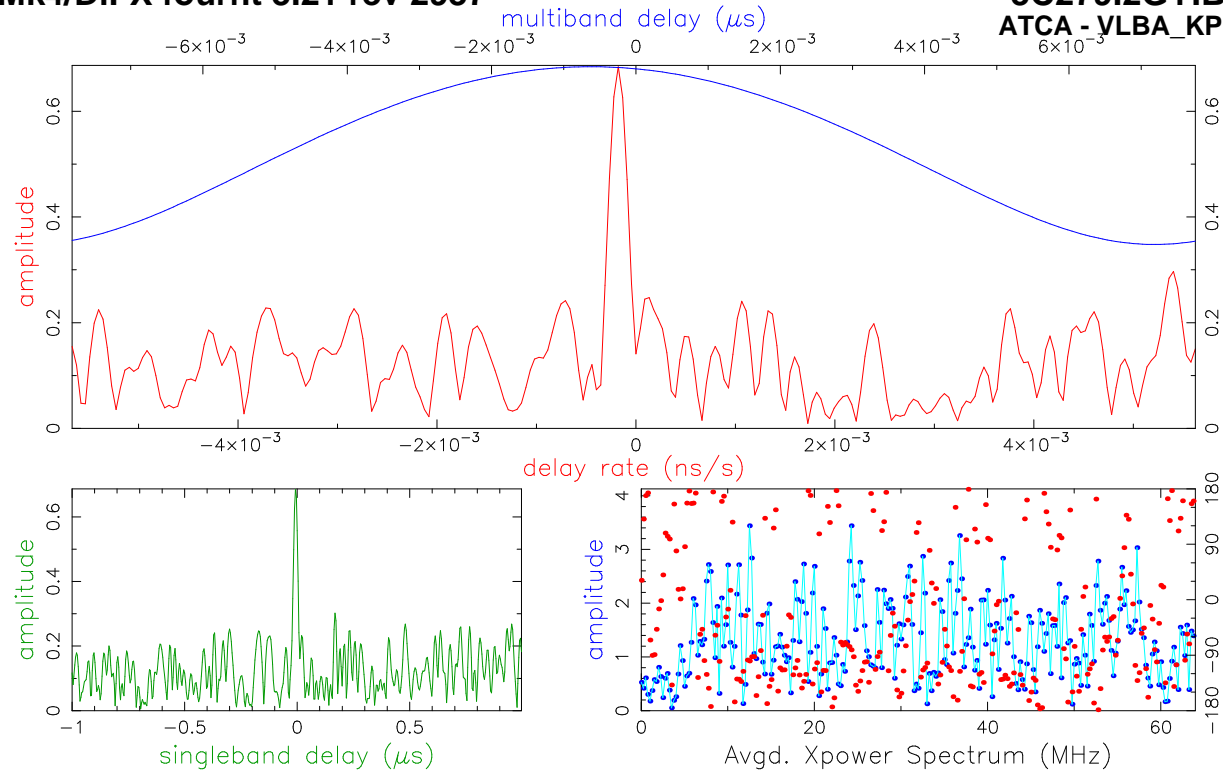


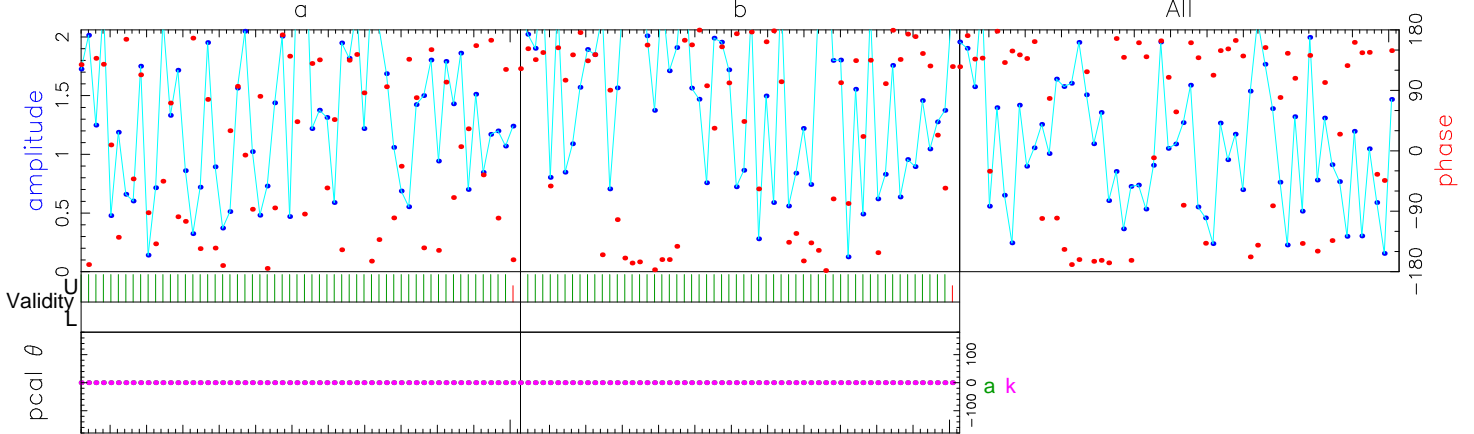
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ak  
ATCA - VLBA\_KP, fgroup W, pol LL



Fringe quality 8  
SNR 7.3  
Int time 59.990  
Amp 0.687  
Phase 164.7  
PFD 1.7e-06  
Delays (us)  
SBD -0.006922  
MBD -0.000574  
Fringe rate (Hz)  
-0.015513  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001601  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 59 segs, 1 APs / seg (1.02 sec / seg.), time ticks 1 sec

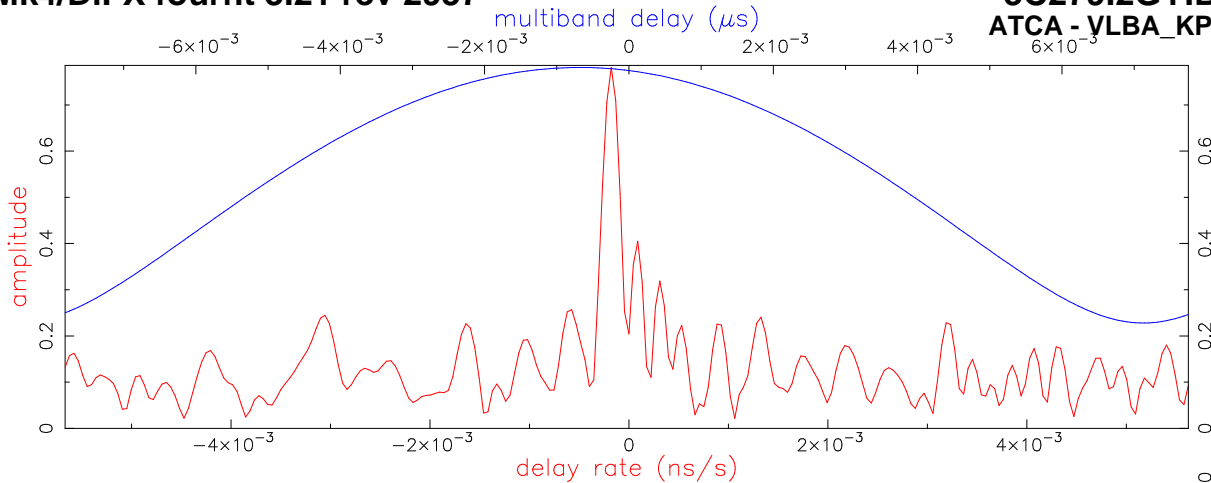


86012.00	86076.00	Freq (MHz)	All				
165.6	164.5	Phase	164.7				
0.3	1.0	Ampl.	0.7				
257.3	254.1	Sbd box	255.2				
U/L 59/0	59/0	APs used					
a 0	0	PC freqs					
k 0	0	PC freqs					
a:k 0:0	0:0	PC phase					
a:k 0:0	0:0	Manl PC					
a 1000	1000	PC amp					
k 1000	1000						
a W00UL	W01UL	Chan ids					
k W00UL	W01UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.92080692012E+03	Apriori delay (usec)	5.92080749385E+03	Resid mbdelay (usec)	-5.73727E-04	+/-	6.8E-04
Sband delay (usec)	5.92080057210E+03	Apriori clock (usec)	-4.4255207E+01	Resid sbdelay (usec)	-6.92175E-03	+/-	1.2E-03
Phase delay (usec)	5.92080749916E+03	Apriori clockrate (us/s)	-6.3099997E-08	Resid phdelay (usec)	5.31265E-06	+/-	5.1E-07
Delay rate (us/s)	1.98965822949E+00	Apriori rate (us/s)	1.98965840958E+00	Resid rate (us/s)	-1.80093E-07	+/-	1.5E-08
Total phase (deg)	352.0	Apriori accel (us/s/s)	-1.97406595234E-05	Resid phase (deg)	164.7	+/-	15.8

ph/seg (deg) RMS Theor. Amplitude 0.687 +/- 0.094 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.1 60.5 Search (128X8) 0.680 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 98.7 105.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 11.1 Inc. seg. avg. 0.701 Sample rate(MISamp/s): 128 dr window (ns/s) -0.006 0.006  
 amp/frq (%) 50.7 19.4 Inc. frq. avg. 0.672 Data rate(Mb/s): 512 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 a: az 67.3 el 43.3 pa -126.9 k: az 245.4 el 24.4 pa 50.7 u, v (fr/asec) -11470.082 -8928.225 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak.W.1.2GYIBK

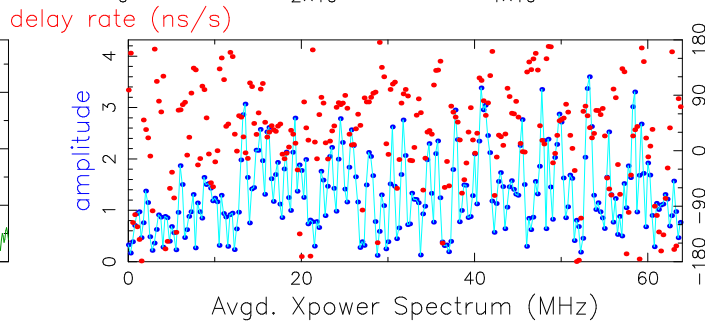
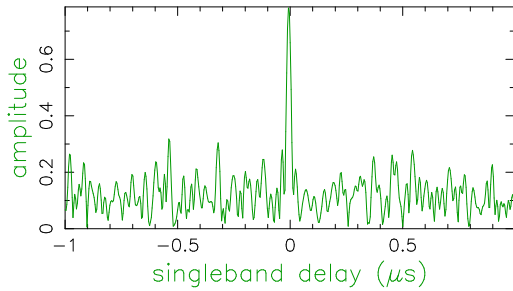
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ak  
ATCA - VLBA\_KP, fgroup W, pol LR



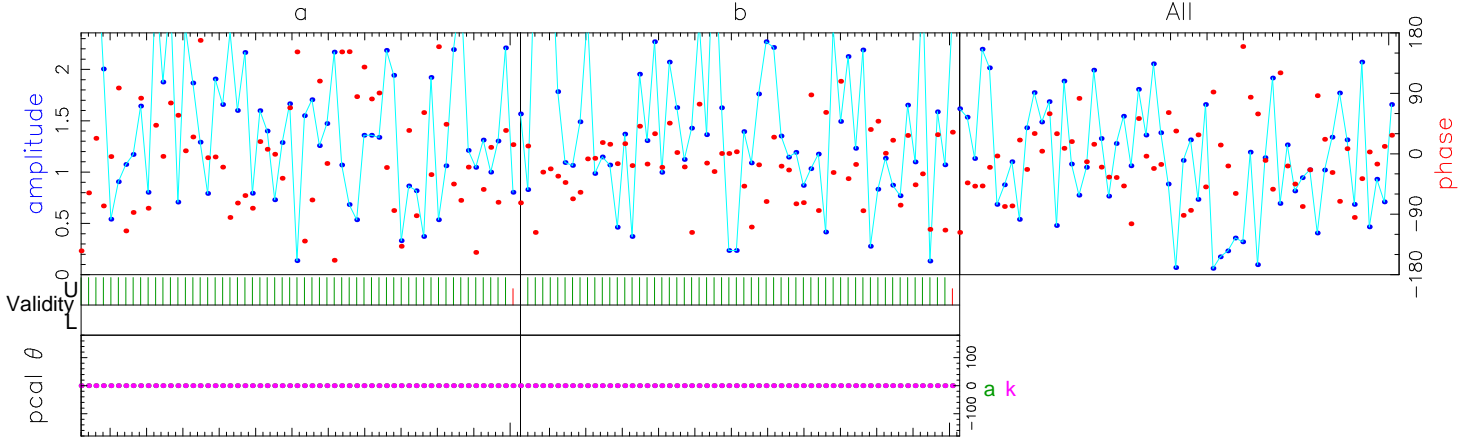
Fringe quality 9

SNR 8.3  
Int time 59.990  
Amp 0.786  
Phase -19.1  
PFD 5.1e-10  
Delays (us)  
SBD -0.006667  
MBD -0.000724  
Fringe rate (Hz)  
-0.016180  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001603  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 59 segs, 1 APs / seg (1.02 sec / seg.), time ticks 1 sec



86012.00	86076.00	Freq (MHz)	All				
-19.7	-18.8	Phase	-19.1				
0.6	1.0	Ampl.	0.8				
257.6	254.2	Sbd box	255.3				
U/L 59/0	59/0	APs used					
a 0	0	PC freqs					
k 0	0	PC freqs					
a:k 0:0	0:0	PC phase					
a:k 0:0	0:0	Manl PC					
a 1000	1000	PC amp					
k 1000	1000						
a W00UL	W01UL	Chan ids					
k W00UR	W01UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.92080677025E+03	Apriori delay (usec)	5.92080749385E+03	Resid mbdelay (usec)	-7.23602E-04	+/-	6.0E-04
Sband delay (usec)	5.92080082635E+03	Apriori clock (usec)	-4.4255207E+01	Resid sbdelay (usec)	-6.66750E-03	+/-	1.0E-03
Phase delay (usec)	5.92080749323E+03	Apriori clockrate (us/s)	-6.3099997E-08	Resid phdelay (usec)	-6.17465E-07	+/-	4.4E-07
Delay rate (us/s)	1.98965822175E+00	Apriori rate (us/s)	1.98965840958E+00	Resid rate (us/s)	-1.87830E-07	+/-	1.3E-08
Total phase (deg)	168.1	Apriori accel (us/s/s)	-1.97406595234E-05	Resid phase (deg)	-19.1	+/-	13.8

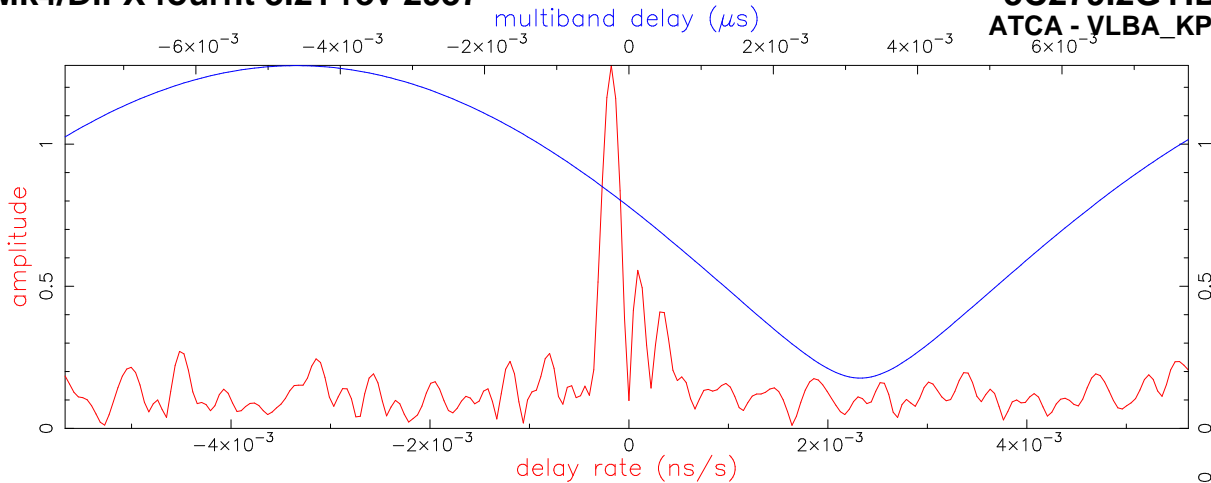
ph/seg (deg)	RMS 57.7	Theor. 52.9	Amplitude Search (128X8)	0.786 +/- 0.094	0.771	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	82.9	92.4	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	0.0	9.7	Inc. seg. avg.	0.785	0.770	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	29.0	17.0	Inc. frq. avg.	0.770	0.770	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.006	0.006	
						Data rate(Mb/s): 512	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

a: az 67.3 el 43.3 pa -126.9 k: az 245.4 el 24.4 pa 50.7 u,v (fr/asec) -11470.082 -8928.225 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak.W.17.2GYIBK

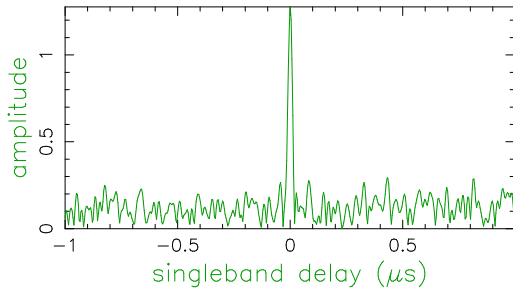
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ak  
ATCA - VLBA\_KP, fgroup W, pol RL

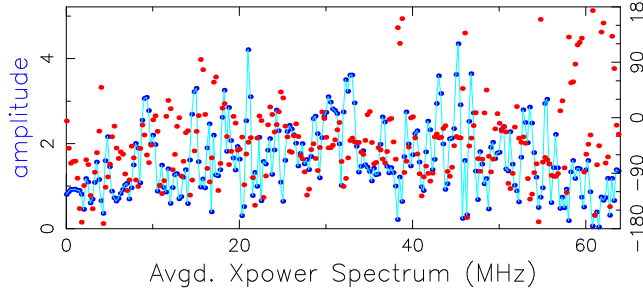


Fringe quality 9

SNR 13.5  
Int time 59.990  
Amp 1.277  
Phase 7.6  
PFD 1.1e-34  
Delays (us)  
SBD 0.000317  
MBD -0.004600  
Fringe rate (Hz)  
-0.014900  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024

