

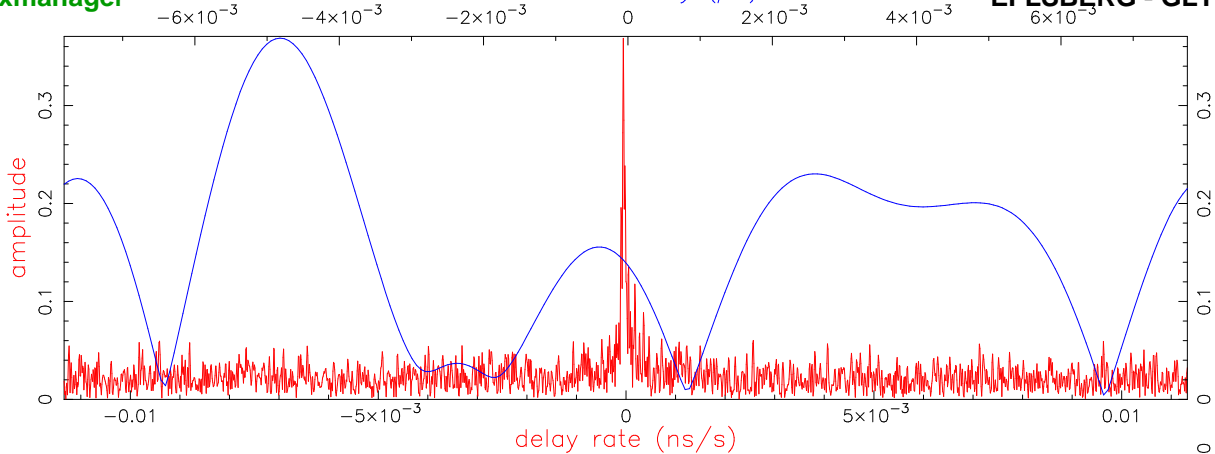
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, Bg

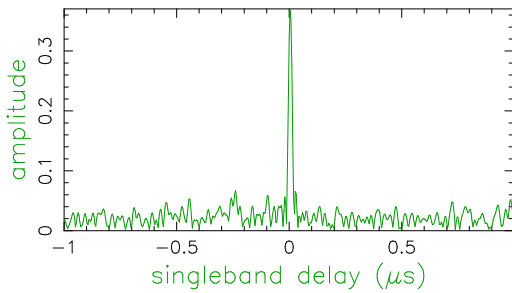
EFLSBERG - GLT, fgroup W, pol LL

multiband delay (μ s)

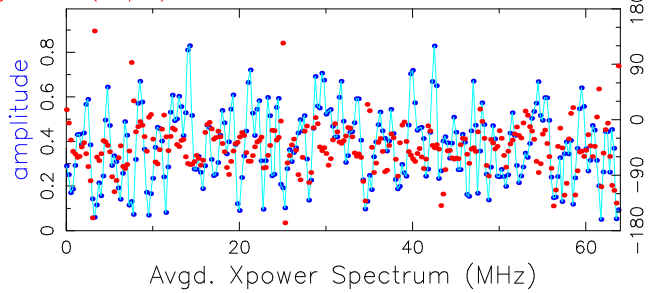


Fringe quality 7

SNR 20.8
Int time 419.810
Amp 0.370
Phase 65.7
PFD 0.0e+00
Delays (us)
SBD 0.004874
MBD -0.004782
Fringe rate (Hz)
-0.004796
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

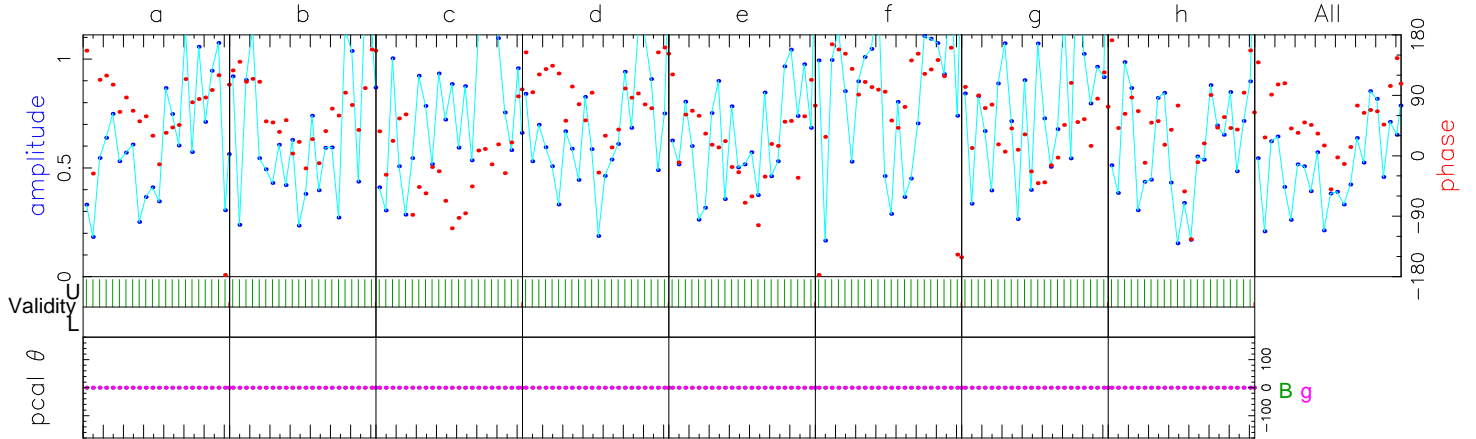


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120854
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



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

Group delay (usec)(sbd)	3.58115211813E+03	Apriori delay (usec)	3.58114127484E+03	Resid mbdelay (usec)	-4.78170E-03	+/-	5.2E-05
Sband delay (usec)	3.58114614884E+03	Apriori clock (usec)	-2.2500973E+01	Resid sbdelay (usec)	4.87400E-03	+/-	4.1E-04
Phase delay (usec)	3.58114127696E+03	Apriori clockrate (us/s)	-7.2000003E-08	Resid phdelay (usec)	2.11845E-06	+/-	1.8E-07
Delay rate (us/s)	-3.35932610711E-01	Apriori rate (us/s)	-3.35932555033E-01	Resid rate (us/s)	-5.56777E-08	+/-	7.3E-10
Total phase (deg)	214.9	Apriori accel (us/s/s)	-3.68199051110E-05	Resid phase (deg)	65.7	+/-	5.5

ph/seg (deg)	48.5	RMS	48.5	Theor.	13.2	Amplitude	0.370 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	59.5	Search (2048X32)	0.367	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	49.8	Inc. seg. avg.	0.492	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
amp/frq (%)	41.5	Inc. frq. avg.	0.500										

B: az 278.4 el 82.8 pa 89.5 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) 3001.069 -4724.229 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/Bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/Bg.W.10.1X0F0I

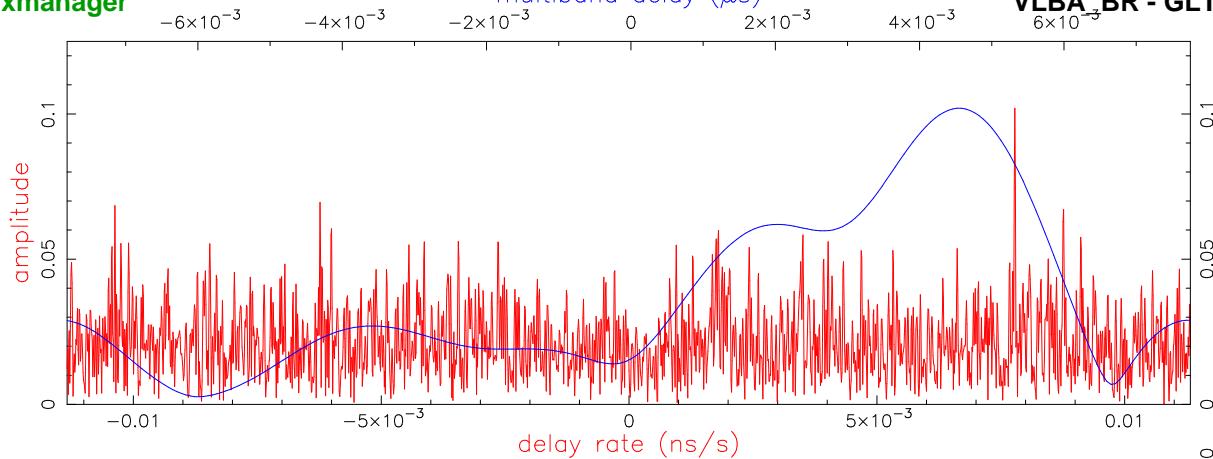
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, bg

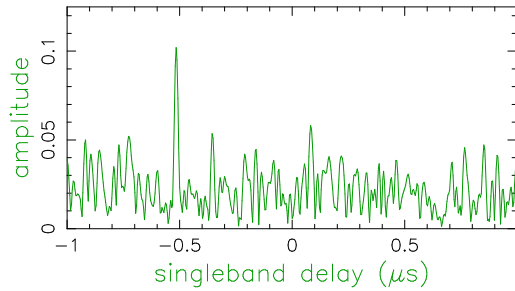
VLBA_BR - GLT, fgroup W, pol LL

multiband delay (μ s)

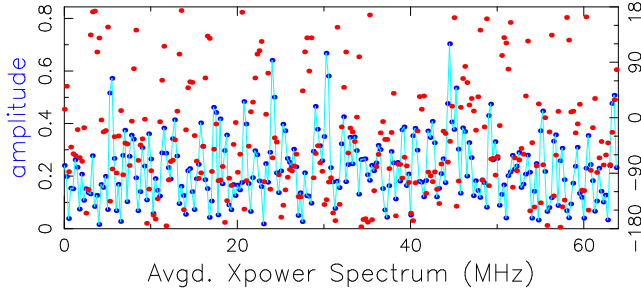


Fringe quality 0

SNR 5.7
 Int time 419.822
 Amp 0.125
 Phase 59.4
 PFD 9.3e-01
 Delays (us)
 SBD -0.515222
 MBD 0.004548
 Fringe rate (Hz)
 0.671376
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

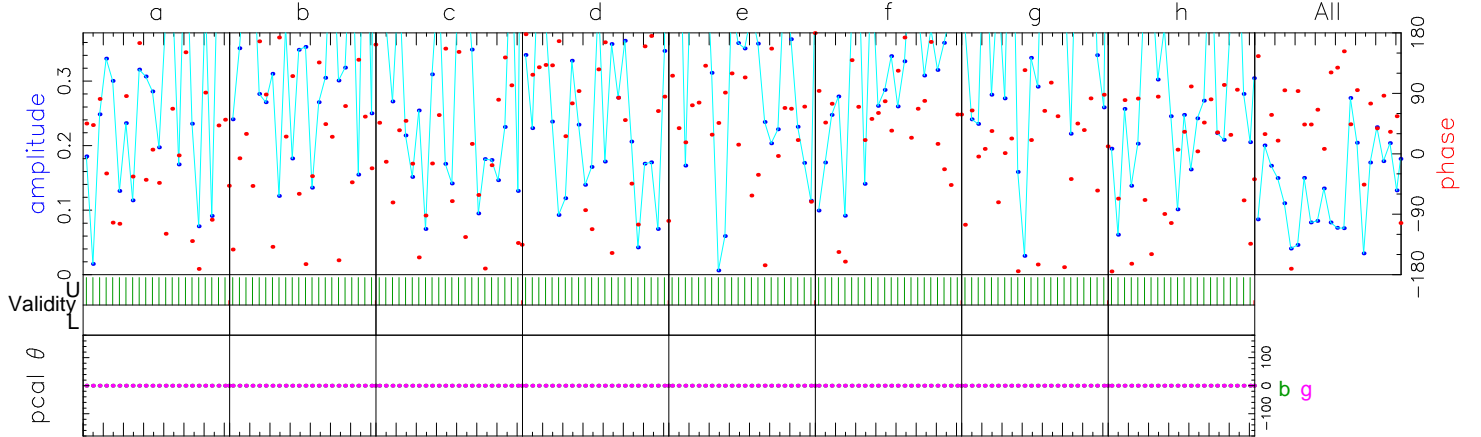


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120854
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	41.2	23.6	42.4	127.3	66.1	64.5	38.3	57.4	Phase	59.4
	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	297.1	205.7	222.4	89.1	125.3	79.0	125.4	488.4	Sbd box	125.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.85954473198E+03		Apriori delay (usec)		-8.85903365548E+03		Resid mbdelay (usec)		4.54849E-03	+/- 1.9E-04
Sband delay (usec)	-8.85954887748E+03		Apriori clock (usec)		-3.4217148E+00		Resid sbdelay (usec)		-5.15222E-01	+/- 1.5E-03
Phase delay (usec)	-8.85903365356E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		1.91667E-06	+/- 6.5E-07
Delay rate (us/s)	3.91237653940E-01		Apriori rate (us/s)		3.91229859931E-01		Resid rate (us/s)		7.79401E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.70380534599E-05		Resid phase (deg)		59.4	+/- 20.0

	RMS	Theor.	Amplitude	0.125 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	55.6	48.1	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	70.2	83.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	34.2	28.3	Inc. seg. avg.	0.120	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	56.5	49.5	Inc. frq. avg.	0.127	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	

b: az 38.4 el 23.6 pa -41.4 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -3514.132 1383.222 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/bg.W.12.1X0F0I

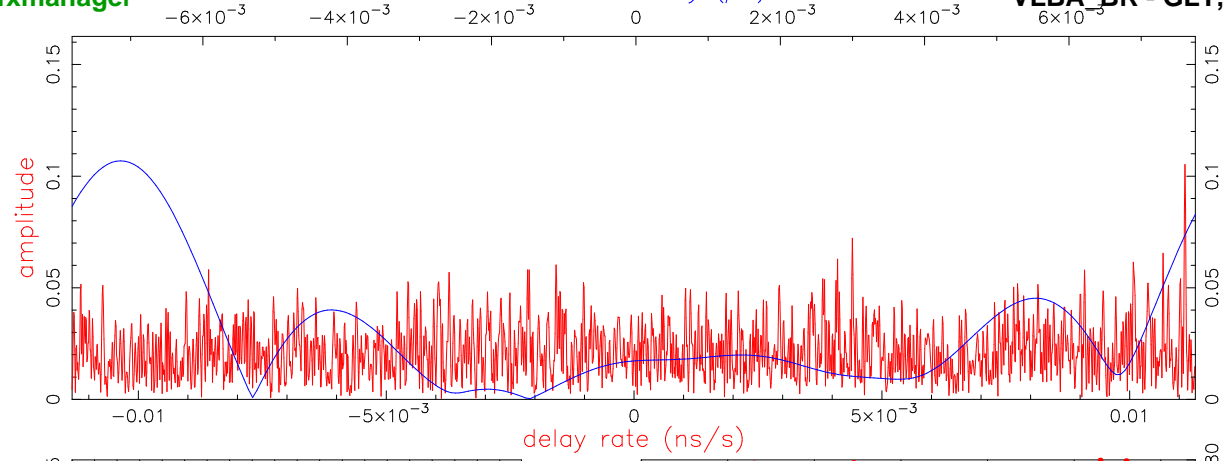
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

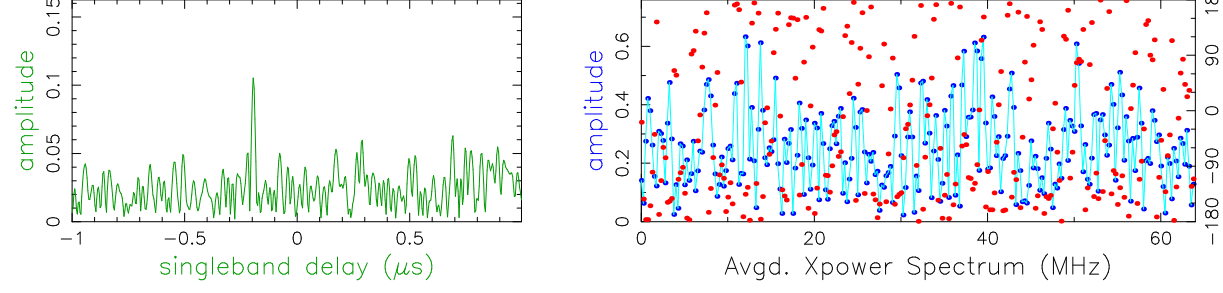
NRAO150.1X0F0I, No0077, bg

VLBA_BR - GLT, fgroup W, pol RR

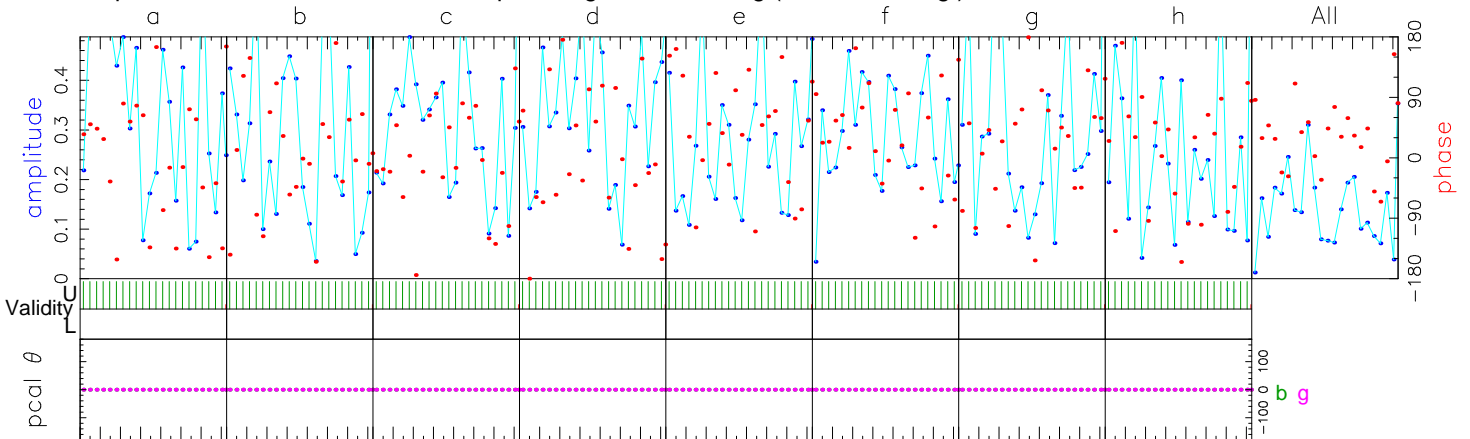
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.822
 Amp 0.163
 Phase 25.3
 PFD 6.0e-01
 Delays (us)
 SBD -0.194937
 MBD 0.008301
 Fringe rate (Hz)
 0.959383
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120858
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



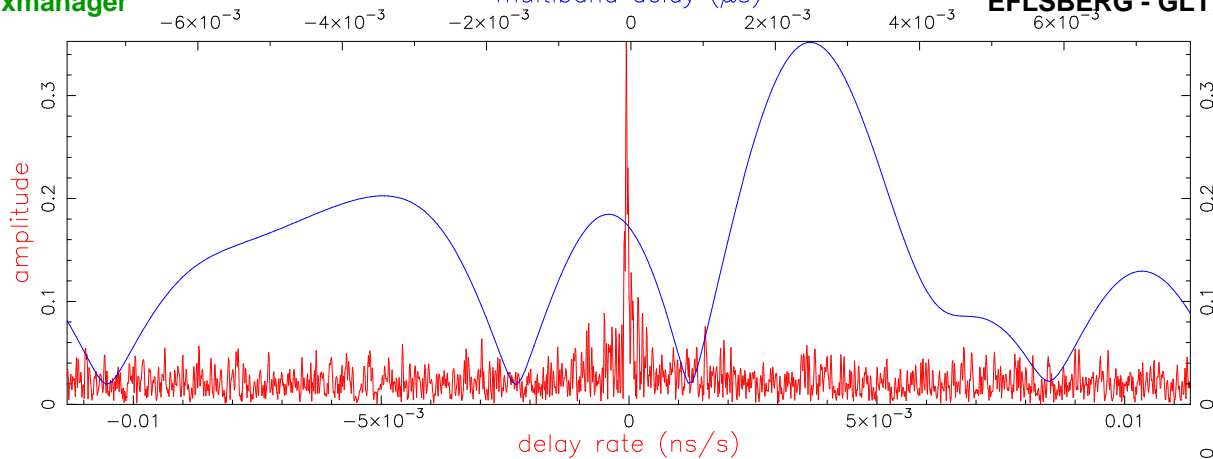
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.7	8.7	22.4	11.5	46.6	33.8	30.1	36.8	Phase	25.3
	0.2	0.2	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	310.0	391.5	194.5	413.7	172.3	76.9	167.5	493.5	Sbd box	207.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.85922847969E+03				-8.85903365548E+03				Resid mbdelay (usec)	8.30078E-03 +/- 1.8E-04
Sband delay (usec)	-8.85922859248E+03				-3.4217148E+00				Resid sbdelay (usec)	-1.94937E-01 +/- 1.5E-03
Phase delay (usec)	-8.85903365466E+03				-1.7200000E-07				Resid phdelay (usec)	8.15223E-07 +/- 6.3E-07
Delay rate (us/s)	3.91240997415E-01				3.91229859931E-01				Resid rate (us/s)	1.11375E-05 +/- 2.6E-09
Total phase (deg)			-4.5		2.70380534599E-05				Resid phase (deg)	25.3 +/- 19.4

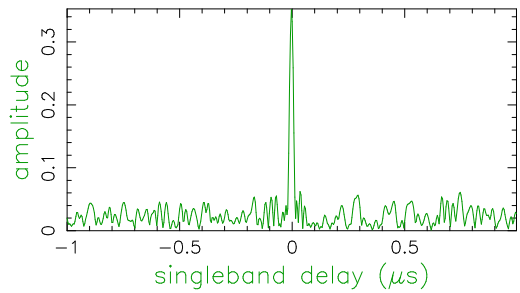
ph/seg (deg) 51.1 46.6 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.0 81.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.6 27.5 Inc. seg. avg. 0.159 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.2 47.9 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
 b: az 38.4 el 23.6 pa -41.4 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -3514.132 1383.222 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/bg.W.30.1X0F0I

multiband delay (μ s)

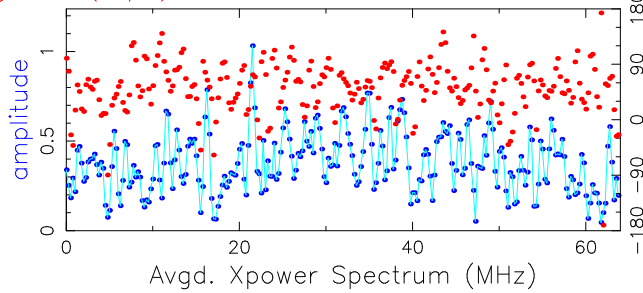


Fringe quality 8

SNR 19.8
Int time 419.810
Amp 0.353
Phase -9.7
PFD 0.0e+00
Delays (us)
SBD -0.003207
MBD 0.002508
Fringe rate (Hz)
-0.004776
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

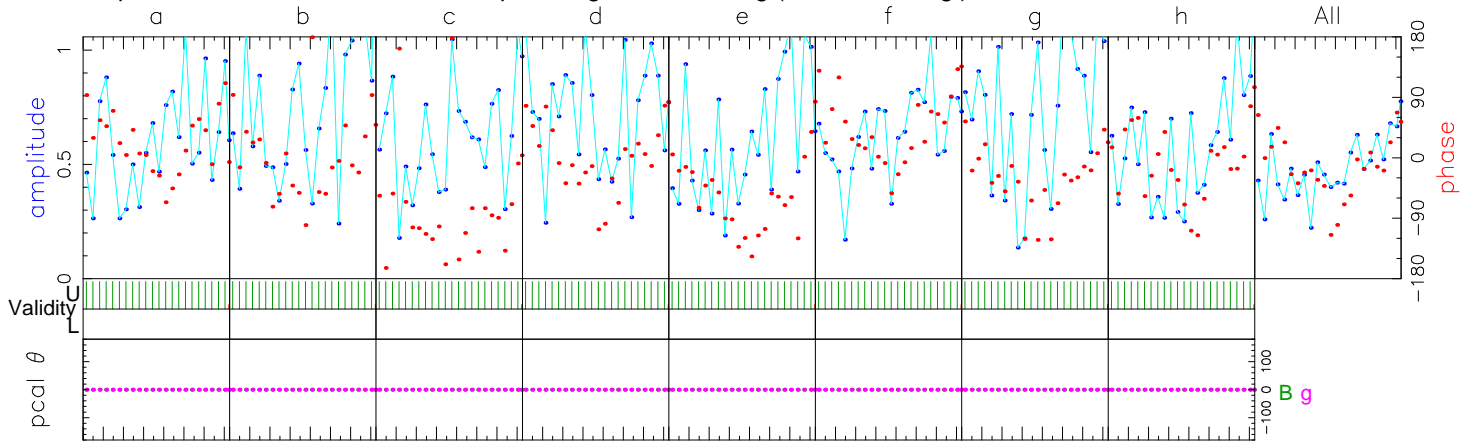


delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 2021:116
Stop 2021:116
FRT 140000.00
140659.84
140330.00
Corr/FF/build
2021:303:054744
2021:303:120858
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	25.7	-2.6	-101.5	3.7	-56.1	43.3	-21.3	-1.5		
	0.4	0.5	0.4	0.5	0.4	0.4	0.6	0.4	Phase	-9.7
	254.7	255.9	256.8	256.5	257.2	257.1	256.3	255.1	Ampl.	0.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Sbd box	256.2
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	3.58114378263E+03		Apriori delay (usec)		3.58114127484E+03		Resid mbdelay (usec)		2.50780E-03	+/- 5.5E-05
Sband delay (usec)	3.58113806784E+03		Apriori clock (usec)		-2.2500973E+01		Resid sbdelay (usec)		-3.20700E-03	+/- 4.4E-04
Phase delay (usec)	3.58114127453E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		-3.12096E-07	+/- 1.9E-07
Delay rate (us/s)	-3.35932610478E-01		Apriori rate (us/s)		-3.35932555033E-01		Resid rate (us/s)		-5.54453E-08	+/- 7.7E-10
Total phase (deg)	139.5		Apriori accel (us/s/s)		-3.68199051110E-05		Resid phase (deg)		-9.7	+/- 5.8

	RMS	Theor.	Amplitude	0.353 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	45.5	13.9	Search (2048X32)	0.350	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	49.9	24.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	50.1	8.2	Inc. seg. avg.	0.465	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.3	14.3	Inc. frq. avg.	0.453	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

B: az 278.4 el 82.8 pa 89.5 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) 3001.069 -4724.229 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/Bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/Bg.W.34.1X0F0I

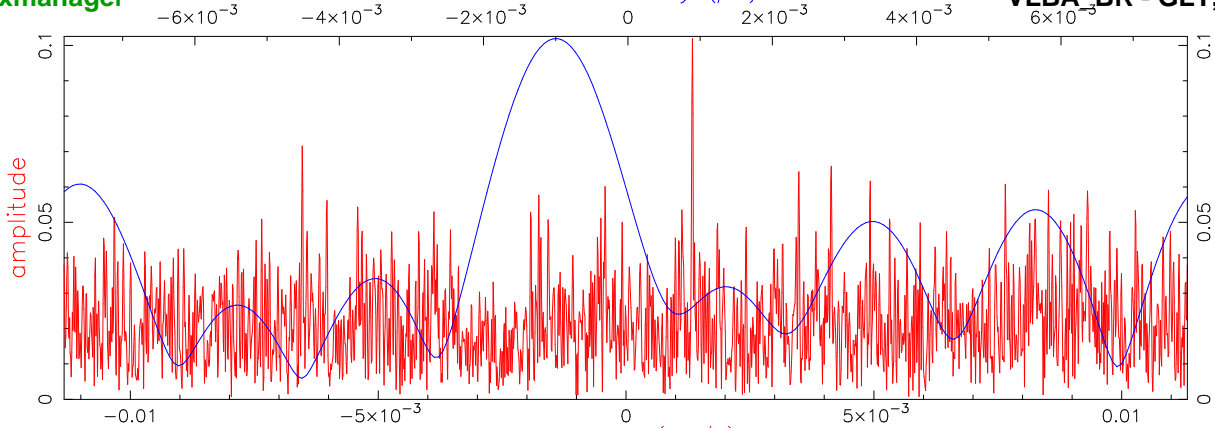
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

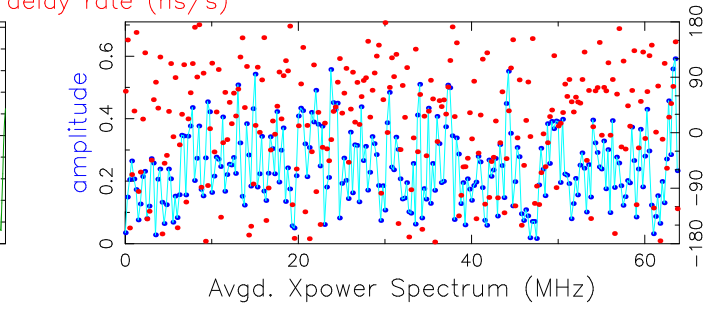
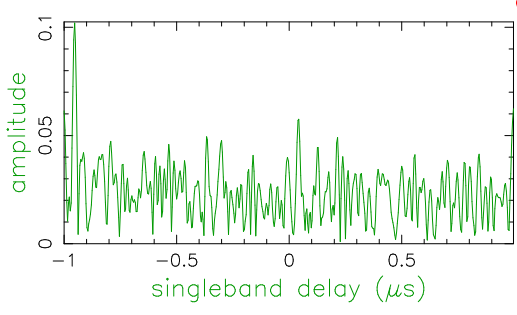
NRAO150.1X0F0I, No0077, bg

VLBA_BR - GLT, fgroup W, pol LR

multiband delay (μ s)

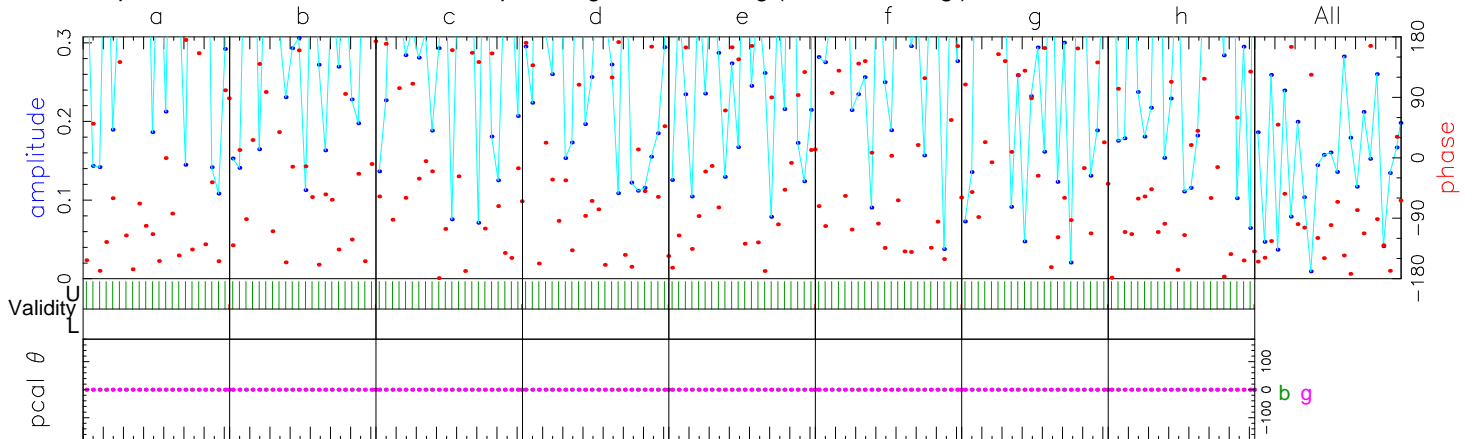


Fringe quality 0
 SNR 5.7
 Int time 419.822
 Amp 0.103
 Phase -119.7
 PFD 9.4e-01
 Delays (us)
 SBD -0.953251
 MBD -0.001000
 Fringe rate (Hz) 0.115852
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120902
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.1	-75.7	-121.8	-137.3	-95.3	-115.6	-58.6	-130.7	Phase	-119.7
	0.3	0.1	0.1	0.1	0.1	0.1	0.0	0.1	Ampl.	0.1
	13.2	317.9	81.2	94.8	236.5	359.0	281.2	310.0	Sbd box	13.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.85998778053E+03		Apriori delay (usec)		-8.85903365548E+03		Resid mbdelay (usec)		-1.00005E-03	+/- 1.9E-04
Sband delay (usec)	-8.85998690698E+03		Apriori clock (usec)		-3.4217148E+00		Resid sbdelay (usec)		-9.53251E-01	+/- 1.5E-03
Phase delay (usec)	-8.85903365934E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-3.86112E-06	+/- 6.5E-07
Delay rate (us/s)	3.91231204860E-01		Apriori rate (us/s)		3.91229859931E-01		Resid rate (us/s)		1.34493E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		2.70380534599E-05		Resid phase (deg)		-119.7	+/- 20.1

ph/seg (deg) 66.0 48.1 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 87.2 84.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 33.7 28.4 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 66.0 49.5 Inc. frq. avg. 0.096 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 38.4 el 23.6 pa -41.4 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -3514.132 1383.222 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/bg.W.50.1X0F0I

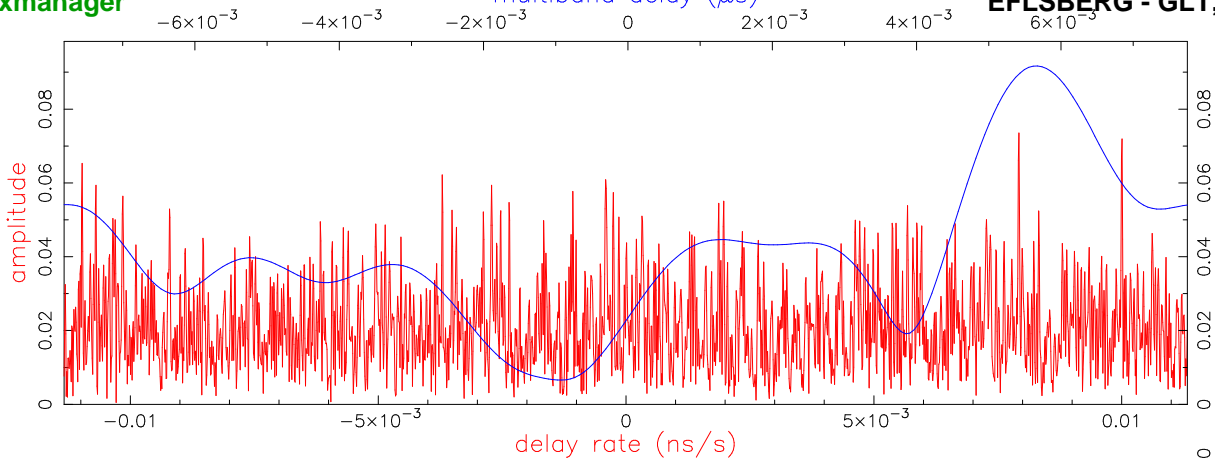
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, Bg

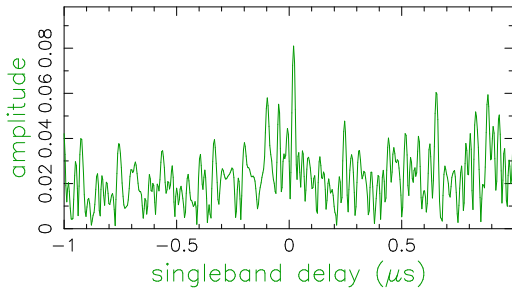
EFLSBERG - GLT, fgroup W, pol LR

multiband delay (μ s)

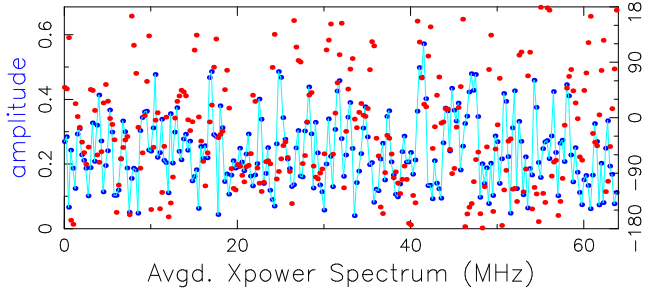


Fringe quality 0

SNR 4.1
Int time 419.810
Amp 0.098
Phase -24.8
PFD 1.0e+00
Delays (us)
SBD 0.023438
MBD -0.008301
Fringe rate (Hz)
-0.794609
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

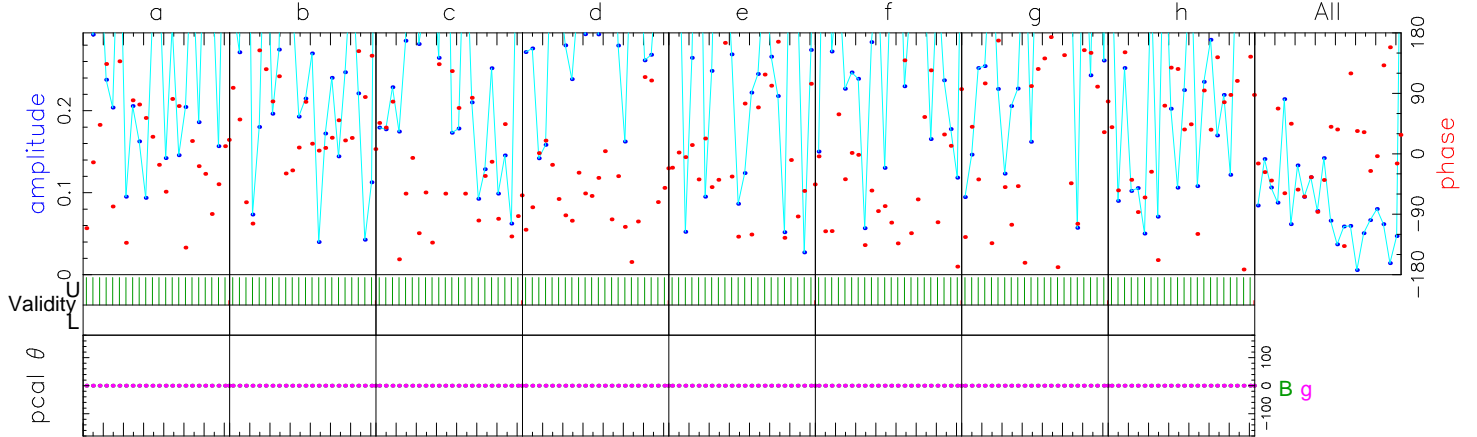


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120902
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
g	0	0	0	0	0	0	0	0		
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:g	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		
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.58116422406E+03		Apriori delay (usec)		3.58114127484E+03		Resid mbdelay (usec)		-8.30078E-03	+/- 2.6E-04
Sband delay (usec)	3.58116471234E+03		Apriori clock (usec)		-2.2500973E+01		Resid sbdelay (usec)		2.34375E-02	+/- 2.1E-03
Phase delay (usec)	3.58114127404E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		-8.00708E-07	+/- 9.0E-07
Delay rate (us/s)	-3.35941779653E-01		Apriori rate (us/s)		-3.35932555033E-01		Resid rate (us/s)		-9.22462E-06	+/- 3.7E-09
Total phase (deg)	124.4		Apriori accel (us/s/s)		-3.68199051110E-05		Resid phase (deg)		-24.8	+/- 27.8

	RMS	Theor.	Amplitude	0.098 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	75.4	66.6	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.9	116.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	93.7	39.3	Inc. seg. avg.	0.068	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	81.4	68.5	Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 278.4 el 82.8 pa 89.5 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) 3001.069 -4724.229 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/Bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/Bg.W.54.1X0F0I

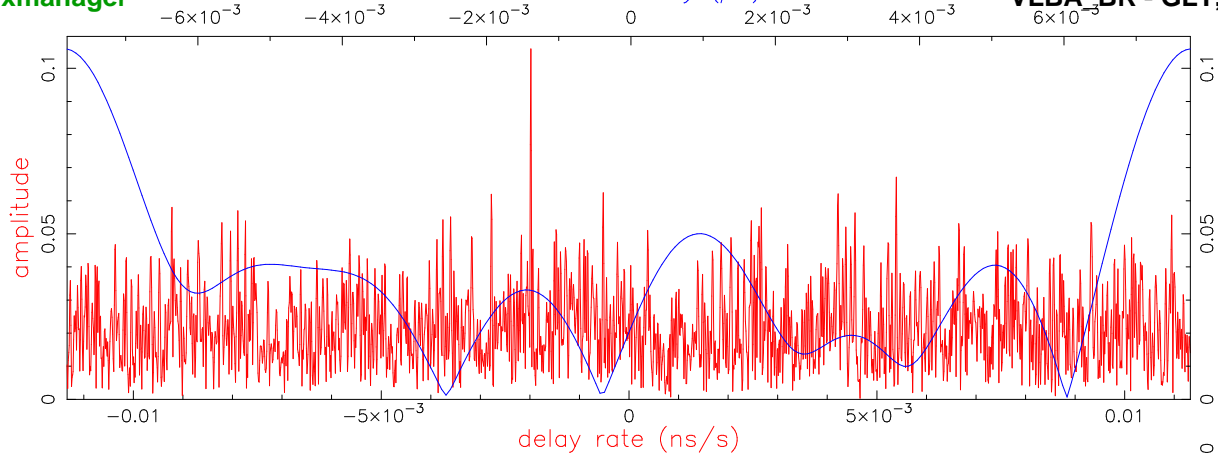
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, bg

