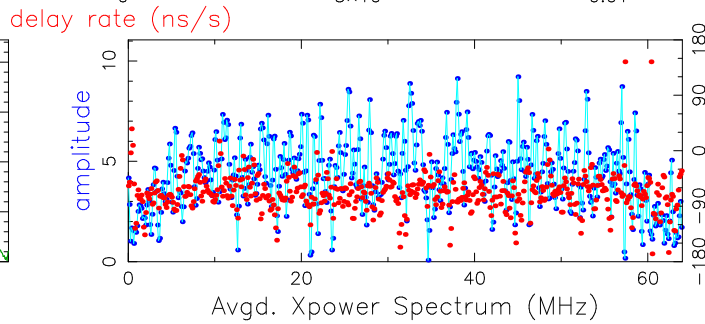
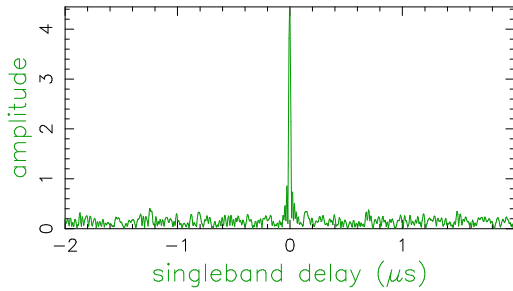


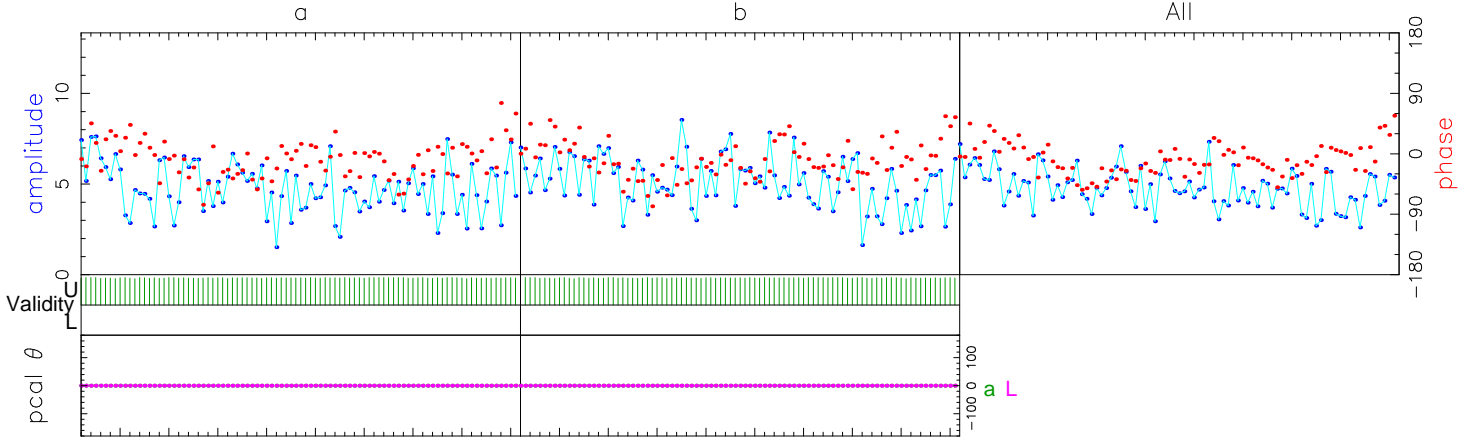
Fringe quality 9

SNR 40.5  
Int time 44.373  
Amp 4.448  
Phase -8.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.002711  
MBD -0.007894  
Fringe rate (Hz)  
-0.005729  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 120001.00  
Stop 120046.00  
FRT 120131.00  
Corr/FF/build  
2022:307:143927  
2022:307:161328  
2021:252:122852  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"



Amp. and Phase vs. time for each freq., 90 segs, 1 APs / seg (0.50 sec / seg.), time ticks 1 sec



86012.00	86076.00	Freq (MHz)	All
-8.9	-8.8	Phase	-8.9
4.3	4.6	Ampl.	4.4
513.0	511.6	Sbd box	512.3
U/L 90/0	90/0	APs used	
a 0	0	PC freqs	
L 0	0	PC freqs	
a:L 0:0	0:0	PC phase	
a:L 0:0	0:0	Manl PC	
a 1000	1000	PC amp	
L 1000	1000		
a W00UL	W01UL	Chan ids	
L W00UX	W01UX	Tracks	
		Chan ids	
		Tracks	