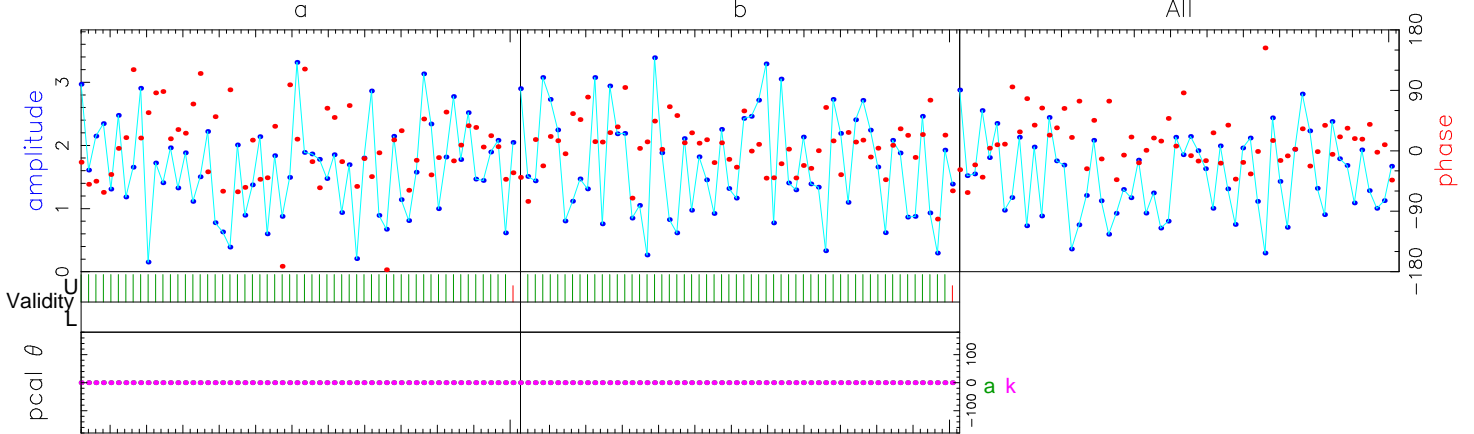


delay rate (ns/s)



Exp. c221a  
Yr:day 16383  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001603  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 59 segs, 1 APs / seg (1.02 sec / seg.), time ticks 1 sec



86012.00	86076.00	Freq (MHz)	All				
7.7	7.5	Phase	7.6				
1.1	1.5	Ampl.	1.3				
255.3	258.1	Sbd box	257.1				
U/L 59/0	59/0	APs used					
a 0	0	PC freqs					
k 0	0	PC freqs					
a:k 0:0	0:0	PC phase					
a:k 0:0	0:0	Manl PC					
a 1000	1000	PC amp					
k 1000	1000						
a W00UR	W01UR	Chan ids					
k W00UL	W01UL	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.92080289412E+03	Apriori delay (usec)	5.92080749385E+03	Resid mbdelay (usec)	-4.59973E-03	+/-	3.7E-04
Sband delay (usec)	5.92080781060E+03	Apriori clock (usec)	-4.4255207E+01	Resid sbdelay (usec)	3.16750E-04	+/-	6.4E-04
Phase delay (usec)	5.92080749409E+03	Apriori clockrate (us/s)	-6.3099997E-08	Resid phdelay (usec)	2.44977E-07	+/-	2.7E-07
Delay rate (us/s)	1.98965823660E+00	Apriori rate (us/s)	1.98965840958E+00	Resid rate (us/s)	-1.72979E-07	+/-	7.8E-09
Total phase (deg)	194.8	Apriori accel (us/s/s)	-1.97406595234E-05	Resid phase (deg)	7.6	+/-	8.5

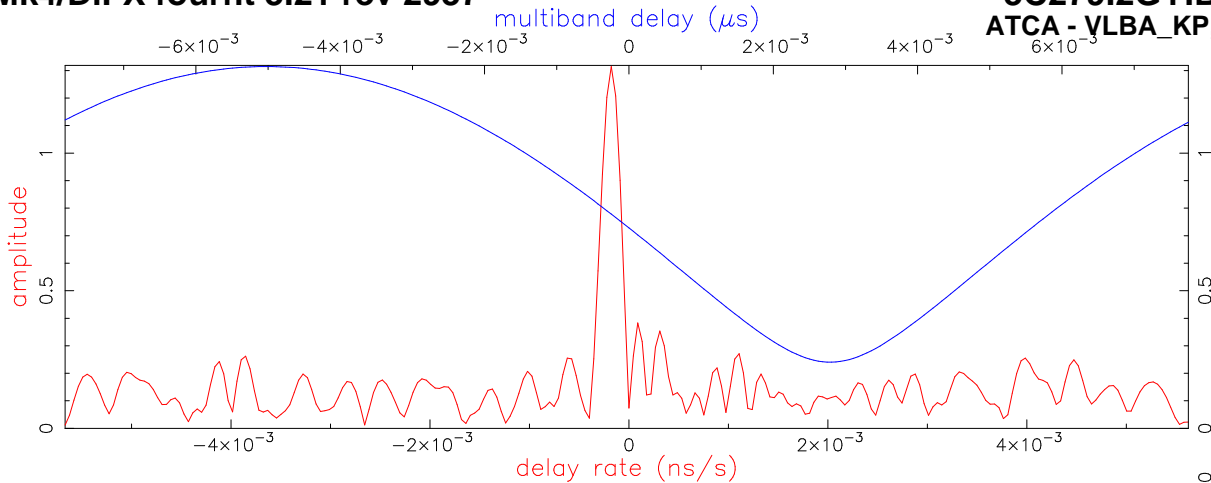
ph/seg (deg)	RMS 39.3	Theor. 32.6	Amplitude Search (128X8)	1.277 +/- 0.094	1.261	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	52.0	56.8	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	0.0	6.0	Inc. seg. avg.	1.303	1.303	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	13.9	10.5	Inc. frq. avg.	1.269	1.269	Sample rate(MISamp/s): 128	dr window (ns/s) -0.006 0.006	
						Data rate(Mb/s): 512	nlags: 256	t_cohere infinite
							ion window (TEC)	0.00 0.00

a: az 67.3 el 43.3 pa -126.9 k: az 245.4 el 24.4 pa 50.7 u,v (fr/asec) -11470.082 -8928.225 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak.W.22.2GYIBK

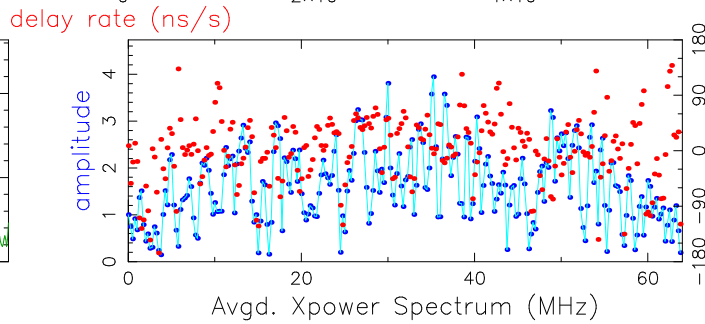
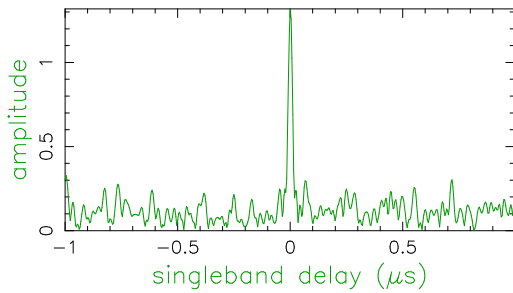
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ak  
ATCA - VLBA\_KP, fgroup W, pol RR



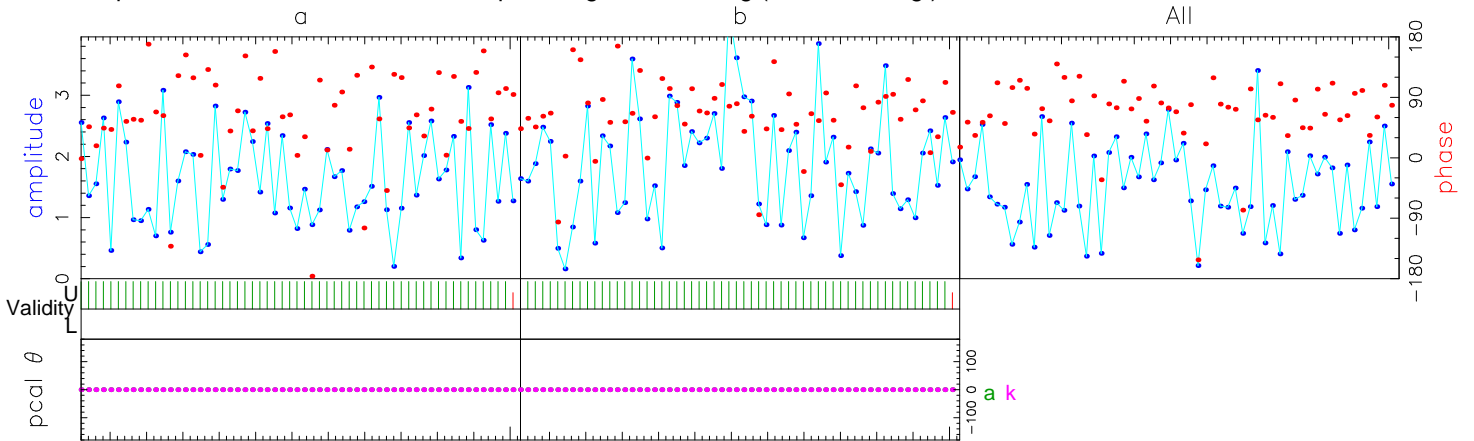
Fringe quality 9

SNR 14.0  
Int time 59.990  
Amp 1.319  
Phase 73.1  
PFD 2.5e-37  
Delays (us)  
SBD 0.000762  
MBD -0.005014  
Fringe rate (Hz)  
-0.015550  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001602  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 59 segs, 1 APs / seg (1.02 sec / seg.), time ticks 1 sec



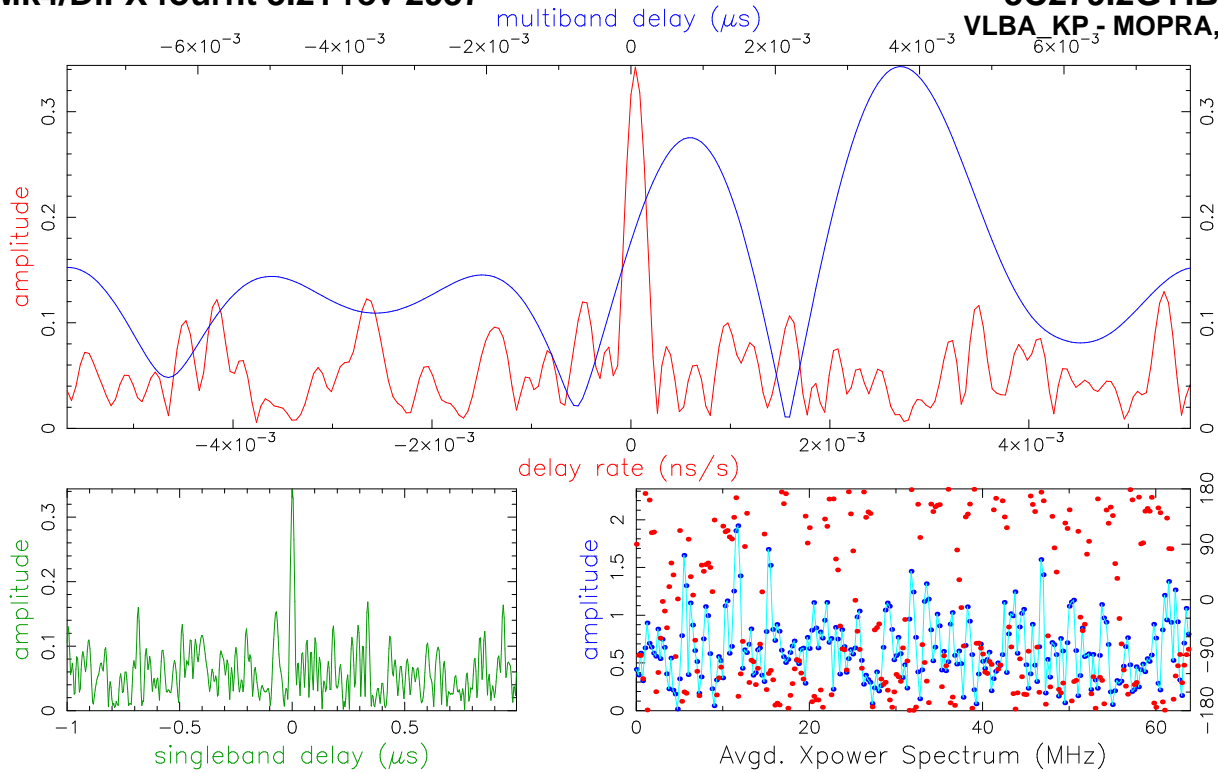
86012.00	86076.00	Freq (MHz)	All				
73.3	73.1	Phase	73.1				
1.1	1.6	Ampl.	1.3				
255.5	257.8	Sbd box	257.2				
U/L 59/0	59/0	APs used					
a 0	0	PC freqs					
k 0	0	PC freqs					
a:k 0:0	0:0	PC phase					
a:k 0:0	0:0	Manl PC					
a 1000	1000	PC amp					
k 1000	1000						
a W00UR	W01UR	Chan ids					
k W00UR	W01UR	Tracks					
		Chan ids					
		Tracks					
Group delay (usec)(sbd)	5.92080248012E+03	Apriori delay (usec)	5.92080749385E+03	Resid mbdelay (usec)	-5.01373E-03	+/-	3.6E-04
Sband delay (usec)	5.92080825635E+03	Apriori clock (usec)	-4.4255207E+01	Resid sbdelay (usec)	7.62500E-04	+/-	6.2E-04
Phase delay (usec)	5.92080749621E+03	Apriori clockrate (us/s)	-6.3099997E-08	Resid phdelay (usec)	2.35875E-06	+/-	2.6E-07
Delay rate (us/s)	1.98965822905E+00	Apriori rate (us/s)	1.98965840958E+00	Resid rate (us/s)	-1.80523E-07	+/-	7.6E-09
Total phase (deg)	260.4	Apriori accel (us/s/s)	-1.97406595234E-05	Resid phase (deg)	73.1	+/-	8.2

ph/seg (deg)	41.2	Theor.	31.5	Amplitude	1.319 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	53.5	Search (128X8)	1.295	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	Inc. seg. avg.	1.324	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	18.2	Inc. frq. avg.	1.308	Sample rate(MISamp/s): 128		nlags: 256	dr window (ns/s)	-0.006 0.006
				Data rate(Mb/s): 512		t_cohere infinite	ion window (TEC)	0.00 0.00

a: az 67.3 el 43.3 pa -126.9 k: az 245.4 el 24.4 pa 50.7 u,v (fr/asec) -11470.082 -8928.225 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ak.W.7.2GYIBK

Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, kL  
VLBA\_KP - MOPRA, fgroup W, pol RY

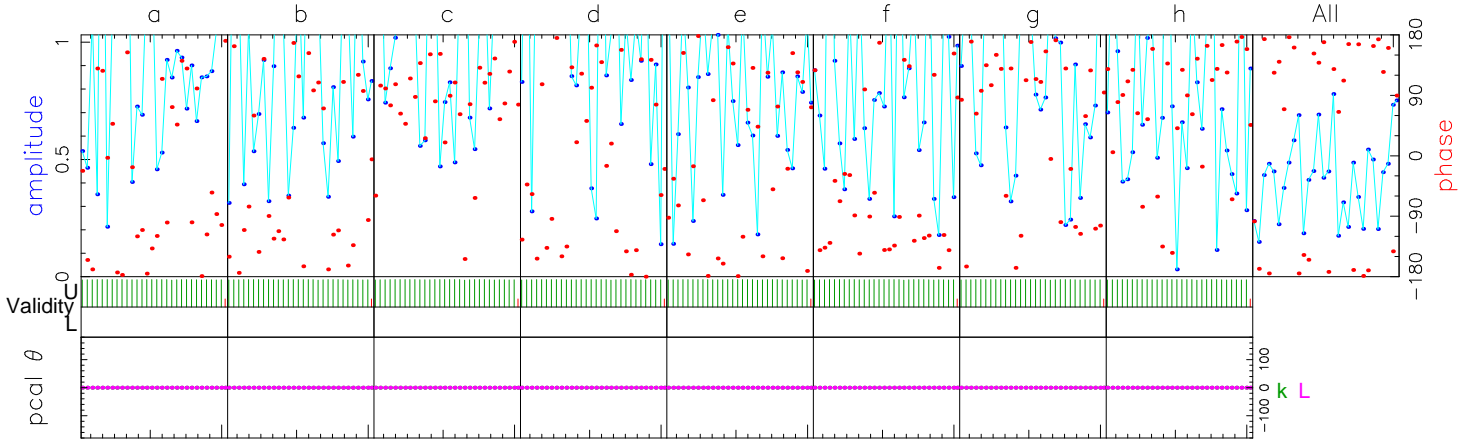


Fringe quality 9

SNR 7.3  
Int time 59.680  
Amp 0.344  
Phase 164.5  
PFD 7.3e-06  
Delays (us)  
SBD 0.000968  
MBD 0.003796  
Fringe rate (Hz) 0.004853  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001602  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec

