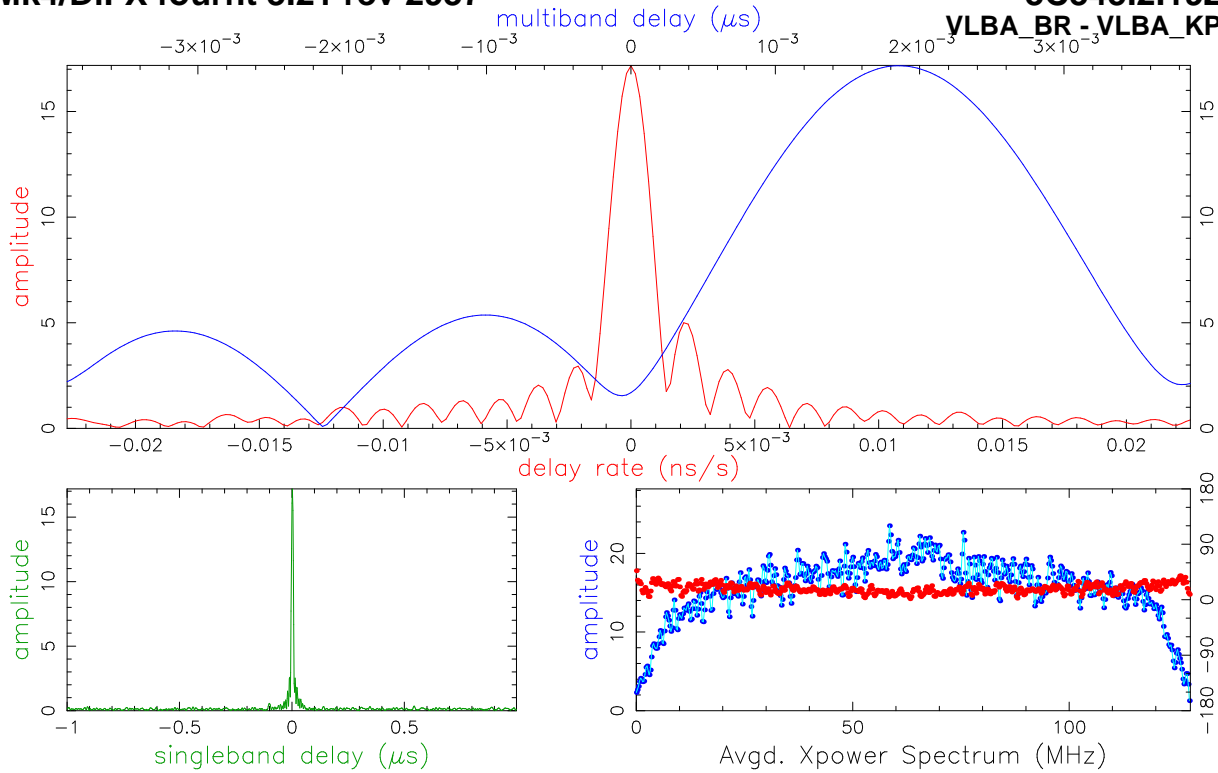


Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, bk  
VLBA\_BR - VLBA\_KP, fgroup Q, pol LL

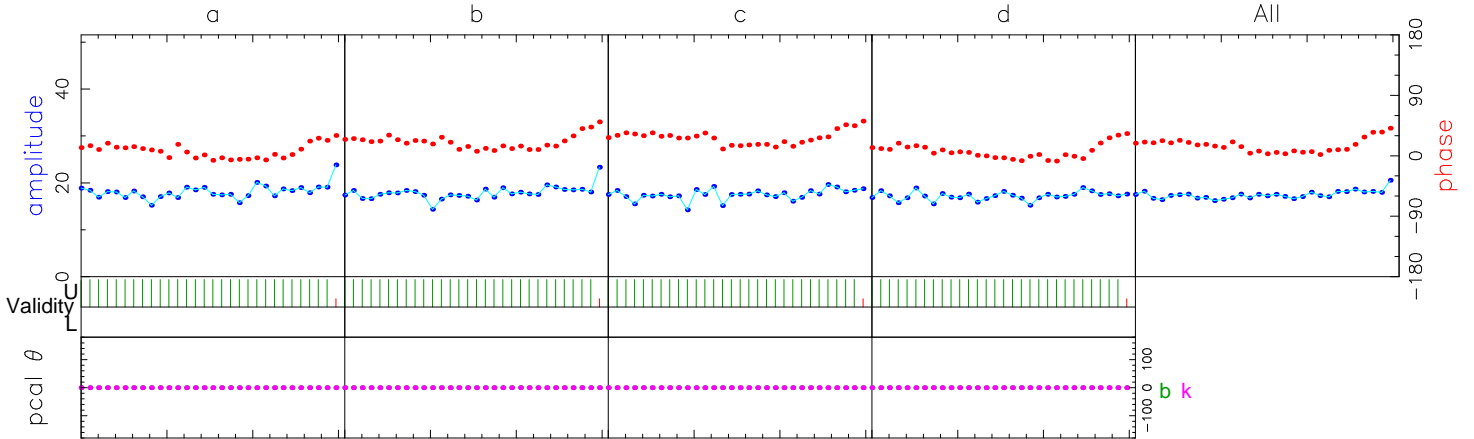


Fringe quality 8

SNR 181.9  
Int time 14.983  
Amp 17.185  
Phase 14.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.001746  
MBD 0.001844  
Fringe rate (Hz)  
-0.001717  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512

Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224247  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Sbd box	513.9
b	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
b	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

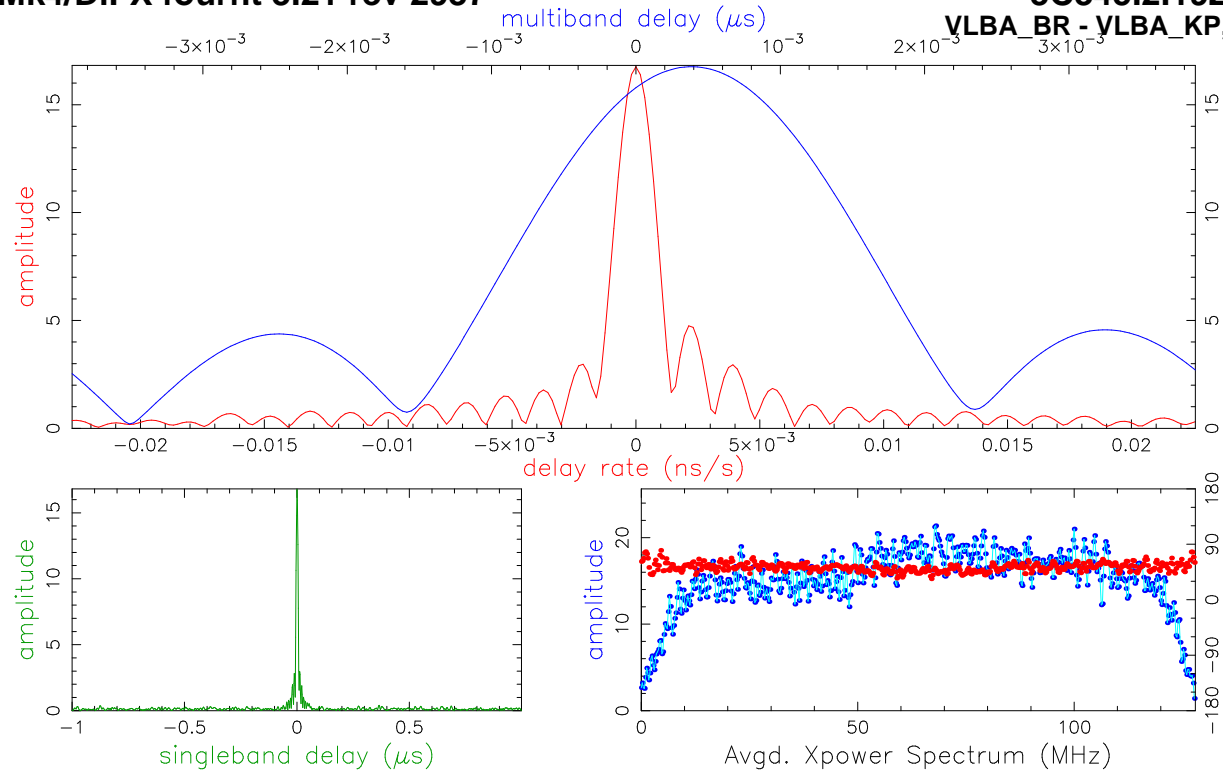
Group delay (usec)(sbd)	2.04282577987E+03	Apriori delay (usec)	2.04282393606E+03	Resid mbdelay (usec)	1.84381E-03	+/-	6.1E-06
Sband delay (usec)	2.04282568168E+03	Apriori clock (usec)	-4.2021637E+00	Resid sbdelay (usec)	1.74563E-03	+/-	2.4E-05
Phase delay (usec)	2.04282393702E+03	Apriori clockrate (us/s)	-3.5177999E-07	Resid phdelay (usec)	9.64047E-07	+/-	4.1E-08
Delay rate (us/s)	2.41714507163E-01	Apriori rate (us/s)	2.41714547171E-01	Resid rate (us/s)	-4.00074E-08	+/-	4.6E-09
Total phase (deg)	282.7	Apriori accel (us/s/s)	4.65211699550E-06	Resid phase (deg)	14.9	+/-	0.6

	RMS	Theor.	Amplitude	17.185 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	9.3	1.7	Search (64X16)	17.090	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.004	0.004
amp/seg (%)	4.3	3.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.023	0.023
ph/frq (deg)	12.5	0.6	Inc. seg. avg.	17.396	Sample rate(MISamp/s): 256		ion window (TEC)	0.00	0.00
amp/frq (%)	2.0	1.1	Inc. frq. avg.	17.371	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite		

b: az 268.5 el 60.5 pa 60.3 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) -891.641 891.741 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/bk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/bk.Q.35.2119Z6

Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, bk  
VLBA\_BR - VLBA\_KP, fgroup Q, pol RR

