

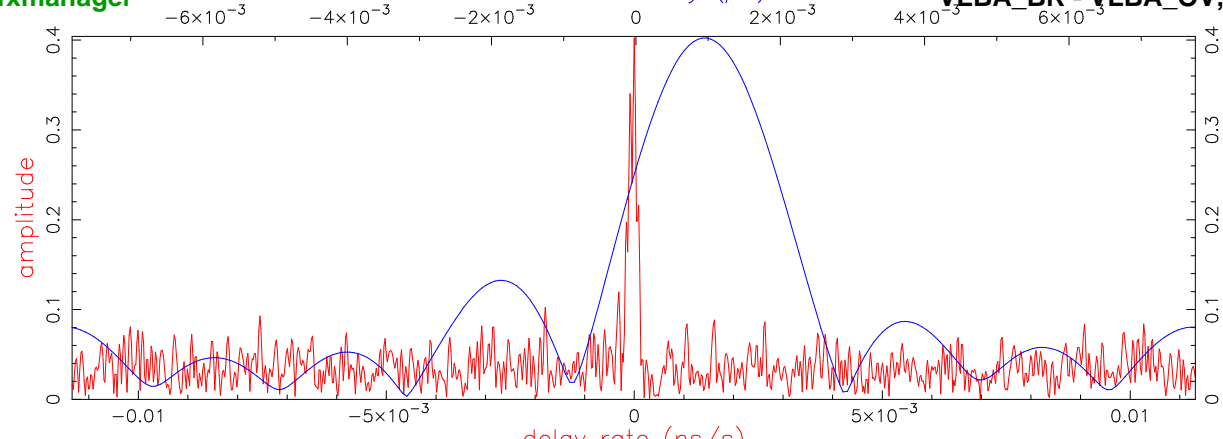
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

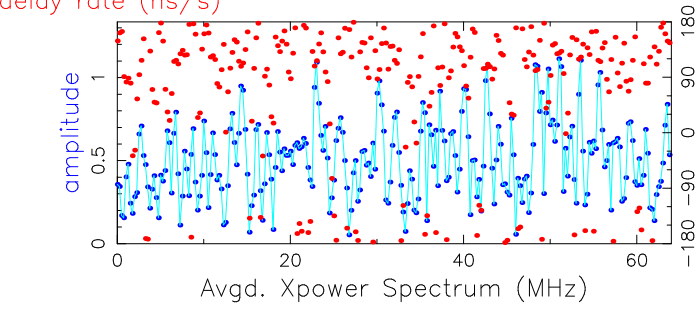
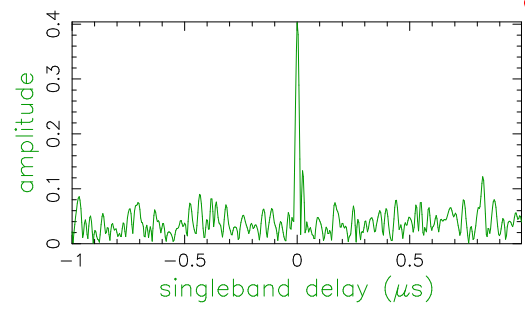
NRAO150.1HV1N7, No0150, bo

VLBA_BR - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

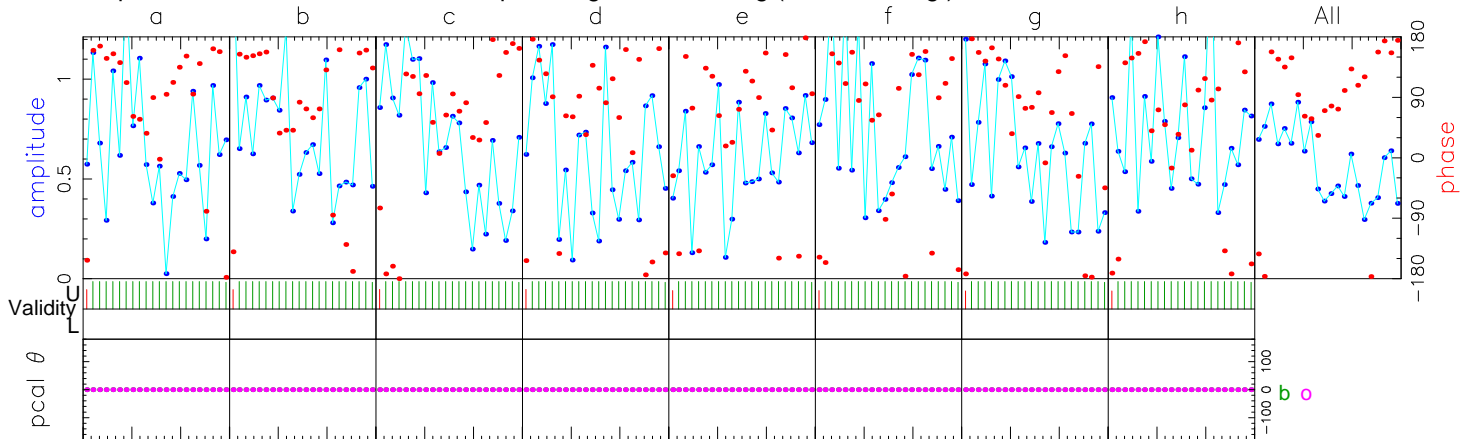


Fringe quality 9
 SNR 14.7
 Int time 177.421
 Amp 0.404
 Phase 127.7
 PFD 1.5e-40
 Delays (us)
 SBD 0.000830
 MBD 0.000966
 Fringe rate (Hz) 0.000724
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145418
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	127.8	130.1	119.0	130.5	129.7	137.4	126.6	117.9	Phase	127.7
	0.4	0.4	0.4	0.4	0.3	0.5	0.4	0.4	Ampl.	0.4
	256.7	257.8	256.7	257.7	421.6	257.4	257.7	257.2	Sbd box	257.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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)	1.76544318554E+03		Apriori delay (usec)		1.76544221907E+03		Resid mbdelay (usec)		9.66469E-04	+/- 7.4E-05
Sband delay (usec)	1.76544304932E+03		Apriori clock (usec)		-2.3113430E+01		Resid sbdelay (usec)		8.30250E-04	+/- 5.9E-04
Phase delay (usec)	1.7654422319E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		4.11663E-06	+/- 2.5E-07
Delay rate (us/s)	1.21061778506E-01		Apriori rate (us/s)		1.21061770096E-01		Resid rate (us/s)		8.41058E-09	+/- 2.4E-09
Total phase (deg)	38.0		Apriori accel (us/s/s)		2.73607043604E-06		Resid phase (deg)		127.7	+/- 7.8

ph/seg (deg) 47.5 18.3 Theor. Amplitude 0.404 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.2 31.9 Search (1024X32) 0.391 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.9 11.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 11.4 19.2 Inc. seg. avg. 0.548 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.397 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 b: az 298.9 el 49.9 pa 68.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -1102.794 1046.268 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo.W.22.1HV1N7

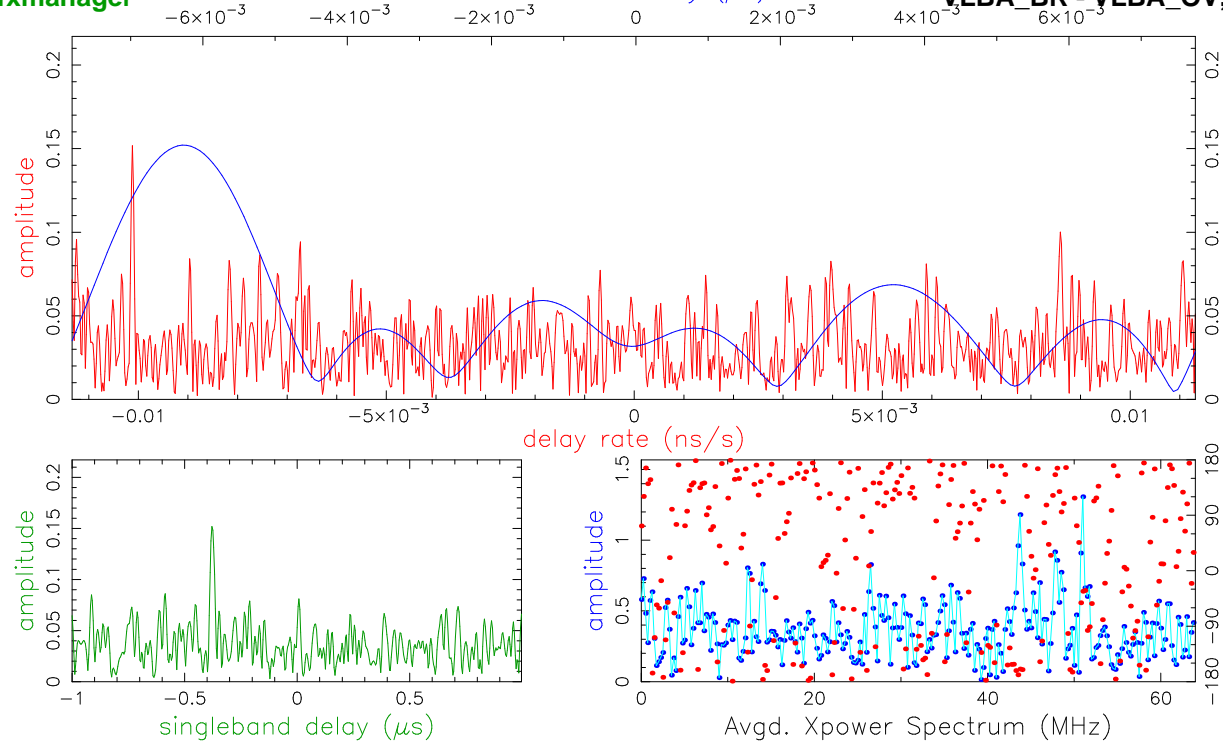
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, bo

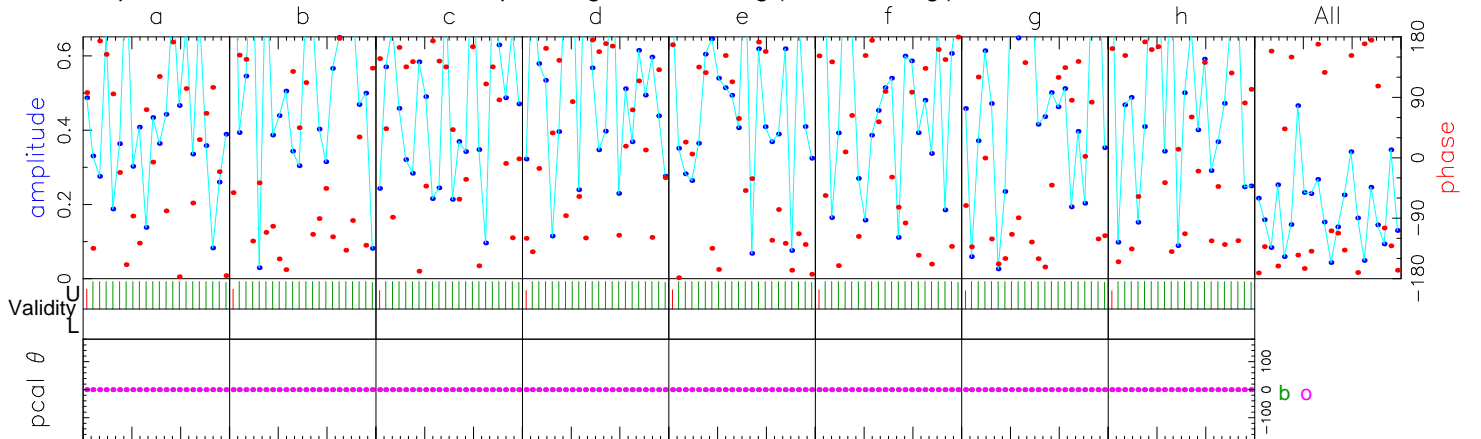
VLBA_BR - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0
 SNR 5.6
 Int time 177.421
 Amp 0.217
 Phase -166.1
 PFD 9.6e-01
 Delays (us)
 SBD -0.377798
 MBD -0.006201
 Fringe rate (Hz)
 -0.873077
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145420
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.76506101780E+03				1.76544221907E+03			Resid mbdelay (usec)	-6.20127E-03 +/- 2.0E-04
Sband delay (usec)		1.76506442082E+03				-2.3113430E+01			Resid sbdelay (usec)	-3.77798E-01 +/- 1.6E-03
Phase delay (usec)		1.76544221372E+03				9.9999998E-08			Resid phdelay (usec)	-5.35724E-06 +/- 6.7E-07
Delay rate (us/s)		1.21051634540E-01				1.21061770096E-01			Resid rate (us/s)	-1.01356E-05 +/- 6.4E-09
Total phase (deg)			104.2			2.73607043604E-06			Resid phase (deg)	-166.1 +/- 20.6

ph/seg (deg) 50.8 48.4 Search (1024X32) 0.149 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.5 84.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.7 29.2 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.6 50.9 Inc. frq. avg. 0.209 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 298.9 el 49.9 pa 68.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -1102.794 1046.268 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo.W.44.1HV1N7

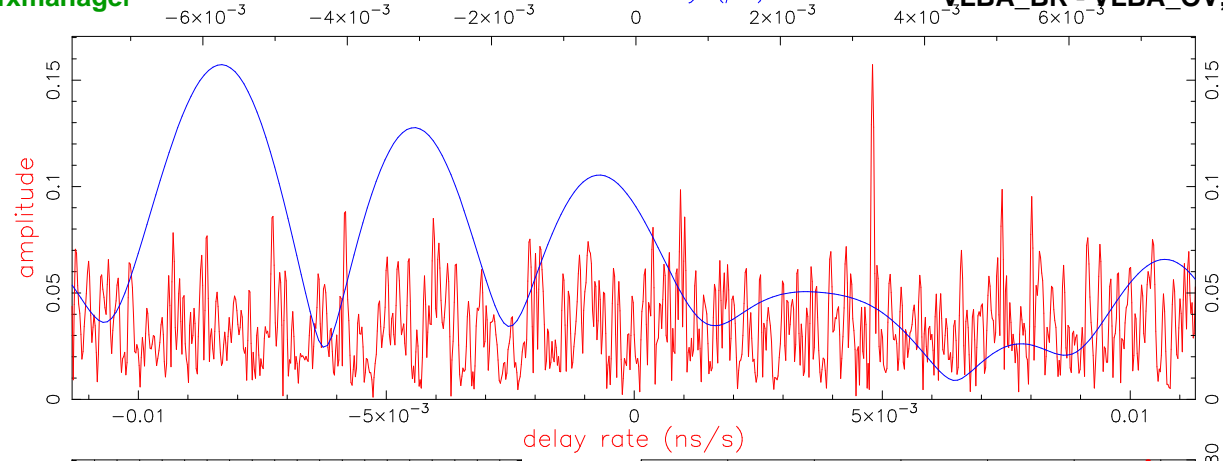
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

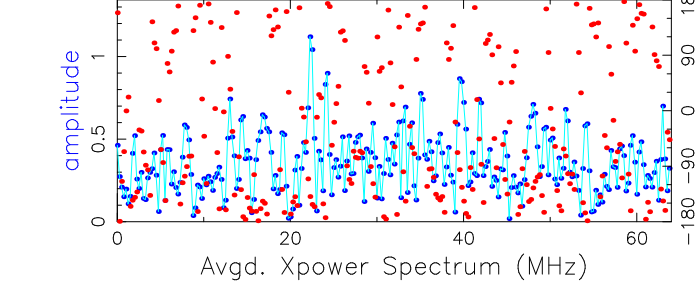
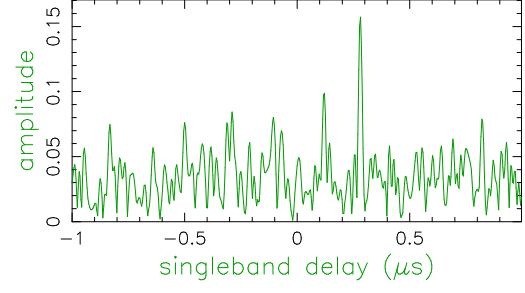
NRAO150.1HV1N7, No0150, bo

VLBA_BR - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

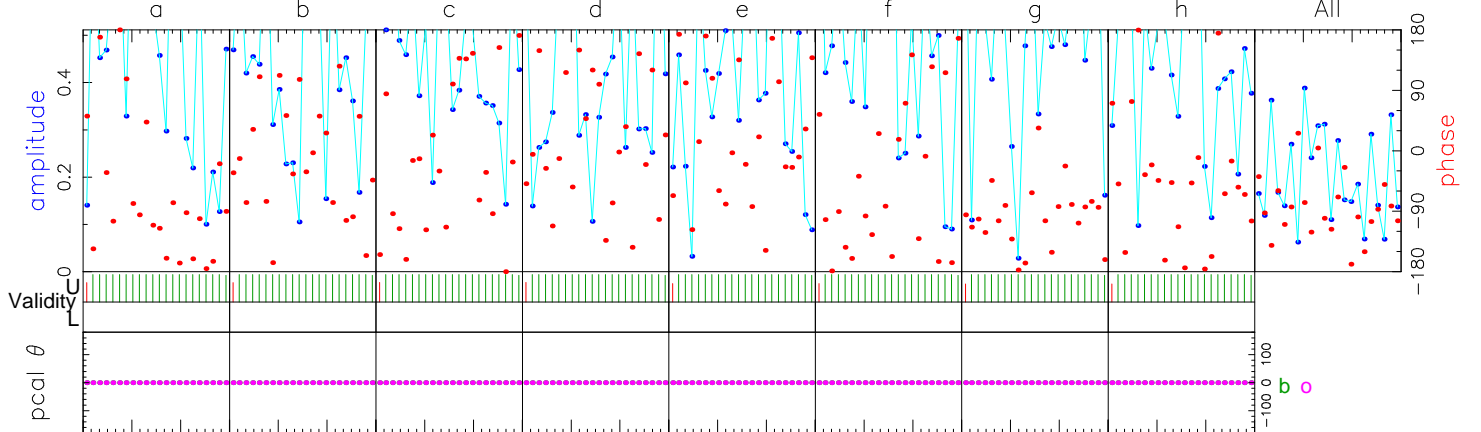


Fringe quality 0
 SNR 5.8
 Int time 177.421
 Amp 0.171
 Phase -88.5
 PFD 6.5e-01
 Delays (us)
 SBD 0.280270
 MBD -0.005755
 Fringe rate (Hz)
 0.415397
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145422
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-114.9	-33.5	-111.6	-51.8	-18.0	-132.0	-93.0	-73.0	Phase	-88.5		
	0.3	0.2	0.1	0.1	0.1	0.2	0.4	0.2	Ampl.	0.2		
	328.1	346.5	177.4	154.6	209.2	200.7	328.9	266.4	Sbd box	328.7		
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used			
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
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	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)	1.76571771383E+03		Apriori delay (usec)		1.76544221907E+03		Resid mbdelay (usec)		-5.75524E-03	+/- 1.9E-04		
Sband delay (usec)	1.76572248907E+03		Apriori clock (usec)		-2.3113430E+01		Resid sbdelay (usec)		2.80270E-01	+/- 1.5E-03		
Phase delay (usec)	1.76544221622E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-2.85541E-06	+/- 6.4E-07		
Delay rate (us/s)	1.21066592444E-01		Apriori rate (us/s)		1.21061770096E-01		Resid rate (us/s)		4.82235E-06	+/- 6.2E-09		
Total phase (deg)			Apriori accel (us/s/s)		2.73607043604E-06		Resid phase (deg)		-88.5	+/- 19.9		
	RMS	Theor.	Amplitude	0.171 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	46.3	46.7	Search (1024X32)	0.152		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	68.4	81.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	46.1	28.1	Inc. seg. avg.	0.164		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	68.7	49.1	Inc. frq. avg.	0.179		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
b: az 298.9 el 49.9 pa 68.3	o: az 308.8 el 42.9 pa 80.6		u,v (fr/asec) -1102.794 1046.268						simultaneous interpolator			
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo.W.61.1HV1N7												

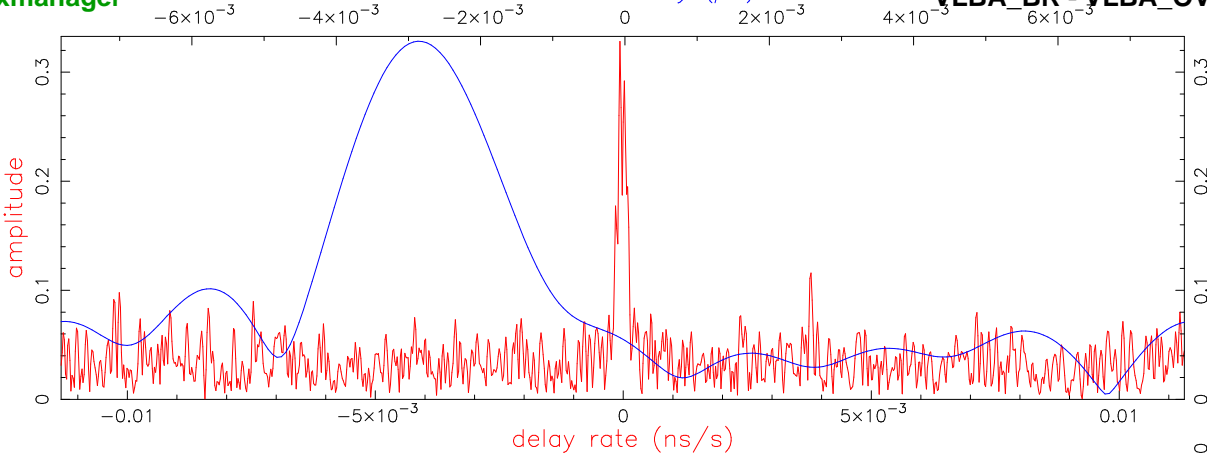
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, bo

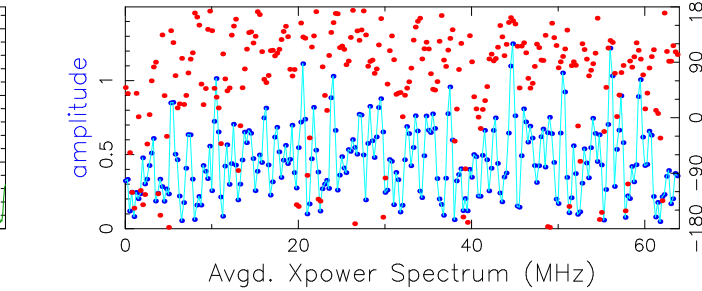
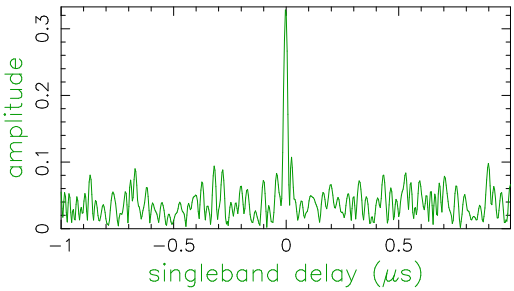
VLBA_BR - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



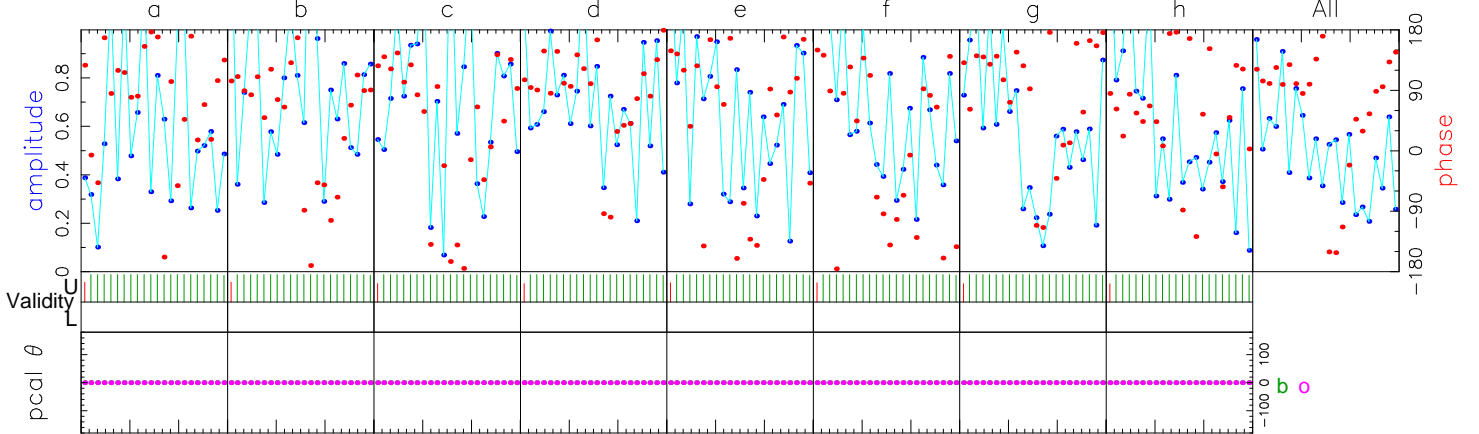
Fringe quality 9

SNR 12.1
 Int time 177.421
 Amp 0.333
 Phase 113.6
 PFD 2.0e-25
 Delays (us)
 SBD -0.002299
 MBD -0.002820
 Fringe rate (Hz)
 -0.006569
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145416
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	105.9	104.9	115.2	111.5	146.2	129.2	121.9	70.2	Phase	113.6
	0.3	0.3	0.4	0.5	0.3	0.3	0.4	0.3	Ampl.	0.3
	255.9	255.1	257.1	256.6	255.6	255.5	256.7	257.1	Sbd box	256.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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		
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)	1.76543939949E+03	Apriori delay (usec)	1.76544221907E+03	Resid mbdelay (usec)	-2.81959E-03	+/-	9.0E-05
Sband delay (usec)	1.76543991957E+03	Apriori clock (usec)	-2.3113430E+01	Resid sbdelay (usec)	-2.29950E-03	+/-	7.1E-04
Phase delay (usec)	1.76544222274E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	3.66408E-06	+/-	3.0E-07
Delay rate (us/s)	1.21061693837E-01	Apriori rate (us/s)	1.21061770096E-01	Resid rate (us/s)	-7.62592E-08	+/-	2.9E-09
Total phase (deg)	24.0	Apriori accel (us/s/s)	2.73607043604E-06	Resid phase (deg)	113.6	+/-	9.5

	RMS	Theor.	Amplitude	0.333 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	59.7	22.2	Search (1024X32)	0.314	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	76.7	38.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.8	13.4	Inc. seg. avg.	0.462	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	17.0	23.3	Inc. frq. avg.	0.339	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 298.9 el 49.9 pa 68.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -1102.794 1046.268 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/bo.W.6.1HV1N7

Mk4/DiFX fourfit 3.21 rev 2937

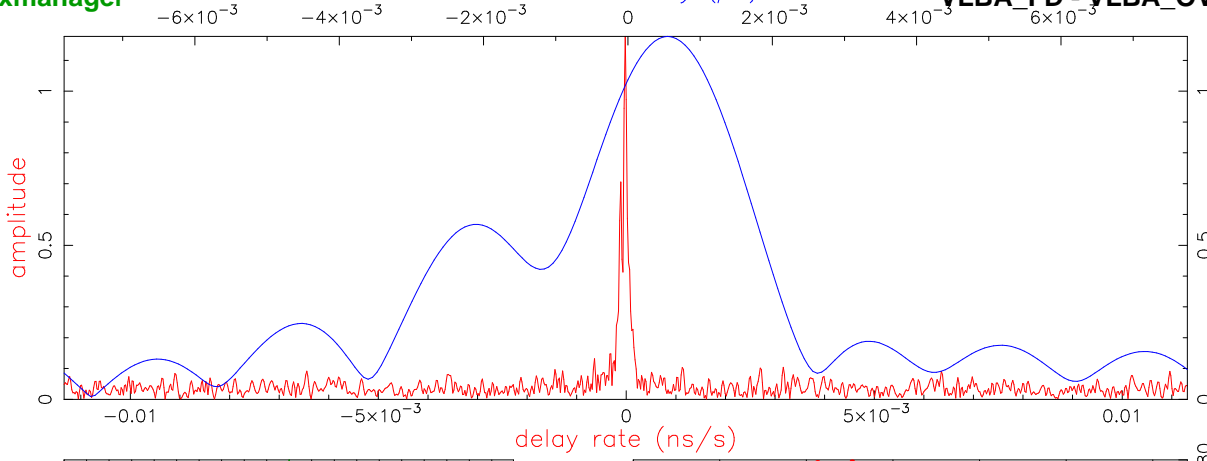
fxmanager

NRAO150.1HV1N7, No0150, fo

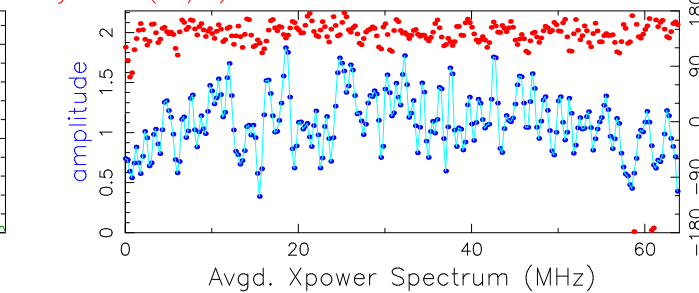
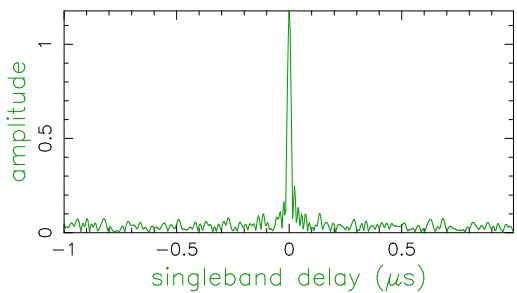
VLBA_FD - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 6

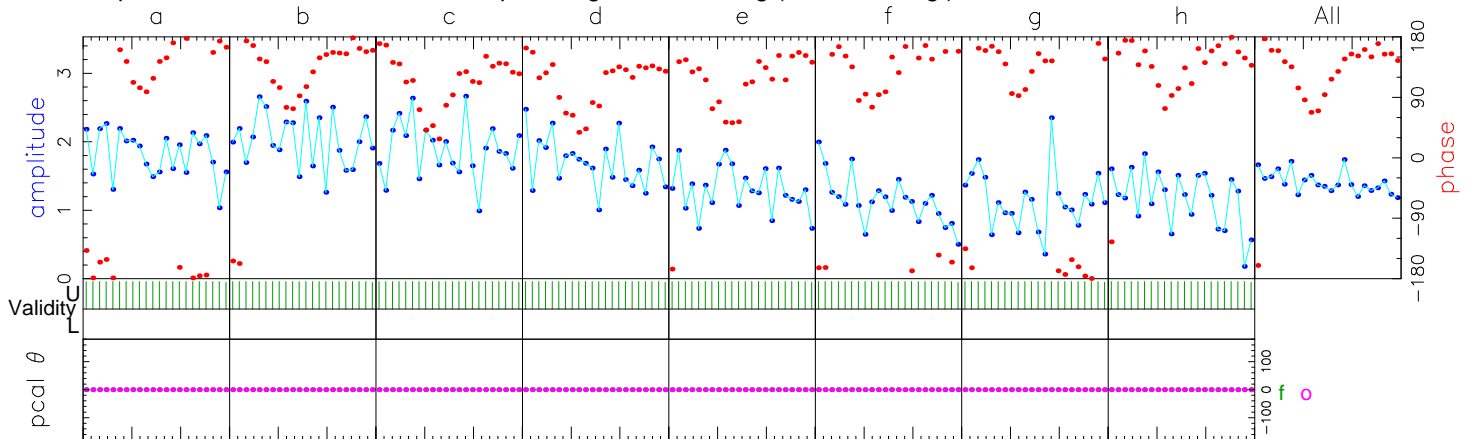


SNR 43.2
 Int time 179.979
 Amp 1.178
 Phase 139.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.000129
 MBD 0.000552
 Fringe rate (Hz)
 -0.001146
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145417
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

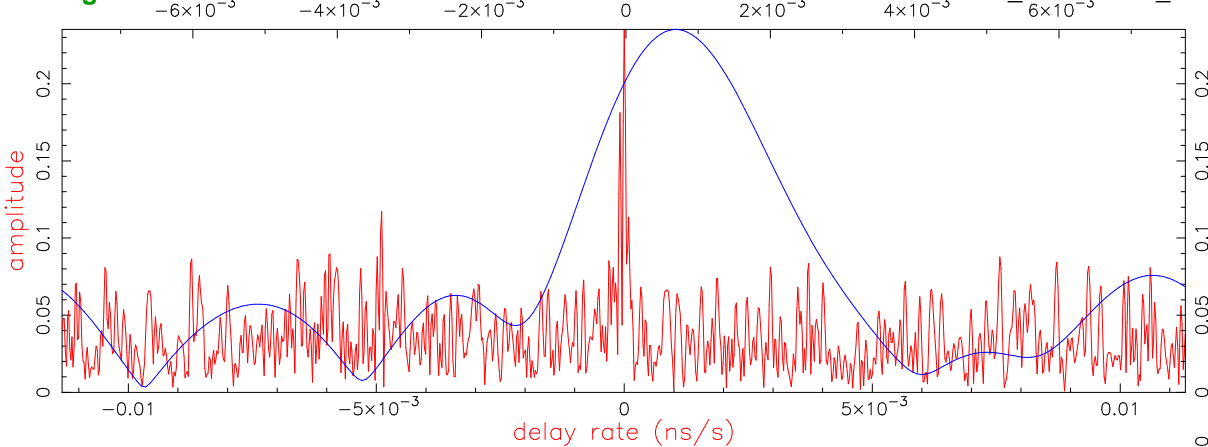
Group delay (usec)(sbd)	-3.97720286791E+03	Apriori delay (usec)	-3.97720341974E+03	Resid mbdelay (usec)	5.51825E-04	+/-	2.5E-05
Sband delay (usec)	-3.97720329049E+03	Apriori clock (usec)	-1.3559155E+01	Resid sbdelay (usec)	1.29250E-04	+/-	2.0E-04
Phase delay (usec)	-3.97720341523E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	4.50369E-06	+/-	8.6E-08
Delay rate (us/s)	-1.19326543037E-01	Apriori rate (us/s)	-1.19326529728E-01	Resid rate (us/s)	-1.33095E-08	+/-	8.2E-10
Total phase (deg)	-67.8	Apriori accel (us/s/s)	1.27118615771E-05	Resid phase (deg)	139.7	+/-	2.7

ph/seg (deg)	RMS 33.9	Theor. 6.2	Amplitude Search (1024X32)	1.178 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	23.7	10.9	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)	22.3	3.8	Inc. seg. avg.	1.402	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.3	6.5	Inc. frq. avg.	1.248	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

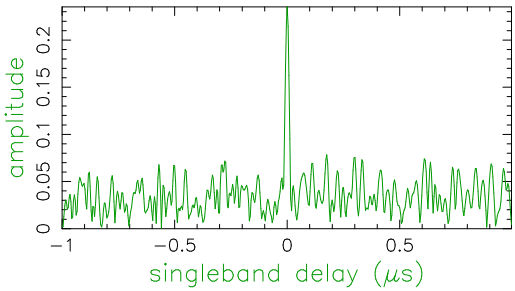
f: az 314.6 el 29.7 pa 76.6 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 1094.596 699.677 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo.W.16.1HV1N7

multiband delay (μ s)

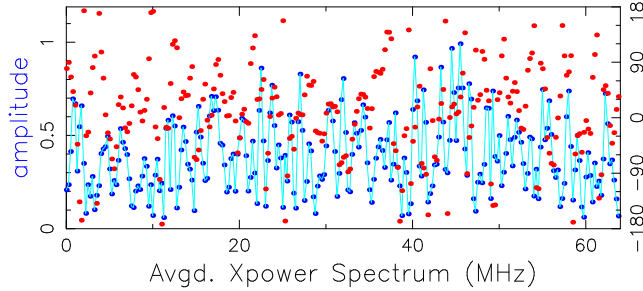
Fringe quality 9



SNR 8.6
Int time 179.979
Amp 0.235
Phase 7.3
PFD 1.1e-09
Delays (us)
SBD -0.000181
MBD 0.000684
Fringe rate (Hz)
-0.000869
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

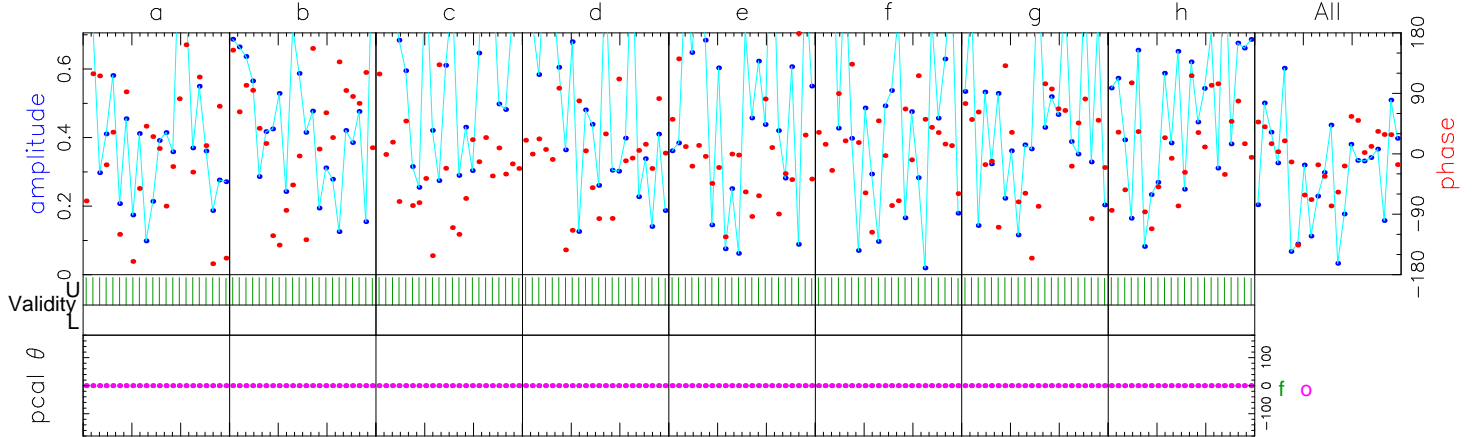


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145423
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		257.0
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.97720273561E+03	Apriori delay (usec)	-3.97720341974E+03	Resid mbdelay (usec)	6.84125E-04	+/-	1.3E-04
Sband delay (usec)	-3.97720360049E+03	Apriori clock (usec)	-1.3559155E+01	Resid sbdelay (usec)	-1.80750E-04	+/-	1.0E-03
Phase delay (usec)	-3.97720341950E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	2.34977E-07	+/-	4.3E-07
Delay rate (us/s)	-1.19326539820E-01	Apriori rate (us/s)	-1.19326529728E-01	Resid rate (us/s)	-1.00927E-08	+/-	4.1E-09
Total phase (deg)	-200.2	Apriori accel (us/s/s)	1.27118615771E-05	Resid phase (deg)	7.3	+/-	13.3

ph/seg (deg)	49.9	Theor.	31.1	Amplitude	0.235 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.3		54.3	Search (1024X32)	0.220	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	34.5		18.8	Inc. seg. avg.	0.263	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.0		32.8	Inc. frq. avg.	0.244	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 314.6 el 29.7 pa 76.6 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 1094.596 699.677 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo.W.72.1HV1N7