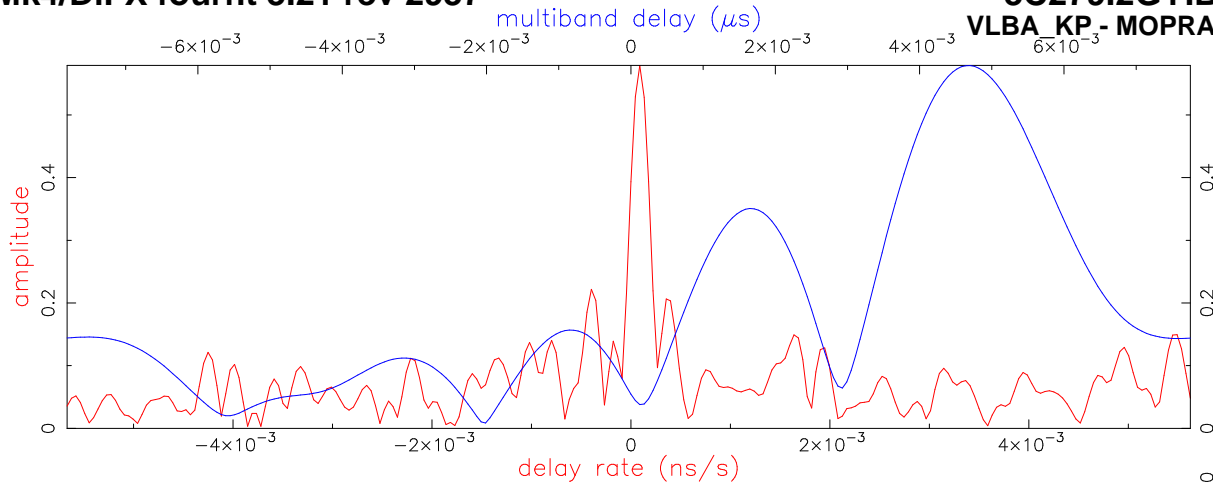


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-172.1	174.6	101.8	-169.0	-176.1	-126.9	151.6	120.9	Phase	164.5
	0.4	0.5	0.7	0.4	0.3	0.5	0.4	0.4	Ampl.	0.4
	255.8	257.9	257.0	496.2	14.0	258.6	256.1	146.8	Sbd box	257.2
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UY	W01UY	W02UY	W03UY	W04UY	W05UY	W06UY	W07UY	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.75801834151E+03		Apriori delay (usec)		-5.75802213747E+03		Resid mbdelay (usec)		3.79596E-03	+/- 1.5E-04
Sband delay (usec)	-5.75802116947E+03		Apriori clock (usec)		5.2653465E+00		Resid sbdelay (usec)		9.68000E-04	+/- 1.2E-03
Phase delay (usec)	-5.75802213216E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		5.30480E-06	+/- 5.1E-07
Delay rate (us/s)	-1.98904246040E+00		Apriori rate (us/s)		-1.98904251674E+00		Resid rate (us/s)		5.63388E-08	+/- 1.5E-08
Total phase (deg)			Apriori accel (us/s/s)		1.85010144576E-05		Resid phase (deg)		164.5	+/- 15.8

ph/seg (deg) 41.2 43.2 Search (128X32) 0.324 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 55.6 75.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 45.5 22.3 Inc. seg. avg. 0.329 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 47.2 38.9 Inc. frq. avg. 0.428 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.006 0.006  
k: az 245.4 el 24.4 pa 50.7 L: az 66.8 el 42.5 pa -128.0 u,v (fr/asec) 11465.963 9064.761 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL.W.13.2GYIBK

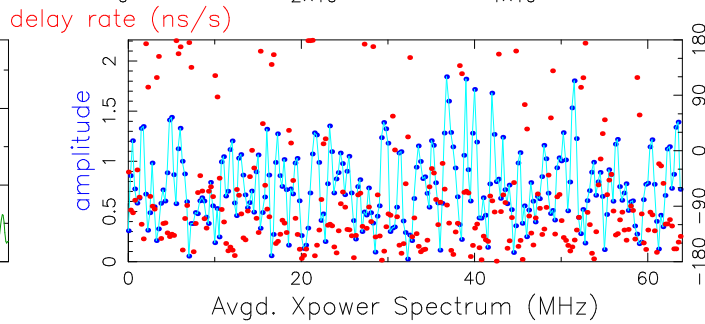
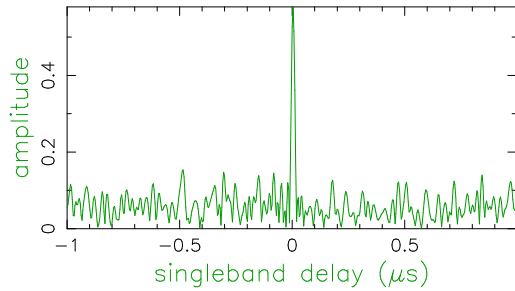
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, kL  
VLBA\_KP - MOPRA, fgroup W, pol LY



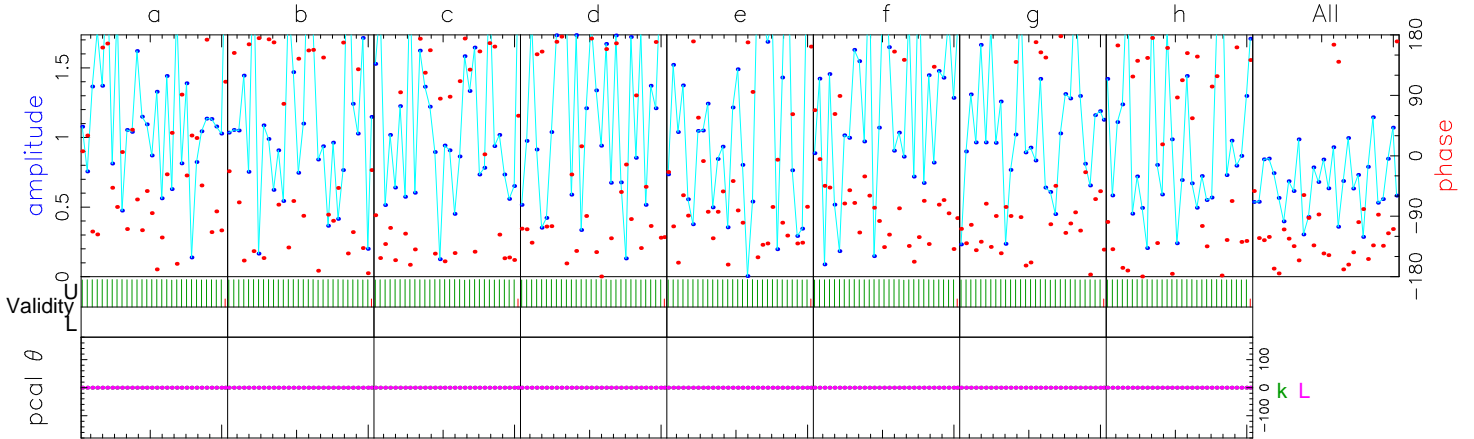
Fringe quality 9

SNR 12.2  
Int time 59.680  
Amp 0.579  
Phase -133.7  
PFD 6.8e-27  
Delays (us)  
SBD 0.003694  
MBD 0.004668  
Fringe rate (Hz)  
0.006747  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



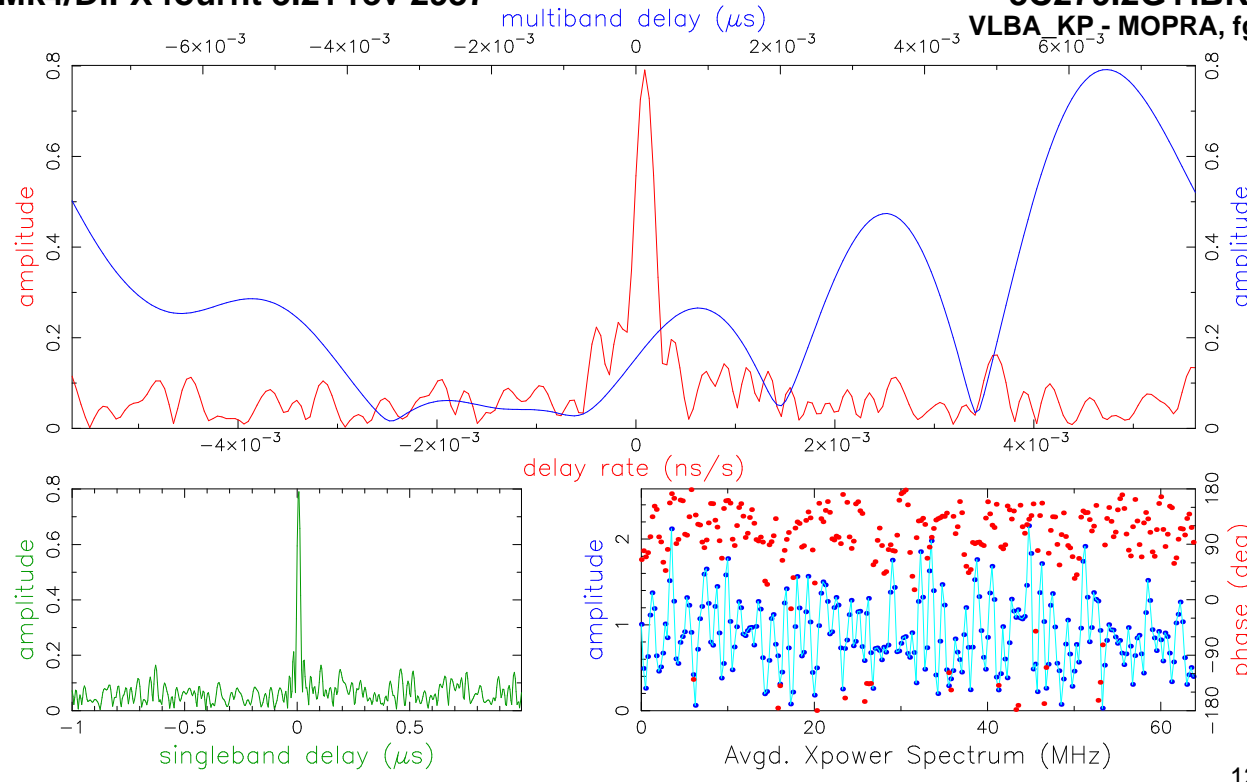
Exp. c221a  
Yr:day 16383  
Start 2022:091  
Stop 2022:091  
FRT 113101.00  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001603  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.6	-152.3	-174.7	-146.9	-98.1	-95.6	-119.4	-179.4	Phase	-133.7
	0.4	0.7	0.7	0.8	0.7	0.8	0.7	0.7	Ampl.	0.7
	256.0	258.1	258.6	257.9	258.0	258.2	258.2	256.2	Sbd box	257.9
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UY	W01UY	W02UY	W03UY	W04UY	W05UY	W06UY	W07UY	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.75801746929E+03		Apriori delay (usec)		-5.75802213747E+03		Resid mbdelay (usec)		4.66818E-03	+/- 8.9E-05
Sband delay (usec)	-5.75801844347E+03		Apriori clock (usec)		5.2653465E+00		Resid sbdelay (usec)		3.69400E-03	+/- 7.0E-04
Phase delay (usec)	-5.75802214178E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-4.31241E-06	+/- 3.0E-07
Delay rate (us/s)	-1.98904243842E+00		Apriori rate (us/s)		-1.98904251674E+00		Resid rate (us/s)		7.83211E-08	+/- 8.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.85010144576E-05		Resid phase (deg)		-133.7	+/- 9.4

ph/seg (deg) 38.2 25.7 Search (128X32) 0.566 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 42.3 44.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 38.2 13.2 Inc. seg. avg. 0.626 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 25.9 23.1 Inc. frq. avg. 0.665 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.006 0.006  
k: az 245.4 el 24.4 pa 50.7 L: az 66.8 el 42.5 pa -128.0 u,v (fr/asec) 11465.963 9064.761 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL.W.19.2GYIBK

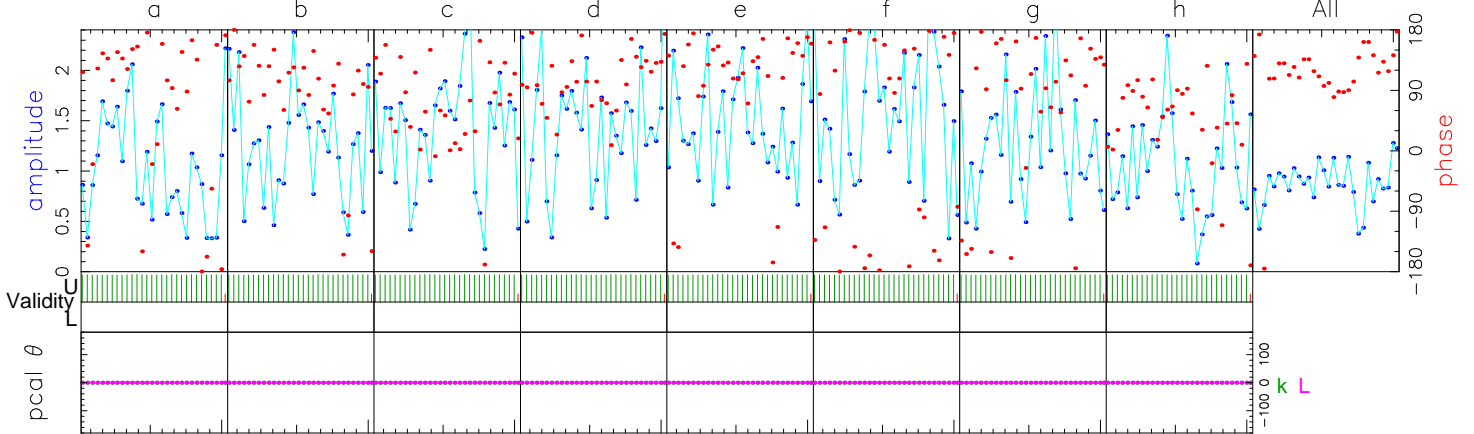


Fringe quality 8

SNR 16.9  
Int time 59.291  
Amp 0.801  
Phase 121.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.006426  
MBD 0.006450  
Fringe rate (Hz)  
0.006641  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001604  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec

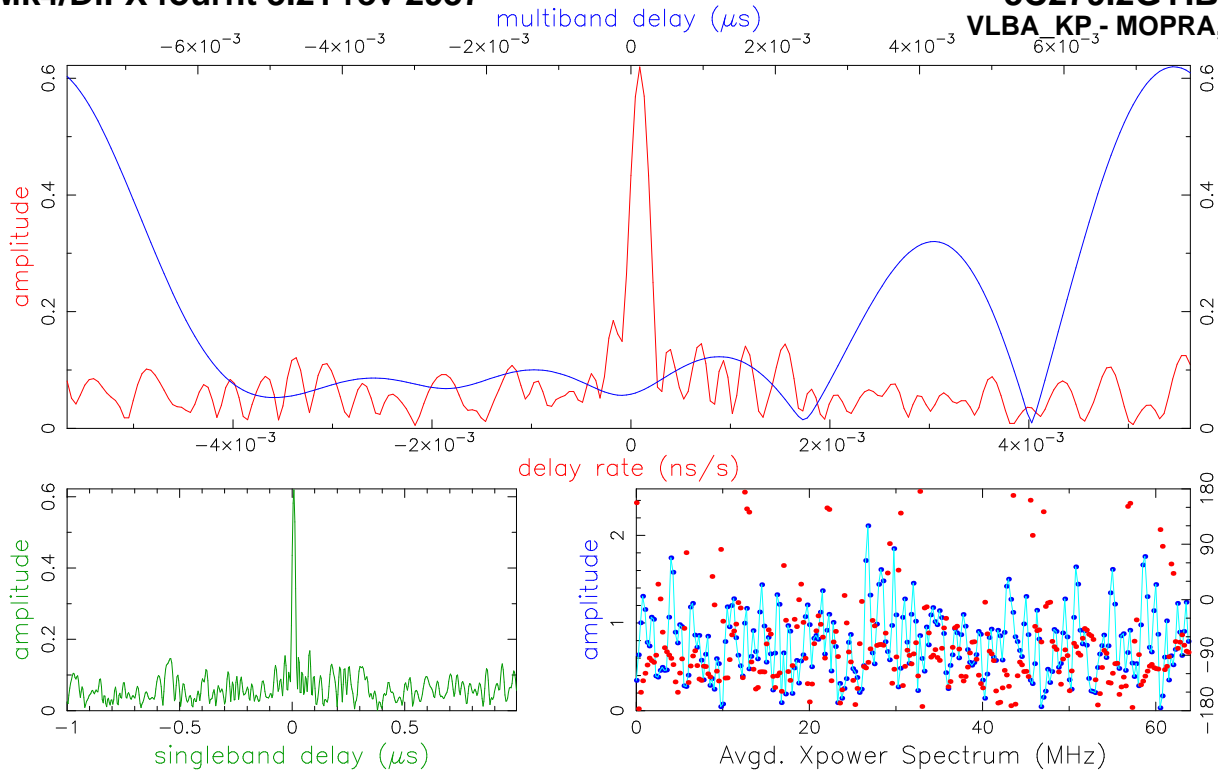


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0		
k	0	0	0	0	0	0	0	0		
L	0	0	0	0	0	0	0	0		
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
L	W00UX	W01UX	W02UX	W03UX	W04UX	W05UX	W06UX	W07UX		
Group delay (usec)(sbd)		-5.75801568776E+03				-5.75802213747E+03			6.44971E-03	+/- 6.4E-05
Sband delay (usec)		-5.75801571172E+03				5.2653465E+00			6.42575E-03	+/- 5.1E-04
Phase delay (usec)		-5.75802213356E+03				5.0000000E-07			3.90514E-06	+/- 2.2E-07
Delay rate (us/s)		-1.98904243965E+00				-1.98904251674E+00			7.70967E-08	+/- 6.3E-09
Total phase (deg)			-210.7			1.85010144576E-05			121.1	+/- 6.8
ph/seg (deg)	26.4	18.6		0.801 +/- 0.047						
amp/seg (%)	27.5	32.5		0.781						
ph/frq (deg)	42.1	9.6		0.000						
amp/frq (%)	30.3	16.8		0.829						

Group delay (usec)(sbd) -5.75801568776E+03 Apriori delay (usec) -5.75802213747E+03 Resid mbdelay (usec) 6.44971E-03 +/- 6.4E-05  
 Sband delay (usec) -5.75801571172E+03 Apriori clock (usec) 5.2653465E+00 Resid sbdelay (usec) 6.42575E-03 +/- 5.1E-04  
 Phase delay (usec) -5.75802213356E+03 Apriori clockrate (us/s) 5.0000000E-07 Resid phdelay (usec) 3.90514E-06 +/- 2.2E-07  
 Delay rate (us/s) -1.98904243965E+00 Apriori rate (us/s) -1.98904251674E+00 Resid rate (us/s) 7.70967E-08 +/- 6.3E-09  
 Total phase (deg) -210.7 Apriori accel (us/s/s) 1.85010144576E-05 Resid phase (deg) 121.1 +/- 6.8

