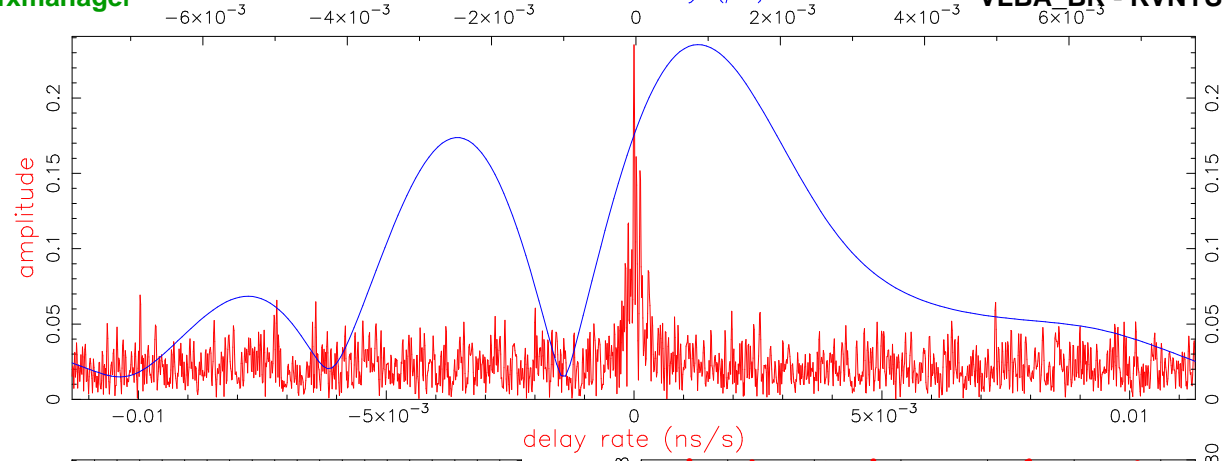
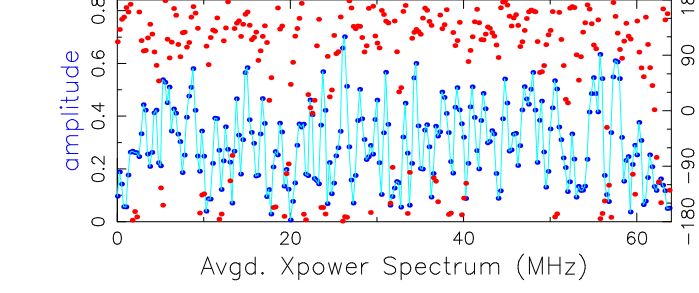
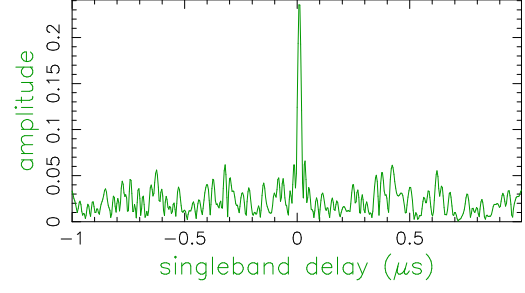


multiband delay (μ s)

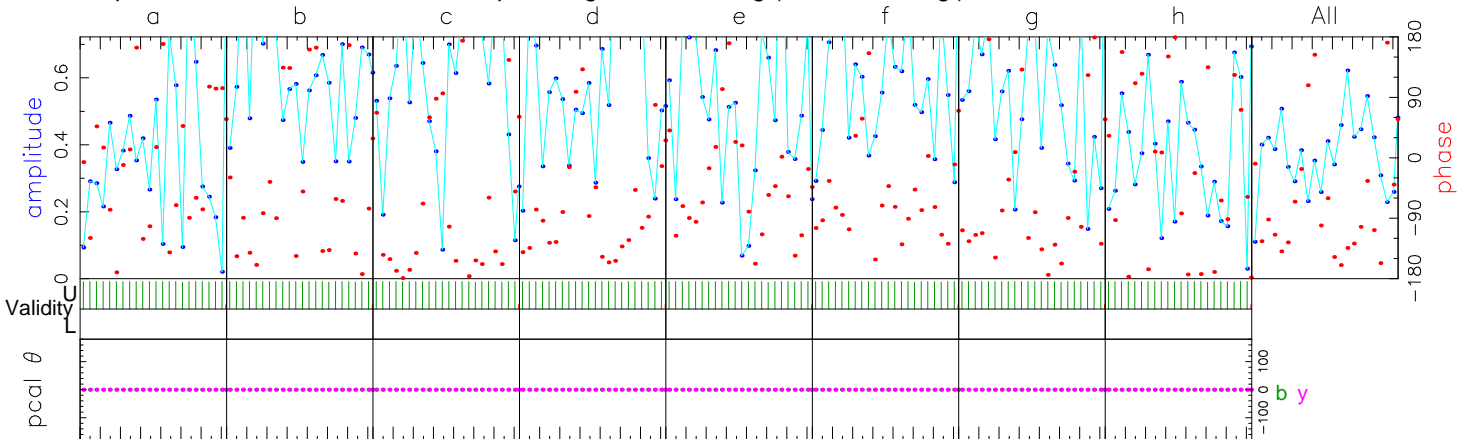


Fringe quality 9
SNR 13.5
Int time 418.916
Amp 0.241
Phase -113.2
PFD 1.1e-32
Delays (us)
SBD 0.009750
MBD 0.000806
Fringe rate (Hz) -0.000344
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133043
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
	-74.3	-125.0	-158.4	-113.4	-52.9	-73.9	-123.1	164.1	Phase	-113.2
	0.1	0.3	0.4	0.4	0.3	0.4	0.4	0.1	Ampl.	0.3
	256.8	259.2	259.8	259.4	259.4	260.0	258.9	256.4	Sbd box	259.5
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.09971910870E+04		Apriori delay (usec)		1.09971746556E+04		Resid mbdelay (usec)		8.06406E-04	+/- 8.0E-05
Sband delay (usec)	1.09971844054E+04		Apriori clock (usec)		-3.6909809E+00		Resid sbdelay (usec)		9.74975E-03	+/- 6.4E-04
Phase delay (usec)	1.09971746520E+04		Apriori clockrate (us/s)		-9.999998E-08		Resid phdelay (usec)		-3.65180E-06	+/- 2.7E-07
Delay rate (us/s)	-1.00871038180E+00		Apriori rate (us/s)		-1.00871037781E+00		Resid rate (us/s)		-3.99272E-09	+/- 1.1E-09
Total phase (deg)	186.9		Apriori accel (us/s/s)		-4.66458454320E-05		Resid phase (deg)		-113.2	+/- 8.5

ph/seg (deg) 61.3 20.4 Search (2048X32) 0.228 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 71.7 35.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 51.3 12.0 Inc. seg. avg. 0.349 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 47.6 21.0 Inc. frq. avg. 0.291 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 290.0 el 76.6 pa 94.4 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9105.172 -3859.408 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/by..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/by.W.17.1X1KZS

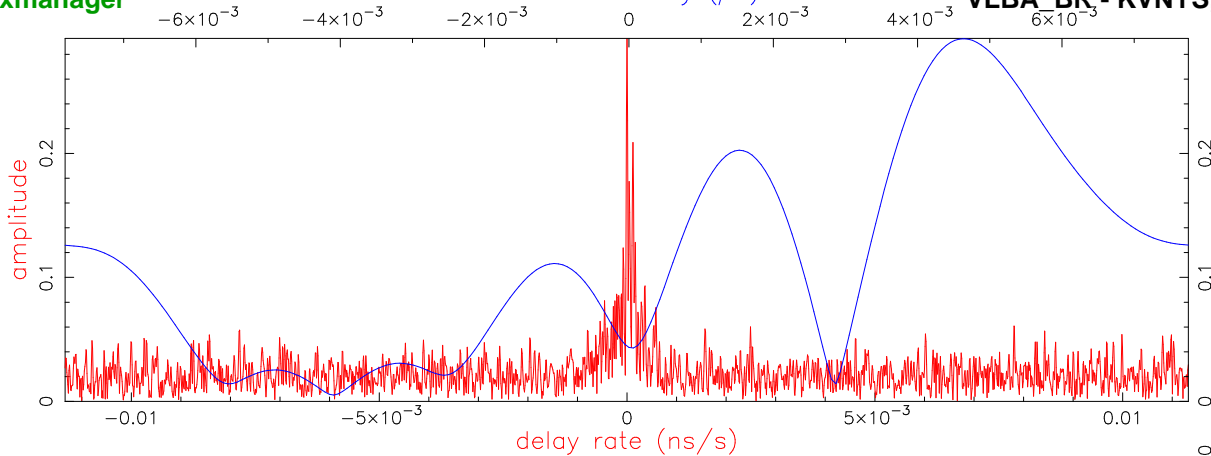
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, by

VLBA_BR - KVNYS, fgroup W, pol RR

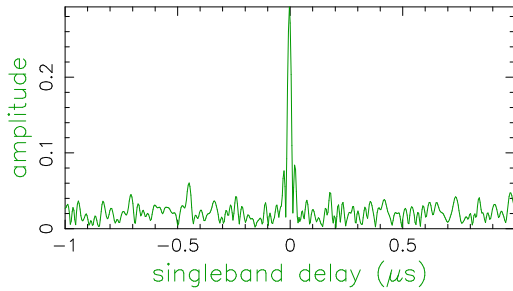
multiband delay (μ s)



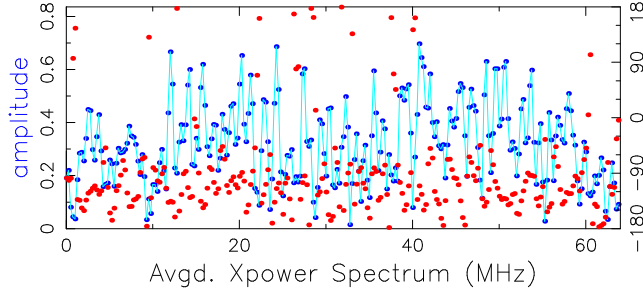
Fringe quality 7

SNR 16.4
 Int time 418.916
 Amp 0.293
 Phase 150.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.003497
 MBD 0.004660
 Fringe rate (Hz)
 -0.000320
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

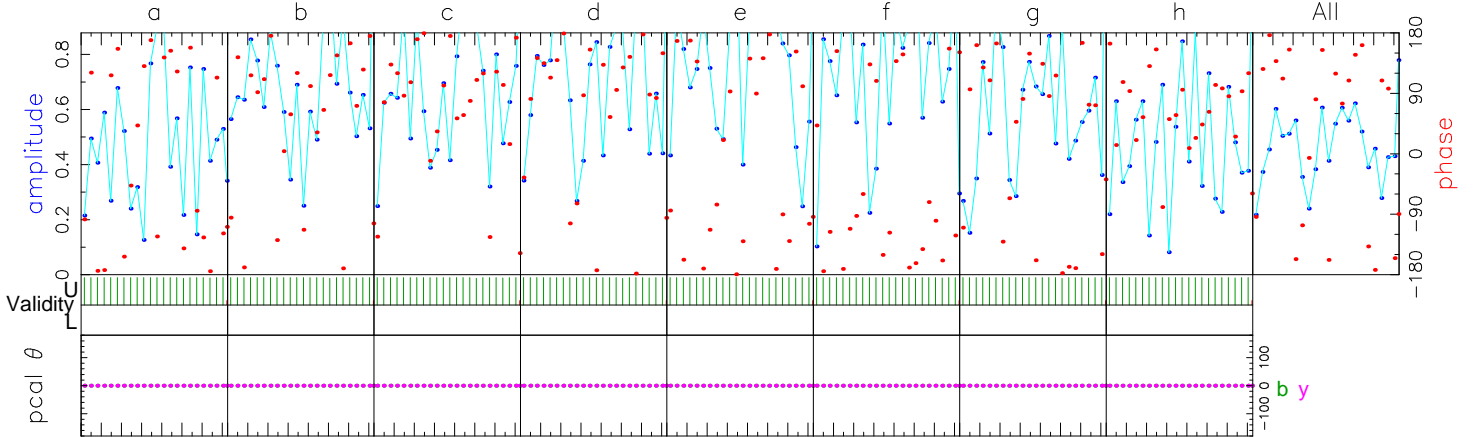
Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133047
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



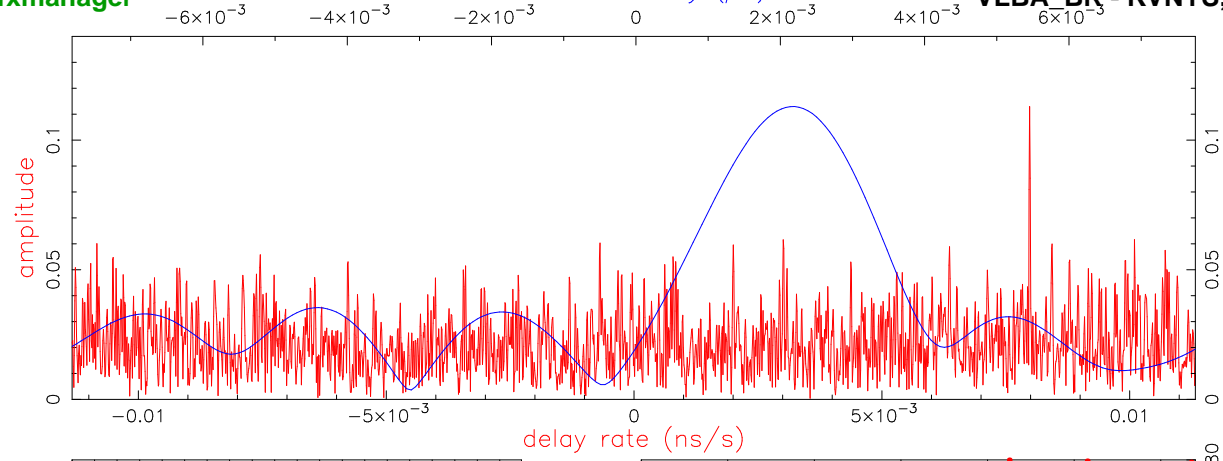
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)		1.09971636902E+04			1.09971746556E+04				Resid mbdelay (usec)	4.65956E-03 +/- 6.6E-05
Sband delay (usec)		1.09971711589E+04			-3.6909809E+00				Resid sbdelay (usec)	-3.49675E-03 +/- 5.3E-04
Phase delay (usec)		1.09971746604E+04			-9.999998E-08				Resid phdelay (usec)	4.83682E-06 +/- 2.3E-07
Delay rate (us/s)		-1.00871038153E+00			-1.00871037781E+00				Resid rate (us/s)	-3.71993E-09 +/- 9.3E-10
Total phase (deg)			90.2		-4.66458454320E-05				Resid phase (deg)	150.0 +/- 7.0

	RMS	Theor.	Amplitude	0.293 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.6	16.8	Search (2048X32)	0.280	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	70.0	29.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	50.6	9.9	Inc. seg. avg.	0.441	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.5	17.3	Inc. frq. avg.	0.384	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

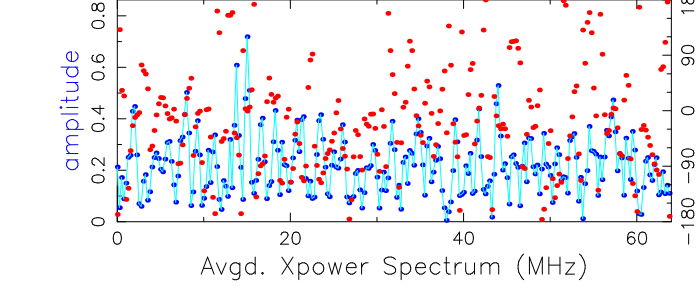
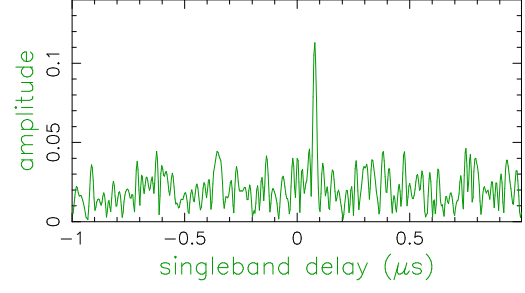
b: az 290.0 el 76.6 pa 94.4 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9105.172 -3859.408 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/by..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/by.W.38.1X1KZS

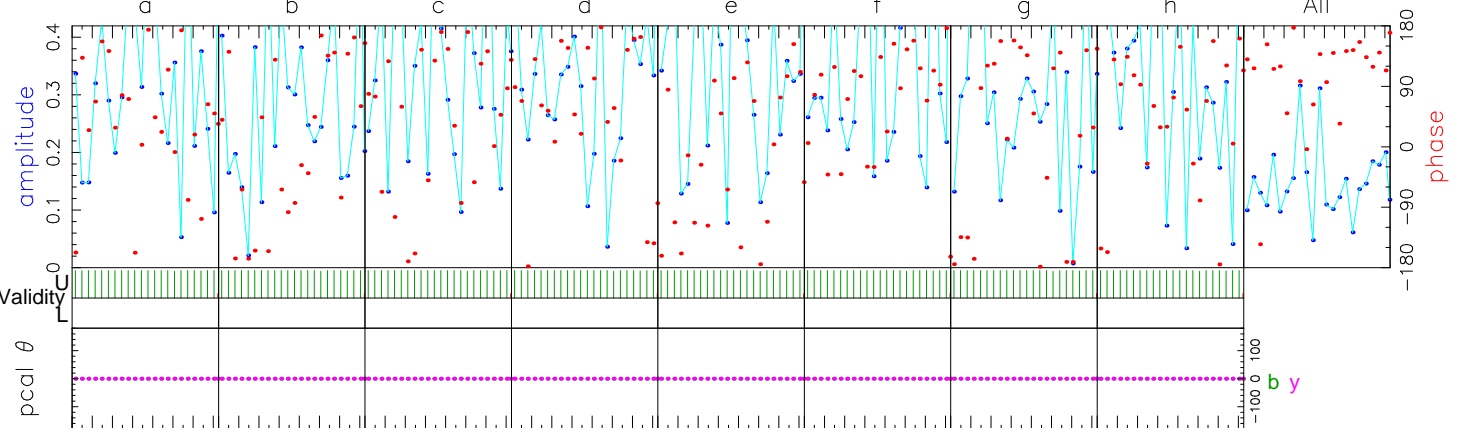
multiband delay (μ s)



Fringe quality 0
SNR 6.3
Int time 418.916
Amp 0.140
Phase 122.3
PFD 6.5e-02
Delays (us)
SBD 0.077655
MBD 0.002161
Fringe rate (Hz) 0.688366
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133051
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
80.4	179.5	135.9	123.5	118.8	106.1	143.9	115.0	122.3	Phase	122.3
0.1	0.0	0.2	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
253.0	106.9	223.9	210.7	398.0	276.8	330.5	276.1	276.9	Sbd box	276.9
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.09972549418E+04		Apriori delay (usec)		1.09971746556E+04		Resid mbdelay (usec)		2.16120E-03	+/- 1.7E-04
Sband delay (usec)	1.09972523109E+04		Apriori clock (usec)		-3.6909809E+00		Resid sbdelay (usec)		7.76552E-02	+/- 1.4E-03
Phase delay (usec)	1.09971746595E+04		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		3.94296E-06	+/- 5.8E-07
Delay rate (us/s)	-1.00870238656E+00		Apriori rate (us/s)		-1.00871037781E+00		Resid rate (us/s)		7.99125E-06	+/- 2.4E-09
Total phase (deg)	62.4		Apriori accel (us/s/s)		-4.66458454320E-05		Resid phase (deg)		122.3	+/- 18.1

ph/seg (deg) 47.4 43.4 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 65.8 75.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 31.6 25.6 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 44.6 44.7 Inc. frq. avg. 0.135 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 290.0 el 76.6 pa 94.4 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9105.172 -3859.408 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/by..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/by.W.56.1X1KZS

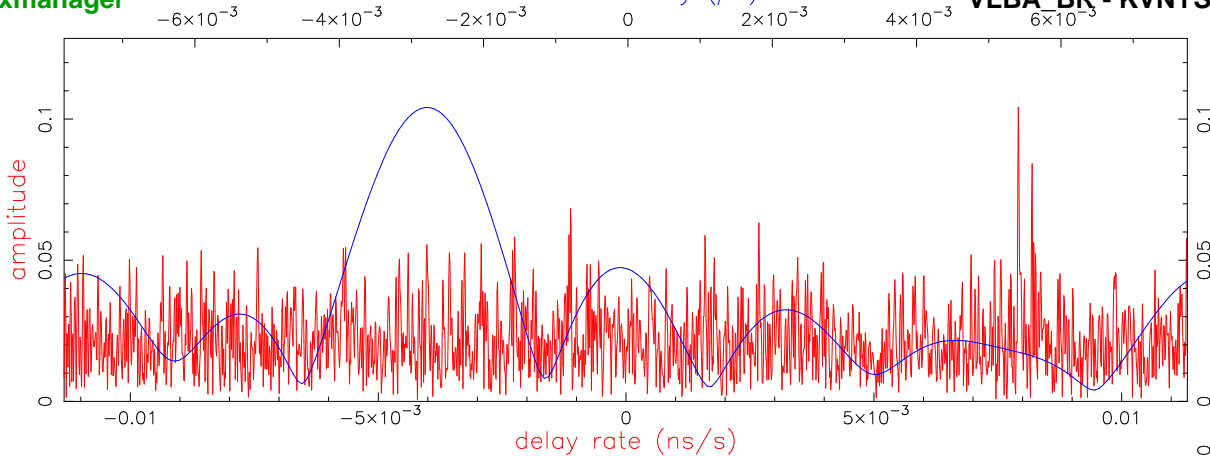
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, by

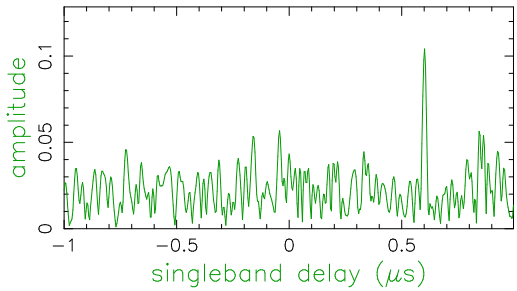
VLBA_BR - KVNYS, fgroup W, pol RL

multiband delay (μ s)

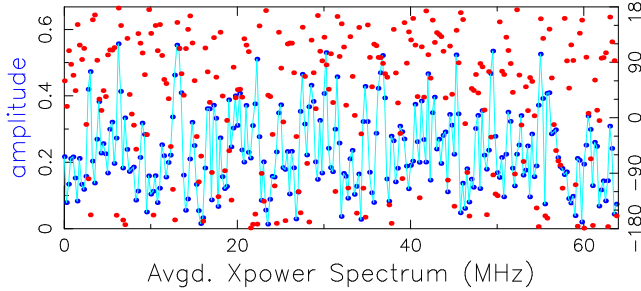


Fringe quality 0

SNR 5.8
 Int time 418.916
 Amp 0.129
 Phase -128.1
 PFD 7.5e-01
 Delays (us)
 SBD 0.601128
 MBD -0.002793
 Fringe rate (Hz)
 0.682846
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

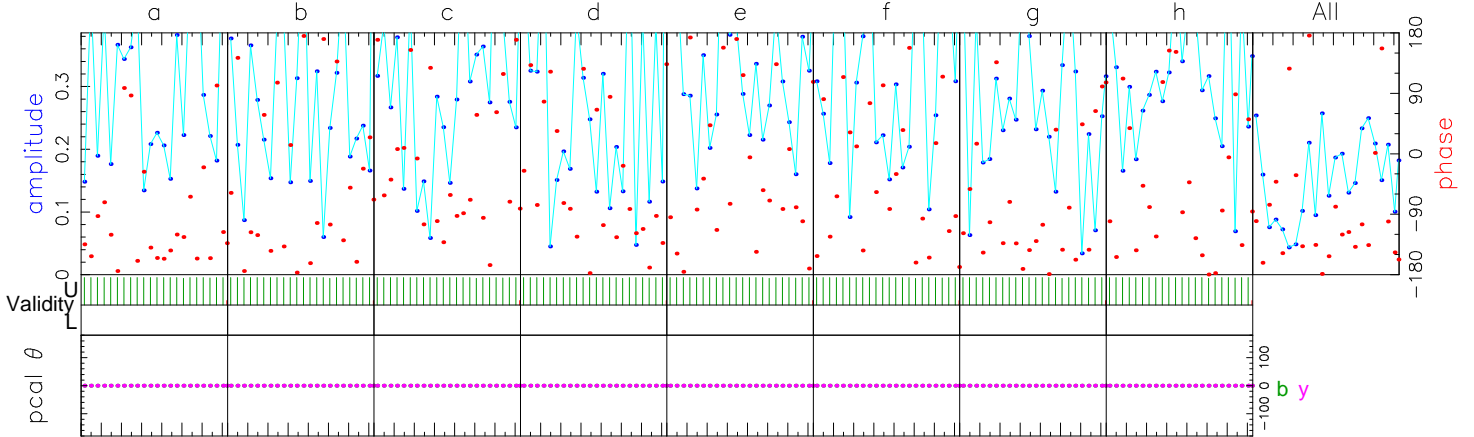


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133055
 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
	-134.4	-142.8	-86.8	-105.0	-133.7	-140.0	-134.1	-124.7	Phase	-128.1
	0.2	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	409.9	378.6	47.0	346.8	75.9	393.4	409.8	382.4	Sbd box	410.9
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.09977812374E+04		Apriori delay (usec)		1.09971746556E+04		Resid mbdelay (usec)		-2.79324E-03	+/- 1.9E-04
Sband delay (usec)	1.09977757834E+04		Apriori clock (usec)		-3.6909809E+00		Resid sbdelay (usec)		6.01128E-01	+/- 1.5E-03
Phase delay (usec)	1.09971746515E+04		Apriori clockrate (us/s)		-9.999998E-08		Resid phdelay (usec)		-4.13100E-06	+/- 6.3E-07
Delay rate (us/s)	-1.00870245064E+00		Apriori rate (us/s)		-1.00871037781E+00		Resid rate (us/s)		7.92717E-06	+/- 2.6E-09
Total phase (deg)	172.1		Apriori accel (us/s/s)		-4.66458454320E-05		Resid phase (deg)		-128.1	+/- 19.6

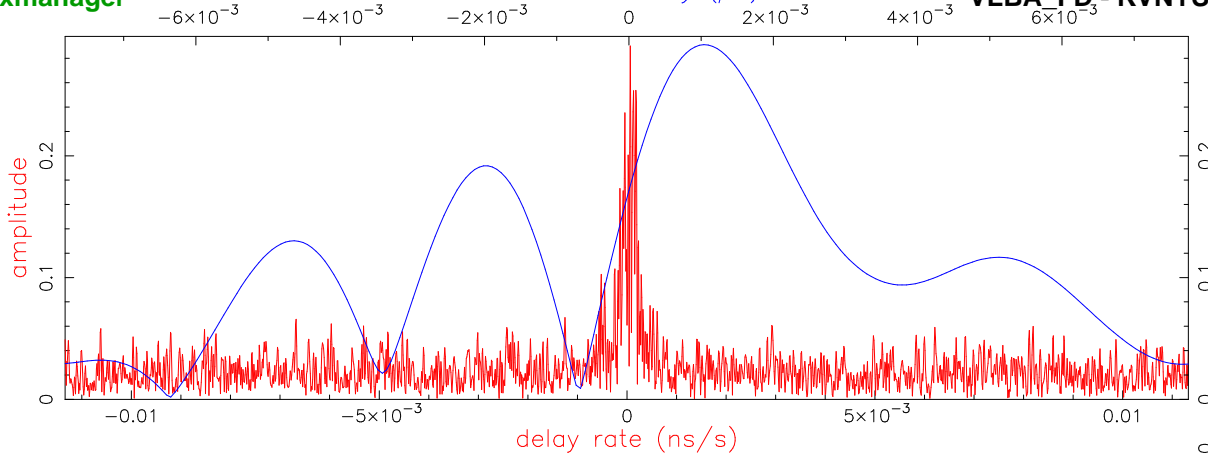
	RMS	Theor.	Amplitude	0.129 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.7	47.1	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.8	82.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.3	27.8	Inc. seg. avg.	0.140	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.6	48.5	Inc. frq. avg.	0.119	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 290.0 el 76.6 pa 94.4 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9105.172 -3859.408 simultaneous interpolator

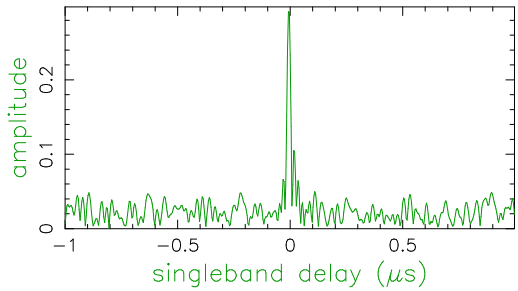
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/by..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/by.W.76.1X1KZS

multiband delay (μ s)

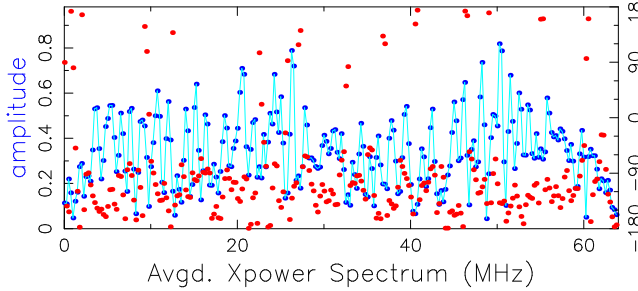
Fringe quality 8



SNR 16.7
Int time 418.919
Amp 0.298
Phase 157.6
PFD 0.0e+00
Delays (us)
SBD -0.005938
MBD 0.000946
Fringe rate (Hz)
0.005612
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

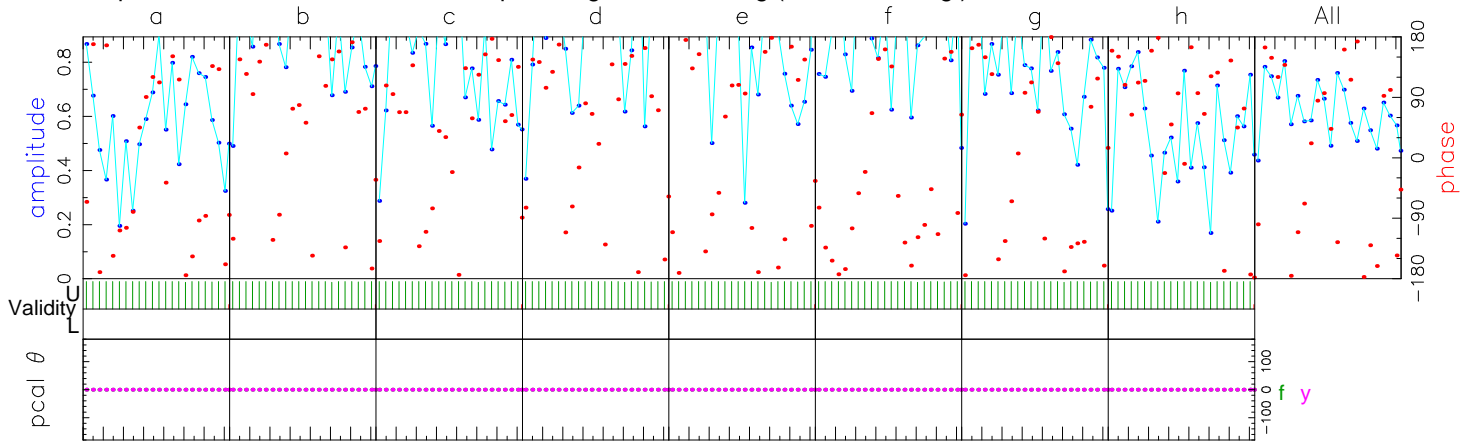


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133102
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
	-173.5	143.1	103.1	134.9	177.6	-127.3	169.7	109.8	Phase	157.6
	0.2	0.5	0.3	0.4	0.5	0.4	0.4	0.3	Ampl.	0.4
	253.6	255.4	255.5	256.1	255.9	255.5	254.8	253.7	Sbd box	255.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.01162505249E+03		Apriori delay (usec)		8.01162410621E+03		Resid mbdelay (usec)		9.46276E-04	+/- 6.5E-05
Sband delay (usec)	8.01161816846E+03		Apriori clock (usec)		9.5585918E+00		Resid sbdelay (usec)		-5.93775E-03	+/- 5.2E-04
Phase delay (usec)	8.01162411129E+03		Apriori clockrate (us/s)		5.9999999E-08		Resid phdelay (usec)		5.08136E-06	+/- 2.2E-07
Delay rate (us/s)	-1.27777335798E+00		Apriori rate (us/s)		-1.27777342313E+00		Resid rate (us/s)		6.51526E-08	+/- 9.1E-10
Total phase (deg)	340.9		Apriori accel (us/s/s)		-5.13121983771E-05		Resid phase (deg)		157.6	+/- 6.9

	RMS	Theor.	Amplitude	0.298 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	70.7	16.5	Search (2048X32)	0.289	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	114.8	28.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	46.6	9.7	Inc. seg. avg.	0.600	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	37.1	17.0	Inc. frq. avg.	0.367	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

f: az 318.0 el 56.5 pa 112.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 11550.709 -5644.727 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fy.W.103.1X1KZS

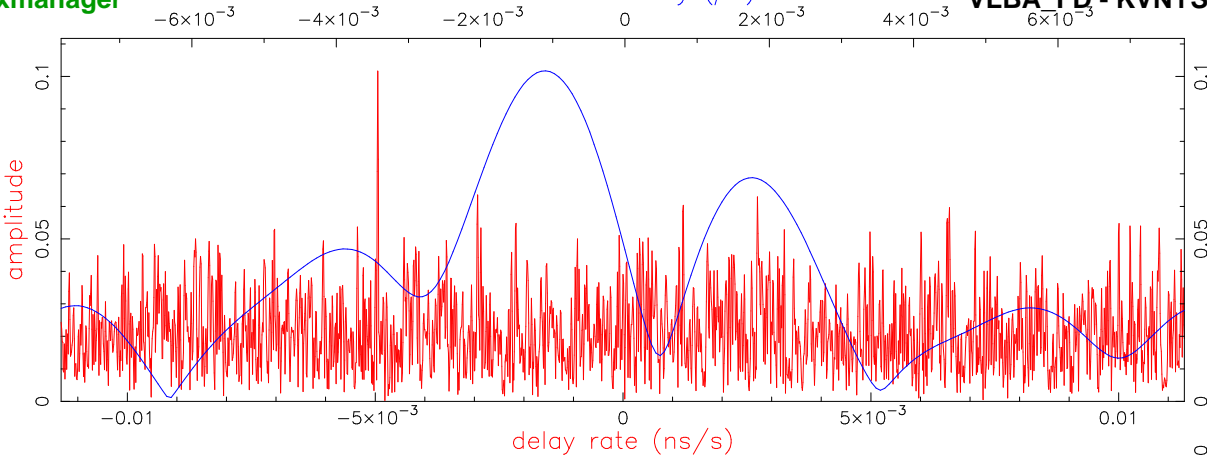
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, fy

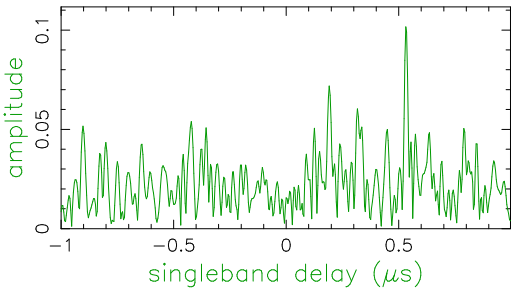
VLBA_FD - KVNYS, fgroup W, pol LR

multiband delay (μ s)

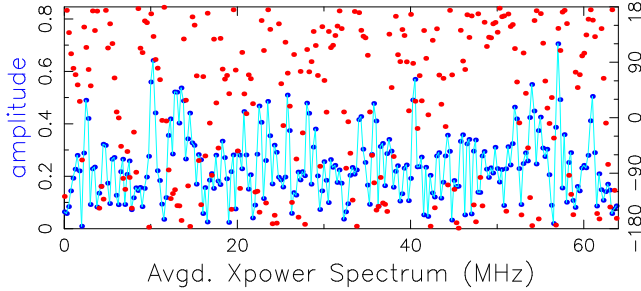


Fringe quality 0

SNR 5.8
 Int time 418.919
 Amp 0.112
 Phase -177.4
 PFD 8.6e-01
 Delays (us)
 SBD 0.532718
 MBD -0.001137
 Fringe rate (Hz)
 -0.427062
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

