

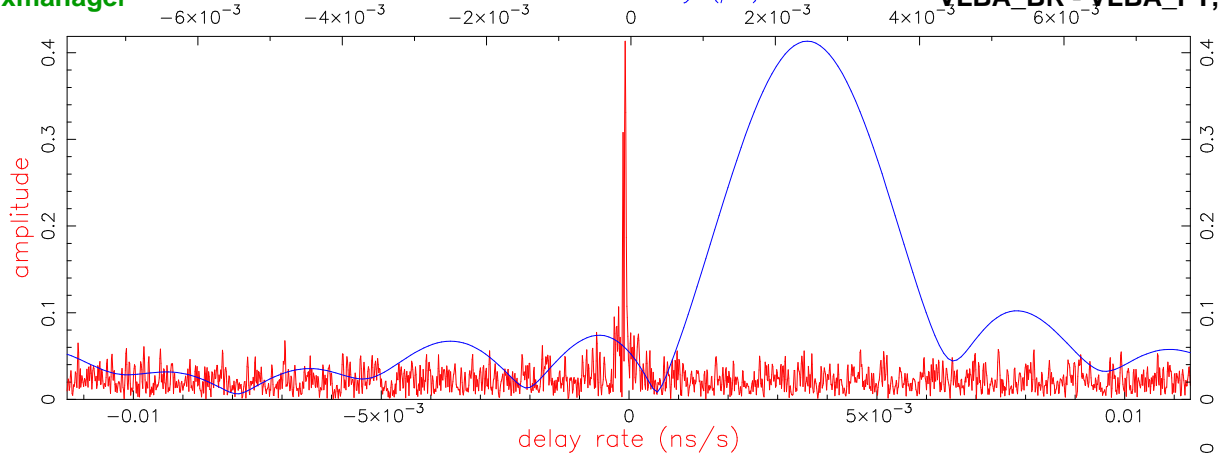
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, bp

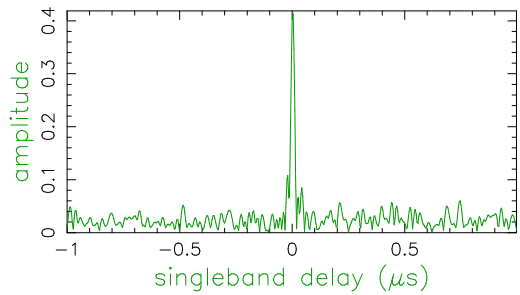
VLBA_BR - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

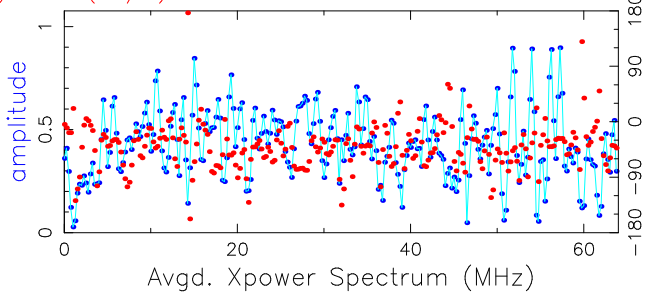


Fringe quality 9

SNR 23.5
 Int time 419.819
 Amp 0.419
 Phase -42.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.002427
 MBD 0.002417
 Fringe rate (Hz)
 -0.007004
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

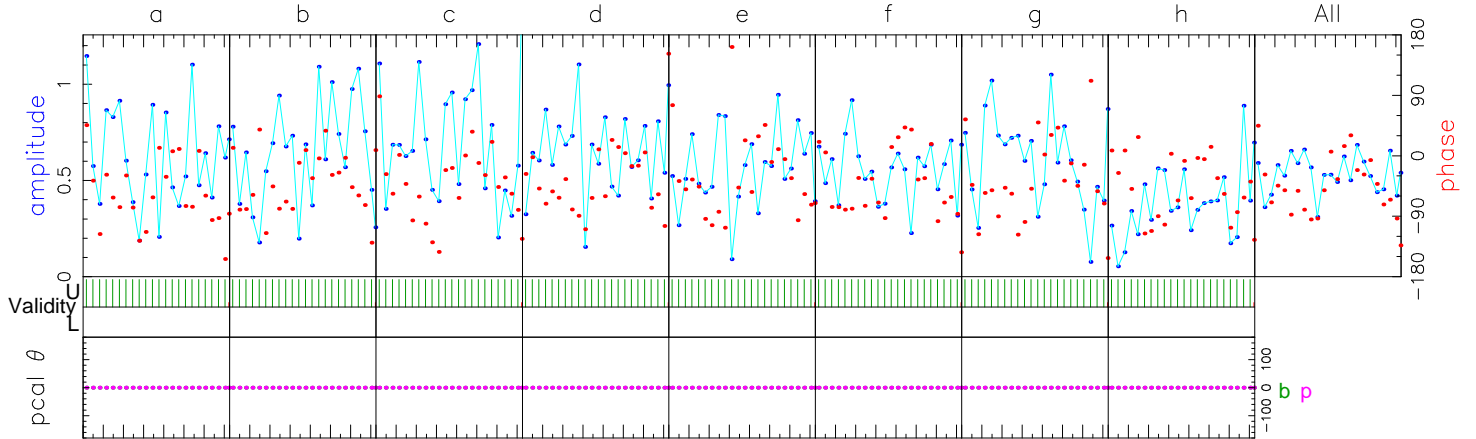


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133045
 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
	-55.2	-43.1	-31.1	-43.2	-43.1	-40.6	-39.3	-49.8	Phase	-42.9
	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.3	Ampl.	0.4
	258.1	257.7	258.0	257.7	257.7	257.4	257.4	256.5	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.00559056112E+03		Apriori delay (usec)		2.00558814428E+03		Resid mbdelay (usec)		2.41684E-03	+/- 4.6E-05
Sband delay (usec)	2.00559057103E+03		Apriori clock (usec)		-8.5208035E+00		Resid sbdelay (usec)		2.42675E-03	+/- 3.7E-04
Phase delay (usec)	2.00558814289E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		-1.38394E-06	+/- 1.6E-07
Delay rate (us/s)	2.00783066887E-01		Apriori rate (us/s)		2.00783148197E-01		Resid rate (us/s)		-8.13098E-08	+/- 6.5E-10
Total phase (deg)	226.4		Apriori accel (us/s/s)		5.16661540620E-06		Resid phase (deg)		-42.9	+/- 4.9

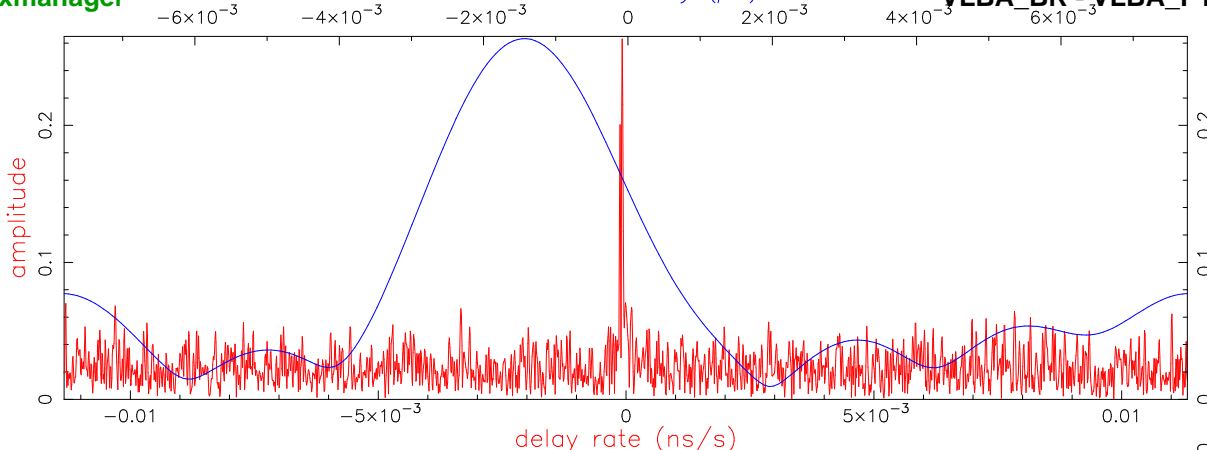
	RMS	Theor.	Amplitude	0.419 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	40.2	11.7	Search (2048X32)	0.400	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	35.9	20.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	7.7	6.9	Inc. seg. avg.	0.522	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	16.4	12.1	Inc. frq. avg.	0.413	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 290.0 el 76.6 pa 94.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1822.254 1527.218 simultaneous interpolator

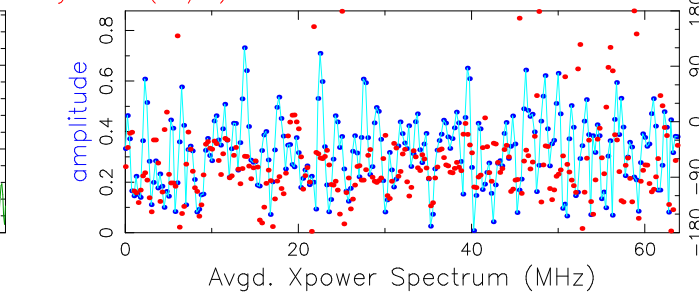
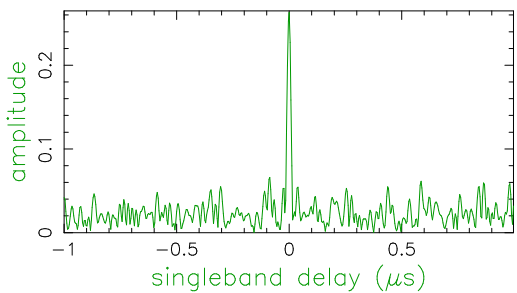
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/bp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/bp.W.23.1X1KZS

multiband delay (μ s)

Fringe quality 7

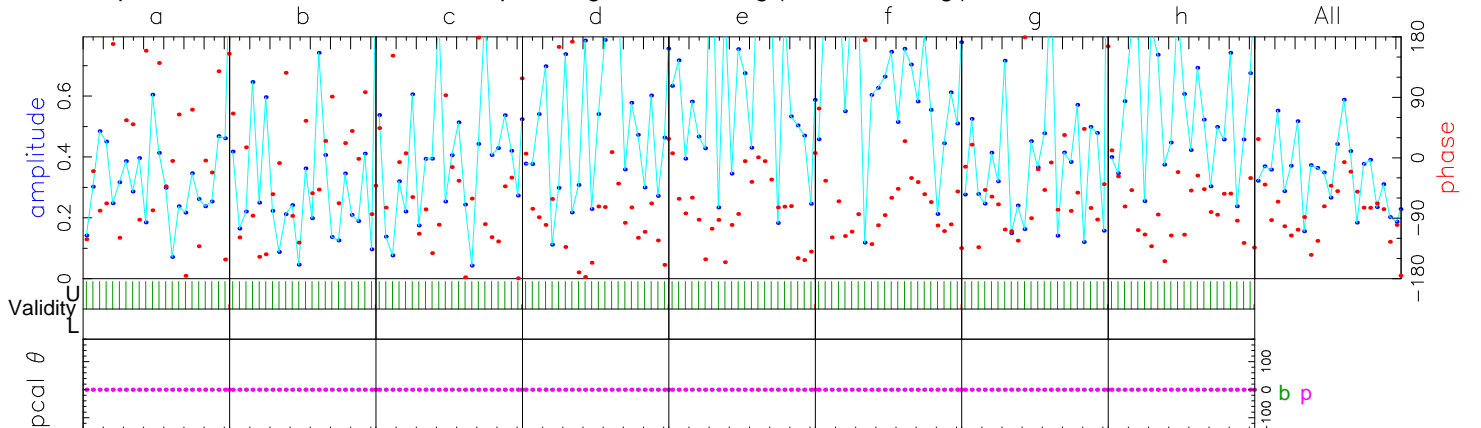


SNR 14.8
 Int time 419.819
 Amp 0.265
 Phase -72.1
 PFD 4.7e-41
 Delays (us)
 SBD -0.001109
 MBD -0.001501
 Fringe rate (Hz)
 -0.006914
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133042
 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
	-97.1	-27.1	-79.0	-92.0	-68.8	-73.1	-56.4	-71.9	Phase	-72.1
	0.1	0.1	0.2	0.3	0.4	0.5	0.3	0.4	Ampl.	0.3
	81.7	466.8	256.7	256.5	256.9	256.6	256.3	257.2	Sbd box	256.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.00558664302E+03		Apriori delay (usec)		2.00558814428E+03		Resid mbdelay (usec)		-1.50125E-03	+/- 7.3E-05
Sband delay (usec)	2.00558703503E+03		Apriori clock (usec)		-8.5208035E+00		Resid sbdelay (usec)		-1.10925E-03	+/- 5.8E-04
Phase delay (usec)	2.00558814195E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		-2.32630E-06	+/- 2.5E-07
Delay rate (us/s)	2.00783067937E-01		Apriori rate (us/s)		2.00783148197E-01		Resid rate (us/s)		-8.02604E-08	+/- 1.0E-09
Total phase (deg)	197.1		Apriori accel (us/s/s)		5.16661540620E-06		Resid phase (deg)		-72.1	+/- 7.7

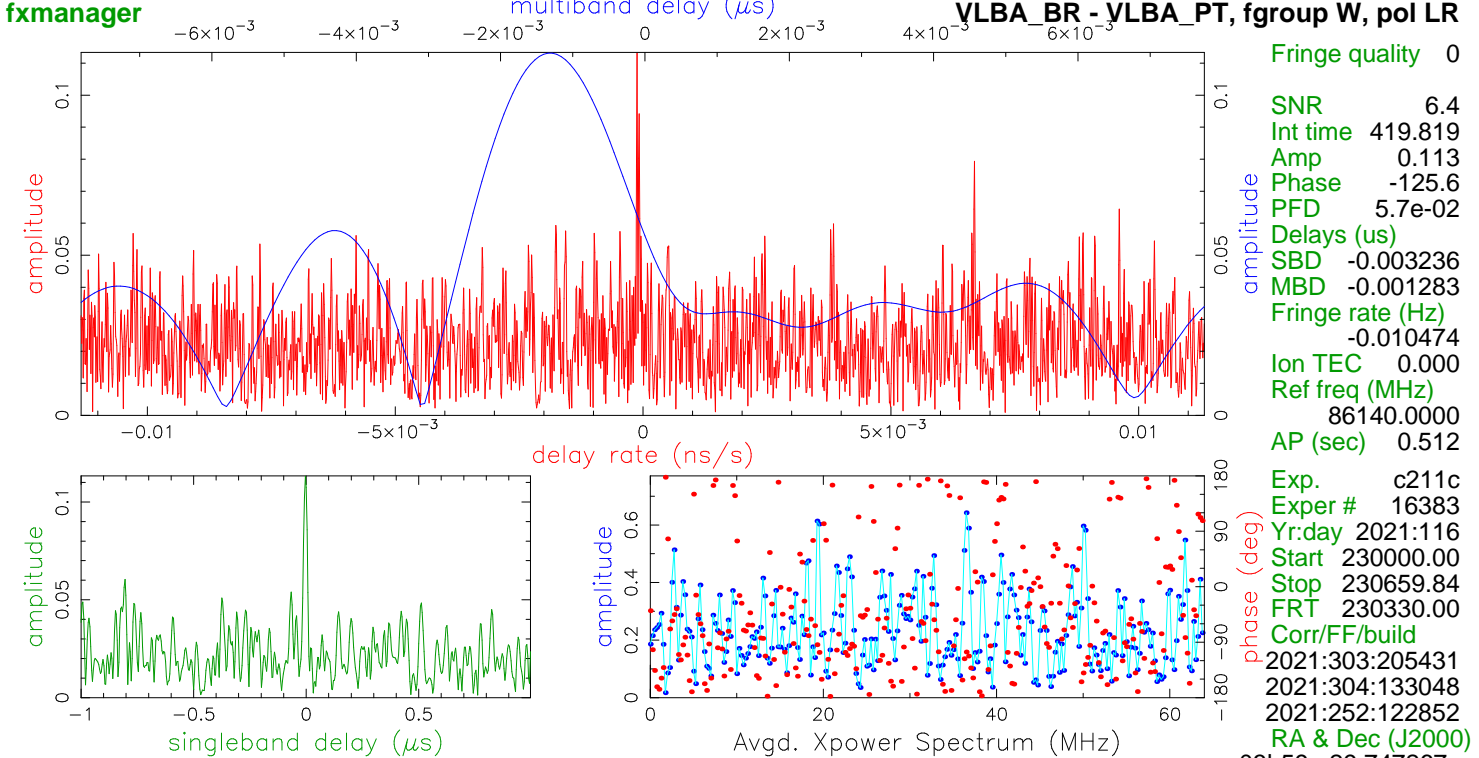
ph/seg (deg) 41.3 18.5 Search (2048X32) 0.259 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.5 32.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.6 10.9 Inc. seg. avg. 0.329 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 54.4 19.1 Inc. frq. avg. 0.266 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 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1822.254 1527.218 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/bp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/bp.W.4.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, bp

