

Mk4/DiFX fourfit 3.21 rev 2937

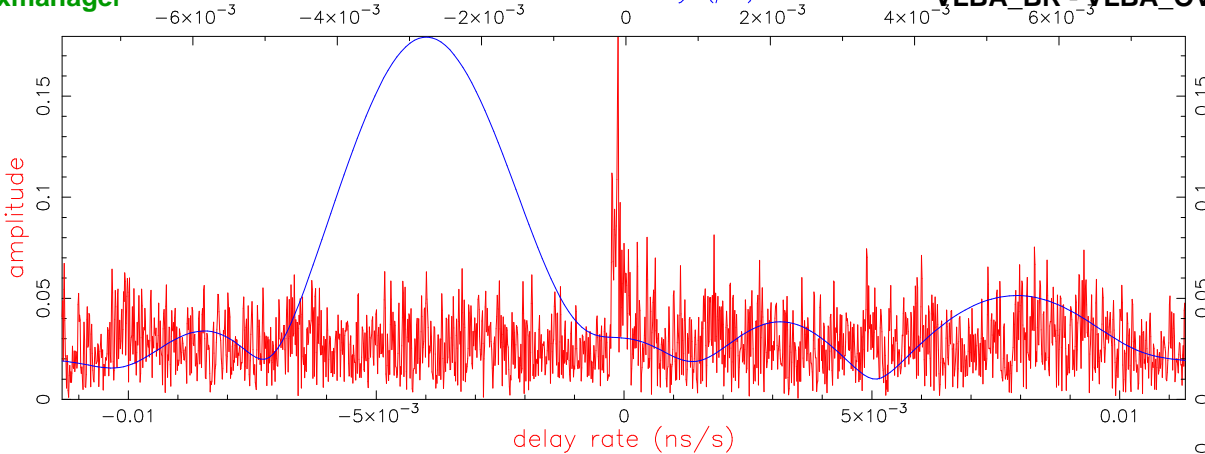
fxmanager

3C273.1W6U9V, No0152, bo

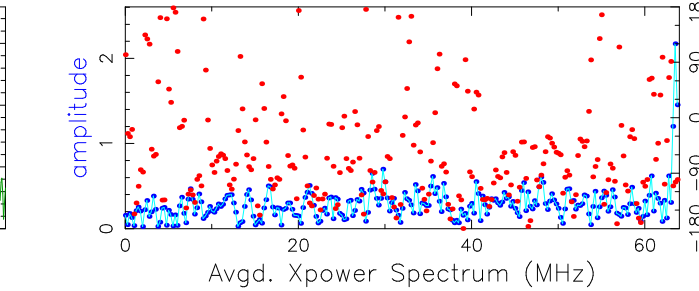
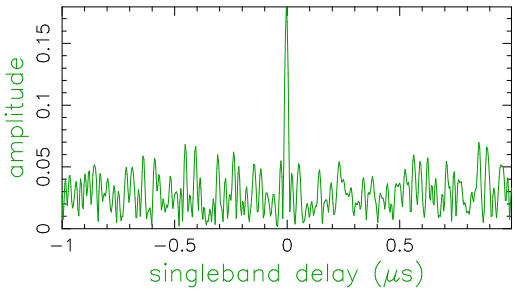
VLBA_BR - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 9

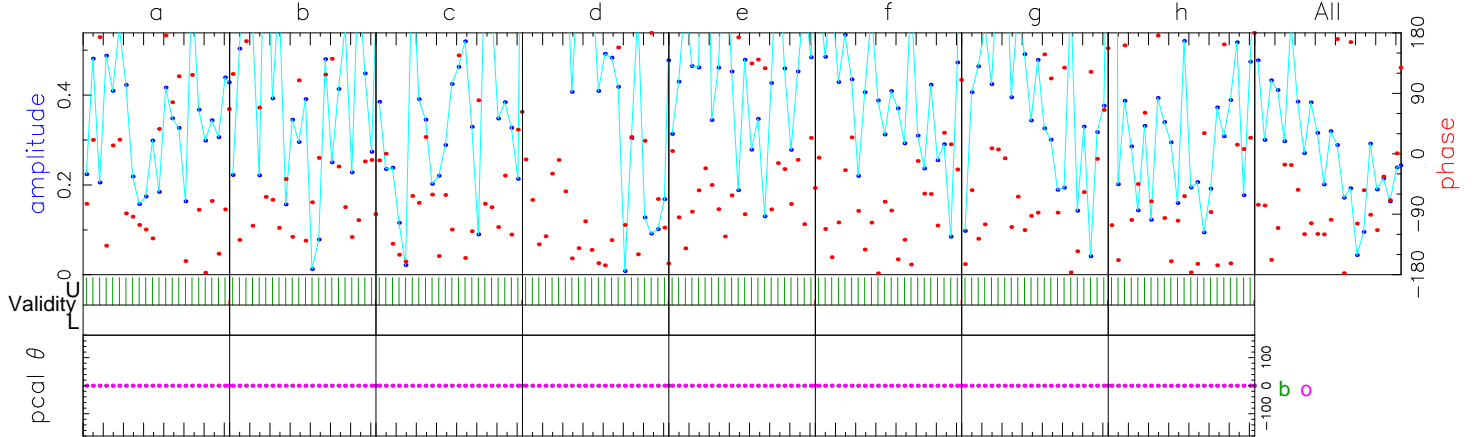


SNR 10.1
 Int time 419.654
 Amp 0.180
 Phase -90.8
 PFD 3.6e-15
 Delays (us)
 SBD -0.003337
 MBD -0.002763
 Fringe rate (Hz)
 -0.010105
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:075957
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-113.4	-100.4	-81.9	-103.9	-63.9	-88.2	-73.8	-114.5	Phase	-90.8
	0.1	0.2	0.2	0.3	0.3	0.2	0.1	0.2	Ampl.	0.2
	477.2	484.7	256.1	256.1	256.2	256.1	101.2	65.1	Sbd box	256.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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)	-1.16508226090E+03		Apriori delay (usec)		-1.16507949763E+03		Resid mbdelay (usec)		-2.76326E-03	+/- 1.1E-04
Sband delay (usec)	-1.16508283488E+03		Apriori clock (usec)		-6.6164207E+00		Resid sbdelay (usec)		-3.33725E-03	+/- 8.6E-04
Phase delay (usec)	-1.16507950056E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-2.92742E-06	+/- 3.7E-07
Delay rate (us/s)	-1.79237782984E-01		Apriori rate (us/s)		-1.79237665674E-01		Resid rate (us/s)		-1.17310E-07	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		6.69119439165E-06		Resid phase (deg)		-90.8	+/- 11.4

	RMS	Theor.	Amplitude	0.180 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.4	27.3	Search (2048X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	89.4	47.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	20.2	16.1	Inc. seg. avg.	0.255	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	35.6	28.1	Inc. frq. avg.	0.181	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 102.0 el 13.1 pa -40.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 1035.345 1253.619 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/bo.W.10.1W6U9V

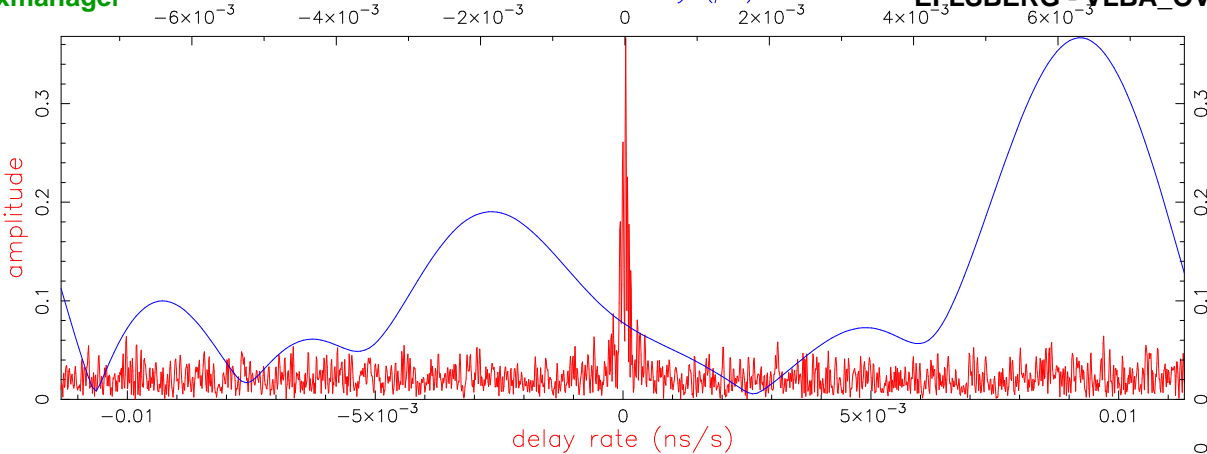
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Bo

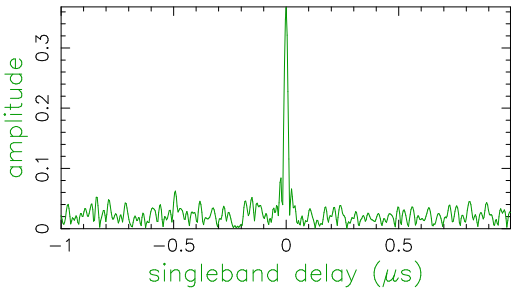
EFLSBERG - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

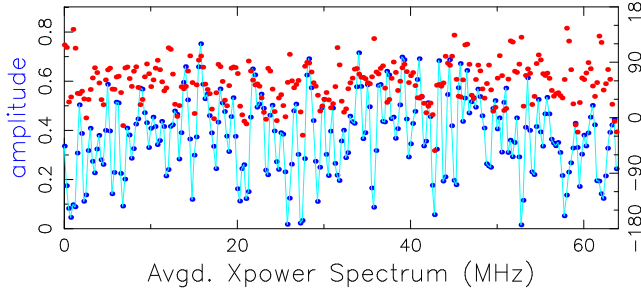


Fringe quality 8

SNR 20.6
 Int time 419.647
 Amp 0.368
 Phase -24.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000829
 MBD 0.006280
 Fringe rate (Hz) 0.004818
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

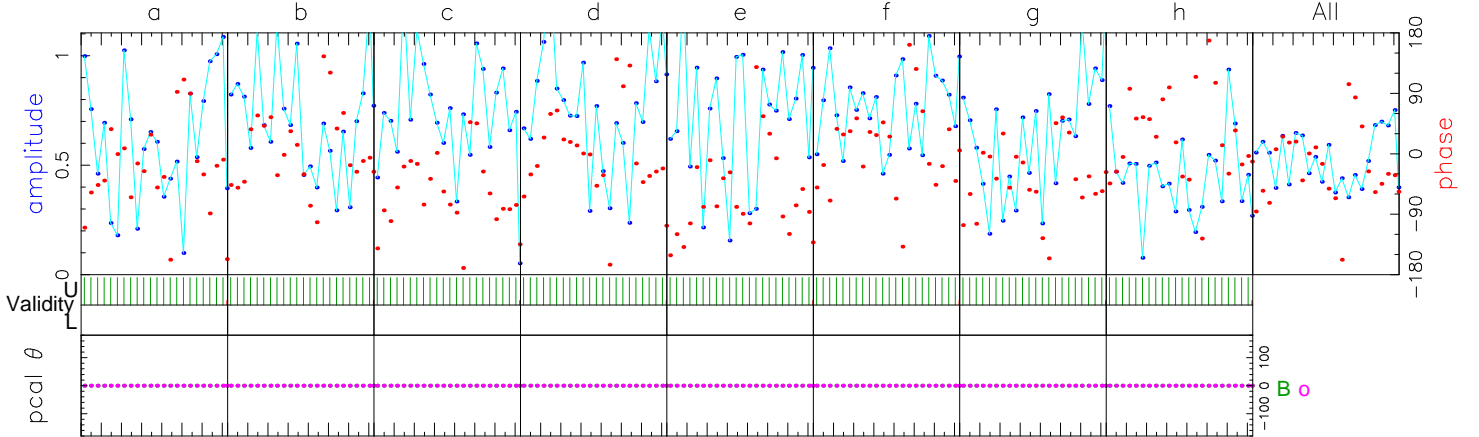


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:075958
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-29.1	1.1	-52.5	-0.3	-73.3	-0.9	-45.1	17.3	Phase	-24.6
	0.4	0.5	0.5	0.5	0.4	0.4	0.4	0.2	Ampl.	0.4
	256.9	257.0	257.1	257.2	257.6	257.6	257.6	258.9	Sbd box	256.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	

Group delay (usec)(sbd)	2.10325636639E+03	Apriori delay (usec)	2.10325008650E+03	Resid mbdelay (usec)	6.27989E-03	+/-	5.3E-05
Sband delay (usec)	2.10324925725E+03	Apriori clock (usec)	-2.5708460E+01	Resid sbdelay (usec)	-8.29250E-04	+/-	4.2E-04
Phase delay (usec)	2.10325008570E+03	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	-7.92679E-07	+/-	1.8E-07
Delay rate (us/s)	-1.97207148588E+00	Apriori rate (us/s)	-1.97207154182E+00	Resid rate (us/s)	5.59335E-08	+/-	7.4E-10
Total phase (deg)	137.7	Apriori accel (us/s/s)	-1.06838684263E-05	Resid phase (deg)	-24.6	+/-	5.6

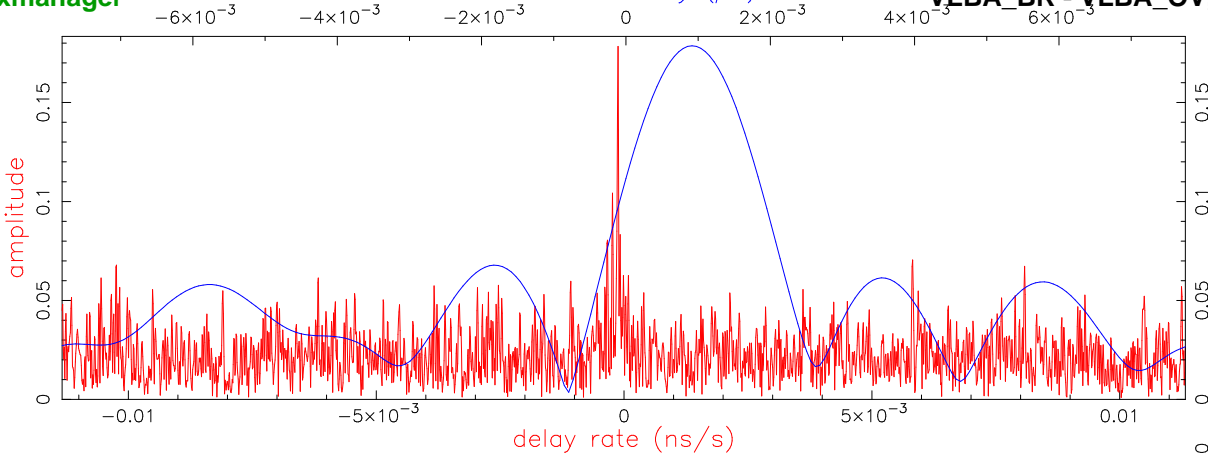
ph/seg (deg)	56.4	Theor.	13.3	Amplitude	0.368 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	55.7	Search (2048X32)	0.366	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.5	Inc. seg. avg.	0.522	Inc. frq. avg.	0.415	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	25.6	Inc. frq. avg.	0.415			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 256	t_cohere infinite

B: az 242.0 el 23.5 pa 34.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11287.159 1441.348 simultaneous interpolator

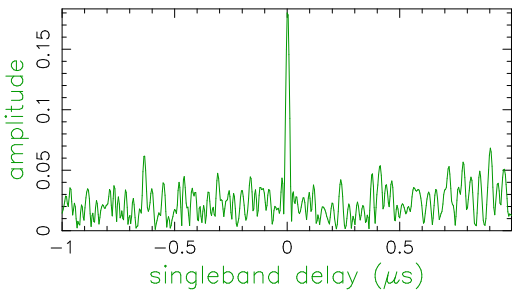
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Bo.W.16.1W6U9V

multiband delay (μ s)

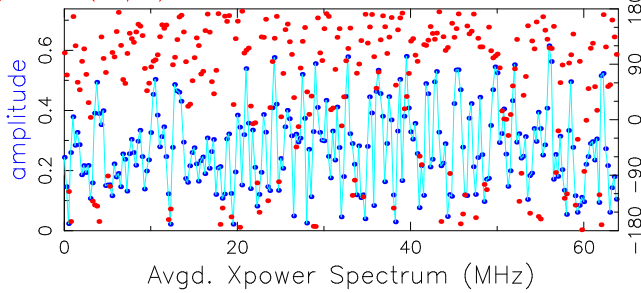
Fringe quality 9



SNR 10.3
Int time 419.654
Amp 0.183
Phase 137.3
PFD 4.0e-16
Delays (us)
SBD 0.001742
MBD 0.000854
Fringe rate (Hz)
-0.010203
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

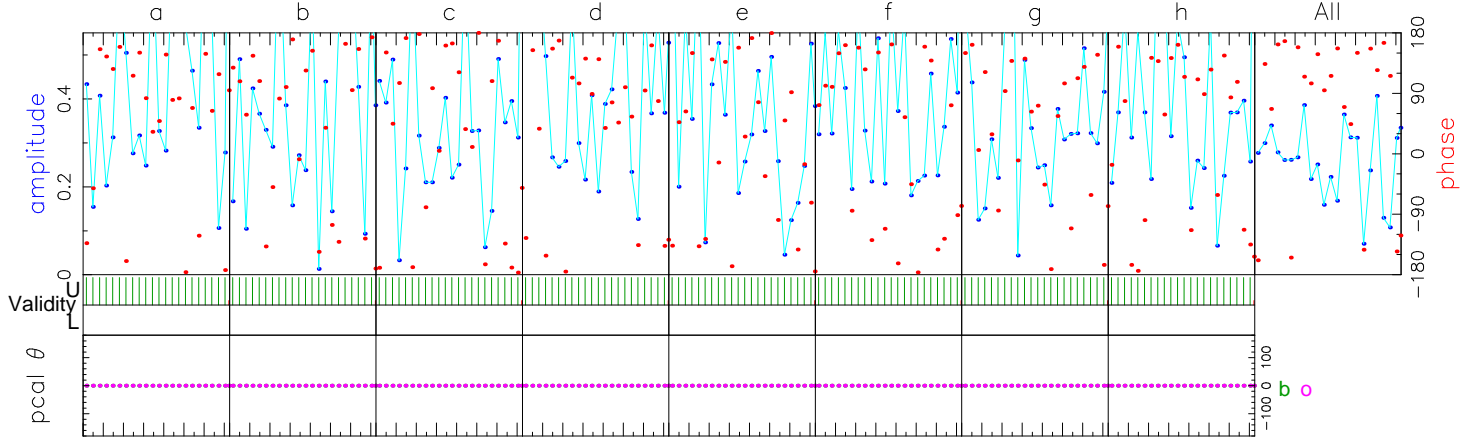


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080001
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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			
b	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
b	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-1.16507864349E+03				-1.16507949763E+03				8.54144E-04	+/- 1.1E-04	
Sband delay (usec)	-1.16507775563E+03				-6.6164207E+00				1.74200E-03	+/- 8.4E-04	
Phase delay (usec)	-1.16507949321E+03				-4.5999999E-07				4.42789E-06	+/- 3.6E-07	
Delay rate (us/s)	-1.79237784119E-01				-1.79237665674E-01				-1.18445E-07	+/- 1.5E-09	
Total phase (deg)			-196.1		6.69119439165E-06				137.3	+/- 11.2	
	RMS	Theor.	Amplitude	0.183 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	47.2	26.7	Search (2048X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	61.7	46.7	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	26.3	15.8	Inc. seg. avg.	0.232	Sample rate(MSamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	25.5	27.5	Inc. frq. avg.	0.181	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00	

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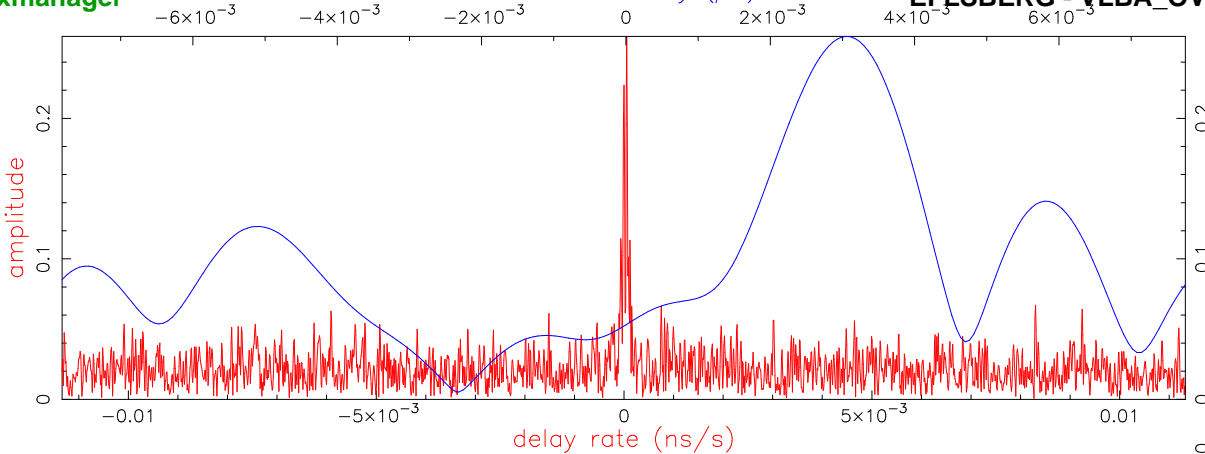
fxmanager

3C273.1W6U9V, No0152, Bo

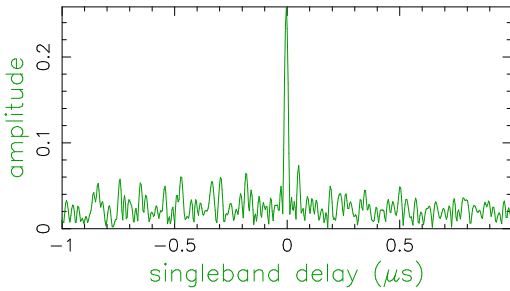
EFLSBERG - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

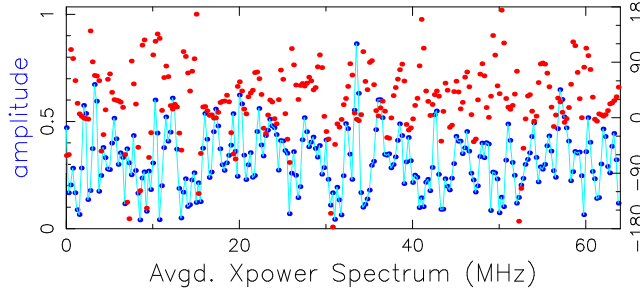
Fringe quality 8



SNR 14.5
 Int time 419.647
 Amp 0.258
 Phase -49.3
 PFD 1.1e-38
 Delays (us)
 SBD -0.004029
 MBD 0.003056
 Fringe rate (Hz)
 0.004833
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

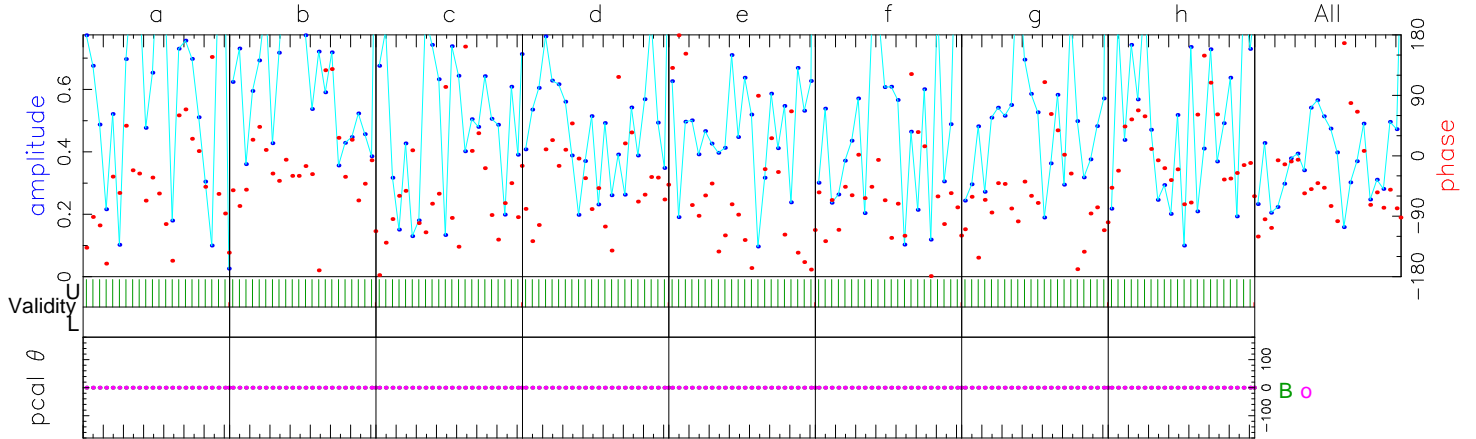


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080002
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-44.1	-19.2	-85.8	-34.9	-116.5	-60.6	-70.5	7.0	Phase	-49.3
	0.3	0.4	0.3	0.3	0.2	0.3	0.3	0.3	Ampl.	0.3
	255.5	255.7	256.2	256.9	256.9	256.4	257.1	256.1	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.10325314258E+03		Apriori delay (usec)		2.10325008650E+03		Resid mbdelay (usec)		3.05608E-03	+/- 7.5E-05
Sband delay (usec)	2.10324605725E+03		Apriori clock (usec)		-2.5708460E+01		Resid sbdelay (usec)		-4.02925E-03	+/- 6.0E-04
Phase delay (usec)	2.10325008491E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-1.59089E-06	+/- 2.6E-07
Delay rate (us/s)	-1.97207148571E+00		Apriori rate (us/s)		-1.97207154182E+00		Resid rate (us/s)		5.61029E-08	+/- 1.1E-09
Total phase (deg)	113.0		Apriori accel (us/s/s)		-1.06838684263E-05		Resid phase (deg)		-49.3	+/- 7.9

ph/seg (deg) 58.5 19.0 Search (2048X32) 0.256 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.1 33.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.3 11.2 Inc. seg. avg. 0.354 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.5 19.5 Inc. frq. avg. 0.305 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 242.0 el 23.5 pa 34.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11287.159 1441.348 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Bo.W.34.1W6U9V

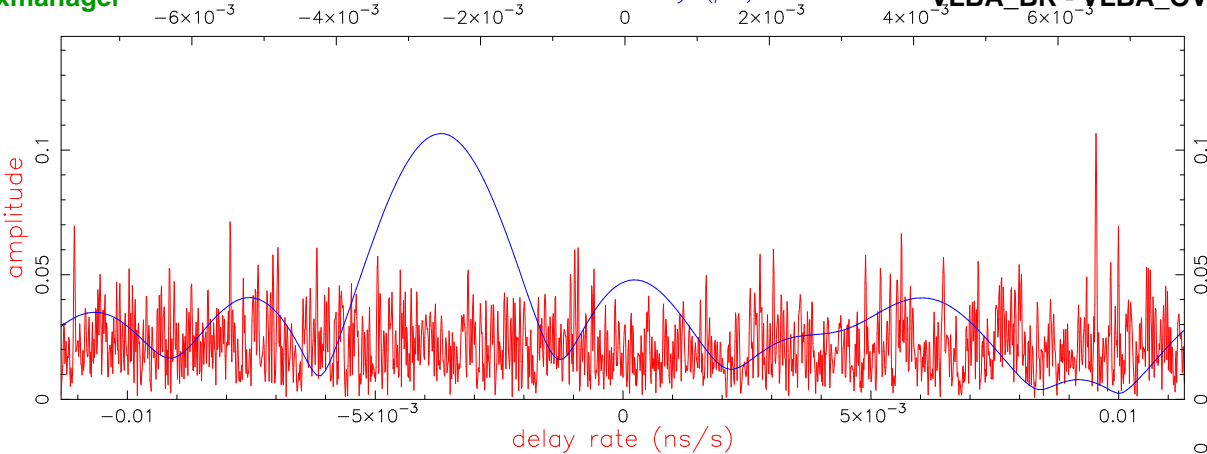
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, bo

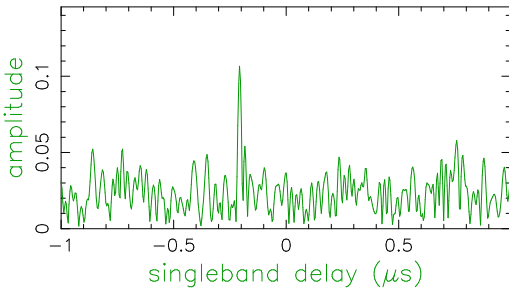
VLBA_BR - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

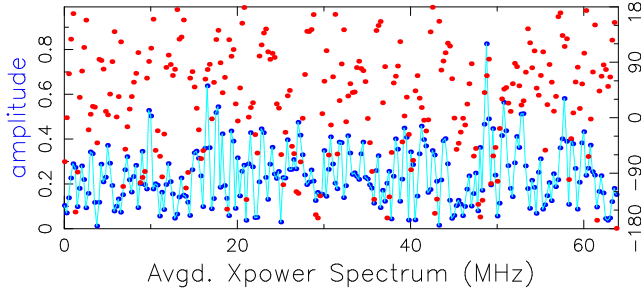


Fringe quality 0

SNR 6.0
 Int time 419.654
 Amp 0.146
 Phase -133.1
 PFD 4.5e-01
 Delays (us)
 SBD -0.206827
 MBD -0.002535
 Fringe rate (Hz)
 0.823057
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

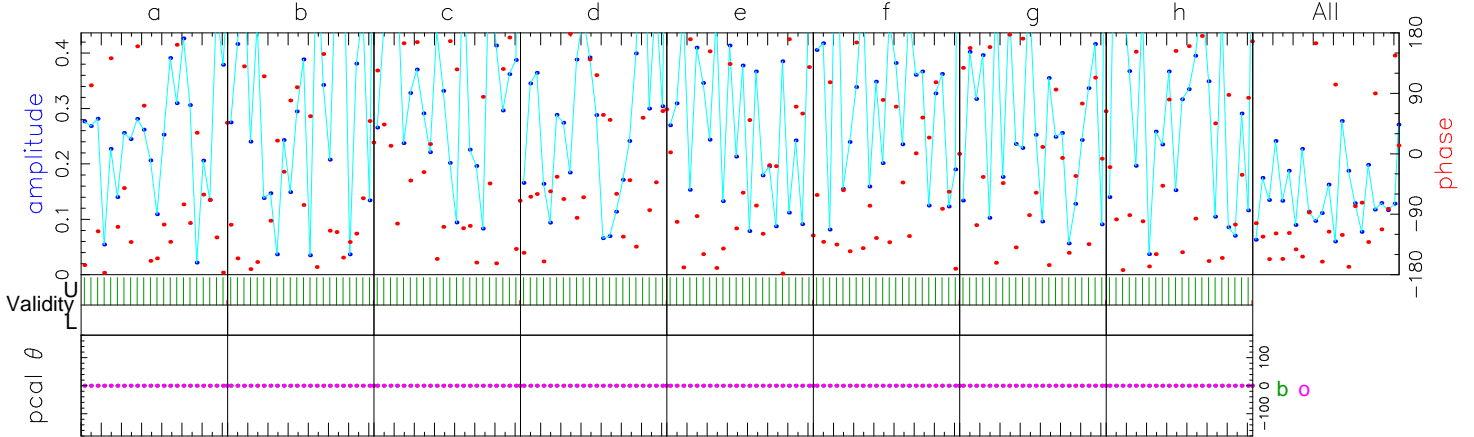


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080005
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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)	-137.4	-147.5	-126.7	-61.3	-150.9	-116.9	-153.3	-140.1		-133.1
Sband delay (usec)	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2		0.1
Phase delay (usec)	206.2	399.9	457.9	189.3	99.0	422.7	230.7	194.3		204.1
Delay rate (us/s)	U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
	b 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
	o 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
b:o 0:0	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	0:0		Mani PC
b 1000	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o 1000	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)	-1.16528515802E+03		Apriori delay (usec)		-1.16507949763E+03		Resid mbdelay (usec)		-2.53539E-03	+/- 1.8E-04
Sband delay (usec)	-1.16528632438E+03		Apriori clock (usec)		-6.6164207E+00		Resid sbdelay (usec)		-2.06827E-01	+/- 1.4E-03
Phase delay (usec)	-1.16507950193E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-4.29098E-06	+/- 6.2E-07
Delay rate (us/s)	-1.79228110804E-01		Apriori rate (us/s)		-1.79237665674E-01		Resid rate (us/s)		9.55487E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		6.69119439165E-06		Resid phase (deg)		-133.1	+/- 19.2

ph/seg (deg) 54.3 46.0 Amplitude 0.146 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.3 80.3 Search (2048X32) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.8 27.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.3 47.4 Inc. seg. avg. 0.149 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

b: az 102.0 el 13.1 pa -40.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 1035.345 1253.619 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/bo.W.53.1W6U9V

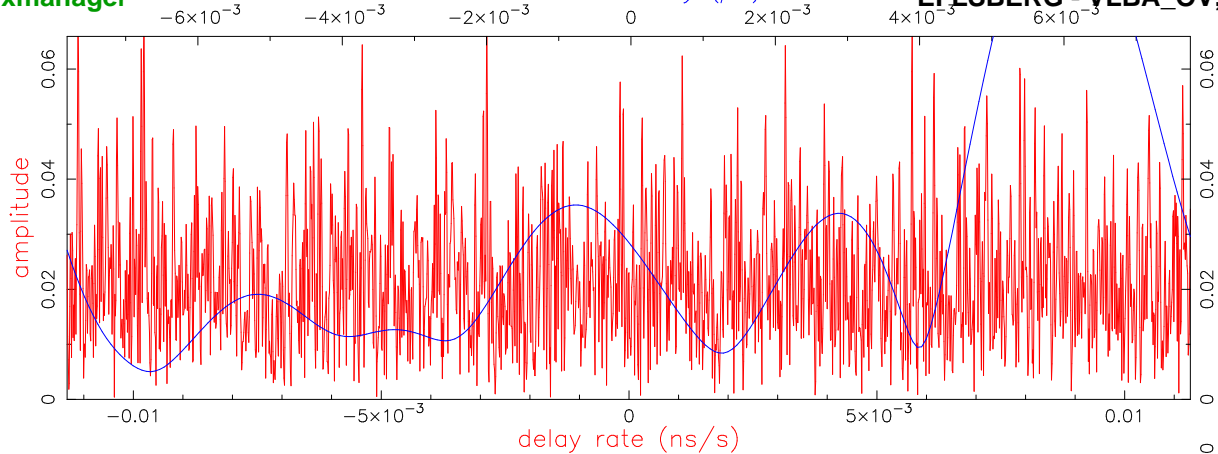
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Bo

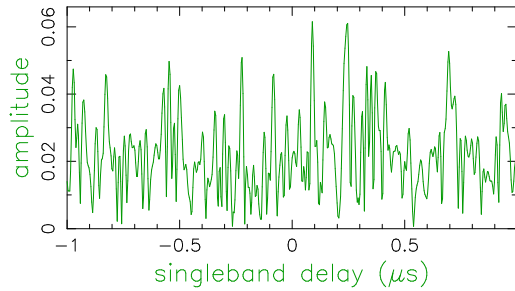
EFLSBERG - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)



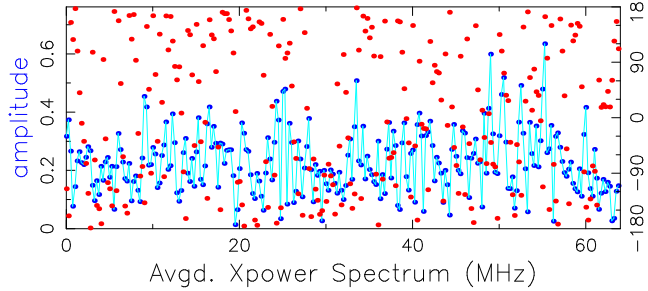
Fringe quality 0

SNR 3.0
 Int time 419.647
 Amp 0.066
 Phase -10.3
 PFD 1.0e+00
 Delays (us)
 SBD 0.695078
 MBD -0.008301
 Fringe rate (Hz)
 -0.704051
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



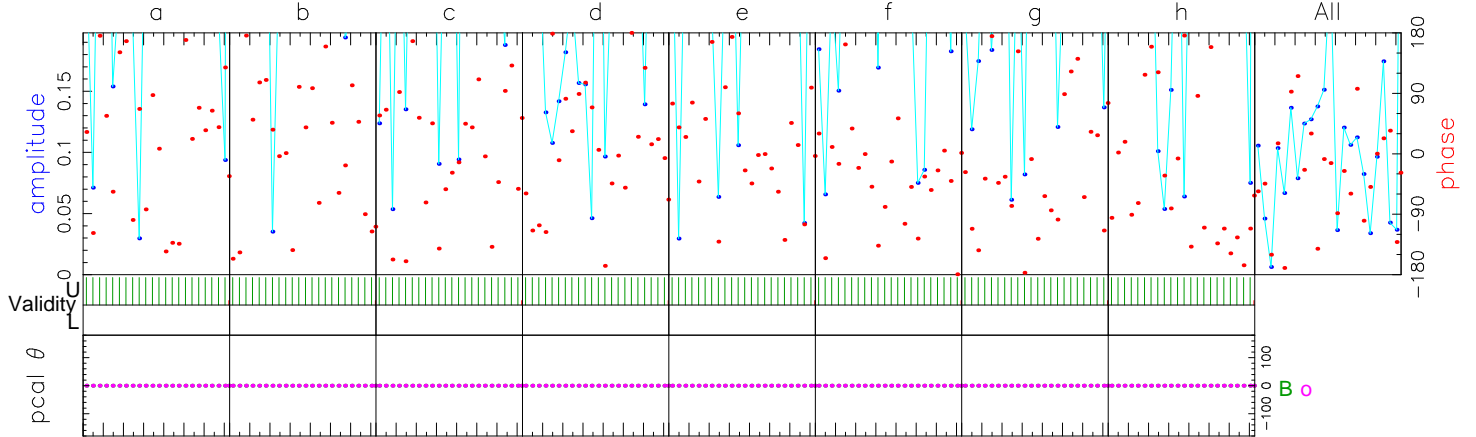
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080006
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
134.4	99.4	50.5	-16.5	19.2	-27.2	-51.5	-110.1		Phase	-10.3
0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2		Ampl.	0.1
14.2	327.1	435.8	503.9	480.6	5.4	54.8	424.4		Sbd box	434.9
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
B 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000		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	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	2.10394491072E+03	Apriori delay (usec)	2.10325008650E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	3.7E-04
Sband delay (usec)	2.10394516412E+03	Apriori clock (usec)	-2.5708460E+01	Resid sbdelay (usec)	6.95078E-01	+/-	2.9E-03
Phase delay (usec)	2.10325008617E+03	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	-3.31055E-07	+/-	1.3E-06
Delay rate (us/s)	-1.97207971515E+00	Apriori rate (us/s)	-1.97207154182E+00	Resid rate (us/s)	-8.17333E-06	+/-	5.2E-09
Total phase (deg)	152.0	Apriori accel (us/s/s)	-1.06838684263E-05	Resid phase (deg)	-10.3	+/-	38.8

ph/seg (deg)	80.0	Theor.	93.0	Amplitude	0.066 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	148.9	Search (2048X32)	0.103	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	90.8	Inc. seg. avg.	0.055	Inc. frq. avg.	0.087	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	116.1	Inc. frq. avg.	0.087			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
						nlags: 256	t_cohere infinite