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(MISamp/s): 128 dr window (ns/s) -0.006 0.006  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 245.4 el 24.4 pa 50.7 L: az 66.8 el 42.5 pa -128.0 u,v (fr/asec) 11465.963 9064.761 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL.W.28.2GYIBK

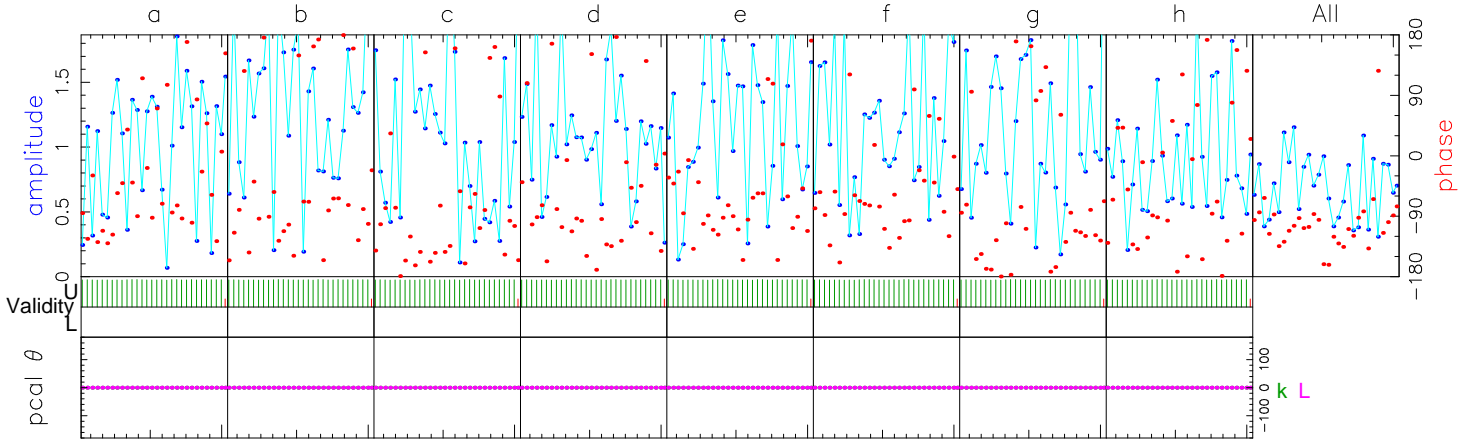


Fringe quality 9

SNR 13.1  
Int time 59.291  
Amp 0.622  
Phase -107.1  
PFD 1.2e-31  
Delays (us)  
SBD 0.007007  
MBD 0.007478  
Fringe rate (Hz)  
0.006145  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001601  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

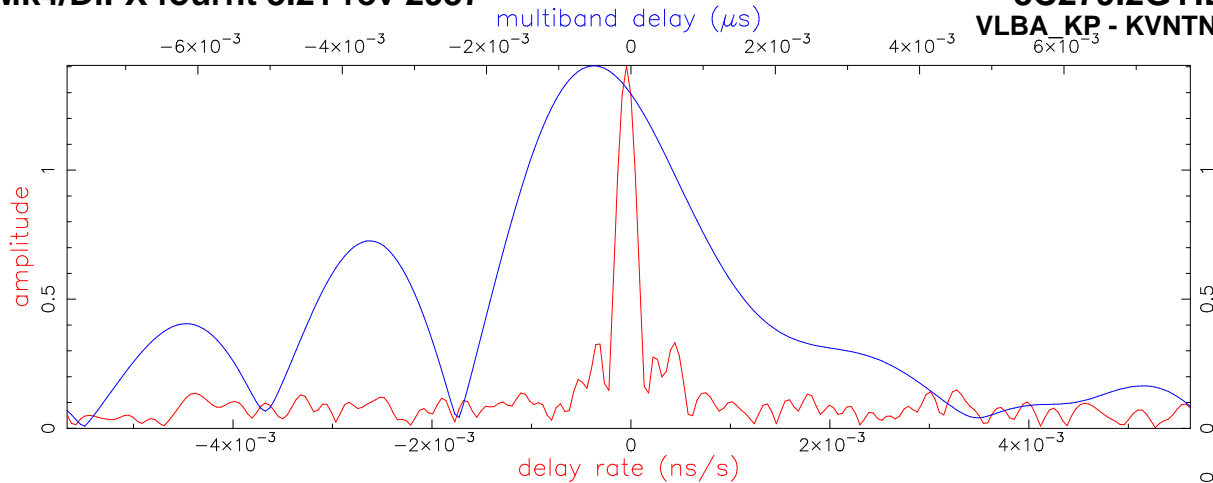
Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.9	-119.3	-138.2	-115.1	-87.5	-70.6	-130.0	-113.9	Phase	-107.1
	0.5	0.9	0.8	0.6	0.8	0.8	0.8	0.2	Ampl.	0.7
	257.0	258.6	259.4	259.0	258.7	259.1	258.3	255.8	Sbd box	258.8
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	0	0	0	0	0	0	PC freqs	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UX	W01UX	W02UX	W03UX	W04UX	W05UX	W06UX	W07UX	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.75801465901E+03		Apriori delay (usec)		-5.75802213747E+03		Resid mbdelay (usec)		7.47846E-03	+/- 8.3E-05
Sband delay (usec)	-5.75801513072E+03		Apriori clock (usec)		5.2653465E+00		Resid sbdelay (usec)		7.00675E-03	+/- 6.6E-04
Phase delay (usec)	-5.75802214092E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-3.45380E-06	+/- 2.8E-07
Delay rate (us/s)	-1.98904244541E+00		Apriori rate (us/s)		-1.98904251674E+00		Resid rate (us/s)		7.13319E-08	+/- 8.1E-09
Total phase (deg)			Apriori accel (us/s/s)		1.85010144576E-05		Resid phase (deg)		-107.1	+/- 8.7

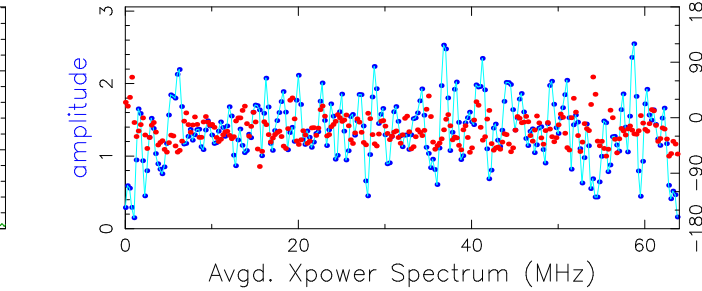
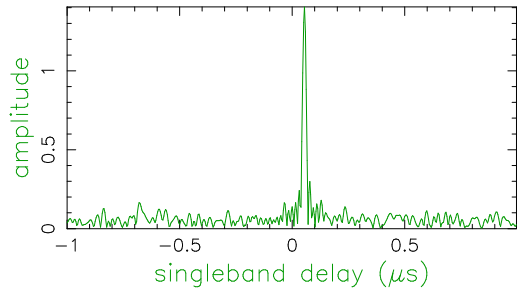
ph/seg (deg) 33.6 24.0 Search (128X32) 0.605 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 41.1 41.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 27.2 12.4 Inc. seg. avg. 0.638 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 37.8 21.6 Inc. frq. avg. 0.665 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.006 0.006  
k: az 245.4 el 24.4 pa 50.7 L: az 66.8 el 42.5 pa -128.0 u,v (fr/asec) 11465.963 9064.761 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kL.W.3.2GYIBK





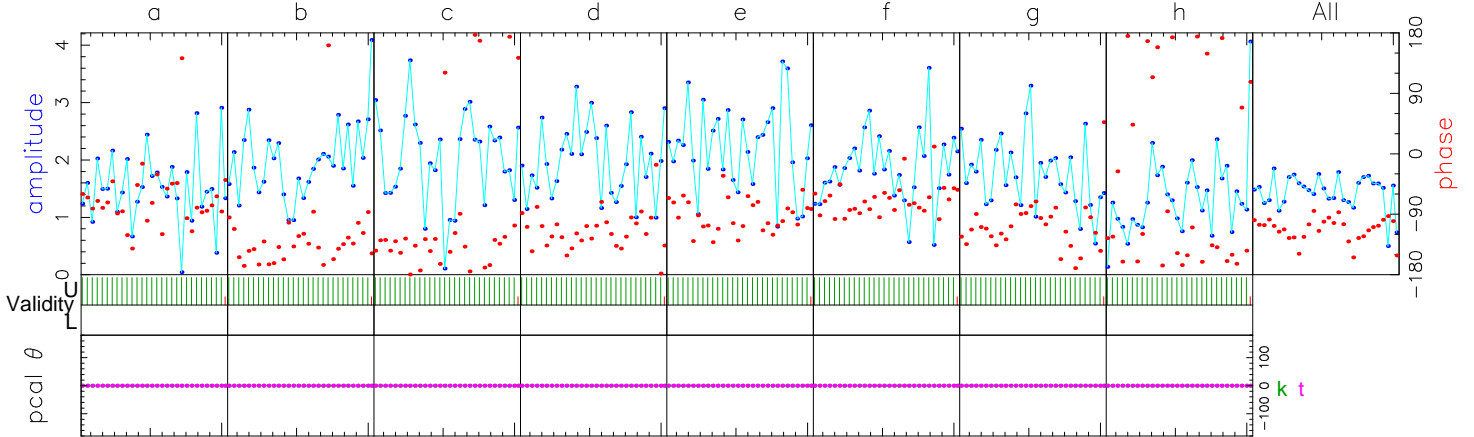
Fringe quality 6

SNR 29.8  
Int time 59.991  
Amp 1.406  
Phase -111.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.054217  
MBD -0.000540  
Fringe rate (Hz)  
-0.002873  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001605  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



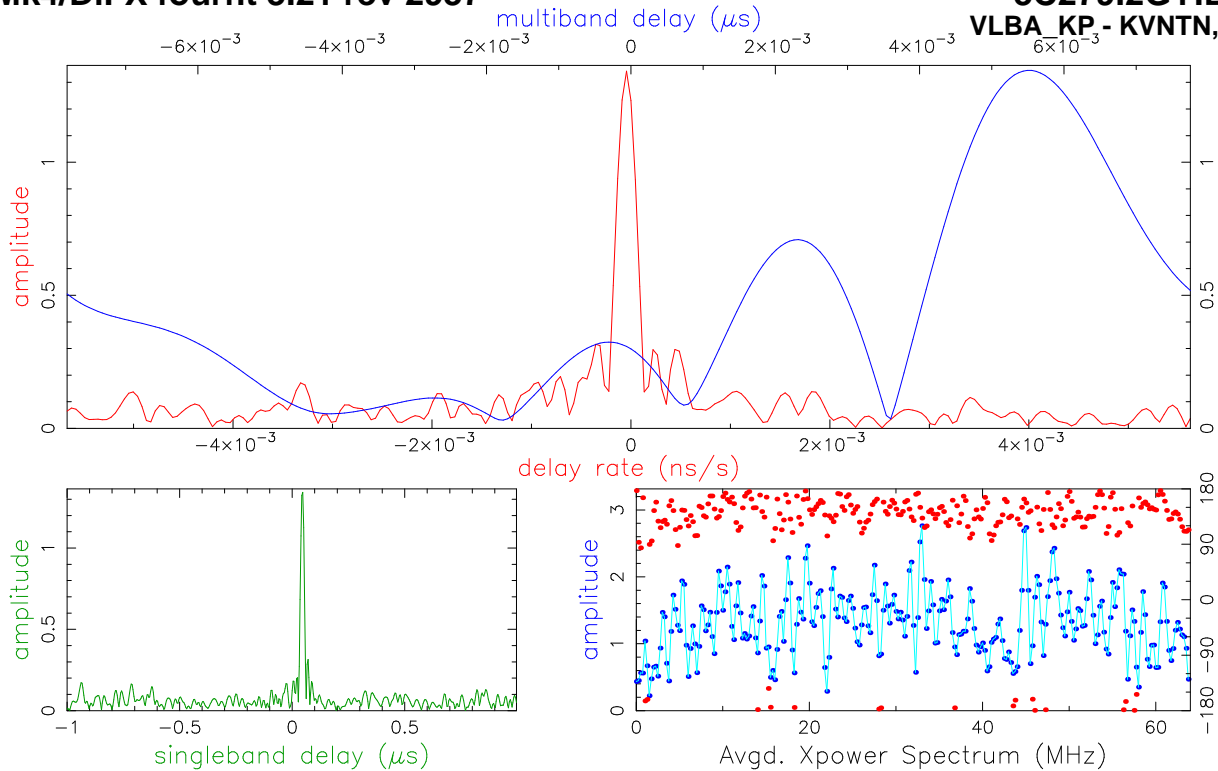
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-74.6	-136.1	-148.4	-116.0	-91.8	-71.6	-108.2	-167.8	Phase	-111.3
	1.4	1.7	1.8	1.8	2.0	1.8	1.6	0.9	Ampl.	1.6
	269.1	270.6	271.3	271.4	271.0	271.2	270.8	268.3	Sbd box	270.9
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
t	0	0	0	0	0	0	0	0	PC freqs	
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.47247767709E+03	Apriori delay (usec)	2.47241571728E+03	Resid mbdelay (usec)	-5.40188E-04	+/-	3.6E-05
Sband delay (usec)	2.47246993428E+03	Apriori clock (usec)	8.4199905E-01	Resid sbdelay (usec)	5.42170E-02	+/-	2.9E-04
Phase delay (usec)	2.47241571369E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.58794E-06	+/-	1.2E-07
Delay rate (us/s)	-2.26831617098E+00	Apriori rate (us/s)	-2.26831613763E+00	Resid rate (us/s)	-3.33532E-08	+/-	3.6E-09
Total phase (deg)	207.8	Apriori accel (us/s/s)	-1.29155916757E-05	Resid phase (deg)	-111.3	+/-	3.8

ph/seg (deg)	16.4	RMS	10.5	Theor.	16.4	Amplitude	1.406 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	19.8	Search (128X32)	1.338	Inc. seg. avg.	1.434	Inc. frq. avg.	1.610	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	37.7	Sample rate (MSamp/s):	128	Inc. frq. avg.	1.610	Inc. frq. avg.	1.610	Data rate (Mb/s):	2048	nlags:	256	t_cohere:	infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	28.5	ion window (TEC)	0.00	0.00	0.00	0.00	0.00	simultaneous interpolator								

Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, kt  
VLBA\_KP - KVNTN, fgroup W, pol RR

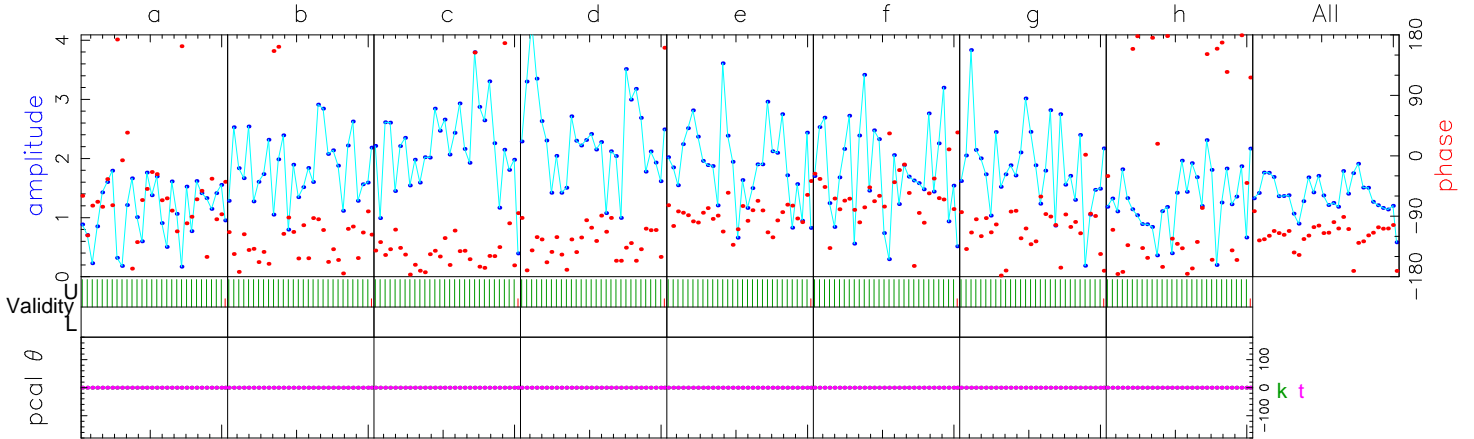


Fringe quality 6

SNR 28.9  
Int time 59.991  
Amp 1.364  
Phase -116.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.045245  
MBD 0.005431  
Fringe rate (Hz)  
-0.002590  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001605  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