VLBA_BR - VLBA_PT, fgroup W, pol LR



Fringe quality 0

SNR 6.4

Int time 419.819

Amp 0.113

Phase -125.6

PFD 5.7e-02

Delays (us)

SBD -0.003236

MBD -0.001283

Fringe rate (Hz)

-0.010474

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

2021:304:133048

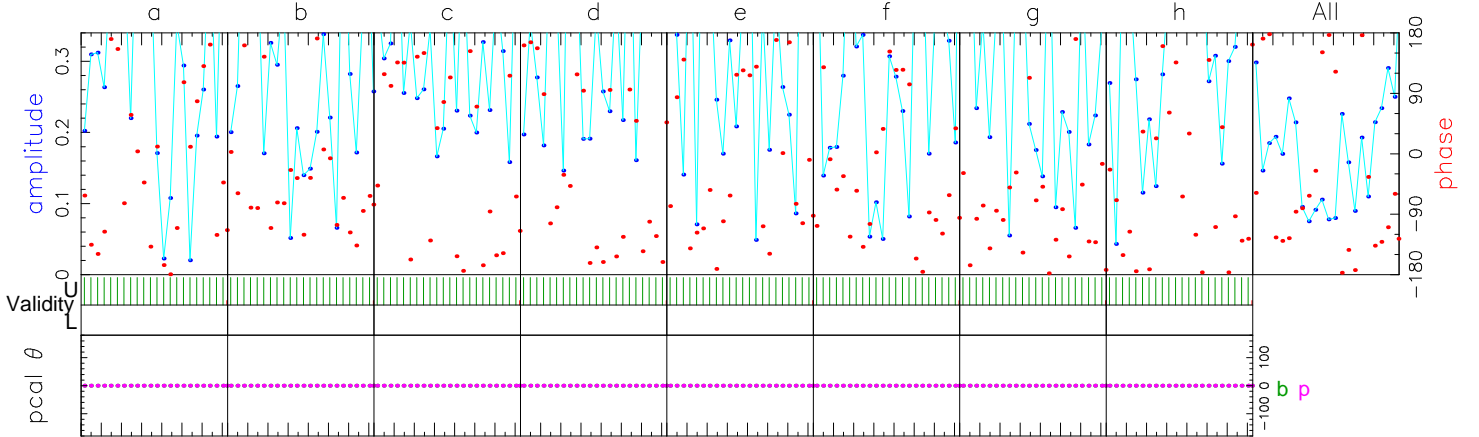
2021:252:122852

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
	-119.5	-79.3	171.5	-153.8	-123.3	-120.4	-96.7	-144.9	Phase	-125.6
	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	38.6	255.1	10.0	311.2	404.6	247.0	257.0	160.8	Sbd box	256.2
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	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.00558686105E+03		Apriori delay (usec)		2.00558814428E+03		Resid mbdelay (usec)		-1.28323E-03	+/- 1.7E-04
Sband delay (usec)	2.00558490853E+03		Apriori clock (usec)		-8.5208035E+00		Resid sbdelay (usec)		-3.23575E-03	+/- 1.4E-03
Phase delay (usec)	2.00558814023E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		-4.05023E-06	+/- 5.8E-07
Delay rate (us/s)	2.00783026605E-01		Apriori rate (us/s)		2.00783148197E-01		Resid rate (us/s)		-1.21592E-07	+/- 2.4E-09
Total phase (deg)	143.7		Apriori accel (us/s/s)		5.16661540620E-06		Resid phase (deg)		-125.6	+/- 18.0

	RMS	Theor.	Amplitude	0.113 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.7	43.3	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	81.9	75.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.9	25.5	Inc. seg. avg.	0.134	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.0	44.5	Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 290.0 el 76.6 pa 94.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1822.254 1527.218 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/bp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/bp.W.42.1X1KZS

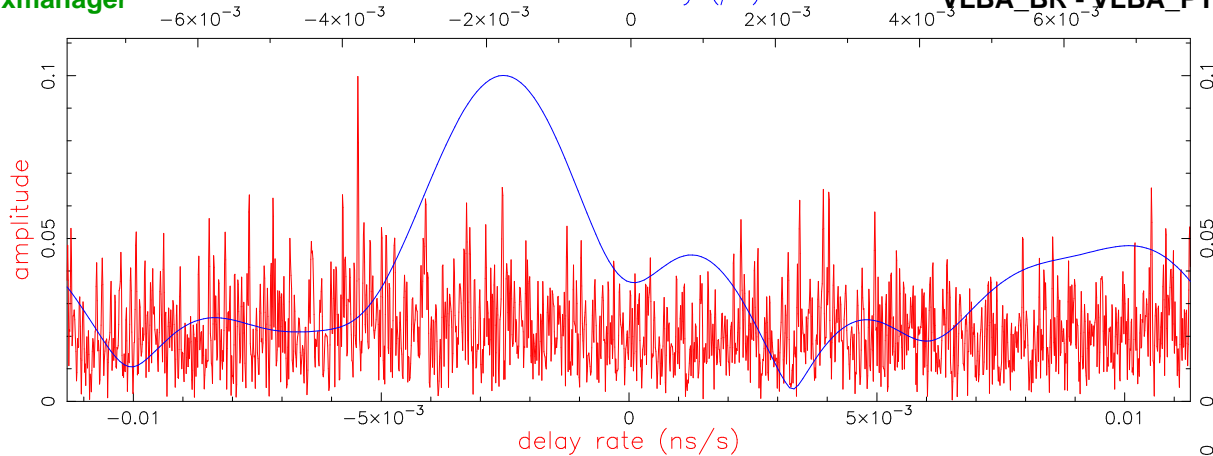
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, bp

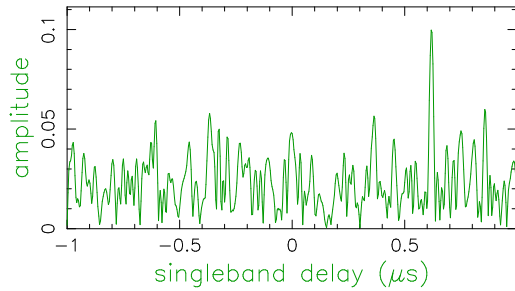
VLBA_BR - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

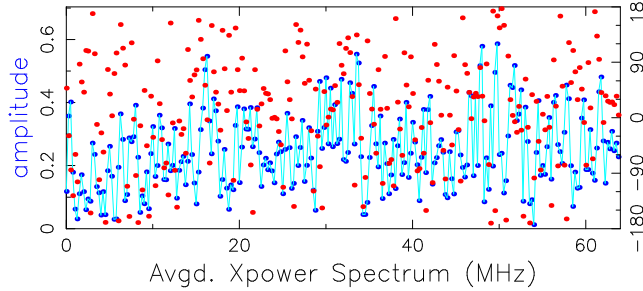


Fringe quality 0

SNR 5.7
 Int time 419.819
 Amp 0.111
 Phase -16.1
 PFD 9.8e-01
 Delays (us)
 SBD 0.618806
 MBD -0.001681
 Fringe rate (Hz)
 -0.472011
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

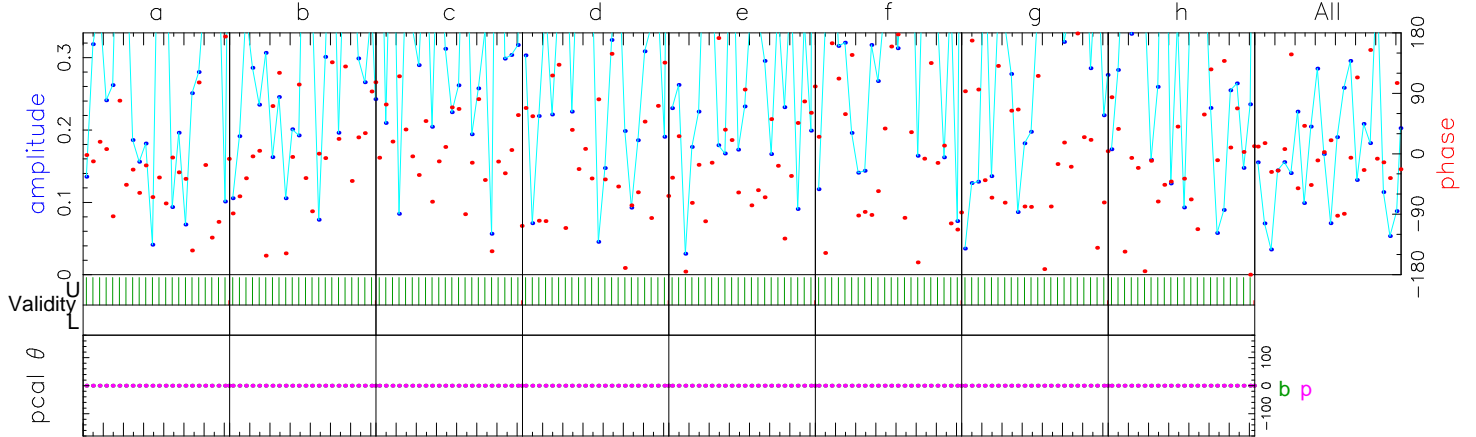


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133052
 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



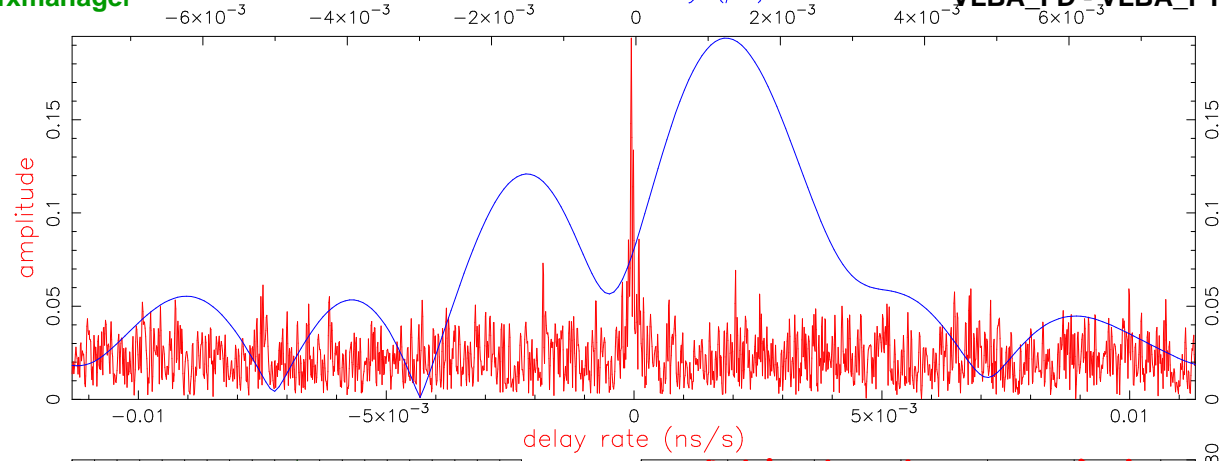
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-35.2	7.4	2.6	-27.8	-19.1	-131.3	-37.6	-18.1	Phase	-16.1
	0.2	0.1	0.3	0.1	0.1	0.0	0.1	0.1	Ampl.	0.1
	323.8	372.5	415.8	259.3	468.2	216.0	231.9	478.4	Sbd box	415.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.00621146295E+03		Apriori delay (usec)		2.00558814428E+03		Resid mbdelay (usec)		-1.68132E-03	+/- 1.9E-04
Sband delay (usec)	2.00620694978E+03		Apriori clock (usec)		-8.5208035E+00		Resid sbdelay (usec)		6.18806E-01	+/- 1.5E-03
Phase delay (usec)	2.00558814376E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		-5.20616E-07	+/- 6.5E-07
Delay rate (us/s)	2.00777668623E-01		Apriori rate (us/s)		2.00783148197E-01		Resid rate (us/s)		-5.47957E-06	+/- 2.7E-09
Total phase (deg)	253.1		Apriori accel (us/s/s)		5.16661540620E-06		Resid phase (deg)		-16.1	+/- 20.2

	RMS	Theor.	Amplitude	0.111 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	70.2	48.5	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	109.7	84.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	50.2	28.6	Inc. seg. avg.	0.136	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	66.0	50.0	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

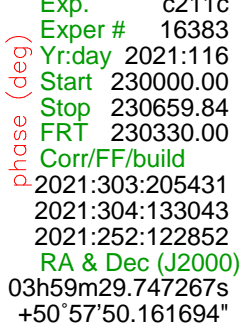
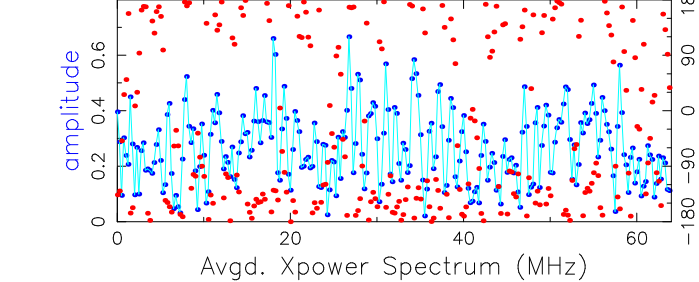
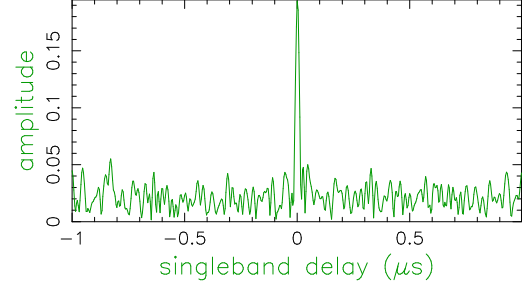
b: az 290.0 el 76.6 pa 94.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1822.254 1527.218 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/bp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/bp.W.63.1X1KZS

