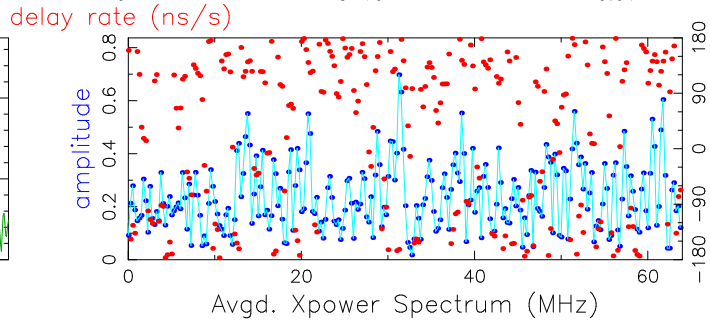
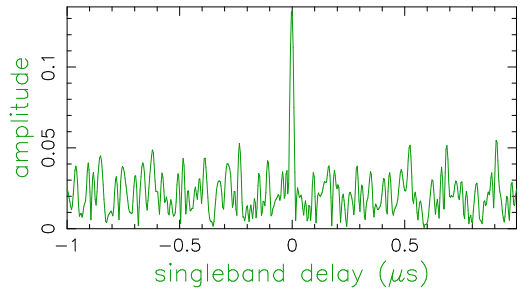


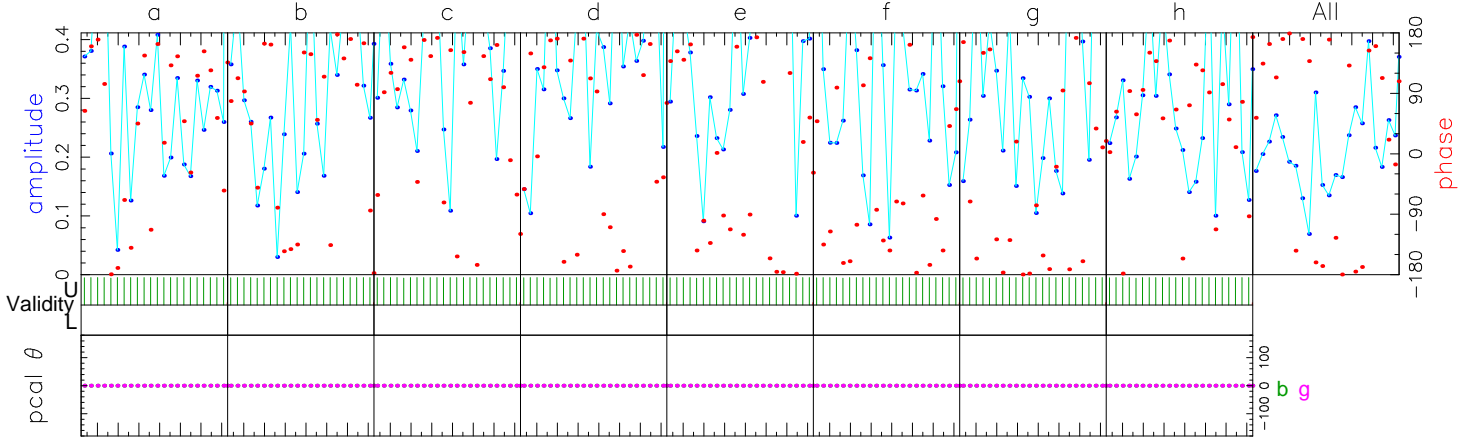
Fringe quality 9

SNR 7.6  
Int time 406.395  
Amp 0.137  
Phase 161.6  
PFD 1.3e-05  
Delays (us)  
SBD -0.001905  
MBD -0.002523  
Fringe rate (Hz)  
0.012010  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

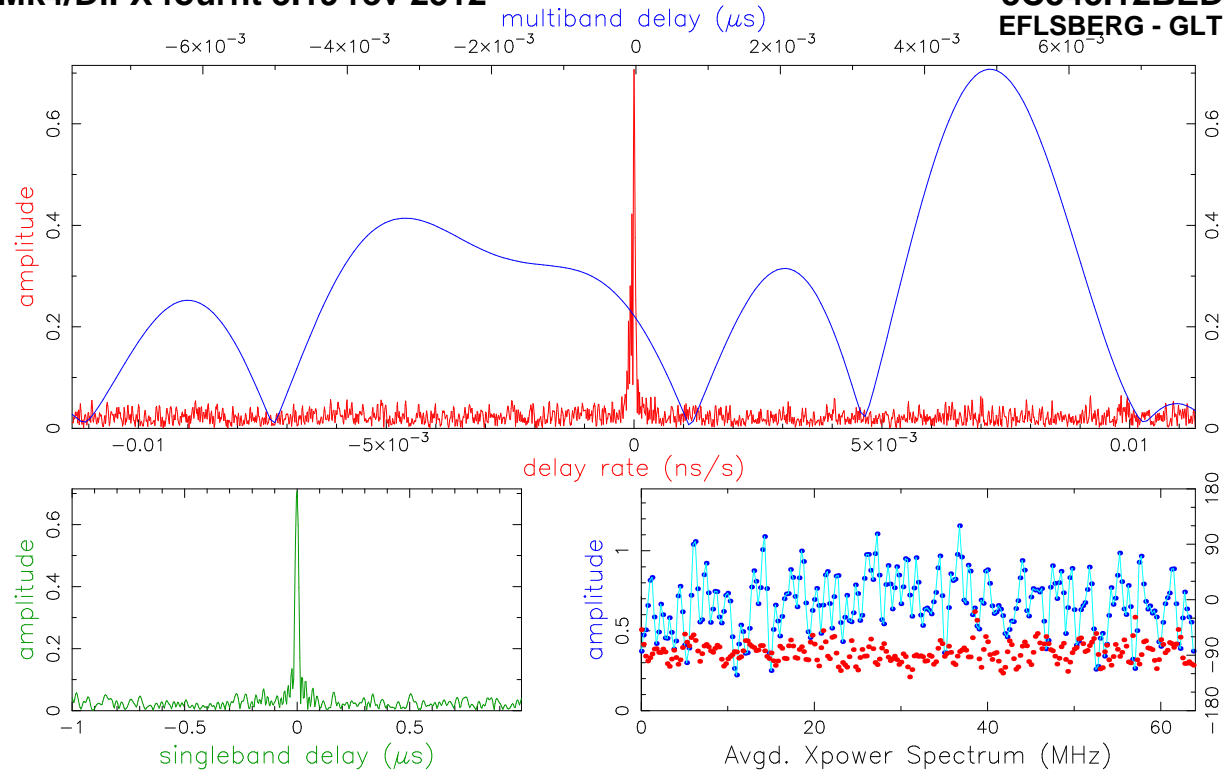


Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165547  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.55393176878E+03				-4.55392924593E+03				-2.52284E-03	+/- 1.4E-04
Sband delay (usec)	-4.55393115118E+03				-1.9088186E+00				-1.90525E-03	+/- 1.1E-03
Phase delay (usec)	-4.55392924072E+03				-3.1739506E-07				5.21027E-06	+/- 4.9E-07
Delay rate (us/s)	6.50043921105E-01				6.50043781683E-01				1.39421E-07	+/- 2.1E-09
Total phase (deg)			73.5		7.70195165707E-06				161.6	+/- 15.1
	RMS	Theor.	Amplitude	0.137 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	61.3	36.3	Search (2048X32)	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	75.4	63.4	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	46.5	21.4	Inc. seg. avg.	0.178	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	30.0	37.4	Inc. frq. avg.	0.157	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
b: az 66.1 el 33.9 pa -52.6			g: az 142.5 el 51.0 pa -10.6		u,v (fr/asec) -4834.133 -994.278					simultaneous interpolator

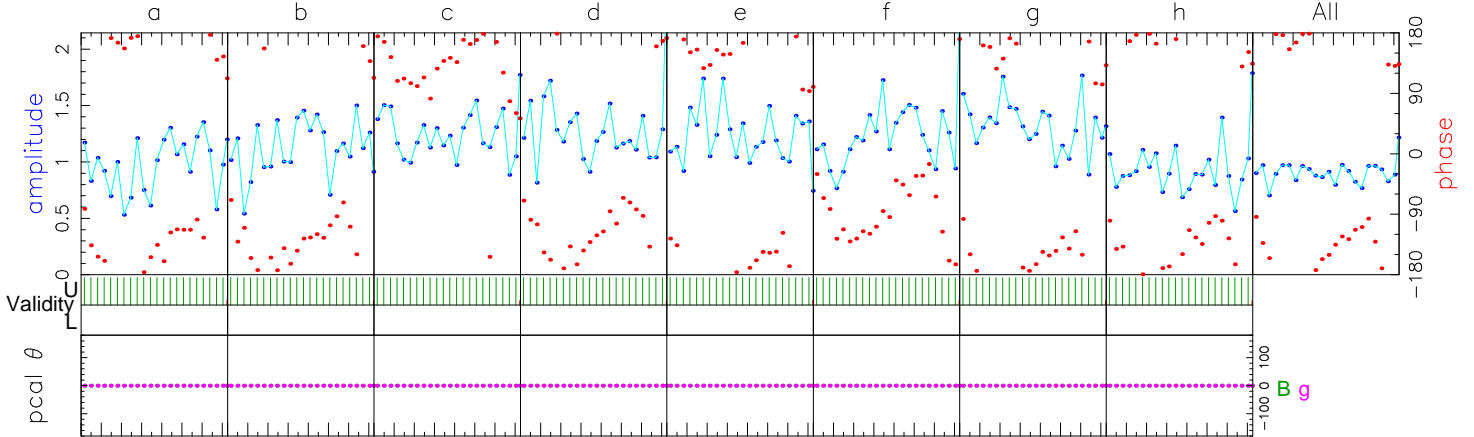


Fringe quality 5

SNR 40.1  
Int time 419.660  
Amp 0.715  
Phase -157.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.001341  
MBD 0.004863  
Fringe rate (Hz)  
0.000087  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165549  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

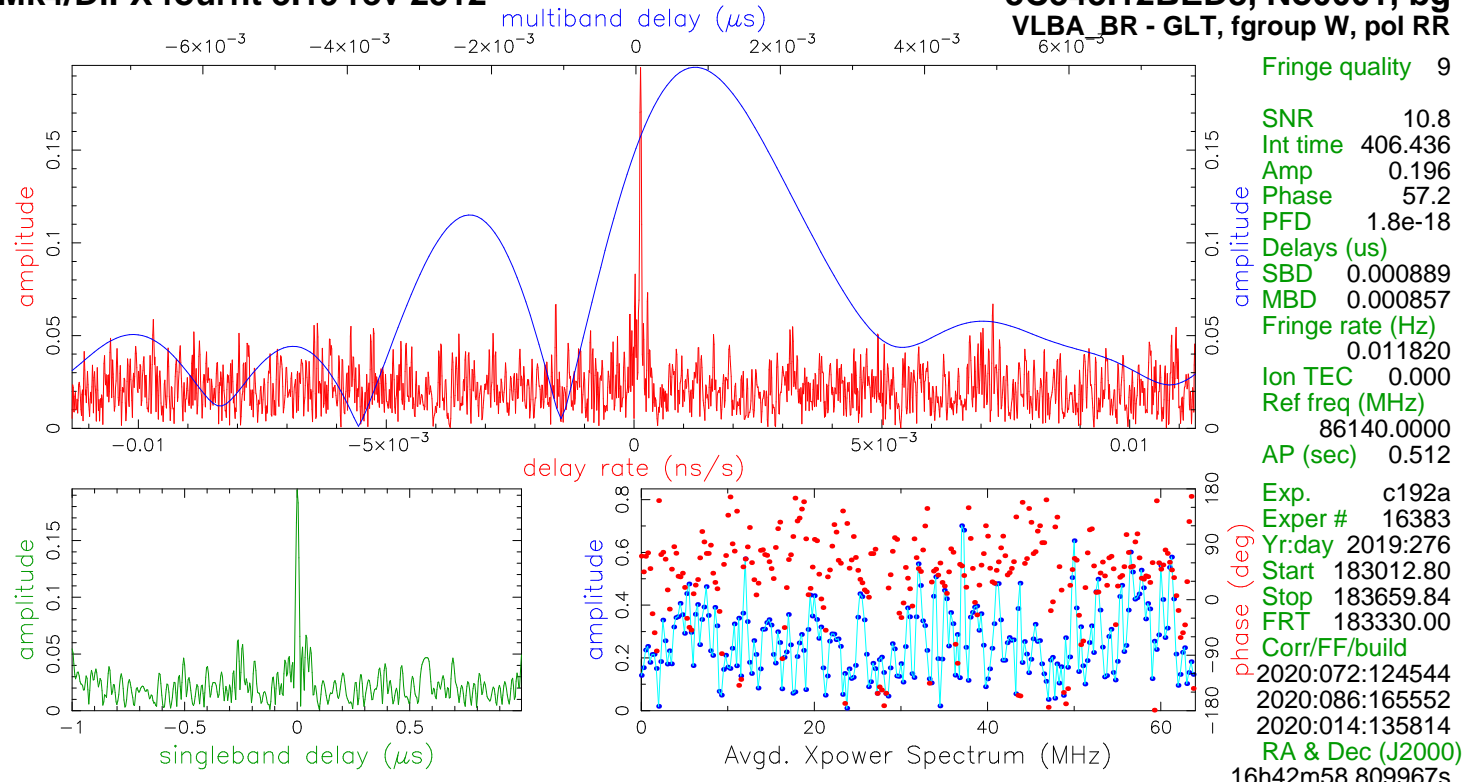
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.11027535756E+03			1.11027049484E+03				4.86272E-03	+/- 2.7E-05
Sband delay (usec)		1.11026915384E+03			1.5542942E+01				-1.34100E-03	+/- 2.2E-04
Phase delay (usec)		1.11027048977E+03			-2.7499999E-07				-5.06902E-06	+/- 9.2E-08
Delay rate (us/s)		-6.86391248998E-01			-6.86391250011E-01				1.01253E-09	+/- 3.8E-10
Total phase (deg)			-4.0		-2.03542527340E-05				-157.2	+/- 2.9
	RMS	Theor.	Amplitude	0.715 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	38.8	6.9	Search (2048X32)	0.706	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	27.7	12.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	44.4	4.0	Inc. seg. avg.	0.890	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.9	7.1	Inc. frq. avg.	0.900	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      g: az 142.5 el 51.0 pa -10.6      u,v (fr/asec) 5076.389 -2763.871      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c192a/v1\_PV/1234/No0001/Bg..12BED8      Output file: /Exps/c192a/v1\_PV/1234/No0001/Bg.W.24.12BED8



Fringe quality 9

SNR 10.8

Int time 406.436

Ampl 0.196

Phase 57.2

PFD 1.8e-18

Delays (us)

SBD 0.000889

MBD 0.000857

Fringe rate (Hz)

0.011820

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c192a

Exper # 16383

Yr:day 2019:276

Start 183012.80

Stop 183659.84

FRT 183330.00

Corr/FF/build

2020:072:124544

2020:086:165552

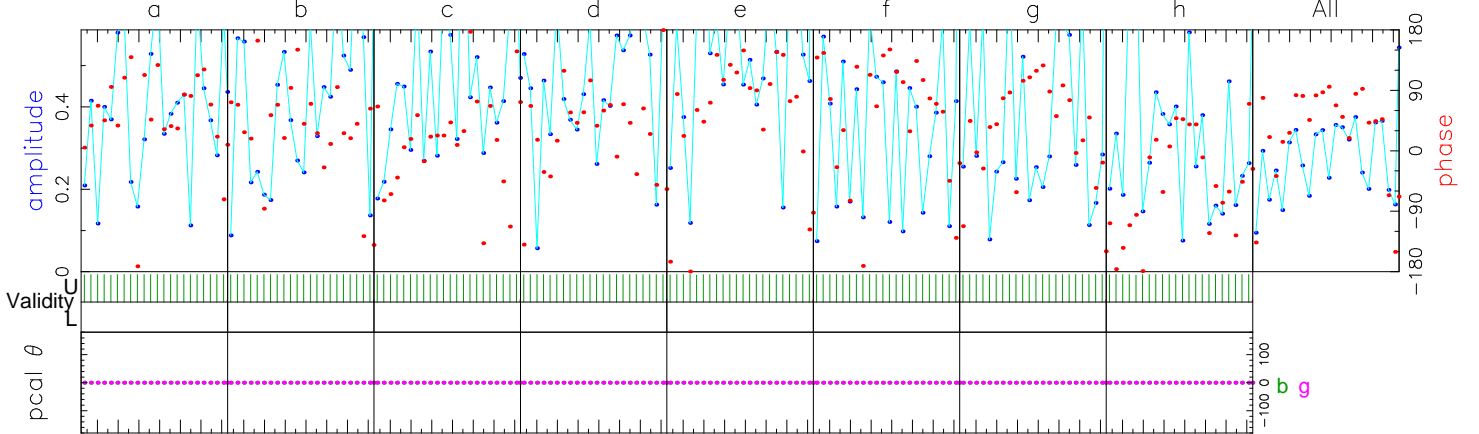
2020:014:135814

RA & Dec (J2000)

16h42m58.809967s

+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	72.1	46.3	22.2	40.8	90.9	95.8	52.9	-45.3	Phase	57.2
	0.3	0.3	0.2	0.2	0.4	0.2	0.2	0.1	Ampl.	0.2
	256.0	257.7	257.7	257.5	256.6	256.8	256.4	254.7	Sbd box	257.2
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.55392838896E+03		Apriori delay (usec)		-4.55392924593E+03		Resid mbdelay (usec)		8.56977E-04	+/- 1.0E-04
Sband delay (usec)	-4.55392835693E+03		Apriori clock (usec)		-1.9088186E+00		Resid sbdelay (usec)		8.89000E-04	+/- 8.0E-04
Phase delay (usec)	-4.55392924409E+03		Apriori clockrate (us/s)		-3.1739506E-07		Resid phdelay (usec)		1.84457E-06	+/- 3.4E-07
Delay rate (us/s)	6.50043918898E-01		Apriori rate (us/s)		6.50043781683E-01		Resid rate (us/s)		1.37215E-07	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		7.70195165707E-06		Resid phase (deg)		57.2	+/- 10.6

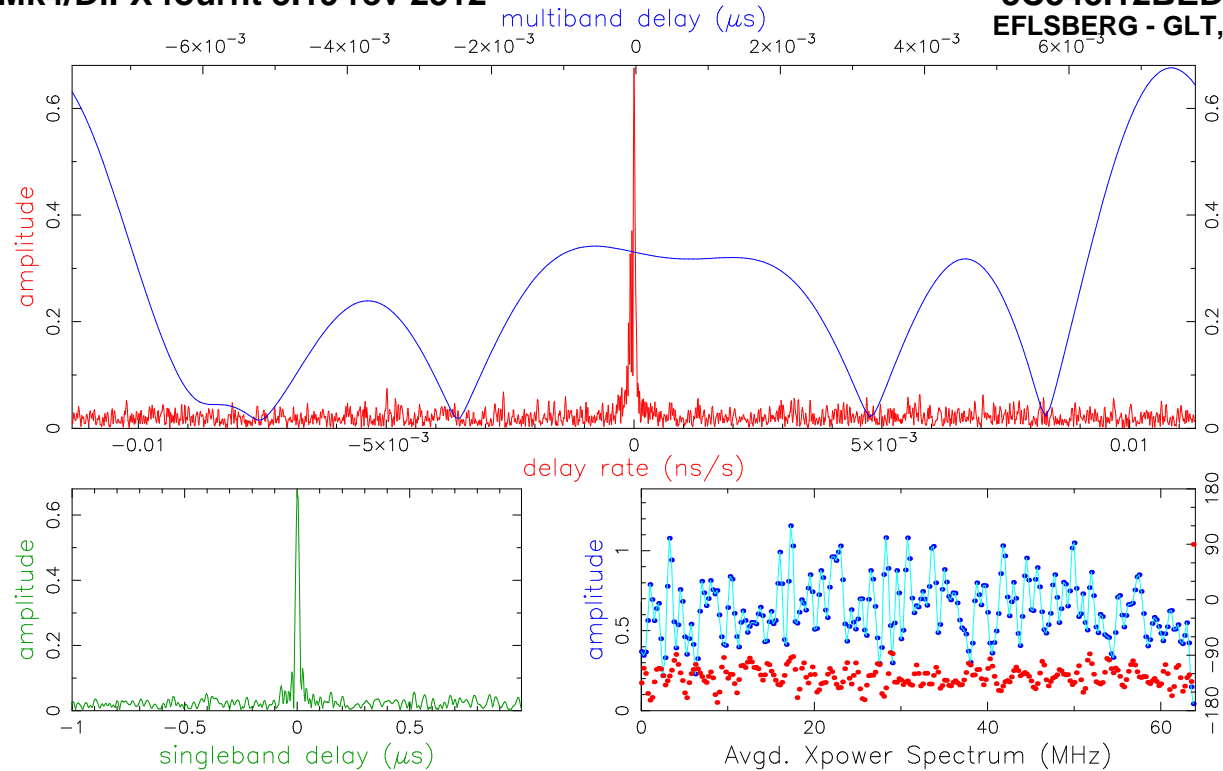
ph/seg (deg) 63.6 25.5 Search (2048X32) 0.189 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

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

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

amp/frq (%) 36.5 26.2 Inc. frq. avg. 0.228 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

b: az 66.1 el 33.9 pa -52.6 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 ion window (TEC) 0.00 0.00 simultaneous interpolator

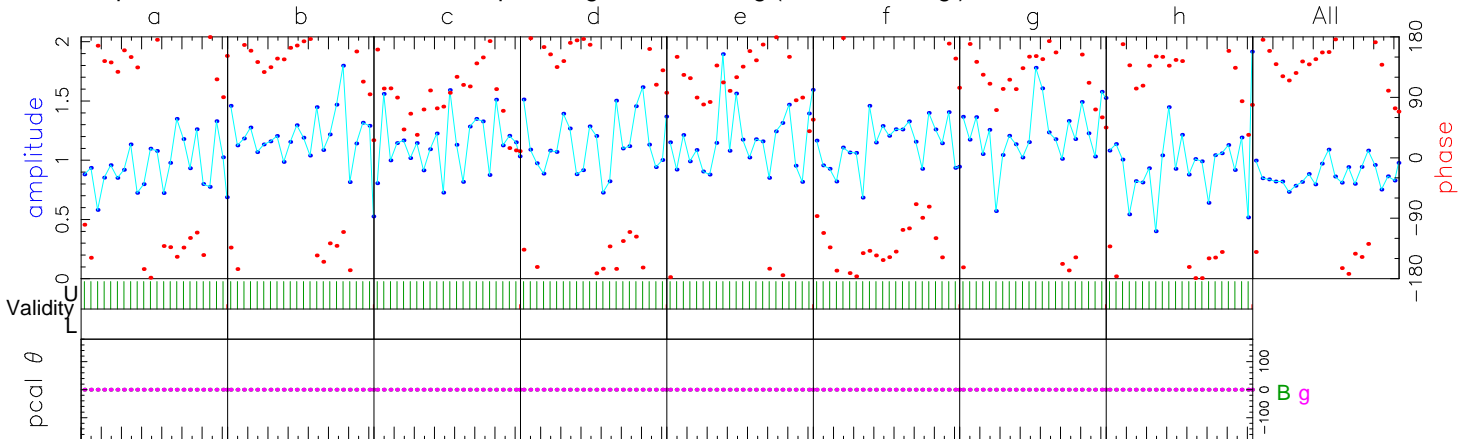


Fringe quality 5

SNR 38.1  
Int time 419.704  
Amp 0.681  
Phase 161.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.001093  
MBD 0.007454  
Fringe rate (Hz) 0.000073  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165553  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

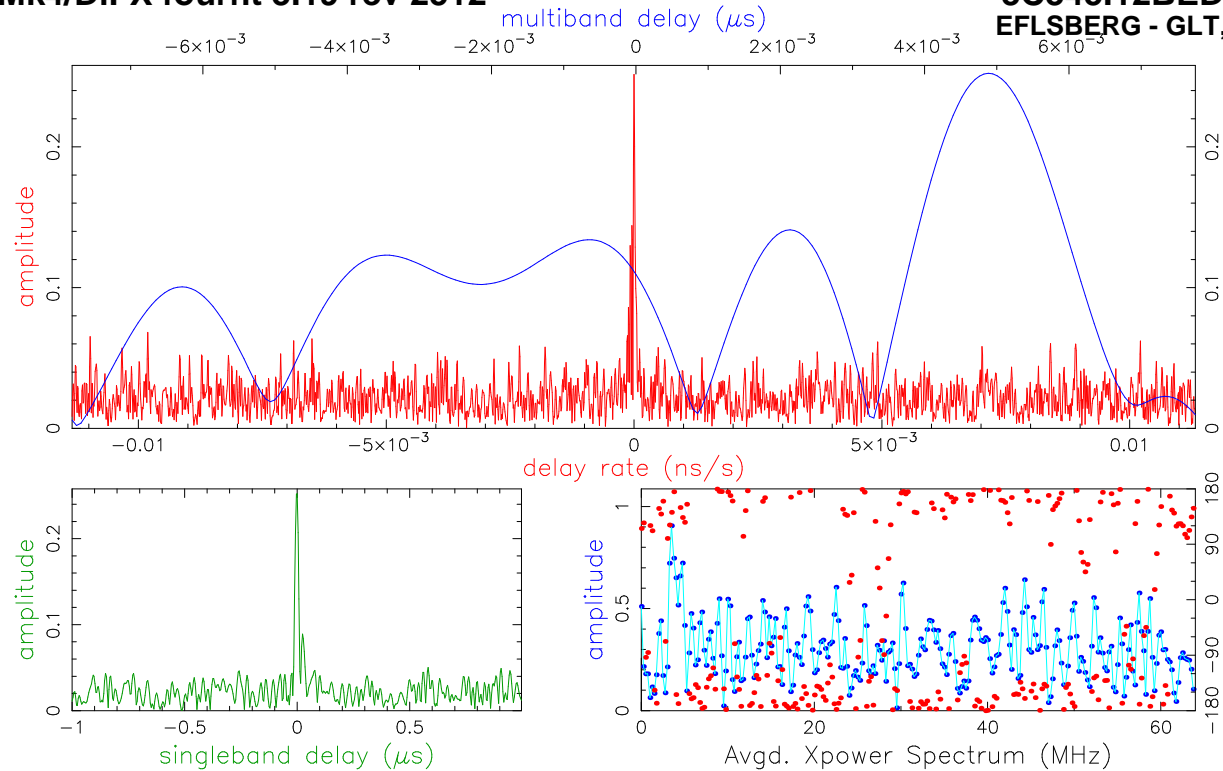
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	1000	1000	1000	1000	1000	1000	1000	1000		
B:g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.11027794878E+03			1.11027049484E+03				7.45394E-03	+/- 2.8E-05
Sband delay (usec)		1.11027158834E+03			1.5542942E+01				1.09350E-03	+/- 2.3E-04
Phase delay (usec)		1.11027050003E+03			-2.7499999E-07				5.19120E-06	+/- 9.7E-08
Delay rate (us/s)		-6.86391249167E-01			-6.86391250011E-01				8.43184E-10	+/- 4.0E-10
Total phase (deg)			314.1		-2.03542527340E-05				161.0	+/- 3.0
	RMS	Theor.	Amplitude	0.681 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	40.5	7.2	Search (2048X32)	0.673	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	32.0	12.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	43.9	4.3	Inc. seg. avg.	0.869	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	28.8	7.4	Inc. frq. avg.	0.850	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      g: az 142.5 el 51.0 pa -10.6      u,v (fr/asec) 5076.389 -2763.871      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c192a/v1\_PV/1234/No0001/Bg..12BED8      Output file: /Exps/c192a/v1\_PV/1234/No0001/Bg.W.40.12BED8

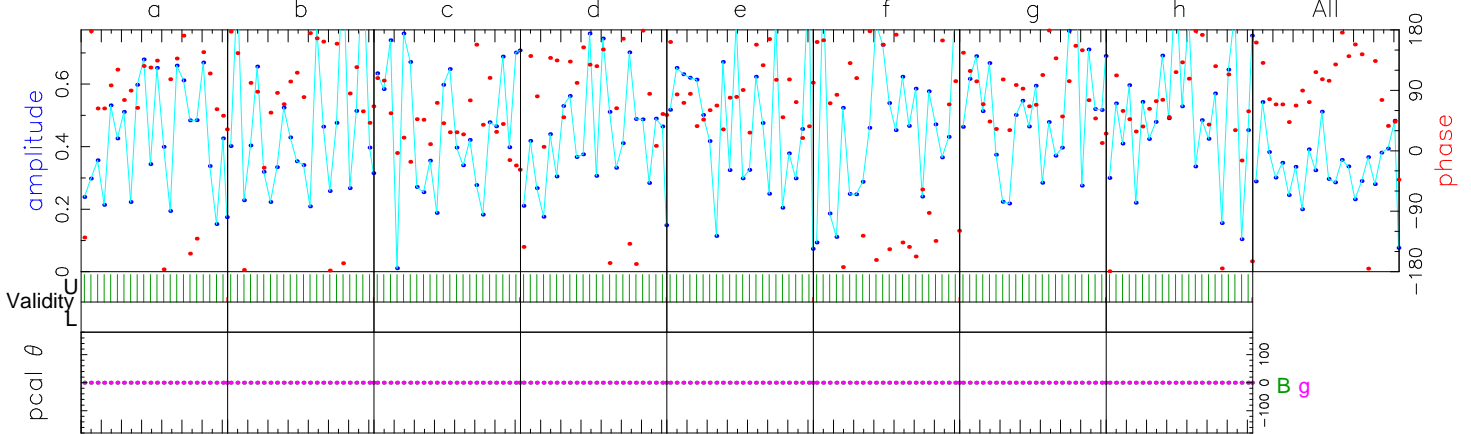


Fringe quality 8

SNR 14.4  
Int time 419.704  
Amp 0.258  
Phase 103.2  
PFD 1.5e-38  
Delays (us)  
SBD -0.001897  
MBD 0.004966  
Fringe rate (Hz) 0.000052  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c192a  
Yr:day 16383  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165557  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



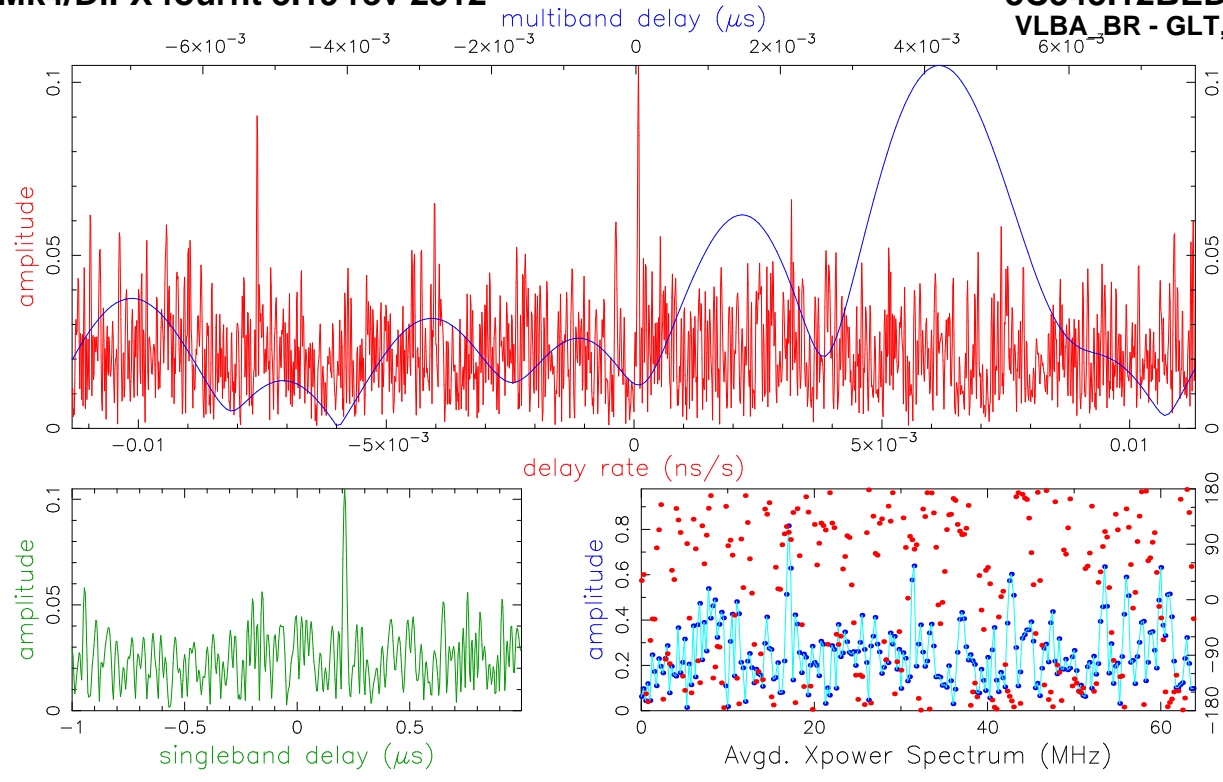
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.11027546121E+03	Apriori delay (usec)	1.11027049484E+03	Resid mbdelay (usec)	4.96637E-03	+/-	7.5E-05
Sband delay (usec)	1.11026859834E+03	Apriori clock (usec)	1.5542942E+01	Resid sbdelay (usec)	-1.89650E-03	+/-	6.0E-04
Phase delay (usec)	1.11027049817E+03	Apriori clockrate (us/s)	-2.7499999E-07	Resid phdelay (usec)	3.32769E-06	+/-	2.6E-07
Delay rate (us/s)	-6.86391249401E-01	Apriori rate (us/s)	-6.86391250011E-01	Resid rate (us/s)	6.09360E-10	+/-	1.1E-09
Total phase (deg)	256.3	Apriori accel (us/s/s)	-2.03542527340E-05	Resid phase (deg)	103.2	+/-	7.9

ph/seg (deg)	45.1	RMS	45.1	Theor.	19.0	Amplitude	0.258 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	47.0		47.0		33.2	Search (2048X32)	0.252	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	47.2		47.2		11.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	30.1		30.1		19.6	Inc. seg. avg.	0.325	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.317	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      g: az 142.5 el 51.0 pa -10.6      u,v (fr/asec) 5076.389 -2763.871      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c192a/v1\_PV/1234/No0001/Bg..12BED8      Output file: /Exps/c192a/v1\_PV/1234/No0001/Bg.W.57.12BED8

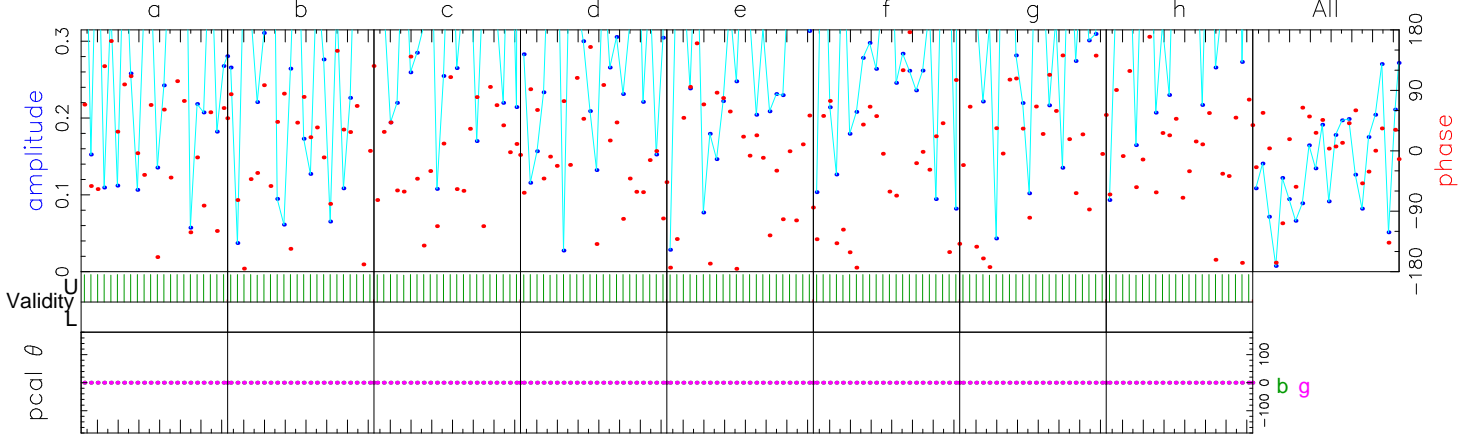


Fringe quality 0

SNR 5.8  
Int time 406.437  
Amp 0.105  
Phase 18.0  
PFD 8.4e-01  
Delays (us)  
SBD 0.211068  
MBD 0.004203  
Fringe rate (Hz)  
0.007668  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165558  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

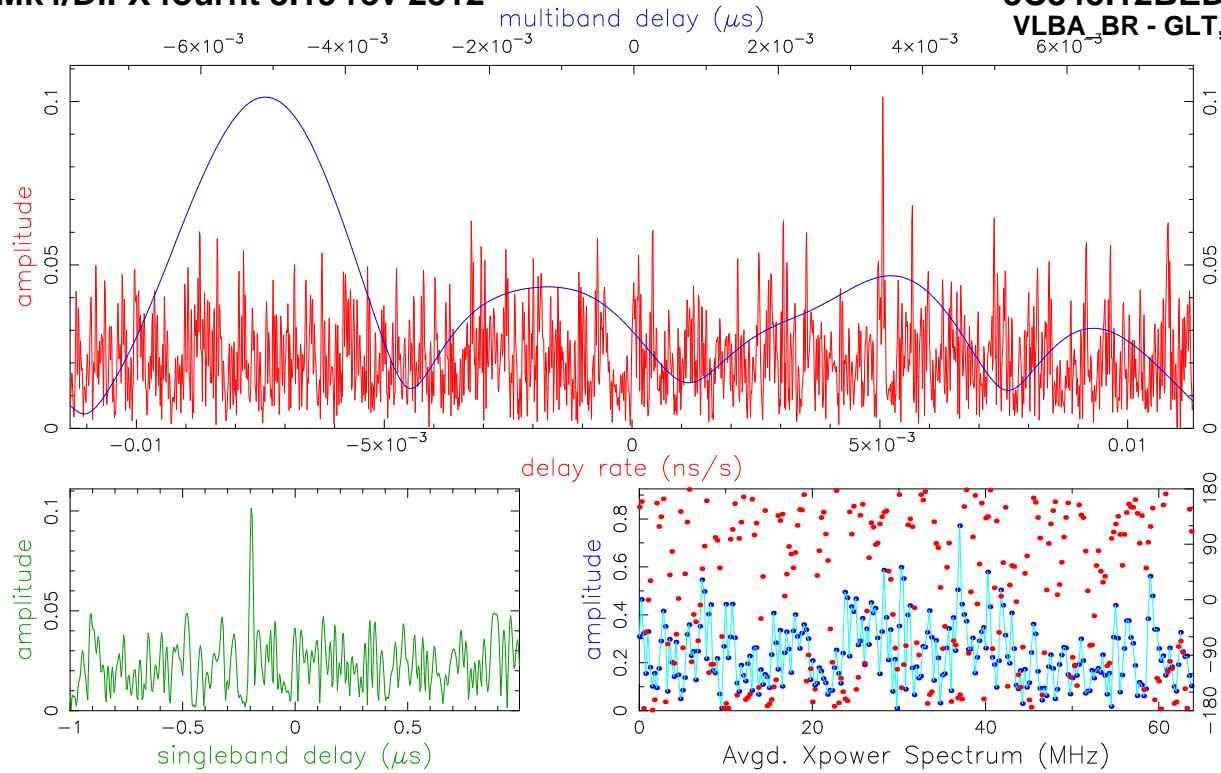
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.55372191780E+03				-4.55392924593E+03				4.20313E-03	+/- 1.9E-04
Sband delay (usec)	-4.55371817743E+03				-1.9088186E+00				2.11068E-01	+/- 1.5E-03
Phase delay (usec)	-4.55392924535E+03				-3.1739506E-07				5.80032E-07	+/- 6.4E-07
Delay rate (us/s)	6.50043870704E-01				6.50043781683E-01				8.90203E-08	+/- 2.7E-09
Total phase (deg)			-70.1		7.70195165707E-06				18.0	+/- 19.8
	RMS	Theor.	Amplitude	0.105 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	65.1	47.5	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)		-1.000	1.000	
amp/seg (%)	66.8	82.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	26.4	28.0	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 128	dr window (ns/s)		-0.011	0.011	
amp/frq (%)	36.5	48.9	Inc. frq. avg.	0.103	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

