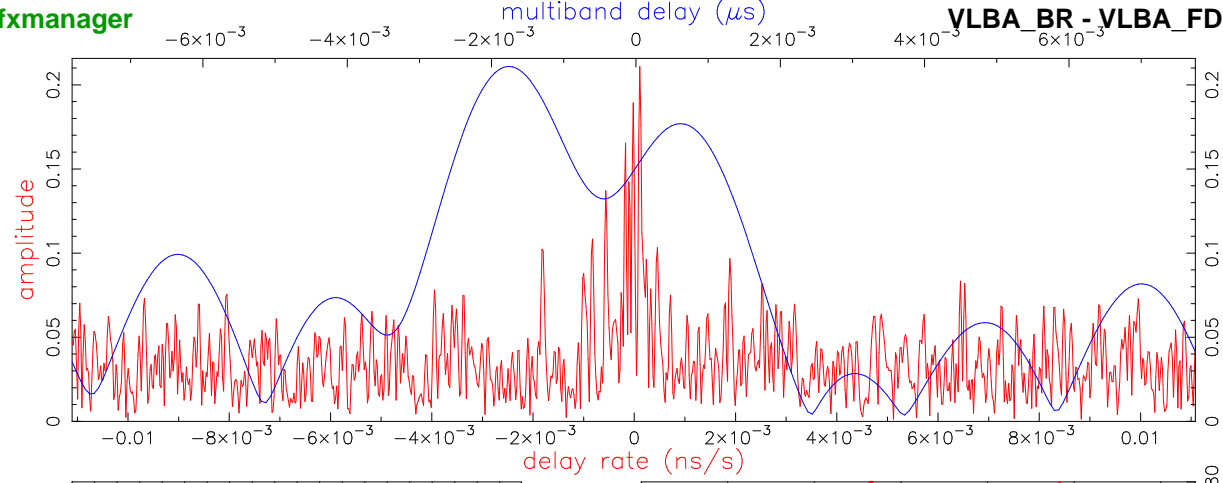


Mk4/DiFX fourfit 3.21 rev 2937

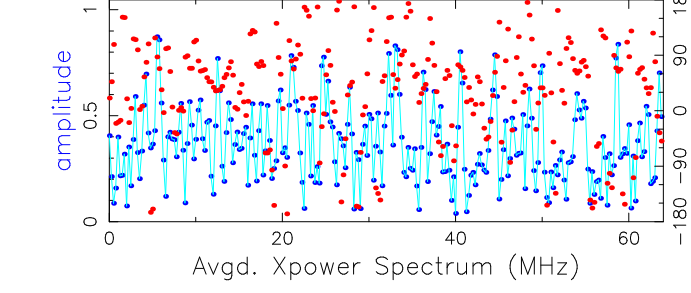
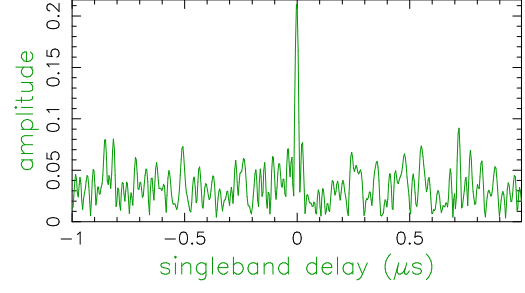
fxmanager

0420-014.1JLJ5P, No0075, bf

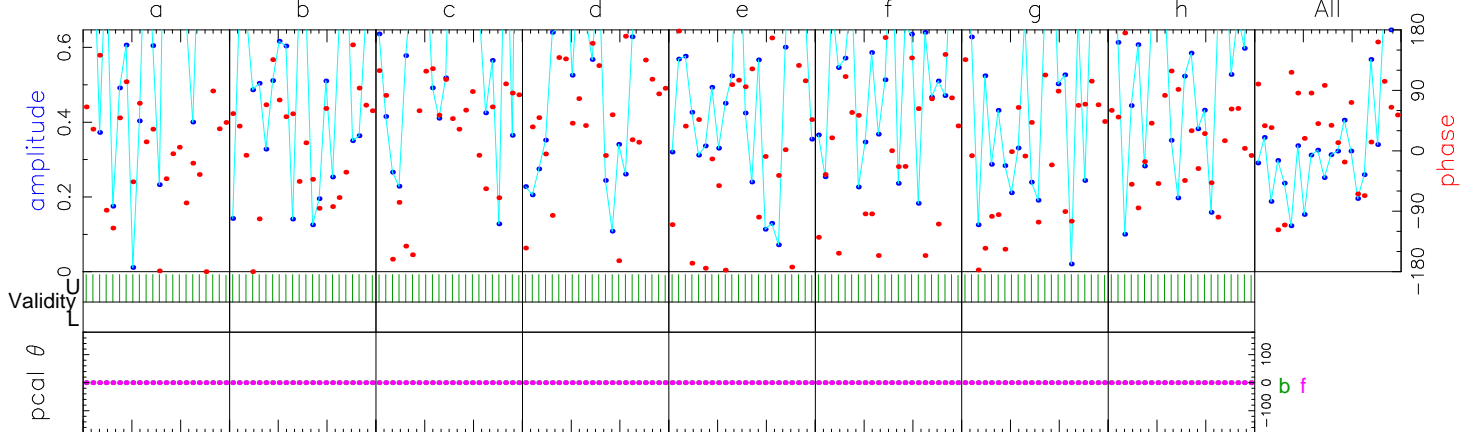
VLBA\_BR - VLBA\_FD, fgroup W, pol LL



Fringe quality 9  
 SNR 7.9  
 Int time 179.976  
 Amp 0.216  
 Phase 54.0  
 PFD 4.2e-07  
 Delays (us)  
 SBD -0.002103  
 MBD -0.001740  
 Fringe rate (Hz) 0.009613  
 Ion TEC 0.000  
 Ref freq (MHz) 87940.0000  
 AP (sec) 0.512  
 Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141912  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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			
f	1000	1000	1000	1000	1000	1000	1000	1000			
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:f	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			
f	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	-4.96382755009E+03		Apriori delay (usec)		-4.96382581058E+03		Resid mbdelay (usec)		-1.73952E-03	+/- 1.4E-04	
Sband delay (usec)	-4.96382791358E+03		Apriori clock (usec)		-9.6462755E+00		Resid sbdelay (usec)		-2.10300E-03	+/- 1.1E-03	
Phase delay (usec)	-4.96382580887E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		1.70640E-06	+/- 4.6E-07	
Delay rate (us/s)	2.61879104579E-01		Apriori rate (us/s)		2.61878995267E-01		Resid rate (us/s)		1.09312E-07	+/- 4.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.57452007748E-05		Resid phase (deg)		54.0	+/- 14.5	
ph/seg (deg)	RMS 74.0	Theor. 34.0	Amplitude 0.216 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	117.1	59.3	Search (1024X32) 0.207		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000				
ph/frq (deg)	42.3	20.5	Interp. 0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us) -0.008 0.008		
amp/frq (%)	56.7	35.7	Inc. seg. avg. 0.309		Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011				
		Inc. frq. avg. 0.245		Data rate(Mb/s): 2048		nlags: 256		t_cohere infinite		ion window (TEC) 0.00 0.00	

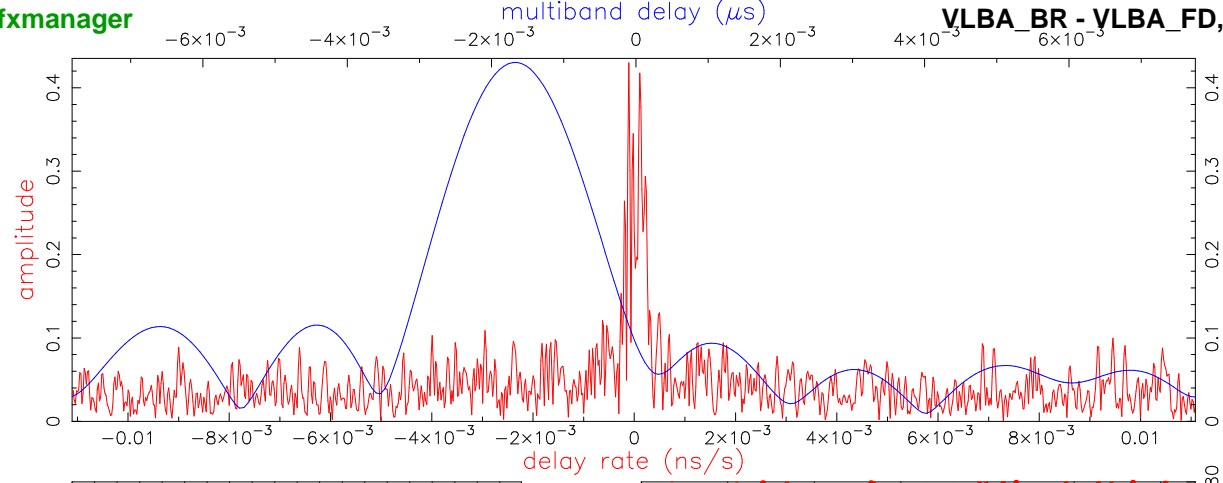
b: az 155.2 el 37.8 pa -16.2 f: az 173.2 el 57.9 pa -5.4 u,v (fr/asec) -1521.688 2075.722 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/bf..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/bf.W.18.1JLJ5P

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, bf

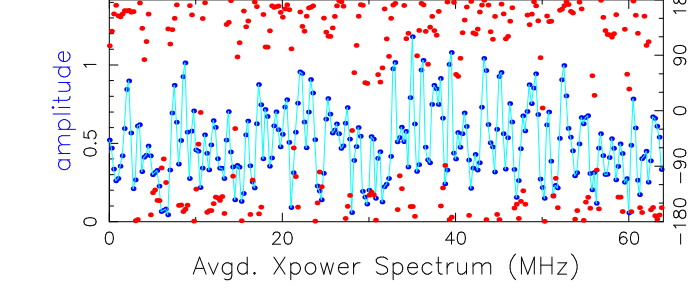
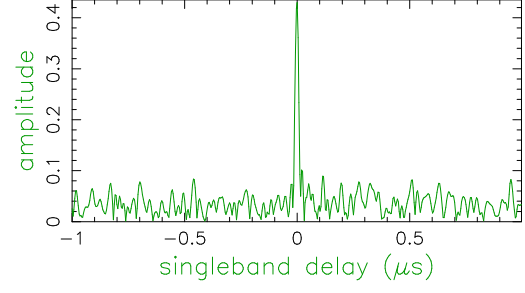
VLBA\_BR - VLBA\_FD, fgroup W, pol RR



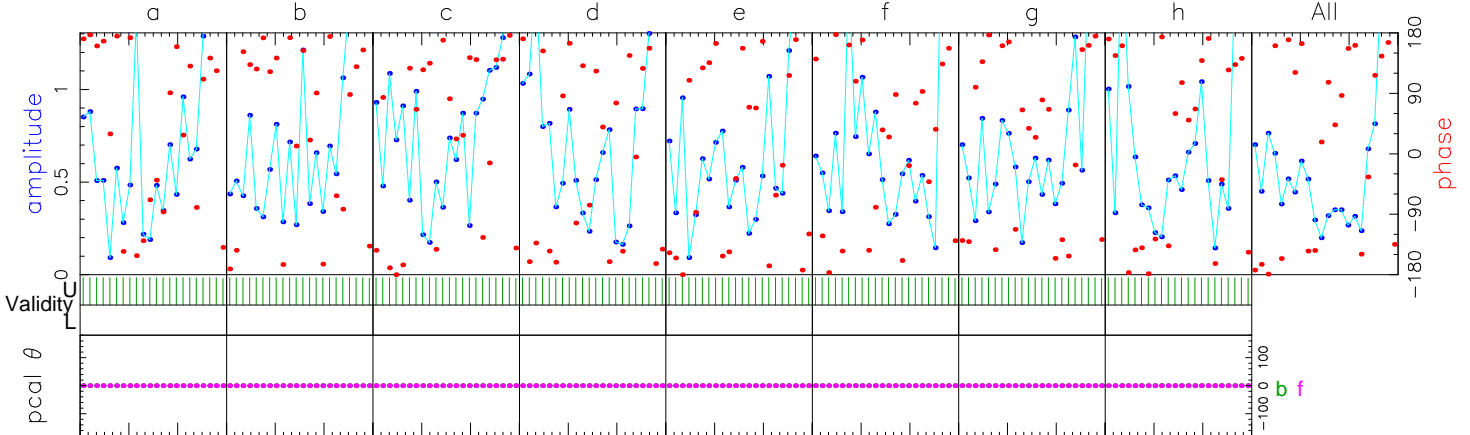
Fringe quality 9

SNR 16.0  
 Int time 179.976  
 Amp 0.435  
 Phase 171.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001388  
 MBD -0.001726  
 Fringe rate (Hz)  
 -0.009375  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512

Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141914  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.96382753687E+03				-4.96382581058E+03					
Sband delay (usec)	-4.96382719883E+03				-9.6462755E+00					
Phase delay (usec)	-4.96382580516E+03				-3.9999997E-07					
Delay rate (us/s)	2.61878888656E-01				2.61878995267E-01					
Total phase (deg)			-109.9		2.57452007748E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Search (1024X32)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
PC period (AP's) 5, 5										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
RMS	64.8	16.8								
Theor.	29.4									
Amplitude	0.435 +/- 0.027									
Search (1024X32)	0.421									
Interp.	0.000									
Inc. seg. avg.	0.615									
Inc. frq. avg.	0.432									
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
b: az 155.2 el 37.8 pa -16.2										
f: az 173.2 el 57.9 pa -5.4										
u,v (fr/asec) -1521.688 2075.722										
Control file: cf_1234_88GHz_gmva										
Input file: /Exps/c202c/v1/1234/No0075/bf..1JLJ5P										
Output file: /Exps/c202c/v1/1234/No0075/bf.W.37.1JLJ5P										

simultaneous interpolator

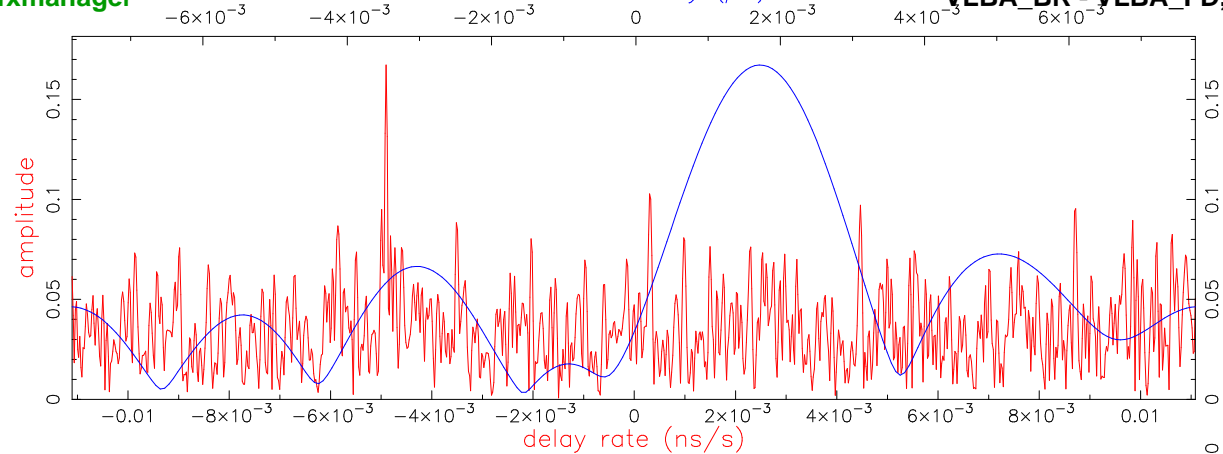
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, bf

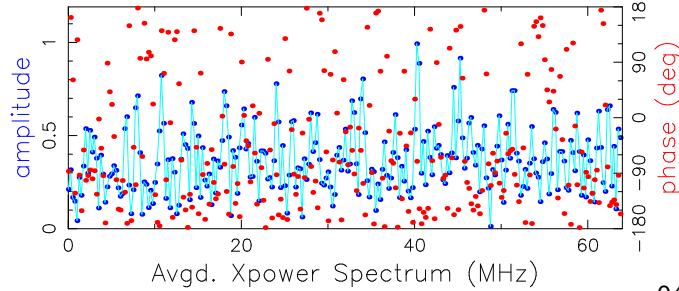
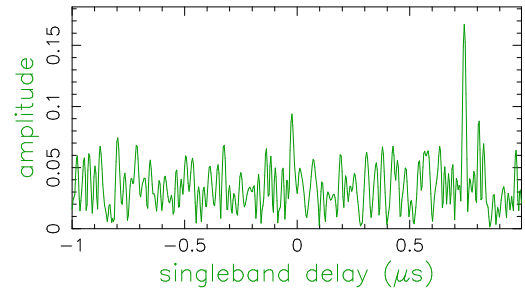
VLBA\_BR - VLBA\_FD, fgroup W, pol LR

multiband delay ( $\mu$ s)



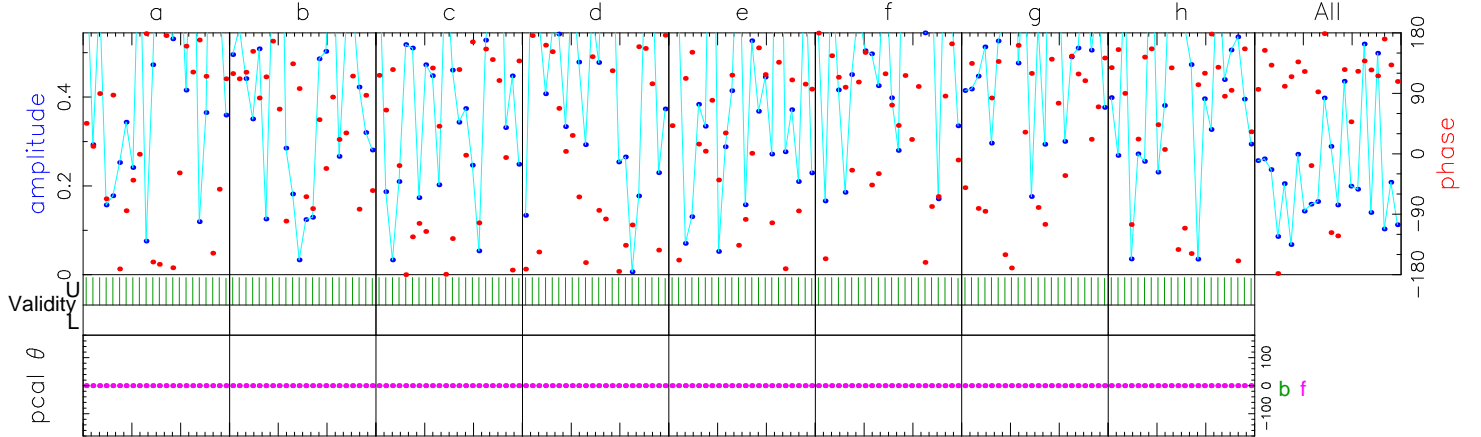
Fringe quality 0

SNR 6.1  
 Int time 179.976  
 Amp 0.182  
 Phase 132.7  
 PFD 1.0e-01  
 Delays (us)  
 SBD 0.742399  
 MBD 0.001730  
 Fringe rate (Hz)  
 -0.431937  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Yr:day 16383  
 Start 2021:041:22286  
 Stop 2021:042:141916  
 FRT 2020:247:085004  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141916  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 -1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
170.0	86.6	154.3	170.1	111.2	109.3	139.5	138.8	138.8	Phase	132.7
0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
287.1	34.1	241.0	90.6	75.4	449.2	132.5	53.2	53.2	Sbd box	447.1
U/L 352/0	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	1000	PC freqs	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.96308970554E+03		Apriori delay (usec)		-4.96382581058E+03		Resid mbdelay (usec)		1.73003E-03	+/- 1.8E-04
Sband delay (usec)	-4.96308341158E+03		Apriori clock (usec)		-9.6462755E+00		Resid sbdelay (usec)		7.42399E-01	+/- 1.4E-03
Phase delay (usec)	-4.96382580638E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		4.19219E-06	+/- 5.9E-07
Delay rate (us/s)	2.61874083540E-01		Apriori rate (us/s)		2.61878995267E-01		Resid rate (us/s)		-4.91173E-06	+/- 5.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.57452007748E-05		Resid phase (deg)		132.7	+/- 18.7

ph/seg (deg) 54.4 43.8 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 84.2 76.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 32.9 26.4 Inc. seg. avg. 0.195 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.1 46.1 Inc. frq. avg. 0.185 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 155.2 el 37.8 pa -16.2 f: az 173.2 el 57.9 pa -5.4 u,v (fr/asec) -1521.688 2075.722 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/bf..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/bf.W.51.1JLJ5P

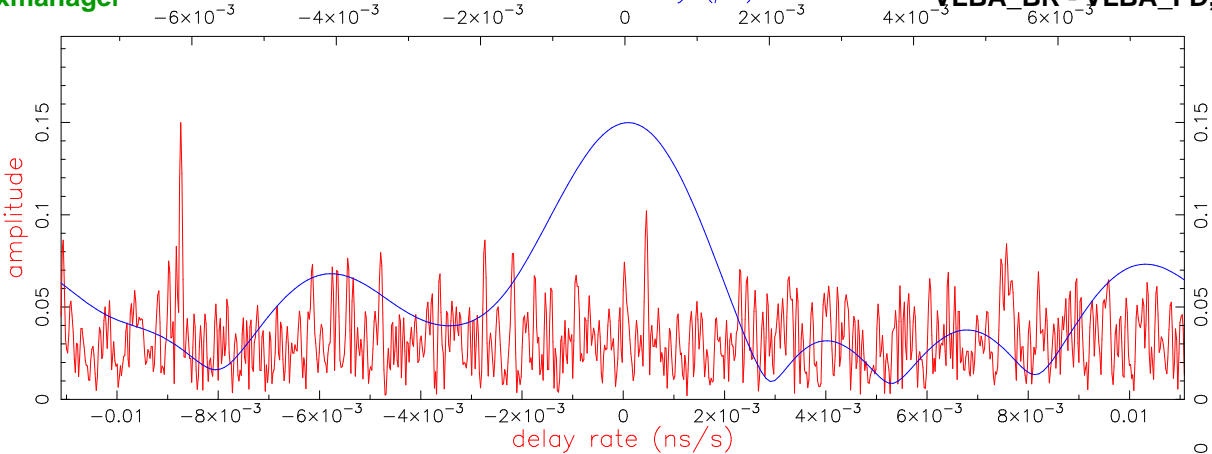
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, bf

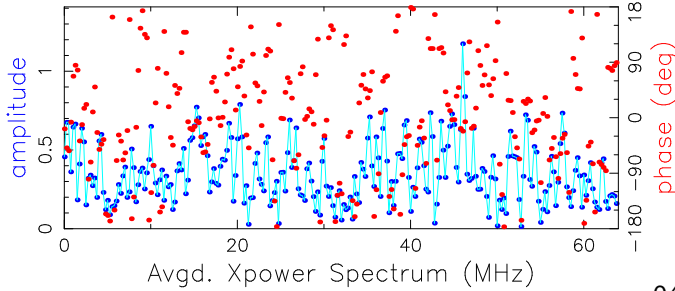
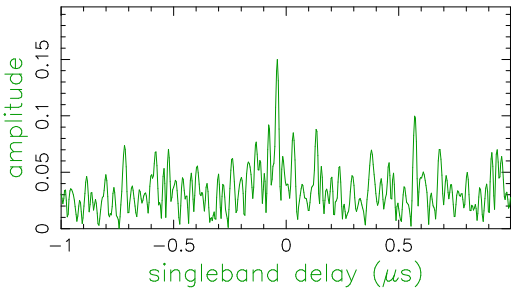
VLBA\_BR - VLBA\_FD, fgroup W, pol RL

multiband delay ( $\mu$ s)



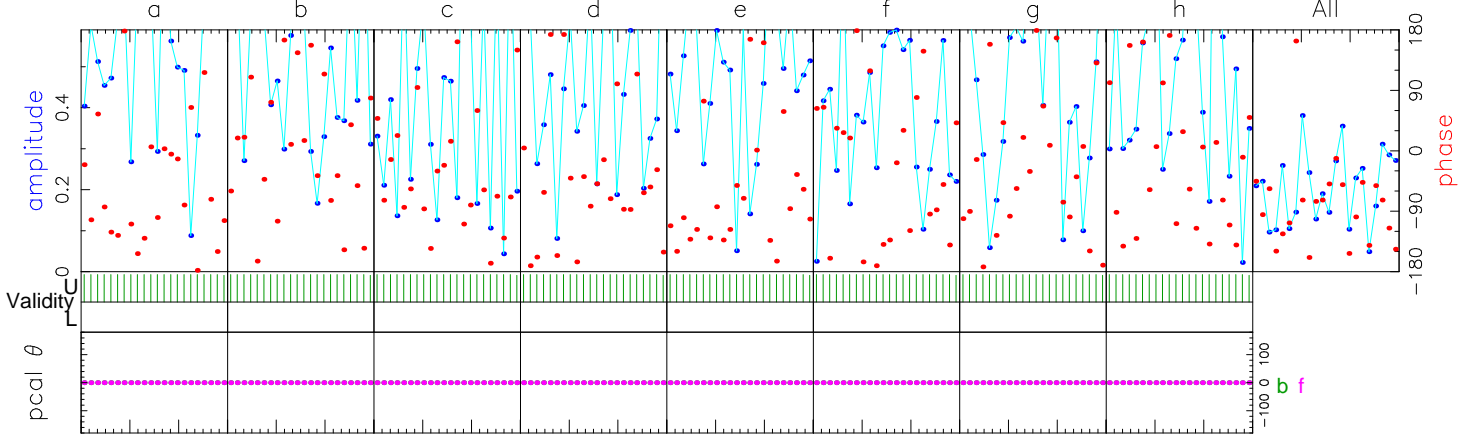
Fringe quality 0

SNR 5.5  
 Int time 179.976  
 Amp 0.197  
 Phase -86.6  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.039615  
 MBD 0.000034  
 Fringe rate (Hz)  
 -0.768828  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141918  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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

