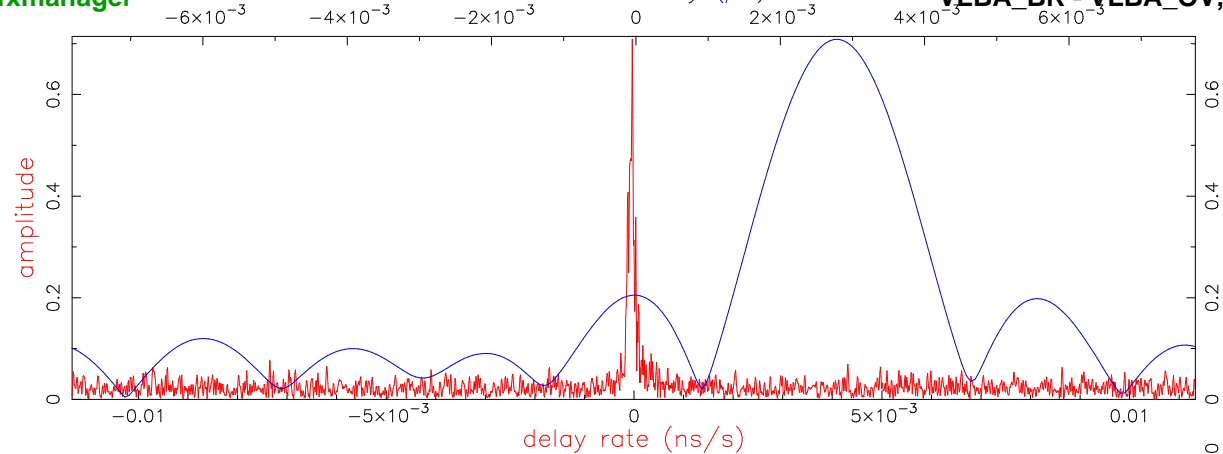
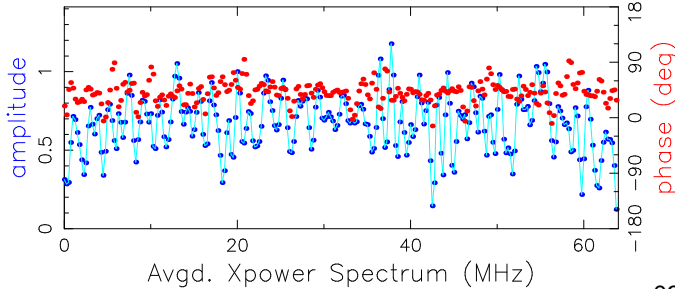
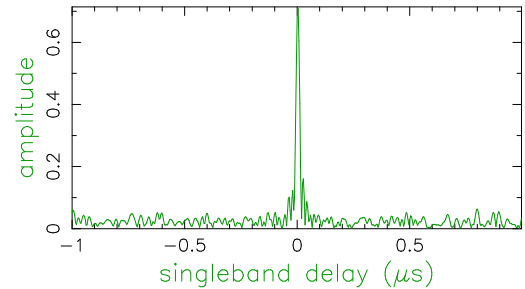


multiband delay (μ s)



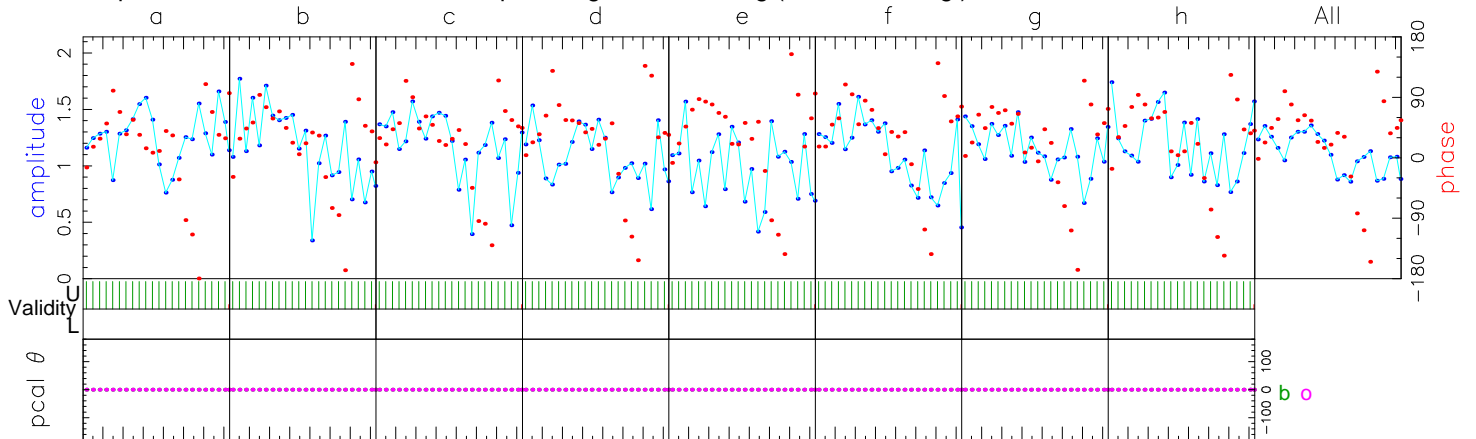
Fringe quality 7

SNR 40.0
Int time 419.787
Amp 0.714
Phase 41.0
PFD 0.0e+00
Delays (us)
SBD 0.002753
MBD 0.002752
Fringe rate (Hz)
-0.003264
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133525
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

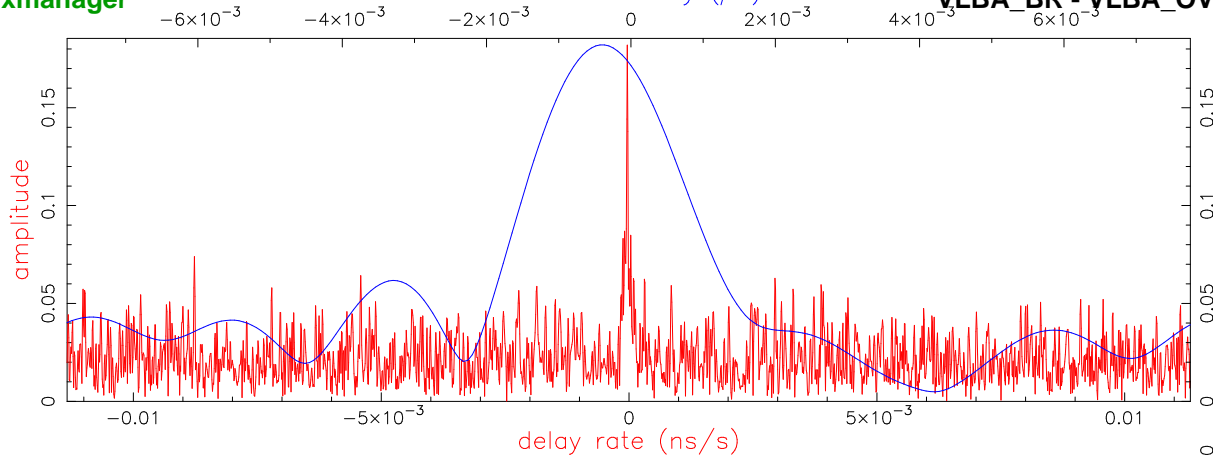
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	33.1	39.7	43.2	41.7	43.9	50.2	37.4	39.8	Phase	41.0
	0.8	0.7	0.7	0.7	0.5	0.8	0.7	0.7	Ampl.	0.7
	257.8	257.6	257.7	257.6	258.0	257.7	257.8	257.7	Sbd box	257.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.67648138033E+02		Apriori delay (usec)		7.67645386155E+02		Resid mbdelay (usec)		2.75188E-03	+/- 2.7E-05
Sband delay (usec)	7.67648139405E+02		Apriori clock (usec)		-6.7431698E+00		Resid sbdelay (usec)		2.75325E-03	+/- 2.2E-04
Phase delay (usec)	7.67645387478E+02		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		1.32263E-06	+/- 9.2E-08
Delay rate (us/s)	1.23098698925E-01		Apriori rate (us/s)		1.23098736817E-01		Resid rate (us/s)		-3.78915E-08	+/- 3.8E-10
Total phase (deg)	243.8		Apriori accel (us/s/s)		6.33904645661E-06		Resid phase (deg)		41.0	+/- 2.9

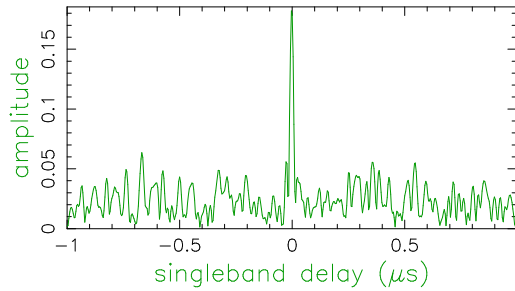
ph/seg (deg) 63.2 6.9 Search (2048X32) 0.673 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 61.1 12.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 5.4 4.0 Inc. seg. avg. 1.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 10.7 7.1 Inc. frq. avg. 0.709 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 275.5 el 57.8 pa 62.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -935.026 1374.968 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/bo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/bo.W.33.1X1O2X

multiband delay (μ s)

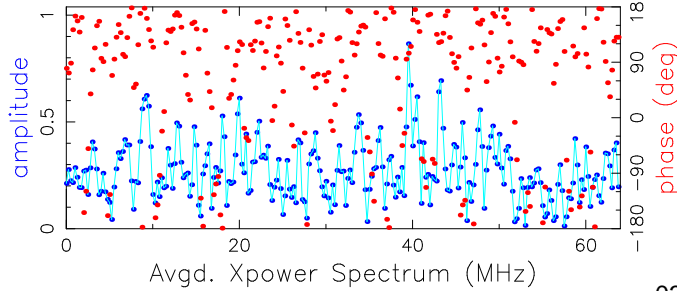


Fringe quality 9

SNR 10.4
Int time 419.787
Amp 0.185
Phase 109.7
PFD 1.2e-16
Delays (us)
SBD -0.002220
MBD -0.000349
Fringe rate (Hz)
-0.003207
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

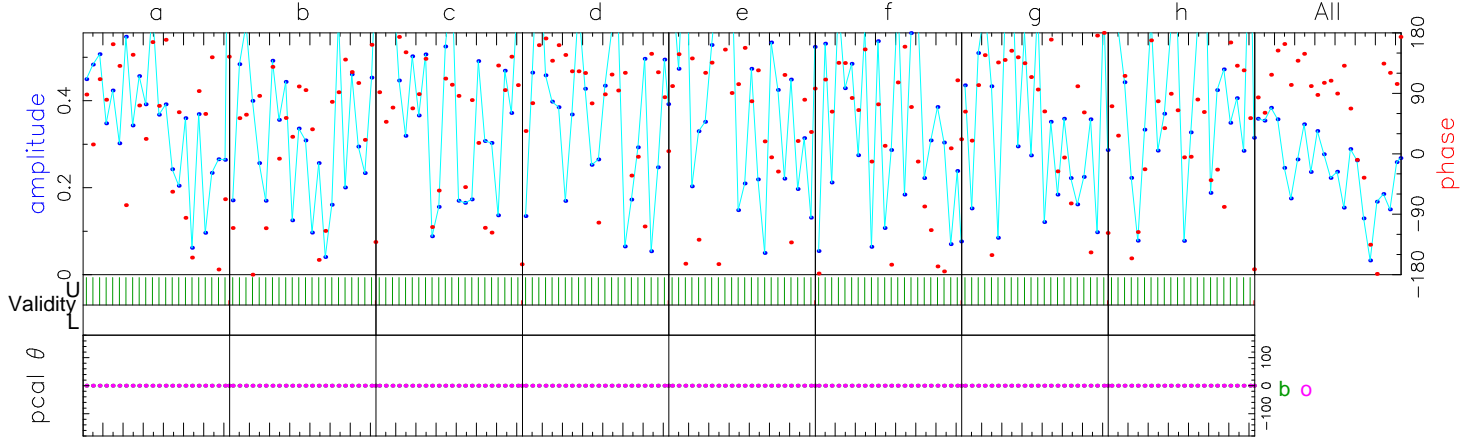


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133529
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

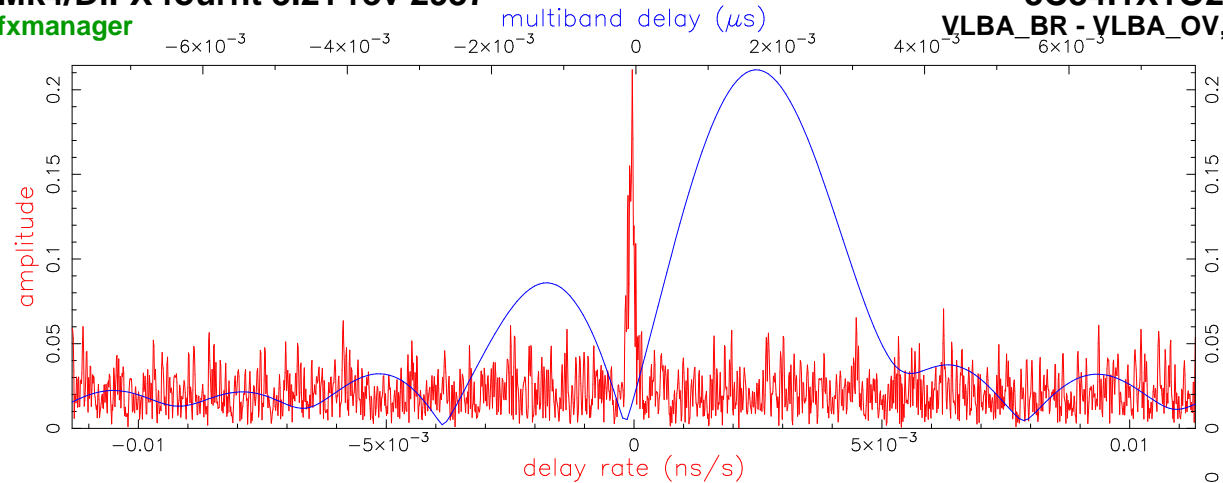
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



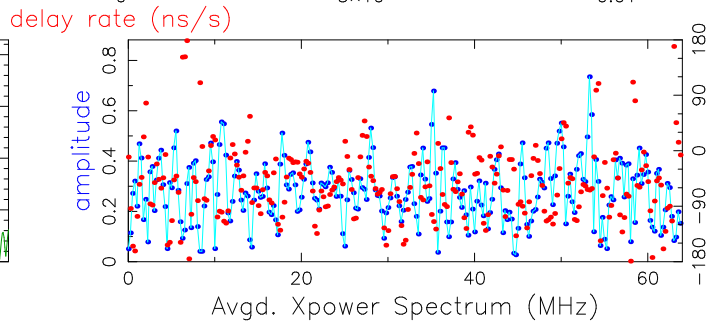
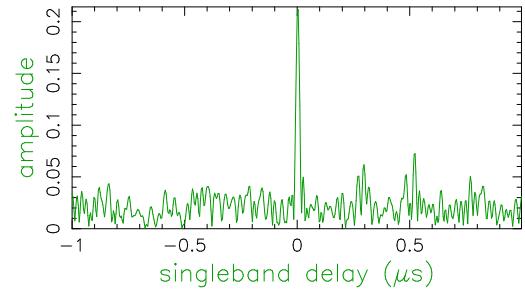
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Validity	113.3	97.3	99.0	122.0	133.2	112.9	135.6	67.9	Phase	109.7
pcal θ	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	18.0	255.4	255.8	255.8	257.1	256.7	257.7	255.6	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.67645037002E+02		Apriori delay (usec)		7.67645386155E+02		Resid mbdelay (usec)		-3.49154E-04	+/- 1.0E-04
Sband delay (usec)	7.67643166405E+02		Apriori clock (usec)		-6.7431698E+00		Resid sbdelay (usec)		-2.21975E-03	+/- 8.3E-04
Phase delay (usec)	7.67645389691E+02		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		3.53593E-06	+/- 3.6E-07
Delay rate (us/s)	1.23098699591E-01		Apriori rate (us/s)		1.23098736817E-01		Resid rate (us/s)		-3.72262E-08	+/- 1.5E-09
Total phase (deg)	312.5		Apriori accel (us/s/s)		6.33904645661E-06		Resid phase (deg)		109.7	+/- 11.0

	RMS	Theor.	Amplitude	0.185 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.6	26.5	Search (2048X32)	0.175	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	57.4	46.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.9	15.6	Inc. seg. avg.	0.223	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	20.2	27.2	Inc. frq. avg.	0.188	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 275.5 el 57.8 pa 62.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -935.026 1374.968 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/bo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/bo.W.52.1X1O2X

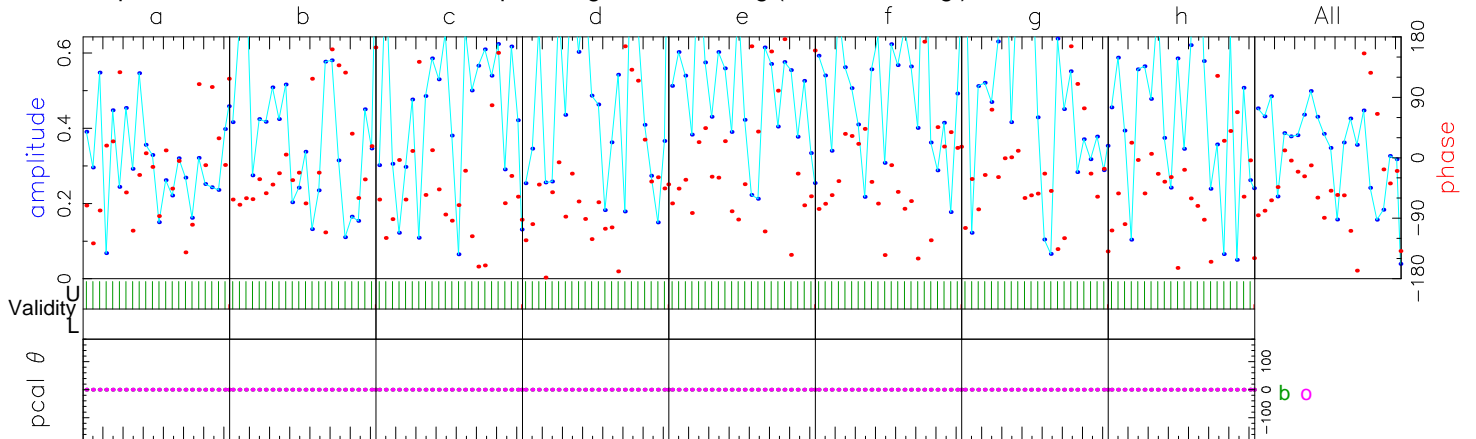


Fringe quality 9
SNR 12.0
Int time 419.787
Amp 0.214
Phase -50.4
PFD 1.6e-24
Delays (us)
SBD 0.002471
MBD 0.001636
Fringe rate (Hz) -0.003312
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133533
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"



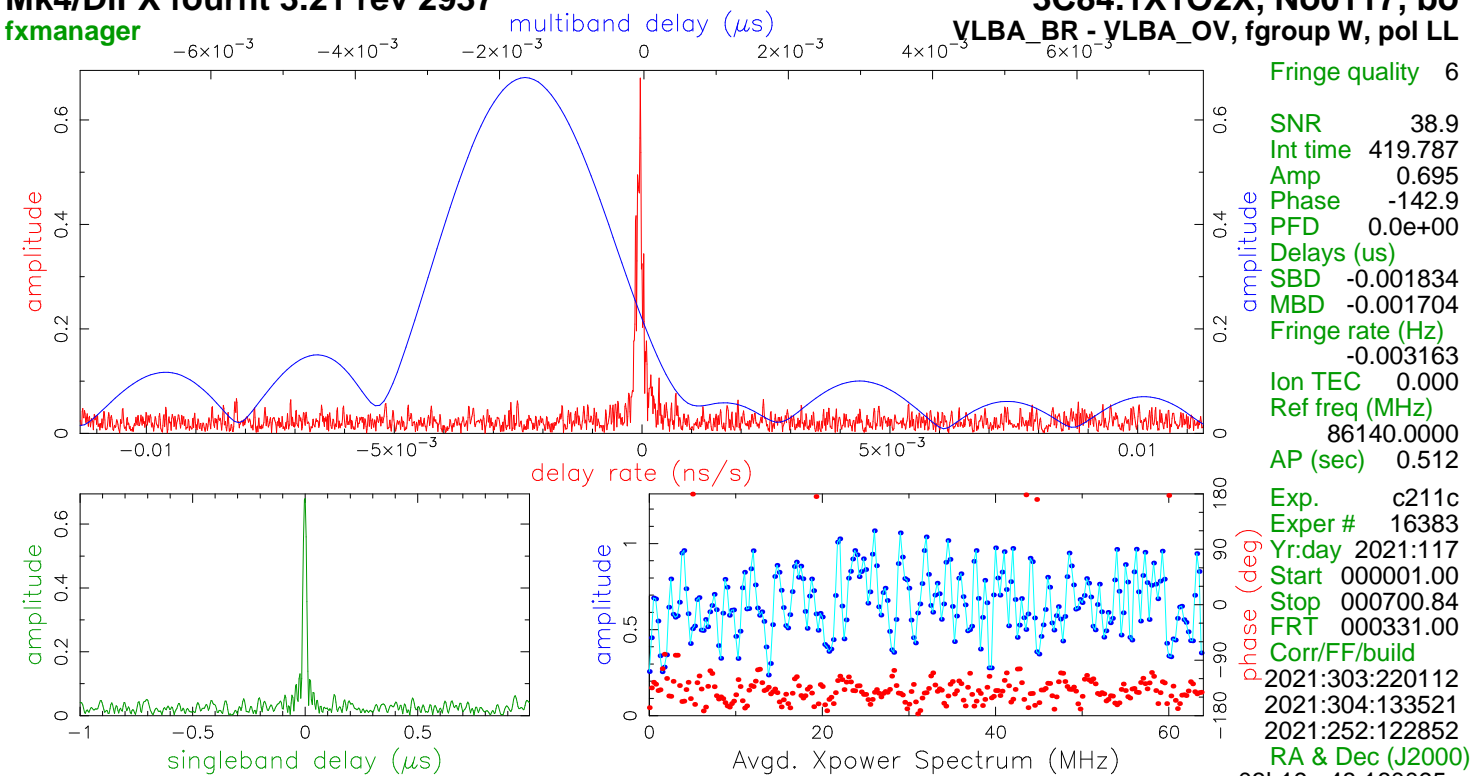
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

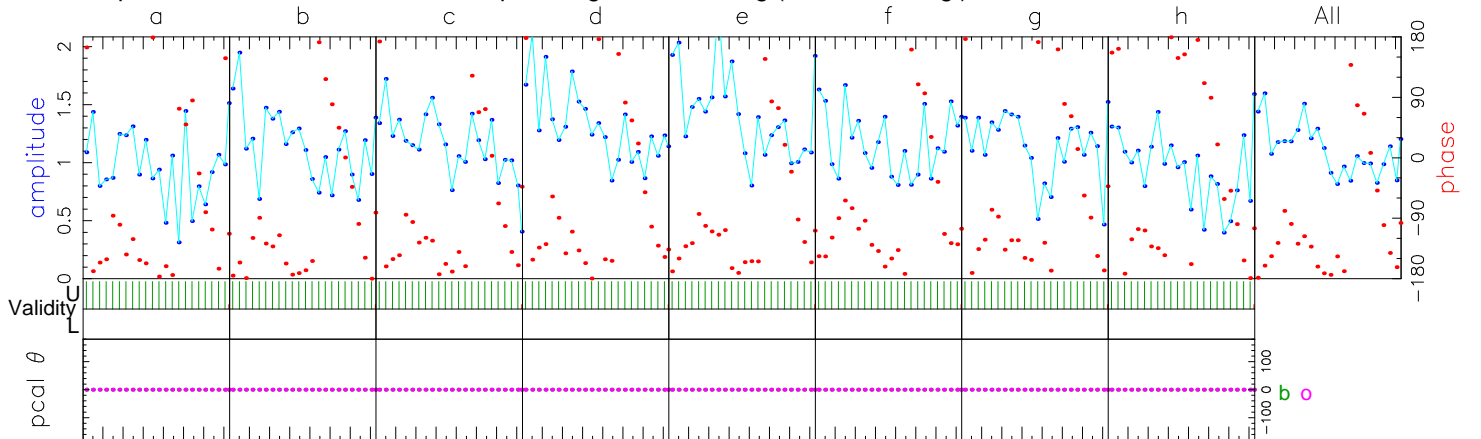


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.0	-47.9	-72.5	-71.8	-50.0	-40.1	-42.8	-49.3	Phase	-50.4
	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2
	409.4	257.6	257.6	256.9	258.7	257.8	257.9	257.3	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.67647021970E+02		Apriori delay (usec)		7.67645386155E+02		Resid mbdelay (usec)		1.63581E-03	+/- 9.0E-05
Sband delay (usec)	7.67647857155E+02		Apriori clock (usec)		-6.7431698E+00		Resid sbdelay (usec)		2.47100E-03	+/- 7.2E-04
Phase delay (usec)	7.67645384531E+02		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-1.62466E-06	+/- 3.1E-07
Delay rate (us/s)	1.23098698367E-01		Apriori rate (us/s)		1.23098736817E-01		Resid rate (us/s)		-3.84499E-08	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		6.33904645661E-06		Resid phase (deg)		-50.4	+/- 9.5

ph/seg (deg) 67.8 22.9 Search (2048X32) 0.199 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 80.7 39.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 16.0 13.5 Inc. seg. avg. 0.327 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 17.1 23.6 Inc. frq. avg. 0.211 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
b: az 275.5 el 57.8 pa 62.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -935.026 1374.968 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/bo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/bo.W.69.1X1O2X



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

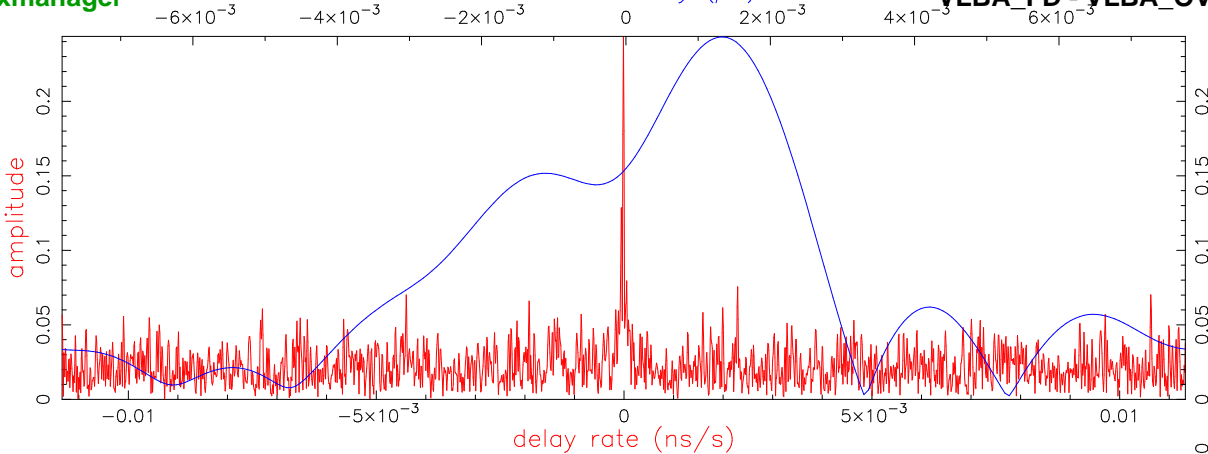


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-152.9	-151.7	-144.8	-141.8	-135.8	-127.0	-133.8	-161.2	Phase	-142.9
	0.6	0.7	0.7	0.8	0.9	0.7	0.6	0.6	Ampl.	0.7
	256.8	256.5	256.7	256.4	256.7	256.7	256.2	255.5	Sbd box	256.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.67643682127E+02		Apriori delay (usec)		7.67645386155E+02		Resid mbdelay (usec)		-1.70403E-03	+/- 2.8E-05
Sband delay (usec)	7.67643552405E+02		Apriori clock (usec)		-6.7431698E+00		Resid sbdelay (usec)		-1.83375E-03	+/- 2.2E-04
Phase delay (usec)	7.67645381548E+02		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-4.60695E-06	+/- 9.5E-08
Delay rate (us/s)	1.23098700101E-01		Apriori rate (us/s)		1.23098736817E-01		Resid rate (us/s)		-3.67153E-08	+/- 3.9E-10
Total phase (deg)	60.0		Apriori accel (us/s/s)		6.33904645661E-06		Resid phase (deg)		-142.9	+/- 2.9

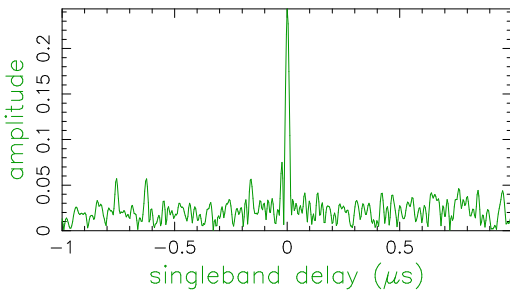
ph/seg (deg) 65.2 7.1 Search (2048X32) 0.657 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 67.5 12.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.3 4.2 Inc. seg. avg. 1.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 13.4 7.3 Inc. frq. avg. 0.690 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 275.5 el 57.8 pa 62.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -935.026 1374.968 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/bo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/bo.W.9.1X1O2X

multiband delay (μ s)

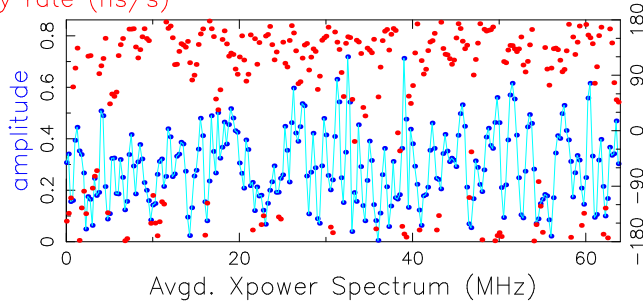
Fringe quality 9



SNR 13.6
Int time 419.580
Amp 0.244
Phase 133.4
PFD 1.3e-33
Delays (us)
SBD 0.000495
MBD 0.001343
Fringe rate (Hz)
-0.000492
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

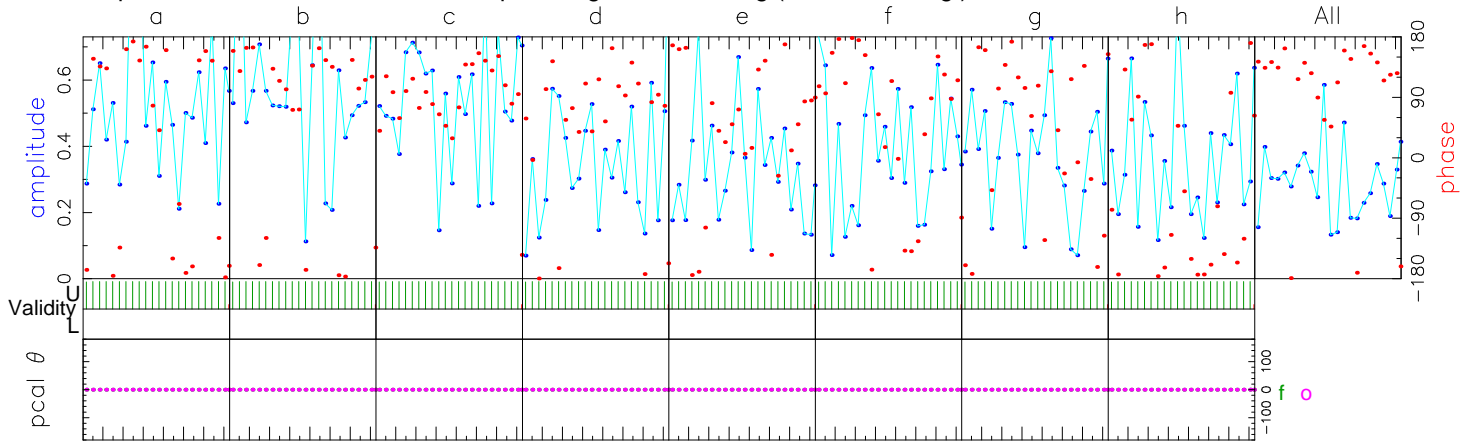


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133522
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

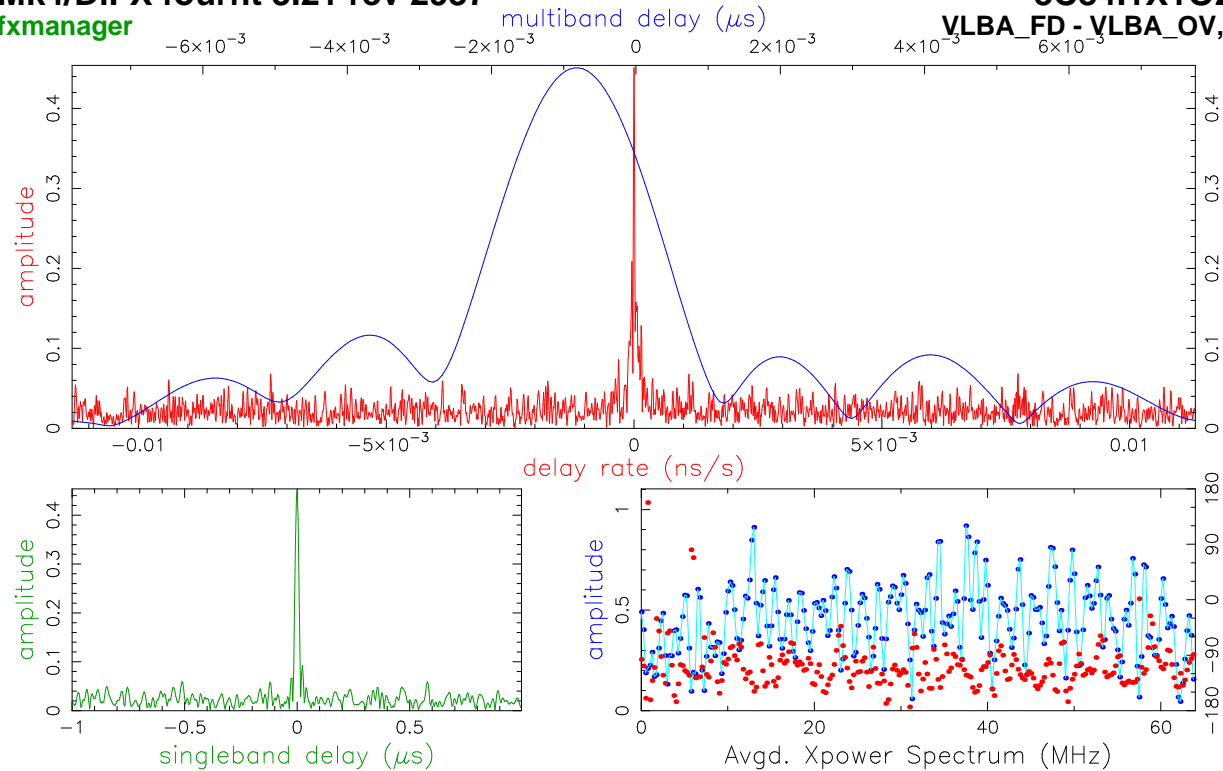


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	162.5	141.0	101.3	99.5	117.6	127.4	152.3	179.0	Phase	133.4
	0.4	0.5	0.4	0.2	0.1	0.2	0.2	0.1	Ampl.	0.3
	257.3	257.1	256.7	257.8	258.7	257.7	256.5	440.6	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.43829306933E+03	Apriori delay (usec)	-3.43829441236E+03	Resid mbdelay (usec)	1.34303E-03	+/-	8.0E-05
Sband delay (usec)	-3.43829391761E+03	Apriori clock (usec)	6.5069771E+00	Resid sbdelay (usec)	4.94750E-04	+/-	6.3E-04
Phase delay (usec)	-3.43829440806E+03	Apriori clockrate (us/s)	-3.0000002E-07	Resid phdelay (usec)	4.30145E-06	+/-	2.7E-07
Delay rate (us/s)	-1.99013201546E-01	Apriori rate (us/s)	-1.99013195836E-01	Resid rate (us/s)	-5.70956E-09	+/-	1.1E-09
Total phase (deg)	-111.8	Apriori accel (us/s/s)	1.11754591602E-05	Resid phase (deg)	133.4	+/-	8.4

