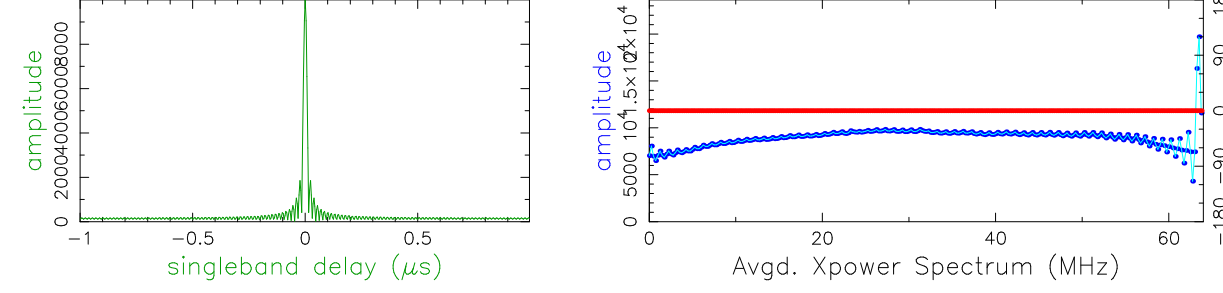
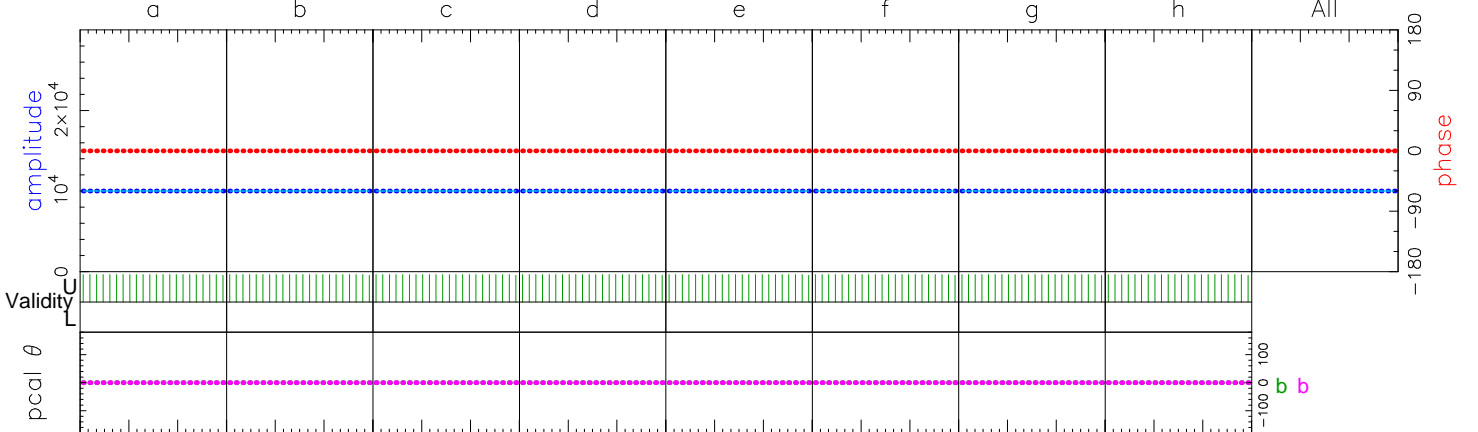


Fringe quality 9  
SNR 366867.8  
Int time 179.980  
Amp 9999.999  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142155  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"



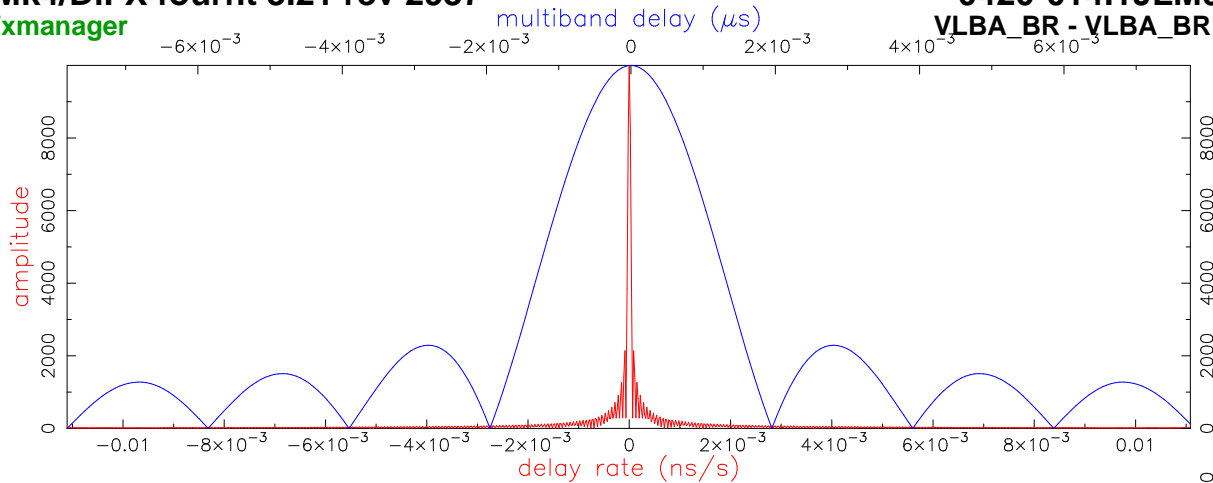
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



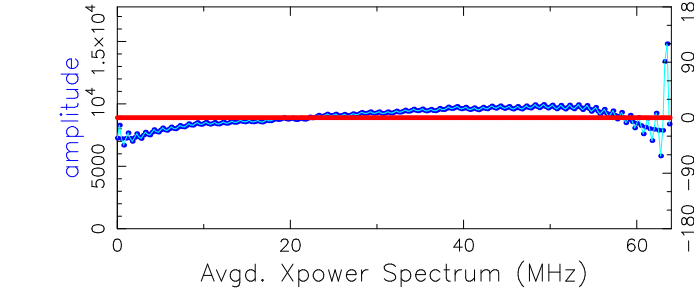
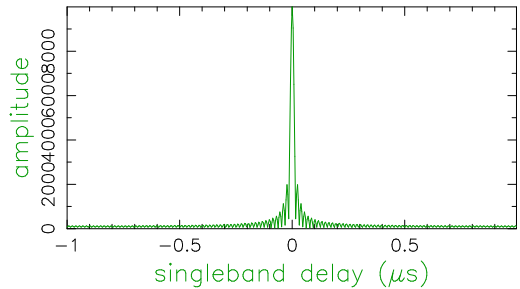
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	1000	1000
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
b	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	Tracks
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	Tracks

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-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

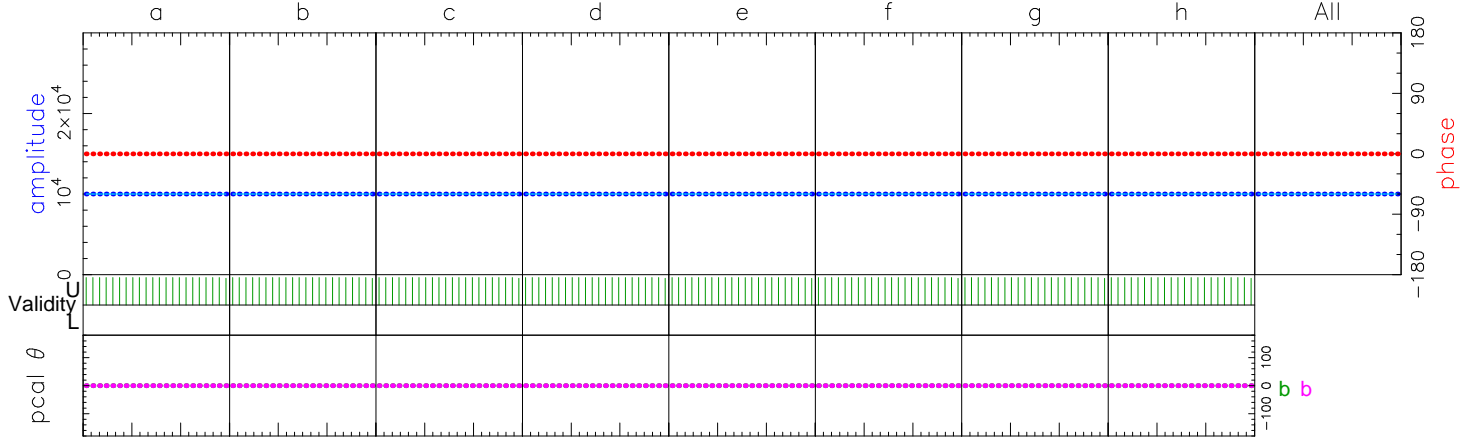
RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 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



Fringe quality 9  
SNR 366867.8  
Int time 179.980  
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 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142157  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"



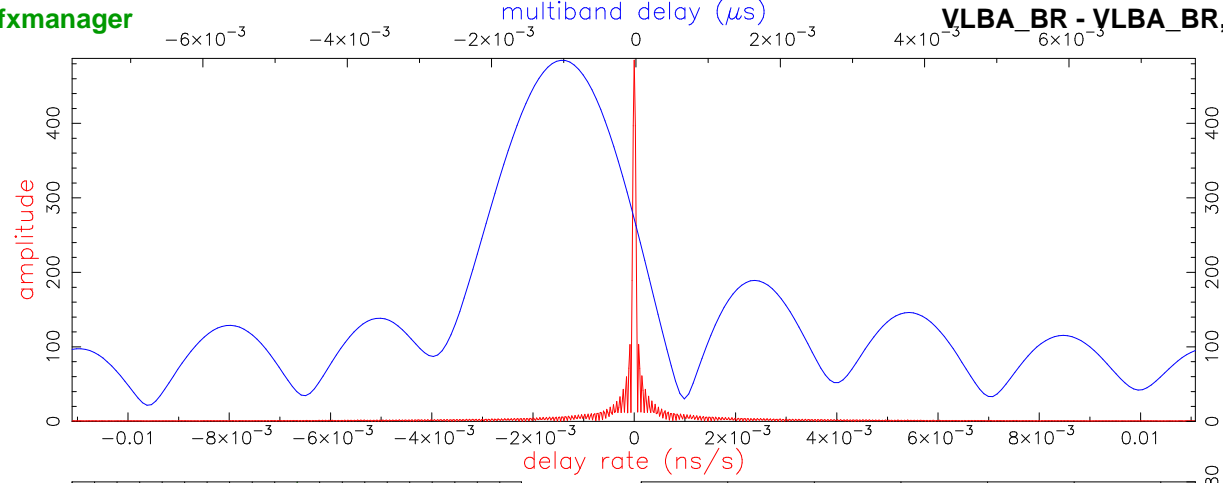
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



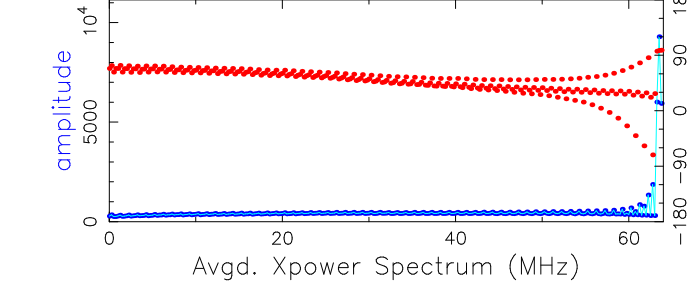
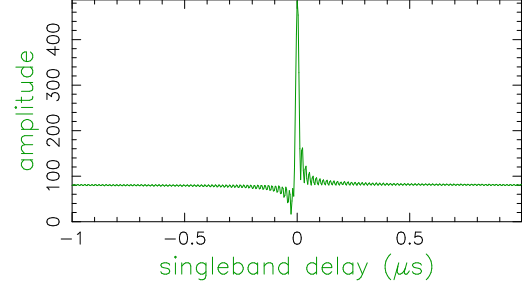
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	Ampl.	10000.0
b	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

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

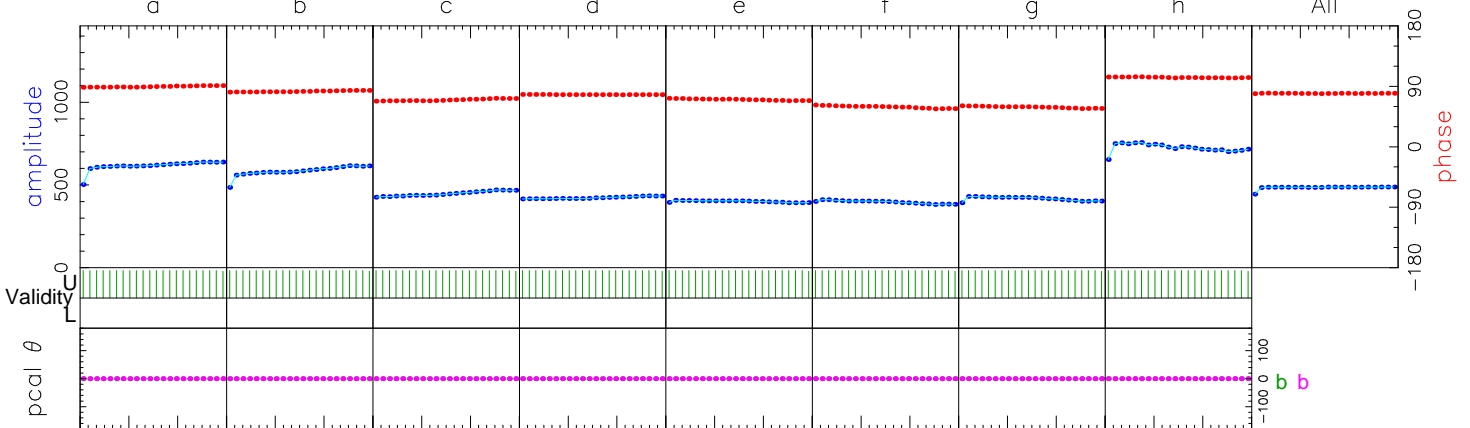
ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (1024X32)	9999.999	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.999	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00



Fringe quality 7  
SNR 17875.5  
Int time 179.980  
Amp 487.245  
Phase 79.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.000826  
MBD -0.001029  
Fringe rate (Hz) 0.000007  
Ion TEC 0.000  
Ref freq (MHz) 87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142159  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

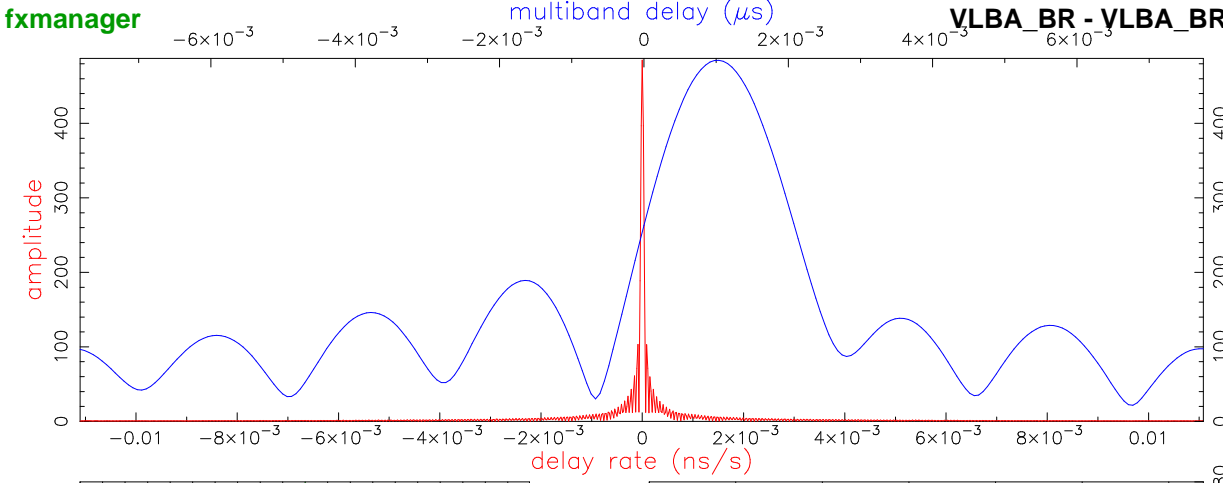


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

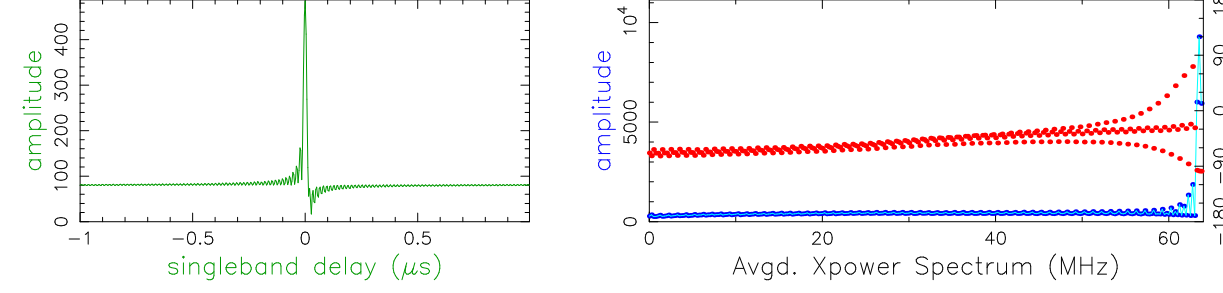


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
89.6	82.6	69.8	77.6	70.3	59.4	59.0	103.2	103.2	Phase	79.4
616.6	584.6	447.5	423.4	400.8	396.8	417.1	725.9	725.9	Ampl.	501.6
256.5	256.5	256.6	256.8	256.6	256.8	256.7	258.2	258.2	Sbd box	257.2
U/L 352/0	352/0	352/0	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	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:b 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:b 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	
b 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
b W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.02881250000E-03		Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-1.02881E-03	+/-	6.1E-08		
Sband delay (usec)	8.25750000000E-04		Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	8.25750E-04	+/-	4.8E-07		
Phase delay (usec)	2.50938955622E-06		Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.50939E-06	+/-	2.0E-10		
Delay rate (us/s)	7.63459957768E-11		Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	7.63460E-11	+/-	1.9E-12		
Total phase (deg)		79.4	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	79.4	+/-	0.0		

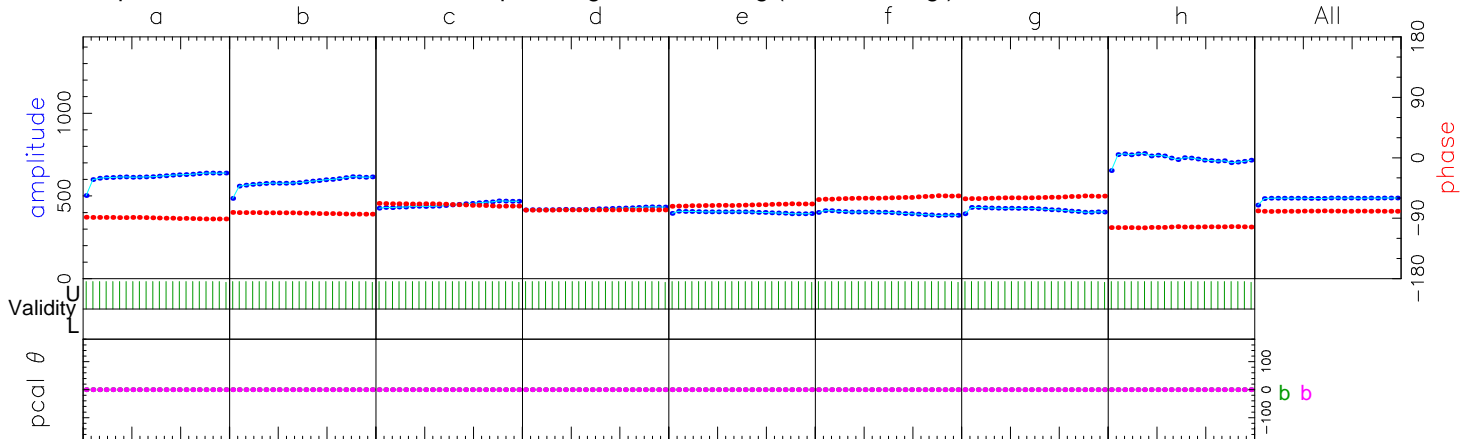
ph/seg (deg) 0.2 0.0 RMS Theor. Amplitude 487.245 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 1.9 0.0 Search (1024X32) 484.372 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 16.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 24.0 0.0 Inc. seg. avg. 484.812 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
b: az 167.8 el 39.9 pa -8.1 u,v (fr/asec) 0.000 0.000 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/No0079/bb..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bb.W.37.1JLM0Z simultaneous interpolator



Fringe quality 7  
SNR 17875.5  
Int time 179.980  
Amp 487.245  
Phase -79.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.000826  
MBD 0.001029  
Fringe rate (Hz)  
-0.000007  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142200  
2020:247:085004  
RA & Dec (J2000)  
04h23m15.800724s  
--1°20'33.065613"

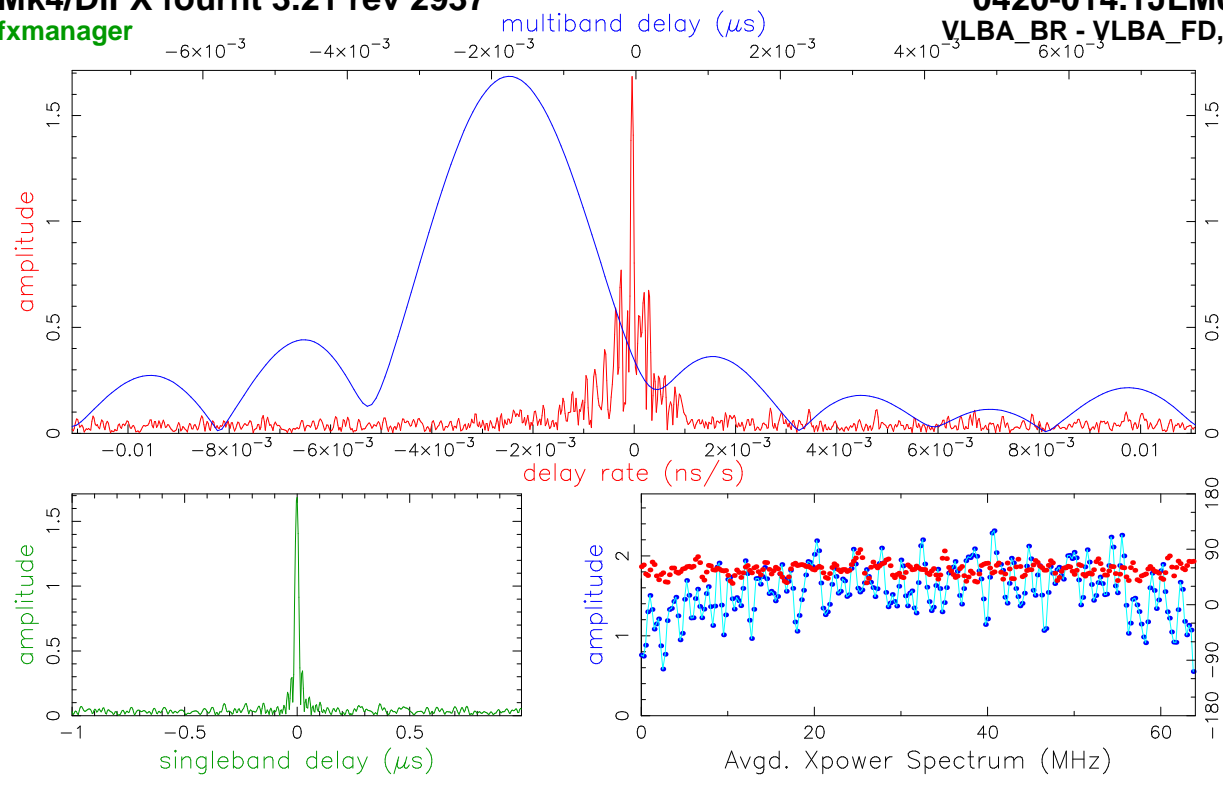


Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



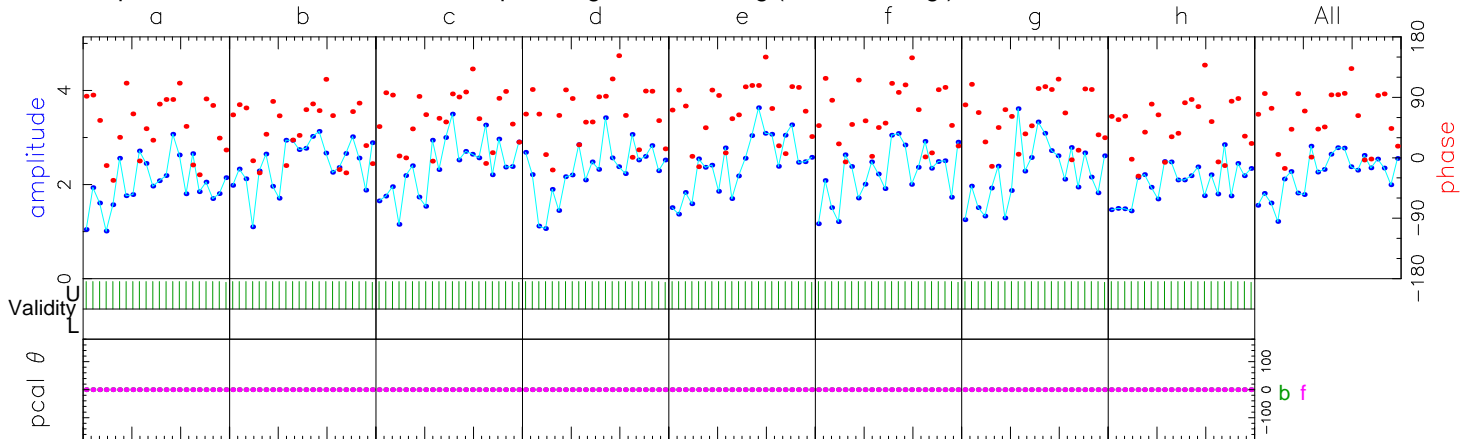
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:b	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.02881250000E-03								1.02881E-03	+/- 6.1E-08
Sband delay (usec)	-8.25750000000E-04								-8.25750E-04	+/- 4.8E-07
Phase delay (usec)	-2.5093895622E-06								-2.50939E-06	+/- 2.0E-10
Delay rate (us/s)	-7.63459957768E-11								-7.63460E-11	+/- 1.9E-12
Total phase (deg)			-79.4						-79.4	+/- 0.0
ph/seg (deg)	0.2	0.0								
amp/seg (%)	1.9	0.0								
ph/frq (deg)	16.7	0.0								
amp/frq (%)	24.0	0.0								
b: az 167.8 el 39.9 pa -8.1	b: az 167.8 el 39.9 pa -8.1		u,v (fr/asec) 0.000 0.000						simultaneous interpolator	