B: az 242.0 el 23.5 pa 34.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11287.159 1441.348 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Bo.W.54.1W6U9V

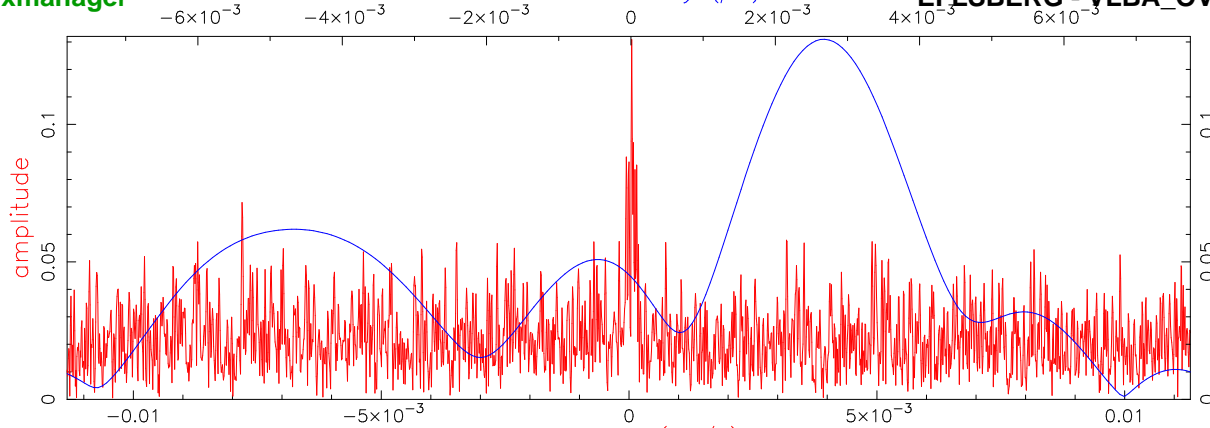
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Bo

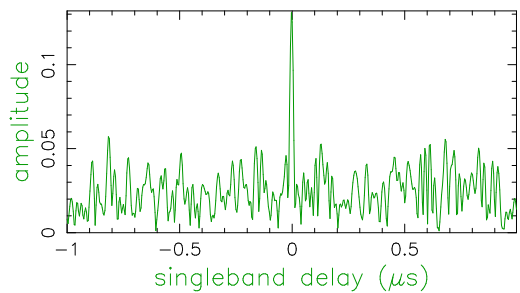
EFLSBERG - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

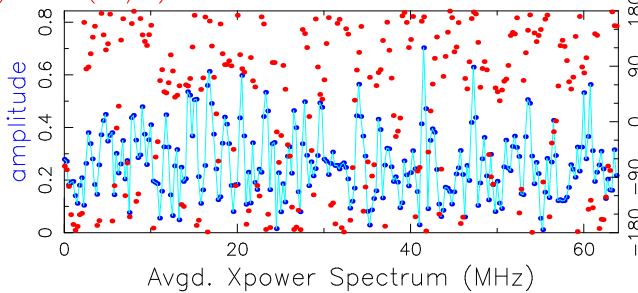


Fringe quality 9

SNR 7.4
 Int time 419.647
 Amp 0.132
 Phase 79.8
 PFD 4.4e-05
 Delays (us)
 SBD -0.002785
 MBD 0.002704
 Fringe rate (Hz)
 0.004808
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

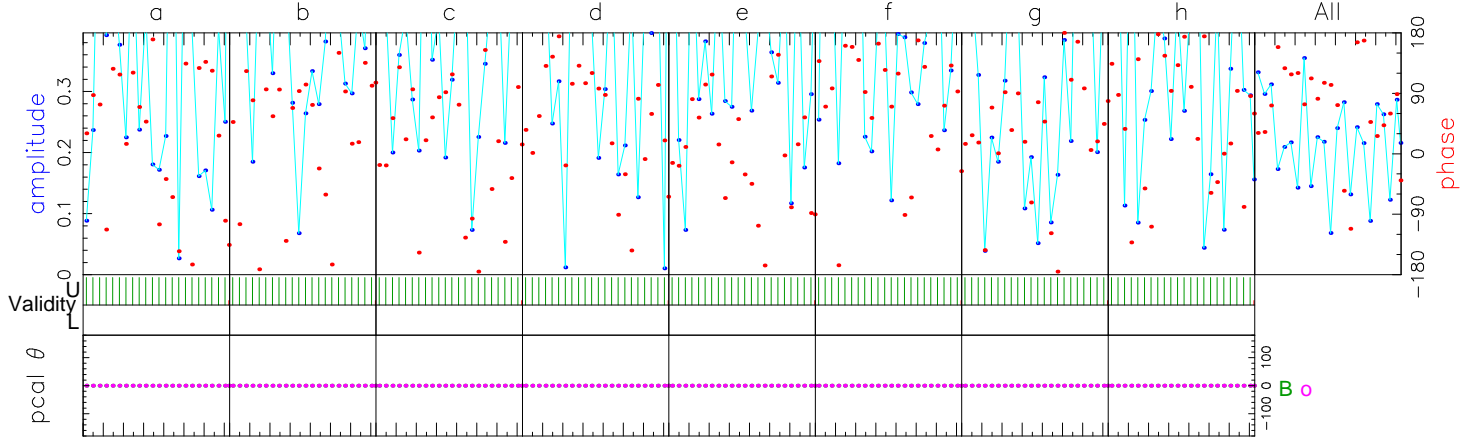


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080009
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	109.8	99.8	47.2	78.6	15.8	111.7	60.9	112.1	Phase	79.8
	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	204.8	255.7	91.1	257.0	257.7	257.2	349.7	404.0	Sbd box	256.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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)	2.10325279061E+03		Apriori delay (usec)		2.10325008650E+03		Resid mbdelay (usec)		2.70411E-03	+/- 1.5E-04
Sband delay (usec)	2.10324730175E+03		Apriori clock (usec)		-2.5708460E+01		Resid sbdelay (usec)		-2.78475E-03	+/- 1.2E-03
Phase delay (usec)	2.10325008907E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		2.57406E-06	+/- 5.0E-07
Delay rate (us/s)	-1.97207148600E+00		Apriori rate (us/s)		-1.97207154182E+00		Resid rate (us/s)		5.58209E-08	+/- 2.1E-09
Total phase (deg)	242.1		Apriori accel (us/s/s)		-1.06838684263E-05		Resid phase (deg)		79.8	+/- 15.5

ph/seg (deg) 63.2 37.2 Search (2048X32) 0.128 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.5 64.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.5 21.9 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.1 38.2 Inc. frq. avg. 0.144 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 242.0 el 23.5 pa 34.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11287.159 1441.348 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Bo.W.72.1W6U9V

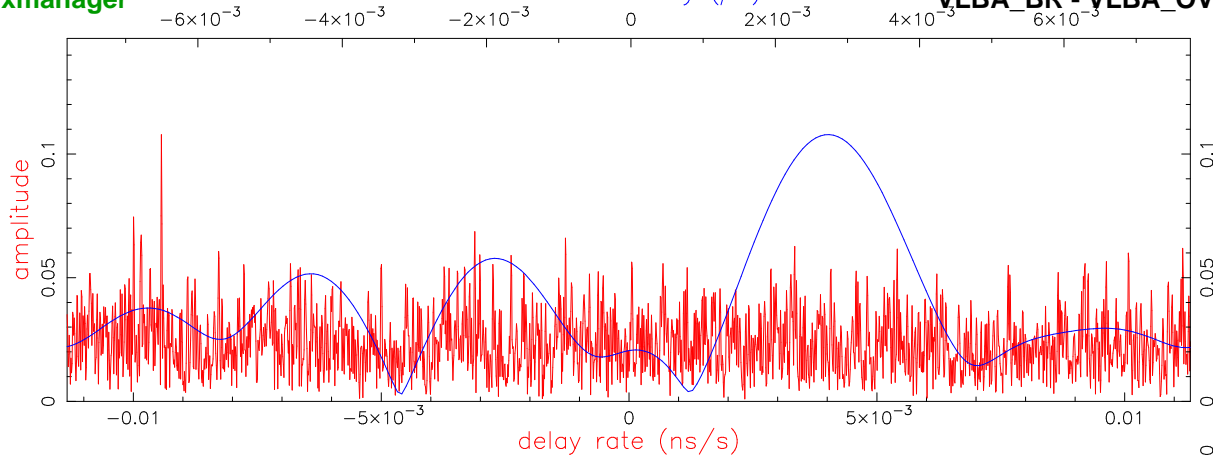
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, bo

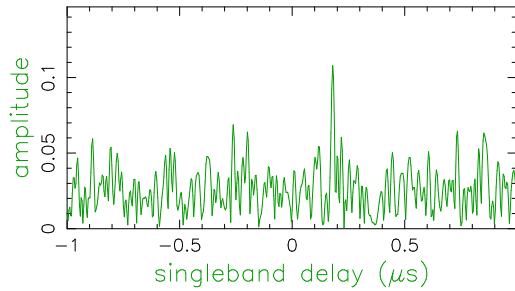
VLBA_BR - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

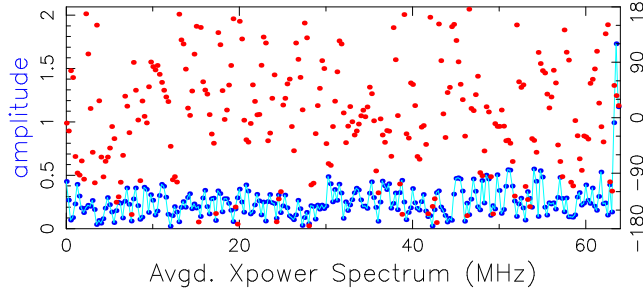


Fringe quality 0

SNR 6.1
 Int time 419.654
 Amp 0.147
 Phase -101.9
 PFD 2.9e-01
 Delays (us)
 SBD 0.180470
 MBD 0.002733
 Fringe rate (Hz)
 -0.813332
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

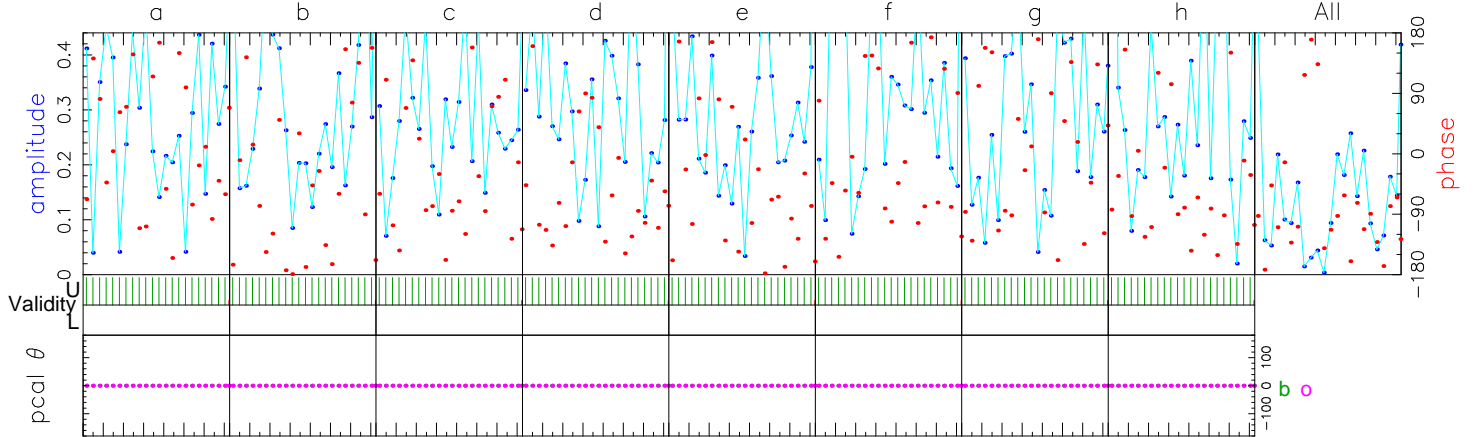


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080009
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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

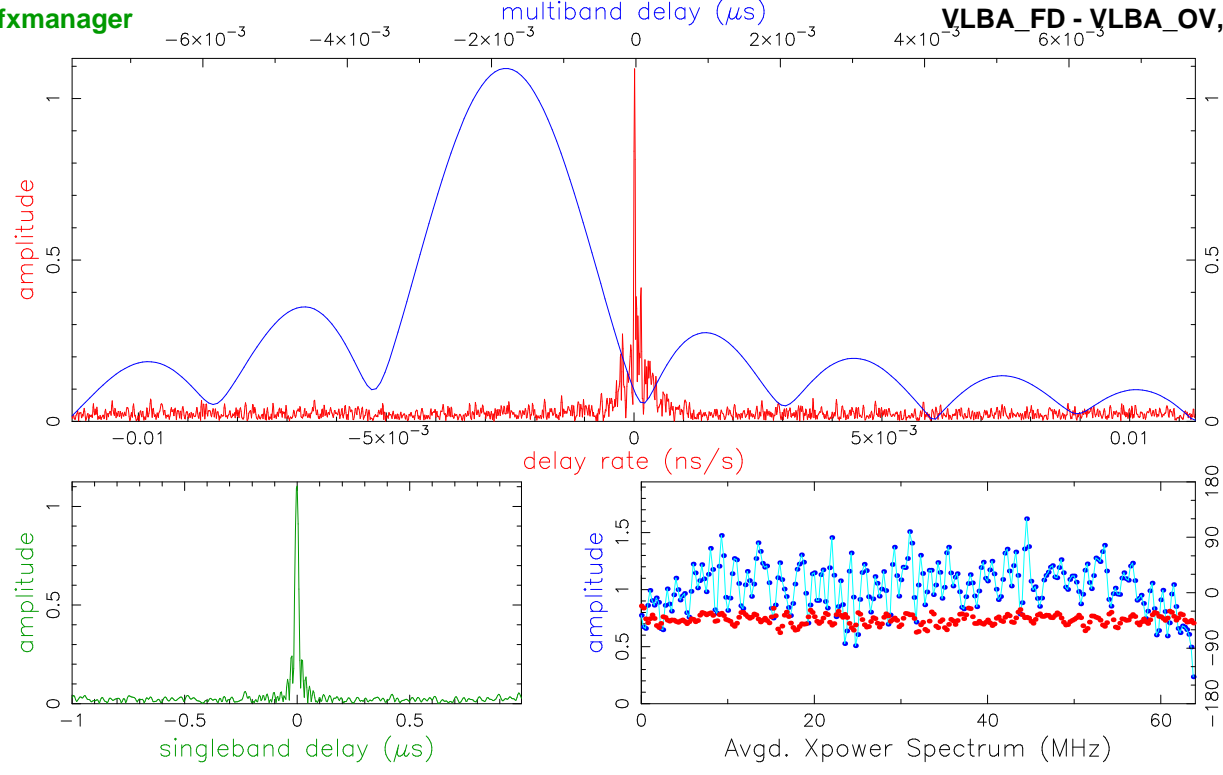


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.7	-139.7	-84.3	-94.6	-120.2	-114.8	-114.5	-93.1	Phase	-101.9
	0.1	0.1	0.1	0.2	0.2	0.1	0.0	0.3	Ampl.	0.1
	101.9	499.9	158.7	301.9	46.1	117.5	27.8	114.1	Sbd box	303.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	PC amp	
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)	-1.16490488928E+03		Apriori delay (usec)		-1.16507949763E+03		Resid mbdelay (usec)		2.73336E-03	+/- 1.8E-04
Sband delay (usec)	-1.16489902788E+03		Apriori clock (usec)		-6.6164207E+00		Resid sbdelay (usec)		1.80470E-01	+/- 1.4E-03
Phase delay (usec)	-1.16507950092E+03		Apriori clockrate (us/s)		-4.5999999E-07		Resid phdelay (usec)		-3.28739E-06	+/- 6.1E-07
Delay rate (us/s)	-1.79247107656E-01		Apriori rate (us/s)		-1.79237665674E-01		Resid rate (us/s)		-9.44198E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		6.69119439165E-06		Resid phase (deg)		-101.9	+/- 18.9

	RMS	Theor.	Amplitude	0.147 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.2	45.3	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	101.8	79.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	26.3	26.7	Inc. seg. avg.	0.139	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	58.4	46.6	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

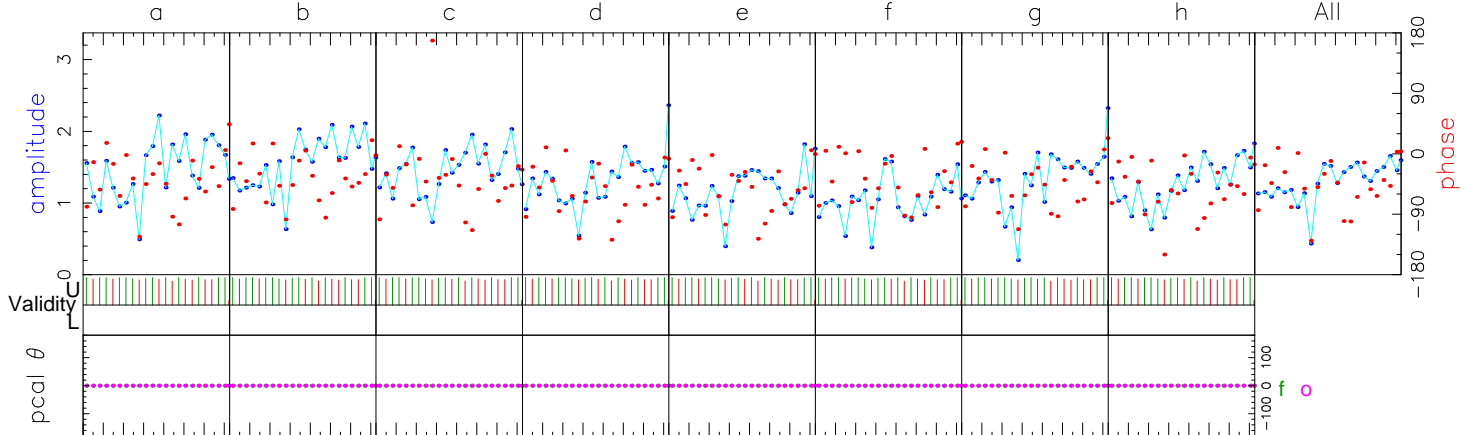
b: az 102.0 el 13.1 pa -40.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 1035.345 1253.619 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/bo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/bo.W.73.1W6U9V



Fringe quality 6
SNR 61.9
Int time 405.239
Amp 1.125
Phase -43.9
PFD 0.0e+00
Delays (us)
SBD -0.001751
MBD -0.001747
Fringe rate (Hz) 0.001409
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080017
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

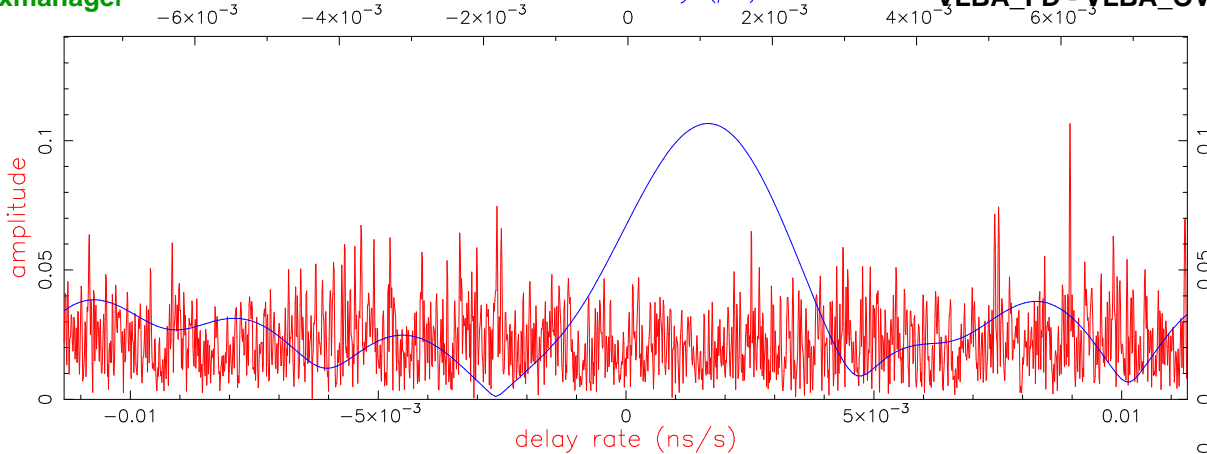


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	804/0	804/0	804/0	804/0	804/0	804/0	804/0	804/0			
f	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
f:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	4.47188674517E+03				4.47188849207E+03						
Sband delay (usec)	4.47188674107E+03				6.5821171E+00						
Phase delay (usec)	4.47188849065E+03				-3.0000002E-07						
Delay rate (us/s)	-5.79399013589E-02				-5.79399177167E-02						
Total phase (deg)			210.6		-2.41060744246E-05						
				Apriori delay (usec)					Resid mbdelay (usec)	-1.74690E-03	+/- 1.8E-05
				Apriori clock (usec)					Resid sbdelay (usec)	-1.75100E-03	+/- 1.4E-04
				Apriori clockrate (us/s)					Resid phdelay (usec)	-1.41539E-06	+/- 6.0E-08
				Apriori rate (us/s)					Resid rate (us/s)	1.63578E-08	+/- 2.5E-10
				Apriori accel (us/s/s)					Resid phase (deg)	-43.9	+/- 1.9
									PCal mode: MANUAL, MANUAL		
									PCal rate: 0.000E+00, 0.000E+00 (us/s)		
									SampCntNorm: enabled		
									Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256 t_cohere infinite		
									ion window (TEC)	0.00	0.00
									sb window (us)	-1.000	1.000
									mb window (us)	-0.008	0.008
									dr window (ns/s)	-0.011	0.011

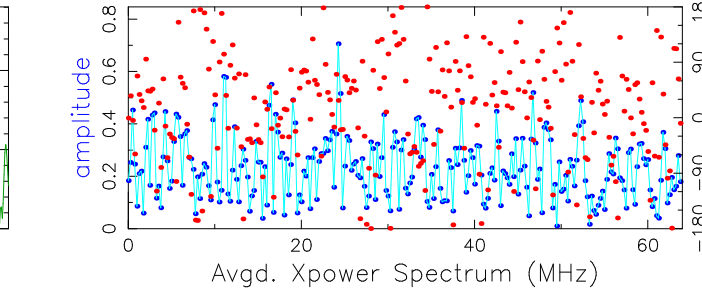
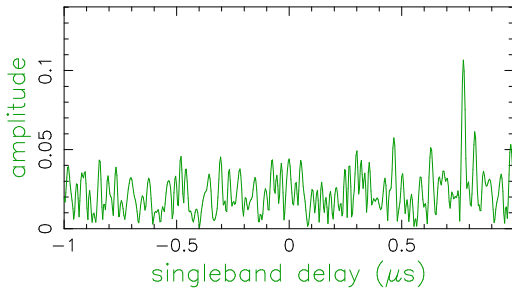
ph/seg (deg) 35.4 4.4 Search (2048X32) 1.021 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 27.2 7.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.5 2.6 Inc. seg. avg. 1.285 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.7 4.6 Inc. frq. avg. 1.098 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 106.7 el 29.3 pa -55.6 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 302.830 -908.930 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/fo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/fo.W.101.1W6U9V

multiband delay (μ s)

Fringe quality 0

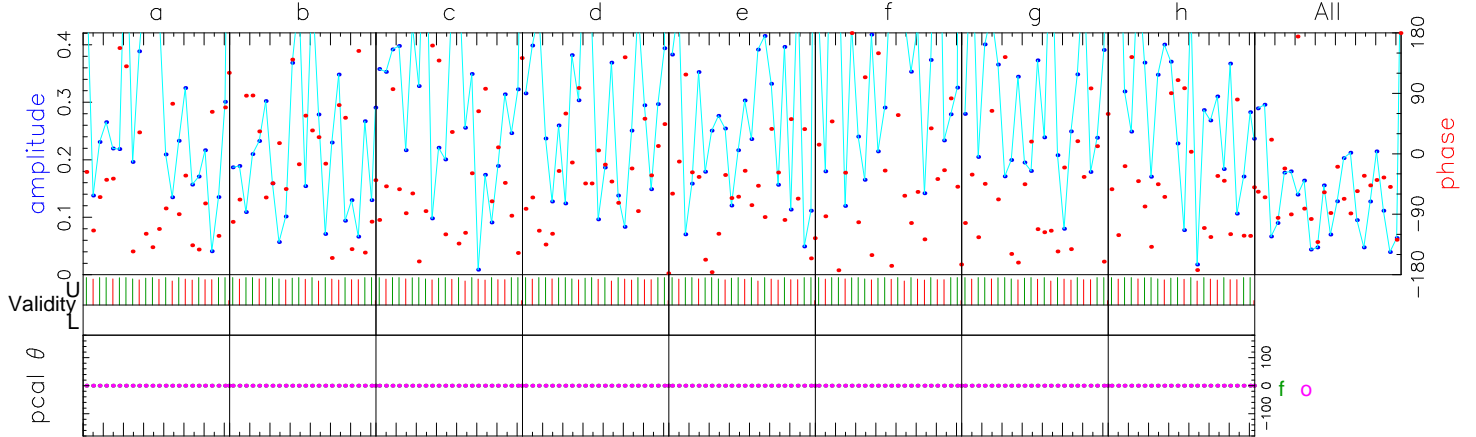


SNR 5.9
Int time 405.238
Amp 0.140
Phase -66.0
PFD 6.4e-01
Delays (us)
SBD 0.774060
MBD 0.001126
Fringe rate (Hz)
0.772418
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Yr:day 16383
Start 2021:287:062922
Stop 2021:287:080021
FRT 2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

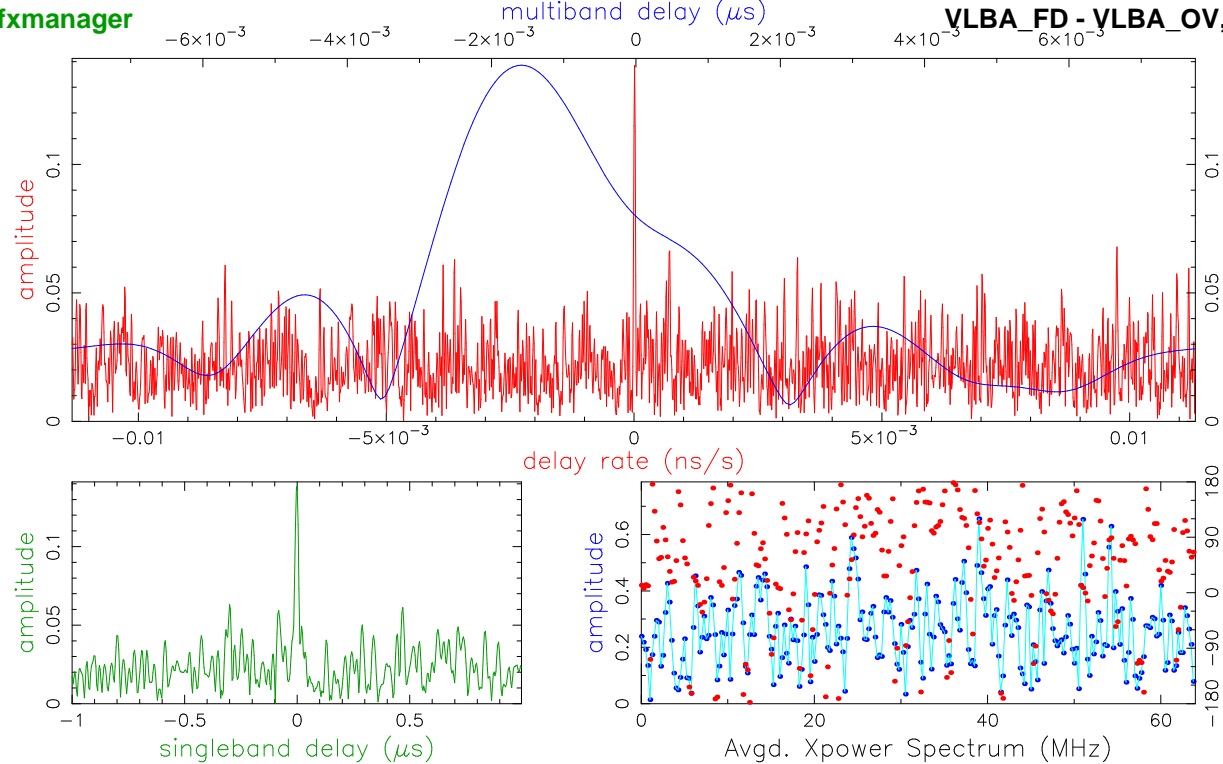


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.7	8.9	-85.3	-42.7	-61.0	-57.9	-78.2	-73.6	Phase	-66.0
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	507.4	445.7	139.9	454.6	456.2	188.8	142.9	179.8	Sbd box	455.2
U/L	804/0	804/0	805/0	805/0	805/0	805/0	805/0	805/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.47265524274E+03		Apriori delay (usec)		4.47188849207E+03		Resid mbdelay (usec)		1.12567E-03	+/- 1.8E-04
Sband delay (usec)	4.47266255232E+03		Apriori clock (usec)		6.5821171E+00		Resid sbdelay (usec)		7.74060E-01	+/- 1.5E-03
Phase delay (usec)	4.47188848994E+03		Apriori clockrate (us/s)		-3.0000002E-07		Resid phdelay (usec)		-2.12813E-06	+/- 6.3E-07
Delay rate (us/s)	-5.79309507117E-02		Apriori rate (us/s)		-5.79399177167E-02		Resid rate (us/s)		8.96700E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.41060744246E-05		Resid phase (deg)		-66.0	+/- 19.5

	RMS	Theor.	Amplitude	0.140 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.8	46.3	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	82.2	80.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.3	27.5	Inc. seg. avg.	0.136	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.1	48.1	Inc. frq. avg.	0.137	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

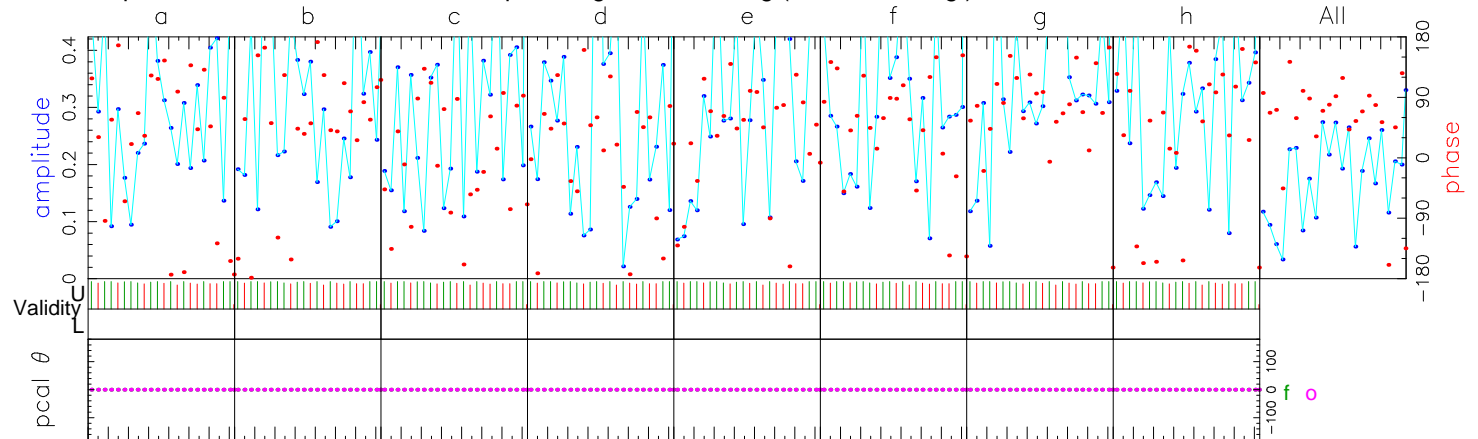
f: az 106.7 el 29.3 pa -55.6 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 302.830 -908.930 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/fo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/fo.W.118.1W6U9V



Fringe quality 9
SNR 7.8
Int time 405.239
Amp 0.141
Phase 81.4
PFD 2.5e-06
Delays (us)
SBD -0.001766
MBD -0.001636
Fringe rate (Hz) 0.001323
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build 2021:287:062922
2021:287:080024
2021:252:122852
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

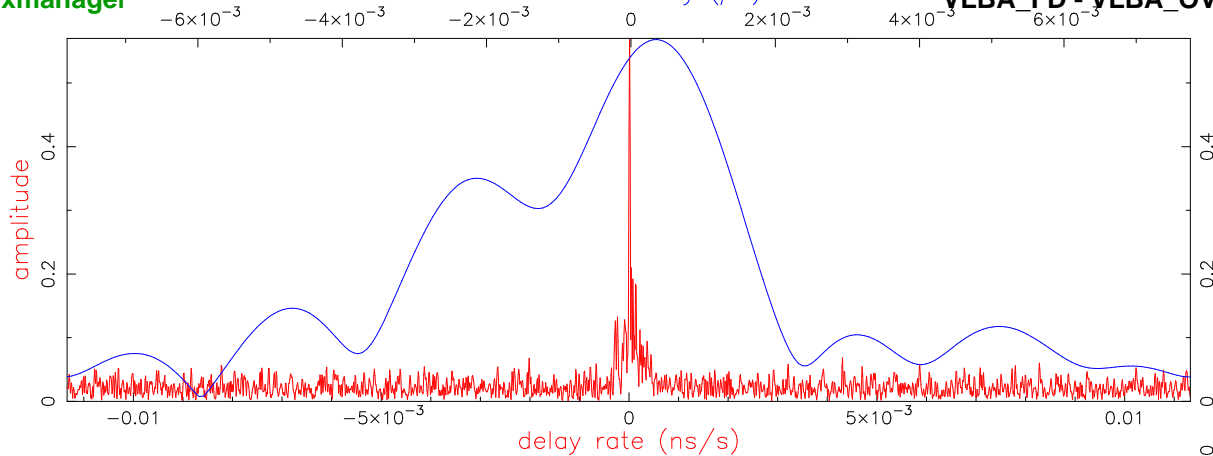
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	804/0	804/0	804/0	804/0	804/0	804/0	804/0	804/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
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)		4.47188685592E+03			4.47188849207E+03				Resid mbdelay (usec)	-1.63615E-03 +/- 1.4E-04
Sband delay (usec)		4.47188672607E+03			6.5821171E+00				Resid sbdelay (usec)	-1.76600E-03 +/- 1.1E-03
Phase delay (usec)		4.47188849469E+03			-3.0000002E-07				Resid phdelay (usec)	2.62373E-06 +/- 4.8E-07
Delay rate (us/s)		-5.79399023608E-02			-5.79399177167E-02				Resid rate (us/s)	1.53559E-08 +/- 2.0E-09
Total phase (deg)			335.8		-2.41060744246E-05				Resid phase (deg)	81.4 +/- 14.7

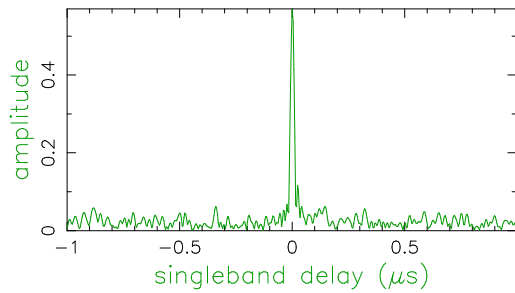
ph/seg (deg) 47.2 35.0 Amplitude 0.141 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.9 61.1 Search (2048X32) 0.134 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 39.9 20.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 31.1 36.4 Inc. seg. avg. 0.145 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
f: az 106.7 el 29.3 pa -55.6 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 302.830 -908.930 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/fo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/fo.W.136.1W6U9V simultaneous interpolator

multiband delay (μ s)

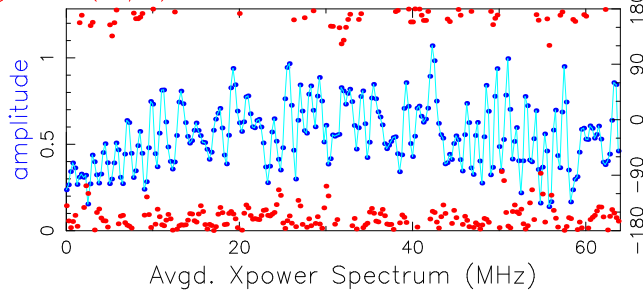


Fringe quality 4

SNR 31.4
Int time 405.238
Amp 0.570
Phase -162.9
PFD 0.0e+00
Delays (us)
SBD 0.000740
MBD 0.000358
Fringe rate (Hz)
0.001406
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

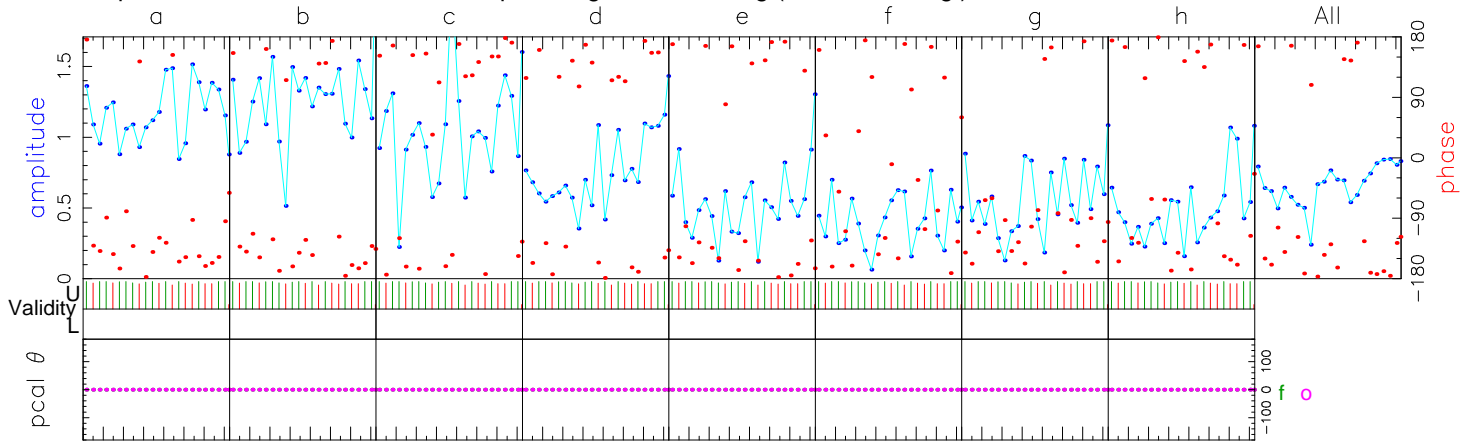


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080014
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