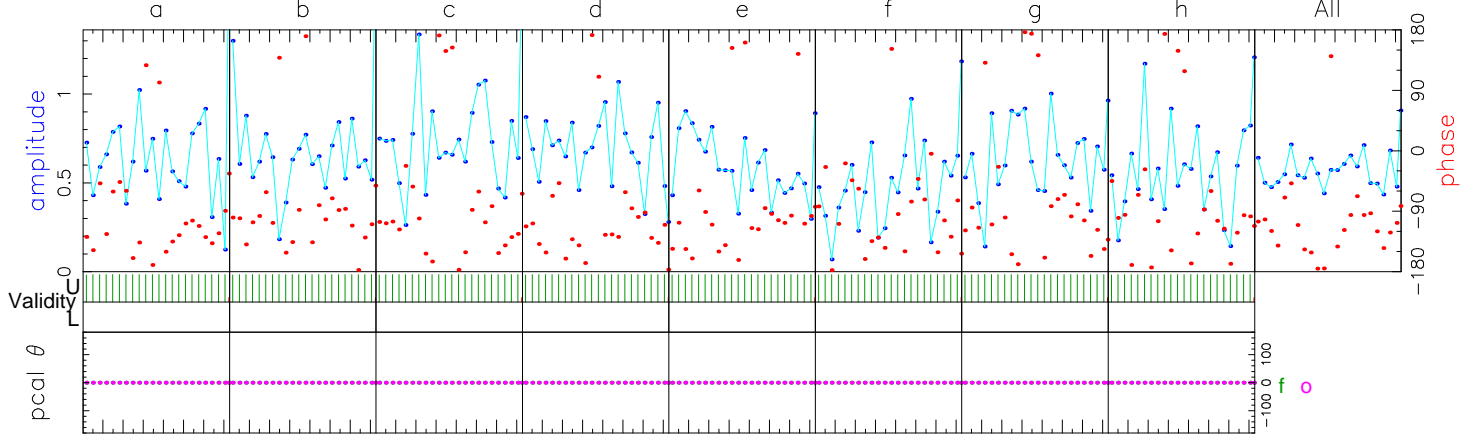
ph/seg (deg)	RMS 34.5	Theor. 20.1	Amplitude Search (2048X32)	0.225	0.244 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	48.4	35.2	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.1	11.9	Inc. seg. avg.	0.274		Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	56.1	20.7	Inc. frq. avg.	0.264		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 300.6 el 40.6 pa 81.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1541.401 134.295 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/fo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/fo.W.20.1X1O2X



Fringe quality 8
SNR 25.4
Int time 419.580
Amp 0.454
Phase -117.5
PFD 0.0e+00
Delays (us)
SBD -0.001062
MBD -0.000836
Fringe rate (Hz)
-0.000292
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133526
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

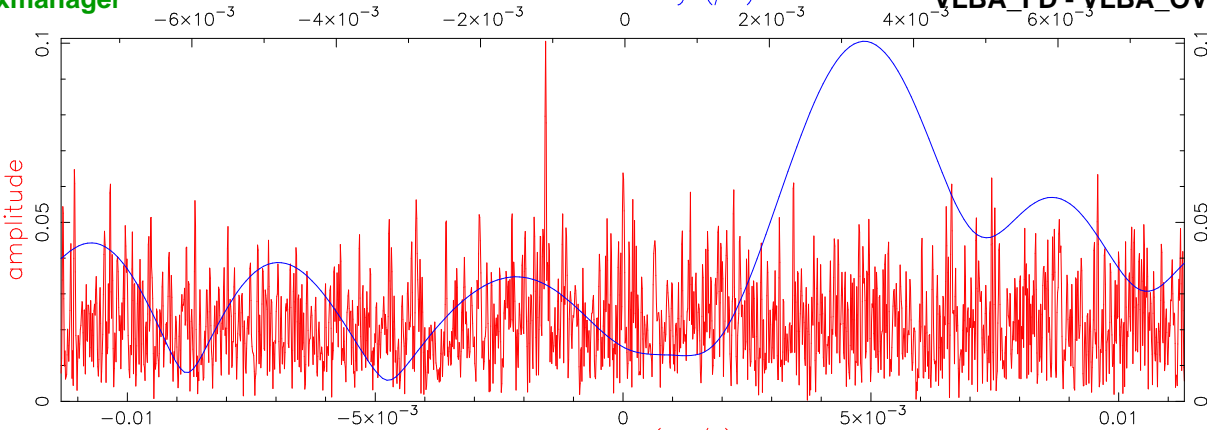
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-120.7	-109.8	-120.1	-124.0	-125.9	-97.6	-120.7	-114.3	Phase	-117.5
	0.4	0.6	0.5	0.5	0.5	0.3	0.5	0.4	Ampl.	0.5
	257.0	256.5	256.6	256.7	256.9	256.8	256.9	256.7	Sbd box	256.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	-3.43829524858E+03		Apriori delay (usec)		-3.43829441236E+03		Resid mbdelay (usec)		-8.36219E-04	+/- 4.3E-05
Sband delay (usec)	-3.43829547411E+03		Apriori clock (usec)		6.5069771E+00		Resid sbdelay (usec)		-1.06175E-03	+/- 3.4E-04
Phase delay (usec)	-3.43829441615E+03		Apriori clockrate (us/s)		-3.0000002E-07		Resid phdelay (usec)		-3.78745E-06	+/- 1.5E-07
Delay rate (us/s)	-1.99013199221E-01		Apriori rate (us/s)		-1.99013195836E-01		Resid rate (us/s)		-3.38478E-09	+/- 6.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.11754591602E-05		Resid phase (deg)		-117.5	+/- 4.5

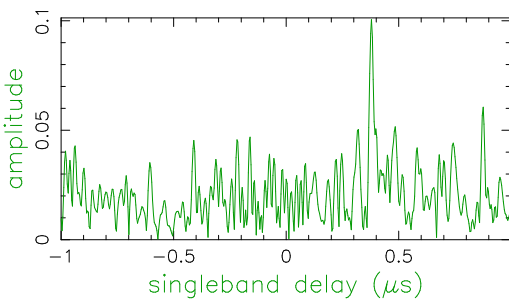
RMS Theor. Amplitude 0.454 +/- 0.018
 ph/seg (deg) 38.5 10.8 Search (2048X32) 0.435
 amp/seg (%) 31.2 18.9 Interp. 0.000
 ph/frq (deg) 10.0 6.4 Inc. seg. avg. 0.556
 amp/frq (%) 17.4 11.1 Inc. frq. avg. 0.453
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled sb window (us) -1.000 1.000
 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
 f: az 300.6 el 40.6 pa 81.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1541.401 134.295 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/fo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/fo.W.40.1X1O2X

multiband delay (μ s)

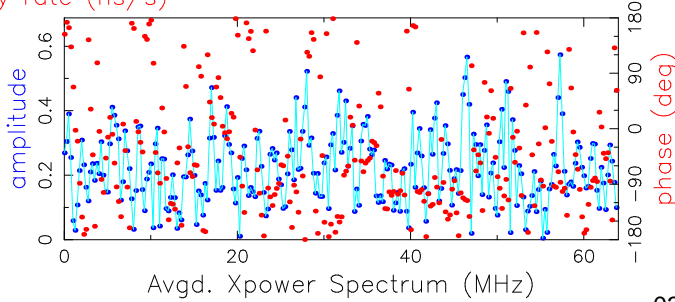


Fringe quality 0

SNR 5.6
Int time 419.580
Amp 0.101
Phase -89.4
PFD 9.9e-01
Delays (us)
SBD 0.378668
MBD 0.003300
Fringe rate (Hz)
-0.134582
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

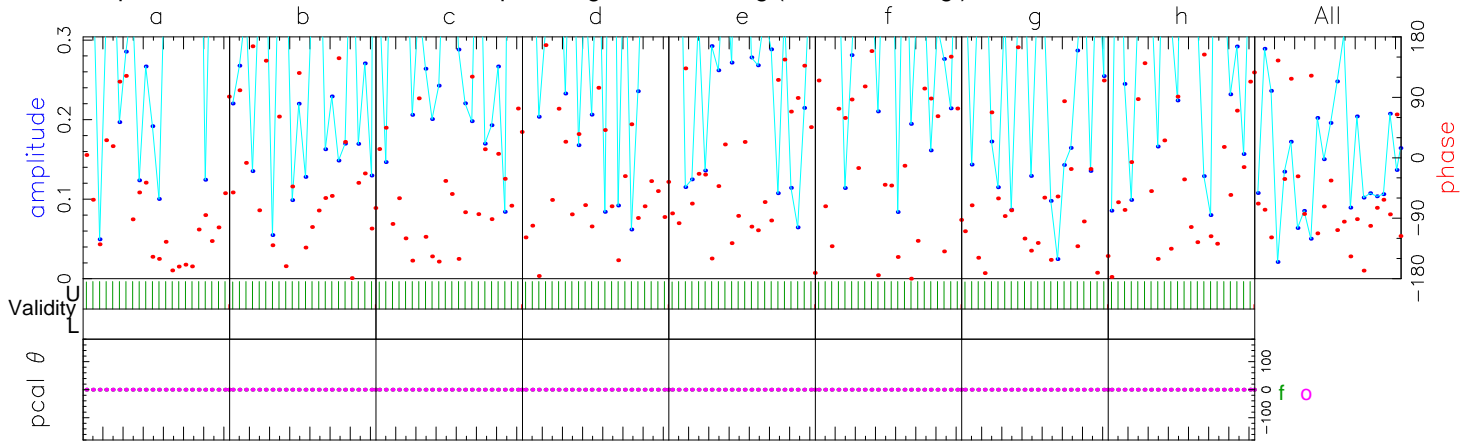


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133530
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



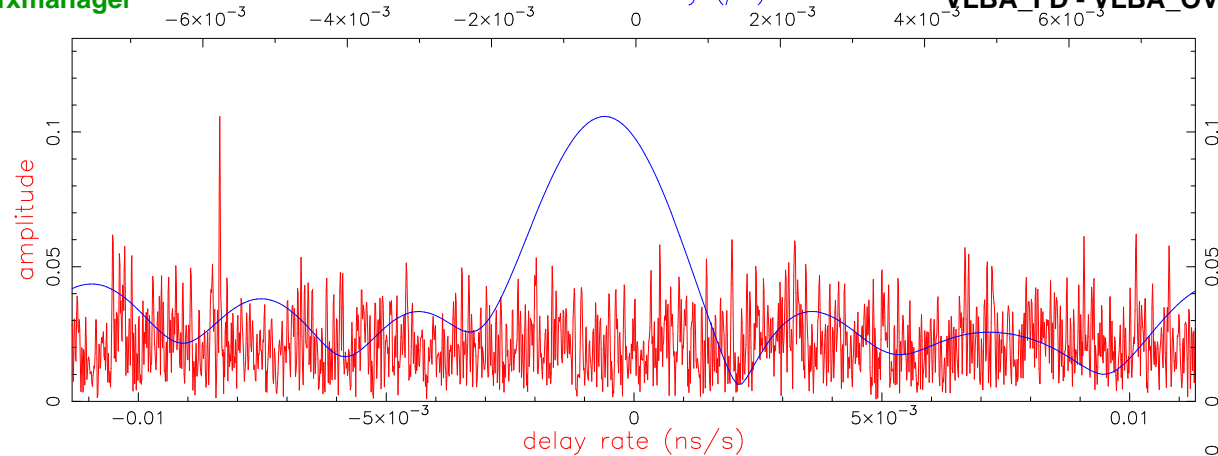
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-115.8	-98.7	-72.7	-66.1	-69.9	91.9	-127.9	-72.4	Phase	-89.4
	0.2	0.1	0.2	0.2	0.1	0.0	0.2	0.1	Ampl.	0.1
	356.1	481.3	353.7	353.5	240.8	218.7	354.9	361.7	Sbd box	353.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
f:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.43791611197E+03	Apriori delay (usec)	-3.43829441236E+03	Resid mbdelay (usec)	3.30039E-03	+/-	1.9E-04
Sband delay (usec)	-3.43791574436E+03	Apriori clock (usec)	6.5069771E+00	Resid sbdelay (usec)	3.78668E-01	+/-	1.5E-03
Phase delay (usec)	-3.43829441525E+03	Apriori clockrate (us/s)	-3.0000002E-07	Resid phdelay (usec)	-2.88315E-06	+/-	6.6E-07
Delay rate (us/s)	-1.99014758199E-01	Apriori rate (us/s)	-1.99013195836E-01	Resid rate (us/s)	-1.56236E-06	+/-	2.7E-09
Total phase (deg)	-334.6	Apriori accel (us/s/s)	1.11754591602E-05	Resid phase (deg)	-89.4	+/-	20.3

ph/seg (deg)	RMS 70.0	Theor. 48.8	Amplitude Search (2048X32)	0.101 +/- 0.018	0.098	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	89.9	85.1	Interp.	0.000	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	77.1	28.8	Inc. seg. avg.	0.112	0.104	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.9	50.2	Inc. frq. avg.	0.104		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

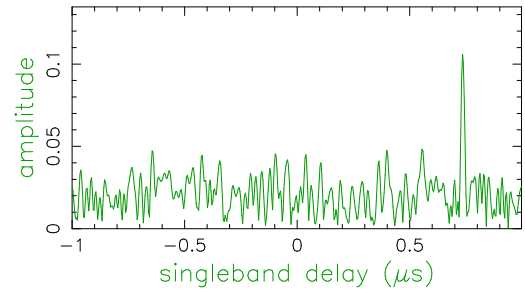
f: az 300.6 el 40.6 pa 81.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1541.401 134.295 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/fo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/fo.W.61.1X1O2X

multiband delay (μ s)

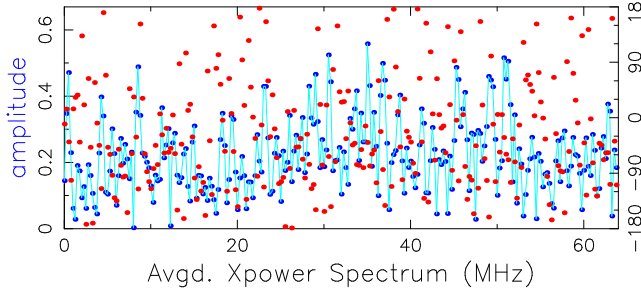


Fringe quality 0

SNR 6.0
Int time 419.580
Amp 0.135
Phase 138.1
PFD 4.6e-01
Delays (us)
SBD 0.735450
MBD -0.000398
Fringe rate (Hz)
-0.720893
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

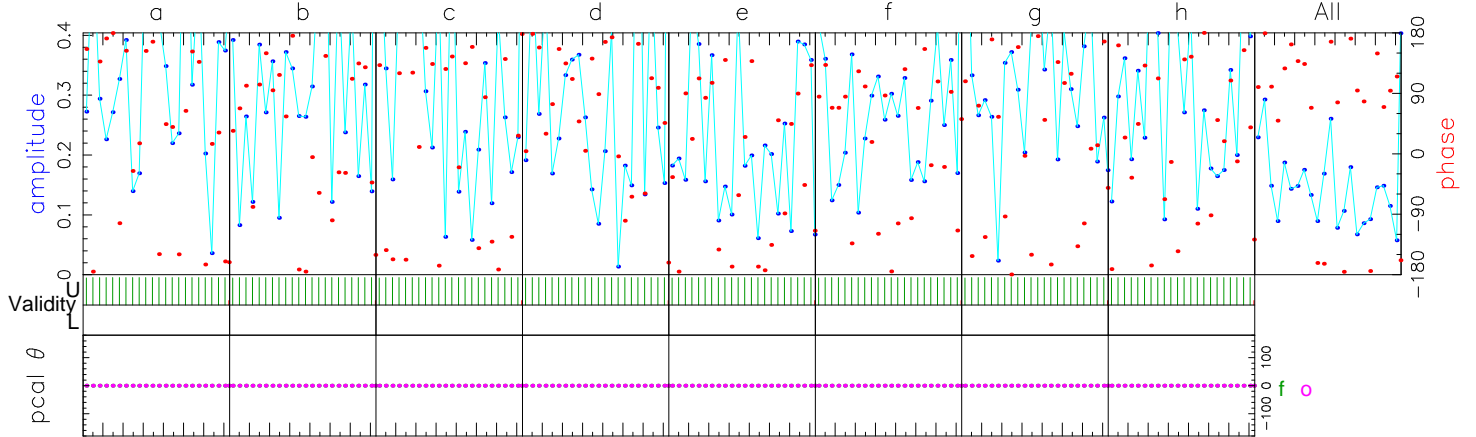


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133534
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fo	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.43756043523E+03									
Sband delay (usec)	-3.43755896236E+03									
Phase delay (usec)	-3.43829440791E+03									
Delay rate (us/s)	-1.99021564686E-01									
Total phase (deg)			-107.1							
Apriori delay (usec)					-3.43829441236E+03					
Apriori clock (usec)					0.104					
Apriori clockrate (us/s)					-3.0000002E-07					
Apriori rate (us/s)					-1.99013195836E-01					
Apriori accel (us/s/s)					1.11754591602E-05					
Resid mbdelay (usec)									-3.97867E-04	+/- 1.8E-04
Resid sbdelay (usec)									7.35450E-01	+/- 1.4E-03
Resid phdelay (usec)									4.45179E-06	+/- 6.2E-07
Resid rate (us/s)									-8.36885E-06	+/- 2.6E-09
Resid phase (deg)									138.1	+/- 19.2
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)									
Bits/sample:	2x2		SampCntNorm: enabled							
Sample rate (MSamp/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) 46.8 46.1 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 70.0 80.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 27.8 27.2 Inc. seg. avg. 0.139 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 42.3 47.4 Inc. frq. avg. 0.129 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 300.6 el 40.6 pa 81.7 o: az 291.8 el 54.1 pa 80.7 u, v (fr/asec) 1541.401 134.295 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/fo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/fo.W.80.1X1O2X

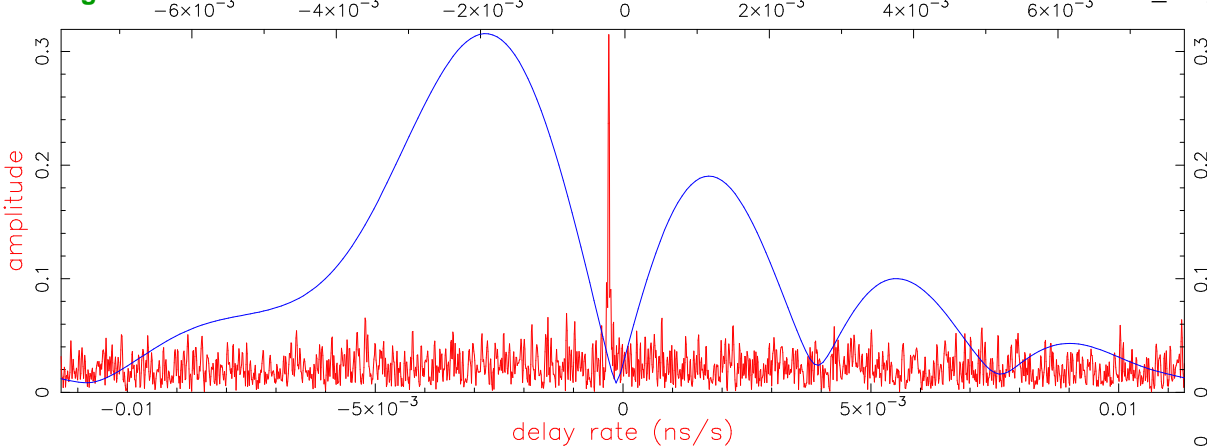
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, go

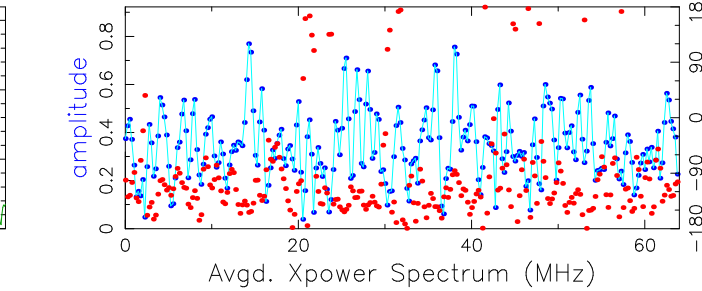
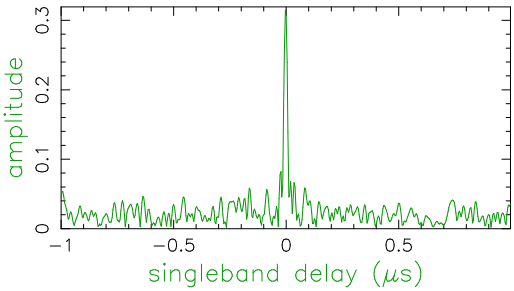
GLT - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)



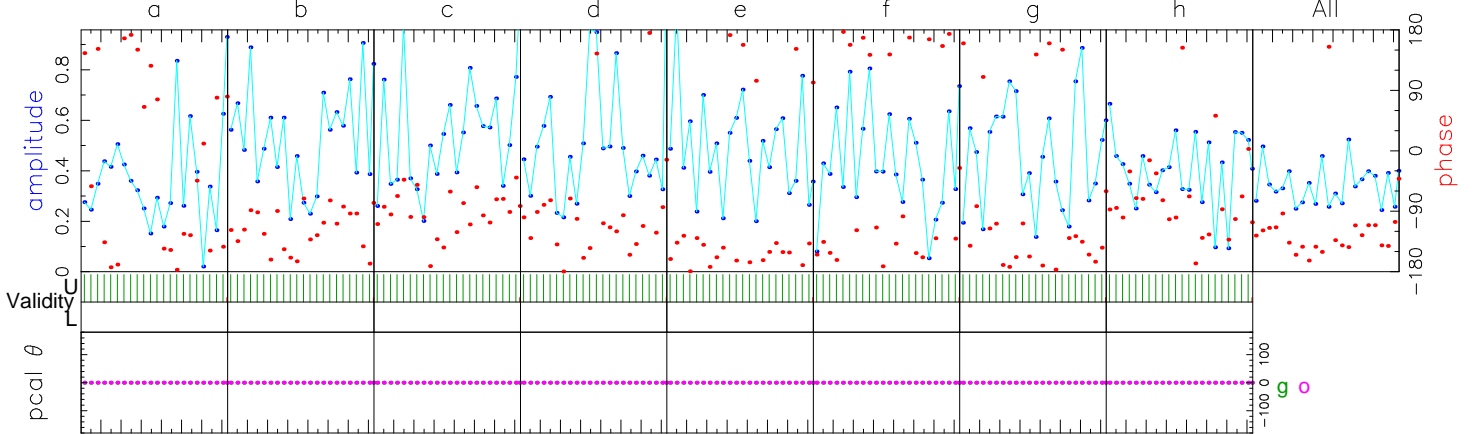
Fringe quality 8

SNR 17.9
 Int time 419.823
 Amp 0.319
 Phase -131.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.002452
 MBD -0.001844
 Fringe rate (Hz)
 -0.024698
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133541
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
Group delay (usec)(sbd)	-169.1	-116.0	-85.3	-121.0	-161.1	-171.5	-150.1	-85.5		-131.0	
Sband delay (usec)	0.2	0.5	0.4	0.4	0.4	0.4	0.4	0.3		0.4	
Phase delay (usec)	258.9	256.2	256.0	256.4	256.0	255.9	257.0	258.9		256.4	
Delay rate (us/s)	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
U/L	g 0	g 0	g 0	g 0	g 0	g 0	g 0	g 0			
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
g:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
g	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Apriori delay (usec)					-3.84664449462E+03				Resid mbdelay (usec)	-1.84428E-03	+/- 6.1E-05
Apriori clock (usec)					0.312				Resid sbdelay (usec)	-2.45250E-03	+/- 4.8E-04
Apriori clockrate (us/s)					0.000				Resid phdelay (usec)	-4.22568E-06	+/- 2.1E-07
Apriori rate (us/s)					4.13281833903E-01				Resid rate (us/s)	-2.86721E-07	+/- 8.5E-10
Apriori accel (us/s/s)					4.80138505692E-05				Resid phase (deg)	-131.0	+/- 6.4

	RMS	Theor.	Amplitude	0.319 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	24.8	15.4	Search (2048X32)	0.312	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	25.4	26.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	38.4	9.1	Inc. seg. avg.	0.330	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	29.9	15.8	Inc. frq. avg.	0.367	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

g: az 287.4 el 38.8 pa 17.2 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3098.560 5812.911 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/go..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/go.W.105.1X1O2X

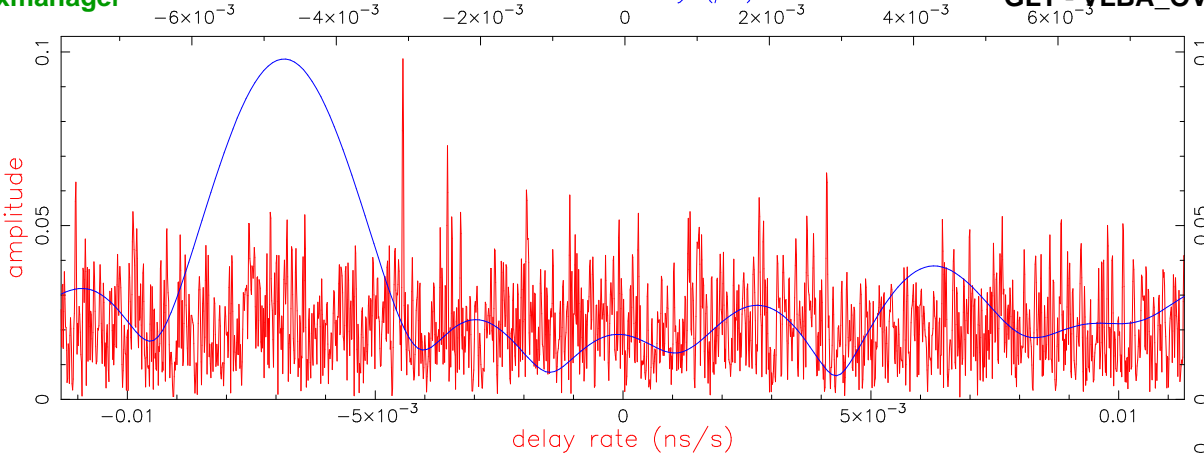
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

multiband delay (μ s)

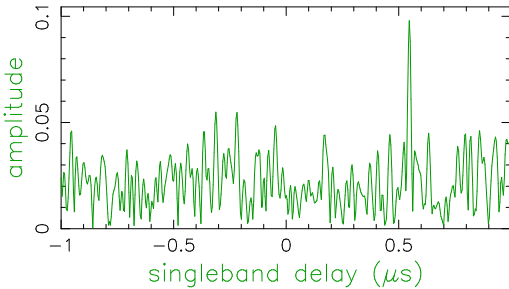
3C84.1X1O2X, No0117, go

GLT - VLBA_OV, fgroup W, pol LR

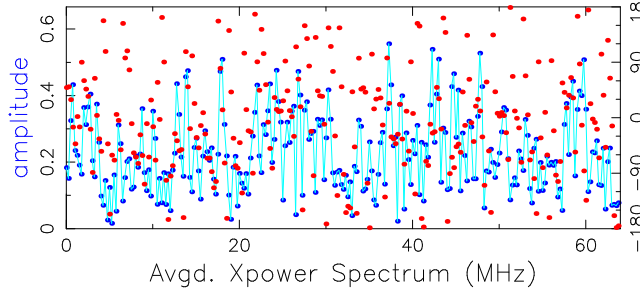


Fringe quality 0

SNR 5.5
 Int time 419.823
 Amp 0.104
 Phase -123.1
 PFD 1.0e+00
 Delays (us)
 SBD 0.546984
 MBD -0.004724
 Fringe rate (Hz)
 -0.383251
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

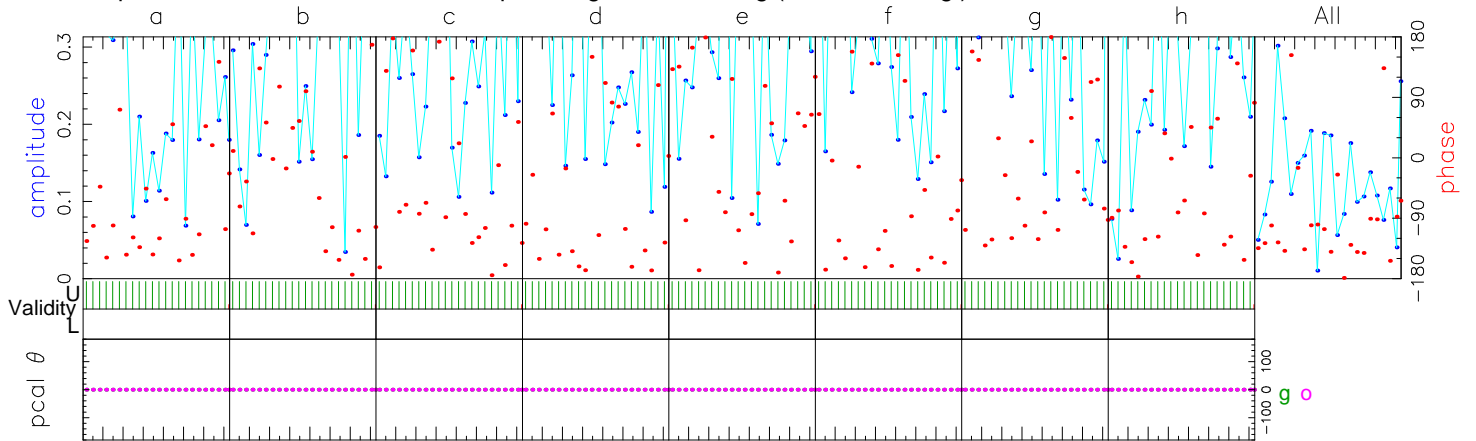


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133545
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-110.5	-110.5	-118.1	-147.5	-155.1	-125.6	-111.6	-112.3	Phase	-123.1
	0.1	0.0	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	102.3	21.3	333.2	136.8	303.9	222.1	352.1	194.6	Sbd box	397.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.84610234361E+03		Apriori delay (usec)		-3.84664449462E+03		Resid mbdelay (usec)		-4.72399E-03	+/- 2.0E-04
Sband delay (usec)	-3.84609751062E+03		Apriori clock (usec)		-3.3152637E+00		Resid sbdelay (usec)		5.46984E-01	+/- 1.6E-03
Phase delay (usec)	-3.84664449858E+03		Apriori clockrate (us/s)		-2.8800001E-07		Resid phdelay (usec)		-3.96923E-06	+/- 6.7E-07
Delay rate (us/s)	4.13277384735E-01		Apriori rate (us/s)		4.13281833903E-01		Resid rate (us/s)		-4.44917E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		4.80138505692E-05		Resid phase (deg)		-123.1	+/- 20.9

ph/seg (deg) 47.7 50.1 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.1 87.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.2 29.5 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.6 51.5 Inc. frq. avg. 0.096 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 287.4 el 38.8 pa 17.2 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3098.560 5812.911 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/go..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/go.W.125.1X1O2X

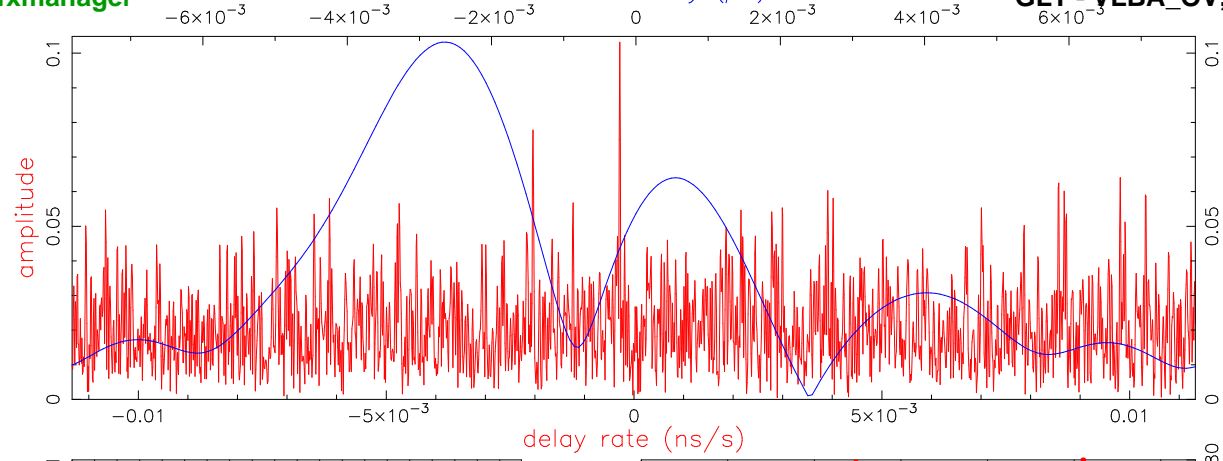
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

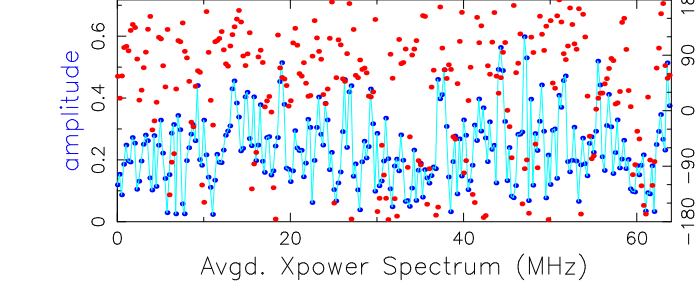
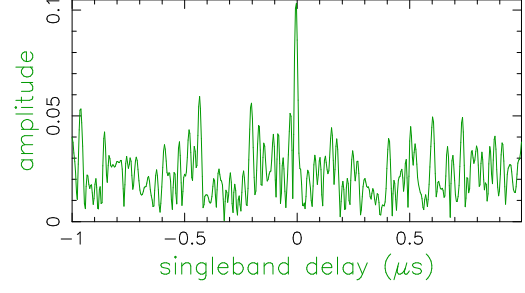
3C84.1X1O2X, No0117, go

GLT - VLBA_OV, fgroup W, pol RL

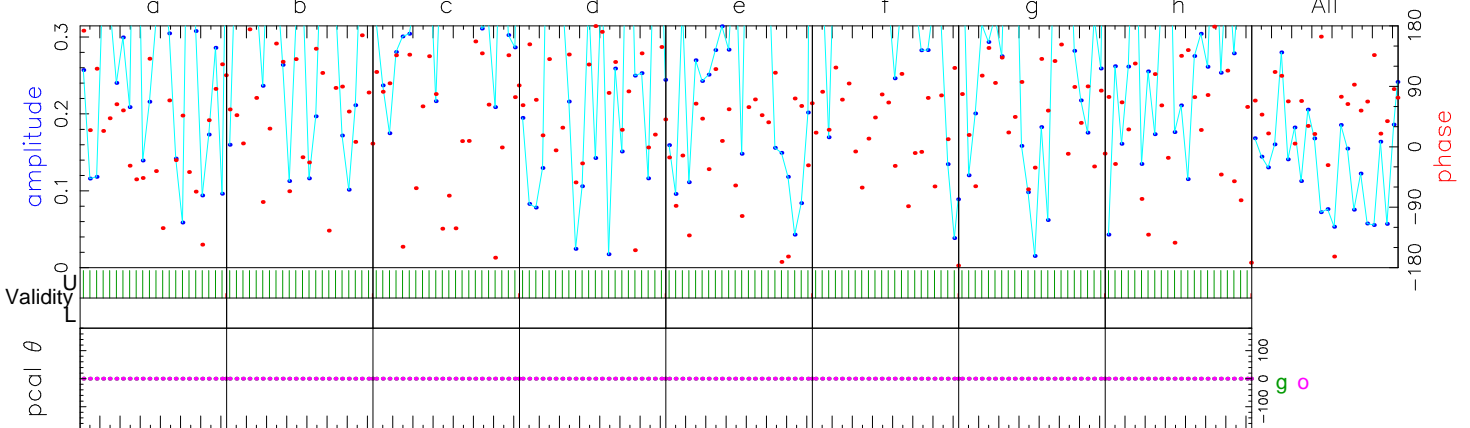
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.823
 Amp 0.105
 Phase 61.2
 PFD 6.6e-01
 Delays (us)
 SBD -0.005433
 MBD -0.002627
 Fringe rate (Hz)
 -0.024532
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133549
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.84664712202E+03				-3.84664449462E+03				Resid mbdelay (usec)	-2.62741E-03 +/- 1.8E-04
Sband delay (usec)	-3.84664992762E+03				-3.3152637E+00				Resid sbdelay (usec)	-5.43300E-03 +/- 1.5E-03
Phase delay (usec)	-3.84664449264E+03				-2.8800001E-07				Resid phdelay (usec)	1.97422E-06 +/- 6.3E-07
Delay rate (us/s)	4.13281549106E-01				4.13281833903E-01				Resid rate (us/s)	-2.84798E-07 +/- 2.6E-09
Total phase (deg)		-214.6			4.80138505692E-05				Resid phase (deg)	61.2 +/- 19.5

ph/seg (deg) 51.6 46.8 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.9 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.6 27.6 Inc. seg. avg. 0.101 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.3 48.2 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 287.4 el 38.8 pa 17.2 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3098.560 5812.911 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/go..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/go.W.146.1X1O2X