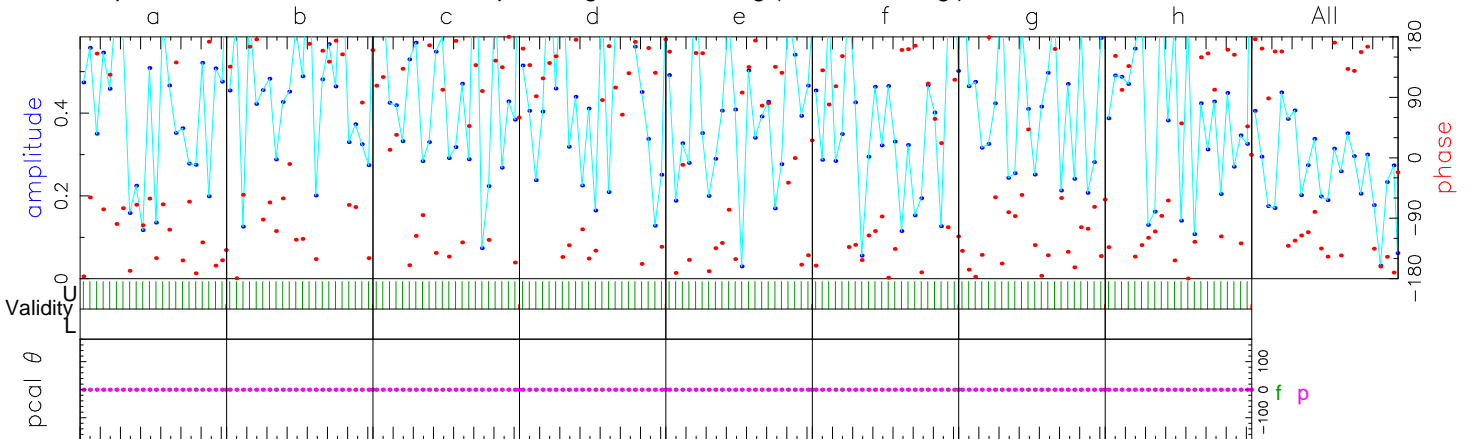
multiband delay (μ s)



Fringe quality 9
SNR 10.9
Int time 419.821
Amp 0.195
Phase -168.0
PFD 4.6e-19
Delays (us)
SBD 0.000963
MBD 0.001280
Fringe rate (Hz) -0.004771
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"

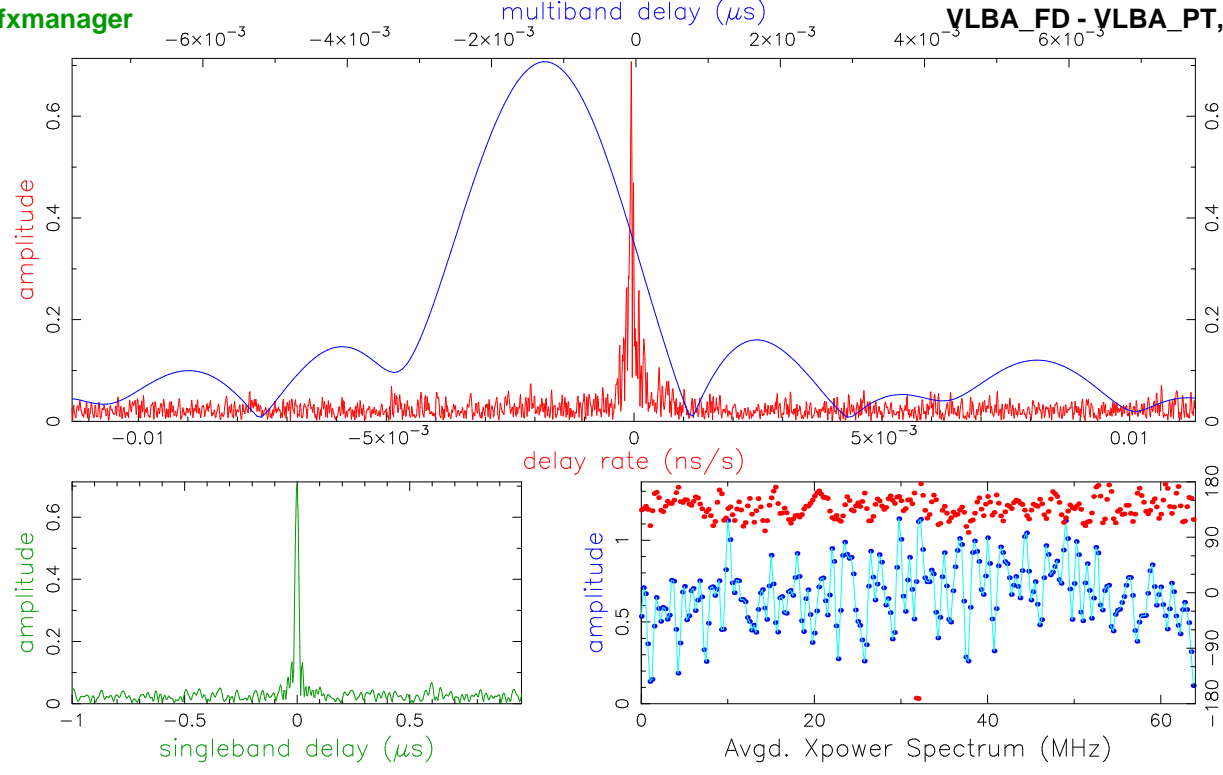


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-119.6	-161.5	157.4	153.5	-177.0	179.6	-134.3	-169.1	Phase	-168.0
	0.2	0.2	0.2	0.3	0.1	0.2	0.3	0.2	Ampl.	0.2
	256.7	256.4	256.3	257.5	260.1	257.2	257.3	256.8	Sbd box	257.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	-9.79961125226E+02		Apriori delay (usec)		-9.79962405116E+02		Resid mbdelay (usec)		1.27989E-03	+/- 9.9E-05
Sband delay (usec)	-9.79961441866E+02		Apriori clock (usec)		4.7287693E+00		Resid sbdelay (usec)		9.63250E-04	+/- 7.9E-04
Phase delay (usec)	-9.79962410534E+02		Apriori clockrate (us/s)		1.8000000E-07		Resid phdelay (usec)		-5.41867E-06	+/- 3.4E-07
Delay rate (us/s)	-6.82799525085E-02		Apriori rate (us/s)		-6.82798971248E-02		Resid rate (us/s)		-5.53837E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.00262461053E-07		Resid phase (deg)		-168.0	+/- 10.5

ph/seg (deg) 46.6 25.2 Search (2048X32) 0.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 62.7 43.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 32.8 14.9 Inc. seg. avg. 0.245 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 31.3 25.9 Inc. frq. avg. 0.217 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 318.0 el 56.5 pa 112.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 623.283 -258.101 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fp.W.15.1X1KZS

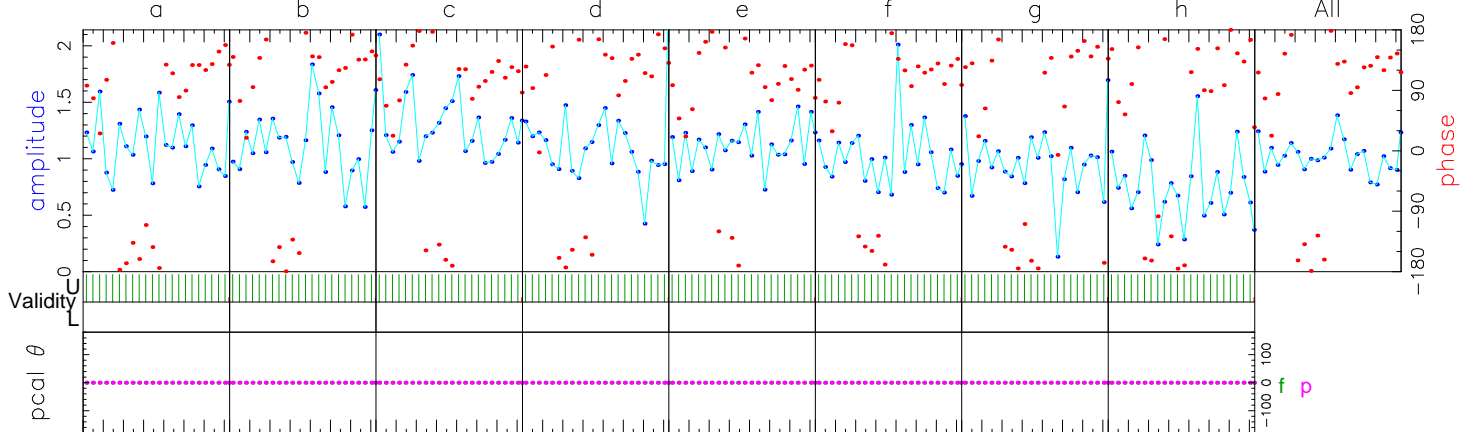


Fringe quality 7

SNR 40.0
Int time 419.821
Amp 0.714
Phase 139.5
PFD 0.0e+00
Delays (us)
SBD -0.001249
MBD -0.001298
Fringe rate (Hz)
-0.004802
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"

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

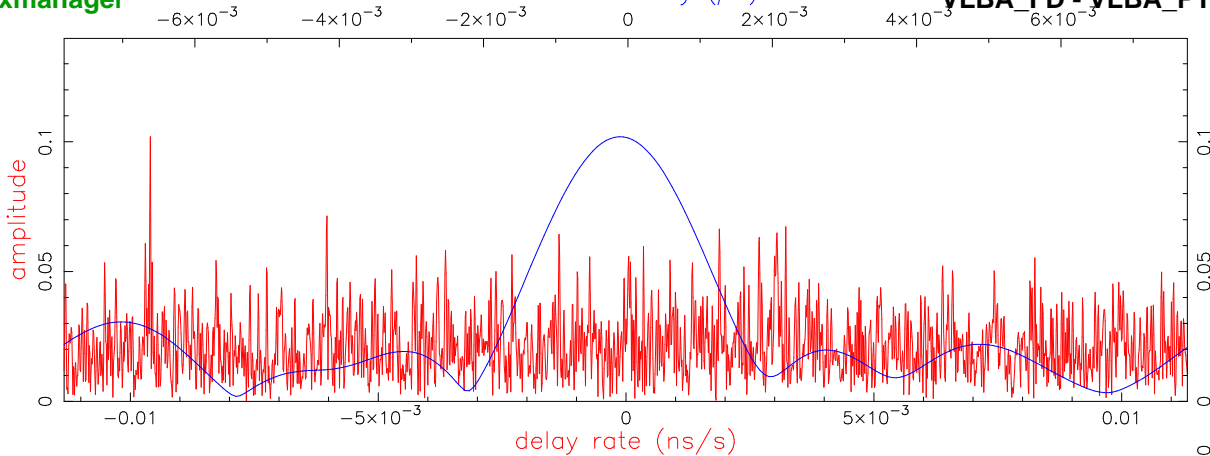


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
f	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-9.79963703164E+02				-9.79962405116E+02				Resid mbdelay (usec)	-1.29805E-03 +/- 2.7E-05
Sband delay (usec)	-9.79963654116E+02				4.7287693E+00				Resid sbdelay (usec)	-1.24900E-03 +/- 2.2E-04
Phase delay (usec)	-9.79962400616E+02				1.8000000E-07				Resid phdelay (usec)	4.49954E-06 +/- 9.2E-08
Delay rate (us/s)	-6.82799528712E-02				-6.82798971248E-02				Resid rate (us/s)	-5.57465E-08 +/- 3.8E-10
Total phase (deg)			-68.1		5.00262461053E-07				Resid phase (deg)	139.5 +/- 2.9

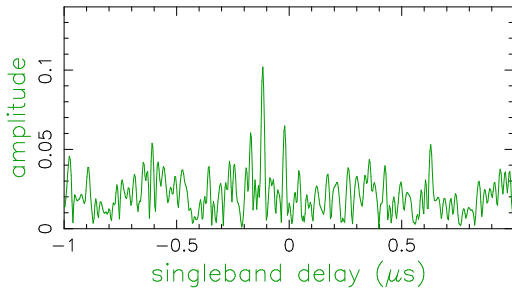
ph/seg (deg) 49.2 6.9 Search (2048X32) 0.693 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 46.9 12.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 10.1 4.1 Inc. seg. avg. 1.011 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 14.3 7.1 Inc. frq. avg. 0.713 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 318.0 el 56.5 pa 112.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 623.283 -258.101 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fp.W.34.1X1KZS

multiband delay (μ s)

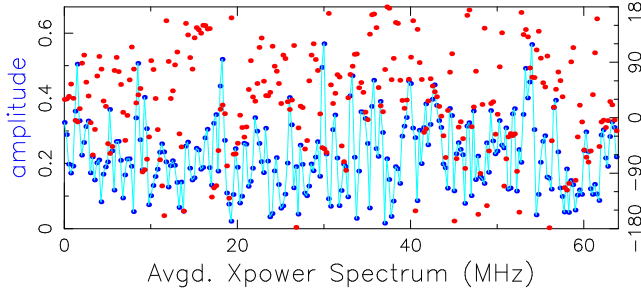
Fringe quality 0



SNR 5.7
Int time 419.821
Amp 0.140
Phase 124.4
PFD 9.3e-01
Delays (us)
SBD -0.117546
MBD -0.000115
Fringe rate (Hz)
-0.827727
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

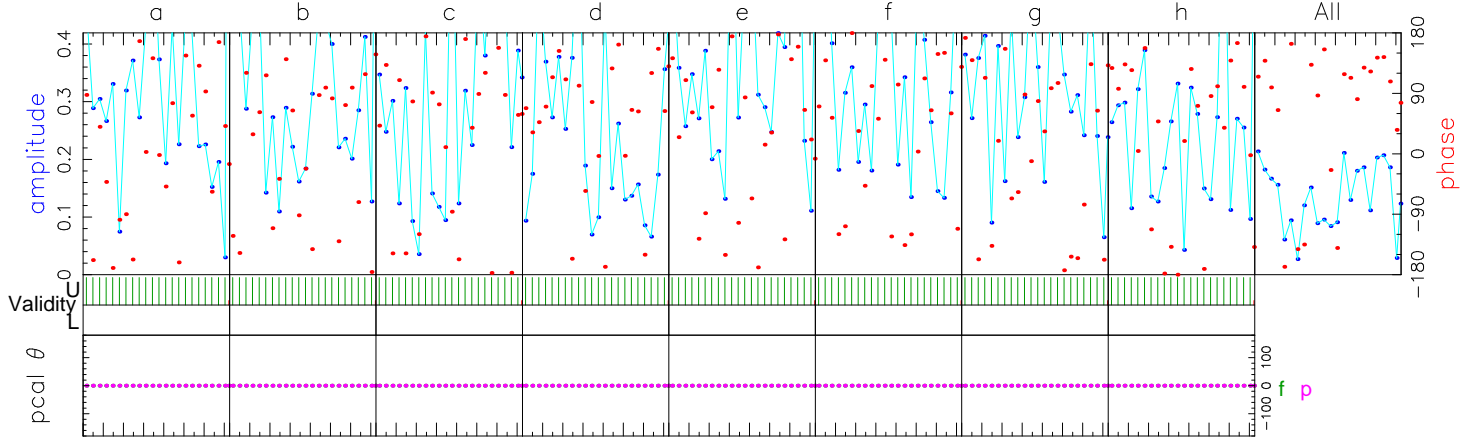


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133050
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		
f	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-9.80087520060E+02								Resid mbdelay (usec)	-1.14944E-04 +/- 1.9E-04
Sband delay (usec)	-9.80079950616E+02								Resid sbdelay (usec)	-1.17546E-01 +/- 1.5E-03
Phase delay (usec)	-9.79962401105E+02								Resid phdelay (usec)	4.01016E-06 +/- 6.5E-07
Delay rate (us/s)	-6.82895062190E-02								Resid rate (us/s)	-9.60909E-06 +/- 2.7E-09
Total phase (deg)		-83.2							Resid phase (deg)	124.4 +/- 20.0
	RMS	Theor.	Amplitude	0.140 +/- 0.024					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.9	48.1	Search (2048X32)	0.101					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	64.7	83.9	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	15.6	28.4	Inc. seg. avg.	0.137					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	23.3	49.5	Inc. frq. avg.	0.128					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 318.0 el 56.5 pa 112.7			p: az 315.8 el 61.6 pa 112.7						u,v (fr/asec) 623.283 -258.101	simultaneous interpolator