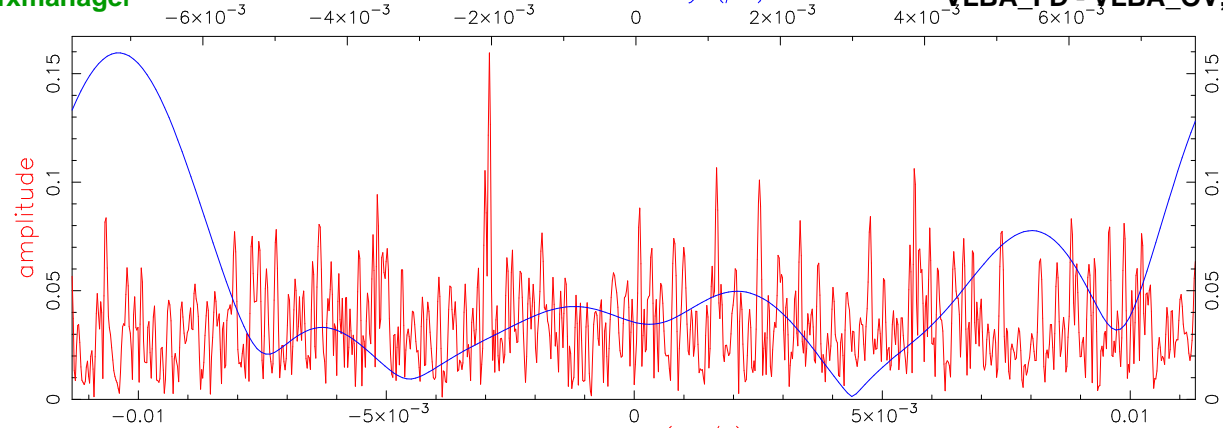
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

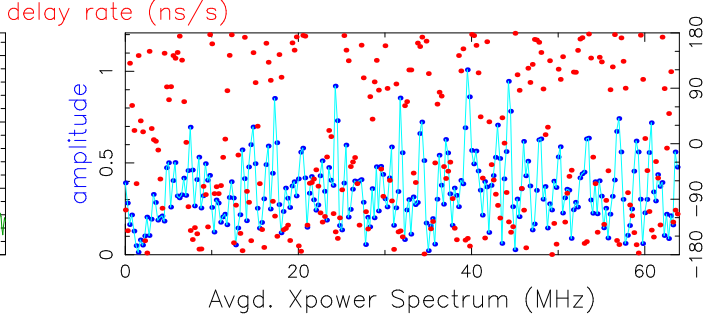
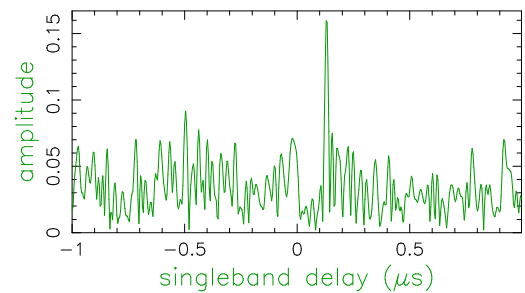
NRAO150.1HV1N7, No0150, fo

VLBA_FD - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

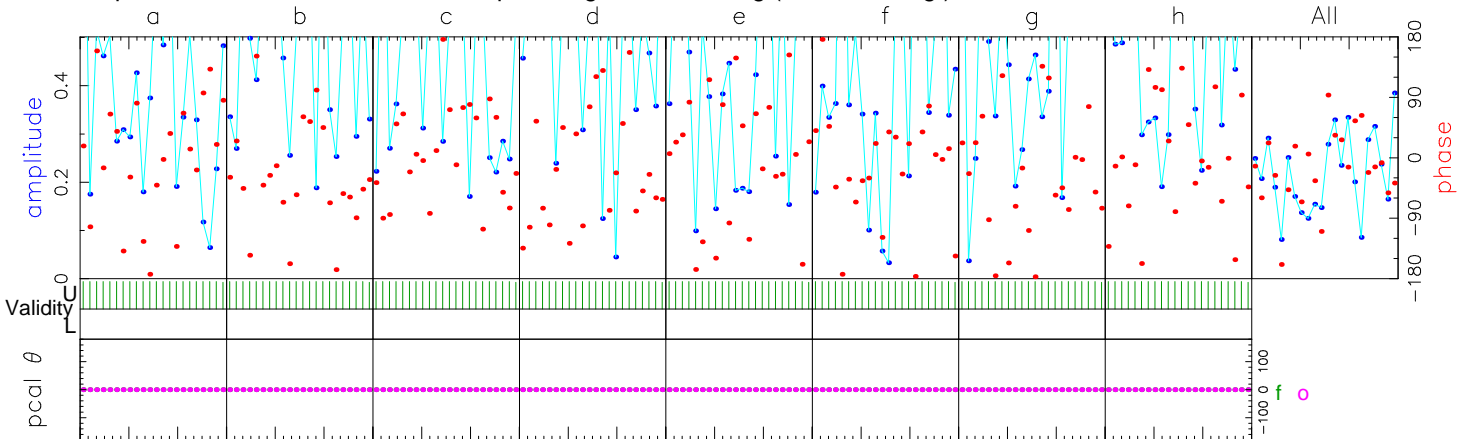


Fringe quality 0
 SNR 6.0
 Int time 179.979
 Amp 0.167
 Phase -9.1
 PFD 2.7e-01
 Delays (us)
 SBD 0.130709
 MBD -0.007137
 Fringe rate (Hz) -0.252323
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145425
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



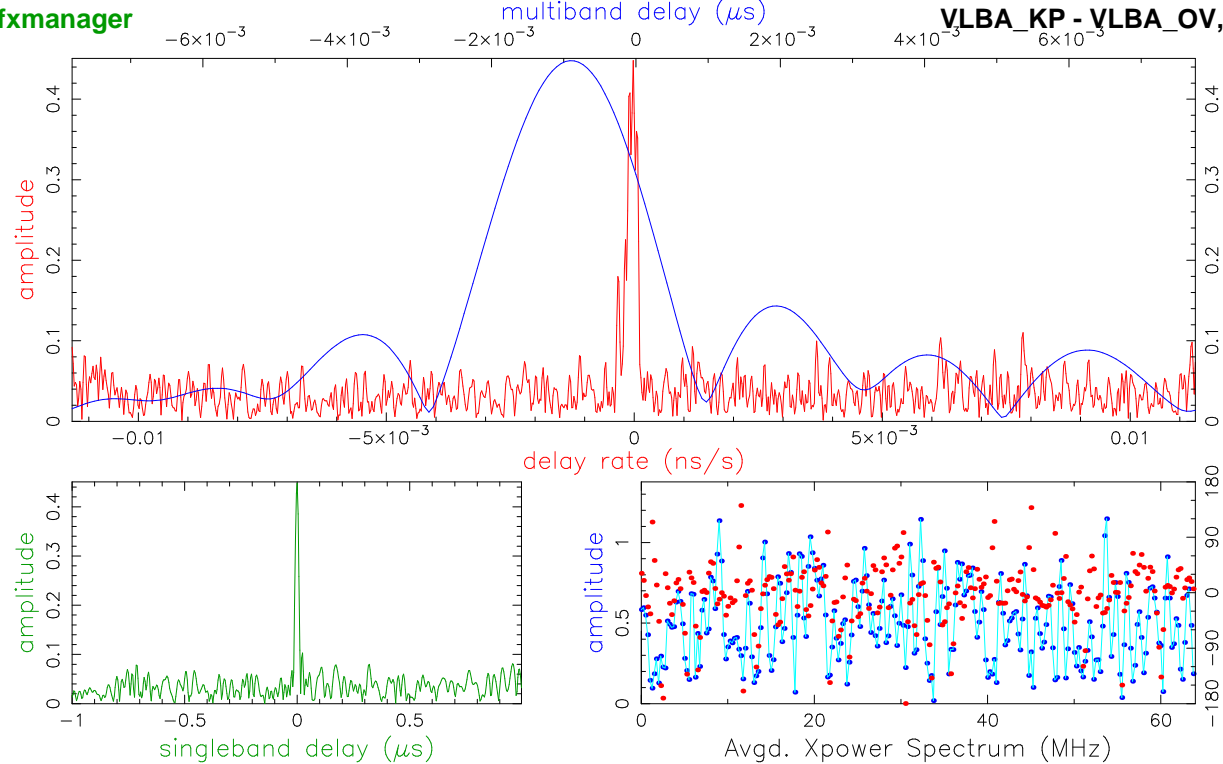
Avgd. Xpower Spectrum (MHz)

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



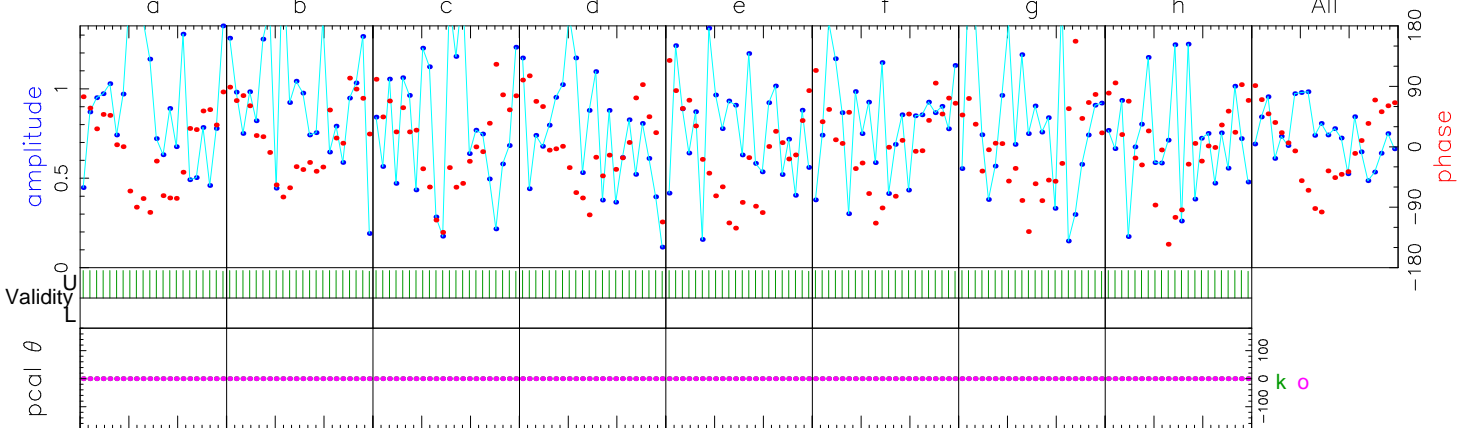
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
24.2	-27.2	-6.2	-55.7	27.4	-0.1	-29.7	-4.5		Phase	-9.1
0.2	0.3	0.2	0.1	0.2	0.1	0.1	0.1		Ampl.	0.2
172.3	290.1	296.6	470.3	99.5	237.1	337.0	186.2		Sbd box	290.5
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		APs used	
f 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
o 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
f:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
fo 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 W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.97706993167E+03		Apriori delay (usec)	-3.97720341974E+03		Resid mbdelay (usec)	-7.13693E-03		+/-	1.8E-04
Sband delay (usec)	-3.97707271074E+03		Apriori clock (usec)	-1.3559155E+01		Resid sbdelay (usec)	1.30709E-01		+/-	1.4E-03
Phase delay (usec)	-3.97720342003E+03		Apriori clockrate (us/s)	5.000000E-07		Resid phdelay (usec)	-2.93095E-07		+/-	6.2E-07
Delay rate (us/s)	-1.19329458943E-01		Apriori rate (us/s)	-1.19326529728E-01		Resid rate (us/s)	-2.92922E-06		+/-	6.0E-09
Total phase (deg)		-216.5	Apriori accel (us/s/s)	1.27118615771E-05		Resid phase (deg)	-9.1		+/-	19.2

ph/seg (deg) 55.7 45.1 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.5 78.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.2 27.2 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.5 47.4 Inc. frq. avg. 0.163 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 314.6 el 29.7 pa 76.6 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 1094.596 699.677 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/fo.W.80.1HV1N7



Fringe quality 9
SNR 16.5
Int time 179.961
Amp 0.451
Phase 1.8
PFD 0.0e+00
Delays (us)
SBD -0.000984
MBD -0.000909
Fringe rate (Hz)
-0.002112
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145428
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.6	12.9	6.4	1.8	-11.7	13.7	-7.6	5.9	Phase	1.8
	0.5	0.6	0.5	0.4	0.4	0.5	0.5	0.4	Ampl.	0.4
	256.7	257.1	256.8	256.3	257.3	257.0	256.7	257.1	Sbd box	256.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.21239528185E+03		Apriori delay (usec)		-2.21239437271E+03		Resid mbdelay (usec)		-9.09143E-04	+/- 6.6E-05
Sband delay (usec)	-2.21239535671E+03		Apriori clock (usec)		-2.1072861E+01		Resid sbdelay (usec)		-9.84000E-04	+/- 5.2E-04
Phase delay (usec)	-2.21239437265E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		5.77654E-08	+/- 2.2E-07
Delay rate (us/s)	-8.11156383991E-02		Apriori rate (us/s)		-8.11156138830E-02		Resid rate (us/s)		-2.45161E-08	+/- 2.1E-09
Total phase (deg)			Apriori accel (us/s/s)		5.01617346007E-06		Resid phase (deg)		1.8	+/- 6.9

ph/seg (deg) 54.4 16.3 Search (1024X32) 0.446 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.1 28.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.4 9.8 Inc. seg. avg. 0.714 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 12.8 17.1 Inc. frq. avg. 0.448 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 312.9 el 35.3 pa 80.9 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 742.307 63.442 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko.W.104.1HV1N7

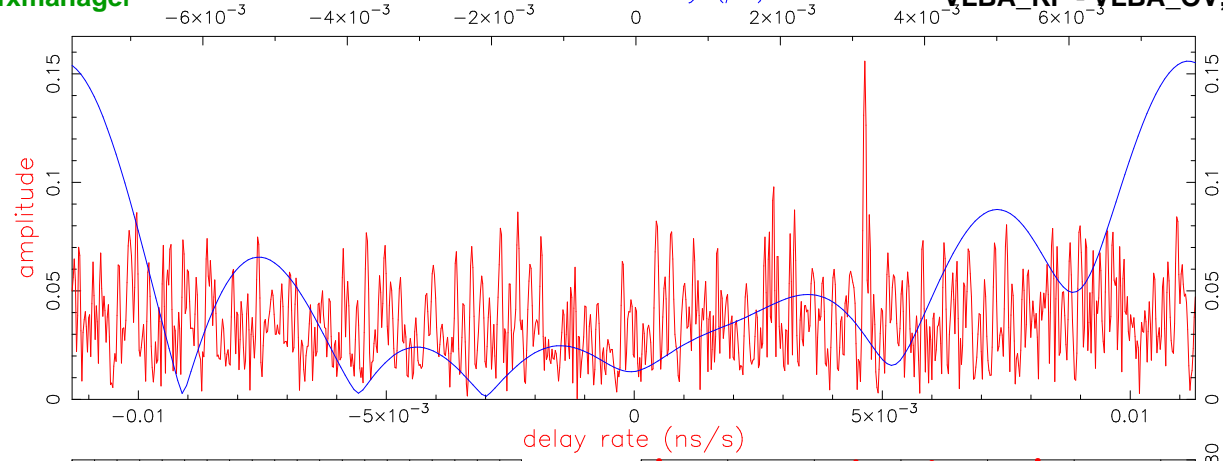
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

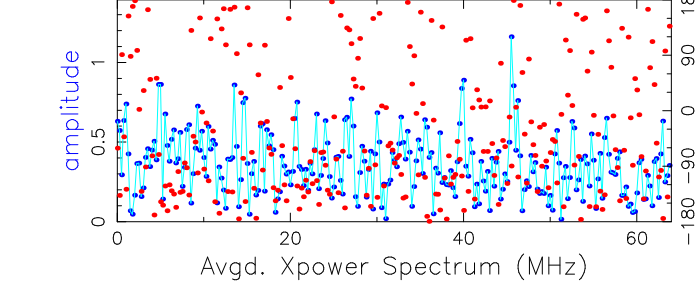
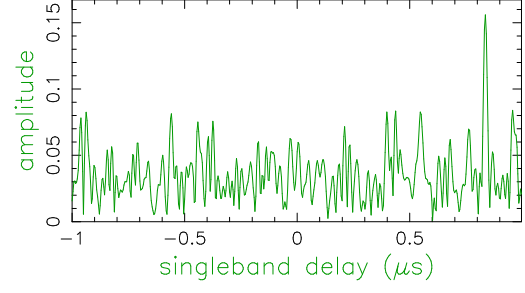
NRAO150.1HV1N7, No0150, ko

VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

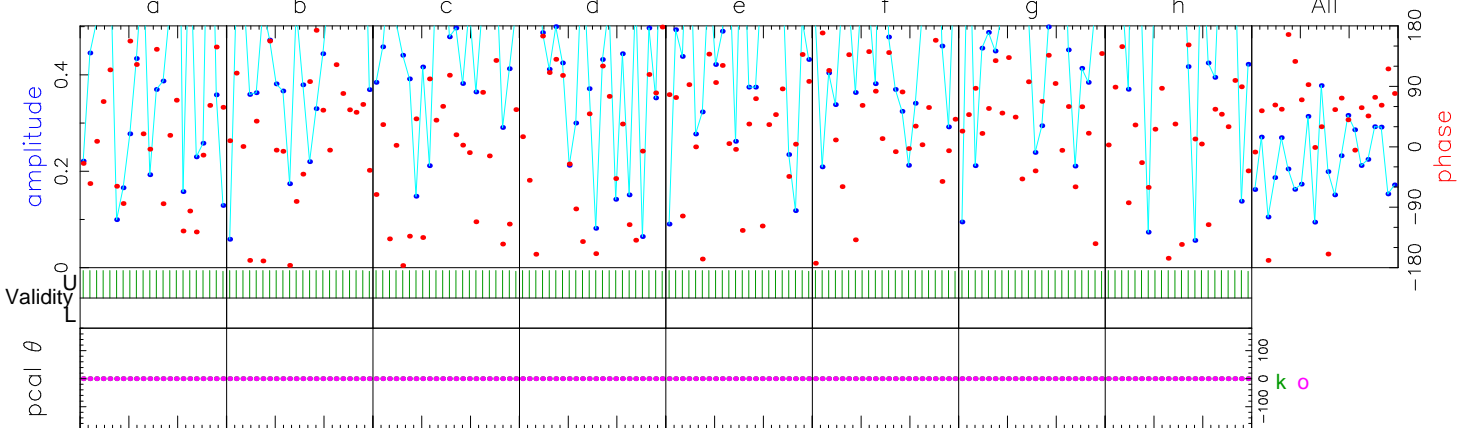


Fringe quality 0
 SNR 5.7
 Int time 179.961
 Amp 0.167
 Phase 62.6
 PFD 7.3e-01
 Delays (us)
 SBD 0.835627
 MBD 0.007647
 Fringe rate (Hz) 0.400192
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145431
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.21155860034E+03								7.64736E-03	+/- 1.9E-04
Sband delay (usec)	-2.21155874596E+03								8.35627E-01	+/- 1.5E-03
Phase delay (usec)	-2.21239437069E+03								2.01840E-06	+/- 6.5E-07
Delay rate (us/s)	-8.11109680507E-02								4.64583E-06	+/- 6.2E-09
Total phase (deg)			-32.8						62.6	+/- 20.0
	RMS	Theor.	Amplitude	0.167 +/- 0.029					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	56.6	47.0	Search (1024X32)	0.153					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	62.1	82.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.4	28.3	Inc. seg. avg.	0.177					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	32.8	49.4	Inc. frq. avg.	0.163					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

k: az 312.9 el 35.3 pa 80.9 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 742.307 63.442 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko.W.131.1HV1N7

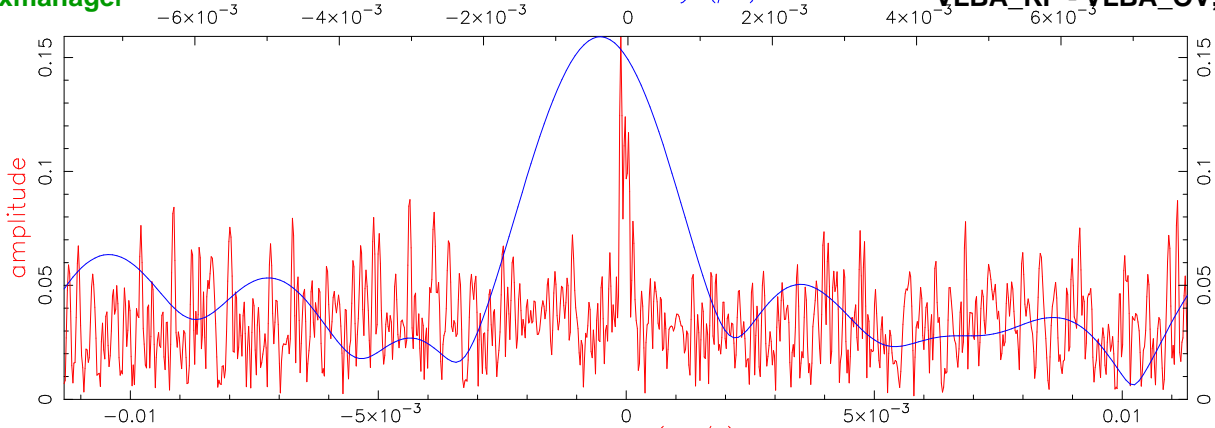
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

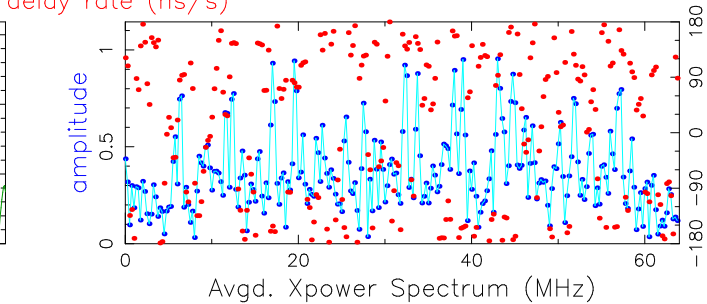
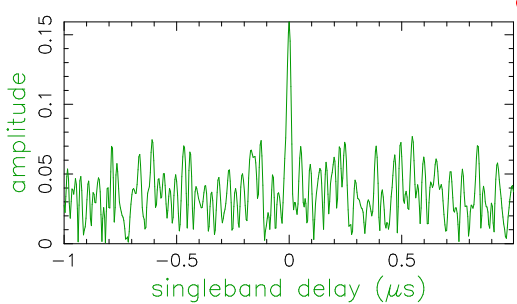
NRAO150.1HV1N7, No0150, ko

VLBA_KP - VLBA_OV, fgroup W, pol RL

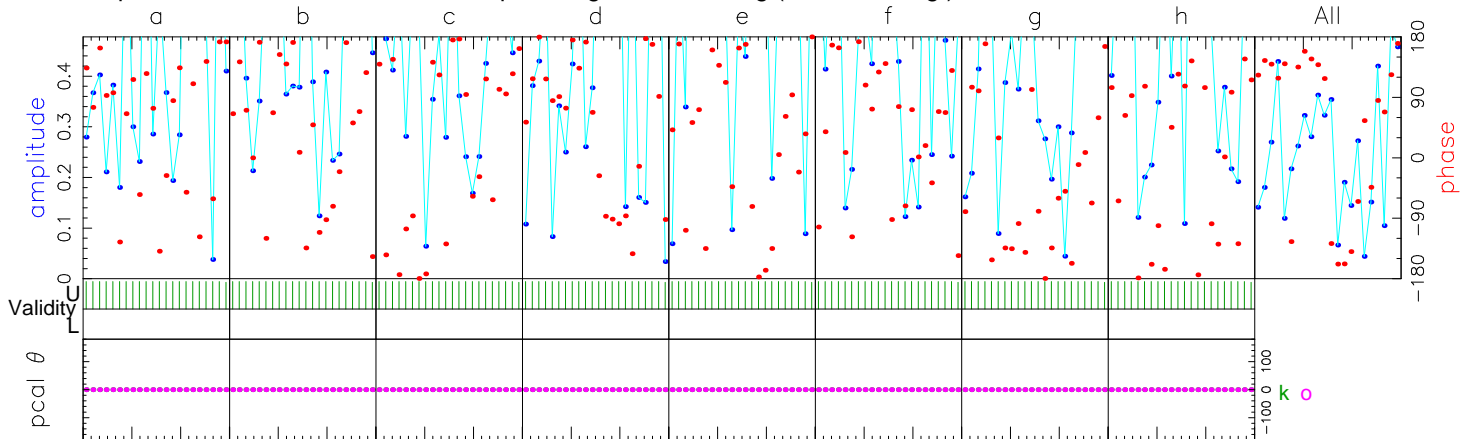
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 179.961
 Amp 0.159
 Phase 147.5
 PFD 4.8e-01
 Delays (us)
 SBD -0.000491
 MBD -0.000394
 Fringe rate (Hz)
 -0.009012
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145433
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.21239476624E+03									
Sband delay (usec)	-2.21239486346E+03									
Phase delay (usec)	-2.21239436795E+03									
Delay rate (us/s)	-8.11157184987E-02									
Total phase (deg)			52.1							
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)									147.5	+/- 19.6
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

k: az 312.9 el 35.3 pa 80.9 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 742.307 63.442 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko.W.150.1HV1N7

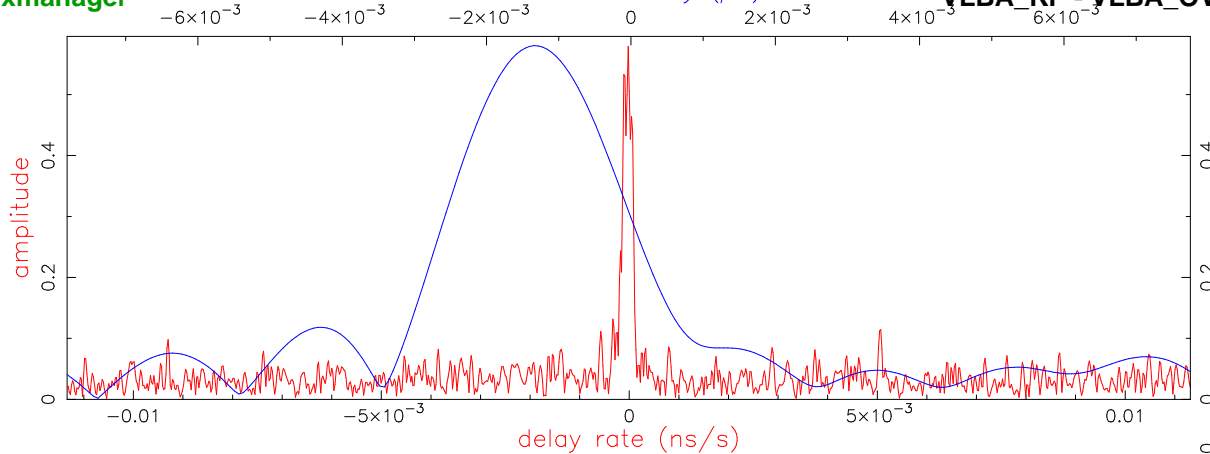
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, ko

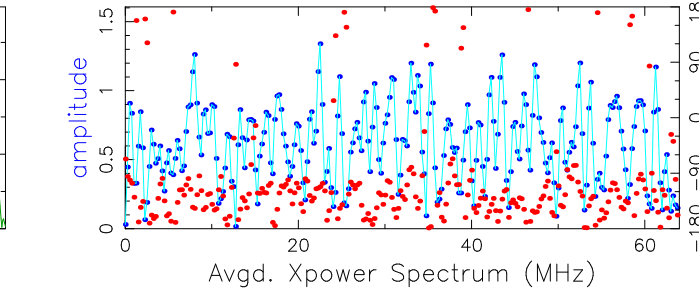
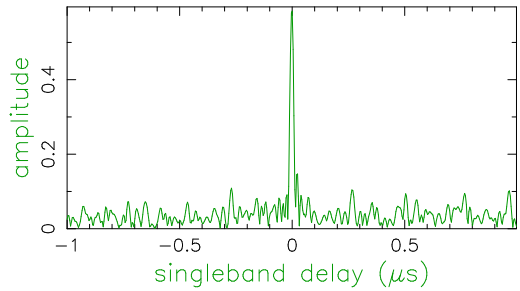
VLBA_KP - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



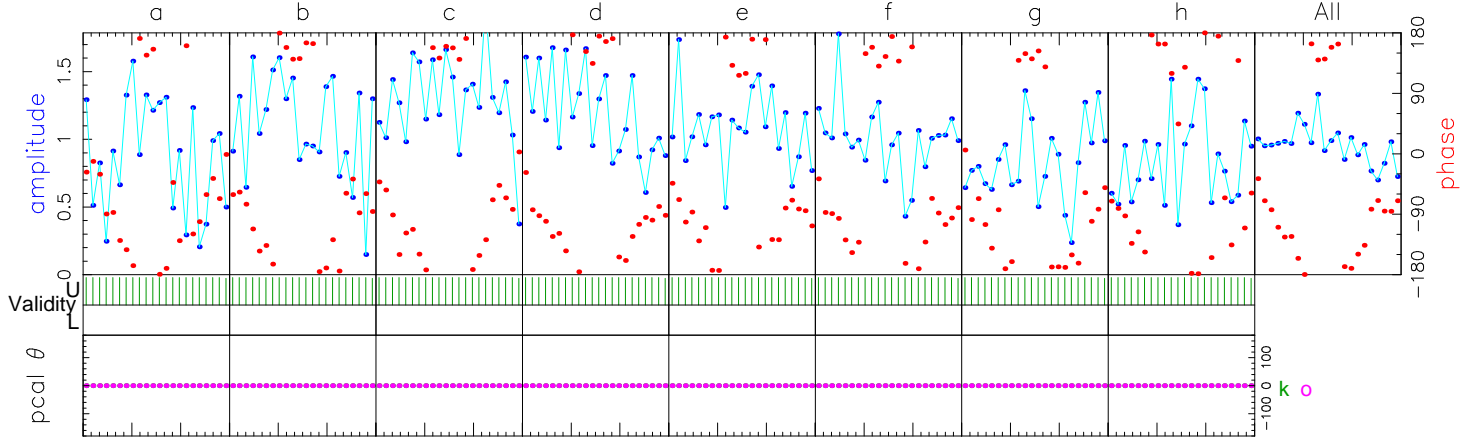
Fringe quality 9

SNR 21.8
 Int time 179.961
 Amp 0.595
 Phase -138.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001780
 MBD -0.001252
 Fringe rate (Hz)
 -0.002221
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145426
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.5	-142.9	-138.7	-135.8	-130.8	-132.2	-138.6	-160.3	Phase	-138.3
	0.4	0.7	0.7	0.8	0.6	0.6	0.4	0.5	Ampl.	0.6
	256.7	256.6	256.6	256.6	256.6	256.2	256.5	256.6	Sbd box	256.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.21239562451E+03		Apriori delay (usec)		-2.21239437271E+03		Resid mbdelay (usec)		-1.25180E-03	+/- 5.0E-05
Sband delay (usec)	-2.21239615296E+03		Apriori clock (usec)		-2.1072861E+01		Resid sbdelay (usec)		-1.78025E-03	+/- 3.9E-04
Phase delay (usec)	-2.21239437716E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		-4.45906E-06	+/- 1.7E-07
Delay rate (us/s)	-8.11156396618E-02		Apriori rate (us/s)		-8.11156138830E-02		Resid rate (us/s)		-2.57787E-08	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		5.01617346007E-06		Resid phase (deg)		-138.3	+/- 5.2

ph/seg (deg) 54.5 12.3 Search (1024X32) 0.575 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.5 21.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.8 7.4 Inc. seg. avg. 0.938 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 22.4 12.9 Inc. frq. avg. 0.581 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 312.9 el 35.3 pa 80.9 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 742.307 63.442 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/ko.W.85.1HV1N7

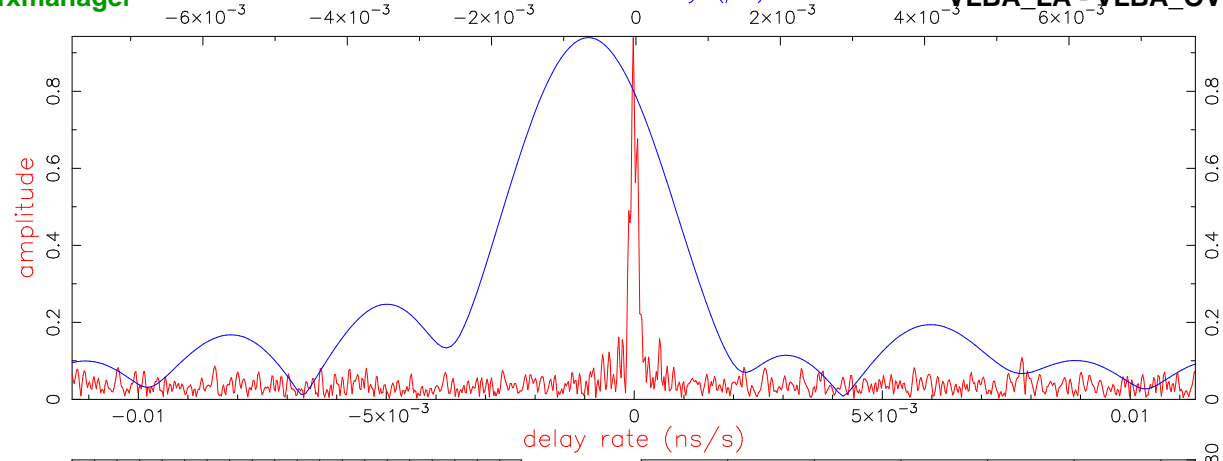
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, lo

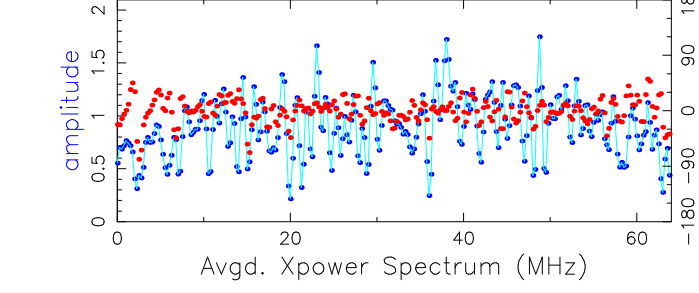
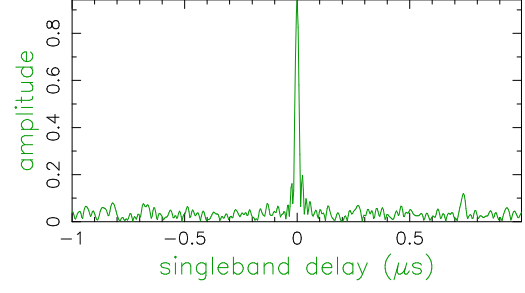
VLBA_LA - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



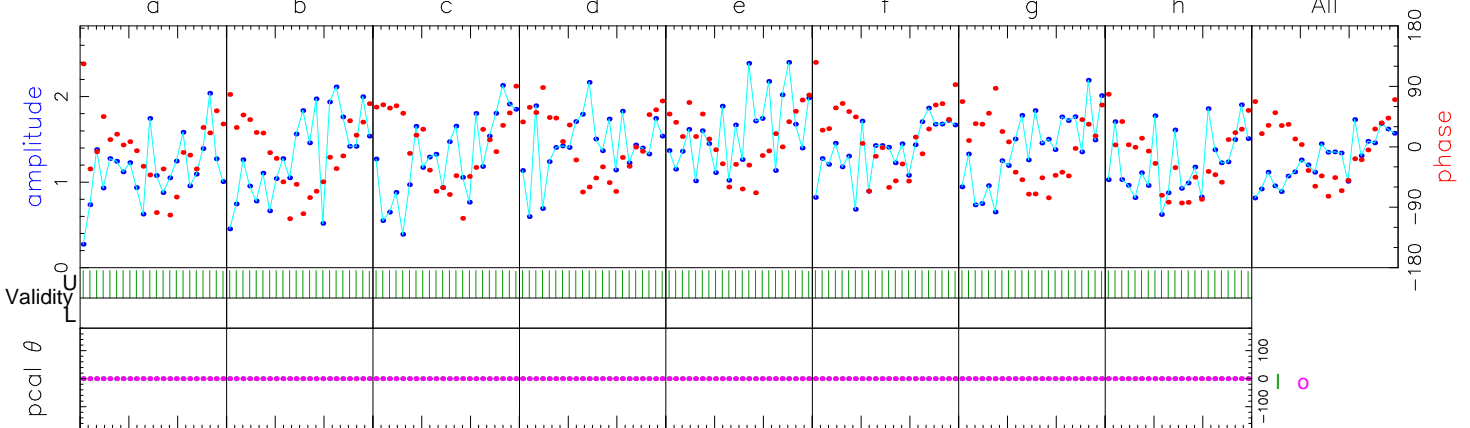
Fringe quality 6

SNR 34.6
 Int time 179.979
 Amp 0.943
 Phase -0.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.000760
 MBD -0.000678
 Fringe rate (Hz)
 -0.001103
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145429
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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