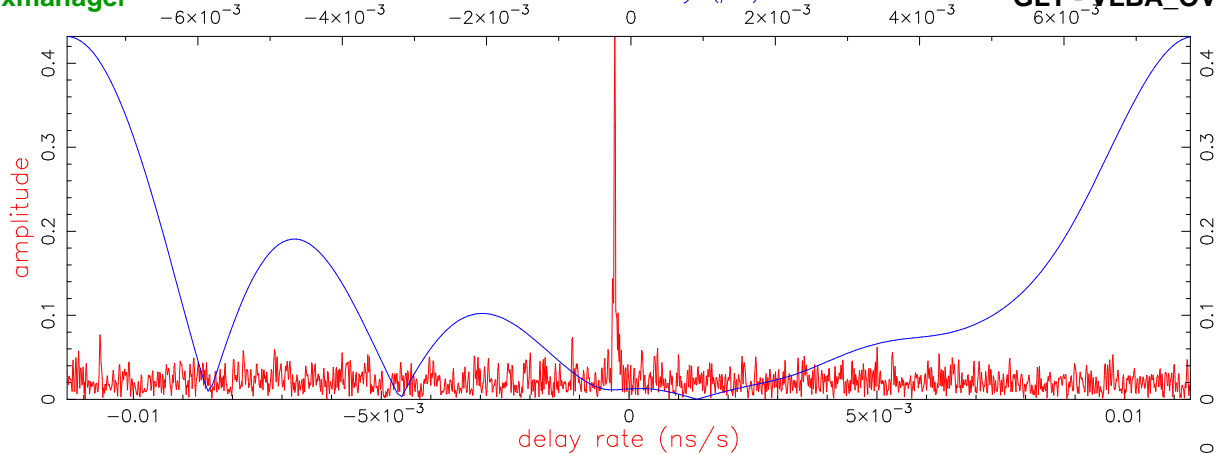
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, go

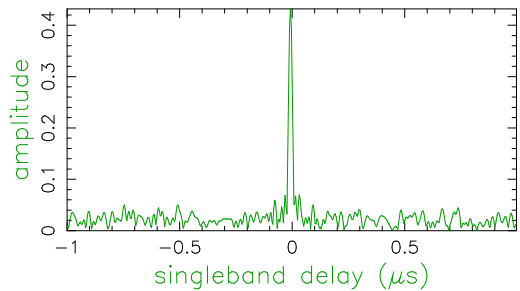
GLT - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

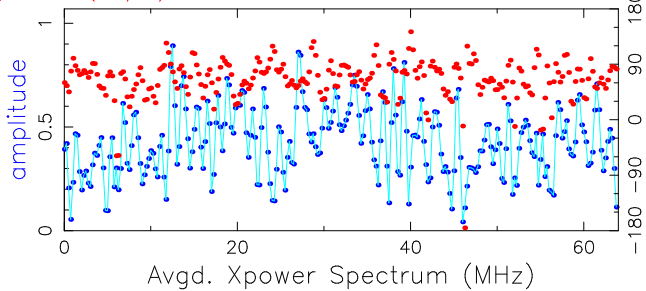


Fringe quality 8

SNR 24.2
 Int time 419.823
 Amp 0.432
 Phase 69.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.007771
 MBD -0.007820
 Fringe rate (Hz)
 -0.024695
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

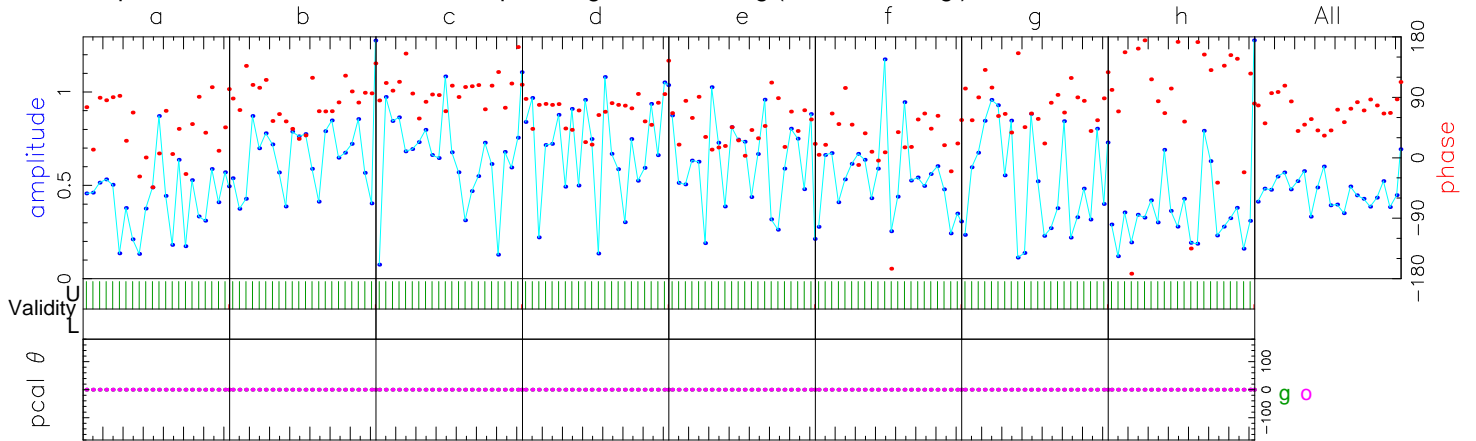


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133537
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.84665231452E+03									
Sband delay (usec)	-3.84665226537E+03									
Phase delay (usec)	-3.84664449239E+03									
Delay rate (us/s)	4.13281547219E-01									
Total phase (deg)			-206.7							
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)									69.1	+/- 4.7
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
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) 20.6 11.4 Search (2048X32) 0.427 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 18.9 19.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.6 6.7 Inc. seg. avg. 0.456 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.0 11.7 Inc. frq. avg. 0.478 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 287.4 el 38.8 pa 17.2 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3098.560 5812.911 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/go..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/go.W.85.1X1O2X

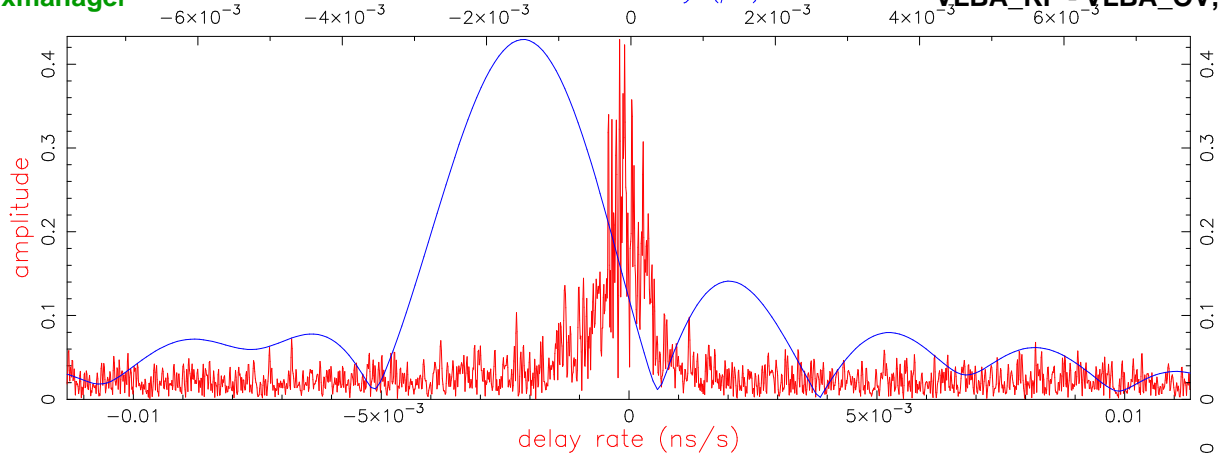
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, ko

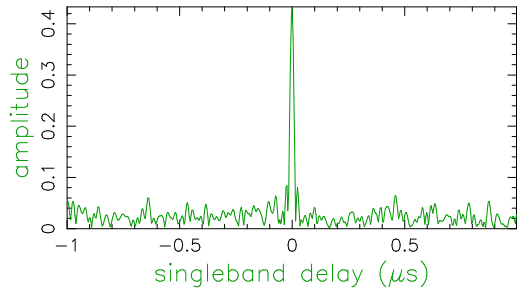
VLBA_KP - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

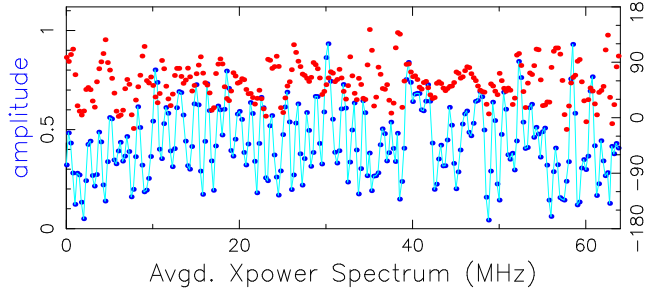


Fringe quality 7

SNR 24.2
 Int time 416.274
 Amp 0.433
 Phase 61.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001195
 MBD -0.001514
 Fringe rate (Hz)
 -0.016403
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

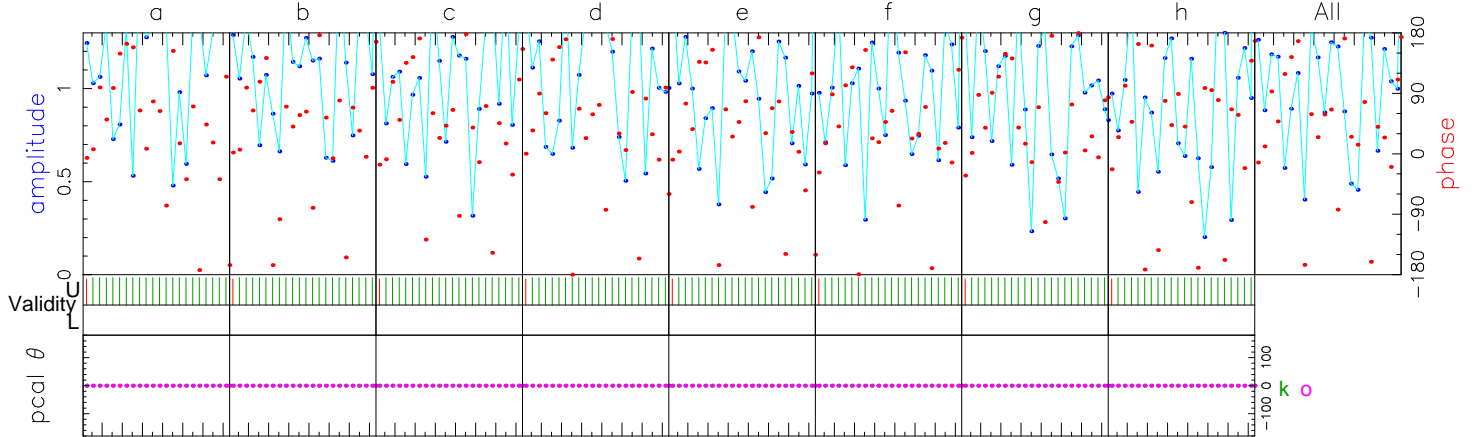


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000003.56
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133543
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
k	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.72680422167E+03									
Sband delay (usec)	-1.72680390302E+03									
Phase delay (usec)	-1.72680270579E+03									
Delay rate (us/s)	-1.17010533206E-01									
Total phase (deg)			-27.5							
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)									61.5	+/- 4.7
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
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)										

ph/seg (deg) 72.8 11.4 Search (2048X32) 0.422 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 145.1 19.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.5 6.7 Inc. seg. avg. 0.968 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 14.5 11.7 Inc. frq. avg. 0.432 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 298.6 el 46.9 pa 84.8 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 902.013 -265.040 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/ko..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/ko.W.118.1X1O2X

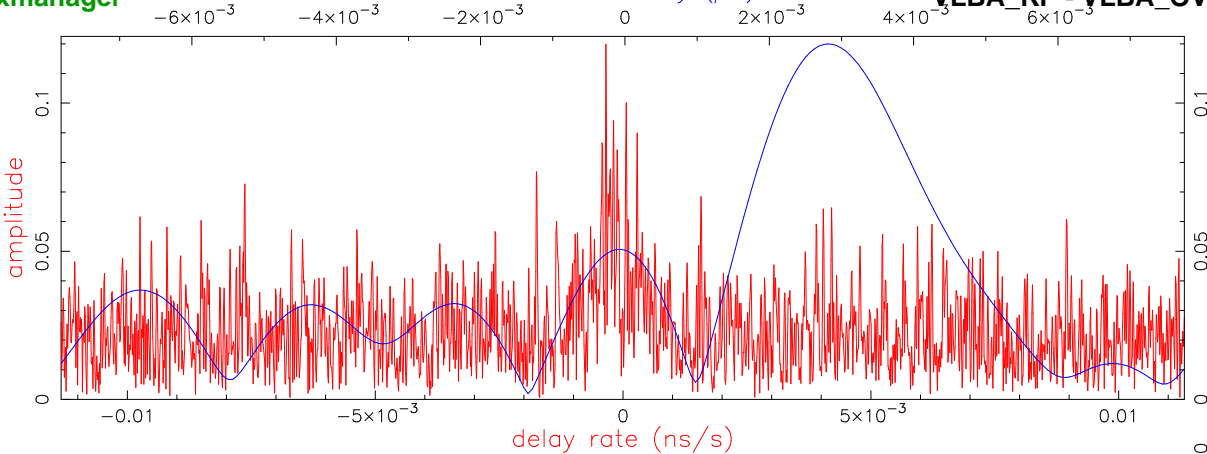
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, ko

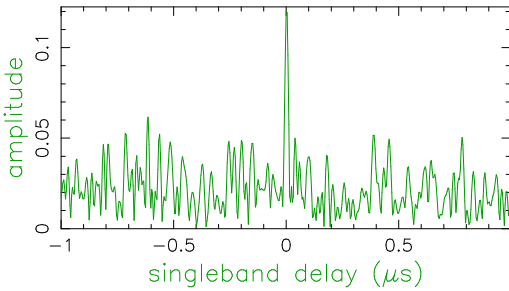
VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

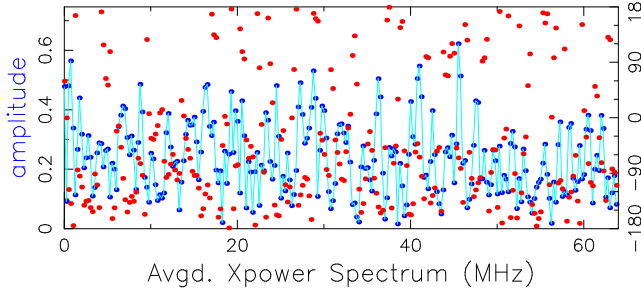


Fringe quality 0

SNR 6.8
 Int time 416.274
 Amp 0.123
 Phase -127.2
 PFD 2.4e-03
 Delays (us)
 SBD 0.001840
 MBD 0.002867
 Fringe rate (Hz)
 -0.029917
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

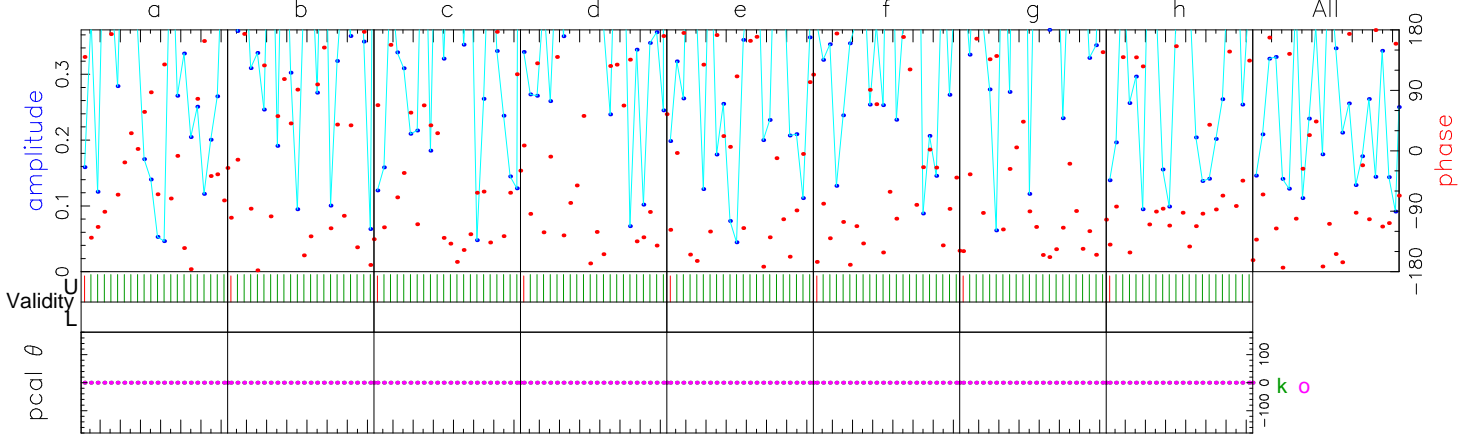


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000003.56
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133546
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-1.72679984091E+03								Resid mbdelay (usec)	2.86686E-03 +/- 1.6E-04
Sband delay (usec)	-1.72680086752E+03								Resid sbdelay (usec)	1.84025E-03 +/- 1.3E-03
Phase delay (usec)	-1.72680271187E+03								Resid phdelay (usec)	-4.10117E-06 +/- 5.4E-07
Delay rate (us/s)	-1.17010690094E-01								Resid rate (us/s)	-3.47306E-07 +/- 2.2E-09
Total phase (deg)		-216.2							Resid phase (deg)	-127.2 +/- 16.8
	RMS	Theor.	Amplitude	0.123 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	71.0	40.2	Search (2048X32)	0.115					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	126.1	70.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.4	23.7	Inc. seg. avg.	0.188					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	23.0	41.4	Inc. frq. avg.	0.125					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

k: az 298.6 el 46.9 pa 84.8 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 902.013 -265.040 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/ko..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/ko.W.134.1X1O2X

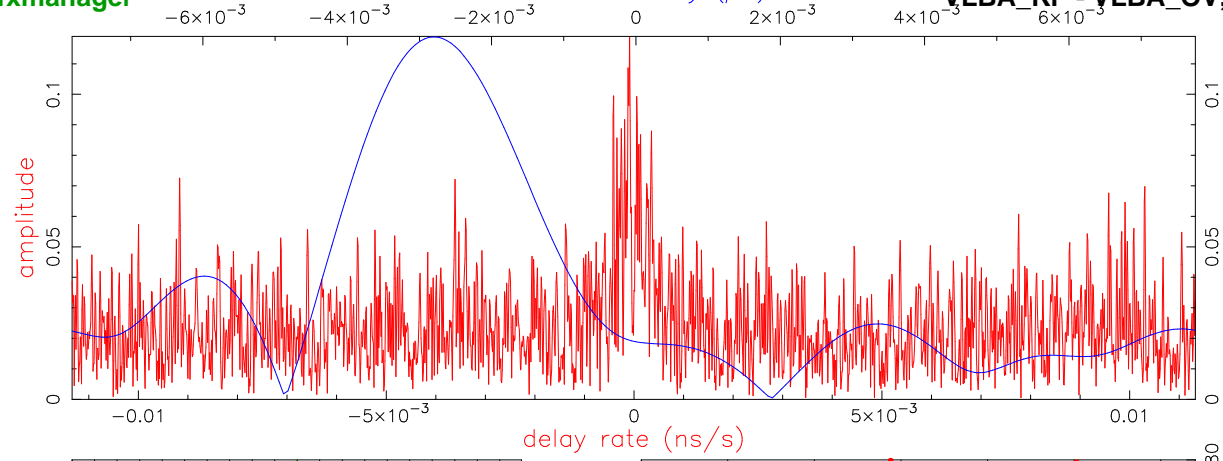
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, ko

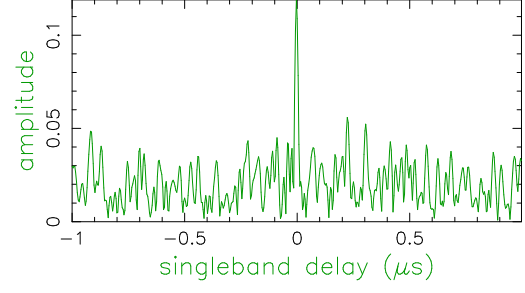
VLBA_KP - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

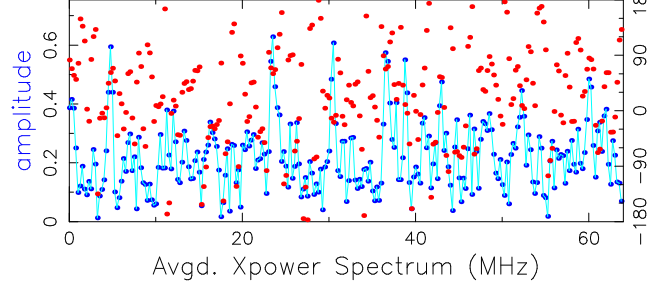


Fringe quality 0

SNR 6.6
 Int time 416.274
 Amp 0.119
 Phase 28.4
 PFD 9.1e-03
 Delays (us)
 SBD -0.003458
 MBD -0.002788
 Fringe rate (Hz)
 -0.007942
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

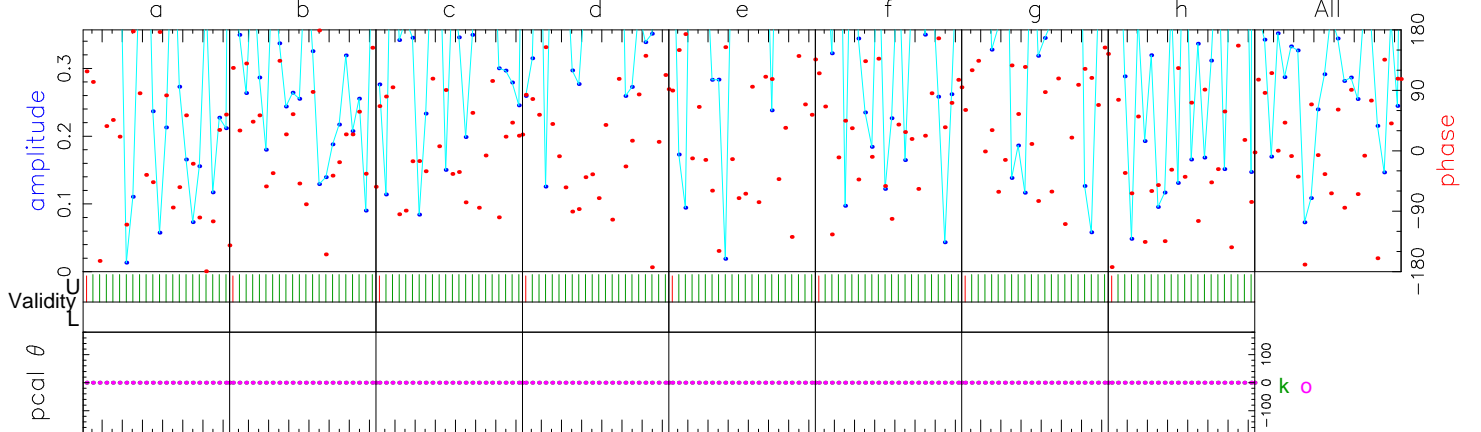


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000003.56
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133550
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

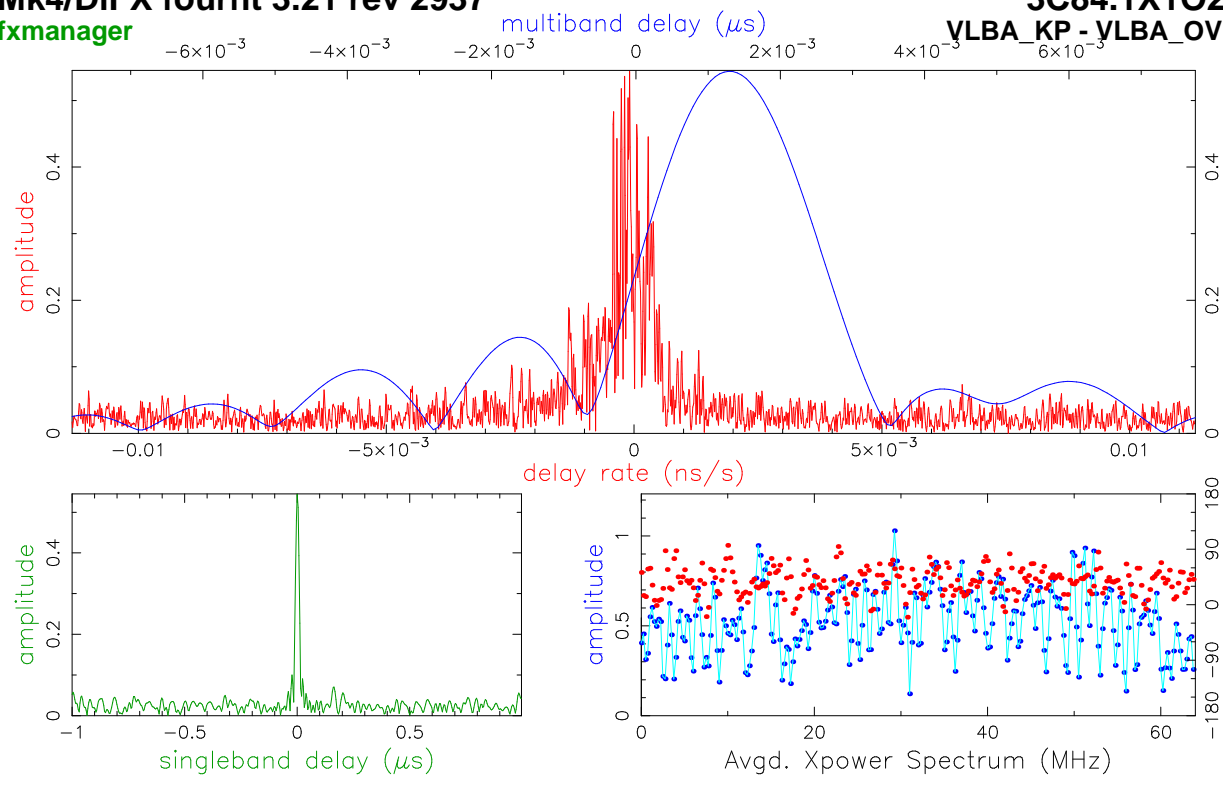
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
k	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)	-1.72680549568E+03									
Sband delay (usec)	-1.72680616602E+03									
Phase delay (usec)	-1.72680270685E+03									
Delay rate (us/s)	-1.17010434989E-01									
Total phase (deg)			-60.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									28.4	+/- 17.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
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								

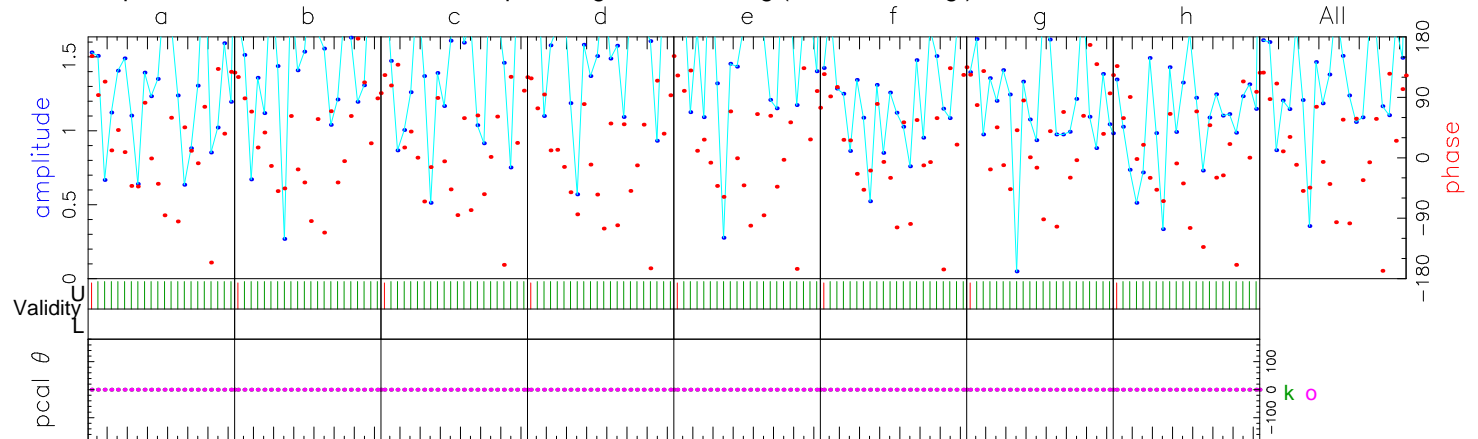
k: az 298.6 el 46.9 pa 84.8 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 902.013 -265.040 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/ko..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/ko.W.156.1X1O2X



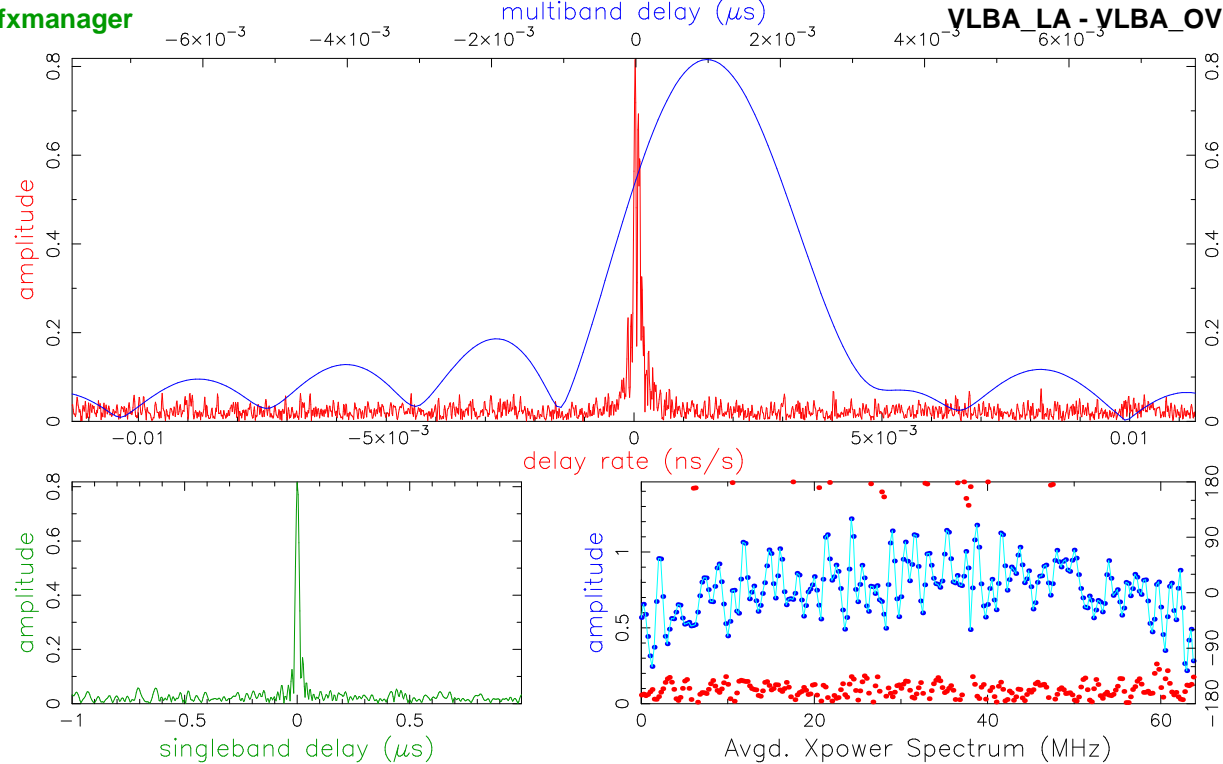
Fringe quality 7
SNR 30.4
Int time 416.274
Amp 0.545
Phase 30.2
PFD 0.0e+00
Delays (us)
SBD 0.000673
MBD 0.001316
Fringe rate (Hz)
-0.007840
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000003.56
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133539
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



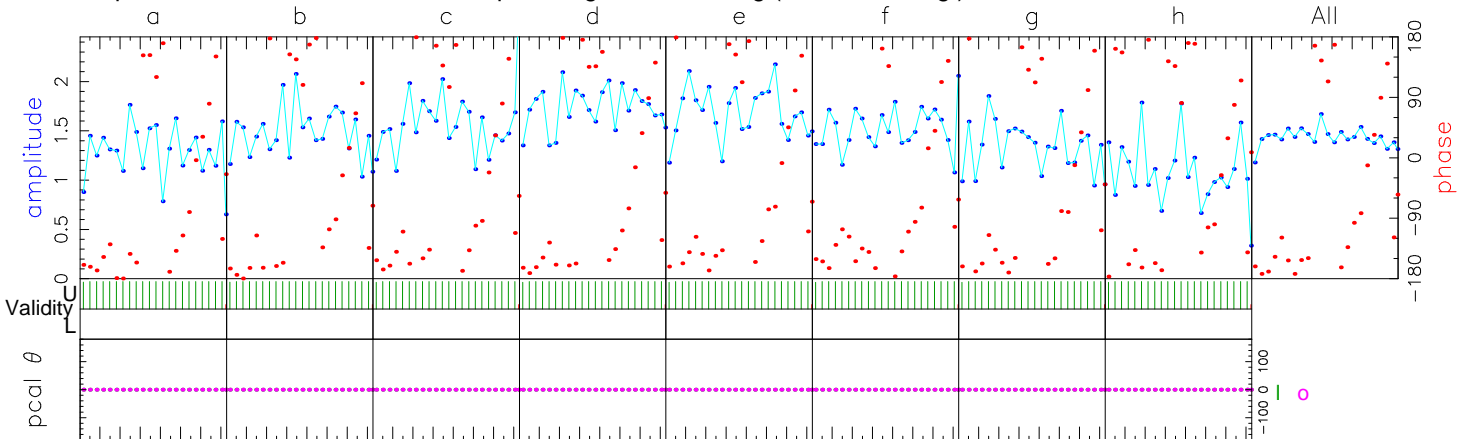
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	37.2	28.8	28.1	22.2	29.1	42.4	37.1	15.4	Phase	30.2
	0.5	0.7	0.5	0.6	0.6	0.5	0.5	0.4	Ampl.	0.5
	256.7	257.0	256.9	257.3	257.4	257.7	257.4	256.8	Sbd box	257.2
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	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)	-1.72680139225E+03		Apriori delay (usec)		-1.72680270777E+03		Resid mbdelay (usec)		1.31552E-03	+/- 3.6E-05
Sband delay (usec)	-1.72680203477E+03		Apriori clock (usec)		-3.4348297E+00		Resid sbdelay (usec)		6.73000E-04	+/- 2.8E-04
Phase delay (usec)	-1.72680270680E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		9.72923E-07	+/- 1.2E-07
Delay rate (us/s)	-1.17010433799E-01		Apriori rate (us/s)		-1.17010342788E-01		Resid rate (us/s)		-9.10107E-08	+/- 5.0E-10
Total phase (deg)			Apriori accel (us/s/s)		3.49771505462E-06		Resid phase (deg)		30.2	+/- 3.8

ph/seg (deg) 74.2 9.0 Search (2048X32) 0.531 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 157.7 15.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 9.5 5.3 Inc. seg. avg. 1.319 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 14.0 9.3 Inc. frq. avg. 0.546 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 298.6 el 46.9 pa 84.8 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 902.013 -265.040 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/ko..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/ko.W.98.1X1O2X