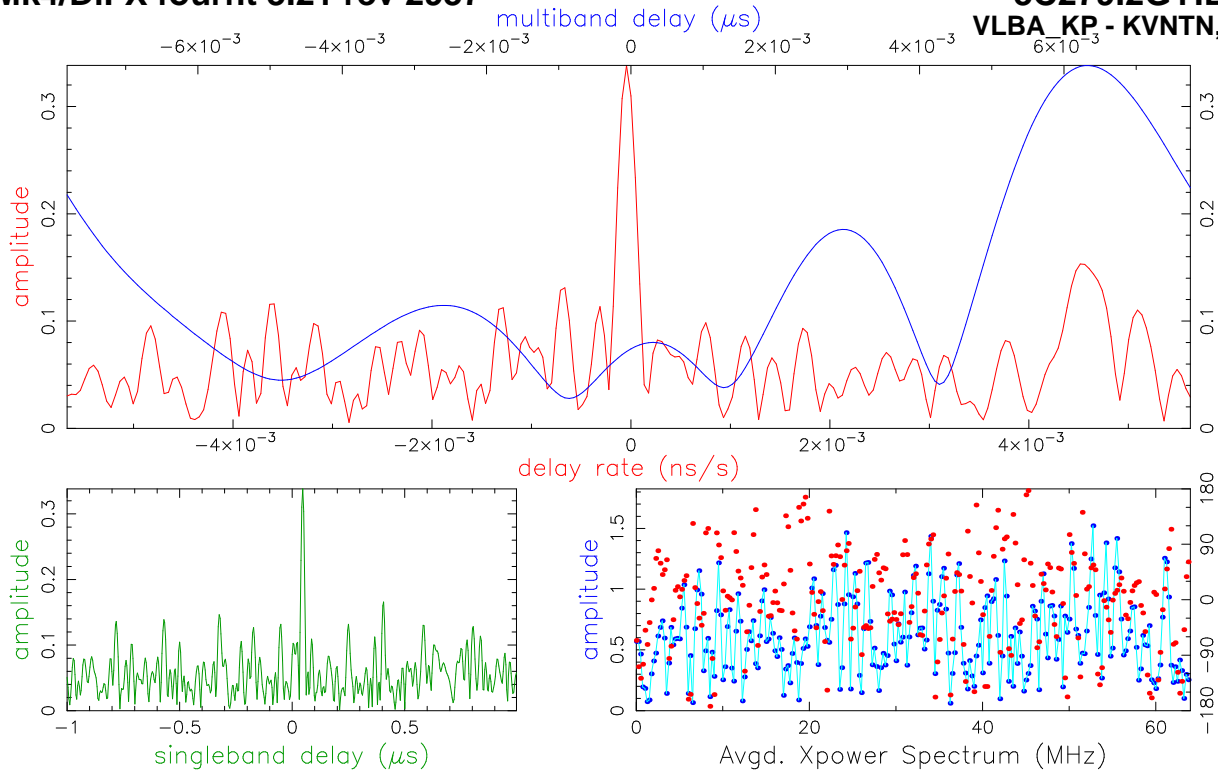
Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-73.3	-132.5	-150.8	-130.5	-89.9	-61.7	-112.1	-162.0	Phase	-116.5
	0.8	1.6	2.0	2.1	1.8	1.6	1.6	0.9	Ampl.	1.6
	266.5	268.7	268.9	268.8	268.6	268.9	268.0	266.2	Sbd box	268.6
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
t	0	0	0	0	0	0	0	0	PC freqs	
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.47246802356E+03		Apriori delay (usec)		2.47241571728E+03		Resid mbdelay (usec)		5.43128E-03	+/- 3.8E-05
Sband delay (usec)	2.47246096178E+03		Apriori clock (usec)		8.4199905E-01		Resid sbdelay (usec)		4.52445E-02	+/- 3.0E-04
Phase delay (usec)	2.47241571352E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-3.75642E-06	+/- 1.3E-07
Delay rate (us/s)	-2.26831616769E+00		Apriori rate (us/s)		-2.26831613763E+00		Resid rate (us/s)		-3.00655E-08	+/- 3.7E-09
Total phase (deg)	202.6		Apriori accel (us/s/s)		-1.29155916757E-05		Resid phase (deg)		-116.5	+/- 4.0

	RMS	Theor.	Amplitude	1.364 +/- 0.047	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	17.6	10.9	Search (128X32)	1.283	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	19.3	19.0	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.006	0.006
ph/frq (deg)	39.3	5.6	Inc. seg. avg.	1.380	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	35.8	9.8	Inc. frq. avg.	1.565					

k: az 245.4 el 24.4 pa 50.7 t: az 109.0 el 16.7 pa -52.7 u,v (fr/asec) 13052.869 -64.113 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt.W.38.2GYIBK

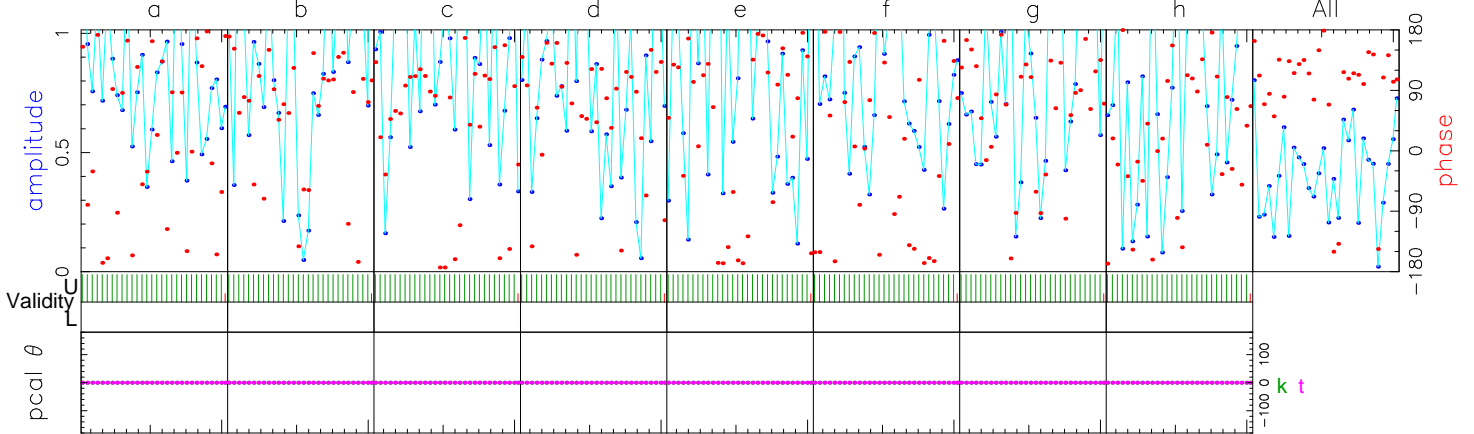


Fringe quality 9

SNR 7.2  
Int time 59.991  
Amp 0.338  
Phase 123.6  
PFD 1.5e-05  
Delays (us)  
SBD 0.046661  
MBD 0.006313  
Fringe rate (Hz) -0.003918  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build 2022:326:001503  
2022:326:001606  
2021:252:122852  
RA & Dec (J2000) 12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec

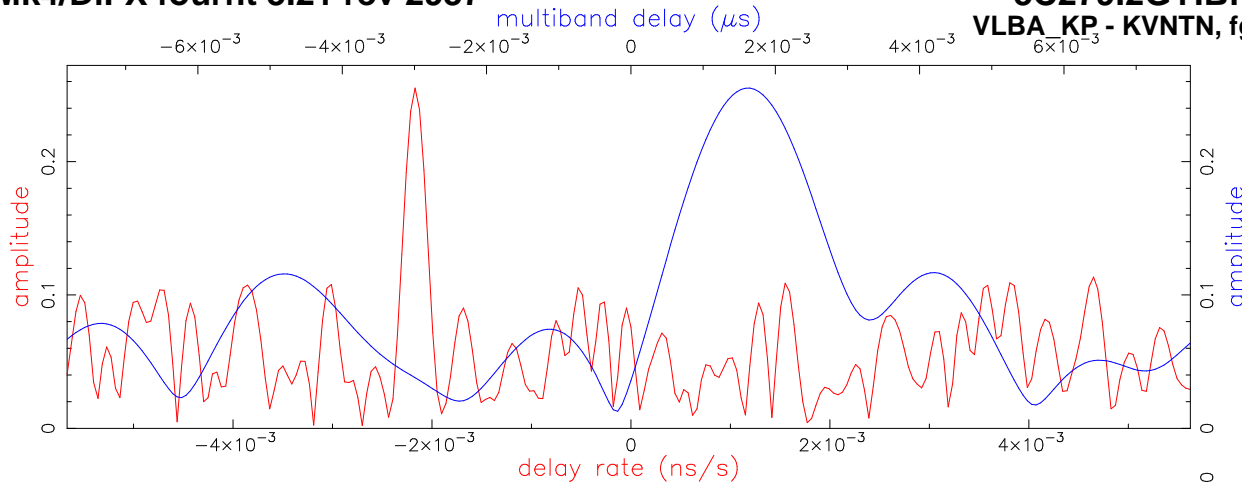


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0		
k	0	0	0	0	0	0	0	0		
t	0	0	0	0	0	0	0	0		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.47246890576E+03		Apriori delay (usec)		2.47241571728E+03		Resid mbdelay (usec)		6.31348E-03	+/- 1.5E-04
Sband delay (usec)	2.47246237803E+03		Apriori clock (usec)		8.4199905E-01		Resid sbdelay (usec)		4.66608E-02	+/- 1.2E-03
Phase delay (usec)	2.47241572126E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		3.98572E-06	+/- 5.2E-07
Delay rate (us/s)	-2.26831618311E+00		Apriori rate (us/s)		-2.26831613763E+00		Resid rate (us/s)		-4.54837E-08	+/- 1.5E-08
Total phase (deg)			82.7		Apriori accel (us/s/s)		-1.29155916757E-05		123.6	+/- 16.0

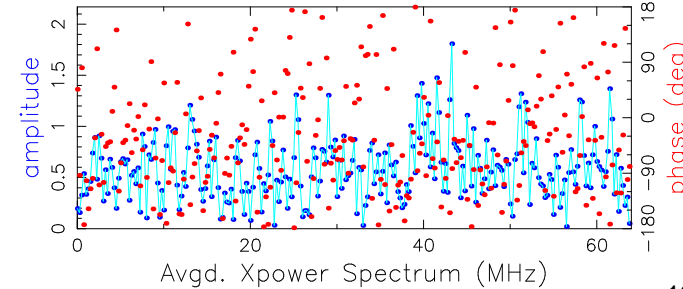
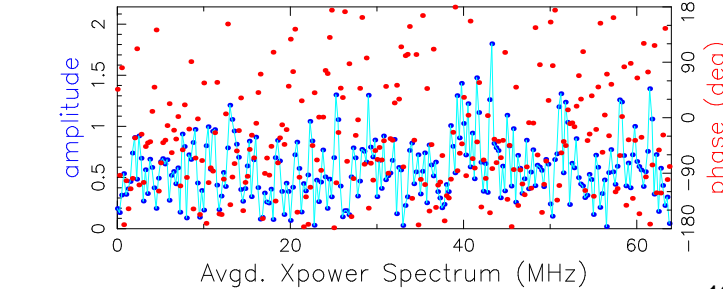
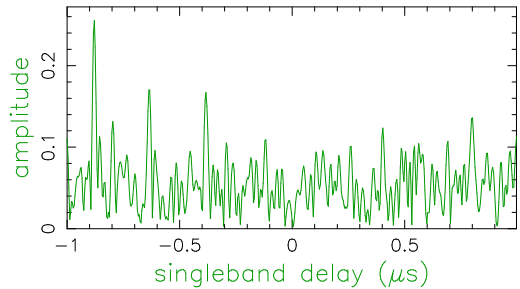
ph/seg (deg) 41.8 43.8 Search (128X32) 0.309 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.8 76.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 53.4 22.6 Inc. seg. avg. 0.314 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 54.3 39.5 Inc. frq. avg. 0.377 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.006 0.006  
 k: az 245.4 el 24.4 pa 50.7 t: az 109.0 el 16.7 pa -52.7 u,v (fr/asec) 13052.869 -64.113 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt.W.44.2GYIBK

Mk4/DiFX fourfit 3.21 rev 2937

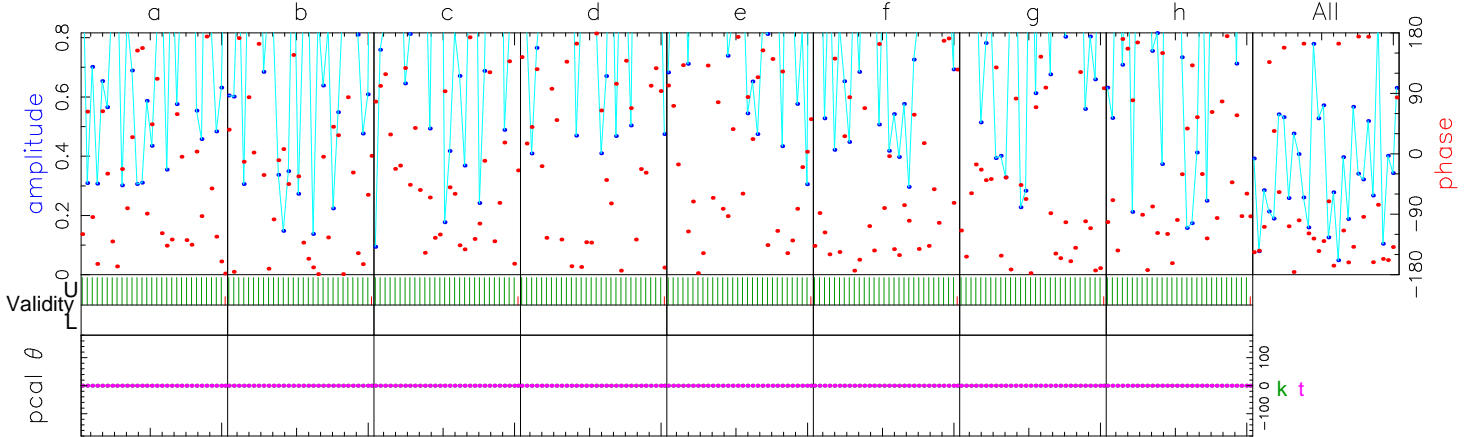
3C279.2GYIBK, No0228, kt  
VLBA\_KP - KVNTN, fgroup W, pol RL



Fringe quality 0  
SNR 5.4  
Int time 59.991  
Amp 0.272  
Phase -137.9  
PFD 5.8e-01  
Delays (us)  
SBD -0.879593  
MBD 0.001608  
Fringe rate (Hz)  
-0.187630  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001607  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"



Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec

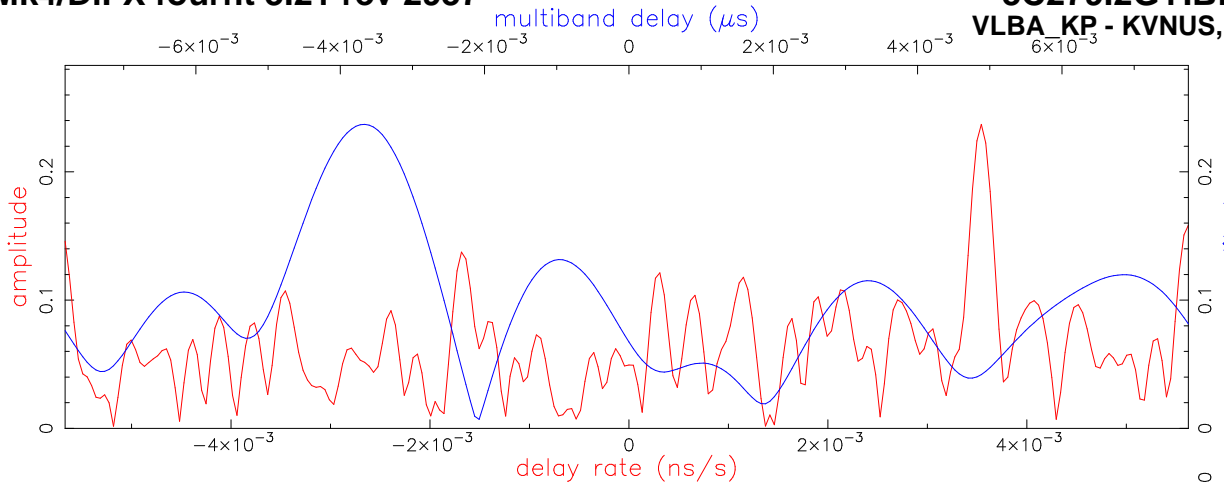


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0		
k	0	0	0	0	0	0	0	0		
t	0	0	0	0	0	0	0	0		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:t	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
t	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec)(sbd)		2.47154232566E+03			2.47241571728E+03				1.60838E-03	+/- 2.0E-04
Sband delay (usec)		2.47153612378E+03			8.4199905E-01				-8.79593E-01	+/- 1.6E-03
Phase delay (usec)		2.47241571283E+03			0.0000000E+00				-4.44624E-06	+/- 6.8E-07
Delay rate (us/s)		-2.26831831583E+00			-2.26831613763E+00				-2.17820E-06	+/- 2.0E-08
Total phase (deg)			181.2		-1.29155916757E-05				-137.9	+/- 21.1
	RMS	Theor.	Amplitude	0.272 +/- 0.050	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	53.4	57.9	Search (128X32)	0.237	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	87.5	101.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.1	29.9	Inc. seg. avg.	0.255	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.006	0.006		
amp/frq (%)	35.8	52.2	Inc. frq. avg.	0.265	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 245.4 el 24.4 pa 50.7 t: az 109.0 el 16.7 pa -52.7 u,v (fr/asec) 13052.869 -64.113 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/kt.W.53.2GYIBK

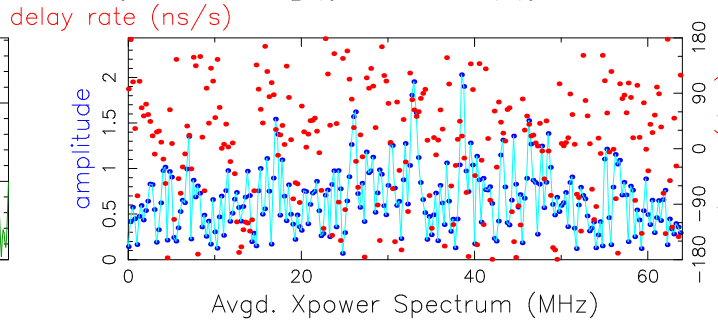
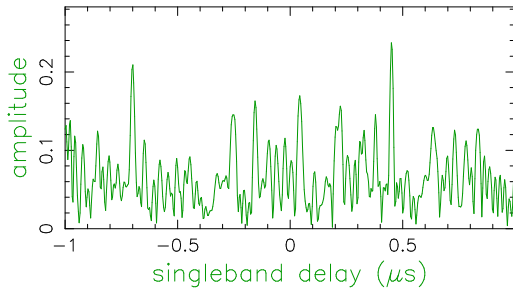
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ku  
VLBA\_KP - KVNUS, fgroup W, pol LL