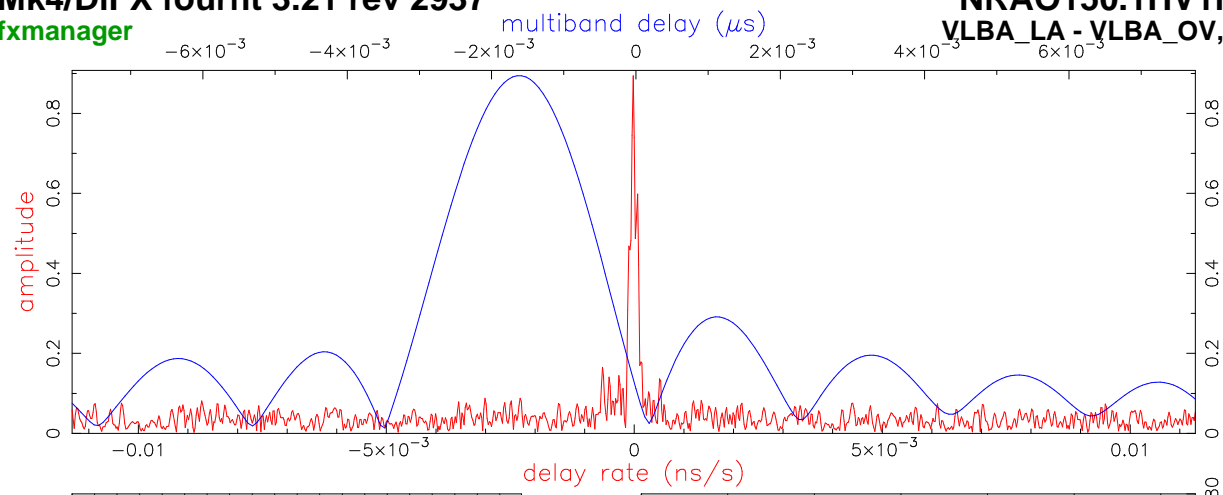


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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		

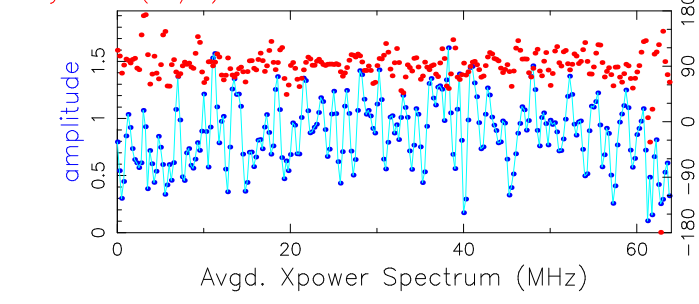
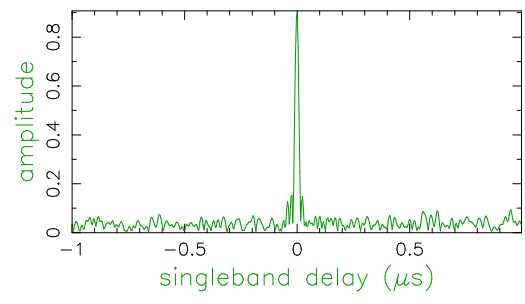
Group delay (usec)(sbd) -2.43528645440E+03 Apriori delay (usec) -2.43528577660E+03 Resid mbdelay (usec) -6.77800E-04 +/- 3.1E-05
 Sband delay (usec) -2.43528653685E+03 Apriori clock (usec) -2.1792999E+01 Resid sbdelay (usec) -7.60250E-04 +/- 2.5E-04
 Phase delay (usec) -2.43528577661E+03 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -5.69006E-09 +/- 1.1E-07
 Delay rate (us/s) -6.61140290201E-02 Apriori rate (us/s) -6.61140162151E-02 Resid rate (us/s) -1.28051E-08 +/- 1.0E-09
 Total phase (deg) -286.9 Apriori accel (us/s/s) 1.10482424232E-05 Resid phase (deg) -0.2 +/- 3.3

RMS Theor. Amplitude 0.943 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.1 7.8 Search (1024X32) 0.898 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 43.9 13.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 13.0 4.7 Inc. seg. avg. 1.253 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 12.1 8.2 Inc. frq. avg. 0.955 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 311.8 el 34.6 pa 74.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 608.110 957.400 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo.W.108.1HV1N7

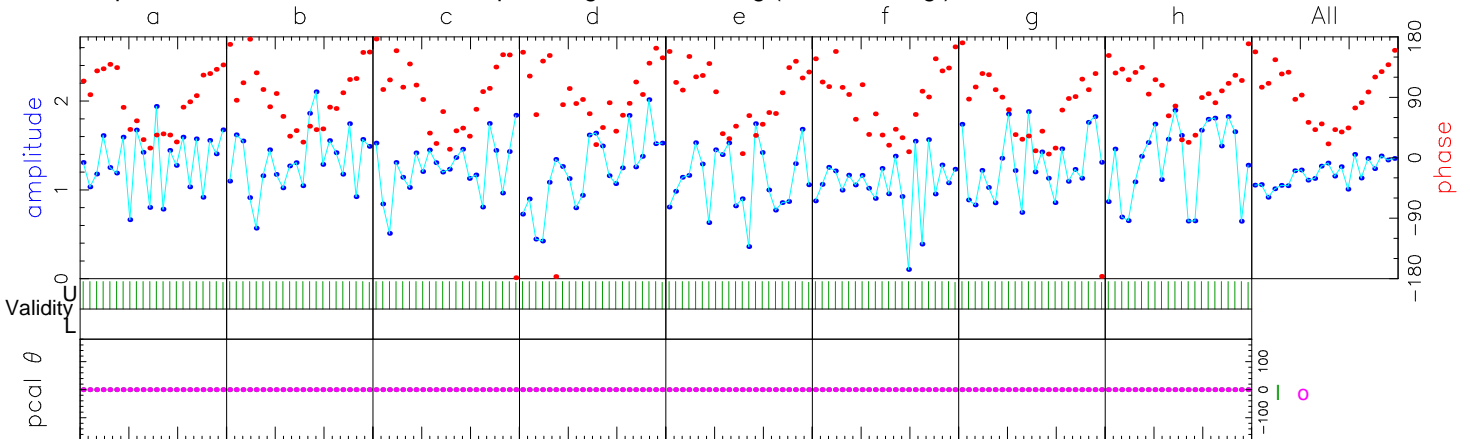


Fringe quality 8
SNR 33.3
Int time 179.979
Amp 0.908
Phase 92.6
PFD 0.0e+00
Delays (us)
SBD -0.001615
MBD -0.001656
Fringe rate (Hz)
-0.001142
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145431
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



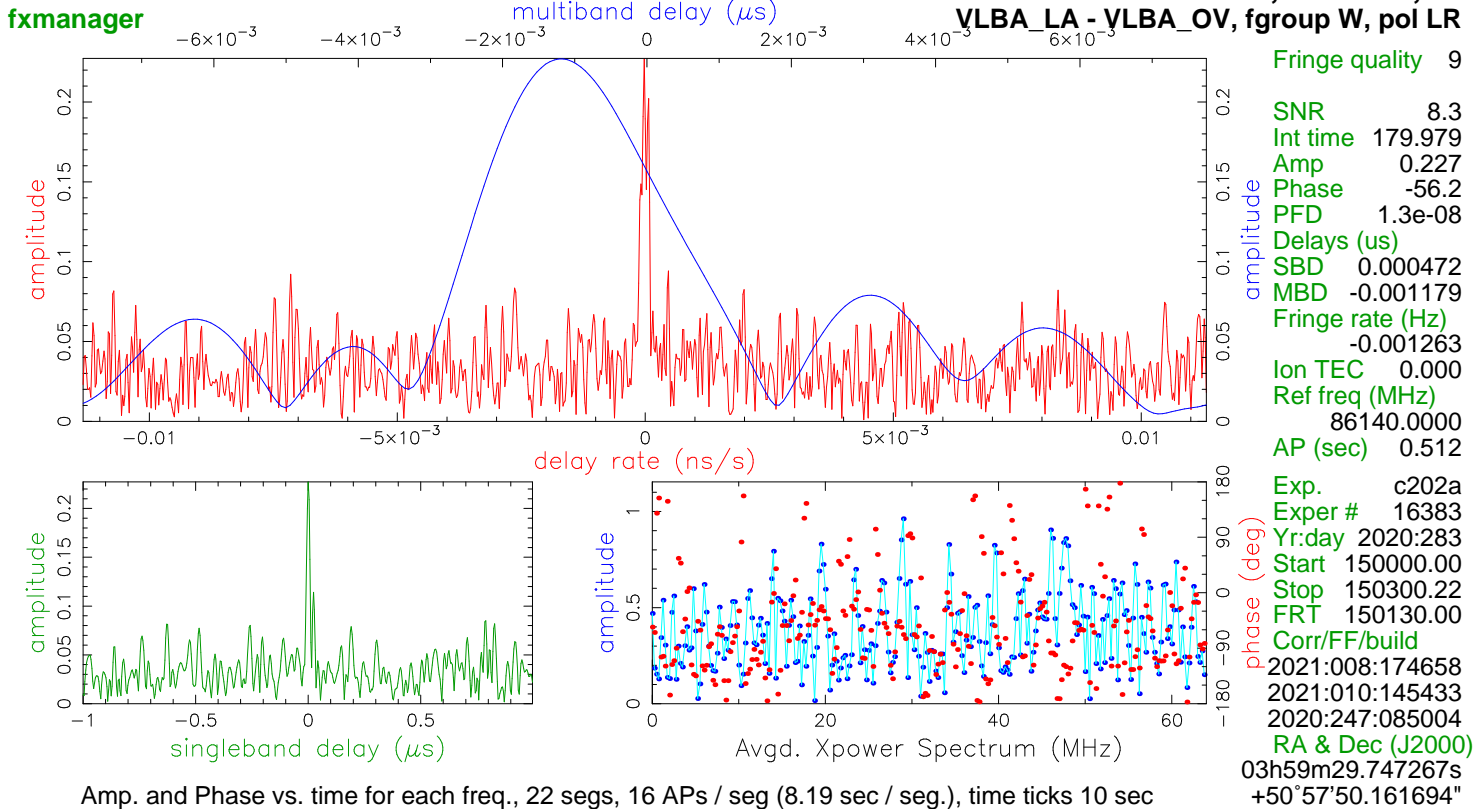
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.43528743284E+03									
Sband delay (usec)	-2.43528739185E+03									
Phase delay (usec)	-2.43528577362E+03									
Delay rate (us/s)	-6.61140294679E-02									
Total phase (deg)			-194.2							
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)									92.6	+/- 3.4
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
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										

Mk4/DiFX fourfit 3.21 rev 2937

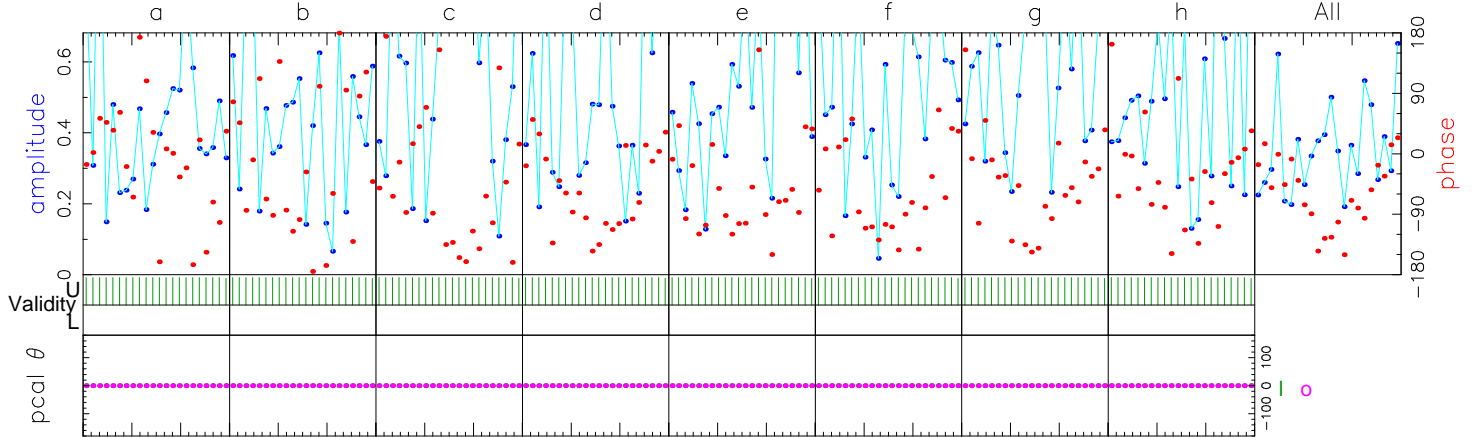
fxmanager

NRAO150.1HV1N7, No0150, lo

VLBA_LA - VLBA_OV, fgroup W, pol LR



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.2
o	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.1
l:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
l:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	-2.43528695534E+03				-2.43528577660E+03				Resid mbdelay (usec)	-1.17874E-03 +/- 1.3E-04
Sband delay (usec)	-2.43528530510E+03				-2.1792999E+01				Resid sbdelay (usec)	4.71500E-04 +/- 1.0E-03
Phase delay (usec)	-2.43528577842E+03				0.0000000E+00				Resid phdelay (usec)	-1.81337E-06 +/- 4.4E-07
Delay rate (us/s)	-6.61140308822E-02				-6.61140162151E-02				Resid rate (us/s)	-1.46671E-08 +/- 4.3E-09
Total phase (deg)			-343.0		1.10482424232E-05				Resid phase (deg)	-56.2 +/- 13.7
	RMS	Theor.	Amplitude	0.227 +/- 0.027					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.2	32.2	Search (1024X32)	0.220					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	80.5	56.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	36.0	19.4	Inc. seg. avg.	0.309					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	36.7	33.9	Inc. frq. avg.	0.237					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 311.8 el 34.6 pa 74.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 608.110 957.400 simultaneous interpolator

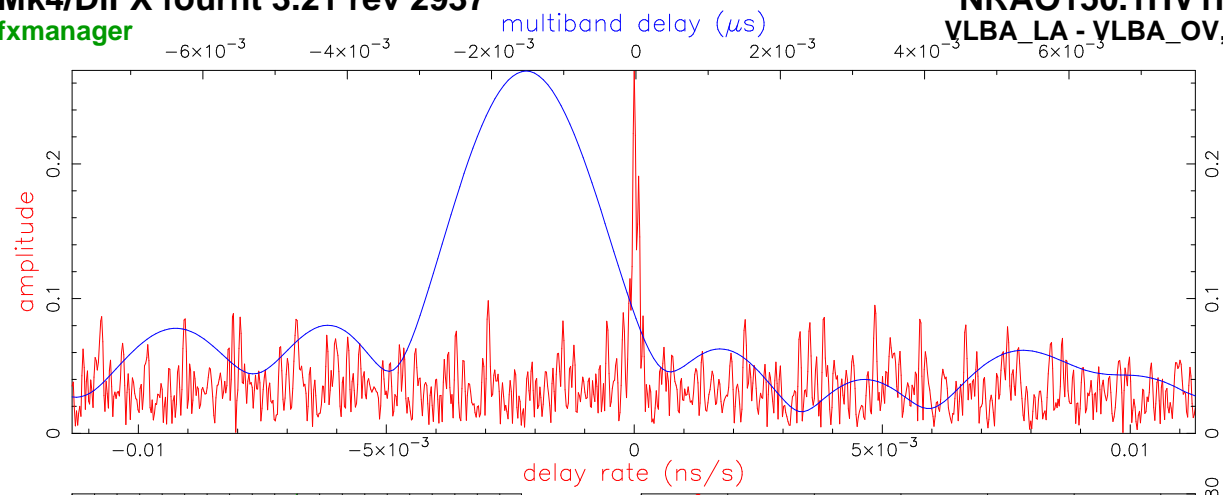
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo.W.149.1HV1N7

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, lo

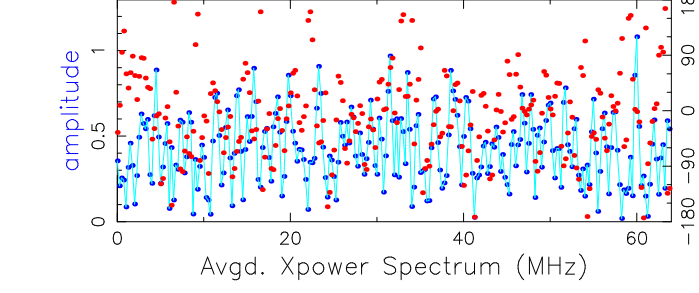
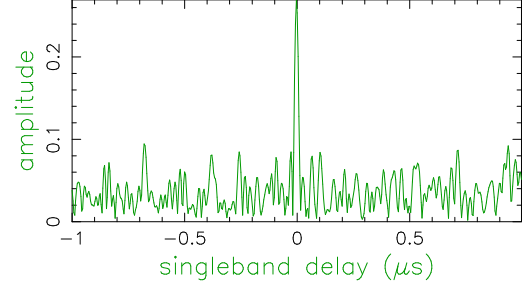
VLBA_LA - VLBA_OV, fgroup W, pol RL



Fringe quality 9

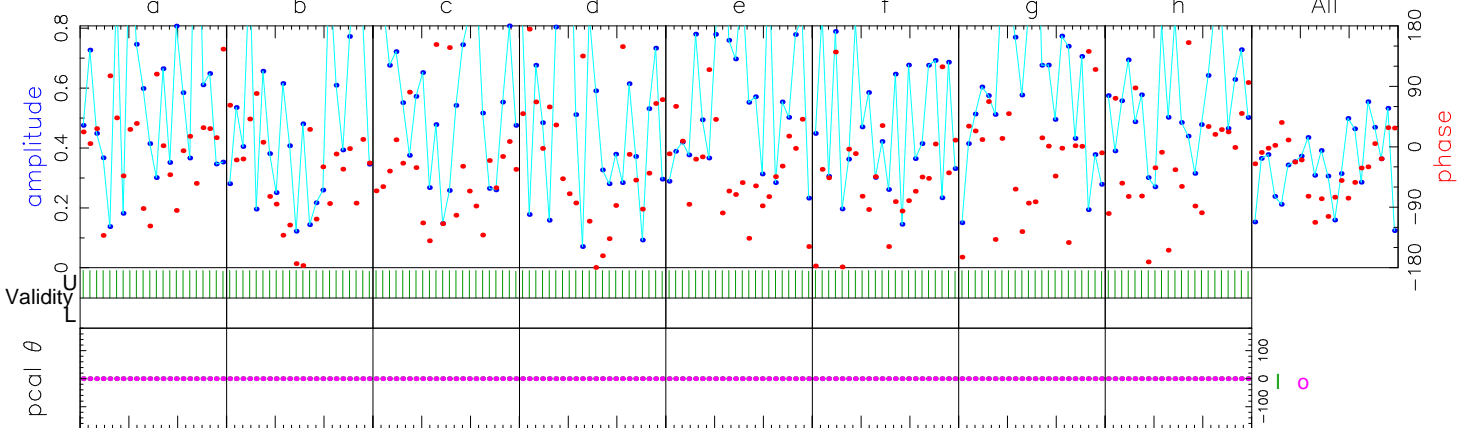
SNR 9.9
 Int time 179.979
 Amp 0.269
 Phase -30.8
 PFD 1.0e-14
 Delays (us)
 SBD -0.003331
 MBD -0.001509
 Fringe rate (Hz) -0.000940
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build 2021:008:174658
 2021:010:145435
 2020:247:085004
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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

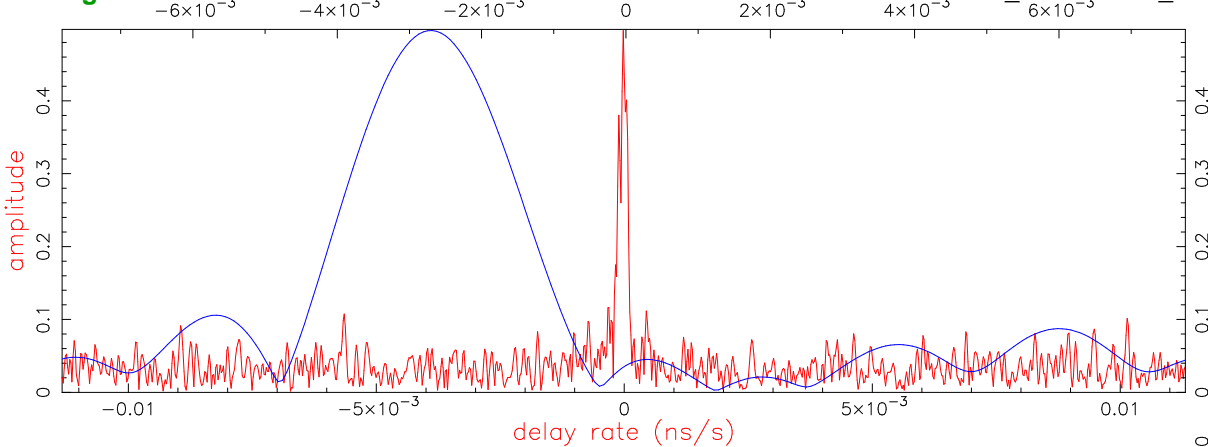


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-2.3	-34.3	-53.3	-31.3	-39.6	-48.1	-19.3	-13.4		-30.8
	0.3	0.3	0.4	0.2	0.4	0.3	0.3	0.2		0.3
	256.1	136.4	256.9	364.1	257.1	255.1	256.9	254.9		256.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	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		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
										Tracks
Group delay (usec)(sbd)	-2.43528728579E+03		Apriori delay (usec)		-2.43528577660E+03		Resid mbdelay (usec)		-1.50919E-03	+/- 1.1E-04
Sband delay (usec)	-2.43528910735E+03		Apriori clock (usec)		-2.1792999E+01		Resid sbdelay (usec)		-3.33075E-03	+/- 8.7E-04
Phase delay (usec)	-2.43528577759E+03		Apriori clockrate (us/s)		0.000000E+00		Resid phdelay (usec)		-9.92070E-07	+/- 3.7E-07
Delay rate (us/s)	-6.61140271311E-02		Apriori rate (us/s)		-6.61140162151E-02		Resid rate (us/s)		-1.09160E-08	+/- 3.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.10482424232E-05		Resid phase (deg)		-30.8	+/- 11.6

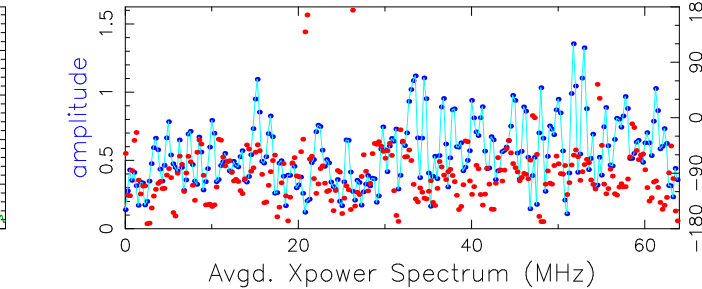
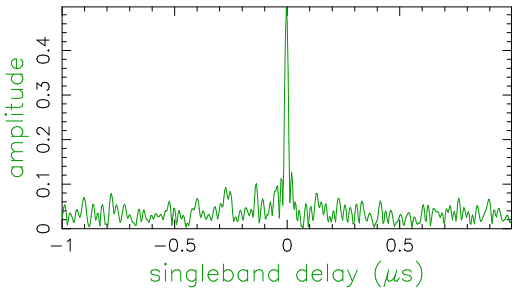
ph/seg (deg) 41.5 27.2 Search (1024X32) 0.256 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.1 47.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.9 16.4 Inc. seg. avg. 0.312 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.0 28.6 Inc. frq. avg. 0.270 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 311.8 el 34.6 pa 74.3 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 608.110 957.400 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/lo.W.164.1HV1N7

multiband delay (μ s)

Fringe quality 9

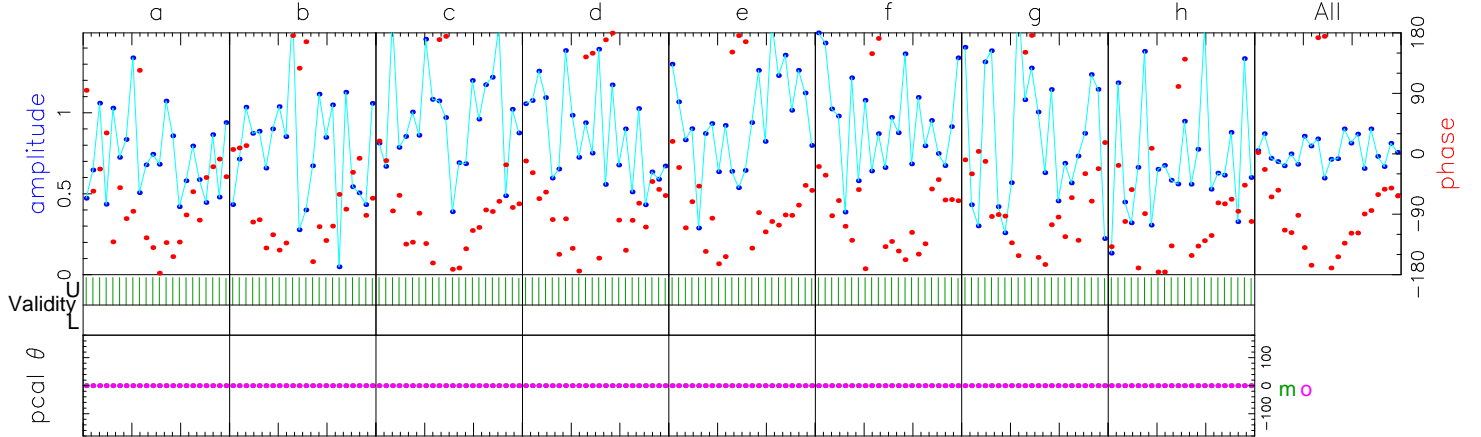


SNR 18.3
Int time 179.977
Amp 0.498
Phase -101.8
PFD 0.0e+00
Delays (us)
SBD -0.003220
MBD -0.002684
Fringe rate (Hz)
-0.001593
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145437
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

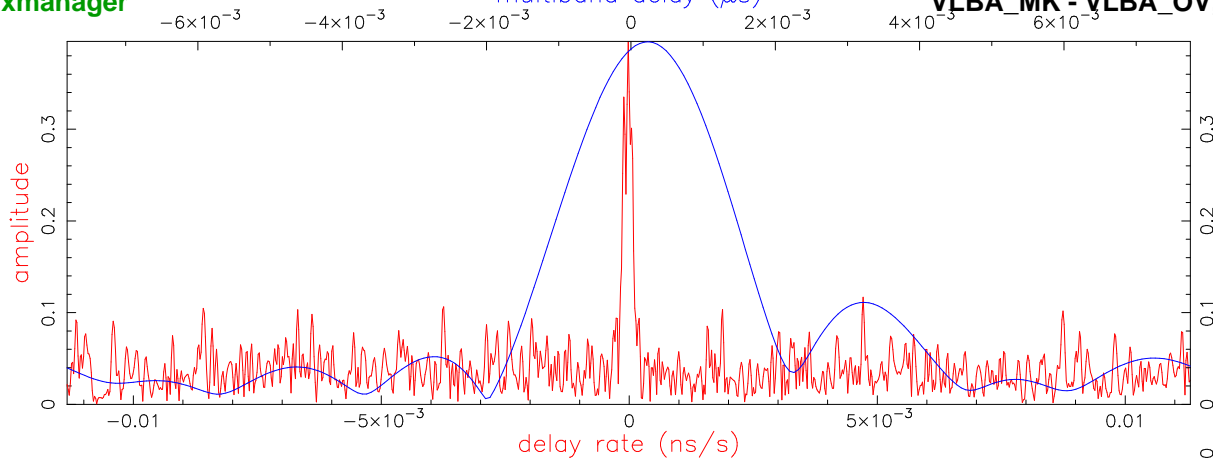
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.5	-108.2	-106.7	-108.1	-97.3	-102.5	-95.4	-107.2	Phase	-101.8
	0.4	0.4	0.7	0.5	0.6	0.6	0.4	0.4	Ampl.	0.5
	255.9	255.2	256.2	256.4	256.7	256.1	256.2	255.9	Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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)	2.28065393316E+03				2.28065661743E+03				Resid mbdelay (usec)	-2.68427E-03 +/- 5.9E-05
Sband delay (usec)	2.28065339718E+03				-8.0428619E+00				Resid sbdelay (usec)	-3.22025E-03 +/- 4.7E-04
Phase delay (usec)	2.28065661415E+03				1.9999998E-07				Resid phdelay (usec)	-3.28268E-06 +/- 2.0E-07
Delay rate (us/s)	2.71841240751E-01				2.71841259239E-01				Resid rate (us/s)	-1.84877E-08 +/- 1.9E-09
Total phase (deg)			-92.6		-3.54767424322E-05				Resid phase (deg)	-101.8 +/- 6.3

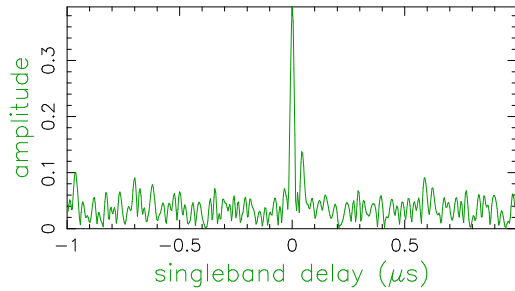
ph/seg (deg) 51.5 14.7 Search (1024X32) 0.484 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 55.8 25.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 8.5 8.9 Inc. seg. avg. 0.738 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 20.2 15.5 Inc. frq. avg. 0.494 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 331.5 el 51.8 pa 134.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -2489.557 -4918.372 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo.W.172.1HV1N7

multiband delay (μ s)

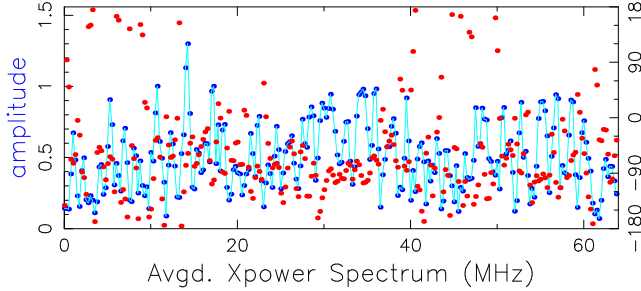


Fringe quality 9

SNR 14.5
Int time 179.977
Amp 0.396
Phase -78.4
PFD 2.8e-39
Delays (us)
SBD 0.000456
MBD 0.000240
Fringe rate (Hz)
-0.001560
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

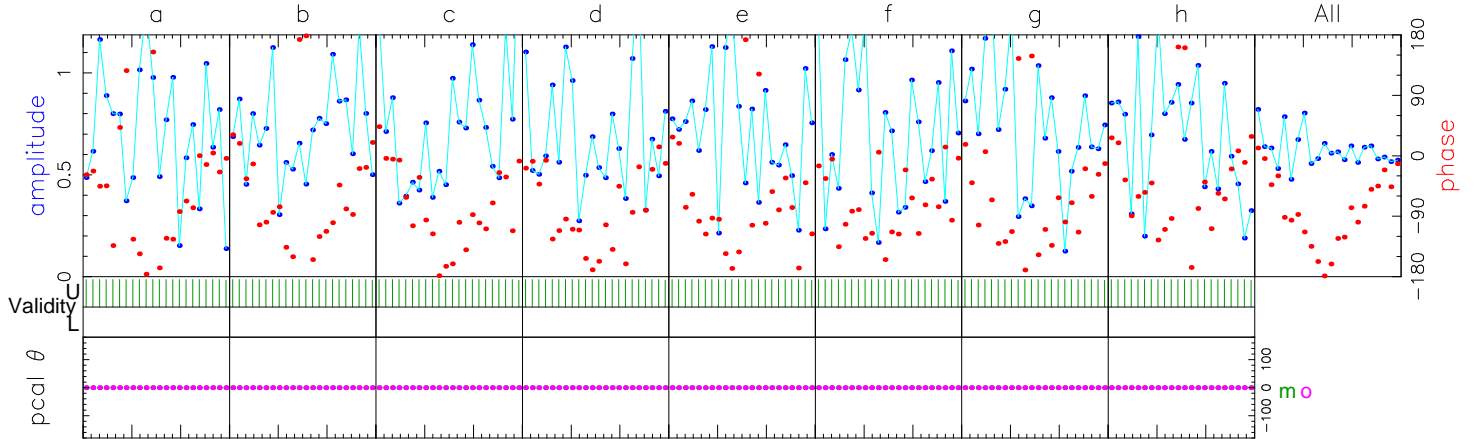


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145440
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



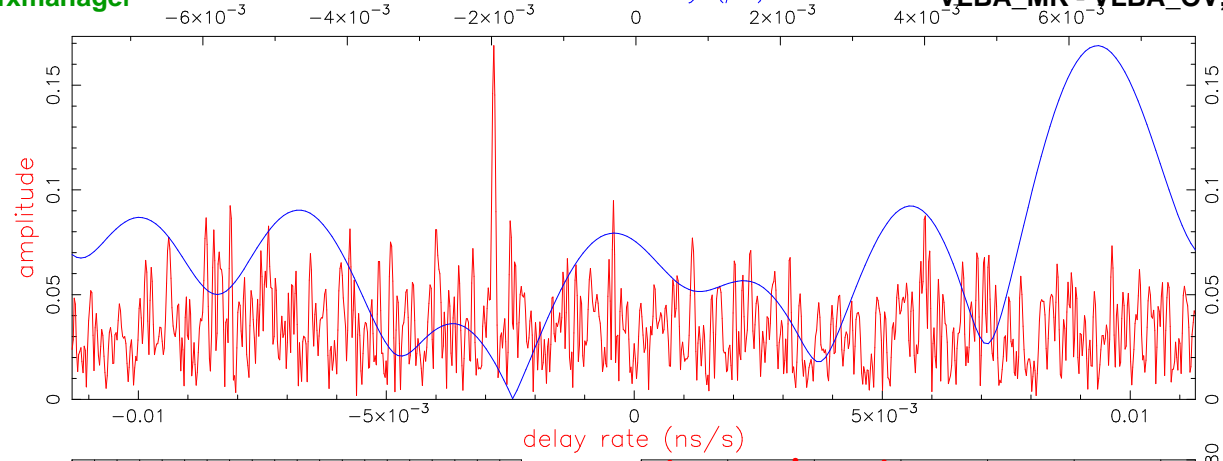
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.4	-75.0	-68.5	-73.7	-96.4	-79.1	-79.9	-70.8	Phase	-78.4
	0.3	0.4	0.4	0.4	0.4	0.5	0.4	0.3	Ampl.	0.4
	371.1	257.3	257.7	257.0	257.0	256.7	257.9	256.7	Sbd box	257.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.28065685729E+03	Apriori delay (usec)	2.28065661743E+03	Resid mbdelay (usec)	2.39857E-04	+/-	7.5E-05
Sband delay (usec)	2.28065707343E+03	Apriori clock (usec)	-8.0428619E+00	Resid sbdelay (usec)	4.56000E-04	+/-	5.9E-04
Phase delay (usec)	2.28065661490E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-2.52836E-06	+/-	2.5E-07
Delay rate (us/s)	2.71841241125E-01	Apriori rate (us/s)	2.71841259239E-01	Resid rate (us/s)	-1.81136E-08	+/-	2.4E-09
Total phase (deg)	-69.2	Apriori accel (us/s/s)	-3.54767424322E-05	Resid phase (deg)	-78.4	+/-	7.9

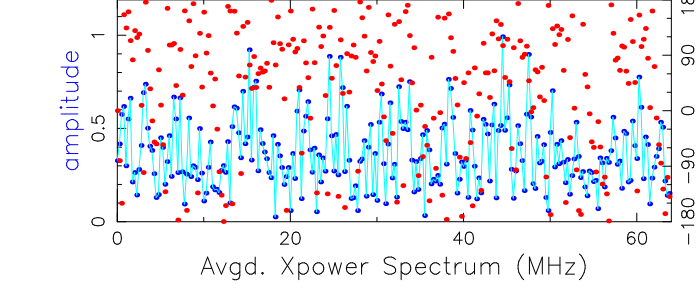
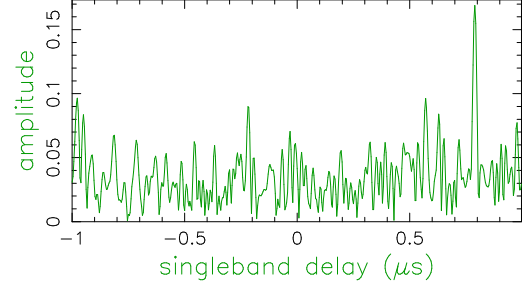
ph/seg (deg)	RMS 52.3	Theor. 18.5	Amplitude Search (1024X32)	0.396 +/- 0.027	0.386	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.5	32.3	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.4	11.2	Inc. seg. avg.	0.593	0.593	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	17.0	19.5	Inc. frq. avg.	0.392	0.392	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 331.5 el 51.8 pa 134.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -2489.557 -4918.372 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo.W.196.1HV1N7

multiband delay (μ s)

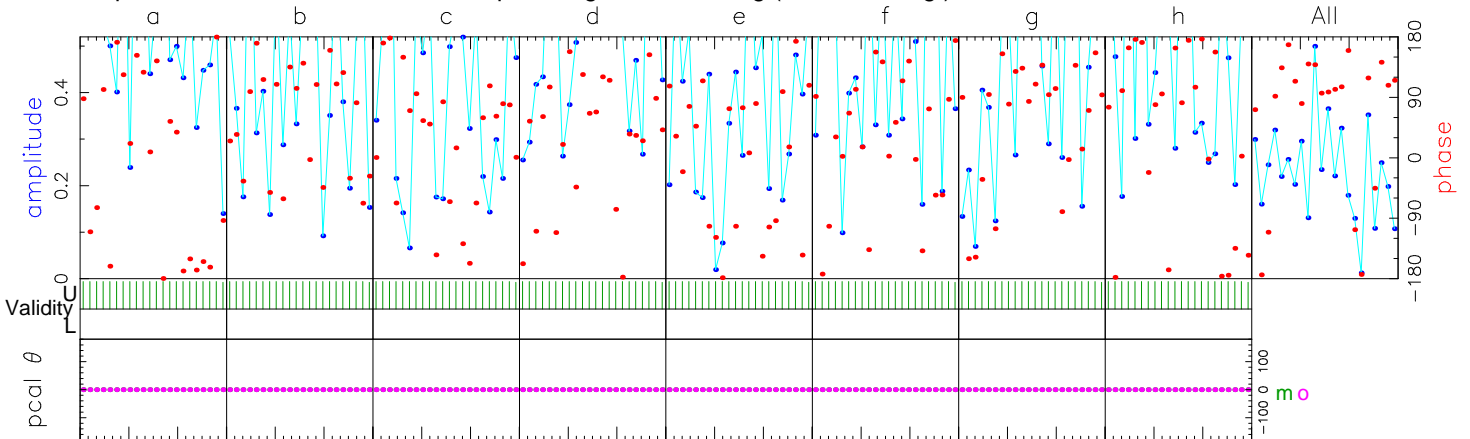


Fringe quality 0
SNR 6.2
Int time 179.977
Amp 0.173
Phase 120.6
PFD 7.4e-02
Delays (us)
SBD 0.788957
MBD 0.006393
Fringe rate (Hz) -0.244018
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145441
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