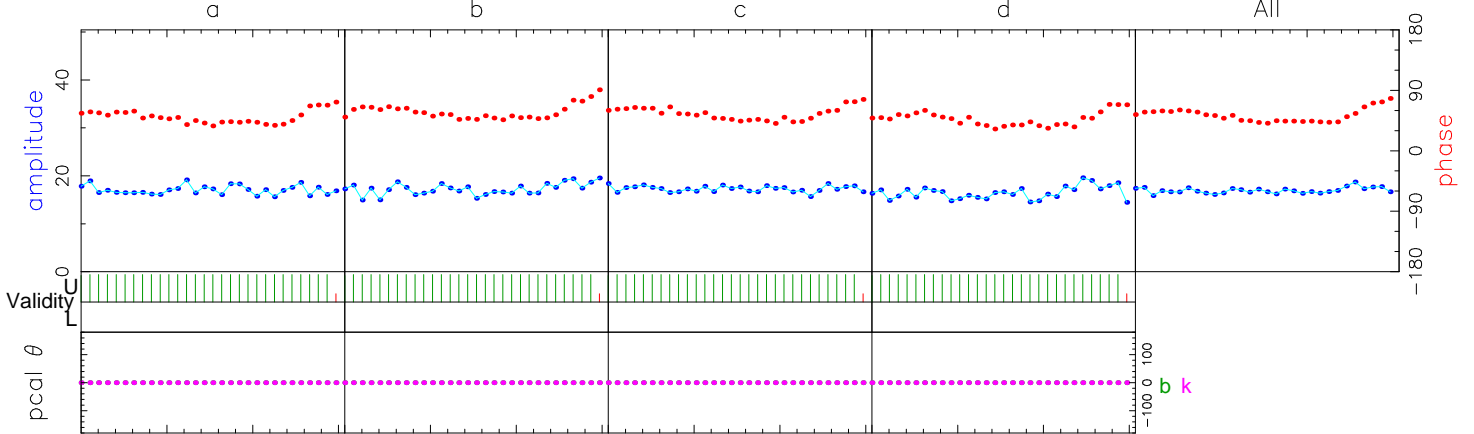


Fringe quality 9

SNR 178.1  
Int time 14.983  
Amp 16.821  
Phase 52.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.000410  
MBD 0.000406  
Fringe rate (Hz)  
-0.001924  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512

Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224248  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Sbd box	513.2
b	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	PC freqs	
b:k	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	Manl PC	
k	1000	1000	1000	1000	PC amp	
b	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	2.04282434184E+03	Apriori delay (usec)	2.04282393606E+03	Resid mbdelay (usec)	4.05781E-04	+/-	6.2E-06
Sband delay (usec)	2.04282434556E+03	Apriori clock (usec)	-4.2021637E+00	Resid sbdelay (usec)	4.09500E-04	+/-	2.4E-05
Phase delay (usec)	2.04282393945E+03	Apriori clockrate (us/s)	-3.5177999E-07	Resid phdelay (usec)	3.39318E-06	+/-	4.2E-08
Delay rate (us/s)	2.41714502339E-01	Apriori rate (us/s)	2.41714547171E-01	Resid rate (us/s)	-4.48319E-08	+/-	4.7E-09
Total phase (deg)	320.3	Apriori accel (us/s/s)	4.65211699550E-06	Resid phase (deg)	52.4	+/-	0.6

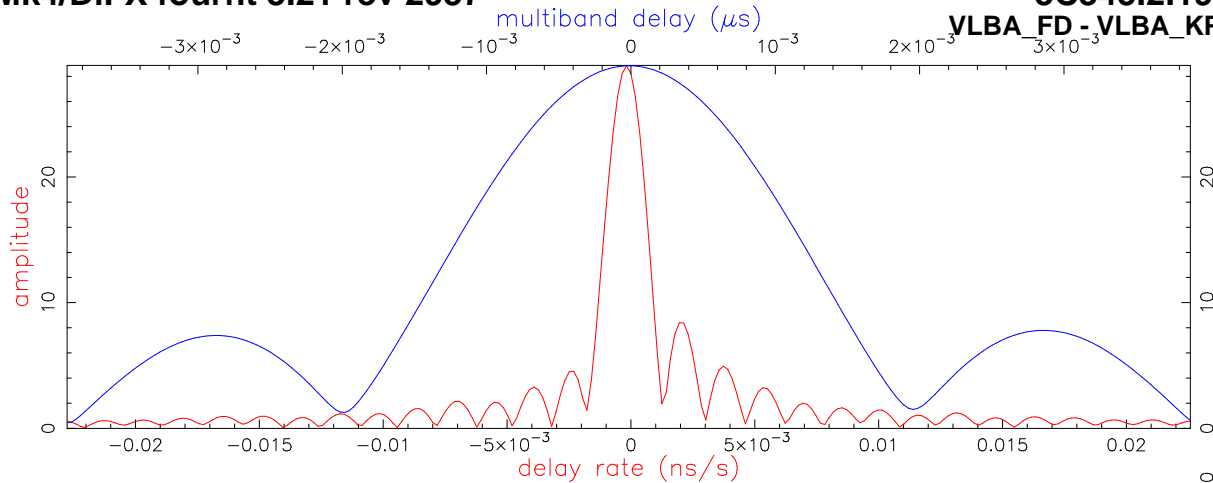
	RMS	Theor.	Amplitude	16.821 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	9.1	1.8	Search (64X16)	16.670	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	3.7	3.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	5.8	0.6	Inc. seg. avg.	16.963	Sample rate(MISamp/s): 256		dr window (ns/s)	-0.023	0.023	
amp/frq (%)	1.8	1.1	Inc. frq. avg.	16.799	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 268.5 el 60.5 pa 60.3 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) -891.641 891.741 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/bk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/bk.Q.43.2119Z6

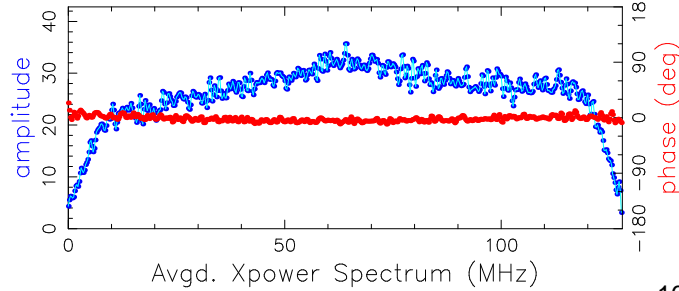
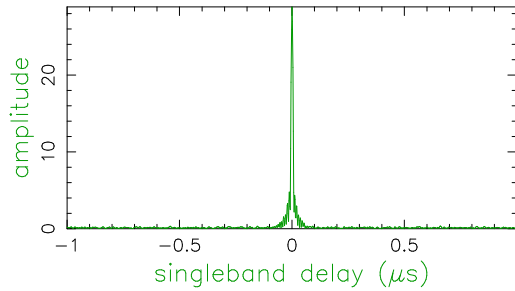
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2I19Z6, No0193, fk  
VLBA\_FD - VLBA\_KP, fgroup Q, pol LL



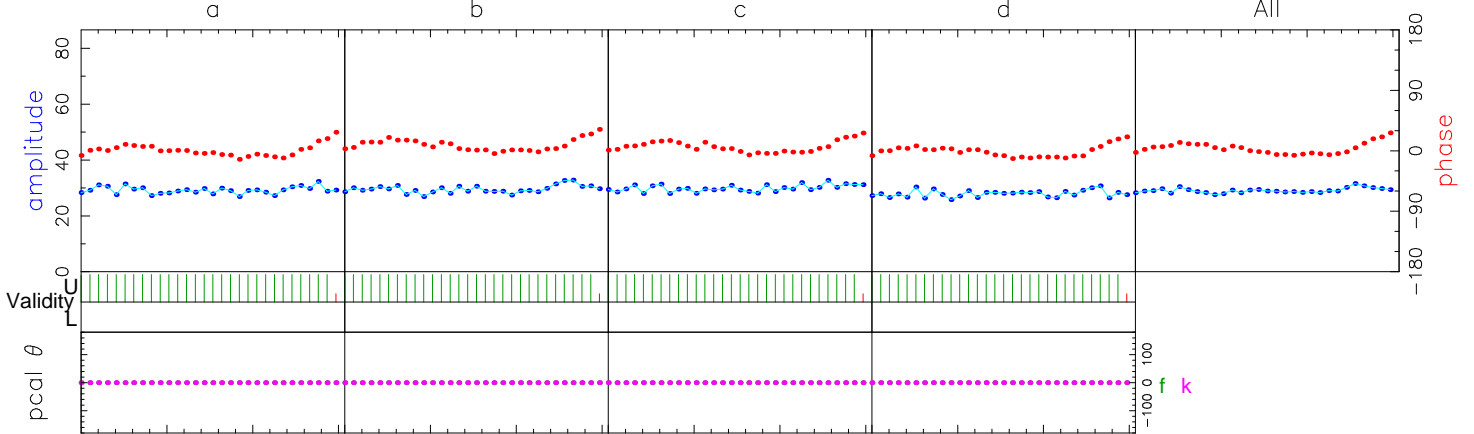
Fringe quality 9

SNR 305.7  
Int time 14.985  
Amp 28.875  
Phase 3.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.000229  
MBD 0.000001  
Fringe rate (Hz)  
-0.006953  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224247  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0		
f	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	ManI PC	
f	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
f	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

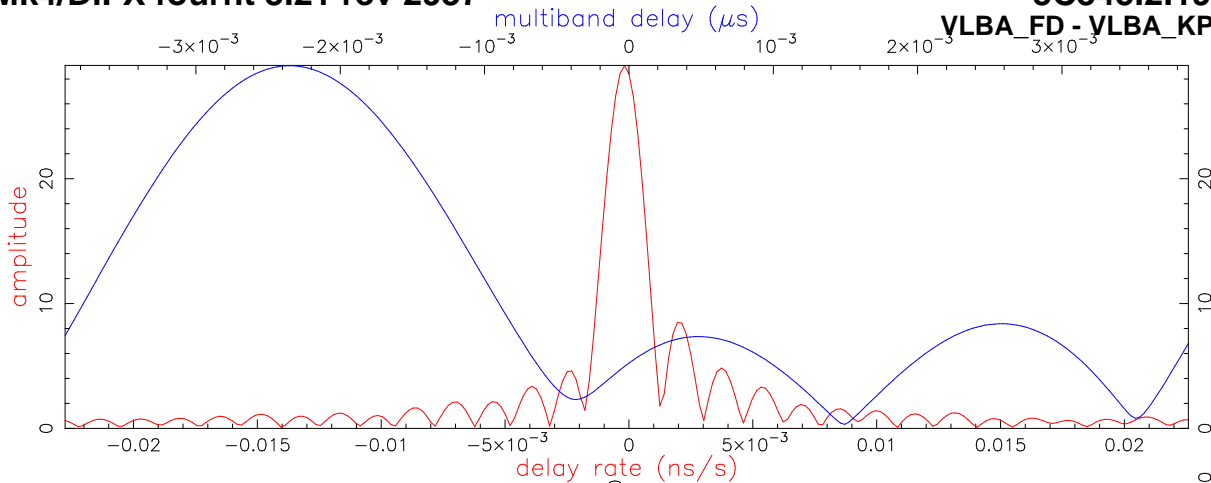
Group delay (usec)(sbd)	-1.61563571398E+03	Apriori delay (usec)	-1.61563571467E+03	Resid mbdelay (usec)	6.87500E-07	+/- 3.6E-06
Sband delay (usec)	-1.61563548554E+03	Apriori clock (usec)	1.6602425E+01	Resid sbdelay (usec)	2.29125E-04	+/- 1.4E-05
Phase delay (usec)	-1.61563571445E+03	Apriori clockrate (us/s)	2.2914000E-07	Resid phdelay (usec)	2.16334E-07	+/- 2.4E-08
Delay rate (us/s)	-9.43763055962E-02	Apriori rate (us/s)	-9.43761435641E-02	Resid rate (us/s)	-1.62032E-07	+/- 2.7E-09
Total phase (deg)	-280.3	Apriori accel (us/s/s)	7.25708576018E-06	Resid phase (deg)	3.3	+/- 0.4

ph/seg (deg)	RMS 7.6	Theor. 1.0	Amplitude Search (64X16)	28.875 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	3.1	1.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
ph/frq (deg)	5.6	0.4	Inc. seg. avg.	29.096	Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023
amp/frq (%)	2.5	0.7	Inc. frq. avg.	28.911	Data rate(Mb/s): 2048	nlags: 512	ion window (TEC)	0.00	0.00

f: az 297.4 el 44.5 pa 83.5 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) 355.488 165.523 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/fk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/fk.Q.31.2119Z6