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bb..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bb.W.51.1JLM0Z



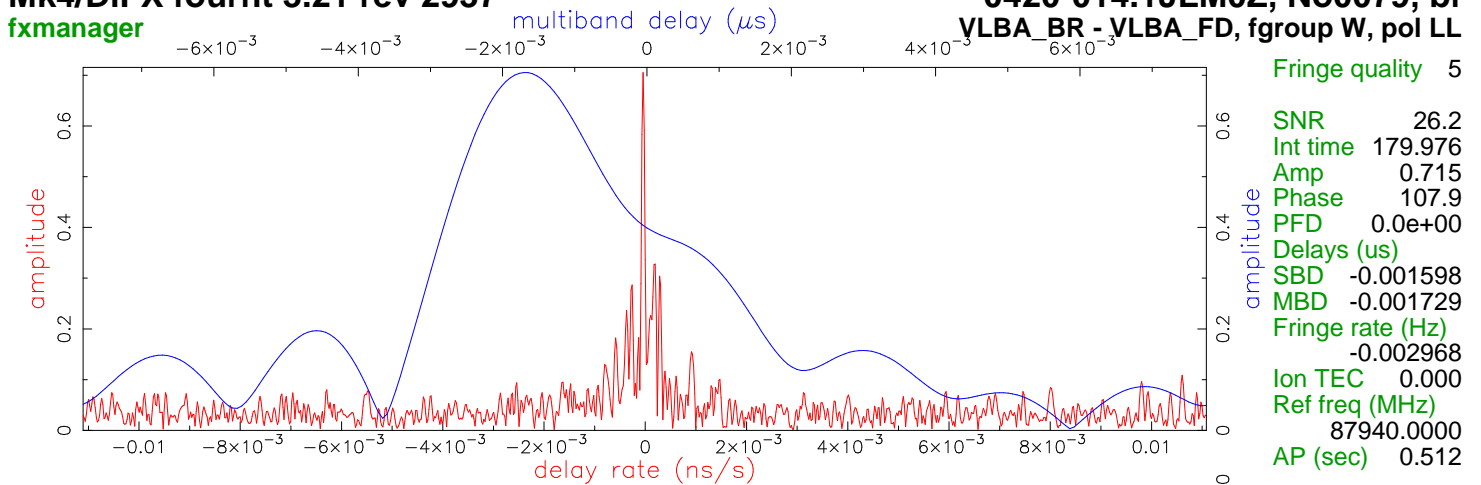
Fringe quality 6  
SNR 62.8  
Int time 179.976  
Amp 1.713  
Phase 57.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.001669  
MBD -0.001797  
Fringe rate (Hz)  
-0.003130  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142157  
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

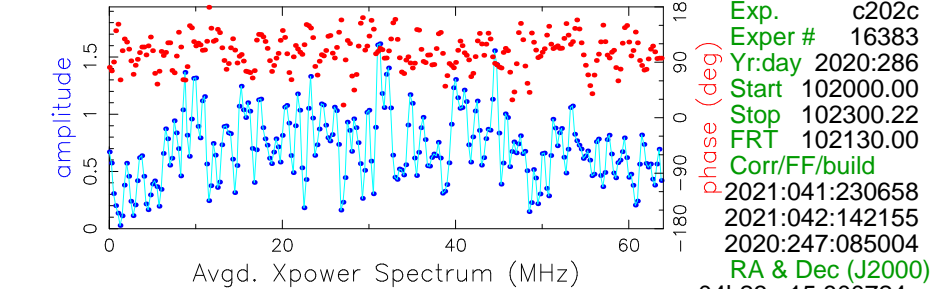
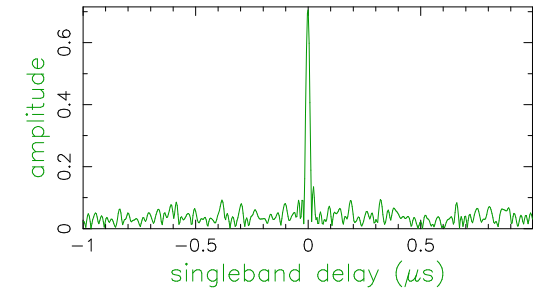


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
f	1000	1000	1000	1000	1000	1000	1000	1000		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-4.26456434555E+03									
Sband delay (usec)	-4.26456421769E+03									
Phase delay (usec)	-4.26456254711E+03									
Delay rate (us/s)	3.19352285294E-01									
Total phase (deg)			-141.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									57.8	+/- 1.8
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

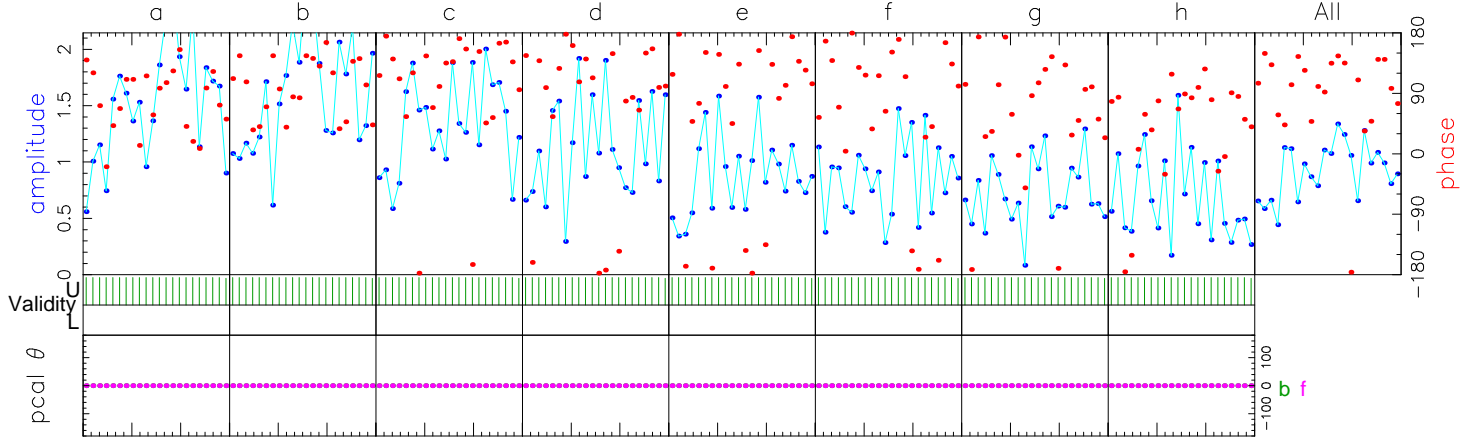
ph/seg (deg) 40.8 4.3  
amp/seg (%) 38.9 7.5  
ph/frq (deg) 10.6 2.6  
amp/frq (%) 7.4 4.5  
RMS Theor. Amplitude 1.713 +/- 0.027  
Search (1024X32) 1.617  
Inc. seg. avg. 2.217  
Inc. frq. avg. 1.704  
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
SampCntNorm: enabled  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite  
b: az 167.8 el 39.9 pa -8.1 f: az 192.0 el 57.5 pa 10.7 u,v (fr/asec) -1859.726 2081.778 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bf..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bf.W.16.1JLM0Z



Fringe quality 5  
SNR 26.2  
Int time 179.976  
Amp 0.715  
Phase 107.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.001598  
MBD -0.001729  
Fringe rate (Hz)  
-0.002968  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142155  
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	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	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-4.26456427824E+03				-4.26456254894E+03				Resid mbdelay (usec)	-1.72930E-03 +/- 4.1E-05
Sband delay (usec)	-4.26456414644E+03				-9.6472359E+00				Resid sbdelay (usec)	-1.59750E-03 +/- 3.3E-04
Phase delay (usec)	-4.26456254553E+03				-3.9999997E-07				Resid phdelay (usec)	3.40946E-06 +/- 1.4E-07
Delay rate (us/s)	3.19352287146E-01				3.19352320891E-01				Resid rate (us/s)	-3.37449E-08 +/- 1.3E-09
Total phase (deg)			-91.3		2.20269287759E-05				Resid phase (deg)	107.9 +/- 4.4
ph/seg (deg)	40.2	10.2			0.667				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	44.8	17.9			0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	29.1	6.2			0.914				Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	40.4	10.8			0.764				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

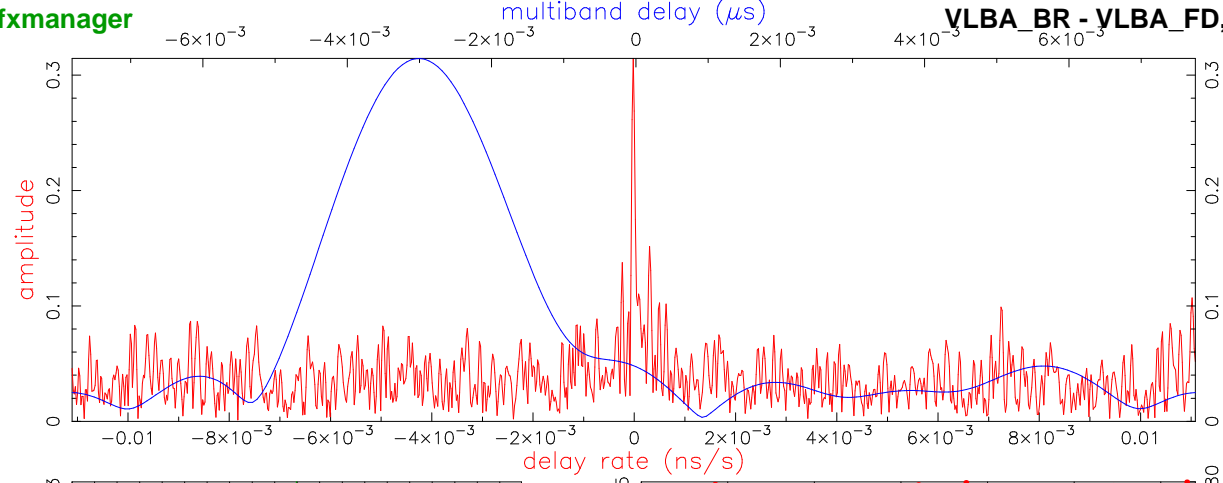
b: az 167.8 el 39.9 pa -8.1 f: az 192.0 el 57.5 pa 10.7 u,v (fr/asec) -1859.726 2081.778 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bf..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bf.W.2.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bf

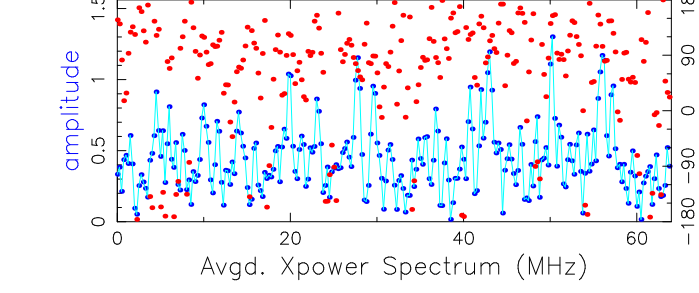
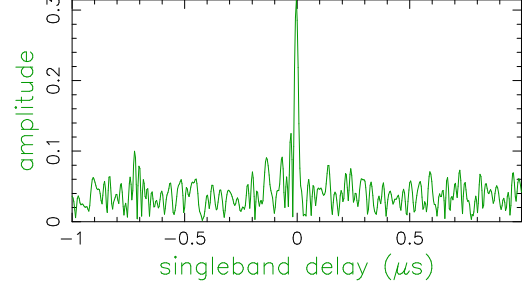
VLBA\_BR - VLBA\_FD, fgroup W, pol LR



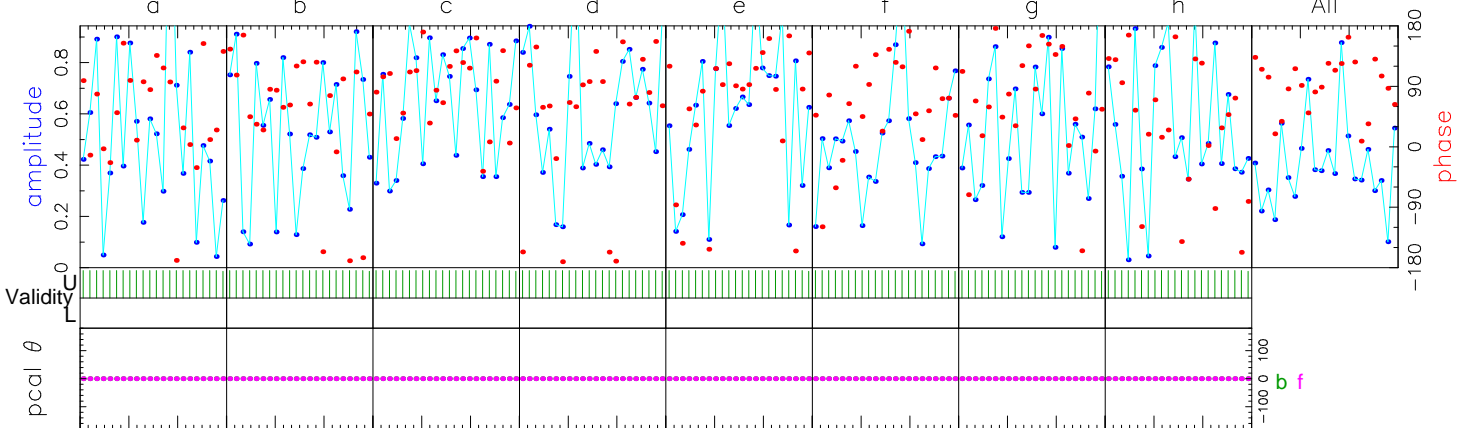
Fringe quality 9

SNR 11.5  
 Int time 179.976  
 Amp 0.315  
 Phase 92.6  
 PFD 2.1e-22  
 Delays (us)  
 SBD -0.004138  
 MBD -0.003020  
 Fringe rate (Hz)  
 -0.002372  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512

Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142159  
 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	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.26456556910E+03		Apriori delay (usec)		-4.26456254894E+03		Resid mbdelay (usec)		-3.02017E-03	+/- 9.4E-05
Sband delay (usec)	-4.26456668669E+03		Apriori clock (usec)		-9.6472359E+00		Resid sbdelay (usec)		-4.13775E-03	+/- 7.5E-04
Phase delay (usec)	-4.26456254601E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		2.92348E-06	+/- 3.1E-07
Delay rate (us/s)	3.19352293916E-01		Apriori rate (us/s)		3.19352320891E-01		Resid rate (us/s)		-2.69751E-08	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20269287759E-05		Resid phase (deg)		92.6	+/- 9.9

ph/seg (deg) 39.7 23.3 Search (1024X32) 0.311 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 61.0 40.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.7 14.0 Inc. seg. avg. 0.375 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 28.1 24.5 Inc. frq. avg. 0.310 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 167.8 el 39.9 pa -8.1 f: az 192.0 el 57.5 pa 10.7 u,v (fr/asec) -1859.726 2081.778 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bf..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bf.W.39.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

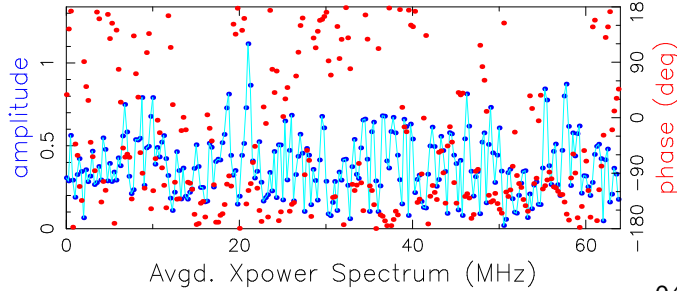
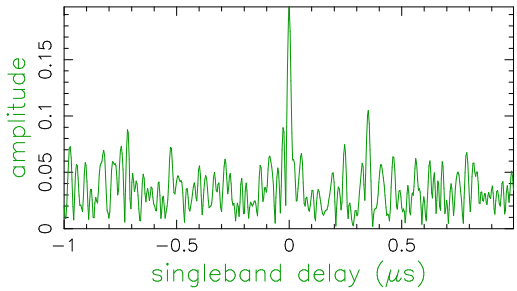
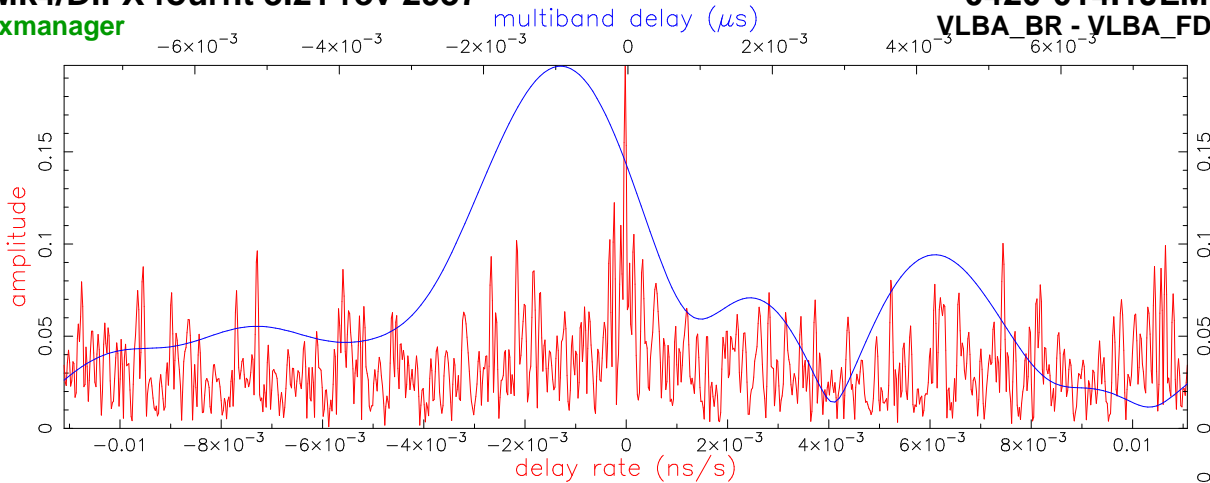
0420-014.1JLM0Z, No0079, bf

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

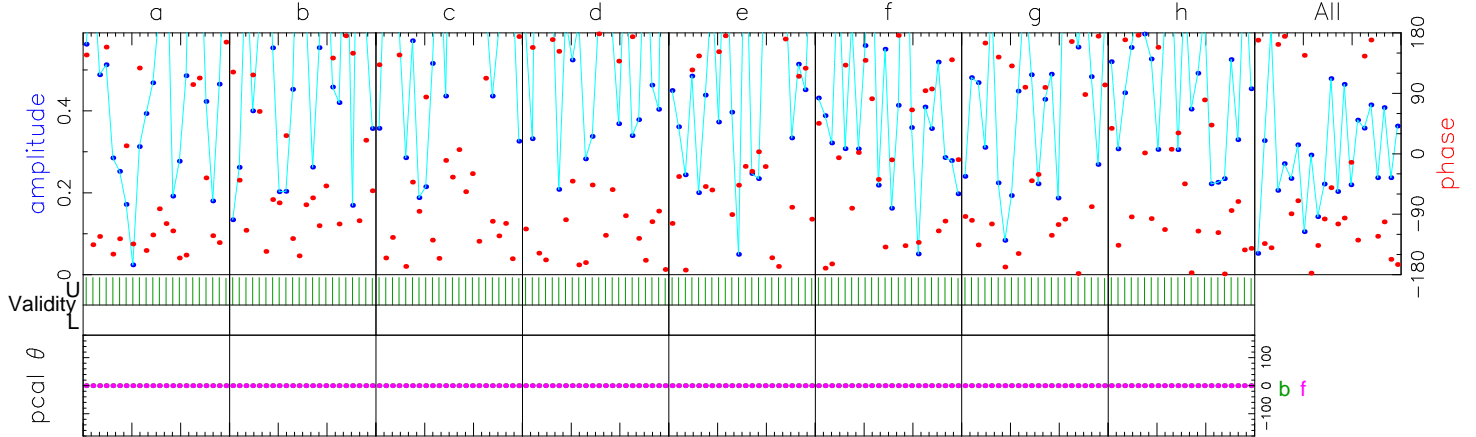
Fringe quality 9

SNR 7.2  
 Int time 179.976  
 Amp 0.197  
 Phase -131.9  
 PFD 7.9e-05  
 Delays (us)  
 SBD -0.000645  
 MBD -0.000950  
 Fringe rate (Hz)  
 -0.002448  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512

Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142201  
 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
	-160.7	-111.3	-106.8	-140.4	-118.6	176.5	-156.4	-106.6	Phase	-131.9
	0.2	0.3	0.3	0.4	0.1	0.1	0.2	0.1	Ampl.	0.2
	258.3	348.7	190.5	256.0	234.0	370.0	457.1	430.1	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.26456349935E+03		Apriori delay (usec)		-4.26456254894E+03		Resid mbdelay (usec)		-9.50415E-04	+/- 1.5E-04
Sband delay (usec)	-4.26456319344E+03		Apriori clock (usec)		-9.6472359E+00		Resid sbdelay (usec)		-6.44500E-04	+/- 1.2E-03
Phase delay (usec)	-4.26456255310E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-4.16752E-06	+/- 5.0E-07
Delay rate (us/s)	3.19352293058E-01		Apriori rate (us/s)		3.19352320891E-01		Resid rate (us/s)		-2.78330E-08	+/- 4.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20269287759E-05		Resid phase (deg)		-131.9	+/- 15.9

	RMS	Theor.	Amplitude	0.197 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.2	37.2	Search (1024X32)	0.192	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	82.4	64.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	31.7	22.4	Inc. seg. avg.	0.245	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	56.1	39.2	Inc. frq. avg.	0.198	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 f: az 192.0 el 57.5 pa 10.7 u,v (fr/asec) -1859.726 2081.778 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bf..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bf.W.60.1JLM0Z



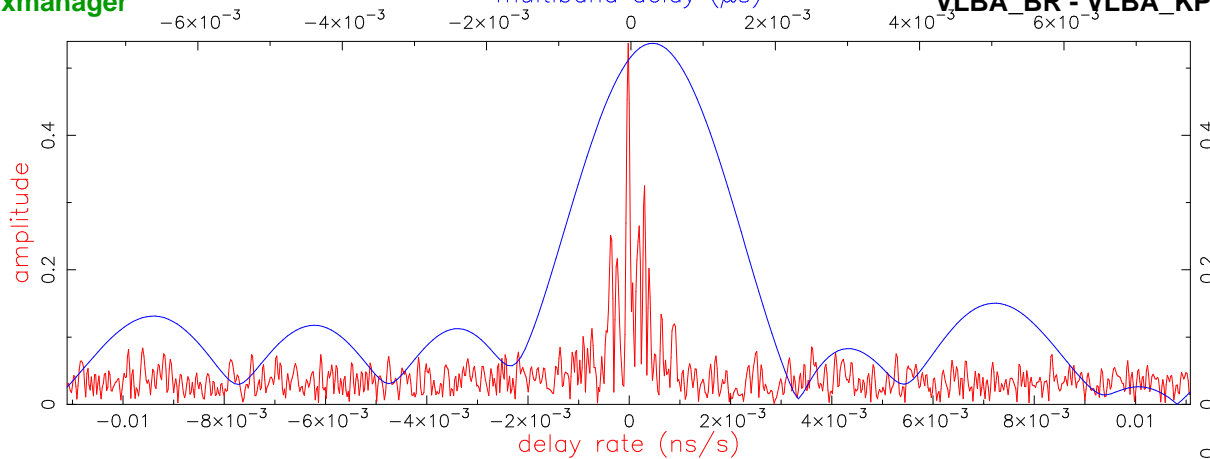
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bk