VLBA_BR - GLT, fgroup W, pol RL

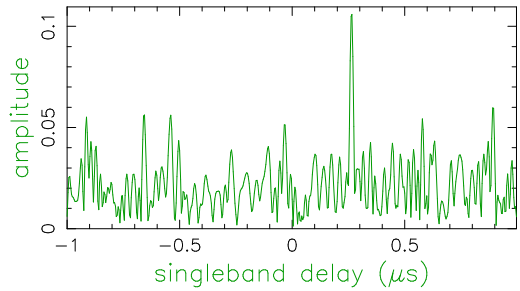
multiband delay (μ s)



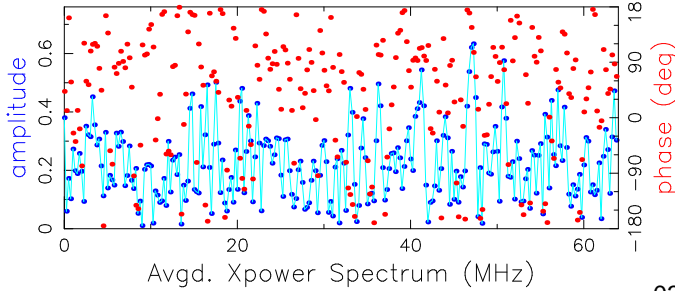
Fringe quality 0

SNR 6.1
 Int time 419.822
 Amp 0.110
 Phase -18.8
 PFD 2.9e-01
 Delays (us)
 SBD 0.263846
 MBD -0.007835
 Fringe rate (Hz)
 -0.170606
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

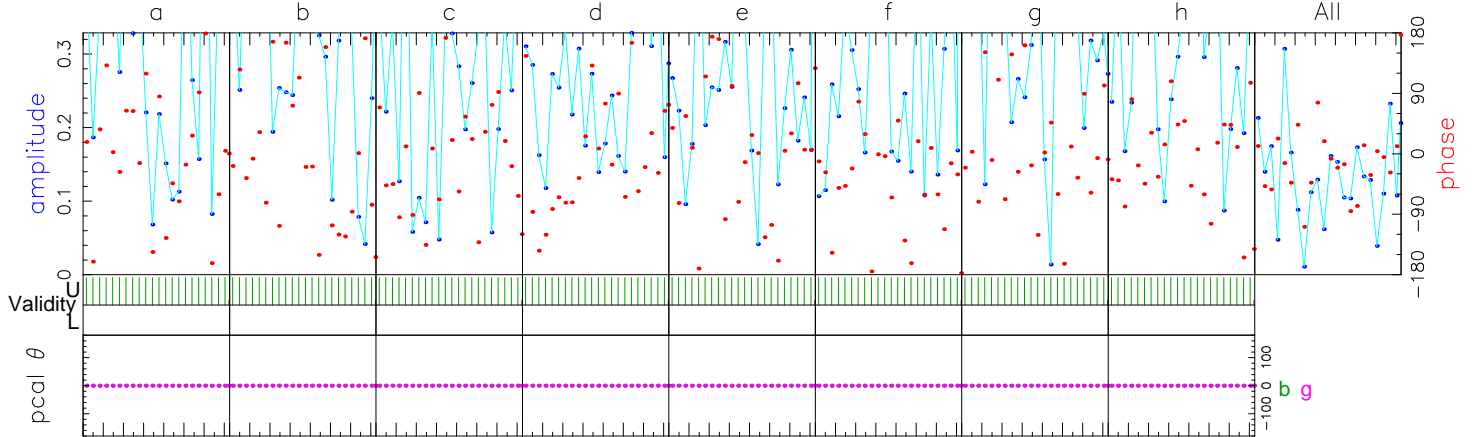
Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120905
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



delay rate (ns/s)



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



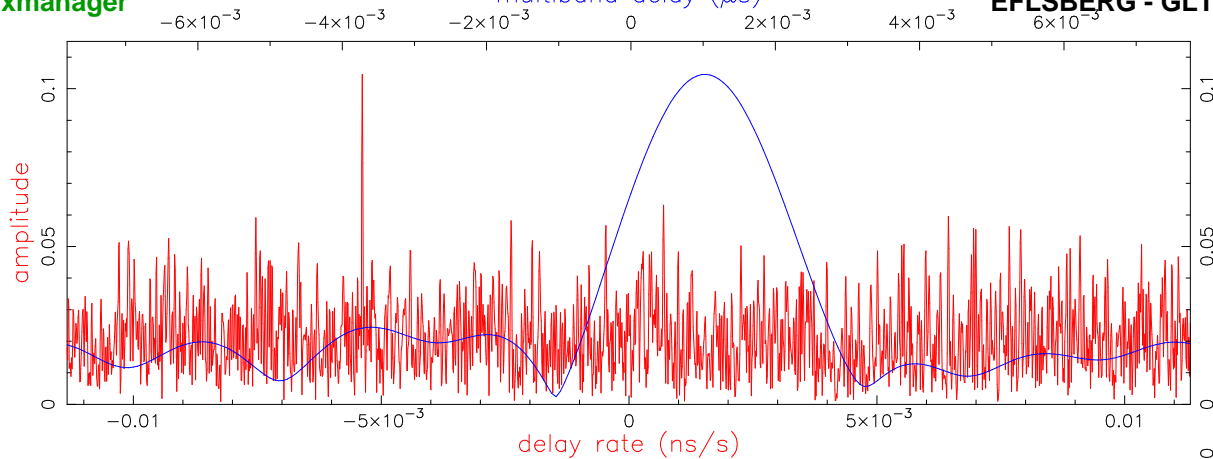
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	23.9	-67.1	-3.8	-36.2	-65.4	-26.5	-28.0	-3.1	Phase	-18.8
	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	Ampl.	0.1
	195.0	289.1	175.5	249.4	32.1	323.7	249.1	485.4	Sbd box	324.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
b:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.85877586542E+03		Apriori delay (usec)		-8.85903365548E+03		Resid mbdelay (usec)		-7.83494E-03	+/- 1.8E-04
Sband delay (usec)	-8.85876980973E+03		Apriori clock (usec)		-3.4217148E+00		Resid sbdelay (usec)		2.63846E-01	+/- 1.4E-03
Phase delay (usec)	-8.85903365608E+03		Apriori clockrate (us/s)		-1.7200000E-07		Resid phdelay (usec)		-6.07297E-07	+/- 6.1E-07
Delay rate (us/s)	3.91227879361E-01		Apriori rate (us/s)		3.91229859931E-01		Resid rate (us/s)		-1.98057E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		2.70380534599E-05		Resid phase (deg)		-18.8	+/- 18.9

	RMS	Theor.	Amplitude	0.110 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.3	45.3	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	64.3	79.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	34.7	26.7	Inc. seg. avg.	0.102	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	41.9	46.6	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 38.4 el 23.6 pa -41.4 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -3514.132 1383.222 simultaneous interpolator

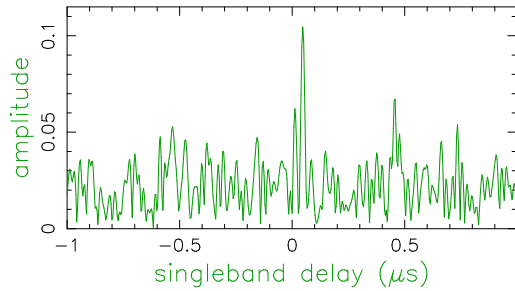
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/bg.W.68.1X0F0I

multiband delay (μ s)

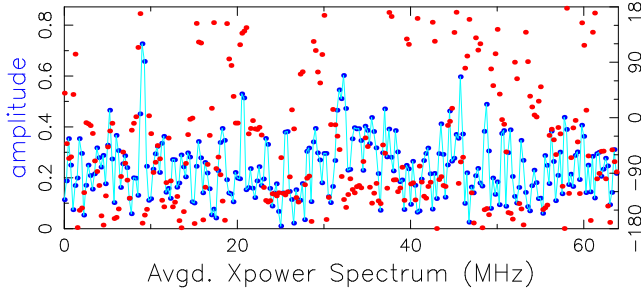


Fringe quality 0

SNR 5.9
 Int time 419.810
 Amp 0.115
 Phase 58.9
 PFD 6.9e-01
 Delays (us)
 SBD 0.047166
 MBD 0.001028
 Fringe rate (Hz)
 -0.464464
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

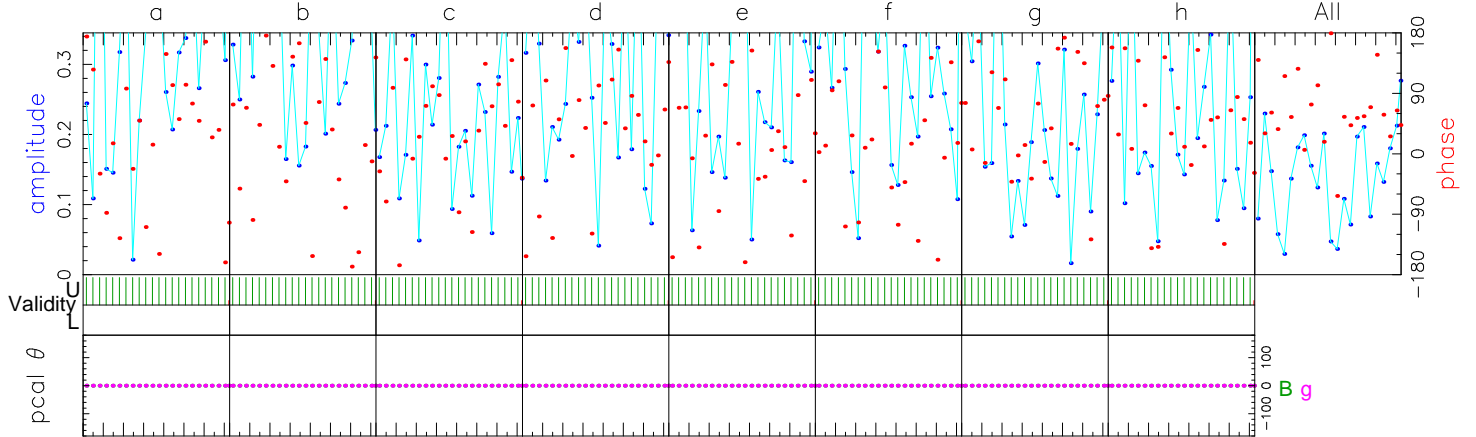


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120907
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	62.3	68.0	53.4	57.1	55.8	45.5	83.0	50.5	Phase	58.9
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	161.3	198.9	481.2	205.0	266.7	444.2	229.0	255.4	Sbd box	269.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
B:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.58118917740E+03		Apriori delay (usec)		3.58114127484E+03		Resid mbdelay (usec)		1.02756E-03	+/- 1.9E-04
Sband delay (usec)	3.58118844059E+03		Apriori clock (usec)		-2.2500973E+01		Resid sbdelay (usec)		4.71658E-02	+/- 1.5E-03
Phase delay (usec)	3.58114127674E+03		Apriori clockrate (us/s)		-7.2000003E-08		Resid phdelay (usec)		1.90079E-06	+/- 6.3E-07
Delay rate (us/s)	-3.35937947003E-01		Apriori rate (us/s)		-3.35932555033E-01		Resid rate (us/s)		-5.39197E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.68199051110E-05		Resid phase (deg)		58.9	+/- 19.6

	RMS	Theor.	Amplitude	0.115 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	52.4	46.9	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	67.2	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	12.7	27.7	Inc. seg. avg.	0.113	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	26.2	48.3	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

B: az 278.4 el 82.8 pa 89.5 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) 3001.069 -4724.229 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/Bg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/Bg.W.75.1X0F0I

Mk4/DiFX fourfit 3.21 rev 2937

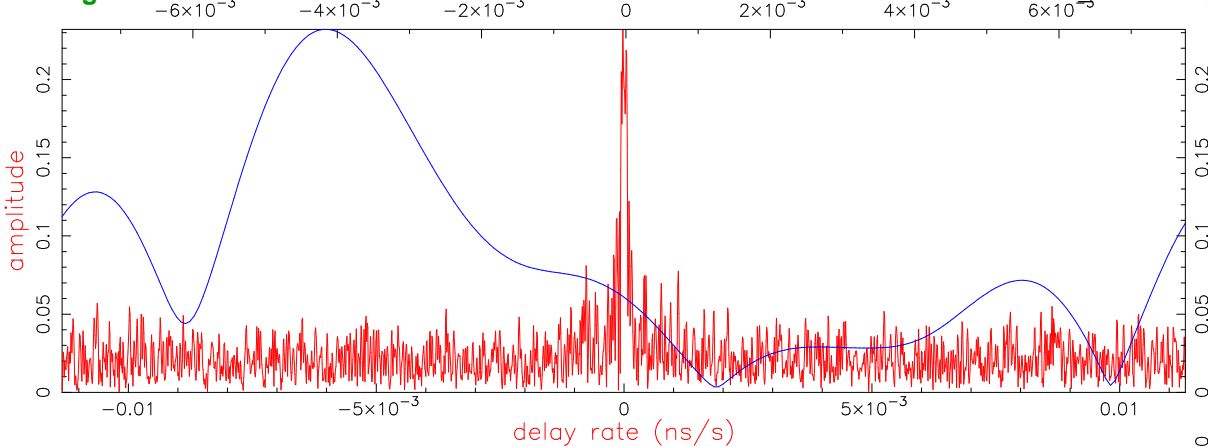
fxmanager

NRAO150.1X0F0I, No0077, fg

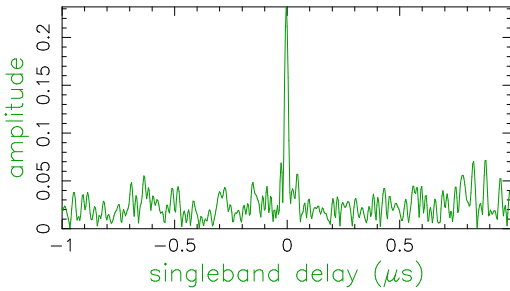
VLBA_FD - GLT, fgroup W, pol RR

multiband delay (μ s)

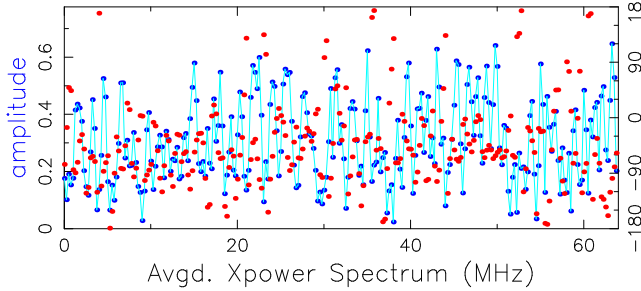
Fringe quality 9



SNR 13.0
Int time 418.955
Amp 0.232
Phase -55.2
PFD 7.7e-30
Delays (us)
SBD -0.003879
MBD -0.004157
Fringe rate (Hz)
-0.002099
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

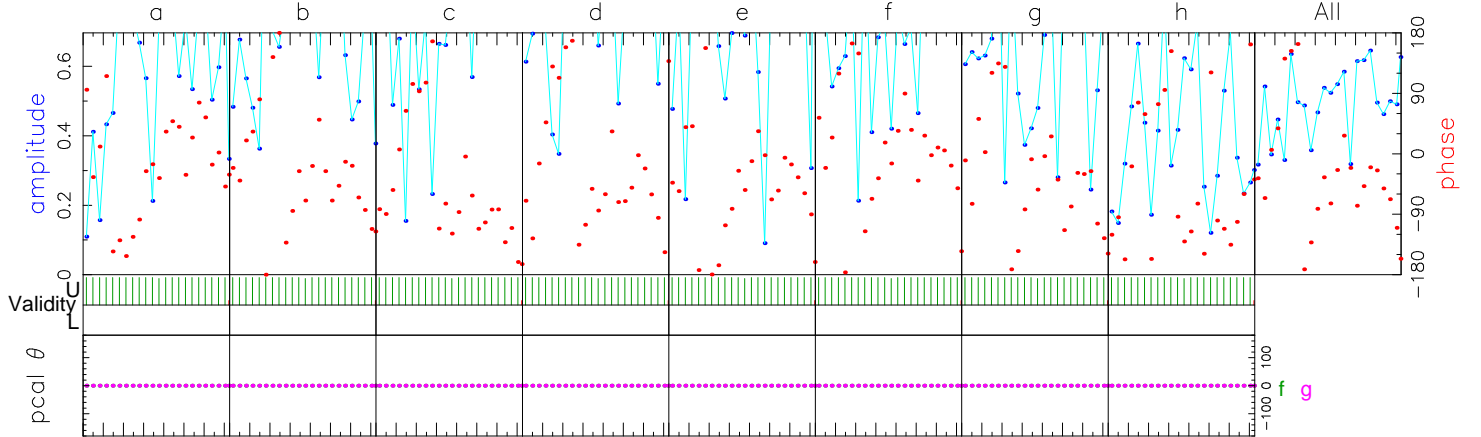


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120915
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-14.7	-55.0	-94.5	-68.5	-51.6	4.4	-54.3	-126.5	Phase	-55.2
	0.2	0.3	0.4	0.3	0.3	0.3	0.2	0.1	Ampl.	0.3
	254.1	255.2	256.1	256.5	256.0	255.5	255.0	253.2	Sbd box	256.0
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fg	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.07544545776E+04	Apriori delay (usec)	-1.07544504206E+04	Resid mbdelay (usec)	-4.15702E-03	+/-	8.4E-05
Sband delay (usec)	-1.07544542993E+04	Apriori clock (usec)	9.8226738E+00	Resid sbdelay (usec)	-3.87875E-03	+/-	6.6E-04
Phase delay (usec)	-1.07544504224E+04	Apriori clockrate (us/s)	-1.2000004E-08	Resid phdelay (usec)	-1.77902E-06	+/-	2.8E-07
Delay rate (us/s)	6.27665854138E-01	Apriori rate (us/s)	6.27665878504E-01	Resid rate (us/s)	-2.43652E-08	+/-	1.2E-09
Total phase (deg)	-137.6	Apriori accel (us/s/s)	1.65745062912E-05	Resid phase (deg)	-55.2	+/-	8.8

ph/seg (deg)	73.6	Theor.	21.1	Amplitude	0.232 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	119.4		36.9	Search (2048X32)	0.228	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.7		12.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.5		21.8	Inc. seg. avg.	0.459	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.276	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 40.7 el 17.9 pa -62.8 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -5680.401 -922.349 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/fg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/fg.W.112.1X0F0I

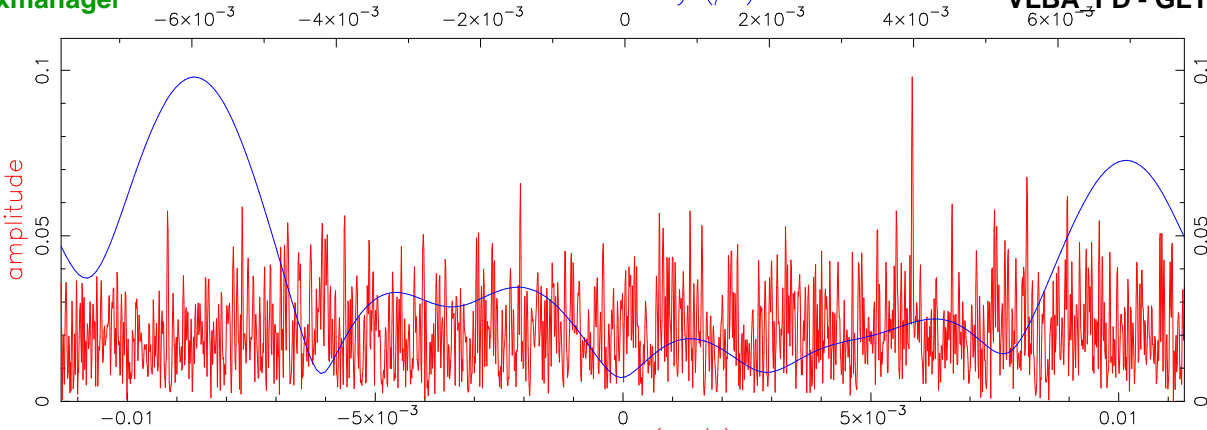
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, fg

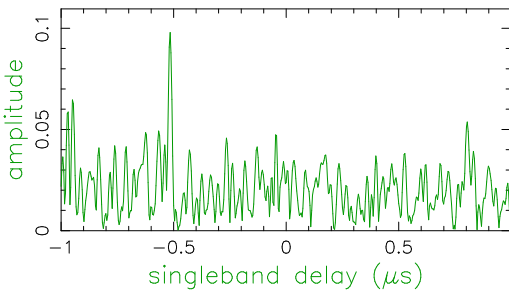
VLBA_FD - GLT, fgroup W, pol LR

multiband delay (μ s)

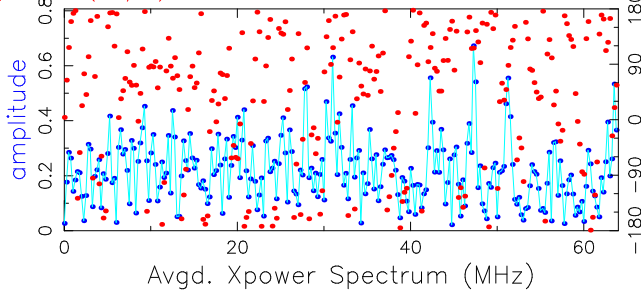


Fringe quality 0

SNR 5.5
 Int time 418.955
 Amp 0.110
 Phase -4.7
 PFD 1.0e+00
 Delays (us)
 SBD -0.515997
 MBD -0.005971
 Fringe rate (Hz)
 0.503442
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

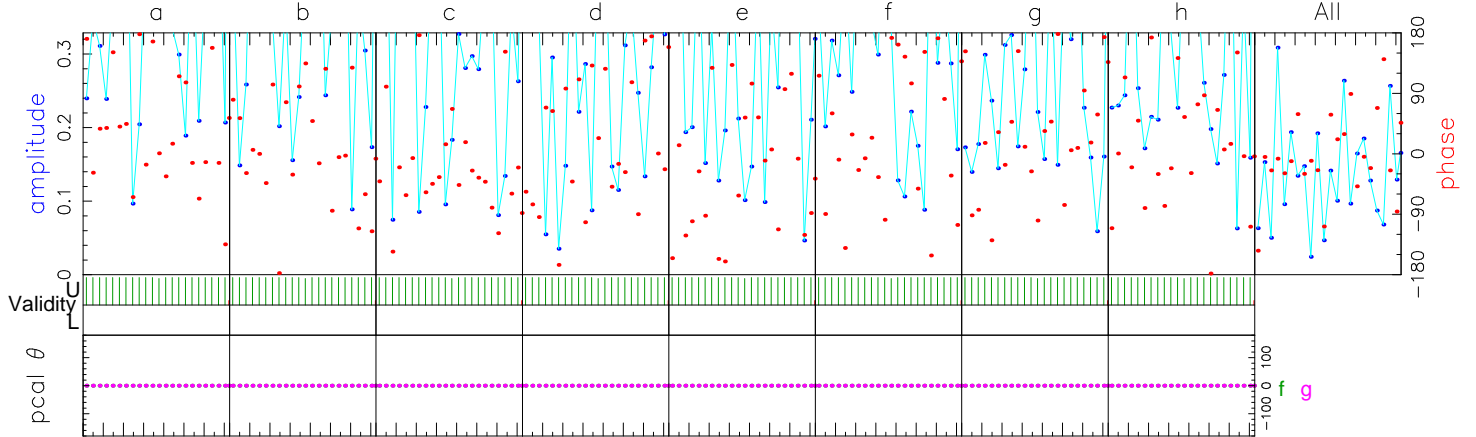


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120920
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	22.1	7.4	-32.9	-28.5	43.4	-43.6	2.2	5.8	Phase	-4.7
	0.1	0.2	0.2	0.1	0.0	0.0	0.1	0.1	Ampl.	0.1
	258.0	466.9	124.6	65.4	311.8	182.9	92.0	103.9	Sbd box	124.9
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fg	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.07549720162E+04		Apriori delay (usec)		-1.07544504206E+04		Resid mbdelay (usec)		-5.97064E-03	+/- 2.0E-04
Sband delay (usec)	-1.07549664176E+04		Apriori clock (usec)		9.8226738E+00		Resid sbdelay (usec)		-5.15997E-01	+/- 1.6E-03
Phase delay (usec)	-1.07544504207E+04		Apriori clockrate (us/s)		-1.2000004E-08		Resid phdelay (usec)		-1.51222E-07	+/- 6.7E-07
Delay rate (us/s)	6.27671722969E-01		Apriori rate (us/s)		6.27665878504E-01		Resid rate (us/s)		5.84447E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.65745062912E-05		Resid phase (deg)		-4.7	+/- 20.9

ph/seg (deg) 62.6 50.1 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.2 87.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.2 29.5 Inc. seg. avg. 0.112 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.2 51.6 Inc. frq. avg. 0.105 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 40.7 el 17.9 pa -62.8 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -5680.401 -922.349 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/fg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/fg.W.133.1X0F0I

Mk4/DiFX fourfit 3.21 rev 2937

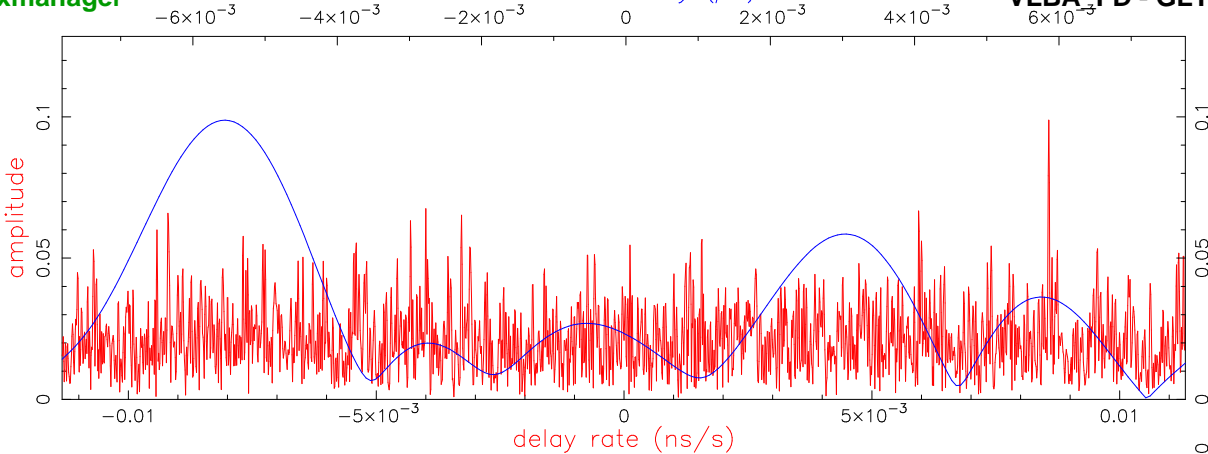
fxmanager

NRAO150.1X0F0I, No0077, fg

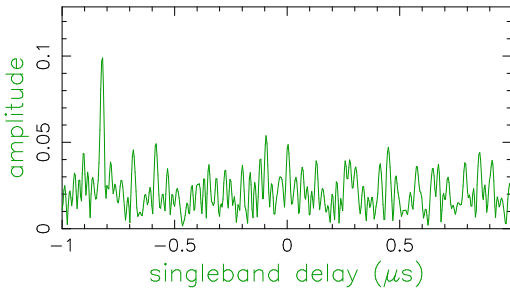
VLBA_FD - GLT, fgroup W, pol RL

multiband delay (μ s)

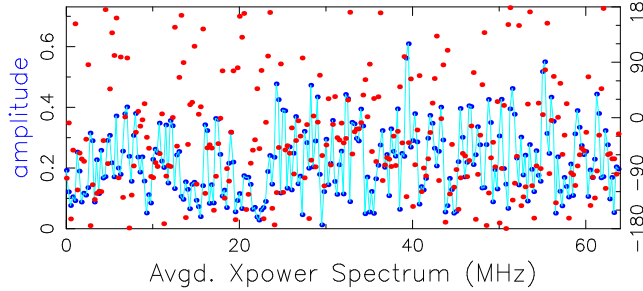
Fringe quality 0



SNR 5.6
 Int time 418.955
 Amp 0.129
 Phase -109.4
 PFD 9.9e-01
 Delays (us)
 SBD -0.821873
 MBD -0.005553
 Fringe rate (Hz)
 0.739359
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

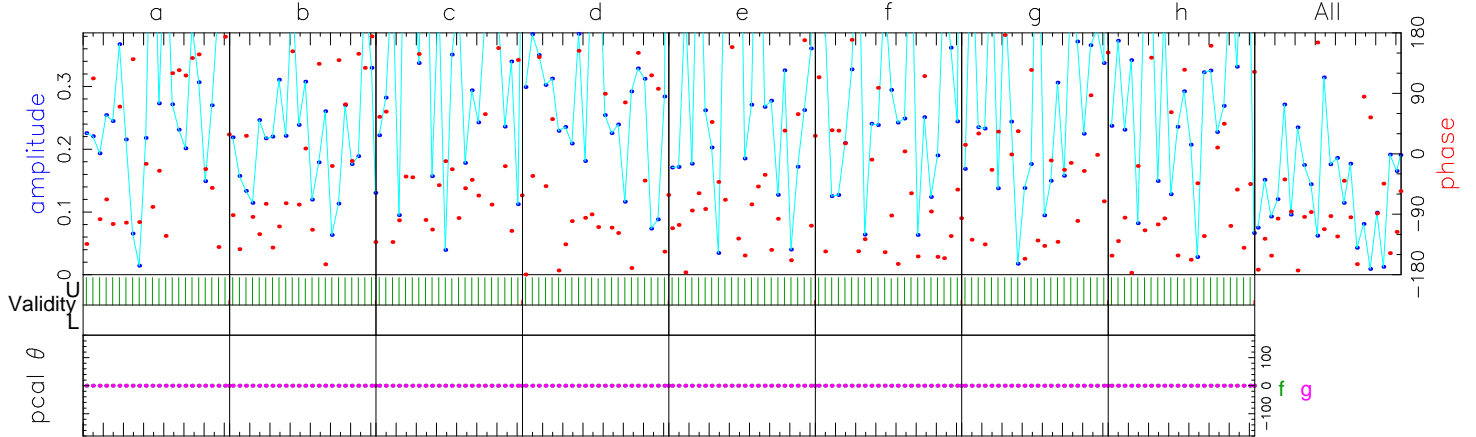


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120924
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

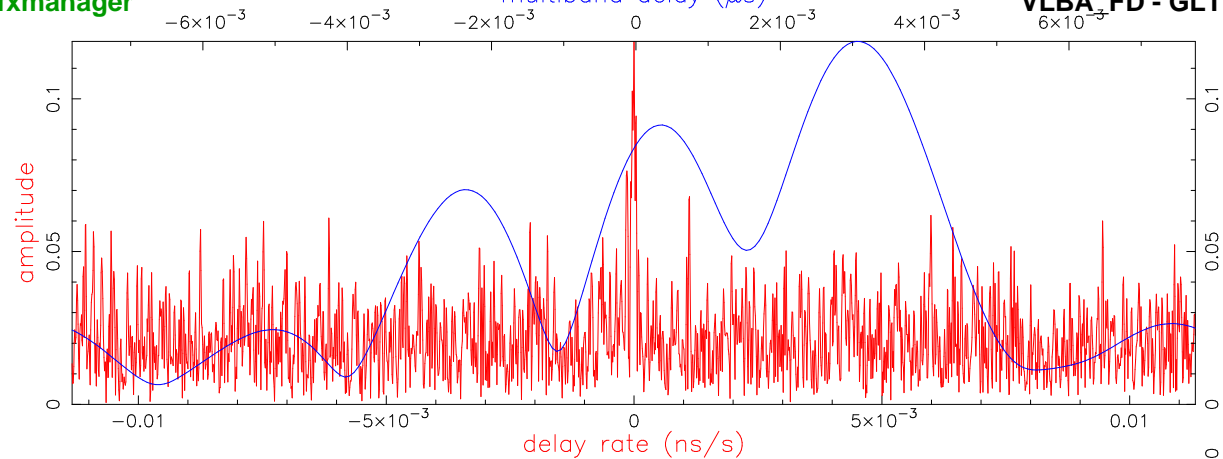
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.6	-151.2	-63.7	-131.8	-95.0	-132.8	-70.7	-128.2	Phase	-109.4
	0.1	0.1	0.2	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	201.7	503.4	45.8	232.4	402.3	92.2	177.7	336.9	Sbd box	46.6
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
g	0	0	0	0	0	0	0	0	PC freqs	
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-1.07552684734E+04		Apriori delay (usec)		-1.07544504206E+04		Resid mbdelay (usec)		-5.55279E-03	+/- 1.9E-04
Sband delay (usec)	-1.07552722936E+04		Apriori clock (usec)		9.8226738E+00		Resid sbdelay (usec)		-8.21873E-01	+/- 1.5E-03
Phase delay (usec)	-1.07544504241E+04		Apriori clockrate (us/s)		-1.2000004E-08		Resid phdelay (usec)		-3.52743E-06	+/- 6.6E-07
Delay rate (us/s)	6.27674461729E-01		Apriori rate (us/s)		6.27665878504E-01		Resid rate (us/s)		8.58323E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.65745062912E-05		Resid phase (deg)		-109.4	+/- 20.4

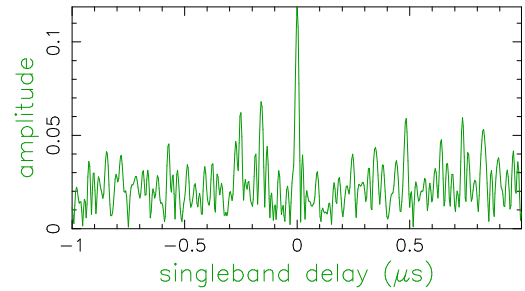
ph/seg (deg) 64.9 48.9 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.3 85.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.4 28.9 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.4 50.4 Inc. frq. avg. 0.130 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 40.7 el 17.9 pa -62.8 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -5680.401 -922.349 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/fg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/fg.W.156.1X0F0I

multiband delay (μ s)

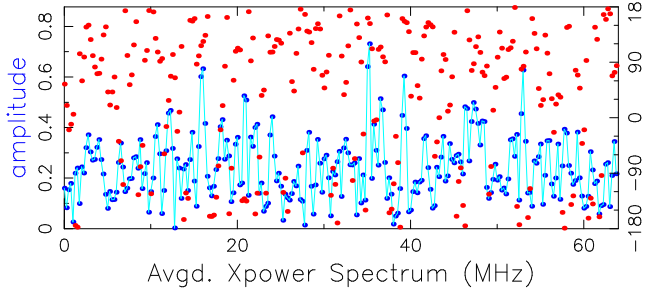


Fringe quality 0

SNR 6.6
Int time 418.955
Amp 0.119
Phase 85.8
PFD 8.4e-03
Delays (us)
SBD 0.000044
MBD 0.003075
Fringe rate (Hz) 0.000385
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

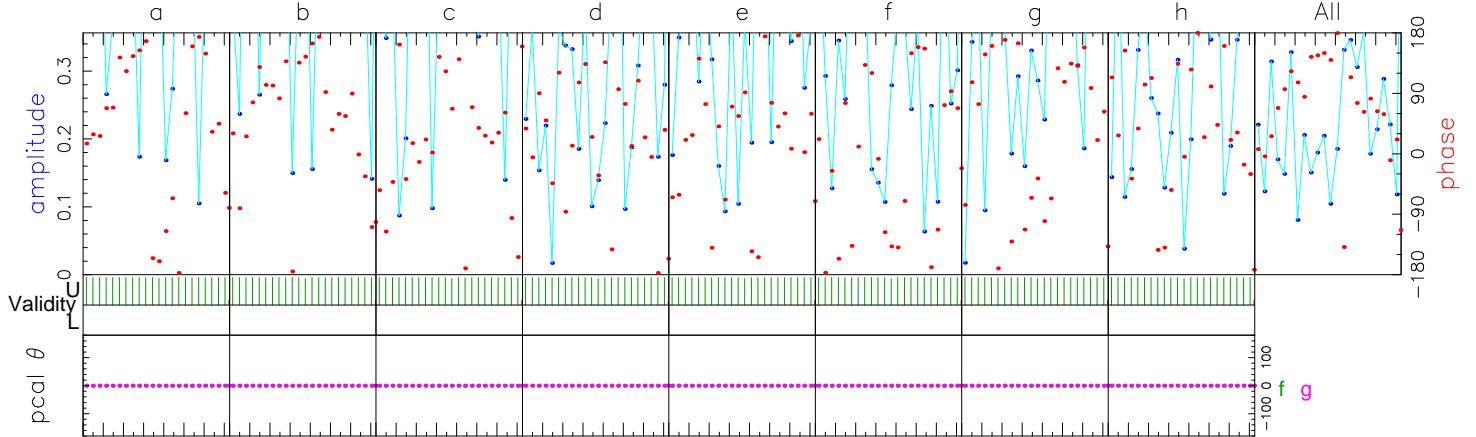


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120911
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
f	0	0	0	0	0	0	0	0	120.5	85.8
g	0	0	0	0	0	0	0	0	0.2	0.1
f:g	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	255.8	257.0
fg	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.2	0.1
f	1000	1000	1000	1000	1000	1000	1000	1000	149.4	149.4
g	1000	1000	1000	1000	1000	1000	1000	1000	129.6	129.6
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	53.4	53.4
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	0.1	0.1

Group delay (usec)(sbd)	-1.07544473460E+04	Apriori delay (usec)	-1.07544504206E+04	Resid mbdelay (usec)	3.07459E-03	+/-	1.6E-04
Sband delay (usec)	-1.07544503768E+04	Apriori clock (usec)	9.8226738E+00	Resid sbdelay (usec)	4.37500E-05	+/-	1.3E-03
Phase delay (usec)	-1.07544504178E+04	Apriori clockrate (us/s)	-1.2000004E-08	Resid phdelay (usec)	2.76624E-06	+/-	5.6E-07
Delay rate (us/s)	6.27665882970E-01	Apriori rate (us/s)	6.27665878504E-01	Resid rate (us/s)	4.46675E-09	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	1.65745062912E-05	Resid phase (deg)	85.8	+/-	17.2

ph/seg (deg)	60.6	RMS	41.3	Theor.	Amplitude	0.119 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	113.0	Search (2048X32)	0.112	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	sb window (us)	-1.000 1.000
ph/frq (deg)	42.7	Inc. seg. avg.	0.175	Inc. frq. avg.	0.128	Bits/sample: 2x2	Sample rate(MISamp/s): 128	mb window (us)	-0.008 0.008
amp/frq (%)	63.2	Inc. frq. avg.	0.128	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00	

f: az 40.7 el 17.9 pa -62.8 g: az 98.6 el 55.1 pa -21.4 u,v (fr/asec) -5680.401 -922.349 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/fg..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/fg.W.93.1X0F0I

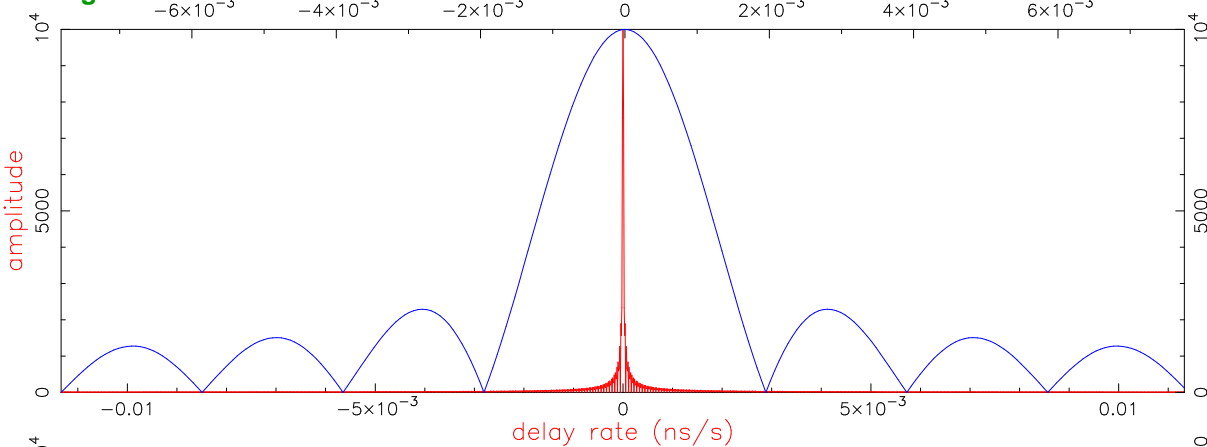
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gg