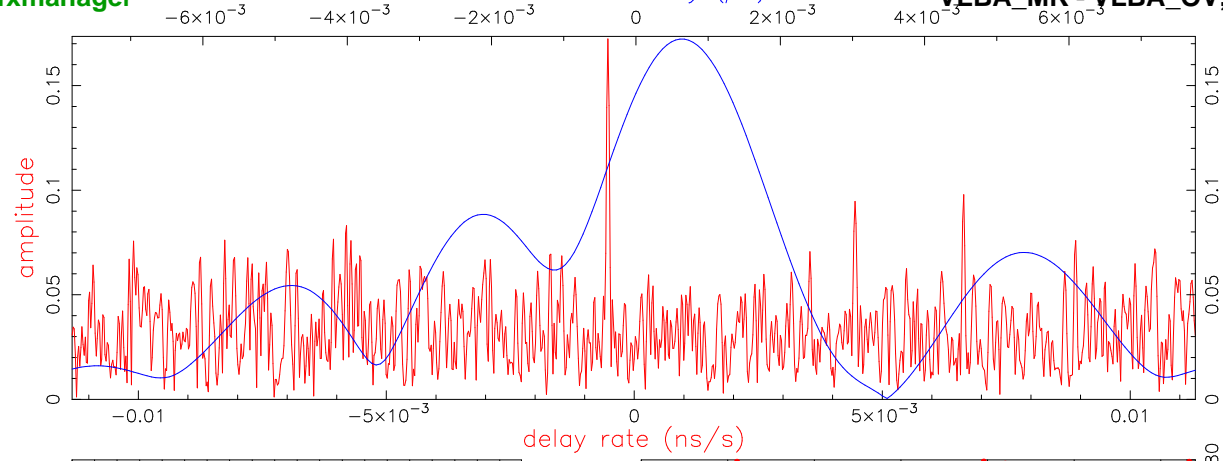
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



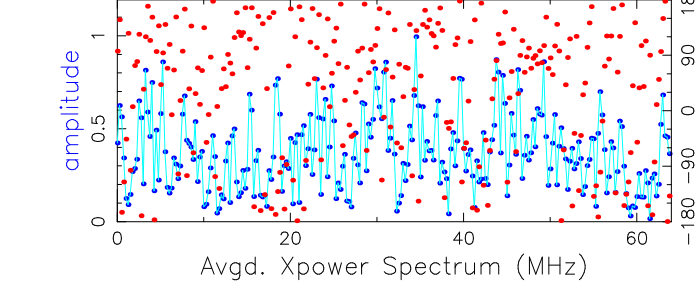
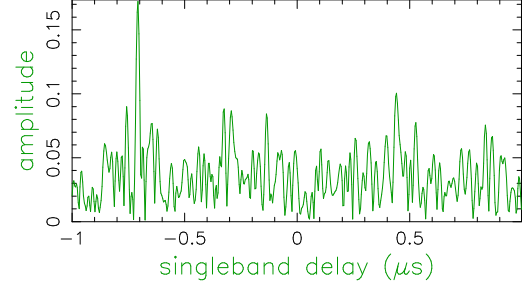
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	162.7	95.4	76.7	100.8	56.2	100.4	109.5	153.2	Phase	120.6
	0.3	0.2	0.1	0.2	0.0	0.1	0.3	0.3	Ampl.	0.2
	458.3	418.2	250.1	176.2	472.8	7.8	459.6	459.1	Sbd box	459.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.28144426076E+03		Apriori delay (usec)		2.28065661743E+03		Resid mbdelay (usec)		6.39333E-03	+/- 1.8E-04
Sband delay (usec)	2.28144557493E+03		Apriori clock (usec)		-8.0428619E+00		Resid sbdelay (usec)		7.88957E-01	+/- 1.4E-03
Phase delay (usec)	2.28065662132E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		3.88975E-06	+/- 6.0E-07
Delay rate (us/s)	2.71838426434E-01		Apriori rate (us/s)		2.71841259239E-01		Resid rate (us/s)		-2.83280E-06	+/- 5.7E-09
Total phase (deg)	129.8		Apriori accel (us/s/s)		-3.54767424322E-05		Resid phase (deg)		120.6	+/- 18.5

ph/seg (deg) 61.1 43.4 Search (1024X32) 0.173 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.3 75.7 Interp. 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 41.8 26.2 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 59.2 45.6 Inc. frq. avg. 0.182 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 331.5 el 51.8 pa 134.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -2489.557 -4918.372 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo.W.213.1HV1N7

multiband delay (μ s)

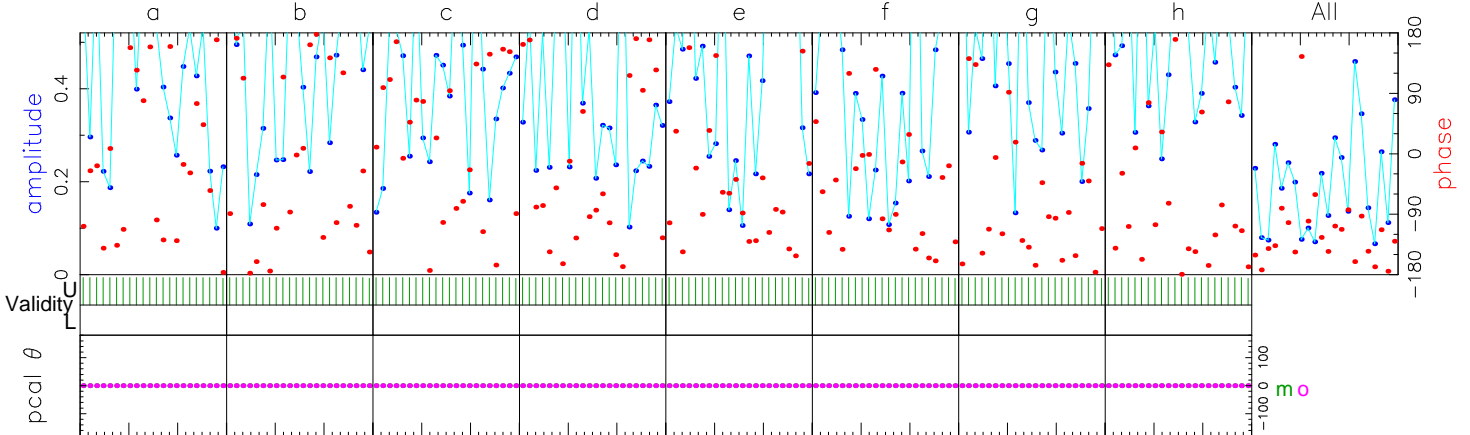


Fringe quality 0
SNR 6.4
Int time 179.977
Amp 0.174
Phase -126.6
PFD 2.7e-02
Delays (us)
SBD -0.708006
MBD 0.000613
Fringe rate (Hz)
-0.045538
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145443
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.8	-130.1	142.6	-137.9	-106.7	-85.4	-129.7	-146.3	Phase	-126.6
	0.1	0.2	0.1	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	114.0	206.1	403.7	73.8	37.1	99.1	77.1	342.7	Sbd box	75.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.27995410565E+03		Apriori delay (usec)		2.28065661743E+03		Resid mbdelay (usec)		6.13215E-04	+/- 1.7E-04
Sband delay (usec)	2.27994861118E+03		Apriori clock (usec)		-8.0428619E+00		Resid sbdelay (usec)		-7.08006E-01	+/- 1.4E-03
Phase delay (usec)	2.28065661335E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		-4.08176E-06	+/- 5.8E-07
Delay rate (us/s)	2.71840730591E-01		Apriori rate (us/s)		2.71841259239E-01		Resid rate (us/s)		-5.28648E-07	+/- 5.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.54767424322E-05		Resid phase (deg)		-126.6	+/- 18.0

ph/seg (deg) 36.1 42.3 Search (1024X32) 0.174 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 63.5 73.7 Interp. 0.168 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 42.6 25.5 Inc. seg. avg. 0.155 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 42.9 44.5 Inc. frq. avg. 0.175 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 331.5 el 51.8 pa 134.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -2489.557 -4918.372 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/mo.W.230.1HV1N7

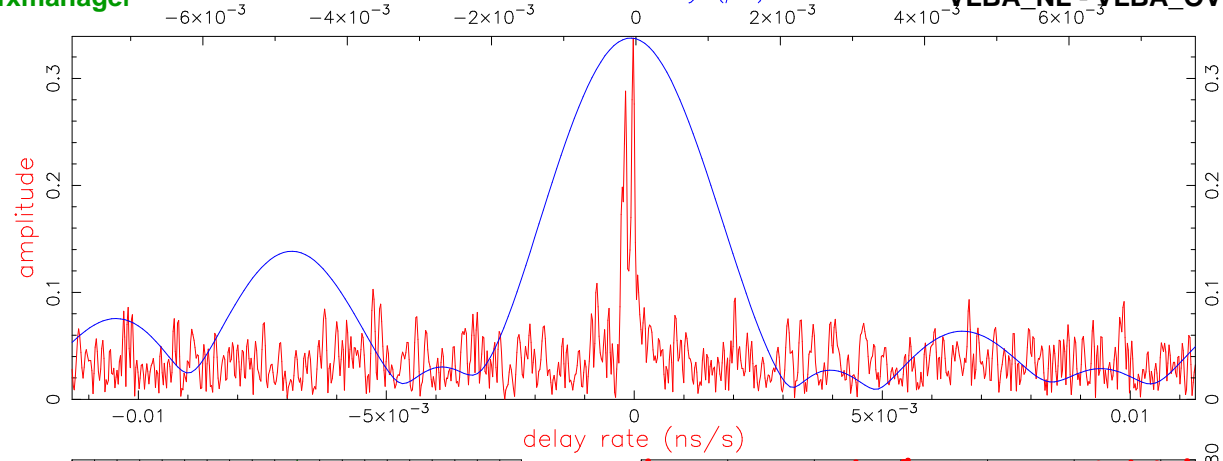
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, no

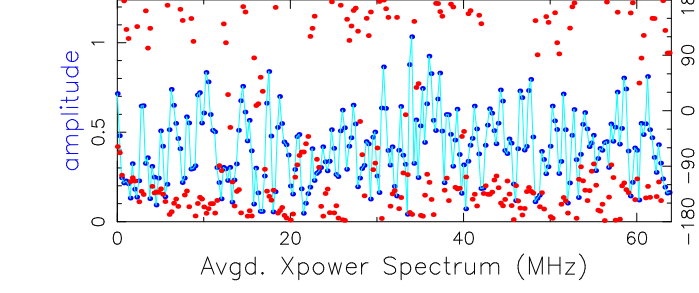
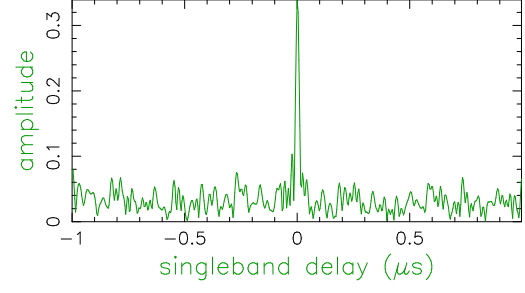
VLBA_NL - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



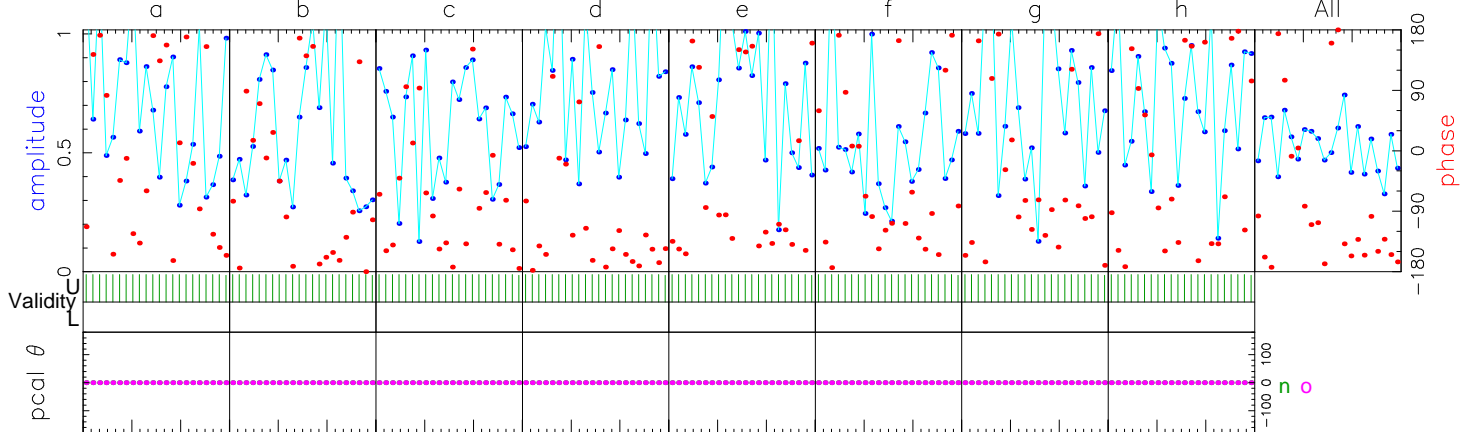
Fringe quality 9

SNR 12.4
 Int time 179.979
 Amp 0.339
 Phase -143.6
 PFD 3.9e-27
 Delays (us)
 SBD 0.000870
 MBD -0.000048
 Fringe rate (Hz)
 -0.001825
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



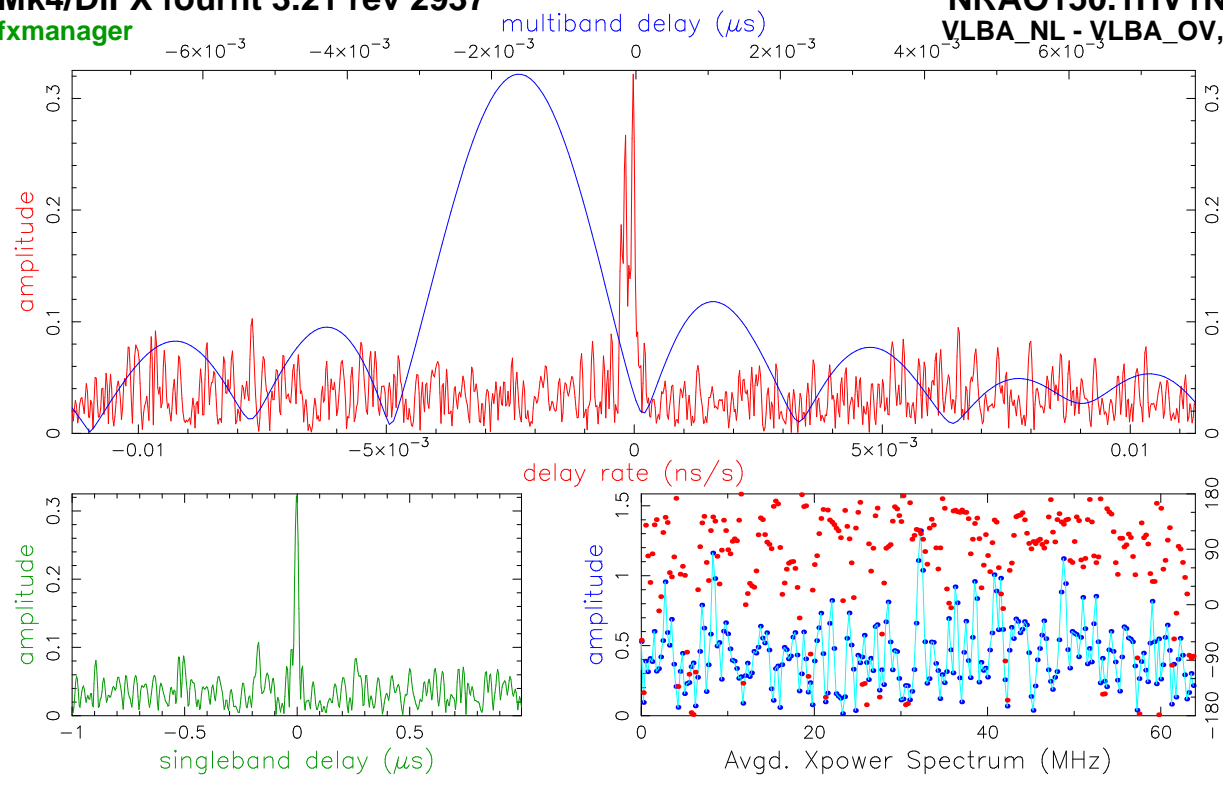
Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145438
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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: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)	-3.82401184075E+03	-3.82401092276E+03	-3.82401179764E+03	-3.82401179301E+03	-3.82401179301E+03	-3.82401179301E+03	-3.82401179301E+03	-3.82401179301E+03		
Sband delay (usec)	-139.8	-172.7	-112.3	-147.6	-149.9	-137.1	-131.0	-157.5		
Phase delay (usec)	0.3	0.2	0.3	0.5	0.5	0.3	0.3	0.4		
Delay rate (us/s)	258.6	255.8	256.8	257.3	257.6	197.5	257.2	256.9		
Total phase (deg)			-89.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

ph/seg (deg) 57.3 21.6 Search (1024X32) 0.337 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.8 37.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.6 13.0 Inc. seg. avg. 0.497 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.7 22.7 Inc. frq. avg. 0.341 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 313.3 el 30.2 pa 59.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 196.930 2821.718 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/no..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/no.W.179.1HV1N7

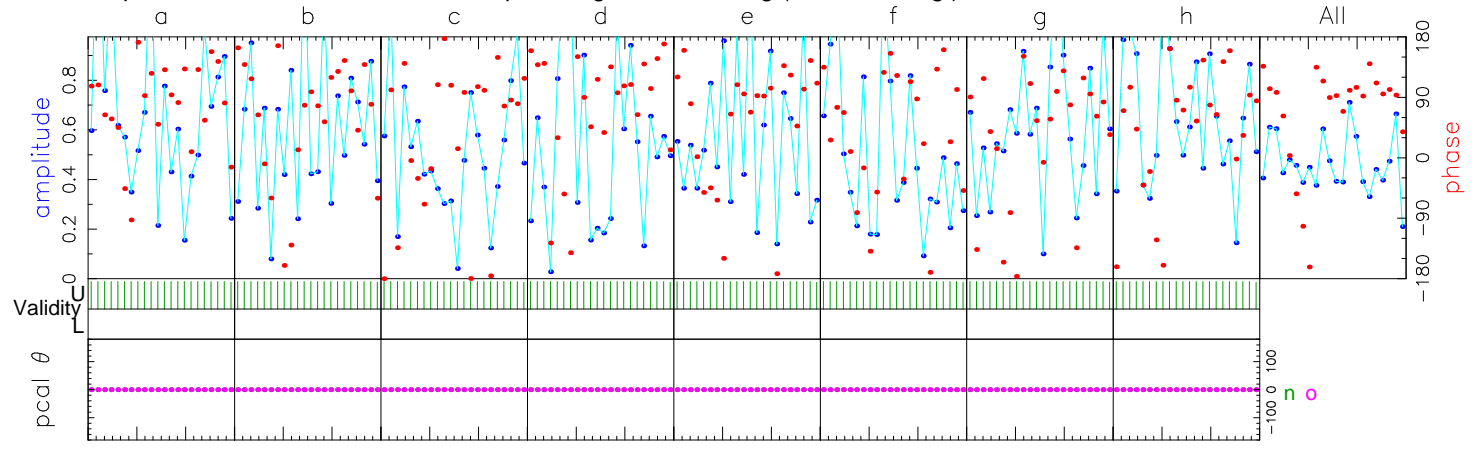


Fringe quality 9

SNR 11.9
Int time 179.979
Amp 0.325
Phase 99.4
PFD 2.1e-24
Delays (us)
SBD -0.002557
MBD -0.001605
Fringe rate (Hz)
-0.001378
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145440
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
95.2	101.0	106.8	109.9	100.6	92.4	97.7	96.1	96.1	Phase	99.4	
0.5	0.3	0.3	0.3	0.3	0.3	0.2	0.4	0.4	Ampl.	0.3	
256.0	256.4	415.7	256.6	256.7	341.8	256.2	257.4	257.4	Sbd box	256.3	
U/L 352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
n 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
n:0 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
n:0 0:0	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	1000	PC amp		
o 1000	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		
									Tracks		
Group delay (usec)(sbd)	-3.82401339800E+03		Apriori delay (usec)		-3.82401179301E+03		Resid mbdelay (usec)		-1.60499E-03	+/- 9.1E-05	
Sband delay (usec)	-3.82401435001E+03		Apriori clock (usec)		-2.1261585E+01		Resid sbdelay (usec)		-2.55700E-03	+/- 7.2E-04	
Phase delay (usec)	-3.82401178981E+03		Apriori clockrate (us/s)		6.0000003E-07		Resid phdelay (usec)		3.20632E-06	+/- 3.1E-07	
Delay rate (us/s)	-2.02299447944E-02		Apriori rate (us/s)		-2.02299287980E-02		Resid rate (us/s)		-1.59964E-08	+/- 3.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		2.55741441909E-05		Resid phase (deg)		99.4	+/- 9.6	
	RMS	Theor.	Amplitude	0.325 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	59.7	22.5	Search (1024X32)	0.314	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	56.2	39.3	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	6.4	13.6	Inc. seg. avg.	0.433	Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	21.3	23.7	Inc. frq. avg.	0.314	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
n: az 313.3 el 30.2 pa 59.7	o: az 308.8 el 42.9 pa 80.6		u,v (fr/asec) 196.930 2821.718						simultaneous interpolator		
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/no..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/no.W.202.1HV1N7											

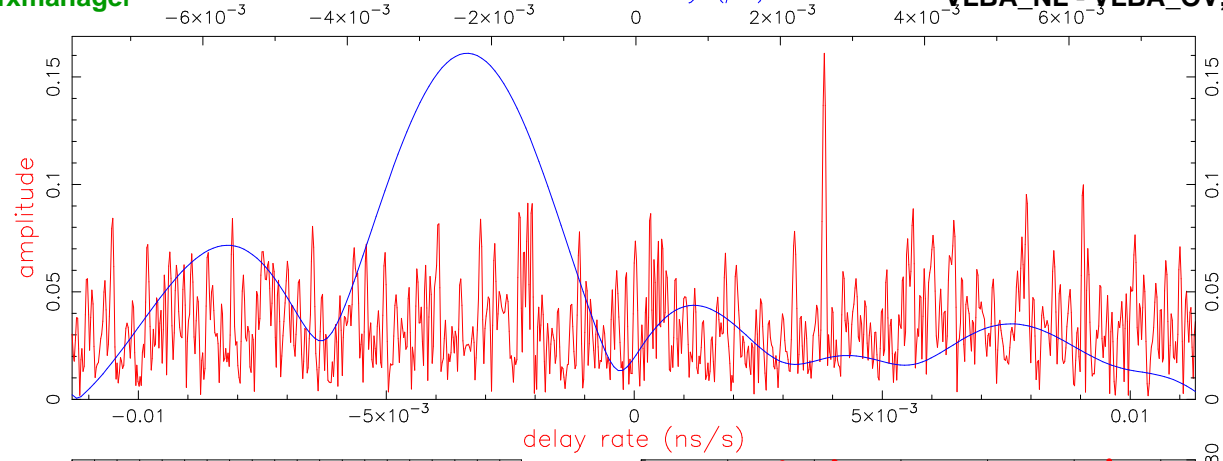
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

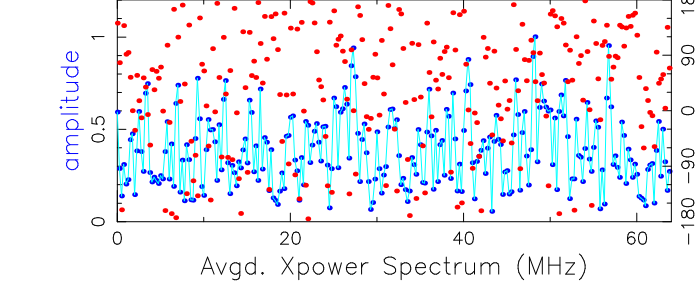
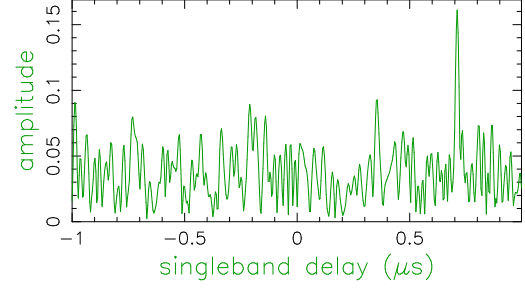
NRAO150.1HV1N7, No0150, no

VLBA_NL - VLBA_OV, fgroup W, pol LR

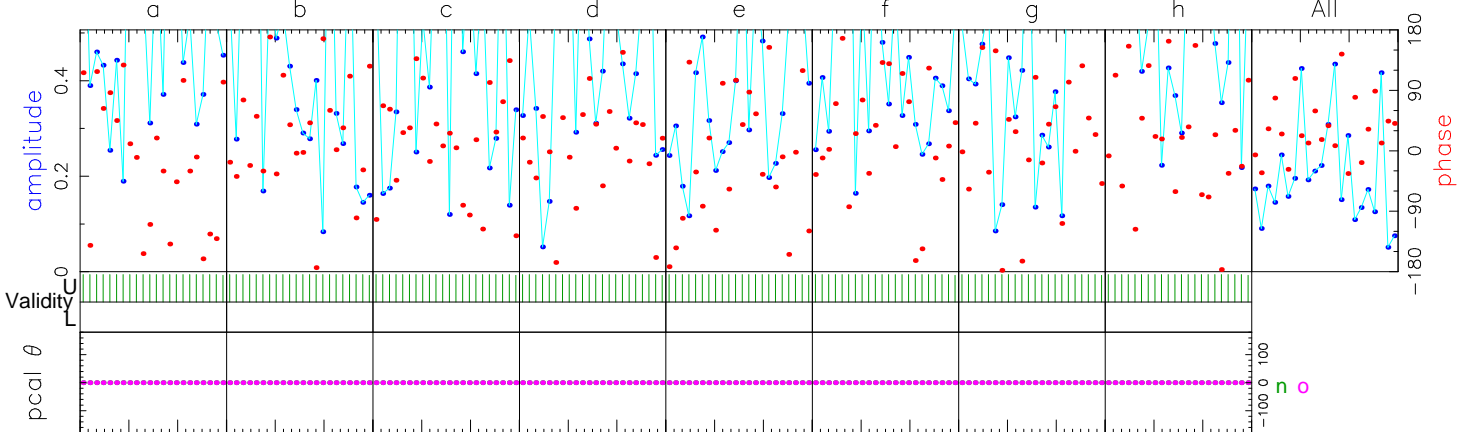
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 179.979
 Amp 0.169
 Phase 24.4
 PFD 3.6e-01
 Delays (us)
 SBD 0.710755
 MBD -0.002339
 Fringe rate (Hz) 0.329806
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145442
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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: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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.82329538186E+03	Apriori delay (usec)	-3.82401179301E+03	Resid mbdelay (usec)	-2.33885E-03	+/-	1.8E-04
Sband delay (usec)	-3.82330103776E+03	Apriori clock (usec)	-2.1261585E+01	Resid sbdelay (usec)	7.10755E-01	+/-	1.5E-03
Phase delay (usec)	-3.82401179223E+03	Apriori clockrate (us/s)	6.0000003E-07	Resid phdelay (usec)	7.85850E-07	+/-	6.3E-07
Delay rate (us/s)	-2.02261000828E-02	Apriori rate (us/s)	-2.02299287980E-02	Resid rate (us/s)	3.82872E-06	+/-	6.0E-09
Total phase (deg)	-281.7	Apriori accel (us/s/s)	2.55741441909E-05	Resid phase (deg)	24.4	+/-	19.4

ph/seg (deg)	45.9	Theor.	45.5	Amplitude	0.169 +/- 0.029	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	71.7		79.4	Search (1024X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	21.1		27.4	Interp.	0.000	Bits/sample: 2x2	mb window (us)	-0.008 0.008
amp/frq (%)	47.4		47.9	Inc. seg. avg.	0.163	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.156	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00

n: az 313.3 el 30.2 pa 59.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 196.930 2821.718 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/no..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/no.W22.1HV1N7

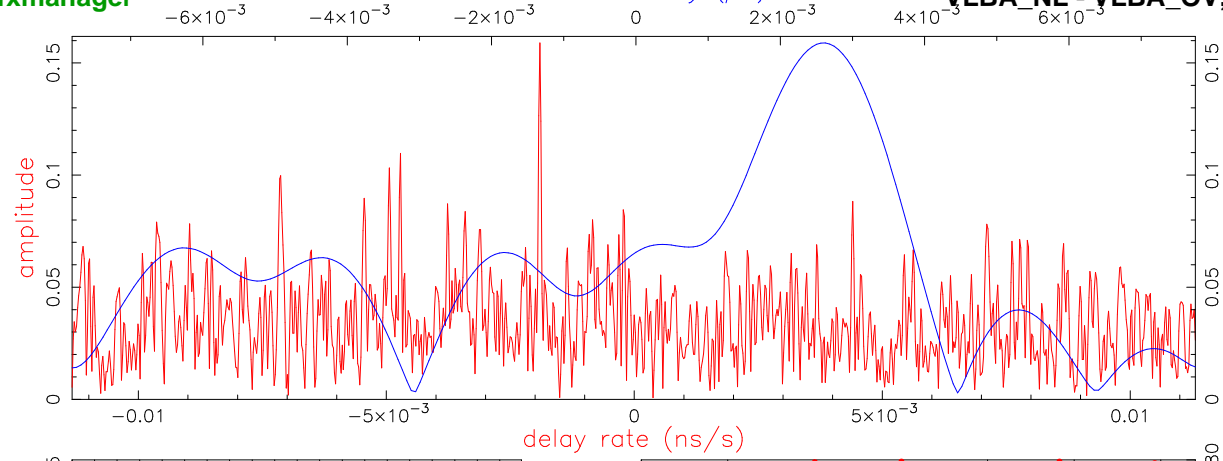
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, no

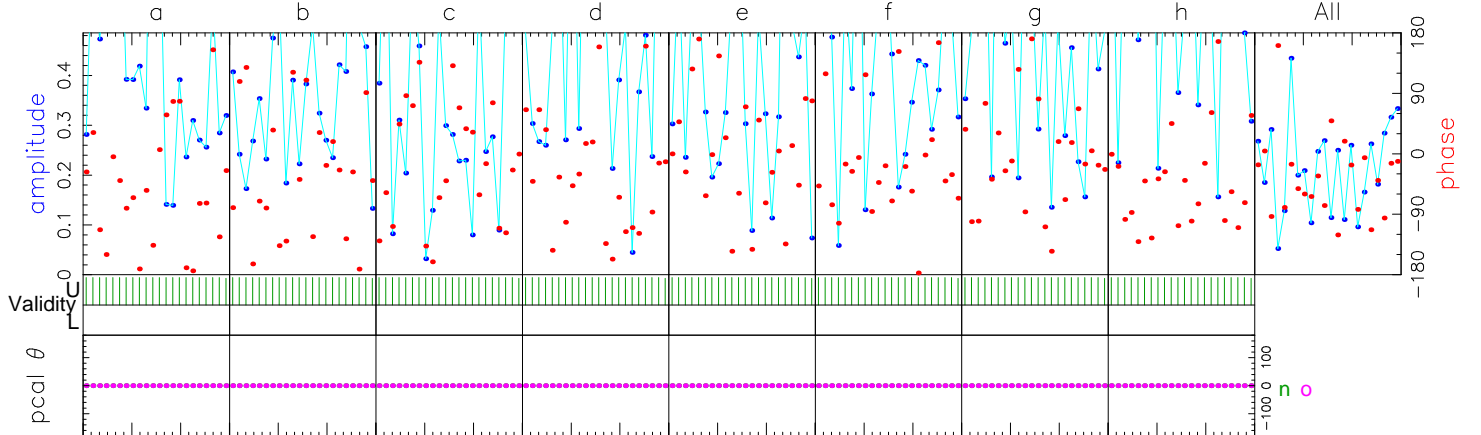
VLBA_NL - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 179.979
 Amp 0.162
 Phase -45.0
 PFD 4.3e-01
 Delays (us)
 SBD -0.008996
 MBD 0.002583
 Fringe rate (Hz) -0.164288
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145444
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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: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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.82402483541E+03	Apriori delay (usec)	-3.82401179301E+03	Resid mbdelay (usec)	2.58261E-03	+/-	1.8E-04
Sband delay (usec)	-3.82402078876E+03	Apriori clock (usec)	-2.1261585E+01	Resid sbdelay (usec)	-8.99575E-03	+/-	1.5E-03
Phase delay (usec)	-3.82401179446E+03	Apriori clockrate (us/s)	6.0000003E-07	Resid phdelay (usec)	-1.45006E-06	+/-	6.3E-07
Delay rate (us/s)	-2.02318360169E-02	Apriori rate (us/s)	-2.02299287980E-02	Resid rate (us/s)	-1.90722E-06	+/-	6.1E-09
Total phase (deg)	-351.0	Apriori accel (us/s/s)	2.55741441909E-05	Resid phase (deg)	-45.0	+/-	19.5

ph/seg (deg)	54.3	Theor.	45.8	Amplitude	0.162 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.8	Search (1024X32)	0.155	Search	0.155	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	27.4	Inc. seg. avg.	0.166	Inc. seg. avg.	0.166	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	57.4	Inc. frq. avg.	0.156	Inc. frq. avg.	0.156	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

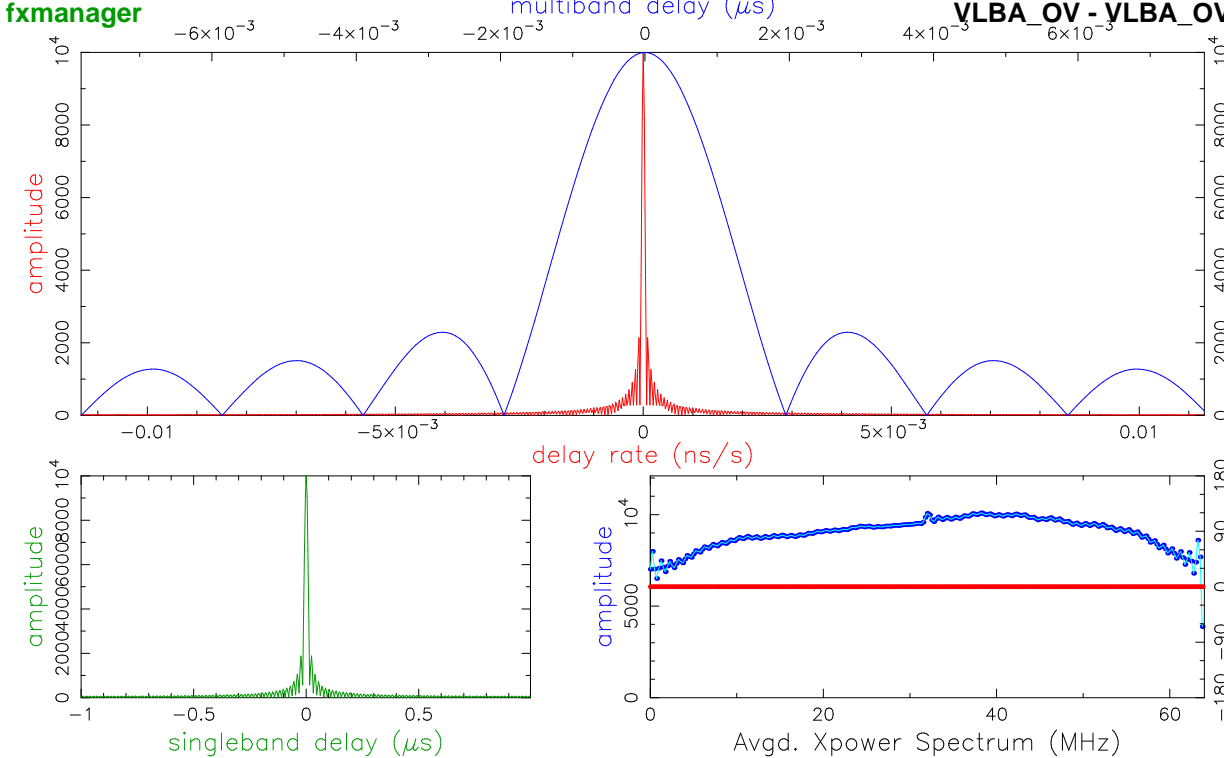
n: az 313.3 el 30.2 pa 59.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 196.930 2821.718 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/no..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/no.W.236.1HV1N7

