

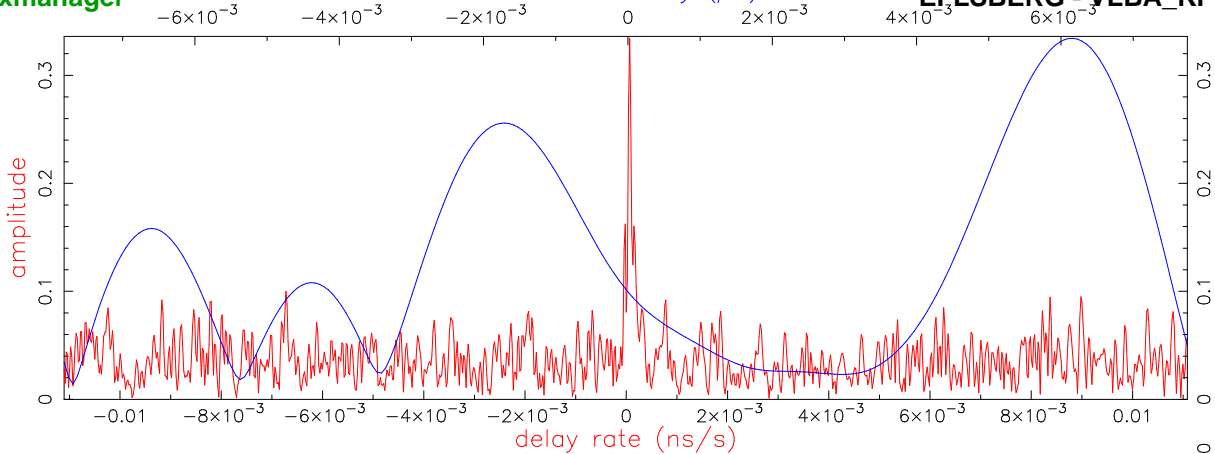
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, Bk

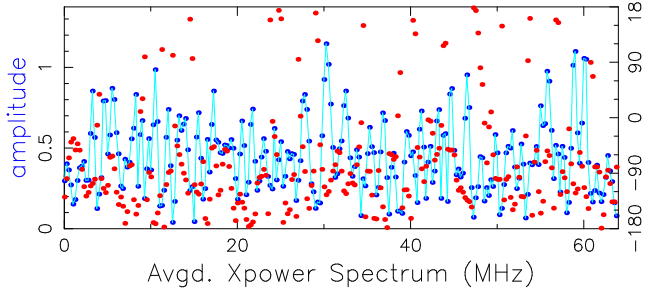
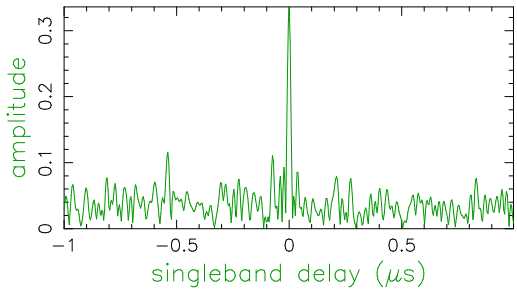
EFLSBERG - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)



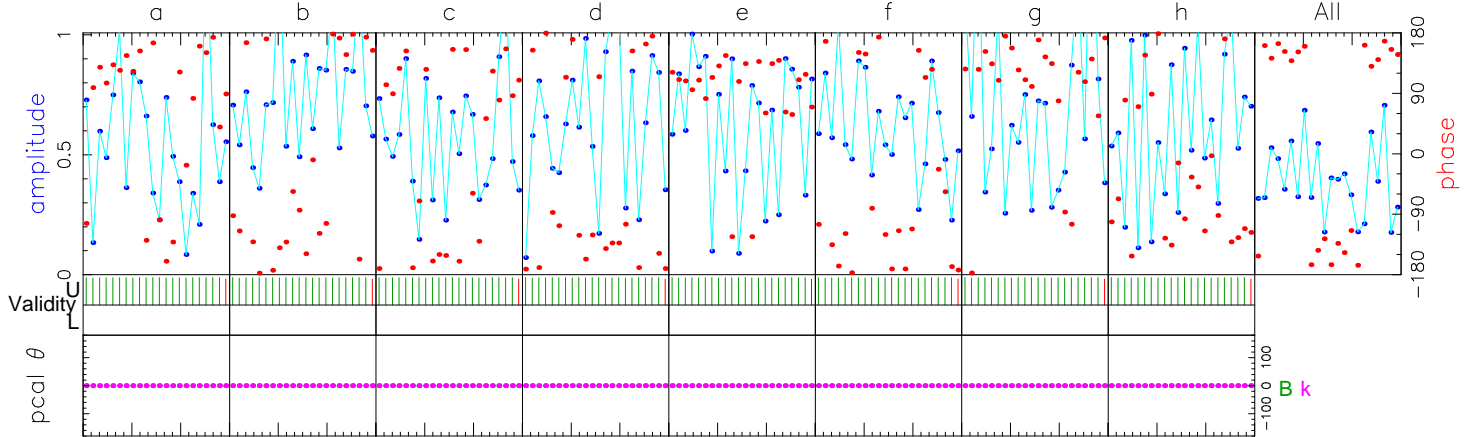
Fringe quality 9

SNR 12.3
 Int time 178.214
 Amp 0.336
 Phase 172.5
 PFD 3.4e-26
 Delays (us)
 SBD -0.000891
 MBD 0.006122
 Fringe rate (Hz)
 0.004776
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Yr:day 16383
 Start 2021:039:054330
 Stop 2021:039:060704
 FRT 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	149.7	-151.5	148.0	-161.2	111.3	-162.9	134.0	-119.0	Phase	172.5
B	0.4	0.5	0.4	0.5	0.4	0.4	0.6	0.3	Ampl.	0.4
k	256.8	257.0	257.3	257.9	257.3	257.9	257.6	258.6	Sbd box	256.8
B:k	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B:k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.66633930783E+03		Apriori delay (usec)		-2.66634543014E+03		Resid mbdelay (usec)		6.12231E-03	+/- 8.8E-05
Sband delay (usec)	-2.66634632114E+03		Apriori clock (usec)		9.7293329E+00		Resid sbdelay (usec)		-8.91000E-04	+/- 7.0E-04
Phase delay (usec)	-2.66634542469E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		5.44764E-06	+/- 3.0E-07
Delay rate (us/s)	-1.88092176265E+00		Apriori rate (us/s)		-1.88092181696E+00		Resid rate (us/s)		5.43153E-08	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20974099643E-05		Resid phase (deg)		172.5	+/- 9.3

	RMS	Theor.	Amplitude	0.336 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	34.1	21.9	Search (1024X32)	0.315	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	48.9	38.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	47.6	13.2	Inc. seg. avg.	0.370	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.2	23.1	Inc. frq. avg.	0.426	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 260.0 el 29.8 pa 40.8 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 11489.530 2627.376 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/Bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/Bk.W.14.1JFJP0

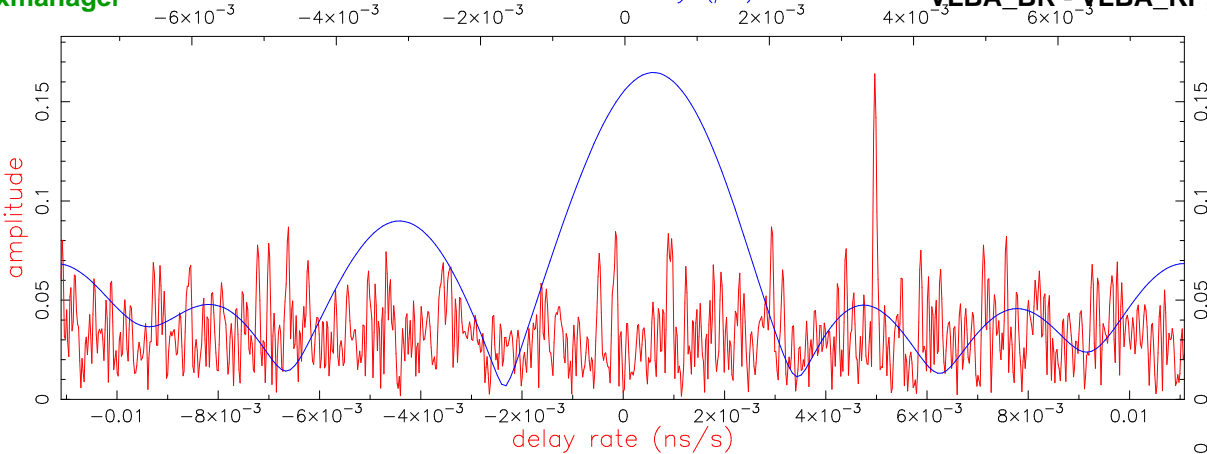
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, bk

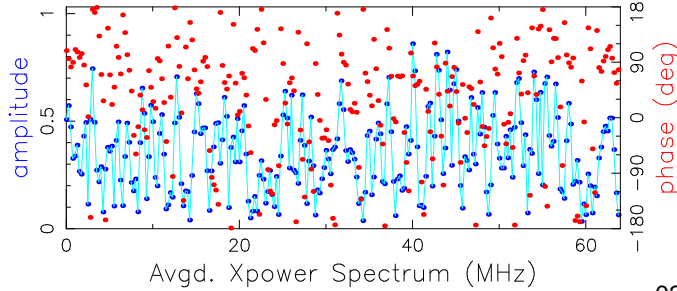
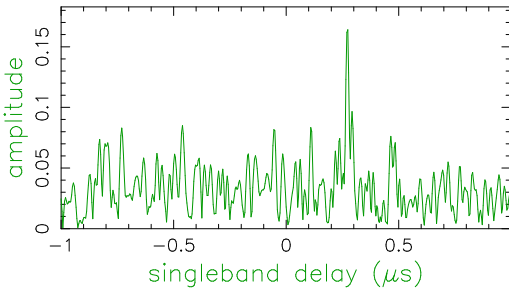
VLBA_BR - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)



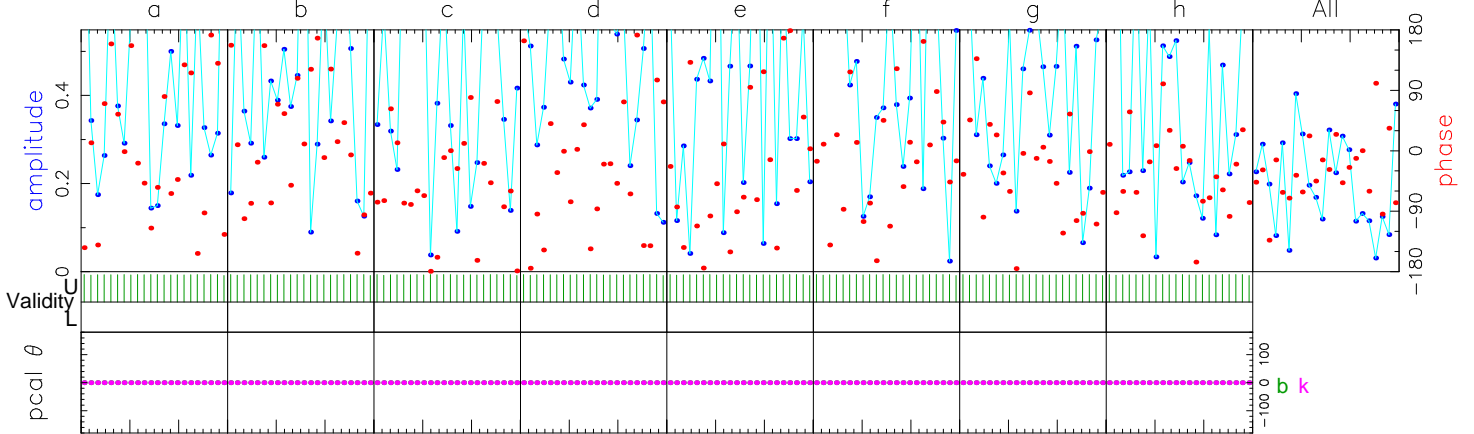
Fringe quality 0

SNR 6.1
 Int time 178.417
 Amp 0.183
 Phase -39.4
 PFD 1.0e-01
 Delays (us)
 SBD 0.271707
 MBD 0.000289
 Fringe rate (Hz)
 0.438295
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060705
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-140.4	0.4	-49.1	-47.8	-76.5	-6.1	-35.9	-36.4	Phase	-39.4
	0.1	0.2	0.3	0.1	0.2	0.2	0.2	0.3	Ampl.	0.2
	267.3	385.9	327.6	285.5	271.7	403.4	262.0	326.5	Sbd box	326.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.44799832941E+03	Apriori delay (usec)	-2.44826424372E+03	Resid mbdelay (usec)	2.89314E-04	+/-	1.8E-04
Sband delay (usec)	-2.44799253697E+03	Apriori clock (usec)	-2.0538893E+00	Resid sbdelay (usec)	2.71707E-01	+/-	1.4E-03
Phase delay (usec)	-2.44826424497E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-1.24603E-06	+/-	5.9E-07
Delay rate (us/s)	-1.47907112107E-01	Apriori rate (us/s)	-1.47912096133E-01	Resid rate (us/s)	4.98403E-06	+/-	5.7E-09
Total phase (deg)	-252.9	Apriori accel (us/s/s)	1.99900647472E-05	Resid phase (deg)	-39.4	+/-	18.7

ph/seg (deg)	RMS 49.0	Theor. 43.8	Amplitude Search (1024X32)	0.163	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	66.2	76.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	49.1	26.4	Inc. seg. avg.	0.170	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	34.9	46.1	Inc. frq. avg.	0.192	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	dr window (ns/s)	-0.011	0.011

b: az 98.5 el 30.0 pa -43.5 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 910.586 2345.893 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/bk.W.19.1JFJP0

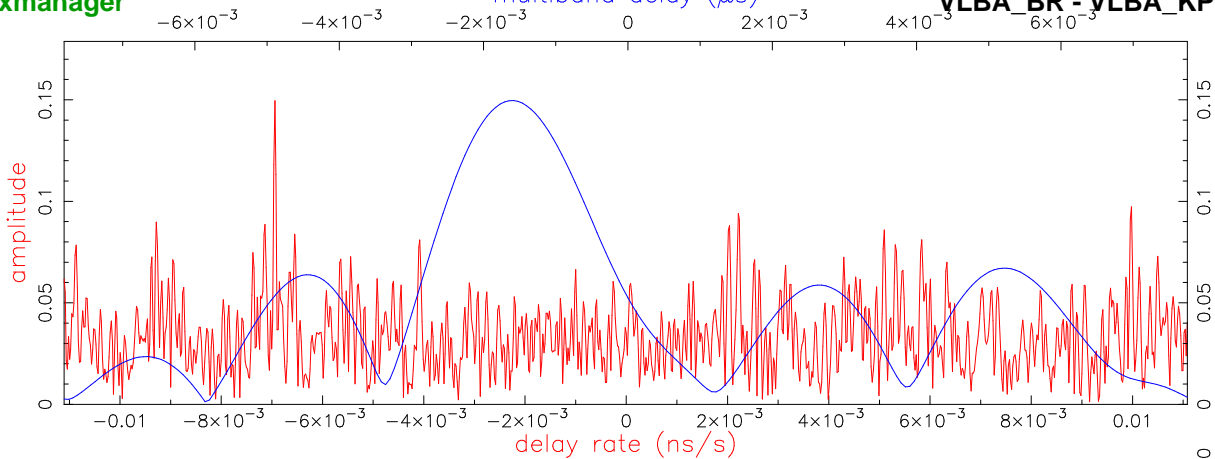
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, bk

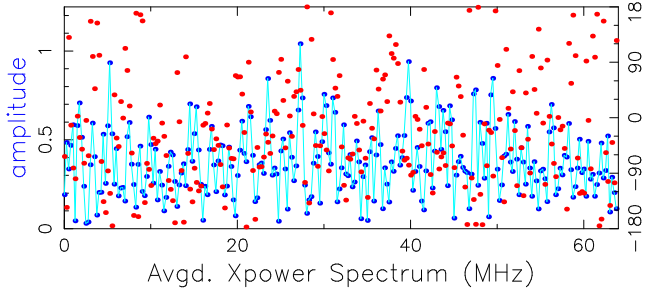
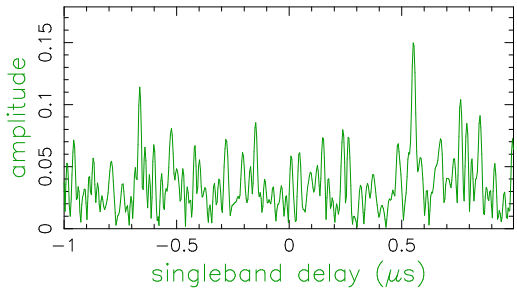
VLBA_BR - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)



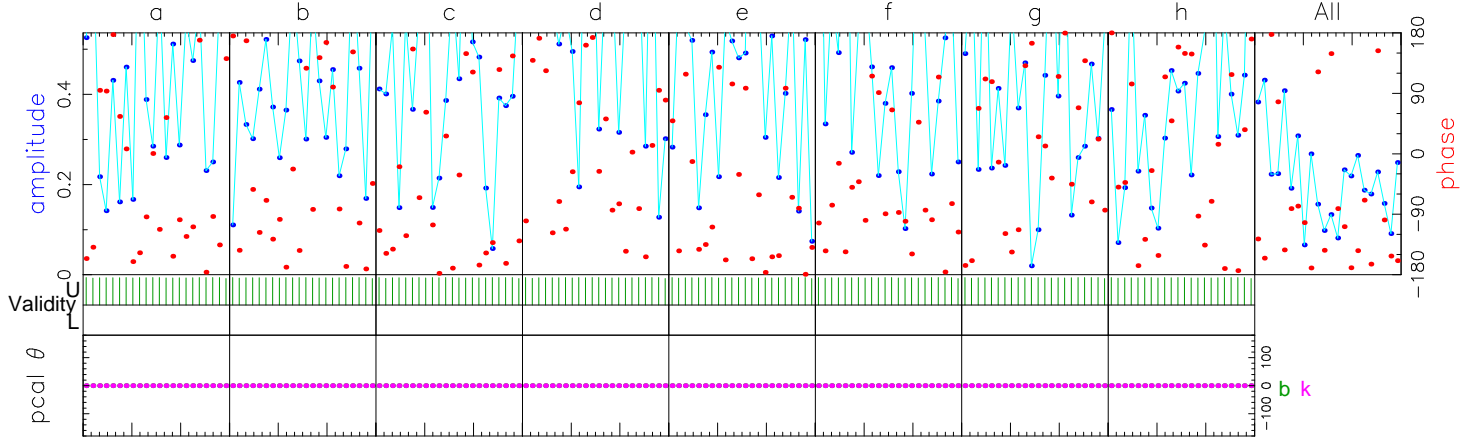
Fringe quality 0

SNR 5.5
 Int time 178.417
 Amp 0.179
 Phase -145.4
 PFD 9.8e-01
 Delays (us)
 SBD 0.552320
 MBD -0.001572
 Fringe rate (Hz)
 -0.611926
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060703
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-148.1	-131.3	-170.4	-136.7	-151.9	-100.3	-169.3	-179.3	Phase	-145.4
	0.3	0.2	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.2
	293.4	65.4	120.7	497.1	103.5	452.5	256.6	53.1	Sbd box	398.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.44771894076E+03		Apriori delay (usec)		-2.44826424372E+03		Resid mbdelay (usec)		-1.57204E-03	+/- 2.0E-04
Sband delay (usec)	-2.44771192372E+03		Apriori clock (usec)		-2.0538893E+08		Resid sbdelay (usec)		5.52320E-01	+/- 1.6E-03
Phase delay (usec)	-2.44826424832E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-4.59416E-06	+/- 6.6E-07
Delay rate (us/s)	-1.47919054582E-01		Apriori rate (us/s)		-1.47912096133E-01		Resid rate (us/s)		-6.95845E-06	+/- 6.3E-09
Total phase (deg)			Apriori accel (us/s/s)		1.99900647472E-05		Resid phase (deg)		-145.4	+/- 20.7

ph/seg (deg) 53.6 48.6 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.2 84.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.0 29.3 Inc. seg. avg. 0.189 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.2 51.2 Inc. frq. avg. 0.172 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 98.5 el 30.0 pa -43.5 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 910.586 2345.893 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/bk.W.3.1JFJP0

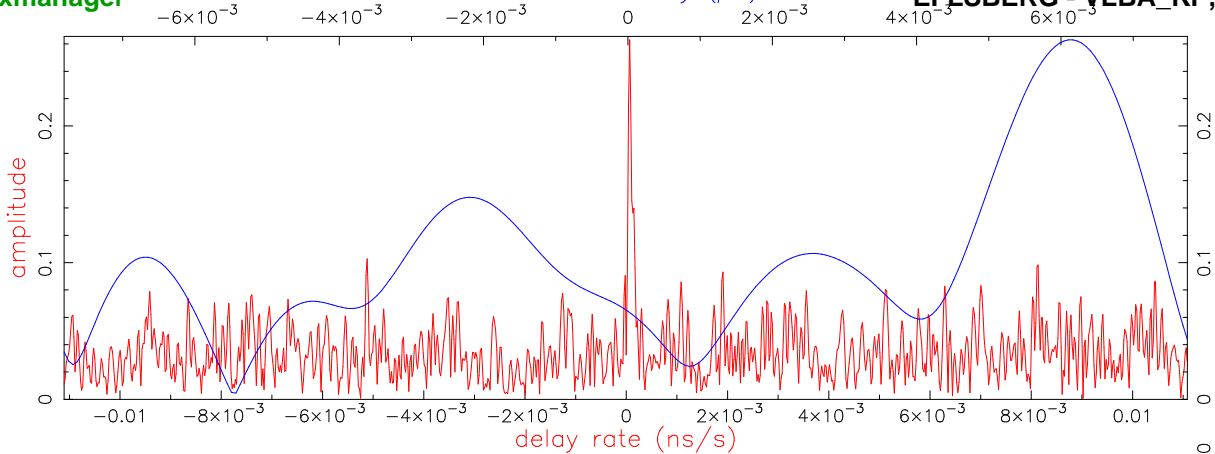
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, Bk

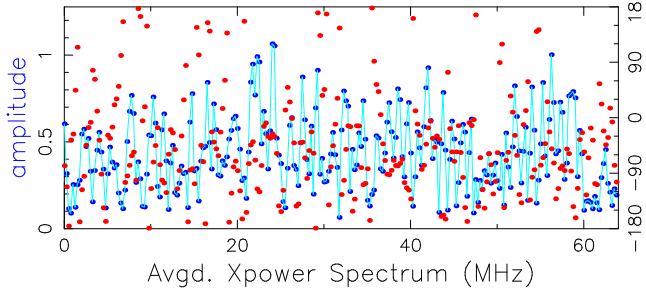
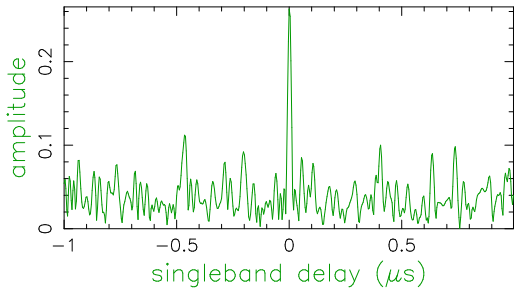
EFLSBERG - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)



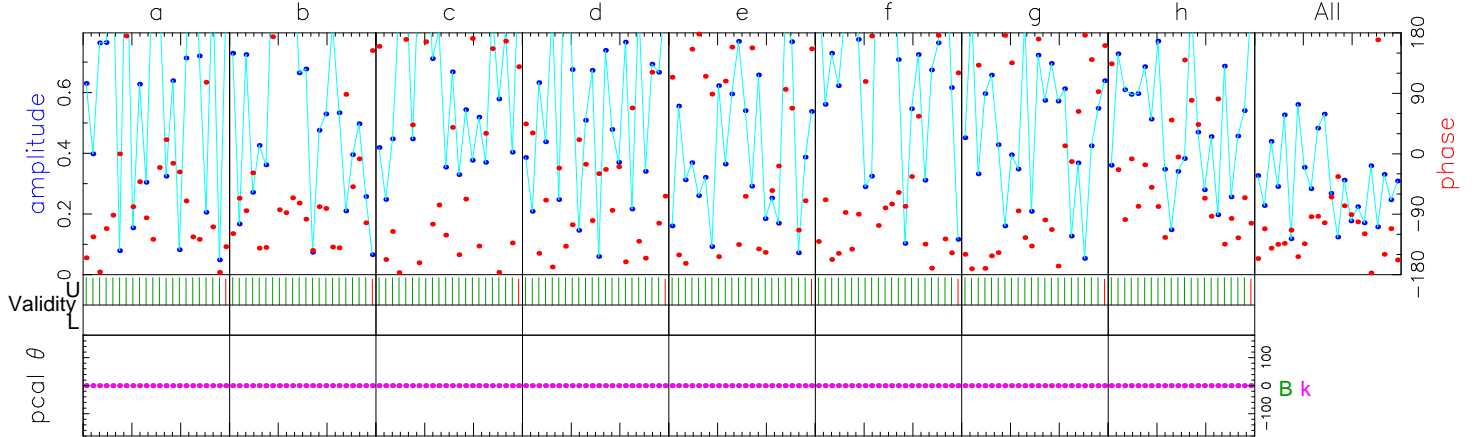
Fringe quality 9

SNR 9.7
 Int time 178.214
 Amp 0.266
 Phase -124.2
 PFD 6.6e-14
 Delays (us)
 SBD 0.001261
 MBD 0.006171
 Fringe rate (Hz) 0.005296
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060707
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-112.2	-97.6	-171.3	-107.0	176.1	-115.7	-166.2	-65.2	Phase	-124.2
	0.4	0.4	0.4	0.3	0.2	0.5	0.3	0.2	Ampl.	0.3
	256.6	257.2	257.6	256.3	259.5	257.7	258.9	183.2	Sbd box	257.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.66633925899E+03		Apriori delay (usec)		-2.66634543014E+03		Resid mbdelay (usec)		6.17115E-03	+/- 1.1E-04
Sband delay (usec)	-2.66634416914E+03		Apriori clock (usec)		9.7293329E+00		Resid sbdelay (usec)		1.26100E-03	+/- 8.9E-04
Phase delay (usec)	-2.66634543406E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-3.92277E-06	+/- 3.7E-07
Delay rate (us/s)	-1.88092175674E+00		Apriori rate (us/s)		-1.88092181696E+00		Resid rate (us/s)		6.02273E-08	+/- 3.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20974099643E-05		Resid phase (deg)		-124.2	+/- 11.8

	RMS	Theor.	Amplitude	0.266 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	36.8	27.7	Search (1024X32)	0.256	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	51.2	48.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	45.2	16.7	Inc. seg. avg.	0.278	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.9	29.2	Inc. frq. avg.	0.305	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
						ion window (TEC) 0.00 0.00

B: az 260.0 el 29.8 pa 40.8 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 11489.530 2627.376 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/Bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/Bk.W.37.1JFJP0

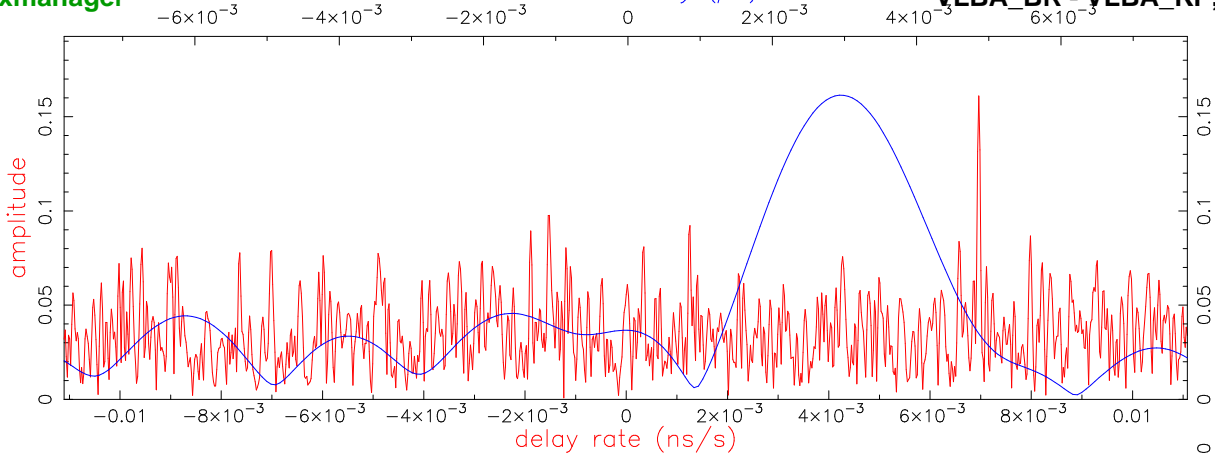
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, bk

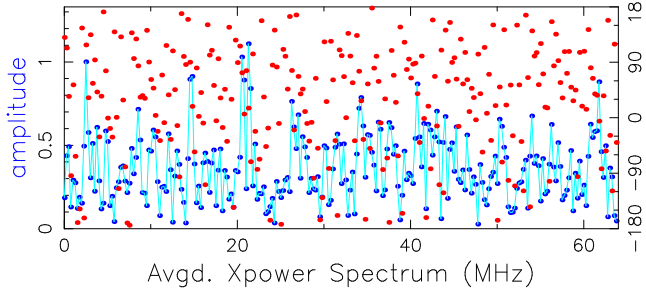
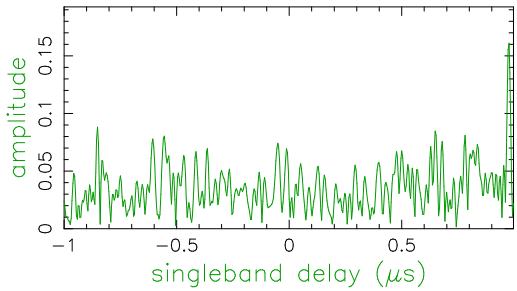
VLBA_BR - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)



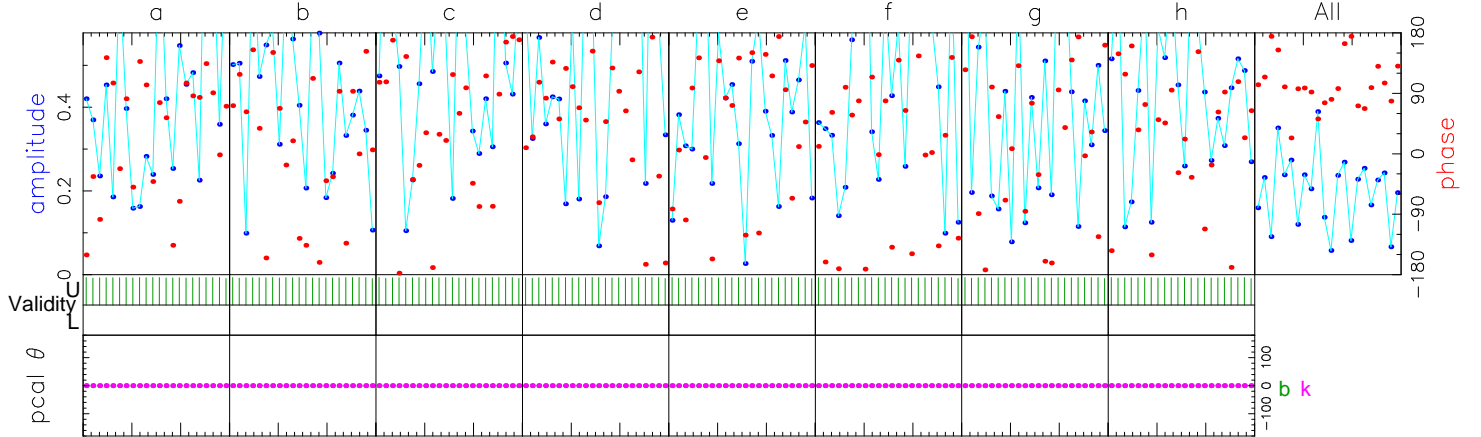
Fringe quality 0

SNR 5.9
 Int time 178.417
 Amp 0.193
 Phase 100.4
 PFD 3.0e-01
 Delays (us)
 SBD 0.975271
 MBD 0.002875
 Fringe rate (Hz) 0.613755
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060707
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



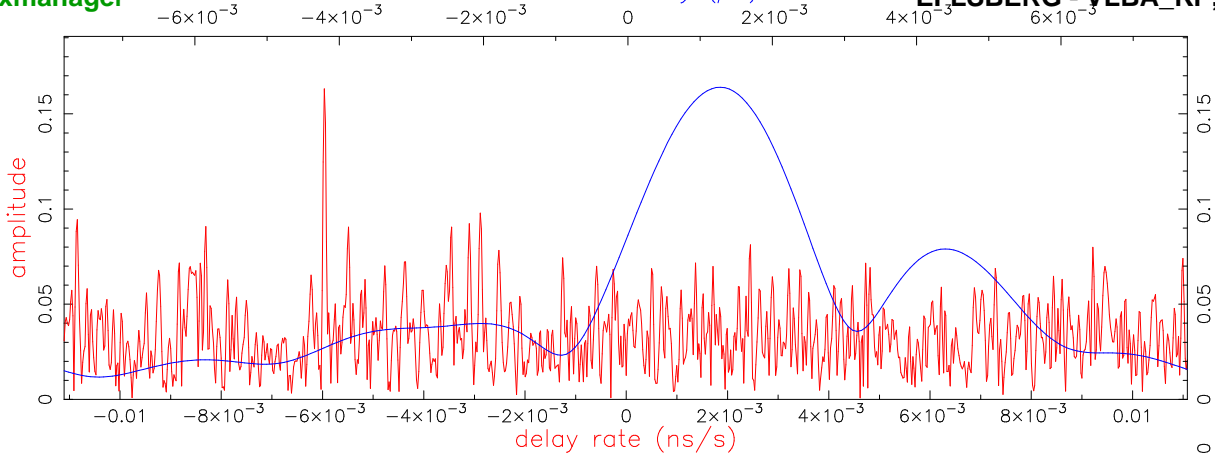
	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.44729261824E+03		Apriori delay (usec)		-2.44826424372E+03		Resid mbdelay (usec)		2.87548E-03	+/- 1.8E-04
Sband delay (usec)	-2.44728897247E+03		Apriori clock (usec)		-2.0538893E+00		Resid sbdelay (usec)		9.75271E-01	+/- 1.4E-03
Phase delay (usec)	-2.44826424055E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		3.17009E-06	+/- 6.1E-07
Delay rate (us/s)	-1.47905116883E-01		Apriori rate (us/s)		-1.47912096133E-01		Resid rate (us/s)		6.97925E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.99900647472E-05		Resid phase (deg)		100.4	+/- 19.3

	RMS	Theor.	Amplitude	0.193 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	38.0	45.2	Search (1024X32)	0.159	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	57.5	78.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	19.7	27.3	Inc. seg. avg.	0.183	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	28.2	47.6	Inc. frq. avg.	0.178	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 98.5 el 30.0 pa -43.5 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 910.586 2345.893 simultaneous interpolator

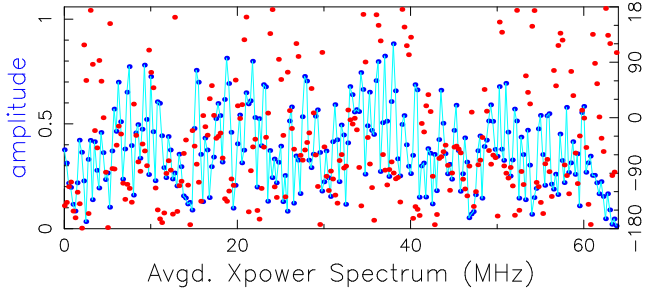
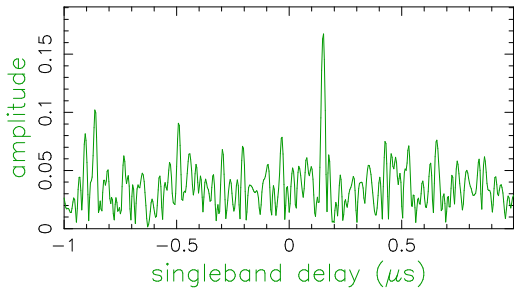
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/bk.W.40.1JFJP0

multiband delay (μ s)



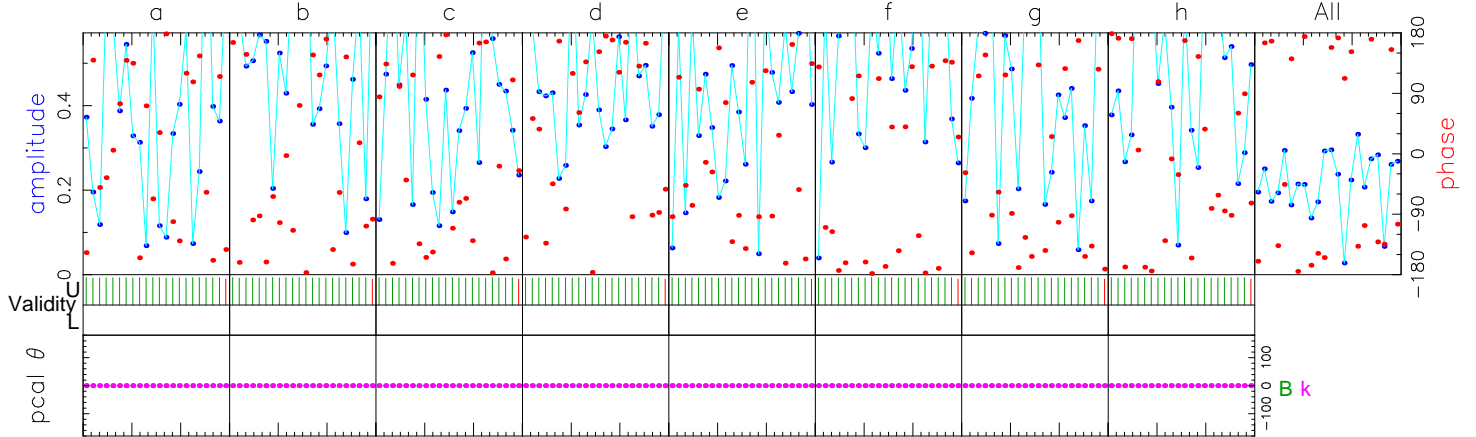
Fringe quality 0

SNR 6.2
 Int time 178.214
 Amp 0.191
 Phase -164.5
 PFD 9.0e-02
 Delays (us)
 SBD 0.151044
 MBD 0.001394
 Fringe rate (Hz) -0.525163
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060708
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-133.2	-146.1	-161.1	-179.7	-173.8	168.5	-169.4	-129.3	Phase	-164.5
	0.1	0.3	0.2	0.2	0.1	0.3	0.2	0.2	Ampl.	0.2
	137.2	255.5	354.8	356.7	371.8	295.7	293.3	286.3	Sbd box	295.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.66618778620E+03		Apriori delay (usec)		-2.66634543014E+03		Resid mbdelay (usec)		1.39394E-03	+/- 1.8E-04
Sband delay (usec)	-2.66619438639E+03		Apriori clock (usec)		9.7293329E+00		Resid sbdelay (usec)		1.51044E-01	+/- 1.4E-03
Phase delay (usec)	-2.66634543534E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-5.19687E-06	+/- 5.9E-07
Delay rate (us/s)	-1.88092778879E+00		Apriori rate (us/s)		-1.88092181696E+00		Resid rate (us/s)		-5.97183E-06	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20974099643E-05		Resid phase (deg)		-164.5	+/- 18.6