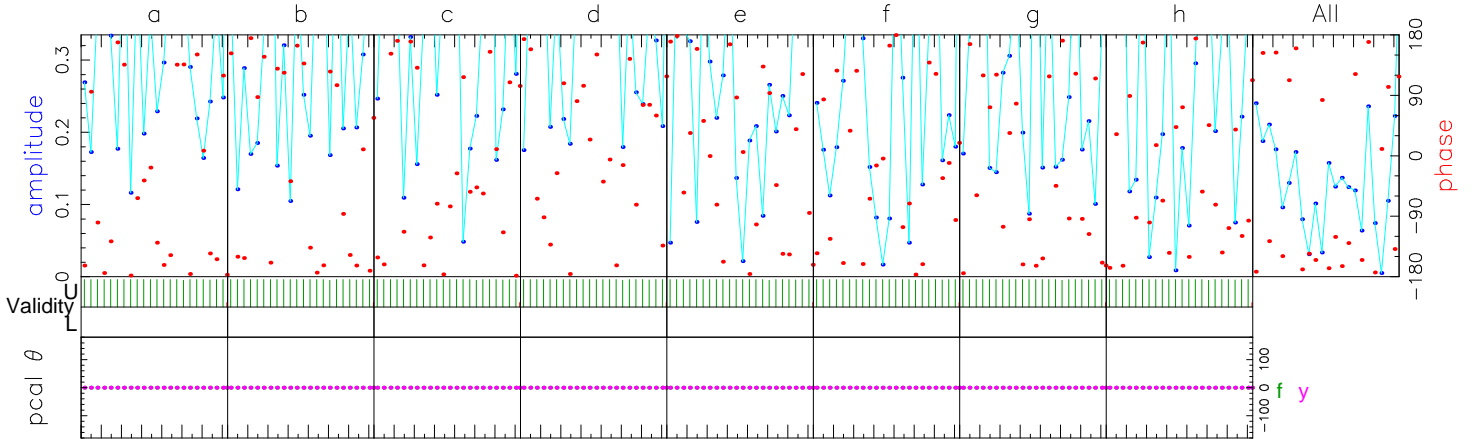


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133106
 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
	-167.7	170.0	-158.9	84.2	175.2	167.7	164.5	-132.9	Phase	-177.4
	0.2	0.2	0.2	0.0	0.0	0.1	0.1	0.1	Ampl.	0.1
	131.4	393.9	499.6	370.2	277.9	442.7	26.8	444.1	Sbd box	393.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.01215421909E+03		Apriori delay (usec)		8.01162410621E+03		Resid mbdelay (usec)		-1.13712E-03	+/- 1.9E-04
Sband delay (usec)	8.01215682371E+03		Apriori clock (usec)		9.5585918E+00		Resid sbdelay (usec)		5.32718E-01	+/- 1.5E-03
Phase delay (usec)	8.01162410049E+03		Apriori clockrate (us/s)		5.9999999E-08		Resid phdelay (usec)		-5.72179E-06	+/- 6.4E-07
Delay rate (us/s)	-1.27777838090E+00		Apriori rate (us/s)		-1.27777342313E+00		Resid rate (us/s)		-4.95777E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.13121983771E-05		Resid phase (deg)		-177.4	+/- 19.9

	RMS	Theor.	Amplitude	0.112 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	56.2	47.6	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	72.2	83.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	46.3	28.1	Inc. seg. avg.	0.105	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	56.6	49.0	Inc. frq. avg.	0.109	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

f: az 318.0 el 56.5 pa 112.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 11550.709 -5644.727 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fy.W.125.1X1KZS

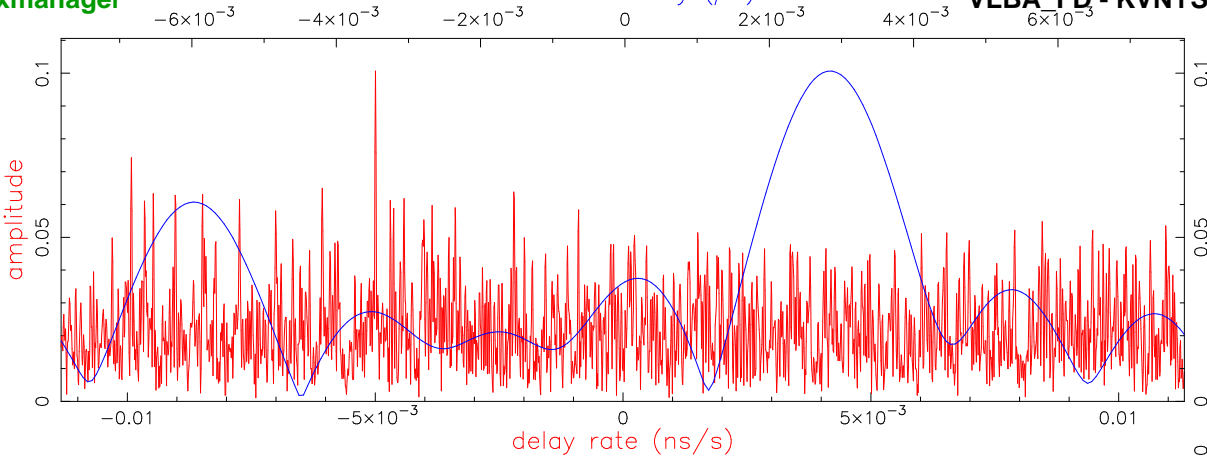
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, fy

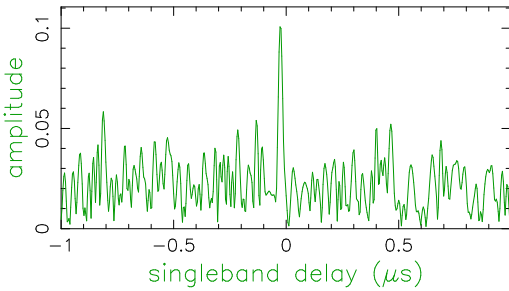
VLBA_FD - KVNYS, fgroup W, pol RL

multiband delay (μ s)

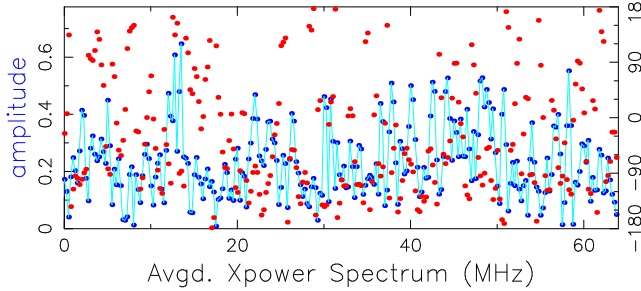


Fringe quality 0

SNR 5.7
 Int time 418.919
 Amp 0.111
 Phase -53.6
 PFD 9.4e-01
 Delays (us)
 SBD -0.025650
 MBD 0.002836
 Fringe rate (Hz)
 -0.430278
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

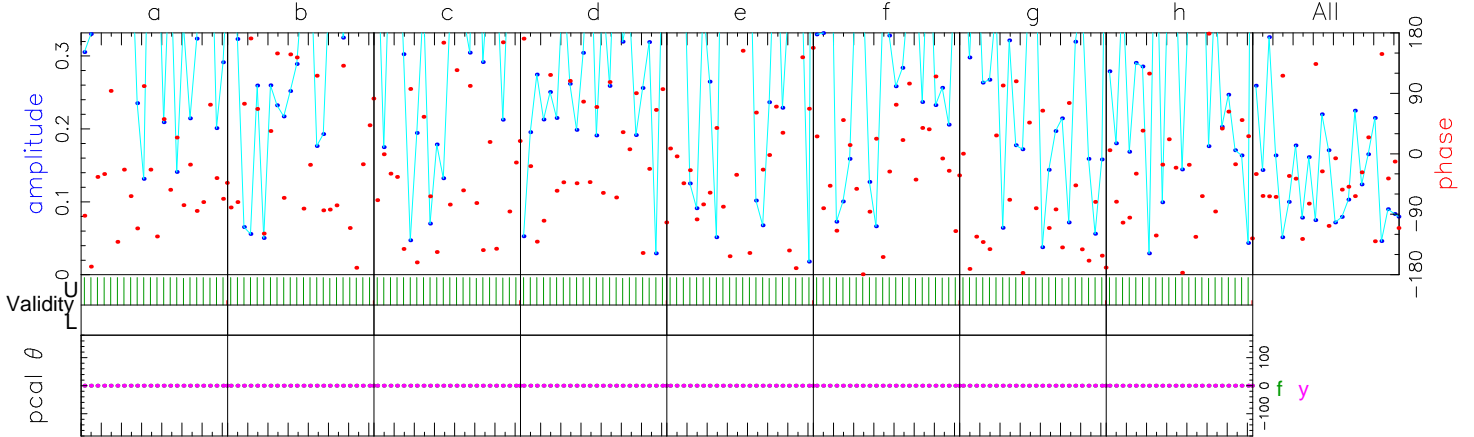


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133110
 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
	-53.0	-73.1	-61.6	-15.7	-65.9	-20.2	-105.4	-47.5	Phase	-53.6
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	250.8	241.3	495.0	177.8	158.6	174.9	108.1	436.2	Sbd box	250.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.01159569225E+03		Apriori delay (usec)		8.01162410621E+03		Resid mbdelay (usec)		2.83604E-03	+/- 1.9E-04
Sband delay (usec)	8.01159845646E+03		Apriori clock (usec)		9.5585918E+00		Resid sbdelay (usec)		-2.56498E-02	+/- 1.5E-03
Phase delay (usec)	8.01162410448E+03		Apriori clockrate (us/s)		5.9999999E-08		Resid phdelay (usec)		-1.72893E-06	+/- 6.5E-07
Delay rate (us/s)	-1.27777841824E+00		Apriori rate (us/s)		-1.27777342313E+00		Resid rate (us/s)		-4.99510E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.13121983771E-05		Resid phase (deg)		-53.6	+/- 20.1

	RMS	Theor.	Amplitude	0.111 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	71.1	48.1	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	80.5	84.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	31.3	28.4	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	37.1	49.5	Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

f: az 318.0 el 56.5 pa 112.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 11550.709 -5644.727 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fy.W.144.1X1KZS

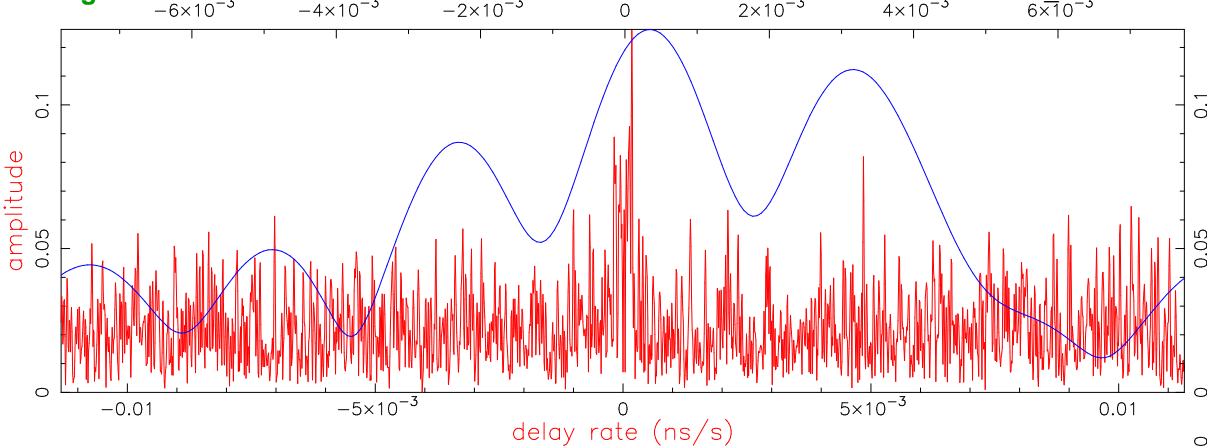
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, fy

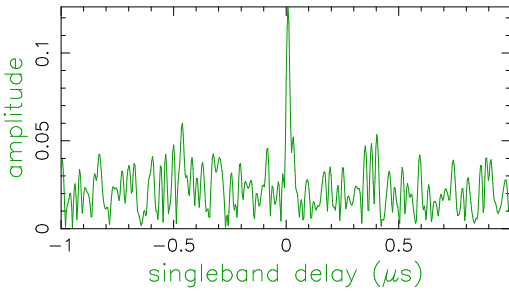
VLBA_FD - KVNYS, fgroup W, pol LL

multiband delay (μ s)

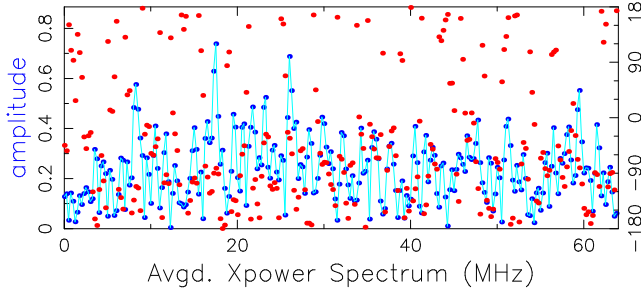


Fringe quality 0

SNR 7.1
 Int time 418.919
 Amp 0.126
 Phase -11.9
 PFD 4.8e-04
 Delays (us)
 SBD 0.008049
 MBD 0.000346
 Fringe rate (Hz)
 0.015291
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

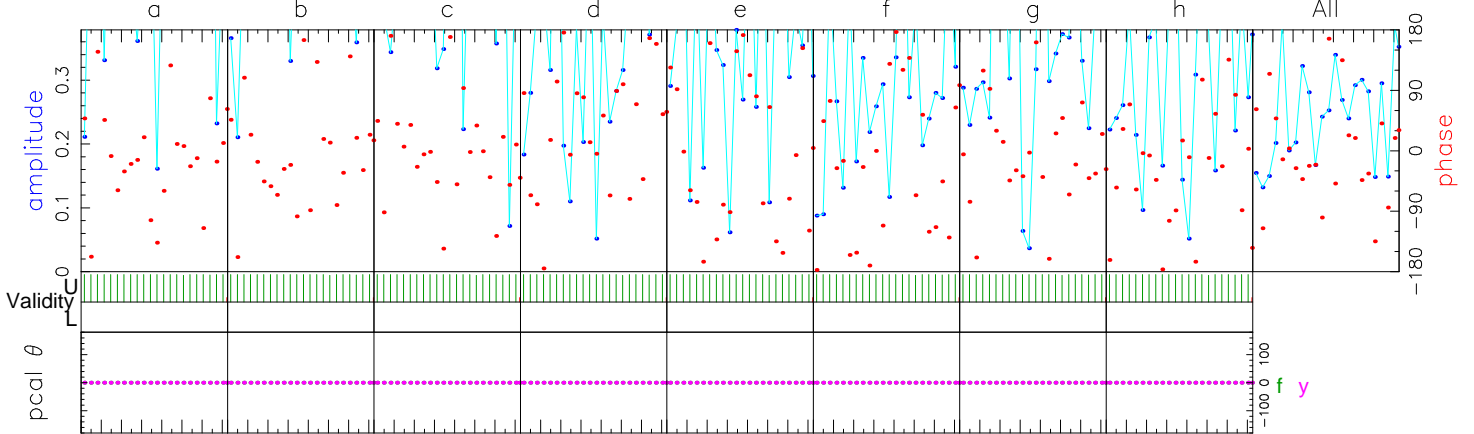


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133058
 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
	-13.1	-20.3	-8.1	62.5	-146.7	-161.4	-4.0	-25.7	Phase	-11.9
	0.2	0.3	0.3	0.1	0.1	0.0	0.2	0.1	Ampl.	0.2
	258.3	259.4	259.8	473.8	81.7	1.8	259.1	205.6	Sbd box	259.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.01162445202E+03		Apriori delay (usec)		8.01162410621E+03		Resid mbdelay (usec)		3.45810E-04	+/- 1.5E-04
Sband delay (usec)	8.01163215546E+03		Apriori clock (usec)		9.5585918E+00		Resid sbdelay (usec)		8.04925E-03	+/- 1.2E-03
Phase delay (usec)	8.01162410583E+03		Apriori clockrate (us/s)		5.9999999E-08		Resid phdelay (usec)		-3.84843E-07	+/- 5.2E-07
Delay rate (us/s)	-1.27777324563E+00		Apriori rate (us/s)		-1.27777342313E+00		Resid rate (us/s)		1.77508E-07	+/- 2.2E-09
Total phase (deg)	171.4		Apriori accel (us/s/s)		-5.13121983771E-05		Resid phase (deg)		-11.9	+/- 16.2

	RMS	Theor.	Amplitude	0.126 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	76.0	38.9	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	112.5	67.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	87.9	22.9	Inc. seg. avg.	0.200	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	80.3	40.0	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

f: az 318.0 el 56.5 pa 112.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 11550.709 -5644.727 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fy.W.82.1X1KZS

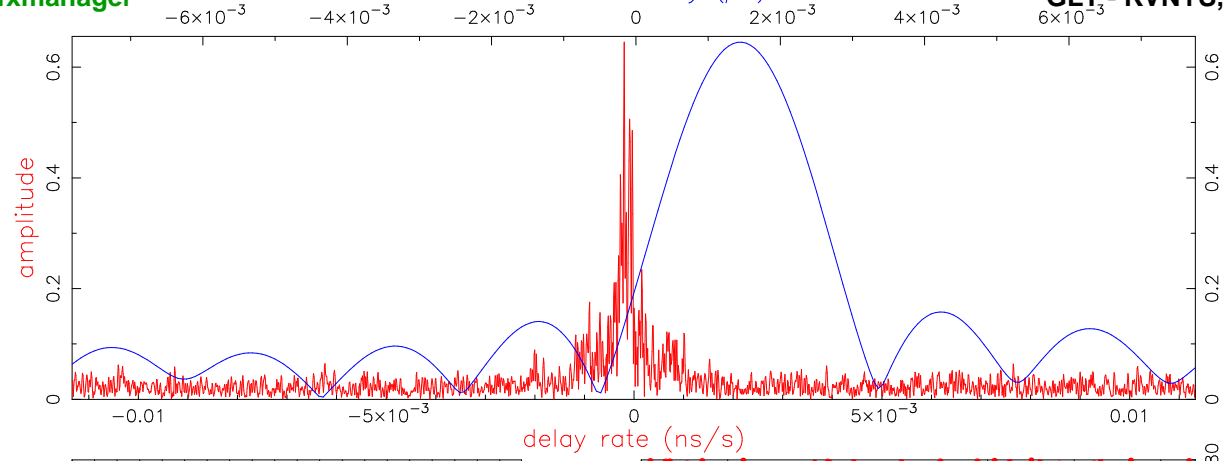
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, gy

GLT - KVNYS, fgroup W, pol RR

multiband delay (μ s)



Fringe quality 7

SNR 36.7

Int time 418.919

Amp 0.656

Phase 104.9

PFD 0.0e+00

Delays (us)

SBD -0.006283

MBD 0.001450

Fringe rate (Hz)

-0.017269

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211c

Exper # 16383

Yr:day 2021:116

Start 230000.00

Stop 230659.84

FRT 230330.00

Corr/FF/build

2021:303:205431

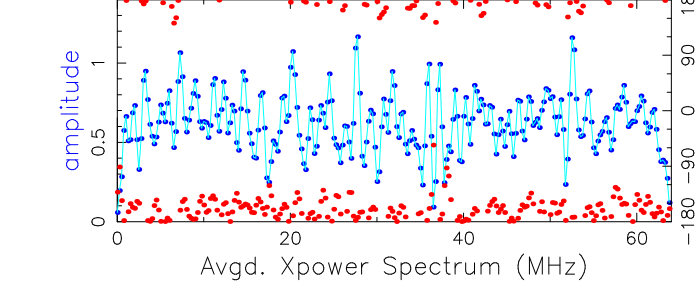
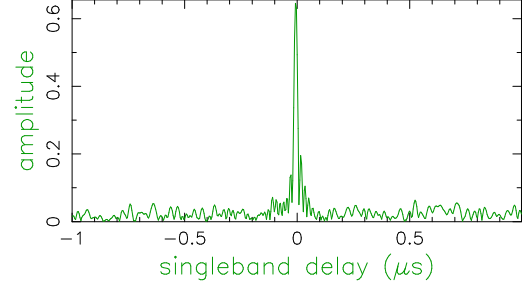
2021:304:133104

2021:252:122852

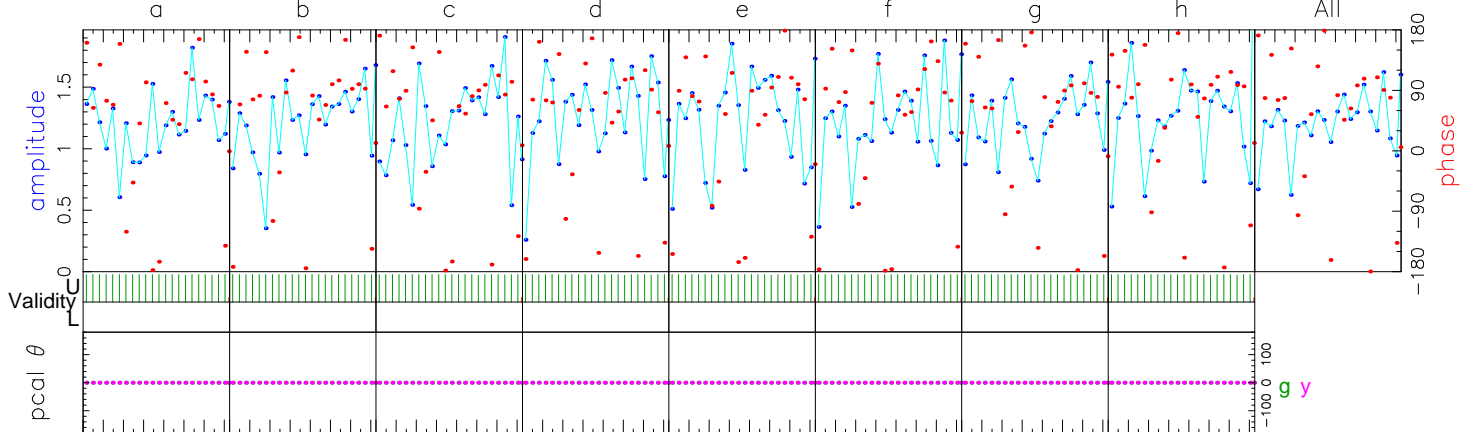
RA & Dec (J2000)

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
	105.1	107.8	108.4	100.3	100.2	107.9	99.6	109.0	Phase	104.9
	0.6	0.7	0.6	0.6	0.7	0.7	0.6	0.7	Ampl.	0.6
	255.2	255.5	255.1	255.4	255.4	255.5	255.4	255.5	Sbd box	255.4
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.38369914612E+03		Apriori delay (usec)		7.38369769632E+03		Resid mbdelay (usec)		1.44980E-03	+/- 3.0E-05
Sband delay (usec)	7.38369141357E+03		Apriori clock (usec)		-2.6369476E-01		Resid sbdelay (usec)		-6.28275E-03	+/- 2.3E-04
Phase delay (usec)	7.38369769970E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		3.38217E-06	+/- 1.0E-07
Delay rate (us/s)	-9.90780740647E-01		Apriori rate (us/s)		-9.90780540169E-01		Resid rate (us/s)		-2.00478E-07	+/- 4.2E-10
Total phase (deg)	306.9		Apriori accel (us/s/s)		-7.36150803554E-06		Resid phase (deg)		104.9	+/- 3.1

ph/seg (deg) 67.6 7.5 Search (2048X32) 0.639 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 89.4 13.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 4.4 4.4 Inc. seg. avg. 1.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 8.2 7.7 Inc. frq. avg. 0.645 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

g: az 268.5 el 53.4 pa 21.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9002.989 1229.460 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gy.W.112.1X1KZS

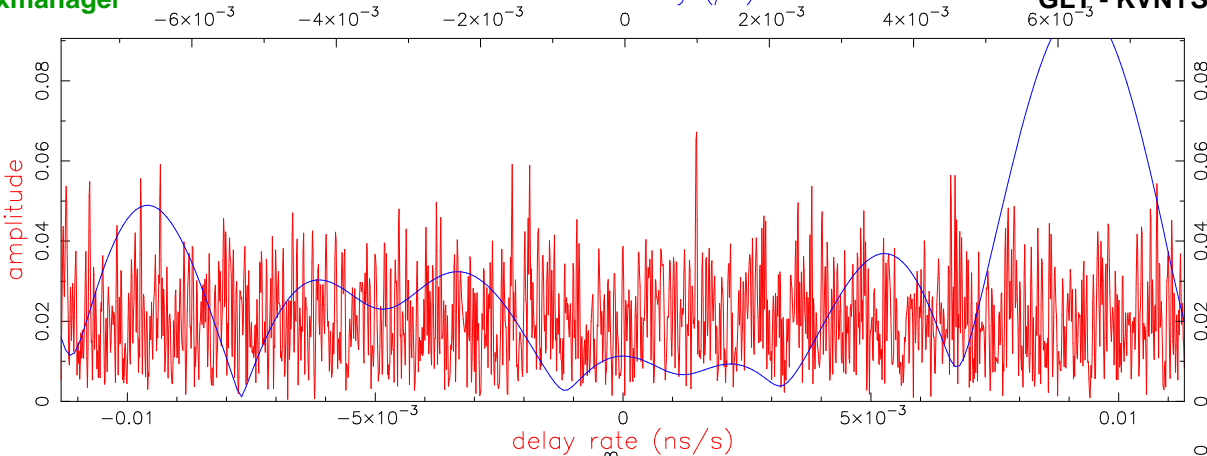
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, gy

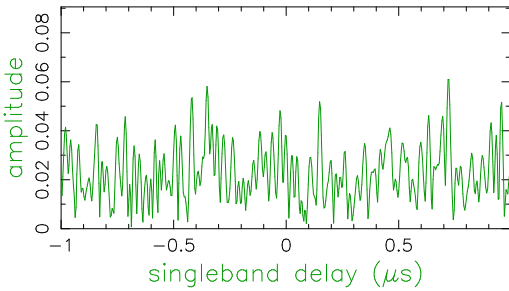
GLT - KVNYS, fgroup W, pol LR

multiband delay (μ s)

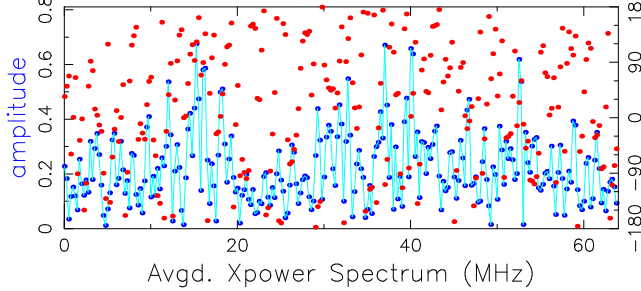


Fringe quality 0

SNR 3.3
Int time 418.920
Amp 0.091
Phase 85.7
PFD 1.0e+00
Delays (us)
SBD -0.351227
MBD -0.008301
Fringe rate (Hz)
-0.969149
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

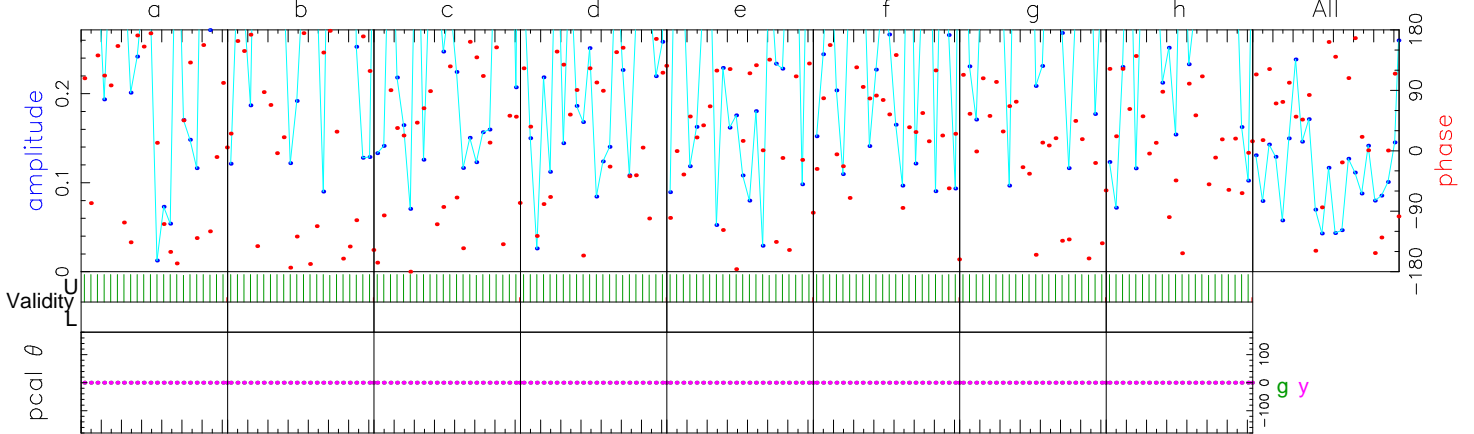


delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 2021:303:205431
Stop 2021:304:133107
FRT 2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

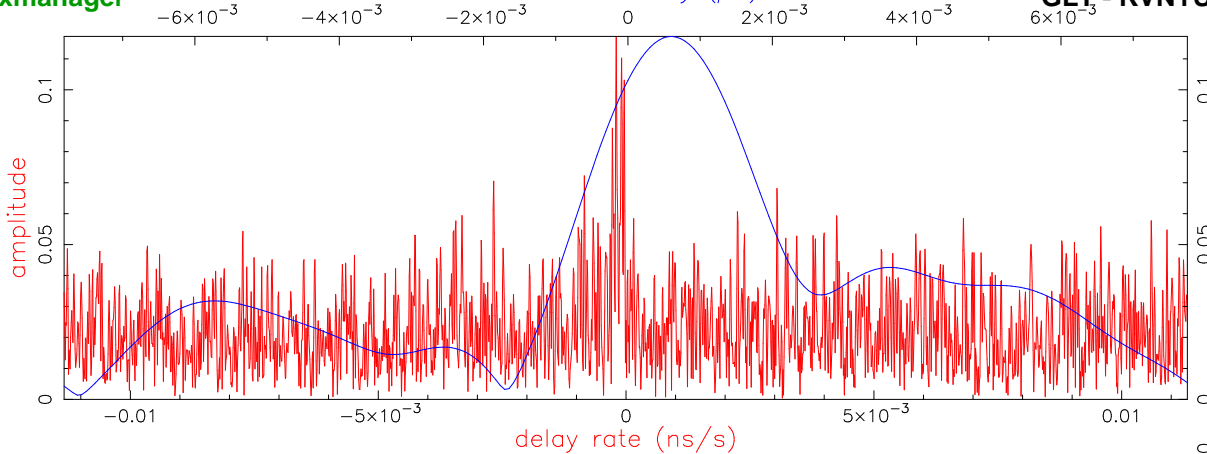
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	7.38334564554E+03		Apriori delay (usec)		7.38369769632E+03		Resid mbdelay (usec)		-8.30078E-03	+/- 3.3E-04
Sband delay (usec)	7.38334646882E+03		Apriori clock (usec)		-2.6369476E-01		Resid sbdelay (usec)		-3.51227E-01	+/- 2.6E-03
Phase delay (usec)	7.38369769909E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		2.76489E-06	+/- 1.1E-06
Delay rate (us/s)	-9.90791791029E-01		Apriori rate (us/s)		-9.90780540169E-01		Resid rate (us/s)		-1.12509E-05	+/- 4.7E-09
Total phase (deg)	287.7		Apriori accel (us/s/s)		-7.36150803554E-06		Resid phase (deg)		85.7	+/- 35.2

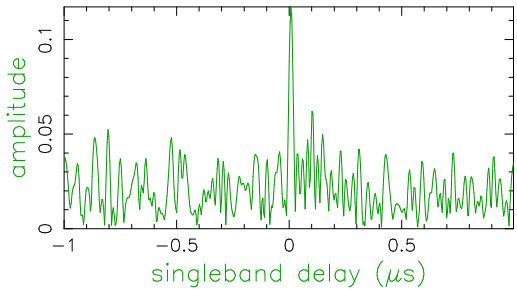
ph/seg (deg) 80.0 84.5 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 124.8 147.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.3 49.8 Inc. seg. avg. 0.084 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 98.2 87.0 Inc. frq. avg. 0.117 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 268.5 el 53.4 pa 21.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9002.989 1229.460 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gy.W.127.1X1KZS

multiband delay (μ s)

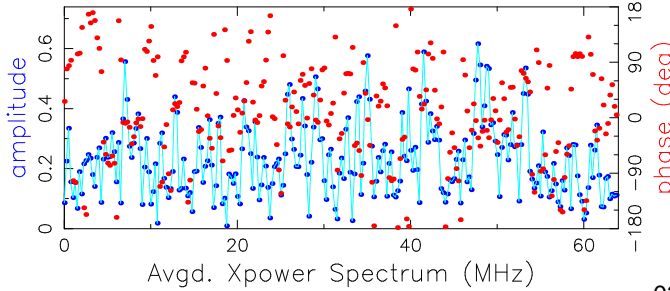


Fringe quality 0

SNR 6.6
 Int time 418.919
 Amp 0.117
 Phase 96.1
 PFD 1.5e-02
 Delays (us)
 SBD 0.007947
 MBD 0.000594
 Fringe rate (Hz)
 -0.016844
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

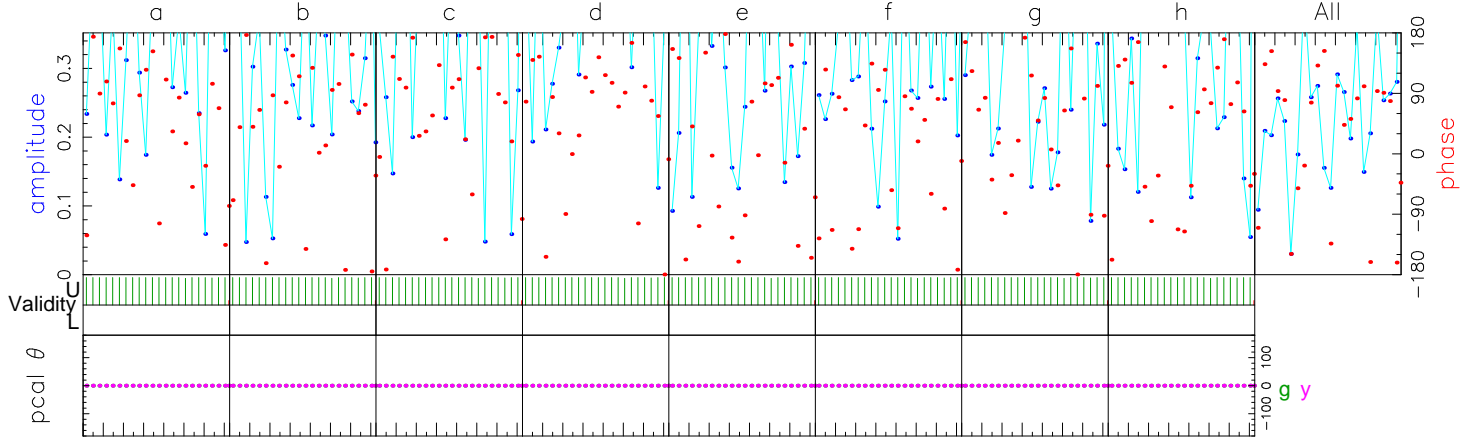


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133111
 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
	86.8	83.7	97.9	99.2	161.4	79.7	80.5	97.3	Phase	96.1
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	267.1	144.5	476.6	258.8	288.1	339.3	257.6	411.3	Sbd box	259.0
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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.38369829027E+03		Apriori delay (usec)		7.38369769632E+03		Resid mbdelay (usec)		5.93952E-04	+/- 1.7E-04
Sband delay (usec)	7.38370564332E+03		Apriori clock (usec)		-2.6369476E-01		Resid sbdelay (usec)		7.94700E-03	+/- 1.3E-03
Phase delay (usec)	7.38369769942E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		3.10029E-06	+/- 5.6E-07
Delay rate (us/s)	-9.90780735710E-01		Apriori rate (us/s)		-9.90780540169E-01		Resid rate (us/s)		-1.95541E-07	+/- 2.3E-09
Total phase (deg)	298.1		Apriori accel (us/s/s)		-7.36150803554E-06		Resid phase (deg)		96.1	+/- 17.5

	RMS	Theor.	Amplitude	0.117 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	76.0	41.9	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	127.9	73.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	29.0	24.7	Inc. seg. avg.	0.184	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	44.9	43.1	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

g: az 268.5 el 53.4 pa 21.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9002.989 1229.460 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gy.W.147.1X1KZS

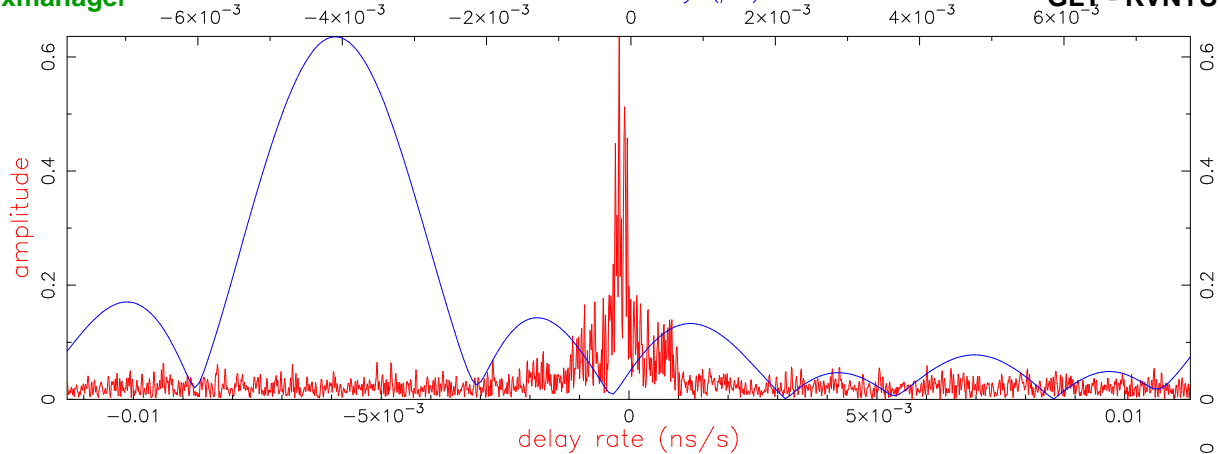
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, gy

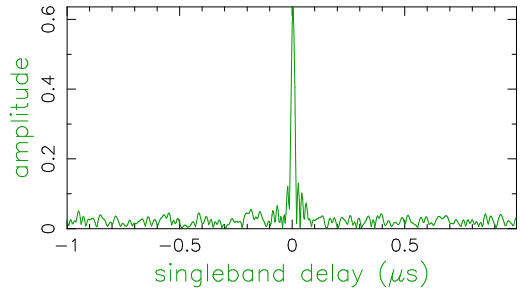
GLT - KVNYS, fgroup W, pol LL

multiband delay (μs)