Group delay (usec)(sbd)	2.00330106773E+02	Apriori delay (usec)	2.00338000773E+02	Resid mbdelay (usec)	-7.89400E-03	+/- 1.2E-04
Sband delay (usec)	2.00335289773E+02	Apriori clock (usec)	-3.8988983E+01	Resid sbdelay (usec)	-2.71100E-03	+/- 2.1E-04
Phase delay (usec)	2.00338000487E+02	Apriori clockrate (us/s)	4.3589999E-07	Resid phdelay (usec)	-2.86329E-07	+/- 9.1E-08
Delay rate (us/s)	-3.61720926283E-03	Apriori rate (us/s)	-3.61714275482E-03	Resid rate (us/s)	-6.65080E-08	+/- 3.5E-09
Total phase (deg)	130.3	Apriori accel (us/s/s)	-1.21814253401E-06	Resid phase (deg)	-8.9	+/- 2.8

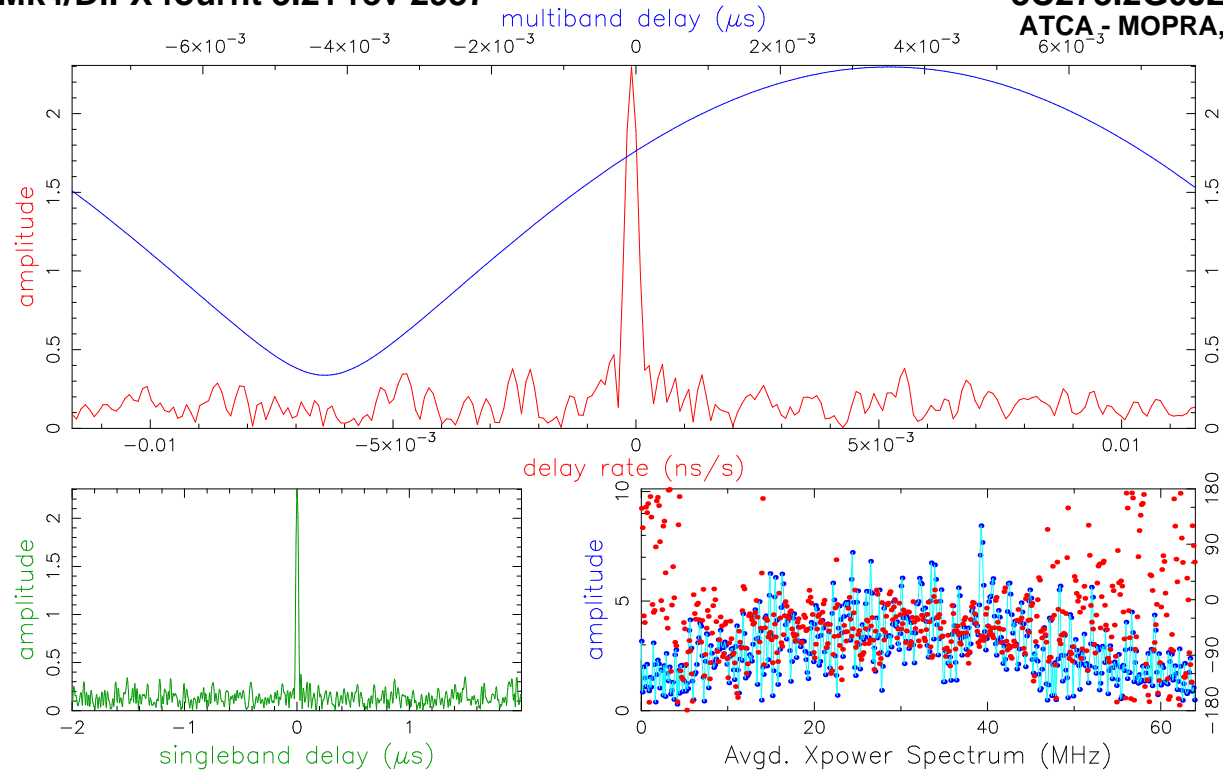
ph/seg (deg)	RMS 23.5	Theor. 13.4	Amplitude 4.448 +/- 0.110	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	25.2	23.4	Search (256X8) 4.352	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -2.000 2.000
ph/frq (deg)	0.0	2.0	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	3.6	3.5	Inc. seg. avg. 4.677	Sample rate(MISamp/s): 128	dr window (ns/s) -0.012 0.012
			Inc. frq. avg. 4.410	Data rate(Mb/s): 512	ion window (TEC) 0.00 0.00

a: az 44.9 el 48.0 pa -142.5 L: az 44.7 el 47.1 pa -143.4 u,v (fr/asec) 20.129 123.832 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/c221a\_mopra\_test/1234/No0235/aL..2G0JZF Output file: /Exps/c221a/FRINGE/c221a\_mopra\_test/1234/No0235/aL.W.1.2G0