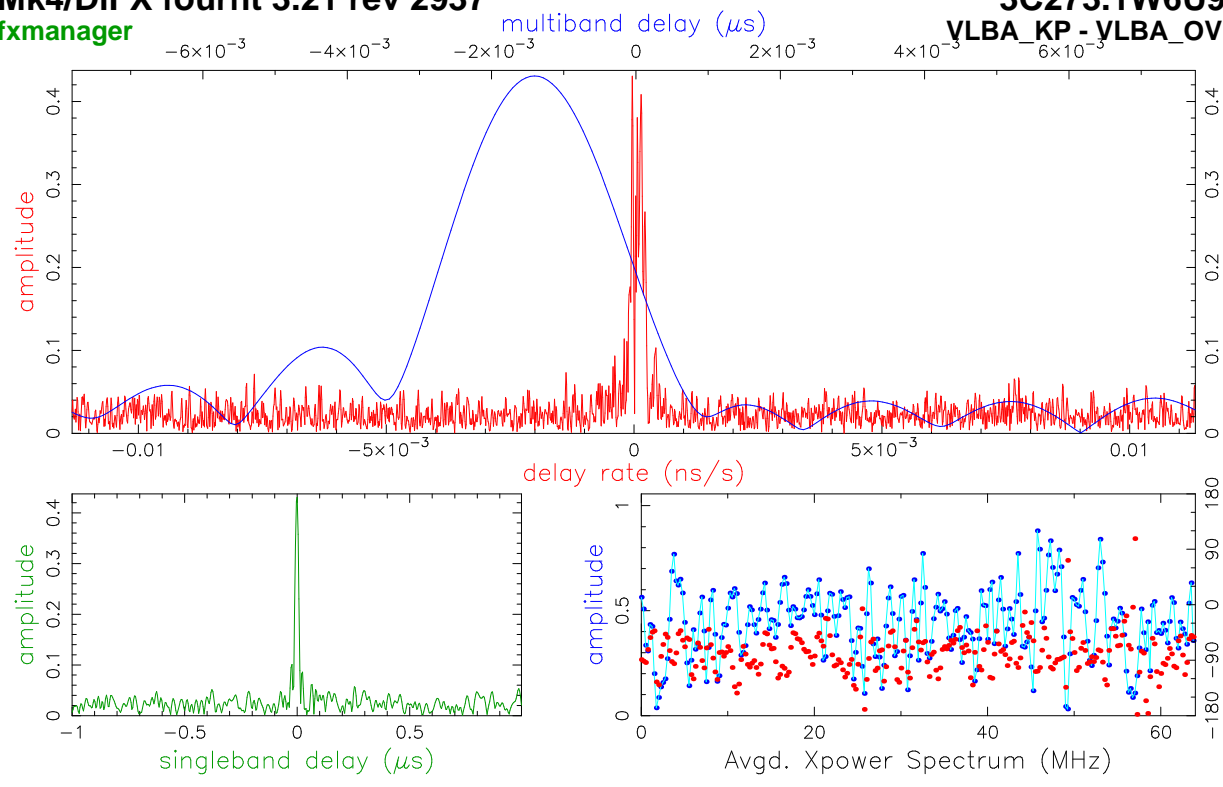
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.4	-158.0	171.9	167.8	-172.6	-154.5	-131.2	-157.8	Phase	-162.9
	1.0	1.0	0.9	0.6	0.4	0.2	0.4	0.4	Ampl.	0.6
	257.3	256.7	256.9	257.1	257.5	258.7	256.8	257.5	Sbd box	257.2
U/L	804/0	804/0	805/0	805/0	805/0	805/0	805/0	805/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

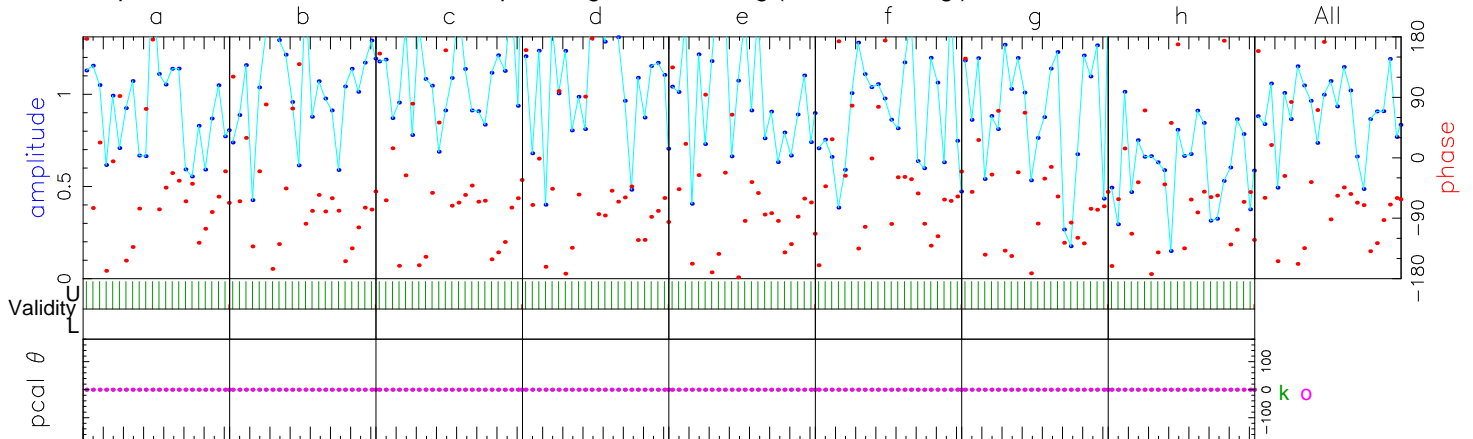
Group delay (usec)(sbd)	4.47188885039E+03	Apriori delay (usec)	4.47188849207E+03	Resid mbdelay (usec)	3.58322E-04	+/-	3.5E-05
Sband delay (usec)	4.47188923182E+03	Apriori clock (usec)	6.5821171E+00	Resid sbdelay (usec)	7.39750E-04	+/-	2.7E-04
Phase delay (usec)	4.47188848682E+03	Apriori clockrate (us/s)	-3.0000002E-07	Resid phdelay (usec)	-5.25262E-06	+/-	1.2E-07
Delay rate (us/s)	-5.79399013965E-02	Apriori rate (us/s)	-5.79399177167E-02	Resid rate (us/s)	1.63202E-08	+/-	5.0E-10
Total phase (deg)	91.6	Apriori accel (us/s/s)	-2.41060744246E-05	Resid phase (deg)	-162.9	+/-	3.7

ph/seg (deg)	34.8	RMS	34.8	Theor.	8.7	Amplitude	0.570 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	28.8	Search (2048X32)	0.530	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm:	enabled
ph/frq (deg)	23.0	Inc. seg. avg.	0.650	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	nlags:	256	t_cohere	infinite
amp/frq (%)	51.9	Inc. frq. avg.	0.604	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00				



Fringe quality 7
SNR 24.5
Int time 419.613
Amp 0.437
Phase -81.9
PFD 0.0e+00
Delays (us)
SBD -0.001583
MBD -0.001447
Fringe rate (Hz)
-0.002538
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080017
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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
	-75.7	-88.1	-88.3	-87.8	-80.7	-69.1	-72.6	-88.8	Phase	-81.9
	0.4	0.5	0.5	0.6	0.4	0.4	0.4	0.3	Ampl.	0.4
	256.1	256.3	257.1	256.6	256.8	256.7	256.2	256.6	Sbd box	256.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.24957372625E+03		Apriori delay (usec)		2.24957517356E+03		Resid mbdelay (usec)		-1.44731E-03	+/- 4.4E-05
Sband delay (usec)	2.24957359031E+03		Apriori clock (usec)		-3.3264599E+00		Resid sbdelay (usec)		-1.58325E-03	+/- 3.5E-04
Phase delay (usec)	2.24957517092E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-2.63968E-06	+/- 1.5E-07
Delay rate (us/s)	1.58075080350E-02		Apriori rate (us/s)		1.58075374969E-02		Resid rate (us/s)		-2.94618E-08	+/- 6.2E-10
Total phase (deg)	80.4		Apriori accel (us/s/s)		-1.22669288016E-05		Resid phase (deg)		-81.9	+/- 4.7

ph/seg (deg) 72.0 11.2 Amplitude 0.437 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 116.0 19.6 Search (2048X32) 0.424 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 8.7 6.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 18.5 11.5 Inc. seg. avg. 0.892 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
k: az 102.5 el 22.6 pa -55.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) -105.476 -702.612 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/ko..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/ko.W.100.1W6U9V simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

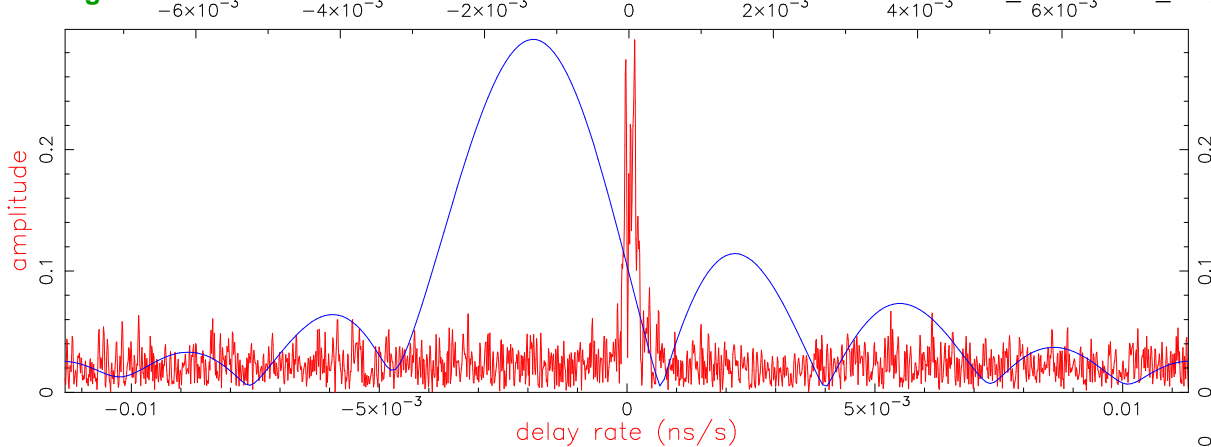
fxmanager

3C273.1W6U9V, No0152, ko

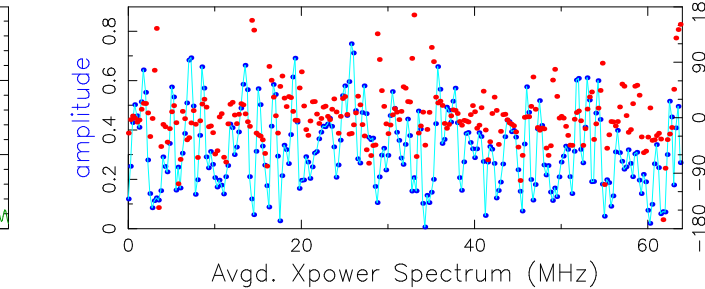
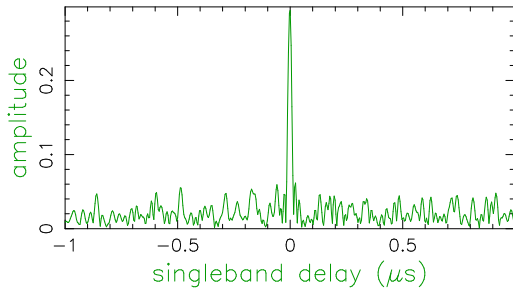
VLBA_KP - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

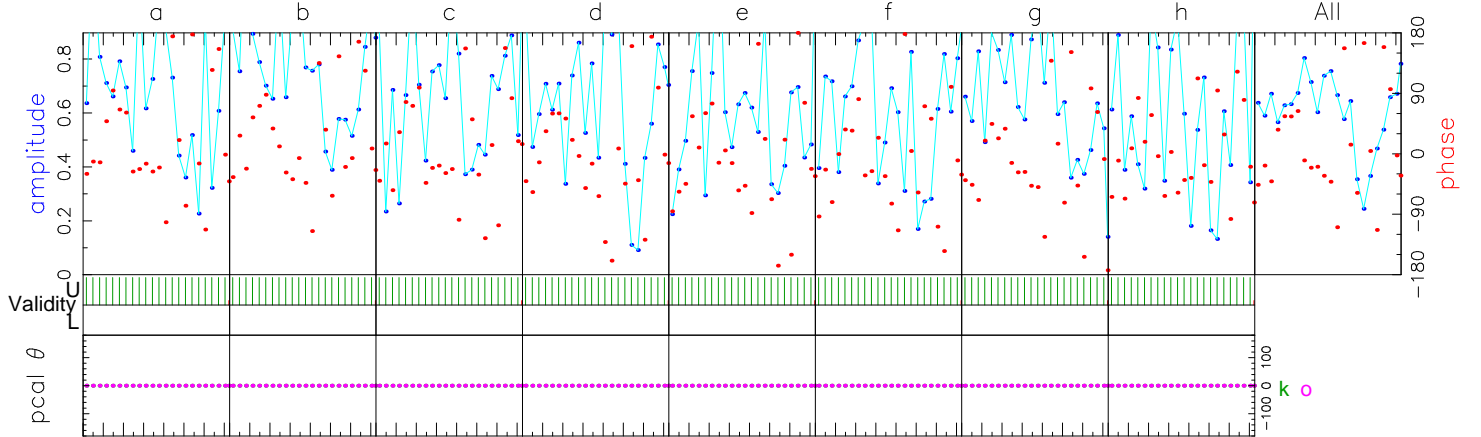


SNR 16.8
Int time 419.613
Amp 0.299
Phase -6.5
PFD 0.0e+00
Delays (us)
SBD -0.001685
MBD -0.001276
Fringe rate (Hz) 0.013255
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080022
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		2.24957389767E+03			2.24957517356E+03				Resid mbdelay (usec)	-1.27590E-03 +/- 6.5E-05
Sband delay (usec)		2.24957348906E+03			-3.3264599E+00				Resid sbdelay (usec)	-1.68450E-03 +/- 5.1E-04
Phase delay (usec)		2.24957517335E+03			-3.6000001E-07				Resid phdelay (usec)	-2.10131E-03 +/- 2.2E-07
Delay rate (us/s)		1.58076913779E-02			1.58075374969E-02				Resid rate (us/s)	1.53881E-07 +/- 9.1E-10
Total phase (deg)			155.7		-1.22669288016E-05				Resid phase (deg)	-6.5 +/- 6.8
	RMS	Theor.	Amplitude	0.299 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	79.2	16.4	Search (2048X32)	0.289	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	110.5	28.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	11.1	9.7	Inc. seg. avg.	0.578	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	14.0	16.9	Inc. frq. avg.	0.291	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 102.5 el 22.6 pa -55.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) -105.476 -702.612 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/ko..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/ko.W.123.1W6U9V

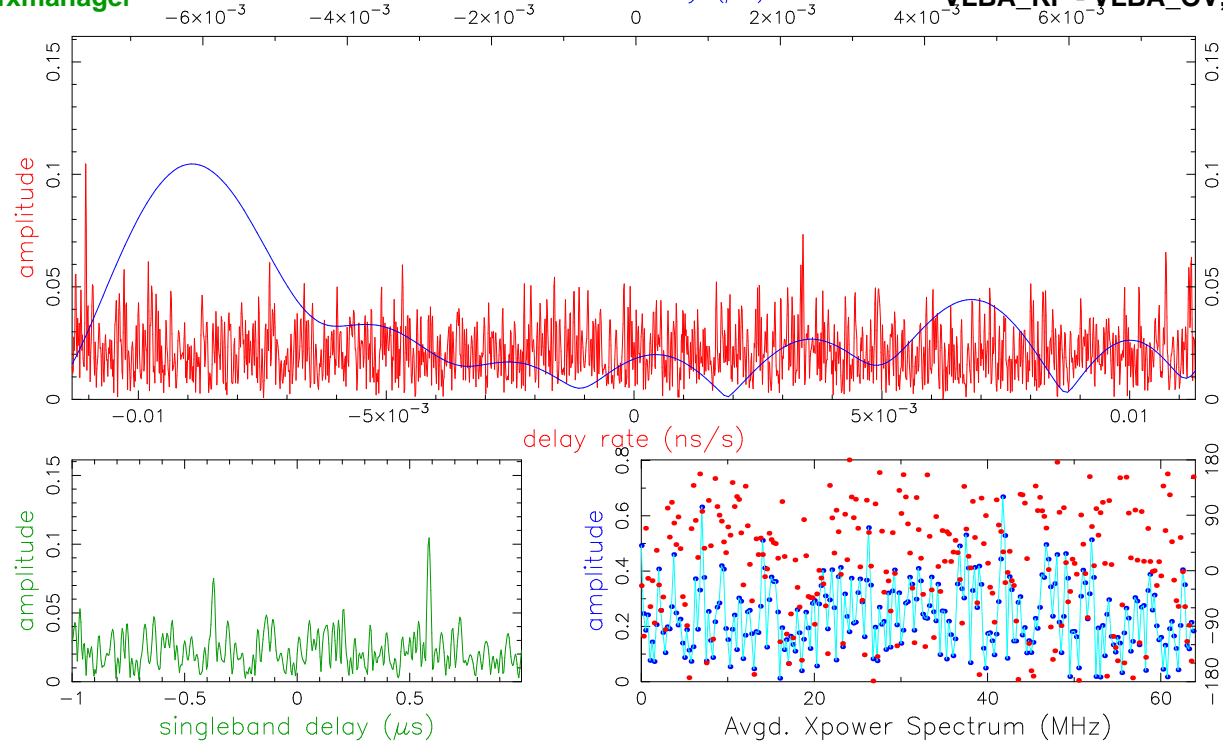
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, ko

VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

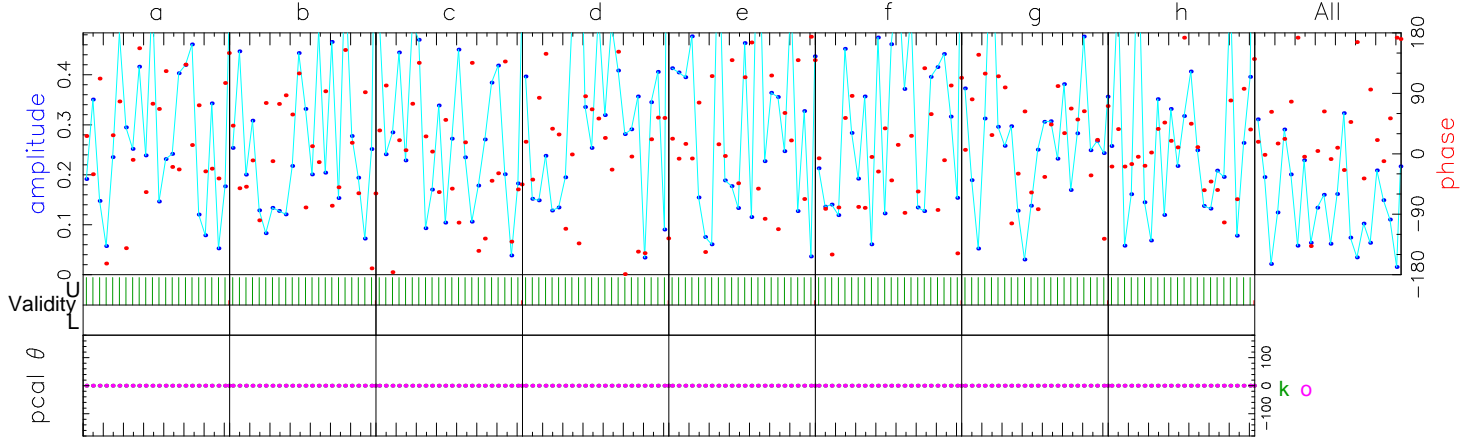


Fringe quality 0

SNR 5.9
 Int time 419.613
 Amp 0.161
 Phase 15.9
 PFD 6.4e-01
 Delays (us)
 SBD 0.585106
 MBD -0.006167
 Fringe rate (Hz)
 -0.954309
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080025
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		2.25016275659E+03		Apriori delay (usec)	2.24957517356E+03		Resid mbdelay (usec)	-6.16697E-03	+/-	1.8E-04
Sband delay (usec)		2.25016027981E+03		Apriori clock (usec)	-3.3264599E+00		Resid sbdelay (usec)	5.85106E-01	+/-	1.5E-03
Phase delay (usec)		2.24957517408E+03		Apriori clockrate (us/s)	-3.6000001E-07		Resid phdelay (usec)	5.13404E-07	+/-	6.3E-07
Delay rate (us/s)		1.57964589122E-02		Apriori rate (us/s)	1.58075374969E-02		Resid rate (us/s)	-1.10786E-05	+/-	2.6E-09
Total phase (deg)			178.2	Apriori accel (us/s/s)	-1.22669288016E-05		Resid phase (deg)	15.9	+/-	19.5

	RMS	Theor.	Amplitude	0.161 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	74.4	46.7	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	92.1	81.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.1	27.5	Inc. seg. avg.	0.163	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.5	48.1	Inc. frq. avg.	0.153	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 102.5 el 22.6 pa -55.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) -105.476 -702.612 simultaneous interpolator

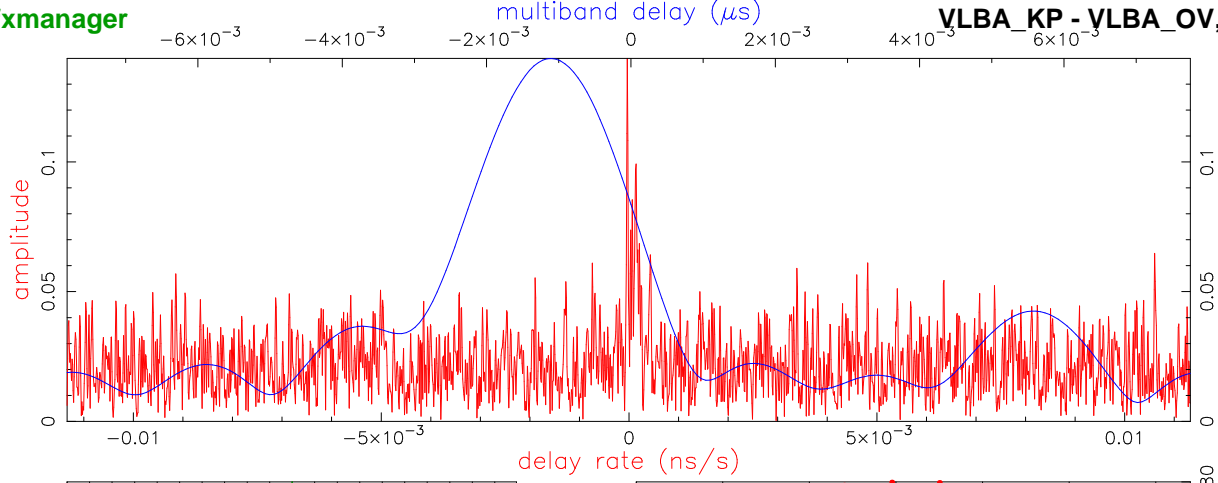
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/ko..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/ko.W.143.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, ko

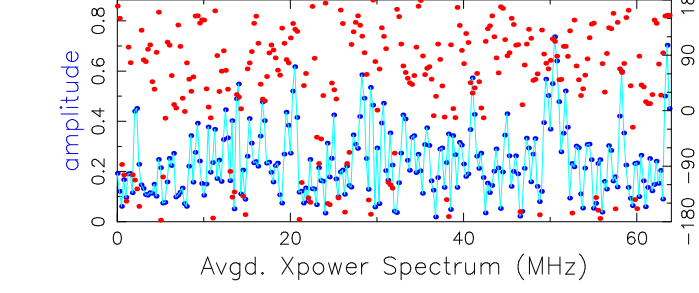
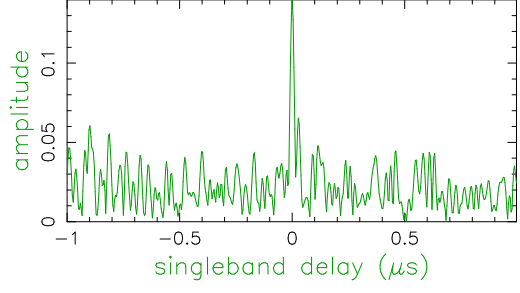
VLBA_KP - VLBA_OV, fgroup W, pol RL



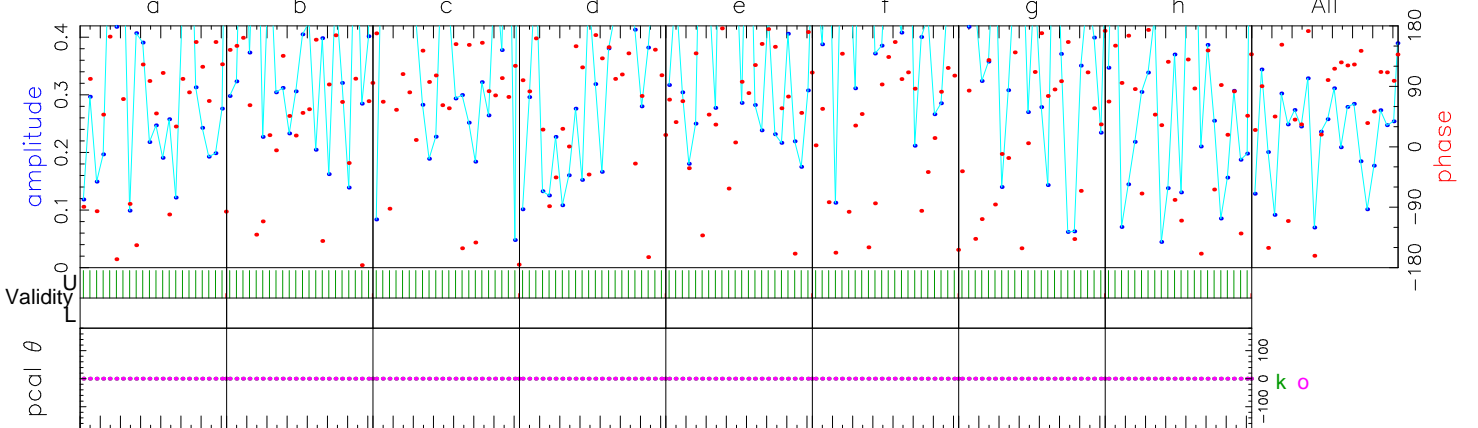
Fringe quality 9

SNR 7.8
 Int time 419.613
 Amp 0.140
 Phase 107.4
 PFD 1.5e-06
 Delays (us)
 SBD -0.000259
 MBD -0.001117
 Fringe rate (Hz)
 -0.002719
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080029
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.24957405678E+03		Apriori delay (usec)		2.24957517356E+03		Resid mbdelay (usec)		-1.11678E-03	+/- 1.4E-04
Sband delay (usec)	2.24957491431E+03		Apriori clock (usec)		-3.3264599E+00		Resid sbdelay (usec)		-2.59250E-04	+/- 1.1E-03
Phase delay (usec)	2.24957517703E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		3.46307E-06	+/- 4.7E-07
Delay rate (us/s)	1.58075059313E-02		Apriori rate (us/s)		1.58075374969E-02		Resid rate (us/s)		-3.15655E-08	+/- 1.9E-09
Total phase (deg)	269.6		Apriori accel (us/s/s)		-1.22669288016E-05		Resid phase (deg)		107.4	+/- 14.6

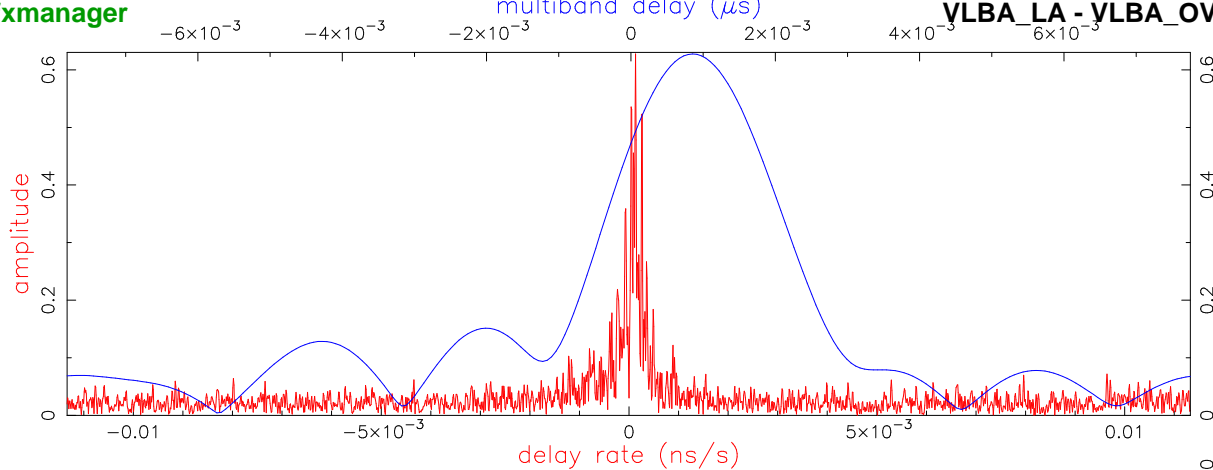
ph/seg (deg) 61.7 35.1 Amplitude 0.140 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.6 61.2 Search (2048X32) 0.138 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.7 20.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.2 36.1 Inc. seg. avg. 0.194 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 k: az 102.5 el 22.6 pa -55.8 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) -105.476 -702.612 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/c211a/v2/1234/No0152/ko..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/ko.W.160.1W6U9V simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

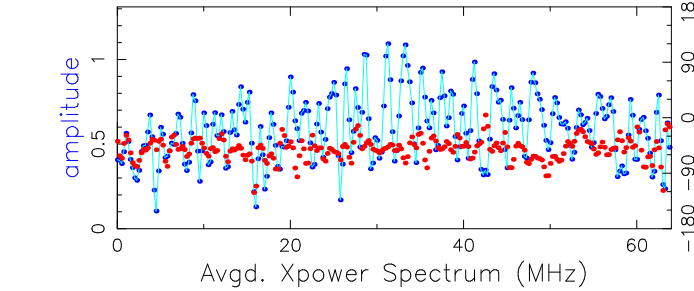
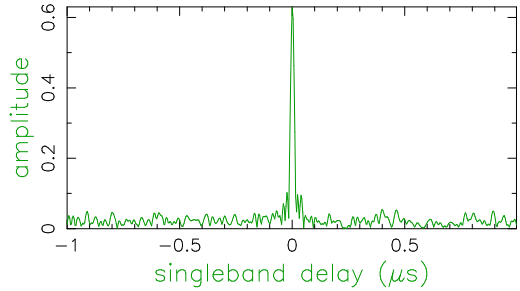
3C273.1W6U9V, No0152, lo

VLBA_LA - VLBA_OV, fgroup W, pol LL



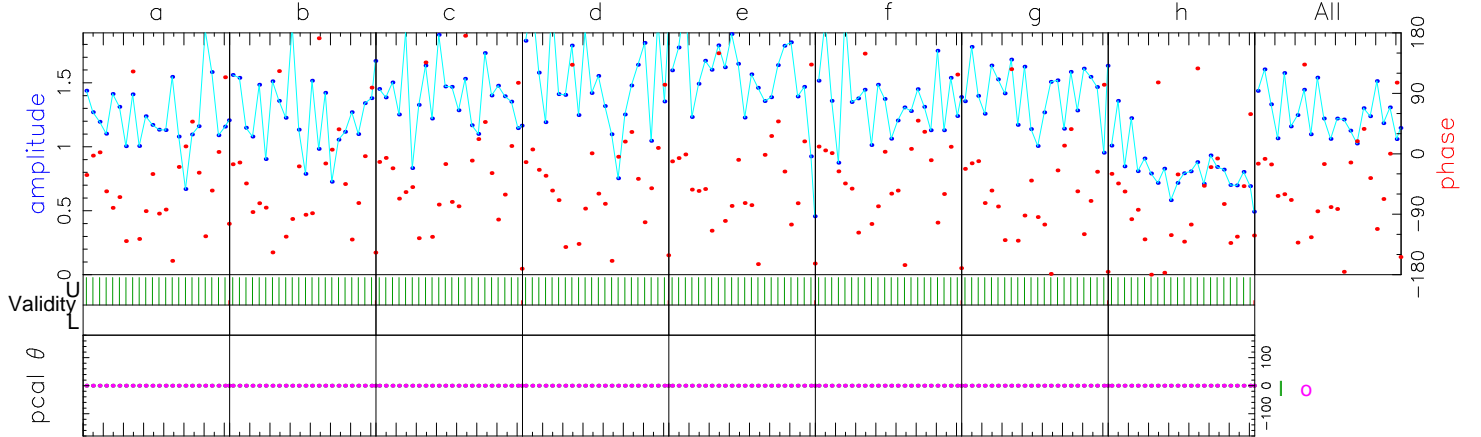
Fringe quality 6

SNR 35.3
 Int time 419.650
 Amp 0.630
 Phase -50.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000855
 MBD 0.000877
 Fringe rate (Hz) 0.011002
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



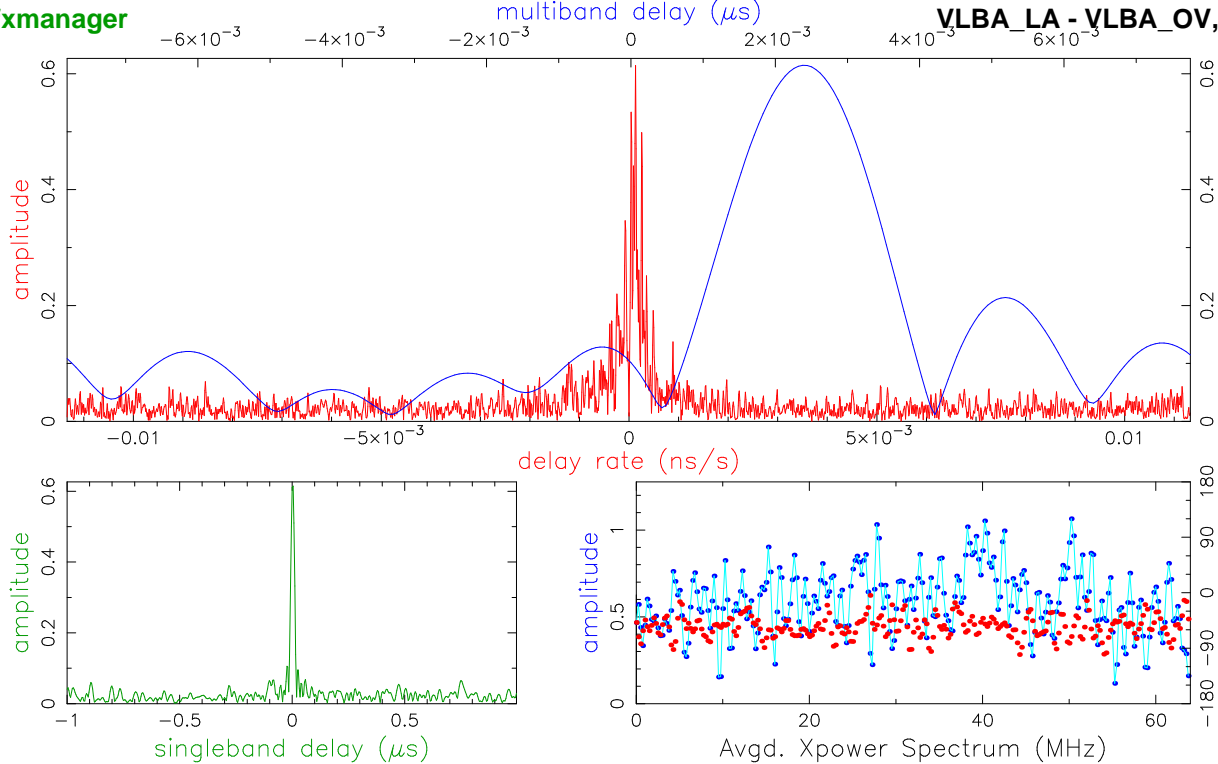
Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080031
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



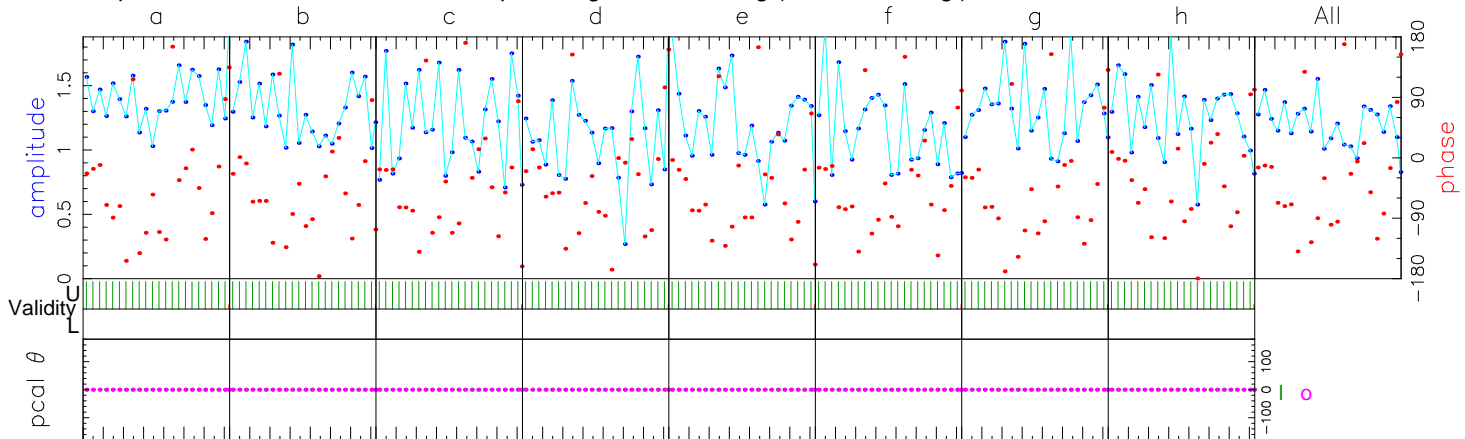
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	3.34705542477E+03		Apriori delay (usec)		3.34705454750E+03		Resid mbdelay (usec)		8.77272E-04	+/- 3.1E-05
Sband delay (usec)	3.34705540225E+03		Apriori clock (usec)		-6.2315083E+00		Resid sbdelay (usec)		8.54750E-04	+/- 2.4E-04
Phase delay (usec)	3.34705454587E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-1.63184E-06	+/- 1.0E-07
Delay rate (us/s)	-9.30834161136E-02		Apriori rate (us/s)		-9.30835438368E-02		Resid rate (us/s)		1.27723E-07	+/- 4.3E-10
Total phase (deg)	209.2		Apriori accel (us/s/s)		-1.79072691712E-05		Resid phase (deg)		-50.6	+/- 3.2

ph/seg (deg) 72.0 7.8 Search (2048X32) 0.587 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 105.4 13.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.0 4.6 Inc. seg. avg. 1.259 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 19.0 8.0 Inc. frq. avg. 0.645 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 107.7 el 25.9 pa -50.5 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 511.799 -228.270 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/lo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/lo.W.166.1W6U9V



Fringe quality 6
SNR 35.1
Int time 419.650
Amp 0.627
Phase -59.0
PFD 0.0e+00
Delays (us)
SBD 0.002097
MBD 0.002357
Fringe rate (Hz)
0.011080
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080035
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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
	-63.5	-56.4	-62.7	-51.9	-62.1	-63.7	-74.3	-37.6		-59.0
	0.6	0.7	0.6	0.5	0.6	0.6	0.7	0.7		0.6
	257.9	257.6	257.7	257.2	257.6	257.4	257.8	257.6		257.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000		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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	3.34705690499E+03		Apriori delay (usec)		3.34705454750E+03		Resid mbdelay (usec)		2.35749E-03	+/- 3.1E-05
Sband delay (usec)	3.34705664450E+03		Apriori clock (usec)		-6.2315083E+00		Resid sbdelay (usec)		2.09700E-03	+/- 2.5E-04
Phase delay (usec)	3.34705454560E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		-1.90195E-06	+/- 1.1E-07
Delay rate (us/s)	-9.30834152138E-02		Apriori rate (us/s)		-9.30835438368E-02		Resid rate (us/s)		1.28623E-07	+/- 4.3E-10
Total phase (deg)	200.8		Apriori accel (us/s/s)		-1.79072691712E-05		Resid phase (deg)		-59.0	+/- 3.3