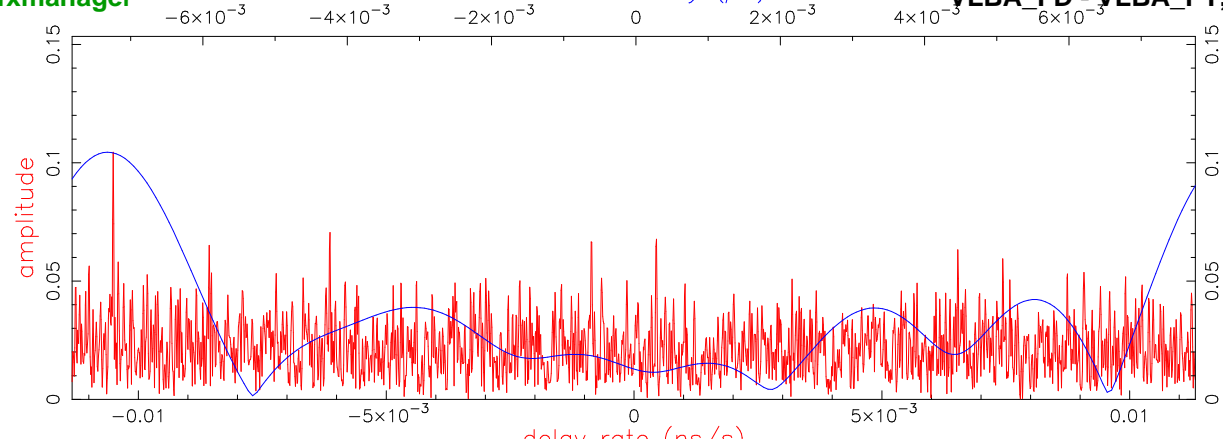
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

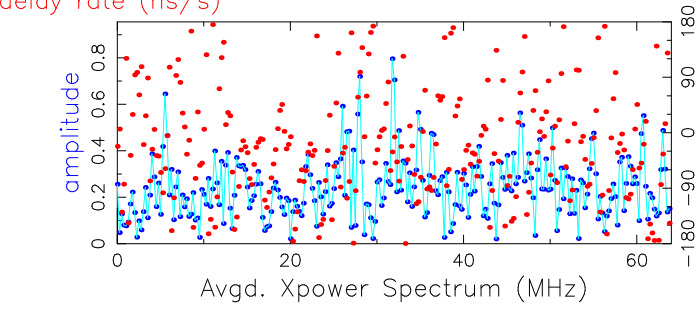
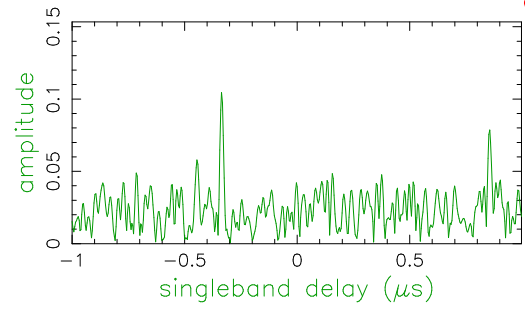
NRAO150.1X1KZS, No0113, fp

VLBA_FD - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

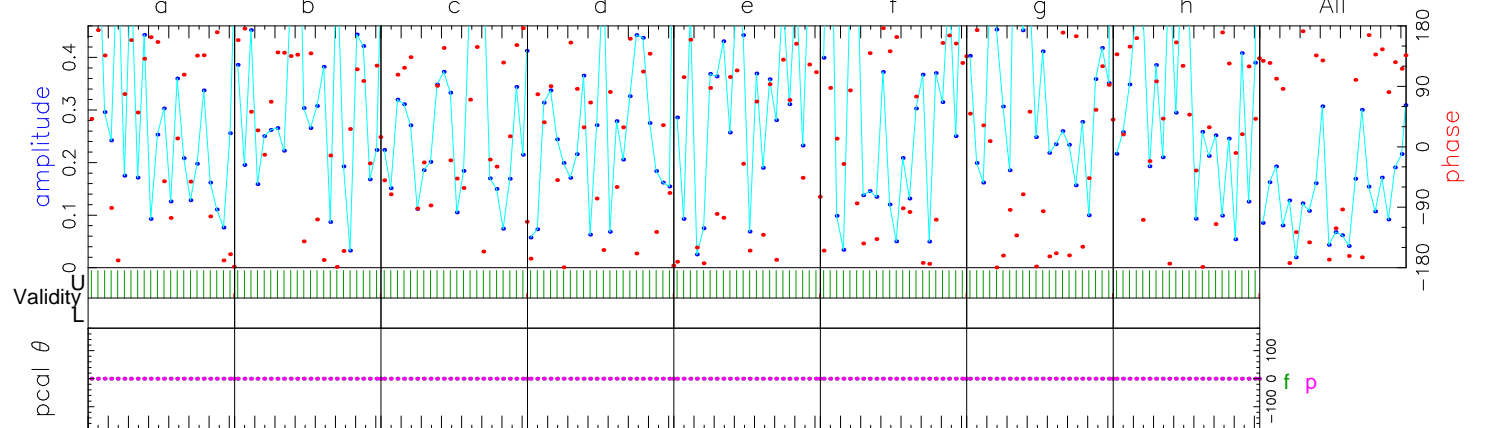


Fringe quality 0
 SNR 5.9
 Int time 419.821
 Amp 0.153
 Phase 143.7
 PFD 6.9e-01
 Delays (us)
 SBD -0.335442
 MBD -0.007295
 Fringe rate (Hz)
 -0.905928
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133054
 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		
f	0	0	0	0	0	0	0	0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	-9.80297824818E+02								Resid mbdelay (usec)	-7.29470E-03 +/- 1.9E-04
Sband delay (usec)	-9.80297846866E+02								Resid sbdelay (usec)	-3.35442E-01 +/- 1.5E-03
Phase delay (usec)	-9.79962400480E+02								Resid phdelay (usec)	4.63519E-06 +/- 6.3E-07
Delay rate (us/s)	-6.82904140478E-02								Resid rate (us/s)	-1.05169E-05 +/- 2.6E-09
Total phase (deg)			-63.9						Resid phase (deg)	143.7 +/- 19.6
	RMS	Theor.	Amplitude	0.153 +/- 0.026					Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.8	46.9	Search (2048X32)	0.101					Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	79.0	81.8	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	21.7	27.7	Inc. seg. avg.	0.150					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.5	48.3	Inc. frq. avg.	0.143					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
f: az 318.0 el 56.5 pa 112.7			p: az 315.8 el 61.6 pa 112.7						u,v (fr/asec) 623.283 -258.101	simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/fp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/fp.W.74.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

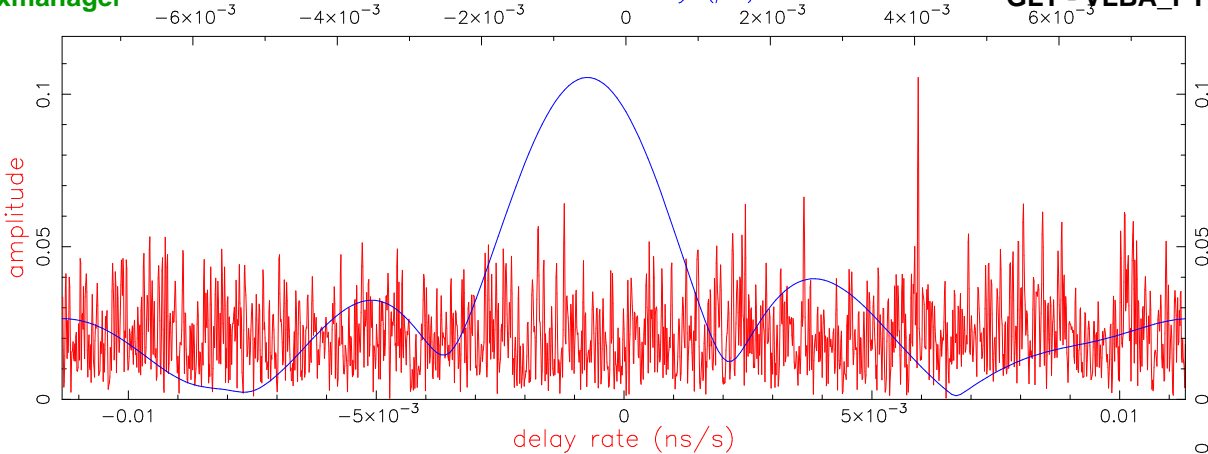
fxmanager

NRAO150.1X1KZS, No0113, gp

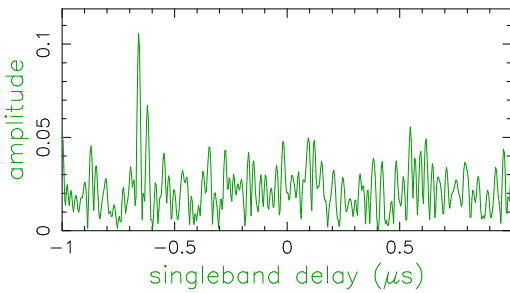
GLT - VLBA_PT, fgroup W, pol RR

multiband delay (μs)

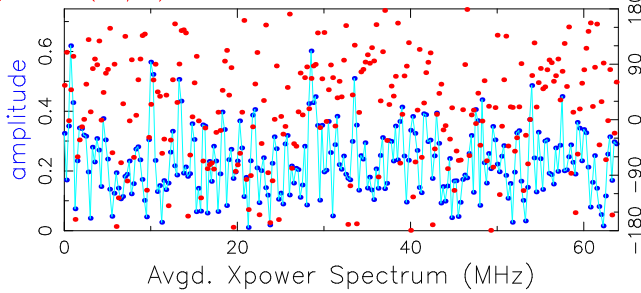
Fringe quality 0



SNR 5.9
Int time 419.821
Amp 0.119
Phase 15.1
PFD 5.3e-01
Delays (us)
SBD -0.659392
MBD -0.000542
Fringe rate (Hz) 0.511852
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

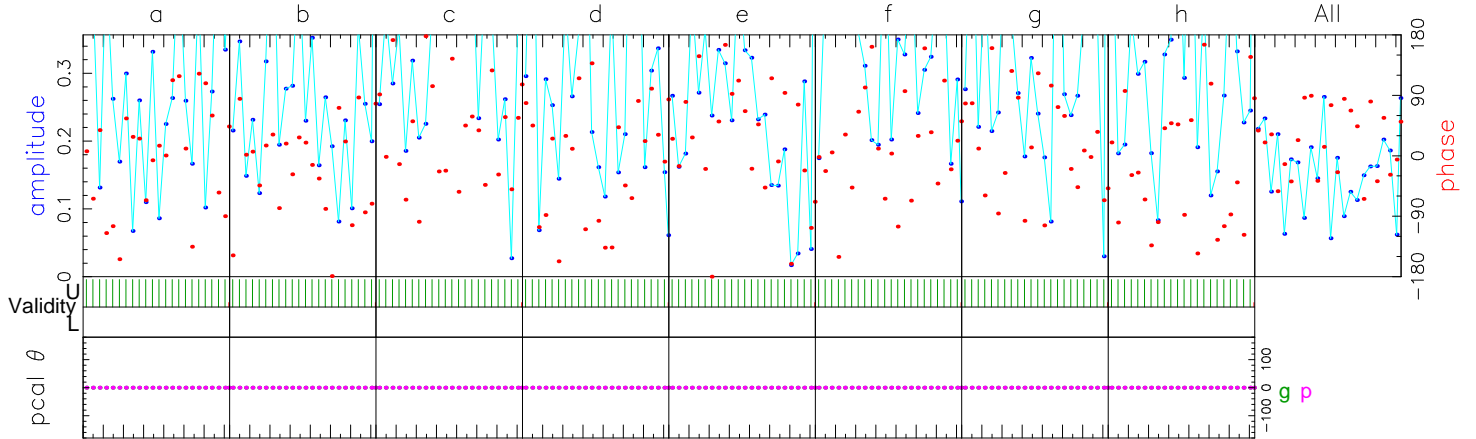


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133104
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

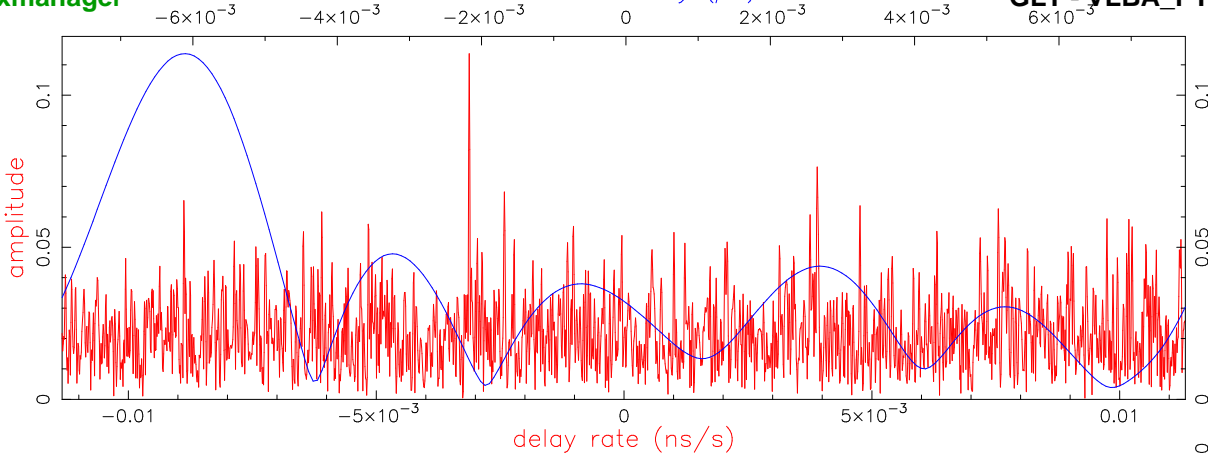


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.2	5.9	28.5	18.4	48.4	-2.7	27.4	-13.7	Phase	15.1
	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	Ampl.	0.1
	353.9	140.9	396.6	121.8	495.2	195.1	357.4	99.2	Sbd box	88.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60854560725E+03		Apriori delay (usec)		-1.60788881501E+03		Resid mbdelay (usec)		-5.42240E-04	+/- 1.8E-04
Sband delay (usec)	-1.60854820751E+03		Apriori clock (usec)		-5.0935173E+00		Resid sbdelay (usec)		-6.59392E-01	+/- 1.5E-03
Phase delay (usec)	-1.60788881452E+03		Apriori clockrate (us/s)		1.9200001E-07		Resid phdelay (usec)		4.86096E-07	+/- 6.2E-07
Delay rate (us/s)	2.18718927936E-01		Apriori rate (us/s)		2.18712985840E-01		Resid rate (us/s)		5.94210E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.44509528027E-05		Resid phase (deg)		15.1	+/- 19.3

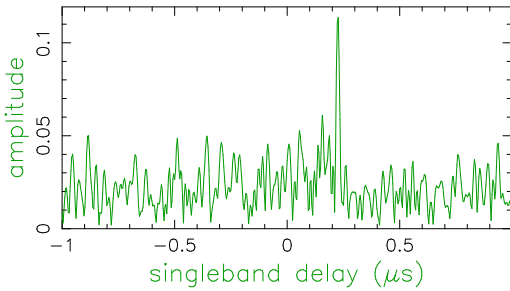
ph/seg (deg) 49.2 46.3 Amplitude 0.119 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.3 80.8 Search (2048X32) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.8 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.8 47.7 Inc. seg. avg. 0.130 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 268.5 el 53.4 pa 21.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1924.437 6616.086 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gp.W.114.1X1KZS

multiband delay (μ s)

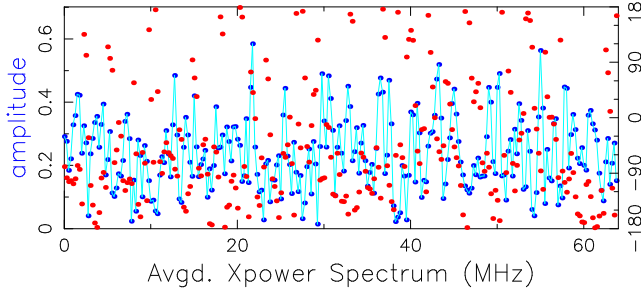
Fringe quality 0



SNR 6.5
 Int time 419.821
 Amp 0.119
 Phase 45.0
 PFD 2.5e-02
 Delays (us)
 SBD 0.225011
 MBD -0.006137
 Fringe rate (Hz)
 -0.269244
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

