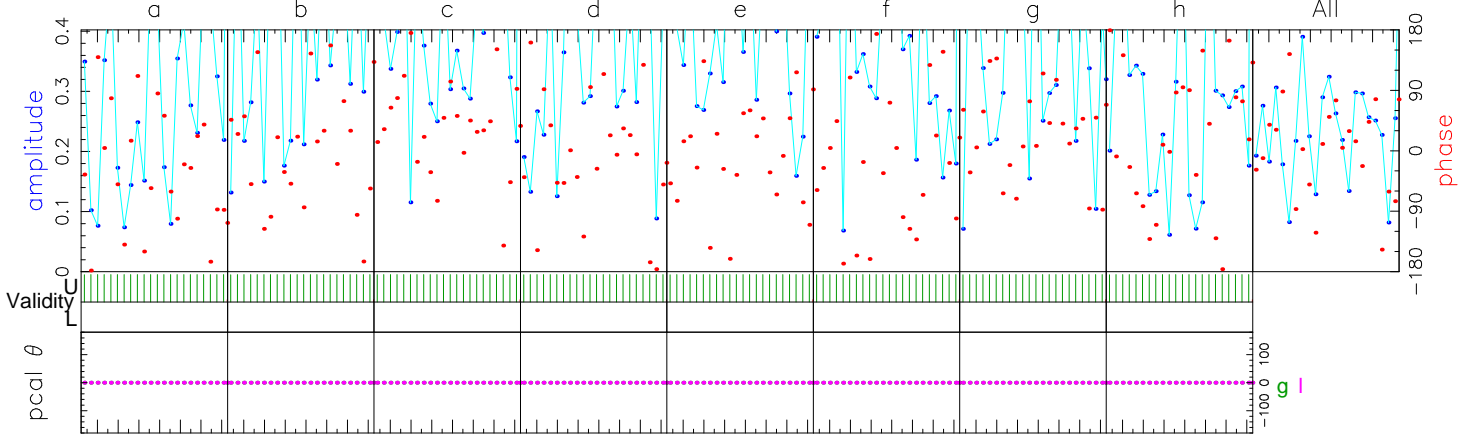
Fringe quality 9

SNR 7.4  
Int time 406.835  
Amp 0.134  
Phase 9.7  
PFD 4.3e-05  
Delays (us)  
SBD -0.005028  
MBD -0.002602  
Fringe rate (Hz)  
-0.017872  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



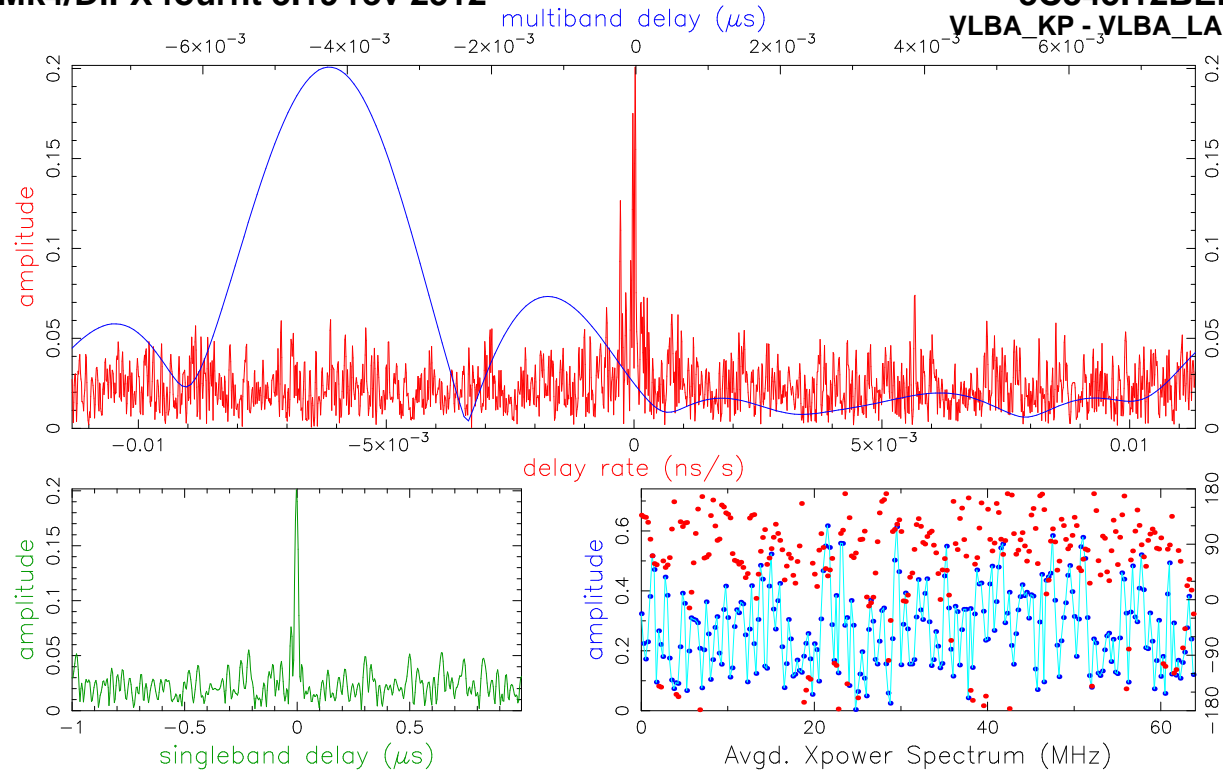
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165623  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-14.3	4.0	41.6	10.1	-16.3	-9.2	3.5	76.4	Phase	9.7
	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	104.8	363.5	255.7	271.1	255.5	208.6	255.4	48.2	Sbd box	255.7
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.34175906370E+03		Apriori delay (usec)		3.34176166590E+03		Resid mbdelay (usec)		-2.60221E-03	+/- 1.5E-04
Sband delay (usec)	3.34175663790E+03		Apriori clock (usec)		2.0363760E+00		Resid sbdelay (usec)		-5.02800E-03	+/- 1.2E-03
Phase delay (usec)	3.34176166622E+03		Apriori clockrate (us/s)		4.2647201E-07		Resid phdelay (usec)		3.11914E-07	+/- 5.0E-07
Delay rate (us/s)	-7.53865229367E-01		Apriori rate (us/s)		-7.53865021895E-01		Resid rate (us/s)		-2.07472E-07	+/- 2.1E-09
Total phase (deg)	334.0		Apriori accel (us/s/s)		1.02940581733E-05		Resid phase (deg)		9.7	+/- 15.5

ph/seg (deg) 69.8 37.1 Search (2048X32) 0.131 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 93.7 64.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 34.5 21.9 Inc. seg. avg. 0.192 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 43.4 38.2 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 142.5 el 51.0 pa -10.6 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 5641.127 3250.966 ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.162.12BED8 simultaneous interpolator

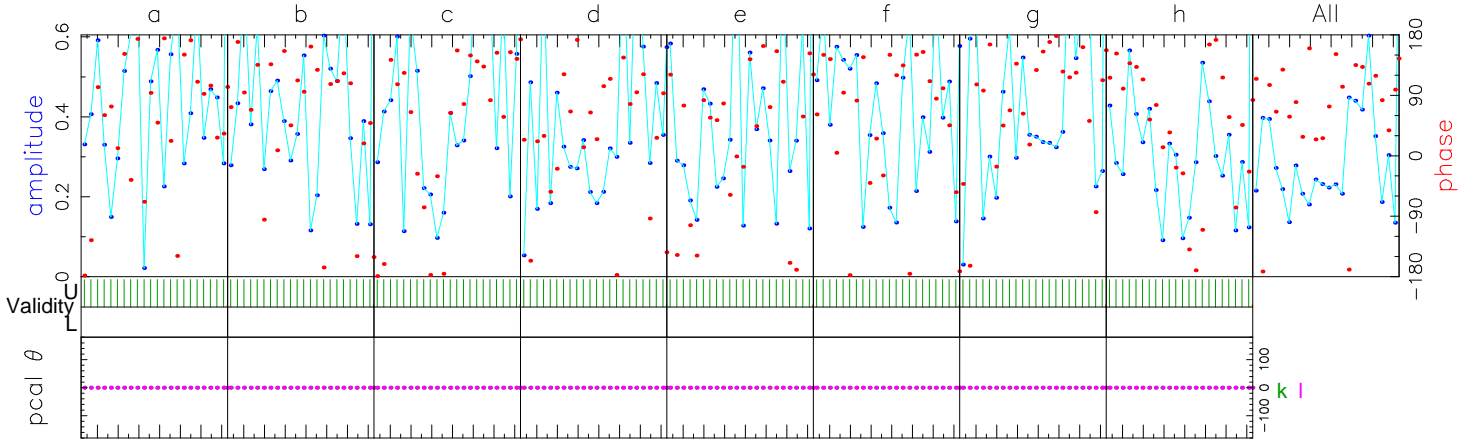


Fringe quality 9

SNR 11.1  
Int time 406.934  
Amp 0.202  
Phase 108.8  
PFD 4.3e-20  
Delays (us)  
SBD -0.003058  
MBD -0.004233  
Fringe rate (Hz) 0.002231  
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  
2020:086:165627  
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



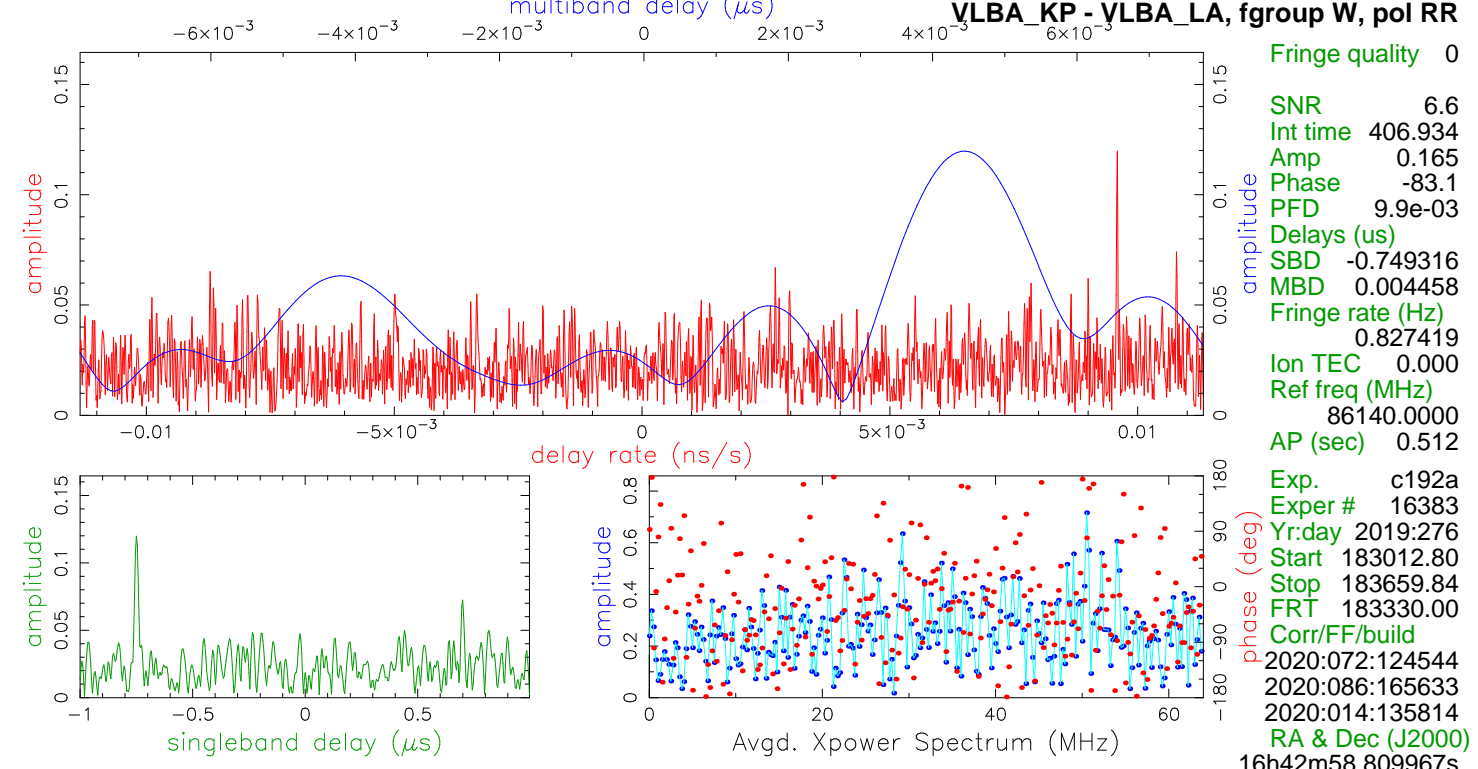
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-1.72674203582E+03	Apriori delay (usec)	-1.72673780302E+03	Resid mbdelay (usec)	-4.23280E-03	+/-	9.8E-05
Sband delay (usec)	-1.72674086152E+03	Apriori clock (usec)	3.3833367E-01	Resid sbdelay (usec)	-3.05850E-03	+/-	7.7E-04
Phase delay (usec)	-1.72673779951E+03	Apriori clockrate (us/s)	1.5689301E-07	Resid phdelay (usec)	3.50984E-06	+/-	3.3E-07
Delay rate (us/s)	7.40331326919E-02	Apriori rate (us/s)	7.40331067955E-02	Resid rate (us/s)	2.58964E-08	+/-	1.4E-09
Total phase (deg)	-18.0	Apriori accel (us/s/s)	5.19110597338E-06	Resid phase (deg)	108.8	+/-	10.3

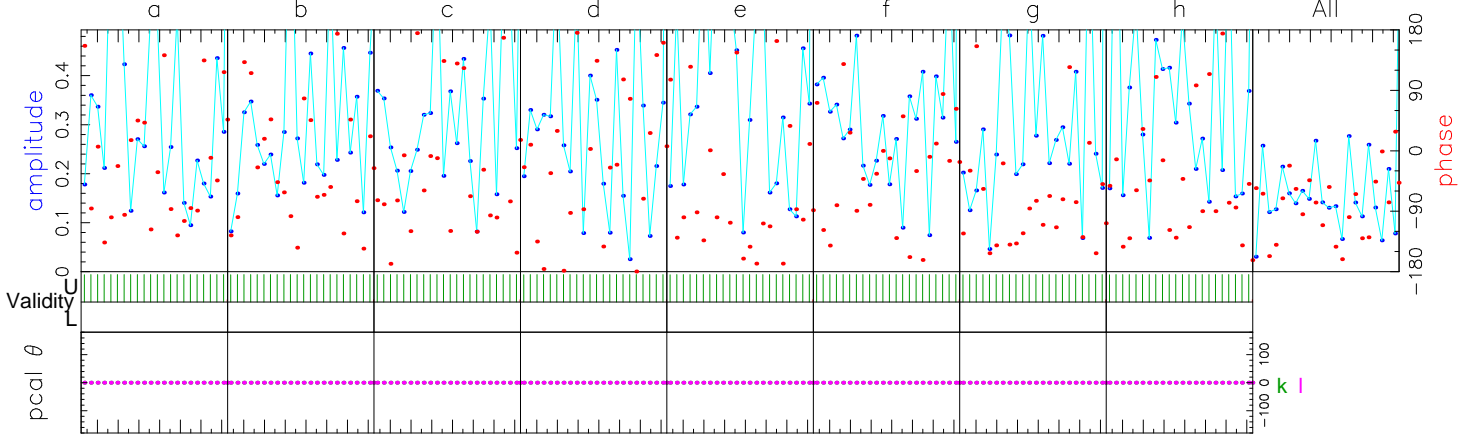
ph/seg (deg)	48.6	RMS	24.7	Theor.	24.7	Amplitude	0.202 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	75.0	48.6	43.1	Search (2048X32)	0.194	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	12.4	14.6	14.6	Inc. seg. avg.	0.266	Inc. frq. avg.	0.198	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	24.6	25.4	25.4	Inc. frq. avg.	0.198	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
											ion window (TEC)	0.00 0.00	

k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/kl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/kl.W.175.12BED8



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
	-69.9	-57.5	-92.9	-150.5	-117.5	-40.6	-86.8	-71.4	Phase	-83.1
	0.2	0.1	0.2	0.0	0.3	0.1	0.2	0.2	Ampl.	0.2
	14.8	157.4	138.9	197.7	65.4	293.5	8.9	65.5	Sbd box	65.2
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

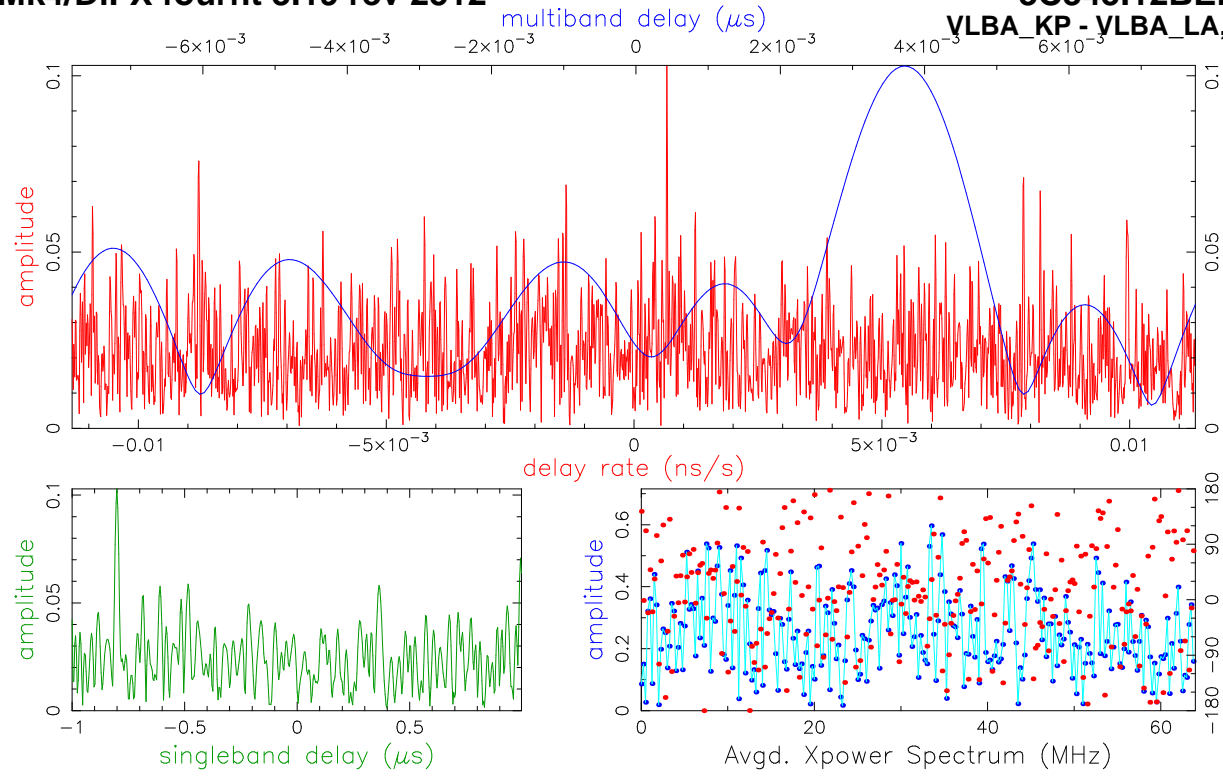
Group delay (usec)(sbd)	-1.72748334464E+03	Apriori delay (usec)		-1.72673780302E+03	Resid mbdelay (usec)		4.45838E-03	+/- 1.6E-04	
Sband delay (usec)	-1.72748711852E+03	Apriori clock (usec)		3.3833367E-01	Resid sbdelay (usec)		-7.49316E-01	+/- 1.3E-03	
Phase delay (usec)	-1.72673780570E+03	Apriori clockrate (us/s)		1.5689301E-07	Resid phdelay (usec)		-2.67861E-06	+/- 5.6E-07	
Delay rate (us/s)	7.40427123052E-02	Apriori rate (us/s)		7.40331067955E-02	Resid rate (us/s)		9.60551E-06	+/- 2.4E-09	
Total phase (deg)	-209.9	Apriori accel (us/s/s)		5.19110597338E-06	Resid phase (deg)		-83.1	+/- 17.3	

ph/seg (deg)	48.9	RMS	41.5	Theor.	41.5	Amplitude	0.165 +/- 0.025	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	67.3		72.4		72.4	Search (2048X32)	0.114	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	37.9		24.5		24.5	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	47.6		42.7		42.7	Inc. seg. avg.	0.169	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.165	Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/kl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/kl.W.203.12BED8



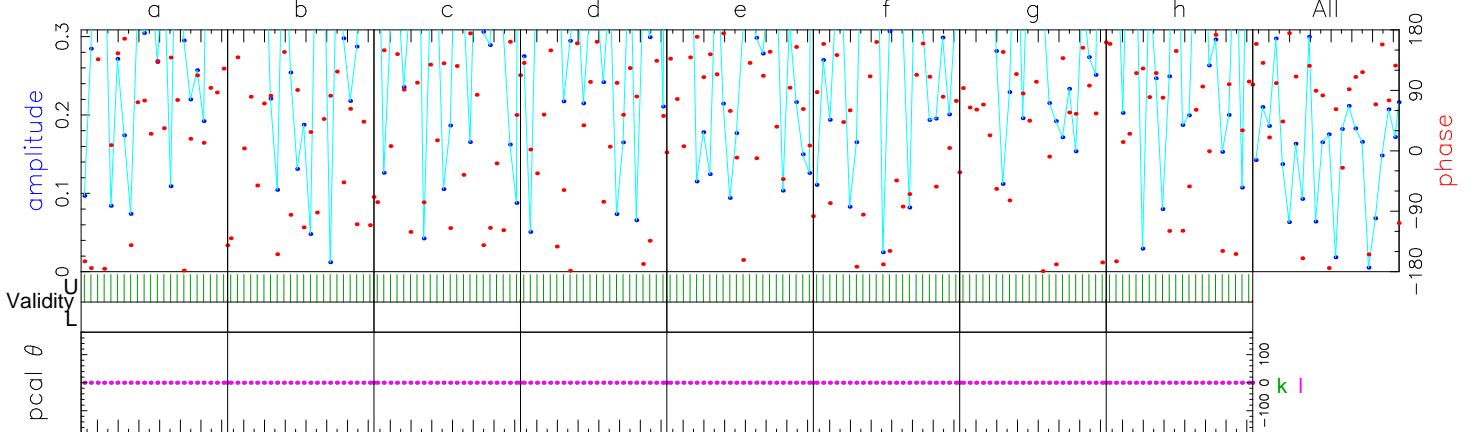


Fringe quality 0

SNR 5.7  
Int time 406.934  
Amp 0.103  
Phase 108.8  
PFD 9.7e-01  
Delays (us)  
SBD -0.801081  
MBD 0.003722  
Fringe rate (Hz) 0.057273  
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  
2020:086:165637  
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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.72754658070E+03									
Sband delay (usec)	-1.72753888452E+03									
Phase delay (usec)	-1.72673779951E+03									
Delay rate (us/s)	7.40337716840E-02									
Total phase (deg)			-18.0							
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)										

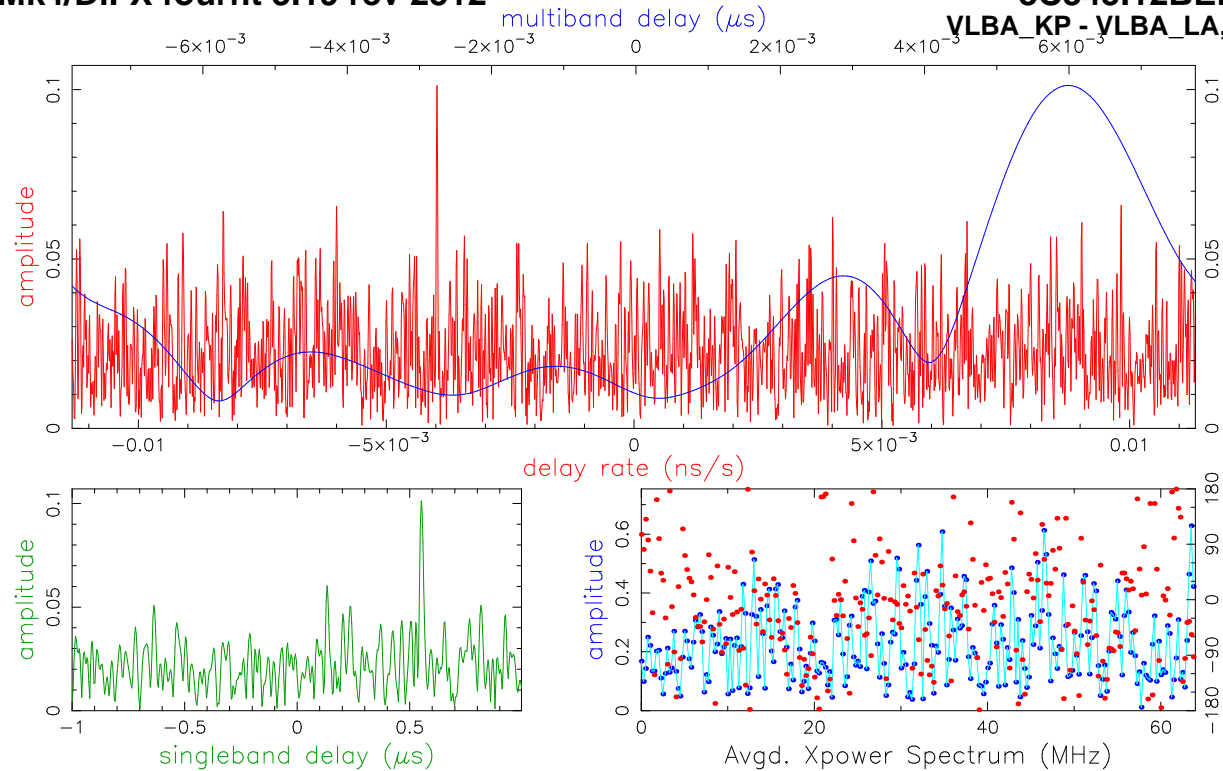
ph/seg (deg) 57.2 48.5  
amp/seg (%) 87.7 84.6  
ph/frq (deg) 34.4 28.6  
amp/frq (%) 57.8 49.9

RMS Theor. Amplitude 0.103 +/- 0.018  
Search (2048X32) 0.100  
Interp. 0.000  
Inc. seg. avg. 0.113  
Inc. frq. avg. 0.098

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Sb window (us) -1.000 1.000  
Mb window (us) -0.008 0.008  
Dr window (ns/s) -0.011 0.011  
Ion window (TEC) 0.00 0.00

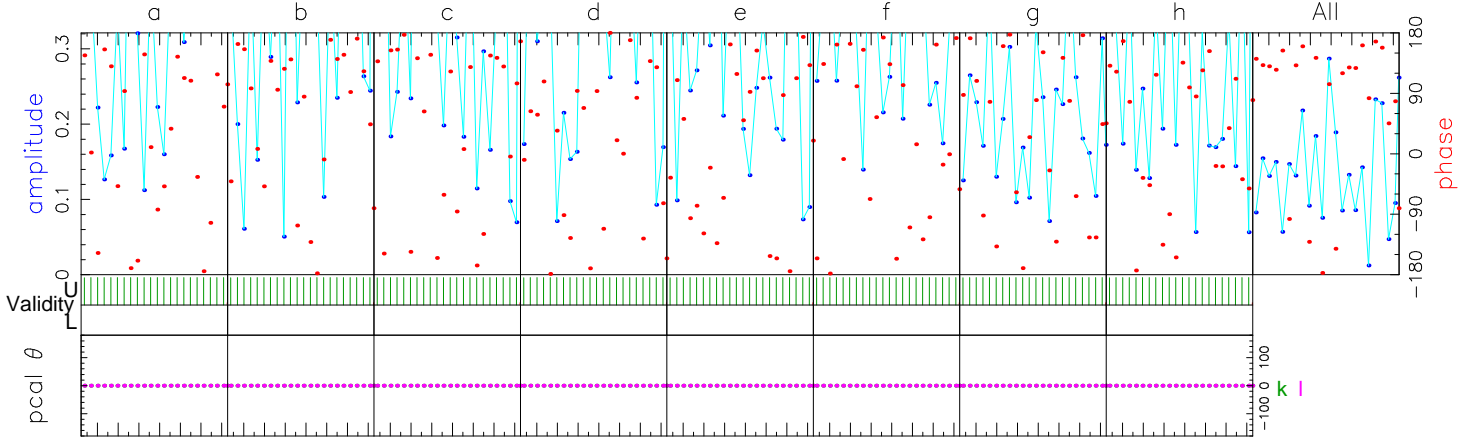
k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/kl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/kl.W.219.12BED8