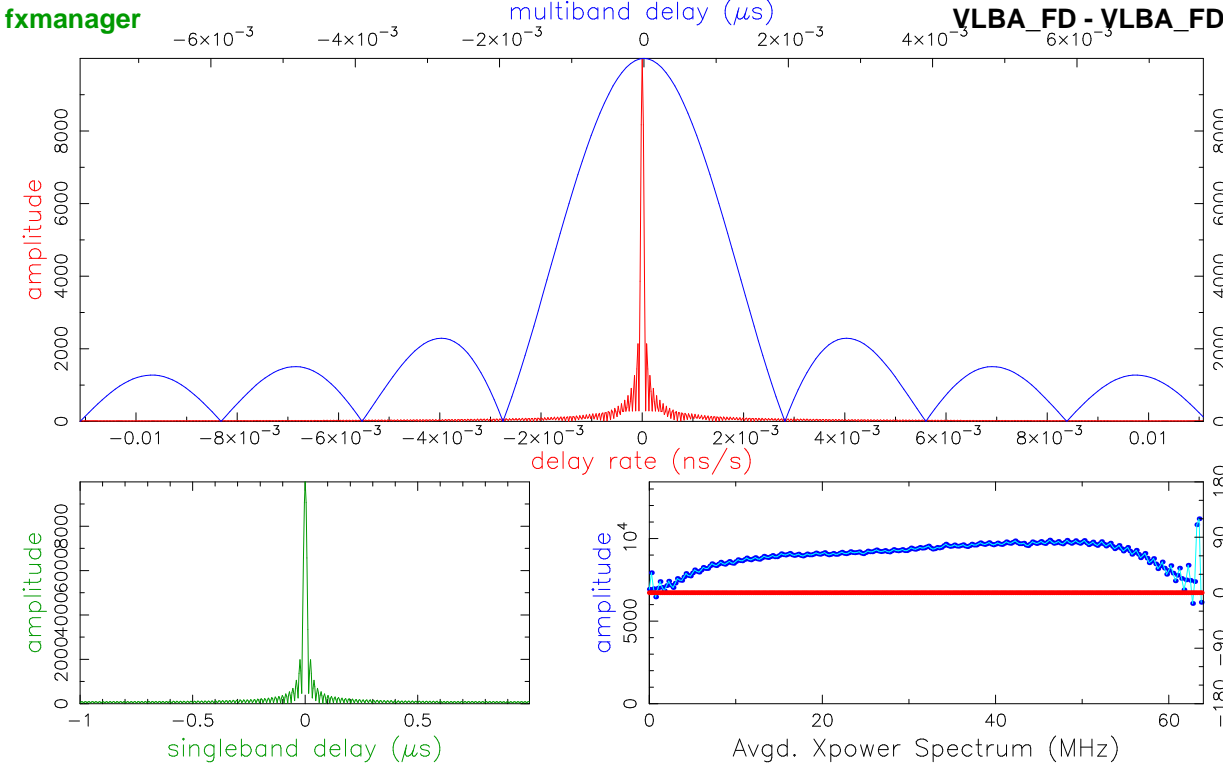


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-94.4	-2.9	-67.0	-89.9	-111.1	-100.1	-91.8	-59.8	Phase	-86.6
	0.3	0.0	0.3	0.3	0.4	0.1	0.2	0.2	Ampl.	0.2
	126.0	71.9	414.2	490.3	246.4	405.0	221.6	297.1	Sbd box	246.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.96387265160E+03		Apriori delay (usec)		-4.96382581058E+03		Resid mbdelay (usec)		3.39765E-05	+/- 2.0E-04
Sband delay (usec)	-4.96386542533E+03		Apriori clock (usec)		-9.6462755E+00		Resid sbdelay (usec)		-3.96147E-02	+/- 1.6E-03
Phase delay (usec)	-4.96382581331E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-2.73617E-06	+/- 6.6E-07
Delay rate (us/s)	2.61870252619E-01		Apriori rate (us/s)		2.61878995267E-01		Resid rate (us/s)		-8.74265E-06	+/- 6.3E-09
Total phase (deg)			Apriori accel (us/s/s)		2.57452007748E-05		Resid phase (deg)		-86.6	+/- 20.8

	RMS	Theor.	Amplitude	0.197 +/- 0.036	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.3	48.8	Search (1024X32)	0.147	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	68.8	85.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	38.7	29.4	Inc. seg. avg.	0.197	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	59.8	51.3	Inc. frq. avg.	0.187	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

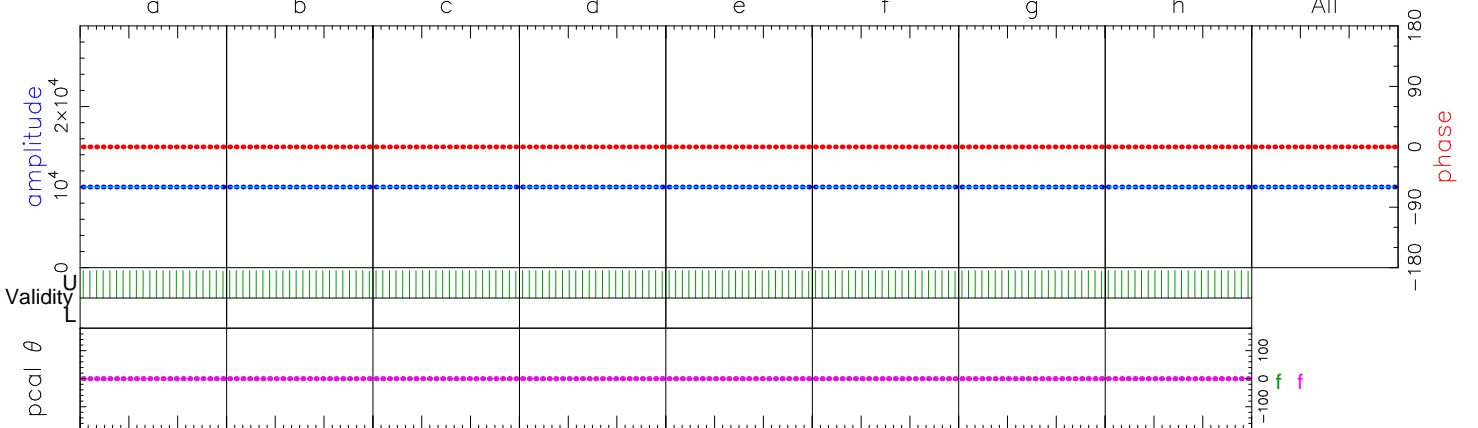
b: az 155.2 el 37.8 pa -16.2 f: az 173.2 el 57.9 pa -5.4 u,v (fr/asec) -1521.688 2075.722 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/bf..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/bf.W.69.1JLJ5P



Fringe quality 9  
SNR 366863.4  
Int time 179.976  
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) 87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141913  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

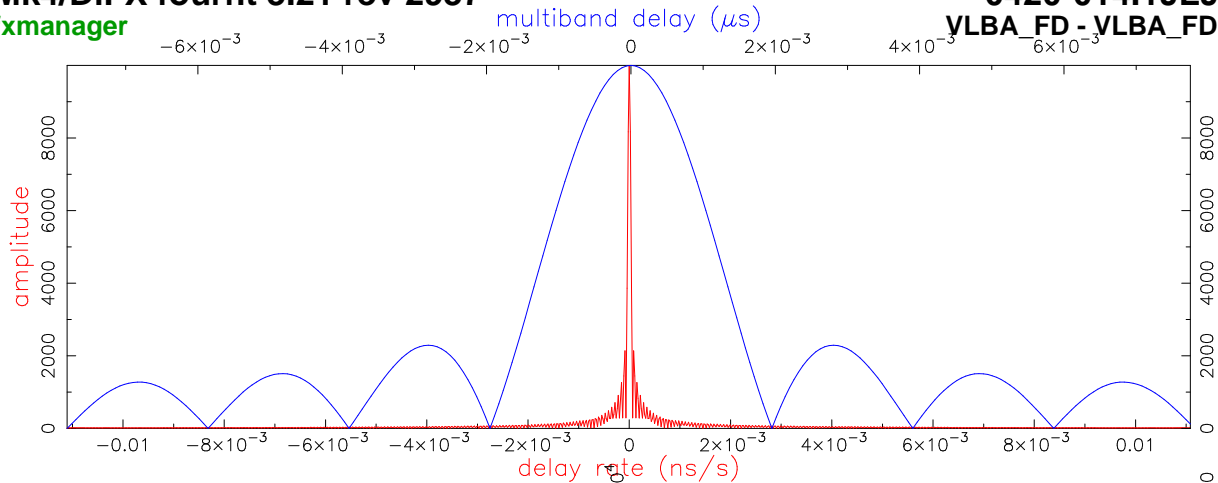
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



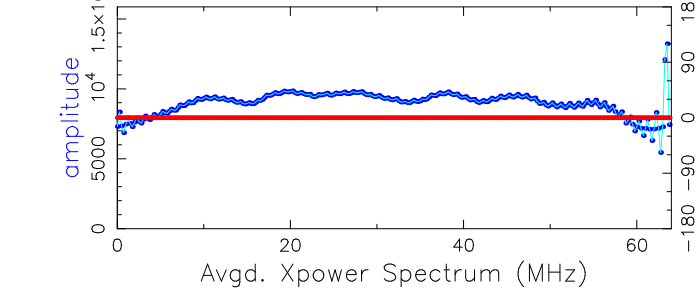
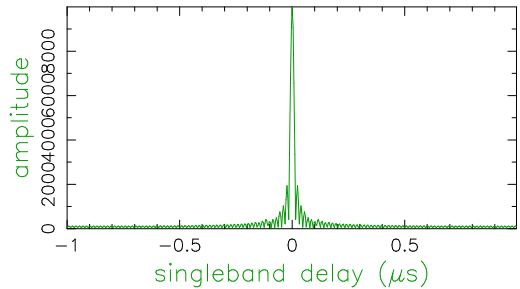
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08  
Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 9.9E-12  
Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.5E-14  
Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

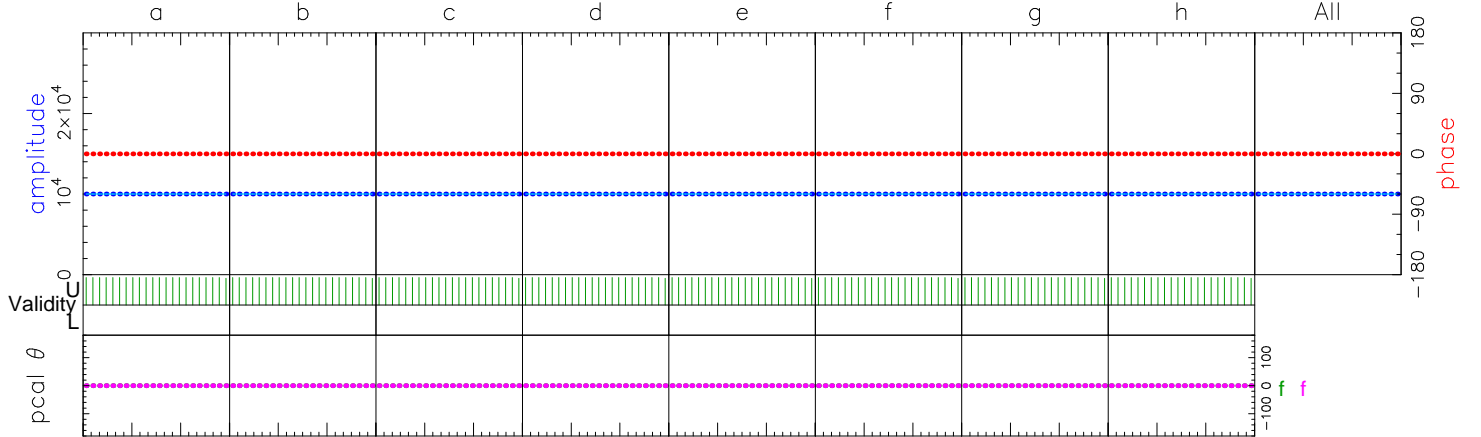
RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
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  
f: az 173.2 el 57.9 pa -5.4 f: az 173.2 el 57.9 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/ff..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/ff.W.21.1JLJ5P



Fringe quality 9  
SNR 366863.4  
Int time 179.976  
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)  
87940.0000  
AP (sec) 0.512  
Exp. c202c  
Yr:day 16383  
Start 2020:286  
Stop 2020:286  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141911  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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		
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:f	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		
f	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	9.9E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.5E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

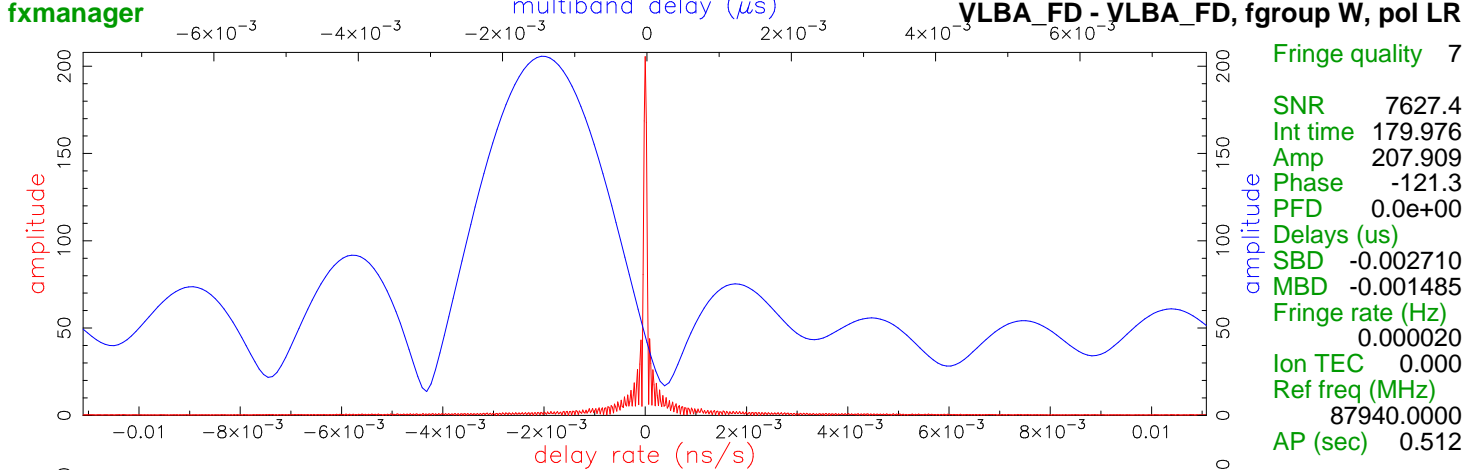
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, ff

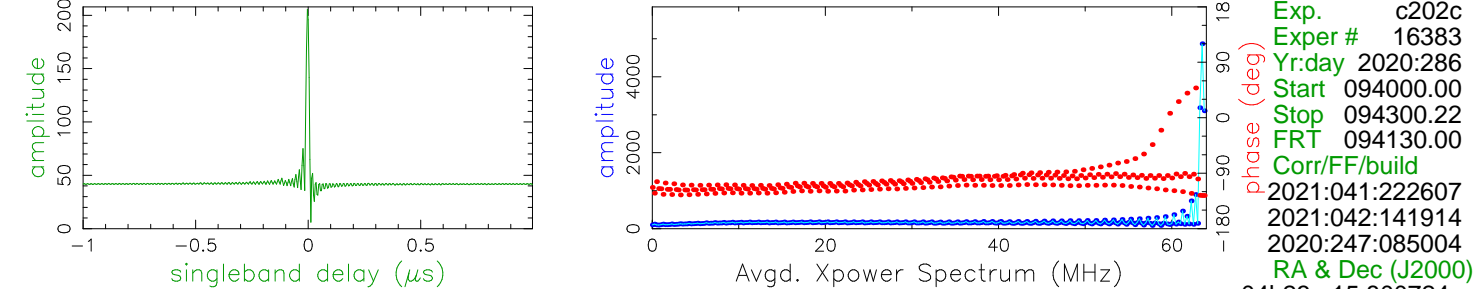
VLBA\_FD - VLBA\_FD, fgroup W, pol LR



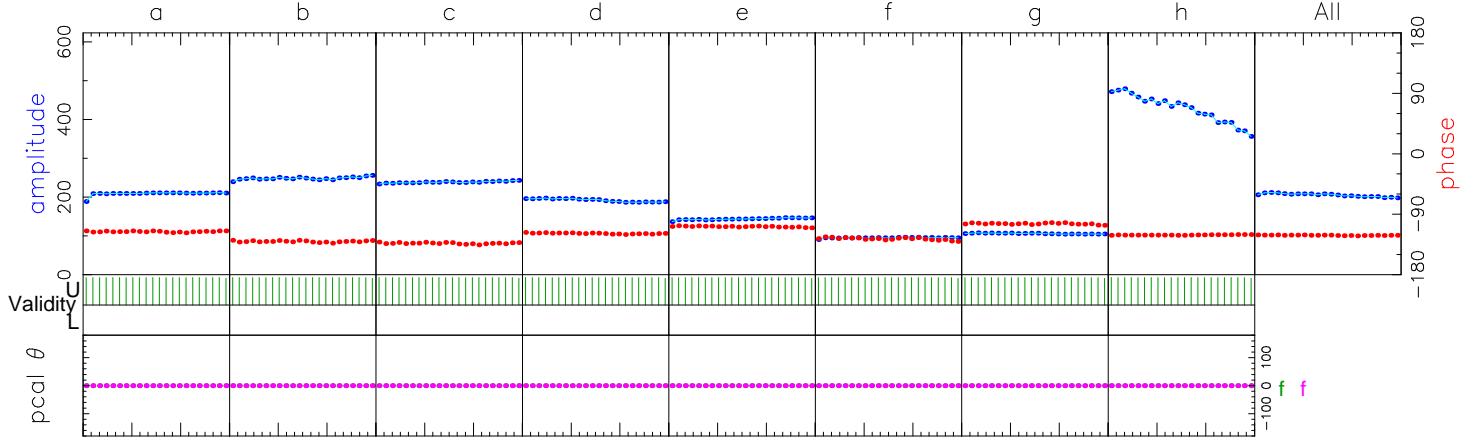
Fringe quality 7

SNR 7627.4  
 Int time 179.976  
 Amp 207.909  
 Phase -121.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.002710  
 MBD -0.001485  
 Fringe rate (Hz) 0.000020  
 Ion TEC 0.000  
 Ref freq (MHz) 87940.0000  
 AP (sec) 0.512

Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141914  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-115.8	-130.4	-133.1	-118.5	-108.4	-126.5	-104.1	-120.8	Phase	-121.3
	209.4	248.5	238.8	192.3	143.9	95.4	106.2	428.0	Ampl.	207.8
	256.7	256.3	256.8	256.8	256.9	256.6	256.8	255.8	Sbd box	256.3
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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f	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	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.48531250000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.48531E-03	+/- 1.4E-07
Sband delay (usec)	-2.71000000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.71000E-03	+/- 1.1E-06
Phase delay (usec)	-3.83148399313E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.83148E-06	+/- 4.7E-10
Delay rate (us/s)	2.30426096344E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		2.30426E-10	+/- 4.6E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-121.3	+/- 0.0

ph/seg (deg) 0.3 0.0  
 amp/seg (%) 2.3 0.1  
 ph/frq (deg) 11.2 0.0  
 amp/frq (%) 47.6 0.0

RMS Theor. Amplitude 207.909 +/- 0.027  
 Search (1024X32) 205.665  
 Interp. 0.000  
 Inc. seg. avg. 205.518  
 Inc. frq. avg. 207.789

Group delay (usec)(sbd) -1.48531250000E-03  
 Sband delay (usec) -2.71000000000E-03  
 Phase delay (usec) -3.83148399313E-06  
 Delay rate (us/s) 2.30426096344E-10  
 Total phase (deg) -121.3

Apriori delay (usec) 0.00000000000E+00  
 Apriori clock (usec) 0.0000000E+00  
 Apriori clockrate (us/s) 0.0000000E+00  
 Apriori rate (us/s) 0.00000000000E+00  
 Apriori accel (us/s/s) 0.00000000000E+00

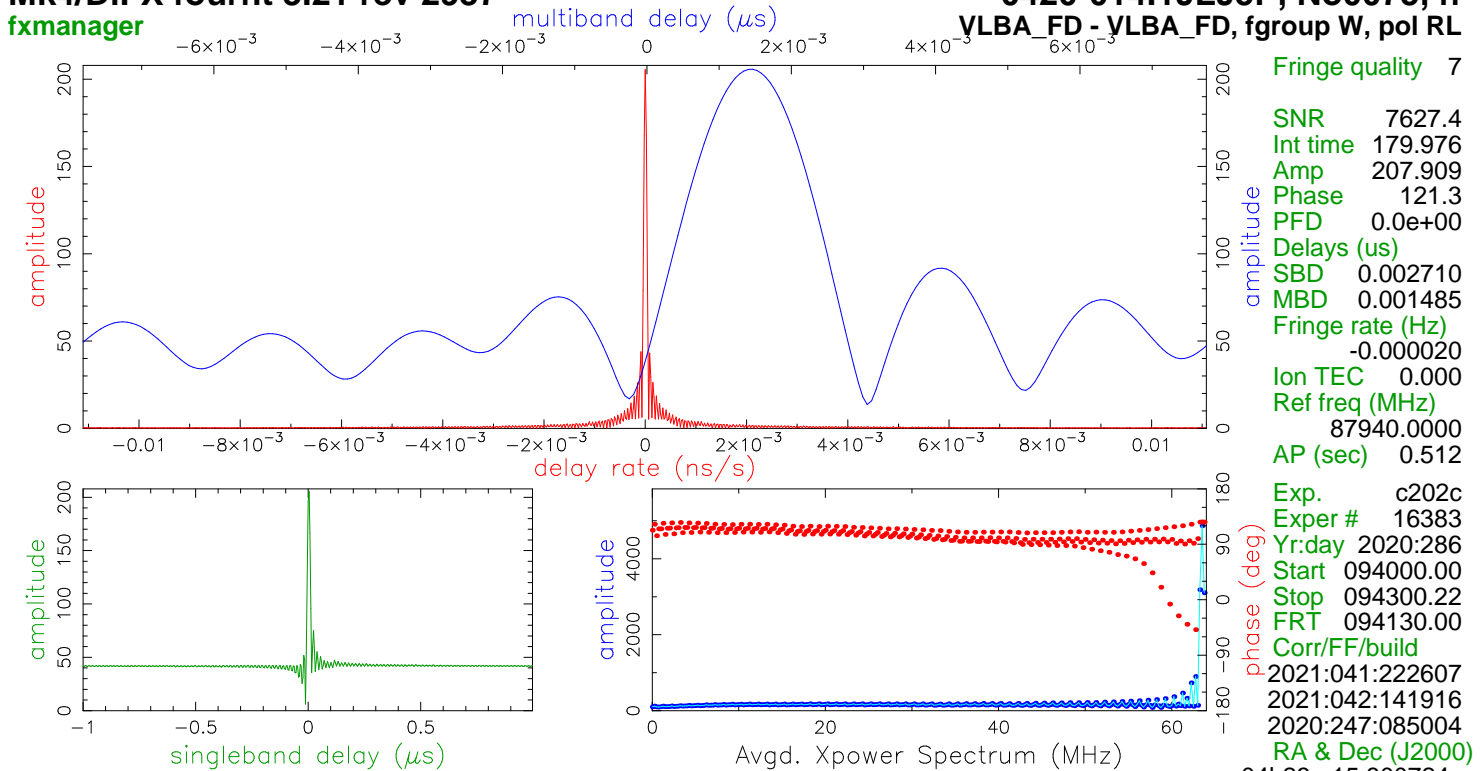
Resid mbdelay (usec) -1.48531E-03  
 Resid sbdelay (usec) -2.71000E-03  
 Resid phdelay (usec) -3.83148E-06  
 Resid rate (us/s) 2.30426E-10  
 Resid phase (deg) -121.3

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

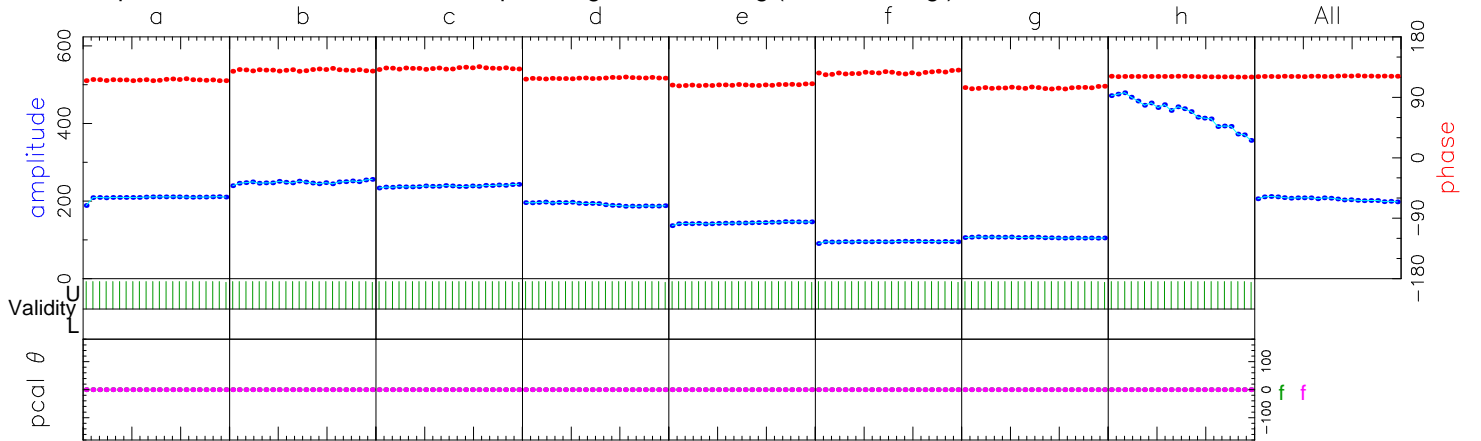
sb window (us) -1.000 1.000  
 mb window (us) -0.008 0.008  
 dr window (ns/s) -0.011 0.011  
 ion window (TEC) 0.00 0.00

f: az 173.2 el 57.9 pa -5.4 f: az 173.2 el 57.9 pa -5.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/ff..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/ff.W.36.1JLJ5P



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
115.8	130.4	133.1	118.5	108.4	126.5	104.1	120.8	120.8	Phase	121.3
209.4	248.5	238.8	192.3	143.9	95.4	106.2	428.0	428.0	Ampl.	207.8
257.3	257.7	257.2	257.2	257.1	257.4	257.2	258.2	258.2	Sbd box	257.7
U/L 352/0	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	1000	PC freqs	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:f 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.48531250000E-03		Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	1.48531E-03	+/-	1.4E-07		
Sband delay (usec)	2.71000000000E-03		Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.71000E-03	+/-	1.1E-06		
Phase delay (usec)	3.83148399320E-06		Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.83148E-06	+/-	4.7E-10		
Delay rate (us/s)	-2.30426096344E-10		Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-2.30426E-10	+/-	4.6E-12		
Total phase (deg)		121.3	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	121.3	+/-	0.0		
RMS	Theor.	Amplitude	207.909 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5					
ph/seg (deg)	0.3	0.0	Search (1024X32)	205.665	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	2.3	0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	11.2	0.0	Inc. seg. avg.	205.518	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	47.6	0.0	Inc. frq. avg.	207.789	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
f: az 173.2 el 57.9 pa -5.4		f: az 173.2 el 57.9 pa -5.4		u,v (fr/asec) 0.000	0.000					simultaneous interpolator
Control file: cf_1234_88GHz_gmva		Input file: /Exps/c202c/v1/1234/No0075/ff..1JLJ5P		Output file: /Exps/c202c/v1/1234/No0075/ff.W.52.1JLJ5P						