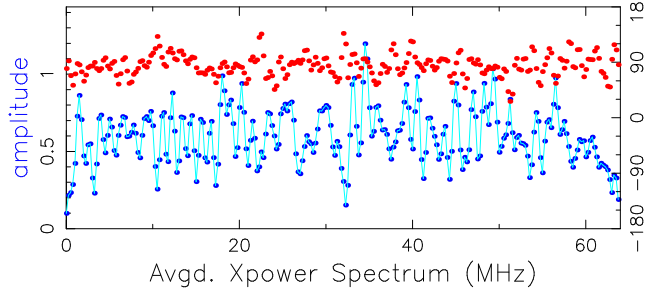
Fringe quality 7

SNR 35.6
 Int time 418.920
 Amp 0.636
 Phase 173.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003577
 MBD -0.004098
 Fringe rate (Hz)
 -0.017185
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



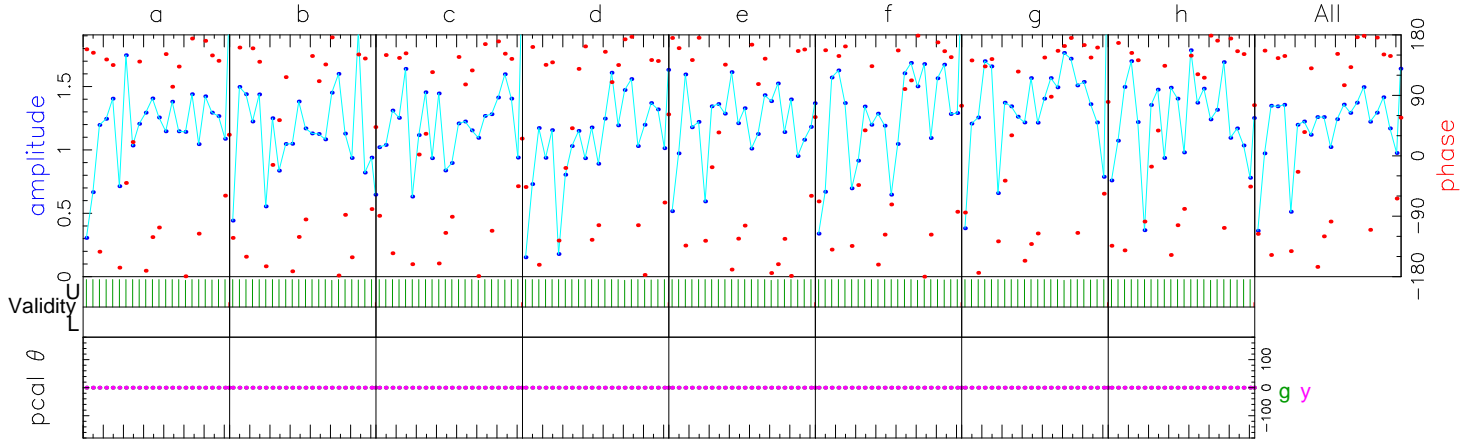
singleband delay (μs)

delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133059
 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

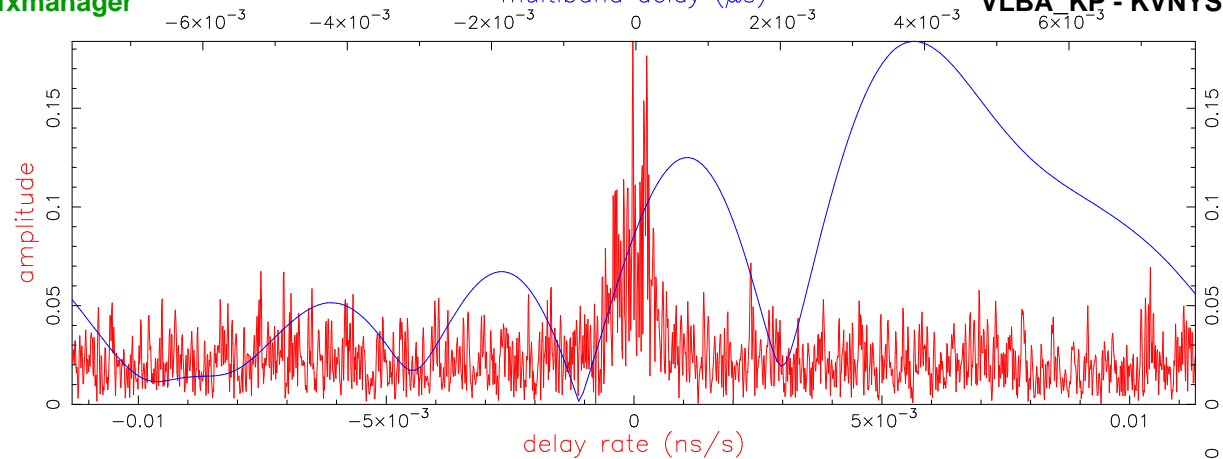


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	173.7	176.7	168.4	163.4	-175.1	172.2	167.4	176.9	Phase	173.0
	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	Ampl.	0.6
	258.2	258.0	257.6	257.9	258.0	257.7	257.9	257.9	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.38369359790E+03		Apriori delay (usec)		7.38369769632E+03		Resid mbdelay (usec)		-4.09842E-03	+/- 3.0E-05
Sband delay (usec)	7.38370127307E+03		Apriori clock (usec)		-2.6369476E-01		Resid sbdelay (usec)		3.57675E-03	+/- 2.4E-04
Phase delay (usec)	7.38369770190E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		5.57754E-06	+/- 1.0E-07
Delay rate (us/s)	-9.90780739664E-01		Apriori rate (us/s)		-9.90780540169E-01		Resid rate (us/s)		-1.99495E-07	+/- 4.3E-10
Total phase (deg)	15.0		Apriori accel (us/s/s)		-7.36150803554E-06		Resid phase (deg)		173.0	+/- 3.2

	RMS	Theor.	Amplitude	0.636 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	67.8	7.7	Search (2048X32)	0.625	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	95.0	13.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	7.3	4.6	Inc. seg. avg.	1.166	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	7.6	7.9	Inc. frq. avg.	0.637				

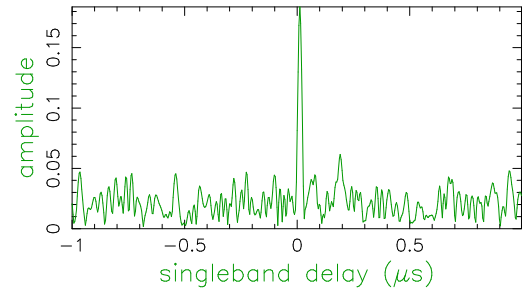
g: az 268.5 el 53.4 pa 21.7 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 9002.989 1229.460 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gy.W.91.1X1KZS

multiband delay (μ s)

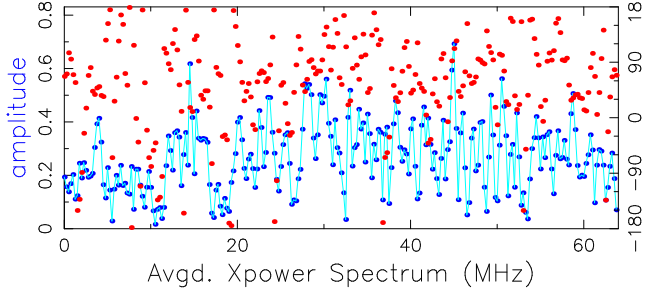


Fringe quality 9

SNR 10.3
Int time 418.918
Amp 0.184
Phase 165.5
PFD 3.4e-16
Delays (us)
SBD 0.011858
MBD 0.003864
Fringe rate (Hz)
-0.001482
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

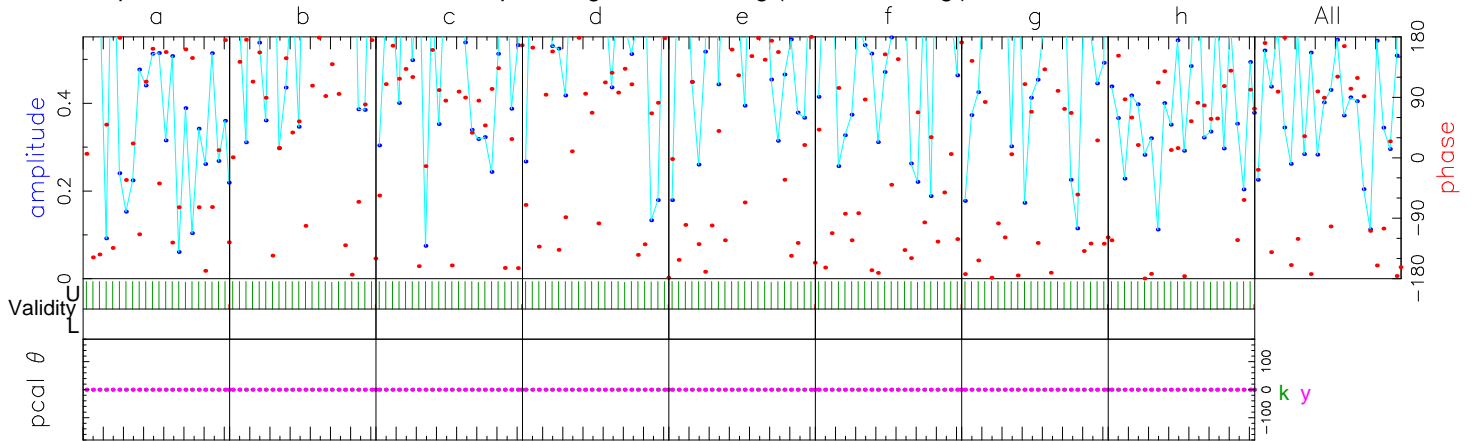


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133116
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

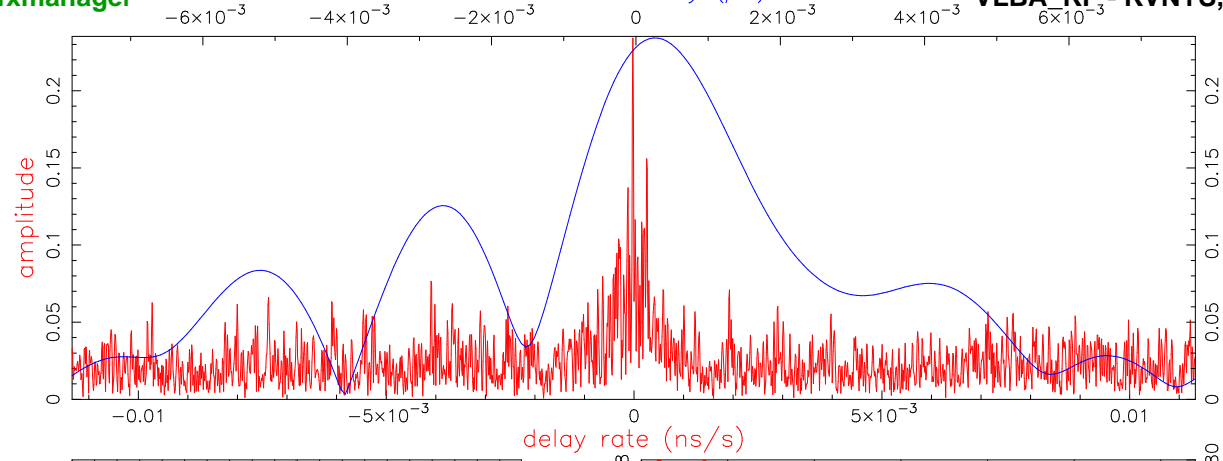


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-136.4	144.0	133.8	148.2	-161.4	-123.8	-179.7	89.2	Phase	165.5
	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	Ampl.	0.2
	257.9	259.5	260.3	260.9	260.0	260.4	259.8	258.2	Sbd box	260.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.02728816722E+03		Apriori delay (usec)		9.02726867793E+03		Resid mbdelay (usec)		3.86429E-03	+/- 1.1E-04
Sband delay (usec)	9.02728053568E+03		Apriori clock (usec)		-3.8300133E-01		Resid sbdelay (usec)		1.18577E-02	+/- 8.4E-04
Phase delay (usec)	9.02726868327E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.33605E-06	+/- 3.6E-07
Delay rate (us/s)	-1.17784100040E+00		Apriori rate (us/s)		-1.17784098320E+00		Resid rate (us/s)		-1.72017E-08	+/- 1.5E-09
Total phase (deg)	135.6		Apriori accel (us/s/s)		-5.50370708520E-05		Resid phase (deg)		165.5	+/- 11.1

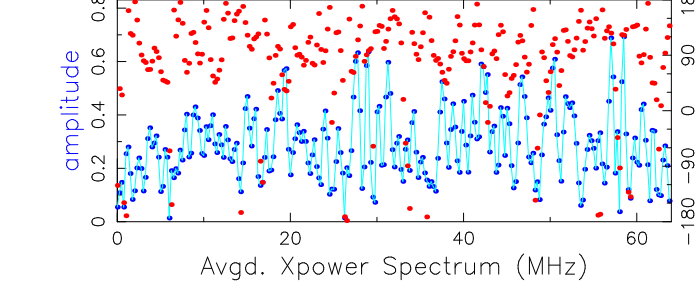
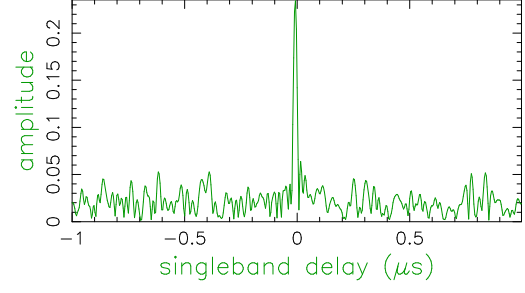
	RMS	Theor.	Amplitude	0.184 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	77.5	26.7	Search (2048X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	135.4	46.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	53.7	15.7	Inc. seg. avg.	0.356	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.2	27.5	Inc. frq. avg.	0.237	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 320.9 el 61.8 pa 121.8 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 10634.468 -5888.059 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ky..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ky.W.163.1X1KZS

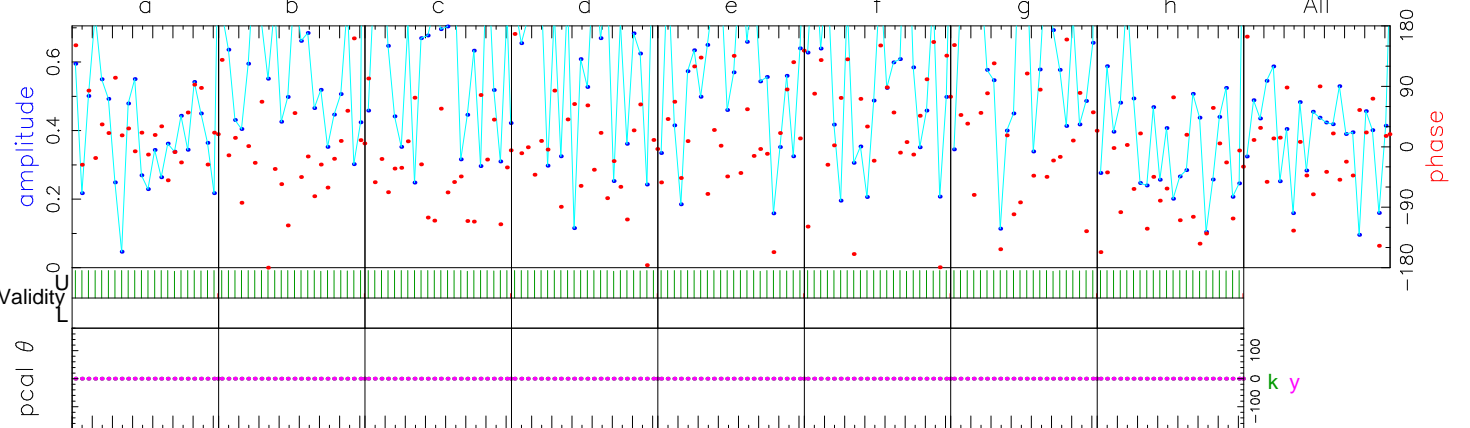
multiband delay (μ s)



Fringe quality 9
SNR 13.2
Int time 418.918
Amp 0.235
Phase 0.5
PFD 7.5e-31
Delays (us)
SBD -0.008688
MBD 0.000228
Fringe rate (Hz)
-0.001437
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Yr:day 16383
Start 2021:116
Stop 2021:116
FRT 230330.00
RA & Dec (J2000)
2021:303:205431
2021:304:133120
2021:252:122852
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		
k	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	9.02725328048E+03				9.02726867793E+03				2.27553E-04	+/- 8.2E-05
Sband delay (usec)	9.02725998993E+03				-3.8300133E-01				-8.68800E-03	+/- 6.5E-04
Phase delay (usec)	9.02726867795E+03				0.0000000E+00				1.64848E-08	+/- 2.8E-07
Delay rate (us/s)	-1.17784099988E+00				-1.17784098320E+00				-1.66780E-08	+/- 1.2E-09
Total phase (deg)			330.6						0.5	+/- 8.7
	RMS	Theor.	Amplitude	0.235 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	69.2	20.9	Search (2048X32)	0.217	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	86.2	36.4	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	41.1	12.3	Inc. seg. avg.	0.367	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	30.2	21.5	Inc. frq. avg.	0.272	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
					nlags: 256				t_cohere infinite	

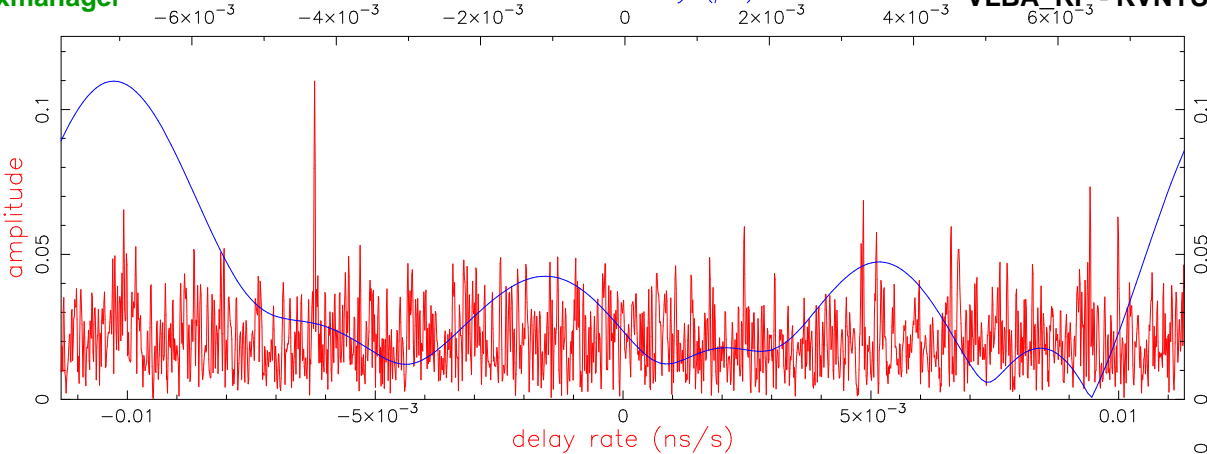
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, ky

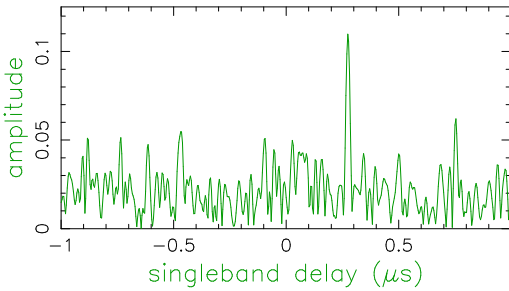
VLBA_KP - KVNYS, fgroup W, pol LR

multiband delay (μ s)

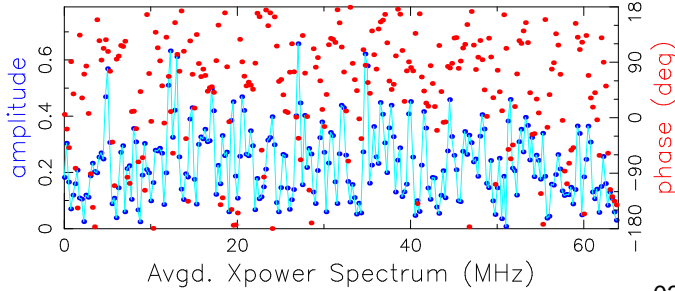


Fringe quality 0

SNR 6.2
 Int time 418.918
 Amp 0.125
 Phase 92.0
 PFD 1.7e-01
 Delays (us)
 SBD 0.274330
 MBD -0.007075
 Fringe rate (Hz)
 -0.537225
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

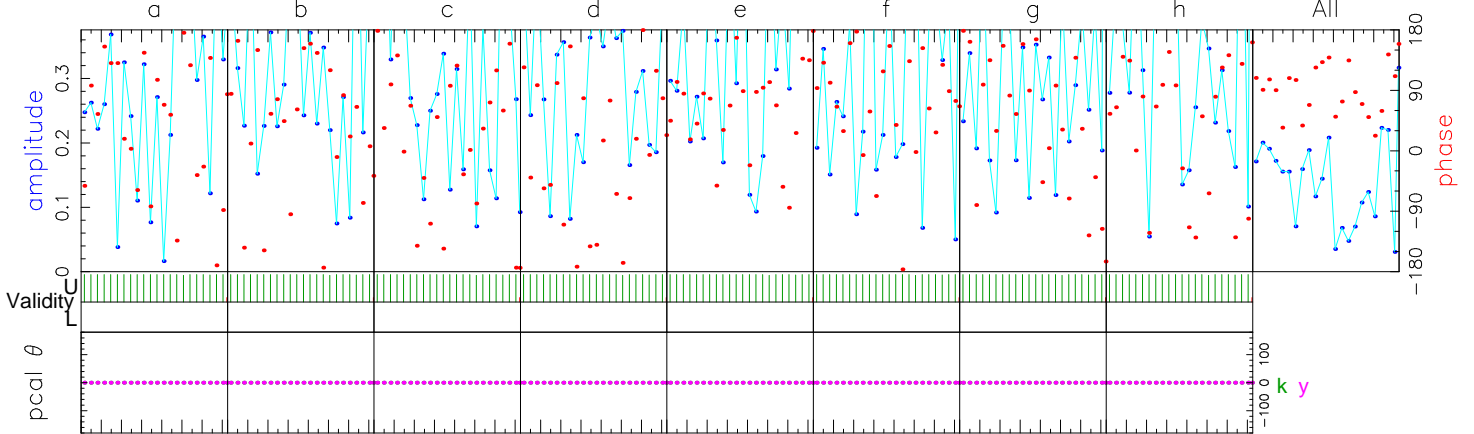


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133124
 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		
k	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		9.02754285255E+03				9.02726867793E+03			Resid mbdelay (usec)	-7.07539E-03 +/- 1.8E-04
Sband delay (usec)		9.02754300768E+03				-3.8300133E-01			Resid sbdelay (usec)	2.74330E-01 +/- 1.4E-03
Phase delay (usec)		9.02726868090E+03				0.0000000E+00			Resid phdelay (usec)	2.96771E-06 +/- 6.0E-07
Delay rate (us/s)		-1.17784721985E+00				-1.17784098320E+00			Resid rate (us/s)	-6.23665E-06 +/- 2.5E-09
Total phase (deg)			62.2			-5.50370708520E-05			Resid phase (deg)	92.0 +/- 18.6
RMS	35.8	44.5							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.7	77.7							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	27.5	26.3							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	52.5	45.9							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)									Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

k: az 320.9 el 61.8 pa 121.8 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 10634.468 -5888.059 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ky..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ky.W.204.1X1KZS

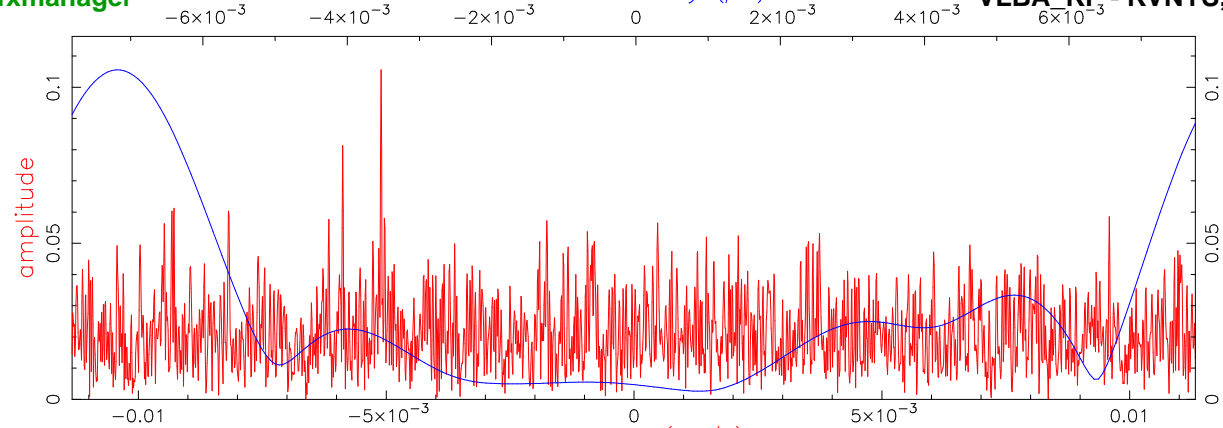
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, ky

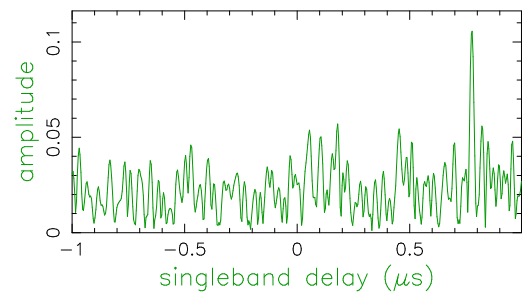
VLBA_KP - KVNYS, fgroup W, pol RL

multiband delay (μ s)

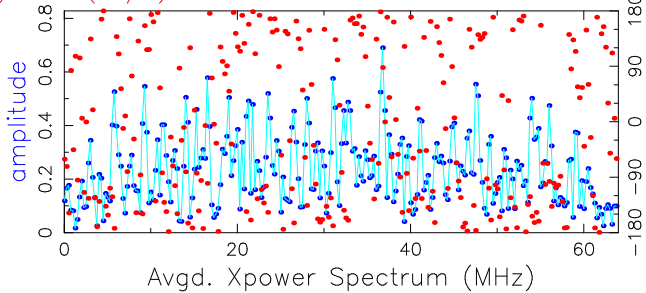


Fringe quality 0

SNR 6.0
 Int time 418.918
 Amp 0.116
 Phase -146.7
 PFD 4.4e-01
 Delays (us)
 SBD 0.775790
 MBD -0.007204
 Fringe rate (Hz)
 -0.440380
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

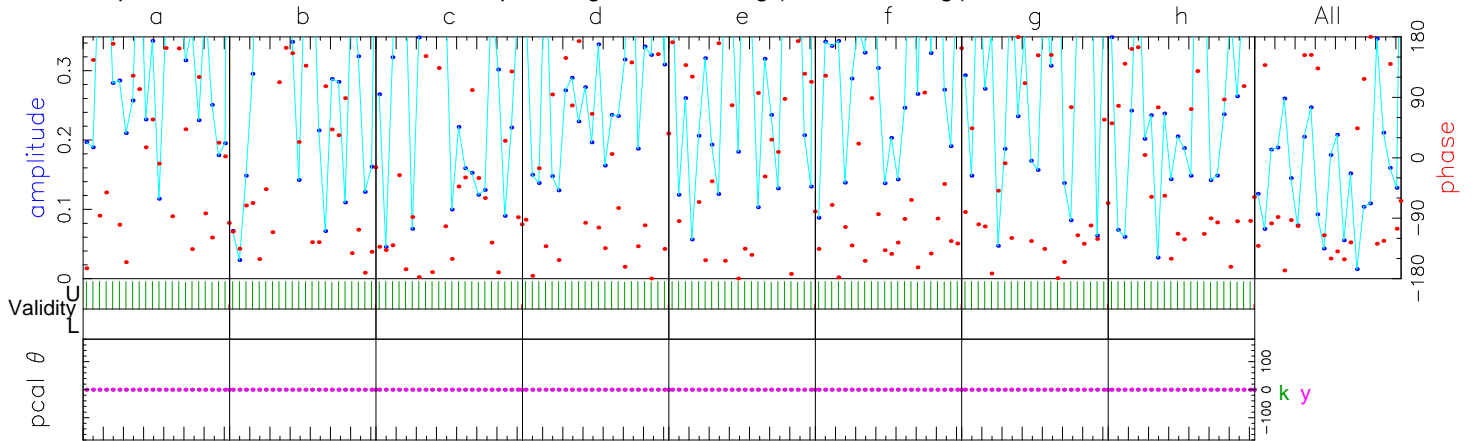


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133127
 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
	-135.5	-148.3	-140.4	-157.1	-177.9	-125.0	-135.8	-156.4	Phase	-146.7
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	307.1	384.7	440.7	204.7	38.8	237.0	200.3	283.8	Sbd box	455.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

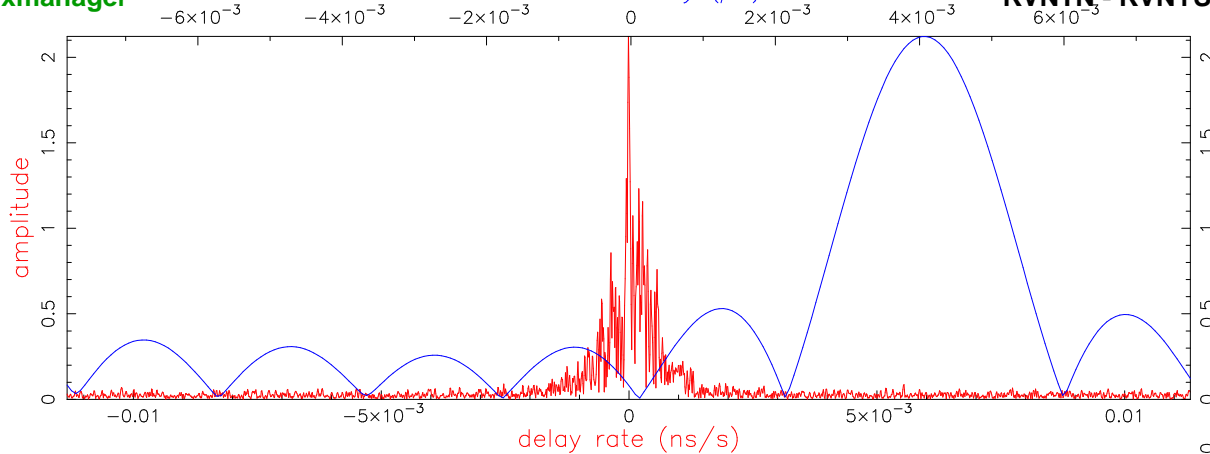
Group delay (usec)(sbd)	9.02804272355E+03	Apriori delay (usec)	9.02726867793E+03	Resid mbdelay (usec)	-7.20438E-03	+/-	1.8E-04
Sband delay (usec)	9.02804446818E+03	Apriori clock (usec)	-3.8300133E-01	Resid sbdelay (usec)	7.75790E-01	+/-	1.4E-03
Phase delay (usec)	9.02726867320E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.72906E-06	+/-	6.2E-07
Delay rate (us/s)	-1.17784609557E+00	Apriori rate (us/s)	-1.17784098320E+00	Resid rate (us/s)	-5.11237E-06	+/-	2.6E-09
Total phase (deg)	183.5	Apriori accel (us/s/s)	-5.50370708520E-05	Resid phase (deg)	-146.7	+/-	19.2

ph/seg (deg)	RMS 60.1	Theor. 46.0	Amplitude Search (2048X32)	0.116 +/- 0.019	0.102	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	90.7	80.2	Interp.	0.000	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	17.9	27.1	Inc. seg. avg.	0.126	0.102	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.7	47.3	Inc. frq. avg.	0.107	0.107	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 320.9 el 61.8 pa 121.8 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 10634.468 -5888.059 simultaneous interpolator

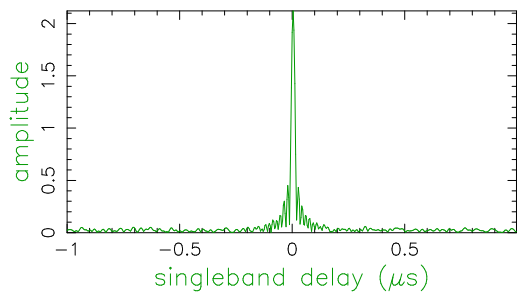
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ky..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ky.W.223.1X1KZS

multiband delay (μ s)

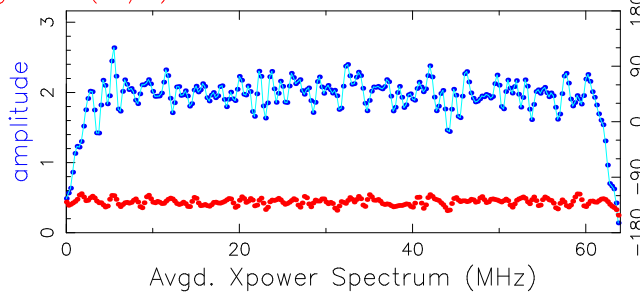


Fringe quality 5

SNR 118.8
Int time 418.937
Amp 2.122
Phase -130.3
PFD 0.0e+00
Delays (us)
SBD 0.004020
MBD 0.004064
Fringe rate (Hz)
-0.000892
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

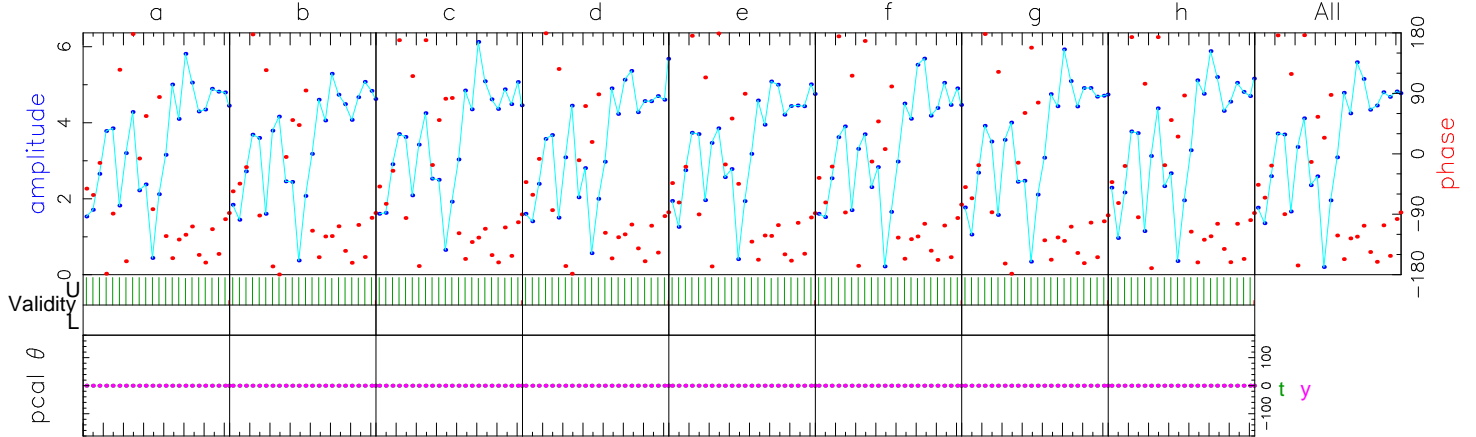


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133137
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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.11979657001E+03									
Sband delay (usec)	-1.11979661362E+03									
Phase delay (usec)	-1.11980063807E+03									
Delay rate (us/s)	4.17733830334E-02									
Total phase (deg)			-346.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
pcal θ										
t y										
Amplitude	2.122 +/- 0.018									
Search (2048X32)	2.096									
Interp.	0.000									
Inc. seg. avg.	3.428									
Inc. frq. avg.	2.122									
PC period (AP's) 5, 5										

ph/seg (deg) 79.1 2.3
amp/seg (%) 90.5 4.0
ph/frq (deg) 1.9 1.4
amp/frq (%) 2.6 2.4
t: az 43.1 el 23.2 pa -64.6 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) -378.391 -274.609
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ty..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ty.W.263.1X1KZS simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

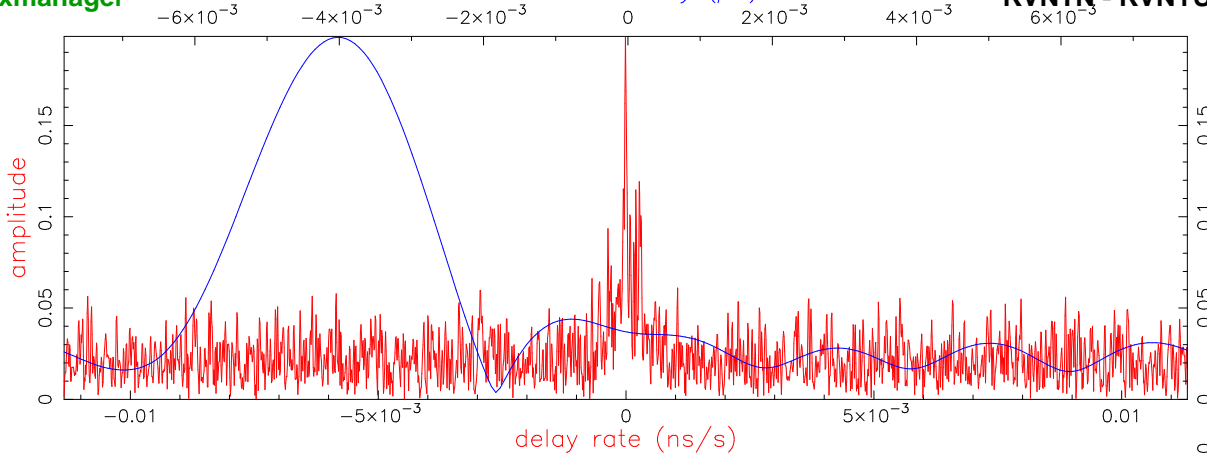
fxmanager

NRAO150.1X1KZS, No0113, ty

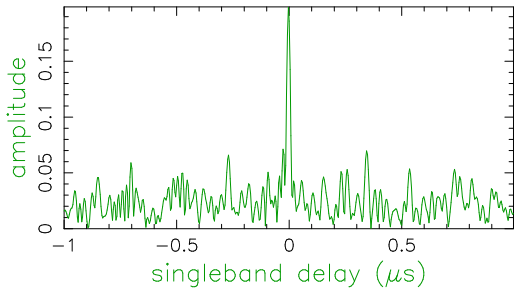
KVNTN - KVNYS, fgroup W, pol LR

multiband delay (μ s)

