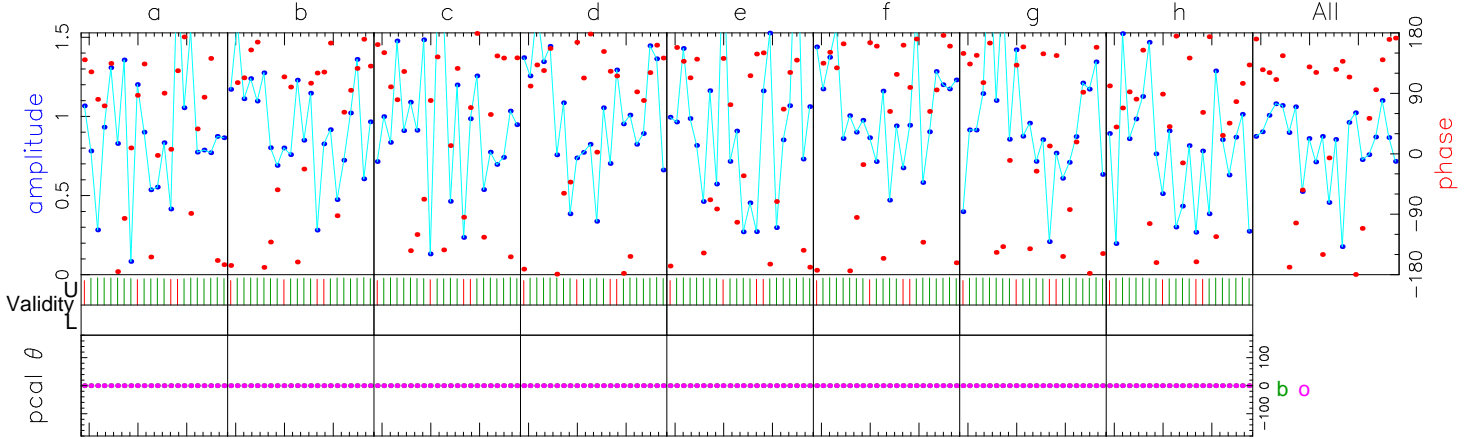


Fringe quality 9

SNR 18.4  
Int time 173.645  
Amp 0.509  
Phase 147.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.003573  
MBD 0.004150  
Fringe rate (Hz)  
-0.024080  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154251  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.65095469036E+03	Apriori delay (usec)	-1.65095884016E+03	Resid mbdelay (usec)	4.14979E-03	+/-	5.9E-05
Sband delay (usec)	-1.65095526691E+03	Apriori clock (usec)	-2.1532032E+01	Resid sbdelay (usec)	3.57325E-03	+/-	4.7E-04
Phase delay (usec)	-1.65095883539E+03	Apriori clockrate (us/s)	-2.4300001E-07	Resid phdelay (usec)	4.77015E-06	+/-	2.0E-07
Delay rate (us/s)	-1.56964849610E-01	Apriori rate (us/s)	-1.56964570061E-01	Resid rate (us/s)	-2.79549E-07	+/-	1.9E-09
Total phase (deg)	-28.8	Apriori accel (us/s/s)	9.19767623614E-06	Resid phase (deg)	147.9	+/-	6.2

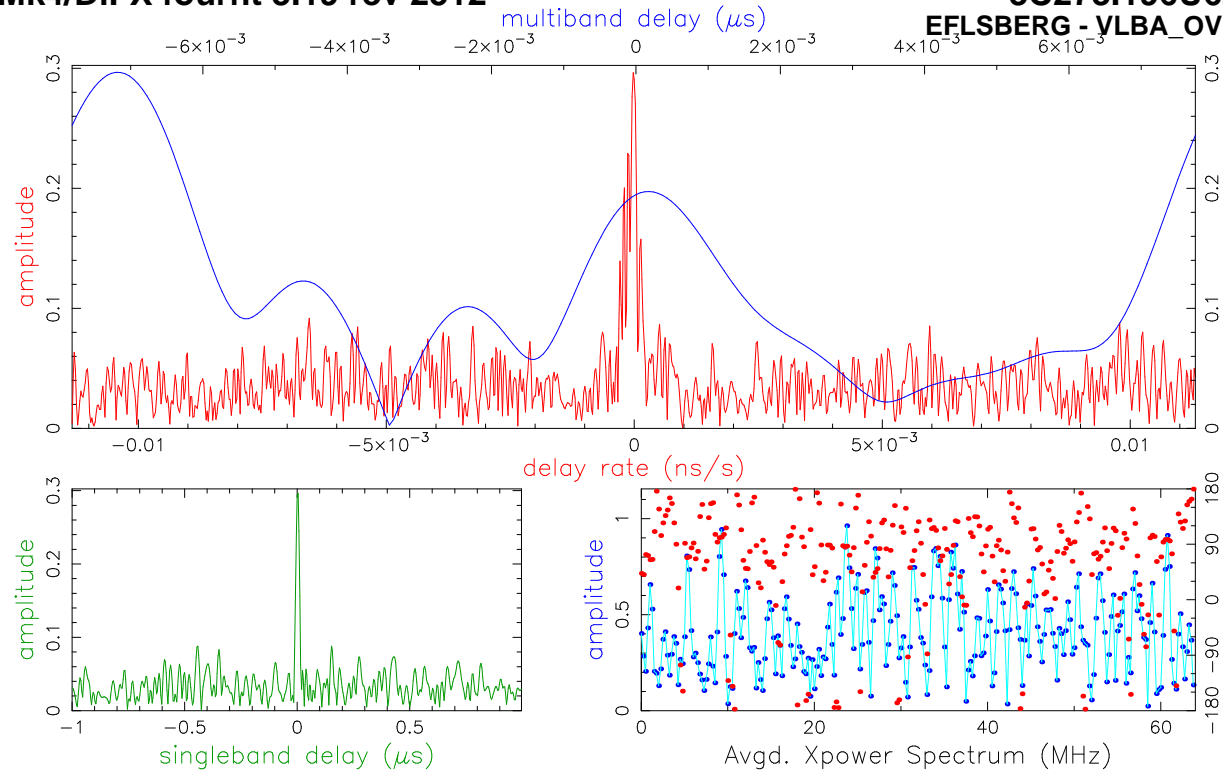
ph/seg (deg)	66.5	RMS	14.6	Theor.	14.6	Amplitude	0.509 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	77.2	Search (1024X32)	0.482	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	Interp.	0.000	SampCntNorm:	enabled	sb window (us)	-1.000 1.000
ph/frq (deg)	22.3	Inc. seg. avg.	0.810	Bits/sample:	2x2	Inc. frq. avg.	0.523	Sample rate (MSamp/s):	128	mb window (us)	-0.008 0.008
amp/frq (%)	25.2	Inc. frq. avg.	0.523	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	dr window (ns/s)	-0.011 0.011

b: az 111.4 el 20.6 pa -38.5 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 910.222 1260.468 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/bo.W.16.196U6Z

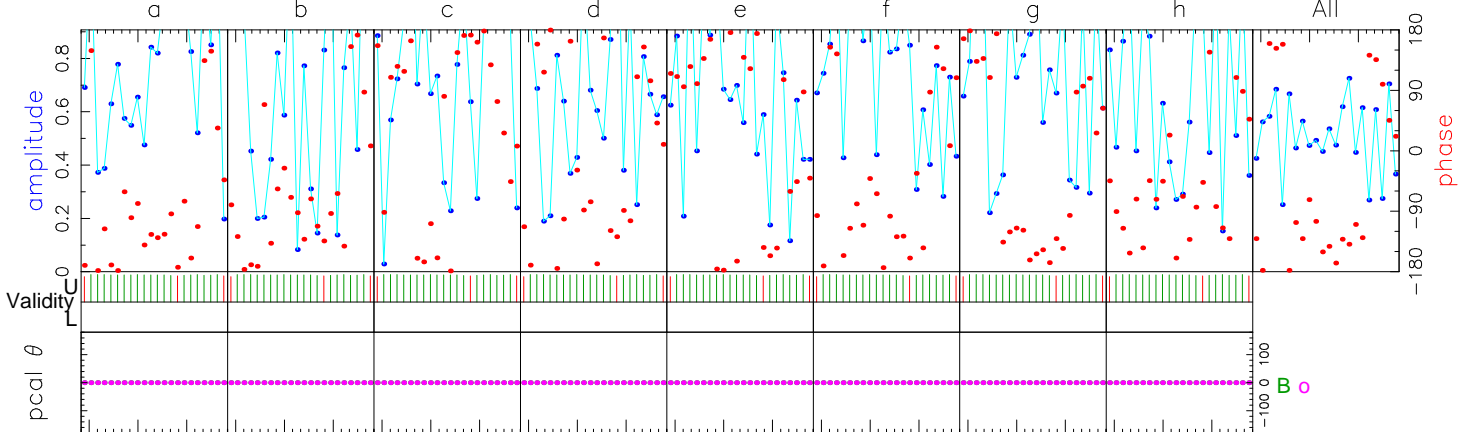
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Bo  
EFLSBERG - VLBA\_OV, fgroup W, pol LL



Fringe quality 9  
SNR 11.0  
Int time 176.415  
Amp 0.302  
Phase -157.3  
PFD 1.0e-19  
Delays (us)  
SBD 0.002101  
MBD -0.007238  
Fringe rate (Hz)  
-0.001566  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154251  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

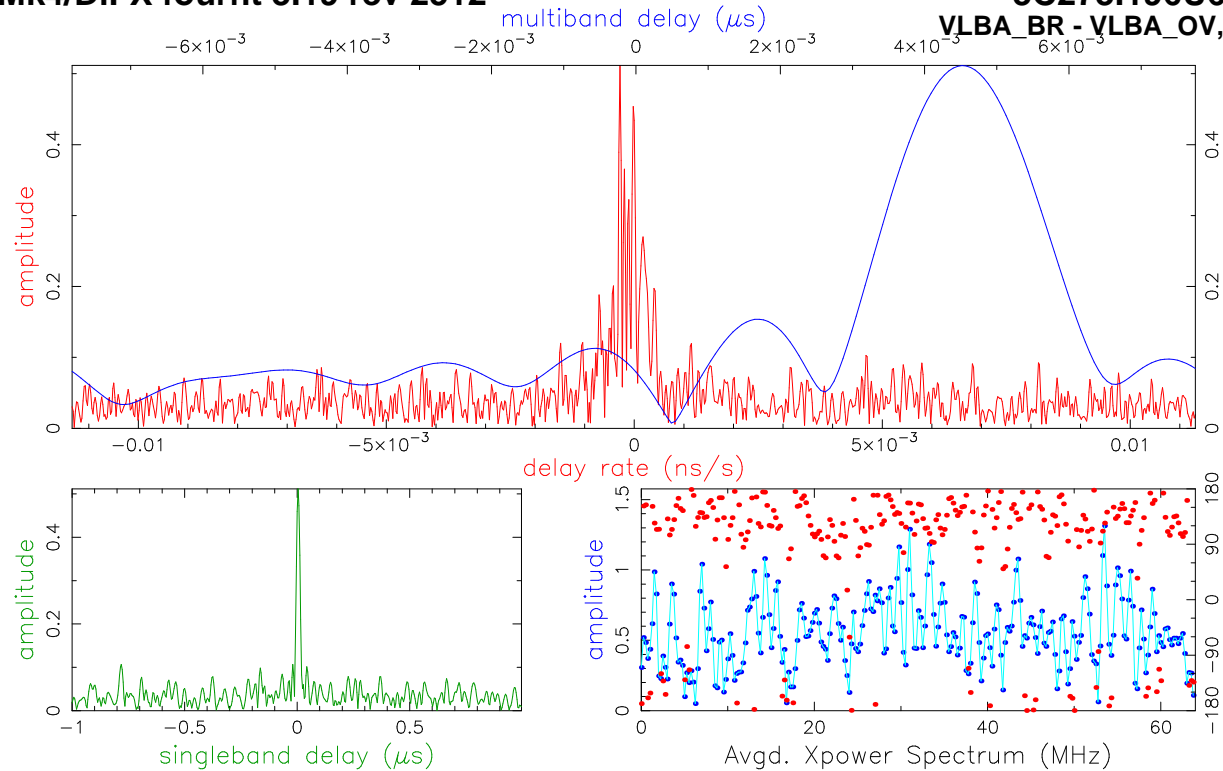


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.3	-116.7	152.0	-138.0	151.4	-136.8	-178.5	-94.1	Phase	-157.3
	0.4	0.3	0.4	0.3	0.4	0.4	0.4	0.3	Ampl.	0.4
	258.1	257.1	257.9	258.1	258.0	257.9	257.2	258.1	Sbd box	257.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.39082236772E+03		Apriori delay (usec)		-3.39083075424E+03		Resid mbdelay (usec)		-7.23849E-03	+/- 9.9E-05
Sband delay (usec)	-3.39082865324E+03		Apriori clock (usec)		-7.0975685E+00		Resid sbdelay (usec)		2.10100E-03	+/- 7.8E-04
Phase delay (usec)	-3.39083075931E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-5.07407E-06	+/- 3.4E-07
Delay rate (us/s)	-1.96092715636E+00		Apriori rate (us/s)		-1.96092713819E+00		Resid rate (us/s)		-1.81759E-08	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86295898768E-05		Resid phase (deg)		-157.3	+/- 10.4

ph/seg (deg) 67.7 24.5 Search (1024X32) 0.294 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 82.6 42.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 45.2 14.8 Inc. seg. avg. 0.469 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 29.3 25.7 Inc. frq. avg. 0.365 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 252.1 el 16.6 pa 37.3 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 11257.655 1519.651 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Bo.W.17.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, bo  
VLBA\_BR - VLBA\_OV, fgroup W, pol RR

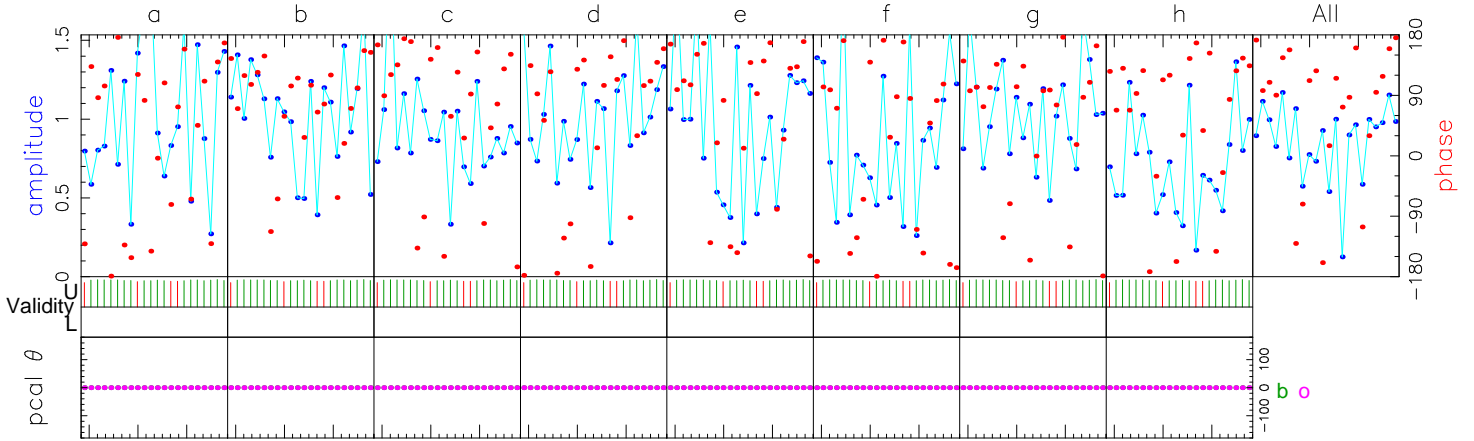


Fringe quality 9

SNR 18.4  
Int time 173.646  
Amp 0.512  
Phase 133.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.004176  
MBD 0.004532  
Fringe rate (Hz)  
-0.024171  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154254  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

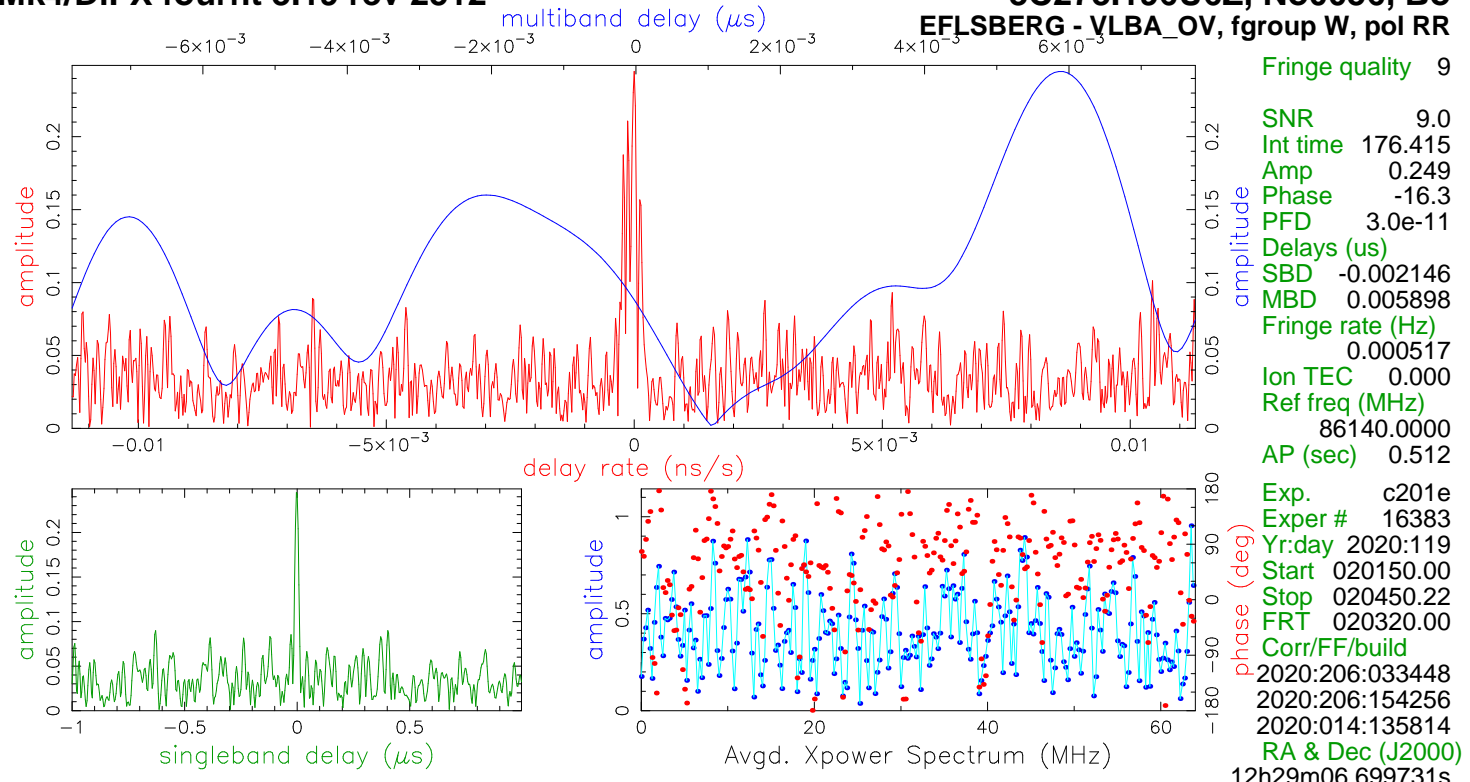


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	143.9	102.8	147.5	132.5	149.3	151.2	123.8	119.7	Phase	133.3
b	0.5	0.6	0.5	0.5	0.6	0.5	0.6	0.5	Ampl.	0.5
o	258.3	258.5	259.2	258.0	258.0	257.4	257.2	257.2	Sbd box	258.1
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.65095430818E+03		Apriori delay (usec)		-1.65095884016E+03		Resid mbdelay (usec)		4.53198E-03	+/- 5.9E-05
Sband delay (usec)	-1.65095466391E+03		Apriori clock (usec)		-2.1532032E+01		Resid sbdelay (usec)		4.17625E-03	+/- 4.7E-04
Phase delay (usec)	-1.65095883586E+03		Apriori clockrate (us/s)		-2.4300001E-07		Resid phdelay (usec)		4.29890E-06	+/- 2.0E-07
Delay rate (us/s)	-1.56964850657E-01		Apriori rate (us/s)		-1.56964570061E-01		Resid rate (us/s)		-2.80596E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		9.19767623614E-06		Resid phase (deg)		133.3	+/- 6.2

ph/seg (deg) 65.8 14.6 Search (1024X32) 0.490 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 83.2 25.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 18.7 8.8 Inc. seg. avg. 0.839 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 12.5 15.3 Inc. frq. avg. 0.527 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 111.4 el 20.6 pa -38.5 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 910.222 1260.468 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/bo.W.30.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Bo  
EFLSBERG - VLBA\_OV, fgroup W, pol RR



Fringe quality 9

SNR 9.0

Int time 176.415

Amp 0.249

Phase -16.3

PFD 3.0e-11

Delays (us)

SBD -0.002146

MBD 0.005898

Fringe rate (Hz)

0.000517

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201e

Exper # 16383

Yr:day 2020:119

Start 020150.00

Stop 020450.22

FRT 020320.00

Corr/FF/build

2020:206:033448

2020:206:154256

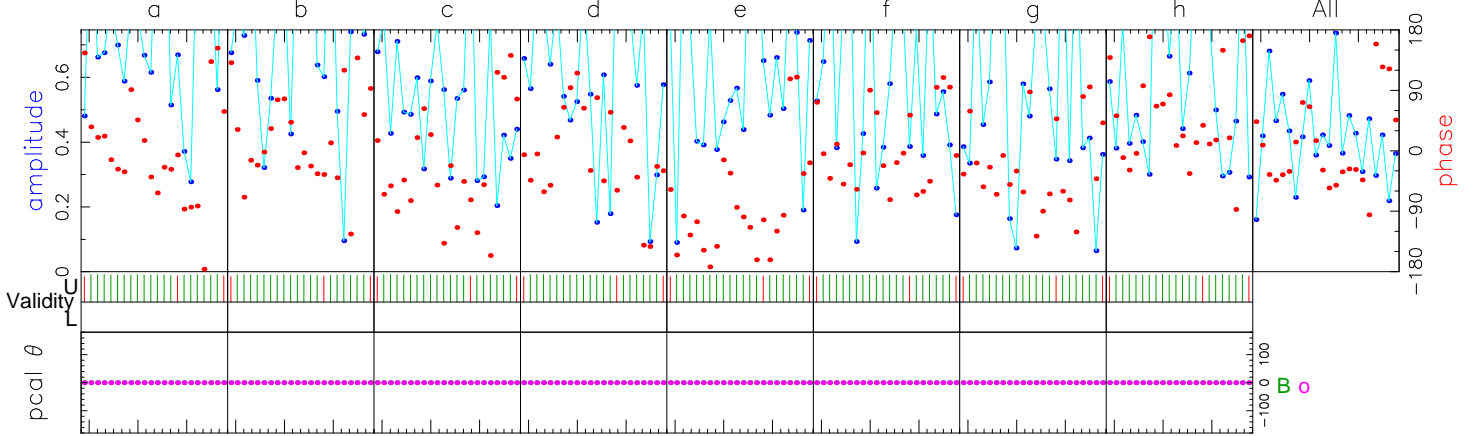
2020:014:135814

RA & Dec (J2000)

12h29m06.699731s

+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-1.3	11.4	-58.0	-9.3	-114.3	-6.9	-48.6	40.2	Phase	-16.3
	0.3	0.4	0.2	0.3	0.3	0.4	0.3	0.3	Ampl.	0.3
	257.0	256.7	257.8	256.2	257.6	257.1	257.3	254.4	Sbd box	256.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	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)	-3.39084048142E+03		Apriori delay (usec)		-3.39083075424E+03		Resid mbdelay (usec)		5.89781E-03	+/- 1.2E-04
Sband delay (usec)	-3.39083289999E+03		Apriori clock (usec)		-7.0975685E+07		Resid sbdelay (usec)		-2.14575E-03	+/- 9.5E-04
Phase delay (usec)	-3.39083075476E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-5.24787E-07	+/- 4.1E-07
Delay rate (us/s)	-1.96092713218E+00		Apriori rate (us/s)		-1.96092713819E+00		Resid rate (us/s)		6.00573E-09	+/- 3.9E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86295898768E-05		Resid phase (deg)		-16.3	+/- 12.7

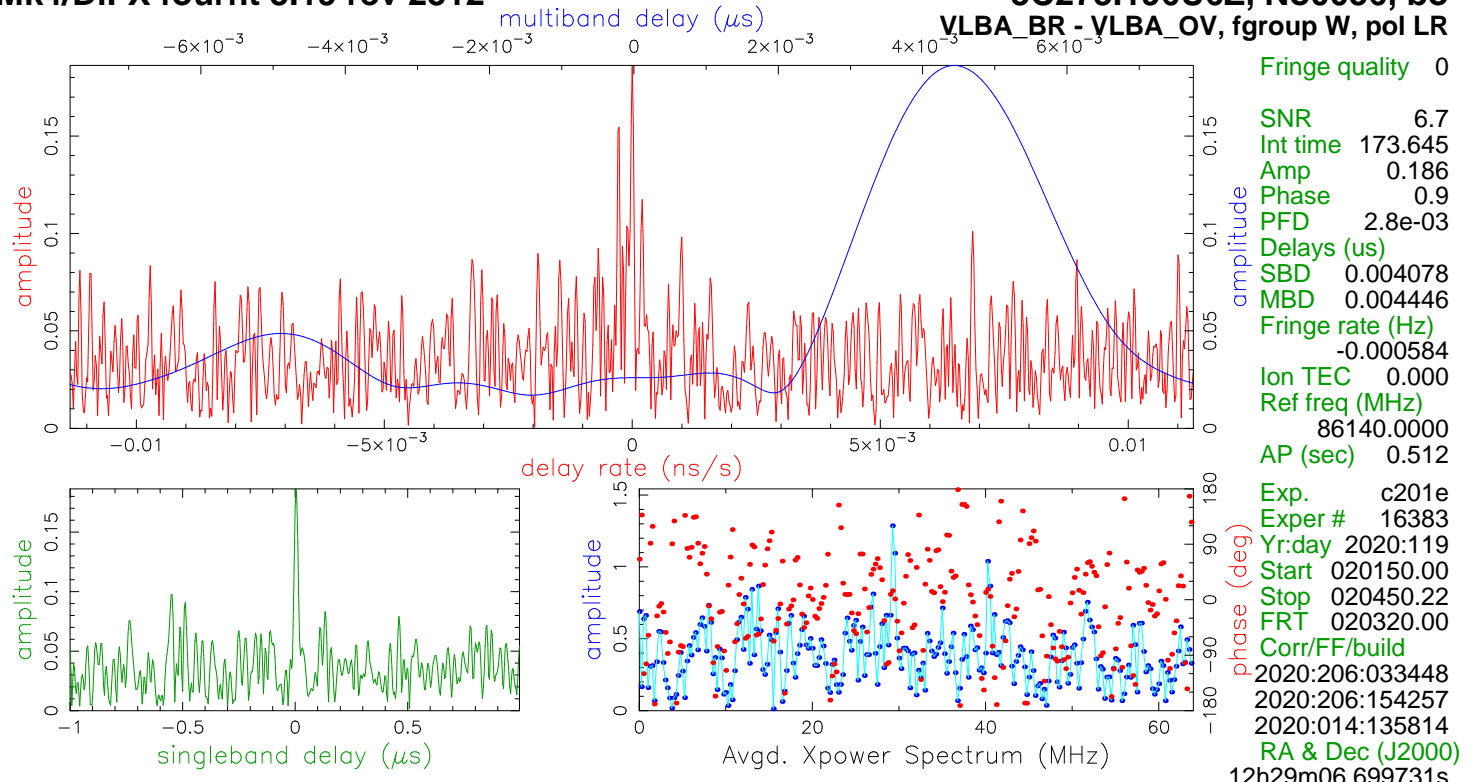
	RMS	Theor.	Amplitude	0.249 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	69.4	29.7	Search (1024X32)	0.243	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	87.7	51.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	52.8	17.9	Inc. seg. avg.	0.370	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	38.9	31.3	Inc. frq. avg.	0.318	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

B: az 252.1 el 16.6 pa 37.3 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 11257.655 1519.651 simultaneous interpolator

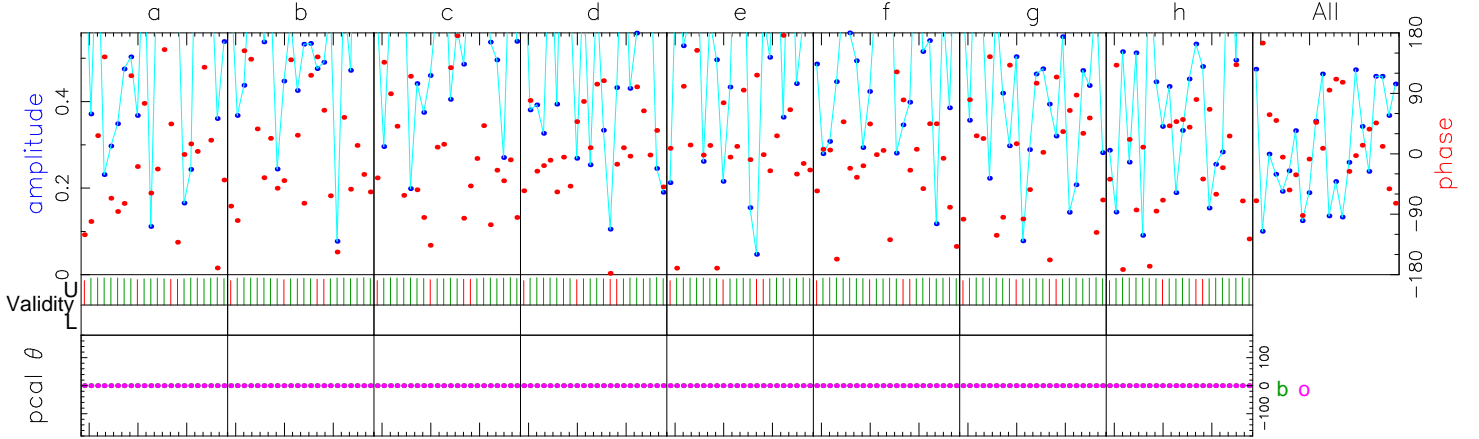
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Bo.W.46.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, bo  
VLBA\_BR - VLBA\_OV, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



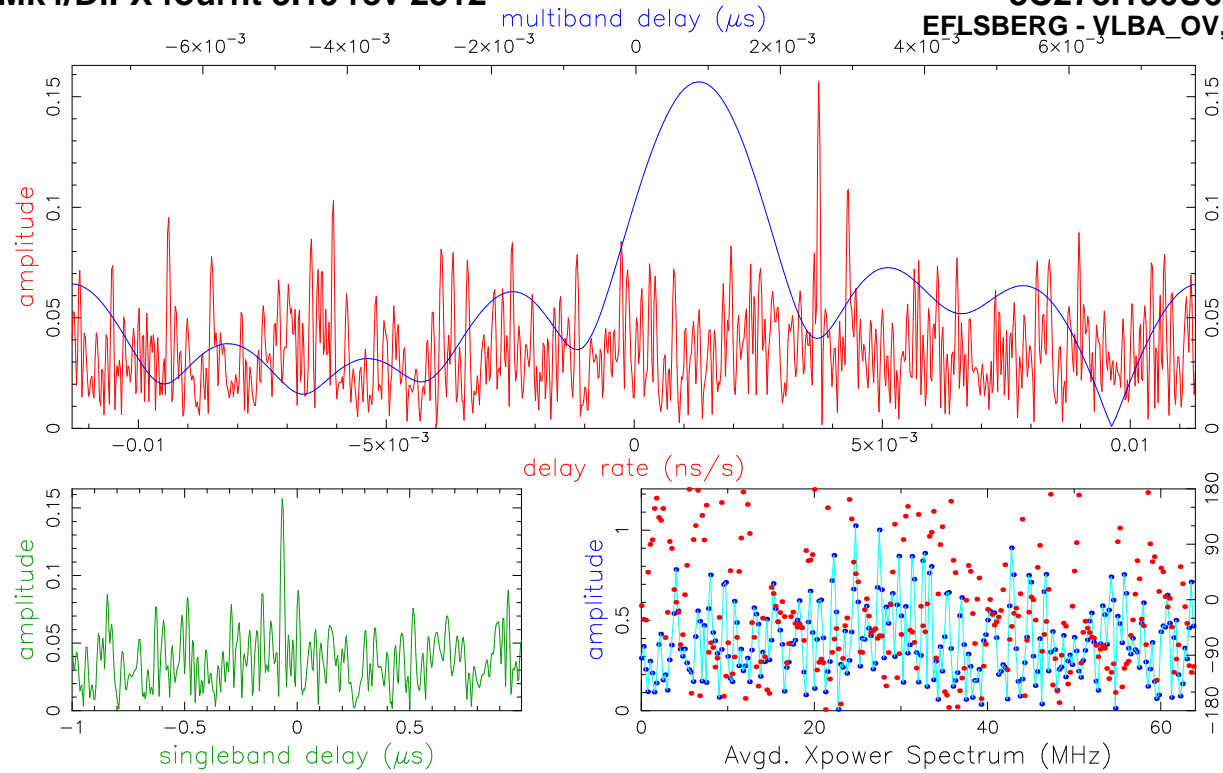
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-4.2	-2.0	-18.0	14.6	26.8	-15.3	15.8	-29.2		0.9		
	0.1	0.2	0.2	0.3	0.2	0.3	0.1	0.1		0.2		
	52.4	251.9	115.9	257.9	258.2	436.9	67.9	199.7		258.0		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0				
b	1000	1000	1000	1000	1000	1000	1000	1000				
o	1000	1000	1000	1000	1000	1000	1000	1000				
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
b:o	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				
o	1000	1000	1000	1000	1000	1000	1000	1000				
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)	-1.65095439437E+03					-1.65095884016E+03			4.44578E-03	+/- 1.6E-04		
Sband delay (usec)	-1.65095476266E+03					-2.1532032E+01			4.07750E-03	+/- 1.3E-03		
Phase delay (usec)	-1.65095884013E+03					-2.4300001E-07			2.86200E-08	+/- 5.5E-07		
Delay rate (us/s)	-1.56964576845E-01					-1.56964570061E-01			-6.78373E-09	+/- 5.3E-09		
Total phase (deg)			-175.9			9.19767623614E-06			0.9	+/- 17.1		
ph/seg (deg)	66.4	40.0		Search (1024X32)	0.183				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	88.4	69.9		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	21.0	24.1		Inc. seg. avg.	0.237				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	44.0	42.1		Inc. frq. avg.	0.180				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

b: az 111.4 el 20.6 pa -38.5 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 910.222 1260.468 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/bo.W.50.196U6Z