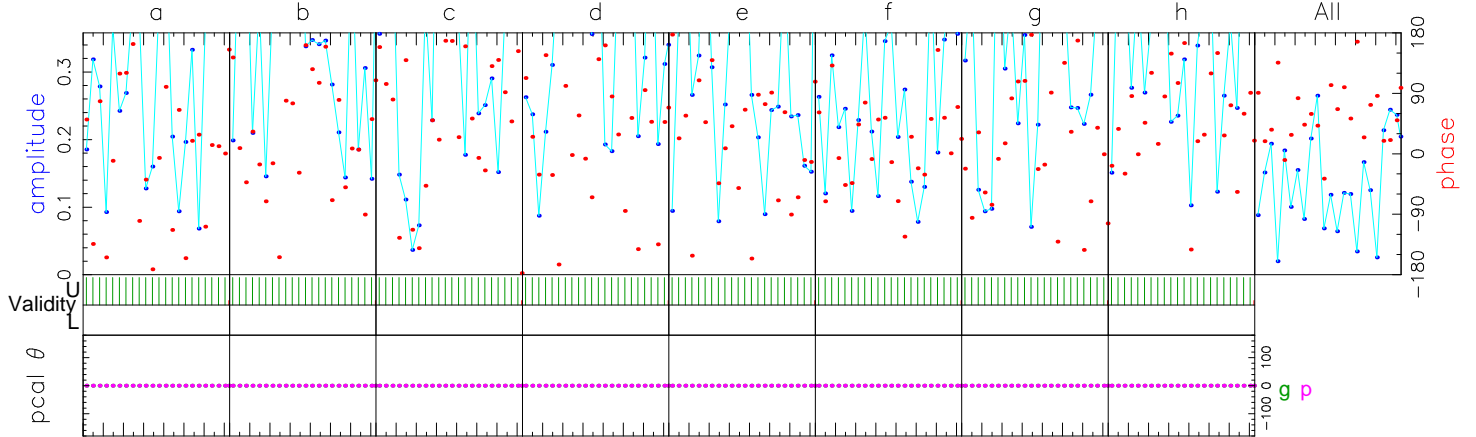


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133108
 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	Ampl.	0.1
p	0	0	0	0	0	0	0	0	Sbd box	314.6
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
p	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60766057722E+03				-1.60788881501E+03				Resid mbdelay (usec)	-6.13721E-03 +/- 1.7E-04
Sband delay (usec)	-1.60766380376E+03				-5.0935173E+00				Resid sbdelay (usec)	2.25011E-01 +/- 1.3E-03
Phase delay (usec)	-1.60788881356E+03				1.9200001E-07				Resid phdelay (usec)	1.45146E-06 +/- 5.7E-07
Delay rate (us/s)	2.18709860184E-01				2.18712985840E-01				Resid rate (us/s)	-3.12566E-06 +/- 2.4E-09
Total phase (deg)			-143.9		4.44509528027E-05				Resid phase (deg)	45.0 +/- 17.7
	RMS	Theor.	Amplitude	0.119 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.9	42.4	Search (2048X32)	0.109					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	63.3	74.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	28.0	25.0	Inc. seg. avg.	0.110					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	36.9	43.7	Inc. frq. avg.	0.116					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

g: az 268.5 el 53.4 pa 21.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1924.437 6616.086 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gp.W.132.1X1KZS

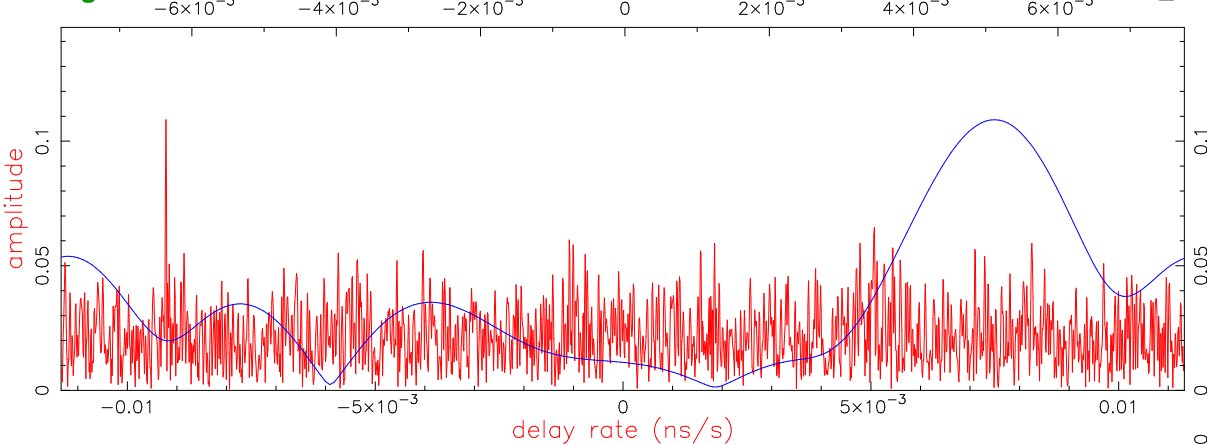
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, gp

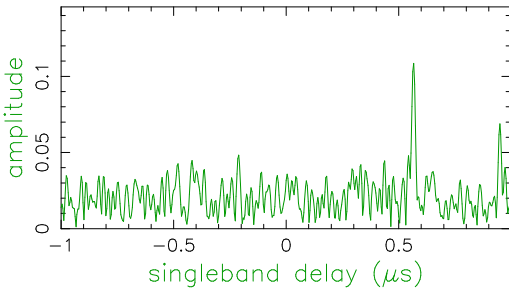
GLT - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

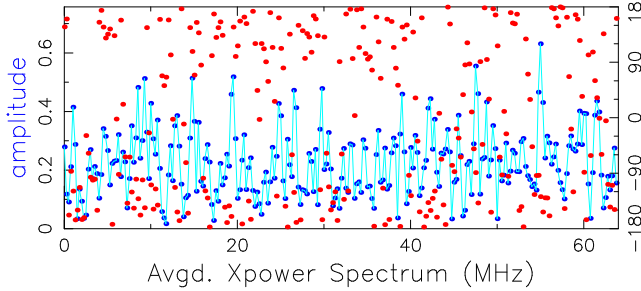


Fringe quality 0

SNR 6.1
 Int time 419.821
 Amp 0.146
 Phase 165.3
 PFD 2.3e-01
 Delays (us)
 SBD 0.565553
 MBD 0.005110
 Fringe rate (Hz) -0.795239
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

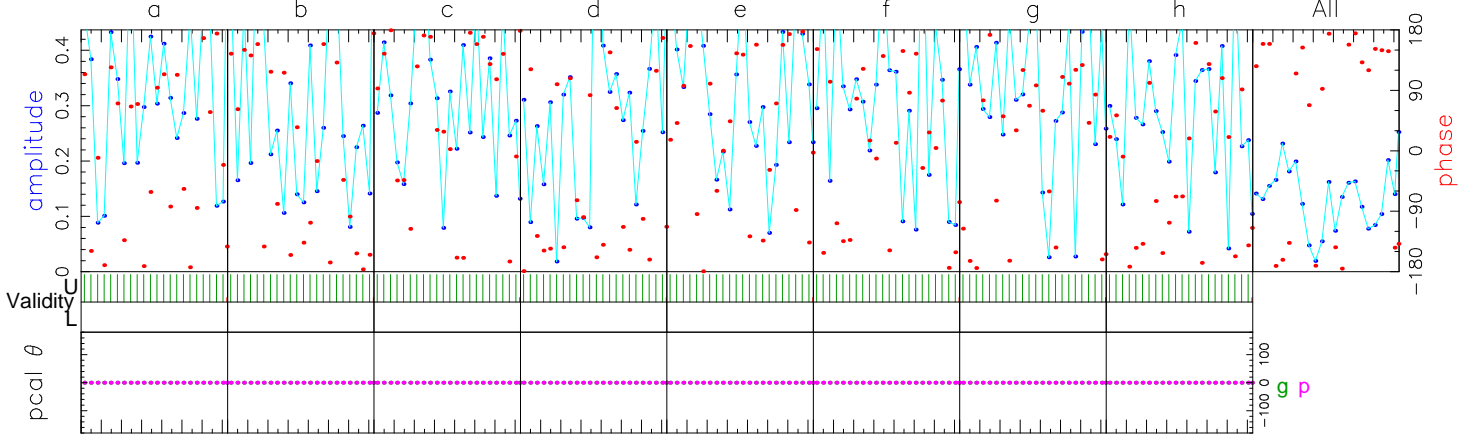


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133112
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	133.0	177.3	157.2	-168.3	168.0	128.0	129.7	-168.2	Phase	165.3
	0.1	0.2	0.2	0.2	0.1	0.0	0.2	0.1	Ampl.	0.1
	342.1	402.6	377.9	401.9	153.3	454.9	395.1	480.8	Sbd box	401.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60732120531E+03		Apriori delay (usec)		-1.60788881501E+03		Resid mbdelay (usec)		5.10970E-03	+/- 1.8E-04
Sband delay (usec)	-1.60732326151E+03		Apriori clock (usec)		-5.0935173E+00		Resid sbdelay (usec)		5.65553E-01	+/- 1.4E-03
Phase delay (usec)	-1.60788880968E+03		Apriori clockrate (us/s)		1.9200001E-07		Resid phdelay (usec)		5.32965E-06	+/- 6.0E-07
Delay rate (us/s)	2.18703753907E-01		Apriori rate (us/s)		2.18712985840E-01		Resid rate (us/s)		-9.23193E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.44509528027E-05		Resid phase (deg)		165.3	+/- 18.8

	RMS	Theor.	Amplitude	0.146 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	39.7	45.0	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	53.3	78.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.8	26.5	Inc. seg. avg.	0.134	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	47.0	46.3	Inc. frq. avg.	0.142	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

g: az 268.5 el 53.4 pa 21.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1924.437 6616.086 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gp.W.157.1X1KZS

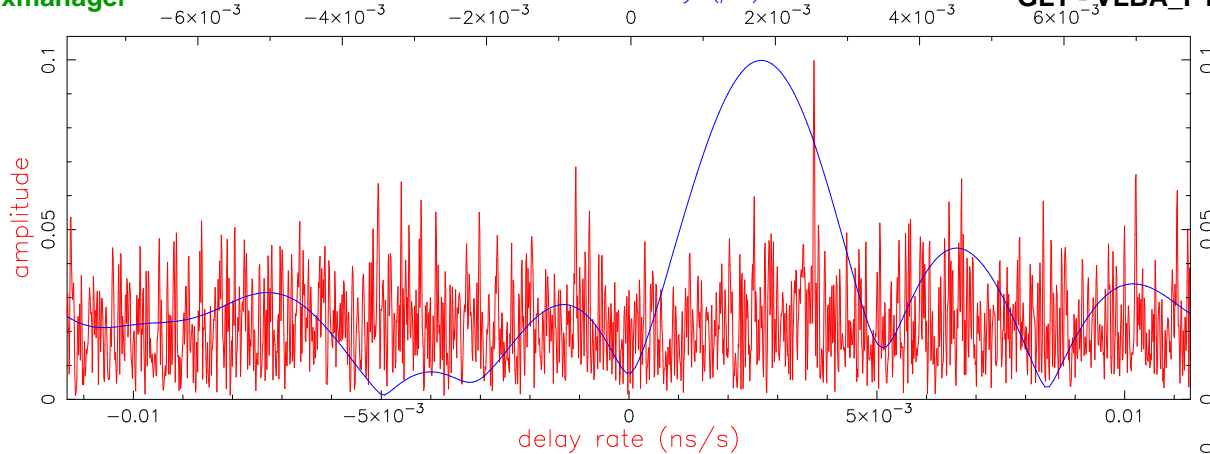
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, gp

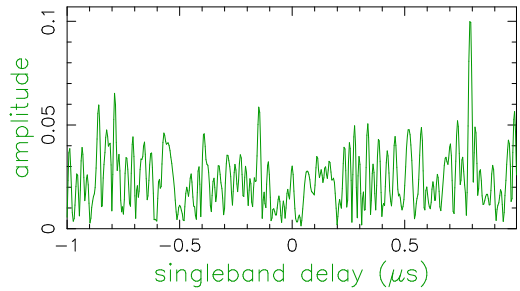
GLT - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

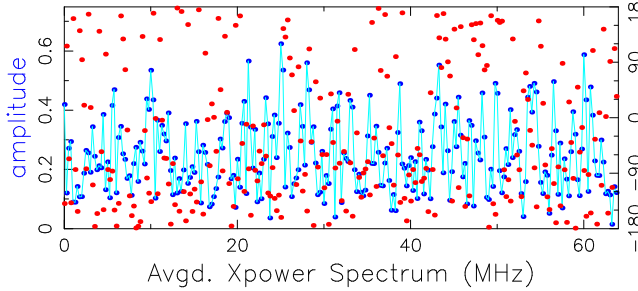


Fringe quality 0

SNR 5.7
 Int time 419.821
 Amp 0.107
 Phase -42.0
 PFD 9.2e-01
 Delays (us)
 SBD 0.790942
 MBD 0.001847
 Fringe rate (Hz)
 0.322298
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

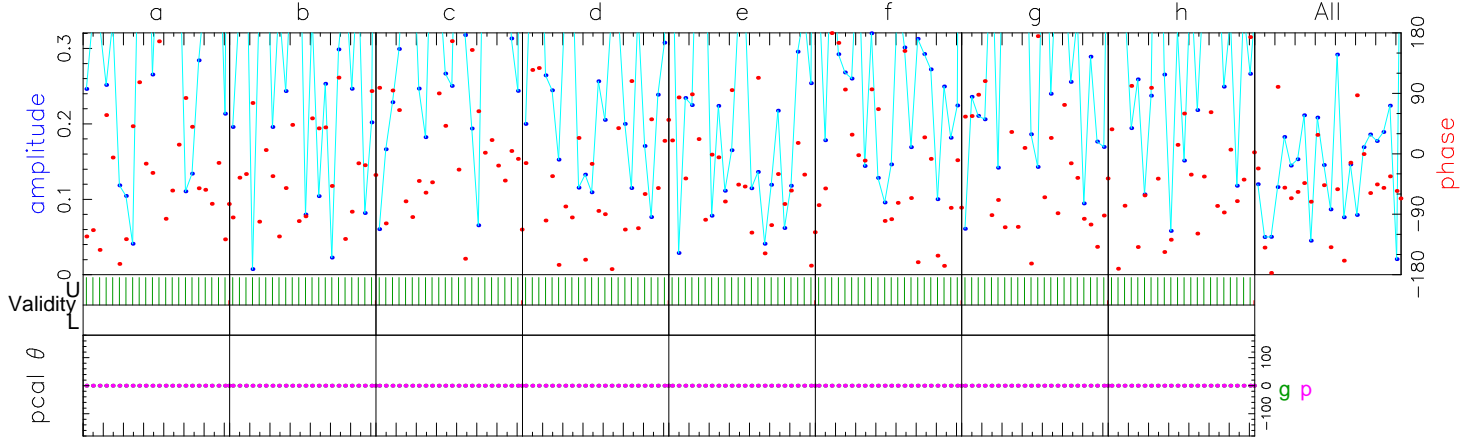


delay rate (ns/s)