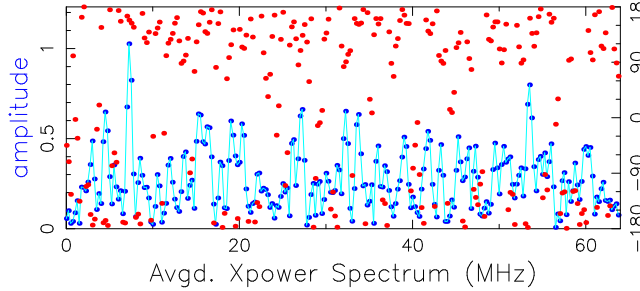
Fringe quality 9



SNR 11.1
 Int time 418.937
 Amp 0.199
 Phase 164.9
 PFD 4.4e-20
 Delays (us)
 SBD -0.003254
 MBD -0.004024
 Fringe rate (Hz)
 -0.000981
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

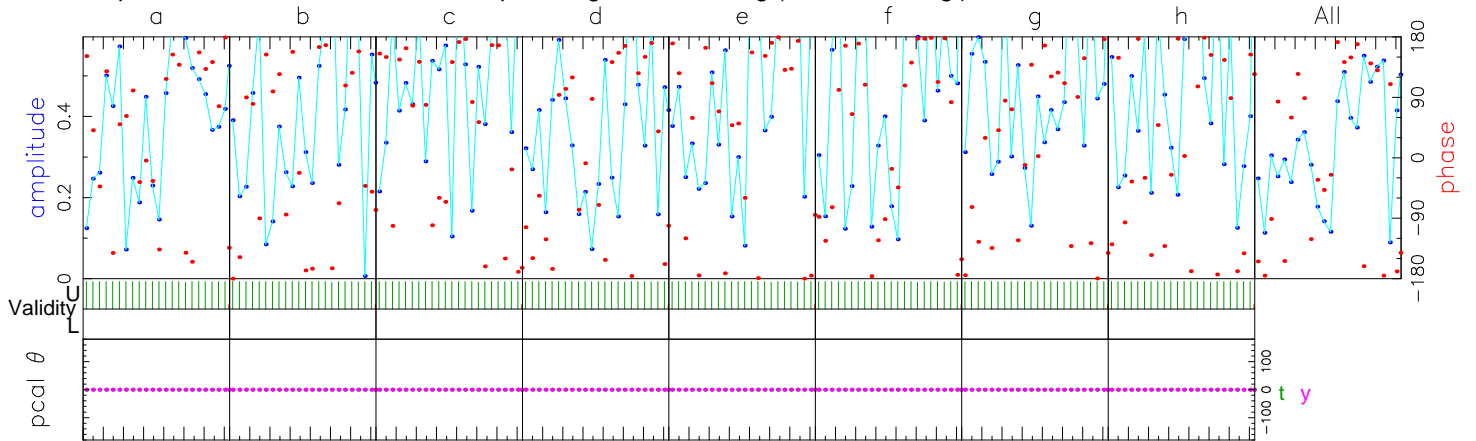


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133140
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

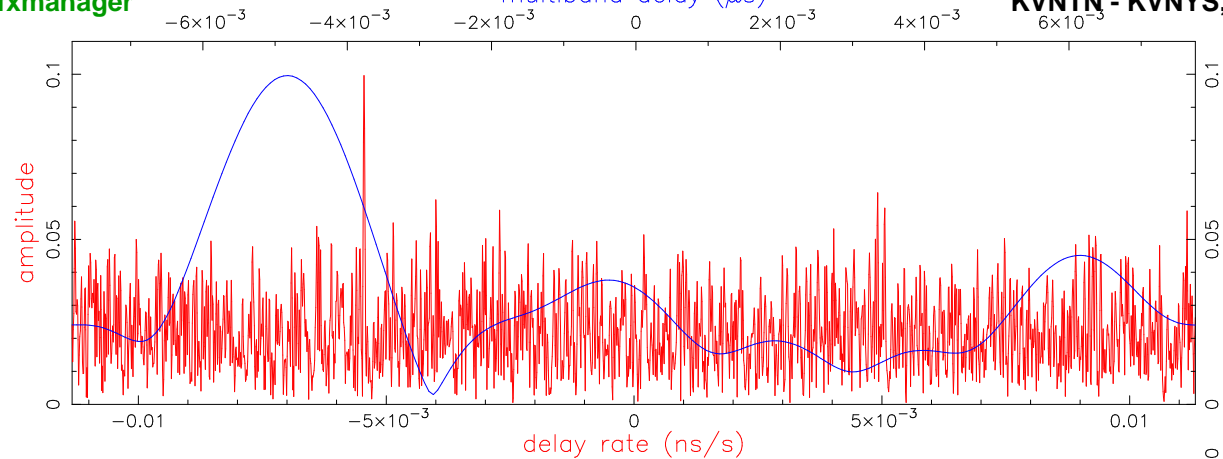
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.11980465754E+03				-1.11980063387E+03				Resid mbdelay (usec)	-4.02367E-03 +/- 9.8E-05
Sband delay (usec)	-1.11980388787E+03				-9.7149086E-01				Resid sbdelay (usec)	-3.25400E-03 +/- 7.7E-04
Phase delay (usec)	-1.11980062855E+03				-4.9999999E-08				Resid phdelay (usec)	5.31779E-06 +/- 3.3E-07
Delay rate (us/s)	4.17733820059E-02				4.17733933911E-02				Resid rate (us/s)	-1.13851E-08 +/- 1.4E-09
Total phase (deg)			-51.7		6.22068880481E-07				Resid phase (deg)	164.9 +/- 10.3
	RMS	Theor.	Amplitude	0.199 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	76.8	24.7	Search (2048X32)	0.197					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	96.7	43.1	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	13.1	14.6	Inc. seg. avg.	0.300					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	34.9	25.4	Inc. frq. avg.	0.196					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

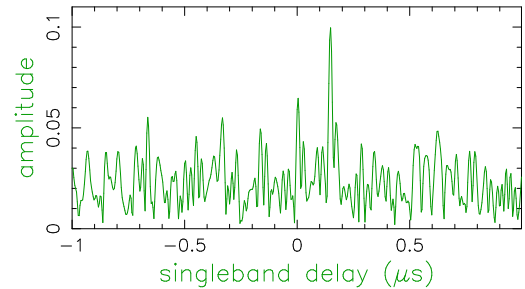
t: az 43.1 el 23.2 pa -64.6 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) -378.391 -274.609 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ty..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ty.W.280.1X1KZS

multiband delay (μs)

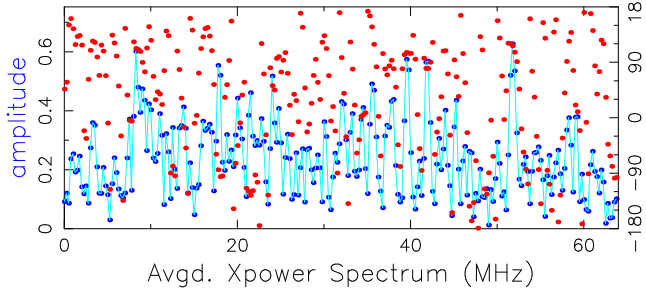


Fringe quality 0

SNR 5.6
Int time 418.937
Amp 0.110
Phase 47.9
PFD 1.0e+00
Delays (us)
SBD 0.147826
MBD -0.004848
Fringe rate (Hz)
-0.469579
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

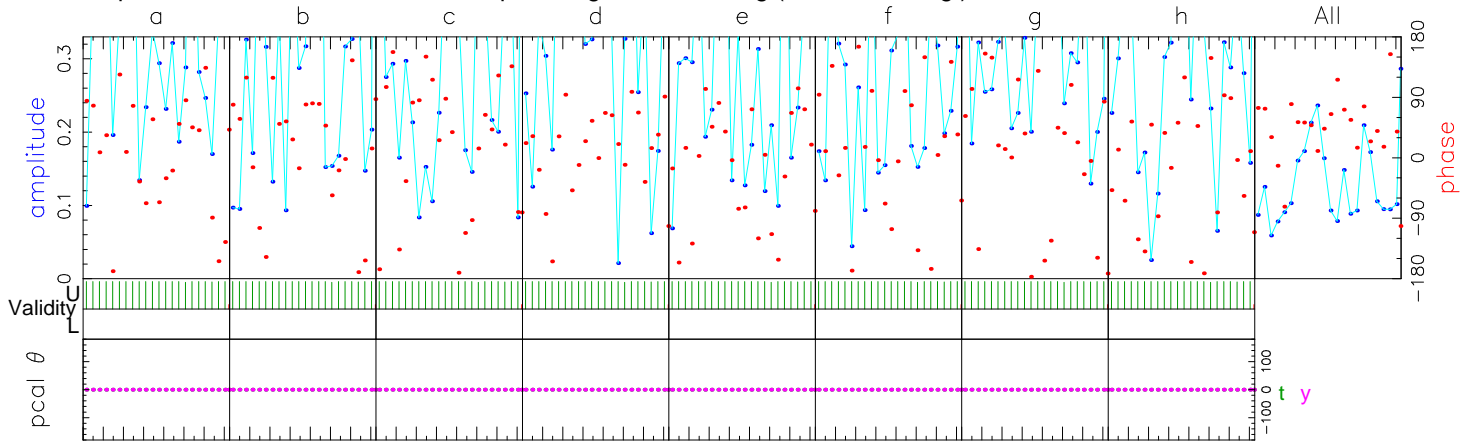


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133144
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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

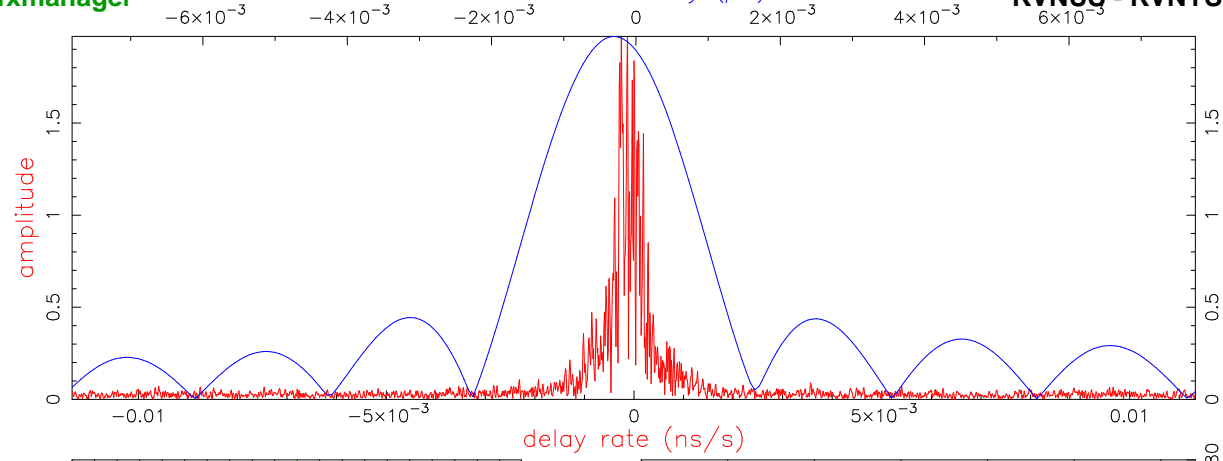
Group delay (usec)(sbd)	-1.11964923142E+03	Apriori delay (usec)	-1.11980063387E+03	Resid mbdelay (usec)	-4.84755E-03	+/-	1.9E-04
Sband delay (usec)	-1.11965280737E+03	Apriori clock (usec)	-9.7149086E-01	Resid sbdelay (usec)	1.47826E-01	+/-	1.5E-03
Phase delay (usec)	-1.11980063233E+03	Apriori clockrate (us/s)	-4.9999999E-08	Resid phdelay (usec)	1.54447E-06	+/-	6.6E-07
Delay rate (us/s)	4.17679420463E-02	Apriori rate (us/s)	4.17733933911E-02	Resid rate (us/s)	-5.45134E-06	+/-	2.7E-09
Total phase (deg)	-168.7	Apriori accel (us/s/s)	6.22068880481E-07	Resid phase (deg)	47.9	+/-	20.5

ph/seg (deg)	45.8	Theor.	49.2	Amplitude	0.110 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	57.9		85.8	Search (2048X32)	0.095	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	30.7		29.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	39.6		50.6	Inc. seg. avg.	0.102	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

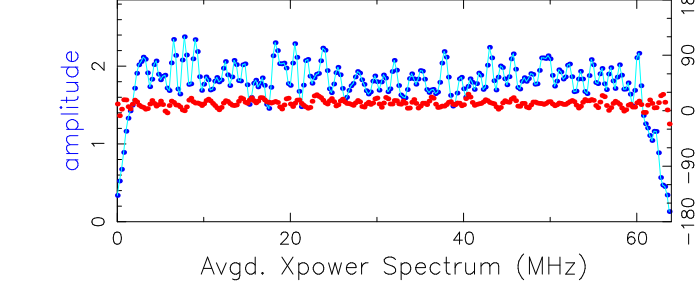
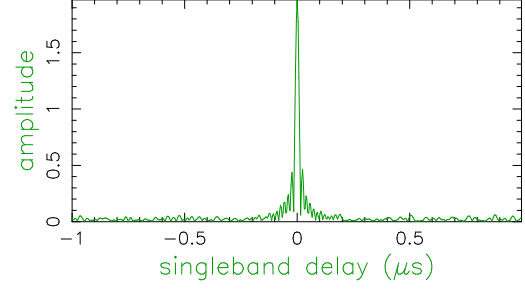
t: az 43.1 el 23.2 pa -64.6 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) -378.391 -274.609 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ty..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ty.W.297.1X1KZS

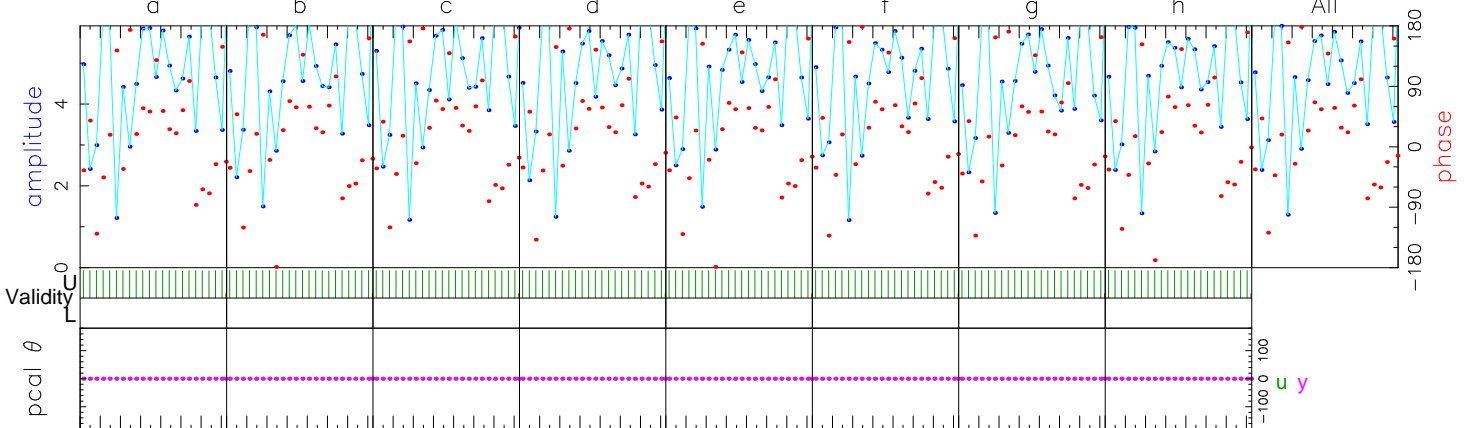
multiband delay (μ s)



Fringe quality 5
SNR 110.2
Int time 418.901
Amp 1.970
Phase 14.2
PFD 0.0e+00
Delays (us)
SBD -0.000114
MBD -0.000304
Fringe rate (Hz)
-0.022178
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133134
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

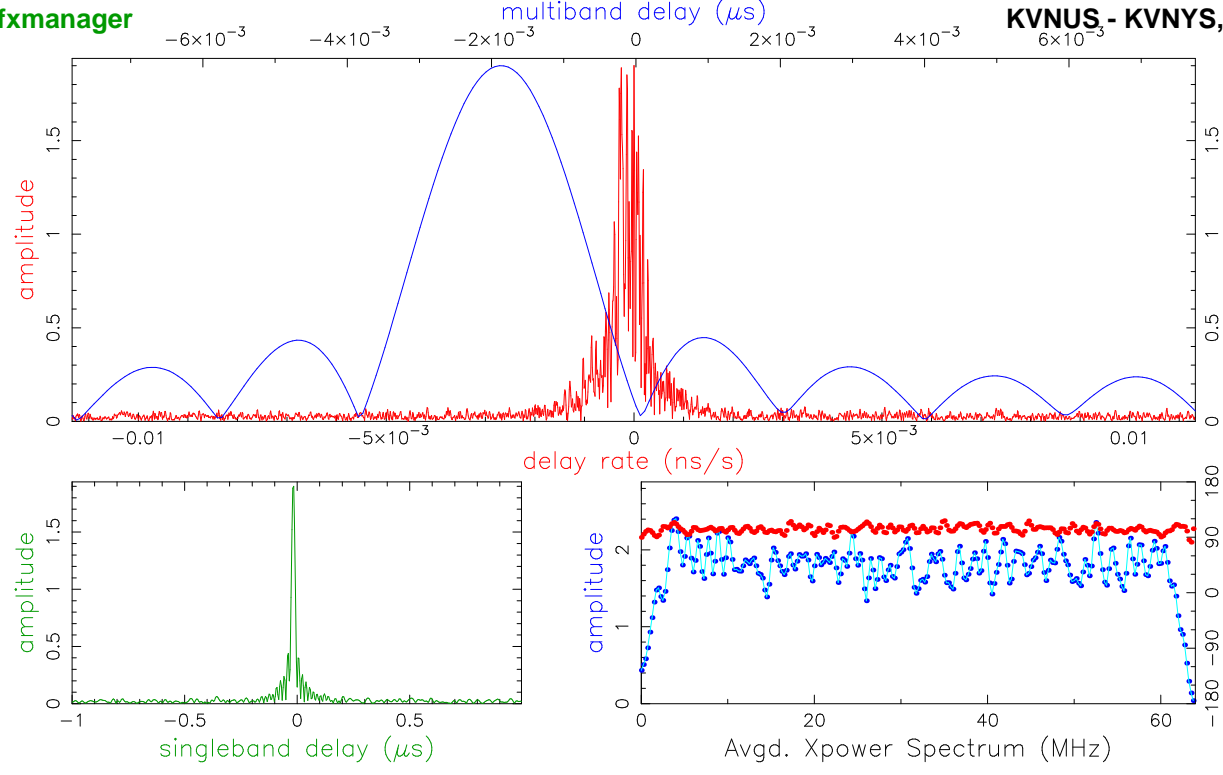


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



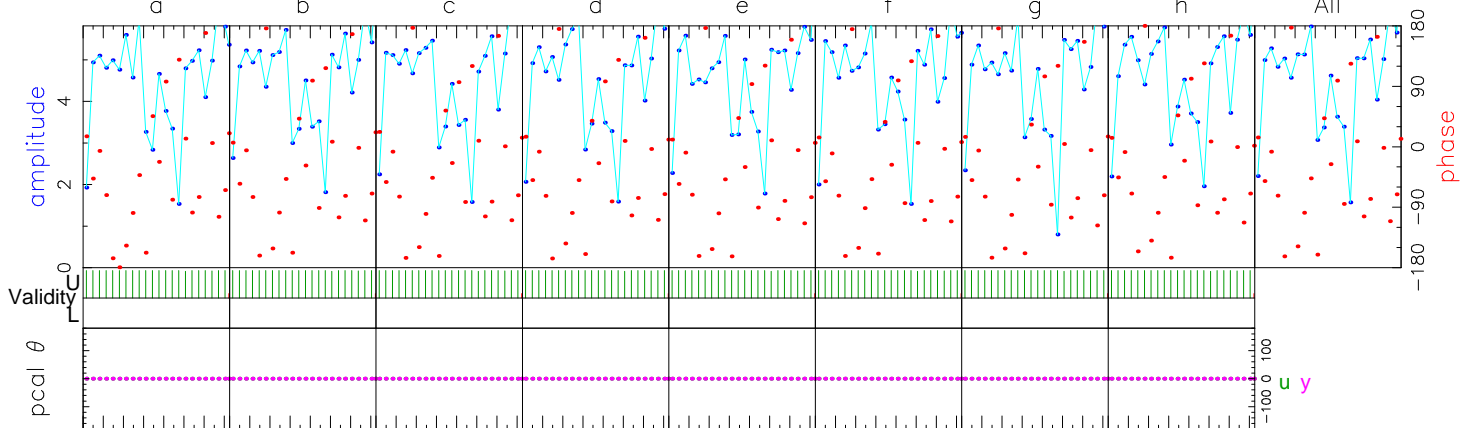
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
u	1000	1000	1000	1000	1000	1000	1000	1000				
y	1000	1000	1000	1000	1000	1000	1000	1000				
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
u	1000	1000	1000	1000	1000	1000	1000	1000				
y	1000	1000	1000	1000	1000	1000	1000	1000				
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	-2.47089223888E+01				-2.47086184487E+01							
Sband delay (usec)	-2.47087321987E+01				1.4054155E+01							
Phase delay (usec)	-2.47086179911E+01				1.1270000E-06							
Delay rate (us/s)	2.10420910031E-02				2.10423484667E-02							
Total phase (deg)			-127.4		-2.27582863306E-06							
				Apriori delay (usec)					Resid mbdelay (usec)	-3.03940E-04	+/- 9.8E-06	
				Apriori clock (usec)					Resid sbdelay (usec)	-1.13750E-04	+/- 7.8E-05	
				Apriori clockrate (us/s)					Resid phdelay (usec)	4.57644E-07	+/- 3.4E-08	
				Apriori rate (us/s)					Resid rate (us/s)	-2.57464E-07	+/- 1.4E-10	
				Apriori accel (us/s/s)					Resid phase (deg)	14.2	+/- 1.0	
ph/seg (deg)	81.9	2.5	Search (2048X32)	1.888	Pcal mode: MANUAL, MANUAL				PC period (AP's)	5, 5		
amp/seg (%)	149.2	4.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000	1.000	
ph/frq (deg)	2.7	1.5	Inc. seg. avg.	4.596	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	2.0	2.6	Inc. frq. avg.	1.971	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011	0.011	
u: az 44.6 el 26.4 pa -65.9			y: az 44.6 el 26.5 pa -62.9		Data rate(Mb/s): 2048				ion window (TEC)	0.00	0.00	
Control file: cf_1234_gmva			Input file: /Exps/c211c/v1/1234/No0113/uy..1X1KZS		nlags: 256							
			Output file: /Exps/c211c/v1/1234/No0113/uy.W.249.1X1KZS									

simultaneous interpolator



Fringe quality 5
SNR 108.6
Int time 418.901
Amp 1.939
Phase -75.3
PFD 0.0e+00
Delays (us)
SBD -0.017399
MBD -0.001873
Fringe rate (Hz) 0.000070
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133137
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
-73.5	-75.7	-77.0	-74.7	-75.5	-77.3	-76.0	-72.5	Phase	-75.3
1.8	1.9	1.9	2.0	1.8	1.9	1.9	2.0	Ampl.	1.9
252.7	252.5	252.5	252.6	252.4	252.6	252.5	252.6	Sbd box	252.5
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y 1000	1000	1000	1000	1000	1000	1000	1000		
u W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.47261166987E+01		Apriori delay (usec)	-2.47086184487E+01		Resid mbdelay (usec)	-1.87325E-03	+/-	1.0E-05
Sband delay (usec)	-2.47260179487E+01		Apriori clock (usec)	1.4054155E+01		Resid sbdelay (usec)	-1.73995E-02	+/-	7.9E-05
Phase delay (usec)	-2.47086208761E+01		Apriori clockrate (us/s)	1.1270000E-06		Resid phdelay (usec)	-2.42734E-06	+/-	3.4E-08
Delay rate (us/s)	2.10423492759E-02		Apriori rate (us/s)	2.10423484667E-02		Resid rate (us/s)	8.09173E-10	+/-	1.4E-10
Total phase (deg)		-216.8	Apriori accel (us/s/s)	-2.27582863306E-06		Resid phase (deg)	-75.3	+/-	1.1

ph/seg (deg) 82.0 2.5 Search (2048X32) 1.892 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 145.8 4.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 1.8 1.5 Inc. seg. avg. 4.515 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 3.0 2.6 Inc. frq. avg. 1.901 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
u: az 44.6 el 26.4 pa -65.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) -194.880 -376.853 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/uy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/uy.W.266.1X1KZS

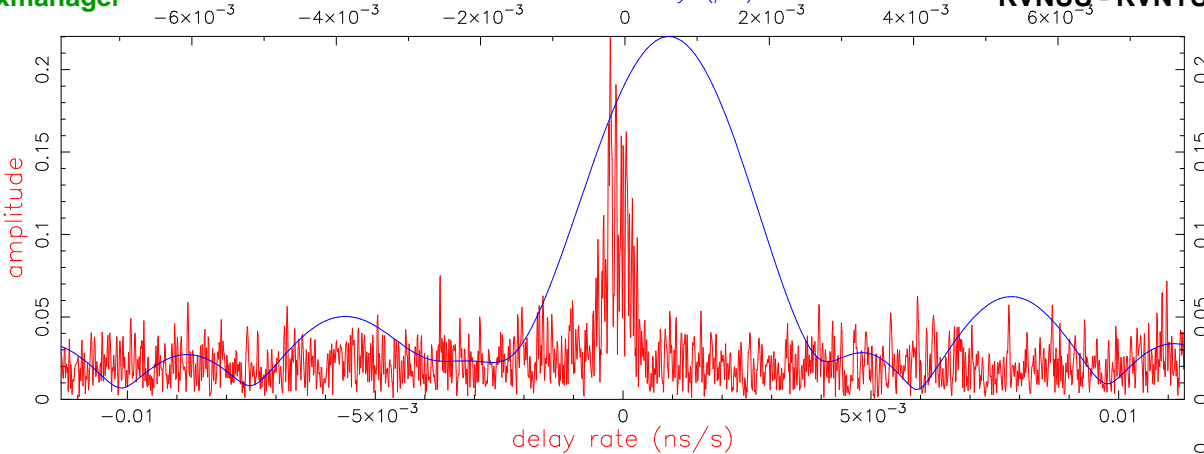
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, uy

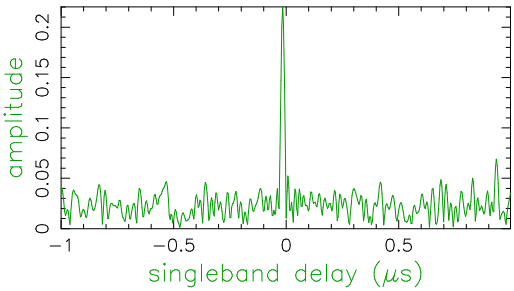
KVNU_S - KVNY_S, fgroup W, pol LR

multiband delay (μ s)

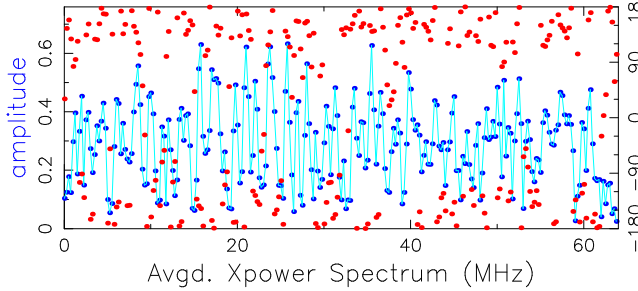


Fringe quality 9

SNR 12.3
Int time 418.901
Amp 0.220
Phase -15.9
PFD 3.6e-26
Delays (us)
SBD -0.015536
MBD 0.000607
Fringe rate (Hz)
-0.022046
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

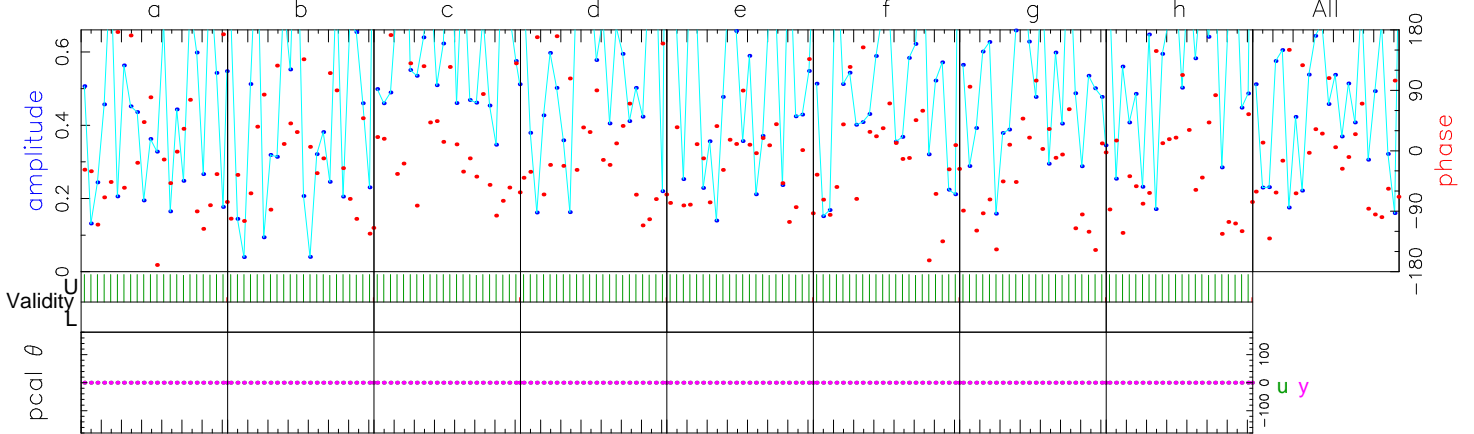


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133141
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
	-45.3	-2.3	-0.0	-18.9	-13.9	8.8	-23.6	-33.1	Phase	-15.9
	0.2	0.2	0.2	0.3	0.3	0.2	0.2	0.2	Ampl.	0.2
	253.1	252.8	252.8	253.4	253.2	252.6	253.0	253.1	Sbd box	253.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.47236360138E+01	Apriori delay (usec)	-2.47086184487E+01	Resid mbdelay (usec)	6.07435E-04	+/-	8.8E-05
Sband delay (usec)	-2.47241546987E+01	Apriori clock (usec)	1.4054155E+01	Resid sbdelay (usec)	-1.55362E-02	+/-	7.0E-04
Phase delay (usec)	-2.47086189609E+01	Apriori clockrate (us/s)	1.1270000E-06	Resid phdelay (usec)	-5.12167E-07	+/-	3.0E-07
Delay rate (us/s)	2.10420925307E-02	Apriori rate (us/s)	2.10423484667E-02	Resid rate (us/s)	-2.55936E-07	+/-	1.2E-09
Total phase (deg)	-157.4	Apriori accel (us/s/s)	-2.27582863306E-06	Resid phase (deg)	-15.9	+/-	9.3

ph/seg (deg)	77.3	Theor.	22.3	Amplitude	0.220 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	130.5	Search (2048X32)	0.216	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	19.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	18.4	Inc. seg. avg.	0.417	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.223	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

u: az 44.6 el 26.4 pa -65.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) -194.880 -376.853 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/uy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/uy.W.283.1X1KZS

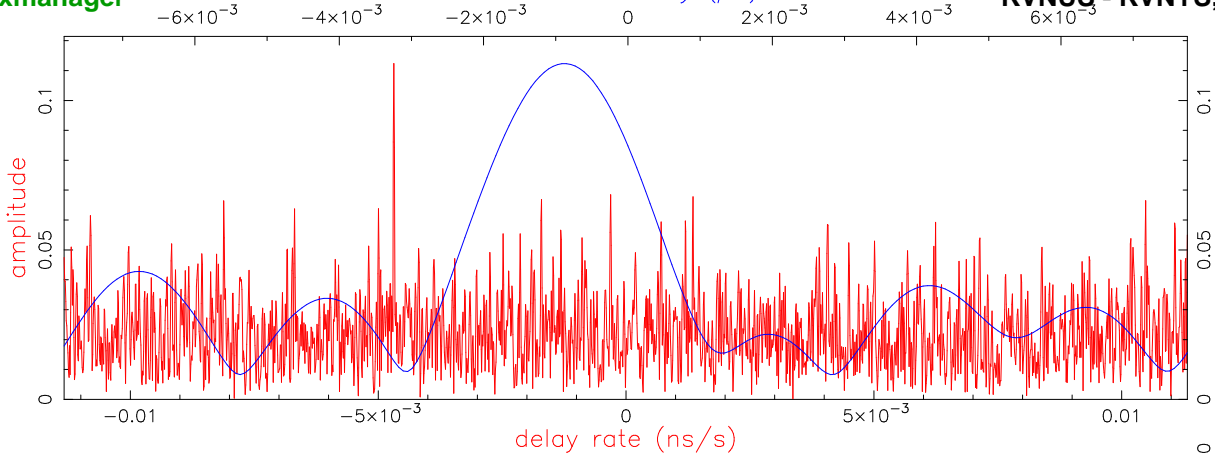
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, uy

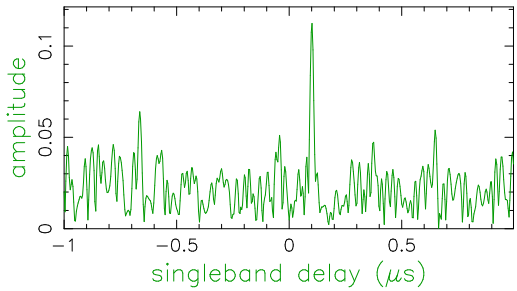
KVNU5 - KVNY5, fgroup W, pol RL

multiband delay (μ s)

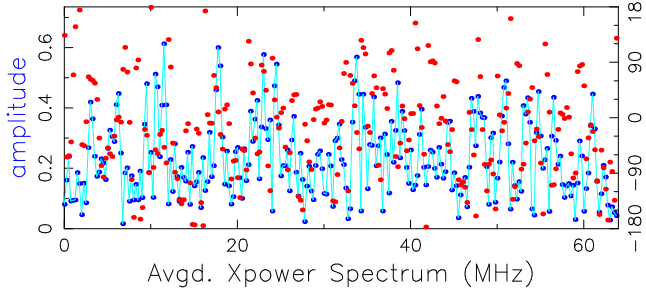


Fringe quality 0

SNR 6.3
 Int time 418.901
 Amp 0.121
 Phase 71.0
 PFD 6.5e-02
 Delays (us)
 SBD 0.100524
 MBD -0.000877
 Fringe rate (Hz)
 -0.403859
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

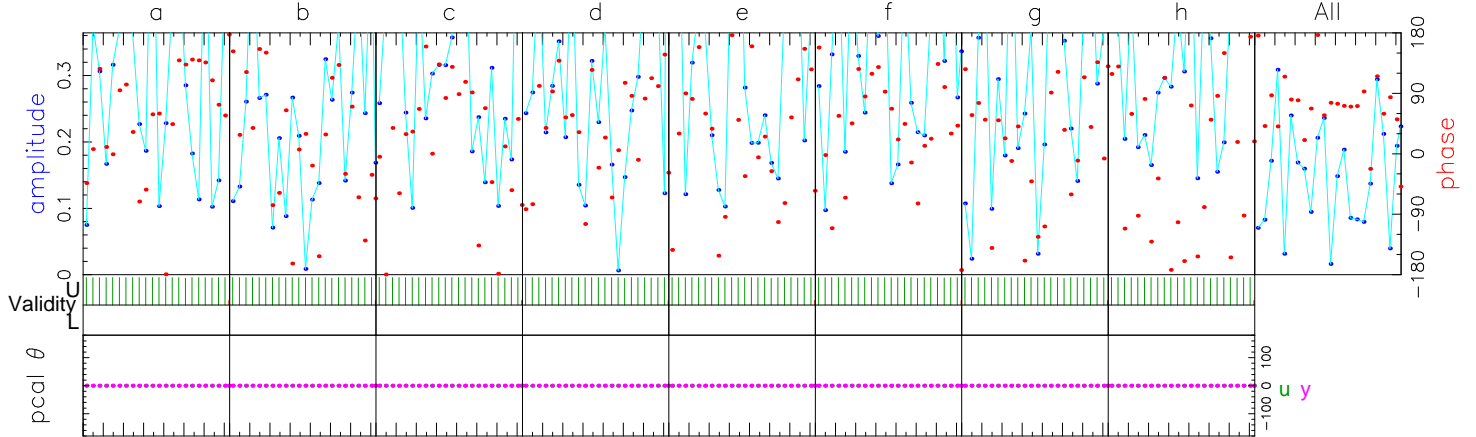


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133144
 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
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.46157449653E+01				-2.47086184487E+01					
Sband delay (usec)	-2.46080944487E+01				1.4054155E+01					
Phase delay (usec)	-2.47086161602E+01				1.1270000E-06					
Delay rate (us/s)	2.10376600692E-02				2.10423484667E-02					
Total phase (deg)			-70.6		-2.27582863306E-06					
ph/seg (deg)	44.2	43.4								
amp/seg (%)	78.1	75.8								
ph/frq (deg)	38.9	25.6								
amp/frq (%)	45.7	44.7								
u: az 44.6 el 26.4 pa -65.9										
y: az 44.6 el 26.5 pa -62.9										
u,v (fr/asec)										