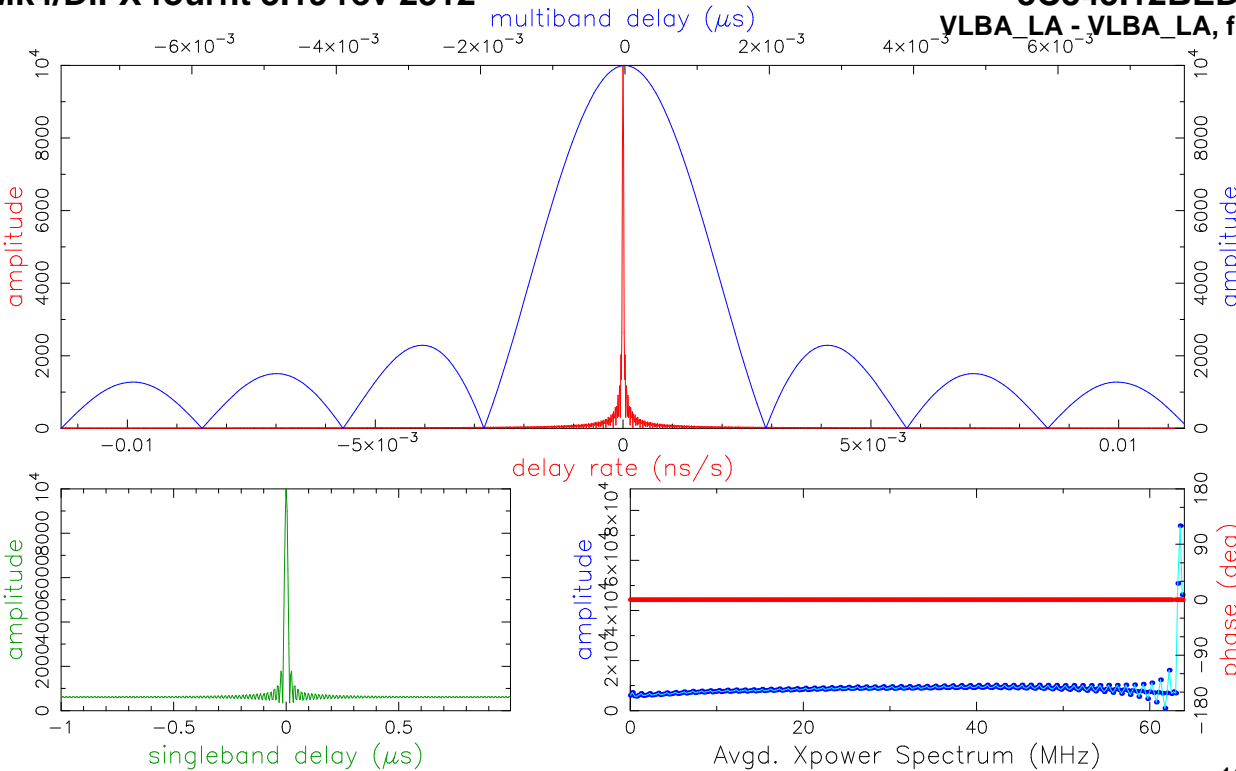
Fringe quality 0  
SNR 5.6  
Int time 406.934  
Amp 0.107  
Phase 147.8  
PFD 9.9e-01  
Delays (us)  
SBD 0.551862  
MBD 0.006027  
Fringe rate (Hz)  
-0.342462  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165641  
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



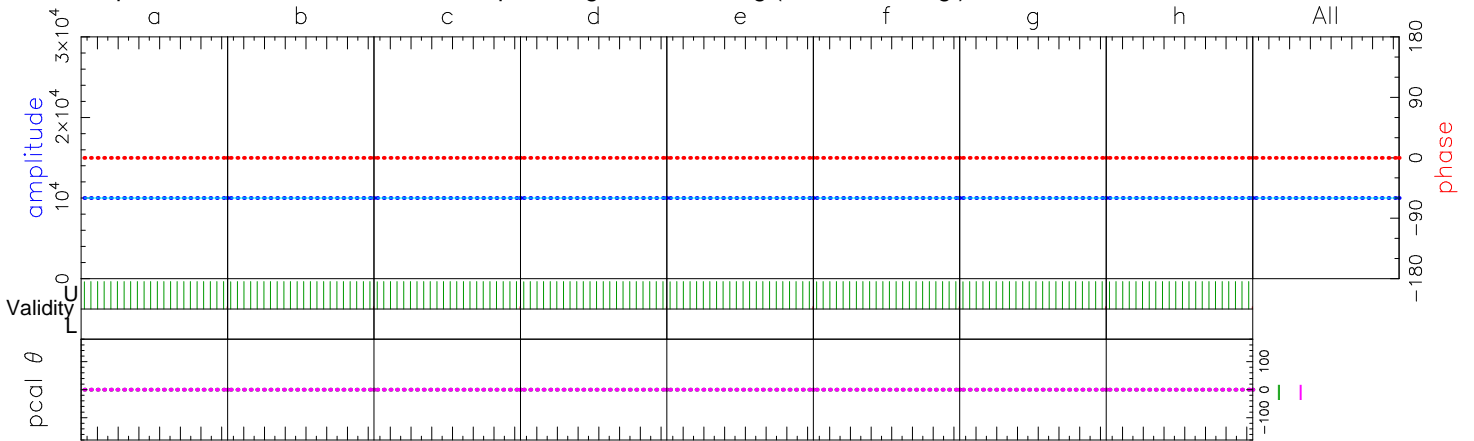
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.72618490085E+03								6.02717E-03	+/- 1.9E-04
Sband delay (usec)	-1.72618594127E+03								5.51862E-01	+/- 1.5E-03
Phase delay (usec)	-1.72673779826E+03								4.76566E-06	+/- 6.6E-07
Delay rate (us/s)	7.40291311524E-02								-3.97564E-06	+/- 2.8E-09
Total phase (deg)			21.0						147.8	+/- 20.4
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) 49.0 48.9 Search (2048X32) 0.107 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.6 85.4 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 28.9 Inc. seg. avg. 0.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.0 50.4 Inc. frq. avg. 0.101 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 60.1 el 32.1 pa -73.4 l: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) -543.636 -30.495 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/kl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/kl.W.237.12BED8 simultaneous interpolator



Fringe quality 9  
SNR 551645.1  
Int time 406.934  
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  
2020:086:165628  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

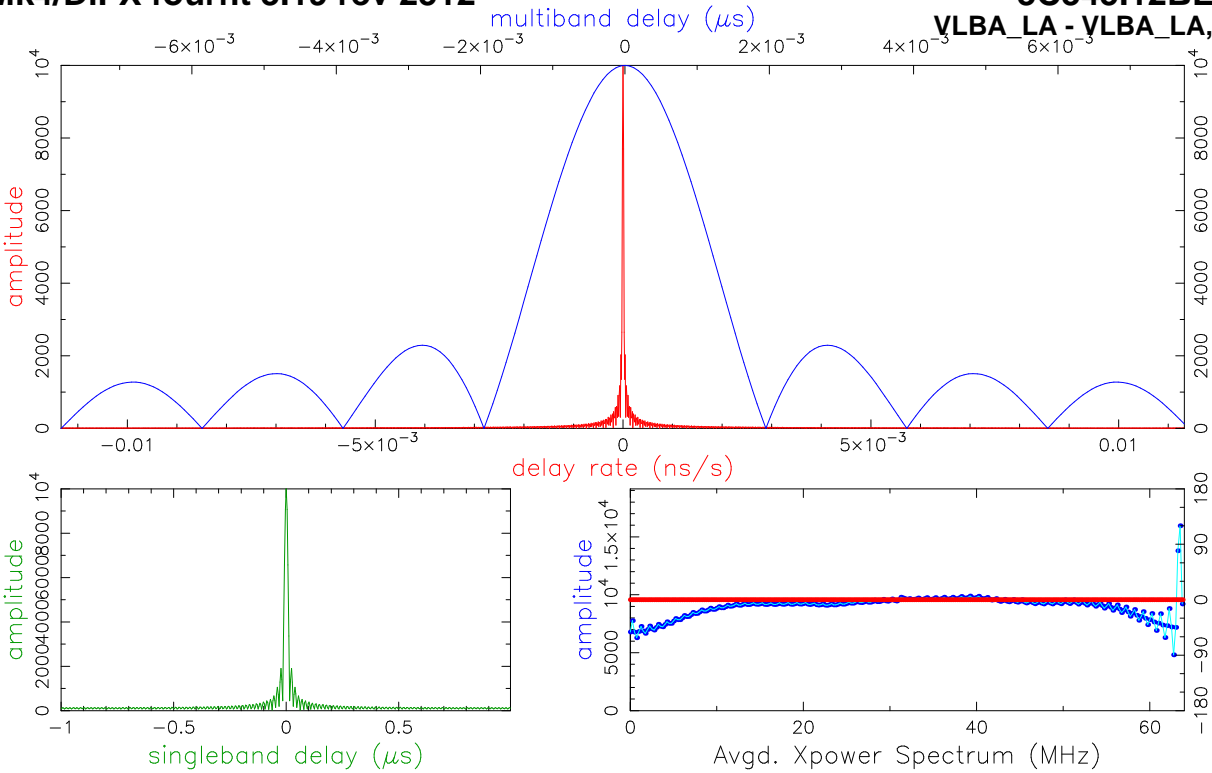


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
	1000	1000	1000	1000	1000	1000	1000	1000		
	1000	1000	1000	1000	1000	1000	1000	1000		
:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		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

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) -1.77905639400E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.77906E-19 +/- 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

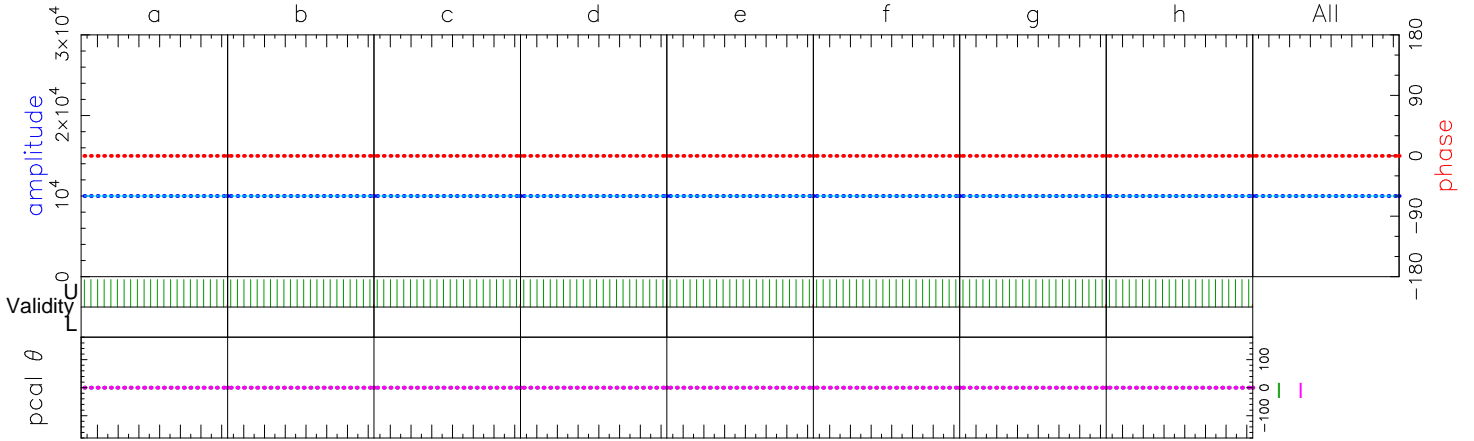
RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0 i: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/II..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/II.W.180.12BED8



Fringe quality 9  
SNR 551645.1  
Int time 406.934  
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  
2020:086:165631  
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



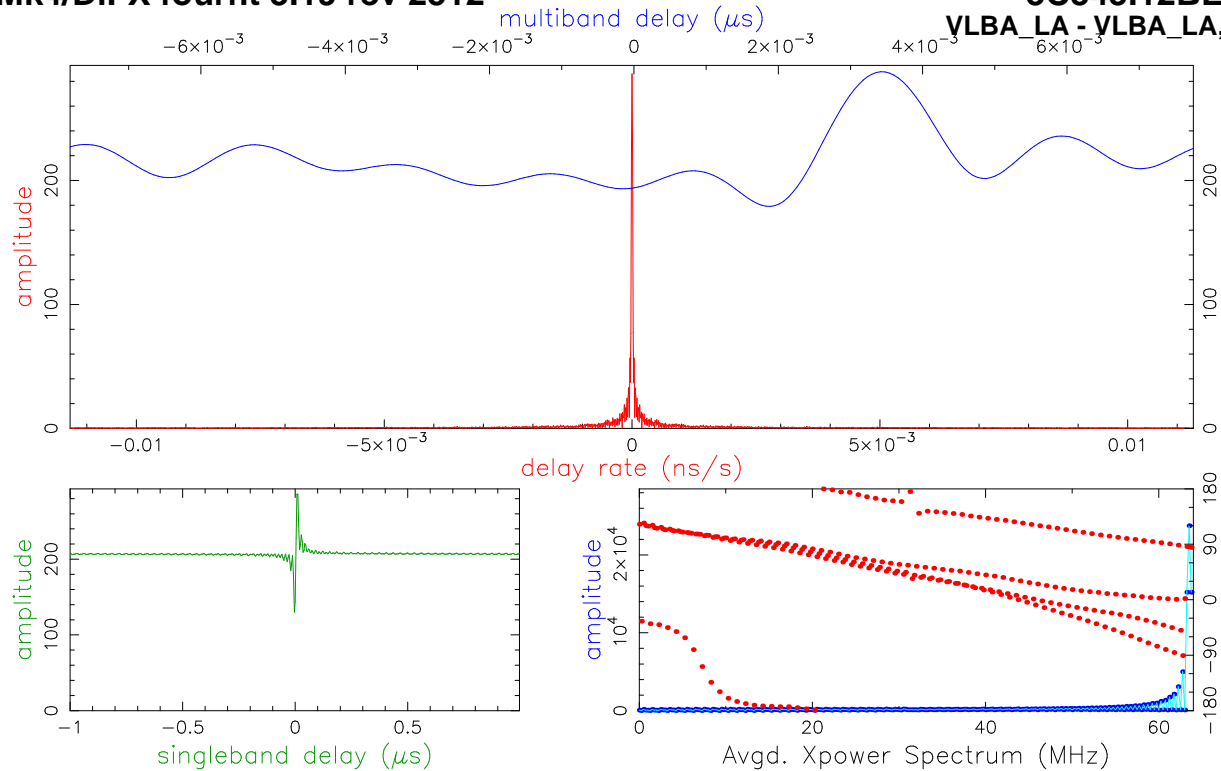
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
	1000	1000	1000	1000	1000	1000	1000	1000		
	1000	1000	1000	1000	1000	1000	1000	1000		
:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
:i	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
	1000	1000	1000	1000	1000	1000	1000	1000		
	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
	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)	5.36591912970E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.36592E-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	Theor.	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
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	10000.000	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

l: az 63.9 el 37.8 pa -72.0      l: az 63.9 el 37.8 pa -72.0      u,v (fr/asec) 0.000 0.000      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c192a/v1\_PV/1234/No0001/II..12BED8    Output file: /Exps/c192a/v1\_PV/1234/No0001/II.W.197.12BED8

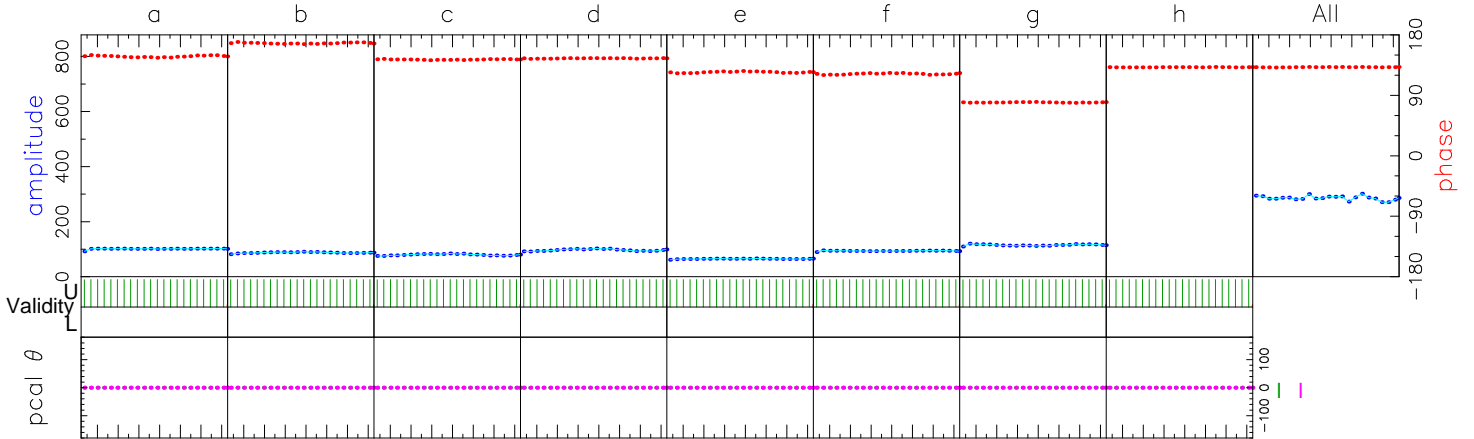


Fringe quality 5

SNR 16158.8  
Int time 406.934  
Amp 292.921  
Phase 131.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.009746  
MBD 0.003570  
Fringe rate (Hz)  
-0.000003  
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  
2020:086:165635  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

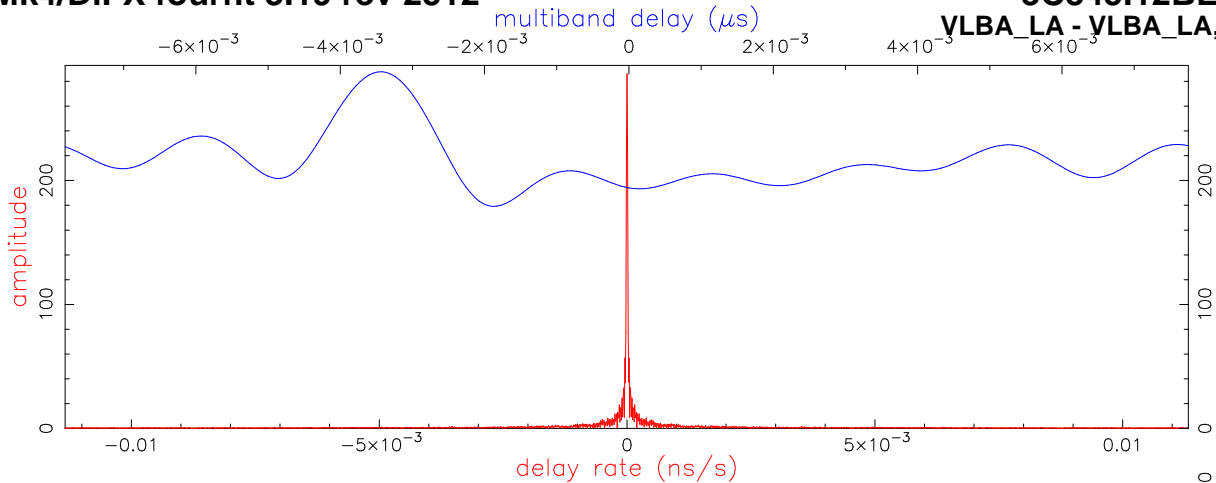
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		
	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
	1000	1000	1000	1000	1000	1000	1000	1000		1000
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.57046875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.57047E-03	+/- 6.7E-08
Sband delay (usec)	9.74550000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		9.74550E-03	+/- 5.3E-07
Phase delay (usec)	4.25010545621E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		4.25011E-06	+/- 2.3E-10
Delay rate (us/s)	-3.33022081205E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-3.33022E-11	+/- 9.7E-13
Total phase (deg)	131.8		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		131.8	+/- 0.0

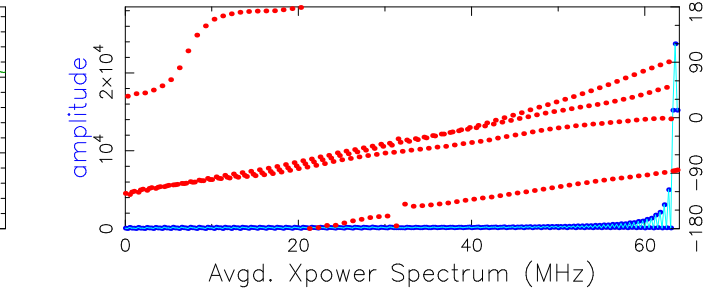
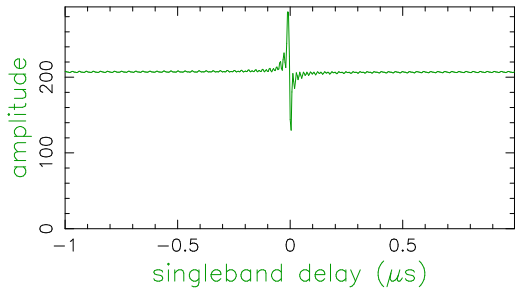
ph/seg (deg) 0.2 0.0 Search (2048X32) 287.781 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 3.6 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.1 0.0 Inc. seg. avg. 286.052 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 183.9 0.0 Inc. frq. avg. 295.006 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/II..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/II.W.213.12BED8 simultaneous interpolator





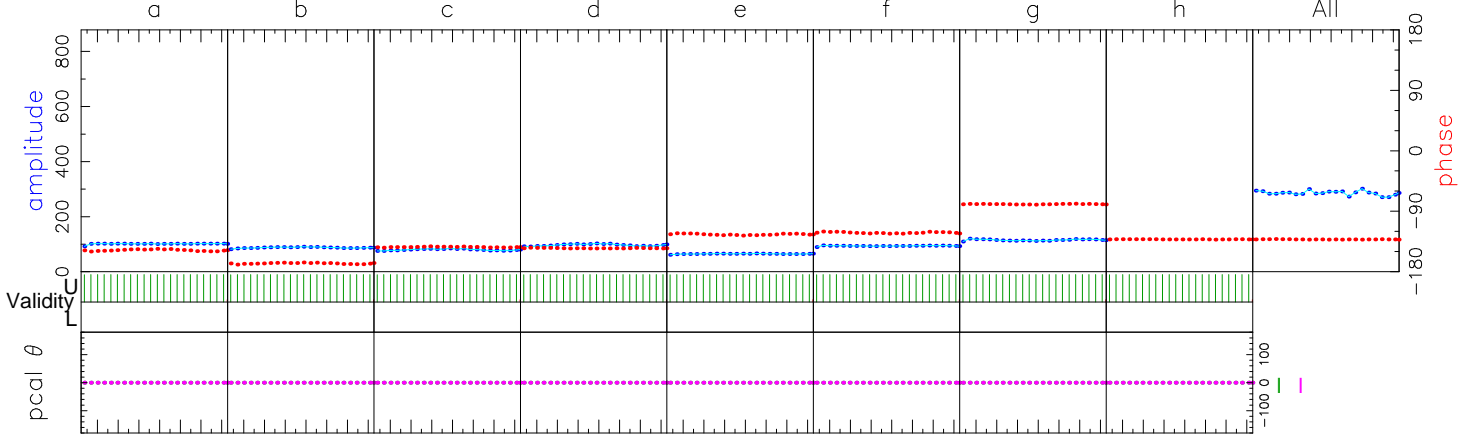
Fringe quality 5

SNR 16158.8  
Int time 406.934  
Amp 292.921  
Phase -131.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.009746  
MBD -0.003570  
Fringe rate (Hz)  
0.000003  
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  
2020:086:165639  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

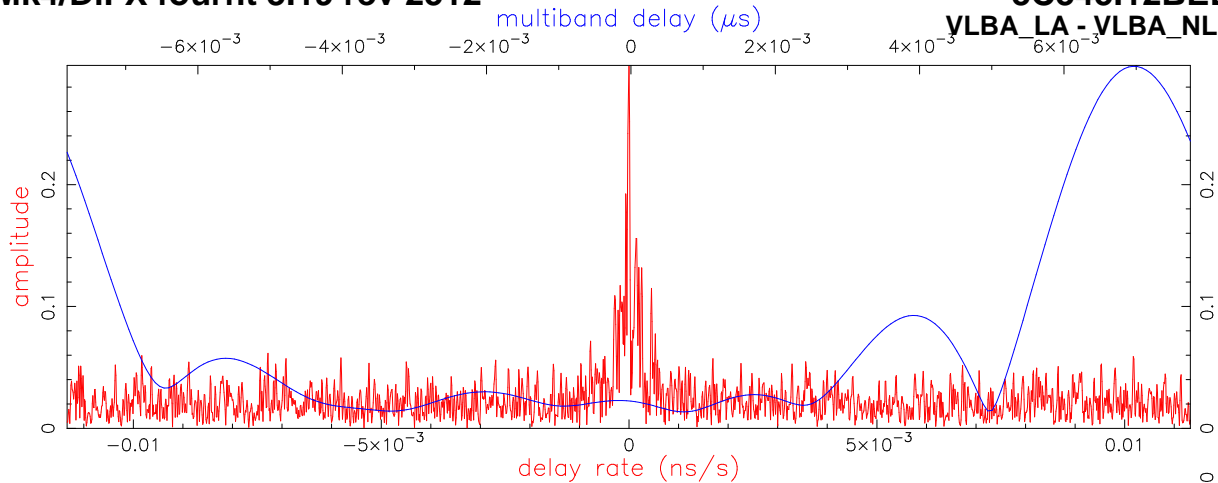


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
	1000	1000	1000	1000	1000	1000	1000	1000		1000
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.57046875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-3.57047E-03	+/- 6.7E-08
Sband delay (usec)	-9.74550000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-9.74550E-03	+/- 5.3E-07
Phase delay (usec)	-4.25010545628E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.25011E-06	+/- 2.3E-10
Delay rate (us/s)	3.33022081205E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.33022E-11	+/- 9.7E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-131.8	+/- 0.0

RMS Theor. Amplitude 292.921 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (2048X32) 287.781 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 3.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 28.1 0.0 Inc. seg. avg. 286.052 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 183.9 0.0 Inc. frq. avg. 295.006 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 I: az 63.9 el 37.8 pa -72.0 I: az 63.9 el 37.8 pa -72.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/II..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/II.W.228.12BED8

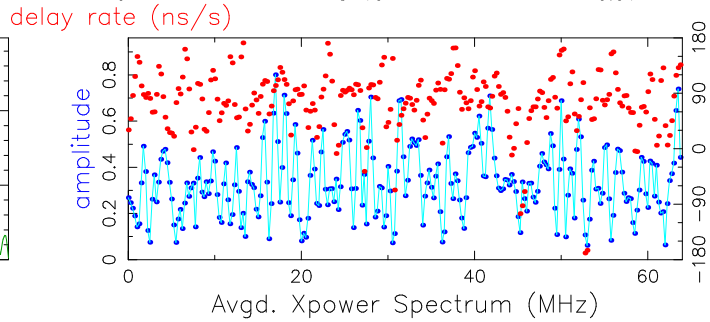
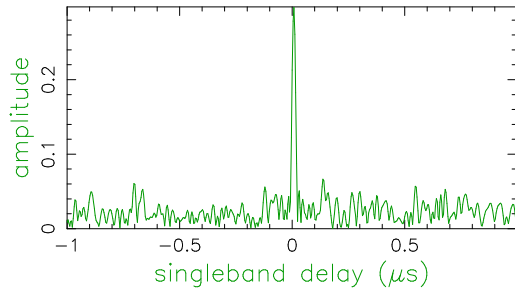
Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, In VLBA\_LA - VLBA\_NL, fgroup W, pol LL



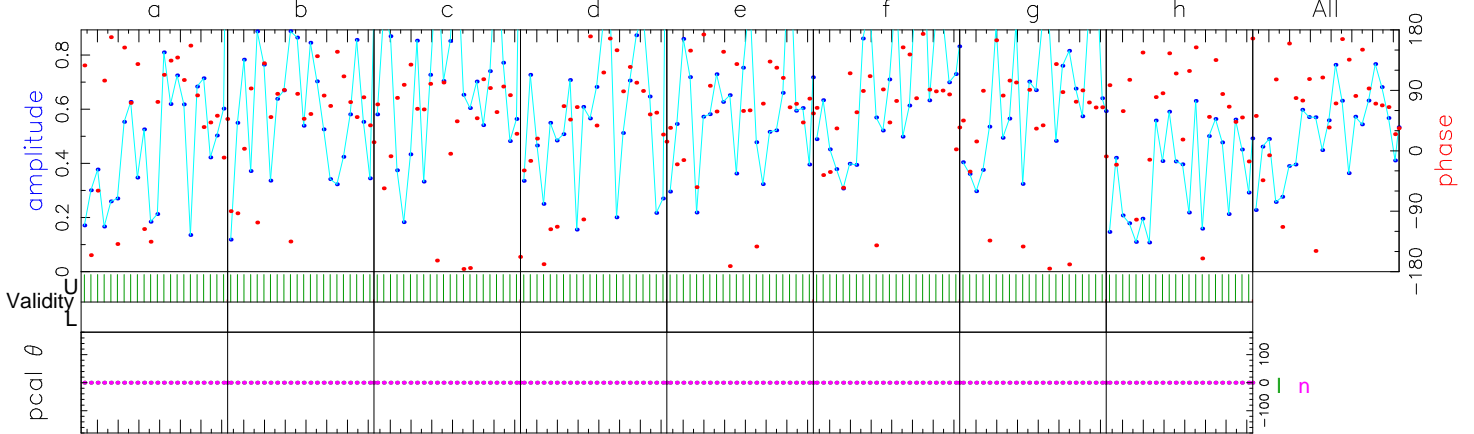
Fringe quality 9

SNR 16.4  
Int time 406.934  
Amp 0.298  
Phase 86.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.007174  
MBD 0.006960  
Fringe rate (Hz) 0.000081  
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  
2020:086:165629  
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