Mk4/DiFX fourfit 3.21 rev 2937

3C273.2G0JZF, No0235, aL  
ATCA - MOPRA, fgroup W, pol RX

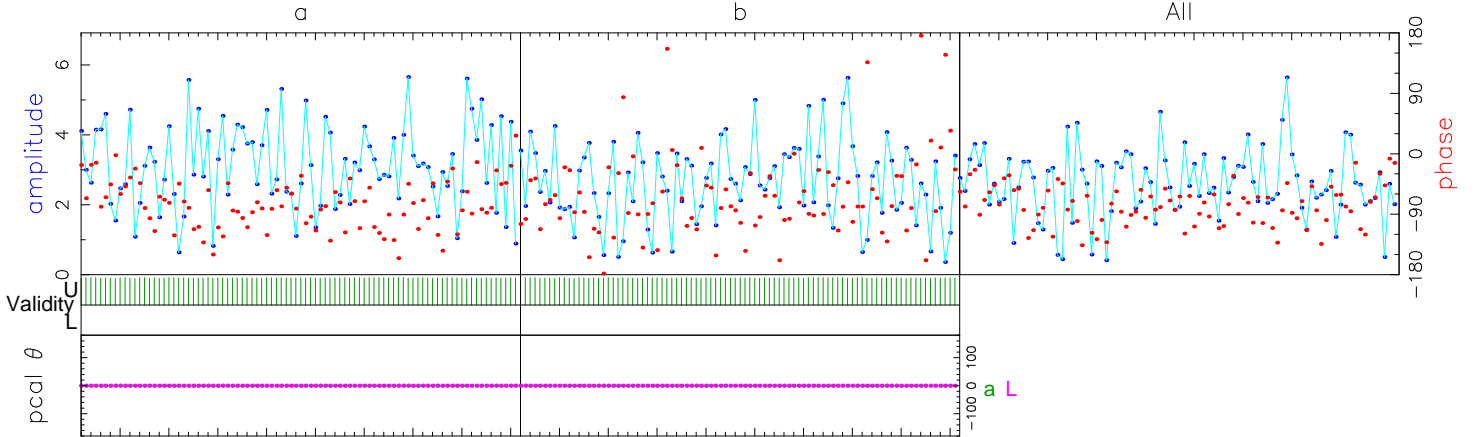


Fringe quality 9

SNR 21.0  
Int time 44.373  
Amp 2.306  
Phase -77.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.001198  
MBD 0.003526  
Fringe rate (Hz)  
-0.006166  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 120001.00  
Stop 120046.00  
FRT 120131.00  
Corr/FF/build  
2022:307:143927  
2022:307:161329  
2021:252:122852  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