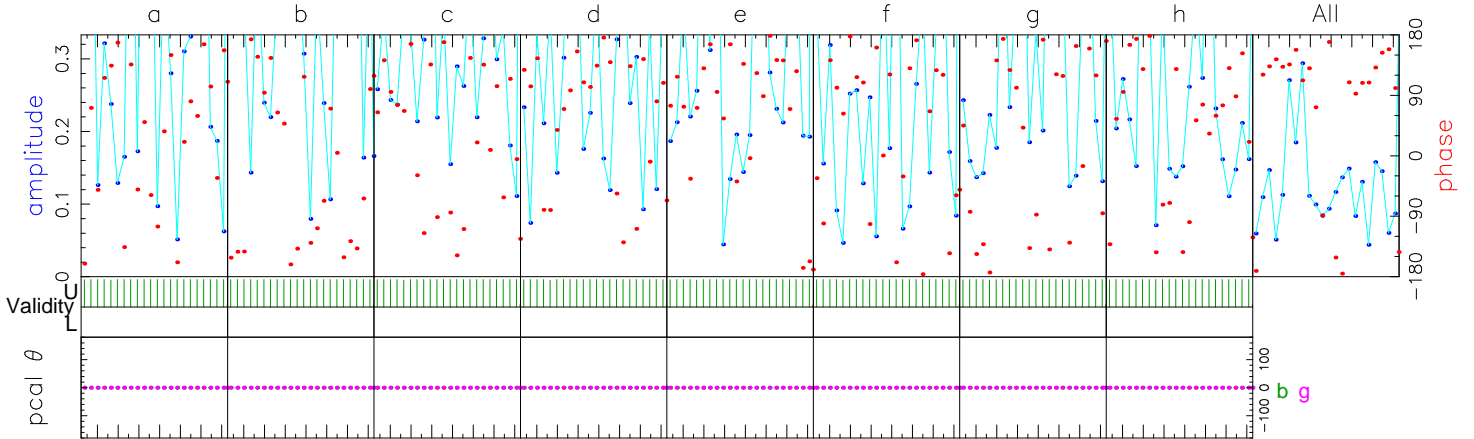
b: az 66.1 el 33.9 pa -52.6      g: az 142.5 el 51.0 pa -10.6      u,v (fr/asec) -4834.133 -994.278      simultaneous interpolator

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



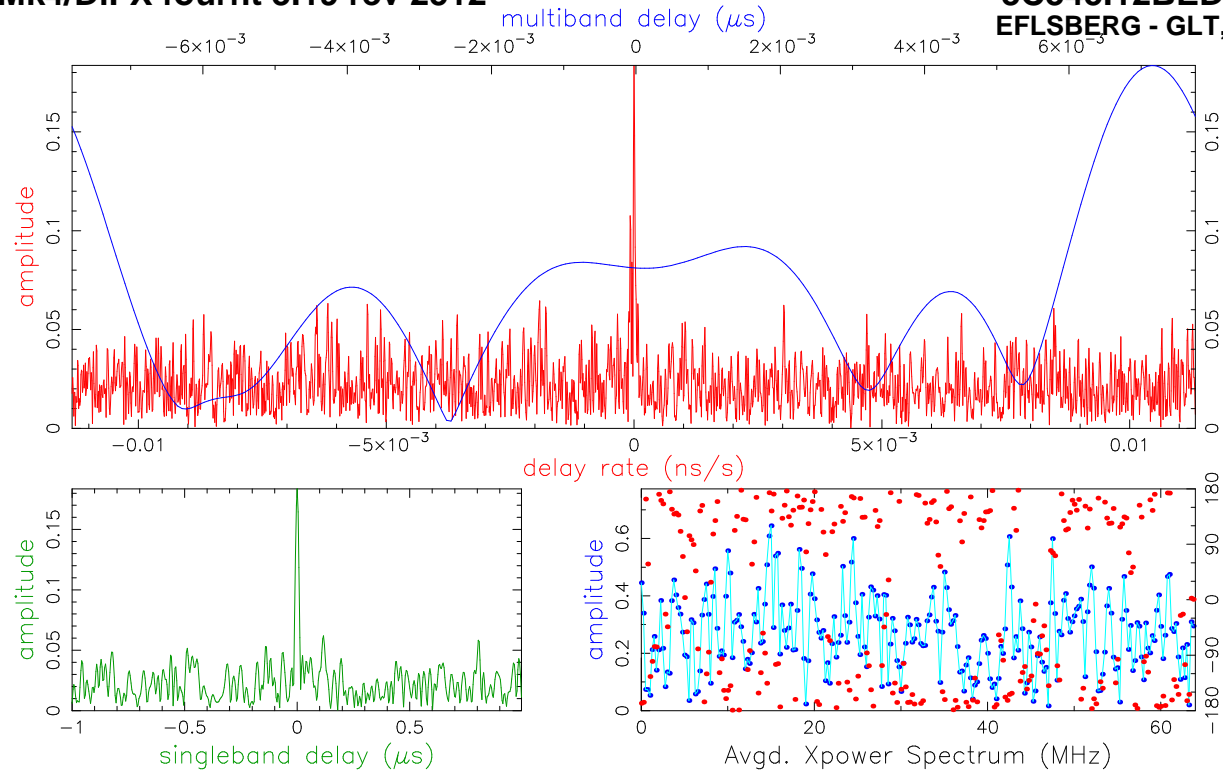
Fringe quality 0  
SNR 5.6  
Int time 406.395  
Amp 0.111  
Phase 136.3  
PFD 9.9e-01  
Delays (us)  
SBD -0.194155  
MBD -0.005128  
Fringe rate (Hz)  
0.436065  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183012.80  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165602  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.55412187430E+03				-4.55392924593E+03				-5.12837E-03	+/- 1.9E-04
Sband delay (usec)	-4.55412340093E+03				-1.9088186E+00				-1.94155E-01	+/- 1.5E-03
Phase delay (usec)	-4.55392924154E+03				-3.1739506E-07				4.39462E-06	+/- 6.6E-07
Delay rate (us/s)	6.50048843968E-01				6.50043781683E-01				5.06228E-06	+/- 2.8E-09
Total phase (deg)			48.2		7.70195165707E-06				136.3	+/- 20.3
	RMS	Theor.	Amplitude	0.111 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	43.6	48.8	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)		-1.000	1.000	
amp/seg (%)	65.7	85.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	35.2	28.8	Inc. seg. avg.	0.100	Sample rate(MISamp/s): 128	dr window (ns/s)		-0.011	0.011	
amp/frq (%)	43.5	50.2	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

b: az 66.1 el 33.9 pa -52.6 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -4834.133 -994.278 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/bg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/bg.W.79.12BED8

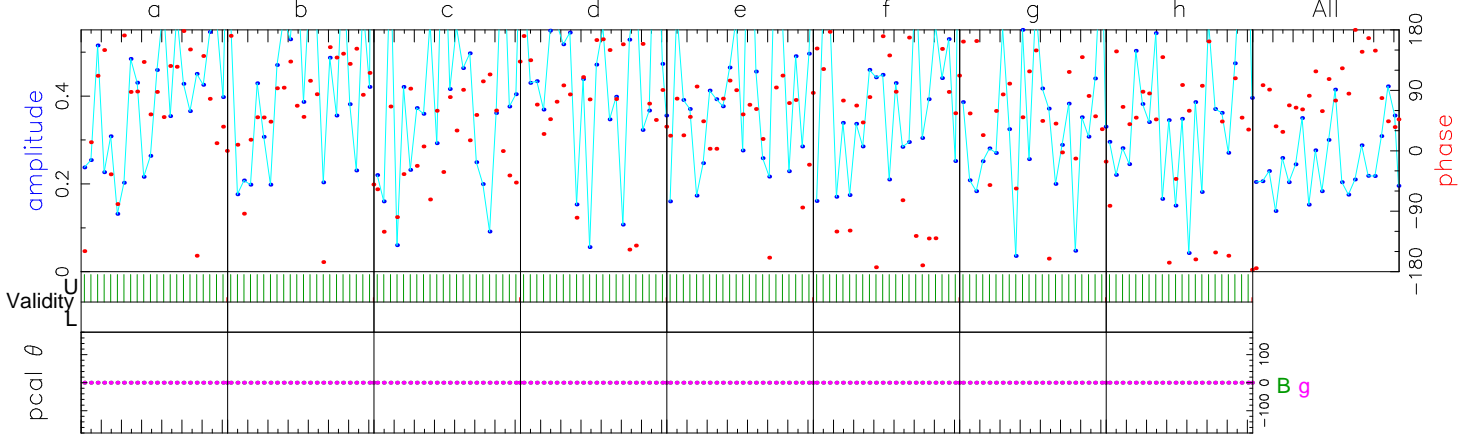


Fringe quality 9

SNR 10.3  
Int time 419.660  
Amp 0.184  
Phase 87.2  
PFD 3.5e-16  
Delays (us)  
SBD -0.000304  
MBD 0.007143  
Fringe rate (Hz)  
-0.000100  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Yr:day 16383  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165602  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

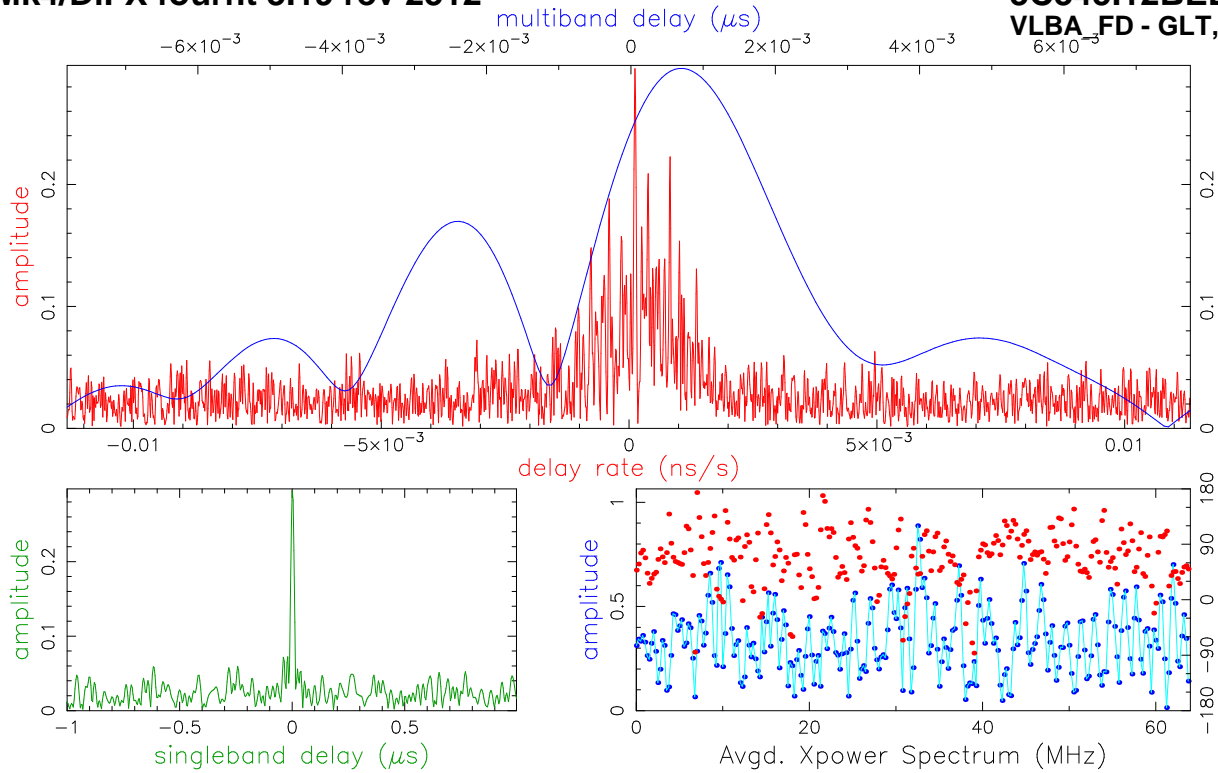
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	86.2	87.2
B	1000	1000	1000	1000	1000	1000	1000	1000	0.2	0.2
g	0	0	0	0	0	0	0	0	0.2	0.2
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.2	0.2
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.2	0.2
B:g	1000	1000	1000	1000	1000	1000	1000	1000	0.2	0.2
g	1000	1000	1000	1000	1000	1000	1000	1000	0.2	0.2
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	256.9	256.9
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.11027763765E+03		Apriori delay (usec)		1.11027049484E+03		Resid mbdelay (usec)		7.14281E-03	+/- 1.1E-04
Sband delay (usec)	1.11027019084E+03		Apriori clock (usec)		1.5542942E+01		Resid sbdelay (usec)		-3.04000E-04	+/- 8.4E-04
Phase delay (usec)	1.11027049765E+03		Apriori clockrate (us/s)		-2.7499999E-07		Resid phdelay (usec)		2.81292E-06	+/- 3.6E-07
Delay rate (us/s)	-6.86391251172E-01		Apriori rate (us/s)		-6.86391250011E-01		Resid rate (us/s)		-1.16133E-09	+/- 1.5E-09
Total phase (deg)	240.4		Apriori accel (us/s/s)		-2.03542527340E-05		Resid phase (deg)		87.2	+/- 11.1

ph/seg (deg) 46.7 26.7 Search (2048X32) 0.181 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.2 46.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.1 15.8 Inc. seg. avg. 0.228 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.3 27.5 Inc. frq. avg. 0.218 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 269.2 el 56.7 pa 55.8 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) 5076.389 -2763.871 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/Bg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/Bg.W.80.12BED8 simultaneous interpolator



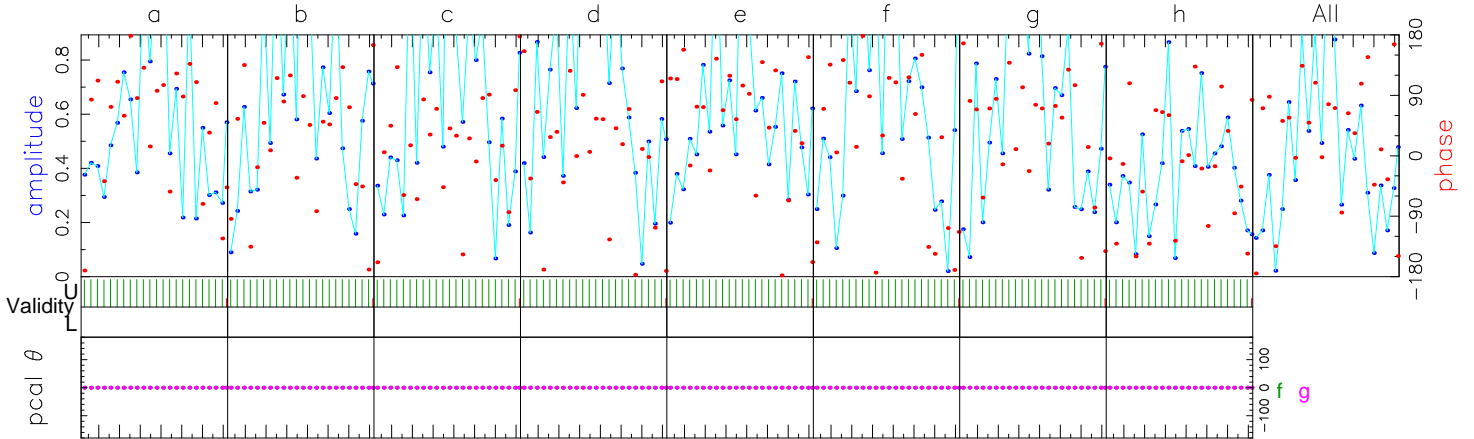


Fringe quality 8

SNR 16.5  
Int time 410.356  
Amp 0.298  
Phase 76.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.001128  
MBD 0.000747  
Fringe rate (Hz)  
0.010498  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165611  
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



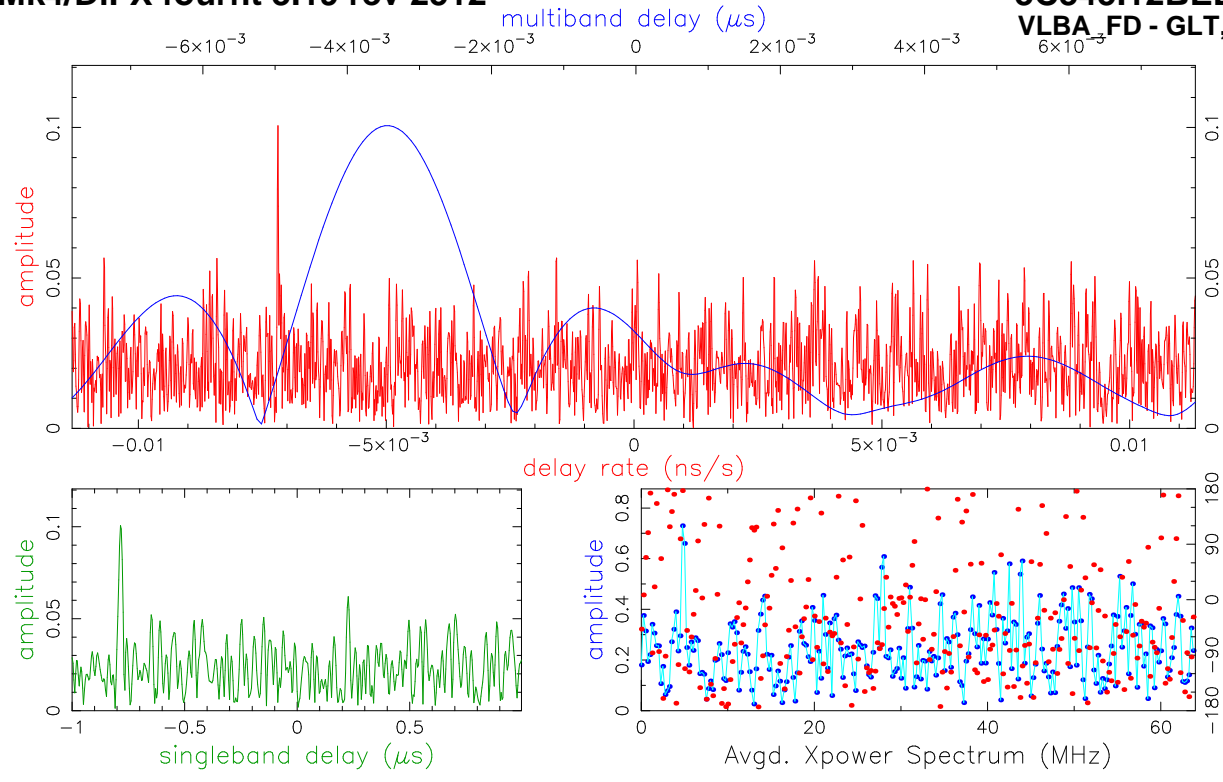
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.52708120769E+03								7.47015E-04	+/- 6.6E-05
Sband delay (usec)	-3.52708082621E+03								1.12850E-03	+/- 5.2E-04
Phase delay (usec)	-3.52708195226E+03								2.45293E-06	+/- 2.2E-07
Delay rate (us/s)	7.90242726518E-01								1.21868E-07	+/- 9.4E-10
Total phase (deg)			-132.2						76.1	+/- 6.9
	RMS	Theor.	Amplitude	0.298 +/- 0.018						
ph/seg (deg)	76.6	16.7	Search (2048X32)	0.291						
amp/seg (%)	117.8	29.1	Interp.	0.000						
ph/frq (deg)	40.7	9.8	Inc. seg. avg.	0.442						
amp/frq (%)	29.8	17.2	Inc. frq. avg.	0.337						
f: az 61.0 el 37.1 pa -78.2			g: az 142.5 el 51.0 pa -10.6							
Control file: cf_1234_gmva			u,v (fr/asec) -5920.965 -4047.708							

Group delay (usec)(sbd) -3.52708120769E+03 Apriori delay (usec) -3.52708195471E+03 Resid mbdelay (usec) 7.47015E-04 +/- 6.6E-05  
 Sband delay (usec) -3.52708082621E+03 Apriori clock (usec) -8.4134048E-01 Resid sbdelay (usec) 1.12850E-03 +/- 5.2E-04  
 Phase delay (usec) -3.52708195226E+03 Apriori clockrate (us/s) -1.6594950E-07 Resid phdelay (usec) 2.45293E-06 +/- 2.2E-07  
 Delay rate (us/s) 7.90242726518E-01 Apriori rate (us/s) 7.90242604651E-01 Resid rate (us/s) 1.21868E-07 +/- 9.4E-10  
 Total phase (deg) -132.2 Apriori accel (us/s/s) -1.47175634827E-05 Resid phase (deg) 76.1 +/- 6.9

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

simultaneous interpolator

Output file: /Exps/c192a/v1\_PV/1234/No0001/fg..12BED8

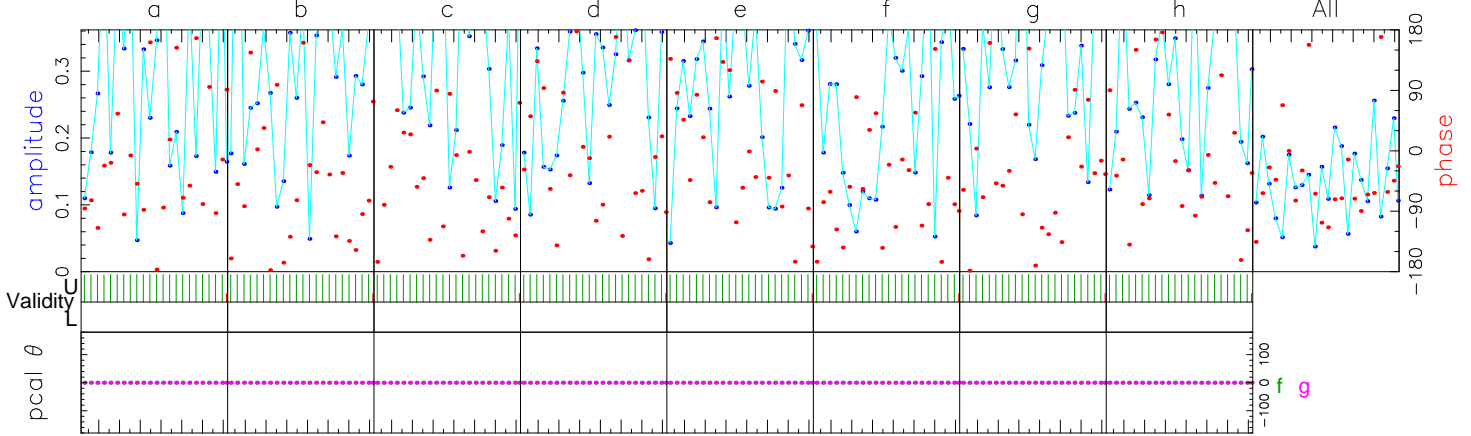


Fringe quality 0

SNR 5.6  
Int time 410.356  
Amp 0.121  
Phase -65.7  
PFD 9.9e-01  
Delays (us)  
SBD -0.783684  
MBD -0.003428  
Fringe rate (Hz)  
-0.619970  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

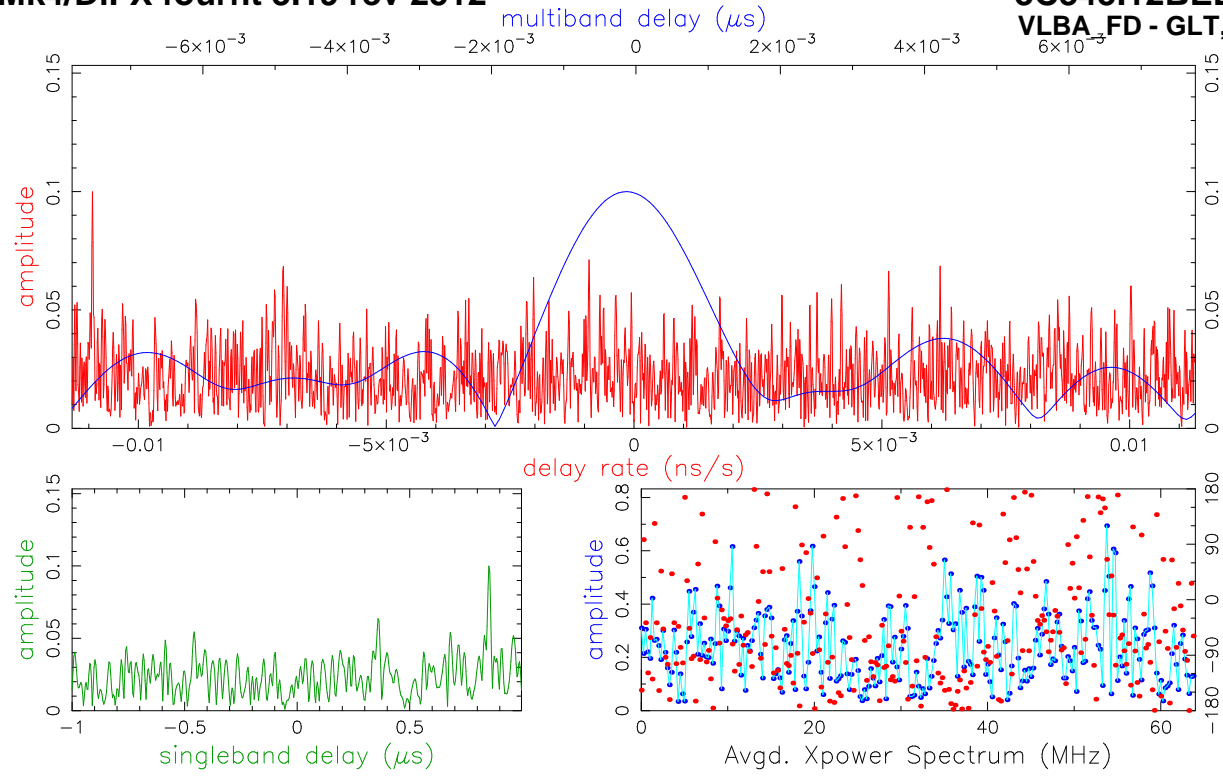
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165615  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.0	-72.6	-67.8	-82.3	-16.6	-78.3	-69.7	-56.2	Phase	-65.7
	0.1	0.1	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	431.0	494.8	207.8	288.5	406.5	333.1	55.1	34.2	Sbd box	56.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fg	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.52786663251E+03		Apriori delay (usec)		-3.52708195471E+03		Resid mbdelay (usec)		-3.42780E-03	+/- 1.9E-04
Sband delay (usec)	-3.52786563871E+03		Apriori clock (usec)		-8.4134048E-01		Resid sbdelay (usec)		-7.83684E-01	+/- 1.5E-03
Phase delay (usec)	-3.52708195683E+03		Apriori clockrate (us/s)		-1.6594950E-07		Resid phdelay (usec)		-2.11973E-06	+/- 6.6E-07
Delay rate (us/s)	7.90235407408E-01		Apriori rate (us/s)		7.90242604651E-01		Resid rate (us/s)		-7.19724E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.47175634827E-05		Resid phase (deg)		-65.7	+/- 20.4

ph/seg (deg) 57.4 48.8 Amplitude 0.121 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.8 85.2 Search (2048X32) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.7 28.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.9 50.2 Inc. seg. avg. 0.121 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 f: az 61.0 el 37.1 pa -78.2 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 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/fg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/fg.W.130.12BED8 simultaneous interpolator

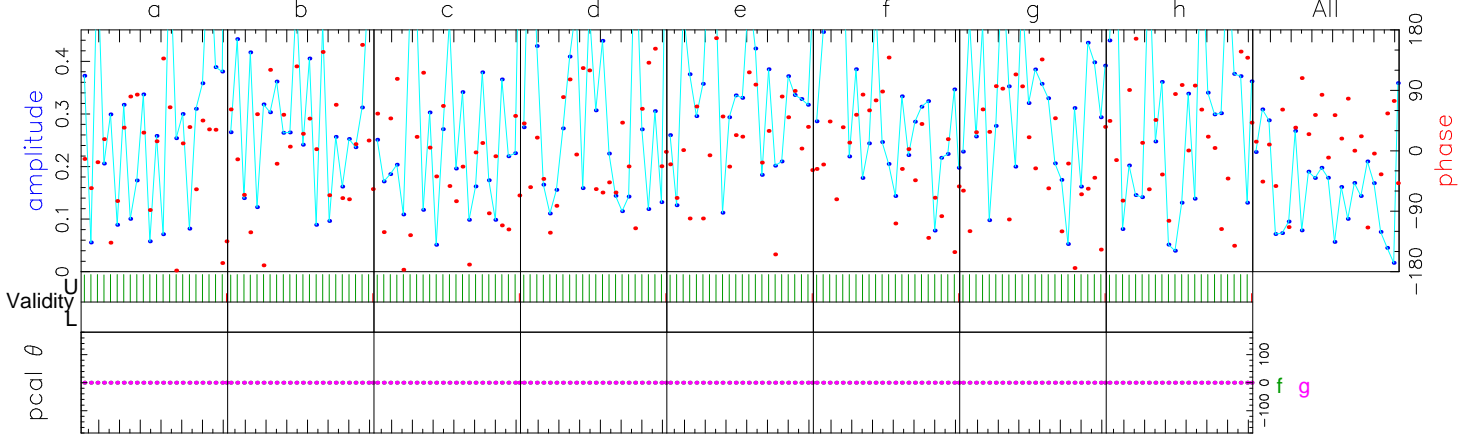


Fringe quality 0

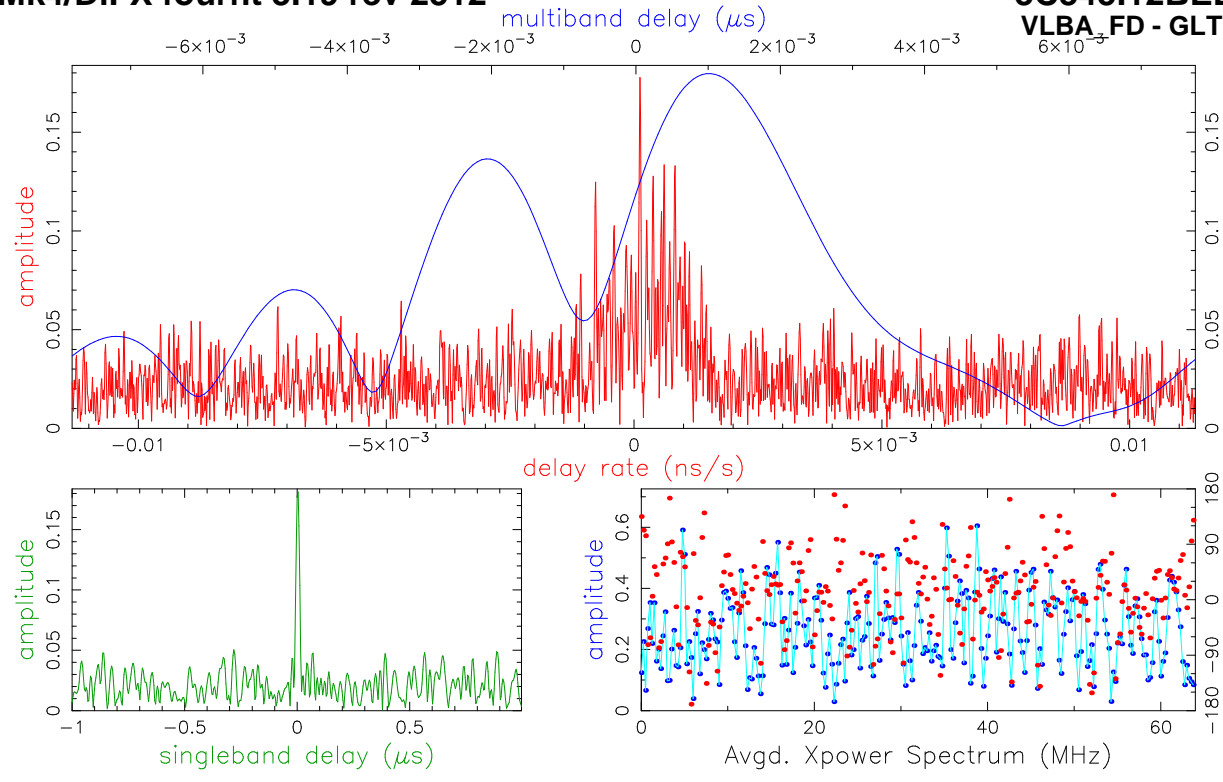
SNR 5.6  
Int time 410.314  
Amp 0.153  
Phase 9.9  
PFD 1.0e+00  
Delays (us)  
SBD 0.852749  
MBD -0.000096  
Fringe rate (Hz)  
-0.943068  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165620  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0				
f	1000	1000	1000	1000	1000	1000	1000	1000				
g	0	0	0	0	0	0	0	0				
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
fg	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				
g	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	-3.52622267608E+03				-3.52708195471E+03				-9.63670E-05	+/- 1.9E-04		
Sband delay (usec)	-3.52622920621E+03				-8.4134048E-01				8.52749E-01	+/- 1.5E-03		
Phase delay (usec)	-3.52708195439E+03				-1.6594950E-07				3.20766E-07	+/- 6.6E-07		
Delay rate (us/s)	7.90231656566E-01				7.90242604651E-01				-1.09481E-05	+/- 2.8E-09		
Total phase (deg)			-198.4		-1.47175634827E-05				9.9	+/- 20.5		
	RMS	Theor.	Amplitude	0.153 +/- 0.027								
ph/seg (deg)	57.8	49.2	Search (2048X32)	0.099					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	96.9	85.8	Interp.	0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	22.4	29.0	Inc. seg. avg.	0.170					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	32.4	50.6	Inc. frq. avg.	0.142					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

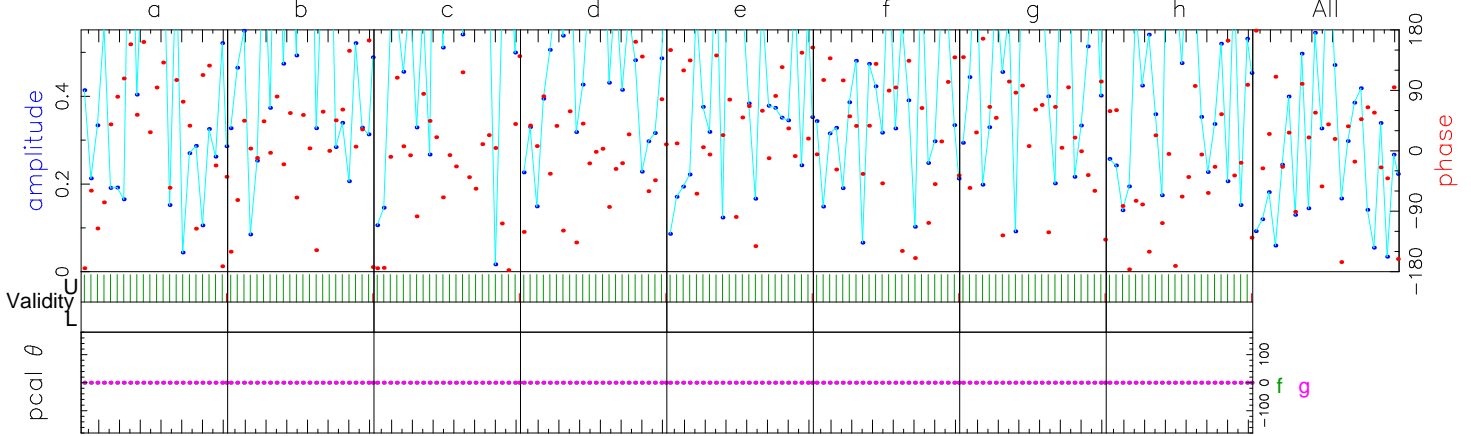


Fringe quality 9

SNR 10.2  
Int time 410.314  
Amp 0.184  
Phase 30.2  
PFD 1.0e-15  
Delays (us)  
SBD 0.002376  
MBD 0.001204  
Fringe rate (Hz) 0.010330  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

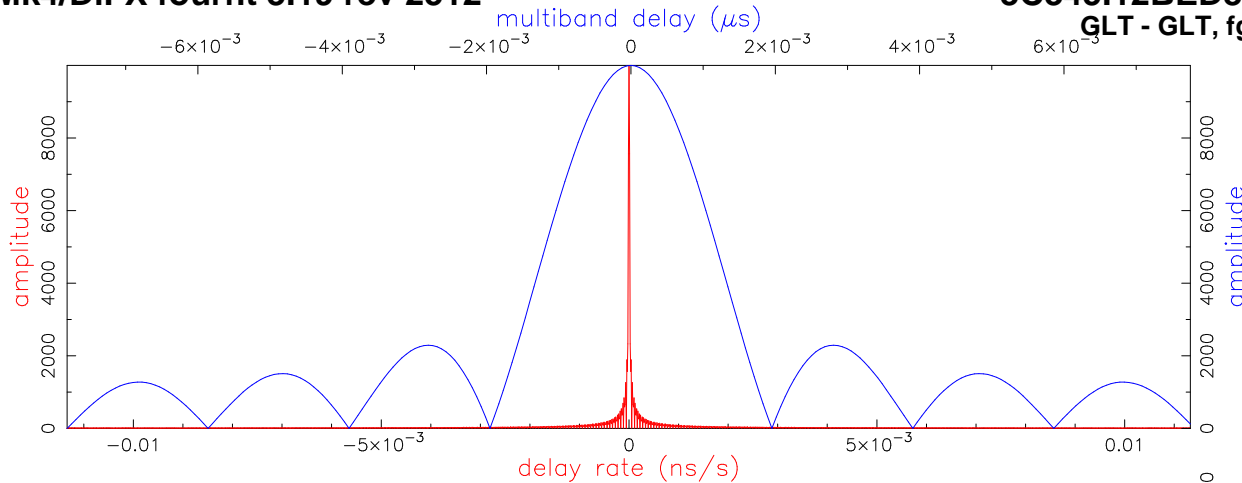
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build 2020:072:124544  
2020:086:165607  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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

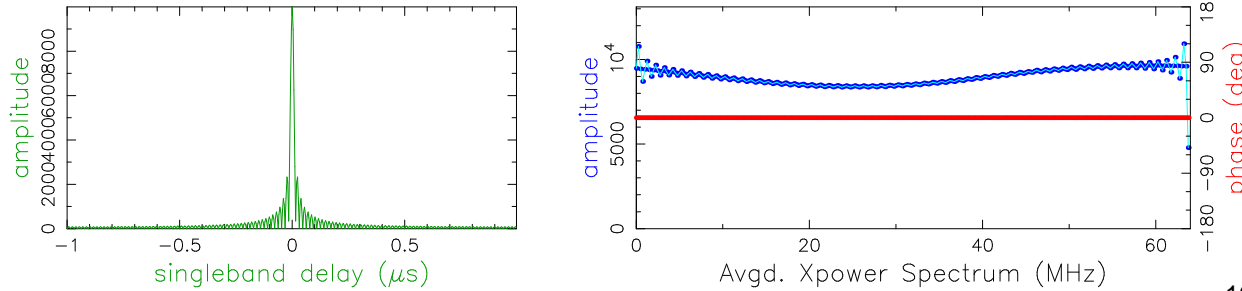


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
127.2	33.0	0.8	3.2	45.7	71.5	43.7	-28.6	Phase	30.2	
0.2	0.4	0.3	0.3	0.2	0.2	0.2	0.1	Ampl.	0.2	
255.3	257.1	258.3	256.9	258.4	148.7	256.8	254.6	Sbd box	257.6	
U/L 803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g 0	0	0	0	0	0	0	0	0	PC freqs	
f:g 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fg 0:0	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	1000	PC amp	
g 1000	1000	1000	1000	1000	1000	1000	1000	1000		
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
g W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.52708075063E+03		Apriori delay (usec)	-3.52708195471E+03		Resid mbdelay (usec)	1.20408E-03	+/-	1.1E-04	
Sband delay (usec)	-3.52707957896E+03		Apriori clock (usec)	-8.4134048E-01		Resid sbdelay (usec)	2.37575E-03	+/-	8.5E-04	
Phase delay (usec)	-3.52708195373E+03		Apriori clockrate (us/s)	-1.6594950E-07		Resid phdelay (usec)	9.75156E-07	+/-	3.6E-07	
Delay rate (us/s)	7.90242724571E-01		Apriori rate (us/s)	7.90242604651E-01		Resid rate (us/s)	1.19921E-07	+/-	1.5E-09	
Total phase (deg)		-178.1	Apriori accel (us/s/s)	-1.47175634827E-05		Resid phase (deg)	30.2	+/-	11.3	