	RMS	Theor.	Amplitude	0.627 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	70.5	7.8	Search (2048X32)	0.588	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	96.9	13.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	11.7	4.6	Inc. seg. avg.	1.202	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	9.4	8.1	Inc. frq. avg.	0.622	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

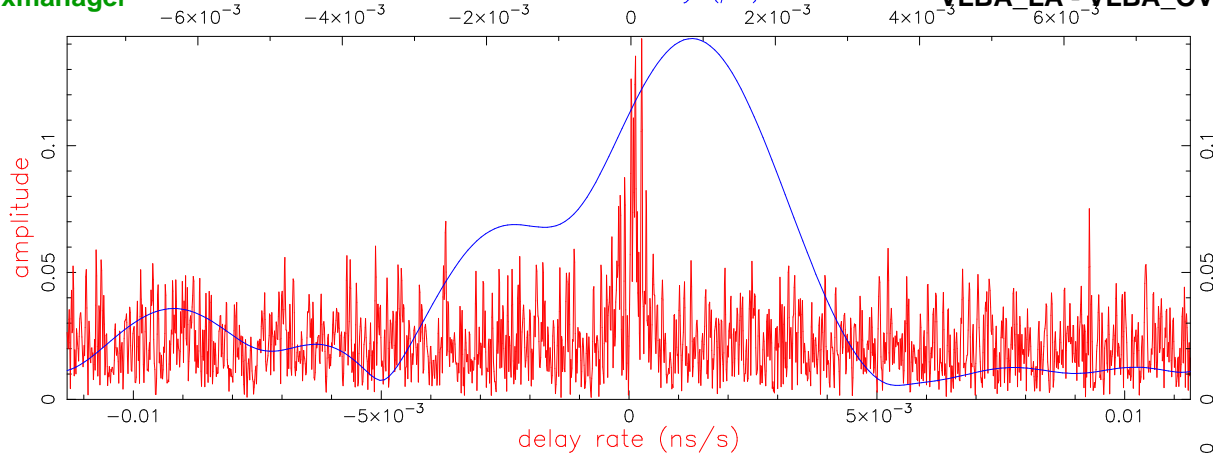
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, lo

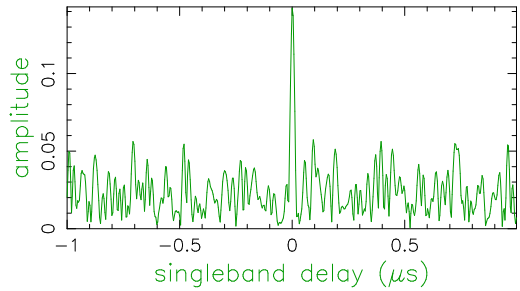
VLBA_LA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

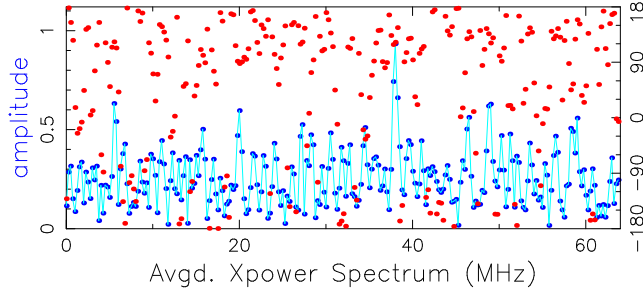


Fringe quality 9

SNR 8.0
 Int time 419.650
 Amp 0.143
 Phase 126.0
 PFD 3.9e-07
 Delays (us)
 SBD 0.001081
 MBD 0.000873
 Fringe rate (Hz)
 0.021845
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

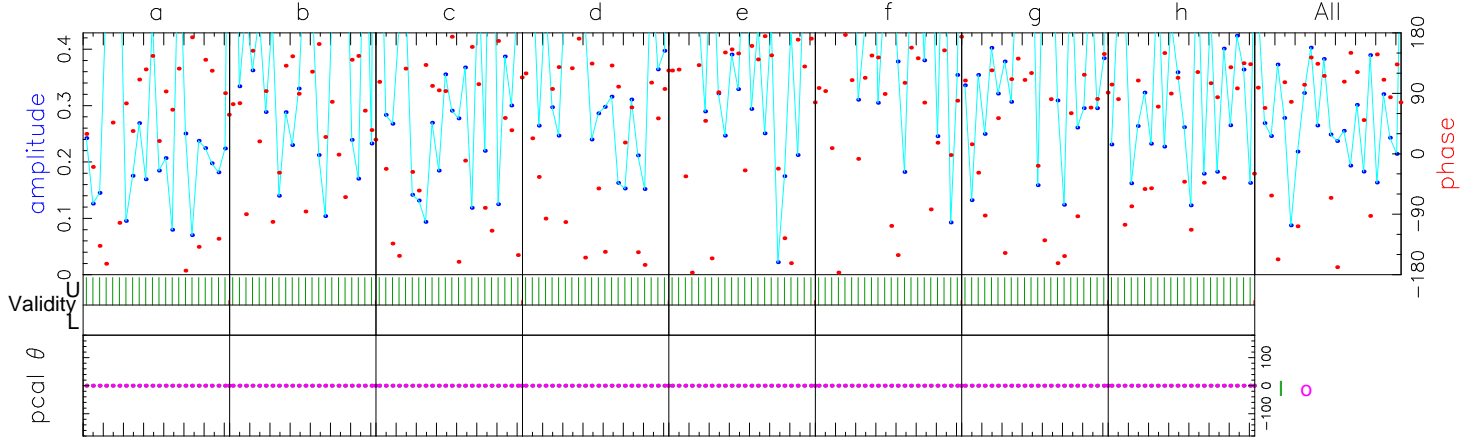


delay rate (ns/s)



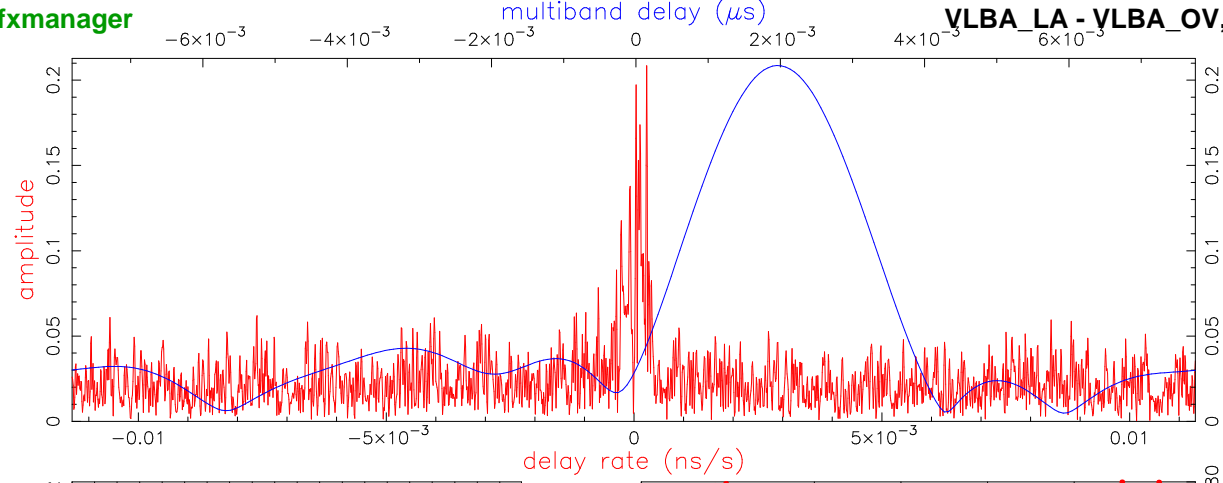
Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080039
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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

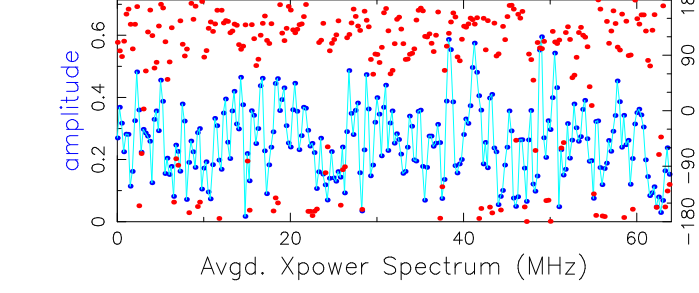
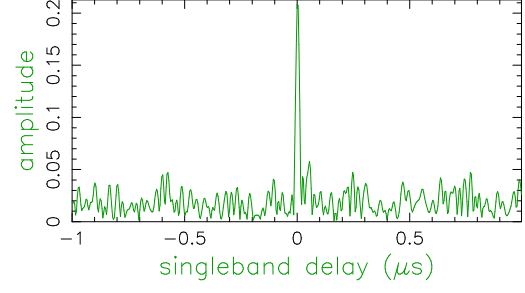


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:o	0:0	0:0	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	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)		3.34705542057E+03				3.34705454750E+03			Resid mbdelay (usec)	8.73065E-04 +/- 1.4E-04
Sband delay (usec)		3.34705562825E+03				-6.2315083E+00			Resid sbdelay (usec)	1.08075E-03 +/- 1.1E-03
Phase delay (usec)		3.34705455156E+03				-6.4600002E-07			Resid phdelay (usec)	4.06286E-06 +/- 4.6E-07
Delay rate (us/s)		-9.30832902370E-02				-9.30835438368E-02			Resid rate (us/s)	2.53600E-07 +/- 1.9E-09
Total phase (deg)			25.8			-1.79072691712E-05			Resid phase (deg)	126.0 +/- 14.3
	RMS	Theor.	Amplitude	0.143 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	74.1	34.3	Search (2048X32)	0.139					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	114.4	59.9	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	31.4	20.2	Inc. seg. avg.	0.236					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.1	35.3	Inc. frq. avg.	0.147					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

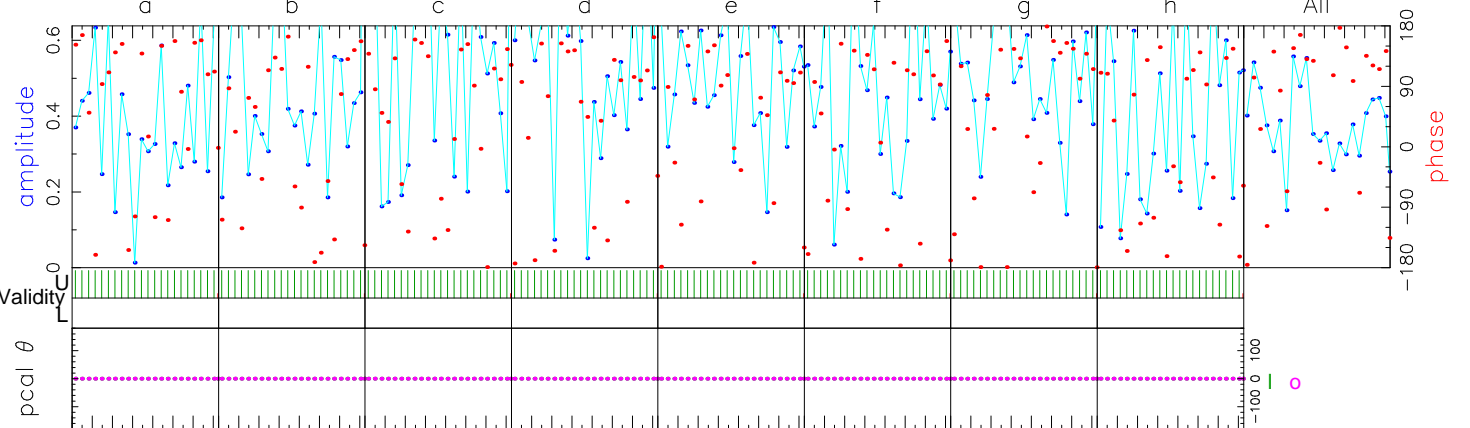
l: az 107.7 el 25.9 pa -50.5 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 511.799 -228.270 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/lo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/lo.W.203.1W6U9V



Fringe quality 9
SNR 11.9
Int time 419.650
Amp 0.213
Phase 135.3
PFD 4.9e-24
Delays (us)
SBD 0.001856
MBD 0.002011
Fringe rate (Hz)
0.022158
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080043
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



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	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.34705655838E+03		Apriori delay (usec)		3.34705454750E+03		Resid mbdelay (usec)		2.01088E-03	+/- 9.1E-05
Sband delay (usec)	3.34705640325E+03		Apriori clock (usec)		-6.2315083E+00		Resid sbdelay (usec)		1.85575E-03	+/- 7.2E-04
Phase delay (usec)	3.34705455186E+03		Apriori clockrate (us/s)		-6.4600002E-07		Resid phdelay (usec)		4.36300E-06	+/- 3.1E-07
Delay rate (us/s)	-9.30832866007E-02		Apriori rate (us/s)		-9.30835438368E-02		Resid rate (us/s)		2.57236E-07	+/- 1.3E-09
Total phase (deg)	35.1		Apriori accel (us/s/s)		-1.79072691712E-05		Resid phase (deg)		135.3	+/- 9.6

ph/seg (deg) 76.3 23.1 Search (2048X32) 0.203 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 93.8 40.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 9.4 13.6 Inc. seg. avg. 0.358 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 31.4 23.7 Inc. frq. avg. 0.205 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
l: az 107.7 el 25.9 pa -50.5 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 511.799 -228.270 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

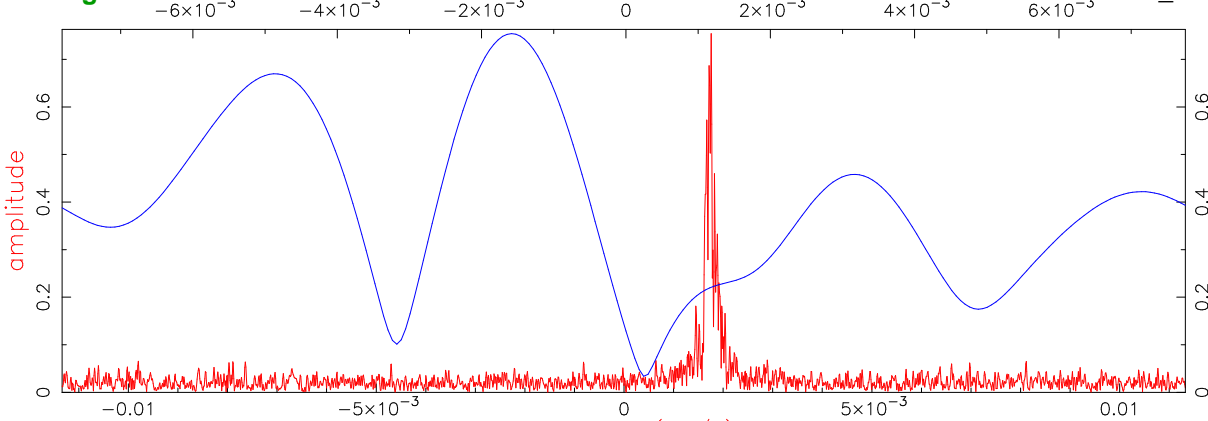
fxmanager

3C273.1W6U9V, No0152, No

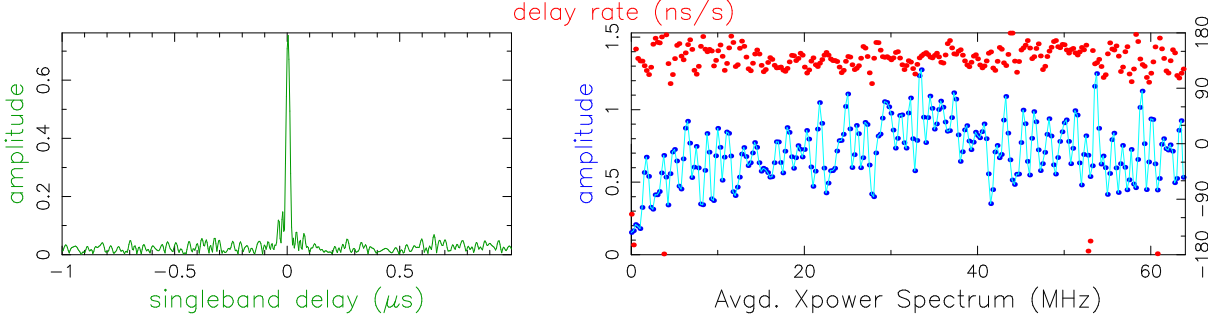
NOEMA - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 3

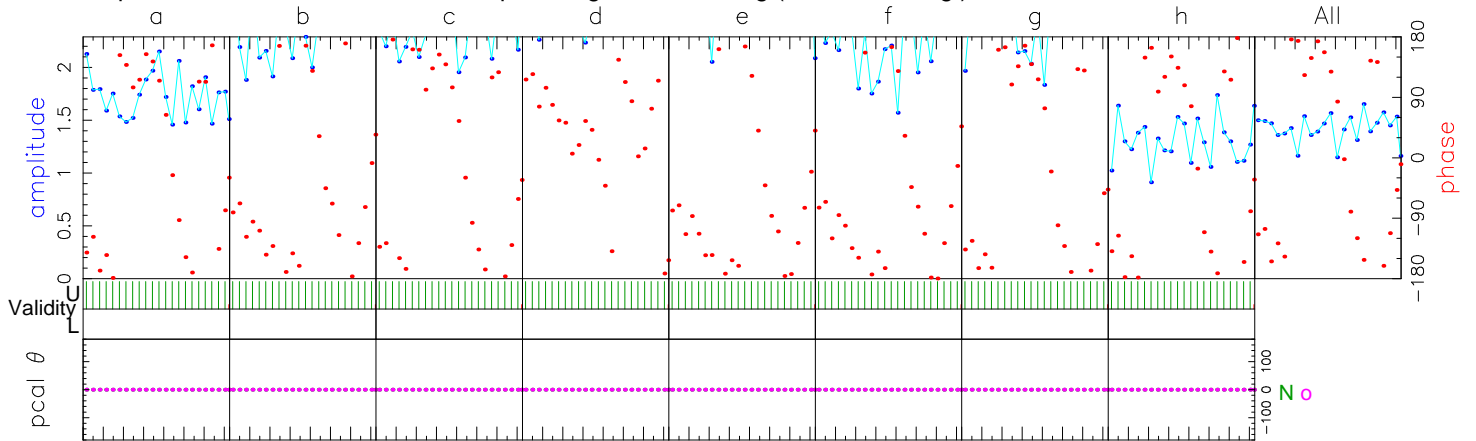


SNR 42.3
 Int time 419.650
 Amp 0.763
 Phase -163.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.003332
 MBD -0.001596
 Fringe rate (Hz)
 0.152146
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080034
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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	172.3	-122.3	178.1	71.2	-126.8	-119.1	-177.0	170.8	Phase	-163.5
N	0.9	1.3	1.3	1.4	1.4	1.2	1.3	0.7	Ampl.	1.2
o	259.5	257.9	257.1	257.5	257.7	257.3	257.9	259.7	Sbd box	257.9
N	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W06UL	W07UL		Tracks	

Group delay (usec)(sbd)	3.19977381971E+03	Apriori delay (usec)	3.19977541611E+03	Resid mbdelay (usec)	-1.59640E-03	+/-	2.6E-05
Sband delay (usec)	3.19977874786E+03	Apriori clock (usec)	-1.7078537E+01	Resid sbdelay (usec)	3.33175E-03	+/-	2.0E-04
Phase delay (usec)	3.19977541084E+03	Apriori clockrate (us/s)	8.2950001E-06	Resid phdelay (usec)	-5.27162E-06	+/-	8.7E-08
Delay rate (us/s)	-2.05769882631E+00	Apriori rate (us/s)	-2.05770059258E+00	Resid rate (us/s)	1.76626E-06	+/-	3.6E-10
Total phase (deg)	-39.8	Apriori accel (us/s/s)	-1.67321399964E-05	Resid phase (deg)	-163.5	+/-	2.7

ph/seg (deg)	65.9	Theor.	6.5	Amplitude	0.763 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	91.2		11.3	Search (2048X32)	0.707	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	61.2		3.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	65.1		6.7	Inc. seg. avg.	1.439	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	1.191	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 243.6 el 26.8 pa 39.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11770.444 812.130 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/No..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/No.W.177.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

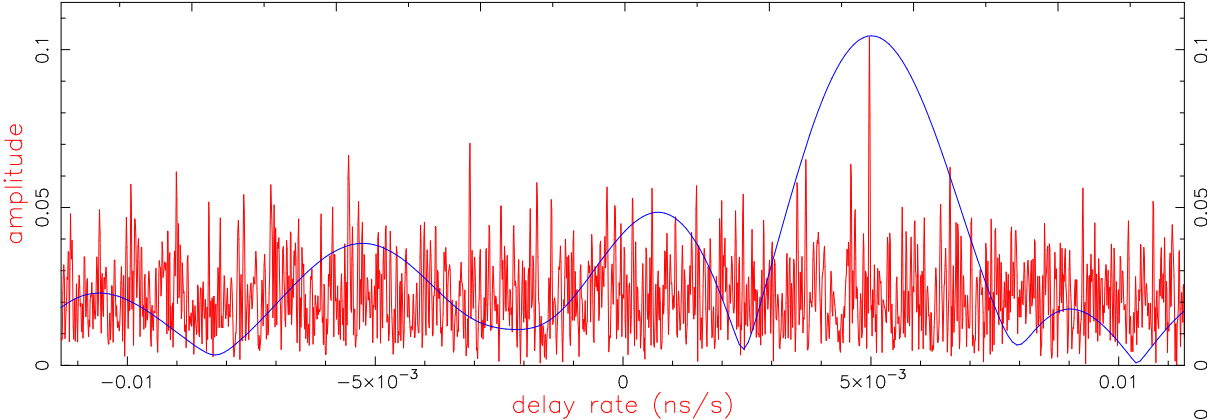
3C273.1W6U9V, No0152, no

VLBA_NL - VLBA_OV, fgroup W, pol LL

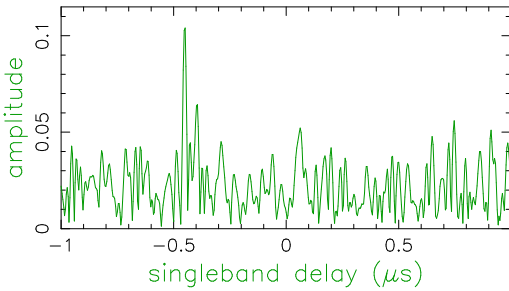
multiband delay (μ s)

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

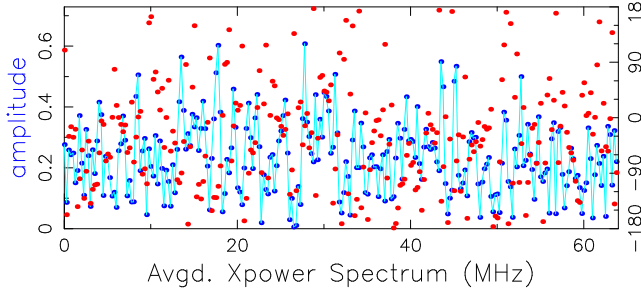
Fringe quality 0



SNR 5.9
Int time 419.648
Amp 0.115
Phase 118.5
PFD 5.2e-01
Delays (us)
SBD -0.450925
MBD 0.003320
Fringe rate (Hz)
0.429214
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

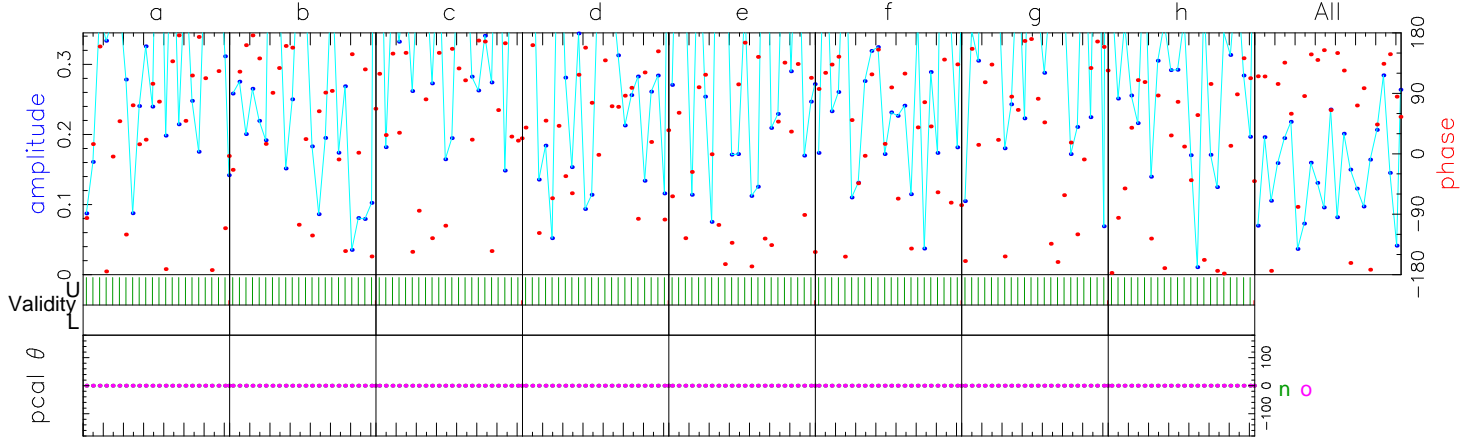


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080035
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.81878552142E+03		Apriori delay (usec)		5.81923532681E+03		Resid mbdelay (usec)		3.31961E-03	+/- 1.8E-04
Sband delay (usec)	5.81878440131E+03		Apriori clock (usec)		1.7604237E+08		Resid sbdelay (usec)		-4.50925E-01	+/- 1.5E-03
Phase delay (usec)	5.81923533063E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		3.82251E-06	+/- 6.2E-07
Delay rate (us/s)	-3.66388465545E-01		Apriori rate (us/s)		-3.66393448299E-01		Resid rate (us/s)		4.98275E-06	+/- 2.6E-09
Total phase (deg)	137.0		Apriori accel (us/s/s)		-3.07003319084E-05		Resid phase (deg)		118.5	+/- 19.3
RMS	54.0	46.3	Amplitude		0.115 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	71.1	80.7	Search (2048X32)		0.103		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	28.7	27.3	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	21.9	47.6	Inc. seg. avg.		0.119		Sample rate(MISamp/s): 128		mb window (us) -0.008 0.008	
amp/frq (%)			Inc. frq. avg.		0.111		Data rate(Mb/s): 2048		dr window (ns/s) -0.011 0.011	
n: az 122.9 el 33.8 pa -38.7	o: az 100.2 el 16.2 pa -51.6		u,v (fr/asec) 2062.645 457.377				nlags: 256 t_cohere infinite		ion window (TEC) 0.00 0.00	
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/no..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/no.W.181.1W6U9V										

simultaneous interpolator

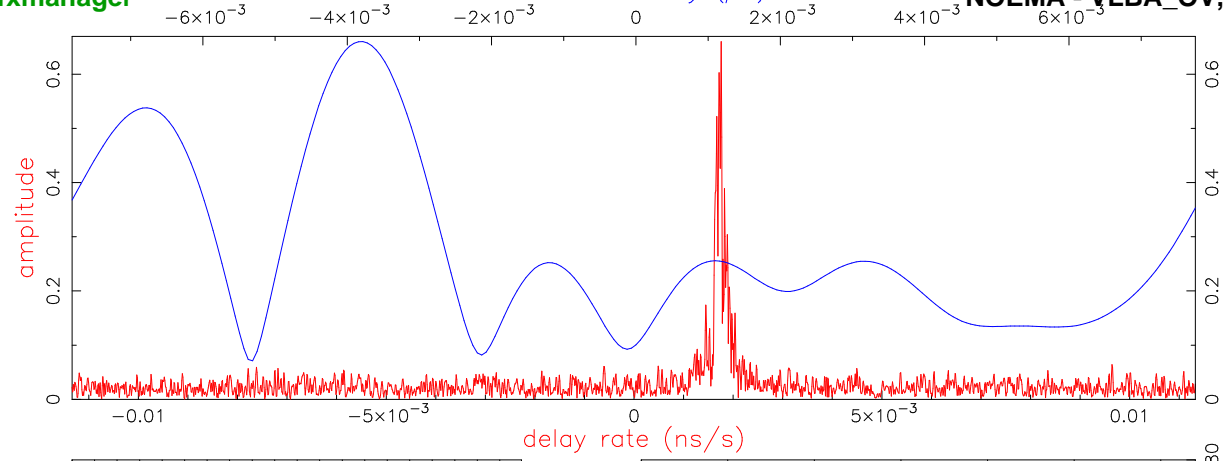
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, No

NOEMA - VLBA_OV, fgroup W, pol RR

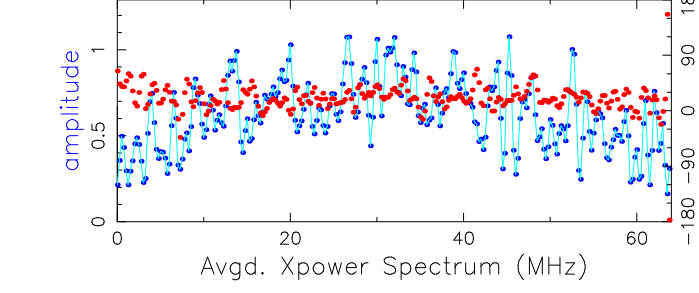
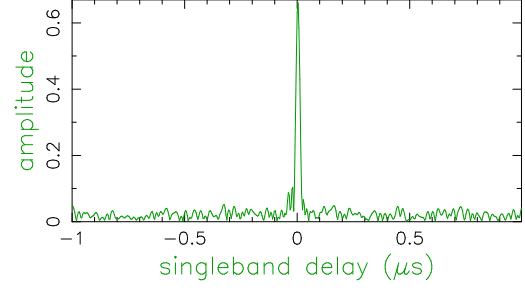
multiband delay (μ s)



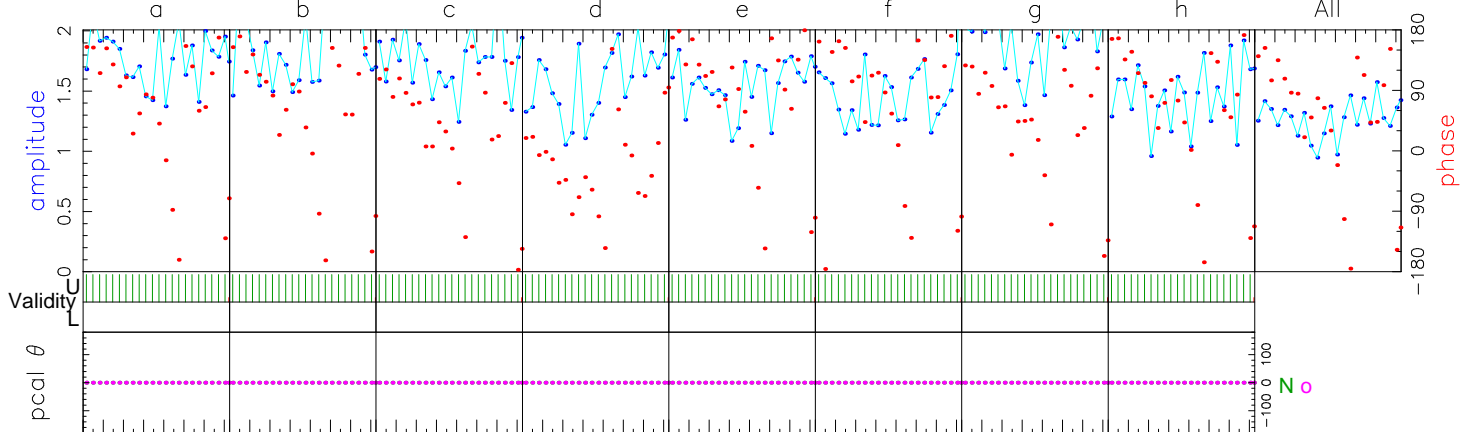
Fringe quality 4

SNR 37.1
 Int time 419.650
 Amp 0.670
 Phase 100.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003017
 MBD -0.003828
 Fringe rate (Hz) 0.152114
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080038
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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		
N	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	
Group delay (usec)(sbd)	3.19977158848E+03		Apriori delay (usec)		3.19977541611E+03		Resid mbdelay (usec)		-3.82763E-03	+/- 2.9E-05
Sband delay (usec)	3.19977843286E+03		Apriori clock (usec)		-1.7078537E+01		Resid sbdelay (usec)		3.01675E-03	+/- 2.3E-04
Phase delay (usec)	3.19977541933E+03		Apriori clockrate (us/s)		8.2950001E-06		Resid phdelay (usec)		3.22614E-06	+/- 9.9E-08
Delay rate (us/s)	-2.05769882668E+00		Apriori rate (us/s)		-2.05770059258E+00		Resid rate (us/s)		1.76589E-06	+/- 4.1E-10
Total phase (deg)	223.7		Apriori accel (us/s/s)		-1.67321399964E-05		Resid phase (deg)		100.0	+/- 3.1

ph/seg (deg) 65.7 7.4 Search (2048X32) 0.604 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 94.1 12.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 56.4 4.4 Inc. seg. avg. 1.271 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.9 7.6 Inc. frq. avg. 0.887 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 243.6 el 26.8 pa 39.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11770.444 812.130 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/No..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/No.W.197.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

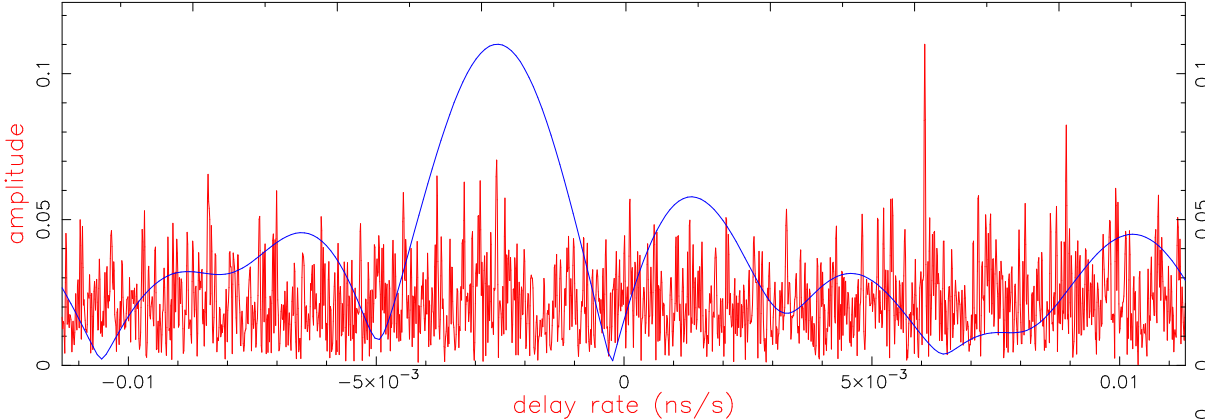
3C273.1W6U9V, No0152, no

VLBA_NL - VLBA_OV, fgroup W, pol RR

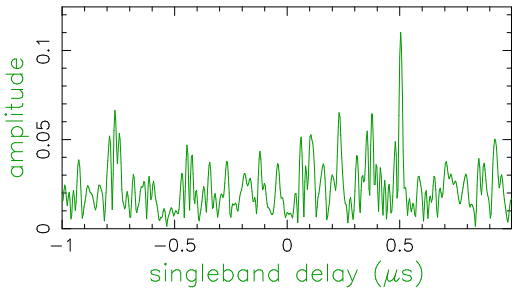
multiband delay (μ s)

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

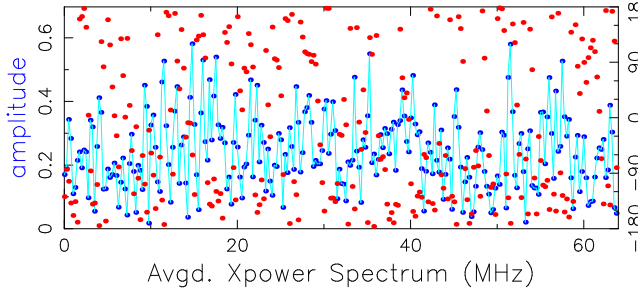
Fringe quality 0



SNR 6.2
 Int time 419.648
 Amp 0.124
 Phase -87.9
 PFD 1.6e-01
 Delays (us)
 SBD 0.504330
 MBD -0.001767
 Fringe rate (Hz)
 0.523774
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

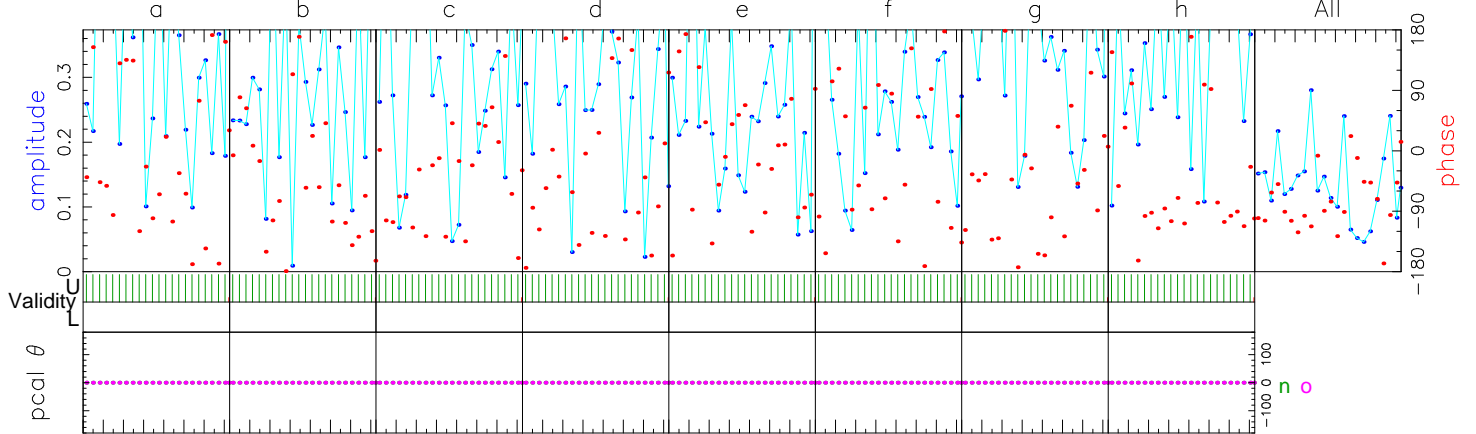


singleband delay (μ s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080039
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-100.1	-84.7	-66.6	-107.0	-25.7	-121.4	-80.3	-93.1	Phase	-87.9
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	205.9	36.6	43.9	1.4	39.0	355.0	436.1	386.0	Sbd box	386.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	PC amp	
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)	5.81973355997E+03		Apriori delay (usec)		5.81923532681E+03		Resid mbdelay (usec)		-1.76684E-03	+/- 1.8E-04
Sband delay (usec)	5.81973965681E+03		Apriori clock (usec)		1.7604237E+08		Resid sbdelay (usec)		5.04330E-01	+/- 1.4E-03
Phase delay (usec)	5.81923532397E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-2.83594E-06	+/- 6.0E-07
Delay rate (us/s)	-3.66387367801E-01		Apriori rate (us/s)		-3.66393448299E-01		Resid rate (us/s)		6.08050E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.07003319084E-05		Resid phase (deg)		-87.9	+/- 18.6

ph/seg (deg) 44.7 44.5 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.9 77.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.8 26.2 Inc. seg. avg. 0.119 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.5 45.8 Inc. frq. avg. 0.120 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 122.9 el 33.8 pa -38.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 2062.645 457.377 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/no..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/no.W.201.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