Fringe quality 6
SNR 45.8
Int time 419.340
Amp 0.818
Phase -162.9
PFD 0.0e+00
Delays (us)
SBD 0.000755
MBD 0.001007
Fringe rate (Hz) 0.001442
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build 2021:303:220112
2021:304:133554
2021:252:122852
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

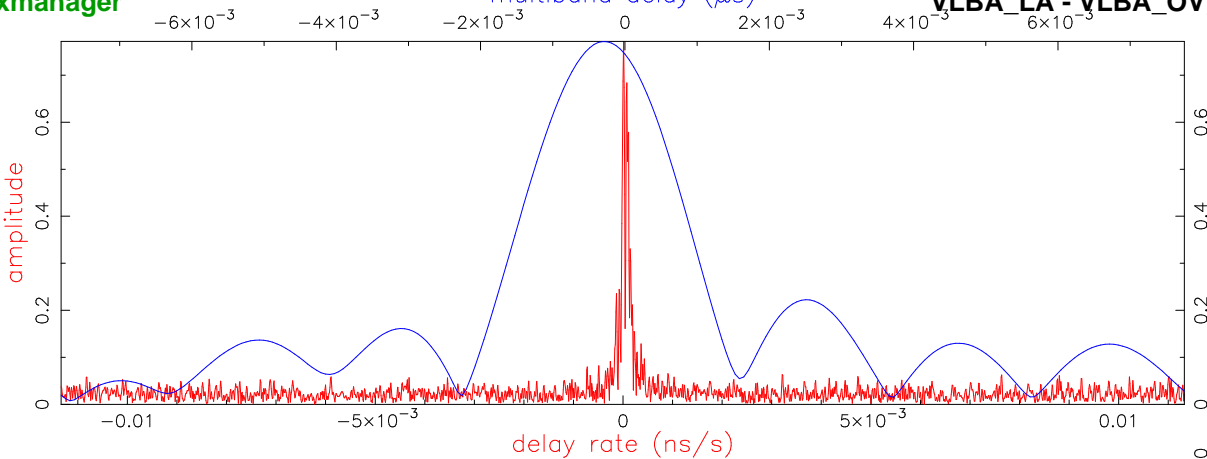


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.30920817194E+03	Apriori delay (usec)	-2.30920917865E+03	Resid mbdelay (usec)	1.00671E-03	+/-	2.4E-05
Sband delay (usec)	-2.30920842365E+03	Apriori clock (usec)	-6.3894634E+00	Resid sbdelay (usec)	7.55000E-04	+/-	1.9E-04
Phase delay (usec)	-2.30920918390E+03	Apriori clockrate (us/s)	-6.4600002E-07	Resid phdelay (usec)	-5.25233E-06	+/-	8.1E-08
Delay rate (us/s)	-1.30455552620E-01	Apriori rate (us/s)	-1.30455569366E-01	Resid rate (us/s)	1.67453E-08	+/-	3.3E-10
Total phase (deg)	-36.4	Apriori accel (us/s/s)	1.07206899042E-05	Resid phase (deg)	-162.9	+/-	2.5

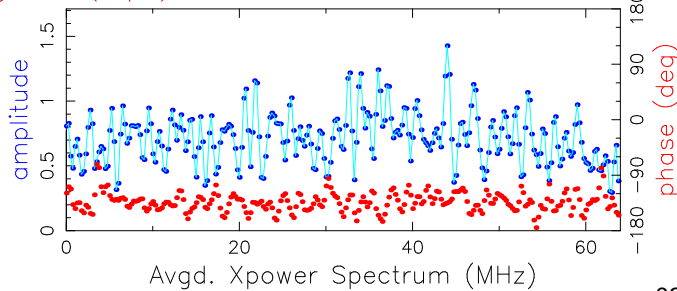
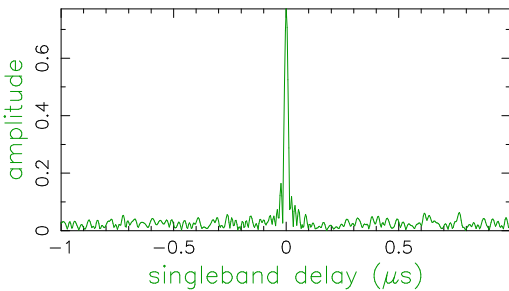
ph/seg (deg)	65.3	RMS	65.3	Theor.	6.0	Amplitude	0.818 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.4	Search (2048X32)	0.791	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	12.7	Inc. seg. avg.	1.429	Inc. frq. avg.	0.826	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	14.4	Inc. frq. avg.	0.826	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

multiband delay (μs)



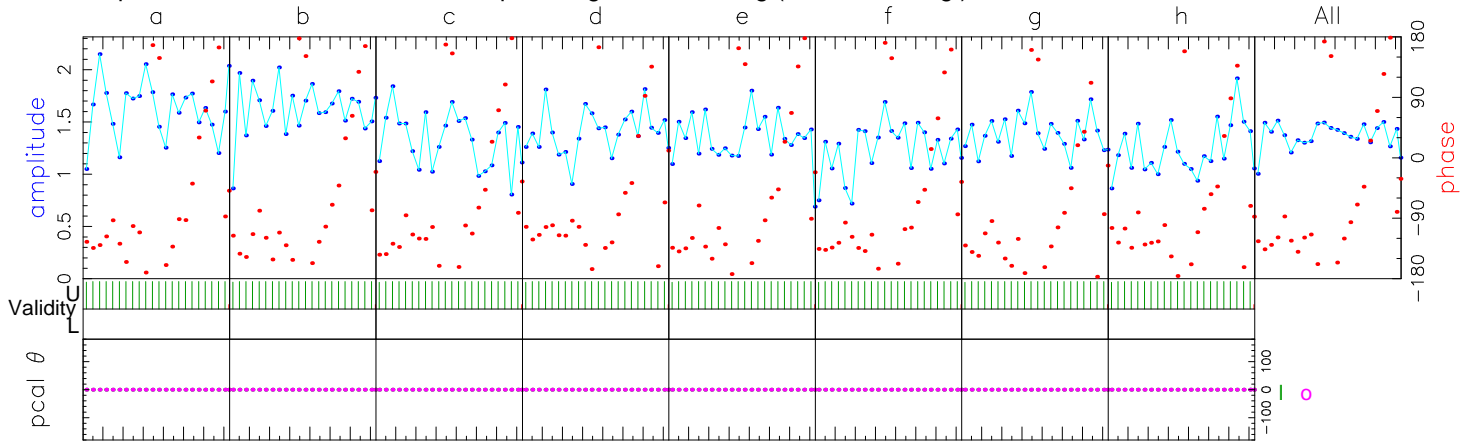
Fringe quality 7

SNR 43.2
Int time 419.340
Amp 0.772
Phase -129.2
PFD 0.0e+00
Delays (us)
SBD 0.000162
MBD -0.000283
Fringe rate (Hz)
0.001430
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133557
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-131.0	-129.9	-131.4	-114.6	-132.0	-132.8	-138.9	-122.4	Phase	-129.2
	0.9	0.9	0.8	0.8	0.8	0.7	0.8	0.7	Ampl.	0.8
	256.9	257.2	257.2	256.8	257.3	256.8	257.3	257.2	Sbd box	257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.30920946128E+03		Apriori delay (usec)		-2.30920917865E+03		Resid mbdelay (usec)		-2.82637E-04	+/- 2.5E-05
Sband delay (usec)	-2.30920901665E+03		Apriori clock (usec)		-6.3894634E+00		Resid sbdelay (usec)		1.62000E-04	+/- 2.0E-04
Phase delay (usec)	-2.30920918281E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-4.16481E-06	+/- 8.5E-08
Delay rate (us/s)	-1.30455552763E-01		Apriori rate (us/s)		-1.30455569366E-01		Resid rate (us/s)		1.66022E-08	+/- 3.5E-10
Total phase (deg)			Apriori accel (us/s/s)		1.07206899042E-05		Resid phase (deg)		-129.2	+/- 2.7

ph/seg (deg) 65.1 6.4 Search (2048X32) 0.735 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.8 11.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.0 3.7 Inc. seg. avg. 1.368 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 9.8 6.5 Inc. frq. avg. 0.776 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 296.0 el 44.7 pa 77.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1014.835 604.068 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/lo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/lo.W.182.1X1O2X

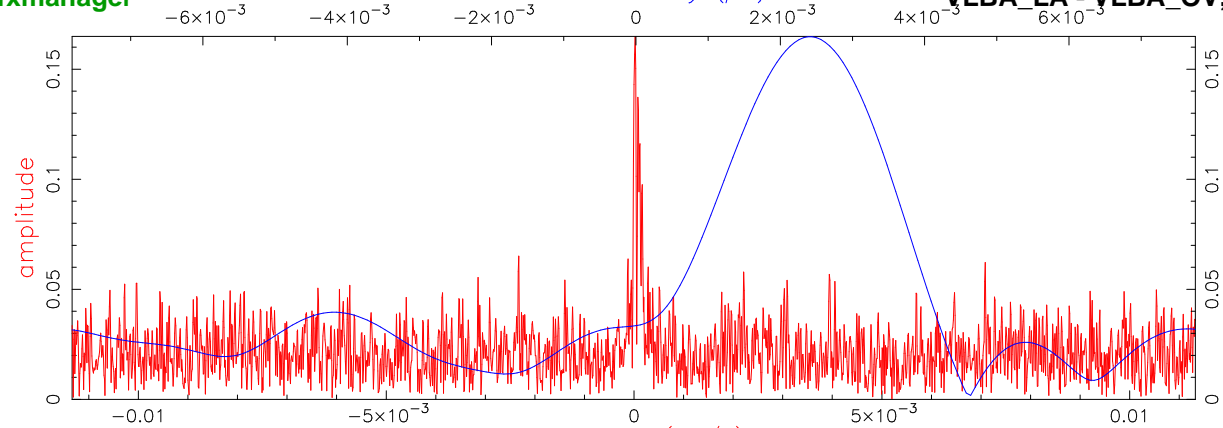
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

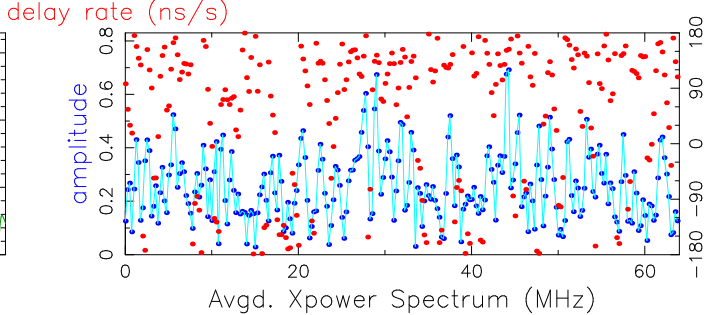
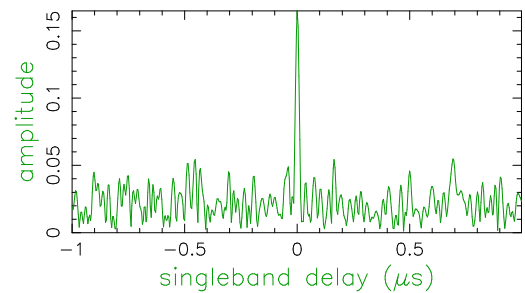
3C84.1X1O2X, No0117, lo

VLBA_LA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

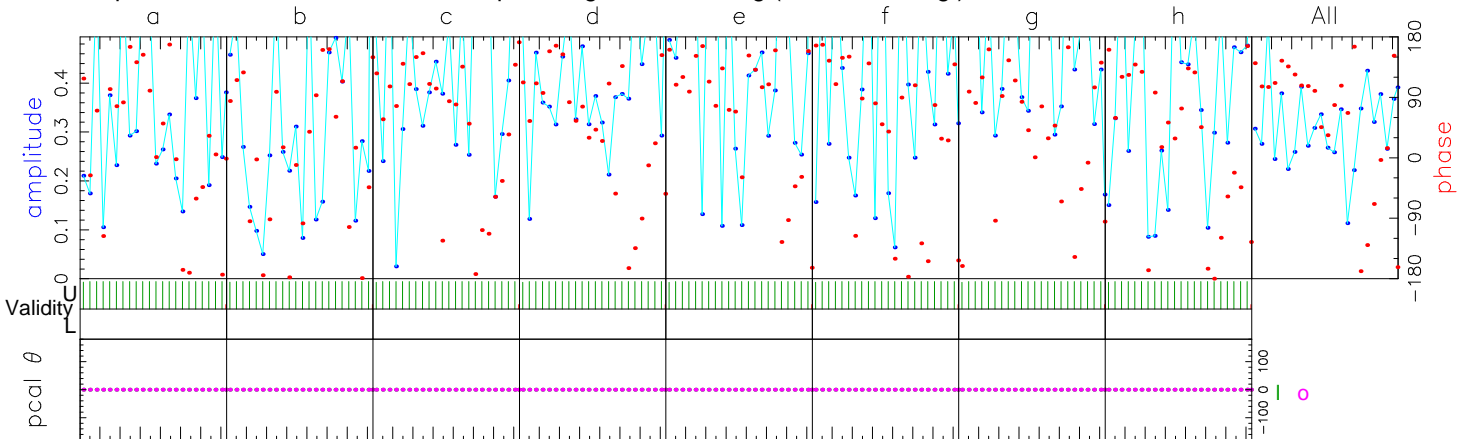


Fringe quality 9
 SNR 9.2
 Int time 419.340
 Amp 0.165
 Phase 112.8
 PFD 1.0e-11
 Delays (us)
 SBD 0.000365
 MBD 0.002418
 Fringe rate (Hz) 0.001762
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build 2021:303:220112
 2021:304:133601
 2021:252:122852
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
o	0	0	0	0	0	0	0	0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -2.30920676078E+03 Apriori delay (usec) -2.30920917865E+03 Resid mbdelay (usec) 2.41786E-03 +/- 1.2E-04
 Sband delay (usec) -2.30920881340E+03 Apriori clock (usec) 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Phase delay (usec) -2.30920917501E+03 Apriori clockrate (us/s) -6.4600002E-07 Resid sbdelay (usec) 3.65250E-04 +/- 9.3E-04
 Delay rate (us/s) -1.30455548910E-01 Apriori rate (us/s) -1.30455569366E-01 Resid phdelay (usec) 3.63623E-06 +/- 4.0E-07
 Total phase (deg) -120.7 Apriori accel (us/s/s) 1.07206899042E-05 Resid rate (us/s) 2.04553E-08 +/- 1.7E-09
 Resid phase (deg) 112.8 +/- 12.4

RMS Theor. Amplitude 0.165 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.3 29.8 Search (2048X32) 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 102.5 51.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 17.3 17.5 Inc. seg. avg. 0.275 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 (%) 32.6 30.6 Inc. frq. avg. 0.163 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

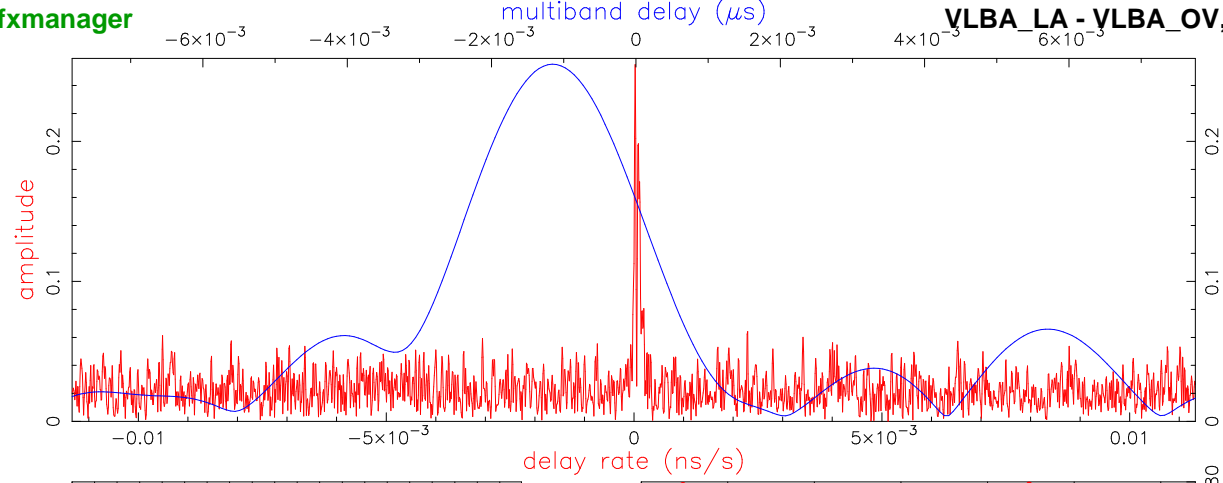
l: az 296.0 el 44.7 pa 77.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1014.835 604.068 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/lo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/lo.W.202.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, lo

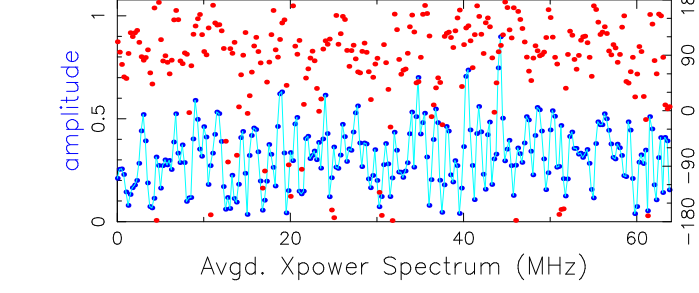
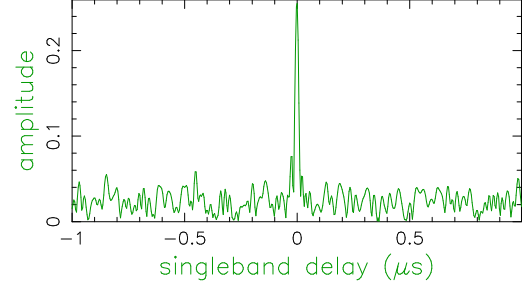
VLBA_LA - VLBA_OV, fgroup W, pol RL



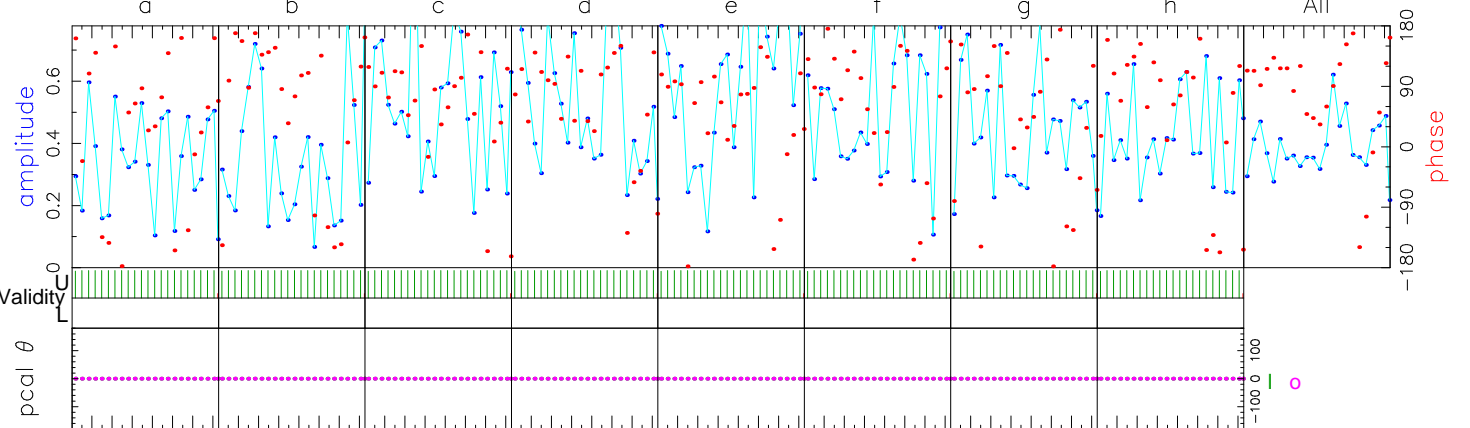
Fringe quality 9

SNR 14.5
 Int time 419.340
 Amp 0.259
 Phase 102.1
 PFD 5.4e-39
 Delays (us)
 SBD -0.001649
 MBD -0.001202
 Fringe rate (Hz) 0.001687
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build 2021:303:220112
 2021:304:133605
 2021:252:122852
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-2.30921038097E+03				-2.30920917865E+03				Resid mbdelay (usec)	-1.20232E-03 +/- 7.5E-05
Sband delay (usec)	-2.30921082765E+03				-6.3894634E+00				Resid sbdelay (usec)	-1.64900E-03 +/- 5.9E-04
Phase delay (usec)	-2.30920917535E+03				-6.4600002E-07				Resid phdelay (usec)	3.29393E-06 +/- 2.5E-07
Delay rate (us/s)	-1.30455549785E-01				-1.30455569366E-01				Resid rate (us/s)	1.95810E-08 +/- 1.0E-09
Total phase (deg)		-131.4			1.07206899042E-05				Resid phase (deg)	102.1 +/- 7.9
	RMS	Theor.	Amplitude	0.259 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	58.0	18.9	Search (2048X32)	0.249	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	61.4	33.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	16.6	11.2	Inc. seg. avg.	0.376	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.1	19.5	Inc. frq. avg.	0.258	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

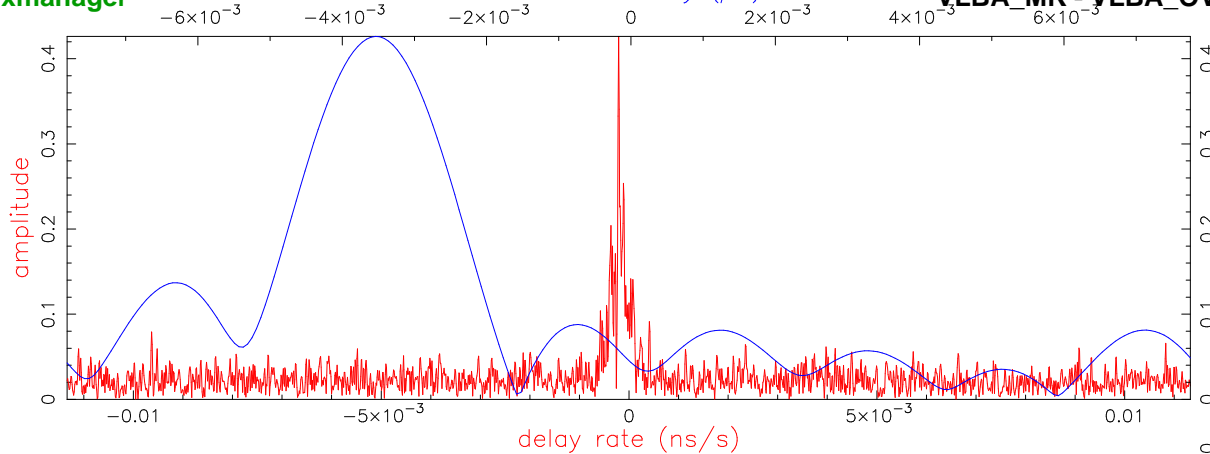
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, mo

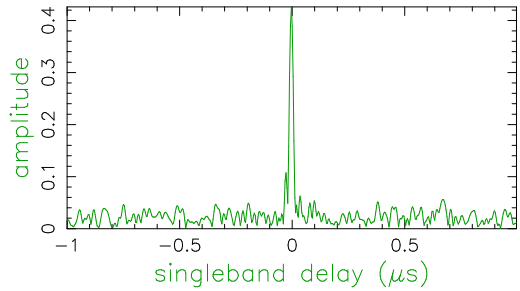
VLBA_MK - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

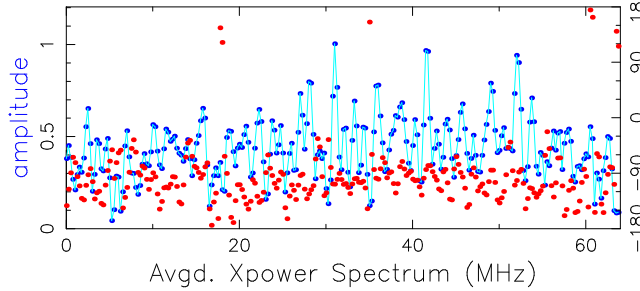


Fringe quality 9

SNR 23.9
 Int time 418.820
 Amp 0.426
 Phase -109.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.003923
 MBD -0.003532
 Fringe rate (Hz)
 -0.017709
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

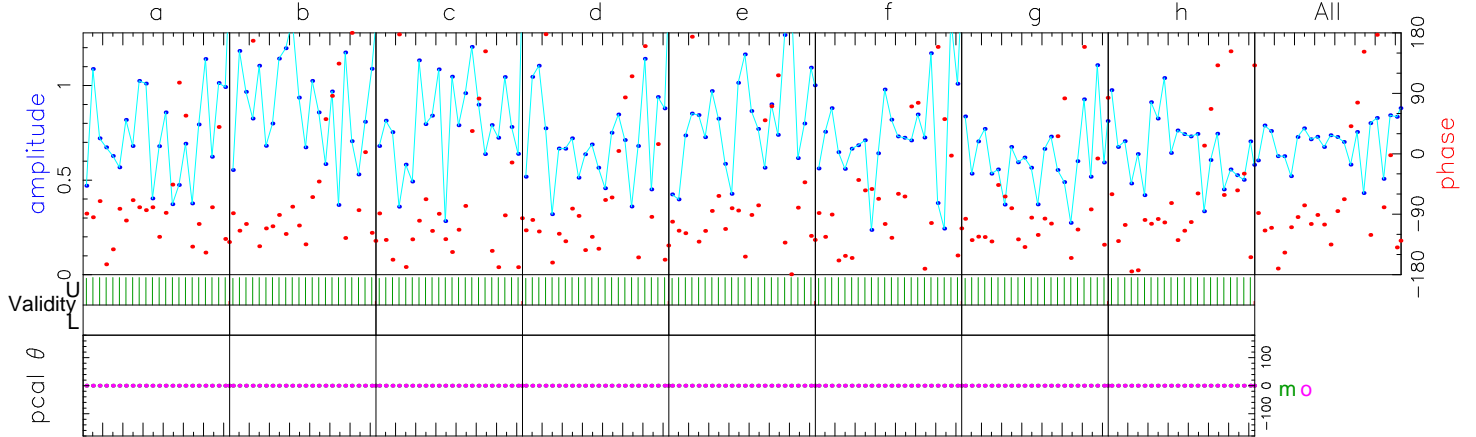


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.51
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133555
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.4	-107.9	-117.7	-123.1	-116.1	-98.3	-105.9	-105.8	Phase	-109.2
	0.5	0.6	0.4	0.4	0.5	0.4	0.4	0.4	Ampl.	0.4
	255.8	256.0	256.0	256.2	256.3	256.1	256.0	256.0	Sbd box	256.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.44326530586E+03		Apriori delay (usec)		2.44326883822E+03		Resid mbdelay (usec)		-3.53236E-03	+/- 4.6E-05
Sband delay (usec)	2.44326491497E+03		Apriori clock (usec)		1.1960838E+01		Resid sbdelay (usec)		-3.92325E-03	+/- 3.6E-04
Phase delay (usec)	2.44326883470E+03		Apriori clockrate (us/s)		-4.2000013E-08		Resid phdelay (usec)		-3.52003E-06	+/- 1.5E-07
Delay rate (us/s)	4.86230244584E-01		Apriori rate (us/s)		4.86230450164E-01		Resid rate (us/s)		-2.05580E-07	+/- 6.4E-10
Total phase (deg)	151.5		Apriori accel (us/s/s)		-3.28287128632E-05		Resid phase (deg)		-109.2	+/- 4.8

	RMS	Theor.	Amplitude	0.426 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	64.5	11.5	Search (2048X32)	0.405	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	68.6	20.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	9.8	6.8	Inc. seg. avg.	0.683	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	15.8	11.9	Inc. frq. avg.	0.428	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

m: az 341.8 el 66.8 pa 156.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3767.492 -4018.617 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/mo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/mo.W.171.1X1O2X

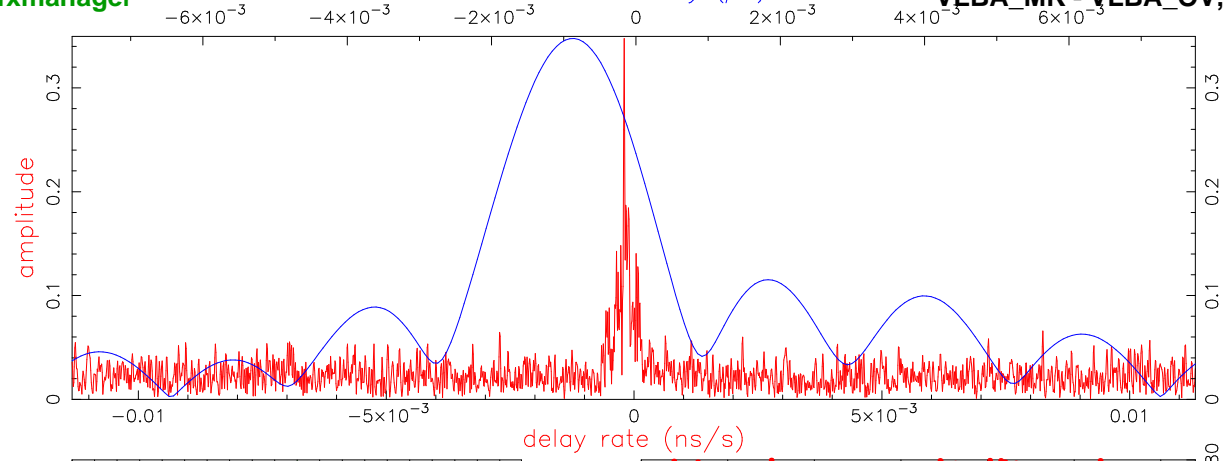
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, mo

VLBA_MK - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

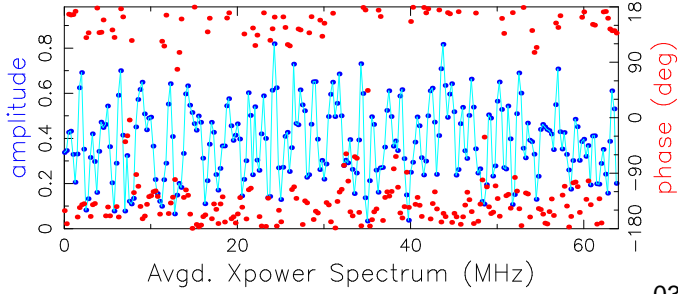
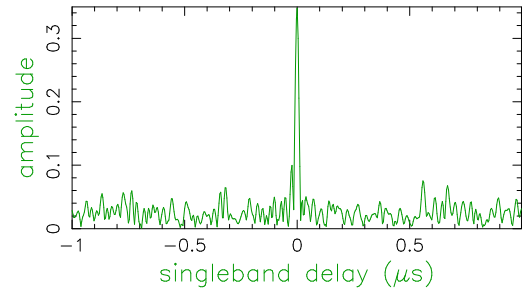


Fringe quality 9

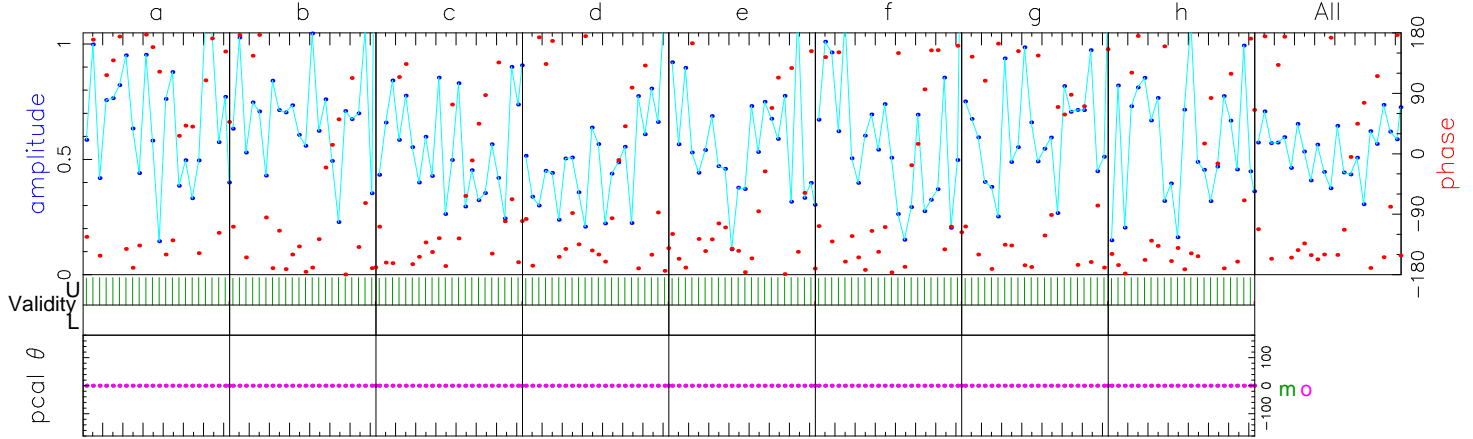
SNR 19.6
 Int time 418.820
 Amp 0.350
 Phase -161.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000956
 MBD -0.000909
 Fringe rate (Hz) -0.017628
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.51
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133559
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	176.4	-154.1	-151.9	-154.1	-148.9	-156.7	-174.1	-164.0	Phase	-161.6
	0.4	0.4	0.3	0.3	0.3	0.4	0.3	0.4	Ampl.	0.4
	256.8	256.7	256.2	256.7	256.8	257.0	257.1	257.3	Sbd box	256.8
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.44326792874E+03		Apriori delay (usec)		2.44326883822E+03		Resid mbdelay (usec)		-9.09477E-04	+/- 5.5E-05
Sband delay (usec)	2.44326788222E+03		Apriori clock (usec)		1.1960838E+01		Resid sbdelay (usec)		-9.56000E-04	+/- 4.4E-04
Phase delay (usec)	2.44326883300E+03		Apriori clockrate (us/s)		-4.2000013E-08		Resid phdelay (usec)		-5.21149E-06	+/- 1.9E-07
Delay rate (us/s)	4.86230245520E-01		Apriori rate (us/s)		4.86230450164E-01		Resid rate (us/s)		-2.04644E-07	+/- 7.8E-10
Total phase (deg)	99.0		Apriori accel (us/s/s)		-3.28287128632E-05		Resid phase (deg)		-161.6	+/- 5.9

	RMS	Theor.	Amplitude	0.350 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.9	14.0	Search (2048X32)	0.320	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	63.4	24.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	13.2	8.3	Inc. seg. avg.	0.528	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	14.5	14.5	Inc. frq. avg.	0.351	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 341.8 el 66.8 pa 156.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3767.492 -4018.617 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/mo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/mo.W.190.1X1O2X