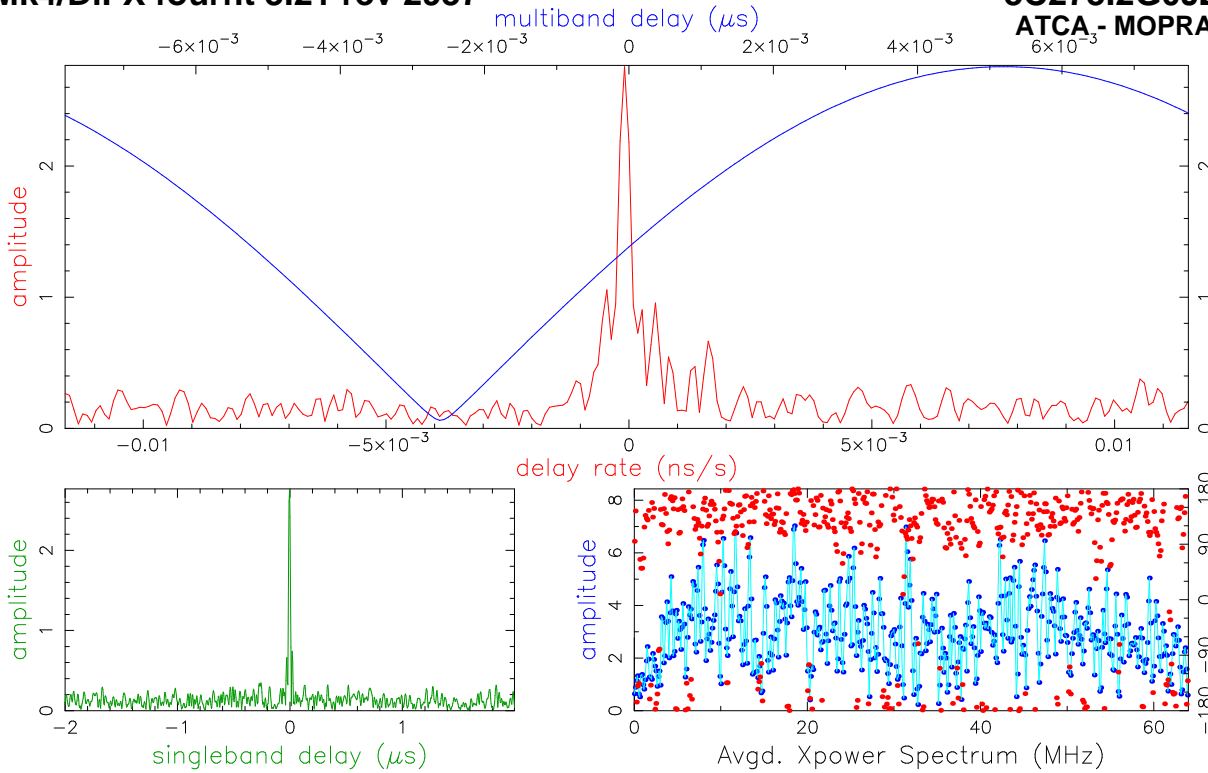
Amp. and Phase vs. time for each freq., 90 segs, 1 APs / seg (0.50 sec / seg.), time ticks 1 sec



86012.00	86076.00	Freq (MHz)	All				
-77.4	-77.9	Phase	-77.7				
2.6	2.0	Ampl.	2.3				
511.1	515.5	Sbd box	513.3				
U/L 90/0	90/0	APs used					
a 0	0	PC freqs					
L 0	0	PC freqs					
a:L 0:0	0:0	PC phase					
a:L 0:0	0:0	Manl PC					
a 1000	1000	PC amp					
L 1000	1000						
a W00UR	W01UR	Chan ids					
L W00UX	W01UX	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	2.00341526758E+02	Apriori delay (usec)	2.00338000773E+02	Resid mbdelay (usec)	3.52599E-03	+/-	2.4E-04
Sband delay (usec)	2.00339198523E+02	Apriori clock (usec)	-3.8988983E+01	Resid sbdelay (usec)	1.19775E-03	+/-	4.1E-04
Phase delay (usec)	2.00337998269E+02	Apriori clockrate (us/s)	4.3589999E-07	Resid phdelay (usec)	-2.50408E-06	+/-	1.8E-07
Delay rate (us/s)	-3.61721434177E-03	Apriori rate (us/s)	-3.61714275482E-03	Resid rate (us/s)	-7.15870E-08	+/-	6.8E-09
Total phase (deg)	61.5	Apriori accel (us/s/s)	-1.21814253401E-06	Resid phase (deg)	-77.7	+/-	5.5
RMS	Theor.	Amplitude	2.306 +/- 0.110	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
ph/seg (deg)	29.6	Search (256X8)	2.270	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-2.000 2.000
amp/seg (%)	44.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	0.0	Inc. seg. avg.	2.375	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.012 0.012
amp/frq (%)	14.6	Inc. frq. avg.	2.291	Data rate(Mb/s):	512	nlags: 512	t_cohere infinite
a: az 44.9 el 48.0 pa -142.5	L: az 44.7 el 47.1 pa -143.4	u,v (fr/asec)	20.129 123.832			ion window (TEC)	0.00 0.00
simultaneous interpolator							