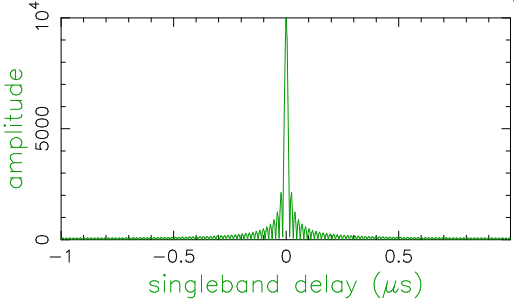
GLT - GLT, fgroup W, pol LL

multiband delay (μ s)

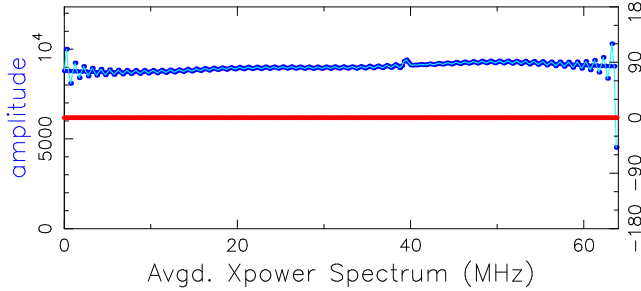


Fringe quality 9

SNR 560312.8
 Int time 419.822
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

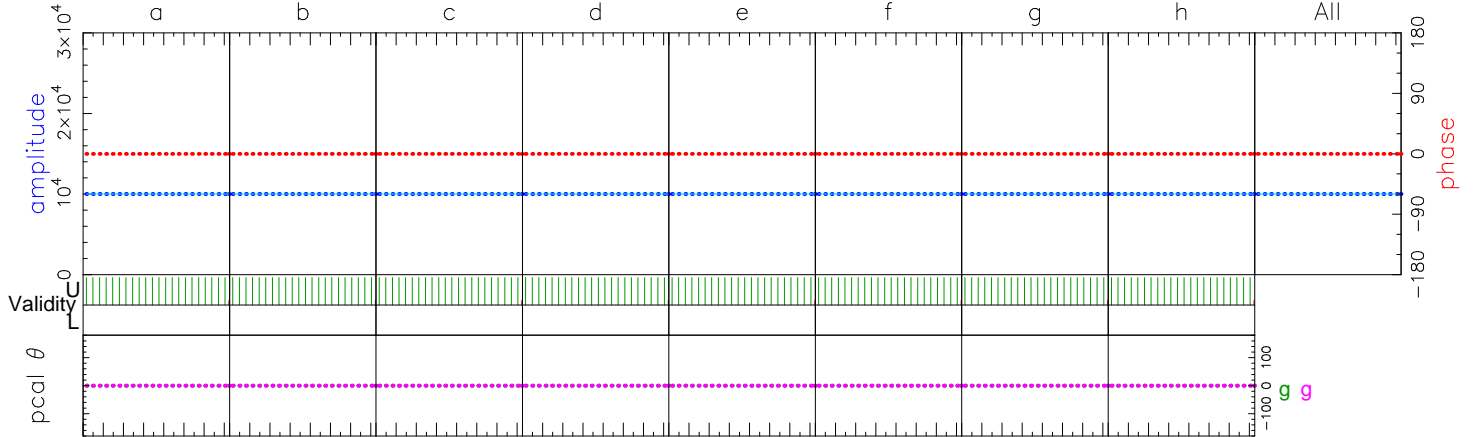


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120911
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.001 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	10000.001	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.001	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. frq. avg.	10000.001	Inc. frq. avg.	10000.001	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
g: az 98.6 el 55.1 pa -21.4				g: az 98.6 el 55.1 pa -21.4				Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva				Input file: /Exps/c211c/v1/1234/No0077/gg..1X0F0I								simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

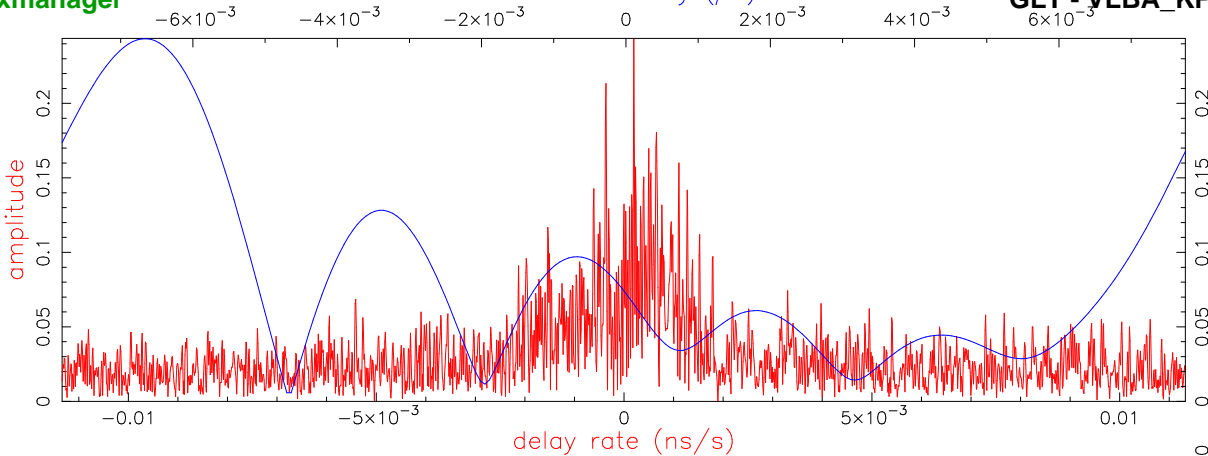
fxmanager

NRAO150.1X0F0I, No0077, gk

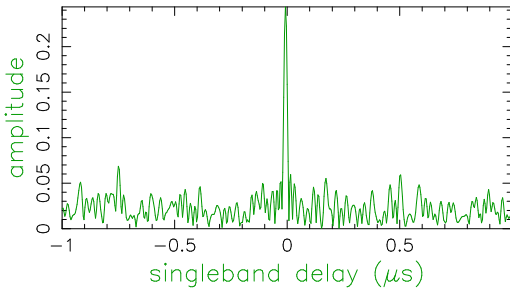
GLT - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)

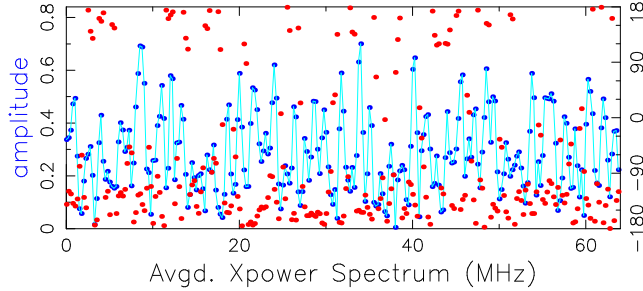
Fringe quality 9



SNR 13.6
 Int time 419.822
 Amp 0.244
 Phase -157.5
 PFD 1.2e-33
 Delays (us)
 SBD -0.007456
 MBD -0.006644
 Fringe rate (Hz)
 0.017149
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

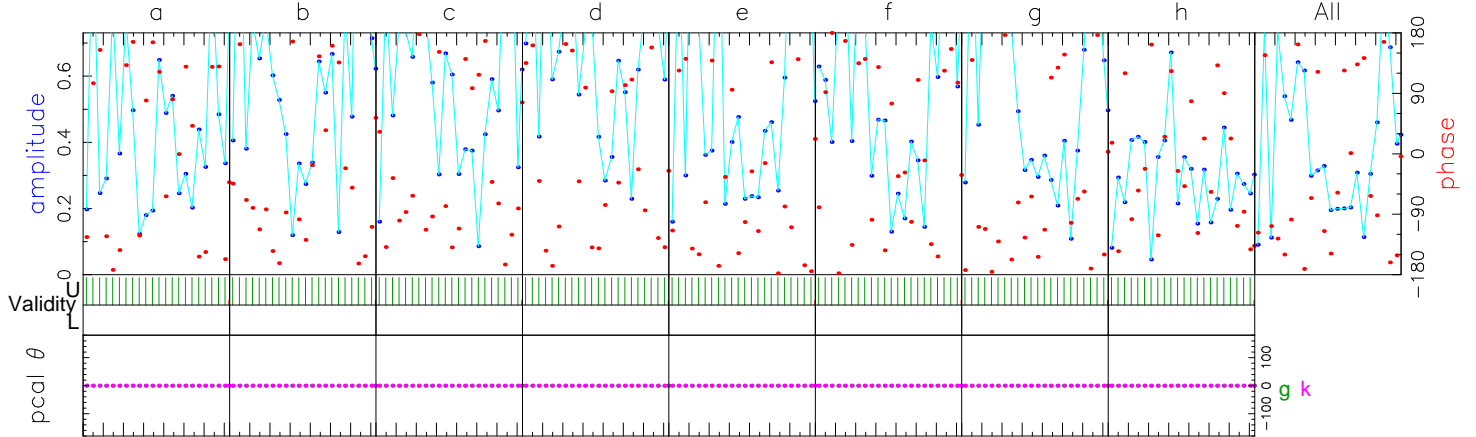


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120914
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



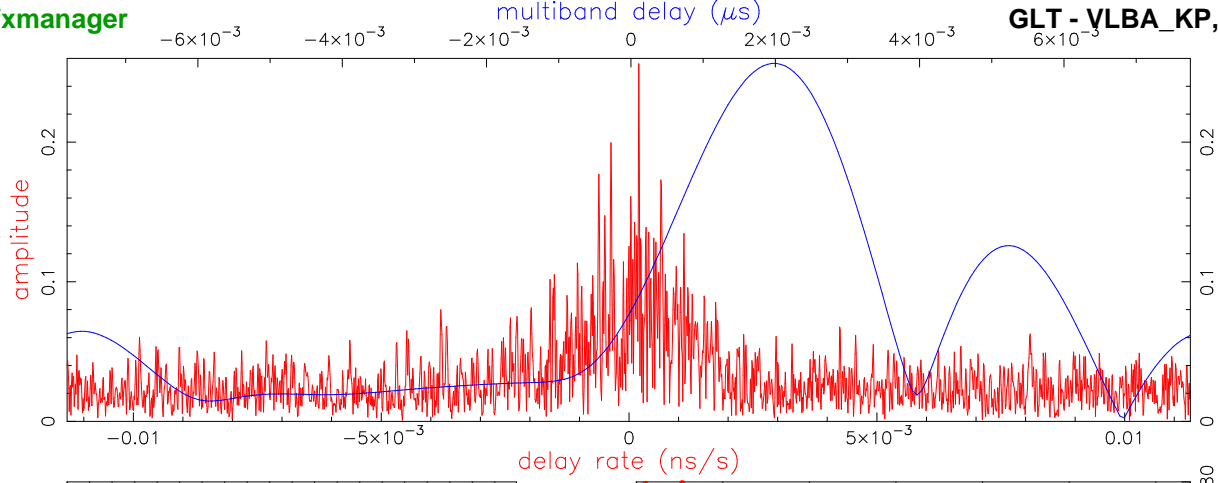
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
k	0	0	0	0	0	0	0	0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		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

Group delay (usec)(sbd)	1.19005686176E+04	Apriori delay (usec)	1.19005752621E+04	Resid mbdelay (usec)	-6.64445E-03	+/-	8.0E-05
Sband delay (usec)	1.19005678058E+04	Apriori clock (usec)	1.1697388E-01	Resid sbdelay (usec)	-7.45625E-03	+/-	6.3E-04
Phase delay (usec)	1.19005752570E+04	Apriori clockrate (us/s)	7.2000003E-08	Resid phdelay (usec)	-5.07831E-06	+/-	2.7E-07
Delay rate (us/s)	-5.92435437410E-01	Apriori rate (us/s)	-5.92435636493E-01	Resid rate (us/s)	1.99083E-07	+/-	1.1E-09
Total phase (deg)	-130.8	Apriori accel (us/s/s)	-2.43445313346E-05	Resid phase (deg)	-157.5	+/-	8.4

ph/seg (deg)	66.7	RMS	20.1	Theor.	20.1	Amplitude	0.244 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	113.0	Search (2048X32)	0.241	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	55.6	Inc. seg. avg.	0.378	Inc. frq. avg.	0.279	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	44.7	Inc. frq. avg.	0.279	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite

g: az 98.6 el 55.1 pa -21.4 k: az 38.4 el 14.8 pa -57.8 u,v (fr/asec) 5347.183 61.220 simultaneous interpolator

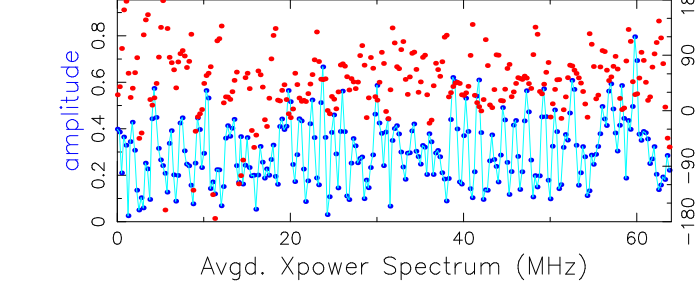
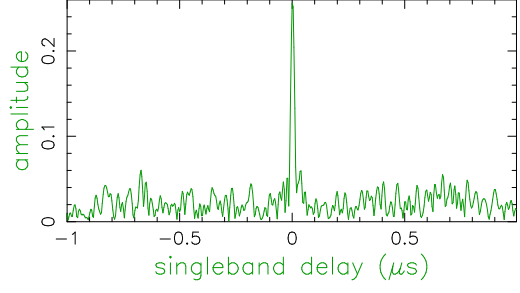
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gk..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gk.W.105.1X0F0I



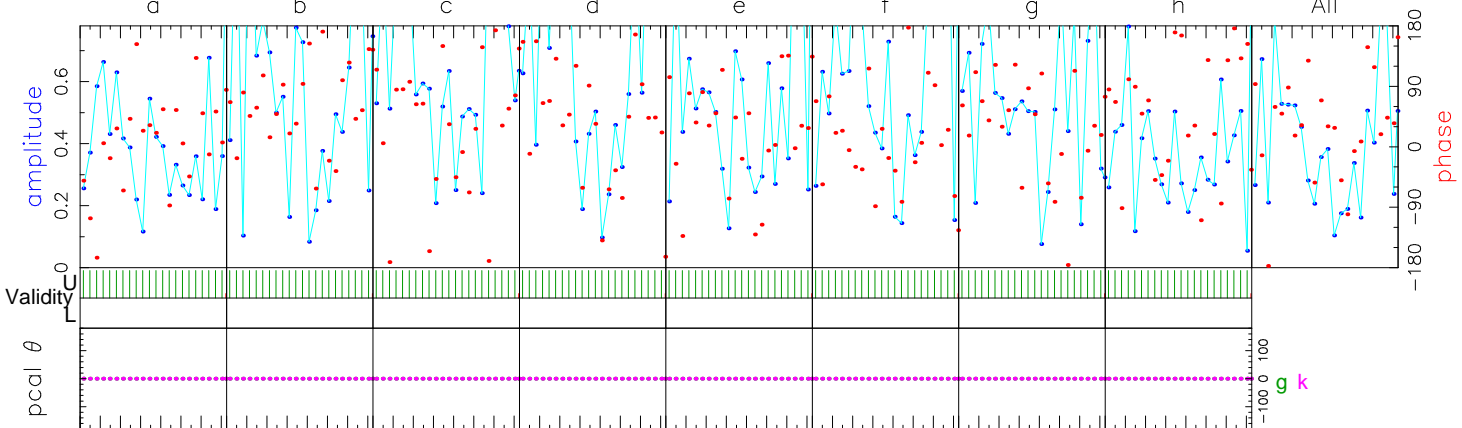
Fringe quality 8

SNR 14.6
Int time 419.822
Amp 0.260
Phase 44.9
PFD 2.9e-39
Delays (us)
SBD 0.001571
MBD 0.002047
Fringe rate (Hz) 0.017026
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120918
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
g	0	0	0	0	0	0	0	0			
k	0	0	0	0	0	0	0	0			
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
g	1000	1000	1000	1000	1000	1000	1000	1000			
k	1000	1000	1000	1000	1000	1000	1000	1000			
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		1.19005773087E+04				1.19005752621E+04			2.04664E-03	+/- 7.5E-05	
Sband delay (usec)		1.19005768328E+04				1.1697388E-01			1.57075E-03	+/- 5.9E-04	
Phase delay (usec)		1.19005752635E+04				7.2000003E-08			1.44844E-06	+/- 2.5E-07	
Delay rate (us/s)		-5.92435438841E-01				-5.92435636493E-01			1.97652E-07	+/- 1.0E-09	
Total phase (deg)			71.6			-2.43445313346E-05			44.9	+/- 7.9	
	RMS	Theor.	Amplitude	0.260 +/- 0.018		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5		
ph/seg (deg)	66.7	18.9	Search (2048X32)	0.253		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000	
amp/seg (%)	99.9	32.9	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	32.5	11.1	Inc. seg. avg.	0.387		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)	37.3	19.4	Inc. frq. avg.	0.275		Data rate(Mb/s): 2048			nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
g: az 98.6 el 55.1 pa -21.4		k: az 38.4 el 14.8 pa -57.8		u, v (fr/asec) 5347.183 61.220						simultaneous interpolator	

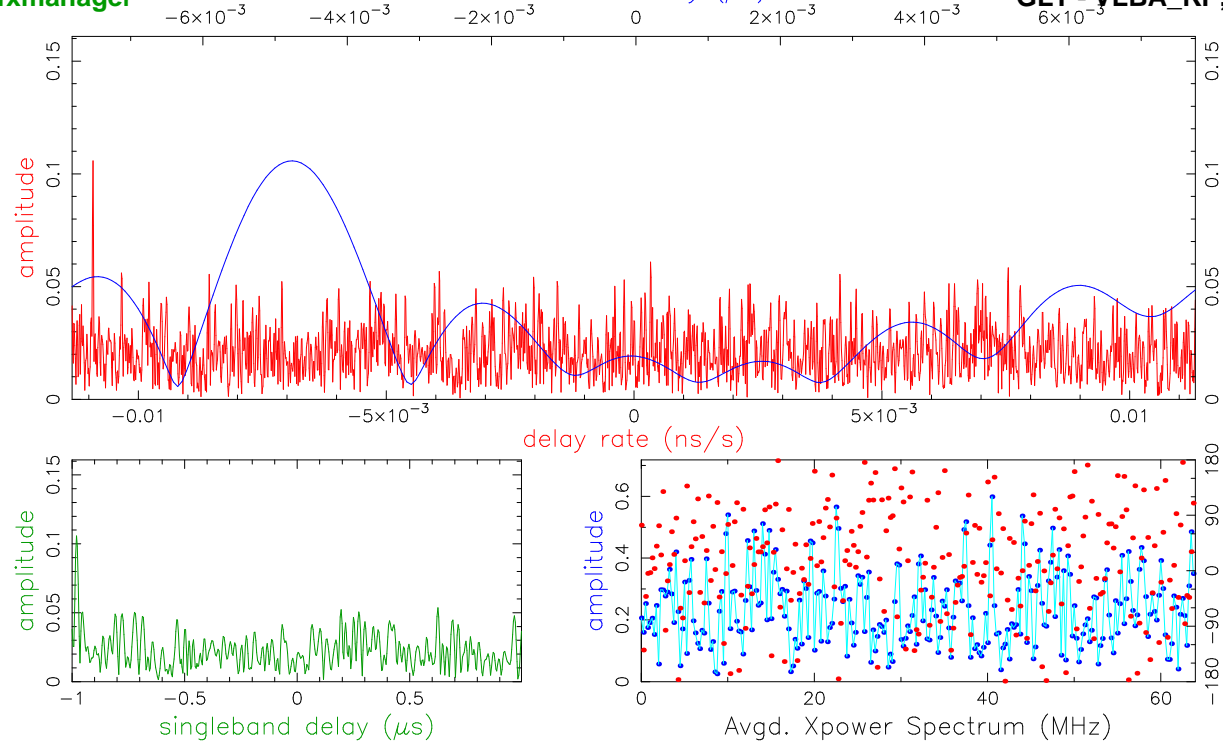
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gk

GLT - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

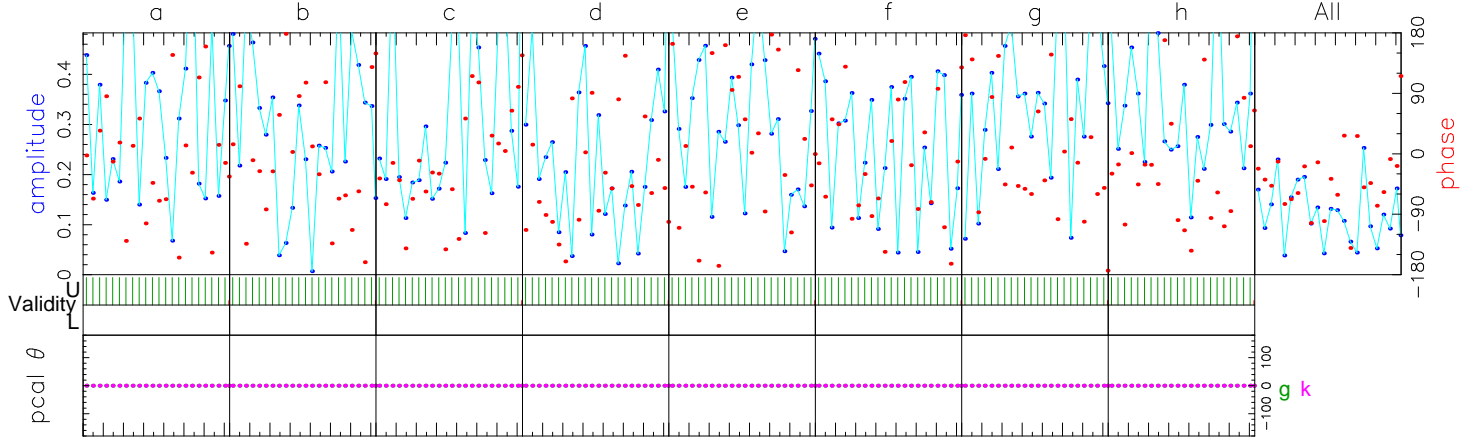


Fringe quality 0

SNR 5.9
 Int time 419.822
 Amp 0.161
 Phase -39.2
 PFD 5.0e-01
 Delays (us)
 SBD -0.979767
 MBD -0.004761
 Fringe rate (Hz)
 -0.941372
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120922
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-34.8	-55.4	-16.6	-54.9	-145.1	-25.1	-25.2	-49.8	Phase	-39.2
	0.2	0.1	0.2	0.2	0.0	0.1	0.3	0.3	Ampl.	0.2
	479.0	393.5	490.8	241.0	112.6	87.5	85.9	6.4	Sbd box	6.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)		1.18996017513E+04		Apriori delay (usec)	1.19005752621E+04		Resid mbdelay (usec)	-4.76071E-03	+/-	1.8E-04
Sband delay (usec)		1.18995954953E+04		Apriori clock (usec)	1.1697388E-01		Resid sbdelay (usec)	-9.79767E-01	+/-	1.4E-03
Phase delay (usec)		1.19005752608E+04		Apriori clockrate (us/s)	7.2000003E-08		Resid phdelay (usec)	-1.26460E-06	+/-	6.2E-07
Delay rate (us/s)		-5.92446564888E-01		Apriori rate (us/s)	-5.92435636493E-01		Resid rate (us/s)	-1.09284E-05	+/-	2.6E-09
Total phase (deg)			-12.5	Apriori accel (us/s/s)	-2.43445313346E-05		Resid phase (deg)	-39.2	+/-	19.3

ph/seg (deg) 42.0 46.2 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.9 80.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.1 27.3 Inc. seg. avg. 0.143 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.4 47.6 Inc. frq. avg. 0.153 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 k: az 38.4 el 14.8 pa -57.8 u,v (fr/asec) 5347.183 61.220 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gk..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gk.W.142.1X0F0I

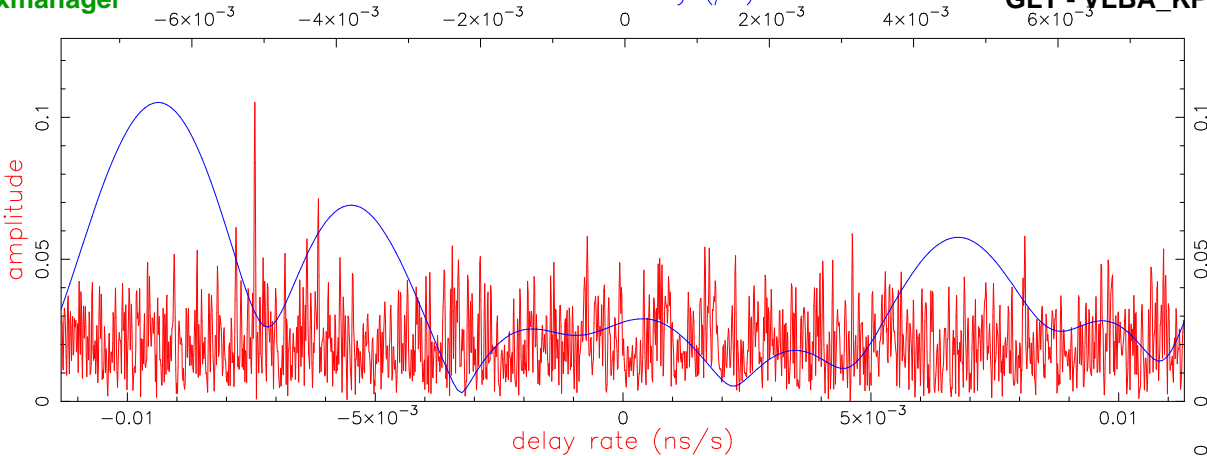
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gk

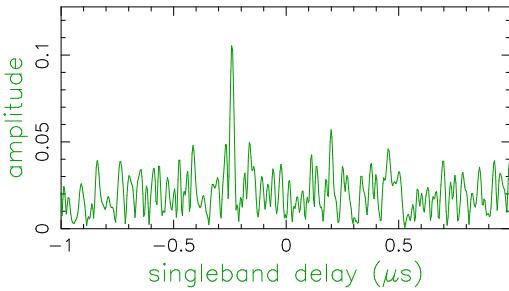
GLT - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

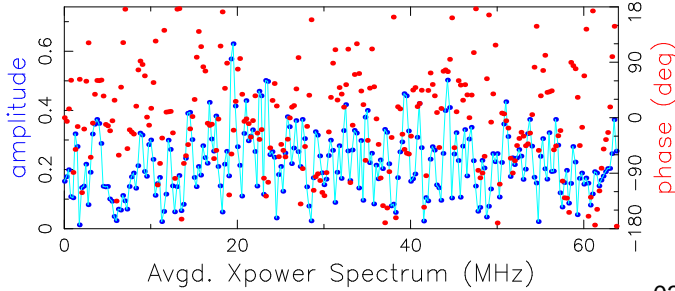


Fringe quality 0

SNR 6.0
 Int time 419.822
 Amp 0.128
 Phase 179.9
 PFD 4.8e-01
 Delays (us)
 SBD -0.240803
 MBD -0.006466
 Fringe rate (Hz)
 -0.640630
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

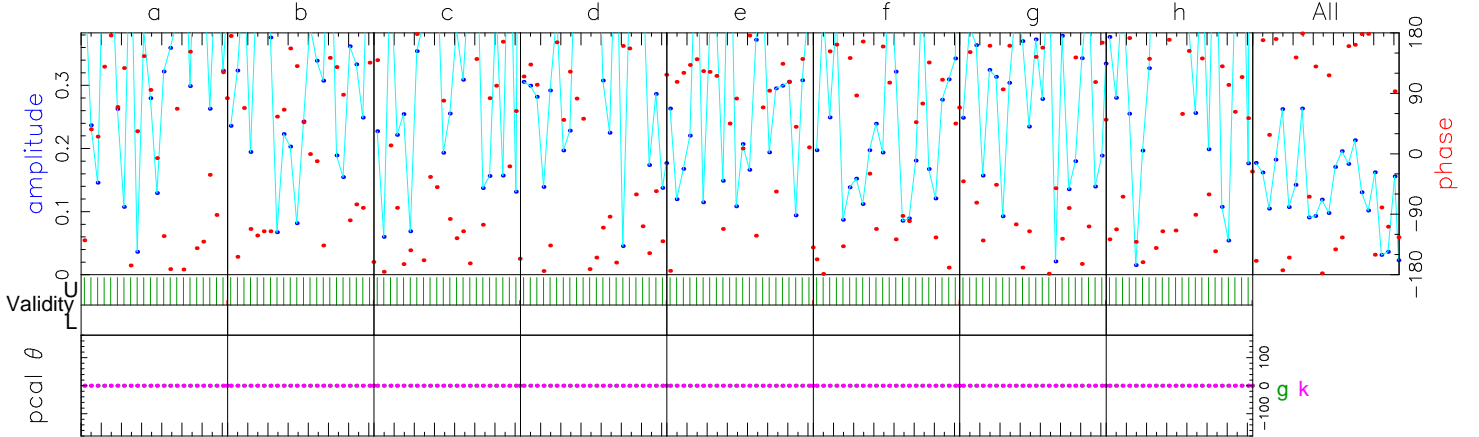


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120925
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-179.7	-157.0	-137.0	-177.4	108.2	147.0	-156.0	-164.5	Phase	179.9
	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	195.7	366.6	97.6	193.5	216.0	307.7	195.6	475.9	Sbd box	195.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.19003344213E+04	Apriori delay (usec)	1.19005752621E+04	Resid mbdelay (usec)	-6.46575E-03	+/-	1.8E-04
Sband delay (usec)	1.19003344591E+04	Apriori clock (usec)	1.1697388E-01	Resid sbdelay (usec)	-2.40803E-01	+/-	1.4E-03
Phase delay (usec)	1.19005752679E+04	Apriori clockrate (us/s)	7.2000003E-08	Resid phdelay (usec)	5.80134E-06	+/-	6.2E-07
Delay rate (us/s)	-5.92443073570E-01	Apriori rate (us/s)	-5.92435636493E-01	Resid rate (us/s)	-7.43708E-06	+/-	2.6E-09
Total phase (deg)	206.6	Apriori accel (us/s/s)	-2.43445313346E-05	Resid phase (deg)	179.9	+/-	19.2

ph/seg (deg)	58.2	RMS	46.1	Theor.	46.1	Amplitude	0.128 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	66.6	Search (2048X32)	0.104	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	0.104	SampCntNorm: enabled	mb window (us)	-1.000 1.000
ph/frq (deg)	39.7	Inc. seg. avg.	0.130	Inc. frq. avg.	0.134	Bits/sample: 2x2	0.130	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011
amp/frq (%)	36.7	Inc. frq. avg.	0.134	u,v (fr/asec)	5347.183 61.220	Data rate(Mb/s): 2048	0.134	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 98.6 el 55.1 pa -21.4 k: az 38.4 el 14.8 pa -57.8 u,v (fr/asec) 5347.183 61.220 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gk..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gk.W.158.1X0F0I

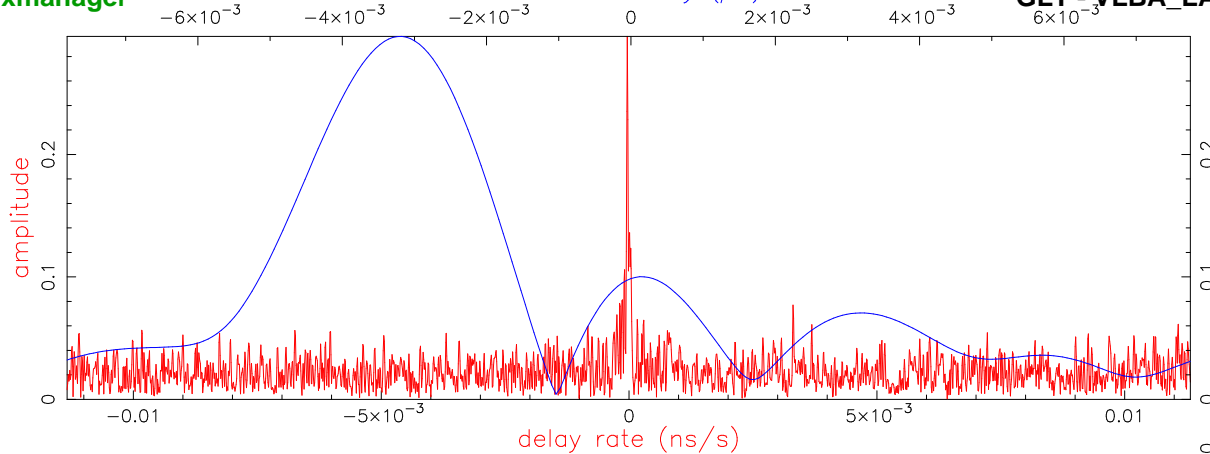
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gl

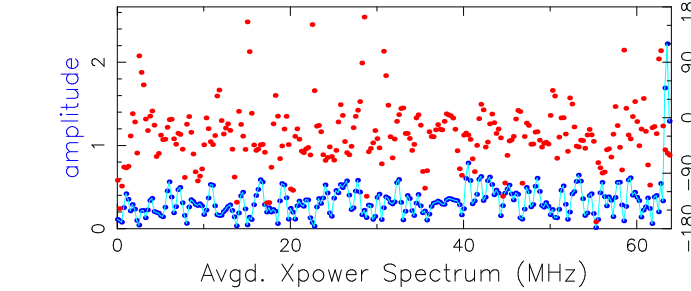
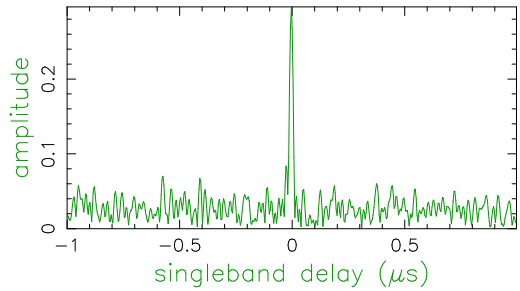
GLT - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)



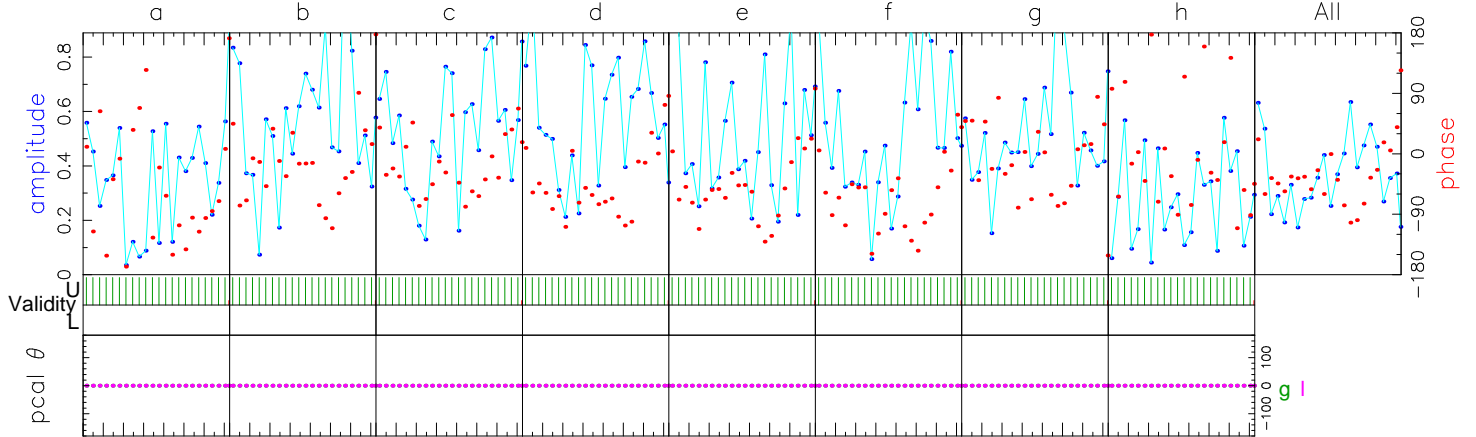
Fringe quality 8

SNR 16.6
 Int time 419.822
 Amp 0.296
 Phase -39.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003954
 MBD -0.003200
 Fringe rate (Hz)
 -0.003296
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120914
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	9.86318808863E+03	Apriori delay (usec)		9.86319128879E+03	Resid mbdelay (usec)		-3.20015E-03	+/-	6.5E-05	
Sband delay (usec)	9.86318733529E+03	Apriori clock (usec)		3.0613117E+00	Resid sbdelay (usec)		-3.95350E-03	+/-	5.2E-04	
Phase delay (usec)	9.86319128751E+03	Apriori clockrate (us/s)		3.5800001E-07	Resid phdelay (usec)		-1.28135E-06	+/-	2.2E-07	
Delay rate (us/s)	-5.75117674504E-01	Apriori rate (us/s)		-5.75117636246E-01	Resid rate (us/s)		-3.82579E-08	+/-	9.2E-10	
Total phase (deg)		182.1	Apriori accel (us/s/s)		-1.83465459543E-05	Resid phase (deg)		-39.7	+/-	6.9

ph/seg (deg)	38.6	Theor. 16.5	Amplitude	0.296 +/- 0.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	51.8	28.9	Search (2048X32)	0.277	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	25.7	9.8	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.6	17.0	Inc. seg. avg.	0.362	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	0.313	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	

g: az 98.6 el 55.1 pa -21.4 l: az 41.1 el 20.5 pa -58.7 u,v (fr/asec) 5200.202 336.687 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gl..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gl.W.104.1X0F0I

Mk4/DiFX fourfit 3.21 rev 2937

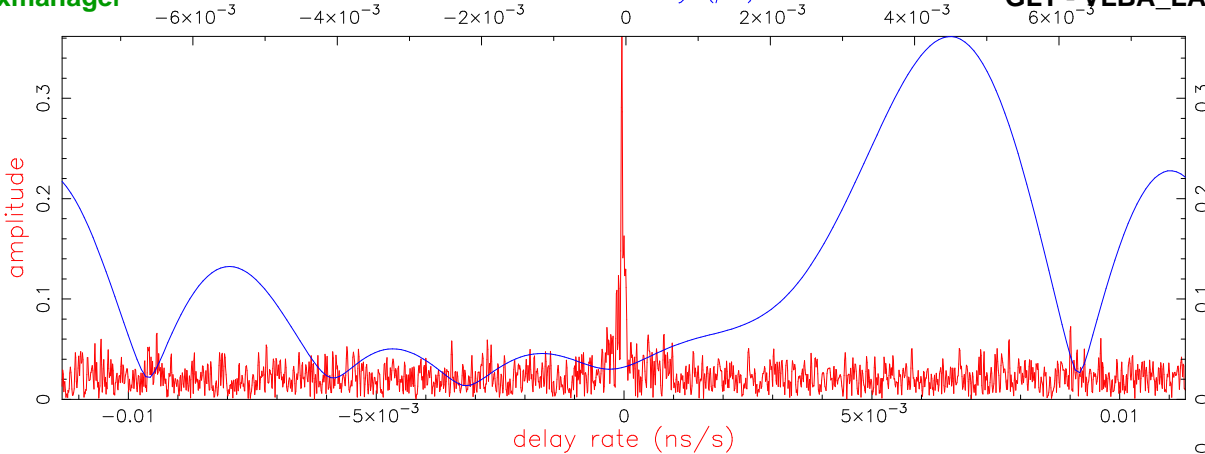
fxmanager

NRAO150.1X0F0I, No0077, gl

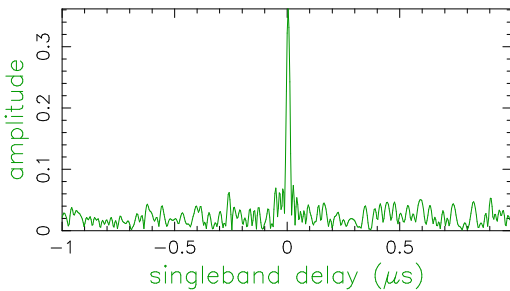
GLT - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