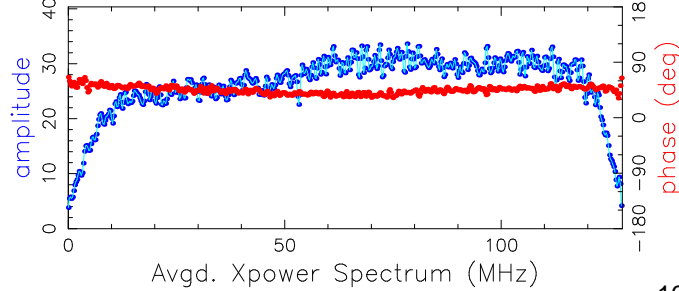
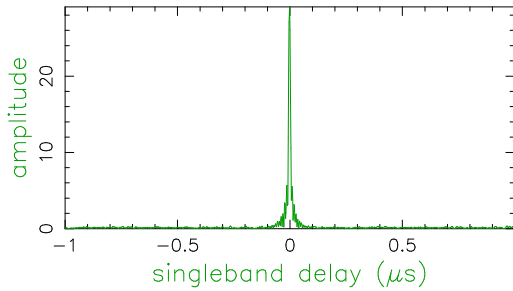
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2I19Z6, No0193, fk  
VLBA\_FD - VLBA\_KP, fgroup Q, pol RR



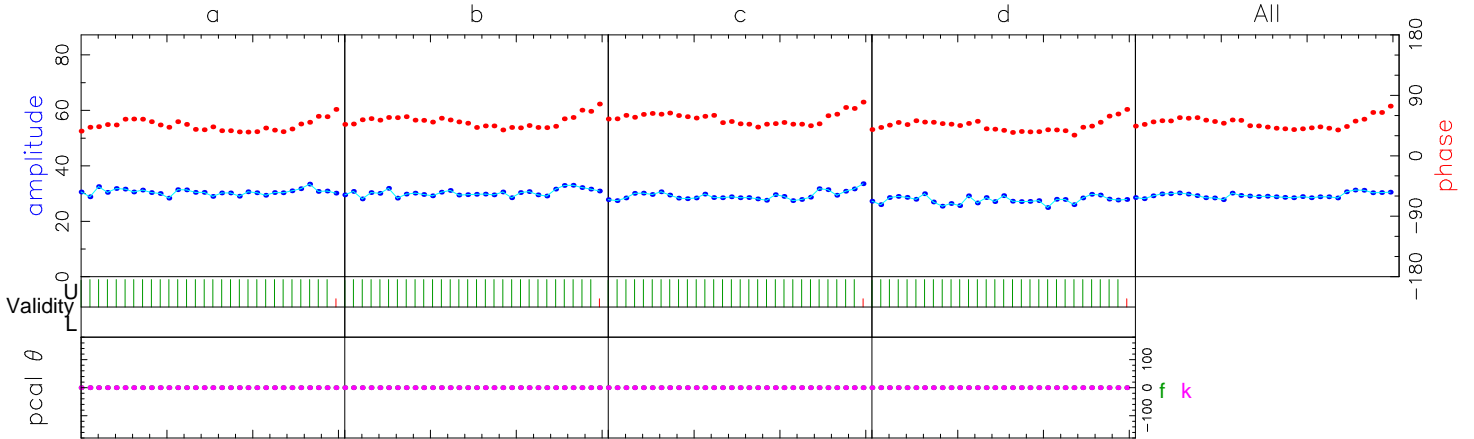
Fringe quality 9

SNR 307.9  
Int time 14.985  
Amp 29.087  
Phase 48.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.002158  
MBD -0.002362  
Fringe rate (Hz)  
-0.006959  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224248  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec

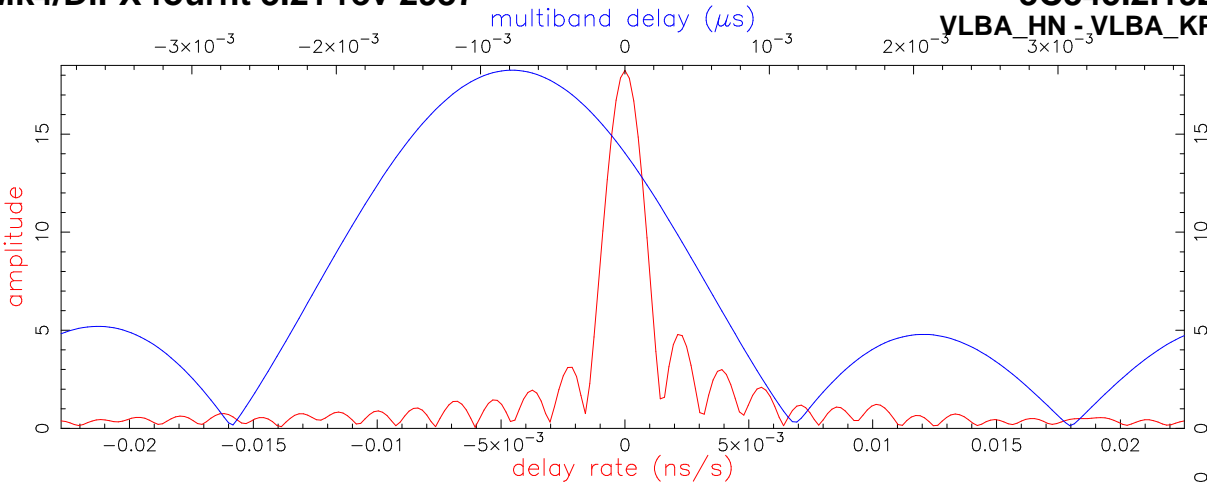


	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Phase	48.9
f	1000	1000	1000	1000	Ampl.	29.2
k	1000	1000	1000	1000	Sbd box	511.9
f:k	0:0	0:0	0:0	0:0	APs used	
f:k	0:0	0:0	0:0	0:0	PC freqs	
f	1000	1000	1000	1000	PC phase	
k	1000	1000	1000	1000	ManI PC	
f	Q00UR	Q01UR	Q02UR	Q03UR	PC amp	
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.61563807664E+03	Apriori delay (usec)	-1.61563571467E+03	Resid mbdelay (usec)	-2.36197E-03	+/-	3.6E-06
Sband delay (usec)	-1.61563787292E+03	Apriori clock (usec)	1.6602425E+01	Resid sbdelay (usec)	-2.15825E-03	+/-	1.4E-05
Phase delay (usec)	-1.61563571150E+03	Apriori clockrate (us/s)	2.2914000E-07	Resid phdelay (usec)	3.16684E-06	+/-	2.4E-08
Delay rate (us/s)	-9.43763057328E-02	Apriori rate (us/s)	-9.43761435641E-02	Resid rate (us/s)	-1.62169E-07	+/-	2.7E-09
Total phase (deg)	-234.7	Apriori accel (us/s/s)	7.25708576018E-06	Resid phase (deg)	48.9	+/-	0.4

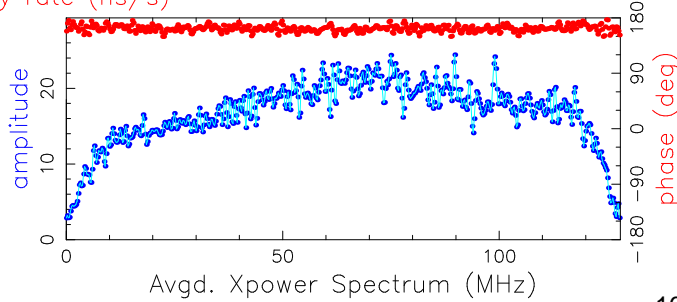
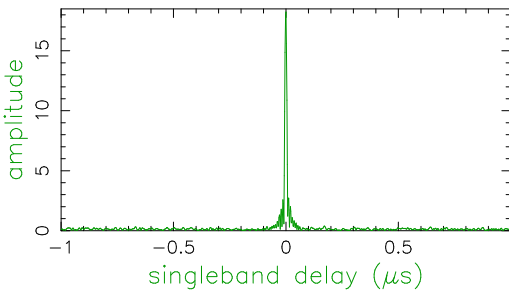
ph/seg (deg)	RMS 7.5	Theor. 1.0	Amplitude Search (64X16)	29.087 +/- 0.094	28.408	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	3.2	1.8	Interp.	0.000	29.309	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	6.6	0.4	Inc. seg. avg.	29.309	29.156	Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	3.9	0.6	Inc. frq. avg.	29.156		Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 297.4 el 44.5 pa 83.5 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) 355.488 165.523 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/fk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/fk.Q.44.2119Z6



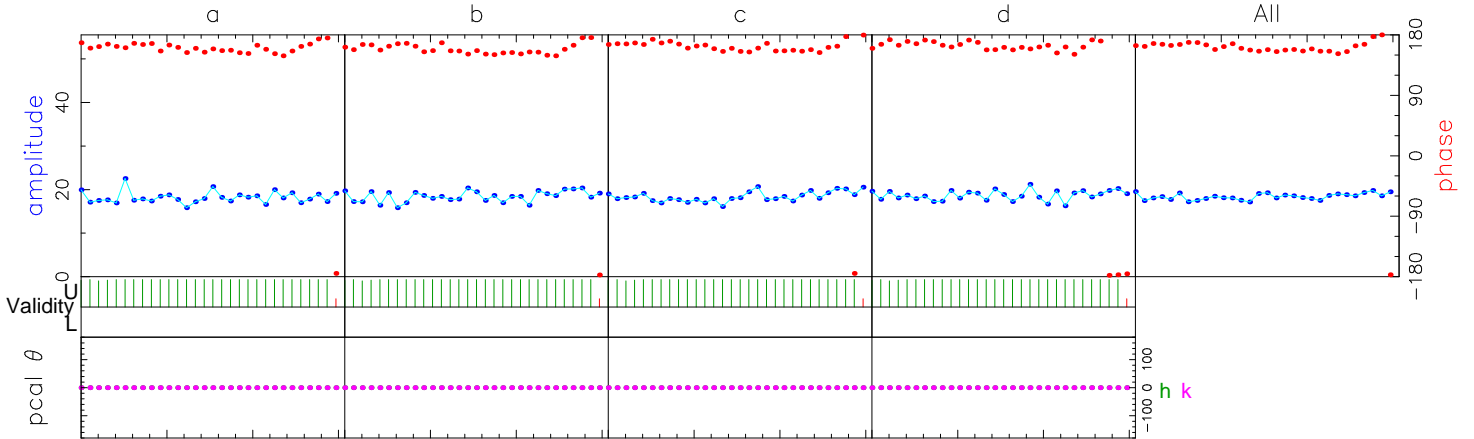
Fringe quality 9

SNR 195.7  
Int time 14.950  
Amp 18.504  
Phase 162.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.000800  
MBD -0.000820  
Fringe rate (Hz)  
-0.002223  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224247  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0		
h	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
h:k	0:0	0:0	0:0	0:0	PC phase	
h	1000	1000	1000	1000	ManI PC	
k	1000	1000	1000	1000	PC amp	
h	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
k	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	