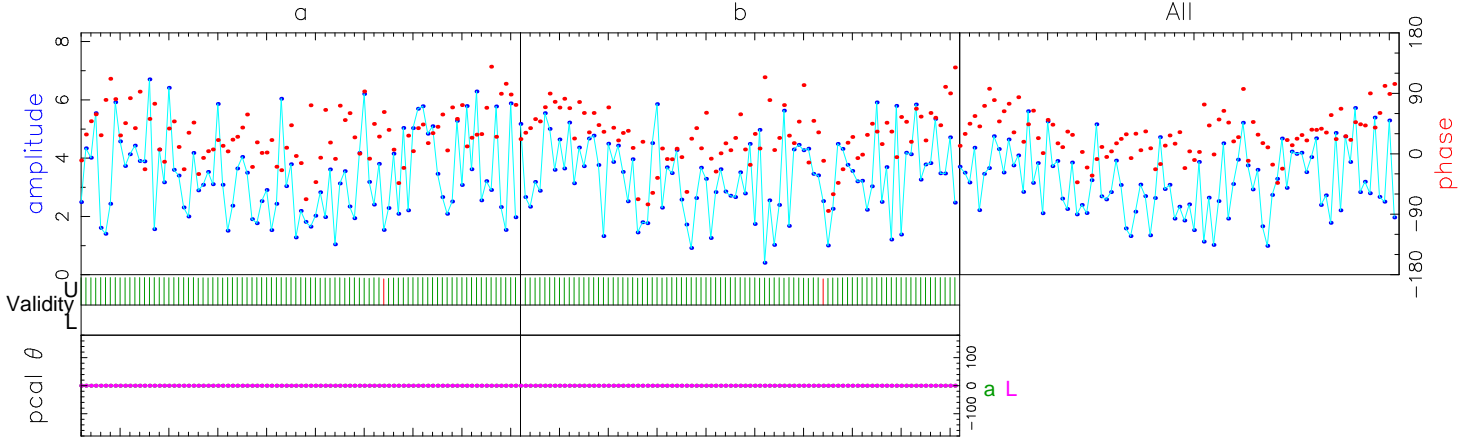
Mk4/DiFX fourfit 3.21 rev 2937

3C273.2G0JZF, No0235, aL  
ATCA - MOPRA, fgroup W, pol LY



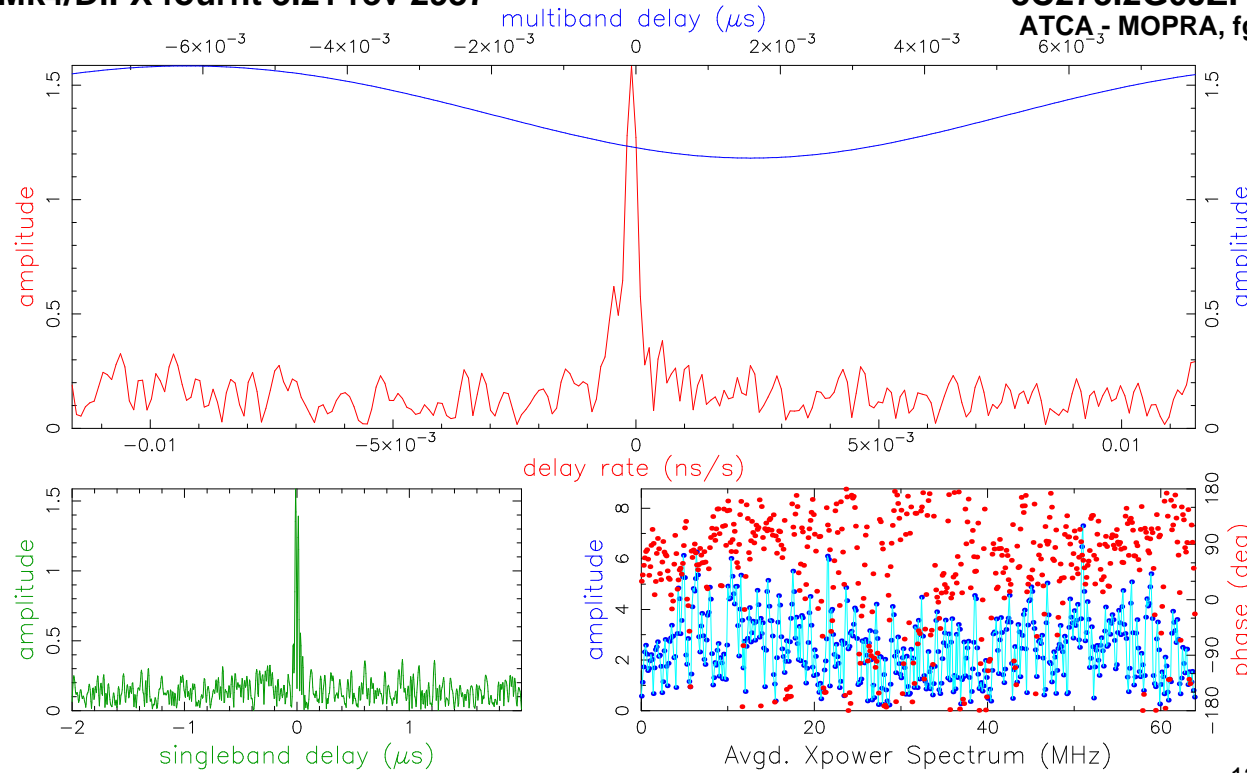
Fringe quality 9  
SNR 25.3  
Int time 44.759  
Amp 2.767  
Phase 31.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.004673  
MBD 0.005203  
Fringe rate (Hz)  
-0.005248  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 120001.00  
Stop 120046.00  
FRT 120131.00  
Corr/FF/build  
2022:307:143927  
2022:307:161329  
2021:252:122852  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 90 segs, 1 APs / seg (0.50 sec / seg.), time ticks 1 sec