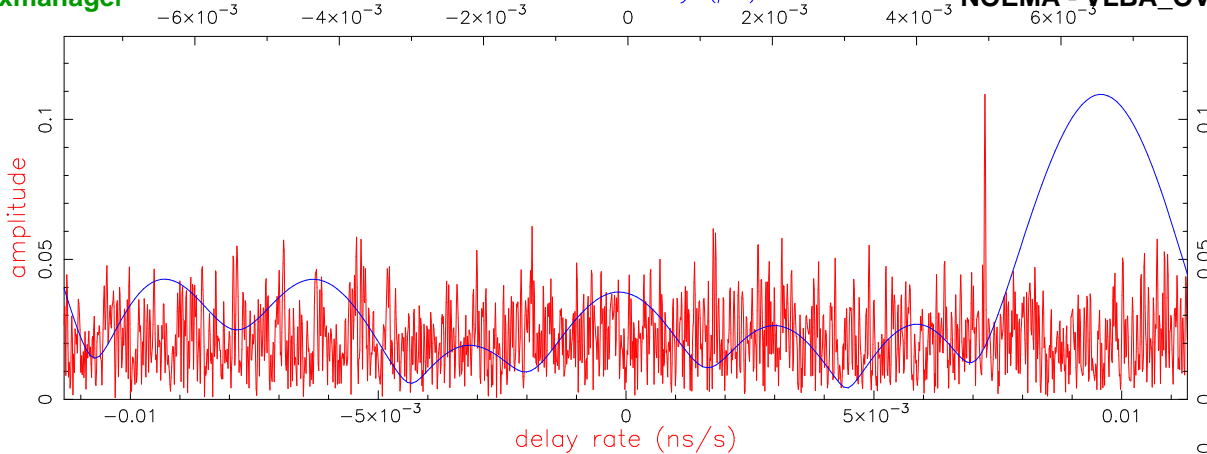
fxmanager

3C273.1W6U9V, No0152, No

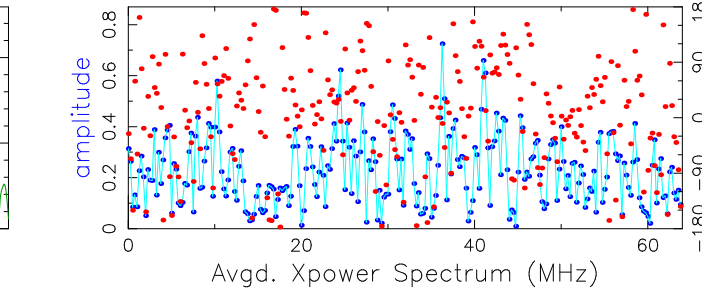
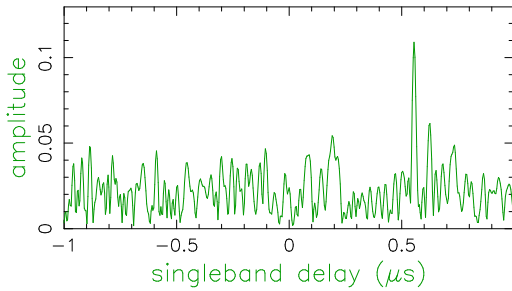
NOEMA - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

Fringe quality 0

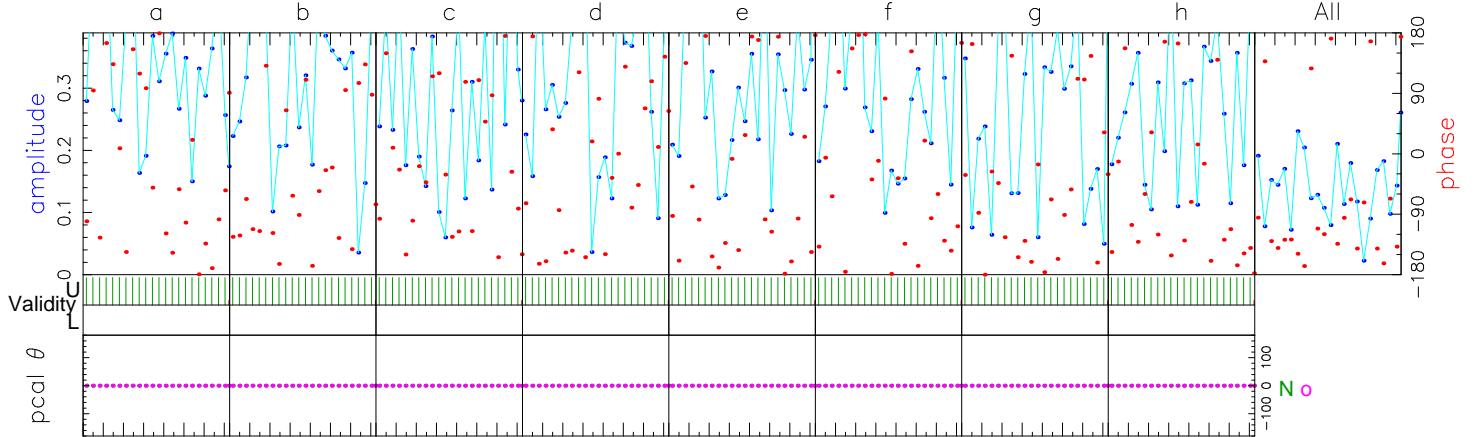


SNR 6.1
 Int time 419.650
 Amp 0.130
 Phase -136.7
 PFD 2.4e-01
 Delays (us)
 SBD 0.554699
 MBD 0.006554
 Fringe rate (Hz)
 0.624494
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080041
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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



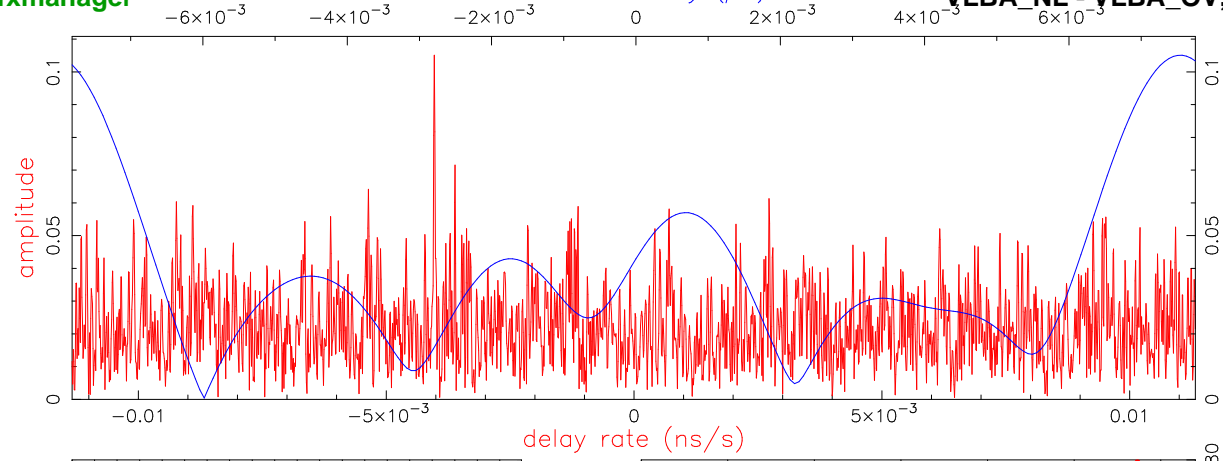
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-150.3	-108.7	-110.7	-178.7	-138.3	-141.1	-126.3	-139.3	Phase	-136.7
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	57.5	259.6	426.3	415.6	222.7	206.2	449.0	398.2	Sbd box	399.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	

Group delay (usec)(sbd) 3.20032884497E+03 Apriori delay (usec) 3.19977541611E+03 Resid mbdelay (usec) 6.55386E-03 +/- 1.8E-04
 Sband delay (usec) 3.20033011536E+03 Apriori clock (usec) -1.7078537E+01 Resid sbdelay (usec) 5.54699E-01 +/- 1.4E-03
 Phase delay (usec) 3.19977541170E+03 Apriori clockrate (us/s) 8.2950001E-06 Resid phdelay (usec) -4.40720E-06 +/- 6.1E-07
 Delay rate (us/s) -2.05769334282E+00 Apriori rate (us/s) -2.05770059258E+00 Resid rate (us/s) 7.24975E-06 +/- 2.5E-09
 Total phase (deg) -13.0 Apriori accel (us/s/s) -1.67321399964E-05 Resid phase (deg) -136.7 +/- 18.8

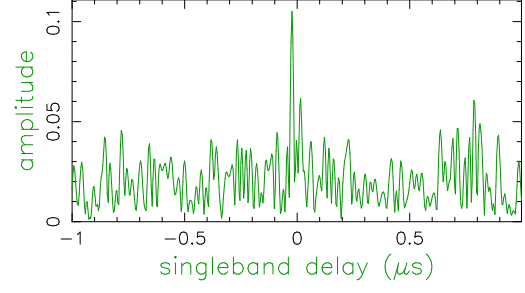
RMS Theor. Amplitude 0.130 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 44.1 45.0 Search (2048X32) 0.106 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 54.7 78.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 24.3 26.6 Inc. seg. avg. 0.125 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 34.7 46.4 Inc. frq. avg. 0.122 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

N: az 243.6 el 26.8 pa 39.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11770.444 812.130 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/No..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/No.W.215.1W6U9V

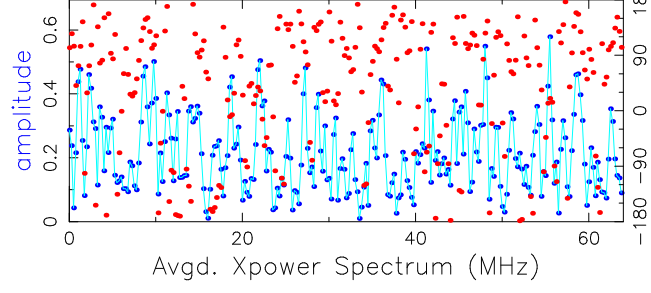
multiband delay (μ s)



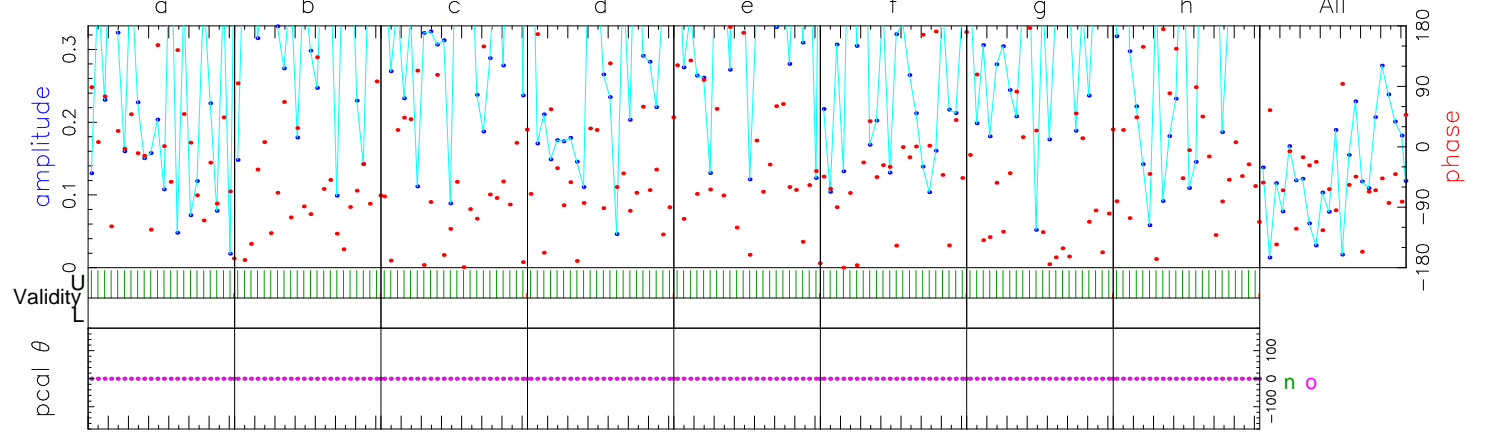
Fringe quality 0
SNR 5.9
Int time 419.648
Amp 0.111
Phase -65.4
PFD 6.2e-01
Delays (us)
SBD -0.023142
MBD -0.008073
Fringe rate (Hz)
-0.347206
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080042
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



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		
	-5.8	-93.0	-77.0	-54.5	-77.9	-49.3	-123.7	-29.9	Phase	-65.4		
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1		
	109.5	49.3	450.9	298.4	114.0	252.3	438.4	286.5	Sbd box	251.1		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
o	1000	1000	1000	1000	1000	1000	1000	1000	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			
									Tracks			
Group delay (usec)(sbd)	5.81921162890E+03		Apriori delay (usec)		5.81923532681E+03		Resid mbdelay (usec)		-8.07291E-03	+/- 1.8E-04		
Sband delay (usec)	5.81921218506E+03		Apriori clock (usec)		1.7604237E+00		Resid sbdelay (usec)		-2.31417E-02	+/- 1.5E-03		
Phase delay (usec)	5.81923532470E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-2.10864E-06	+/- 6.3E-07		
Delay rate (us/s)	-3.66397479021E-01		Apriori rate (us/s)		-3.66393448299E-01		Resid rate (us/s)		-4.03072E-06	+/- 2.6E-09		
Total phase (deg)			Apriori accel (us/s/s)		-3.07003319084E-05		Resid phase (deg)		-65.4	+/- 19.5		
	RMS	Theor.	Amplitude	0.111 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	58.3	46.6	Search (2048X32)	0.103		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	72.4	81.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	40.1	27.5	Inc. seg. avg.	0.106		Sample rate(MSamp/s): 128			dr window (ns/s)	-0.011	0.011	
amp/frq (%)	32.4	48.0	Inc. frq. avg.	0.119		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
n: az 122.9 el 33.8 pa -38.7	o: az 100.2 el 16.2 pa -51.6		u,v (fr/asec) 2062.645 457.377						simultaneous interpolator			

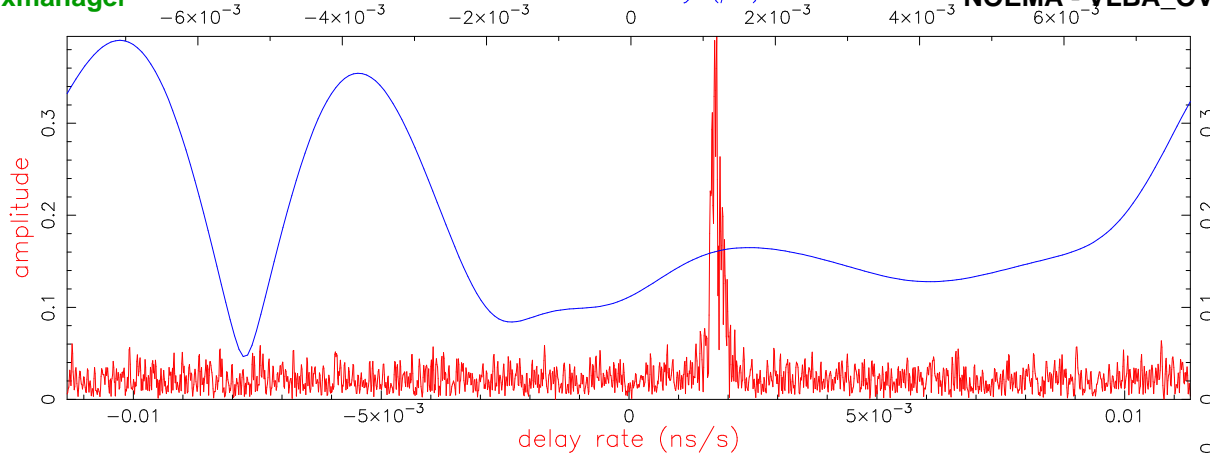
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, No

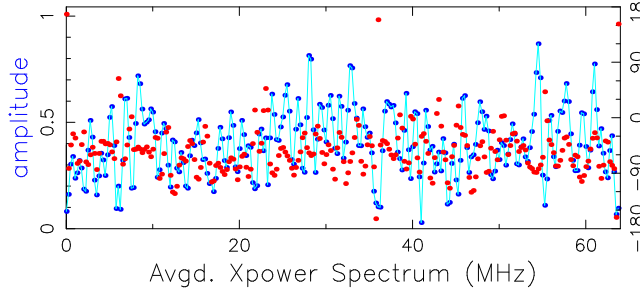
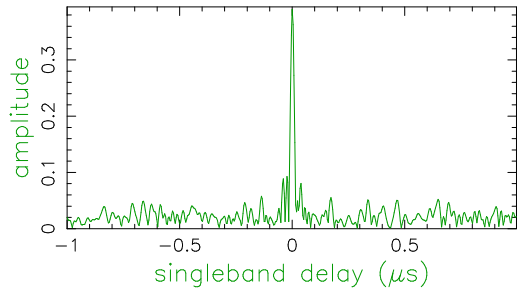
NOEMA - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



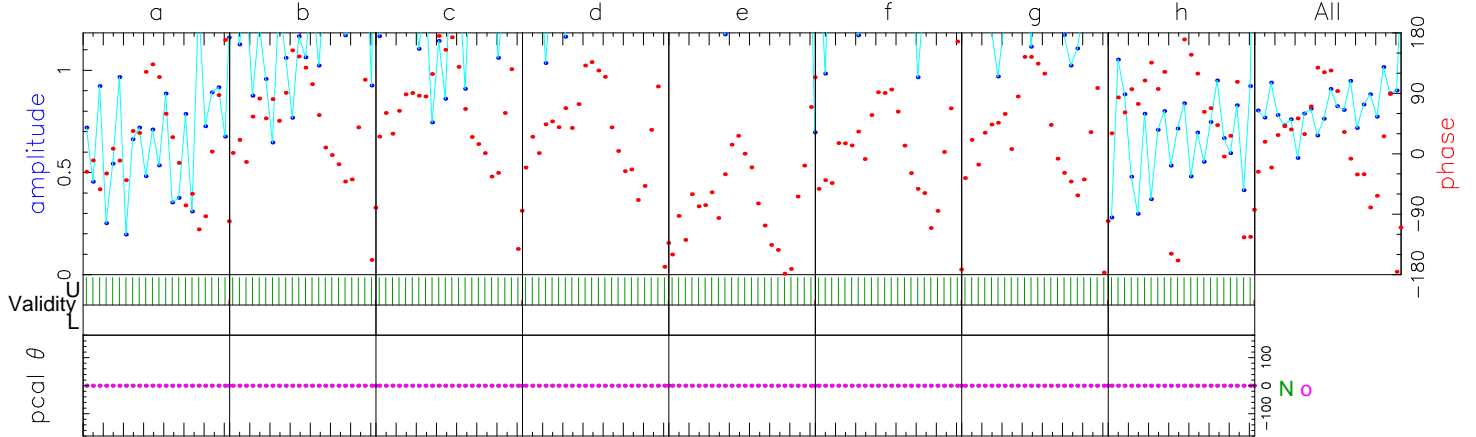
Fringe quality 7

SNR 21.9
 Int time 419.650
 Amp 0.394
 Phase 29.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.000484
 MBD -0.007049
 Fringe rate (Hz)
 0.148651
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080045
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-6.9	43.8	71.8	39.7	-75.2	5.7	36.4	101.5	Phase	29.3
	0.2	0.6	0.7	0.7	0.7	0.7	0.6	0.3	Ampl.	0.6
	259.7	257.2	256.7	256.8	257.0	256.8	257.6	259.5	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	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	

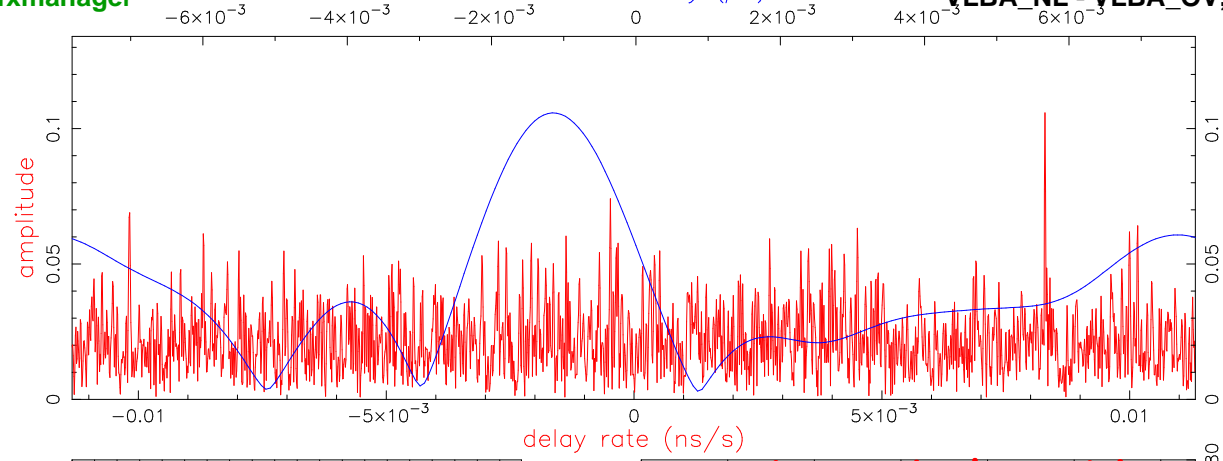
Group delay (usec)(sbd)	3.19976836727E+03	Apriori delay (usec)	3.19977541611E+03	Resid mbdelay (usec)	-7.04884E-03	+/-	5.0E-05
Sband delay (usec)	3.19977589986E+03	Apriori clock (usec)	-1.7078537E+01	Resid sbdelay (usec)	4.83750E-04	+/-	3.9E-04
Phase delay (usec)	3.19977541705E+03	Apriori clockrate (us/s)	8.2950001E-06	Resid phdelay (usec)	9.44171E-07	+/-	1.7E-07
Delay rate (us/s)	-2.05769886688E+00	Apriori rate (us/s)	-2.05770059258E+00	Resid rate (us/s)	1.72570E-06	+/-	7.0E-10
Total phase (deg)	153.0	Apriori accel (us/s/s)	-1.67321399964E-05	Resid phase (deg)	29.3	+/-	5.2

ph/seg (deg)	RMS 66.9	Theor. 12.6	Amplitude Search (2048X32)	0.394 +/- 0.018	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	112.6	21.9	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)	58.0	7.4	Inc. seg. avg.	0.806	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	64.9	12.9	Inc. frq. avg.	0.570	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

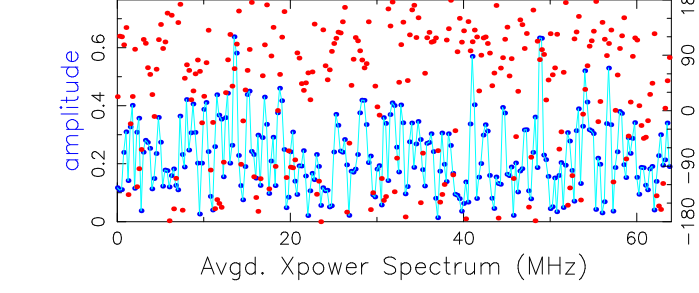
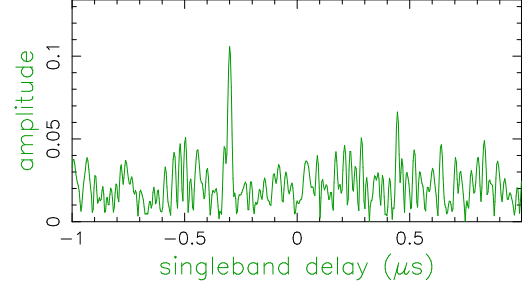
N: az 243.6 el 26.8 pa 39.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 11770.444 812.130 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/No..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/No.W.232.1W6U9V

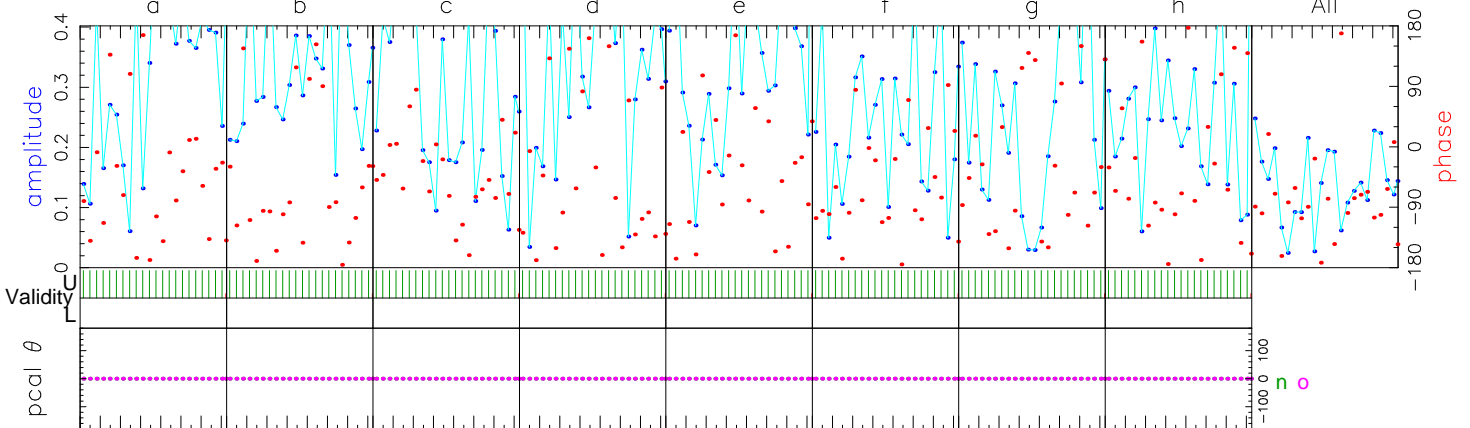
multiband delay (μ s)



Fringe quality 0
SNR 6.0
Int time 419.648
Amp 0.134
Phase -89.4
PFD 4.8e-01
Delays (us)
SBD -0.299799
MBD -0.001142
Fringe rate (Hz) 0.715266
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080046
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"



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



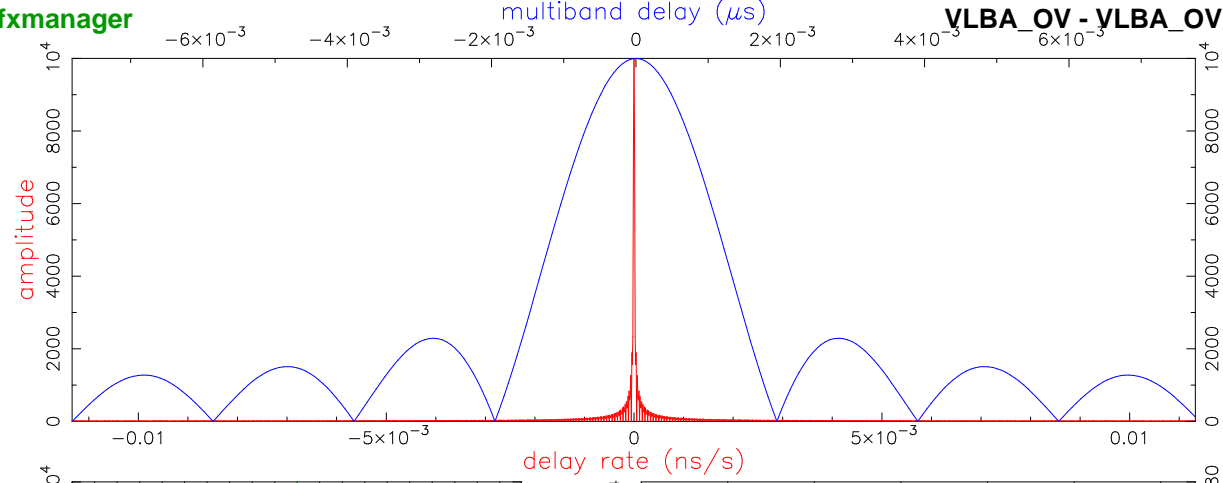
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-70.7	-128.3	-31.1	-140.9	-71.9	-71.0	-91.6	-96.6	Phase	-89.4		
	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1		
	403.8	345.3	181.9	180.6	143.5	462.9	69.1	129.3	Sbd box	180.3		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
o	1000	1000	1000	1000	1000	1000	1000	1000	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	PC amp			
n	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)	5.81893730940E+03		Apriori delay (usec)		5.81923532681E+03		Resid mbdelay (usec)		-1.14241E-03	+/- 1.8E-04		
Sband delay (usec)	5.81893552781E+03		Apriori clock (usec)		1.7604237E+08		Resid sbdelay (usec)		-2.99799E-01	+/- 1.4E-03		
Phase delay (usec)	5.81923532393E+03		Apriori clockrate (us/s)		-6.0000019E-08		Resid phdelay (usec)		-2.88354E-06	+/- 6.2E-07		
Delay rate (us/s)	-3.66385144767E-01		Apriori rate (us/s)		-3.66393448299E-01		Resid rate (us/s)		8.30353E-06	+/- 2.6E-09		
Total phase (deg)			Apriori accel (us/s/s)		-3.07003319084E-05		Resid phase (deg)		-89.4	+/- 19.2		
	RMS	Theor.	Amplitude	0.134 +/- 0.022		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	50.4	46.1	Search (2048X32)	0.105		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	67.1	80.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	37.9	27.2	Inc. seg. avg.	0.134		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011	
amp/frq (%)	36.1	47.5	Inc. frq. avg.	0.147		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
n: az 122.9 el 33.8 pa -38.7	o: az 100.2 el 16.2 pa -51.6		u,v (fr/asec) 2062.645 457.377						simultaneous interpolator			

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, oo

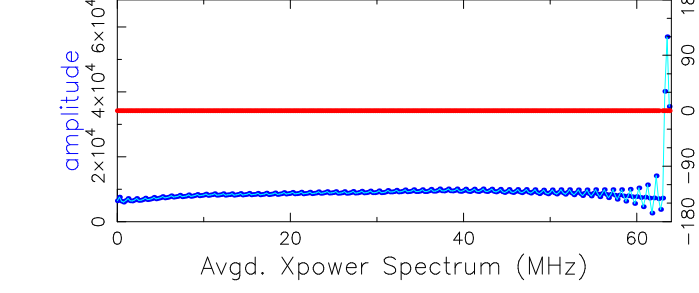
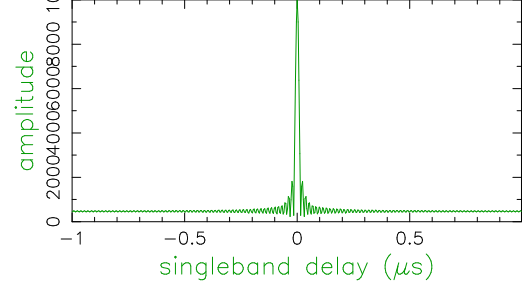
VLBA_OV - VLBA_OV, fgroup W, pol LL



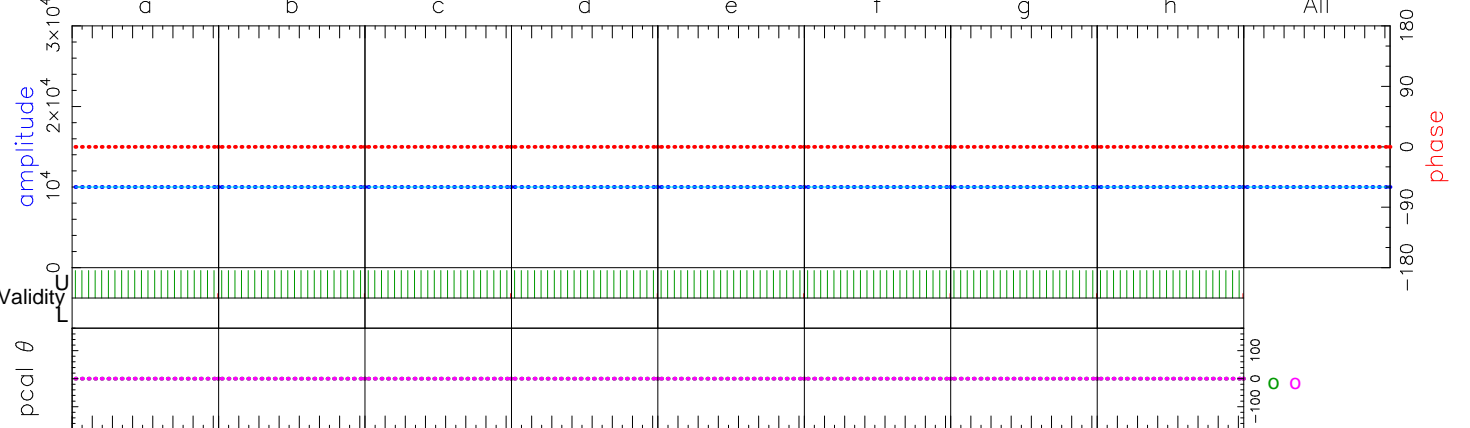
Fringe quality 9

SNR 560200.0
 Int time 419.654
 Amp 10000.000
 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. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080045
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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	Ampl.	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	0:0	0:0	0:0	0:0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	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	Resid mbdelay (usec)	0.00000E+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	Resid sbdelay (usec)	0.00000E+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	Resid phdelay (usec)	0.00000E+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	Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
Total phase (deg)			0.0						Resid phase (deg)	0.0 +/- 0.0

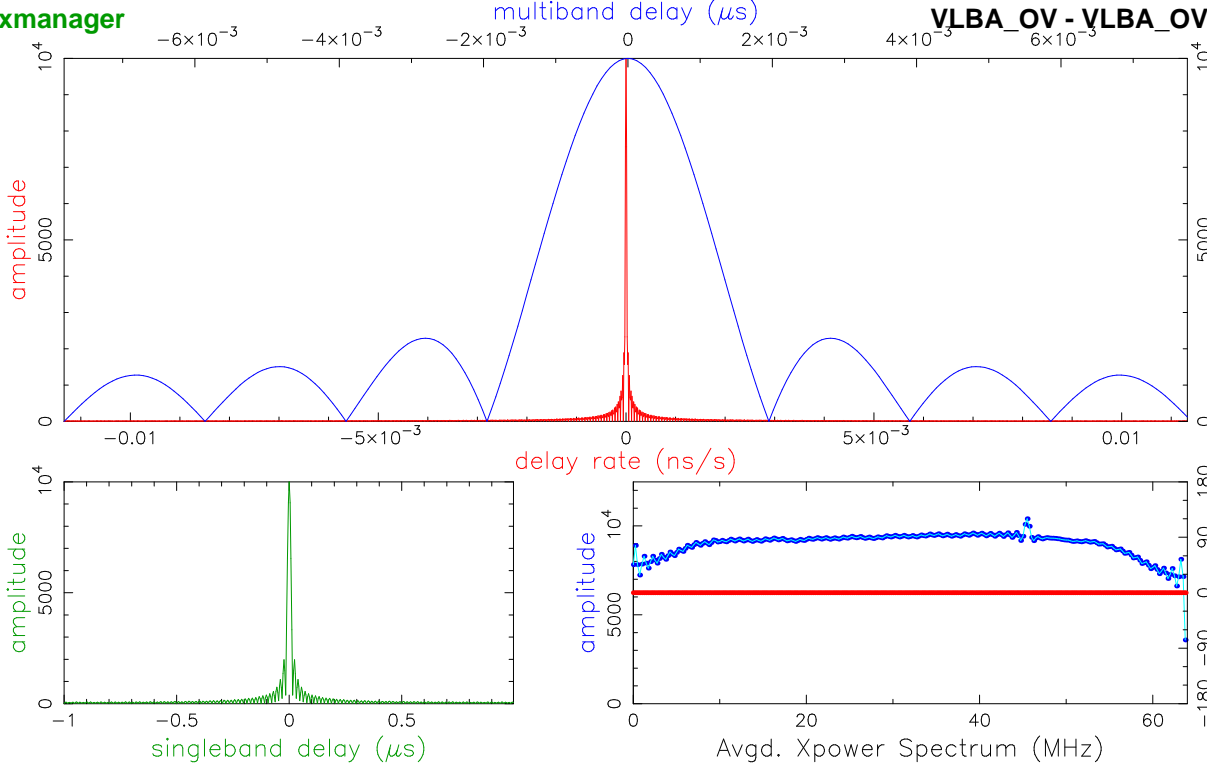
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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 100.2 el 16.2 pa -51.6 o: az 100.2 el 16.2 pa -51.6 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/c211a/v2/1234/No0152/oo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oo.W.233.1W6U9V simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

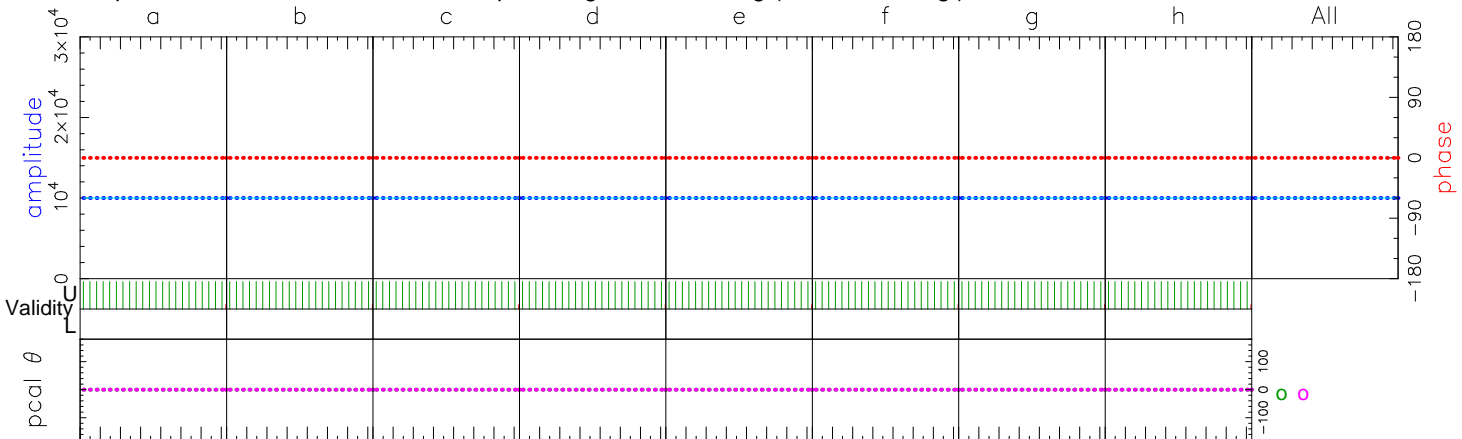
3C273.1W6U9V, No0152, oo

VLBA_OV - VLBA_OV, fgroup W, pol RR



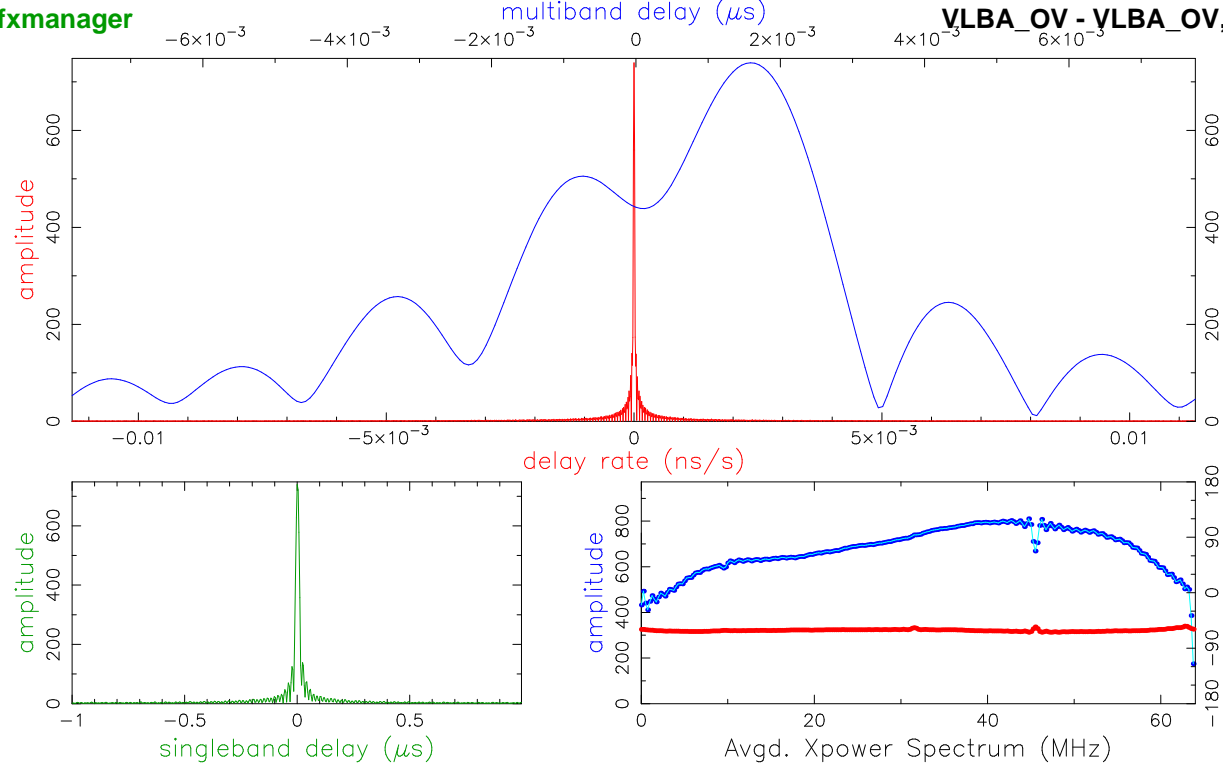
Fringe quality 9
 SNR 560200.1
 Int time 419.654
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Yr:day # 16383
 Start 2021:114
 Stop 2021:114
 FRT 013000.00
 2021:287:062922
 2021:287:080048
 2021:252:122852
 RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"