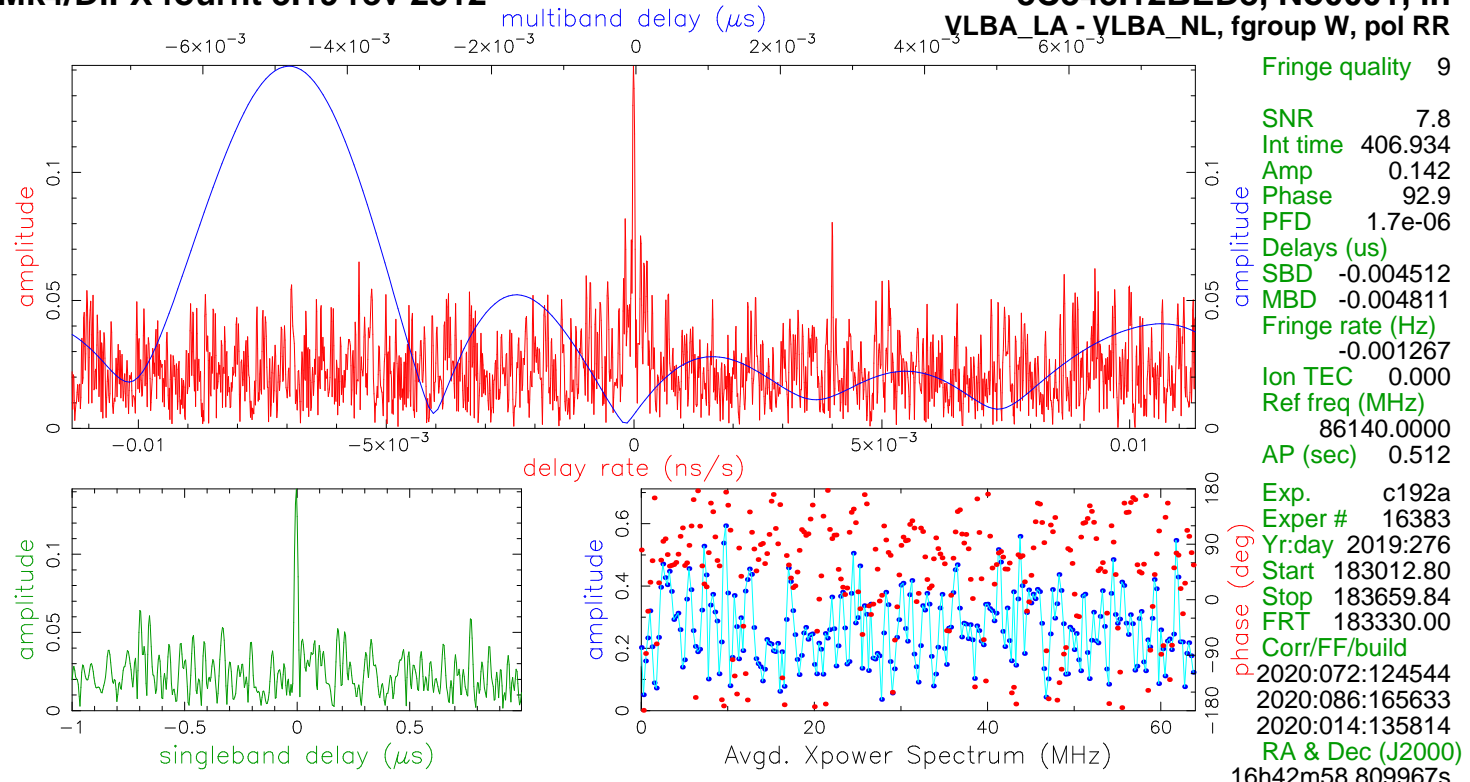
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.38737451760E+03	Apriori delay (usec)	-3.38738147779E+03	Resid mbdelay (usec)	6.96019E-03	+/-	6.6E-05
Sband delay (usec)	-3.38737430404E+03	Apriori clock (usec)	-2.7215591E+01	Resid sbdelay (usec)	7.17375E-03	+/-	5.2E-04
Phase delay (usec)	-3.38738147501E+03	Apriori clockrate (us/s)	-4.8569552E-07	Resid phdelay (usec)	2.77688E-06	+/-	2.2E-07
Delay rate (us/s)	1.87942733924E-01	Apriori rate (us/s)	1.87942732980E-01	Resid rate (us/s)	9.44507E-10	+/-	9.6E-10
Total phase (deg)	-92.6	Apriori accel (us/s/s)	1.19919343883E-05	Resid phase (deg)	86.1	+/-	7.0

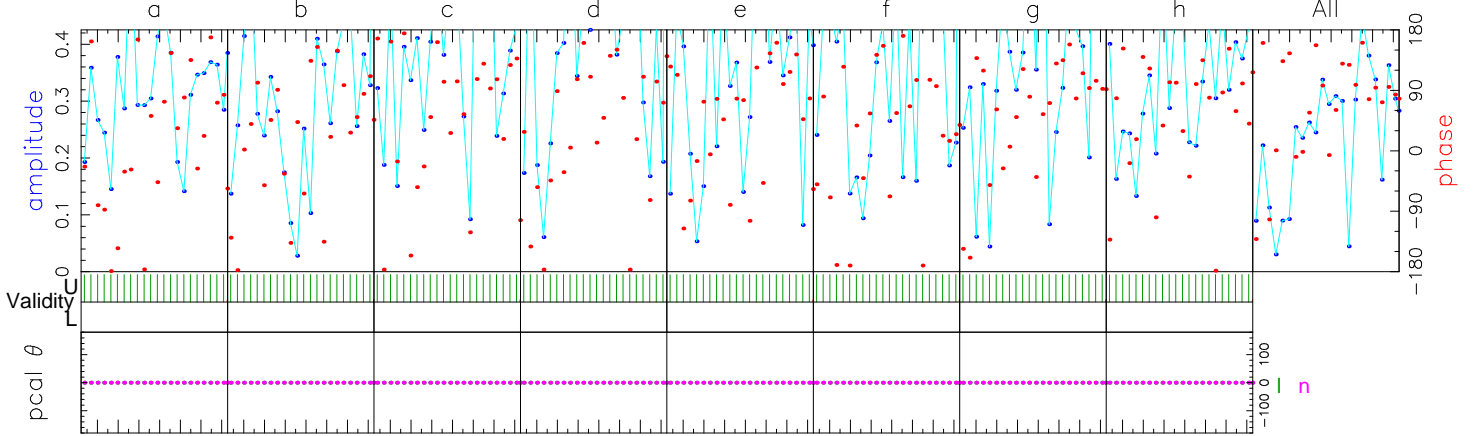
ph/seg (deg)	65.9	RMS	16.7	Theor.	0.298 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	86.3	Search (2048X32)	0.295	Amplitude	0.298 +/- 0.018	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	9.6	Interp.	0.000	Search (2048X32)	0.295	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.6	Inc. seg. avg.	0.488	Interp.	0.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.296	Inc. seg. avg.	0.488	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/In..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/In.W.186.12BED8

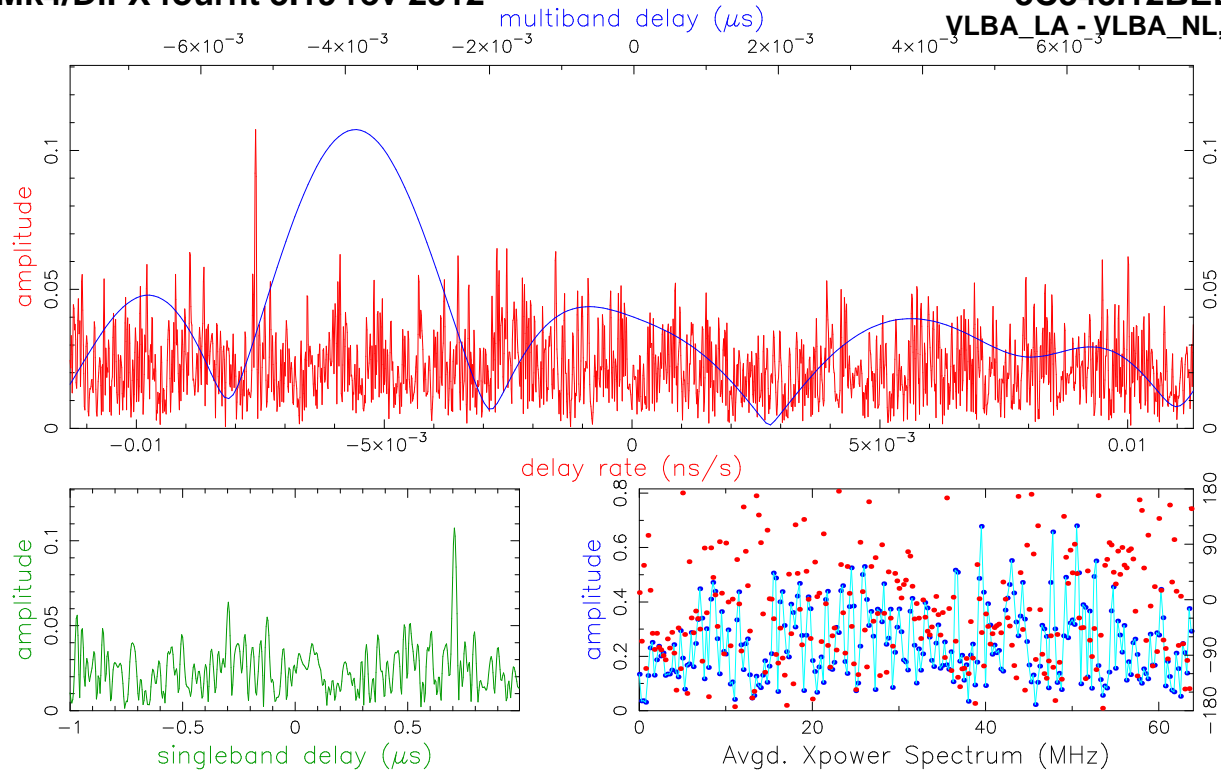


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.38738628915E+03									
Sband delay (usec)	-3.38738598979E+03									
Phase delay (usec)	-3.38738147479E+03									
Delay rate (us/s)	1.87942718269E-01									
Total phase (deg)			-85.9							
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								
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) 69.5 35.1 Search (2048X32) 0.139 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 105.3 61.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 18.5 20.7 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.1 36.2 Inc. frq. avg. 0.137 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 ion window (TEC) 0.00 0.00 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/In..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/In.W.202.12BED8

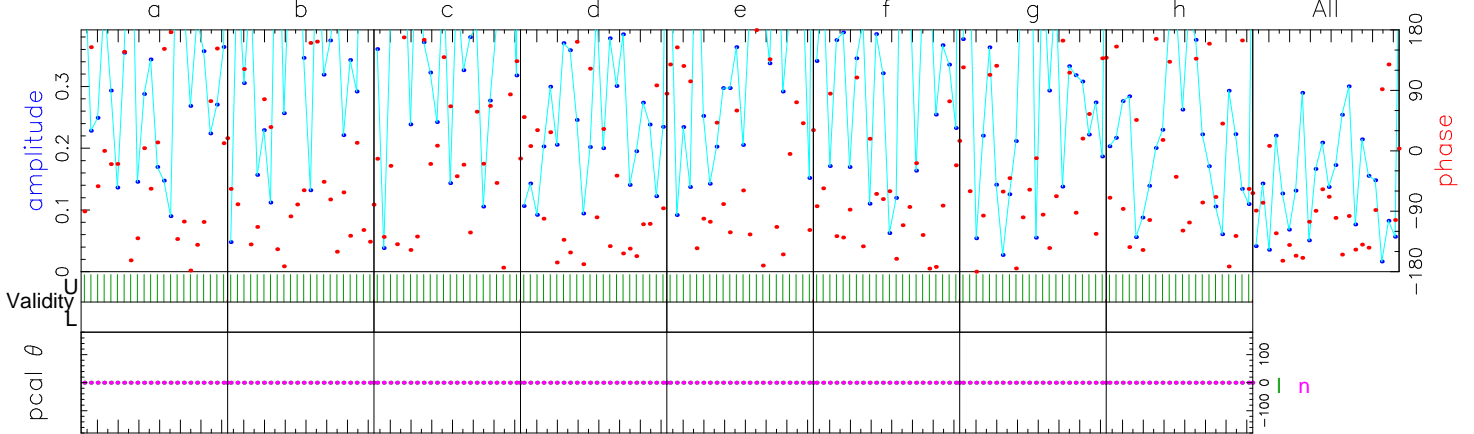


Fringe quality 0

SNR 5.9  
 Int time 406.934  
 Amp 0.131  
 Phase -118.5  
 PFD 5.2e-01  
 Delays (us)  
 SBD 0.707720  
 MBD -0.003857  
 Fringe rate (Hz)  
 -0.655451  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

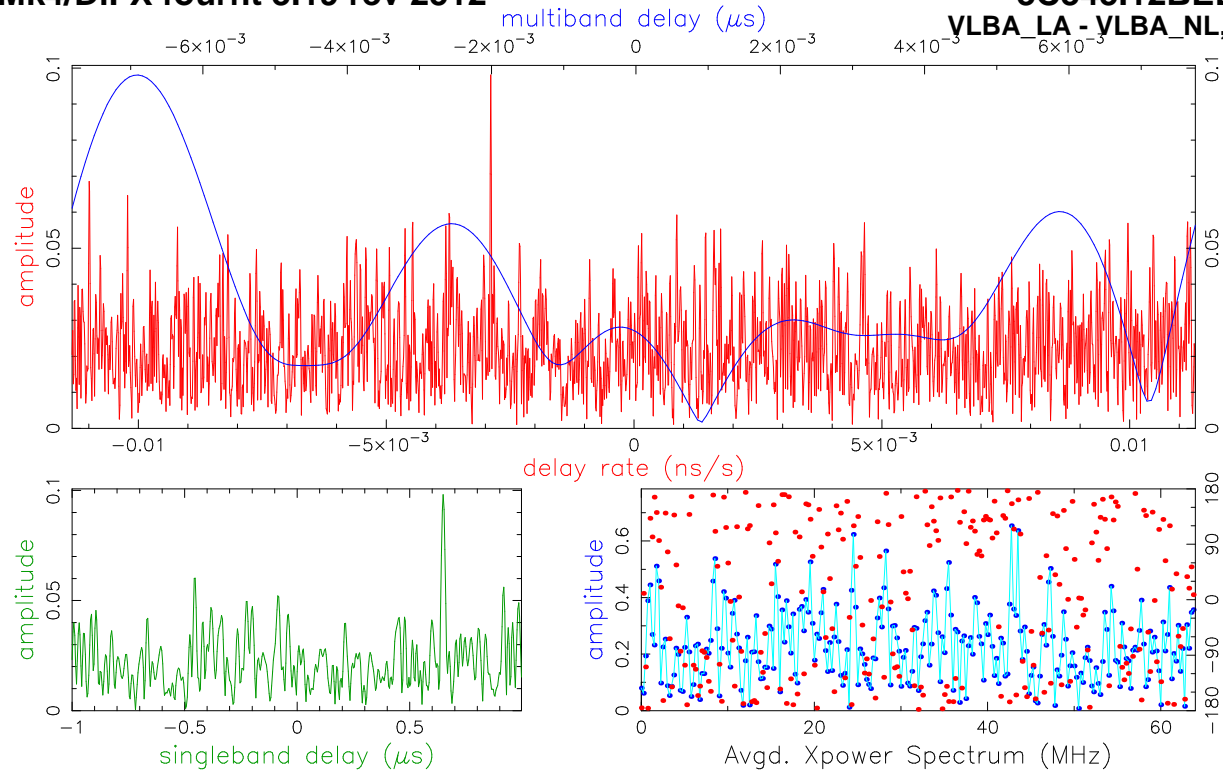
Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165637  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

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



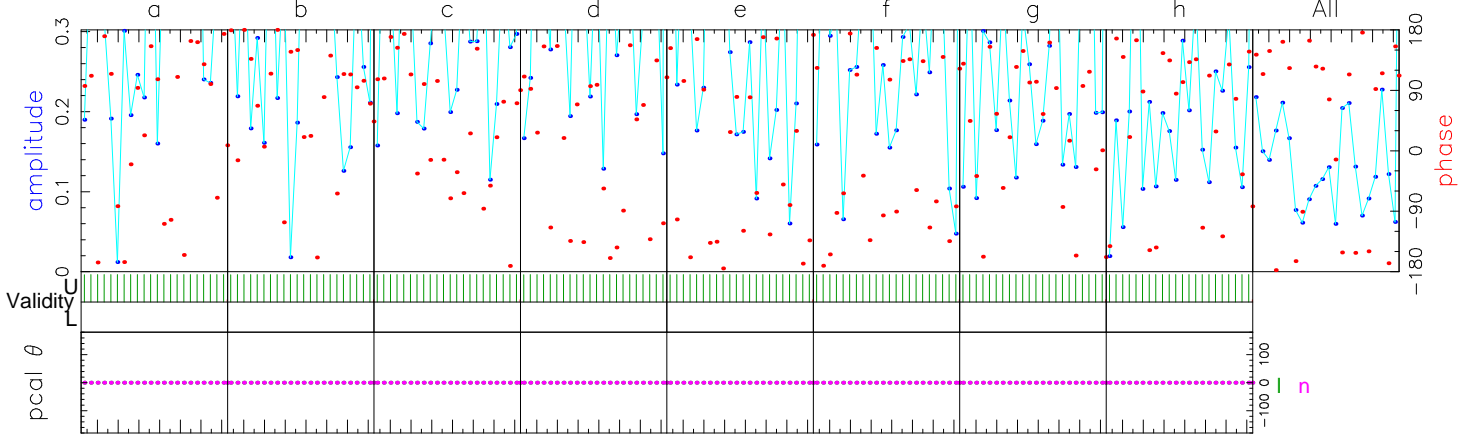
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0			
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
n	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	-3.38666658482E+03	-3.38667375804E+03	-3.38738148161E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	Resid mbdelay (usec)	-3.85703E-03	+/- 1.8E-04
Sband delay (usec)	-3.38667375804E+03	-3.38667375804E+03	-3.38738148161E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	Resid sbdelay (usec)	7.07720E-01	+/- 1.4E-03
Phase delay (usec)	-3.38738148161E+03	-3.38738148161E+03	-3.38738148161E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	-3.38738147779E+03	Resid phdelay (usec)	-3.82201E-06	+/- 6.2E-07
Delay rate (us/s)	1.87935123849E-01	1.87935123849E-01	1.87935123849E-01	1.87942732980E-01	1.87942732980E-01	1.87942732980E-01	1.87942732980E-01	1.87942732980E-01	Resid rate (us/s)	-7.60913E-06	+/- 2.6E-09
Total phase (deg)			-297.3						Resid phase (deg)	-118.5	+/- 19.3

ph/seg (deg) 57.5 46.2 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.7 80.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.0 27.3 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.6 47.6 Inc. frq. avg. 0.123 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/ln..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/ln.W.222.12BED8



Fringe quality 0  
 SNR 5.4  
 Int time 406.934  
 Amp 0.101  
 Phase 148.2  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.648483  
 MBD -0.006909  
 Fringe rate (Hz)  
 -0.248922  
 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  
 2020:086:165641  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

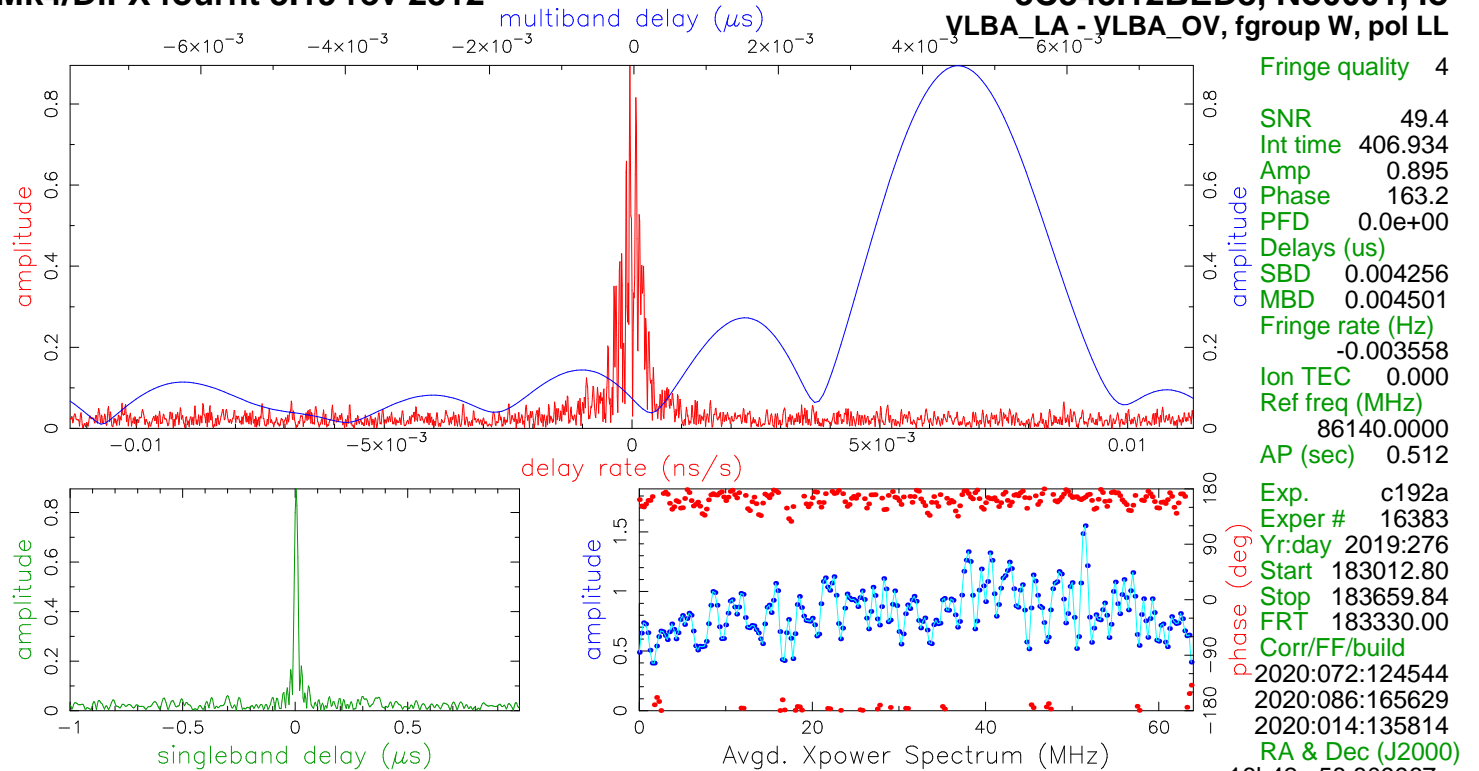
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



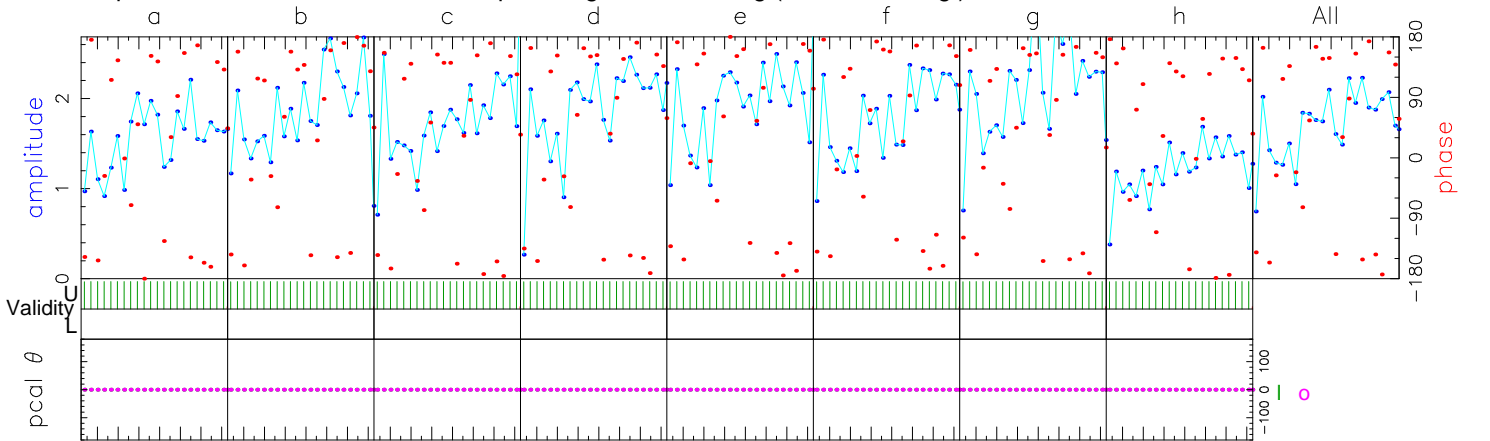
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0			
l	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		-3.38673213690E+03				-3.38738147779E+03			Resid mbdelay (usec)	-6.90912E-03	+/- 2.0E-04
Sband delay (usec)		-3.38673299504E+03				-2.7215591E+01			Resid sbdelay (usec)	6.48483E-01	+/- 1.6E-03
Phase delay (usec)		-3.38738147301E+03				-4.8569552E-07			Resid phdelay (usec)	4.77951E-06	+/- 6.8E-07
Delay rate (us/s)		1.87939843246E-01				1.87942732980E-01			Resid rate (us/s)	-2.88973E-06	+/- 2.9E-09
Total phase (deg)			-30.5			1.19919343883E-05			Resid phase (deg)	148.2	+/- 21.2
RMS	57.2	50.8		0.101 +/- 0.019					PCal mode: MANUAL, MANUAL		
ph/seg (deg)	57.2	50.8		0.097					PCal rate: 0.000E+00, 0.000E+00 (us/s)		
amp/seg (%)	72.2	88.6		0.000					SampCntNorm: enabled		
ph/frq (deg)	44.0	30.0		0.100					mb window (us)	-1.000	1.000
amp/frq (%)	38.5	52.3		0.109					dr window (ns/s)	-0.011	0.011
									nlags: 256		
									t_cohere infinite		
									ion window (TEC)	0.00	0.00

l: az 63.9 el 37.8 pa -72.0 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) -1381.185 246.839 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/ln..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/ln.W.241.12BED8





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

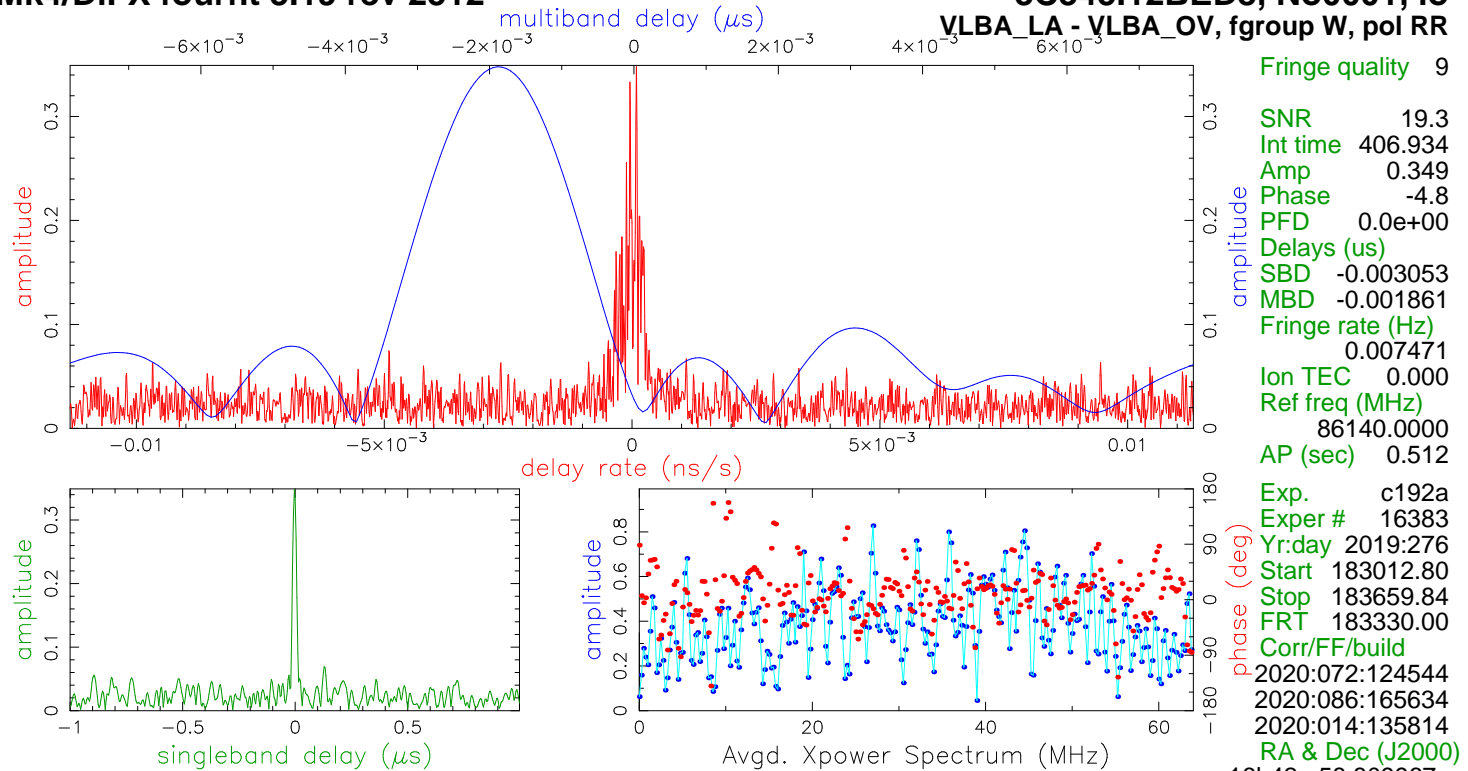


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	162.4	160.6	154.6	163.9	175.5	177.0	165.4	136.1	Phase	163.2
	0.8	1.0	0.9	1.0	1.0	0.9	1.1	0.6	Ampl.	0.9
	257.8	258.3	258.2	258.5	257.8	257.9	257.8	258.4	Sbd box	258.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.41250017438E+03		Apriori delay (usec)		2.41249567319E+03		Resid mbdelay (usec)		4.50118E-03	+/- 2.2E-05
Sband delay (usec)	2.41249992869E+03		Apriori clock (usec)		-1.7370033E+01		Resid sbdelay (usec)		4.25550E-03	+/- 1.7E-04
Phase delay (usec)	2.41249567846E+03		Apriori clockrate (us/s)		-3.5245298E-07		Resid phdelay (usec)		5.26375E-06	+/- 7.5E-08
Delay rate (us/s)	-4.29120560591E-02		Apriori rate (us/s)		-4.29120147566E-02		Resid rate (us/s)		-4.13025E-08	+/- 3.2E-10
Total phase (deg)	267.2		Apriori accel (us/s/s)		-1.43902509739E-05		Resid phase (deg)		163.2	+/- 2.3

	RMS	Theor.	Amplitude	0.895 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	76.1	5.6	Search (2048X32)	0.872	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	100.1	9.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	13.9	3.3	Inc. seg. avg.	1.703	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	16.1	5.7	Inc. frq. avg.	0.909	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lo.W.189.12BED8



Fringe quality 9

SNR 19.3

Int time 406.934

Amp 0.349

Phase -4.8

PFD 0.0e+00

Delays (us)