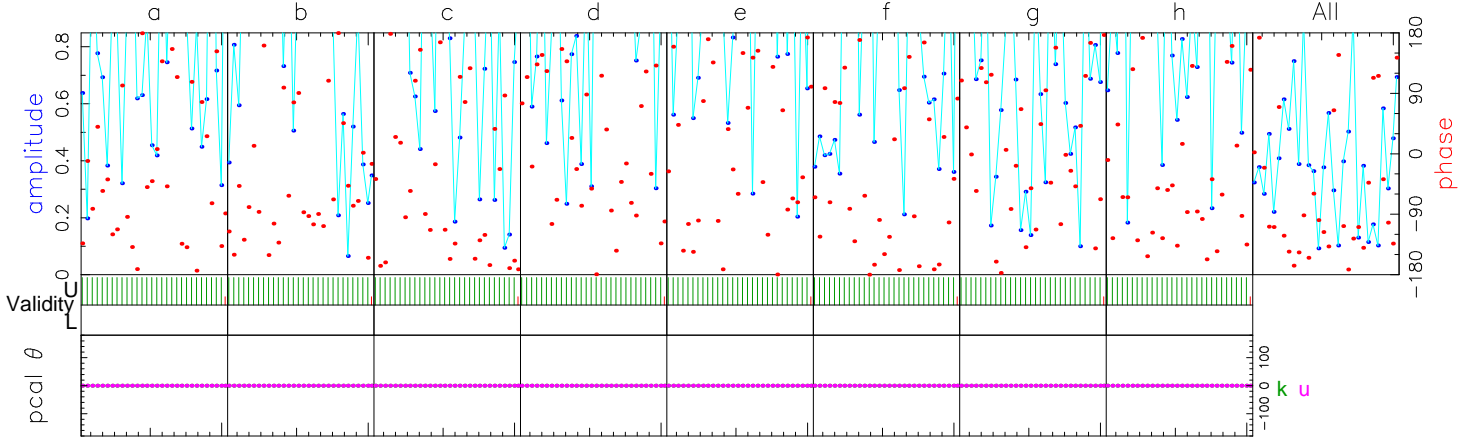
Fringe quality 0

SNR 5.1  
Int time 59.991  
Amp 0.283  
Phase -125.6  
PFD 1.0e+00  
Delays (us)  
SBD 0.450469  
MBD -0.003655  
Fringe rate (Hz)  
0.306201  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001601  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-125.3	-104.7	-148.6	-50.2	-156.7	-145.6	-27.3	-113.1	Phase	-125.6
	0.4	0.6	0.4	0.0	0.2	0.4	0.0	0.5	Ampl.	0.3
	76.4	372.2	6.9	493.4	91.6	457.3	312.1	217.6	Sbd box	372.3
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
u	0	0	0	0	0	0	0	0	PC freqs	
k:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ku	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

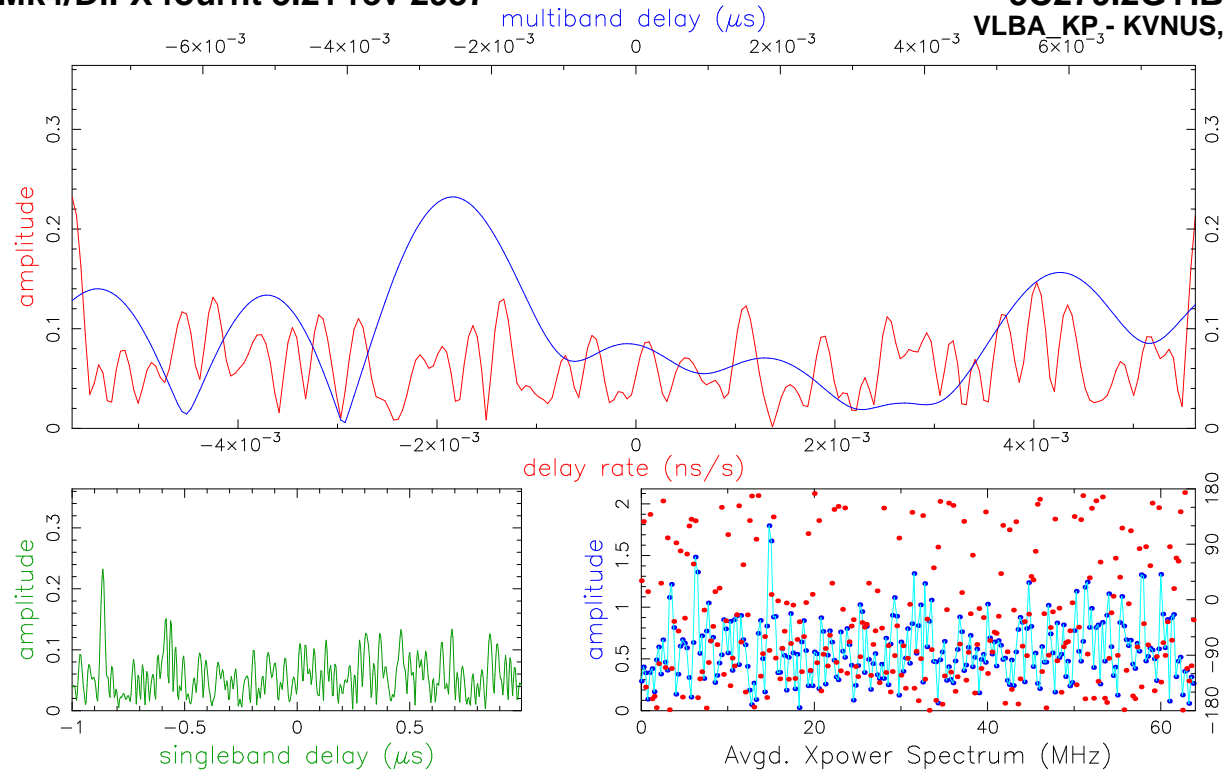
Group delay (usec)(sbd)	1.95116878163E+03	Apriori delay (usec)	1.95071931119E+03	Resid mbdelay (usec)	-3.65456E-03	+/-	2.1E-04
Sband delay (usec)	1.95116978044E+03	Apriori clock (usec)	-3.5912071E+01	Resid sbdelay (usec)	4.50469E-01	+/-	1.7E-03
Phase delay (usec)	1.95071930714E+03	Apriori clockrate (us/s)	-2.3102000E-06	Resid phdelay (usec)	-4.04969E-06	+/-	7.3E-07
Delay rate (us/s)	-2.21016203365E+00	Apriori rate (us/s)	-2.21016558835E+00	Resid rate (us/s)	3.55469E-06	+/-	2.1E-08
Total phase (deg)	42.2	Apriori accel (us/s/s)	-9.96046709064E-06	Resid phase (deg)	-125.6	+/-	22.6

ph/seg (deg)	RMS 72.6	Theor. 61.9	Amplitude Search (128X32)	0.283 +/- 0.056	0.233	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	112.1	108.0	Interp.	0.000	0.299	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	54.5	32.0	Inc. seg. avg.	0.299	0.264	Bits/sample: 2x2	Sample rate (MSamp/s): 128	dr window (ns/s)	-0.006	0.006
amp/frq (%)	66.6	55.8	Inc. frq. avg.	0.264		Data rate (Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

k: az 245.4 el 24.4 pa 50.7 u: az 111.5 el 18.1 pa -49.5 u,v (fr/asec) 12719.442 -374.101 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku.W.2.2GYIBK

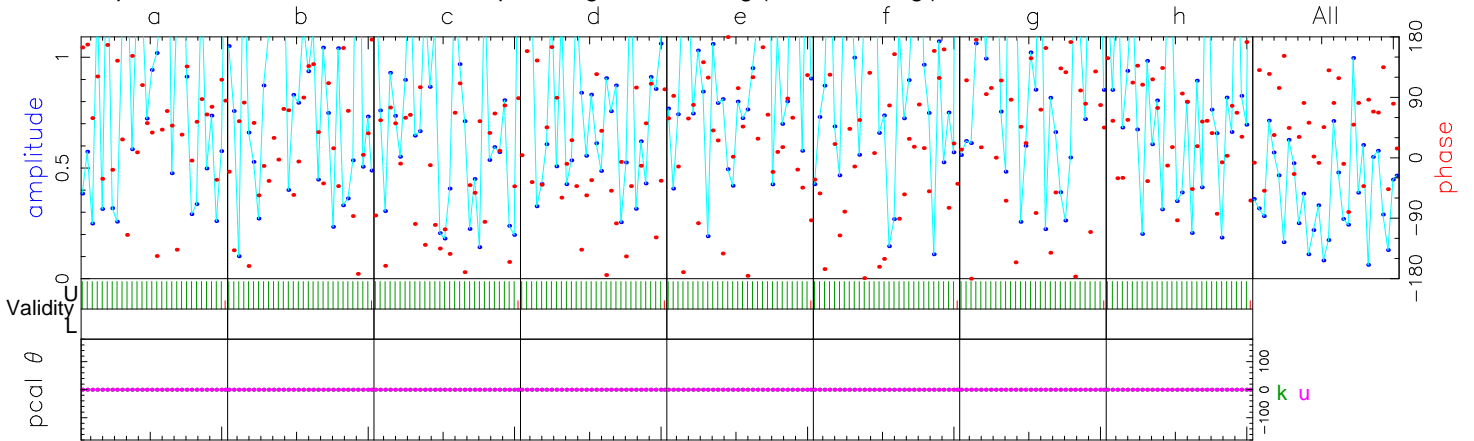
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ku  
VLBA\_KP - KVNUS, fgroup W, pol RR



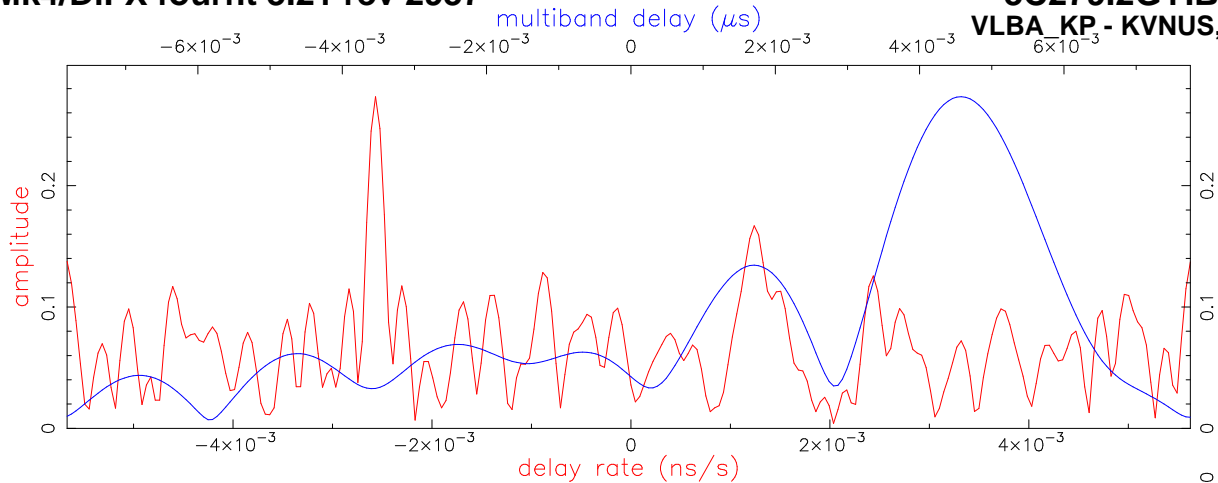
Fringe quality 0  
SNR 4.9  
Int time 59.991  
Amp 0.364  
Phase 56.5  
PFD 1.0e+00  
Delays (us)  
SBD -0.863537  
MBD -0.002546  
Fringe rate (Hz)  
-0.487238  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001603  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



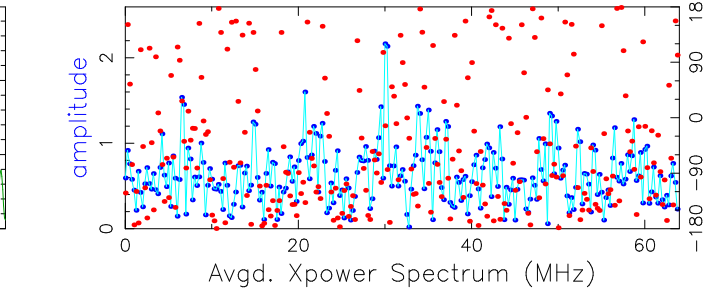
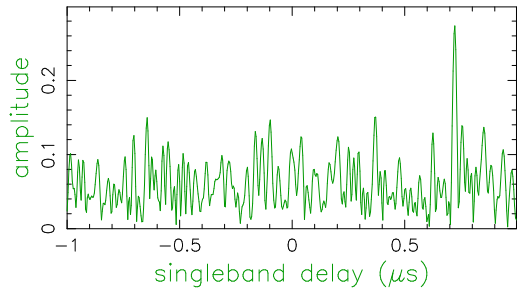
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	82.0	37.0	34.4	-35.3	66.9	17.5	107.6	45.0	Phase	56.5
	0.6	0.3	0.2	0.3	0.6	0.3	0.6	0.7	Ampl.	0.4
	480.0	58.9	201.2	133.4	328.2	112.1	179.0	131.9	Sbd box	35.9
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
u	0	0	0	0	0	0	0	0	PC freqs	
k:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ku	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.94985739021E+03		Apriori delay (usec)		1.95071931119E+03		Resid mbdelay (usec)		-2.54598E-03	+/- 2.2E-04
Sband delay (usec)	1.94985577394E+03		Apriori clock (usec)		-3.5912071E+01		Resid sbdelay (usec)		-8.63537E-01	+/- 1.8E-03
Phase delay (usec)	1.95071931301E+03		Apriori clockrate (us/s)		-2.3102000E-06		Resid phdelay (usec)		1.82094E-06	+/- 7.5E-07
Delay rate (us/s)	-2.21017124469E+00		Apriori rate (us/s)		-2.21016558835E+00		Resid rate (us/s)		-5.65635E-06	+/- 2.2E-08
Total phase (deg)	224.2		Apriori accel (us/s/s)		-9.96046709064E-06		Resid phase (deg)		56.5	+/- 23.3

ph/seg (deg) RMS Theor. Amplitude 0.364 +/- 0.074 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 62.6 63.8 Search (128X32) 0.231 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 115.6 111.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 48.9 32.9 Inc. seg. avg. 0.379 Sample rate(MISamp/s): 128 dr window (ns/s) -0.006 0.006  
amp/frq (%) 53.9 57.5 Inc. frq. avg. 0.389 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
k: az 245.4 el 24.4 pa 50.7 u: az 111.5 el 18.1 pa -49.5 u,v (fr/asec) 12719.442 -374.101 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku.W.23.2GYIBK



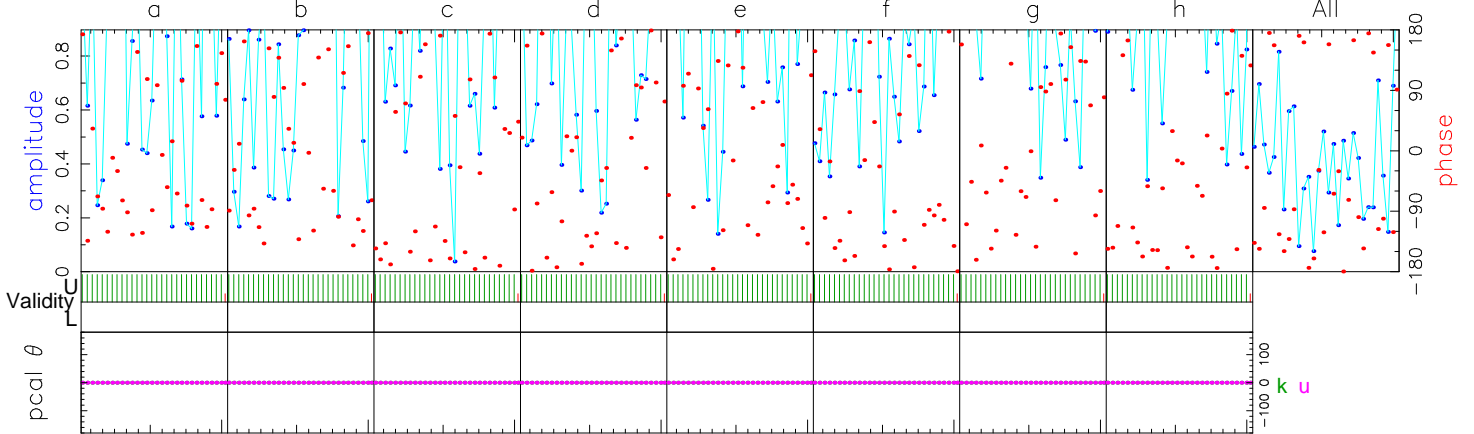
Fringe quality 0

SNR 5.8  
Int time 59.991  
Amp 0.299  
Phase -135.8  
PFD 8.8e-02  
Delays (us)  
SBD 0.721659  
MBD 0.004559  
Fringe rate (Hz)  
-0.219941  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001606  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.0	-130.0	-164.3	-166.7	-126.3	-134.2	-112.4	-133.2	Phase	-135.8
	0.3	0.3	0.4	0.3	0.2	0.4	0.2	0.4	Ampl.	0.3
	115.2	275.0	442.5	277.1	310.9	2.0	244.9	374.1	Sbd box	441.7
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
u	0	0	0	0	0	0	0	0	PC freqs	
k:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ku	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