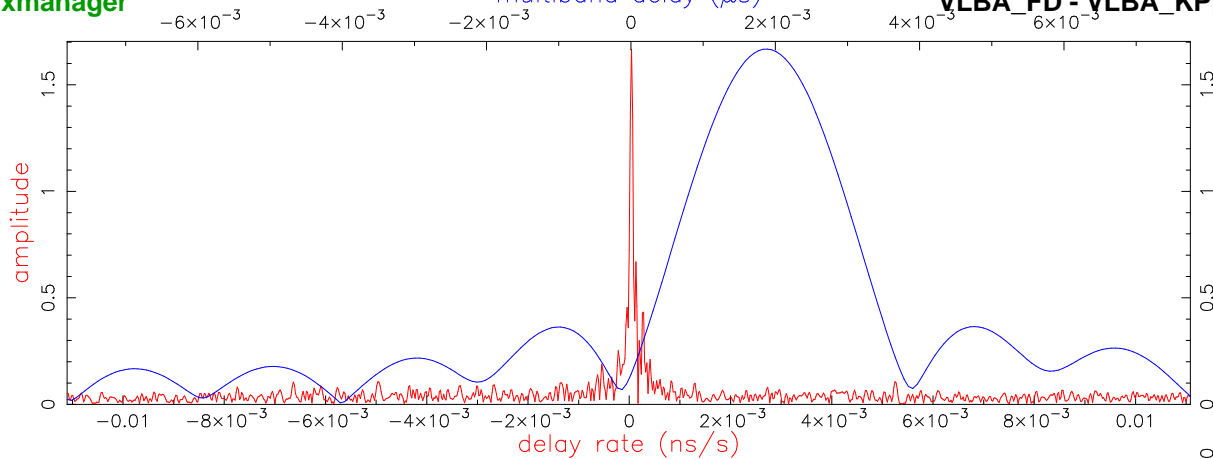
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fk

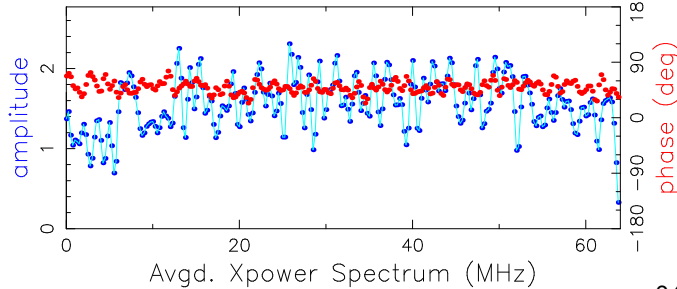
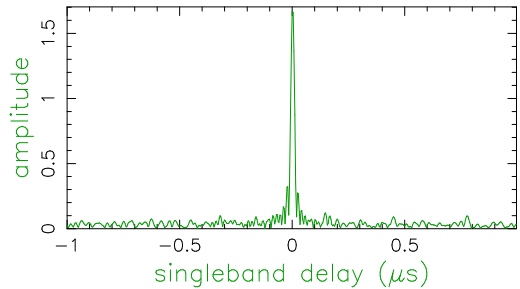
VLBA\_FD - VLBA\_KP, fgroup W, pol RR

multiband delay ( $\mu$ s)



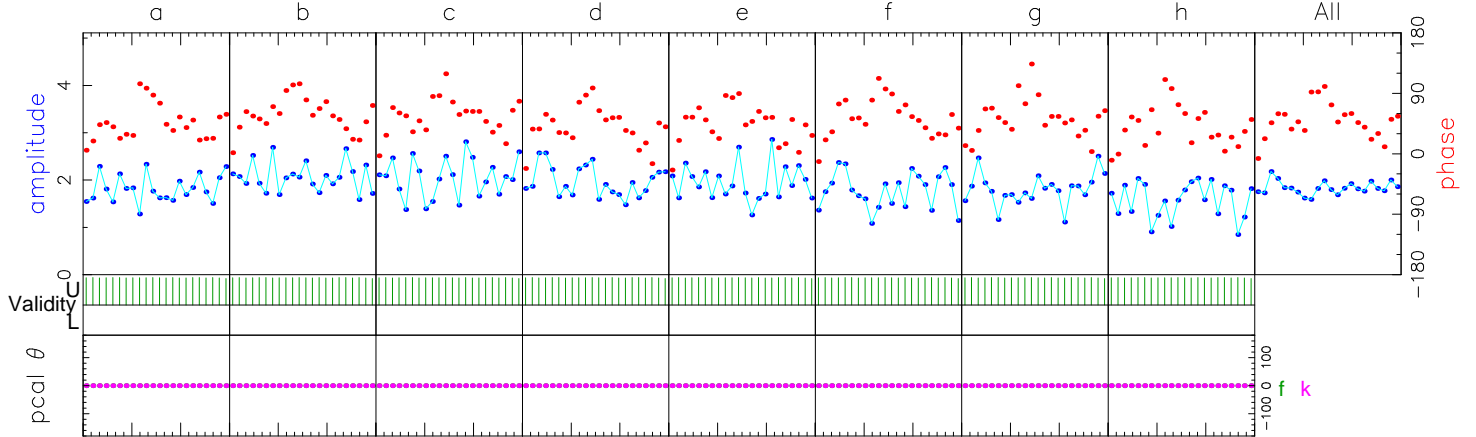
Fringe quality 7

SNR 62.3  
 Int time 178.596  
 Amp 1.704  
 Phase 49.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.001896  
 MBD 0.001923  
 Fringe rate (Hz)  
 0.003186  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141913  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		5.66542225916E+02			5.66540303305E+02				Resid mbdelay (usec)	1.92261E-03 +/- 1.7E-05
Sband delay (usec)		5.66542199055E+02			7.5907078E+00				Resid sbdelay (usec)	1.89575E-03 +/- 1.4E-04
Phase delay (usec)		5.66540304854E+02			2.9999999E-07				Resid phdelay (usec)	1.54877E-06 +/- 5.8E-08
Delay rate (us/s)		-1.73821146609E-01			Apriori rate (us/s)				Resid rate (us/s)	3.62338E-08 +/- 5.6E-10
Total phase (deg)			147.2		Apriori accel (us/s/s)				Resid phase (deg)	49.0 +/- 1.8

ph/seg (deg) 25.5 4.3 Search (1024X32) 1.628 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 11.1 7.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 7.8 2.6 Inc. seg. avg. 1.831 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 8.7 4.5 Inc. frq. avg. 1.676 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 173.2 el 57.9 pa -5.4 k: az 160.0 el 55.1 pa -16.3 u,v (fr/asec) 1015.233 -170.965 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fk..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fk.W.26.1JLJ5P

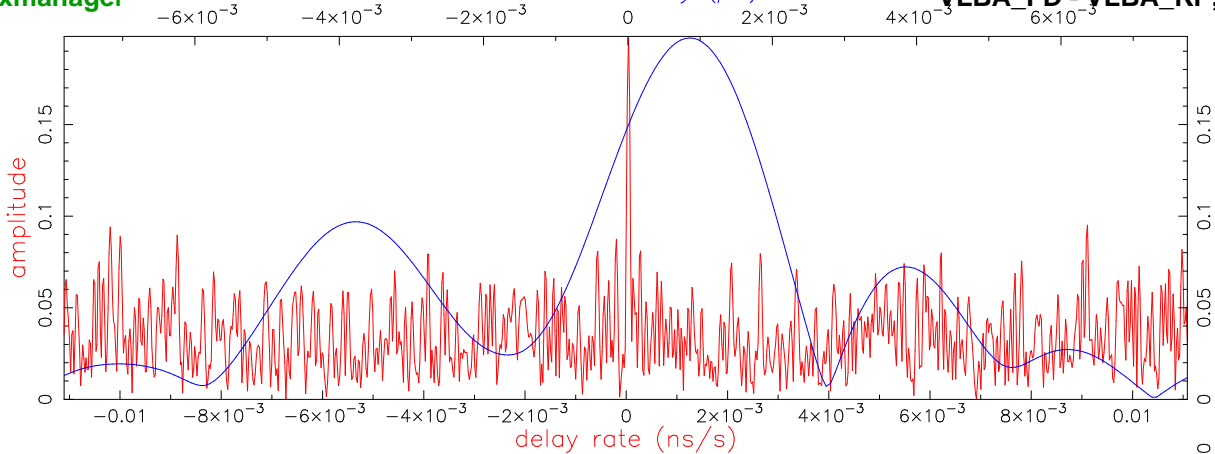
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fk

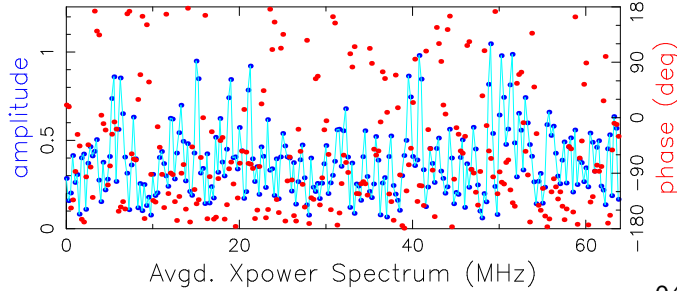
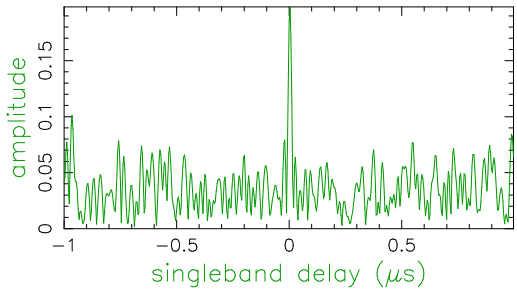
VLBA\_FD - VLBA\_KP, fgroup W, pol LR

multiband delay ( $\mu$ s)



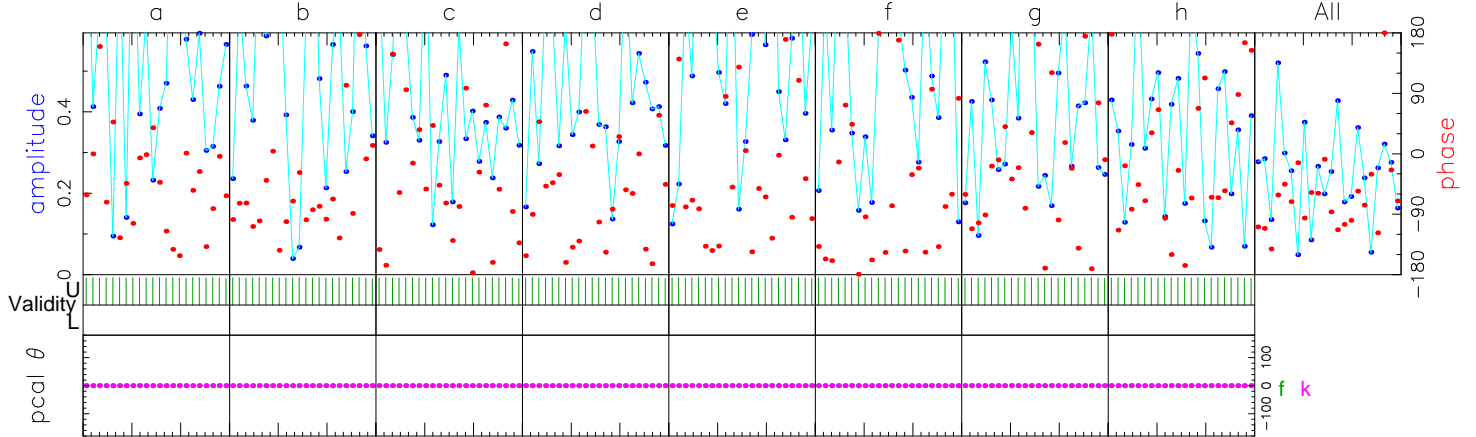
Fringe quality 9

SNR 7.2  
 Int time 178.596  
 Amp 0.198  
 Phase -82.3  
 PFD 7.0e-05  
 Delays (us)  
 SBD 0.003094  
 MBD 0.000840  
 Fringe rate (Hz)  
 0.003848  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141915  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-74.2	-87.9	-88.7	-57.3	-95.4	-120.4	-60.0	-49.7	Phase	-82.3
	0.3	0.3	0.1	0.2	0.3	0.2	0.2	0.1	Ampl.	0.2
	258.1	256.8	381.7	221.4	257.5	223.8	393.2	442.3	Sbd box	257.8
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	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.66541143791E+02		Apriori delay (usec)		5.66540303305E+02		Resid mbdelay (usec)		8.40487E-04	+/- 1.5E-04
Sband delay (usec)	5.66543397805E+02		Apriori clock (usec)		7.5907078E+00		Resid sbdelay (usec)		3.09450E-03	+/- 1.2E-03
Phase delay (usec)	5.66540300706E+02		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-2.59850E-06	+/- 5.0E-07
Delay rate (us/s)	-1.73821139082E-01		Apriori rate (us/s)		-1.73821182843E-01		Resid rate (us/s)		4.37615E-08	+/- 4.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.92204800210E-06		Resid phase (deg)		-82.3	+/- 15.8

ph/seg (deg) 41.6 37.1 Search (1024X32) 0.196 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.4 64.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.6 22.4 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.1 39.1 Inc. frq. avg. 0.194 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 173.2 el 57.9 pa -5.4 k: az 160.0 el 55.1 pa -16.3 u,v (fr/asec) 1015.233 -170.965 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fk..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fk.W.40.1JLJ5P

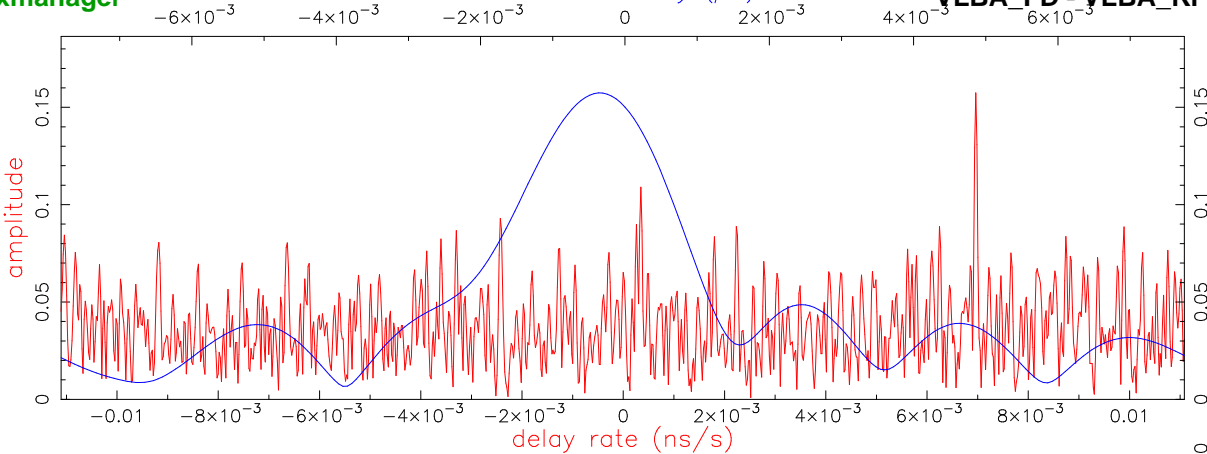
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fk

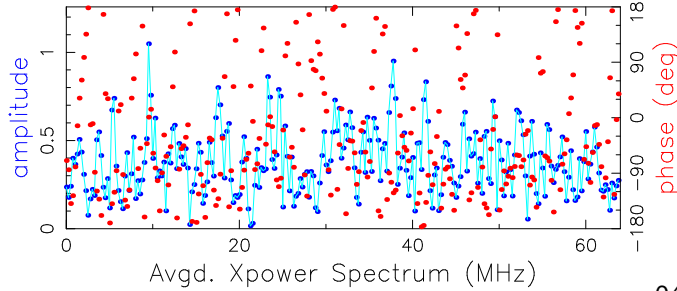
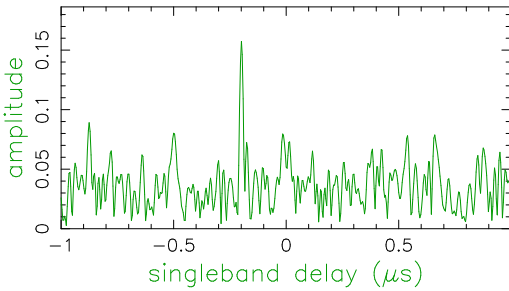
VLBA\_FD - VLBA\_KP, fgroup W, pol RL

multiband delay ( $\mu$ s)



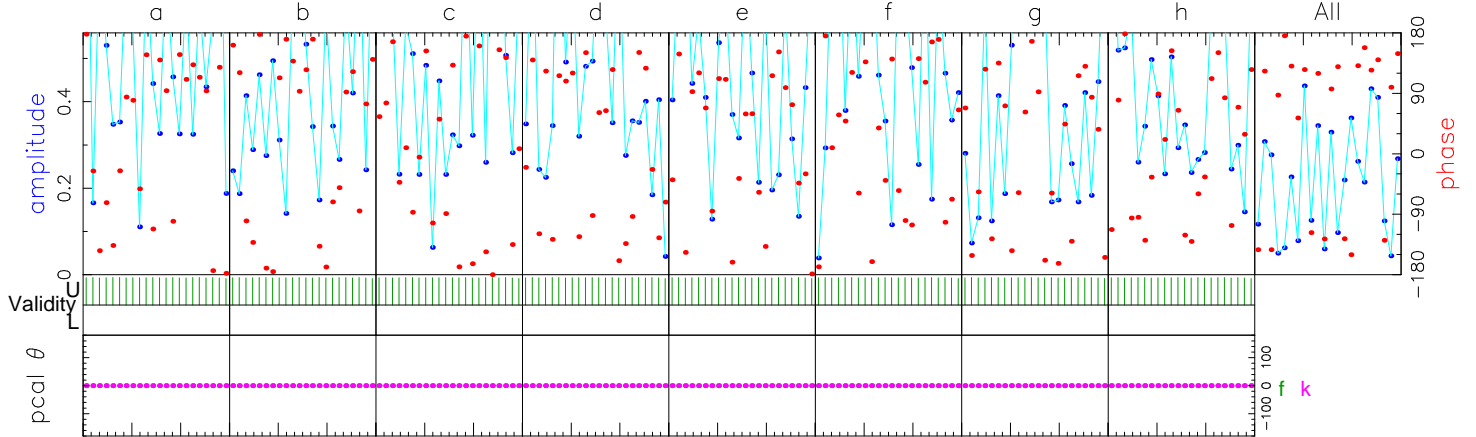
Fringe quality 0

SNR 5.8  
 Int time 178.597  
 Amp 0.186  
 Phase 148.0  
 PFD 6.5e-01  
 Delays (us)  
 SBD -0.198717  
 MBD -0.000331  
 Fringe rate (Hz)  
 0.613404  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141917  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



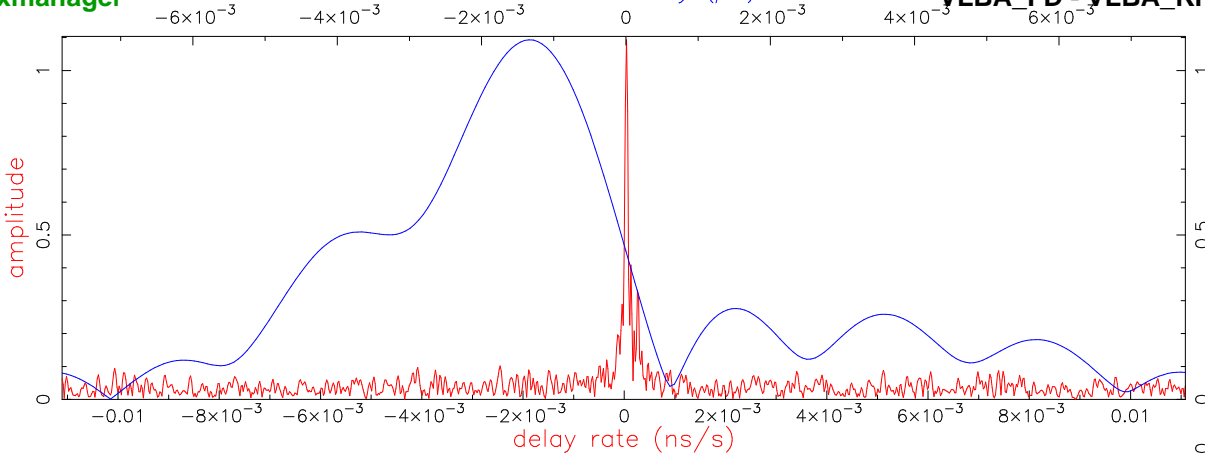
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.66336847320E+02		Apriori delay (usec)		5.66540303305E+02		Resid mbdelay (usec)		-3.30985E-04	+/- 1.9E-04
Sband delay (usec)	5.66341586805E+02		Apriori clock (usec)		7.5907078E+00		Resid sbdelay (usec)		-1.98717E-01	+/- 1.5E-03
Phase delay (usec)	5.66540307981E+02		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		4.67604E-06	+/- 6.3E-07
Delay rate (us/s)	-1.73814207587E-01		Apriori rate (us/s)		-1.73821182843E-01		Resid rate (us/s)		6.97526E-06	+/- 6.0E-09
Total phase (deg)	246.2		Apriori accel (us/s/s)		-2.92204800210E-06		Resid phase (deg)		148.0	+/- 19.9

	RMS	Theor.	Amplitude	0.186 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	54.8	46.7	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	90.8	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	16.4	28.1	Inc. seg. avg.	0.196	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.4	49.1	Inc. frq. avg.	0.170	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

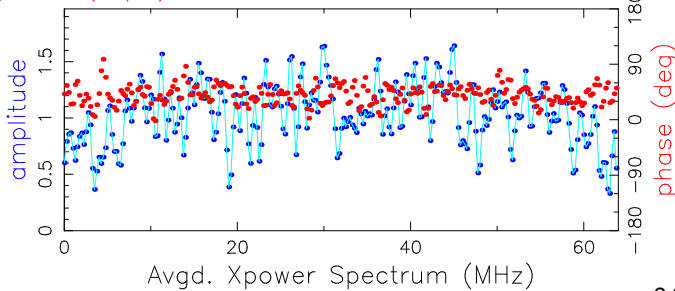
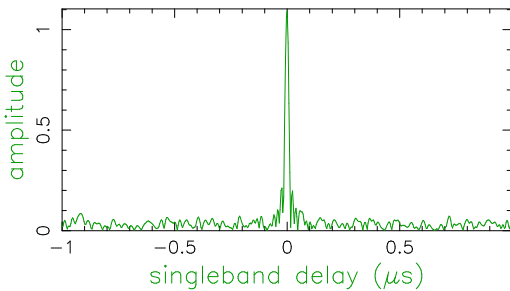
f: az 173.2 el 57.9 pa -5.4 k: az 160.0 el 55.1 pa -16.3 u,v (fr/asec) 1015.233 -170.965 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fk..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fk.W.58.1JLJ5P

multiband delay ( $\mu$ s)

Fringe quality 6

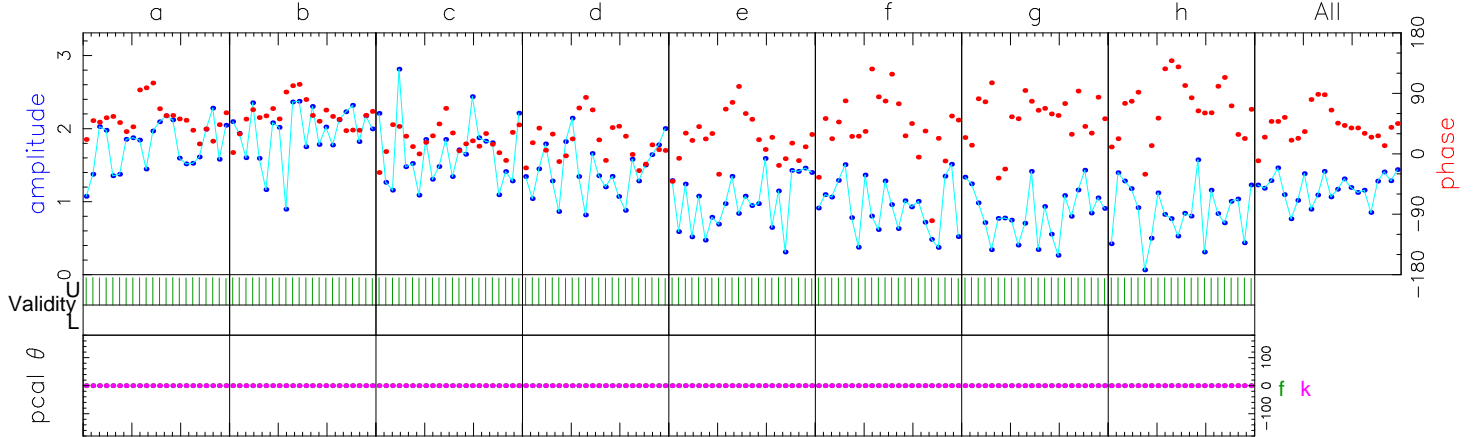


SNR 40.3  
Int time 178.597  
Amp 1.104  
Phase 41.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.001257  
MBD -0.001357  
Fringe rate (Hz)  
0.003163  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141911  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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