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, oo

VLBA_OV - VLBA_OV, fgroup W, pol LL

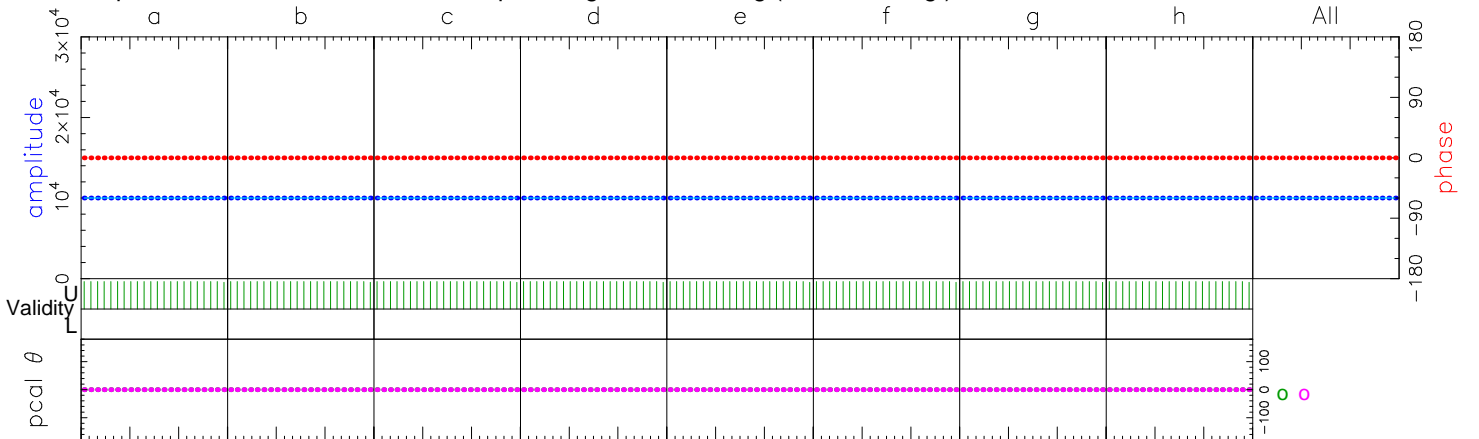


Fringe quality 9

SNR 366867.1
 Int time 179.979
 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. c202a
 Yr:day 16383
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145437
 2020:247:085004
 RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:o	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 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
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo.W.175.1HV1N7

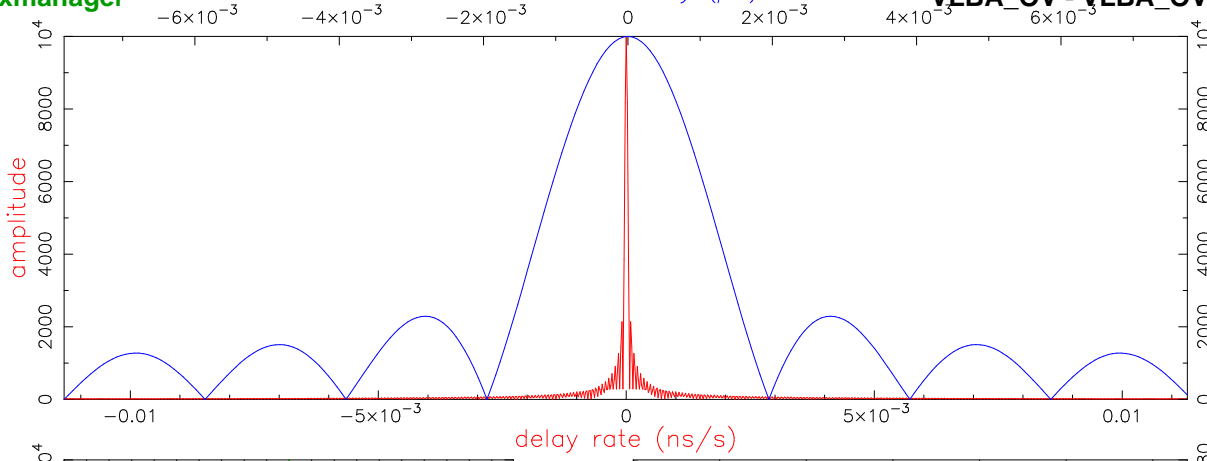
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

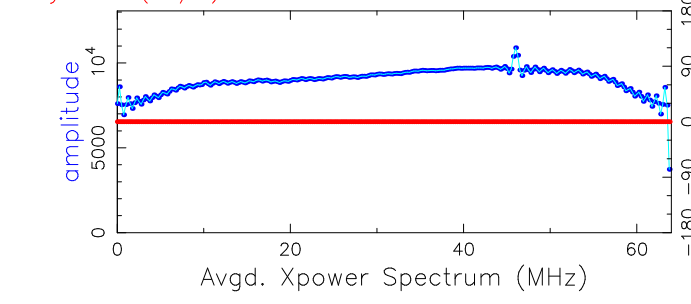
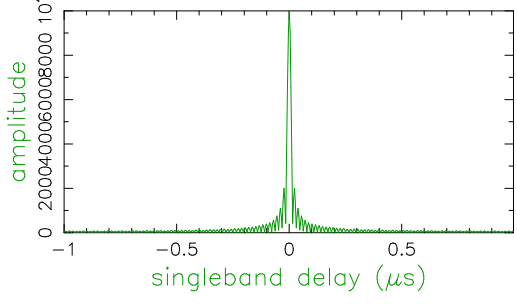
NRAO150.1HV1N7, No0150, oo

VLBA_OV - VLBA_OV, fgroup W, pol RR

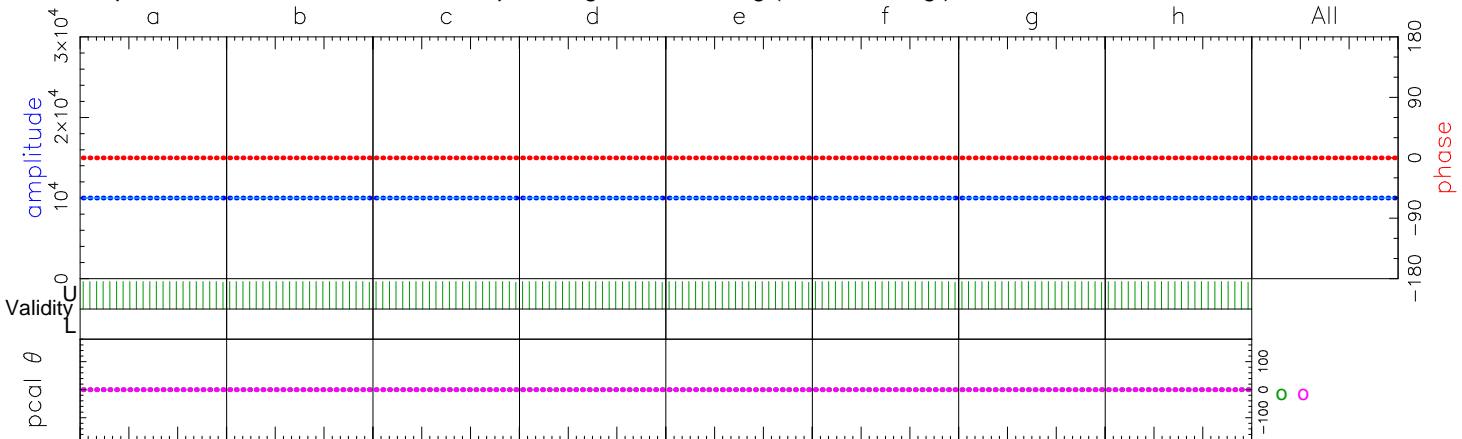
multiband delay (μ s)



Fringe quality 9
 SNR 366867.1
 Int time 179.979
 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. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145439
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.0E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.3E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

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

o: az 308.8 el 42.9 pa 80.6 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo.W.194.1HV1N7

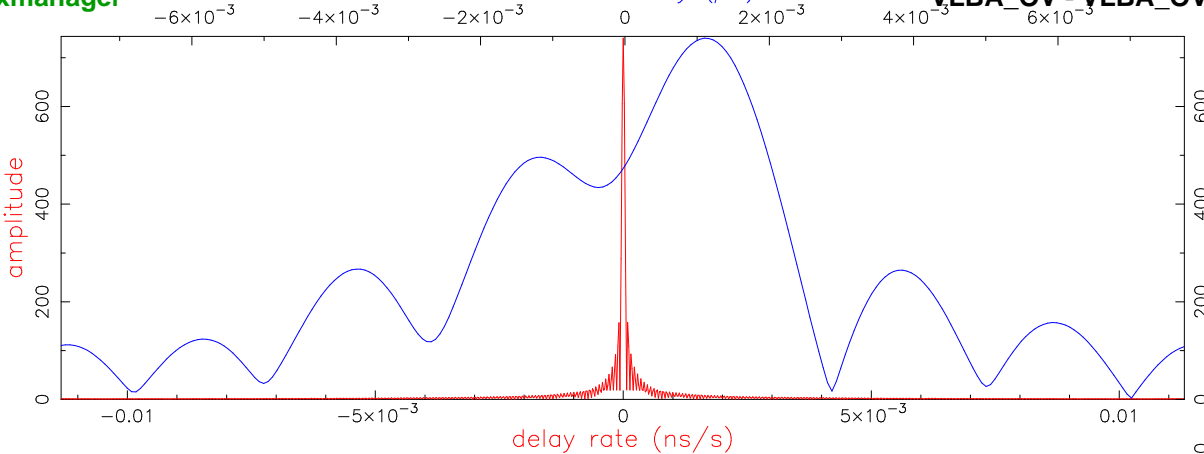
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, oo

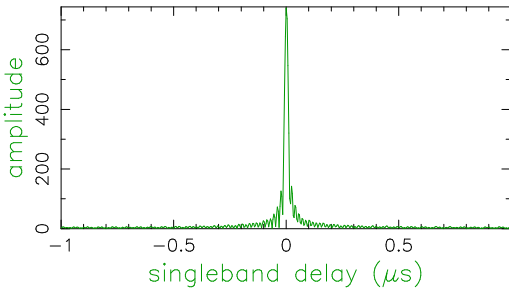
VLBA_OV - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

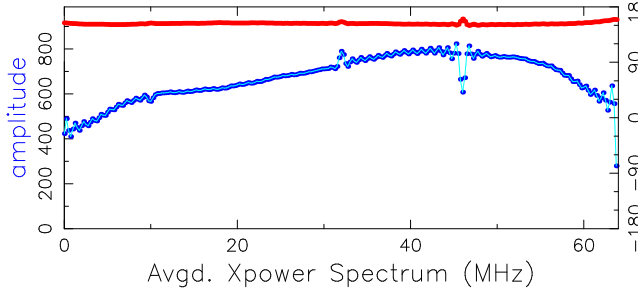


Fringe quality 5

SNR 27288.5
 Int time 179.979
 Amp 743.824
 Phase 150.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000908
 MBD 0.001136
 Fringe rate (Hz) 0.000014
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

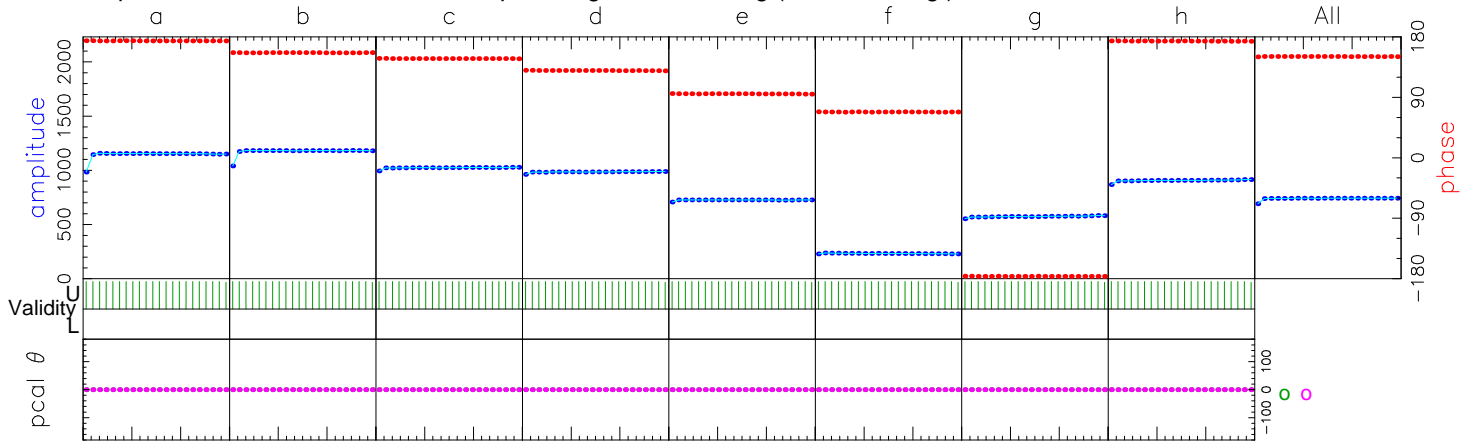


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145441
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000	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) 1.13646875000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 1.13647E-03 +/- 4.0E-08
 Sband delay (usec) 9.08250000000E-04 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 9.08250E-04 +/- 3.2E-07
 Phase delay (usec) 4.85803743392E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 4.85804E-06 +/- 1.4E-10
 Delay rate (us/s) 1.61551137265E-10 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.61551E-10 +/- 1.3E-12
 Total phase (deg) 150.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 150.6 +/- 0.0

ph/seg (deg) 0.1 0.0 Search (1024X32) 733.675 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.5 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.7 0.0 Inc. seg. avg. 740.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.5 0.0 Inc. frq. avg. 845.993 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 308.8 el 42.9 pa 80.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo.W.210.1HV1N7

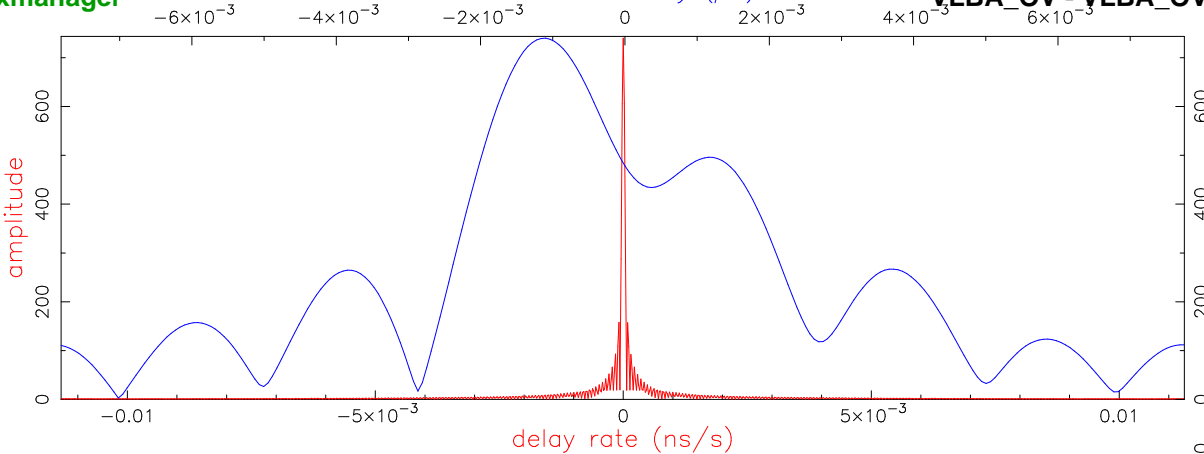
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, oo

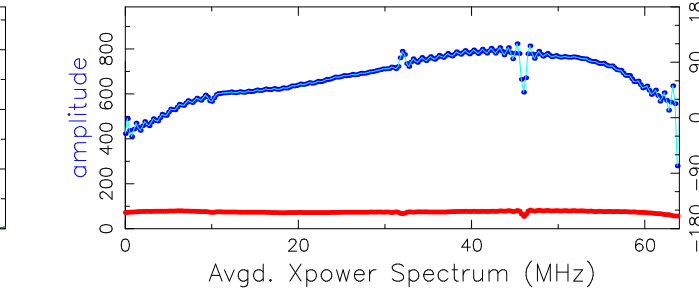
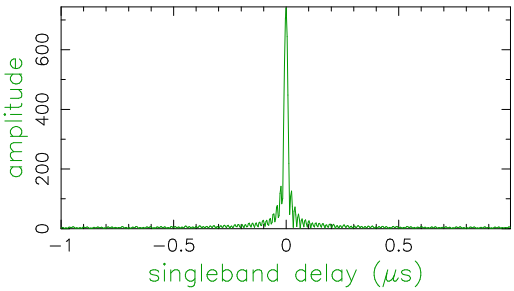
VLBA_OV - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)



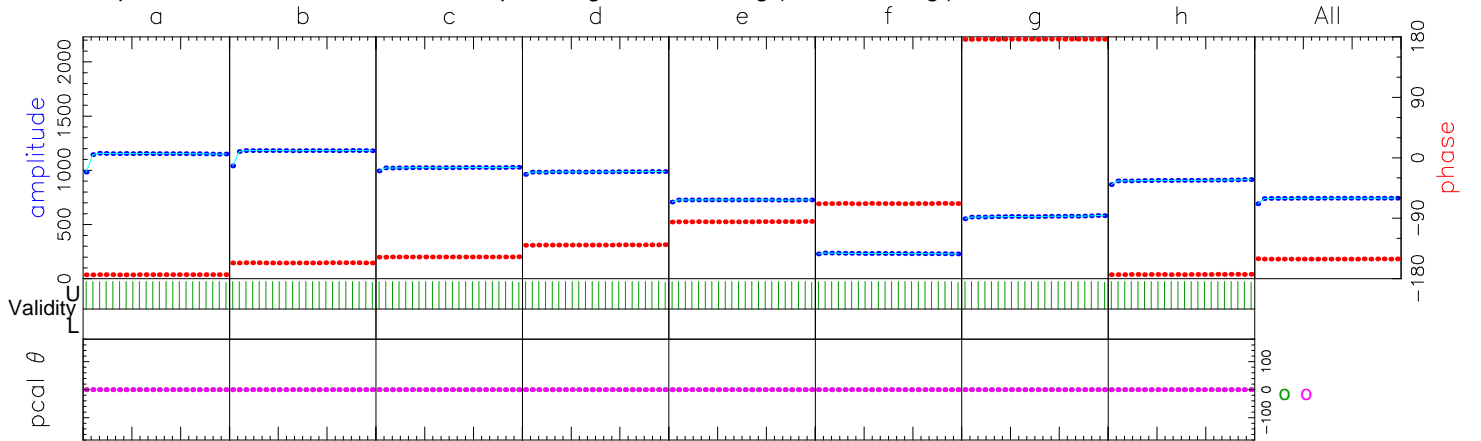
Fringe quality 5

SNR 27288.5
 Int time 179.979
 Amp 743.824
 Phase -150.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000908
 MBD -0.001136
 Fringe rate (Hz)
 -0.000014
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145443
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-174.0	-156.3	-147.6	-129.8	-95.1	-68.1	176.4	-173.6	Phase	-150.6
	1145.3	1175.2	1023.4	985.1	725.9	233.0	574.1	906.0	Ampl.	846.0
	256.9	257.1	256.8	257.0	257.1	256.3	256.8	256.8	Sbd box	256.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.13646875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.13647E-03	+/- 4.0E-08
Sband delay (usec)	-9.08250000000E-04		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-9.08250E-04	+/- 3.2E-07
Phase delay (usec)	-4.85803743399E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.85804E-06	+/- 1.4E-10
Delay rate (us/s)	-1.61551137265E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.61551E-10	+/- 1.3E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-150.6	+/- 0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 743.824 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.5 0.0 Search (1024X32) 733.675 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.5 0.0 Inc. seg. avg. 740.106 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 o: az 308.8 el 42.9 pa 80.6 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/oo.W.228.1HV1N7

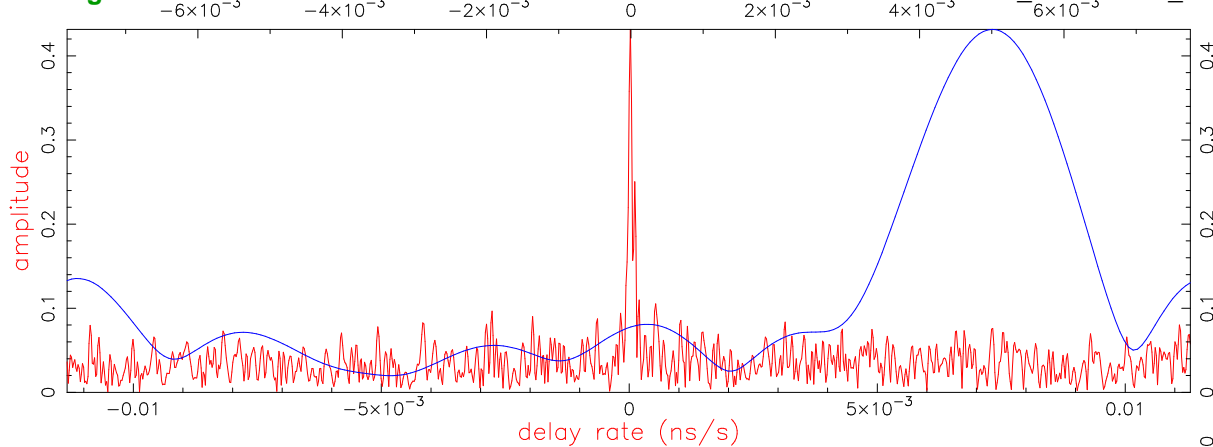
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, op

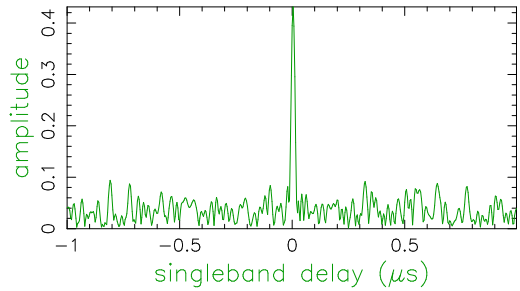
VLBA_OV - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

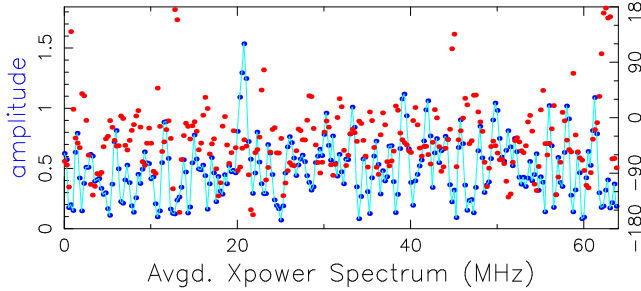


Fringe quality 9

SNR 15.8
Int time 179.979
Amp 0.431
Phase -59.0
PFD 0.0e+00
Delays (us)
SBD 0.003860
MBD 0.005006
Fringe rate (Hz) 0.001880
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

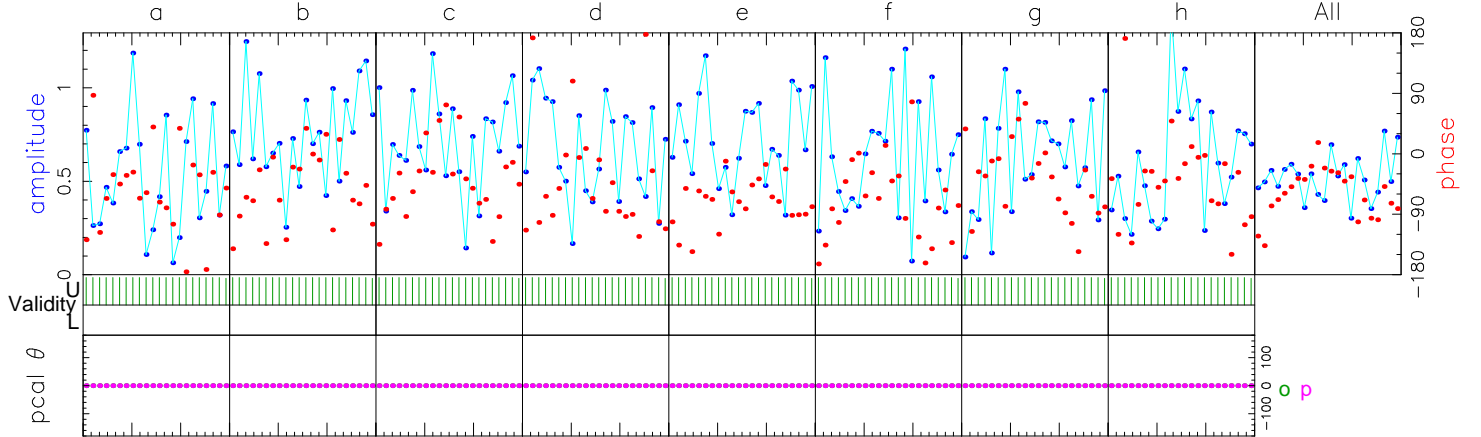


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145437
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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

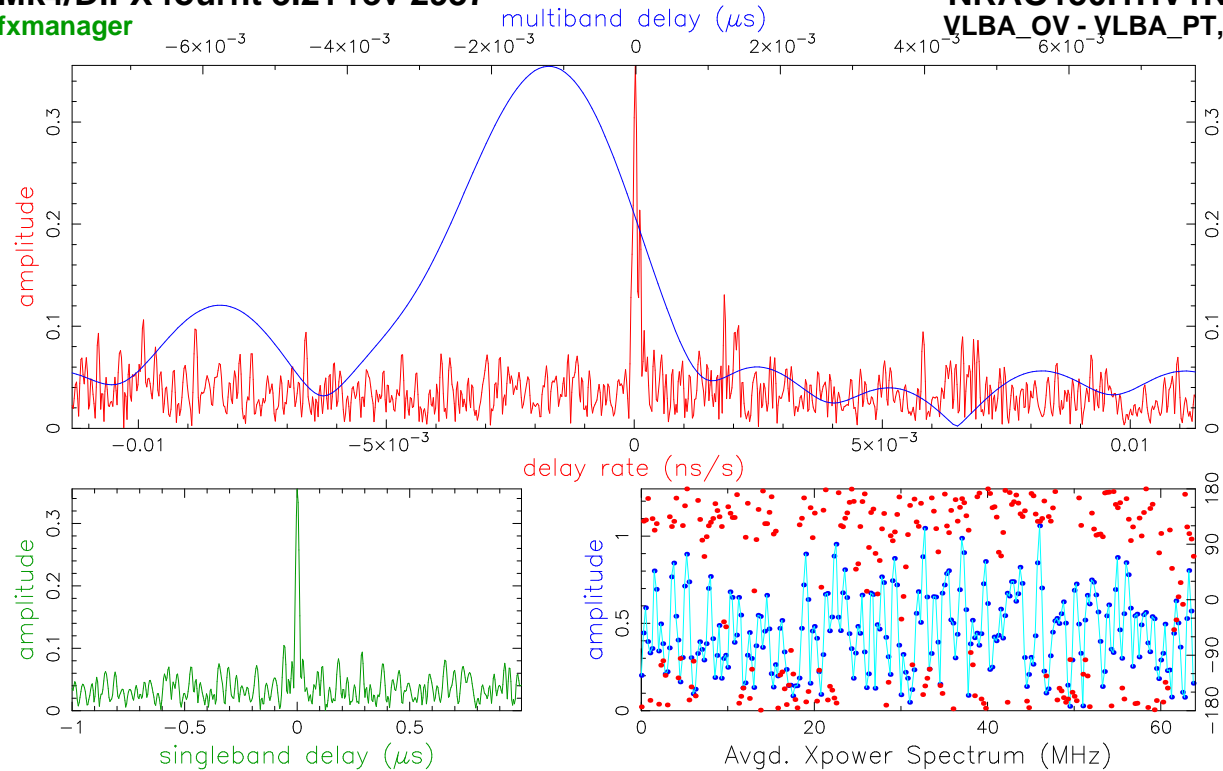


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-55.8	-51.2	-42.7	-76.8	-72.5	-82.5	-43.2	-40.1	Phase	-59.0
	0.3	0.5	0.5	0.4	0.6	0.4	0.4	0.4	Ampl.	0.4
	257.4	257.8	257.6	257.8	257.8	258.4	258.9	258.6	Sbd box	258.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.38673764516E+03	Apriori delay (usec)	2.38673263946E+03	Resid mbdelay (usec)	5.00571E-03	+/-	6.9E-05
Sband delay (usec)	2.38673649996E+03	Apriori clock (usec)	2.1348156E+01	Resid sbdelay (usec)	3.86050E-03	+/-	5.4E-04
Phase delay (usec)	2.38673263756E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-1.90160E-06	+/-	2.3E-07
Delay rate (us/s)	7.40846725590E-02	Apriori rate (us/s)	7.40846507326E-02	Resid rate (us/s)	2.18264E-08	+/-	2.2E-09
Total phase (deg)	143.7	Apriori accel (us/s/s)	-8.94876992598E-06	Resid phase (deg)	-59.0	+/-	7.2

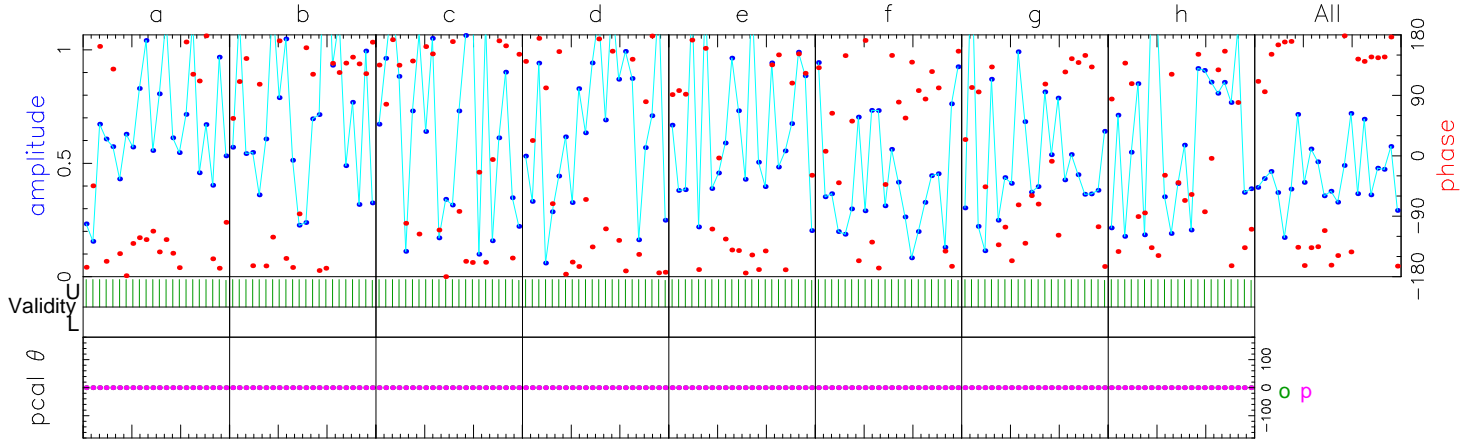
ph/seg (deg)	RMS 36.3	Theor. 17.0	Amplitude Search (1024X32)	0.431 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	34.0	29.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	18.2	10.2	Inc. seg. avg.	0.499	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.1	17.9	Inc. frq. avg.	0.441	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 308.8 el 42.9 pa 80.6 p: az 312.2 el 34.7 pa 76.4 u,v (fr/asec) -679.878 -636.325 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/op..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/op.W.174.1HV1N7



Fringe quality 9
SNR 13.0
Int time 179.979
Amp 0.355
Phase 178.8
PFD 2.0e-30
Delays (us)
SBD 0.000653
MBD -0.001185
Fringe rate (Hz)
0.001591
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145439
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.38673145470E+03	Apriori delay (usec)	2.38673263946E+03	Resid mbdelay (usec)	-1.18476E-03	+/-	8.3E-05
Sband delay (usec)	2.38673329246E+03	Apriori clock (usec)	2.1348156E+01	Resid sbdelay (usec)	6.53000E-04	+/-	6.6E-04
Phase delay (usec)	2.38673264522E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	5.76637E-06	+/-	2.8E-07
Delay rate (us/s)	7.40846691976E-02	Apriori rate (us/s)	7.40846507326E-02	Resid rate (us/s)	1.84650E-08	+/-	2.7E-09
Total phase (deg)	21.5	Apriori accel (us/s/s)	-8.94876992598E-06	Resid phase (deg)	178.8	+/-	8.8

ph/seg (deg)	38.7	Theor.	20.6	Amplitude	0.355 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	46.5	Search (1024X32)	0.346	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	21.7	Inc. seg. avg.	0.424	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	40.1	Inc. frq. avg.	0.362	Sample rate (MSamp/s):	128	ion window (TEC)	0.00	0.00	
				Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

o: az 308.8 el 42.9 pa 80.6 p: az 312.2 el 34.7 pa 76.4 u,v (fr/asec) -679.878 -636.325 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/op..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/op.W.189.1HV1N7

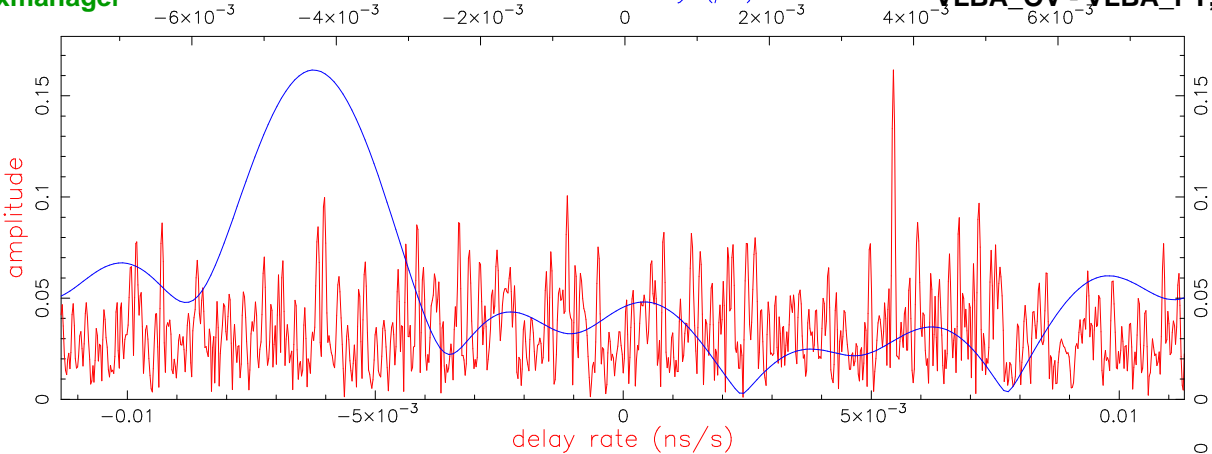
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, op

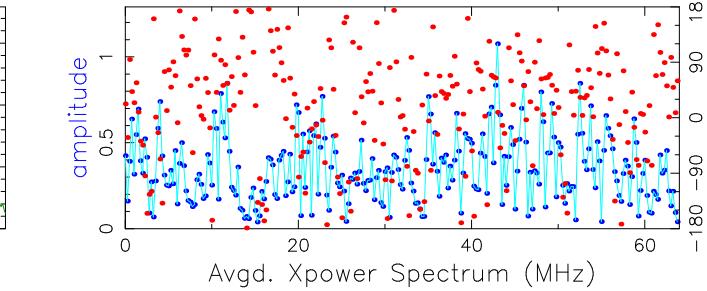
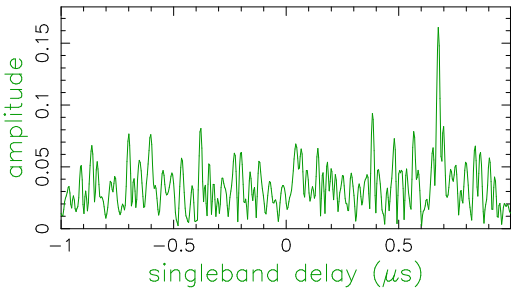
VLBA_OV - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



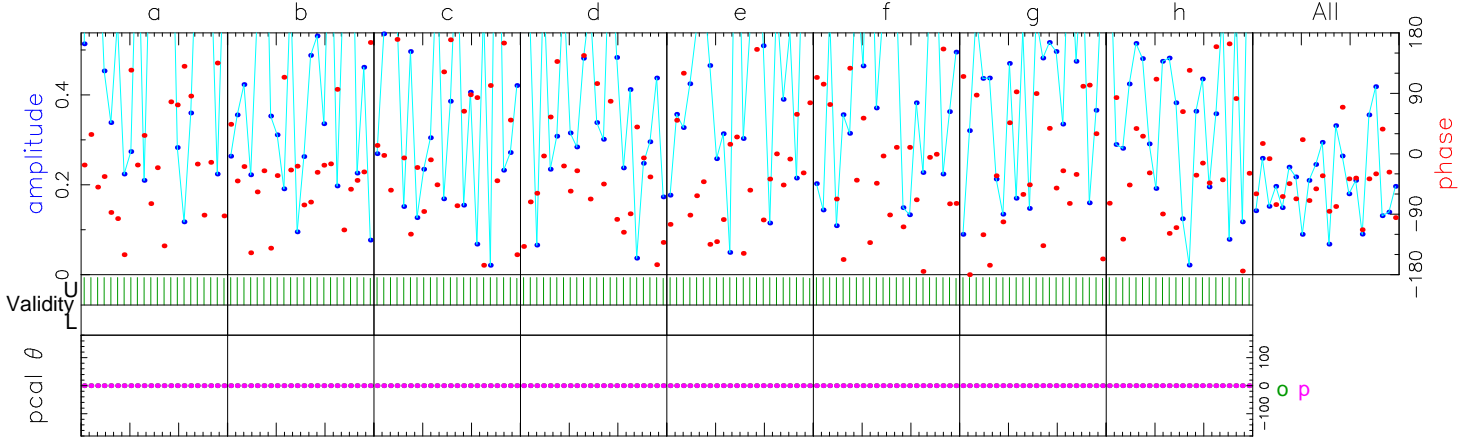
Fringe quality 0

SNR 6.0
 Int time 179.979
 Amp 0.179
 Phase -40.9
 PFD 2.6e-01
 Delays (us)
 SBD 0.675980
 MBD -0.004306
 Fringe rate (Hz)
 0.469769
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145440
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