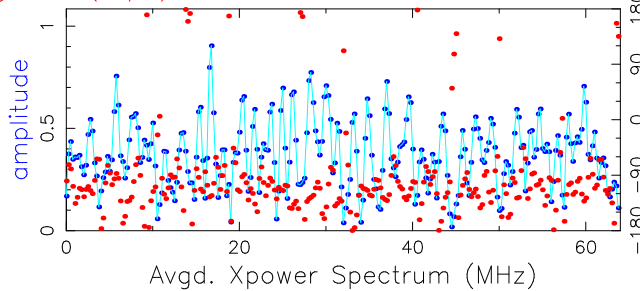
Fringe quality 8



SNR 20.3
 Int time 419.822
 Amp 0.362
 Phase -119.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.004173
 MBD 0.004506
 Fringe rate (Hz)
 -0.003386
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

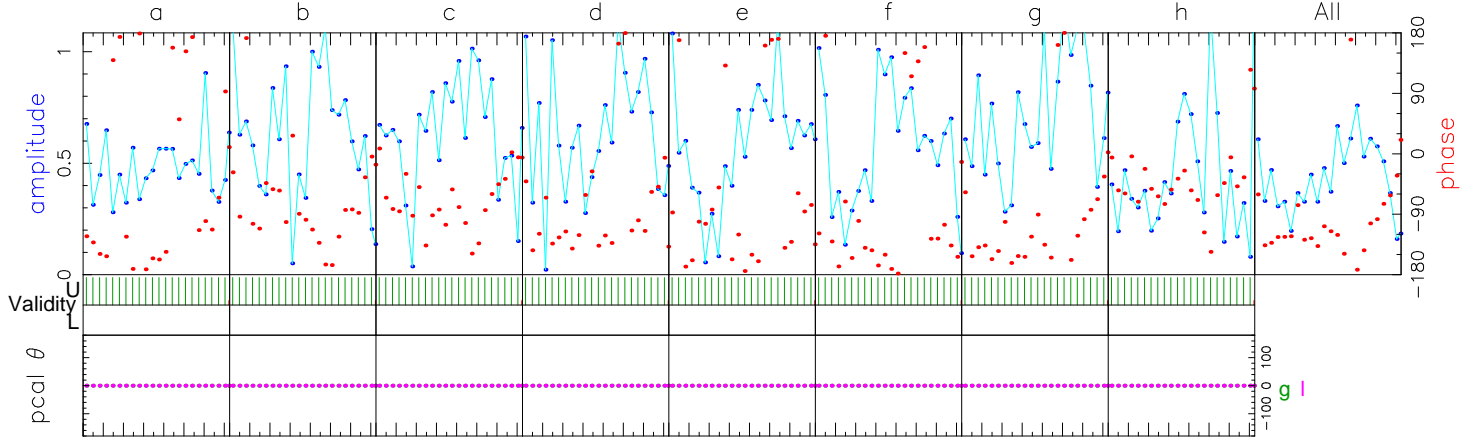


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120918
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-156.2	-97.7	-78.8	-116.0	-144.0	-160.6	-132.4	-54.2	Phase	-119.4
	0.3	0.5	0.5	0.5	0.4	0.5	0.6	0.3	Ampl.	0.4
	260.0	258.1	257.7	258.1	258.1	257.4	258.3	259.7	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.86319579512E+03		Apriori delay (usec)		9.86319128879E+03		Resid mbdelay (usec)		4.50634E-03	+/- 5.4E-05
Sband delay (usec)	9.86319546129E+03		Apriori clock (usec)		3.0613117E+00		Resid sbdelay (usec)		4.17250E-03	+/- 4.3E-04
Phase delay (usec)	9.86319128494E+03		Apriori clockrate (us/s)		3.5800001E-07		Resid phdelay (usec)		-3.84999E-06	+/- 1.8E-07
Delay rate (us/s)	-5.75117675558E-01		Apriori rate (us/s)		-5.75117636246E-01		Resid rate (us/s)		-3.93122E-08	+/- 7.5E-10
Total phase (deg)	102.4		Apriori accel (us/s/s)		-1.83465459543E-05		Resid phase (deg)		-119.4	+/- 5.7

	RMS	Theor.	Amplitude	0.362 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	38.3	13.6	Search (2048X32)	0.343	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	47.8	23.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	41.2	8.0	Inc. seg. avg.	0.434	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	28.2	14.0	Inc. frq. avg.	0.428	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

g: az 98.6 el 55.1 pa -21.4 l: az 41.1 el 20.5 pa -58.7 u,v (fr/asec) 5200.202 336.687 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gl..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gl.W.121.1X0F0I

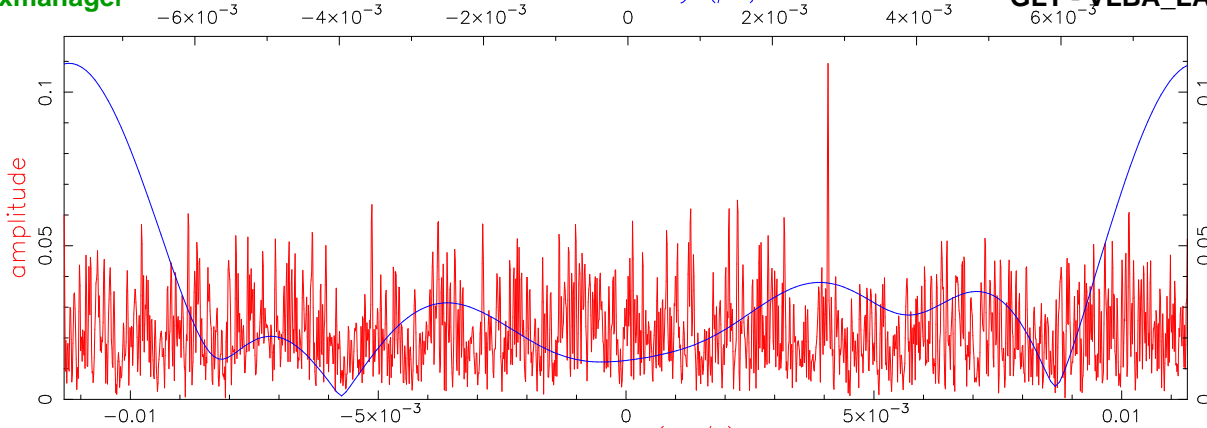
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gl

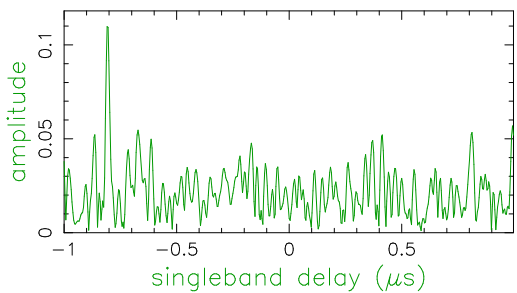
GLT - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

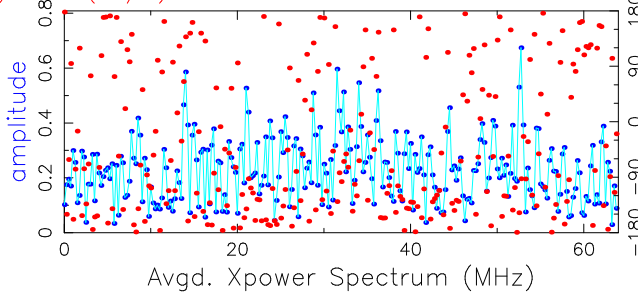


Fringe quality 0

SNR 6.3
 Int time 419.822
 Amp 0.118
 Phase -169.2
 PFD 9.1e-02
 Delays (us)
 SBD -0.806727
 MBD 0.007844
 Fringe rate (Hz) 0.351626
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

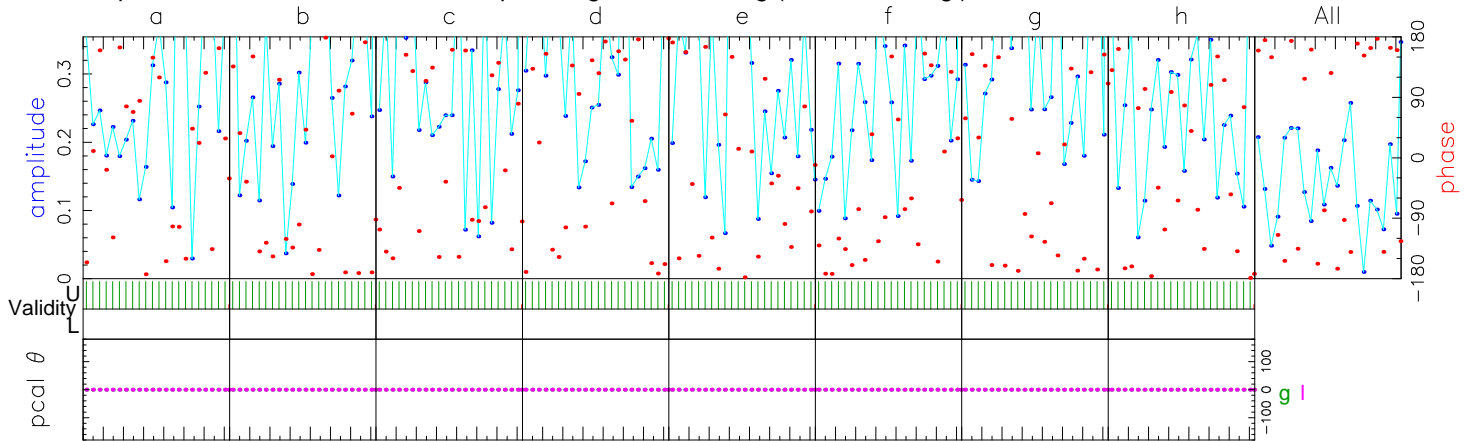


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120921
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	9.86238663259E+03	Apriori delay (usec)		9.86319128879E+03	Resid mbdelay (usec)		7.84380E-03	+/-	1.7E-04	
Sband delay (usec)	9.86238456229E+03	Apriori clock (usec)		3.0613117E+00	Resid sbdelay (usec)		-8.06727E-01	+/-	1.4E-03	
Phase delay (usec)	9.86319128333E+03	Apriori clockrate (us/s)		3.5800001E-07	Resid phdelay (usec)		-5.45764E-06	+/-	5.9E-07	
Delay rate (us/s)	-5.75113554221E-01	Apriori rate (us/s)		-5.75117636246E-01	Resid rate (us/s)		4.08202E-06	+/-	2.4E-09	
Total phase (deg)		52.6	Apriori accel (us/s/s)		-1.83465459543E-05	Resid phase (deg)		-169.2	+/-	18.3

ph/seg (deg)	41.9	Theor. 43.8	Amplitude Search (2048X32)	0.118 +/- 0.019	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
amp/seg (%)	64.2	76.5	Interp.	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	24.3	25.8	Inc. seg. avg.	0.116	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.0	45.1	Inc. frq. avg.	0.112	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
g: az 98.6 el 55.1 pa -21.4		l: az 41.1 el 20.5 pa -58.7		u,v (fr/asec) 5200.202 336.687		Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gl..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gl.W.140.1X0F0I simultaneous interpolator

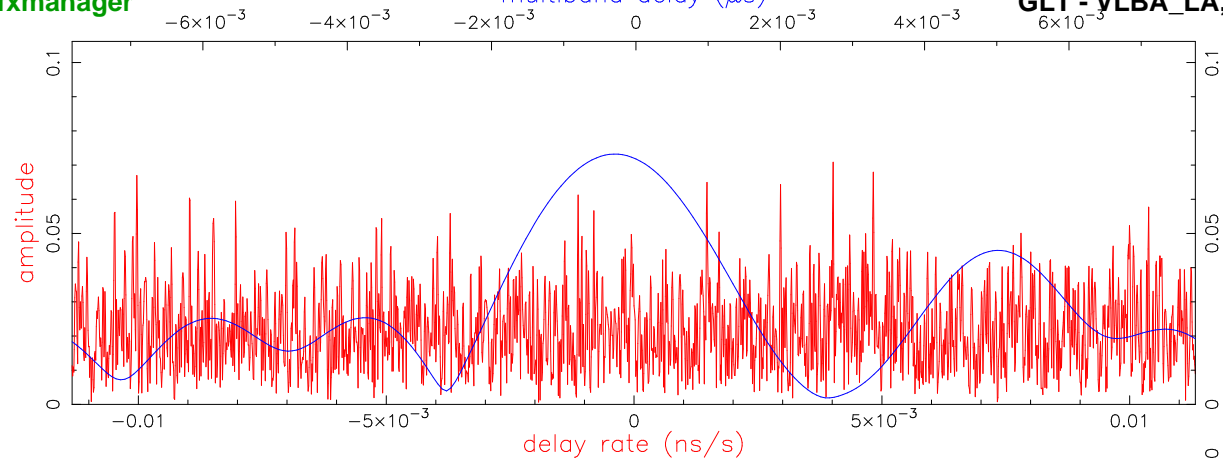
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gl

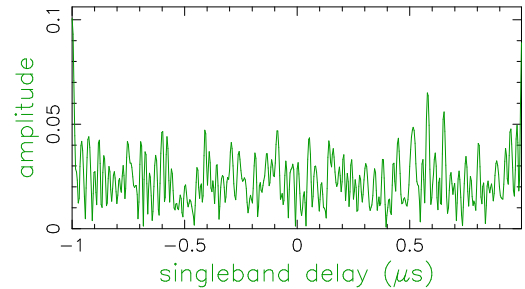
GLT - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

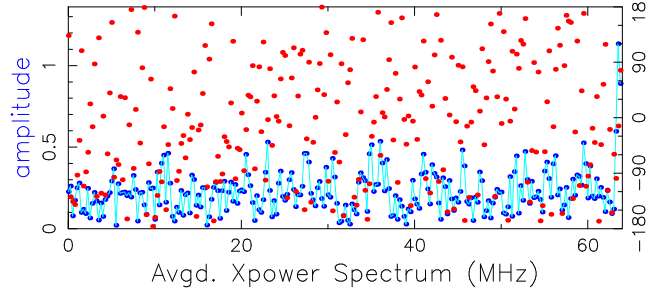


Fringe quality 0

SNR 5.6
 Int time 419.822
 Amp 0.106
 Phase 17.0
 PFD 9.8e-01
 Delays (us)
 SBD -0.999593
 MBD -0.000667
 Fringe rate (Hz)
 0.346265
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

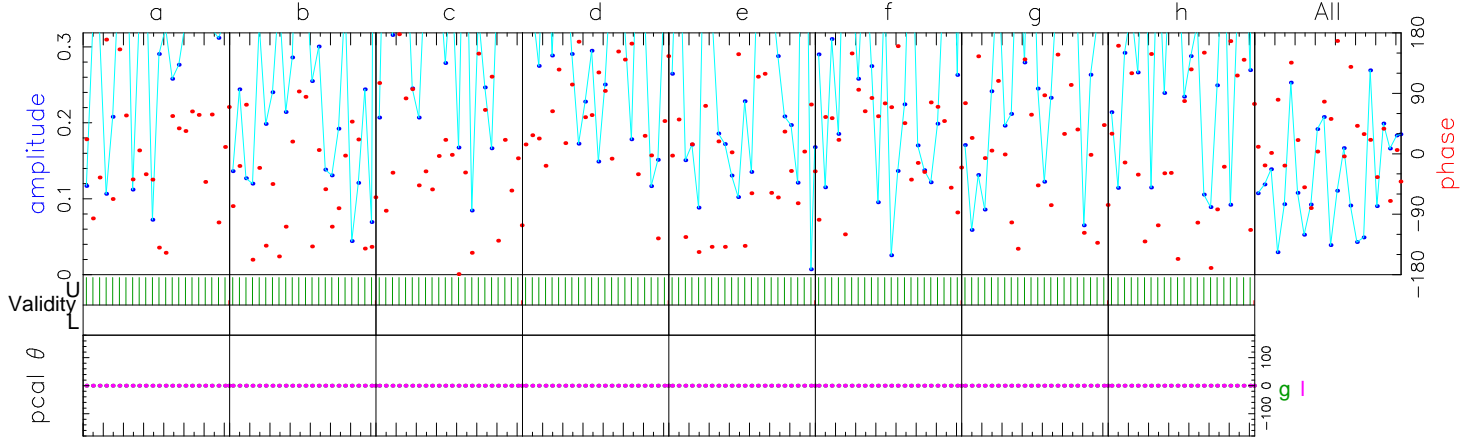


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120925
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	9.86219062190E+03									
Sband delay (usec)	9.86219169591E+03									
Phase delay (usec)	9.86319128934E+03									
Delay rate (us/s)	-5.75113616451E-01									
Total phase (deg)			238.8							
Apriori delay (usec)					9.86319128879E+03					
Apriori clock (usec)					3.0613117E+00					
Apriori clockrate (us/s)					3.5800001E-07					
Apriori rate (us/s)					-5.75117636246E-01					
Apriori accel (us/s/s)					-1.83465459543E-05					
Resid mbdelay (usec)									-6.66883E-04	+/- 1.9E-04
Resid sbdelay (usec)									-9.99593E-01	+/- 1.5E-03
Resid phdelay (usec)									5.47997E-07	+/- 6.5E-07
Resid rate (us/s)									4.01979E-06	+/- 2.7E-09
Resid phase (deg)									17.0	+/- 20.3
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00	(us/s)							
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 63.0 48.7 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.1 84.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 68.4 28.7 Inc. seg. avg. 0.099 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.0 50.1 Inc. frq. avg. 0.085 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 l: az 41.1 el 20.5 pa -58.7 u,v (fr/asec) 5200.202 336.687 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gl..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gl.W.157.1X0F0I

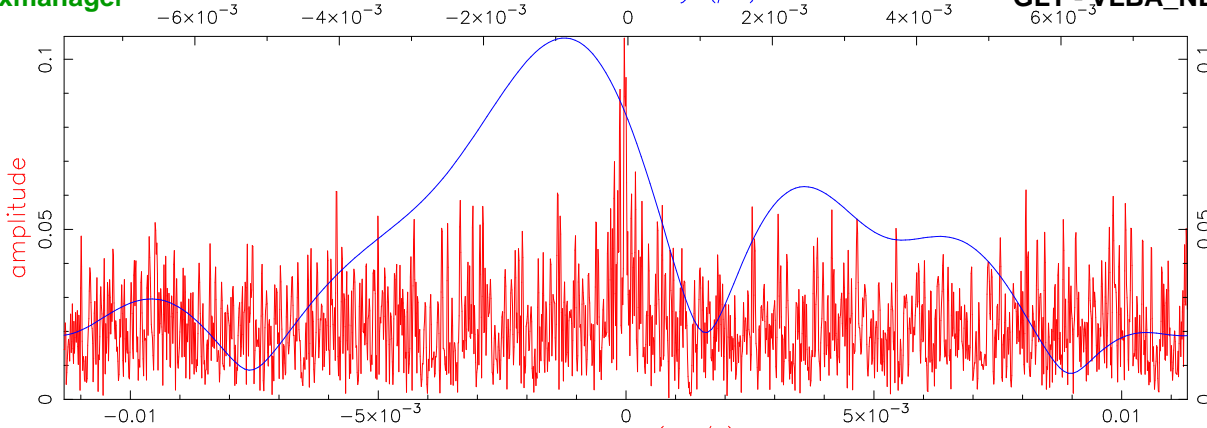
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

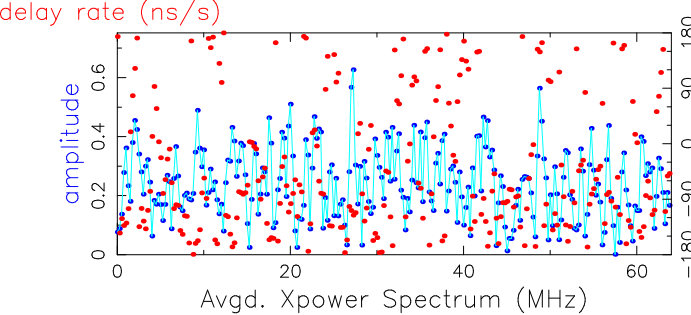
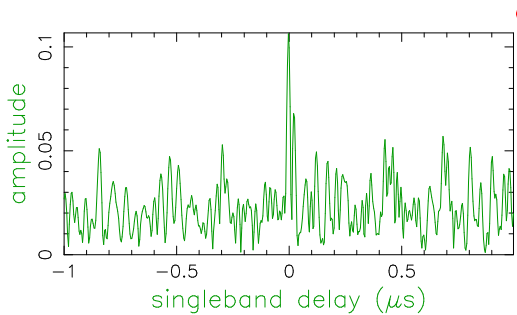
NRAO150.1X0F0I, No0077, gn

GLT - VLBA_NL, fgroup W, pol LL

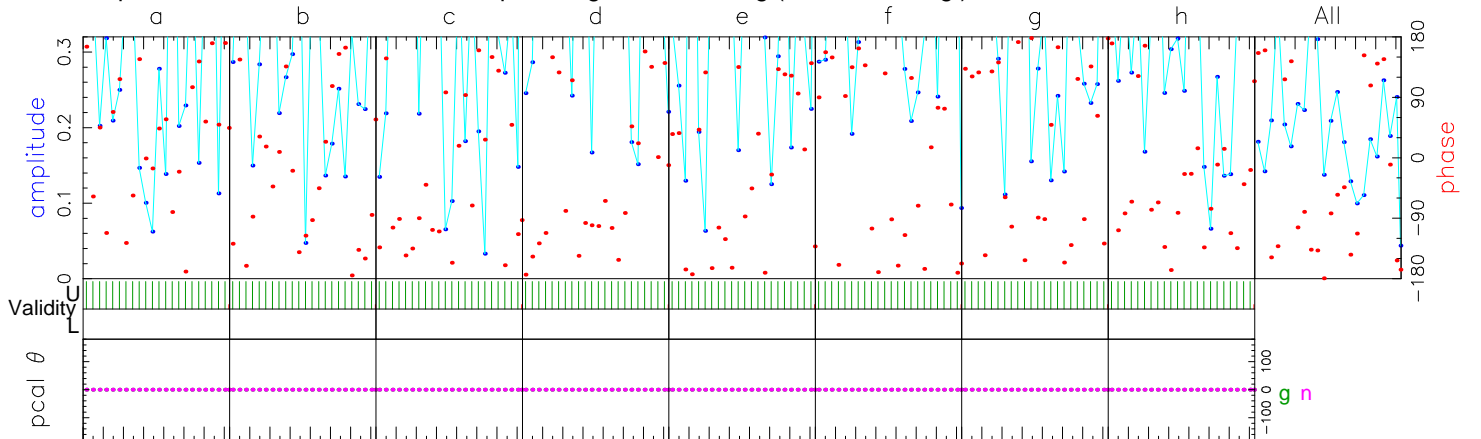
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 419.822
 Amp 0.107
 Phase -147.6
 PFD 4.4e-01
 Delays (us)
 SBD -0.003089
 MBD -0.000852
 Fringe rate (Hz)
 -0.002826
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120916
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.79978449296E+03		Apriori delay (usec)		5.79978534508E+03		Resid mbdelay (usec)		-8.52123E-04	+/- 1.8E-04
Sband delay (usec)	5.79978225558E+03		Apriori clock (usec)		-5.0362492E+00		Resid sbdelay (usec)		-3.08950E-03	+/- 1.4E-03
Phase delay (usec)	5.79978534032E+03		Apriori clockrate (us/s)		-2.2799999E-07		Resid phdelay (usec)		-4.75979E-06	+/- 6.2E-07
Delay rate (us/s)	-5.23664999064E-01		Apriori rate (us/s)		-5.23664966262E-01		Resid rate (us/s)		-3.28020E-08	+/- 2.5E-09
Total phase (deg)	77.4		Apriori accel (us/s/s)		-3.92164617054E-06		Resid phase (deg)		-147.6	+/- 19.2
ph/seg (deg)	RMS 65.7	Theor. 45.9	Amplitude 0.107 +/- 0.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	115.5	80.2	Search (2048X32) 0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	47.0	27.1	Interp. 0.000	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.6	47.3	Inc. seg. avg. 0.156	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
g: az 98.6 el 55.1 pa -21.4		n: az 48.4 el 32.8 pa -62.6		u,v (fr/asec) 4756.650 1287.582				simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gn..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gn.W.117.1X0F0I

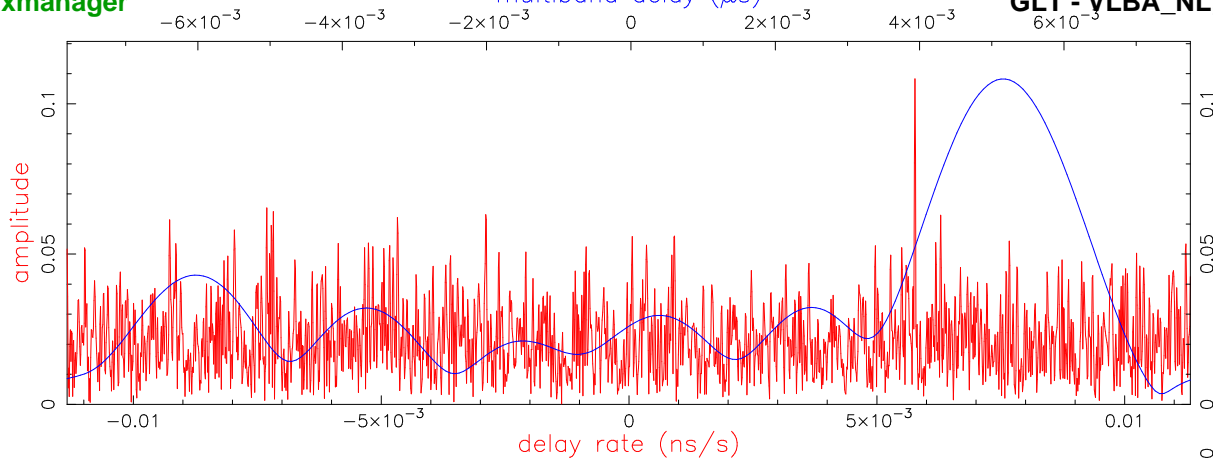
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gn

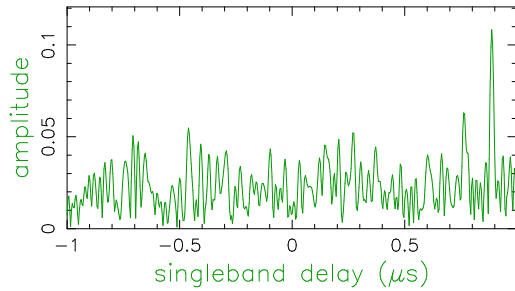
GLT - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

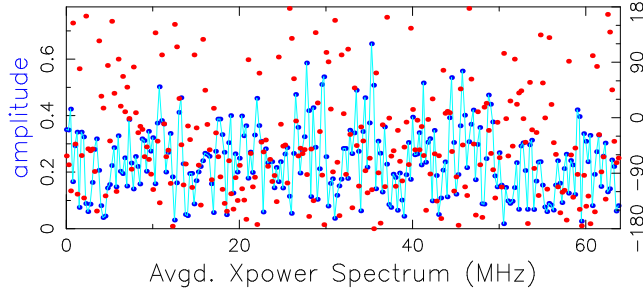


Fringe quality 0

SNR 6.1
Int time 419.822
Amp 0.121
Phase 3.6
PFD 2.9e-01
Delays (us)
SBD 0.886741
MBD 0.005158
Fringe rate (Hz) 0.497210
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

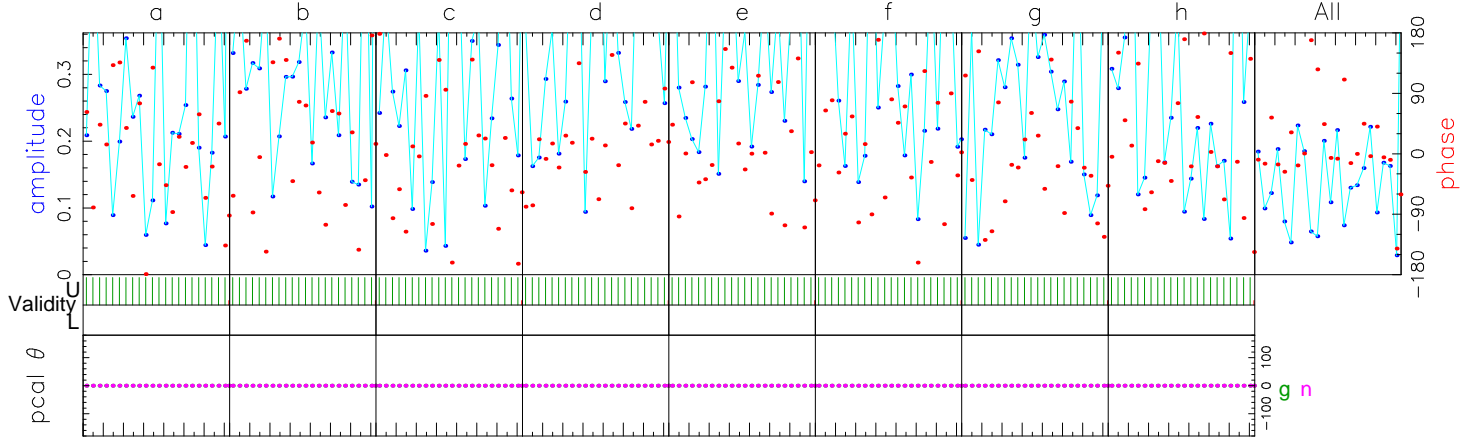


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build 2021:303:054744
2021:303:120920
2021:252:122852
RA & Dec (J2000) 03h59m29.747267s +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0	Phase	3.6
n	0	0	0	0	0	0	0	0	Ampl.	0.1
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	484.0
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	5.80066550343E+03		Apriori delay (usec)		5.79978534508E+03		Resid mbdelay (usec)		5.15836E-03	+/- 1.8E-04
Sband delay (usec)	5.80067208583E+03		Apriori clock (usec)		-5.0362492E+00		Resid sbdelay (usec)		8.86741E-01	+/- 1.4E-03
Phase delay (usec)	5.79978534519E+03		Apriori clockrate (us/s)		-2.2799999E-07		Resid phdelay (usec)		1.16100E-07	+/- 6.1E-07
Delay rate (us/s)	-5.23659194150E-01		Apriori rate (us/s)		-5.23664966262E-01		Resid rate (us/s)		5.77211E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.92164617054E-06		Resid phase (deg)		3.6	+/- 18.9

ph/seg (deg) 62.4 45.3 Search (2048X32) 0.104 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.4 79.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.0 26.7 Inc. seg. avg. 0.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.6 46.6 Inc. frq. avg. 0.115 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 n: az 48.4 el 32.8 pa -62.6 u,v (fr/asec) 4756.650 1287.582 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gn..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gn.W.136.1X0F0I

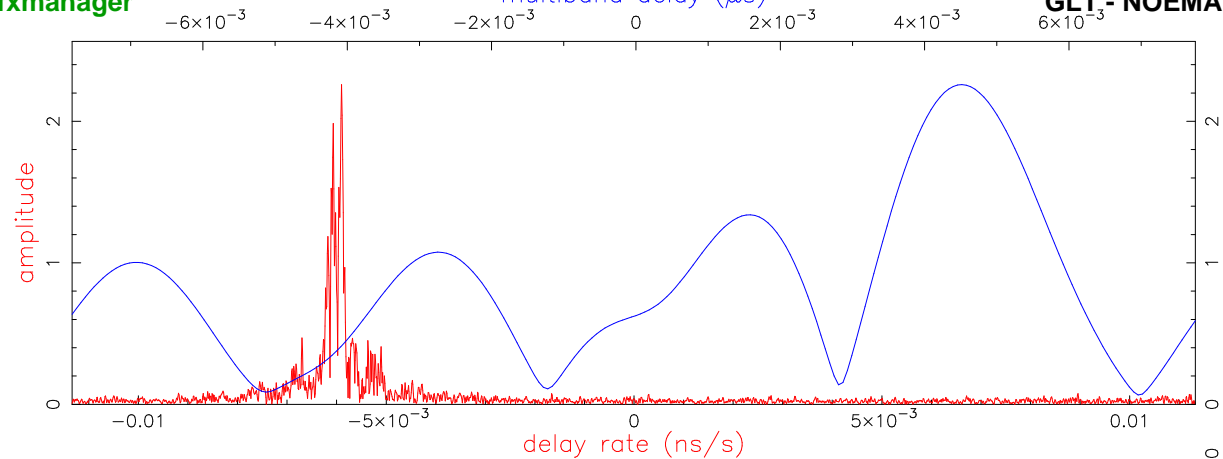
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gN

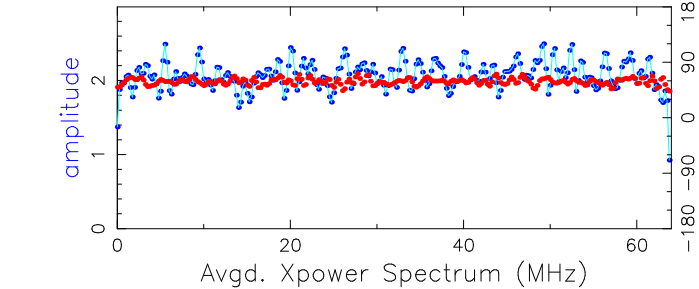
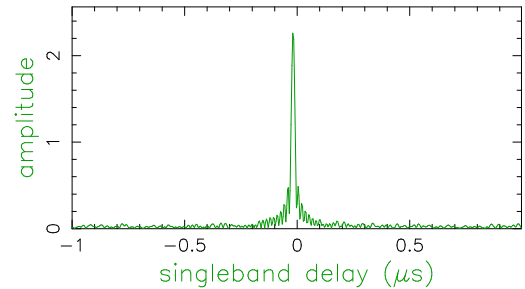
GLT - NOEMA, fgroup W, pol LL

multiband delay (μ s)

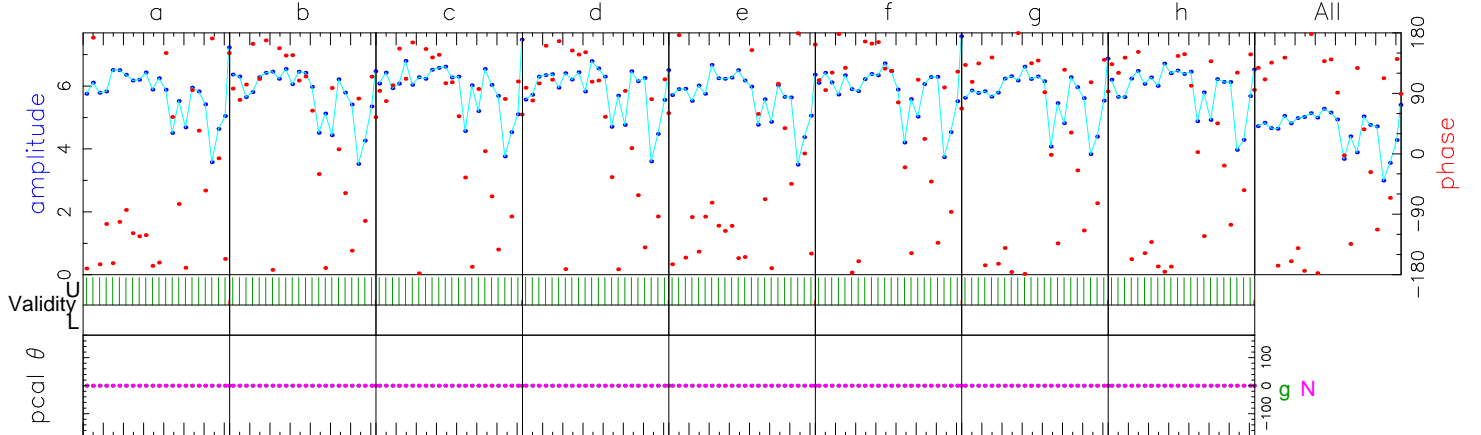


Fringe quality 2

SNR 128.2
 Int time 419.819
 Amp 2.565
 Phase 157.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.018153
 MBD 0.004515
 Fringe rate (Hz)
 -0.508749
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120923
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-142.8	127.0	123.5	126.2	-133.1	141.4	156.9	166.2	Phase	157.5
	3.1	3.3	3.3	3.2	3.0	3.3	3.1	3.2	Ampl.	3.2
	252.2	252.2	252.3	252.3	252.4	252.4	252.6	252.4	Sbd box	252.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.47595283007E+03		Apriori delay (usec)		-3.47594172019E+03		Resid mbdelay (usec)		4.51512E-03	+/- 8.5E-06
Sband delay (usec)	-3.47595987369E+03		Apriori clock (usec)		1.3778524E+01		Resid sbdelay (usec)		-1.81535E-02	+/- 6.7E-05
Phase delay (usec)	-3.47594171511E+03		Apriori clockrate (us/s)		4.4610001E-06		Resid phdelay (usec)		5.07847E-06	+/- 2.9E-08
Delay rate (us/s)	3.40108626327E-01		Apriori rate (us/s)		3.40114532402E-01		Resid rate (us/s)		-5.90608E-06	+/- 1.2E-10
Total phase (deg)			Apriori accel (us/s/s)		4.22829358625E-05		Resid phase (deg)		157.5	+/- 0.9

ph/seg (deg) 74.8 2.1 Search (2048X32) 2.186 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 105.2 3.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 44.3 1.3 Inc. seg. avg. 5.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.1 2.2 Inc. frq. avg. 3.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 N: az 316.1 el 80.5 pa 130.4 u,v (fr/asec) -3031.173 5640.497 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gN..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gN.W.149.1X0F0I

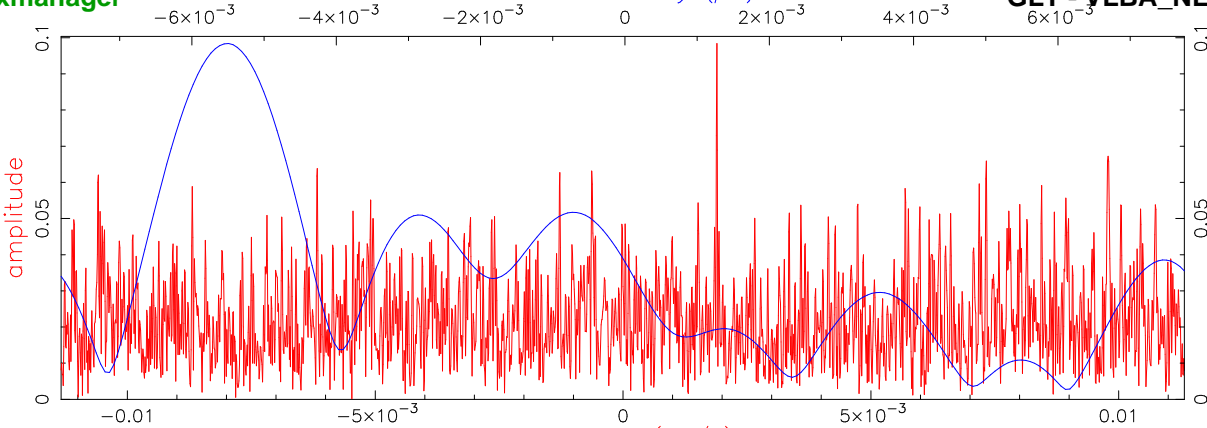
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gn

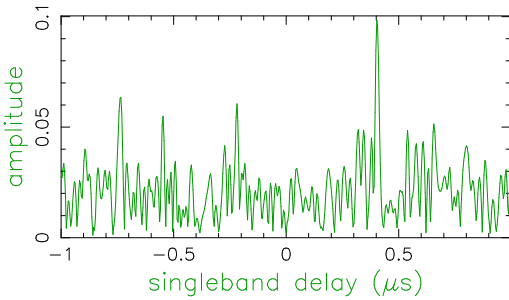
GLT - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

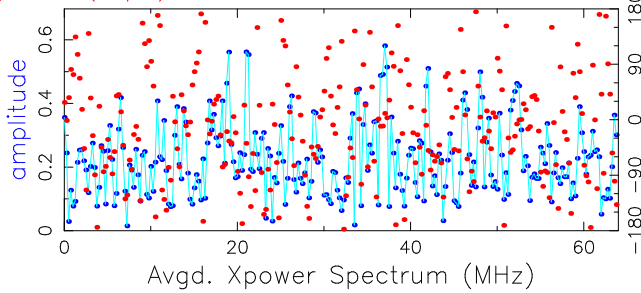


Fringe quality 0

SNR 5.6
 Int time 419.822
 Amp 0.100
 Phase 11.4
 PFD 1.0e+00
 Delays (us)
 SBD 0.403563
 MBD -0.005497
 Fringe rate (Hz)
 0.163097
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