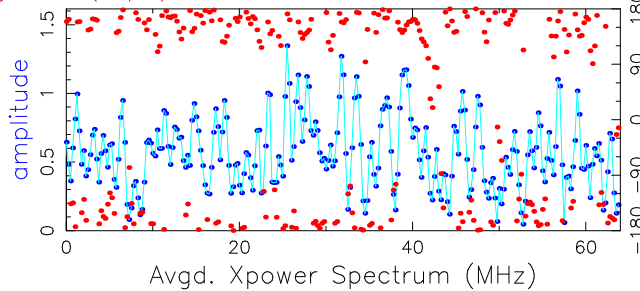
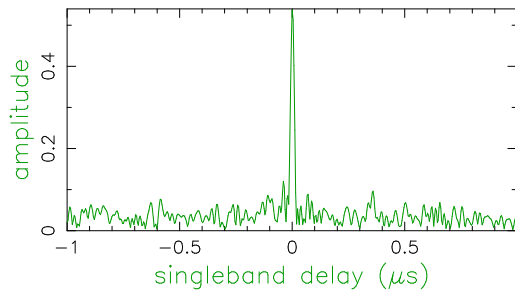
VLBA\_BR - VLBA\_KP, fgroup W, pol RR

multiband delay ( $\mu$ s)



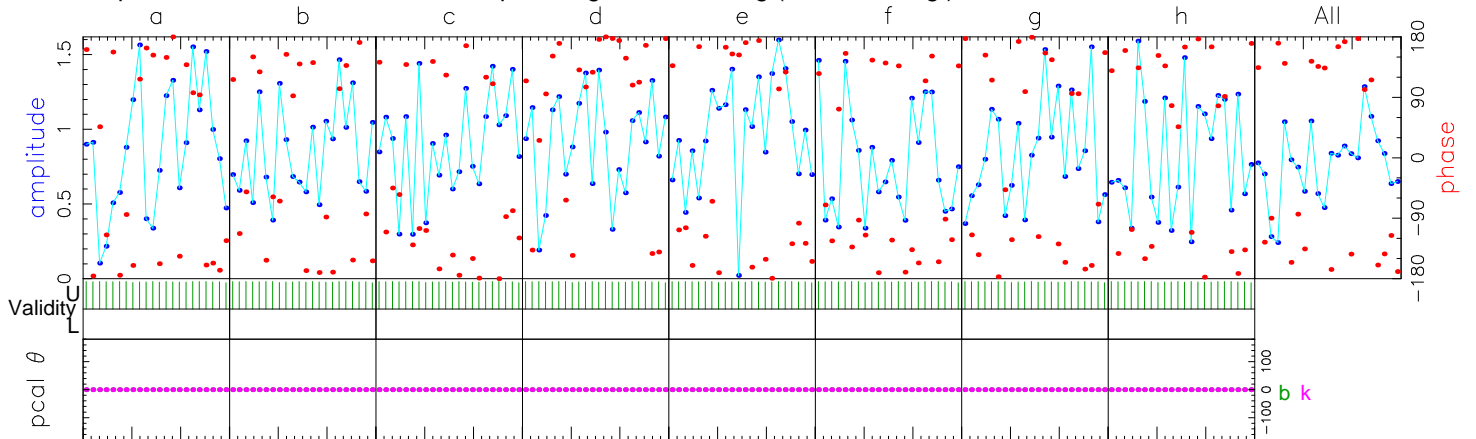
Fringe quality 9

SNR 19.7  
 Int time 178.249  
 Amp 0.540  
 Phase 176.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000962  
 MBD 0.000329  
 Fringe rate (Hz)  
 -0.001911  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142158  
 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	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-4.12146050113E+03				-4.12146082971E+03				3.28585E-04	+/- 5.5E-05
Sband delay (usec)	-4.12145986721E+03				-2.0558081E+00				9.62500E-04	+/- 4.4E-04
Phase delay (usec)	-4.12146082413E+03				-9.9999991E-08				5.57683E-06	+/- 1.8E-07
Delay rate (us/s)	1.41209101063E-01				1.41209122795E-01				-2.17322E-08	+/- 1.8E-09
Total phase (deg)			45.3		2.13564953243E-05				176.6	+/- 5.8
pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/s):	128		dr window (ns/s)		-0.011		0.011			
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	
ph/seg (deg)	48.3	13.6	Search (1024X32)	0.529						
amp/seg (%)	61.9	23.8	Interp.	0.000						
ph/frq (deg)	13.6	8.2	Inc. seg. avg.	0.747						
amp/frq (%)	16.1	14.4	Inc. frq. avg.	0.543						

b: az 167.8 el 39.9 pa -8.1 k: az 177.7 el 56.7 pa -1.3 u,v (fr/asec) -818.037 1906.798 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bk..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bk.W.26.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

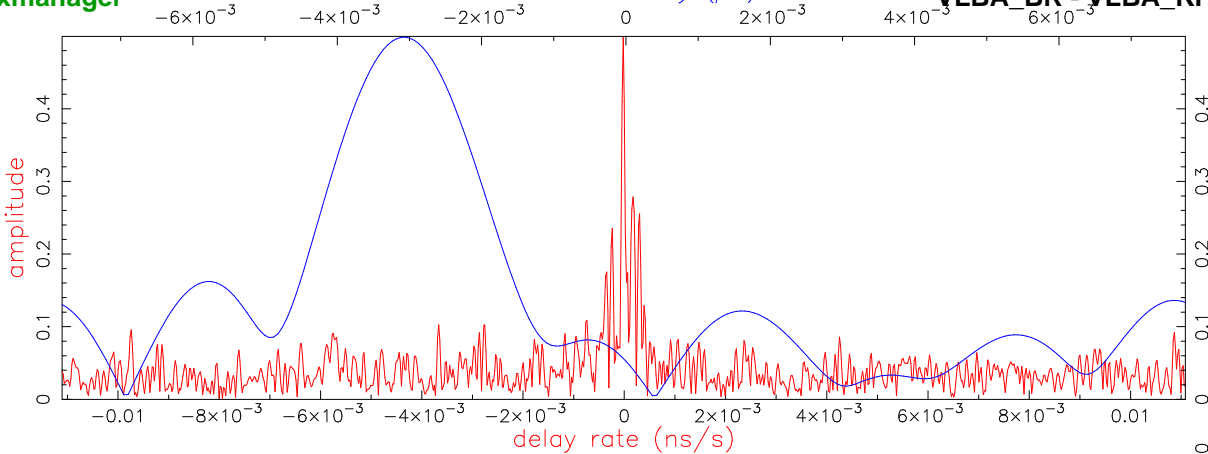
fxmanager

0420-014.1JLM0Z, No0079, bk

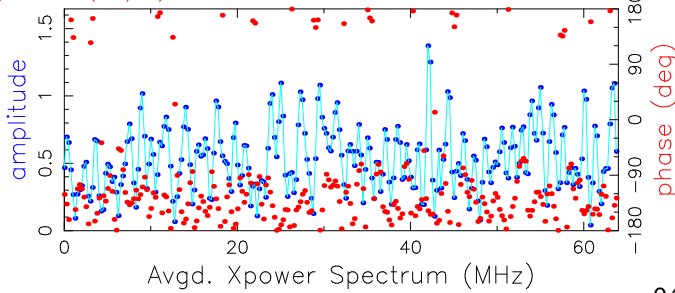
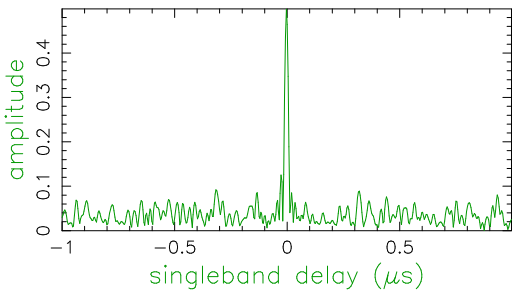
VLBA\_BR - VLBA\_KP, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 9

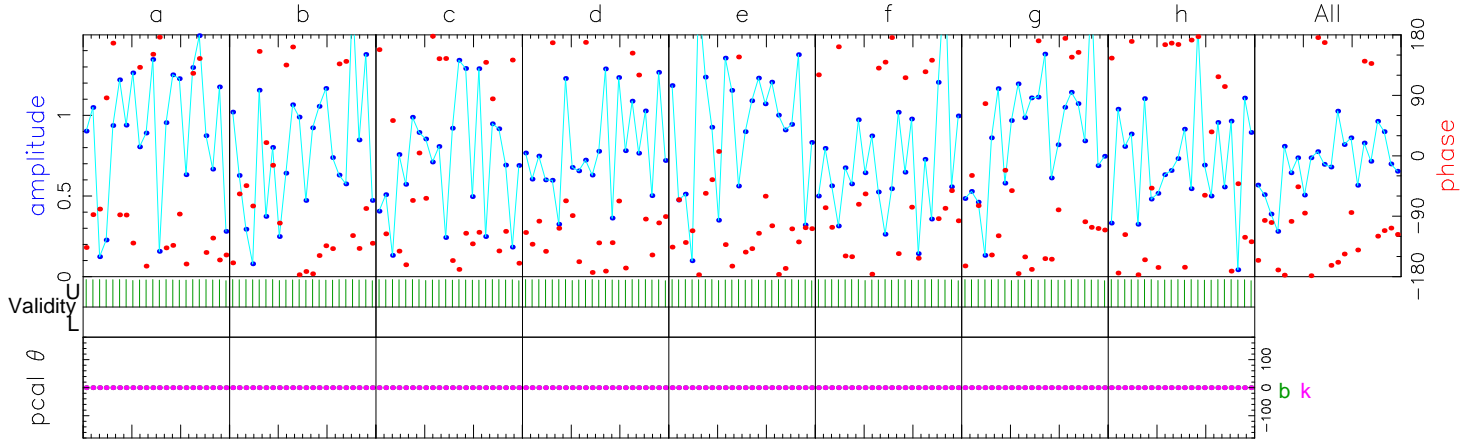


SNR 18.2  
 Int time 178.249  
 Amp 0.500  
 Phase -141.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.003327  
 MBD -0.003067  
 Fringe rate (Hz)  
 -0.001659  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142155  
 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	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-4.12146389663E+03								Resid mbdelay (usec)	-3.06692E-03 +/- 6.0E-05
Sband delay (usec)	-4.12146415671E+03								Resid sbdelay (usec)	-3.32700E-03 +/- 4.7E-04
Phase delay (usec)	-4.12146083418E+03								Resid phdelay (usec)	-4.46628E-06 +/- 2.0E-07
Delay rate (us/s)	1.41209103935E-01								Resid rate (us/s)	-1.88602E-08 +/- 1.9E-09
Total phase (deg)		-272.7							Resid phase (deg)	-141.4 +/- 6.3
ph/seg (deg)	45.7	14.7							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	53.2	25.7							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.4	8.9							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	19.6	15.5							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 k: az 177.7 el 56.7 pa -1.3 u,v (fr/asec) -818.037 1906.798 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bk..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bk.W.3.1JLM0Z

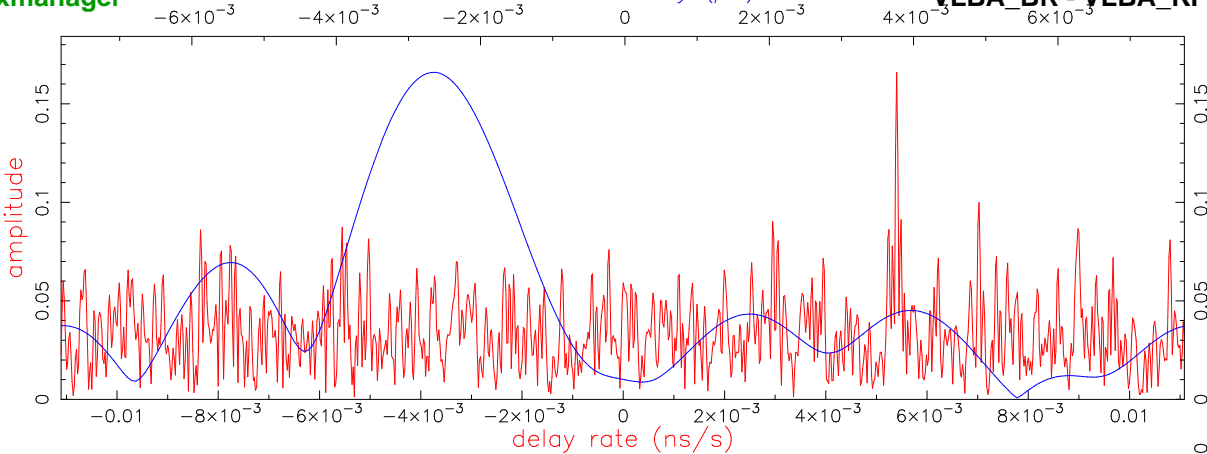
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bk

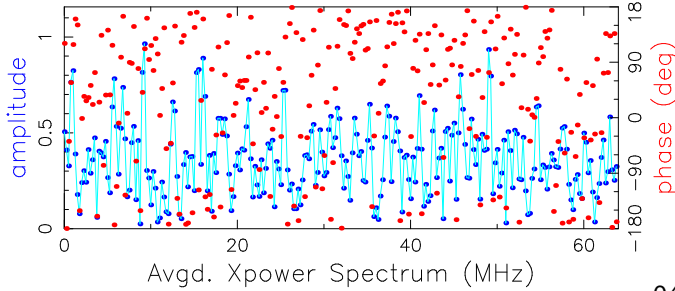
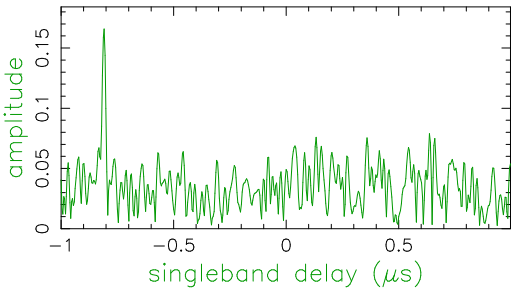
VLBA\_BR - VLBA\_KP, fgroup W, pol LR

multiband delay ( $\mu$ s)



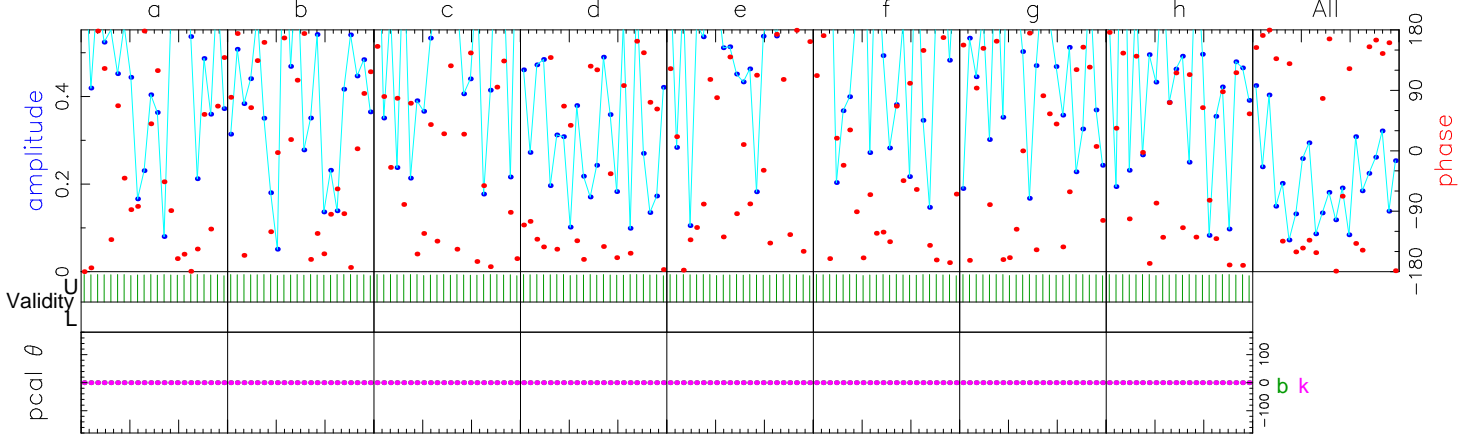
Fringe quality 0

SNR 6.1  
 Int time 178.249  
 Amp 0.184  
 Phase -178.9  
 PFD 1.4e-01  
 Delays (us)  
 SBD -0.809577  
 MBD -0.002699  
 Fringe rate (Hz)  
 0.475133  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142201  
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.12227602857E+03				-4.12146082971E+03					
Sband delay (usec)	-4.12227040696E+03				-2.0558081E+08					
Phase delay (usec)	-4.12146083536E+03				-9.9999991E-08					
Delay rate (us/s)	1.41214525714E-01				1.41209122795E-01					
Total phase (deg)			-310.2		2.13564953243E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.184 +/- 0.030										
0.161										
0.000										
0.181										
0.177										
0.000E+00										
0.000E+00 (us/s)										
SampCntNorm: enabled										
128										
2048										
infinite										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										

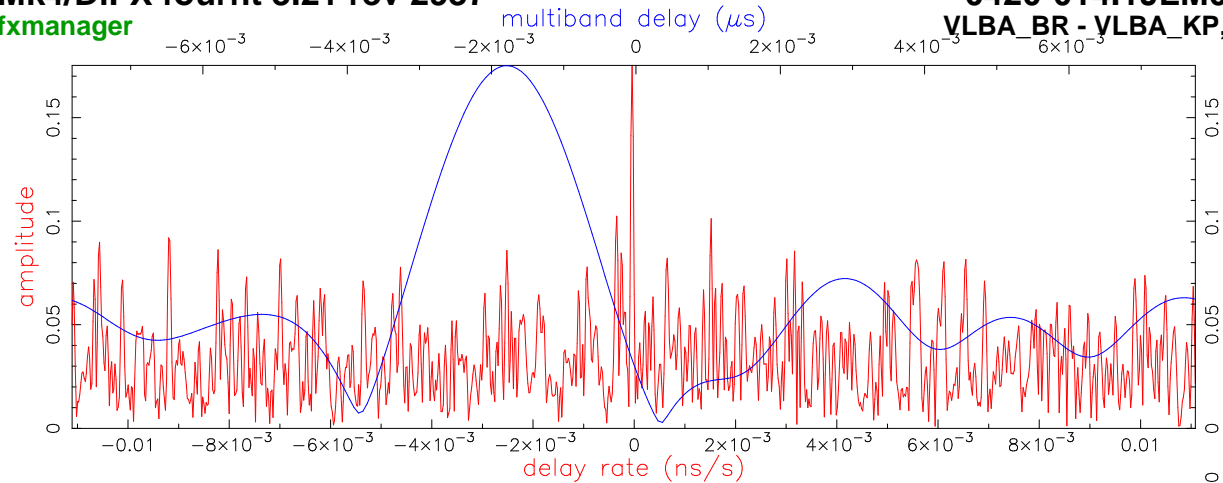
b: az 167.8 el 39.9 pa -8.1 k: az 177.7 el 56.7 pa -1.3 u,v (fr/asec) -818.037 1906.798 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bk..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bk.W.54.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

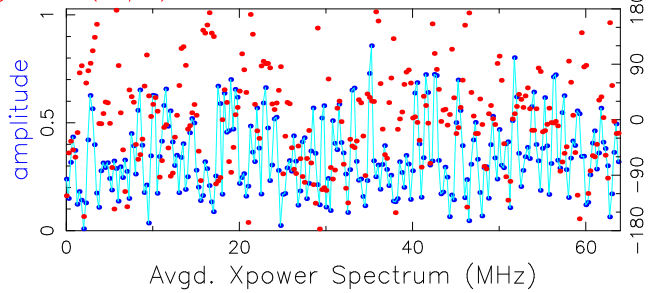
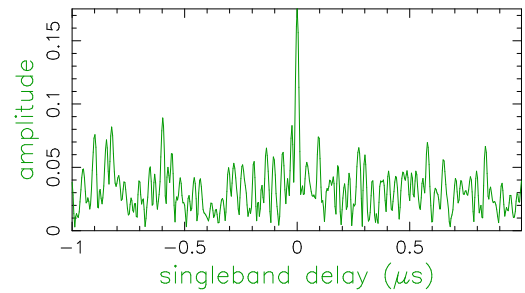
0420-014.1JLM0Z, No0079, bk

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



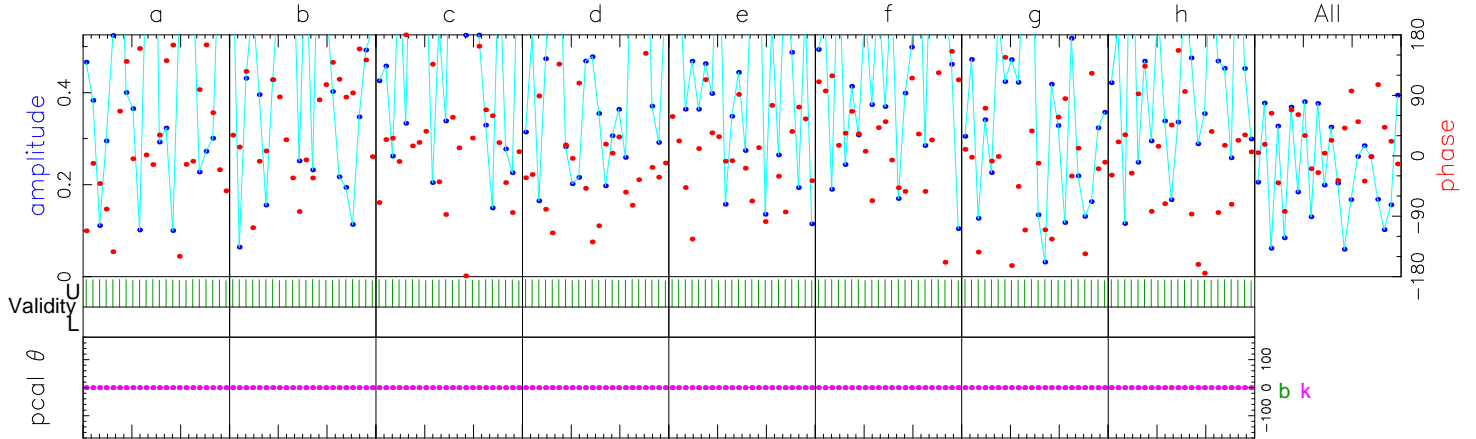
Fringe quality 0

SNR 6.4  
 Int time 178.249  
 Amp 0.175  
 Phase 12.4  
 PFD 2.2e-02  
 Delays (us)  
 SBD -0.000322  
 MBD -0.001793  
 Fringe rate (Hz)  
 -0.003506  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



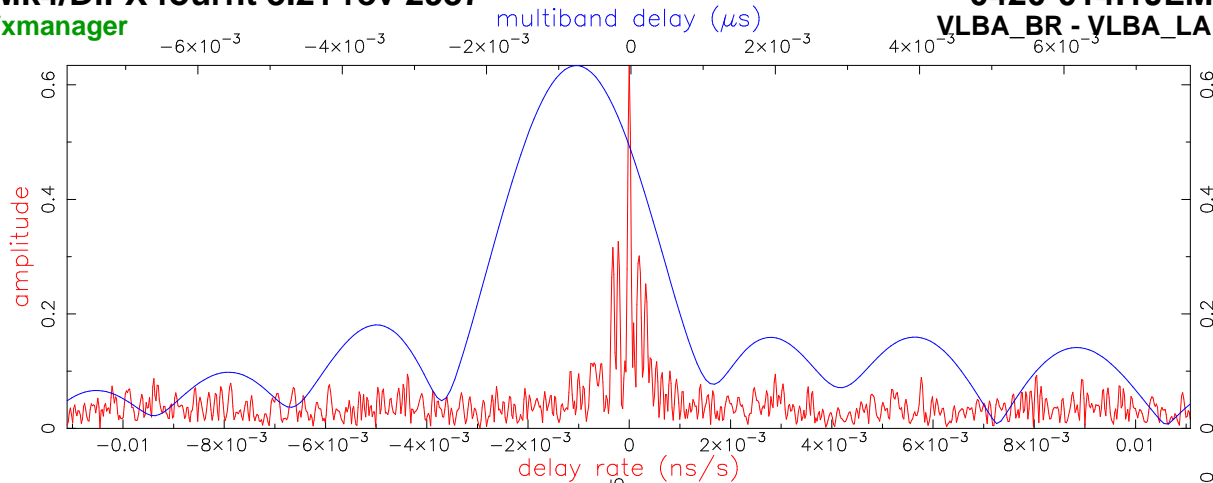
Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142203  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 -1°20'33.065613"

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

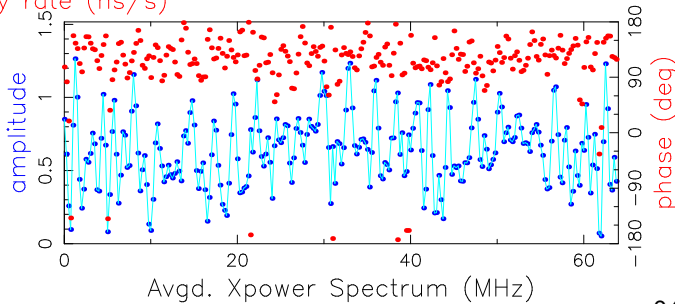
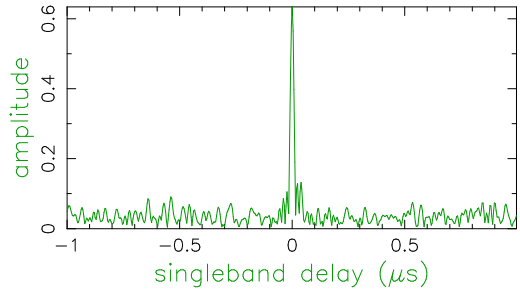