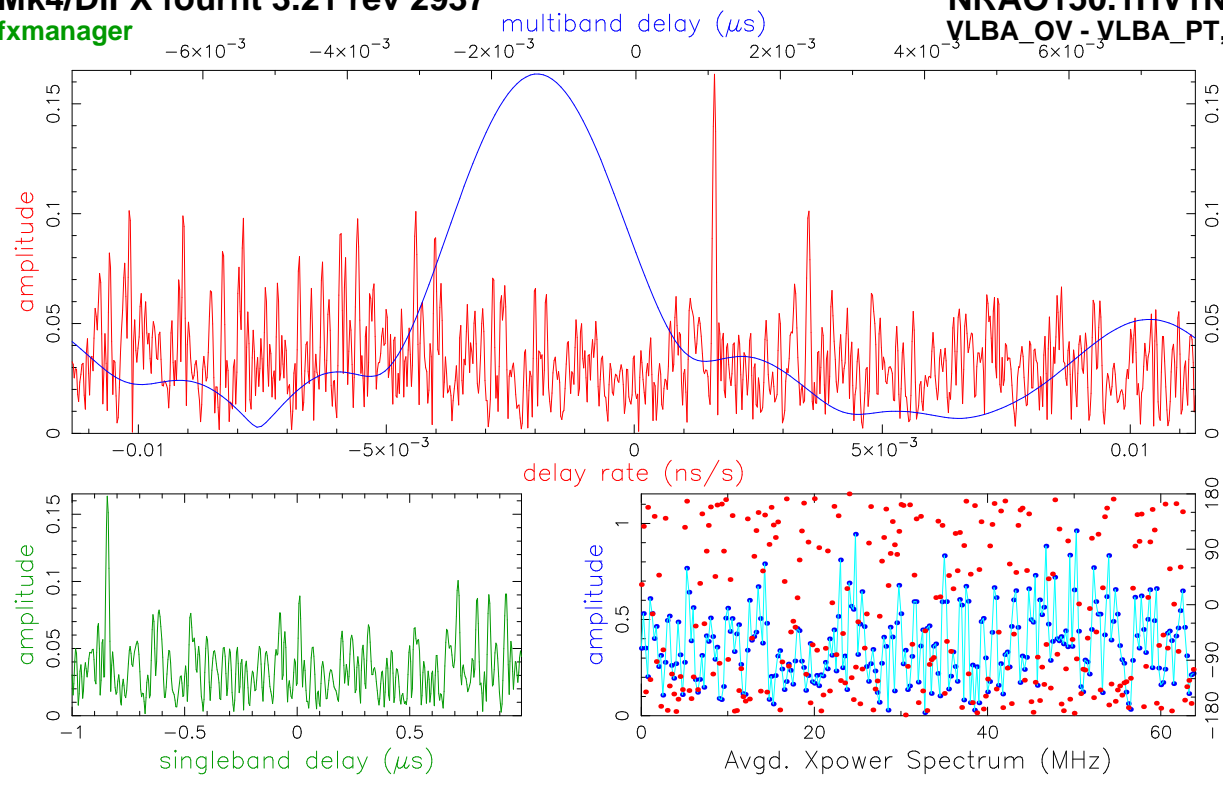
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.2	-41.4	-64.1	-57.7	-35.6	-42.2	-26.8	-37.0	Phase	-40.9
	0.3	0.4	0.1	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	429.6	429.8	375.9	370.1	421.5	84.5	177.0	46.6	Sbd box	430.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.38741583320E+03		Apriori delay (usec)		2.38673263946E+03		Resid mbdelay (usec)		-4.30625E-03	+/- 1.8E-04
Sband delay (usec)	2.38740861921E+03		Apriori clock (usec)		2.1348156E+01		Resid sbdelay (usec)		6.75980E-01	+/- 1.4E-03
Phase delay (usec)	2.38673263814E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-1.32045E-06	+/- 6.2E-07
Delay rate (us/s)	7.40901042852E-02		Apriori rate (us/s)		7.40846507326E-02		Resid rate (us/s)		5.45355E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.94876992598E-06		Resid phase (deg)		-40.9	+/- 19.2

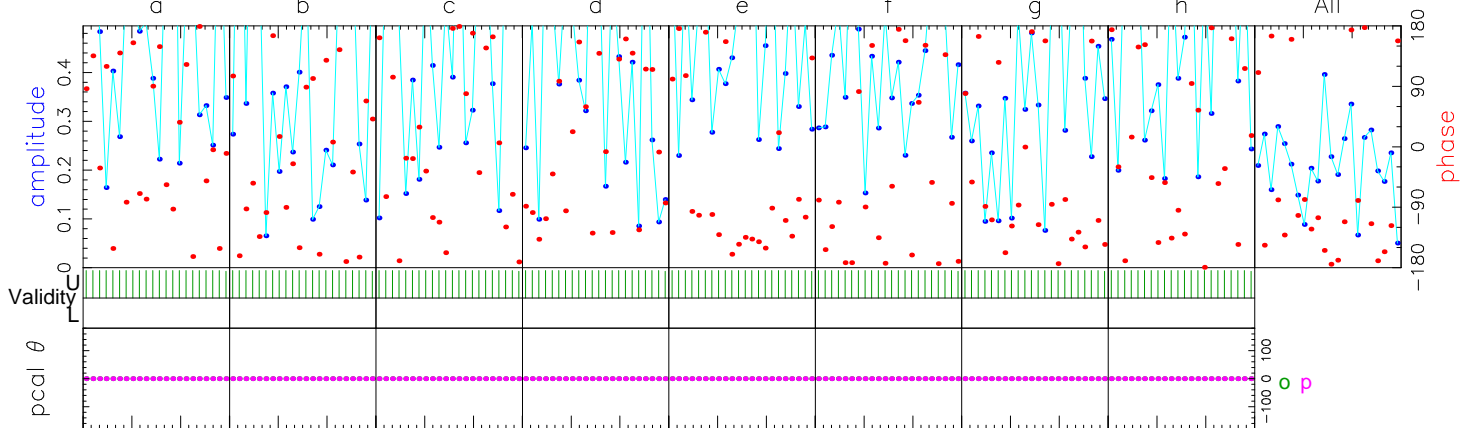
	RMS	Theor.	Amplitude	0.179 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	43.7	45.0	Search (1024X32)	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	60.4	78.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	14.1	27.1	Inc. seg. avg.	0.175	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	51.0	47.4	Inc. frq. avg.	0.164				

o: az 308.8 el 42.9 pa 80.6 p: az 312.2 el 34.7 pa 76.4 u,v (fr/asec) -679.878 -636.325 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/op..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/op.W.204.1HV1N7



Fringe quality 0
SNR 6.0
Int time 179.979
Amp 0.165
Phase -147.3
PFD 2.1e-01
Delays (us)
SBD -0.843178
MBD -0.001314
Fringe rate (Hz)
0.139644
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145443
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-140.7	-148.5	-137.0	-163.8	-142.9	-161.8	-133.5	-162.6	Phase	-147.3
	0.1	0.1	0.2	0.1	0.3	0.2	0.2	0.1	Ampl.	0.2
	368.5	414.5	111.3	491.2	41.9	241.9	462.1	260.0	Sbd box	41.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.38588757527E+03		Apriori delay (usec)		2.38673263946E+03		Resid mbdelay (usec)		-1.31419E-03	+/- 1.8E-04
Sband delay (usec)	2.38588946121E+03		Apriori clock (usec)		2.1348156E+01		Resid sbdelay (usec)		-8.43178E-01	+/- 1.4E-03
Phase delay (usec)	2.38673263471E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-4.75078E-06	+/- 6.1E-07
Delay rate (us/s)	7.40862718642E-02		Apriori rate (us/s)		7.40846507326E-02		Resid rate (us/s)		1.62113E-06	+/- 5.9E-09
Total phase (deg)	55.3		Apriori accel (us/s/s)		-8.94876992598E-06		Resid phase (deg)		-147.3	+/- 19.1

ph/seg (deg) 45.2 44.7 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 58.1 78.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 13.4 27.0 Inc. seg. avg. 0.166 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 41.5 47.1 Inc. frq. avg. 0.151 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 308.8 el 42.9 pa 80.6 p: az 312.2 el 34.7 pa 76.4 u,v (fr/asec) -679.878 -636.325 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/op..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/op.W.225.1HV1N7

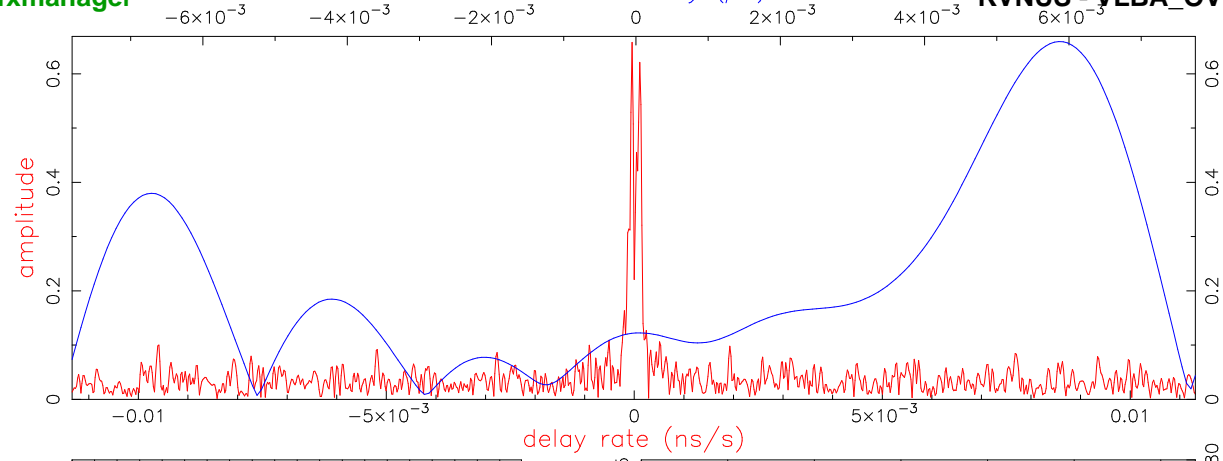
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, uo

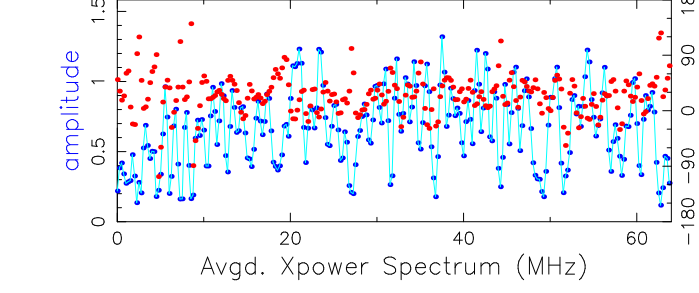
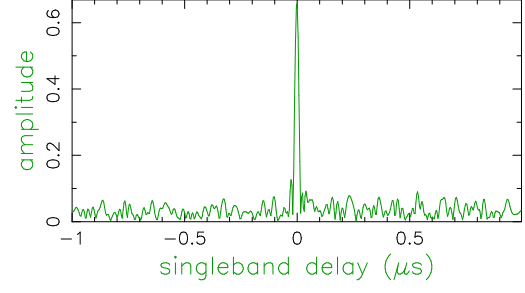
KVNUS - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

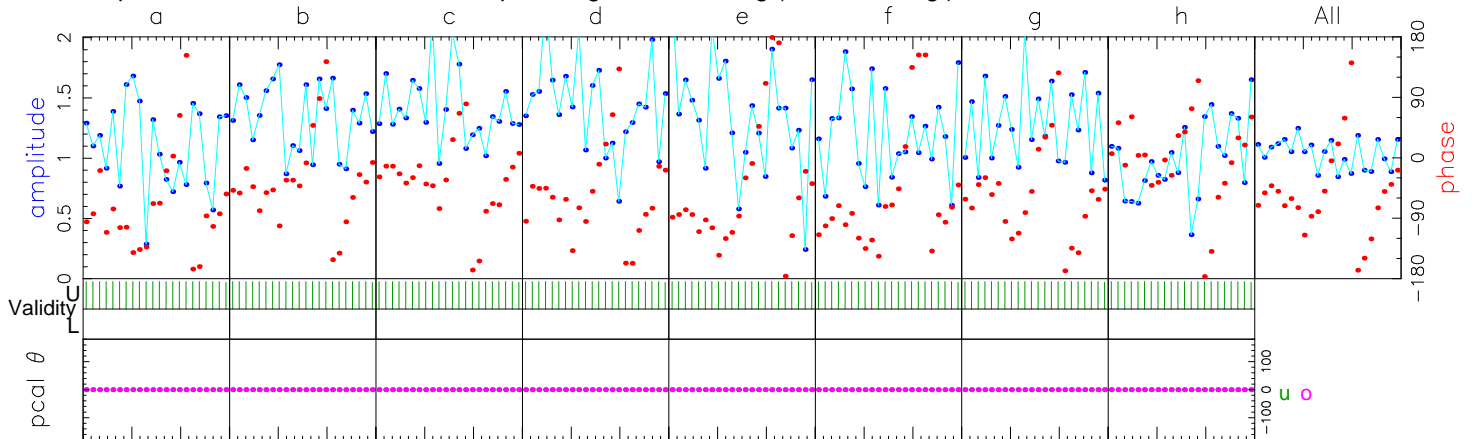


Fringe quality 6

SNR 24.5
 Int time 179.977
 Amp 0.669
 Phase -64.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.001704
 MBD 0.005792
 Fringe rate (Hz)
 -0.003365
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145445
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-96.4	-47.7	-26.5	-65.8	-100.5	-98.6	-66.9	7.8	Phase	-64.3
	0.7	0.8	1.0	1.0	0.8	0.8	0.7	0.5	Ampl.	0.8
	258.2	256.1	256.2	256.2	256.4	256.5	256.9	258.3	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 2.60909595570E+03 Apriori delay (usec) 2.60909016374E+03 Resid mbdelay (usec) 5.79196E-03 +/- 4.4E-05
 Sband delay (usec) 2.60908845999E+03 Apriori clock (usec) -1.8873156E+01 Resid sbdelay (usec) -1.70375E-03 +/- 3.5E-04
 Phase delay (usec) 2.60909016166E+03 Apriori clockrate (us/s) 5.0000000E-07 Resid phdelay (usec) -2.07439E-06 +/- 1.5E-07
 Delay rate (us/s) 1.28914040238E+00 Apriori rate (us/s) 1.28914044144E+00 Resid rate (us/s) -3.90628E-08 +/- 1.4E-09
 Total phase (deg) 189.2 Apriori accel (us/s/s) -1.60595712935E-05 Resid phase (deg) -64.3 +/- 4.7

ph/seg (deg) 59.8 11.0 Theor. Amplitude 0.669 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.3 19.1 Search (1024X32) 0.652 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.7 6.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.7 11.5 Inc. seg. avg. 1.022 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.779 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 50.3 el 53.0 pa -96.4 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11743.829 -1664.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo.W.246.1HV1N7

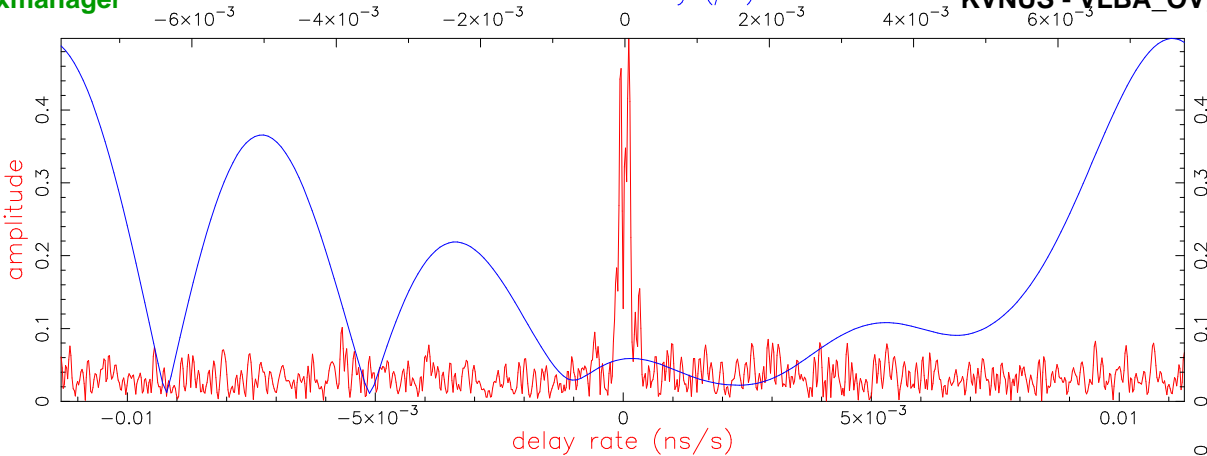
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, uo

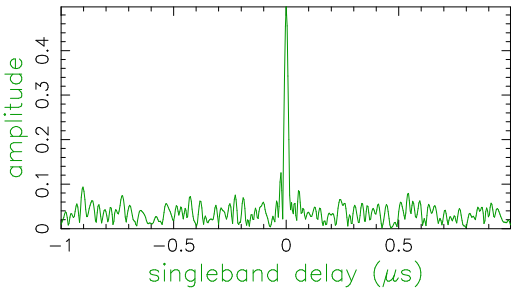
KVNUS - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

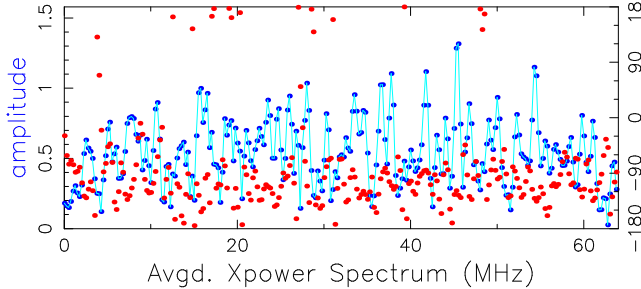


Fringe quality 8

SNR 18.3
 Int time 179.977
 Amp 0.498
 Phase 162.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.000005
 MBD 0.007585
 Fringe rate (Hz) 0.010268
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

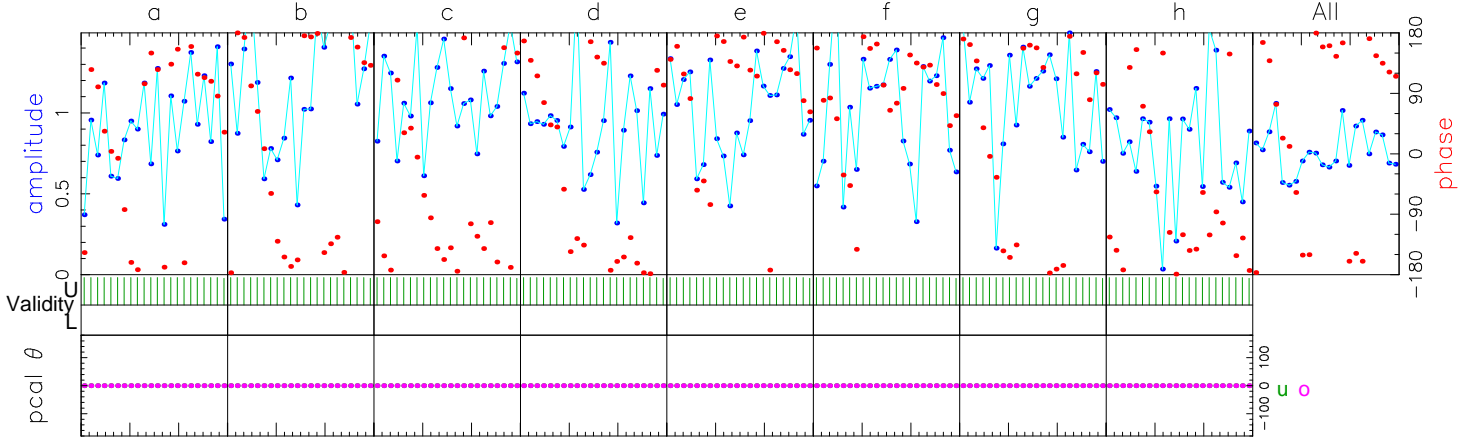


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145447
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	128.6	178.4	-150.1	170.8	139.2	103.1	158.2	-137.0	Phase	162.1
	0.5	0.8	0.6	0.5	0.7	0.7	0.7	0.5	Ampl.	0.6
	259.3	256.9	257.0	256.2	256.9	256.8	258.0	259.6	Sbd box	257.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.60909774911E+03 Apriori delay (usec) 2.60909016374E+03 Resid mbdelay (usec) 7.58537E-03 +/- 5.9E-05
 Sband delay (usec) 2.60909016849E+03 Apriori clock (usec) -1.8873156E+01 Resid sbdelay (usec) 4.75000E-06 +/- 4.7E-04
 Phase delay (usec) 2.60909016896E+03 Apriori clockrate (us/s) 5.0000000E-07 Resid phdelay (usec) 5.22712E-06 +/- 2.0E-07
 Delay rate (us/s) 1.28914056064E+00 Apriori rate (us/s) 1.28914044144E+00 Resid rate (us/s) 1.19201E-07 +/- 1.9E-09
 Total phase (deg) 55.7 Apriori accel (us/s/s) -1.60595712935E-05 Resid phase (deg) 162.1 +/- 6.3

ph/seg (deg) RMS Theor. Amplitude 0.498 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 62.6 14.7 Search (1024X32) 0.476 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 60.9 25.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.7 8.9 Inc. seg. avg. 0.745 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

u: az 50.3 el 53.0 pa -96.4 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11743.829 -1664.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo.W.255.1HV1N7

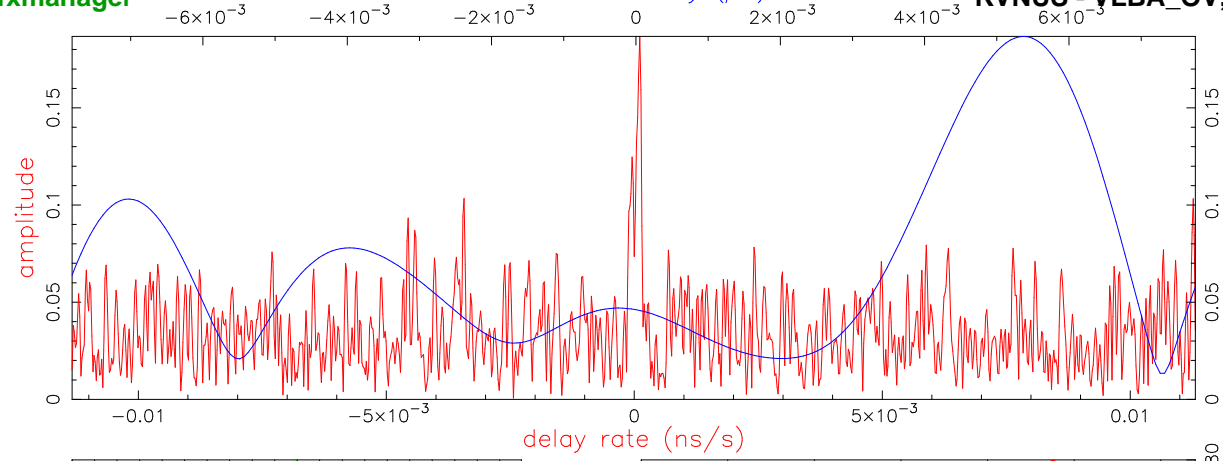
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

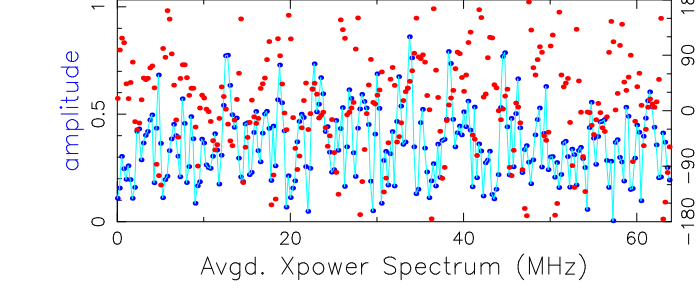
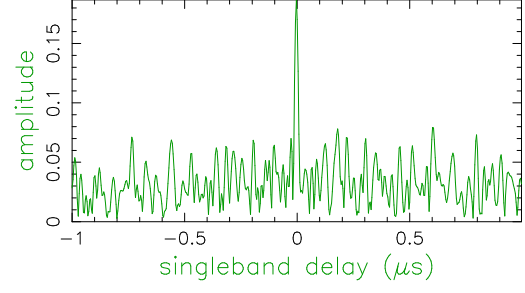
NRAO150.1HV1N7, No0150, uo

KVNUS - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

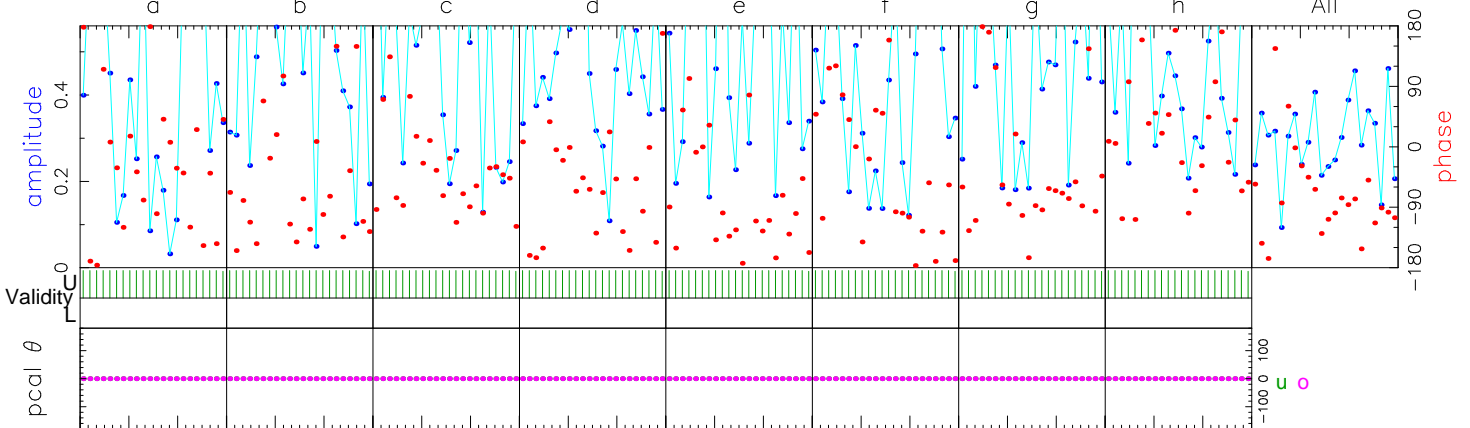


Fringe quality 0
 SNR 6.9
 Int time 179.977
 Amp 0.187
 Phase -88.8
 PFD 1.1e-03
 Delays (us)
 SBD -0.003811
 MBD 0.005372
 Fringe rate (Hz) 0.009686
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145450
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-113.4	-102.4	-51.9	-72.9	-102.0	-148.2	-101.7	-11.5	Phase	-88.8
	0.1	0.2	0.3	0.3	0.3	0.1	0.4	0.1	Ampl.	0.2
	345.4	255.2	255.6	256.3	255.4	111.0	256.3	386.8	Sbd box	256.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
u	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)	2.60907991099E+03		Apriori delay (usec)		2.60909016374E+03		Resid mbdelay (usec)		5.37225E-03	+/- 1.6E-04
Sband delay (usec)	2.60908635274E+03		Apriori clock (usec)		-1.8873156E+01		Resid sbdelay (usec)		-3.81100E-03	+/- 1.3E-03
Phase delay (usec)	2.60909016088E+03		Apriori clockrate (us/s)		5.0000000E-07		Resid phdelay (usec)		-2.86227E-06	+/- 5.4E-07
Delay rate (us/s)	1.28914055388E+00		Apriori rate (us/s)		1.28914044144E+00		Resid rate (us/s)		1.12441E-07	+/- 5.2E-09
Total phase (deg)	164.8		Apriori accel (us/s/s)		-1.60595712935E-05		Resid phase (deg)		-88.8	+/- 16.7

ph/seg (deg) 56.7 39.2 Search (1024X32) 0.186 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.6 68.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 45.2 23.7 Inc. seg. avg. 0.241 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.5 41.3 Inc. frq. avg. 0.201 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 50.3 el 53.0 pa -96.4 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11743.829 -1664.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo.W.275.1HV1N7

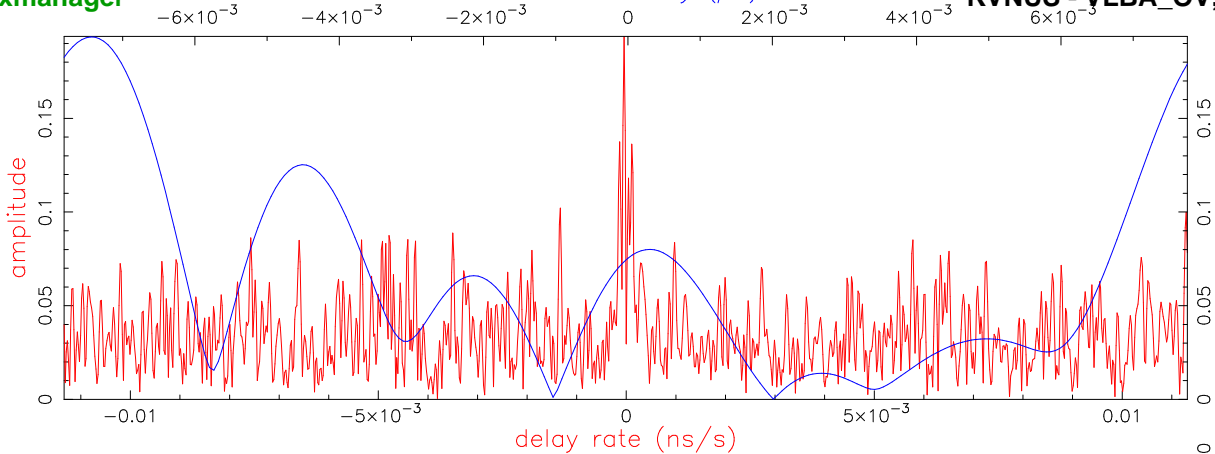
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, uo

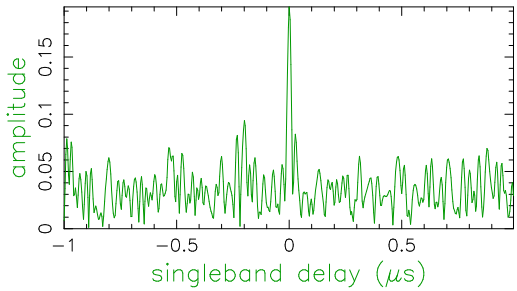
KVNUS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

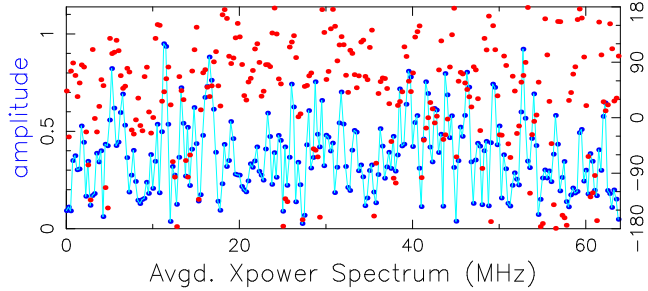


Fringe quality 0

SNR 7.1
 Int time 179.977
 Amp 0.194
 Phase 163.6
 PFD 1.8e-04
 Delays (us)
 SBD 0.000507
 MBD -0.007425
 Fringe rate (Hz)
 -0.004202
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

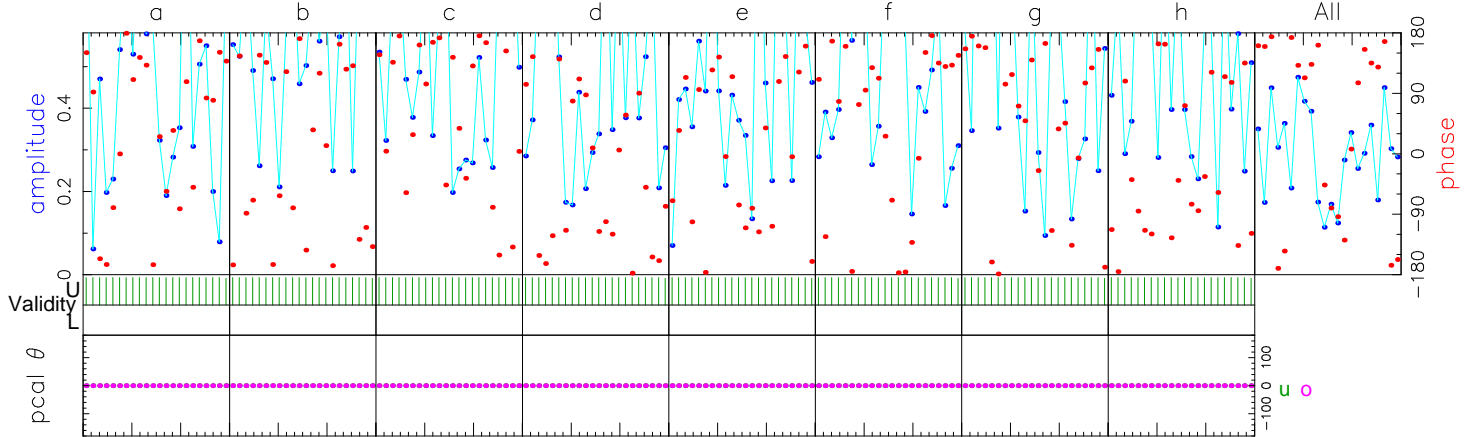


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145452
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
u:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	138.9	-166.2	169.5	-150.4	143.8	135.3	143.2	-136.2		
Sband delay (usec)	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2		
Phase delay (usec)	257.9	482.0	36.1	391.1	255.6	357.8	257.3	119.7		
Delay rate (us/s)	1.28914039266E+00				1.28914044144E+00					
Total phase (deg)			57.2							
Apriori delay (usec)	2.60909836373E+03				2.60909016374E+03					
Apriori clock (usec)	2.60909067074E+03				-1.8873156E+01					
Apriori clockrate (us/s)	2.60909016901E+03				5.0000000E-07					
Apriori rate (us/s)	1.28914039266E+00				1.28914044144E+00					
Apriori accel (us/s/s)					-1.60595712935E-05					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									163.6	+/- 16.1
Pcal mode:	MANUAL	MANUAL			MANUAL					
Pcal rate:	0.000E+00	0.000E+00			0.000E+00					
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
ion window (TEC)	0.00									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
simultaneous interpolator										

u: az 50.3 el 53.0 pa -96.4 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11743.829 -1664.231 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/uo.W.299.1HV1N7

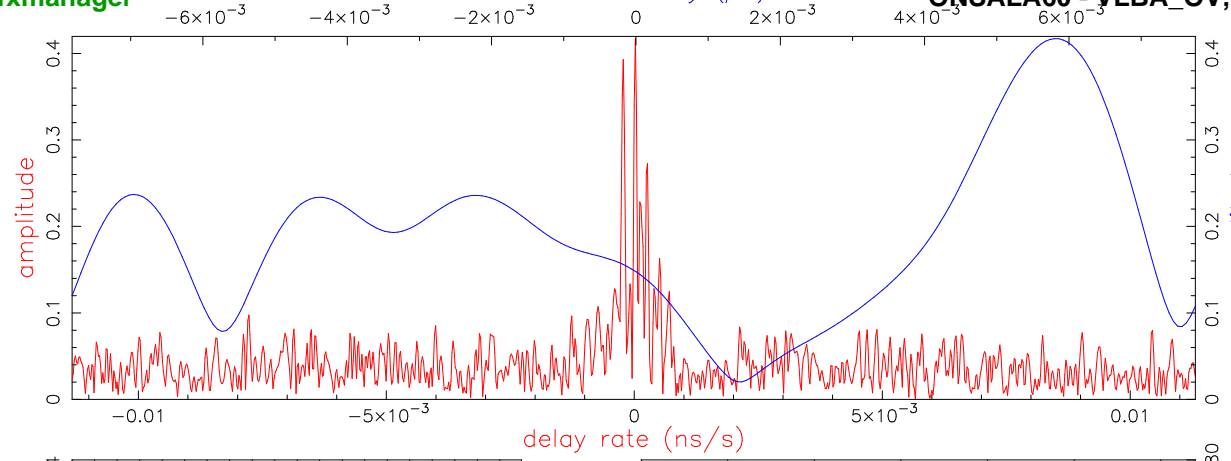
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, Xo

ONSALA60 - VLBA_OV, fgroup W, pol LL

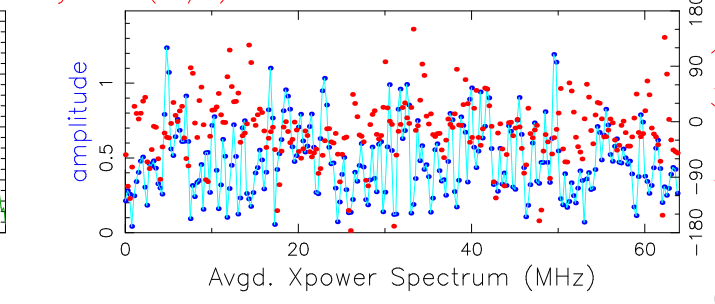
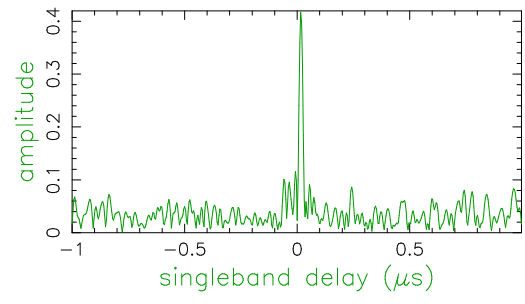
multiband delay (μ s)