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/uy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/uy.W.300.1X1KZS

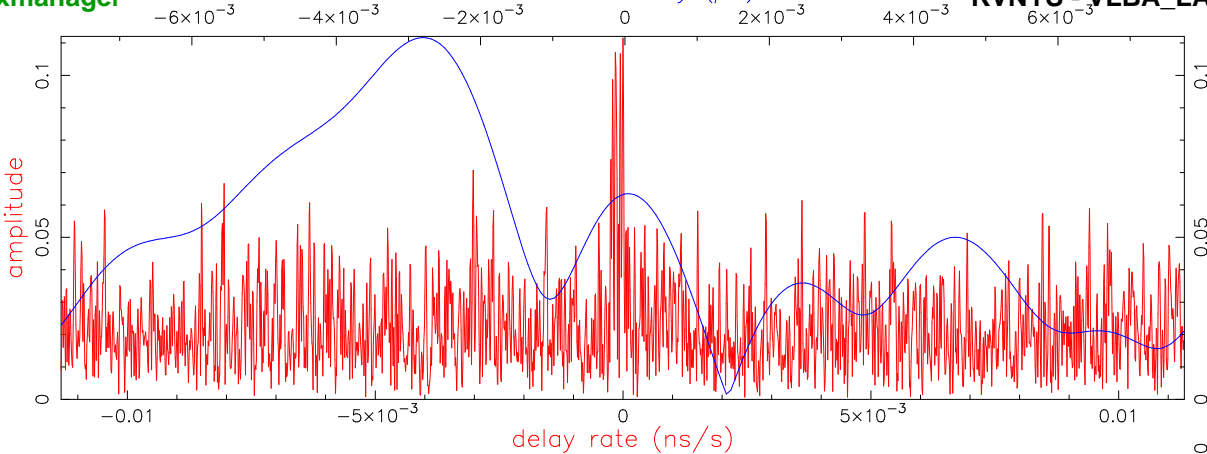
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yl

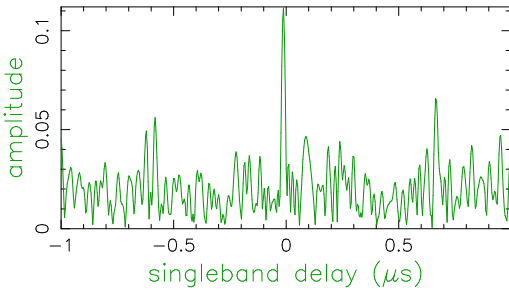
KVNYS - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

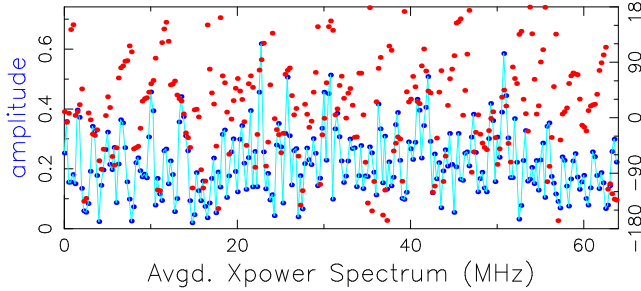


Fringe quality 0

SNR 6.3
 Int time 418.918
 Amp 0.112
 Phase -85.0
 PFD 9.2e-02
 Delays (us)
 SBD -0.012586
 MBD -0.002862
 Fringe rate (Hz)
 0.000043
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

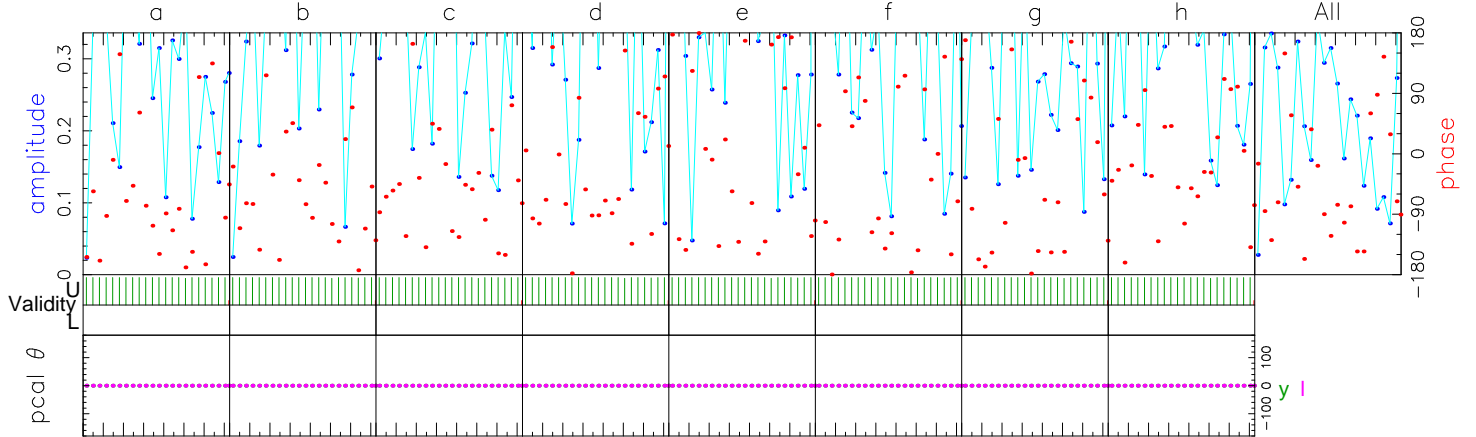


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133134
 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
	-103.6	-74.9	-59.3	-70.2	-133.4	159.5	-147.2	-17.1		-85.0
	0.1	0.2	0.2	0.2	0.2	0.0	0.1	0.1		0.1
	97.6	254.1	253.9	253.5	253.5	262.8	115.0	256.2		253.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.96696667455E+03		Apriori delay (usec)		-8.96694818727E+03		Resid mbdelay (usec)		-2.86228E-03	+/- 1.7E-04
Sband delay (usec)	-8.96696077327E+03		Apriori clock (usec)		3.3366051E+00		Resid sbdelay (usec)		-1.25860E-02	+/- 1.4E-03
Phase delay (usec)	-8.96694819001E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		-2.74228E-06	+/- 5.9E-07
Delay rate (us/s)	1.22330854004E+00		Apriori rate (us/s)		1.22330853954E+00		Resid rate (us/s)		4.93865E-10	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		4.98811245116E-05		Resid phase (deg)		-85.0	+/- 18.3

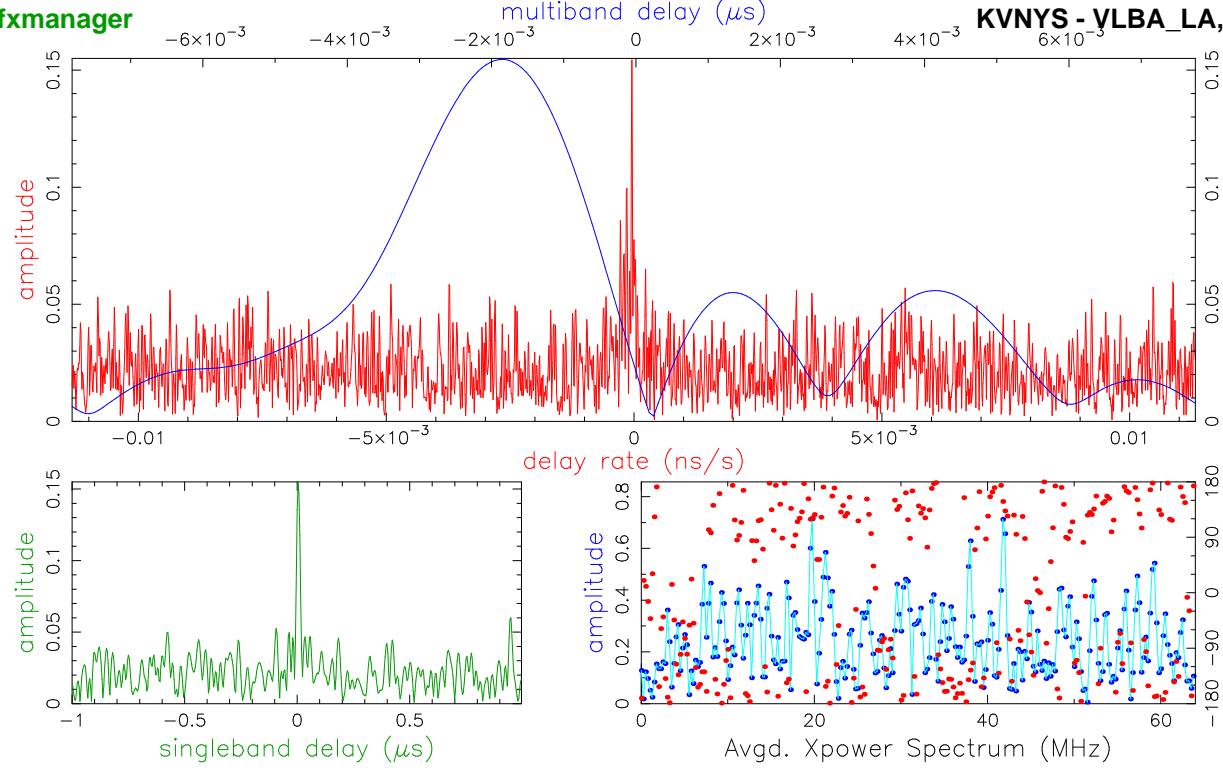
ph/seg (deg) 84.7 43.8 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 128.4 76.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 65.2 25.8 Inc. seg. avg. 0.164 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.8 45.1 Inc. frq. avg. 0.136 Data rate (Mbit/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 l: az 313.0 el 61.6 pa 110.3 u,v (fr/asec) -11056.058 5083.157 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yl..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yl.W.250.1X1KZS simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yl

KVNYS - VLBA_LA, fgroup W, pol RR

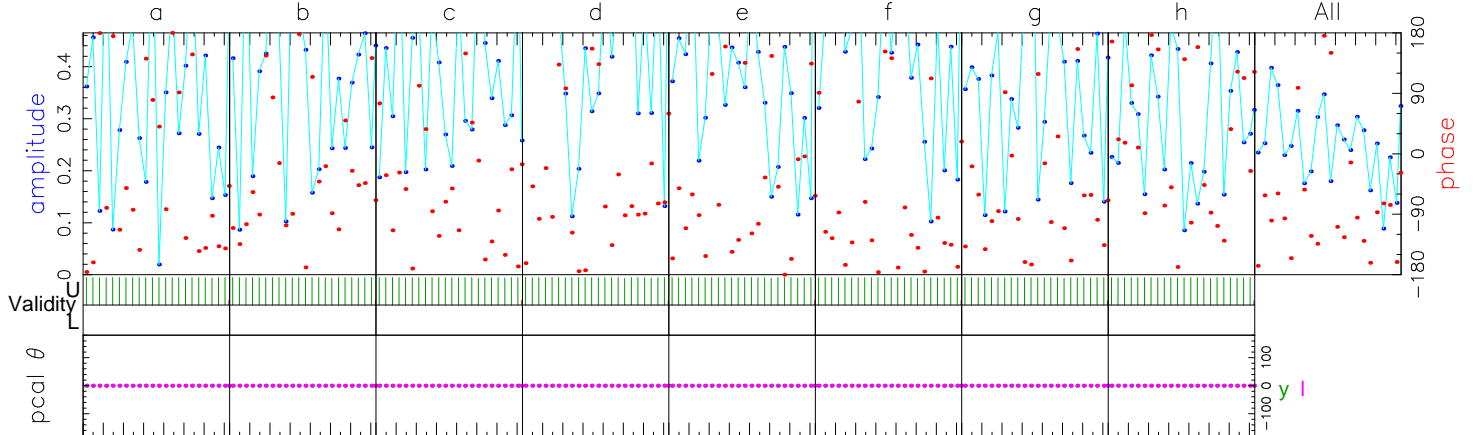


Fringe quality 9

SNR 8.7
 Int time 418.918
 Amp 0.155
 Phase -113.2
 PFD 1.5e-09
 Delays (us)
 SBD 0.004749
 MBD -0.001790
 Fringe rate (Hz)
 -0.004210
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133138
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.96694997715E+03	-8.96694343852E+03	-8.96694819092E+03	-8.96694818727E+03	-8.96694818727E+03	-8.96694818727E+03	-8.96694818727E+03	-8.96694818727E+03		
Sband delay (usec)	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03	-8.96694343852E+03		
Phase delay (usec)	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03	-8.96694819092E+03		
Delay rate (us/s)	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00	1.22330849067E+00		
Total phase (deg)			-59.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	56.9	31.7	Search (2048X32)	0.148						
amp/seg (%)	77.1	55.3	Interp.	0.000						
ph/frq (deg)	24.4	18.7	Inc. seg. avg.	0.217						
amp/frq (%)	43.7	32.6	Inc. frq. avg.	0.158						
y: az 44.6 el 26.5 pa -62.9			l: az 313.0 el 61.6 pa 110.3							
Control file: cf_1234_gmva			Input file: /Exps/c211c/v1/1234/No0113/yl.1X1KZS							
			Output file: /Exps/c211c/v1/1234/No0113/yl.W.268.1X1KZS							

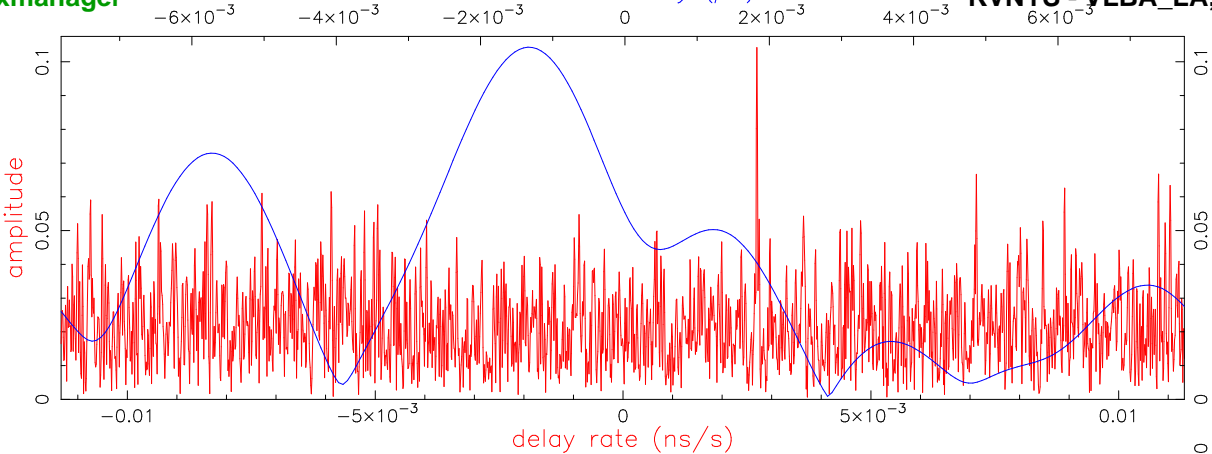
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yl

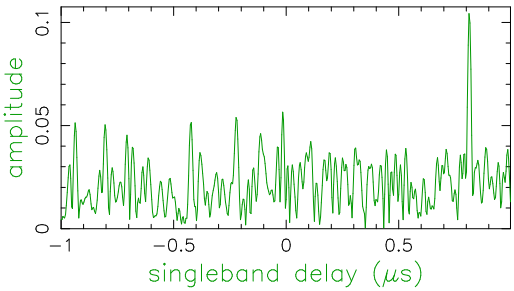
KVNYS - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

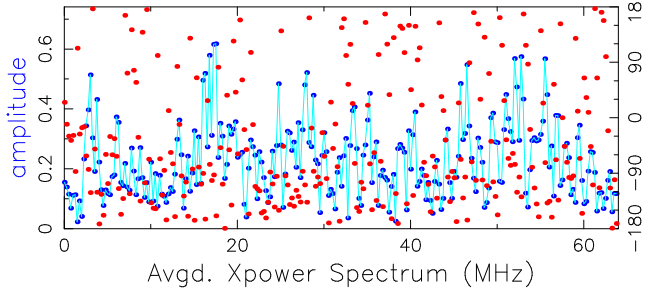


Fringe quality 0

SNR 5.9
 Int time 418.918
 Amp 0.108
 Phase -84.8
 PFD 6.5e-01
 Delays (us)
 SBD 0.813567
 MBD -0.001286
 Fringe rate (Hz)
 0.233450
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

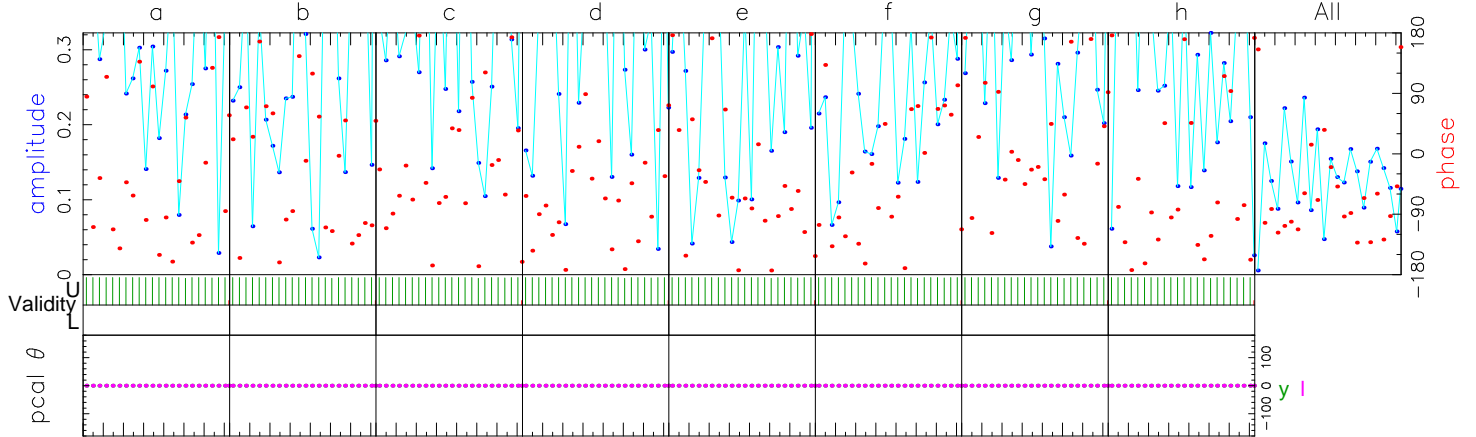


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133141
 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
	-134.8	-123.4	-49.3	-67.6	-84.9	-35.1	-55.1	-125.5	Phase	-84.8
	0.1	0.1	0.2	0.2	0.1	0.0	0.1	0.2	Ampl.	0.1
	46.7	415.8	465.9	465.1	417.0	386.3	178.1	464.2	Sbd box	465.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.96613697354E+03		Apriori delay (usec)		-8.96694818727E+03		Resid mbdelay (usec)		-1.28627E-03	+/- 1.8E-04
Sband delay (usec)	-8.96613462077E+03		Apriori clock (usec)		3.3366051E+00		Resid sbdelay (usec)		8.13567E-01	+/- 1.5E-03
Phase delay (usec)	-8.96694819000E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		-2.73488E-06	+/- 6.3E-07
Delay rate (us/s)	1.22331124967E+00		Apriori rate (us/s)		1.22330853954E+00		Resid rate (us/s)		2.71013E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.98811245116E-05		Resid phase (deg)		-84.8	+/- 19.5

ph/seg (deg) 51.6 46.7 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 56.8 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.9 27.6 Inc. seg. avg. 0.100 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 61.1 48.1 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 l: az 313.0 el 61.6 pa 110.3 u,v (fr/asec) -11056.058 5083.157 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yl.1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yl.W.285.1X1KZS simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

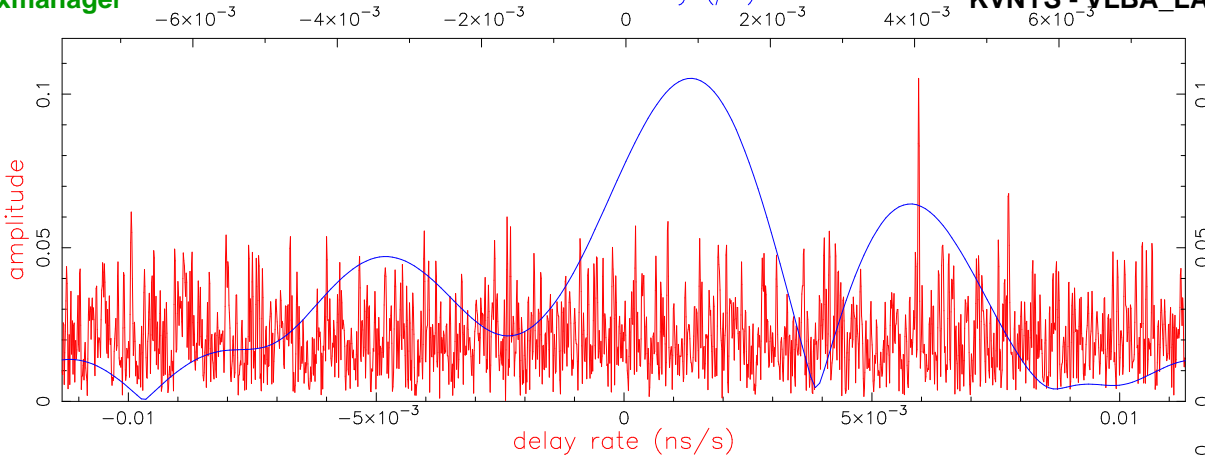
fxmanager

NRAO150.1X1KZS, No0113, yl

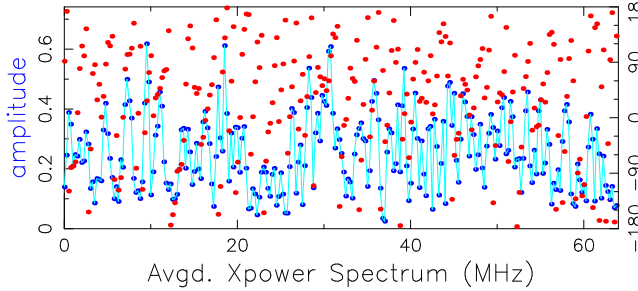
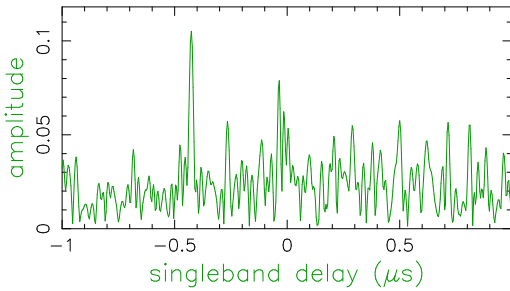
KVNYS - VLBA_LA, fgroup W, pol RL

multiband delay (μs)

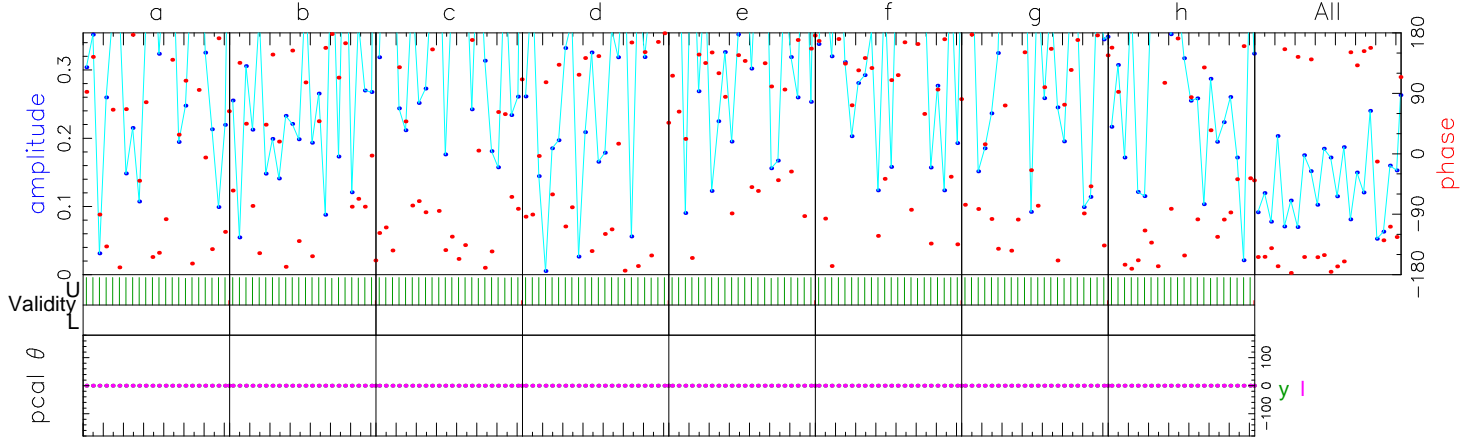
Fringe quality 0



SNR 5.9
 Int time 418.918
 Amp 0.118
 Phase -171.5
 PFD 6.3e-01
 Delays (us)
 SBD -0.426085
 MBD 0.000900
 Fringe rate (Hz) 0.513262
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133144
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.96736916228E+03				-8.96694818727E+03				8.99988E-04	+/- 1.8E-04
Sband delay (usec)	-8.96737427252E+03				3.3366051E+00				-4.26085E-01	+/- 1.5E-03
Phase delay (usec)	-8.96694819280E+03				2.8600001E-07				-5.52950E-06	+/- 6.3E-07
Delay rate (us/s)	1.22331449801E+00				1.22330853954E+00				5.95847E-06	+/- 2.6E-09
Total phase (deg)			-117.9		4.98811245116E-05				-171.5	+/- 19.5
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
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) 47.4 46.7 Search (2048X32) 0.102 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 54.5 81.5 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.9 27.5 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.6 48.0 Inc. frq. avg. 0.125 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 l: az 313.0 el 61.6 pa 110.3 u,v (fr/asec) -11056.058 5083.157 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yl.1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yl.W.301.1X1KZS simultaneous interpolator

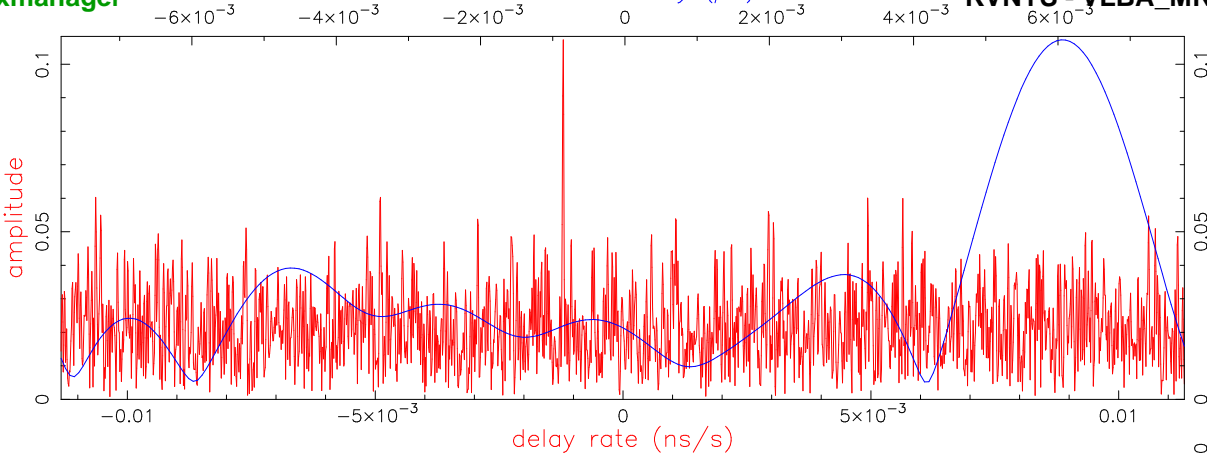
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, ym

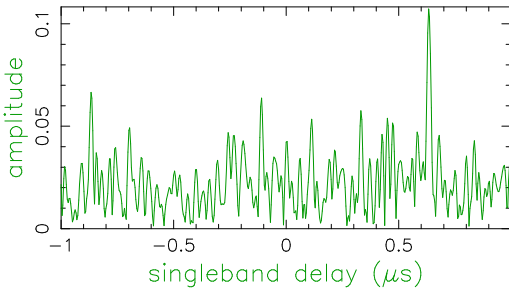
KVNYS - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

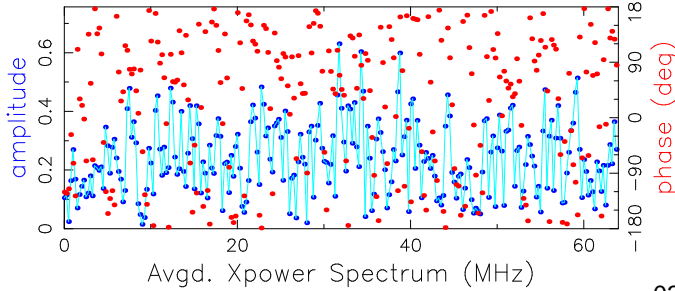


Fringe quality 0

SNR 6.0
 Int time 418.919
 Amp 0.108
 Phase 155.2
 PFD 3.4e-01
 Delays (us)
 SBD 0.633797
 MBD 0.006039
 Fringe rate (Hz)
 -0.103972
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

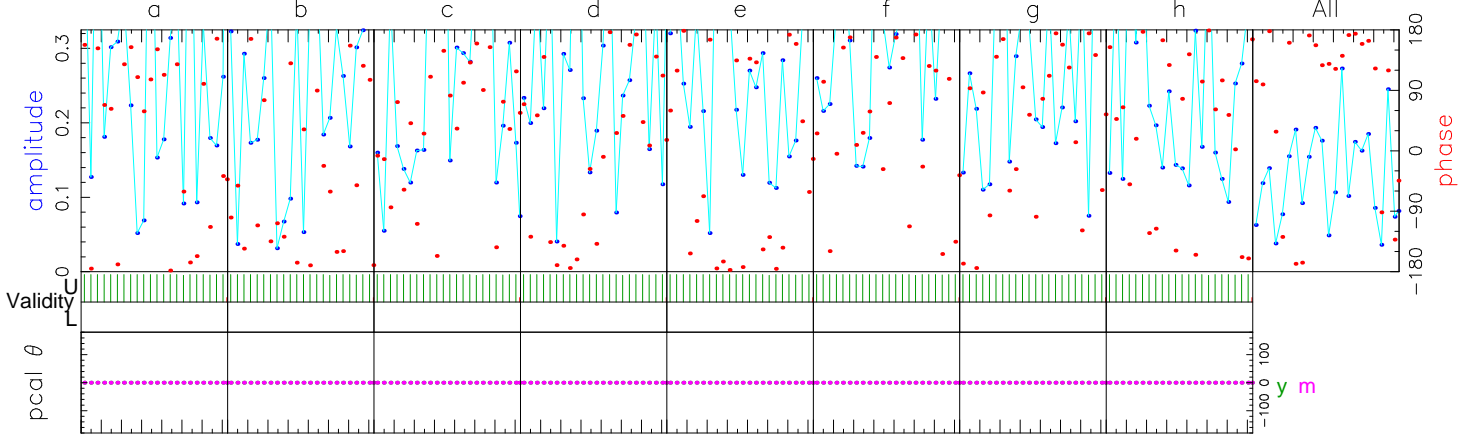


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133134
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	0	0	0	0	0	0	0	0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.17154837073E+03	Apriori delay (usec)	-8.17217940959E+03	Resid mbdelay (usec)	6.03886E-03	+/-	1.8E-04
Sband delay (usec)	-8.17154561284E+03	Apriori clock (usec)	-1.5011522E+01	Resid sbdelay (usec)	6.33797E-01	+/-	1.4E-03
Phase delay (usec)	-8.17217940458E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	5.00433E-06	+/-	6.1E-07
Delay rate (us/s)	5.40977207040E-01	Apriori rate (us/s)	5.40978414056E-01	Resid rate (us/s)	-1.20702E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	6.70795184374E-05	Resid phase (deg)	155.2	+/-	19.0

ph/seg (deg)	51.8	Theor.	45.5	Amplitude	0.108 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.1		79.5	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	23.9		26.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	27.8		46.9	Inc. seg. avg.	0.100	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.104	Data rate(Mb/s): 2048	nlags: 256			
							t_cohere infinite			

y: az 44.6 el 26.5 pa -62.9

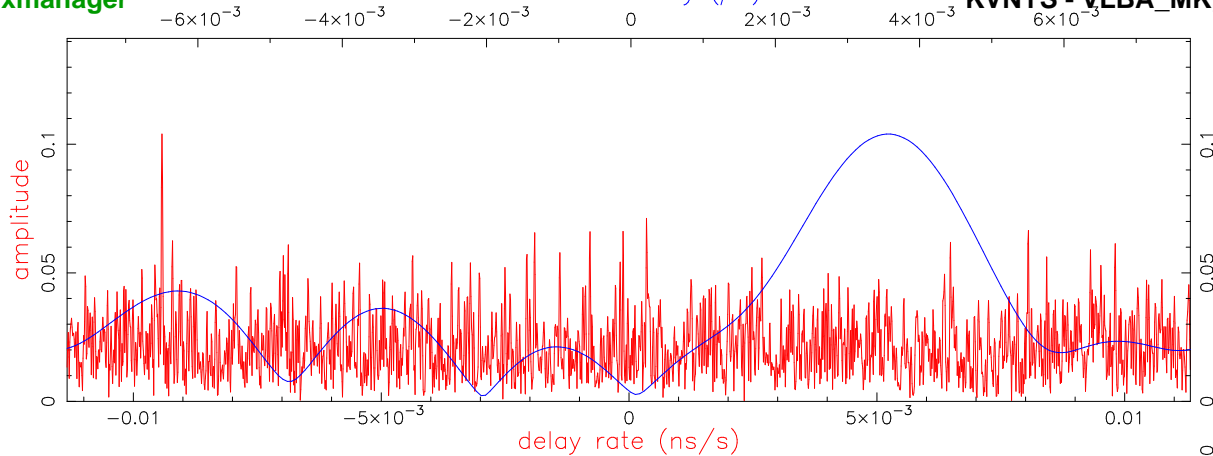
m: az 17.8 el 56.5 pa -152.6

u,v (fr/asec) -4819.257 8062.901

simultaneous interpolator

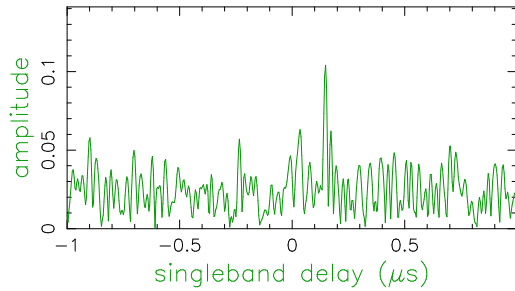
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ym..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ym.W.252.1X1KZS

multiband delay (μ s)

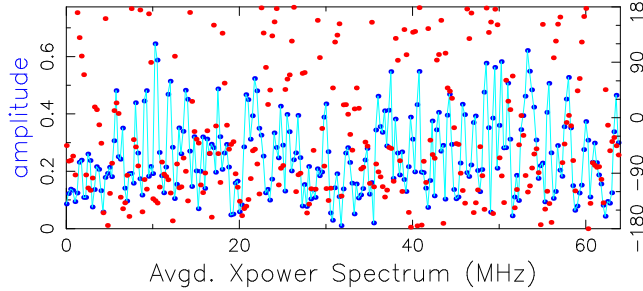


Fringe quality 0

SNR 5.8
Int time 418.919
Amp 0.141
Phase 114.6
PFD 7.4e-01
Delays (us)
SBD 0.147790
MBD 0.003570
Fringe rate (Hz)
-0.812515
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