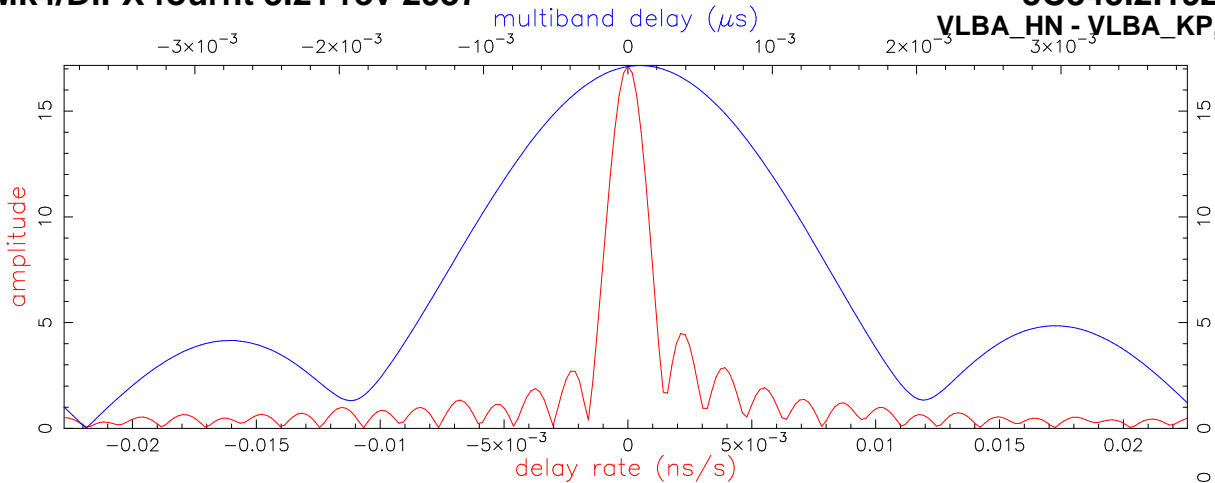
Group delay (usec)(sbd)	-6.75160686820E+03	Apriori delay (usec)	-6.75160604776E+03	Resid mbdelay (usec)	-8.20438E-04	+/- 5.7E-06
Sband delay (usec)	-6.75160684776E+03	Apriori clock (usec)	5.8978958E+00	Resid sbdelay (usec)	-8.00000E-04	+/- 2.2E-05
Phase delay (usec)	-6.75160603725E+03	Apriori clockrate (us/s)	1.8314000E-07	Resid phdelay (usec)	1.05049E-05	+/- 3.8E-08
Delay rate (us/s)	-1.14081887952E-01	Apriori rate (us/s)	-1.14081836156E-01	Resid rate (us/s)	-5.17957E-08	+/- 4.3E-09
Total phase (deg)	-97.4	Apriori accel (us/s/s)	4.68807128850E-05	Resid phase (deg)	162.3	+/- 0.6

	RMS	Theor.	Amplitude	18.504 +/- 0.095	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	6.8	1.6	Search (64X16)	17.936	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	3.9	2.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.004 0.004
ph/frq (deg)	3.3	0.6	Inc. seg. avg.	18.372	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	1.6	1.0	Inc. frq. avg.	18.263	Data rate(Mb/s): 2048	nlags: 512 t_cohere infinite ion window (TEC) 0.00 0.00

h: az 300.1 el 27.4 pa 55.4 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) 459.760 2036.127 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/hk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/hk.Q.37.2119Z6

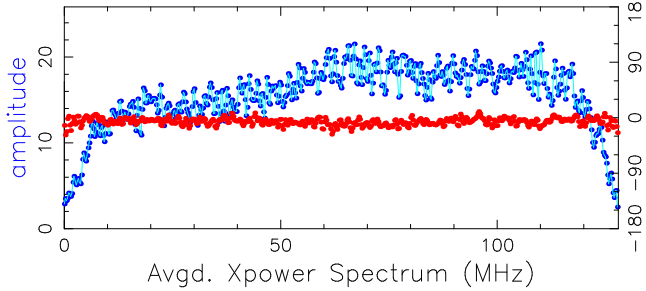
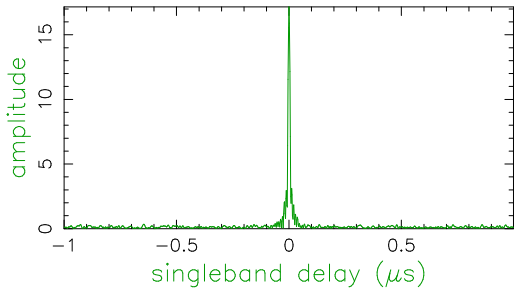
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, hk  
VLBA\_HN - VLBA\_KP, fgroup Q, pol RR



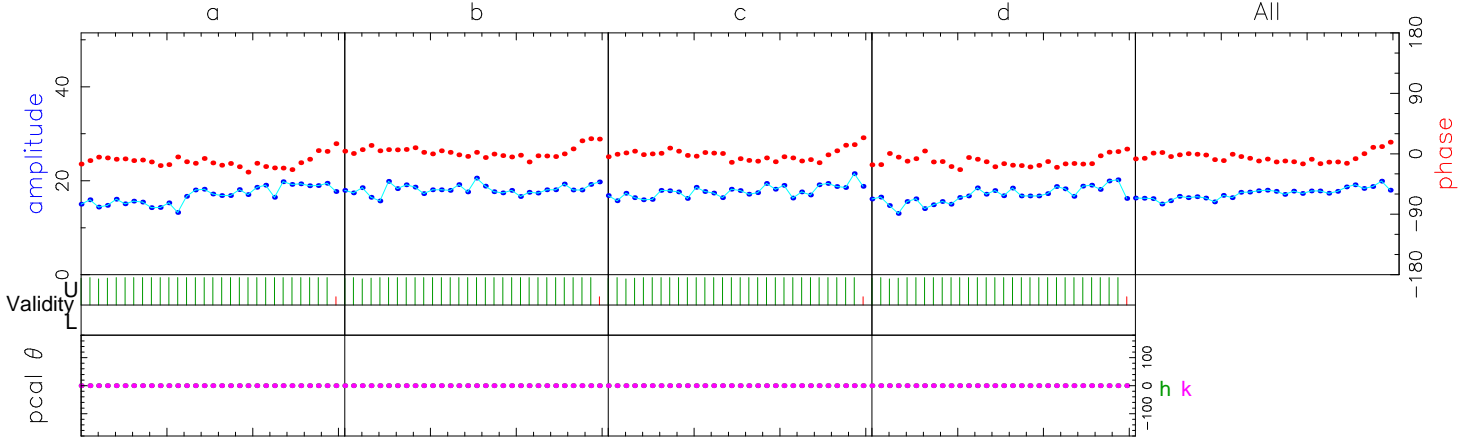
Fringe quality 9

SNR 181.5  
Int time 14.950  
Amp 17.162  
Phase -5.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.000119  
MBD 0.000089  
Fringe rate (Hz)  
-0.002404  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224248  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Sbd box	513.1
h	1000	1000	1000	1000	APs used	
k	1000	1000	1000	1000	PC freqs	
h:k	0:0	0:0	0:0	0:0	PC phase	
h:k	0:0	0:0	0:0	0:0	Manl PC	
h	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
h	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
k	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

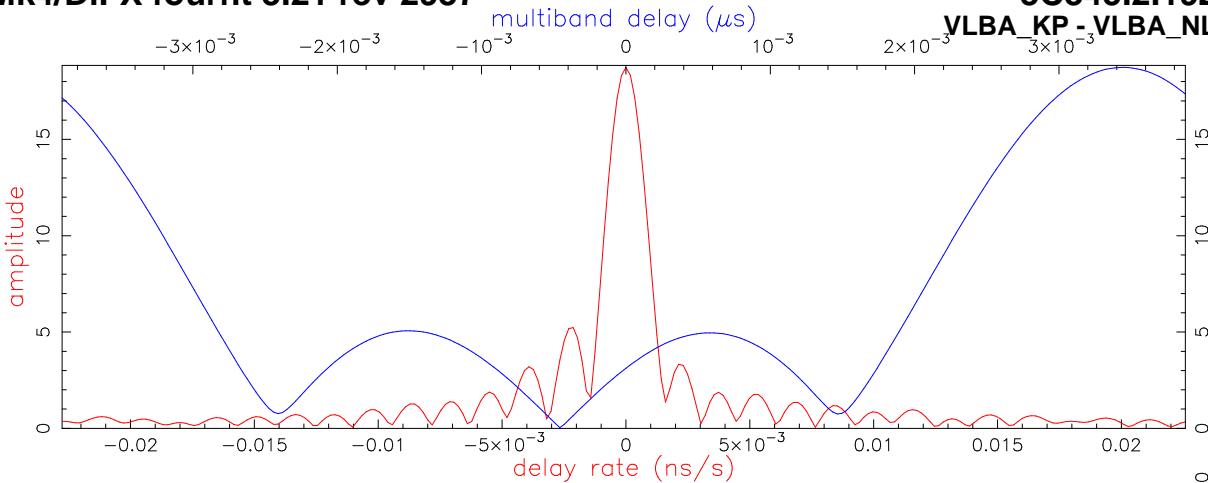
Group delay (usec)(sbd)	-6.75160595910E+03	Apriori delay (usec)	-6.75160604776E+03	Resid mbdelay (usec)	8.86562E-05	+/-	6.1E-06
Sband delay (usec)	-6.75160592901E+03	Apriori clock (usec)	5.8978958E+00	Resid sbdelay (usec)	1.18750E-04	+/-	2.4E-05
Phase delay (usec)	-6.75160604812E+03	Apriori clockrate (us/s)	1.8314000E-07	Resid phdelay (usec)	-3.56831E-07	+/-	4.1E-08
Delay rate (us/s)	-1.14081892185E-01	Apriori rate (us/s)	-1.14081836156E-01	Resid rate (us/s)	-5.60285E-08	+/-	4.6E-09
Total phase (deg)		Apriori accel (us/s/s)	4.68807128850E-05	Resid phase (deg)	-5.5	+/-	0.6