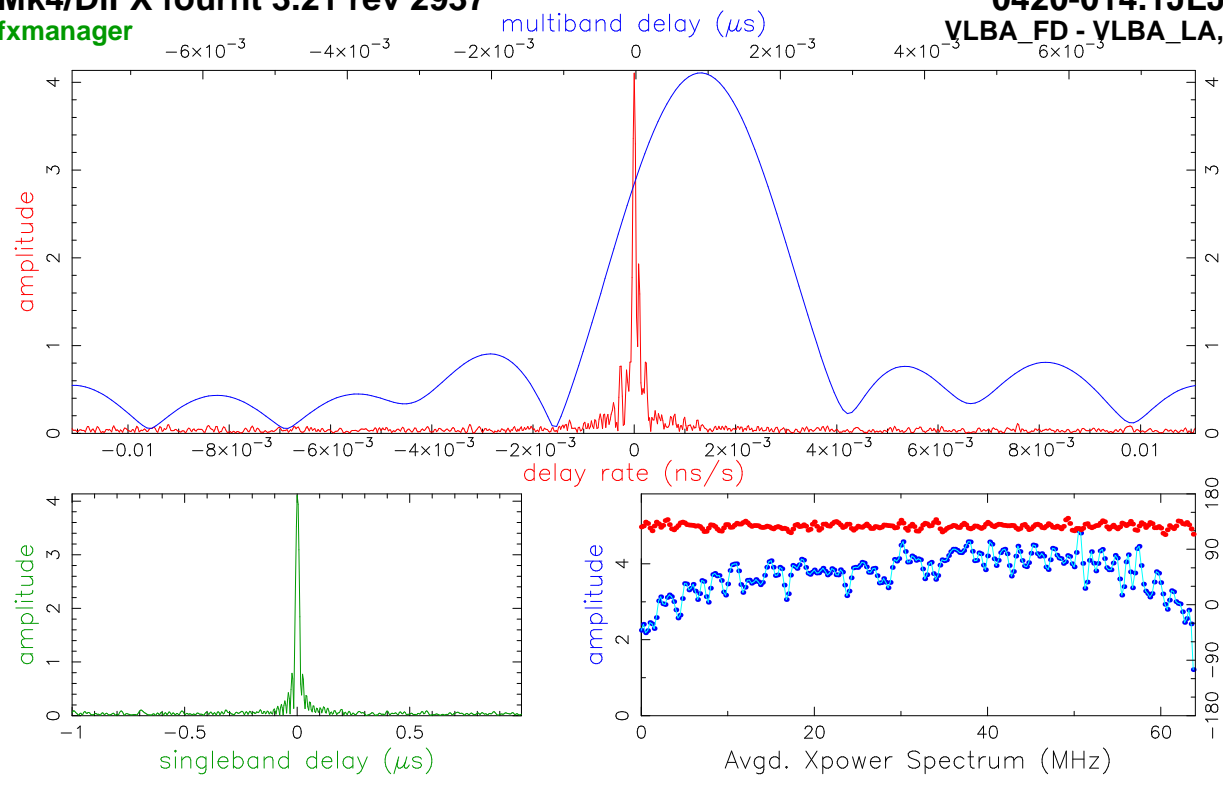


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.66538946041E+02	Apriori delay (usec)	5.66540303305E+02	Resid mbdelay (usec)	-1.35726E-03	+/-	2.7E-05
Sband delay (usec)	5.66539046805E+02	Apriori clock (usec)	7.5907078E+00	Resid sbdelay (usec)	-1.25650E-03	+/-	2.1E-04
Phase delay (usec)	5.66540304601E+02	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	1.29599E-06	+/-	9.0E-08
Delay rate (us/s)	-1.73821146876E-01	Apriori rate (us/s)	-1.73821182843E-01	Resid rate (us/s)	3.59673E-08	+/-	8.6E-10
Total phase (deg)	139.2	Apriori accel (us/s/s)	-2.92204800210E-06	Resid phase (deg)	41.0	+/-	2.8

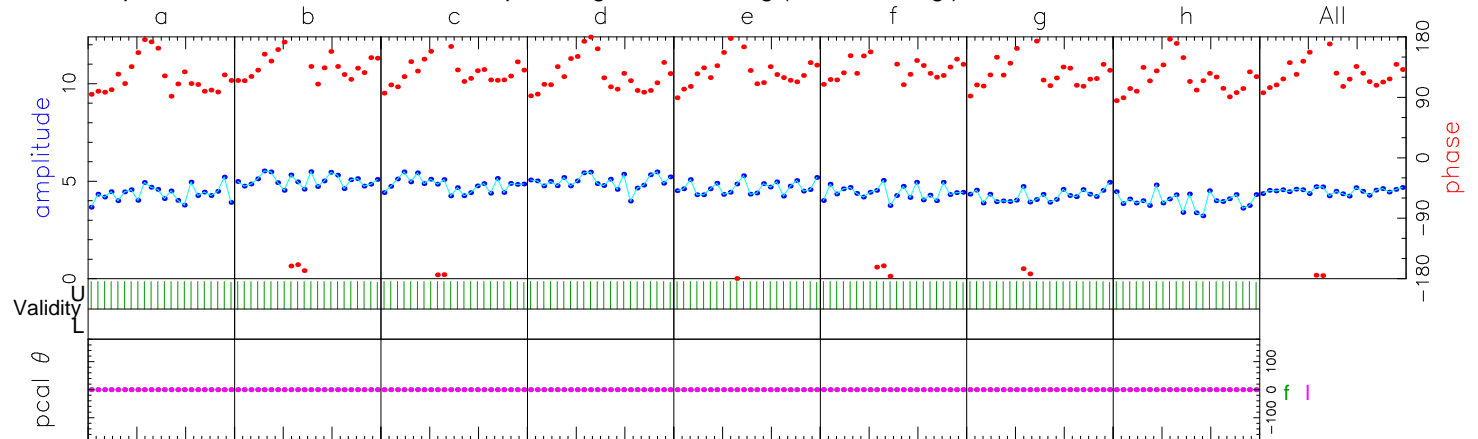
ph/seg (deg)	23.5	Theor.	Amplitude	1.104 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	18.5	6.7	Search (1024X32)	1.059	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.8	4.0	Inc. seg. avg.	1.179	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	39.0	7.0	Inc. frq. avg.	1.150	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011 0.011
f: az 173.2 el 57.9 pa -5.4		k: az 160.0 el 55.1 pa -16.3		u,v (fr/asec)	1015.233 -170.965	ion window (TEC)	0.00 0.00	

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fk..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fk.W.7.1JLJ5P simultaneous interpolator



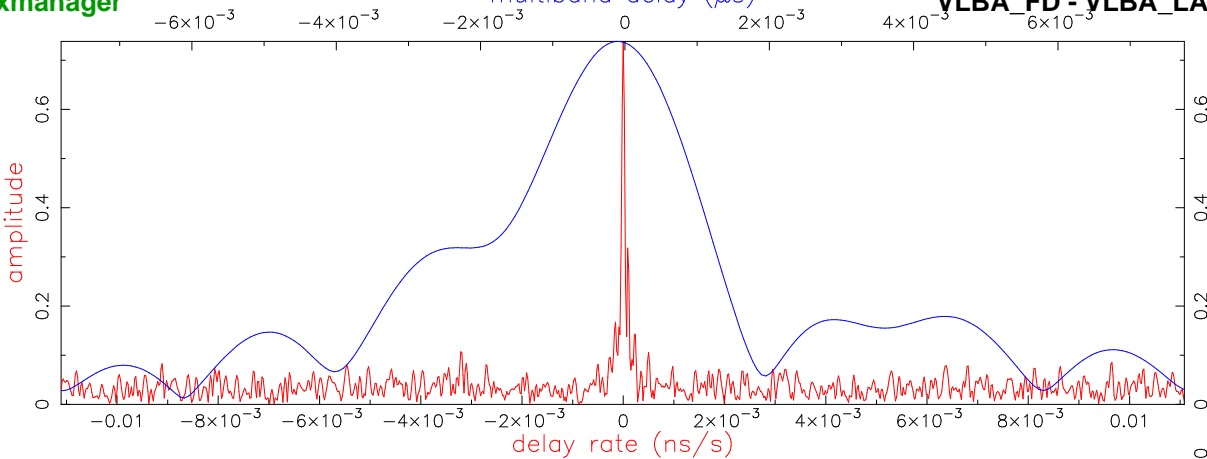
Fringe quality 7  
SNR 151.7  
Int time 179.976  
Amp 4.135  
Phase 129.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.001098  
MBD 0.000924  
Fringe rate (Hz) 0.000885  
Ion TEC 0.000  
Ref freq (MHz) 87940.0000  
AP (sec) 0.512  
Exp. c202c  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141914  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



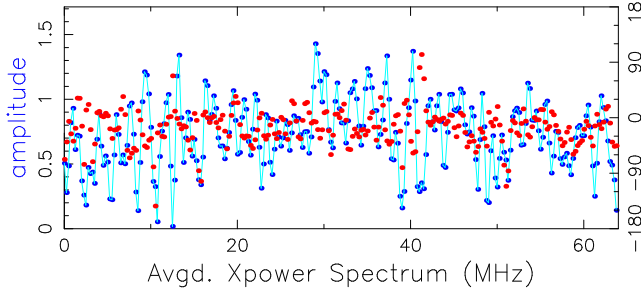
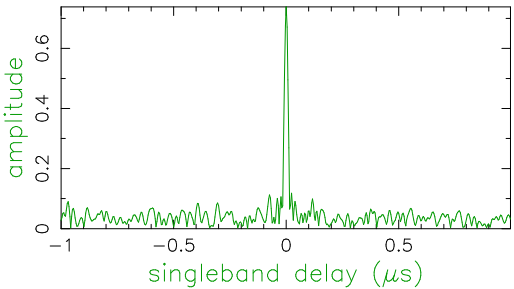
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		1.13565313813E+03				1.13565221432E+03			Resid mbdelay (usec)	9.23813E-04 +/- 7.2E-06
Sband delay (usec)		1.13565331232E+03				8.3578453E+00			Resid sbdelay (usec)	1.09800E-03 +/- 5.7E-05
Phase delay (usec)		1.13565221842E+03				5.0000000E-07			Resid phdelay (usec)	4.09712E-06 +/- 2.4E-08
Delay rate (us/s)		-4.61867536469E-02				-4.61867637107E-02			Resid rate (us/s)	1.00638E-08 +/- 2.3E-10
Total phase (deg)			31.5			-5.80331495808E-06			Resid phase (deg)	129.7 +/- 0.8
ph/seg (deg)	24.5	1.8							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	9.5	3.1							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	9.8	1.1							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	7.5	1.9							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
f: az 173.2 el 57.9 pa -5.4		l: az 170.3 el 52.5 pa -7.3				u,v (fr/asec) 268.263 -667.365				simultaneous interpolator
Control file: cf_1234_88GHz_gmva		Input file: /Exps/c202c/v1/1234/No0075/fl..1JLJ5P				Output file: /Exps/c202c/v1/1234/No0075/fl.W.32.1JLJ5P				

multiband delay ( $\mu$ s)



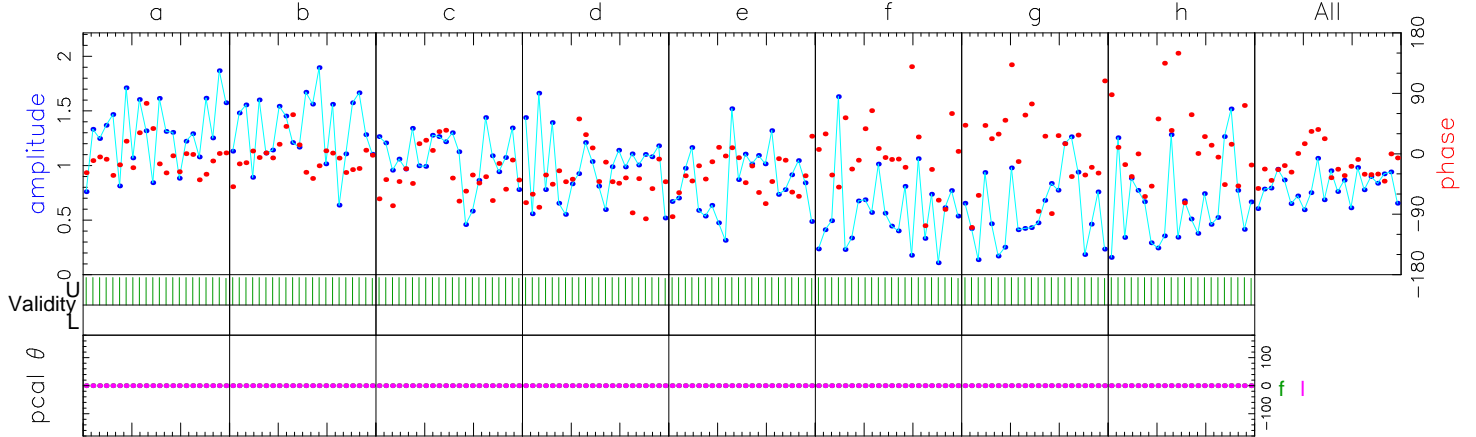
Fringe quality 7

SNR 27.1  
Int time 179.976  
Amp 0.738  
Phase -15.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.000056  
MBD -0.000099  
Fringe rate (Hz) 0.000888  
Ion TEC 0.000  
Ref freq (MHz) 87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141916  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

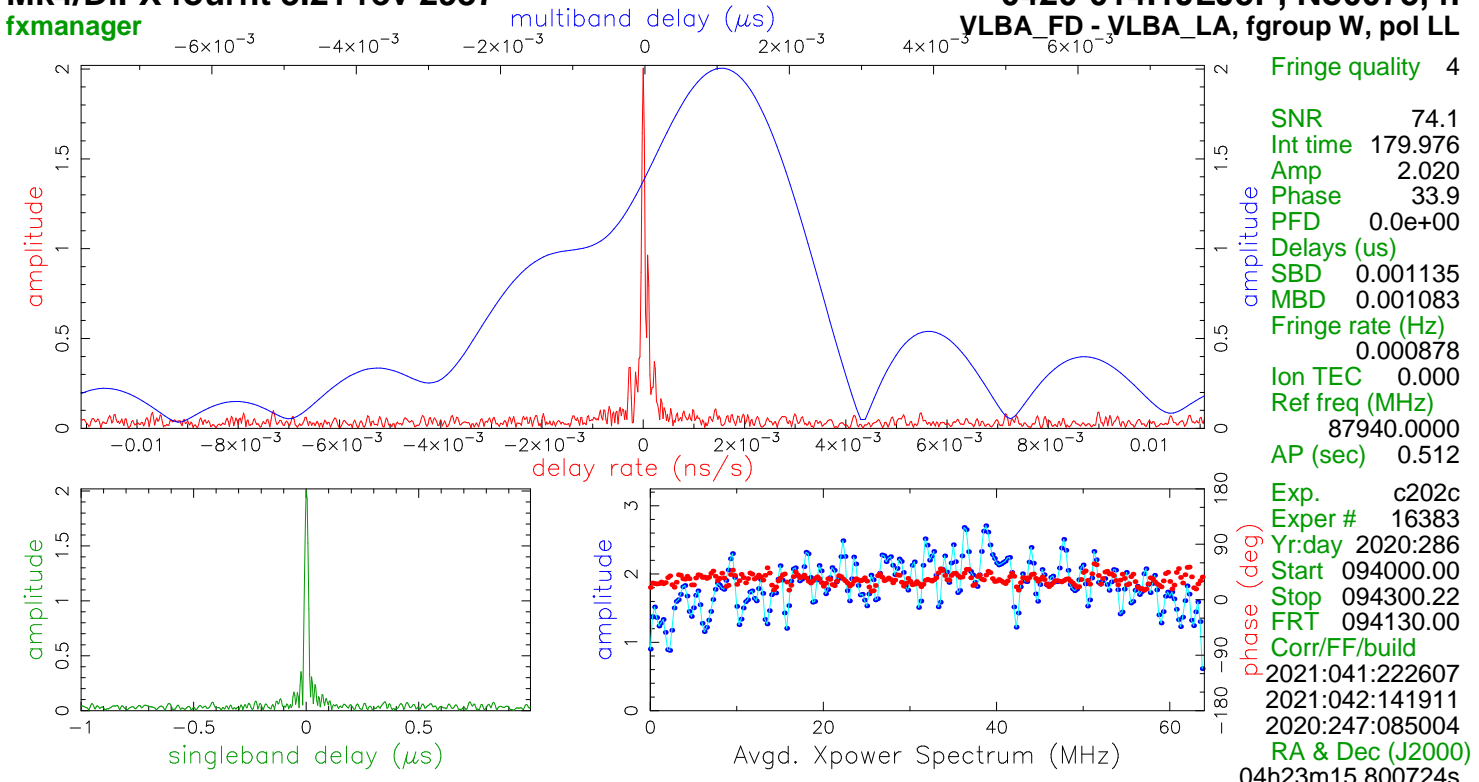
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



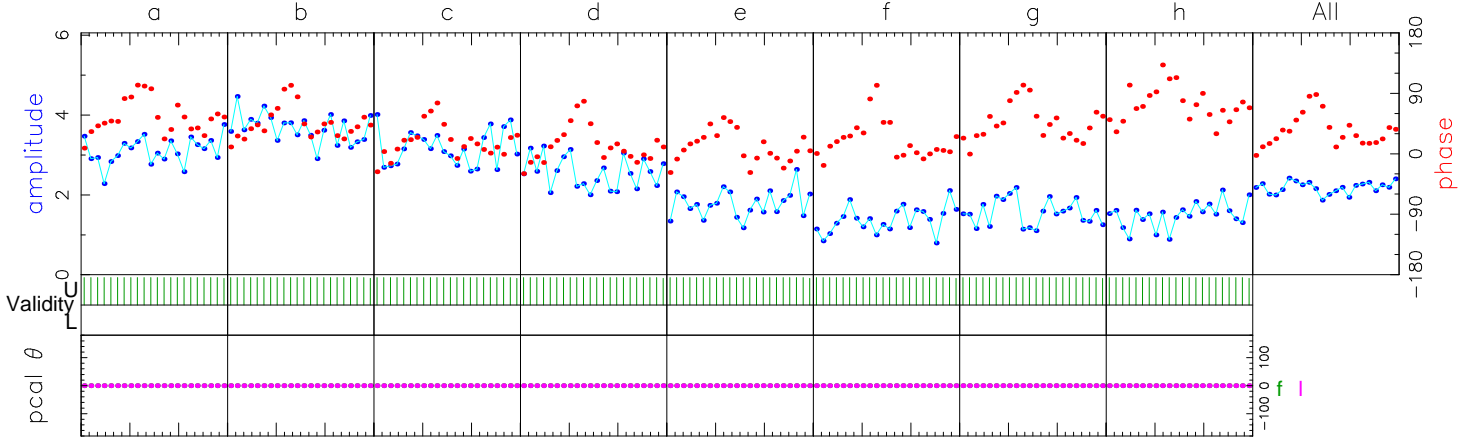
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.13565211538E+03	Apriori delay (usec)	1.13565221432E+03	Resid mbdelay (usec)	-9.89375E-05	+/-	4.0E-05
Sband delay (usec)	1.13565215857E+03	Apriori clock (usec)	8.3578453E+00	Resid sbdelay (usec)	-5.57500E-05	+/-	3.2E-04
Phase delay (usec)	1.13565221382E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-4.94590E-07	+/-	1.3E-07
Delay rate (us/s)	-4.61867536164E-02	Apriori rate (us/s)	-4.61867637107E-02	Resid rate (us/s)	1.00943E-08	+/-	1.3E-09
Total phase (deg)	246.1	Apriori accel (us/s/s)	-5.80331495808E-06	Resid phase (deg)	-15.7	+/-	4.2

ph/seg (deg)	23.6	Theor.	9.9	Amplitude	0.738 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	20.2		17.3	Search (1024X32)	0.706	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	19.3		6.0	Inc. seg. avg.	0.793	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	42.3		10.4	Inc. frq. avg.	0.762	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



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



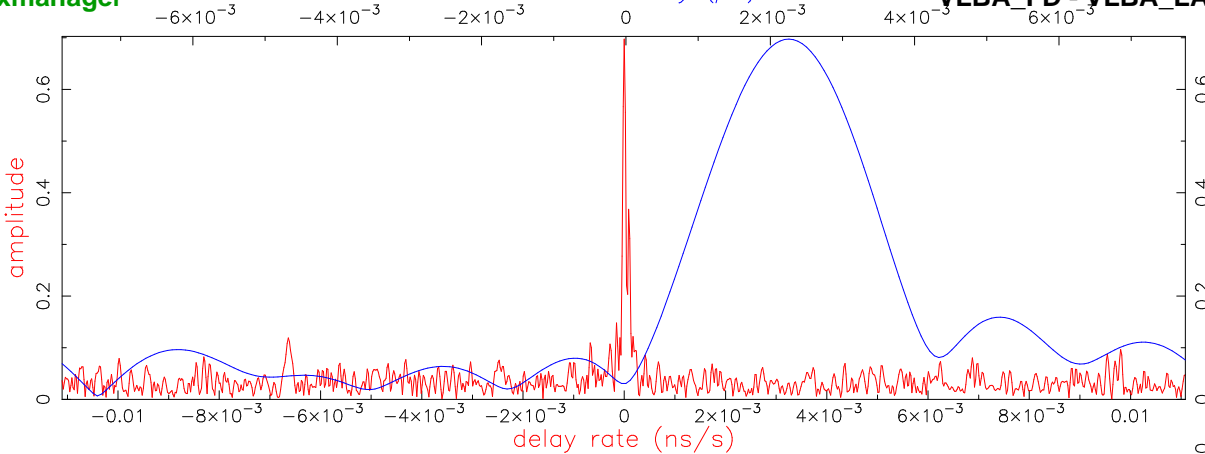
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.13565329719E+03	Apriori delay (usec)	1.13565221432E+03	Resid mbdelay (usec)	1.08287E-03	+/-	1.5E-05
Sband delay (usec)	1.13565334932E+03	Apriori clock (usec)	8.3578453E+00	Resid sbdelay (usec)	1.13500E-03	+/-	1.2E-04
Phase delay (usec)	1.13565221539E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	1.07095E-06	+/-	4.9E-08
Delay rate (us/s)	-4.61867537219E-02	Apriori rate (us/s)	-4.61867637107E-02	Resid rate (us/s)	9.98883E-09	+/-	4.7E-10
Total phase (deg)	295.7	Apriori accel (us/s/s)	-5.80331495808E-06	Resid phase (deg)	33.9	+/-	1.5

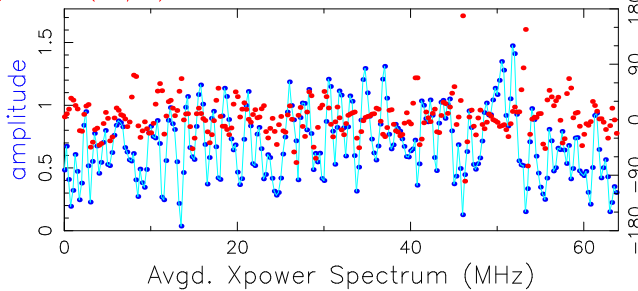
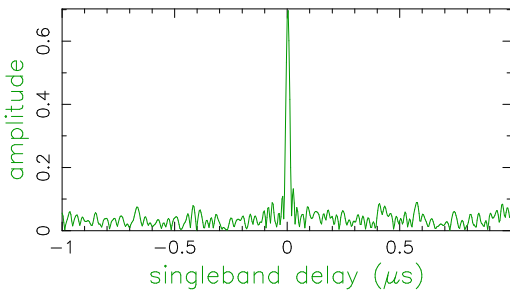
ph/seg (deg)	23.7	Theor.	3.6	Amplitude	2.020 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	10.8	Search (1024X32)	1.917	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.7	Inc. seg. avg.	2.178	Inc. seg. avg.	2.178	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.7	Inc. frq. avg.	2.131	Inc. frq. avg.	2.131	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	

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

Fringe quality 8

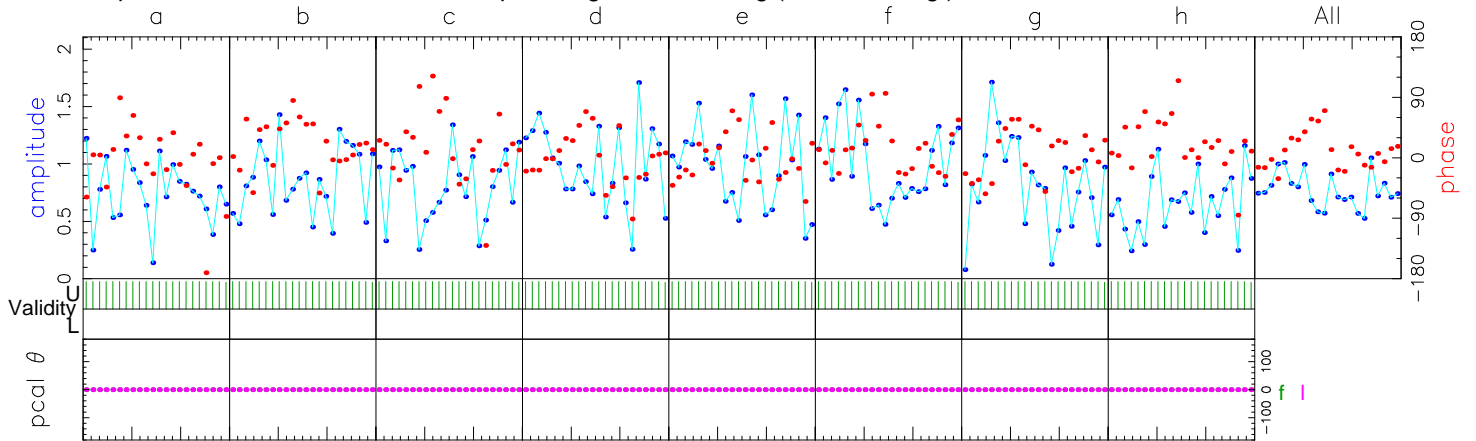


SNR 25.8  
Int time 179.976  
Amp 0.702  
Phase 8.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.002764  
MBD 0.002227  
Fringe rate (Hz)  
0.000867  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141917  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

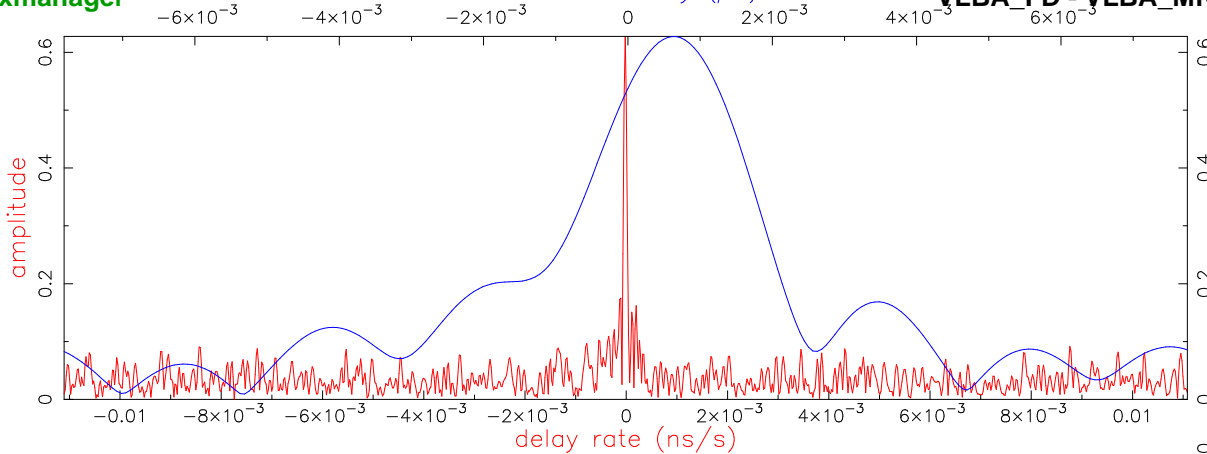
Group delay (usec)(sbd)	1.13565444157E+03	Apriori delay (usec)	1.13565221432E+03	Resid mbdelay (usec)	2.22725E-03	+/-	4.2E-05
Sband delay (usec)	1.13565497807E+03	Apriori clock (usec)	8.3578453E+00	Resid sbdelay (usec)	2.76375E-03	+/-	3.3E-04
Phase delay (usec)	1.13565221459E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	2.69453E-07	+/-	1.4E-07
Delay rate (us/s)	-4.61867538496E-02	Apriori rate (us/s)	-4.61867637107E-02	Resid rate (us/s)	9.86113E-09	+/-	1.3E-09
Total phase (deg)	270.3	Apriori accel (us/s/s)	-5.80331495808E-06	Resid phase (deg)	8.5	+/-	4.4

ph/seg (deg)	26.6	Theor.	10.4	Amplitude	0.702 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	23.1		18.2	Search (1024X32)	0.660	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.6		6.3	Inc. seg. avg.	0.758	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	18.6		11.0	Inc. frq. avg.	0.702	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	

f: az 173.2 el 57.9 pa -5.4 l: az 170.3 el 52.5 pa -7.3 u,v (fr/asec) 268.263 -667.365 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fl..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fl.W.63.1JLJ5P