	RMS	Theor.	Amplitude	0.191 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.3	43.6	Search (1024X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	51.9	76.1	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.6	26.3	Inc. seg. avg.	0.190	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	42.0	45.9	Inc. frq. avg.	0.178					

B: az 260.0 el 29.8 pa 40.8 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 11489.530 2627.376 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/Bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/Bk.W.51.1JFJP0

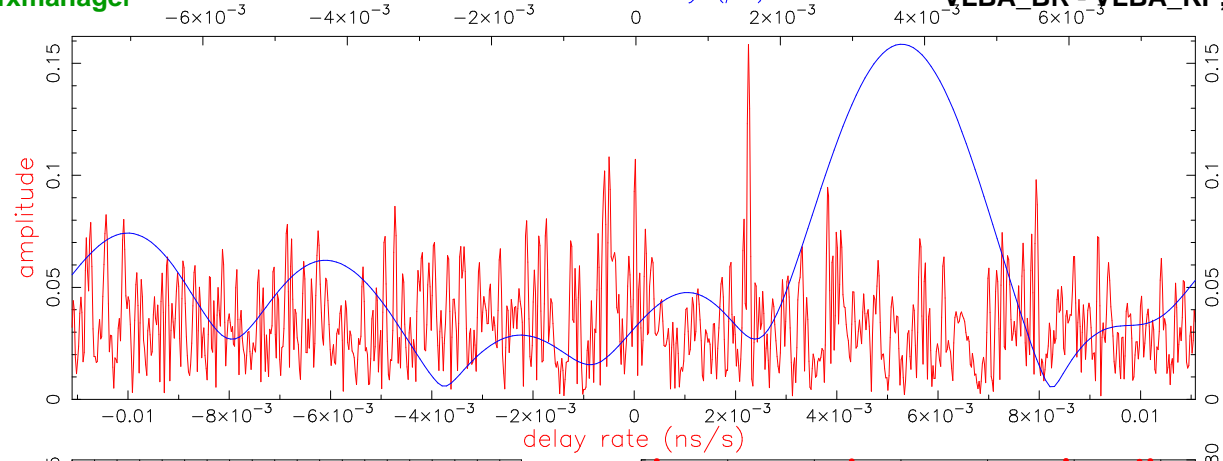
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, bk

VLBA_BR - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.8

Int time 178.417

Amp 0.162

Phase -133.2

PFD 5.3e-01

Delays (us)

SBD 0.065510

MBD 0.003640

Fringe rate (Hz) 0.198216

Ion TEC 0.000

Ref freq (MHz) 87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 050000.00

Stop 050300.22

FRT 050130.00

Corr/FF/build

2021:039:054330

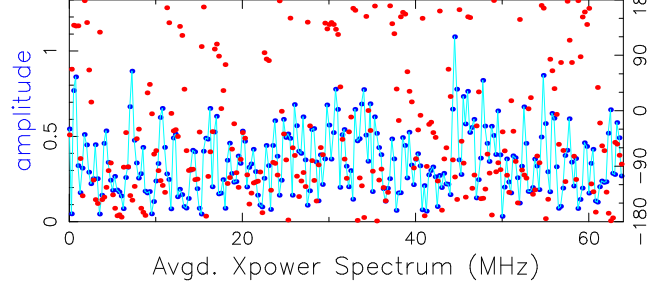
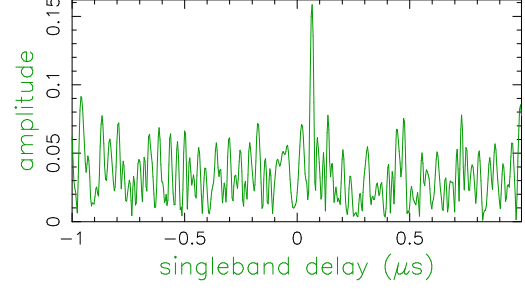
2021:039:060709

2020:247:085004

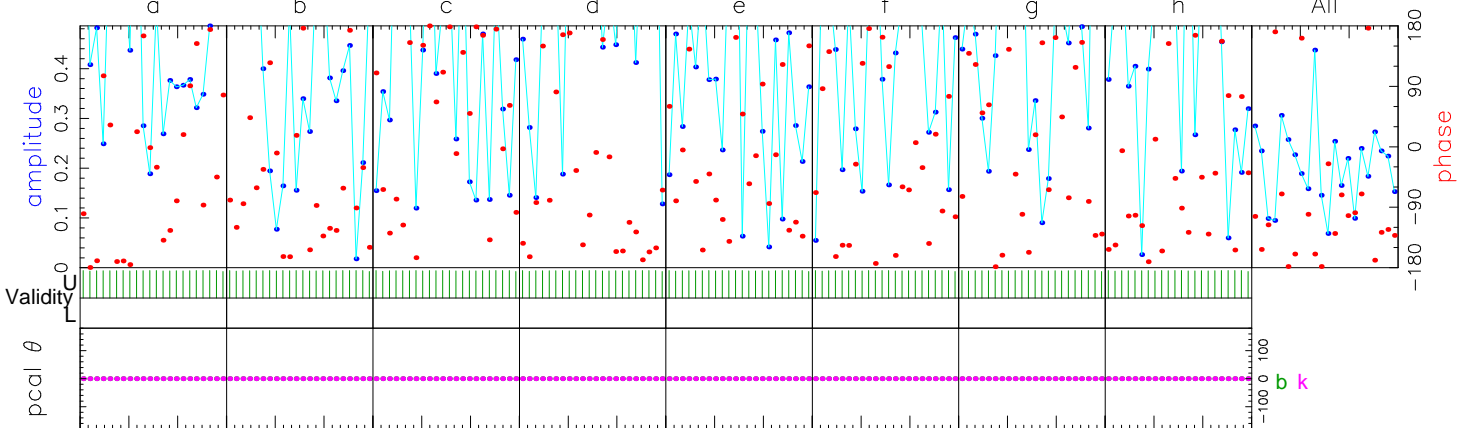
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.44819810338E+03								3.64034E-03	+/- 1.9E-04
Sband delay (usec)	-2.44819873372E+03								6.55100E-02	+/- 1.5E-03
Phase delay (usec)	-2.44826424793E+03								-4.20841E-06	+/- 6.2E-07
Delay rate (us/s)	-1.47909842138E-01								2.25399E-06	+/- 6.0E-09
Total phase (deg)			-346.7						-133.2	+/- 19.7
Apriori delay (usec)					-2.44826424372E+03					
Apriori clock (usec)					-2.0538893E+08					
Apriori clockrate (us/s)					-9.9999991E-08					
Apriori rate (us/s)					-1.47912096133E-01					
Apriori accel (us/s/s)					1.99900647472E-05					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
ph/seg (deg)	45.2	46.2								
amp/seg (%)	59.6	80.6								
ph/frq (deg)	27.0	27.9								
amp/frq (%)	45.1	48.6								
Search (1024X32)					0.157					
Inc. seg. avg.					0.159					
Inc. frq. avg.					0.157					
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

b: az 98.5 el 30.0 pa -43.5 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 910.586 2345.893

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/bk.W.55.1JFJP0

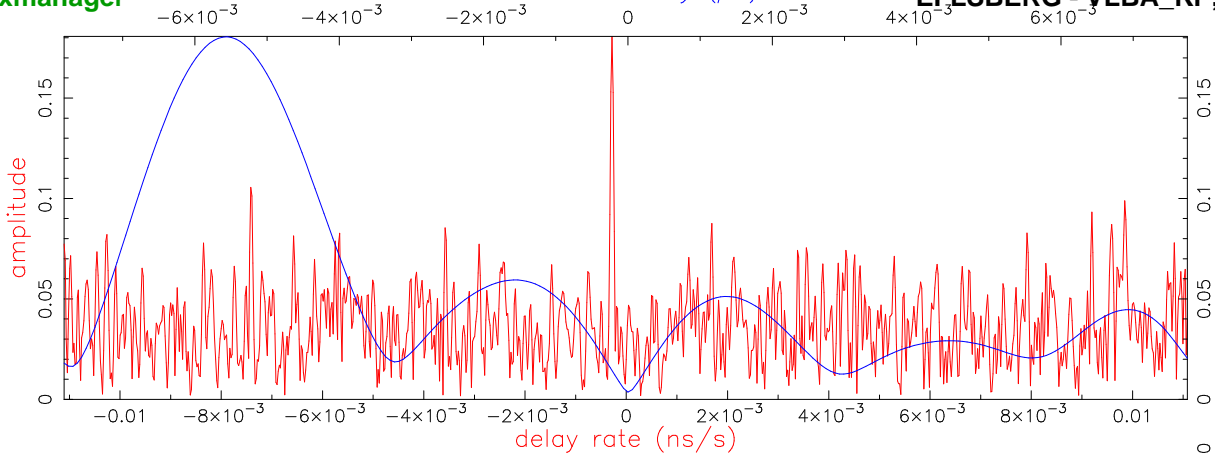
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

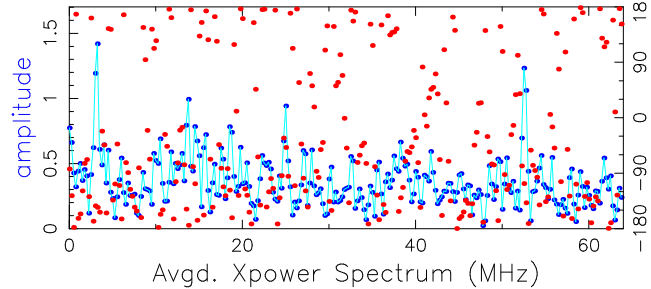
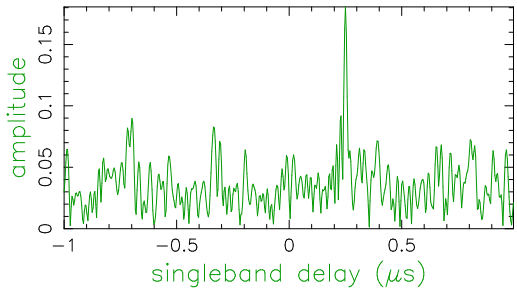
0235+164.1JFJP0, No0042, Bk

EFLSBERG - VLBA_KP, fgroup W, pol RL

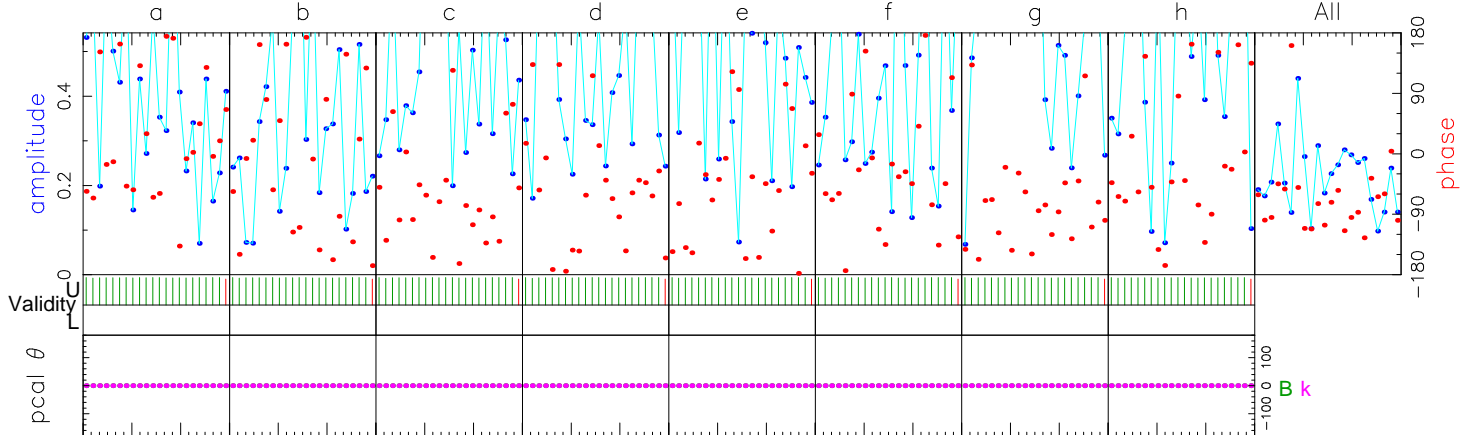
multiband delay (μ s)



Fringe quality 0
 SNR 6.6
 Int time 178.214
 Amp 0.181
 Phase -77.3
 PFD 6.0e-03
 Delays (us)
 SBD 0.249648
 MBD -0.005583
 Fringe rate (Hz)
 -0.025643
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060710
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-43.4	-109.0	-86.6	-69.6	-85.4	-62.9	-90.7	-57.1	Phase	-77.3
	0.1	0.1	0.2	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	86.3	230.9	447.0	198.2	127.1	120.9	320.7	485.3	Sbd box	320.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.66610101295E+03		Apriori delay (usec)		-2.66634543014E+03		Resid mbdelay (usec)		-5.58280E-03	+/- 1.6E-04
Sband delay (usec)	-2.66609578214E+03		Apriori clock (usec)		9.7293329E+00		Resid sbdelay (usec)		2.49648E-01	+/- 1.3E-03
Phase delay (usec)	-2.66634543258E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-2.44171E-06	+/- 5.5E-07
Delay rate (us/s)	-1.88092210856E+00		Apriori rate (us/s)		-1.88092181696E+00		Resid rate (us/s)		-2.91599E-07	+/- 5.3E-09
Total phase (deg)			Apriori accel (us/s/s)		2.20974099643E-05		Resid phase (deg)		-77.3	+/- 17.4

ph/seg (deg) 40.1 40.8 Search (1024X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.6 71.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.0 24.6 Inc. seg. avg. 0.176 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.7 42.9 Inc. frq. avg. 0.172 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 260.0 el 29.8 pa 40.8 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 11489.530 2627.376 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/Bk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/Bk.W.68.1JFJP0

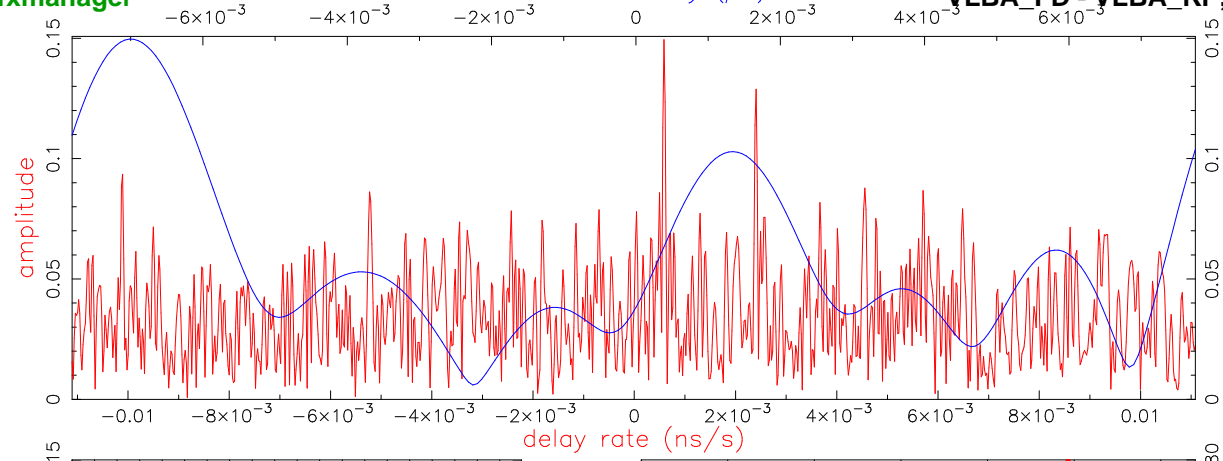
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

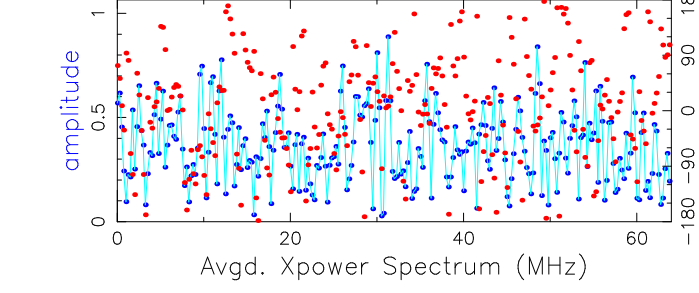
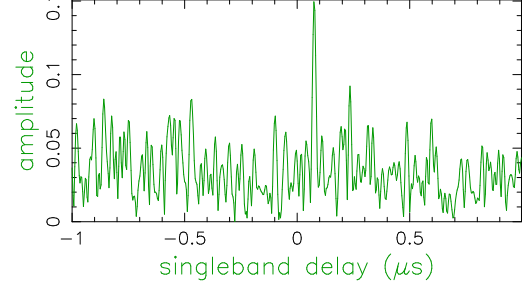
0235+164.1JFJP0, No0042, fk

VLBA_FD - VLBA_KP, fgroup W, pol LR

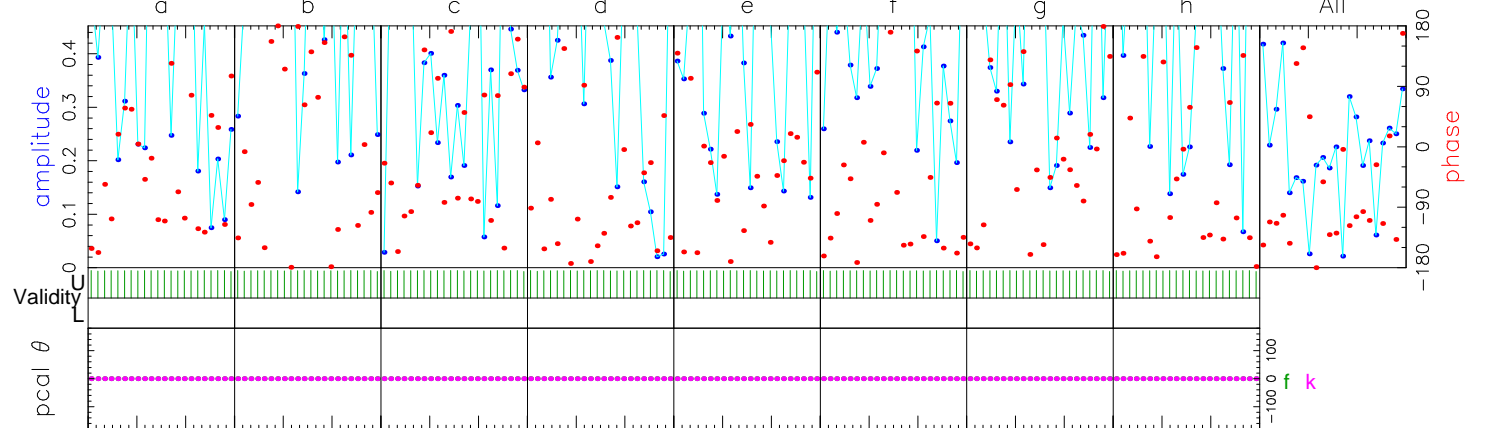
multiband delay (μ s)



Fringe quality 0
 SNR 5.5
 Int time 178.363
 Amp 0.151
 Phase -125.0
 PFD 9.9e-01
 Delays (us)
 SBD 0.075354
 MBD -0.006932
 Fringe rate (Hz) 0.051108
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060715
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



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

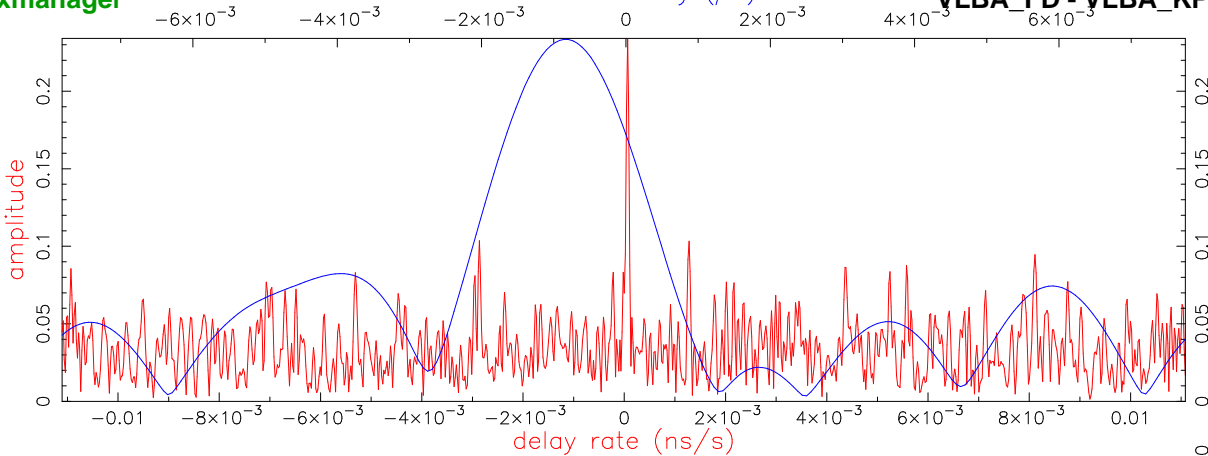


	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-73.4	-172.0	-111.3	-129.3	-38.9	-111.0	-105.9	-149.0		-125.0
	0.1	0.2	0.2	0.3	0.1	0.2	0.1	0.3		0.2
	61.1	31.9	211.6	275.3	37.3	146.5	344.4	278.1		276.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
k	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
f	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	1.85393153367E+03		Apriori delay (usec)		1.85386034078E+03		Resid mbdelay (usec)		-6.93210E-03	+/- 2.0E-04
Sband delay (usec)	1.85393569478E+03		Apriori clock (usec)		7.5856667E+00		Resid sbdelay (usec)		7.53540E-02	+/- 1.6E-03
Phase delay (usec)	1.85386033683E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		-3.94806E-06	+/- 6.6E-07
Delay rate (us/s)	-9.29626955122E-02		Apriori rate (us/s)		-9.29632766815E-02		Resid rate (us/s)		5.81169E-07	+/- 6.3E-09
Total phase (deg)	7.4		Apriori accel (us/s/s)		-1.04566729843E-05		Resid phase (deg)		-125.0	+/- 20.8

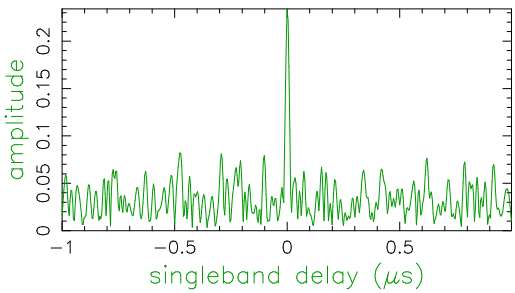
ph/seg (deg) 70.5 48.9 Search (1024X32) 0.145 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.8 85.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.6 29.5 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.4 51.4 Inc. frq. avg. 0.157 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 96.6 el 44.5 pa -63.1 k: az 93.2 el 37.9 pa -62.1 u, v (fr/asec) 562.313 -422.714 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/fk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/fk.W.108.1JFJP0

multiband delay (μ s)

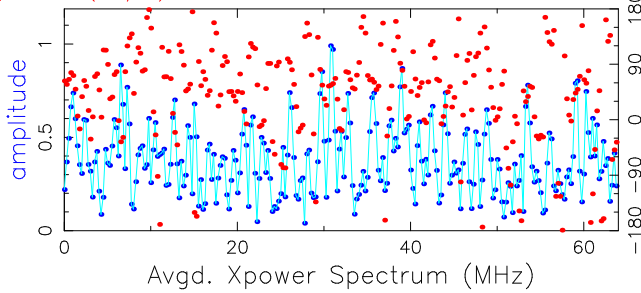
Fringe quality 9



SNR 8.5
Int time 178.363
Amp 0.234
Phase 79.1
PFD 2.3e-09
Delays (us)
SBD 0.000695
MBD -0.000821
Fringe rate (Hz)
0.005836
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512

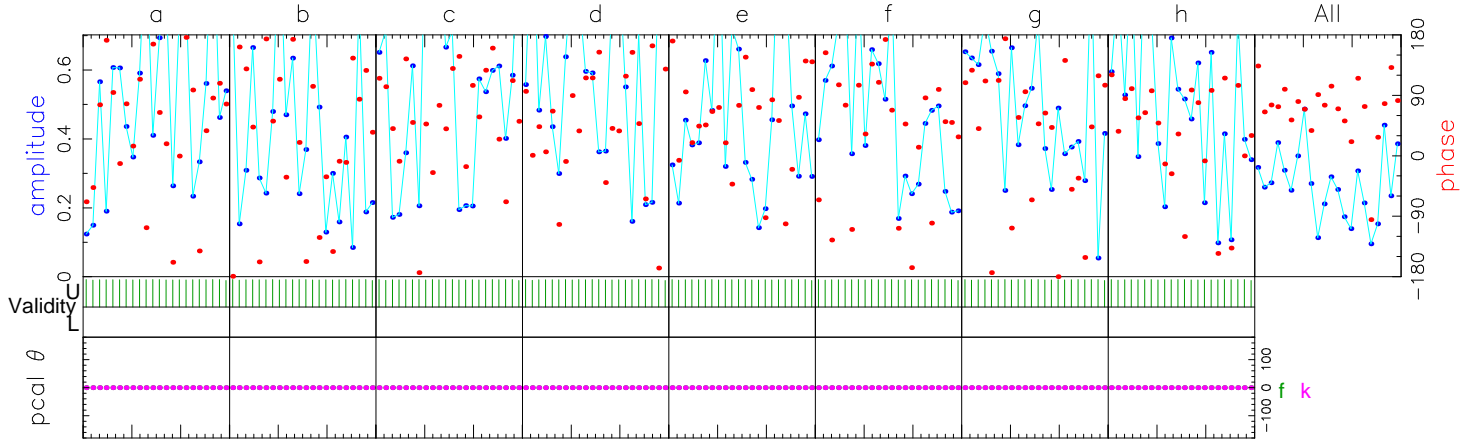


singleband delay (μ s)



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 050000.00
Stop 050300.22
FRT 050130.00
Corr/FF/build
2021:039:054330
2021:039:060718
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
75.2	118.0	74.4	65.7	59.7	103.7	94.9	71.1	71.1	Phase	79.1
0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
508.3	460.2	257.9	199.8	258.2	91.7	196.7	256.6	256.6	Sbd box	257.2
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.85385952005E+03		Apriori delay (usec)		1.85386034078E+03		Resid mbdelay (usec)		-8.20723E-04	+/- 1.3E-04
Sband delay (usec)	1.85386103603E+03		Apriori clock (usec)		7.5856667E+00		Resid sbdelay (usec)		6.95250E-04	+/- 1.0E-03
Phase delay (usec)	1.85386034327E+03		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		2.49842E-06	+/- 4.2E-07
Delay rate (us/s)	-9.29632103174E-02		Apriori rate (us/s)		-9.29632766815E-02		Resid rate (us/s)		6.63641E-08	+/- 4.1E-09
Total phase (deg)	211.5		Apriori accel (us/s/s)		-1.04566729843E-05		Resid phase (deg)		79.1	+/- 13.4

	RMS	Theor.	Amplitude	0.234 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.9	31.4	Search (1024X32)	0.232	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	45.2	54.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	22.5	19.0	Inc. seg. avg.	0.234	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	27.8	33.1	Inc. frq. avg.	0.232	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
f: az 96.6 el 44.5 pa -63.1	k: az 93.2 el 37.9 pa -62.1		u,v (fr/asec) 562.313 -422.714		ion window (TEC) 0.00 0.00	

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/fk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/fk.W.136.1JFJP0

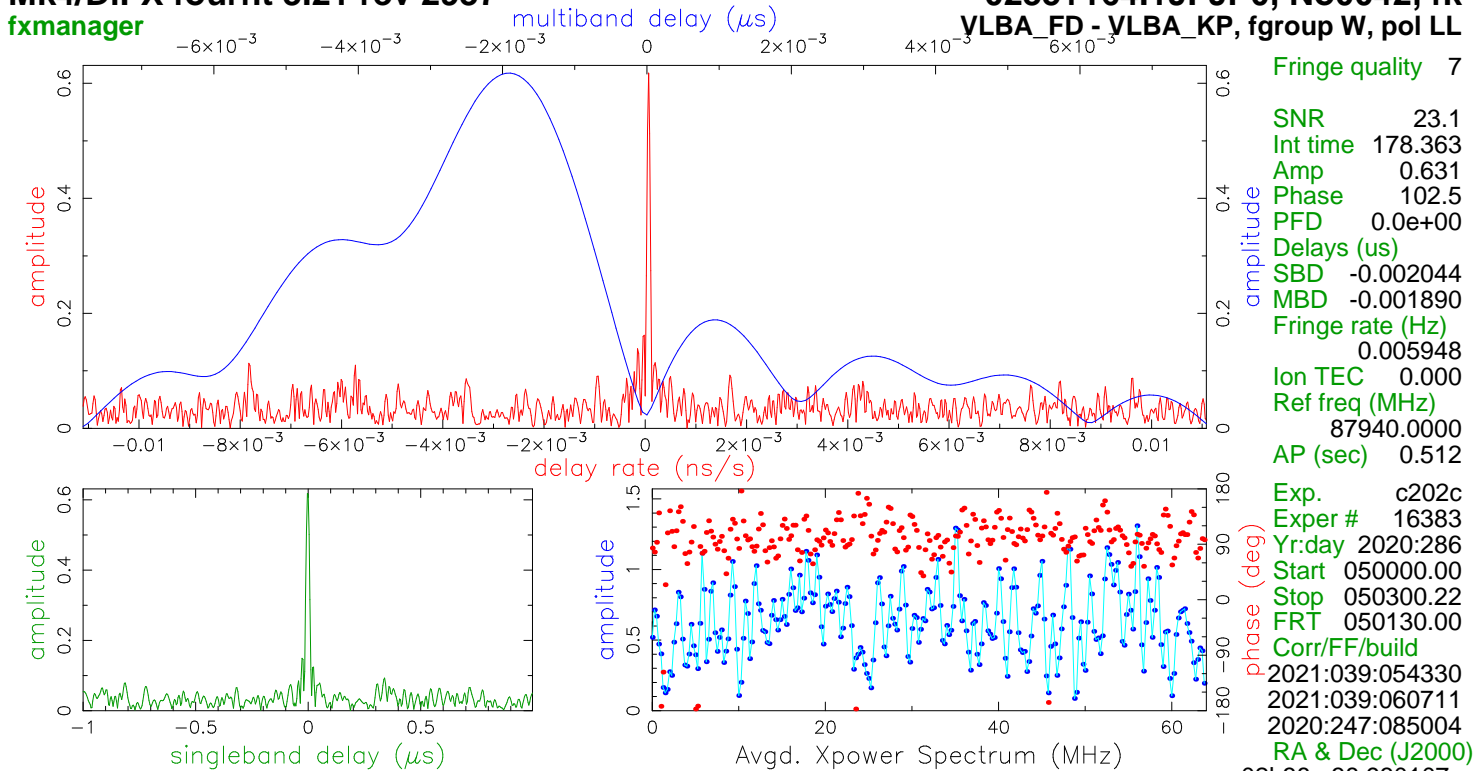
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

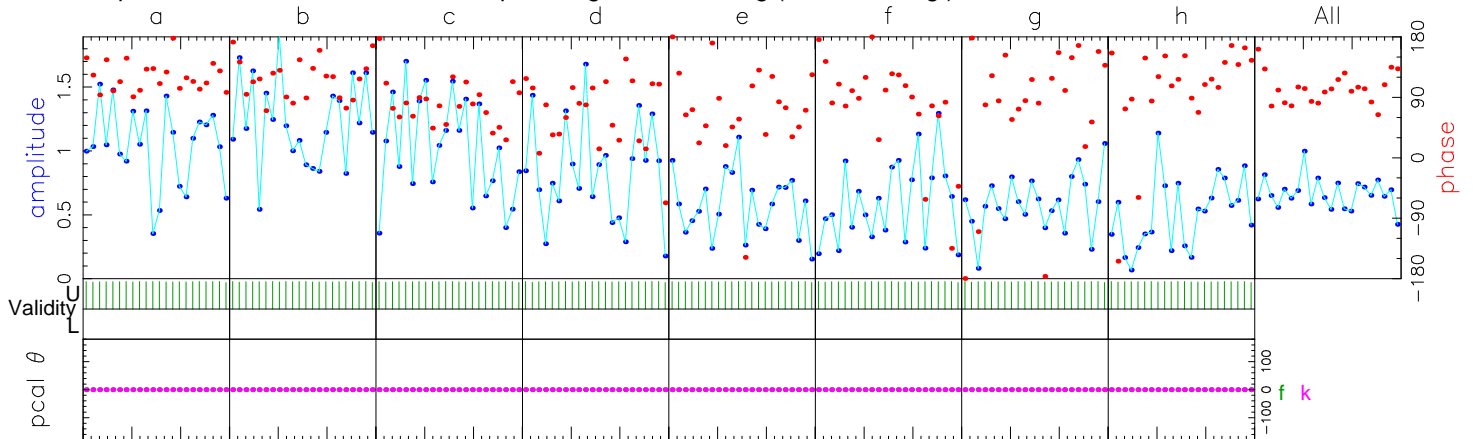
fxmanager

0235+164.1JFJP0, No0042, fk

VLBA_FD - VLBA_KP, fgroup W, pol LL



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
120.1	116.7	81.7	74.1	74.5	92.7	120.6	131.7	131.7	Phase	102.5
1.0	1.1	0.9	0.6	0.4	0.4	0.4	0.4	0.4	Ampl.	0.7
256.6	256.0	256.4	256.3	256.9	257.1	256.4	257.2	257.2	Sbd box	256.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.85385845096E+03		Apriori delay (usec)	1.85386034078E+03	Resid mbdelay (usec)	-1.88982E-03	+/-	4.7E-05		
Sband delay (usec)	1.85385829678E+03		Apriori clock (usec)	7.5856667E+00	Resid sbdelay (usec)	-2.04400E-03	+/-	3.7E-04		
Phase delay (usec)	1.85386034401E+03		Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	3.23625E-06	+/-	1.6E-07		
Delay rate (us/s)	-9.29632090473E-02		Apriori rate (us/s)	-9.29632766815E-02	Resid rate (us/s)	6.76342E-08	+/-	1.5E-09		
Total phase (deg)		234.9	Apriori accel (us/s/s)	-1.04566729843E-05	Resid phase (deg)	102.5	+/-	5.0		

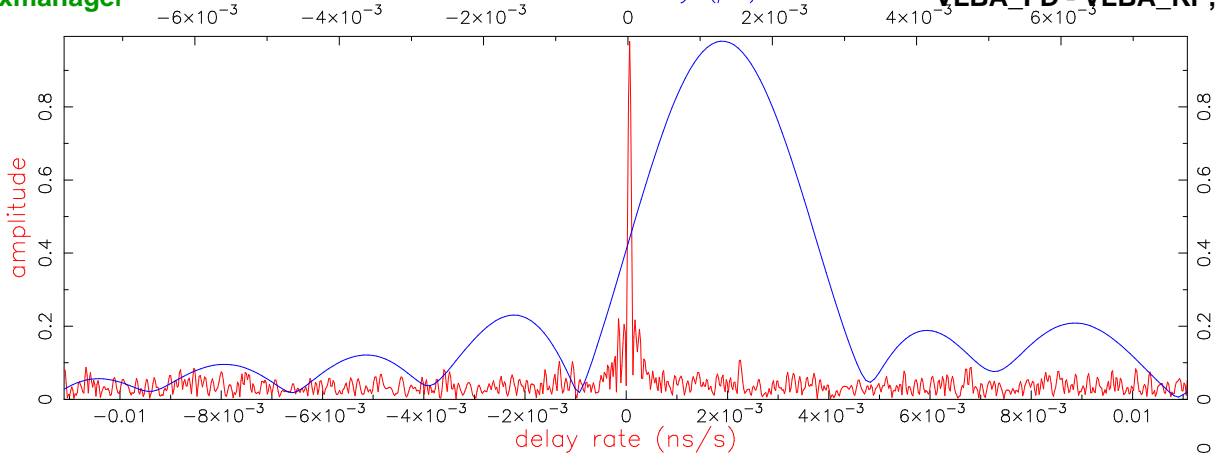
	RMS	Theor.	Amplitude	0.631 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	22.9	11.7	Search (1024X32)	0.616	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	19.5	20.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.2	7.0	Inc. seg. avg.	0.655	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.7	12.3	Inc. frq. avg.	0.656	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 96.6 el 44.5 pa -63.1 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 562.313 -422.714 simultaneous interpolator

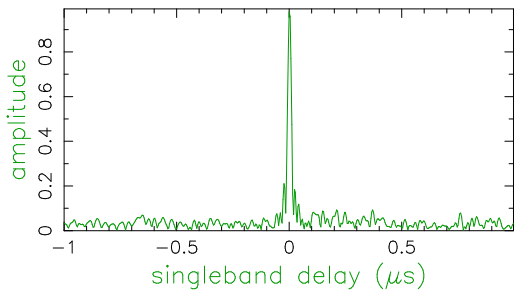
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/fk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/fk.W.81.1JFJP0

multiband delay (μ s)

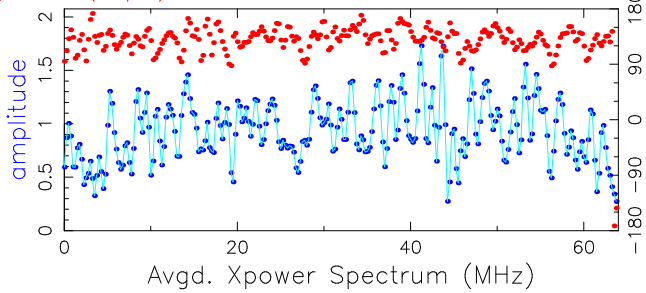
Fringe quality 9



SNR 36.3
Int time 178.363
Amp 0.993
Phase 133.9
PFD 0.0e+00
Delays (us)
SBD 0.001506
MBD 0.001346
Fringe rate (Hz) 0.005986
Ion TEC 0.000
Ref freq (MHz) 87940.0000
AP (sec) 0.512