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
k	1000	1000	1000	1000	1000	1000	1000	1000			
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
k	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
Group delay (usec)(sbd)	-4.12146262310E+03				-4.12146082971E+03				Resid mbdelay (usec)	-1.79339E-03	+/- 1.7E-04
Sband delay (usec)	-4.12146115171E+03				-2.0558081E+00				Resid sbdelay (usec)	-3.22000E-04	+/- 1.3E-03
Phase delay (usec)	-4.12146082932E+03				-9.9999991E-08				Resid phdelay (usec)	3.92748E-07	+/- 5.7E-07
Delay rate (us/s)	1.41209082926E-01				1.41209122795E-01				Resid rate (us/s)	-3.98693E-08	+/- 5.4E-09
Total phase (deg)			-118.9		2.13564953243E-05				Resid phase (deg)	12.4	+/- 17.9
ph/seg (deg)	46.6	42.0			0.175 +/- 0.027				Pcal mode: MANUAL, MANUAL		
amp/seg (%)	69.2	73.3			0.172				Pcal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	36.3	25.3			0.000				Bits/sample: 2x2		
amp/frq (%)	33.4	44.2			0.182				SampCntNorm: enabled		
					0.182				Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
b: az 167.8 el 39.9 pa -8.1									ion window (TEC)	0.00	0.00
k: az 177.7 el 56.7 pa -1.3											
u,v (fr/asec) -818.037 1906.798											
Control file: cf_1234_88GHz_gmva											
Input file: /Exps/c202c/v1/1234/No0079/bk..1JLM0Z											
Output file: /Exps/c202c/v1/1234/No0079/bk.W.77.1JLM0Z											

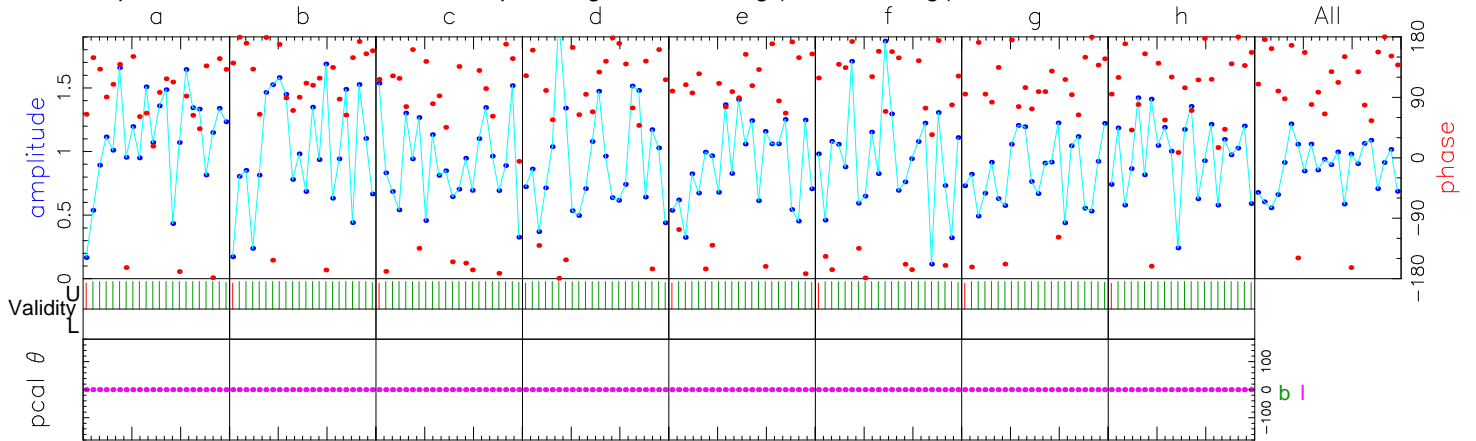
simultaneous interpolator



Fringe quality 9  
SNR 23.2  
Int time 179.511  
Amp 0.634  
Phase 129.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.000271  
MBD -0.000762  
Fringe rate (Hz)  
-0.000528  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512  
Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142158  
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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.25586527410E+03		Apriori delay (usec)		-3.25586451225E+03		Resid mbdelay (usec)		-7.61844E-04	+/- 4.7E-05
Sband delay (usec)	-3.25586478350E+03		Apriori clock (usec)		-1.2881908E+00		Resid sbdelay (usec)		-2.71250E-04	+/- 3.7E-04
Phase delay (usec)	-3.25586450816E+03		Apriori clockrate (us/s)		9.999998E-08		Resid phdelay (usec)		4.09788E-06	+/- 1.6E-07
Delay rate (us/s)	2.60014097070E-01		Apriori rate (us/s)		2.60014103071E-01		Resid rate (us/s)		-6.00080E-09	+/- 1.5E-09
Total phase (deg)	55.0		Apriori accel (us/s/s)		1.68986853137E-05		Resid phase (deg)		129.7	+/- 4.9

ph/seg (deg) 42.7 11.6  
amp/seg (%) 47.6 20.2  
ph/frq (deg) 13.1 7.0  
amp/frq (%) 11.4 12.2

RMS Theor. Amplitude 0.634 +/- 0.027  
Search (1024X32) 0.610  
Interp. 0.000  
Inc. seg. avg. 0.858  
Inc. frq. avg. 0.643

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

b: az 167.8 el 39.9 pa -8.1 l: az 186.8 el 52.7 pa 6.1 u,v (fr/asec) -1514.203 1413.344 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bl.1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bl.W.24.1JLM0Z

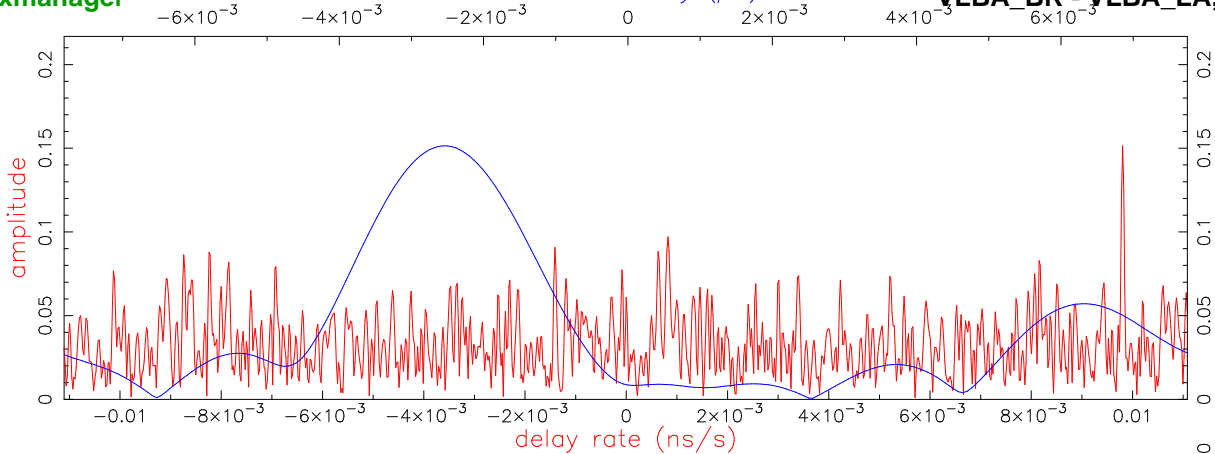
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bl

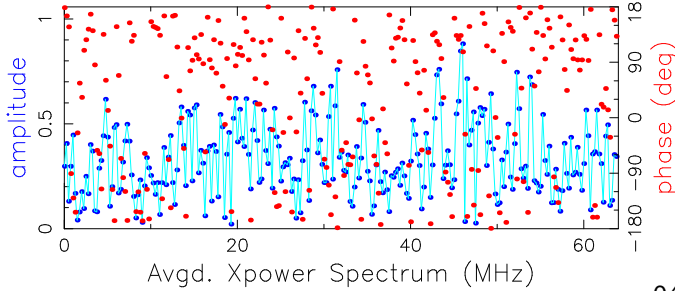
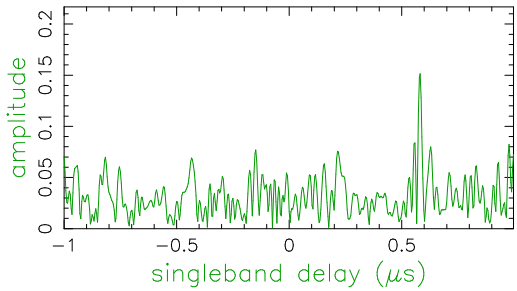
VLBA\_BR - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)



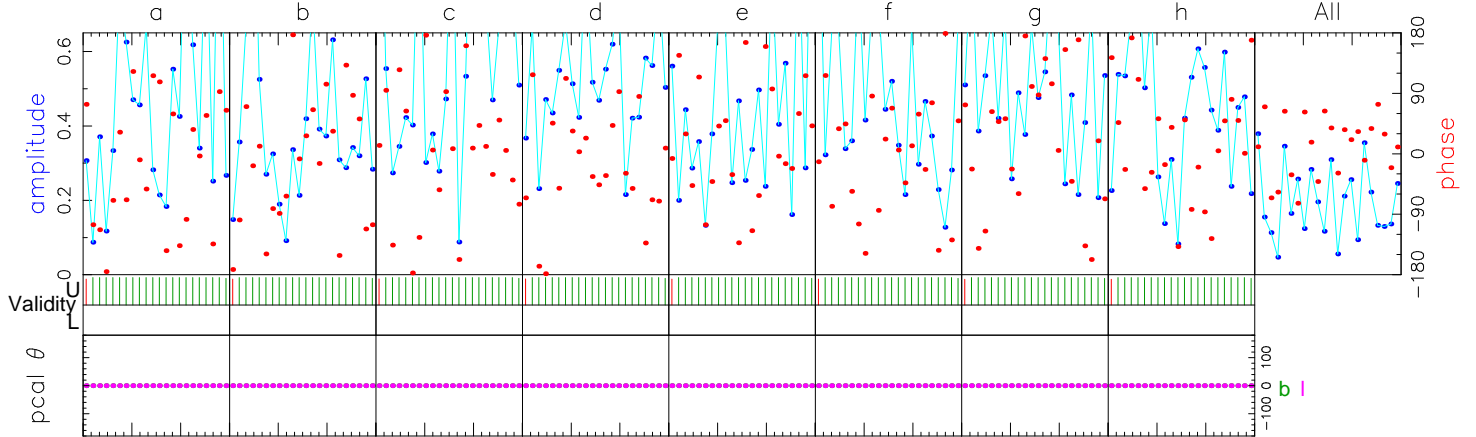
Fringe quality 0

SNR 5.6  
 Int time 179.511  
 Amp 0.217  
 Phase 15.9  
 PFD 9.0e-01  
 Delays (us)  
 SBD 0.580549  
 MBD -0.002558  
 Fringe rate (Hz)  
 0.863596  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142200  
 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



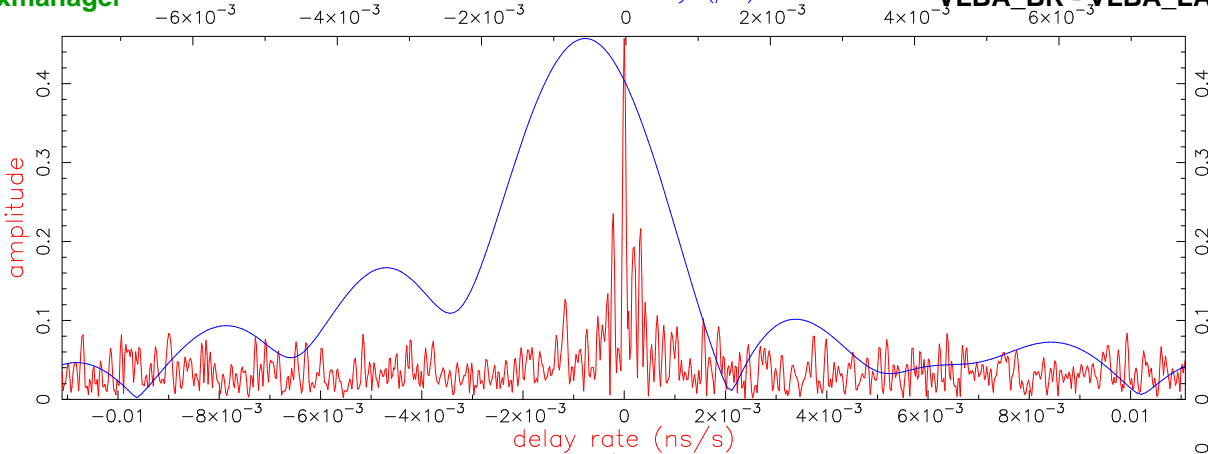
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.25528894484E+03									
Sband delay (usec)	-3.25528396300E+03									
Phase delay (usec)	-3.25586451175E+03									
Delay rate (us/s)	2.60023923358E-01									
Total phase (deg)			-58.8							
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)									15.9	+/- 20.4
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	44.9	47.8								
amp/seg (%)	67.5	83.4								
ph/frq (deg)	22.3	28.8								
amp/frq (%)	33.1	50.3								
Amplitude				0.217 +/- 0.039						
Search (1024X32)				0.149						
Interp.				0.000						
Inc. seg. avg.				0.206						
Inc. frq. avg.				0.198						
Pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

b: az 167.8 el 39.9 pa -8.1 l: az 186.8 el 52.7 pa 6.1 u,v (fr/asec) -1514.203 1413.344 simultaneous interpolator

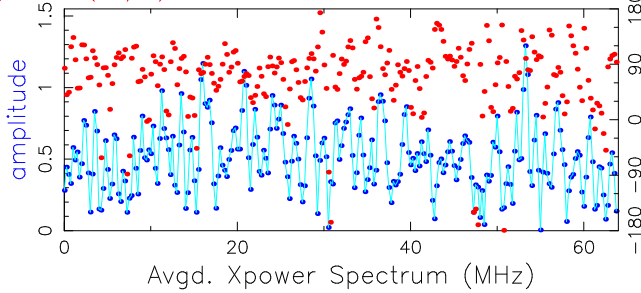
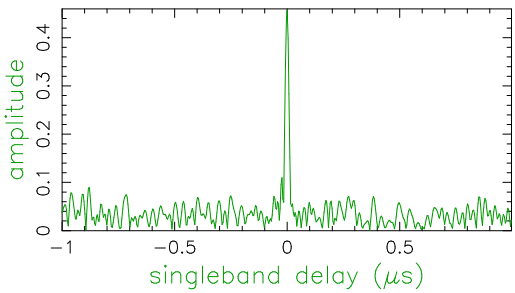
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bl..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bl.W.42.1JLM0Z

multiband delay ( $\mu$ s)

Fringe quality 9

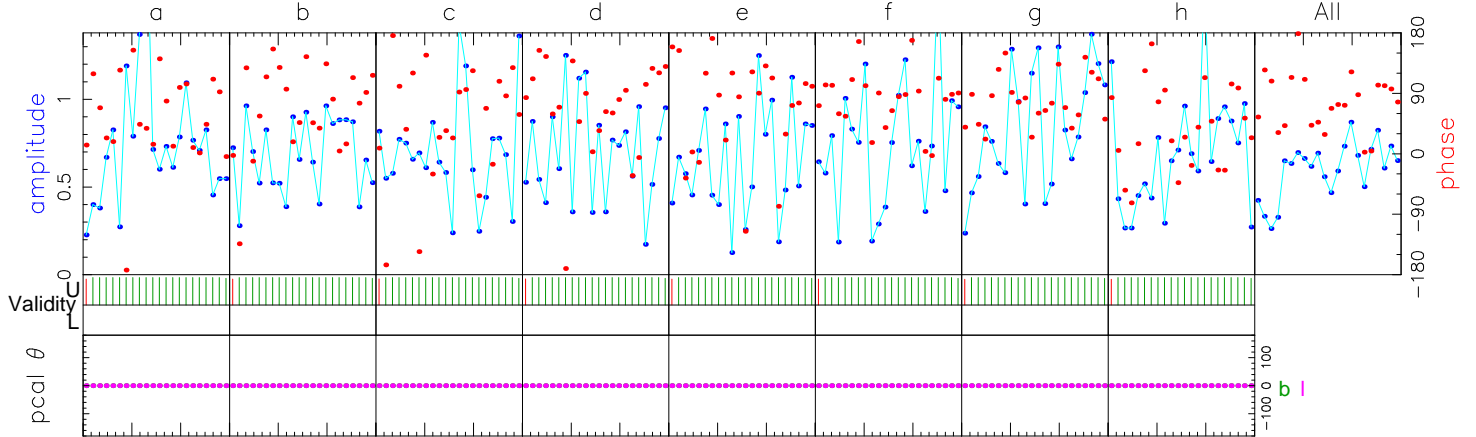


SNR 16.8  
Int time 179.511  
Amp 0.460  
Phase 78.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.001001  
MBD -0.000585  
Fringe rate (Hz)  
-0.000132  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142156  
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	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.25586509763E+03	Apriori delay (usec)	-3.25586451225E+03	Resid mbdelay (usec)	-5.85375E-04	+/-	6.4E-05
Sband delay (usec)	-3.25586551275E+03	Apriori clock (usec)	-1.2881908E+00	Resid sbdelay (usec)	-1.00050E-03	+/-	5.1E-04
Phase delay (usec)	-3.25586450979E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	2.46421E-06	+/-	2.1E-07
Delay rate (us/s)	2.60014101565E-01	Apriori rate (us/s)	2.60014103071E-01	Resid rate (us/s)	-1.50610E-09	+/-	2.1E-09
Total phase (deg)		Apriori accel (us/s/s)	1.68986853137E-05	Resid phase (deg)	78.0	+/-	6.8

ph/seg (deg)	42.2	Theor.	16.0	Amplitude	0.460 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	45.7	Search (1024X32)	0.456	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	16.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	22.6	Inc. seg. avg.	0.580	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.464	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	

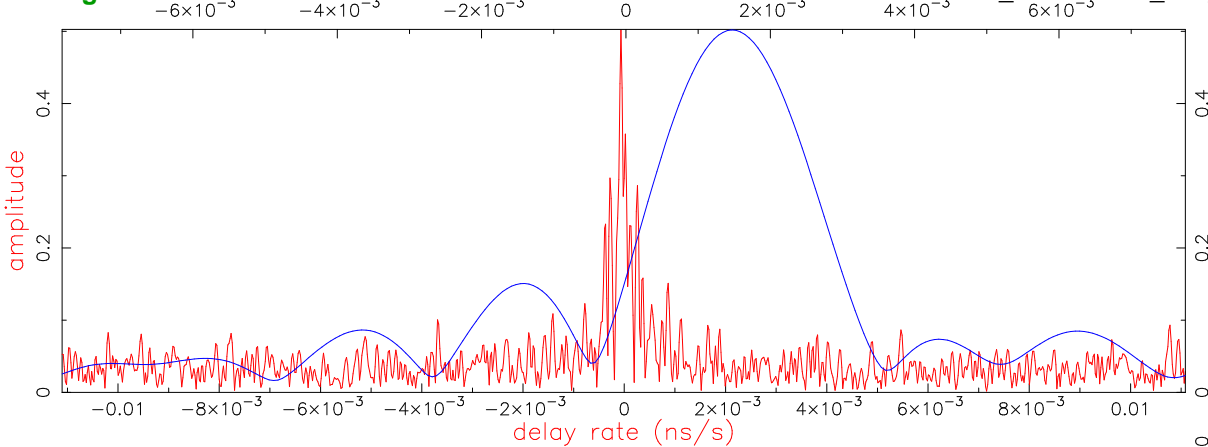
b: az 167.8 el 39.9 pa -8.1 l: az 186.8 el 52.7 pa 6.1 u,v (fr/asec) -1514.203 1413.344 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bl..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bl.W.5.1JLM0Z



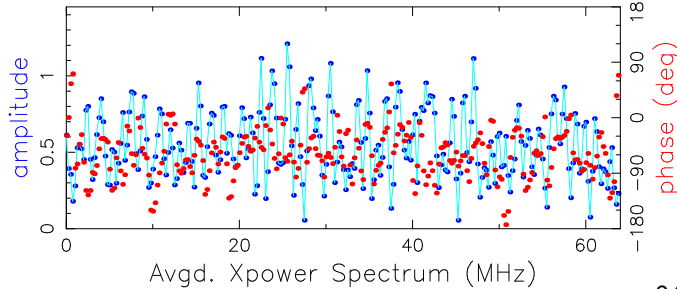
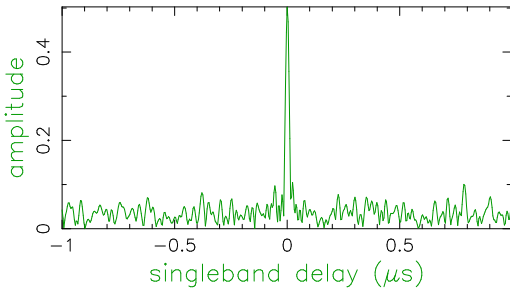


multiband delay ( $\mu$ s)

Fringe quality 9

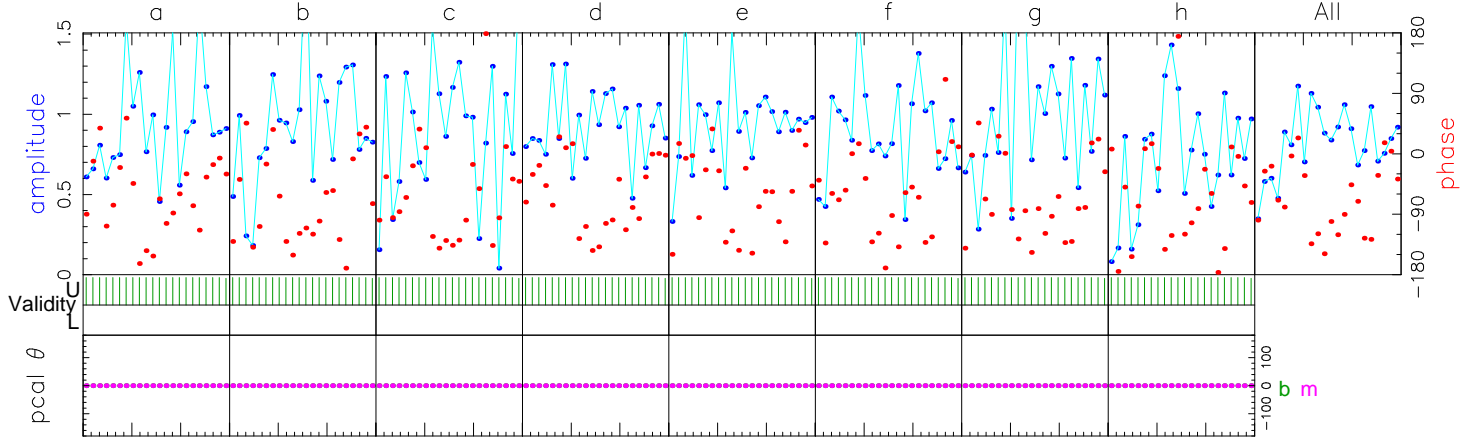


SNR 18.4  
Int time 179.980  
Amp 0.503  
Phase -69.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000516  
MBD 0.001479  
Fringe rate (Hz)  
-0.005334  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142157  
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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.95396601894E+02	Apriori delay (usec)	-3.95398081242E+02	Resid mbdelay (usec)	1.47935E-03	+/-	5.9E-05
Sband delay (usec)	-3.95397564742E+02	Apriori clock (usec)	-1.5094809E+01	Resid sbdelay (usec)	5.16500E-04	+/-	4.7E-04
Phase delay (usec)	-3.95398083442E+02	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-2.20080E-06	+/-	2.0E-07
Delay rate (us/s)	-8.66513941980E-01	Apriori rate (us/s)	-8.66513881328E-01	Resid rate (us/s)	-6.06520E-08	+/-	1.9E-09
Total phase (deg)	-164.9	Apriori accel (us/s/s)	9.89649496328E-07	Resid phase (deg)	-69.7	+/-	6.2

ph/seg (deg)	51.8	RMS	14.6	Theor.	14.6	Amplitude	0.503 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.6	Search (1024X32)	0.498	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	11.7	Inc. seg. avg.	0.797	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
amp/frq (%)	14.6	Inc. frq. avg.	0.504	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	dr window (ns/s)	-0.011	0.011		
						nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00

b: az 167.8 el 39.9 pa -8.1 m: az 110.2 el 41.0 pa -61.9 u,v (fr/asec) 5060.957 3673.959 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bm..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bm.W.18.1JLM0Z