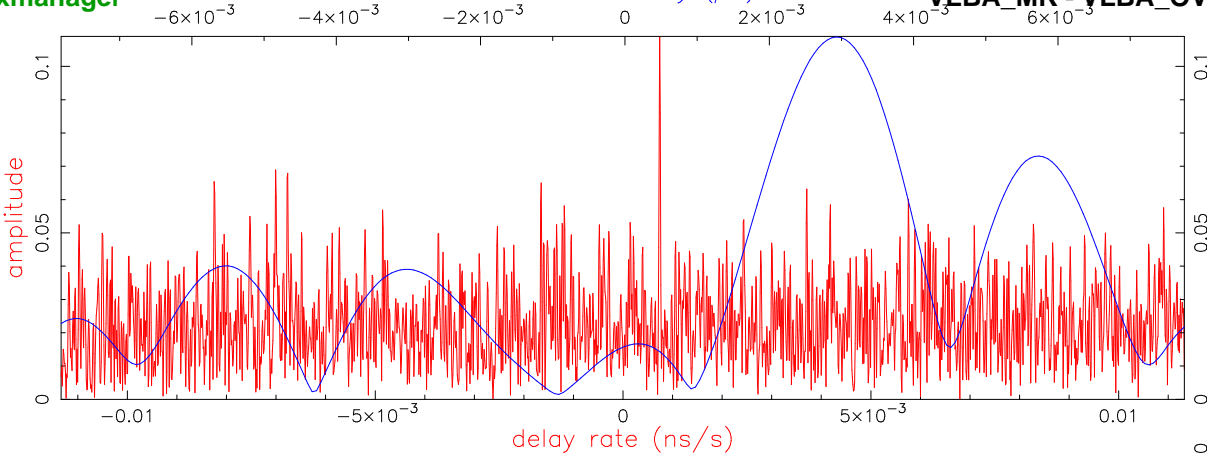
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, mo

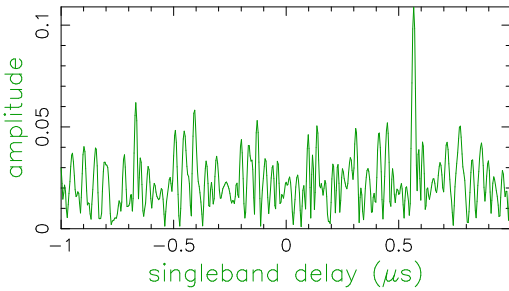
VLBA_MK - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

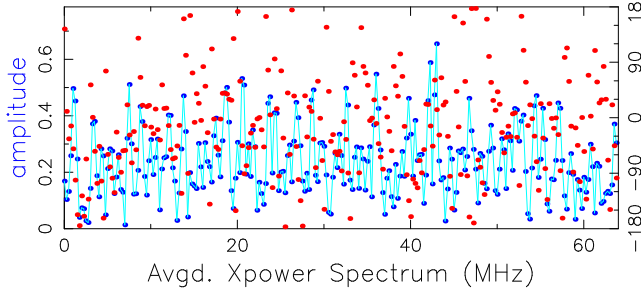


Fringe quality 0

SNR 6.1
Int time 418.820
Amp 0.109
Phase -12.7
PFD 2.6e-01
Delays (us)
SBD 0.566472
MBD 0.002936
Fringe rate (Hz) 0.063789
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

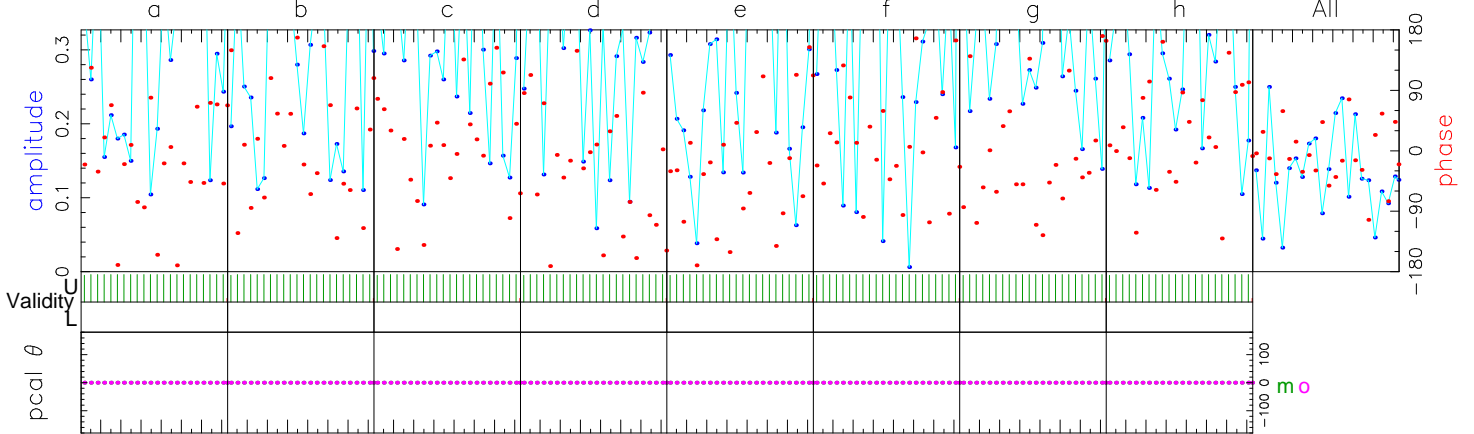


delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 2021:303:220112
Stop 2021:304:133603
FRT 2021:252:122852
RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-26.5	13.8	21.1	-44.8	-51.8	-13.1	-37.3	23.8	Phase	-12.7
	0.2	0.1	0.1	0.0	0.1	0.2	0.2	0.1	Ampl.	0.1
	363.9	22.4	121.7	1.5	143.9	403.1	151.8	408.2	Sbd box	402.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.44383427379E+03	Apriori delay (usec)	2.44326883822E+03	Resid mbdelay (usec)	2.93558E-03	+/-	1.8E-04
Sband delay (usec)	2.44383530972E+03	Apriori clock (usec)	1.1960838E+01	Resid sbdelay (usec)	5.66472E-01	+/-	1.4E-03
Phase delay (usec)	2.44326883781E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	-4.09798E-07	+/-	6.1E-07
Delay rate (us/s)	4.86231190687E-01	Apriori rate (us/s)	4.86230450164E-01	Resid rate (us/s)	7.40523E-07	+/-	2.5E-09
Total phase (deg)	247.9	Apriori accel (us/s/s)	-3.28287128632E-05	Resid phase (deg)	-12.7	+/-	18.8

ph/seg (deg)	44.2	Theor.	45.1	Amplitude	0.109 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.0		78.7	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	33.0		26.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.3		46.4	Inc. seg. avg.	0.103	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 341.8 el 66.8 pa 156.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3767.492 -4018.617 simultaneous interpolator

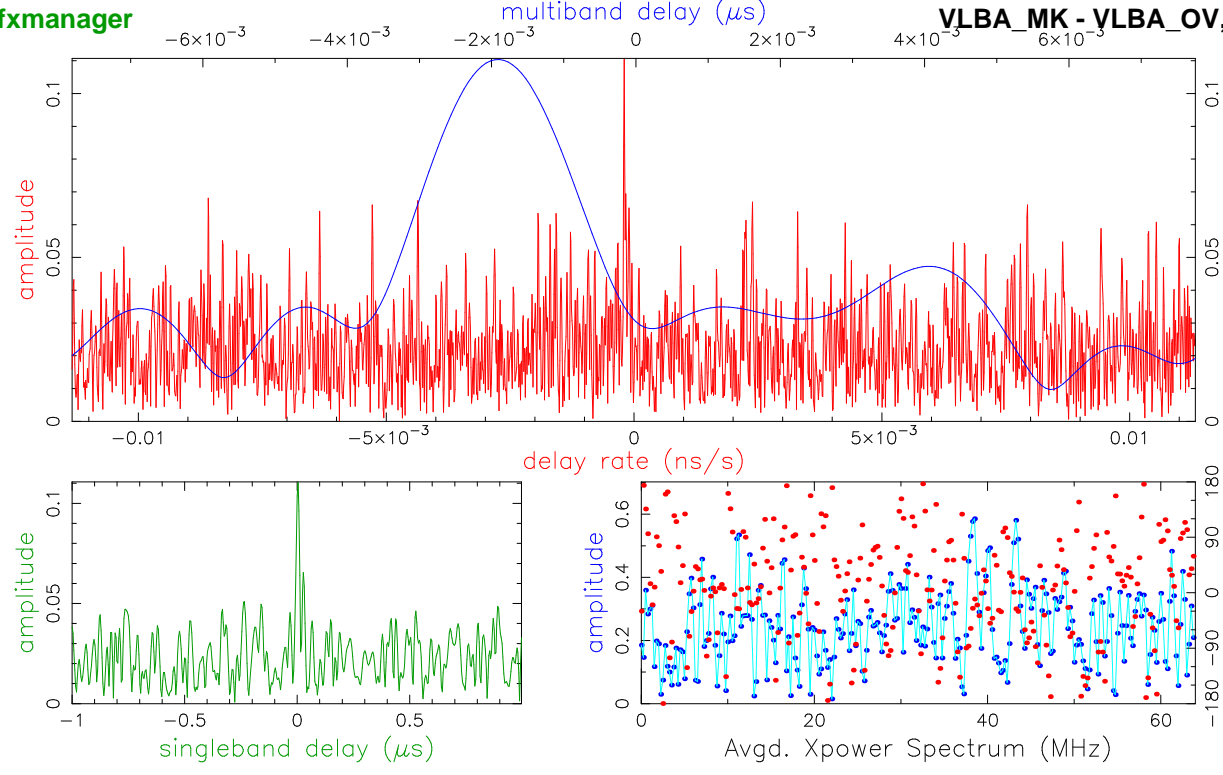
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/mo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/mo.W.210.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

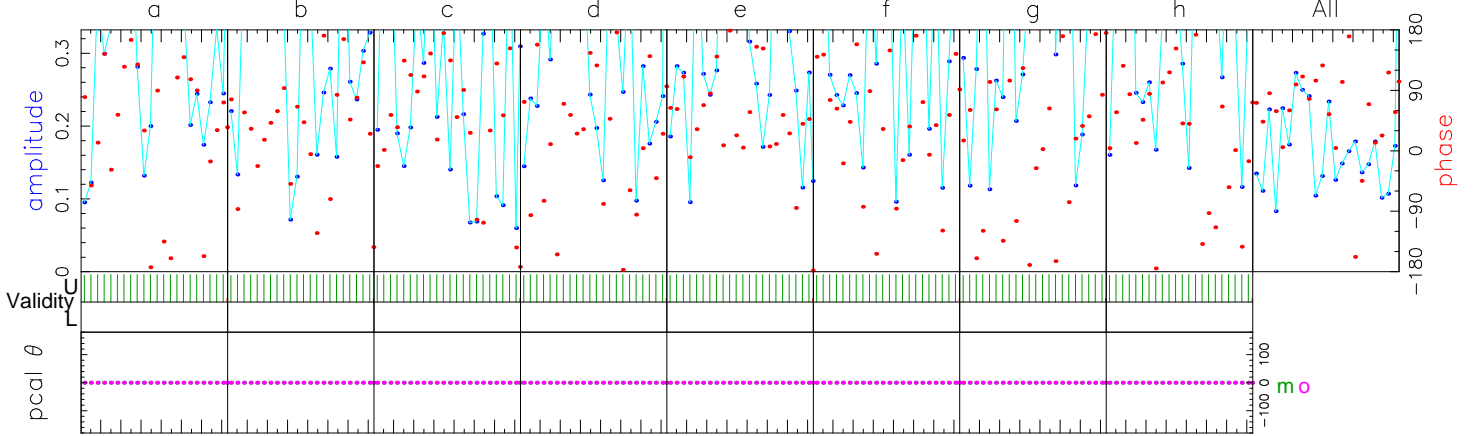
3C84.1X1O2X, No0117, mo

VLBA_MK - VLBA_OV, fgroup W, pol RL



Fringe quality 0
 SNR 6.2
 Int time 418.820
 Amp 0.111
 Phase 74.3
 PFD 1.4e-01
 Delays (us)
 SBD 0.003261
 MBD -0.001918
 Fringe rate (Hz)
 -0.017525
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.51
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133607
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	117.2	49.7	81.4	38.7	41.6	93.7	112.6	83.4	Phase	74.3
	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	173.8	291.3	12.0	317.6	258.8	220.5	74.6	272.8	Sbd box	257.8
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.44326692043E+03		Apriori delay (usec)		2.44326883822E+03		Resid mbdelay (usec)		-1.91779E-03	+/- 1.8E-04
Sband delay (usec)	2.44327209897E+03		Apriori clock (usec)		1.1960838E+01		Resid sbdelay (usec)		3.26075E-03	+/- 1.4E-03
Phase delay (usec)	2.44326884061E+03		Apriori clockrate (us/s)		-4.2000013E-08		Resid phdelay (usec)		2.39675E-06	+/- 6.0E-07
Delay rate (us/s)	4.86230246713E-01		Apriori rate (us/s)		4.86230450164E-01		Resid rate (us/s)		-2.03451E-07	+/- 2.5E-09
Total phase (deg)	334.9		Apriori accel (us/s/s)		-3.28287128632E-05		Resid phase (deg)		74.3	+/- 18.5

	RMS	Theor.	Amplitude	0.111 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.8	44.3	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	75.8	77.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	33.6	26.2	Inc. seg. avg.	0.129	Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.8	45.6	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 341.8 el 66.8 pa 156.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -3767.492 -4018.617 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/mo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/mo.W.229.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

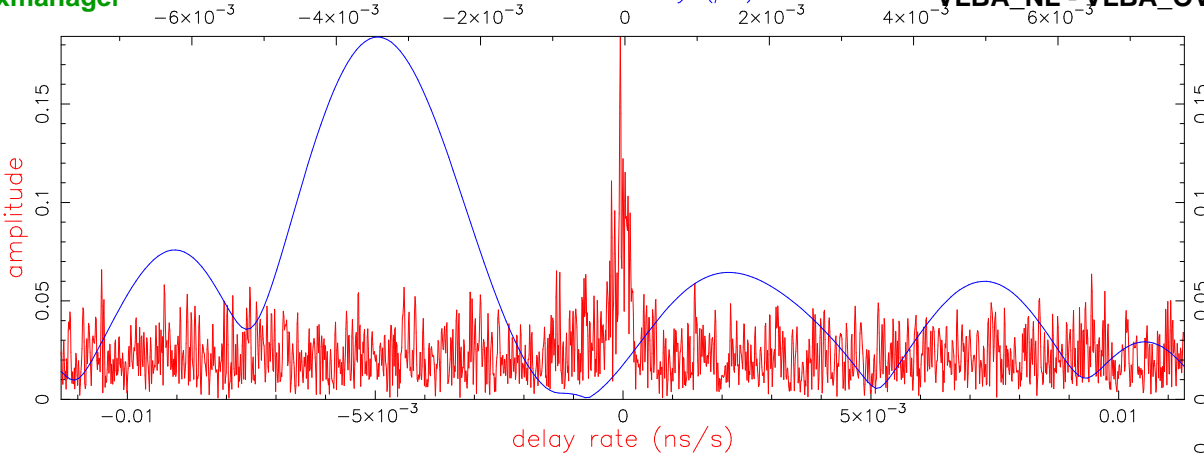
fxmanager

3C84.1X1O2X, No0117, no

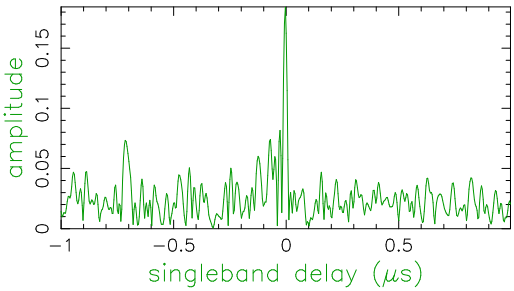
VLBA_NL - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

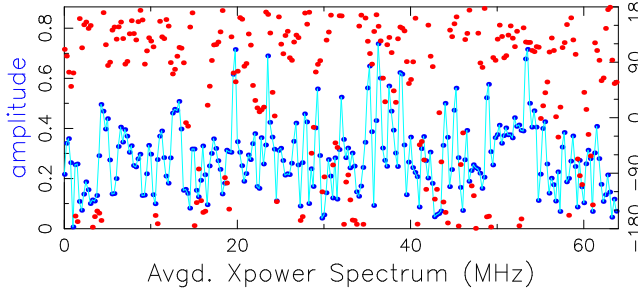
Fringe quality 9



SNR 10.3
 Int time 419.081
 Amp 0.184
 Phase 120.3
 PFD 2.5e-16
 Delays (us)
 SBD -0.004413
 MBD -0.003438
 Fringe rate (Hz)
 -0.004884
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

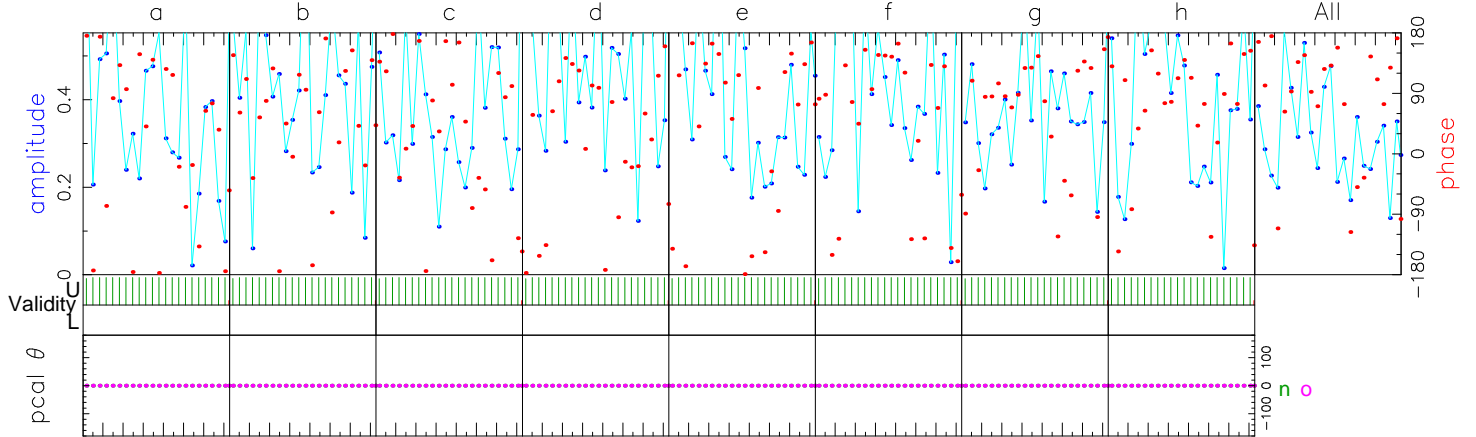


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133554
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	139.7	96.8	136.8	88.2	142.3	144.1	111.1	108.2	Phase	120.3
	0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.3	Ampl.	0.2
	23.3	255.1	54.4	255.8	256.3	255.5	396.8	255.8	Sbd box	255.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.47506788004E+03		Apriori delay (usec)		-4.47506444211E+03		Resid mbdelay (usec)		-3.43792E-03	+/- 1.1E-04
Sband delay (usec)	-4.4750688511E+03		Apriori clock (usec)		1.7291946E+00		Resid sbdelay (usec)		-4.41300E-03	+/- 8.3E-04
Phase delay (usec)	-4.47506443823E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		3.88000E-06	+/- 3.6E-07
Delay rate (us/s)	-1.51798739433E-01		Apriori rate (us/s)		-1.51798682732E-01		Resid rate (us/s)		-5.67009E-08	+/- 1.5E-09
Total phase (deg)	104.6		Apriori accel (us/s/s)		2.83760107006E-05		Resid phase (deg)		120.3	+/- 11.1

	RMS	Theor.	Amplitude	0.184 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	70.9	26.6	Search (2048X32)	0.183	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	94.6	46.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	24.2	15.7	Inc. seg. avg.	0.288	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	34.1	27.4	Inc. frq. avg.	0.191	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 296.2 el 37.0 pa 63.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1203.116 2372.663 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/no..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/no.W.165.1X1O2X

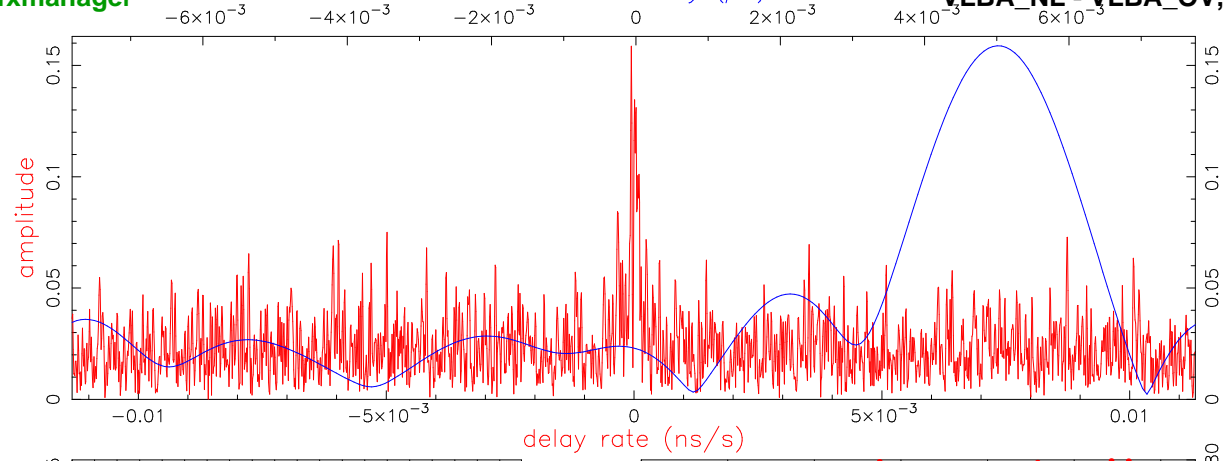
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, no

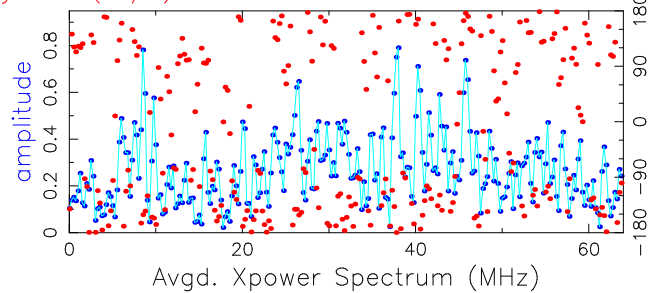
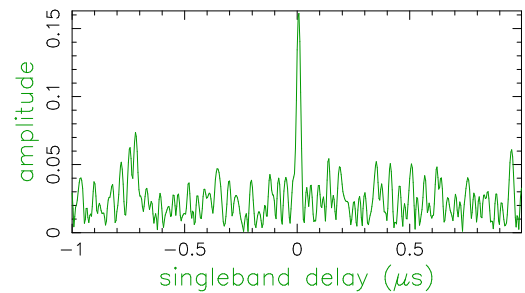
VLBA_NL - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)



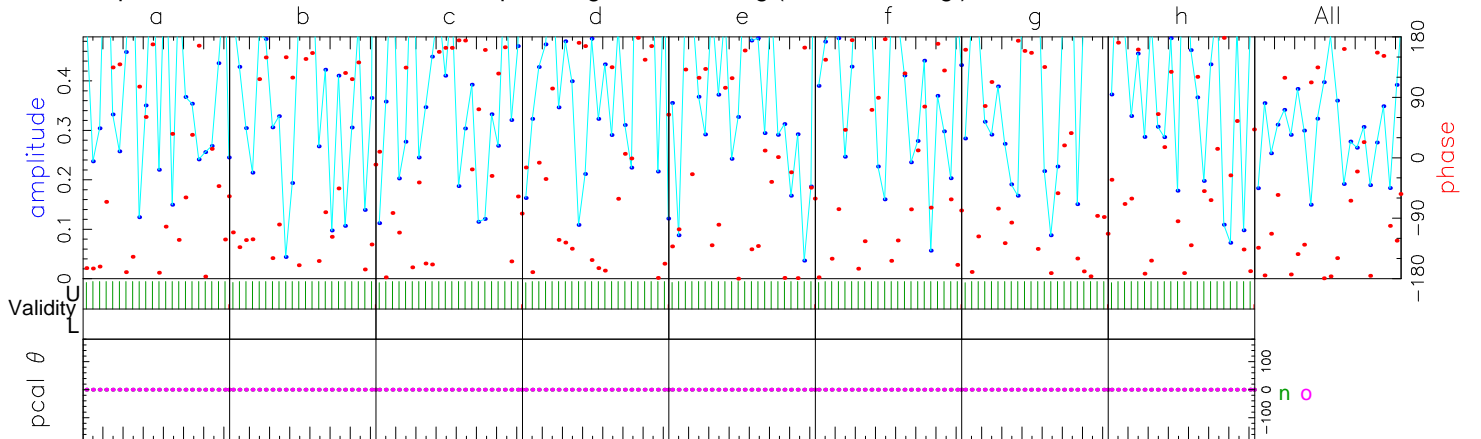
Fringe quality 9

SNR 9.1
 Int time 419.081
 Amp 0.163
 Phase -160.7
 PFD 2.7e-11
 Delays (us)
 SBD 0.006273
 MBD 0.005079
 Fringe rate (Hz) -0.004884
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133558
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.6	-166.3	-161.6	-170.0	-159.4	-173.0	-153.1	-159.3	Phase	-160.7
	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.1	Ampl.	0.2
	66.3	257.6	410.1	258.4	442.4	259.5	258.9	206.0	Sbd box	258.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	-4.47505936357E+03		Apriori delay (usec)		-4.47506444211E+03		Resid mbdelay (usec)		5.07855E-03	+/- 1.2E-04
Sband delay (usec)	-4.47505816886E+03		Apriori clock (usec)		1.7291946E+00		Resid sbdelay (usec)		6.27325E-03	+/- 9.4E-04
Phase delay (usec)	-4.47506444729E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-5.18112E-06	+/- 4.0E-07
Delay rate (us/s)	-1.51798739433E-01		Apriori rate (us/s)		-1.51798682732E-01		Resid rate (us/s)		-5.67016E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.83760107006E-05		Resid phase (deg)		-160.7	+/- 12.6

ph/seg (deg) 69.6 30.1 Amplitude 0.163 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.8 52.5 Search (2048X32) 0.157 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.4 17.8 Inc. seg. avg. 0.264 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.7 31.0 Inc. frq. avg. 0.154 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 296.2 el 37.0 pa 63.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1203.116 2372.663 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/no..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/no.W.185.1X1O2X

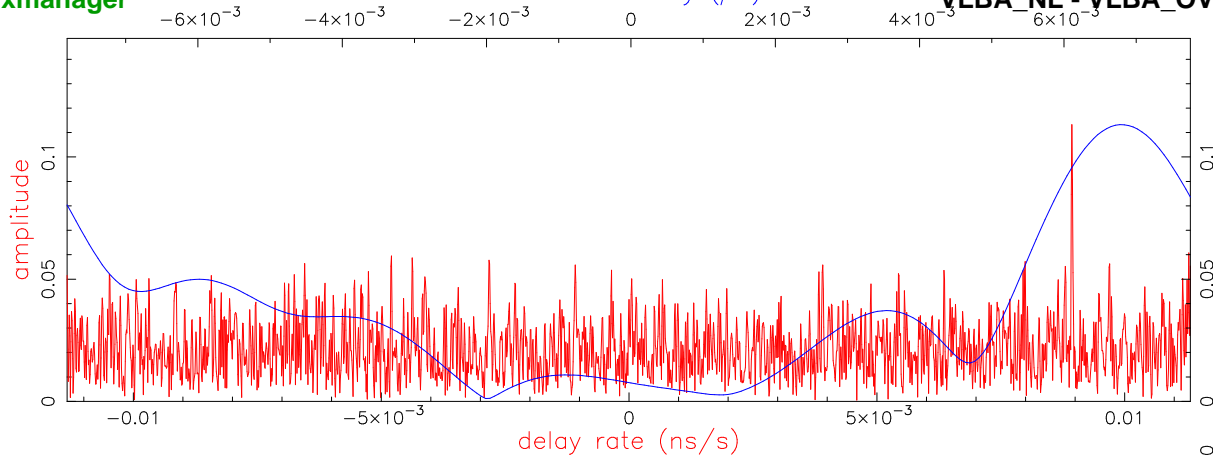
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, no

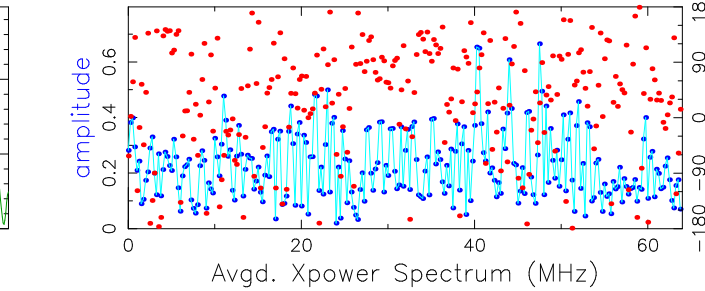
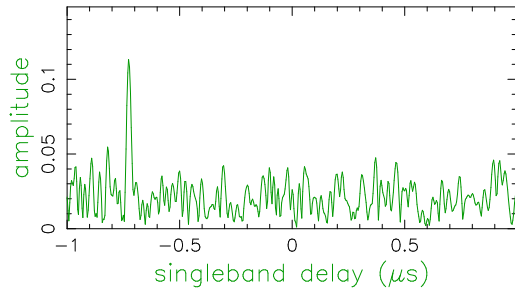
VLBA_NL - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)



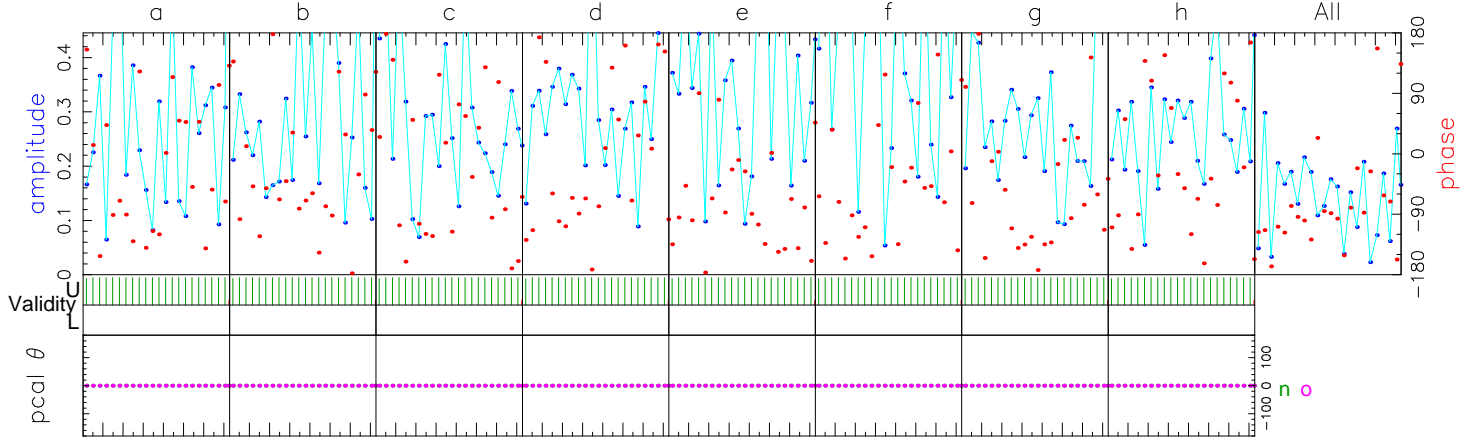
Fringe quality 0

SNR 6.3
 Int time 419.081
 Amp 0.149
 Phase -100.5
 PFD 5.9e-02
 Delays (us)
 SBD -0.726071
 MBD 0.006803
 Fringe rate (Hz) 0.770306
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133602
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.3	-72.7	-149.9	-144.8	-100.8	-88.9	-105.0	-84.1	Phase	-100.5
	0.1	0.2	0.1	0.1	0.3	0.3	0.2	0.1	Ampl.	0.1
	397.4	483.5	309.6	277.1	72.1	70.6	230.4	240.6	Sbd box	71.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	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)	-4.47579201362E+03		Apriori delay (usec)		-4.47506444211E+03		Resid mbdelay (usec)		6.80349E-03	+/- 1.7E-04
Sband delay (usec)	-4.47579051336E+03		Apriori clock (usec)		1.7291946E+00		Resid sbdelay (usec)		-7.26071E-01	+/- 1.4E-03
Phase delay (usec)	-4.47506444535E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-3.24056E-06	+/- 5.8E-07
Delay rate (us/s)	-1.51789740242E-01		Apriori rate (us/s)		-1.51798682732E-01		Resid rate (us/s)		8.94249E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.83760107006E-05		Resid phase (deg)		-100.5	+/- 18.1

ph/seg (deg) 50.3 43.3 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.3 75.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.6 25.5 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.9 44.6 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
 n: az 296.2 el 37.0 pa 63.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1203.116 2372.663 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/no..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/no.W.206.1X1O2X

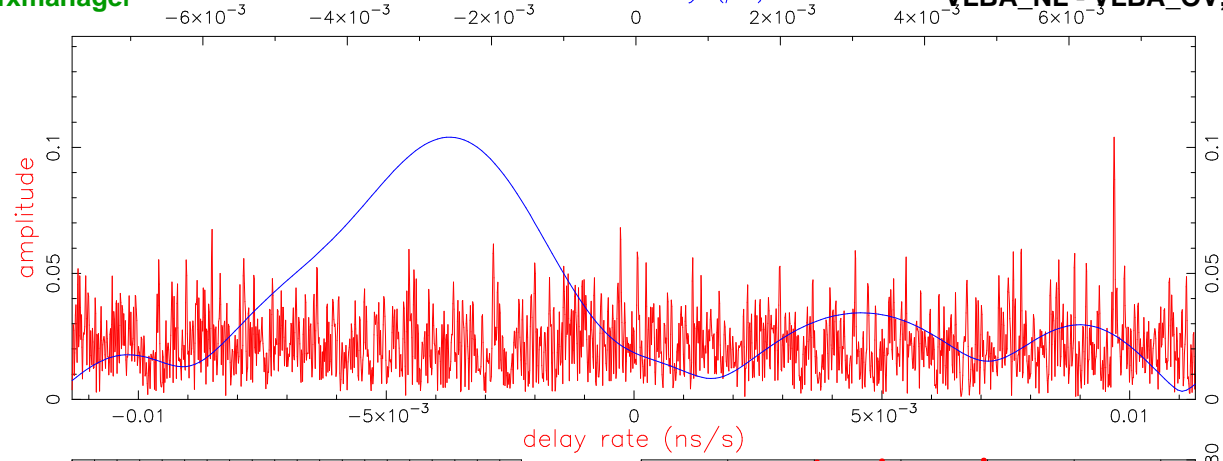
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, no

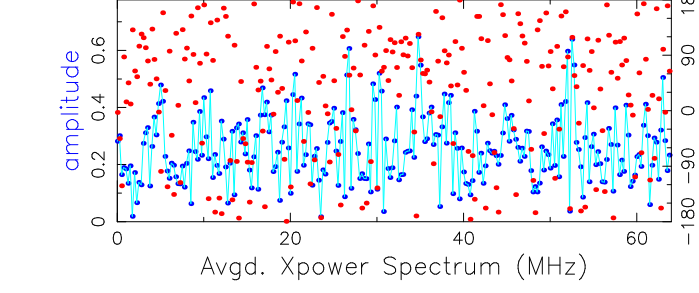
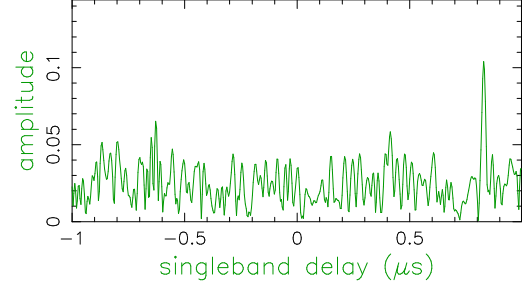
VLBA_NL - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