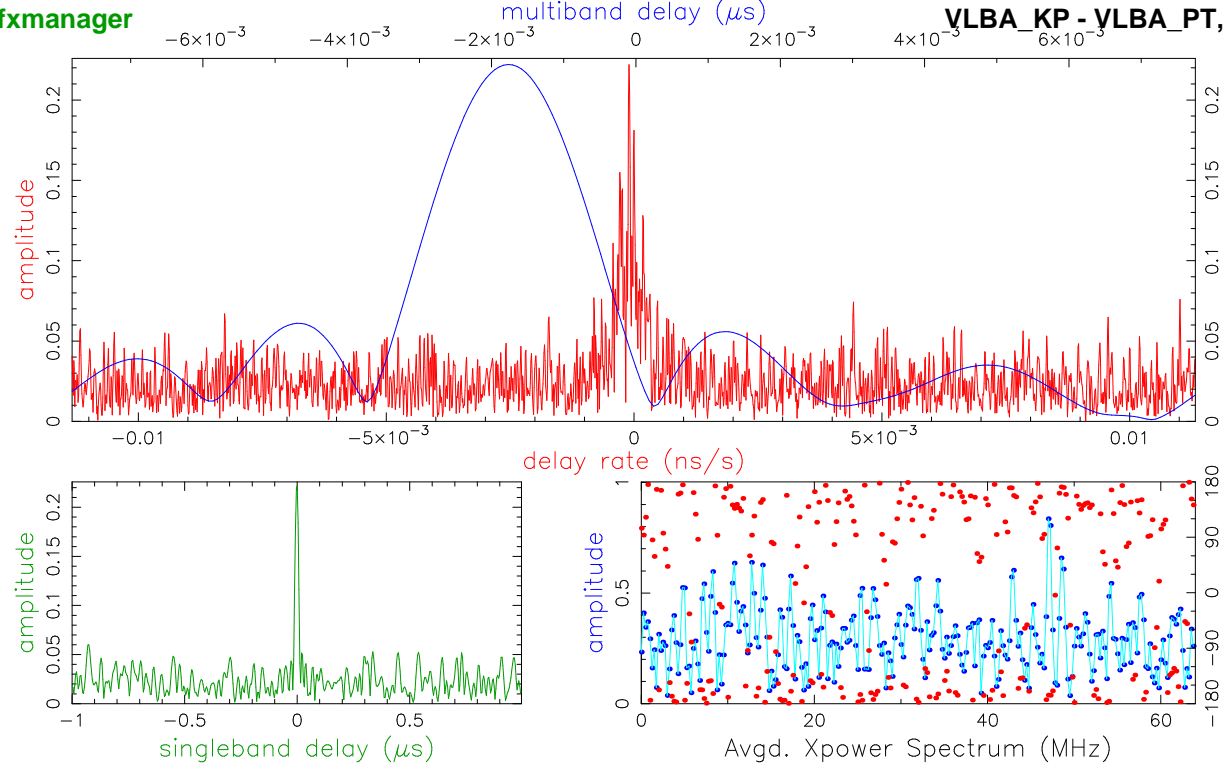
Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133100
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

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



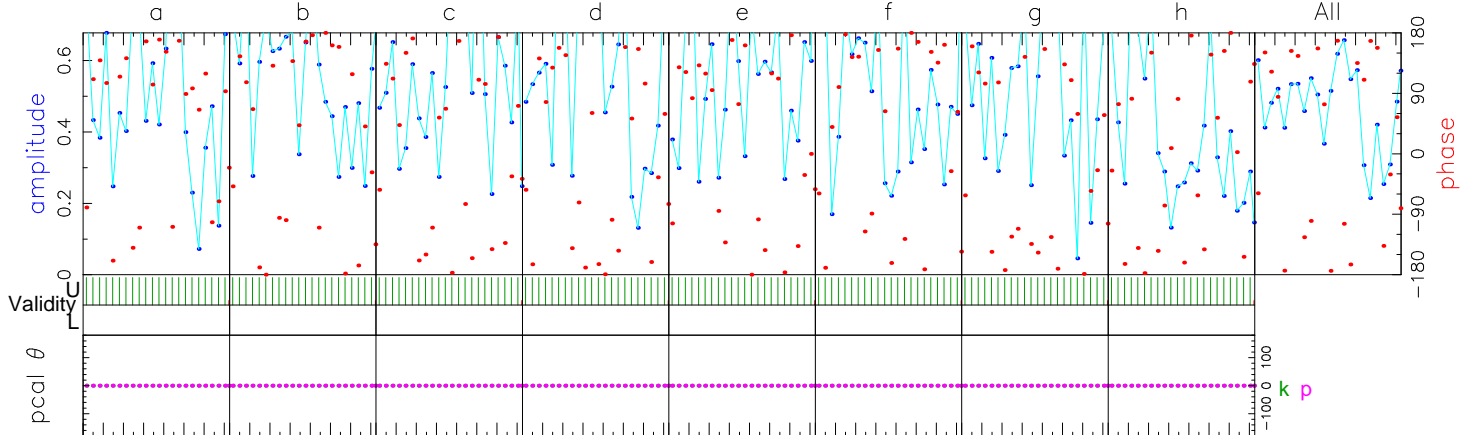
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-51.5	-37.2	-21.2	-86.5	-25.7	-66.0	-55.5	-40.5	Phase	-42.0
	0.1	0.1	0.2	0.1	0.1	0.0	0.1	0.1	Ampl.	0.1
	328.6	55.3	397.3	82.4	460.9	351.7	363.7	322.4	Sbd box	459.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.60709009291E+03		Apriori delay (usec)		-1.60788881501E+03		Resid mbdelay (usec)		1.84710E-03	+/- 1.9E-04
Sband delay (usec)	-1.60709787251E+03		Apriori clock (usec)		-5.0935173E+00		Resid sbdelay (usec)		7.90942E-01	+/- 1.5E-03
Phase delay (usec)	-1.60788881636E+03		Apriori clockrate (us/s)		1.9200001E-07		Resid phdelay (usec)		-1.35521E-06	+/- 6.5E-07
Delay rate (us/s)	2.18716727403E-01		Apriori rate (us/s)		2.18712985840E-01		Resid rate (us/s)		3.74156E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		4.44509528027E-05		Resid phase (deg)		-42.0	+/- 20.0

ph/seg (deg) 66.5 48.0 Amplitude 0.107 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.2 83.8 Search (2048X32) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.3 28.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.4 49.4 Inc. seg. avg. 0.110 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 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1924.437 6616.086 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/gp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/gp.W.93.1X1KZS



Fringe quality 9
SNR 12.7
Int time 419.821
Amp 0.226
Phase 169.4
PFD 5.4e-28
Delays (us)
SBD -0.001677
MBD -0.001805
Fringe rate (Hz)
-0.008224
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
	167.3	174.9	161.0	169.8	147.7	179.3	-176.6	162.7	Phase	169.4
	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.1	Ampl.	0.2
	256.2	256.3	256.1	256.2	257.3	256.9	257.0	354.7	Sbd box	256.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.56803618603E+01		Apriori delay (usec)		3.56821666031E+01		Resid mbdelay (usec)		-1.80474E-03	+/- 8.6E-05
Sband delay (usec)	3.56804898531E+01		Apriori clock (usec)		-5.2128239E+00		Resid sbdelay (usec)		-1.67675E-03	+/- 6.8E-04
Phase delay (usec)	3.56821720648E+01		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		5.46170E-06	+/- 2.9E-07
Delay rate (us/s)	3.16524473312E-02		Apriori rate (us/s)		3.16525428093E-02		Resid rate (us/s)		-9.54781E-08	+/- 1.2E-09
Total phase (deg)	108.6		Apriori accel (us/s/s)		-3.22461001386E-06		Resid phase (deg)		169.4	+/- 9.1

ph/seg (deg) 69.5 21.7 Search (2048X32) 0.214 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 118.8 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 12.4 12.8 Inc. seg. avg. 0.437 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 15.7 22.3 Inc. frq. avg. 0.220 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 320.9 el 61.8 pa 121.8 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -292.958 -501.433 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/kp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/kp.W.115.1X1KZS simultaneous interpolator

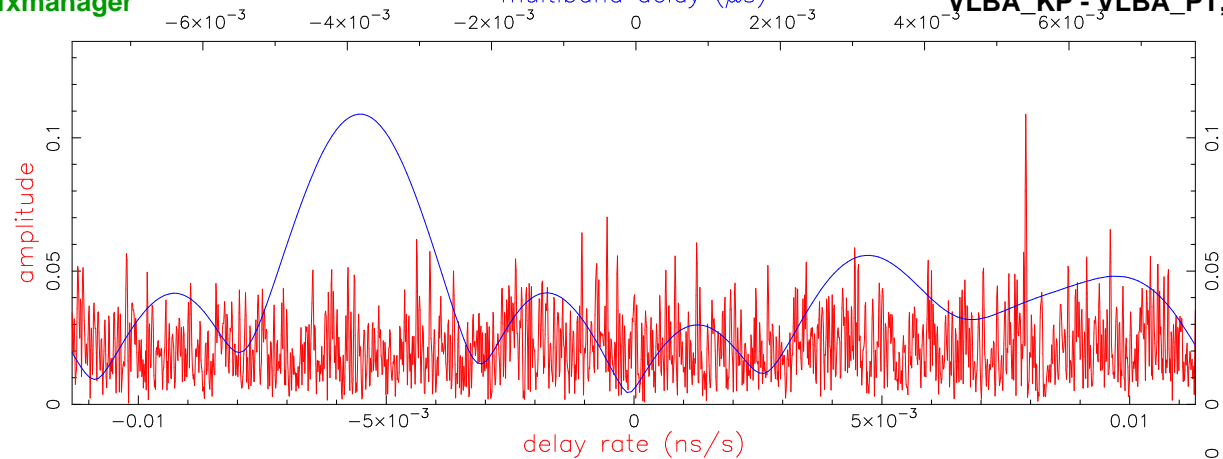
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, kp

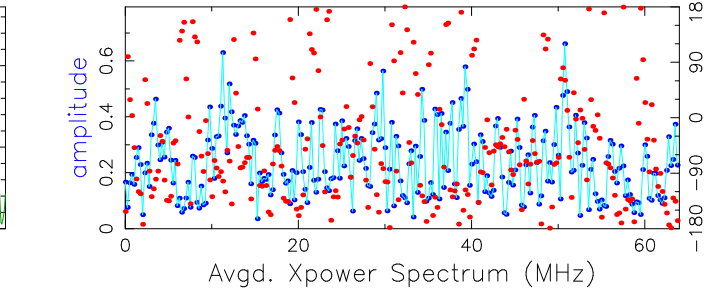
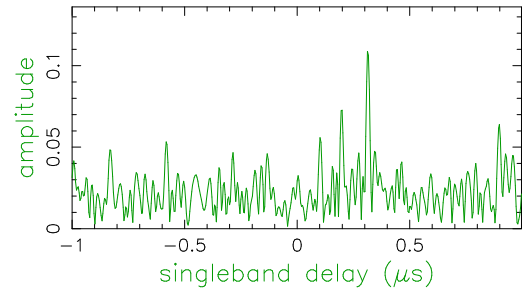
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



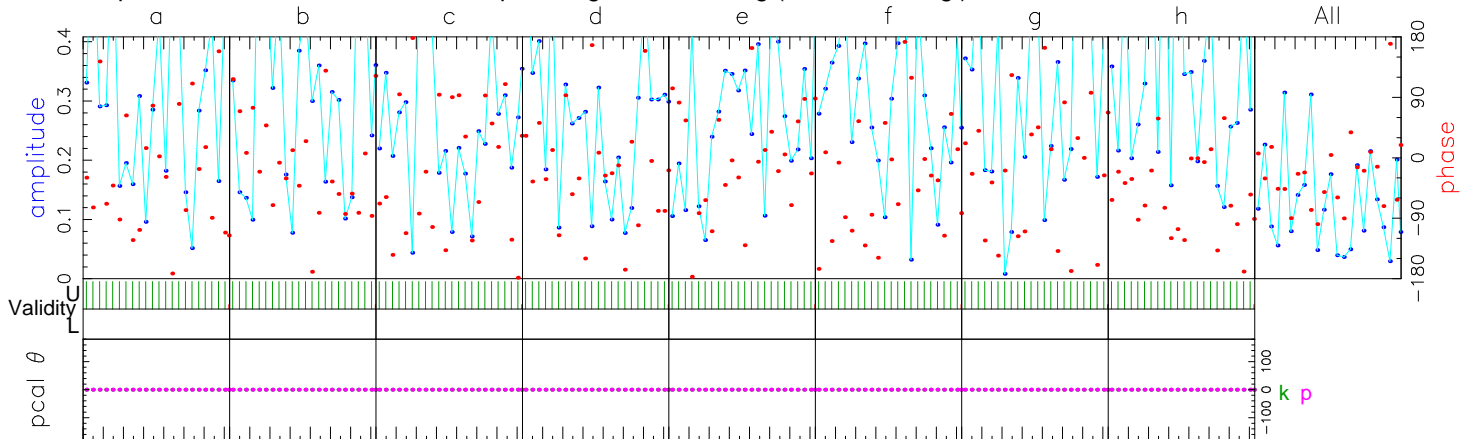
Fringe quality 0

SNR 6.2
 Int time 419.821
 Amp 0.136
 Phase -33.6
 PFD 1.5e-01
 Delays (us)
 SBD 0.314018
 MBD -0.003778
 Fringe rate (Hz)
 0.682212
 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
 2021:304:133108
 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
	-58.3	-23.1	-49.7	-14.3	2.2	-61.8	15.9	-58.9	Phase	-33.6
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.3	Ampl.	0.1
	1.4	337.4	493.8	504.4	371.7	313.0	45.1	337.3	Sbd box	337.4
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	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	3.59908888255E+01		Apriori delay (usec)		3.56821666031E+01		Resid mbdelay (usec)		-3.77778E-03	+/- 1.8E-04
Sband delay (usec)	3.59961846031E+01		Apriori clock (usec)		-5.2128239E+00		Resid sbdelay (usec)		3.14018E-01	+/- 1.4E-03
Phase delay (usec)	3.56821655193E+01		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-1.08377E-06	+/- 6.0E-07
Delay rate (us/s)	3.16604626171E-02		Apriori rate (us/s)		3.16525428093E-02		Resid rate (us/s)		7.91981E-06	+/- 2.5E-09
Total phase (deg)	265.6		Apriori accel (us/s/s)		-3.22461001386E-06		Resid phase (deg)		-33.6	+/- 18.5

	RMS	Theor.	Amplitude	0.136 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.7	44.4	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.9	77.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	33.0	26.2	Inc. seg. avg.	0.125	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	46.8	45.7	Inc. frq. avg.	0.137	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 320.9 el 61.8 pa 121.8 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -292.958 -501.433 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/kp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/kp.W.134.1X1KZS

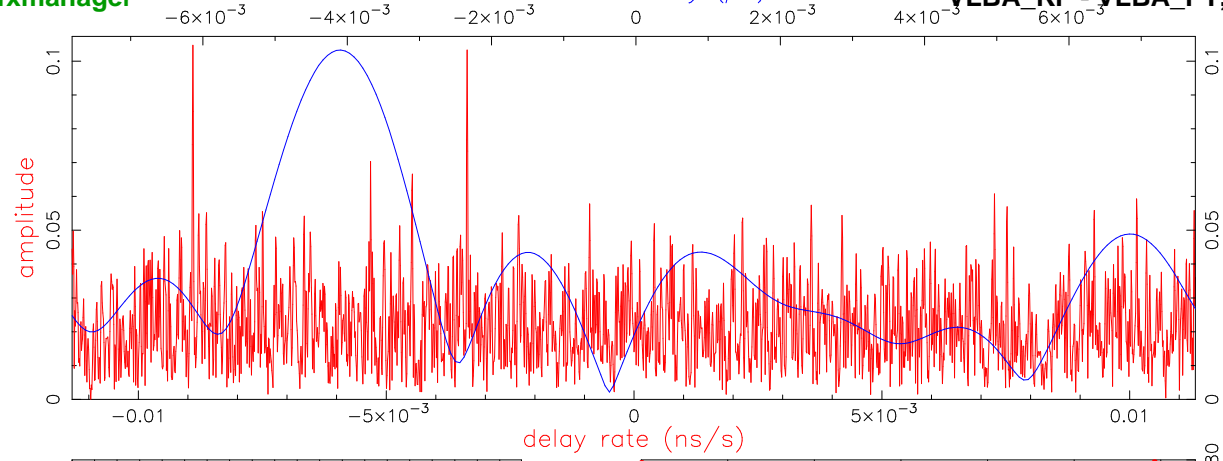
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