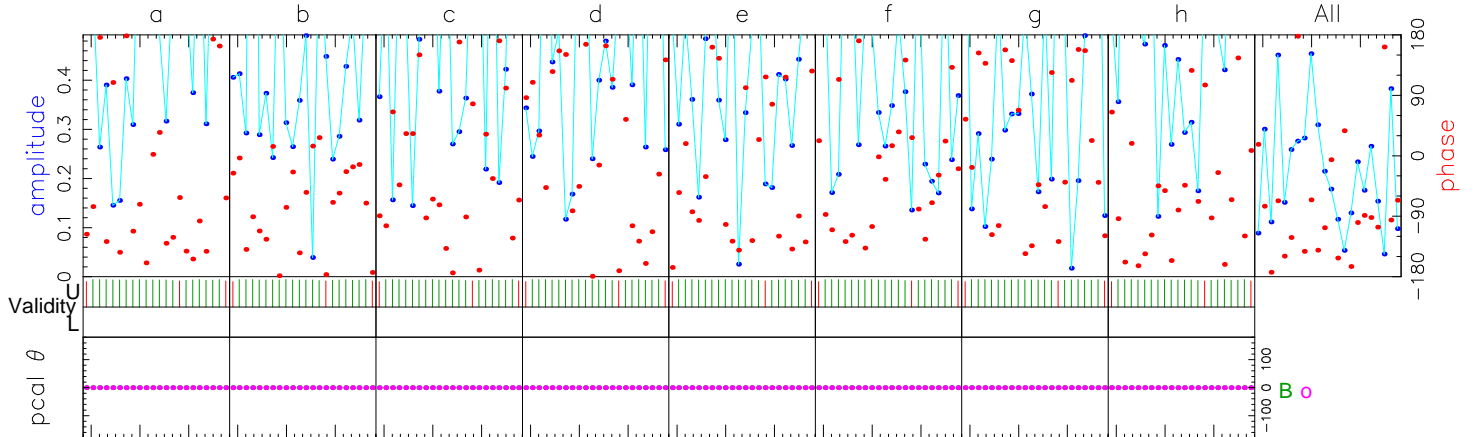
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Bo  
EFLSBERG - VLBA\_OV, fgroup W, pol LR



Fringe quality 0  
SNR 5.7  
Int time 176.415  
Amp 0.164  
Phase -103.2  
PFD 7.7e-01  
Delays (us)  
SBD -0.065777  
MBD 0.000892  
Fringe rate (Hz) 0.320076  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154258  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

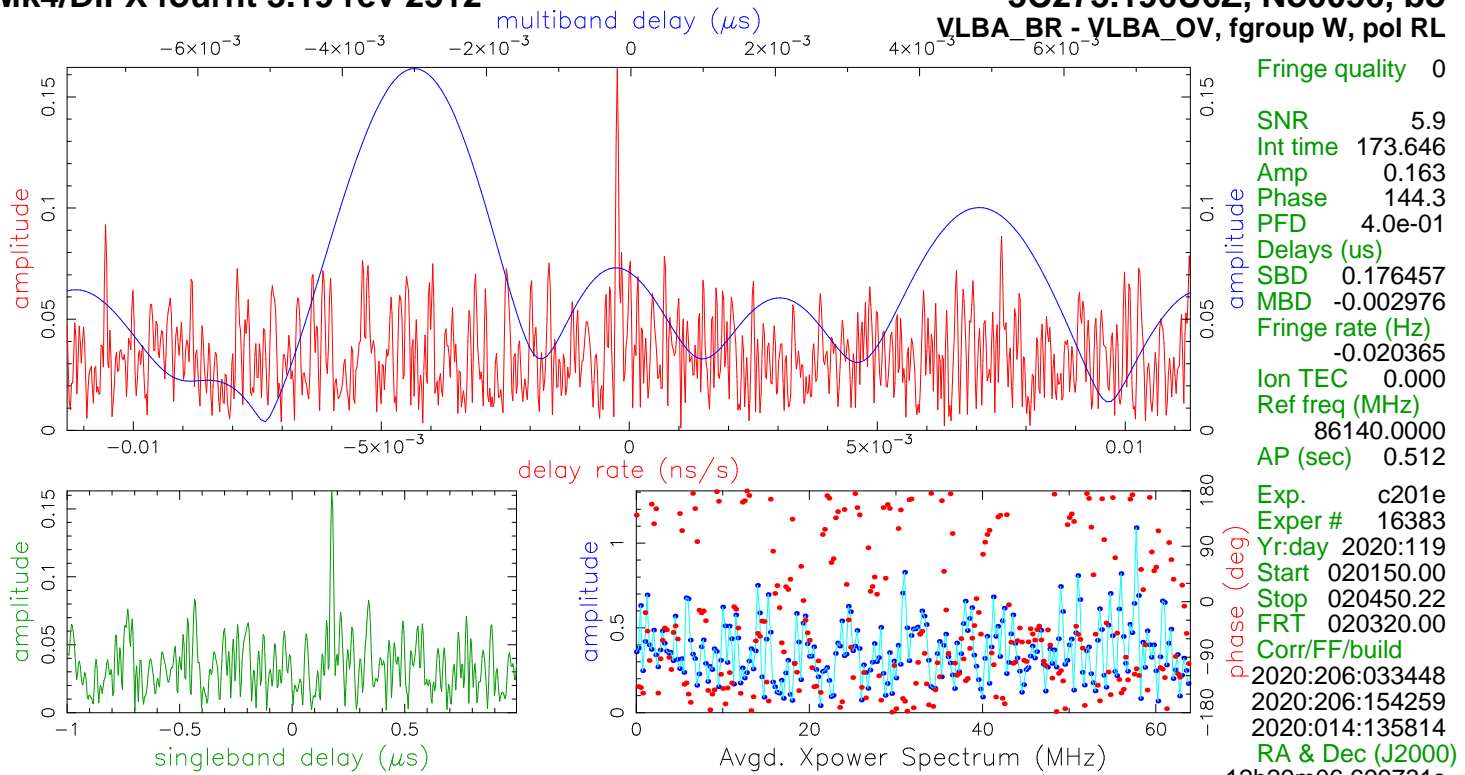
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



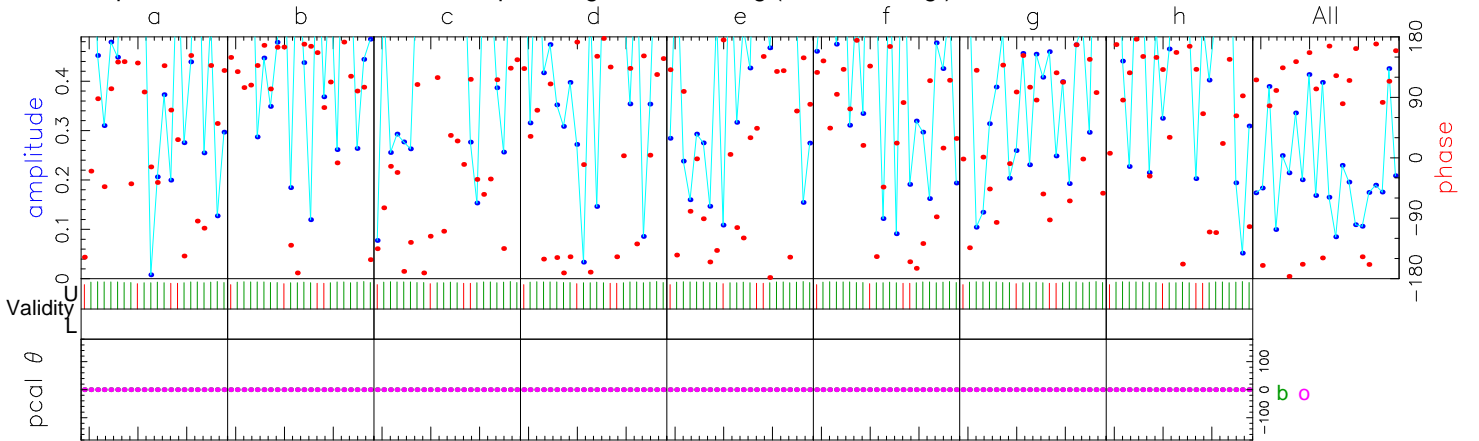
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.2	-75.1	-94.1	-127.6	-142.1	-70.3	-104.0	-111.8	Phase	-103.2
	0.3	0.2	0.2	0.1	0.1	0.1	0.1	0.2	Ampl.	0.2
	240.5	228.2	29.1	96.8	31.4	417.3	276.1	182.8	Sbd box	240.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.39089236246E+03		Apriori delay (usec)		-3.39083075424E+03		Resid mbdelay (usec)		8.91779E-04	+/- 1.9E-04
Sband delay (usec)	-3.39089653124E+03		Apriori clock (usec)		-7.0975685E+07		Resid sbdelay (usec)		-6.57770E-02	+/- 1.5E-03
Phase delay (usec)	-3.39083075756E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-3.32701E-06	+/- 6.5E-07
Delay rate (us/s)	-1.96092342243E+00		Apriori rate (us/s)		-1.96092713819E+00		Resid rate (us/s)		3.71576E-06	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86295898768E-05		Resid phase (deg)		-103.2	+/- 20.1

	RMS	Theor.	Amplitude	0.164 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	60.2	47.1	Search (1024X32)	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	82.9	82.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.9	28.4	Inc. seg. avg.	0.169	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	49.7	49.6	Inc. frq. avg.	0.157	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 252.1 el 16.6 pa 37.3 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 11257.655 1519.651 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Bo.W.58.196U6Z



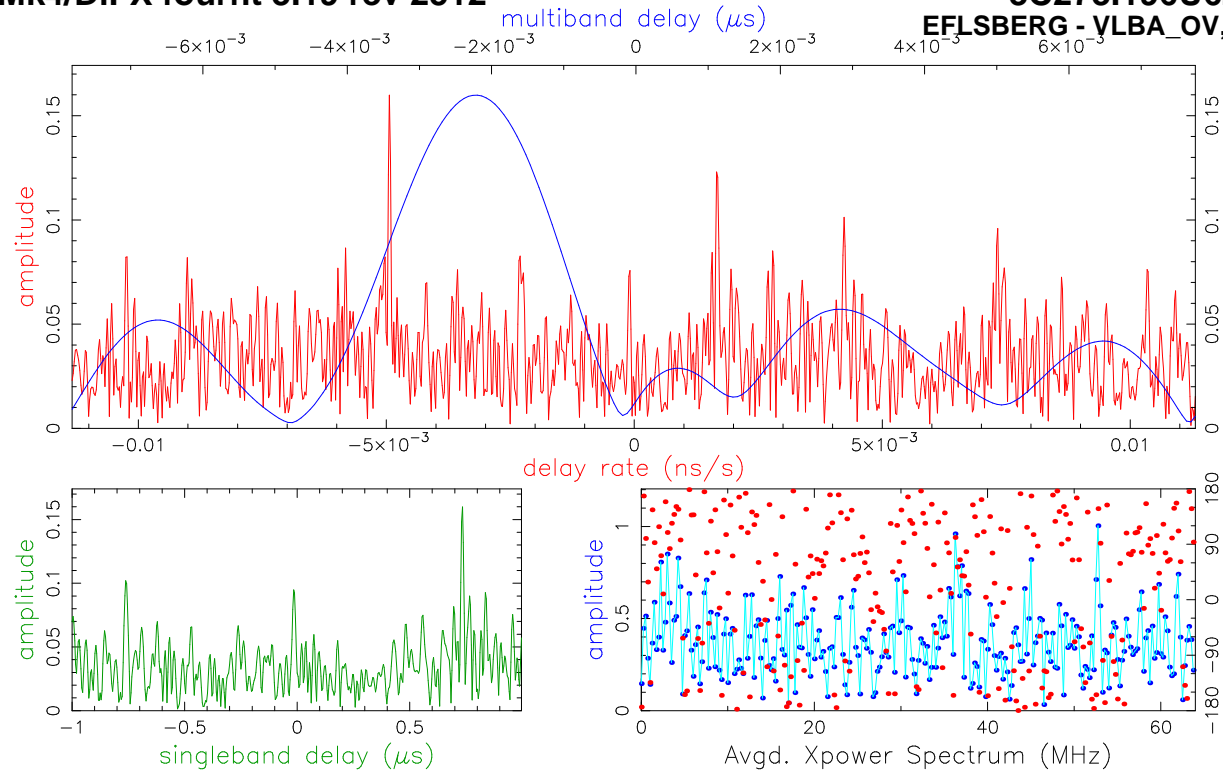
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All						
122.2	141.2	-130.4	156.6	153.2	126.4	110.7	146.6	Phase	144.3						
0.1	0.4	0.1	0.2	0.1	0.2	0.0	0.2	Ampl.	0.2						
286.1	302.4	341.9	154.9	430.9	93.5	55.8	183.9	Sbd box	302.2						
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used							
b 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs							
o 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs							
b:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase							
b:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC							
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp							
o 1000	1000	1000	1000	1000	1000	1000	1000	PC amp							
b W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids							
o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks							
Group delay (usec)(sbd)									-1.65078994155E+03	Apriori delay (usec)	-1.65095884016E+03	Resid mbdelay (usec)	-2.97639E-03	+/-	1.8E-04
Sband delay (usec)									-1.65078238316E+03	Apriori clock (usec)	-2.1532032E+01	Resid sbdelay (usec)	1.76457E-01	+/-	1.5E-03
Phase delay (usec)									-1.65095883550E+03	Apriori clockrate (us/s)	-2.4300001E-07	Resid phdelay (usec)	4.65296E-06	+/-	6.3E-07
Delay rate (us/s)									-1.56964806477E-01	Apriori rate (us/s)	-1.56964570061E-01	Resid rate (us/s)	-2.36416E-07	+/-	6.0E-09
Total phase (deg)									-32.5	Apriori accel (us/s/s)	9.19767623614E-06	Resid phase (deg)	144.3	+/-	19.5
ph/seg (deg)	RMS 43.5	Theor. 45.7	Amplitude Search (1024X32)	0.163 +/- 0.028	0.158	Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5						
amp/seg (%)	72.1	79.7	Interp.	0.000	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000						
ph/frq (deg)	39.7	27.5	Inc. seg. avg.	0.169	0.157	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008					
amp/frq (%)	67.3	48.1	Inc. frq. avg.	0.157	0.157	Sample rate (MSamp/s):	128		dr window (ns/s)	-0.011 0.011					
b: az 111.4 el 20.6 pa -38.5									o: az 108.1 el 25.3 pa -49.2	u,v (fr/asec)	910.222 1260.468	simultaneous interpolator			
Control file: cf_1234_gmva									Input file: /Exps/c201e/v1/1234/No0056/bo..196U6Z	Output file: /Exps/c201e/v1/1234/No0056/bo.W.68.196U6Z					

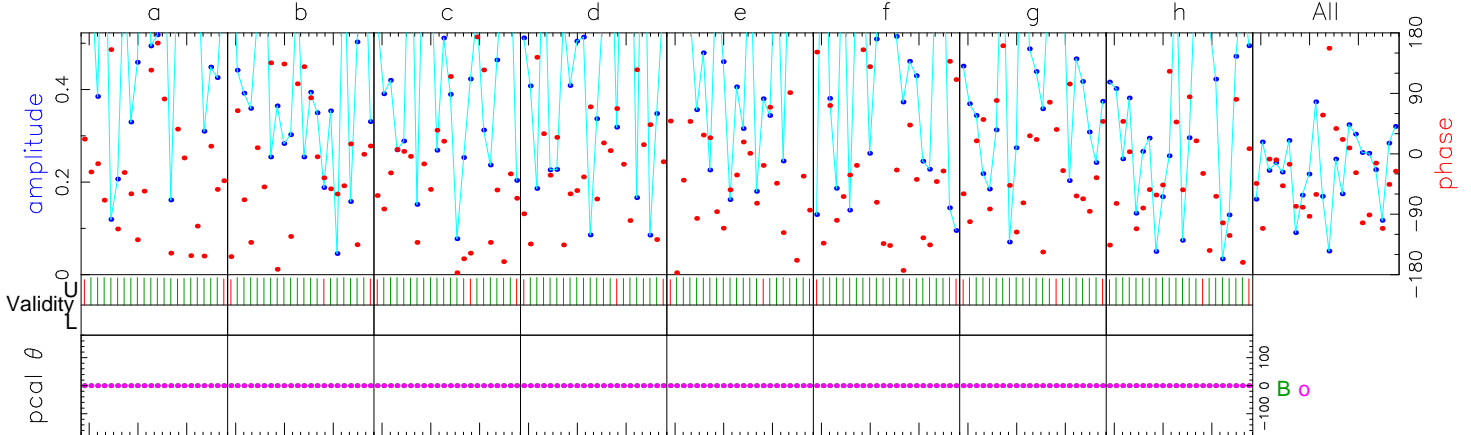
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Bo  
EFLSBERG - VLBA\_OV, fgroup W, pol RL



Fringe quality 0  
SNR 5.8  
Int time 176.415  
Amp 0.174  
Phase -39.7  
PFD 4.8e-01  
Delays (us)  
SBD 0.733541  
MBD -0.002232  
Fringe rate (Hz)  
-0.426324  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154300  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

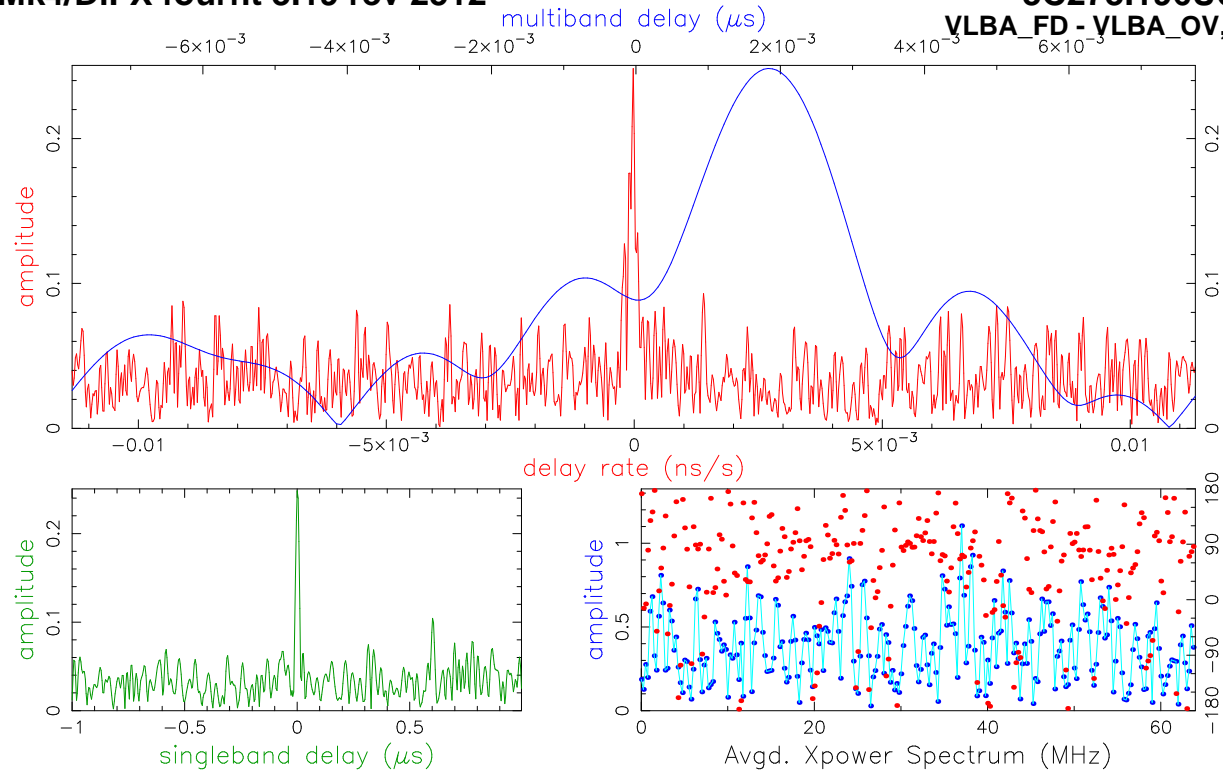
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.0	-38.2	-45.6	-28.6	-30.6	-87.4	-24.1	-25.6	Phase	-39.7
	0.2	0.1	0.2	0.3	0.2	0.2	0.1	0.1	Ampl.	0.2
	134.5	22.8	61.8	443.8	168.3	69.4	252.2	97.9	Sbd box	444.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.39009861150E+03		Apriori delay (usec)		-3.39083075424E+03		Resid mbdelay (usec)		-2.23226E-03	+/- 1.9E-04
Sband delay (usec)	-3.39009721324E+03		Apriori clock (usec)		-7.0975685E-07		Resid sbdelay (usec)		7.33541E-01	+/- 1.5E-03
Phase delay (usec)	-3.39083075552E+03		Apriori clockrate (us/s)		-4.0100001E-07		Resid phdelay (usec)		-1.28076E-06	+/- 6.3E-07
Delay rate (us/s)	-1.96093208738E+00		Apriori rate (us/s)		-1.96092713819E+00		Resid rate (us/s)		-4.94920E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		1.86295898768E-05		Resid phase (deg)		-39.7	+/- 19.6

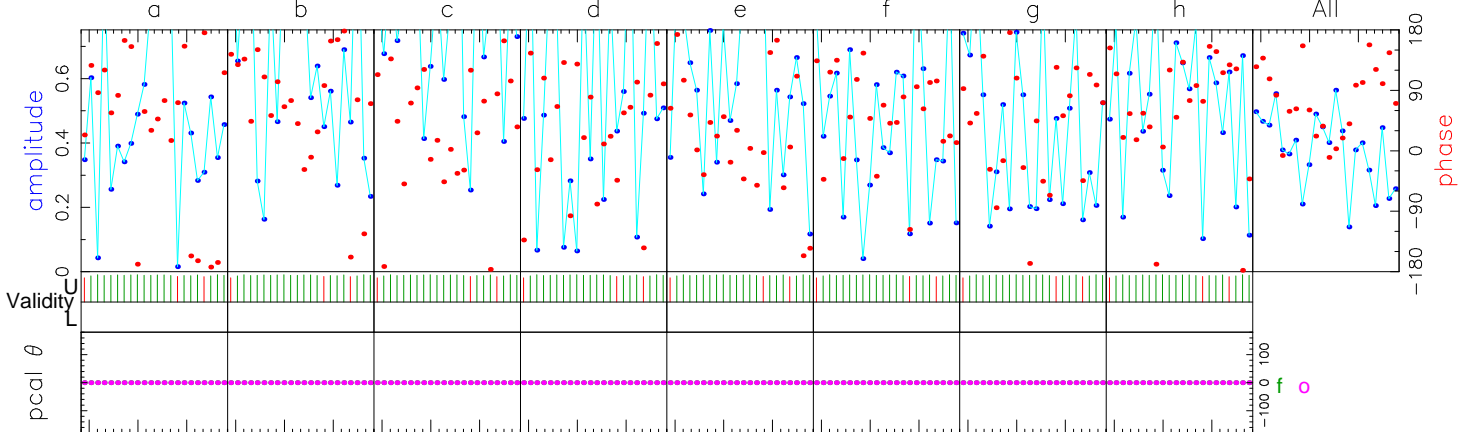
ph/seg (deg) 58.5 46.0 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 64.3 80.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 22.2 27.7 Inc. seg. avg. 0.187 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 33.3 48.4 Inc. frq. avg. 0.164 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 252.1 el 16.6 pa 37.3 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 11257.655 1519.651 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Bo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Bo.W.70.196U6Z





Fringe quality 9  
SNR 9.0  
Int time 173.784  
Amp 0.251  
Phase 72.3  
PFD 3.3e-11  
Delays (us)  
SBD 0.001222  
MBD 0.001869  
Fringe rate (Hz)  
-0.001695  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154305  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

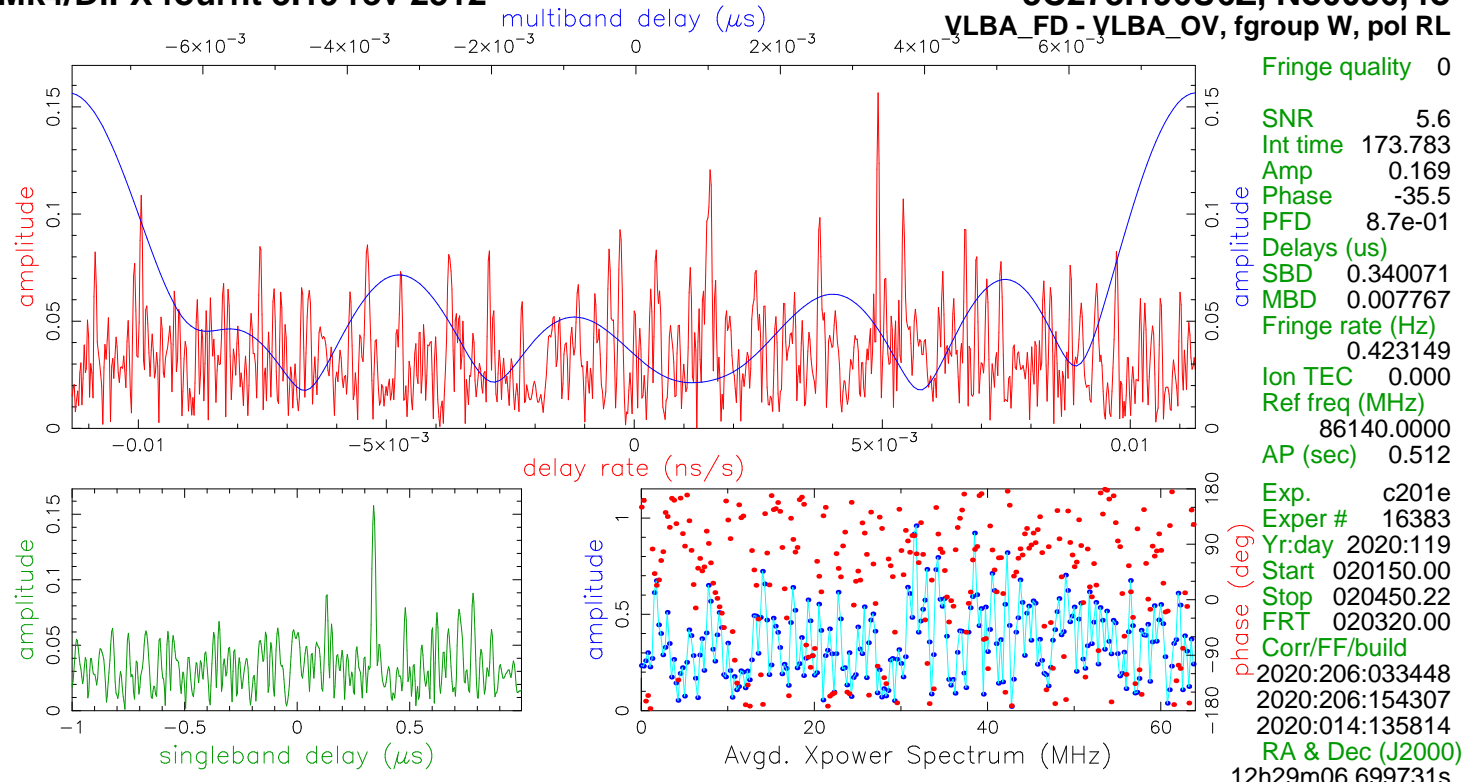
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



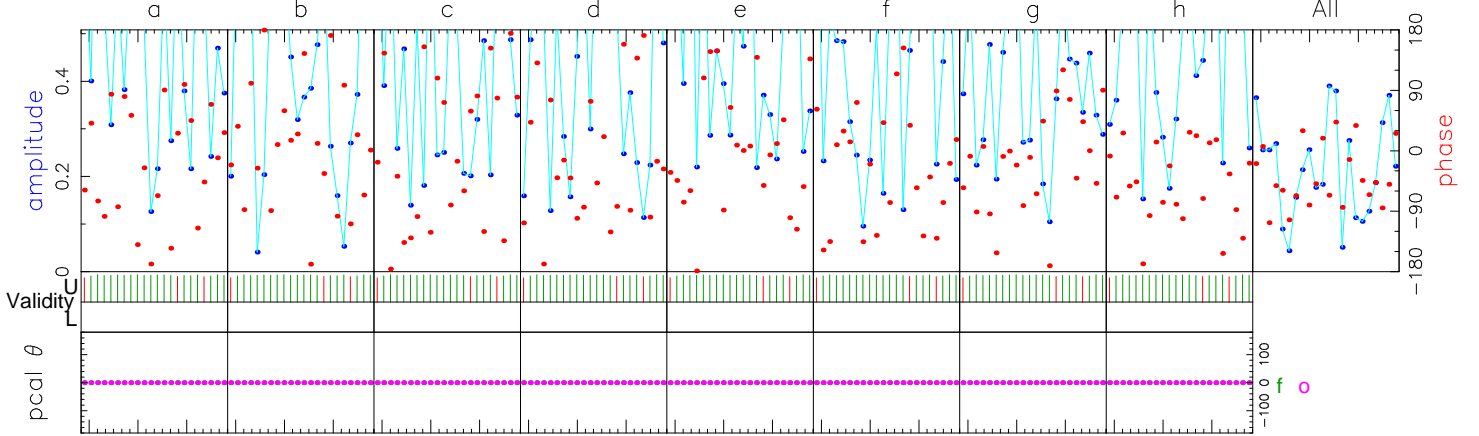
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 4.19438689980E+03 Apriori delay (usec) 4.19438503060E+03 Resid mbdelay (usec) 1.86920E-03 +/- 1.2E-04  
Sband delay (usec) 4.19438625260E+03 Apriori clock (usec) -1.6194515E+01 Resid sbdelay (usec) 1.22200E-03 +/- 9.5E-04  
Phase delay (usec) 4.19438503293E+03 Apriori clockrate (us/s) -9.2000002E-08 Resid phdelay (usec) 2.33141E-06 +/- 4.1E-07  
Delay rate (us/s) -1.23625235588E-01 Apriori rate (us/s) -1.23625215910E-01 Resid rate (us/s) -1.96781E-08 +/- 3.9E-09  
Total phase (deg) 265.3 Apriori accel (us/s/s) -2.27537083508E-05 Resid phase (deg) 72.3 +/- 12.7

ph/seg (deg) 51.8 29.8 RMS Theor. Amplitude 0.251 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 68.7 51.9 Search (1024X32) 0.247 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 29.6 17.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 24.1 31.3 Inc. seg. avg. 0.336 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
f: az 115.1 el 38.7 pa -51.3 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 682.148 -905.792 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/fo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/fo.W.101.196U6Z

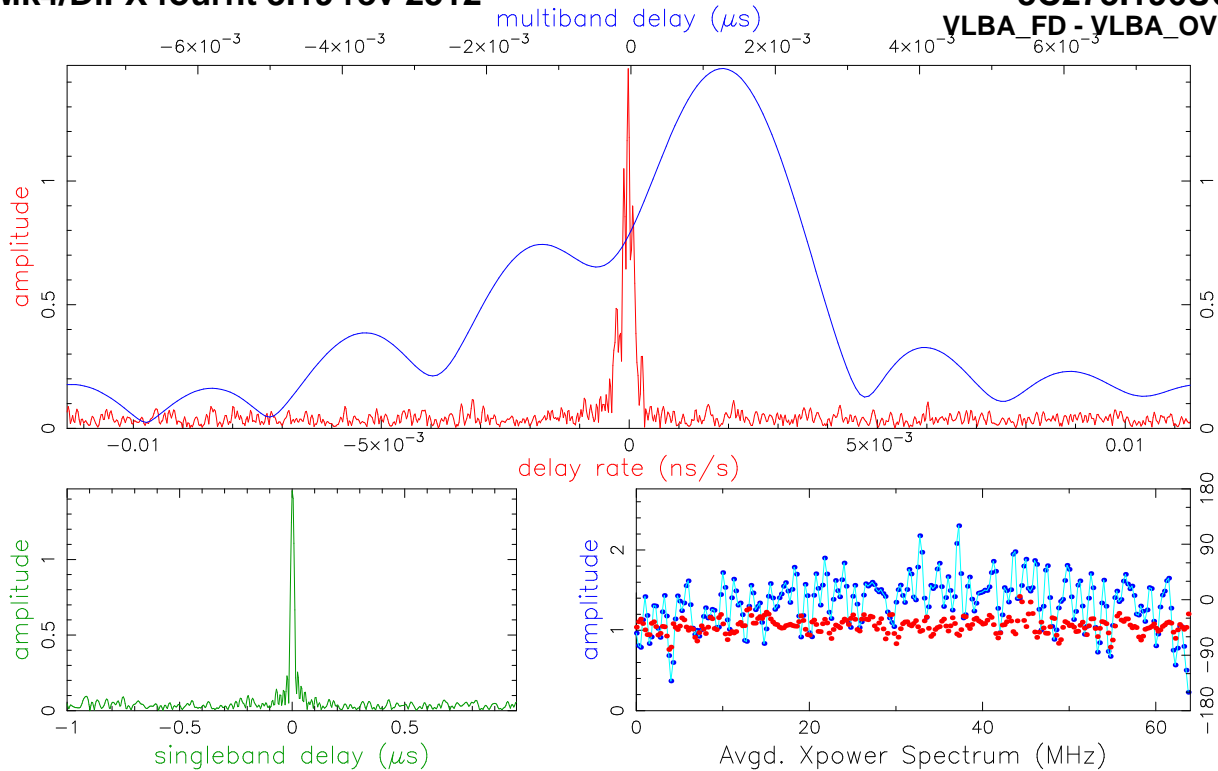


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.9	-6.6	-136.0	-50.8	-32.6	-30.8	-12.3	-44.2	Phase	-35.5
	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
	144.8	414.7	410.0	478.9	218.6	468.1	15.8	344.1	Sbd box	344.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.19472092272E+03		Apriori delay (usec)	4.19438503060E+03	Resid mbdelay (usec)	7.76712E-03	+/-	1.9E-04		
Sband delay (usec)	4.19472510160E+03		Apriori clock (usec)	-1.6194515E+01	Resid sbdelay (usec)	3.40071E-01	+/-	1.5E-03		
Phase delay (usec)	4.19438502946E+03		Apriori clockrate (us/s)	-9.2000002E-08	Resid phdelay (usec)	-1.14521E-06	+/-	6.5E-07		
Delay rate (us/s)	-1.23620303572E-01		Apriori rate (us/s)	-1.23625215910E-01	Resid rate (us/s)	4.91234E-06	+/-	6.3E-09		
Total phase (deg)		157.5	Apriori accel (us/s/s)	-2.27537083508E-05	Resid phase (deg)	-35.5	+/-	20.3		