SBD -0.003053

MBD -0.001861

Fringe rate (Hz) 0.007471

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

2020:086:165634

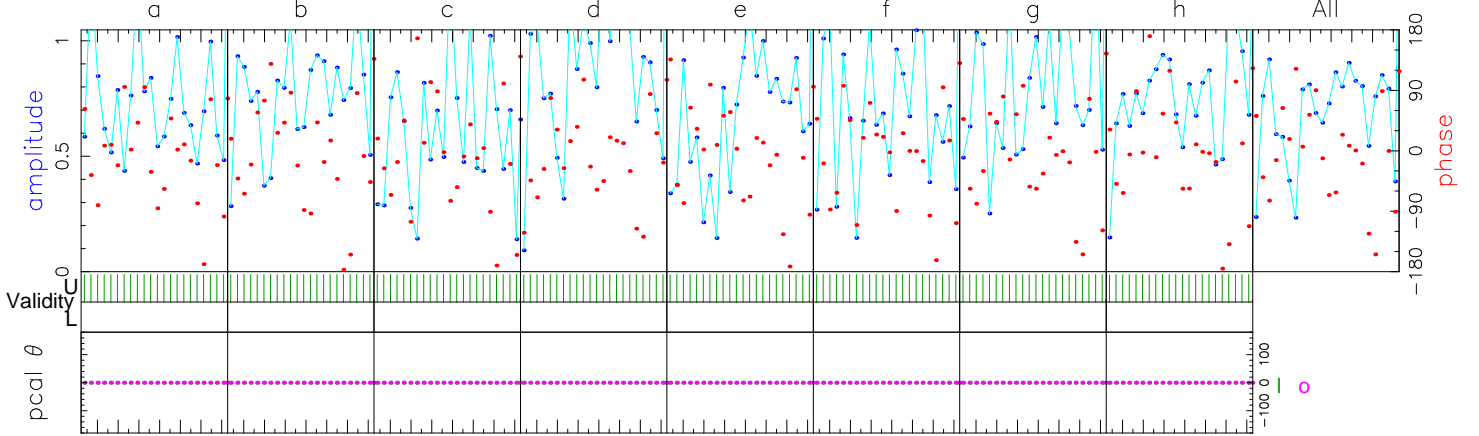
2020:014:135814

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
	-1.4	3.9	-16.1	-6.4	-9.8	3.8	-13.6	3.6	186112E-03	+/- 5.6E-05
	0.4	0.3	0.3	0.5	0.3	0.3	0.4	0.2	-3.05250E-03	+/- 4.5E-04
	256.2	256.1	256.3	256.6	256.1	256.4	256.4	255.2	-1.55082E-07	+/- 1.9E-07
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	8.67324E-08	+/- 8.2E-10
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.41249381207E+03		Apriori delay (usec)		2.41249567319E+03		Resid mbdelay (usec)		-1.86112E-03	+/- 5.6E-05
Sband delay (usec)	2.41249262069E+03		Apriori clock (usec)		-1.7370033E+01		Resid sbdelay (usec)		-3.05250E-03	+/- 4.5E-04
Phase delay (usec)	2.41249567304E+03		Apriori clockrate (us/s)		-3.5245298E-07		Resid phdelay (usec)		-1.55082E-07	+/- 1.9E-07
Delay rate (us/s)	-4.29119280242E-02		Apriori rate (us/s)		-4.29120147566E-02		Resid rate (us/s)		8.67324E-08	+/- 8.2E-10
Total phase (deg)	99.1		Apriori accel (us/s/s)		-1.43902509739E-05		Resid phase (deg)		-4.8	+/- 5.9

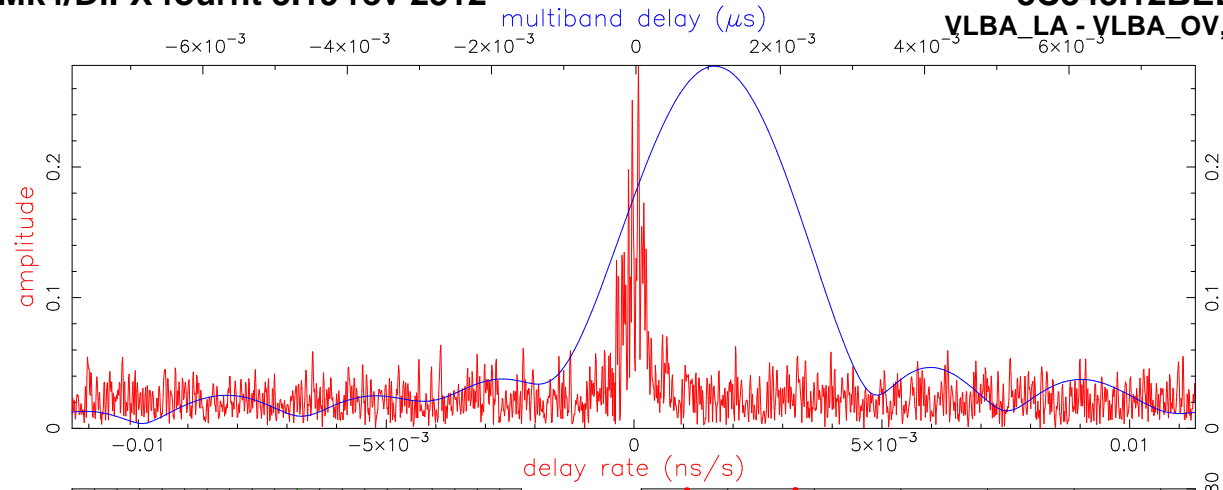
ph/seg (deg) 69.0 14.3 Search (2048X32) 0.345 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 112.2 24.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 8.8 8.4 Inc. seg. avg. 0.661 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 24.6 14.7 Inc. frq. avg. 0.347 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

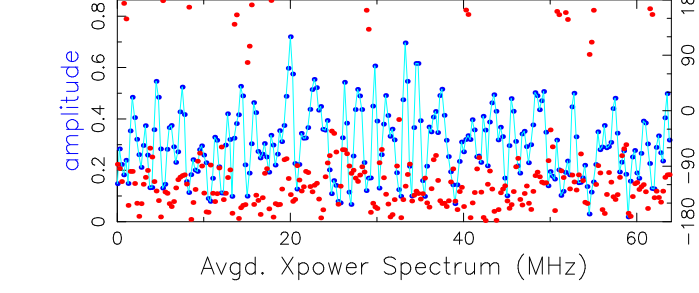
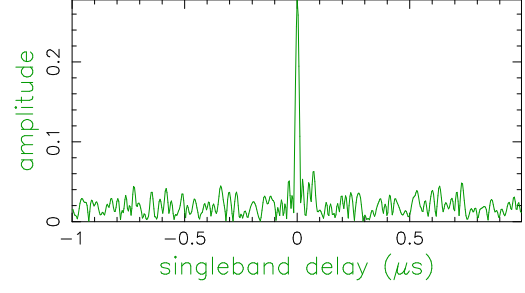
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 ion window (TEC) 0.00 0.00 simultaneous interpolator



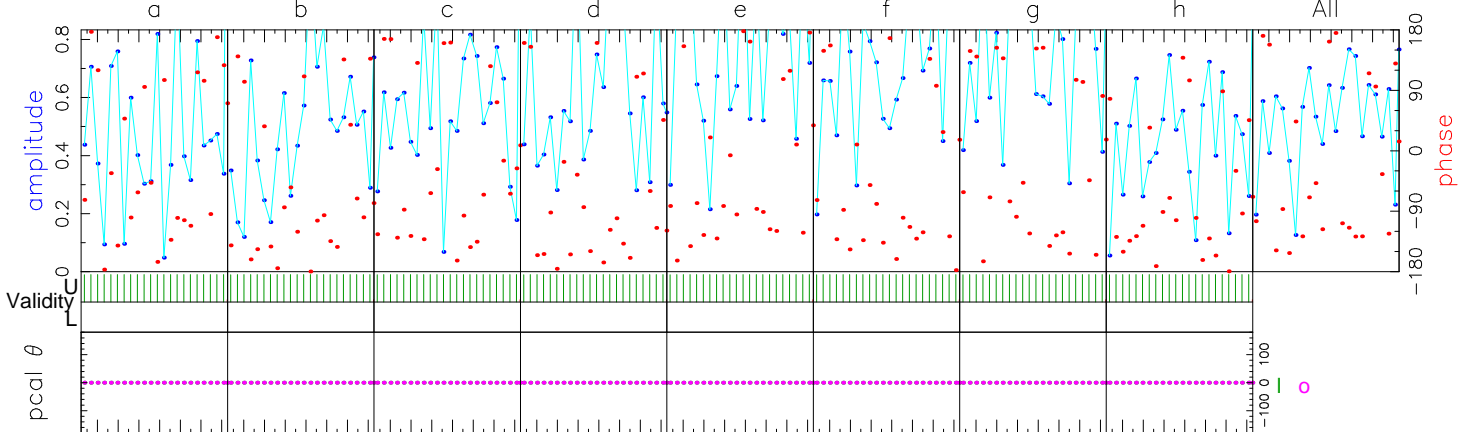
Fringe quality 9

SNR 15.3  
Int time 406.934  
Amp 0.278  
Phase -136.0  
PFD 3.5e-44  
Delays (us)  
SBD 0.000562  
MBD 0.001097  
Fringe rate (Hz) 0.007249  
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  
2020:086:165639  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"



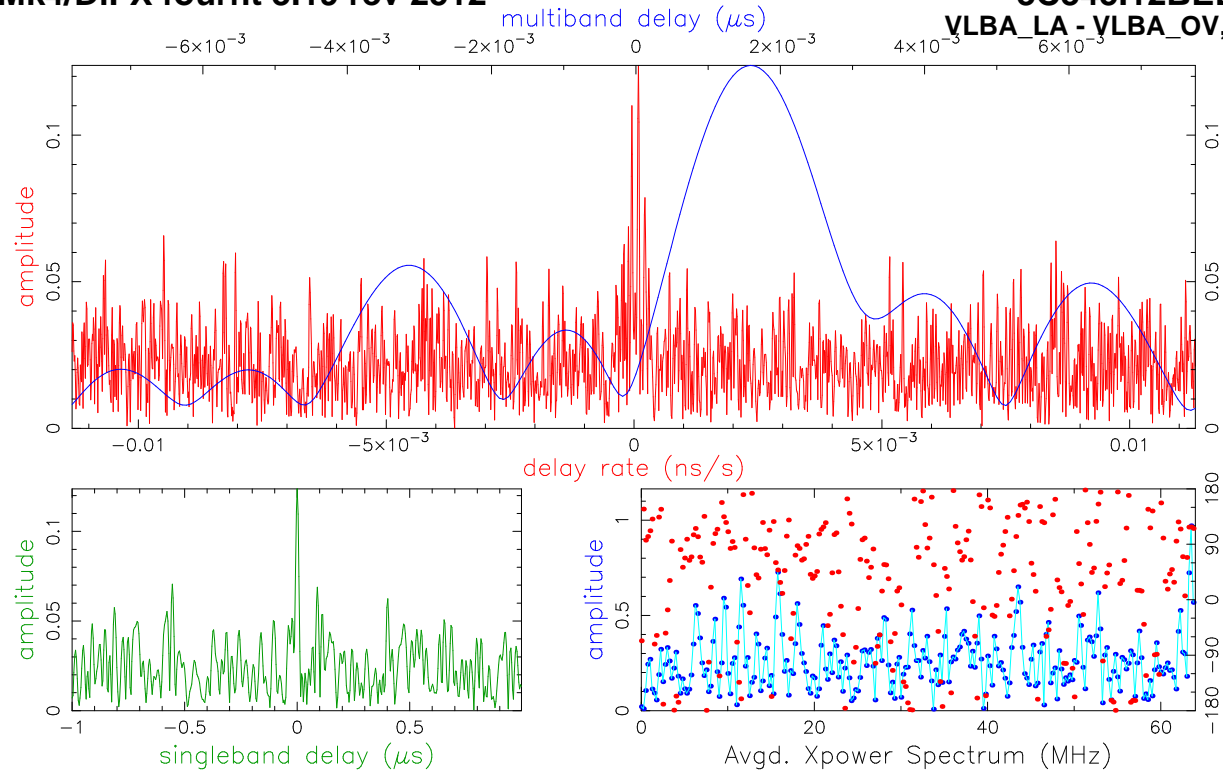
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.41249676992E+03				2.41249567319E+03				1.09672E-03	+/- 7.1E-05
Sband delay (usec)	2.41249623544E+03				-1.7370033E+01				5.62250E-04	+/- 5.6E-04
Phase delay (usec)	2.41249566881E+03				-3.5245298E-07				-4.38662E-06	+/- 2.4E-07
Delay rate (us/s)	-4.29119306062E-02				-4.29120147566E-02				8.41504E-08	+/- 1.0E-09
Total phase (deg)			-32.1		-1.43902509739E-05				-136.0	+/- 7.5
	RMS	Theor.	Amplitude	0.278 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	71.5	17.9	Search (2048X32)	0.268	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	106.1	31.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	7.3	10.6	Inc. seg. avg.	0.496	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	27.8	18.5	Inc. frq. avg.	0.274	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

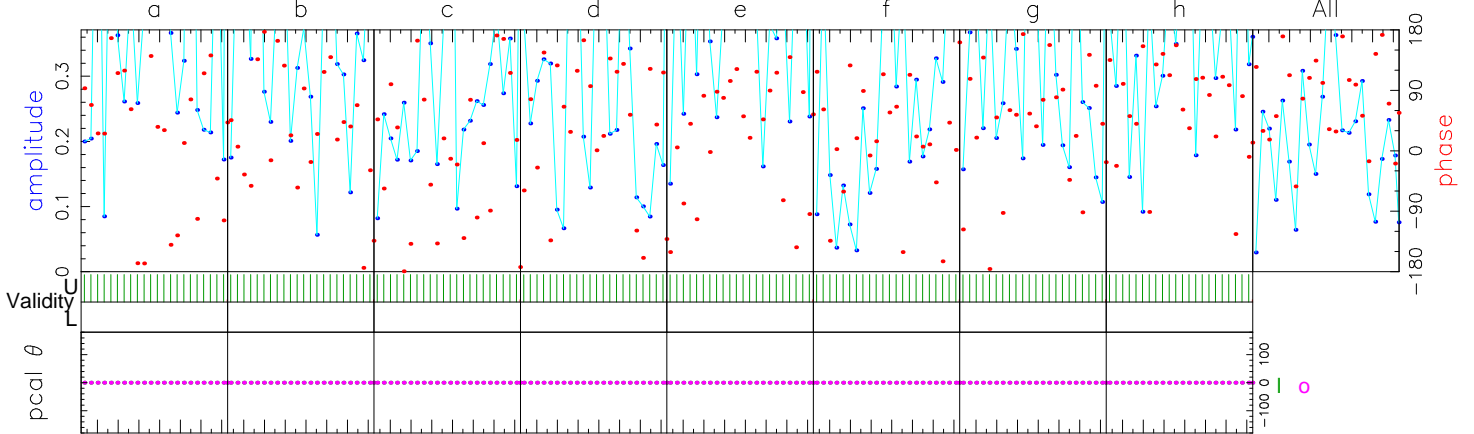
l: az 63.9 el 37.8 pa -72.0 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 294.771 -1083.386 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lo..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lo.W.229.12BED8

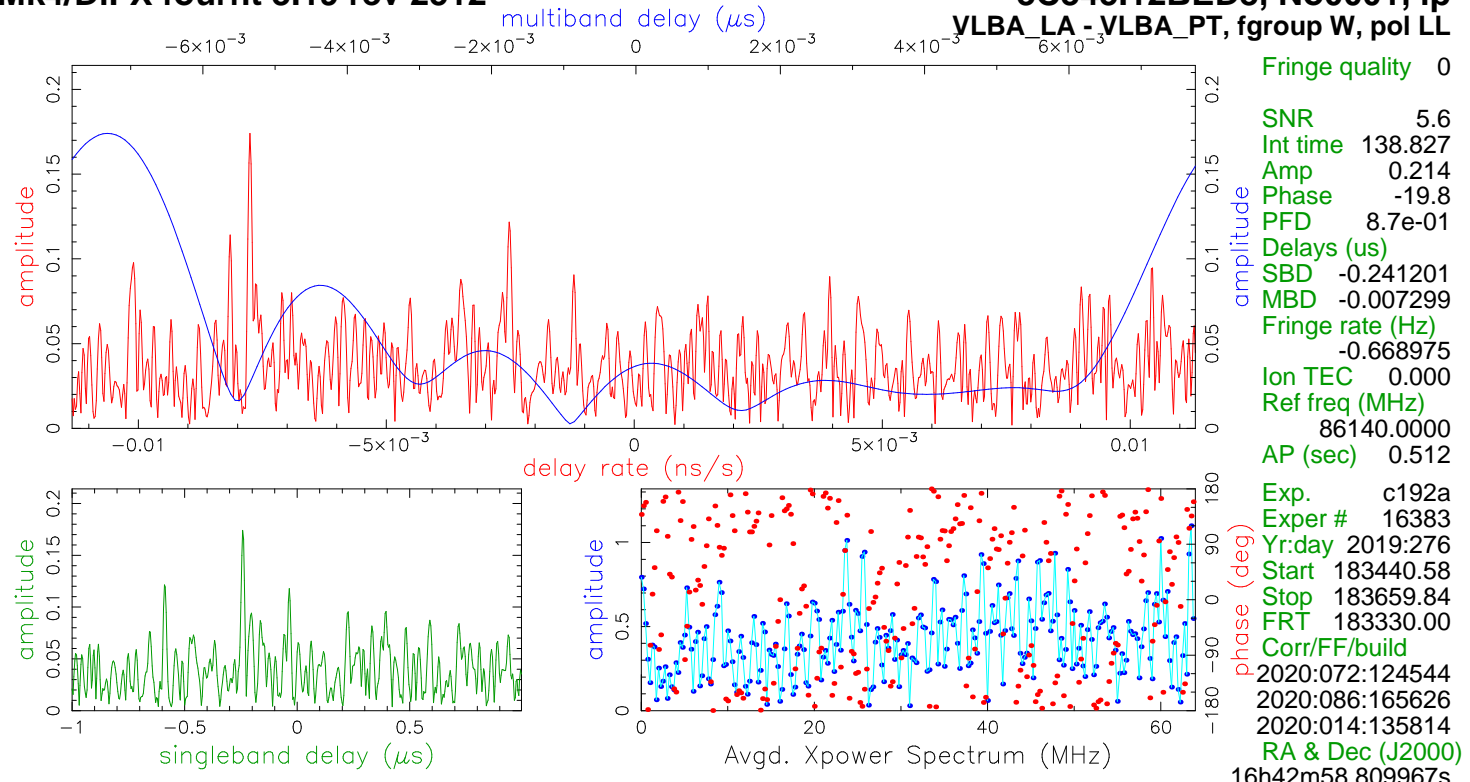


Fringe quality 0  
SNR 6.8  
Int time 406.934  
Amp 0.124  
Phase 74.0  
PFD 2.5e-03  
Delays (us)  
SBD -0.000098  
MBD 0.001588  
Fringe rate (Hz) 0.007418  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165642  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

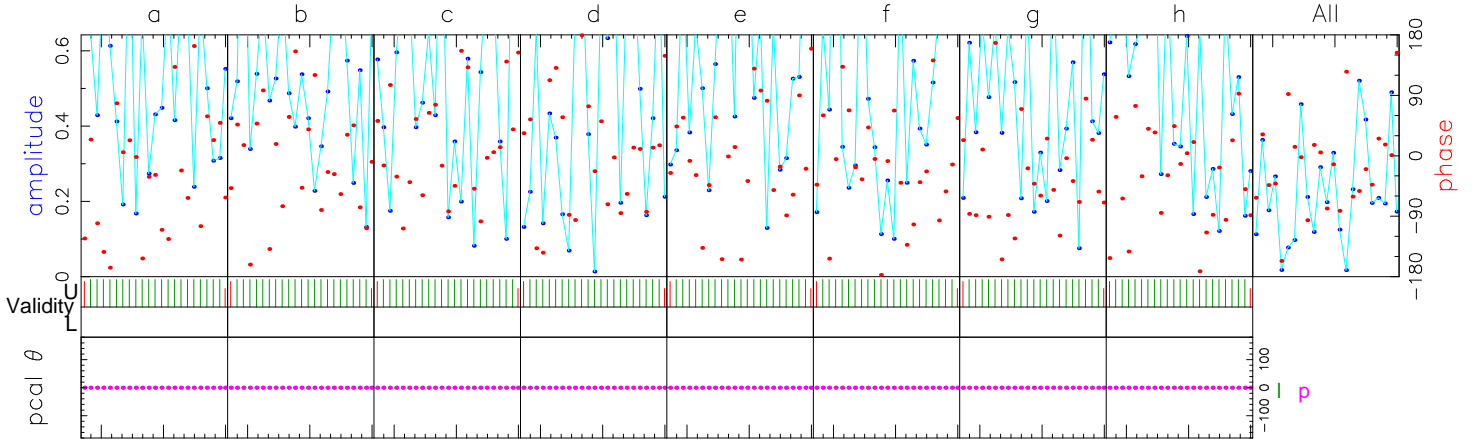
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.41249726107E+03				2.41249567319E+03				1.58788E-03	+/- 1.6E-04
Sband delay (usec)	2.41249557544E+03				-1.7370033E+01				-9.77500E-05	+/- 1.3E-03
Phase delay (usec)	2.41249567558E+03				-3.5245298E-07				2.38483E-06	+/- 5.4E-07
Delay rate (us/s)	-4.29119286392E-02				-4.29120147566E-02				8.61174E-08	+/- 2.3E-09
Total phase (deg)			177.9		-1.43902509739E-05				74.0	+/- 16.8
	RMS	Theor.	Amplitude	0.124 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	62.8	40.2	Search (2048X32)	0.122	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	104.1	70.2	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	30.8	23.7	Inc. seg. avg.	0.167	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	40.7	41.4	Inc. frq. avg.	0.119	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00



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
	-72.8	-7.4	5.1	-4.2	-15.2	-20.5	-48.5	-12.6	Phase	-19.8
	0.2	0.3	0.3	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	406.3	248.9	85.3	245.4	49.8	308.7	440.1	27.2	Sbd box	195.3
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

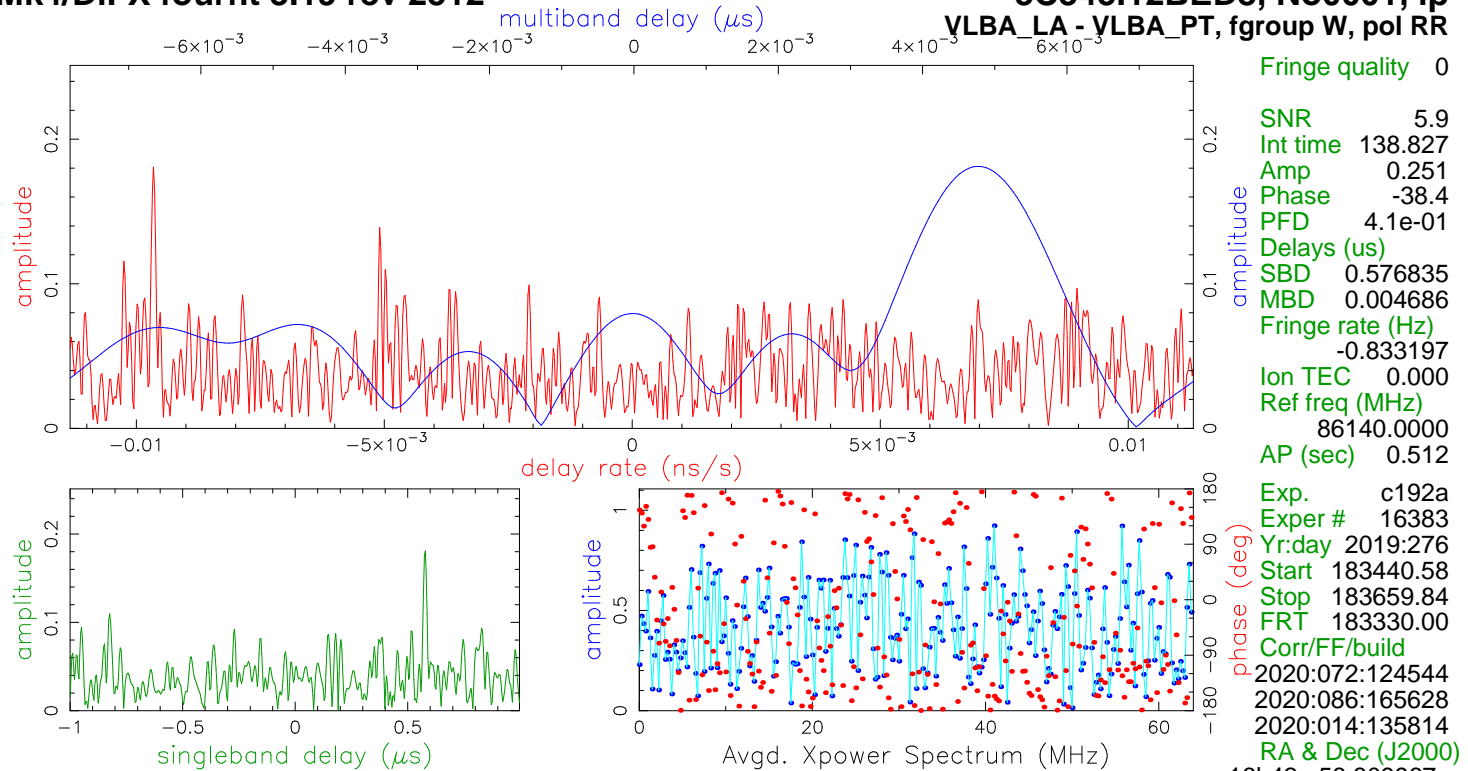
Group delay (usec)(sbd)	5.85299638370E+02	Apriori delay (usec)	5.85541312802E+02	Resid mbdelay (usec)	-7.29943E-03	+/-	1.9E-04
Sband delay (usec)	5.85300111552E+02	Apriori clock (usec)	-1.2646159E+01	Resid sbdelay (usec)	-2.41201E-01	+/-	1.5E-03
Phase delay (usec)	5.85541312162E+02	Apriori clockrate (us/s)	-5.5535860E-07	Resid phdelay (usec)	-6.39827E-07	+/-	6.5E-07
Delay rate (us/s)	-2.84988022861E-02	Apriori rate (us/s)	-2.84910361502E-02	Resid rate (us/s)	-7.76614E-06	+/-	8.1E-09
Total phase (deg)	226.7	Apriori accel (us/s/s)	-1.66334602352E-06	Resid phase (deg)	-19.8	+/-	20.3

ph/seg (deg)	66.9	Theor.	48.7	Amplitude	0.214 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	86.5		85.0	Search (1024X32)	0.172	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	28.0		28.7	Inc. seg. avg.	0.208	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.4		50.1	Inc. frq. avg.	0.205	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

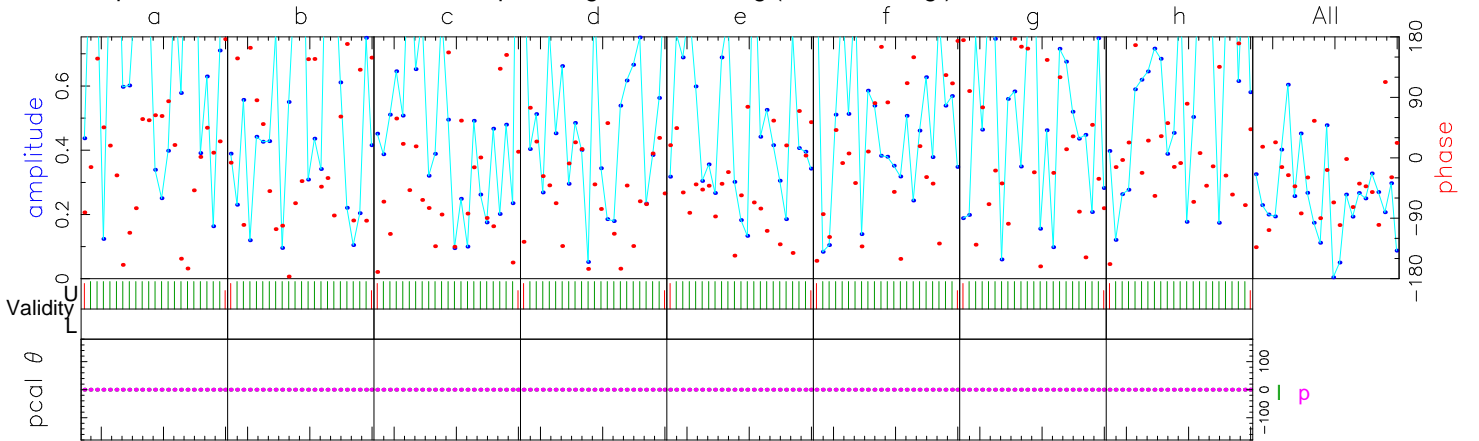
l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.8 u, v (fr/asec) 209.779 31.809 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lp.W.171.12BED8





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
	-1.7	-65.8	-49.5	-51.4	-46.8	9.4	-68.2	-21.1	Phase	-38.4
	0.2	0.3	0.2	0.4	0.4	0.1	0.1	0.5	Ampl.	0.2
	320.6	407.5	46.3	490.7	158.5	160.8	426.9	404.8	Sbd box	404.7
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	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)	5.86124124190E+02		Apriori delay (usec)		5.85541312802E+02		Resid mbdelay (usec)		4.68639E-03	+/- 1.8E-04
Sband delay (usec)	5.86118147802E+02		Apriori clock (usec)		-1.2646159E+01		Resid sbdelay (usec)		5.76835E-01	+/- 1.5E-03
Phase delay (usec)	5.85541311564E+02		Apriori clockrate (us/s)		-5.5535860E-07		Resid phdelay (usec)		-1.23788E-06	+/- 6.3E-07
Delay rate (us/s)	-2.85007087454E-02		Apriori rate (us/s)		-2.84910361502E-02		Resid rate (us/s)		-9.67260E-06	+/- 7.8E-09
Total phase (deg)	208.1		Apriori accel (us/s/s)		-1.66334602352E-06		Resid phase (deg)		-38.4	+/- 19.5

ph/seg (deg) 56.0 46.8 Search (1024X32) 0.177 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