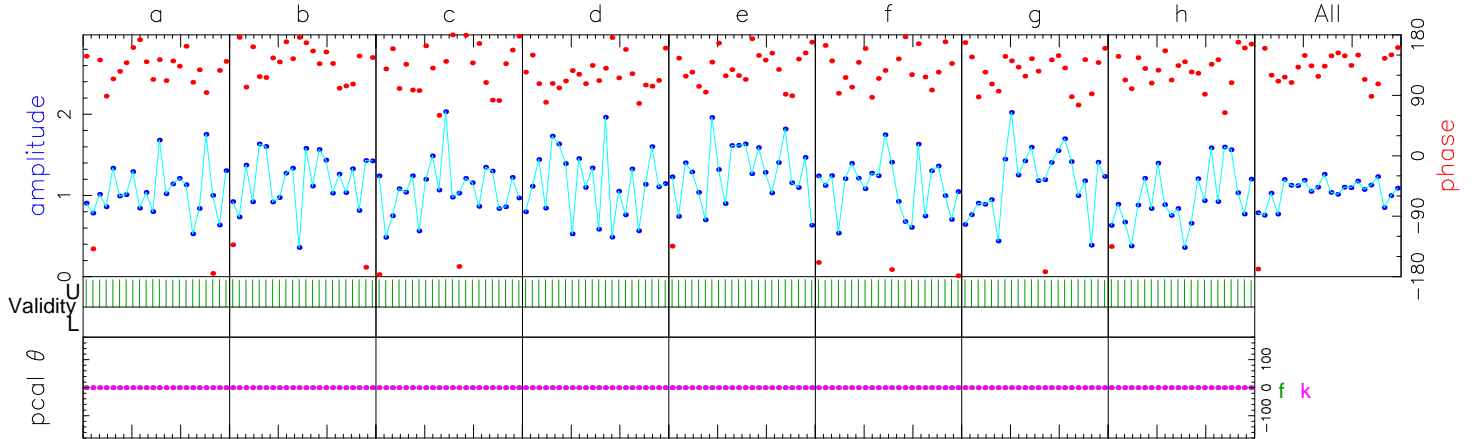


singleband delay (μ s)



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 050000.00
Stop 050300.22
FRT 050130.00
Corr/FF/build
2021:039:054330
2021:039:060713
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.85386168712E+03	Apriori delay (usec)	1.85386034078E+03	Resid mbdelay (usec)	1.34634E-03	+/-	3.0E-05
Sband delay (usec)	1.85386184653E+03	Apriori clock (usec)	7.5856667E+00	Resid sbdelay (usec)	1.50575E-03	+/-	2.4E-04
Phase delay (usec)	1.85386034500E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	4.22853E-06	+/-	1.0E-07
Delay rate (us/s)	-9.29632086114E-02	Apriori rate (us/s)	-9.29632766815E-02	Resid rate (us/s)	6.80701E-08	+/-	9.6E-10
Total phase (deg)	266.3	Apriori accel (us/s/s)	-1.04566729843E-05	Resid phase (deg)	133.9	+/-	3.2

ph/seg (deg)	22.8	Theor.	7.4	Amplitude	0.993 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	15.5	Search (1024X32)	0.966	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.1	Inc. seg. avg.	1.046	Inc. frq. avg.	0.984	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	9.6	Inc. frq. avg.	0.984			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

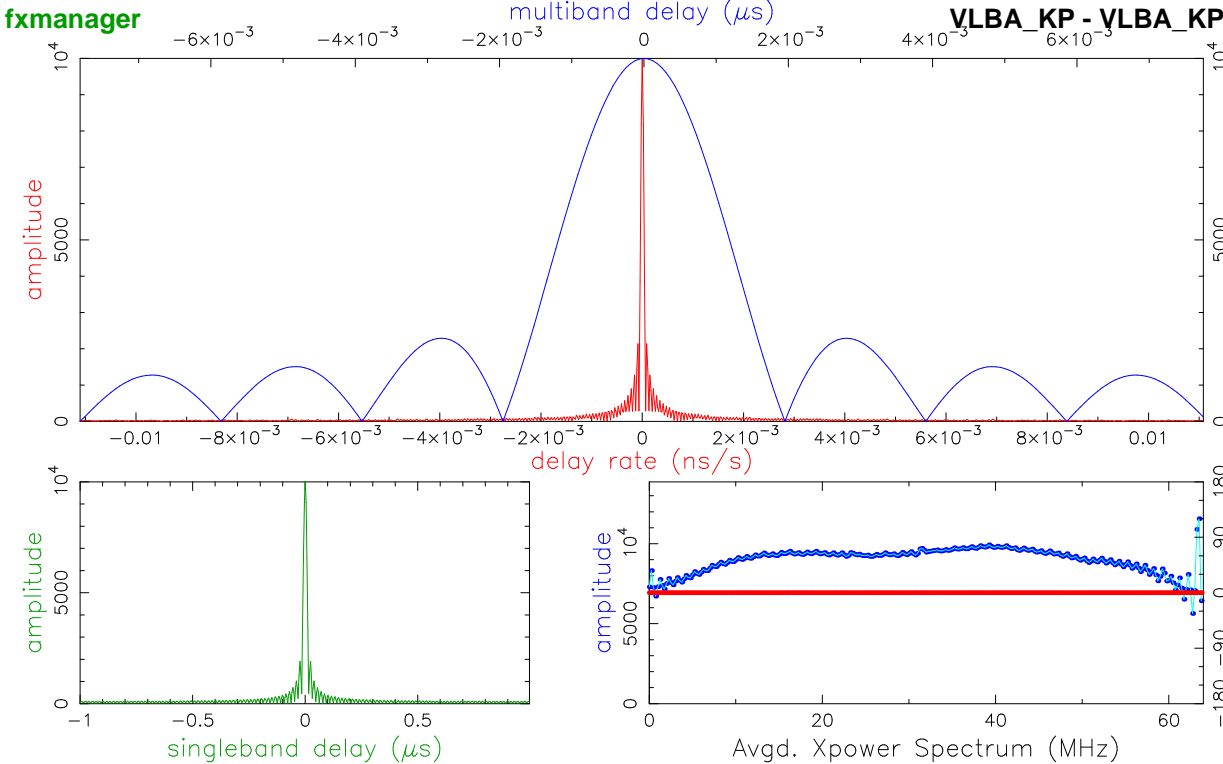
f: az 96.6 el 44.5 pa -63.1 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 562.313 -422.714 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/fk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/fk.W.91.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kk

VLBA_KP - VLBA_KP, fgroup W, pol RR

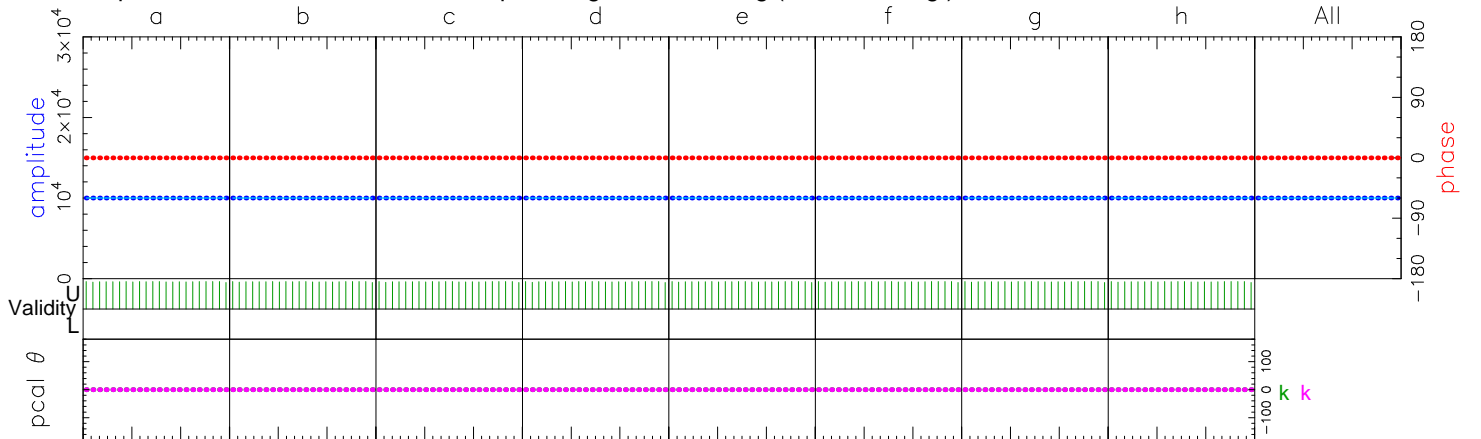


Fringe quality 9

SNR 365271.2
 Int time 178.417
 Amp 10000.007
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Yr:day 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060717
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	10000.0	10000.0
k	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
k:k	0:0	0:0	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	1000	1000
k	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 3.0E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 2.4E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 9.9E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 9.5E-14
Total phase (deg)			0.0						0.0	+/- 0.0
ph/seg (deg)	0.0	0.0								
amp/seg (%)	0.0	0.0								
ph/frq (deg)	0.0	0.0								
amp/frq (%)	0.0	0.0								
k: az 93.2 el 37.9 pa -62.1	k: az 93.2 el 37.9 pa -62.1		u,v (fr/asec) 0.000 0.000						simultaneous interpolator	
Control file: cf_1234_88GHz_gmva	Input file: /Exps/c202c/v1/1234/No0042/kk..1JFJP0		Output file: /Exps/c202c/v1/1234/No0042/kk.W.123.1JFJP0							

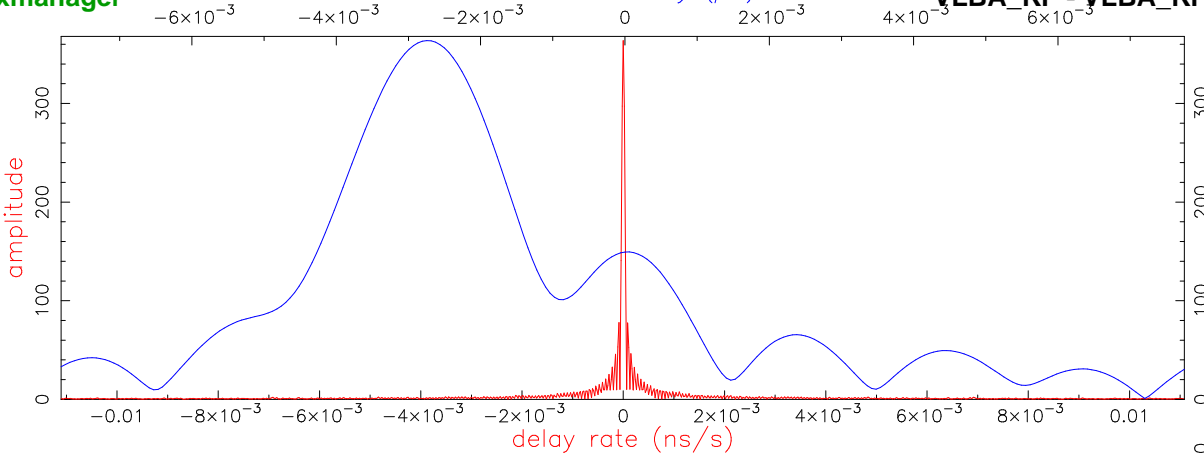
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kk

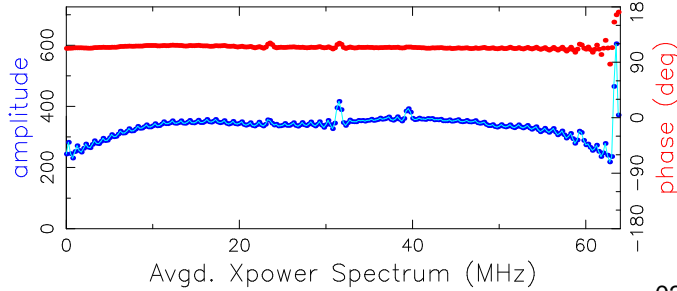
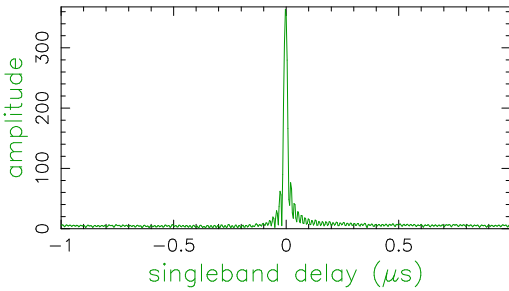
VLBA_KP - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)



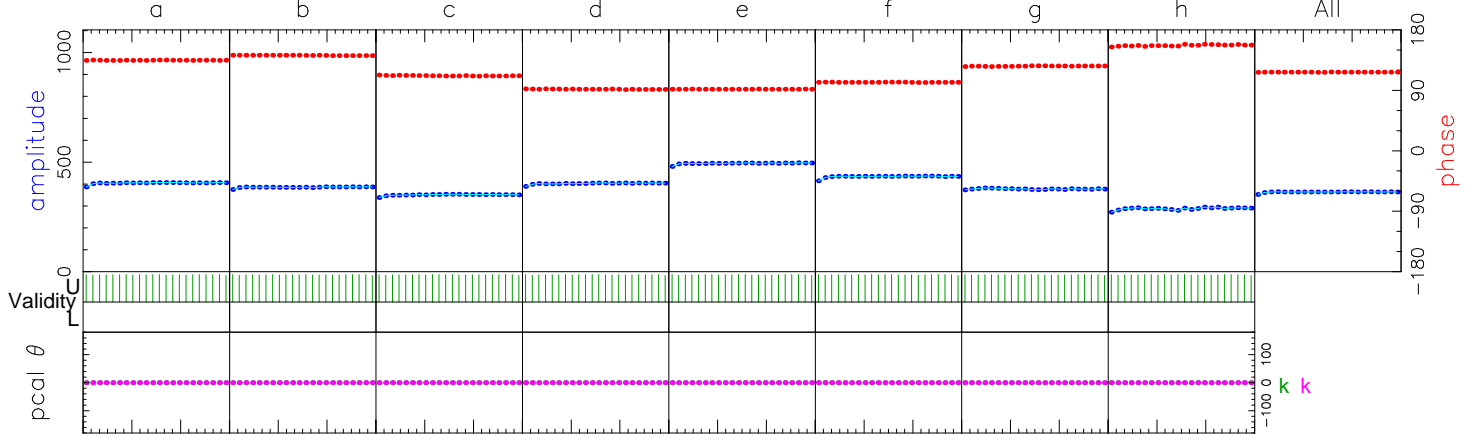
Fringe quality 7

SNR 13441.6
 Int time 178.417
 Amp 367.990
 Phase 117.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.002521
 MBD -0.002702
 Fringe rate (Hz)
 0.000003
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060721
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All			
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0					
k	1000	1000	1000	1000	1000	1000	1000	1000					
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
k:k	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					
k	1000	1000	1000	1000	1000	1000	1000	1000					
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL					
Group delay (usec)(sbd)	-2.70168750000E-03												
Sband delay (usec)	-2.52075000000E-03												
Phase delay (usec)	3.69491220876E-06												
Delay rate (us/s)	3.19265073248E-11												
Total phase (deg)			117.0										
				Apriori delay (usec)	0.00000000000E+00				Resid mbdelay (usec)	-2.70169E-03	+/- 8.1E-08		
				Apriori clock (usec)	0.0000000E+00				Resid sbdelay (usec)	-2.52075E-03	+/- 6.4E-07		
				Apriori clockrate (us/s)	0.0000000E+00				Resid phdelay (usec)	3.69491E-06	+/- 2.7E-10		
				Apriori rate (us/s)	0.00000000000E+00				Resid rate (us/s)	3.19265E-11	+/- 2.6E-12		
				Apriori accel (us/s/s)	0.00000000000E+00				Resid phase (deg)	117.0	+/- 0.0		
ph/seg (deg)	0.1	0.0		Search (1024X32)	358.565				PCal mode: MANUAL, MANUAL				
amp/seg (%)	1.4	0.0		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.3	0.0		Inc. seg. avg.	363.627				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	16.7	0.0		Inc. frq. avg.	392.337				Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
									Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 93.2 el 37.9 pa -62.1 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

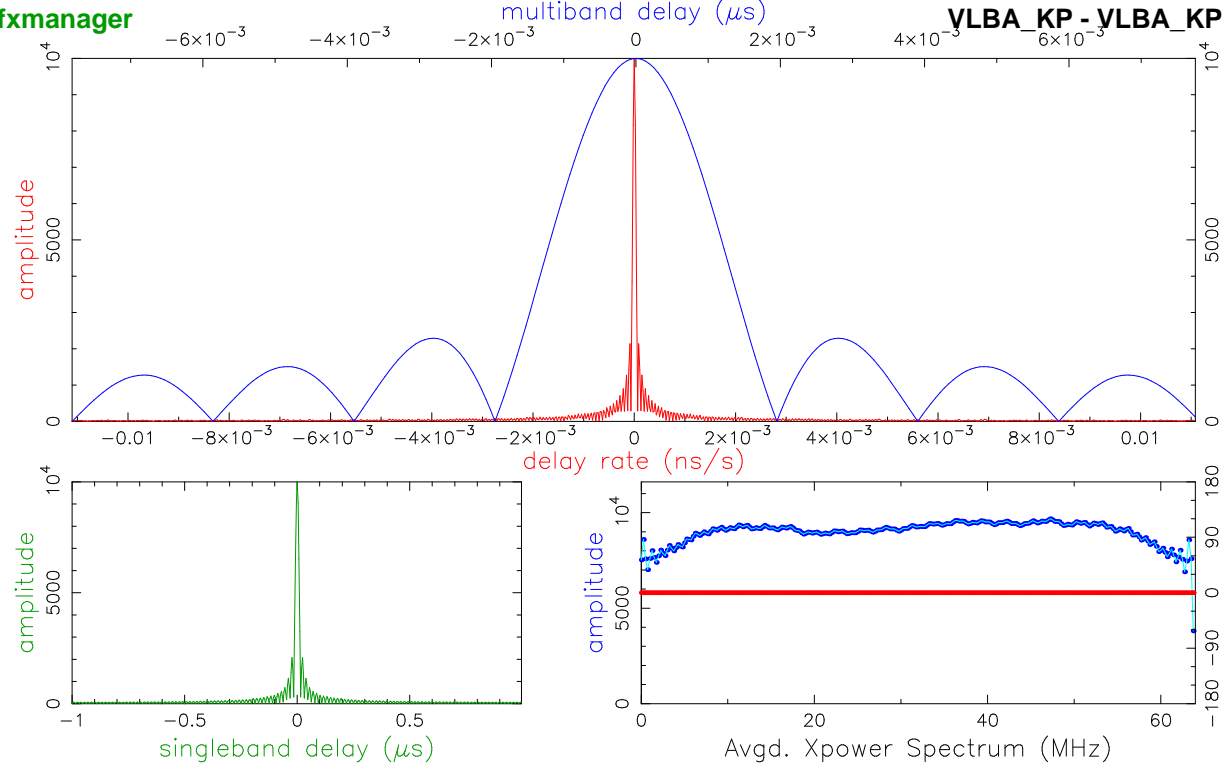
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kk.W.162.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kk

VLBA_KP - VLBA_KP, fgroup W, pol LL

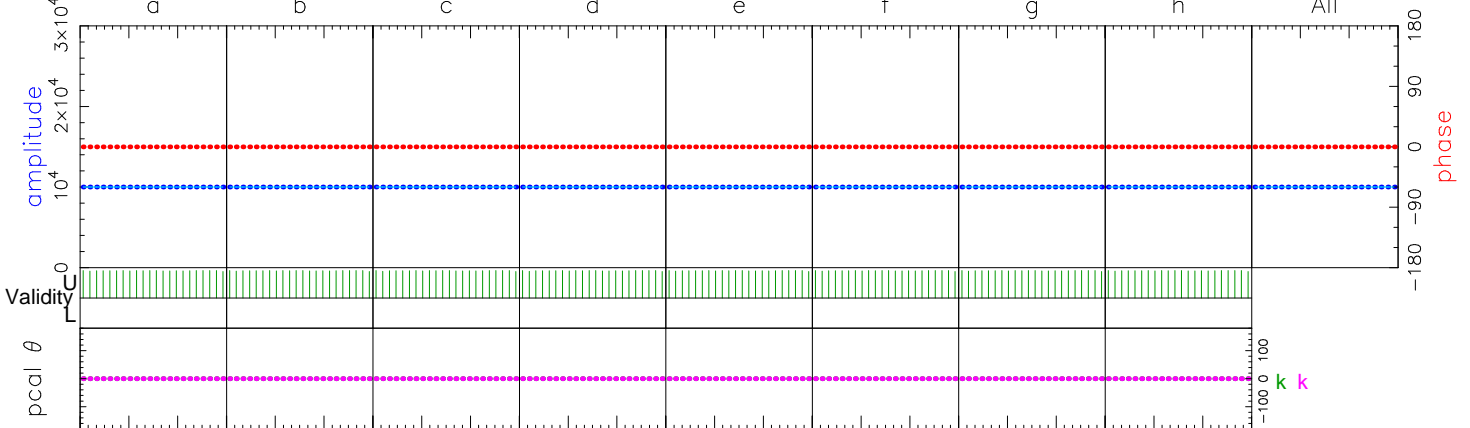


Fringe quality 9

SNR 365271.3
 Int time 178.417
 Amp 10000.002
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512

Exp. c202c
 Yr:day 16383
 Start 2020:286
 Stop 2020:286
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060714
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.4E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 9.9E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.5E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.002 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.003 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.003 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 93.2 el 37.9 pa -62.1 k: az 93.2 el 37.9 pa -62.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kk..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kk.W.96.1JFJP0

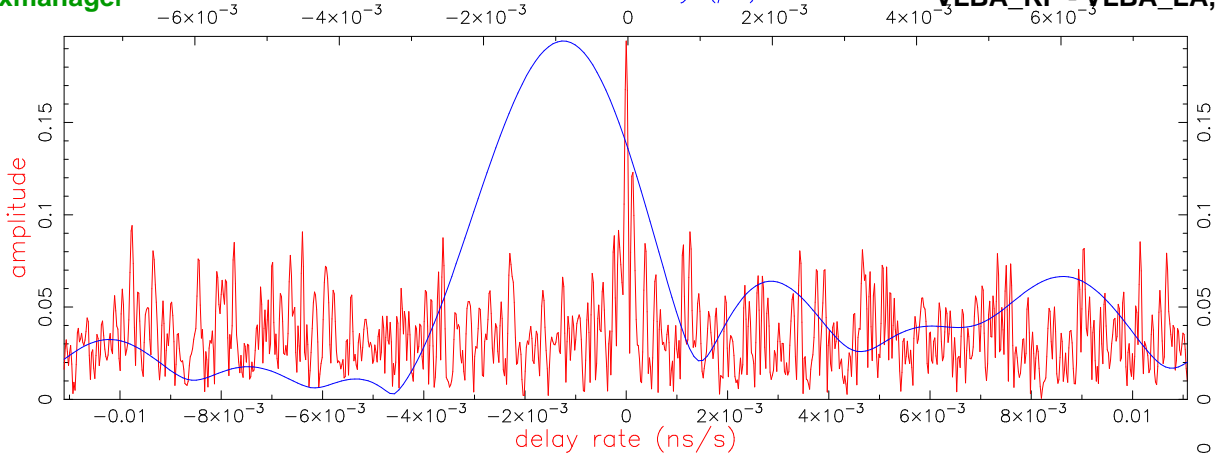
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kl

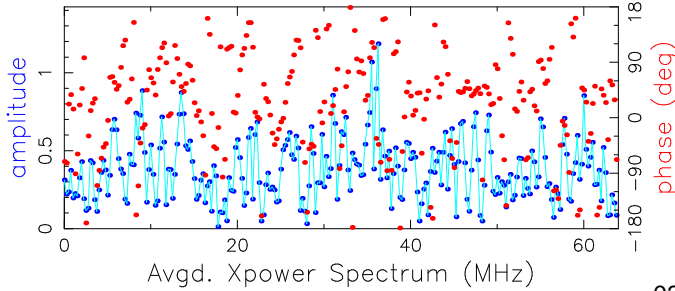
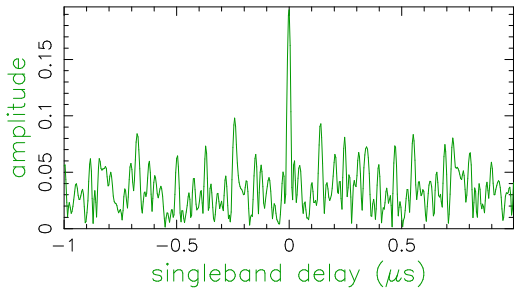
VLBA_KP - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)



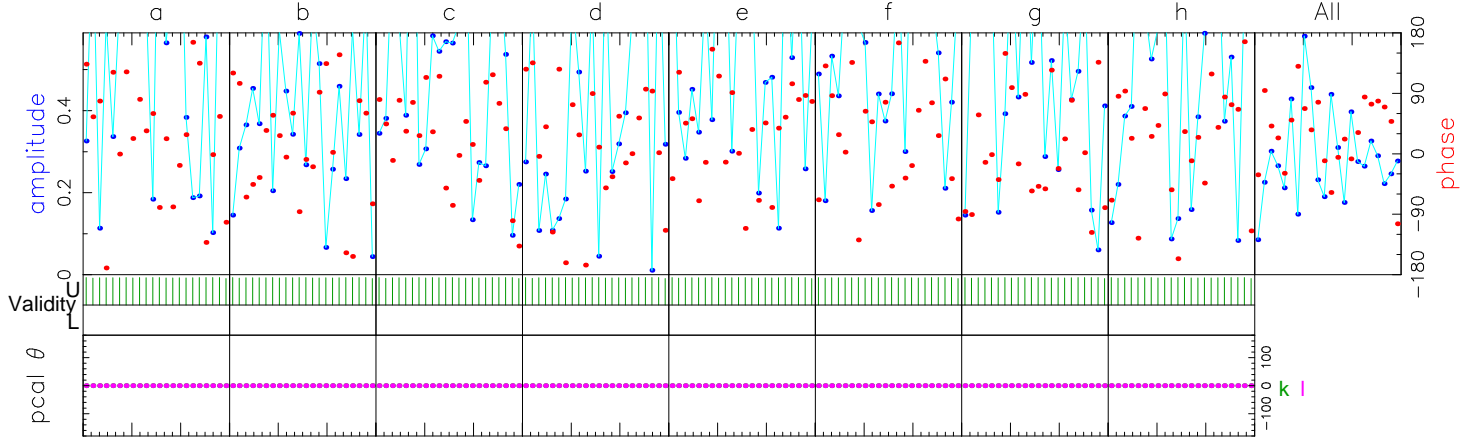
Fringe quality 0

SNR 7.2
 Int time 178.415
 Amp 0.197
 Phase 36.9
 PFD 1.1e-04
 Delays (us)
 SBD -0.001426
 MBD -0.000920
 Fringe rate (Hz)
 -0.000884
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060716
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.12971465447E+03				-1.12971373494E+03					
Sband delay (usec)	-1.12971516119E+03				7.6377773E-01					
Phase delay (usec)	-1.12971373377E+03				1.9999998E-07					
Delay rate (us/s)	1.14191865757E-01				1.14191875808E-01					
Total phase (deg)			-269.3		4.21756197340E-06					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude				0.197 +/- 0.027						
Search (1024X32)				0.188						
Interp.				0.000						
Inc. seg. avg.				0.238						
Inc. frq. avg.				0.189						
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

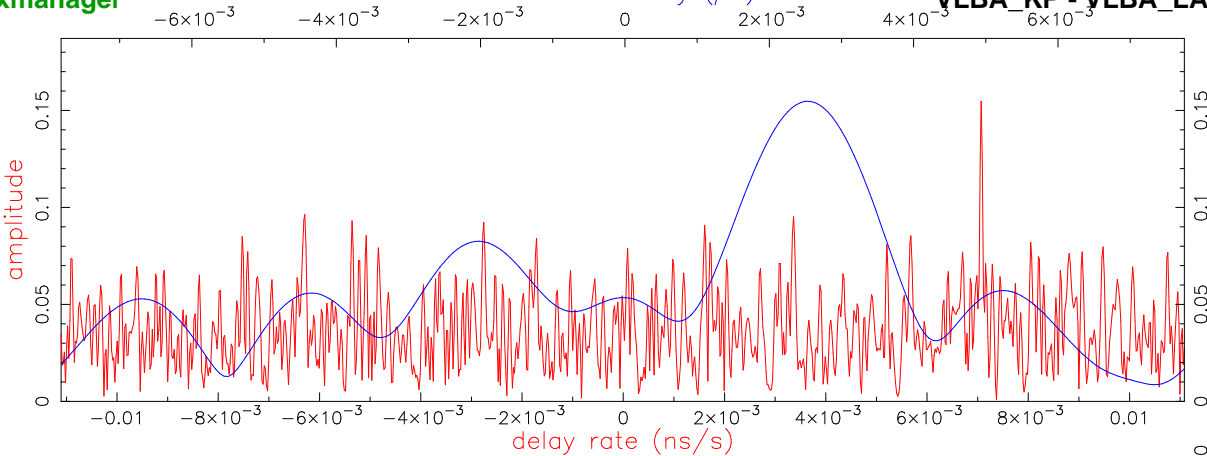
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kl

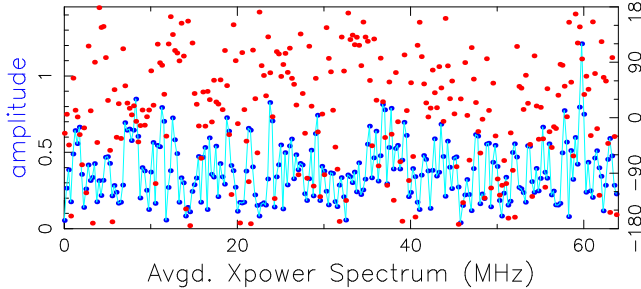
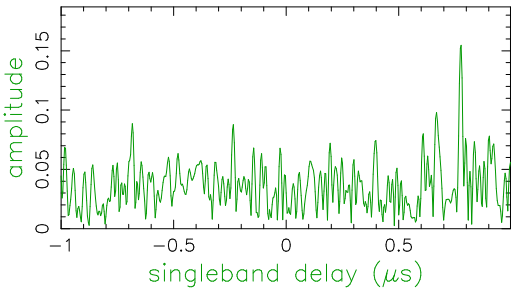
VLBA_KP - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)



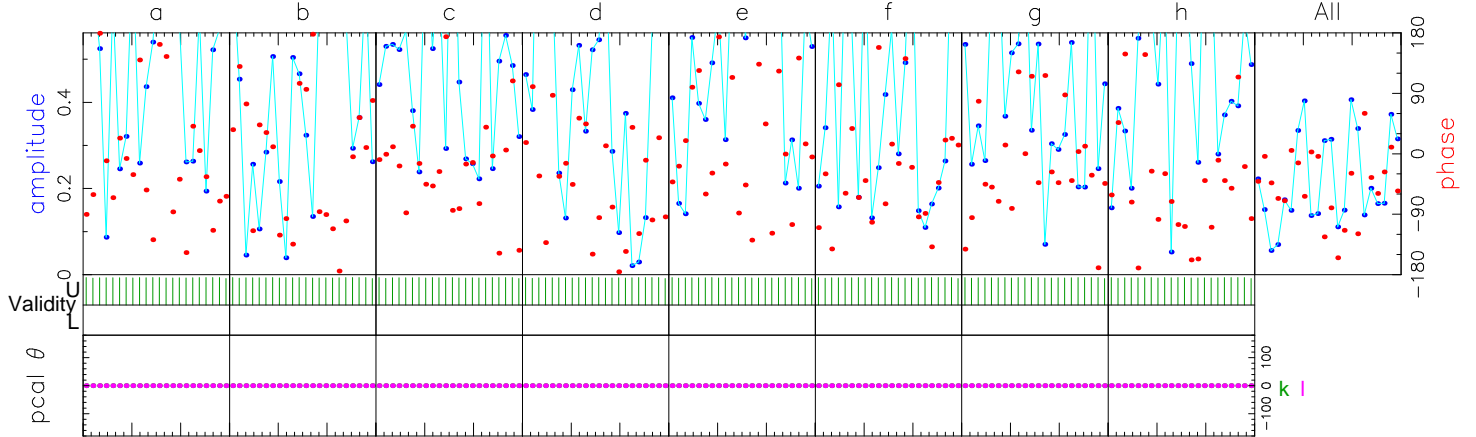
Fringe quality 0

SNR 5.7
 Int time 178.416
 Amp 0.187
 Phase -47.3
 PFD 6.7e-01
 Delays (us)
 SBD 0.775738
 MBD 0.002517
 Fringe rate (Hz)
 0.622432
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060718
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.12894559332E+03	-1.12893799694E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03		
Sband delay (usec)	-1.12893799694E+03	-1.12893799694E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03		
Phase delay (usec)	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03	-1.12971373643E+03		
Delay rate (us/s)	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01	1.14198953726E-01		
Total phase (deg)			-353.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Search (1024X32)										
Inc. seg. avg.										
Inc. frq. avg.										
0.187 +/- 0.033										
0.151										
0.000										
0.196										
0.178										
2.51661E-03										
7.75738E-01										
-1.49455E-06										
7.07792E-06										
-47.3										
+/- 1.9E-04										
+/- 1.5E-03										
+/- 6.3E-07										
+/- 6.1E-09										
+/- 19.9										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000										
1.000										
-0.008										
0.008										
-0.011										
0.011										
0.00										
0.00										

k: az 93.2 el 37.9 pa -62.1 l: az 99.8 el 41.9 pa -56.4 u,v (fr/asec) -694.212 -377.280 simultaneous interpolator

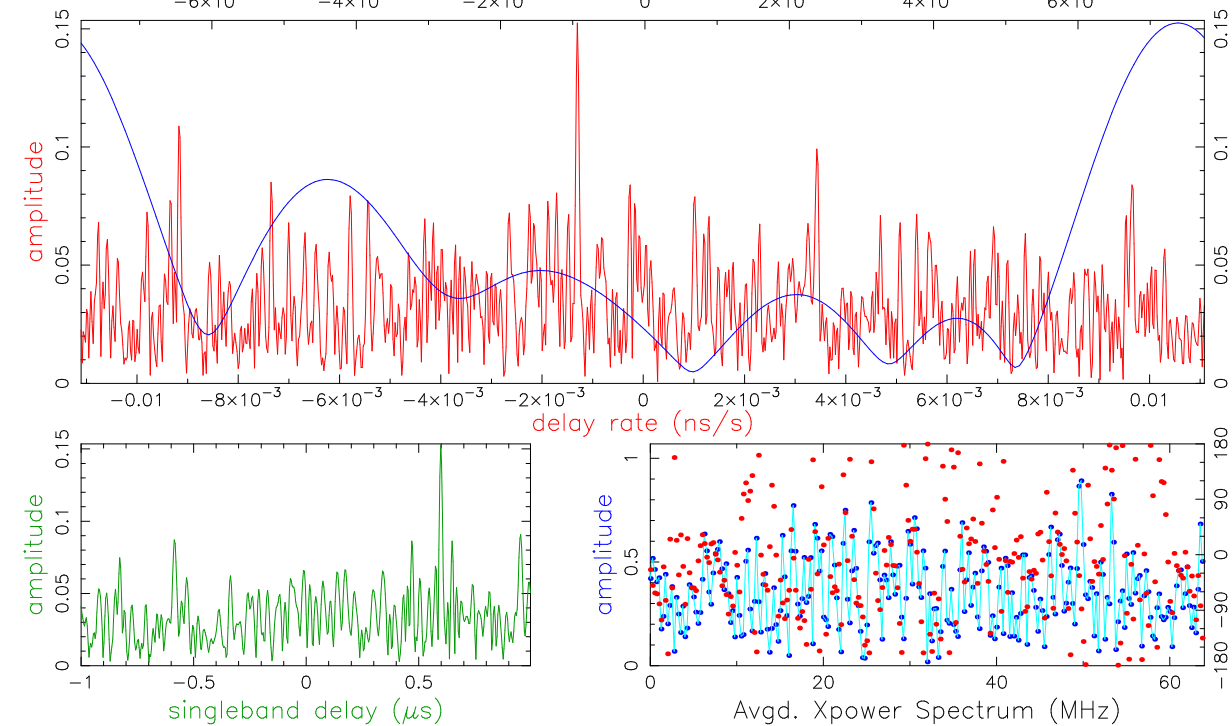
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kl..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kl.W.134.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

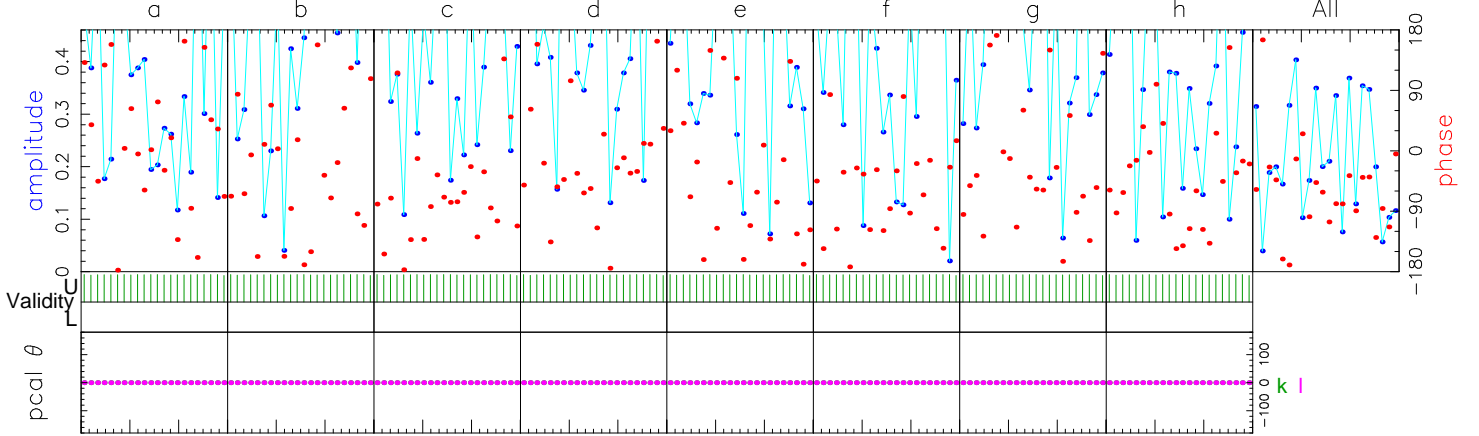
0235+164.1JFJP0, No0042, kl

VLBA_KP - VLBA_LA, fgroup W, pol RL



Fringe quality 0
 SNR 5.6
 Int time 178.415
 Amp 0.154
 Phase -61.6
 PFD 9.5e-01
 Delays (us)
 SBD 0.598103
 MBD 0.007373
 Fringe rate (Hz) -0.114941
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060720
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



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

Group delay (usec)(sbd)	-1.12911261195E+03	Apriori delay (usec)	-1.12971373494E+03	Resid mbdelay (usec)	7.37299E-03	+/-	1.9E-04
Sband delay (usec)	-1.12911563169E+03	Apriori clock (usec)	7.6377773E-01	Resid sbdelay (usec)	5.98103E-01	+/-	1.5E-03
Phase delay (usec)	-1.12971373689E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-1.94732E-06	+/-	6.5E-07
Delay rate (us/s)	1.14190568769E-01	Apriori rate (us/s)	1.14191875808E-01	Resid rate (us/s)	-1.30704E-06	+/-	6.2E-09
Total phase (deg)	-7.8	Apriori accel (us/s/s)	4.21756197340E-06	Resid phase (deg)	-61.6	+/-	20.5

ph/seg (deg)	55.7	Theor.	48.2	Amplitude	0.154 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	83.9	Search (1024X32)	0.148	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	40.8	Inc. seg. avg.	0.161	Inc. frq. avg.	0.153	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	52.5	Inc. frq. avg.	0.153			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 93.2 el 37.9 pa -62.1 l: az 99.8 el 41.9 pa -56.4 u,v (fr/asec) -694.212 -377.280 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kl..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kl.W.151.1JFJP0