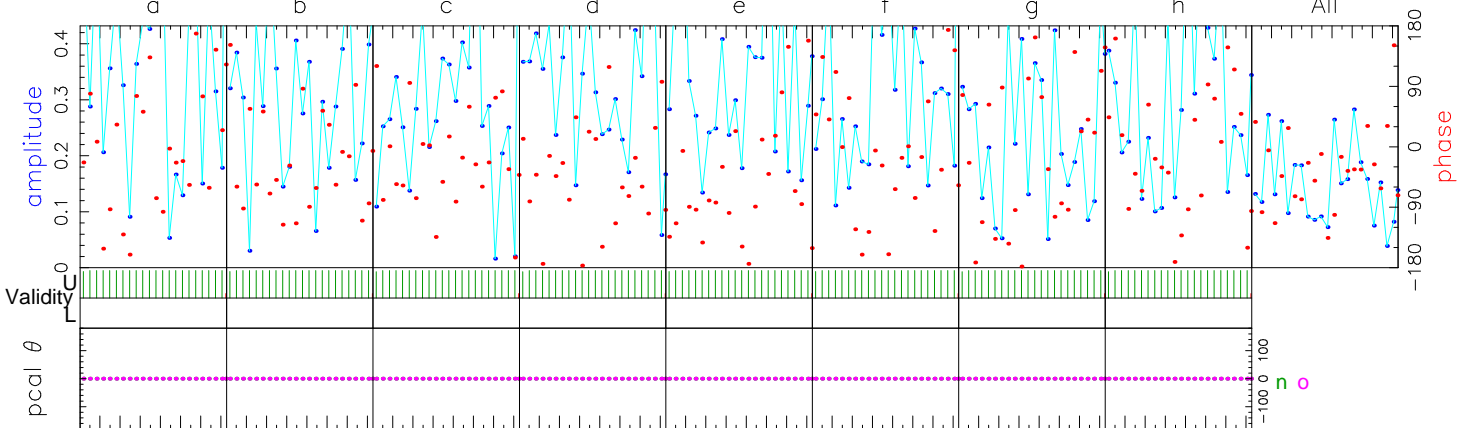
Fringe quality 0

SNR 5.8
 Int time 419.081
 Amp 0.144
 Phase -42.2
 PFD 7.2e-01
 Delays (us)
 SBD 0.828933
 MBD -0.002565
 Fringe rate (Hz)
 0.836021
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133606
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



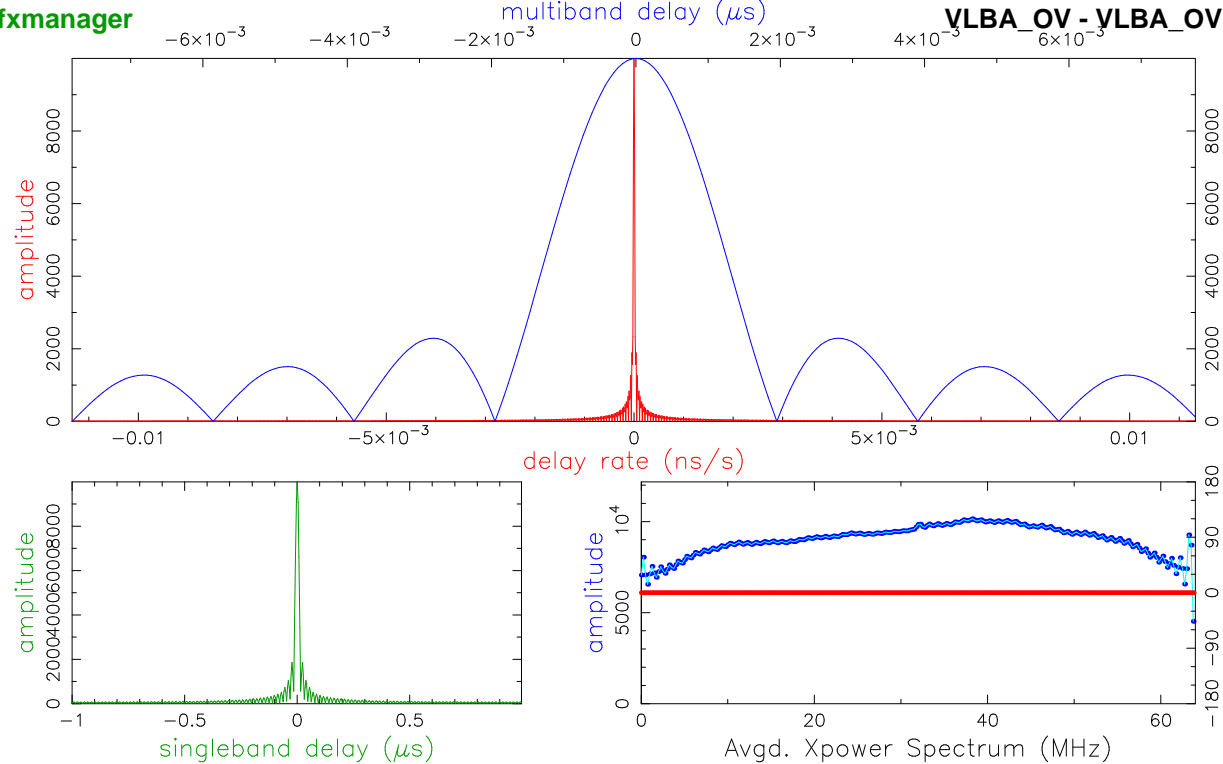
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-25.7	-50.6	-27.1	-46.1	-66.9	-33.4	164.3	-16.6	Phase	-42.2
	0.1	0.2	0.3	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	278.2	91.7	468.4	469.9	236.4	285.3	225.5	335.7	Sbd box	469.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.47423888161E+03	Apriori delay (usec)	-4.47506444211E+03	Resid mbdelay (usec)	-2.56450E-03	+/-	1.9E-04
Sband delay (usec)	-4.47423550961E+03	Apriori clock (usec)	1.7291946E+00	Resid sbdelay (usec)	8.28933E-01	+/-	1.5E-03
Phase delay (usec)	-4.47506444347E+03	Apriori clockrate (us/s)	-6.0000019E-08	Resid phdelay (usec)	-1.36100E-06	+/-	6.3E-07
Delay rate (us/s)	-1.51788977354E-01	Apriori rate (us/s)	-1.51798682732E-01	Resid rate (us/s)	9.70538E-06	+/-	2.6E-09
Total phase (deg)	-57.9	Apriori accel (us/s/s)	2.83760107006E-05	Resid phase (deg)	-42.2	+/-	19.6

ph/seg (deg)	58.8	Theor.	47.0	Amplitude	0.144 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.8		82.1	Search (2048X32)	0.100	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	65.2		27.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	49.7		48.4	Inc. seg. avg.	0.153	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.149	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

n: az 296.2 el 37.0 pa 63.6 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 1203.116 2372.663 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/no..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/no.W.224.1X1O2X

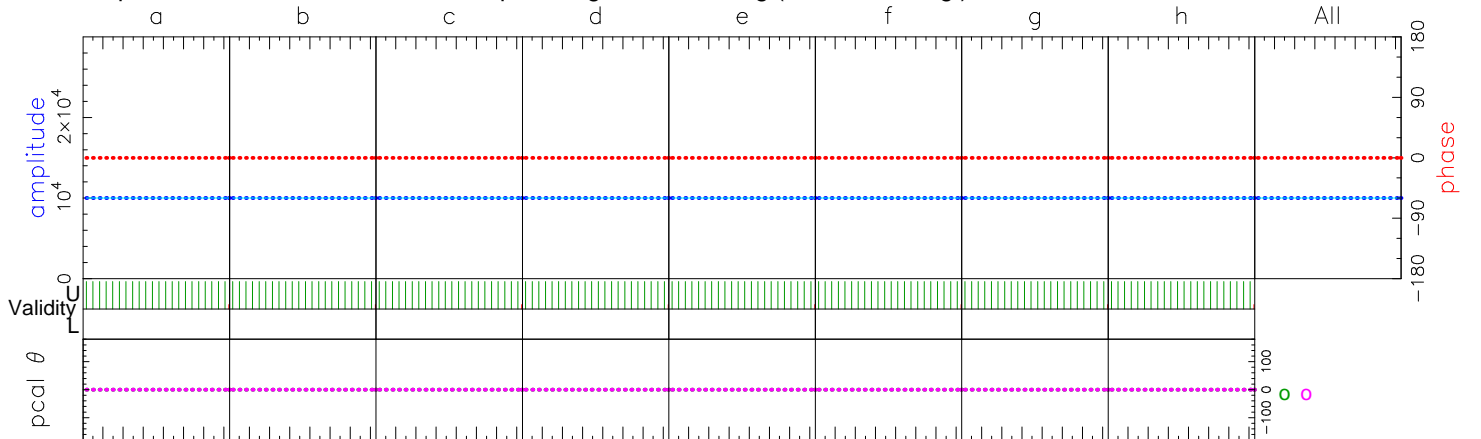


Fringe quality 9

SNR 560312.9
Int time 419.823
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

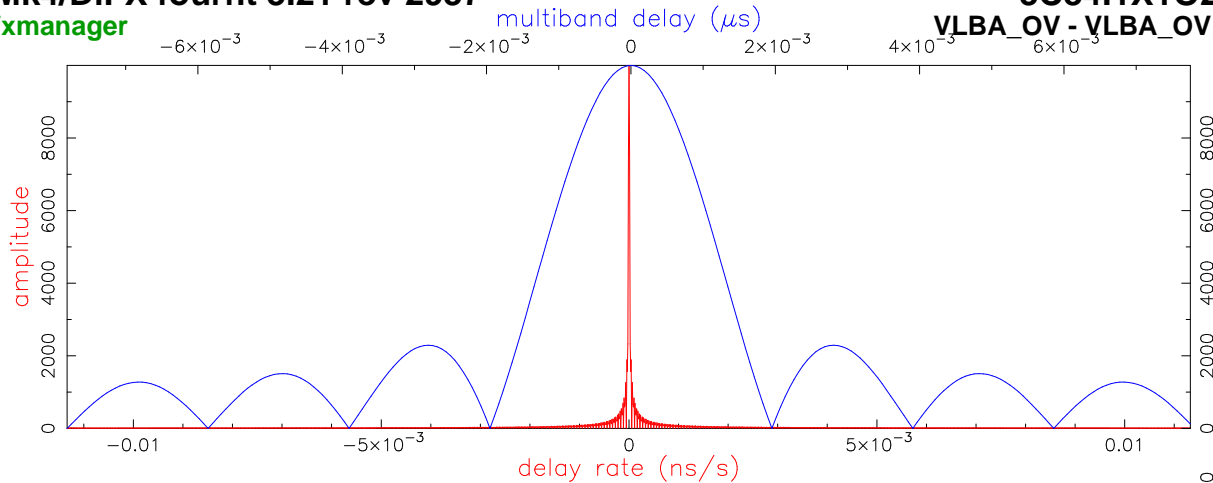
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133555
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



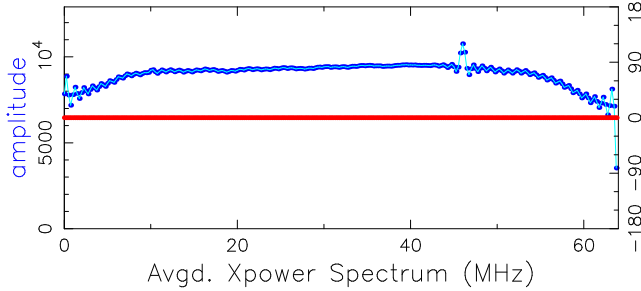
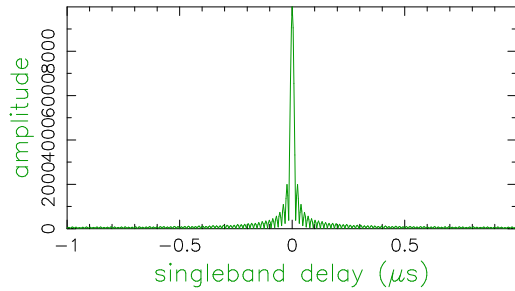
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	0	0	0	0	0	0	0	0	Ampl.	10000.0
o	0	0	0	0	0	0	0	0	Sbd box	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
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		+/- 1.9E-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		+/- 1.5E-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		+/- 6.6E-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		+/- 2.7E-14
Total phase (deg)			0.0							+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 0.0 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
o: az 291.8 el 54.1 pa 80.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/oo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/oo.W.166.1X1O2X simultaneous interpolator



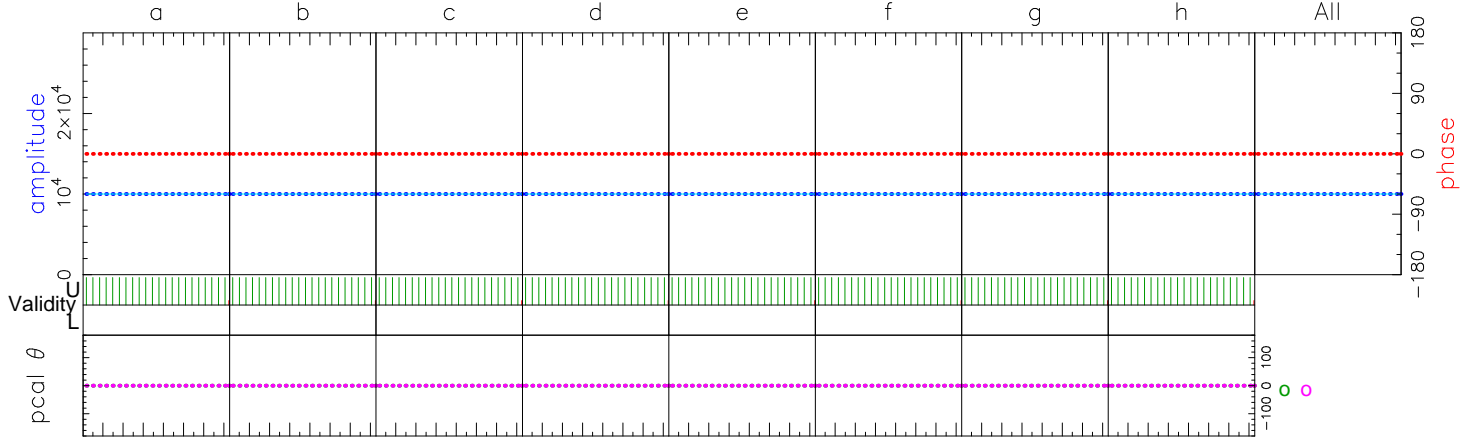
Fringe quality 9

SNR 560312.9
Int time 419.823
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133558
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
o	0	0	0	0	0	0	0	0	Ampl.	10000.0	
o	0	0	0	0	0	0	0	0	Sbd box	257.0	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used		
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
o	1000	1000	1000	1000	1000	1000	1000	1000	PC phase		
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
									Tracks		
									Chan ids		
									Tracks		
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		+/- 1.9E-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		+/- 1.5E-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		+/- 6.6E-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		+/- 2.7E-14	
Total phase (deg)			0.0							0.0	+/- 0.0
	RMS	Theor.	Amplitude	9999.999 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5					
ph/seg (deg)	0.0	0.0	Search (2048X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000			
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00	

Mk4/DiFX fourfit 3.21 rev 2937

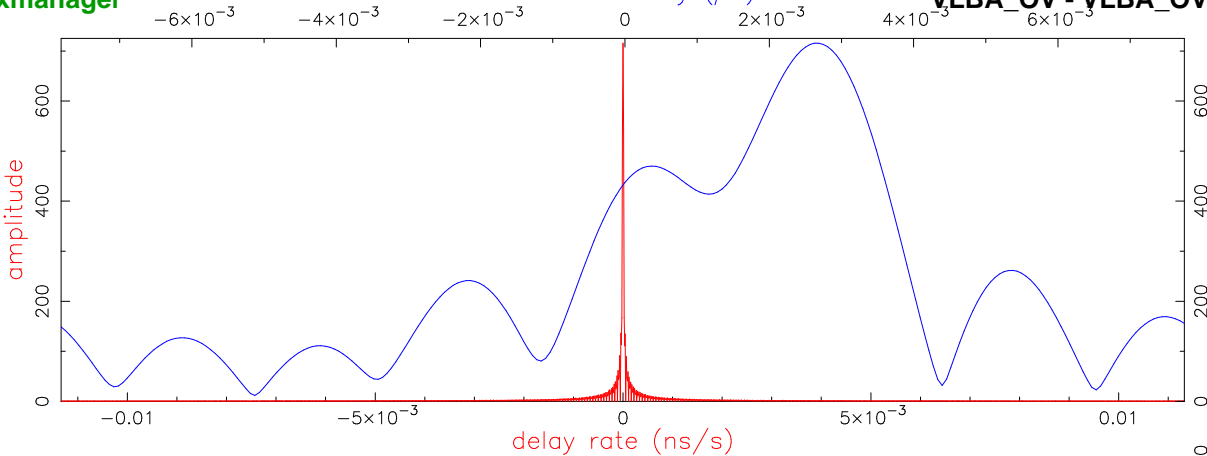
fxmanager

3C84.1X1O2X, No0117, oo

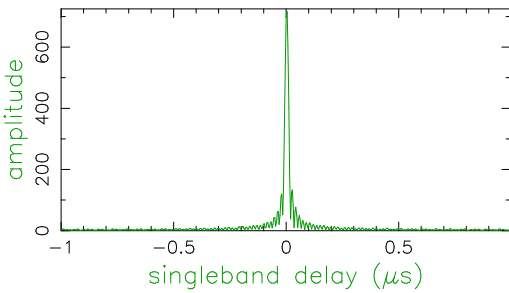
VLBA_OV - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

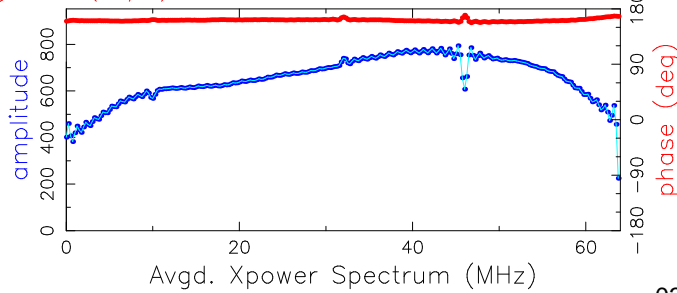
Fringe quality 5



SNR 40634.7
 Int time 419.823
 Amp 725.215
 Phase 158.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.002413
 MBD 0.002628
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

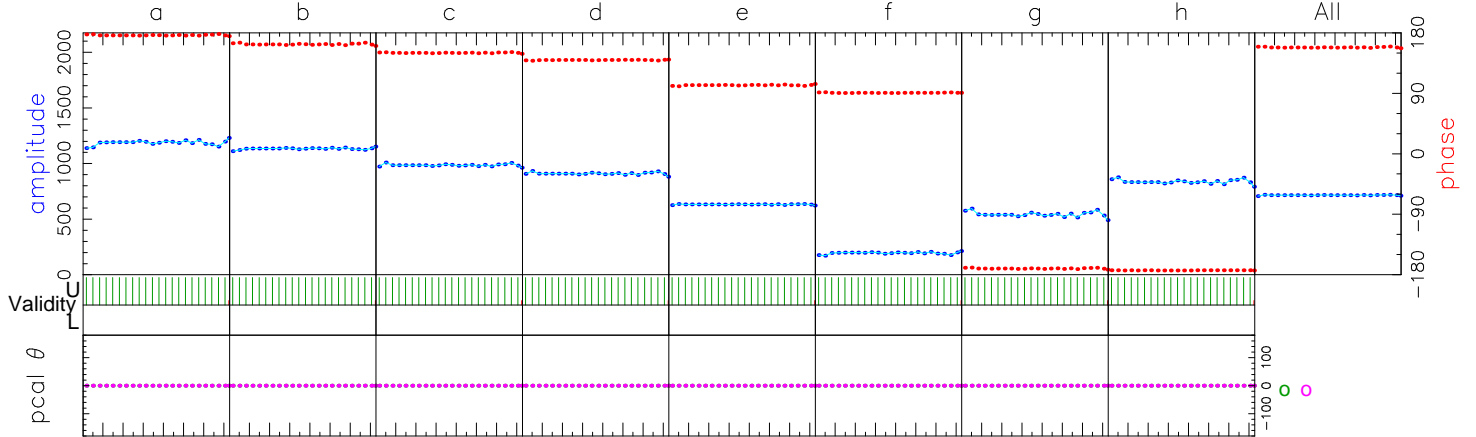


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133602
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	176.5	163.0	150.2	139.4	102.0	90.8	-170.6	-173.4	Phase	158.3
	1185.7	1132.8	986.1	910.9	632.5	194.4	545.6	838.5	Ampl.	803.3
	257.5	257.2	257.6	257.4	257.3	258.7	257.5	257.5	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.62800000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		2.62800E-03	+/- 2.7E-08
Sband delay (usec)	2.41300000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		2.41300E-03	+/- 2.1E-07
Phase delay (usec)	5.10599567074E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.10600E-06	+/- 9.1E-11
Delay rate (us/s)	-5.81017248059E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.81017E-11	+/- 3.8E-13
Total phase (deg)	158.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		158.3	+/- 0.0

RMS Theor. Amplitude 725.215 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.5 0.0 Search (2048X32) 701.019 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 41.4 0.0 Inc. seg. avg. 715.566 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 44.0 0.0 Inc. frq. avg. 803.317 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 o: az 291.8 el 54.1 pa 80.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/oo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/oo.W.204.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

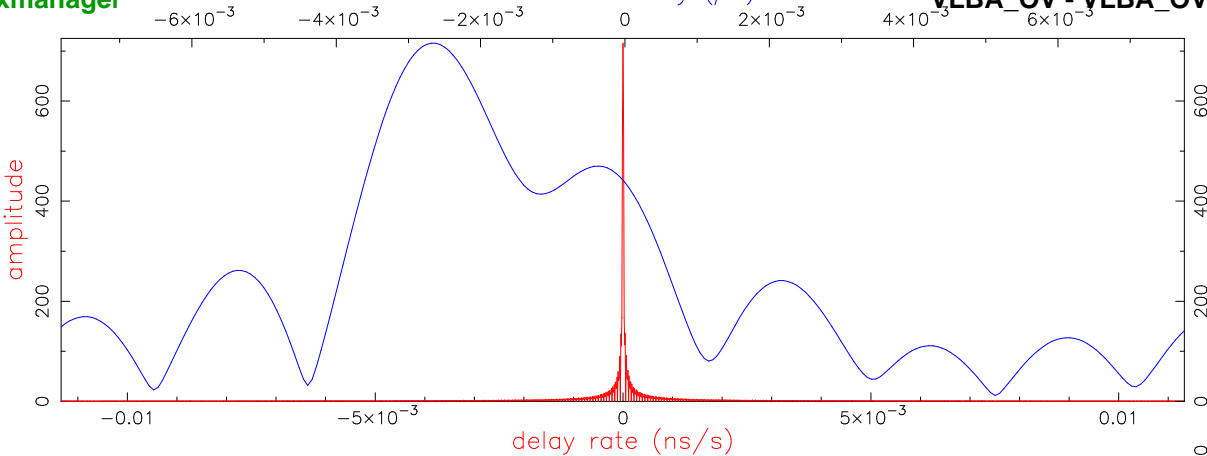
fxmanager

3C84.1X1O2X, No0117, oo

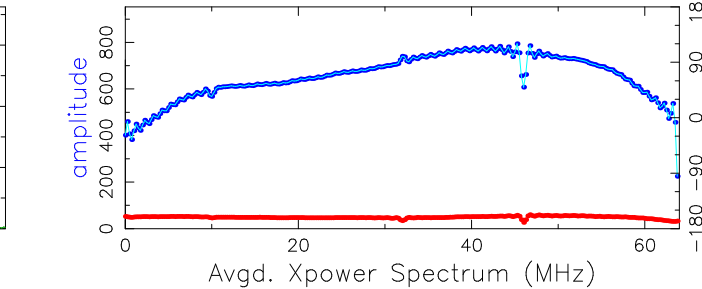
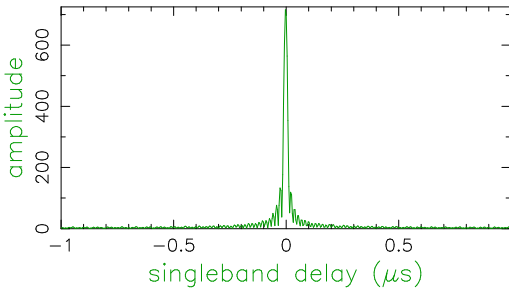
VLBA_OV - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 5

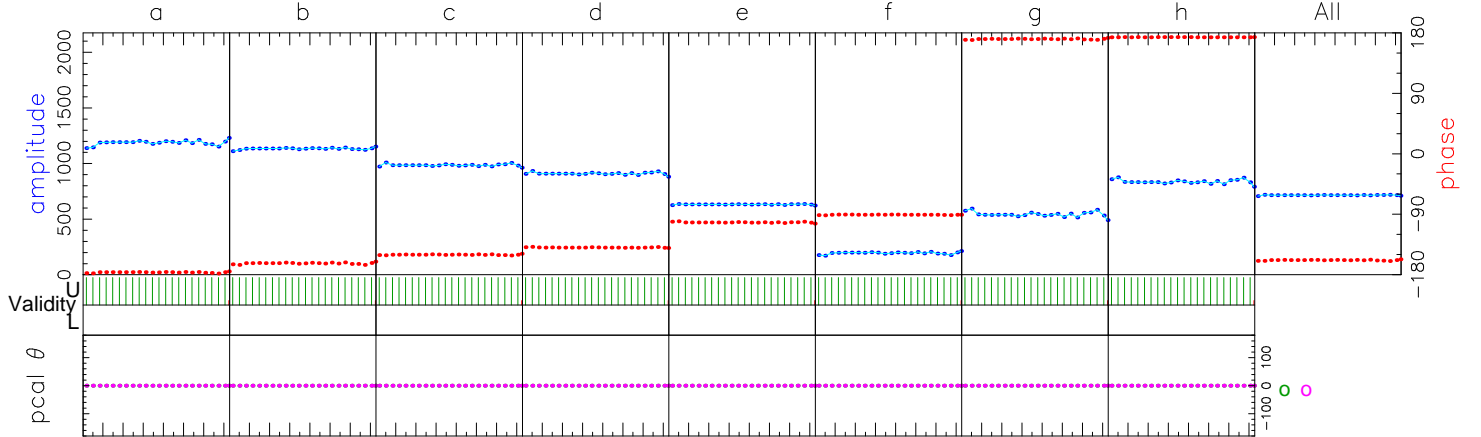


SNR 40634.7
 Int time 419.823
 Amp 725.215
 Phase -158.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002413
 MBD -0.002628
 Fringe rate (Hz)
 0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133605
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

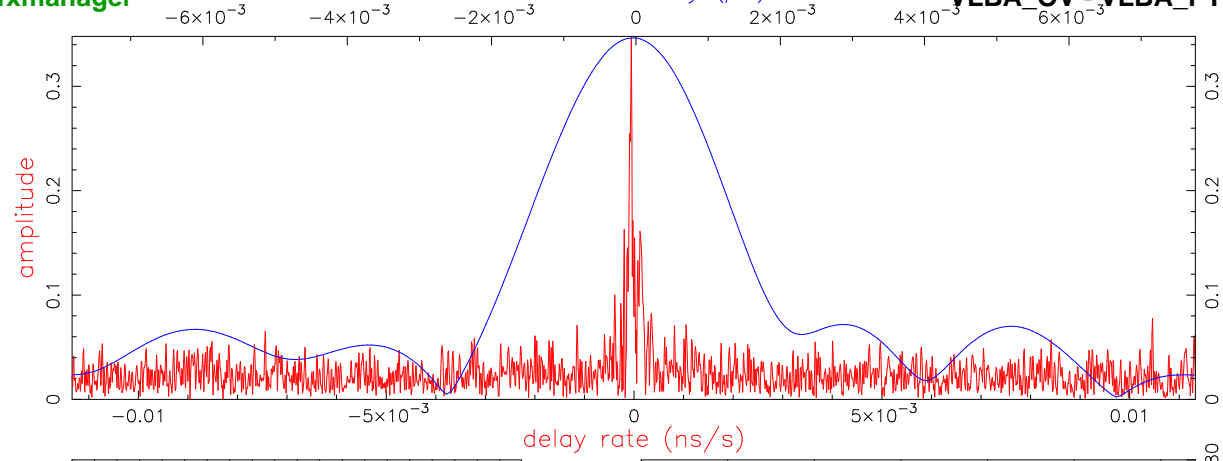


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.5	-163.0	-150.2	-139.4	-102.0	-90.8	170.6	173.4	Phase	-158.3
	1185.7	1132.8	986.1	910.9	632.5	194.4	545.6	838.5	Ampl.	803.3
	256.5	256.8	256.4	256.6	256.7	255.3	256.5	256.5	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.62800000000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-2.62800E-03	+/- 2.7E-08
Sband delay (usec)	-2.41300000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.41300E-03	+/- 2.1E-07
Phase delay (usec)	-5.10599567075E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.10600E-06	+/- 9.1E-11
Delay rate (us/s)	5.81017248059E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.81017E-11	+/- 3.8E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-158.3	+/- 0.0

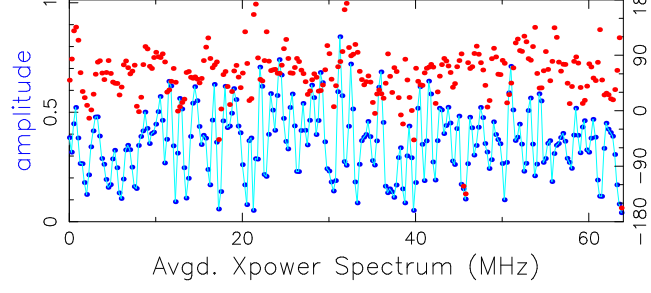
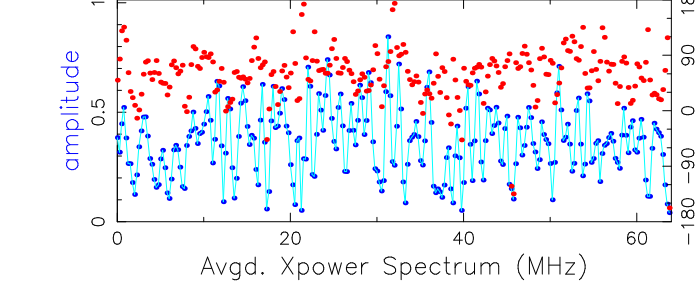
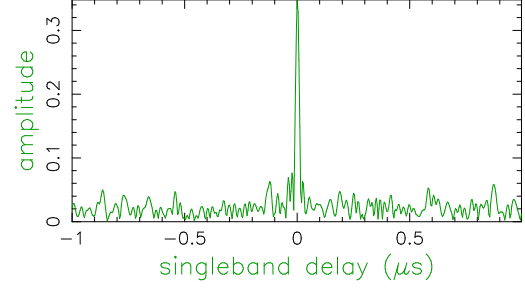
ph/seg (deg) 0.5 0.0 Amplitude 725.215 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.4 0.0 Search (2048X32) 701.019 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.0 0.0 Inc. seg. avg. 715.566 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 o: az 291.8 el 54.1 pa 80.7 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/oo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/oo.W.222.1X1O2X

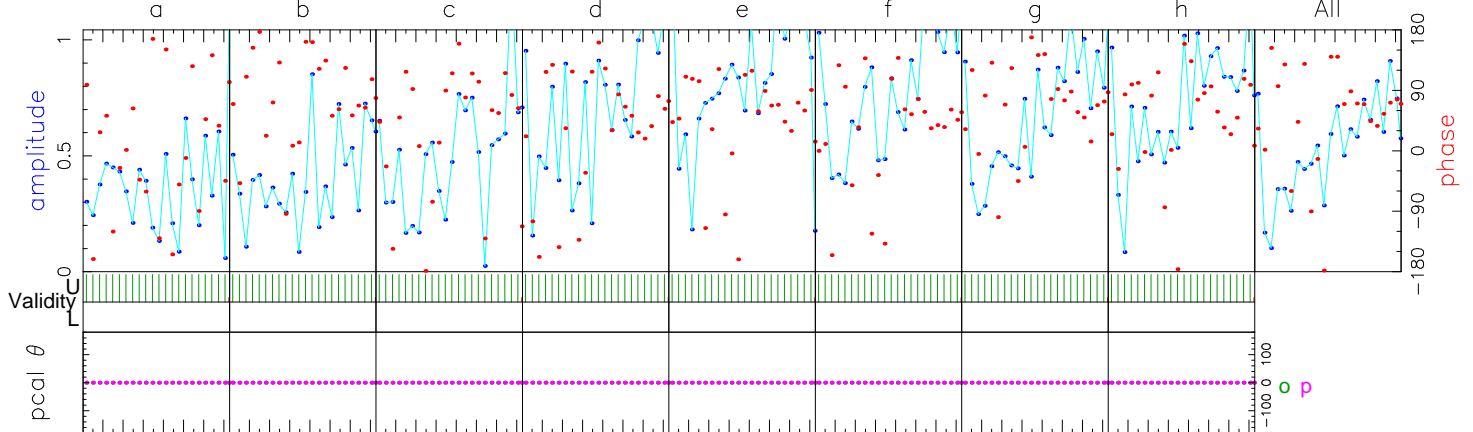
multiband delay (μ s)



Fringe quality 9
SNR 19.5
Int time 419.823
Amp 0.348
Phase 70.8
PFD 0.0e+00
Delays (us)
SBD 0.000824
MBD -0.000010
Fringe rate (Hz)
-0.005107
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133556
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