	RMS	Theor.	Amplitude	17.162 +/- 0.095	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	7.0	1.7	Search (64X16)	17.069	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	6.4	3.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	9.0	0.6	Inc. seg. avg.	17.282	Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
amp/frq (%)	3.2	1.1	Inc. frq. avg.	17.262	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

h: az 300.1 el 27.4 pa 55.4 k: az 295.3 el 50.9 pa 86.1 u,v (fr/asec) 459.760 2036.127 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/hk..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/hk.Q.41.2119Z6

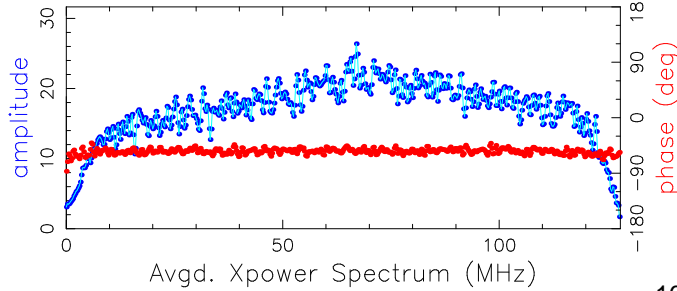
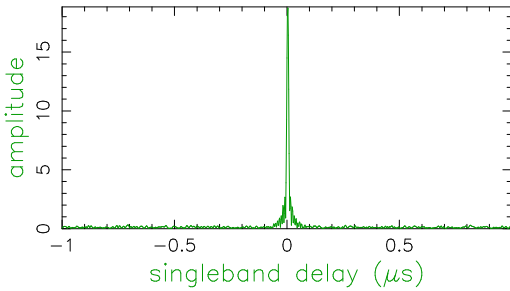
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, kn  
VLBA\_KP - VLBA\_NL, fgroup Q, pol LL



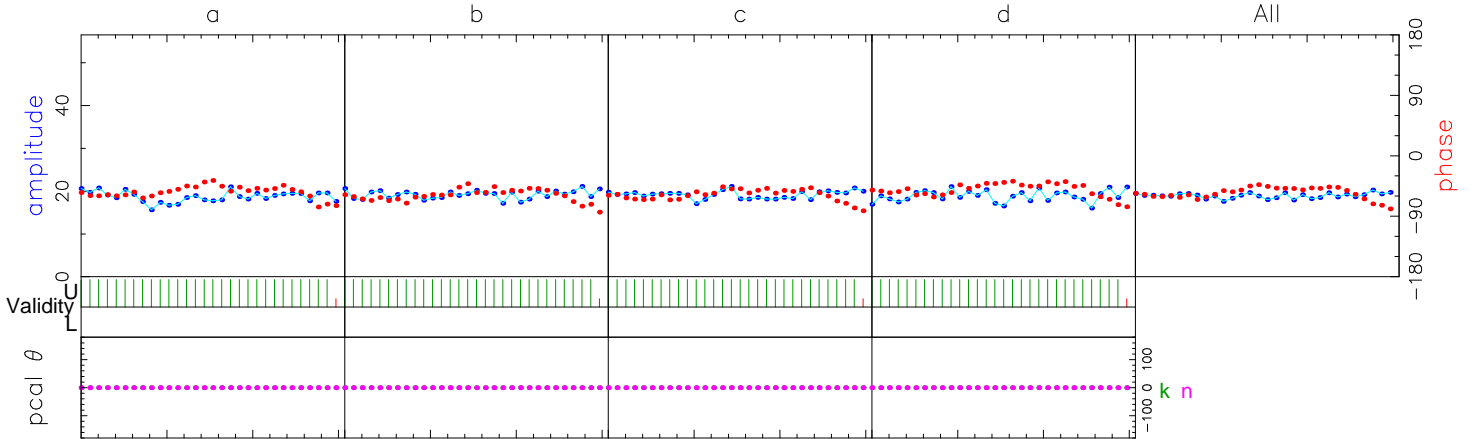
Fringe quality 9

SNR 199.5  
Int time 14.985  
Amp 18.842  
Phase -55.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.003390  
MBD 0.003417  
Fringe rate (Hz)  
0.003279  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224303  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
-53.8	-58.6	-58.1	-50.1	Phase	-55.2
18.5	19.0	19.0	18.6	Ampl.	18.8
514.7	514.7	514.8	514.8	Sbd box	514.7
U/L 30/0	30/0	30/0	30/0	APs used	
k 1000	1000	1000	1000	PC freqs	
n 1000	1000	1000	1000	PC freqs	
k:n 0:0	0:0	0:0	0:0	PC phase	
k:n 0:0	0:0	0:0	0:0	Manl PC	
k 1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000		
k Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
n Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
				Chan ids	
				Tracks	

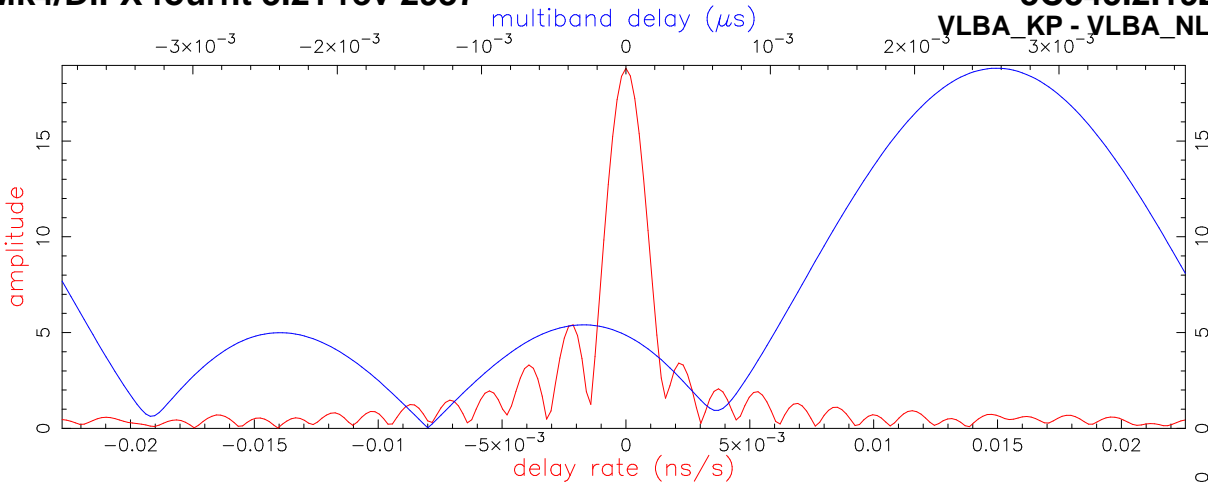
Group delay (usec)(sbd)	2.86838720408E+03	Apriori delay (usec)	2.86838378705E+03	Resid mbdelay (usec)	3.41703E-03	+/- 5.6E-06
Sband delay (usec)	2.86838717693E+03	Apriori clock (usec)	-1.4431259E+01	Resid sbdelay (usec)	3.38987E-03	+/- 2.2E-05
Phase delay (usec)	2.86838378348E+03	Apriori clockrate (us/s)	-3.2422001E-07	Resid phdelay (usec)	-3.57295E-06	+/- 3.7E-08
Delay rate (us/s)	6.96014219439E-02	Apriori rate (us/s)	6.96013455248E-02	Resid rate (us/s)	7.64191E-08	+/- 4.2E-09
Total phase (deg)	-30.0	Apriori accel (us/s/s)	-2.51942636084E-05	Resid phase (deg)	-55.2	+/- 0.6

ph/seg (deg)	8.1	Theor.	1.6	Search (64X16)	18.660	18.842 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	3.2		2.7	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	4.9		0.6	Inc. seg. avg.	18.918		Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	1.2		1.0	Inc. frq. avg.	18.767		Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 295.3 el 50.9 pa 86.1 n: az 291.8 el 39.9 pa 64.3 u,v (fr/asec) -278.336 -1281.085 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/kn..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/kn.Q.56.2119Z6

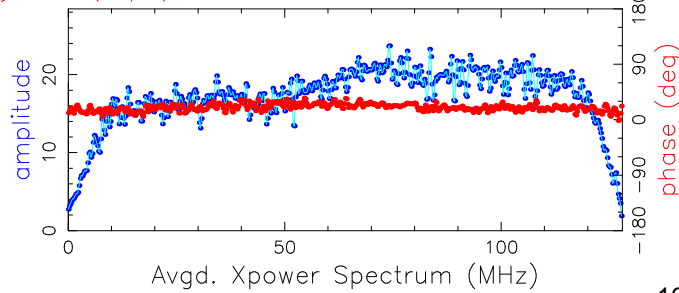
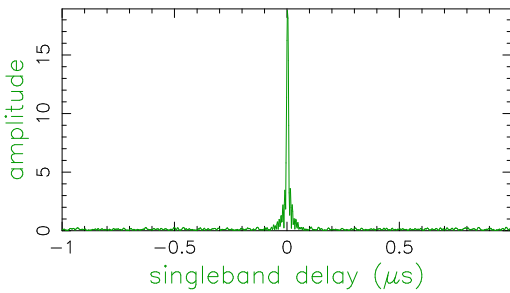
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, kn  
VLBA\_KP - VLBA\_NL, fgroup Q, pol RR



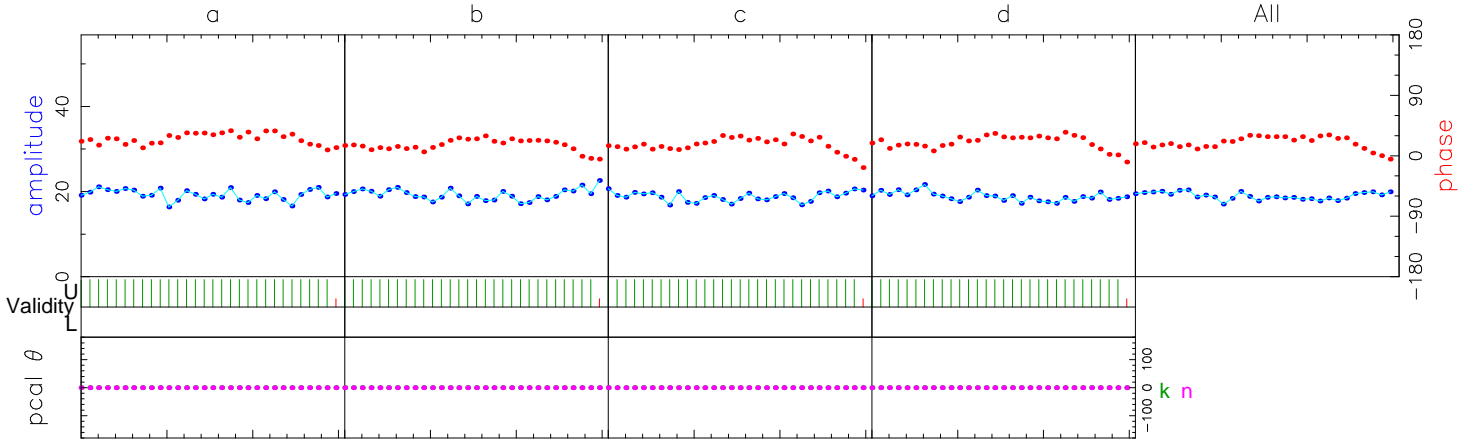
Fringe quality 9

SNR 200.6  
Int time 14.985  
Amp 18.946  
Phase 19.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.002550  
MBD 0.002599  
Fringe rate (Hz)  
0.003107  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224303  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Phase	19.8
k	1000	1000	1000	1000	Ampl.	18.8
n	1000	1000	1000	1000	Sbd box	514.3
k:n	0:0	0:0	0:0	0:0	APs used	
k:n	0:0	0:0	0:0	0:0	PC freqs	
k	1000	1000	1000	1000	PC phase	
n	1000	1000	1000	1000	Manl PC	
k	Q00UR	Q01UR	Q02UR	Q03UR	PC amp	
n	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
					Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	2.86838638640E+03	Apriori delay (usec)	2.86838378705E+03	Resid mbdelay (usec)	2.59934E-03	+/-	5.5E-06
Sband delay (usec)	2.86838633680E+03	Apriori clock (usec)	-1.4431259E+01	Resid sbdelay (usec)	2.54975E-03	+/-	2.1E-05
Phase delay (usec)	2.86838378833E+03	Apriori clockrate (us/s)	-3.2422001E-07	Resid phdelay (usec)	1.27968E-06	+/-	3.7E-08
Delay rate (us/s)	6.96014179387E-02	Apriori rate (us/s)	6.96013455248E-02	Resid rate (us/s)	7.24138E-08	+/-	4.2E-09
Total phase (deg)	45.0	Apriori accel (us/s/s)	-2.51942636084E-05	Resid phase (deg)	19.8	+/-	0.6