86012.00		86076.00		Freq (MHz)		All		
U/L	90/0	U/L	90/0	Phase		31.2		
a	0	a	0	Ampl.		2.8		
L	0	L	0	Sbd box		511.8		
a:L	0:0	a:L	0:0	APs used				
a:L	0:0	a:L	0:0	PC freqs				
a	1000	a	1000	PC phase				
L	1000	L	1000	ManI PC				
a	W00UL	a	W01UL	PC amp				
L	W00UY	L	W01UY	Chan ids				
				Tracks				
				Chan ids				
				Tracks				
Group delay (usec)(sbd)	2.00327578633E+02	Apriori delay (usec)	2.00338000773E+02	Resid mbdelay (usec)	5.20286E-03	+/- 2.0E-04		
Sband delay (usec)	2.00333327523E+02	Apriori clock (usec)	-3.8988983E+01	Resid sbdelay (usec)	-4.67325E-03	+/- 3.4E-04		
Phase delay (usec)	2.00338001780E+02	Apriori clockrate (us/s)	4.3589999E-07	Resid phdelay (usec)	1.00648E-06	+/- 1.5E-07		
Delay rate (us/s)	-3.61720367890E-03	Apriori rate (us/s)	-3.61714275482E-03	Resid rate (us/s)	-6.09241E-08	+/- 5.6E-09		
Total phase (deg)	170.4	Apriori accel (us/s/s)	-1.21814253401E-06	Resid phase (deg)	31.2	+/- 4.5		
RMS	32.4	Theor.	21.5	Amplitude	2.767 +/- 0.109			
ph/seg (deg)	32.4	Search (256X8)	2.668	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	44.2	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-2.000 2.000		
ph/frq (deg)	0.0	Inc. seg. avg.	3.016	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	2.2	Inc. frq. avg.	2.753	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.012 0.012		
				Data rate(Mb/s): 512	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00
a: az 44.9 el 48.0 pa -142.5		L: az 44.7 el 47.1 pa -143.4		u,v (fr/asec)	20.129 123.832		simultaneous interpolator	

Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/c221a\_mopra\_test/1234/No0235/aL..2G0JZF Output file: /Exps/c221a/FRINGE/c221a\_mopra\_test/1234/No0235/aL.W.3.2G0