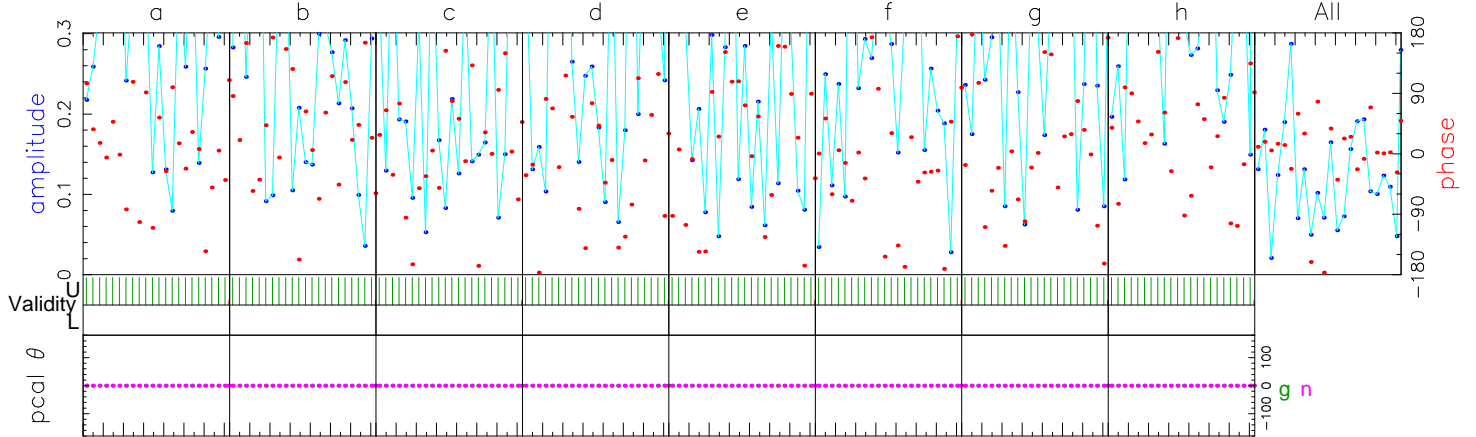


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120924
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g	0	0	0	0	0	0	0	0		
n	0	0	0	0	0	0	0	0		
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	5.80018609847E+03									
Sband delay (usec)	5.80018890833E+03									
Phase delay (usec)	5.79978534544E+03									
Delay rate (us/s)	-5.23663072870E-01									
Total phase (deg)		236.4								
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
pcal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
nlags: 256 t_cohere infinite										
simultaneous interpolator										

Mk4/DiFX fourfit 3.21 rev 2937

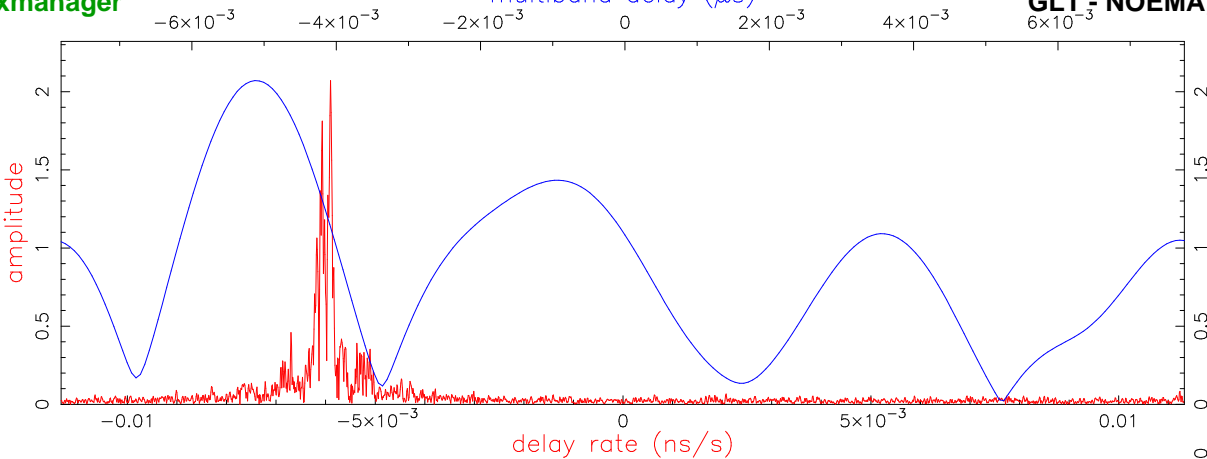
fxmanager

NRAO150.1X0F0I, No0077, gN

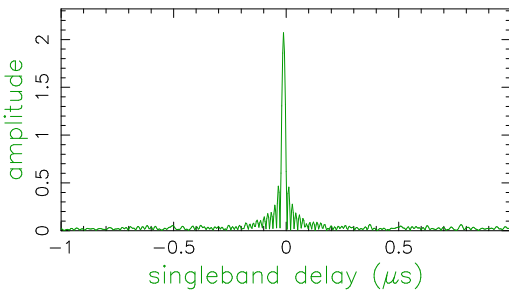
GLT - NOEMA, fgroup W, pol RR

multiband delay (μ s)

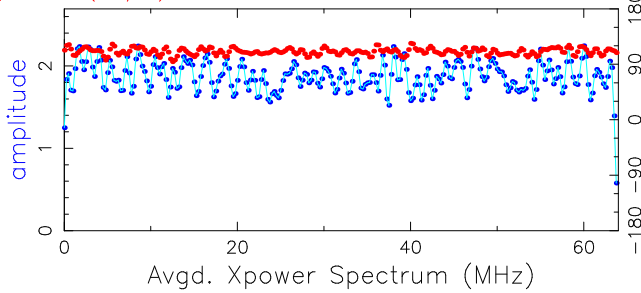
Fringe quality 2



SNR 116.0
Int time 419.814
Amp 2.321
Phase 35.2
PFD 0.0e+00
Delays (us)
SBD -0.011674
MBD -0.005111
Fringe rate (Hz)
-0.508791
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

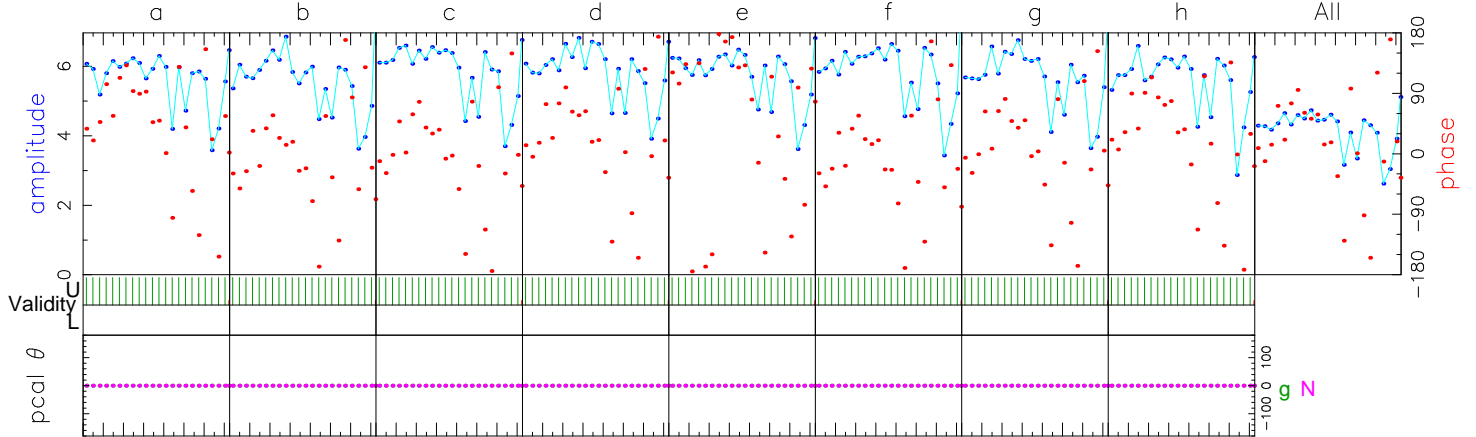


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120927
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.47594683123E+03				-3.47594172019E+03					
Sband delay (usec)	-3.47595339444E+03				1.3778524E+01					
Phase delay (usec)	-3.47594171905E+03				4.4610001E-06					
Delay rate (us/s)	3.40108625839E-01				3.40114532402E-01					
Total phase (deg)			-244.6		4.22829358625E-05					
Apriori delay (usec)									-5.11104E-03	+/- 9.4E-06
Apriori clock (usec)									-1.16742E-02	+/- 7.4E-05
Apriori clockrate (us/s)									1.13358E-06	+/- 3.2E-08
Apriori rate (us/s)									-5.90656E-06	+/- 1.3E-10
Apriori accel (us/s/s)									35.2	+/- 1.0
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256 t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 74.4 2.4 Search (2048X32) 2.002 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 103.4 4.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 54.8 1.4 Inc. seg. avg. 4.633 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 36.5 2.4 Inc. frq. avg. 3.161 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 98.6 el 55.1 pa -21.4 N: az 316.1 el 80.5 pa 130.4 u,v (fr/asec) -3031.173 5640.497 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gN..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gN.W.160.1X0F0I

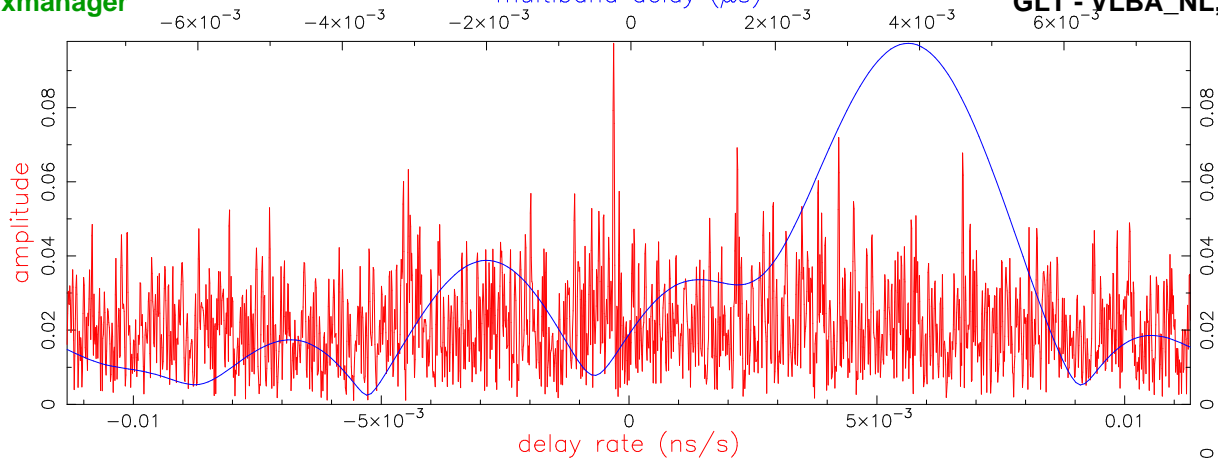
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gn

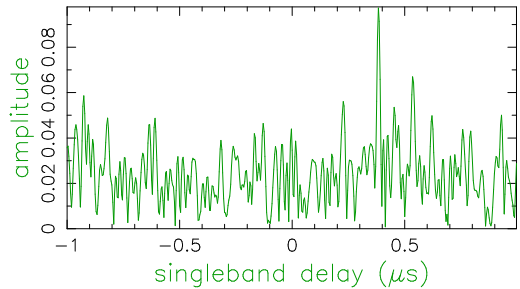
GLT - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

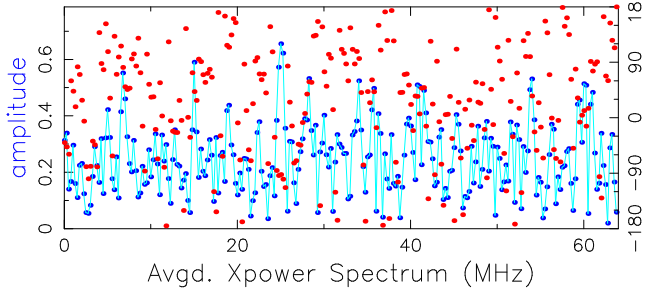


Fringe quality 0

SNR 5.5
 Int time 419.822
 Amp 0.098
 Phase 107.1
 PFD 1.0e+00
 Delays (us)
 SBD 0.383679
 MBD 0.003876
 Fringe rate (Hz)
 -0.026733
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

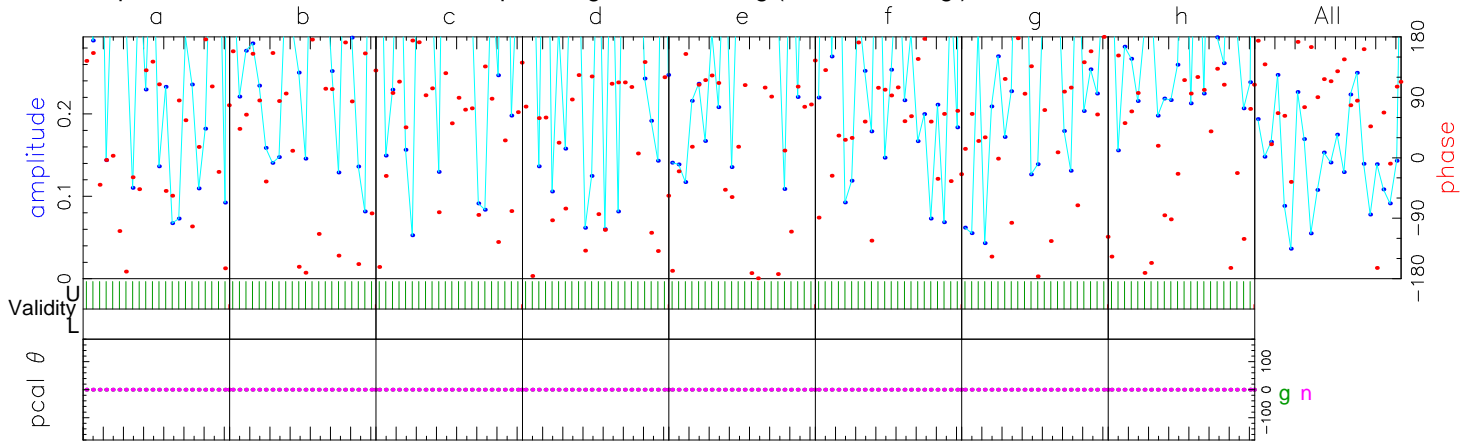


singleband delay (μ s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120928
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



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

Group delay (usec)(sbd)	5.80016422081E+03	Apriori delay (usec)	5.79978534508E+03	Resid mbdelay (usec)	3.87573E-03	+/-	2.0E-04
Sband delay (usec)	5.80016902433E+03	Apriori clock (usec)	-5.0362492E+00	Resid sbdelay (usec)	3.83679E-01	+/-	1.6E-03
Phase delay (usec)	5.79978534853E+03	Apriori clockrate (us/s)	-2.2799999E-07	Resid phdelay (usec)	3.45342E-06	+/-	6.7E-07
Delay rate (us/s)	-5.23665276601E-01	Apriori rate (us/s)	-5.23664966262E-01	Resid rate (us/s)	-3.10339E-07	+/-	2.8E-09
Total phase (deg)	332.1	Apriori accel (us/s/s)	-3.92164617054E-06	Resid phase (deg)	107.1	+/-	20.9

ph/seg (deg)	59.7	Theor.	50.1	Amplitude	0.098 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.8	Search (2048X32)	0.096	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.8	Inc. seg. avg.	0.107	Inc. frq. avg.	0.093	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	49.6	Inc. frq. avg.	0.093			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	

g: az 98.6 el 55.1 pa -21.4 n: az 48.4 el 32.8 pa -62.6 u,v (fr/asec) 4756.650 1287.582 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gn..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gn.W.166.1X0F0I

Mk4/DiFX fourfit 3.21 rev 2937

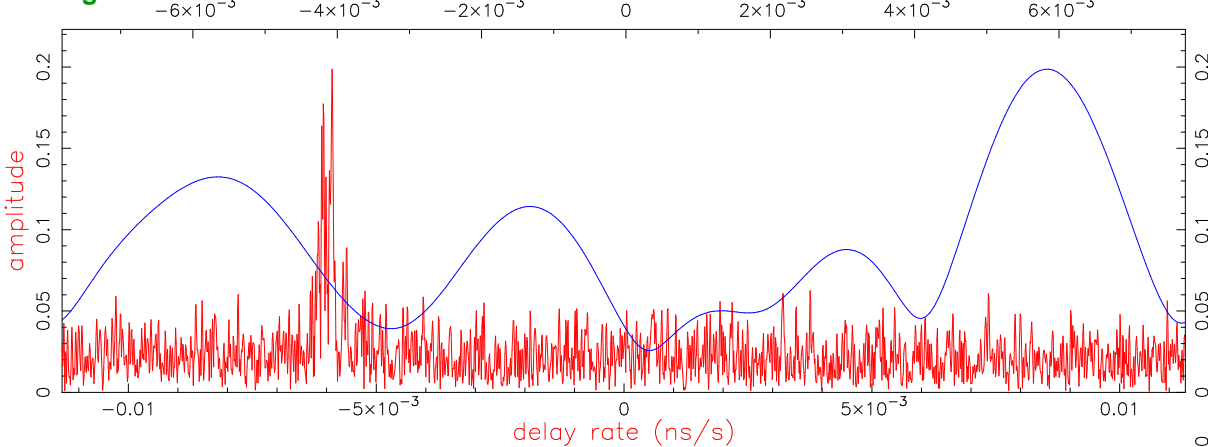
fxmanager

NRAO150.1X0F0I, No0077, gN

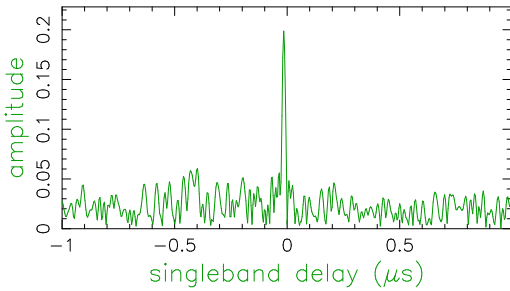
GLT - NOEMA, fgroup W, pol LR

multiband delay (μs)

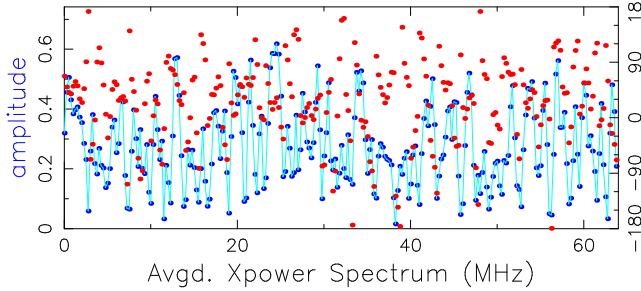
Fringe quality 9



SNR 11.2
 Int time 419.814
 Amp 0.223
 Phase 152.2
 PFD 3.2e-20
 Delays (us)
 SBD -0.015104
 MBD 0.005839
 Fringe rate (Hz)
 -0.508392
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

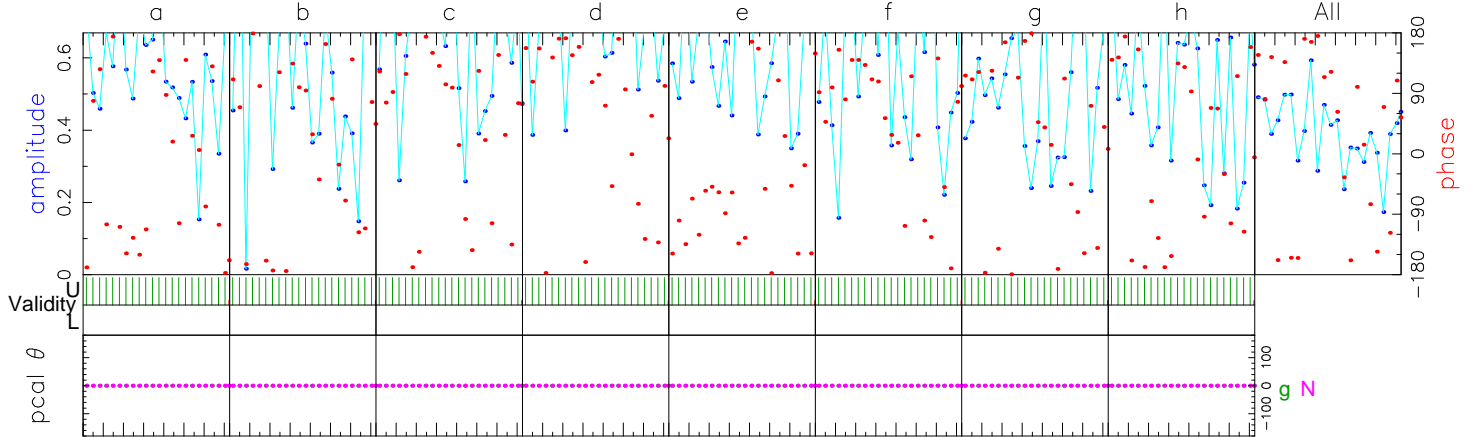


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120931
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



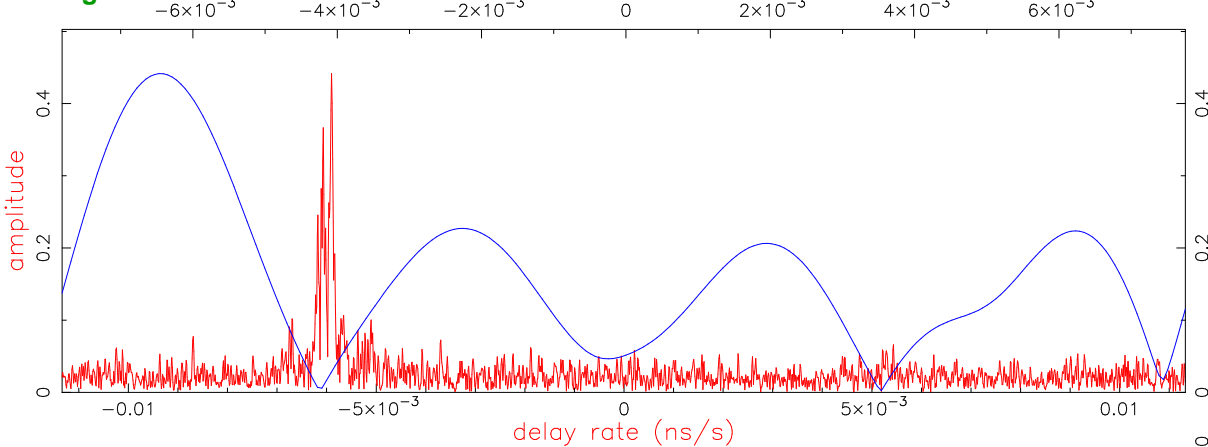
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	-167.7	125.6	130.0	145.5	-108.8	98.8	147.4	164.0	Phase	152.2
Sband delay (usec)	0.3	0.3	0.4	0.4	0.4	0.3	0.2	0.3	Ampl.	0.3
Phase delay (usec)	253.3	253.1	252.5	253.1	253.4	253.0	253.3	253.3	Sbd box	253.1
Delay rate (us/s)	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
Total phase (deg)	0	0	0	0	0	0	0	0	PC freqs	
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	1000	1000	1000	1000	1000	1000	1000	1000		
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -3.47595150569E+03 Apriori delay (usec) -3.47594172019E+03 Resid mbdelay (usec) 5.83950E-03 +/- 9.7E-05
 Sband delay (usec) -3.47595682469E+03 Apriori clock (usec) 1.3778524E+01 Resid sbdelay (usec) -1.51045E-02 +/- 7.7E-04
 Phase delay (usec) -3.47594171528E+03 Apriori clockrate (us/s) 4.4610001E-06 Resid phdelay (usec) 4.90914E-06 +/- 3.3E-07
 Delay rate (us/s) 3.40108630477E-01 Apriori rate (us/s) 3.40114532402E-01 Resid rate (us/s) -5.90193E-06 +/- 1.4E-09
 Total phase (deg) -127.5 Apriori accel (us/s/s) 4.22829358625E-05 Resid phase (deg) 152.2 +/- 10.3

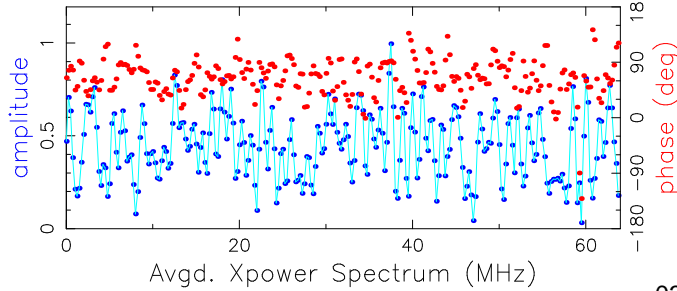
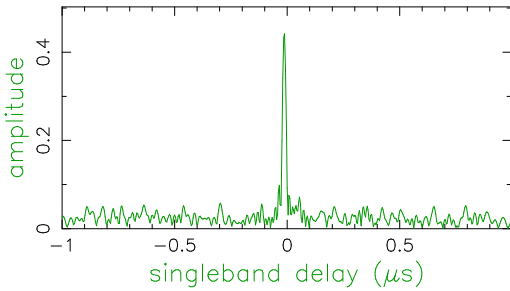
ph/seg (deg) 73.3 24.6 Search (2048X32) 0.193 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 108.5 43.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.1 14.5 Inc. seg. avg. 0.404 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.8 25.4 Inc. frq. avg. 0.296 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 N: az 316.1 el 80.5 pa 130.4 u,v (fr/asec) -3031.173 5640.497 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gN..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gN.W.179.1X0F0I

multiband delay (μs)

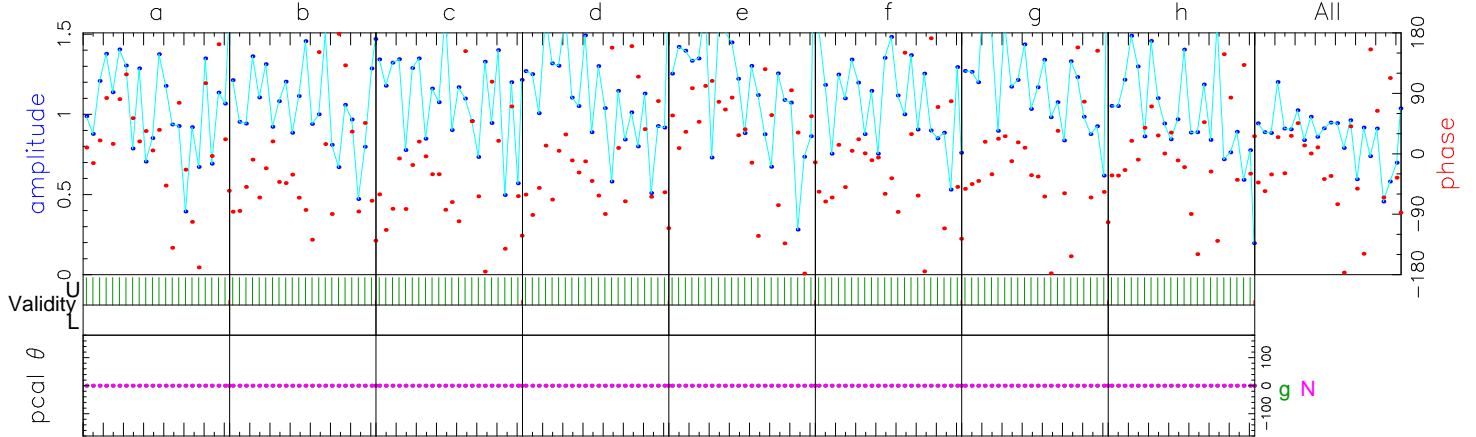
Fringe quality 6



SNR 25.1
 Int time 419.819
 Amp 0.503
 Phase -11.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.013268
 MBD -0.006457
 Fringe rate (Hz)
 -0.508681
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120935
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	39.7	-49.2	-45.3	-26.8	60.6	-33.6	-20.0	-2.5		-11.6
	0.5	0.6	0.5	0.7	0.7	0.6	0.7	0.6		0.6
	253.7	253.6	253.7	253.6	253.7	253.7	253.6	253.6	Sbd box	253.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
g:N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.47594817744E+03		Apriori delay (usec)		-3.47594172019E+03		Resid mbdelay (usec)		-6.45725E-03	+/- 4.3E-05
Sband delay (usec)	-3.47595498769E+03		Apriori clock (usec)		1.3778524E+01		Resid sbdelay (usec)		-1.32675E-02	+/- 3.4E-04
Phase delay (usec)	-3.47594172056E+03		Apriori clockrate (us/s)		4.4610001E-06		Resid phdelay (usec)		-3.73049E-07	+/- 1.5E-07
Delay rate (us/s)	3.40108627120E-01		Apriori rate (us/s)		3.40114532402E-01		Resid rate (us/s)		-5.90528E-06	+/- 6.1E-10
Total phase (deg)			Apriori accel (us/s/s)		4.22829358625E-05		Resid phase (deg)		-11.6	+/- 4.6

ph/seg (deg) 73.5 10.9 Search (2048X32) 0.428 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.6 19.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.3 6.4 Inc. seg. avg. 0.948 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.7 11.3 Inc. frq. avg. 0.614 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 N: az 316.1 el 80.5 pa 130.4 u,v (fr/asec) -3031.173 5640.497 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gN..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gN.W.199.1X0F0I

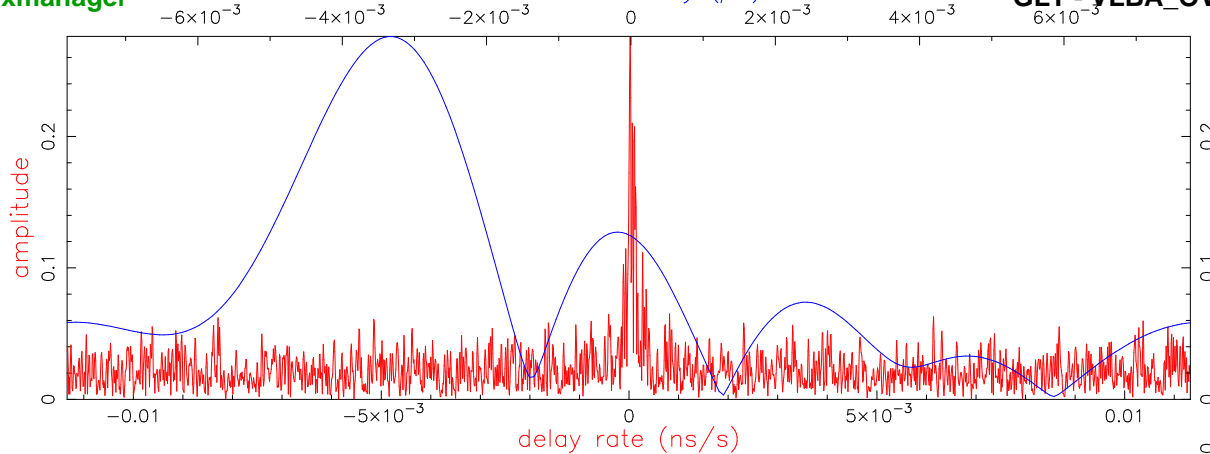
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, go

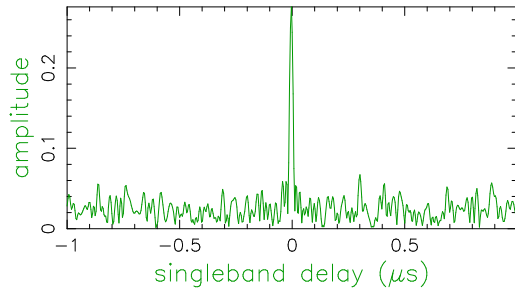
GLT - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

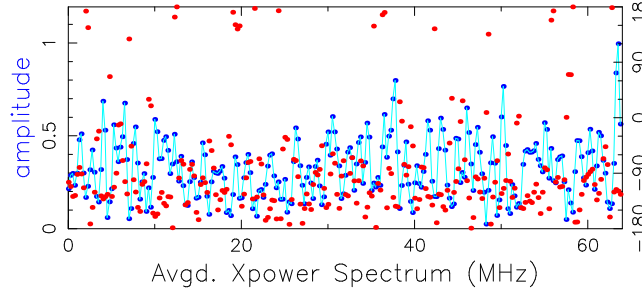


Fringe quality 8

SNR 15.5
 Int time 419.822
 Amp 0.276
 Phase -127.1
 PFD 4.2e-45
 Delays (us)
 SBD -0.004099
 MBD -0.003336
 Fringe rate (Hz) 0.001595
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

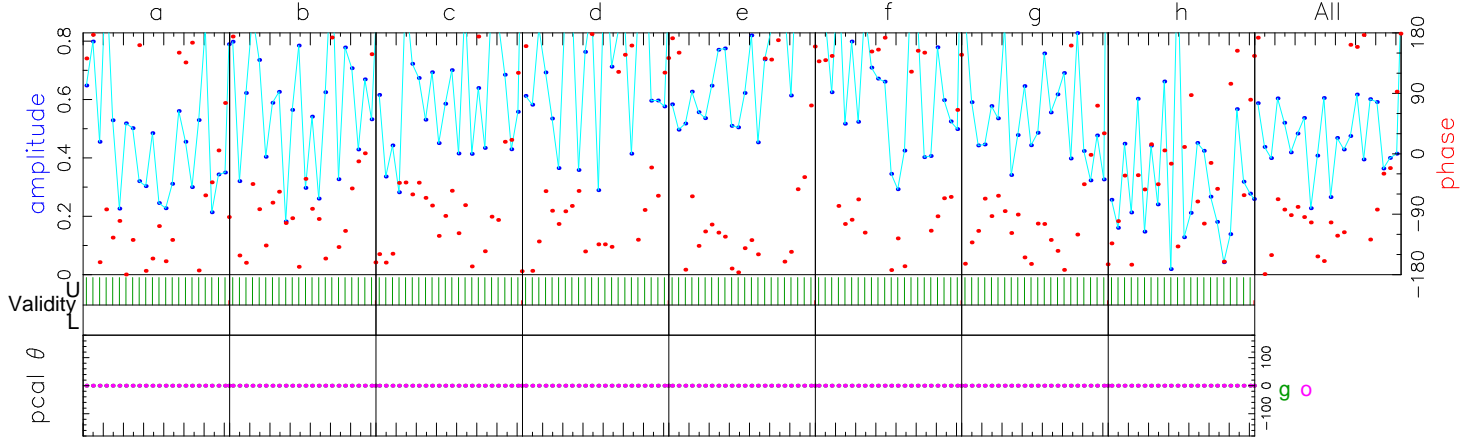


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120925
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-153.0	-112.1	-89.5	-129.1	-149.5	-162.7	-119.5	-61.9	Phase	-127.1
	0.3	0.3	0.4	0.4	0.4	0.3	0.4	0.1	Ampl.	0.3
	257.3	256.3	255.7	255.6	256.2	255.9	256.4	259.5	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.16232179411E+04	Apriori delay (usec)	1.16232212773E+04	Resid mbdelay (usec)	-3.33626E-03	+/-	7.0E-05
Sband delay (usec)	1.16232171778E+04	Apriori clock (usec)	-3.3048954E+00	Resid sbdelay (usec)	-4.09950E-03	+/-	5.6E-04
Phase delay (usec)	1.16232212732E+04	Apriori clockrate (us/s)	-2.8800001E-07	Resid phdelay (usec)	-4.09842E-06	+/-	2.4E-07
Delay rate (us/s)	-5.13289086016E-01	Apriori rate (us/s)	-5.13289104532E-01	Resid rate (us/s)	1.85160E-08	+/-	9.9E-10
Total phase (deg)	171.1	Apriori accel (us/s/s)	-2.95245758219E-05	Resid phase (deg)	-127.1	+/-	7.4

ph/seg (deg)	58.8	RMS	17.8	Theor.	0.276 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	80.7	Search (2048X32)	0.271	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	37.4	Inc. seg. avg.	0.447	Inc. frq. avg.	0.304	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.9	Inc. frq. avg.	0.304	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
g: az 98.6 el 55.1 pa -21.4	o: az 36.7 el 15.6 pa -50.0	u, v (fr/asec)	4619.226 -856.635			ion window (TEC)	0.00	0.00	simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/go..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/go.W.159.1X0F0I

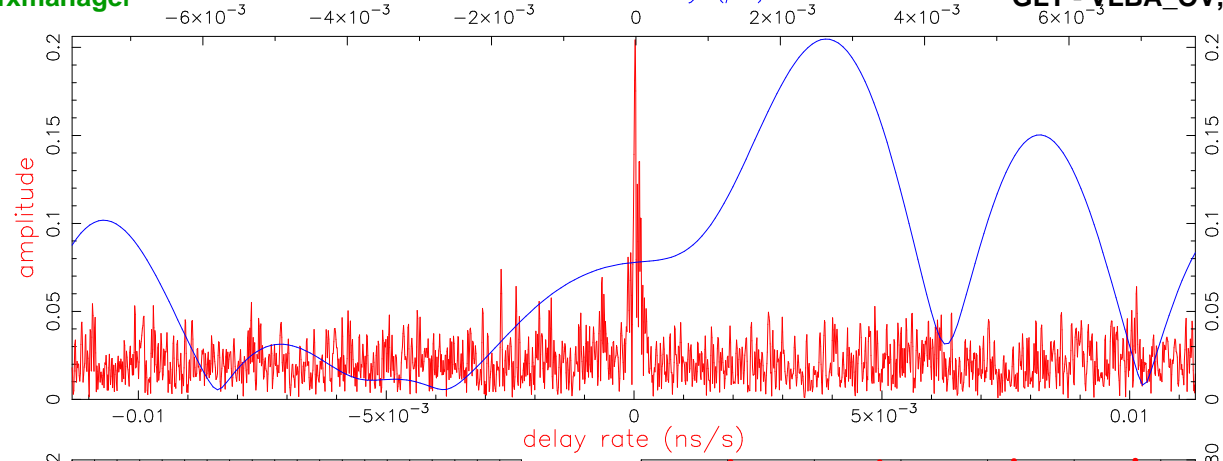
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

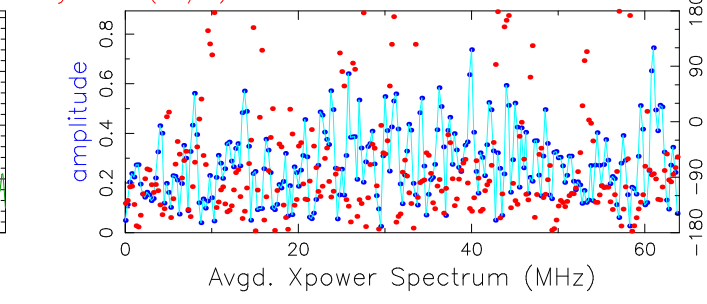
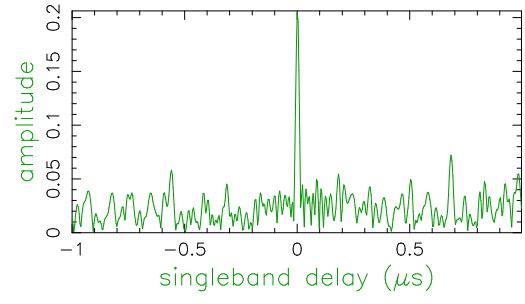
NRAO150.1X0F0I, No0077, go