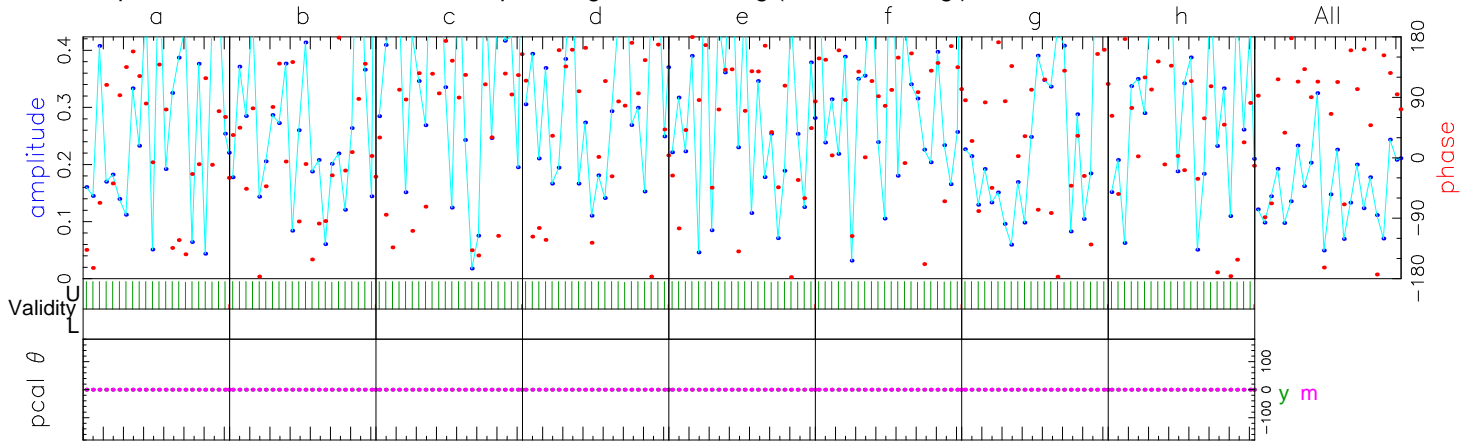


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133138
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		
	114.1	36.3	126.1	140.5	122.7	115.4	138.4	85.9	Phase	114.6		
	0.1	0.1	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.1		
	202.8	476.3	295.4	474.6	197.1	295.8	364.4	497.3	Sbd box	294.8		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
m	0	0	0	0	0	0	0	0	PC freqs			
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
m	1000	1000	1000	1000	1000	1000	1000	1000				
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	-8.17203521413E+03					-8.17217940959E+03			Resid mbdelay (usec)	3.57046E-03 +/- 1.9E-04		
Sband delay (usec)	-8.17203161984E+03					-1.5011522E+01			Resid sbdelay (usec)	1.47790E-01 +/- 1.5E-03		
Phase delay (usec)	-8.17217940589E+03					-3.1799999E-07			Resid phdelay (usec)	3.69502E-06 +/- 6.3E-07		
Delay rate (us/s)	5.40968981567E-01					5.40978414056E-01			Resid rate (us/s)	-9.43249E-06 +/- 2.6E-09		
Total phase (deg)		-8.5				6.70795184374E-05			Resid phase (deg)	114.6 +/- 19.6		
	RMS	Theor.	Amplitude	0.141 +/- 0.024					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	74.8	47.1	Search (2048X32)	0.102					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	81.3	82.2	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	37.4	27.8	Inc. seg. avg.	0.160					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	44.4	48.5	Inc. frq. avg.	0.142					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

y: az 44.6 el 26.5 pa -62.9 m: az 17.8 el 56.5 pa -152.6 u,v (fr/asec) -4819.257 8062.901 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ym..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ym.W.273.1X1KZS

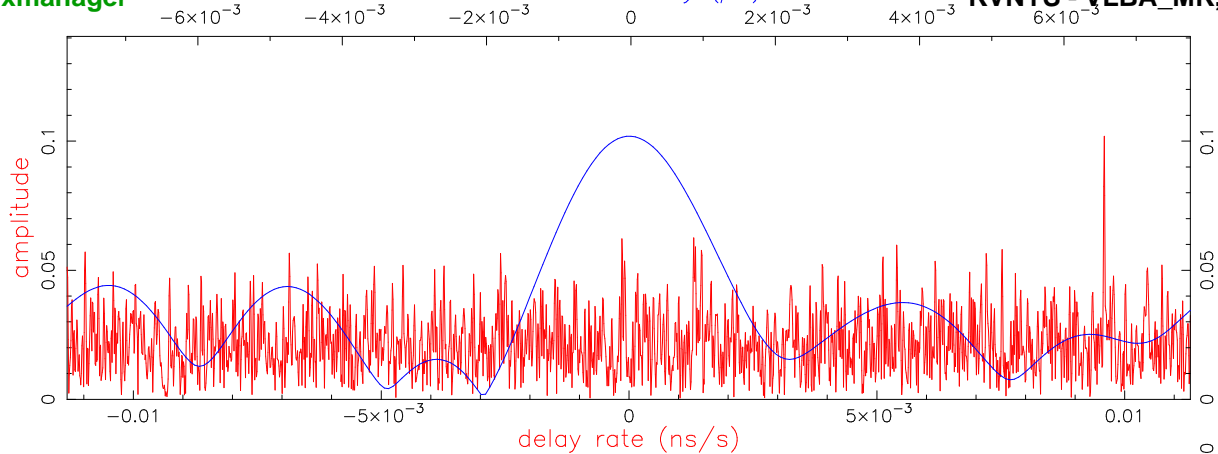
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, ym

KVNYS - VLBA_MK, fgroup W, pol LR

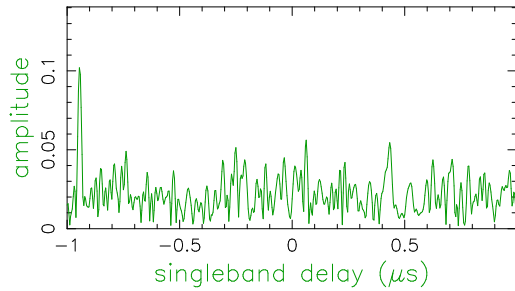
multiband delay (μ s)



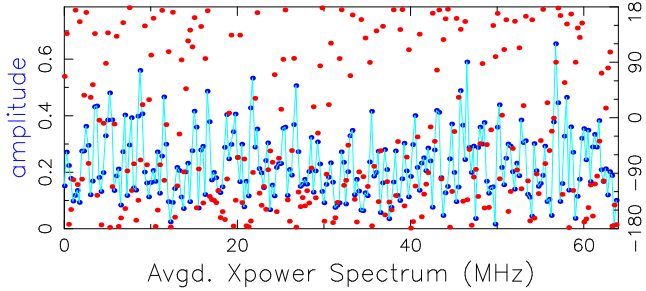
Fringe quality 0

SNR 5.7
 Int time 418.919
 Amp 0.141
 Phase 129.6
 PFD 9.0e-01
 Delays (us)
 SBD -0.944224
 MBD 0.000000
 Fringe rate (Hz)
 0.826653
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

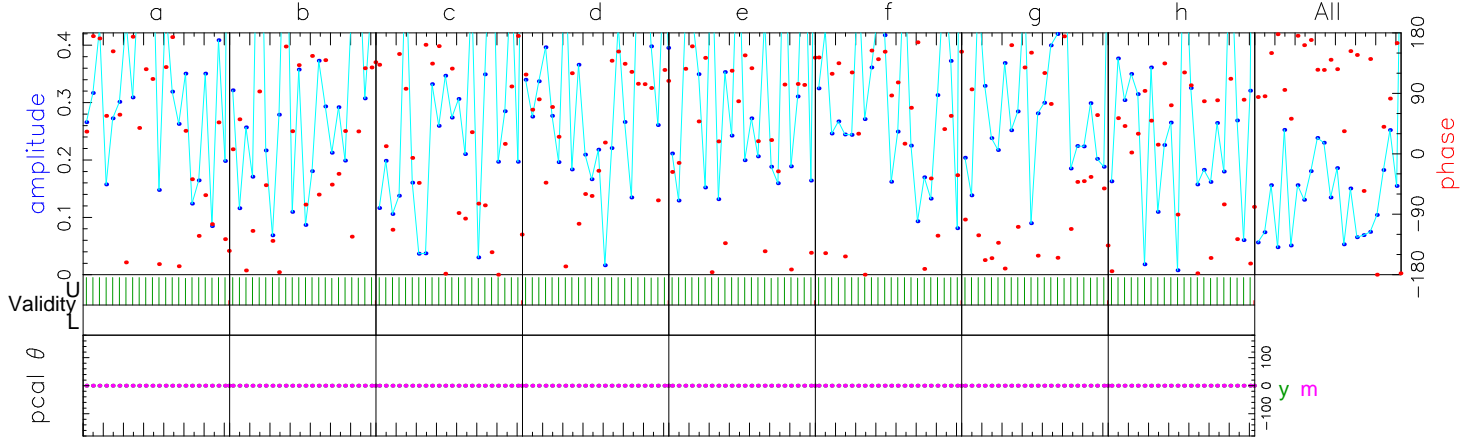
Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133142
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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



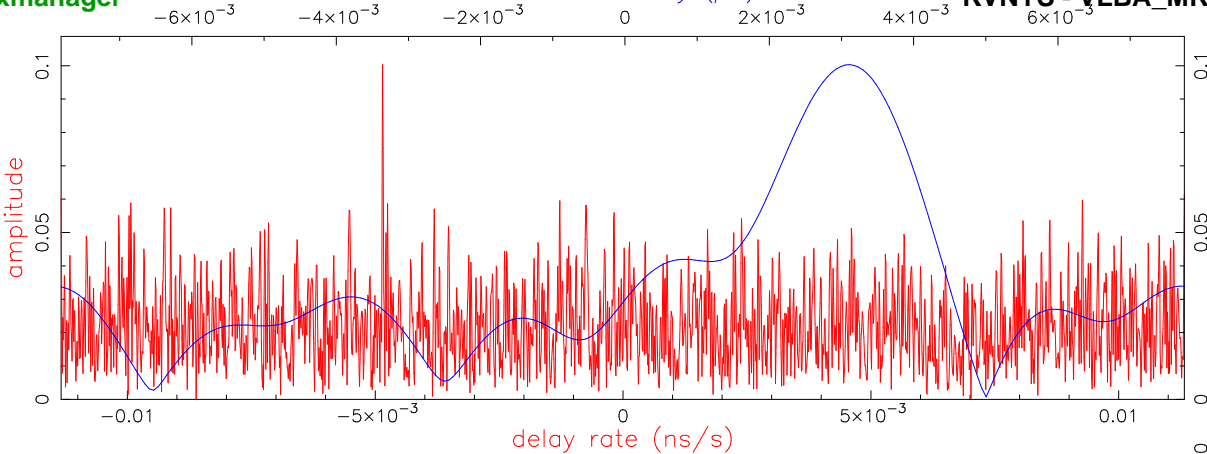
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	135.5	123.2	153.2	113.0	123.4	120.0	-160.2	90.7	Phase	129.6
	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.1
	349.1	233.2	245.6	439.4	16.0	187.5	445.4	333.9	Sbd box	15.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.17311690919E+03		Apriori delay (usec)		-8.17217940959E+03		Resid mbdelay (usec)		4.03438E-07	+/- 1.9E-04
Sband delay (usec)	-8.17312363359E+03		Apriori clock (usec)		-1.5011522E+01		Resid sbdelay (usec)		-9.44224E-01	+/- 1.5E-03
Phase delay (usec)	-8.17217940541E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		4.17968E-06	+/- 6.4E-07
Delay rate (us/s)	5.40988010680E-01		Apriori rate (us/s)		5.40978414056E-01		Resid rate (us/s)		9.59662E-06	+/- 2.7E-09
Total phase (deg)	6.5		Apriori accel (us/s/s)		6.70795184374E-05		Resid phase (deg)		129.6	+/- 19.9

	RMS	Theor.	Amplitude	0.141 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	57.8	47.8	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	83.4	83.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	35.3	28.2	Inc. seg. avg.	0.142	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	30.4	49.2	Inc. frq. avg.	0.144				

y: az 44.6 el 26.5 pa -62.9 m: az 17.8 el 56.5 pa -152.6 u,v (fr/asec) -4819.257 8062.901 simultaneous interpolator

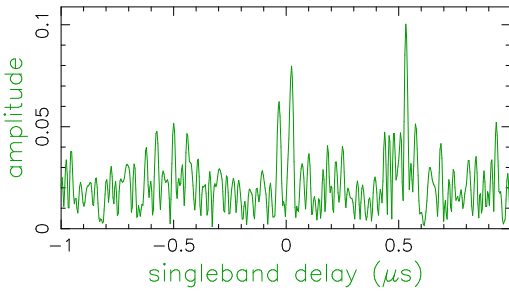
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ym..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ym.W.290.1X1KZS

multiband delay (μ s)

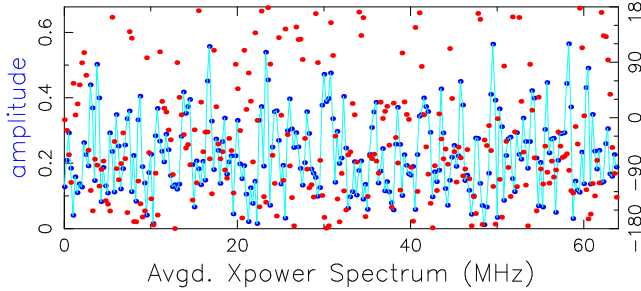


Fringe quality 0

SNR 5.6
 Int time 418.919
 Amp 0.109
 Phase -119.7
 PFD 9.8e-01
 Delays (us)
 SBD 0.532042
 MBD 0.003110
 Fringe rate (Hz)
 -0.418578
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

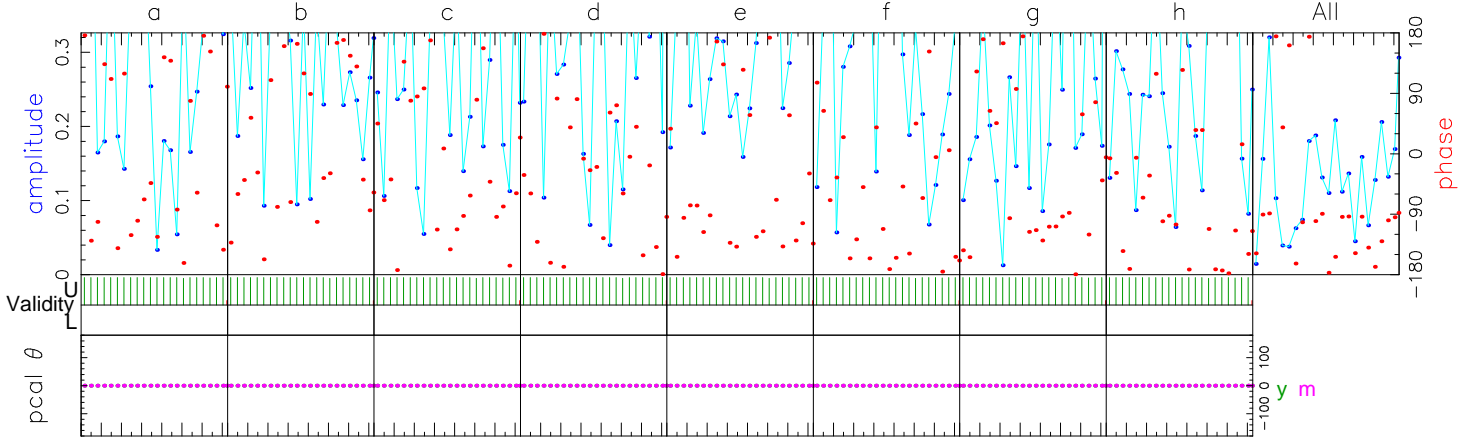


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133145
 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
	-147.8	-99.2	-85.4	-80.5	-116.2	-115.4	-125.4	-139.6	Phase	-119.7
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	256.9	287.6	322.3	203.3	392.7	440.9	460.9	40.1	Sbd box	393.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.17164504953E+03	Apriori delay (usec)	-8.17217940959E+03	Resid mbdelay (usec)	3.11006E-03	+/-	1.9E-04
Sband delay (usec)	-8.17164736734E+03	Apriori clock (usec)	-1.5011522E+01	Resid sbdelay (usec)	5.32042E-01	+/-	1.5E-03
Phase delay (usec)	-8.17217941345E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	-3.86120E-06	+/-	6.6E-07
Delay rate (us/s)	5.40973554778E-01	Apriori rate (us/s)	5.40978414056E-01	Resid rate (us/s)	-4.85928E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	6.70795184374E-05	Resid phase (deg)	-119.7	+/-	20.3

ph/seg (deg)	51.1	Theor.	48.7	Amplitude	0.109 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.3		85.0	Search (2048X32)	0.097	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.0		28.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.4		50.2	Inc. seg. avg.	0.101	Sample rate (MSamp/s):	128	nlags: 256	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.103	Data rate (Mb/s):	2048	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 44.6 el 26.5 pa -62.9 m: az 17.8 el 56.5 pa -152.6 u,v (fr/asec) -4819.257 8062.901 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/ym..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/ym.W.306.1X1KZS

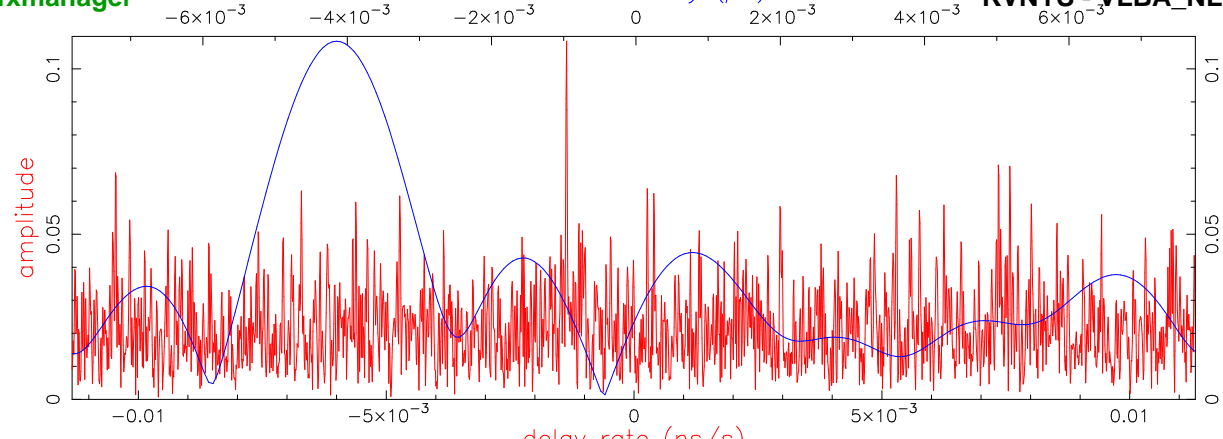
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

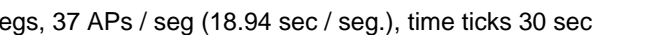
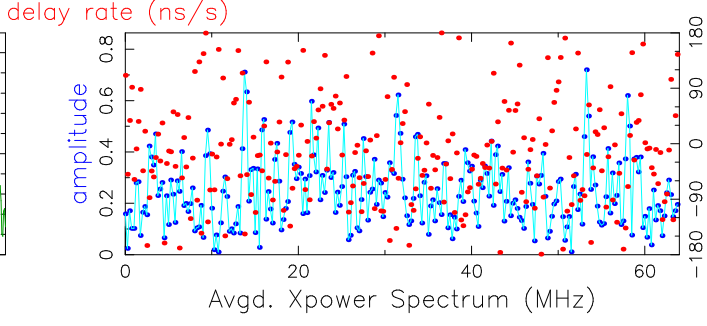
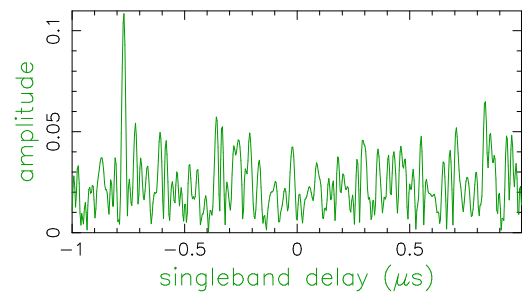
NRAO150.1X1KZS, No0113, yn

KVNYS - VLBA_NL, fgroup W, pol LL

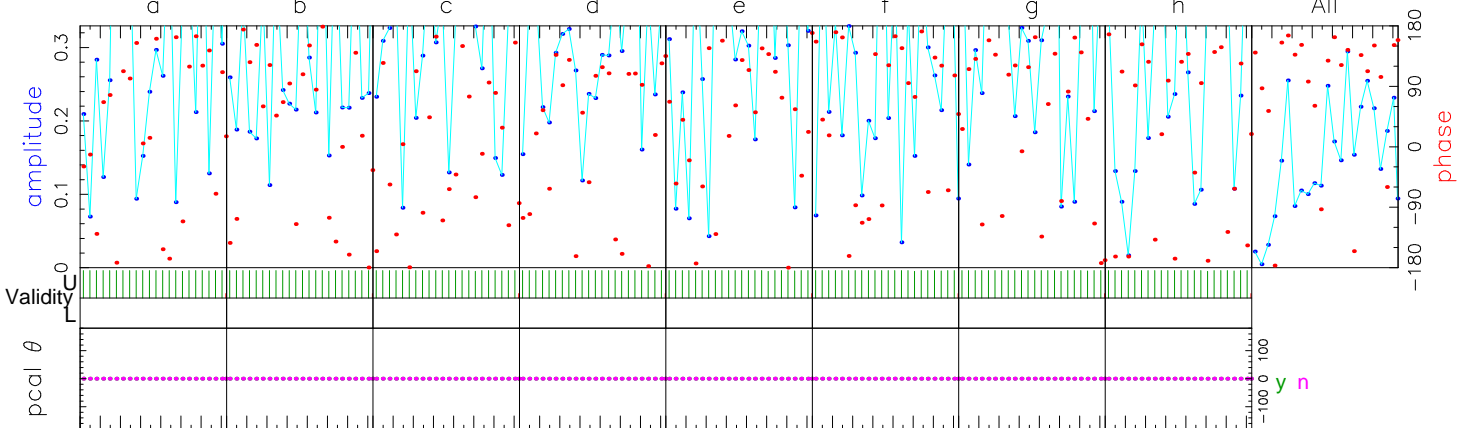
multiband delay (μ s)



Fringe quality 0
 SNR 6.1
 Int time 418.919
 Amp 0.110
 Phase 143.8
 PFD 2.3e-01
 Delays (us)
 SBD -0.770626
 MBD -0.004144
 Fringe rate (Hz)
 -0.117292
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133134
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	0	0	0	0	0	0	0	0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.89211502706E+03				-7.89134525769E+03				-1.44437E-03	+/- 1.8E-04
Sband delay (usec)	-7.89211588394E+03				-4.7799435E+00				-7.70626E-01	+/- 1.4E-03
Phase delay (usec)	-7.89134525306E+03				-2.9999999E-07				4.63568E-06	+/- 6.0E-07
Delay rate (us/s)	1.32566426084E+00				1.32566562249E+00				-1.36165E-06	+/- 2.5E-09
Total phase (deg)			-35.3		3.69795478029E-05				143.8	+/- 18.7
ph/seg (deg)	56.2	45.0								
amp/seg (%)	81.9	78.5								
ph/frq (deg)	26.9	26.5								
amp/frq (%)	34.0	46.3								
y: az 44.6 el 26.5 pa -62.9										
n: az 302.7 el 56.1 pa 86.9										
u,v (fr/asec)					-12007.927	3385.792				
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0113/yn..1X1KZS										
Output file: /Exps/c211c/v1/1234/No0113/yn.W.254.1X1KZS										

RMS Theor. Amplitude 0.110 +/- 0.018
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048
 nlags: 256 t_cohere infinite
 sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

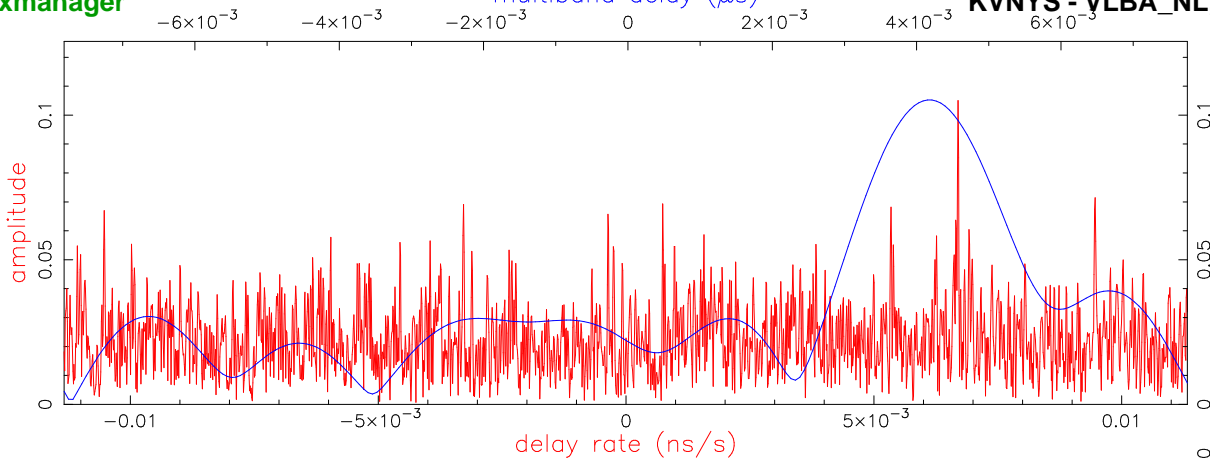
fxmanager

NRAO150.1X1KZS, No0113, yn

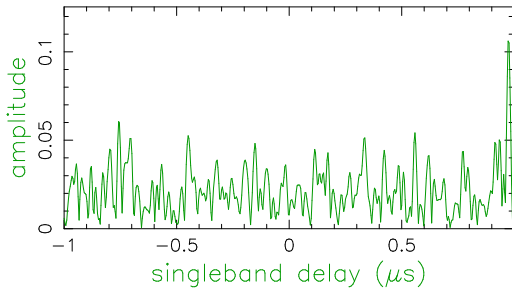
KVNYS - VLBA_NL, fgroup W, pol RR

multiband delay (μ s)

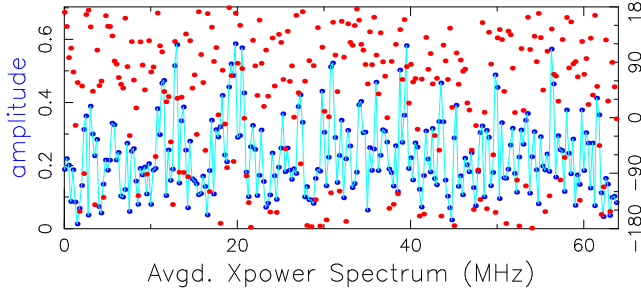
Fringe quality 0



SNR 6.1
 Int time 418.919
 Amp 0.125
 Phase 131.3
 PFD 3.0e-01
 Delays (us)
 SBD 0.974397
 MBD 0.004103
 Fringe rate (Hz)
 0.577406
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

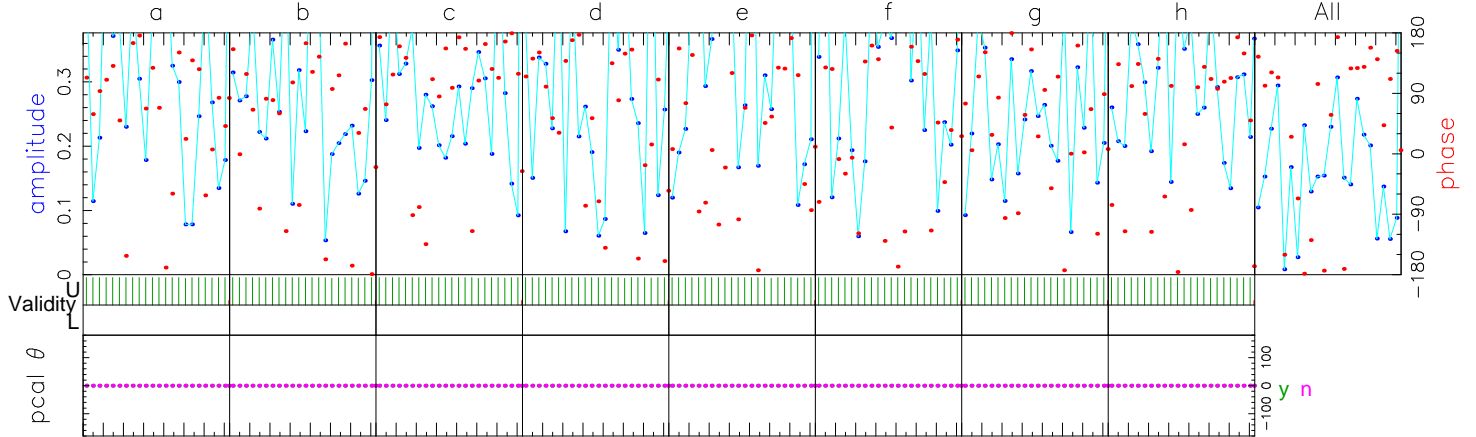


delay rate (ns/s)



Exp. c211c
 Yr:day # 16383
 Start 2021:116
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133138
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	0	0	0	0	0	0	0	0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-7.89037240437E+03								4.10332E-03	+/- 1.8E-04
Sband delay (usec)	-7.89037086069E+03								9.74397E-01	+/- 1.4E-03
Phase delay (usec)	-7.89134525346E+03								4.23498E-06	+/- 6.1E-07
Delay rate (us/s)	1.32567232560E+00								6.70311E-06	+/- 2.5E-09
Total phase (deg)			-47.8						131.3	+/- 18.9
Apriori delay (usec)					-7.89134525769E+03				Resid mbdelay (usec)	
Apriori clock (usec)					-4.7799435E+00				Resid sbdelay (usec)	
Apriori clockrate (us/s)					-2.9999999E-07				Resid phdelay (usec)	
Apriori rate (us/s)					1.32566562249E+00				Resid rate (us/s)	
Apriori accel (us/s/s)					3.69795478029E-05				Resid phase (deg)	
Pcal mode: MANUAL, MANUAL									PC period (AP's) 5, 5	
Pcal rate: 0.000E+00, 0.000E+00 (us/s)									sb window (us)	-1.000 1.000
Bits/sample: 2x2									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										

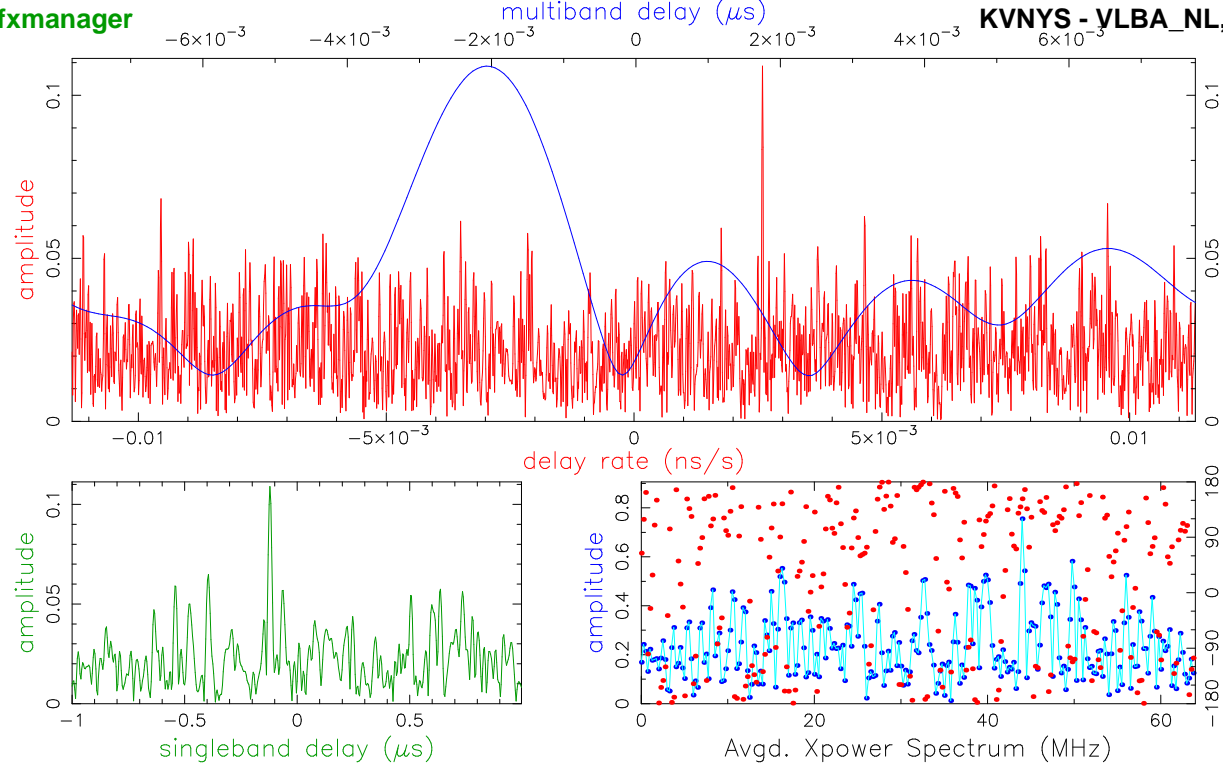
ph/seg (deg) 61.7 45.4 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 99.4 79.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.8 26.8 Inc. seg. avg. 0.144 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 31.0 46.7 Inc. frq. avg. 0.117 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 n: az 302.7 el 56.1 pa 86.9 u,v (fr/asec) -12007.927 3385.792 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yn..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yn.W.269.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

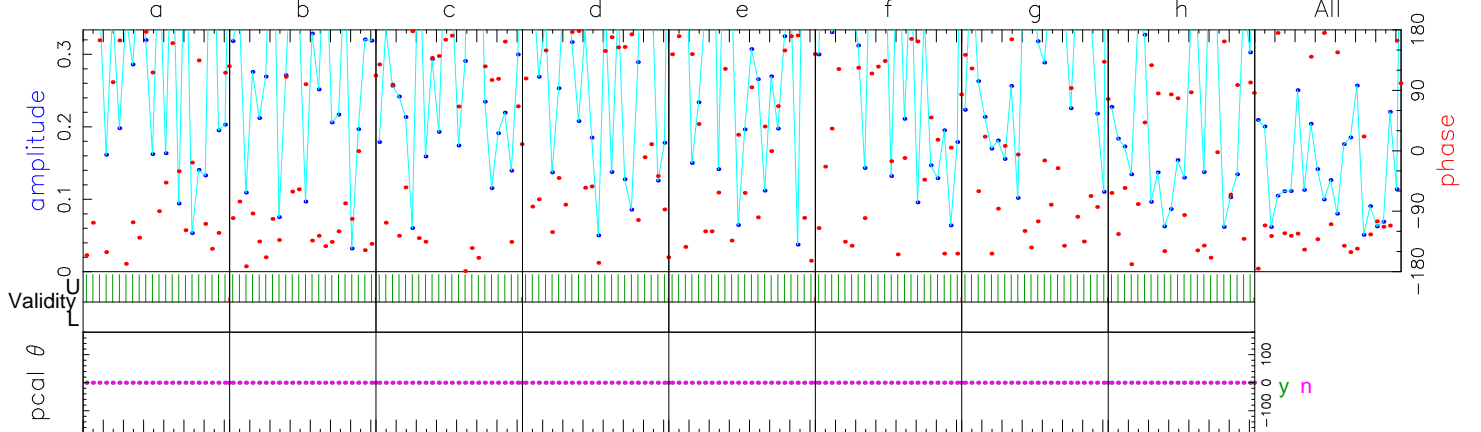
NRAO150.1X1KZS, No0113, yn

KVNYS - VLBA_NL, fgroup W, pol LR



Fringe quality 0
 SNR 6.1
 Int time 418.919
 Amp 0.111
 Phase -146.0
 PFD 2.5e-01
 Delays (us)
 SBD -0.121073
 MBD -0.002065
 Fringe rate (Hz)
 0.223276
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133141
 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
	-152.4	-112.5	-179.2	-108.4	-165.1	169.5	-107.1	-161.4	Phase	-146.0
	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.0	Ampl.	0.1
	225.0	226.5	225.8	313.2	337.3	156.5	90.3	387.1	Sbd box	226.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-7.89147232272E+03		Apriori delay (usec)		-7.89134525769E+03		Resid mbdelay (usec)		-2.06503E-03 +/- 1.8E-04	
Sband delay (usec)	-7.89146633094E+03		Apriori clock (usec)		-4.7799435E+00		Resid sbdelay (usec)		-1.21073E-01 +/- 1.4E-03	
Phase delay (usec)	-7.89134526240E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-4.70770E-06 +/- 6.1E-07	
Delay rate (us/s)	1.32566821450E+00		Apriori rate (us/s)		1.32566562249E+00		Resid rate (us/s)		2.59201E-06 +/- 2.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		3.69795478029E-05		Resid phase (deg)		-146.0 +/- 18.8	

ph/seg (deg) 50.1 45.1 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.9 78.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.0 26.6 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.6 46.4 Inc. frq. avg. 0.116 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 n: az 302.7 el 56.1 pa 86.9 u,v (fr/asec) -12007.927 3385.792 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yn..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yn.W.286.1X1KZS simultaneous interpolator

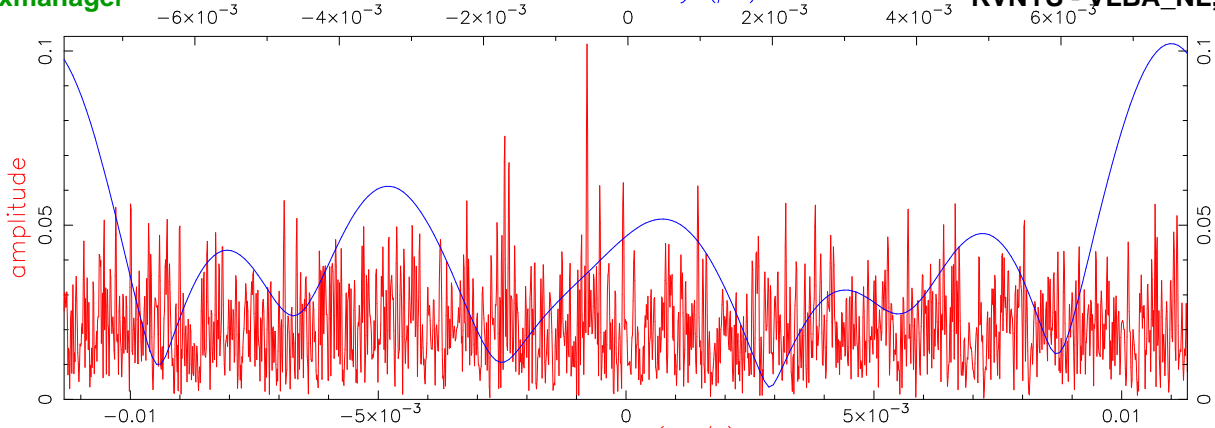
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