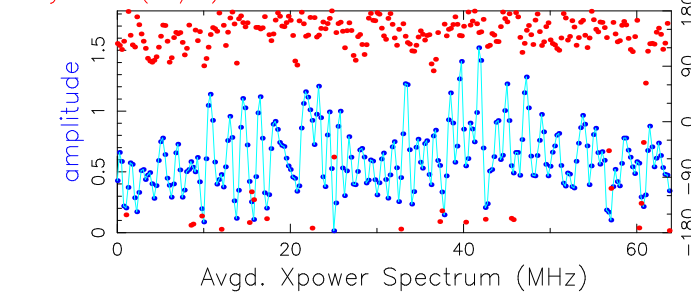
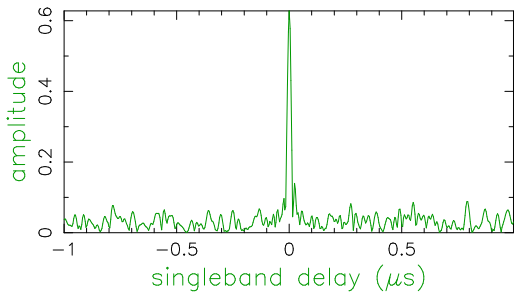


multiband delay ( $\mu$ s)



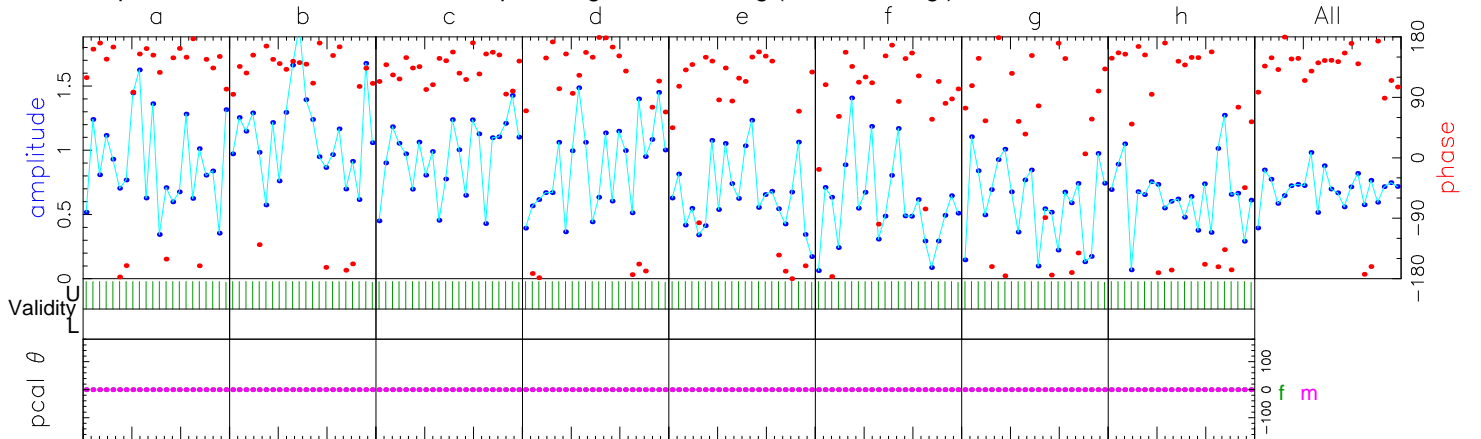
Fringe quality 9

SNR 23.0  
 Int time 179.976  
 Amp 0.628  
 Phase 142.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000186  
 MBD 0.000636  
 Fringe rate (Hz)  
 -0.001208  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141912  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



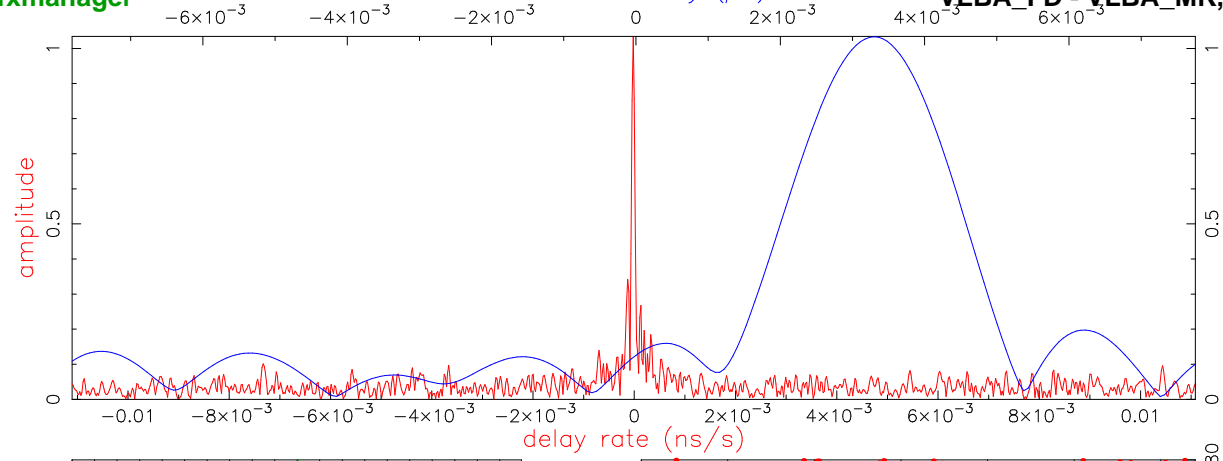
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	6.64030488480E+03	Apriori delay (usec)	6.64030424868E+03	Resid mbdelay (usec)	6.36116E-04	+/-	4.7E-05
Sband delay (usec)	6.64030443443E+03	Apriori clock (usec)	-5.4482927E+00	Resid sbdelay (usec)	1.85750E-04	+/-	3.7E-04
Phase delay (usec)	6.64030425319E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	4.50614E-06	+/-	1.6E-07
Delay rate (us/s)	-1.11751983444E+00	Apriori rate (us/s)	-1.11751982071E+00	Resid rate (us/s)	-1.37326E-08	+/-	1.5E-09
Total phase (deg)	9.1	Apriori accel (us/s/s)	-3.57725692753E-05	Resid phase (deg)	142.7	+/-	5.0

ph/seg (deg)	27.5	Theor.	11.7	Amplitude	0.628 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	23.2		20.4	Search (1024X32)	0.609	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	13.5		7.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.7		12.3	Inc. seg. avg.	0.685	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.634	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

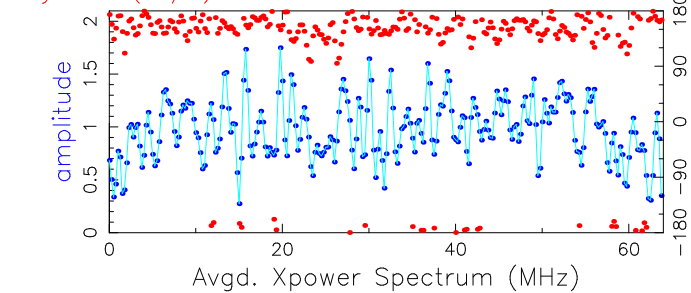
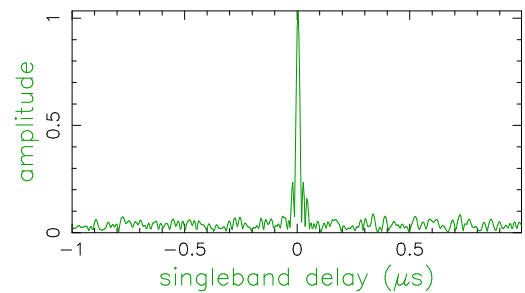
f: az 173.2 el 57.9 pa -5.4 m: az 104.7 el 32.0 pa -65.5 u,v (fr/asec) 6513.271 1618.002 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fm..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fm.W.10.1JLJ5P

multiband delay ( $\mu$ s)



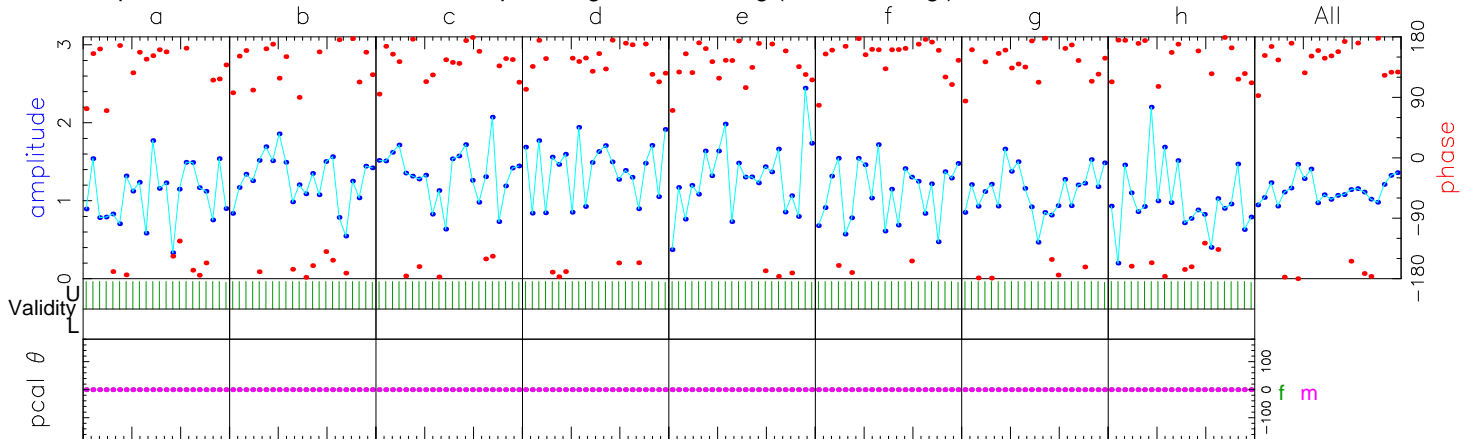
Fringe quality 8

SNR 37.9  
Int time 179.976  
Amp 1.034  
Phase 157.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.003462  
MBD 0.003285  
Fringe rate (Hz)  
-0.001392  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Yr:day 16383  
2021:041:22286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141914  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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	157.5	157.5
m	1000	1000	1000	1000	1000	1000	1000	1000	1.0	1.0
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.9	257.9
f:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	6.64030753389E+03		Apriori delay (usec)		6.64030424868E+03		Resid mbdelay (usec)		3.28521E-03	+/- 2.9E-05
Sband delay (usec)	6.64030771043E+03		Apriori clock (usec)		-5.4482927E+00		Resid sbdelay (usec)		3.46175E-03	+/- 2.3E-04
Phase delay (usec)	6.64030425366E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		4.97549E-06	+/- 9.5E-08
Delay rate (us/s)	-1.11751983654E+00		Apriori rate (us/s)		-1.11751982071E+00		Resid rate (us/s)		-1.58300E-08	+/- 9.2E-10
Total phase (deg)	24.0		Apriori accel (us/s/s)		-3.57725692753E-05		Resid phase (deg)		157.5	+/- 3.0

ph/seg (deg) 25.8 7.1 Search (1024X32) 1.014 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 17.7 12.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 6.9 4.3 Inc. seg. avg. 1.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 12.5 7.5 Inc. frq. avg. 1.036 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 173.2 el 57.9 pa -5.4 m: az 104.7 el 32.0 pa -65.5 u,v (fr/asec) 6513.271 1618.002 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fm..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fm.W.29.1JLJ5P

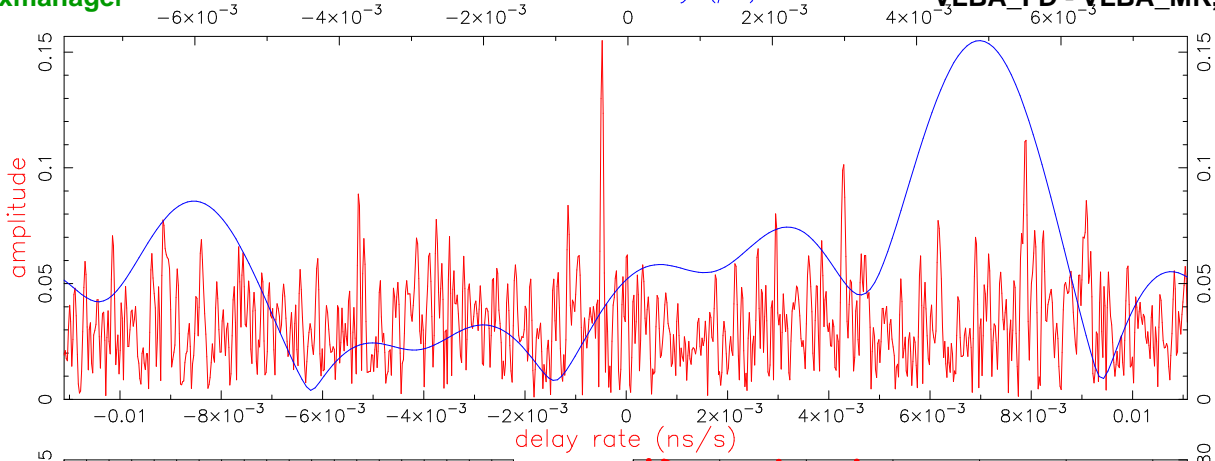
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fm

VLBA\_FD - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)



Fringe quality 0

SNR 5.7

Int time 179.976

Ampl 0.157

Phase -167.8

PFD 6.8e-01

Delays (us)

SBD 0.501384

MBD 0.004885

Fringe rate (Hz)

-0.041766

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 094000.00

Stop 094300.22

FRT 094130.00

Corr/FF/build

2021:041:222607

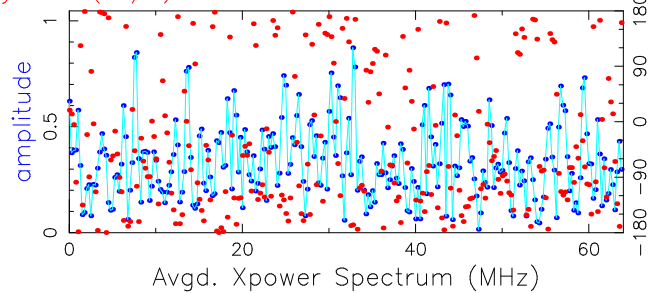
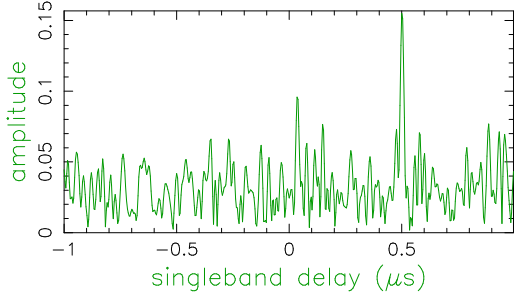
2021:042:141916

2020:247:085004

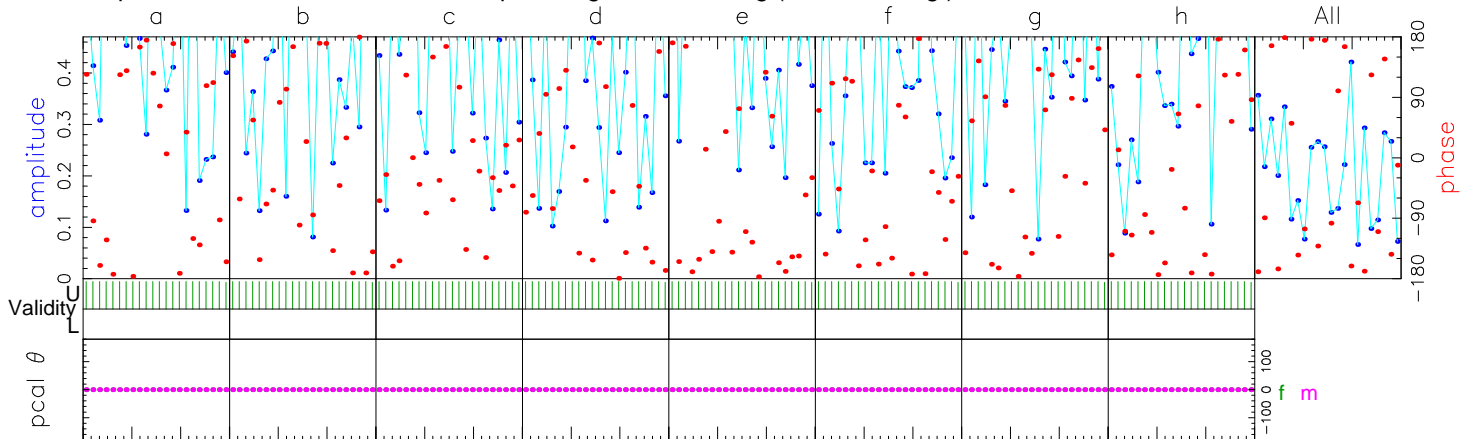
RA & Dec (J2000)

04h23m15.800724s

--1°20'33.065613"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	176.9	-167.7	-58.9	-152.4	-156.5	-164.0	170.6	-176.7	Phase	-167.8
	0.3	0.1	0.1	0.1	0.3	0.1	0.2	0.2	Ampl.	0.2
	384.5	234.9	276.3	204.3	384.4	151.9	206.7	193.4	Sbd box	385.4
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.64080913358E+03		Apriori delay (usec)		6.64030424868E+03		Resid mbdelay (usec)		4.88490E-03	+/- 1.9E-04
Sband delay (usec)	6.64080563318E+03		Apriori clock (usec)		-5.4482927E+00		Resid sbdelay (usec)		5.01384E-01	+/- 1.5E-03
Phase delay (usec)	6.64030424338E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-5.29902E-06	+/- 6.3E-07
Delay rate (us/s)	-1.11752029564E+00		Apriori rate (us/s)		-1.11751982071E+00		Resid rate (us/s)		-4.74936E-07	+/- 6.1E-09
Total phase (deg)	58.7		Apriori accel (us/s/s)		-3.57725692753E-05		Resid phase (deg)		-167.8	+/- 19.9

ph/seg (deg) 64.8 46.8 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 72.5 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 46.6 28.2 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

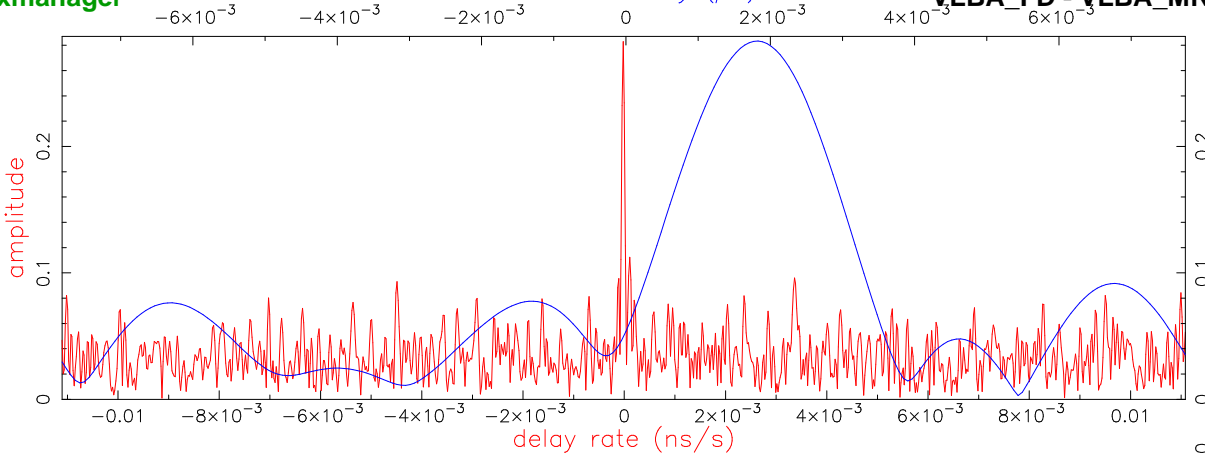
amp/frq (%) 50.5 49.2 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011

f: az 173.2 el 57.9 pa -5.4 m: az 104.7 el 32.0 pa -65.5 u,v (fr/asec) 6513.271 1618.002 simultaneous interpolator

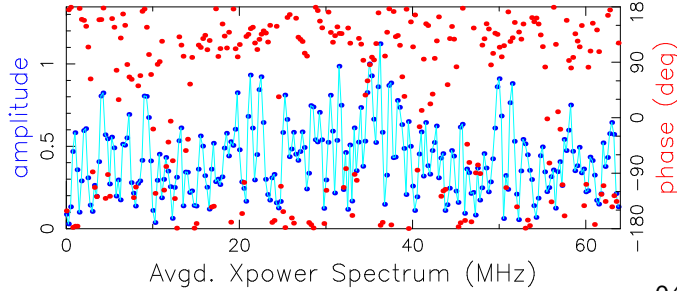
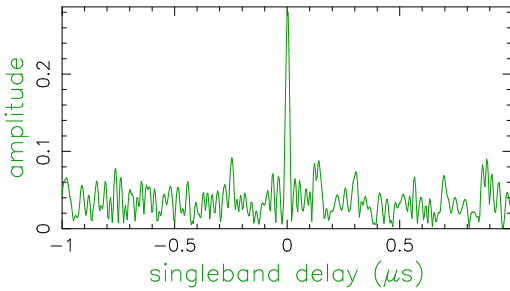
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fm..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fm.W.55.1JLJ5P

multiband delay ( $\mu$ s)

Fringe quality 9

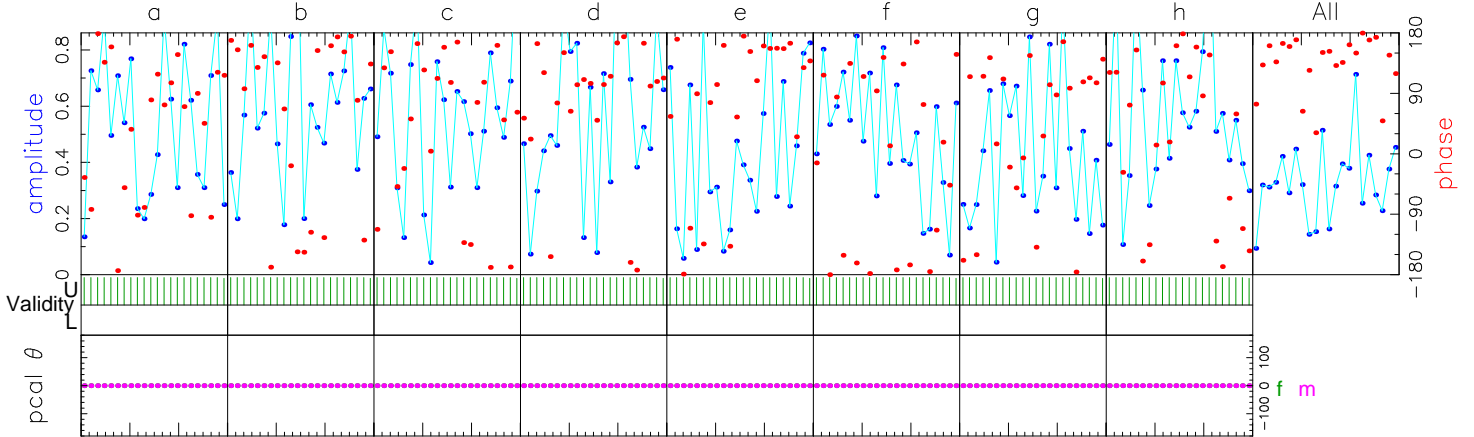


SNR 10.5  
 Int time 179.976  
 Amp 0.287  
 Phase 144.3  
 PFD 1.4e-17  
 Delays (us)  
 SBD 0.001625  
 MBD 0.001882  
 Fringe rate (Hz) -0.001283  
 Ion TEC 0.000  
 Ref freq (MHz) 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141918  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	121.5	171.0	142.4	130.7	145.7	157.3	122.8	144.3	Phase	144.3
	0.2	0.4	0.3	0.4	0.3	0.3	0.2	0.3	Ampl.	0.3
	308.5	256.9	98.7	257.0	258.3	257.8	75.3	257.9	Sbd box	257.4
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	6.64030613027E+03	Apriori delay (usec)	6.64030424868E+03	Resid mbdelay (usec)	1.88158E-03	+/-	1.0E-04
Sband delay (usec)	6.64030587368E+03	Apriori clock (usec)	-5.4482927E+00	Resid sbdelay (usec)	1.62500E-03	+/-	8.2E-04
Phase delay (usec)	6.64030425324E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	4.55686E-06	+/-	3.4E-07
Delay rate (us/s)	-1.11751983530E+00	Apriori rate (us/s)	-1.11751982071E+00	Resid rate (us/s)	-1.45946E-08	+/-	3.3E-09
Total phase (deg)	10.7	Apriori accel (us/s/s)	-3.57725692753E-05	Resid phase (deg)	144.3	+/-	10.9