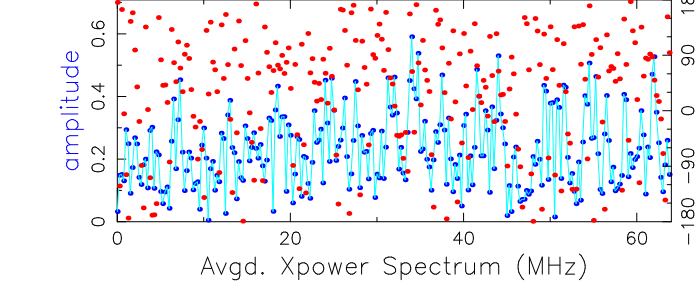
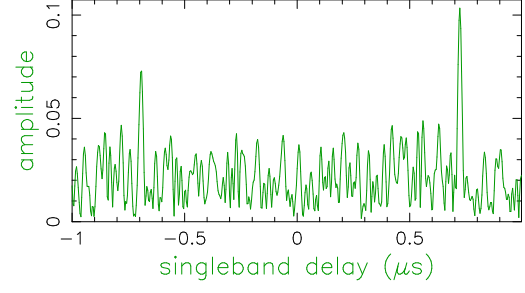
NRAO150.1X1KZS, No0113, kp

VLBA_KP - VLBA_PT, fgroup W, pol RL

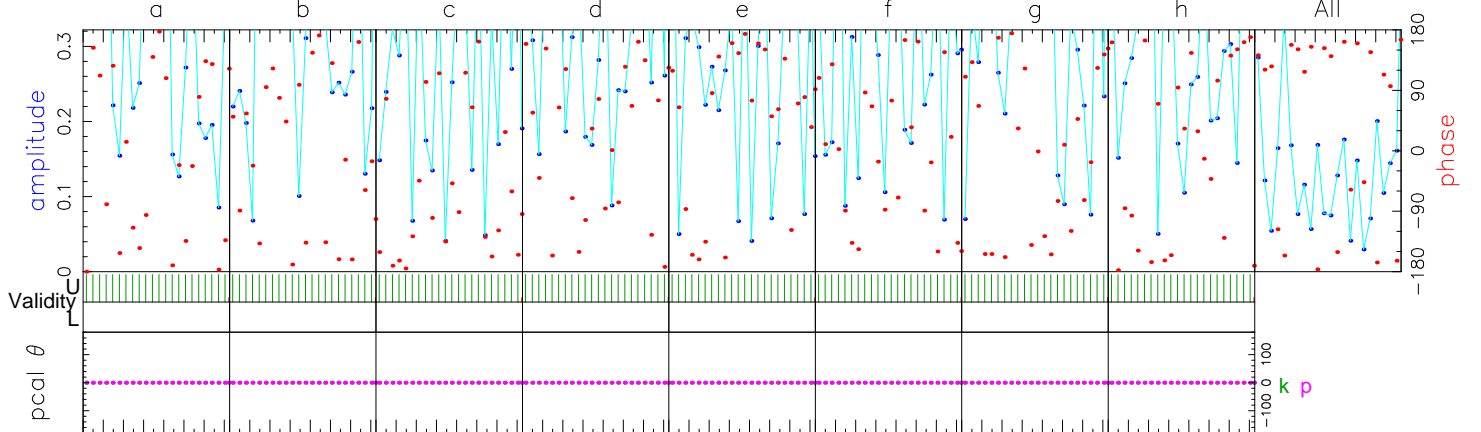
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 419.821
 Amp 0.107
 Phase 166.8
 PFD 8.2e-01
 Delays (us)
 SBD 0.722087
 MBD -0.004112
 Fringe rate (Hz)
 -0.290752
 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
 2021:304:133112
 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
	174.9	163.7	-161.8	139.9	150.7	54.8	173.6	-178.4	Phase	166.8
	0.1	0.1	0.1	0.1	0.2	0.0	0.1	0.2	Ampl.	0.1
	354.4	357.6	196.1	309.3	119.2	81.9	377.7	239.1	Sbd box	441.9
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	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.63968044189E+01		Apriori delay (usec)		3.56821666031E+01		Resid mbdelay (usec)		-4.11218E-03	+/- 1.9E-04
Sband delay (usec)	3.64042533531E+01		Apriori clock (usec)		-5.2128239E+00		Resid sbdelay (usec)		7.22087E-01	+/- 1.5E-03
Phase delay (usec)	3.56821719807E+01		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		5.37762E-06	+/- 6.4E-07
Delay rate (us/s)	3.16491674725E-02		Apriori rate (us/s)		3.16525428093E-02		Resid rate (us/s)		-3.37534E-06	+/- 2.6E-09
Total phase (deg)	106.0		Apriori accel (us/s/s)		-3.22461001386E-06		Resid phase (deg)		166.8	+/- 19.8

	RMS	Theor.	Amplitude	0.107 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	55.1	47.4	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	80.4	82.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	49.7	28.0	Inc. seg. avg.	0.104	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	38.8	48.8	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	

k: az 320.9 el 61.8 pa 121.8 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -292.958 -501.433 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/kp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/kp.W.152.1X1KZS

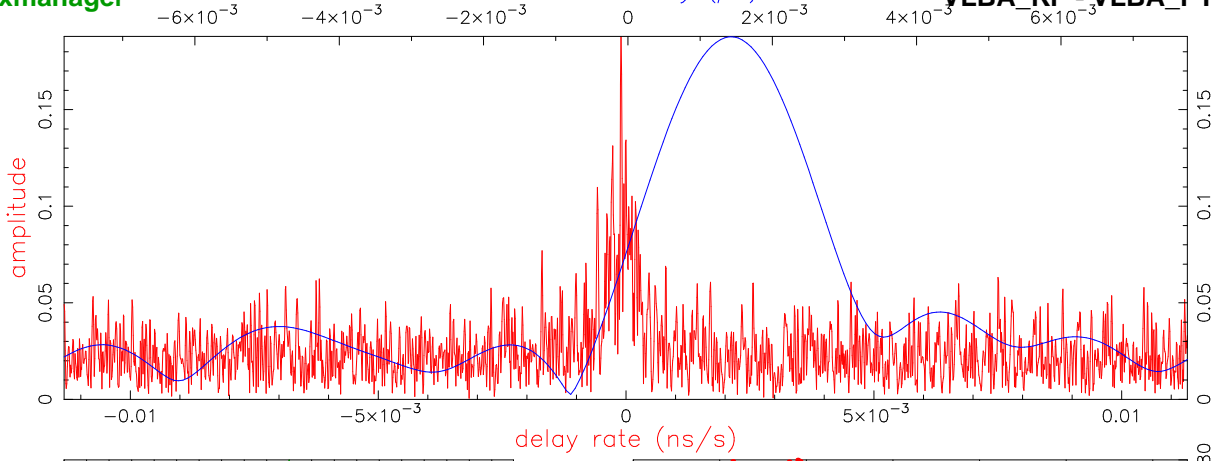
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, kp

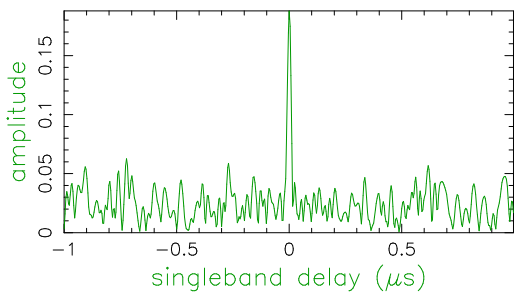
VLBA_KP - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

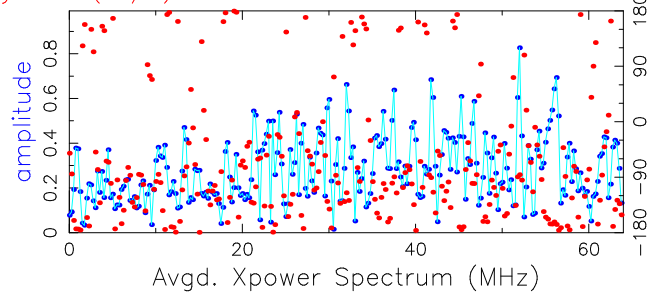


Fringe quality 9

SNR 10.5
 Int time 419.821
 Amp 0.188
 Phase -133.5
 PFD 2.8e-17
 Delays (us)
 SBD 0.000399
 MBD 0.001443
 Fringe rate (Hz) -0.008221
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

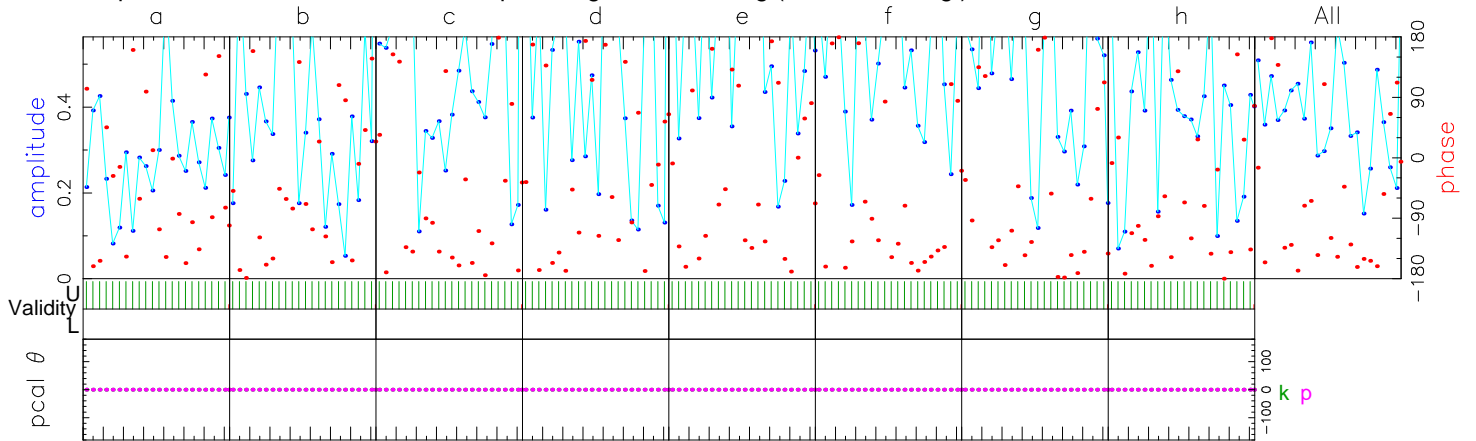


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133100
 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
	-126.6	-111.1	-143.3	-137.9	-128.0	-148.9	-137.1	-115.5	Phase	-133.5
	0.1	0.1	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	173.3	95.0	256.1	257.7	257.1	257.6	256.1	256.5	Sbd box	257.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.56836091728E+01	Apriori delay (usec)	3.56821666031E+01	Resid mbdelay (usec)	1.44257E-03	+/-	1.0E-04
Sband delay (usec)	3.56825651031E+01	Apriori clock (usec)	-5.2128239E+00	Resid sbdelay (usec)	3.98500E-04	+/-	8.2E-04
Phase delay (usec)	3.56821622986E+01	Apriori clockrate (us/s)	1.2000000E-07	Resid phdelay (usec)	-4.30453E-06	+/-	3.5E-07
Delay rate (us/s)	3.16524473715E-02	Apriori rate (us/s)	3.16525428093E-02	Resid rate (us/s)	-9.54377E-08	+/-	1.4E-09
Total phase (deg)	165.7	Apriori accel (us/s/s)	-3.22461001386E-06	Resid phase (deg)	-133.5	+/-	10.9

ph/seg (deg)	RMS 69.6	Theor. 26.1	Amplitude Search (2048X32)	0.188 +/- 0.018	0.184	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	119.3	45.5	Interp.	0.000	0.184	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	14.5	15.4	Inc. seg. avg.	0.346	0.186	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	27.3	26.9	Inc. frq. avg.	0.186	0.186	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

k: az 320.9 el 61.8 pa 121.8 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -292.958 -501.433 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/kp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/kp.W.99.1X1KZS

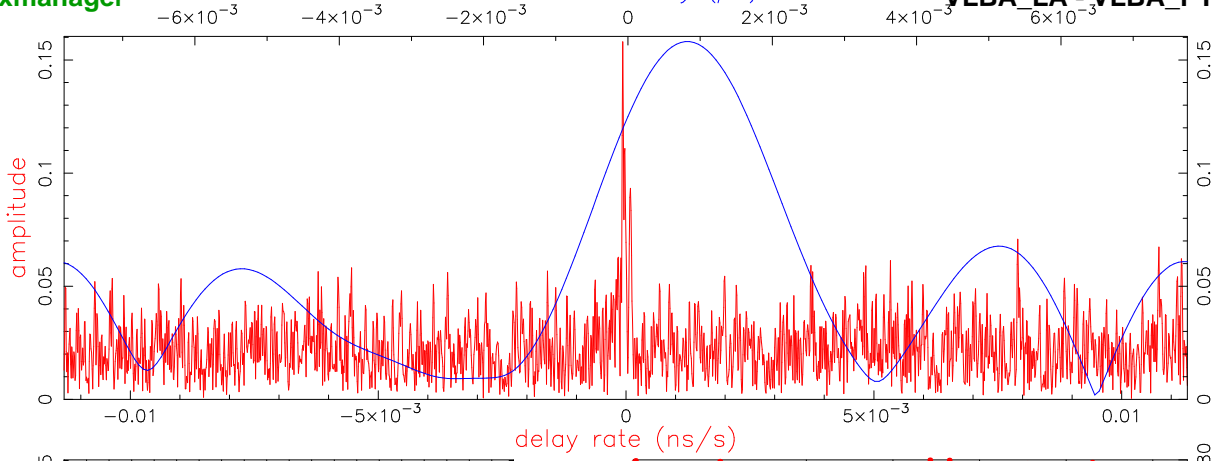
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

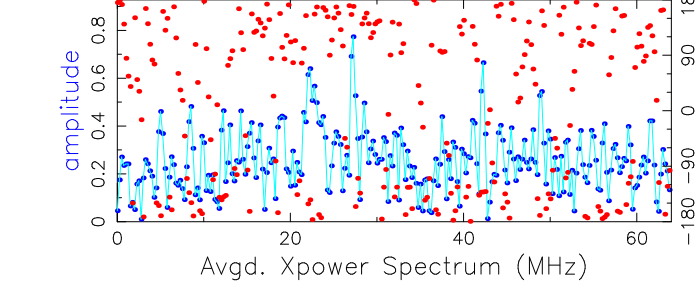
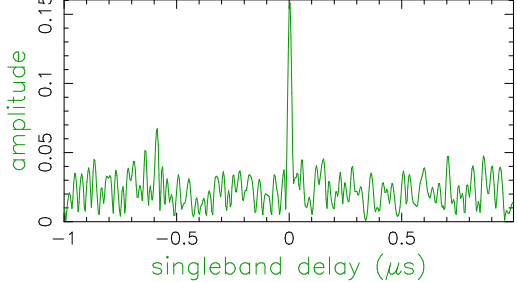
NRAO150.1X1KZS, No0113, lp