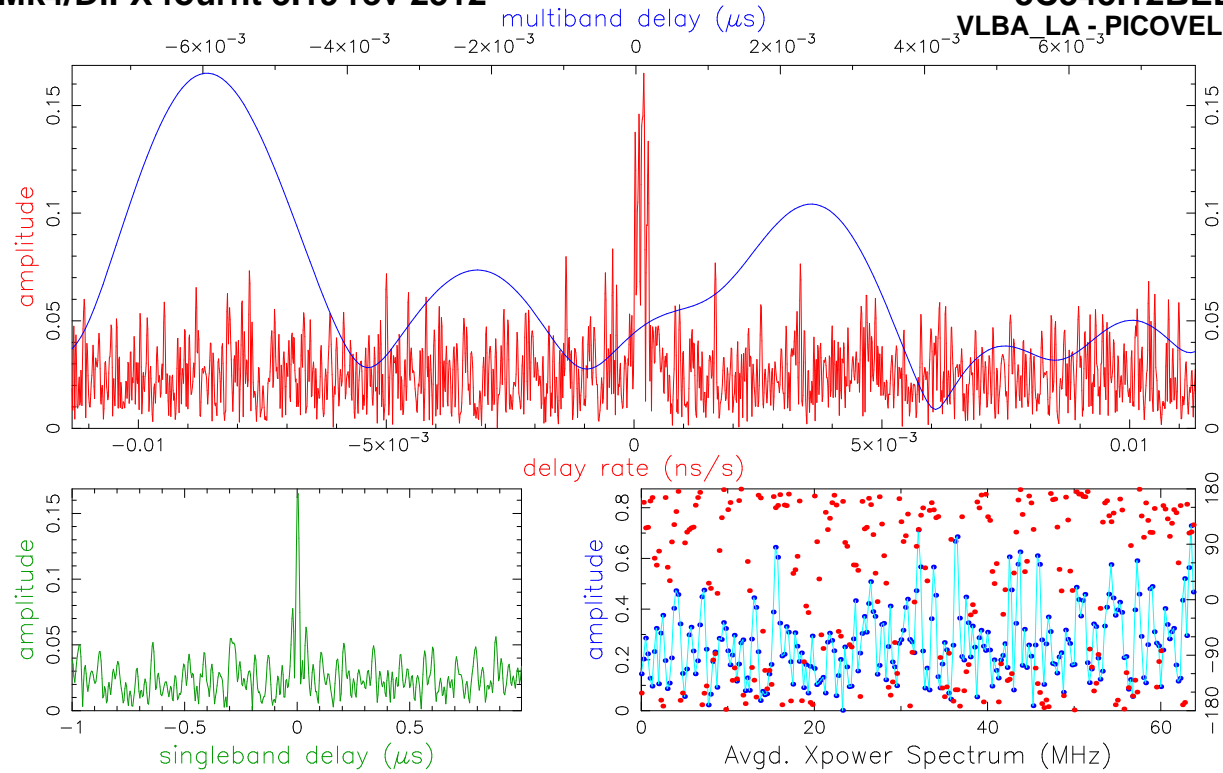
amp/seg (%) 84.9 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 31.4 27.6 Inc. seg. avg. 0.268 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 50.6 48.1 Inc. frq. avg. 0.241 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 209.779 31.809 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lp.W.184.12BED8

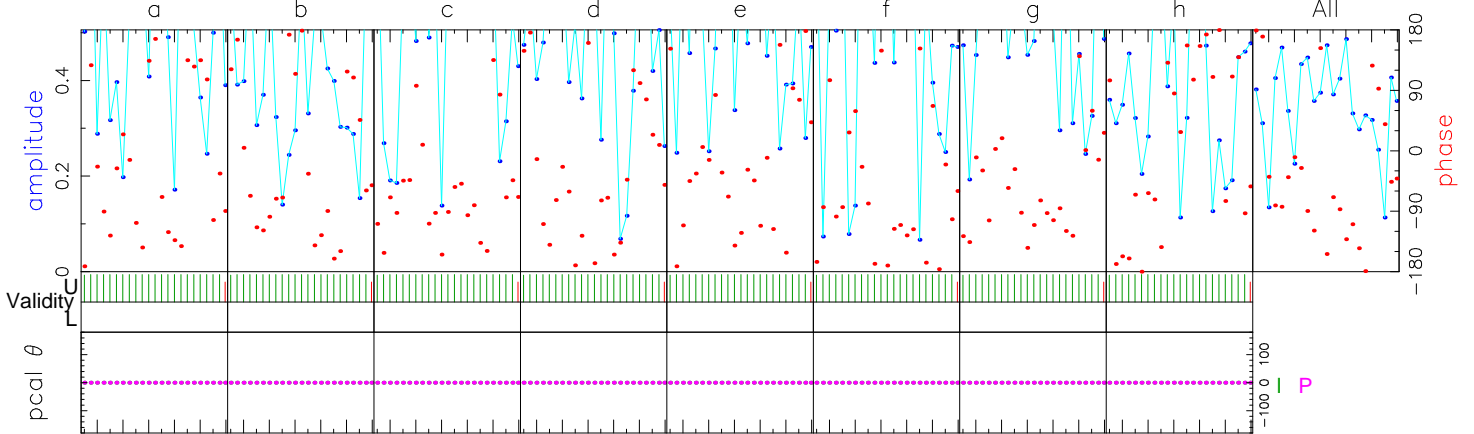


Fringe quality 9

SNR 8.5  
Int time 336.738  
Amp 0.169  
Phase -105.4  
PFD 9.4e-09  
Delays (us)  
SBD 0.002232  
MBD -0.005968  
Fringe rate (Hz)  
0.017013  
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  
2020:086:165630  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



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

Group delay (usec)(sbd)	-5.51232241017E+03	Apriori delay (usec)	-5.51233206710E+03	Resid mbdelay (usec)	-5.96807E-03	+/-	1.3E-04
Sband delay (usec)	-5.51232983560E+03	Apriori clock (usec)	-6.5028608E-01	Resid sbdelay (usec)	2.23150E-03	+/-	1.0E-03
Phase delay (usec)	-5.51233207050E+03	Apriori clockrate (us/s)	1.5279932E-09	Resid phdelay (usec)	-3.39884E-06	+/-	4.4E-07
Delay rate (us/s)	1.45254580856E+00	Apriori rate (us/s)	1.45254561106E+00	Resid rate (us/s)	1.97499E-07	+/-	2.2E-09
Total phase (deg)	-199.1	Apriori accel (us/s/s)	2.79932495079E-05	Resid phase (deg)	-105.4	+/-	13.5

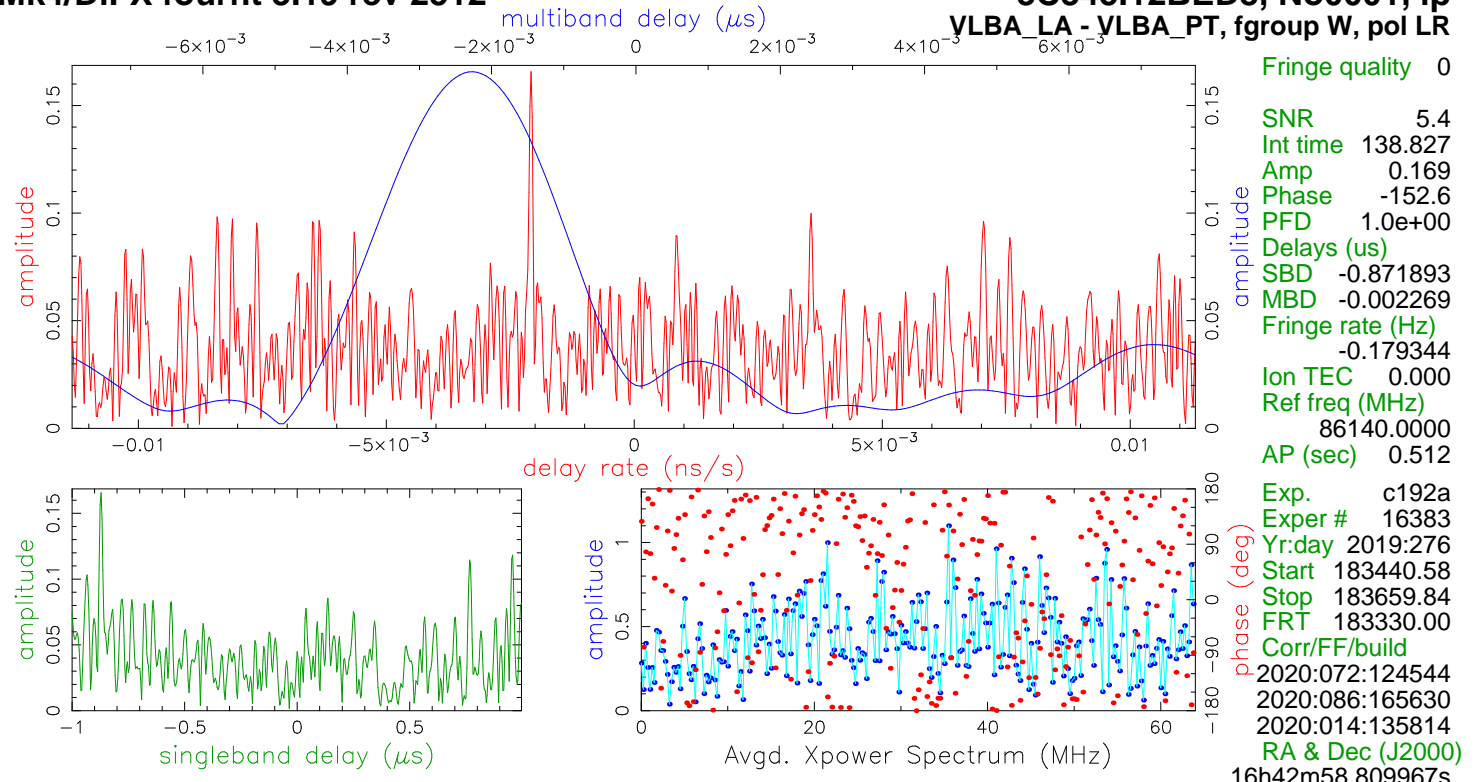
ph/seg (deg)	75.9	Theor.	32.5	Amplitude	0.169 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	120.8	Search (2048X32)	0.164	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	45.7	Inc. seg. avg.	0.300	Inc. frq. avg.	0.197	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.1	Inc. frq. avg.	0.197			Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 63.9 el 37.8 pa -72.0 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 simultaneous interpolator

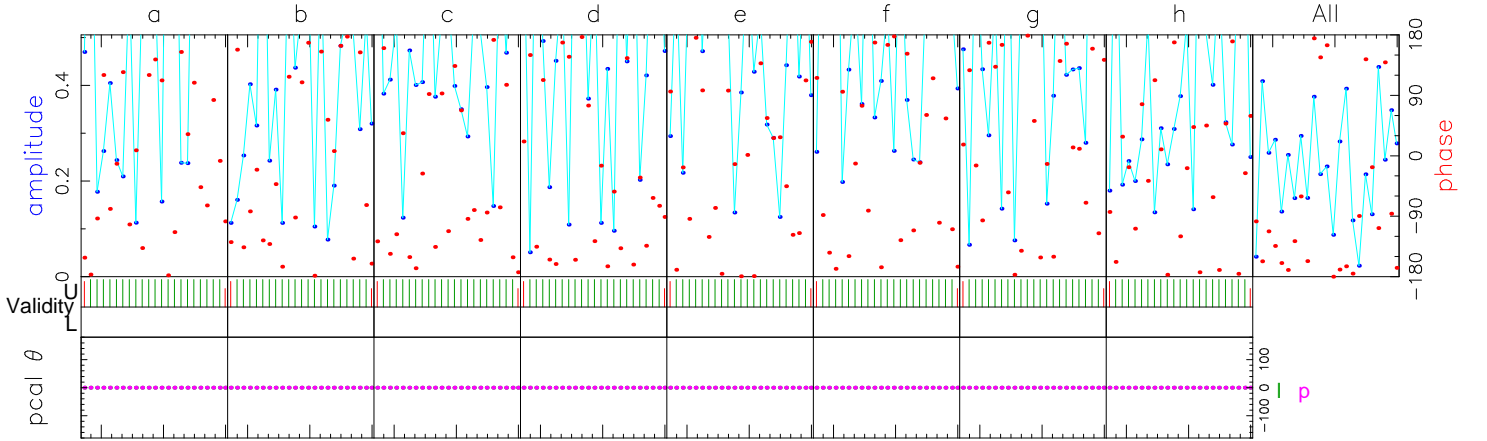
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IP.W.190.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, lp  
VLBA\_LA - VLBA\_PT, fgroup W, pol LR



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
	-152.1	-162.5	-143.4	-145.3	-163.6	-150.7	-174.0	-122.5	Phase	-152.6
	0.2	0.2	0.2	0.3	0.1	0.2	0.1	0.1	Ampl.	0.2
	500.3	436.6	511.2	344.0	415.7	140.5	381.3	341.0	Sbd box	33.8
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.84664043731E+02		Apriori delay (usec)		5.85541312802E+02		Resid mbdelay (usec)		-2.26907E-03	+/- 2.0E-04
Sband delay (usec)	5.84669419802E+02		Apriori clock (usec)		-1.2646159E+01		Resid sbdelay (usec)		-8.71893E-01	+/- 1.6E-03
Phase delay (usec)	5.85541307881E+02		Apriori clockrate (us/s)		-5.5535860E-07		Resid phdelay (usec)		-4.92110E-06	+/- 6.9E-07
Delay rate (us/s)	-2.84931181604E-02		Apriori rate (us/s)		-2.84910361502E-02		Resid rate (us/s)		-2.08201E-06	+/- 8.6E-09
Total phase (deg)	93.9		Apriori accel (us/s/s)		-1.66334602352E-06		Resid phase (deg)		-152.6	+/- 21.4

ph/seg (deg) 51.7 51.3 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

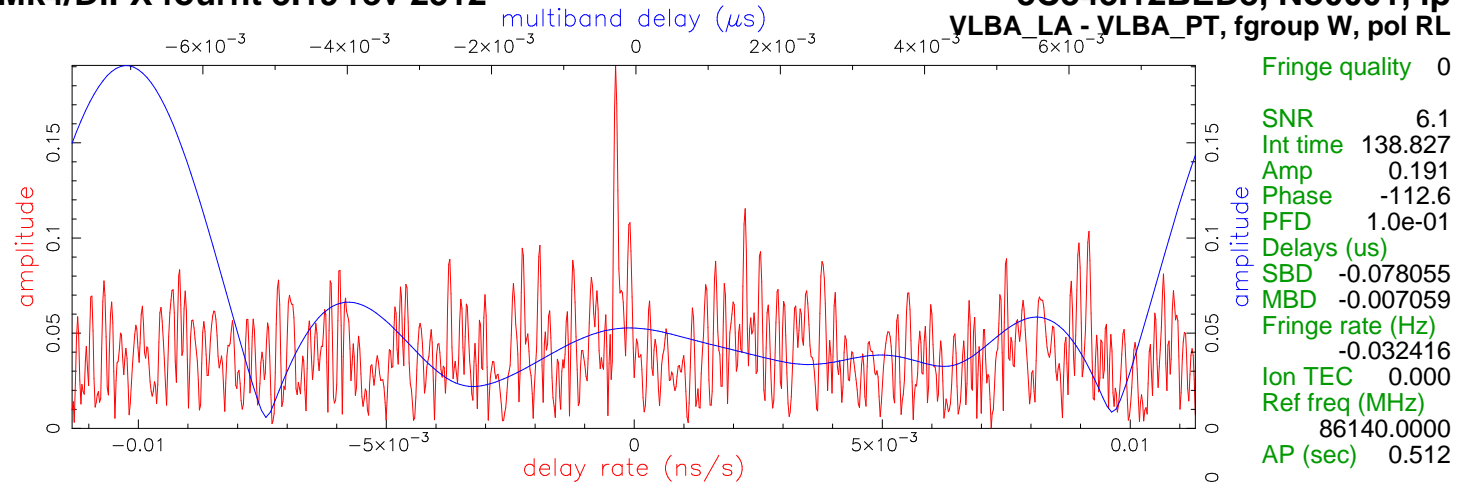
amp/seg (%) 79.2 89.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 17.0 30.2 Inc. seg. avg. 0.170 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 36.8 52.8 Inc. frq. avg. 0.150 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 209.779 31.809 simultaneous interpolator

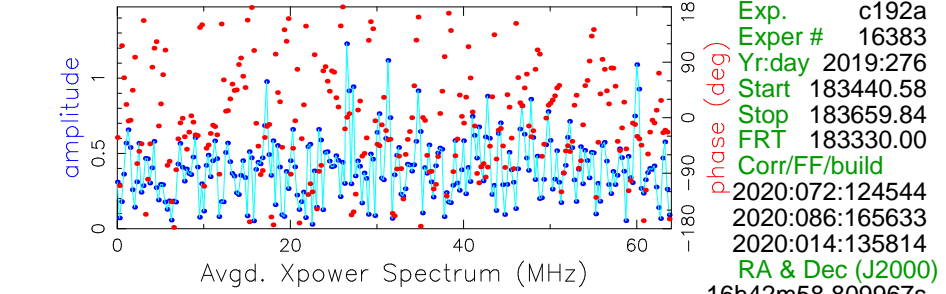
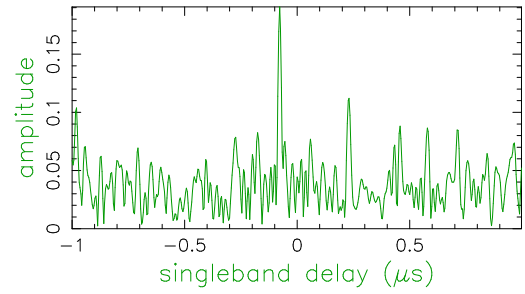
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lp.W.192.12BED8



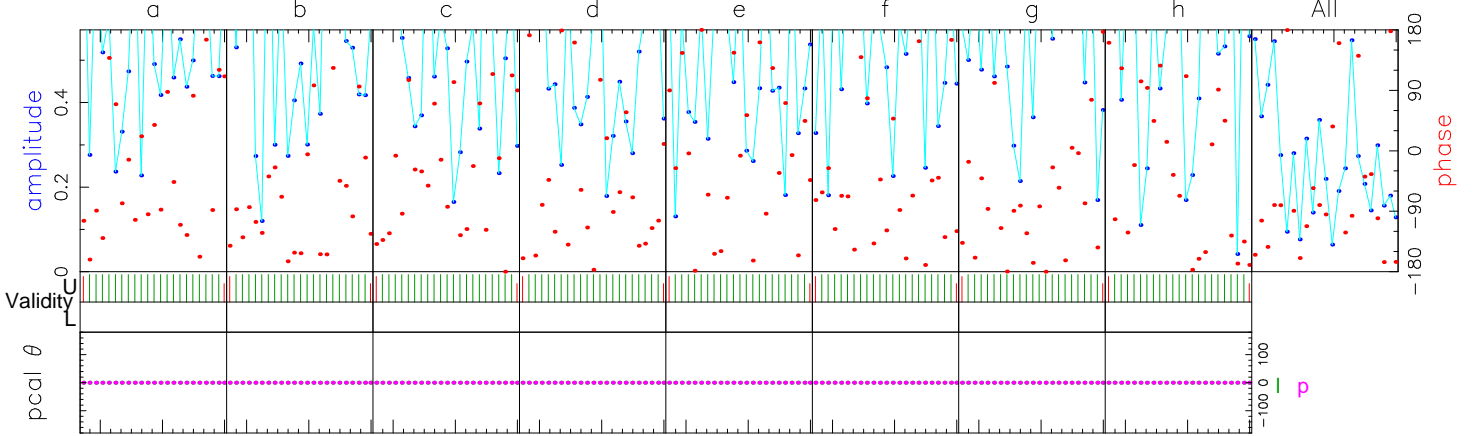
Fringe quality 0

SNR 6.1  
Int time 138.827  
Amp 0.191  
Phase -112.6  
PFD 1.0e-01  
Delays (us)  
SBD -0.078055  
MBD -0.007059  
Fringe rate (Hz)  
-0.032416  
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  
2020:086:165633  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

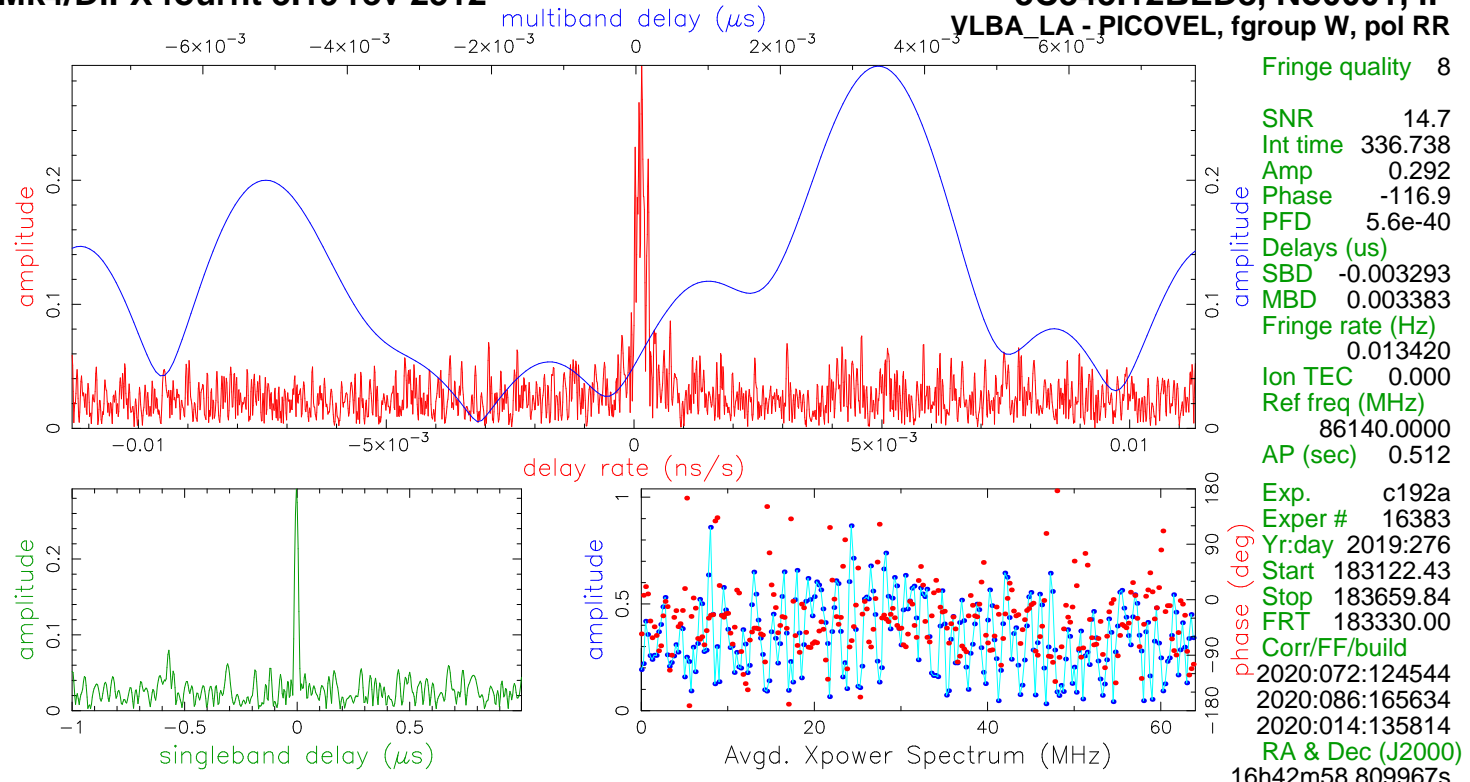


Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec

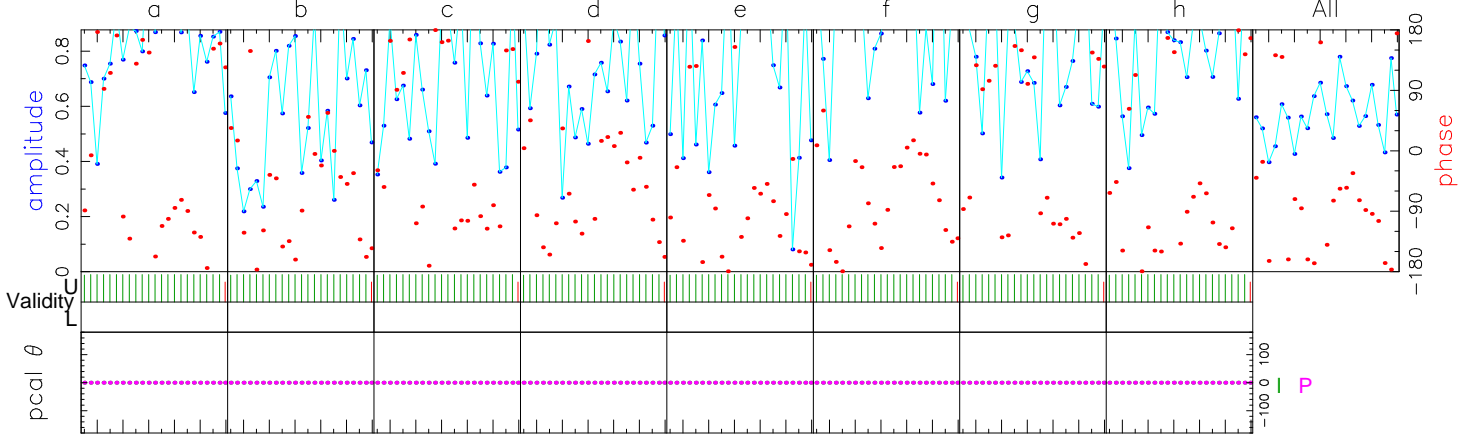


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.2	-103.5	-86.4	-131.7	-135.8	-108.2	-99.4	-126.8	Phase	-112.6
	0.2	0.3	0.1	0.3	0.1	0.3	0.2	0.1	Ampl.	0.2
	6.1	236.9	69.7	121.6	340.8	504.4	365.6	183.7	Sbd box	237.0
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	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)	5.85456128402E+02		Apriori delay (usec)		5.85541312802E+02		Resid mbdelay (usec)		-7.05940E-03	+/- 1.8E-04
Sband delay (usec)	5.85463257552E+02		Apriori clock (usec)		-1.2646159E+01		Resid sbdelay (usec)		-7.80552E-02	+/- 1.4E-03
Phase delay (usec)	5.85541309171E+02		Apriori clockrate (us/s)		-5.5535860E-07		Resid phdelay (usec)		-3.63080E-06	+/- 6.0E-07
Delay rate (us/s)	-2.84914124638E-02		Apriori rate (us/s)		-2.84910361502E-02		Resid rate (us/s)		-3.76314E-07	+/- 7.5E-09
Total phase (deg)	133.9		Apriori accel (us/s/s)		-1.66334602352E-06		Resid phase (deg)		-112.6	+/- 18.7

ph/seg (deg) 59.2 44.7 Search (1024X32) 0.186 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 85.2 78.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.0 26.4 Inc. seg. avg. 0.204 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.3 46.1 Inc. frq. avg. 0.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 l: az 63.9 el 37.8 pa -72.0 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 209.779 31.809 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/lp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/lp.W.207.12BED8



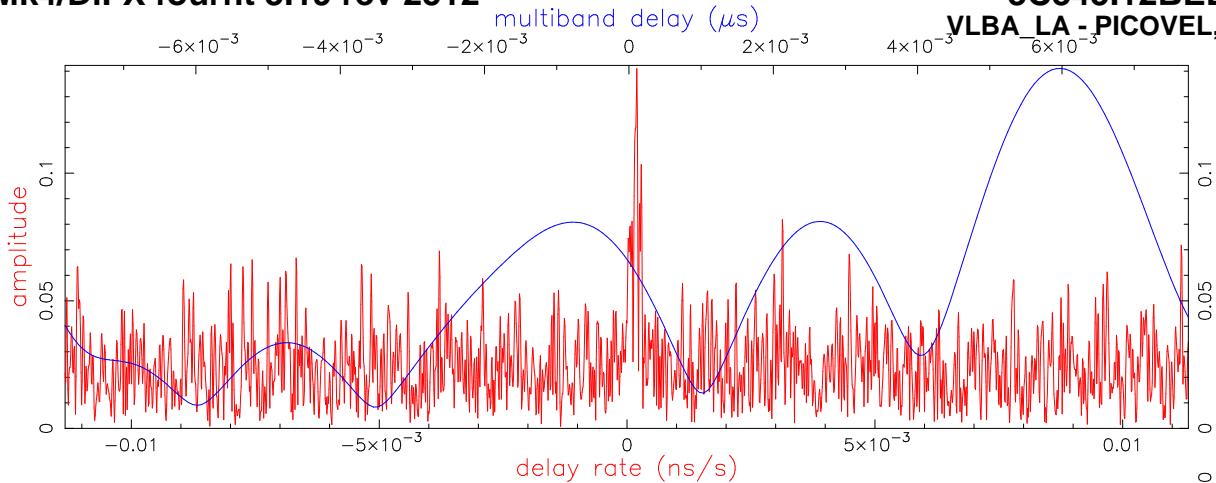
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.51232868449E+03	-5.51233535960E+03	-5.51233207087E+03	-5.51232868449E+03	-5.51233206710E+03	-5.51233206710E+03	-5.51233206710E+03	-5.51233206710E+03		
Sband delay (usec)	-149.9	-61.9	-141.0	-70.3	-114.9	-62.9	-163.6	-135.8		
Phase delay (usec)	0.4	0.2	0.3	0.3	0.4	0.4	0.4	0.5		
Delay rate (us/s)	256.6	256.9	257.4	257.6	257.0	257.0	257.0	255.4		
Total phase (deg)			-210.6							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

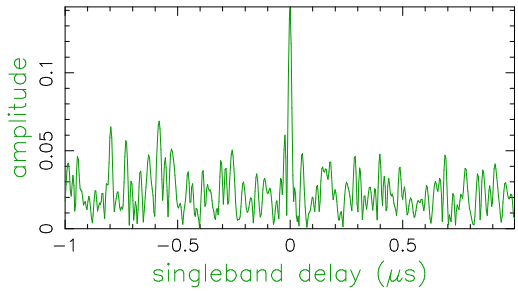
ph/seg (deg) 61.1 18.7 Search (2048X32) 0.290 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 101.3 32.7 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 45.3 11.0 Inc. seg. avg. 0.543 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.4 19.3 Inc. frq. avg. 0.361 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IP.W.209.12BED8



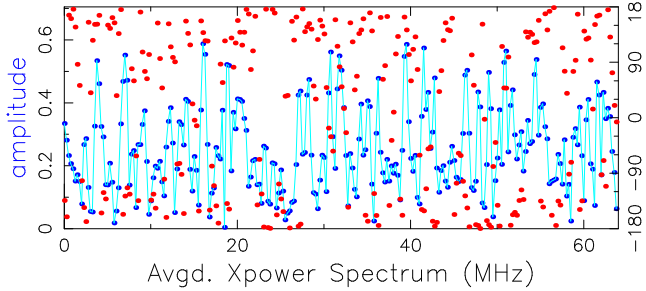


Fringe quality 0

SNR 7.1  
Int time 336.738  
Amp 0.142  
Phase 84.0  
PFD 2.9e-04  
Delays (us)  
SBD -0.001141  
MBD 0.005916  
Fringe rate (Hz)  
0.017268  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