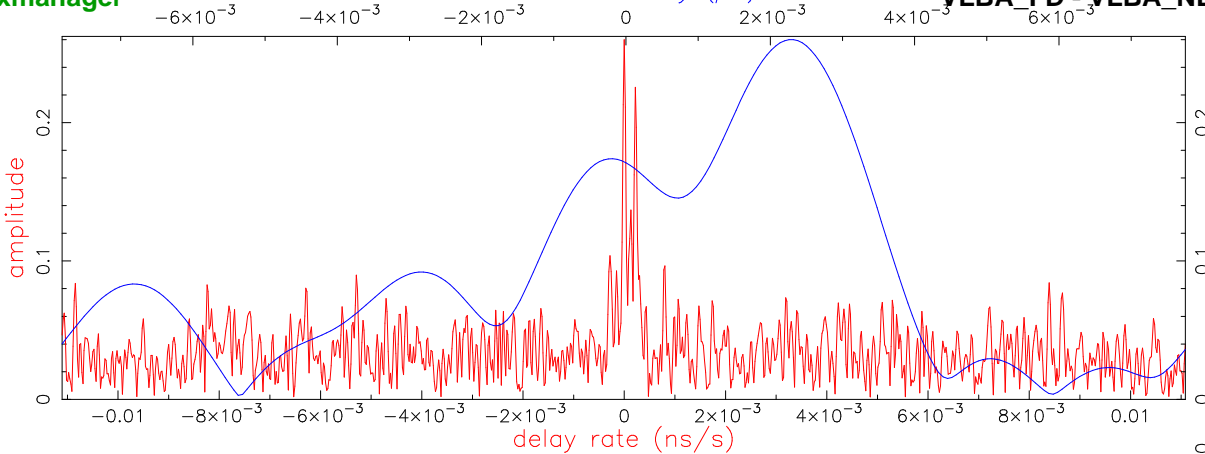
ph/seg (deg)	42.4	RMS	25.5	Theor.	Amplitude	0.287 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	50.0	42.4	25.5	Search (1024X32)	Interp.	0.275	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	18.5	18.5	15.4	Inc. seg. avg.	Inc. frq. avg.	0.303	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.5	29.5	26.9	Inc. frq. avg.	0.284	0.284	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 173.2 el 57.9 pa -5.4 m: az 104.7 el 32.0 pa -65.5 u,v (fr/asec) 6513.271 1618.002 simultaneous interpolator

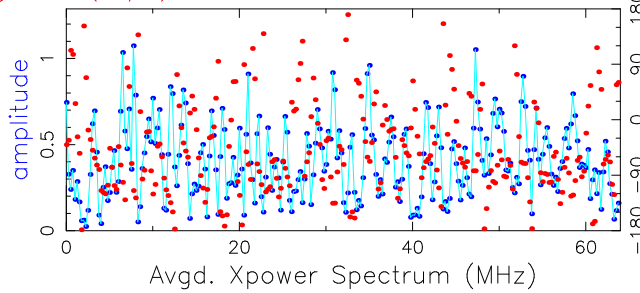
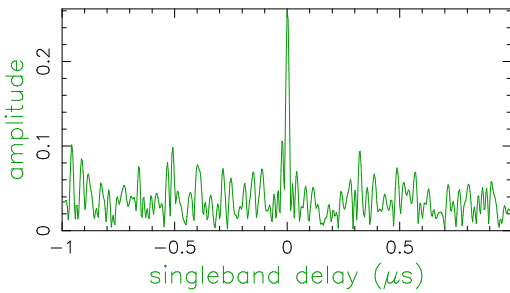
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fm..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fm.W.74.1JLJ5P

multiband delay ( $\mu$ s)

Fringe quality 9

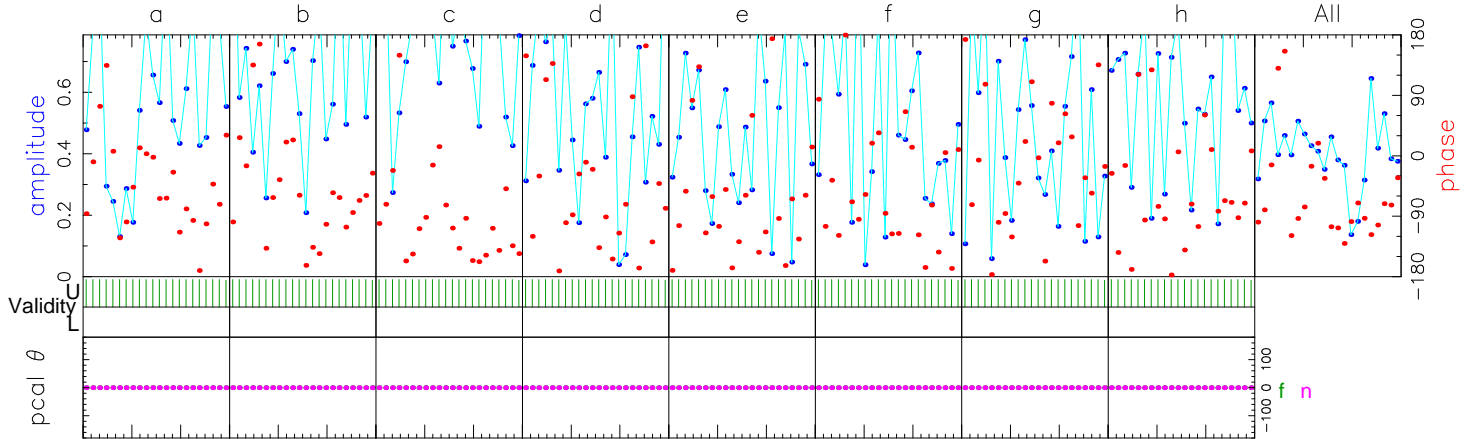


SNR 9.6  
Int time 179.976  
Amp 0.262  
Phase -83.5  
PFD 1.3e-13  
Delays (us)  
SBD 0.001142  
MBD 0.002309  
Fringe rate (Hz)  
0.000465  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141912  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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

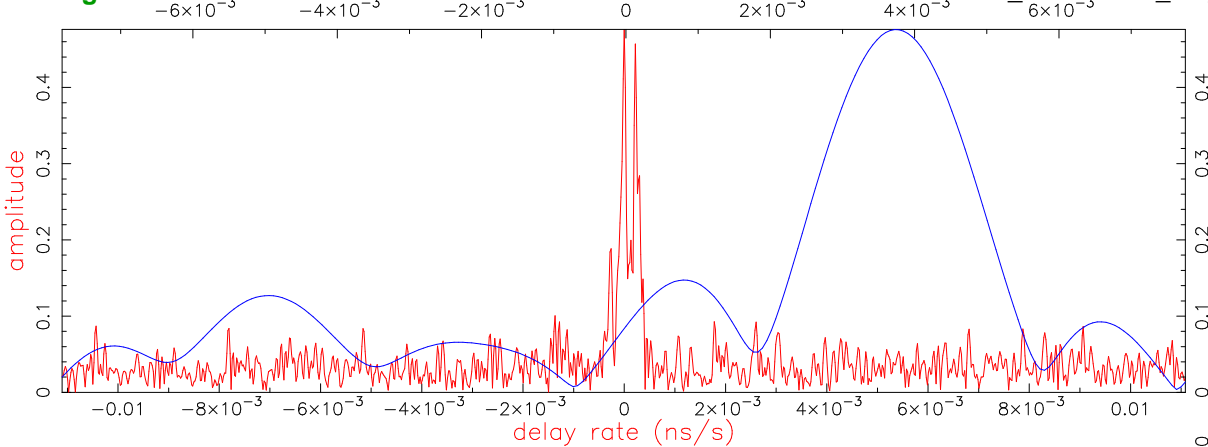


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-44.2	-67.6	-110.9	-117.3	-109.8	-85.8	-22.9	-69.7	Phase	-83.5
	0.3	0.4	0.6	0.2	0.2	0.2	0.1	0.3	Ampl.	0.3
	36.7	257.7	256.6	46.8	442.1	423.1	317.4	7.7	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.68994714900E+03		Apriori delay (usec)		2.68994483987E+03		Resid mbdelay (usec)		2.30912E-03 +/- 1.1E-04	
Sband delay (usec)	2.68994598212E+03		Apriori clock (usec)		7.6974316E+00		Resid sbdelay (usec)		1.14225E-03 +/- 9.0E-04	
Phase delay (usec)	2.68994483723E+03		Apriori clockrate (us/s)		-1.0000003E-07		Resid phdelay (usec)		-2.63728E-06 +/- 3.8E-07	
Delay rate (us/s)	2.59302491736E-01		Apriori rate (us/s)		2.59302486445E-01		Resid rate (us/s)		5.29147E-09 +/- 3.6E-09	
Total phase (deg)			Apriori accel (us/s/s)		-1.38643352526E-05		Resid phase (deg)		-83.5 +/- 11.9	

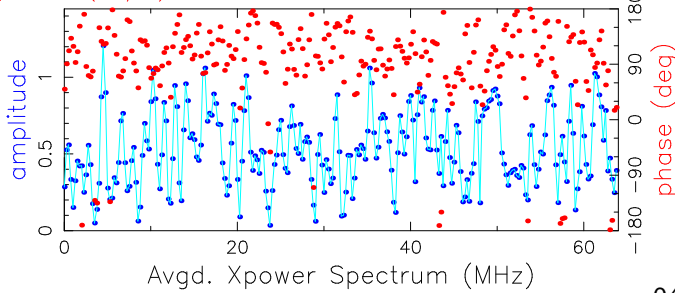
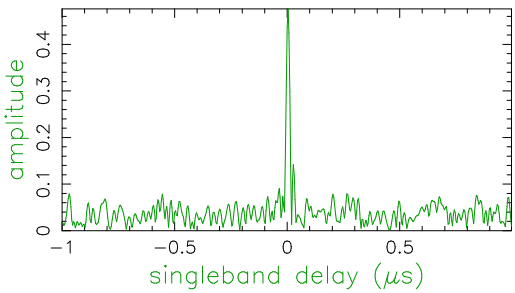
ph/seg (deg) 55.7 27.9 Amplitude 0.262 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.1 48.7 Interp. 0.254 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.1 16.8 Inc. seg. avg. 0.365 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 52.1 29.4 Inc. frq. avg. 0.284 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 173.2 el 57.9 pa -5.4 n: az 192.7 el 46.2 pa 9.5 u,v (fr/asec) -1521.038 -1392.352 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

multiband delay ( $\mu$ s)

Fringe quality 9

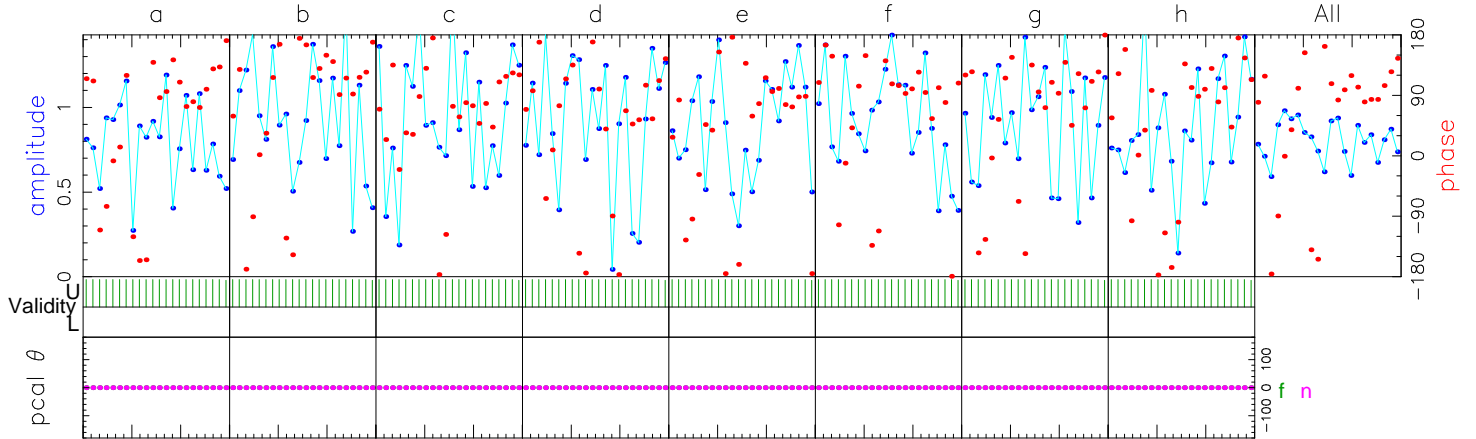


SNR 17.5  
Int time 179.976  
Amp 0.476  
Phase 110.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.003625  
MBD 0.003738  
Fringe rate (Hz)  
0.000851  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141915  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.68994857793E+03				2.68994483987E+03				3.73806E-03	+/- 6.2E-05
Sband delay (usec)	2.68994846487E+03				7.6974316E+00				3.62500E-03	+/- 4.9E-04
Phase delay (usec)	2.68994484336E+03				-1.0000003E-07				3.48621E-06	+/- 2.1E-07
Delay rate (us/s)	2.59302496126E-01				2.59302486445E-01				9.68067E-09	+/- 2.0E-09
Total phase (deg)			189.0		-1.38643352526E-05				110.4	+/- 6.6
	RMS	Theor.	Amplitude	0.476 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	60.4	15.4	Search (1024X32)	0.456	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	73.0	26.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	15.9	9.3	Inc. seg. avg.	0.777	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	16.3	16.2	Inc. frq. avg.	0.486	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

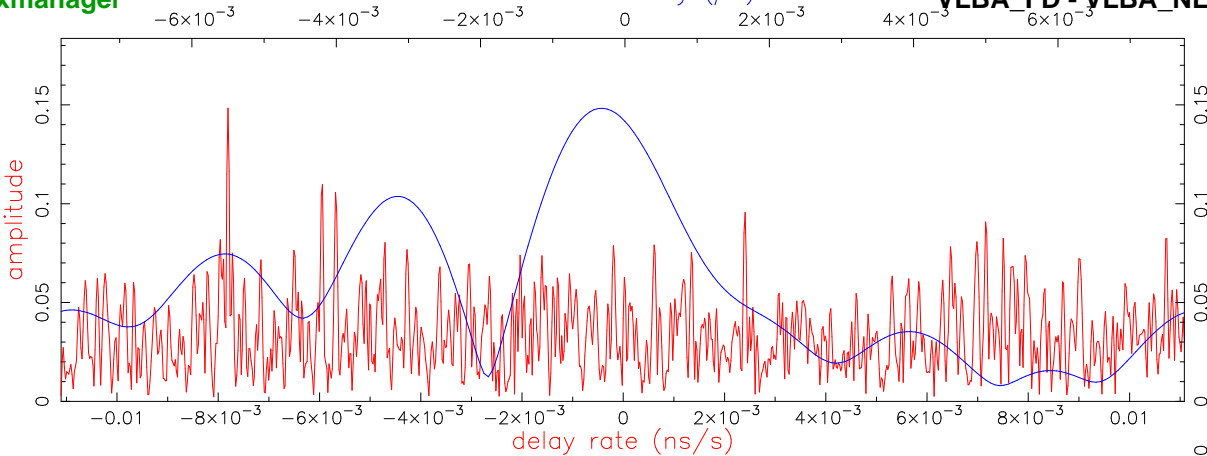
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fn

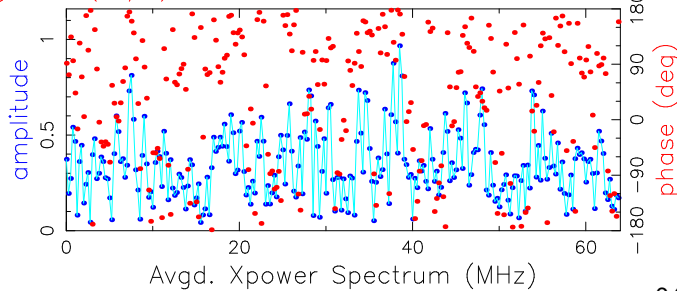
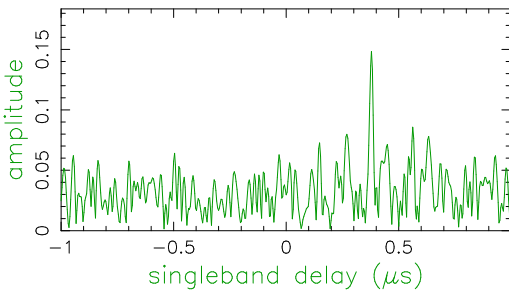
VLBA\_FD - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)



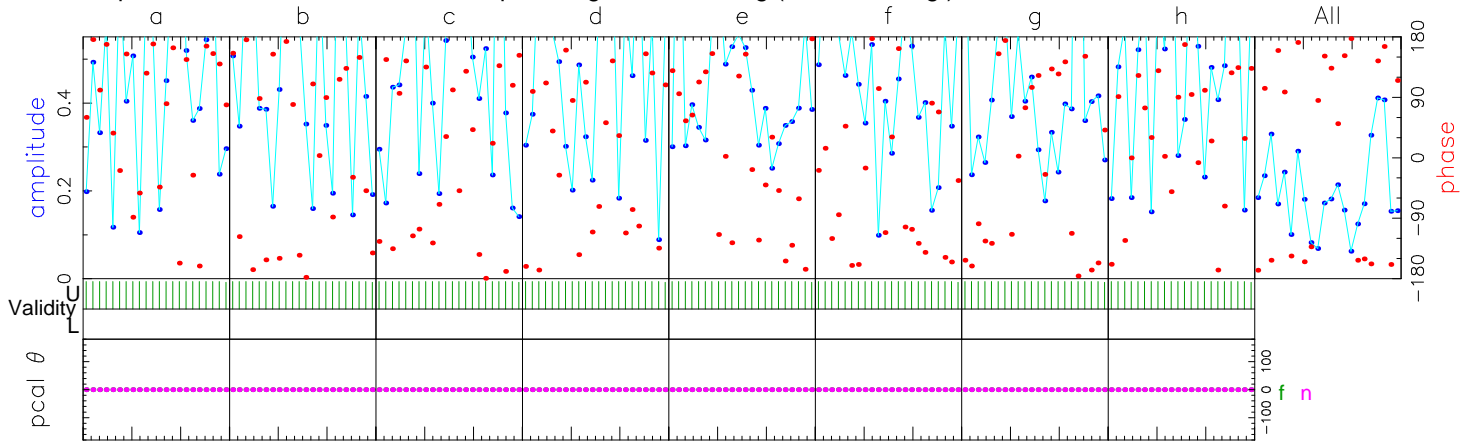
Fringe quality 0

SNR 5.4  
 Int time 179.976  
 Amp 0.184  
 Phase 164.5  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.378773  
 MBD -0.000324  
 Fringe rate (Hz)  
 -0.688554  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141917  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
160.3	161.8	153.6	164.3	160.0	-111.4	-179.9	99.9	99.9	Phase	164.5
0.3	0.3	0.2	0.1	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
417.4	334.3	470.0	248.8	239.5	327.4	353.1	341.5	341.5	Sbd box	354.0
U/L 352/0	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	1000	PC freqs	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000	1000		
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
n W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.69031951598E+03		Apriori delay (usec)	2.68994483987E+03		Resid mbdelay (usec)	-3.23897E-04		+/-	2.0E-04
Sband delay (usec)	2.69032361287E+03		Apriori clock (usec)	7.6974316E+00		Resid sbdelay (usec)	3.78773E-01		+/-	1.6E-03
Phase delay (usec)	2.68994484507E+03		Apriori clockrate (us/s)	-1.0000003E-07		Resid phdelay (usec)	5.19738E-06		+/-	6.7E-07
Delay rate (us/s)	2.59294656631E-01		Apriori rate (us/s)	2.59302486445E-01		Resid rate (us/s)	-7.82981E-06		+/-	6.4E-09
Total phase (deg)		243.1	Apriori accel (us/s/s)	-1.38643352526E-05		Resid phase (deg)	164.5		+/-	21.1

	RMS	Theor.	Amplitude	0.184 +/- 0.034	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.3	49.4	Search (1024X32)	0.147	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	74.4	86.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	44.0	29.8	Inc. seg. avg.	0.182	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.6	52.0	Inc. frq. avg.	0.197	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 173.2 el 57.9 pa -5.4 n: az 192.7 el 46.2 pa 9.5 u,v (fr/asec) -1521.038 -1392.352 simultaneous interpolator

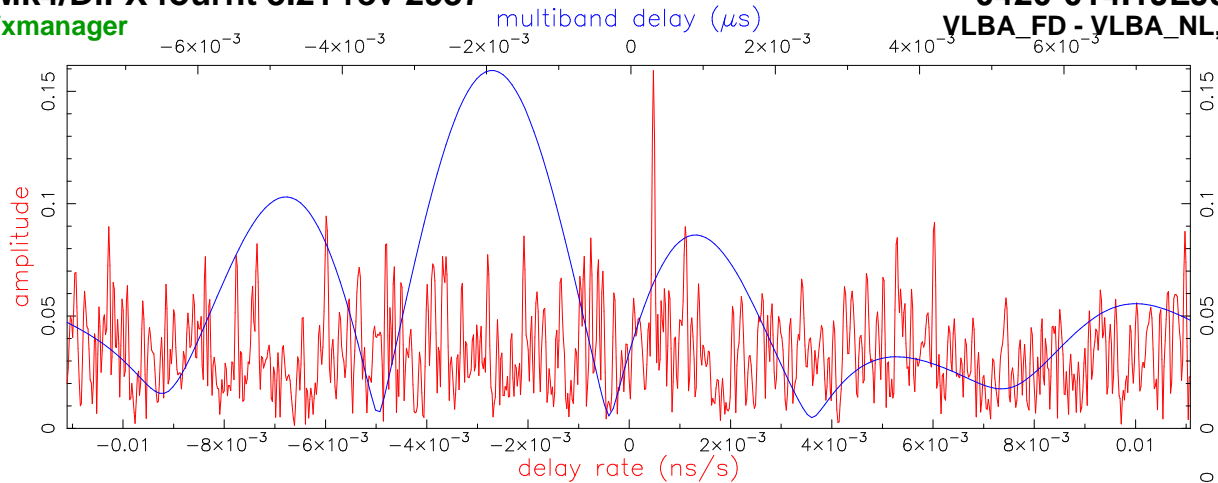
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fn..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fn.W.65.1JLJ5P

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

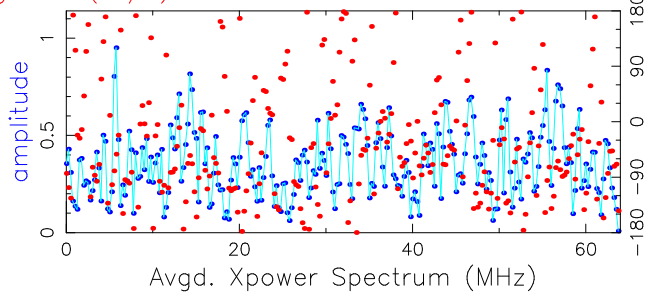
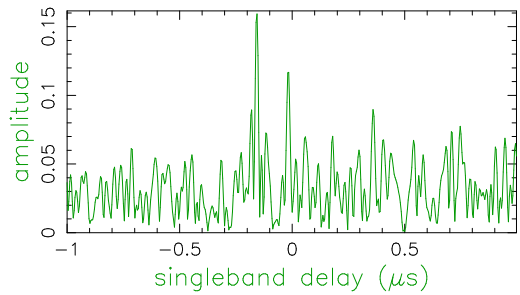
0420-014.1JLJ5P, No0075, fn

VLBA\_FD - VLBA\_NL, fgroup W, pol RL



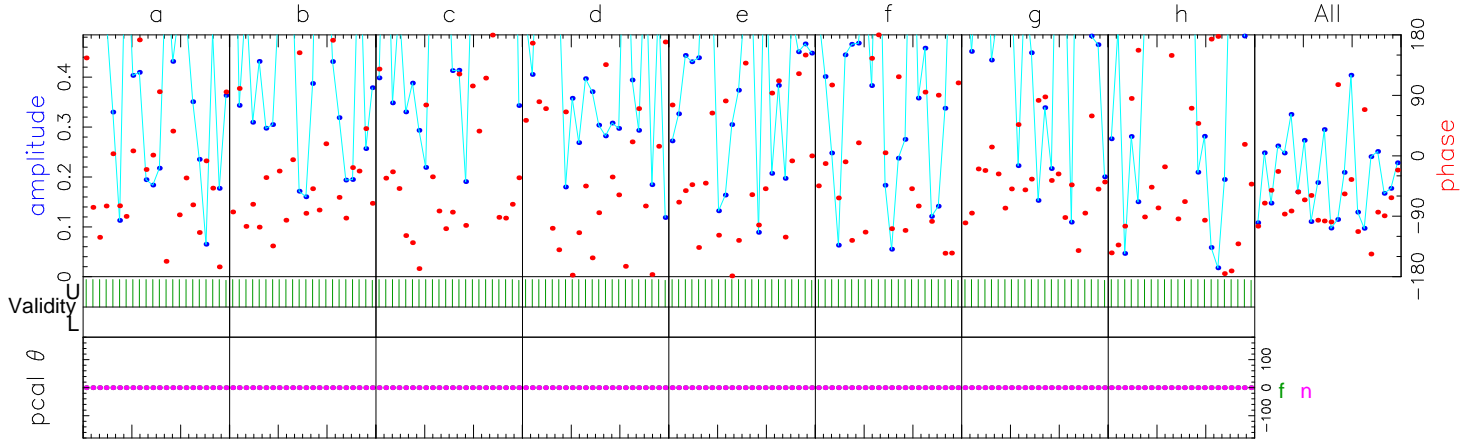
Fringe quality 0

SNR 5.9  
 Int time 179.976  
 Amp 0.162  
 Phase -70.5  
 PFD 3.3e-01  
 Delays (us)  
 SBD -0.157573  
 MBD -0.001957  
 Fringe rate (Hz)  
 0.042053  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141919  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 -1°20'33.065613"