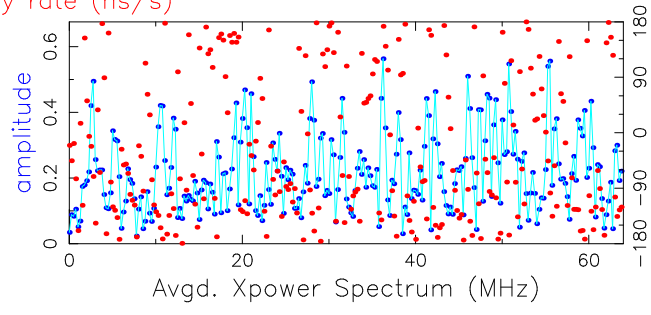
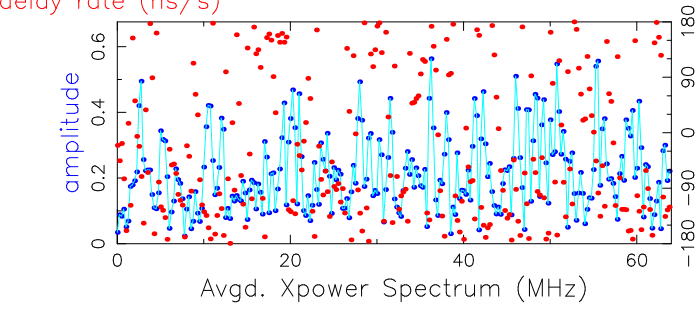
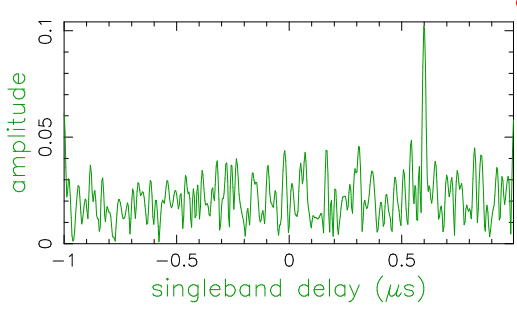
NRAO150.1X1KZS, No0113, yn

KVNYS - VLBA_NL, fgroup W, pol RL

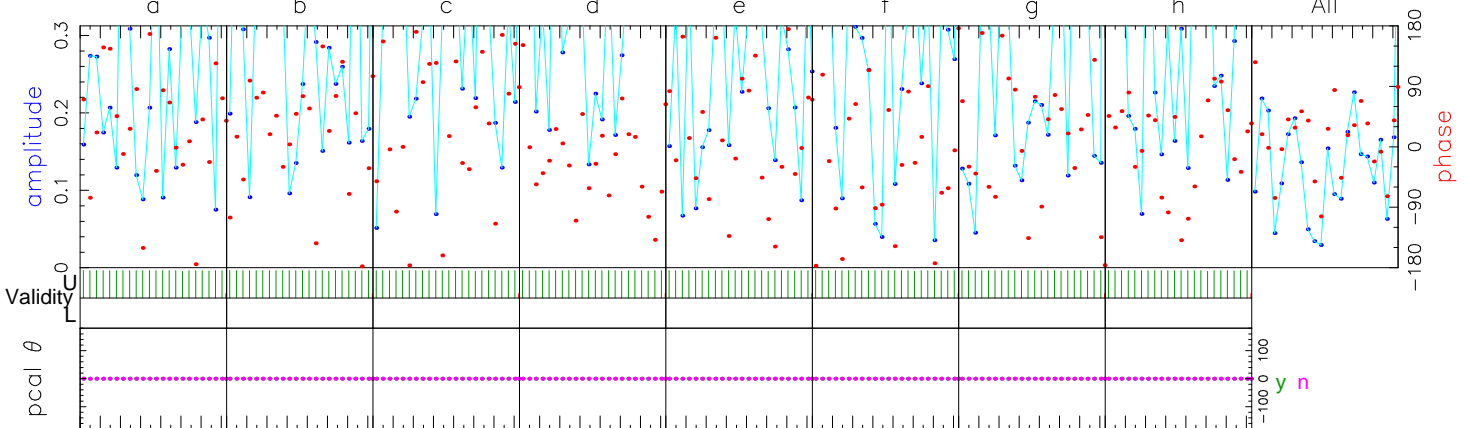
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 418.919
 Amp 0.104
 Phase 24.3
 PFD 7.7e-01
 Delays (us)
 SBD 0.599357
 MBD -0.008050
 Fringe rate (Hz)
 -0.067453
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133145
 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



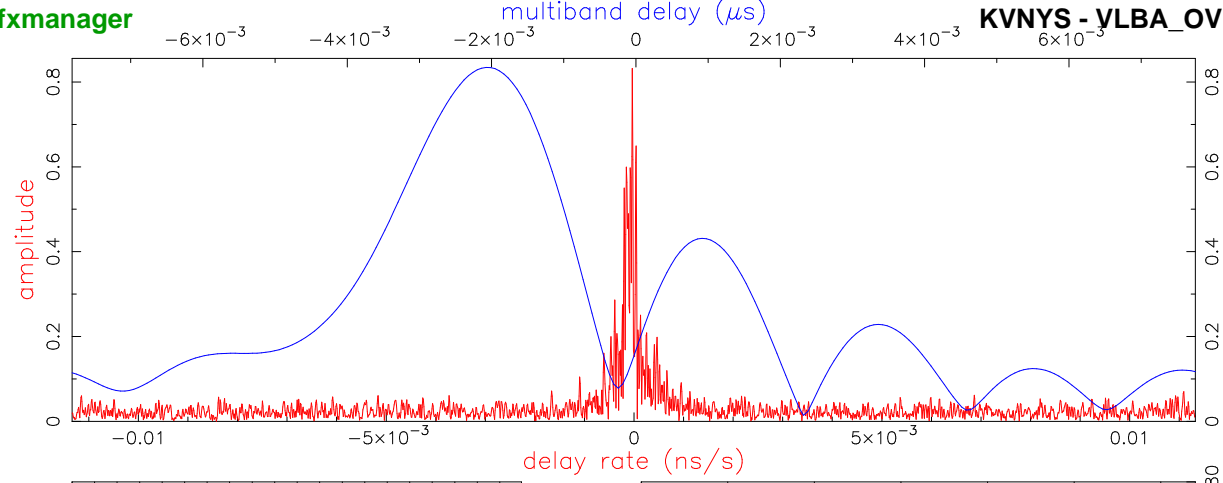
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	0	0	0	0	0	0	0	0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-7.89074393275E+03									
Sband delay (usec)	-7.89074590019E+03									
Phase delay (usec)	-7.89134525691E+03									
Delay rate (us/s)	1.32566483943E+00									
Total phase (deg)			-154.8							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal theta										
RMS	56.1	47.2								
Theor.	47.2									
Amplitude	0.104 +/- 0.018									
Search (2048X32)	0.098									
Interp.	0.000									
Inc. seg. avg.	0.098									
Inc. frq. avg.	0.106									
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								
Chan ids										
Tracks										
Chan ids										
Tracks										
u,v (fr/asec)	-12007.927	3385.792								
simultaneous interpolator										

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yo

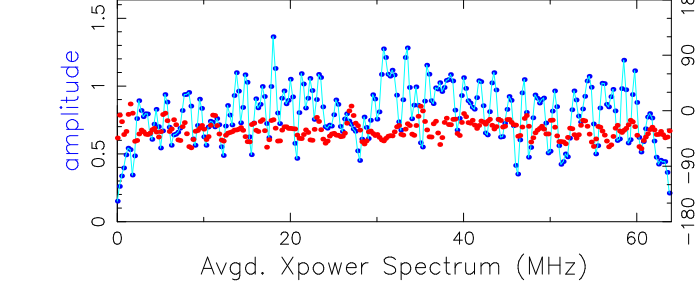
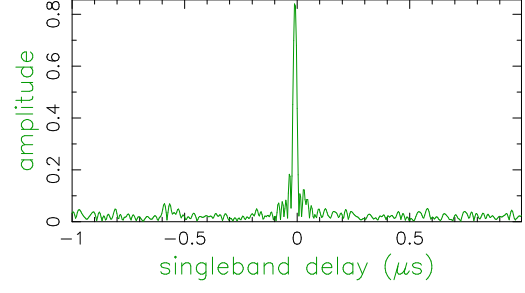
KVNYS - VLBA_OV, fgroup W, pol LL



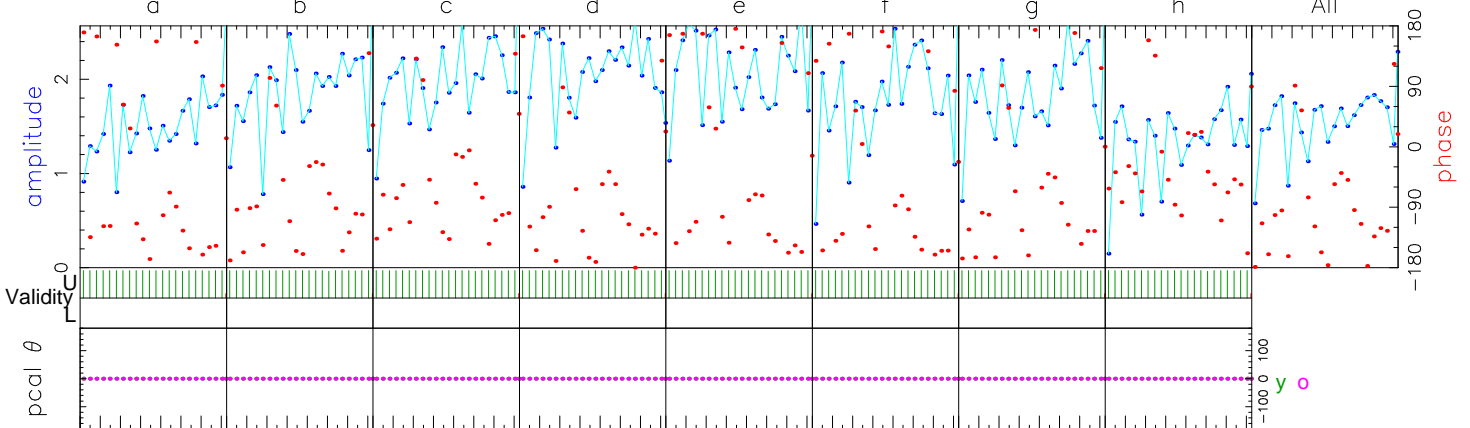
Fringe quality 5

SNR 47.9
 Int time 418.917
 Amp 0.856
 Phase -121.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.009973
 MBD -0.002151
 Fringe rate (Hz)
 -0.002887
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133135
 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
	-148.7	-103.8	-90.7	-123.7	-149.5	-150.8	-126.3	-54.7	Phase	-121.4
	0.8	0.9	1.0	1.1	1.1	1.0	1.0	0.7	Ampl.	1.0
	256.0	254.3	254.0	254.1	254.3	254.1	254.8	256.3	Sbd box	254.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

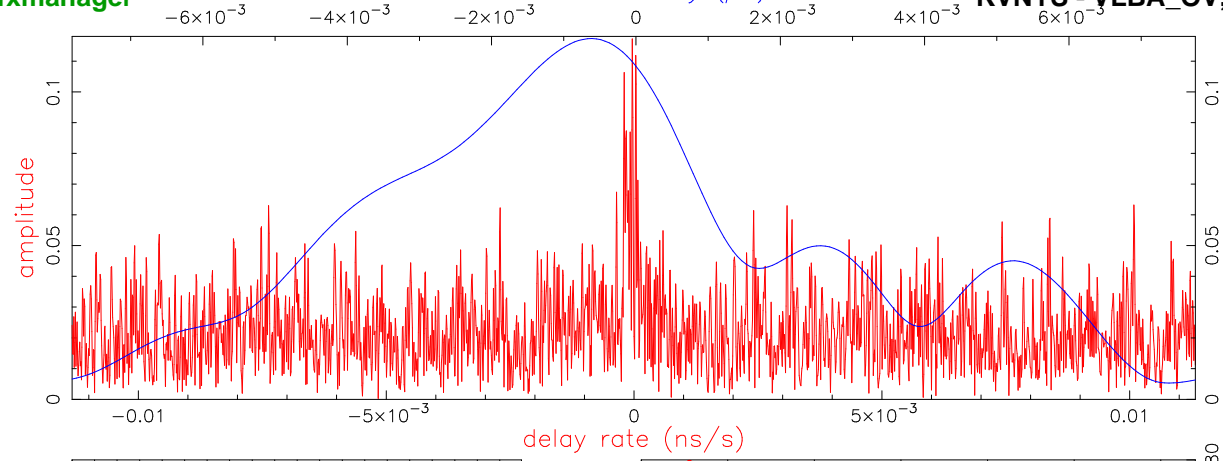
Group delay (usec)(sbd)	-1.02094839210E+04	Apriori delay (usec)	-1.02094661448E+04	Resid mbdelay (usec)	-2.15125E-03	+/-	2.3E-05
Sband delay (usec)	-1.02094761183E+04	Apriori clock (usec)	-3.0505314E+00	Resid sbdelay (usec)	-9.97350E-03	+/-	1.8E-04
Phase delay (usec)	-1.02094661487E+04	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	-3.91642E-06	+/-	7.7E-08
Delay rate (us/s)	1.07161231353E+00	Apriori rate (us/s)	1.07161234705E+00	Resid rate (us/s)	-3.35197E-08	+/-	3.2E-10
Total phase (deg)	-17.5	Apriori accel (us/s/s)	5.46686520026E-05	Resid phase (deg)	-121.4	+/-	2.4

ph/seg (deg)	68.4	Theor.	5.7	Search (2048X32)	0.830	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	86.5		10.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	36.8		3.4	Inc. seg. avg.	1.522	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	17.4		5.9	Inc. frq. avg.	0.954	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

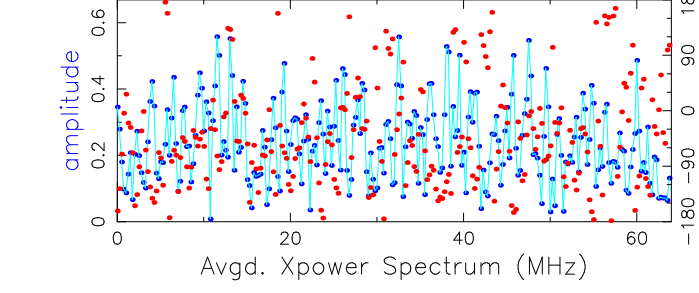
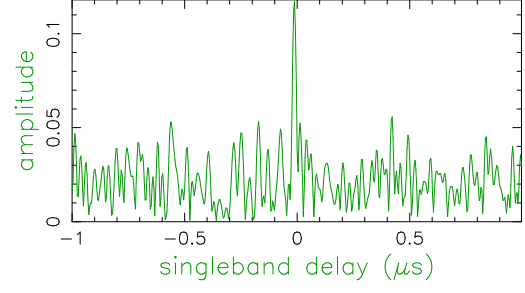
y: az 44.6 el 26.5 pa -62.9 o: az 318.8 el 69.4 pa 122.4 u,v (fr/asec) -9666.788 5421.677 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yo..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yo.W.255.1X1KZS

multiband delay (μ s)

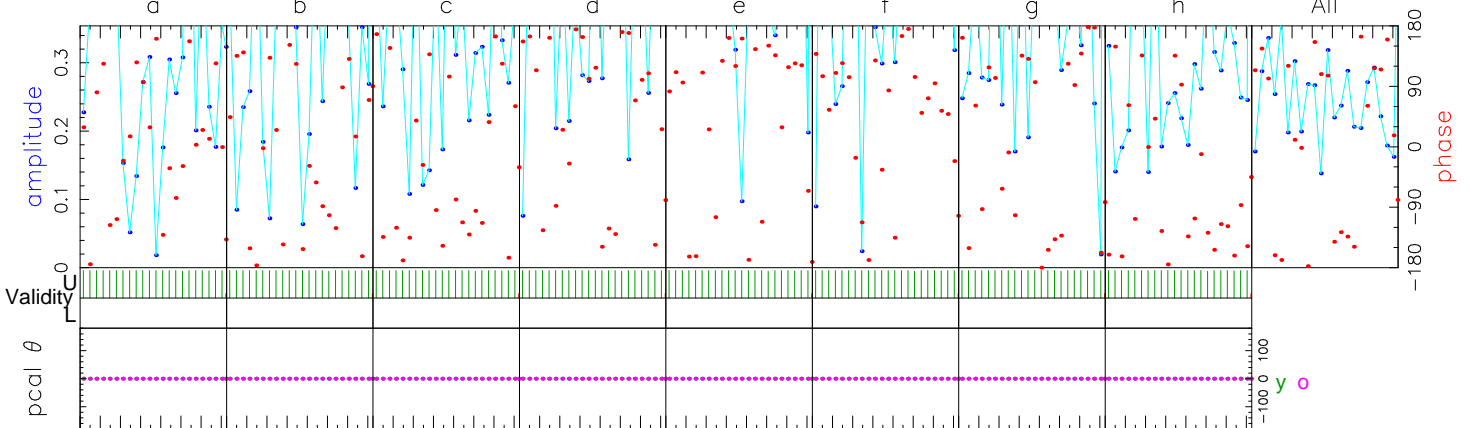


Fringe quality 0
SNR 6.6
Int time 418.917
Amp 0.118
Phase 147.6
PFD 1.1e-02
Delays (us)
SBD -0.012811
MBD -0.000685
Fringe rate (Hz)
-0.002726
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133142
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
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.02094824551E+04									
Sband delay (usec)	-1.02094789553E+04									
Phase delay (usec)	-1.02094661400E+04									
Delay rate (us/s)	1.07161231540E+00									
Total phase (deg)			-108.5							
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)										
Amplitude	0.118 +/- 0.018									
Search (2048X32)	0.117									
Interp.	0.000									
Inc. seg. avg.	0.195									
Inc. frq. avg.	0.139									
PCal 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) 69.4 41.6
amp/seg (%) 121.0 72.6
ph/frq (deg) 59.6 24.5
amp/frq (%) 71.3 42.8
y: az 44.6 el 26.5 pa -62.9
o: az 318.8 el 69.4 pa 122.4
u,v (fr/asec) -9666.788 5421.677
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yo..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yo.W.288.1X1KZS simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

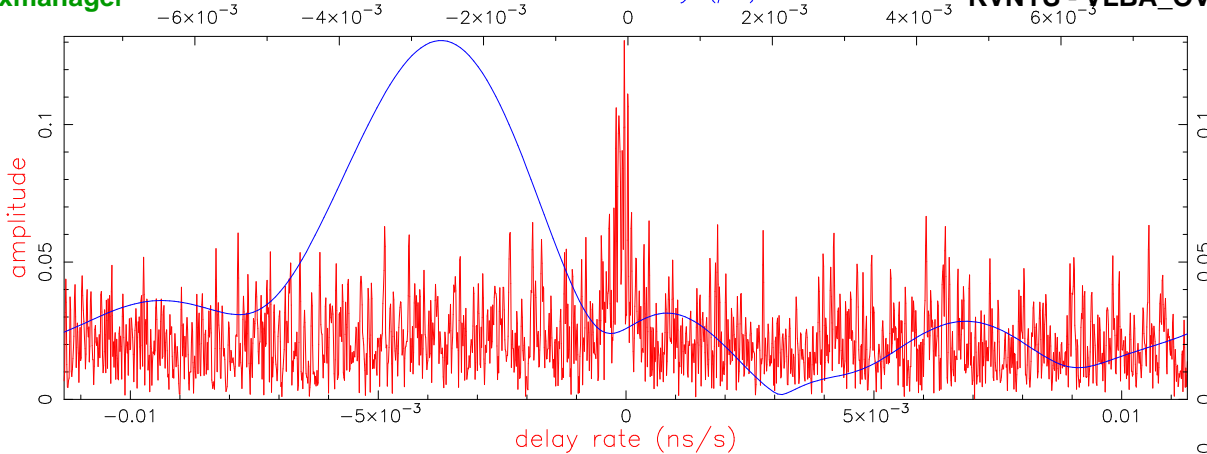
fxmanager

NRAO150.1X1KZS, No0113, yo

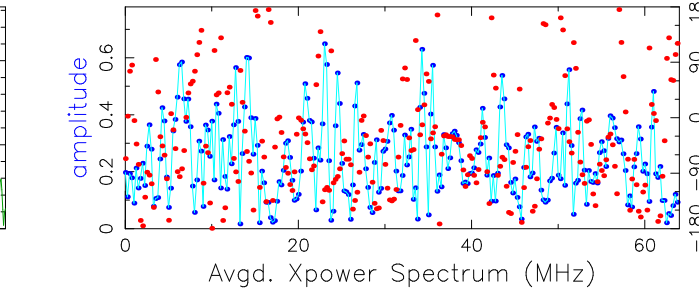
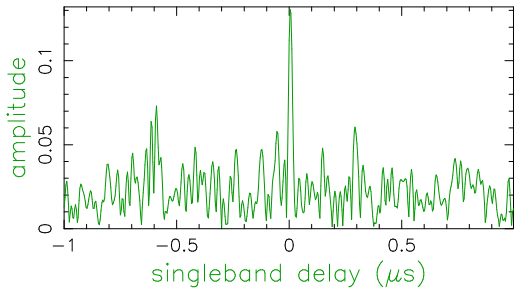
KVNYS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

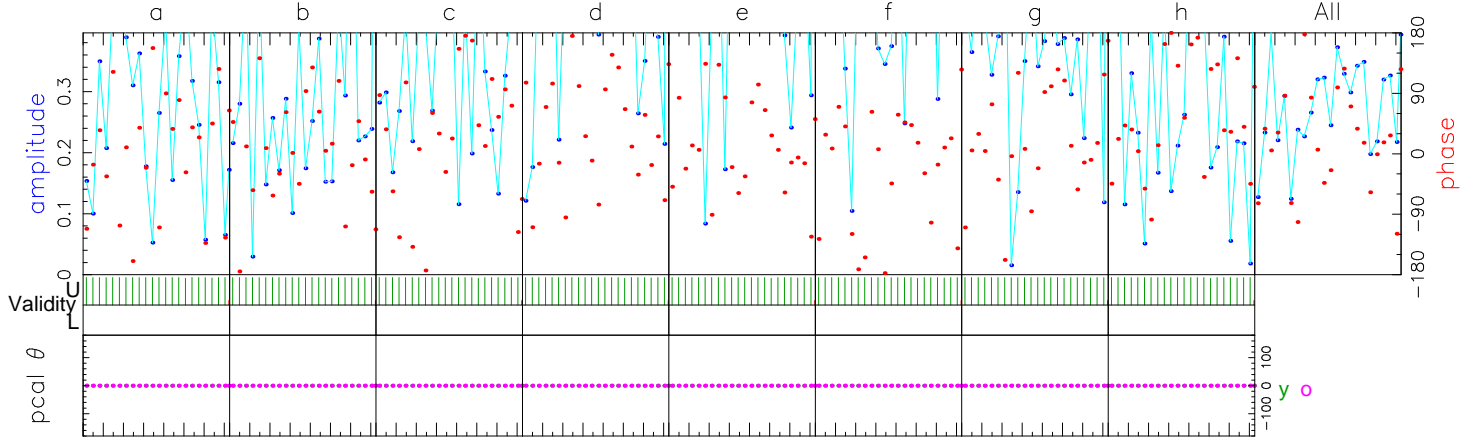


SNR 7.4
 Int time 418.917
 Amp 0.132
 Phase 25.5
 PFD 4.5e-05
 Delays (us)
 SBD 0.005408
 MBD -0.002541
 Fringe rate (Hz)
 -0.002775
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133145
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.02094530612E+04									
Sband delay (usec)	-1.02094607363E+04									
Phase delay (usec)	-1.02094661440E+04									
Delay rate (us/s)	1.07161231484E+00									
Total phase (deg)			-230.6							
Apriori delay (usec)					-1.02094661448E+04					
Apriori clock (usec)					-3.0505314E+00					
Apriori clockrate (us/s)					-3.6000001E-07					
Apriori rate (us/s)					1.07161234705E+00					
Apriori accel (us/s/s)					5.46686520026E-05					
Resid mbdelay (usec)									-2.54140E-03	+/- 1.5E-04
Resid sbdelay (usec)									5.40850E-03	+/- 1.2E-03
Resid phdelay (usec)									8.22012E-07	+/- 5.0E-07
Resid rate (us/s)									-3.22139E-08	+/- 2.1E-09
Resid phase (deg)									25.5	+/- 15.5
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)									
Bits/sample:	2x2		SampCntNorm: enabled							
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite					
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 74.3 37.2 Search (2048X32) 0.129 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 119.7 64.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.1 21.9 Inc. seg. avg. 0.225 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.8 38.3 Inc. frq. avg. 0.129 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 o: az 318.8 el 69.4 pa 122.4 u,v (fr/asec) -9666.788 5421.677 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yo..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yo.W.304.1X1KZS

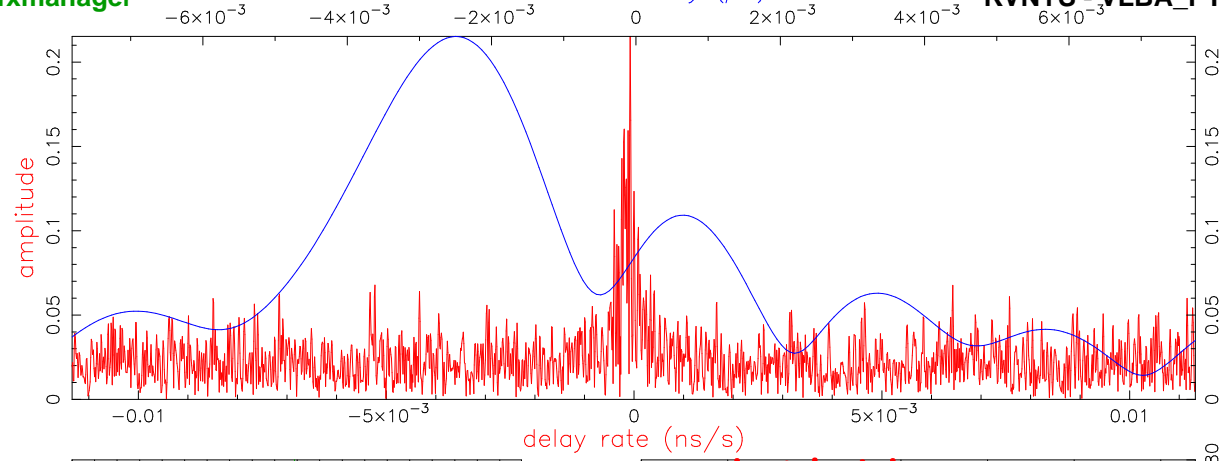
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

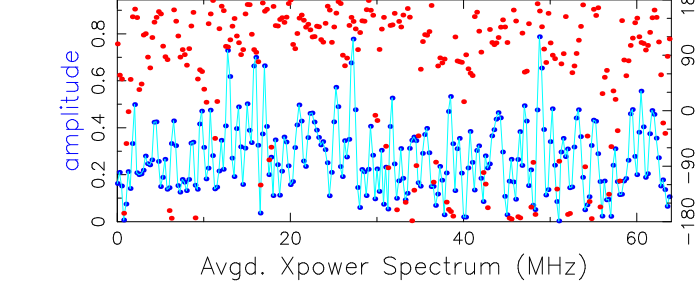
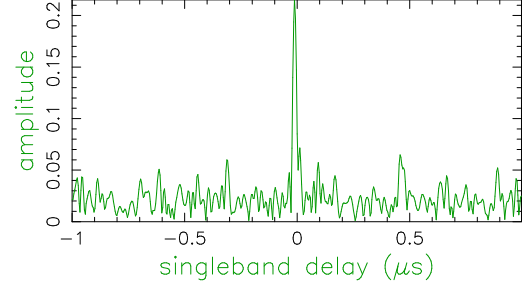
NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol LL

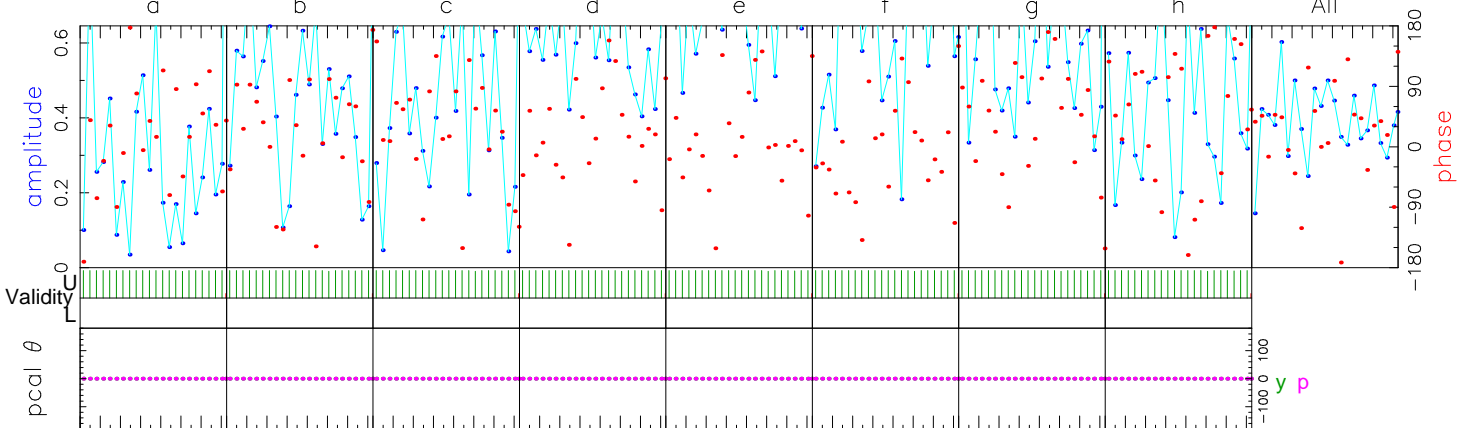
multiband delay (μ s)



Fringe quality 9
 SNR 12.0
 Int time 418.918
 Amp 0.215
 Phase 27.3
 PFD 1.0e-24
 Delays (us)
 SBD -0.011541
 MBD -0.002490
 Fringe rate (Hz) -0.006651
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133134
 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			
y	1000	1000	1000	1000	1000	1000	1000	1000			
p	0	0	0	0	0	0	0	0			
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000		Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Tracks	
Group delay (usec)(sbd)	-8.99160462593E+03				-8.99158651133E+03				Resid mbdelay (usec)	-2.48960E-03	+/- 9.0E-05
Sband delay (usec)	-8.99159805283E+03				-4.8298225E+00				Resid sbdelay (usec)	-1.15415E-02	+/- 7.2E-04
Phase delay (usec)	-8.99158651045E+03				1.2000000E-07				Resid phdelay (usec)	8.79960E-07	+/- 3.1E-07
Delay rate (us/s)	1.20949344880E+00				1.20949352601E+00				Resid rate (us/s)	-7.72129E-08	+/- 1.3E-09
Total phase (deg)			-3.6		5.18124608382E-05				Resid phase (deg)	27.3	+/- 9.5

ph/seg (deg) 68.0 22.8 Amplitude 0.215 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 92.8 39.8 Search (2048X32) 0.215 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.1 13.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 23.5 Inc. seg. avg. 0.361 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -10927.426 5386.626 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yp.W.253.1X1KZS simultaneous interpolator

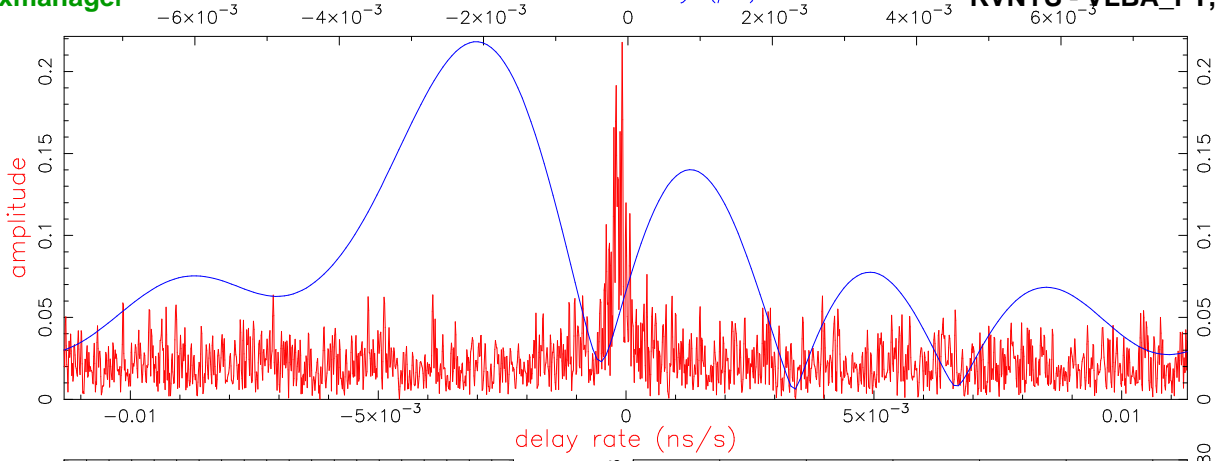
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

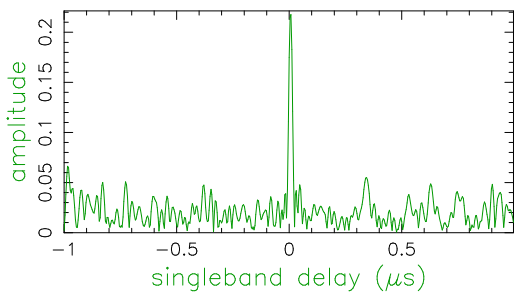


Fringe quality 9

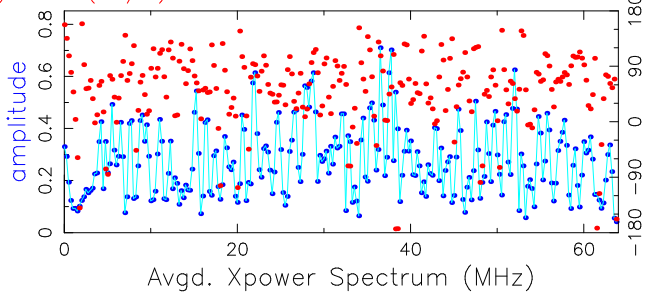
SNR 12.4
 Int time 418.918
 Amp 0.221
 Phase 162.1
 PFD 1.5e-26
 Delays (us)
 SBD 0.006141
 MBD -0.002173
 Fringe rate (Hz)
 -0.006658
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133138
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

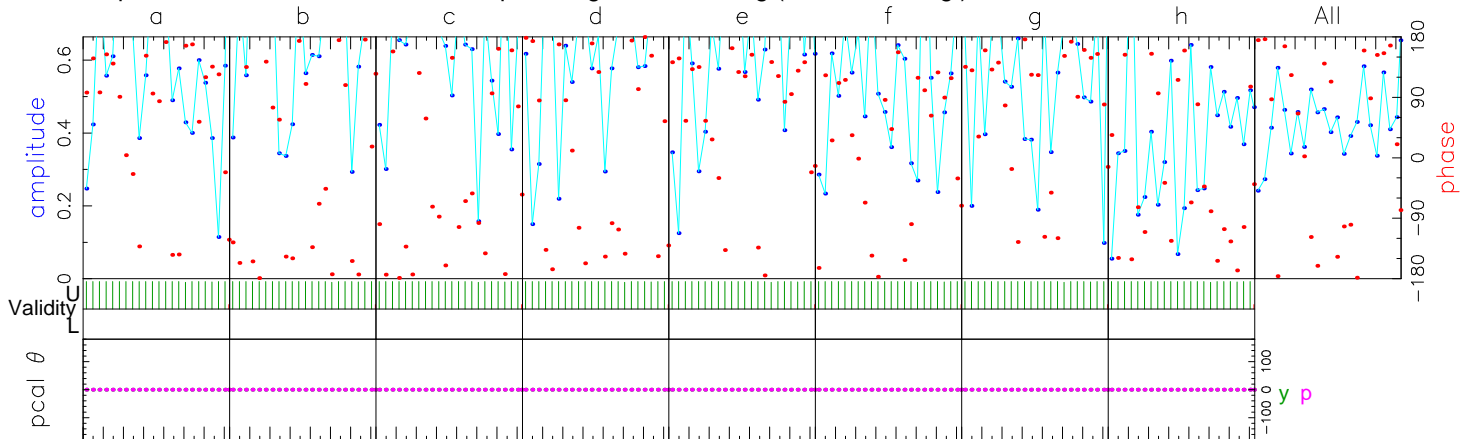
delay rate (ns/s)



singleband delay (μ 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
123.0	176.4	-159.4	-172.7	126.7	102.7	149.8	-133.3		Phase	162.1
0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2		Ampl.	0.3
260.5	258.4	258.0	258.4	258.0	258.0	259.2	260.3		Sbd box	258.6
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		APs used	
y 1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
p 0	0	0	0	0	0	0	0		PC freqs	
y:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
y:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
y 1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000			
y 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)	-8.99157305965E+03		Apriori delay (usec)	-8.99158651133E+03		Resid mbdelay (usec)	-2.17332E-03		+/-	8.8E-05
Sband delay (usec)	-8.99158037008E+03		Apriori clock (usec)	-4.8298225E+00		Resid sbdelay (usec)	6.14125E-03		+/-	7.0E-04
Phase delay (usec)	-8.99158650610E+03		Apriori clockrate (us/s)	1.2000000E-07		Resid phdelay (usec)	5.22569E-06		+/-	3.0E-07
Delay rate (us/s)	1.20949344871E+00		Apriori rate (us/s)	1.20949352601E+00		Resid rate (us/s)	-7.72951E-08		+/-	1.2E-09
Total phase (deg)		131.2	Apriori accel (us/s/s)	5.18124608382E-05		Resid phase (deg)	162.1		+/-	9.2

ph/seg (deg) 68.4 22.2 Search (2048X32) 0.216 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 101.0 38.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.5 13.1 Inc. seg. avg. 0.397 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.3 22.8 Inc. frq. avg. 0.264 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -10927.426 5386.626 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yp.W.272.1X1KZS simultaneous interpolator