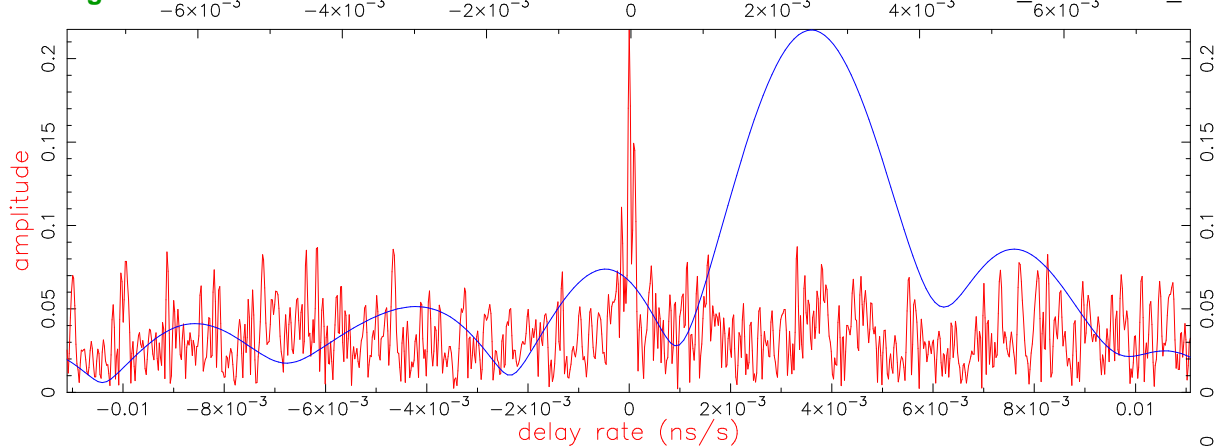
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kl

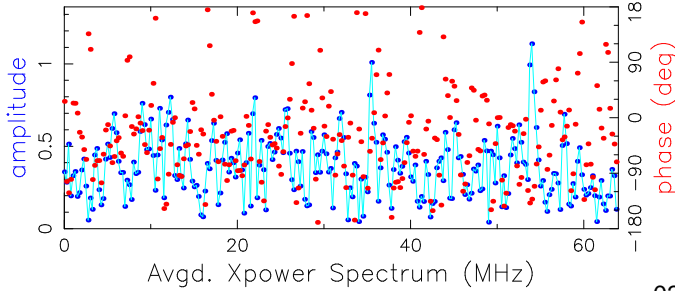
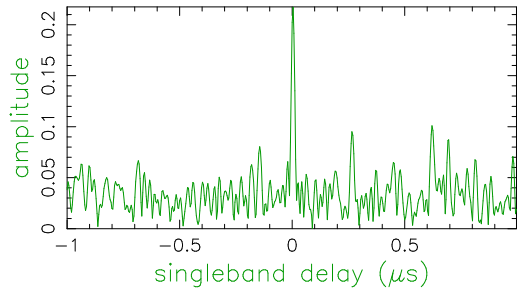
VLBA_KP - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)



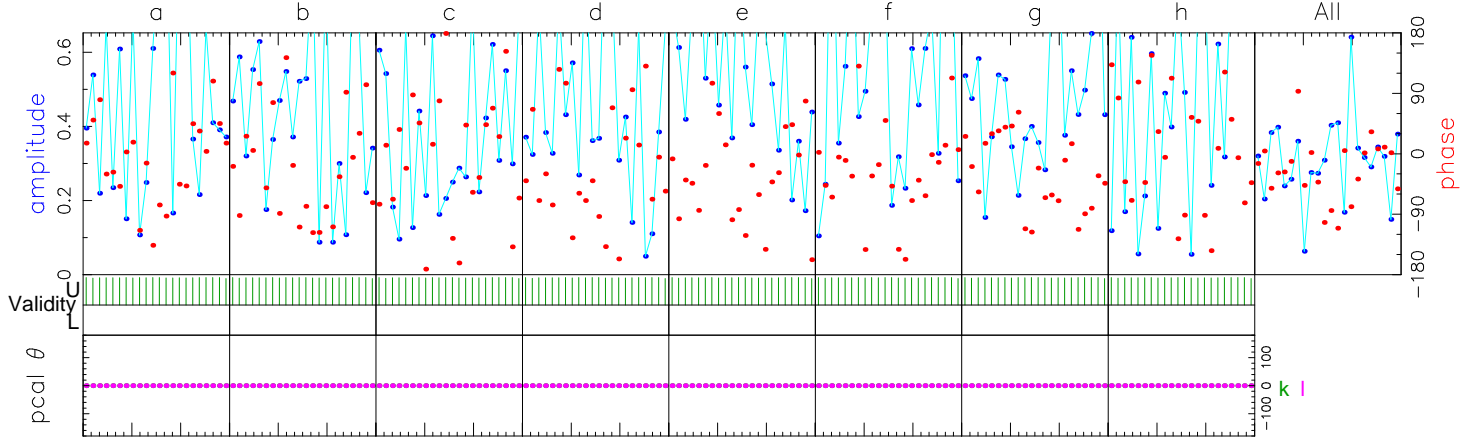
Fringe quality 9

SNR 7.9
 Int time 178.416
 Amp 0.218
 Phase -31.7
 PFD 3.3e-07
 Delays (us)
 SBD 0.003369
 MBD 0.002488
 Fringe rate (Hz)
 -0.000284
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060714
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.12971124647E+03									
Sband delay (usec)	-1.12971036569E+03									
Phase delay (usec)	-1.12971373594E+03									
Delay rate (us/s)	1.14191872574E-01									
Total phase (deg)			-337.8							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										
pcal θ										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Chan ids										
Tracks										
Chan ids										
Tracks										

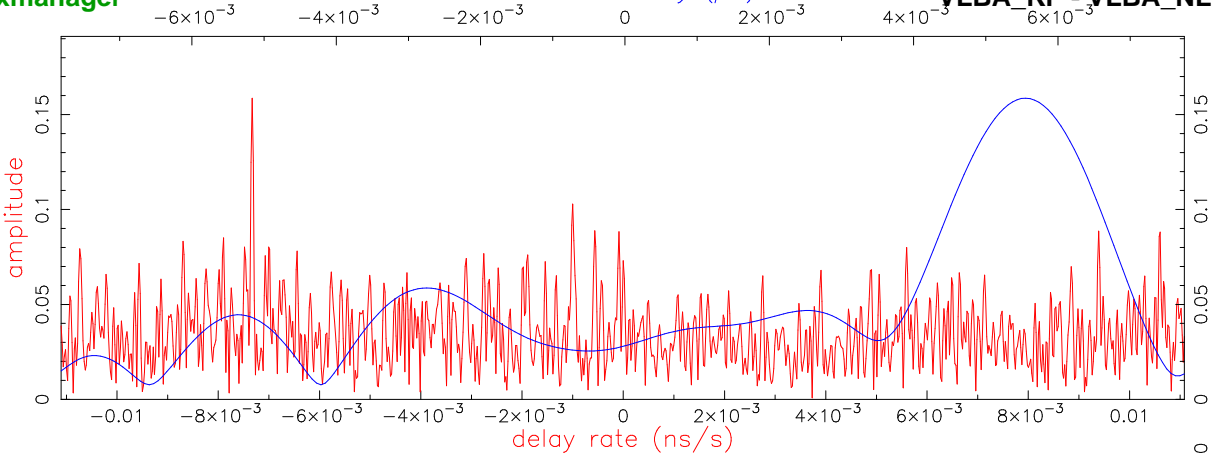
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kn

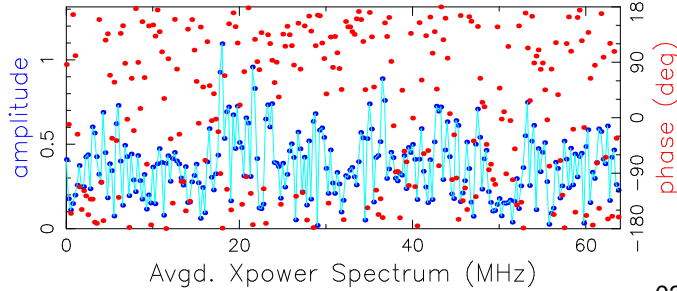
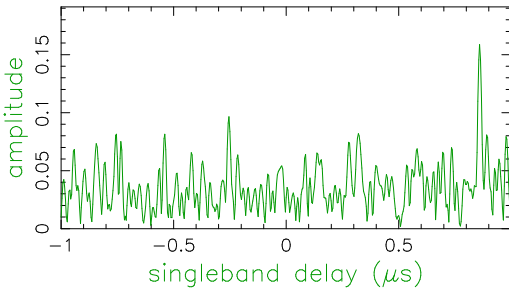
VLBA_KP - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)



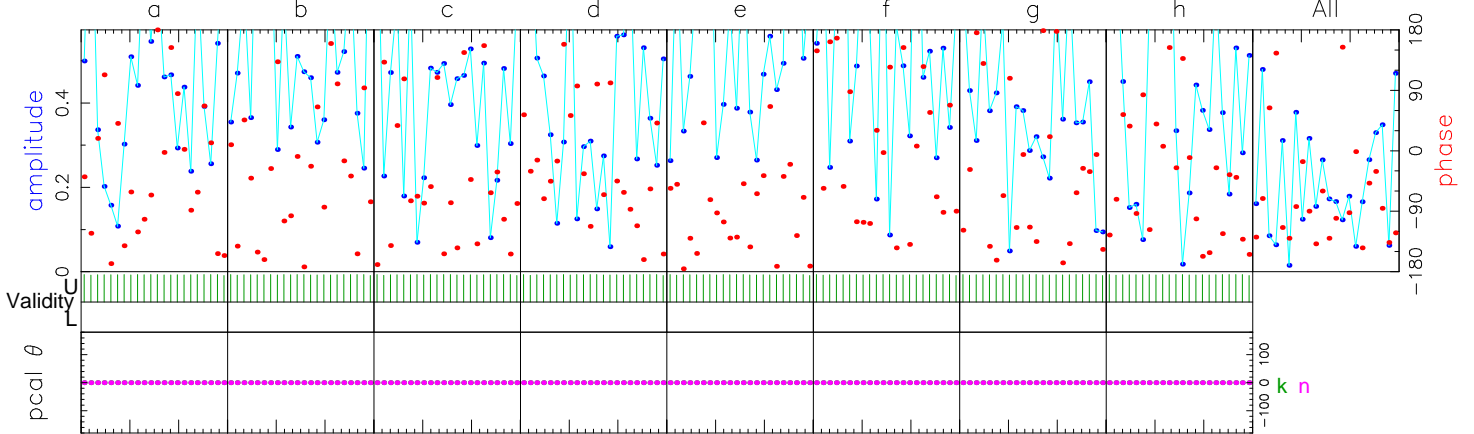
Fringe quality 0

SNR 5.8
 Int time 178.413
 Amp 0.191
 Phase -90.8
 PFD 5.8e-01
 Delays (us)
 SBD 0.859327
 MBD 0.005547
 Fringe rate (Hz)
 -0.645500
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060715
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-102.3	-80.7	-123.3	-46.3	-84.9	-80.0	-121.8	-85.7	Phase	-90.8
	0.2	0.2	0.2	0.2	0.4	0.2	0.2	0.2	Ampl.	0.2
	80.1	405.0	137.0	14.9	477.6	126.8	479.0	209.1	Sbd box	477.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.37352981881E+03		Apriori delay (usec)		-3.37439474090E+03		Resid mbdelay (usec)		5.54709E-03	+/- 1.9E-04
Sband delay (usec)	-3.37353541415E+03		Apriori clock (usec)		1.1344433E-01		Resid sbdelay (usec)		8.59327E-01	+/- 1.5E-03
Phase delay (usec)	-3.37439474377E+03		Apriori clockrate (us/s)		-4.0000002E-07		Resid phdelay (usec)		-2.86866E-06	+/- 6.2E-07
Delay rate (us/s)	3.98141481235E-01		Apriori rate (us/s)		3.98148821468E-01		Resid rate (us/s)		-7.34023E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		1.35104354003E-05		Resid phase (deg)		-90.8	+/- 19.8

ph/seg (deg) 62.6 46.4 Amplitude 0.191 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 89.0 80.9 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.1 28.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.1 48.8 Inc. seg. avg. 0.194 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 n: az 119.0 el 50.8 pa -42.8 u,v (fr/asec) -2421.759 -857.861 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kn.1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kn.W.102.1JFJP0

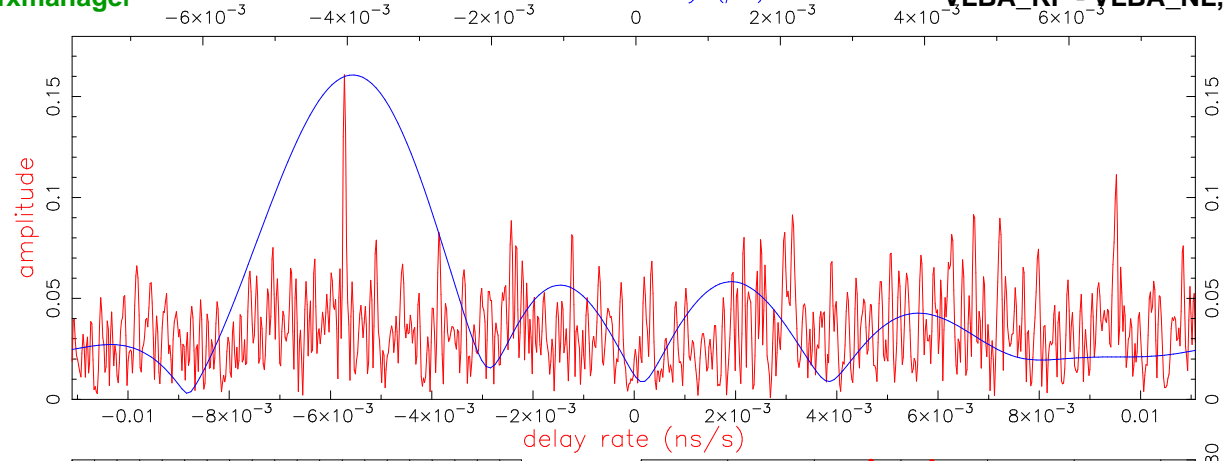
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

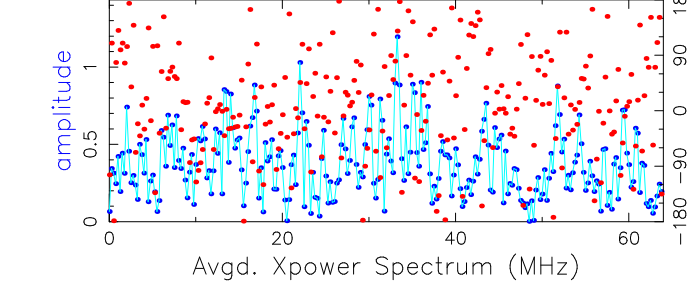
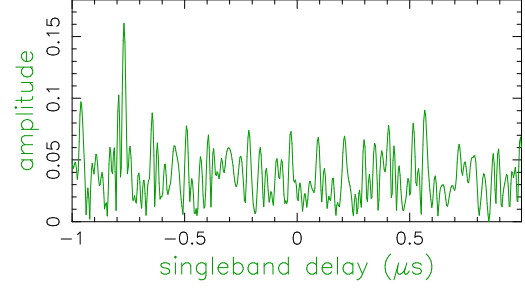
0235+164.1JFJP0, No0042, kn

VLBA_KP - VLBA_NL, fgroup W, pol RR

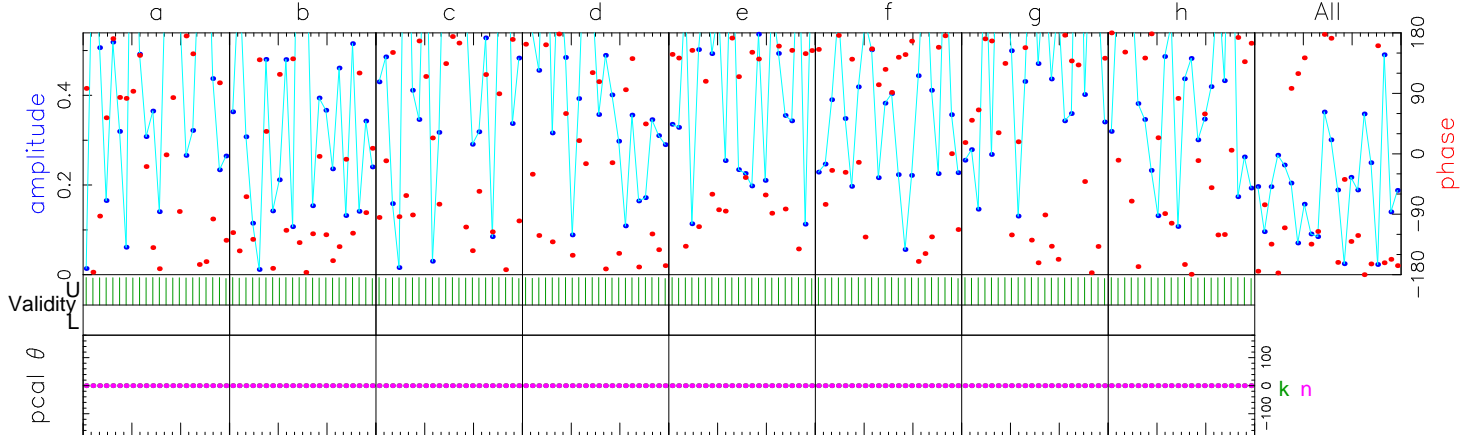
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 178.413
 Amp 0.180
 Phase -164.8
 PFD 4.2e-01
 Delays (us)
 SBD -0.769696
 MBD -0.003926
 Fringe rate (Hz)
 -0.503942
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512
 Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060716
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.37516429217E+03				-3.37439474090E+03					
Sband delay (usec)	-3.37516443665E+03				1.1344433E-01					
Phase delay (usec)	-3.37439474610E+03				-4.0000002E-07					
Delay rate (us/s)	3.98143090944E-01				3.98148821468E-01					
Total phase (deg)		-350.0			1.35104354003E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode:	MANUAL	MANUAL			MANUAL					
Pcal rate:	0.000E+00	0.000E+00			0.000E+00					
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
pcal θ										
RMS	49.9	45.8			0.180 +/- 0.031					
ph/seg (deg)	49.9	45.8			0.158					
amp/seg (%)	73.4	79.9			0.000					
ph/frq (deg)	26.1	27.6			0.168					
amp/frq (%)	27.1	48.2			0.173					
Search (1024X32)										
Inc. seg. avg.										
Inc. frq. avg.										
PC period (AP's)	5	5								
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
az	93.2	37.9	pa -62.1							
n	az 119.0	el 50.8	pa -42.8							
u,v (fr/asec)	-2421.759	-857.861								
simultaneous interpolator										

k: az 93.2 el 37.9 pa -62.1 n: az 119.0 el 50.8 pa -42.8 u,v (fr/asec) -2421.759 -857.861 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kn.1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kn.W.116.1JFJP0

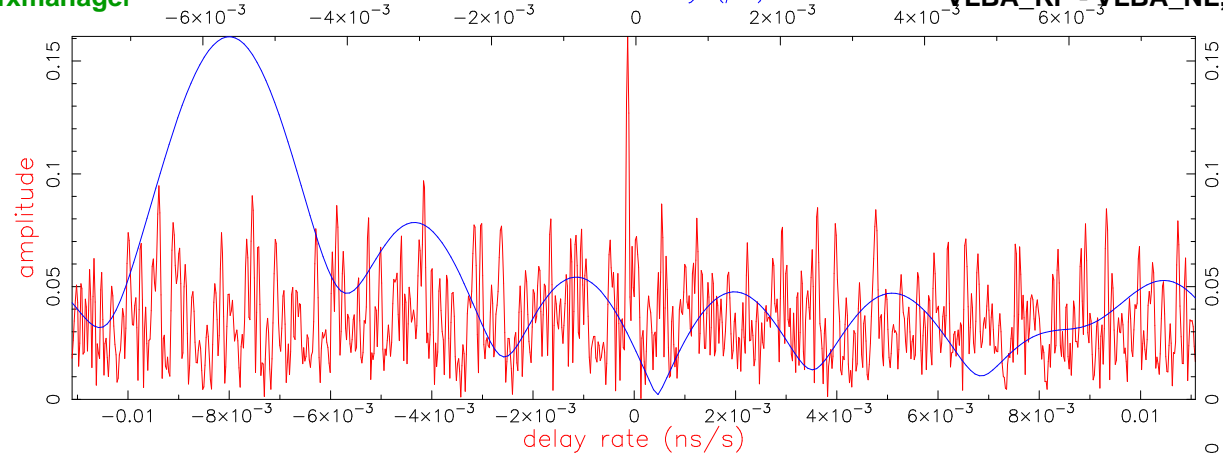
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kn

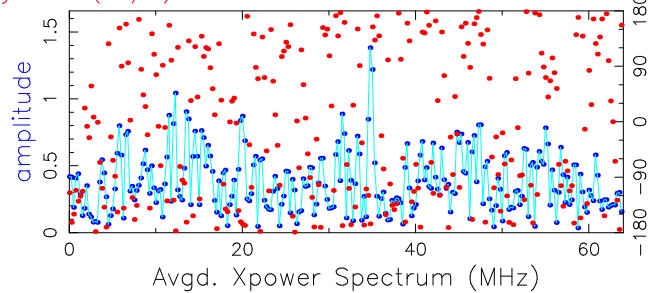
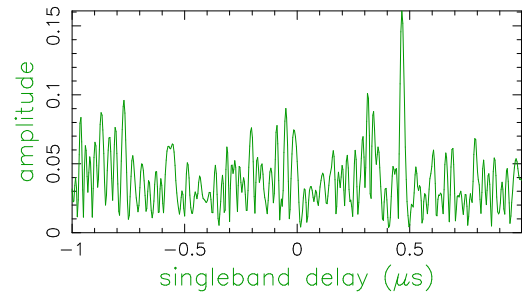
VLBA_KP - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)



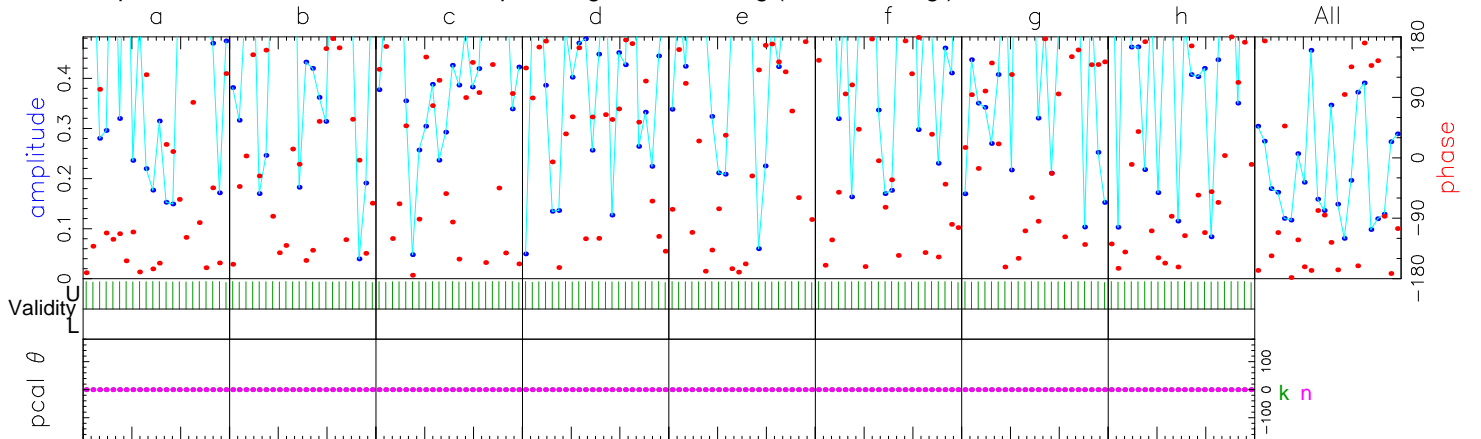
Fringe quality 0

SNR 5.9
 Int time 178.413
 Amp 0.161
 Phase -157.8
 PFD 4.1e-01
 Delays (us)
 SBD 0.465275
 MBD -0.005623
 Fringe rate (Hz)
 -0.011150
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060718
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.37393161389E+03	-3.37392946590E+03	-3.37439474588E+03	-3.37439474090E+03	-3.37439474090E+03	-3.37439474090E+03	-3.37439474090E+03	-3.37439474090E+03		
Sband delay (usec)	-140.1	-133.5	-177.3	146.1	-166.1	-164.1	-171.0	-121.4		
Phase delay (usec)	0.3	0.1	0.1	0.1	0.2	0.2	0.2	0.2		
Delay rate (us/s)	378.1	255.2	396.4	78.8	378.4	479.3	406.8	344.3		
Total phase (deg)			-343.1							
Apriori delay (usec)				0.155						
Apriori clock (usec)				0.155						
Apriori clockrate (us/s)				0.000						
Apriori rate (us/s)				3.98148821468E-01						
Apriori accel (us/s/s)				1.35104354003E-05						
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

	RMS	Theor.	Amplitude	0.161 +/- 0.027	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.1	45.7	Search (1024X32)	0.155	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	73.7	79.8	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	31.7	27.6	Inc. seg. avg.	0.166	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	27.6	48.1	Inc. frq. avg.	0.160					

k: az 93.2 el 37.9 pa -62.1 n: az 119.0 el 50.8 pa -42.8 u,v (fr/asec) -2421.759 -857.861 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kn..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kn.W.133.1JFJP0

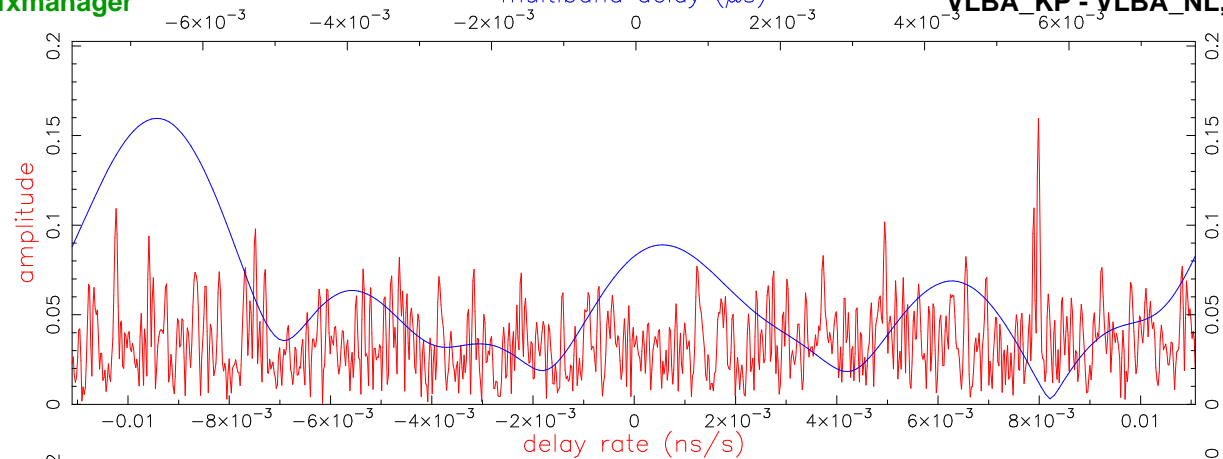
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kn

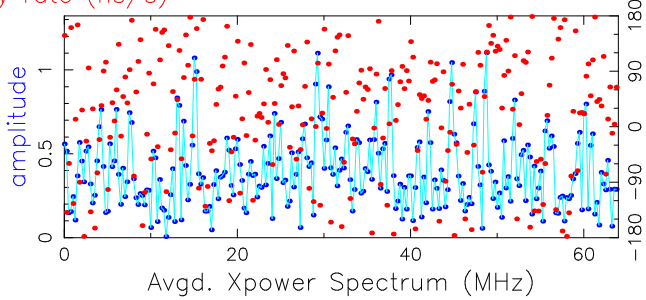
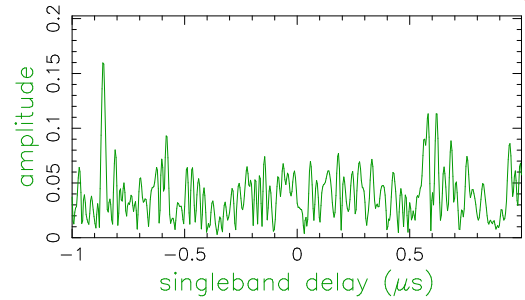
VLBA_KP - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)



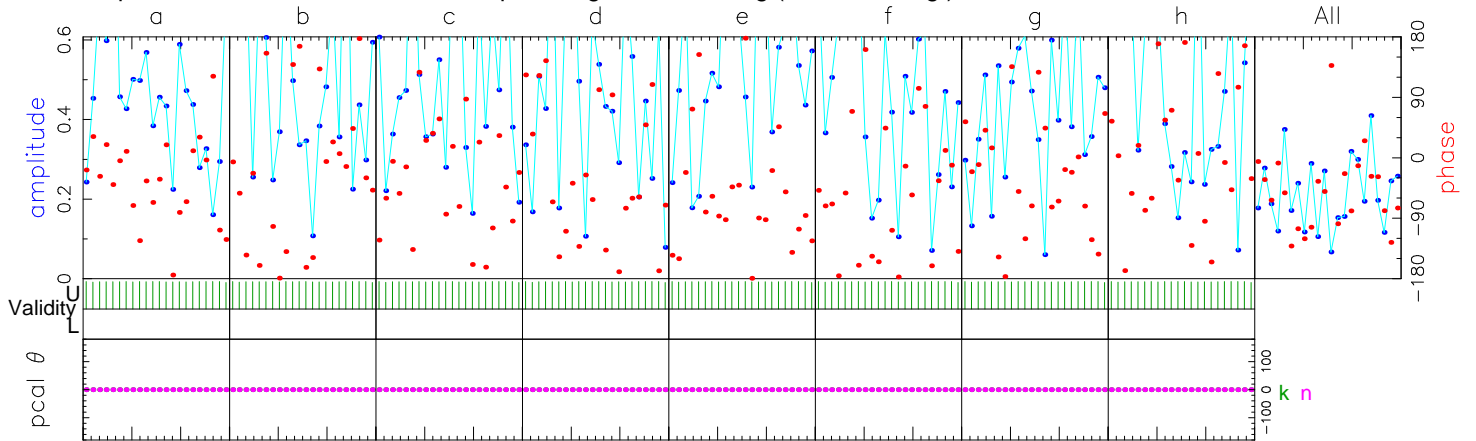
Fringe quality 0

SNR 5.9
 Int time 178.413
 Amp 0.203
 Phase -57.5
 PFD 3.3e-01
 Delays (us)
 SBD -0.861516
 MBD -0.006612
 Fringe rate (Hz)
 0.701980
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060720
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.37526072810E+03				-3.37439474090E+03					
Sband delay (usec)	-3.37525625665E+03				1.1344433E-01					
Phase delay (usec)	-3.37439474272E+03				-4.0000002E-07					
Delay rate (us/s)	3.98156803958E-01				3.98148821468E-01					
Total phase (deg)			-242.8		1.35104354003E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 55.2 45.4 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.8 79.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.5 27.4 Inc. seg. avg. 0.205 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.2 47.7 Inc. frq. avg. 0.197 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 n: az 119.0 el 50.8 pa -42.8 u,v (fr/asec) -2421.759 -857.861 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kn..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kn.W.152.1JFJP0

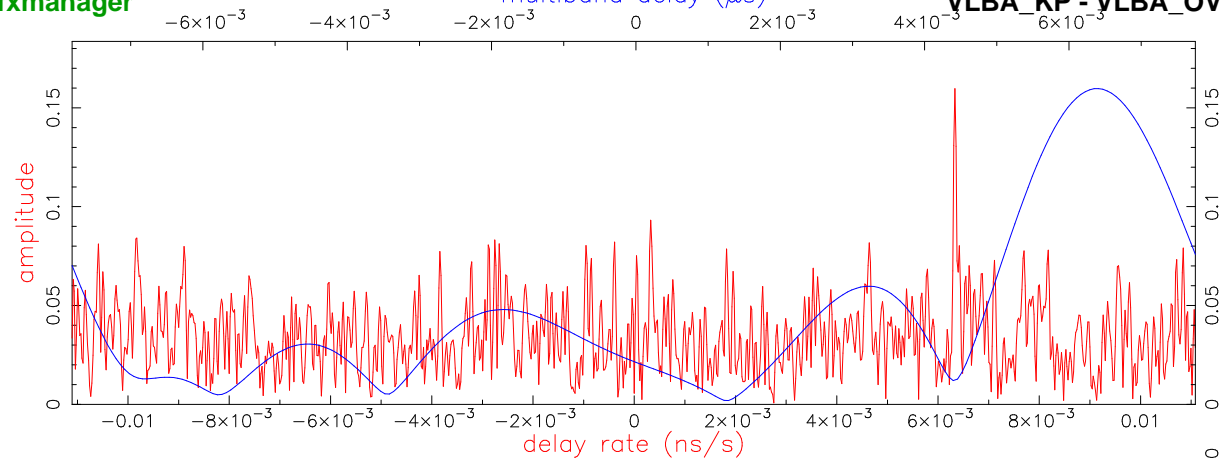
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, ko

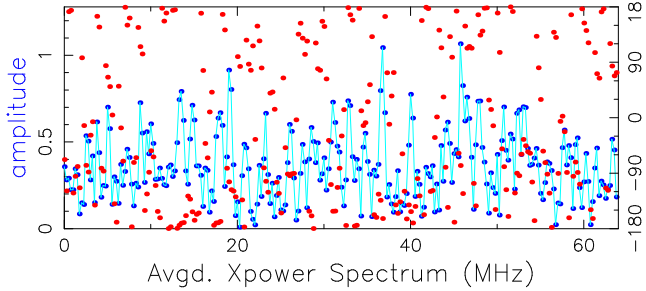
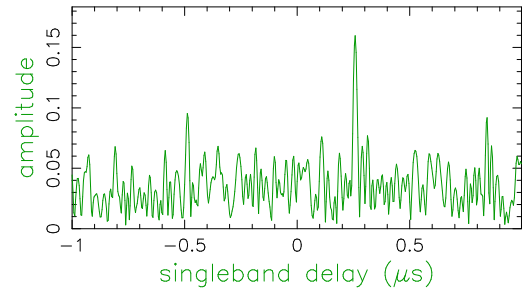
VLBA_KP - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



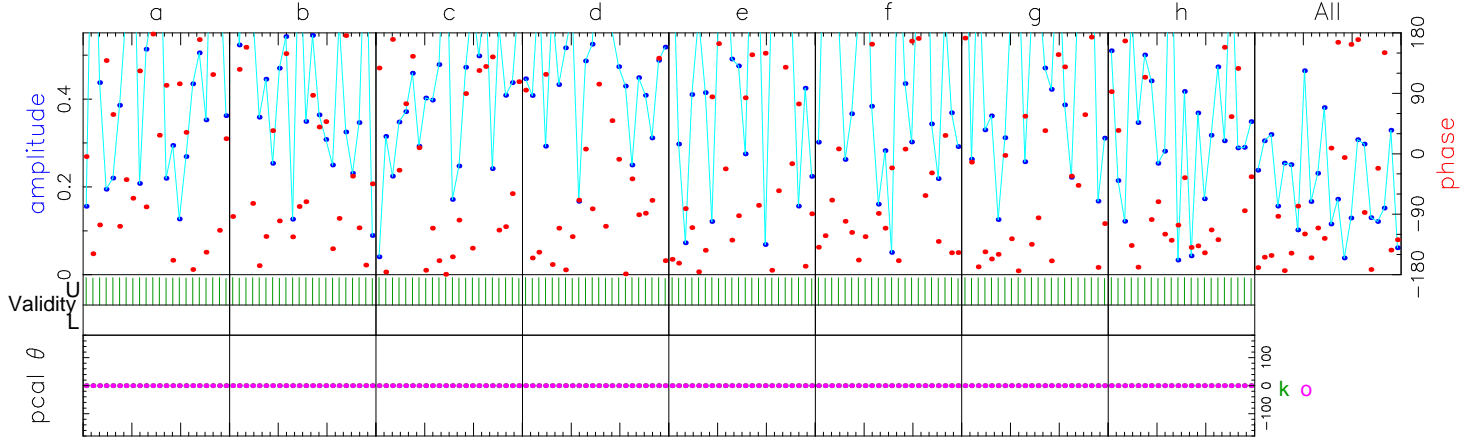
Fringe quality 0

SNR 5.8
 Int time 178.235
 Amp 0.184
 Phase -142.7
 PFD 4.8e-01
 Delays (us)
 SBD 0.257223
 MBD 0.006359
 Fringe rate (Hz)
 0.557697
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060715
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

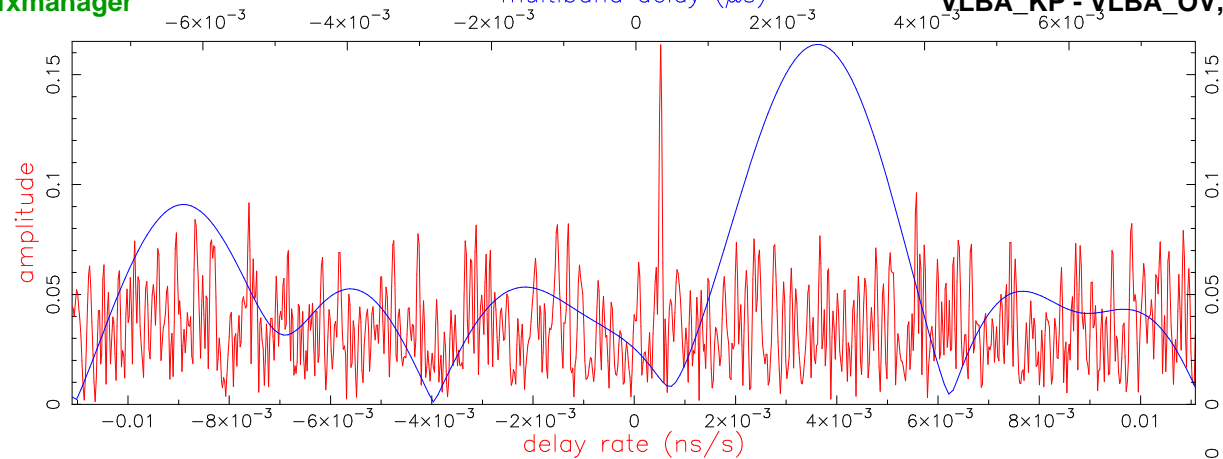
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-137.2	-128.7	178.8	-139.4	-145.9	-113.9	-162.6	-136.1	Phase	-142.7
	0.1	0.2	0.2	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
	206.0	36.5	462.8	460.5	199.5	472.5	477.3	416.7	Sbd box	322.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.73508589515E+03		Apriori delay (usec)		1.73482953581E+03		Resid mbdelay (usec)		6.35934E-03	+/- 1.9E-04
Sband delay (usec)	1.73508675881E+03		Apriori clock (usec)		-2.1042221E+01		Resid sbdelay (usec)		2.57223E-01	+/- 1.5E-03
Phase delay (usec)	1.73482953130E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		-4.50799E-06	+/- 6.2E-07
Delay rate (us/s)	-8.91491642865E-03		Apriori rate (us/s)		-8.92125821567E-03		Resid rate (us/s)		6.34179E-06	+/- 6.0E-09
Total phase (deg)	-6.2		Apriori accel (us/s/s)		-1.17906261147E-05		Resid phase (deg)		-142.7	+/- 19.6