GLT - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

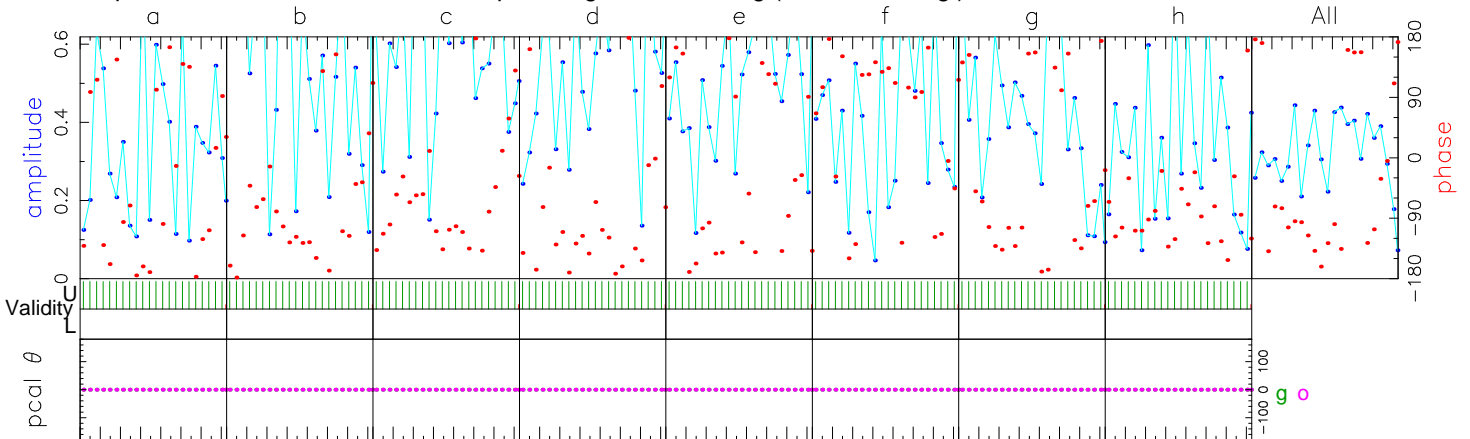


Fringe quality 9
 SNR 11.6
 Int time 419.822
 Amp 0.206
 Phase -129.2
 PFD 3.3e-22
 Delays (us)
 SBD 0.001187
 MBD 0.002711
 Fringe rate (Hz) 0.001663
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120930
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	179.6	-115.3	-88.5	-124.8	-157.2	145.4	-161.2	-94.3	Phase	-129.2
	0.2	0.4	0.4	0.3	0.2	0.2	0.2	0.3	Ampl.	0.2
	260.0	257.3	256.8	257.8	256.7	257.1	258.0	258.8	Sbd box	257.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	1.16232239888E+04		Apriori delay (usec)		1.16232212773E+04		Resid mbdelay (usec)		2.71146E-03	+/- 9.4E-05
Sband delay (usec)	1.16232224643E+04		Apriori clock (usec)		-3.3048954E+00		Resid sbdelay (usec)		1.18700E-03	+/- 7.5E-04
Phase delay (usec)	1.16232212732E+04		Apriori clockrate (us/s)		-2.8800001E-07		Resid phdelay (usec)		-4.16629E-06	+/- 3.2E-07
Delay rate (us/s)	-5.13289085226E-01		Apriori rate (us/s)		-5.13289104532E-01		Resid rate (us/s)		1.93068E-08	+/- 1.3E-09
Total phase (deg)	169.0		Apriori accel (us/s/s)		-2.95245758219E-05		Resid phase (deg)		-129.2	+/- 9.9

ph/seg (deg) 58.0 23.8 Search (2048X32) 0.202 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.3 41.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.7 14.0 Inc. seg. avg. 0.303 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.8 24.5 Inc. frq. avg. 0.249 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 o: az 36.7 el 15.6 pa -50.0 u,v (fr/asec) 4619.226 -856.635 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/go..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/go.W.177.1X0F0I

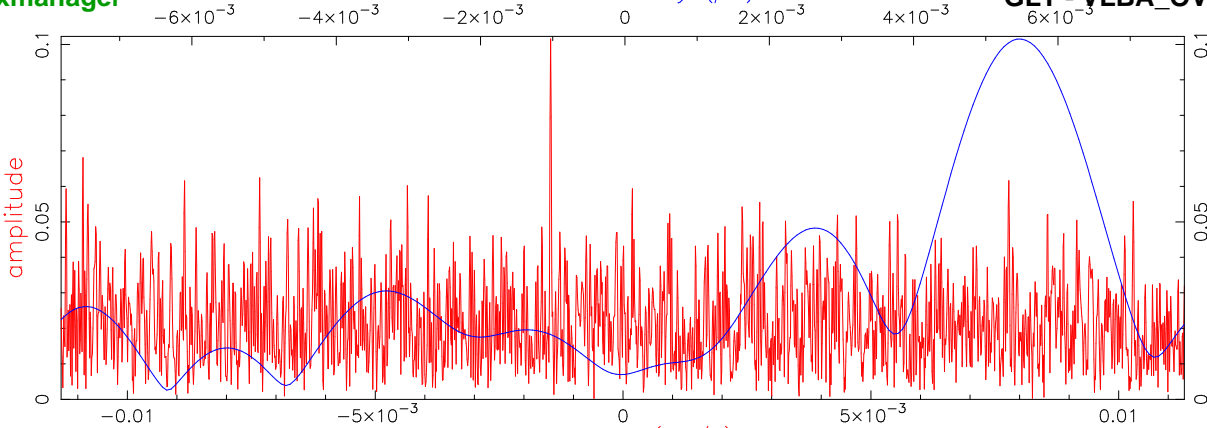
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, go

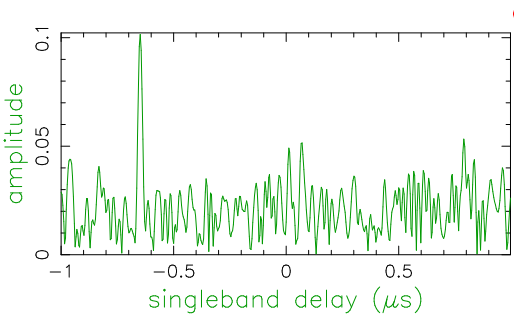
GLT - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

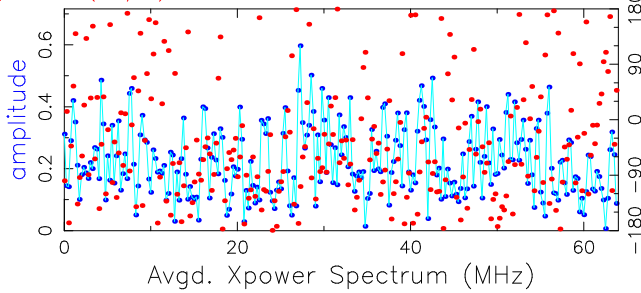


Fringe quality 0

SNR 5.7
 Int time 419.822
 Amp 0.102
 Phase -53.5
 PFD 9.6e-01
 Delays (us)
 SBD -0.648699
 MBD 0.005454
 Fringe rate (Hz)
 -0.125847
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

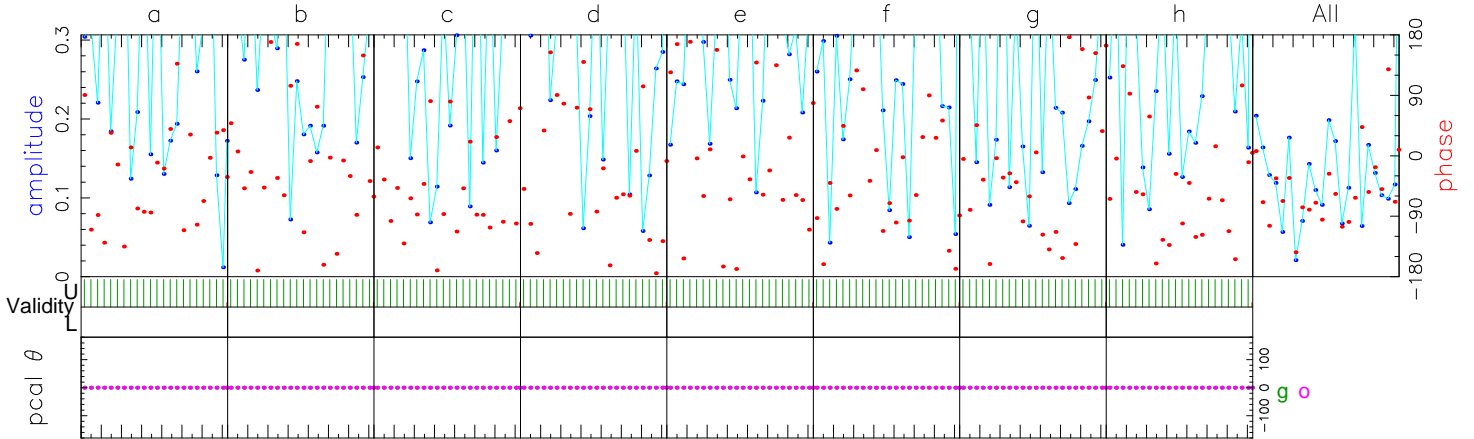


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120934
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-56.9	-33.4	-68.3	-58.8	-74.1	-20.6	-43.2	-62.4	Phase	-53.5
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	442.0	393.2	91.8	110.5	279.3	496.5	225.9	55.9	Sbd box	90.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.16225704817E+04		Apriori delay (usec)		1.16232212773E+04		Resid mbdelay (usec)		5.45439E-03	+/- 1.9E-04
Sband delay (usec)	1.16225725781E+04		Apriori clock (usec)		-3.3048954E+00		Resid sbdelay (usec)		-6.48699E-01	+/- 1.5E-03
Phase delay (usec)	1.16232212756E+04		Apriori clockrate (us/s)		-2.8800001E-07		Resid phdelay (usec)		-1.72566E-06	+/- 6.5E-07
Delay rate (us/s)	-5.13290565490E-01		Apriori rate (us/s)		-5.13289104532E-01		Resid rate (us/s)		-1.46096E-06	+/- 2.7E-09
Total phase (deg)	244.7		Apriori accel (us/s/s)		-2.95245758219E-05		Resid phase (deg)		-53.5	+/- 20.1

ph/seg (deg) 55.2 48.3 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.2 84.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.8 28.5 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.1 49.7 Inc. frq. avg. 0.095 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 o: az 36.7 el 15.6 pa -50.0 u,v (fr/asec) 4619.226 -856.635 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/go..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/go.W.198.1X0F0I

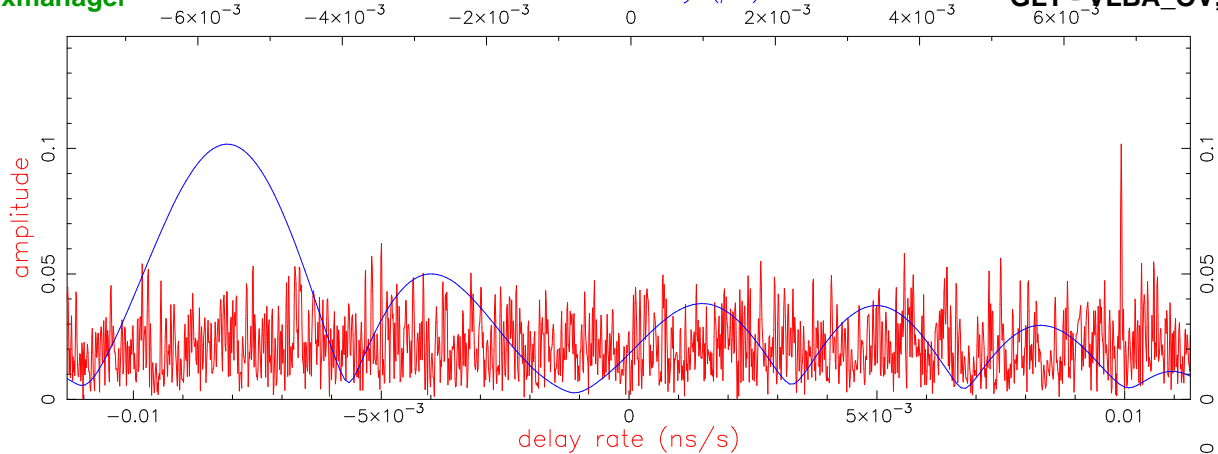
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, go

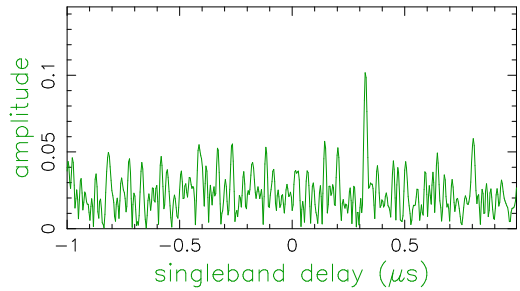
GLT - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

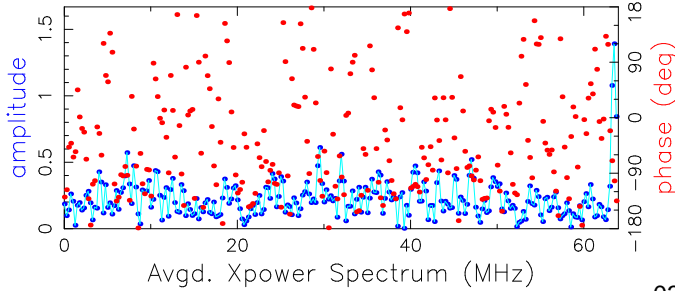


Fringe quality 0

SNR 5.8
 Int time 419.822
 Amp 0.145
 Phase 142.7
 PFD 8.6e-01
 Delays (us)
 SBD 0.325578
 MBD -0.005611
 Fringe rate (Hz)
 0.856478
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

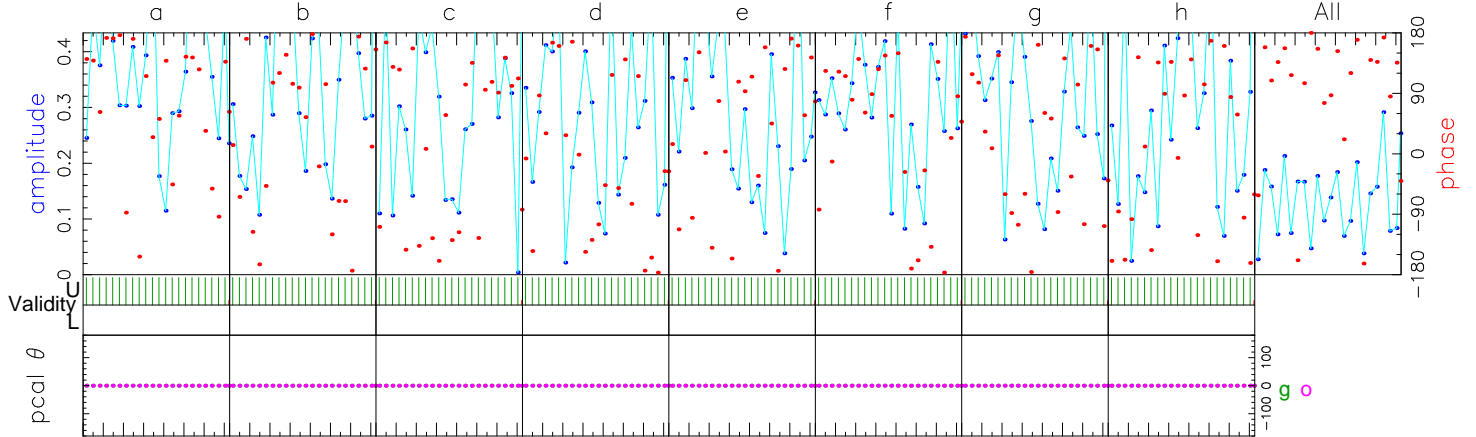


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120939
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

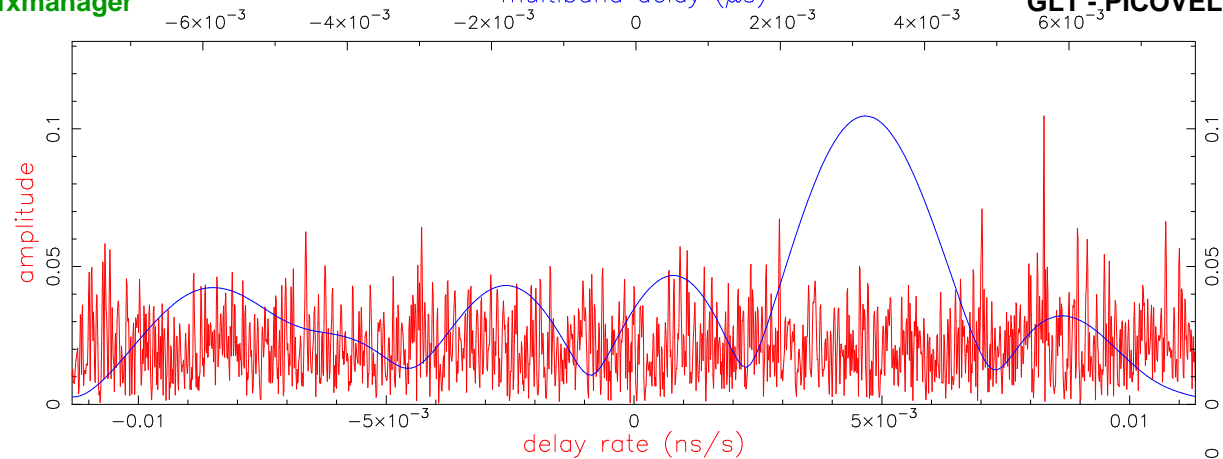
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	132.7	146.0	157.2	-179.0	113.7	119.2	172.2	150.3	Phase	142.7
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	340.4	440.1	341.1	51.1	152.9	501.2	110.4	299.3	Sbd box	340.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
g	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)	1.16235437916E+04		Apriori delay (usec)		1.16232212773E+04		Resid mbdelay (usec)		-5.61067E-03	+/- 1.9E-04
Sband delay (usec)	1.16235468556E+04		Apriori clock (usec)		-3.3048954E+00		Resid sbdelay (usec)		3.25578E-01	+/- 1.5E-03
Phase delay (usec)	1.16232212819E+04		Apriori clockrate (us/s)		-2.8800001E-07		Resid phdelay (usec)		4.60136E-06	+/- 6.4E-07
Delay rate (us/s)	-5.13279161672E-01		Apriori rate (us/s)		-5.13289104532E-01		Resid rate (us/s)		9.94286E-06	+/- 2.6E-09
Total phase (deg)	80.9		Apriori accel (us/s/s)		-2.95245758219E-05		Resid phase (deg)		142.7	+/- 19.8

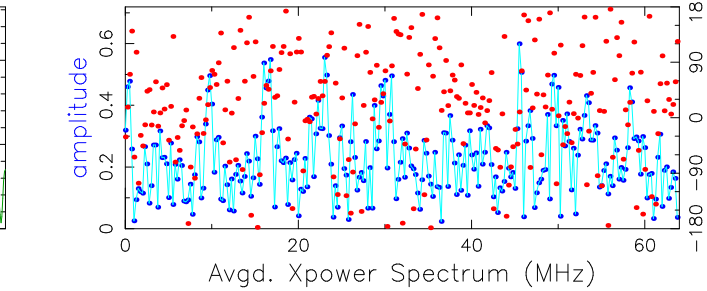
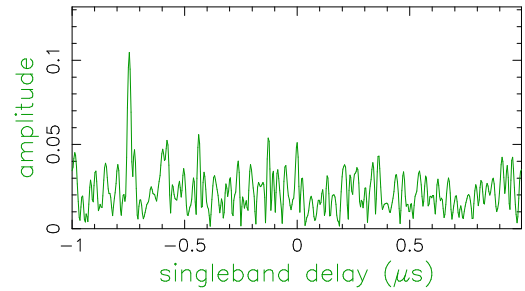
ph/seg (deg) 55.7 47.6 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.7 83.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.2 28.1 Inc. seg. avg. 0.137 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.1 49.0 Inc. frq. avg. 0.136 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 o: az 36.7 el 15.6 pa -50.0 u,v (fr/asec) 4619.226 -856.635 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/go..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/go.W.220.1X0F0I

multiband delay (μs)



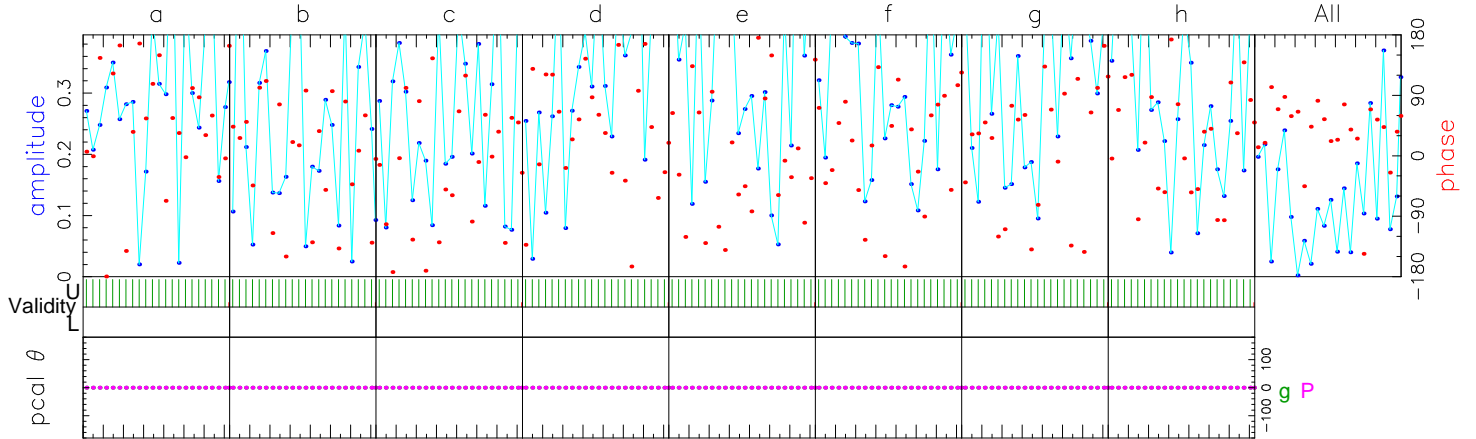
Fringe quality 0

SNR 5.9
Int time 419.819
Amp 0.132
Phase 47.5
PFD 6.8e-01
Delays (us)
SBD -0.746159
MBD 0.003177
Fringe rate (Hz)
0.713376
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120927
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	g P	All
86012.00	66.5	44.2	24.0	59.0	-23.3	58.0	84.1	42.2		47.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		0.1
P	1000	1000	1000	1000	1000	1000	1000	1000		66.0
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.17382938990E+03	Apriori delay (usec)	-3.17380256716E+03	Resid mbdelay (usec)	3.17726E-03	+/-	1.9E-04
Sband delay (usec)	-3.17382872591E+03	Apriori clock (usec)	1.4904194E+00	Resid sbdelay (usec)	-7.46159E-01	+/-	1.5E-03
Phase delay (usec)	-3.17380256563E+03	Apriori clockrate (us/s)	6.7200000E-07	Resid phdelay (usec)	1.53267E-06	+/-	6.3E-07
Delay rate (us/s)	2.31020208079E-01	Apriori rate (us/s)	2.31011926486E-01	Resid rate (us/s)	8.28159E-06	+/-	2.6E-09
Total phase (deg)	-73.1	Apriori accel (us/s/s)	4.93672038521E-05	Resid phase (deg)	47.5	+/-	19.5

ph/seg (deg)	49.2	RMS	46.9	Theor.	49.2	Amplitude	0.132 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	90.5	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
ph/frq (deg)	35.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
amp/frq (%)	23.1	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00		

g: az 98.6 el 55.1 pa -21.4 P: az 357.0 el 76.0 pa 176.8 u,v (fr/asec) -2027.753 6875.639 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gP..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gP.W.161.1X0F0I

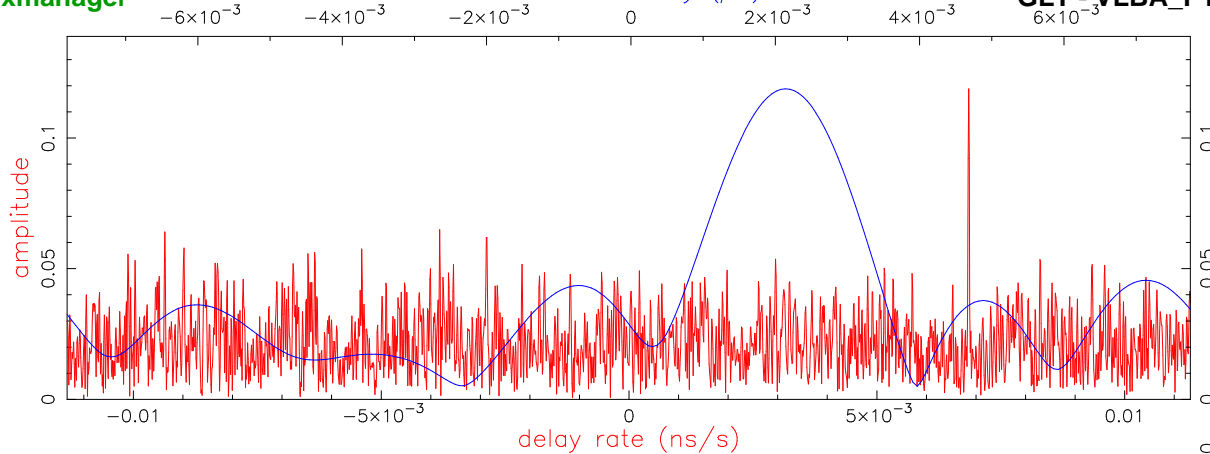
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gp

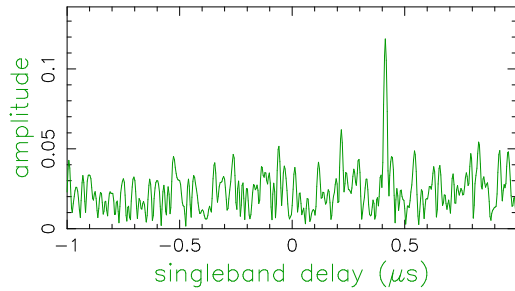
GLT - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

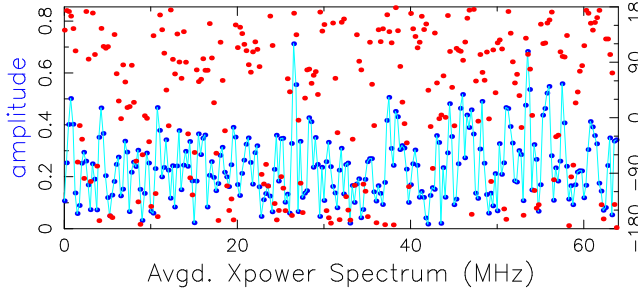


Fringe quality 0

SNR 6.7
 Int time 419.822
 Amp 0.139
 Phase -166.0
 PFD 7.9e-03
 Delays (us)
 SBD 0.413837
 MBD 0.002140
 Fringe rate (Hz) 0.591439
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

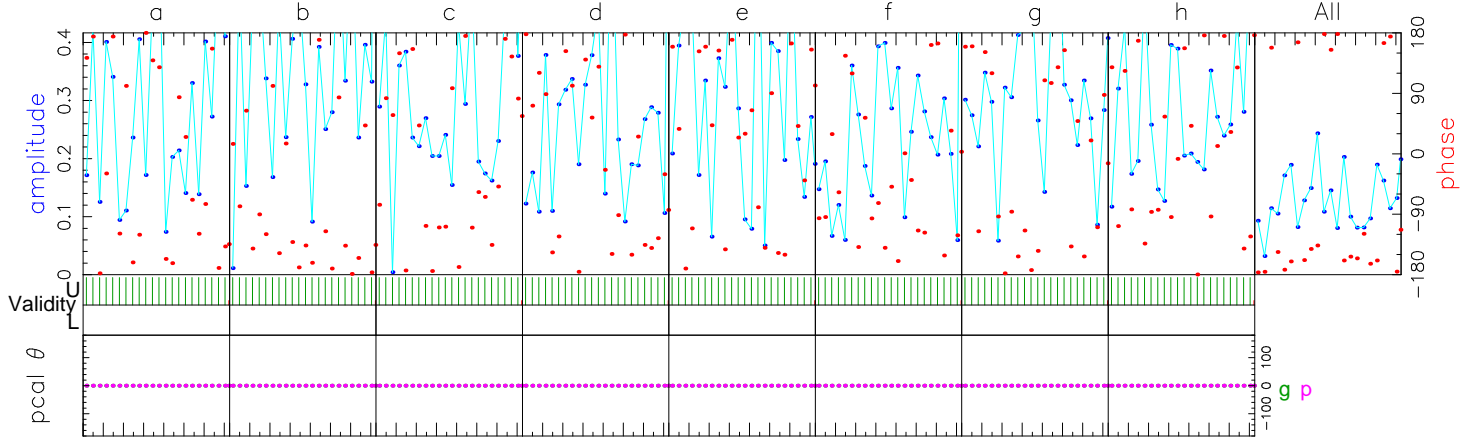


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120928
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.3	-151.0	-174.9	173.7	178.3	-116.4	170.8	-141.8	Phase	-166.0
	0.2	0.2	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	361.4	363.9	225.9	501.7	469.2	333.3	363.7	19.8	Sbd box	362.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.05937413216E+04	Apriori delay (usec)	1.05933329311E+04	Resid mbdelay (usec)	2.14050E-03	+/-	1.6E-04
Sband delay (usec)	1.05937467681E+04	Apriori clock (usec)	-5.0997372E+00	Resid sbdelay (usec)	4.13837E-01	+/-	1.3E-03
Phase delay (usec)	1.05933329258E+04	Apriori clockrate (us/s)	1.9200001E-07	Resid phdelay (usec)	-5.35405E-06	+/-	5.5E-07
Delay rate (us/s)	-5.83886618633E-01	Apriori rate (us/s)	-5.83893484657E-01	Resid rate (us/s)	6.86602E-06	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.04286095838E-05	Resid phase (deg)	-166.0	+/-	17.2

ph/seg (deg)	RMS 22.0	Theor. 41.3	Amplitude Search (2048X32)	0.139 +/- 0.021	0.115	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	41.9	72.0	Interp.	0.000	0.115	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	27.6	24.3	Inc. seg. avg.	0.119	0.119	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.0	42.5	Inc. frq. avg.	0.137	0.137	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

g: az 98.6 el 55.1 pa -21.4 p: az 40.1 el 18.4 pa -58.5 u,v (fr/asec) 5276.365 250.999 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gp..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gp.W.162.1X0F0I

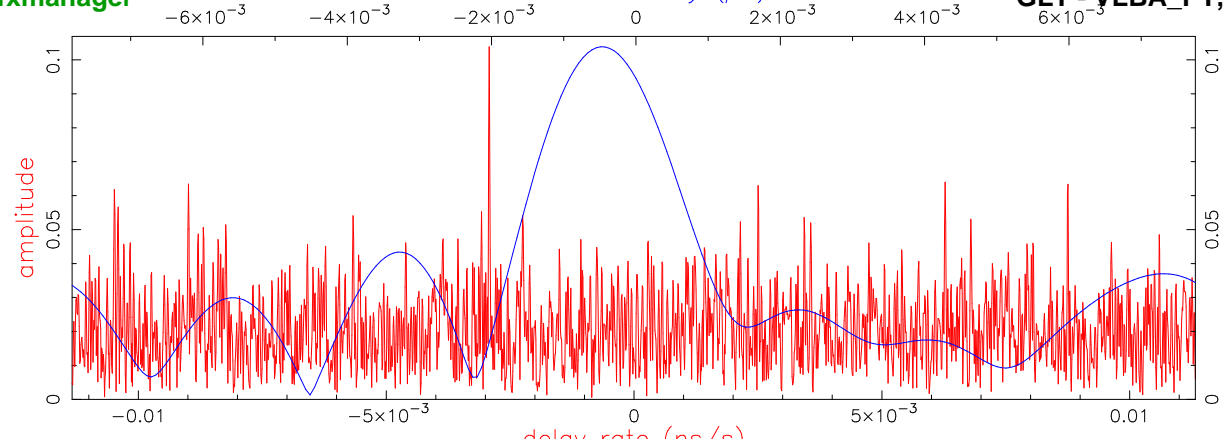
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

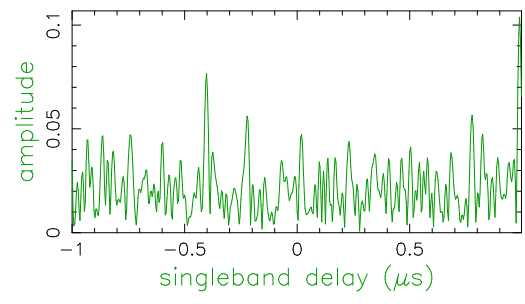
NRAO150.1X0F0I, No0077, gp

GLT - VLBA_PT, fgroup W, pol RR

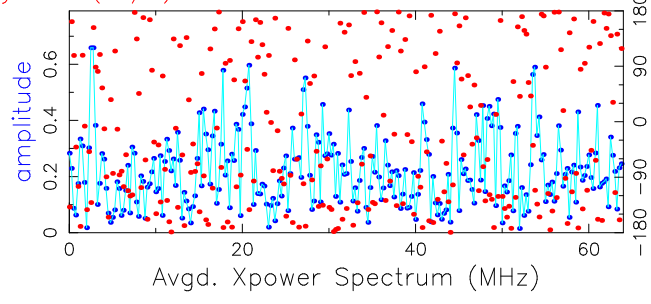
multiband delay (μ s)



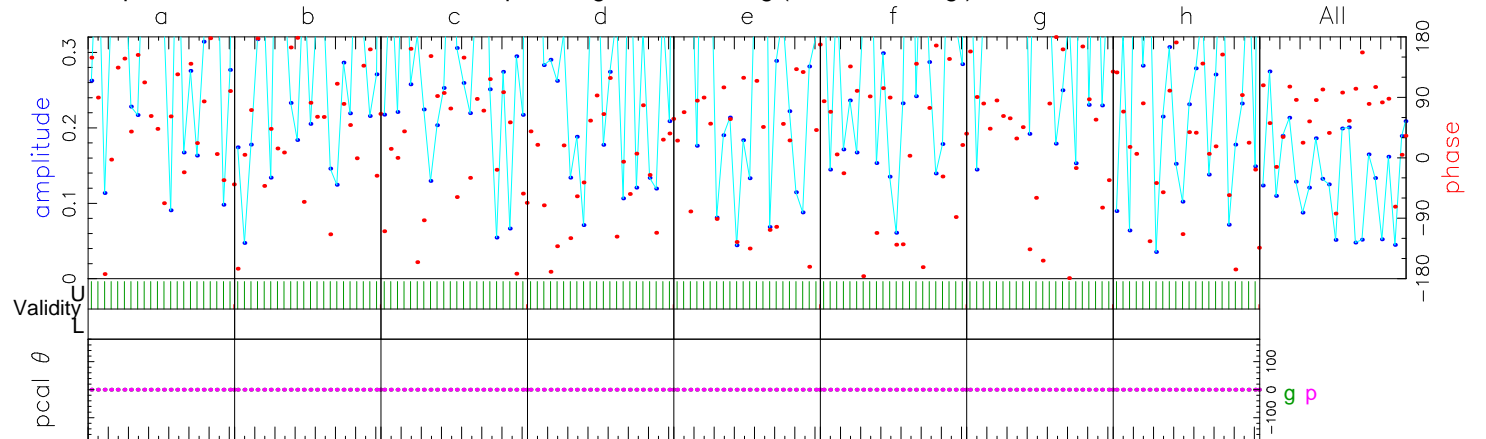
Fringe quality 0
 SNR 5.8
 Int time 419.822
 Amp 0.107
 Phase 67.9
 PFD 7.6e-01
 Delays (us)
 SBD 0.987865
 MBD -0.000473
 Fringe rate (Hz)
 -0.252474
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120931
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.4	42.6	70.9	18.2	67.6	88.5	80.7	58.8	Phase	67.9
	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	112.6	375.8	82.4	477.8	234.0	489.7	380.1	95.0	Sbd box	509.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.05943168332E+04		Apriori delay (usec)		1.0593329311E+04		Resid mbdelay (usec)		-4.72893E-04	+/- 1.9E-04
Sband delay (usec)	1.05943207959E+04		Apriori clock (usec)		-5.0997372E+00		Resid sbdelay (usec)		9.87865E-01	+/- 1.5E-03
Phase delay (usec)	1.0593329333E+04		Apriori clockrate (us/s)		1.9200001E-07		Resid phdelay (usec)		2.18912E-06	+/- 6.3E-07
Delay rate (us/s)	-5.83896415635E-01		Apriori rate (us/s)		-5.83893484657E-01		Resid rate (us/s)		-2.93098E-06	+/- 2.6E-09
Total phase (deg)	315.1		Apriori accel (us/s/s)		-2.04286095838E-05		Resid phase (deg)		67.9	+/- 19.7

ph/seg (deg) 58.3 47.2 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.2 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.9 27.8 Inc. seg. avg. 0.105 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.7 48.5 Inc. frq. avg. 0.103 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 p: az 40.1 el 18.4 pa -58.5 u,v (fr/asec) 5276.365 250.999 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gp..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gp.W.180.1X0F0I

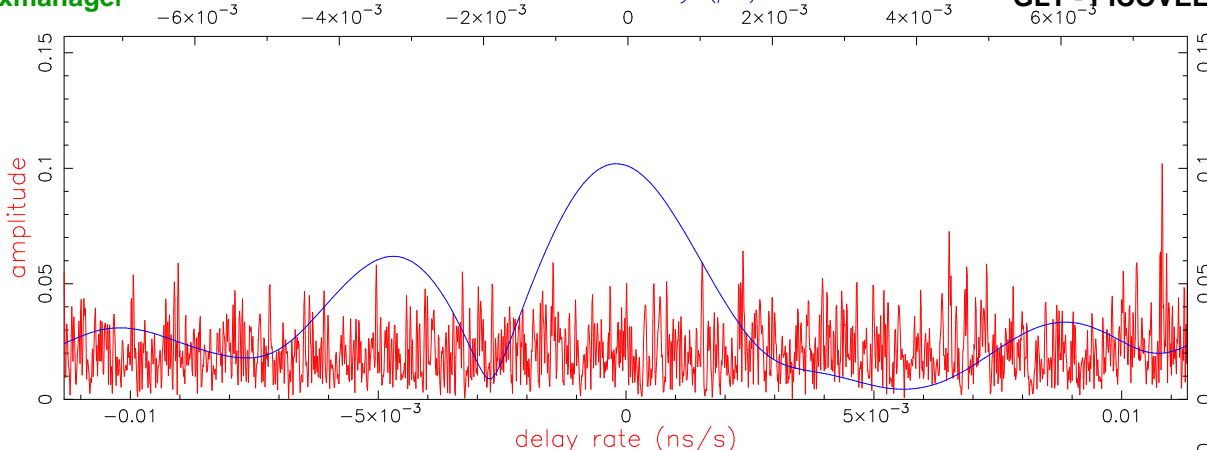
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

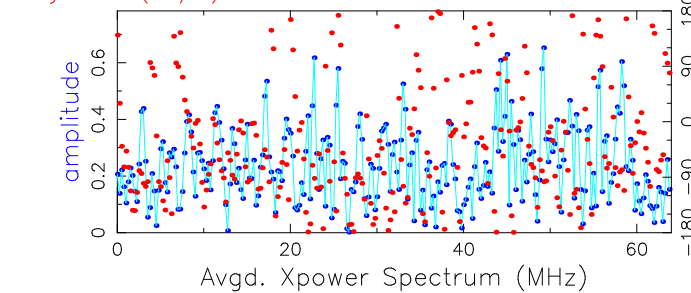
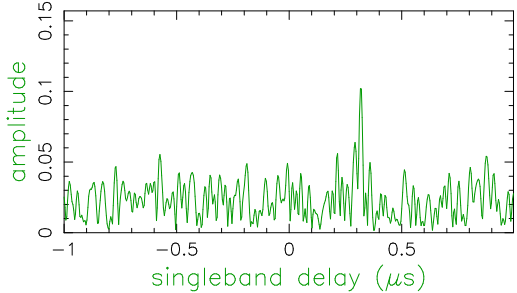
NRAO150.1X0F0I, No0077, gP

GLT - PICOVEL, fgroup W, pol RR

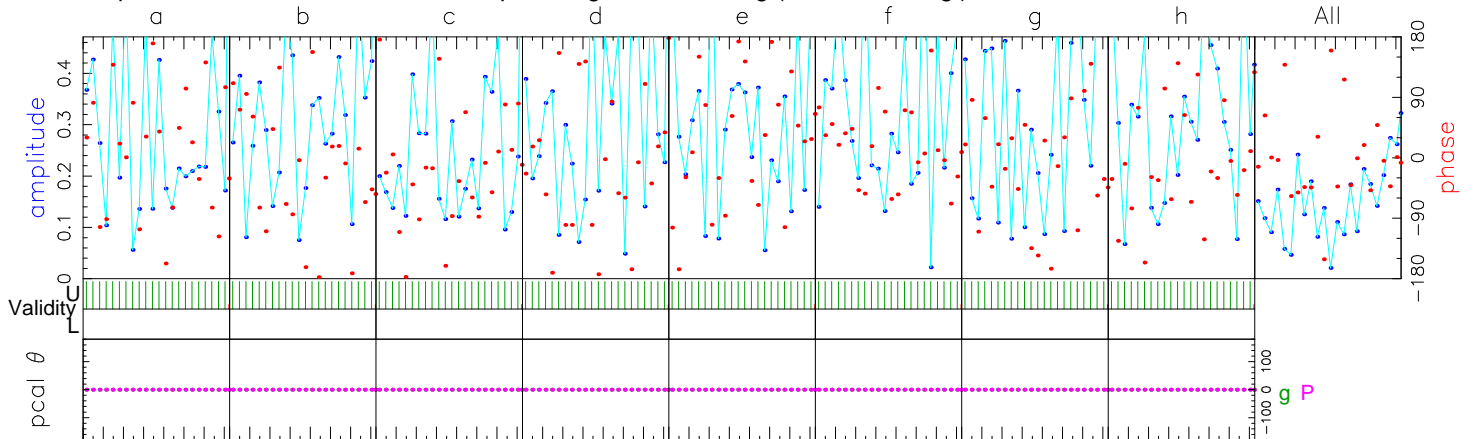
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.819
 Amp 0.157
 Phase -16.6
 PFD 7.1e-01
 Delays (us)
 SBD 0.318335
 MBD -0.000118
 Fringe rate (Hz) 0.932678
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120931
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