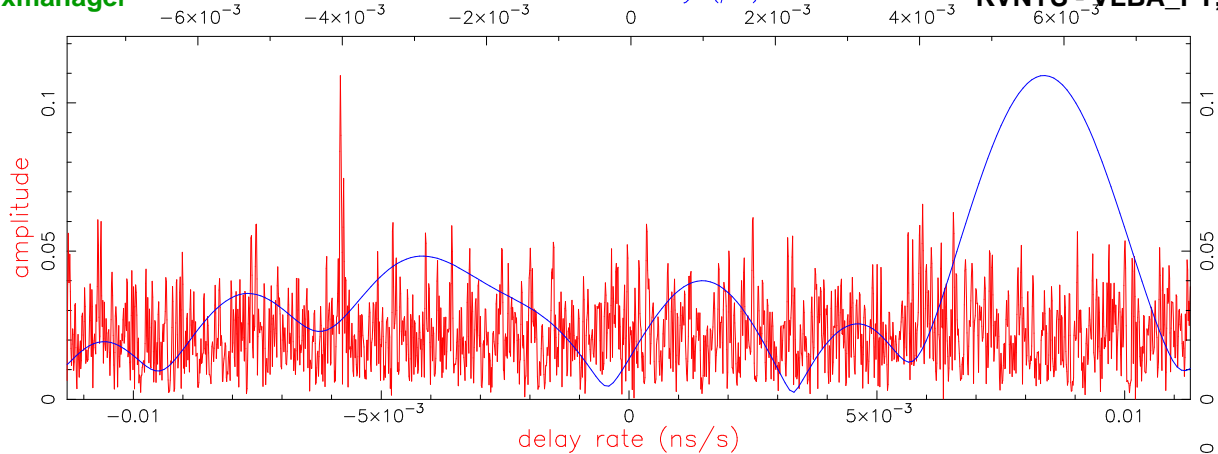
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yp

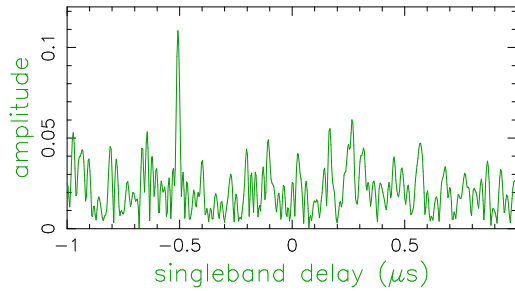
KVNYS - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

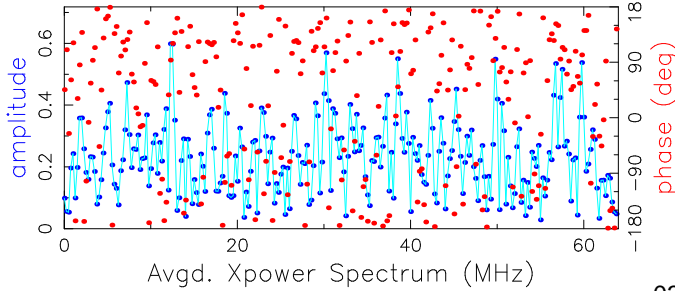


Fringe quality 0

SNR 6.1
 Int time 418.918
 Amp 0.122
 Phase -17.3
 PFD 2.1e-01
 Delays (us)
 SBD -0.507155
 MBD 0.005722
 Fringe rate (Hz)
 -0.502274
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

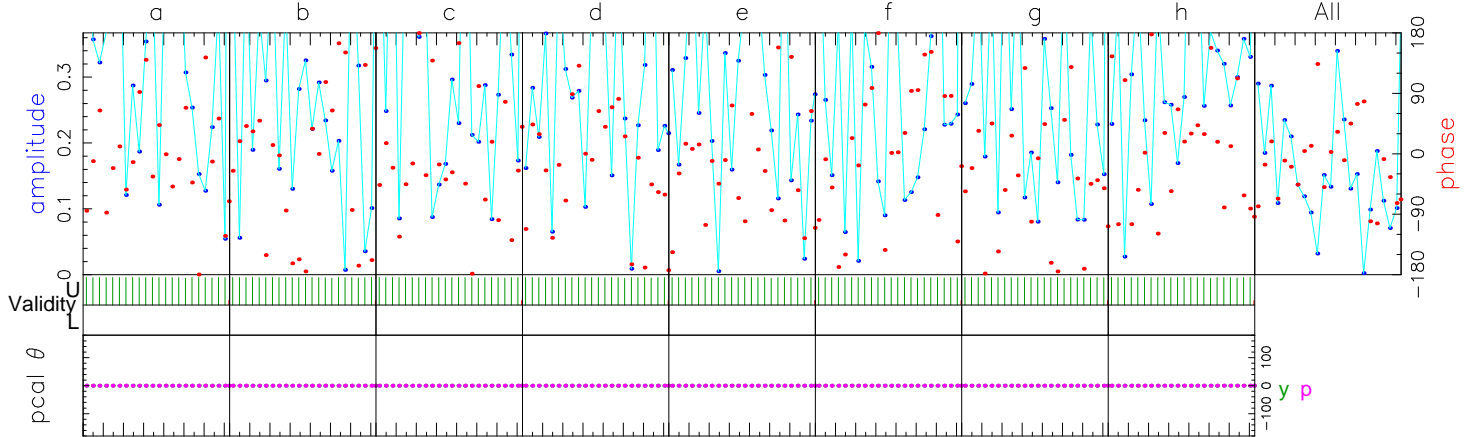


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133142
 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
	-13.6	-10.2	-36.6	7.8	-32.7	1.3	-14.2	-18.1		-17.3
	0.2	0.0	0.2	0.1	0.1	0.0	0.1	0.1		0.1
	126.6	205.6	127.8	489.5	322.8	272.6	293.9	402.5	Sbd box	127.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	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)	-8.99209641402E+03		Apriori delay (usec)		-8.99158651133E+03		Resid mbdelay (usec)		5.72230E-03	+/- 1.8E-04
Sband delay (usec)	-8.99209366658E+03		Apriori clock (usec)		-4.8298225E+00		Resid sbdelay (usec)		-5.07155E-01	+/- 1.4E-03
Phase delay (usec)	-8.99158651189E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-5.56777E-07	+/- 6.0E-07
Delay rate (us/s)	1.20948769511E+00		Apriori rate (us/s)		1.20949352601E+00		Resid rate (us/s)		-5.83090E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		5.18124608382E-05		Resid phase (deg)		-17.3	+/- 18.7

	RMS	Theor.	Amplitude	0.122 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	58.5	44.8	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	88.3	78.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	16.6	26.4	Inc. seg. avg.	0.134	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	48.4	46.1	Inc. frq. avg.	0.114	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

y: az 44.6 el 26.5 pa -62.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -10927.426 5386.626 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yp.W.289.1X1KZS

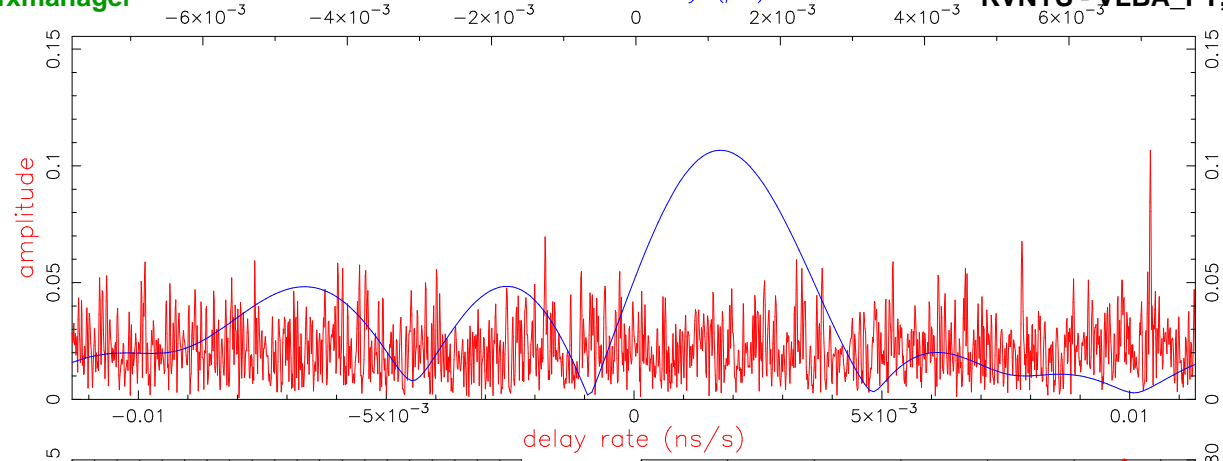
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

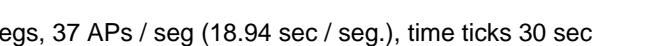
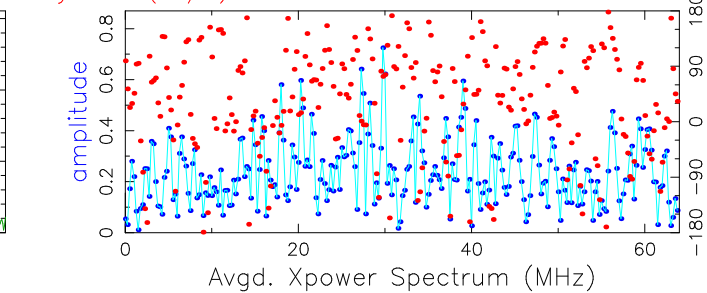
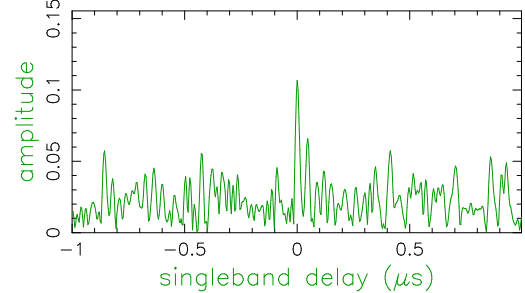
NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol RL

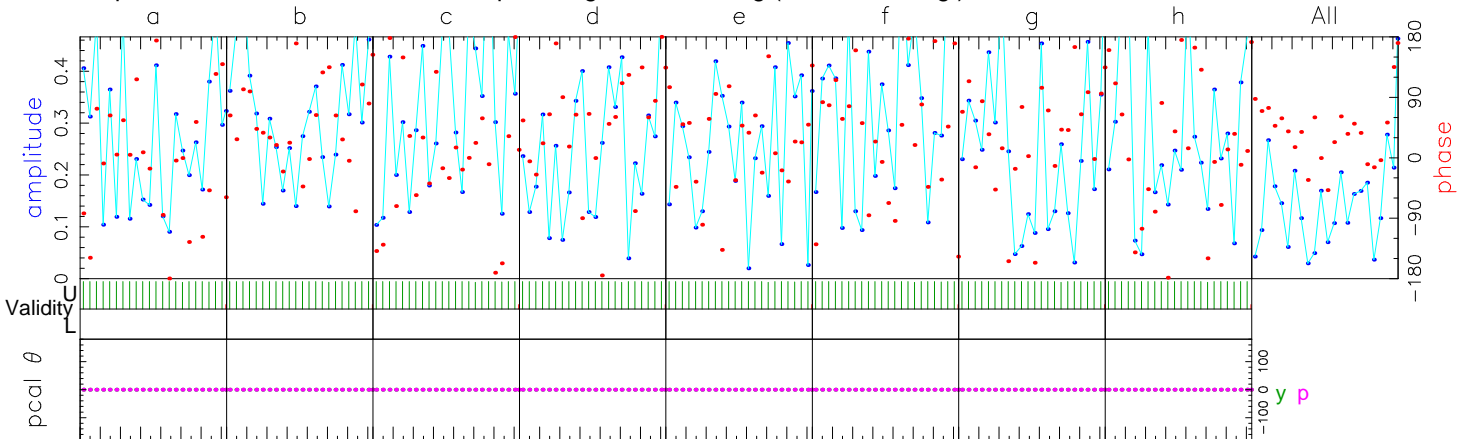
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 418.918
 Amp 0.155
 Phase 43.8
 PFD 4.5e-01
 Delays (us)
 SBD 0.000200
 MBD 0.001169
 Fringe rate (Hz) 0.898330
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133145
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

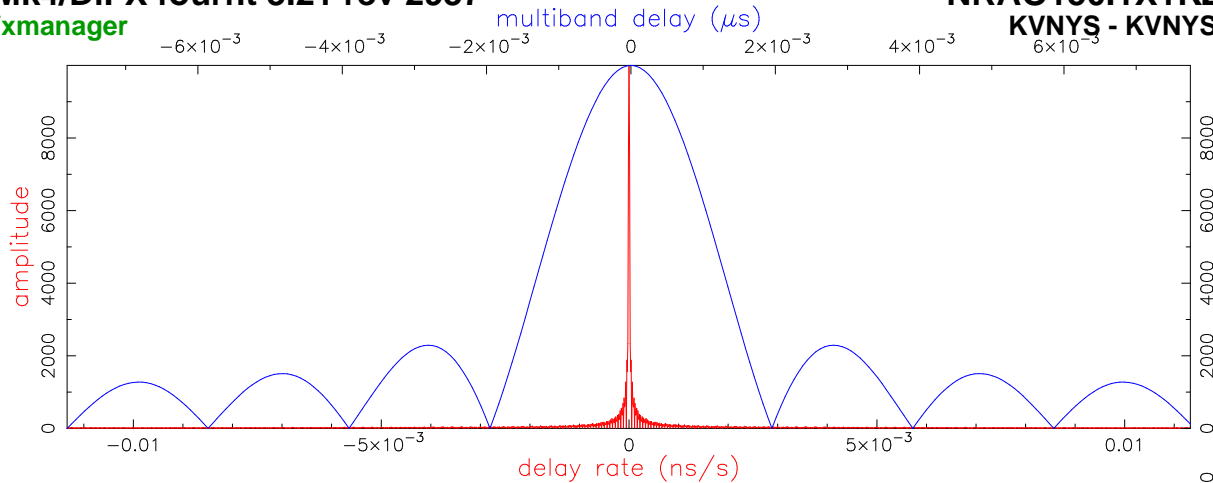


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

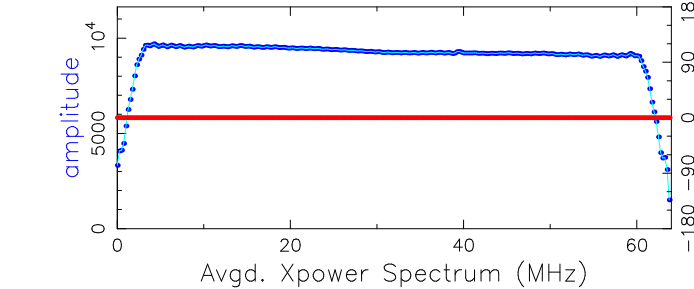
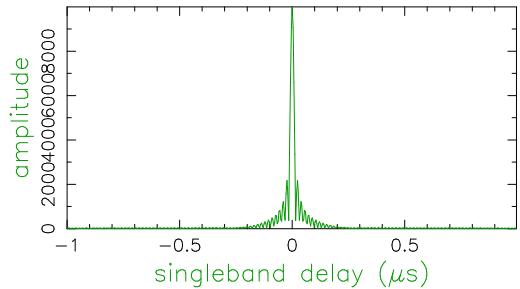


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	0	0	0	0	0	0	0	0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.99158534258E+03				-8.99158651133E+03				1.16875E-03	+/- 1.8E-04
Sband delay (usec)	-8.99158631158E+03				-4.8298225E+00				1.99750E-04	+/- 1.4E-03
Phase delay (usec)	-8.99158650992E+03				1.2000000E-07				1.41128E-06	+/- 6.2E-07
Delay rate (us/s)	1.20950395472E+00				1.20949352601E+00				1.04287E-05	+/- 2.6E-09
Total phase (deg)			12.9		5.18124608382E-05				43.8	+/- 19.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

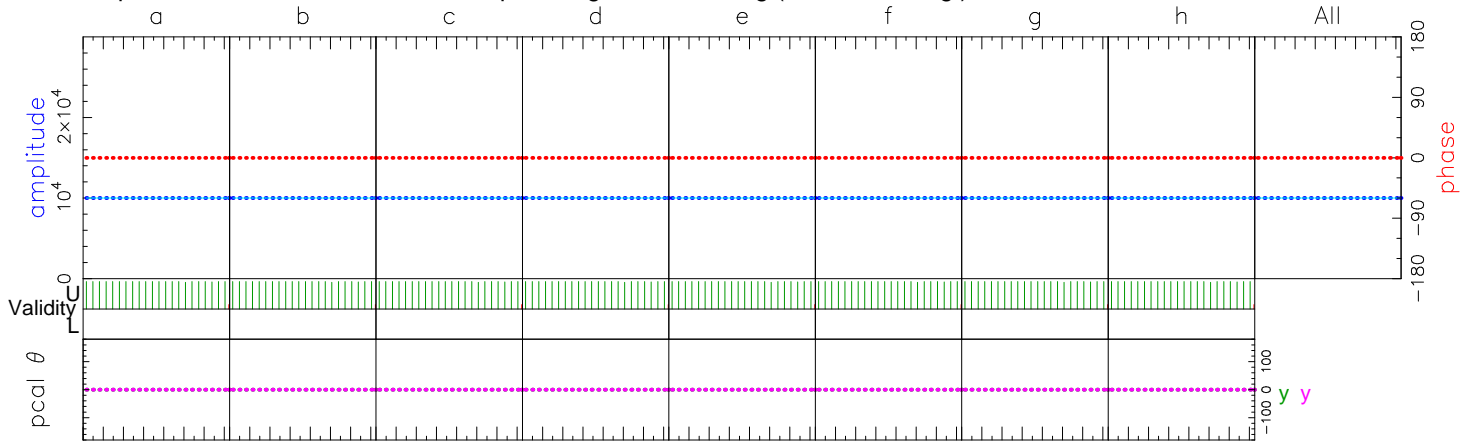
ph/seg (deg) 43.3 46.0 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 77.9 80.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.5 27.1 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.0 47.3 Inc. frq. avg. 0.152 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -10927.426 5386.626 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/No0113/yp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yp.W.305.1X1KZS simultaneous interpolator



Fringe quality 9
SNR 559721.5
Int time 418.937
Amp 9999.998
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Yr:day 16383
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133135
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	10000.0	10000.0
y	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0
	RMS	Theor.	Amplitude	9999.998 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (2048X32)	9999.998	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	0.0	0.0	Inc. frq. avg.	9999.998	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 44.6 el 26.5 pa -62.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

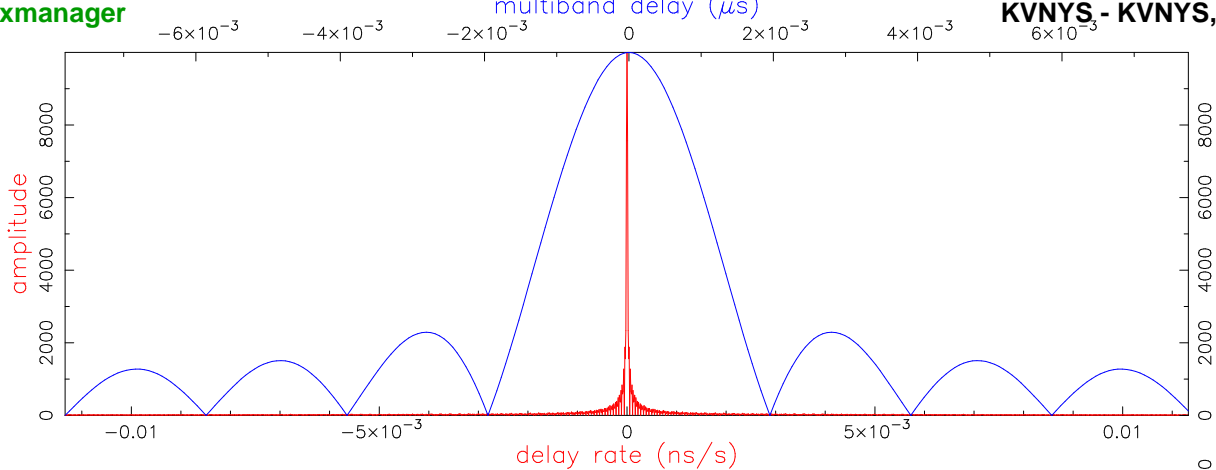
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yy.W.256.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

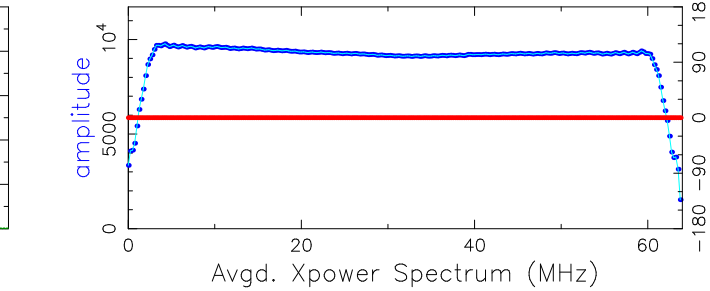
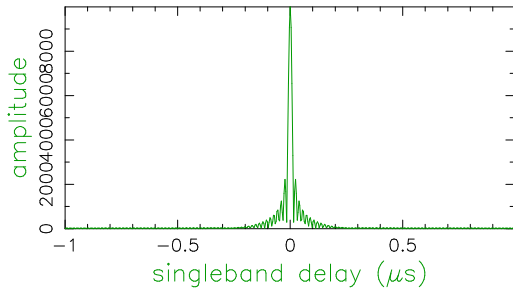
NRAO150.1X1KZS, No0113, yy

KVNYS - KVNYS, fgroup W, pol RR



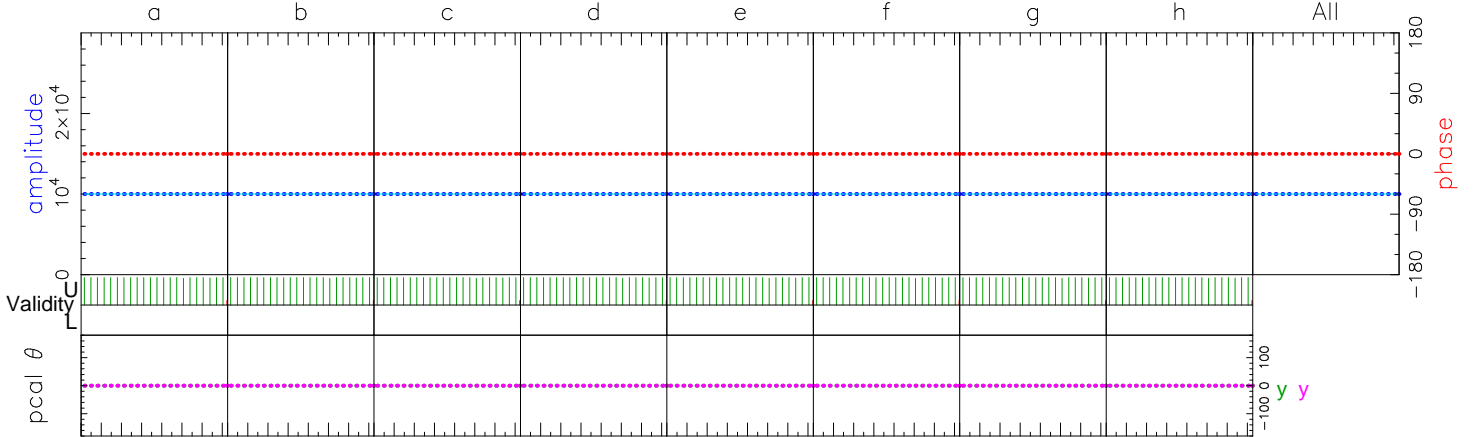
Fringe quality 9

SNR 559721.5
 Int time 418.937
 Amp 9999.998
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133138
 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	820.0	10000.0
y	1000	1000	1000	1000	1000	1000	1000	1000	1000.0	10000.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0.0	0.0
y	1000	1000	1000	1000	1000	1000	1000	1000	1000.0	10000.0
y	1000	1000	1000	1000	1000	1000	1000	1000	1000.0	10000.0
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.998 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 9999.998 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 y: az 44.6 el 26.5 pa -62.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yy.W.270.1X1KZS simultaneous interpolator

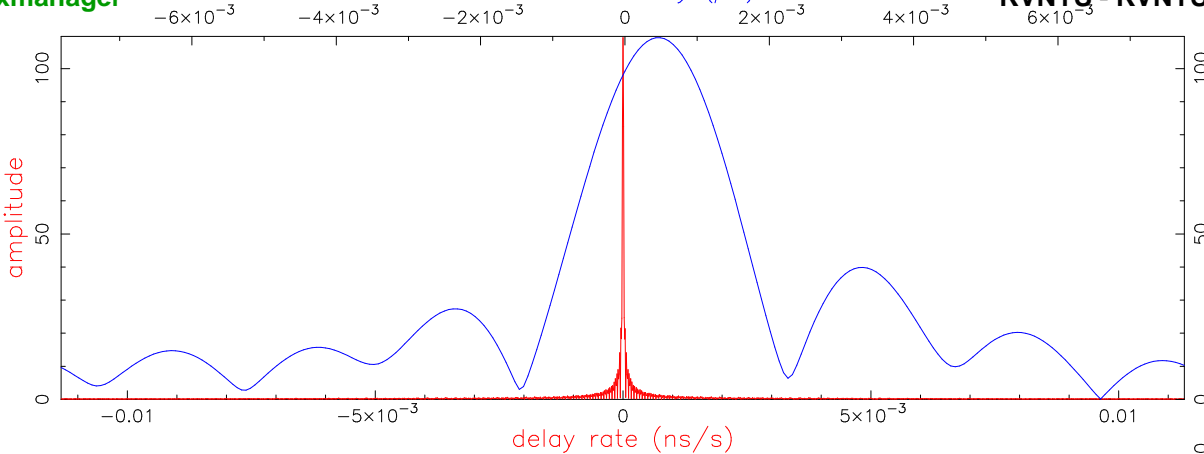
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yy

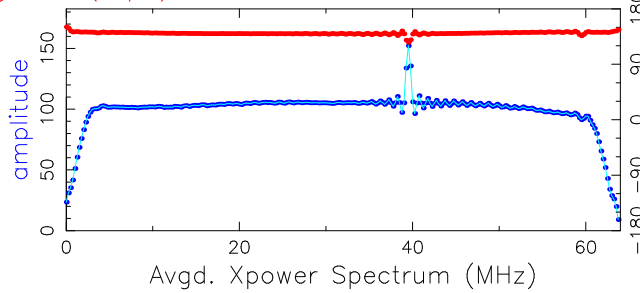
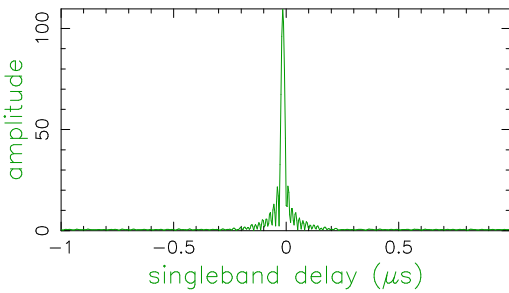
KVNY5 - KVNY5, fgroup W, pol LR

multiband delay (μ s)



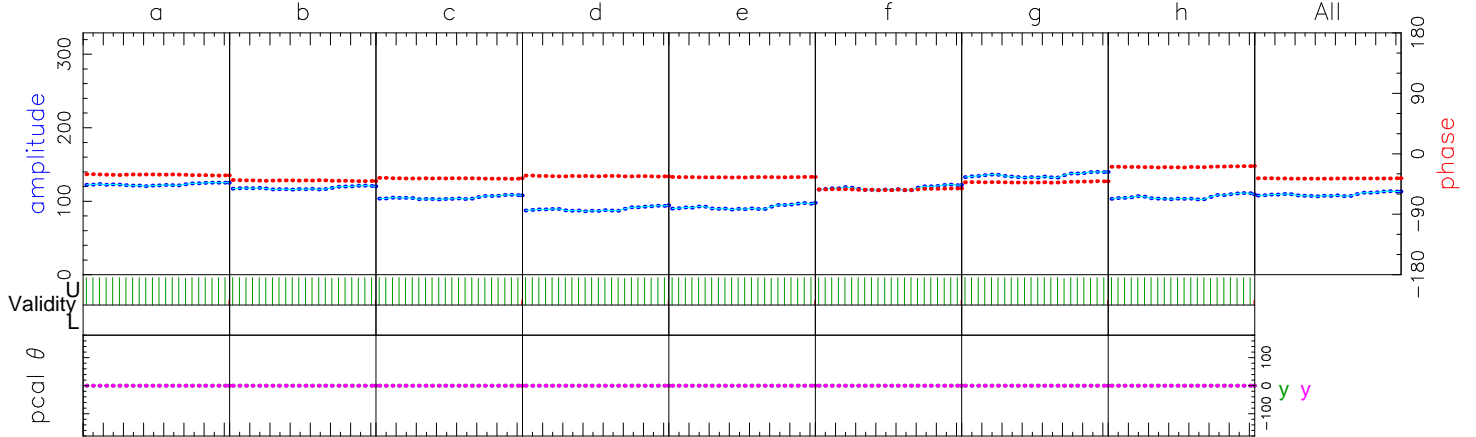
Fringe quality 9

SNR 6142.0
 Int time 418.937
 Amp 109.734
 Phase -36.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.014896
 MBD 0.000462
 Fringe rate (Hz)
 0.000004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133141
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

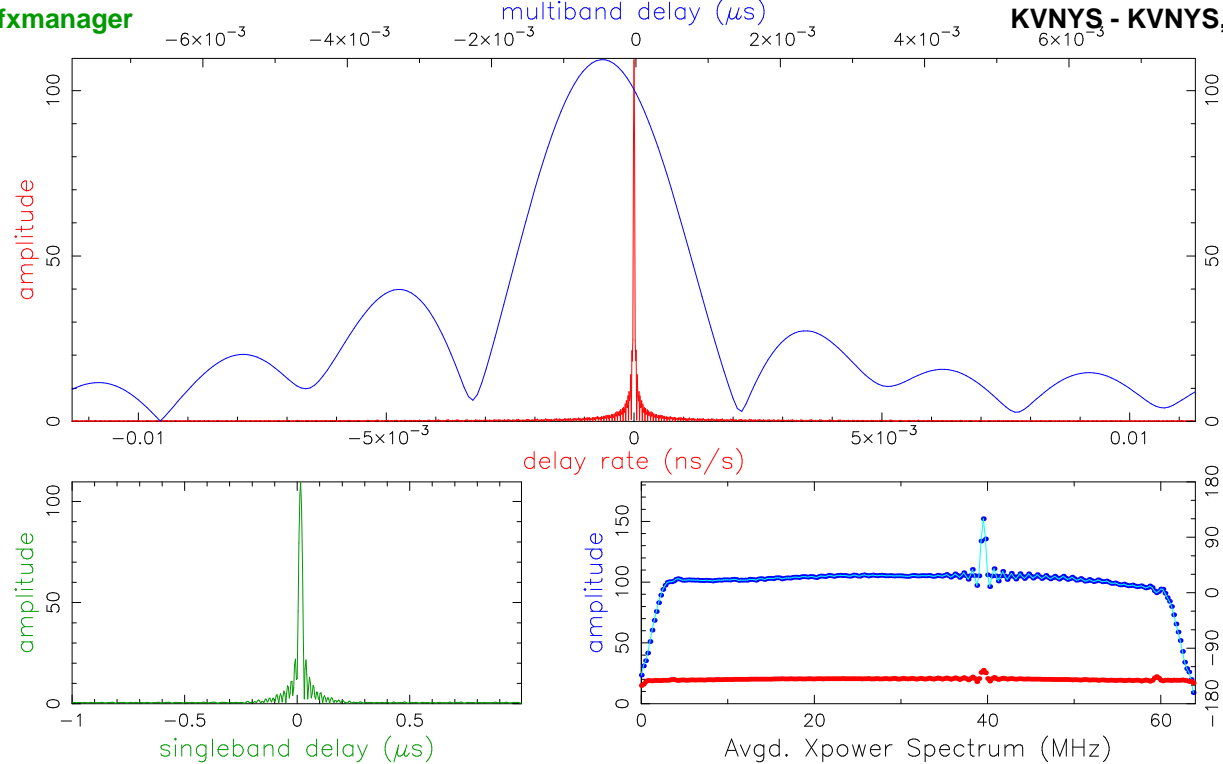
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All				
	-31.2	-39.9	-36.6	-33.2	-34.8	-52.9	-42.1	-19.5	Phase	-36.8				
	122.9	117.9	104.9	89.3	92.1	117.9	135.3	105.8	Ampl.	110.8				
	253.1	253.0	253.2	253.2	253.0	253.2	253.3	253.6	Sbd box	253.2				
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used					
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids					
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Chan ids					
									Tracks					
Group delay (usec)(sbd)	-1.51631250000E-02								Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	4.61875E-04	+/-	1.8E-07
Sband delay (usec)	-1.48957500000E-02								Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-1.48958E-02	+/-	1.4E-06
Phase delay (usec)	-1.18512507591E-06								Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.18513E-06	+/-	6.0E-10
Delay rate (us/s)	4.25134571751E-11								Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	4.25135E-11	+/-	2.5E-12
Total phase (deg)			-36.8						Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-36.8	+/-	0.0

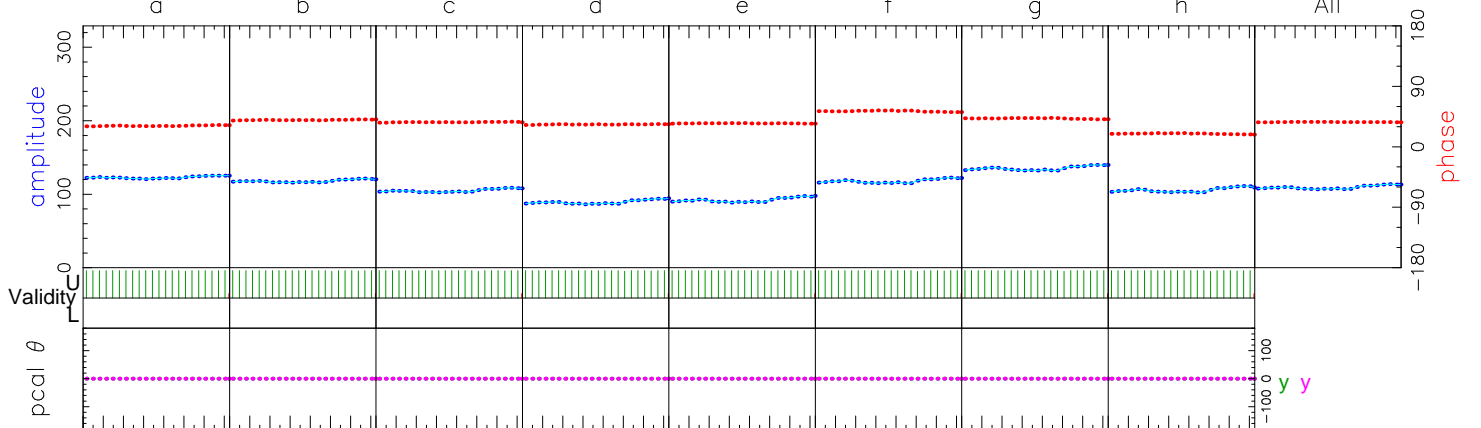
RMS Theor. Amplitude 109.734 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.0 Search (2048X32) 109.350 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 2.1 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 10.4 0.0 Inc. seg. avg. 109.382 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 13.4 0.0 Inc. frq. avg. 110.756 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 y: az 44.6 el 26.5 pa -62.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yy.W.287.1X1KZS



Fringe quality 9
SNR 6142.0
Int time 418.937
Amp 109.734
Phase 36.8
PFD 0.0e+00
Delays (us)
SBD 0.014896
MBD -0.000462
Fringe rate (Hz)
-0.000004
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133145
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
31.2	39.9	36.6	33.2	34.8	52.9	42.1	19.5	19.5	Phase	36.8
122.9	117.9	104.9	89.3	92.1	117.9	135.3	105.8	105.8	Ampl.	110.8
260.9	261.0	260.8	260.8	261.0	260.8	260.7	260.4	260.4	Sbd box	260.8
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
y 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y 1000	1000	1000	1000	1000	1000	1000	1000	1000		
y W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.51631250000E-02		Apriori delay (usec)	0.00000000000E+00		Resid mbdelay (usec)	-4.61875E-04	+/-	1.8E-07	
Sband delay (usec)	1.48957500000E-02		Apriori clock (usec)	0.0000000E+00		Resid sbdelay (usec)	1.48958E-02	+/-	1.4E-06	
Phase delay (usec)	1.18512507600E-06		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	1.18513E-06	+/-	6.0E-10	
Delay rate (us/s)	-4.25134571751E-11		Apriori rate (us/s)	0.00000000000E+00		Resid rate (us/s)	-4.25135E-11	+/-	2.5E-12	
Total phase (deg)		36.8	Apriori accel (us/s/s)	0.00000000000E+00		Resid phase (deg)	36.8	+/-	0.0	

ph/seg (deg) 0.2 0.0 Theor. Amplitude 109.734 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 2.1 0.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 10.4 0.0 Inc. seg. avg. 109.382 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 13.4 0.0 Inc. frq. avg. 110.756 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
y: az 44.6 el 26.5 pa -62.9 y: az 44.6 el 26.5 pa -62.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/yy..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/yy.W.302.1X1KZS