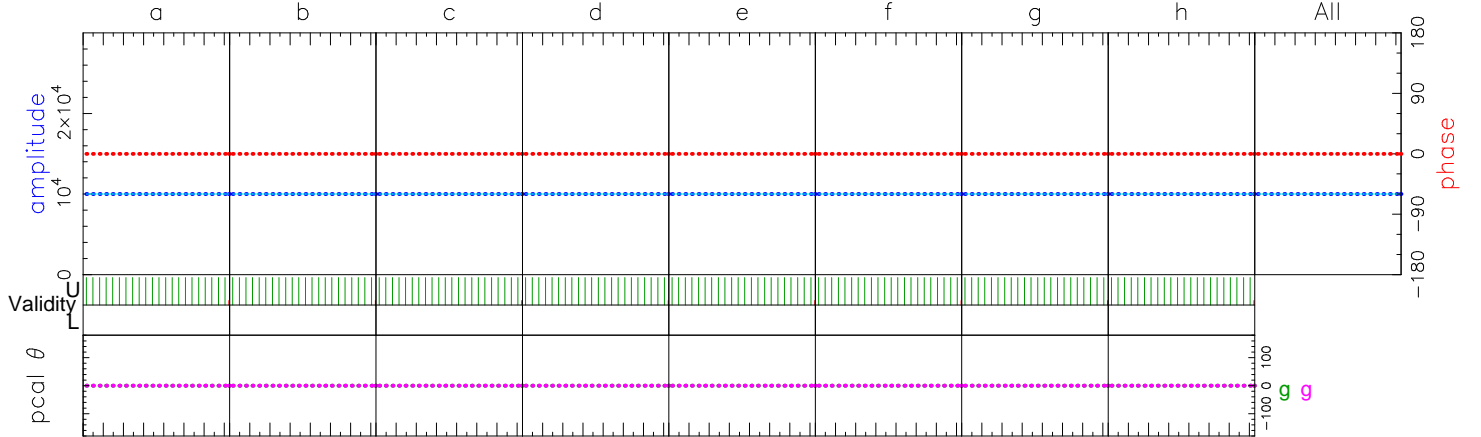
ph/seg (deg) 71.5 27.0 Amplitude 0.184 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 112.9 47.1 Search (2048X32) 0.179 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 52.6 15.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.7 27.8 Inc. seg. avg. 0.249 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 f: az 61.0 el 37.1 pa -78.2 g: az 142.5 el 51.0 pa -10.6 u,v (fr/asec) -5920.965 -4047.708 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/fg..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/fg.W.90.12BED8 simultaneous interpolator



Fringe quality 9  
SNR 560243.8  
Int time 419.724  
Amp 9999.946  
Phase -0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165612  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Phase delay (usec)	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20	-7.39937467759E-20		
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Total phase (deg)			-0.0							
				Apriori delay (usec)	0.0000000000E+00		Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
				Apriori clock (usec)	0.000000E+00		Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
				Apriori clockrate (us/s)	0.000000E+00		Resid phdelay (usec)	-7.39937E-20	+/-	6.6E-12
				Apriori rate (us/s)	0.0000000000E+00		Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
				Apriori accel (us/s/s)	0.0000000000E+00		Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg) 0.0 0.0  
amp/seg (%) 0.0 0.0  
ph/frq (deg) 0.0 0.0  
amp/frq (%) 0.0 0.0  
g: az 142.5 el 51.0 pa -10.6  
Control file: cf\_1234\_gmva

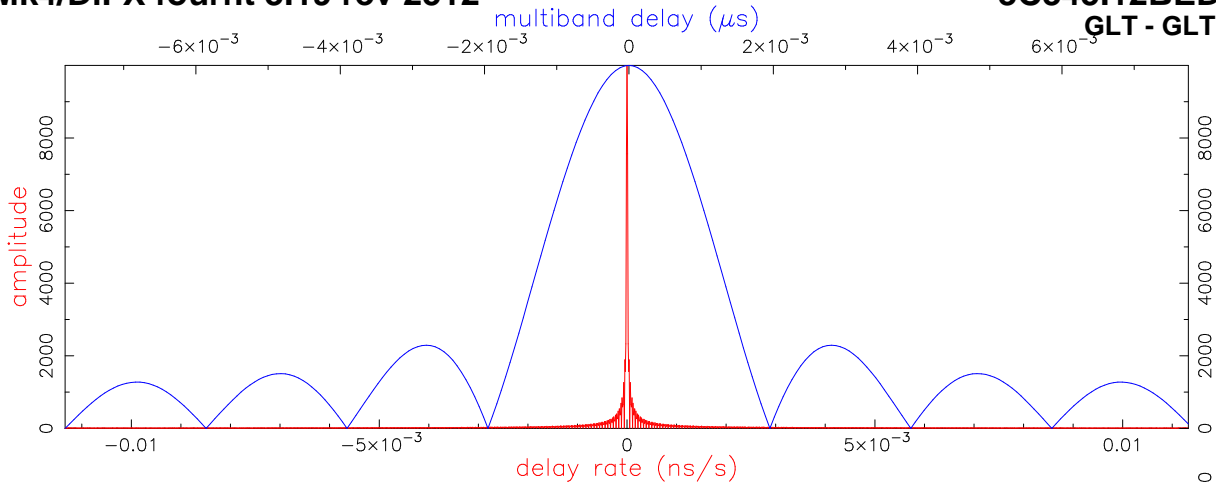
RMS Theor. Amplitude 9999.946 +/- 0.018  
Search (2048X32) 9999.946  
Interp. 0.000  
Inc. seg. avg. 10000.000  
Inc. frq. avg. 9999.946

u,v (fr/asec) 0.000 0.000  
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled  
Sample rate(MISamp/s): 128  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

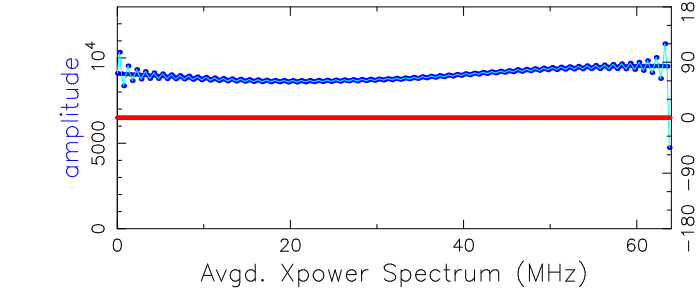
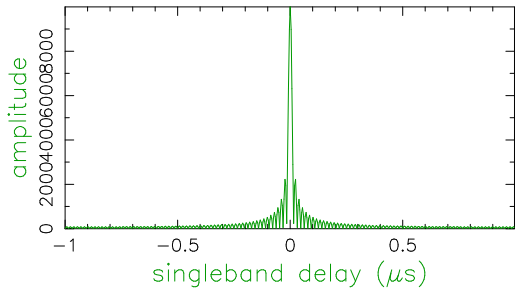
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

simultaneous interpolator

Input file: /Exps/c192a/v1\_PV/1234/No0001/gg..12BED8  
Output file: /Exps/c192a/v1\_PV/1234/No0001/gg.W.118.12BED8

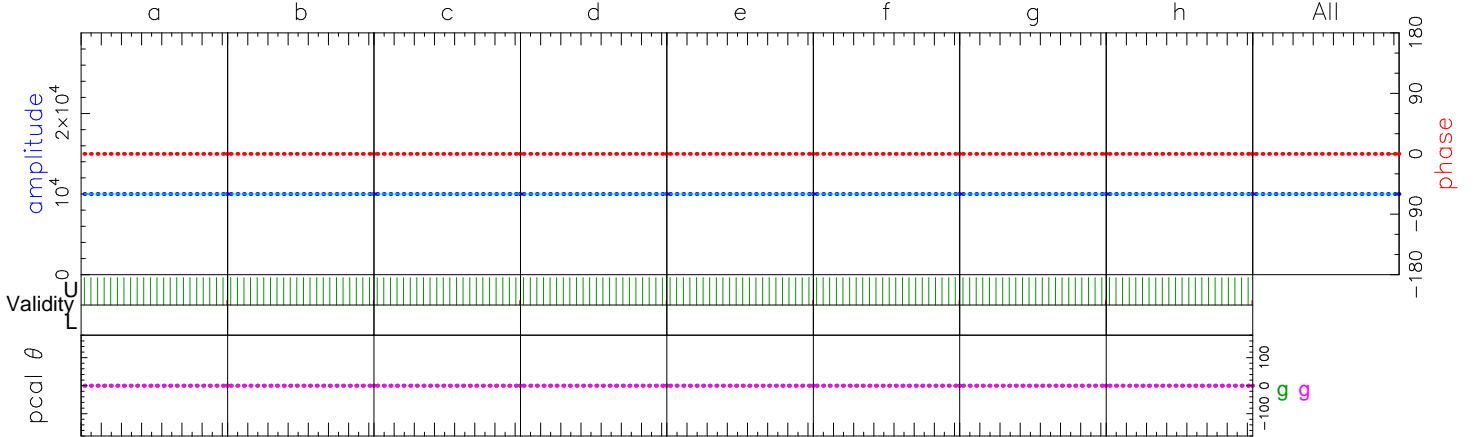


Fringe quality 9  
SNR 560215.7  
Int time 419.680  
Amp 9999.965  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165608  
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, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

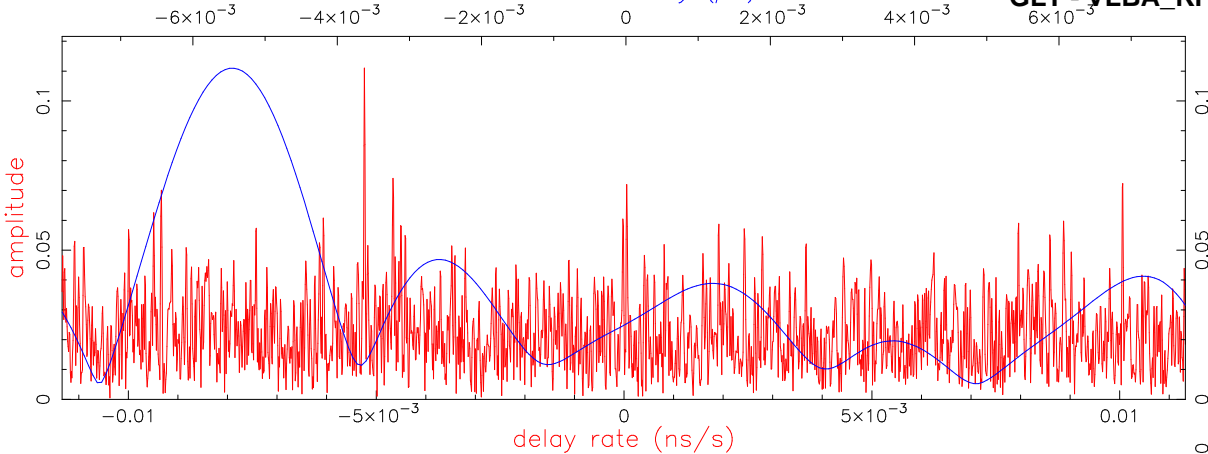
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	5.4657882761E-21	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.46579E-21	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

	RMS	Theor.	Amplitude	9999.965 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (2048X32)	9999.965	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.965	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Mk4/DiFX fourfit 3.19 rev 2512

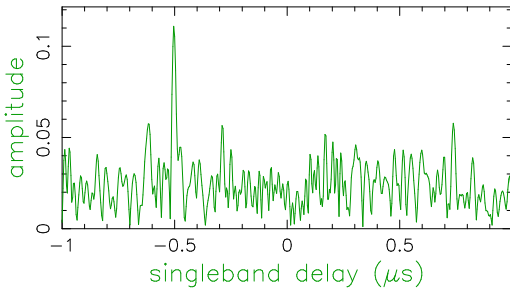
3C345.12BED8, No0001, gk  
GLT - VLBA\_KP, fgroup W, pol LL

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



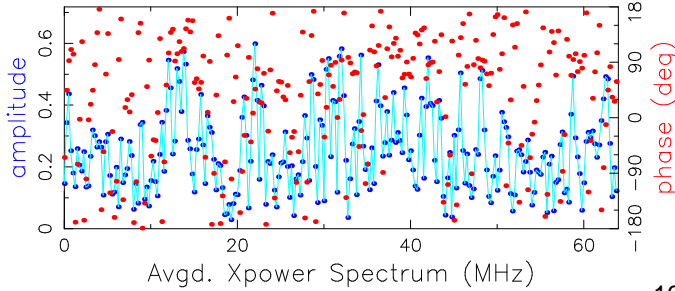
Fringe quality 0

SNR 6.1  
Int time 407.593  
Amp 0.122  
Phase 119.3  
PFD 2.0e-01  
Delays (us)  
SBD -0.503299  
MBD -0.005437  
Fringe rate (Hz)  
-0.452198  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



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

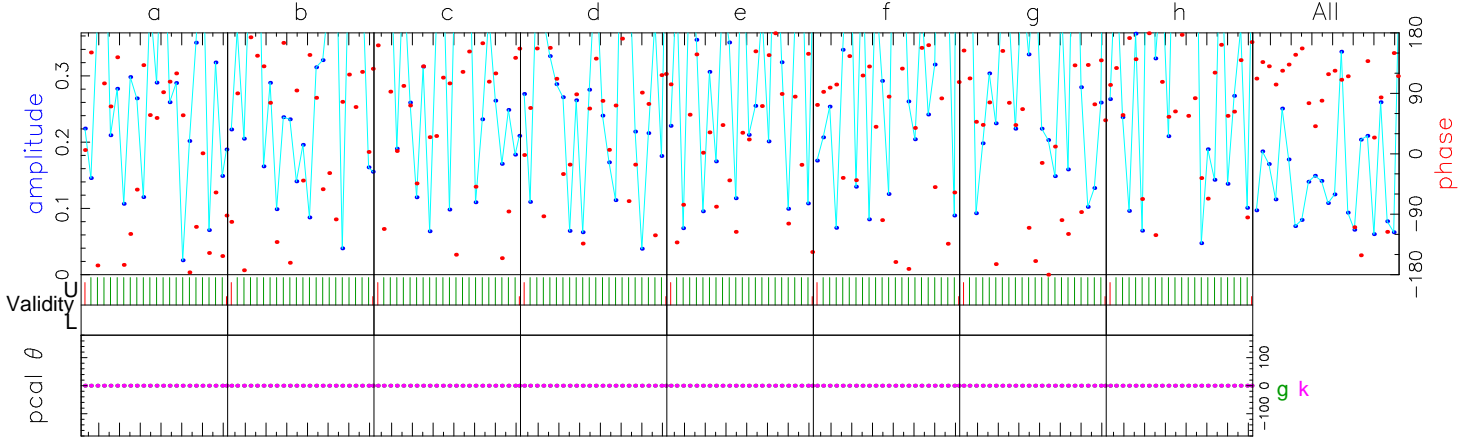
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165609  
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



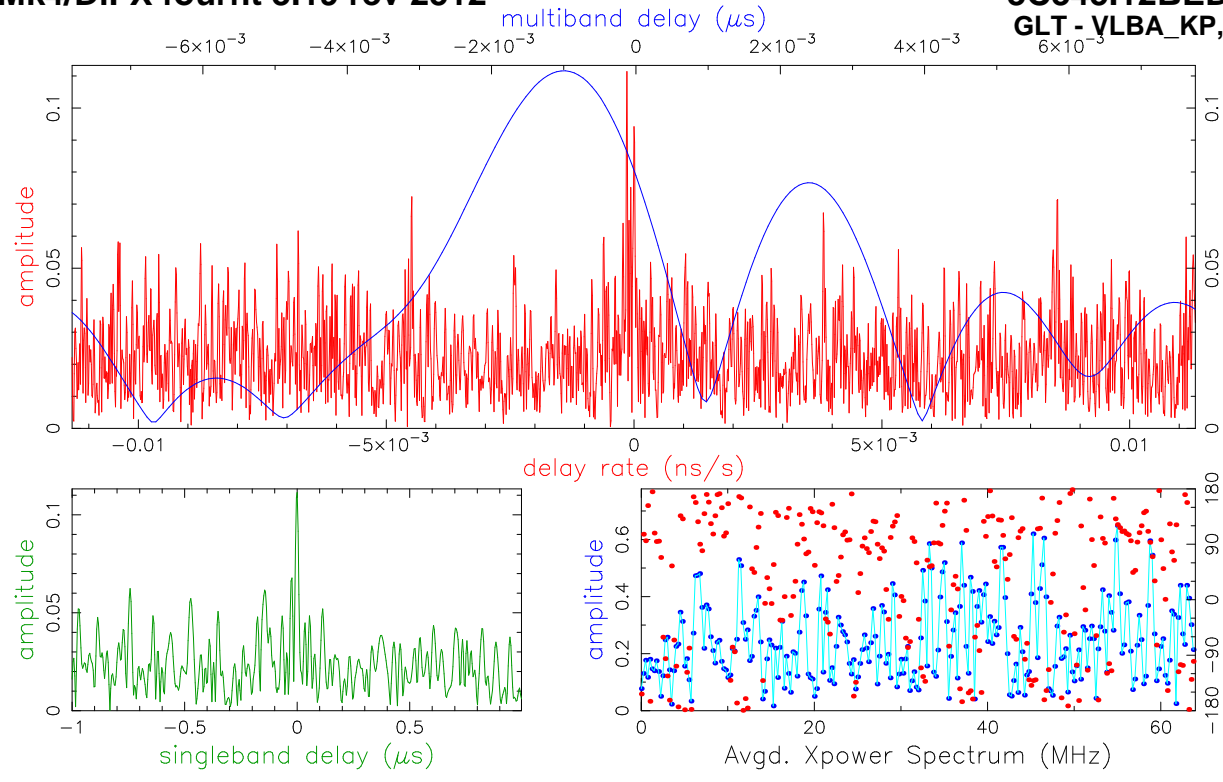
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0		
g	0	0	0	0	0	0	0	0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	106.8	129.0	128.3	131.1	66.2	128.9	125.4	116.7		
Sband delay (usec)	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.2		
Phase delay (usec)	466.9	446.6	283.9	309.5	90.0	10.5	9.0	128.4		
Delay rate (us/s)		-8.27903378264E-01								
Total phase (deg)			210.4							
Apriori delay (usec)		5.06799403189E+03			5.06849946893E+03					
Apriori clock (usec)		5.06799616993E+03			1.6980423E+00					
Apriori clockrate (us/s)		5.06849947277E+03			2.6957898E-07					
Apriori rate (us/s)		-8.27903378264E-01			-8.27898128691E-01					
Apriori accel (us/s/s)					5.10295219994E-06					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										119.3 +/- 18.7
Pcal mode:										MANUAL, MANUAL
Pcal rate:										0.000E+00, 0.000E+00 (us/s)
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

ph/seg (deg) 54.4 44.7  
amp/seg (%) 75.7 78.1  
ph/frq (deg) 23.9 26.4  
amp/frq (%) 39.3 46.1

RMS Theor. Amplitude 0.122 +/- 0.020  
Search (2048X32) 0.110  
Interp. 0.000  
Inc. seg. avg. 0.124  
Inc. frq. avg. 0.115

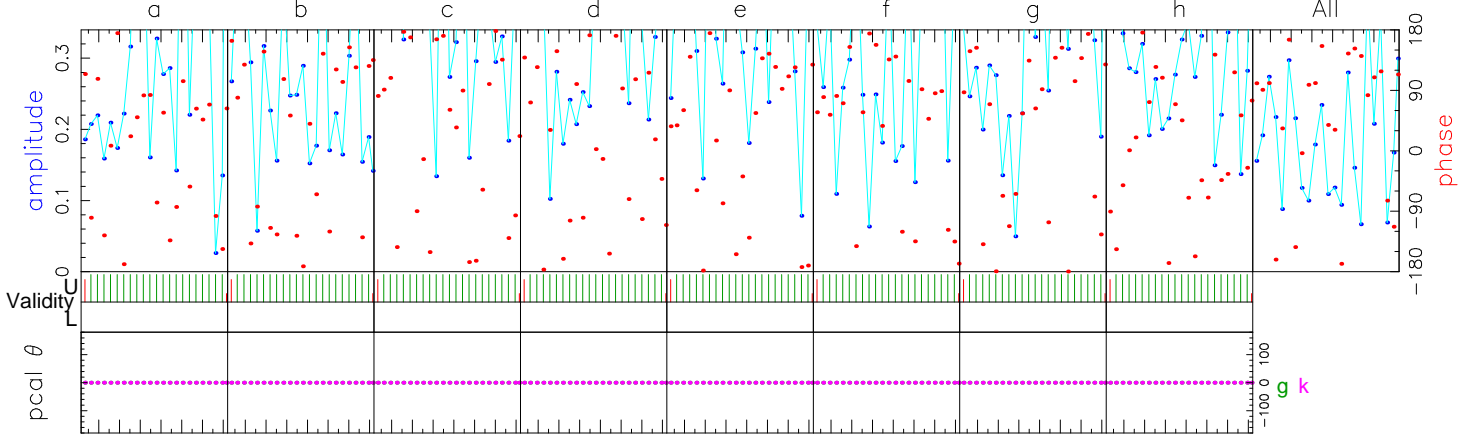
g: az 142.5 el 51.0 pa -10.6  
k: az 60.1 el 32.1 pa -73.4  
u,v (fr/asec) 6184.763 3281.461

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gk.W.104.12BED8 simultaneous interpolator



Fringe quality 0  
SNR 6.3  
Int time 407.634  
Amp 0.113  
Phase 124.7  
PFD 1.0e-01  
Delays (us)  
SBD -0.001545  
MBD -0.001084  
Fringe rate (Hz)  
-0.012470  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165614  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

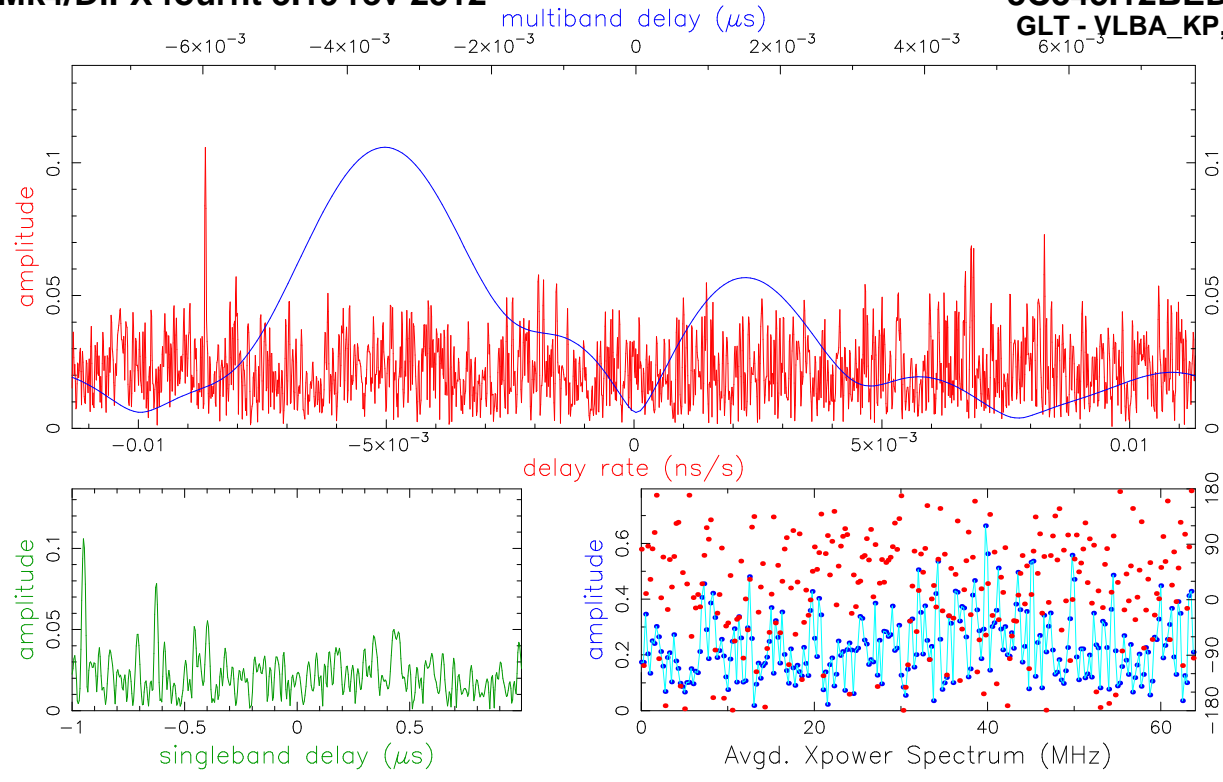
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.4	145.6	161.3	133.9	116.2	103.6	141.6	-44.2	Phase	124.7
	0.1	0.2	0.1	0.1	0.2	0.2	0.2	0.0	Ampl.	0.1
	414.4	219.3	396.7	90.4	256.8	388.1	257.2	39.2	Sbd box	256.6
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.06849838527E+03		Apriori delay (usec)		5.06849946893E+03		Resid mbdelay (usec)		-1.08365E-03	+/- 1.7E-04
Sband delay (usec)	5.06849792368E+03		Apriori clock (usec)		1.6980423E+00		Resid sbdelay (usec)		-1.54525E-03	+/- 1.4E-03
Phase delay (usec)	5.06849947295E+03		Apriori clockrate (us/s)		2.6957898E-07		Resid phdelay (usec)		4.02122E-06	+/- 5.9E-07
Delay rate (us/s)	-8.27898273457E-01		Apriori rate (us/s)		-8.27898128691E-01		Resid rate (us/s)		-1.44767E-07	+/- 2.5E-09
Total phase (deg)	215.9		Apriori accel (us/s/s)		5.10295219994E-06		Resid phase (deg)		124.7	+/- 18.3

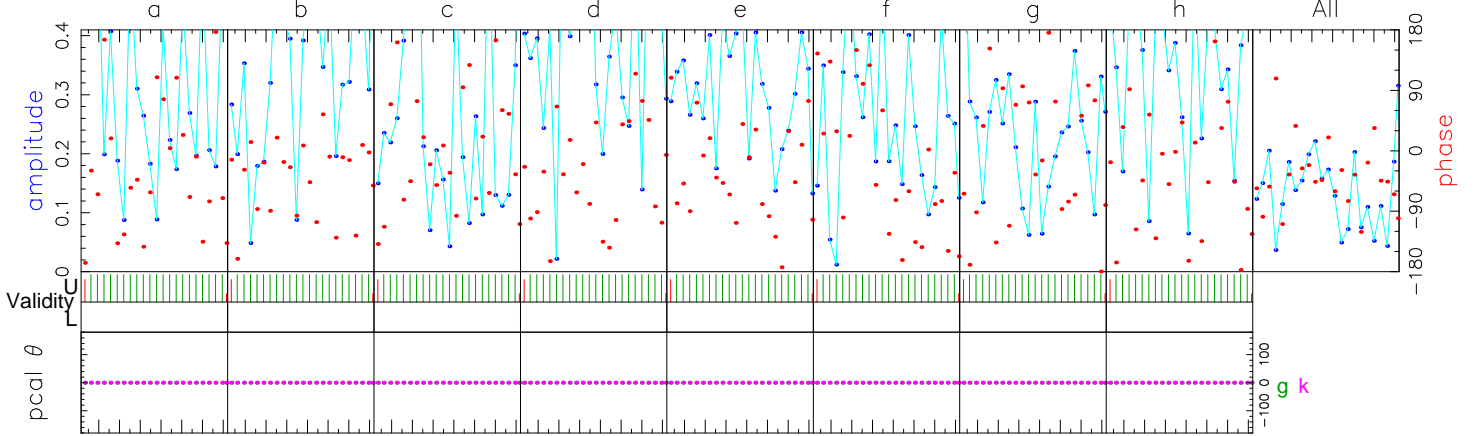
ph/seg (deg) 70.5 43.9 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 103.5 76.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 75.6 25.9 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 48.3 45.2 Inc. frq. avg. 0.125 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 142.5 el 51.0 pa -10.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 6184.763 3281.461 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gk.W.125.12BED8





Fringe quality 0  
SNR 5.9  
Int time 407.593  
Amp 0.137  
Phase -43.4  
PFD 6.9e-01  
Delays (us)  
SBD -0.948468  
MBD -0.003448  
Fringe rate (Hz)  
-0.745922  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165618  
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

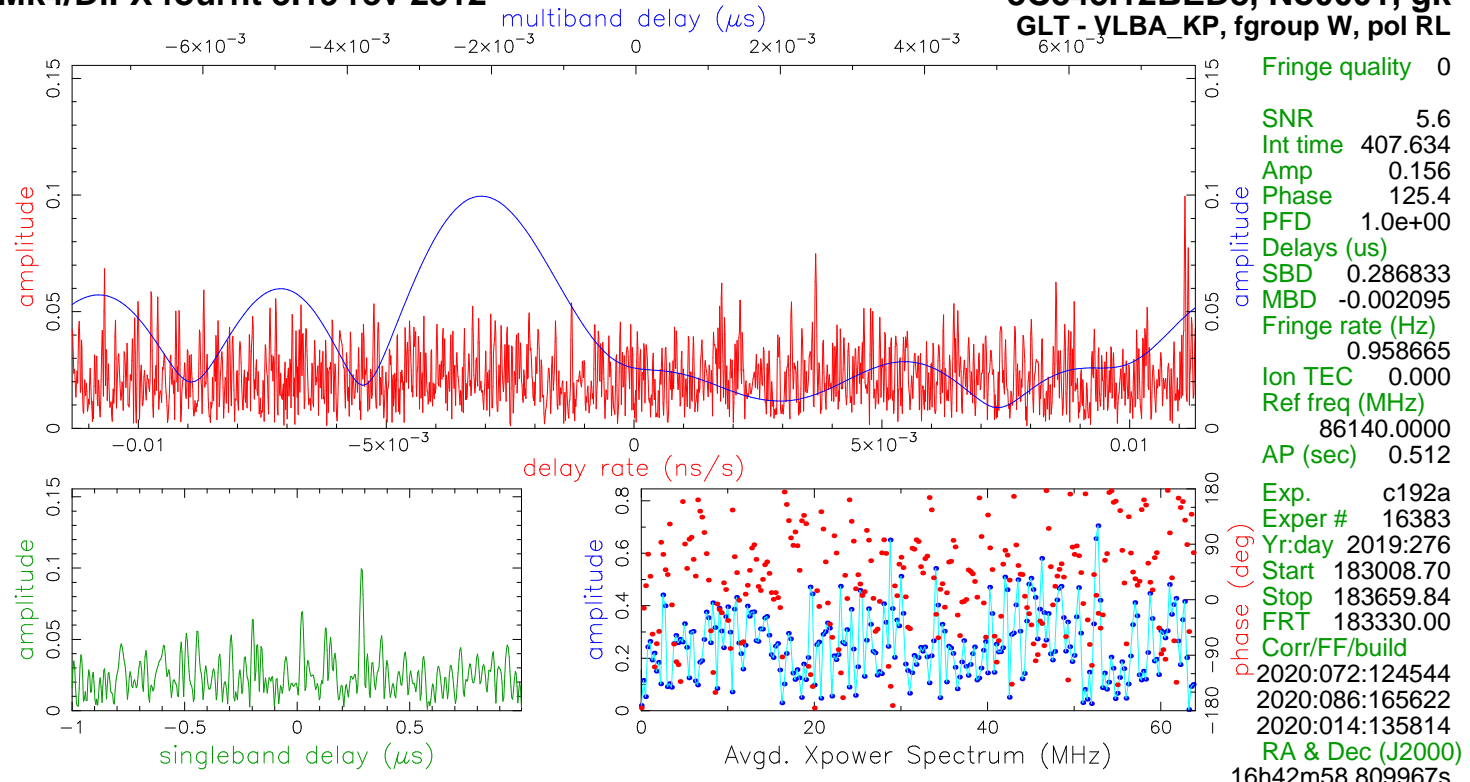


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-65.0	-29.3	-37.5	-50.8	-25.3	-65.0	-102.9	-39.6	Phase	-43.4
	0.2	0.3	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	313.9	13.6	141.4	370.9	15.0	140.7	336.1	278.9	Sbd box	14.2
U/L	801/0	801/0	801/0	801/0	801/0	801/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.06755852079E+03		Apriori delay (usec)		5.06849946893E+03		Resid mbdelay (usec)		-3.44814E-03	+/- 1.9E-04
Sband delay (usec)	5.06755100118E+03		Apriori clock (usec)		1.6980423E+00		Resid sbdelay (usec)		-9.48468E-01	+/- 1.5E-03
Phase delay (usec)	5.06849946752E+03		Apriori clockrate (us/s)		2.6957898E-07		Resid phdelay (usec)		-1.40038E-06	+/- 6.3E-07
Delay rate (us/s)	-8.27906788101E-01		Apriori rate (us/s)		-8.27898128691E-01		Resid rate (us/s)		-8.65941E-06	+/- 2.7E-09
Total phase (deg)	47.7		Apriori accel (us/s/s)		5.10295219994E-06		Resid phase (deg)		-43.4	+/- 19.5

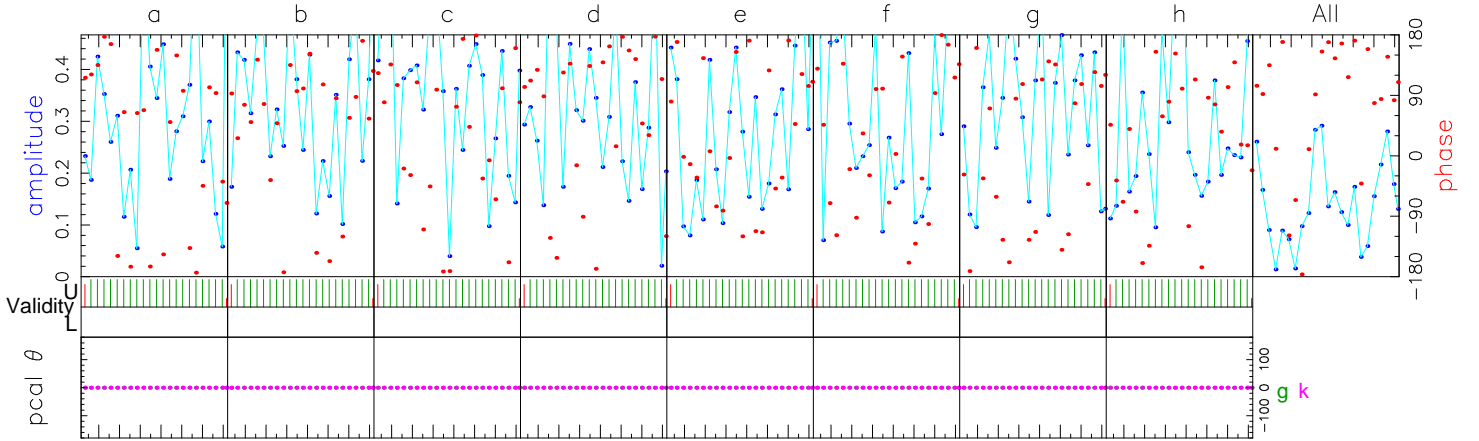
ph/seg (deg) 50.9 46.8 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.5 81.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.1 27.6 Inc. seg. avg. 0.129 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 55.1 48.3 Inc. frq. avg. 0.129 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 6184.763 3281.461 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gk.W.142.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, gk  
GLT - VLBA\_KP, fgroup W, pol RL

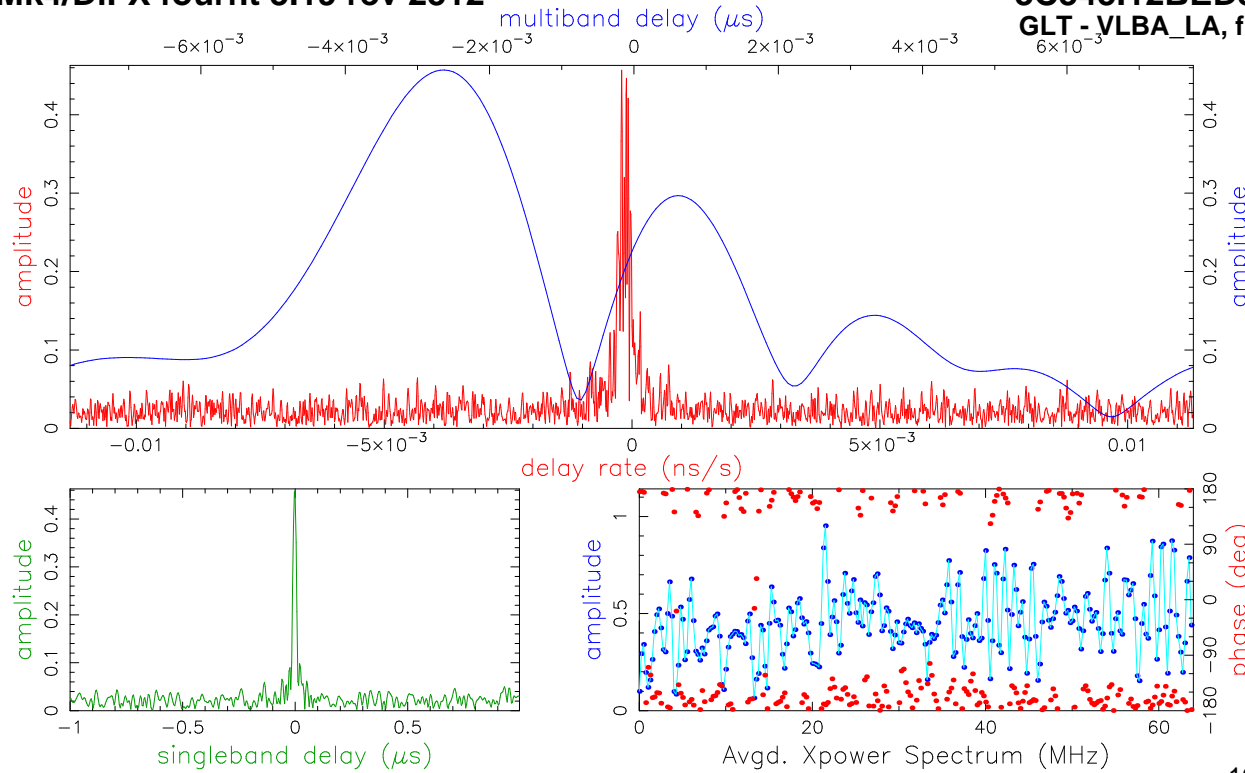


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
158.3	95.9	99.8	155.4	96.1	149.4	144.7	144.7	85.4	Phase	125.4
0.2	0.3	0.2	0.2	0.0	0.0	0.1	0.1	0.1	Ampl.	0.2
182.7	329.8	417.2	56.1	458.1	376.4	185.7	186.6	186.6	Sbd box	330.4
U/L	802/0	802/0	802/0	802/0	802/0	802/0	802/0	802/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.06877862344E+03		Apriori delay (usec)	5.06849946893E+03	Resid mbdelay (usec)	-2.09549E-03	+/-	1.9E-04		
Sband delay (usec)	5.06878630143E+03		Apriori clock (usec)	1.6980423E+00	Resid sbdelay (usec)	2.86833E-01	+/-	1.5E-03		
Phase delay (usec)	5.06849947297E+03		Apriori clockrate (us/s)	2.6957898E-07	Resid phdelay (usec)	4.04480E-06	+/-	6.6E-07		
Delay rate (us/s)	-8.27886999543E-01		Apriori rate (us/s)	-8.27898128691E-01	Resid rate (us/s)	1.11291E-05	+/-	2.8E-09		
Total phase (deg)		216.6	Apriori accel (us/s/s)	5.10295219994E-06	Resid phase (deg)	125.4	+/-	20.6		

ph/seg (deg) 73.3 49.3 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 90.1 86.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.0 29.1 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 53.6 50.8 Inc. frq. avg. 0.156 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 k: az 60.1 el 32.1 pa -73.4 u,v (fr/asec) 6184.763 3281.461 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gk..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gk.W.160.12BED8