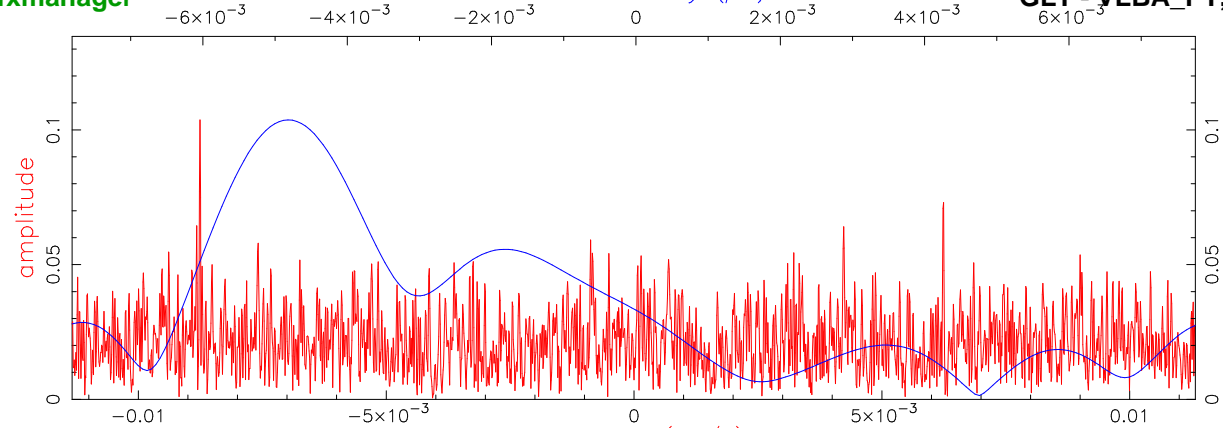
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



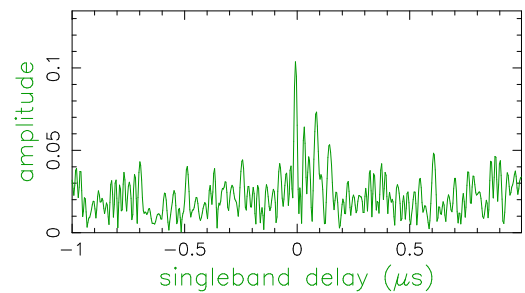
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	25.1	-26.6	-30.0	-45.7	-51.7	7.4	-19.5	-33.8	Phase	-16.6
	0.1	0.1	0.2	0.1	0.0	0.4	0.2	0.2	Ampl.	0.1
	330.3	182.6	116.3	402.6	439.7	337.7	452.9	461.7	Sbd box	338.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
P _g	0	0	0	0	0	0	0	0	PC freqs	
g:P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P _g	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.17277018531E+03		Apriori delay (usec)		-3.17308256716E+03		Resid mbdelay (usec)		-1.18154E-04	+/- 1.9E-04
Sband delay (usec)	-3.17276423216E+03		Apriori clock (usec)		1.4904194E+00		Resid sbdelay (usec)		3.18335E-01	+/- 1.5E-03
Phase delay (usec)	-3.17308256770E+03		Apriori clockrate (us/s)		6.7200000E-07		Resid phdelay (usec)		-5.36333E-07	+/- 6.3E-07
Delay rate (us/s)	2.31022753948E-01		Apriori rate (us/s)		2.31011926486E-01		Resid rate (us/s)		1.08275E-05	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.93672038521E-05		Resid phase (deg)		-16.6	+/- 19.6

ph/seg (deg) 71.6 47.0 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.5 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.8 27.7 Inc. seg. avg. 0.165 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.5 48.3 Inc. frq. avg. 0.149 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 P: az 357.0 el 76.0 pa 176.8 u,v (fr/asec) -2027.753 6875.639 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gP..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gP.W.181.1X0F0I

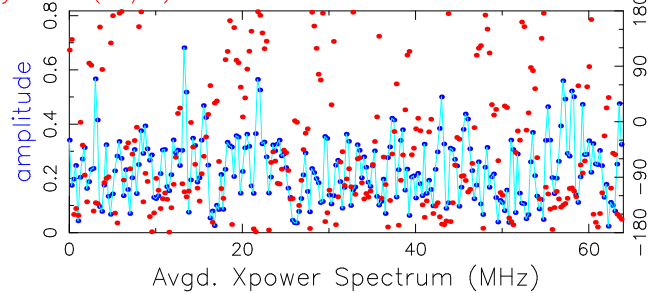
multiband delay (μ s)



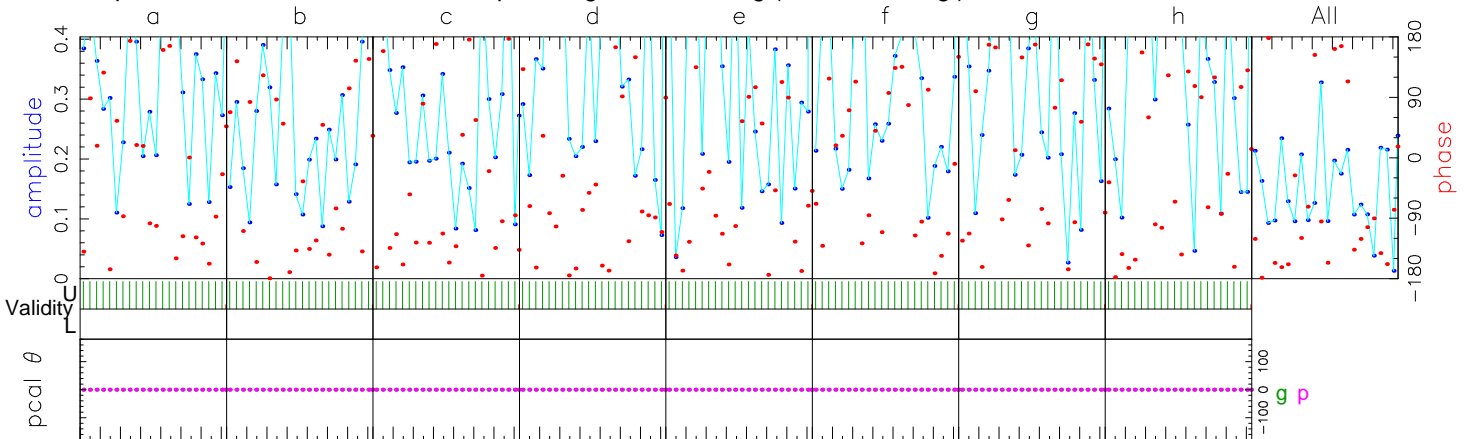
Fringe quality 0
SNR 5.8
Int time 419.822
Amp 0.135
Phase -148.4
PFD 7.7e-01
Delays (us)
SBD -0.007270
MBD -0.004801
Fringe rate (Hz)
-0.755019
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120935
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"



delay rate (ns/s)



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-151.0	178.3	-153.4	-111.8	-98.3	169.6	-160.0	-165.0	Phase	-148.4
	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	55.8	296.4	255.2	253.6	353.4	390.5	131.5	232.3	Sbd box	255.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.05933281296E+04		Apriori delay (usec)		1.05933329311E+04		Resid mbdelay (usec)		-4.80149E-03	+/- 1.9E-04
Sband delay (usec)	1.05933256609E+04		Apriori clock (usec)		-5.0997372E+00		Resid sbdelay (usec)		-7.27025E-03	+/- 1.5E-03
Phase delay (usec)	1.05933329263E+04		Apriori clockrate (us/s)		1.9200001E-07		Resid phdelay (usec)		-4.78403E-06	+/- 6.3E-07
Delay rate (us/s)	-5.83902249683E-01		Apriori rate (us/s)		-5.83893484657E-01		Resid rate (us/s)		-8.76503E-06	+/- 2.6E-09
Total phase (deg)	98.9		Apriori accel (us/s/s)		-2.04286095838E-05		Resid phase (deg)		-148.4	+/- 19.7

ph/seg (deg) 52.5 47.2 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 82.5 82.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 34.6 27.8 Inc. seg. avg. 0.146 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.5 48.6 Inc. frq. avg. 0.136 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
g: az 98.6 el 55.1 pa -21.4 p: az 40.1 el 18.4 pa -58.5 u,v (fr/asec) 5276.365 250.999 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gp..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gp.W.200.1X0F0I

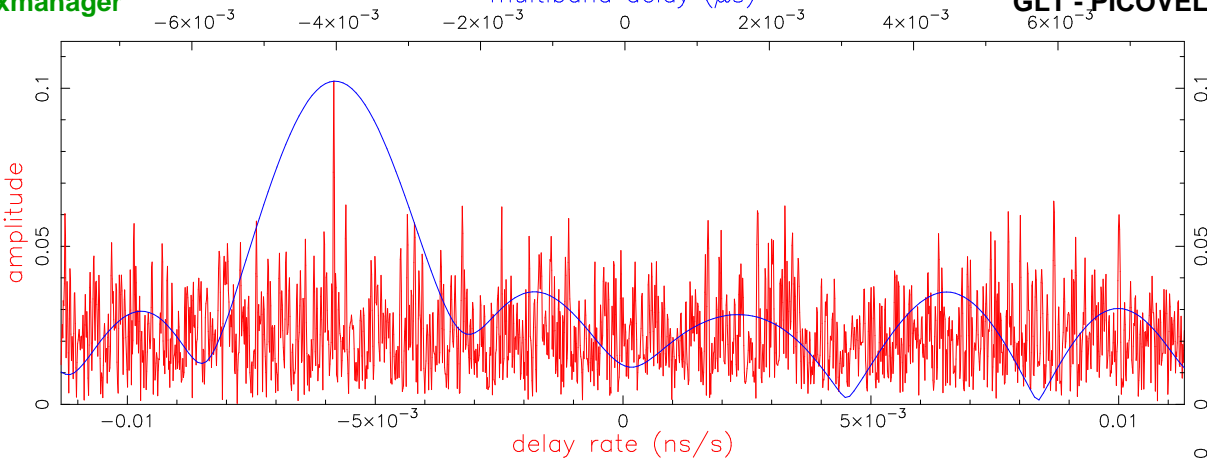
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gP

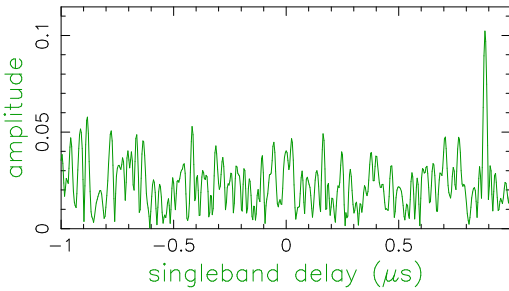
GLT - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

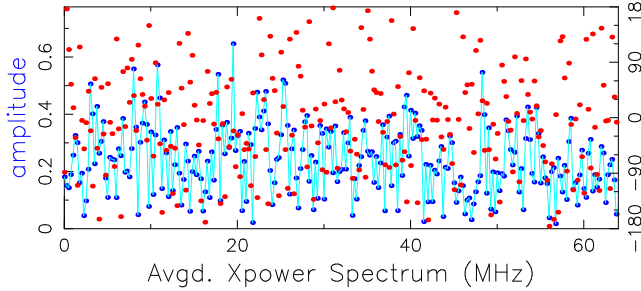


Fringe quality 0

SNR 5.8
Int time 419.819
Amp 0.115
Phase 131.9
PFD 8.9e-01
Delays (us)
SBD 0.883637
MBD -0.004021
Fringe rate (Hz)
-0.503677
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

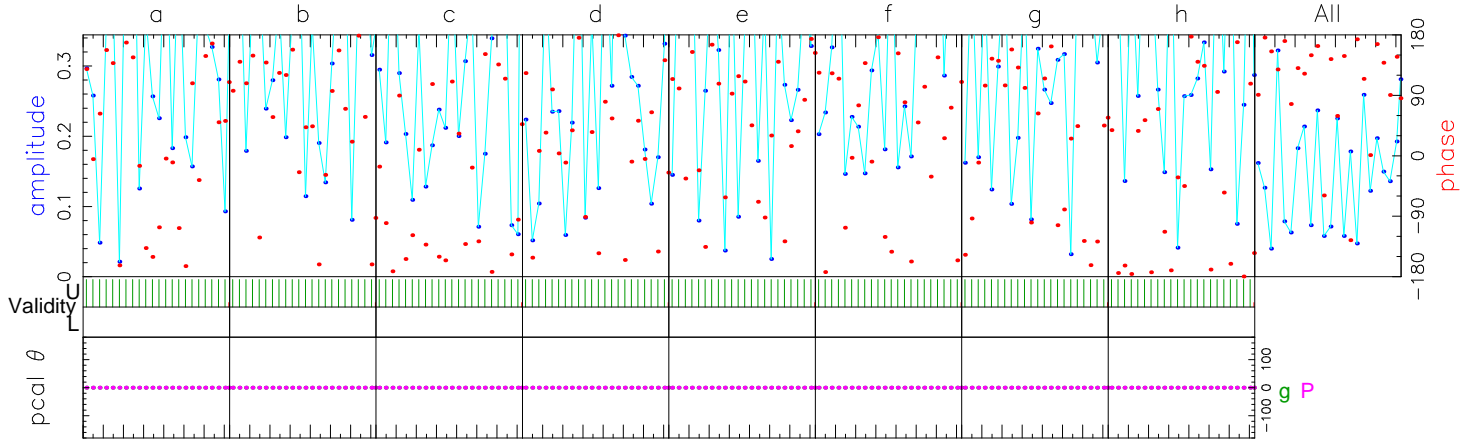


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120935
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



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

Group delay (usec)(sbd)	-3.17219596286E+03	Apriori delay (usec)	-3.17308256716E+03	Resid mbdelay (usec)	-4.02070E-03	+/-	1.9E-04
Sband delay (usec)	-3.17219893016E+03	Apriori clock (usec)	1.4904194E+00	Resid sbdelay (usec)	8.83637E-01	+/-	1.5E-03
Phase delay (usec)	-3.17308256291E+03	Apriori clockrate (us/s)	6.7200000E-07	Resid phdelay (usec)	4.25404E-06	+/-	6.4E-07
Delay rate (us/s)	2.31006079293E-01	Apriori rate (us/s)	2.31011926486E-01	Resid rate (us/s)	-5.84719E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	4.93672038521E-05	Resid phase (deg)	131.9	+/-	19.9

ph/seg (deg)	59.2	Theor.	47.8	Amplitude	0.115 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	86.6	Search (2048X32)	0.100	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	26.2	Inc. seg. avg.	0.121	Inc. frq. avg.	0.109	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	31.3	Inc. frq. avg.	0.109			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	

g: az 98.6 el 55.1 pa -21.4 P: az 357.0 el 76.0 pa 176.8 u,v (fr/asec) -2027.753 6875.639 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gP..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gP.W.201.1X0F0I

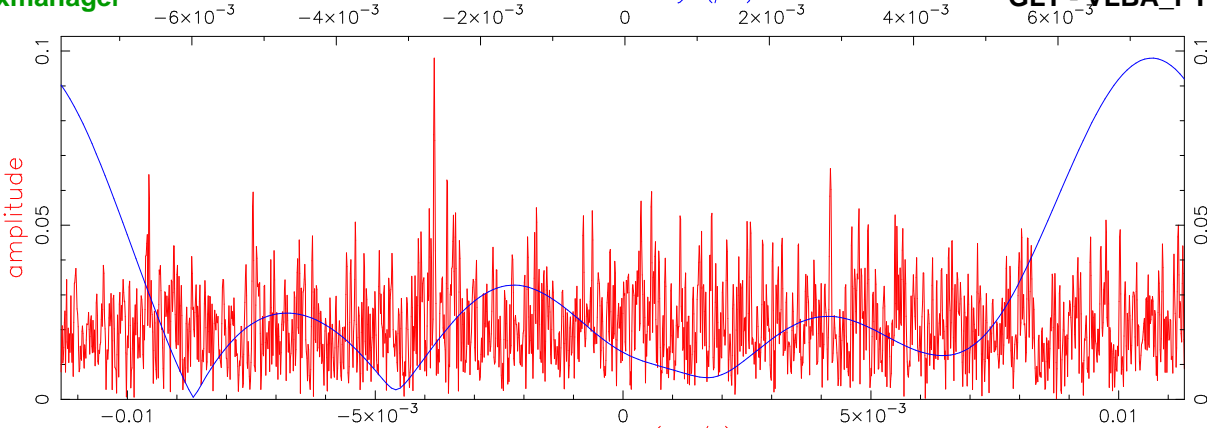
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gp

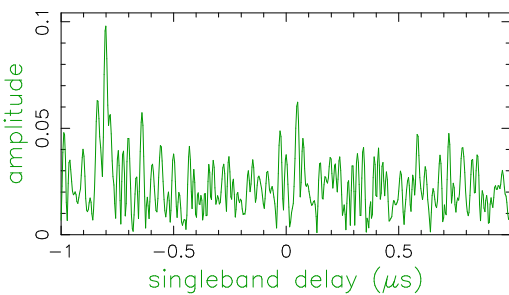
GLT - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

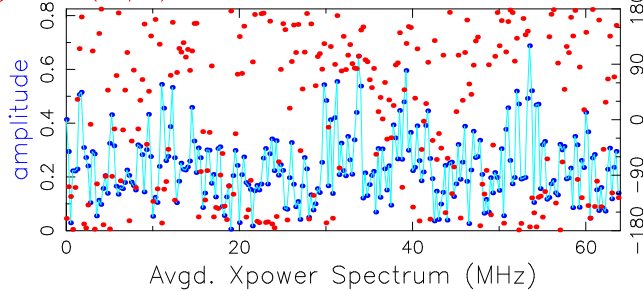


Fringe quality 0

SNR 5.6
Int time 419.822
Amp 0.104
Phase 2.3
PFD 1.0e+00
Delays (us)
SBD -0.802297
MBD -0.008301
Fringe rate (Hz)
-0.328100
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

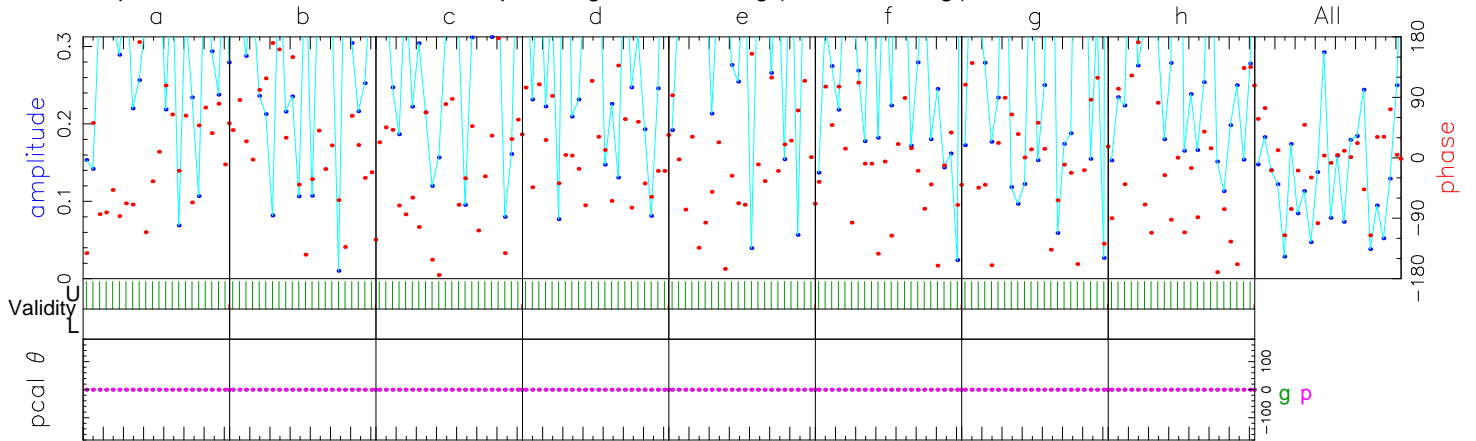


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 140000.00
Stop 140659.84
FRT 140330.00
Corr/FF/build
2021:303:054744
2021:303:120938
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-19.0	28.6	5.7	20.9	-22.8	3.0	28.7	-22.1	Phase	2.3
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.0	Ampl.	0.1
	104.1	35.3	248.6	51.5	467.6	128.3	335.3	105.3	Sbd box	51.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.05925277553E+04	Apriori delay (usec)	1.0593329311E+04	Resid mbdelay (usec)	-8.30078E-03	+/-	1.9E-04
Sband delay (usec)	1.05925306344E+04	Apriori clock (usec)	-5.0997372E+00	Resid sbdelay (usec)	-8.02297E-01	+/-	1.5E-03
Phase delay (usec)	1.0593329312E+04	Apriori clockrate (us/s)	1.9200001E-07	Resid phdelay (usec)	7.55381E-08	+/-	6.6E-07
Delay rate (us/s)	-5.83897293571E-01	Apriori rate (us/s)	-5.83893484657E-01	Resid rate (us/s)	-3.80891E-06	+/-	2.7E-09
Total phase (deg)	249.6	Apriori accel (us/s/s)	-2.04286095838E-05	Resid phase (deg)	2.3	+/-	20.6

ph/seg (deg)	54.4	RMS	54.4	Theor.	49.3	Amplitude	0.104 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.6	Search (2048X32)	0.096	sb window (us)	-1.000	1.000		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	mb window (us)	-0.008 0.008
ph/frq (deg)	23.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled		Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011
amp/frq (%)	43.1	Inc. seg. avg.	0.104	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00		

g: az 98.6 el 55.1 pa -21.4 p: az 40.1 el 18.4 pa -58.5 u,v (fr/asec) 5276.365 250.999 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gp..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gp.W.218.1X0F0I

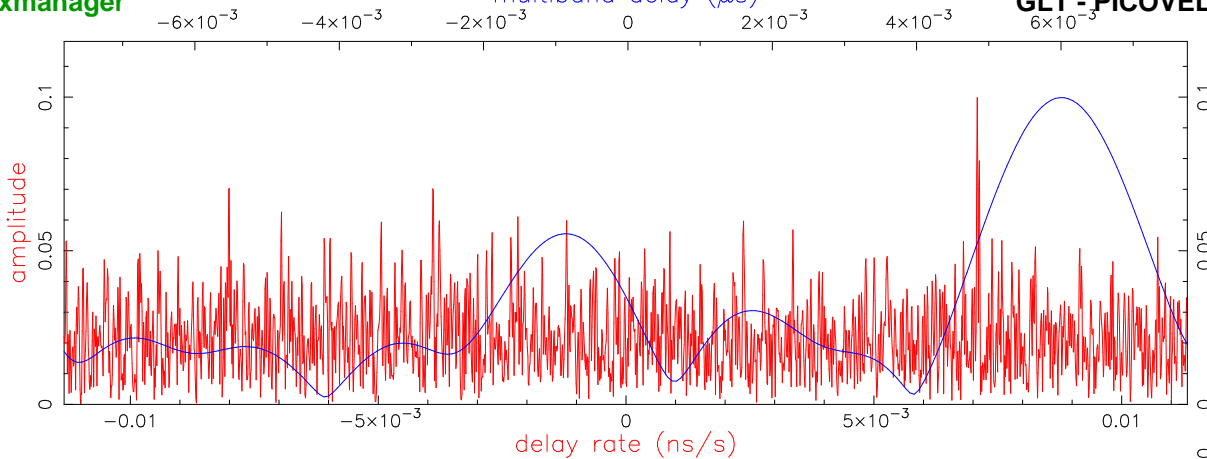
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gP

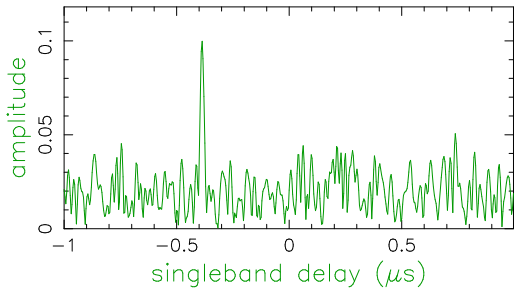
GLT - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

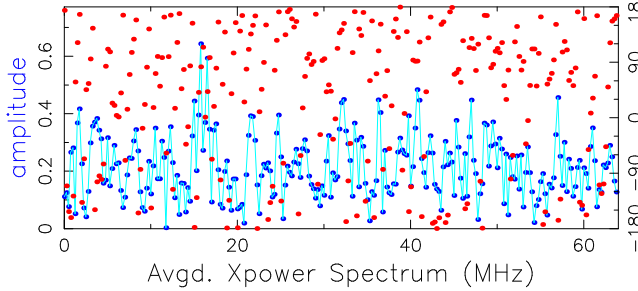


Fringe quality 0

SNR 5.6
 Int time 419.819
 Amp 0.118
 Phase -80.8
 PFD 9.9e-01
 Delays (us)
 SBD -0.387269
 MBD 0.005996
 Fringe rate (Hz)
 0.611414
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

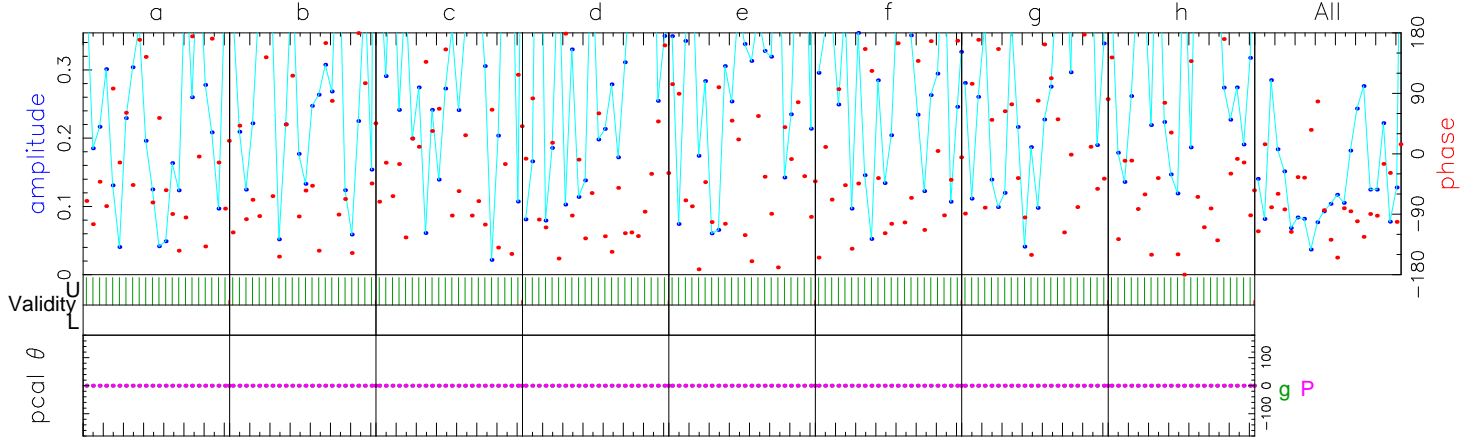


delay rate (ns/s)



Exp. c211c
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 140000.00
 Corr/FF/build
 2021:303:054744
 2021:303:120939
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.17346719612E+03									
Sband delay (usec)	-3.17346983591E+03									
Phase delay (usec)	-3.17308256977E+03									
Delay rate (us/s)	2.31019024397E-01									
Total phase (deg)			-201.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

ph/seg (deg) 57.7 49.1 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 85.9 85.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.2 28.9 Inc. seg. avg. 0.120 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.9 50.5 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 P: az 357.0 el 76.0 pa 176.8 u,v (fr/asec) -2027.753 6875.639 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gP..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gP.W.219.1X0F0I

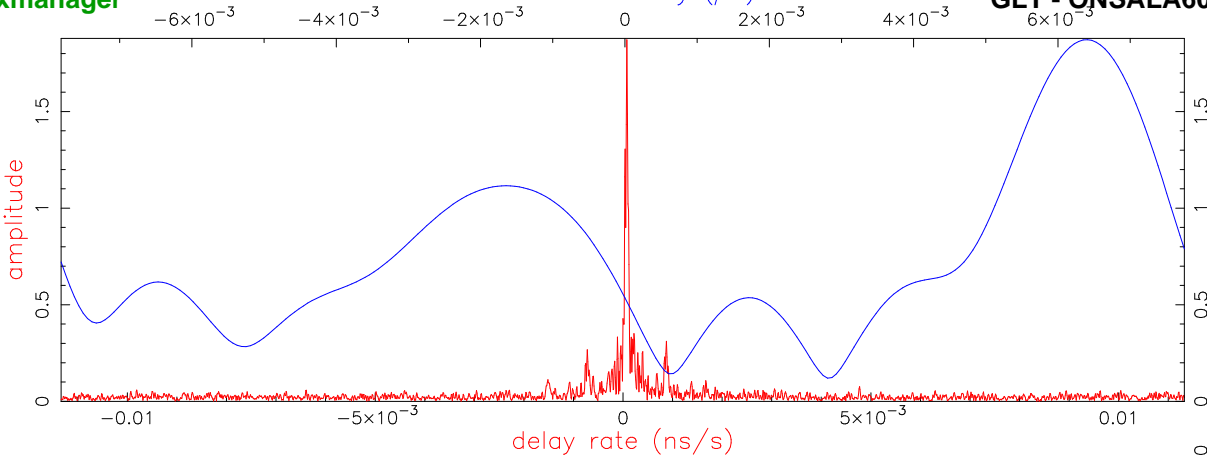
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gX

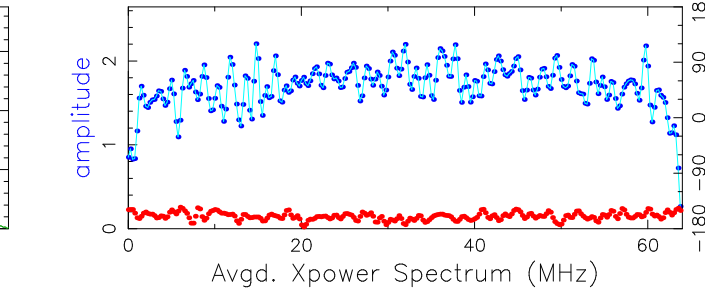
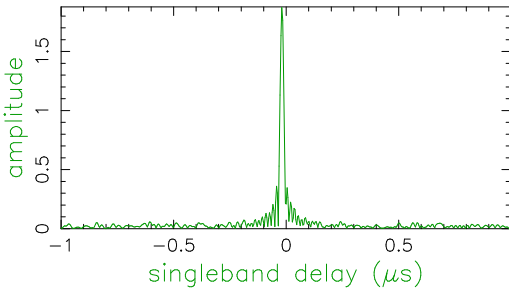
GLT - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



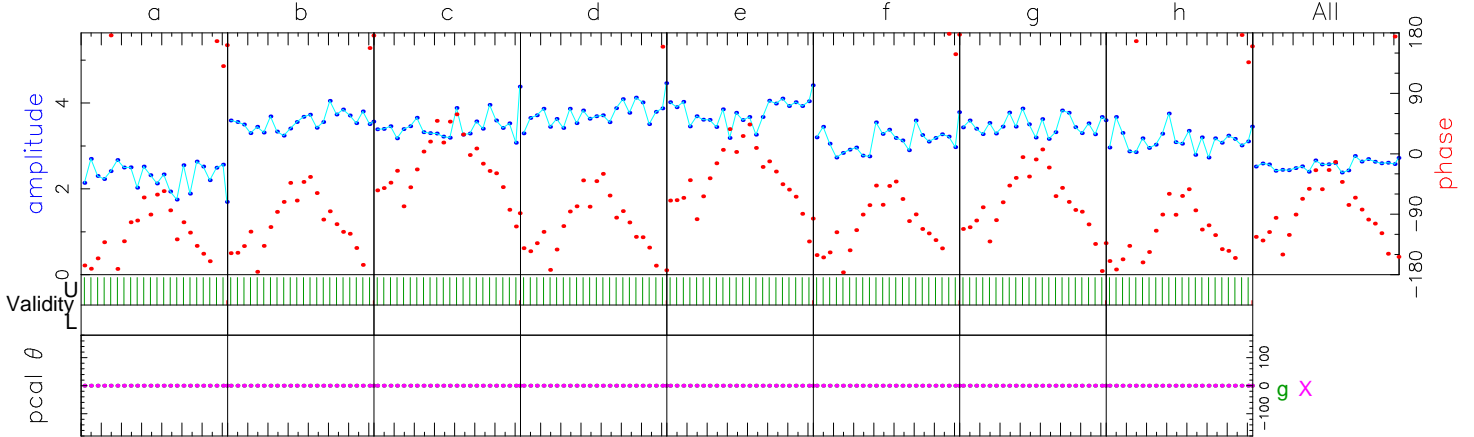
Fringe quality 3

SNR 105.2
 Int time 419.787
 Amp 1.878
 Phase -90.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.018768
 MBD 0.006418
 Fringe rate (Hz)
 0.006713
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120929
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-132.6	-109.6	-19.1	-109.9	-37.1	-114.1	-73.2	-130.7	Phase	-90.0
	1.7	2.6	2.5	2.8	2.8	2.3	2.5	2.3	Ampl.	2.4
	254.2	252.1	251.6	251.6	251.8	251.4	251.8	252.1	Sbd box	252.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.39502135901E+03	Apriori delay (usec)	-3.39499652661E+03	Resid mbdelay (usec)	6.41760E-03	+/-	1.0E-05
Sband delay (usec)	-3.39501529461E+03	Apriori clock (usec)	-5.6052502E+01	Resid sbdelay (usec)	-1.87680E-02	+/-	8.2E-05
Phase delay (usec)	-3.39499652951E+03	Apriori clockrate (us/s)	-4.5599998E-07	Resid phdelay (usec)	-2.90350E-06	+/-	3.5E-08
Delay rate (us/s)	3.60630749282E-01	Apriori rate (us/s)	3.60630671353E-01	Resid rate (us/s)	7.79286E-08	+/-	1.4E-10
Total phase (deg)	-18.7	Apriori accel (us/s/s)	2.92156185911E-05	Resid phase (deg)	-90.0	+/-	1.1

ph/seg (deg)	44.3	RMS	2.6	Theor.	1.878 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	36.3		4.6	Search (2048X32)	1.866	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.5		1.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.1		2.7	Inc. seg. avg.	2.550	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	2.424	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

g: az 98.6 el 55.1 pa -21.4 X: az 243.4 el 78.5 pa 49.9 u,v (fr/asec) -3237.360 3594.409 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gX..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gX.W.169.1X0F0I

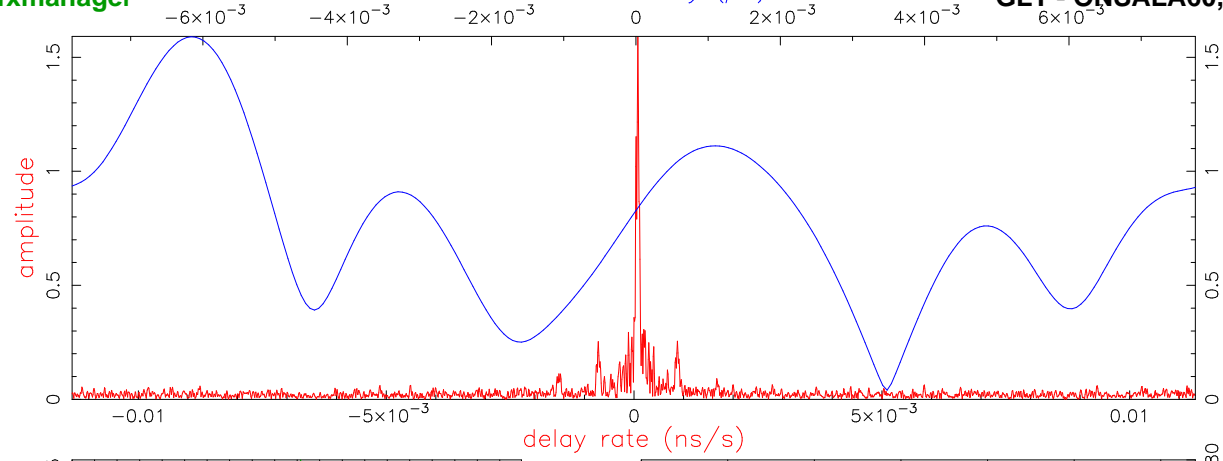
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gX

GLT - ONSALA60, fgroup W, pol RR

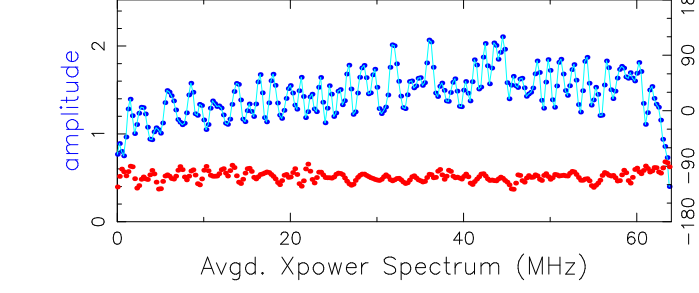
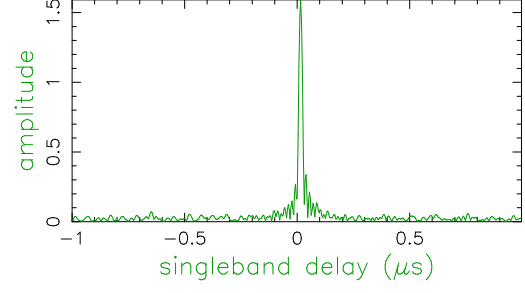
multiband delay (μ s)



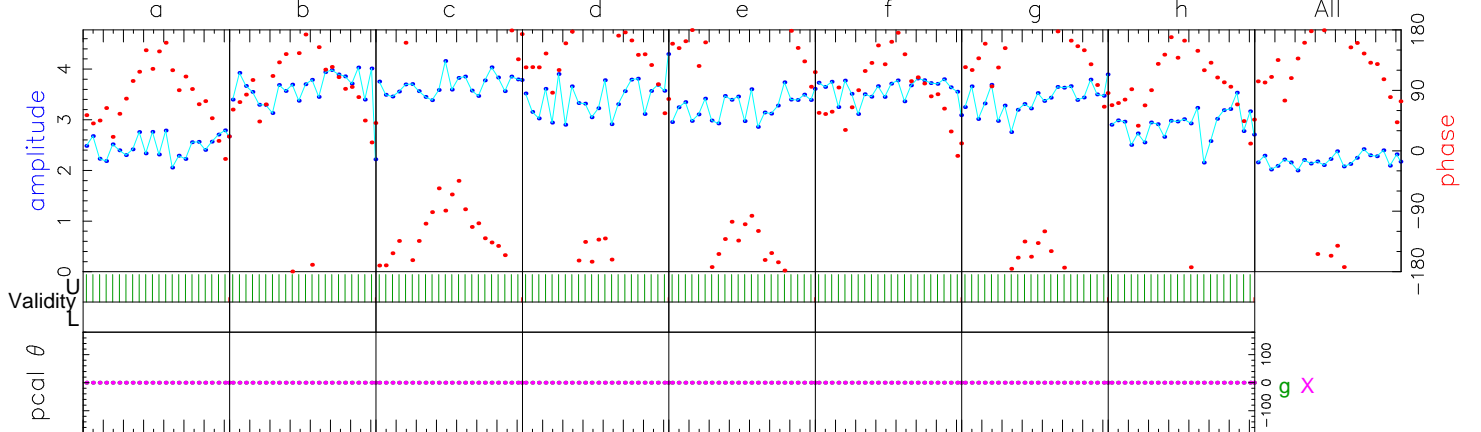
Fringe quality 2

SNR 89.2
 Int time 419.787
 Amp 1.592
 Phase 138.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.015165
 MBD -0.006168
 Fringe rate (Hz)
 0.006730
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120933
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	78.9	106.4	-130.4	154.5	-172.4	91.7	159.5	102.3	Phase	138.5
	1.8	2.6	2.7	2.5	2.4	2.6	2.4	2.1	Ampl.	2.4
	262.4	261.4	260.7	260.3	260.1	260.4	260.6	260.8	Sbd box	260.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.39498706969E+03		Apriori delay (usec)		-3.39499652661E+03		Resid mbdelay (usec)		-6.16809E-03	+/- 1.2E-05
Sband delay (usec)	-3.39498136161E+03		Apriori clock (usec)		-5.6052502E+01		Resid sbdelay (usec)		1.51650E-02	+/- 9.7E-05
Phase delay (usec)	-3.39499652214E+03		Apriori clockrate (us/s)		-4.5599998E-07		Resid phdelay (usec)		4.46528E-06	+/- 4.1E-08
Delay rate (us/s)	3.60630749479E-01		Apriori rate (us/s)		3.60630671353E-01		Resid rate (us/s)		7.81263E-08	+/- 1.7E-10
Total phase (deg)			Apriori accel (us/s/s)		2.92156185911E-05		Resid phase (deg)		138.5	+/- 1.3

ph/seg (deg) 45.1 3.1 Search (2048X32) 1.564 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.0 5.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 57.0 1.8 Inc. seg. avg. 2.198 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.2 3.2 Inc. frq. avg. 2.373 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 X: az 243.4 el 78.5 pa 49.9 u,v (fr/asec) -3237.360 3594.409 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gX..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gX.W.189.1X0F0I