	RMS	Theor.	Amplitude	0.169 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	45.8	47.6	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	76.7	83.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.4	28.7	Inc. seg. avg.	0.175	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	39.5	50.1	Inc. frq. avg.	0.170	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

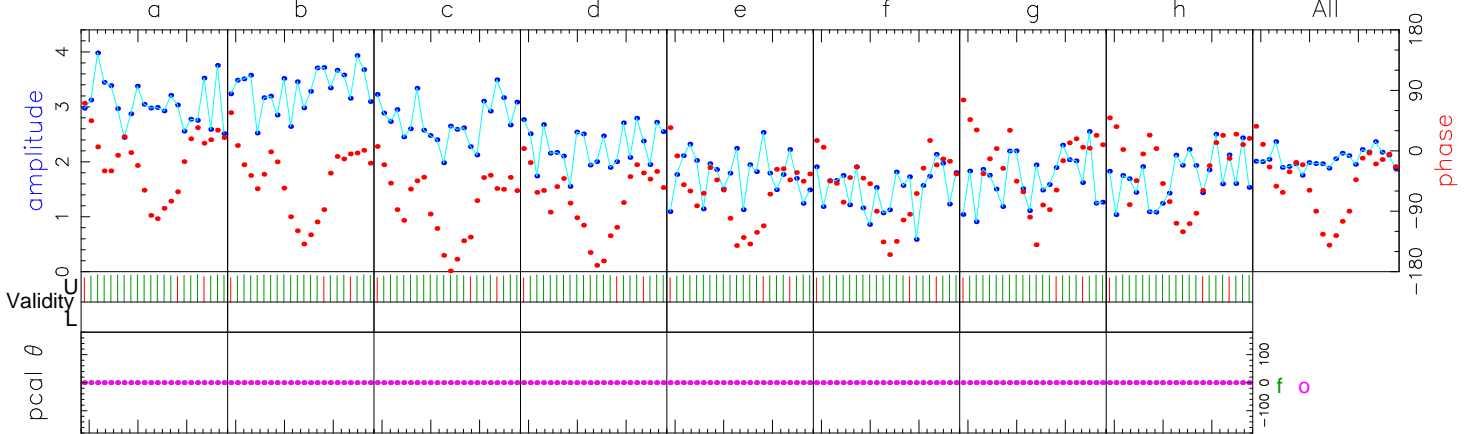


Fringe quality 2

SNR 52.9  
 Int time 173.783  
 Amp 1.467  
 Phase -42.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001202  
 MBD 0.001287  
 Fringe rate (Hz)  
 -0.001713  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020150.00  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154301  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



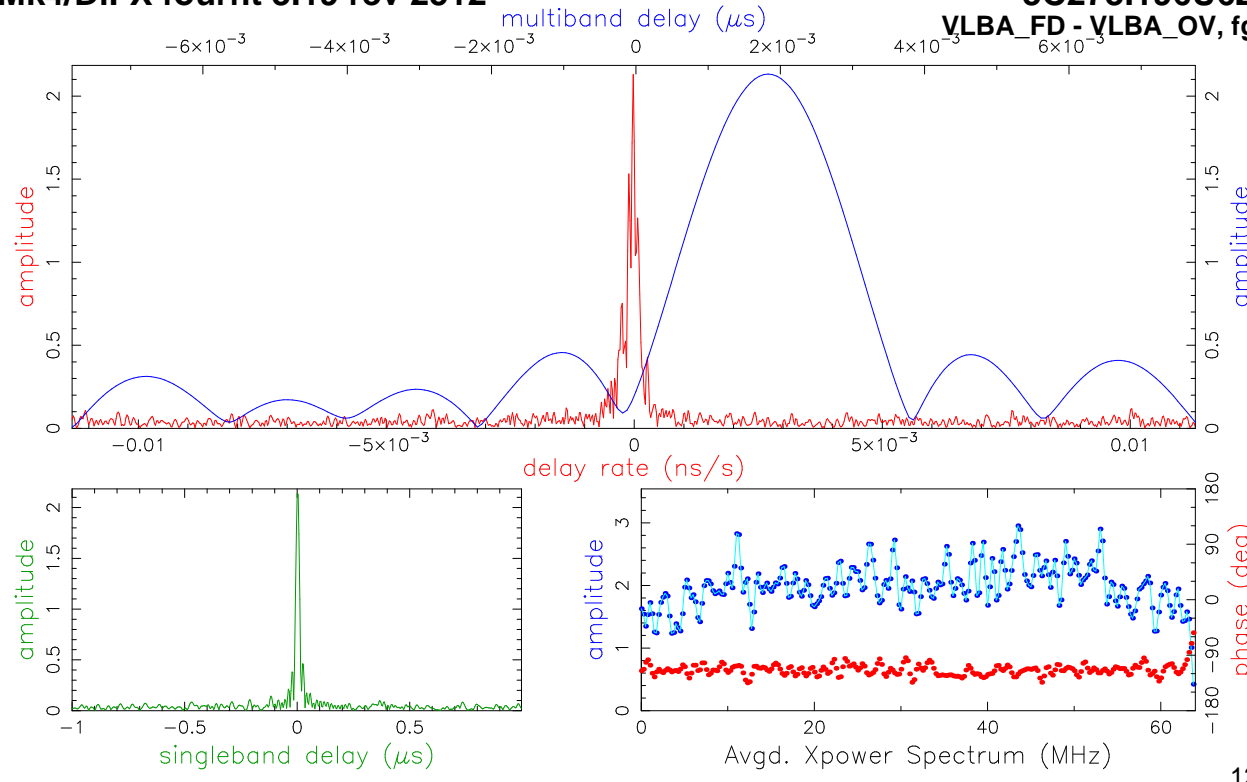
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.7	-37.4	-70.6	-68.1	-64.5	-46.8	-14.7	-25.2	Phase	-42.7
	2.2	2.3	1.9	1.6	1.3	1.1	1.2	1.1	Ampl.	1.6
	257.3	257.0	257.3	257.4	257.4	257.5	257.0	257.8	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.19438631787E+03	Apriori delay (usec)	4.19438503060E+03	Resid mbdelay (usec)	1.28726E-03	+/-	2.1E-05
Sband delay (usec)	4.19438623285E+03	Apriori clock (usec)	-1.6194515E+01	Resid sbdelay (usec)	1.20225E-03	+/-	1.6E-04
Phase delay (usec)	4.19438502923E+03	Apriori clockrate (us/s)	-9.2000002E-08	Resid phdelay (usec)	-1.37547E-06	+/-	7.0E-08
Delay rate (us/s)	-1.23625235798E-01	Apriori rate (us/s)	-1.23625215910E-01	Resid rate (us/s)	-1.98878E-08	+/-	6.7E-10
Total phase (deg)	150.3	Apriori accel (us/s/s)	-2.27537083508E-05	Resid phase (deg)	-42.7	+/-	2.2

ph/seg (deg)	46.9	RMS	5.1	Theor.	1.467 +/- 0.028	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	40.6	Search (1024X32)	1.429	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.6	Inc. seg. avg.	2.036	Inc. frq. avg.	1.573	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.3	Inc. frq. avg.	1.573	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
f: az 115.1 el 38.7 pa -51.3		o: az 108.1 el 25.3 pa -49.2		u, v (fr/asec)	682.148 -905.792				ion window (TEC)	0.00 0.00	

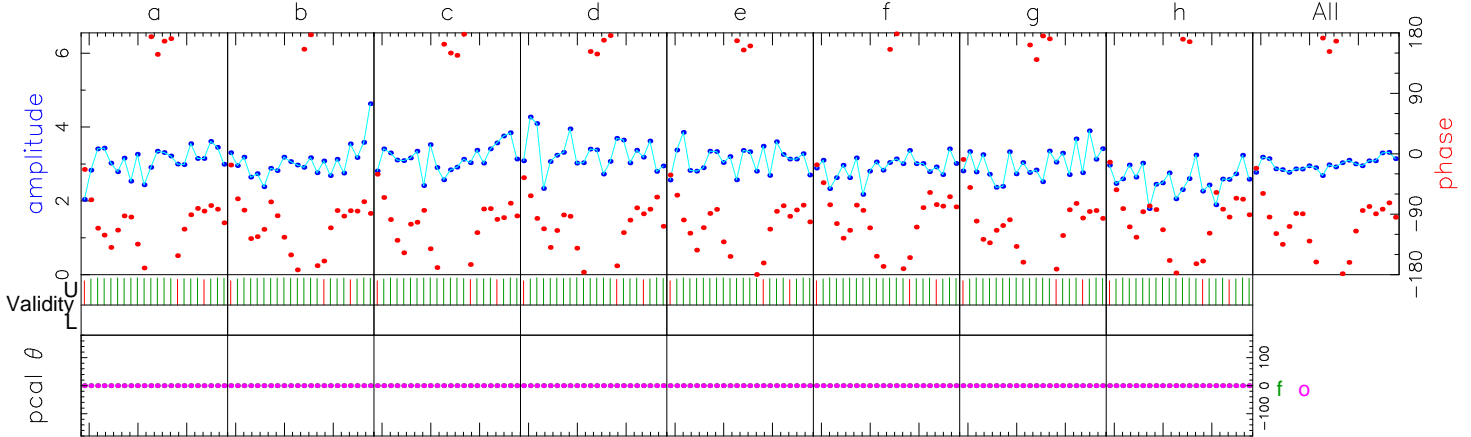
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, fo  
VLBA\_FD - VLBA\_OV, fgroup W, pol RR



Fringe quality 6  
 SNR 78.7  
 Int time 173.783  
 Amp 2.184  
 Phase -113.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001896  
 MBD 0.001787  
 Fringe rate (Hz)  
 -0.001699  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020150.00  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154303  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fo	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	4.19438681755E+03	Apriori delay (usec)	4.19438503060E+03	Resid mbdelay (usec)	1.78695E-03	+/-	1.4E-05
Sband delay (usec)	4.19438692685E+03	Apriori clock (usec)	-1.6194515E+01	Resid sbdelay (usec)	1.89625E-03	+/-	1.1E-04
Phase delay (usec)	4.19438502695E+03	Apriori clockrate (us/s)	-9.2000002E-08	Resid phdelay (usec)	-3.64810E-06	+/-	4.7E-08
Delay rate (us/s)	-1.23625235631E-01	Apriori rate (us/s)	-1.23625215910E-01	Resid rate (us/s)	-1.97206E-08	+/-	4.5E-10
Total phase (deg)	79.9	Apriori accel (us/s/s)	-2.27537083508E-05	Resid phase (deg)	-113.1	+/-	1.5

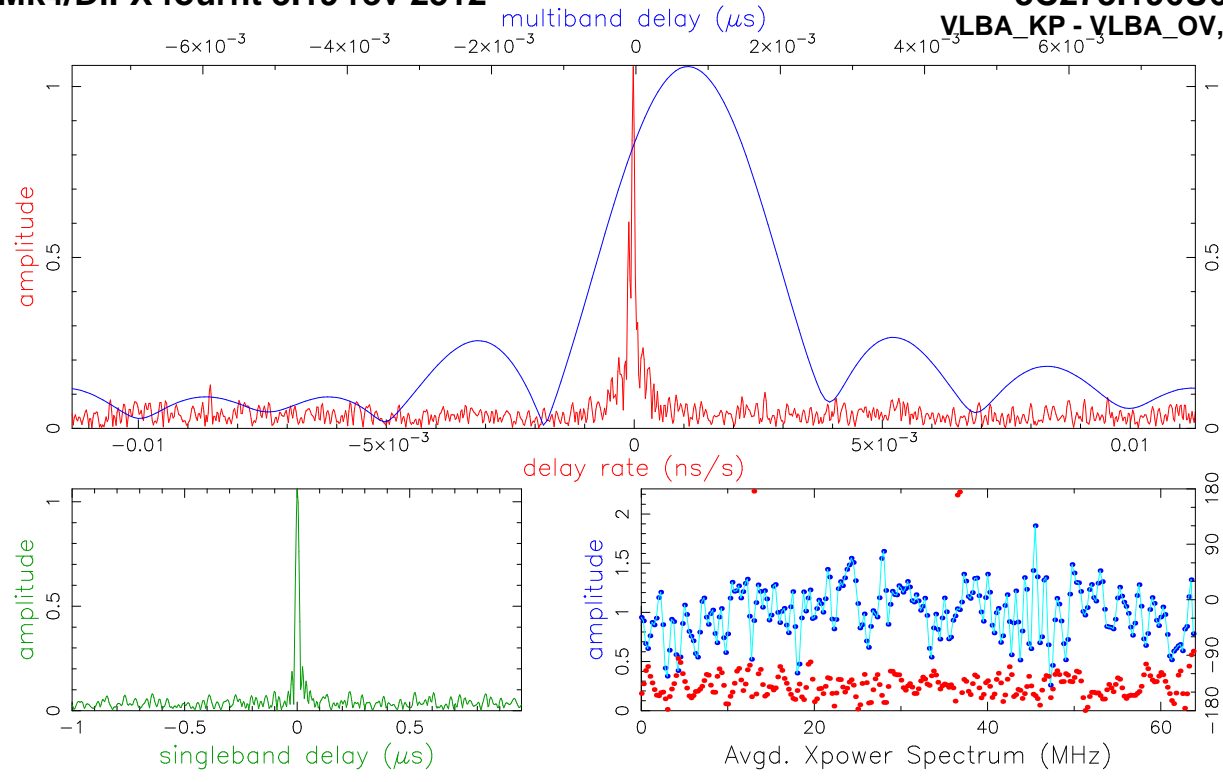
ph/seg (deg)	46.9	RMS	2.184 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	37.7	Theor.	2.115	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	6.2	Search (1024X32)	2.115	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	7.3	Interp.	0.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. seg. avg.	2.986	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
		Inc. frq. avg.	2.138	nlags:	256	t_cohere	infinite	

f: az 115.1 el 38.7 pa -51.3      o: az 108.1 el 25.3 pa -49.2      u,v (fr/asec) 682.148 -905.792      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201e/v1/1234/No0056/fo..196U6Z    Output file: /Exps/c201e/v1/1234/No0056/fo.W.90.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, ko  
VLBA\_KP - VLBA\_OV, fgroup W, pol RR

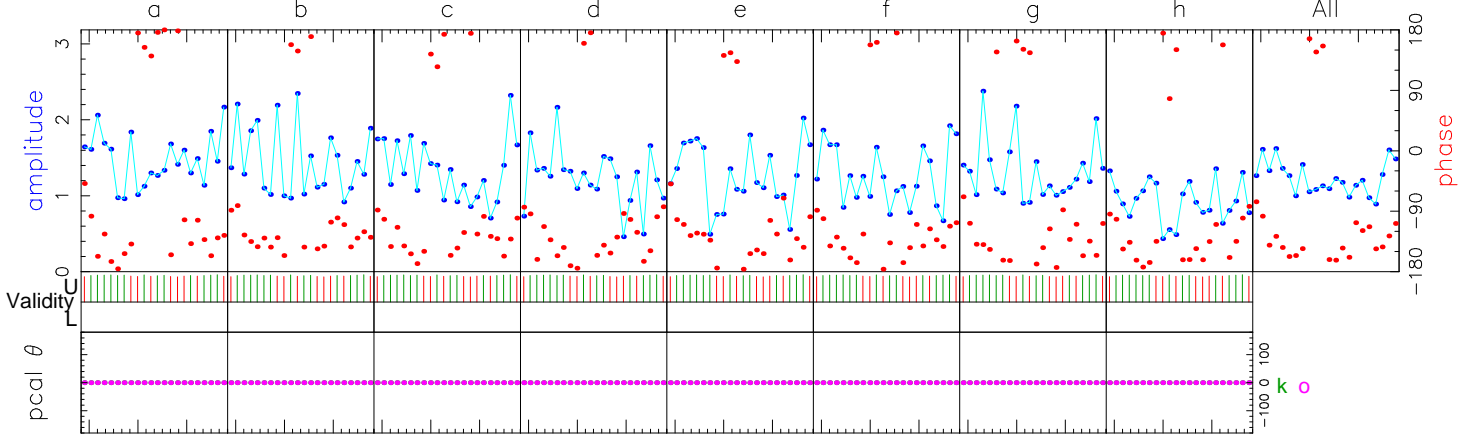


Fringe quality 8

SNR 38.1  
Int time 172.123  
Amp 1.062  
Phase -140.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.000727  
MBD 0.000736  
Fringe rate (Hz)  
-0.002294  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154305  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

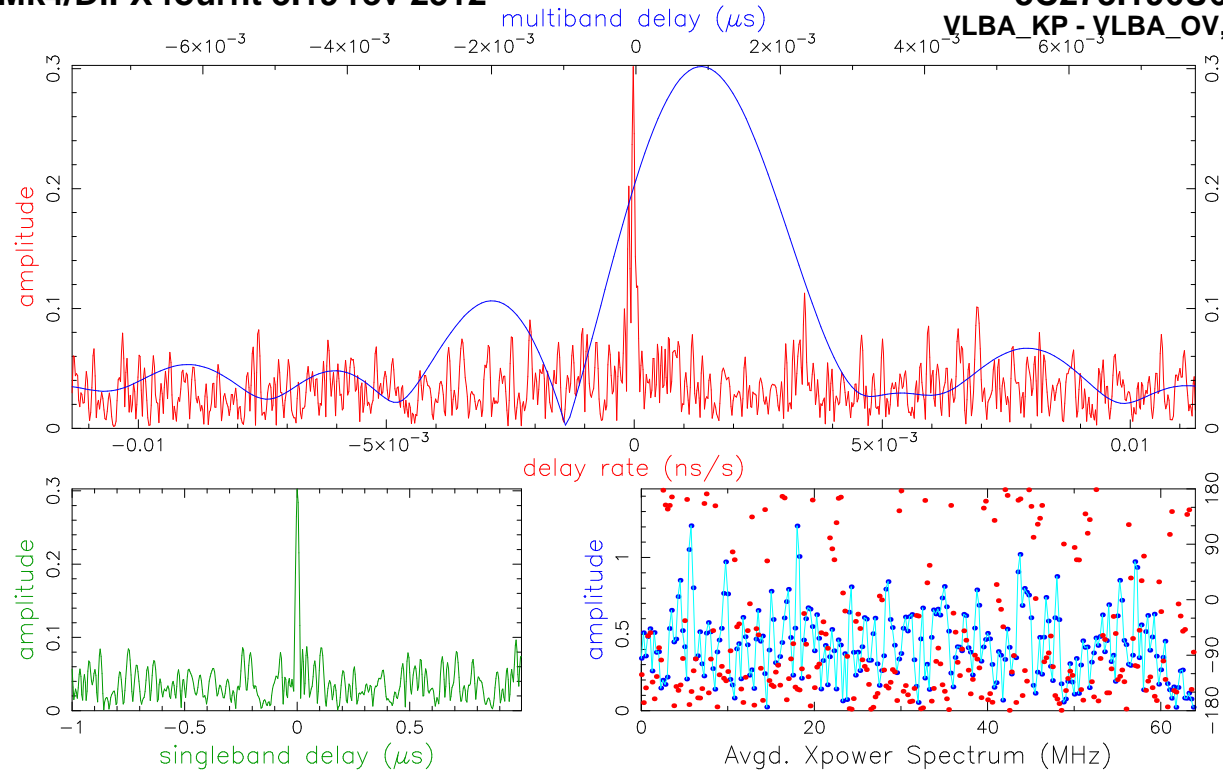


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.22842524238E+03				2.22842450624E+03				7.36138E-04	+/- 2.8E-05
Sband delay (usec)	2.22842523349E+03				-2.0456371E+01				7.27250E-04	+/- 2.3E-04
Phase delay (usec)	2.22842450172E+03				-1.9560001E-07				-4.51831E-06	+/- 9.7E-08
Delay rate (us/s)	-1.85551657848E-02				-1.85551391586E-02				-2.66262E-08	+/- 9.3E-10
Total phase (deg)			208.2		-1.22472016790E-05				-140.1	+/- 3.0
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
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) 32.8 7.1 Search (1024X32) 1.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 25.7 12.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 5.3 4.3 Inc. seg. avg. 1.228 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 12.7 7.4 Inc. frq. avg. 1.059 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 110.2 el 32.2 pa -52.7 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 92.152 -702.806 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/ko..196U6Z Output file: /Exps/c201e/v1/1234/No0056/ko.W.102.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, ko  
VLBA\_KP - VLBA\_OV, fgroup W, pol LR

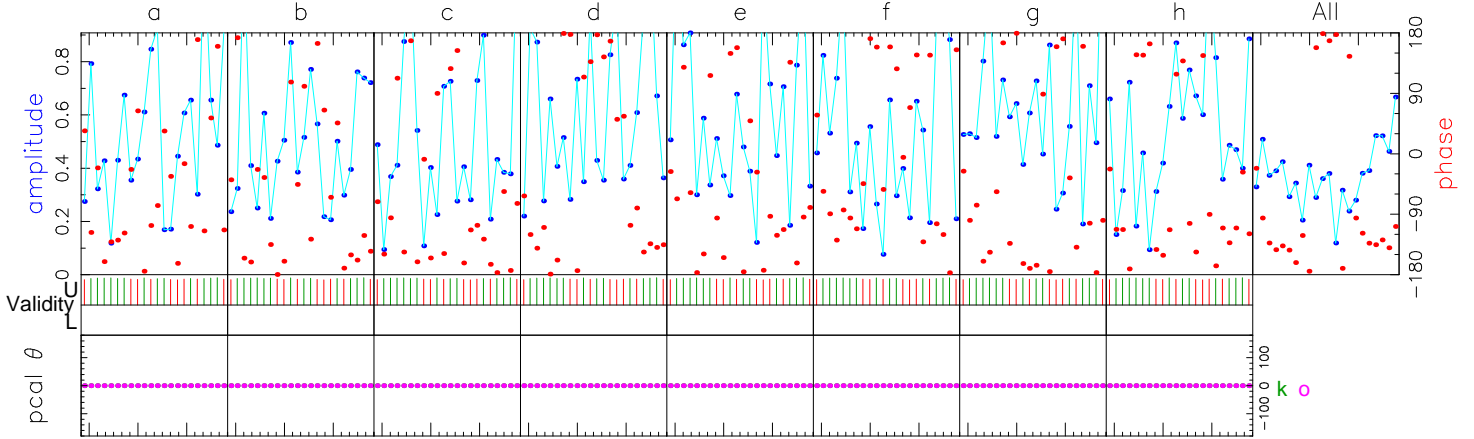


Fringe quality 9

SNR 10.9  
Int time 172.122  
Amp 0.303  
Phase -140.0  
PFD 4.0e-19  
Delays (us)  
SBD 0.000725  
MBD 0.000924  
Fringe rate (Hz)  
-0.002191  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154308  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

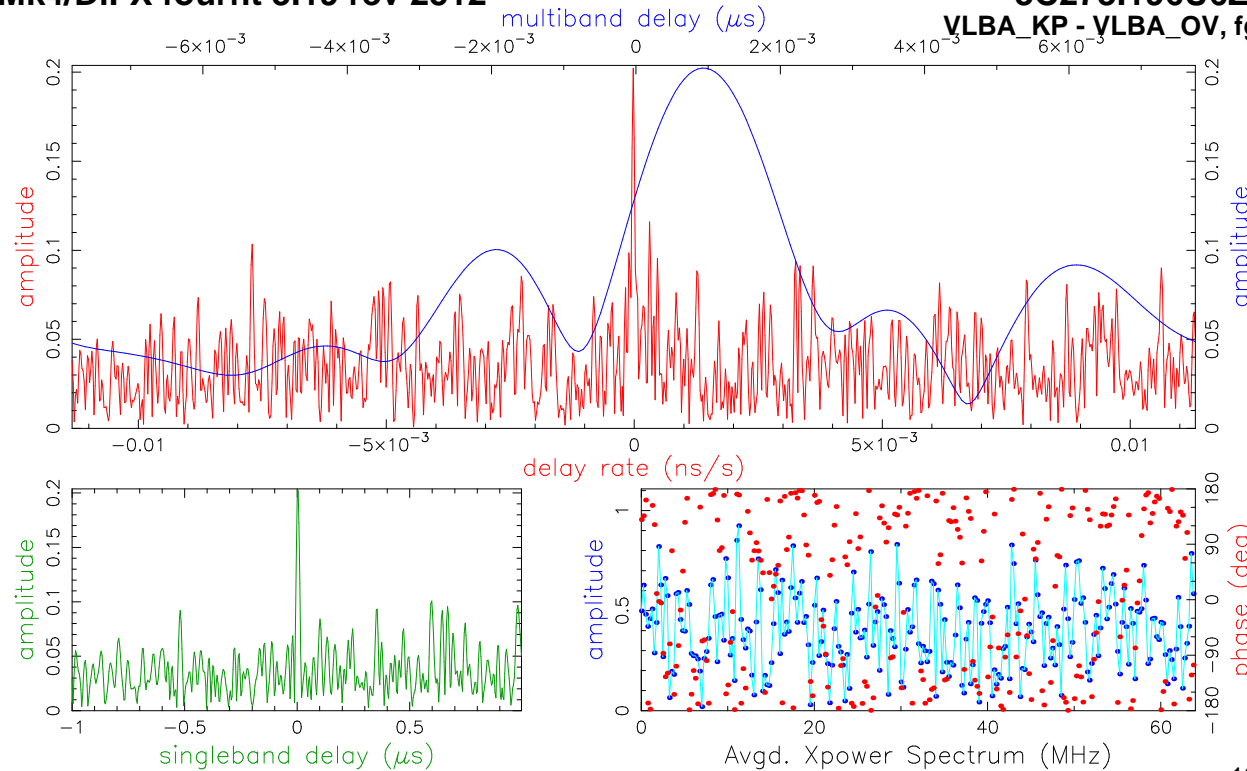


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-110.7	-156.2	-146.0	-160.5	-128.0	-129.7	-141.0	-140.0	Phase	-140.0
	0.3	0.2	0.3	0.4	0.3	0.3	0.4	0.3	Ampl.	0.3
	256.9	73.3	257.6	257.0	257.4	465.9	257.8	255.8	Sbd box	257.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.22842543010E+03 Apriori delay (usec) 2.22842450624E+03 Resid mbdelay (usec) 9.23857E-04 +/- 1.0E-04  
 Sband delay (usec) 2.22842523149E+03 Apriori clock (usec) -2.0456371E+01 Resid sbdelay (usec) 7.25250E-04 +/- 7.9E-04  
 Phase delay (usec) 2.22842450173E+03 Apriori clockrate (us/s) -1.9560001E-07 Resid phdelay (usec) -4.51427E-06 +/- 3.4E-07  
 Delay rate (us/s) -1.85551645973E-02 Apriori rate (us/s) -1.85551391586E-02 Resid rate (us/s) -2.54386E-08 +/- 3.3E-09  
 Total phase (deg) 208.4 Apriori accel (us/s/s) -1.22472016790E-05 Resid phase (deg) -140.0 +/- 10.5

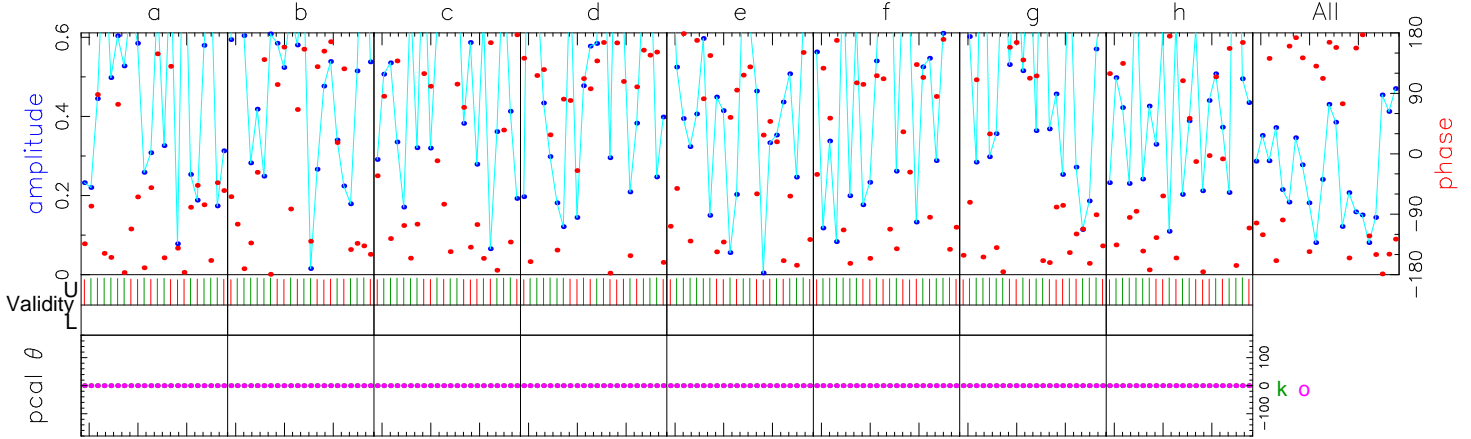
RMS Theor. Amplitude 0.303 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 41.4 24.7 Search (1024X32) 0.300 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 45.1 43.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 17.4 14.9 Inc. seg. avg. 0.342 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 18.7 26.0 Inc. frq. avg. 0.302 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 110.2 el 32.2 pa -52.7 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 92.152 -702.806 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/ko..196U6Z Output file: /Exps/c201e/v1/1234/No0056/ko.W.122.196U6Z



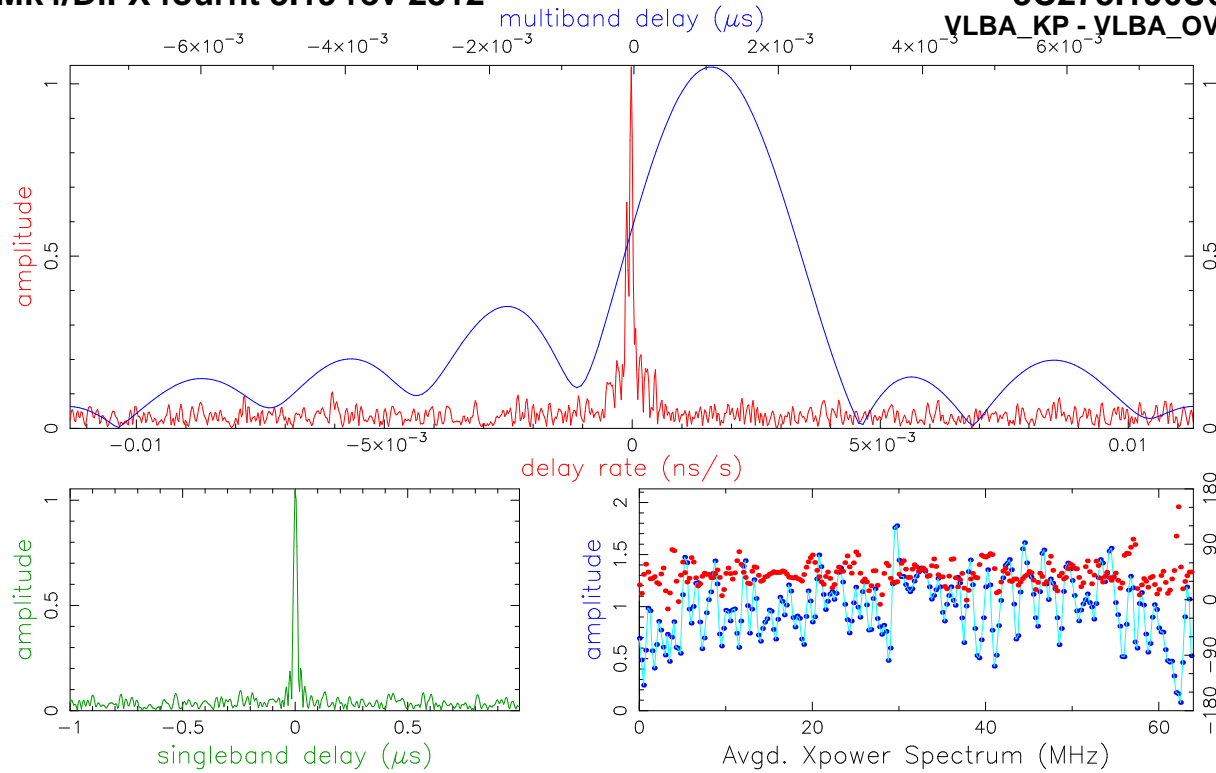
Fringe quality 9  
SNR 7.3  
Int time 172.122  
Amp 0.204  
Phase -171.2  
PFD 4.1e-05  
Delays (us)  
SBD 0.002795  
MBD 0.000888  
Fringe rate (Hz)  
-0.002509  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154310  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-151.1	-160.3	-171.1	143.8	-163.8	-166.0	-160.9	-148.4	Phase	-171.2
	0.2	0.2	0.1	0.4	0.1	0.1	0.4	0.2	Ampl.	0.2
	411.0	421.6	415.1	257.7	377.3	185.9	257.6	306.5	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	2.22842539435E+03		Apriori delay (usec)		2.22842450624E+03		Resid mbdelay (usec)		8.88107E-04	+/- 1.5E-04
Sband delay (usec)	2.22842730124E+03		Apriori clock (usec)		-2.0456371E+01		Resid sbdelay (usec)		2.79500E-03	+/- 1.2E-03
Phase delay (usec)	2.22842450072E+03		Apriori clockrate (us/s)		-1.9560001E-07		Resid phdelay (usec)		-5.52122E-06	+/- 5.1E-07
Delay rate (us/s)	-1.85551682818E-02		Apriori rate (us/s)		-1.85551391586E-02		Resid rate (us/s)		-2.91231E-08	+/- 4.9E-09
Total phase (deg)	177.1		Apriori accel (us/s/s)		-1.22472016790E-05		Resid phase (deg)		-171.2	+/- 15.7

ph/seg (deg) 47.1 36.8 Search (1024X32) 0.198 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.4 64.1 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 22.2 Inc. seg. avg. 0.221 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 50.7 38.7 Inc. frq. avg. 0.206 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 110.2 el 32.2 pa -52.7 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 92.152 -702.806 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/ko..196U6Z Output file: /Exps/c201e/v1/1234/No0056/ko.W.132.196U6Z