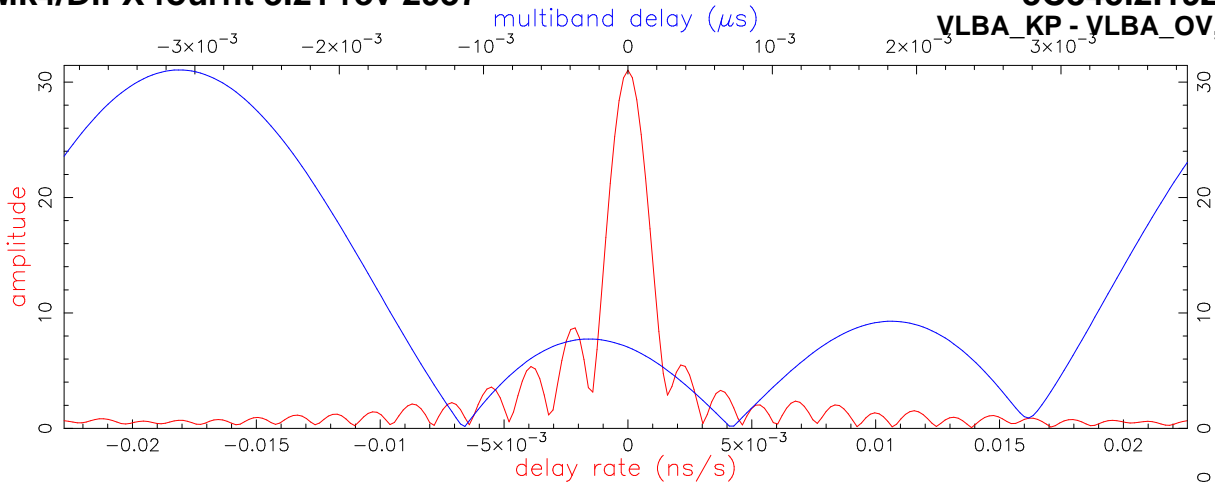
ph/seg (deg)	8.4	1.6	Search (64X16)	18.619	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	4.4	2.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	5.3	0.6	Inc. seg. avg.	18.989	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
amp/frq (%)	1.4	1.0	Inc. frq. avg.	18.832	Sample rate(MISamp/s): 256		dr window (ns/s)	-0.023	0.023	
					Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 295.3 el 50.9 pa 86.1 n: az 291.8 el 39.9 pa 64.3 u,v (fr/asec) -278.336 -1281.085 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/kn..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/kn.Q.58.2119Z6

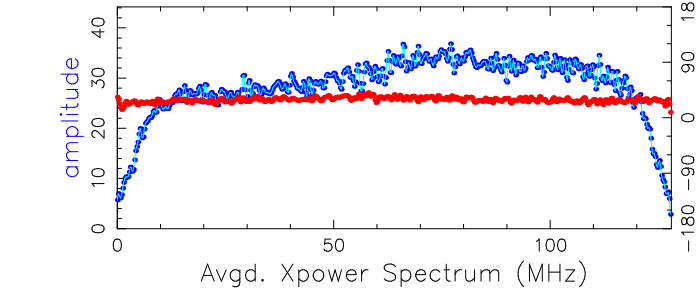
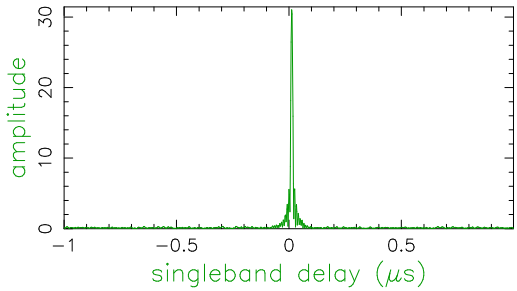


Mk4/DiFX fourfit 3.21 rev 2937

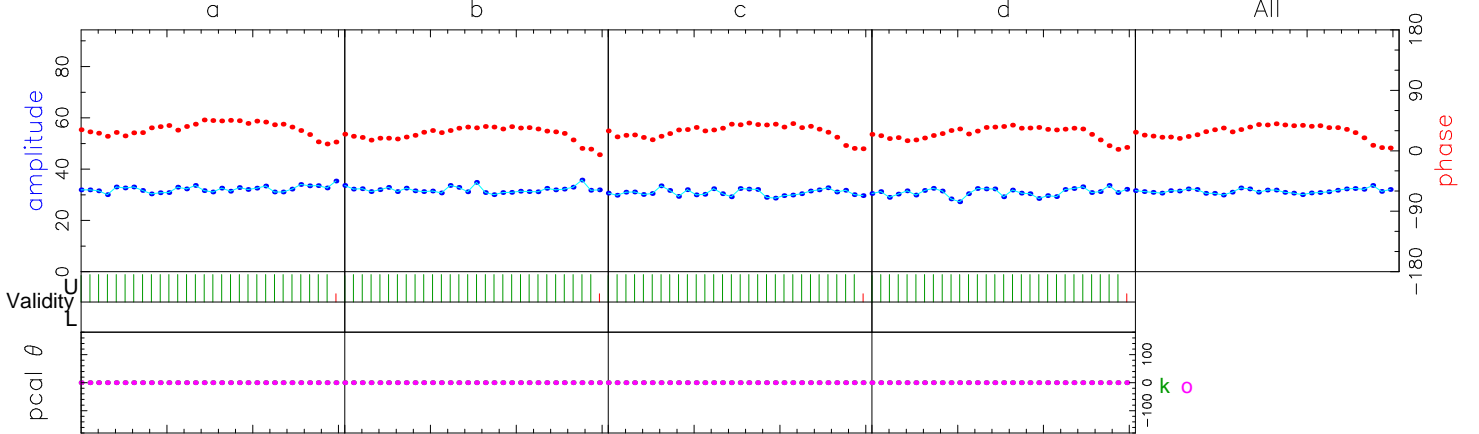
3C345.2119Z6, No0193, ko  
VLBA\_KP - VLBA\_OV, fgroup Q, pol RR



Fringe quality 9  
SNR 332.8  
Int time 14.984  
Amp 31.444  
Phase 28.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.012482  
MBD -0.003069  
Fringe rate (Hz) 0.001172  
Ion TEC 0.000  
Ref freq (MHz) 42912.0000  
AP (sec) 0.512  
Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224217  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Sbd box	519.4
k	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
o	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	

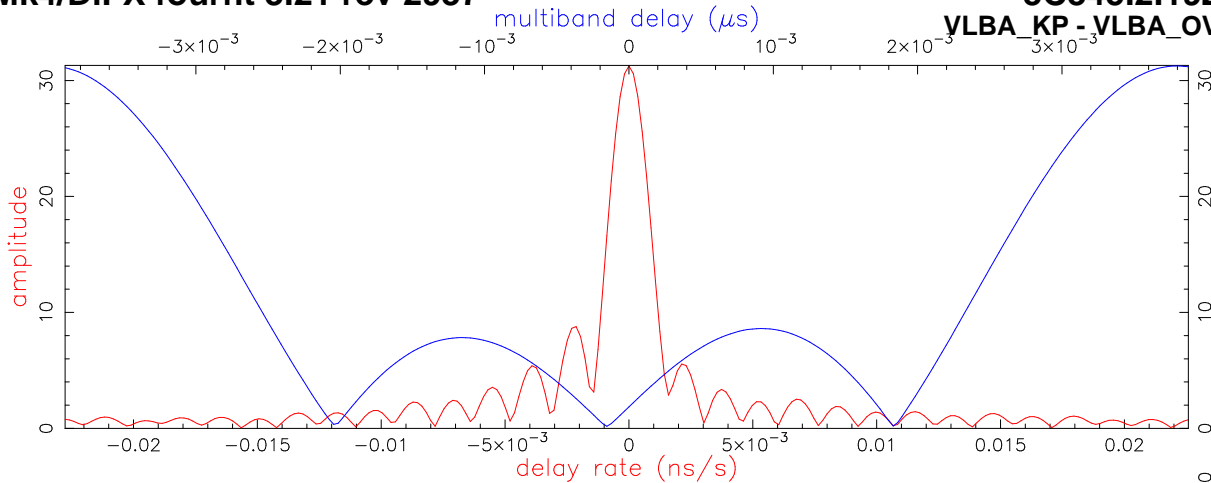
Group delay (usec)(sbd)	-1.54199364477E+03	Apriori delay (usec)	-1.54200620049E+03	Resid mbdelay (usec)	-3.06928E-03	+/- 3.3E-06
Sband delay (usec)	-1.54199371874E+03	Apriori clock (usec)	-2.3172226E+00	Resid sbdelay (usec)	1.24817E-02	+/- 1.3E-05
Phase delay (usec)	-1.54200619866E+03	Apriori clockrate (us/s)	-1.9240000E-07	Resid phdelay (usec)	1.83238E-06	+/- 2.2E-08
Delay rate (us/s)	-1.24468561394E-01	Apriori rate (us/s)	-1.24468588703E-01	Resid rate (us/s)	2.73088E-08	+/- 2.5E-09
Total phase (deg)	1.1	Apriori accel (us/s/s)	2.72693106996E-06	Resid phase (deg)	28.3	+/- 0.3

ph/seg (deg)	9.3	Theor.	0.9	Amplitude	31.444 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	2.6	Search (64X16)	30.622	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	4.4	Inc. seg. avg.	31.445	Inc. frq. avg.	31.077	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	2.3	Inc. frq. avg.	31.077			Sample rate(MISamp/s): 256	dr window (ns/s) -0.023 0.023
						Data rate(Mb/s): 2048	nlags: 512
							t_cohere infinite
							ion window (TEC) 0.00 0.00