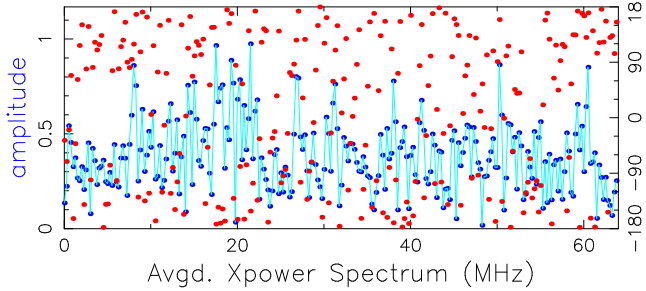
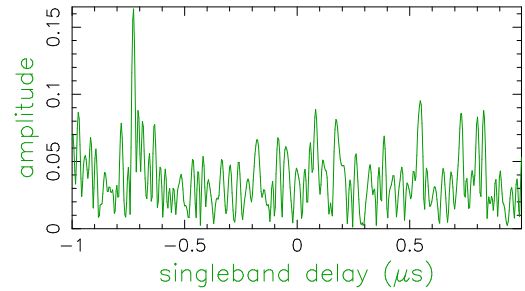
ph/seg (deg) 61.6 46.0 Search (1024X32) 0.154 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.1 80.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.3 27.8 Inc. seg. avg. 0.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.8 48.4 Inc. frq. avg. 0.175 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 o: az 92.9 el 32.1 pa -56.1 u,v (fr/asec) 49.292 -939.323 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/ko..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/ko.W.106.1JFJP0

multiband delay (μ s)



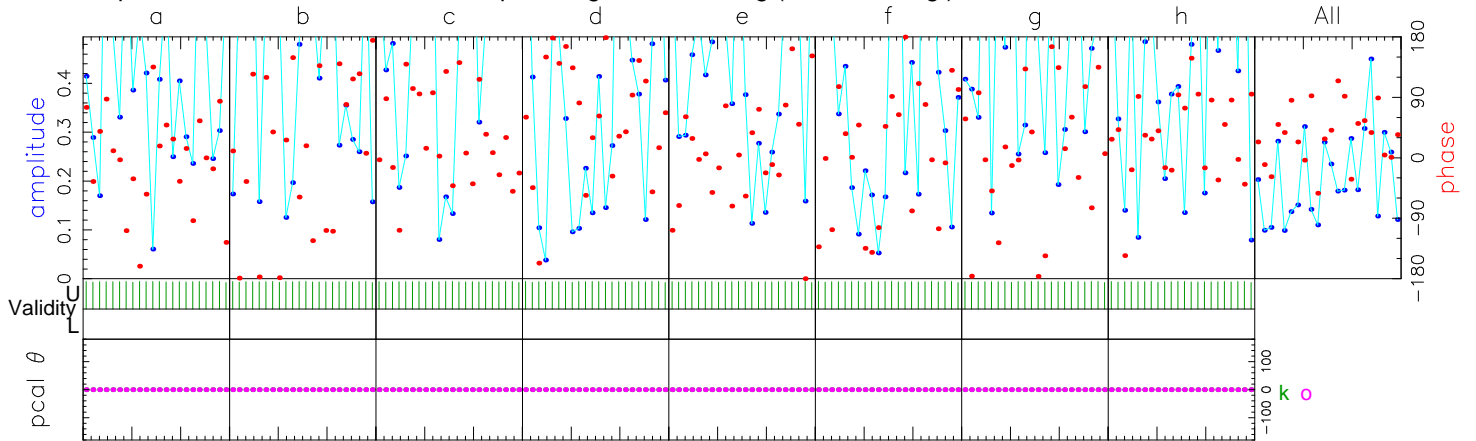
Fringe quality 0

SNR 6.0
Int time 178.235
Amp 0.165
Phase 31.8
PFD 2.0e-01
Delays (us)
SBD -0.727635
MBD 0.002466
Fringe rate (Hz)
0.046639
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 050000.00
Stop 050300.22
FRT 050130.00
Corr/FF/build
2021:039:054330
2021:039:060717
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	10.8	131.3	24.8	55.4	11.0	46.3	22.9	37.3	Phase	31.8
	0.2	0.1	0.3	0.2	0.2	0.1	0.2	0.3	Ampl.	0.2
	333.3	462.7	71.3	47.6	381.9	78.9	440.8	72.1	Sbd box	70.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.73409762653E+03		Apriori delay (usec)		1.73482953581E+03		Resid mbdelay (usec)		2.46572E-03	+/- 1.8E-04
Sband delay (usec)	1.73410190056E+03		Apriori clock (usec)		-2.1042221E+01		Resid sbdelay (usec)		-7.27635E-01	+/- 1.4E-03
Phase delay (usec)	1.73482953681E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		1.00332E-06	+/- 6.0E-07
Delay rate (us/s)	-8.92072786780E-03		Apriori rate (us/s)		-8.92125821567E-03		Resid rate (us/s)		5.30348E-07	+/- 5.8E-09
Total phase (deg)	168.3		Apriori accel (us/s/s)		-1.17906261147E-05		Resid phase (deg)		31.8	+/- 19.0

ph/seg (deg) 43.3 44.6 Amplitude 0.165 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.5 77.9 Interp. 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 44.2 26.9 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 46.7 47.0 Inc. frq. avg. 0.160 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 93.2 el 37.9 pa -62.1 o: az 92.9 el 32.1 pa -56.1 u,v (fr/asec) 49.292 -939.323 simultaneous interpolator
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/ko..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/ko.W.122.1JFJP0

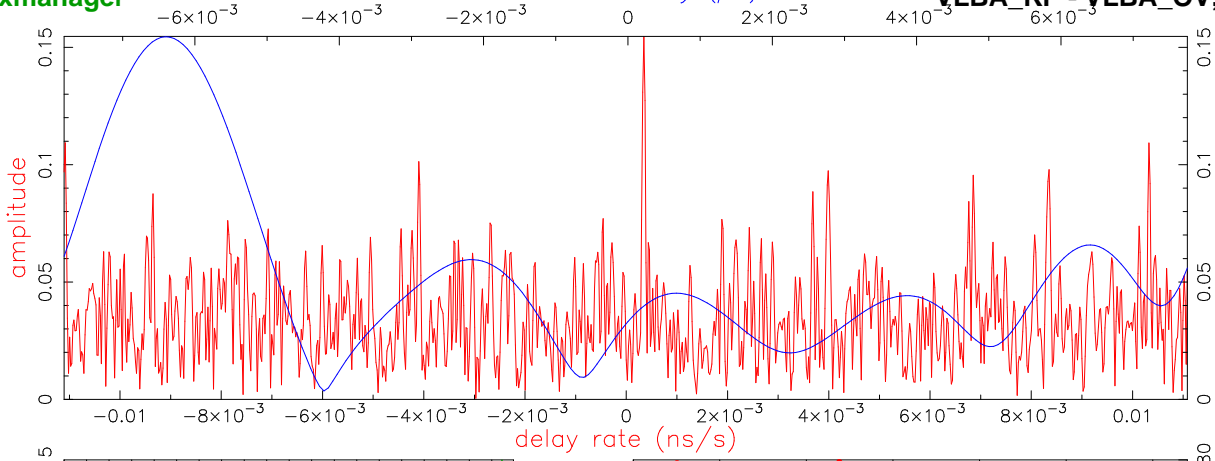
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, ko

VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0

SNR 5.6

Int time 178.235

Amp 0.155

Phase -170.0

PF 8.7e-01

Delays (us)

SBD 0.945028

MBD -0.006400

Fringe rate (Hz) 0.031209

Ion TEC 0.000

Ref freq (MHz) 87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 050000.00

Stop 050300.22

FRT 050130.00

Corr/FF/build

2021:039:054330

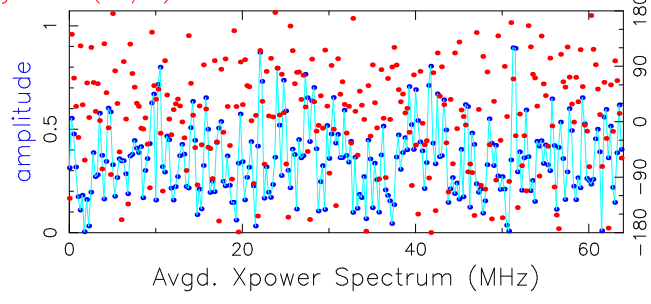
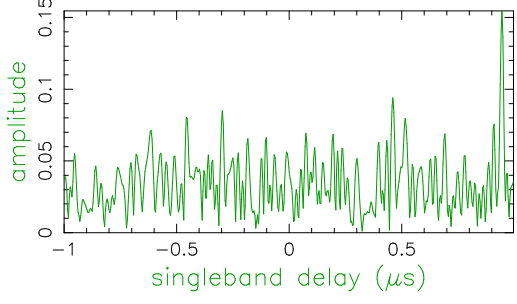
2021:039:060719

2020:247:085004

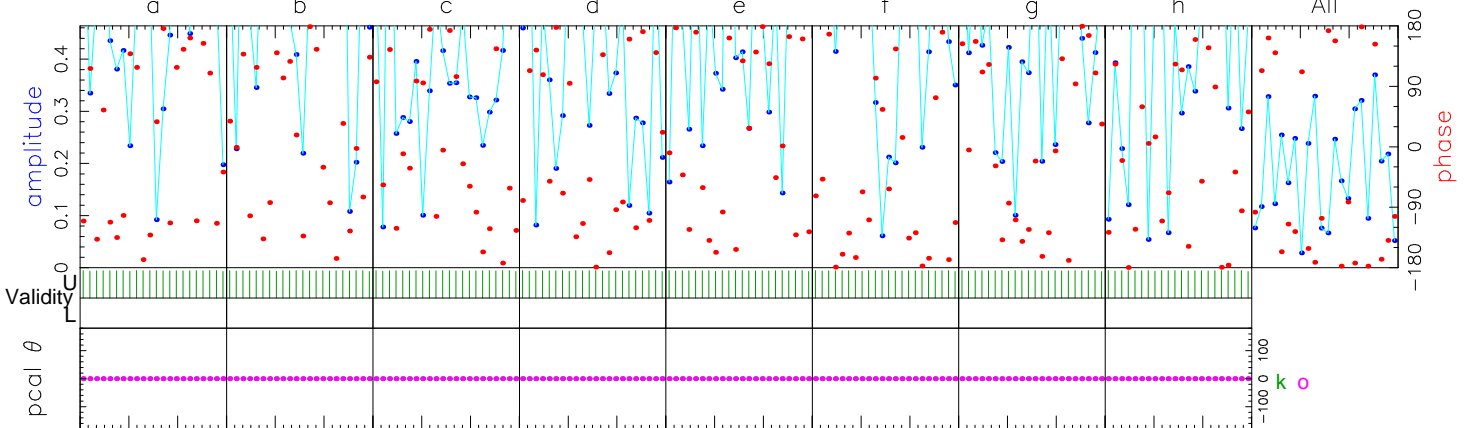
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-178.6	172.1	-141.0	-167.5	-167.5	-142.5	162.2	159.7	Phase	-170.0
	0.3	0.1	0.1	0.1	0.3	0.2	0.1	0.1	Ampl.	0.1
	43.9	389.0	424.4	57.9	499.5	313.4	490.1	326.7	Sbd box	498.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.73577626080E+03			Apriori delay (usec)	1.73482953581E+03			Resid mbdelay (usec)	-6.40001E-03	+/- 1.9E-04
Sband delay (usec)	1.73577456406E+03			Apriori clock (usec)	-2.1042221E+01			Resid sbdelay (usec)	9.45028E-01	+/- 1.5E-03
Phase delay (usec)	1.73482953044E+03			Apriori clockrate (us/s)	1.9999998E-07			Resid phdelay (usec)	-5.37066E-06	+/- 6.4E-07
Delay rate (us/s)	-8.92090332200E-03			Apriori rate (us/s)	-8.92125821567E-03			Resid rate (us/s)	3.54894E-07	+/- 6.2E-09
Total phase (deg)		-33.5		Apriori accel (us/s/s)	-1.17906261147E-05			Resid phase (deg)	-170.0	+/- 20.3

ph/seg (deg) 45.8 47.6 Search (1024X32) 0.150 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 69.0 83.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.8 28.7 Inc. seg. avg. 0.141 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 50.5 50.1 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

k: az 93.2 el 37.9 pa -62.1 o: az 92.9 el 32.1 pa -56.1 u,v (fr/asec) 49.292 -939.323 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/ko..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/ko.W.142.1JFJP0

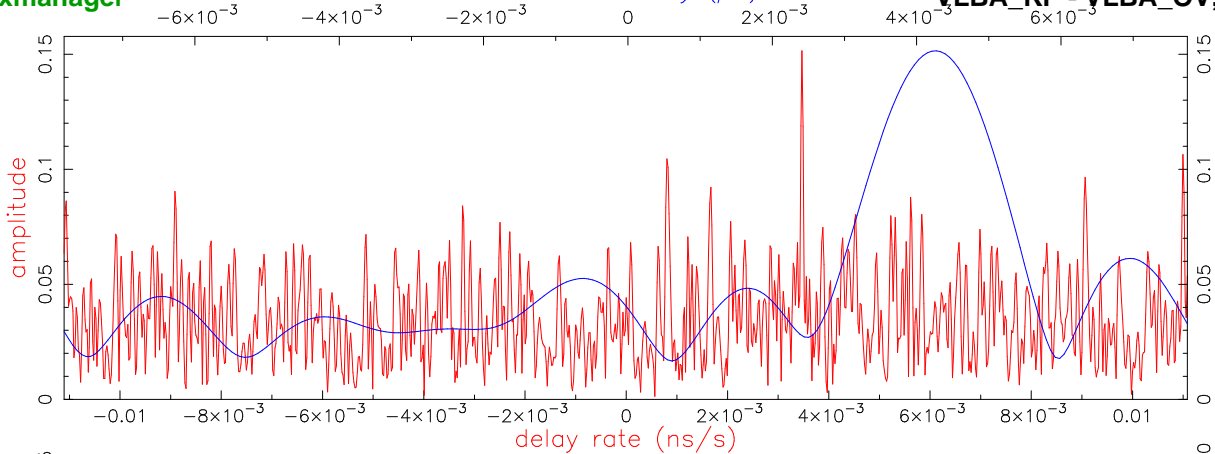
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, ko

VLBA_KP - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 5.5

Int time 178.235

Amp 0.158

Phase -171.4

PFD 9.8e-01

Delays (us)

SBD -0.230589

MBD 0.004259

Fringe rate (Hz)

0.304831

Ion TEC 0.000

Ref freq (MHz)

87940.0000

AP (sec) 0.512

Exp. c202c

Exper # 16383

Yr:day 2020:286

Start 050000.00

Stop 050300.22

FRT 050130.00

Corr/FF/build

2021:039:054330

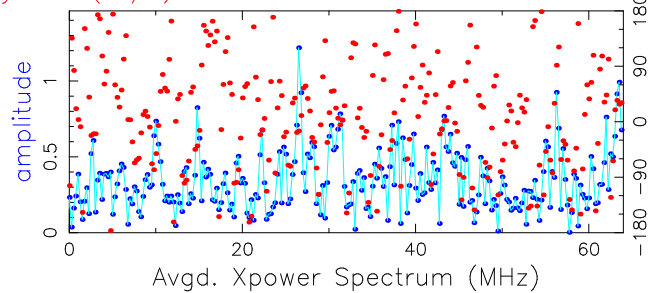
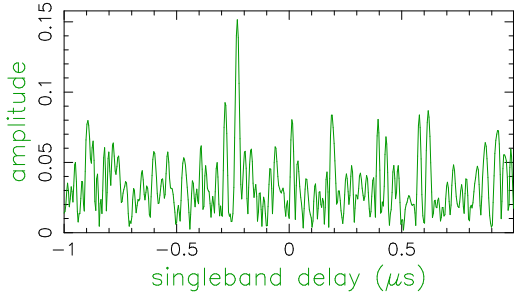
2021:039:060721

2020:247:085004

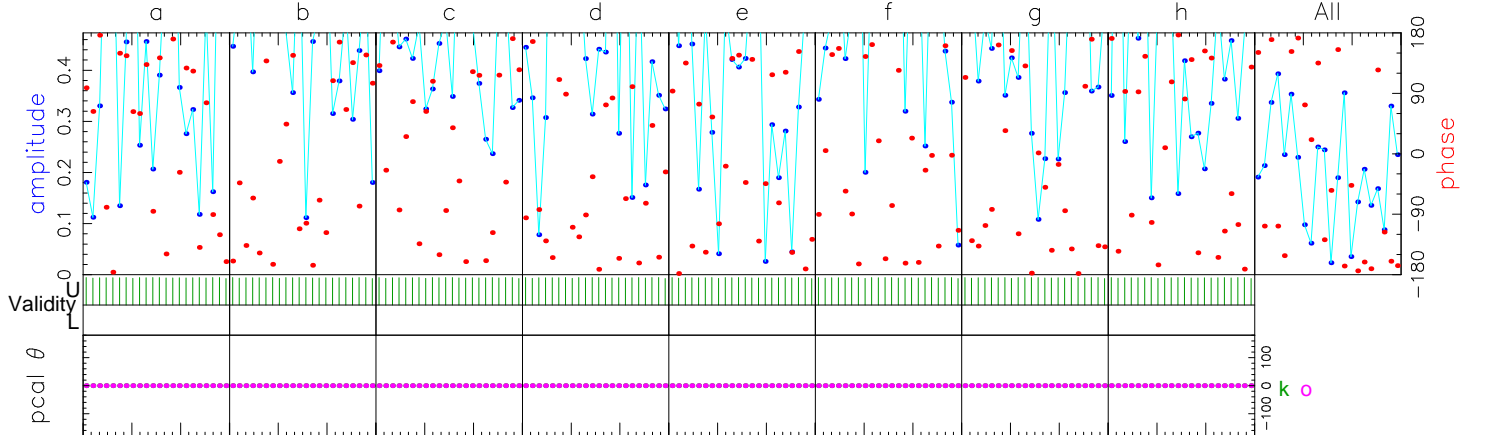
RA & Dec (J2000)

02h38m38.930107s

+16°36'59.274536"



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.73459942000E+03				1.73482953581E+03				4.25919E-03	+/- 2.0E-04
Sband delay (usec)	1.73459894681E+03				-2.1042221E+01				-2.30589E-01	+/- 1.6E-03
Phase delay (usec)	1.73482953040E+03				1.9999998E-07				-5.41469E-06	+/- 6.5E-07
Delay rate (us/s)	-8.91779186871E-03				-8.92125821567E-03				3.46635E-06	+/- 6.3E-09
Total phase (deg)			-34.9		-1.17906261147E-05				-171.4	+/- 20.7
Apriori delay (usec)					0.149					
Apriori clock (usec)					0.149					
Apriori clockrate (us/s)					0.157					
Apriori rate (us/s)					0.146					
Apriori accel (us/s/s)					0.157 +/- 0.029					
Search (1024X32)					0.000					
Inc. seg. avg.					0.157					
Inc. frq. avg.					0.146					
PCal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					128					
Data rate (Mb/s):					2048					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PC period (AP's)					5, 5					
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 66.1 48.6

amp/seg (%) 77.3 84.8

ph/frq (deg) 21.3 29.3

amp/frq (%) 37.0 51.1

k: az 93.2 el 37.9 pa -62.1

o: az 92.9 el 32.1 pa -56.1

u,v (fr/asec) 49.292 -939.323

Control file: cf_1234_88GHz_gmva

Input file: /Exps/c202c/v1/1234/No0042/ko..1JFJP0

Output file: /Exps/c202c/v1/1234/No0042/ko.W.157.1JFJP0

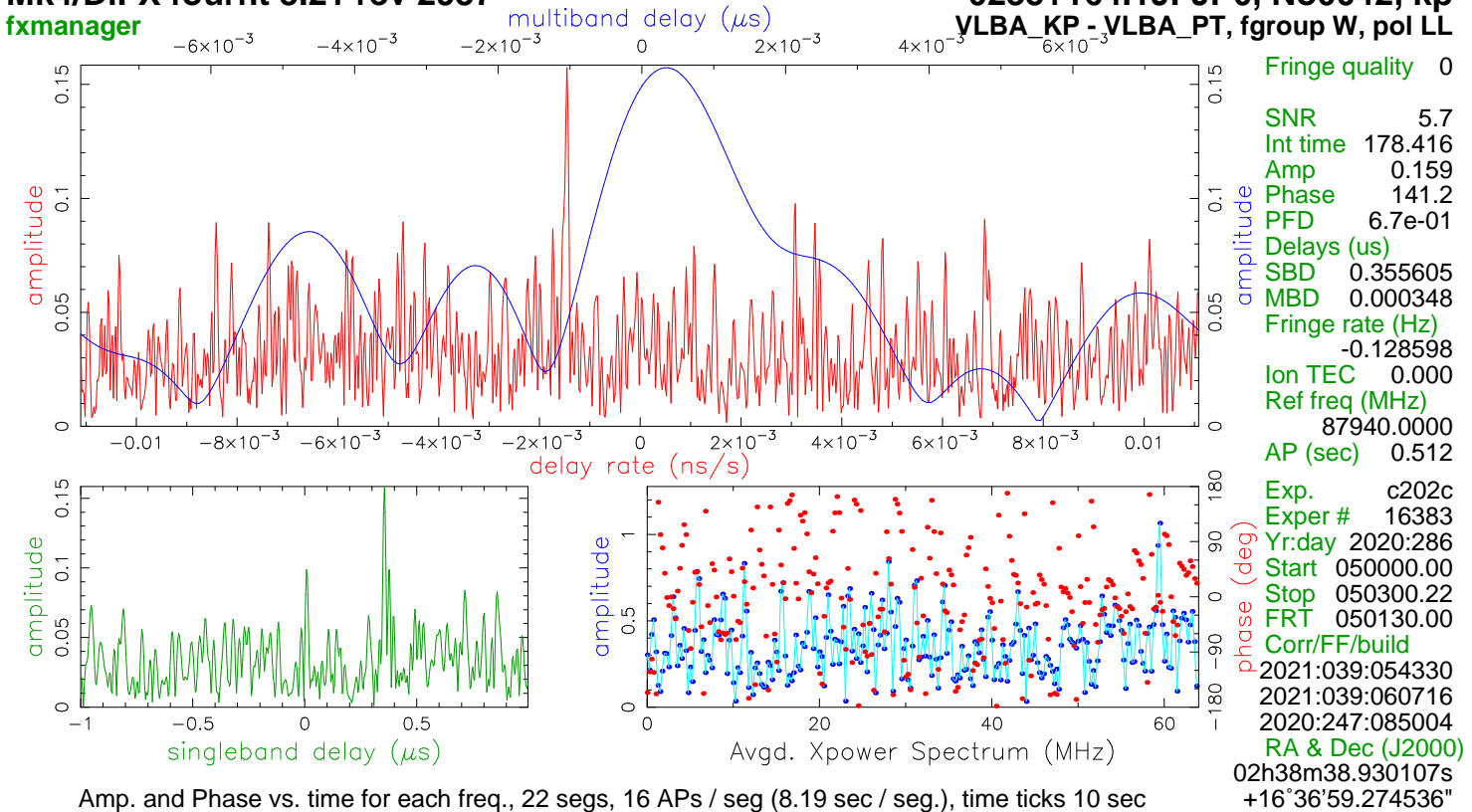
simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

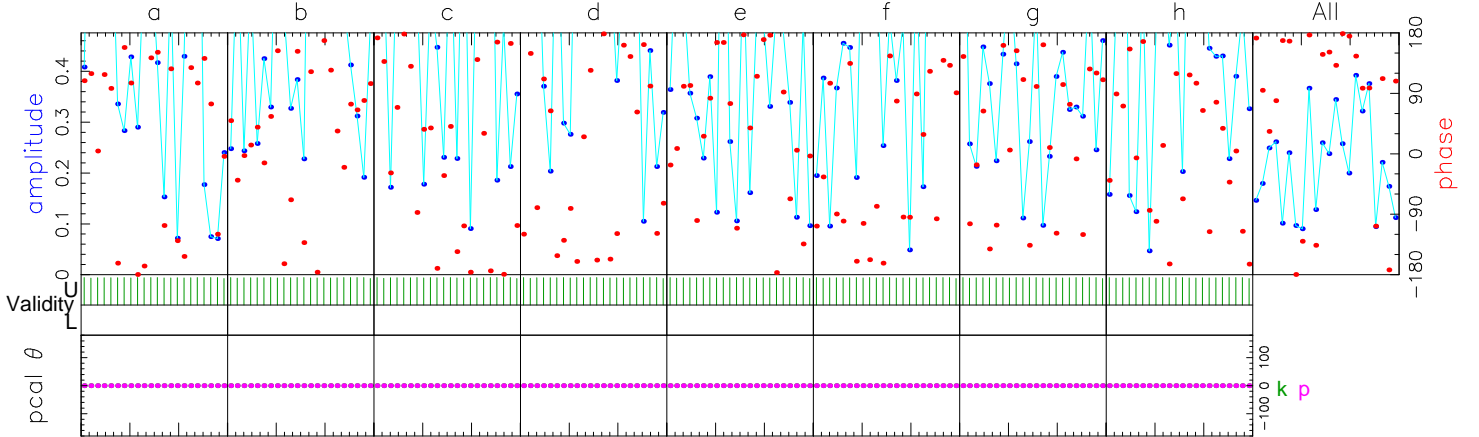
fxmanager

0235+164.1JFJP0, No0042, kp

VLBA_KP - VLBA_PT, fgroup W, pol LL



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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
128.8	104.9	159.4	-173.7	138.3	-175.2	127.8	91.5	141.2		
0.3	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.2		
354.1	484.0	353.6	486.9	219.6	257.2	165.4	386.9	348.0		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
k	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000			
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-7.71411706519E+02		Apriori delay (usec)	-7.71771429199E+02	Resid mbdelay (usec)	3.47680E-04	+/-	1.9E-04		
Sband delay (usec)	-7.71415824449E+02		Apriori clock (usec)	2.0433331E-01	Resid sbdelay (usec)	3.55605E-01	+/-	1.5E-03		
Phase delay (usec)	-7.71771424741E+02		Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	4.45856E-06	+/-	6.3E-07		
Delay rate (us/s)	7.19173684833E-02		Apriori rate (us/s)	7.19188308173E-02	Resid rate (us/s)	-1.46233E-06	+/-	6.1E-09		
Total phase (deg)		-33.0	Apriori accel (us/s/s)	2.99298979168E-06	Resid phase (deg)	141.2	+/-	19.9		

	RMS	Theor.	Amplitude	0.159 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.5	46.7	Search (1024X32)	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	72.5	81.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	37.4	28.2	Inc. seg. avg.	0.167	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.2	49.2	Inc. frq. avg.	0.166	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 93.2 el 37.9 pa -62.1 p: az 97.3 el 40.6 pa -58.7 u,v (fr/asec) -437.055 -224.770 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kp..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kp.W.111.1JFJP0

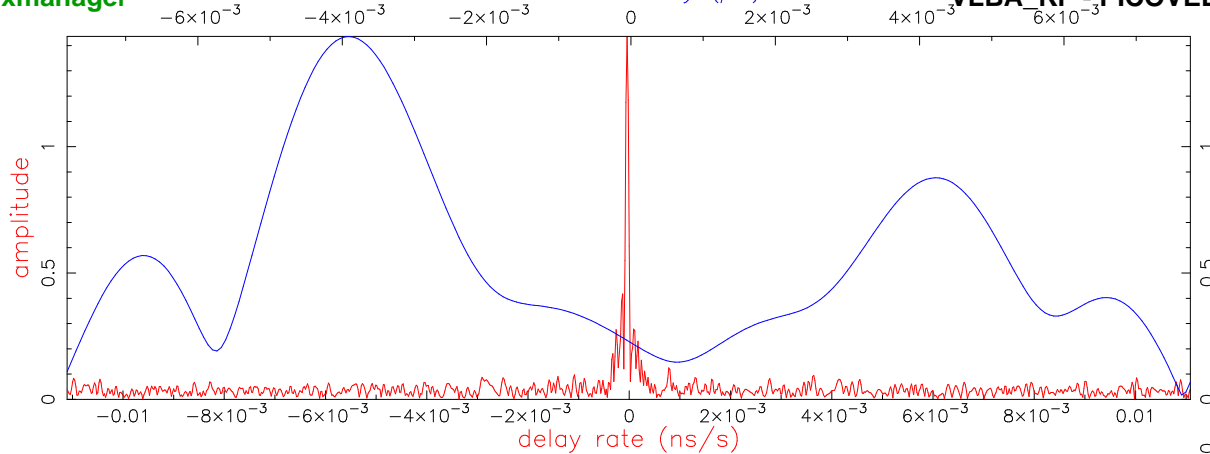
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kP

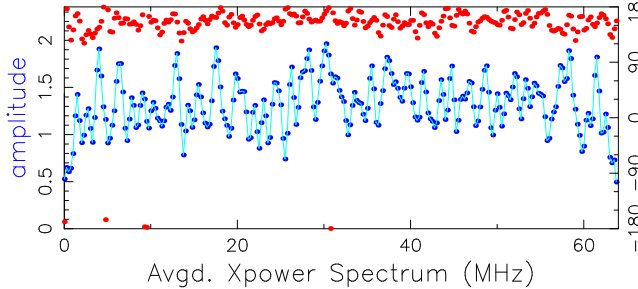
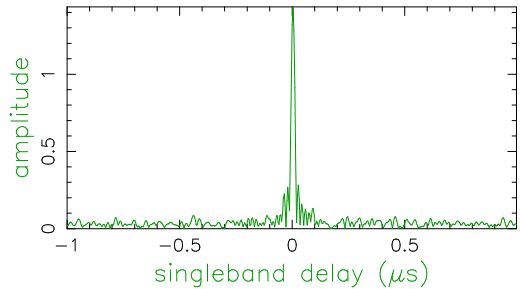
VLBA_KP - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



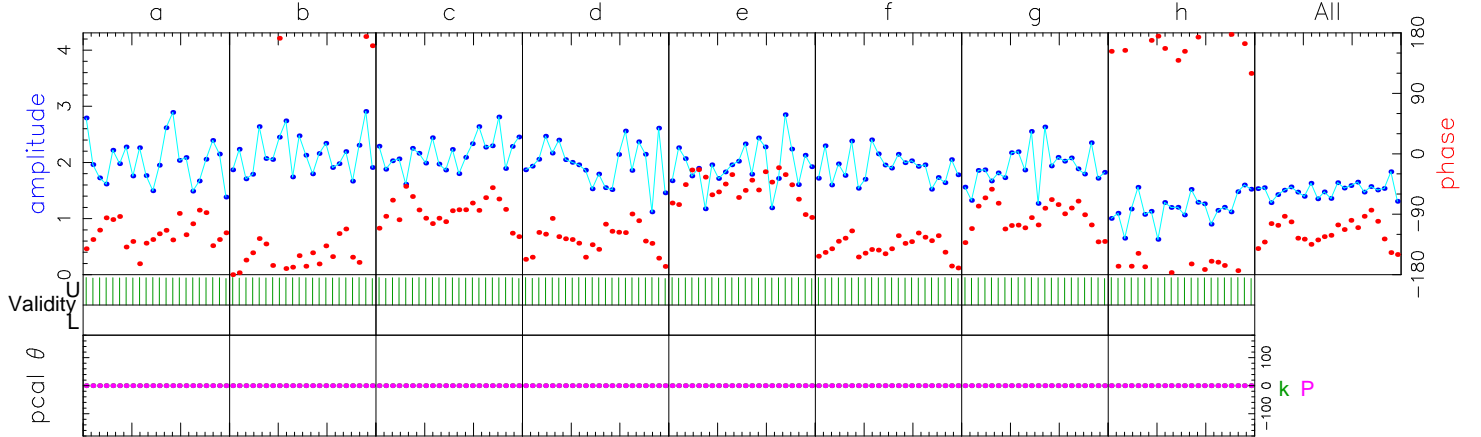
Fringe quality 5

SNR 52.4
 Int time 178.227
 Amp 1.436
 Phase -116.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.003595
 MBD -0.003922
 Fringe rate (Hz)
 -0.003355
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060716
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-119.2	-158.1	-85.6	-127.1	-50.1	-138.2	-93.3	176.6	Phase	-116.6
	1.9	2.0	2.0	1.9	1.8	1.9	1.8	1.1	Ampl.	1.8
	257.3	257.5	257.7	257.4	257.1	257.2	257.2	255.3	Sbd box	257.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.49810710340E+02	Apriori delay (usec)	-2.49806788290E+02	Resid mbdelay (usec)	-3.92205E-03	+/-	2.1E-05
Sband delay (usec)	-2.49803193540E+02	Apriori clock (usec)	5.9676456E-01	Resid sbdelay (usec)	3.59475E-03	+/-	1.6E-04
Phase delay (usec)	-2.49806791973E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-3.68237E-06	+/-	6.9E-08
Delay rate (us/s)	1.98525952230E+00	Apriori rate (us/s)	1.98525956045E+00	Resid rate (us/s)	-3.81522E-08	+/-	6.6E-10
Total phase (deg)	-103.0	Apriori accel (us/s/s)	-1.05277902889E-06	Resid phase (deg)	-116.6	+/-	2.2

ph/seg (deg)	18.0	Theor.	5.1	Amplitude	1.436 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	10.0		8.9	Search (1024X32)	1.419	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	46.0		3.1	Inc. seg. avg.	1.504	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.3		5.4	Inc. frq. avg.	1.790	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 93.2 el 37.9 pa -62.1 P: az 261.1 el 39.4 pa 55.3 u,v (fr/asec) -12117.589 -655.801 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kP..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kP.W.117.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

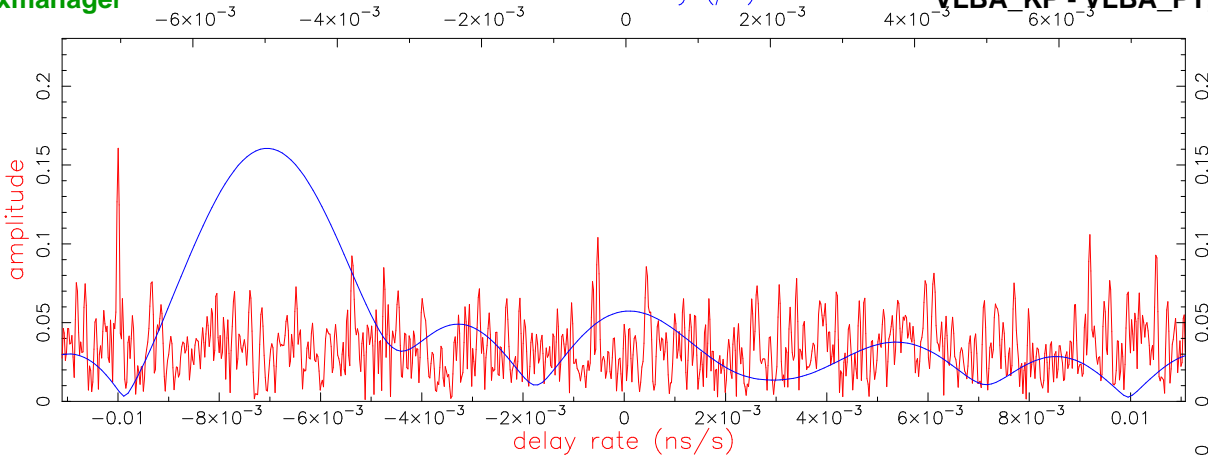
fxmanager

0235+164.1JFJP0, No0042, kp

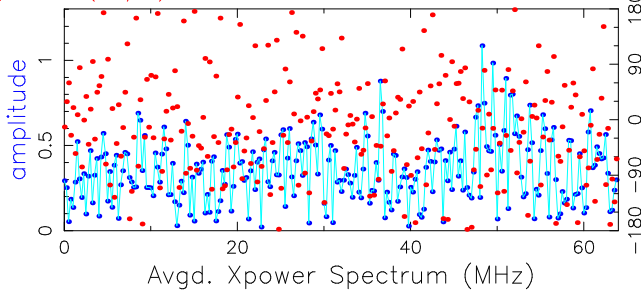
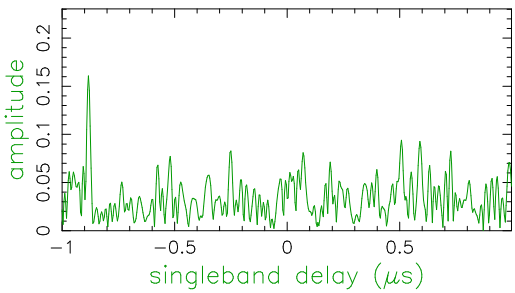
VLBA_KP - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

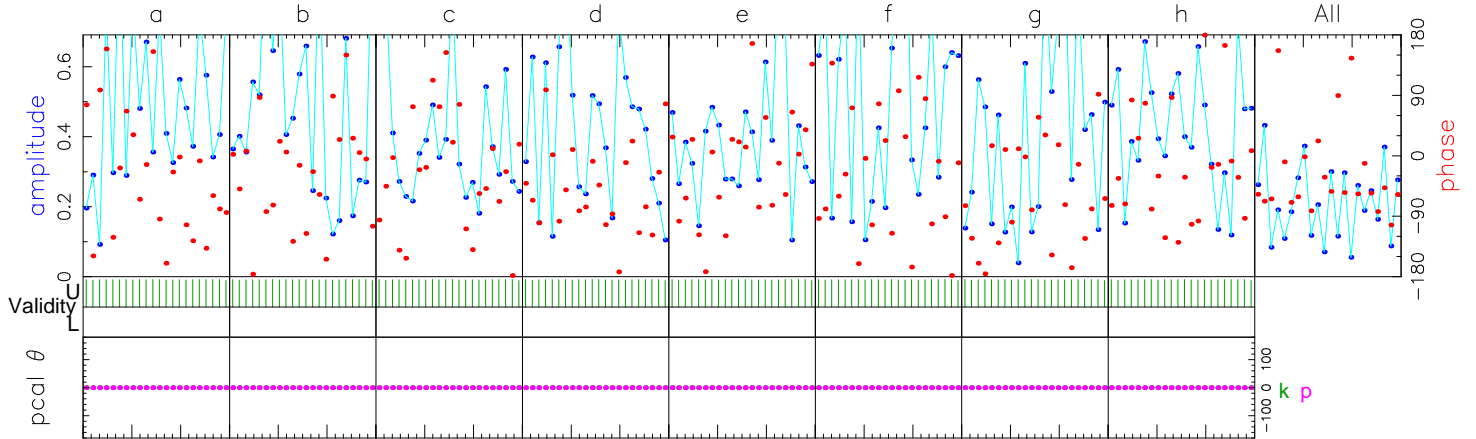


SNR 5.9
 Int time 178.416
 Amp 0.230
 Phase -49.6
 PFD 4.3e-01
 Delays (us)
 SBD -0.882954
 MBD -0.004974
 Fringe rate (Hz)
 -0.881167
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060718
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-62.3	-54.4	-26.4	-57.2	-15.2	-66.7	-61.6	-52.9	Phase	-49.6
	0.3	0.3	0.2	0.3	0.3	0.1	0.2	0.2	Ampl.	0.2
	503.1	407.9	388.1	188.3	463.4	426.7	501.5	166.0	Sbd box	31.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.72651403315E+02		Apriori delay (usec)	-7.71771429199E+02	Resid mbdelay (usec)	-4.97412E-03	+/-	1.8E-04		
Sband delay (usec)	-7.72654383199E+02		Apriori clock (usec)	2.0433331E-01	Resid sbdelay (usec)	-8.82954E-01	+/-	1.5E-03		
Phase delay (usec)	-7.71771430766E+02		Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-1.56696E-06	+/-	6.2E-07		
Delay rate (us/s)	7.19088107219E-02		Apriori rate (us/s)	7.19188308173E-02	Resid rate (us/s)	-1.00201E-05	+/-	5.9E-09		
Total phase (deg)		-223.8	Apriori accel (us/s/s)	2.99298979168E-06	Resid phase (deg)	-49.6	+/-	19.5		