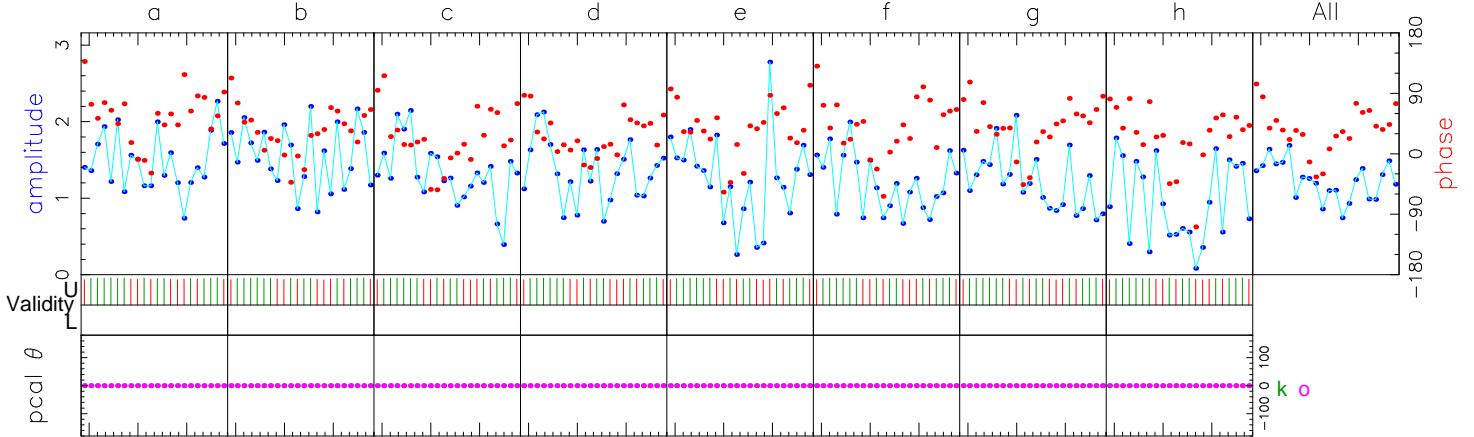


Fringe quality 8

SNR 37.8  
Int time 172.122  
Amp 1.054  
Phase 38.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.000875  
MBD 0.001092  
Fringe rate (Hz)  
-0.002235  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154302  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

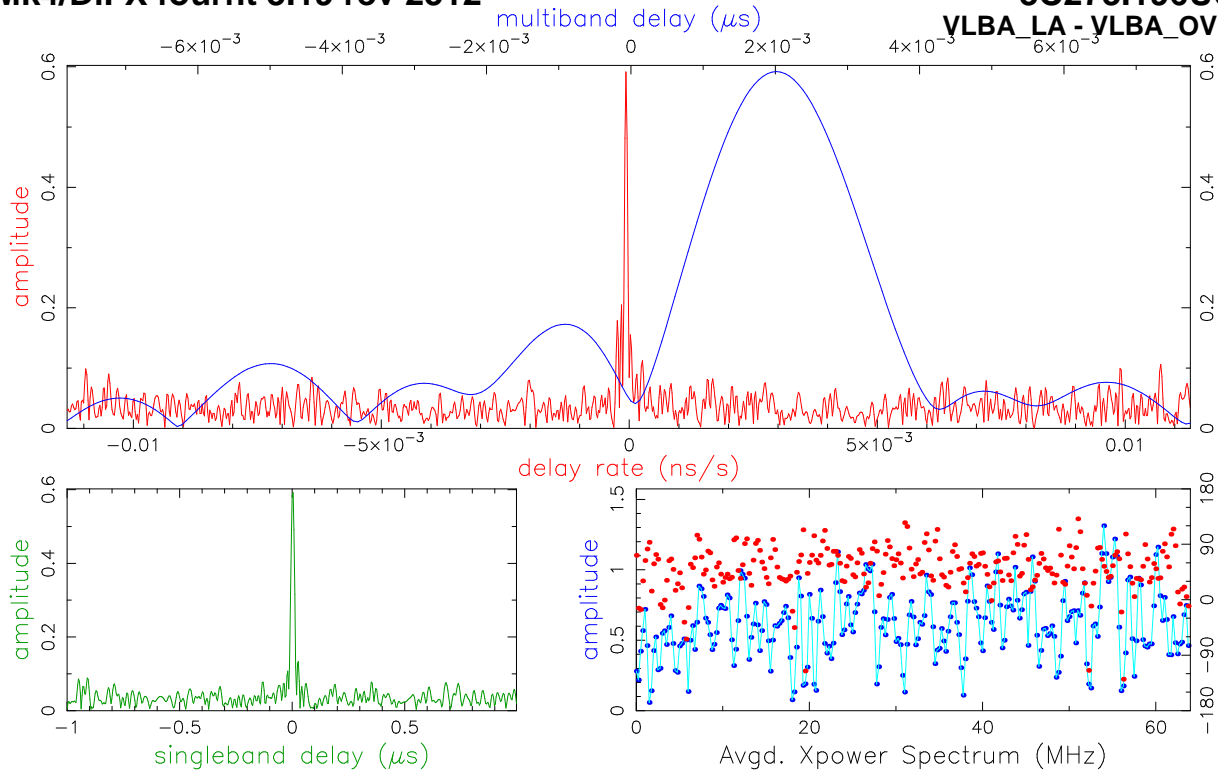


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.22842559847E+03		Apriori delay (usec)		2.22842450624E+03		Resid mbdelay (usec)		1.09223E-03	+/- 2.9E-05
Sband delay (usec)	2.22842538174E+03		Apriori clock (usec)		-2.0456371E+01		Resid sbdelay (usec)		8.75500E-04	+/- 2.3E-04
Phase delay (usec)	2.22842450749E+03		Apriori clockrate (us/s)		-1.9560001E-07		Resid phdelay (usec)		1.25000E-06	+/- 9.8E-08
Delay rate (us/s)	-1.85551651074E-02		Apriori rate (us/s)		-1.85551391586E-02		Resid rate (us/s)		-2.59488E-08	+/- 9.4E-10
Total phase (deg)	27.1		Apriori accel (us/s/s)		-1.22472016790E-05		Resid phase (deg)		38.8	+/- 3.0

ph/seg (deg) 33.4 7.1 Amplitude 1.054 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 28.8 12.4 Interp. 0.008 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 11.2 4.3 Search (1024X32) 1.038 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 13.9 7.5 Inc. seg. avg. 1.225 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 1.062 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 110.2 el 32.2 pa -52.7 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 92.152 -702.806 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/ko..196U6Z Output file: /Exps/c201e/v1/1234/No0056/ko.W.85.196U6Z



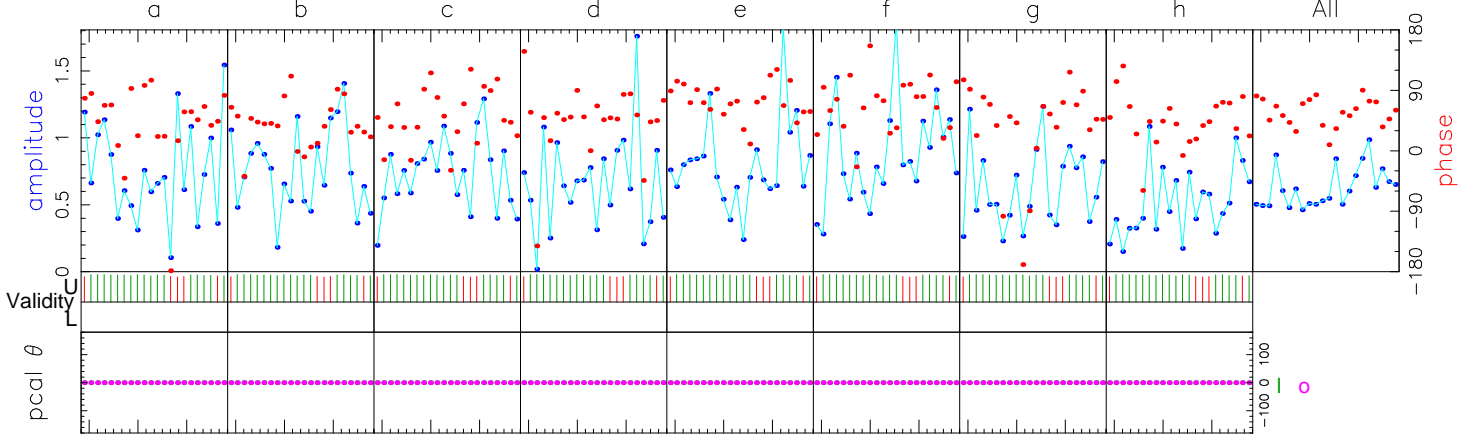


Fringe quality 9

SNR 21.7  
Int time 174.317  
Amp 0.602  
Phase 57.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.002196  
MBD 0.001967  
Fringe rate (Hz)  
-0.006238  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154306  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



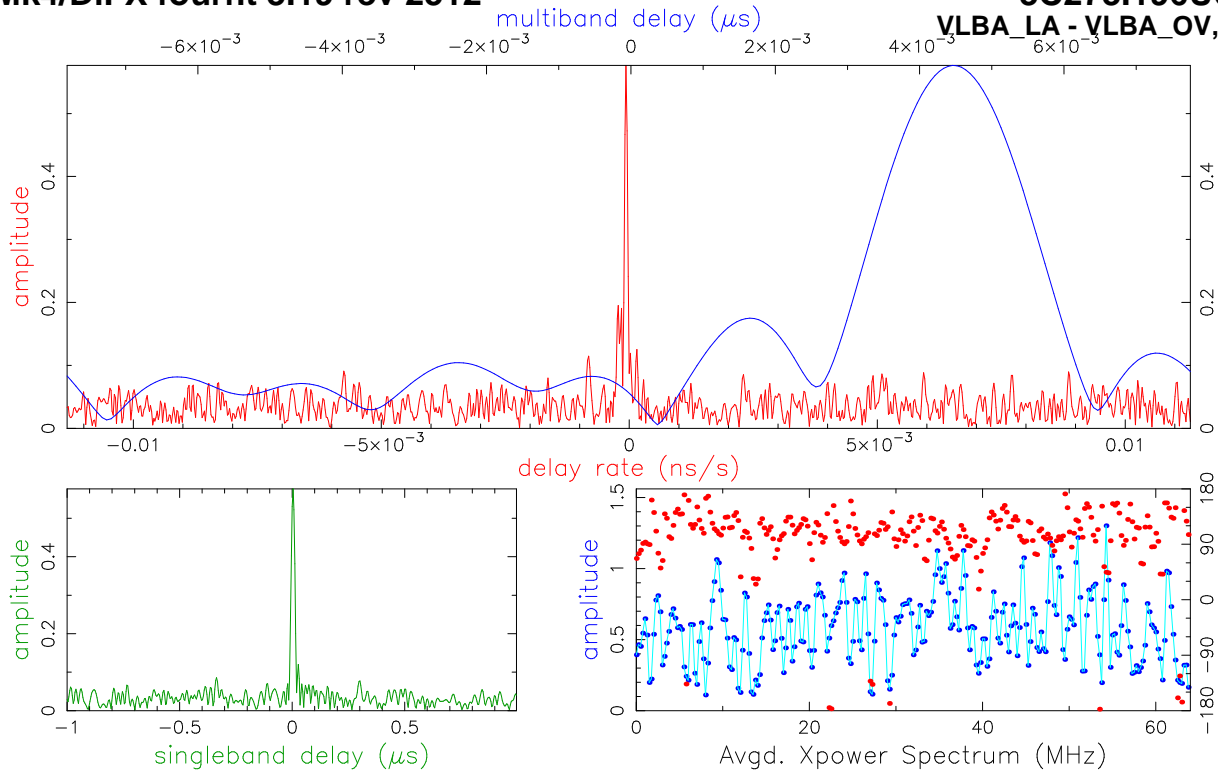
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.00147825049E+03	Apriori delay (usec)	3.00147628392E+03	Resid mbdelay (usec)	1.96657E-03	+/-	5.0E-05
Sband delay (usec)	3.00147847942E+03	Apriori clock (usec)	-2.3851446E+01	Resid sbdelay (usec)	2.19550E-03	+/-	4.0E-04
Phase delay (usec)	3.00147628577E+03	Apriori clockrate (us/s)	-3.5200000E-07	Resid phdelay (usec)	1.85505E-06	+/-	1.7E-07
Delay rate (us/s)	-1.40843338778E-01	Apriori rate (us/s)	-1.40843266366E-01	Resid rate (us/s)	-7.24118E-08	+/-	1.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.61645860443E-05	Resid phase (deg)	57.5	+/-	5.3

ph/seg (deg)	RMS 20.3	Theor. 12.4	Amplitude 0.602 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	25.0	21.6	Search (1024X32) 0.581	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	11.1	7.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.1	13.0	Inc. seg. avg. 0.616	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.595	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

l: az 116.7 el 34.7 pa -46.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 788.501 -223.961 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/lo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/lo.W.109.196U6Z

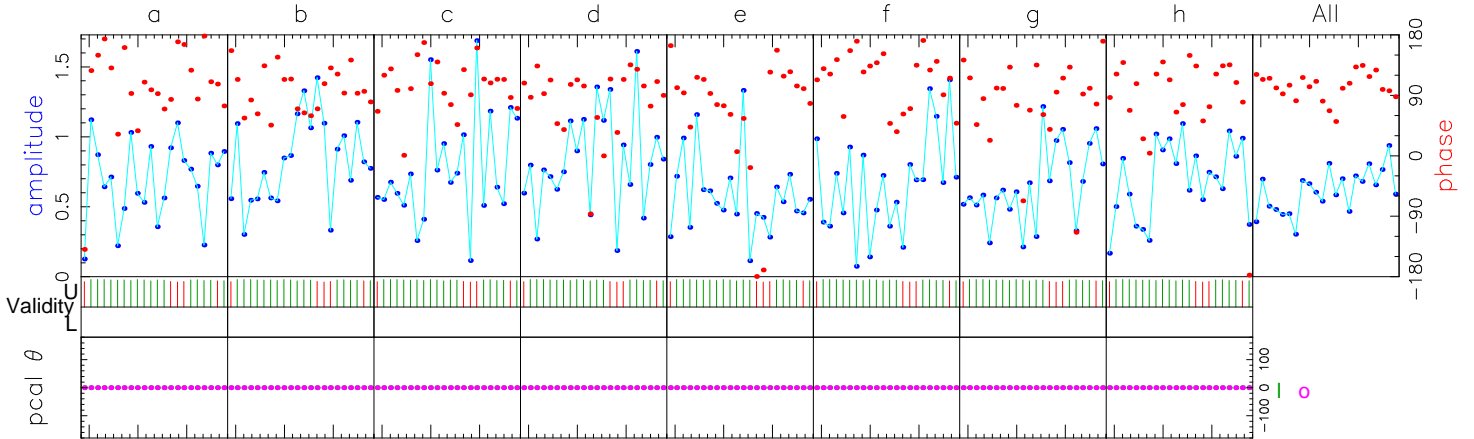


Fringe quality 9

SNR 20.8  
Int time 174.318  
Amp 0.576  
Phase 103.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.003756  
MBD 0.004465  
Fringe rate (Hz)  
-0.006127  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154309  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

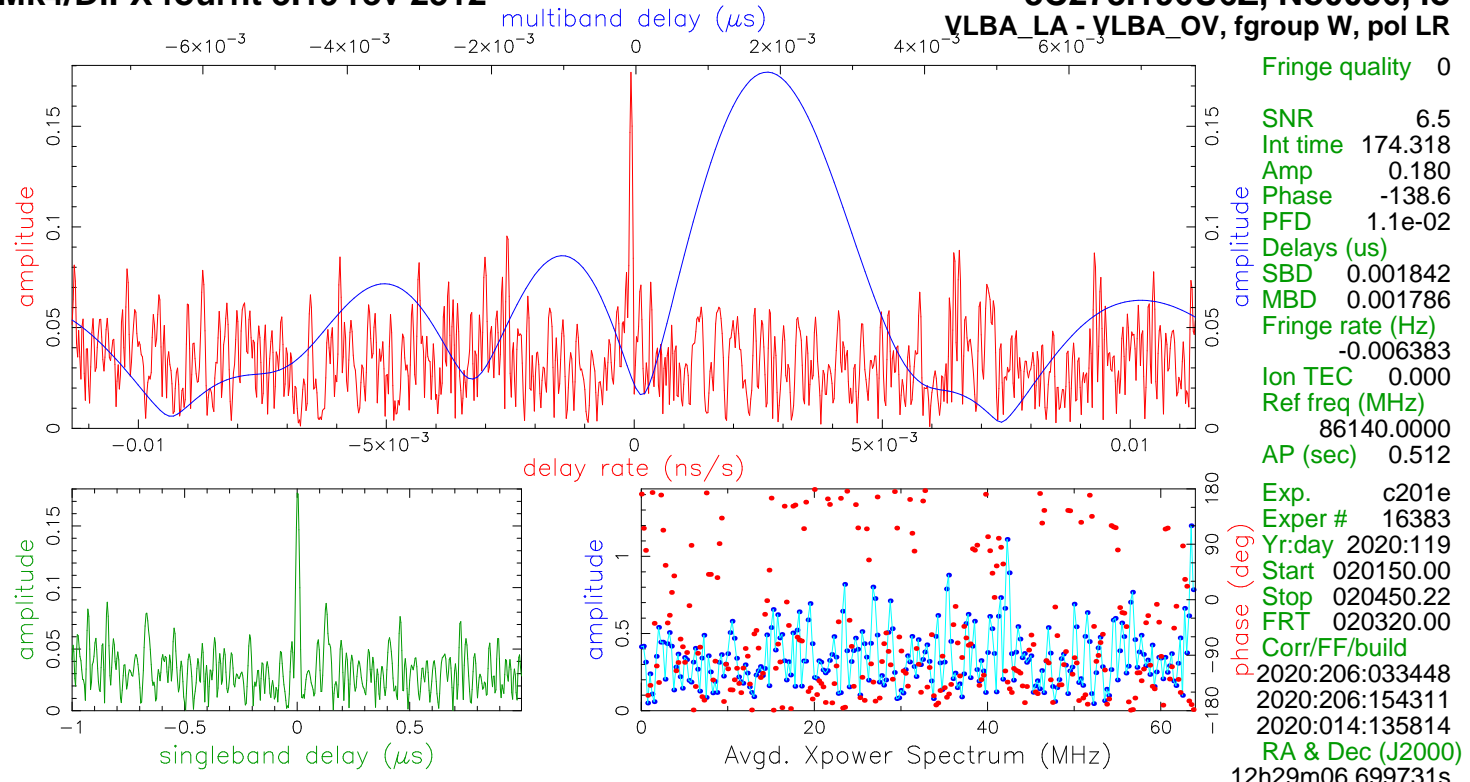


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.00148074915E+03		Apriori delay (usec)		3.00147628392E+03		Resid mbdelay (usec)		4.46523E-03	+/- 5.2E-05
Sband delay (usec)	3.00148003992E+03		Apriori clock (usec)		-2.3851446E+01		Resid sbdelay (usec)		3.75600E-03	+/- 4.1E-04
Phase delay (usec)	3.00147628726E+03		Apriori clockrate (us/s)		-3.5200000E-07		Resid phdelay (usec)		3.34013E-06	+/- 1.8E-07
Delay rate (us/s)	-1.40843337489E-01		Apriori rate (us/s)		-1.40843266366E-01		Resid rate (us/s)		-7.11236E-08	+/- 1.7E-09
Total phase (deg)	138.4		Apriori accel (us/s/s)		-1.61645860443E-05		Resid phase (deg)		103.6	+/- 5.5

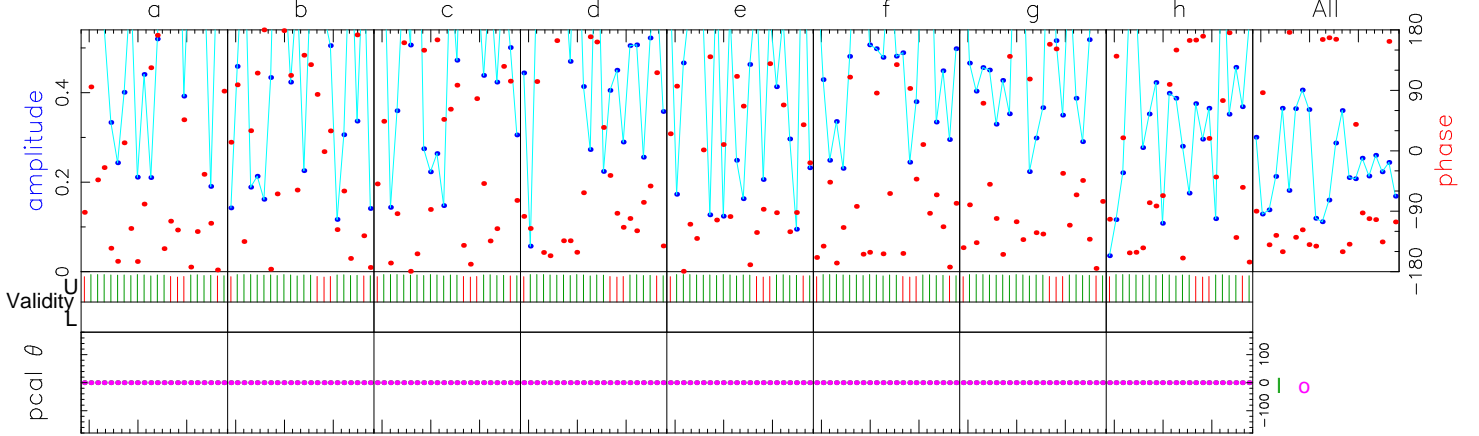
	RMS	Theor.	Amplitude	0.576 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	20.1	12.9	Search (1024X32)	0.569	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	27.0	22.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	10.4	7.8	Inc. seg. avg.	0.599	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	14.6	13.6	Inc. frq. avg.	0.578	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

l: az 116.7 el 34.7 pa -46.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 788.501 -223.961 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/lo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/lo.W.129.196U6Z



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



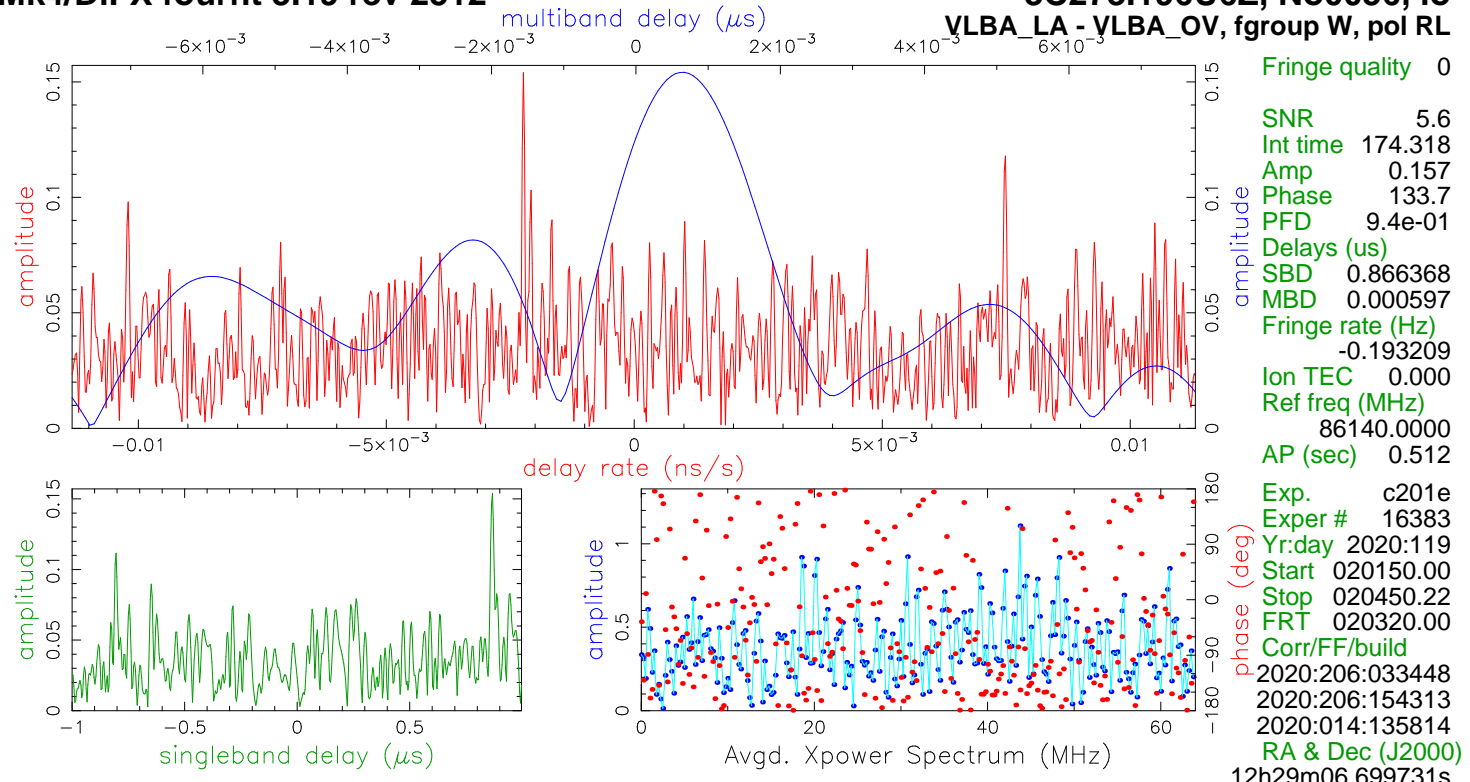
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.6	-168.0	-176.7	-143.9	-105.3	-120.2	-129.2	-164.5	Phase	-138.6
	0.2	0.1	0.1	0.3	0.1	0.2	0.3	0.1	Ampl.	0.2
	337.8	289.9	363.2	163.7	111.8	258.6	496.7	12.8	Sbd box	257.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	3.00147806974E+03	Apriori delay (usec)	3.00147628392E+03	Resid mbdelay (usec)	1.78582E-03	+/-	1.7E-04
Sband delay (usec)	3.00147812617E+03	Apriori clock (usec)	-2.3851446E+01	Resid sbdelay (usec)	1.84225E-03	+/-	1.3E-03
Phase delay (usec)	3.00147627945E+03	Apriori clockrate (us/s)	-3.5200000E-07	Resid phdelay (usec)	-4.46861E-06	+/-	5.7E-07
Delay rate (us/s)	-1.40843340470E-01	Apriori rate (us/s)	-1.40843266366E-01	Resid rate (us/s)	-7.41038E-08	+/-	5.5E-09
Total phase (deg)	-103.7	Apriori accel (us/s/s)	-1.61645860443E-05	Resid phase (deg)	-138.6	+/-	17.6

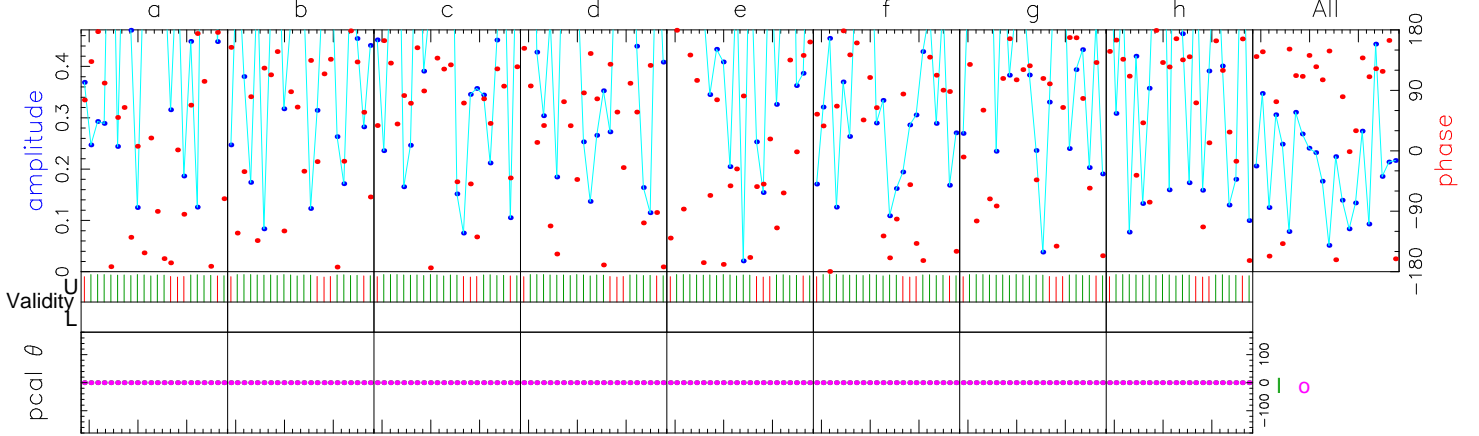
ph/seg (deg)	57.6	Theor.	41.3	Amplitude	0.180 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.6	Search (1024X32)	0.173	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.3	Inc. seg. avg.	0.190	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.5	Inc. frq. avg.	0.172			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	
						nlags:	256	t_cohere	infinite	

l: az 116.7 el 34.7 pa -46.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 788.501 -223.961 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/lo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/lo.W.142.196U6Z



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
163.3	141.7	111.2	83.4	-171.0	125.6	129.1	145.1	145.1	Phase	133.7
0.1	0.1	0.3	0.2	0.2	0.2	0.2	0.1	0.3	Ampl.	0.2
469.8	419.5	33.5	145.1	202.9	98.4	400.7	51.9	51.9	Sbd box	478.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	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)	3.00233625619E+03		Apriori delay (usec)		3.00147628392E+03		Resid mbdelay (usec)	5.97267E-04	+/-	1.9E-04
Sband delay (usec)	3.00234265192E+03		Apriori clock (usec)		-2.3851446E+01		Resid sbdelay (usec)	8.66368E-01	+/-	1.5E-03
Phase delay (usec)	3.00147628823E+03		Apriori clockrate (us/s)		-3.5200000E-07		Resid phdelay (usec)	4.31231E-06	+/-	6.6E-07
Delay rate (us/s)	-1.40845509336E-01		Apriori rate (us/s)		-1.40843266366E-01		Resid rate (us/s)	-2.24297E-06	+/-	6.4E-09
Total phase (deg)		168.6	Apriori accel (us/s/s)		-1.61645860443E-05		Resid phase (deg)	133.7	+/-	20.5