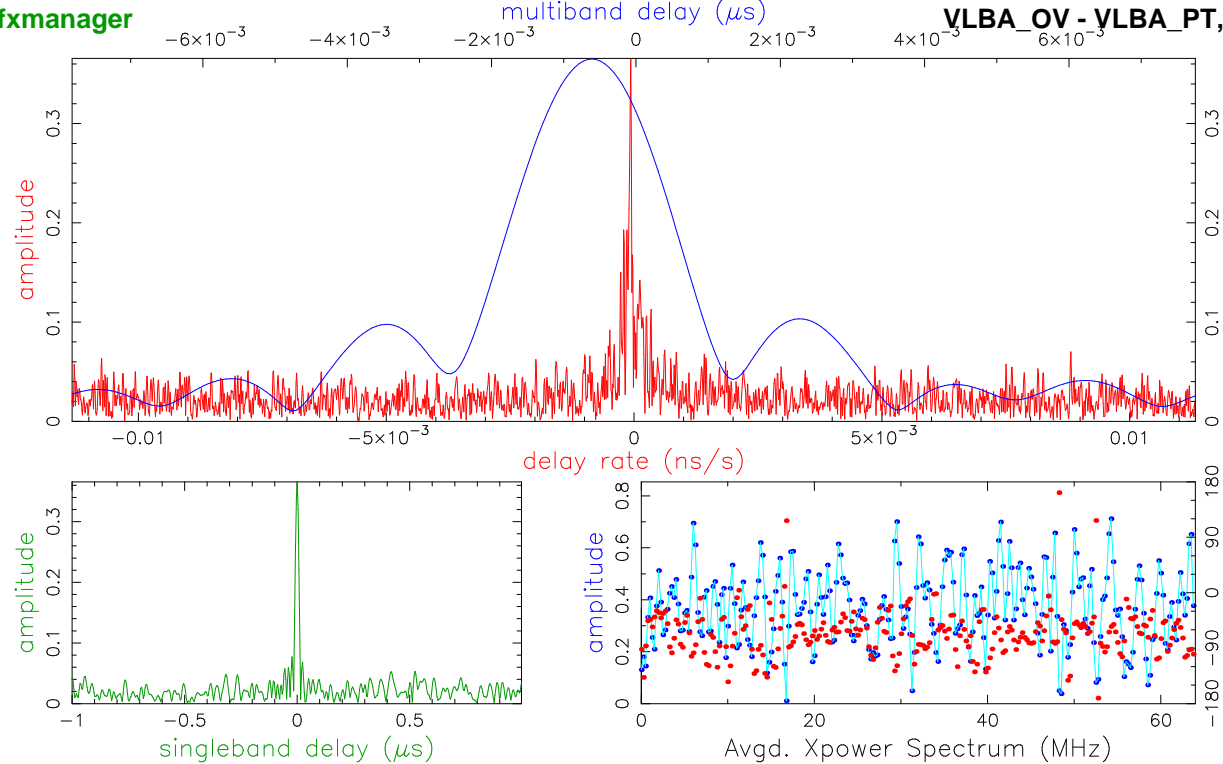


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



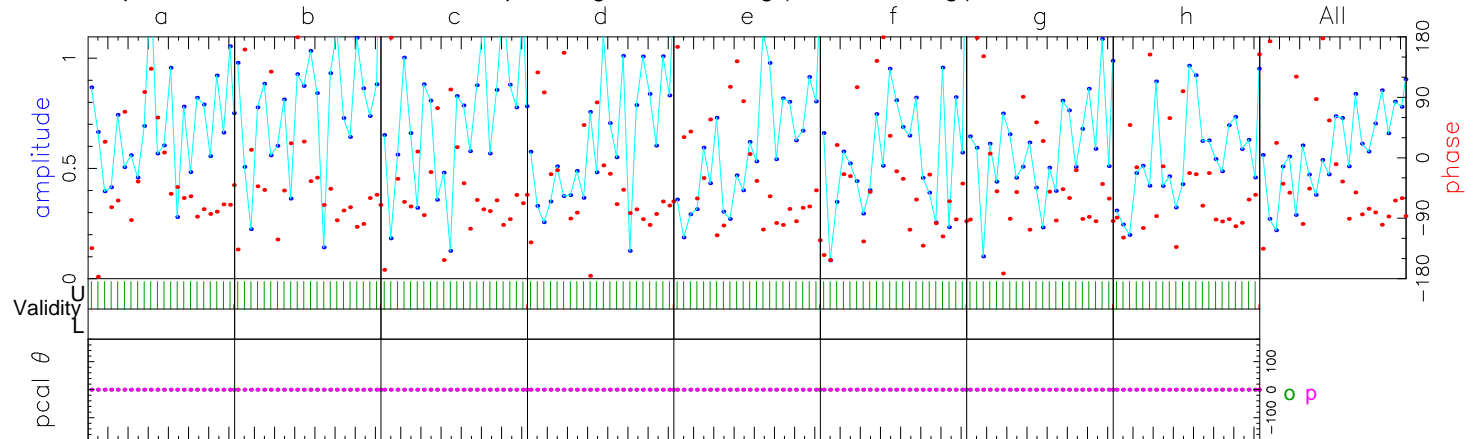
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	28.3	94.8	86.3	63.8	70.9	53.4	74.3	75.2	Phase	70.8
	0.1	0.2	0.3	0.4	0.5	0.4	0.4	0.5	Ampl.	0.4
	390.0	256.9	256.4	257.5	257.1	257.2	257.3	257.8	Sbd box	257.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.11044924889E+03		Apriori delay (usec)		2.11044925897E+03		Resid mbdelay (usec)		-1.00794E-05	+/- 5.6E-05
Sband delay (usec)	2.11045008347E+03		Apriori clock (usec)		-1.7775612E+00		Resid sbdelay (usec)		8.24500E-04	+/- 4.4E-04
Phase delay (usec)	2.11044926126E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		2.28418E-06	+/- 1.9E-07
Delay rate (us/s)	1.28885094803E-01		Apriori rate (us/s)		1.28885154095E-01		Resid rate (us/s)		-5.92914E-08	+/- 7.8E-10
Total phase (deg)	131.3		Apriori accel (us/s/s)		-8.13300804444E-06		Resid phase (deg)		70.8	+/- 5.9

ph/seg (deg) 65.6 14.1 Search (2048X32) 0.334 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 80.2 24.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 22.4 8.3 Inc. seg. avg. 0.517 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 38.8 14.5 Inc. frq. avg. 0.352 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 291.8 el 54.1 pa 80.7 p: az 296.9 el 45.4 pa 79.6 u,v (fr/asec) -999.289 -284.499 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/op..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/op.W.176.1X1O2X



Fringe quality 9
SNR 20.5
Int time 419.823
Amp 0.366
Phase -69.0
PFD 0.0e+00
Delays (us)
SBD -0.000571
MBD -0.000621
Fringe rate (Hz)
-0.005329
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133600
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-68.7	-70.4	-68.7	-67.4	-72.3	-69.1	-69.0	-65.7	Phase	-69.0
	0.3	0.5	0.5	0.4	0.3	0.3	0.3	0.3	Ampl.	0.4
	256.5	256.8	257.1	256.9	257.4	256.8	256.2	256.8	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.11044863748E+03		Apriori delay (usec)		2.11044925897E+03		Resid mbdelay (usec)		-6.21495E-04	+/- 5.3E-05
Sband delay (usec)	2.11044868822E+03		Apriori clock (usec)		-1.7775612E+00		Resid sbdelay (usec)		-5.70750E-04	+/- 4.2E-04
Phase delay (usec)	2.11044925675E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-2.22385E-06	+/- 1.8E-07
Delay rate (us/s)	1.28885092234E-01		Apriori rate (us/s)		1.28885154095E-01		Resid rate (us/s)		-6.18606E-08	+/- 7.4E-10
Total phase (deg)			Apriori accel (us/s/s)		-8.13300804444E-06		Resid phase (deg)		-69.0	+/- 5.6

ph/seg (deg) RMS Theor. Amplitude 0.366 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 73.0 13.4 Search (2048X32) 0.351 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 75.9 23.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 2.1 7.9 Inc. seg. avg. 0.563 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 22.4 13.8 Inc. frq. avg. 0.362 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
o: az 291.8 el 54.1 pa 80.7 p: az 296.9 el 45.4 pa 79.6 u,v (fr/asec) -999.289 -284.499 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/op..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/op.W.198.1X1O2X

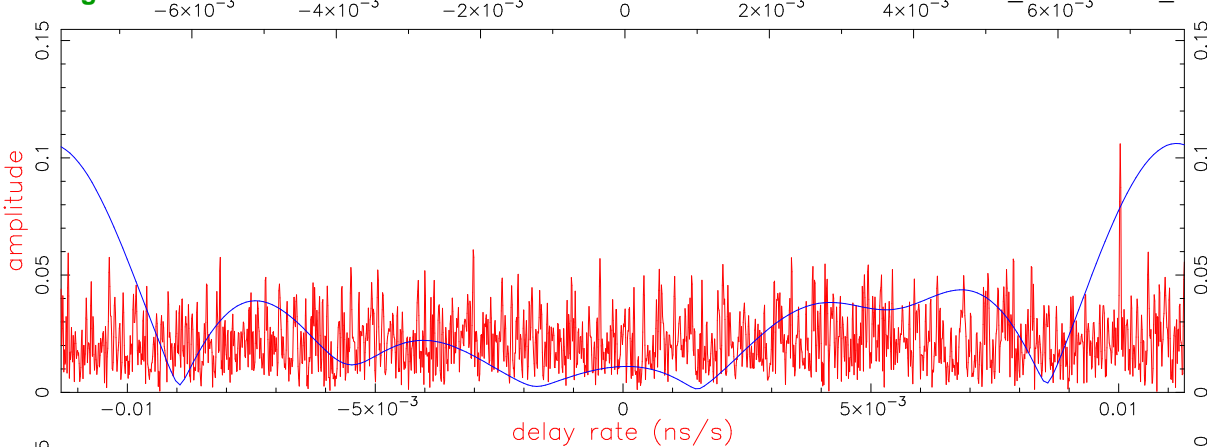
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, op

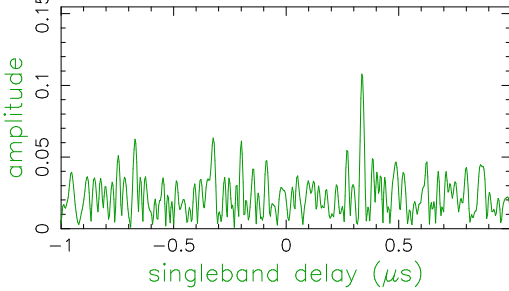
VLBA_OV - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

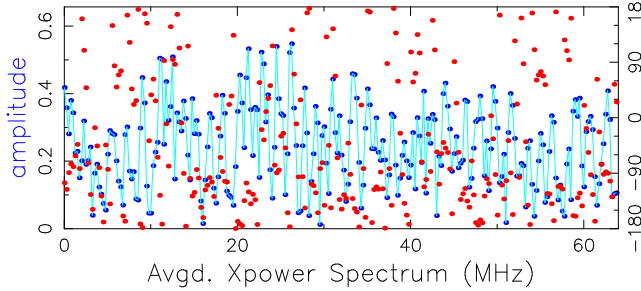


Fringe quality 0

SNR 6.1
 Int time 419.823
 Amp 0.155
 Phase 73.1
 PFD 2.1e-01
 Delays (us)
 SBD 0.337528
 MBD 0.007585
 Fringe rate (Hz) 0.865510
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

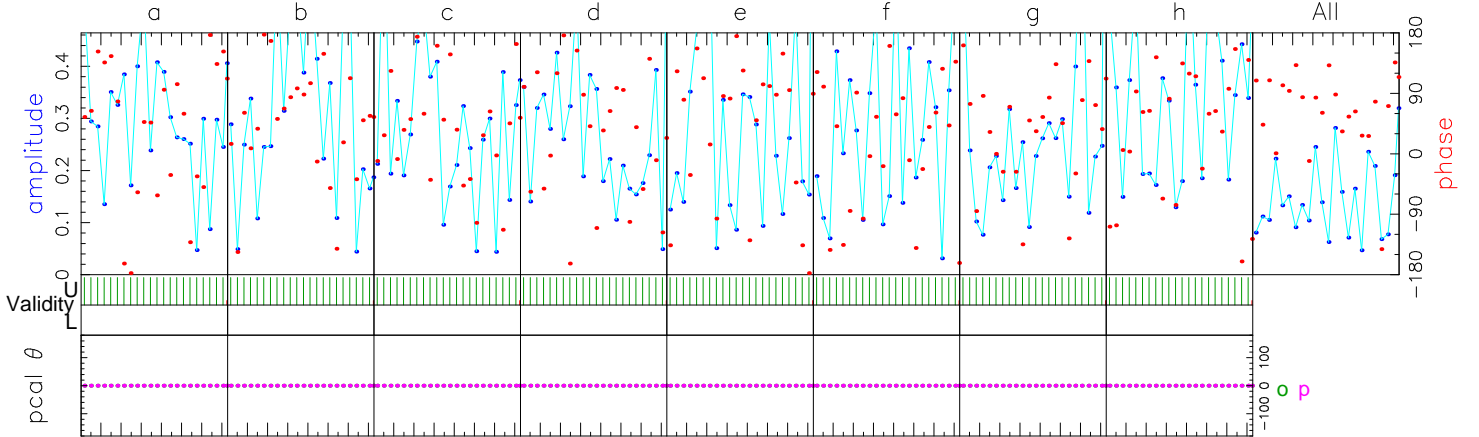


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build 2021:303:220112
 2021:304:133605
 2021:252:122852
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.11078496921E+03	Apriori delay (usec)	2.11044925897E+03	Resid mbdelay (usec)	7.58524E-03	+/-	1.8E-04
Sband delay (usec)	2.11078678647E+03	Apriori clock (usec)	-1.7775612E+00	Resid sbdelay (usec)	3.37528E-01	+/-	1.4E-03
Phase delay (usec)	2.11044926133E+03	Apriori clockrate (us/s)	4.7999999E-07	Resid phdelay (usec)	2.35680E-06	+/-	6.0E-07
Delay rate (us/s)	1.28895201811E-01	Apriori rate (us/s)	1.28885154095E-01	Resid rate (us/s)	1.00477E-05	+/-	2.5E-09
Total phase (deg)	133.6	Apriori accel (us/s/s)	-8.13300804444E-06	Resid phase (deg)	73.1	+/-	18.7

ph/seg (deg)	RMS 50.3	Theor. 44.8	Amplitude Search (2048X32)	0.155 +/- 0.025	0.103	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.7	78.2	Interp.	0.000	0.000E+00	0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.6	26.4	Inc. seg. avg.	0.153	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.6	46.1	Inc. frq. avg.	0.143	Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00

o: az 291.8 el 54.1 pa 80.7 p: az 296.9 el 45.4 pa 79.6 u,v (fr/asec) -999.289 -284.499 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/op..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/op.W.218.1X1O2X

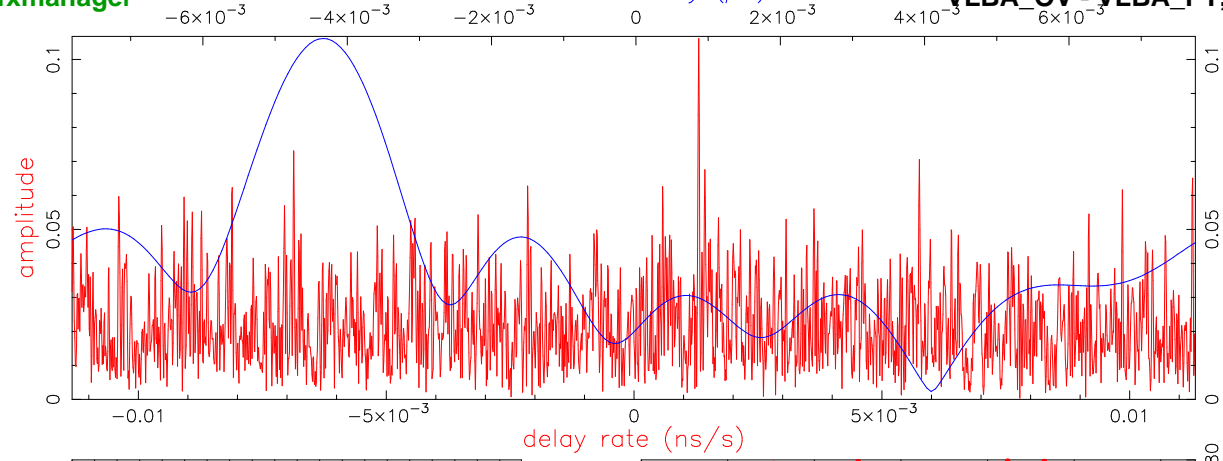
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, op

VLBA_OV - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 6.0

Int time 419.823

Amp 0.107

Phase -87.0

PFD 4.9e-01

Delays (us)

SBD -0.097812

MBD -0.004336

Fringe rate (Hz)

0.112904

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211c

Exper # 16383

Yr:day 2021:117

Start 000001.00

Stop 000700.84

FRT 000331.00

Corr/FF/build

2021:303:220112

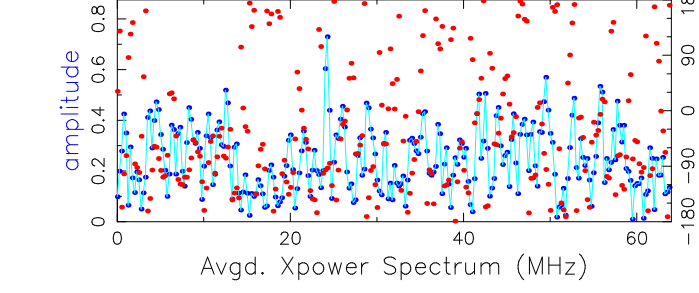
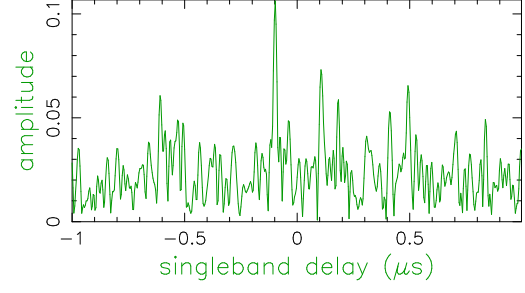
2021:304:133608

2021:252:122852

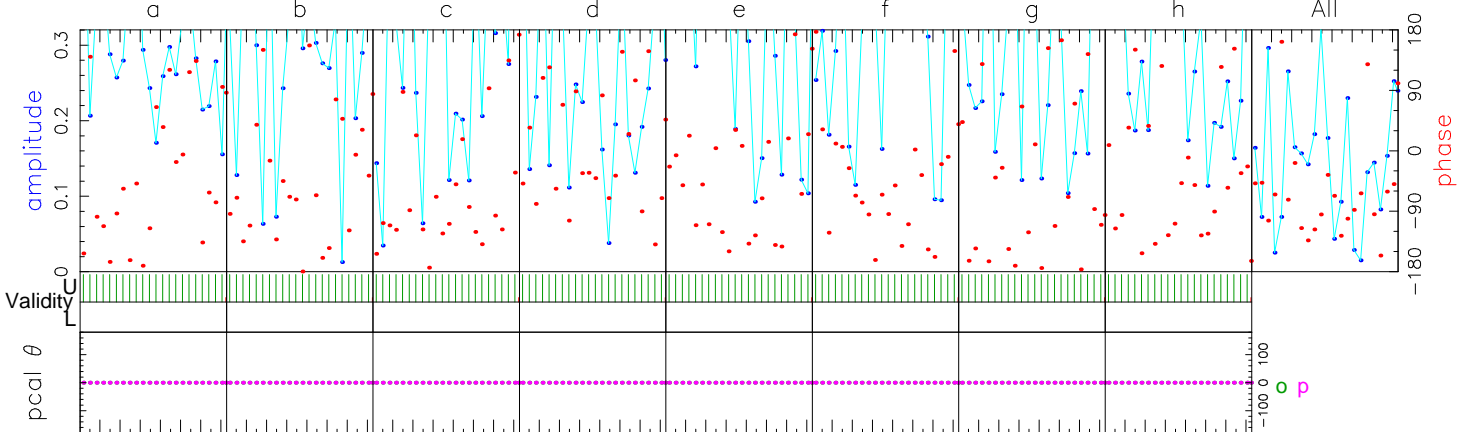
RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"



Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.4	-84.4	-101.4	-33.0	-38.6	-72.1	-139.6	-90.0	Phase	-87.0
	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	165.4	182.0	231.0	221.7	232.9	232.9	364.0	101.3	Sbd box	232.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.11035117298E+03		Apriori delay (usec)		2.11044925897E+03		Resid mbdelay (usec)		-4.33599E-03	+/- 1.8E-04
Sband delay (usec)	2.11035144697E+03		Apriori clock (usec)		-1.7775612E+00		Resid sbdelay (usec)		-9.78120E-02	+/- 1.4E-03
Phase delay (usec)	2.11044925617E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-2.80545E-06	+/- 6.2E-07
Delay rate (us/s)	1.28886464796E-01		Apriori rate (us/s)		1.28885154095E-01		Resid rate (us/s)		1.31070E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.13300804444E-06		Resid phase (deg)		-87.0	+/- 19.3

ph/seg (deg) 53.2 46.2 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 89.9 80.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 40.4 27.2 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 37.0 47.5 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

o: az 291.8 el 54.1 pa 80.7 p: az 296.9 el 45.4 pa 79.6 u,v (fr/asec) -999.289 -284.499 simultaneous interpolator

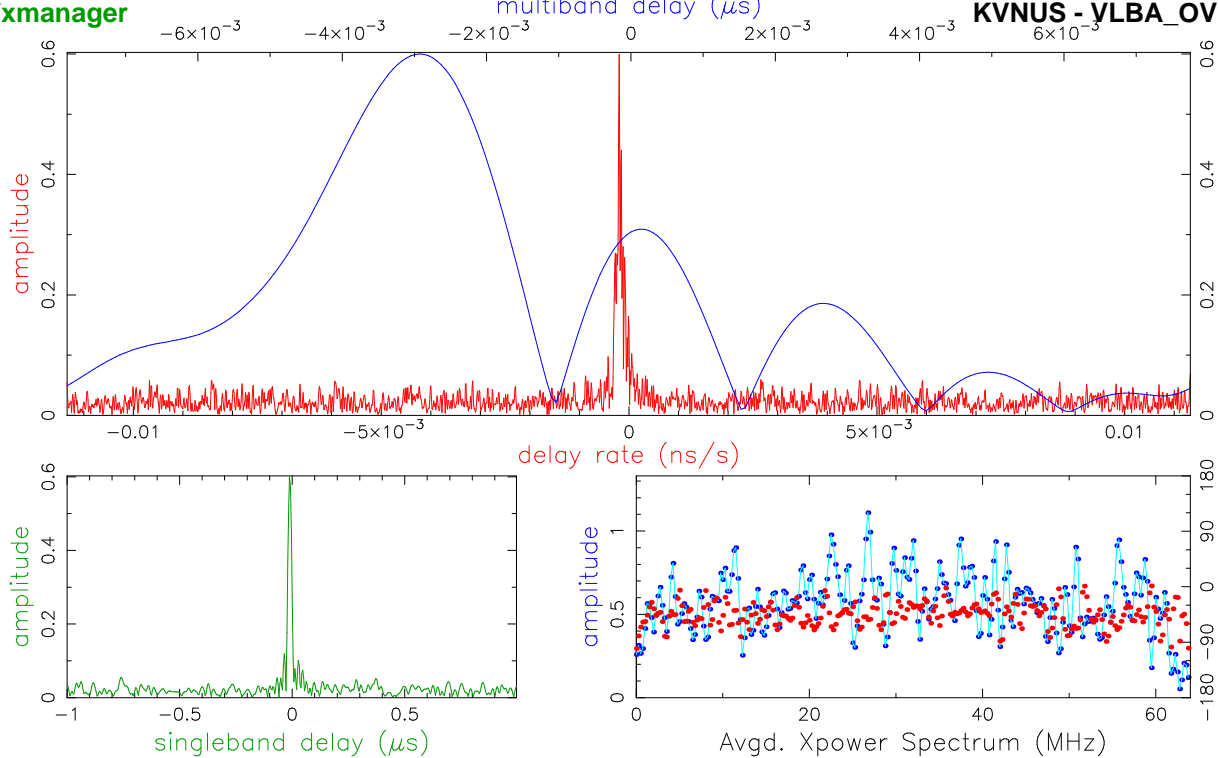
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/op..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/op.W.238.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, uo

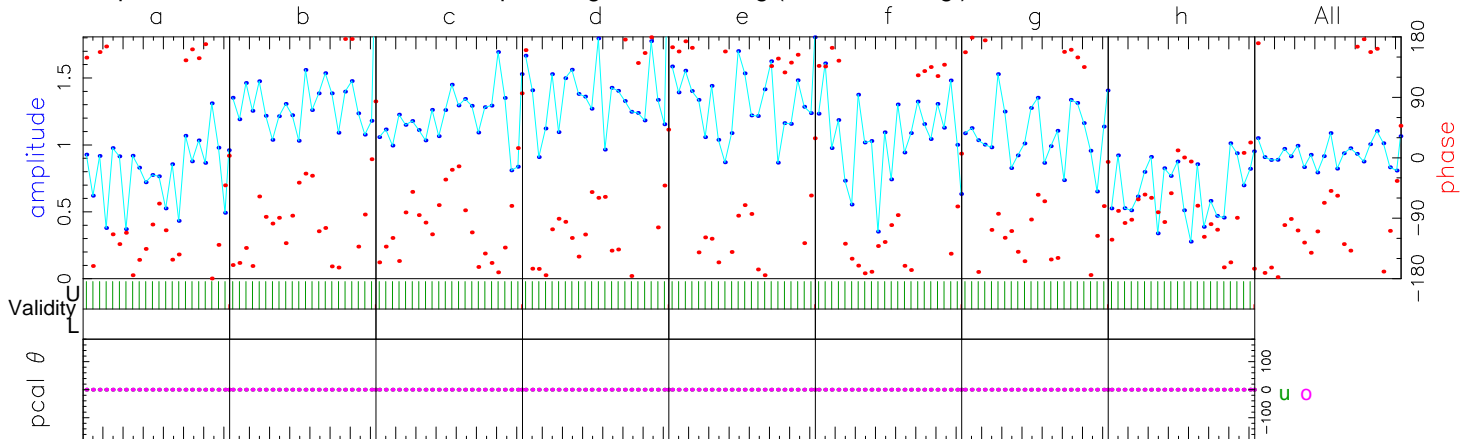
KVNUS - VLBA_OV, fgroup W, pol LL



Fringe quality 4

SNR 33.8
 Int time 419.823
 Amp 0.603
 Phase -136.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.010777
 MBD -0.002874
 Fringe rate (Hz)
 -0.017659
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133612
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
u	1000	1000	1000	1000	1000	1000	1000	1000			
o	0	0	0	0	0	0	0	0			
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
u:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
u	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	-3.40751933224E+03	-3.40751161040E+03	-3.40750083756E+03	1.53867071315E+00	-3.40750083315E+03	1.1006386E+01	7.6699996E-07	1.53867091815E+00	1.63972384417E-05	-3.40750083315E+03	-3.40750083315E+03
Sband delay (usec)	-159.9	-112.6	-103.4	-135.1	-163.4	178.8	-143.8	-72.5			
Phase delay (usec)	0.6	0.8	0.7	0.8	0.8	0.7	0.7	0.4			
Delay rate (us/s)	255.9	254.4	253.8	253.9	253.9	254.2	254.3	256.2			
Total phase (deg)											-136.8
Apriori delay (usec)											0.7
Apriori clock (usec)											254.2
Apriori clockrate (us/s)											
Apriori rate (us/s)											
Apriori accel (us/s/s)											
Resid mbdelay (usec)											-2.87409E-03
Resid sbdelay (usec)											-1.07772E-02
Resid phdelay (usec)											-4.41004E-06
Resid rate (us/s)											-2.05001E-07
Resid phase (deg)											-136.8
PCal mode: MANUAL, MANUAL											
PCal rate: 0.000E+00, 0.000E+00 (us/s)											
Bits/sample: 2x2											
Sample rate(MISamp/s): 128											
Data rate(Mb/s): 2048											
PC period (AP's) 5, 5											
sb window (us)											-1.000 1.000
SampCntNorm: enabled											-0.008 0.008
mb window (us)											-0.011 0.011
dr window (ns/s)											0.00 0.00
nlags: 256 t_cohere infinite											
ion window (TEC)											

u: az 62.0 el 39.4 pa -74.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11756.230 1082.043 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/uo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/uo.W.246.1X1O2X

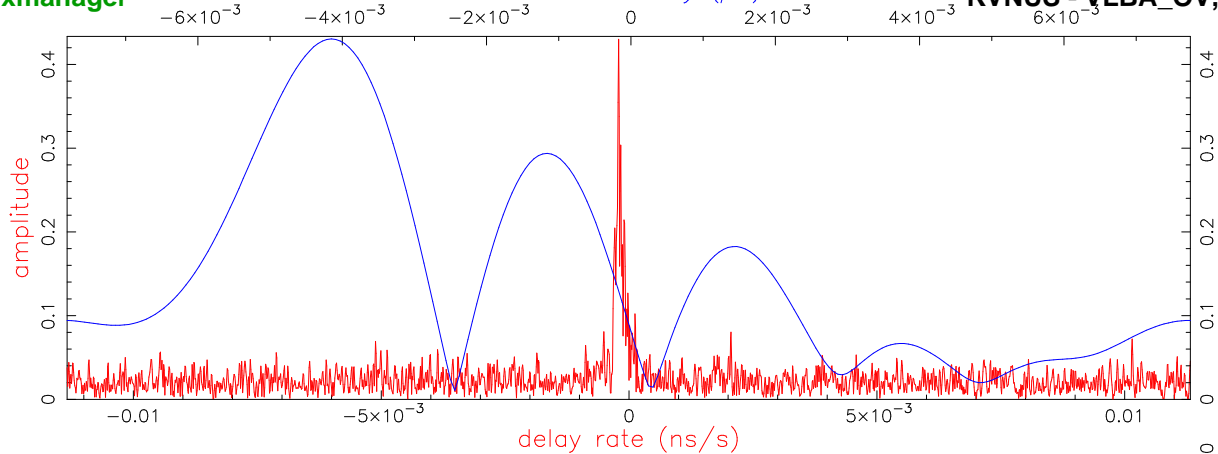
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, uo

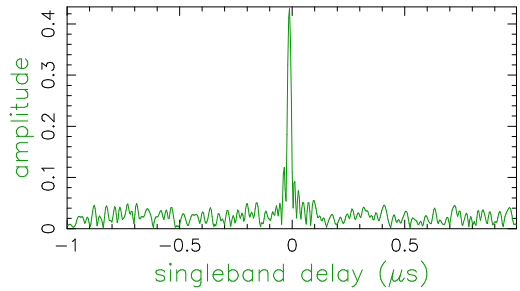
KVNUS - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

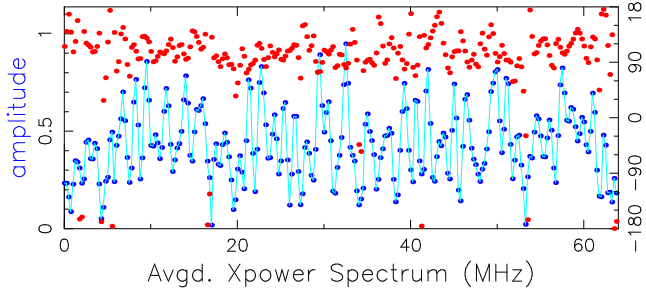


Fringe quality 6

SNR 24.3
Int time 419.823
Amp 0.433
Phase 10.3
PFD 0.0e+00
Delays (us)
SBD -0.012844
MBD -0.004199
Fringe rate (Hz)
-0.017806
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

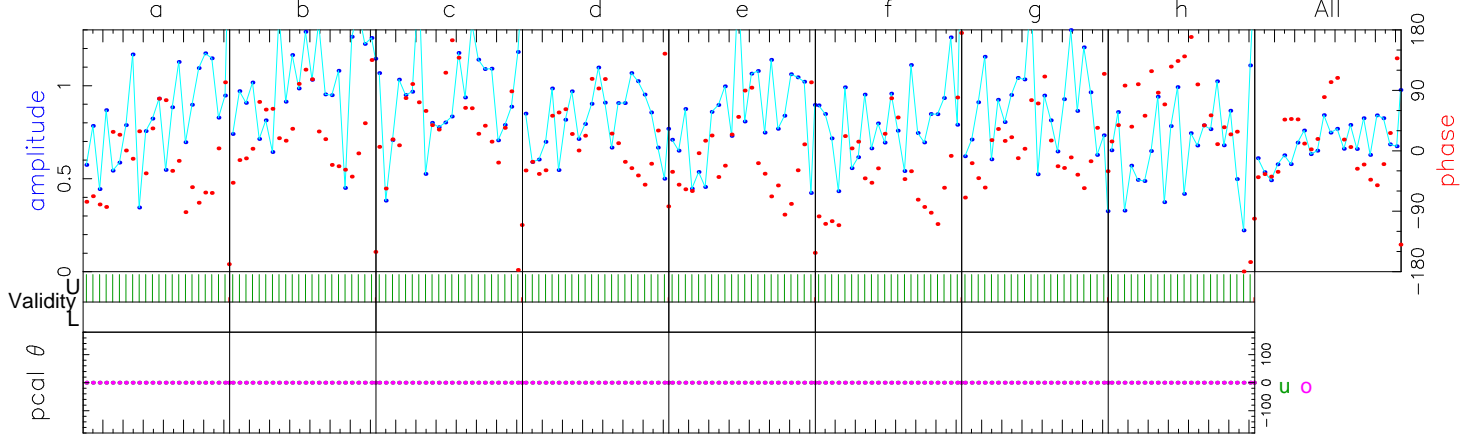


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:117
Start 000001.00
Stop 000700.84
FRT 000331.00
Corr/FF/build
2021:303:220112
2021:304:133615
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-27.9	25.3	57.0	14.3	-17.4	-38.6	0.4	75.9	Phase	10.3
	0.5	0.6	0.6	0.5	0.5	0.4	0.6	0.4	Ampl.	0.5
	255.8	253.8	253.5	253.3	253.5	253.5	254.6	255.9	Sbd box	253.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.40752065755E+03		Apriori delay (usec)		-3.40750083315E+03		Resid mbdelay (usec)		-4.19940E-03	+/- 4.5E-05
Sband delay (usec)	-3.40751367690E+03		Apriori clock (usec)		1.1006386E+01		Resid sbdelay (usec)		-1.28438E-02	+/- 3.5E-04
Phase delay (usec)	-3.40750083282E+03		Apriori clockrate (us/s)		7.6699996E-07		Resid phdelay (usec)		3.33176E-07	+/- 1.5E-07
Delay rate (us/s)	1.53867071145E+00		Apriori rate (us/s)		1.53867091815E+00		Resid rate (us/s)		-2.06708E-07	+/- 6.3E-10
Total phase (deg)			Apriori accel (us/s/s)		1.63972384417E-05		Resid phase (deg)		10.3	+/- 4.7

ph/seg (deg) 54.4 11.3 Search (2048X32) 0.412 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 63.4 19.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 43.7 6.7 Inc. seg. avg. 0.675 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 28.5 11.6 Inc. frq. avg. 0.521 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
u: az 62.0 el 39.4 pa -74.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11756.230 1082.043 simultaneous interpolator

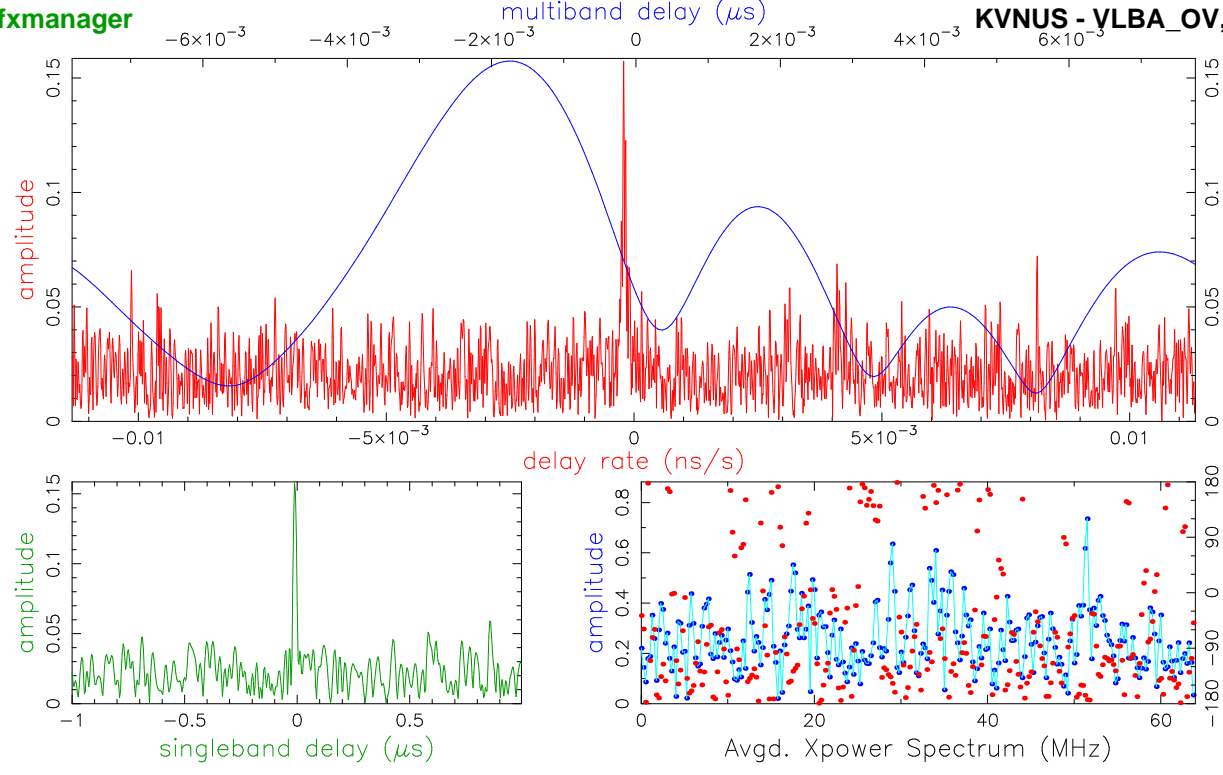
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/uo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/uo.W.262.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