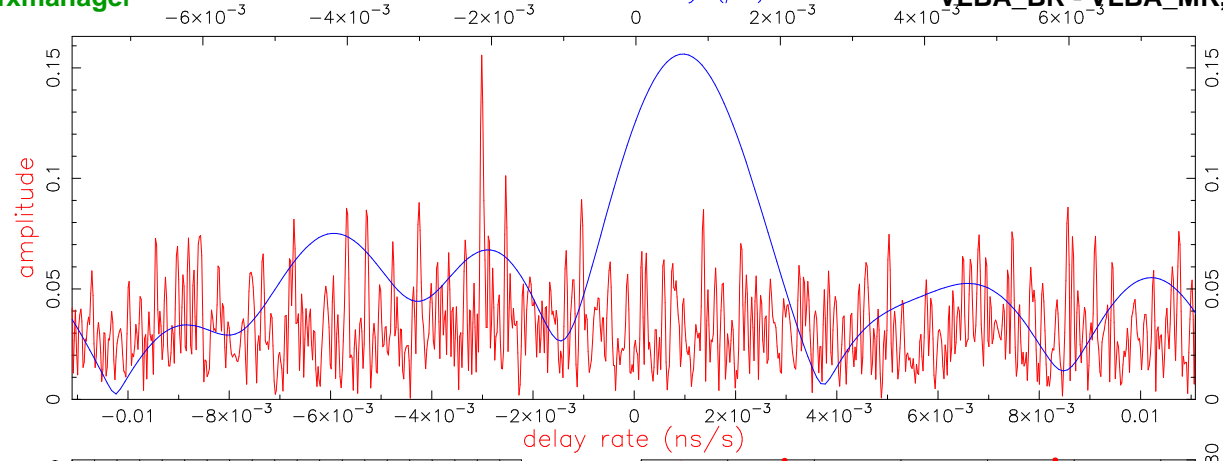
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bm

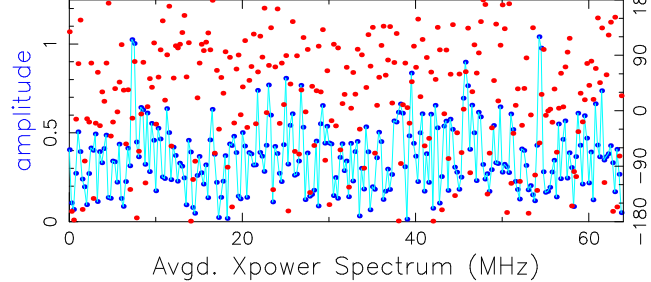
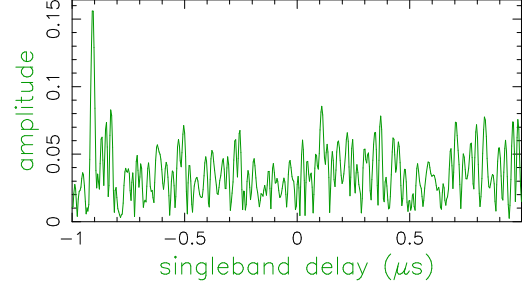
VLBA\_BR - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)



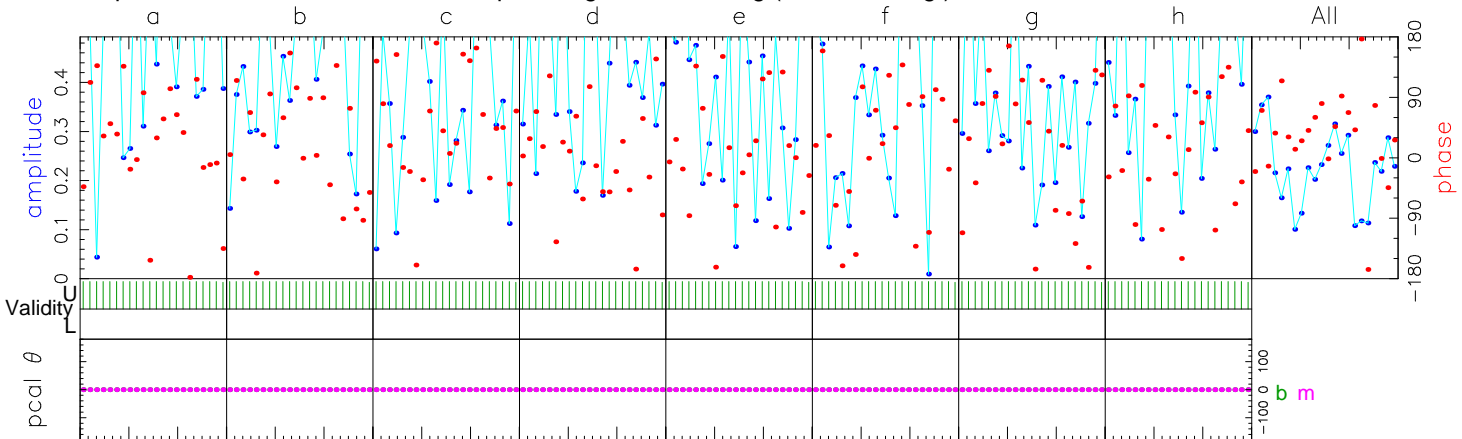
Fringe quality 0

SNR 5.8  
 Int time 179.980  
 Amp 0.164  
 Phase 37.8  
 PFD 4.7e-01  
 Delays (us)  
 SBD -0.908220  
 MBD 0.000568  
 Fringe rate (Hz)  
 -0.264878  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142159  
 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
	37.0	37.3	49.1	13.8	-15.1	83.4	81.9	22.1	Phase	37.8
	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.2	Ampl.	0.2
	24.3	494.8	437.2	273.9	189.0	224.2	347.0	370.9	Sbd box	24.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	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)	-3.96303762895E+02		Apriori delay (usec)		-3.95398081242E+02		Resid mbdelay (usec)		5.68346E-04	+/- 1.9E-04
Sband delay (usec)	-3.96306300992E+02		Apriori clock (usec)		-1.5094809E+01		Resid sbdelay (usec)		-9.08220E-01	+/- 1.5E-03
Phase delay (usec)	-3.95398080048E+02		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		1.19383E-06	+/- 6.2E-07
Delay rate (us/s)	-8.66516893356E-01		Apriori rate (us/s)		-8.66513881328E-01		Resid rate (us/s)		-3.01203E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		9.89649496328E-07		Resid phase (deg)		37.8	+/- 19.6

	RMS	Theor.	Amplitude	0.164 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	58.5	46.0	Search (1024X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	63.7	80.2	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	36.0	27.7	Inc. seg. avg.	0.176	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	27.8	48.4	Inc. frq. avg.	0.166				

b: az 167.8 el 39.9 pa -8.1 m: az 110.2 el 41.0 pa -61.9 u,v (fr/asec) 5060.957 3673.959 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bm..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bm.W.33.1JLM0Z

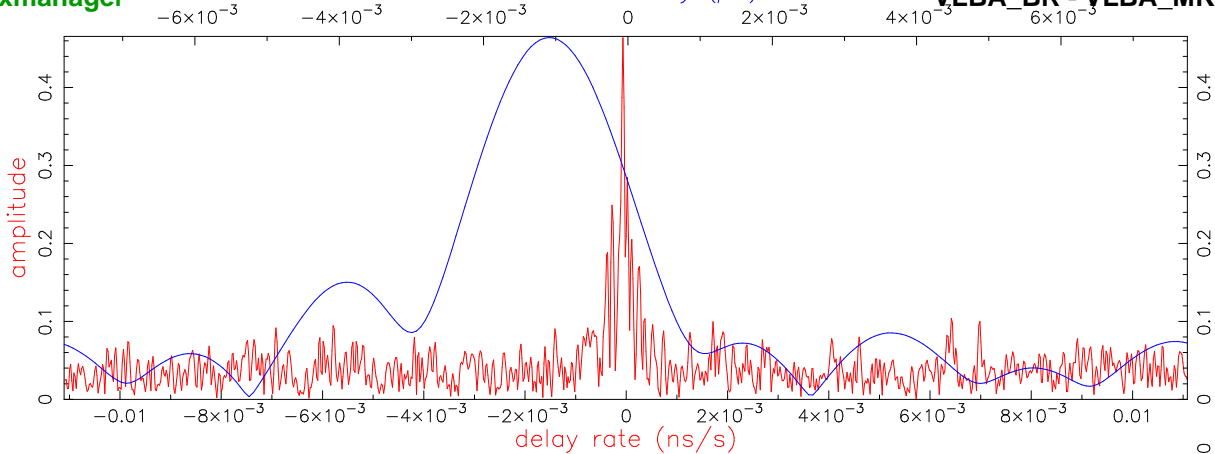
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bm

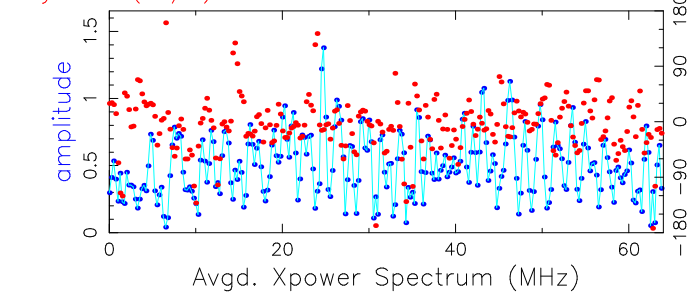
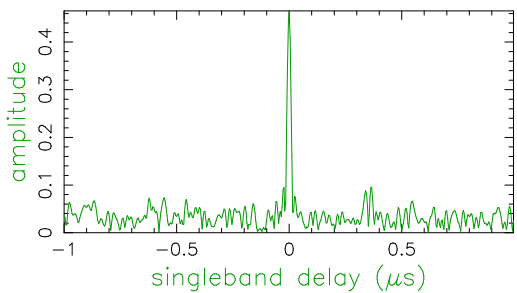
VLBA\_BR - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)



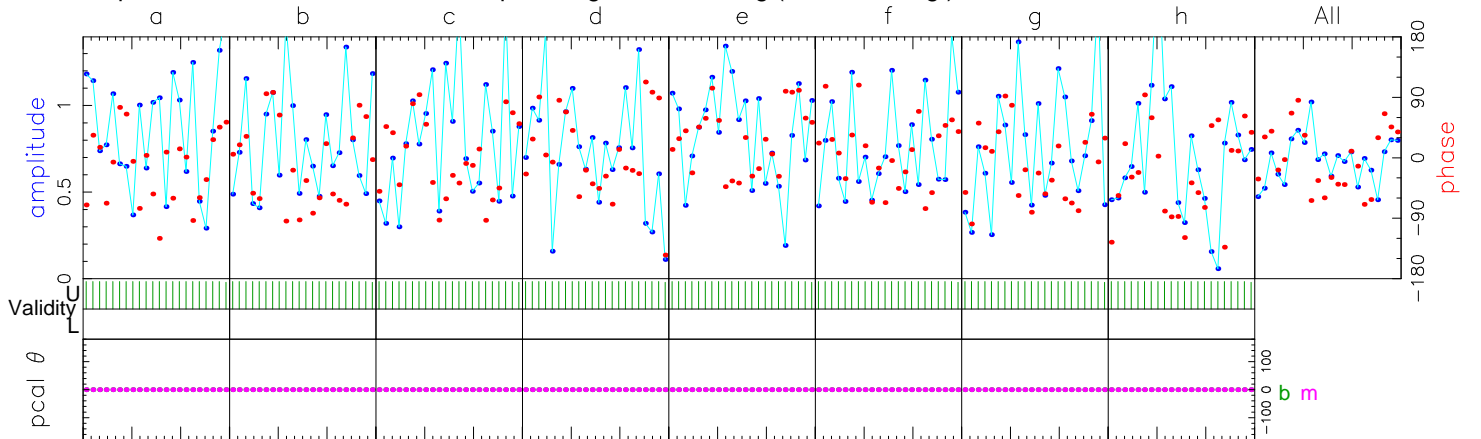
Fringe quality 9

SNR 17.1  
 Int time 179.980  
 Amp 0.466  
 Phase -0.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000804  
 MBD -0.001124  
 Fringe rate (Hz)  
 -0.005174  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142155  
 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
	-13.3	-11.4	-1.8	5.5	25.1	10.9	-6.2	-20.4	Phase	-0.2
	0.5	0.4	0.4	0.5	0.6	0.5	0.5	0.4	Ampl.	0.5
	256.4	257.9	257.4	257.5	256.8	255.5	256.3	256.0	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.95399205581E+02	Apriori delay (usec)	-3.95398081242E+02	Resid mbdelay (usec)	-1.12434E-03	+/-	6.4E-05
Sband delay (usec)	-3.95398885492E+02	Apriori clock (usec)	-1.5094809E+01	Resid sbdelay (usec)	-8.04250E-04	+/-	5.0E-04
Phase delay (usec)	-3.95398081247E+02	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-5.36103E-09	+/-	2.1E-07
Delay rate (us/s)	-8.66513940167E-01	Apriori rate (us/s)	-8.66513881328E-01	Resid rate (us/s)	-5.88392E-08	+/-	2.0E-09
Total phase (deg)	-95.3	Apriori accel (us/s/s)	9.89649496328E-07	Resid phase (deg)	-0.2	+/-	6.7

ph/seg (deg)	46.3	RMS	15.7	Theor.	15.7	Amplitude	0.466 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	55.4	Search (1024X32)	0.455	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	16.0	Inc. seg. avg.	0.661	Inc. frq. avg.	0.472	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	12.7	Inc. frq. avg.	0.472	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

b: az 167.8 el 39.9 pa -8.1 m: az 110.2 el 41.0 pa -61.9 u,v (fr/asec) 5060.957 3673.959 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bm..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bm.W.4.1JLM0Z

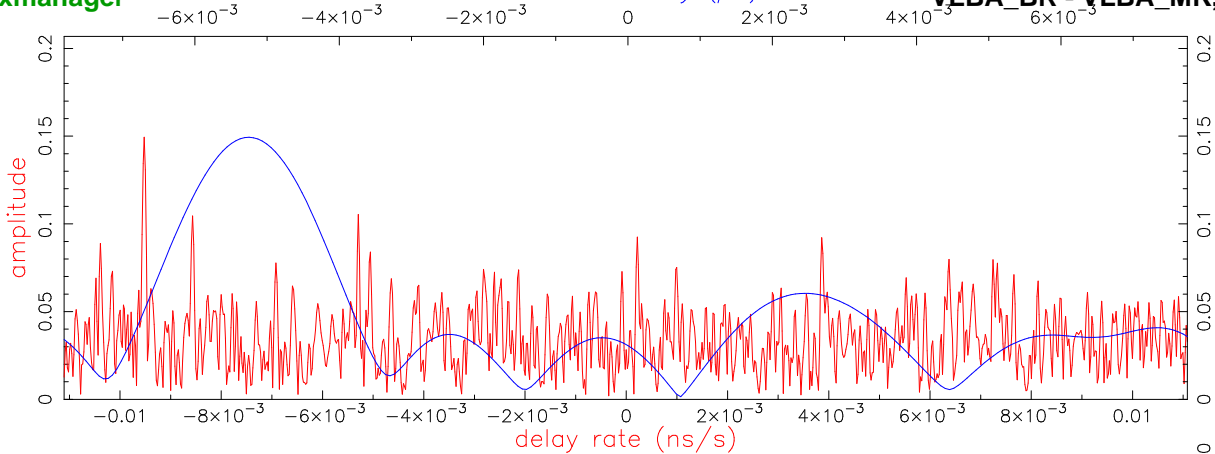
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bm

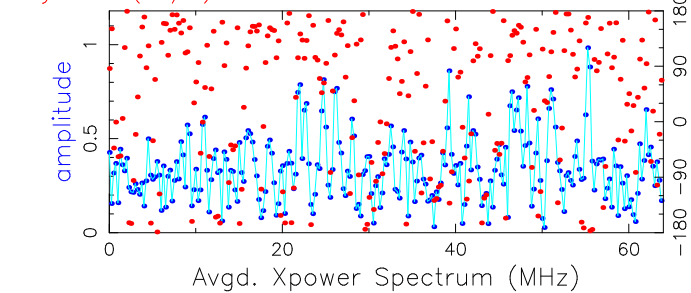
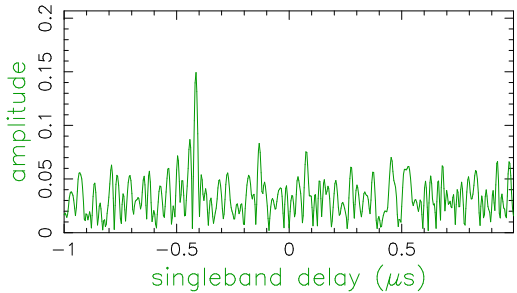
VLBA\_BR - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)



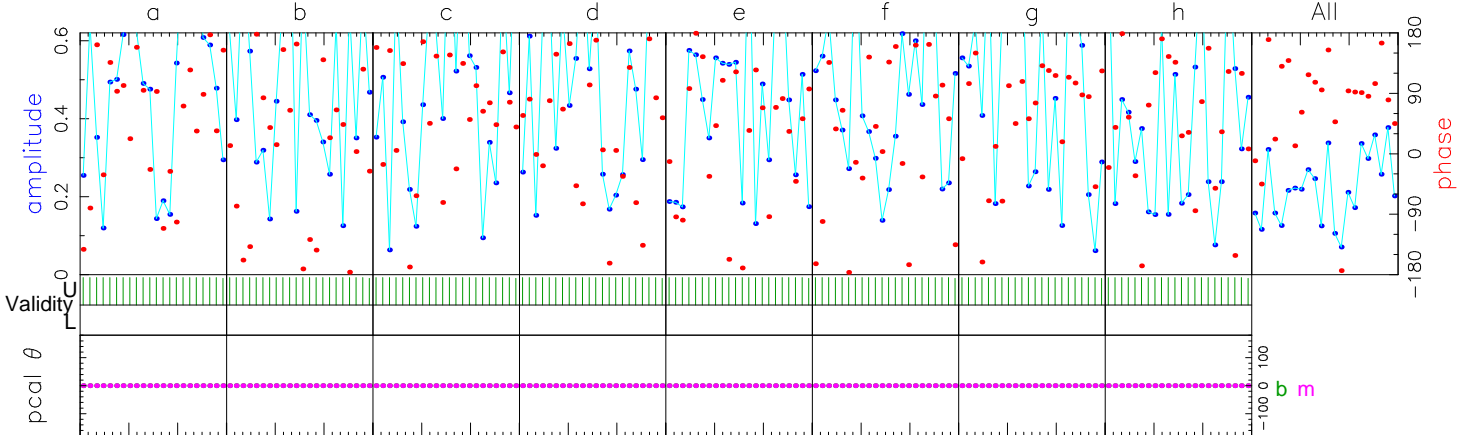
Fringe quality 0

SNR 5.5  
 Int time 179.980  
 Amp 0.207  
 Phase 98.8  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.414672  
 MBD -0.005263  
 Fringe rate (Hz)  
 -0.837677  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142202  
 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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) -3.95809594526E+02 Apriori delay (usec) -3.95398081242E+02 Resid mbdelay (usec) -5.26328E-03 +/- 2.0E-04  
 Sband delay (usec) -3.95812753242E+02 Apriori clock (usec) -1.5094809E+01 Resid sbdelay (usec) -4.14672E-01 +/- 1.6E-03  
 Phase delay (usec) -3.95398078122E+02 Apriori clockrate (us/s) -9.9999991E-08 Resid phdelay (usec) 3.11970E-06 +/- 6.6E-07  
 Delay rate (us/s) -8.66523406879E-01 Apriori rate (us/s) -8.66513881328E-01 Resid rate (us/s) -9.52555E-06 +/- 6.3E-09  
 Total phase (deg) 3.6 Apriori accel (us/s/s) 9.89649496328E-07 Resid phase (deg) 98.8 +/- 20.9

RMS Theor. Amplitude 0.207 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 59.1 48.9 Search (1024X32) 0.147 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 76.1 85.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 25.3 29.5 Inc. seg. avg. 0.226 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 36.0 51.5 Inc. frq. avg. 0.192 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 m: az 110.2 el 41.0 pa -61.9 u,v (fr/asec) 5060.957 3673.959 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bm..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bm.W.67.1JLM0Z

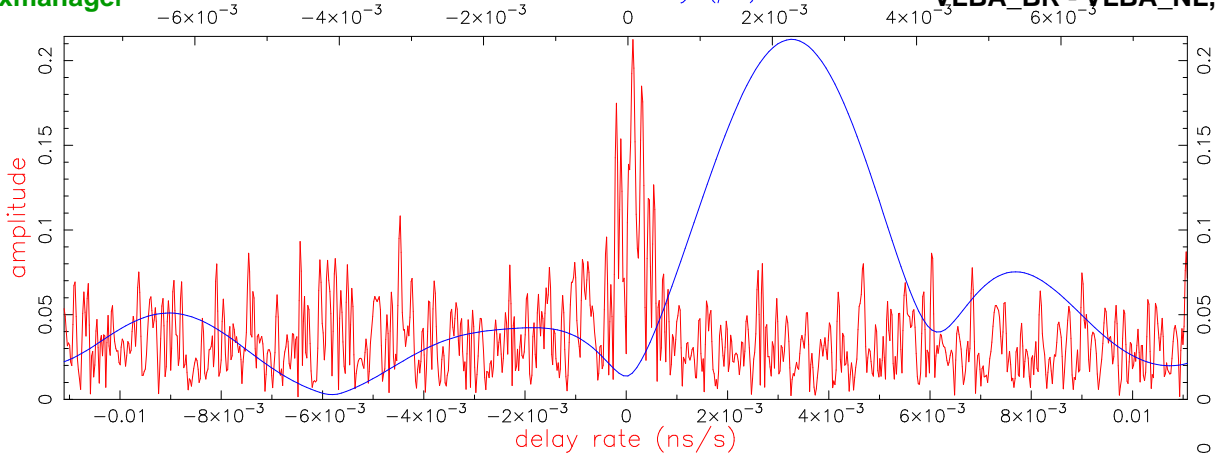
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bn

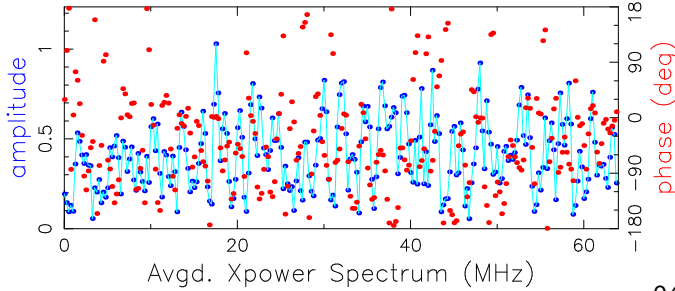
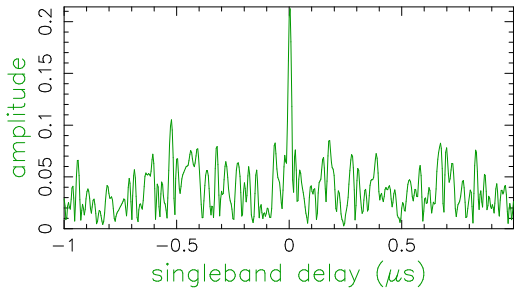
VLBA\_BR - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)



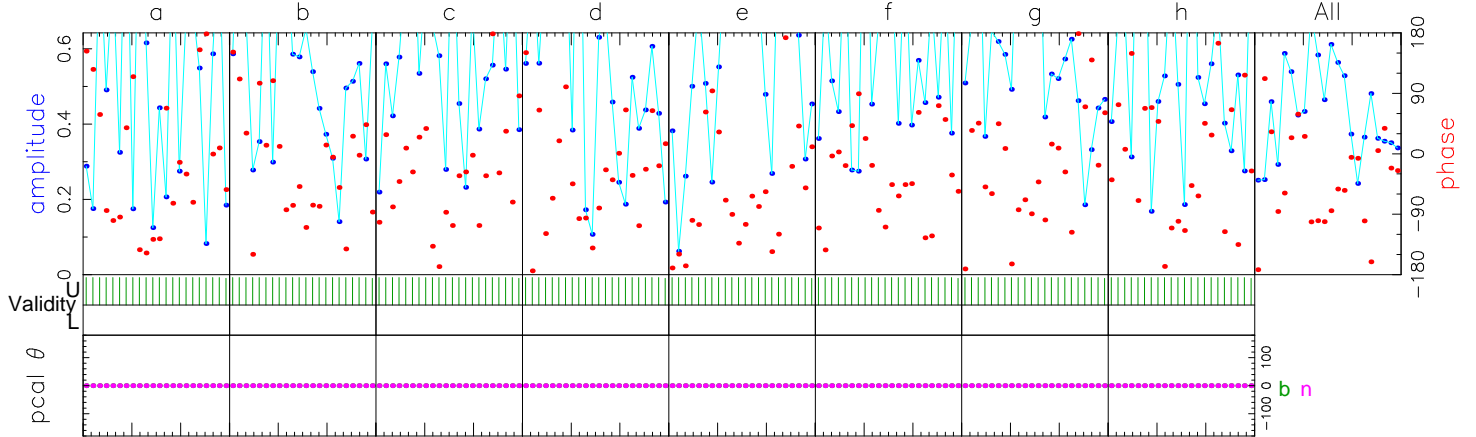
Fringe quality 9

SNR 7.9  
 Int time 179.979  
 Amp 0.214  
 Phase -46.3  
 PFD 6.4e-07  
 Delays (us)  
 SBD 0.002728  
 MBD 0.002224  
 Fringe rate (Hz) 0.011979  
 Ion TEC 0.000  
 Ref freq (MHz) 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142158  
 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
	-62.0	-25.3	-37.3	-49.8	-85.9	-35.0	-37.6	-33.7	Phase	-46.3
	0.1	0.2	0.3	0.2	0.3	0.3	0.3	0.1	Ampl.	0.2
	375.4	445.5	295.1	468.3	257.3	258.3	49.8	473.5	Sbd box	257.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.95288975676E+02		Apriori delay (usec)		-9.95291199199E+02		Resid mbdelay (usec)		2.22352E-03	+/- 1.4E-04
Sband delay (usec)	-9.95288471199E+02		Apriori clock (usec)		-1.9500446E+00		Resid sbdelay (usec)		2.72800E-03	+/- 1.1E-03
Phase delay (usec)	-9.95291200663E+02		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-1.46387E-06	+/- 4.6E-07
Delay rate (us/s)	5.41589205550E-01		Apriori rate (us/s)		5.41589069335E-01		Resid rate (us/s)		1.36215E-07	+/- 4.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.08202568933E-06		Resid phase (deg)		-46.3	+/- 14.6