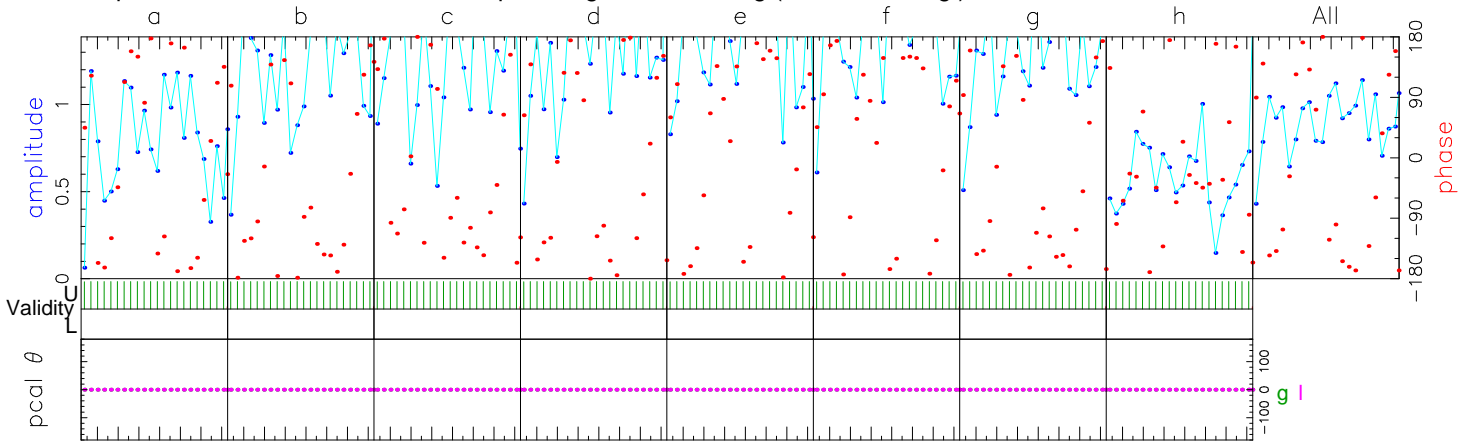


Fringe quality 6

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"

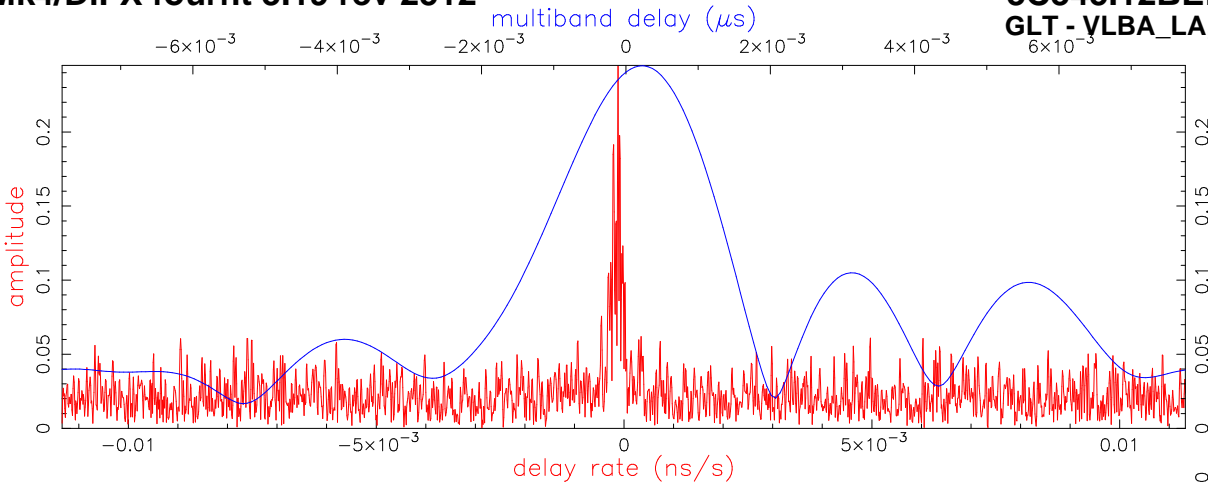
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



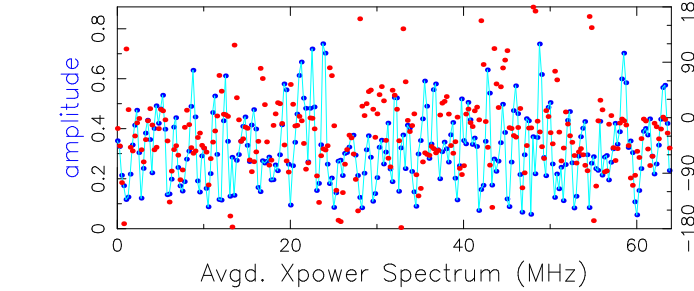
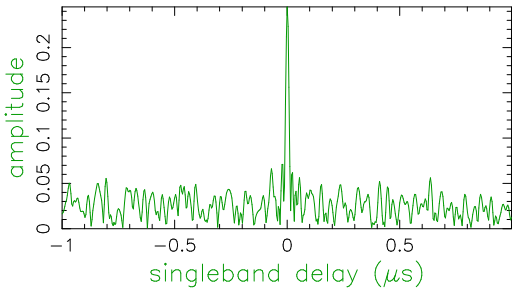
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	174.0	-150.9	-126.9	-172.0	156.7	146.5	-150.1	-62.4	Phase	-167.6
g	0.5	0.6	0.7	0.6	0.6	0.7	0.7	0.2	Ampl.	0.6
l	257.7	256.4	256.0	256.0	256.3	256.5	257.0	258.9	Sbd box	256.4
g	795/0	795/0	795/0	795/0	795/0	795/0	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 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

Fringe quality 9

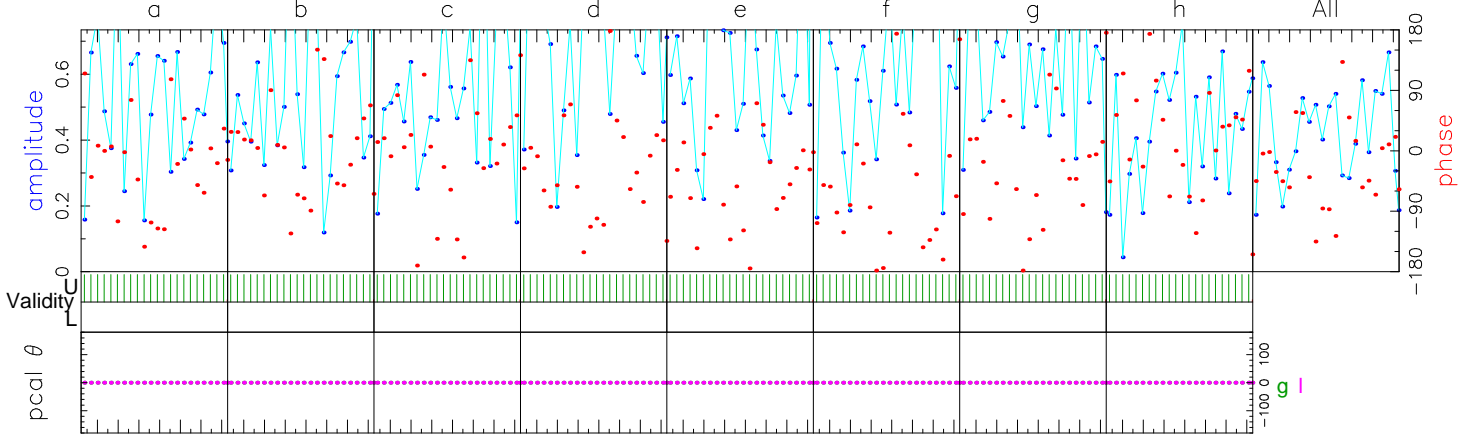


SNR 13.5  
Int time 406.835  
Amp 0.245  
Phase -26.8  
PFD 7.9e-33  
Delays (us)  
SBD 0.000421  
MBD 0.000253  
Fringe rate (Hz)  
-0.010067  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



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

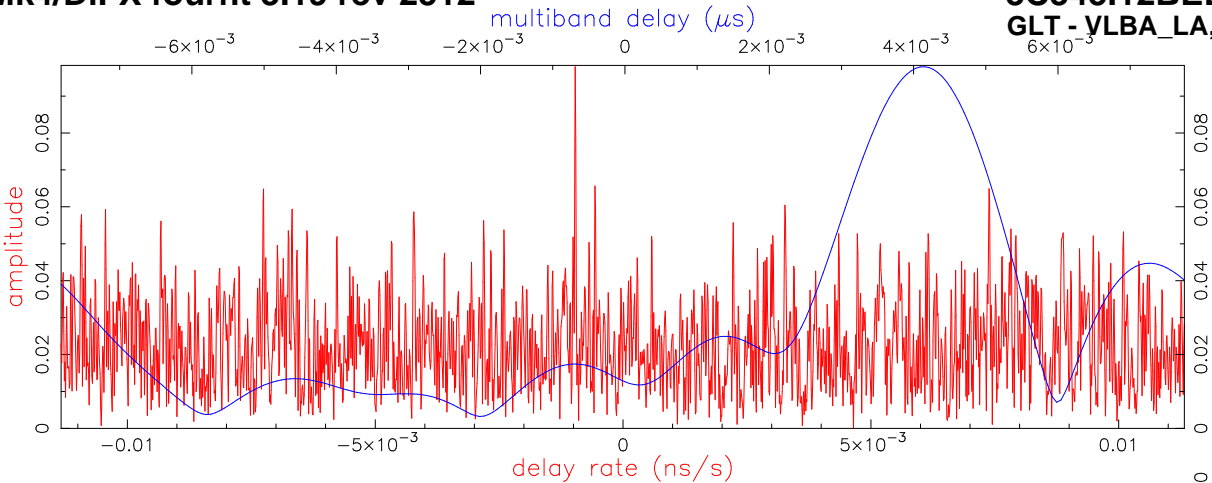


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.6	-14.4	3.6	-33.5	-31.7	-85.3	-27.5	31.4	Phase	-26.8
	0.3	0.2	0.3	0.4	0.3	0.3	0.3	0.2	Ampl.	0.3
	258.6	257.4	255.9	257.3	256.7	256.6	257.3	259.3	Sbd box	257.1
U/L	795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	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

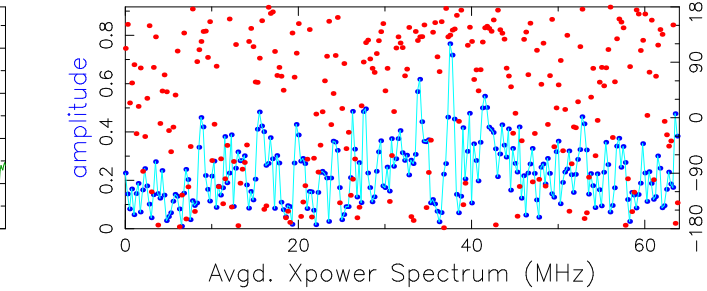
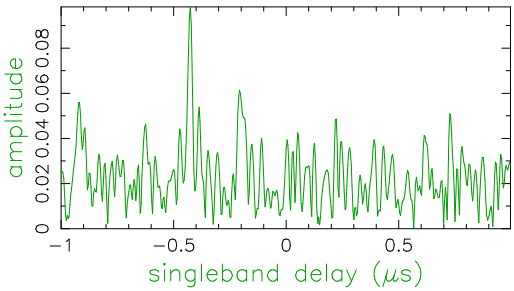
	RMS	Theor.	Amplitude	0.245 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	62.3	20.3	Search (2048X32)	0.223	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	94.1	35.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008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

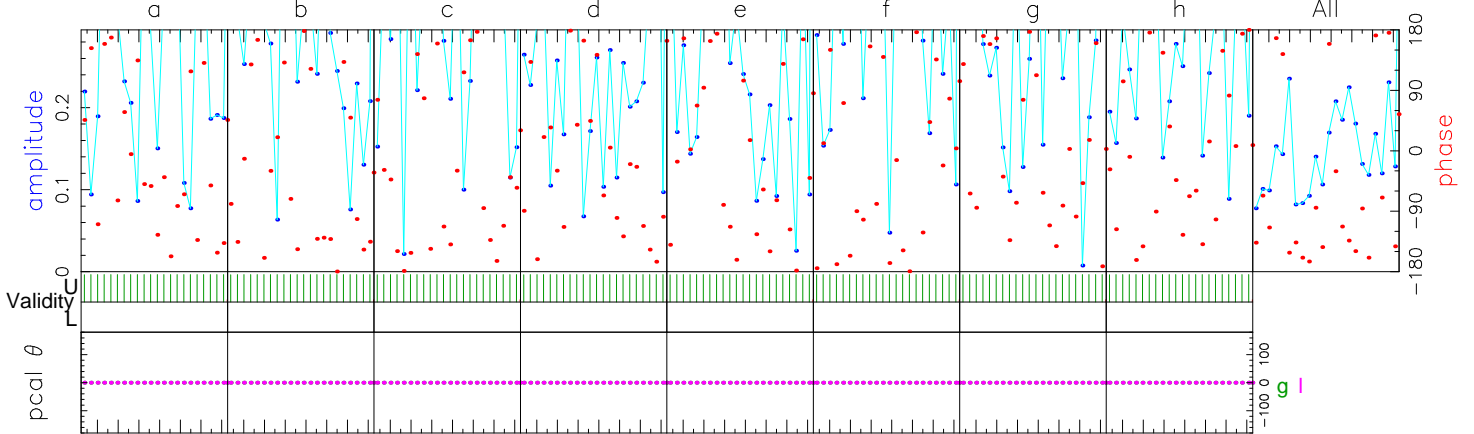
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.126.12BED8



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

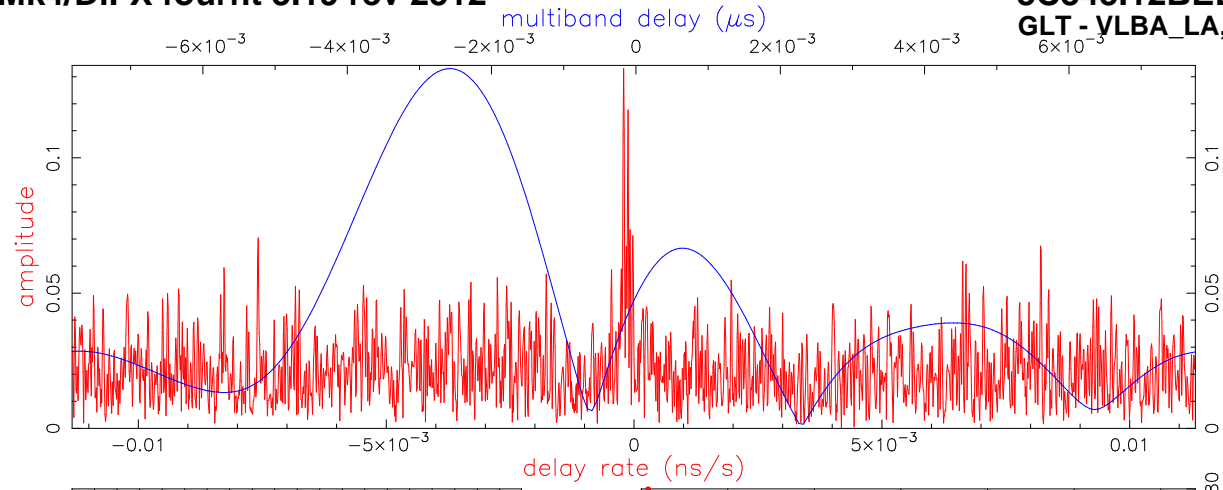


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.5	-151.2	-141.8	-131.6	-165.9	-171.0	-133.9	-108.8	Phase	-142.8
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	27.2	319.0	147.3	345.0	89.9	211.5	146.2	254.0	Sbd box	147.9
U/L	795/0	795/0	795/0	795/0	795/0	795/0	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

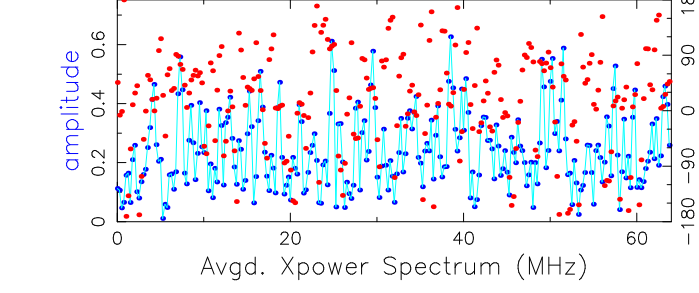
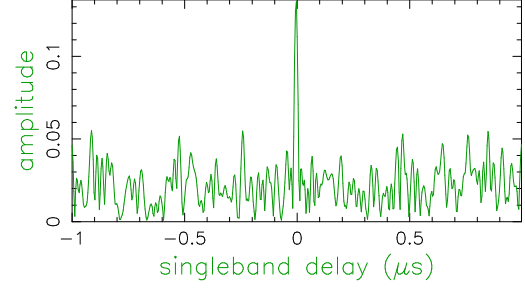
ph/seg (deg) 47.9 50.8 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 72.0 88.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 23.3 30.0 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.8 52.3 Inc. frq. avg. 0.091 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 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

Mk4/DiFX fourfit 3.19 rev 2512

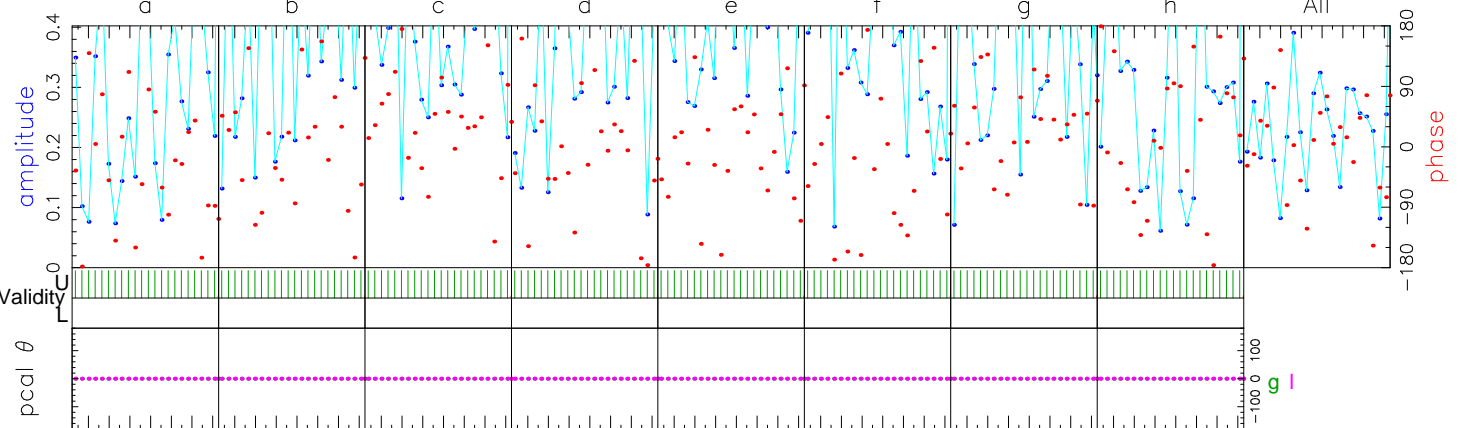
3C345.12BED8, No0001, gl  
GLT - VLBA\_LA, fgroup W, pol RL



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"

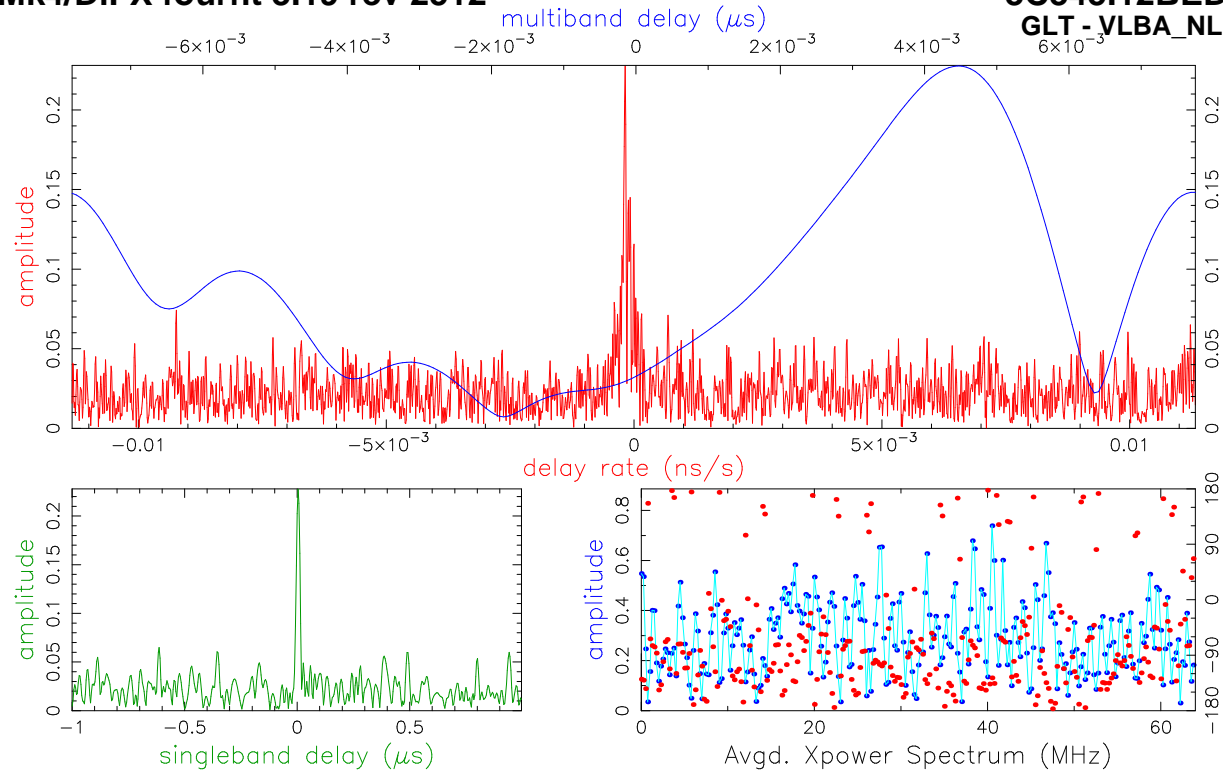


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



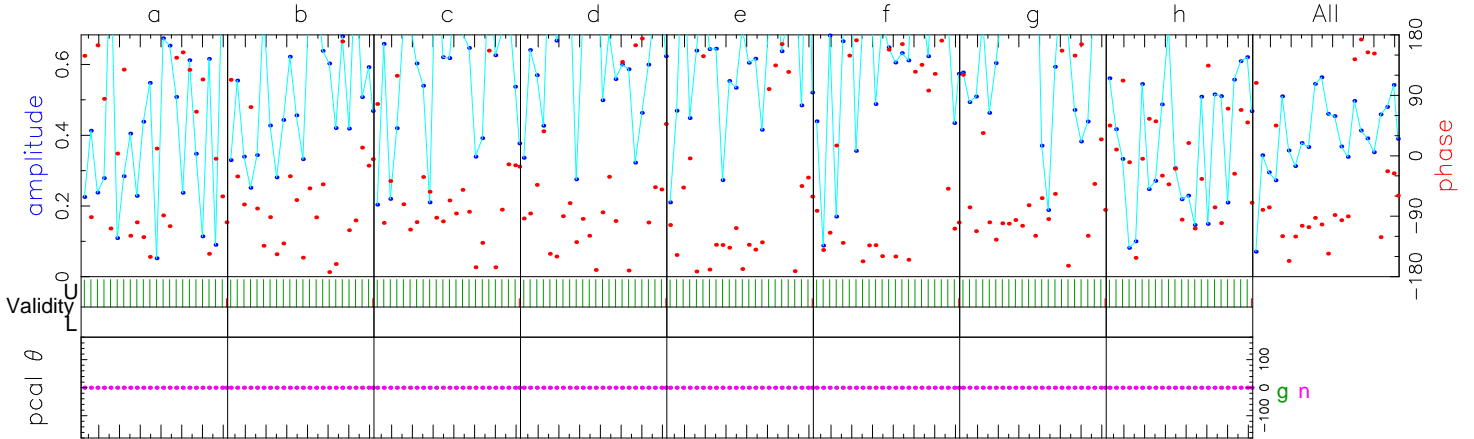
86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
-14.3	4.0	41.6	10.1	-16.3	-9.2	3.5	76.4	Phase	9.7		
0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1		
104.8	363.5	255.7	271.1	255.5	208.6	255.4	48.2	Sbd box	255.7		
U/L 795/0	795/0	795/0	795/0	795/0	795/0	795/0	795/0	APs 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	Manl 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			
								PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
								PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
								Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
								Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011		
								Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00
								Resid mbdelay (usec)	-2.60221E-03	+/- 1.5E-04	
								Resid sbdelay (usec)	-5.02800E-03	+/- 1.2E-03	
								Resid phdelay (usec)	3.11914E-07	+/- 5.0E-07	
								Resid rate (us/s)	-2.07472E-07	+/- 2.1E-09	
								Resid phase (deg)	9.7	+/- 15.5	
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 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 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/gl..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gl.W.162.12BED8 simultaneous interpolator



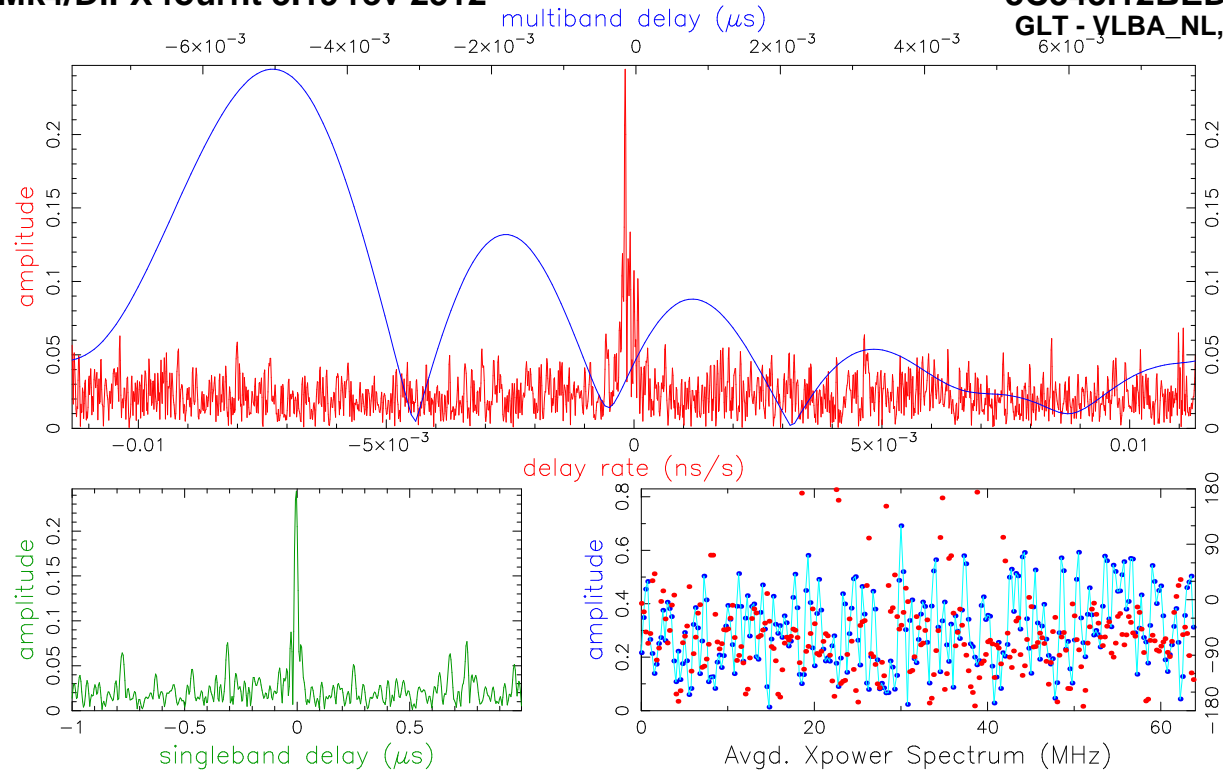
Fringe quality 9  
SNR 12.6  
Int time 410.682  
Amp 0.228  
Phase -112.0  
PFD 7.4e-28  
Delays (us)  
SBD 0.004478  
MBD 0.004501  
Fringe rate (Hz)  
-0.015267  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165609  
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
	-130.8	-87.5	-85.7	-106.0	-151.1	-173.2	-101.6	-4.5	Phase	-112.0
	0.2	0.3	0.4	0.4	0.3	0.4	0.4	0.2	Ampl.	0.3
	260.4	258.8	257.8	257.7	257.5	258.2	258.3	259.5	Sbd box	258.1
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.56153107446E+01		Apriori delay (usec)		-4.56198118825E+01		Resid mbdelay (usec)		4.50114E-03	+/- 8.6E-05
Sband delay (usec)	-4.56153336325E+01		Apriori clock (usec)		-2.5179216E+01		Resid sbdelay (usec)		4.47825E-03	+/- 6.8E-04
Phase delay (usec)	-4.56198154954E+01		Apriori clockrate (us/s)		-5.9223514E-08		Resid phdelay (usec)		-3.61289E-06	+/- 2.9E-07
Delay rate (us/s)	-5.65922466154E-01		Apriori rate (us/s)		-5.6592288916E-01		Resid rate (us/s)		-1.77239E-07	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		2.22859925616E-05		Resid phase (deg)		-112.0	+/- 9.1

ph/seg (deg) 67.6 21.8 Amplitude 0.228 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 88.7 38.0 Search (2048X32) 0.226 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 55.7 12.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 46.0 22.4 Inc. seg. avg. 0.372 Sample rate(MSamp/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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gn.W.105.12BED8

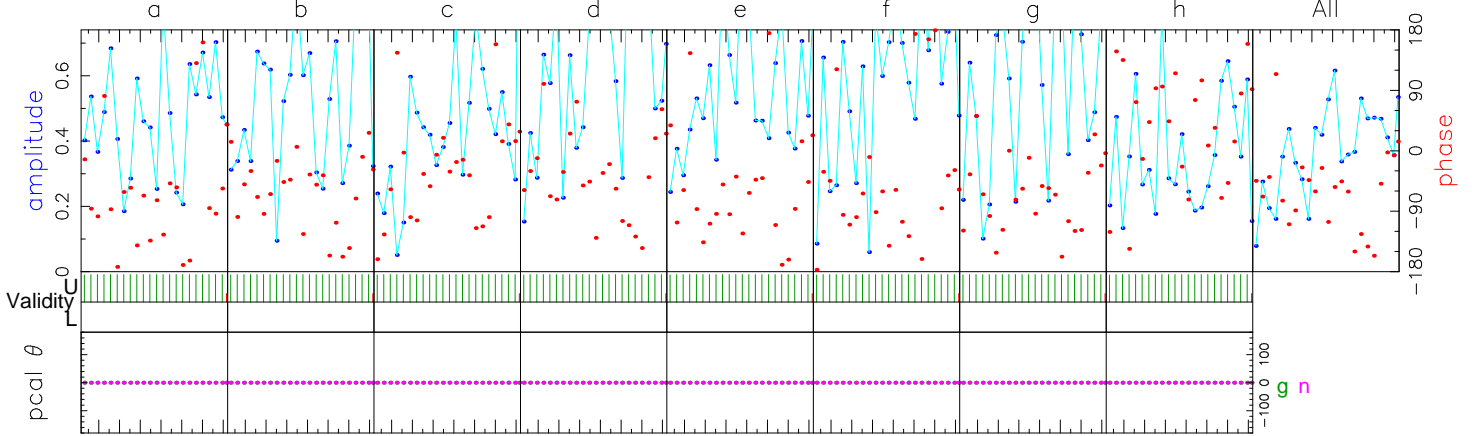


Fringe quality 9

SNR 13.7  
Int time 410.724  
Amp 0.247  
Phase -72.7  
PFD 6.9e-34  
Delays (us)  
SBD -0.005140  
MBD -0.005068  
Fringe rate (Hz)  
-0.015286  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

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

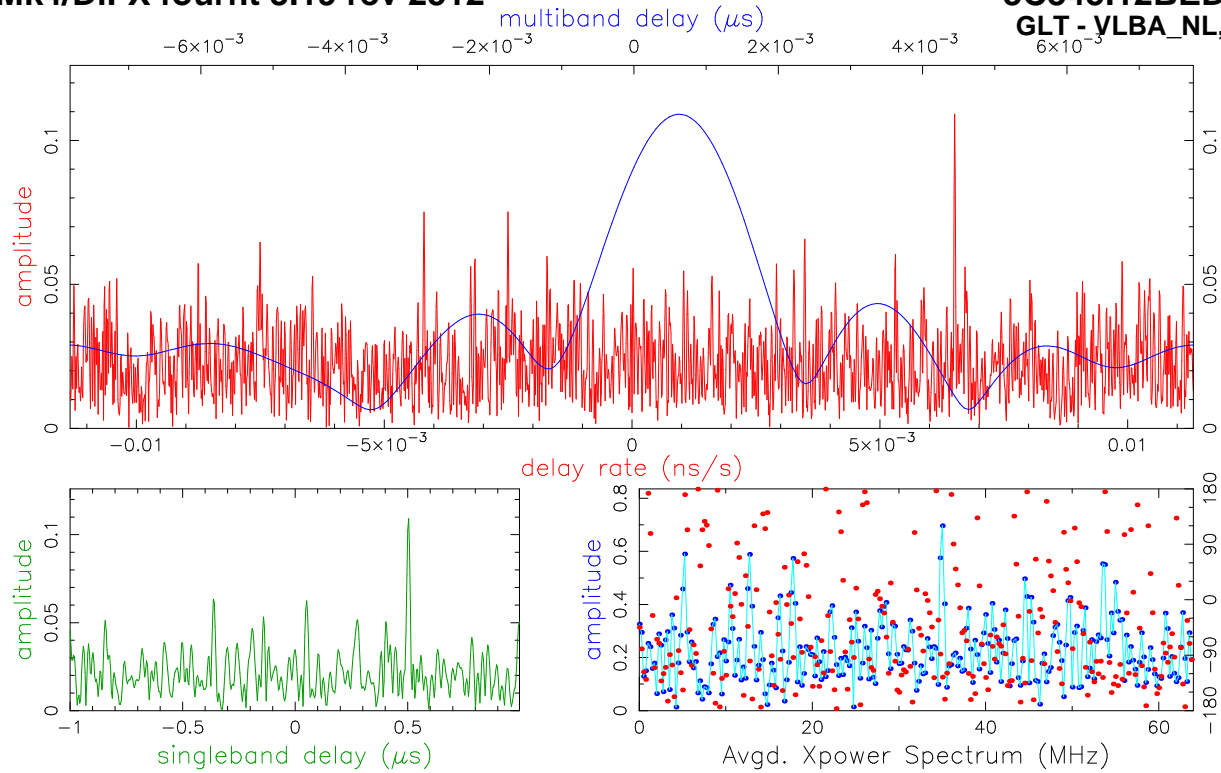
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-106.7	-55.8	-49.4	-54.3	-88.0	-101.0	-70.8	55.5	Phase	-72.7
	0.3	0.3	0.2	0.3	0.3	0.3	0.4	0.1	Ampl.	0.3
	258.3	256.2	254.2	255.7	255.2	256.3	256.0	258.8	Sbd box	255.7
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.56248799946E+01			Apriori delay (usec)	-4.56198118825E+01			Resid mbdelay (usec)	-5.06811E-03	+/- 7.9E-05
Sband delay (usec)	-4.56249521325E+01			Apriori clock (usec)	-2.5179216E+01			Resid sbdelay (usec)	-5.14025E-03	+/- 6.3E-04
Phase delay (usec)	-4.56198142271E+01			Apriori clockrate (us/s)	-5.9223514E-08			Resid phdelay (usec)	-2.34459E-06	+/- 2.7E-07
Delay rate (us/s)	-5.65922466366E-01			Apriori rate (us/s)	-5.65922288916E-01			Resid rate (us/s)	-1.77450E-07	+/- 1.1E-09
Total phase (deg)		-287.1		Apriori accel (us/s/s)	2.22859925616E-05			Resid phase (deg)	-72.7	+/- 8.4

ph/seg (deg) 57.6 20.1 Amplitude 0.247 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.5 35.0 Search (2048X32) 0.242 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 57.4 11.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.4 20.7 Inc. seg. avg. 0.348 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 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/gn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gn.W.129.12BED8 simultaneous interpolator



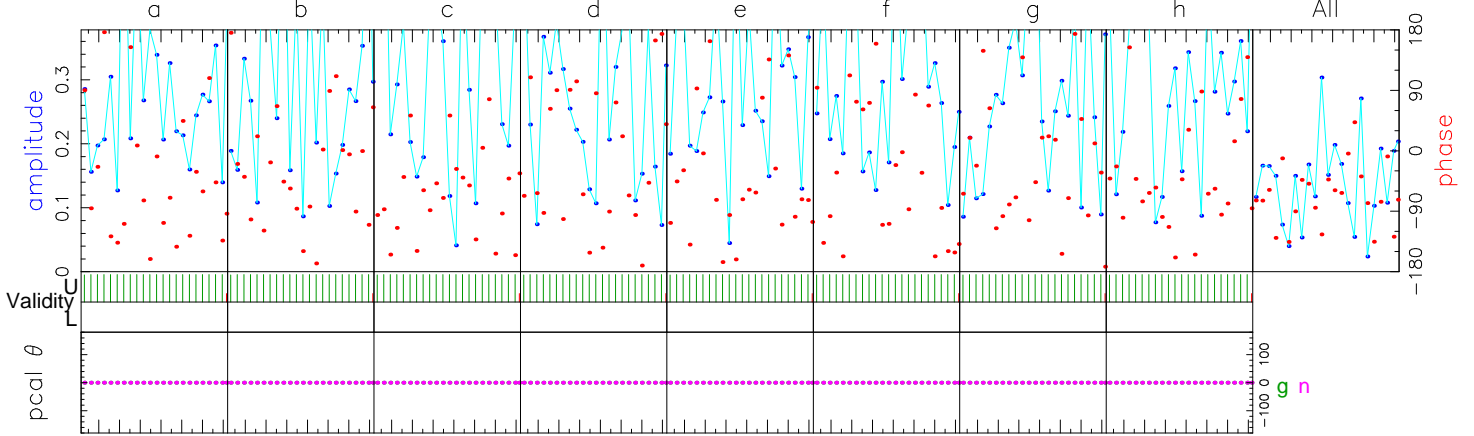


Fringe quality 0

SNR 6.1  
Int time 410.682  
Amp 0.126  
Phase -72.3  
PFD 2.8e-01  
Delays (us)  
SBD 0.503116  
MBD 0.000626  
Fringe rate (Hz) 0.562006  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

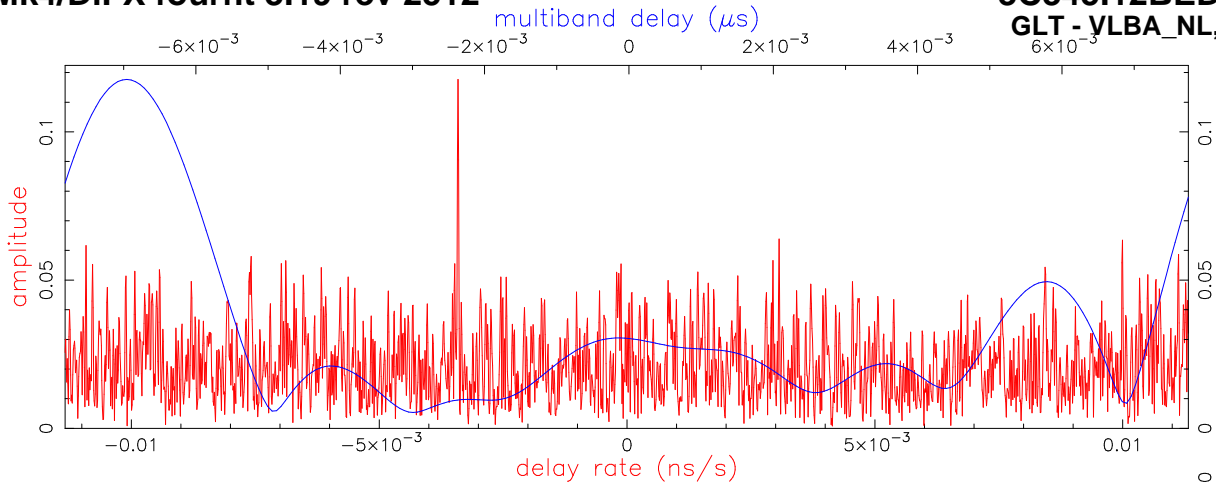
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165619  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