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



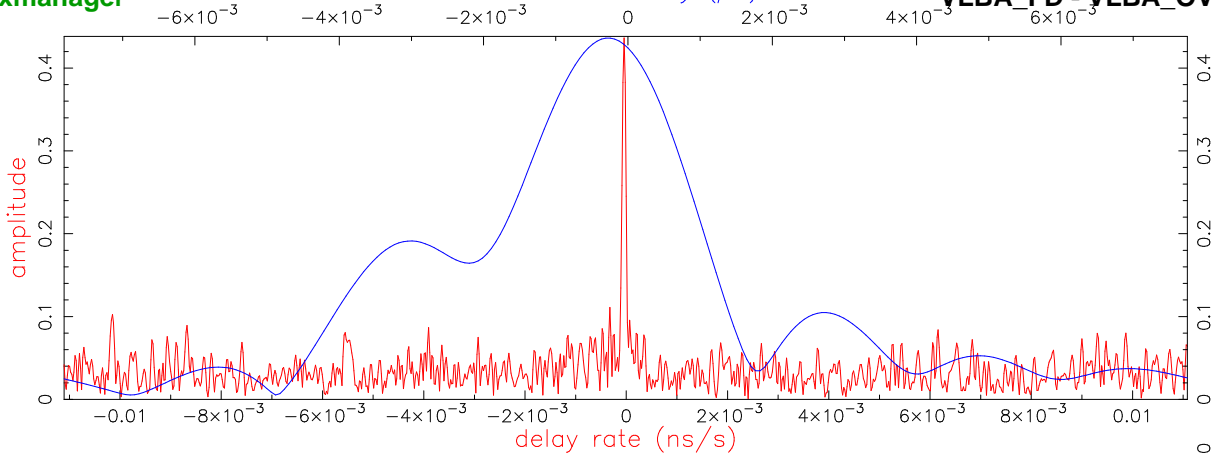
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-81.1	-60.9	-77.8	-125.1	-41.0	-109.5	-50.2	-84.6	Phase	-70.5
	0.2	0.3	0.2	0.0	0.1	0.1	0.3	0.2	Ampl.	0.2
	509.5	217.0	451.0	102.5	153.3	132.6	216.5	505.7	Sbd box	216.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.68978663313E+03		Apriori delay (usec)		2.68994483987E+03		Resid mbdelay (usec)		-1.95674E-03	+/- 1.8E-04
Sband delay (usec)	2.68978726662E+03		Apriori clock (usec)		7.6974316E+00		Resid sbdelay (usec)		-1.57573E-01	+/- 1.5E-03
Phase delay (usec)	2.68994483764E+03		Apriori clockrate (us/s)		-1.0000003E-07		Resid phdelay (usec)		-2.22828E-06	+/- 6.1E-07
Delay rate (us/s)	2.59302964651E-01		Apriori rate (us/s)		2.59302486445E-01		Resid rate (us/s)		4.78206E-07	+/- 5.9E-09
Total phase (deg)	8.1		Apriori accel (us/s/s)		-1.38643352526E-05		Resid phase (deg)		-70.5	+/- 19.3

	RMS	Theor.	Amplitude	0.162 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	56.1	45.4	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	56.1	79.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	
ph/frq (deg)	32.3	27.4	Inc. seg. avg.	0.156	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	58.4	47.8	Inc. frq. avg.	0.152	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	
f: az 173.2 el 57.9 pa -5.4	n: az 192.7 el 46.2 pa 9.5		u, v (fr/asec) -1521.038 -1392.352		ion window (TEC) 0.00 0.00		
Control file: cf_1234_88GHz_gmva							simultaneous interpolator
Input file: /Exps/c202c/v1/1234/No0075/fn..1JLJ5P							
Output file: /Exps/c202c/v1/1234/No0075/fn.W.80.1JLJ5P							

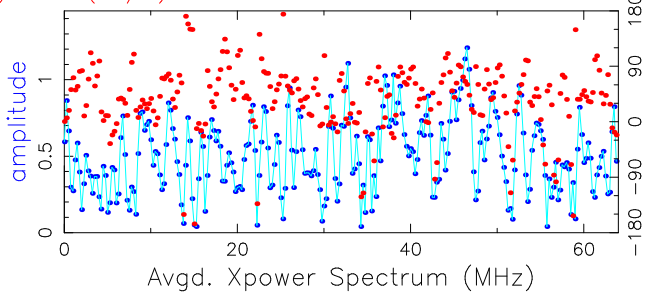
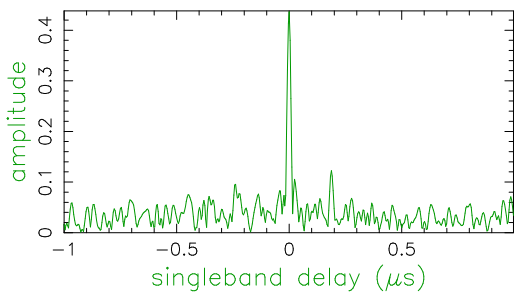


multiband delay ( $\mu$ s)

Fringe quality 9

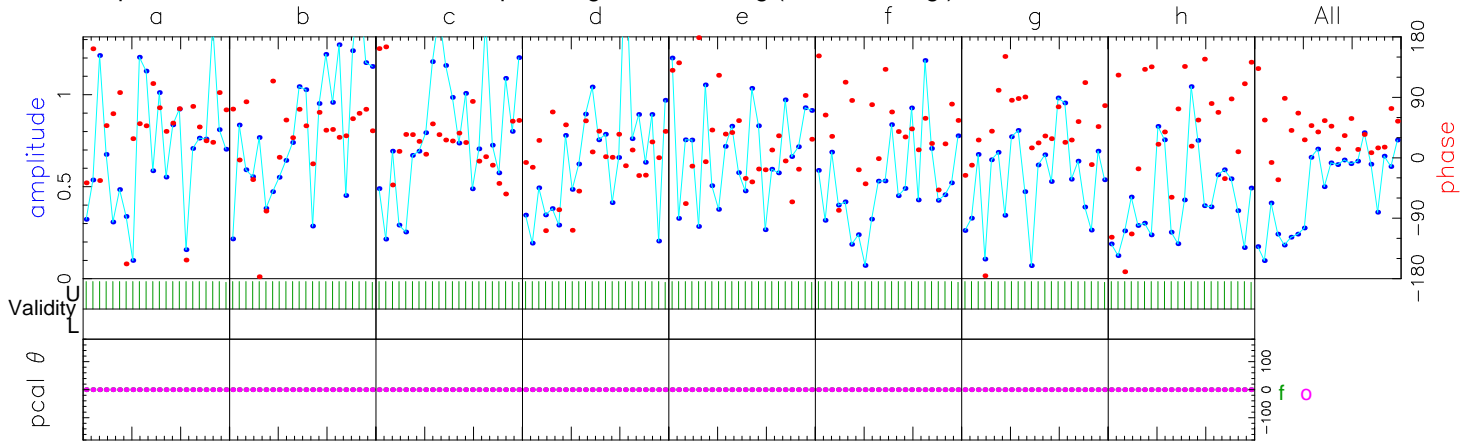


SNR 16.1  
Int time 179.976  
Amp 0.438  
Phase 36.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.000861  
MBD -0.000284  
Fringe rate (Hz)  
-0.003847  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



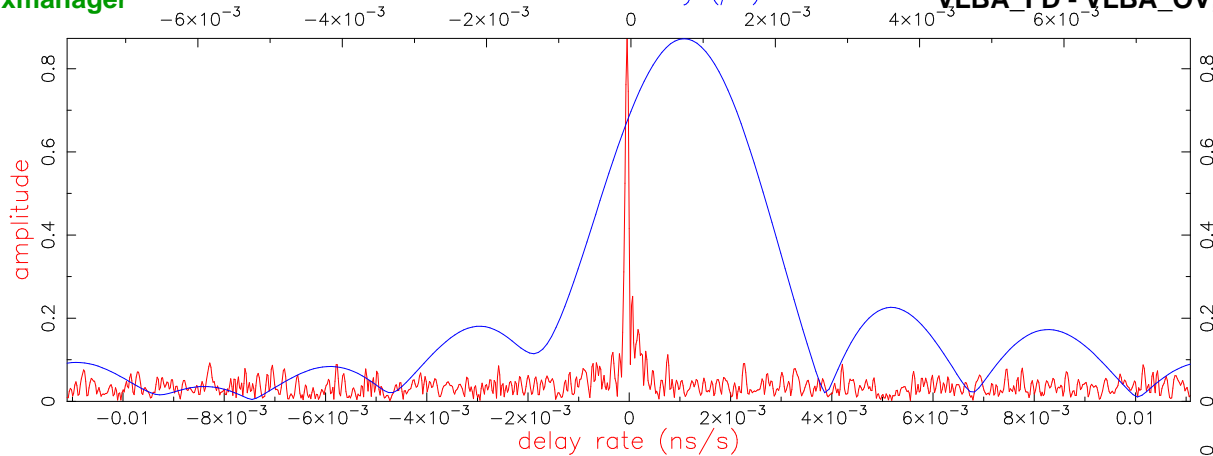
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141912  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



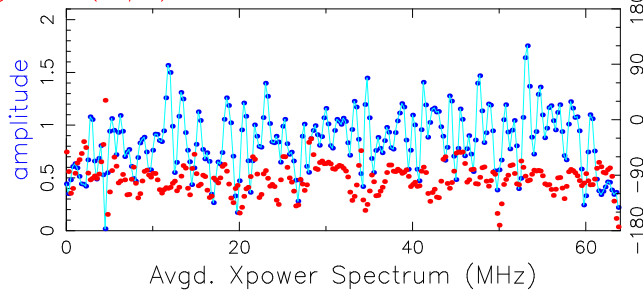
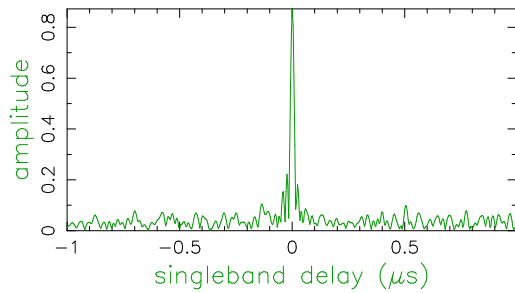
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		2.15604444426E+03			2.15604472840E+03				Resid mbdelay (usec)	-2.84143E-04 +/- 6.8E-05
Sband delay (usec)		2.15604386740E+03			-1.3448155E+01				Resid sbdelay (usec)	-8.61000E-04 +/- 5.4E-04
Phase delay (usec)		2.15604472955E+03			5.0000000E-07				Resid phdelay (usec)	1.14194E-06 +/- 2.3E-07
Delay rate (us/s)		-2.97886859975E-01			-2.97886816233E-01				Resid rate (us/s)	-4.37421E-08 +/- 2.2E-09
Total phase (deg)			185.8		-1.12933722432E-05				Resid phase (deg)	36.2 +/- 7.1
ph/seg (deg)	RMS 34.2	Theor. 16.7	Amplitude 0.438 +/- 0.027	Search (1024X32) 0.428	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000 1.000
amp/seg (%)	50.0	29.2	Interp. 0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled			mb window (us)	-0.008 0.008
ph/frq (deg)	22.5	10.1	Inc. seg. avg. 0.466		Bits/sample: 2x2	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	31.7	17.6	Inc. frq. avg. 0.455		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			ion window (TEC)	0.00 0.00

multiband delay ( $\mu$ s)



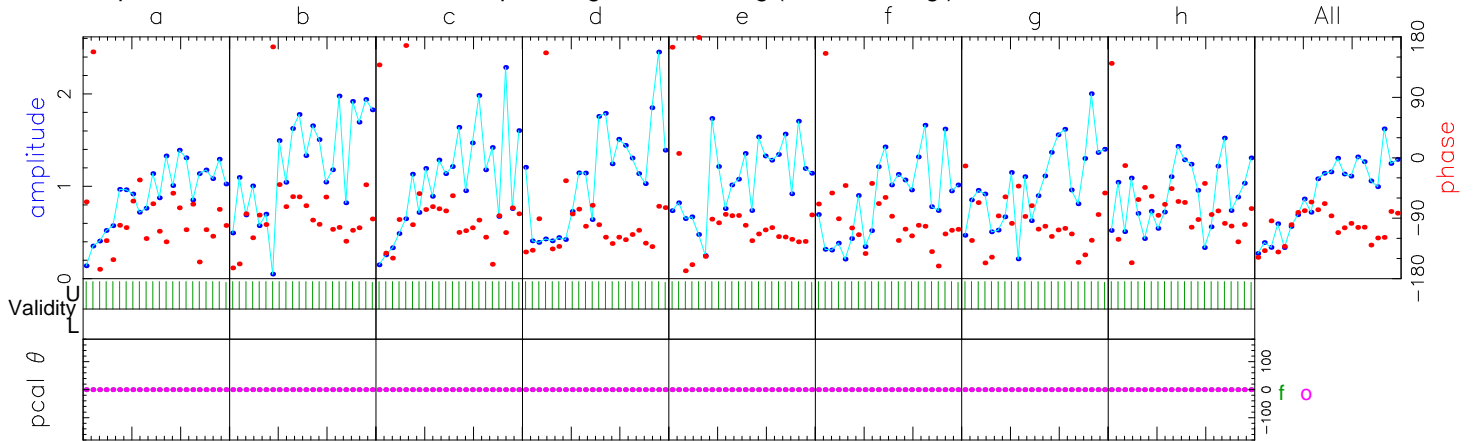
Fringe quality 7

SNR 32.0  
Int time 179.976  
Amp 0.873  
Phase -99.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.000405  
MBD 0.000751  
Fringe rate (Hz)  
-0.003493  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141914  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-99.4	-87.3	-98.2	-107.6	-110.9	-101.2	-103.6	-85.5	Phase	-99.3
	0.8	1.1	0.9	1.0	0.9	0.8	0.9	0.8	Ampl.	0.9
	257.8	256.8	257.0	257.0	257.3	257.0	257.4	257.2	Sbd box	257.1
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:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.15604547932E+03		Apriori delay (usec)		2.15604472840E+03		Resid mbdelay (usec)		7.50920E-04	+/- 3.4E-05
Sband delay (usec)	2.15604513340E+03		Apriori clock (usec)		-1.3448155E+01		Resid sbdelay (usec)		4.05000E-04	+/- 2.7E-04
Phase delay (usec)	2.15604472527E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-3.13513E-06	+/- 1.1E-07
Delay rate (us/s)	-2.97886855949E-01		Apriori rate (us/s)		-2.97886816233E-01		Resid rate (us/s)		-3.97166E-08	+/- 1.1E-09
Total phase (deg)	50.4		Apriori accel (us/s/s)		-1.12933722432E-05		Resid phase (deg)		-99.3	+/- 3.6

ph/seg (deg) 24.0 8.4 Search (1024X32) 0.849 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 43.5 14.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 9.7 5.1 Inc. seg. avg. 0.922 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 12.9 8.8 Inc. frq. avg. 0.878 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 173.2 el 57.9 pa -5.4 o: az 152.6 el 48.0 pa -21.2 u,v (fr/asec) 1737.563 -838.670 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fo..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fo.W.33.1JLJ5P

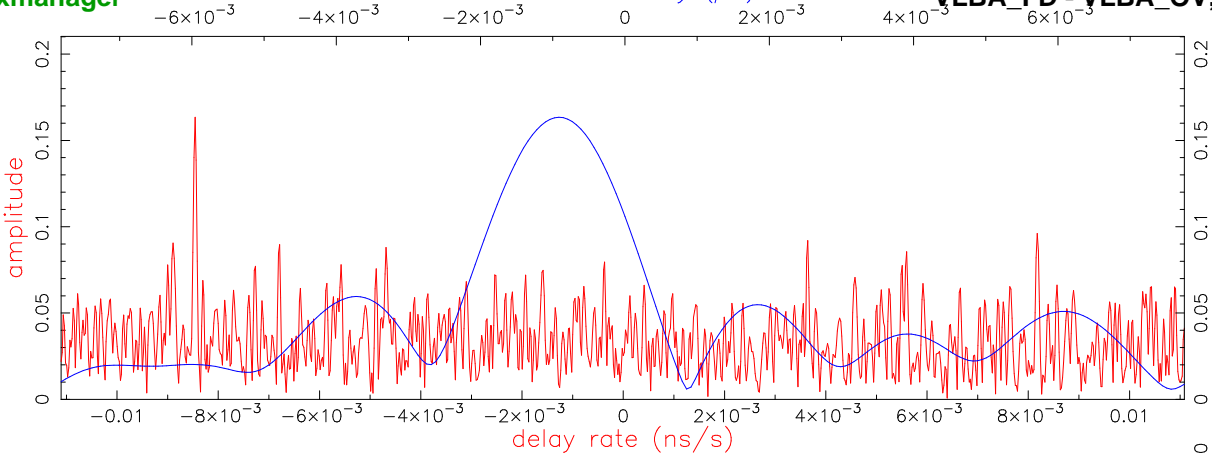
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fo

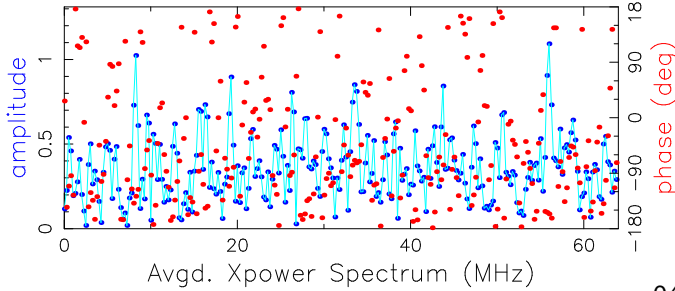
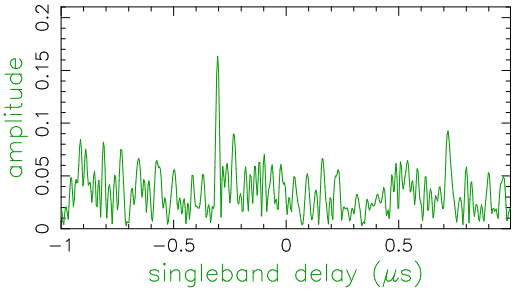
VLBA\_FD - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)



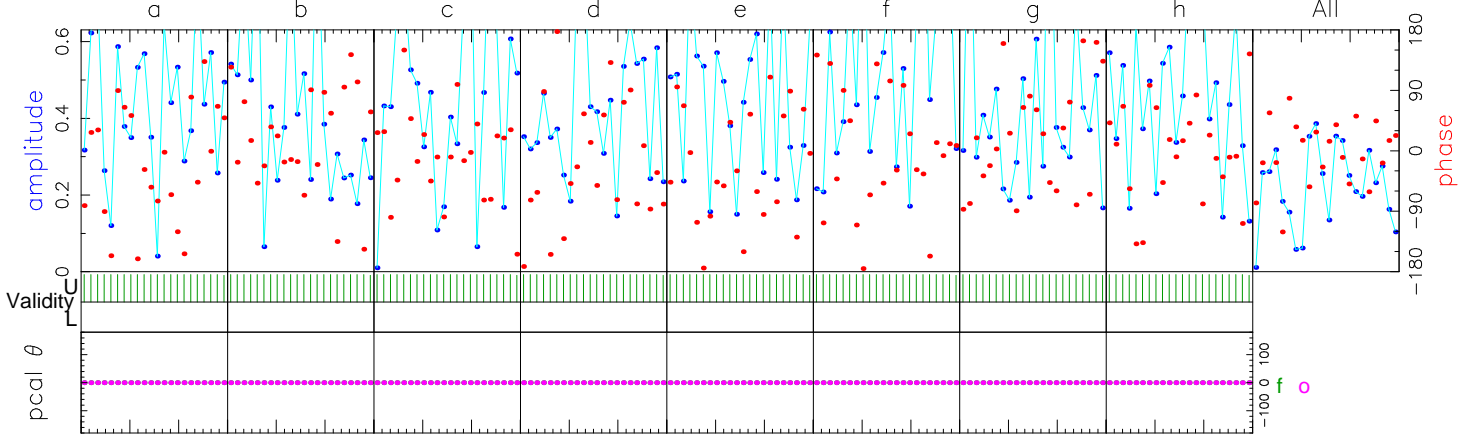
Fringe quality 0

SNR 6.0  
 Int time 179.976  
 Amp 0.210  
 Phase -2.0  
 PFD 2.3e-01  
 Delays (us)  
 SBD -0.304451  
 MBD -0.000905  
 Fringe rate (Hz)  
 -0.744889  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141917  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



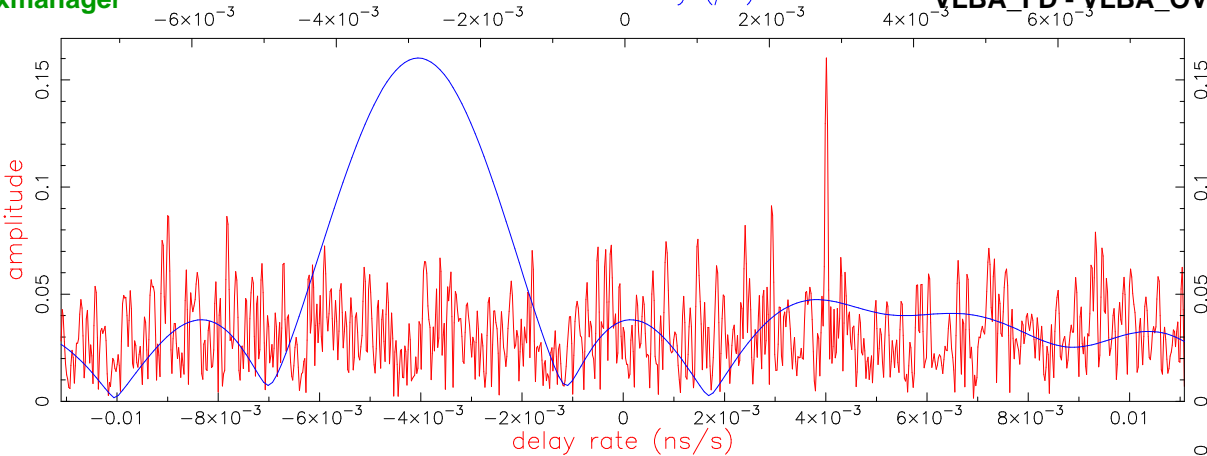
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		2.15574694814E+03		Apriori delay (usec)	2.15604472840E+03		Resid mbdelay (usec)	-9.05260E-04	+/-	1.8E-04
Sband delay (usec)		2.15574027765E+03		Apriori clock (usec)	-1.3448155E+01		Resid sbdelay (usec)	-3.04451E-01	+/-	1.4E-03
Phase delay (usec)		2.15604472834E+03		Apriori clockrate (us/s)	5.0000000E-07		Resid phdelay (usec)	-6.25668E-08	+/-	6.0E-07
Delay rate (us/s)		-2.97895286657E-01		Apriori rate (us/s)	-2.97886816233E-01		Resid rate (us/s)	-8.47042E-06	+/-	5.8E-09
Total phase (deg)		147.7		Apriori accel (us/s/s)	-1.12933722432E-05		Resid phase (deg)	-2.0	+/-	19.1

	RMS	Theor.	Amplitude	0.210 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	47.6	44.8	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	72.2	78.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	16.0	27.0	Inc. seg. avg.	0.219	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	27.8	47.2	Inc. frq. avg.	0.195	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

f: az 173.2 el 57.9 pa -5.4 o: az 152.6 el 48.0 pa -21.2 u,v (fr/asec) 1737.563 -838.670 simultaneous interpolator

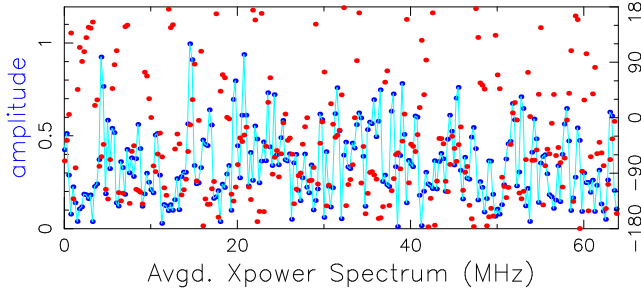
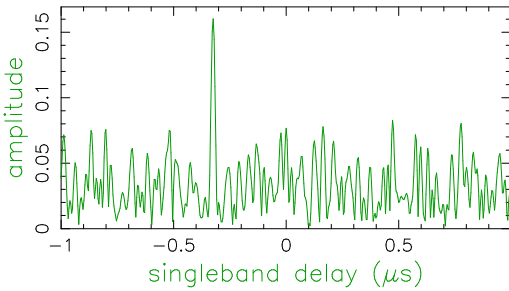
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fo..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fo.W.60.1JLJ5P

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



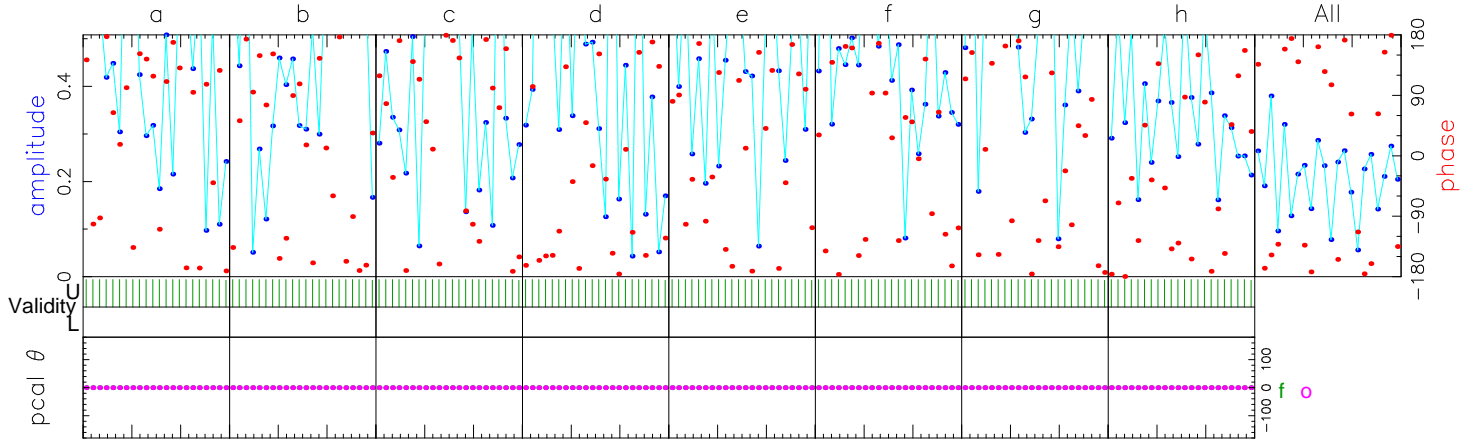
Fringe quality 0

SNR 5.9  
Int time 179.976  
Amp 0.169  
Phase 175.0  
PFD 4.0e-01  
Delays (us)  
SBD -0.324713  
MBD -0.002871  
Fringe rate (Hz)  
0.353613  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 094000.00  
Stop 094300.22  
FRT 094130.00  
Corr/FF/build  
2021:041:222607  
2021:042:141919  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	2.15571373194E+03		Apriori delay (usec)		2.15604472840E+03		Resid mbdelay (usec)		-2.87146E-03	+/- 1.8E-04		
Sband delay (usec)	2.15572001590E+03		Apriori clock (usec)		-1.3448155E+01		Resid sbdelay (usec)		-3.24713E-01	+/- 1.5E-03		
Phase delay (usec)	2.15604473393E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		5.52723E-06	+/- 6.2E-07		
Delay rate (us/s)	-2.97882795164E-01		Apriori rate (us/s)		-2.97886816233E-01		Resid rate (us/s)		4.02107E-06	+/- 5.9E-09		
Total phase (deg)	324.7		Apriori accel (us/s/s)		-1.12933722432E-05		Resid phase (deg)		175.0	+/- 19.5		
ph/seg (deg)	RMS 49.1	Theor. 45.7	Amplitude Search (1024X32)		0.169 +/- 0.029		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	57.6	79.7	Interp.		0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	18.2	27.5	Inc. seg. avg.		0.168		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	34.8	48.1	Inc. frq. avg.		0.158		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