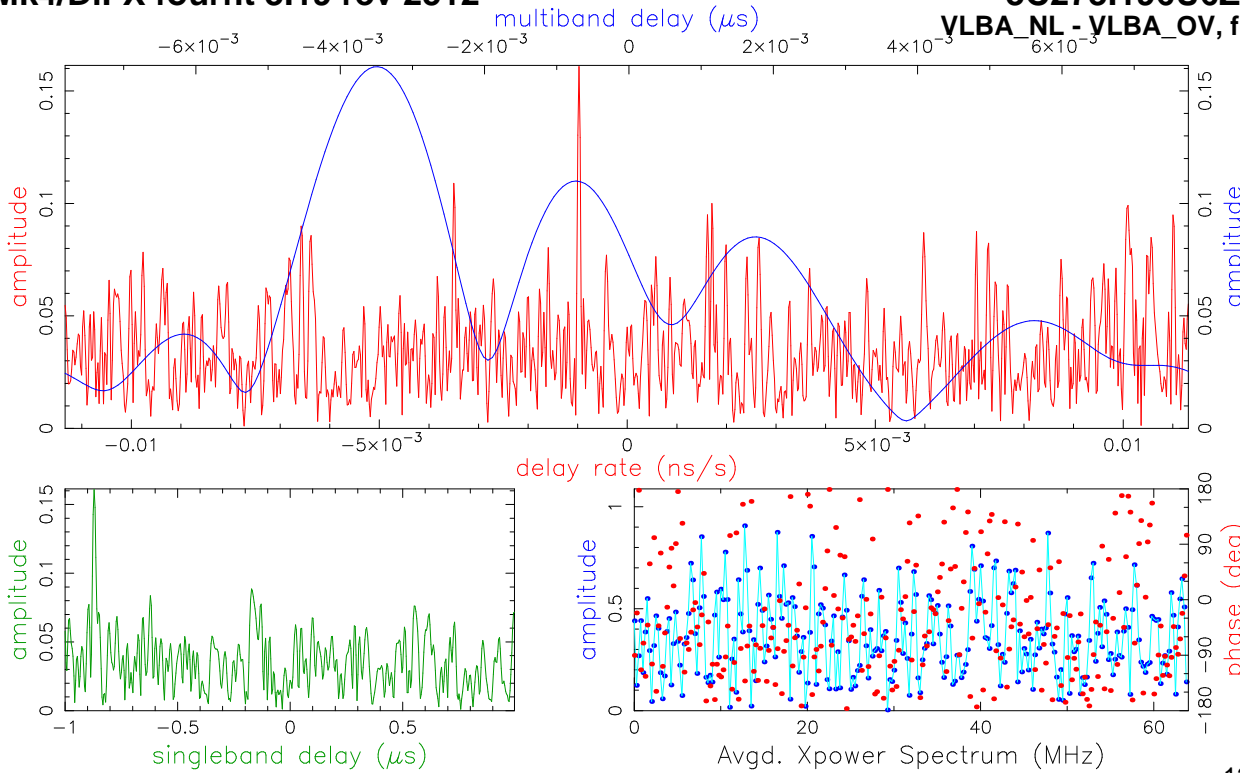
	RMS	Theor.	Amplitude	0.157 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.1	48.1	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.8	84.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.8	29.0	Inc. seg. avg.	0.158	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.9	50.7	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 116.7 el 34.7 pa -46.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 788.501 -223.961 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/lo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/lo.W.156.196U6Z

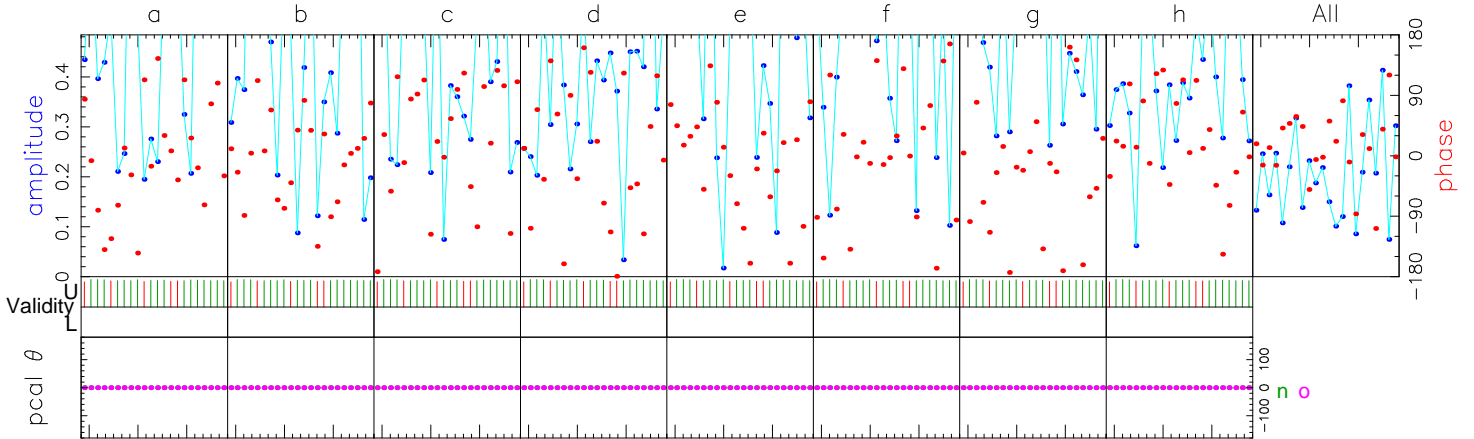
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, no VLBA\_NL - VLBA\_OV, fgroup W, pol LL



Fringe quality 0  
 SNR 5.8  
 Int time 173.864  
 Amp 0.161  
 Phase 12.5  
 PFD 5.6e-01  
 Delays (us)  
 SBD -0.870826  
 MBD -0.003485  
 Fringe rate (Hz)  
 -0.083118  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020150.00  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154313  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

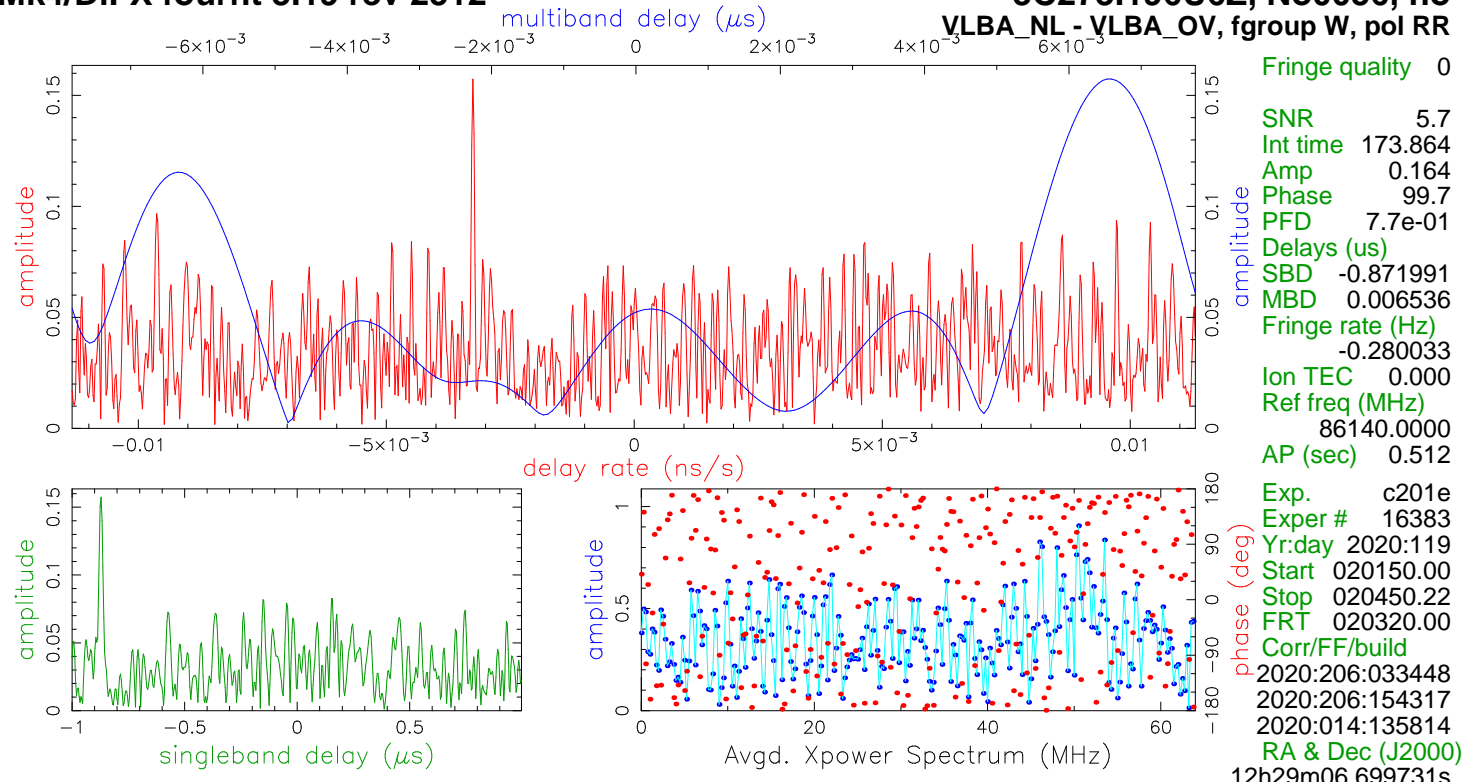


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.2	2.4	80.2	4.1	11.7	18.2	-23.8	23.2	Phase	12.5
	0.2	0.3	0.2	0.1	0.1	0.2	0.1	0.2	Ampl.	0.2
	128.9	33.7	413.9	44.0	368.0	37.2	373.8	189.0	Sbd box	34.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	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)	4.69297382177E+03		Apriori delay (usec)		4.69385230683E+03		Resid mbdelay (usec)		-3.48506E-03	+/- 1.9E-04
Sband delay (usec)	4.69298148083E+03		Apriori clock (usec)		1.2220331E+01		Resid sbdelay (usec)		-8.70826E-01	+/- 1.5E-03
Phase delay (usec)	4.69385230724E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		4.03694E-07	+/- 6.4E-07
Delay rate (us/s)	-4.43995674144E-01		Apriori rate (us/s)		-4.43994709231E-01		Resid rate (us/s)		-9.64912E-07	+/- 6.1E-09
Total phase (deg)	268.3		Apriori accel (us/s/s)		-2.46609823147E-05		Resid phase (deg)		12.5	+/- 19.8

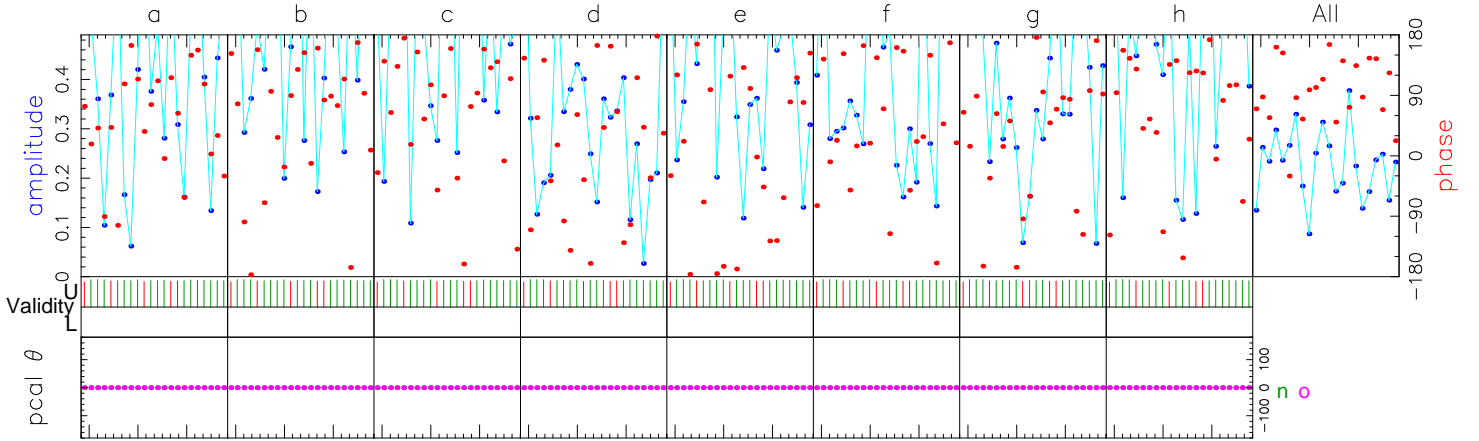
ph/seg (deg) 50.1 46.3 Amplitude 0.161 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.0 80.8 Search (1024X32) 0.154 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.7 27.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.3 48.8 Inc. seg. avg. 0.159 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 n: az 134.8 el 40.6 pa -31.8 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 2516.016 472.939 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/no..196U6Z Output file: /Exps/c201e/v1/1234/No0056/no.W.152.196U6Z simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, no VLBA\_NL - VLBA\_OV, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



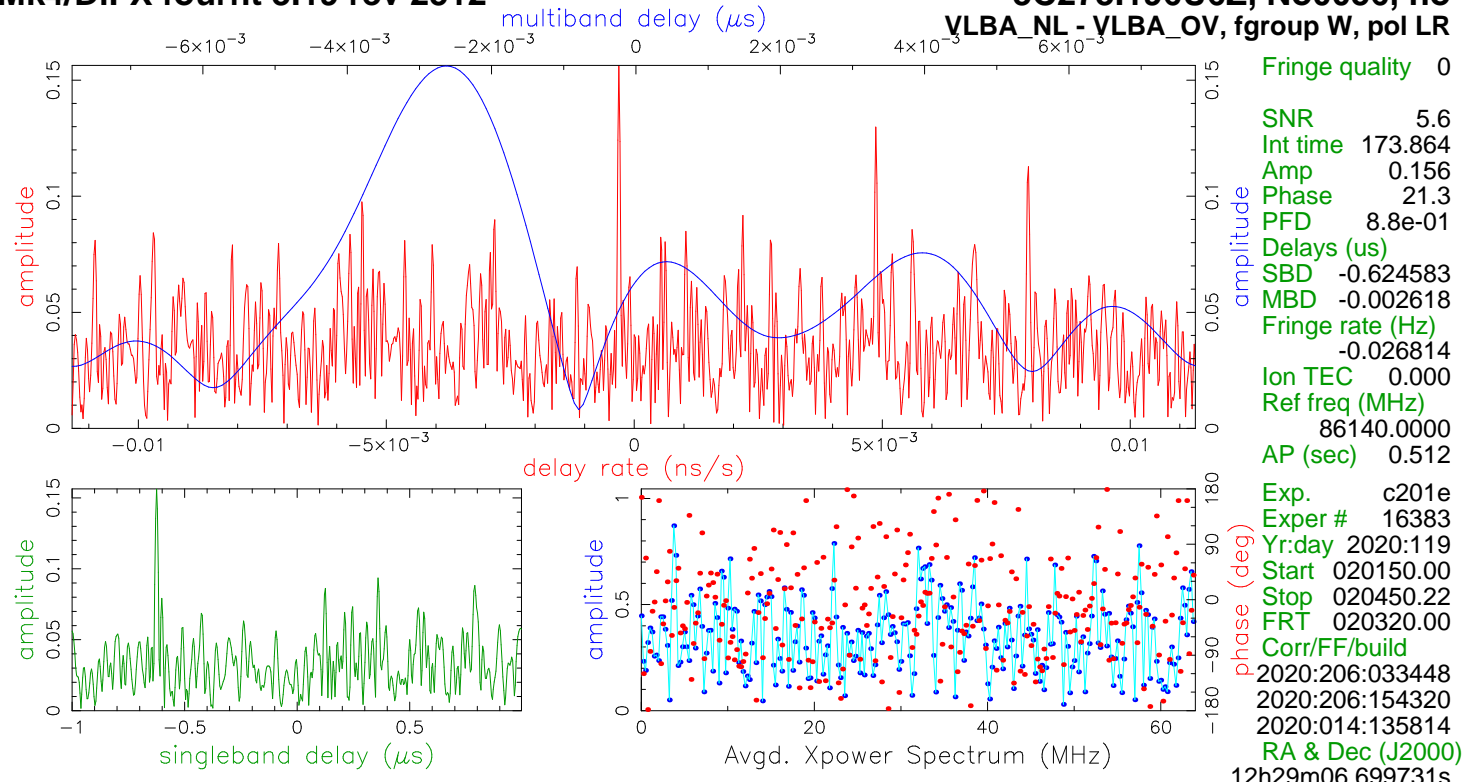
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
71.9	101.2	118.2	97.1	153.9	76.6	73.8	110.0	110.0	Phase	99.7
0.2	0.3	0.3	0.0	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2
163.6	315.4	430.1	299.4	280.4	316.6	163.8	132.1	132.1	Sbd box	33.8
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	4.69298384291E+03		Apriori delay (usec)	4.69385230683E+03	Resid mbdelay (usec)	6.53608E-03	+/-	1.9E-04		
Sband delay (usec)	4.69298031558E+03		Apriori clock (usec)	1.2220331E+01	Resid sbdelay (usec)	-8.71991E-01	+/-	1.5E-03		
Phase delay (usec)	4.69385231005E+03		Apriori clockrate (us/s)	1.3299997E-07	Resid phdelay (usec)	3.21573E-06	+/-	6.5E-07		
Delay rate (us/s)	-4.43997960139E-01		Apriori rate (us/s)	-4.43994709231E-01	Resid rate (us/s)	-3.25091E-06	+/-	6.2E-09		
Total phase (deg)		355.5	Apriori accel (us/s/s)	-2.46609823147E-05	Resid phase (deg)	99.7	+/-	20.1		

ph/seg (deg) 48.1 47.2 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.6 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.9 28.4 Inc. seg. avg. 0.176 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 51.2 49.6 Inc. frq. avg. 0.157 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 134.8 el 40.6 pa -31.8 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 2516.016 472.939 ion window (TEC) 0.00 0.00 simultaneous interpolator

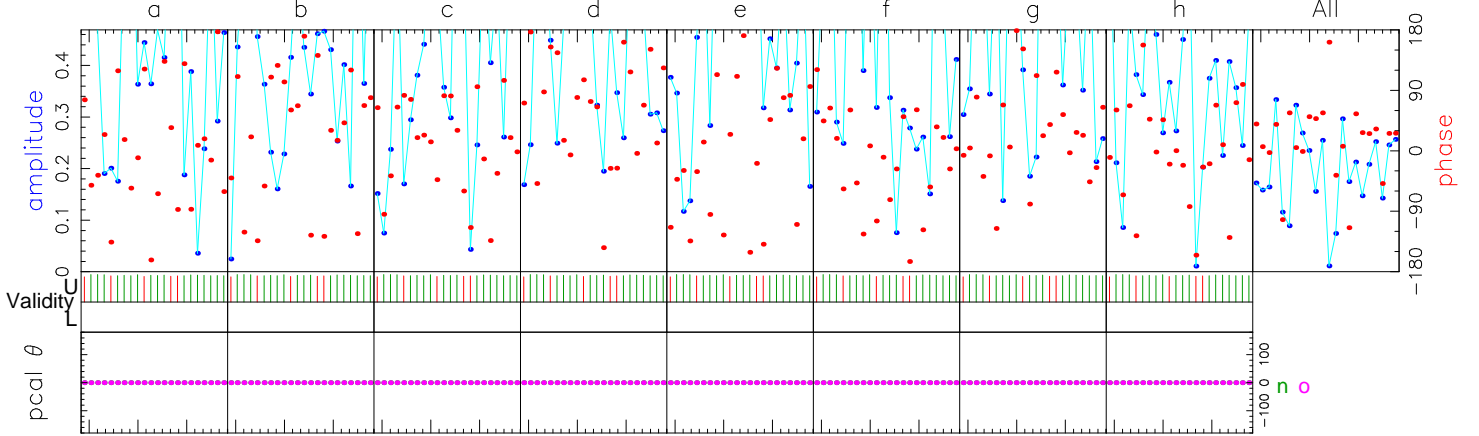
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/no..196U6Z Output file: /Exps/c201e/v1/1234/No0056/no.W.178.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, no VLBA\_NL - VLBA\_OV, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.7	100.0	15.5	66.7	51.0	9.0	21.3	6.1	Phase	21.3
	0.2	0.1	0.3	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	456.8	244.6	97.5	396.6	196.2	97.5	66.7	92.4	Sbd box	97.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	4.69322468892E+03		Apriori delay (usec)		4.69385230683E+03		Resid mbdelay (usec)		-2.61791E-03	+/- 1.9E-04
Sband delay (usec)	4.69322772408E+03		Apriori clock (usec)		1.2220331E+01		Resid sbdelay (usec)		-6.24583E-01	+/- 1.5E-03
Phase delay (usec)	4.69385230752E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		6.86784E-07	+/- 6.6E-07
Delay rate (us/s)	-4.43995020513E-01		Apriori rate (us/s)		-4.43994709231E-01		Resid rate (us/s)		-3.11282E-07	+/- 6.3E-09
Total phase (deg)	277.1		Apriori accel (us/s/s)		-2.46609823147E-05		Resid phase (deg)		21.3	+/- 20.3

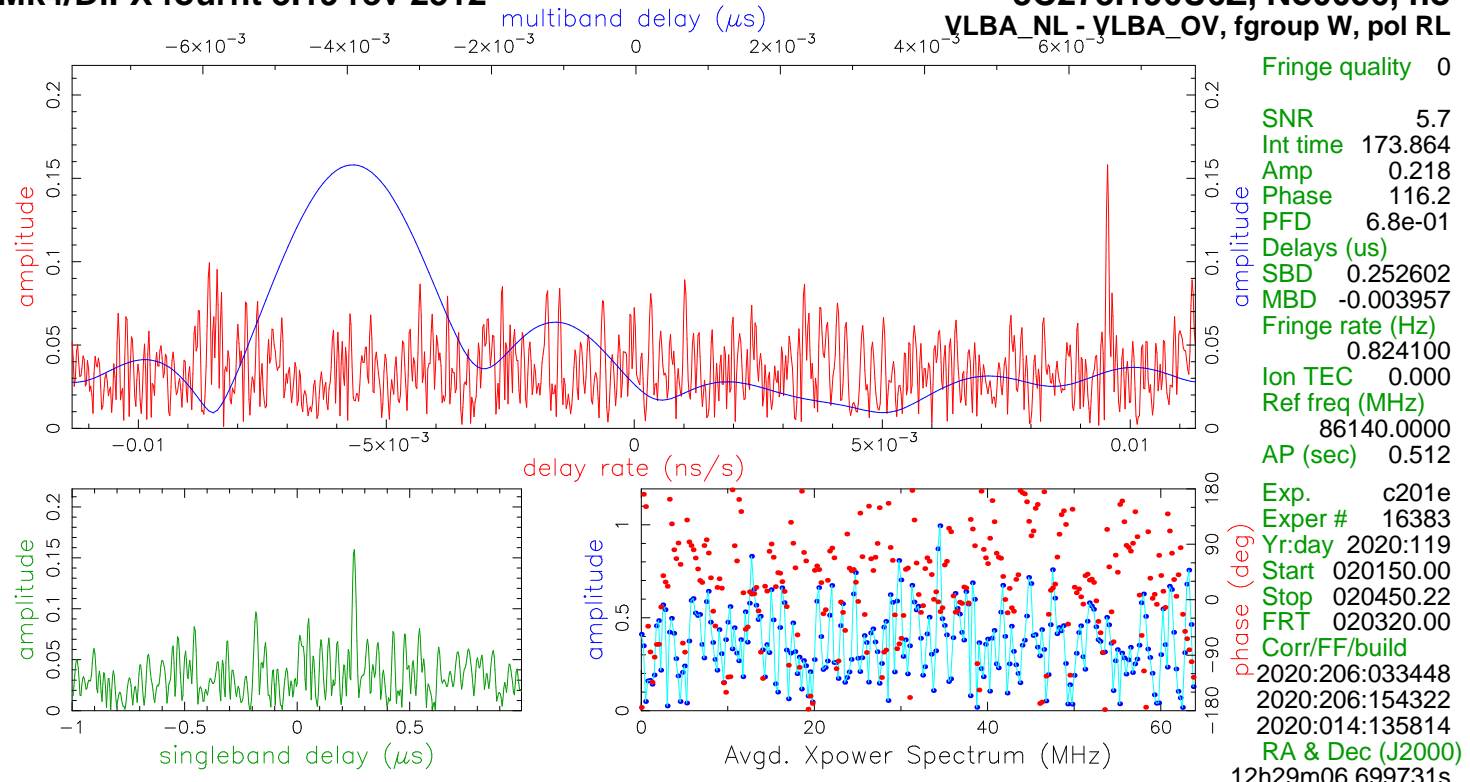
	RMS	Theor.	Amplitude	0.156 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.0	47.7	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	57.2	83.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.6	28.7	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	50.0	50.2	Inc. frq. avg.	0.162	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 134.8 el 40.6 pa -31.8 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 2516.016 472.939 simultaneous interpolator

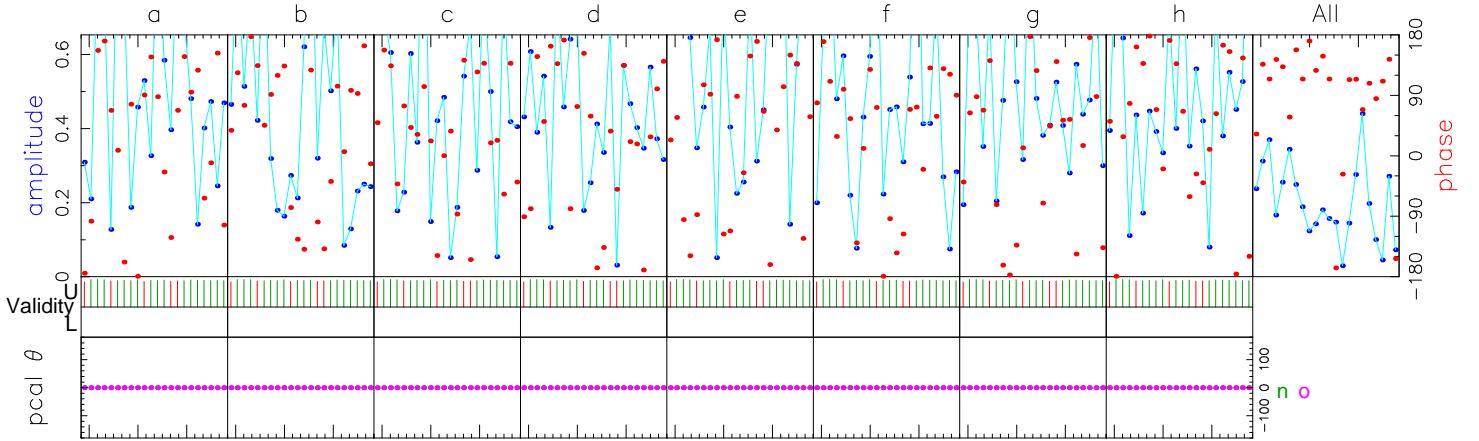
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/no..196U6Z Output file: /Exps/c201e/v1/1234/No0056/no.W.198.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, no VLBA\_NL - VLBA\_OV, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	128.7	123.1	99.1	103.4	121.2	91.0	132.1	138.7	Phase	116.2
	0.2	0.2	0.2	0.1	0.2	0.4	0.3	0.2	Ampl.	0.2
	318.6	356.8	211.0	8.6	510.0	322.2	489.9	355.1	Sbd box	321.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

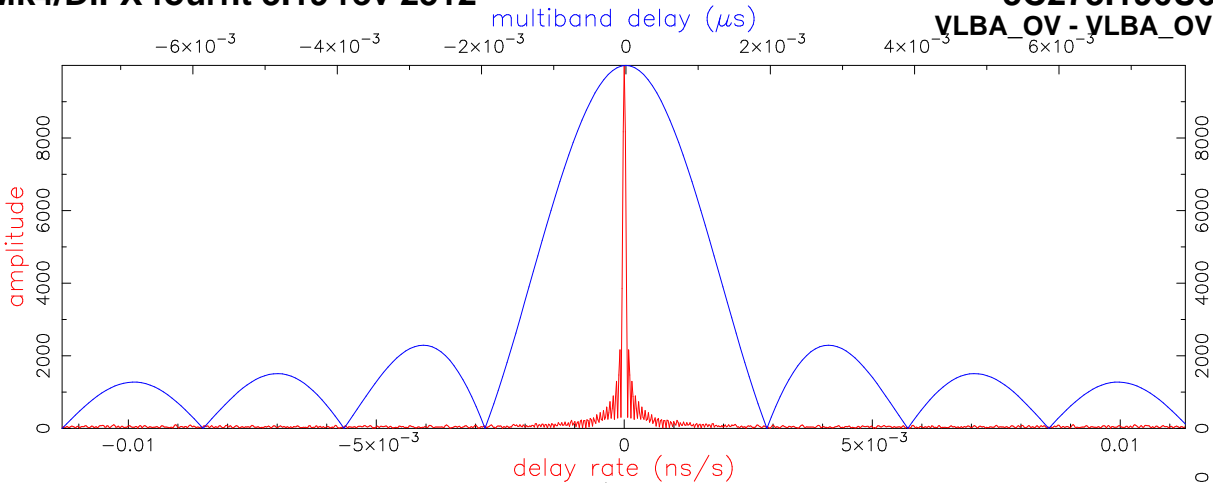
Group delay (usec)(sbd)	4.69409834987E+03	Apriori delay (usec)	4.69385230683E+03	Resid mbdelay (usec)	-3.95696E-03	+/-	1.9E-04
Sband delay (usec)	4.69410490933E+03	Apriori clock (usec)	1.2220331E+01	Resid sbdelay (usec)	2.52602E-01	+/-	1.5E-03
Phase delay (usec)	4.69385231058E+03	Apriori clockrate (us/s)	1.3299997E-07	Resid phdelay (usec)	3.74558E-06	+/-	6.4E-07
Delay rate (us/s)	-4.43985142242E-01	Apriori rate (us/s)	-4.43994709231E-01	Resid rate (us/s)	9.56699E-06	+/-	6.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.46609823147E-05	Resid phase (deg)	116.2	+/-	19.9

ph/seg (deg)	50.3	Theor.	46.8	Amplitude	0.218 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	70.6		81.6	Search (1024X32)	0.156	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	18.6		28.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	28.3		49.2	Inc. seg. avg.	0.208	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.202	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

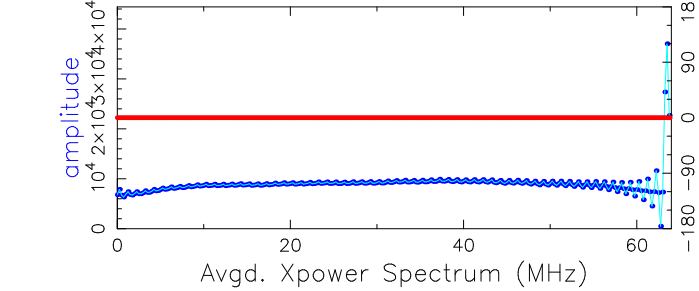
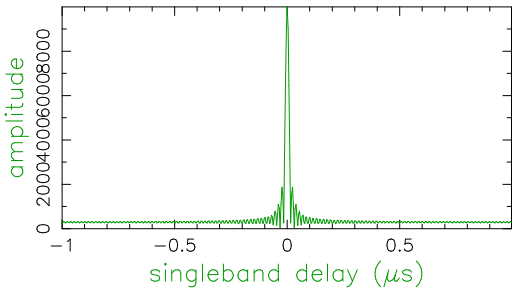
n: az 134.8 el 40.6 pa -31.8 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 2516.016 472.939 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/no..196U6Z Output file: /Exps/c201e/v1/1234/No0056/no.W.209.196U6Z

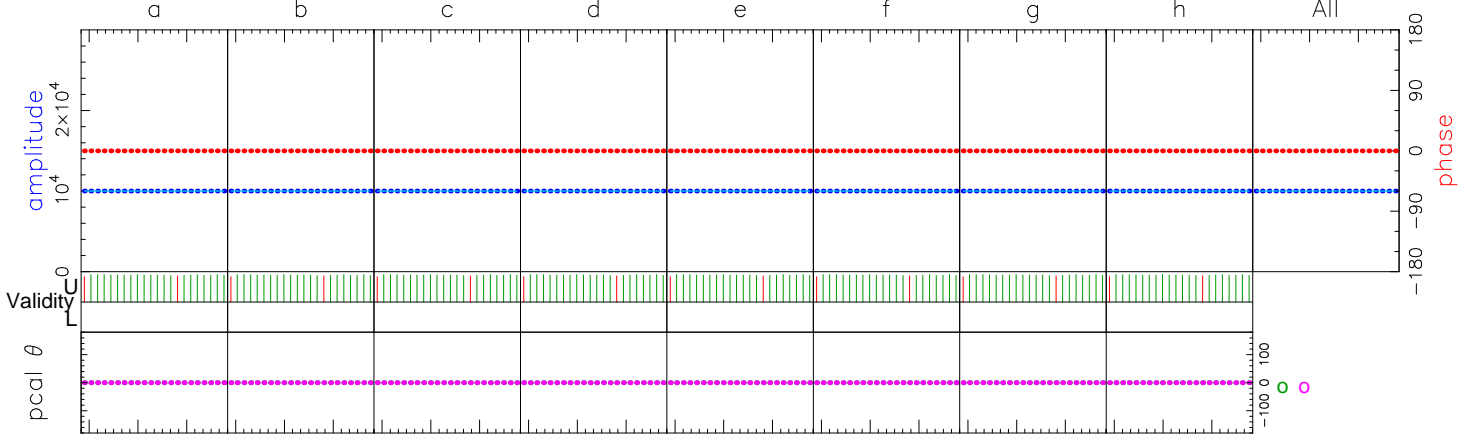




Fringe quality 9  
SNR 363428.6  
Int time 176.621  
Amp 9999.999  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154316  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"



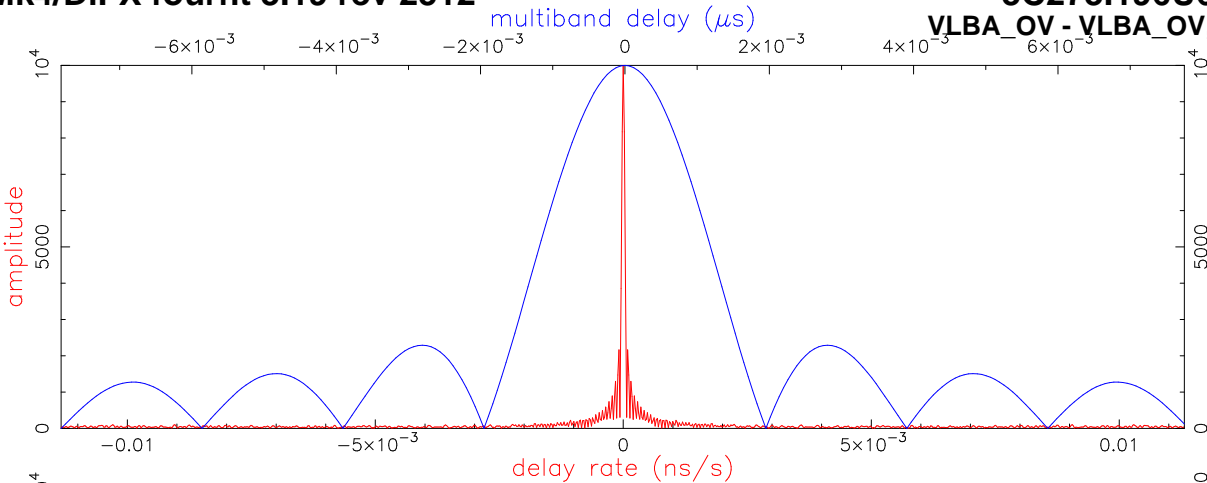
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