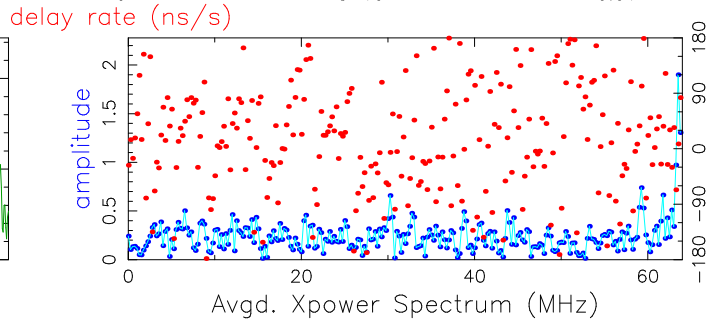
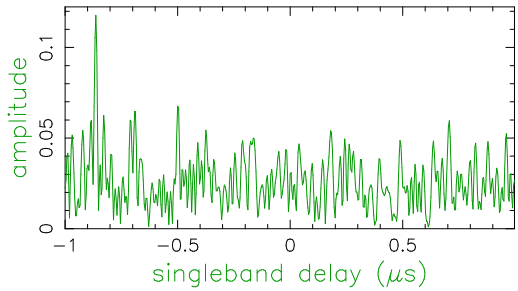


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.0	-58.2	-71.9	-75.9	-84.6	-51.8	-73.8	-69.1	Phase	-72.3
	0.1	0.2	0.2	0.0	0.2	0.0	0.1	0.1	Ampl.	0.1
	109.8	41.9	386.1	132.4	166.7	511.6	208.9	40.2	Sbd box	385.8
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.51191859119E+01		Apriori delay (usec)		-4.56198118825E+01		Resid mbdelay (usec)		6.25971E-04	+/- 1.8E-04
Sband delay (usec)	-4.51166958825E+01		Apriori clock (usec)		-2.5179216E+01		Resid sbdelay (usec)		5.03116E-01	+/- 1.4E-03
Phase delay (usec)	-4.56198142142E+01		Apriori clockrate (us/s)		-5.9223514E-08		Resid phdelay (usec)		-2.33172E-06	+/- 6.1E-07
Delay rate (us/s)	-5.65915764587E-01		Apriori rate (us/s)		-5.65922288916E-01		Resid rate (us/s)		6.52433E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.22859925616E-05		Resid phase (deg)		-72.3	+/- 18.9

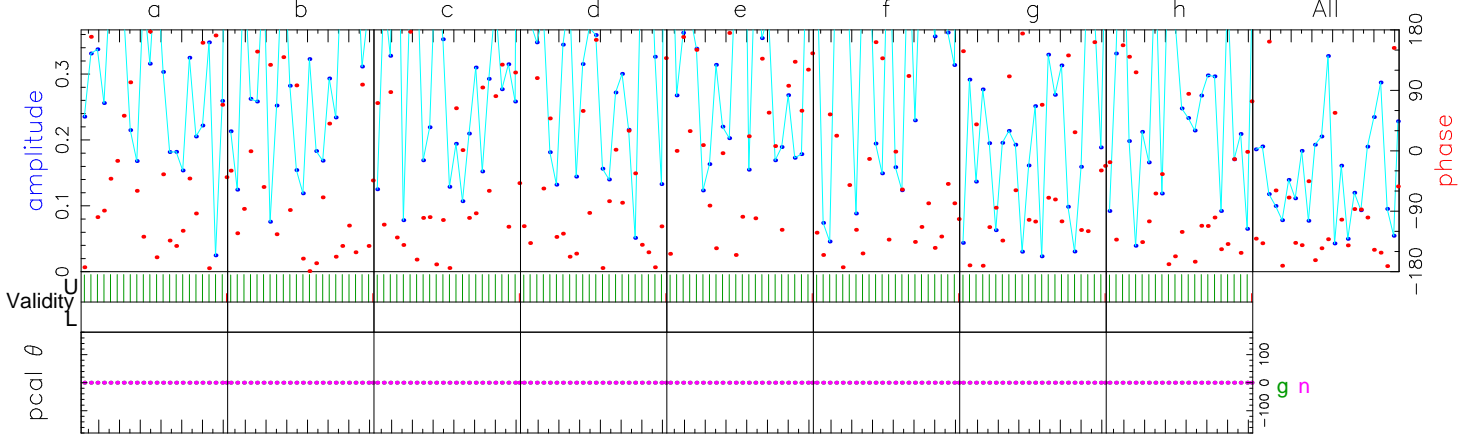
ph/seg (deg) 45.9 45.3 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 68.5 79.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.6 26.7 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.0 46.6 Inc. frq. avg. 0.115 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gn.W.147.12BED8



Fringe quality 0  
SNR 6.5  
Int time 410.724  
Amp 0.122  
Phase -130.6  
PFD 1.8e-02  
Delays (us)  
SBD -0.863748  
MBD -0.006943  
Fringe rate (Hz)  
-0.293712  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165623  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

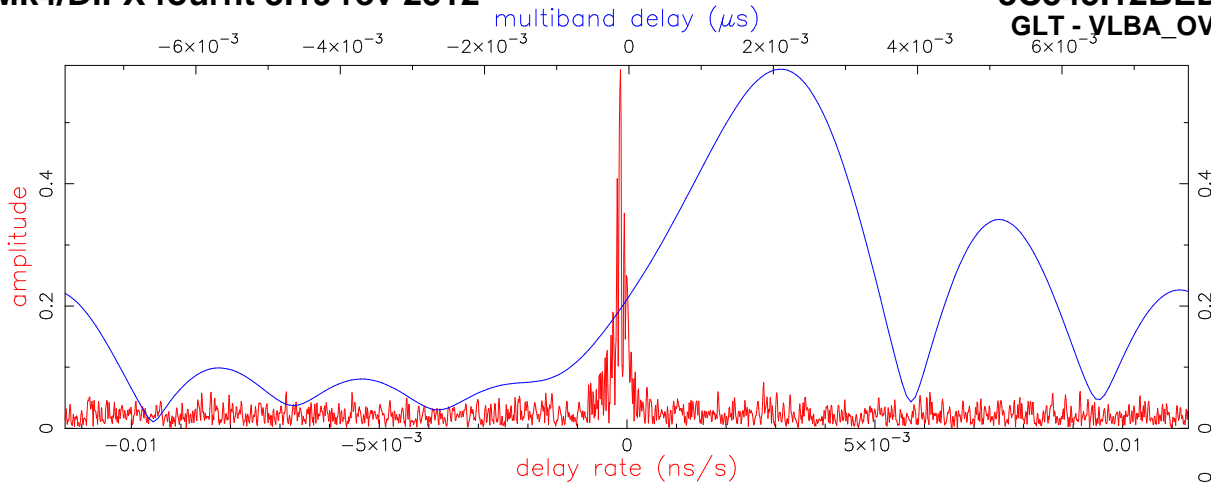


Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



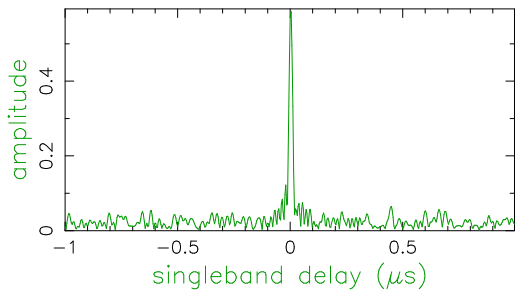
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.9	-130.7	-139.0	-136.5	-175.7	-109.7	-118.5	-139.3	Phase	-130.6
	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	502.3	420.8	53.9	503.3	401.8	36.5	101.9	129.2	Sbd box	35.9
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.64861301031E+01		Apriori delay (usec)		-4.56198118825E+01		Resid mbdelay (usec)		-6.94322E-03	+/- 1.7E-04
Sband delay (usec)	-4.64835603825E+01		Apriori clock (usec)		-2.5179216E+01		Resid sbdelay (usec)		-8.63748E-01	+/- 1.3E-03
Phase delay (usec)	-4.56198160956E+01		Apriori clockrate (us/s)		-5.9223514E-08		Resid phdelay (usec)		-4.21307E-06	+/- 5.7E-07
Delay rate (us/s)	-5.65925698617E-01		Apriori rate (us/s)		-5.65922288916E-01		Resid rate (us/s)		-3.40970E-06	+/- 2.4E-09
Total phase (deg)	-345.1		Apriori accel (us/s/s)		2.22859925616E-05		Resid phase (deg)		-130.6	+/- 17.5

ph/seg (deg) 55.7 42.0 Search (2048X32) 0.116 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 68.1 73.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 22.9 24.8 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 23.5 43.3 Inc. frq. avg. 0.117 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 n: az 74.7 el 50.6 pa -69.4 u,v (fr/asec) 4259.942 3497.805 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gn..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gn.W.165.12BED8

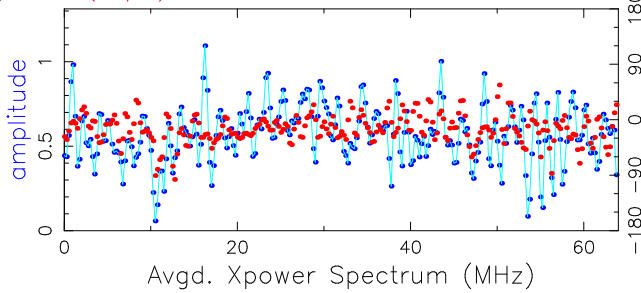


Fringe quality 4

SNR 32.9  
Int time 410.688  
Amp 0.594  
Phase -7.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.002512  
MBD 0.002028  
Fringe rate (Hz)  
-0.011371  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

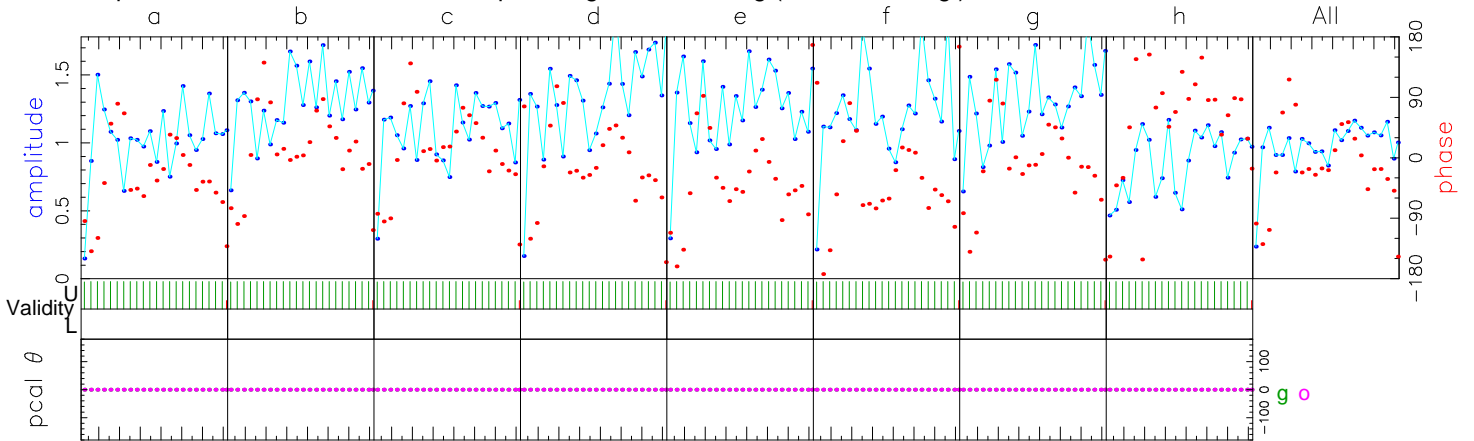


delay rate (ns/s)



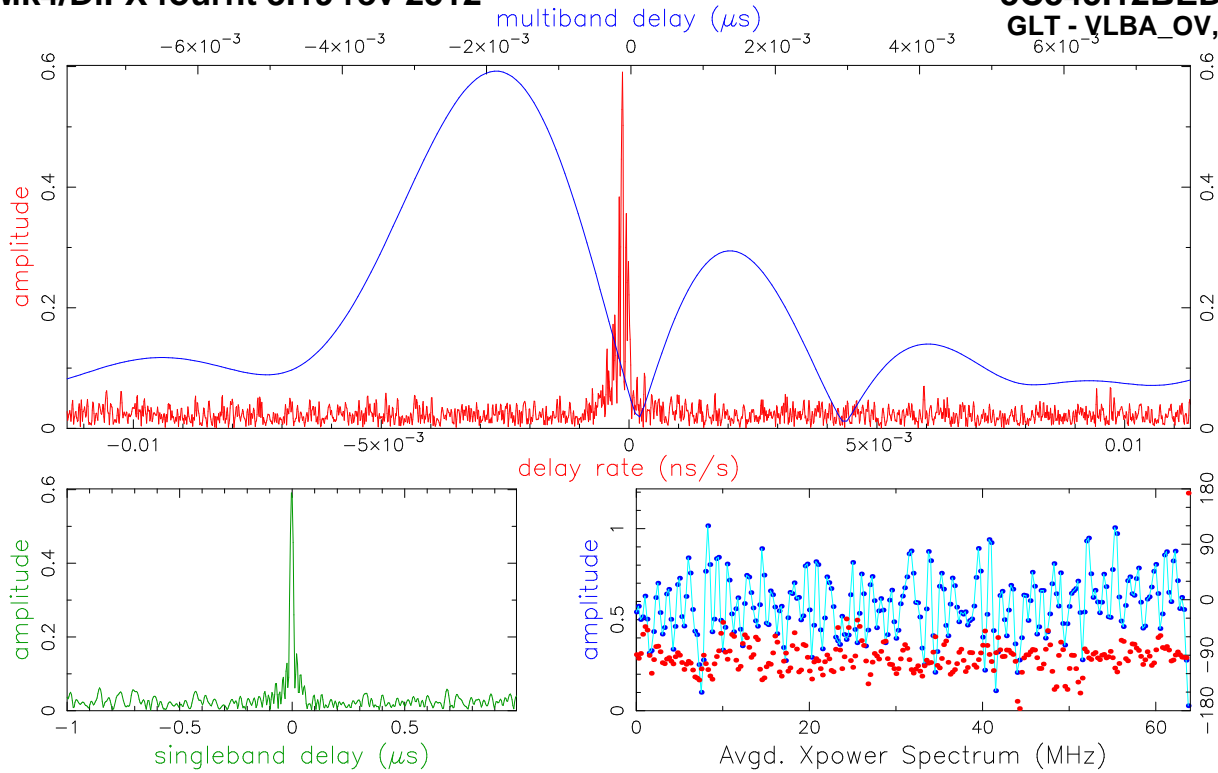
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165618  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.4	13.8	16.0	-9.9	-38.1	-45.4	-8.6	87.2	Phase	-7.8
	0.7	0.8	0.7	0.8	0.7	0.7	0.8	0.5	Ampl.	0.7
	259.3	257.6	257.1	257.4	257.2	257.3	257.8	259.6	Sbd box	257.6
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.75425936679E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		2.02770E-03	+/- 3.3E-05
Sband delay (usec)	5.75425985160E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		2.51250E-03	+/- 2.6E-04
Phase delay (usec)	5.75425733884E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-2.51647E-07	+/- 1.1E-07
Delay rate (us/s)	-7.96777168656E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.32004E-07	+/- 4.7E-10
Total phase (deg)	60.5		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-7.8	+/- 3.5

ph/seg (deg) 60.2 8.4 Search (2048X32) 0.578 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.3 14.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 46.2 4.9 Inc. seg. avg. 0.963 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 24.9 8.6 Inc. frq. avg. 0.703 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/go.W.140.12BED8

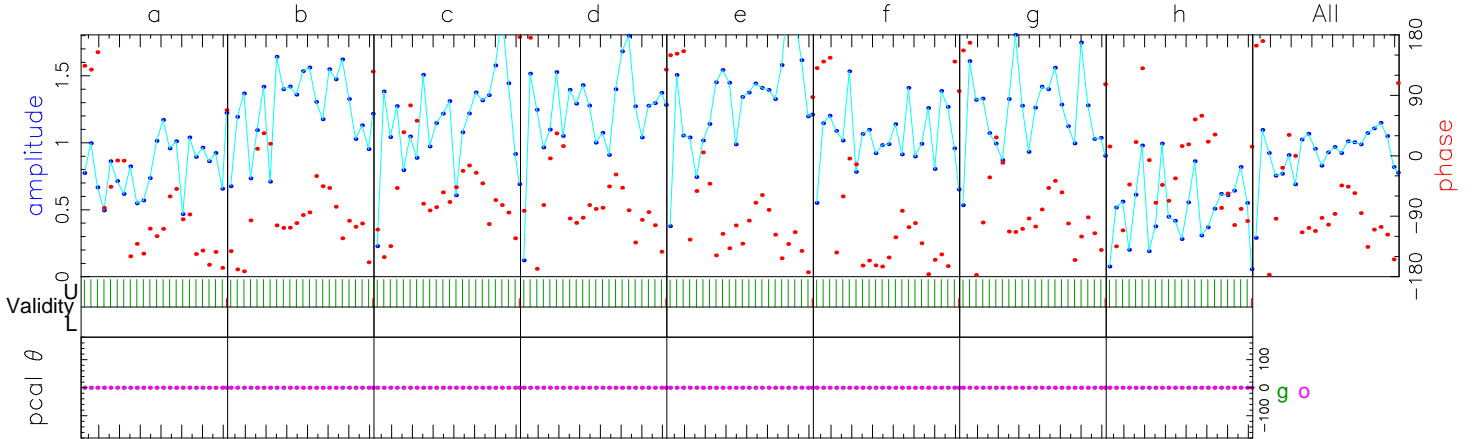


Fringe quality 4

SNR 33.4  
Int time 410.730  
Amp 0.602  
Phase -99.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.002245  
MBD -0.001771  
Fringe rate (Hz)  
-0.011234  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165622  
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

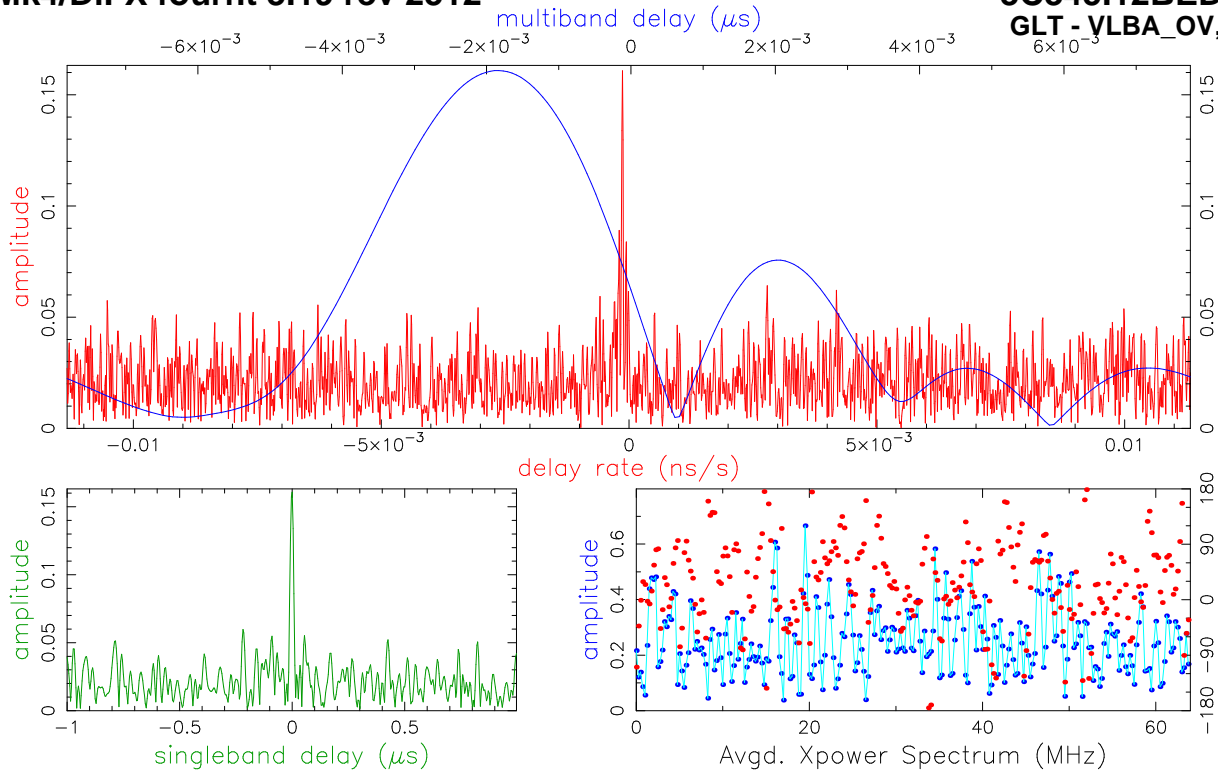


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-119.8	-92.3	-64.0	-82.3	-120.8	-148.1	-100.2	-40.0	Phase	-99.3
	0.4	0.8	0.8	0.8	0.9	0.6	0.8	0.2	Ampl.	0.7
	258.4	256.6	256.2	256.2	256.6	256.6	256.9	259.1	Sbd box	256.4
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.75425556767E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		-1.77143E-03	+/- 3.3E-05
Sband delay (usec)	5.75425509385E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-2.24525E-03	+/- 2.6E-04
Phase delay (usec)	5.75425733590E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-3.20056E-06	+/- 1.1E-07
Delay rate (us/s)	-7.96777167063E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.30411E-07	+/- 4.7E-10
Total phase (deg)			Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-99.3	+/- 3.4

ph/seg (deg) 59.0 8.2 Search (2048X32) 0.582 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.2 14.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.3 4.9 Inc. seg. avg. 0.913 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.0 8.5 Inc. frq. avg. 0.663 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/go.W.159.12BED8

Mk4/DiFX fourfit 3.19 rev 2512

3C345.12BED8, No0001, go  
GLT - VLBA\_OV, fgroup W, pol LR

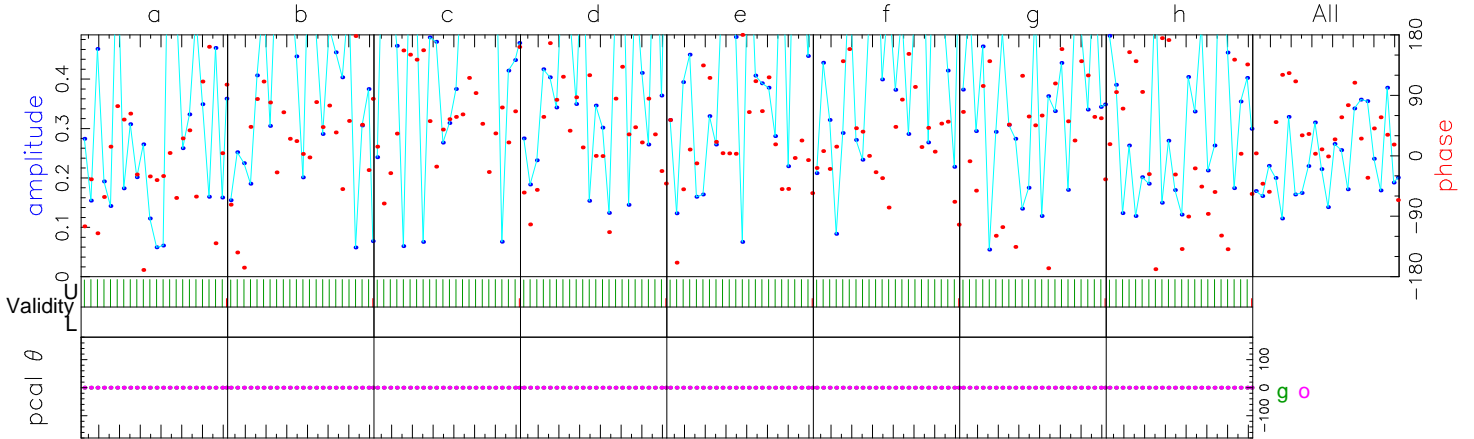


Fringe quality 9

SNR 9.0  
Int time 410.688  
Amp 0.163  
Phase 32.8  
PFD 5.8e-11  
Delays (us)  
SBD -0.001513  
MBD -0.001895  
Fringe rate (Hz)  
-0.011373  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

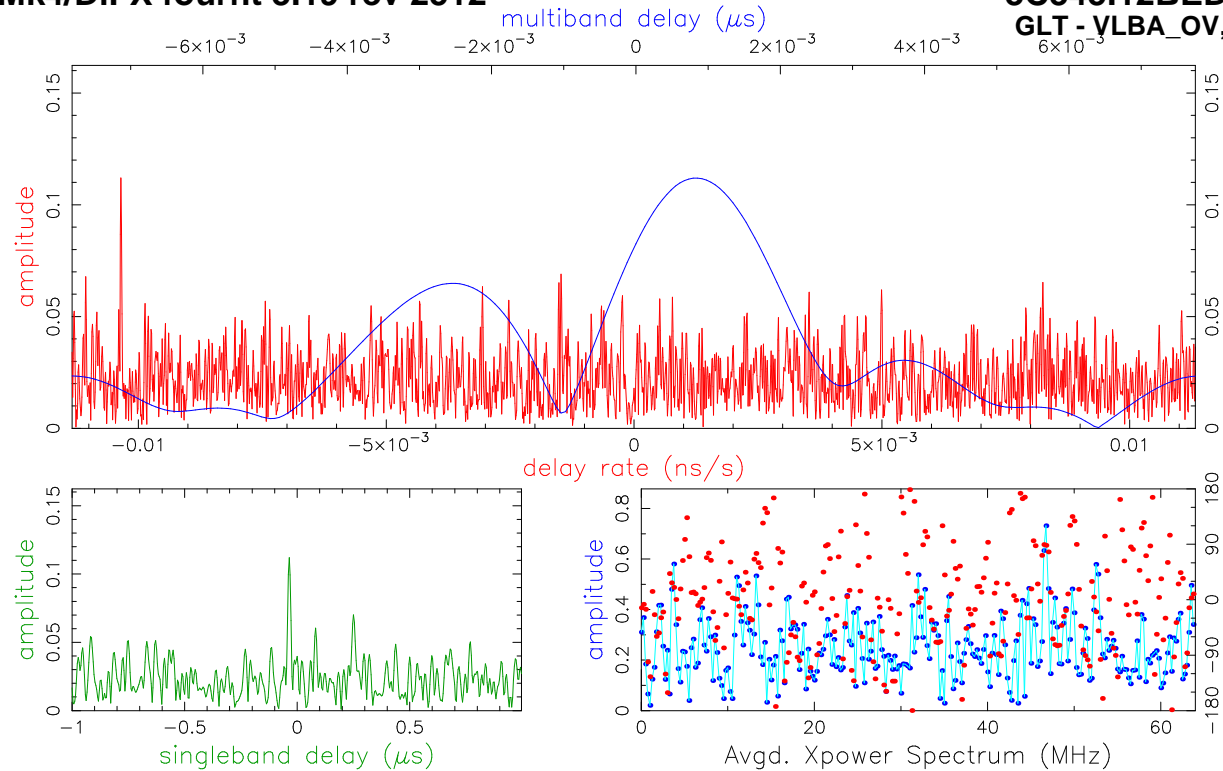
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165627  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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
	-14.1	37.2	47.4	49.5	16.3	21.1	74.4	-114.6	Phase	32.8
	0.1	0.2	0.2	0.2	0.3	0.2	0.1	0.1	Ampl.	0.2
	235.0	256.8	256.8	256.4	256.9	256.8	62.8	172.2	Sbd box	256.6
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.75425544457E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		-1.89452E-03	+/- 1.2E-04
Sband delay (usec)	5.75425582560E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-1.51350E-03	+/- 9.5E-04
Phase delay (usec)	5.75425734015E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		1.05886E-06	+/- 4.1E-07
Delay rate (us/s)	-7.96777168682E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.32031E-07	+/- 1.7E-09
Total phase (deg)	101.1		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		32.8	+/- 12.7

ph/seg (deg) 49.7 30.4 Search (2048X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.1 53.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 66.6 17.9 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.8 31.3 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  
 g: az 142.5 el 51.0 pa -10.6 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/go.W.173.12BED8

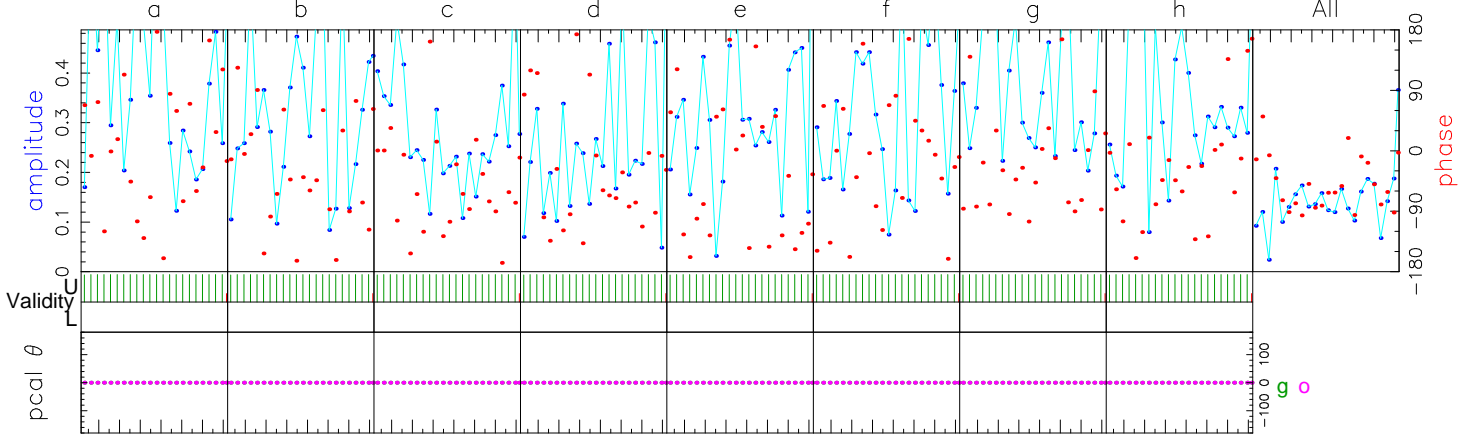


Fringe quality 0

SNR 6.2  
Int time 410.730  
Amp 0.162  
Phase -54.0  
PFD 1.4e-01  
Delays (us)  
SBD -0.035156  
MBD 0.000833  
Fringe rate (Hz)  
-0.893291  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183008.70  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165631  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

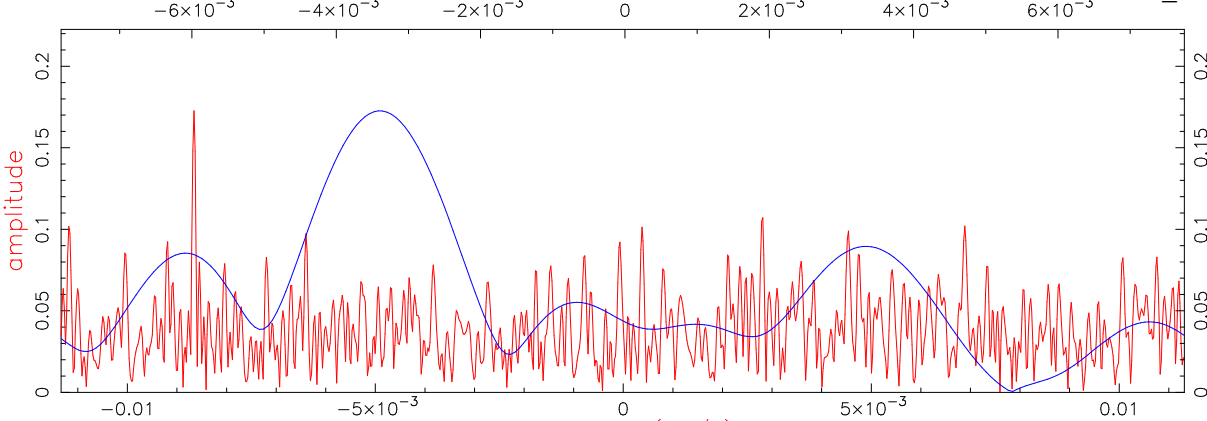
Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.5	-18.9	-59.7	-71.3	-108.2	-24.6	-47.9	-60.9	Phase	-54.0
	0.1	0.1	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	98.5	198.4	422.8	388.1	96.5	55.0	248.1	43.4	Sbd box	248.0
U/L	803/0	803/0	803/0	803/0	803/0	803/0	803/0	803/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.75422692259E+03		Apriori delay (usec)		5.75425733910E+03		Resid mbdelay (usec)		8.33497E-04	+/- 1.7E-04
Sband delay (usec)	5.75422218310E+03		Apriori clock (usec)		-1.5333658E+01		Resid sbdelay (usec)		-3.51560E-02	+/- 1.4E-03
Phase delay (usec)	5.75425733736E+03		Apriori clockrate (us/s)		7.4018997E-08		Resid phdelay (usec)		-1.74027E-06	+/- 6.0E-07
Delay rate (us/s)	-7.96787406871E-01		Apriori rate (us/s)		-7.96777036652E-01		Resid rate (us/s)		-1.03702E-05	+/- 2.5E-09
Total phase (deg)	14.3		Apriori accel (us/s/s)		-4.09619280062E-06		Resid phase (deg)		-54.0	+/- 18.5

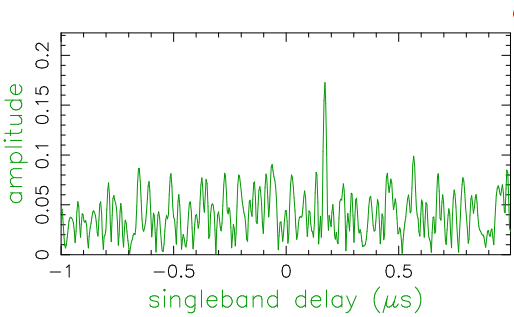
ph/seg (deg) 39.4 44.3 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 50.3 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 30.6 26.1 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.5 45.6 Inc. frq. avg. 0.159 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 o: az 60.7 el 29.9 pa -64.6 u,v (fr/asec) 5935.898 2167.580 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/go..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/go.W.194.12BED8

multiband delay ( $\mu$ s)

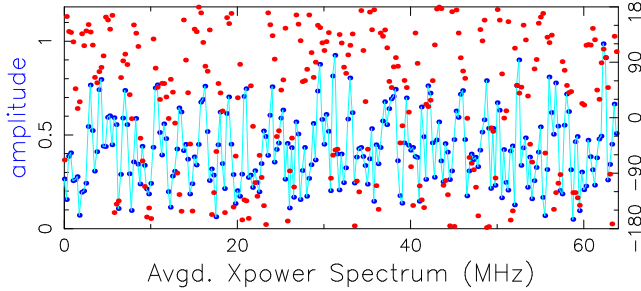


Fringe quality 0

SNR 5.6  
Int time 138.698  
Amp 0.223  
Phase -16.9  
PFD 9.6e-01  
Delays (us)  
SBD 0.171710  
MBD -0.003390  
Fringe rate (Hz)  
-0.747741  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

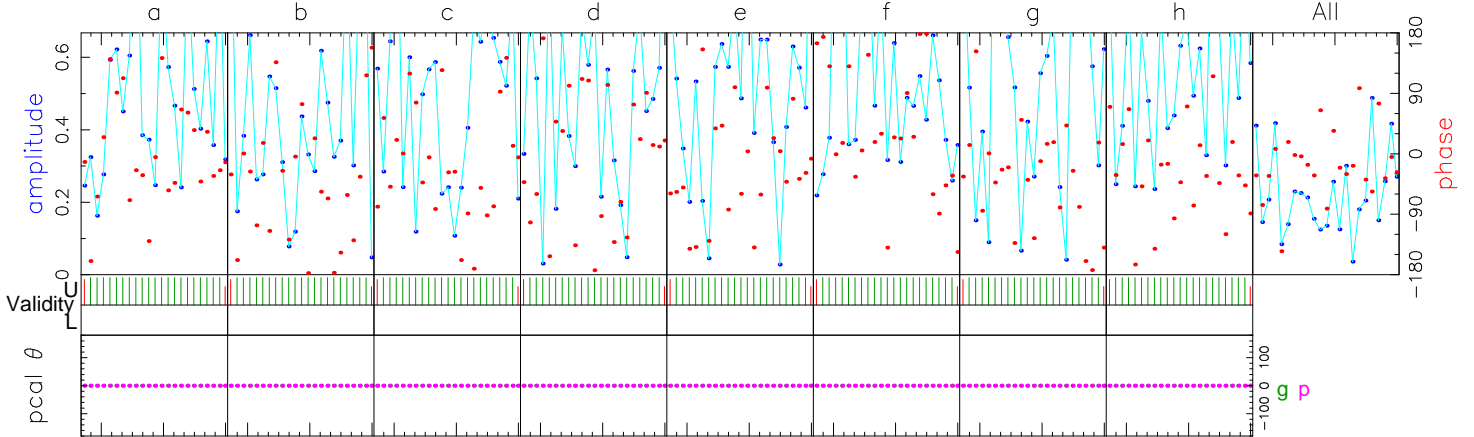


delay rate (ns/s)



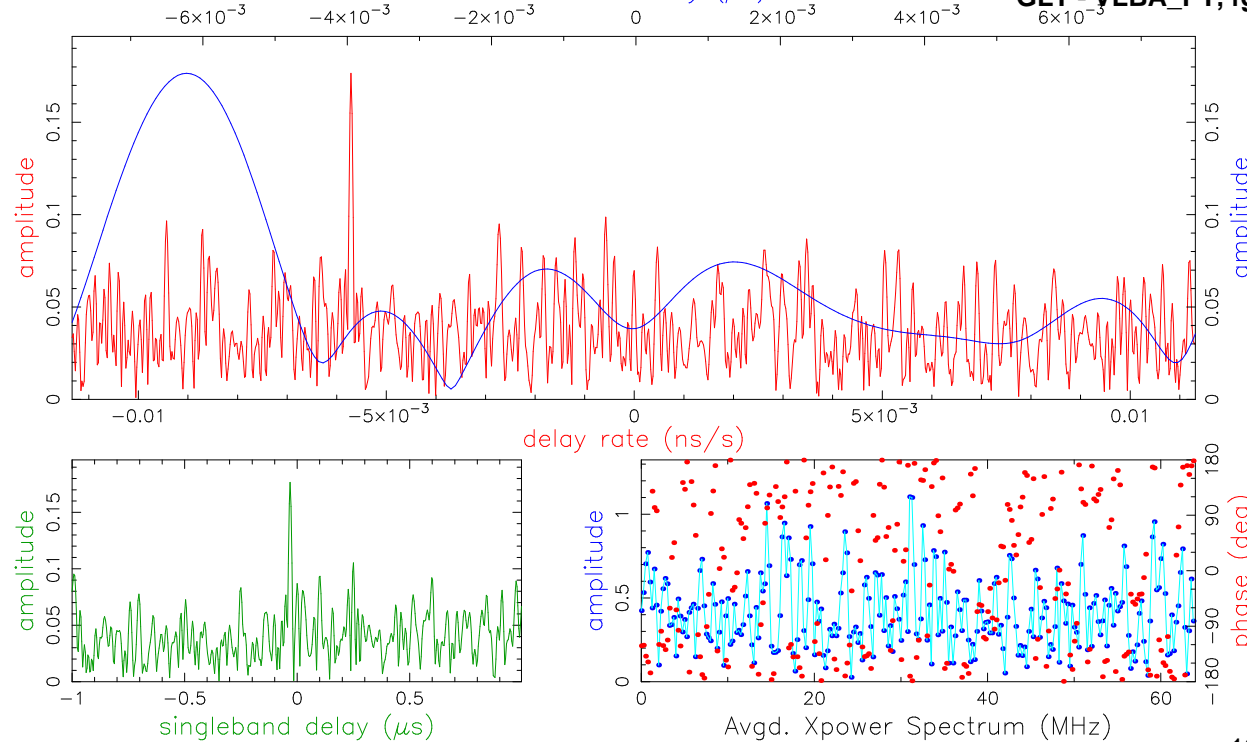
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183440.58  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165615  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