	RMS	Theor.	Amplitude	0.214 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	70.9	34.2	Search (1024X32)	0.206	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	118.5	59.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.3	20.6	Inc. seg. avg.	0.369	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	31.4	36.0	Inc. frq. avg.	0.211	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 n: az 206.5 el 43.7 pa 19.4 u,v (fr/asec) -3165.636 695.411 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bn..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bn.W.28.1JLM0Z

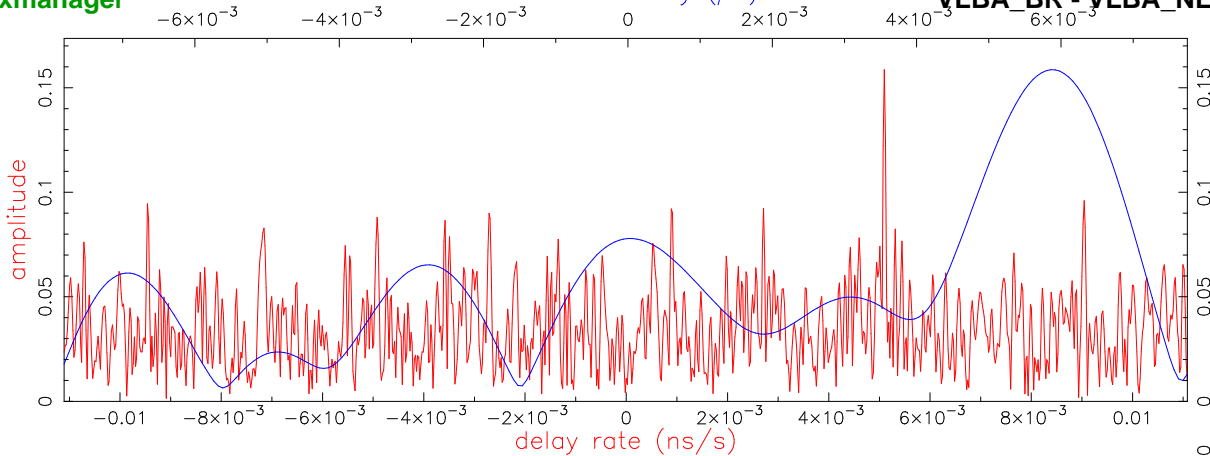
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bn

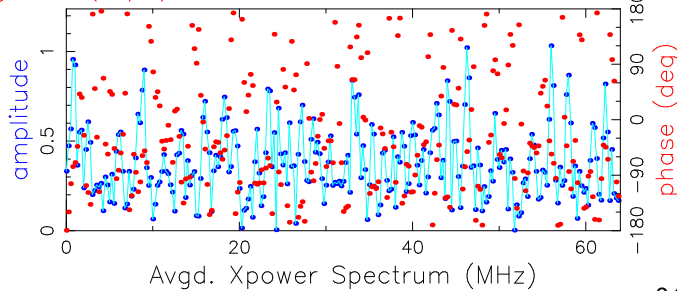
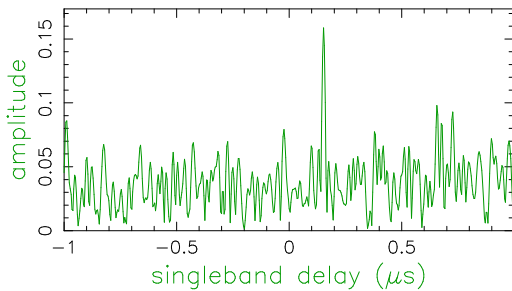
VLBA\_BR - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)



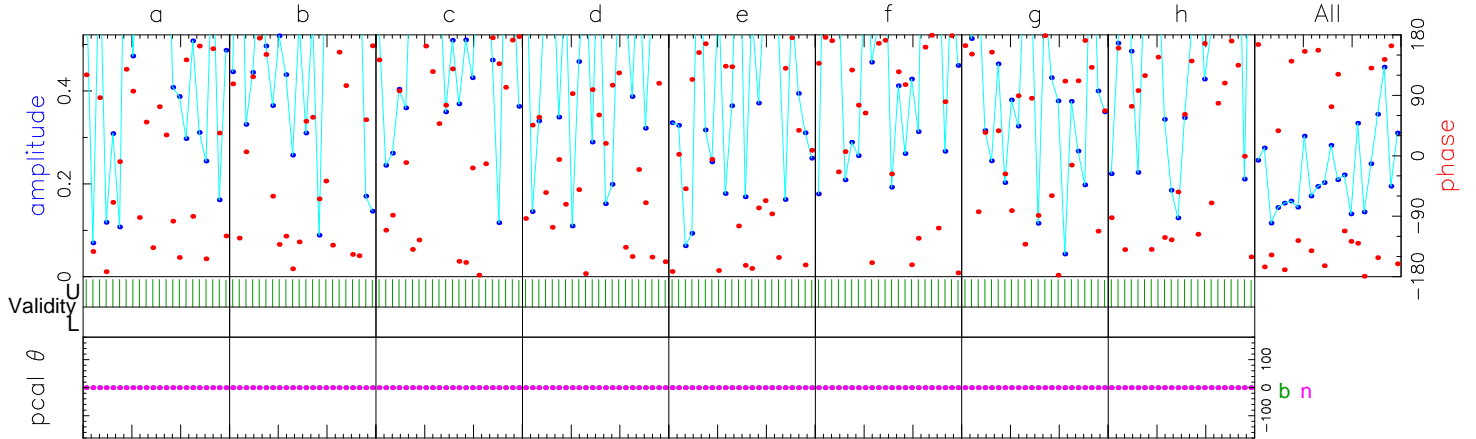
Fringe quality 0

SNR 5.8  
 Int time 179.979  
 Amp 0.174  
 Phase 177.7  
 PFD 5.0e-01  
 Delays (us)  
 SBD 0.152848  
 MBD 0.005895  
 Fringe rate (Hz)  
 0.448286  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142200  
 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	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.95144679058E+02								5.89514E-03	+/- 1.9E-04
Sband delay (usec)	-9.95138350949E+02								1.52848E-01	+/- 1.5E-03
Phase delay (usec)	-9.95291193585E+02								5.61416E-06	+/- 6.2E-07
Delay rate (us/s)	5.41594166969E-01								5.09763E-06	+/- 6.0E-09
Total phase (deg)		157.0							177.7	+/- 19.7
			Apriori delay (usec)						Resid mbdelay (usec)	
			Apriori clock (usec)						Resid sbdelay (usec)	
			Apriori clockrate (us/s)						Resid phdelay (usec)	
			Apriori rate (us/s)						Resid rate (us/s)	
			Apriori accel (us/s/s)						Resid phase (deg)	
ph/seg (deg)	51.8	46.1	Amplitude	0.174 +/- 0.030					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	67.5	80.4	Search (1024X32)	0.157					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	39.0	27.8	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	43.8	48.5	Inc. seg. avg.	0.188					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
			Inc. frq. avg.	0.174					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

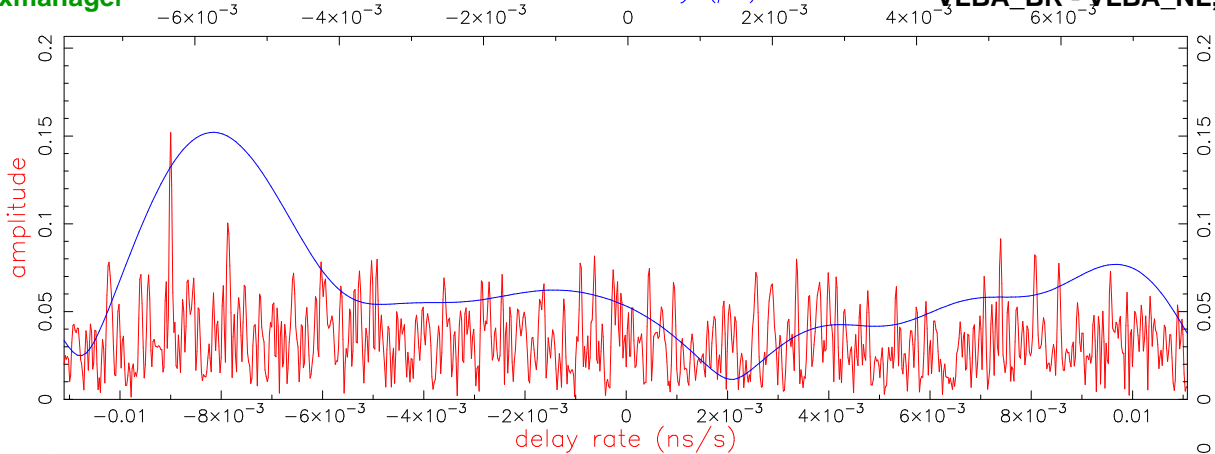
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

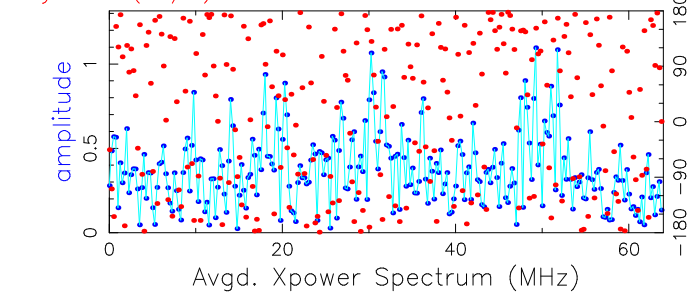
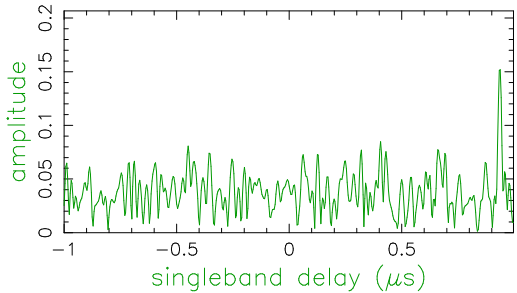
0420-014.1JLM0Z, No0079, bn

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

multiband delay ( $\mu$ s)

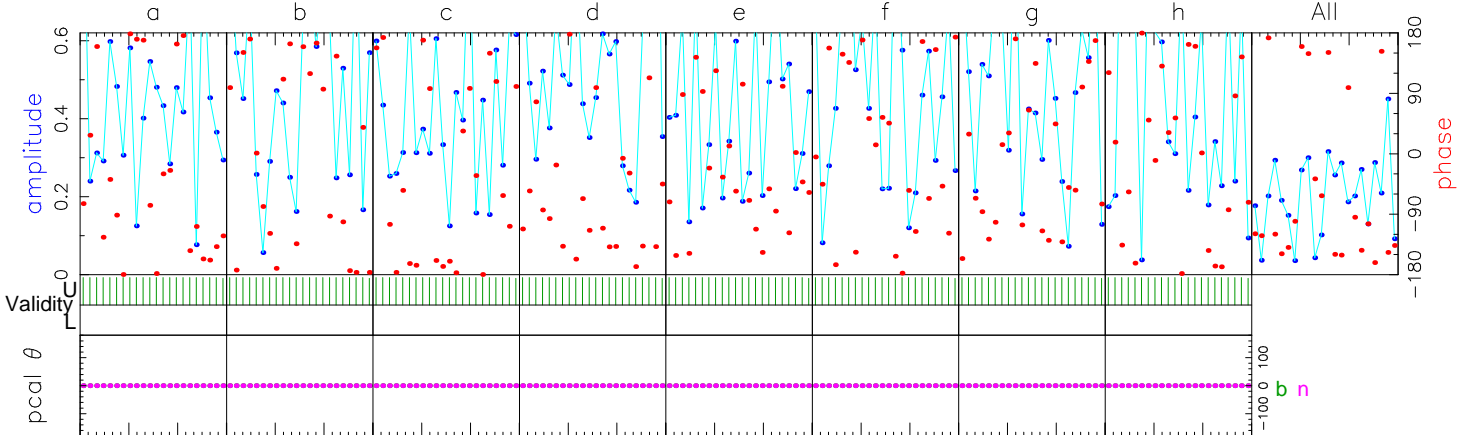


Fringe quality 0  
 SNR 5.7  
 Int time 179.979  
 Amp 0.207  
 Phase -158.2  
 PFD 8.0e-01  
 Delays (us)  
 SBD 0.935693  
 MBD -0.005800  
 Fringe rate (Hz)  
 -0.793414  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142202  
 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

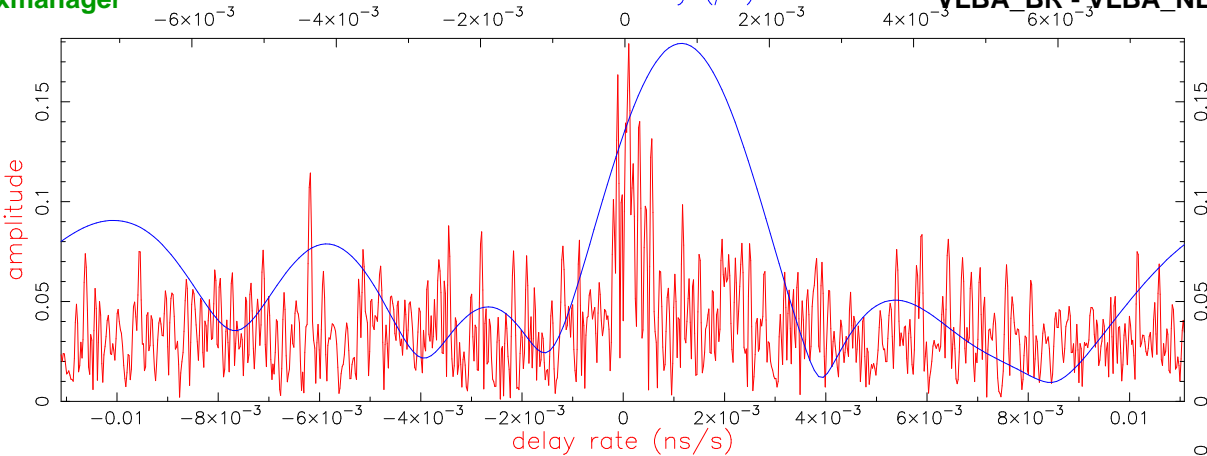


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-133.7	163.7	168.6	-124.6	-84.2	-174.3	-157.3	-172.1	Phase	-158.2
	0.3	0.4	0.3	0.4	0.1	0.2	0.1	0.1	Ampl.	0.2
	263.0	495.5	121.5	496.5	30.7	37.1	321.1	168.7	Sbd box	496.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -9.94359499620E+02 Apriori delay (usec) -9.95291199199E+02 Resid mbdelay (usec) -5.80042E-03 +/- 1.9E-04  
 Sband delay (usec) -9.94355506449E+02 Apriori clock (usec) -1.9500446E+00 Resid sbdelay (usec) 9.35693E-01 +/- 1.5E-03  
 Phase delay (usec) -9.95291204197E+02 Apriori clockrate (us/s) -5.0000000E-07 Resid phdelay (usec) -4.99816E-06 +/- 6.4E-07  
 Delay rate (us/s) 5.41580047118E-01 Apriori rate (us/s) 5.41589069335E-01 Resid rate (us/s) -9.02222E-06 +/- 6.1E-09  
 Total phase (deg) -179.0 Apriori accel (us/s/s) 5.08202568933E-06 Resid phase (deg) -158.2 +/- 20.2

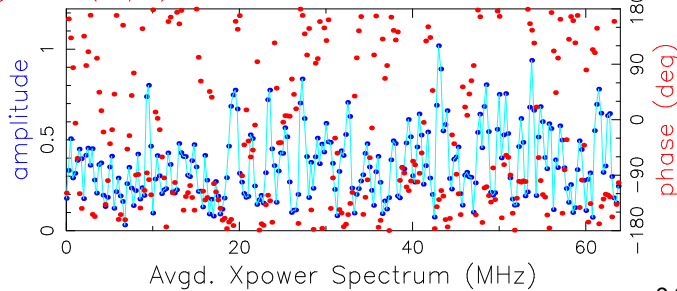
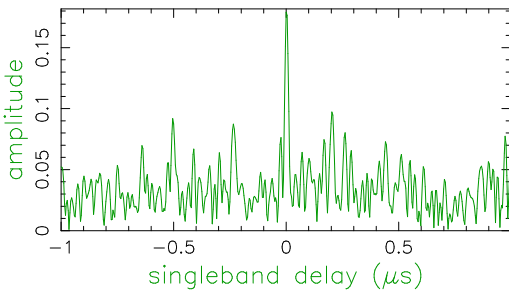
ph/seg (deg) 52.7 47.3 Search (1024X32) 0.150 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.1 82.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 41.2 28.5 Inc. seg. avg. 0.203 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 56.1 49.7 Inc. frq. avg. 0.217 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 167.8 el 39.9 pa -8.1 n: az 206.5 el 43.7 pa 19.4 u,v (fr/asec) -3165.636 695.411 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bn..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bn.W.61.1JLM0Z

multiband delay ( $\mu$ s)



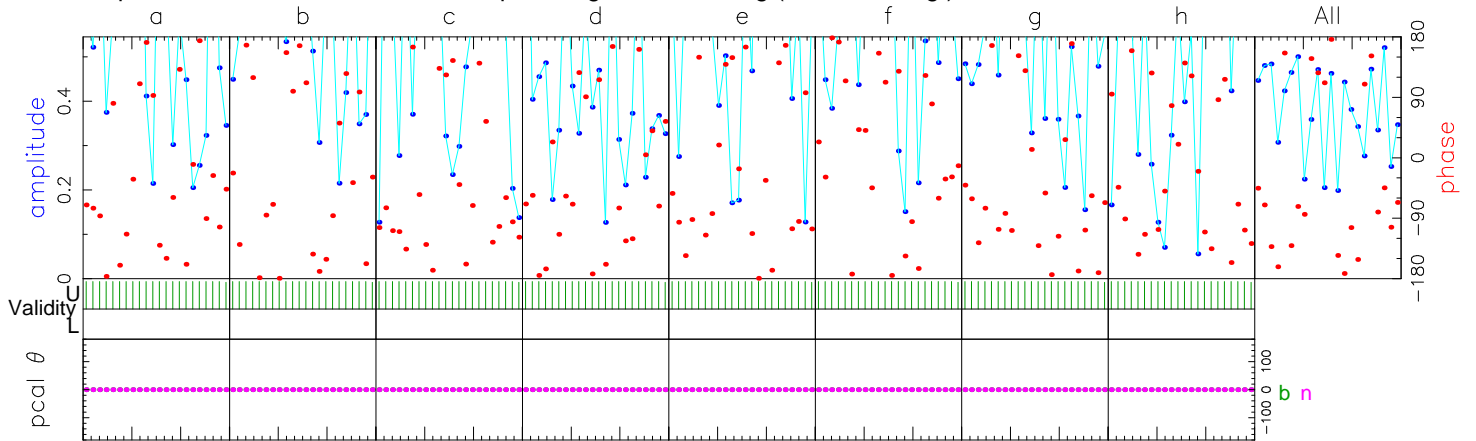
Fringe quality 0

SNR 6.7  
Int time 179.979  
Amp 0.182  
Phase -135.0  
PFD 3.7e-03  
Delays (us)  
SBD 0.001602  
MBD 0.000828  
Fringe rate (Hz) 0.010505  
Ion TEC 0.000  
Ref freq (MHz) 87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142156  
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
	-113.7	-166.1	-122.0	-129.1	-142.1	99.4	-121.5	-144.2	Phase	-135.0
	0.2	0.2	0.3	0.1	0.3	0.1	0.3	0.2	Ampl.	0.2
	323.7	491.4	300.2	502.2	68.9	107.1	256.7	22.8	Sbd box	257.4
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	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.95290370842E+02		Apriori delay (usec)		-9.95291199199E+02		Resid mbdelay (usec)		8.28357E-04	+/- 1.6E-04
Sband delay (usec)	-9.95289597199E+02		Apriori clock (usec)		-1.9500446E+00		Resid sbdelay (usec)		1.60200E-03	+/- 1.3E-03
Phase delay (usec)	-9.95291203462E+02		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-4.26315E-06	+/- 5.4E-07
Delay rate (us/s)	5.41589188794E-01		Apriori rate (us/s)		5.41589069335E-01		Resid rate (us/s)		1.19459E-07	+/- 5.2E-09
Total phase (deg)			Apriori accel (us/s/s)		5.08202568933E-06		Resid phase (deg)		-135.0	+/- 17.2

	RMS	Theor.	Amplitude	0.182 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.2	40.3	Search (1024X32)	0.171	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	123.2	70.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	54.4	24.3	Inc. seg. avg.	0.306	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.7	42.4	Inc. frq. avg.	0.184	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 n: az 206.5 el 43.7 pa 19.4 u,v (fr/asec) -3165.636 695.411 simultaneous interpolator  
Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bn..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bn.W.6.1JLM0Z



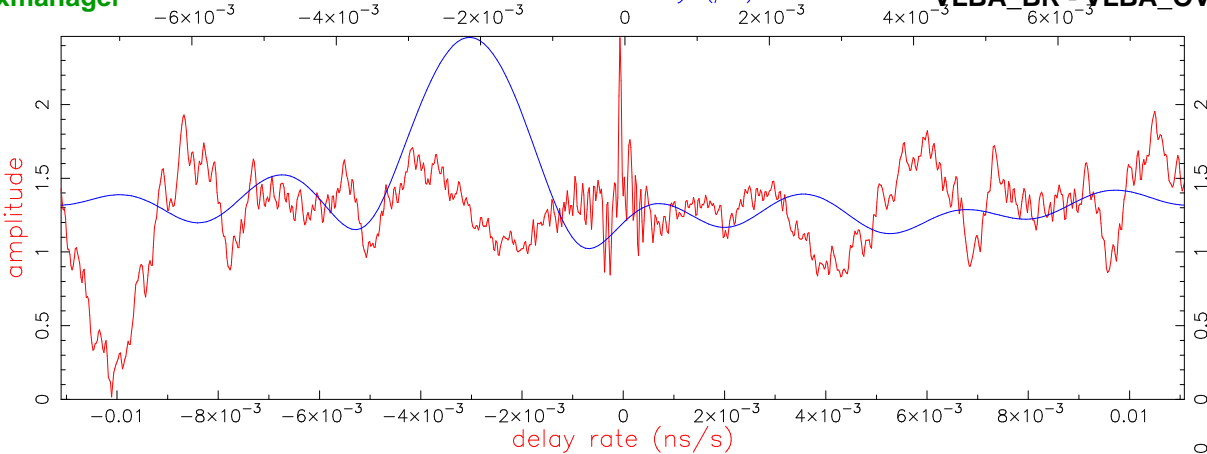
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bo

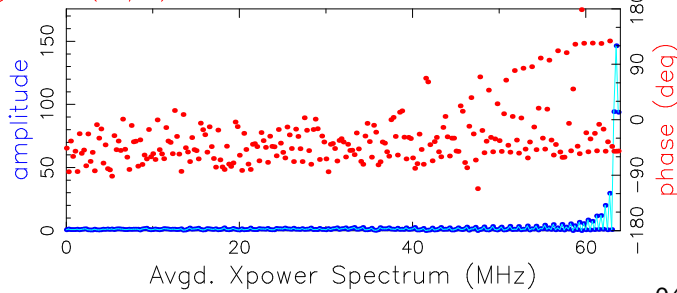
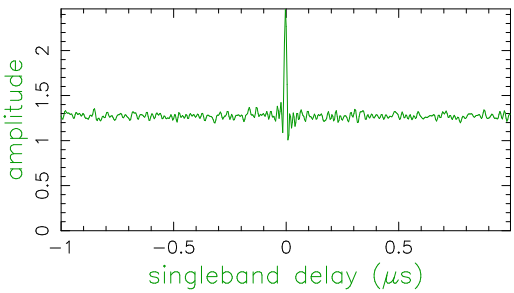
VLBA\_BR - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)