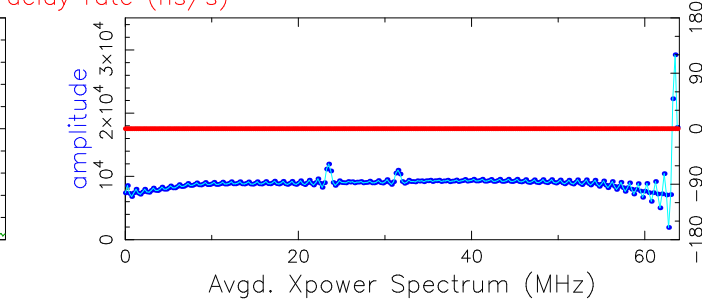
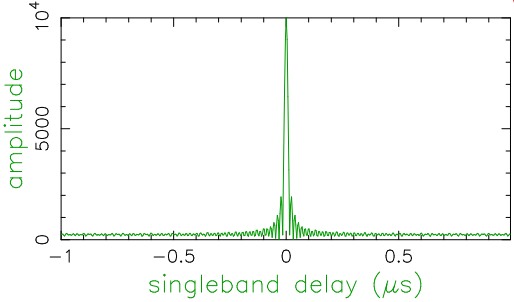
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08  
Phase delay (usec) 5.56405774649E-22 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 5.56406E-22 +/- 1.0E-11  
Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14  
Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 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. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
o: az 108.1 el 25.3 pa -49.2 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



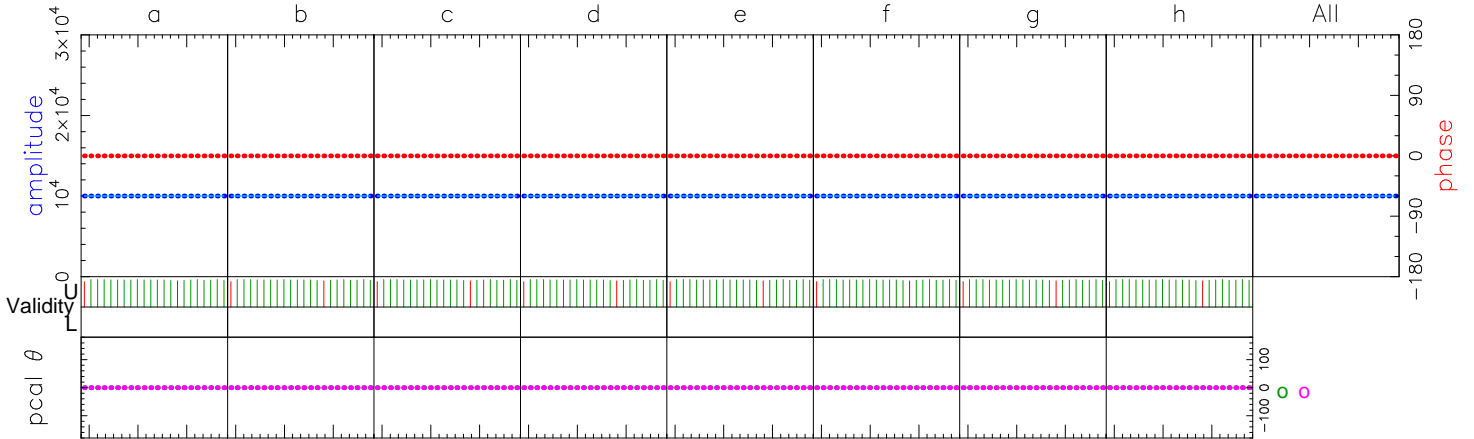
Fringe quality 9

SNR 363429.1  
Int time 176.622  
Amp 10000.001  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154318  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



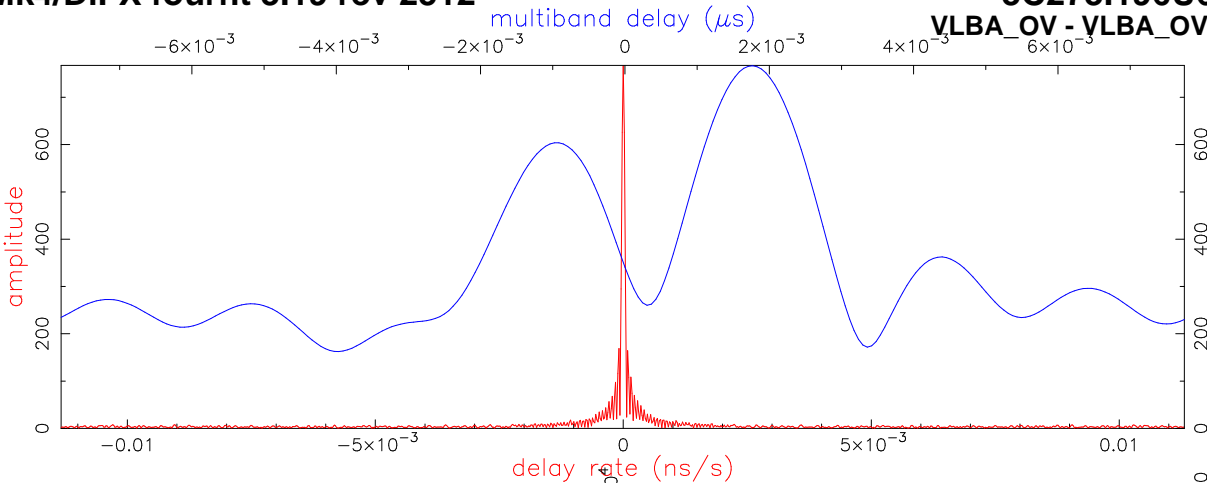
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08  
 Phase delay (usec) 3.86710084009E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.86710E-19 +/- 1.0E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.8E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.002 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.002 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

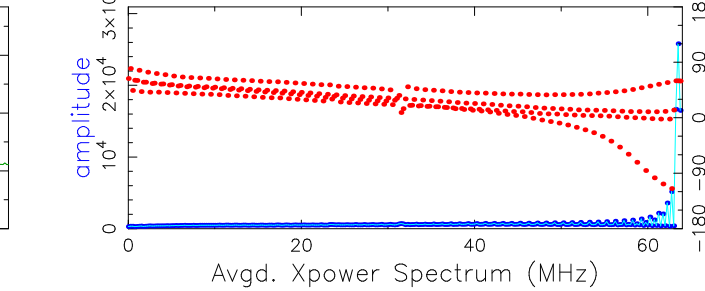
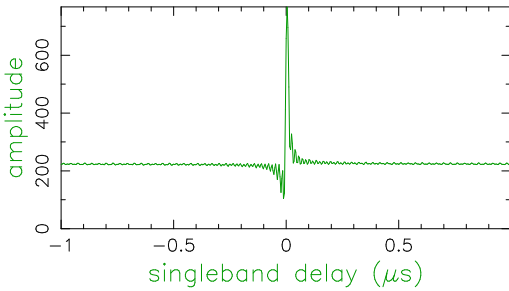
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, oo  
VLBA\_OV - VLBA\_OV, fgroup W, pol LR



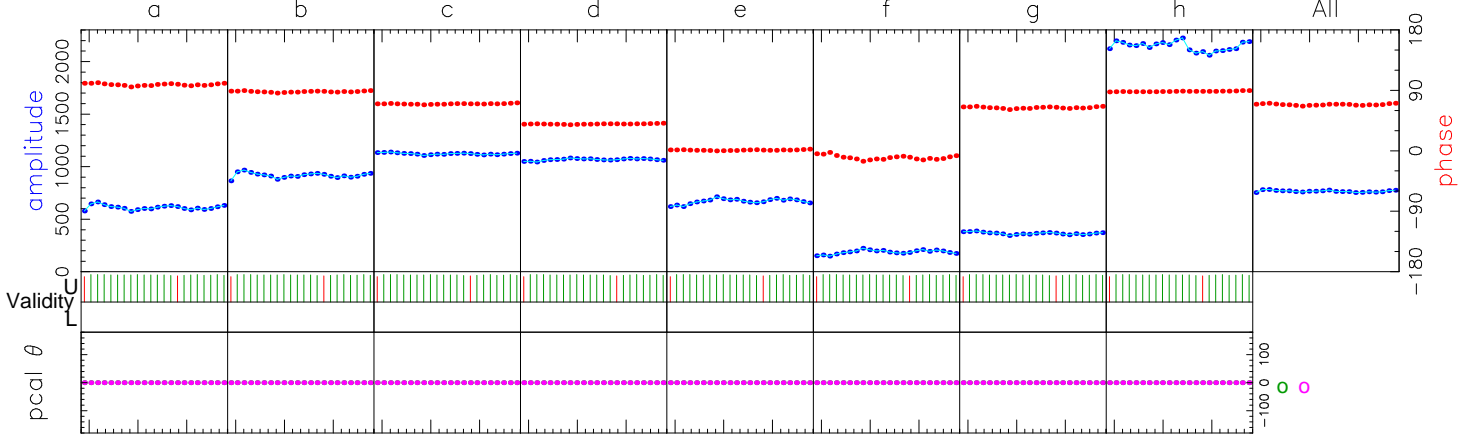
Fringe quality 5

SNR 27893.4  
Int time 176.621  
Amp 767.506  
Phase 68.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.004304  
MBD 0.001745  
Fringe rate (Hz)  
-0.000032  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154320  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



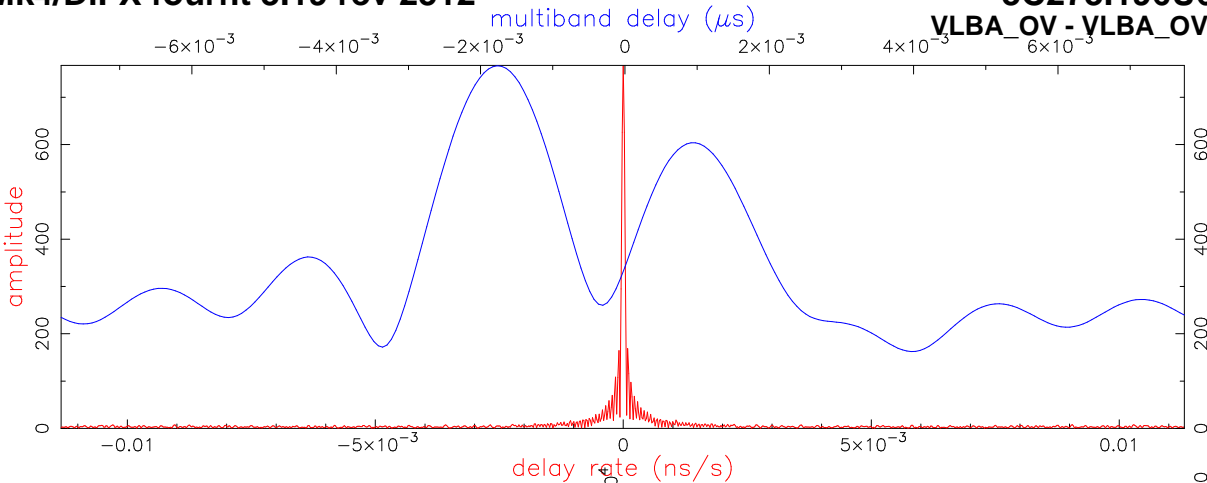
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.74537500000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.74537E-03	+/-	3.9E-08
Sband delay (usec)	4.30350000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	4.30350E-03	+/-	3.1E-07
Phase delay (usec)	2.21686052555E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.21686E-06	+/-	1.3E-10
Delay rate (us/s)	-3.74118423140E-10	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-3.74118E-10	+/-	1.3E-12
Total phase (deg)	68.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	68.7	+/-	0.0

ph/seg (deg)	1.1	RMS	767.506 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	1.1	Theor.	751.488	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.1	Search (1024X32)	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	75.3	Inc. seg. avg.	766.691	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	886.444	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

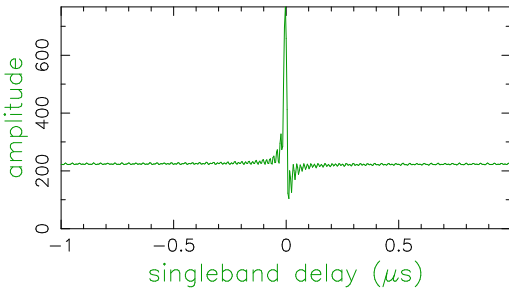
o: az 108.1 el 25.3 pa -49.2    o: az 108.1 el 25.3 pa -49.2    u,v (fr/asec) 0.000 0.000    simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201e/v1/1234/No0056/oo..196U6Z    Output file: /Exps/c201e/v1/1234/No0056/oo.W.199.196U6Z

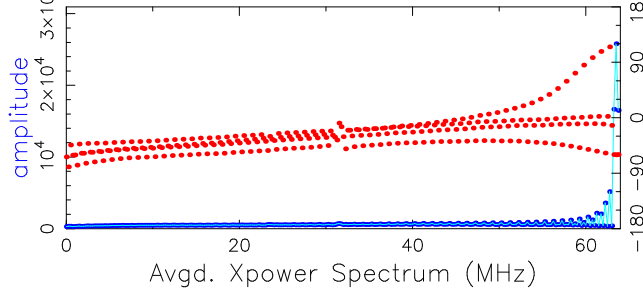


Fringe quality 5

SNR 27893.3  
Int time 176.622  
Amp 767.505  
Phase -68.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.004304  
MBD -0.001745  
Fringe rate (Hz)  
0.000032  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

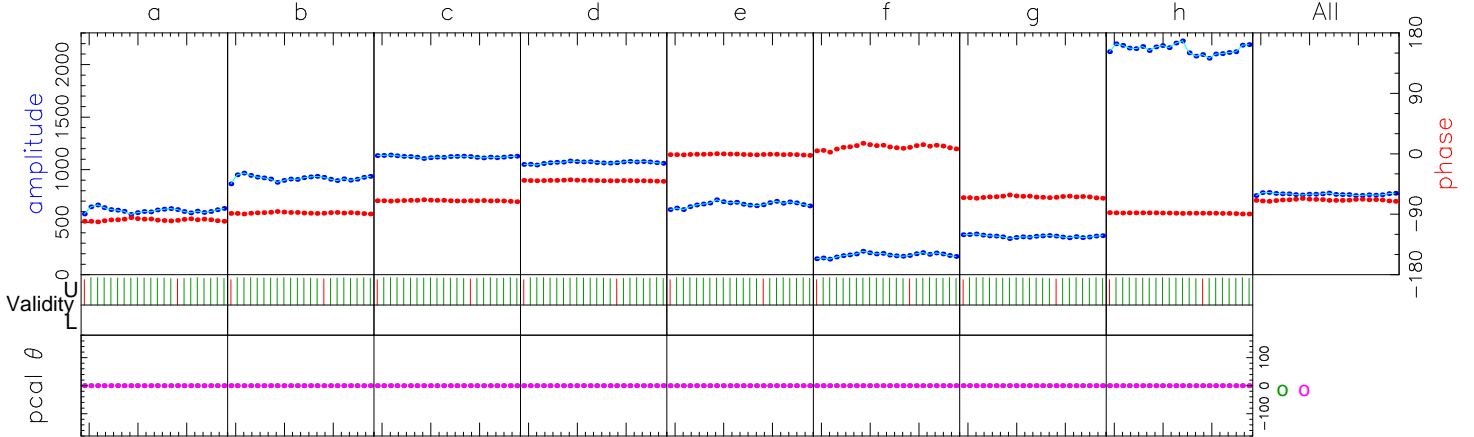


delay rate (ns/s)



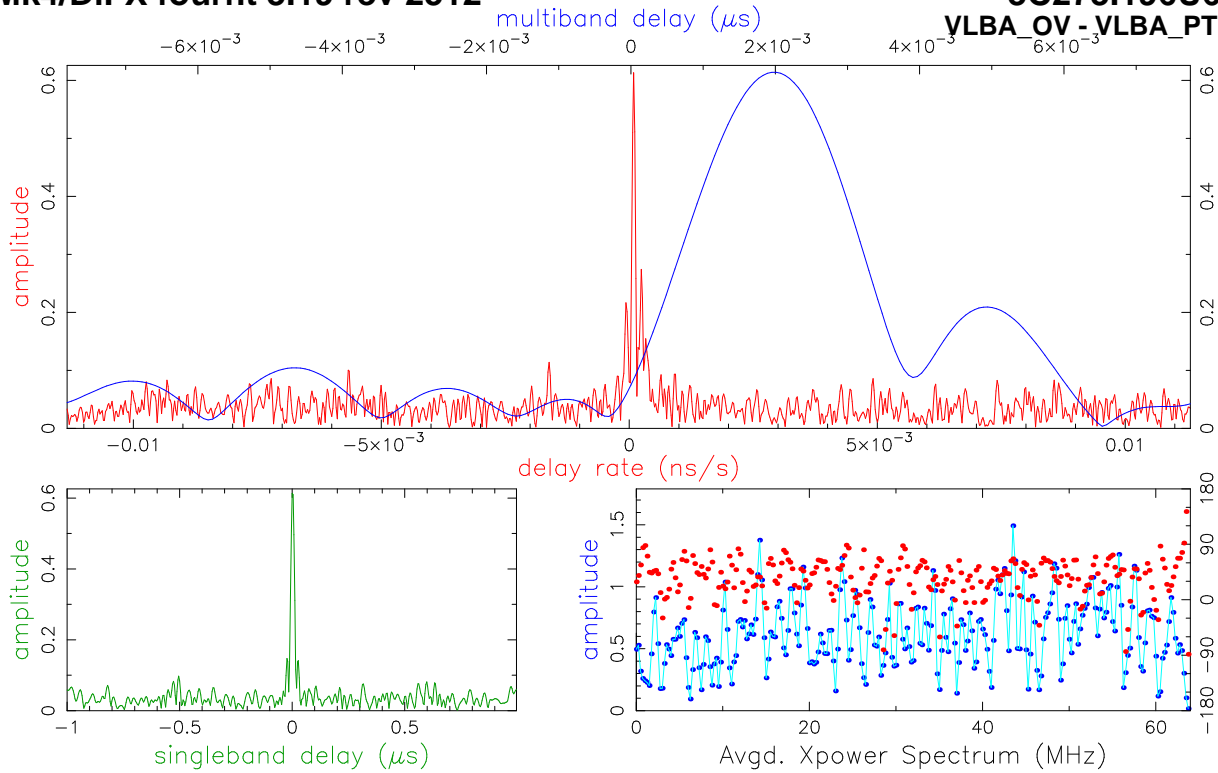
Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154322  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-98.5	-88.0	-69.8	-39.9	-1.0	10.3	-64.2	-88.4	Phase	-68.7
	611.9	918.1	1123.1	1067.8	670.4	187.4	366.0	2146.7	Ampl.	886.4
	256.4	257.1	256.9	257.0	256.9	255.7	256.6	255.7	Sbd box	255.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	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)	-1.74537500000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.74537E-03	+/- 3.9E-08
Sband delay (usec)	-4.30350000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-4.30350E-03	+/- 3.1E-07
Phase delay (usec)	-2.21686052546E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.21686E-06	+/- 1.3E-10
Delay rate (us/s)	3.74118423140E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		3.74118E-10	+/- 1.3E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-68.7	+/- 0.0

ph/seg (deg) 1.1 0.0 Theor. Amplitude 767.505 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 1.1 0.0 Search (1024X32) 751.486 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 47.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 75.3 0.0 Inc. seg. avg. 766.689 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
o: az 108.1 el 25.3 pa -49.2 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 0.000 0.000 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/oo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/oo.W.210.196U6Z simultaneous interpolator

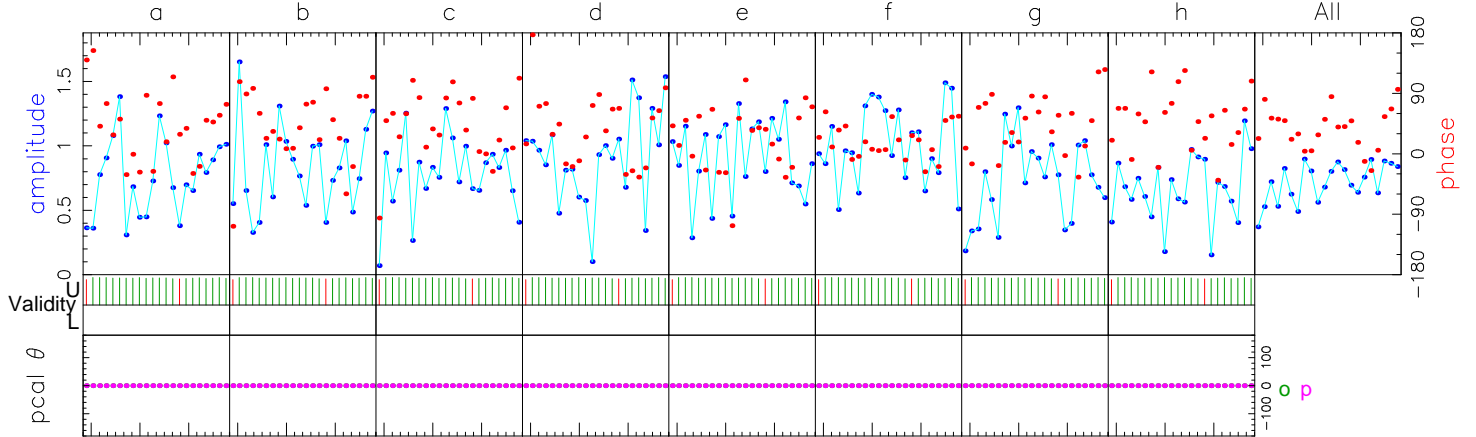


Fringe quality 9

SNR 22.7  
Int time 176.137  
Amp 0.626  
Phase 37.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.001813  
MBD 0.002043  
Fringe rate (Hz) 0.008094  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154314  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



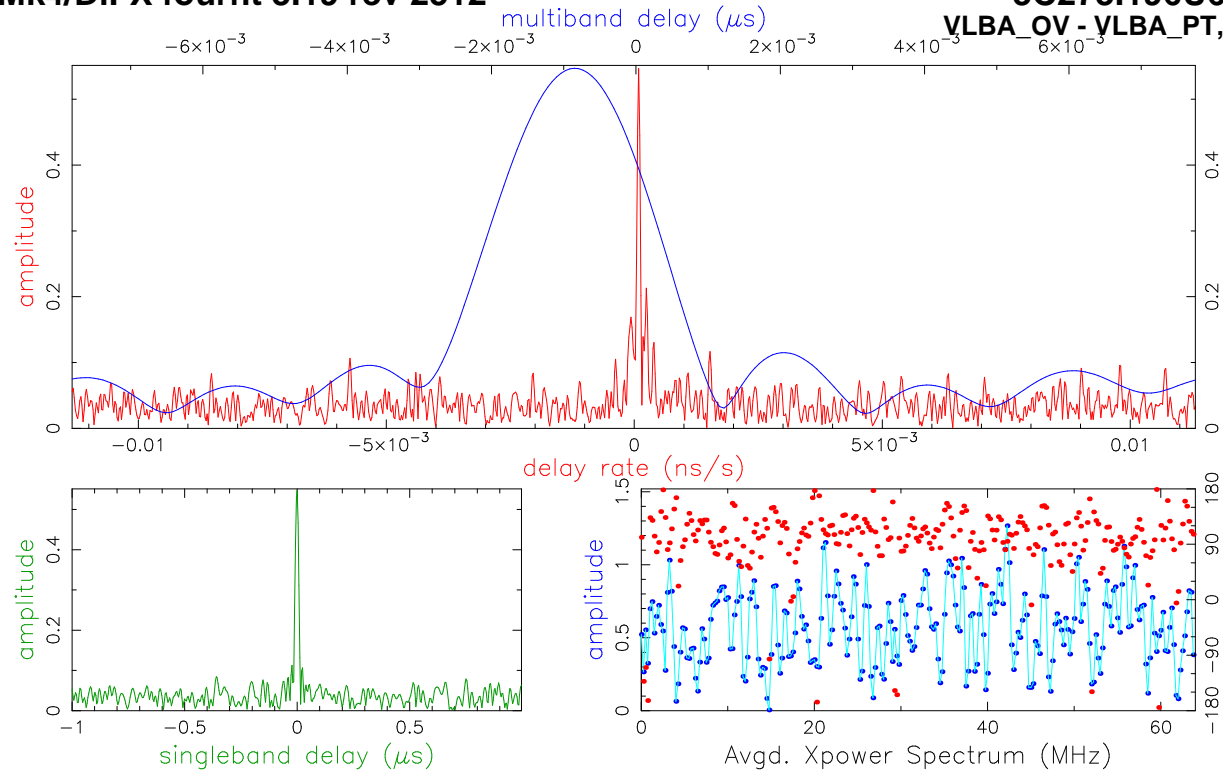
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.80067194329E+03								2.04276E-03	+/- 4.8E-05
Sband delay (usec)	-2.80067217305E+03								1.81300E-03	+/- 3.8E-04
Phase delay (usec)	-2.80067398485E+03								1.20208E-06	+/- 1.6E-07
Delay rate (us/s)	9.58377478107E-02								9.39590E-08	+/- 1.6E-09
Total phase (deg)			-19.7						37.3	+/- 5.0
				Apriori delay (usec)	-2.80067398605E+03				Resid mbdelay (usec)	
				Apriori clock (usec)	2.8081360E+09				Resid sbdelay (usec)	
				Apriori clockrate (us/s)	-2.9999874E-09				Resid phdelay (usec)	
				Apriori rate (us/s)	9.58376538517E-02				Resid rate (us/s)	
				Apriori accel (us/s/s)	1.50652391225E-05				Resid phase (deg)	
ph/seg (deg)	30.4	11.8		Search (1024X32)	0.606				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	27.6	20.6		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	13.2	7.1		Inc. seg. avg.	0.702				Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	19.9	12.5		Inc. frq. avg.	0.622				Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
									Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
									nlags: 256	t_cohere infinite
										ion window (TEC) 0.00 0.00

o: az 108.1 el 25.3 pa -49.2 p: az 114.2 el 34.0 pa -48.8 u,v (fr/asec) -531.832 407.007 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/op..196U6Z Output file: /Exps/c201e/v1/1234/No0056/op.W.162.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, op VLBA\_OV - VLBA\_PT, fgroup W, pol RR

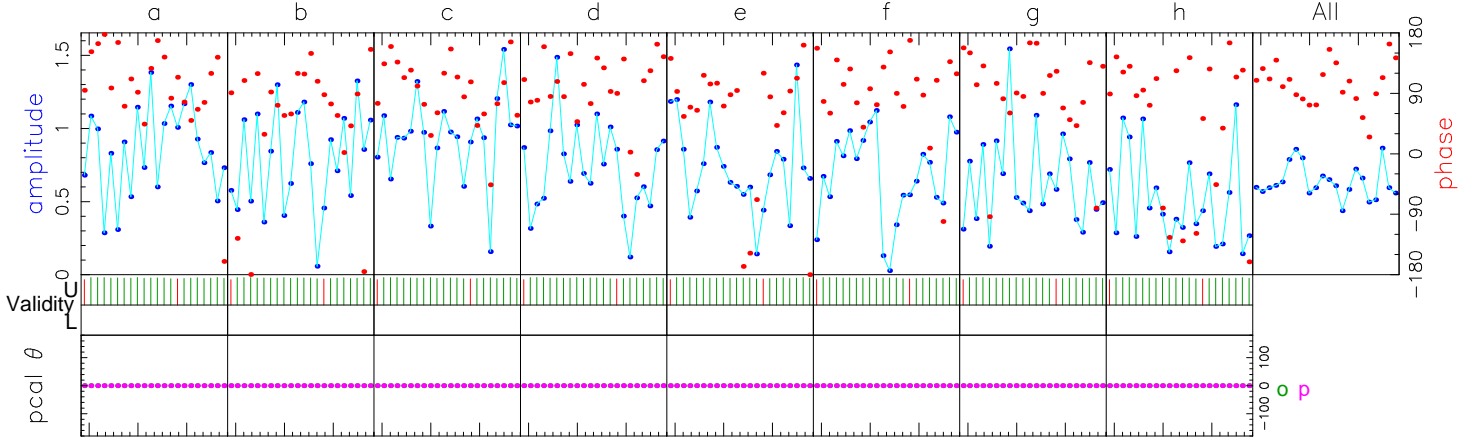


Fringe quality 9

SNR 20.0  
 Int time 176.137  
 Amp 0.551  
 Phase 104.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001153  
 MBD -0.000884  
 Fringe rate (Hz) 0.008340  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020150.00  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154319  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



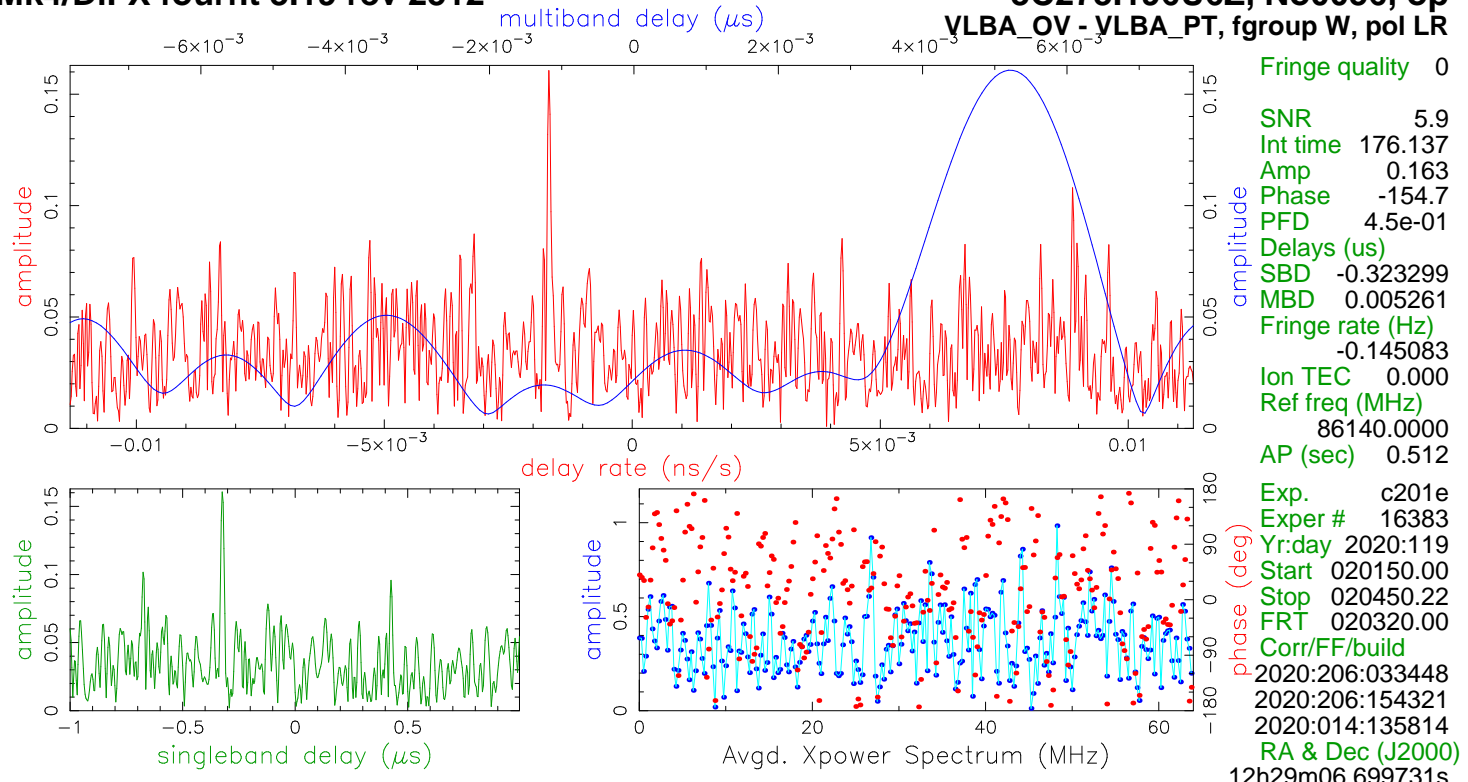
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.80067486960E+03									
Sband delay (usec)	-2.80067513880E+03									
Phase delay (usec)	-2.80067398267E+03									
Delay rate (us/s)	9.58377506718E-02									
Total phase (deg)			47.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal $\theta$										
o										
p										
Chan ids										
Tracks										
Chan ids										
Tracks										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.551 +/- 0.028										
0.532										
0.000										
0.618										
0.544										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										

o: az 108.1 el 25.3 pa -49.2 p: az 114.2 el 34.0 pa -48.8 u,v (fr/asec) -531.832 407.007 simultaneous interpolator