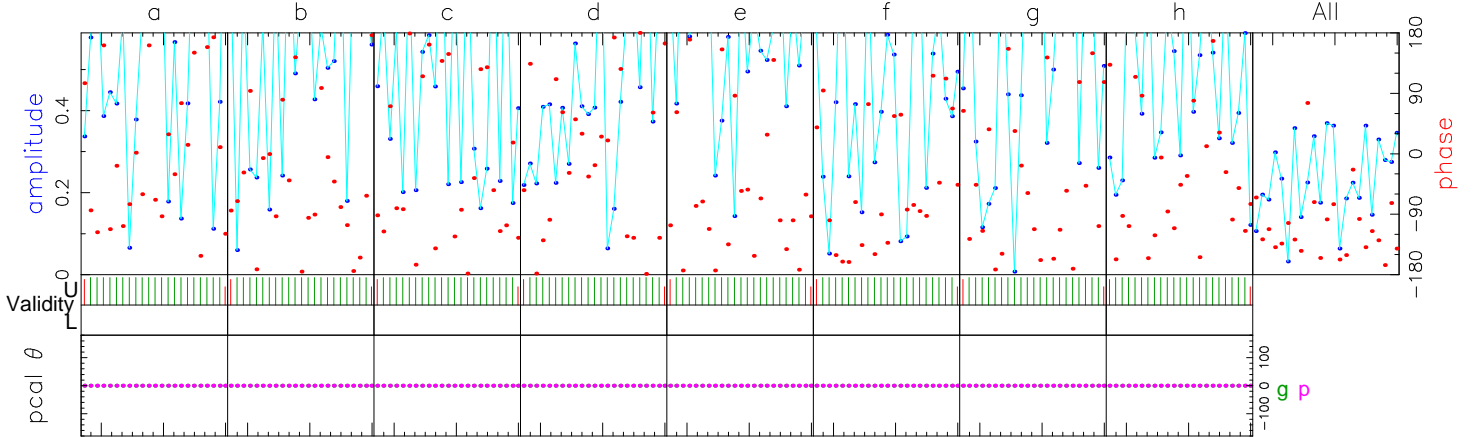
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0		
g	0	0	0	0	0	0	0	0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.92747146411E+03				3.92730297871E+03					
Sband delay (usec)	3.92747468846E+03				-1.0609783E+01					
Phase delay (usec)	3.92730297816E+03				-1.2888659E-07					
Delay rate (us/s)	-7.82364738575E-01				-7.82356058045E-01					
Total phase (deg)			193.9		8.63071214981E-06					
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										
Tracks										
Chan ids										
Tracks										
Chan ids										
Tracks										
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								
simultaneous interpolator										

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



Fringe quality 0  
SNR 5.7  
Int time 138.804  
Amp 0.197  
Phase -116.5  
PFD 8.0e-01  
Delays (us)  
SBD -0.031389  
MBD -0.006230  
Fringe rate (Hz)  
-0.493192  
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  
2020:086:165617  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

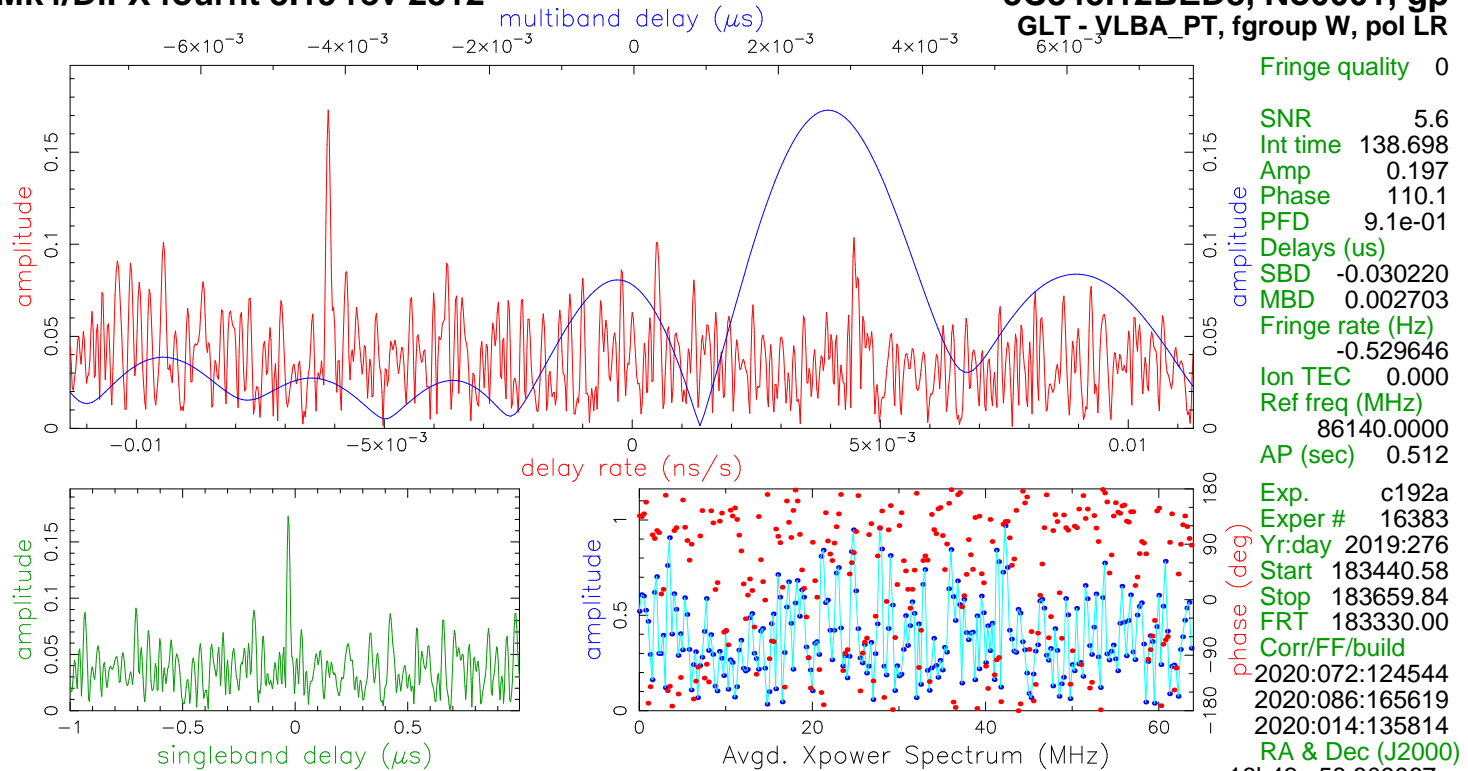
Amp. and Phase vs. time for each freq., 23 segs, 12 APs / seg (6.14 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.7	-90.4	-142.1	-162.5	-113.7	-107.0	-130.9	-86.7	Phase	-116.5
	0.2	0.2	0.3	0.1	0.3	0.1	0.3	0.2	Ampl.	0.2
	62.1	450.1	358.6	281.9	314.8	77.4	265.6	287.7	Sbd box	249.0
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	3.92726549842E+03		Apriori delay (usec)		3.92730297871E+03		Resid mbdelay (usec)		-6.23029E-03	+/- 1.9E-04
Sband delay (usec)	3.92727158971E+03		Apriori clock (usec)		-1.0609783E+01		Resid sbdelay (usec)		-3.13890E-02	+/- 1.5E-03
Phase delay (usec)	3.92730297495E+03		Apriori clockrate (us/s)		-1.2888659E-07		Resid phdelay (usec)		-3.75547E-06	+/- 6.5E-07
Delay rate (us/s)	-7.82361783520E-01		Apriori rate (us/s)		-7.82356058045E-01		Resid rate (us/s)		-5.72547E-06	+/- 8.1E-09
Total phase (deg)			Apriori accel (us/s/s)		8.63071214981E-06		Resid phase (deg)		-116.5	+/- 20.1

ph/seg (deg) 49.5 48.3 Search (1024X32) 0.169 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 64.4 84.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 27.9 28.5 Inc. seg. avg. 0.193 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.3 49.7 Inc. frq. avg. 0.187 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 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 5850.907 3282.776 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gp.W.137.12BED8





Fringe quality 0

SNR 5.6

Int time 138.698

Amp 0.197

Phase 110.1

PFD 9.1e-01

Delays (us)

SBD -0.030220

MBD 0.002703

Fringe rate (Hz)

-0.529646

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

2020:086:165619

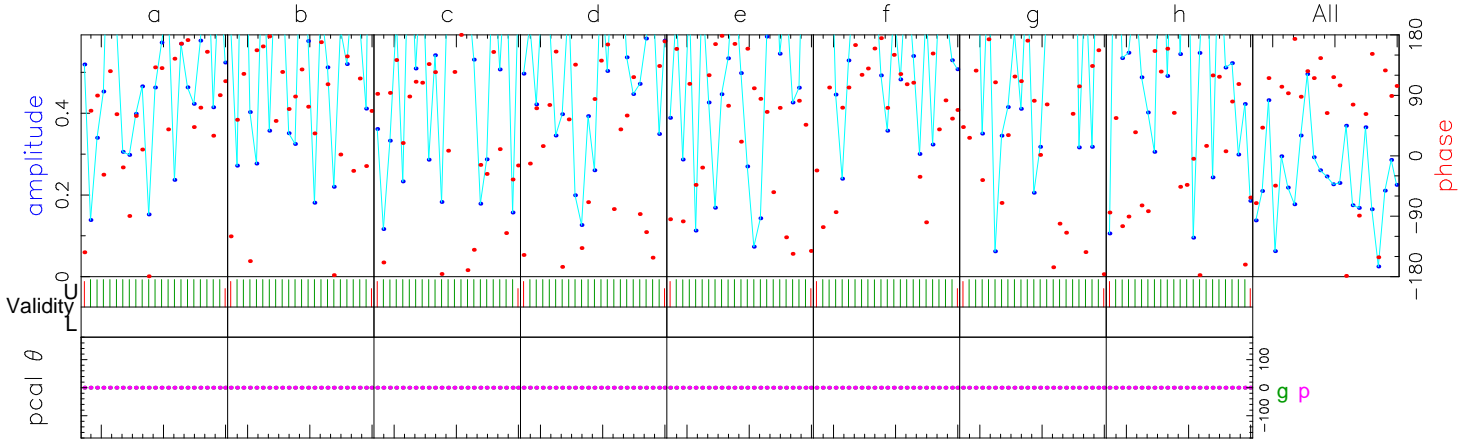
2020:014:135814

RA & Dec (J2000)

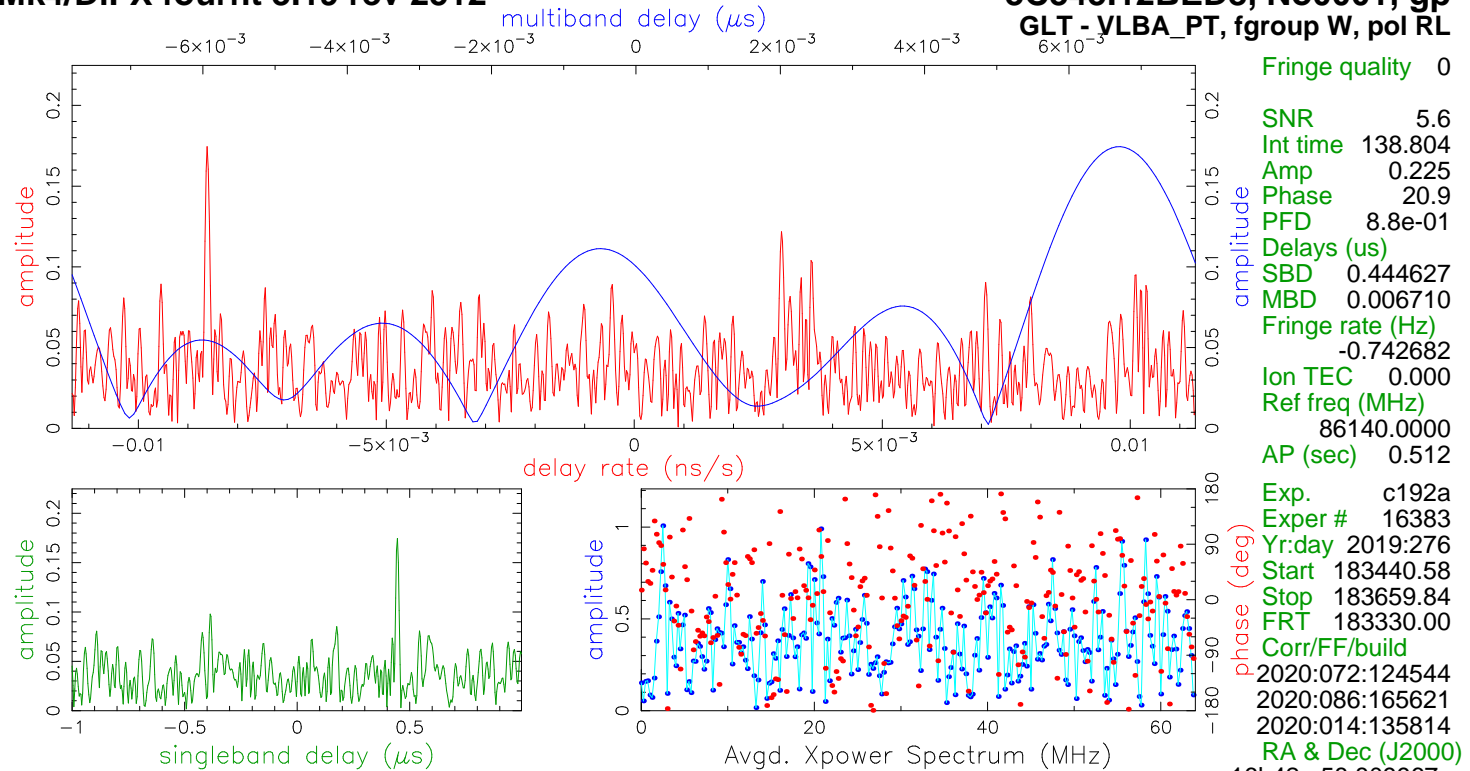
16h42m58.809967s

+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		
	99.2	109.4	125.9	118.6	105.6	114.0	132.8	51.0	Phase	110.1		
	0.3	0.3	0.2	0.1	0.1	0.3	0.2	0.1	Ampl.	0.2		
	249.0	12.9	190.1	89.3	196.2	265.4	321.0	398.9	Sbd box	249.3		
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used			
g	0	0	0	0	0	0	0	0	PC freqs			
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
g:p	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			
p	1000	1000	1000	1000	1000	1000	1000	1000				
g	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)	3.92727443181E+03		Apriori delay (usec)		3.92730297871E+03		Resid mbdelay (usec)		2.70311E-03	+/- 1.9E-04		
Sband delay (usec)	3.92727275846E+03		Apriori clock (usec)		-1.0609783E+01		Resid sbdelay (usec)		-3.02202E-02	+/- 1.5E-03		
Phase delay (usec)	3.92730298226E+03		Apriori clockrate (us/s)		-1.2888659E-07		Resid phdelay (usec)		3.55096E-06	+/- 6.6E-07		
Delay rate (us/s)	-7.82362206709E-01		Apriori rate (us/s)		-7.82356058045E-01		Resid rate (us/s)		-6.14866E-06	+/- 8.2E-09		
Total phase (deg)	321.0		Apriori accel (us/s/s)		8.63071214981E-06		Resid phase (deg)		110.1	+/- 20.4		
	RMS	Theor.	Amplitude	0.197 +/- 0.035		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	71.0	49.0	Search (1024X32)	0.167		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	73.9	85.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	27.3	28.9	Inc. seg. avg.	0.203		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	45.7	50.4	Inc. frq. avg.	0.184		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	p: az 62.4 el 35.8 pa -72.8		u, v (fr/asec) 5850.907 3282.776						simultaneous interpolator			



Fringe quality 0

SNR 5.6

Int time 138.804

Amp 0.225

Phase 20.9

PFD 8.8e-01

Delays (us)

SBD 0.444627

MBD 0.006710

Fringe rate (Hz)

-0.742682

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

2020:086:165621

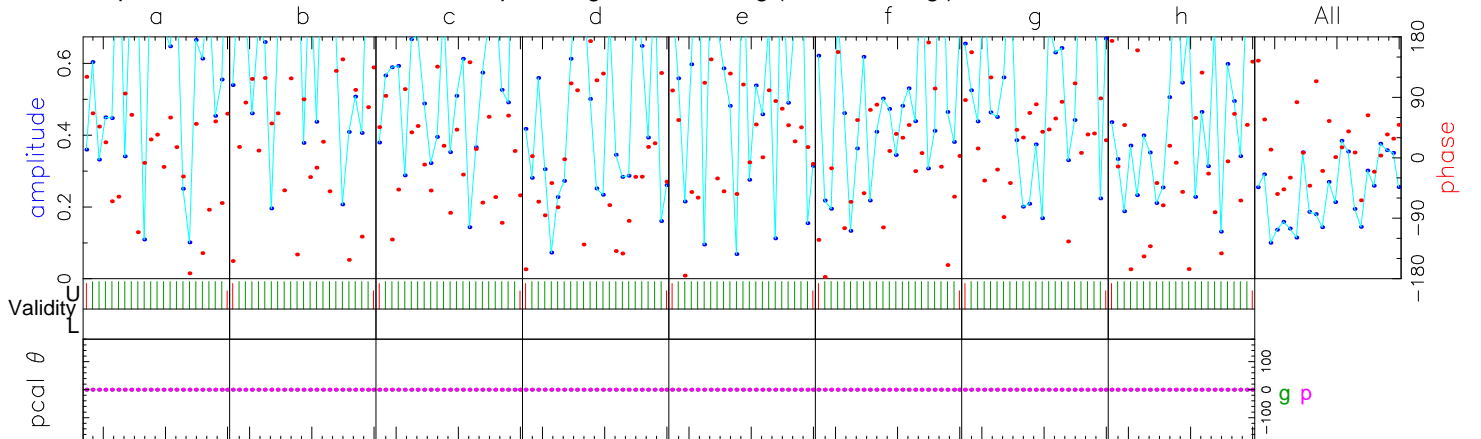
2020:014:135814

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
	13.9	67.1	2.1	-52.1	48.1	-5.2	34.9	-24.0	Phase	20.9
	0.4	0.2	0.4	0.1	0.3	0.2	0.4	0.1	Ampl.	0.2
	160.3	175.0	369.9	452.3	40.5	396.4	371.7	279.8	Sbd box	370.8
U/L	272/0	272/0	272/0	272/0	272/0	272/0	272/0	272/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.92774718825E+03		Apriori delay (usec)		3.92730297871E+03		Resid mbdelay (usec)		6.70954E-03	+/- 1.9E-04
Sband delay (usec)	3.92774760621E+03		Apriori clock (usec)		-1.0609783E+01		Resid sbdelay (usec)		4.44627E-01	+/- 1.5E-03
Phase delay (usec)	3.92730297938E+03		Apriori clockrate (us/s)		-1.2888659E-07		Resid phdelay (usec)		6.75171E-07	+/- 6.6E-07
Delay rate (us/s)	-7.82364679845E-01		Apriori rate (us/s)		-7.82356058045E-01		Resid rate (us/s)		-8.62180E-06	+/- 8.2E-09
Total phase (deg)	231.8		Apriori accel (us/s/s)		8.63071214981E-06		Resid phase (deg)		20.9	+/- 20.3

ph/seg (deg) 51.6 51.6 Theor. 48.7 Amplitude 0.225 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

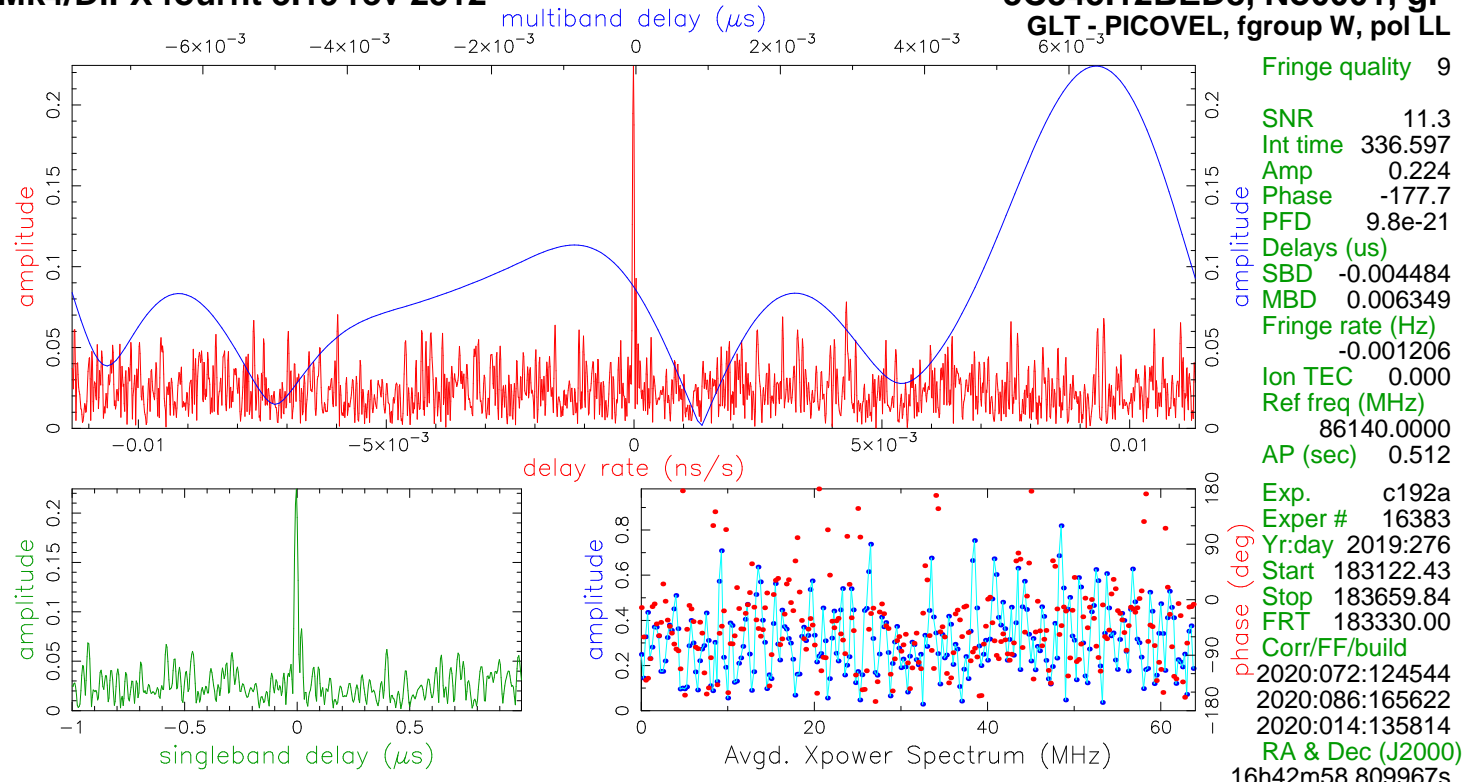
amp/seg (%) 64.1 64.1 Search (1024X32) 0.170 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 43.8 43.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 51.5 51.5 Inc. seg. avg. 0.226 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

g: az 142.5 el 51.0 pa -10.6 p: az 62.4 el 35.8 pa -72.8 u,v (fr/asec) 5850.907 3282.776 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/gp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gp.W.156.12BED8 simultaneous interpolator



Fringe quality 9

SNR 11.3

Int time 336.597

Amp 0.224

Phase -177.7

PFD 9.8e-21

Delays (us)

SBD -0.004484

MBD 0.006349

Fringe rate (Hz)

-0.001206

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

2020:086:165622

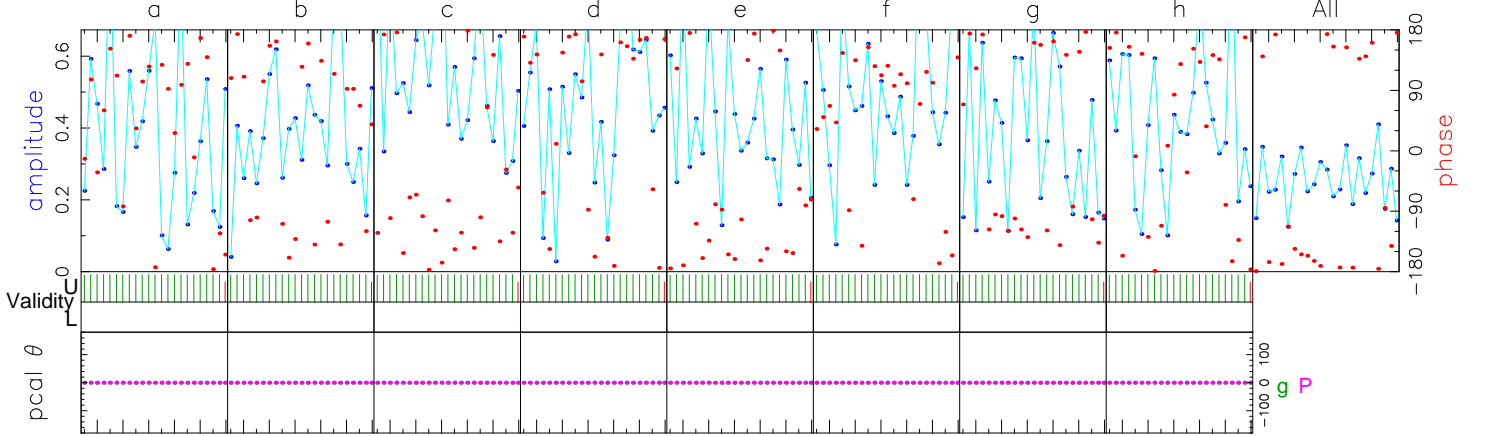
2020:014:135814

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		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.17057967714E+03				-2.17057040120E+03				6.34906E-03	+/- 9.6E-05
Sband delay (usec)	-2.17057488545E+03				1.3860899E+00				-4.48425E-03	+/- 7.7E-04
Phase delay (usec)	-2.17057040693E+03				4.2799997E-07				-5.73165E-06	+/- 3.3E-07
Delay rate (us/s)	6.98680575167E-01				6.98680589162E-01				-1.39954E-08	+/- 1.7E-09
Total phase (deg)			-307.1		3.82873076812E-05				-177.7	+/- 10.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
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
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

ph/seg (deg) 32.8 24.4 Search (2048X32) 0.221 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5

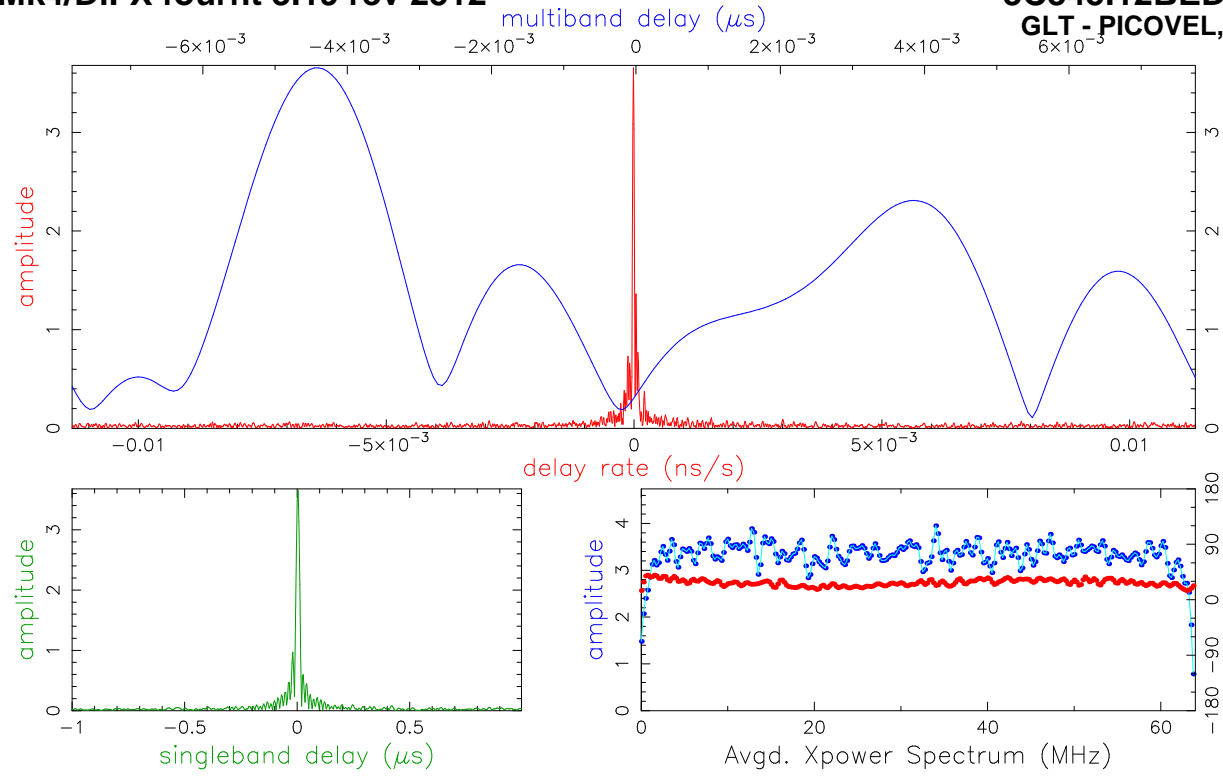
amp/seg (%) 35.2 42.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 42.2 14.4 Inc. seg. avg. 0.235 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 37.7 25.1 Inc. frq. avg. 0.269 Sample rate(MSamp/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 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 ion window (TEC) 0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gP.W.158.12BED8

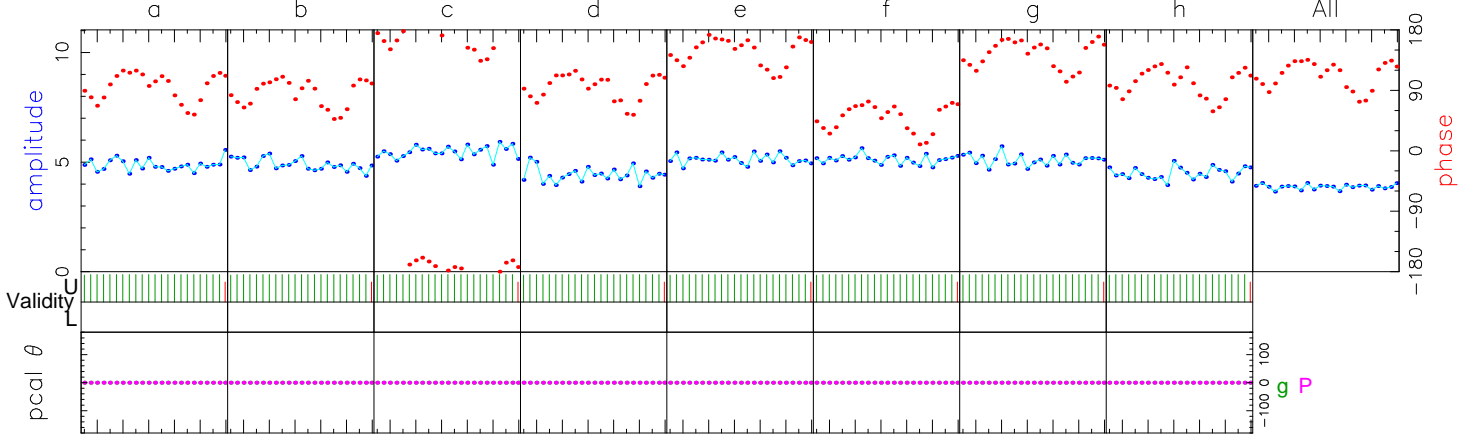


Fringe quality 5

SNR 184.6  
Int time 336.640  
Amp 3.679  
Phase 112.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.002881  
MBD -0.004446  
Fringe rate (Hz)  
-0.000771  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

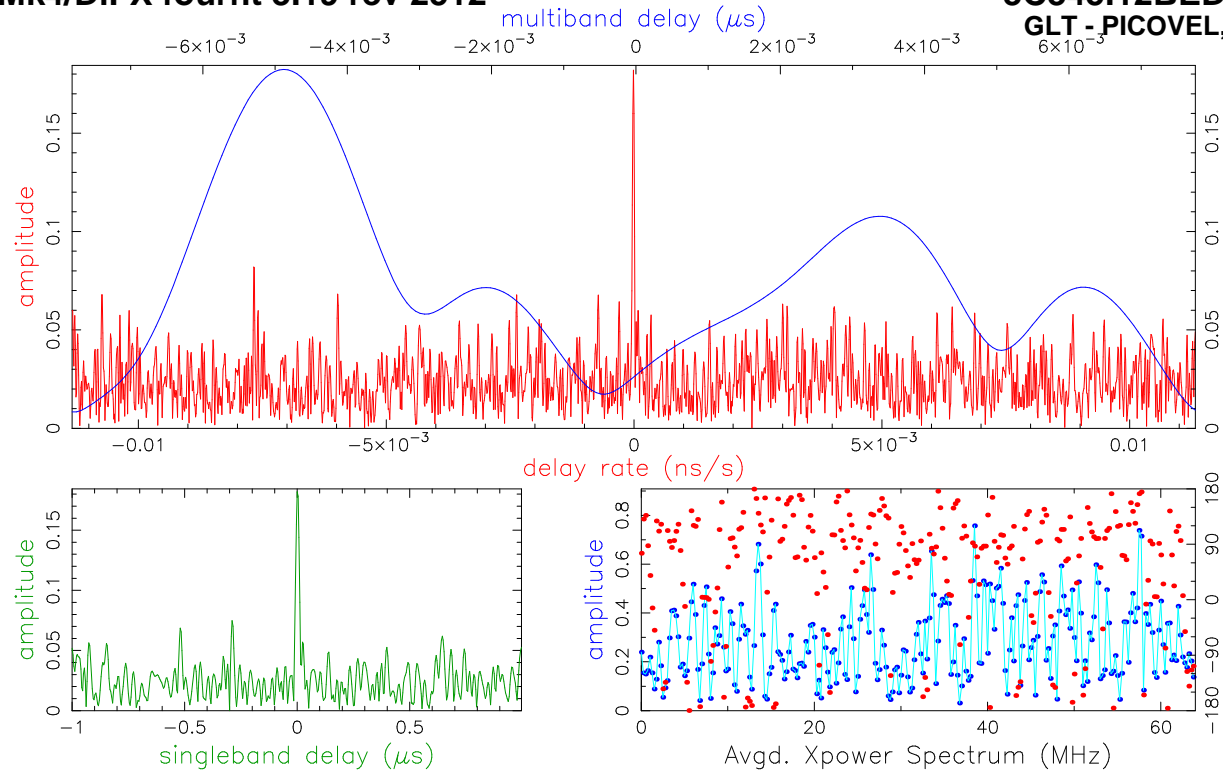
Exp. c192a  
Yr:day 16383  
Yr:day 2019:276  
Start 183122.43  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165625  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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		
P	0	0	0	0	0	0	0	0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.17057484758E+03				-2.17057040120E+03					
Sband delay (usec)	-2.17056752045E+03				1.3860899E+00					
Phase delay (usec)	-2.17057039759E+03				4.2799997E-07					
Delay rate (us/s)	6.98680580206E-01				6.98680589162E-01					
Total phase (deg)			-17.3		3.82873076812E-05					
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)										
simultaneous interpolator										

ph/seg (deg) 19.5 1.5 Search (2048X32) 3.631 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 6.1 2.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.0 0.9 Inc. seg. avg. 3.873 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 27.8 1.5 Inc. frq. avg. 4.655 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 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/gP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gP.W.170.12BED8 simultaneous interpolator

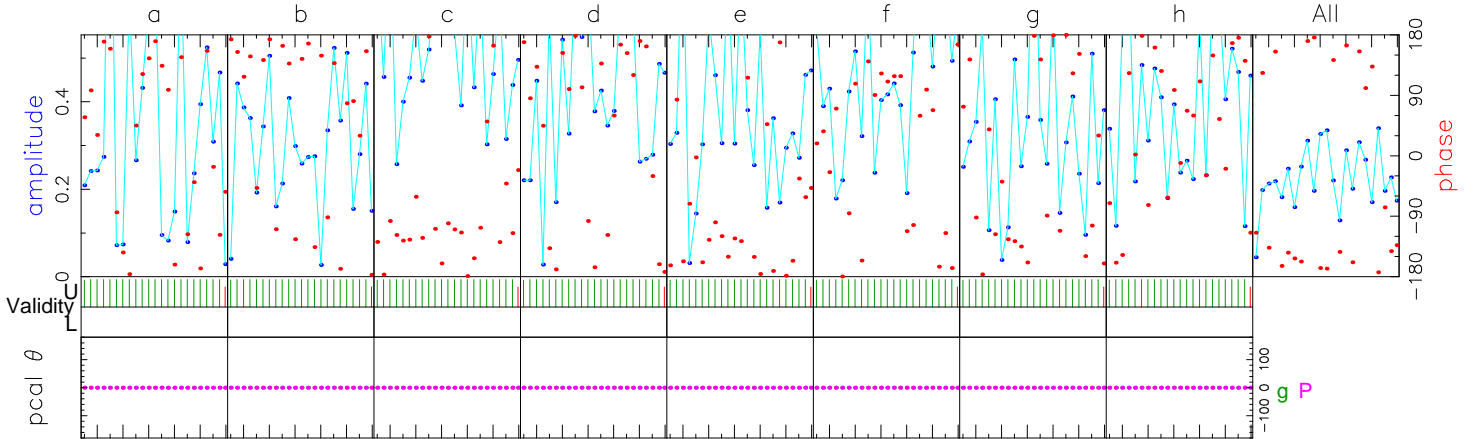


Fringe quality 9

SNR 9.3  
Int time 336.597  
Amp 0.184  
Phase -176.4  
PFD 8.7e-12  
Delays (us)  
SBD 0.001528  
MBD -0.004801  
Fringe rate (Hz)  
-0.001391  
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  
2020:086:165629  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

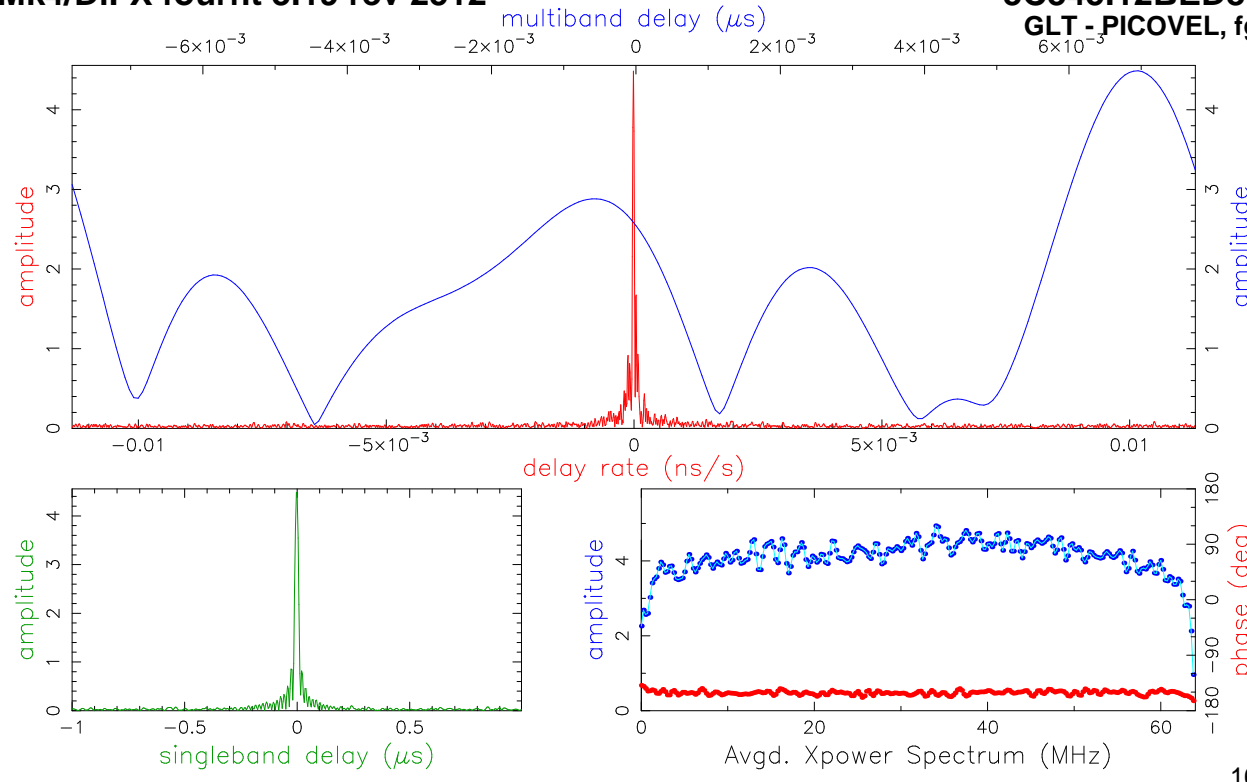
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	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		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.17057520223E+03				-2.17057040120E+03				-4.80103E-03	+/- 1.2E-04
Sband delay (usec)	-2.17056887345E+03				1.3860899E+00				1.52775E-03	+/- 9.3E-04
Phase delay (usec)	-2.17057040689E+03				4.2799997E-07				-5.68980E-06	+/- 4.0E-07
Delay rate (us/s)	6.98680573012E-01				6.98680589162E-01				-1.61502E-08	+/- 2.1E-09
Total phase (deg)			-305.8		3.82873076812E-05				-176.4	+/- 12.4
	RMS	Theor.	Amplitude	0.184 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000 1.000
ph/seg (deg)	41.2	29.7	Search (2048X32)	0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled			mb window (us)	-0.008 0.008
amp/seg (%)	44.6	51.8	Interp.	0.000	Bits/sample: 2x2	Sample rate(MSamp/s): 128			dr window (ns/s)	-0.011 0.011
ph/frq (deg)	41.9	17.5	Inc. seg. avg.	0.200	Data rate(Mb/s): 2048	nlags: 256			ion window (TEC)	0.00 0.00
amp/frq (%)	47.8	30.6	Inc. frq. avg.	0.216						

g: az 142.5 el 51.0 pa -10.6 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gp..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gP.W.188.12BED8