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	820.0	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
o	1000	1000	1000	1000	1000	1000	1000	1000	257.0	257.0
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
o	0:0	0:0	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	1000	1000
o	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+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	0.00000E+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	0.00000E+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	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 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 100.2 el 16.2 pa -51.6 o: az 100.2 el 16.2 pa -51.6 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/c211a/v2/1234/No0152/oo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oo.W.243.1W6U9V simultaneous interpolator

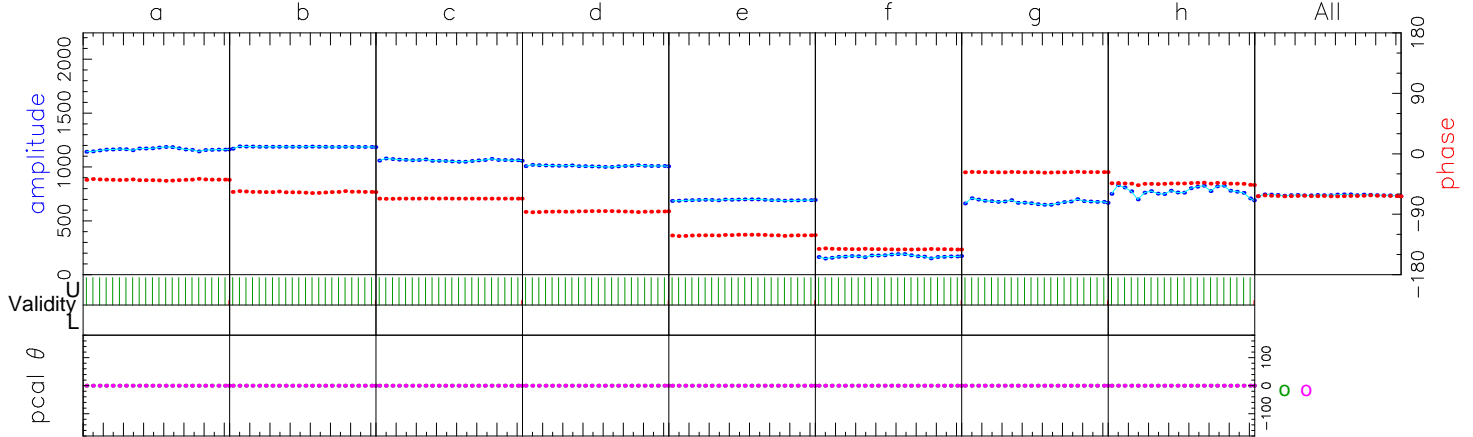


Fringe quality 5

SNR 41928.3
Int time 419.654
Amp 748.453
Phase -62.7
PFD 0.0e+00
Delays (us)
SBD 0.001433
MBD 0.001619
Fringe rate (Hz) -0.000005
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080051
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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



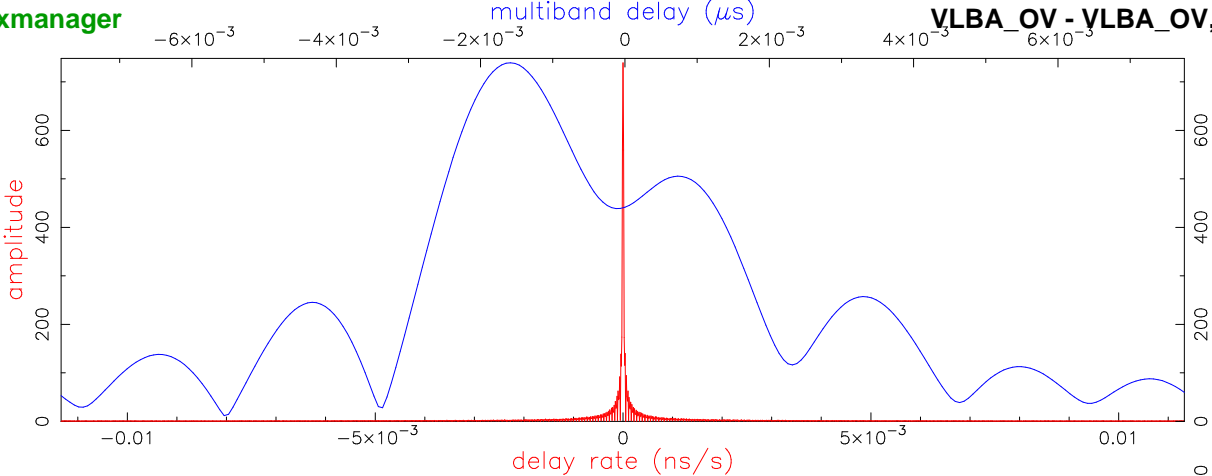
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o	1000	1000	1000	1000	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	
Group delay (usec)(sbd)	1.61928125000E-03								1.61928E-03	+/- 2.6E-08
Sband delay (usec)	1.43350000000E-03								1.43350E-03	+/- 2.1E-07
Phase delay (usec)	-2.02307115291E-06								-2.02307E-06	+/- 8.8E-11
Delay rate (us/s)	-5.81017248059E-11								-5.81017E-11	+/- 3.6E-13
Total phase (deg)			-62.7						-62.7	+/- 0.0
Apriori delay (usec)					0.00000000000E+00				Resid mbdelay (usec)	
Apriori clock (usec)					0.0000000E+00				Resid sbdelay (usec)	
Apriori clockrate (us/s)					0.0000000E+00				Resid phdelay (usec)	
Apriori rate (us/s)					0.00000000000E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					0.00000000000E+00				Resid phase (deg)	
ph/seg (deg)	0.4	0.0							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	1.4	0.0							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	45.5	0.0							Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	44.2	0.0							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

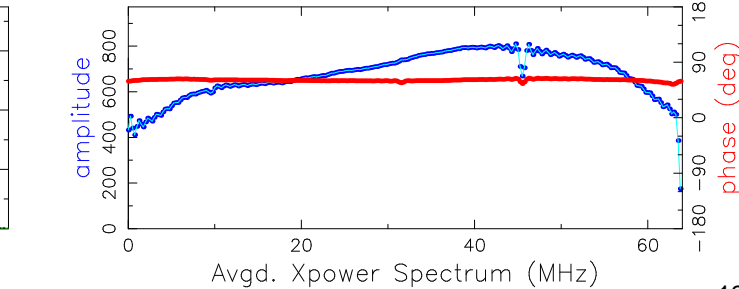
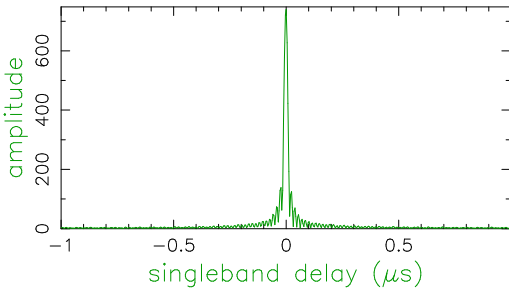
3C273.1W6U9V, No0152, oo

VLBA_OV - VLBA_OV, fgroup W, pol RL



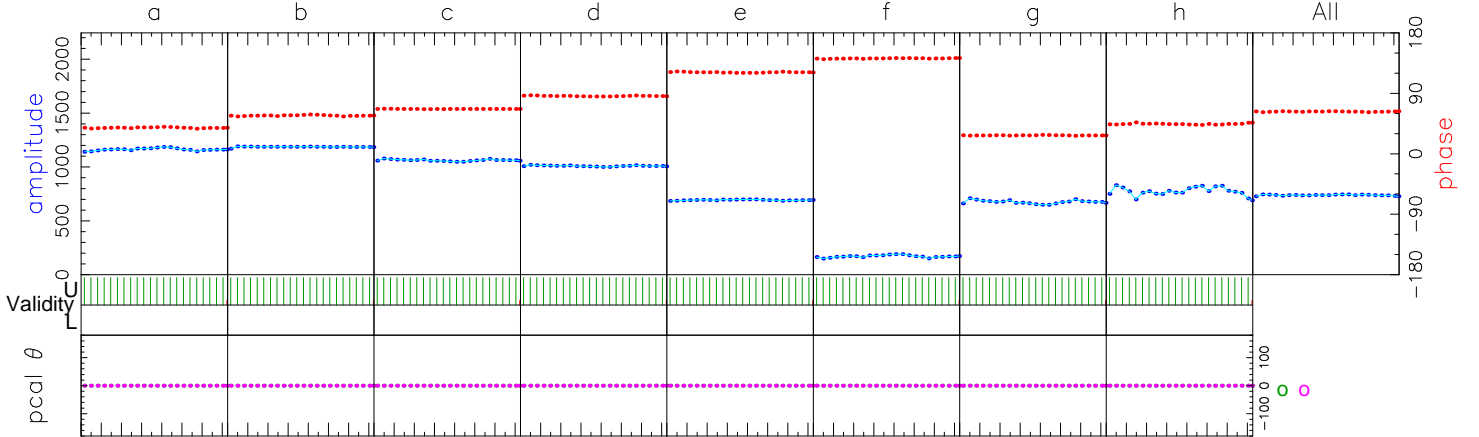
Fringe quality 5

SNR 41928.3
 Int time 419.654
 Amp 748.453
 Phase 62.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001433
 MBD -0.001619
 Fringe rate (Hz)
 0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080054
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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

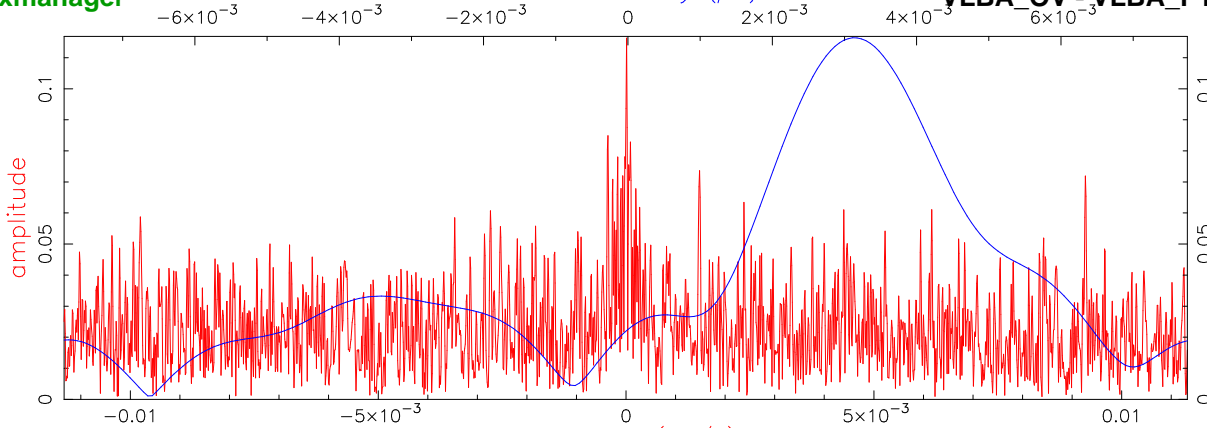


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.61928125000E-03									
Sband delay (usec)	-1.43350000000E-03									
Phase delay (usec)	2.02307115285E-06									
Delay rate (us/s)	5.81017248059E-11									
Total phase (deg)			62.7							
Apriori delay (usec)					0.00000000000E+00					
Apriori clock (usec)					0.0000000E+00					
Apriori clockrate (us/s)					0.0000000E+00					
Apriori rate (us/s)					0.00000000000E+00					
Apriori accel (us/s/s)					0.00000000000E+00					
Resid mbdelay (usec)									-1.61928E-03	+/- 2.6E-08
Resid sbdelay (usec)									-1.43350E-03	+/- 2.1E-07
Resid phdelay (usec)									2.02307E-06	+/- 8.8E-11
Resid rate (us/s)									5.81017E-11	+/- 3.6E-13
Resid phase (deg)									62.7	+/- 0.0
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled mb window (us) -0.008 0.008							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

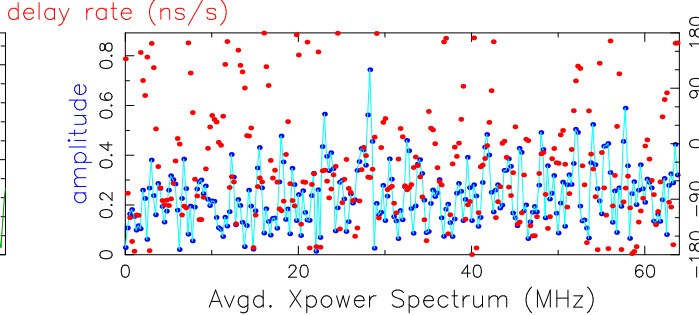
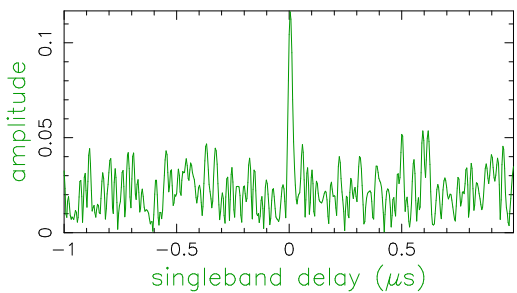
o: az 100.2 el 16.2 pa -51.6 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/oo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oo.W.272.1W6U9V

multiband delay (μ s)

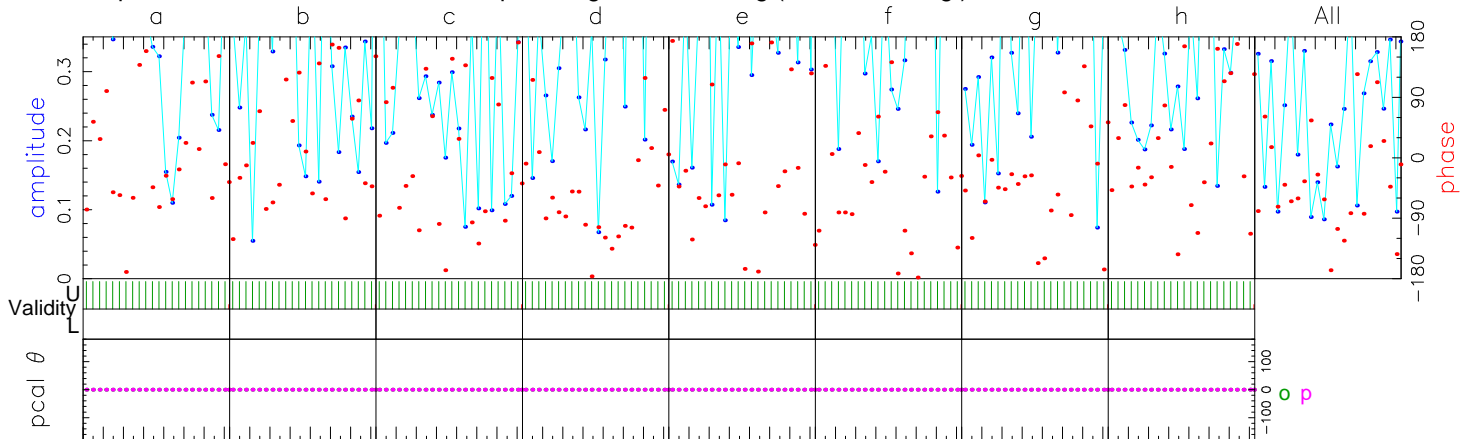


Fringe quality 0
SNR 6.5
Int time 419.651
Amp 0.117
Phase -49.9
PFD 1.6e-02
Delays (us)
SBD 0.004903
MBD 0.003191
Fringe rate (Hz) 0.000946
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Yr:day 2021:114
Exp# 16383
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build 2021:287:062922
2021:287:080046
2021:252:122852
RA & Dec (J2000) 12h29m06.699731s +02°03'08.598201"



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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.01278404177E+03	Apriori delay (usec)	-3.01278723240E+03	Resid mbdelay (usec)	3.19063E-03	+/-	1.7E-04
Sband delay (usec)	-3.01278232990E+03	Apriori clock (usec)	-1.8943863E+00	Resid sbdelay (usec)	4.90250E-03	+/-	1.3E-03
Phase delay (usec)	-3.01278723401E+03	Apriori clockrate (us/s)	4.7999999E-07	Resid phdelay (usec)	-1.60835E-06	+/-	5.6E-07
Delay rate (us/s)	5.20588290725E-02	Apriori rate (us/s)	5.20588180863E-02	Resid rate (us/s)	1.09862E-08	+/-	2.3E-09
Total phase (deg)	-121.6	Apriori accel (us/s/s)	1.61667117051E-05	Resid phase (deg)	-49.9	+/-	17.5

ph/seg (deg)	76.9	Theor.	42.0	Amplitude	0.117 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	135.3	Search (2048X32)	0.115	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.7	Inc. seg. avg.	0.185	Inc. frq. avg.	0.118	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.9	Inc. seg. avg.	0.118	Inc. frq. avg.	0.118	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

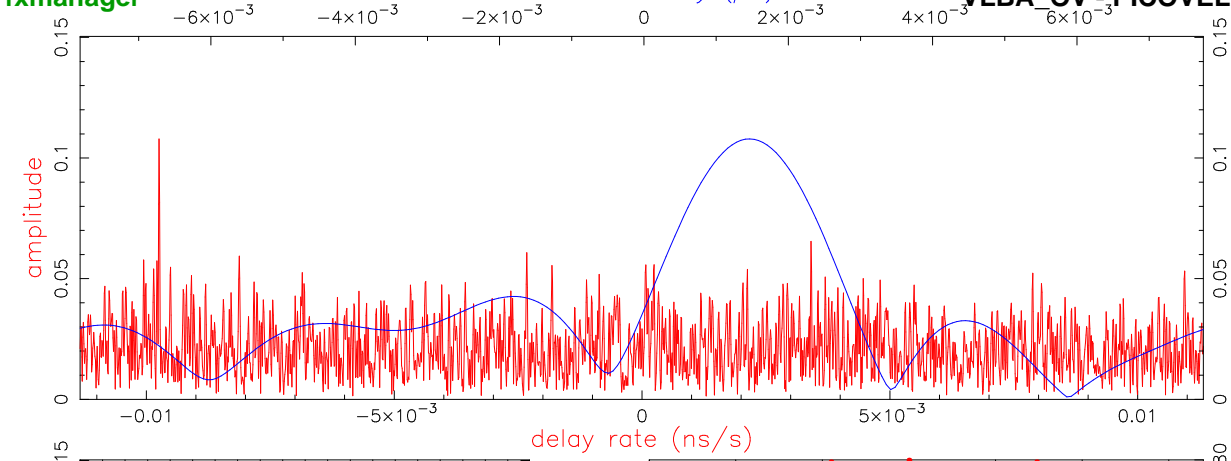
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, oP

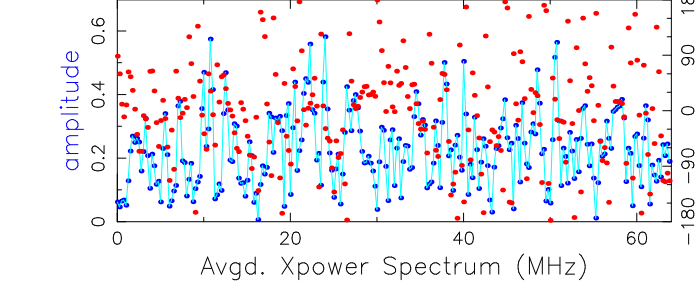
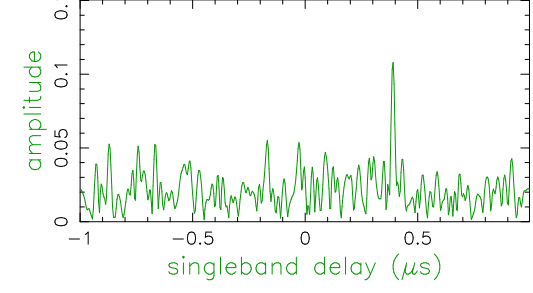
VLBA_OV - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



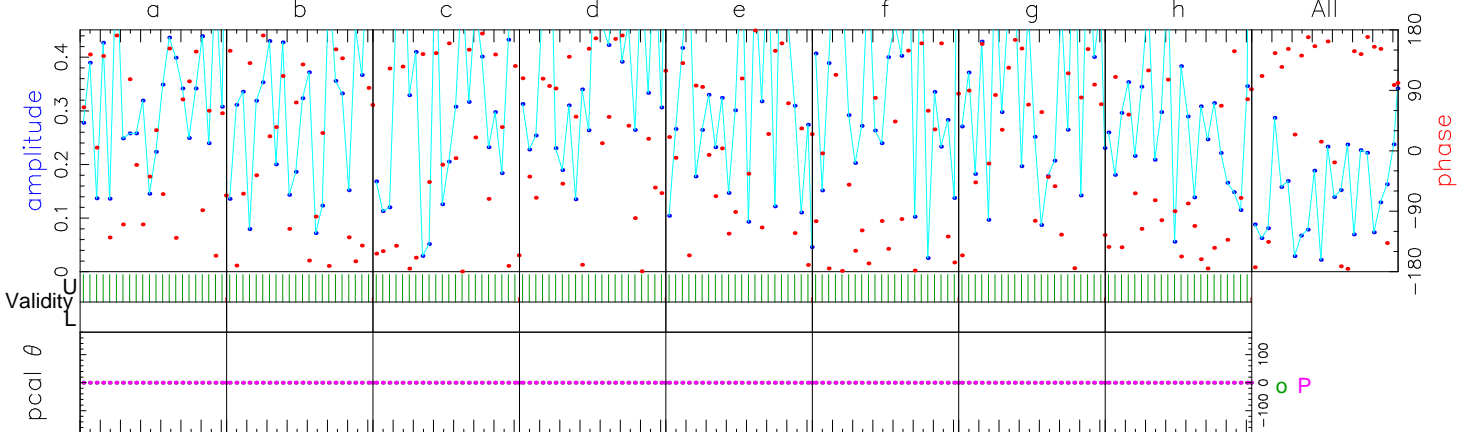
Fringe quality 0

SNR 6.1
 Int time 419.647
 Amp 0.150
 Phase 155.6
 PFD 2.7e-01
 Delays (us)
 SBD 0.389600
 MBD 0.001445
 Fringe rate (Hz)
 -0.840443
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080048
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	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	

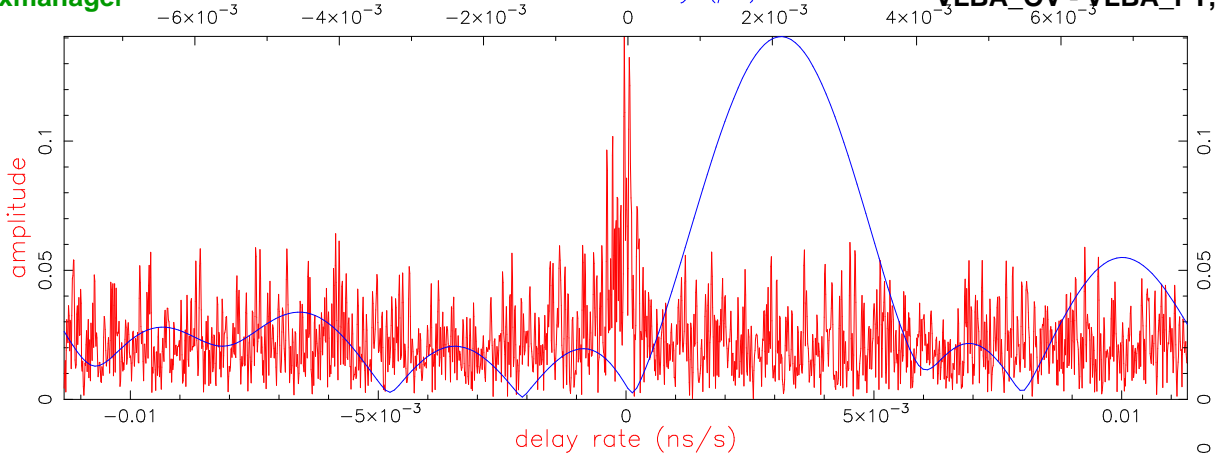
Group delay (usec)(sbd)	-6.30828148126E+03	Apriori delay (usec)	-6.30867355125E+03	Resid mbdelay (usec)	1.44499E-03	+/-	1.8E-04
Sband delay (usec)	-6.30828395075E+03	Apriori clock (usec)	4.5862255E+00	Resid sbdelay (usec)	3.89600E-01	+/-	1.4E-03
Phase delay (usec)	-6.30867354624E+03	Apriori clockrate (us/s)	9.5999998E-07	Resid phdelay (usec)	5.01703E-06	+/-	6.1E-07
Delay rate (us/s)	2.03508158188E+00	Apriori rate (us/s)	2.03509133858E+00	Resid rate (us/s)	-9.75671E-06	+/-	2.5E-09
Total phase (deg)	-98.2	Apriori accel (us/s/s)	3.35775658496E-05	Resid phase (deg)	155.6	+/-	18.8

ph/seg (deg)	62.7	Theor.	45.2	Amplitude	0.150 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	77.6		78.8	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	25.9		26.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	37.7		46.5	Inc. seg. avg.	0.151	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

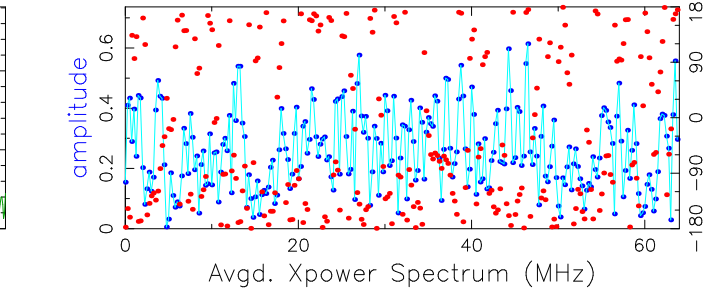
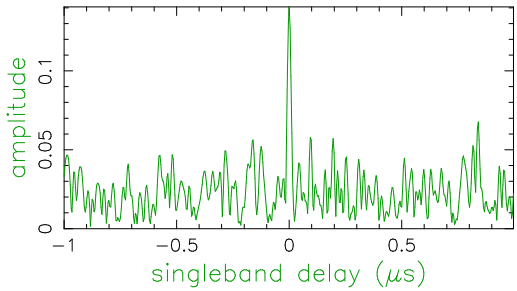
o: az 100.2 el 16.2 pa -51.6 P: az 239.5 el 36.5 pa 43.5 u,v (fr/asec) -11620.414 117.038 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/oP..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oP.W.242.1W6U9V

multiband delay (μ s)

Fringe quality 9

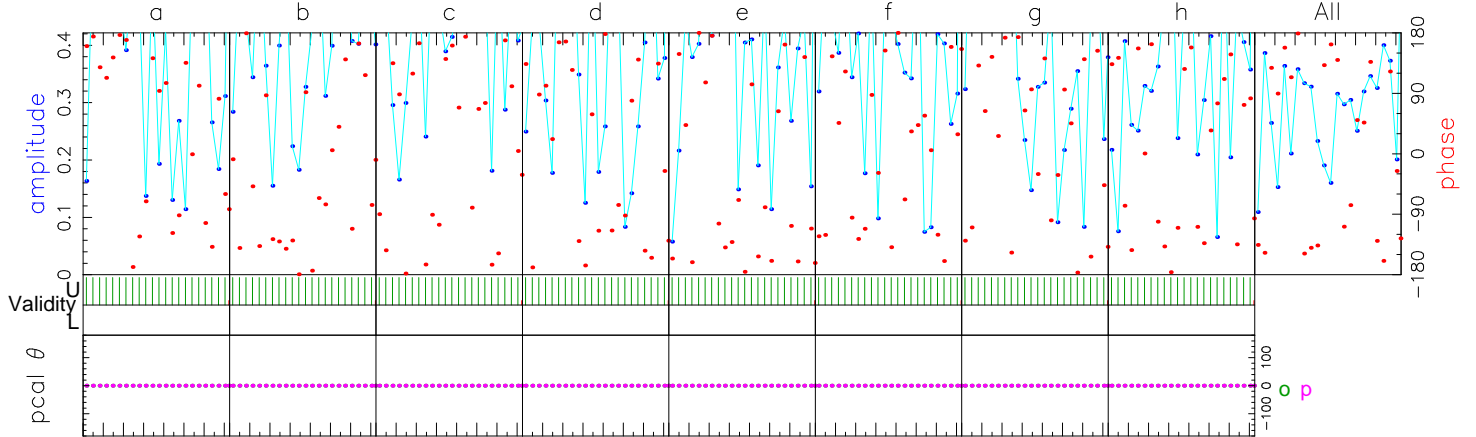


SNR 7.9
Int time 419.651
Amp 0.141
Phase 177.9
PFD 1.1e-06
Delays (us)
SBD -0.000348
MBD 0.002114
Fringe rate (Hz)
-0.002460
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080050
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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
163.3	-150.2	168.8	173.9	-169.0	177.9	169.8	175.3	177.9	Phase	177.9
0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
471.4	340.5	467.4	256.0	256.8	470.7	154.9	362.2	256.9	Sbd box	256.9
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p 0:0	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	0:0	Manl PC	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	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)	-3.01278511859E+03		Apriori delay (usec)		-3.01278723240E+03		Resid mbdelay (usec)		2.11381E-03	+/- 1.4E-04
Sband delay (usec)	-3.01278758040E+03		Apriori clock (usec)		-1.8943863E+00		Resid sbdelay (usec)		-3.48000E-04	+/- 1.1E-03
Phase delay (usec)	-3.01278722667E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		5.73788E-06	+/- 4.7E-07
Delay rate (us/s)	5.20587895314E-02		Apriori rate (us/s)		5.20588180863E-02		Resid rate (us/s)		-2.85549E-08	+/- 1.9E-09
Total phase (deg)	106.2		Apriori accel (us/s/s)		1.61667117051E-05		Resid phase (deg)		177.9	+/- 14.6

ph/seg (deg) RMS Theor. Amplitude 0.141 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 70.6 34.9 Search (2048X32) 0.132 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 118.4 60.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 16.2 20.6 Inc. seg. avg. 0.240 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 24.9 35.9 Inc. frq. avg. 0.136 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 100.2 el 16.2 pa -51.6 p: az 105.8 el 24.9 pa -52.5 u,v (fr/asec) -278.778 409.633 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/op..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/op.W.253.1W6U9V

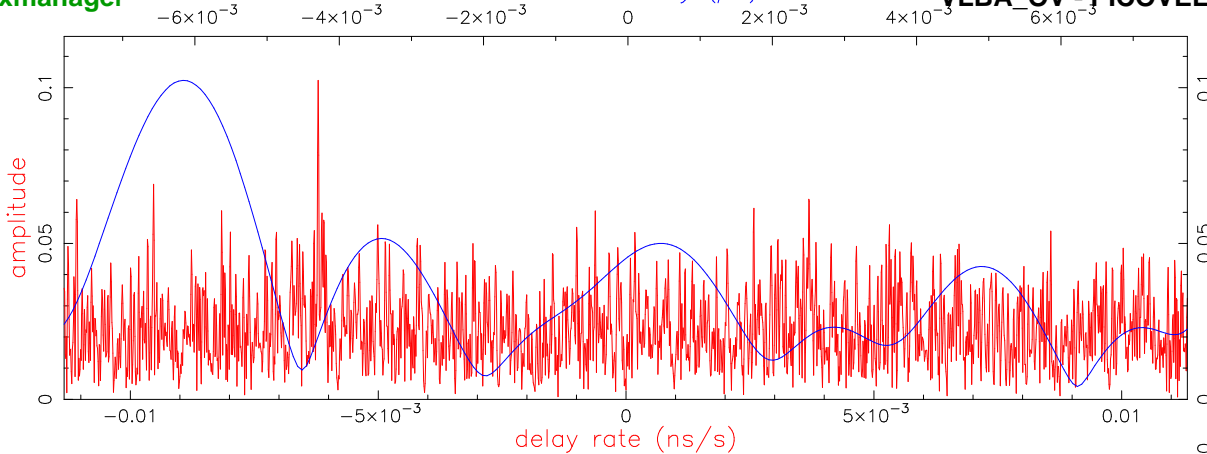
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, oP

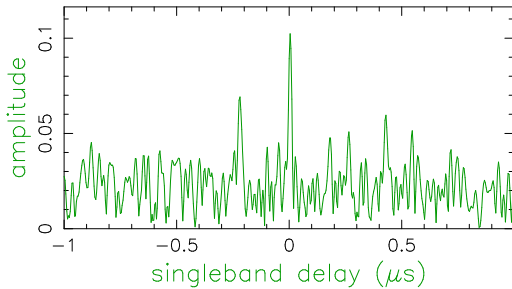
VLBA_OV - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

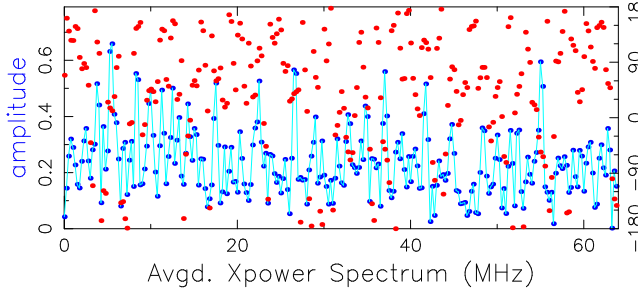


Fringe quality 0

SNR 5.7
 Int time 419.647
 Amp 0.116
 Phase -155.4
 PFD 9.0e-01
 Delays (us)
 SBD 0.004476
 MBD -0.006138
 Fringe rate (Hz)
 -0.535982
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

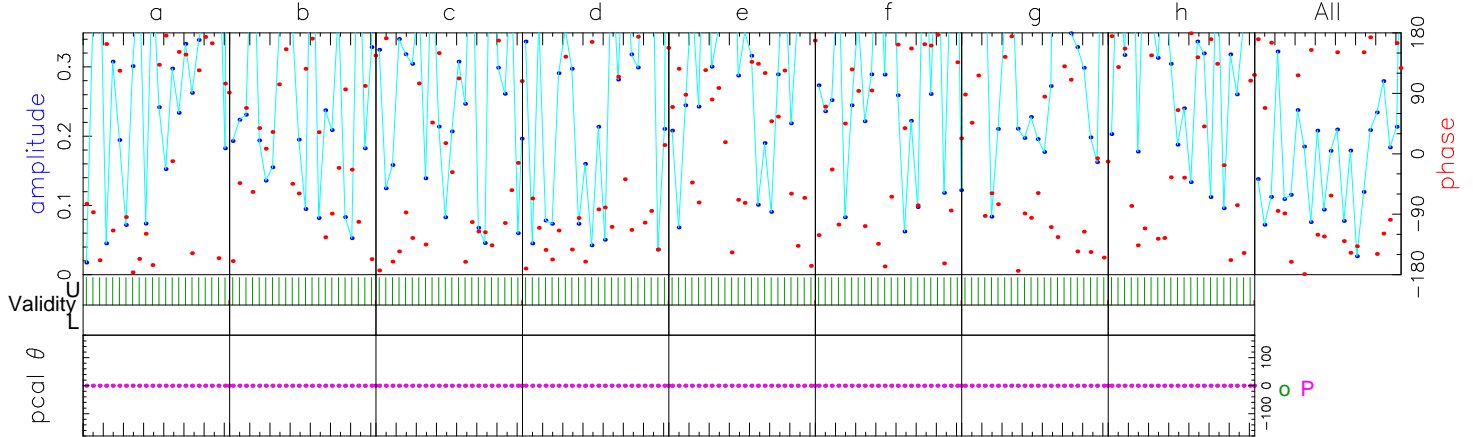


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080053
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-177.0	-105.7	-139.4	-119.6	151.5	-167.9	-153.2	-166.0	Phase	-155.4
	0.2	0.0	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	257.4	372.4	269.7	141.9	132.5	479.4	113.4	355.2	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	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)	-6.30866406429E+03		Apriori delay (usec)		-6.30867355125E+03		Resid mbdelay (usec)		-6.13803E-03	+/- 1.9E-04
Sband delay (usec)	-6.30866907525E+03		Apriori clock (usec)		4.5862255E+00		Resid sbdelay (usec)		4.47600E-03	+/- 1.5E-03
Phase delay (usec)	-6.30867355627E+03		Apriori clockrate (us/s)		9.5999998E-07		Resid phdelay (usec)		-5.01264E-06	+/- 6.4E-07
Delay rate (us/s)	2.03508511636E+00		Apriori rate (us/s)		2.03509133858E+00		Resid rate (us/s)		-6.22222E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		3.35775658496E-05		Resid phase (deg)		-155.4	+/- 20.0

	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	55.2	47.8	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	97.5	83.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	35.5	28.2	Inc. seg. avg.	0.139	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	47.0	49.2	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	
o: az 100.2 el 16.2 pa -51.6	P: az 239.5 el 36.5 pa 43.5		u,v (fr/asec) -11620.414 117.038		nlags: 256 t_cohere infinite		simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/oP..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oP.W.265.1W6U9V