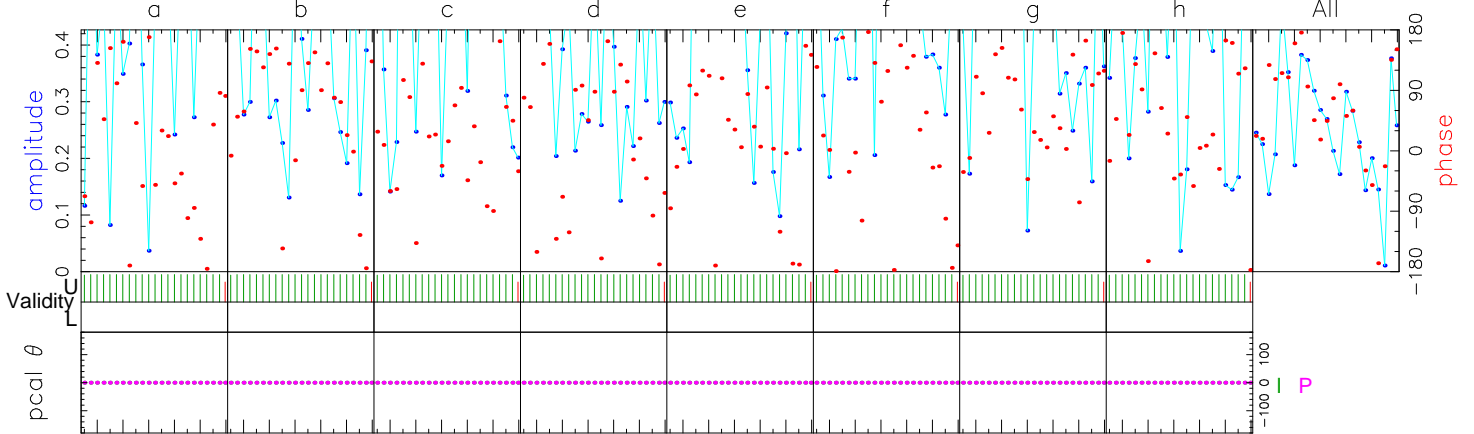


delay rate (ns/s)



Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183122.43  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165638  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-5.51232615073E+03	Apriori delay (usec)	-5.51233206710E+03	Resid mbdelay (usec)	5.91637E-03	+/-	1.5E-04
Sband delay (usec)	-5.51233320785E+03	Apriori clock (usec)	-6.5028608E-01	Resid sbdelay (usec)	-1.14075E-03	+/-	1.2E-03
Phase delay (usec)	-5.51233206440E+03	Apriori clockrate (us/s)	1.5279932E-09	Resid phdelay (usec)	2.70748E-06	+/-	5.2E-07
Delay rate (us/s)	1.45254581152E+00	Apriori rate (us/s)	1.45254561106E+00	Resid rate (us/s)	2.00463E-07	+/-	2.7E-09
Total phase (deg)	-9.7	Apriori accel (us/s/s)	2.79932495079E-05	Resid phase (deg)	84.0	+/-	16.1

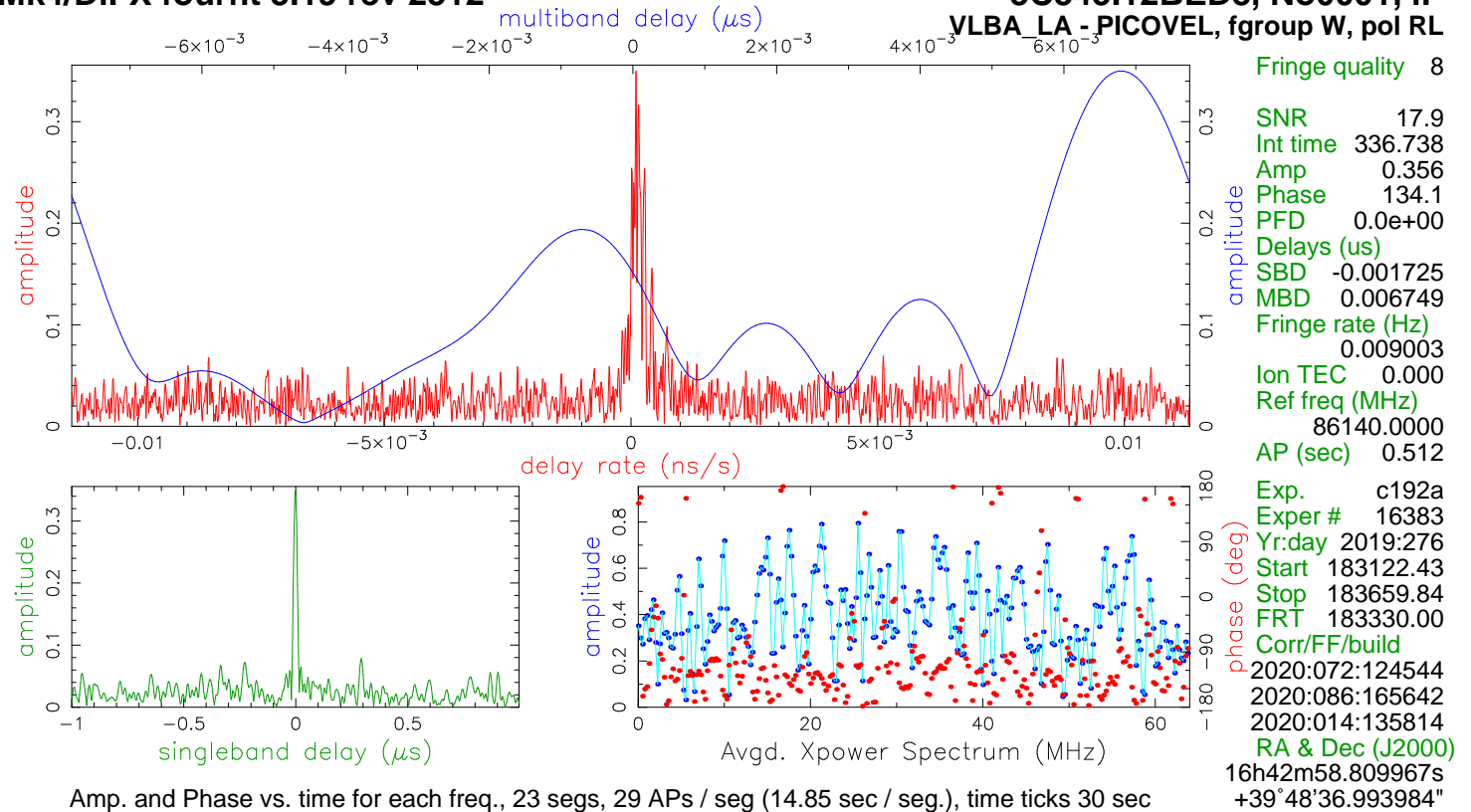
ph/seg (deg)	RMS 67.1	Theor. 38.5	Amplitude Search (2048X32)	0.142 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	105.3	67.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	48.1	22.7	Inc. seg. avg.	0.206	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	51.6	39.6	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 63.9 el 37.8 pa -72.0 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 simultaneous interpolator

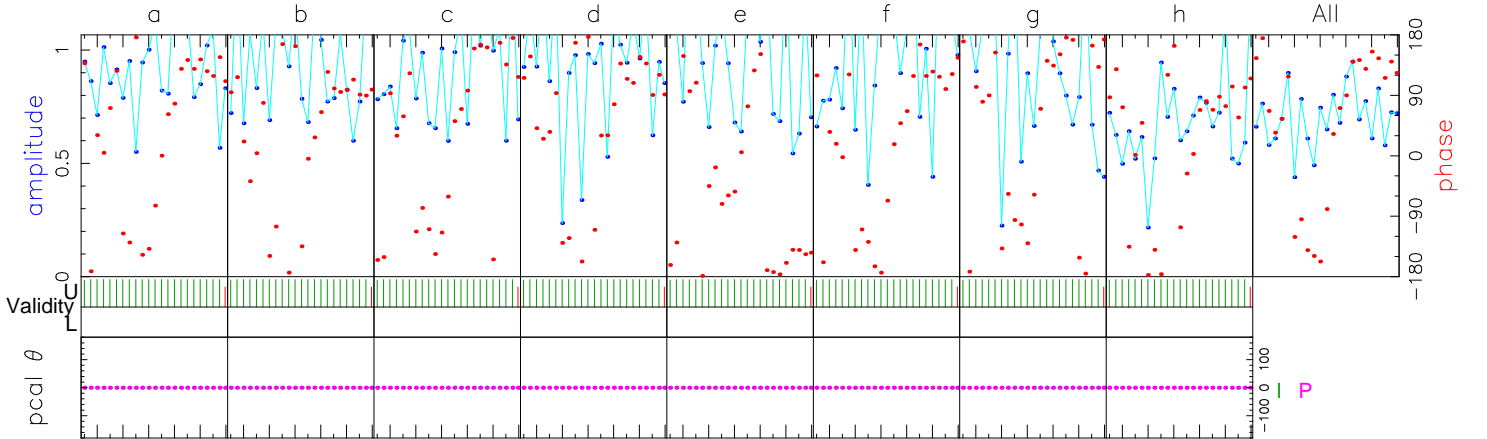
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IP.W.224.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, IP  
VLBA\_LA - PICOVEL, fgroup W, pol RL



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

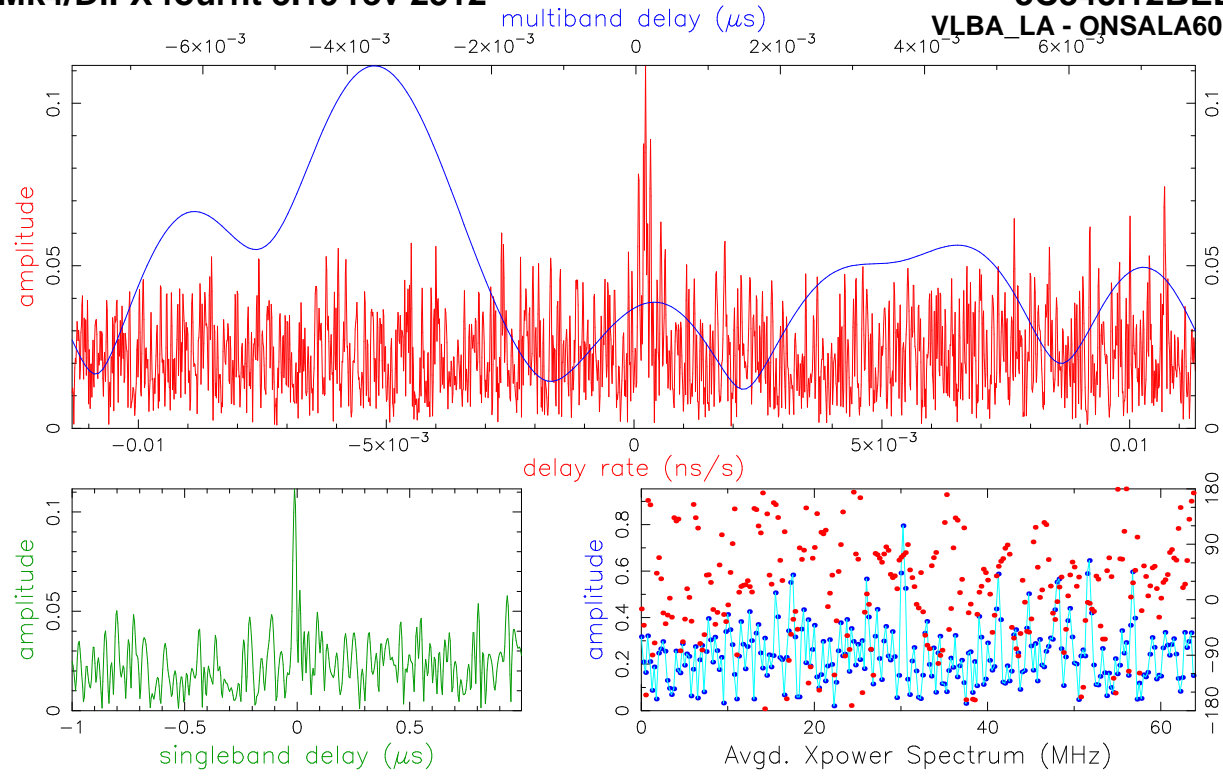


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
134.3	100.4	163.3	111.5	-171.4	120.2	165.2	94.9	94.9	Phase	134.1
0.4	0.4	0.4	0.5	0.4	0.4	0.5	0.3	0.3	Ampl.	0.4
255.6	256.3	256.7	255.8	256.0	256.0	255.5	254.1	254.1	Sbd box	256.6
U/L 659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0	APs used	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000	1000	1000	1000	1000	1000		
I 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)	-5.51234094285E+03		Apriori delay (usec)	-5.51233206710E+03	Resid mbdelay (usec)	6.74925E-03	+/-	6.1E-05		
Sband delay (usec)	-5.51233379235E+03		Apriori clock (usec)	-6.5028608E-01	Resid sbdelay (usec)	-1.72525E-03	+/-	4.8E-04		
Phase delay (usec)	-5.51233206278E+03		Apriori clockrate (us/s)	1.5279932E-09	Resid phdelay (usec)	4.32352E-06	+/-	2.1E-07		
Delay rate (us/s)	1.45254571558E+00		Apriori rate (us/s)	1.45254561106E+00	Resid rate (us/s)	1.04521E-07	+/-	1.1E-09		
Total phase (deg)		40.4	Apriori accel (us/s/s)	2.79932495079E-05	Resid phase (deg)	134.1	+/-	6.4		

	RMS	Theor.	Amplitude	0.356 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	68.9	15.4	Search (2048X32)	0.335	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	103.8	26.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	36.9	9.1	Inc. seg. avg.	0.679	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	21.3	15.8	Inc. frq. avg.	0.403	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

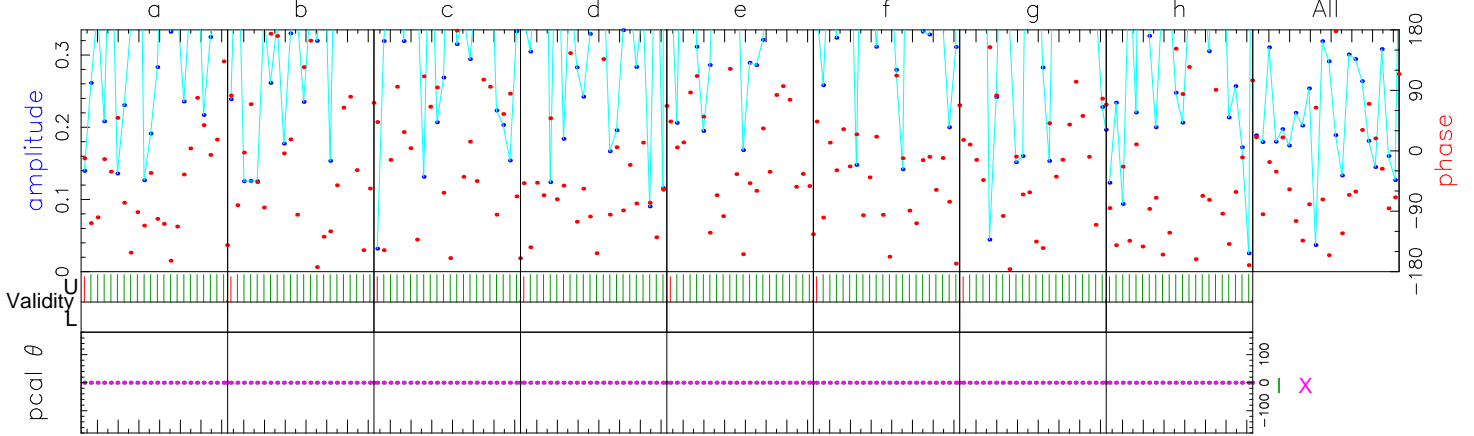
I: az 63.9 el 37.8 pa -72.0 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -10775.658 1837.797 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IP.W.242.12BED8



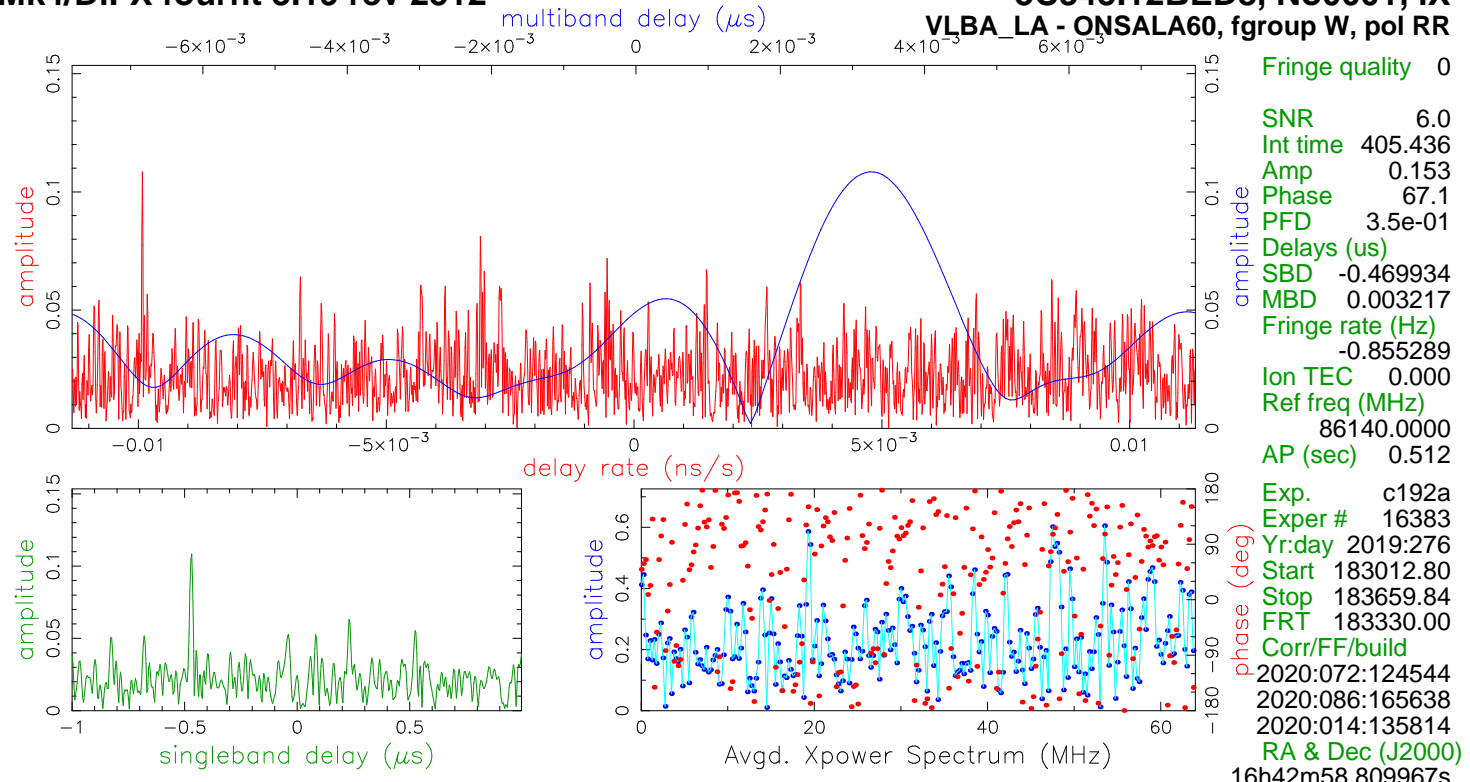
Fringe quality 0  
 SNR 6.1  
 Int time 405.436  
 Amp 0.112  
 Phase -56.9  
 PFD 1.9e-01  
 Delays (us)  
 SBD -0.011247  
 MBD -0.003587  
 Fringe rate (Hz) 0.020407  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80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

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

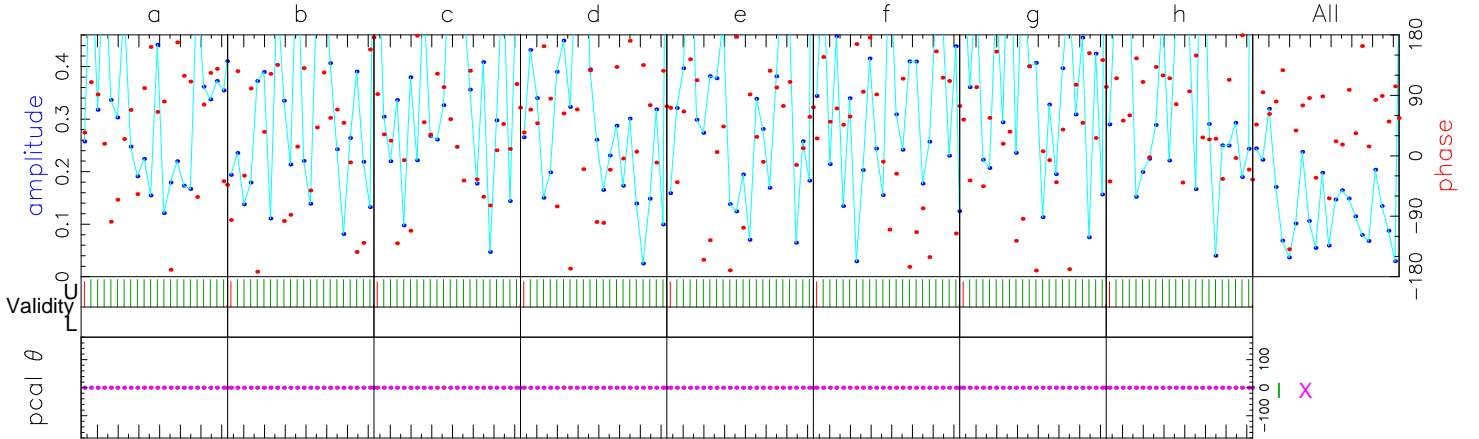


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-70.0	-88.3	34.2	-78.1	-8.9	-47.2	-30.9	-127.4	Phase	-56.9
	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1
	391.2	509.7	313.4	254.2	252.0	253.3	254.3	251.8	Sbd box	254.1
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0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

ph/seg (deg) 68.0 44.7 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 111.4 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) 54.7 26.4 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 54.6 46.0 Inc. frq. avg. 0.130 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IX.W.205.12BED8



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.74981294590E+03					-3.74934741338E+03			3.21749E-03	+/- 1.8E-04
Sband delay (usec)	-3.74981734763E+03					-3.3065510E+01			-4.69934E-01	+/- 1.4E-03
Phase delay (usec)	-3.74934741122E+03					-8.7947201E-07			2.16453E-06	+/- 6.1E-07
Delay rate (us/s)	1.39351595673E+00					1.39352588580E+00			-9.92906E-06	+/- 2.6E-09
Total phase (deg)			-0.8			1.14108435483E-06			67.1	+/- 19.0
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) 59.7 45.6 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

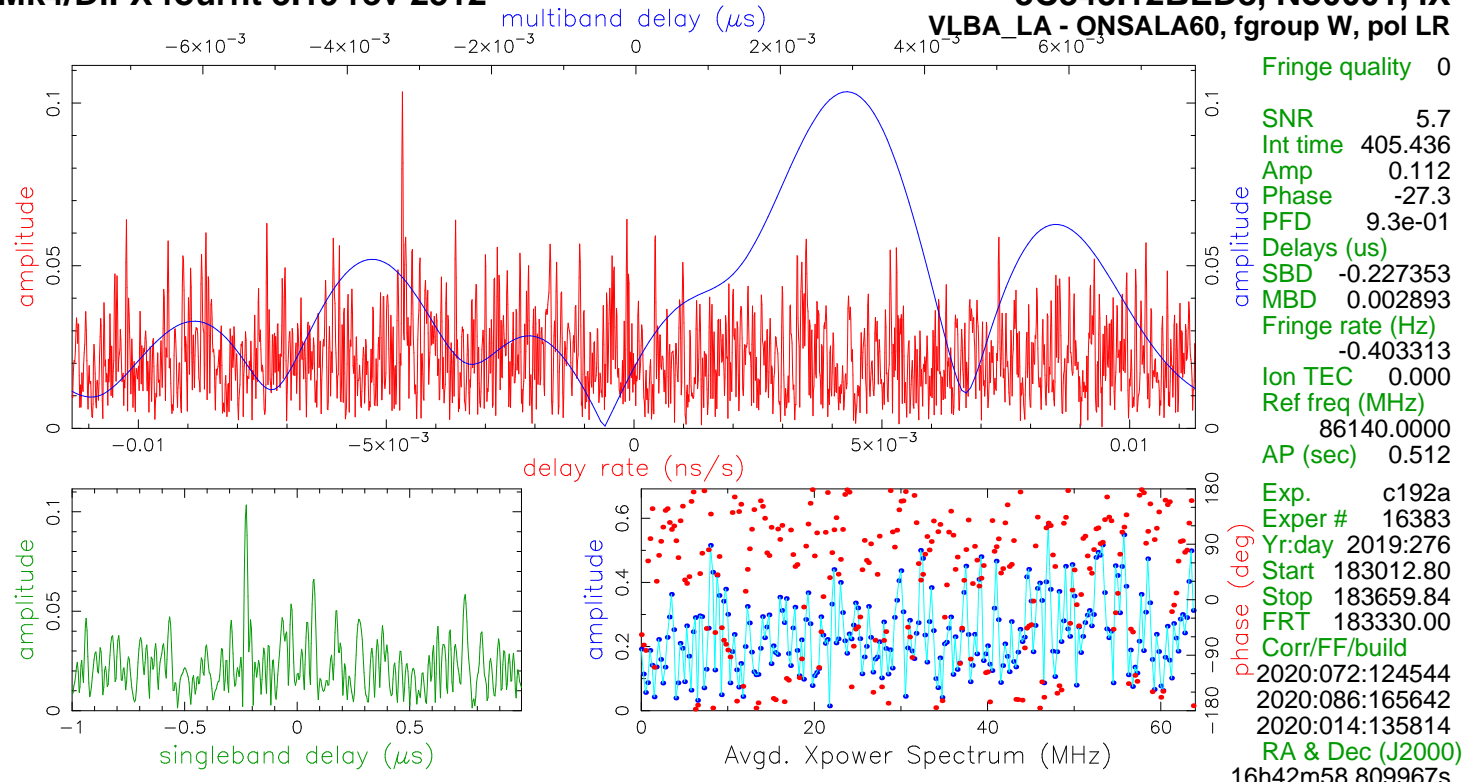
amp/seg (%) 75.8 79.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 36.6 26.9 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

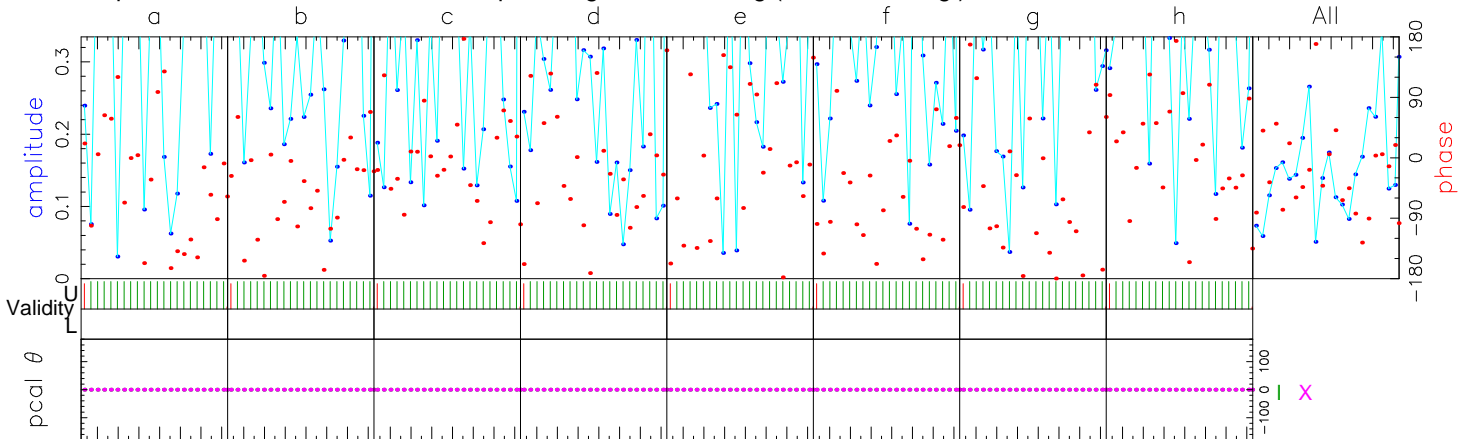
amp/frq (%) 37.0 46.9 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IX.W.225.12BED8



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



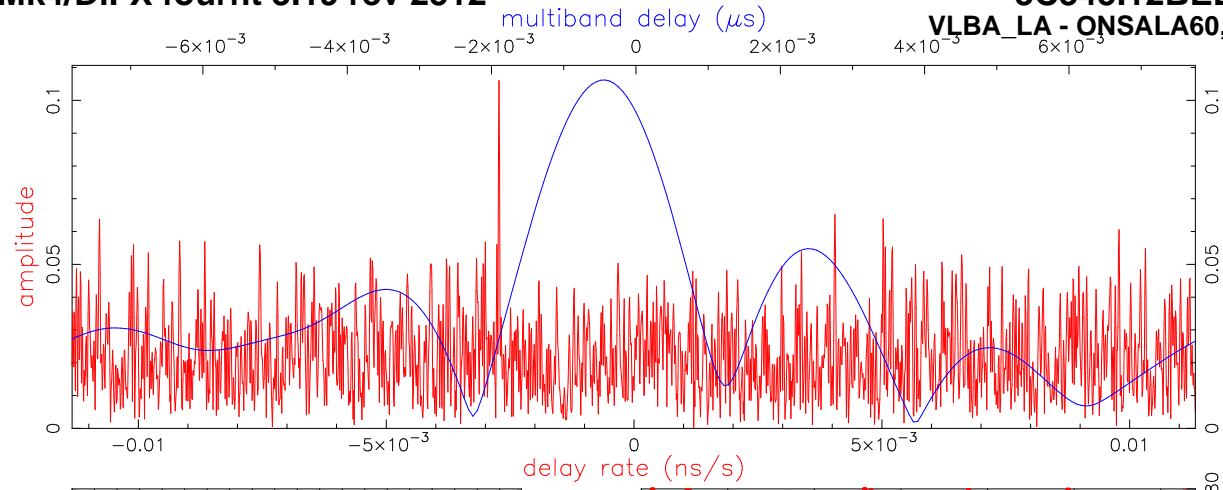
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-14.1	-41.1	-14.0	-26.3	-54.8	-62.9	-97.4	16.2	Phase	-27.3
	0.1	0.2	0.2	0.1	0.0	0.1	0.1	0.2	Ampl.	0.1
	176.0	198.8	198.7	105.0	340.4	211.9	65.4	199.0	Sbd box	198.8
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.74957889513E+03		Apriori delay (usec)	-3.74934741338E+03	Resid mbdelay (usec)	2.89325E-03	+/-	1.9E-04		
Sband delay (usec)	-3.74957476688E+03		Apriori clock (usec)	-3.3065510E+01	Resid sbdelay (usec)	-2.27353E-01	+/-	1.5E-03		
Phase delay (usec)	-3.74934741426E+03		Apriori clockrate (us/s)	-8.7947201E-07	Resid phdelay (usec)	-8.81940E-07	+/-	6.5E-07		
Delay rate (us/s)	1.39352120373E+00		Apriori rate (us/s)	1.39352588580E+00	Resid rate (us/s)	-4.68206E-06	+/-	2.8E-09		
Total phase (deg)		-95.3	Apriori accel (us/s/s)	1.14108435483E-06	Resid phase (deg)	-27.3	+/-	20.0		