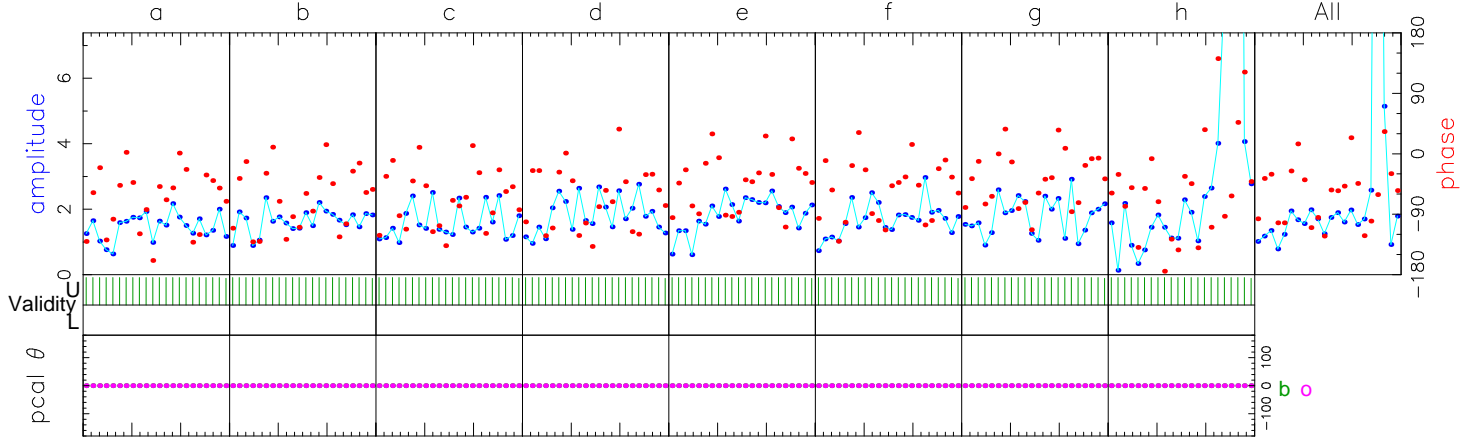
Fringe quality 2

SNR 90.4  
 Int time 179.977  
 Amp 2.463  
 Phase -55.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.003224  
 MBD -0.002199  
 Fringe rate (Hz)  
 -0.005441  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



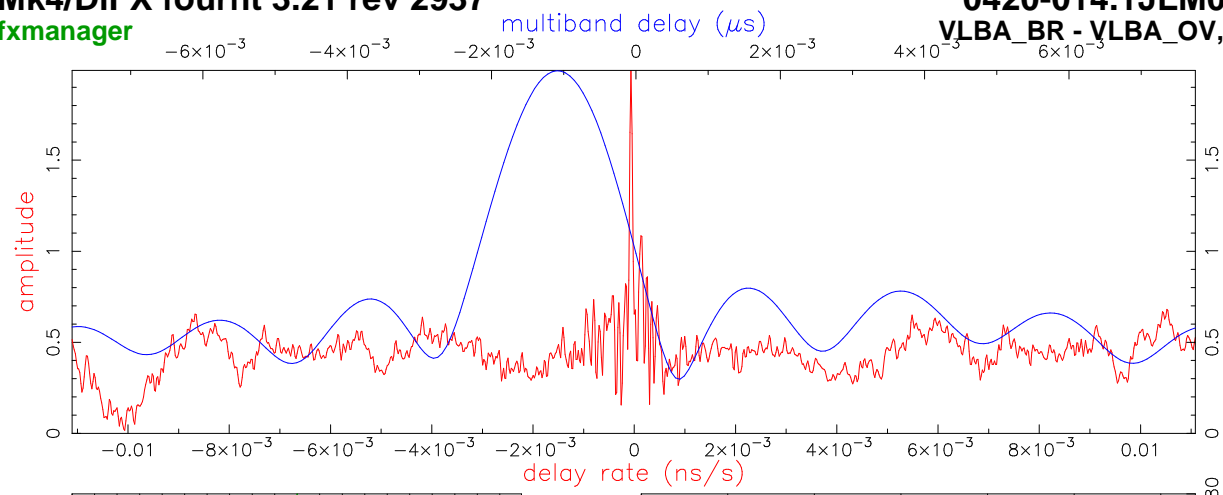
Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142156  
 2020:247:085004  
 RA & Dec (J2000)  
 04h23m15.800724s  
 --1°20'33.065613"

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	
	-62.7	-57.6	-68.6	-67.0	-41.7	-55.2	-35.5	-56.3		Phase	-55.6
	1.1	1.2	1.2	1.3	1.4	1.3	1.4	1.1		Ampl.	2.5
	256.5	256.4	256.3	256.5	256.7	256.7	256.5	256.1		Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Chan ids	
										Tracks	
Group delay (usec)(sbd)	-2.85224641763E+03		Apriori delay (usec)		-2.85224421823E+03		Resid mbdelay (usec)		-2.19940E-03		+/- 1.2E-05
Sband delay (usec)	-2.85224744273E+03		Apriori clock (usec)		-2.3094191E+01		Resid sbdelay (usec)		-3.22450E-03		+/- 9.5E-05
Phase delay (usec)	-2.85224421999E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-1.75674E-06		+/- 4.0E-08
Delay rate (us/s)	-9.50225281230E-04		Apriori rate (us/s)		-9.50163414599E-04		Resid rate (us/s)		-6.18666E-08		+/- 3.9E-10
Total phase (deg)			Apriori accel (us/s/s)		1.46882802795E-05		Resid phase (deg)		-55.6		+/- 1.3

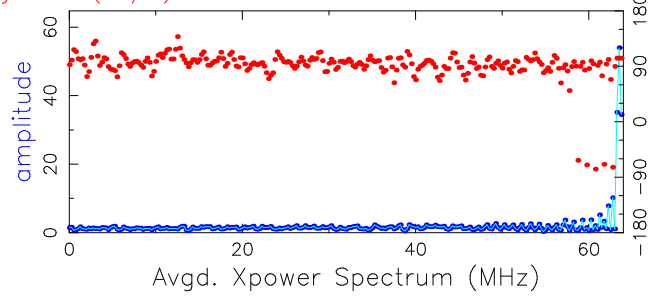
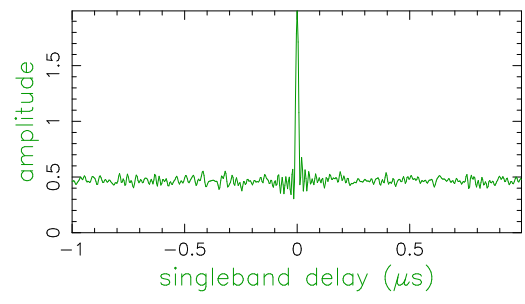
RMS Theor. Amplitude 2.463 +/- 0.027  
 ph/seg (deg) 44.5 3.0 Search (1024X32) 2.414 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 246.8 5.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.6 1.8 Inc. seg. avg. 3.048 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 130.2 3.1 Inc. frq. avg. 2.477 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 167.8 el 39.9 pa -8.1 o: az 167.4 el 50.8 pa -9.6 u,v (fr/asec) 10.994 1236.224 simultaneous interpolator  
 Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bo..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bo.W.12.1JLM0Z



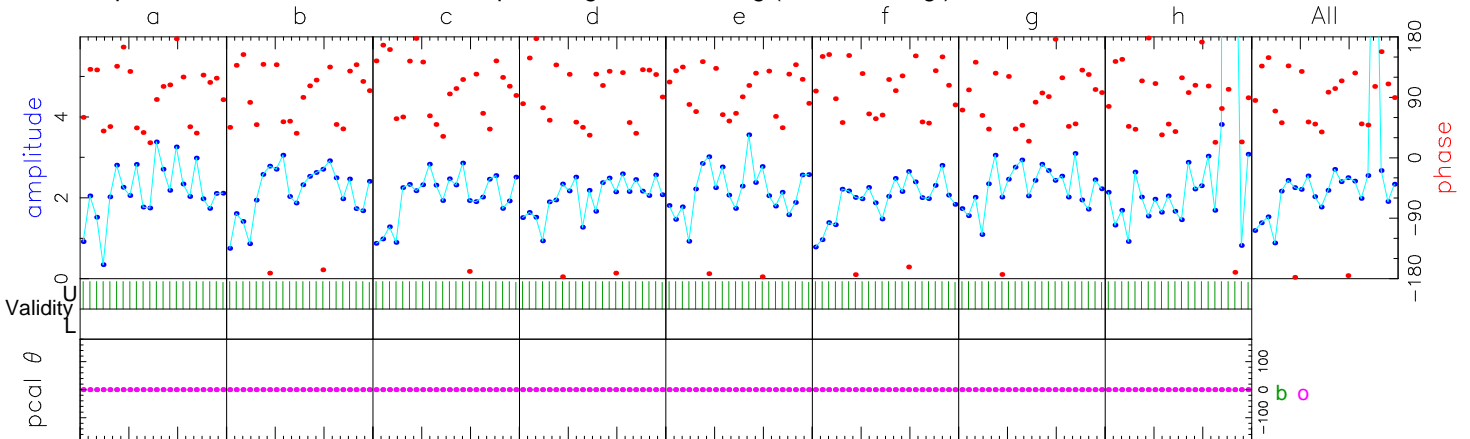
Fringe quality 3

SNR 73.1  
Int time 179.977  
Amp 1.993  
Phase 104.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.000312  
MBD -0.001075  
Fringe rate (Hz)  
-0.005101  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512

Exp. c202c  
Yr:day 16383  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142159  
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	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.85224529345E+03				-2.85224421823E+03				Resid mbdelay (usec)	-1.07521E-03 +/- 1.5E-05
Sband delay (usec)	-2.85224452973E+03				-2.3094191E+01				Resid sbdelay (usec)	-3.11500E-04 +/- 1.2E-04
Phase delay (usec)	-2.85224421493E+03				9.9999998E-08				Resid phdelay (usec)	3.30518E-06 +/- 5.0E-08
Delay rate (us/s)	-9.50221425063E-04				-9.50163414599E-04				Resid rate (us/s)	-5.80105E-08 +/- 4.8E-10
Total phase (deg)			-93.8		1.46882802795E-05				Resid phase (deg)	104.6 +/- 1.6
	RMS	Theor.	Amplitude	1.993 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.2	3.7	Search (1024X32)	1.953					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	110.5	6.4	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	7.1	2.2	Inc. seg. avg.	2.545					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	60.5	3.9	Inc. frq. avg.	1.999					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 167.8 el 39.9 pa -8.1 o: az 167.4 el 50.8 pa -9.6 u,v (fr/asec) 10.994 1236.224 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bo..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bo.W.36.1JLM0Z

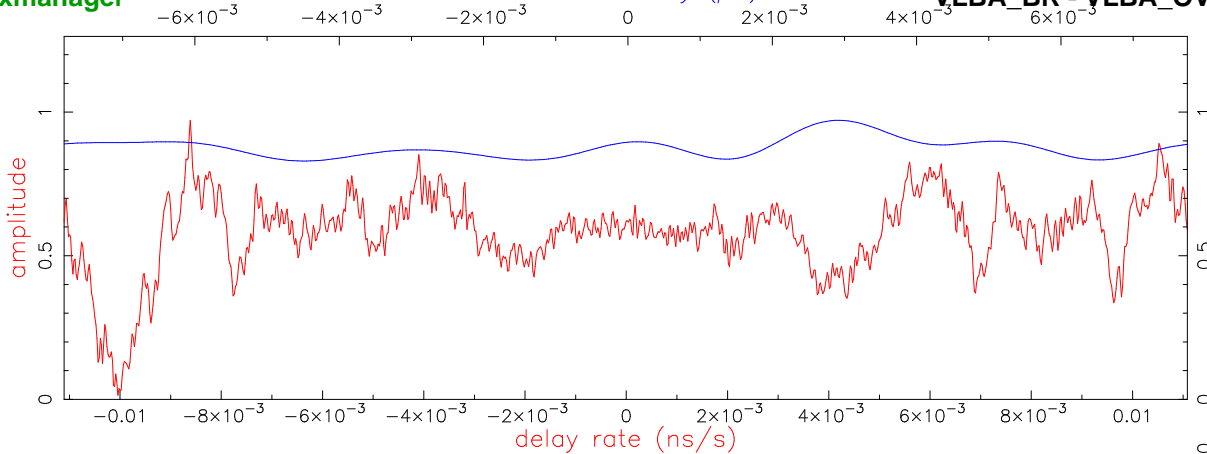
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bo

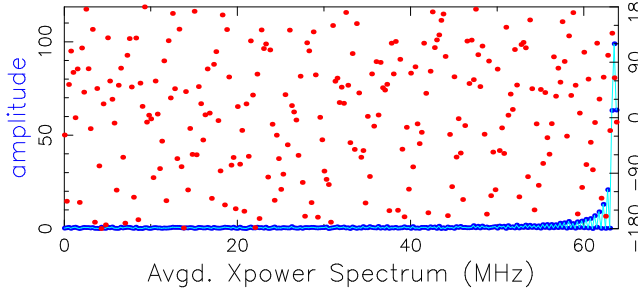
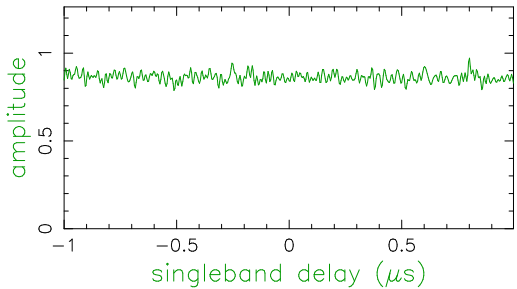
VLBA\_BR - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)



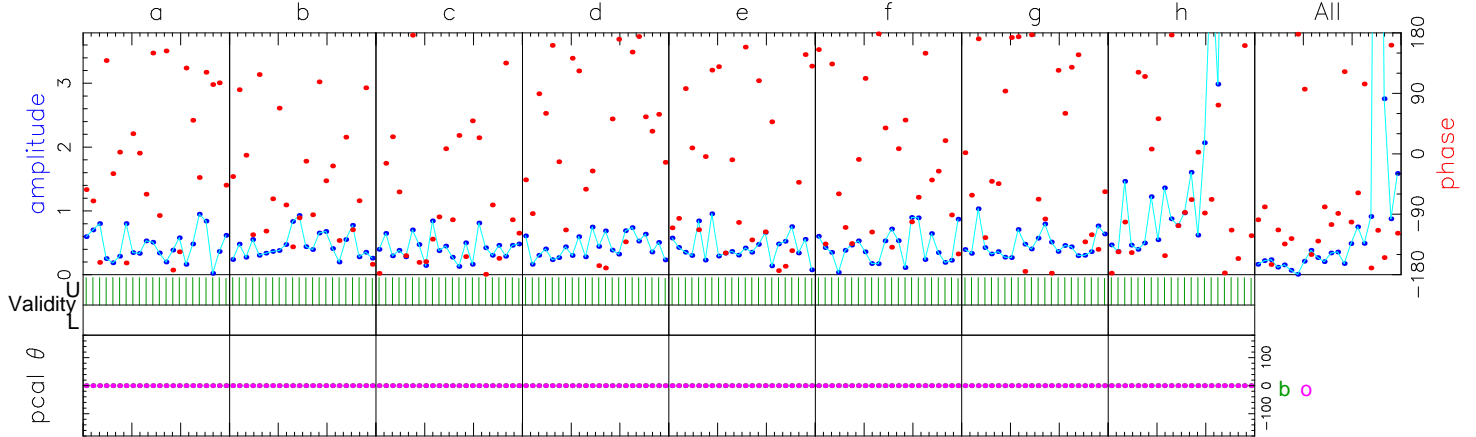
Fringe quality 3

SNR 35.7  
 Int time 179.977  
 Amp 1.264  
 Phase -123.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.799951  
 MBD 0.002980  
 Fringe rate (Hz)  
 -0.758404  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142200  
 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
	-104.1	-79.9	-121.2	130.4	-157.0	-101.4	-148.2	-122.8	Phase	-123.2
	0.1	0.2	0.2	0.1	0.2	0.2	0.3	9.1	Ampl.	1.3
	297.2	418.6	211.5	239.4	165.1	215.0	387.5	7.2	Sbd box	461.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.85144436340E+03		Apriori delay (usec)		-2.85224421823E+03		Resid mbdelay (usec)		2.97983E-03	+/- 3.0E-05
Sband delay (usec)	-2.85144426748E+03		Apriori clock (usec)		-2.3094191E+01		Resid sbdelay (usec)		7.99951E-01	+/- 2.4E-04
Phase delay (usec)	-2.85224422212E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-3.89236E-06	+/- 1.0E-07
Delay rate (us/s)	-9.58787523523E-04		Apriori rate (us/s)		-9.50163414599E-04		Resid rate (us/s)		-8.62411E-06	+/- 9.7E-10
Total phase (deg)			Apriori accel (us/s/s)		1.46882802795E-05		Resid phase (deg)		-123.2	+/- 3.2

ph/seg (deg) 59.0 7.5 Search (1024X32) 0.951 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 303.9 13.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 51.3 4.5 Inc. seg. avg. 1.472 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 233.4 7.9 Inc. frq. avg. 1.286 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 167.8 el 39.9 pa -8.1 o: az 167.4 el 50.8 pa -9.6 u,v (fr/asec) 10.994 1236.224 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bo..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bo.W.50.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

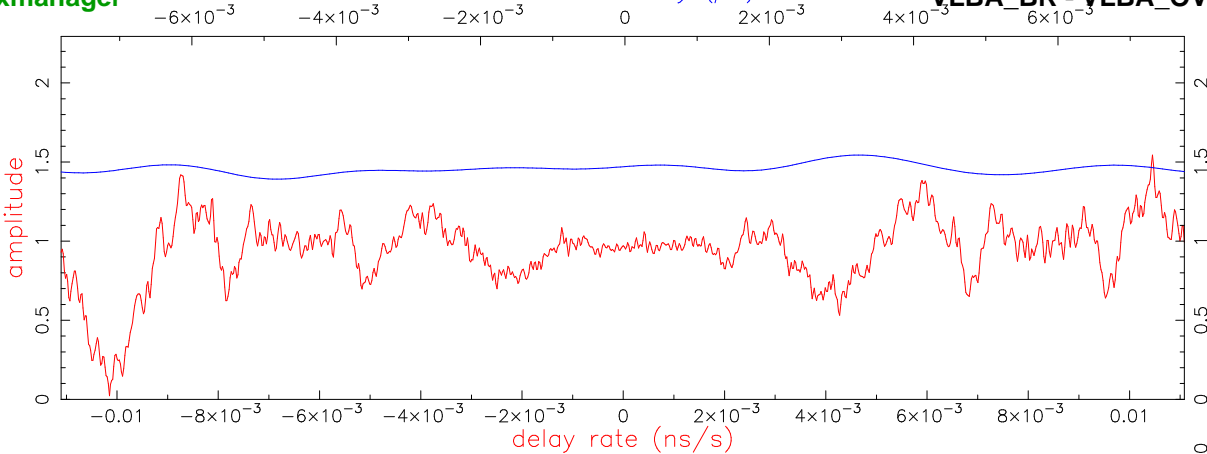
fxmanager

0420-014.1JLM0Z, No0079, bo

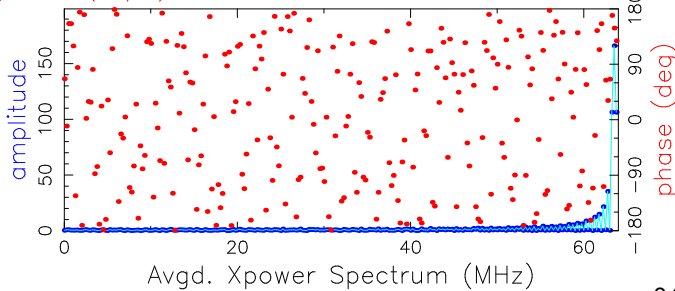
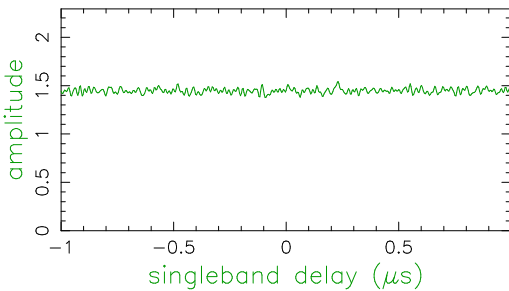
VLBA\_BR - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 1

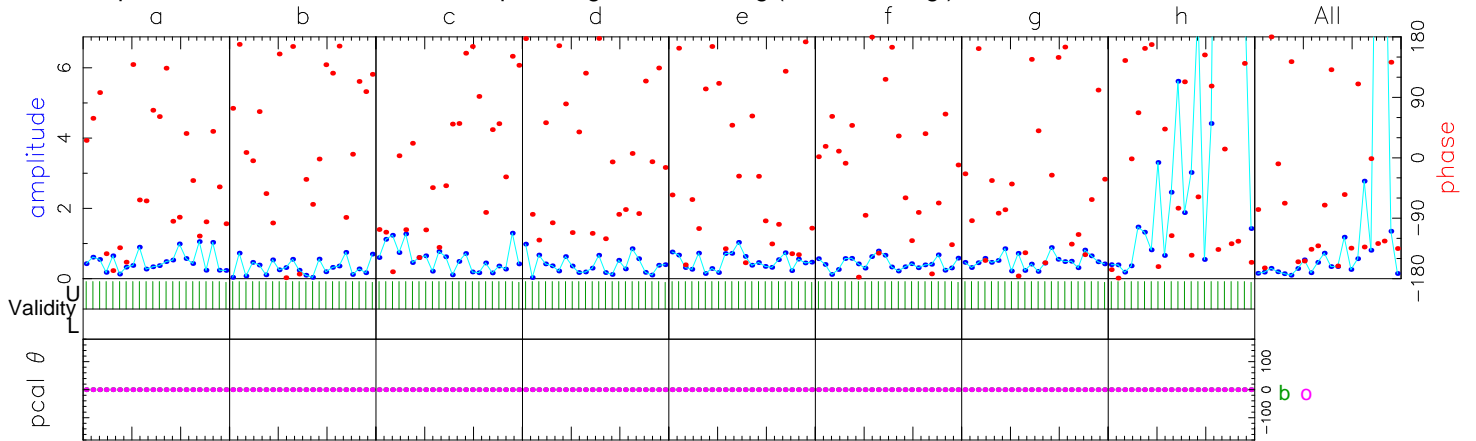


SNR 56.7  
 Int time 179.977  
 Amp 2.294  
 Phase -127.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.229864  
 MBD 0.003280  
 Fringe rate (Hz)  
 0.919806  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142202  
 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	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-2.85200656316E+03								3.28008E-03	+/- 1.9E-05
Sband delay (usec)	-2.85201435373E+03								2.29864E-01	+/- 1.5E-04
Phase delay (usec)	-2.85224422226E+03								-4.02480E-06	+/- 6.4E-08
Delay rate (us/s)	-9.39703942384E-04								1.04595E-05	+/- 6.1E-10
Total phase (deg)			-325.9						-127.4	+/- 2.0
Apriori delay (usec)					-2.85224421823E+03				Resid mbdelay (usec)	
Apriori clock (usec)					-2.3094191E+01				Resid sbdelay (usec)	
Apriori clockrate (us/s)					9.9999998E-08				Resid phdelay (usec)	
Apriori rate (us/s)					-9.50163414599E-04				Resid rate (us/s)	
Apriori accel (us/s/s)					1.46882802795E-05				Resid phase (deg)	
RMS	65.1	4.7			2.294 +/- 0.040				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.1	4.7			Search (1024X32)	1.540			PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	263.4	8.3			Interp.	0.000			SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	53.4	2.9			Inc. seg. avg.	2.688			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	247.2	5.0			Inc. frq. avg.	2.321			Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
b: az 167.8 el 39.9 pa -8.1					o: az 167.4 el 50.8 pa -9.6				u,v (fr/asec) 10.994 1236.224	simultaneous interpolator

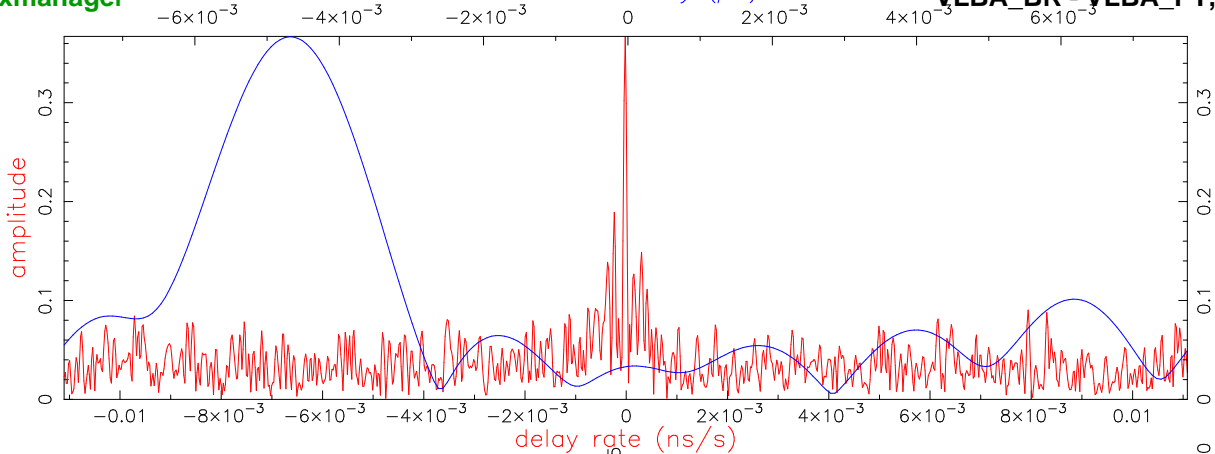
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bp