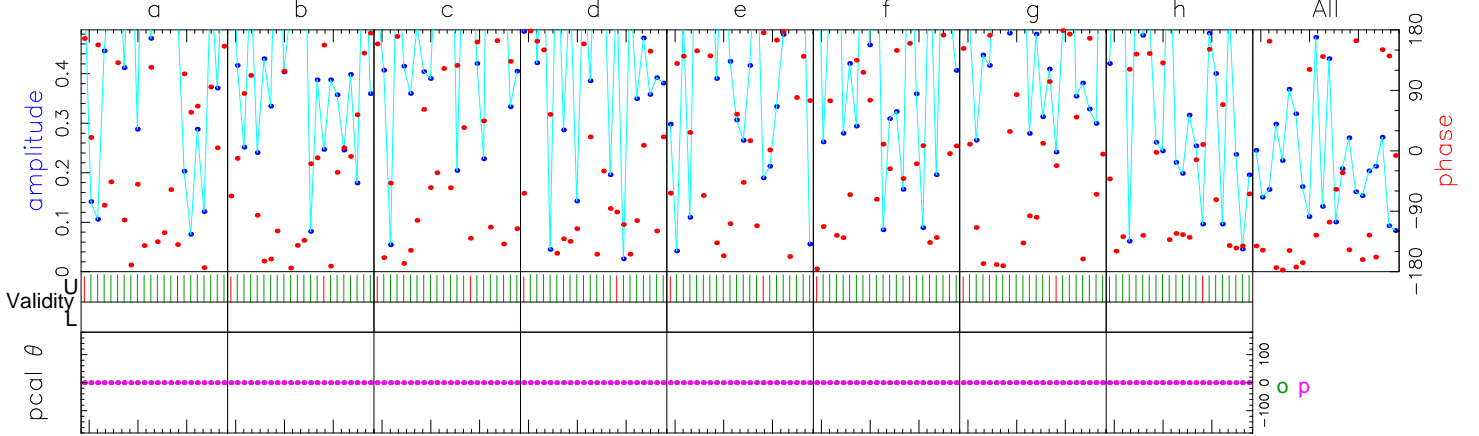
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/op..196U6Z Output file: /Exps/c201e/v1/1234/No0056/op.W.193.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, op  
VLBA\_OV - VLBA\_PT, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

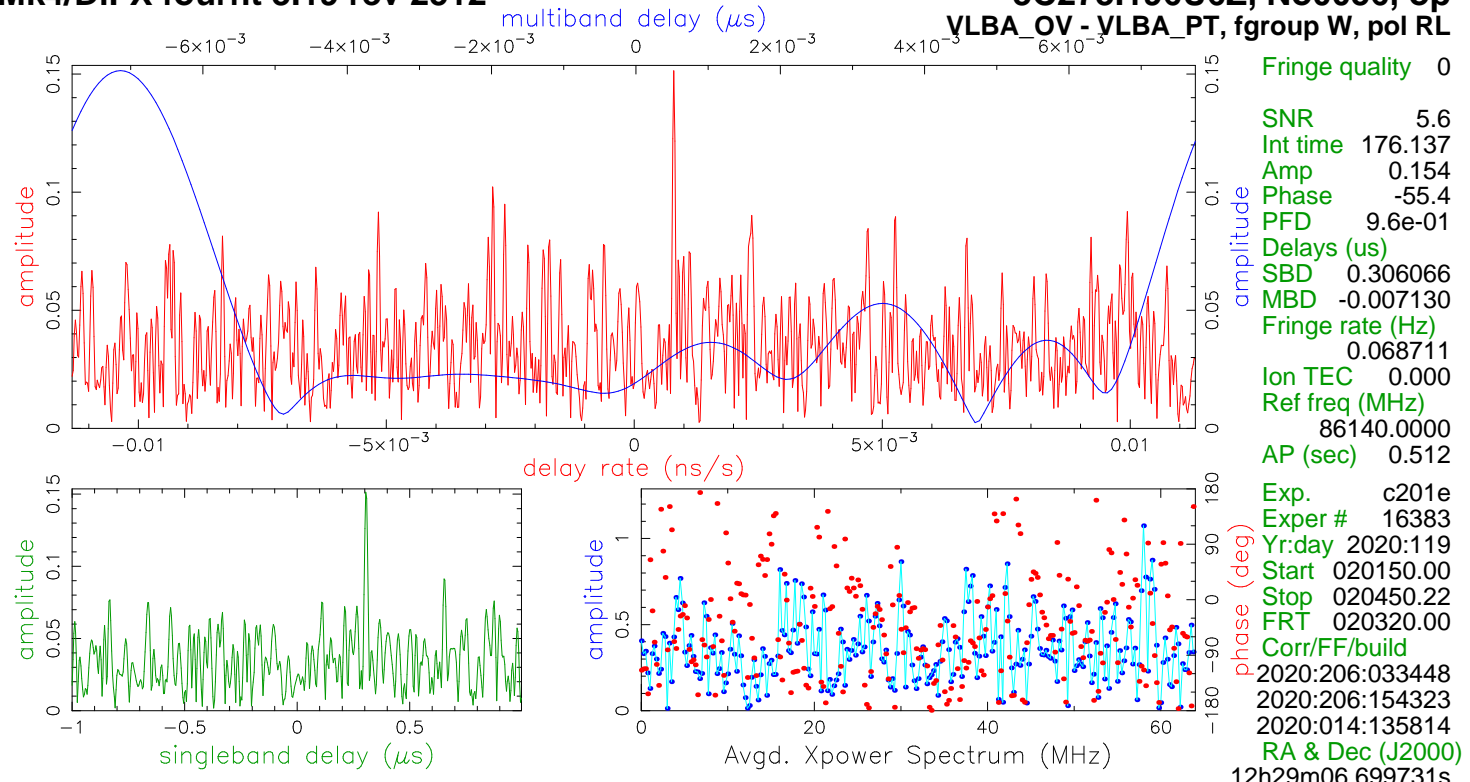


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-153.5	-146.8	-148.1	-144.2	179.0	-153.2	-179.4	-141.4	Phase	-154.7
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	459.2	83.6	421.7	219.7	365.6	291.0	279.8	40.2	Sbd box	174.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.80099684966E+03		Apriori delay (usec)		-2.80067398605E+03		Resid mbdelay (usec)		5.26138E-03	+/- 1.9E-04
Sband delay (usec)	-2.80099728555E+03		Apriori clock (usec)		2.8081360E+00		Resid sbdelay (usec)		-3.23299E-01	+/- 1.5E-03
Phase delay (usec)	-2.80067399104E+03		Apriori clockrate (us/s)		-2.9999874E-09		Resid phdelay (usec)		-4.98943E-06	+/- 6.3E-07
Delay rate (us/s)	9.58359695819E-02		Apriori rate (us/s)		9.58376538517E-02		Resid rate (us/s)		-1.68427E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		1.50652391225E-05		Resid phase (deg)		-154.7	+/- 19.6

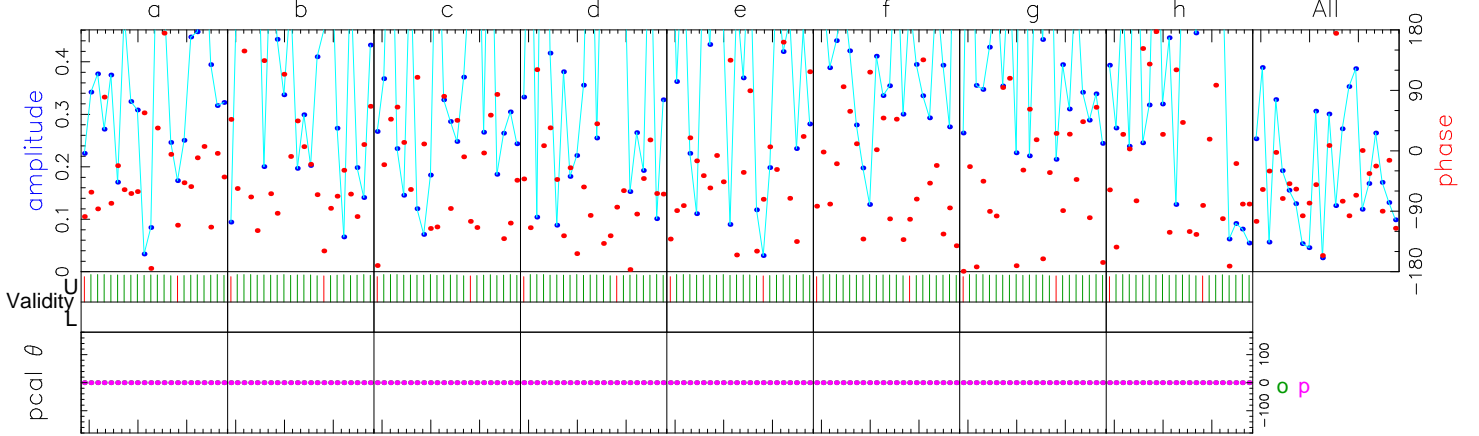
	RMS	Theor.	Amplitude	0.163 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.9	45.9	Search (1024X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	74.2	80.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	16.8	27.7	Inc. seg. avg.	0.168	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	20.9	48.3	Inc. frq. avg.	0.150	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

o: az 108.1 el 25.3 pa -49.2 p: az 114.2 el 34.0 pa -48.8 u,v (fr/asec) -531.832 407.007 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/op..196U6Z Output file: /Exps/c201e/v1/1234/No0056/op.W.205.196U6Z



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-42.5	-68.6	-41.0	-70.2	-55.2	-51.5	-32.2	-82.5	Phase	-55.4
	0.2	0.2	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	355.4	170.8	77.1	367.5	385.5	60.4	172.3	286.6	Sbd box	335.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

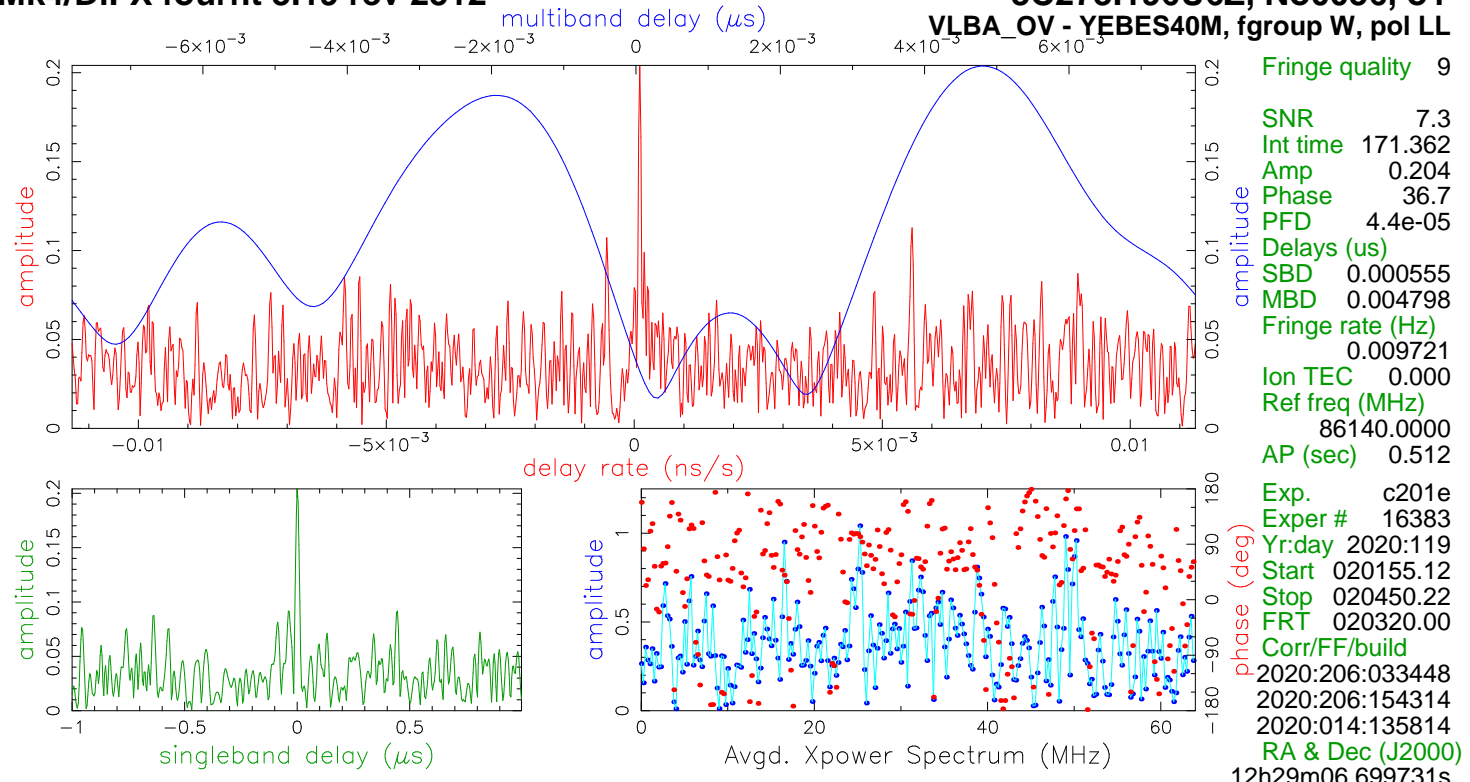
Group delay (usec)(sbd)	-2.80036861589E+03	Apriori delay (usec)	-2.80067398605E+03	Resid mbdelay (usec)	-7.12984E-03	+/-	1.9E-04
Sband delay (usec)	-2.80036792005E+03	Apriori clock (usec)	2.8081360E+00	Resid sbdelay (usec)	3.06066E-01	+/-	1.5E-03
Phase delay (usec)	-2.80067398783E+03	Apriori clockrate (us/s)	-2.9999874E-09	Resid phdelay (usec)	-1.78587E-06	+/-	6.6E-07
Delay rate (us/s)	9.58384515175E-02	Apriori rate (us/s)	9.58376538517E-02	Resid rate (us/s)	7.97666E-07	+/-	6.4E-09
Total phase (deg)	-112.3	Apriori accel (us/s/s)	1.50652391225E-05	Resid phase (deg)	-55.4	+/-	20.6

ph/seg (deg)	RMS 49.0	Theor. 48.3	Amplitude Search (1024X32)	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.2	84.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	18.5	29.1	Inc. seg. avg.	0.145	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.0	50.8	Inc. frq. avg.	0.139	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

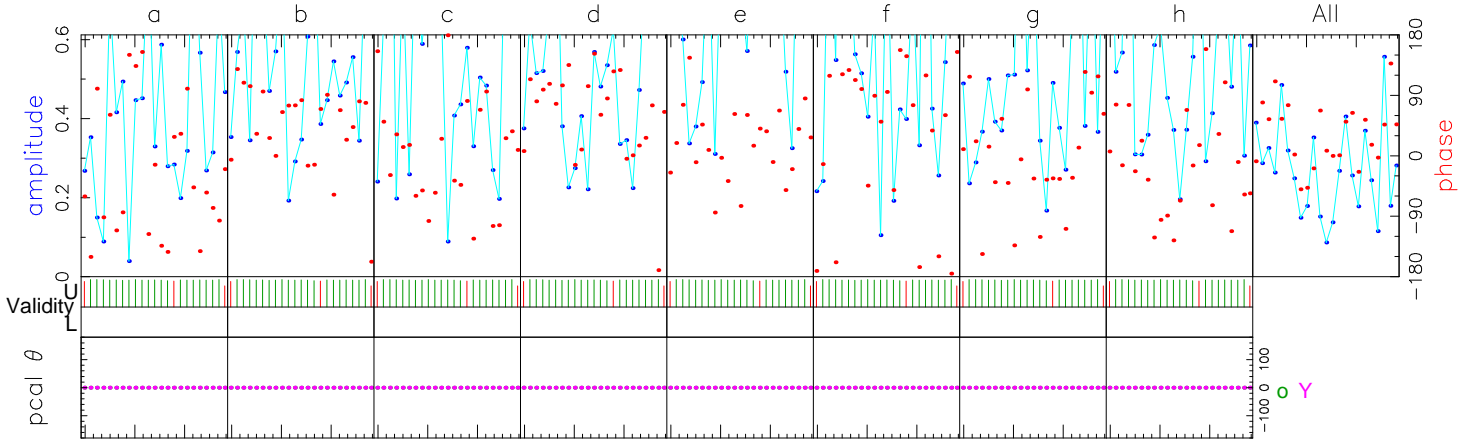
o: az 108.1 el 25.3 pa -49.2      p: az 114.2 el 34.0 pa -48.8      u,v (fr/asec) -531.832 407.007      simultaneous interpolator

Control file: cf\_1234\_gmva    Input file: /Exps/c201e/v1/1234/No0056/op..196U6Z    Output file: /Exps/c201e/v1/1234/No0056/op.W.216.196U6Z





Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



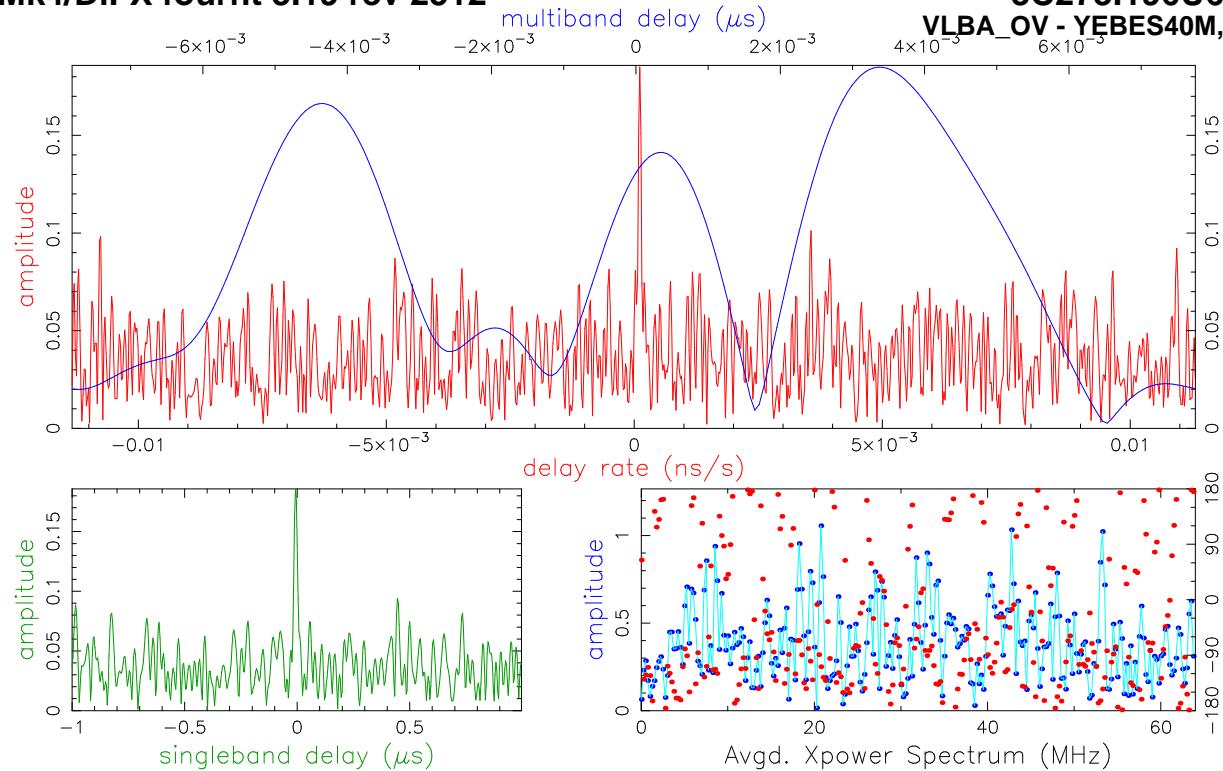
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.4	55.5	-8.2	81.8	18.1	121.4	6.1	-3.6		Phase
	0.1	0.3	0.3	0.3	0.5	0.4	0.2	0.2		Ampl.
	11.0	257.7	257.2	258.1	257.4	257.2	458.3	257.3		Sbd box
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0		APs used
o	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Y	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
o	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-4.32468097467E+01	Apriori delay (usec)	-4.32516077719E+01	Resid mbdelay (usec)	4.79803E-03	+/-	1.5E-04
Sband delay (usec)	-4.32510525219E+01	Apriori clock (usec)	8.1255245E+00	Resid sbdelay (usec)	5.55250E-04	+/-	1.2E-03
Phase delay (usec)	-4.32516065873E+01	Apriori clockrate (us/s)	-1.8999993E-08	Resid phdelay (usec)	1.18458E-06	+/-	5.1E-07
Delay rate (us/s)	2.04060570421E+00	Apriori rate (us/s)	2.04060559135E+00	Resid rate (us/s)	1.12853E-07	+/-	5.0E-09
Total phase (deg)	-140.9	Apriori accel (us/s/s)	1.02586130025E-07	Resid phase (deg)	36.7	+/-	15.7

ph/seg (deg)	47.9	Theor.	37.6	Amplitude	0.204 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	65.9	Search (1024X32)	0.203	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	73.0	Inc. seg. avg.	0.222	Inc. frq. avg.	0.301	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	81.5	Inc. frq. avg.	0.301			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

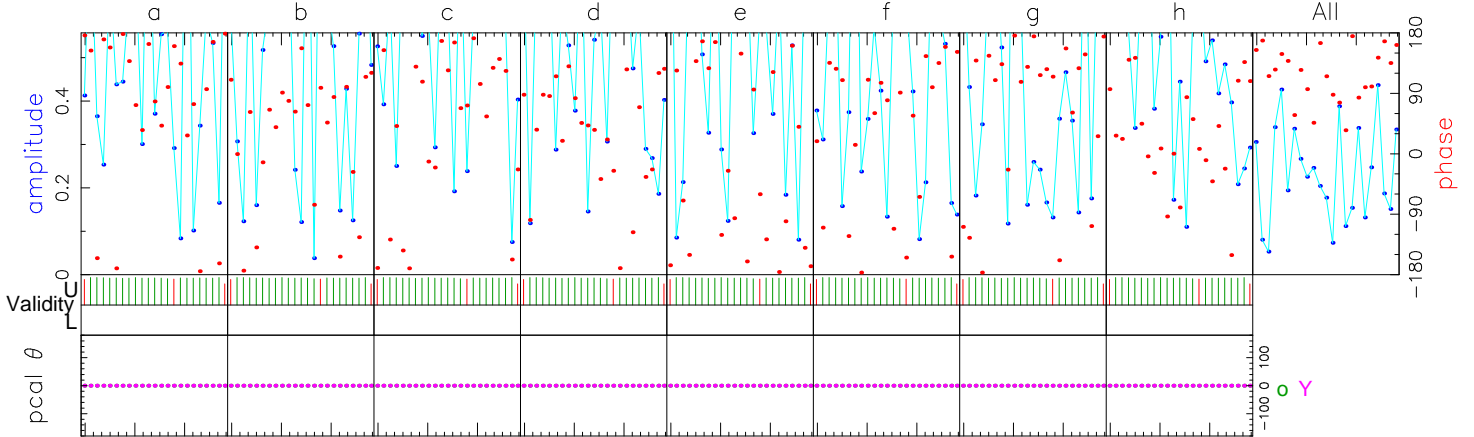
o: az 108.1 el 25.3 pa -49.2 Y: az 247.7 el 26.6 pa 44.8 u,v (fr/asec) -11692.548 -387.104 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/oY..196U6Z Output file: /Exps/c201e/v1/1234/No0056/oY.W.160.196U6Z



Fringe quality 0  
 SNR 6.7  
 Int time 171.361  
 Amp 0.186  
 Phase 119.4  
 PFD 4.1e-03  
 Delays (us)  
 SBD -0.006925  
 MBD 0.003374  
 Fringe rate (Hz)  
 0.009974  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020155.12  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154316  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



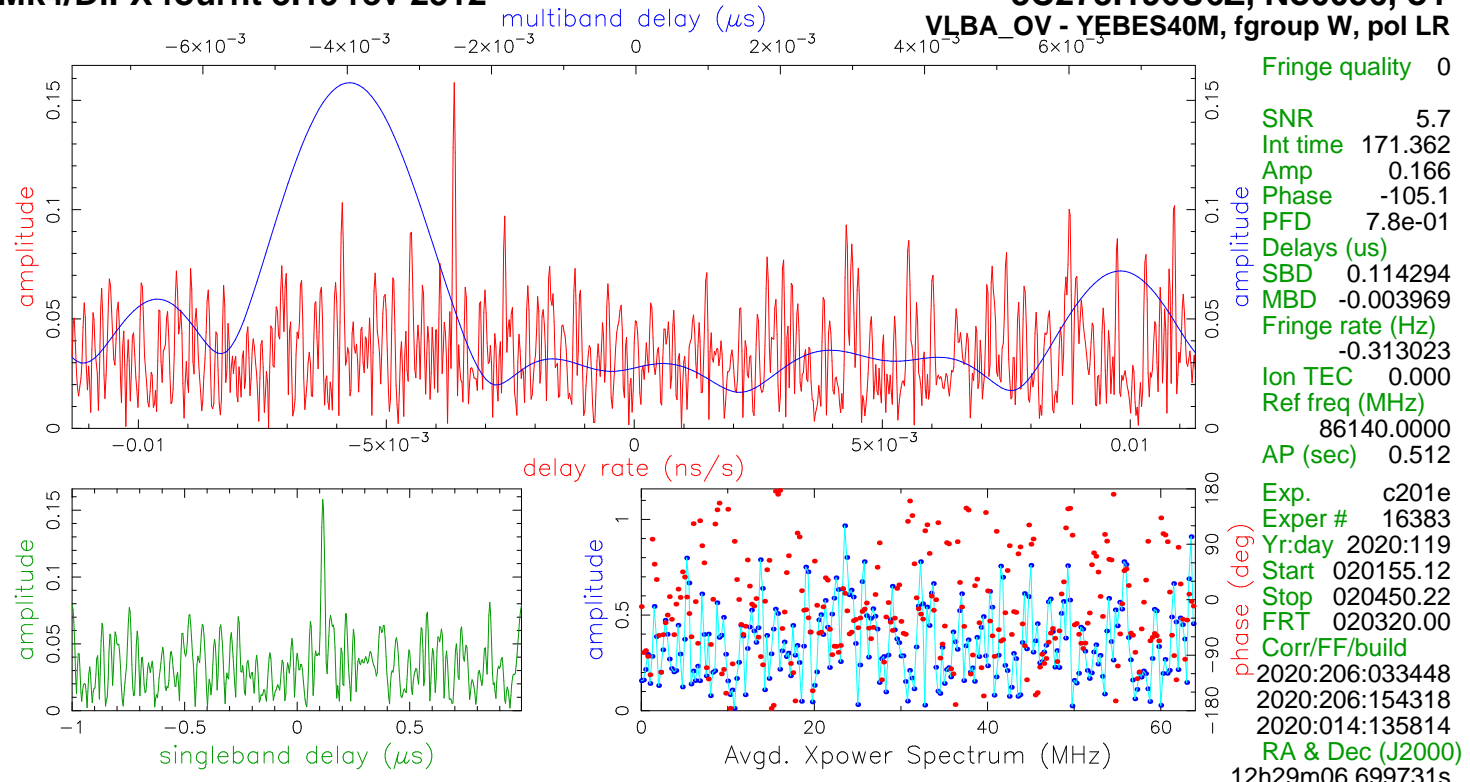
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0			
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
Y	1000	1000	1000	1000	1000	1000	1000	1000			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec)(sbd)	-4.32638591217E+01				-4.32516077719E+01				3.37365E-03	+/- 1.6E-04	
Sband delay (usec)	-4.32585332719E+01				8.1255245E+00				-6.92550E-03	+/- 1.3E-03	
Phase delay (usec)	-4.32516039232E+01				-1.8999993E-08				3.84873E-06	+/- 5.6E-07	
Delay rate (us/s)	2.04060570714E+00				2.04060559135E+00				1.15787E-07	+/- 5.5E-09	
Total phase (deg)			-58.3		1.02586130025E-07				119.4	+/- 17.2	
	RMS	Theor.	Amplitude	0.186 +/- 0.028	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	39.8	41.3	Search (1024X32)	0.182	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	64.8	72.1	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	60.4	24.4	Inc. seg. avg.	0.186	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	58.4	42.5	Inc. frq. avg.	0.257	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

o: az 108.1 el 25.3 pa -49.2 Y: az 247.7 el 26.6 pa 44.8 u,v (fr/asec) -11692.548 -387.104 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/oY..196U6Z Output file: /Exps/c201e/v1/1234/No0056/oY.W.173.196U6Z

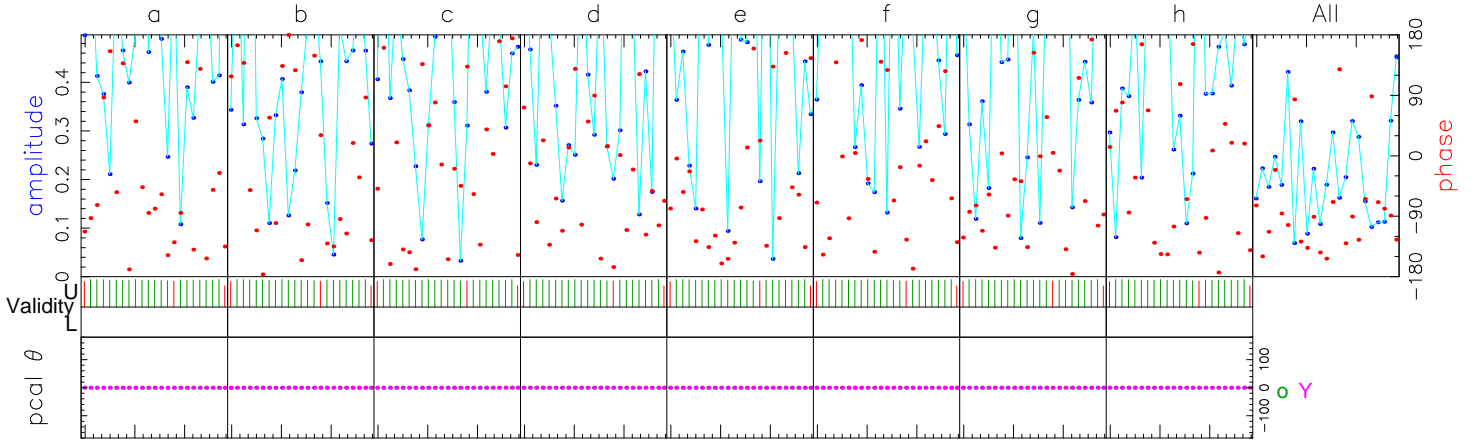
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, oY

VLBA\_OV - YEBES40M, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 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
	-101.6	-125.9	-149.6	-73.9	-112.2	-94.0	-93.3	-129.0	Phase	-105.1
	0.2	0.1	0.1	0.2	0.3	0.2	0.2	0.1	Ampl.	0.2
	498.6	47.5	353.0	455.6	286.1	458.4	498.5	466.4	Sbd box	286.3
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
Y	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-4.31305762907E+01		Apriori delay (usec)		-4.32516077719E+01		Resid mbdelay (usec)		-3.96852E-03	+/- 1.9E-04
Sband delay (usec)	-4.31373142719E+01		Apriori clock (usec)		8.1255245E+00		Resid sbdelay (usec)		1.14294E-01	+/- 1.5E-03
Phase delay (usec)	-4.32516111598E+01		Apriori clockrate (us/s)		-1.8999993E-08		Resid phdelay (usec)		-3.38794E-06	+/- 6.5E-07
Delay rate (us/s)	2.04060195746E+00		Apriori rate (us/s)		2.04060559135E+00		Resid rate (us/s)		-3.63389E-06	+/- 6.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.02586130025E-07		Resid phase (deg)		-105.1	+/- 20.1

	RMS	Theor.	Amplitude	0.166 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	64.7	48.3	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	71.5	84.2	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.7	28.5	Inc. seg. avg.	0.164	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	40.5	49.7	Inc. frq. avg.	0.155					

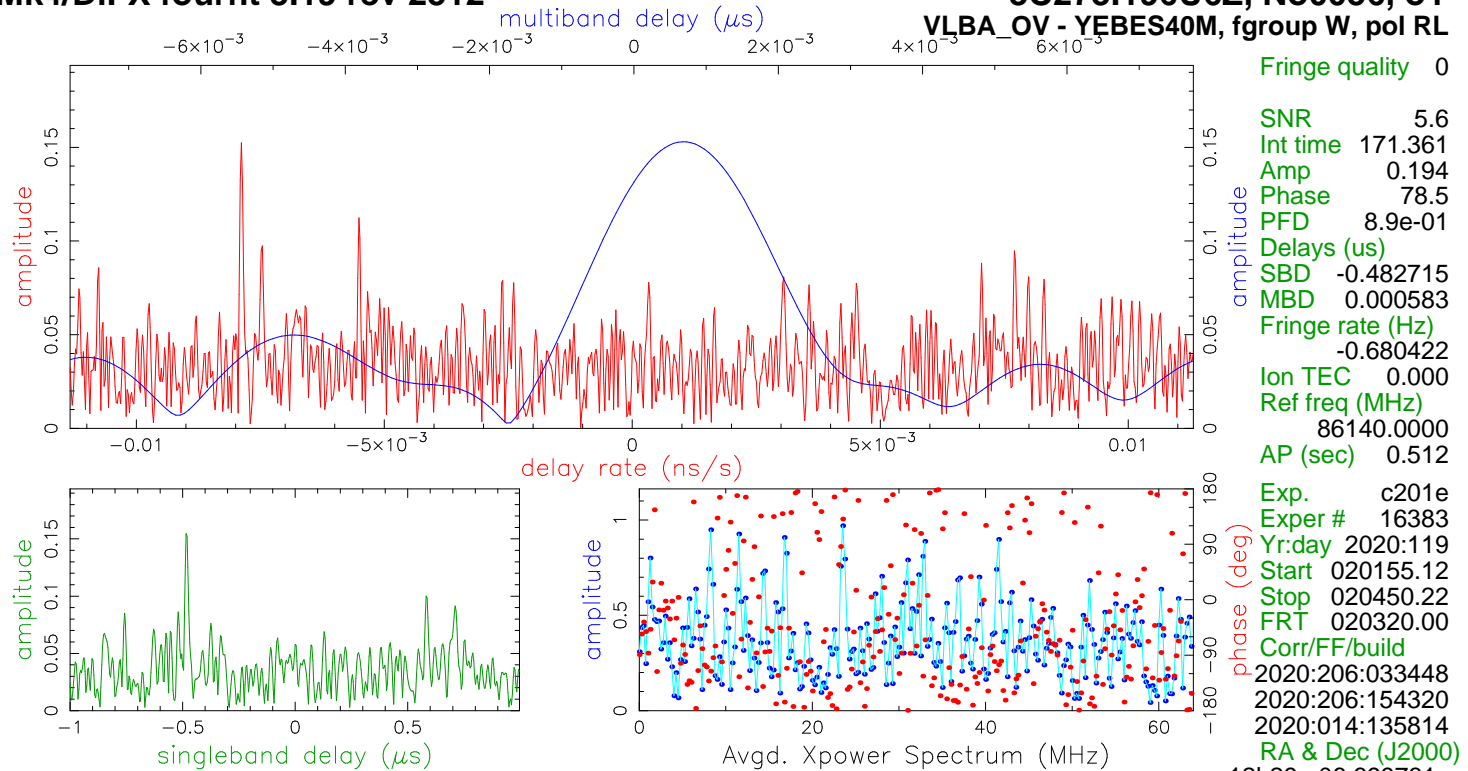
o: az 108.1 el 25.3 pa -49.2 Y: az 247.7 el 26.6 pa 44.8 u,v (fr/asec) -11692.548 -387.104 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/oY..196U6Z Output file: /Exps/c201e/v1/1234/No0056/oY.W.185.196U6Z