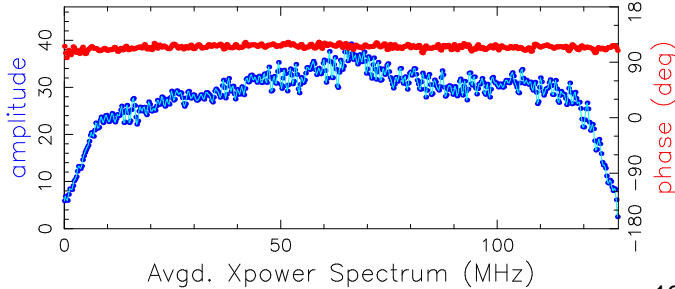
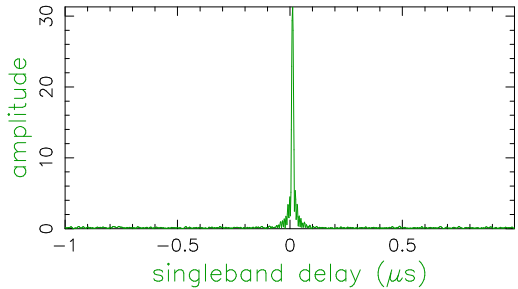
k: az 295.3 el 50.9 pa 86.1 o: az 287.5 el 57.9 pa 81.1 u,v (fr/asec) 463.281 -173.013 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/ko..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/ko.Q.13.2119Z6

Mk4/DiFX fourfit 3.21 rev 2937

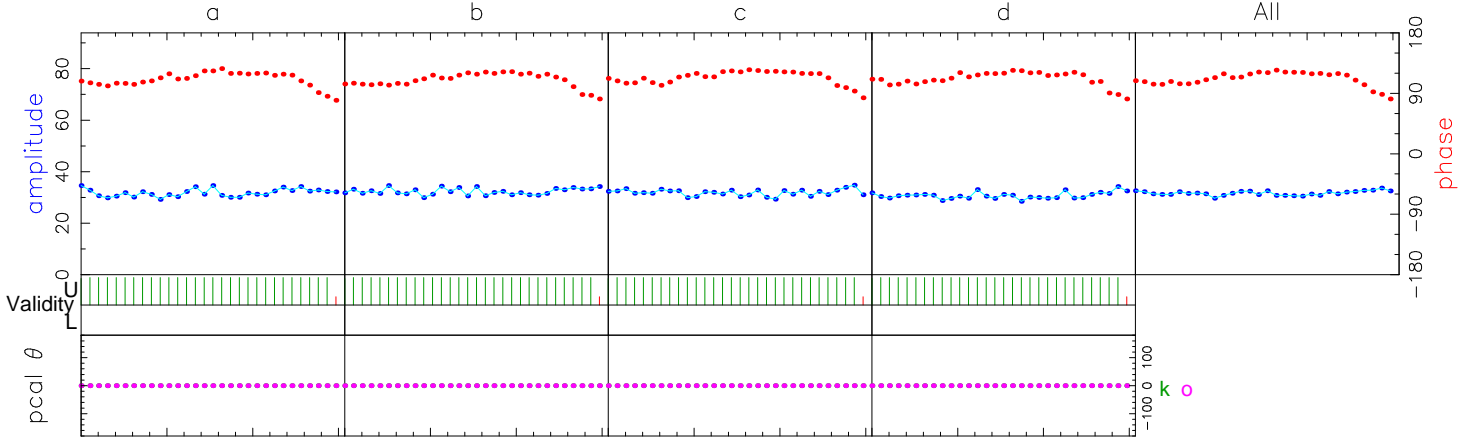
3C345.2119Z6, No0193, ko  
VLBA\_KP - VLBA\_OV, fgroup Q, pol LL



Fringe quality 9  
SNR 331.4  
Int time 14.984  
Amp 31.305  
Phase 111.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.011454  
MBD -0.004030  
Fringe rate (Hz) 0.001029  
Ion TEC 0.000  
Ref freq (MHz) 42912.0000  
AP (sec) 0.512  
Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224216  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"



Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	111.0	110.1	113.5	112.0	Phase	111.7
	31.4	31.9	31.5	30.3	Ampl.	31.3
	518.9	518.9	518.9	518.7	Sbd box	518.9
U/L	30/0	30/0	30/0	30/0	APs used	
k	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
o	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

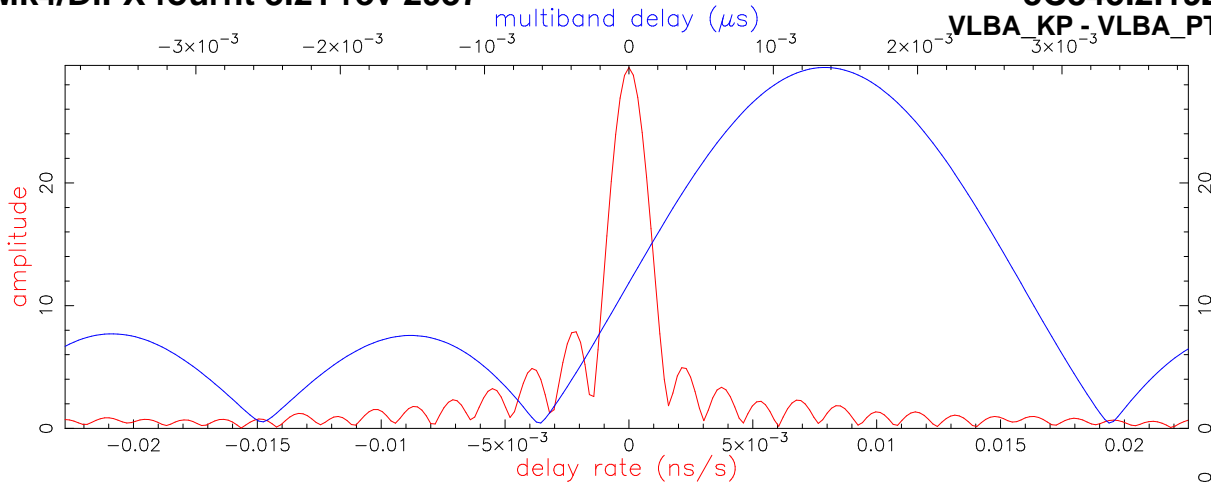
Group delay (usec)(sbd)	-1.54199460587E+03	Apriori delay (usec)	-1.54200620049E+03	Resid mbdelay (usec)	-4.03037E-03	+/-	3.4E-06
Sband delay (usec)	-1.54199474612E+03	Apriori clock (usec)	-2.3172226E+00	Resid sbdelay (usec)	1.14544E-02	+/-	1.3E-05
Phase delay (usec)	-1.54200619326E+03	Apriori clockrate (us/s)	-1.9240000E-07	Resid phdelay (usec)	7.22831E-06	+/-	2.2E-08
Delay rate (us/s)	-1.24468564716E-01	Apriori rate (us/s)	-1.24468588703E-01	Resid rate (us/s)	2.39862E-08	+/-	2.5E-09
Total phase (deg)	84.5	Apriori accel (us/s/s)	2.72693106996E-06	Resid phase (deg)	111.7	+/-	0.3

ph/seg (deg)	9.4	RMS	9.4	Theor.	0.9	Amplitude	31.305 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	3.0		1.7	Search (64X16)		Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.004	0.004
ph/frq (deg)	1.8		0.3	Inc. seg. avg.		Inc. frq. avg.	31.679	Bits/sample: 2x2	SampCntNorm: enabled		dr window (ns/s)	-0.023	0.023
amp/frq (%)	1.9		0.6	Inc. frq. avg.		Inc. frq. avg.	31.263	Sample rate(MISamp/s): 256			ion window (TEC)	0.00	0.00
								Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite			

k: az 295.3 el 50.9 pa 86.1 o: az 287.5 el 57.9 pa 81.1 u,v (fr/asec) 463.281 -173.013 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/ko..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/ko.Q.9.2119Z6

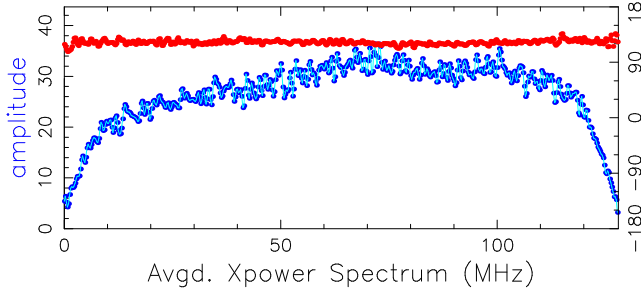
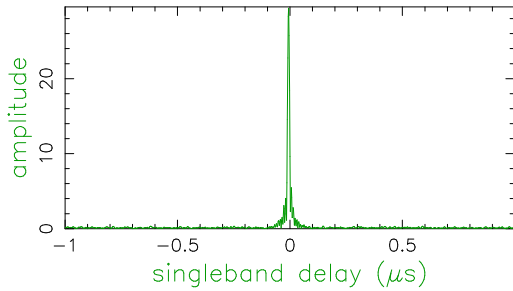
Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, kp  
VLBA\_KP - VLBA\_PT, fgroup Q, pol LL



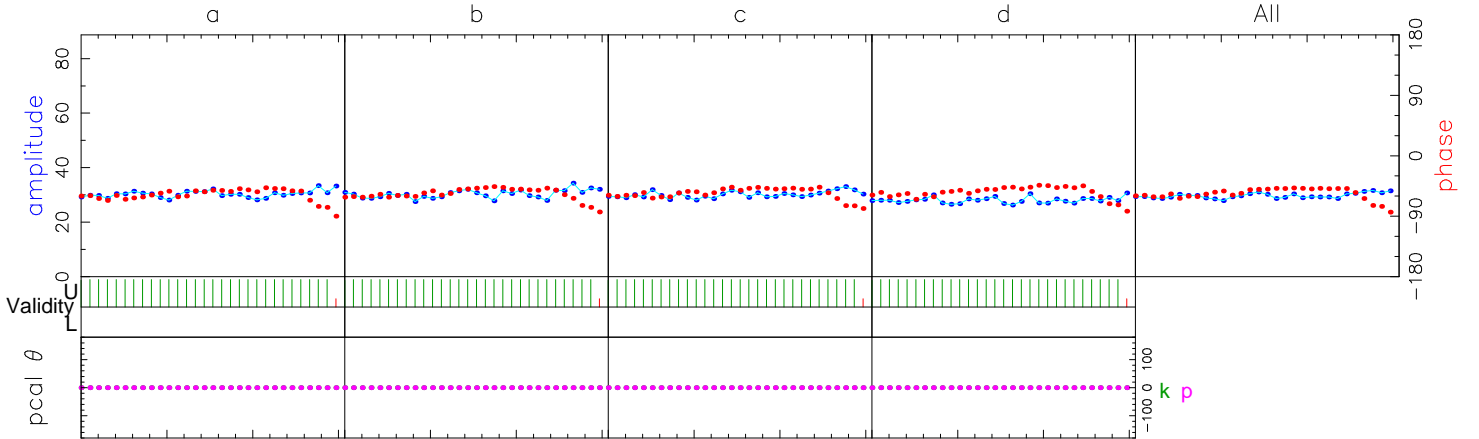
Fringe quality 9

SNR 313.1  
Int time 14.985  
Amp 29.577  
Phase -56.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.006386  
MBD 0.001331  
Fringe rate (Hz)  
-0.000830  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512



Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224249  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
	-57.9	-56.3	-55.6	-54.1	Phase	-56.0
	30.0	30.0	29.9	27.7	Ampl.	29.4
	510.0	509.7	509.7	509.6	Sbd box	509.7
U/L	30/0	30/0	30/0	30/0	APs used	
k	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k:p	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
k	Q00UL	Q01UL	Q02UL	Q03UL	Chan ids	
p	Q00UL	Q01UL	Q02UL	Q03UL	Tracks	
					Chan ids	
					Tracks	

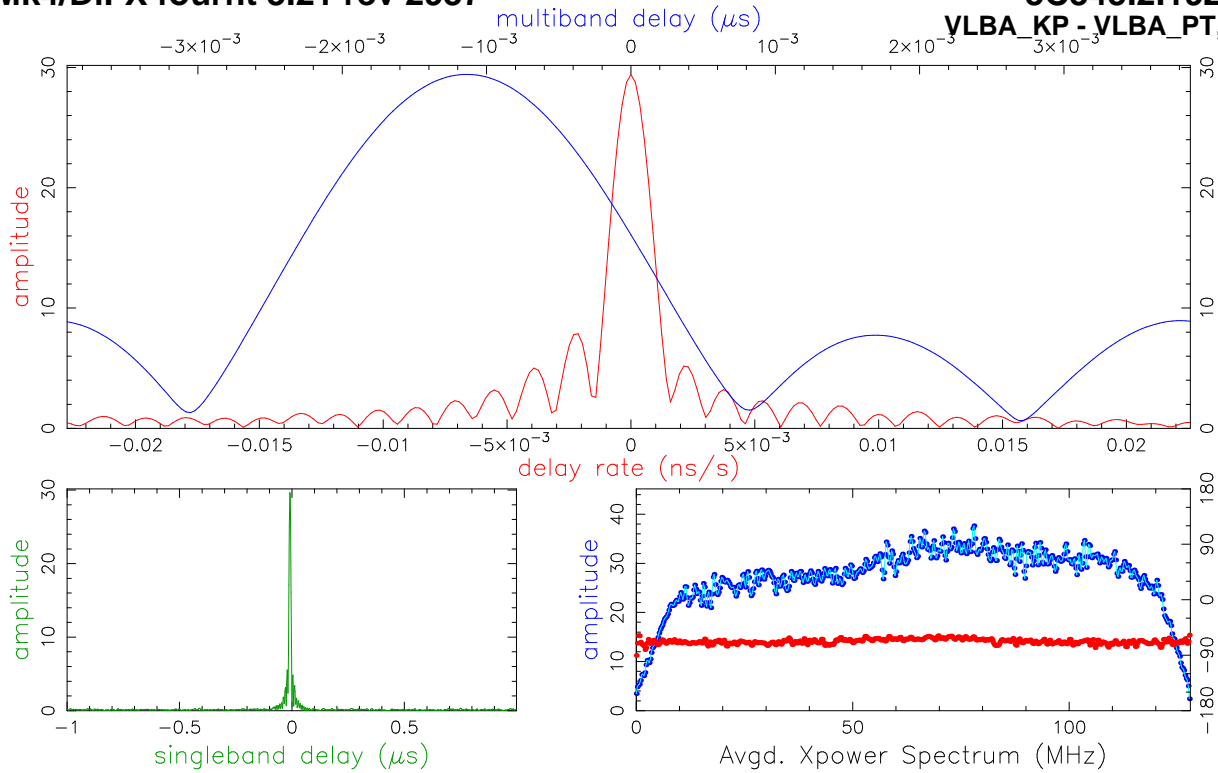
Group delay (usec)(sbd)	4.13650687423E+02	Apriori delay (usec)	4.13657168673E+02	Resid mbdelay (usec)	1.33125E-03	+/-	3.6E-06
Sband delay (usec)	4.13650782923E+02	Apriori clock (usec)	3.5530357E+00	Resid sbdelay (usec)	-6.38575E-03	+/-	1.4E-05
Phase delay (usec)	4.13657165045E+02	Apriori clockrate (us/s)	-3.5779000E-08	Resid phdelay (usec)	-3.62710E-06	+/-	2.4E-08
Delay rate (us/s)	1.84842787496E-02	Apriori rate (us/s)	1.84842980934E-02	Resid rate (us/s)	-1.93437E-08	+/-	2.7E-09
Total phase (deg)	95.9	Apriori accel (us/s/s)	-4.65494901088E-06	Resid phase (deg)	-56.0	+/-	0.4

ph/seg (deg)	RMS 7.8	Theor. 1.0	Amplitude Search (64X16)	29.577 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	3.1	1.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004	
ph/frq (deg)	2.0	0.4	Inc. seg. avg.	29.672	Bits/sample: 2x2	Sample rate(MISamp/s): 256	dr window (ns/s)	-0.023	0.023	
amp/frq (%)	3.3	0.6	Inc. frq. avg.	29.405	Data rate(Mb/s): 2048	nlags: 512	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 295.3 el 50.9 pa 86.1 p: az 293.2 el 49.2 pa 80.8 u,v (fr/asec) -72.378 -267.099 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/kp..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/kp.Q.51.2119Z6

Mk4/DiFX fourfit 3.21 rev 2937

3C345.2119Z6, No0193, kp  
VLBA\_KP - VLBA\_PT, fgroup Q, pol RR

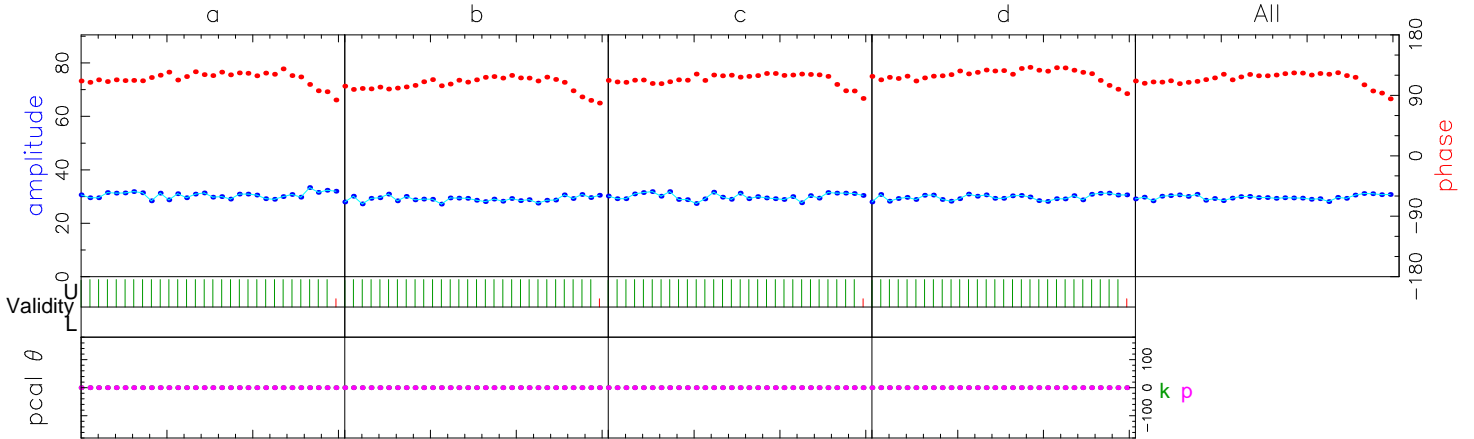


Fringe quality 9

SNR 319.4  
Int time 14.985  
Amp 30.173  
Phase 114.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.008890  
MBD -0.001184  
Fringe rate (Hz)  
-0.000721  
Ion TEC 0.000  
Ref freq (MHz)  
42912.0000  
AP (sec) 0.512

Exp. c221c  
Exper # 16383  
Yr:day 2022:093  
Start 143530.00  
Stop 143545.36  
FRT 143700.00  
Corr/FF/build  
2022:346:223224  
2022:346:224249  
2021:252:122852  
RA & Dec (J2000)  
16h42m58.809967s  
+39°48'36.993984"

Amp. and Phase vs. time for each freq., 30 segs, 1 APs / seg (0.51 sec / seg.), time ticks 1 sec



	42912.00	43040.00	43168.00	43296.00	Freq (MHz)	All
U/L	30/0	30/0	30/0	30/0	Sbd box	508.4
k	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC freqs	
k:p	0:0	0:0	0:0	0:0	PC phase	
k	1000	1000	1000	1000	Manl PC	
p	1000	1000	1000	1000	PC amp	
k	Q00UR	Q01UR	Q02UR	Q03UR	Chan ids	
p	Q00UR	Q01UR	Q02UR	Q03UR	Tracks	
					Chan ids	
					Tracks	

	42912.00	43040.00	43168.00	43296.00	Resid mbdelay (usec)	-1.18422E-03	+/- 3.5E-06
Group delay (usec)(sbd)	4.13648171954E+02	4.13648278548E+02	4.13657168673E+02	4.13657168673E+02	Resid sbdelay (usec)	-8.89012E-03	+/- 1.3E-05
Sband delay (usec)	4.13648278548E+02	4.13657176069E+02	1.84842980934E-02	1.84842980934E-02	Resid phdelay (usec)	7.39615E-06	+/- 2.3E-08
Phase delay (usec)	4.13657176069E+02	1.84842812985E-02	-4.65494901088E-06	-4.65494901088E-06	Resid rate (us/s)	-1.67949E-08	+/- 2.6E-09
Delay rate (us/s)	1.84842812985E-02	266.2			Resid phase (deg)	114.3	+/- 0.4
Total phase (deg)		266.2					

	RMS	Theor.	Amplitude	30.173 +/- 0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	8.2	1.0	Search (64X16)	29.119	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.004	0.004
amp/seg (%)	3.0	1.7	Interp.	0.000	Sample rate(MISamp/s): 256		dr window (ns/s)	-0.023	0.023
ph/frq (deg)	7.1	0.4	Inc. seg. avg.	29.702	Data rate(Mb/s): 2048	nlags: 512	ion window (TEC)	0.00	0.00
amp/frq (%)	2.9	0.6	Inc. frq. avg.	29.512					

k: az 295.3 el 50.9 pa 86.1 p: az 293.2 el 49.2 pa 80.8 u,v (fr/asec) -72.378 -267.099 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c221c/FRINGE/7mm/1234/No0193/kp..2119Z6 Output file: /Exps/c221c/FRINGE/7mm/1234/No0193/kp.Q.53.2119Z6