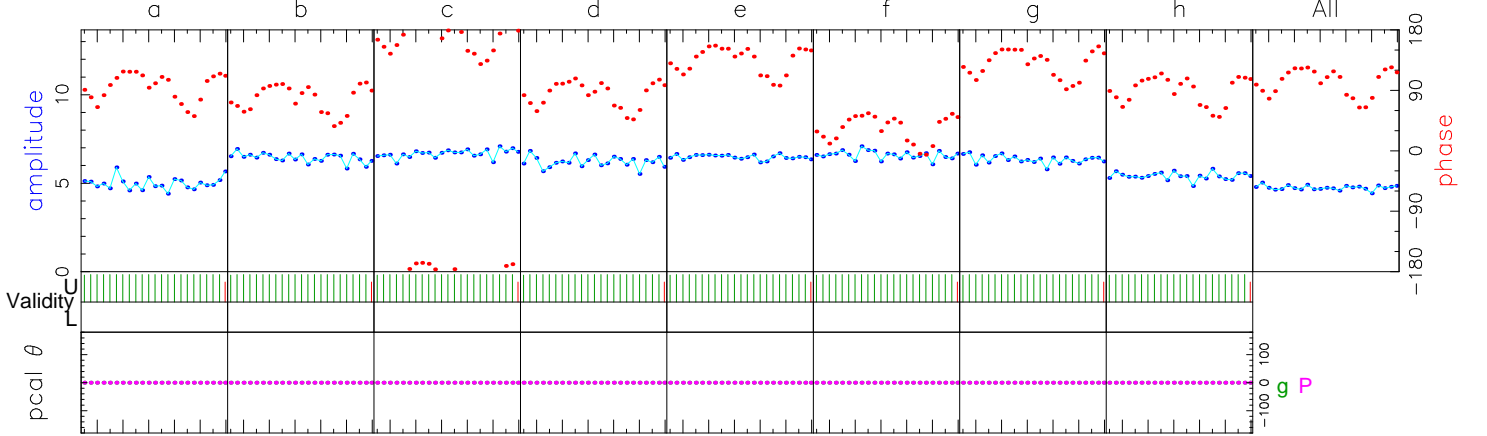


Fringe quality 5

SNR 228.6  
Int time 336.640  
Amp 4.557  
Phase 102.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.002311  
MBD 0.006981  
Fringe rate (Hz)  
-0.000768  
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  
2020:086:165635  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

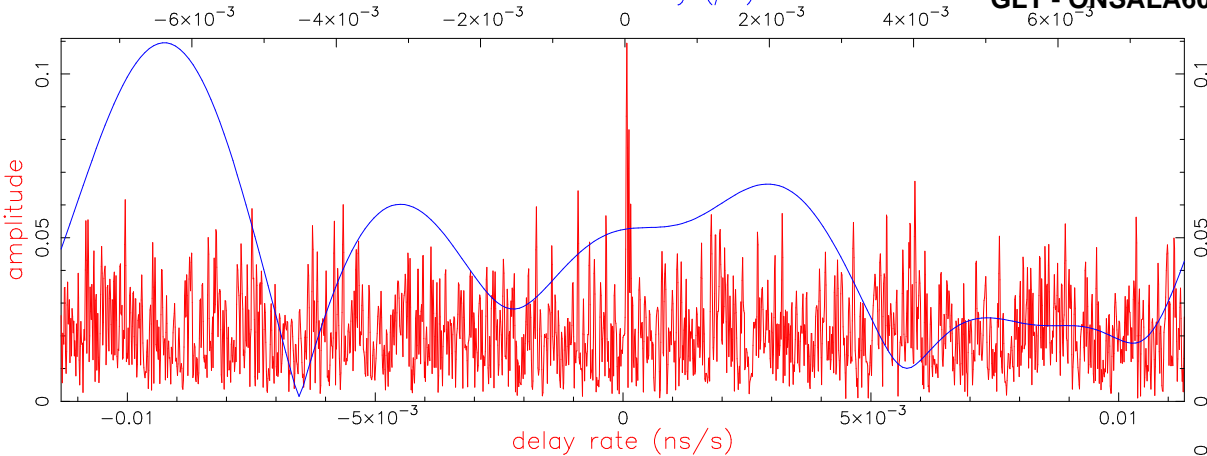
Amp. and Phase vs. time for each freq., 23 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



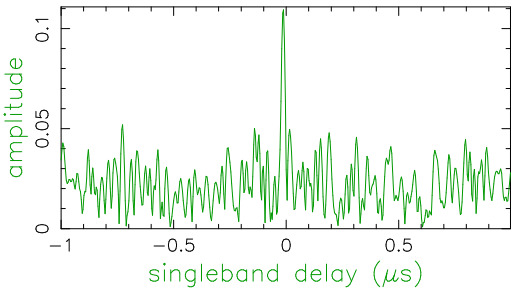
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	659/0	659/0	659/0	659/0	659/0	659/0	659/0	659/0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.17057904517E+03									
Sband delay (usec)	-2.17057271195E+03									
Phase delay (usec)	-2.17057039791E+03									
Delay rate (us/s)	6.98680580241E-01									
Total phase (deg)			-27.4							
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)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

ph/seg (deg) 19.3 1.2 Search (2048X32) 4.436 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 5.0 2.1 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 0.7 Inc. seg. avg. 4.748 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 29.9 1.2 Inc. frq. avg. 5.802 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 P: az 286.6 el 62.3 pa 84.7 u,v (fr/asec) -5134.530 5088.763 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/gP..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gP.W.214.12BED8

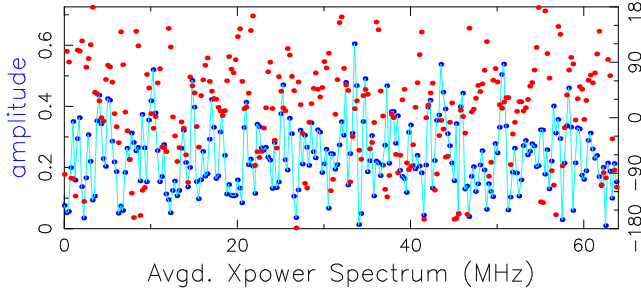
multiband delay ( $\mu\text{s}$ )



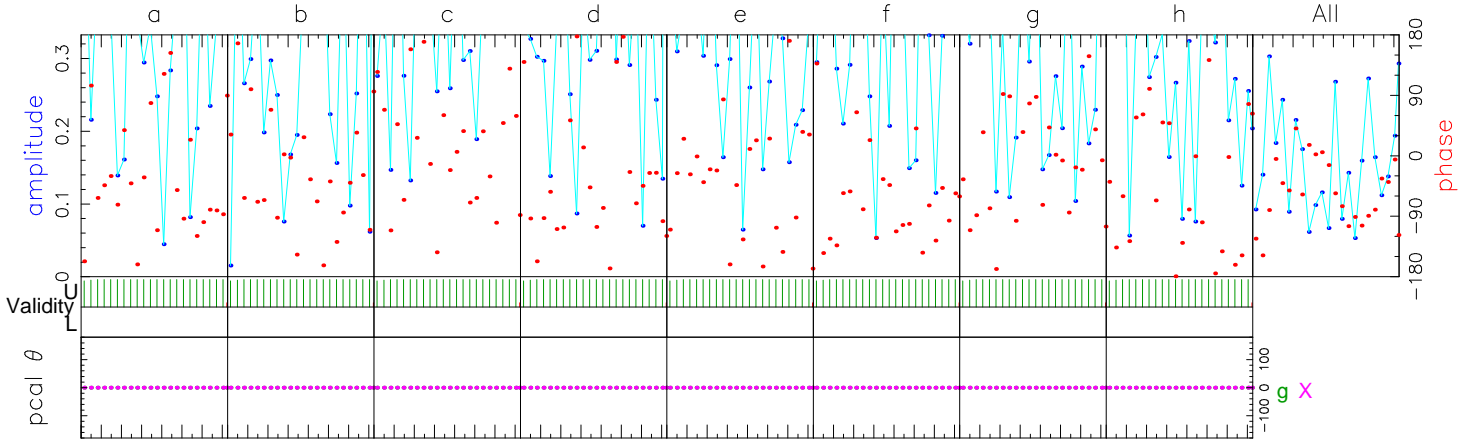
Fringe quality 0  
SNR 6.2  
Int time 418.177  
Amp 0.111  
Phase -54.5  
PFD 1.4e-01  
Delays (us)  
SBD -0.013284  
MBD -0.006444  
Fringe rate (Hz) 0.006533  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84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



delay rate (ns/s)

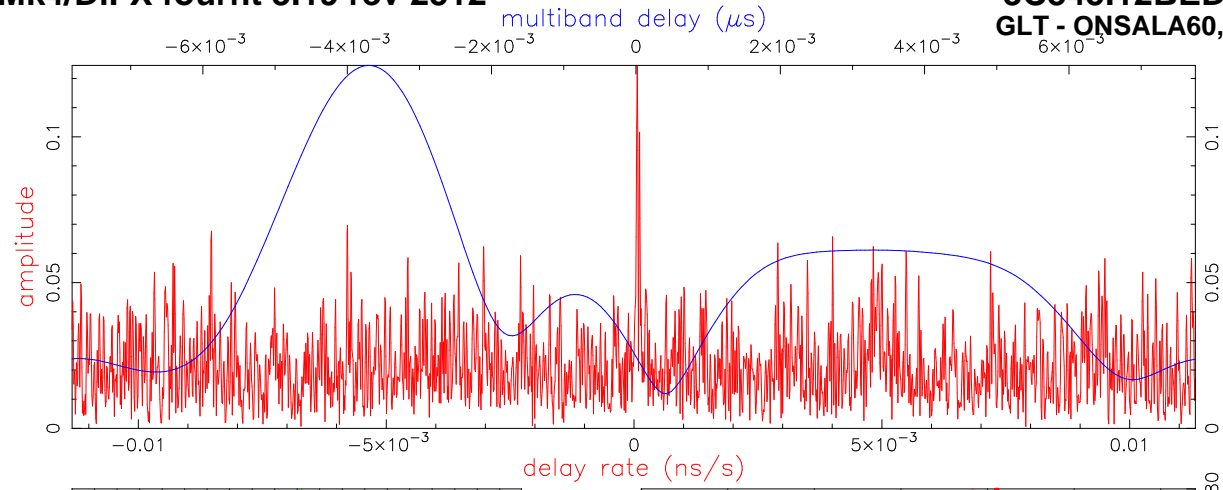


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

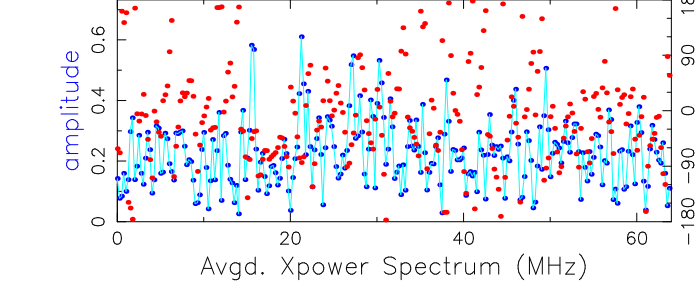
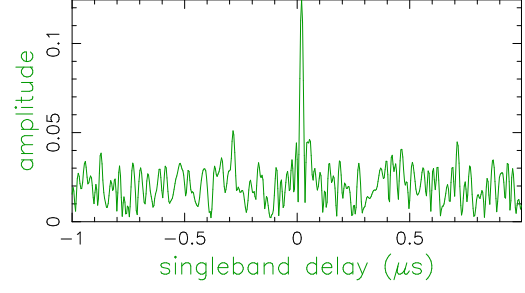


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.2	-56.5	22.3	-96.5	-27.4	-89.6	-9.5	-82.6	Phase	-54.5
	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.0	Ampl.	0.1
	256.2	501.0	252.6	251.9	253.5	253.6	109.2	96.9	Sbd box	253.6
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0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

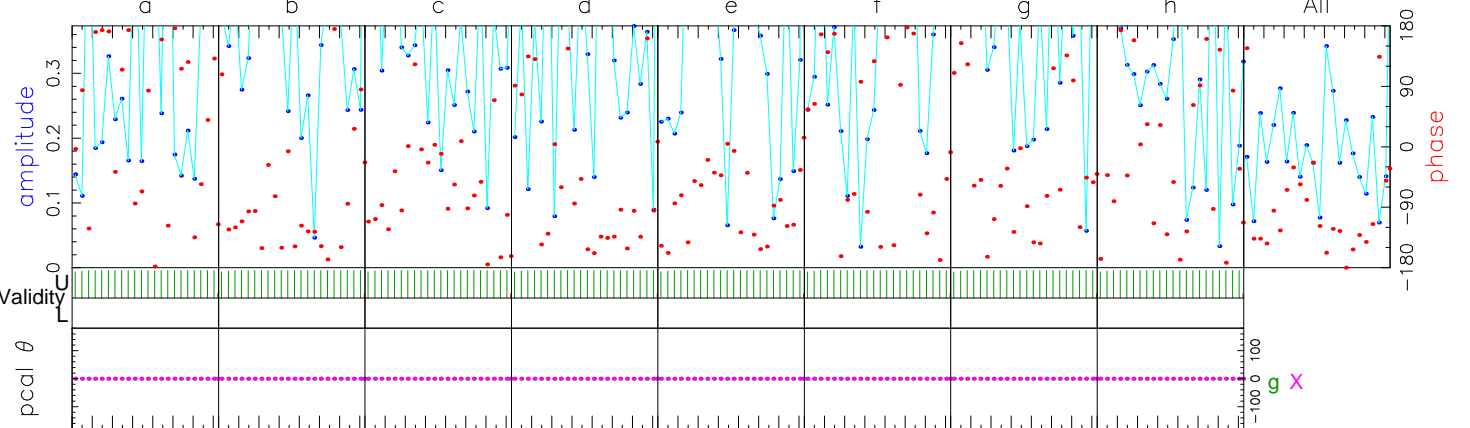
ph/seg (deg) 48.1 44.3 Search (2048X32) 0.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 75.6 77.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 46.6 26.1 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 49.6 45.6 Inc. frq. avg. 0.129 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gX.W.164.12BED8



Fringe quality 0  
SNR 7.0  
Int time 418.221  
Amp 0.124  
Phase -117.8  
PFD 1.0e-03  
Delays (us)  
SBD 0.019461  
MBD -0.003704  
Fringe rate (Hz)  
0.006183  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165628  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



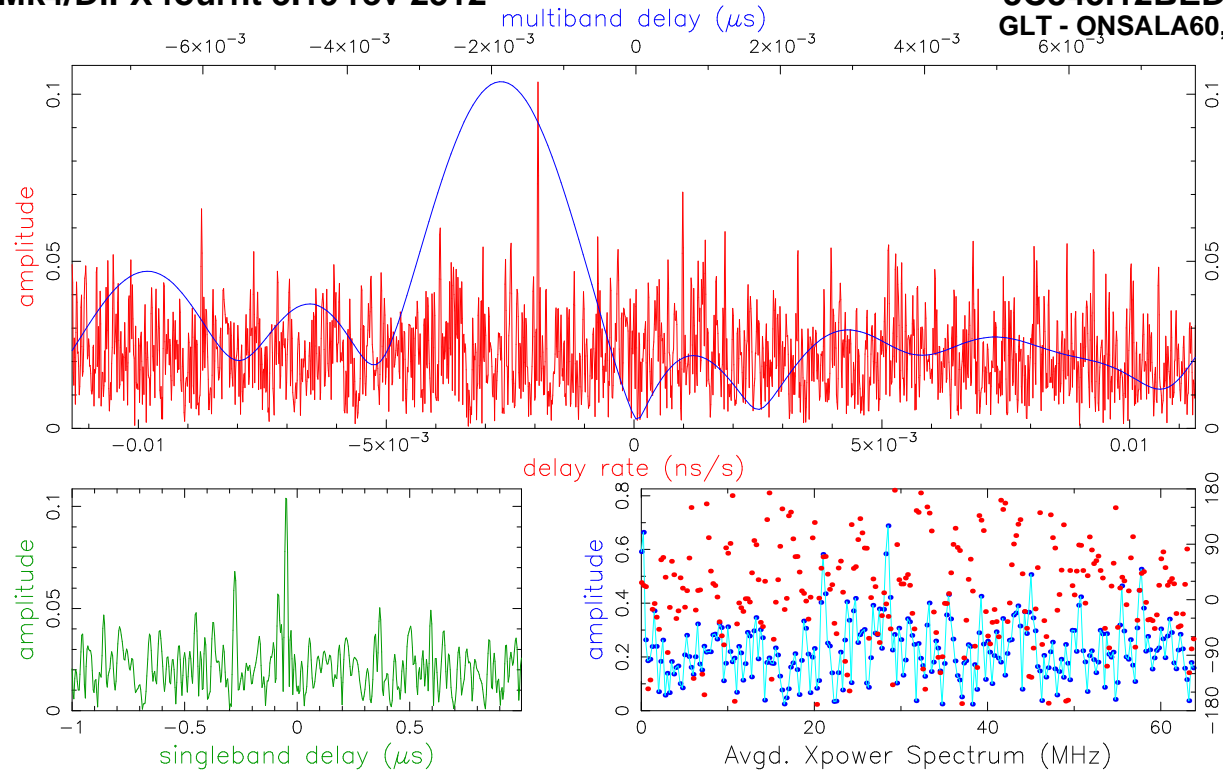
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



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

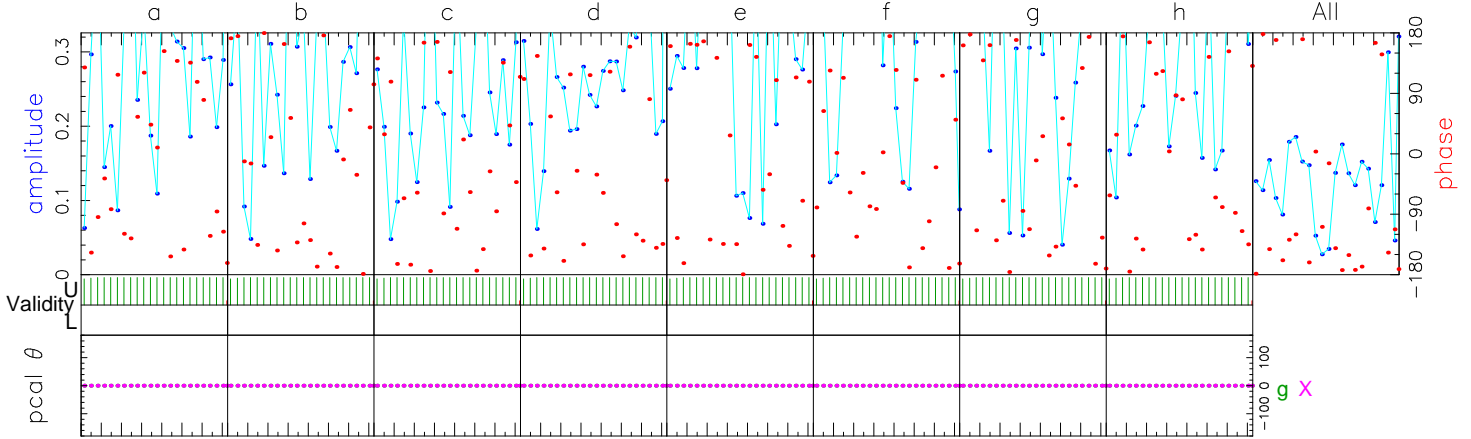
ph/seg (deg) 52.2 39.4 Amplitude 0.124 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.1 68.8 Search (2048X32) 0.118 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 41.3 23.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 49.4 40.6 Inc. seg. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gX.W.178.12BED8





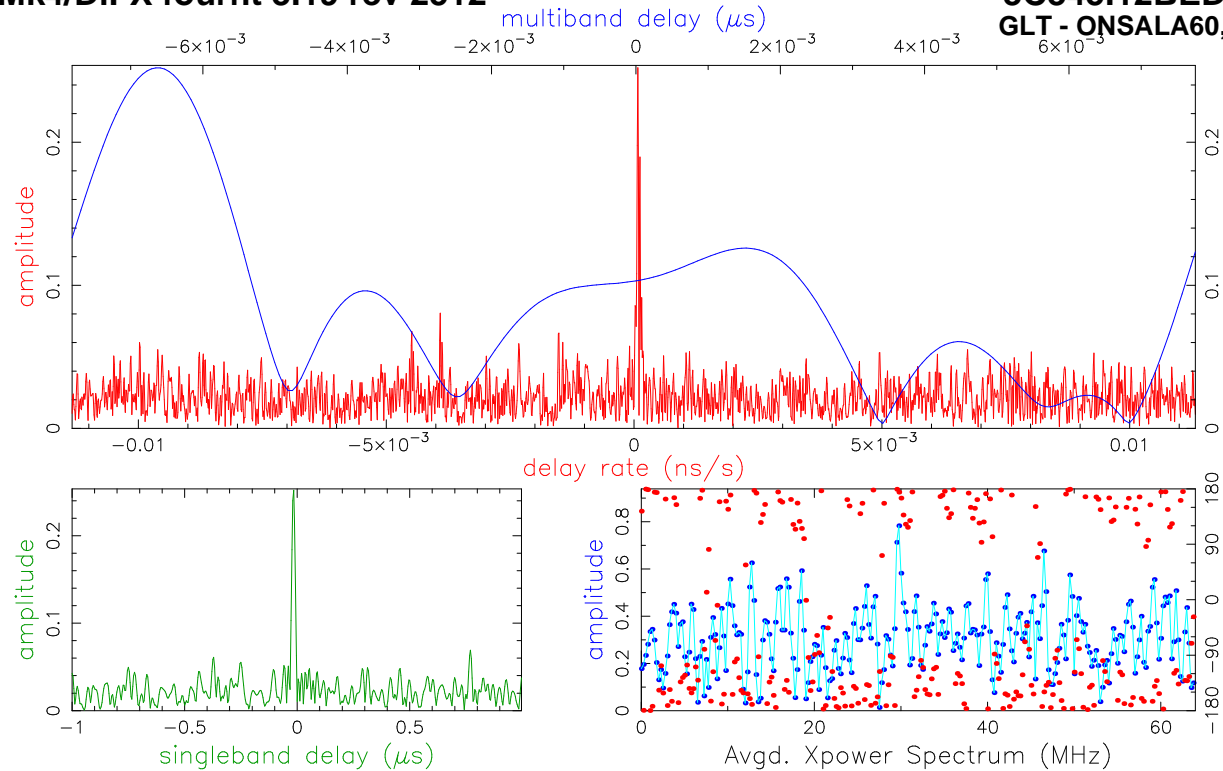
Fringe quality 0  
SNR 6.0  
Int time 418.177  
Amp 0.109  
Phase -155.4  
PFD 4.0e-01  
Delays (us)  
SBD -0.048873  
MBD -0.001924  
Fringe rate (Hz)  
-0.167009  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84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

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



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

ph/seg (deg) 54.8 45.8 Amplitude 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 60.1 79.9 Interp. 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 29.5 27.0 Inc. seg. avg. 0.097 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.8 47.1 Inc. frq. avg. 0.102 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gX.W.199.12BED8

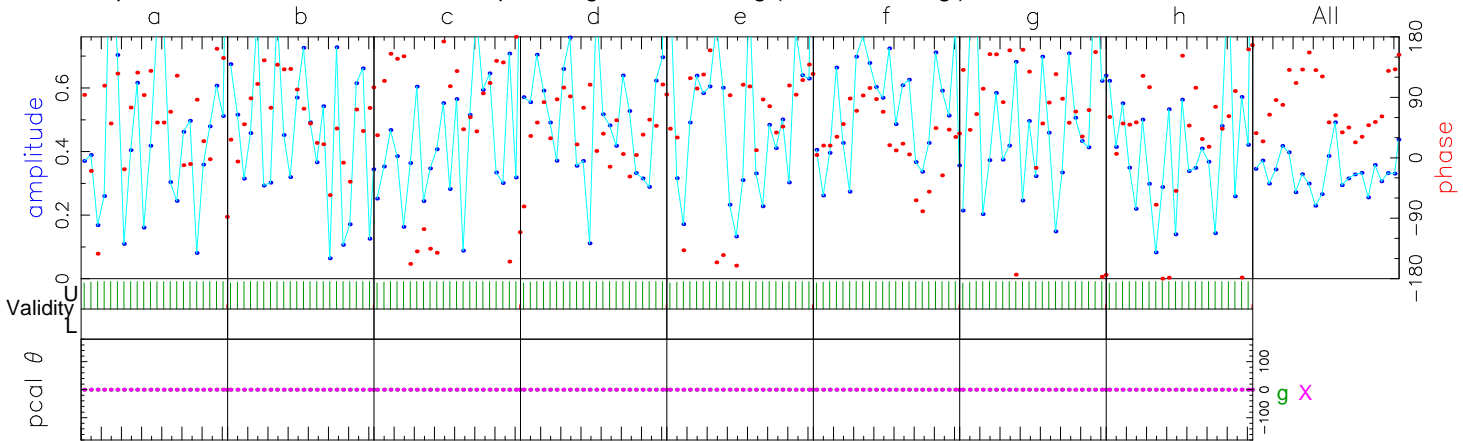


Fringe quality 8

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

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

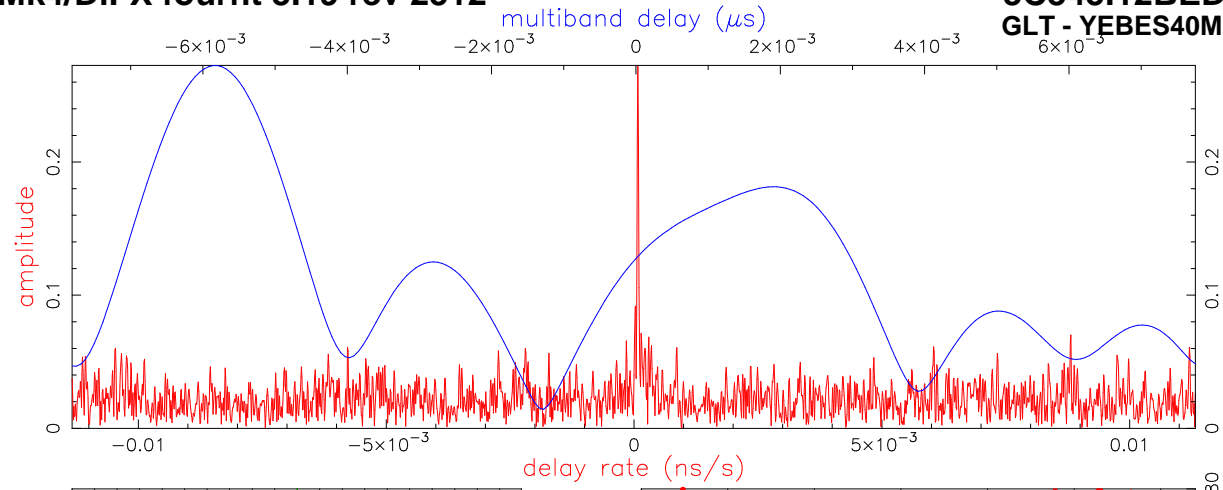
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
g	0	0	0	0	0	0	0	0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.07608022691E+02									
Sband delay (usec)	-4.07602382727E+02									
Phase delay (usec)	-4.07585744987E+02									
Delay rate (us/s)	6.39660941501E-01									
Total phase (deg)			-26.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

g: az 142.5 el 51.0 pa -10.6 X: az 263.7 el 53.3 pa 44.2 u,v (fr/asec) -4744.604 1695.387

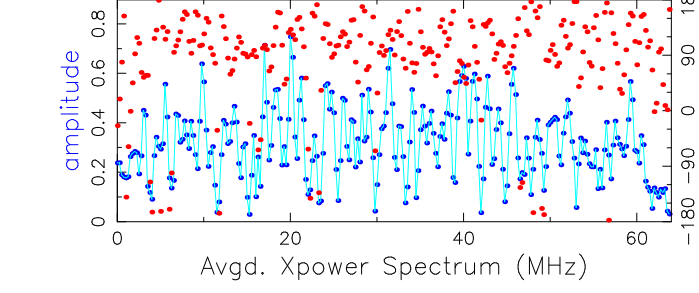
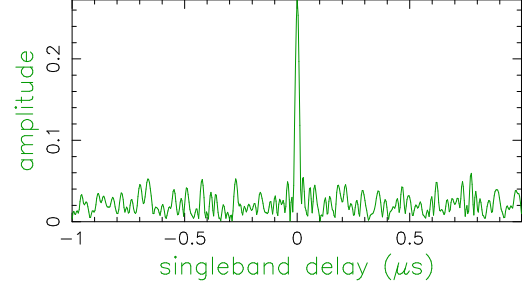
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gX..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gX.W.220.12BED8



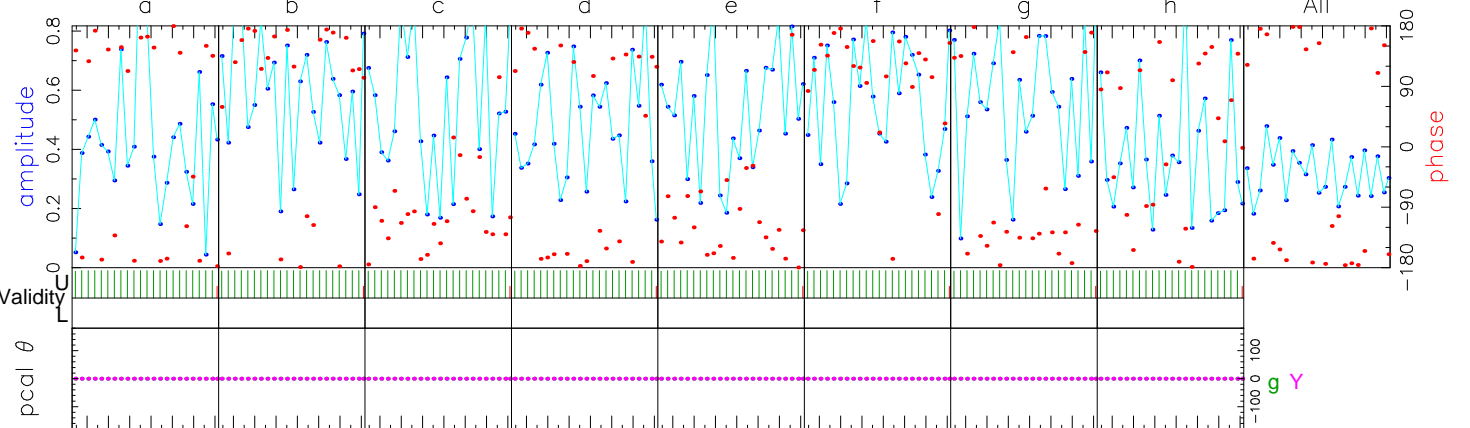
Fringe quality 7

SNR 14.9  
Int time 401.178  
Amp 0.273  
Phase -177.7  
PFD 1.3e-41  
Delays (us)  
SBD 0.000245  
MBD -0.005826  
Fringe rate (Hz) 0.006701  
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  
2020:086:165624  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

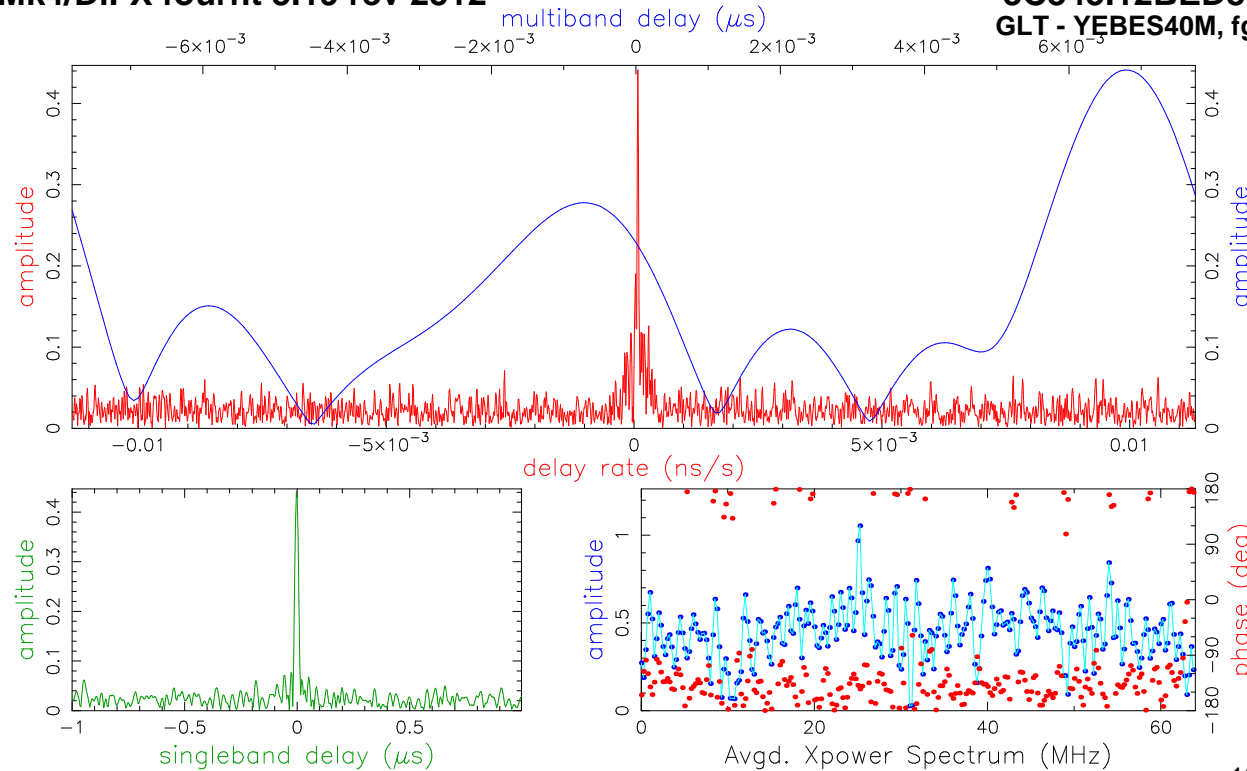


Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



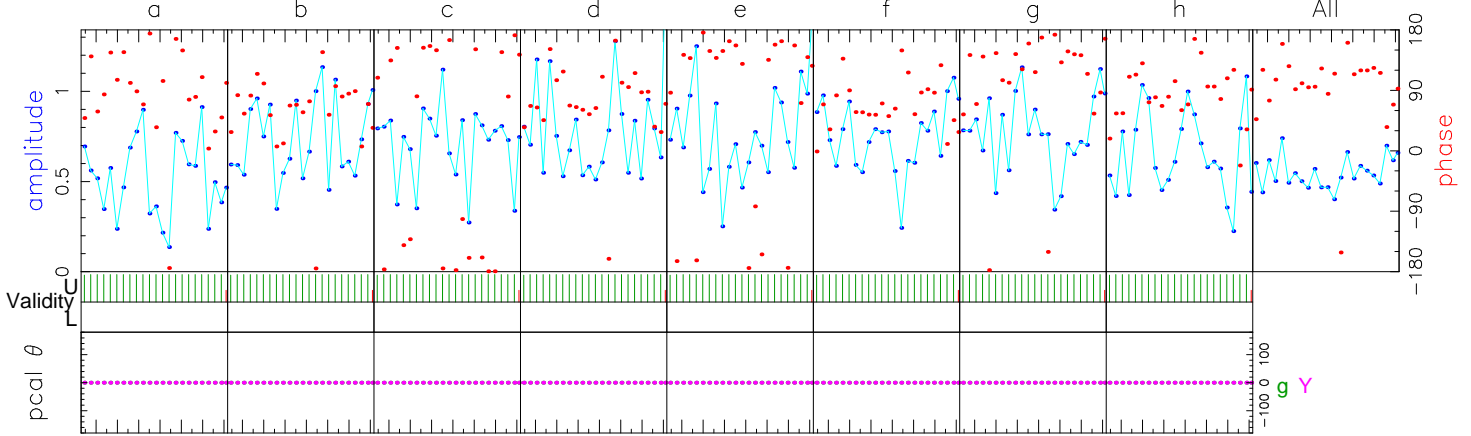
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	167.6	158.2	-106.1	164.2	-131.0	127.2	-154.6	134.0	Phase	-177.7
g	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.1	Ampl.	0.4
Y	258.7	257.1	256.4	255.5	256.3	256.9	257.1	330.5	Sbd box	257.1
g	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
Y	0	0	0	0	0	0	0	0	PC freqs	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27657262473E+03		Apriori delay (usec)		-2.27656679922E+03		Resid mbdelay (usec)		-5.82551E-03	+/- 7.3E-05
Sband delay (usec)	-2.27656655447E+03		Apriori clock (usec)		-8.3558588E-07		Resid sbdelay (usec)		2.44750E-04	+/- 5.8E-04
Phase delay (usec)	-2.27656680495E+03		Apriori clockrate (us/s)		-1.4500001E-07		Resid phdelay (usec)		-5.72906E-06	+/- 2.5E-07
Delay rate (us/s)	6.75820060661E-01		Apriori rate (us/s)		6.75819982870E-01		Resid rate (us/s)		7.77911E-08	+/- 1.1E-09
Total phase (deg)	-208.3		Apriori accel (us/s/s)		3.54163203504E-05		Resid phase (deg)		-177.7	+/- 7.7

ph/seg (deg) 32.9 18.4 Search (2048X32) 0.272 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 34.9 32.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 48.9 10.9 Inc. seg. avg. 0.306 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 46.3 18.9 Inc. frq. avg. 0.355 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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -4969.863 4579.881 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gY.W.167.12BED8

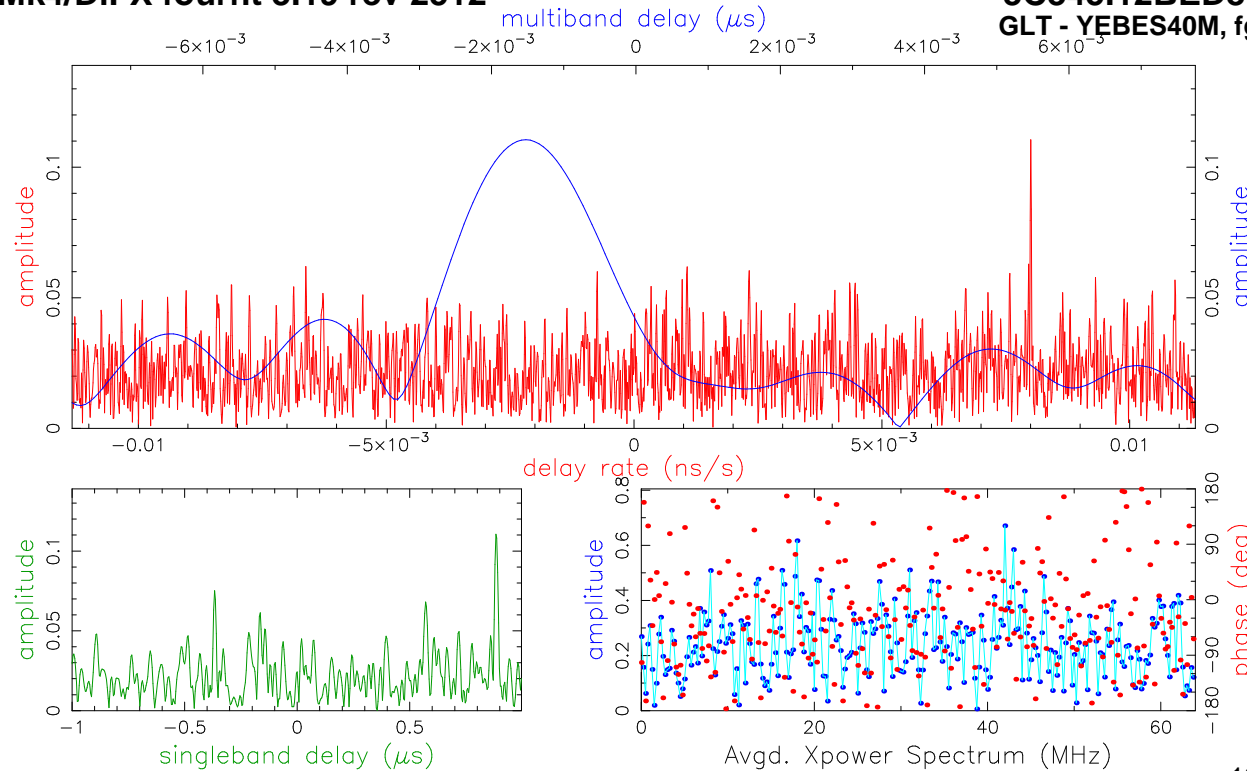


Fringe quality 7  
 SNR 24.5  
 Int time 401.218  
 Amp 0.447  
 Phase 107.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.002445  
 MBD 0.006829  
 Fringe rate (Hz)  
 0.006583  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c192a  
 Yr:day 16383  
 Start 183017.92  
 Stop 183659.84  
 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, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec