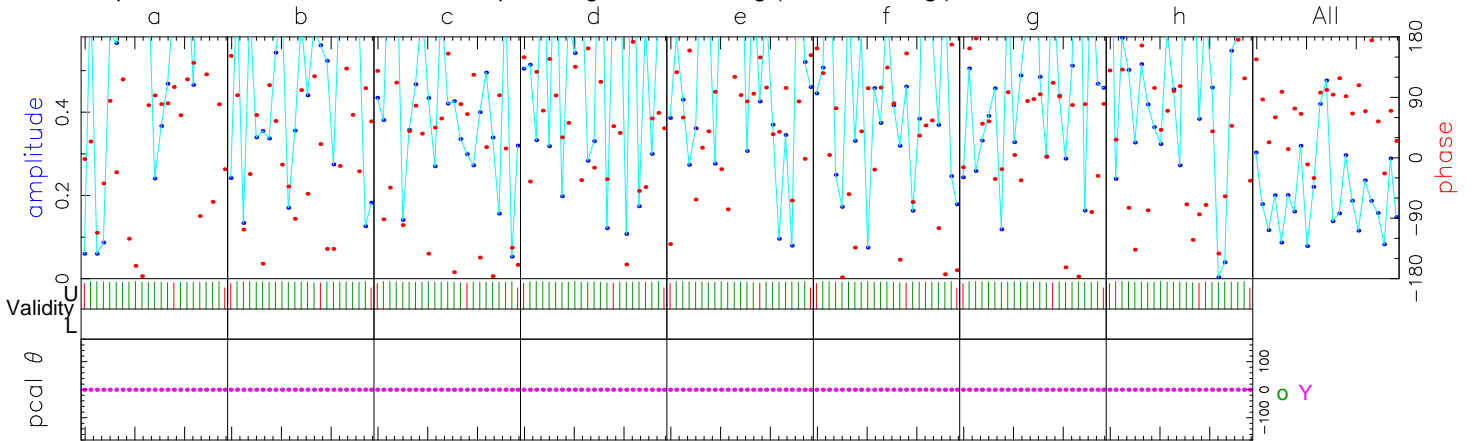
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, oY

VLBA\_OV - YEBES40M, fgroup W, pol RL



Amp. and Phase vs. time for each freq., 23 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec

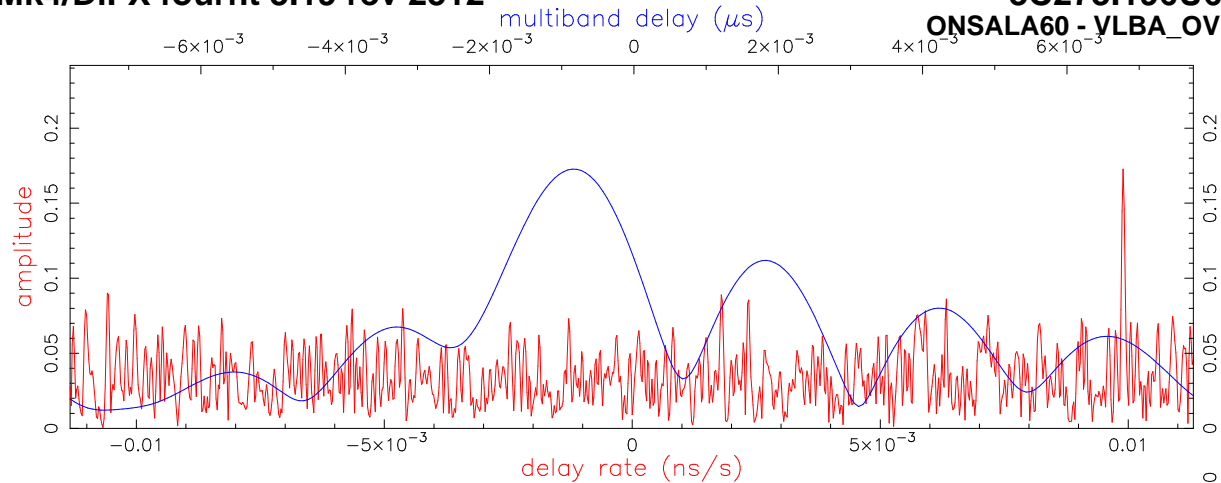


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.9	45.9	78.7	72.5	77.4	83.9	83.5	146.2	Phase	78.5
	0.2	0.2	0.1	0.3	0.3	0.1	0.2	0.0	Ampl.	0.2
	414.0	313.9	254.8	7.1	40.9	168.2	508.4	389.7	Sbd box	133.4
U/L	342/0	342/0	342/0	342/0	342/0	342/0	342/0	342/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
o	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)	-4.37353997741E+01			Apriori delay (usec)	-4.32516077719E+01			Resid mbdelay (usec)	5.82998E-04	+/- 1.9E-04
Sband delay (usec)	-4.37343230219E+01			Apriori clock (usec)	8.1255245E+00			Resid sbdelay (usec)	-4.82715E-01	+/- 1.5E-03
Phase delay (usec)	-4.32516052412E+01			Apriori clockrate (us/s)	-1.8999993E-08			Resid phdelay (usec)	2.53073E-06	+/- 6.6E-07
Delay rate (us/s)	2.04059769233E+00			Apriori rate (us/s)	2.04060559135E+00			Resid rate (us/s)	-7.89902E-06	+/- 6.5E-09
Total phase (deg)		-99.2		Apriori accel (us/s/s)	1.02586130025E-07			Resid phase (deg)	78.5	+/- 20.3

	RMS	Theor.	Amplitude	0.194 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	50.9	48.8	Search (1024X32)	0.150	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.8	85.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	31.4	28.8	Inc. seg. avg.	0.187	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.9	50.2	Inc. frq. avg.	0.173	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

o: az 108.1 el 25.3 pa -49.2 Y: az 247.7 el 26.6 pa 44.8 u,v (fr/asec) -11692.548 -387.104 simultaneous interpolator

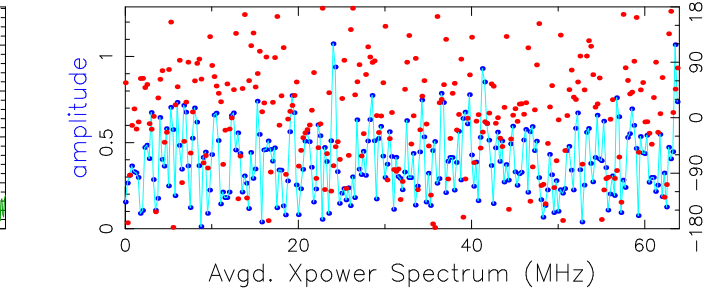
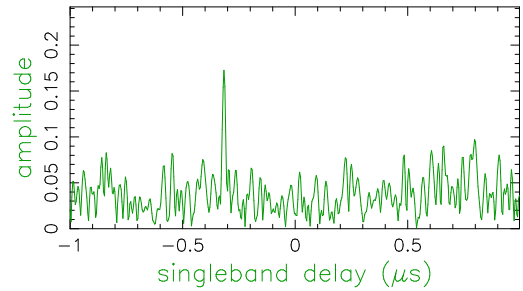
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/oY..196U6Z Output file: /Exps/c201e/v1/1234/No0056/oY.W.197.196U6Z



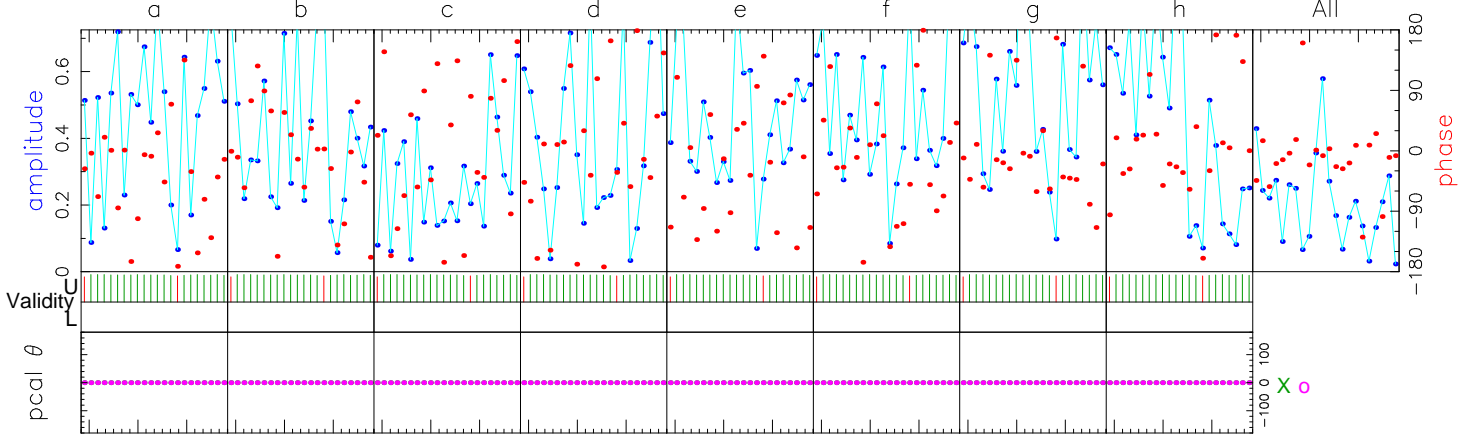
Fringe quality 0

SNR 6.3  
Int time 176.579  
Amp 0.242  
Phase -14.4  
PFD 4.6e-02  
Delays (us)  
SBD -0.316342  
MBD -0.000833  
Fringe rate (Hz) 0.853371  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201e  
Exper # 16383  
Yr:day 2020:119  
Start 020150.00  
Stop 020450.22  
FRT 020320.00  
Corr/FF/build  
2020:206:033448  
2020:206:154317  
2020:014:135814  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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
	-47.8	15.0	101.6	8.1	-34.6	-10.3	-23.9	-11.3		Phase
	0.3	0.3	0.0	0.2	0.2	0.3	0.5	0.4		Ampl.
	107.1	177.1	423.1	83.9	330.5	155.3	175.6	365.1		Sbd box
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		176.0
X	1000	1000	1000	1000	1000	1000	1000	1000		APs used
o	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
X	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-5.07295944745E+03	Apriori delay (usec)	-5.07264611412E+03	Resid mbdelay (usec)	-8.33338E-04	+/-	1.7E-04
Sband delay (usec)	-5.07296245587E+03	Apriori clock (usec)	2.0724241E+01	Resid sbdelay (usec)	-3.16342E-01	+/-	1.4E-03
Phase delay (usec)	-5.07264611458E+03	Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	-4.64020E-07	+/-	5.9E-07
Delay rate (us/s)	-1.84904746811E+00	Apriori rate (us/s)	-1.84905737490E+00	Resid rate (us/s)	9.90679E-06	+/-	5.7E-09
Total phase (deg)	-111.6	Apriori accel (us/s/s)	2.79891493025E-05	Resid phase (deg)	-14.4	+/-	18.3

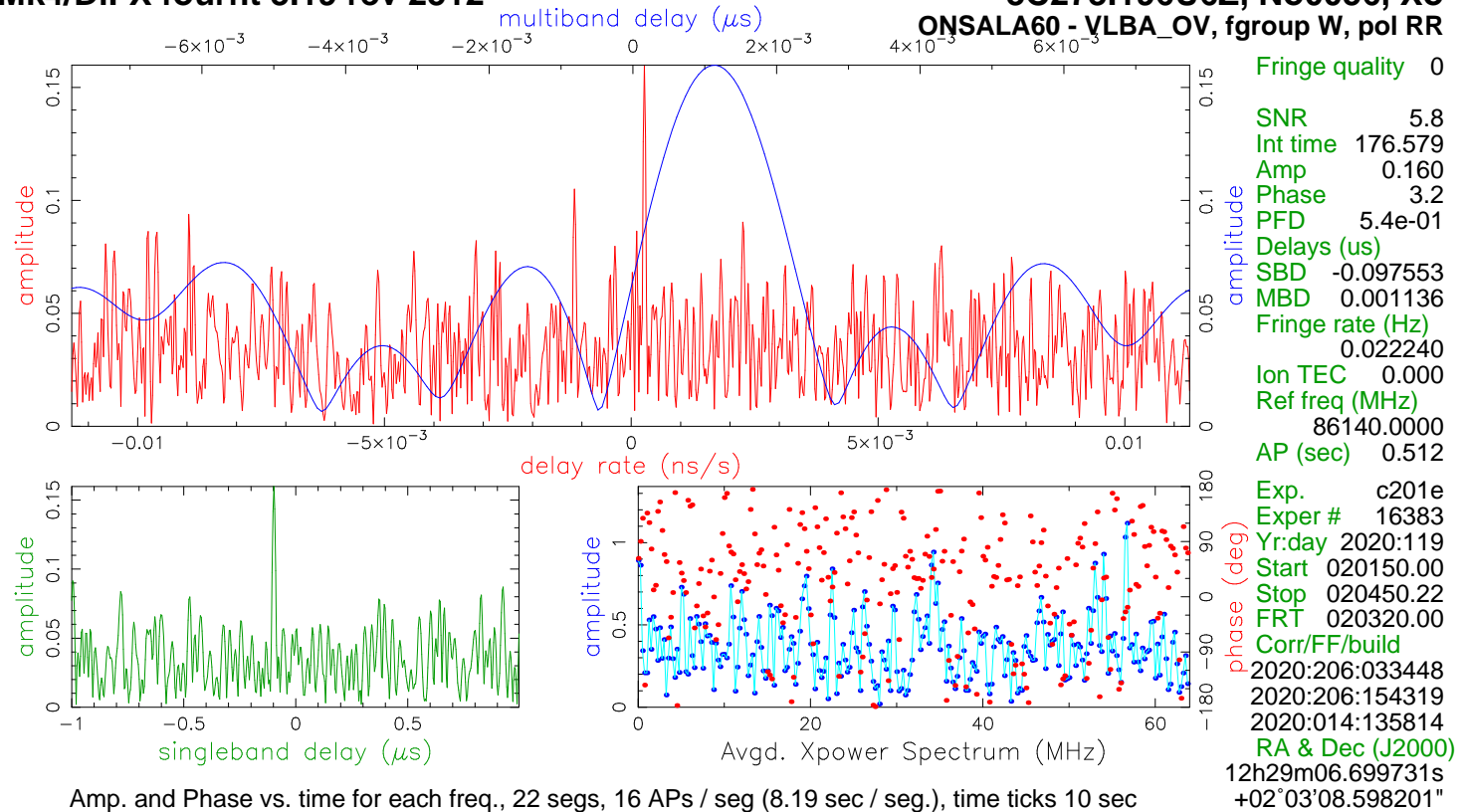
ph/seg (deg)	51.6	Theor.	42.8	Amplitude	0.242 +/- 0.039	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	77.8	Search (1024X32)	0.163	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	52.4	Inc. seg. avg.	0.228	Inc. frq. avg.	0.238	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.3	Inc. frq. avg.	0.238			Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

X: az 254.8 el 11.8 pa 31.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 10627.485 2170.765 simultaneous interpolator

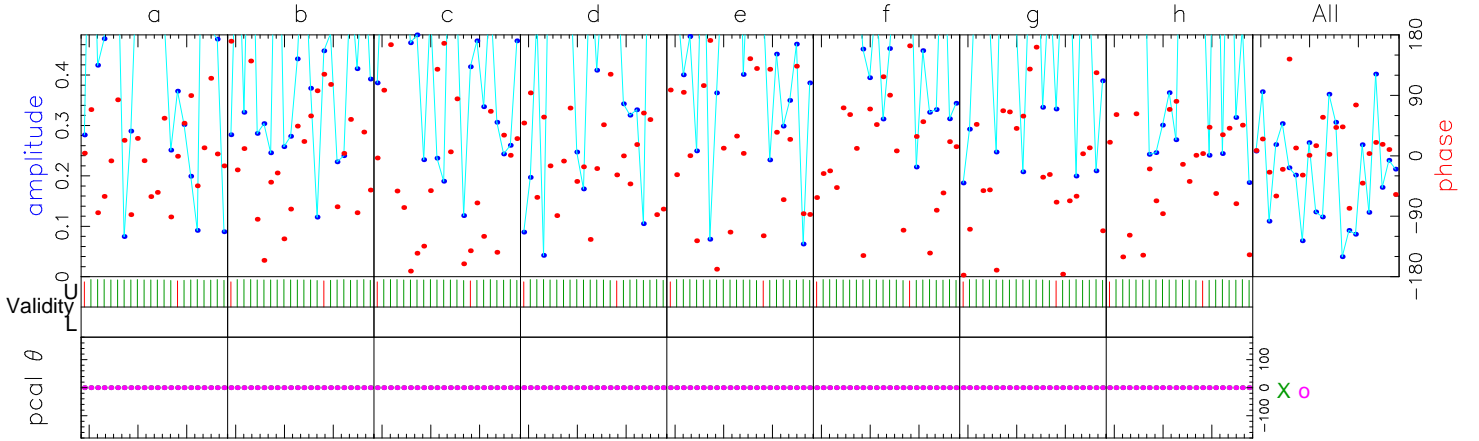
Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Xo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Xo.W.180.196U6Z

Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Xo  
ONSALA60 - VLBA\_OV, fgroup W, pol RR



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

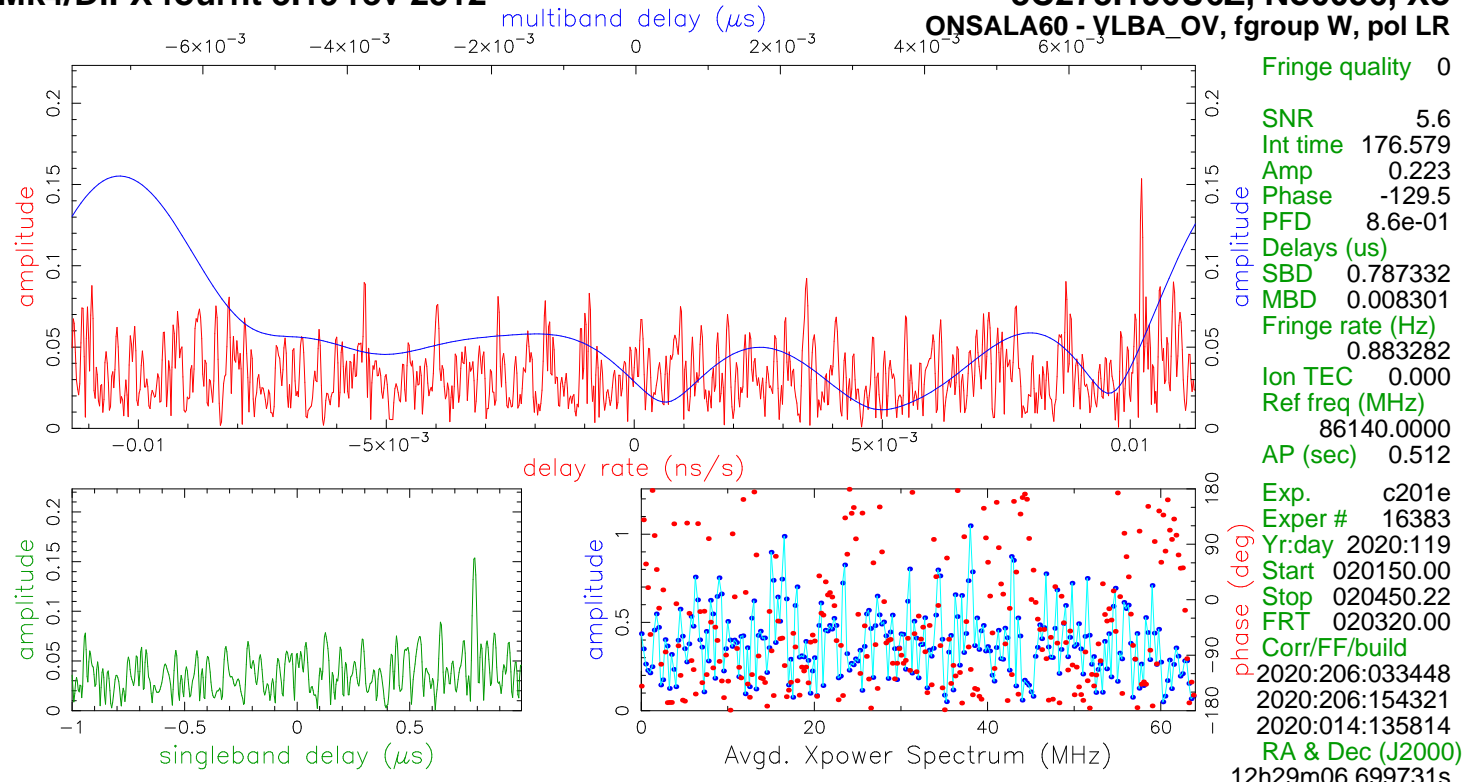


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
6.4	13.3	-52.8	-12.5	61.8	0.4	5.8	0.5	0.5	Phase	3.2
0.3	0.1	0.1	0.2	0.1	0.2	0.1	0.3	0.3	Ampl.	0.2
174.7	208.3	352.6	182.6	226.0	2.8	375.7	12.1	12.1	Sbd box	232.0
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.07273872774E+03		Apriori delay (usec)	-5.07264611412E+03		Resid mbdelay (usec)	1.13638E-03	+/-	1.9E-04	
Sband delay (usec)	-5.07274366712E+03		Apriori clock (usec)	2.0724241E+01		Resid sbdelay (usec)	-9.75530E-02	+/-	1.5E-03	
Phase delay (usec)	-5.07264611401E+03		Apriori clockrate (us/s)	3.2700001E-07		Resid phdelay (usec)	1.04645E-07	+/-	6.4E-07	
Delay rate (us/s)	-1.84905711671E+00		Apriori rate (us/s)	-1.84905737490E+00		Resid rate (us/s)	2.58190E-07	+/-	6.1E-09	
Total phase (deg)		-93.9	Apriori accel (us/s/s)	2.79891493025E-05		Resid phase (deg)	3.2	+/-	19.7	

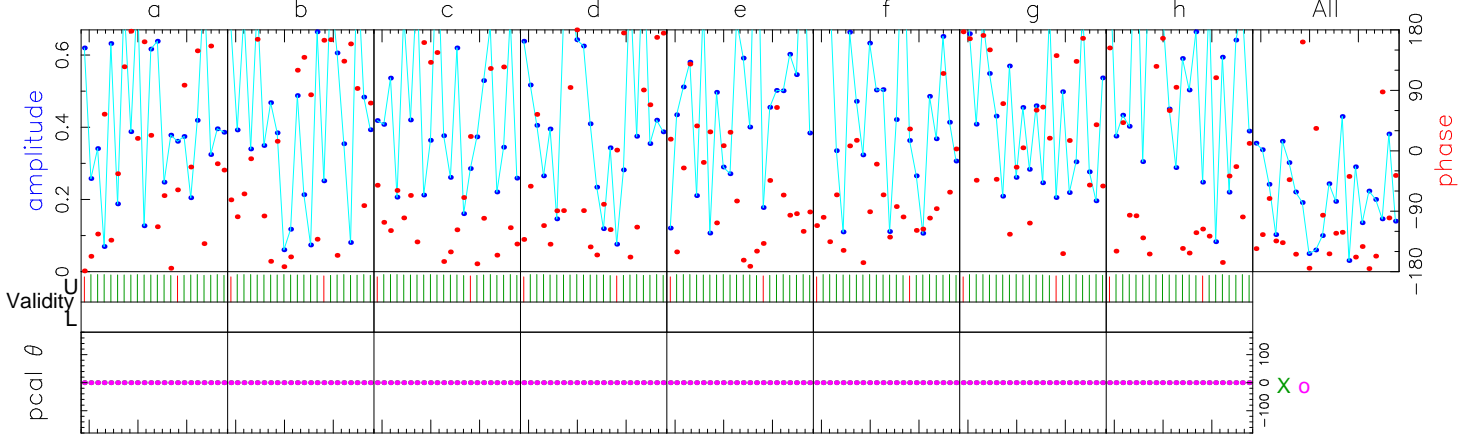
	RMS	Theor.	Amplitude	0.160 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	48.1	46.3	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	70.1	80.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	34.1	27.9	Inc. seg. avg.	0.158	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	47.6	48.7	Inc. frq. avg.	0.153	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 254.8 el 11.8 pa 31.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 10627.485 2170.765 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Xo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Xo.W.192.196U6Z



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

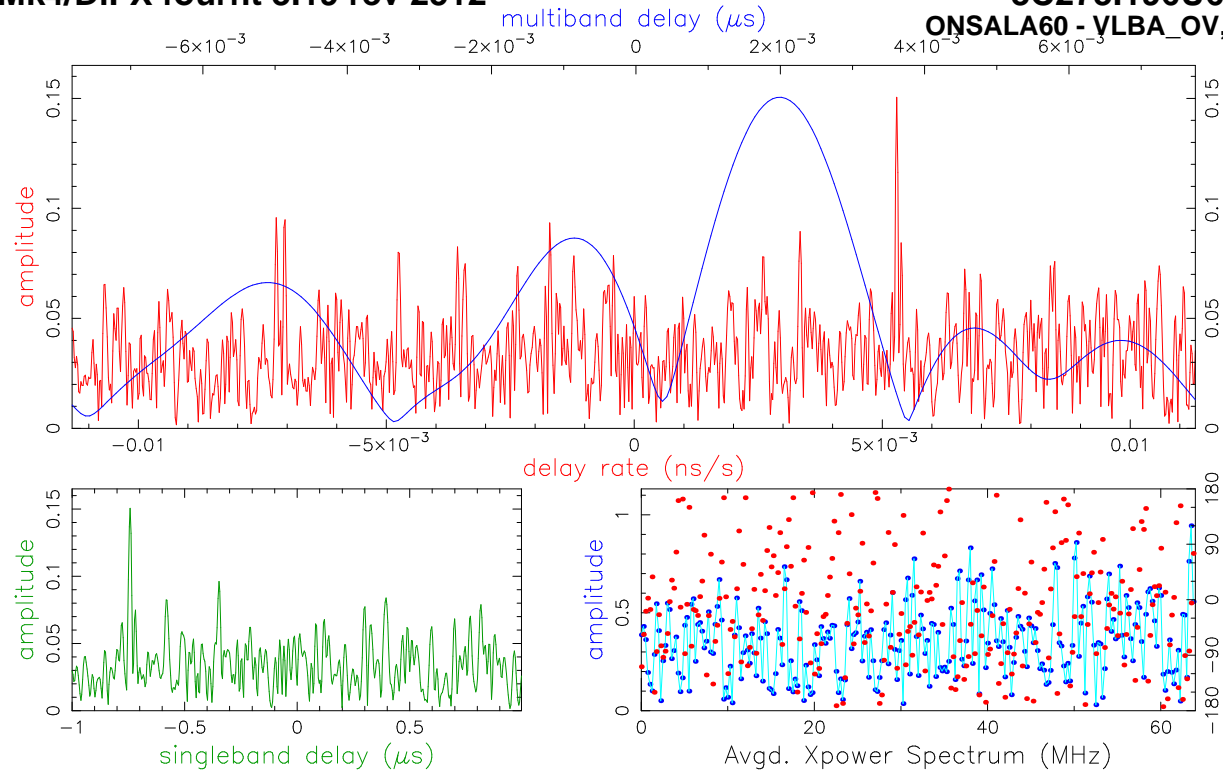


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.3	-163.8	-138.2	-151.9	-97.5	-82.4	177.5	-142.0	Phase	-129.5
	0.1	0.2	0.4	0.3	0.3	0.4	0.1	0.3	Ampl.	0.2
	17.8	488.9	457.9	395.7	351.5	381.6	141.8	458.1	Sbd box	458.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.07185656333E+03		Apriori delay (usec)	-5.07264611412E+03	Resid mbdelay (usec)	8.30078E-03	+/-	1.9E-04		
Sband delay (usec)	-5.07185878162E+03		Apriori clock (usec)	2.0724241E+01	Resid sbdelay (usec)	7.87332E-01	+/-	1.5E-03		
Phase delay (usec)	-5.07264611829E+03		Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	-4.17578E-06	+/-	6.5E-07		
Delay rate (us/s)	-1.84904712087E+00		Apriori rate (us/s)	-1.84905737490E+00	Resid rate (us/s)	1.02540E-05	+/-	6.3E-09		
Total phase (deg)		-226.7	Apriori accel (us/s/s)	2.79891493025E-05	Resid phase (deg)	-129.5	+/-	20.3		

	RMS	Theor.	Amplitude	0.223 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	63.6	47.6	Search (1024X32)	0.151	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	81.3	83.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	37.0	28.7	Inc. seg. avg.	0.230	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	48.0	50.1	Inc. frq. avg.	0.226	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

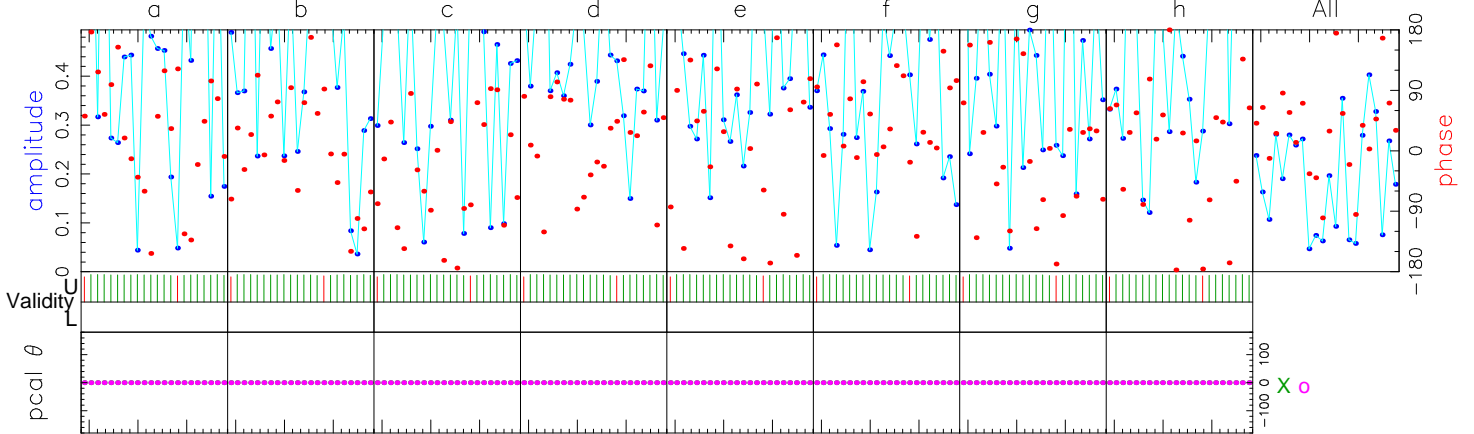
Mk4/DiFX fourfit 3.19 rev 2512

3C273.196U6Z, No0056, Xo  
 ONSALA60 - VLBA\_OV, fgroup W, pol RL



Fringe quality 0  
 SNR 5.5  
 Int time 176.579  
 Amp 0.165  
 Phase 39.6  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.742431  
 MBD 0.001988  
 Fringe rate (Hz)  
 0.456181  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201e  
 Exper # 16383  
 Yr:day 2020:119  
 Start 020150.00  
 Stop 020450.22  
 FRT 020320.00  
 Corr/FF/build  
 2020:206:033448  
 2020:206:154322  
 2020:014:135814  
 RA & Dec (J2000)  
 12h29m06.699731s  
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 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	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.07339412606E+03								1.98805E-03	+/- 2.0E-04
Sband delay (usec)	-5.07338854487E+03								-7.42431E-01	+/- 1.6E-03
Phase delay (usec)	-5.07264611284E+03								1.27589E-06	+/- 6.8E-07
Delay rate (us/s)	-1.84905207909E+00								5.29580E-06	+/- 6.5E-09
Total phase (deg)			-57.6						39.6	+/- 20.9
Apriori delay (usec)					-5.07264611412E+03					
Apriori clock (usec)					2.0724241E+01					
Apriori clockrate (us/s)					3.2700001E-07					
Apriori rate (us/s)					-1.84905737490E+00					
Apriori accel (us/s/s)					2.79891493025E-05					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

ph/seg (deg) 66.7 49.1 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 76.4 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.6 29.6 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.2 51.7 Inc. frq. avg. 0.164 Sample rate (MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 X: az 254.8 el 11.8 pa 31.4 o: az 108.1 el 25.3 pa -49.2 u,v (fr/asec) 10627.485 2170.765 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201e/v1/1234/No0056/Xo..196U6Z Output file: /Exps/c201e/v1/1234/No0056/Xo.W.213.196U6Z simultaneous interpolator