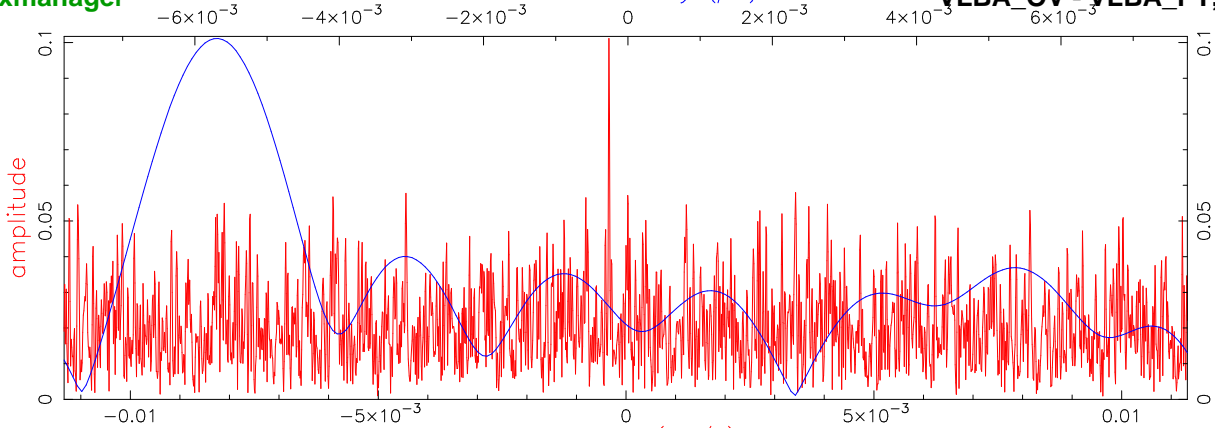
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

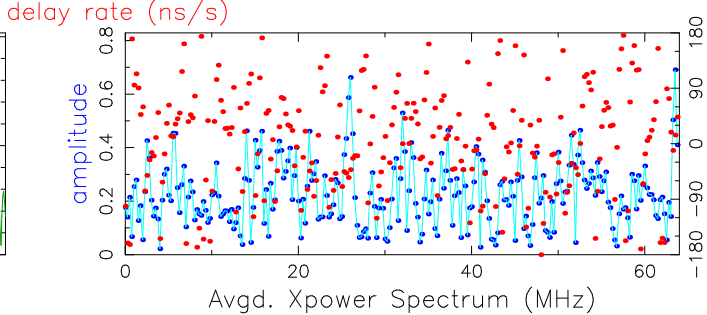
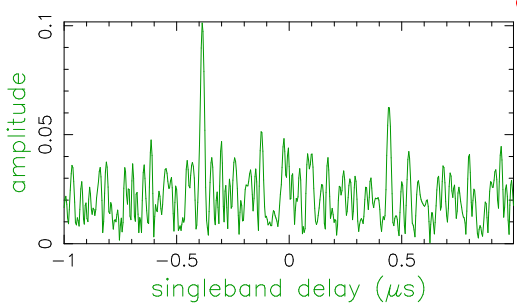
3C273.1W6U9V, No0152, op

VLBA_OV - VLBA_PT, fgroup W, pol LR

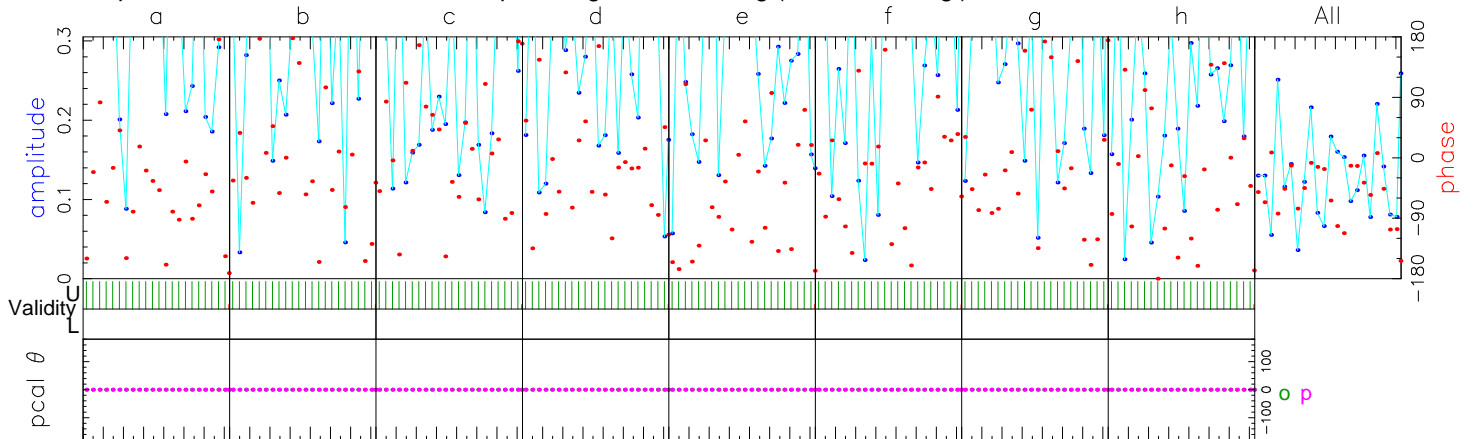
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 419.651
 Amp 0.102
 Phase -48.2
 PFD 9.5e-01
 Delays (us)
 SBD -0.385696
 MBD -0.005681
 Fringe rate (Hz)
 -0.029528
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080054
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"



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	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
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)		-3.01316791358E+03			-3.01278723240E+03					
Sband delay (usec)		-3.01317292840E+03			-1.8943863E+00					
Phase delay (usec)		-3.01278723396E+03			4.7999999E-07					
Delay rate (us/s)		5.20584752918E-02			5.20588180863E-02					
Total phase (deg)			-120.0		1.61667117051E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

ph/seg (deg) 38.1 48.2 Search (2048X32) 0.098 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.5 84.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.3 28.4 Inc. seg. avg. 0.095 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.3 49.6 Inc. frq. avg. 0.093 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 100.2 el 16.2 pa -51.6 p: az 105.8 el 24.9 pa -52.5 u,v (fr/asec) -278.778 409.633 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/op..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/op.W.270.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

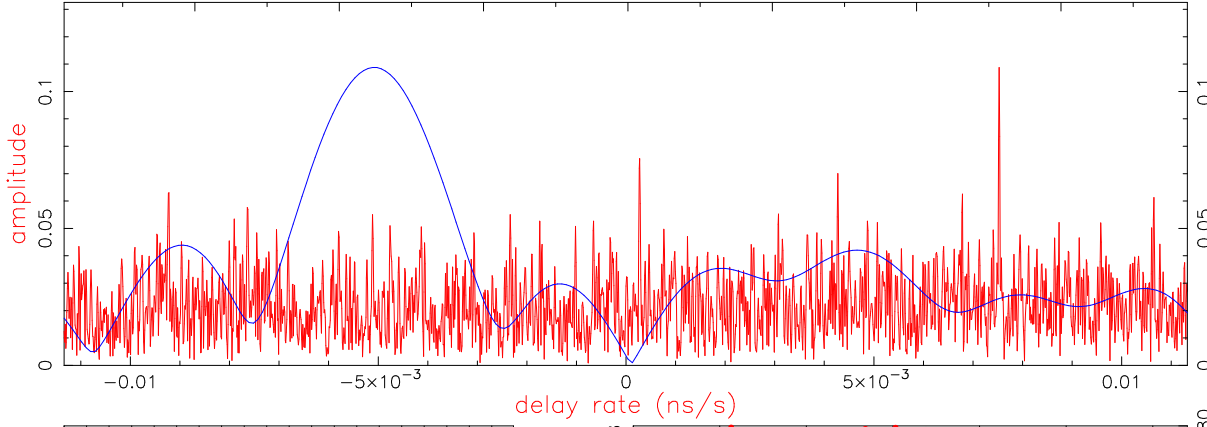
3C273.1W6U9V, No0152, oP

VLBA_OV - PICOVEL, fgroup W, pol LR

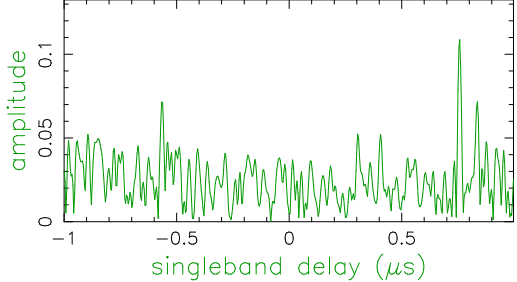
multiband delay (μ s)

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

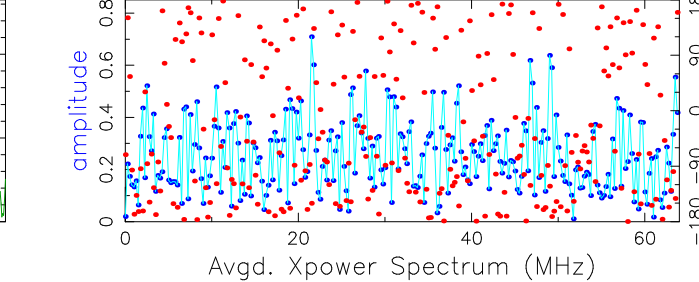
Fringe quality 0



SNR 6.1
Int time 419.647
Amp 0.133
Phase -43.4
PFD 1.9e-01
Delays (us)
SBD 0.756700
MBD -0.003533
Fringe rate (Hz)
0.649827
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

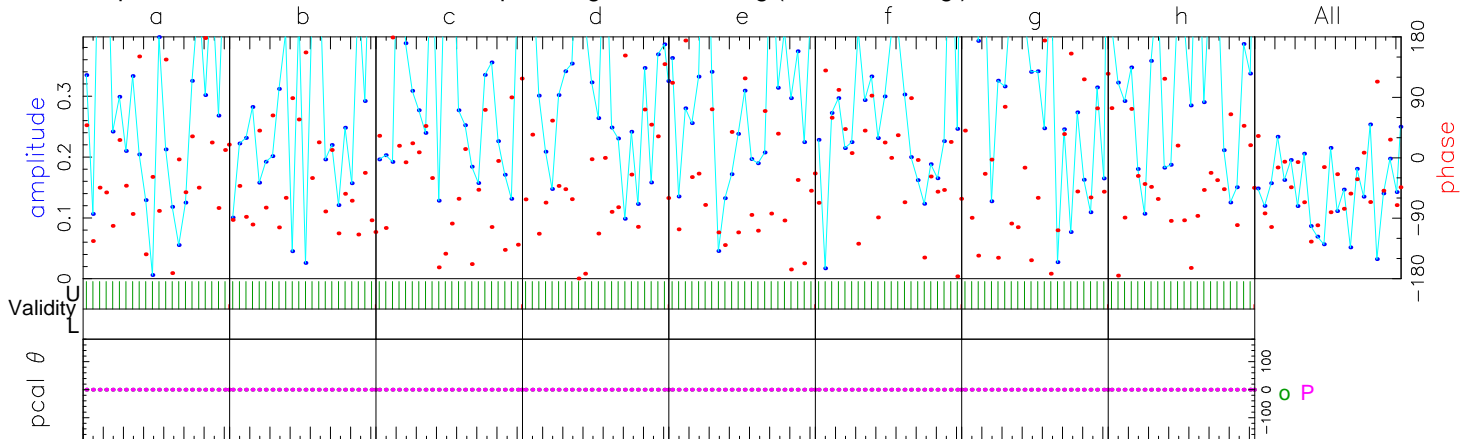


singleband delay (μ s)



Exp. c211a
Yr:day 16383
Start 2021:114
Stop 2021:114
FRT 013300.00
Corr/FF/build
2021:287:062922
2021:287:080056
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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

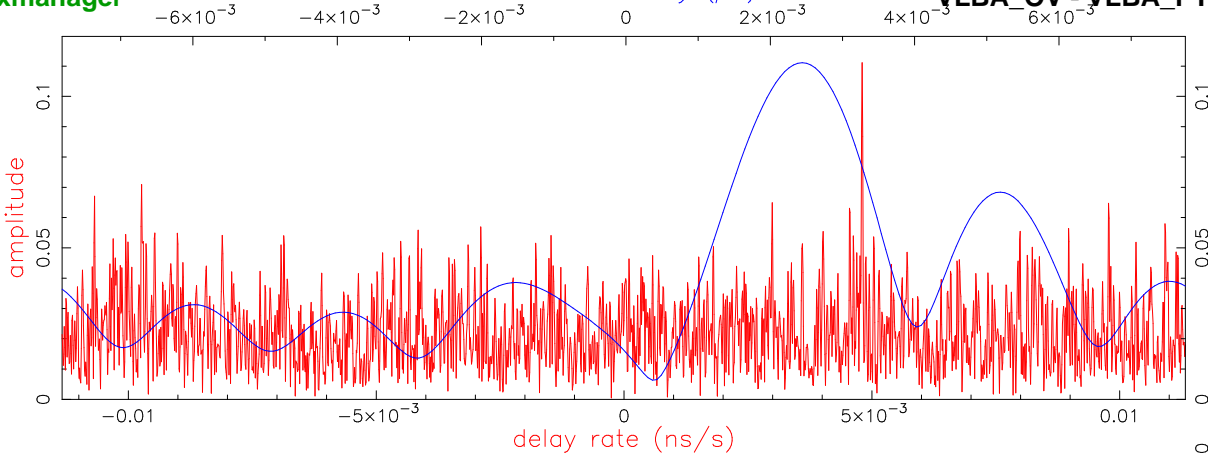


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-34.0	-55.3	-44.8	-40.1	-69.5	9.6	-84.9	-36.9	Phase	-43.4
Sband delay (usec)	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
Phase delay (usec)	370.4	41.2	63.7	406.4	271.3	483.2	184.9	391.4	Sbd box	450.7
Delay rate (us/s)	U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Total phase (deg)	o 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	P 1000	1000	1000	1000	1000	1000	1000	1000	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 W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)									Resid mbdelay (usec)	-3.53267E-03 +/- 1.8E-04
Sband delay (usec)									Resid sbdelay (usec)	7.56700E-01 +/- 1.4E-03
Phase delay (usec)									Resid phdelay (usec)	-1.39904E-06 +/- 6.0E-07
Delay rate (us/s)									Resid rate (us/s)	7.54385E-06 +/- 2.5E-09
Total phase (deg)									Resid phase (deg)	-43.4 +/- 18.6

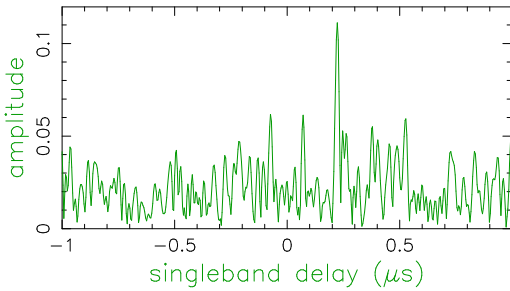
ph/seg (deg) 53.0 44.7 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.6 78.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.3 26.4 Inc. seg. avg. 0.134 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.5 46.0 Inc. frq. avg. 0.131 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 100.2 el 16.2 pa -51.6 P: az 239.5 el 36.5 pa 43.5 u,v (fr/asec) -11620.414 117.038 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/oP..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oP.W.282.1W6U9V simultaneous interpolator

multiband delay (μ s)

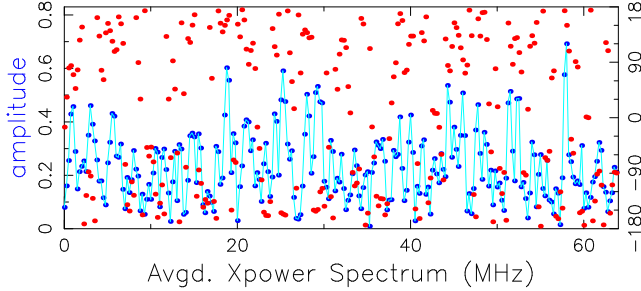
Fringe quality 0



SNR 6.2
Int time 419.651
Amp 0.120
Phase -178.4
PFD 1.2e-01
Delays (us)
SBD 0.222760
MBD 0.002445
Fringe rate (Hz)
0.414243
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

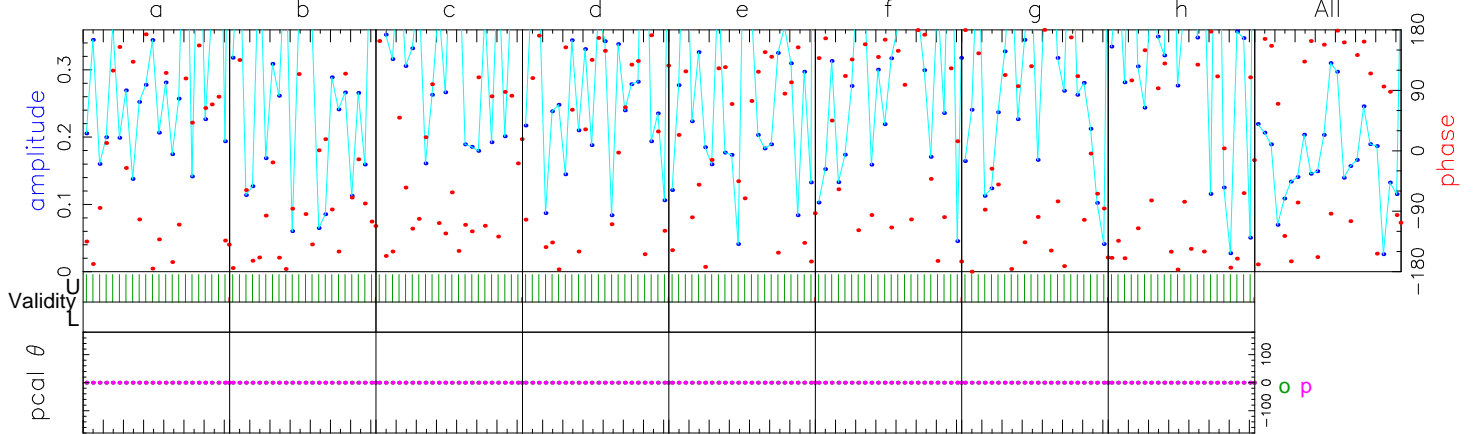


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080057
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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
142.8	-137.1	-125.1	153.8	138.5	170.1	-174.4	-170.9		Phase	-178.4
0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.2		Ampl.	0.1
333.4	59.0	496.7	94.0	274.6	380.0	389.2	314.7		Sbd box	314.0
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
o 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p 1000	1000	1000	1000	1000	1000	1000	1000		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		Manl 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	
Group delay (usec)(sbd)	-3.01256603726E+03		Apriori delay (usec)		-3.01278723240E+03		Resid mbdelay (usec)		2.44514E-03	+/- 1.7E-04
Sband delay (usec)	-3.01256447215E+03		Apriori clock (usec)		-1.8943863E+00		Resid sbdelay (usec)		2.22760E-01	+/- 1.4E-03
Phase delay (usec)	-3.01278723816E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-5.75442E-06	+/- 5.9E-07
Delay rate (us/s)	5.20636270392E-02		Apriori rate (us/s)		5.20588180863E-02		Resid rate (us/s)		4.80895E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.61667117051E-05		Resid phase (deg)		-178.4	+/- 18.4

ph/seg (deg) 57.8 44.1 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 81.5 77.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.5 26.0 Inc. seg. avg. 0.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 32.5 45.4 Inc. frq. avg. 0.126 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 100.2 el 16.2 pa -51.6 p: az 105.8 el 24.9 pa -52.5 u,v (fr/asec) -278.778 409.633 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/op..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/op.W.288.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

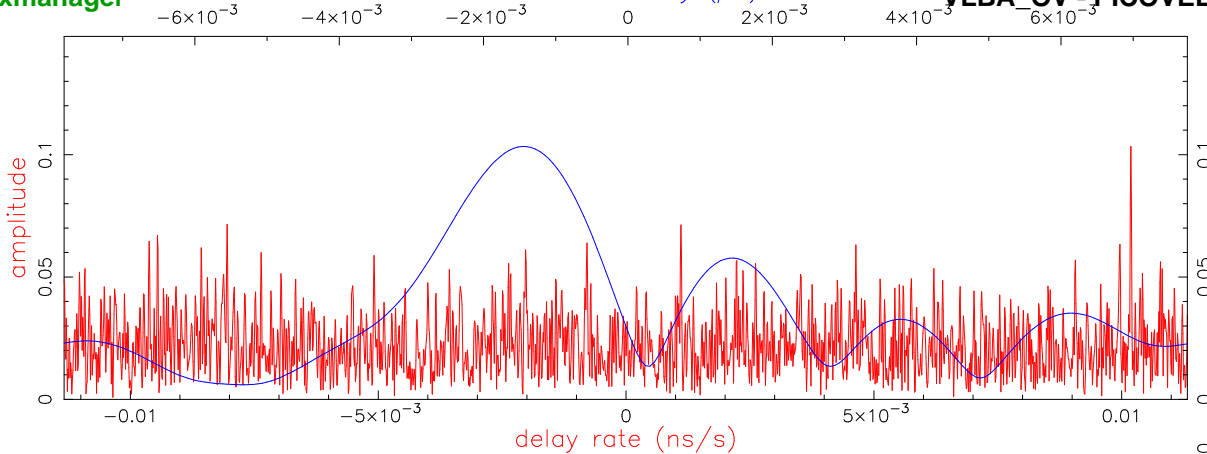
fxmanager

3C273.1W6U9V, No0152, oP

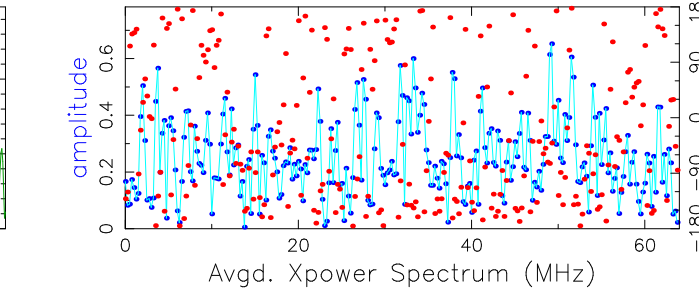
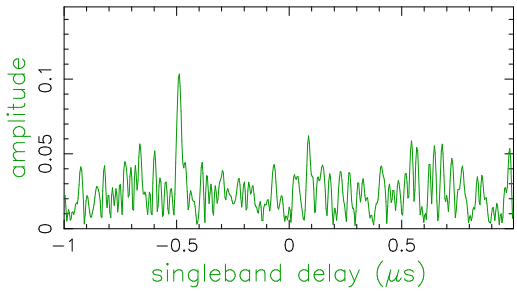
VLBA_OV - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

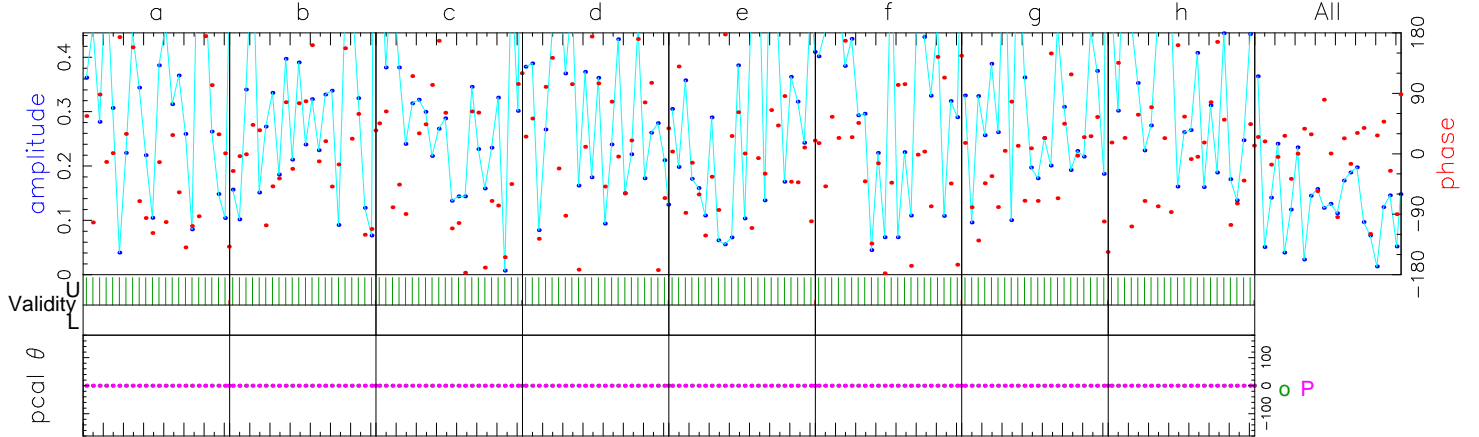


SNR 5.8
 Int time 419.647
 Amp 0.148
 Phase 3.8
 PFD 7.9e-01
 Delays (us)
 SBD -0.489237
 MBD -0.001462
 Fringe rate (Hz)
 0.878319
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080100
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.30915938868E+03	Apriori delay (usec)	-6.30867355125E+03	Resid mbdelay (usec)	-1.46242E-03	+/-	1.9E-04
Sband delay (usec)	-6.30916278825E+03	Apriori clock (usec)	4.5862255E+00	Resid sbdelay (usec)	-4.89237E-01	+/-	1.5E-03
Phase delay (usec)	-6.30867355113E+03	Apriori clockrate (us/s)	9.5999998E-07	Resid phdelay (usec)	1.22832E-07	+/-	6.4E-07
Delay rate (us/s)	2.03510153500E+00	Apriori rate (us/s)	2.03509133858E+00	Resid rate (us/s)	1.01964E-05	+/-	2.6E-09
Total phase (deg)	-250.0	Apriori accel (us/s/s)	3.35775658496E-05	Resid phase (deg)	3.8	+/-	19.7

ph/seg (deg)	49.9	Theor.	47.3	Amplitude	0.148 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	81.7	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	40.5	Inc. seg. avg.	0.144	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	34.7	Inc. frq. avg.	0.151	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

o: az 100.2 el 16.2 pa -51.6 P: az 239.5 el 36.5 pa 43.5 u,v (fr/asec) -11620.414 117.038 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/oP..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/oP.W.298.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

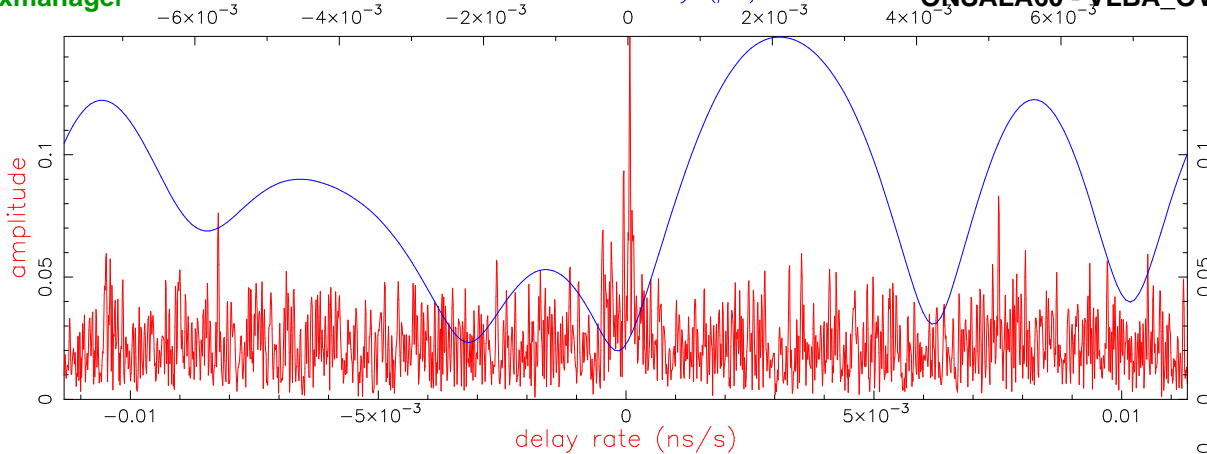
fxmanager

3C273.1W6U9V, No0152, Xo

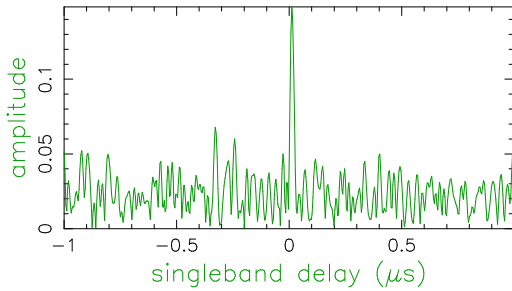
ONSALA60 - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

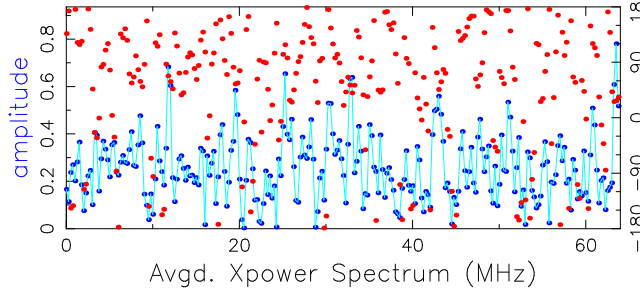
Fringe quality 9



SNR 8.3
 Int time 419.623
 Amp 0.148
 Phase -145.0
 PFD 3.3e-08
 Delays (us)
 SBD 0.012269
 MBD 0.002102
 Fringe rate (Hz) 0.006785
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

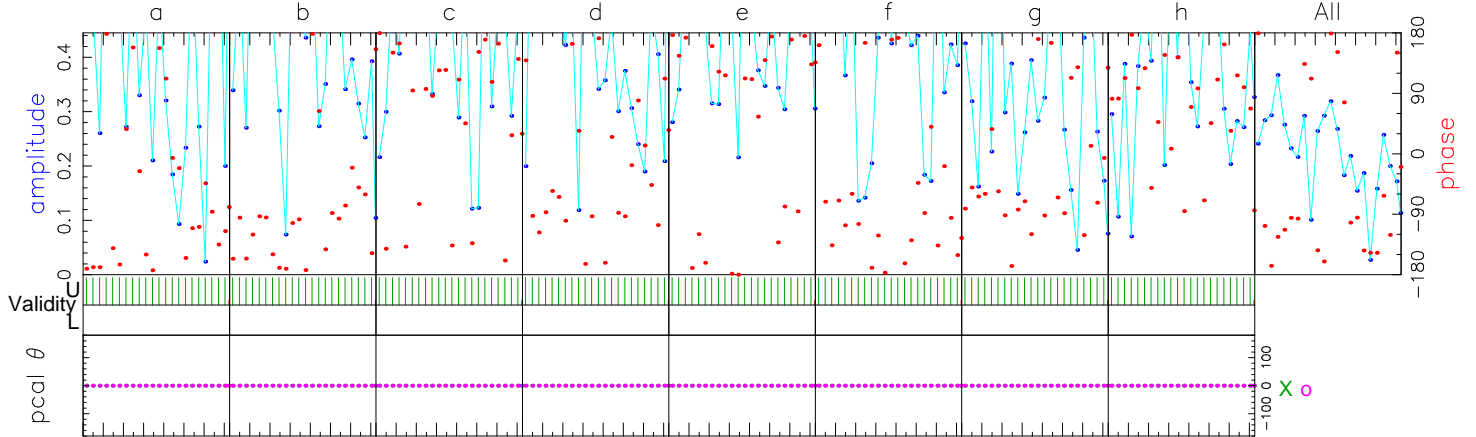


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080049
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-152.0	-114.1	149.1	-98.5	165.6	-129.2	-78.5	78.2	Phase	-145.0
	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.2	Ampl.	0.2
	260.6	261.0	260.3	260.3	260.2	261.3	260.4	261.4	Sbd box	260.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.97942495287E+02	Apriori delay (usec)	1.97924768782E+02	Resid mbdelay (usec)	2.10150E-03	+/-	1.3E-04
Sband delay (usec)	1.97937037282E+02	Apriori clock (usec)	5.2740013E+01	Resid sbdelay (usec)	1.22685E-02	+/-	1.0E-03
Phase delay (usec)	1.97924764105E+02	Apriori clockrate (us/s)	1.6800000E-07	Resid phdelay (usec)	-4.67704E-06	+/-	4.4E-07
Delay rate (us/s)	-1.88848497960E+00	Apriori rate (us/s)	-1.88848505837E+00	Resid rate (us/s)	7.87696E-08	+/-	1.8E-09
Total phase (deg)	64.8	Apriori accel (us/s/s)	1.33618032276E-07	Resid phase (deg)	-145.0	+/-	13.8

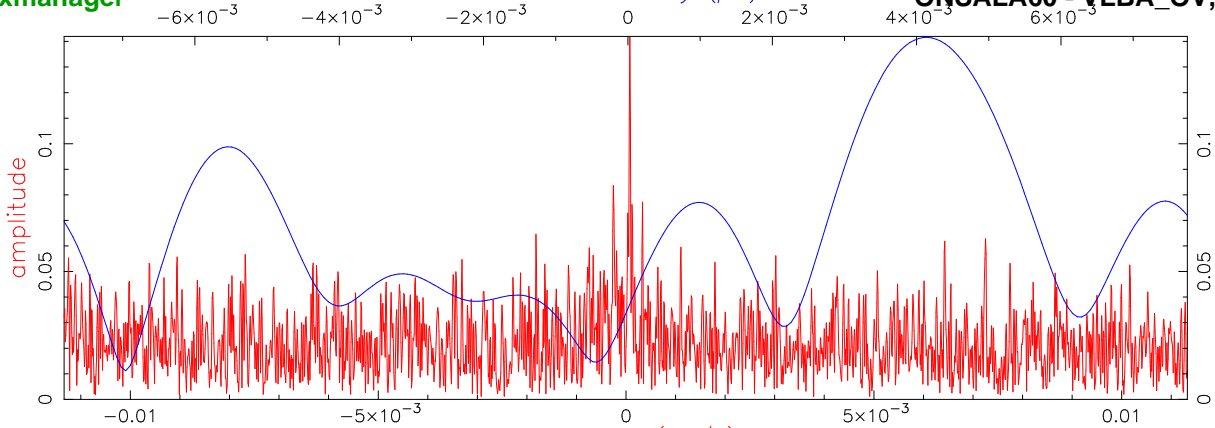
ph/seg (deg)	56.2	Theor.	33.1	Amplitude	0.148 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	73.3	Search (2048X32)	0.147	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	74.5	Inc. seg. avg.	0.194	Inc. frq. avg.	0.232	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	72.9	Inc. frq. avg.	0.232			Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	
						nlags: 256	t_cohere infinite	

X: az 244.3 el 17.7 pa 29.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10821.354 2096.145 simultaneous interpolator

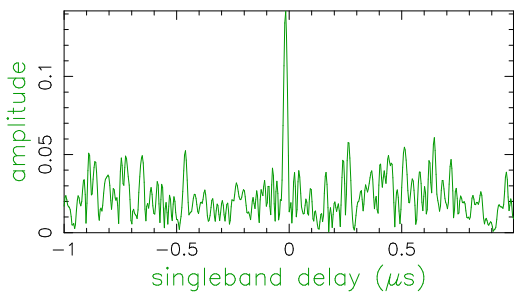
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Xo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Xo.W.245.1W6U9V

multiband delay (μ s)

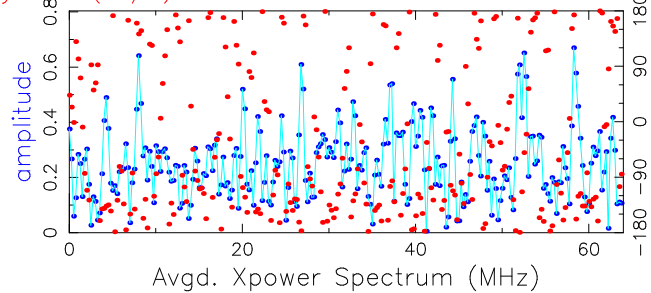
Fringe quality 9



SNR 8.0
 Int time 419.623
 Amp 0.142
 Phase -24.9
 PFD 6.2e-07
 Delays (us)
 SBD -0.016340
 MBD 0.004119
 Fringe rate (Hz)
 0.006608
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

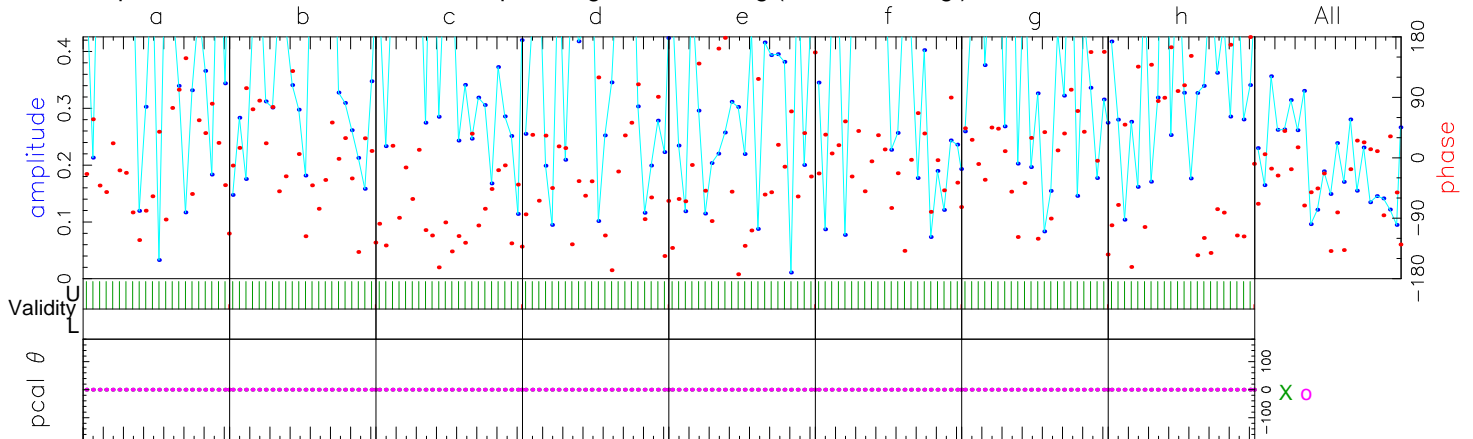


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080052
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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
	-20.7	7.1	-76.1	-16.0	-65.3	-3.1	14.0	-158.8	Phase	-24.9
	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.1	Ampl.	0.2
	252.1	252.4	252.2	364.7	51.9	253.5	252.3	469.7	Sbd box	252.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.97913263037E+02		Apriori delay (usec)	1.97924768782E+02	Resid mbdelay (usec)	4.11925E-03	+/-	1.4E-04		
Sband delay (usec)	1.97908428782E+02		Apriori clock (usec)	5.2740013E+01	Resid sbdelay (usec)	-1.63400E-02	+/-	1.1E-03		
Phase delay (usec)	1.97924767977E+02		Apriori clockrate (us/s)	1.6800000E-07	Resid phdelay (usec)	-8.04246E-07	+/-	4.6E-07		
Delay rate (us/s)	-1.88848498166E+00		Apriori rate (us/s)	-1.88848505837E+00	Resid rate (us/s)	7.67092E-08	+/-	1.9E-09		
Total phase (deg)		184.9	Apriori accel (us/s/s)	1.33618032276E-07	Resid phase (deg)	-24.9	+/-	14.4		

	RMS	Theor.	Amplitude	0.142 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.0	34.5	Search (2048X32)	0.139	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	68.7	60.3	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	64.9	20.4	Inc. seg. avg.	0.172	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	51.2	35.6	Inc. frq. avg.	0.185					

X: az 244.3 el 17.7 pa 29.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10821.354 2096.145 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Xo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Xo.W.260.1W6U9V