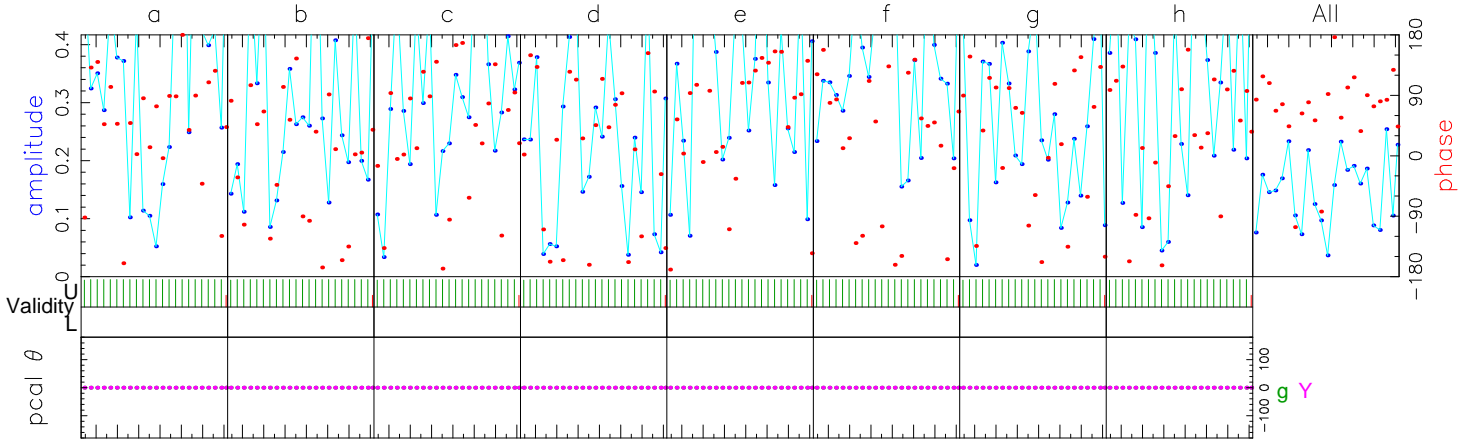


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0		
g	0	0	0	0	0	0	0	0		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.27657559508E+03				-2.27656679922E+03				6.82915E-03	+/- 4.4E-05
Sband delay (usec)	-2.27656924397E+03				-8.3558588E+00				-2.44475E-03	+/- 3.5E-04
Phase delay (usec)	-2.27656679577E+03				-1.4500001E-07				3.45887E-06	+/- 1.5E-07
Delay rate (us/s)	6.75820059293E-01				6.75819982870E-01				7.64229E-08	+/- 6.5E-10
Total phase (deg)			76.6		3.54163203504E-05				107.3	+/- 4.7
	RMS	Theor.	Amplitude	0.447 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	36.4	11.2	Search (2048X32)	0.438	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	29.4	19.6	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	41.1	6.6	Inc. seg. avg.	0.538	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	26.9	11.6	Inc. frq. avg.	0.541	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
g: az 142.5 el 51.0 pa -10.6	Y: az 280.2 el 62.9 pa 76.6	u, v (fr/asec)	-4969.863 4579.881		nlags: 256 t_cohere infinite					simultaneous interpolator



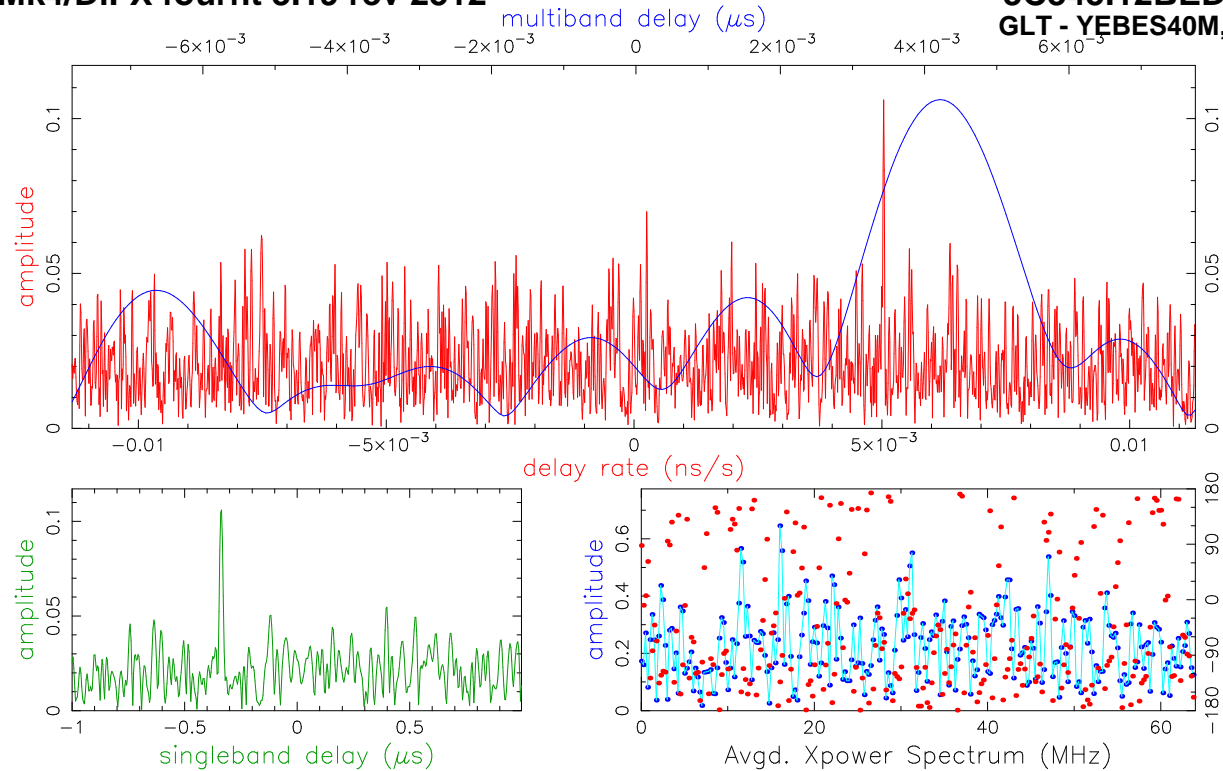
Fringe quality 0  
SNR 6.1  
Int time 401.178  
Amp 0.139  
Phase 82.5  
PFD 2.0e-01  
Delays (us)  
SBD 0.884321  
MBD -0.001504  
Fringe rate (Hz) 0.690327  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183017.92  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165634  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



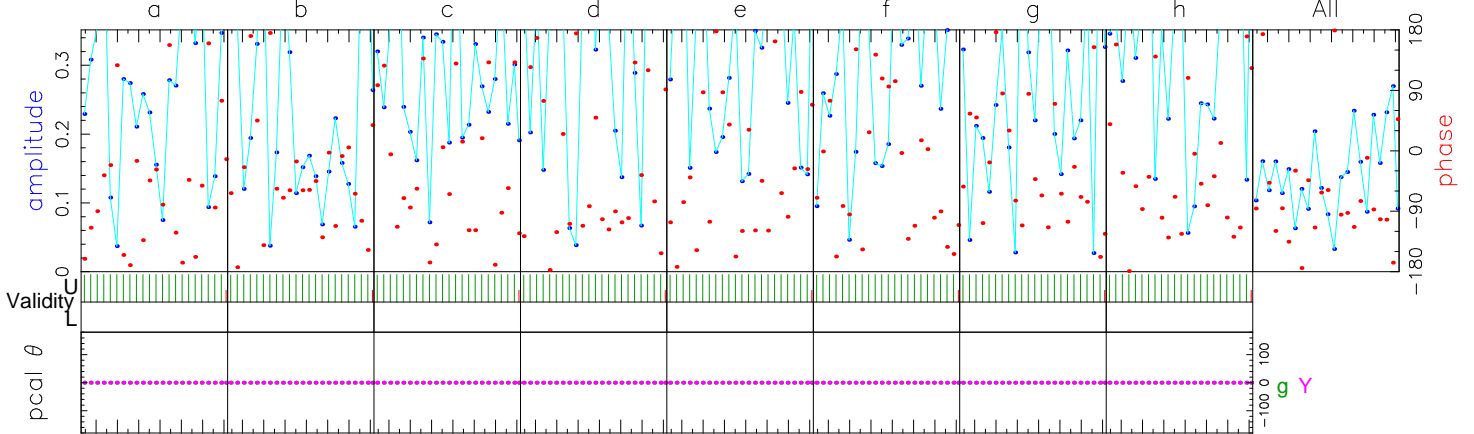
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	96.7	48.1	60.2	110.6	96.3	101.6	85.3	55.2	Phase	82.5
	0.2	0.1	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	274.4	395.9	162.2	215.2	482.7	446.0	144.4	148.7	Sbd box	483.4
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27567767796E+03		Apriori delay (usec)		-2.27656679922E+03		Resid mbdelay (usec)		-1.50374E-03	+/- 1.8E-04
Sband delay (usec)	-2.27568247847E+03		Apriori clock (usec)		-8.3558588E+00		Resid sbdelay (usec)		8.84321E-01	+/- 1.4E-03
Phase delay (usec)	-2.27656679656E+03		Apriori clockrate (us/s)		-1.4500001E-07		Resid phdelay (usec)		2.65958E-06	+/- 6.0E-07
Delay rate (us/s)	6.75827996882E-01		Apriori rate (us/s)		6.75819982870E-01		Resid rate (us/s)		8.01401E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		3.54163203504E-05		Resid phase (deg)		82.5	+/- 18.7

ph/seg (deg) 58.9 44.7 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.0 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) 25.7 26.4 Inc. seg. avg. 0.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 23.9 46.1 Inc. frq. avg. 0.133 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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -4969.863 4579.881 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gY.W.212.12BED8



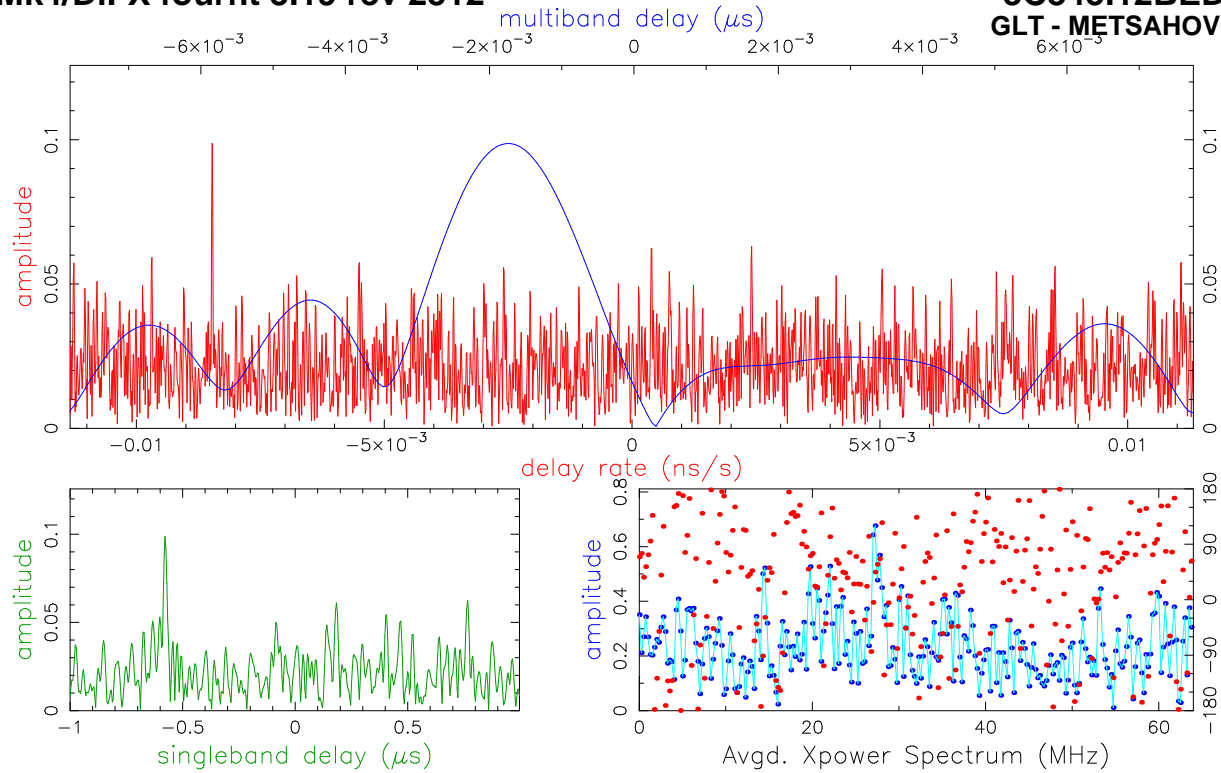
Fringe quality 0  
SNR 5.9  
Int time 401.218  
Amp 0.117  
Phase -103.5  
PFD 5.8e-01  
Delays (us)  
SBD -0.337637  
MBD 0.004174  
Fringe rate (Hz) 0.434228  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183017.92  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165639  
2020:014:135814  
RA & Dec (J2000) 16h42m58.809967s +39°48'36.993984"

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



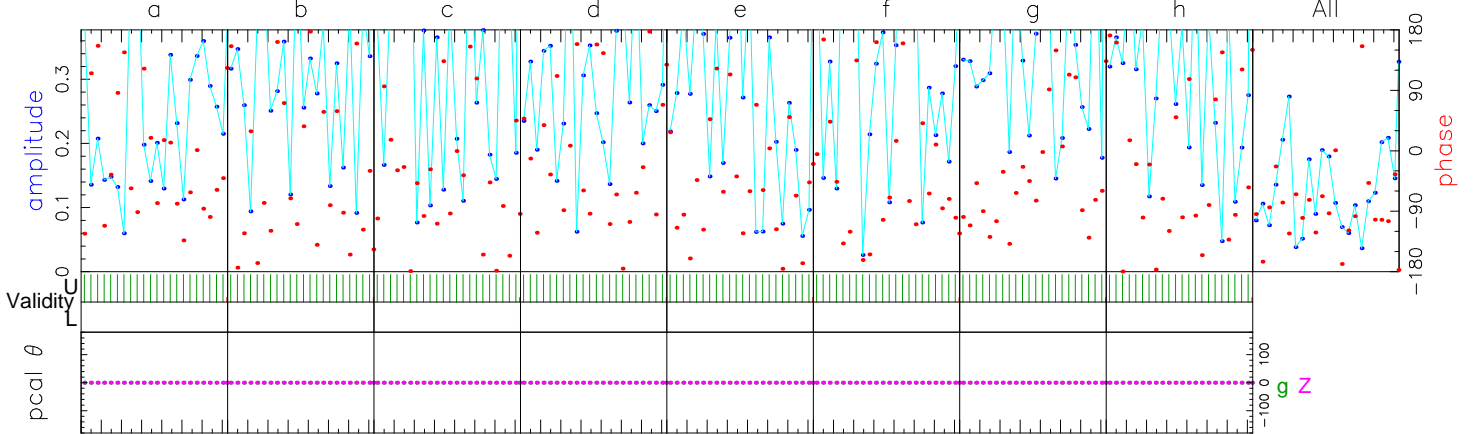
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.8	-88.2	-130.0	-129.8	-110.2	-111.5	-89.0	-91.4	Phase	-103.5
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	271.0	467.1	347.1	442.7	393.0	432.3	498.0	170.5	Sbd box	170.6
U/L	785/0	785/0	785/0	785/0	785/0	785/0	785/0	785/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27690637546E+03		Apriori delay (usec)		-2.27656679922E+03		Resid mbdelay (usec)		4.17376E-03	+/- 1.8E-04
Sband delay (usec)	-2.27690443597E+03		Apriori clock (usec)		-8.3558588E+00		Resid sbdelay (usec)		-3.37637E-01	+/- 1.5E-03
Phase delay (usec)	-2.27656680256E+03		Apriori clockrate (us/s)		-1.4500001E-07		Resid phdelay (usec)		-3.33618E-06	+/- 6.3E-07
Delay rate (us/s)	6.75825023830E-01		Apriori rate (us/s)		6.75819982870E-01		Resid rate (us/s)		5.04096E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		3.54163203504E-05		Resid phase (deg)		-103.5	+/- 19.4

ph/seg (deg) 51.5 46.5 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 63.5 81.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.2 27.4 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 32.8 47.9 Inc. frq. avg. 0.108 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 Y: az 280.2 el 62.9 pa 76.6 u,v (fr/asec) -4969.863 4579.881 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gY..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gY.W.230.12BED8



Fringe quality 0  
SNR 5.5  
Int time 419.218  
Amp 0.126  
Phase -90.7  
PFD 1.0e+00  
Delays (us)  
SBD -0.577842  
MBD -0.001742  
Fringe rate (Hz)  
-0.730342  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165624  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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

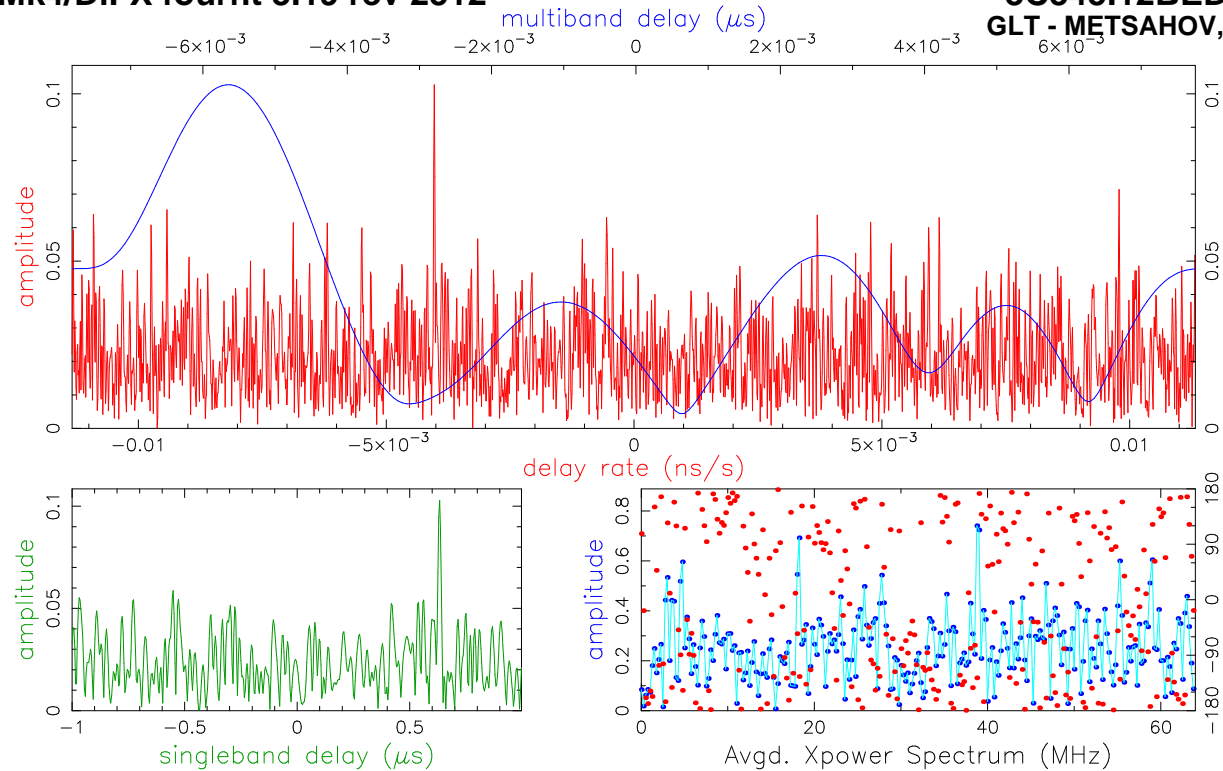


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-67.6	-140.3	-104.5	-59.0	-64.5	-111.0	-70.9	-112.5	Phase	-90.7
	0.2	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	363.7	20.0	207.6	503.4	467.0	11.8	220.0	292.8	Sbd box	109.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.20105083715E+03	Apriori delay (usec)	1.20163070427E+03	Resid mbdelay (usec)	-1.74212E-03	+/-	2.0E-04
Sband delay (usec)	1.20105286177E+03	Apriori clock (usec)	1.1139116E+00	Resid sbdelay (usec)	-5.77842E-01	+/-	1.6E-03
Phase delay (usec)	1.20163070135E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-2.92381E-06	+/-	6.7E-07
Delay rate (us/s)	6.68986242808E-01	Apriori rate (us/s)	6.68994721357E-01	Resid rate (us/s)	-8.47855E-06	+/-	2.8E-09
Total phase (deg)	221.1	Apriori accel (us/s/s)	1.20134941382E-06	Resid phase (deg)	-90.7	+/-	20.7

ph/seg (deg)	RMS 46.9	Theor. 49.7	Amplitude Search (2048X32)	0.126 +/- 0.023	0.097	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	71.8	86.7	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	32.0	29.3	Inc. seg. avg.	0.118	0.118	Bits/sample: 2x2	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	21.2	51.2	Inc. frq. avg.	0.125	0.125	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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gZ.W.168.12BED8

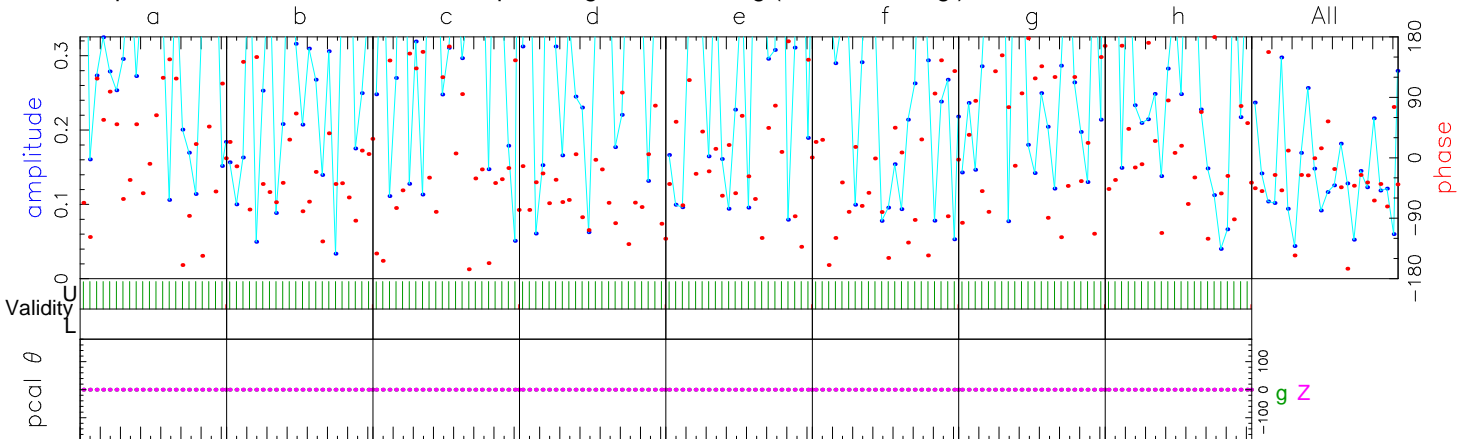


Fringe quality 0

SNR 5.8  
Int time 419.262  
Amp 0.108  
Phase -34.9  
PFD 8.7e-01  
Delays (us)  
SBD 0.632279  
MBD -0.005648  
Fringe rate (Hz)  
-0.347861  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

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

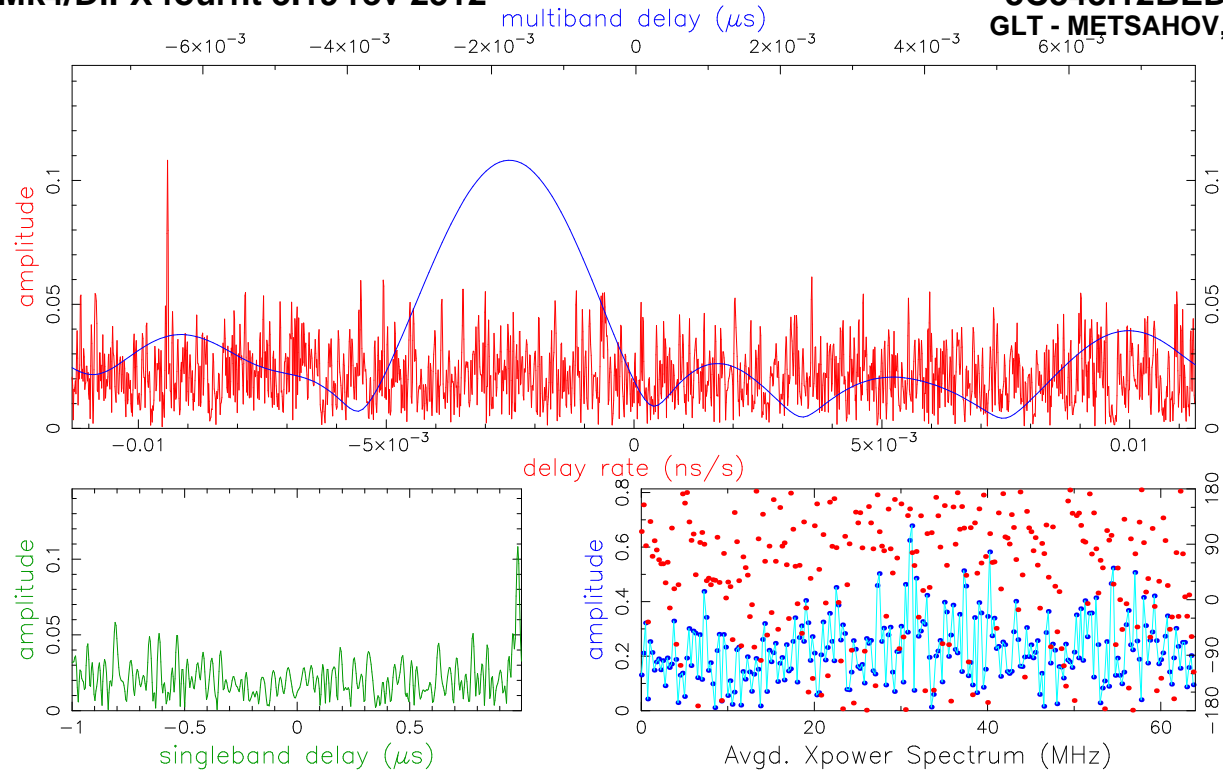
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	g Z	All
11.9	-28.1	-60.9	-57.9	-13.1	-50.2	167.6	-13.2			Phase
0.1	0.2	0.1	0.2	0.1	0.1	0.0	0.2			Ampl.
437.6	418.7	176.1	419.2	337.3	440.5	141.3	489.7			Sbd box
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			APs used
g 0	0	0	0	0	0	0	0			PC freqs
Z 1000	1000	1000	1000	1000	1000	1000	1000			PC freqs
g:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			PC phase
g:Z 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
Z 1000	1000	1000	1000	1000	1000	1000	1000			
g W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			Chan ids
Z W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			Tracks
										Tracks
Group delay (usec)(sbd)	1.20226568110E+03		Apriori delay (usec)	1.20163070427E+03		Resid mbdelay (usec)	-5.64817E-03		+/-	1.9E-04
Sband delay (usec)	1.20226298302E+03		Apriori clock (usec)	1.1139116E+00		Resid sbdelay (usec)	6.32279E-01		+/-	1.5E-03
Phase delay (usec)	1.20163070315E+03		Apriori clockrate (us/s)	5.8707190E-08		Resid phdelay (usec)	-1.12460E-06		+/-	6.4E-07
Delay rate (us/s)	6.68990683039E-01		Apriori rate (us/s)	6.68994721357E-01		Resid rate (us/s)	-4.03832E-06		+/-	2.6E-09
Total phase (deg)		276.9	Apriori accel (us/s/s)	1.20134941382E-06		Resid phase (deg)	-34.9		+/-	19.9

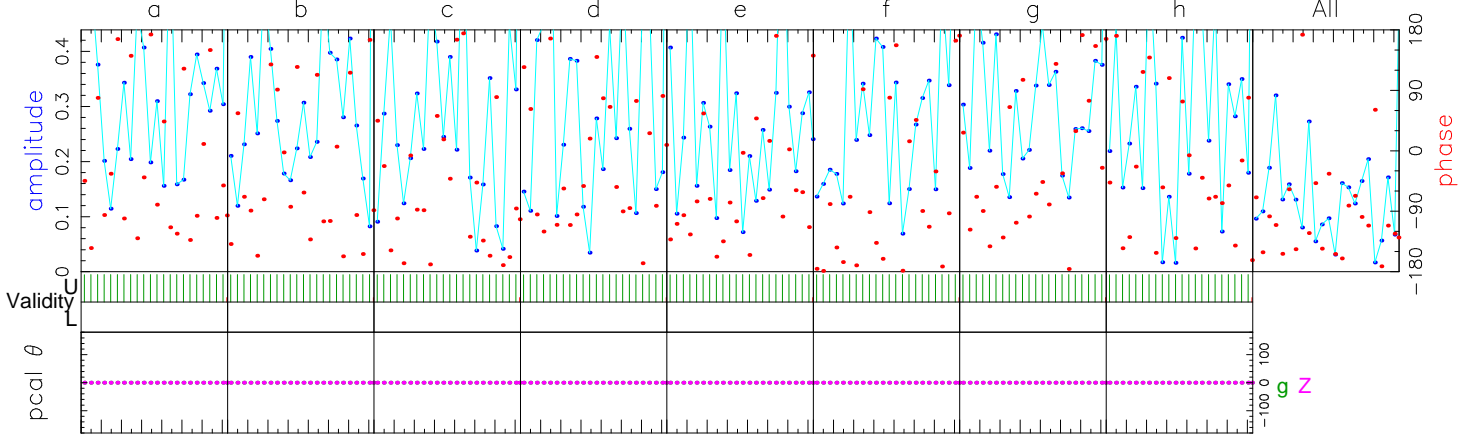
ph/seg (deg) 62.5 47.7 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 72.6 83.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 70.0 28.1 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 55.3 49.1 Inc. frq. avg. 0.112 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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gZ.W.185.12BED8





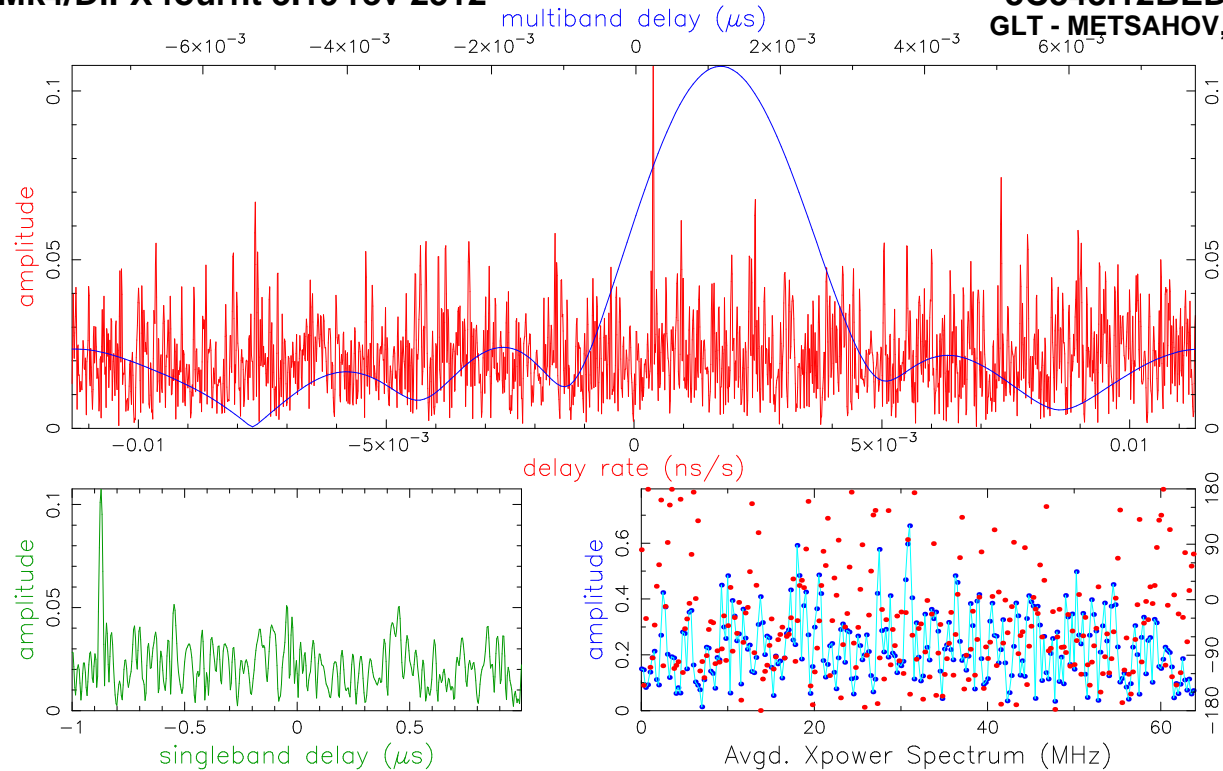
Fringe quality 0  
SNR 6.1  
Int time 419.218  
Amp 0.146  
Phase -112.6  
PFD 3.0e-01  
Delays (us)  
SBD 0.980099  
MBD -0.001771  
Fringe rate (Hz)  
-0.811375  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Exper # 16383  
Yr:day 2019:276  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165632  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



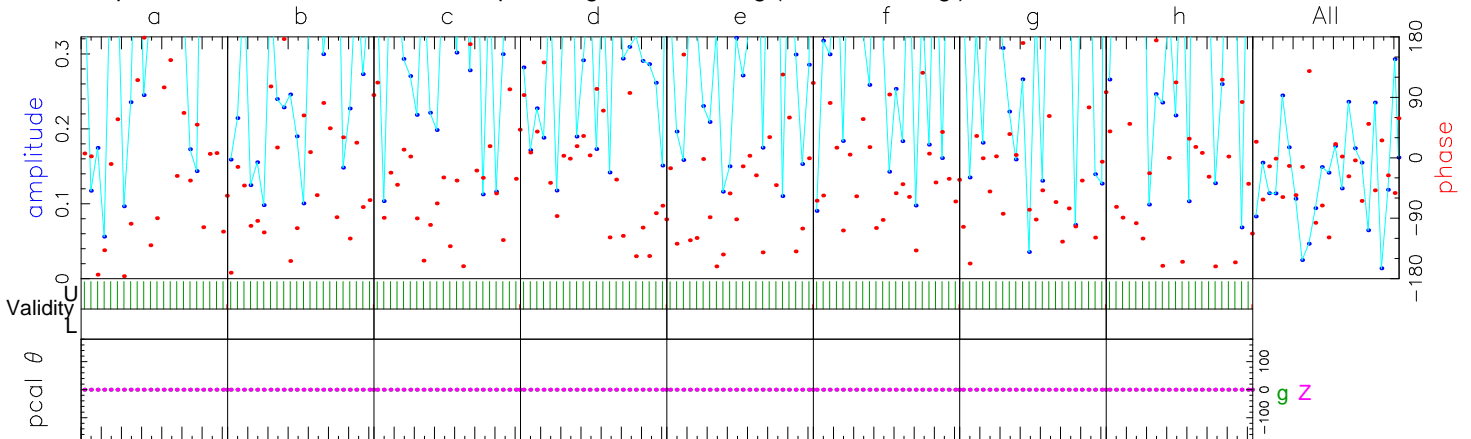
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All												
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0														
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0														
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0														
g	1000	1000	1000	1000	1000	1000	1000	1000														
Z	1000	1000	1000	1000	1000	1000	1000	1000														
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL														
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR														
Group delay (usec)(sbd)	1.20261330802E+03	1.20261080352E+03	1.20163070064E+03	6.68985302096E-01	199.2	Apriori delay (usec)	1.20163070427E+03	1.1139116E+00	5.8707190E-08	6.68994721357E-01	1.20134941382E-06	Resid mbdelay (usec)	-1.77125E-03	9.80099E-01	-3.63052E-06	-9.41926E-06	-112.6	+/- 1.8E-04	+/- 1.4E-03	+/- 6.1E-07	+/- 2.5E-09	+/- 18.9
Sband delay (usec)	1.20261330802E+03	1.20261080352E+03	1.20163070064E+03	6.68985302096E-01	199.2	Apriori clock (usec)	1.20163070427E+03	1.1139116E+00	5.8707190E-08	6.68994721357E-01	1.20134941382E-06	Resid sbdelay (usec)	9.80099E-01	-3.63052E-06	-9.41926E-06	-112.6						
Phase delay (usec)	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	1.20163070064E+03	Resid phdelay (usec)	-3.63052E-06	-9.41926E-06	-112.6							
Delay rate (us/s)	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	6.68985302096E-01	Resid rate (us/s)	-9.41926E-06	-9.41926E-06	-112.6							
Total phase (deg)			199.2									Resid phase (deg)	-112.6									

ph/seg (deg) 55.2 79.1 22.4 33.9  
amp/seg (%) 75.2 79.1 22.4 33.9  
ph/frq (deg) 22.4 26.7  
amp/frq (%) 33.9 46.7  
g: az 142.5 el 51.0 pa -10.6 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gZ.W.198.12BED8



Fringe quality 0  
SNR 6.0  
Int time 419.262  
Amp 0.108  
Phase -35.2  
PFD 3.6e-01  
Delays (us)  
SBD -0.871692  
MBD 0.001176  
Fringe rate (Hz)  
0.033602  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c192a  
Yr:day 16383  
Start 183000.00  
Stop 183659.84  
FRT 183330.00  
Corr/FF/build  
2020:072:124544  
2020:086:165637  
2020:014:135814  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.20075687998E+03	Apriori delay (usec)	1.20163070427E+03	Resid mbdelay (usec)	1.17571E-03	+/-	1.8E-04
Sband delay (usec)	1.20075901202E+03	Apriori clock (usec)	1.1139116E+00	Resid sbdelay (usec)	-8.71692E-01	+/-	1.4E-03
Phase delay (usec)	1.20163070314E+03	Apriori clockrate (us/s)	5.8707190E-08	Resid phdelay (usec)	-1.13529E-06	+/-	6.1E-07
Delay rate (us/s)	6.68995111447E-01	Apriori rate (us/s)	6.68994721357E-01	Resid rate (us/s)	3.90090E-07	+/-	2.5E-09
Total phase (deg)	276.6	Apriori accel (us/s/s)	1.20134941382E-06	Resid phase (deg)	-35.2	+/-	19.0

ph/seg (deg)	54.6	Theor.	45.6	Amplitude	0.108 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	71.2		79.6	Search (2048X32)	0.104	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	16.3		26.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.8		47.0	Inc. seg. avg.	0.105	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.099	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 Z: az 271.4 el 46.7 pa 40.3 u,v (fr/asec) -4981.112 854.646 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c192a/v1\_PV/1234/No0001/gZ..12BED8 Output file: /Exps/c192a/v1\_PV/1234/No0001/gZ.W.221.12BED8