RMS Theor. Amplitude 0.230 +/- 0.039
 ph/seg (deg) 63.1 45.8 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.4 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.1 27.6 Inc. seg. avg. 0.231 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.3 48.2 Inc. frq. avg. 0.216 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 p: az 97.3 el 40.6 pa -58.7 u,v (fr/asec) -437.055 -224.770 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kp..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kp.W.129.1JFJP0

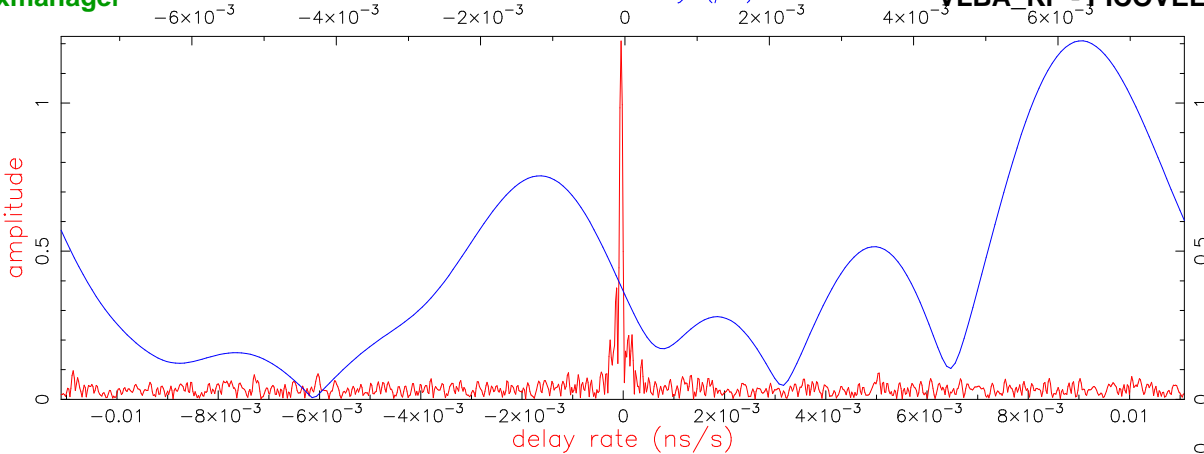
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kP

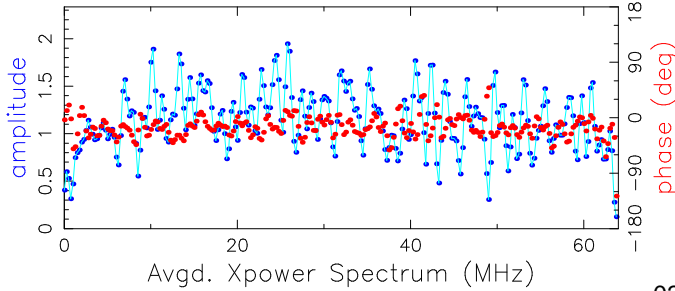
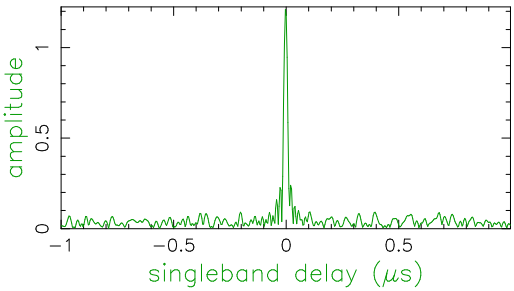
VLBA_KP - PICOVEL, fgroup W, pol RR

multiband delay (μ s)



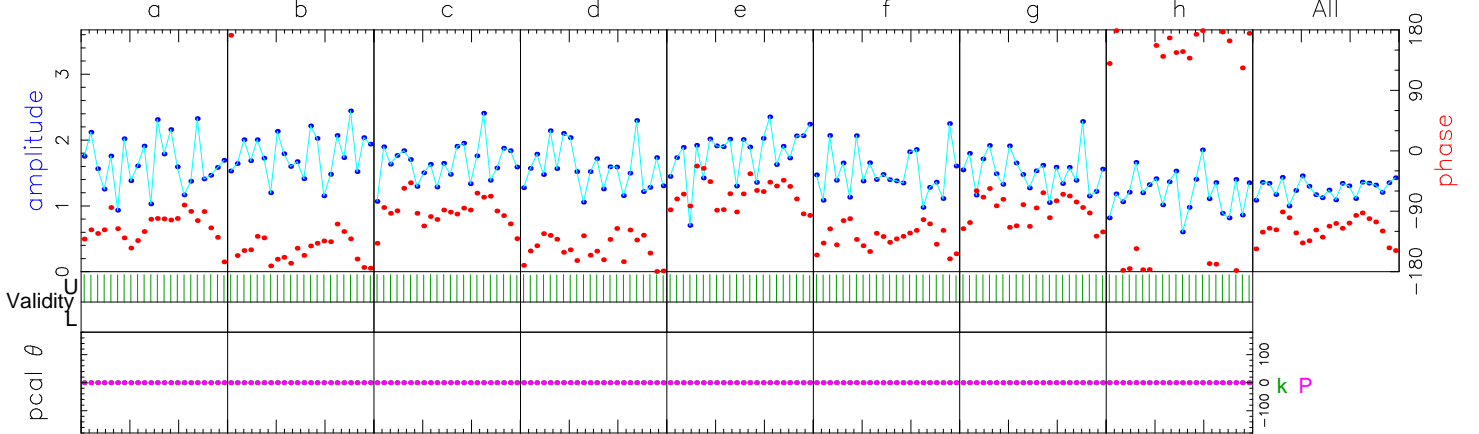
Fringe quality 6

SNR 44.7
 Int time 178.227
 Amp 1.225
 Phase -117.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.002455
 MBD 0.006364
 Fringe rate (Hz)
 -0.003307
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060718
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-113.6	-147.9	-88.6	-144.5	-63.5	-130.4	-87.5	171.7	Phase	-117.4
	1.6	1.7	1.6	1.5	1.7	1.4	1.4	1.1	Ampl.	1.5
	256.4	256.0	256.1	255.9	255.9	256.3	255.5	254.6	Sbd box	256.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.49816049183E+02	Apriori delay (usec)	-2.49806788290E+02	Resid mbdelay (usec)	6.36411E-03	+/-	2.4E-05
Sband delay (usec)	-2.49809243790E+02	Apriori clock (usec)	5.9676456E-01	Resid sbdelay (usec)	-2.45550E-03	+/-	1.9E-04
Phase delay (usec)	-2.49806791998E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-3.70797E-06	+/-	8.1E-08
Delay rate (us/s)	1.98525952285E+00	Apriori rate (us/s)	1.98525956045E+00	Resid rate (us/s)	-3.76067E-08	+/-	7.8E-10
Total phase (deg)	-103.8	Apriori accel (us/s/s)	-1.05277902889E-06	Resid phase (deg)	-117.4	+/-	2.6

ph/seg (deg)	RMS 16.5	Theor. 6.0	Amplitude Search (1024X32)	1.225 +/- 0.027	1.192	1.192	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	10.6	10.5	Interp.	0.000	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	43.8	3.6	Inc. seg. avg.	1.256	1.256	1.256	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	25.6	6.3	Inc. frq. avg.	1.489	1.489	1.489	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 93.2 el 37.9 pa -62.1 P: az 261.1 el 39.4 pa 55.3 u,v (fr/asec) -12117.589 -655.801 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kP..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kP.W.132.1JFJP0

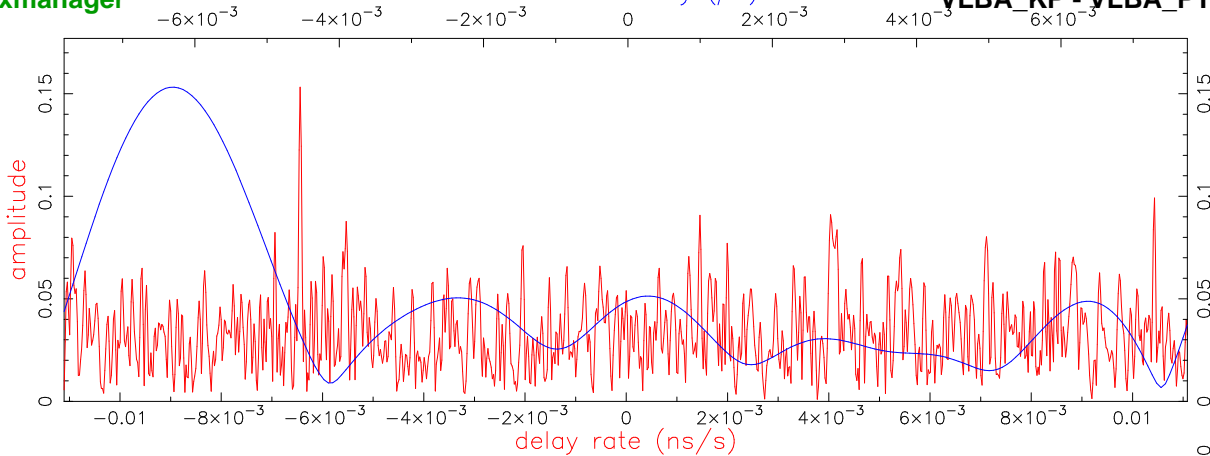
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kp

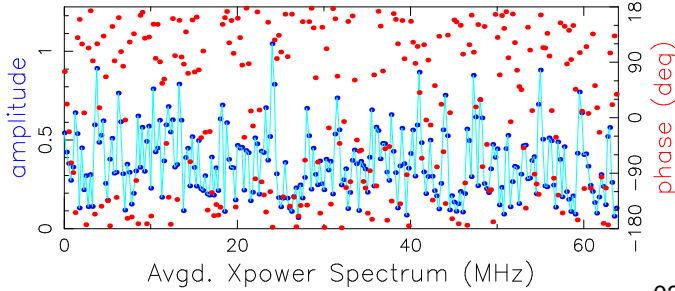
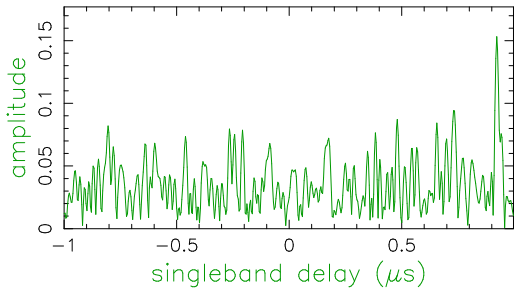
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



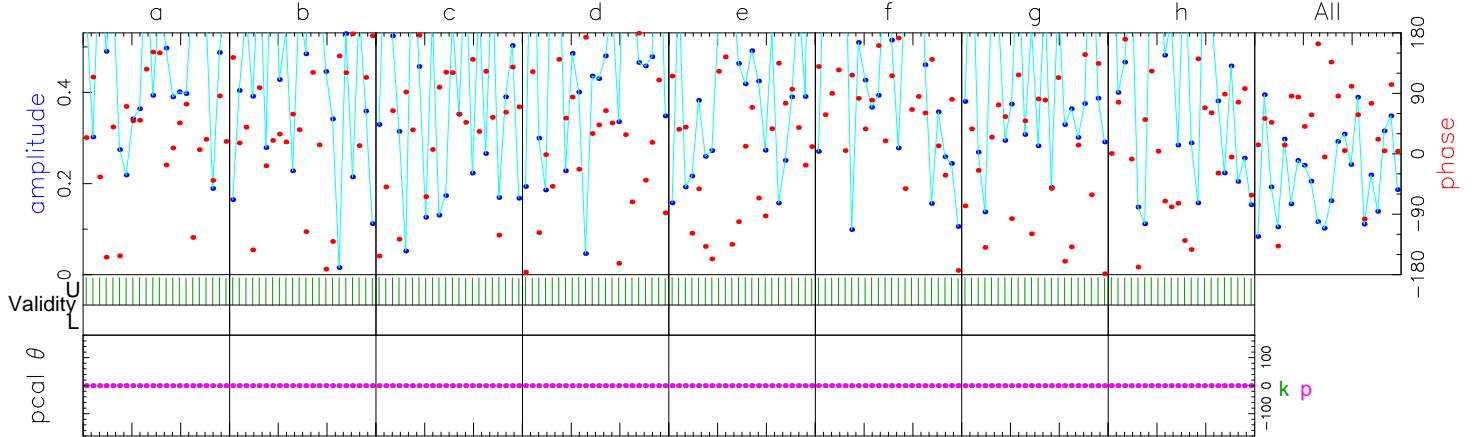
Fringe quality 0

SNR 5.6
 Int time 178.416
 Amp 0.177
 Phase 54.8
 PFD 9.2e-01
 Delays (us)
 SBD 0.922309
 MBD -0.006280
 Fringe rate (Hz)
 -0.567968
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060719
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000	1000			
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
kp	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			
p	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-7.70855834311E+02					-7.71771429199E+02			Resid mbdelay (usec)	-6.28011E-03	+/- 1.9E-04
Sband delay (usec)	-7.70849119949E+02					2.0433331E-01			Resid sbdelay (usec)	9.22309E-01	+/- 1.5E-03
Phase delay (usec)	-7.71771427469E+02					-2.9999999E-07			Resid phdelay (usec)	1.73051E-01	+/- 6.5E-07
Delay rate (us/s)	7.19123722306E-02					7.19188308173E-02			Resid rate (us/s)	-6.45859E-06	+/- 6.2E-09
Total phase (deg)			-119.4			2.99298979168E-06			Resid phase (deg)	54.8	+/- 20.5
RMS	65.2	48.0							PCal mode: MANUAL, MANUAL		
ph/seg (deg)	65.2	48.0							PCal rate: 0.000E+00, 0.000E+00 (us/s)		
amp/seg (%)	74.8	83.7							Bits/sample: 2x2		
ph/frq (deg)	20.4	28.9							SampCntNorm: enabled		
amp/frq (%)	41.1	50.5							Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
k: az 93.2 el 37.9 pa -62.1											
p: az 97.3 el 40.6 pa -58.7											
u,v (fr/asec) -437.055 -224.770											
Control file: cf_1234_88GHz_gmva											
Input file: /Exps/c202c/v1/1234/No0042/kp..1JFJP0											
Output file: /Exps/c202c/v1/1234/No0042/kp.W.143.1JFJP0											

simultaneous interpolator

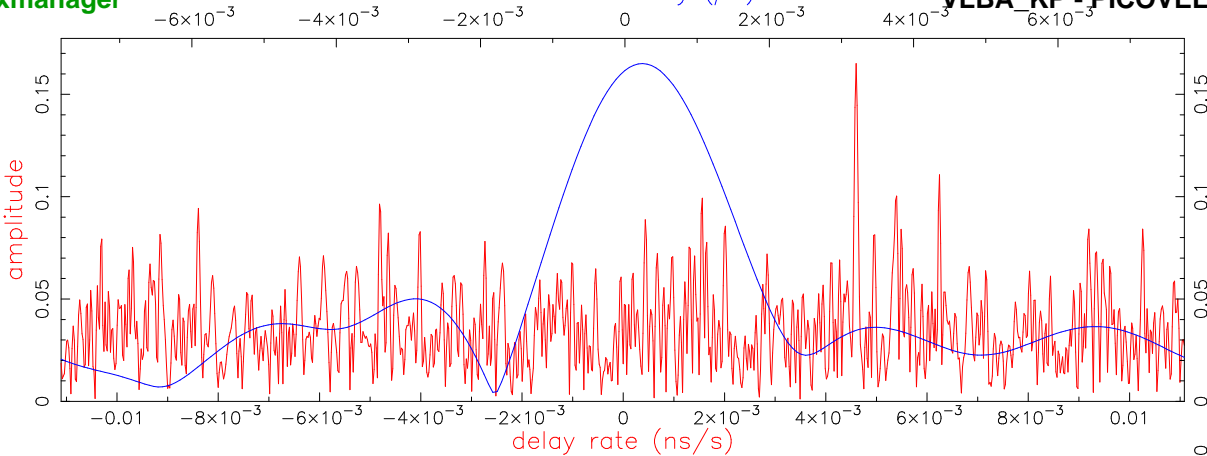
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kP

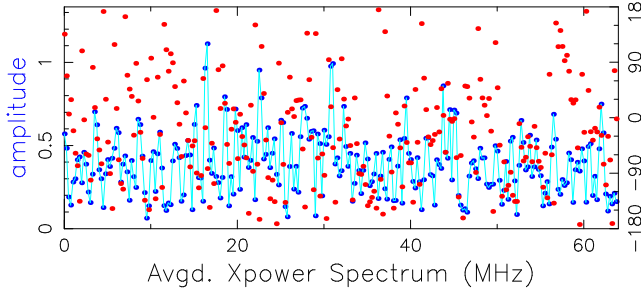
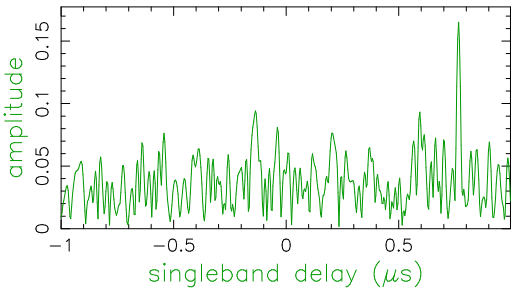
VLBA_KP - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



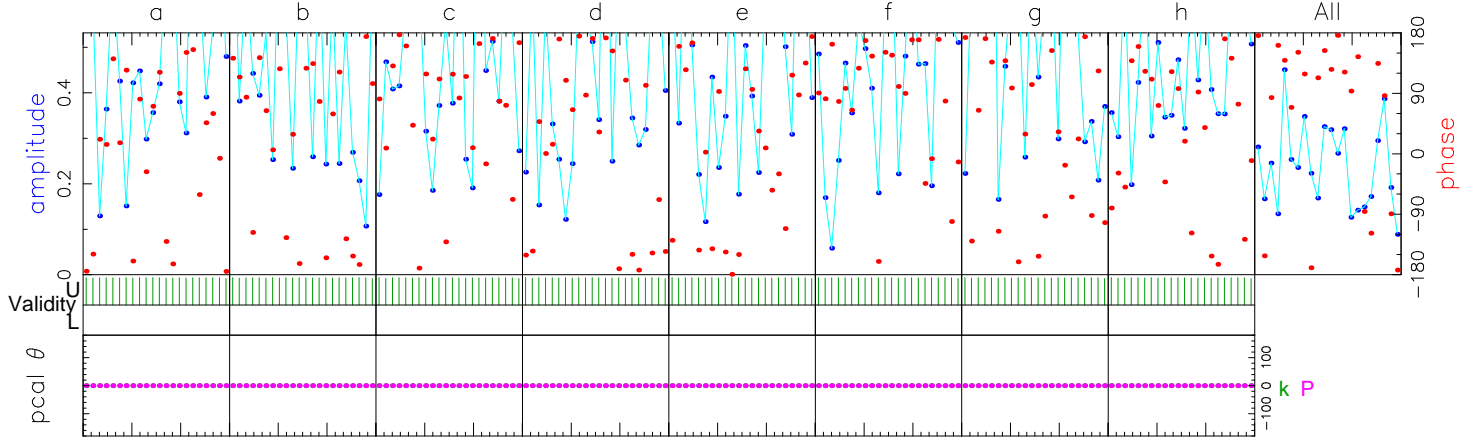
Fringe quality 0

SNR 6.0
 Int time 178.227
 Amp 0.177
 Phase 140.7
 PFD 2.0e-01
 Delays (us)
 SBD 0.765579
 MBD 0.000238
 Fringe rate (Hz)
 0.405271
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060719
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	453.0
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.49040924972E+02		Apriori delay (usec)		-2.49806788290E+02		Resid mbdelay (usec)		2.38318E-04	+/- 1.8E-04
Sband delay (usec)	-2.49041209790E+02		Apriori clock (usec)		5.9676456E-01		Resid sbdelay (usec)		7.65579E-01	+/- 1.4E-03
Phase delay (usec)	-2.49806783846E+02		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		4.44468E-06	+/- 6.0E-07
Delay rate (us/s)	1.98526416895E+00		Apriori rate (us/s)		1.98525956045E+00		Resid rate (us/s)		4.60850E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.05277902889E-06		Resid phase (deg)		140.7	+/- 19.0

	RMS	Theor.	Amplitude	0.177 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	57.5	44.6	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	72.2	77.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	22.1	26.9	Inc. seg. avg.	0.199	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	31.2	46.9	Inc. frq. avg.	0.168	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

k: az 93.2 el 37.9 pa -62.1 P: az 261.1 el 39.4 pa 55.3 u,v (fr/asec) -12117.589 -655.801 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kP..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kP.W.147.1JFJP0

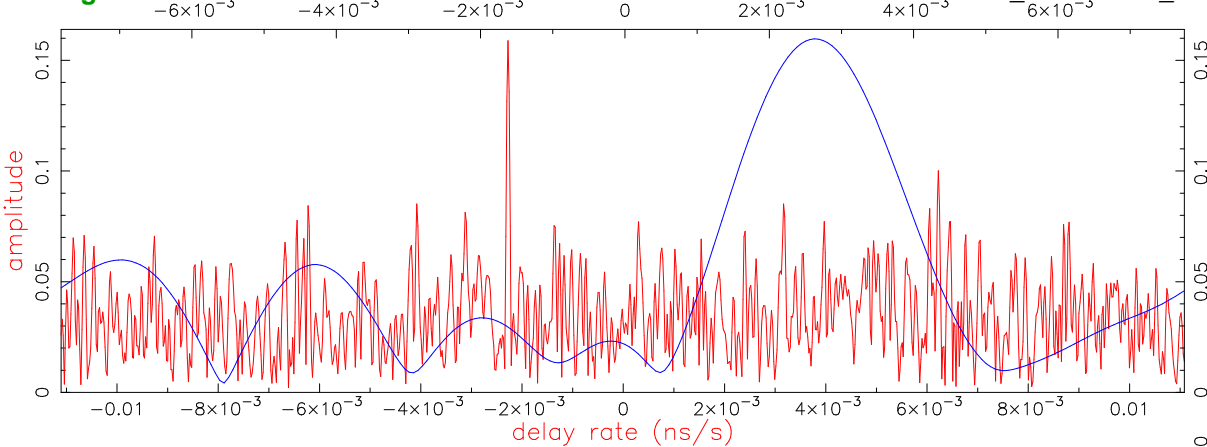
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kp

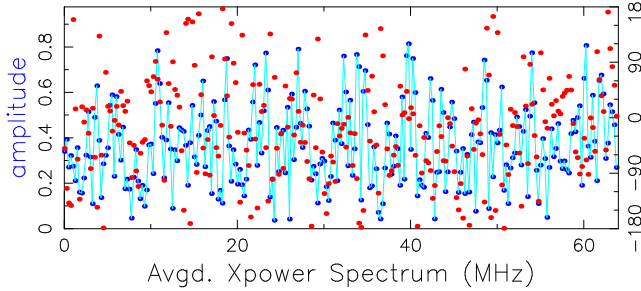
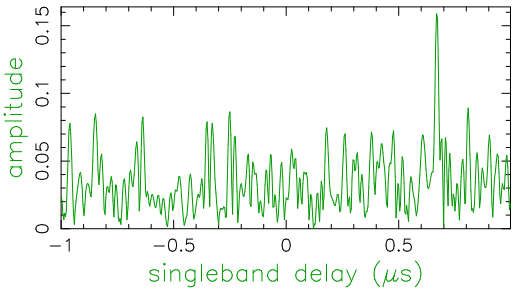
VLBA_KP - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



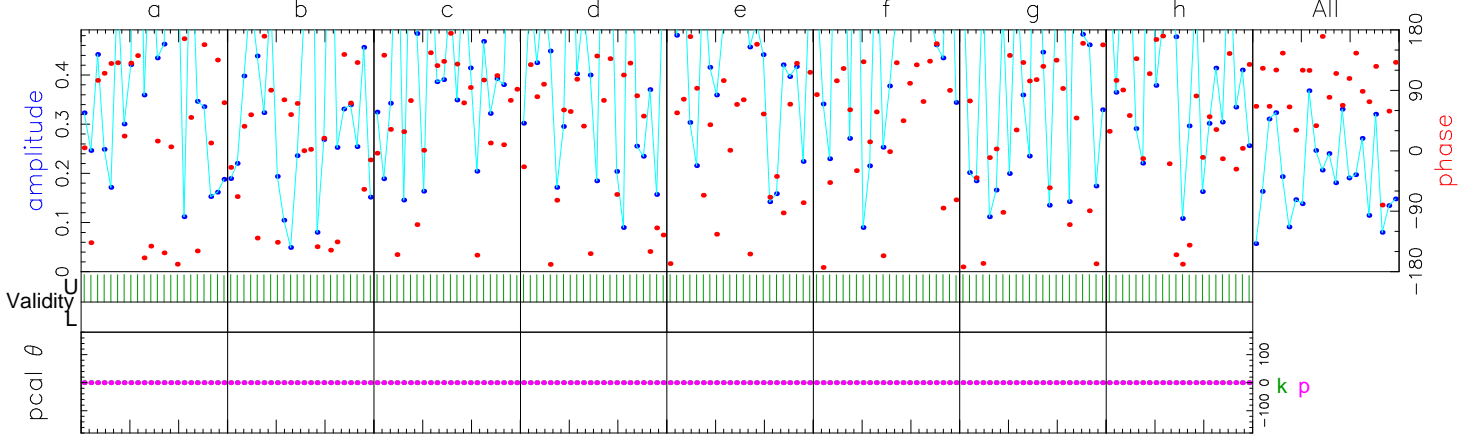
Fringe quality 0

SNR 5.9
 Int time 178.416
 Amp 0.164
 Phase 100.5
 PFD 3.9e-01
 Delays (us)
 SBD 0.669512
 MBD 0.002758
 Fringe rate (Hz)
 -0.200529
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060721
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-7.71096795829E+02								2.75837E-03	+/- 1.8E-04
Sband delay (usec)	-7.71101916949E+02								6.69512E-01	+/- 1.5E-03
Phase delay (usec)	-7.71771426024E+02								3.17484E-06	+/- 6.1E-07
Delay rate (us/s)	7.19165505234E-02								-2.28029E-06	+/- 5.9E-09
Total phase (deg)		-73.6							100.5	+/- 19.5
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 52.8 45.7 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.7 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.9 27.5 Inc. seg. avg. 0.156 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.7 48.0 Inc. frq. avg. 0.156 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 p: az 97.3 el 40.6 pa -58.7 u,v (fr/asec) -437.055 -224.770 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kp..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kp.W.160.1JFJP0 simultaneous interpolator

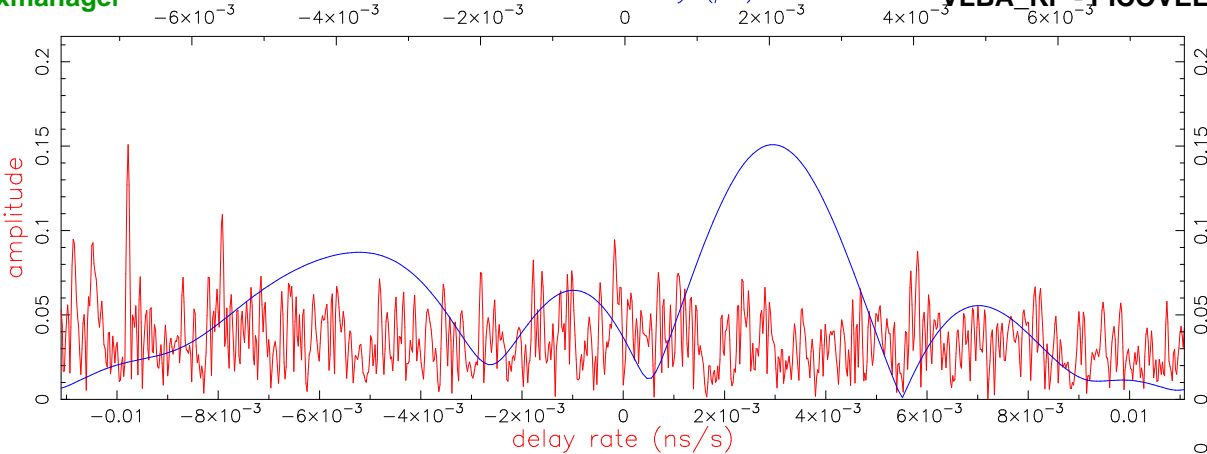
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kP

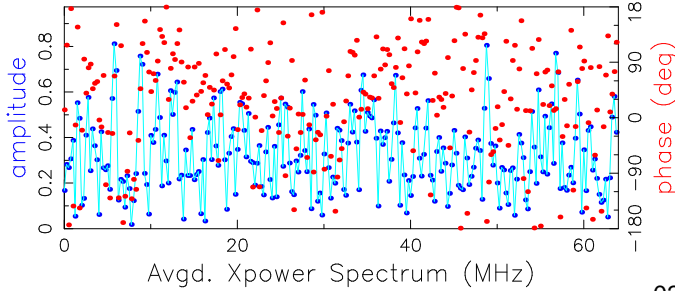
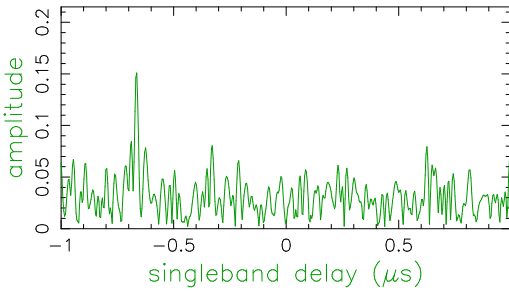
VLBA_KP - PICOVEL, fgroup W, pol RL

multiband delay (μ s)



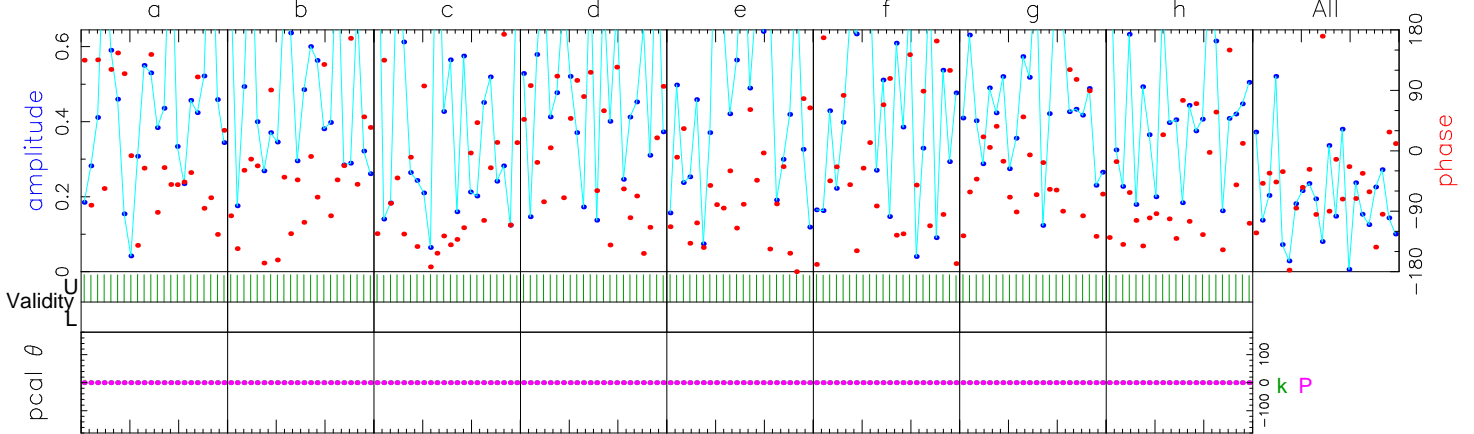
Fringe quality 0

SNR 5.6
 Int time 178.227
 Amp 0.215
 Phase -67.7
 PFD 9.5e-01
 Delays (us)
 SBD -0.665415
 MBD 0.002037
 Fringe rate (Hz)
 -0.860715
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060721
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-67.6	-54.1	-103.7	28.9	-78.5	-100.8	-41.3	-79.1	Phase	-67.7
	0.2	0.4	0.3	0.1	0.3	0.1	0.3	0.2	Ampl.	0.2
	170.1	88.3	174.3	128.5	504.5	129.7	164.6	121.2	Sbd box	86.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	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	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.50476626151E+02	Apriori delay (usec)	-2.49806788290E+02	Resid mbdelay (usec)	2.03714E-03	+/-	1.9E-04
Sband delay (usec)	-2.50472203540E+02	Apriori clock (usec)	5.9676456E-01	Resid sbdelay (usec)	-6.65415E-01	+/-	1.5E-03
Phase delay (usec)	-2.49806790427E+02	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-2.13708E-06	+/-	6.5E-07
Delay rate (us/s)	1.98524977293E+00	Apriori rate (us/s)	1.98525956045E+00	Resid rate (us/s)	-9.78752E-06	+/-	6.2E-09
Total phase (deg)	-54.1	Apriori accel (us/s/s)	-1.05277902889E-06	Resid phase (deg)	-67.7	+/-	20.6

ph/seg (deg)	54.1	Theor.	48.2	Amplitude	0.215 +/- 0.039	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	84.4		84.2	Search (1024X32)	0.148	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	46.3		29.1	Inc. seg. avg.	0.207	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.1		50.8	Inc. frq. avg.	0.217	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 93.2 el 37.9 pa -62.1 P: az 261.1 el 39.4 pa 55.3 u,v (fr/asec) -12117.589 -655.801 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kP..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kP.W.163.1JFJP0

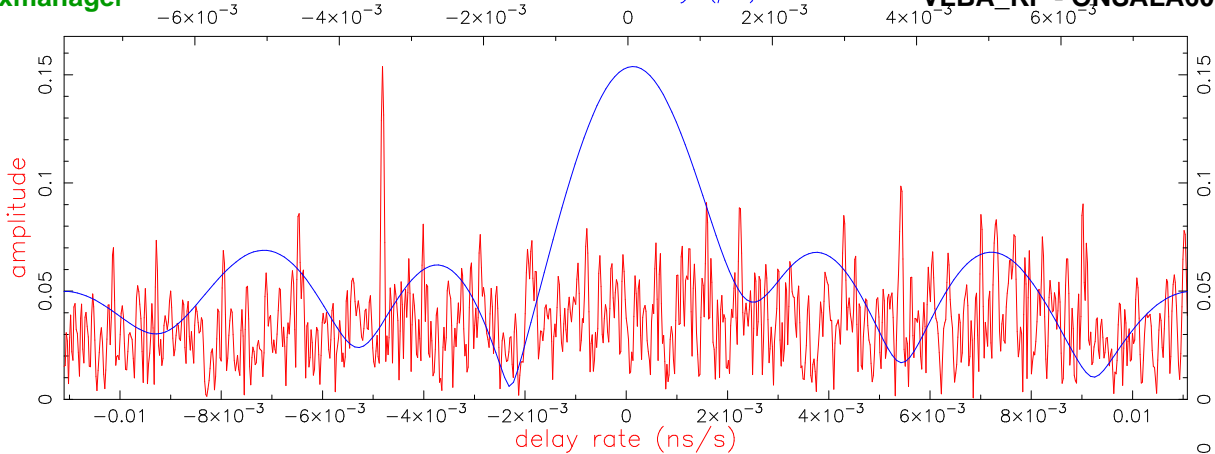
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kX

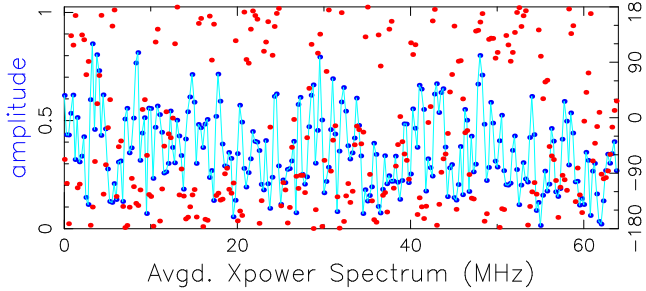
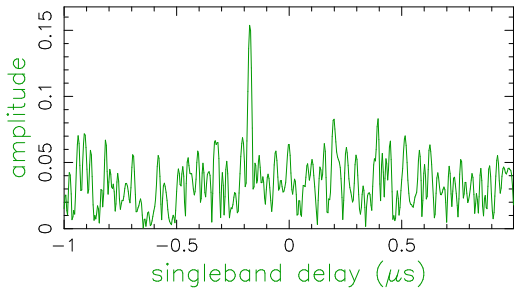
VLBA_KP - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