Fringe quality 7

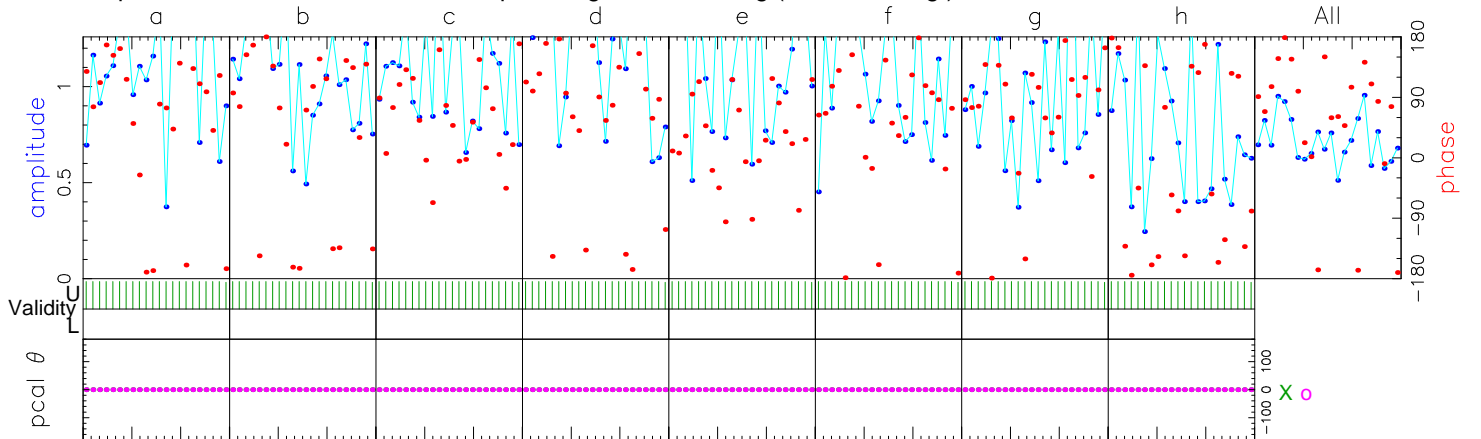
SNR 15.4
 Int time 179.970
 Amp 0.420
 Phase 110.9
 PFD 5.6e-45
 Delays (us)
 SBD 0.016641
 MBD 0.005851
 Fringe rate (Hz) 0.002100
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145448
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	123.6	148.0	63.8	132.6	25.2	107.6	107.7	-157.1	Phase	110.9
X	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.3	Ampl.	0.6
o	261.1	260.8	261.1	262.0	261.1	262.1	262.1	263.3	Sbd box	261.3
X:0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X:0	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
X:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
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)	-7.43412781456E+03	Apriori delay (usec)	-7.43414929070E+03	Resid mbdelay (usec)	5.85114E-03	+/-	7.0E-05
Sband delay (usec)	-7.43413264970E+03	Apriori clock (usec)	2.6899323E+01	Resid sbdelay (usec)	1.66410E-02	+/-	5.6E-04
Phase delay (usec)	-7.43414928713E+03	Apriori clockrate (us/s)	6.2800004E-07	Resid phdelay (usec)	3.57506E-06	+/-	2.4E-07
Delay rate (us/s)	8.51034081846E-01	Apriori rate (us/s)	8.51034057471E-01	Resid rate (us/s)	2.43758E-08	+/-	2.3E-09
Total phase (deg)	-213.5	Apriori accel (us/s/s)	6.05111085880E-05	Resid phase (deg)	110.9	+/-	7.4

ph/seg (deg)	59.1	Theor.	17.5	Amplitude	0.420 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	77.8	Search (1024X32)	0.416	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	57.8	Inc. seg. avg.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.571	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	

X: az 10.2 el 19.1 pa -8.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -7718.561 7214.423 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo.W.262.1HV1N7

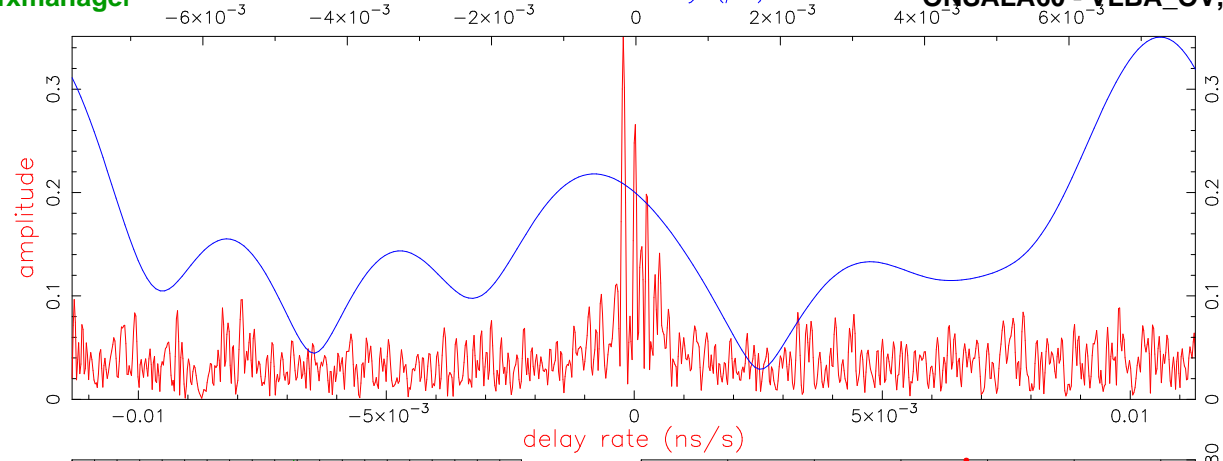
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, Xo

ONSALA60 - VLBA_OV, fgroup W, pol RR

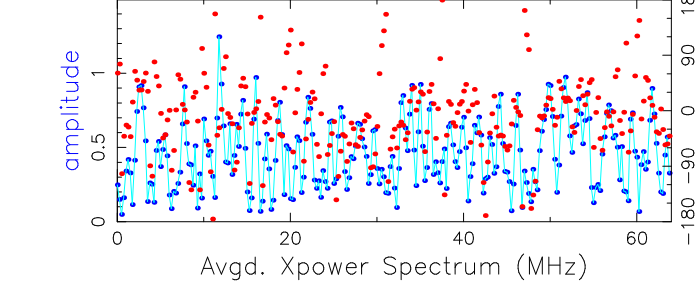
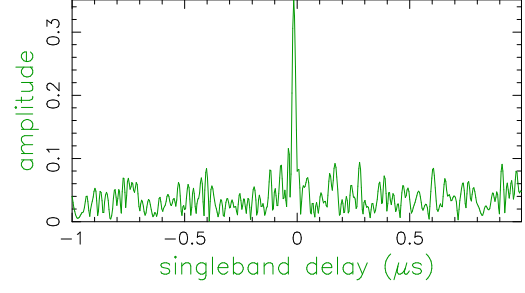
multiband delay (μ s)



Fringe quality 9

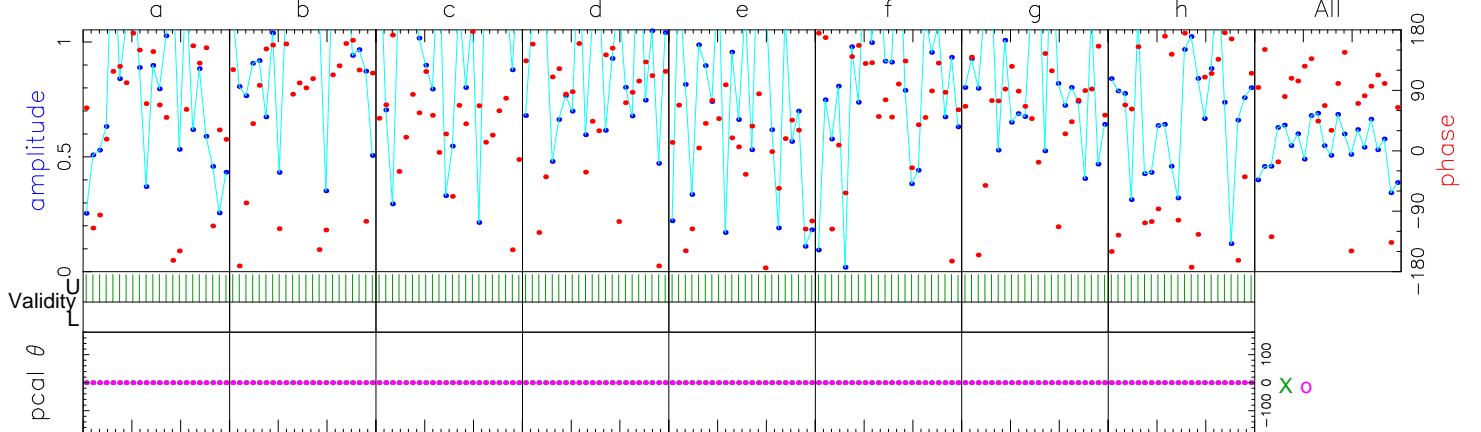
SNR 12.9
 Int time 179.970
 Amp 0.351
 Phase 99.0
 PFD 1.7e-29
 Delays (us)
 SBD -0.015105
 MBD 0.007276
 Fringe rate (Hz) -0.018369
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145450
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-7.43415763932E+03	Apriori delay (usec)	-7.43414929070E+03	Resid mbdelay (usec)	7.27638E-03	+/-	8.4E-05
Sband delay (usec)	-7.43416439545E+03	Apriori clock (usec)	2.6899323E+01	Resid sbdelay (usec)	-1.51048E-02	+/-	6.7E-04
Phase delay (usec)	-7.43414928751E+03	Apriori clockrate (us/s)	6.2800004E-07	Resid phdelay (usec)	3.19285E-06	+/-	2.9E-07
Delay rate (us/s)	8.51033844226E-01	Apriori rate (us/s)	8.51034057471E-01	Resid rate (us/s)	-2.13245E-07	+/-	2.8E-09
Total phase (deg)		Apriori accel (us/s/s)	6.05111085880E-05	Resid phase (deg)	99.0	+/-	8.9

ph/seg (deg)	59.5	Theor.	Amplitude	0.351 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.2	Search (1024X32)	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)	51.1	Inc. seg. avg.	Inc. seg. avg.	0.517	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.4	Inc. frq. avg.	Inc. frq. avg.	0.464	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 10.2 el 19.1 pa -8.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -7718.561 7214.423 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo.W.279.1HV1N7

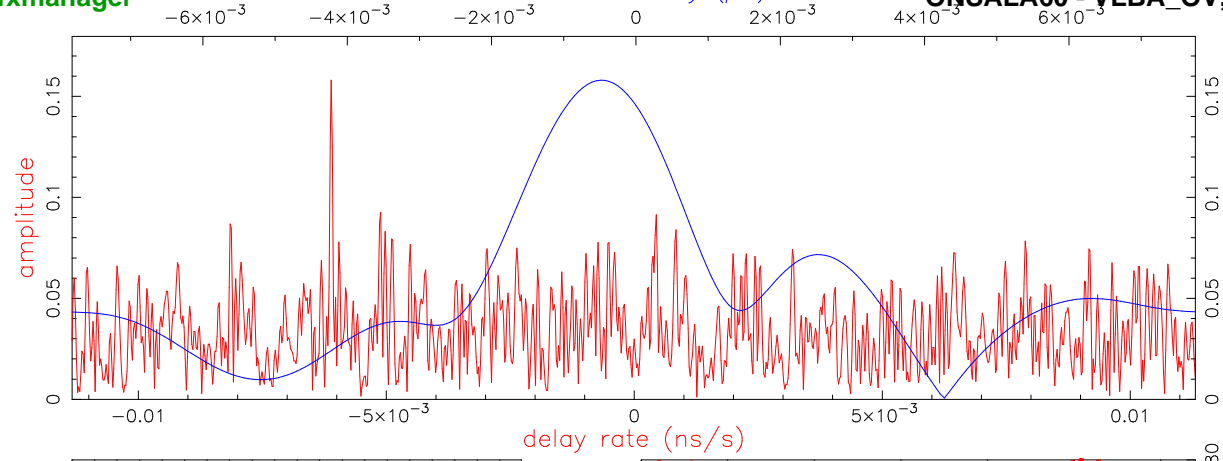
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, Xo

ONSALA60 - VLBA_OV, fgroup W, pol LR

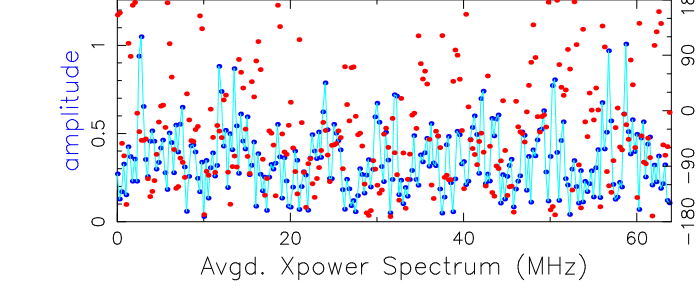
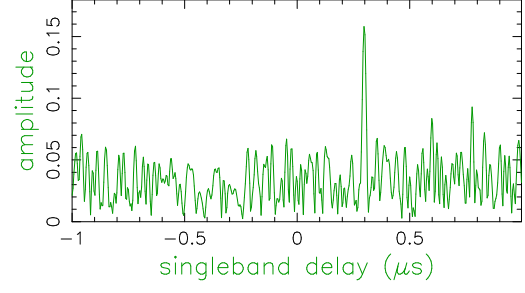
multiband delay (μ s)



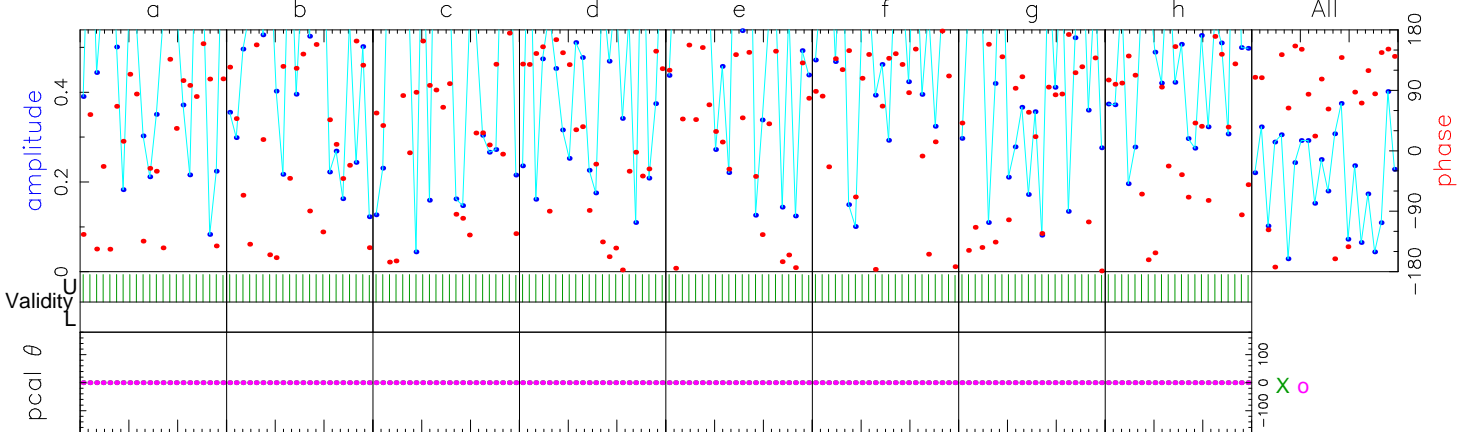
Fringe quality 0

SNR 5.8
 Int time 179.970
 Amp 0.180
 Phase 132.1
 PFD 5.0e-01
 Delays (us)
 SBD 0.297885
 MBD -0.000451
 Fringe rate (Hz)
 -0.526752
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Yr:day 16383
 Xpr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145452
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	113.4	-173.2	105.5	173.4	117.4	126.8	140.9	128.9	Phase	132.1
	0.2	0.2	0.2	0.1	0.3	0.3	0.2	0.1	Ampl.	0.2
	244.5	469.6	241.5	223.8	333.3	334.0	5.9	465.1	Sbd box	333.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.43385286706E+03		Apriori delay (usec)		-7.43414929070E+03		Resid mbdelay (usec)		-4.51360E-04	+/- 1.9E-04
Sband delay (usec)	-7.43385140545E+03		Apriori clock (usec)		2.6899323E+01		Resid sbdelay (usec)		2.97885E-01	+/- 1.5E-03
Phase delay (usec)	-7.43414928644E+03		Apriori clockrate (us/s)		6.2800004E-07		Resid phdelay (usec)		4.26097E-06	+/- 6.3E-07
Delay rate (us/s)	8.51027942397E-01		Apriori rate (us/s)		8.51034057471E-01		Resid rate (us/s)		-6.11507E-06	+/- 6.1E-09
Total phase (deg)			Apriori accel (us/s/s)		6.05111085880E-05		Resid phase (deg)		132.1	+/- 19.6

ph/seg (deg) 53.4 46.1 Search (1024X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.9 80.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.9 27.8 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 48.5 Inc. frq. avg. 0.175 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 10.2 el 19.1 pa -8.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -7718.561 7214.423 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo.W.301.1HV1N7

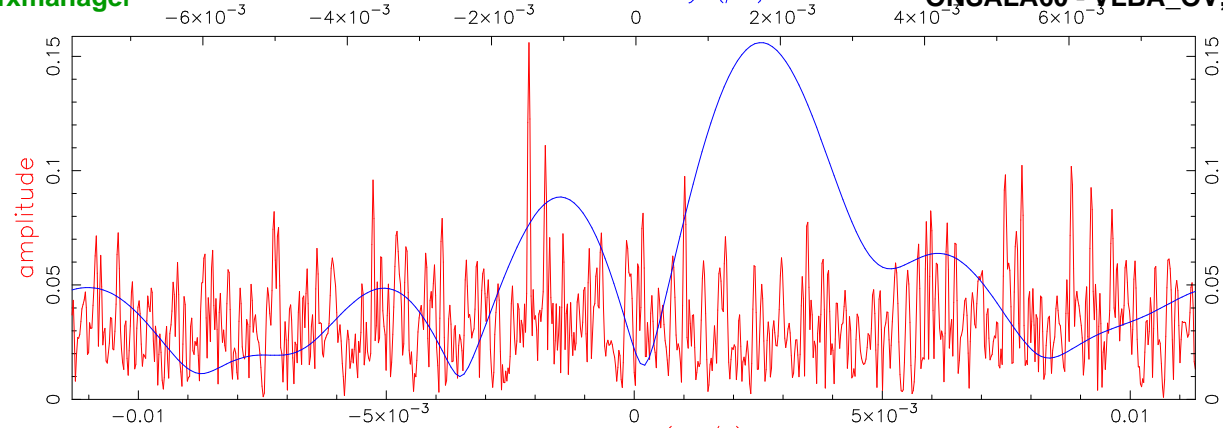
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, Xo

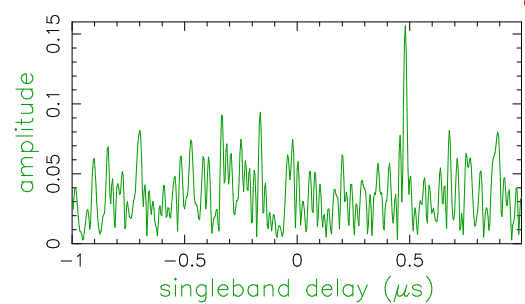
ONSALA60 - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

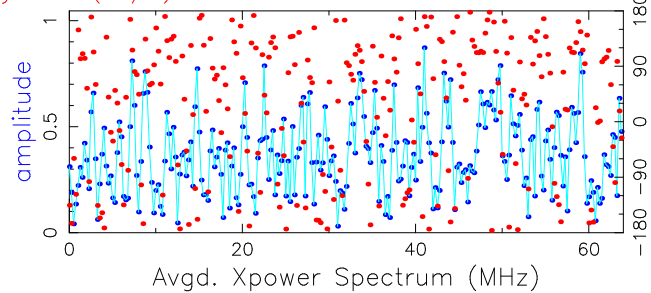


Fringe quality 0

SNR 5.7
 Int time 179.970
 Amp 0.159
 Phase -132.7
 PFD 6.9e-01
 Delays (us)
 SBD 0.479786
 MBD 0.001707
 Fringe rate (Hz)
 -0.182613
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

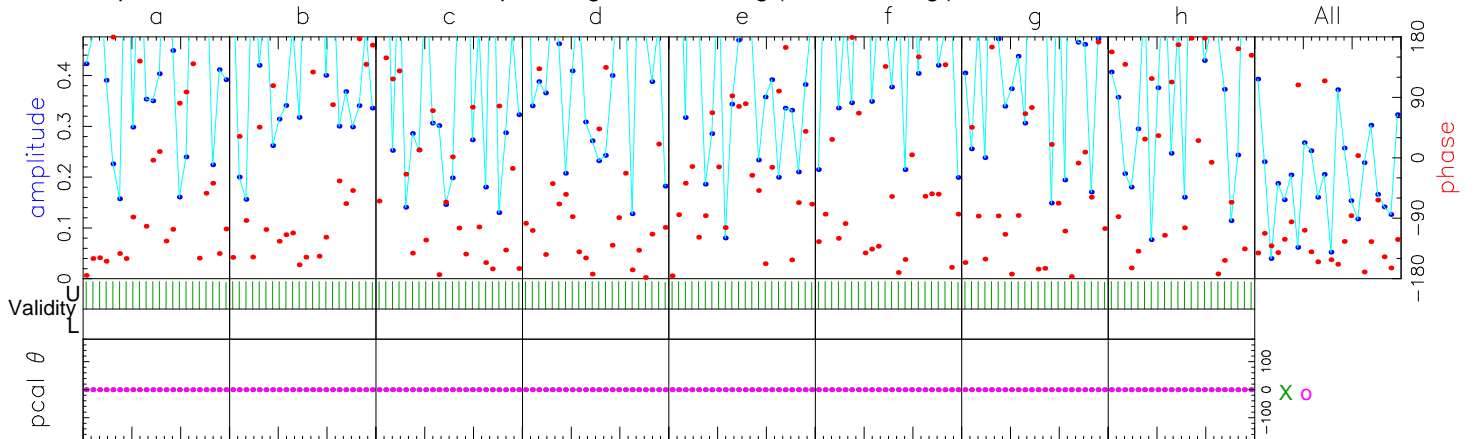


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145454
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.8	-150.0	-147.7	-108.8	-38.3	-113.2	-136.4	-170.9	Phase	-132.7
	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	382.2	132.2	77.8	481.9	335.0	239.7	118.4	374.2	Sbd box	379.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-7.43366320834E+03	Apriori delay (usec)	-7.43414929070E+03	Resid mbdelay (usec)	1.70736E-03	+/-	1.9E-04
Sband delay (usec)	-7.43366950470E+03	Apriori clock (usec)	2.6899323E+01	Resid sbdelay (usec)	4.79786E-01	+/-	1.5E-03
Phase delay (usec)	-7.43414929498E+03	Apriori clockrate (us/s)	6.2800004E-07	Resid phdelay (usec)	-4.28080E-06	+/-	6.4E-07
Delay rate (us/s)	8.51031937510E-01	Apriori rate (us/s)	8.51034057471E-01	Resid rate (us/s)	-2.11996E-06	+/-	6.2E-09
Total phase (deg)	-97.1	Apriori accel (us/s/s)	6.05111085880E-05	Resid phase (deg)	-132.7	+/-	20.0

ph/seg (deg)	52.0	Theor.	46.8	Amplitude	0.159 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.1	Search (1024X32)	0.152	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	44.6	Inc. seg. avg.	0.152	Inc. frq. avg.	0.162	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	30.5	Inc. frq. avg.	0.162			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 10.2 el 19.1 pa -8.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -7718.561 7214.423 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Xo.W.315.1HV1N7

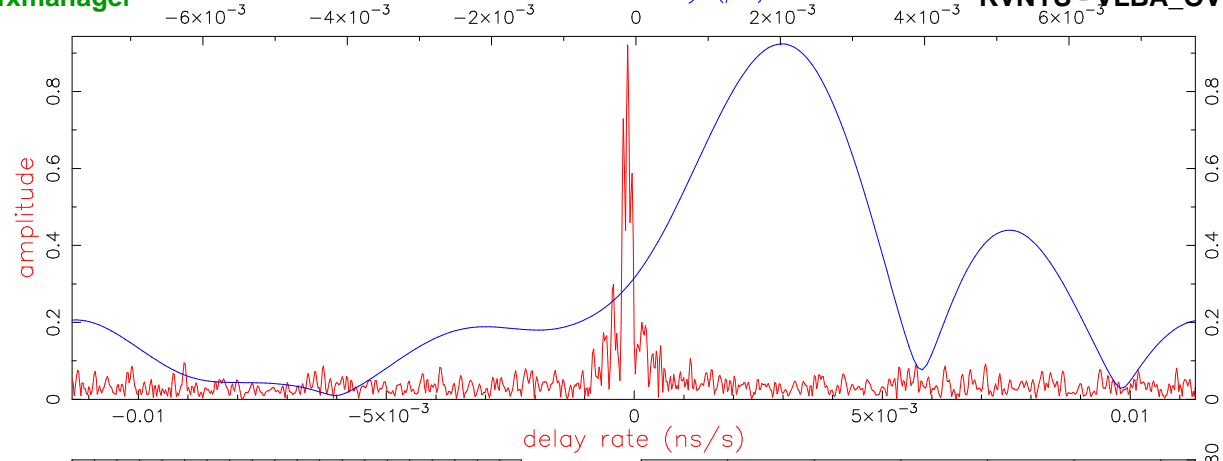
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1HV1N7, No0150, yo

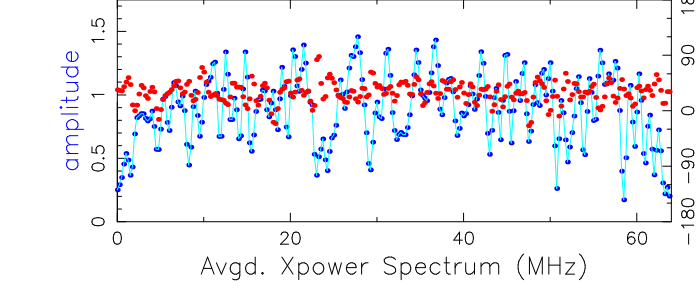
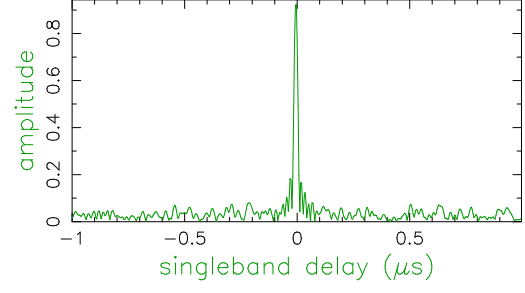
KVNYS - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)



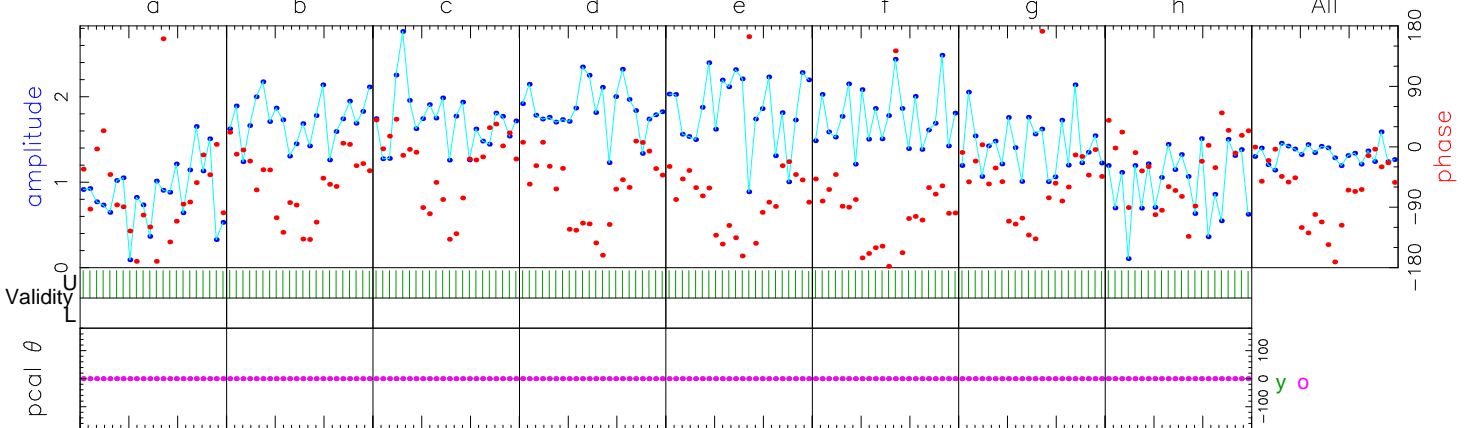
Fringe quality 4

SNR 34.6
 Int time 179.956
 Amp 0.943
 Phase -62.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.005811
 MBD 0.002126
 Fringe rate (Hz)
 -0.011390
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145449
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.8	-49.7	-20.7	-59.3	-84.6	-106.2	-59.7	-25.2	Phase	-62.0
	0.5	1.2	1.1	1.2	1.3	1.2	1.0	0.7	Ampl.	1.0
	257.8	255.6	255.1	255.2	255.1	255.5	255.8	257.7	Sbd box	255.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	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) 2.56470700220E+03 Apriori delay (usec) 2.56472050106E+03 Resid mbdelay (usec) 2.12614E-03 +/- 3.1E-05
 Sband delay (usec) 2.56471469006E+03 Apriori clock (usec) -2.0161861E+01 Resid sbdelay (usec) -5.81100E-03 +/- 2.5E-04
 Phase delay (usec) 2.56472049906E+03 Apriori clockrate (us/s) 1.9999998E-07 Resid phdelay (usec) -2.00085E-06 +/- 1.1E-07
 Delay rate (us/s) 1.29505091431E+00 Apriori rate (us/s) 1.29505104653E+00 Resid rate (us/s) -1.32223E-07 +/- 1.0E-09
 Total phase (deg) 284.0 Apriori accel (us/s/s) -1.33486823431E-05 Resid phase (deg) -62.0 +/- 3.3

ph/seg (deg) 48.6 7.8 Search (1024X32) 0.921 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.6 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) 31.5 4.7 Inc. seg. avg. 1.320 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.3 8.2 Inc. frq. avg. 1.031 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 52.5 el 52.8 pa -91.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11796.627 -1243.309 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo.W.268.1HV1N7

Mk4/DiFX fourfit 3.21 rev 2937

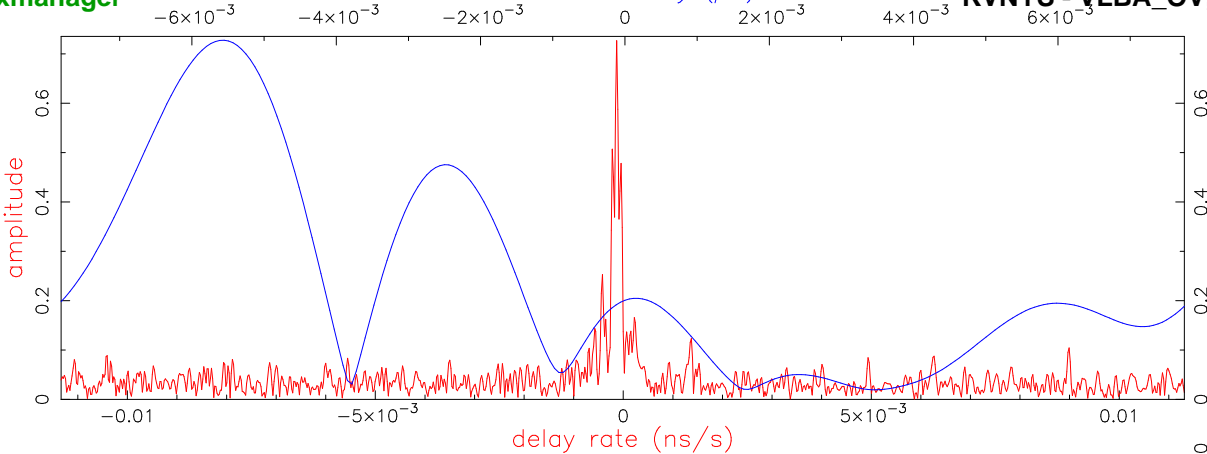
fxmanager

NRAO150.1HV1N7, No0150, yo

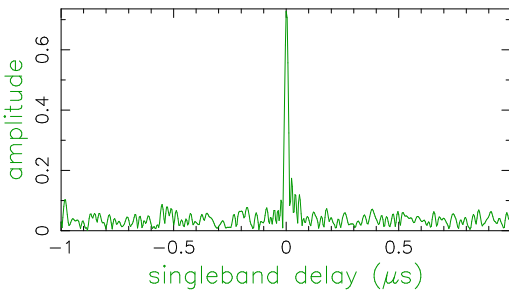
KVNYS - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

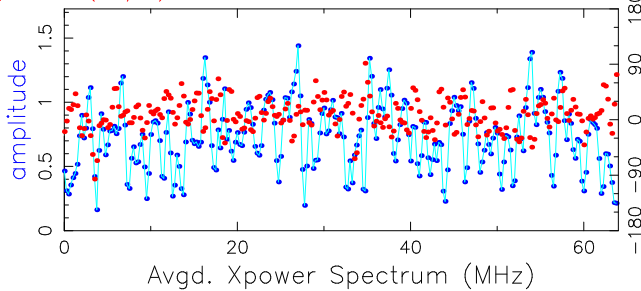
Fringe quality 6



SNR 27.0
 Int time 179.956
 Amp 0.736
 Phase 86.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.001368
 MBD -0.005510
 Fringe rate (Hz)
 -0.011338
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

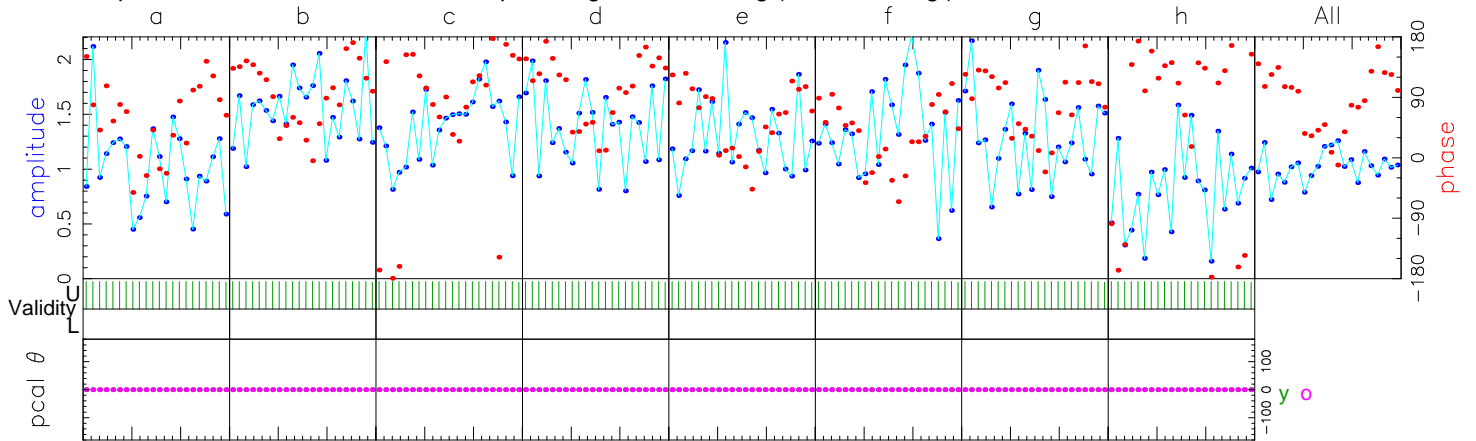


delay rate (ns/s)



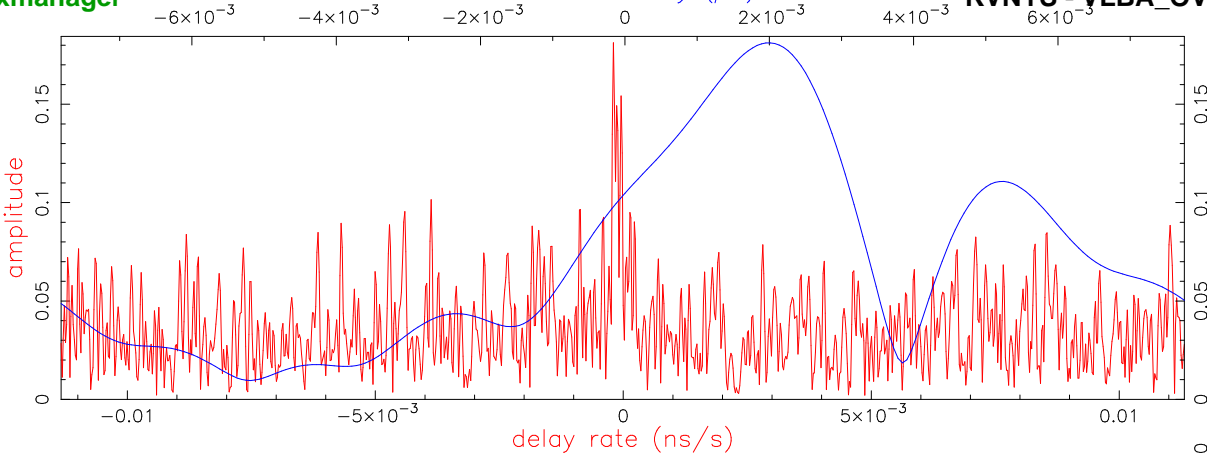
Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145450
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



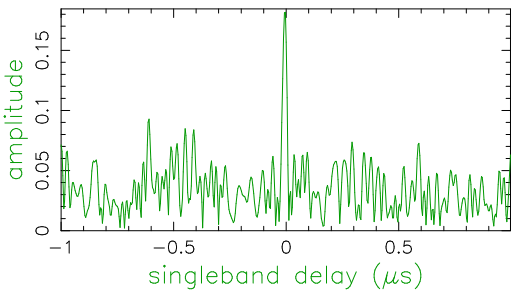
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All			
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0					
y	1000	1000	1000	1000	1000	1000	1000	1000					
o	1000	1000	1000	1000	1000	1000	1000	1000					
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0					
y	1000	1000	1000	1000	1000	1000	1000	1000					
o	1000	1000	1000	1000	1000	1000	1000	1000					
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR					
Group delay (usec)(sbd)		2.56471499089E+03				2.56472050106E+03			Resid mbdelay (usec)	-5.51017E-03	+/- 4.0E-05		
Sband delay (usec)		2.56472186906E+03				-2.0161861E+01			Resid sbdelay (usec)	1.36800E-03	+/- 3.2E-04		
Phase delay (usec)		2.56472050385E+03				1.9999998E-07			Resid phdelay (usec)	2.78588E-06	+/- 1.4E-07		
Delay rate (us/s)		1.29505091491E+00				1.29505104653E+00			Resid rate (us/s)	-1.31622E-07	+/- 1.3E-09		
Total phase (deg)			72.5			-1.33486823431E-05			Resid phase (deg)	86.4	+/- 4.2		
	RMS	Theor.	Amplitude	0.736 +/- 0.027					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	45.7	10.0	Search (1024X32)	0.717					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	43.6	17.4	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	40.8	6.0	Inc. seg. avg.	1.010					Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	28.3	10.5	Inc. frq. avg.	0.867					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
y: az 52.5 el 52.8 pa -91.8			o: az 308.8 el 42.9 pa 80.6			u,v (fr/asec) -11796.627 -1243.309						simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo..1HV1N7			Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo.W.282.1HV1N7							

multiband delay (μ s)