	RMS	Theor.	Amplitude	0.112 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.6	48.0	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	81.0	83.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	39.5	28.3	Inc. seg. avg.	0.121	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	50.9	49.4	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

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

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IX.W.246.12BED8

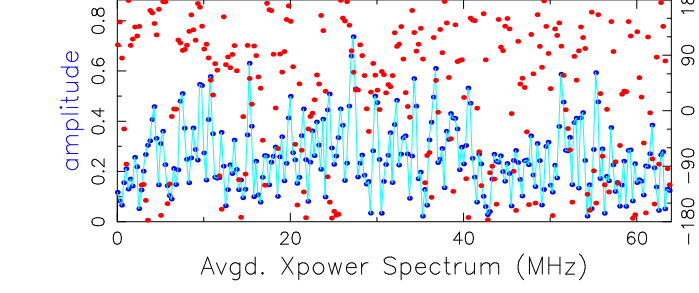
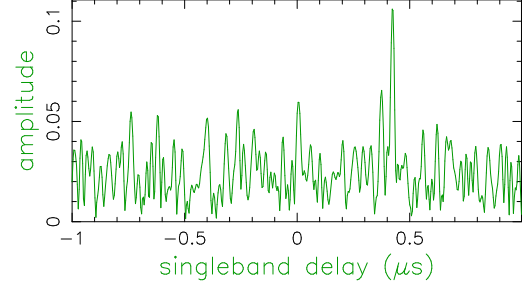




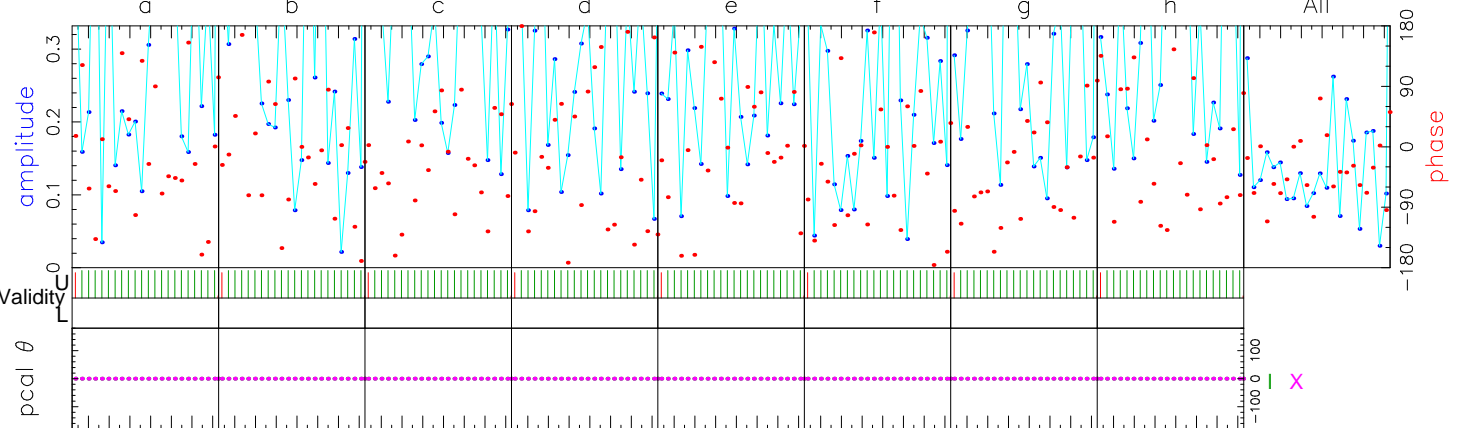
Fringe quality 0

SNR 5.9  
 Int time 405.436  
 Amp 0.111  
 Phase -40.1  
 PFD 5.0e-01  
 Delays (us)  
 SBD 0.423687  
 MBD -0.000383  
 Fringe rate (Hz)  
 -0.234765  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165649  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"

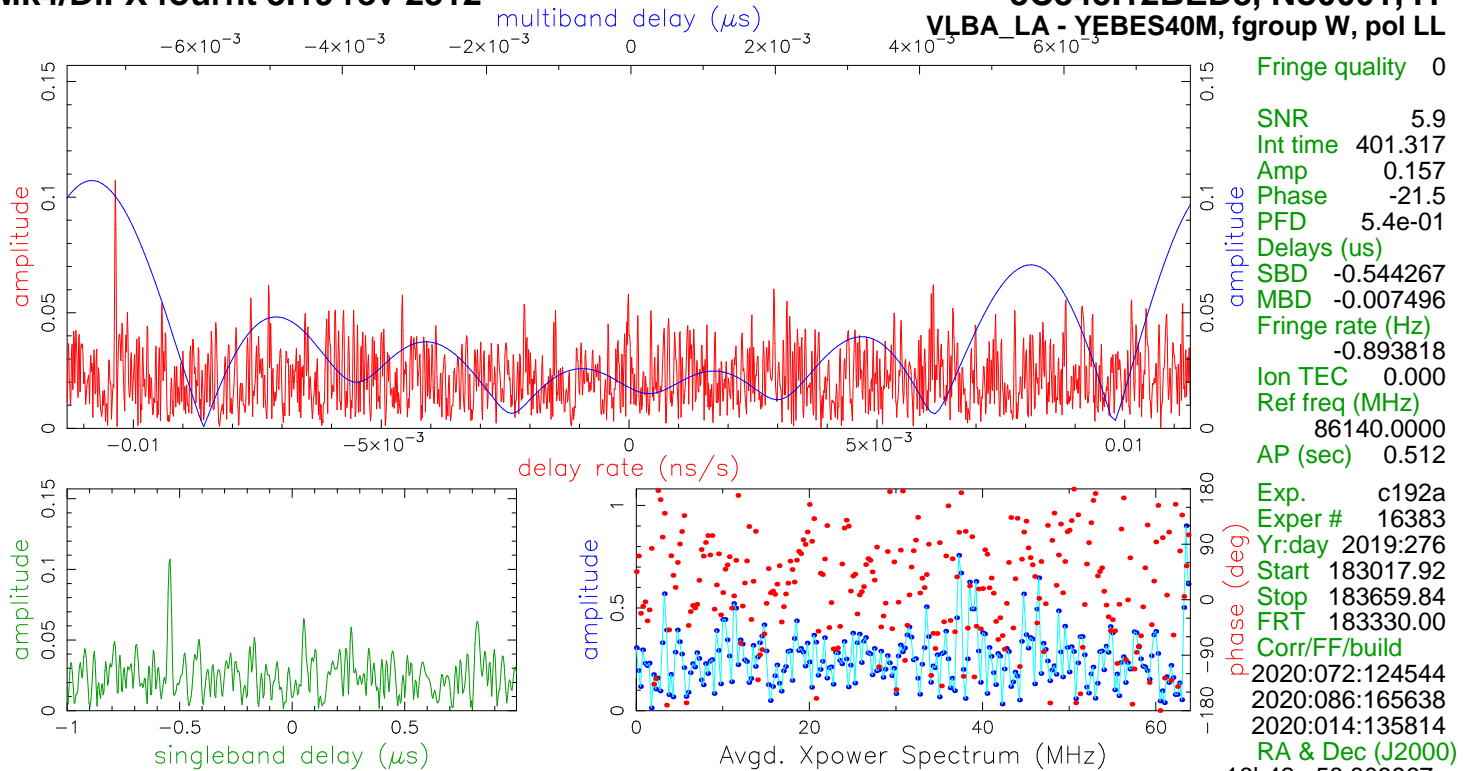


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec

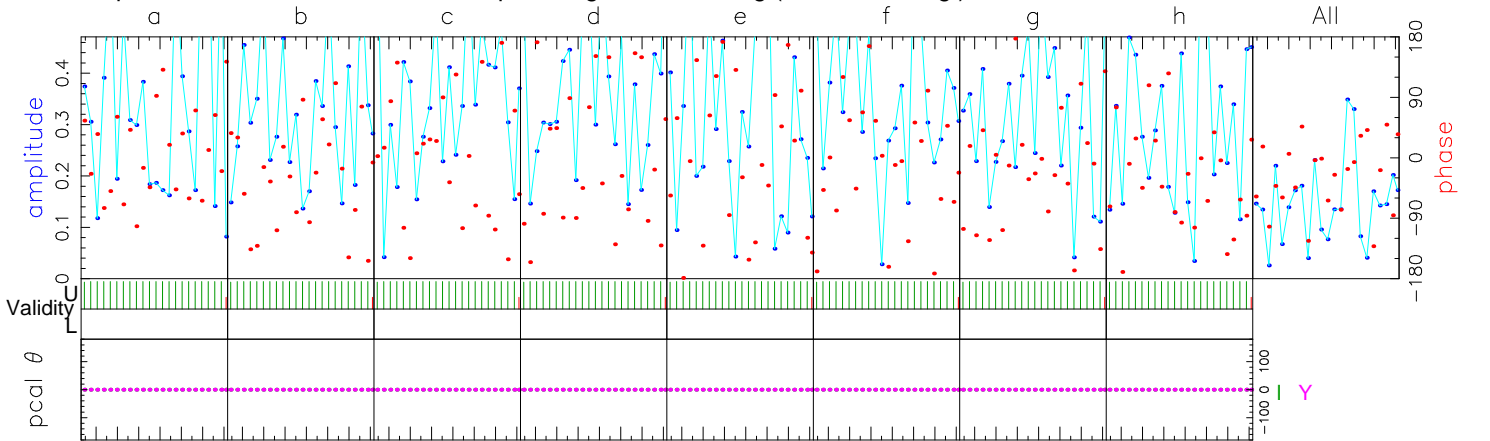


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-57.6	-23.5	-23.5	-85.7	14.2	-50.4	-50.8	-47.9	Phase	-40.1
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	58.3	139.8	303.0	503.1	407.7	337.2	365.2	359.0	Sbd box	365.5
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0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

ph/seg (deg) 42.8 46.2 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.5 80.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.1 27.2 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.0 47.5 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  
 I: az 63.9 el 37.8 pa -72.0 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -10385.731 -1555.579 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IX.W.275.12BED8 simultaneous interpolator



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

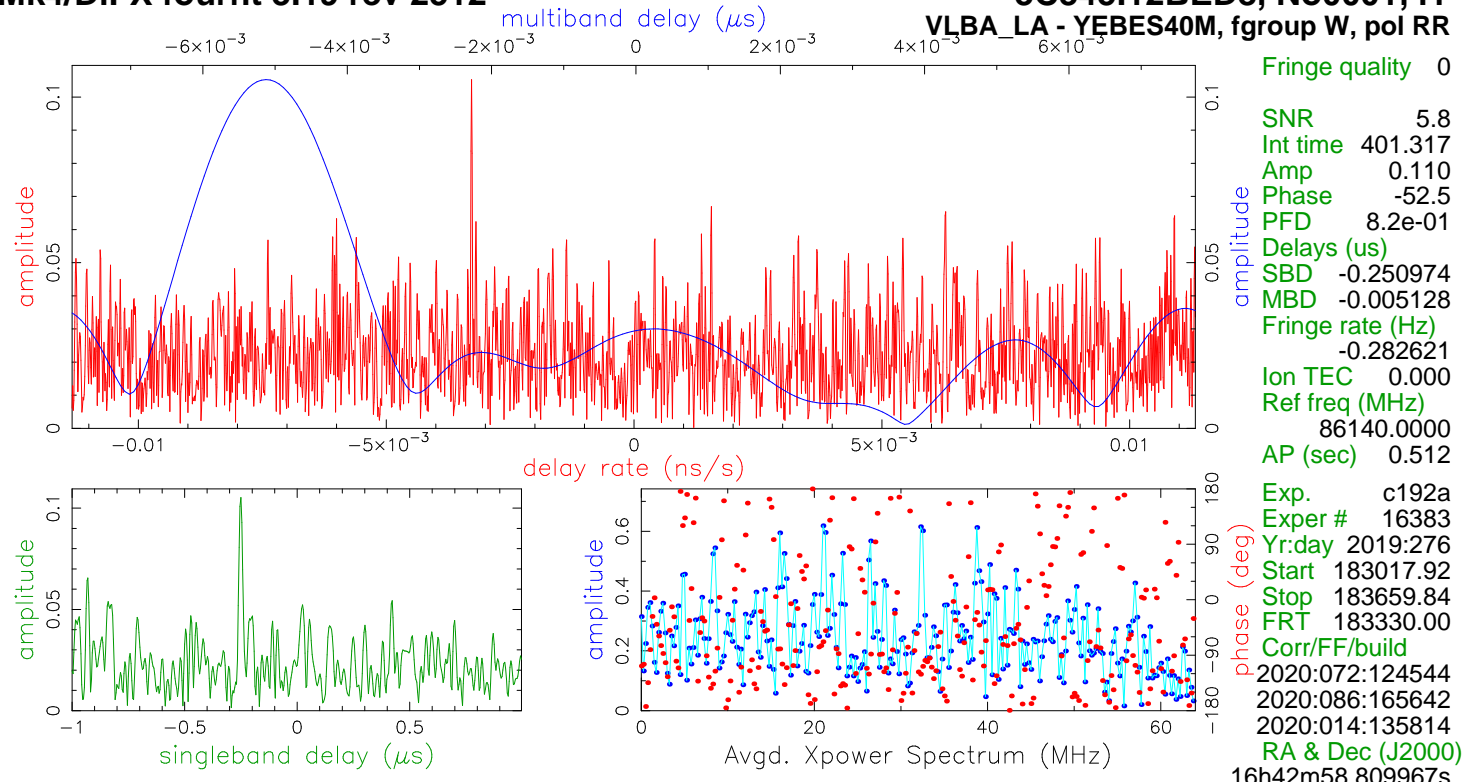


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.3	-21.3	-30.0	-65.5	-31.0	14.6	-14.4	-30.0	Phase	-21.5
	0.3	0.2	0.1	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	117.7	22.0	297.5	144.3	137.3	4.8	497.5	64.5	Sbd box	117.7
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

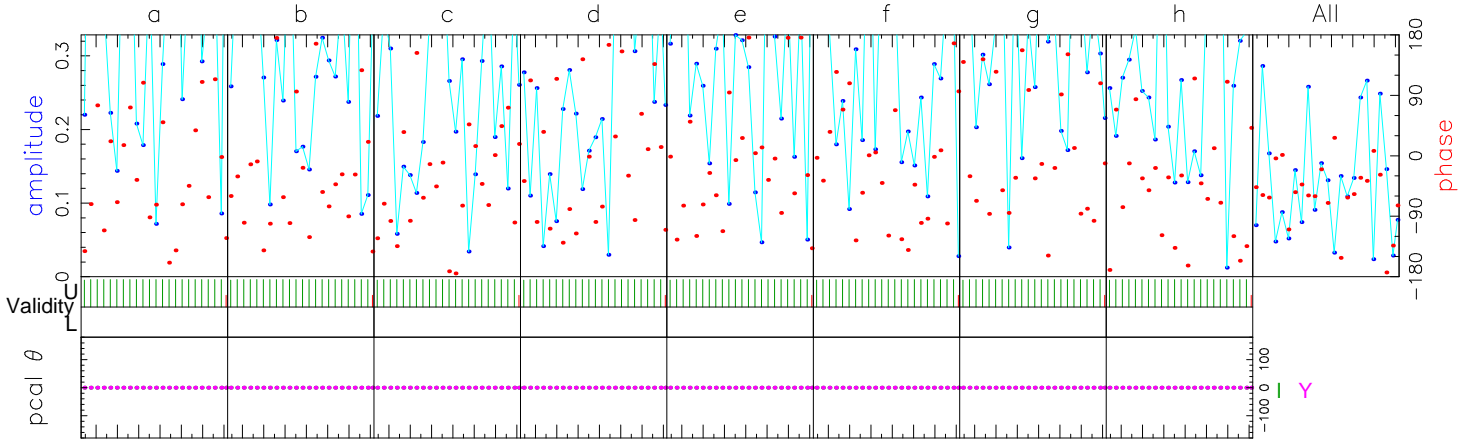
Group delay (usec)(sbd)	-5.61886721125E+03	Apriori delay (usec)	-5.61832846513E+03	Resid mbdelay (usec)	-7.49612E-03	+/-	1.8E-04
Sband delay (usec)	-5.61887273213E+03	Apriori clock (usec)	-1.0392235E+01	Resid sbdelay (usec)	-5.44267E-01	+/-	1.5E-03
Phase delay (usec)	-5.61832846582E+03	Apriori clockrate (us/s)	-5.7147201E-07	Resid phdelay (usec)	-6.94704E-07	+/-	6.2E-07
Delay rate (us/s)	1.42967462842E+00	Apriori rate (us/s)	1.42968500476E+00	Resid rate (us/s)	-1.03763E-05	+/-	2.7E-09
Total phase (deg)	-16.6	Apriori accel (us/s/s)	2.51222621771E-05	Resid phase (deg)	-21.5	+/-	19.3

ph/seg (deg)	52.9	Theor.	46.3	Amplitude	0.157 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	84.0		80.9	Search (2048X32)	0.104	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	24.3		27.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	51.9		47.7	Inc. seg. avg.	0.163	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.146	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10610.991 1328.915 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IY.W.226.12BED8



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



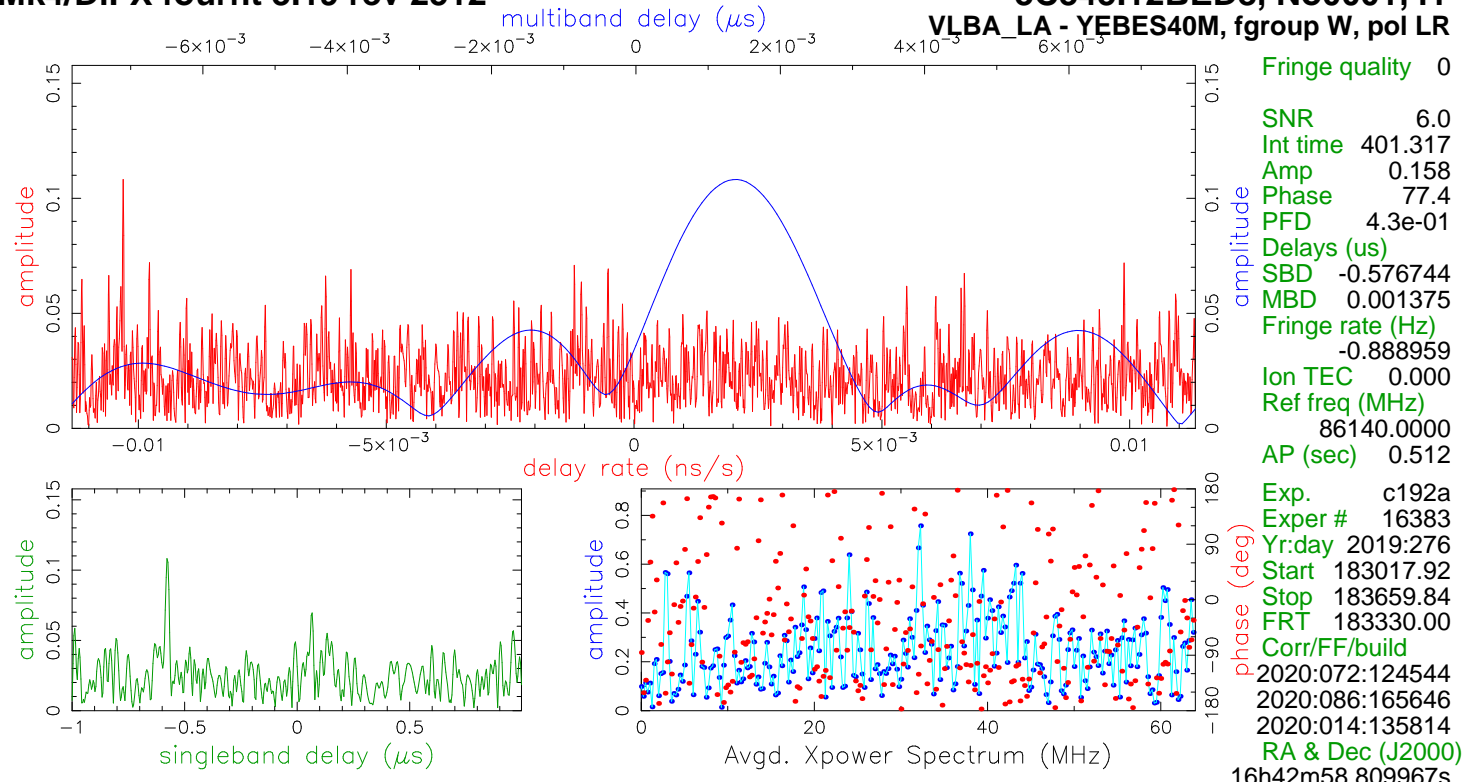
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-36.8	-60.8	-54.4	-36.8	-70.0	-34.1	-37.0	-64.1	Phase	-52.5
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	429.0	192.6	310.1	329.5	365.4	44.0	315.6	229.0	Sbd box	192.8
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.61858359363E+03	Apriori delay (usec)	-5.61832846513E+03	Resid mbdelay (usec)	-5.12850E-03	+/-	1.9E-04
Sband delay (usec)	-5.61857943888E+03	Apriori clock (usec)	-1.0392235E+01	Resid sbdelay (usec)	-2.50974E-01	+/-	1.5E-03
Phase delay (usec)	-5.61832846682E+03	Apriori clockrate (us/s)	-5.7147201E-07	Resid phdelay (usec)	-1.69233E-06	+/-	6.4E-07
Delay rate (us/s)	1.42968172381E+00	Apriori rate (us/s)	1.42968500476E+00	Resid rate (us/s)	-3.28095E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	2.51222621771E-05	Resid phase (deg)	-52.5	+/-	19.8

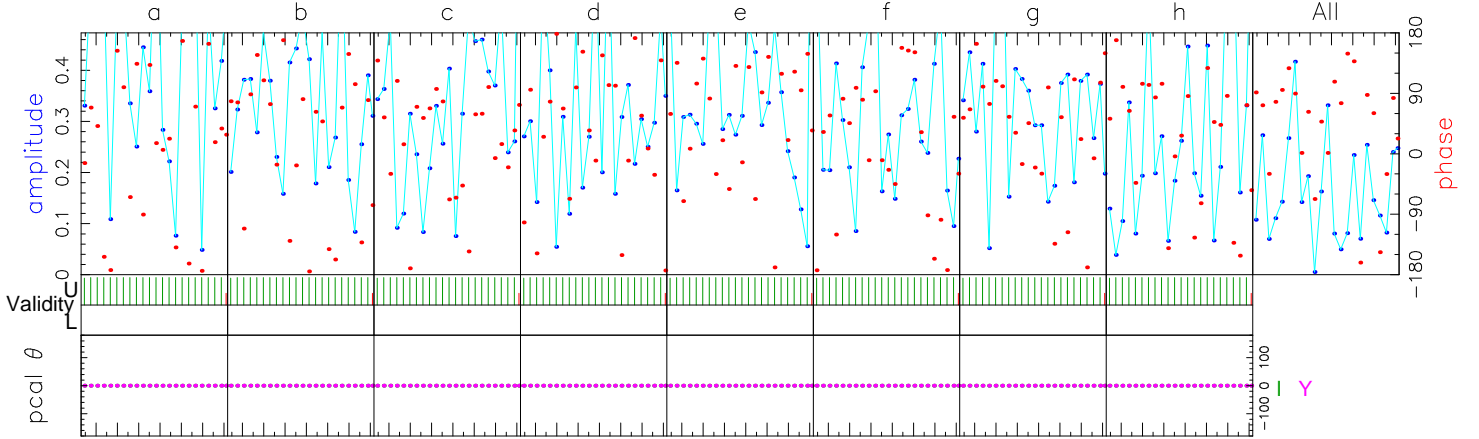
ph/seg (deg)	48.5	Theor.	47.4	Search (2048X32)	0.101	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.9		82.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	16.3		28.0	Inc. seg. avg.	0.102	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.9		48.8	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10610.991 1328.915 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IY.W.243.12BED8



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

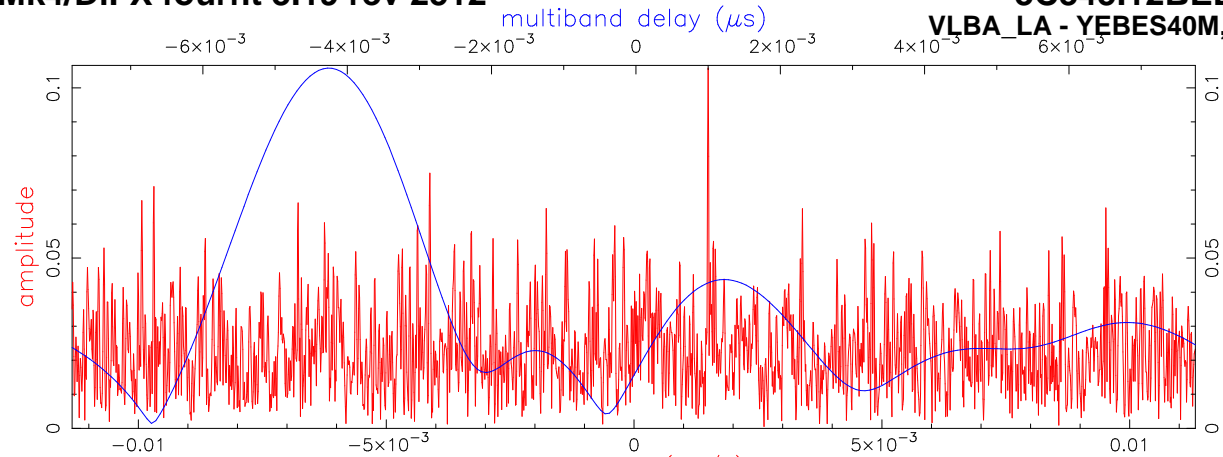


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.61890521497E+03		Apriori delay (usec)		-5.61832846513E+03		Resid mbdelay (usec)		1.37516E-03	+/- 1.8E-04
Sband delay (usec)	-5.61890520913E+03		Apriori clock (usec)		-1.0392235E+01		Resid sbdelay (usec)		-5.76744E-01	+/- 1.4E-03
Phase delay (usec)	-5.61832846263E+03		Apriori clockrate (us/s)		-5.7147201E-07		Resid phdelay (usec)		2.49469E-06	+/- 6.2E-07
Delay rate (us/s)	1.42967468483E+00		Apriori rate (us/s)		1.42968500476E+00		Resid rate (us/s)		-1.03199E-05	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.51222621771E-05		Resid phase (deg)		77.4	+/- 19.1

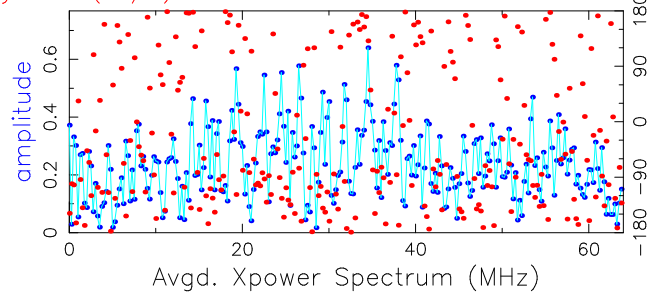
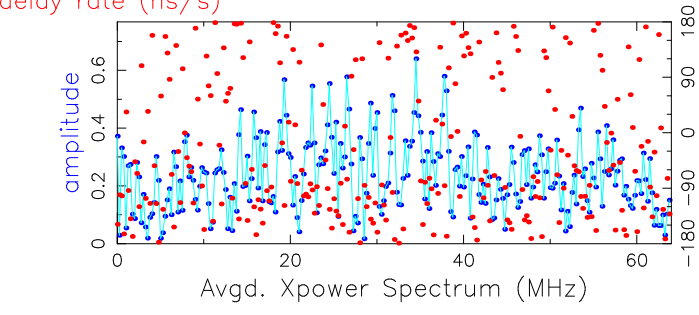
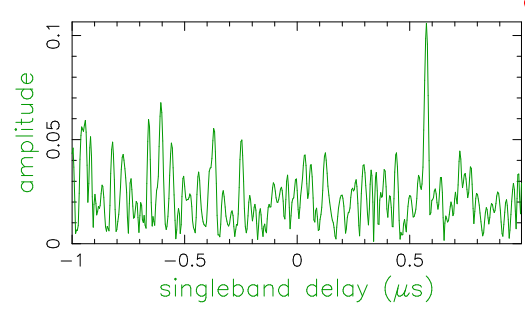
	RMS	Theor.	Amplitude	0.158 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	68.2	45.9	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	104.3	80.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.6	27.1	Inc. seg. avg.	0.180	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	28.6	47.3	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10610.991 1328.915 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IY.W.264.12BED8