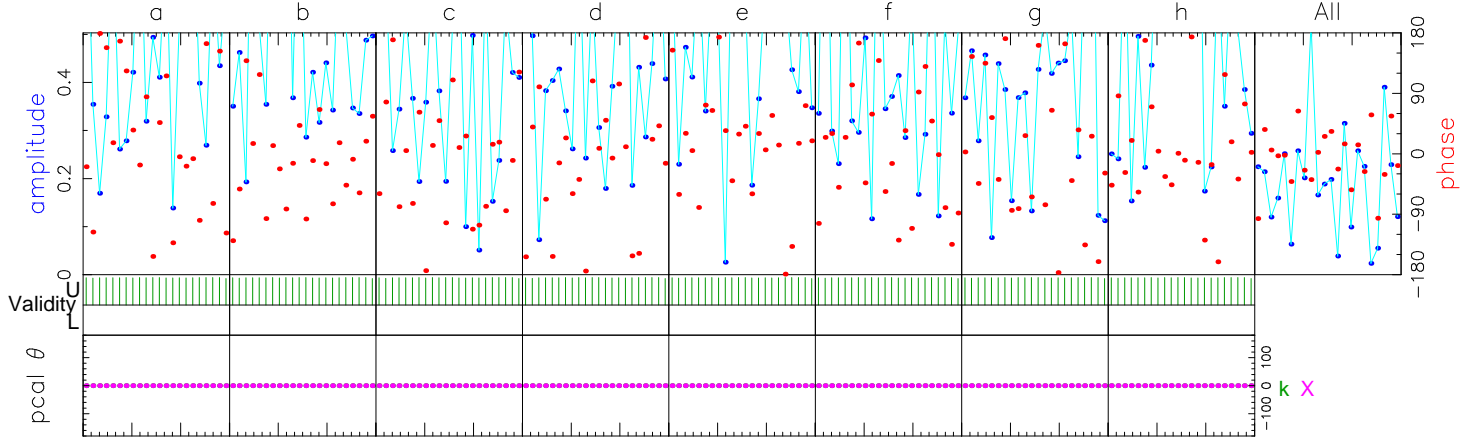
Fringe quality 0

SNR 5.7
 Int time 178.392
 Amp 0.168
 Phase -4.4
 PFD 8.4e-01
 Delays (us)
 SBD -0.174499
 MBD 0.000056
 Fringe rate (Hz)
 -0.423489
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060715
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All	
	-16.8	-10.9	-17.6	11.8	30.7	-0.6	-39.1	-15.2		Phase	-4.4
	0.1	0.3	0.1	0.1	0.2	0.1	0.0	0.3		Ampl.	0.2
	219.2	360.6	77.7	474.6	121.8	119.7	107.7	228.7		Sbd box	212.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
k:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Chan ids	
										Tracks	
Group delay (usec)(sbd)	3.96212107867E+03		Apriori delay (usec)		3.96229289753E+03		Resid mbdelay (usec)		5.61324E-05	+/-	1.9E-04
Sband delay (usec)	3.96211839828E+03		Apriori clock (usec)		-4.8079716E+01		Resid sbdelay (usec)		-1.74499E-01	+/-	1.5E-03
Phase delay (usec)	3.96229289739E+03		Apriori clockrate (us/s)		-4.2800003E-07		Resid phdelay (usec)		-1.40453E-07	+/-	6.4E-07
Delay rate (us/s)	1.78061777620E+00		Apriori rate (us/s)		1.78062259186E+00		Resid rate (us/s)		-4.81566E-06	+/-	6.1E-09
Total phase (deg)	142.8		Apriori accel (us/s/s)		-3.14838398242E-05		Resid phase (deg)		-4.4	+/-	20.2

	RMS	Theor.	Amplitude	0.168 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	43.2	47.5	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	78.7	82.8	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.1	28.6	Inc. seg. avg.	0.159	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	60.0	49.9	Inc. frq. avg.	0.155					

k: az 93.2 el 37.9 pa -62.1 X: az 260.8 el 25.7 pa 33.7 u,v (fr/asec) -10881.300 -3465.704 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kX..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kX.W.105.1JFJP0

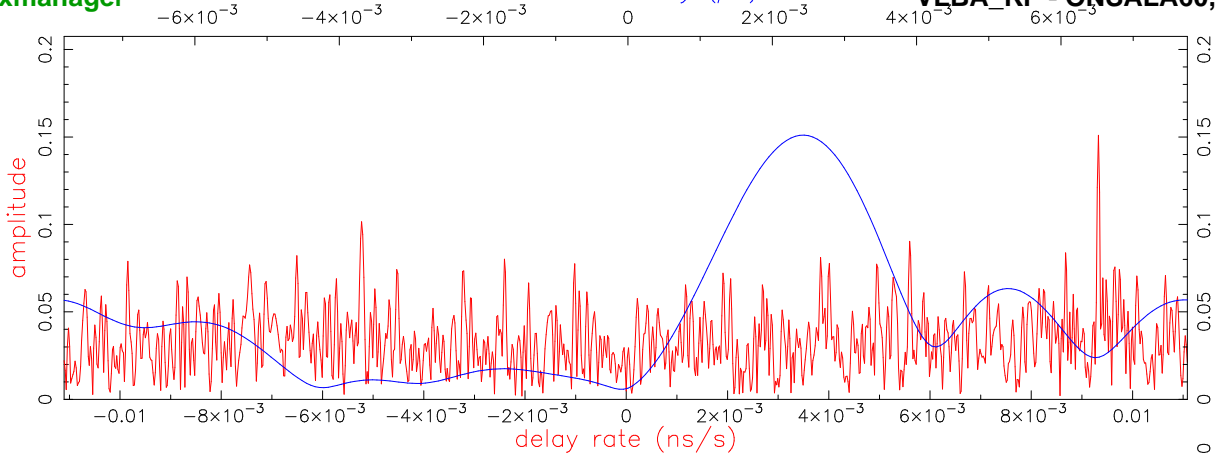
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kX

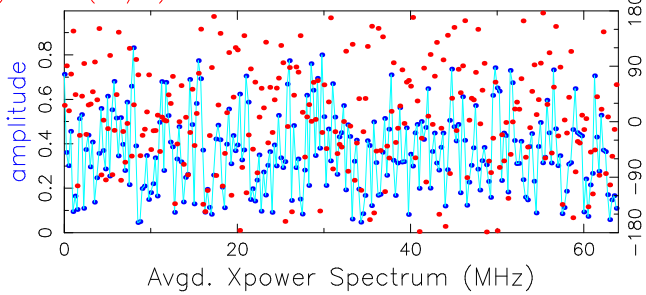
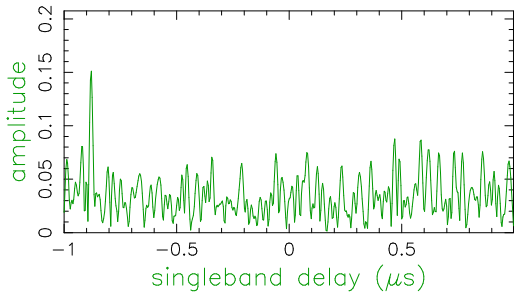
VLBA_KP - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



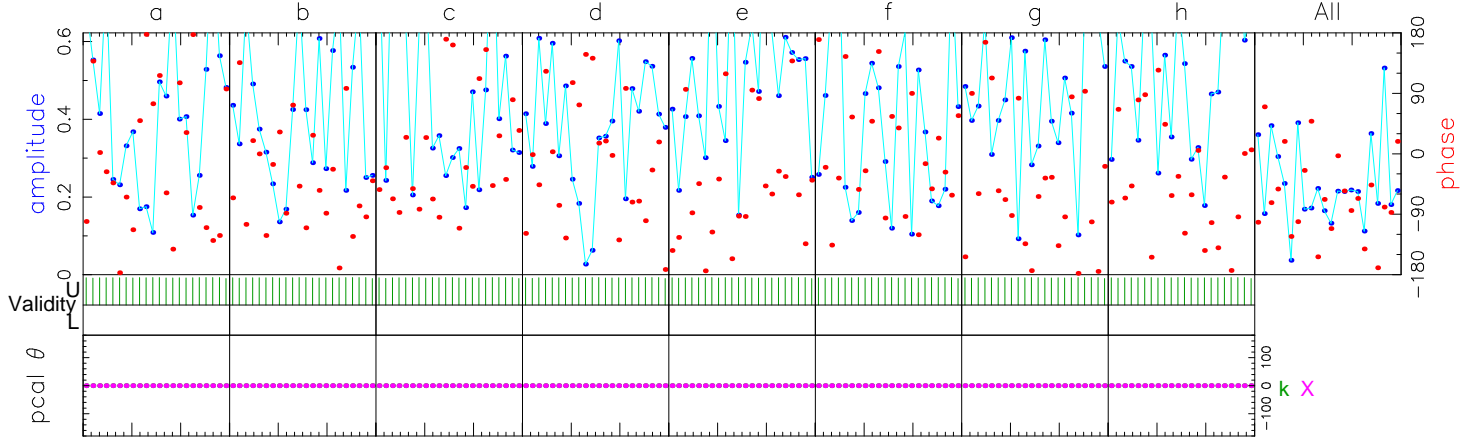
Fringe quality 0

SNR 5.6
 Int time 178.392
 Amp 0.208
 Phase -68.5
 PFD 9.6e-01
 Delays (us)
 SBD -0.879929
 MBD 0.002393
 Fringe rate (Hz)
 0.821804
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060717
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

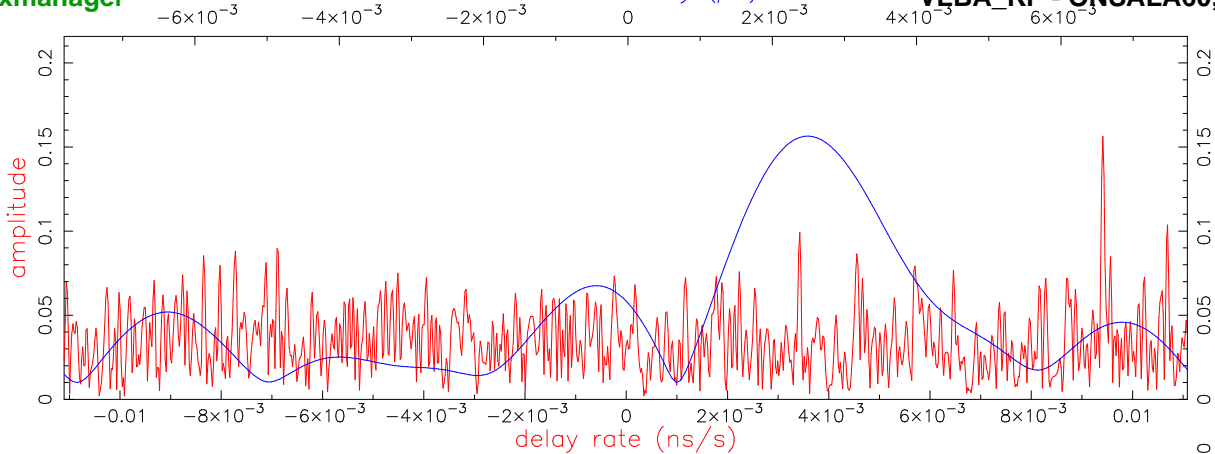
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-113.0	-67.1	-44.7	-49.5	-90.2	-41.2	-109.0	-55.1	Phase	-68.5
	0.2	0.3	0.3	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	69.3	241.5	31.8	278.6	349.8	421.5	452.1	473.0	Sbd box	31.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.96142029025E+03		Apriori delay (usec)		3.96229289753E+03		Resid mbdelay (usec)		2.39271E-03	+/- 2.0E-04
Sband delay (usec)	3.96141296803E+03		Apriori clock (usec)		-4.8079716E+01		Resid sbdelay (usec)		-8.79929E-01	+/- 1.6E-03
Phase delay (usec)	3.96229289537E+03		Apriori clockrate (us/s)		-4.2800003E-07		Resid phdelay (usec)		-2.16239E-06	+/- 6.5E-07
Delay rate (us/s)	1.78063193691E+00		Apriori rate (us/s)		1.78062259186E+00		Resid rate (us/s)		9.34505E-06	+/- 6.3E-09
Total phase (deg)	78.8		Apriori accel (us/s/s)		-3.14838398242E-05		Resid phase (deg)		-68.5	+/- 20.6

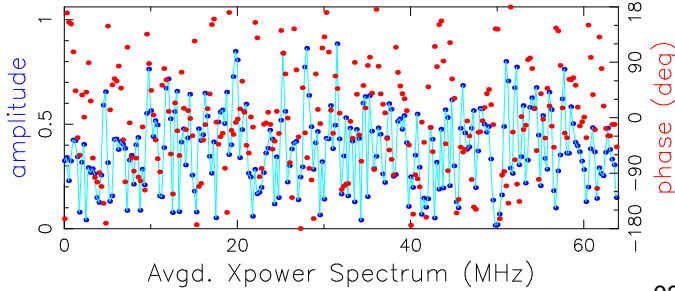
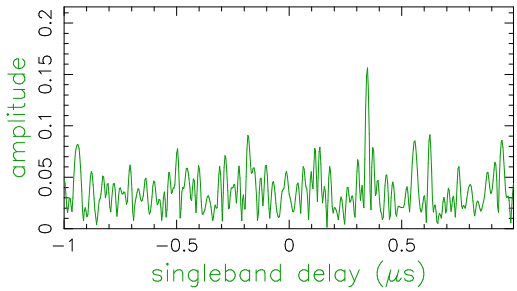
ph/seg (deg) 62.2 48.4 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 90.6 84.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.5 29.2 Inc. seg. avg. 0.237 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.8 50.9 Inc. frq. avg. 0.202 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 X: az 260.8 el 25.7 pa 33.7 u,v (fr/asec) -10881.300 -3465.704 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kX..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kX.W.120.1JFJP0

multiband delay (μ s)



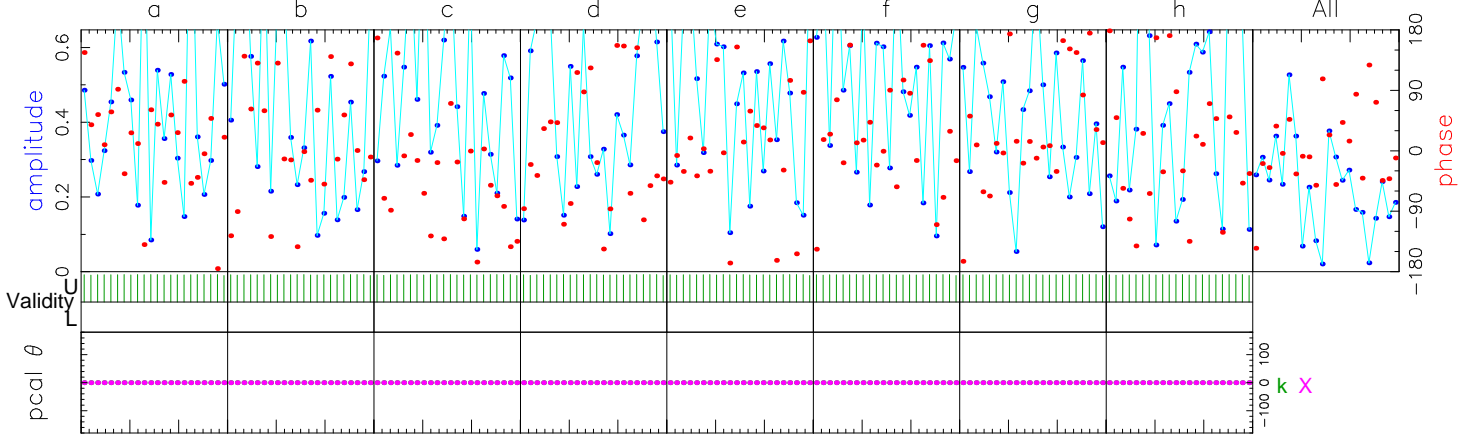
Fringe quality 0

SNR 5.7
 Int time 178.392
 Amp 0.216
 Phase -0.0
 PFD 6.9e-01
 Delays (us)
 SBD 0.346713
 MBD 0.002438
 Fringe rate (Hz) 0.829857
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060719
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.96263908547E+03		Apriori delay (usec)		3.96229289753E+03		Resid mbdelay (usec)		2.43794E-03	+/- 1.9E-04
Sband delay (usec)	3.96263961078E+03		Apriori clock (usec)		-4.8079716E+01		Resid sbdelay (usec)		3.46713E-01	+/- 1.5E-03
Phase delay (usec)	3.96229289753E+03		Apriori clockrate (us/s)		-4.2800003E-07		Resid phdelay (usec)		-5.43410E-10	+/- 6.3E-07
Delay rate (us/s)	1.78063202848E+00		Apriori rate (us/s)		1.78062259186E+00		Resid rate (us/s)		9.43662E-06	+/- 6.1E-09
Total phase (deg)	147.2		Apriori accel (us/s/s)		-3.14838398242E-05		Resid phase (deg)		-0.0	+/- 20.0

	RMS	Theor.	Amplitude	0.216 +/- 0.038	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	60.4	46.8	Search (1024X32)	0.153	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	88.2	81.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	28.3	28.2	Inc. seg. avg.	0.232	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	30.7	49.3	Inc. frq. avg.	0.209	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

k: az 93.2 el 37.9 pa -62.1 X: az 260.8 el 25.7 pa 33.7 u,v (fr/asec) -10881.300 -3465.704 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kX..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kX.W.140.1JFJP0

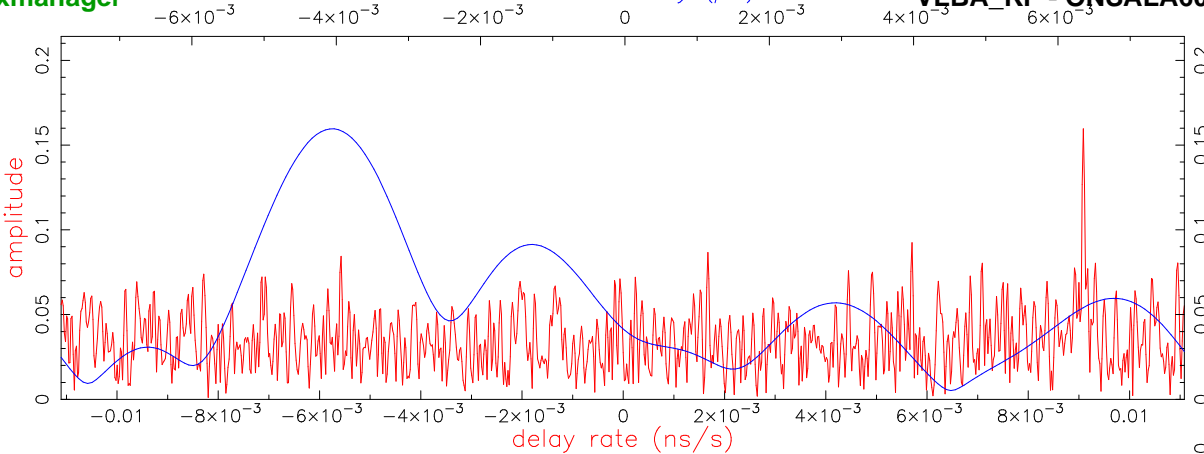
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kX

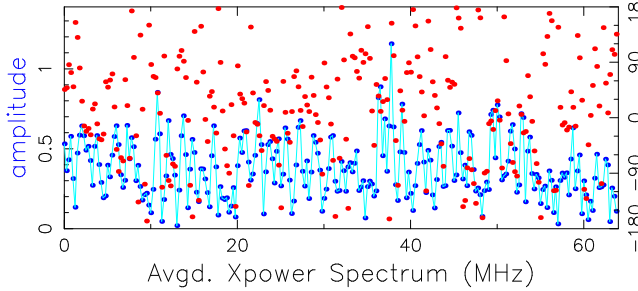
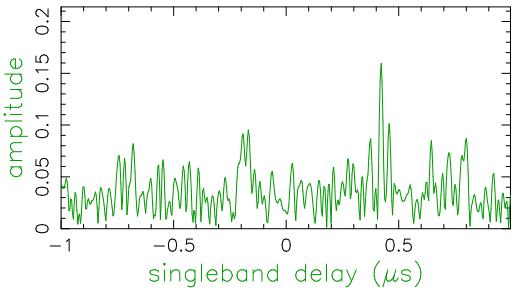
VLBA_KP - ONSALA60, fgroup W, pol RL

multiband delay (μ s)



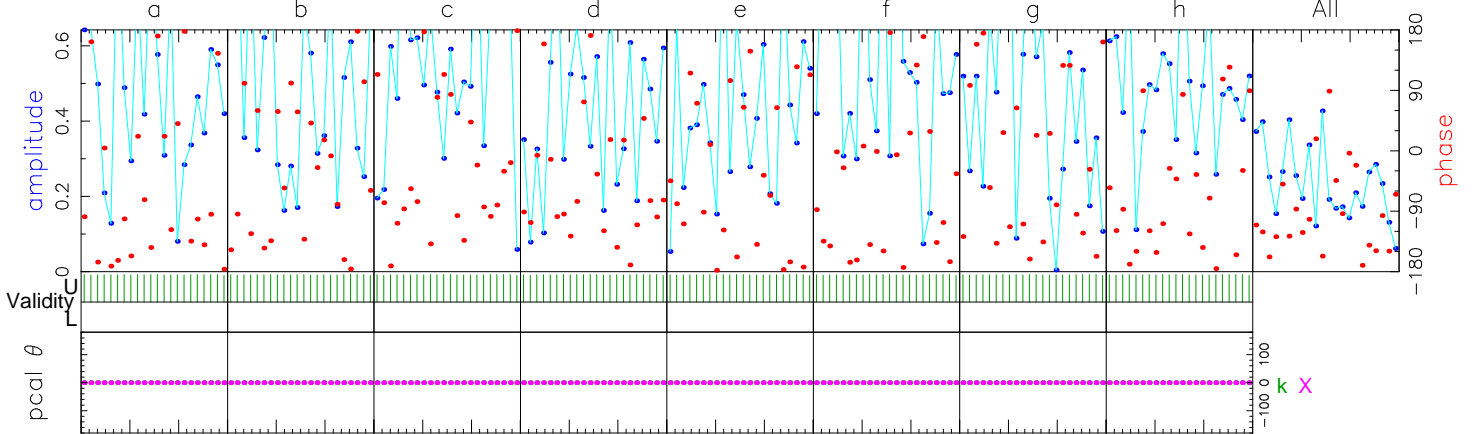
Fringe quality 0

SNR 5.8
Int time 178.392
Amp 0.214
Phase -114.4
PFD 5.0e-01
Delays (us)
SBD 0.421578
MBD -0.004067
Fringe rate (Hz)
0.800209
Ion TEC 0.000
Ref freq (MHz)
87940.0000
AP (sec) 0.512



Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 050000.00
Stop 050300.22
FRT 050130.00
Corr/FF/build
2021:039:054330
2021:039:060721
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

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



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec)(sbd)		3.96271070574E+03			3.96229289753E+03				Resid mbdelay (usec)	-4.06679E-03 +/- 1.9E-04
Sband delay (usec)		3.96271447603E+03			-4.8079716E+01				Resid sbdelay (usec)	4.21578E-01 +/- 1.5E-03
Phase delay (usec)		3.96229289392E+03			-4.2800003E-07				Resid phdelay (usec)	-3.61244E-06 +/- 6.2E-07
Delay rate (us/s)		1.78063169135E+00			1.78062259186E+00				Resid rate (us/s)	9.09949E-06 +/- 6.0E-09
Total phase (deg)			32.9		-3.14838398242E-05				Resid phase (deg)	-114.4 +/- 19.6
ph/seg (deg)	62.8	46.1		0.151					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	78.2	80.4		0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.2	27.8		0.240					Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	31.3	48.5		0.220					Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
									Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
									nlags: 256	t_cohere infinite
										ion window (TEC) 0.00 0.00

k: az 93.2 el 37.9 pa -62.1 X: az 260.8 el 25.7 pa 33.7 u,v (fr/asec) -10881.300 -3465.704 simultaneous interpolator

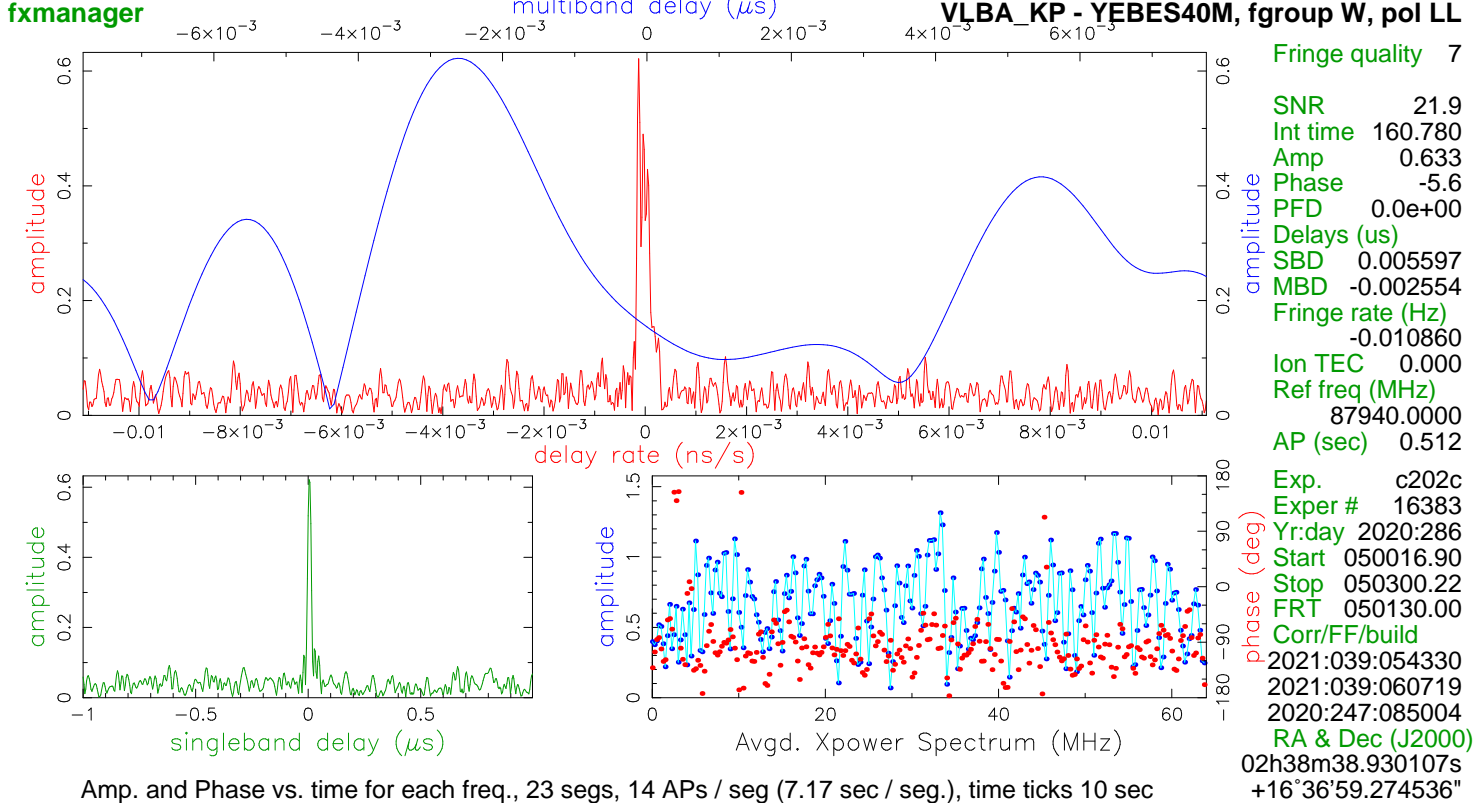
Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kX..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kX.W.156.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

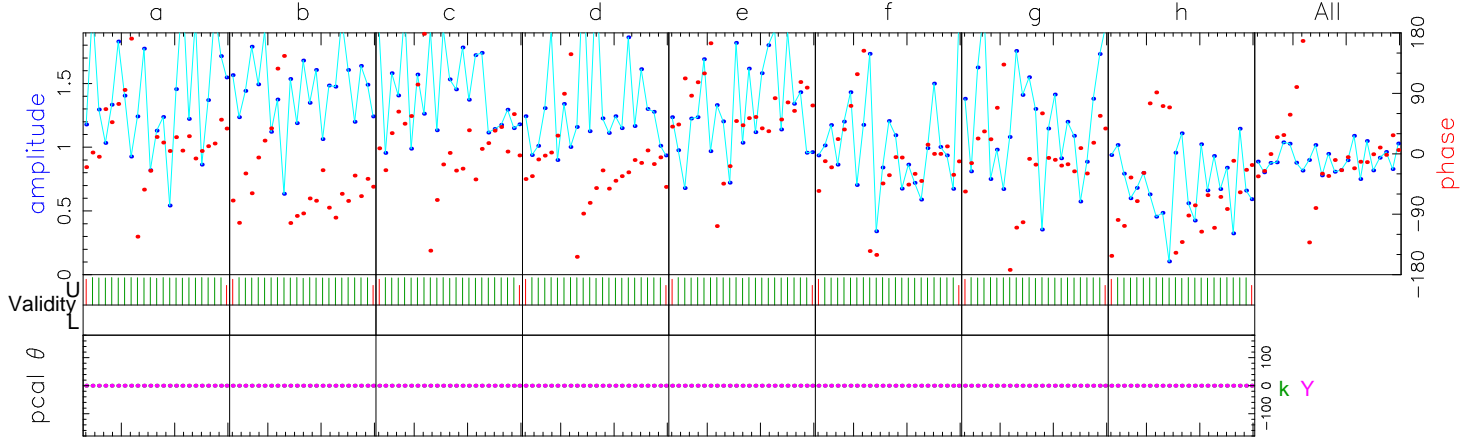
fxmanager

0235+164.1JFJP0, No0042, kY

VLBA_KP - YEBES40M, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
17.4	-58.2	12.6	-27.9	66.0	-8.3	-1.1	-83.7		Phase	-5.6
1.0	1.0	0.9	0.9	0.9	0.6	0.7	0.4		Ampl.	0.8
258.0	258.4	258.4	257.9	257.7	257.1	257.2	254.9		Sbd box	258.4
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0		APs used	
k	1000	1000	1000	1000	1000	1000	1000		PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000		PC freqs	
k:Y	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		Mani PC	
k	1000	1000	1000	1000	1000	1000	1000		PC amp	
Y	1000	1000	1000	1000	1000	1000	1000			
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.04535634987E+01		Apriori delay (usec)	-2.04666344561E+01	Resid mbdelay (usec)	-2.55404E-03	+/-	4.9E-05		
Sband delay (usec)	-2.04610372061E+01		Apriori clock (usec)	-1.3359754E+01	Resid sbdelay (usec)	5.59725E-03	+/-	3.9E-04		
Phase delay (usec)	-2.04666346322E+01		Apriori clockrate (us/s)	-2.0000006E-08	Resid phdelay (usec)	-1.76096E-07	+/-	1.7E-07		
Delay rate (us/s)	1.94365658458E+00		Apriori rate (us/s)	1.94365670808E+00	Resid rate (us/s)	-1.23492E-07	+/-	1.8E-09		
Total phase (deg)		-305.8	Apriori accel (us/s/s)	-3.86626393582E-06	Resid phase (deg)	-5.6	+/-	5.2		

	RMS	Theor.	Amplitude	0.633 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	57.0	12.5	Search (1024X32)	0.607	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000			
amp/seg (%)	45.5	21.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008		
ph/frq (deg)	50.6	7.4	Inc. seg. avg.	0.883	Sample rate(MISamp/s): 128	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	dr window (ns/s) -0.011 0.011
amp/frq (%)	43.1	12.9	Inc. frq. avg.	0.809					ion window (TEC) 0.00 0.00

k: az 93.2 el 37.9 pa -62.1 Y: az 258.6 el 38.5 pa 51.1 u,v (fr/asec) -11864.545 -1129.635 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kY..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kY.W.145.1JFJP0

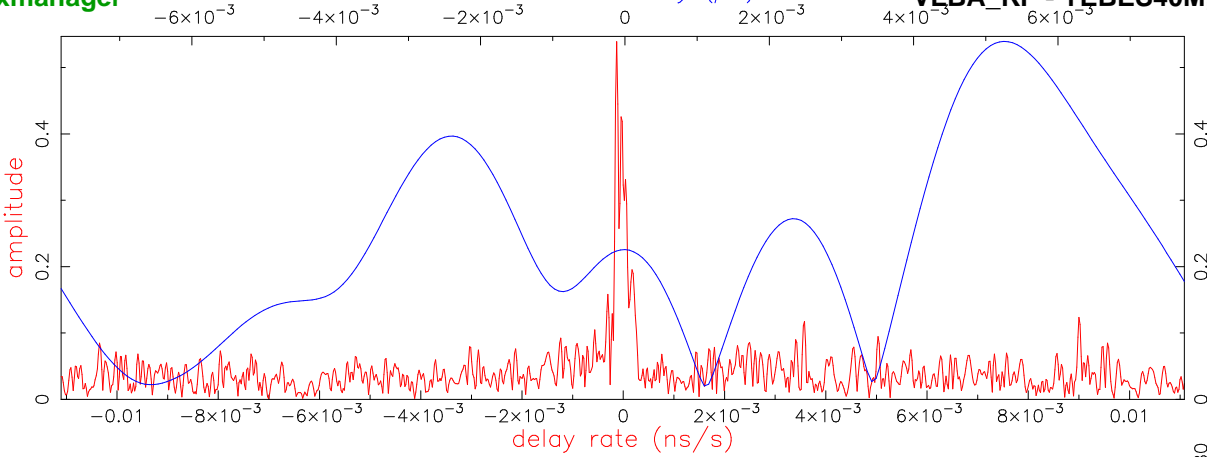
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kY

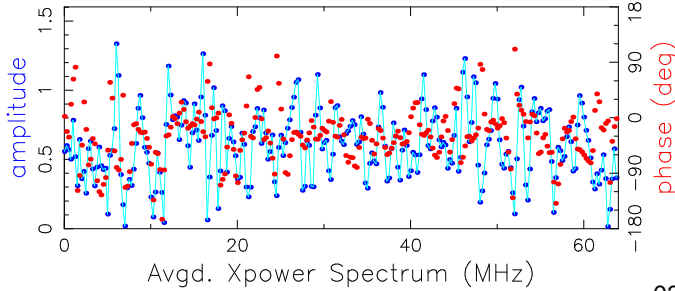
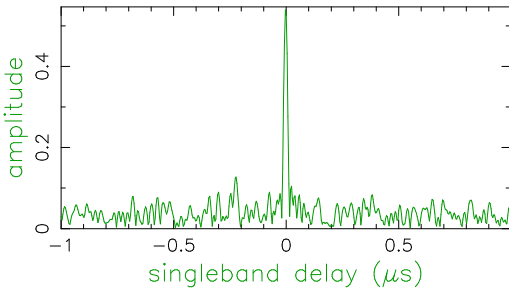
VLBA_KP - YEBES40M, fgroup W, pol RR

multiband delay (μ s)



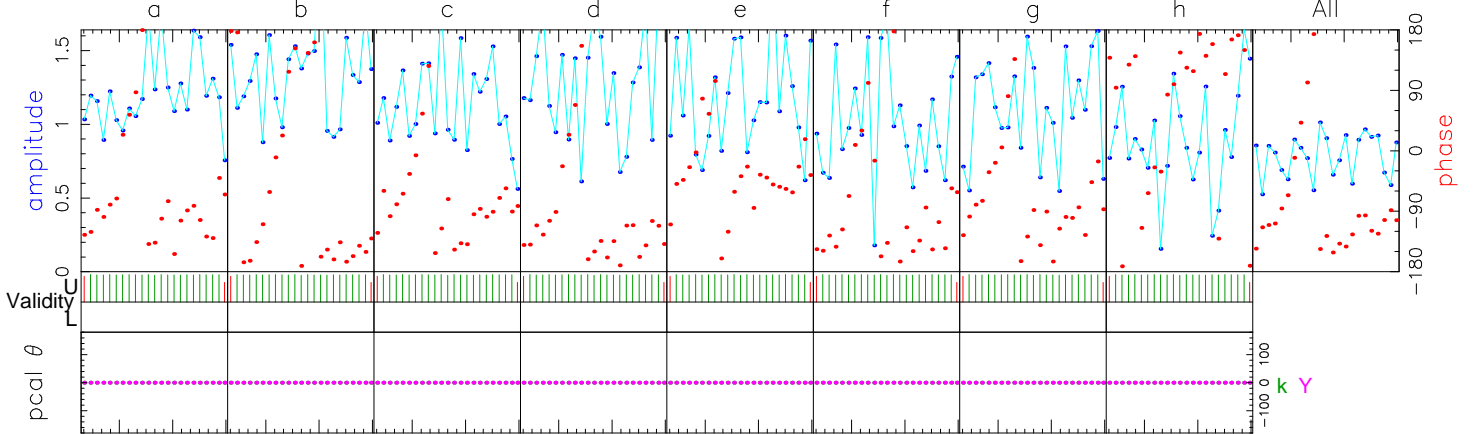
Fringe quality 7

SNR 19.0
 Int time 160.779
 Amp 0.547
 Phase -115.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002337
 MBD 0.005291
 Fringe rate (Hz)
 -0.010906
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050016.90
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060721
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -2.04613439050E+01 Apriori delay (usec) -2.04666344561E+01 Resid mbdelay (usec) 5.29055E-03 +/- 5.7E-05
 Sband delay (usec) -2.04689712061E+01 Apriori clock (usec) -1.3359754E+01 Resid sbdelay (usec) -2.33675E-03 +/- 4.5E-04
 Phase delay (usec) -2.04666381183E+01 Apriori clockrate (us/s) -2.0000006E-08 Resid phdelay (usec) -3.66216E-06 +/- 1.9E-07
 Delay rate (us/s) 1.94365658406E+00 Apriori rate (us/s) 1.94365670808E+00 Resid rate (us/s) -1.24012E-07 +/- 2.0E-09
 Total phase (deg) -56.2 Apriori accel (us/s/s) -3.86626393582E-06 Resid phase (deg) -115.9 +/- 6.0

RMS Theor. Amplitude 0.547 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.0 14.5 Search (1024X32) 0.530 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 50.9 25.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 55.7 8.5 Inc. seg. avg. 0.762 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.0 14.9 Inc. frq. avg. 0.743 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 93.2 el 37.9 pa -62.1 Y: az 258.6 el 38.5 pa 51.1 u,v (fr/asec) -11864.545 -1129.635 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kY..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kY.W.161.1JFJP0

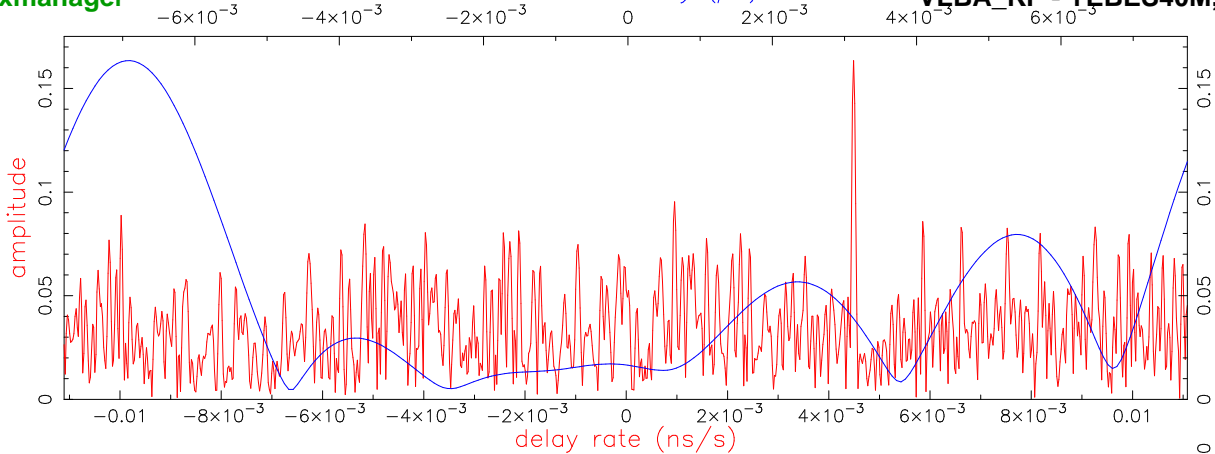
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kY