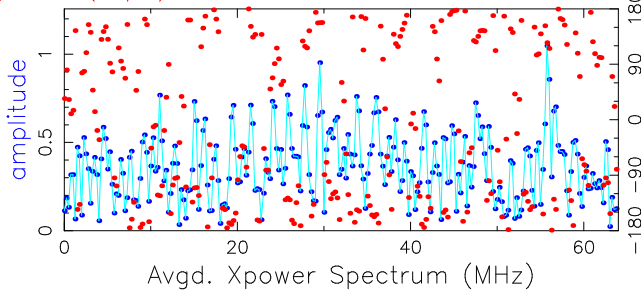


Fringe quality 0

SNR 6.8
Int time 179.956
Amp 0.184
Phase 95.7
PFD 1.9e-03
Delays (us)
SBD -0.005765
MBD 0.002009
Fringe rate (Hz)
-0.017991
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

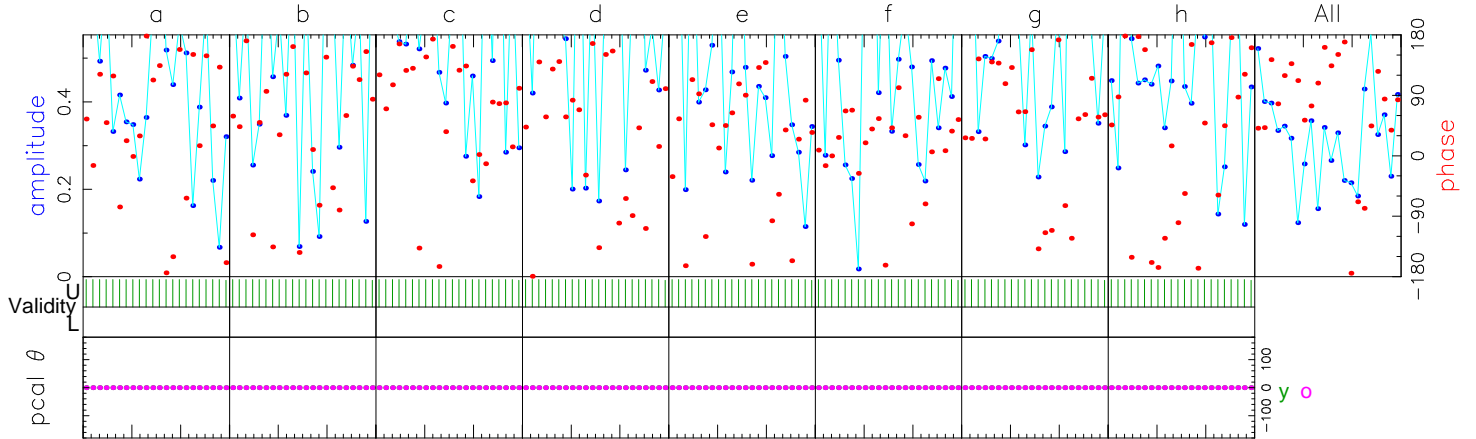


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 150000.00
Stop 150300.22
FRT 150130.00
Corr/FF/build
2021:008:174658
2021:010:145452
2020:247:085004
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.56472250980E+03	Apriori delay (usec)	2.56472050106E+03	Resid mbdelay (usec)	2.00874E-03	+/-	1.6E-04
Sband delay (usec)	2.56471473581E+03	Apriori clock (usec)	-2.0161861E+01	Resid sbdelay (usec)	-5.76525E-03	+/-	1.3E-03
Phase delay (usec)	2.56472050415E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	3.08571E-06	+/-	5.5E-07
Delay rate (us/s)	1.29505083768E+00	Apriori rate (us/s)	1.29505104653E+00	Resid rate (us/s)	-2.08856E-07	+/-	5.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.33486823431E-05	Resid phase (deg)	95.7	+/-	16.9

ph/seg (deg)	67.5	Theor.	Amplitude	0.184 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	94.9	39.7	Search (1024X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	45.0	23.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.4	41.8	Inc. seg. avg.	0.260	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg.	0.214	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 52.5 el 52.8 pa -91.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11796.627 -1243.309 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo.W.298.1HV1N7

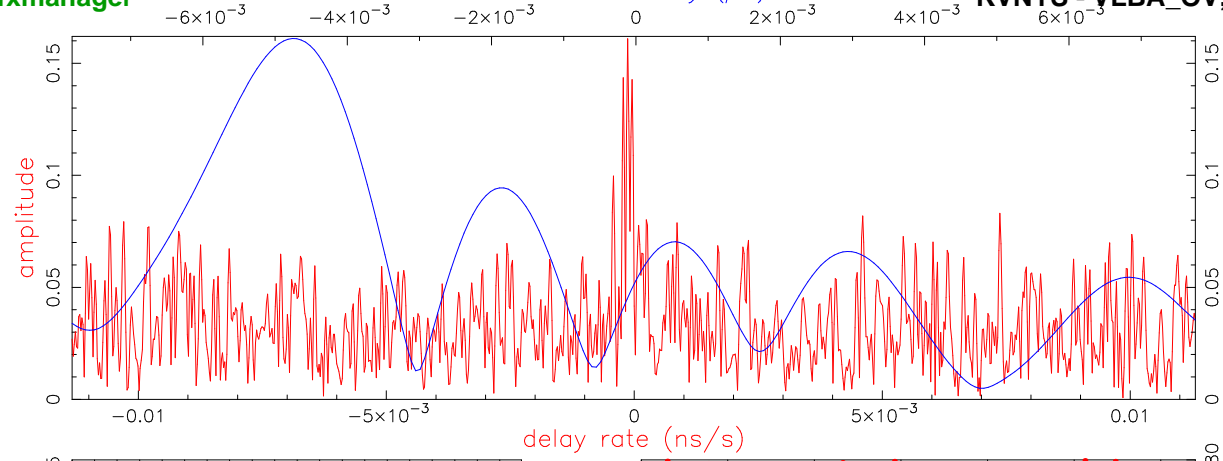
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

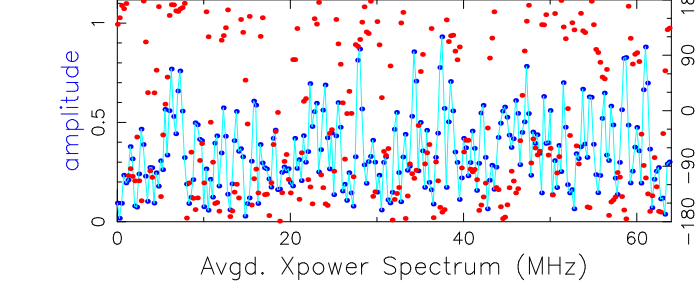
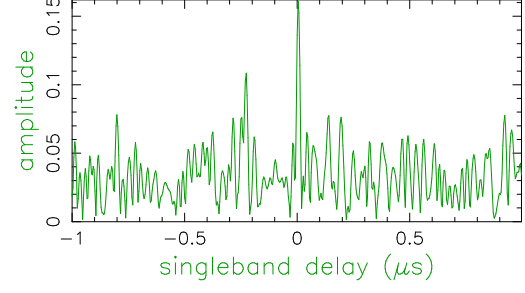
NRAO150.1HV1N7, No0150, yo

KVNYS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

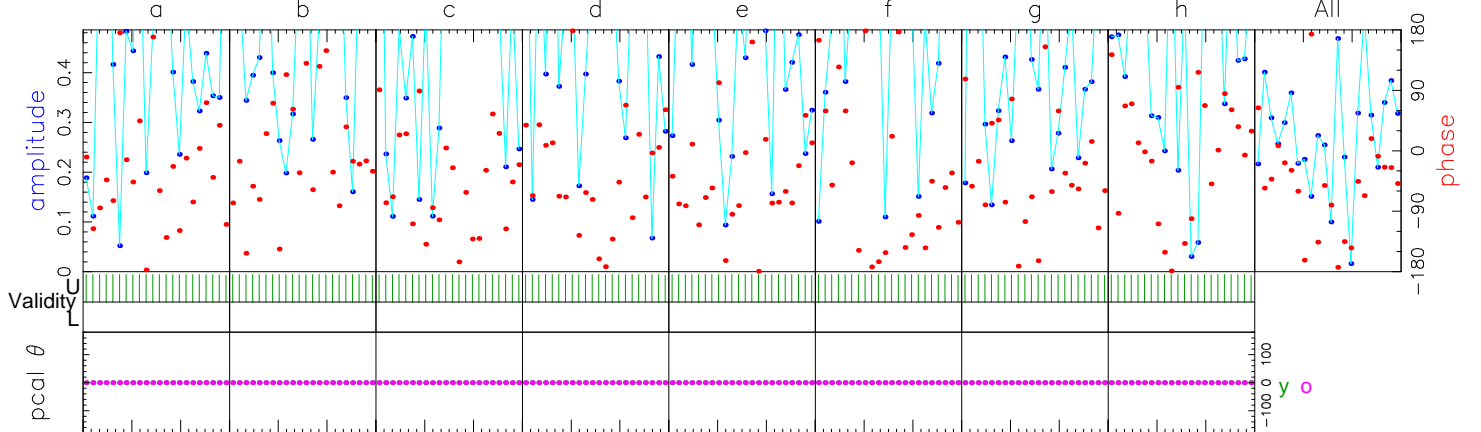


Fringe quality 0
 SNR 5.9
 Int time 179.956
 Amp 0.162
 Phase -49.9
 PFD 3.0e-01
 Delays (us)
 SBD 0.004874
 MBD -0.004696
 Fringe rate (Hz)
 -0.011271
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145454
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-53.4	-22.1	-31.5	-35.5	-73.6	-123.6	-60.7	25.2	Phase	-49.9
	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
	234.8	474.7	405.9	284.9	257.6	248.9	399.9	260.9	Sbd box	258.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.56473142973E+03		Apriori delay (usec)		2.56472050106E+03		Resid mbdelay (usec)		-4.69633E-03	+/- 1.8E-04
Sband delay (usec)	2.56472537481E+03		Apriori clock (usec)		-2.0161861E+01		Resid sbdelay (usec)		4.87375E-03	+/- 1.4E-03
Phase delay (usec)	2.56472049945E+03		Apriori clockrate (us/s)		1.9999998E-07		Resid phdelay (usec)		-1.60856E-06	+/- 6.2E-07
Delay rate (us/s)	1.29505091568E+00		Apriori rate (us/s)		1.29505104653E+00		Resid rate (us/s)		-1.30847E-07	+/- 6.0E-09
Total phase (deg)	296.2		Apriori accel (us/s/s)		-1.33486823431E-05		Resid phase (deg)		-49.9	+/- 19.3

ph/seg (deg) 66.4 45.2 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 100.5 78.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.7 27.3 Inc. seg. avg. 0.214 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.5 47.6 Inc. frq. avg. 0.179 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 52.5 el 52.8 pa -91.8 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -11796.627 -1243.309 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/yo.W.311.1HV1N7

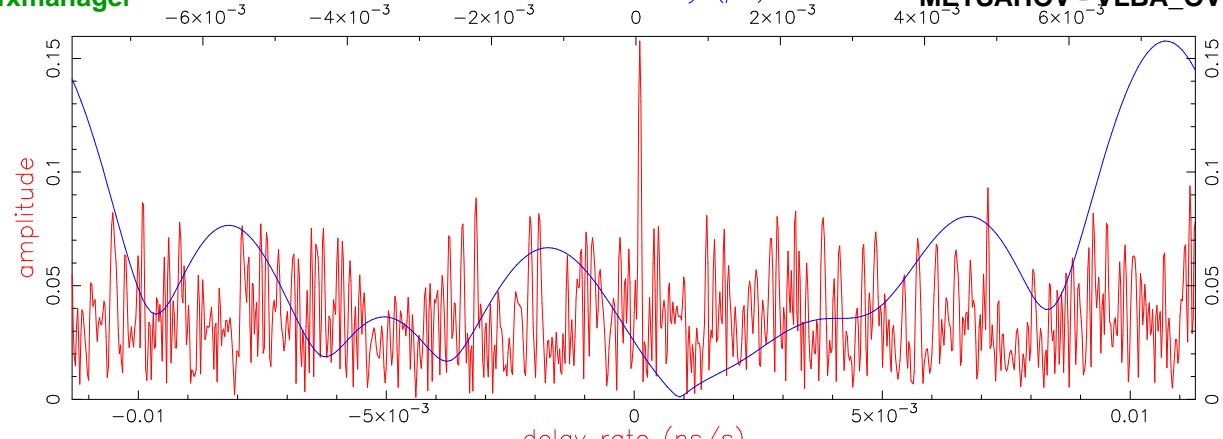
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

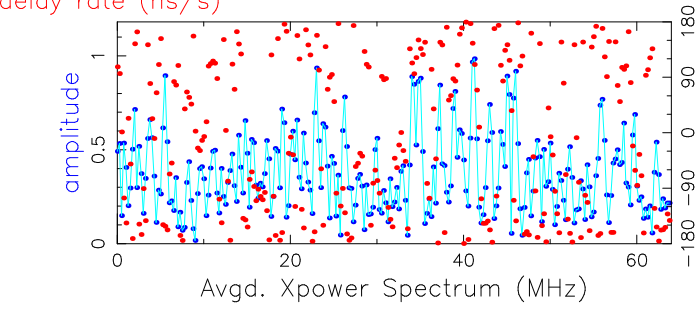
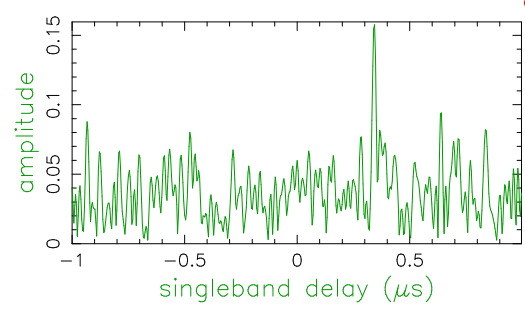
NRAO150.1HV1N7, No0150, Zo

MEṬSAHOV - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

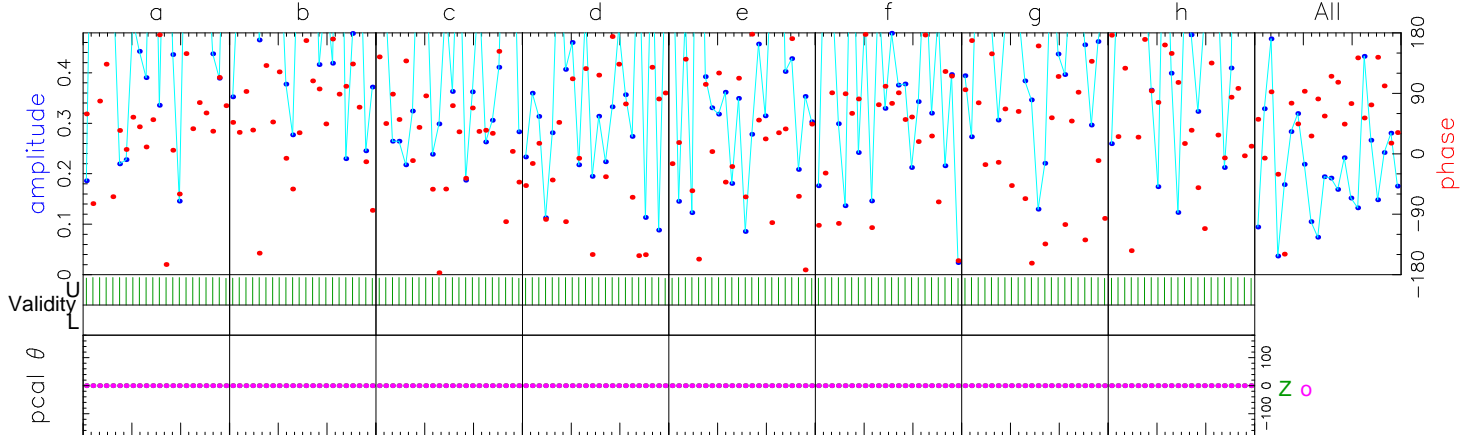


Fringe quality 0
 SNR 5.9
 Int time 179.702
 Amp 0.160
 Phase 67.8
 PFD 4.6e-01
 Delays (us)
 SBD 0.342257
 MBD 0.007322
 Fringe rate (Hz) 0.009122
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145456
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.97561332369E+03		Apriori delay (usec)		-5.97594877085E+03		Resid mbdelay (usec)		7.32215E-03	+/- 1.9E-04
Sband delay (usec)	-5.97560651410E+03		Apriori clock (usec)		-2.1256271E+01		Resid sbdelay (usec)		3.42257E-01	+/- 1.5E-03
Phase delay (usec)	-5.97594876866E+03		Apriori clockrate (us/s)		1.1600001E-07		Resid phdelay (usec)		2.18635E-06	+/- 6.3E-07
Delay rate (us/s)	9.37762467716E-01		Apriori rate (us/s)		9.37762361817E-01		Resid rate (us/s)		1.05898E-07	+/- 6.1E-09
Total phase (deg)	24.3		Apriori accel (us/s/s)		5.47458640151E-05		Resid phase (deg)		67.8	+/- 19.6

ph/seg (deg) 52.6 45.9 Search (1024X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.8 80.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.5 27.7 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.2 48.3 Inc. frq. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 18.7 el 23.5 pa -14.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -8511.585 6799.367 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo.W.328.1HV1N7

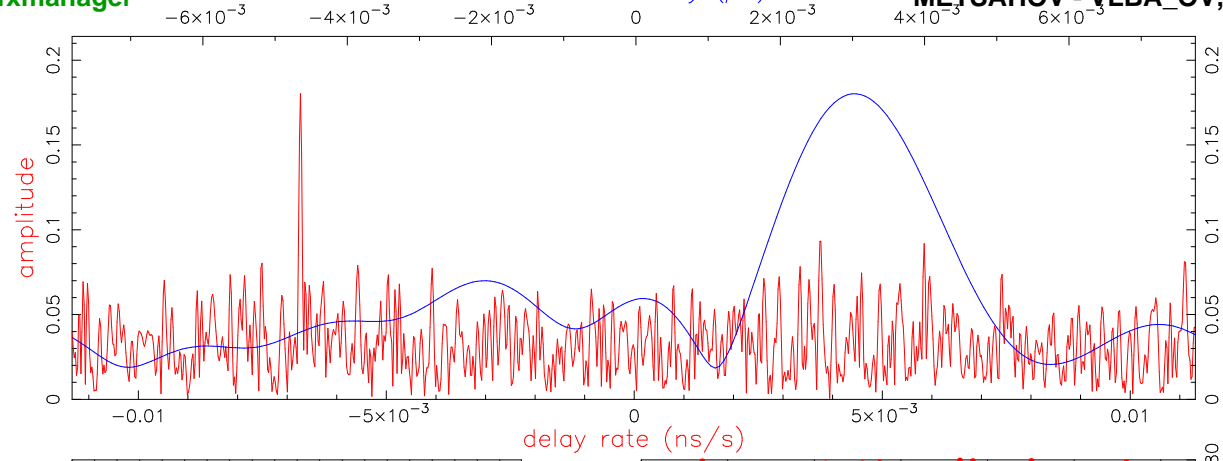
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

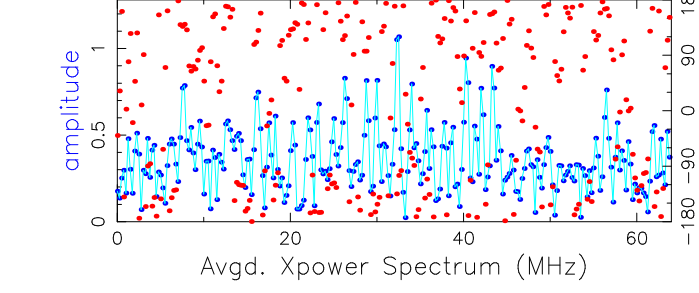
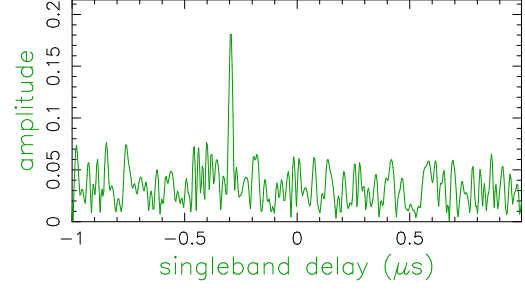
NRAO150.1HV1N7, No0150, Zo

METSAHOV - VLBA_OV, fgroup W, pol RR

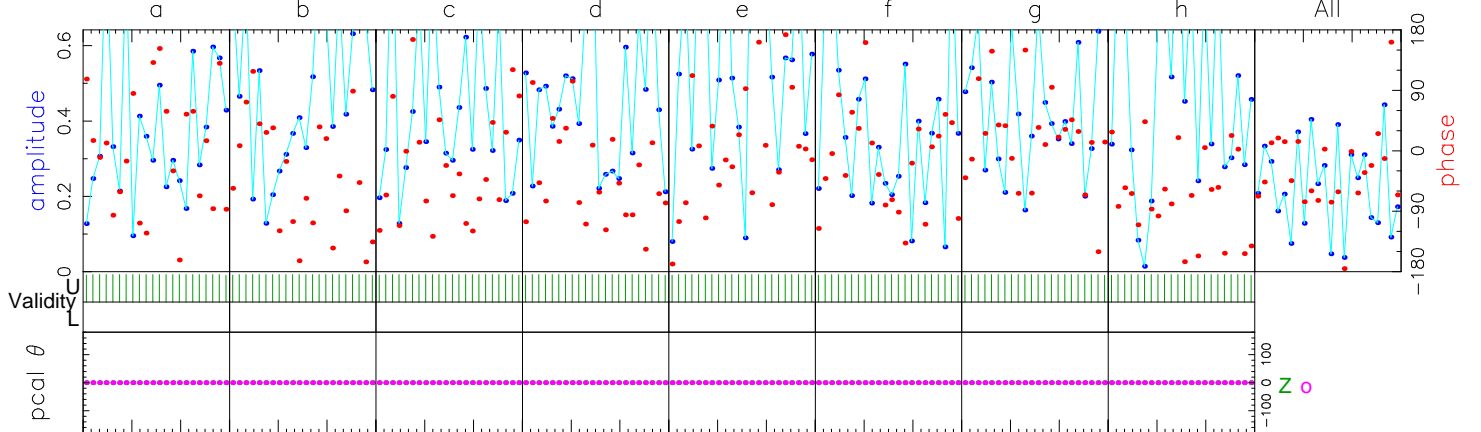
multiband delay (μ s)



Fringe quality 0
 SNR 6.8
 Int time 179.702
 Amp 0.214
 Phase -28.9
 PFD 2.1e-03
 Delays (us)
 SBD -0.294869
 MBD 0.003012
 Fringe rate (Hz) -0.581392
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145458
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-19.0	-31.6	-47.3	-39.7	-29.2	-8.1	19.2	-58.4	Phase	-28.9
	0.1	0.2	0.2	0.3	0.3	0.2	0.3	0.3	Ampl.	0.2
	317.0	191.3	420.8	71.6	61.8	420.4	328.0	181.2	Sbd box	181.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	Manl 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.97624263340E+03	Apriori delay (usec)	-5.97594877085E+03	Resid mbdelay (usec)	3.01245E-03	+/-	1.6E-04
Sband delay (usec)	-5.97624363960E+03	Apriori clock (usec)	-2.1256271E+01	Resid sbdelay (usec)	-2.94869E-01	+/-	1.3E-03
Phase delay (usec)	-5.97594877178E+03	Apriori clockrate (us/s)	1.1600001E-07	Resid phdelay (usec)	-9.33128E-07	+/-	5.5E-07
Delay rate (us/s)	9.37755612428E-01	Apriori rate (us/s)	9.37762361817E-01	Resid rate (us/s)	-6.74939E-06	+/-	5.3E-09
Total phase (deg)	-72.4	Apriori accel (us/s/s)	5.47458640151E-05	Resid phase (deg)	-28.9	+/-	17.0

ph/seg (deg)	58.7	Theor.	39.8	Amplitude	0.214 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.1		69.5	Search (1024X32)	0.176	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.4		24.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	36.5		41.9	Inc. seg. avg.	0.214	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.211	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

Z: az 18.7 el 23.5 pa -14.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -8511.585 6799.367 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo.W.339.1HV1N7

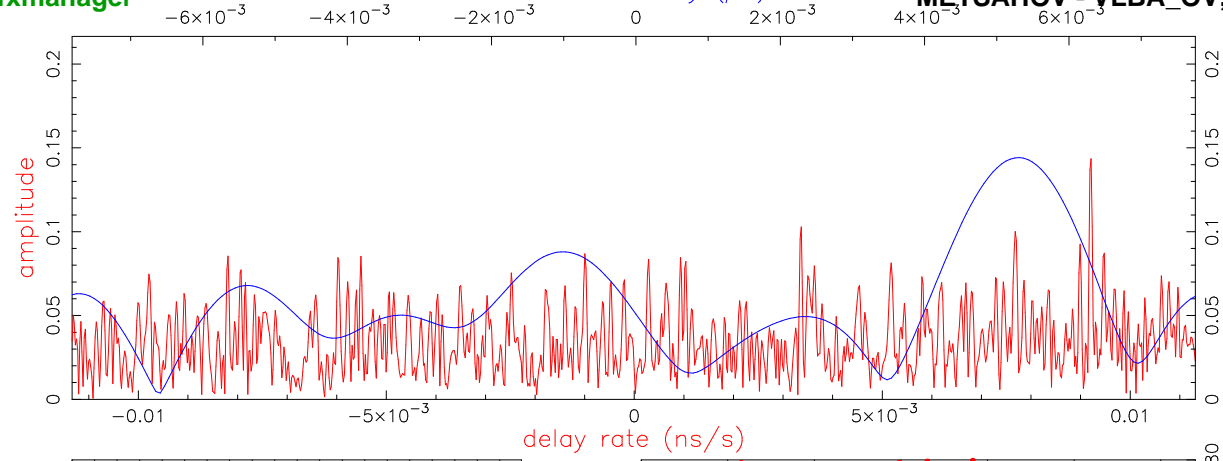
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

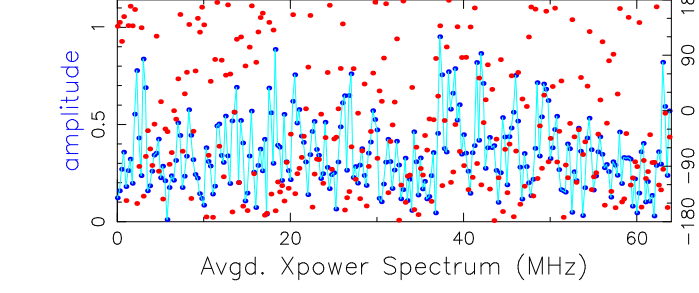
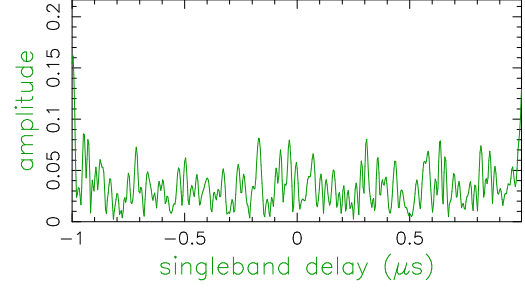
NRAO150.1HV1N7, No0150, Zo

METSAHOV - VLBA_OV, fgroup W, pol LR

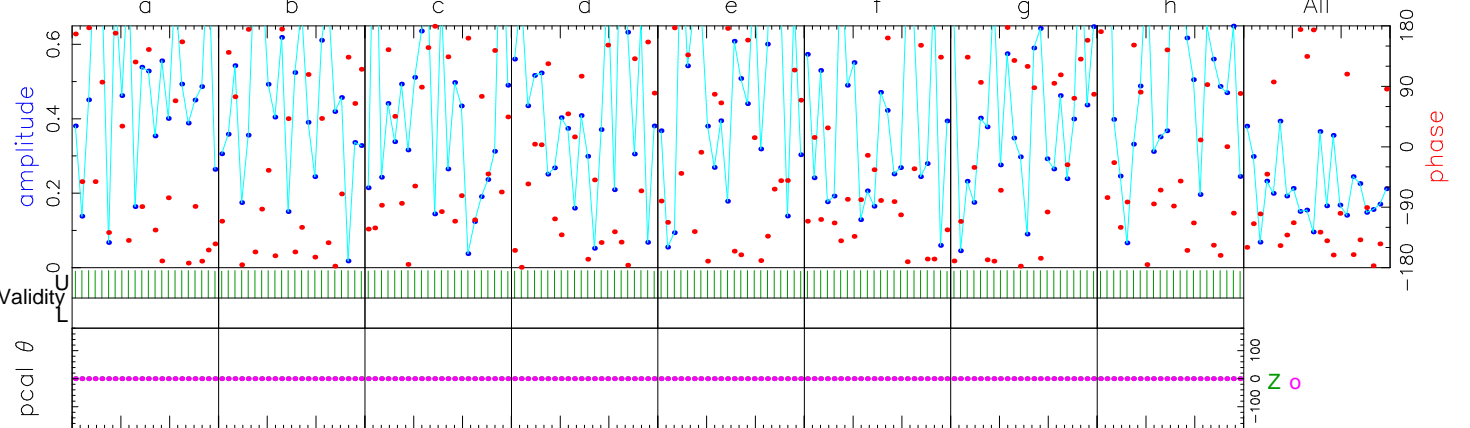
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 179.702
 Amp 0.216
 Phase -146.7
 PFD 3.0e-01
 Delays (us)
 SBD -0.996880
 MBD 0.005202
 Fringe rate (Hz) 0.794506
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145459
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.7	-160.6	-113.9	-161.8	-99.5	-120.8	145.8	-114.6	Phase	-146.7
	0.3	0.2	0.2	0.2	0.1	0.3	0.3	0.3	Ampl.	0.2
	455.7	240.3	402.5	433.0	499.1	2.6	420.8	15.1	Sbd box	1.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.97694356852E+03		Apriori delay (usec)		-5.97594877085E+03		Resid mbdelay (usec)		5.20233E-03 +/- 1.8E-04	
Sband delay (usec)	-5.97694565047E+03		Apriori clock (usec)		-2.1256271E+01		Resid sbdelay (usec)		-9.96880E-01 +/- 1.4E-03	
Phase delay (usec)	-5.97594877558E+03		Apriori clockrate (us/s)		1.1600001E-07		Resid phdelay (usec)		-4.73129E-06 +/- 6.2E-07	
Delay rate (us/s)	9.37771585239E-01		Apriori rate (us/s)		9.37762361817E-01		Resid rate (us/s)		9.22342E-06 +/- 6.0E-09	
Total phase (deg)			Apriori accel (us/s/s)		5.47458640151E-05		Resid phase (deg)		-146.7 +/- 19.3	

ph/seg (deg) 57.6 45.2 Amplitude 0.216 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.8 78.9 Search (1024X32) 0.156 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.5 27.3 Inc. seg. avg. 0.219 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.9 47.6 Inc. frq. avg. 0.212 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 18.7 el 23.5 pa -14.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -8511.585 6799.367 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo.W.349.1HV1N7

Mk4/DiFX fourfit 3.21 rev 2937

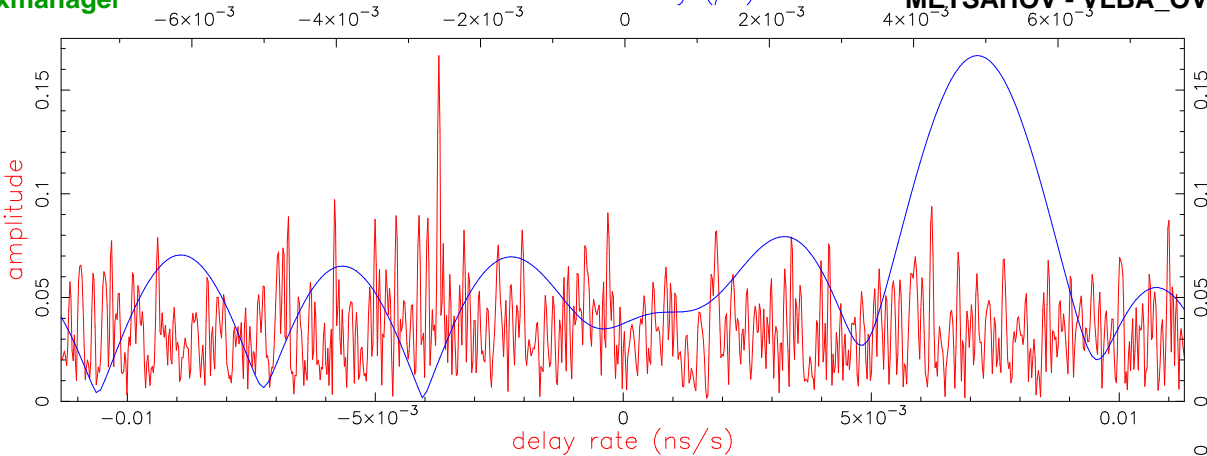
fxmanager

NRAO150.1HV1N7, No0150, Zo

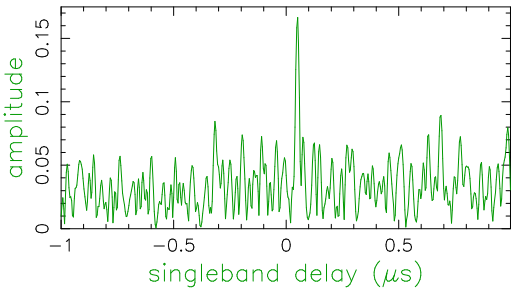
METSAHOV - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

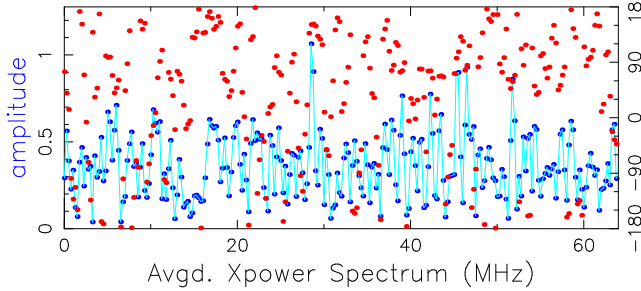
Fringe quality 0



SNR 6.1
 Int time 179.702
 Amp 0.175
 Phase -102.5
 PFD 1.1e-01
 Delays (us)
 SBD 0.049943
 MBD 0.004849
 Fringe rate (Hz)
 -0.321521
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

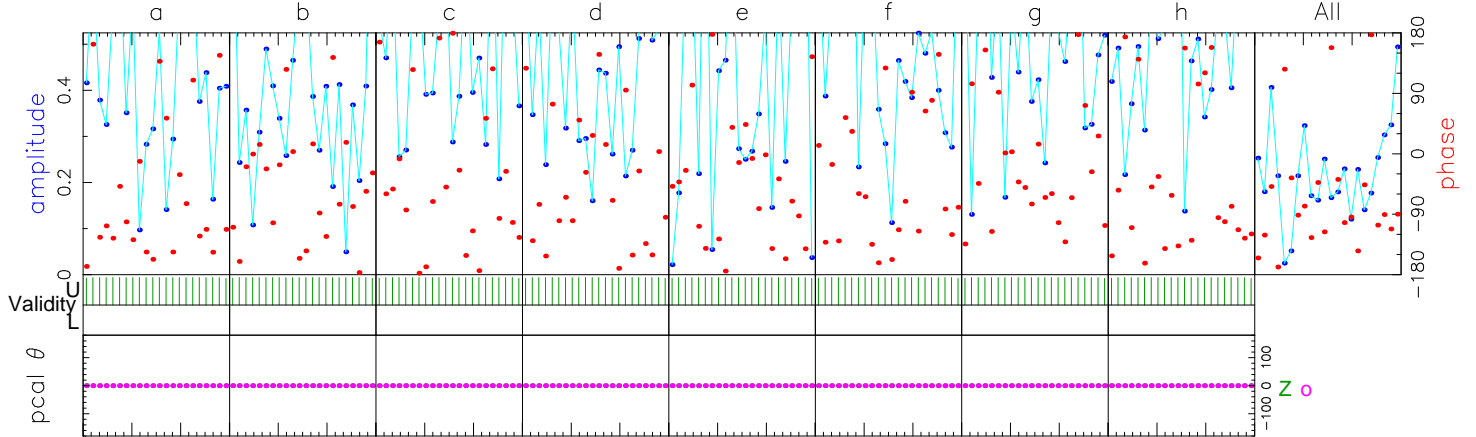


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 150000.00
 Stop 150300.22
 FRT 150130.00
 Corr/FF/build
 2021:008:174658
 2021:010:145501
 2020:247:085004
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-131.7	-71.7	-124.0	-102.3	-81.6	-70.2	-76.8	-120.6	Phase	-102.5
	0.2	0.2	0.2	0.1	0.2	0.1	0.2	0.4	Ampl.	0.2
	510.0	434.7	92.7	200.2	111.7	186.1	89.7	270.3	Sbd box	269.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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)	-5.97589704639E+03	Apriori delay (usec)	-5.97594877085E+03	Resid mbdelay (usec)	4.84945E-03	+/-	1.8E-04
Sband delay (usec)	-5.97589882835E+03	Apriori clock (usec)	-2.1256271E+01	Resid sbdelay (usec)	4.99425E-02	+/-	1.4E-03
Phase delay (usec)	-5.97594877415E+03	Apriori clockrate (us/s)	1.1600001E-07	Resid phdelay (usec)	-3.30383E-06	+/-	6.0E-07
Delay rate (us/s)	9.37758629282E-01	Apriori rate (us/s)	9.37762361817E-01	Resid rate (us/s)	-3.73254E-06	+/-	5.8E-09
Total phase (deg)	-145.9	Apriori accel (us/s/s)	5.47458640151E-05	Resid phase (deg)	-102.5	+/-	18.7

ph/seg (deg)	RMS 53.6	Theor. 43.8	Amplitude Search (1024X32)	0.175 +/- 0.029	0.157	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.8	76.5	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.1	26.4	Inc. seg. avg.	0.179		Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.7	46.1	Inc. frq. avg.	0.172		Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

Z: az 18.7 el 23.5 pa -14.7 o: az 308.8 el 42.9 pa 80.6 u,v (fr/asec) -8511.585 6799.367 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo..1HV1N7 Output file: /Exps/c202a/v1/v1_3mm/1234/No0150/Zo.W.359.1HV1N7