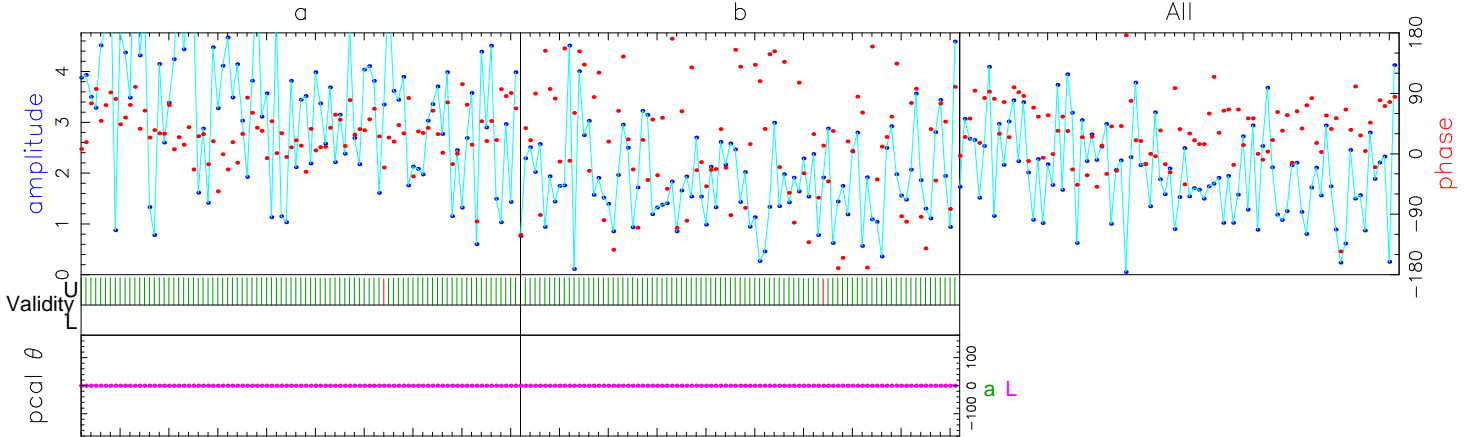


Fringe quality 7

SNR 14.5  
Int time 44.759  
Amp 1.587  
Phase 34.4  
PFD 3.7e-40  
Delays (us)  
SBD -0.011300  
MBD -0.006189  
Fringe rate (Hz)  
-0.006942  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 120001.00  
Stop 120046.00  
FRT 120131.00  
Corr/FF/build  
2022:307:143927  
2022:307:161328  
2021:252:122852  
RA & Dec (J2000)  
12h29m06.699731s  
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 90 segs, 1 APs / seg (0.50 sec / seg.), time ticks 1 sec



86012.00	86076.00	Freq (MHz)	All					
34.5	33.6	Phase	34.4					
2.8	0.4	Ampl.	1.6					
510.6	515.3	Sbd box	510.1					
U/L 90/0	90/0	APs used						
a 0	0	PC freqs						
L 0	0	PC freqs						
a:L 0:0	0:0	PC phase						
a:L 0:0	0:0	Manl PC						
a 1000	1000	PC amp						
L 1000	1000							
a W00UR	W01UR	Chan ids						
L W00UY	W01UY	Tracks						
		Chan ids						
		Tracks						
Group delay (usec)(sbd)	2.00331812133E+02	Apriori delay (usec)	2.00338000773E+02	Resid mbdelay (usec)	-6.18864E-03	+/-	3.4E-04	
Sband delay (usec)	2.00326700523E+02	Apriori clock (usec)	-3.8988983E+01	Resid sbdelay (usec)	-1.13002E-02	+/-	5.9E-04	
Phase delay (usec)	2.00338001882E+02	Apriori clockrate (us/s)	4.3589999E-07	Resid phdelay (usec)	1.10888E-06	+/-	2.5E-07	
Delay rate (us/s)	-3.6172233875E-03	Apriori rate (us/s)	-3.61714275482E-03	Resid rate (us/s)	-8.05839E-08	+/-	9.8E-09	
Total phase (deg)	173.6	Apriori accel (us/s/s)	-1.21814253401E-06	Resid phase (deg)	34.4	+/-	7.9	
				Resid mbdelay (usec)	-6.18864E-03	+/-	3.4E-04	
				Resid sbdelay (usec)	-1.13002E-02	+/-	5.9E-04	
				Resid phdelay (usec)	1.10888E-06	+/-	2.5E-07	
				Resid rate (us/s)	-8.05839E-08	+/-	9.8E-09	
				Resid phase (deg)	34.4	+/-	7.9	
				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-2.000	2.000	
				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
				Sample rate(MISamp/s): 128	dr window (ns/s)	-0.012	0.012	
				Data rate(Mb/s): 512	nlags: 512	t_cohere infinite	ion window (TEC)	0.00 0.00
a: az 44.9 el 48.0 pa -142.5	L: az 44.7 el 47.1 pa -143.4	u, v (fr/asec)	20.129 123.832	simultaneous interpolator				
Control file: cf_1234_gmva				Input file: /Exps/c221a/FRINGE/c221a_mopra_test/1234/No0235/aL..2G0JZF				
				Output file: /Exps/c221a/FRINGE/c221a_mopra_test/1234/No0235/aL.W.2.2G0				