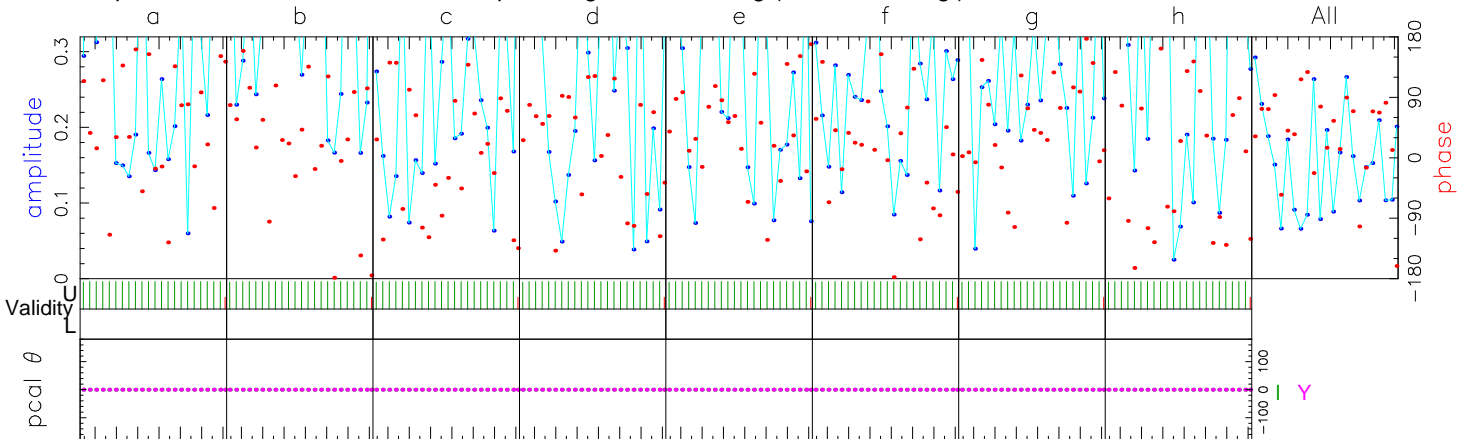


Fringe quality 0  
 SNR 5.8  
 Int time 401.317  
 Amp 0.107  
 Phase 49.1  
 PFD 8.2e-01  
 Delays (us)  
 SBD 0.573946  
 MBD -0.004264  
 Fringe rate (Hz)  
 0.128687  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183017.92  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165650  
 2020:014:135814  
 RA & Dec (J2000)  
 16h42m58.809967s  
 +39°48'36.993984"



Avgd. Xpower Spectrum (MHz)

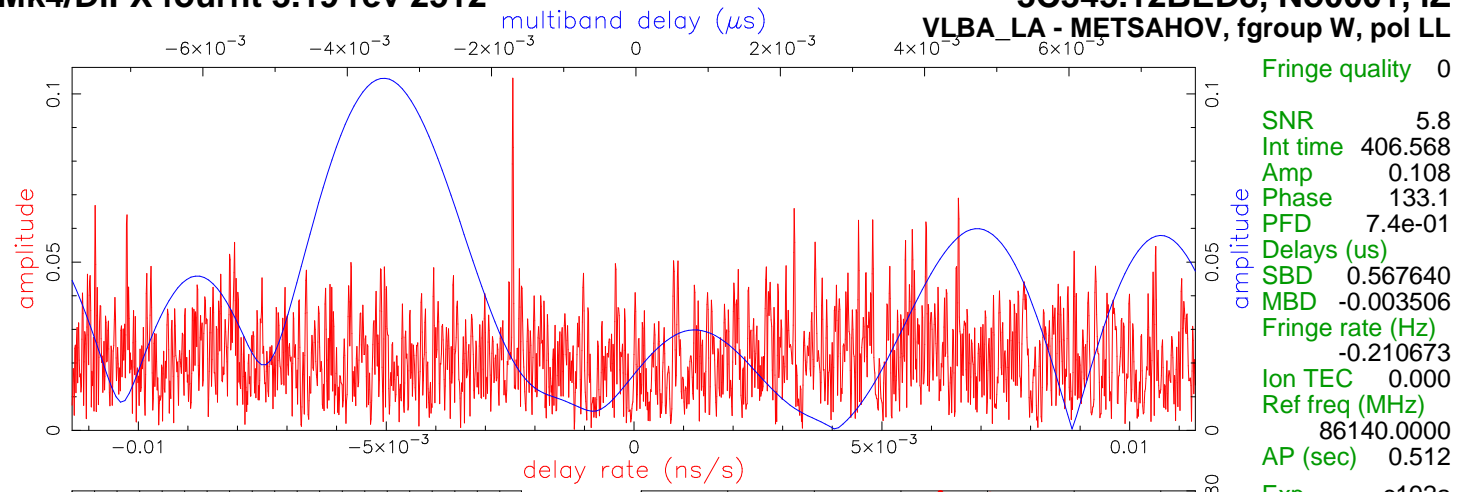
Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



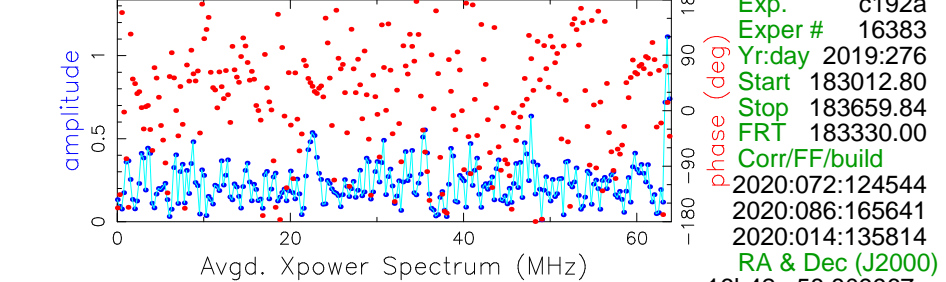
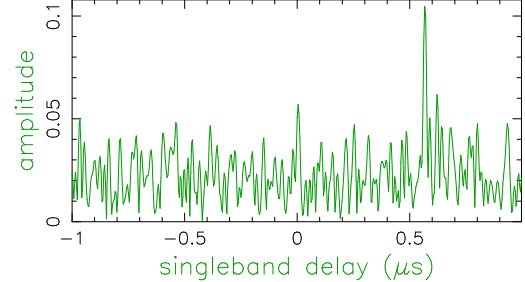
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.61775460418E+03									
Sband delay (usec)	-5.61775451913E+03									
Phase delay (usec)	-5.61832846354E+03									
Delay rate (us/s)	1.42968649869E+00									
Total phase (deg)			-305.9							
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										
Validity										
Channels										
Tracks										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

I: az 63.9 el 37.8 pa -72.0 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -10610.991 1328.915  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IY.W.287.12BED8

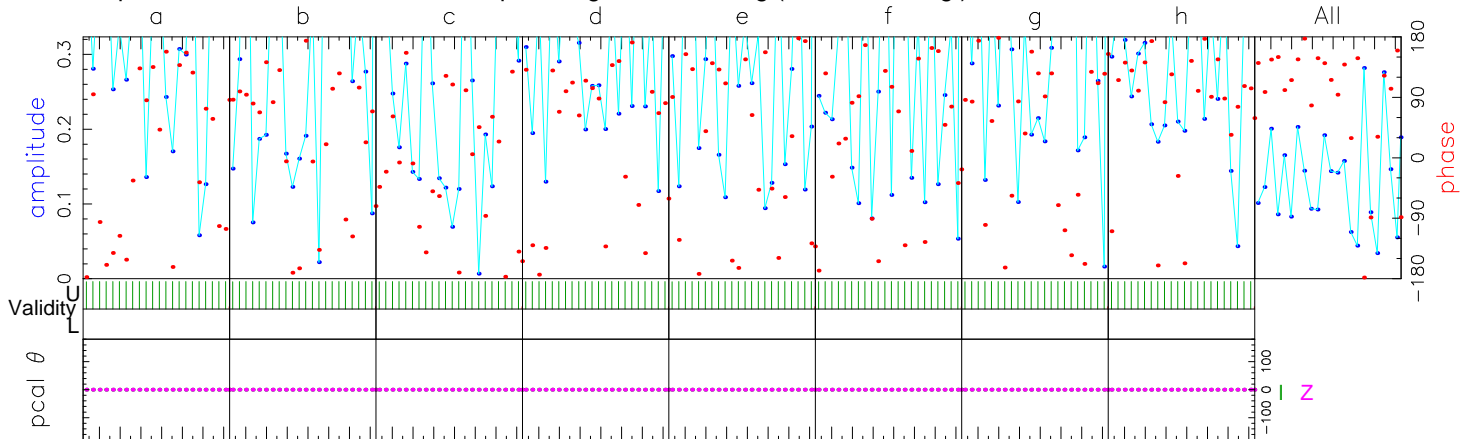




Fringe quality 0  
 SNR 5.8  
 Int time 406.568  
 Amp 0.108  
 Phase 133.1  
 PFD 7.4e-01  
 Delays (us)  
 SBD 0.567640  
 MBD -0.003506  
 Fringe rate (Hz)  
 -0.210673  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Exper # 16383  
 Yr:day 2019:276  
 Start 183012.80  
 Stop 183659.84  
 FRT 183330.00  
 Corr/FF/build  
 2020:072:124544  
 2020:086:165641  
 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



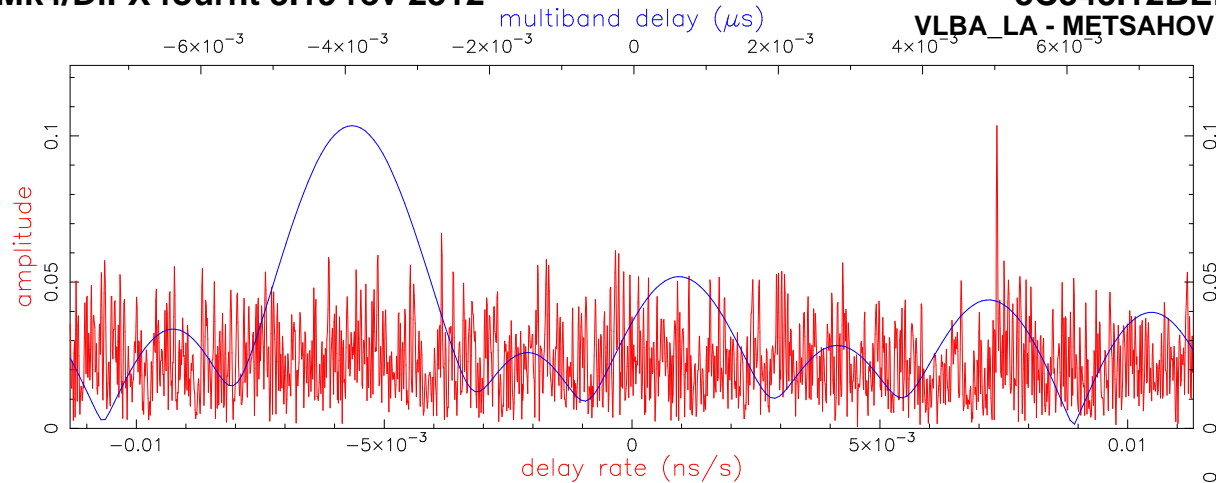
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Validity	1	1	1	1	1	1	1	1		
pcal $\theta$										133.1
	166.6	89.9	37.6	119.7	162.5	117.8	163.8	122.2	Phase	133.1
	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	27.9	400.6	346.4	415.1	121.1	474.5	362.4	433.1	Sbd box	402.3
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-2.13955634263E+03		Apriori delay (usec)		-2.14013096163E+03		Resid mbdelay (usec)		-3.50600E-03 +/- 1.9E-04
Sband delay (usec)		-2.13956332213E+03		Apriori clock (usec)		-9.2246437E-01		Resid sbdelay (usec)		5.67640E-01 +/- 1.5E-03
Phase delay (usec)		-2.14013095734E+03		Apriori clockrate (us/s)		-3.6776479E-07		Resid phdelay (usec)		4.29196E-06 +/- 6.3E-07
Delay rate (us/s)		1.42285729755E+00		Apriori rate (us/s)		1.42285974325E+00		Resid rate (us/s)		-2.44571E-06 +/- 2.7E-09
Total phase (deg)			120.5	Apriori accel (us/s/s)		-9.09270875951E-06		Resid phase (deg)		133.1 +/- 19.6

ph/seg (deg) 50.6 47.1 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.8 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) 49.1 27.8 Inc. seg. avg. 0.101 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.3 48.5 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 I: az 63.9 el 37.8 pa -72.0 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -10622.239 -2396.320 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/IZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/IZ.W.240.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

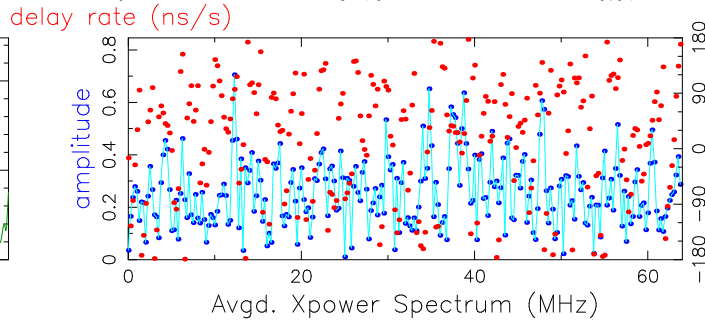
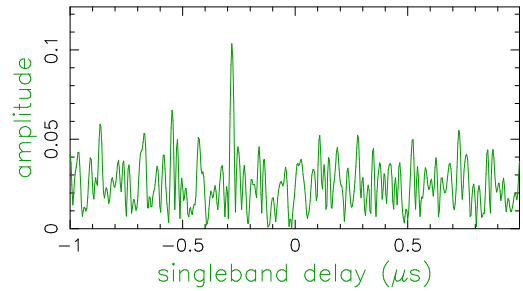
3C345.12BED8, No0001, IZ

VLBA\_LA - METSAHOV, fgroup W, pol RR



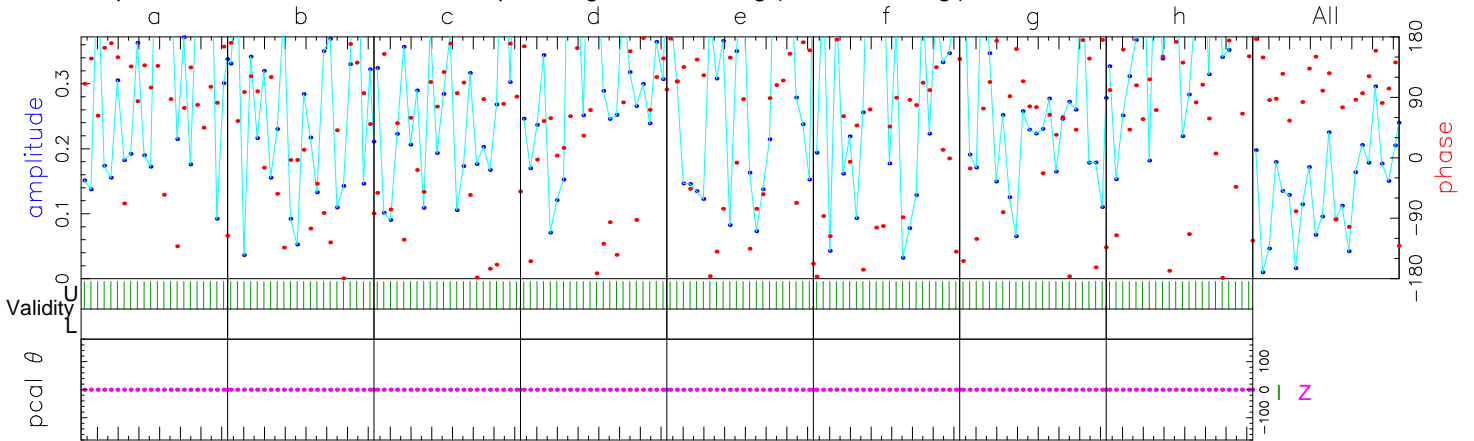
Fringe quality 0

SNR 5.7  
 Int time 406.568  
 Amp 0.124  
 Phase 117.5  
 PFD 9.3e-01  
 Delays (us)  
 SBD -0.280785  
 MBD -0.003900  
 Fringe rate (Hz)  
 0.635084  
 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  
 2020:086:165645  
 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



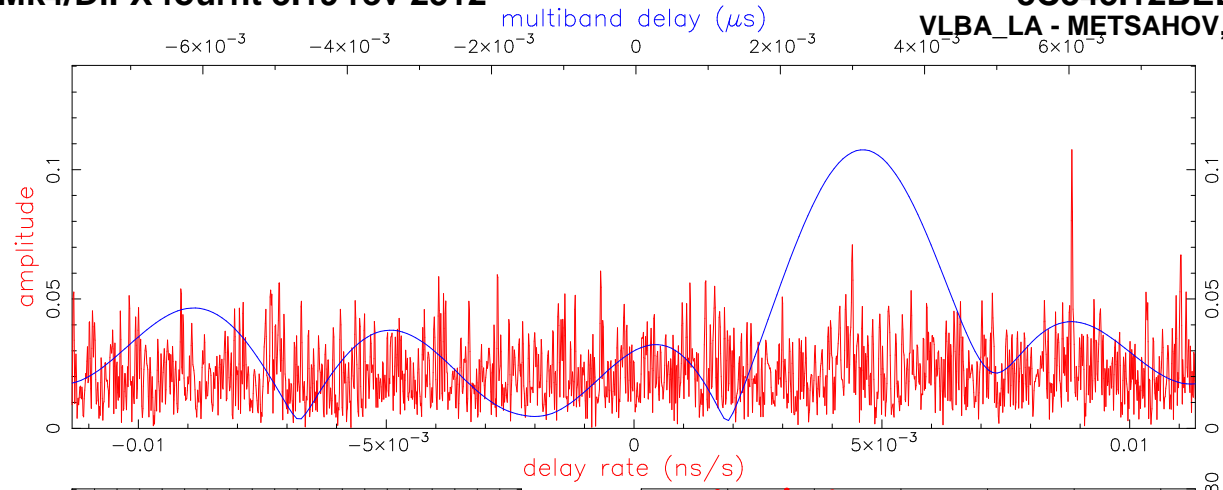
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.1404161185E+03	Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-3.90022E-03	+/-	1.9E-04
Sband delay (usec)	-2.14041174638E+03	Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	-2.80785E-01	+/-	1.5E-03
Phase delay (usec)	-2.14013095784E+03	Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	3.78816E-06	+/-	6.5E-07
Delay rate (us/s)	1.42286711595E+00	Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	7.37269E-06	+/-	2.8E-09
Total phase (deg)	104.9	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	117.5	+/-	20.1

ph/seg (deg)	63.8	Theor.	48.1	Amplitude	0.124 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	76.0		83.9	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	15.5		28.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	49.5		49.5	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

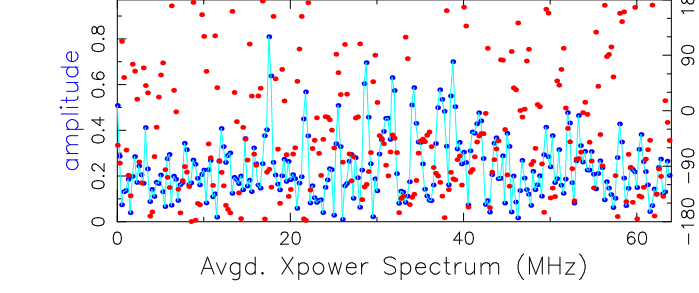
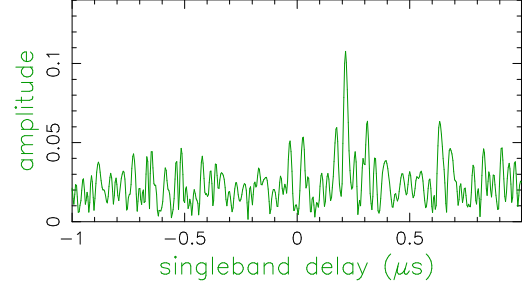
I: az 63.9 el 37.8 pa -72.0      Z: az 271.4 el 46.7 pa 40.3      u,v (fr/asec) -10622.239 -2396.320      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c192a/v1\_PV/1234/No0001/IZ..12BED8    Output file: /Exps/c192a/v1\_PV/1234/No0001/IZ.W.257.12BED8



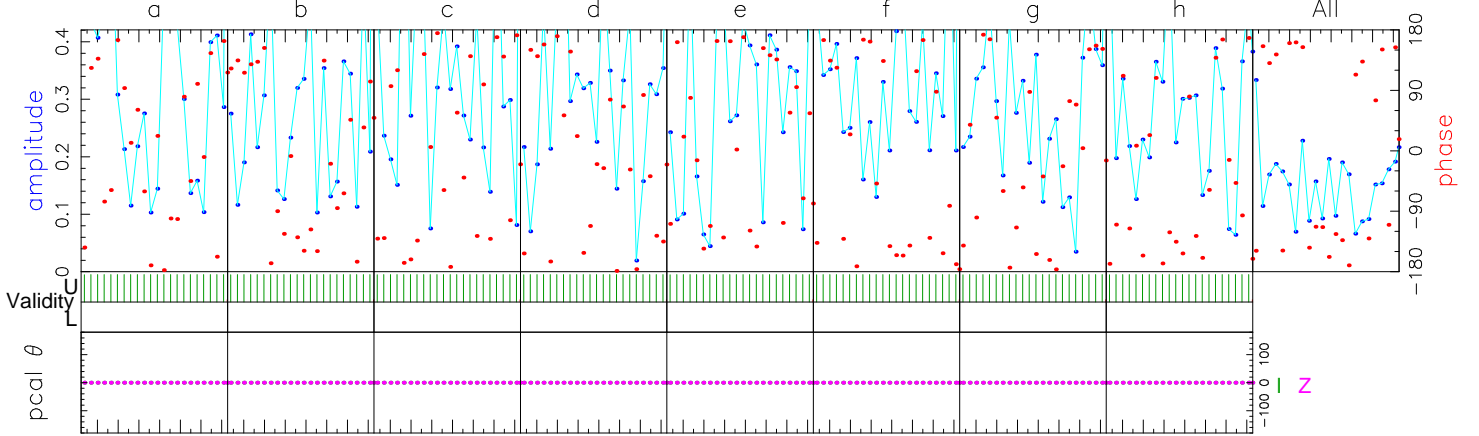
Fringe quality 0

SNR 5.9  
 Int time 406.568  
 Amp 0.140  
 Phase -175.0  
 PFD 5.2e-01  
 Delays (us)  
 SBD 0.214840  
 MBD 0.003143  
 Fringe rate (Hz)  
 0.762279  
 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  
 2020:086:165651  
 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



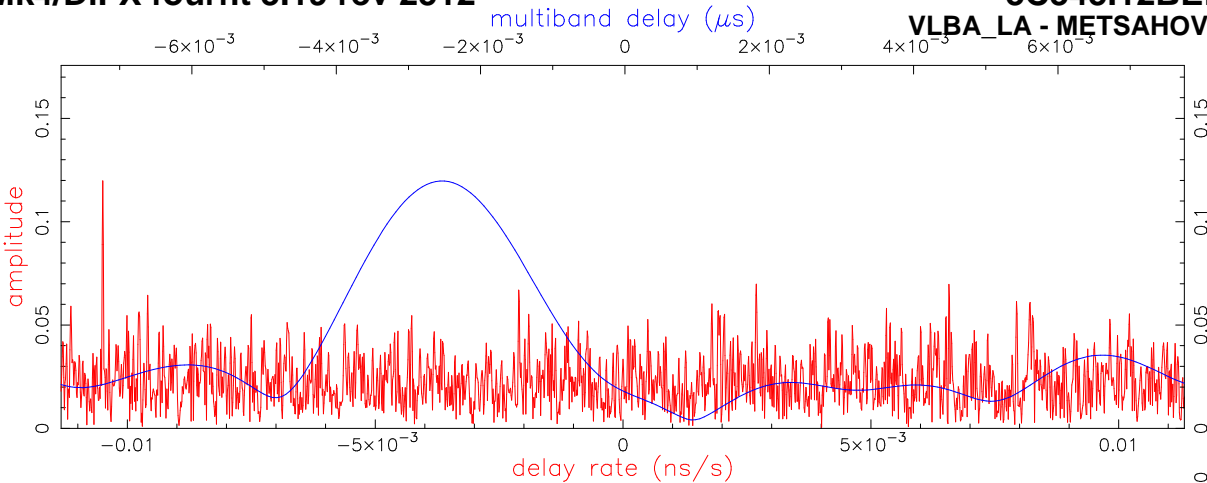
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-2.13990906820E+03	Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	3.14343E-03	+/-	1.8E-04
Sband delay (usec)	-2.13991612188E+03	Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	2.14840E-01	+/-	1.5E-03
Phase delay (usec)	-2.14013096728E+03	Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	-5.64353E-06	+/-	6.2E-07
Delay rate (us/s)	1.42286859255E+00	Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	8.84930E-06	+/-	2.6E-09
Total phase (deg)	-187.6	Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	-175.0	+/-	19.3

ph/seg (deg)	49.0	Theor.	46.3	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	69.7	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	24.0	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	51.5	Inc. seg. avg.	0.149	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.130	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

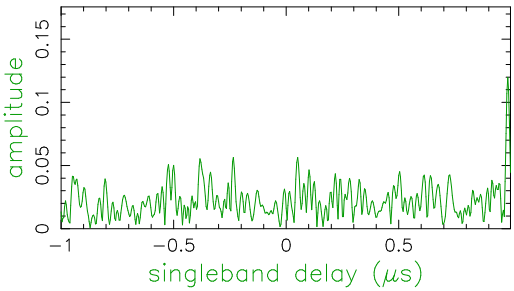
I: az 63.9 el 37.8 pa -72.0      Z: az 271.4 el 46.7 pa 40.3      u,v (fr/asec) -10622.239 -2396.320      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c192a/v1\_PV/1234/No0001/IZ..12BED8      Output file: /Exps/c192a/v1\_PV/1234/No0001/IZ.W.290.12BED8

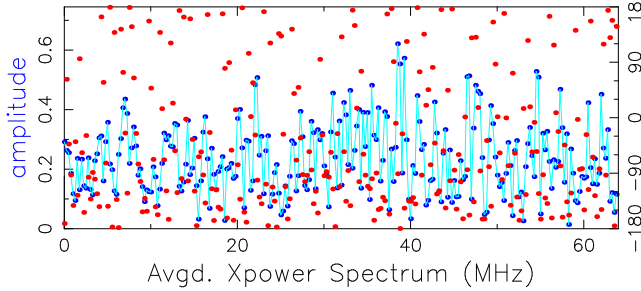


Fringe quality 0

SNR 6.6  
Int time 406.568  
Amp 0.176  
Phase 88.9  
PFD 1.1e-02  
Delays (us)  
SBD 0.984604  
MBD -0.002532  
Fringe rate (Hz)  
-0.905541  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

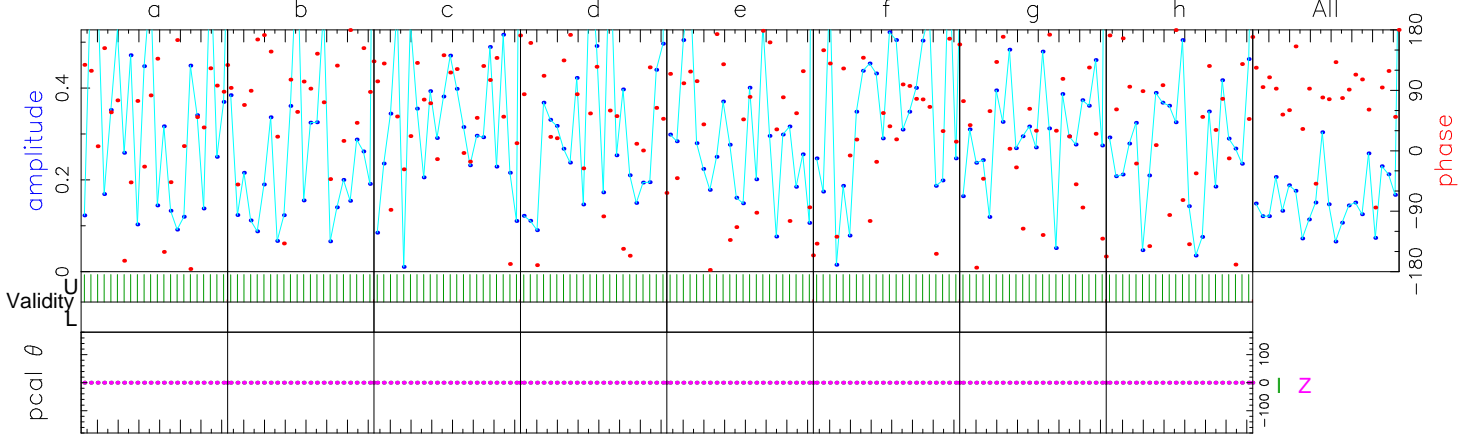


delay rate (ns/s)



Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165655  
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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.13914911858E+03	Apriori delay (usec)	-2.14013096163E+03	Resid mbdelay (usec)	-2.53195E-03	+/-	1.6E-04
Sband delay (usec)	-2.13914635763E+03	Apriori clock (usec)	-9.2246437E-01	Resid sbdelay (usec)	9.84604E-01	+/-	1.3E-03
Phase delay (usec)	-2.14013095876E+03	Apriori clockrate (us/s)	-3.6776479E-07	Resid phdelay (usec)	2.86725E-06	+/-	5.6E-07
Delay rate (us/s)	1.42284923081E+00	Apriori rate (us/s)	1.42285974325E+00	Resid rate (us/s)	-1.05124E-05	+/-	2.4E-09
Total phase (deg)		Apriori accel (us/s/s)	-9.09270875951E-06	Resid phase (deg)	88.9	+/-	17.3

ph/seg (deg)	55.2	Theor.	41.6	Amplitude	0.176 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.1		72.6	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	25.5		24.5	Inc. seg. avg.	0.183	Bits/sample: 2x2	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.1		42.8	Inc. frq. avg.	0.169	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 63.9 el 37.8 pa -72.0

Z: az 271.4 el 46.7 pa 40.3

u,v (fr/asec) -10622.239 -2396.320

simultaneous interpolator

Control file: cf\_1234\_gmva

Input file: /Exps/c192a/v1\_PV/1234/No0001/IZ..12BED8

Output file: /Exps/c192a/v1\_PV/1234/No0001/IZ.W.308.12BED8