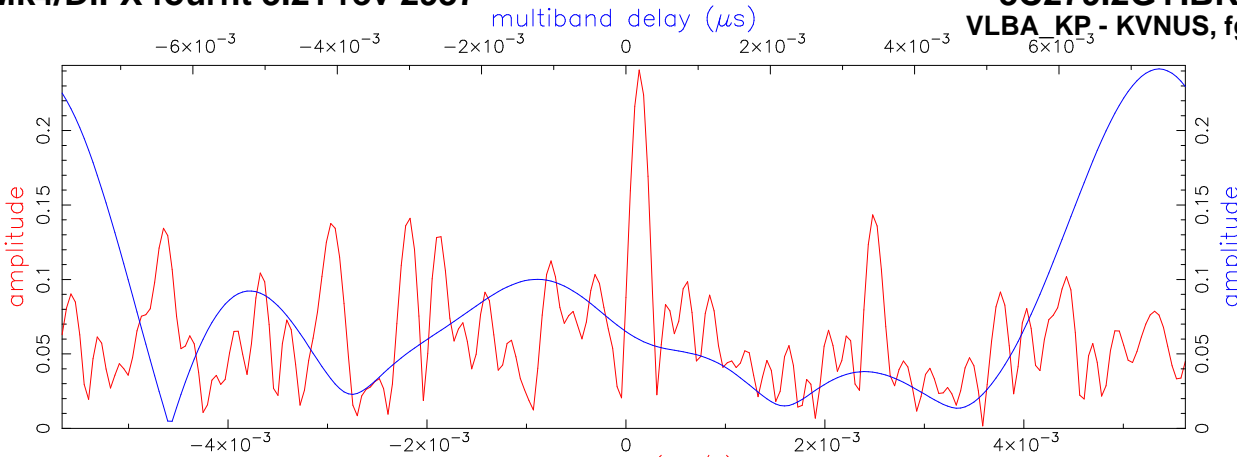
Group delay (usec)(sbd)	1.95144261987E+03	Apriori delay (usec)	1.95071931119E+03	Resid mbdelay (usec)	4.55868E-03	+/-	1.9E-04
Sband delay (usec)	1.95144097044E+03	Apriori clock (usec)	-3.5912071E+01	Resid sbdelay (usec)	7.21659E-01	+/-	1.5E-03
Phase delay (usec)	1.95071930681E+03	Apriori clockrate (us/s)	-2.3102000E-06	Resid phdelay (usec)	-4.37880E-06	+/-	6.3E-07
Delay rate (us/s)	-2.21016814164E+00	Apriori rate (us/s)	-2.21016558835E+00	Resid rate (us/s)	-2.55330E-06	+/-	1.8E-08
Total phase (deg)	32.0	Apriori accel (us/s/s)	-9.96046709064E-06	Resid phase (deg)	-135.8	+/-	19.7

ph/seg (deg)	RMS 53.7	Theor. 53.9	Amplitude Search (128X32)	0.299 +/- 0.051	0.266	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	87.5	94.1	Interp.	0.000	0.000E+00	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	26.5	27.8	Inc. seg. avg.	0.309	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.006	0.006
amp/frq (%)	27.9	48.6	Inc. frq. avg.	0.287				ion window (TEC)	0.00	0.00	

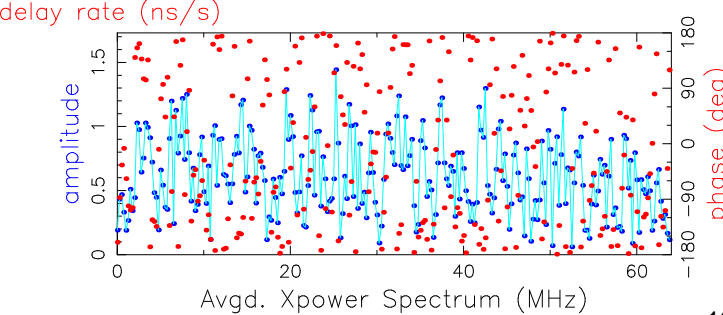
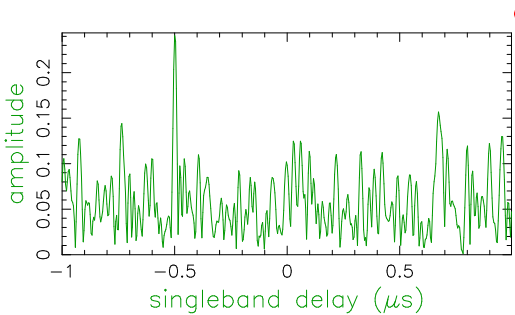
k: az 245.4 el 24.4 pa 50.7 u: az 111.5 el 18.1 pa -49.5 u,v (fr/asec) 12719.442 -374.101 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku.W.49.2GYIBK

Mk4/DiFX fourfit 3.21 rev 2937

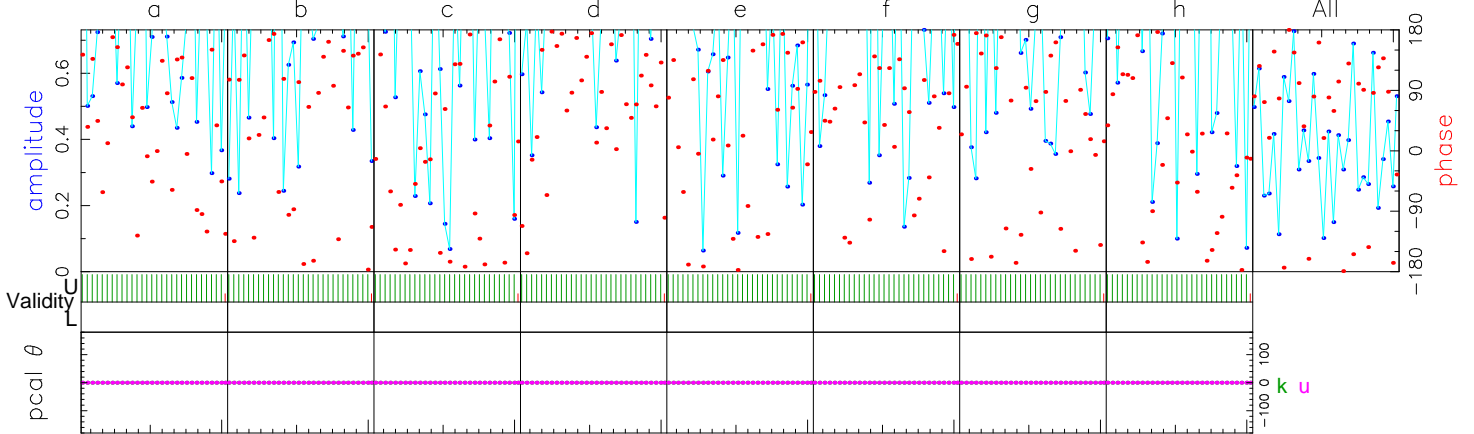
3C279.2GYIBK, No0228, ku  
VLBA\_KP - KVNUS, fgroup W, pol RL



Fringe quality 0  
SNR 5.2  
Int time 59.991  
Amp 0.244  
Phase 124.4  
PFD 9.7e-01  
Delays (us)  
SBD -0.498569  
MBD 0.007477  
Fringe rate (Hz)  
0.009803  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001607  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"



Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	85.2	150.6	172.9	121.0	130.0	100.2	135.0	118.6	Phase	124.4
	0.2	0.3	0.2	0.4	0.1	0.4	0.2	0.2	Ampl.	0.2
	93.7	204.0	499.1	174.1	488.7	128.0	59.8	362.0	Sbd box	129.4
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
u	0	0	0	0	0	0	0	0	PC freqs	
k:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ku	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.95022678771E+03	Apriori delay (usec)	1.95071931119E+03	Resid mbdelay (usec)	7.47652E-03	+/-	2.1E-04
Sband delay (usec)	1.95022074219E+03	Apriori clock (usec)	-3.5912071E+01	Resid sbdelay (usec)	-4.98569E-01	+/-	1.7E-03
Phase delay (usec)	1.95071931520E+03	Apriori clockrate (us/s)	-2.3102000E-06	Resid phdelay (usec)	4.01274E-06	+/-	7.2E-07
Delay rate (us/s)	-2.21016547455E+00	Apriori rate (us/s)	-2.21016558835E+00	Resid rate (us/s)	1.13800E-07	+/-	2.1E-08
Total phase (deg)	292.2	Apriori accel (us/s/s)	-9.96046709064E-06	Resid phase (deg)	124.4	+/-	22.2

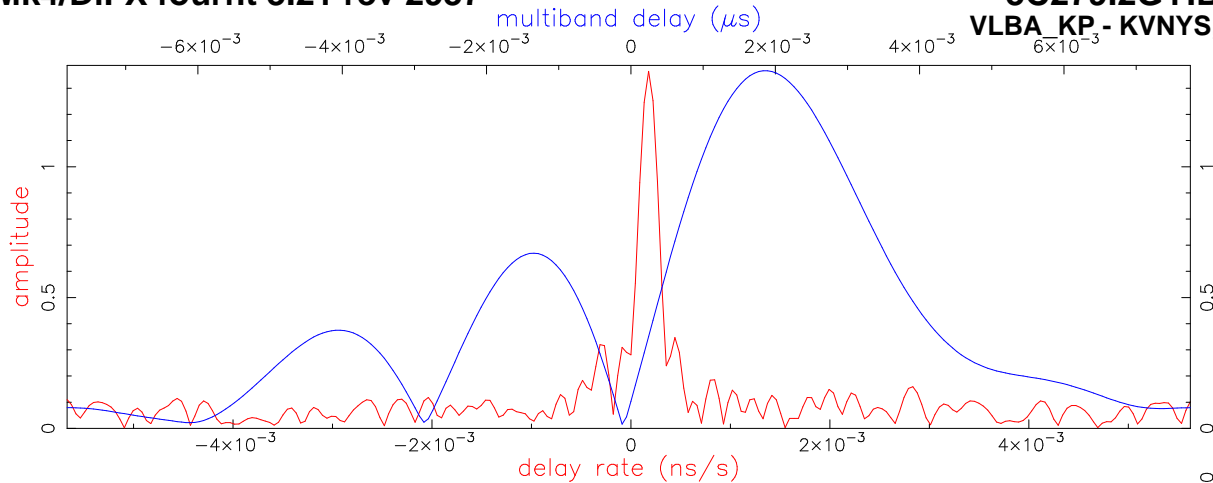
ph/seg (deg)	RMS 57.3	Theor. 60.8	Amplitude Search (128X32)	0.244 +/- 0.047	0.235	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	90.8	106.1	Interp.	0.000	0.235	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.8	31.4	Inc. seg. avg.	0.247	0.235	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.006	0.006
amp/frq (%)	39.1	54.8	Inc. frq. avg.	0.230	0.235	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 245.4 el 24.4 pa 50.7 u: az 111.5 el 18.1 pa -49.5 u,v (fr/asec) 12719.442 -374.101 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ku.W.55.2GYIBK



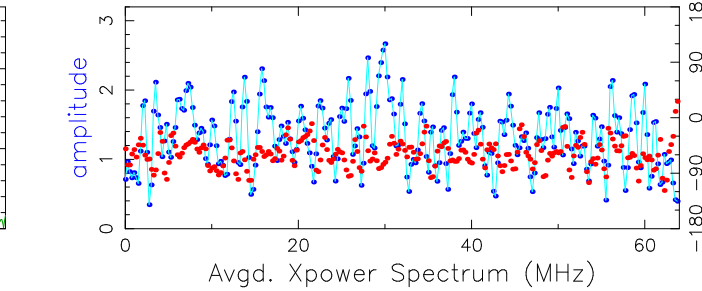
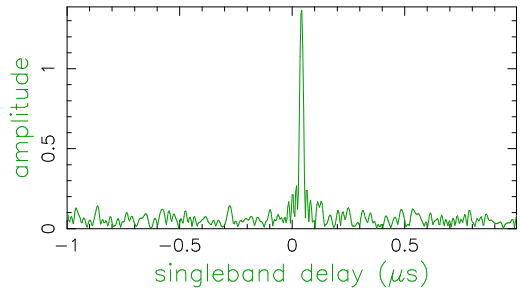
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ky  
VLBA\_KP - KVNYS, fgroup W, pol RR



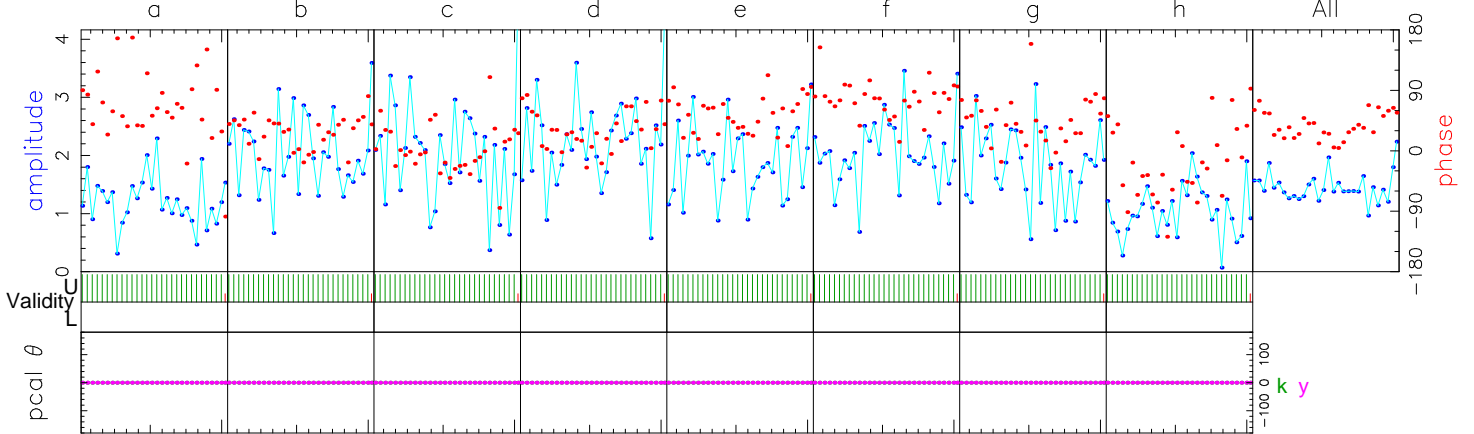
Fringe quality 6

SNR 29.4  
Int time 59.991  
Amp 1.387  
Phase 37.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.041351  
MBD 0.001779  
Fringe rate (Hz)  
0.015702  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 1.024



Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001604  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0		
k	0	0	0	0	0	0	0	0	APs used	
y	0	0	0	0	0	0	0	0	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

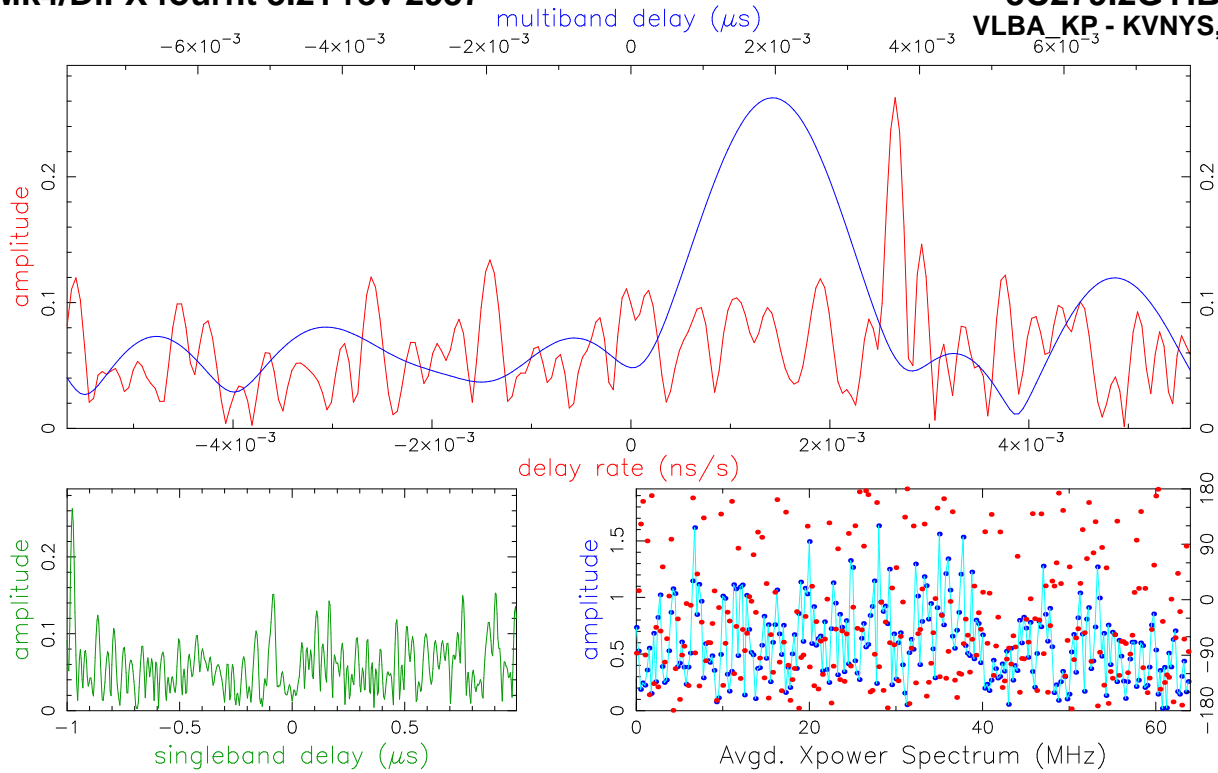
Group delay (usec)(sbd) 2.86108875162E+03 Apriori delay (usec) 2.86104009739E+03 Resid mbdelay (usec) 1.77923E-03 +/- 3.7E-05  
 Sband delay (usec) 2.86108144814E+03 Apriori clock (usec) 1.360 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Phase delay (usec) 2.86104009861E+03 Apriori clockrate (us/s) 0.0000000E+00 Resid sbdelay (usec) 4.13507E-02 +/- 2.9E-04  
 Delay rate (us/s) -2.20351609412E+00 Apriori rate (us/s) -2.20351627640E+00 Resid phdelay (usec) 1.21433E-06 +/- 1.3E-07  
 Total phase (deg) 33.8 Apriori accel (us/s/s) -1.42730623433E-05 Resid rate (us/s) 1.82281E-07 +/- 3.6E-09  
 Resid phase (deg) 37.7 +/- 3.9

RMS Theor. Amplitude 1.387 +/- 0.047 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 19.3 10.7 Search (128X32) 1.360 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 16.6 18.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 36.0 5.5 Inc. seg. avg. 1.419 Sample rate(MISamp/s): 128 dr window (ns/s) -0.006 0.006  
 amp/frq (%) 32.8 9.6 Inc. frq. avg. 1.533 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

k: az 245.4 el 24.4 pa 50.7 y: az 110.5 el 15.6 pa -48.2 u,v (fr/asec) 12678.814 -588.459 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky.W.25.2GYIBK

Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ky  
VLBA\_KP - KVNYS, fgroup W, pol LR