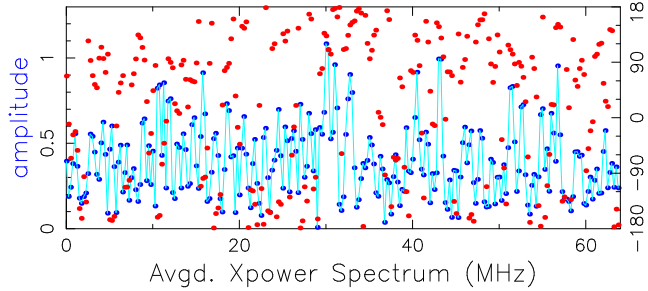
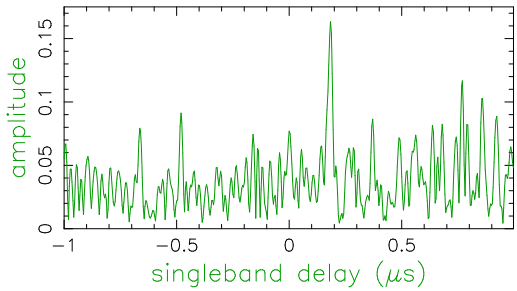
VLBA_KP - YEBES40M, fgroup W, pol LR

multiband delay (μ s)



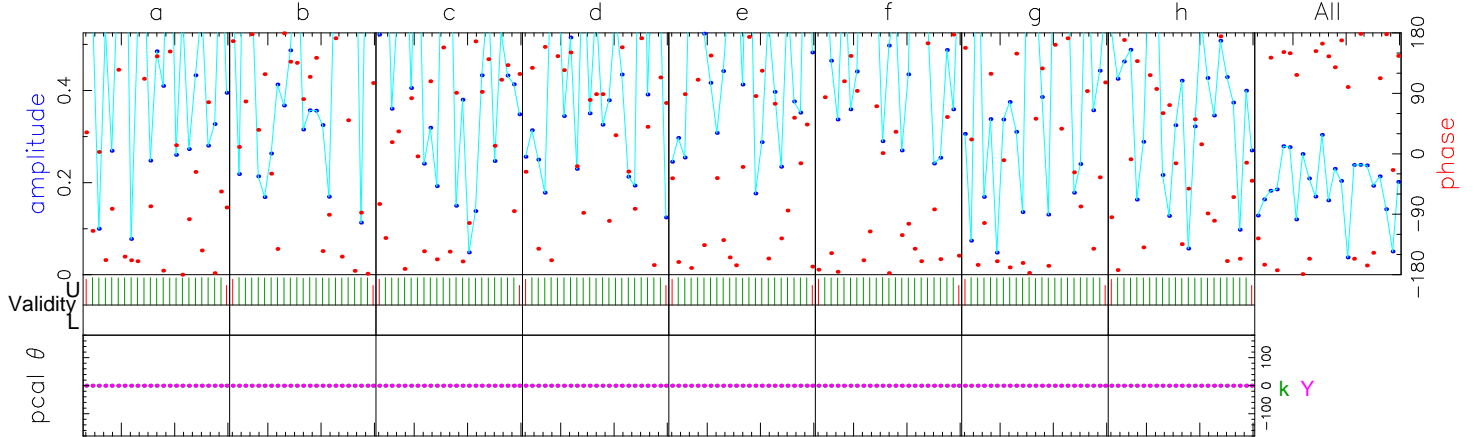
Fringe quality 0

SNR 5.7
 Int time 160.780
 Amp 0.175
 Phase 168.1
 PFD 8.2e-01
 Delays (us)
 SBD 0.183973
 MBD -0.006907
 Fringe rate (Hz)
 0.395144
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050016.90
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060724
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-163.5	151.6	161.2	152.8	-177.3	179.8	148.8	-143.7	Phase	168.1
	0.2	0.3	0.1	0.2	0.2	0.3	0.2	0.0	Ampl.	0.2
	155.7	305.0	319.9	494.8	246.3	304.1	68.5	430.2	Sbd box	304.1
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.02860411743E+01		Apriori delay (usec)		-2.04666344561E+01		Resid mbdelay (usec)		-6.90672E-03	+/- 1.9E-04
Sband delay (usec)	-2.02826614561E+01		Apriori clock (usec)		-1.3359754E+01		Resid sbdelay (usec)		1.83973E-01	+/- 1.5E-03
Phase delay (usec)	-2.04666291469E+01		Apriori clockrate (us/s)		-2.0000006E-08		Resid phdelay (usec)		5.30919E-06	+/- 6.4E-07
Delay rate (us/s)	1.94366120141E+00		Apriori rate (us/s)		1.94365670808E+00		Resid rate (us/s)		4.49334E-06	+/- 6.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.86626393582E-06		Resid phase (deg)		168.1	+/- 20.2

	RMS	Theor.	Amplitude	0.175 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.5	48.5	Search (1024X32)	0.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	44.1	84.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	27.1	28.6	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.8	49.9	Inc. frq. avg.	0.164	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

k: az 93.2 el 37.9 pa -62.1 Y: az 258.6 el 38.5 pa 51.1 u,v (fr/asec) -11864.545 -1129.635 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kY..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kY.W.182.1JFJP0

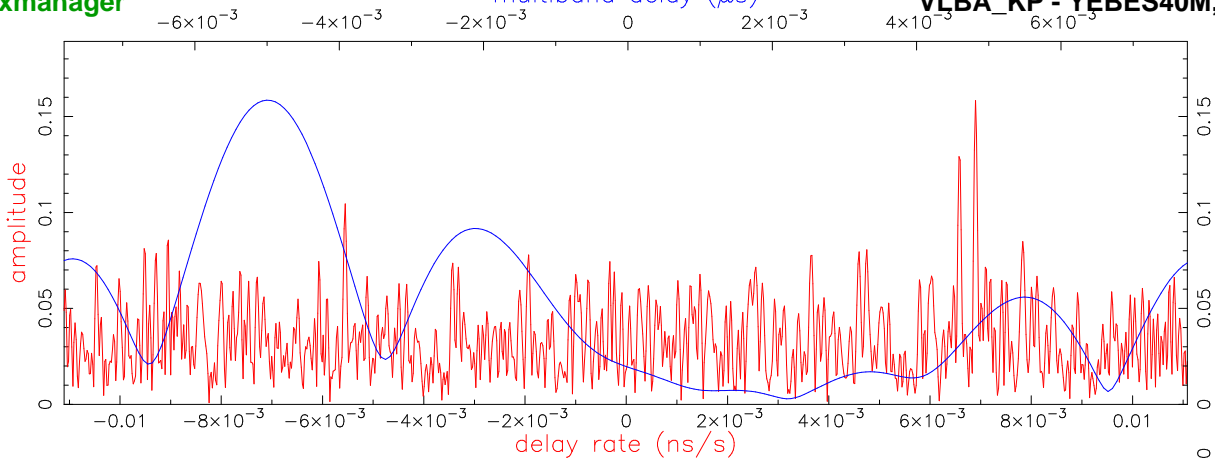
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kY

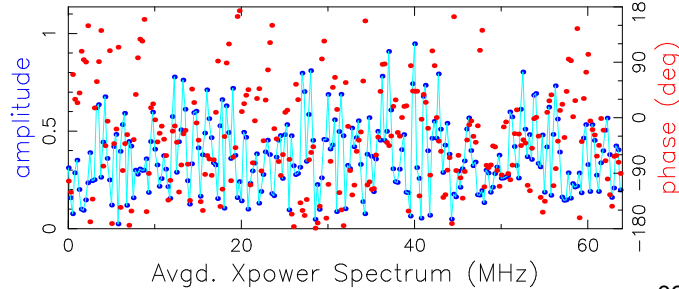
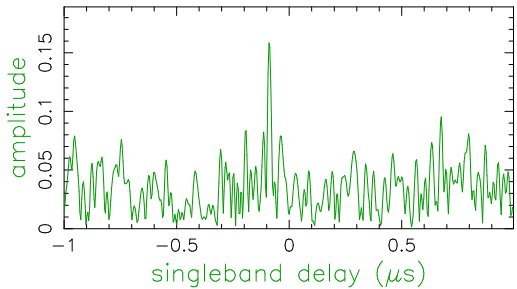
VLBA_KP - YEBES40M, fgroup W, pol RL

multiband delay (μ s)



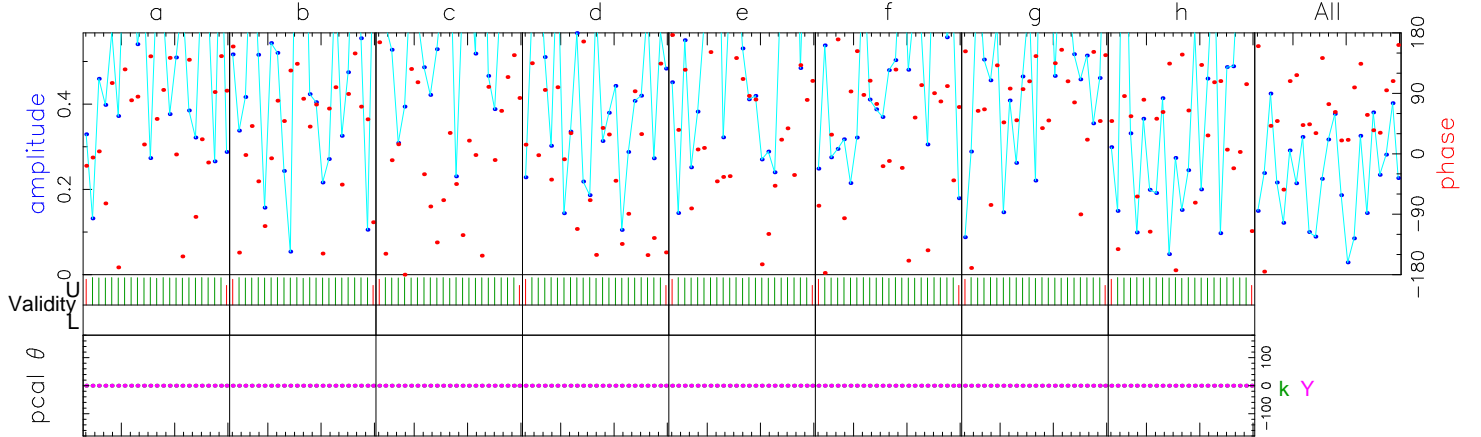
Fringe quality 0

SNR 5.6
 Int time 160.779
 Amp 0.189
 Phase 78.9
 PFD 9.6e-01
 Delays (us)
 SBD -0.088358
 MBD -0.004940
 Fringe rate (Hz)
 0.606668
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050016.90
 Stop 050300.22
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060725
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	319/0	319/0	319/0	319/0	319/0	319/0	319/0	319/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.05496997926E+01									
Sband delay (usec)	-2.05549919561E+01									
Phase delay (usec)	-2.04666319651E+01									
Delay rate (us/s)	1.94366360673E+00									
Total phase (deg)		-221.4								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256 t_cohere infinite										
simultaneous interpolator										

ph/seg (deg) 55.6 49.4 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.0 86.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.7 29.1 Inc. seg. avg. 0.202 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.2 50.8 Inc. frq. avg. 0.172 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 Y: az 258.6 el 38.5 pa 51.1 u,v (fr/asec) -11864.545 -1129.635 ion window (TEC) 0.00 0.00
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kY..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kY.W.197.1JFJP0

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

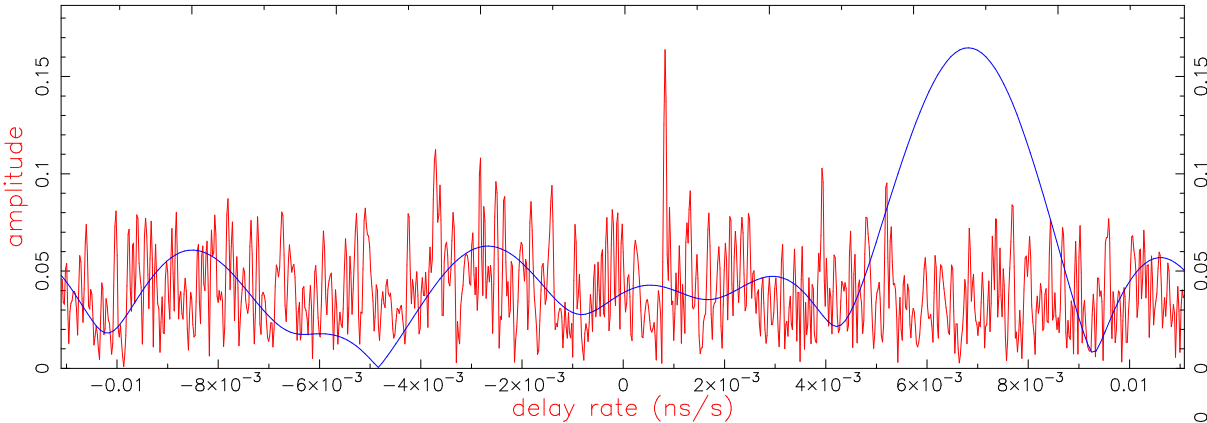
0235+164.1JFJP0, No0042, kZ

VLBA_KP - METSAHOV, fgroup W, pol LL

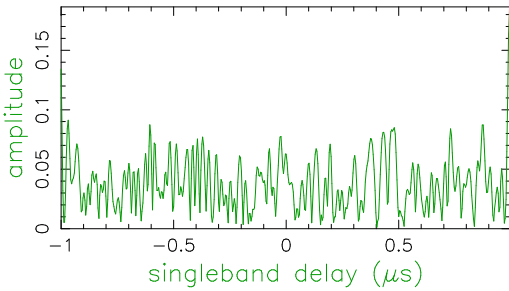
multiband delay (μ s)

-6×10^{-3} -4×10^{-3} -2×10^{-3} 0 2×10^{-3} 4×10^{-3} 6×10^{-3}

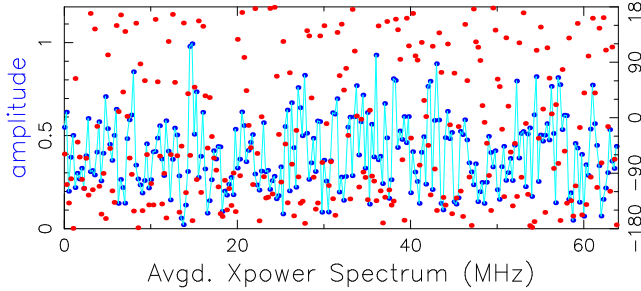
Fringe quality 0



SNR 5.9
Int time 136.192
Amp 0.187
Phase 79.5
PFD 3.1e-01
Delays (us)
SBD 0.992879
MBD 0.004873
Fringe rate (Hz) 0.071962
Ion TEC 0.000
Ref freq (MHz) 87940.0000
AP (sec) 0.512



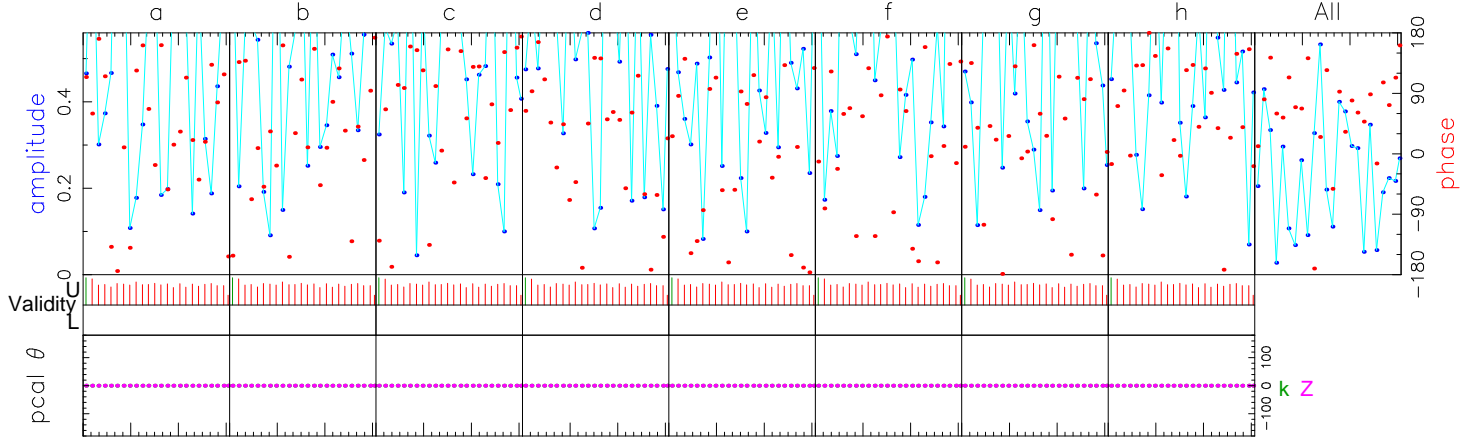
singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

Exp. c202c
Exper # 16383
Yr:day 2020:286
Start 050000.00
Stop 050259.71
FRT 050130.00
Corr/FF/build
2021:039:054330
2021:039:060720
2020:247:085004
RA & Dec (J2000)
02h38m38.930107s
+16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	6.29573676990E+03	Apriori delay (usec)	6.29474752156E+03	Resid mbdelay (usec)	4.87334E-03	+/-	1.8E-04
Sband delay (usec)	6.29574040031E+03	Apriori clock (usec)	2.0115757E-01	Resid sbdelay (usec)	9.92879E-01	+/-	1.5E-03
Phase delay (usec)	6.29474752407E+03	Apriori clockrate (us/s)	8.3999986E-08	Resid phdelay (usec)	2.51052E-06	+/-	6.1E-07
Delay rate (us/s)	1.76439805963E+00	Apriori rate (us/s)	1.76439724132E+00	Resid rate (us/s)	8.18306E-07	+/-	5.9E-09
Total phase (deg)	96.0	Apriori accel (us/s/s)	-4.44597509048E-05	Resid phase (deg)	79.5	+/-	19.3

ph/seg (deg)	53.6	Theor.	47.3	Amplitude	0.187 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	76.3	Search (1024X32)	0.181	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.3	Inc. seg. avg.	0.177	Inc. frq. avg.	0.159	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	25.7	Inc. frq. avg.	0.159	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011

k: az 93.2 el 37.9 pa -62.1 Z: az 270.5 el 19.1 pa 31.2 u,v (fr/asec) -10788.605 -3999.799 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kZ..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kZ.W.149.1JFJP0

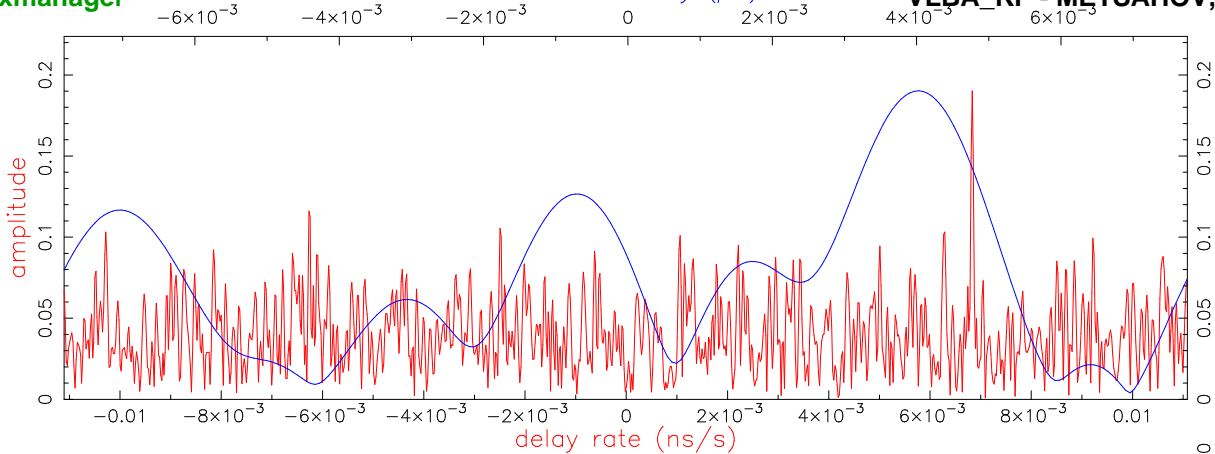
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kZ

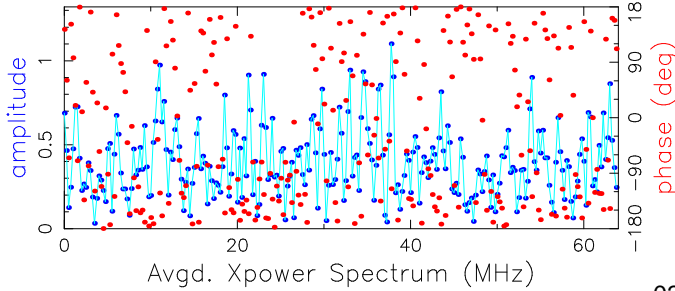
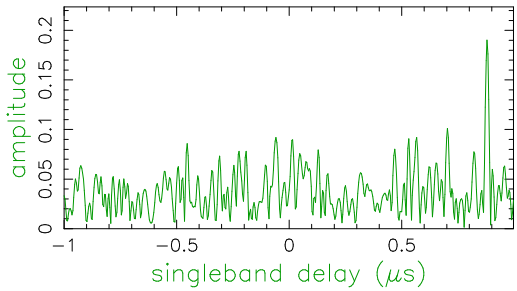
VLBA_KP - METSAHOV, fgroup W, pol RR

multiband delay (μ s)



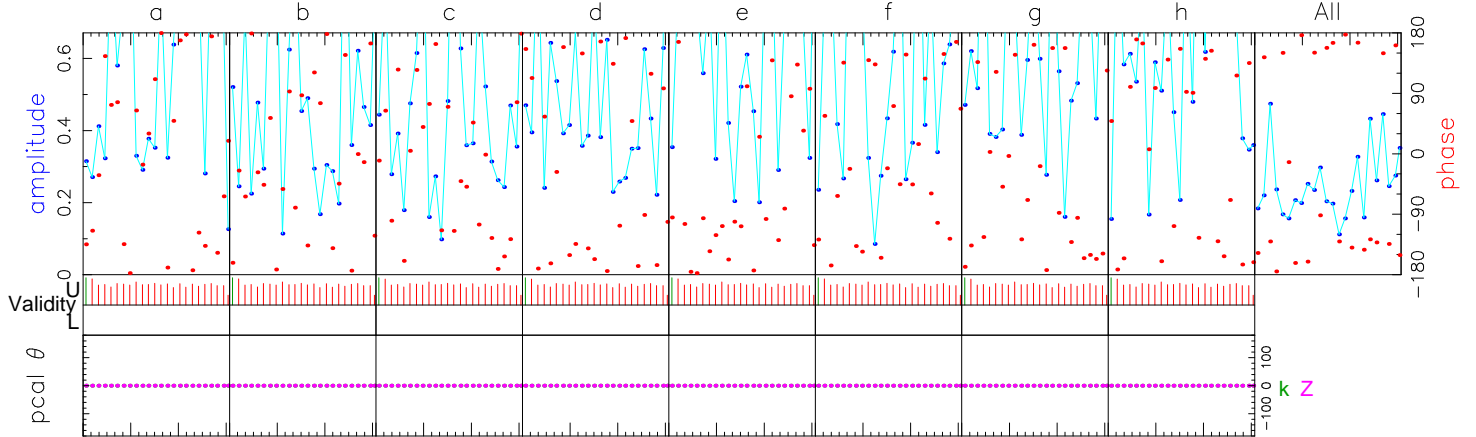
Fringe quality 0

SNR 6.1
 Int time 136.192
 Amp 0.224
 Phase -164.6
 PFD 1.5e-01
 Delays (us)
 SBD 0.879314
 MBD 0.004038
 Fringe rate (Hz) 0.602245
 Ion TEC 0.000
 Ref freq (MHz) 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050259.71
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060722
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-176.3	-154.4	-2.8	-172.5	-149.7	-94.1	-149.1	168.6	Phase	-164.6
	0.3	0.1	0.0	0.3	0.4	0.1	0.4	0.4	Ampl.	0.2
	485.0	296.8	35.3	185.9	481.5	128.3	198.9	482.9	Sbd box	482.1
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.29562655927E+03		Apriori delay (usec)		6.29474752156E+03		Resid mbdelay (usec)		4.03771E-03	+/- 1.8E-04
Sband delay (usec)	6.29562683531E+03		Apriori clock (usec)		2.0115757E-01		Resid sbdelay (usec)		8.79314E-01	+/- 1.4E-03
Phase delay (usec)	6.29474751636E+03		Apriori clockrate (us/s)		8.3999986E-08		Resid phdelay (usec)		-5.19866E-06	+/- 6.0E-07
Delay rate (us/s)	1.76440408969E+00		Apriori rate (us/s)		1.76439724132E+00		Resid rate (us/s)		6.84837E-06	+/- 5.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.44597509048E-05		Resid phase (deg)		-164.6	+/- 18.9

	RMS	Theor.	Amplitude	0.224 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.4	46.2	Search (1024X32)	0.186	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	56.8	80.6	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	73.7	26.7	Inc. seg. avg.	0.219	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	66.3	46.6	Inc. frq. avg.	0.228					

k: az 93.2 el 37.9 pa -62.1 Z: az 270.5 el 19.1 pa 31.2 u,v (fr/asec) -10788.605 -3999.799 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kZ..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kZ.W.164.1JFJP0

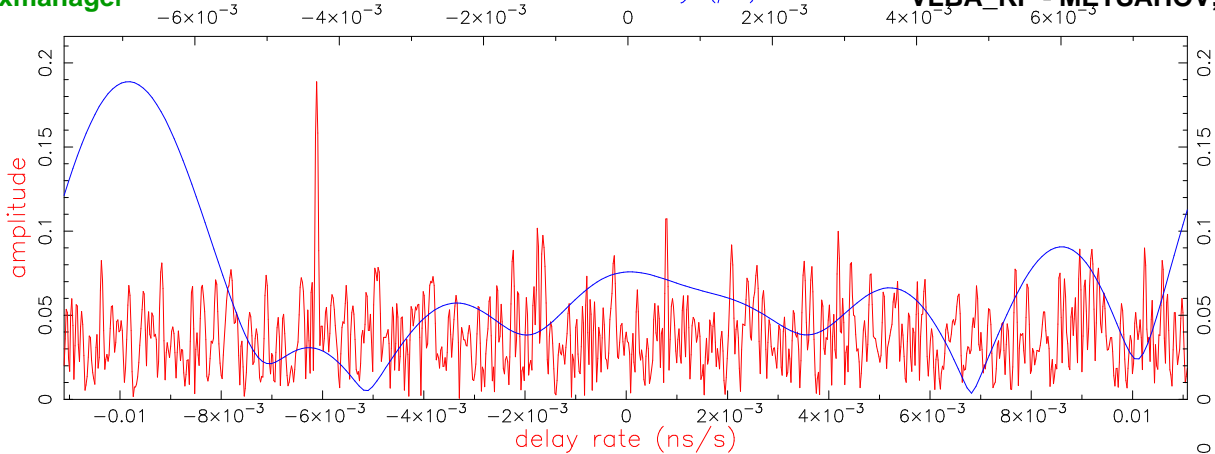
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kZ

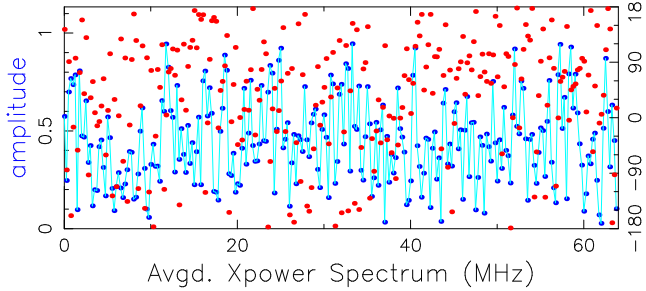
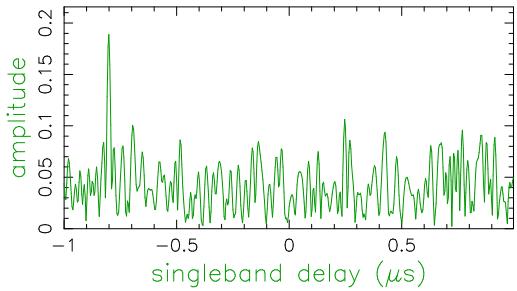
VLBA_KP - METSAHOV, fgroup W, pol LR

multiband delay (μ s)



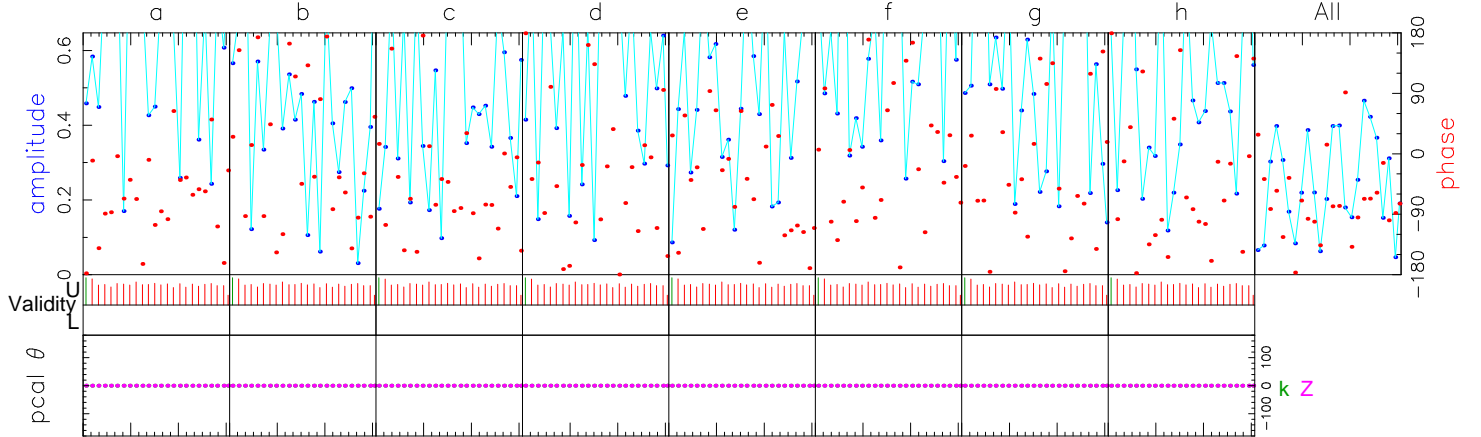
Fringe quality 0

SNR 6.1
 Int time 136.192
 Amp 0.216
 Phase -74.8
 PFD 1.7e-01
 Delays (us)
 SBD -0.801607
 MBD -0.006955
 Fringe rate (Hz)
 -0.539160
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050259.71
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060724
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	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		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	6.29394369146E+03		Apriori delay (usec)		6.29474752156E+03		Resid mbdelay (usec)		-6.95510E-03	+/- 1.8E-04
Sband delay (usec)	6.29394591431E+03		Apriori clock (usec)		2.0115757E-01		Resid sbdelay (usec)		-8.01607E-01	+/- 1.4E-03
Phase delay (usec)	6.29474751920E+03		Apriori clockrate (us/s)		8.3999986E-08		Resid phdelay (usec)		-2.36184E-06	+/- 6.0E-07
Delay rate (us/s)	1.76439111033E+00		Apriori rate (us/s)		1.76439724132E+00		Resid rate (us/s)		-6.13100E-06	+/- 5.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.44597509048E-05		Resid phase (deg)		-74.8	+/- 18.9

ph/seg (deg) 56.9 46.4 Search (1024X32) 0.184 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.7 80.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.1 26.8 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.4 46.7 Inc. frq. avg. 0.204 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 93.2 el 37.9 pa -62.1 Z: az 270.5 el 19.1 pa 31.2 u,v (fr/asec) -10788.605 -3999.799 simultaneous interpolator
 Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kZ..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kZ.W.188.1JFJP0

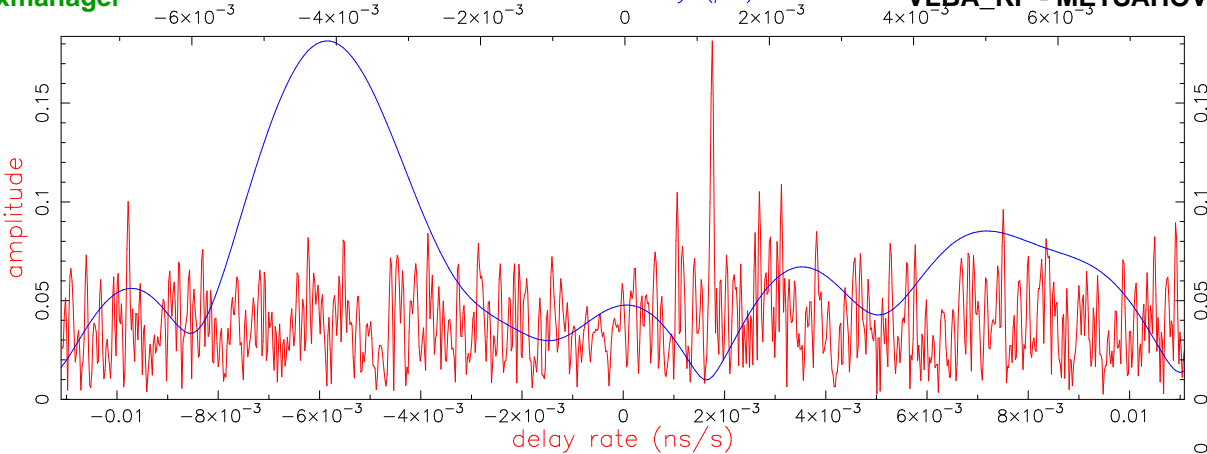
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0235+164.1JFJP0, No0042, kZ

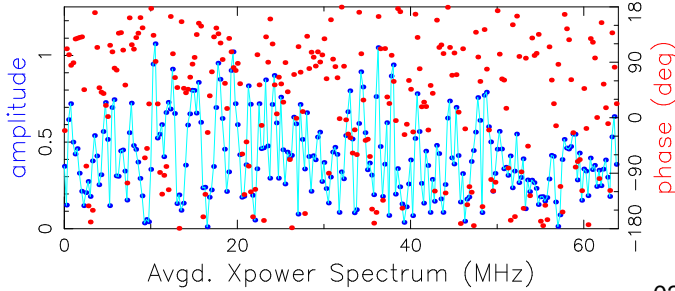
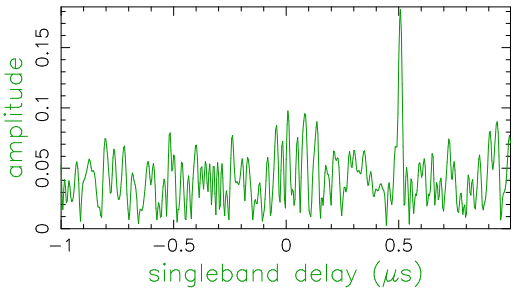
VLBA_KP - METSAHOV, fgroup W, pol RL

multiband delay (μ s)



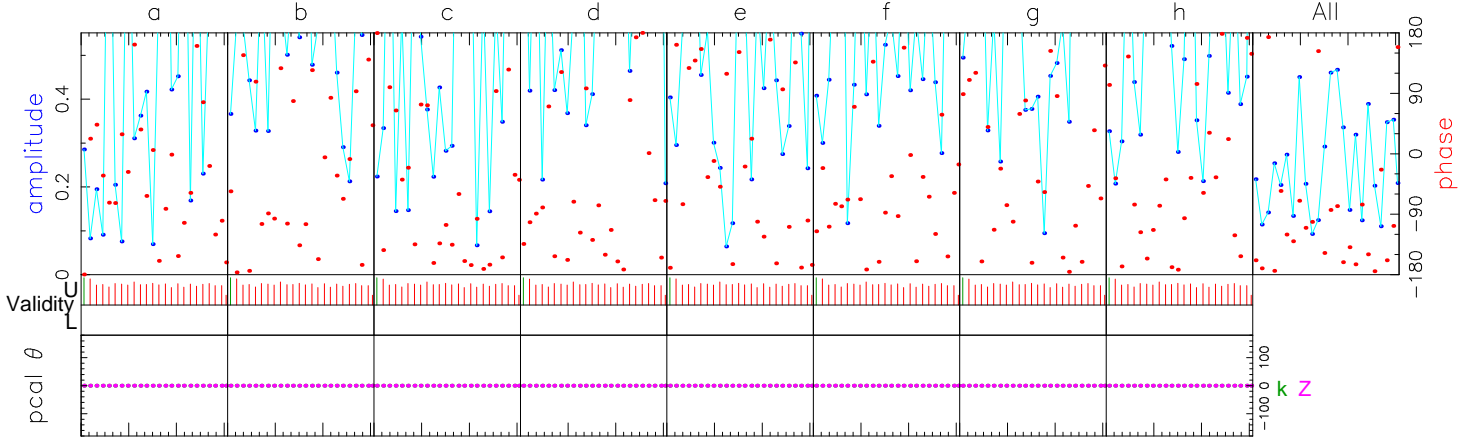
Fringe quality 0

SNR 5.8
 Int time 136.192
 Amp 0.184
 Phase -127.4
 PFD 5.5e-01
 Delays (us)
 SBD 0.507137
 MBD -0.004155
 Fringe rate (Hz)
 0.154947
 Ion TEC 0.000
 Ref freq (MHz)
 87940.0000
 AP (sec) 0.512



Exp. c202c
 Exper # 16383
 Yr:day 2020:286
 Start 050000.00
 Stop 050259.71
 FRT 050130.00
 Corr/FF/build
 2021:039:054330
 2021:039:060726
 2020:247:085004
 RA & Dec (J2000)
 02h38m38.930107s
 +16°36'59.274536"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	87812.00	87876.00	87940.00	88004.00	88068.00	88132.00	88196.00	88260.00	Freq (MHz)	All
	-92.8	-158.7	-157.1	-135.3	-175.6	-90.4	-136.9	-113.9	Phase	-127.4
	0.2	0.1	0.1	0.4	0.2	0.3	0.1	0.2	Ampl.	0.2
	121.8	482.0	510.0	387.2	289.6	10.0	320.6	103.0	Sbd box	386.8
U/L	351/0	351/0	351/0	351/0	351/0	351/0	351/0	351/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.29525899200E+03		Apriori delay (usec)		6.29474752156E+03		Resid mbdelay (usec)		-4.15455E-03	+/- 1.9E-04
Sband delay (usec)	6.29525465806E+03		Apriori clock (usec)		2.0115757E-01		Resid sbdelay (usec)		5.07137E-01	+/- 1.5E-03
Phase delay (usec)	6.29474751753E+03		Apriori clockrate (us/s)		8.3999986E-08		Resid phdelay (usec)		-4.02474E-06	+/- 6.2E-07
Delay rate (us/s)	1.7643990329E+00		Apriori rate (us/s)		1.76439724132E+00		Resid rate (us/s)		1.76197E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.44597509048E-05		Resid phase (deg)		-127.4	+/- 19.7

	RMS	Theor.	Amplitude	0.184 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	46.9	48.4	Search (1024X32)	0.177	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	73.2	84.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	34.4	27.9	Inc. seg. avg.	0.183	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	45.8	48.7	Inc. frq. avg.	0.188	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	

k: az 93.2 el 37.9 pa -62.1 Z: az 270.5 el 19.1 pa 31.2 u,v (fr/asec) -10788.605 -3999.799 simultaneous interpolator

Control file: cf_1234_88GHz_gmva Input file: /Exps/c202c/v1/1234/No0042/kZ..1JFJP0 Output file: /Exps/c202c/v1/1234/No0042/kZ.W.209.1JFJP0