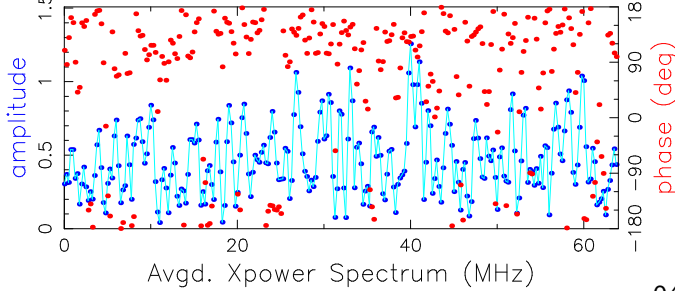
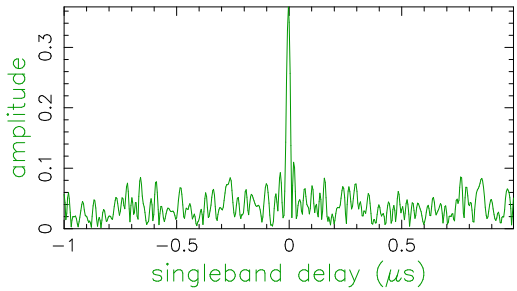
VLBA\_BR - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)



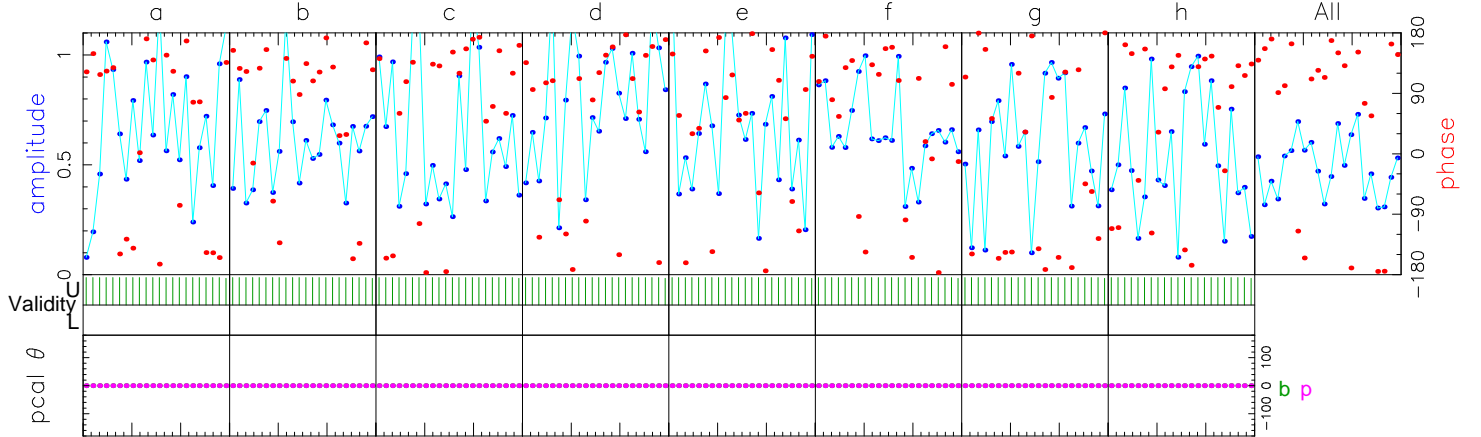
Fringe quality 9

SNR 13.5  
 Int time 179.976  
 Amp 0.367  
 Phase 149.7  
 PFD 6.9e-33  
 Delays (us)  
 SBD -0.003443  
 MBD -0.004662  
 Fringe rate (Hz)  
 -0.001714  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142158  
 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			
p	1000	1000	1000	1000	1000	1000	1000	1000			
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-3.61561938135E+03				-3.61561471946E+03				Resid mbdelay (usec)	-4.66188E-03	+/- 8.1E-05
Sband delay (usec)	-3.61561816271E+03				-1.8572359E+00				Resid sbdelay (usec)	-3.44325E-03	+/- 6.4E-04
Phase delay (usec)	-3.61561471473E+03				-3.9999997E-07				Resid phdelay (usec)	4.72751E-06	+/- 2.7E-07
Delay rate (us/s)	2.19937293068E-01				2.19937312561E-01				Resid rate (us/s)	-1.94932E-08	+/- 2.6E-09
Total phase (deg)		-5.0			1.87550672314E-05				Resid phase (deg)	149.7	+/- 8.5

ph/seg (deg) 43.4 20.0 Search (1024X32) 0.360 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 48.7 34.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 15.7 12.0 Inc. seg. avg. 0.462 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.7 21.0 Inc. frq. avg. 0.368 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 167.8 el 39.9 pa -8.1 p: az 183.9 el 54.3 pa 3.7 u,v (fr/asec) -1279.220 1600.547 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bp..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bp.W.25.1JLM0Z

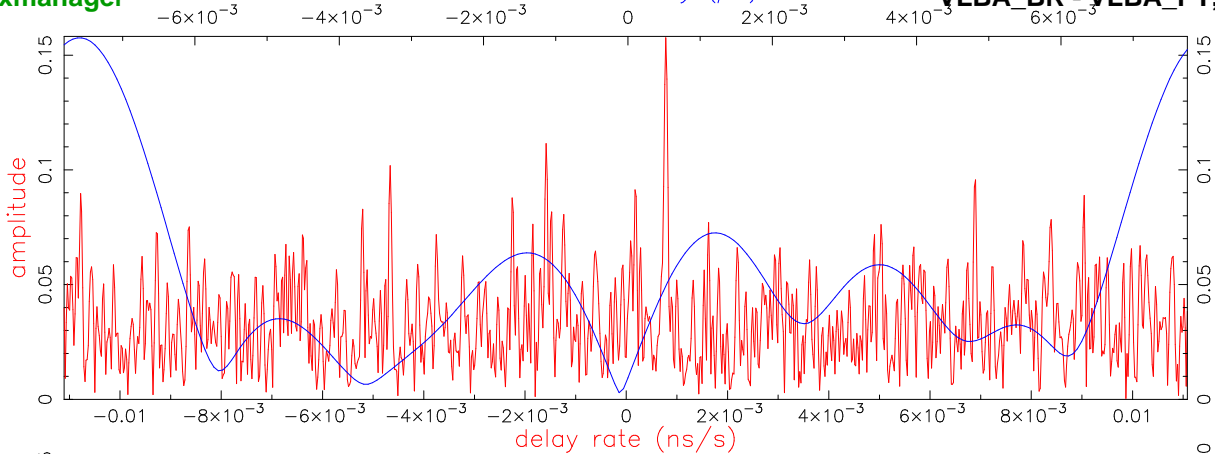
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bp

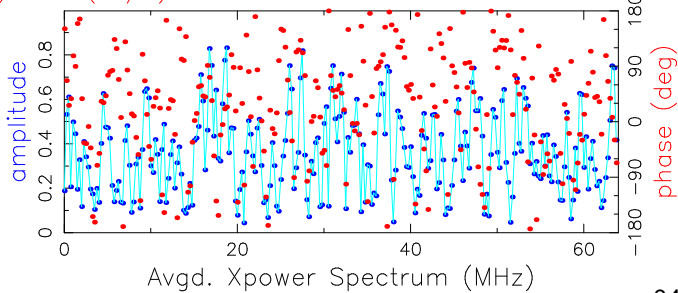
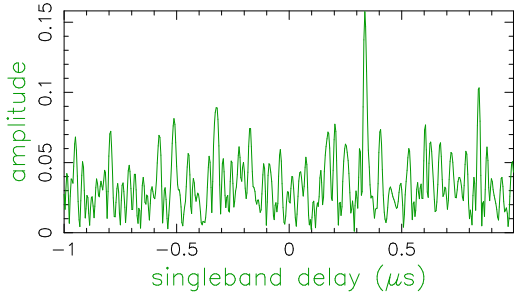
VLBA\_BR - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)



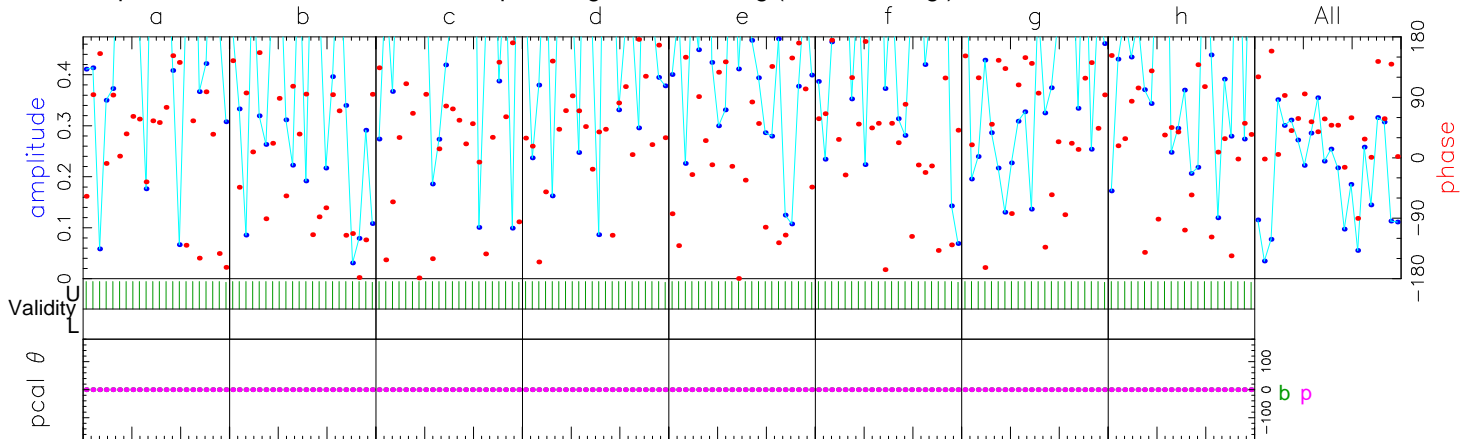
Fringe quality 0

SNR 5.8  
 Int time 179.976  
 Amp 0.158  
 Phase 55.2  
 PFD 5.8e-01  
 Delays (us)  
 SBD 0.336457  
 MBD -0.007580  
 Fringe rate (Hz)  
 0.069549  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142200  
 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	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-3.61527854925E+03		Apriori delay (usec)		-3.61561471946E+03		Resid mbdelay (usec)		-7.57979E-03	+/- 1.9E-04
Sband delay (usec)	-3.61527826296E+03		Apriori clock (usec)		-1.8572359E+00		Resid sbdelay (usec)		3.36457E-01	+/- 1.5E-03
Phase delay (usec)	-3.61561471772E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		1.74365E-06	+/- 6.3E-07
Delay rate (us/s)	2.19938103429E-01		Apriori rate (us/s)		2.19937312561E-01		Resid rate (us/s)		7.90868E-07	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		1.87550672314E-05		Resid phase (deg)		55.2	+/- 19.8

ph/seg (deg) 57.1 46.4 Search (1024X32) 0.152 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.5 81.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.8 28.0 Inc. seg. avg. 0.158 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 47.9 48.8 Inc. frq. avg. 0.148 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 167.8 el 39.9 pa -8.1 p: az 183.9 el 54.3 pa 3.7 u,v (fr/asec) -1279.220 1600.547 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bp..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bp.W.47.1JLM0Z

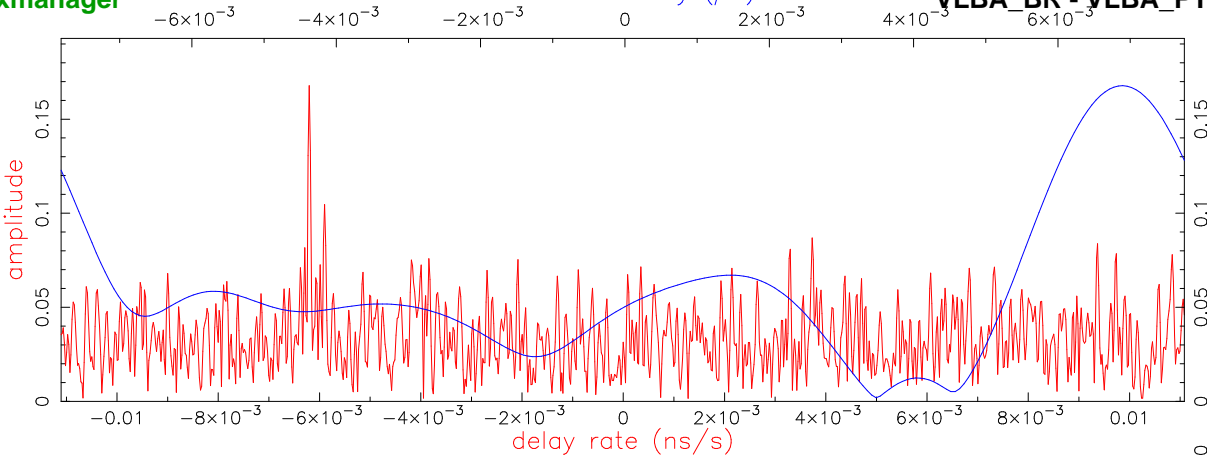
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0420-014.1JLM0Z, No0079, bp

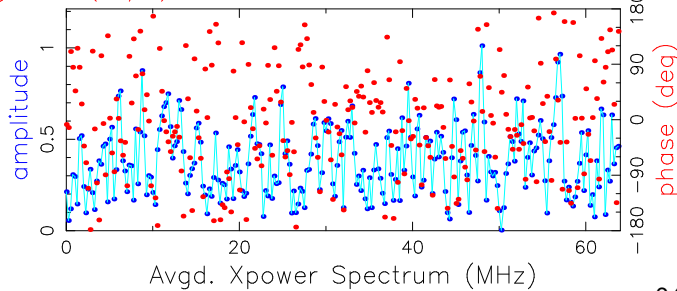
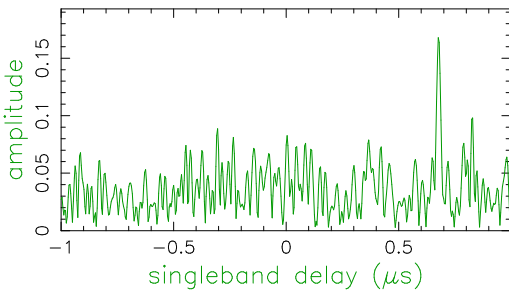
VLBA\_BR - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)



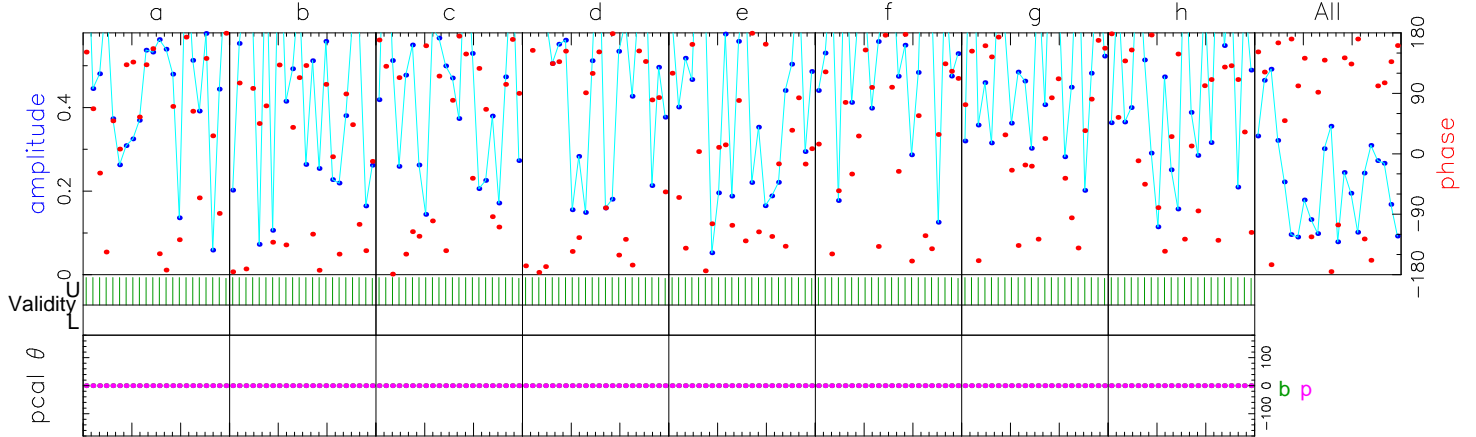
Fringe quality 0

SNR 6.2  
 Int time 179.976  
 Amp 0.193  
 Phase 153.7  
 PFD 7.3e-02  
 Delays (us)  
 SBD 0.677025  
 MBD 0.006869  
 Fringe rate (Hz)  
 -0.546792  
 Ion TEC 0.000  
 Ref freq (MHz)  
 87940.0000  
 AP (sec) 0.512



Exp. c202c  
 Exper # 16383  
 Yr:day 2020:286  
 Start 102000.00  
 Stop 102300.22  
 FRT 102130.00  
 Corr/FF/build  
 2021:041:230658  
 2021:042:142202  
 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	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-3.61493597557E+03		Apriori delay (usec)		-3.61561471946E+03		Resid mbdelay (usec)		6.86889E-03	+/- 1.8E-04
Sband delay (usec)	-3.61493769421E+03		Apriori clock (usec)		-1.8572359E+00		Resid sbdelay (usec)		6.77025E-01	+/- 1.4E-03
Phase delay (usec)	-3.61561471461E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		4.85338E-06	+/- 5.8E-07
Delay rate (us/s)	2.19931094775E-01		Apriori rate (us/s)		2.19937312561E-01		Resid rate (us/s)		-6.21779E-06	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.87550672314E-05		Resid phase (deg)		153.7	+/- 18.5

ph/seg (deg) 49.5 43.3 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.3 75.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 45.9 26.1 Inc. seg. avg. 0.204 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 61.4 45.6 Inc. frq. avg. 0.181 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 167.8 el 39.9 pa -8.1 p: az 183.9 el 54.3 pa 3.7 u,v (fr/asec) -1279.220 1600.547 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bp..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bp.W.62.1JLM0Z

Mk4/DiFX fourfit 3.21 rev 2937

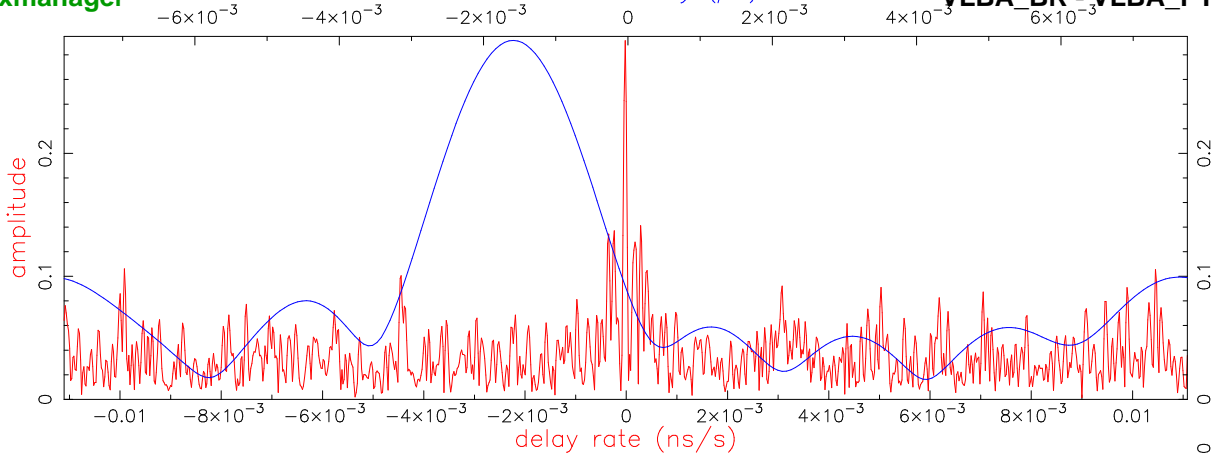
fxmanager

0420-014.1JLM0Z, No0079, bp

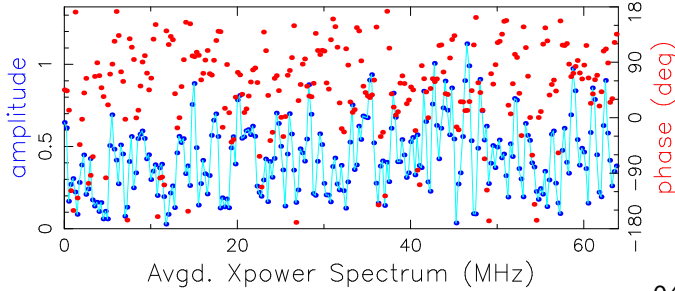
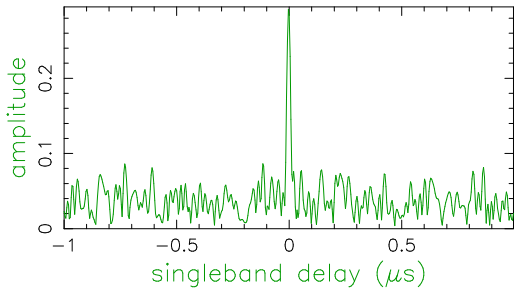
VLBA\_BR - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 9

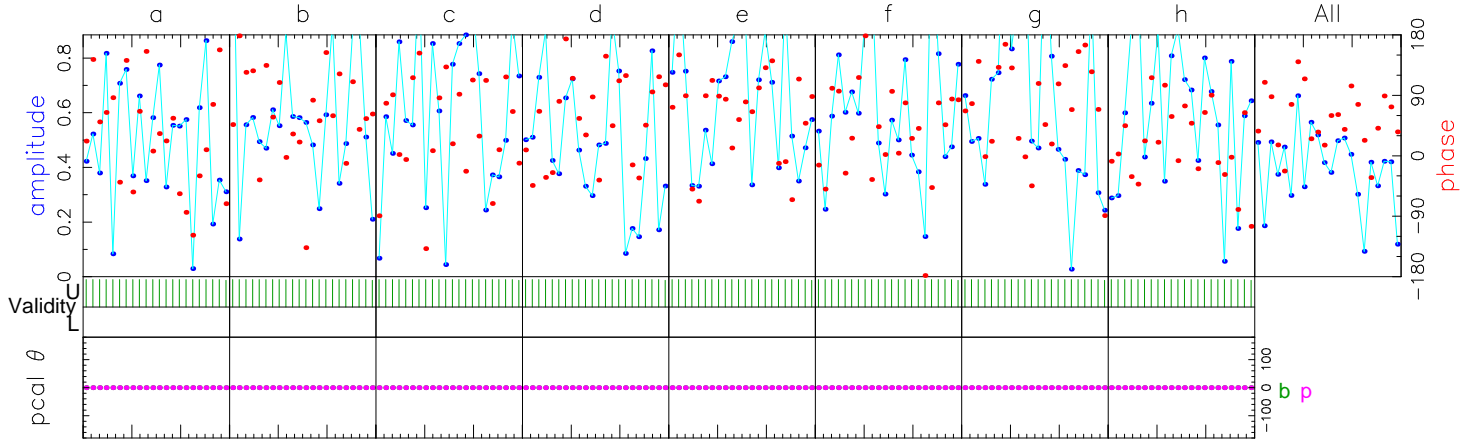


SNR 10.8  
Int time 179.976  
Amp 0.295  
Phase 55.7  
PFD 6.1e-19  
Delays (us)  
SBD -0.002493  
MBD -0.001551  
Fringe rate (Hz)  
-0.001743  
Ion TEC 0.000  
Ref freq (MHz)  
87940.0000  
AP (sec) 0.512



Exp. c202c  
Exper # 16383  
Yr:day 2020:286  
Start 102000.00  
Stop 102300.22  
FRT 102130.00  
Corr/FF/build  
2021:041:230658  
2021:042:142156  
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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		-3.61561627069E+03			-3.61561471946E+03				-1.55123E-03	+/- 1.0E-04
Sband delay (usec)		-3.61561721221E+03			-1.8572359E+00				-2.49275E-03	+/- 8.0E-04
Phase delay (usec)		-3.61561471770E+03			-3.9999997E-07				1.75824E-06	+/- 3.3E-07
Delay rate (us/s)		2.19937292740E-01			2.19937312561E-01				-1.98208E-08	+/- 3.2E-09
Total phase (deg)			-99.0		1.87550672314E-05				55.7	+/- 10.6
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 42.6 24.8  
amp/seg (%) 57.8 43.3  
ph/frq (deg) 24.0 15.0  
amp/frq (%) 21.2 26.1

RMS Theor. Amplitude 0.295 +/- 0.027  
Search (1024X32) 0.290  
Interp. 0.000  
Inc. seg. avg. 0.364  
Inc. frq. avg. 0.302

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

b: az 167.8 el 39.9 pa -8.1 p: az 183.9 el 54.3 pa 3.7 u,v (fr/asec) -1279.220 1600.547 simultaneous interpolator

Control file: cf\_1234\_88GHz\_gmva Input file: /Exps/c202c/v1/1234/No0079/bp..1JLM0Z Output file: /Exps/c202c/v1/1234/No0079/bp.W.8.1JLM0Z