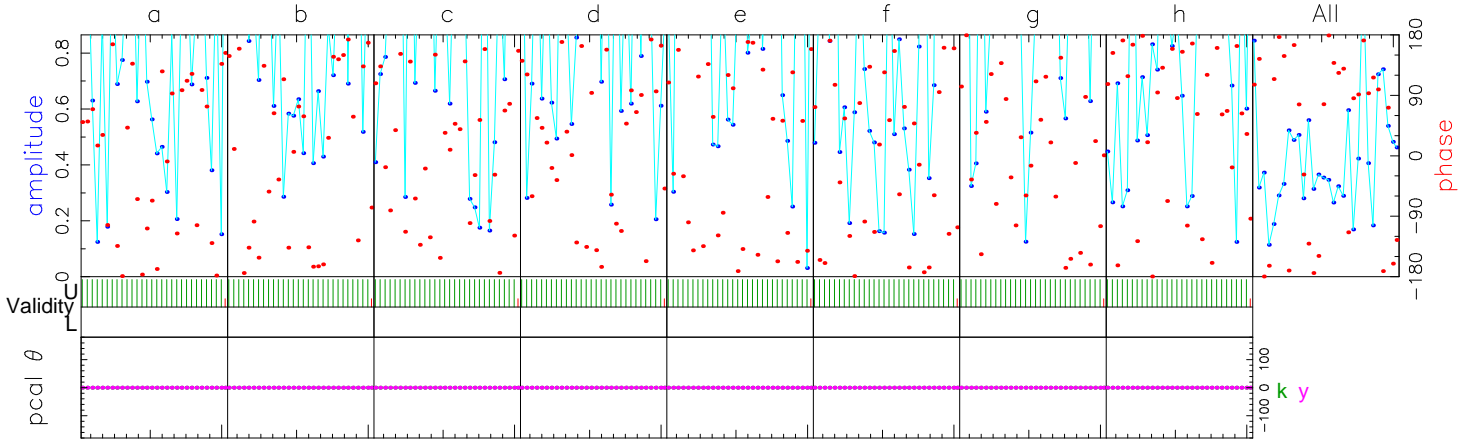


Fringe quality 0

SNR 5.6  
Int time 59.991  
Amp 0.288  
Phase 150.9  
PFD 3.3e-01  
Delays (us)  
SBD -0.976437  
MBD 0.001967  
Fringe rate (Hz) 0.230596  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build 2022:326:001503  
2022:326:001605  
2021:252:122852  
RA & Dec (J2000) 12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec

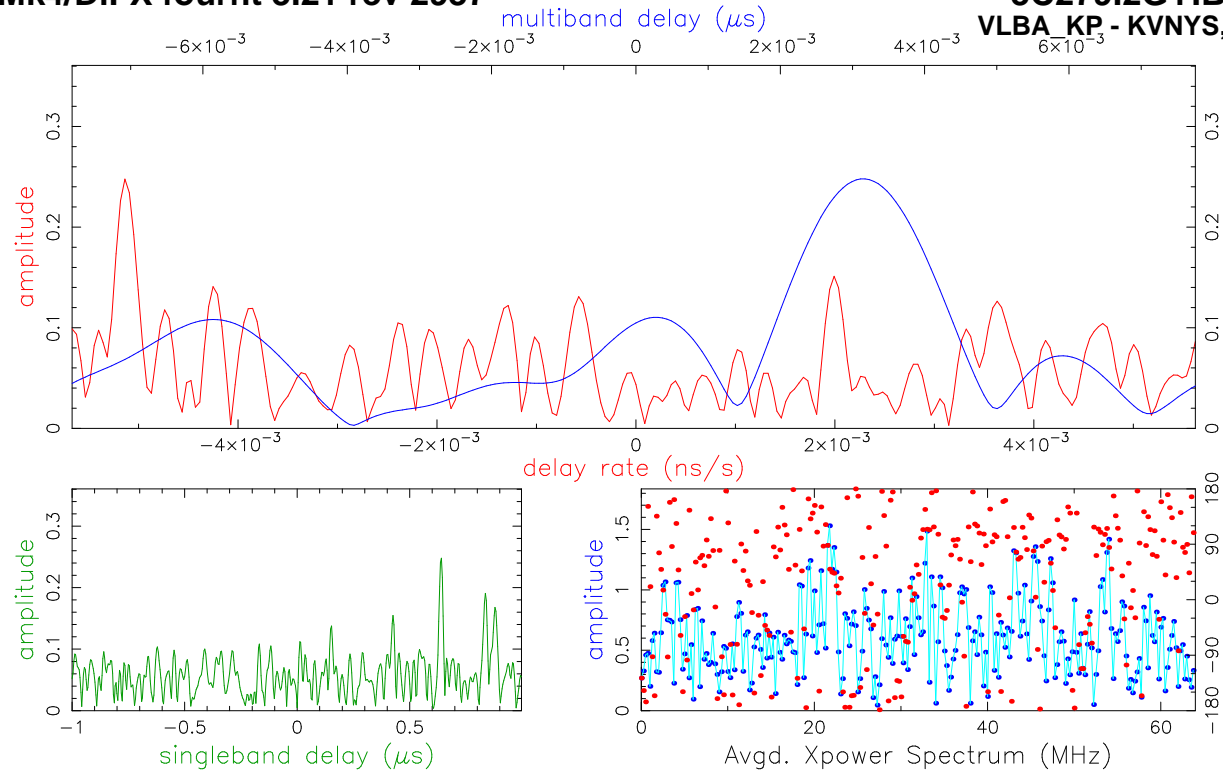


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	119.7	169.4	140.7	149.3	-177.2	149.1	121.2	138.4	Phase	150.9
	0.3	0.4	0.2	0.3	0.5	0.4	0.1	0.4	Ampl.	0.3
	290.7	1.5	302.3	342.4	6.8	119.9	434.2	446.5	Sbd box	7.0
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	0	0	0	0	0	0	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.86005768901E+03		Apriori delay (usec)		2.86104009739E+03		Resid mbdelay (usec)		1.96662E-03	+/- 2.0E-04
Sband delay (usec)	2.86006366014E+03		Apriori clock (usec)		1.4349976E+00		Resid sbdelay (usec)		-9.76437E-01	+/- 1.5E-03
Phase delay (usec)	2.86104010226E+03		Apriori clockrate (us/s)		0.000000E+00		Resid phdelay (usec)		4.86674E-06	+/- 6.6E-07
Delay rate (us/s)	-2.20351359941E+00		Apriori rate (us/s)		-2.20351627640E+00		Resid rate (us/s)		2.67699E-06	+/- 1.9E-08
Total phase (deg)	147.1		Apriori accel (us/s/s)		-1.42730623433E-05		Resid phase (deg)		150.9	+/- 20.6

ph/seg (deg) 58.9 56.4 Search (128X32) 0.252 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 103.9 98.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 24.1 29.1 Inc. seg. avg. 0.318 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 36.9 50.8 Inc. frq. avg. 0.274 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.006 0.006  
k: az 245.4 el 24.4 pa 50.7 y: az 110.5 el 15.6 pa -48.2 u,v (fr/asec) 12678.814 -588.459 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky.W.40.2GYIBK

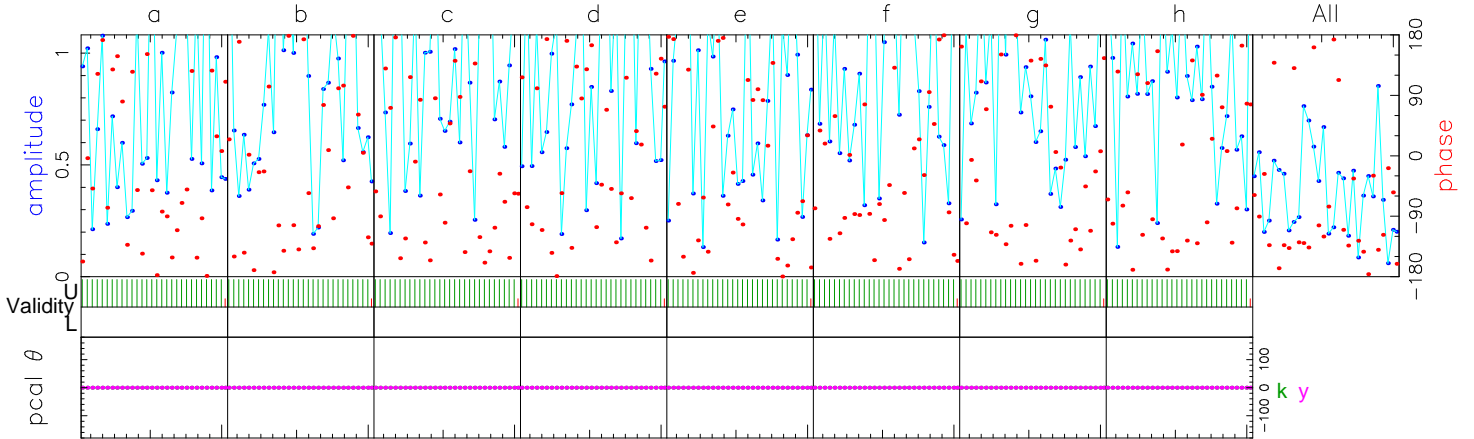
Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ky  
VLBA\_KP - KVNYS, fgroup W, pol RL



Fringe quality 0  
SNR 5.3  
Int time 59.991  
Amp 0.361  
Phase -131.3  
PFD 8.3e-01  
Delays (us)  
SBD 0.639385  
MBD 0.003104  
Fringe rate (Hz) -0.444729  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 1.024  
Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001606  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
-5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.8	-136.4	-126.4	-166.2	-170.3	-82.1	-139.9	-122.4	Phase	-131.3
	0.3	0.3	0.5	0.2	0.4	0.4	0.4	0.5	Ampl.	0.3
	375.7	209.0	184.5	55.4	413.8	406.6	324.5	261.6	Sbd box	420.7
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	0	0	0	0	0	0	0	0	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

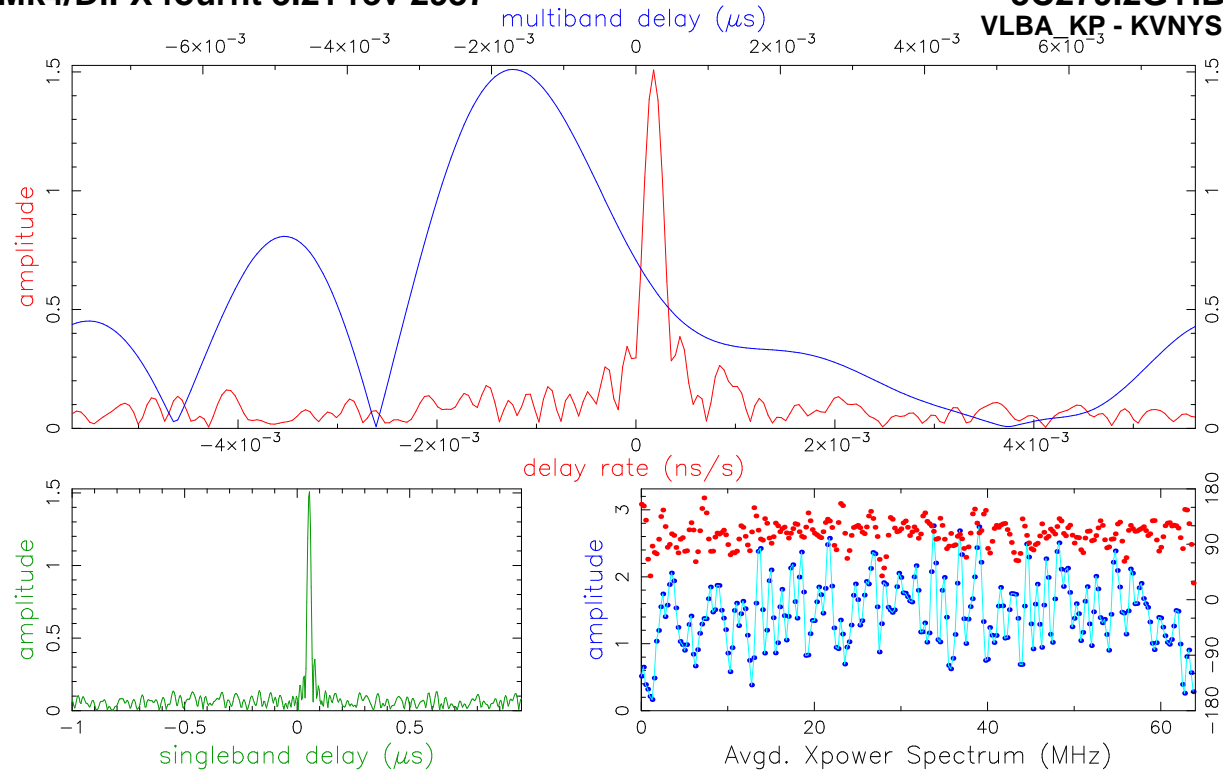
Group delay (usec)(sbd)	2.86168382656E+03	Apriori delay (usec)	2.86104009739E+03	Resid mbdelay (usec)	3.10417E-03	+/-	2.1E-04
Sband delay (usec)	2.86167948239E+03	Apriori clock (usec)	1.4349976E+00	Resid sbdelay (usec)	6.39385E-01	+/-	1.6E-03
Phase delay (usec)	2.86104009316E+03	Apriori clockrate (us/s)	0.000000E+00	Resid phdelay (usec)	-4.23366E-06	+/-	7.0E-07
Delay rate (us/s)	-2.20352143927E+00	Apriori rate (us/s)	-2.20351627640E+00	Resid rate (us/s)	-5.16287E-06	+/-	2.0E-08
Total phase (deg)	224.9	Apriori accel (us/s/s)	-1.42730623433E-05	Resid phase (deg)	-131.3	+/-	21.7

ph/seg (deg)	59.5	Theor.	59.3	Amplitude	0.361 +/- 0.068	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	97.5	Search (128X32)	0.237	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	30.1	Inc. seg. avg.	0.370	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	28.1	Inc. frq. avg.	0.344	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 245.4 el 24.4 pa 50.7 y: az 110.5 el 15.6 pa -48.2 u,v (fr/asec) 12678.814 -588.459 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky.W.48.2GYIBK

Mk4/DiFX fourfit 3.21 rev 2937

3C279.2GYIBK, No0228, ky  
VLBA\_KP - KVNYS, fgroup W, pol LL

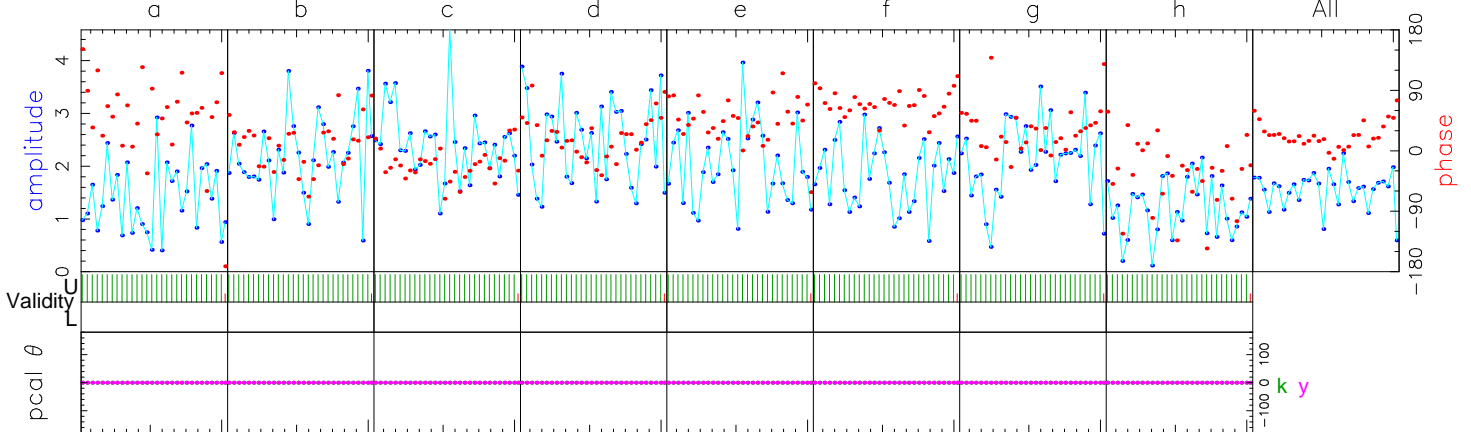


Fringe quality 6

SNR 32.3  
Int time 59.991  
Amp 1.527  
Phase 21.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.053238  
MBD -0.001780  
Fringe rate (Hz) 0.015905  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 1.024

Exp. c221a  
Exper # 16383  
Yr:day 2022:091  
Start 113001.00  
Stop 113101.41  
FRT 113131.00  
Corr/FF/build  
2022:326:001503  
2022:326:001602  
2021:252:122852  
RA & Dec (J2000)  
12h56m11.166577s  
--5°47'21.525129"

Amp. and Phase vs. time for each freq., 30 segs, 2 APs / seg (2.05 sec / seg.), time ticks 5 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	59/0	59/0	59/0	59/0	59/0	59/0	59/0	59/0				
k	0	0	0	0	0	0	0	0				
y	0	0	0	0	0	0	0	0				
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
k	1000	1000	1000	1000	1000	1000	1000	1000				
y	1000	1000	1000	1000	1000	1000	1000	1000				
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)		2.86110081784E+03				2.86104009739E+03			Resid mbdelay (usec)	-1.77955E-03 +/- 3.4E-05		
Sband delay (usec)		2.86109333514E+03				1.4349976E+00			Resid sbdelay (usec)	5.32378E-02 +/- 2.7E-04		
Phase delay (usec)		2.86104009810E+03				0.0000000E+00			Resid phdelay (usec)	7.07365E-07 +/- 1.1E-07		
Delay rate (us/s)		-2.20351609177E+00				-2.20351627640E+00			Resid rate (us/s)	1.84639E-07 +/- 3.3E-09		
Total phase (deg)			18.1			-1.42730623433E-05			Resid phase (deg)	21.9 +/- 3.5		
	RMS	Theor.	Amplitude	1.527 +/- 0.047		PCal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			
ph/seg (deg)	17.2	9.7	Search (128X32)	1.479		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000		
amp/seg (%)	20.2	16.9	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	37.5	5.0	Inc. seg. avg.	1.558		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.006 0.006		
amp/frq (%)	33.5	8.7	Inc. frq. avg.	1.737		Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 245.4 el 24.4 pa 50.7 y: az 110.5 el 15.6 pa -48.2 u,v (fr/asec) 12678.814 -588.459 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky..2GYIBK Output file: /Exps/c221a/FRINGE/3mm/AtKp/1234/No0228/ky.W.6.2GYIBK