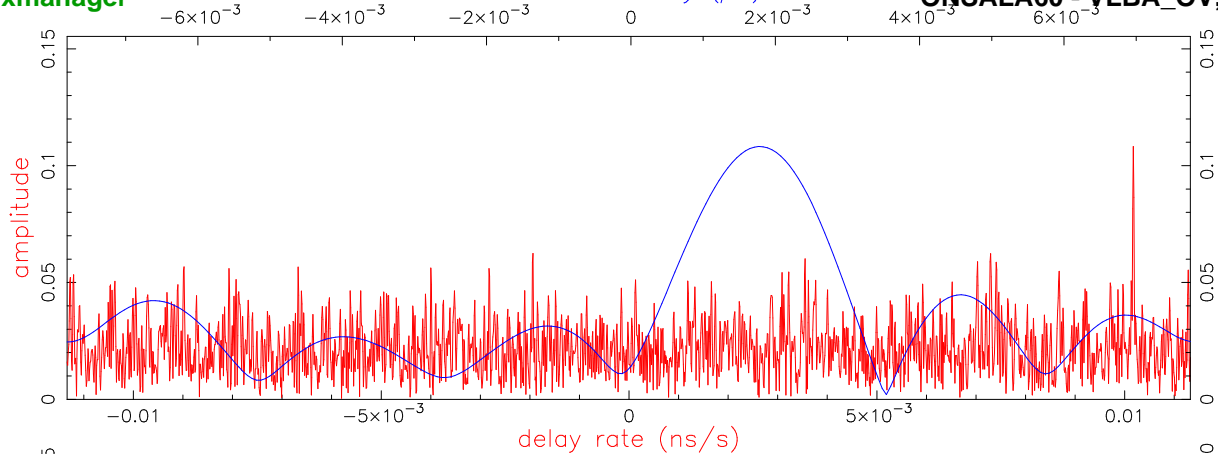
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Xo

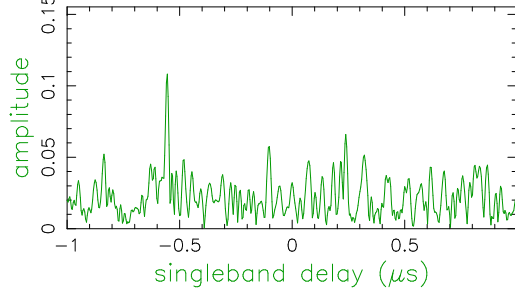
ONSALA60 - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

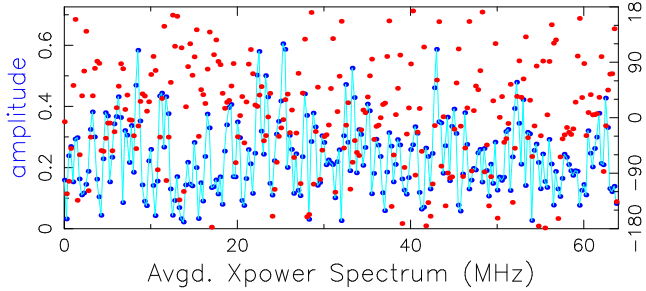


Fringe quality 0

SNR 6.1
 Int time 419.623
 Amp 0.155
 Phase 69.2
 PFD 2.6e-01
 Delays (us)
 SBD -0.555496
 MBD 0.001767
 Fringe rate (Hz)
 0.877372
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

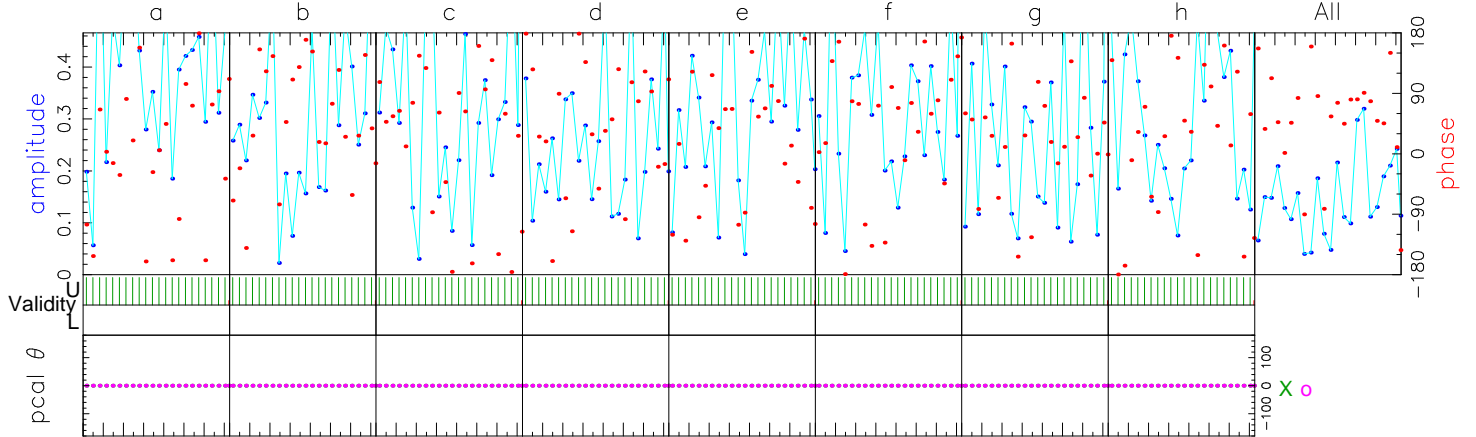


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013000.00
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080055
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

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				
X	1000	1000	1000	1000	1000	1000	1000	1000				
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
X	1000	1000	1000	1000	1000	1000	1000	1000				
o	1000	1000	1000	1000	1000	1000	1000	1000				
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		1.97364035289E+02				1.97924768782E+02			Resid mbdelay (usec)	1.76651E-03 +/- 1.8E-04		
Sband delay (usec)		1.97369272782E+02				5.2740013E+01			Resid sbdelay (usec)	-5.55496E-01 +/- 1.4E-03		
Phase delay (usec)		1.97924771013E+02				1.6800000E-07			Resid phdelay (usec)	2.23116E-06 +/- 6.1E-07		
Delay rate (us/s)		-1.88847487295E+00				-1.88848505837E+00			Resid rate (us/s)	1.01854E-05 +/- 2.5E-09		
Total phase (deg)			279.0			1.33618032276E-07			Resid phase (deg)	69.2 +/- 18.8		
	RMS	Theor.	Amplitude	0.155 +/- 0.026					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	63.4	45.1	Search (2048X32)	0.106					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	79.4	78.8	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	24.7	26.6	Inc. seg. avg.	0.163					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	32.0	46.5	Inc. frq. avg.	0.152					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

X: az 244.3 el 17.7 pa 29.3 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10821.354 2096.145 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Xo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Xo.W.276.1W6U9V

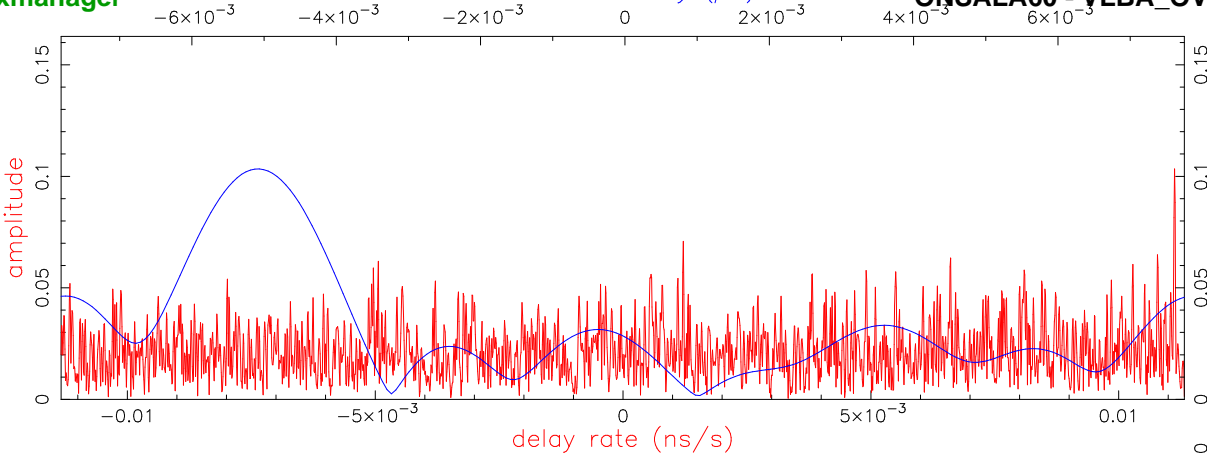
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Xo

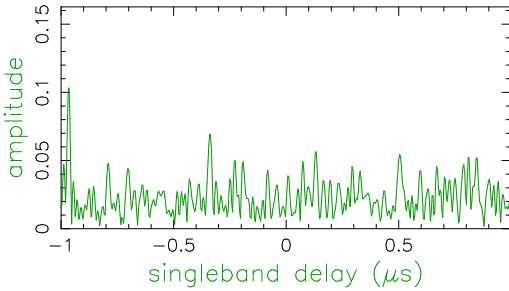
ONSALA60 - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

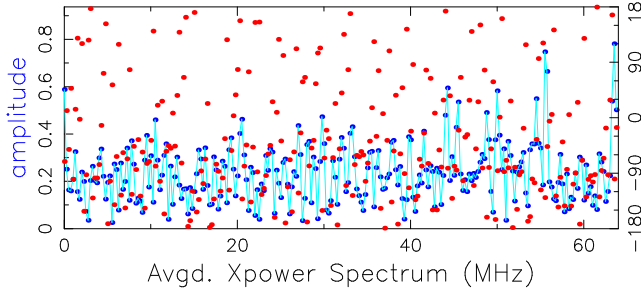


Fringe quality 0

SNR 5.9
Int time 419.623
Amp 0.163
Phase -1.9
PFD 6.0e-01
Delays (us)
SBD -0.966374
MBD -0.005108
Fringe rate (Hz)
0.960274
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

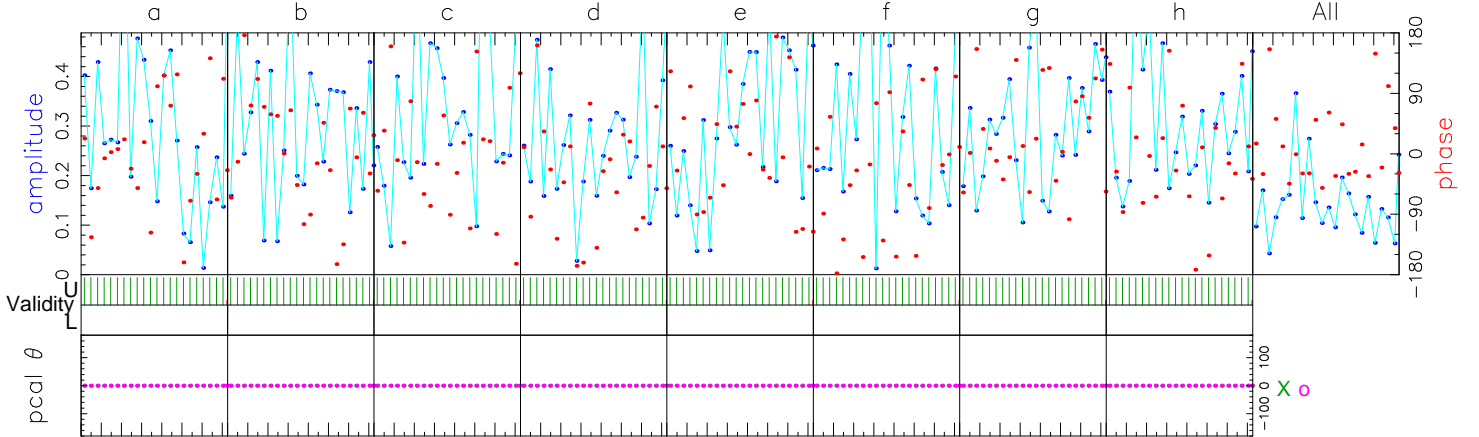


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013000.00
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080059
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

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			
X	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
X	1000	1000	1000	1000	1000	1000	1000	1000			
o	1000	1000	1000	1000	1000	1000	1000	1000			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)		1.96950911157E+02			1.97924768782E+02				Resid mbdelay (usec)	-5.10762E-03	+/- 1.8E-04
Sband delay (usec)		1.96958395282E+02			5.2740013E+01				Resid sbdelay (usec)	-9.66374E-01	+/- 1.5E-03
Phase delay (usec)		1.97924768720E+02			1.6800000E-07				Resid phdelay (usec)	-6.12704E-08	+/- 6.3E-07
Delay rate (us/s)		-1.88847391054E+00			-1.88848505837E+00				Resid rate (us/s)	-1.11478E-05	+/- 2.6E-09
Total phase (deg)		207.9			1.33618032276E-07				Resid phase (deg)	-1.9	+/- 19.4
	RMS	Theor.	Amplitude	0.163 +/- 0.028					Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5
ph/seg (deg)	61.0	46.6	Search (2048X32)	0.103					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000
amp/seg (%)	74.3	81.3	Interp.	0.000					Bits/sample: 2x2		mb window (us) -0.008 0.008
ph/frq (deg)	29.7	27.5	Inc. seg. avg.	0.163					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	32.3	47.9	Inc. frq. avg.	0.150					Data rate(Mb/s): 2048		ion window (TEC) 0.00 0.00
X: az 244.3 el 17.7 pa 29.3			o: az 100.2 el 16.2 pa -51.6						u,v (fr/asec) 10821.354 2096.145		simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Xo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Xo.W.293.1W6U9V

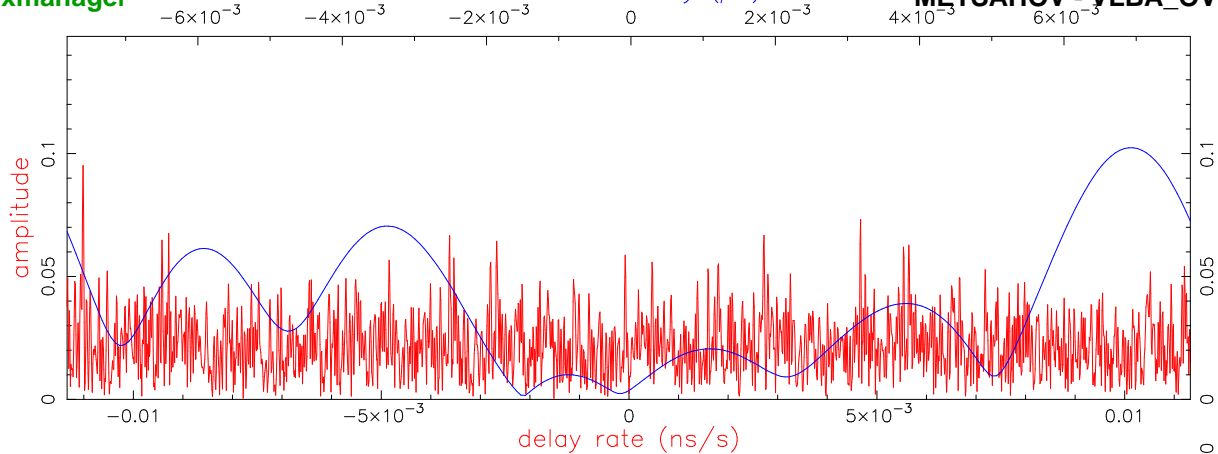
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Zo

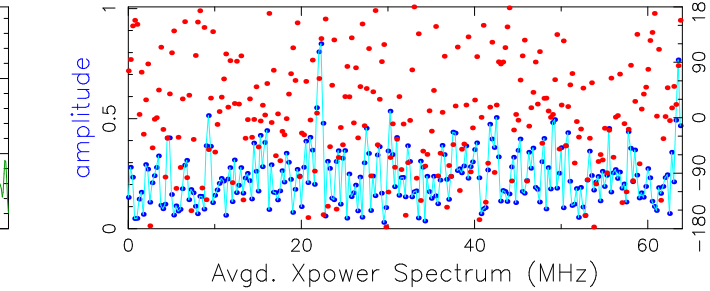
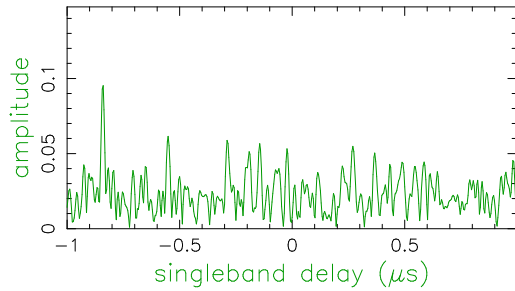
MEṬSAHOV - VLBA_OV, fgroup W, pol LL

multiband delay (μs)



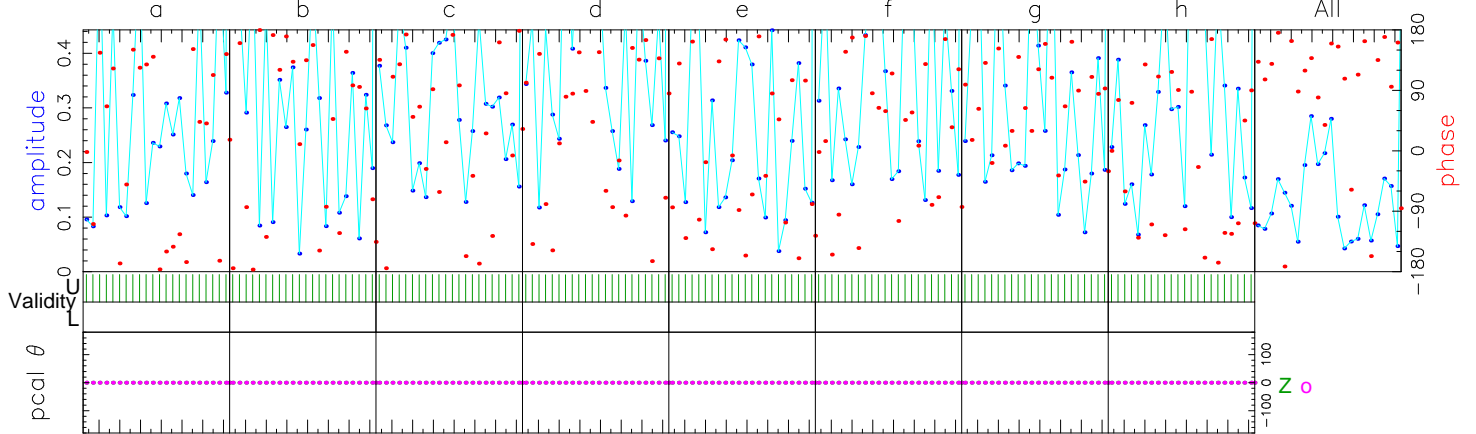
Fringe quality 0

SNR 5.3
 Int time 405.427
 Amp 0.148
 Phase 135.8
 PFD 1.0e+00
 Delays (us)
 SBD -0.841321
 MBD -0.008301
 Fringe rate (Hz)
 -0.949967
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 013013.82
 Stop 013659.84
 FRT 013330.00
 Corr/FF/build
 2021:287:062922
 2021:287:080052
 2021:252:122852
 RA & Dec (J2000)
 12h29m06.699731s
 +02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.39433483860E+03	Apriori delay (usec)	-2.39349841282E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.0E-04
Sband delay (usec)	-2.39433973382E+03	Apriori clock (usec)	-4.3615055E+00	Resid sbdelay (usec)	-8.41321E-01	+/-	1.6E-03
Phase delay (usec)	-2.39349840844E+03	Apriori clockrate (us/s)	-3.4400000E-07	Resid phdelay (usec)	4.38075E-06	+/-	7.0E-07
Delay rate (us/s)	-1.89928738800E+00	Apriori rate (us/s)	-1.89927635983E+00	Resid rate (us/s)	-1.10282E-05	+/-	3.0E-09
Total phase (deg)		Apriori accel (us/s/s)	1.37051347378E-05	Resid phase (deg)	135.8	+/-	21.6

ph/seg (deg)	52.3	Theor.	51.7	Amplitude	0.148 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	82.4		90.2	Search (2048X32)	0.100	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	49.7		30.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	53.9		53.2	Inc. seg. avg.	0.142	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.167	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 254.9 el 10.7 pa 28.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10899.501 2358.832 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Zo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Zo.W.257.1W6U9V

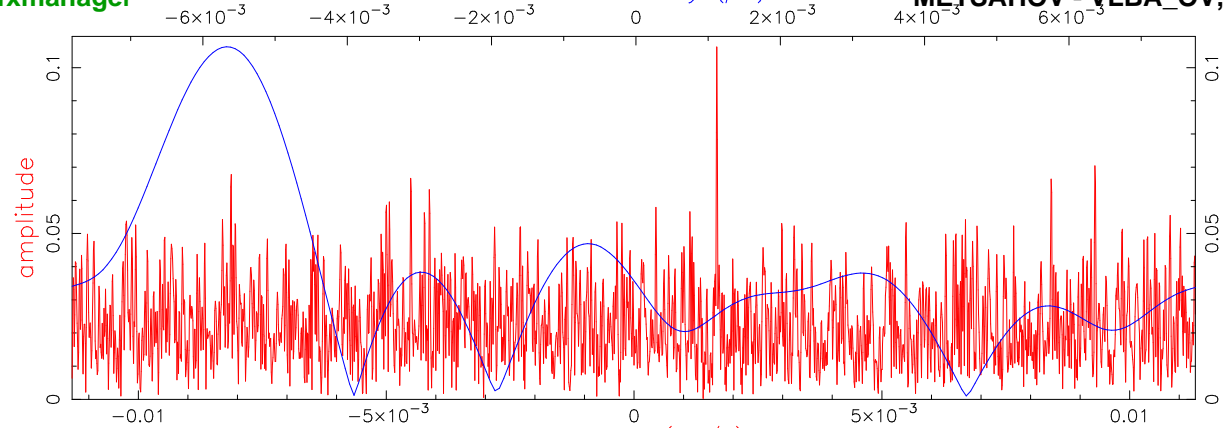
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C273.1W6U9V, No0152, Zo

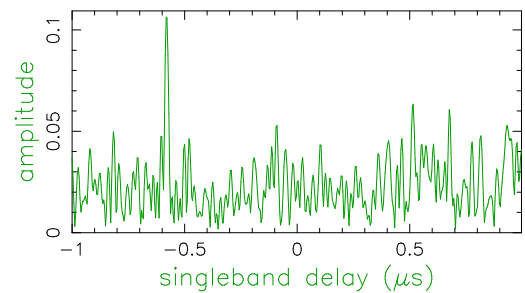
METSAHOV - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

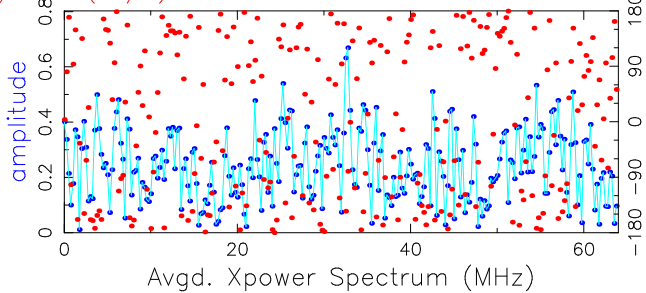


Fringe quality 0

SNR 6.0
Int time 405.427
Amp 0.109
Phase 39.1
PFD 4.5e-01
Delays (us)
SBD -0.580201
MBD -0.005638
Fringe rate (Hz)
0.144079
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

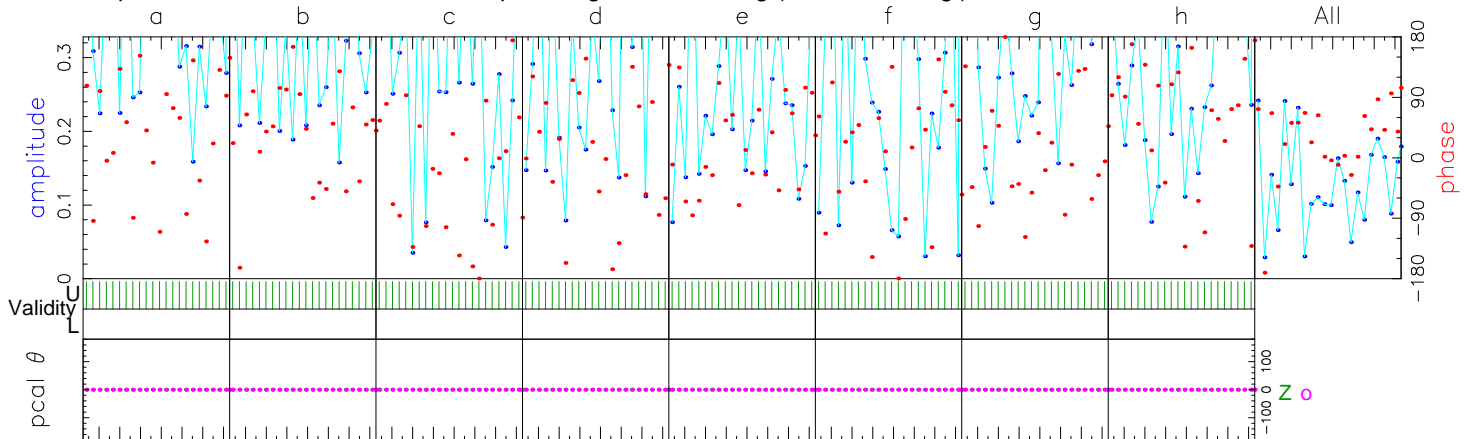


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013013.82
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080055
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -2.39408217535E+03 Apriori delay (usec) -2.39349841282E+03 Resid mbdelay (usec) -5.63753E-03 +/- 1.8E-04
 Sband delay (usec) -2.39407861407E+03 Apriori clock (usec) -4.3615055E+00 Resid sbdelay (usec) -5.80201E-01 +/- 1.4E-03
 Phase delay (usec) -2.39349841156E+03 Apriori clockrate (us/s) -3.4400000E-07 Resid phdelay (usec) 1.26040E-06 +/- 6.2E-07
 Delay rate (us/s) -1.89927468722E+00 Apriori rate (us/s) -1.89927635983E+00 Resid rate (us/s) 1.67261E-06 +/- 2.6E-09
 Total phase (deg) -61.7 Apriori accel (us/s/s) 1.37051347378E-05 Resid phase (deg) 39.1 +/- 19.2

RMS Theor. Amplitude 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.6 46.0 Search (2048X32) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 59.2 80.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 32.9 27.1 Inc. seg. avg. 0.098 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 (%) 34.0 47.4 Inc. frq. avg. 0.110 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 254.9 el 10.7 pa 28.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10899.501 2358.832 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Zo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Zo.W.275.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

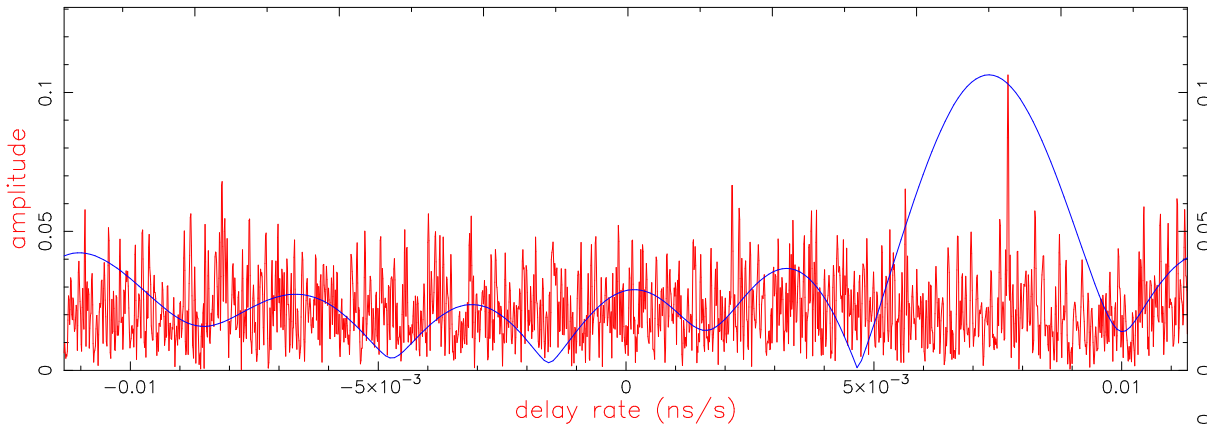
3C273.1W6U9V, No0152, Zo

METSAHOV - VLBA_OV, fgroup W, pol LR

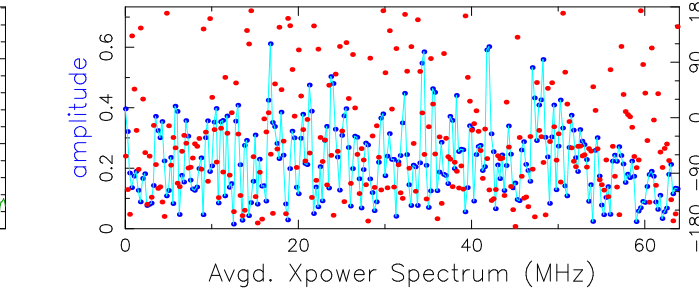
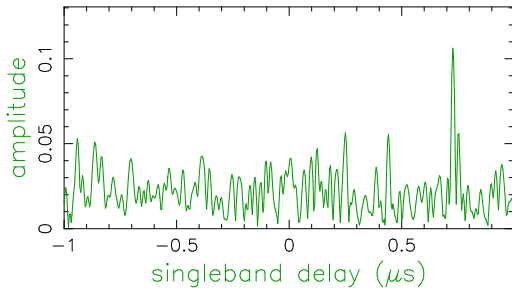
multiband delay (μ s)

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

Fringe quality 0

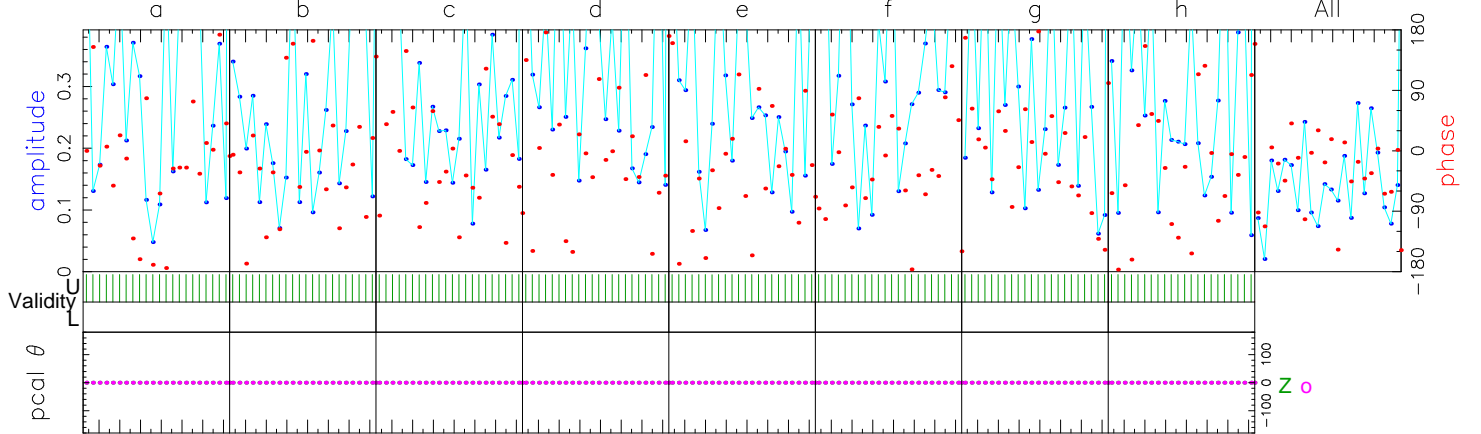


SNR 5.9
Int time 405.427
Amp 0.131
Phase -23.2
PFD 6.1e-01
Delays (us)
SBD 0.727649
MBD 0.005036
Fringe rate (Hz) 0.664658
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013013.82
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080058
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-15.6	-23.3	-15.3	-23.4	-64.5	-30.5	6.1	-48.6		Phase
	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1		Ampl.
	70.4	180.3	252.9	301.8	460.5	41.9	229.1	230.1		Sbd box
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0		APs used
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
o	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd) -2.39277462650E+03 Apriori delay (usec) -2.39349841282E+03 Resid mbdelay (usec) 5.03631E-03 +/- 1.8E-04
 Sband delay (usec) -2.39277076382E+03 Apriori clock (usec) -4.3615055E+00 Resid sbdelay (usec) 7.27649E-01 +/- 1.5E-03
 Phase delay (usec) -2.39349841356E+03 Apriori clockrate (us/s) -3.4400000E-07 Resid phdelay (usec) -7.47830E-07 +/- 6.3E-07
 Delay rate (us/s) -1.89926864380E+00 Apriori rate (us/s) -1.89927635983E+00 Resid rate (us/s) 7.71602E-06 +/- 2.7E-09
 Total phase (deg) -124.0 Apriori accel (us/s/s) 1.37051347378E-05 Resid phase (deg) -23.2 +/- 19.4

RMS Theor. Amplitude 0.131 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 48.5 46.6 Search (2048X32) 0.105 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 69.6 81.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 23.7 27.5 Inc. seg. avg. 0.131 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 28.7 48.0 Inc. frq. avg. 0.124 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 254.9 el 10.7 pa 28.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10899.501 2358.832 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Zo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Zo.W.291.1W6U9V

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

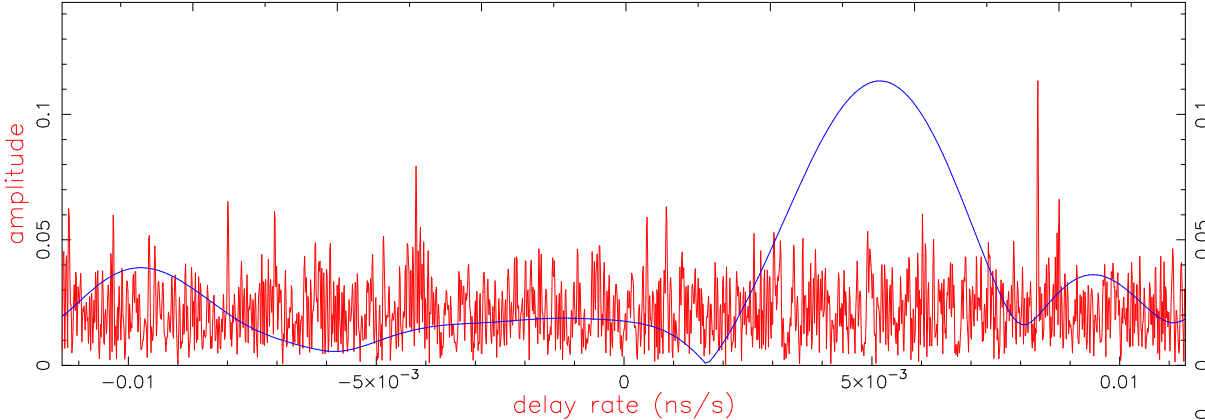
3C273.1W6U9V, No0152, Zo

METSAHOV - VLBA_OV, fgroup W, pol RL

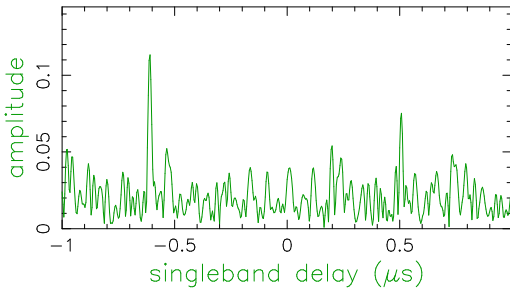
multiband delay (μ s)

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

Fringe quality 0

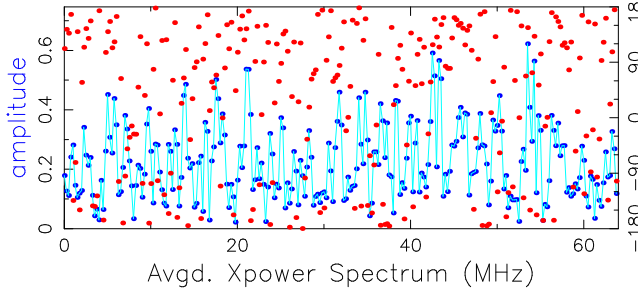


SNR 6.3
Int time 405.427
Amp 0.145
Phase -96.7
PFD 7.8e-02
Delays (us)
SBD -0.610637
MBD 0.003486
Fringe rate (Hz)
0.719945
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



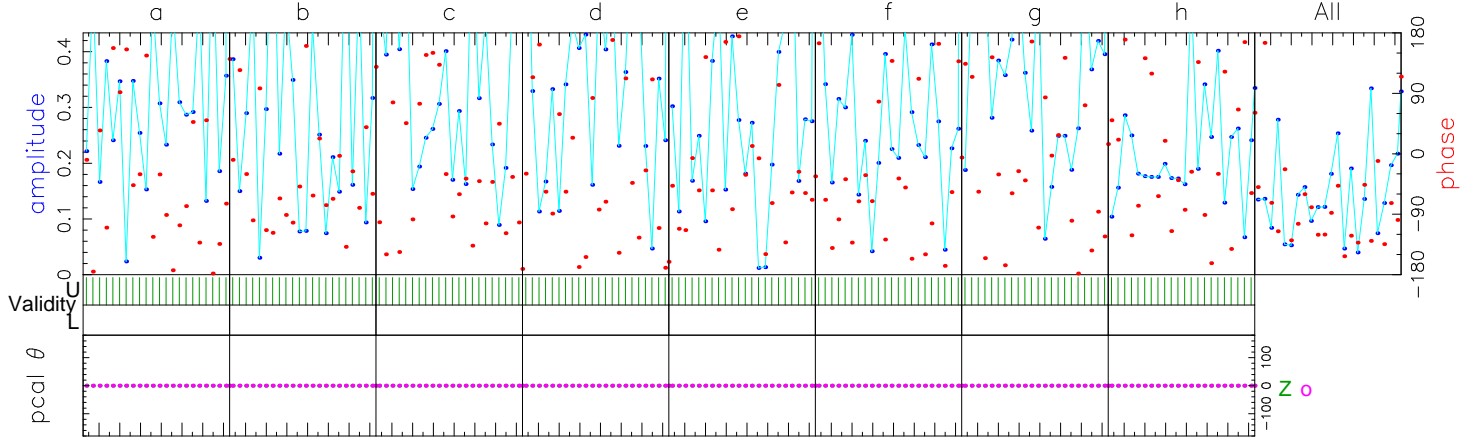
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 013013.82
Stop 013659.84
FRT 013330.00
Corr/FF/build
2021:287:062922
2021:287:080102
2021:252:122852
RA & Dec (J2000)
12h29m06.699731s
+02°03'08.598201"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 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
	-125.8	-82.1	-93.9	-95.5	-82.2	-121.3	-103.3	-76.0	Phase	-96.7
	0.1	0.3	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	235.0	100.9	8.2	494.9	409.6	84.4	239.2	473.7	Sbd box	100.7
U/L	793/0	793/0	793/0	793/0	793/0	793/0	793/0	793/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -2.39410430214E+03 Apriori delay (usec) -2.39349841282E+03 Resid mbdelay (usec) 3.48568E-03 +/- 1.7E-04
 Sband delay (usec) -2.39410905032E+03 Apriori clock (usec) -4.3615055E+00 Resid sbdelay (usec) -6.10637E-01 +/- 1.4E-03
 Phase delay (usec) -2.39349841593E+03 Apriori clockrate (us/s) -3.4400000E-07 Resid phdelay (usec) -3.11717E-06 +/- 5.9E-07
 Delay rate (us/s) -1.89926800198E+00 Apriori rate (us/s) -1.89927635983E+00 Resid rate (us/s) 8.35785E-06 +/- 2.5E-09
 Total phase (deg) -197.5 Apriori accel (us/s/s) 1.37051347378E-05 Resid phase (deg) -96.7 +/- 18.2

RMS Theor. Amplitude 0.145 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 44.2 43.6 Search (2048X32) 0.112 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 71.6 76.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 19.8 25.7 Inc. seg. avg. 0.142 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 36.1 44.9 Inc. frq. avg. 0.136 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 254.9 el 10.7 pa 28.7 o: az 100.2 el 16.2 pa -51.6 u,v (fr/asec) 10899.501 2358.832 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0152/Zo..1W6U9V Output file: /Exps/c211a/v2/1234/No0152/Zo.W.305.1W6U9V