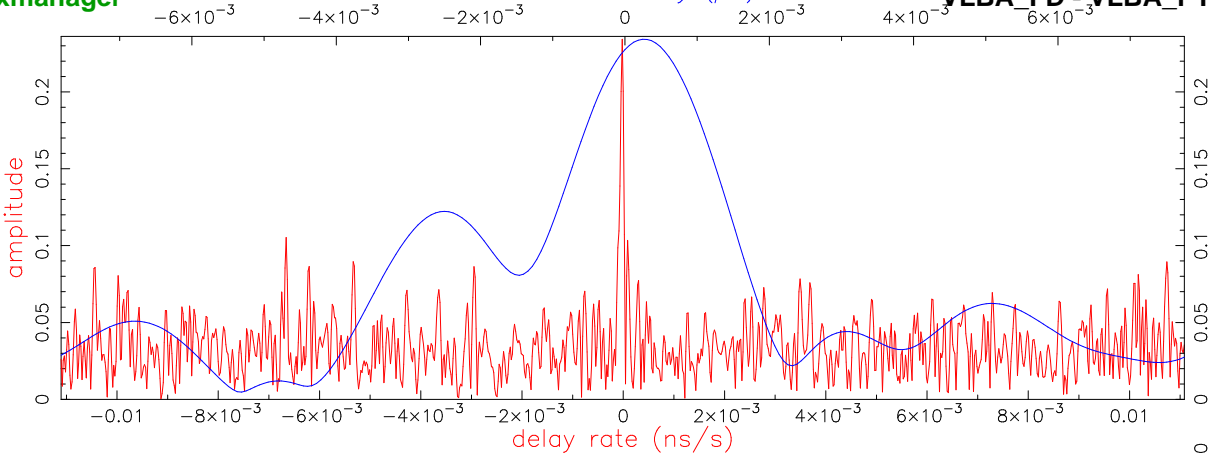
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fp

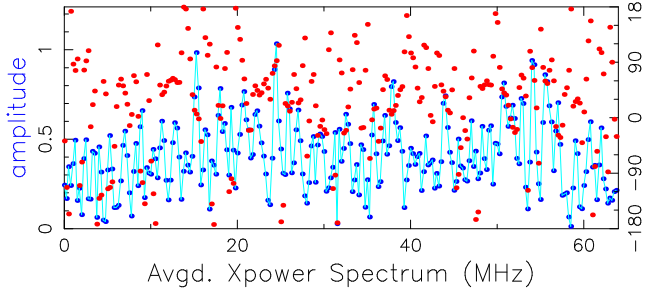
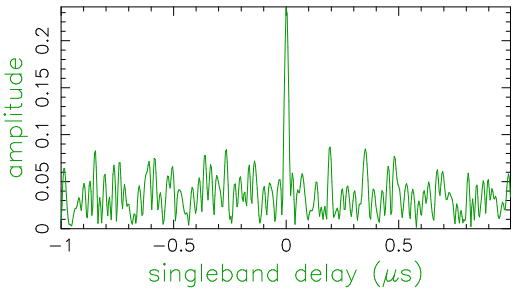
VLBA\_FD - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)



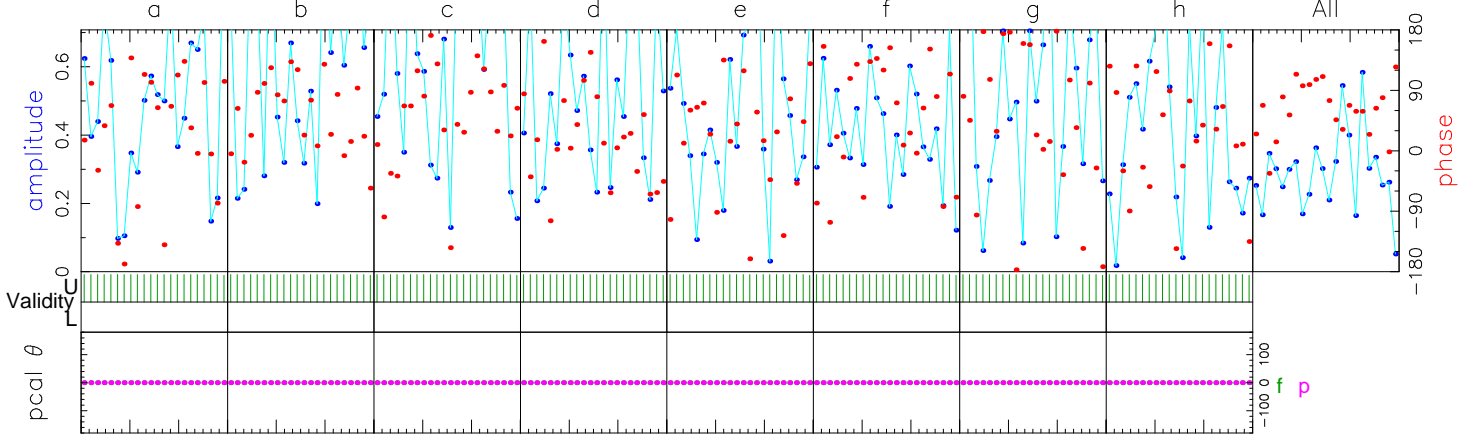
Fringe quality 9

SNR 8.7  
 Int time 179.976  
 Amp 0.236  
 Phase 58.4  
 PFD 8.6e-10  
 Delays (us)  
 SBD 0.001301  
 MBD 0.000284  
 Fringe rate (Hz)  
 -0.002302  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141912  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		8.76929094055E+02			8.76928810001E+02				2.84054E-04	+/- 1.3E-04
Sband delay (usec)		8.76930111251E+02			7.7900000E+00				1.30125E-03	+/- 9.9E-04
Phase delay (usec)		8.76928811847E+02			0.0000000E+00				1.84559E-06	+/- 4.2E-07
Delay rate (us/s)		-9.00840116295E-02			-9.00839854539E-02				-2.61756E-08	+/- 4.0E-09
Total phase (deg)			257.0		-4.48413405184E-06				58.4	+/- 13.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 39.3 31.0 Search (1024X32) 0.228 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.5 54.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.2 18.7 Inc. seg. avg. 0.255 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.8 32.7 Inc. frq. avg. 0.240 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 173.2 el 57.9 pa -5.4 p: az 166.8 el 53.7 pa -10.4 u,v (fr/asec) 525.305 -479.148 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fp..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fp.W.11.1JLJ5P simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

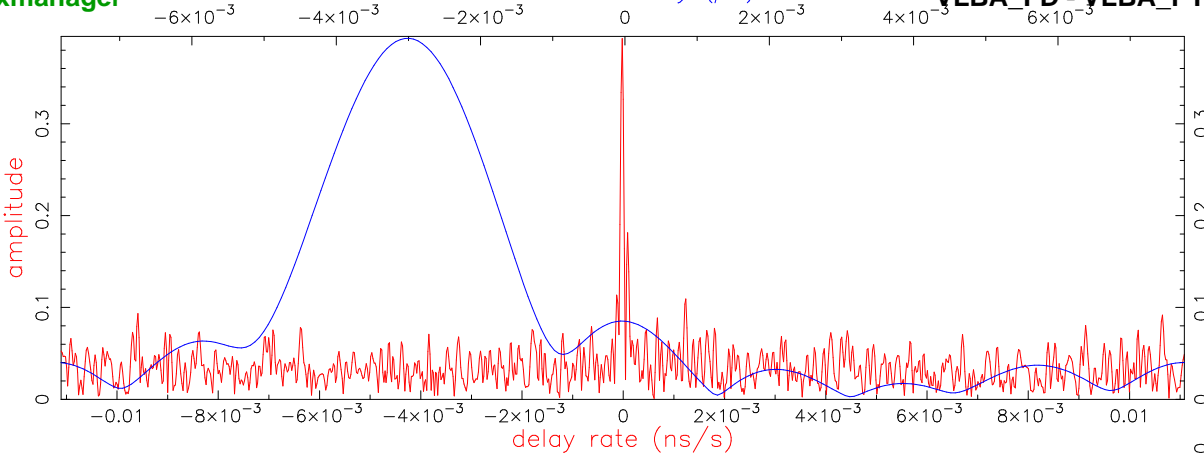
fxmanager

0420-014.1JLJ5P, No0075, fp

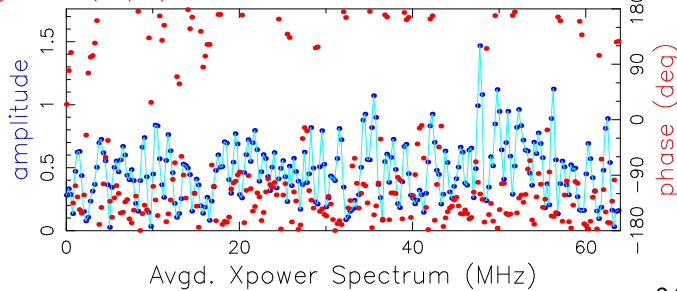
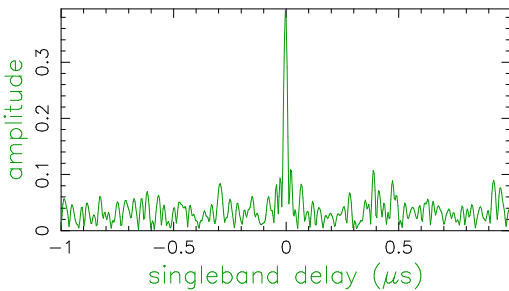
VLBA\_FD - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 9

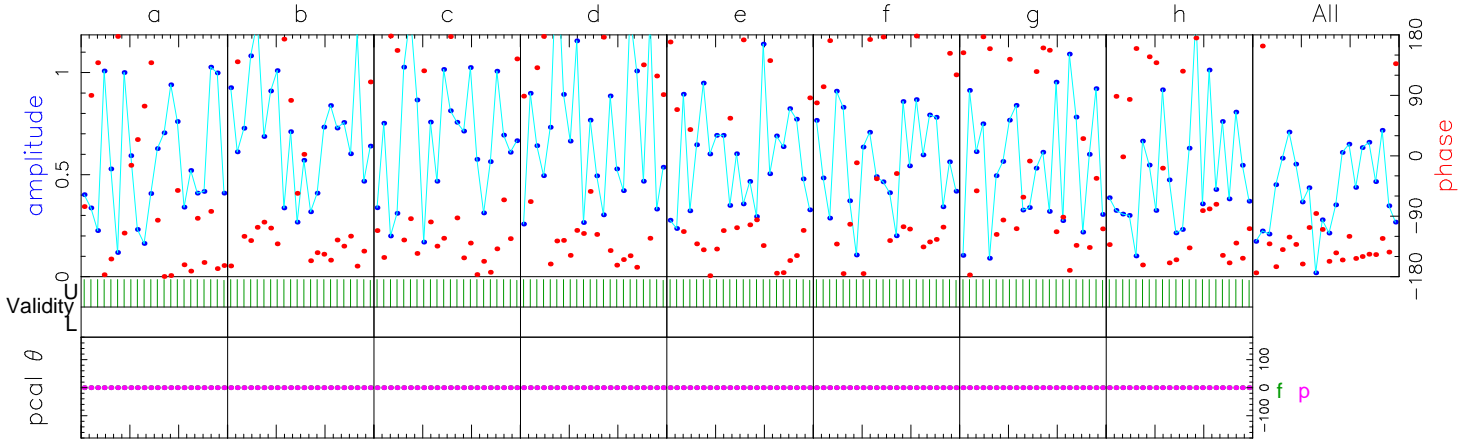


SNR 14.5  
 Int time 179.976  
 Amp 0.395  
 Phase -141.9  
 PFD 4.2e-39  
 Delays (us)  
 SBD -0.002927  
 MBD -0.002970  
 Fringe rate (Hz)  
 -0.001266  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141915  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-142.5	-139.1	-135.6	-142.4	-145.3	-153.7	-138.3	-143.4	Phase	-141.9
	0.3	0.5	0.5	0.5	0.4	0.3	0.3	0.3	Ampl.	0.4
	256.3	256.1	255.8	256.1	256.8	256.3	256.4	258.1	Sbd box	256.3
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.76925840117E+02		Apriori delay (usec)		8.76928810001E+02		Resid mbdelay (usec)		-2.96988E-03	+/- 7.5E-05
Sband delay (usec)	8.76925883001E+02		Apriori clock (usec)		7.7900000E+00		Resid sbdelay (usec)		-2.92700E-03	+/- 5.9E-04
Phase delay (usec)	8.76928805518E+02		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.48358E-06	+/- 2.5E-07
Delay rate (us/s)	-9.00839998542E-02		Apriori rate (us/s)		-9.00839854539E-02		Resid rate (us/s)		-1.44002E-08	+/- 2.4E-09
Total phase (deg)	56.6		Apriori accel (us/s/s)		-4.48413405184E-06		Resid phase (deg)		-141.9	+/- 7.9

	RMS	Theor.	Amplitude	0.395 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	29.3	18.5	Search (1024X32)	0.386	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	49.2	32.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	6.0	11.2	Inc. seg. avg.	0.404	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	26.0	19.5	Inc. frq. avg.	0.387	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

f: az 173.2 el 57.9 pa -5.4 p: az 166.8 el 53.7 pa -10.4 u,v (fr/asec) 525.305 -479.148 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/tp..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/tp.W.38.1JLJ5P

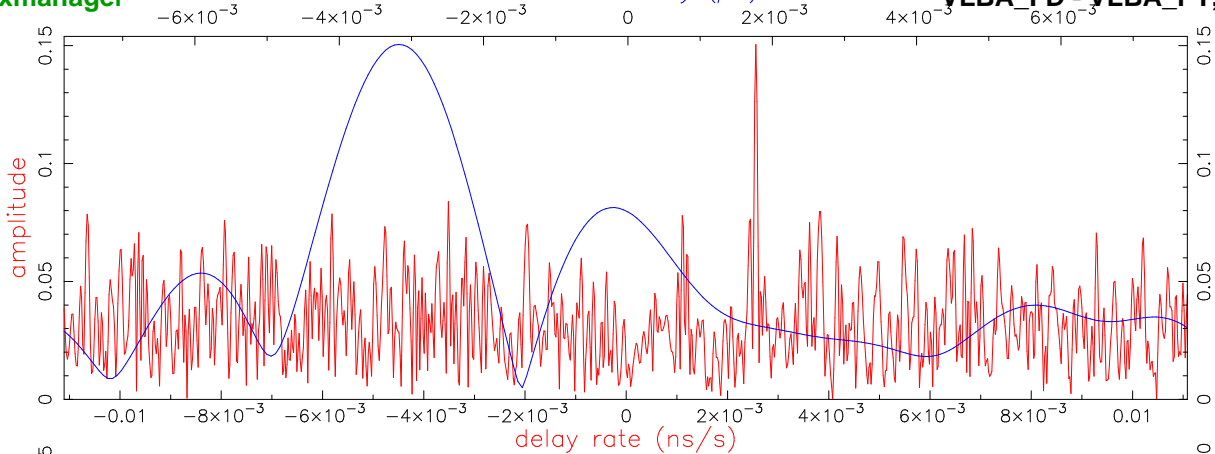
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fp

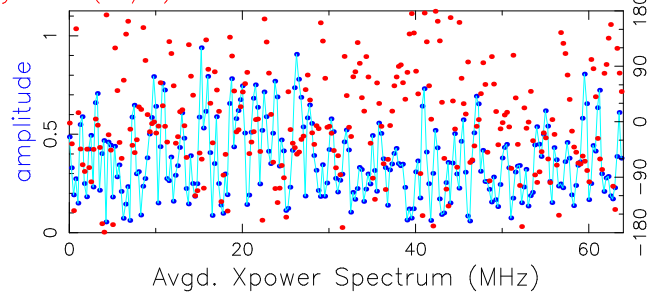
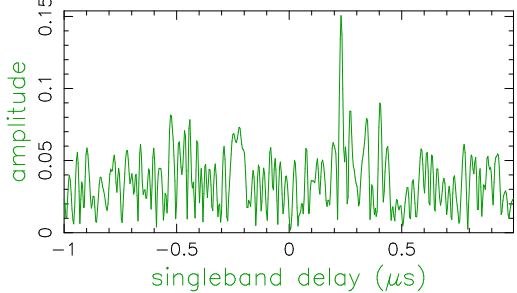
VLBA\_FD - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)



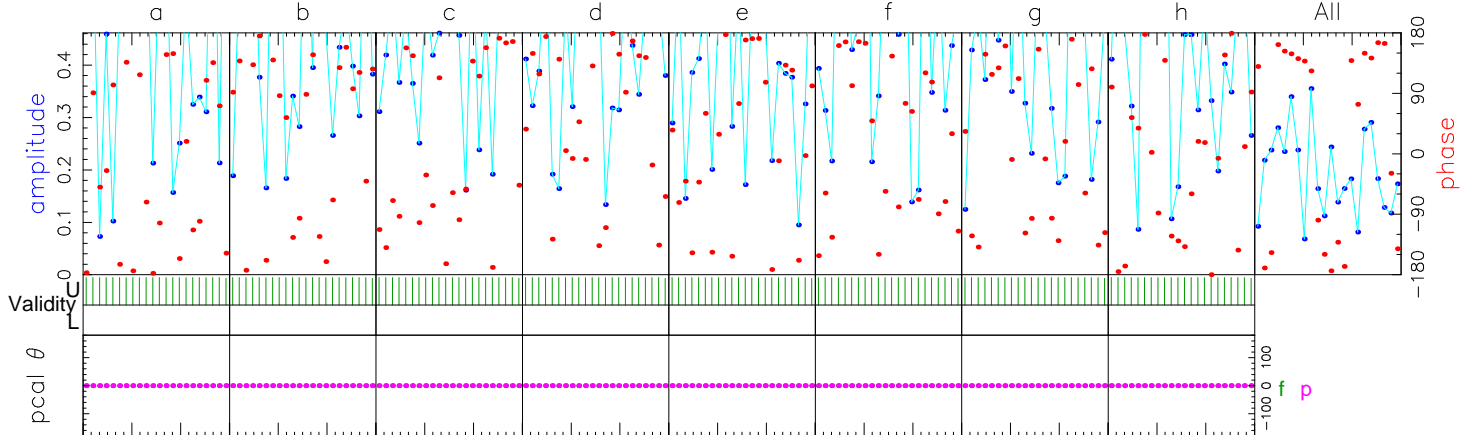
Fringe quality 0

SNR 5.5  
 Int time 179.976  
 Amp 0.154  
 Phase 165.7  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.230689  
 MBD -0.003165  
 Fringe rate (Hz)  
 0.225136  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141917  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 -1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	171.9	150.3	-151.2	121.1	134.2	168.5	169.7	172.7	Phase	165.7
	0.2	0.3	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	127.6	316.0	454.5	7.1	87.0	195.6	219.8	148.6	Sbd box	316.1
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.77160019842E+02		Apriori delay (usec)		8.76928810001E+02		Resid mbdelay (usec)		-3.16516E-03	+/- 2.0E-04
Sband delay (usec)	8.77159499501E+02		Apriori clock (usec)		7.7900000E+00		Resid sbdelay (usec)		2.30689E-01	+/- 1.6E-03
Phase delay (usec)	8.76928815236E+02		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.23447E-06	+/- 6.6E-07
Delay rate (us/s)	-9.00814253409E-02		Apriori rate (us/s)		-9.00839854539E-02		Resid rate (us/s)		2.56011E-06	+/- 6.3E-09
Total phase (deg)	4.3		Apriori accel (us/s/s)		-4.48413405184E-06		Resid phase (deg)		165.7	+/- 20.7

	RMS	Theor.	Amplitude	0.154 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.0	48.7	Search (1024X32)	0.149	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.3	84.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	29.4	29.3	Inc. seg. avg.	0.148	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	36.7	51.2	Inc. frq. avg.	0.147	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

f: az 173.2 el 57.9 pa -5.4 p: az 166.8 el 53.7 pa -10.4 u,v (fr/asec) 525.305 -479.148 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fp..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fp.W.57.1JLJ5P

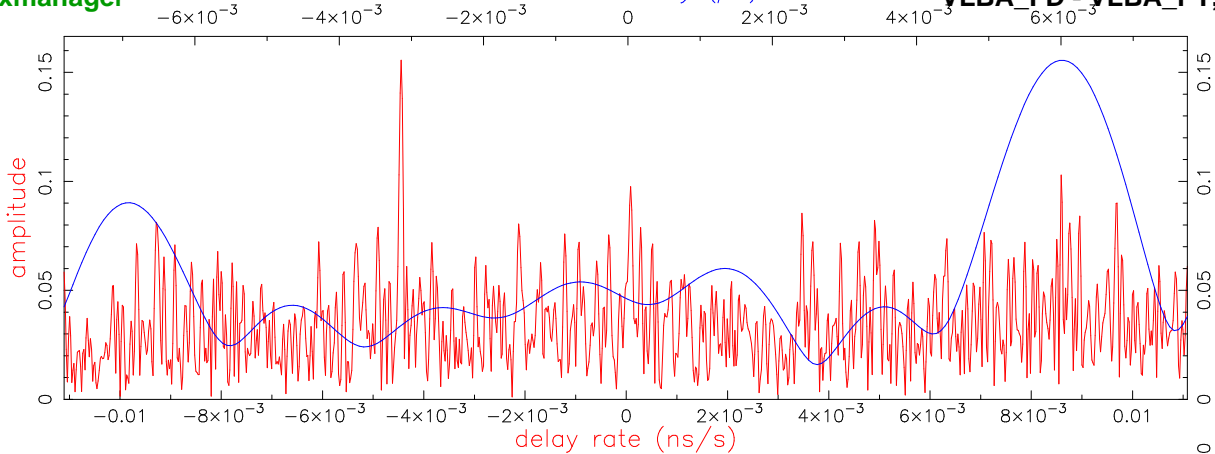
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLJ5P, No0075, fp

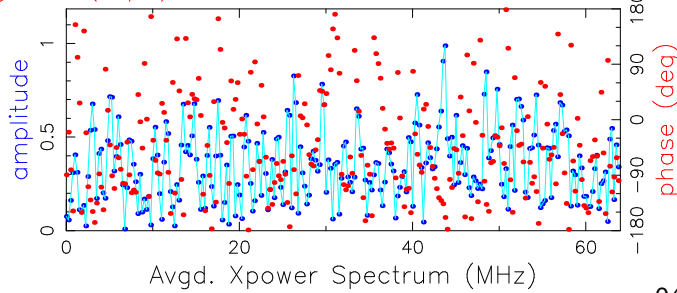
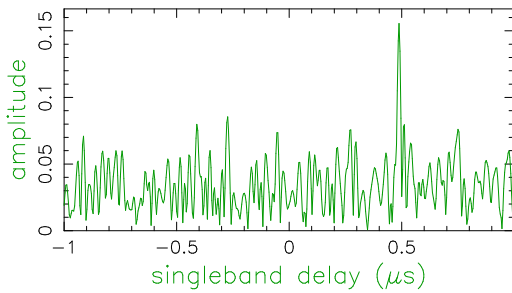
VLBA\_FD - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)



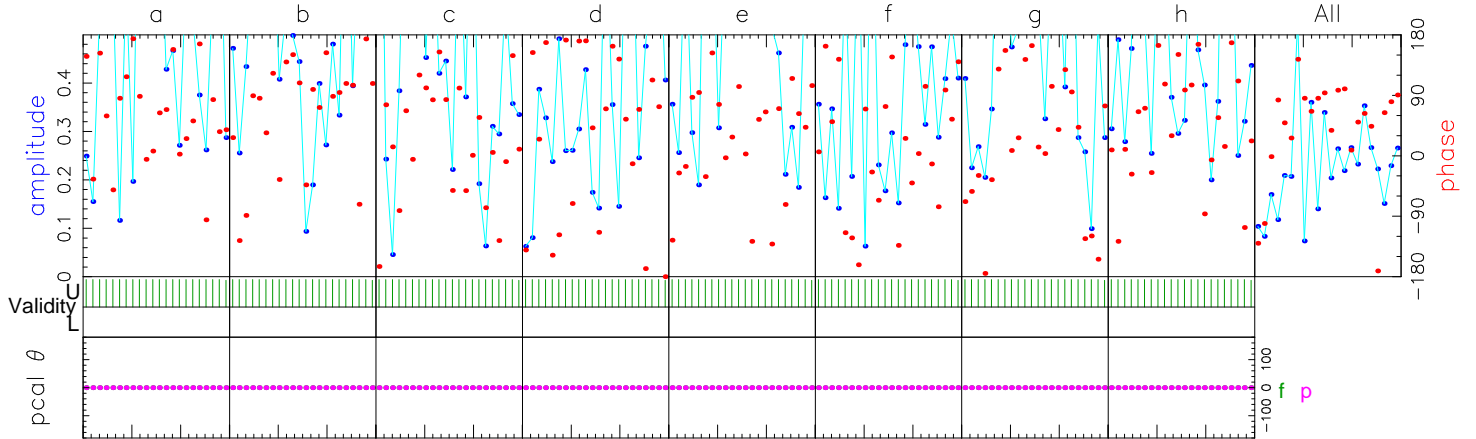
Fringe quality 0

SNR 5.7  
 Int time 179.976  
 Amp 0.167  
 Phase 75.2  
 PFD 7.5e-01  
 Delays (us)  
 SBD 0.487900  
 MBD 0.006005  
 Fringe rate (Hz)  
 -0.390986  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 094000.00  
 Stop 094300.22  
 FRT 094130.00  
 Corr/FF/build  
 2021:041:222607  
 2021:042:141918  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	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	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	8.77419189911E+02		Apriori delay (usec)		8.76928810001E+02		Resid mbdelay (usec)		6.00491E-03	+/- 1.9E-04
Sband delay (usec)	8.77416709751E+02		Apriori clock (usec)		7.7900000E+00		Resid sbdelay (usec)		4.87900E-01	+/- 1.5E-03
Phase delay (usec)	8.76928812375E+02		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.37392E-06	+/- 6.3E-07
Delay rate (us/s)	-9.00884315116E-02		Apriori rate (us/s)		-9.00839854539E-02		Resid rate (us/s)		-4.44606E-06	+/- 6.1E-09
Total phase (deg)	273.7		Apriori accel (us/s/s)		-4.48413405184E-06		Resid phase (deg)		75.2	+/- 20.1

ph/seg (deg) 64.4 47.0 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.7 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 40.3 28.4 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.3 49.5 Inc. frq. avg. 0.167 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 173.2 el 57.9 pa -5.4 p: az 166.8 el 53.7 pa -10.4 u,v (fr/asec) 525.305 -479.148 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0075/fp..1JLJ5P Output file: /Exps/c202c/v1/1234/No0075/fp.W.73.1JLJ5P