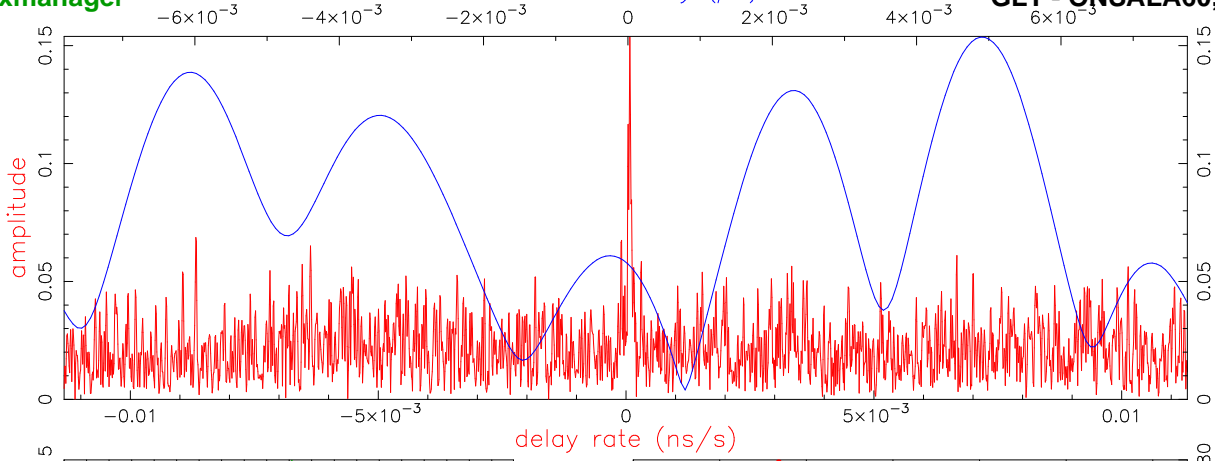
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gX

GLT - ONSALA60, fgroup W, pol LR

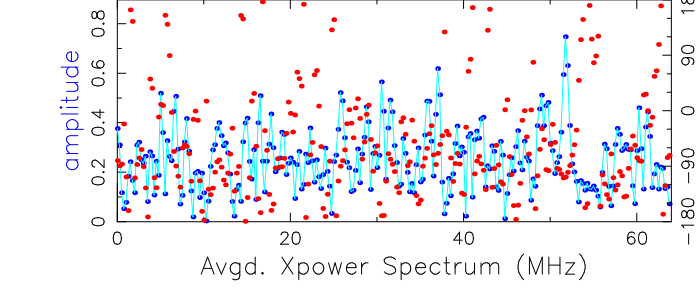
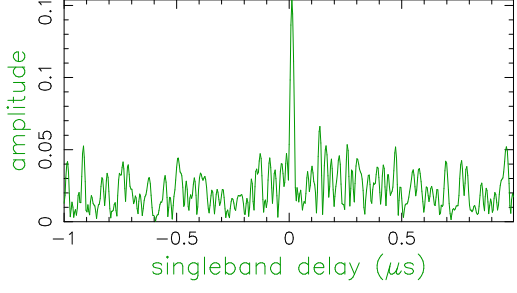
multiband delay (μ s)



Fringe quality 9

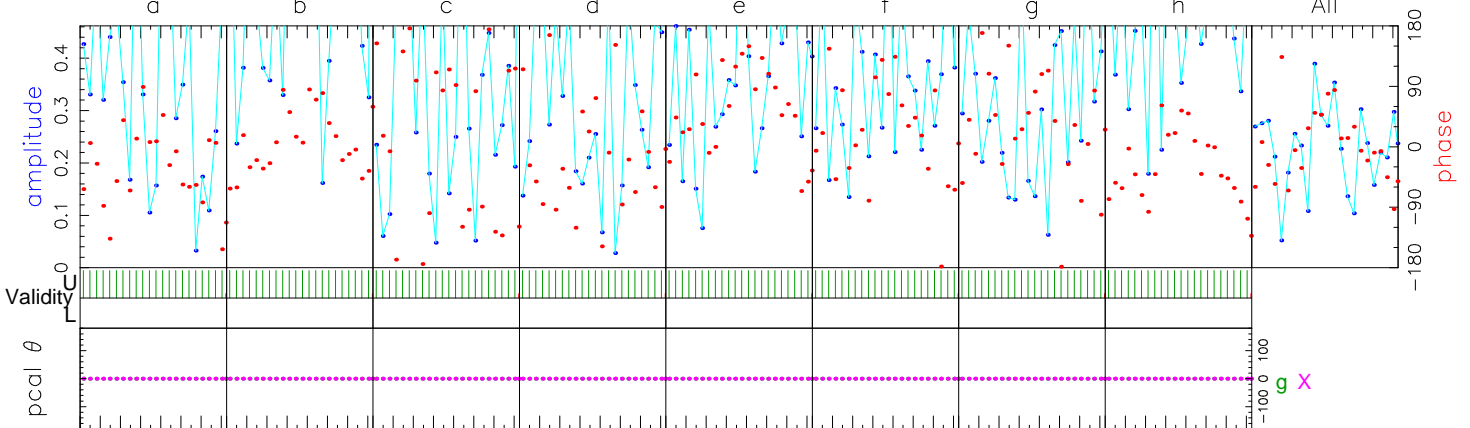
SNR 8.6
 Int time 419.787
 Amp 0.154
 Phase -1.6
 PFD 2.4e-09
 Delays (us)
 SBD 0.012308
 MBD 0.004919
 Fringe rate (Hz) 0.006466
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120936
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-25.9	8.2	178.9	-48.1	65.8	27.5	29.7	-31.9	Phase	-1.6
	0.2	0.4	0.2	0.2	0.2	0.2	0.1	0.4	Ampl.	0.2
	260.7	260.4	123.0	260.4	258.6	259.4	264.3	259.5	Sbd box	260.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.39499160801E+03		Apriori delay (usec)		-3.39499652661E+03		Resid mbdelay (usec)		4.91860E-03	+/- 1.3E-04
Sband delay (usec)	-3.39498421861E+03		Apriori clock (usec)		-5.6052502E+01		Resid sbdelay (usec)		1.23080E-02	+/- 1.0E-03
Phase delay (usec)	-3.39499652666E+03		Apriori clockrate (us/s)		-4.5599998E-07		Resid phdelay (usec)		-5.08053E-08	+/- 4.3E-07
Delay rate (us/s)	3.60630746418E-01		Apriori rate (us/s)		3.60630671353E-01		Resid rate (us/s)		7.50653E-08	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		2.92156185911E-05		Resid phase (deg)		-1.6	+/- 13.3

ph/seg (deg) 53.1 31.9 Search (2048X32) 0.151 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 72.0 55.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 84.0 18.8 Inc. seg. avg. 0.200 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 78.7 32.8 Inc. frq. avg. 0.222 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 X: az 243.4 el 78.5 pa 49.9 u,v (fr/asec) -3237.360 3594.409 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gX..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gX.W.208.1X0F0I

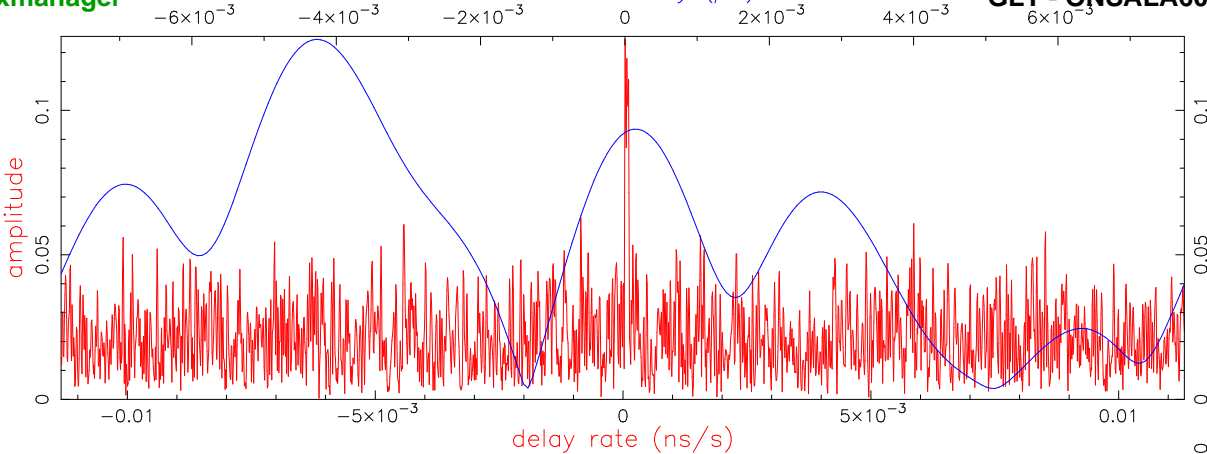
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gX

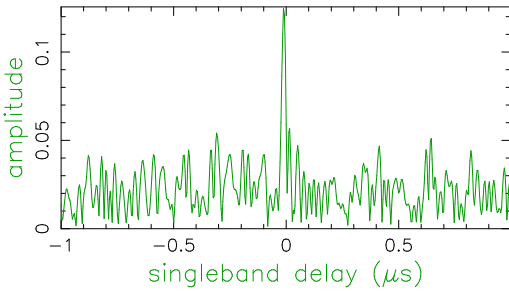
GLT - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

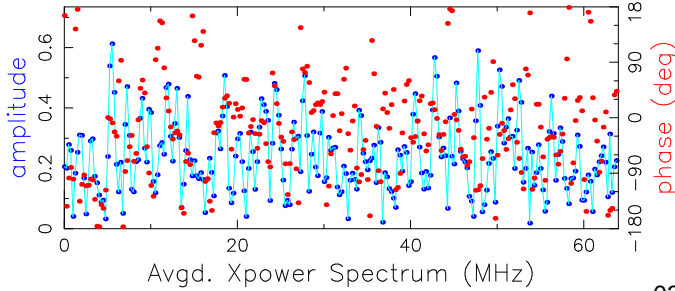


Fringe quality 0

SNR 7.0
 Int time 419.787
 Amp 0.126
 Phase -93.1
 PFD 5.9e-04
 Delays (us)
 SBD -0.010437
 MBD -0.004252
 Fringe rate (Hz)
 0.003746
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

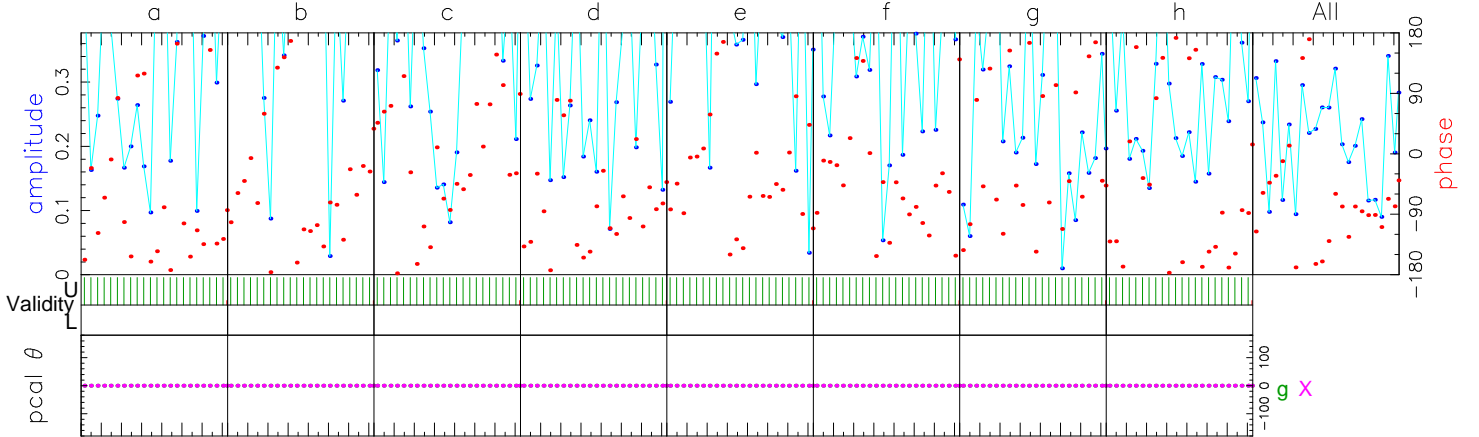


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140000.00
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120940
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.2	-85.8	52.6	-85.2	-57.3	-68.8	-130.6	-155.7	Phase	-93.1
	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	254.6	254.2	219.0	252.2	253.3	254.3	268.3	414.0	Sbd box	254.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -3.39500077900E+03 Apriori delay (usec) -3.39499652661E+03 Resid mbdelay (usec) -4.25240E-03 +/- 1.5E-04
 Sband delay (usec) -3.39500696411E+03 Apriori clock (usec) -5.6052502E+01 Resid sbdelay (usec) -1.04375E-02 +/- 1.2E-03
 Phase delay (usec) -3.39499652961E+03 Apriori clockrate (us/s) -4.5599998E-07 Resid phdelay (usec) -3.00084E-06 +/- 5.3E-07
 Delay rate (us/s) 3.60630714838E-01 Apriori rate (us/s) 3.60630671353E-01 Resid rate (us/s) 4.34849E-08 +/- 2.2E-09
 Total phase (deg) -21.7 Apriori accel (us/s/s) 2.92156185911E-05 Resid phase (deg) -93.1 +/- 16.3

RMS Theor. Amplitude 0.126 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.7 39.0 Search (2048X32) 0.123 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 93.9 68.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 70.9 23.0 Inc. seg. avg. 0.173 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 64.8 40.2 Inc. frq. avg. 0.154 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 98.6 el 55.1 pa -21.4 X: az 243.4 el 78.5 pa 49.9 u,v (fr/asec) -3237.360 3594.409 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gX..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gX.W.226.1X0F0I

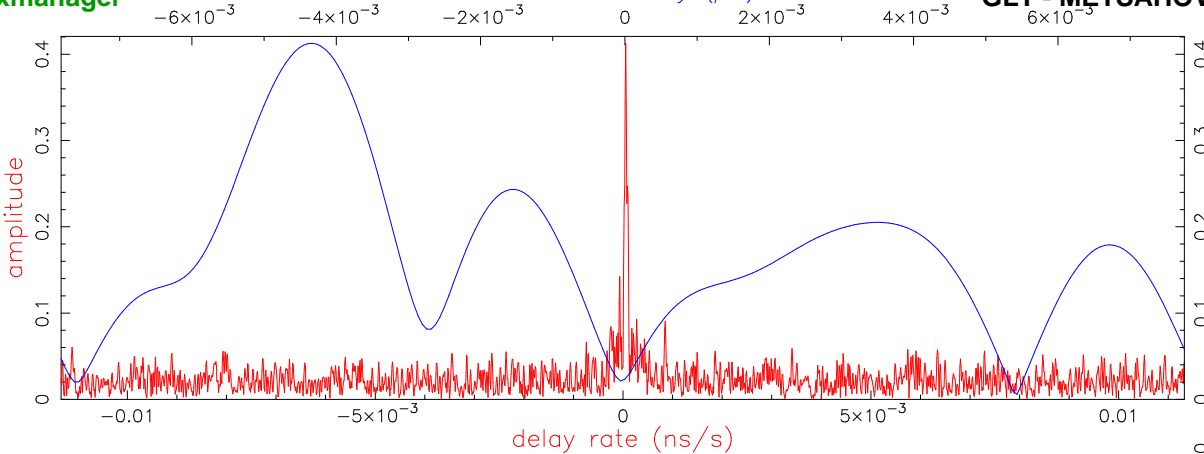
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gZ

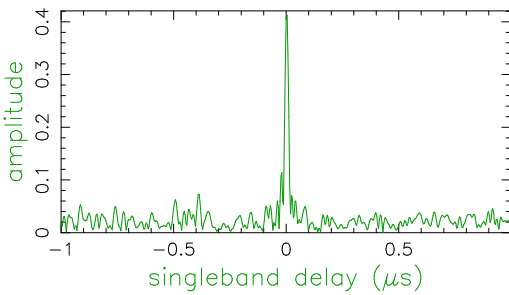
GLT - METSAHOV, fgroup W, pol LL

multiband delay (μ s)

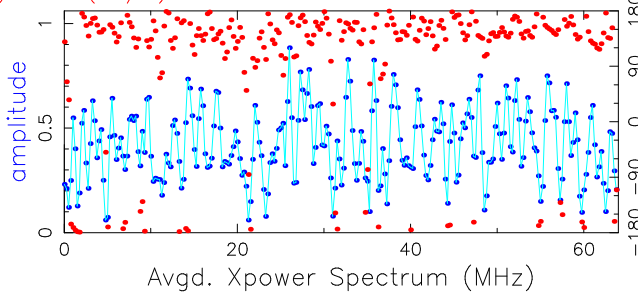


Fringe quality 8

SNR 23.2
 Int time 405.582
 Amp 0.421
 Phase -136.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.002130
 MBD -0.004390
 Fringe rate (Hz)
 0.004897
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

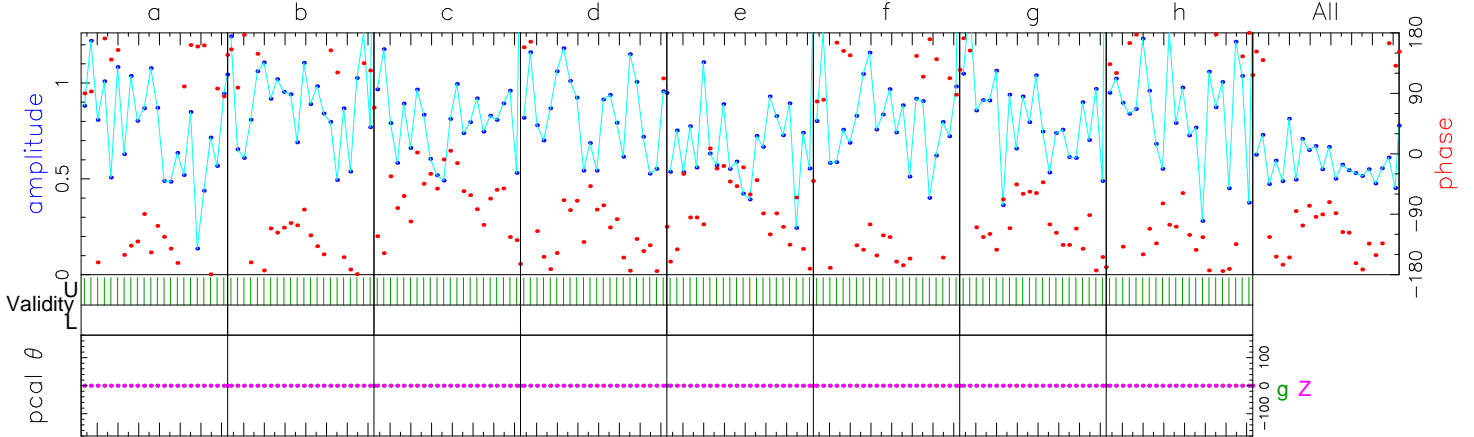


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140013.31
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120928
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	177.4	-162.6	-65.5	-130.5	-86.1	174.1	-118.4	-153.6	Phase	-136.2
g	0.4	0.6	0.6	0.6	0.5	0.5	0.6	0.6	Ampl.	0.5
Z	260.0	257.7	256.9	257.0	256.6	256.5	257.2	257.6	Sbd box	257.5
g	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g	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	
g	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
g									Tracks	
Z									Chan ids	
									Tracks	

Group delay (usec)(sbd) -2.64292161059E+03 Apriori delay (usec) -2.64291722027E+03 Resid mbdelay (usec) -4.39031E-03 +/- 4.7E-05
 Sband delay (usec) -2.64291509027E+03 Apriori clock (usec) 1.1535339E+00 Resid sbdelay (usec) 2.13000E-03 +/- 3.7E-04
 Phase delay (usec) -2.64291722466E+03 Apriori clockrate (us/s) 5.6000004E-08 Resid phdelay (usec) -4.39138E-06 +/- 1.6E-07
 Delay rate (us/s) 4.45100642358E-01 Apriori rate (us/s) 4.45100585504E-01 Resid rate (us/s) 5.68540E-08 +/- 6.8E-10
 Total phase (deg) -263.8 Apriori accel (us/s/s) 2.32756881354E-05 Resid phase (deg) -136.2 +/- 4.9

RMS Theor. Amplitude 0.421 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 45.9 11.9 Search (2048X32) 0.410 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 44.1 20.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 47.4 7.0 Inc. seg. avg. 0.569 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.0 12.2 Inc. frq. avg. 0.530 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

g: az 98.6 el 55.1 pa -21.4 Z: az 253.2 el 71.5 pa 48.7 u,v (fr/asec) -4015.776 2882.272 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gZ..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gZ.W.164.1X0F0I

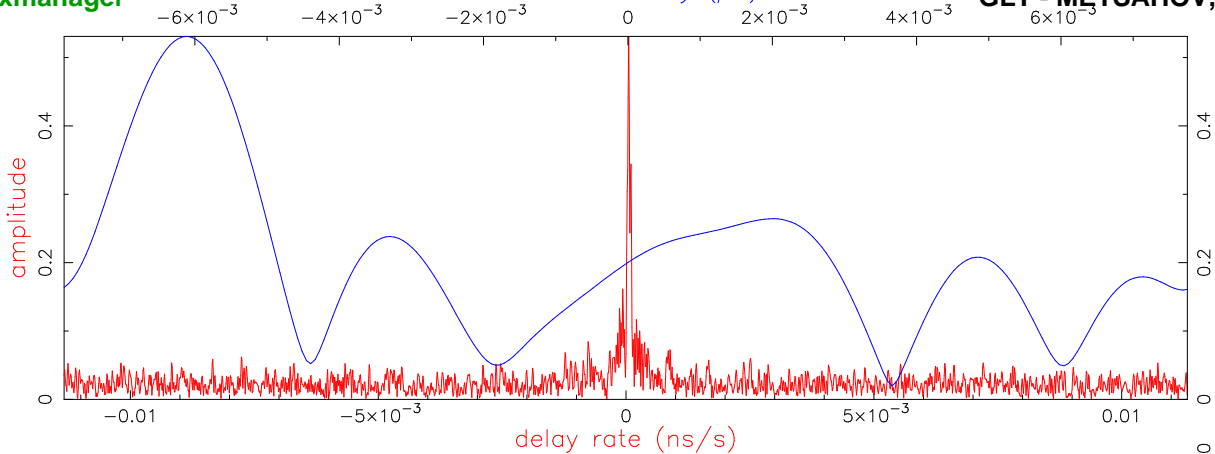
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gZ

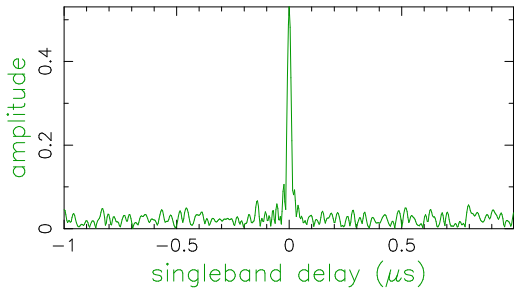
GLT - METSAHOV, fgroup W, pol RR

multiband delay (μ s)

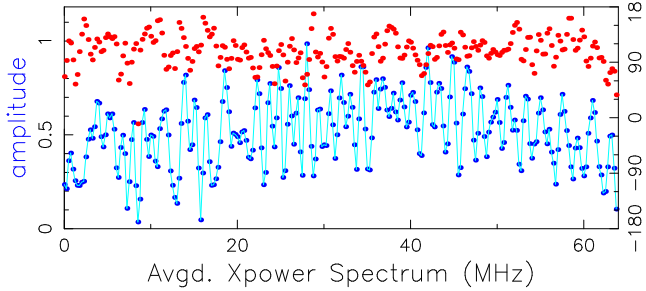


Fringe quality 4

SNR 29.2
 Int time 405.582
 Amp 0.531
 Phase 178.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.000147
 MBD -0.006119
 Fringe rate (Hz) 0.004725
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

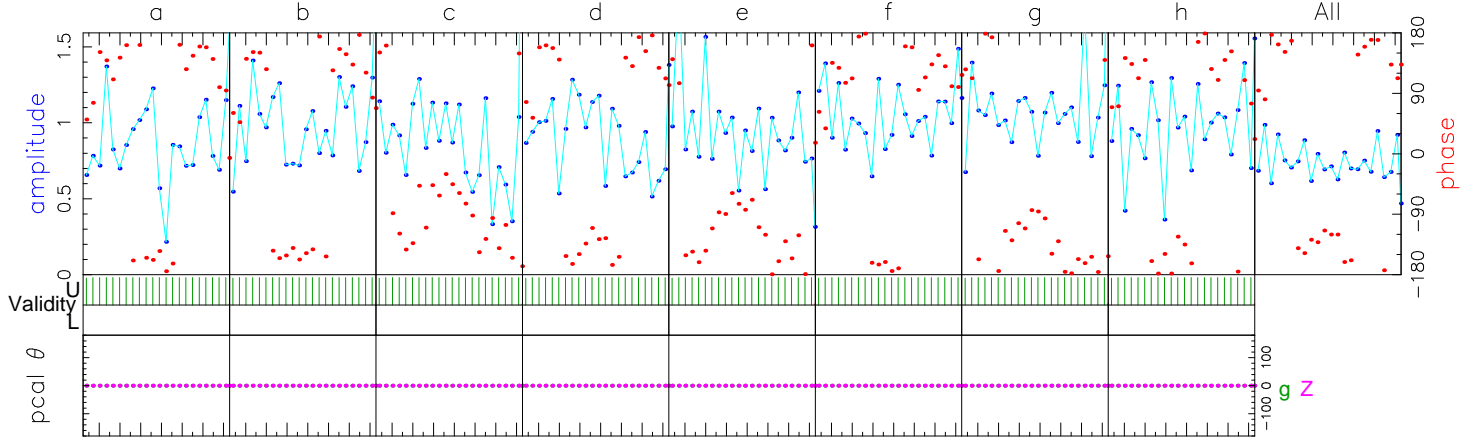


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140013.31
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120932
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.64292333965E+03				-2.64291722027E+03					
Sband delay (usec)	-2.64291736727E+03				1.1535339E+08					
Phase delay (usec)	-2.64291721452E+03				5.6000004E-08					
Delay rate (us/s)	4.45100640355E-01				4.45100585504E-01					
Total phase (deg)			50.8		2.32756881354E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal θ										
ph/seg (deg)	46.1	9.4			0.531 +/- 0.018					
amp/seg (%)	46.6	16.4			0.000					
ph/frq (deg)	45.1	5.5			0.742					
amp/frq (%)	28.5	9.7			0.657					
g: az 98.6 el 55.1 pa -21.4										
Z: az 253.2 el 71.5 pa 48.7										
u,v (fr/asec)										
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0077/gZ..1X0F0I										
Output file: /Exps/c211c/v1/1234/No0077/gZ.W.183.1X0F0I										

simultaneous interpolator

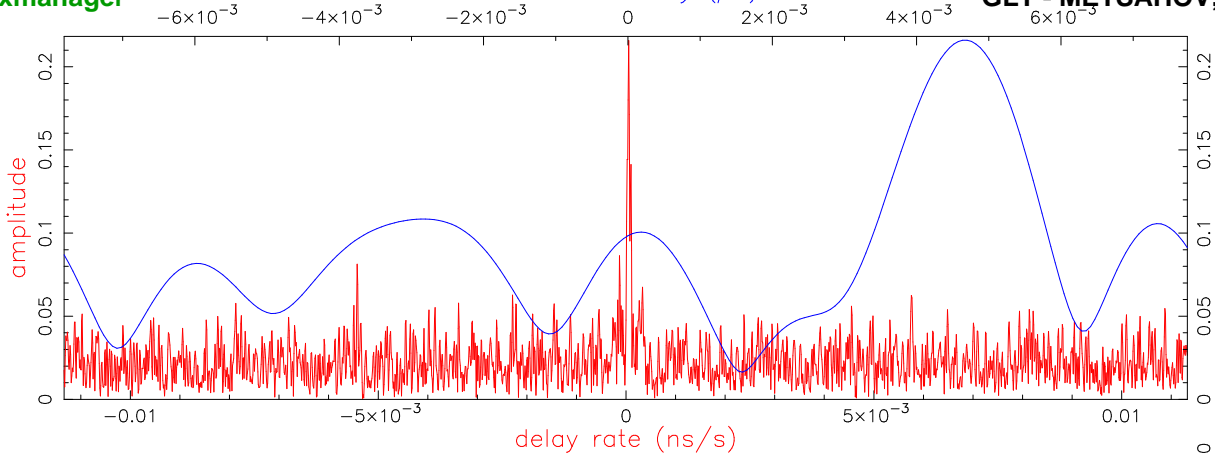
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gZ

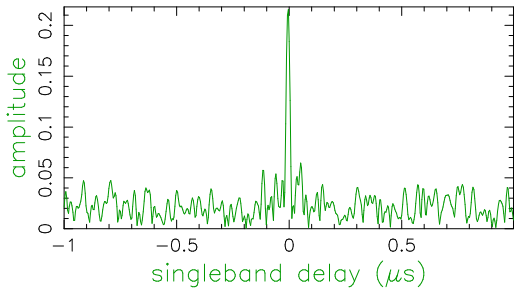
GLT - METSAHOV, fgroup W, pol LR

multiband delay (μ s)

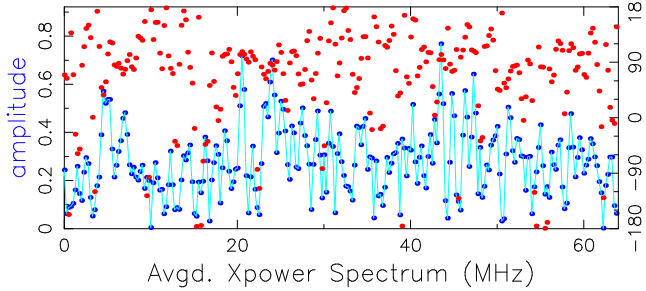


Fringe quality 9

SNR 12.0
 Int time 405.582
 Amp 0.218
 Phase -21.5
 PFD 1.4e-24
 Delays (us)
 SBD -0.005281
 MBD 0.004626
 Fringe rate (Hz)
 0.004717
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

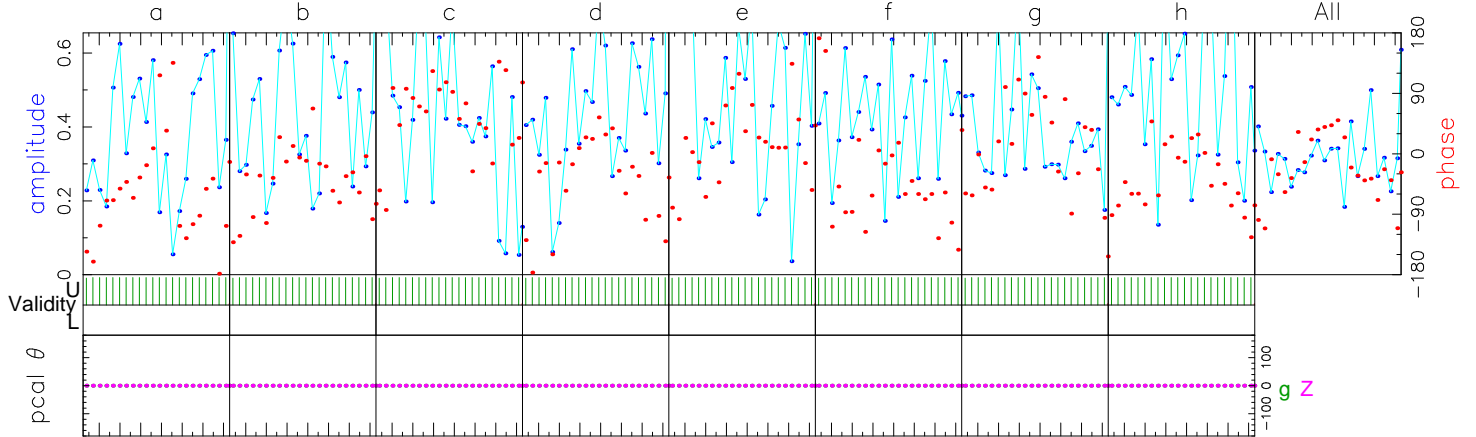


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140013.31
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120936
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-64.4	-36.9	53.7	-18.0	10.7	-66.7	19.5	-35.3	Phase	-21.5
	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.4	Ampl.	0.3
	257.0	255.5	255.3	254.9	255.1	254.8	293.0	255.6	Sbd box	255.6
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.64292821927E+03		Apriori delay (usec)		-2.64291722027E+03		Resid mbdelay (usec)		4.62600E-03	+/- 9.0E-05
Sband delay (usec)	-2.64292250152E+03		Apriori clock (usec)		1.1535339E+00		Resid sbdelay (usec)		-5.28125E-03	+/- 7.2E-04
Phase delay (usec)	-2.64291722097E+03		Apriori clockrate (us/s)		5.6000004E-08		Resid phdelay (usec)		-6.92793E-07	+/- 3.1E-07
Delay rate (us/s)	4.45100640264E-01		Apriori rate (us/s)		4.45100585504E-01		Resid rate (us/s)		5.47595E-08	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		2.32756881354E-05		Resid phase (deg)		-21.5	+/- 9.5

ph/seg (deg) 47.6 22.9 Search (2048X32) 0.211 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.4 39.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.0 13.5 Inc. seg. avg. 0.291 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.3 23.5 Inc. frq. avg. 0.263 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 98.6 el 55.1 pa -21.4 Z: az 253.2 el 71.5 pa 48.7 u,v (fr/asec) -4015.776 2882.272 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0077/gZ..1X0F0I Output file: /Exps/c211c/v1/1234/No0077/gZ.W.205.1X0F0I

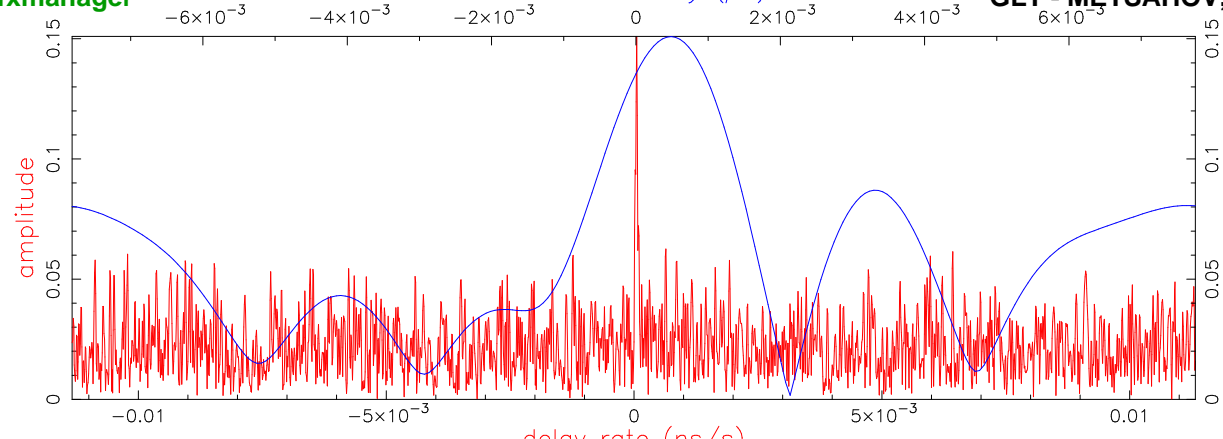
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X0F0I, No0077, gZ

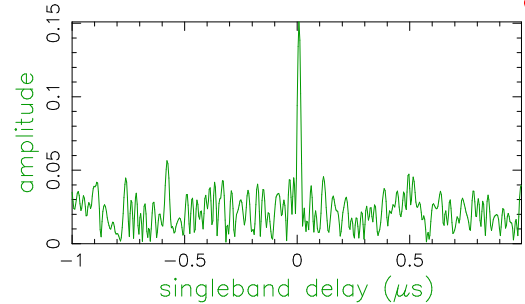
GLT - METSAHOV, fgroup W, pol RL

multiband delay (μ s)

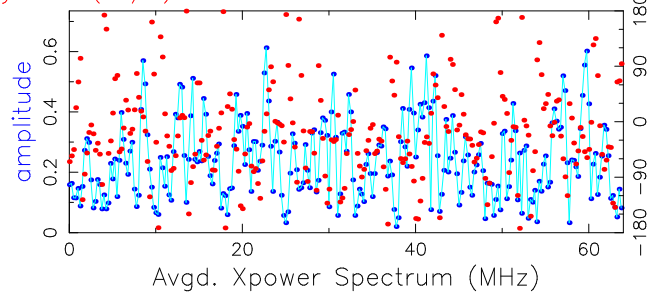


Fringe quality 9

SNR 8.3
 Int time 405.582
 Amp 0.151
 Phase 56.6
 PFD 3.2e-08
 Delays (us)
 SBD 0.008097
 MBD 0.000496
 Fringe rate (Hz) 0.004762
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

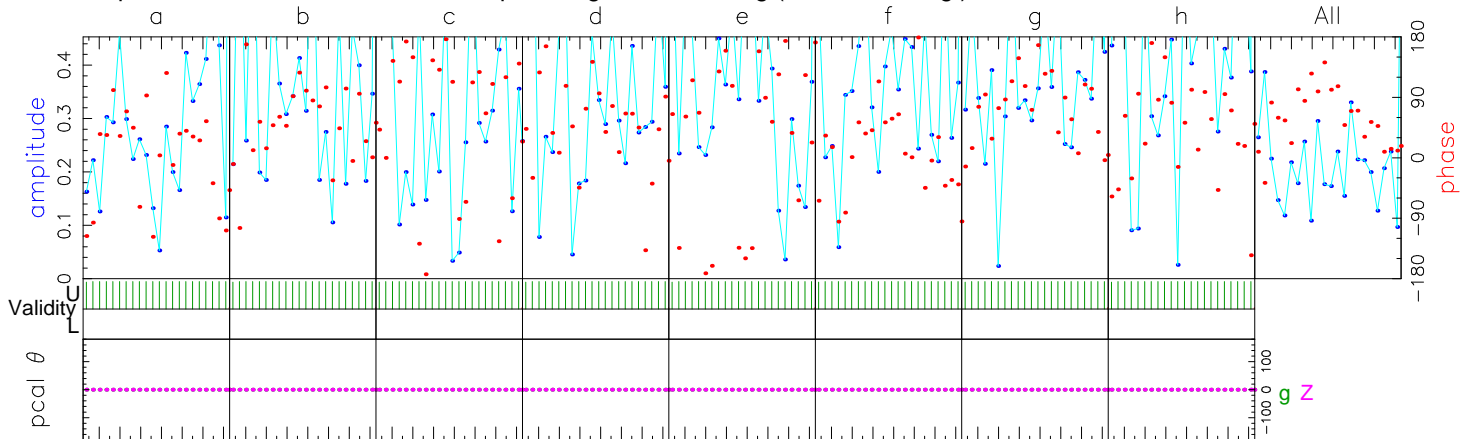


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 140013.31
 Stop 140659.84
 FRT 140330.00
 Corr/FF/build
 2021:303:054744
 2021:303:120939
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

Amp. and Phase vs. time for each freq., 23 segs, 36 APs / seg (18.43 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.64291672431E+03				-2.64291722027E+03				4.95967E-04	+/- 1.3E-04
Sband delay (usec)	-2.64290912377E+03				1.1535339E+08				8.09650E-03	+/- 1.0E-03
Phase delay (usec)	-2.64291721845E+03				5.6000004E-08				1.82494E-06	+/- 4.4E-07
Delay rate (us/s)	4.45100640781E-01				4.45100585504E-01				5.52767E-08	+/- 1.9E-09
Total phase (deg)			-71.0		2.32756881354E-05				56.6	+/- 13.8
ph/seg (deg)	43.4	33.0			0.151					
amp/seg (%)	62.6	57.7			0.000					
ph/frq (deg)	49.6	19.5			0.180					
amp/frq (%)	39.1	34.0			0.180					
g: az 98.6 el 55.1 pa -21.4	Z: az 253.2 el 71.5 pa 48.7		u,v (fr/asec) -4015.776 2882.272		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us) -1.000 1.000	
Control file: cf_1234_gmva	Input file: /Exps/c211c/v1/1234/No0077/gZ..1X0F0I		Output file: /Exps/c211c/v1/1234/No0077/gZ.W.222.1X0F0I		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us) -0.008 0.008	
						Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048		ion window (TEC) 0.00 0.00		
						nlags: 256 t_cohere infinite		simultaneous interpolator		