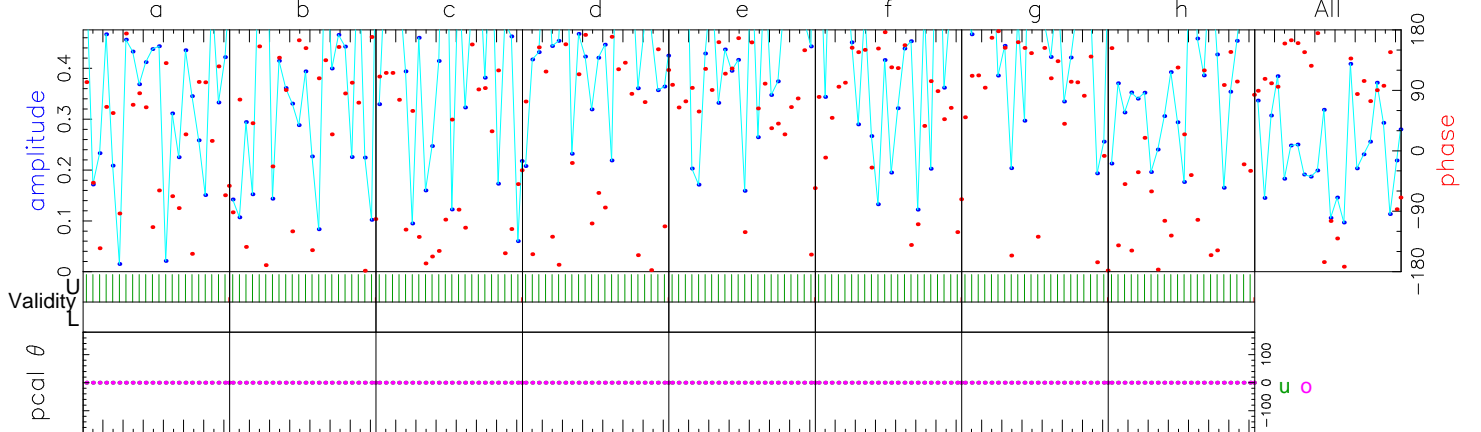
3C84.1X1O2X, No0117, uo

KVNUS - VLBA_OV, fgroup W, pol LR



Fringe quality 9
 SNR 8.9
 Int time 419.823
 Amp 0.159
 Phase 127.8
 PFD 2.5e-10
 Delays (us)
 SBD -0.010609
 MBD -0.001695
 Fringe rate (Hz)
 -0.017743
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133619
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.40751815365E+03					-3.40750083315E+03				
Sband delay (usec)	-3.40751144240E+03					1.1006386E+01				
Phase delay (usec)	-3.40750082903E+03					7.6699996E-07				
Delay rate (us/s)	1.53867071218E+00					1.53867091815E+00				
Total phase (deg)			-148.5			1.63972384417E-05				
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
u										
o										

ph/seg (deg) 59.3 30.9 Search (2048X32) 0.150 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.4 54.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 66.6 18.2 Inc. seg. avg. 0.206 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 65.0 31.8 Inc. frq. avg. 0.186 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 62.0 el 39.4 pa -74.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11756.230 1082.043 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/uo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/uo.W.280.1X1O2X

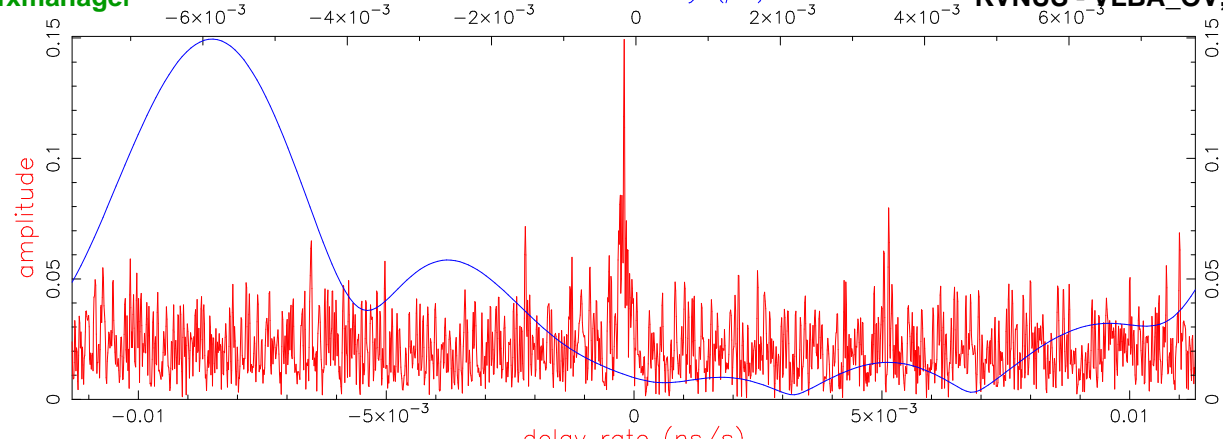
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

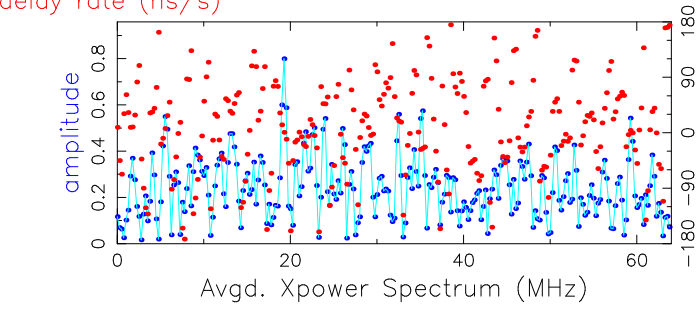
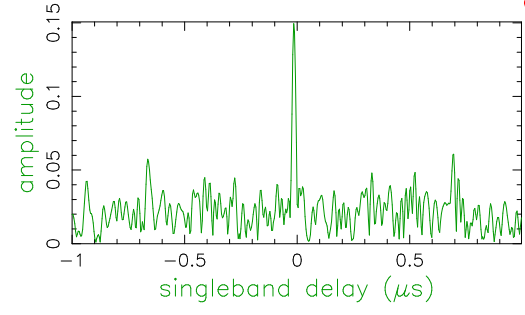
3C84.1X1O2X, No0117, uo

KVNUS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

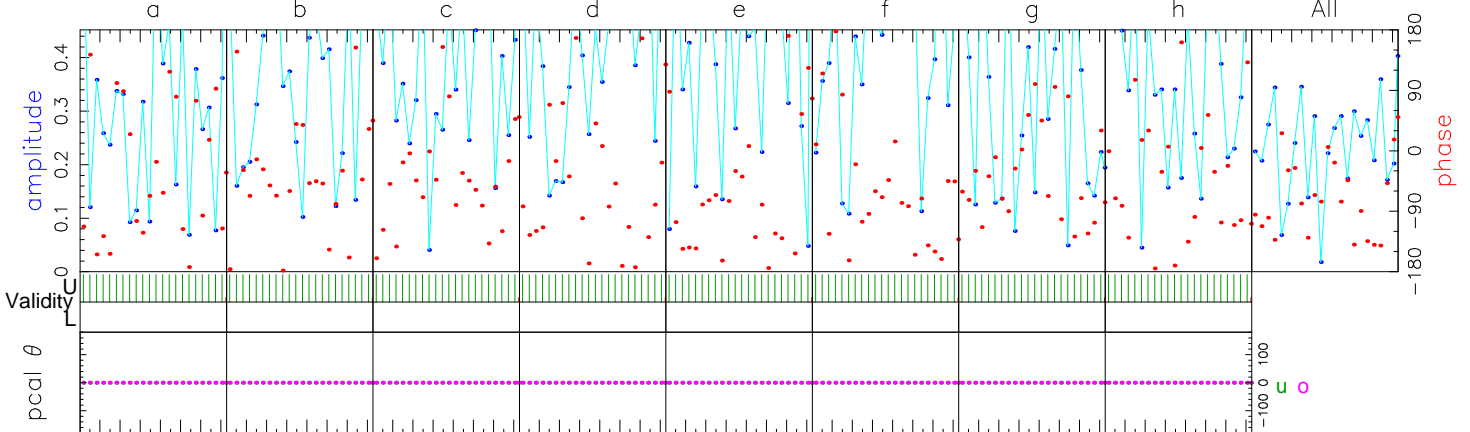


Fringe quality 9
 SNR 8.4
 Int time 419.823
 Amp 0.151
 Phase -85.2
 PFD 1.1e-08
 Delays (us)
 SBD -0.014459
 MBD -0.005819
 Fringe rate (Hz) -0.017621
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133622
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-110.1	-52.0	-64.6	-108.6	-111.3	-92.7	-64.2	-72.1	Phase	-85.2
	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	12.4	253.3	131.4	349.2	253.6	253.6	254.3	256.7	Sbd box	253.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.40752227682E+03		Apriori delay (usec)		-3.40750083315E+03		Resid mbdelay (usec)		-5.81867E-03	+/- 1.3E-04
Sband delay (usec)	-3.40751529215E+03		Apriori clock (usec)		1.1006386E+01		Resid sbdelay (usec)		-1.44590E-02	+/- 1.0E-03
Phase delay (usec)	-3.40750083590E+03		Apriori clockrate (us/s)		7.6699996E-07		Resid phdelay (usec)		-2.74687E-06	+/- 4.4E-07
Delay rate (us/s)	1.53867071359E+00		Apriori rate (us/s)		1.53867091815E+00		Resid rate (us/s)		-2.04564E-07	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.63972384417E-05		Resid phase (deg)		-85.2	+/- 13.6

	RMS	Theor.	Amplitude	0.151 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.4	32.6	Search (2048X32)	0.140	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	77.5	56.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	26.0	19.2	Inc. seg. avg.	0.197	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	39.4	33.5	Inc. frq. avg.	0.153	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

u: az 62.0 el 39.4 pa -74.4 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11756.230 1082.043 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/uo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/uo.W.296.1X1O2X

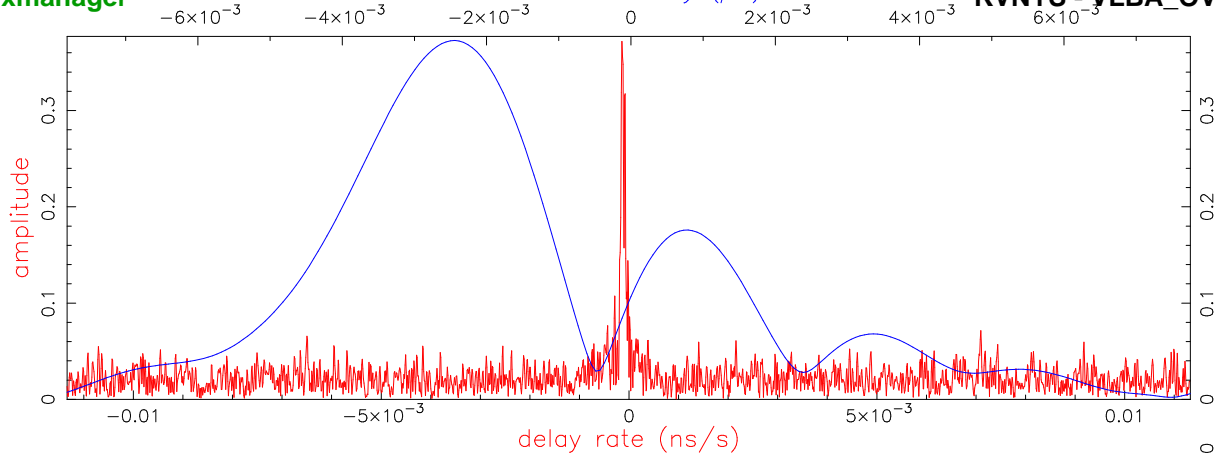
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, yo

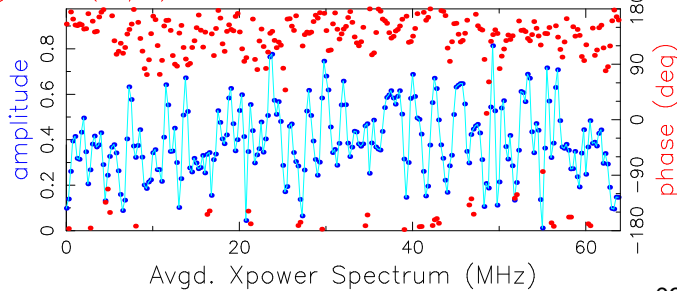
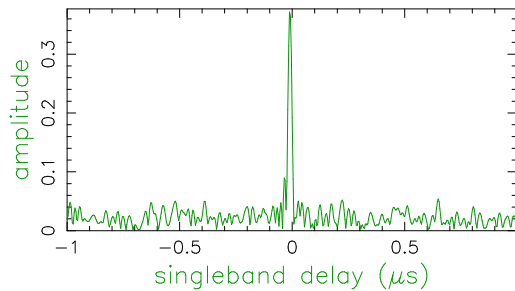
KVNYS - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



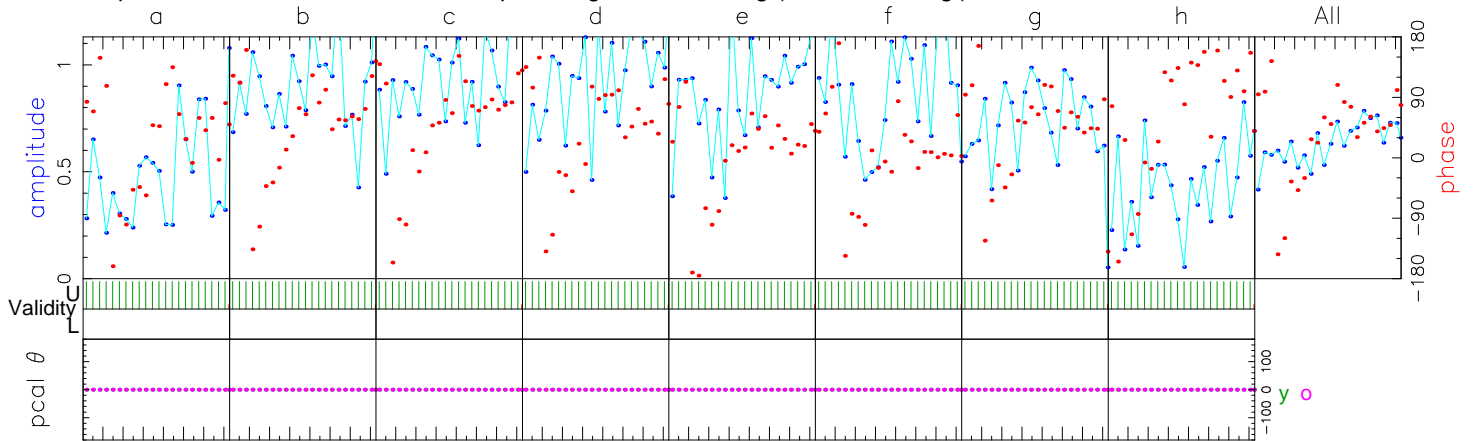
Fringe quality 8

SNR 21.1
 Int time 419.813
 Amp 0.377
 Phase 55.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.010224
 MBD -0.002362
 Fringe rate (Hz)
 -0.012220
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133613
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	44.6	72.0	81.2	58.8	31.7	15.6	57.2	118.5	Phase	55.8
	0.2	0.4	0.5	0.5	0.5	0.5	0.4	0.2	Ampl.	0.4
	256.8	254.4	253.5	254.0	254.5	254.6	254.4	256.6	Sbd box	254.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.62933181269E+03		Apriori delay (usec)		-3.62931382554E+03		Resid mbdelay (usec)		-2.36216E-03	+/- 5.1E-05
Sband delay (usec)	-3.62932404954E+03		Apriori clock (usec)		-3.0518284E+00		Resid sbdelay (usec)		-1.02240E-02	+/- 4.1E-04
Phase delay (usec)	-3.62931382374E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		1.79855E-06	+/- 1.7E-07
Delay rate (us/s)	1.53168757033E+00		Apriori rate (us/s)		1.53168771219E+00		Resid rate (us/s)		-1.41860E-07	+/- 7.2E-10
Total phase (deg)			Apriori accel (us/s/s)		1.96210562878E-05		Resid phase (deg)		55.8	+/- 5.4

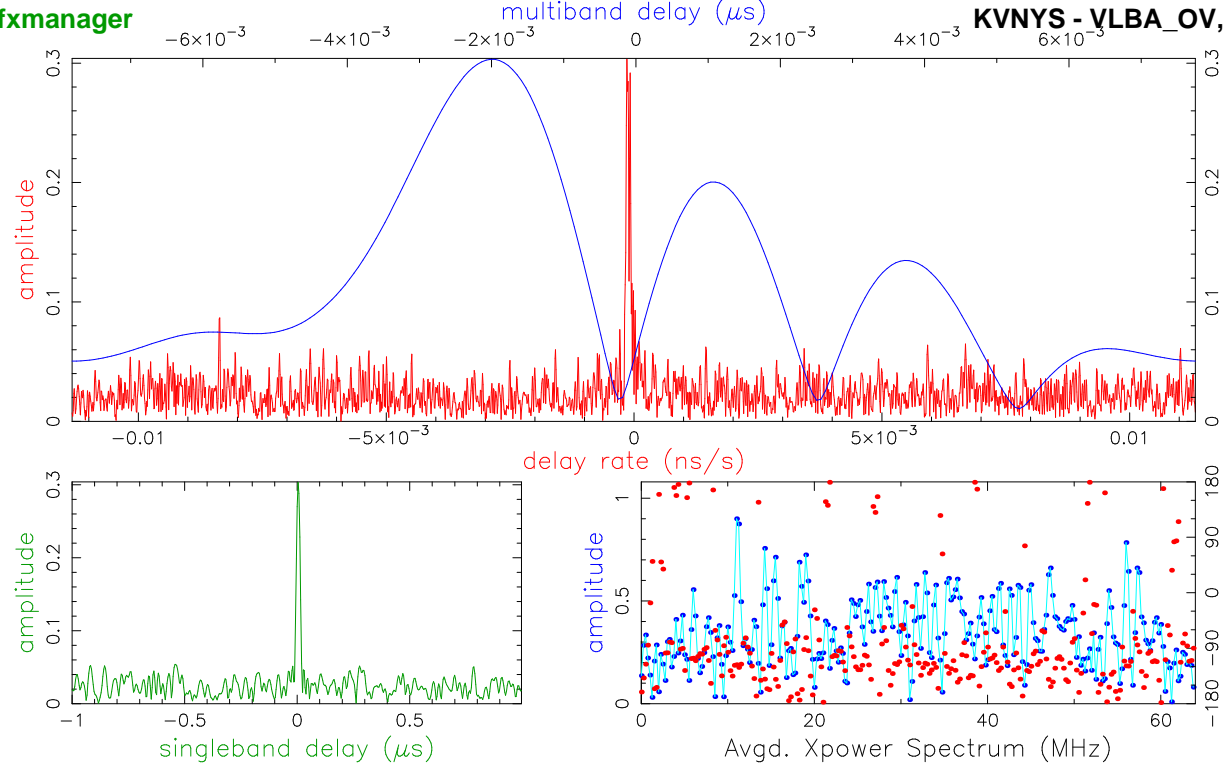
ph/seg (deg) 68.2 13.0 Search (2048X32) 0.369 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.8 22.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 34.6 7.7 Inc. seg. avg. 0.619 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.4 13.4 Inc. frq. avg. 0.412 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 62.8 el 38.7 pa -70.9 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11698.409 1493.830 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/yo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/yo.W.253.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

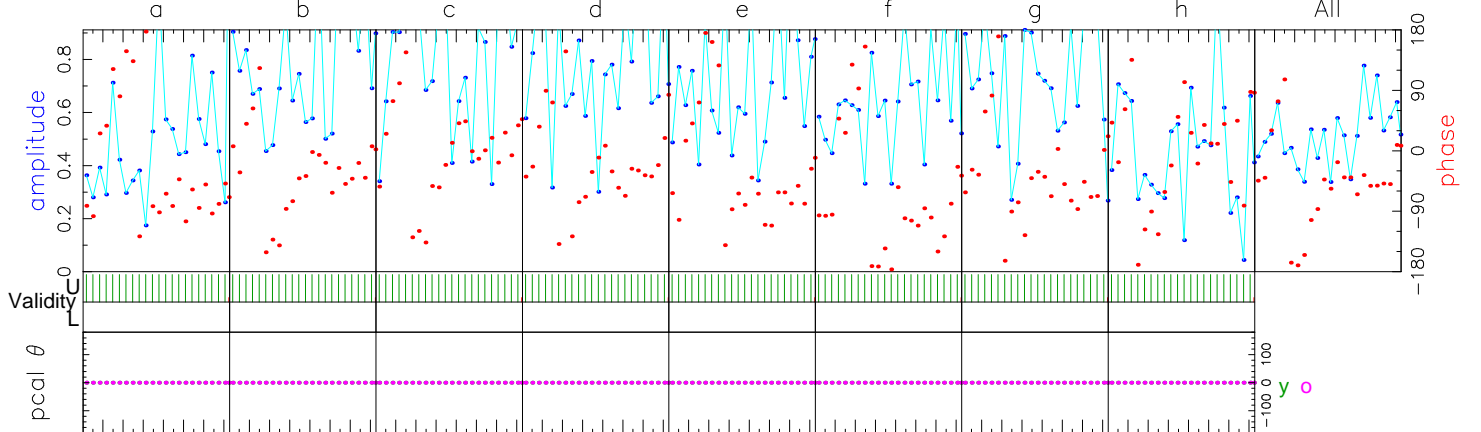
3C84.1X1O2X, No0117, yo

KVNYS - VLBA_OV, fgroup W, pol RR



Fringe quality 8
 SNR 17.0
 Int time 419.813
 Amp 0.304
 Phase -43.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.004643
 MBD -0.001958
 Fringe rate (Hz)
 -0.012571
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133617
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-79.5	-30.9	2.0	-29.1	-75.0	-111.4	-54.0	22.9	Phase	-43.8
	0.3	0.5	0.4	0.5	0.4	0.3	0.5	0.2	Ampl.	0.4
	260.4	258.1	258.2	258.2	257.9	257.8	258.9	260.4	Sbd box	258.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	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)	-3.62931578379E+03		Apriori delay (usec)		-3.62931382554E+03		Resid mbdelay (usec)		-1.95825E-03	+/- 6.4E-05
Sband delay (usec)	-3.62930918254E+03		Apriori clock (usec)		-3.0518284E+00		Resid sbdelay (usec)		4.64300E-03	+/- 5.1E-04
Phase delay (usec)	-3.62931382695E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-1.41230E-06	+/- 2.2E-07
Delay rate (us/s)	1.53168756625E+00		Apriori rate (us/s)		1.53168771219E+00		Resid rate (us/s)		-1.45940E-07	+/- 9.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.96210562878E-05		Resid phase (deg)		-43.8	+/- 6.7

ph/seg (deg) 65.6 16.1 Search (2048X32) 0.300 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.4 28.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 48.0 9.5 Inc. seg. avg. 0.497 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.8 16.6 Inc. frq. avg. 0.372 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 62.8 el 38.7 pa -70.9 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11698.409 1493.830 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/yo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/yo.W.273.1X1O2X

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

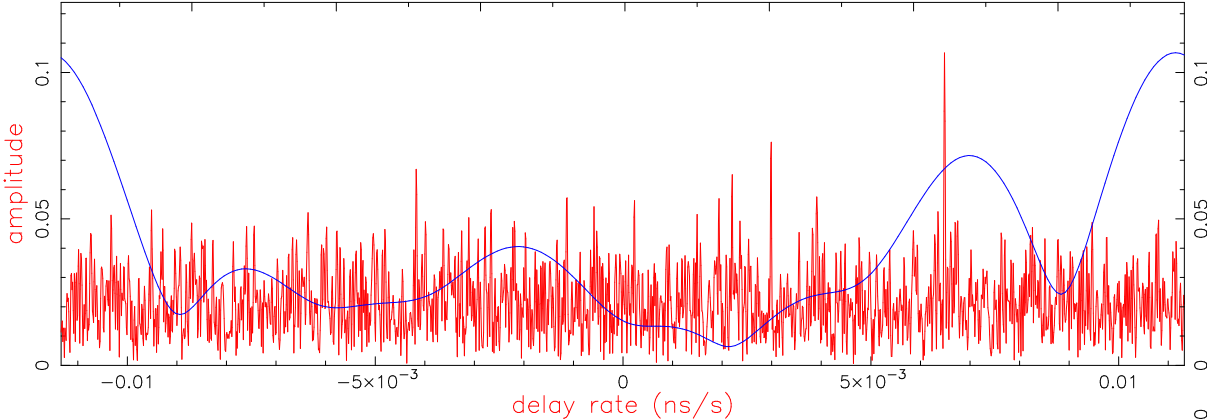
3C84.1X1O2X, No0117, yo

KVNYS - VLBA_OV, fgroup W, pol LR

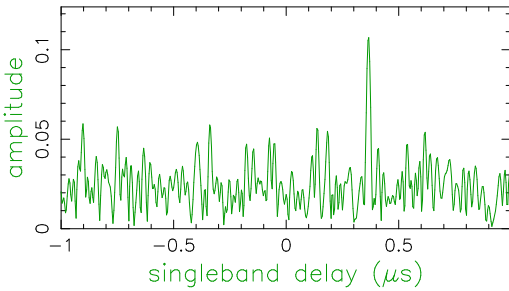
multiband delay (μs)

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

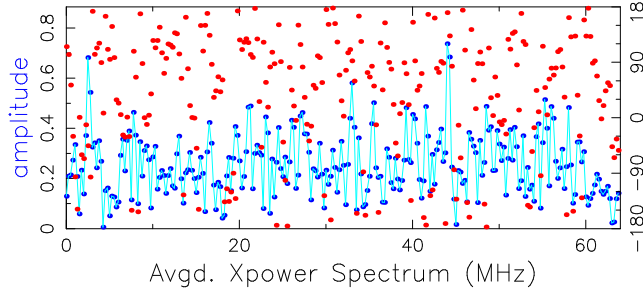
Fringe quality 0



SNR 6.0
 Int time 419.813
 Amp 0.124
 Phase -105.0
 PFD 3.3e-01
 Delays (us)
 SBD 0.365685
 MBD 0.007654
 Fringe rate (Hz)
 0.559989
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

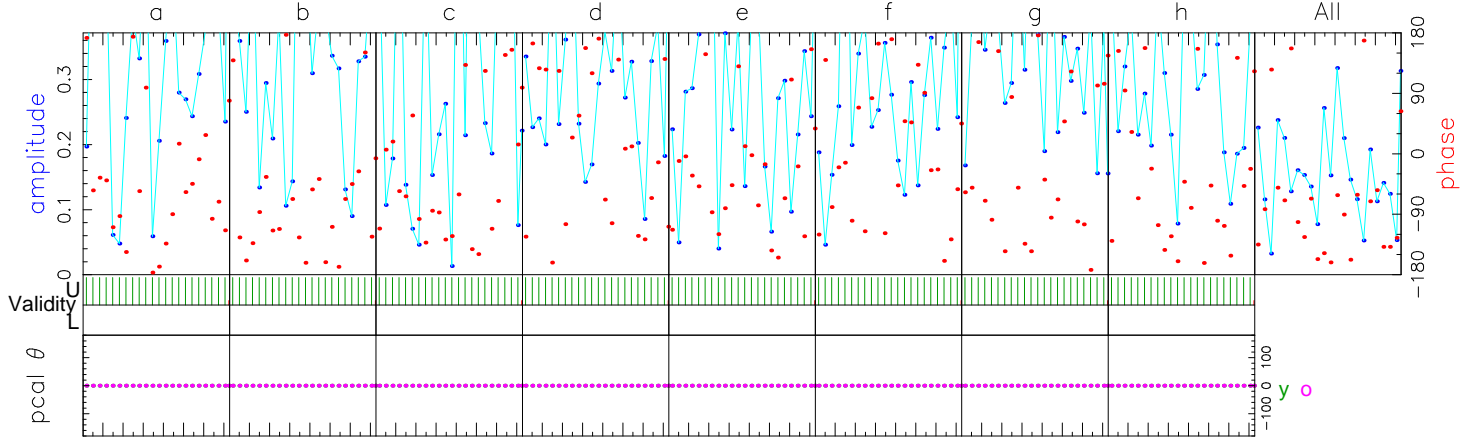


singleband delay (μs)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133620
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-69.8	-122.4	-120.8	-156.8	-73.1	-54.6	-129.8	-99.2		-105.0
	0.2	0.2	0.2	0.0	0.1	0.1	0.1	0.1		0.1
	231.5	350.4	351.8	27.2	88.9	364.4	349.1	191.8		350.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.62894679683E+03		Apriori delay (usec)		-3.62931382554E+03		Resid mbdelay (usec)		7.65371E-03	+/- 1.8E-04
Sband delay (usec)	-3.62894814104E+03		Apriori clock (usec)		-3.0518284E+00		Resid sbdelay (usec)		3.65685E-01	+/- 1.4E-03
Phase delay (usec)	-3.62931382892E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-3.38553E-06	+/- 6.1E-07
Delay rate (us/s)	1.53169421310E+00		Apriori rate (us/s)		1.53168771219E+00		Resid rate (us/s)		6.50091E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.96210562878E-05		Resid phase (deg)		-105.0	+/- 19.0

ph/seg (deg) 55.0 45.5 Amplitude 0.124 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.7 79.4 Search (2048X32) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.0 26.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.5 46.8 Inc. seg. avg. 0.134 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

y: az 62.8 el 38.7 pa -70.9 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11698.409 1493.830 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/yo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/yo.W.290.1X1O2X

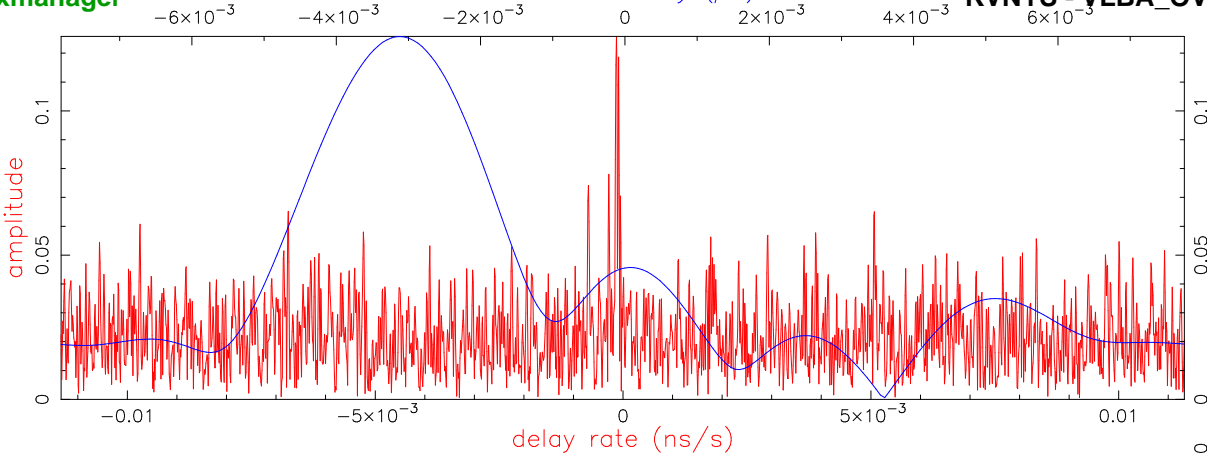
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1O2X, No0117, yo

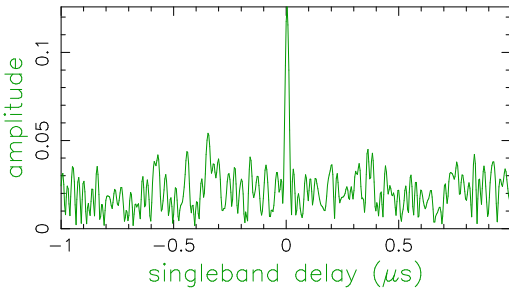
KVNYS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

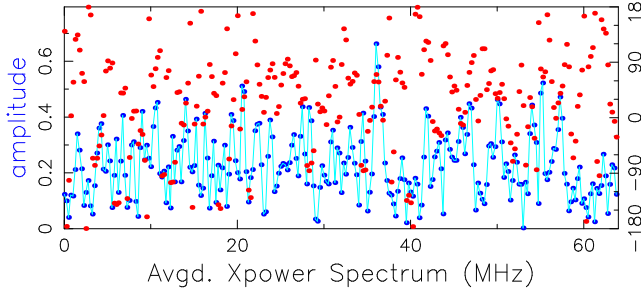


Fringe quality 0

SNR 7.0
 Int time 419.813
 Amp 0.126
 Phase 121.4
 PFD 5.4e-04
 Delays (us)
 SBD 0.003677
 MBD -0.003129
 Fringe rate (Hz)
 -0.011079
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

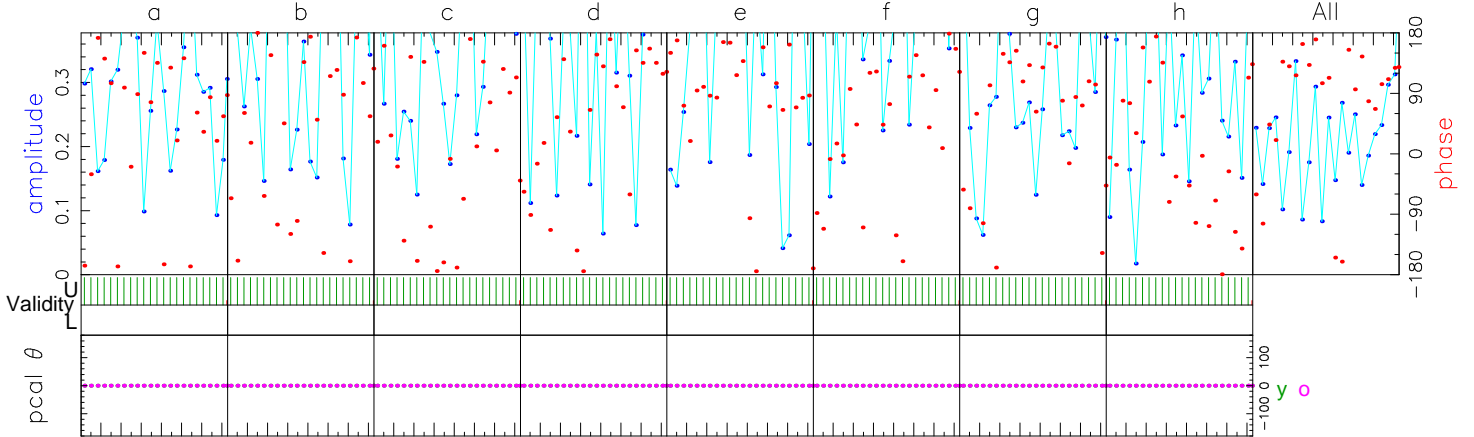


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:117
 Start 000001.00
 Stop 000700.84
 FRT 000331.00
 Corr/FF/build
 2021:303:220112
 2021:304:133623
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	112.2	143.8	113.4	128.3	111.9	109.6	135.2	-118.0	Phase	121.4
	0.1	0.1	0.1	0.1	0.3	0.2	0.1	0.0	Ampl.	0.1
	169.6	501.2	482.3	304.0	258.2	68.0	348.3	462.8	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.62931695434E+03		Apriori delay (usec)		-3.62931382554E+03		Resid mbdelay (usec)		-3.12880E-03	+/- 1.5E-04
Sband delay (usec)	-3.62931014804E+03		Apriori clock (usec)		-3.0518284E+00		Resid sbdelay (usec)		3.67750E-03	+/- 1.2E-03
Phase delay (usec)	-3.62931382162E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		3.91544E-06	+/- 5.2E-07
Delay rate (us/s)	1.53168758357E+00		Apriori rate (us/s)		1.53168771219E+00		Resid rate (us/s)		-1.28620E-07	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		1.96210562878E-05		Resid phase (deg)		121.4	+/- 16.3

ph/seg (deg) 64.4 39.0 Amplitude 0.126 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.9 68.0 Search (2048X32) 0.122 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.1 23.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.8 40.1 Inc. seg. avg. 0.171 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 62.8 el 38.7 pa -70.9 o: az 291.8 el 54.1 pa 80.7 u,v (fr/asec) -11698.409 1493.830 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0117/yo..1X1O2X Output file: /Exps/c211c/v1/1234/No0117/yo.W.305.1X1O2X