VLBA_LA - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

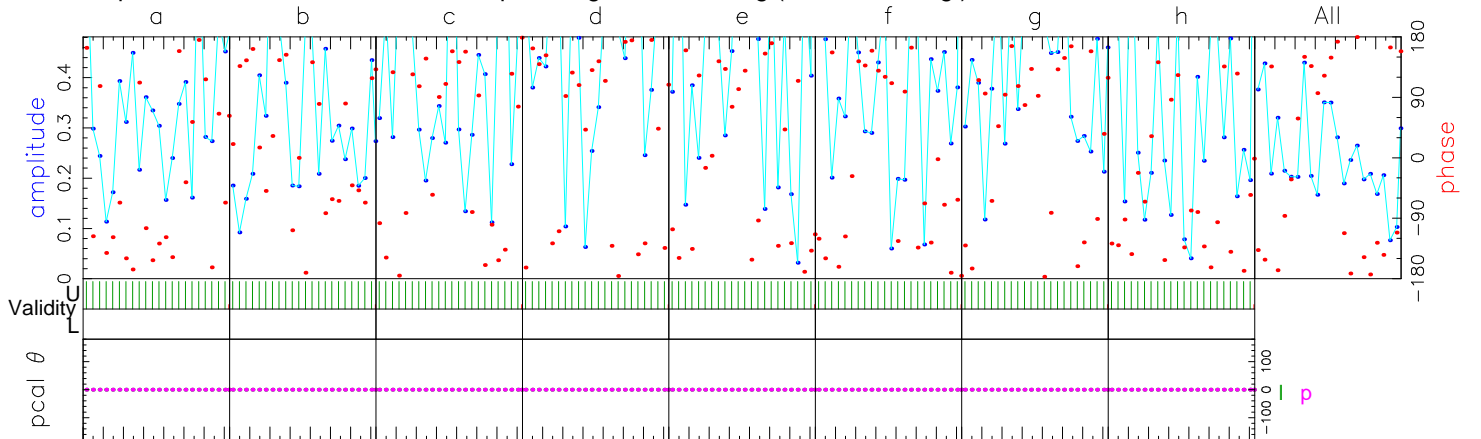


Fringe quality 9
 SNR 9.0
 Int time 419.821
 Amp 0.160
 Phase -177.6
 PFD 9.6e-11
 Delays (us)
 SBD 0.002290
 MBD 0.000777
 Fringe rate (Hz) -0.005699
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133116
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

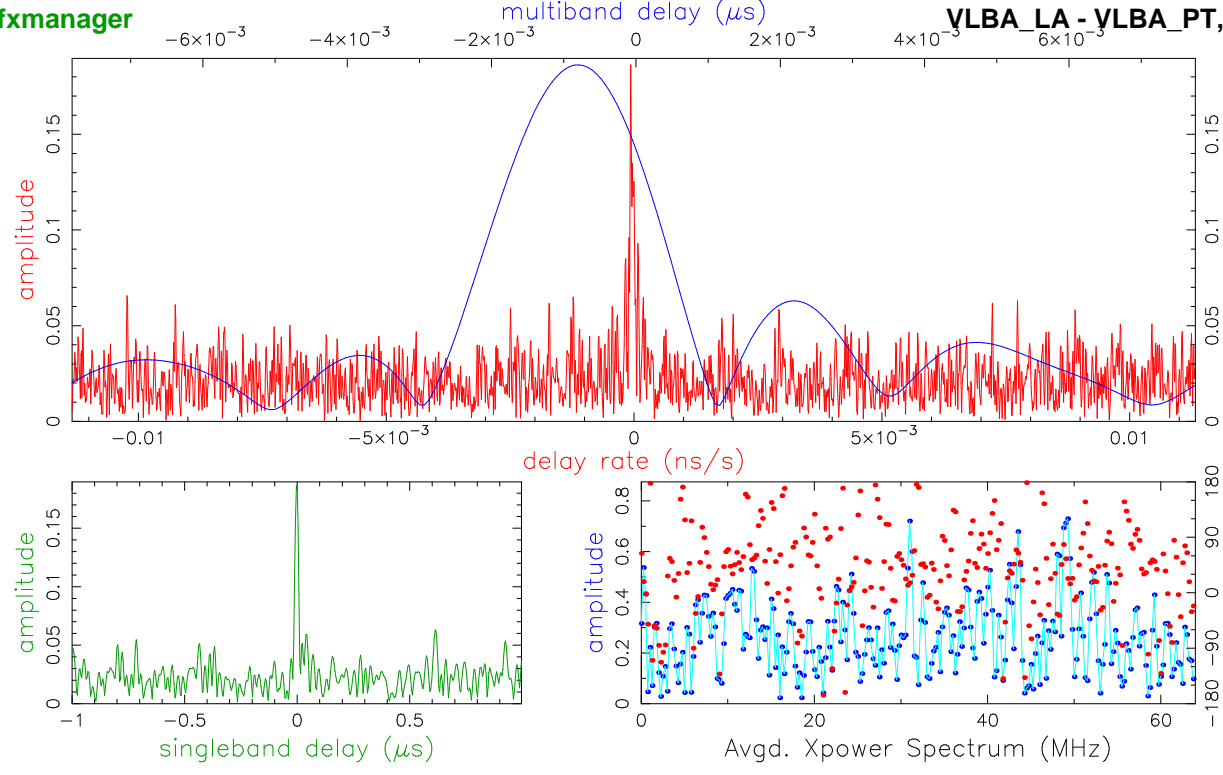
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-160.2	69.6	174.8	176.9	178.0	-156.0	144.5	-142.8	Phase	-177.6
	0.1	0.0	0.2	0.3	0.2	0.2	0.2	0.2	Ampl.	0.2
	370.3	28.1	258.6	257.5	257.6	258.2	257.1	192.0	Sbd box	257.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.46375473055E+01		Apriori delay (usec)		-2.46383240603E+01		Resid mbdelay (usec)		7.76755E-04	+/- 1.2E-04
Sband delay (usec)	-2.46360343103E+01		Apriori clock (usec)		-8.1664276E+00		Resid sbdelay (usec)		2.28975E-03	+/- 9.6E-04
Phase delay (usec)	-2.46383297887E+01		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-5.72842E-06	+/- 4.1E-07
Delay rate (us/s)	-1.38150796957E-02		Apriori rate (us/s)		-1.38150135327E-02		Resid rate (us/s)		-6.61630E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.93133632659E-06		Resid phase (deg)		-177.6	+/- 12.7

	RMS	Theor.	Amplitude	0.160 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	59.5	30.6	Search (2048X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.5	53.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	52.0	18.0	Inc. seg. avg.	0.215	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	45.8	31.5	Inc. frq. avg.	0.166	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

l: az 313.0 el 61.6 pa 110.3 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 128.632 303.469 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/lp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/lp.W.162.1X1KZS

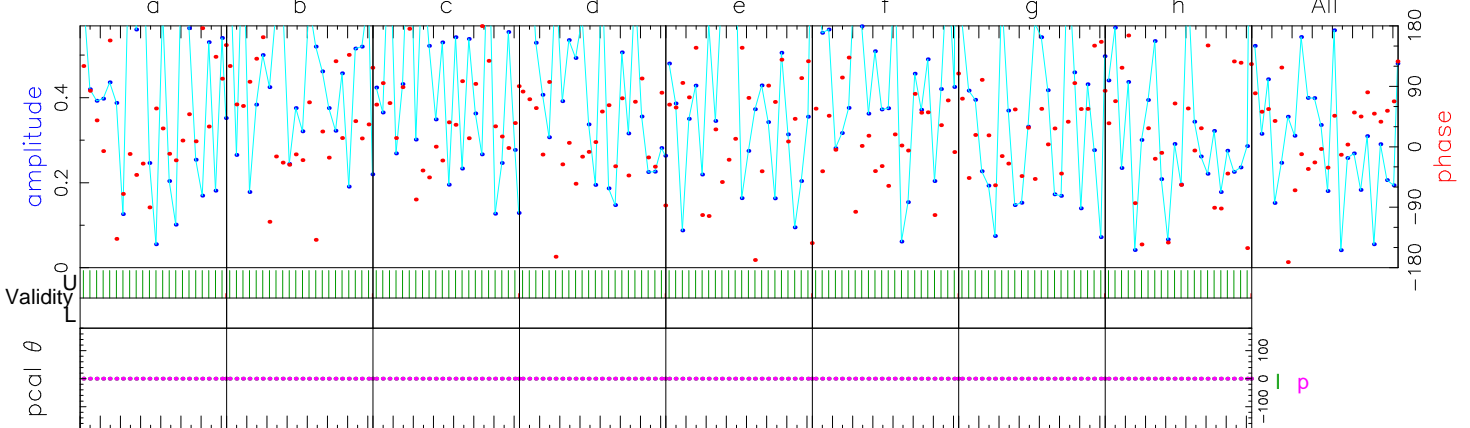


Fringe quality 9

SNR 10.6
Int time 419.821
Amp 0.190
Phase 32.2
PFD 1.0e-17
Delays (us)
SBD -0.002168
MBD -0.000793
Fringe rate (Hz)
-0.005552
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
2021:304:133119
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		
l	0	0	0	0	0	0	0	0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.46391170555E+01				-2.46383240603E+01				Resid mbdelay (usec)	-7.92995E-04 +/- 1.0E-04
Sband delay (usec)	-2.46404923103E+01				-8.1664276E+00				Resid sbdelay (usec)	-2.16825E-03 +/- 8.1E-04
Phase delay (usec)	-2.46383230225E+01				-1.6600001E-07				Resid phdelay (usec)	1.03785E-06 +/- 3.5E-07
Delay rate (us/s)	-1.38150779838E-02				-1.38150135327E-02				Resid rate (us/s)	-6.44511E-08 +/- 1.4E-09
Total phase (deg)		-52.3			1.93133632659E-06				Resid phase (deg)	32.2 +/- 10.8
	RMS	Theor.	Amplitude	0.190 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.4	25.9	Search (2048X32)	0.183					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	93.5	45.1	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	11.2	15.2	Inc. seg. avg.	0.272					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	30.2	26.6	Inc. frq. avg.	0.182					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

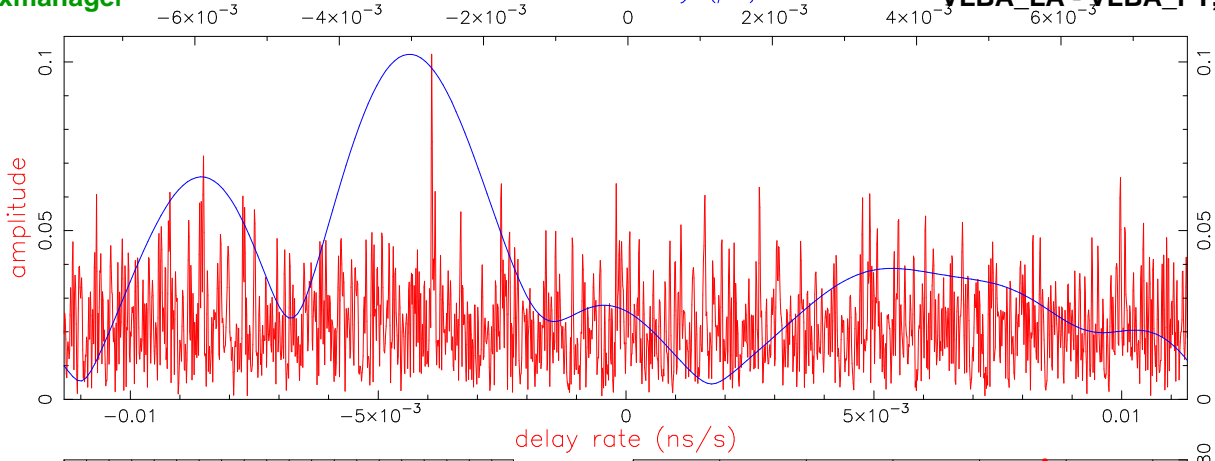
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

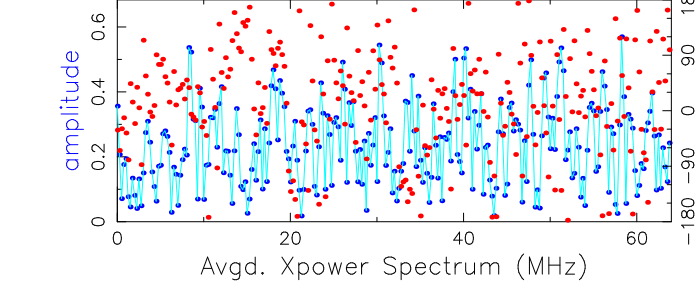
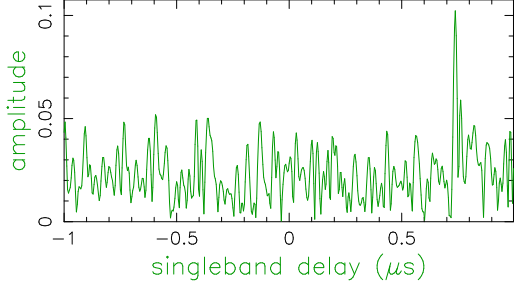
NRAO150.1X1KZS, No0113, lp

VLBA_LA - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

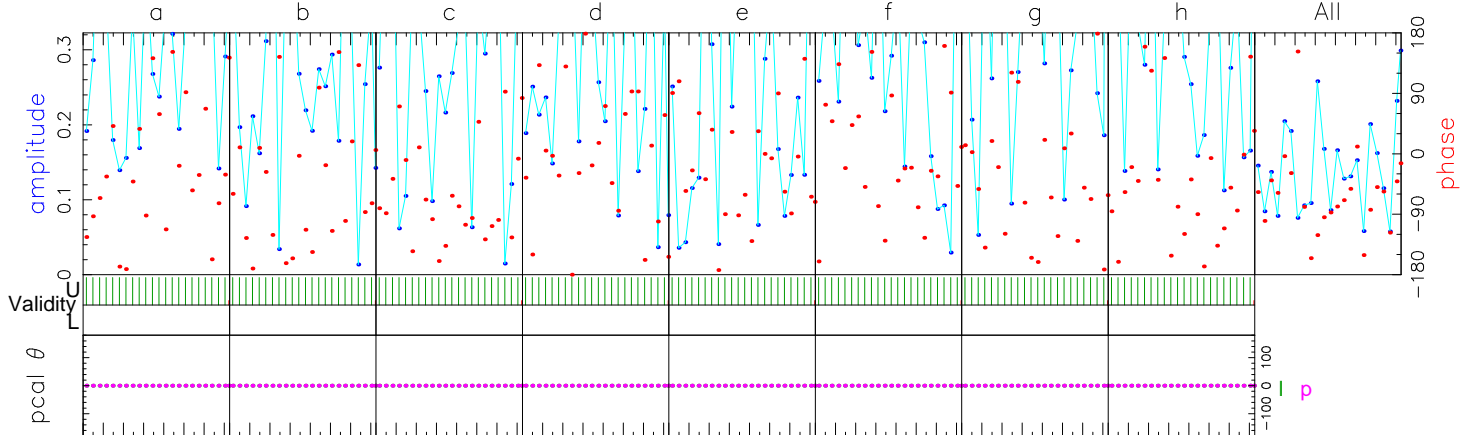


Fringe quality 0
 SNR 5.7
 Int time 419.821
 Amp 0.108
 Phase -65.1
 PFD 9.1e-01
 Delays (us)
 SBD 0.737972
 MBD -0.003040
 Fringe rate (Hz)
 -0.338572
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133123
 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
	-60.9	-96.3	-79.3	38.4	-48.1	-23.7	-74.5	-101.3	Phase	-65.1
	0.1	0.1	0.2	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	64.1	129.1	77.9	223.7	273.0	18.1	418.4	381.7	Sbd box	445.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.39069891943E+01		Apriori delay (usec)		-2.46383240603E+01		Resid mbdelay (usec)		-3.04013E-03	+/- 1.9E-04
Sband delay (usec)	-2.39003520603E+01		Apriori clock (usec)		-8.1664276E+00		Resid sbdelay (usec)		7.37972E-01	+/- 1.5E-03
Phase delay (usec)	-2.46383261603E+01		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-2.09997E-06	+/- 6.4E-07
Delay rate (us/s)	-1.38189440230E-02		Apriori rate (us/s)		-1.38150135327E-02		Resid rate (us/s)		-3.93049E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.93133632659E-06		Resid phase (deg)		-65.1	+/- 20.0

ph/seg (deg) 51.2 47.9 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.9 83.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.5 28.3 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 36.1 49.3 Inc. frq. avg. 0.115 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 313.0 el 61.6 pa 110.3 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 128.632 303.469 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/lp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/lp.W.202.1X1KZS

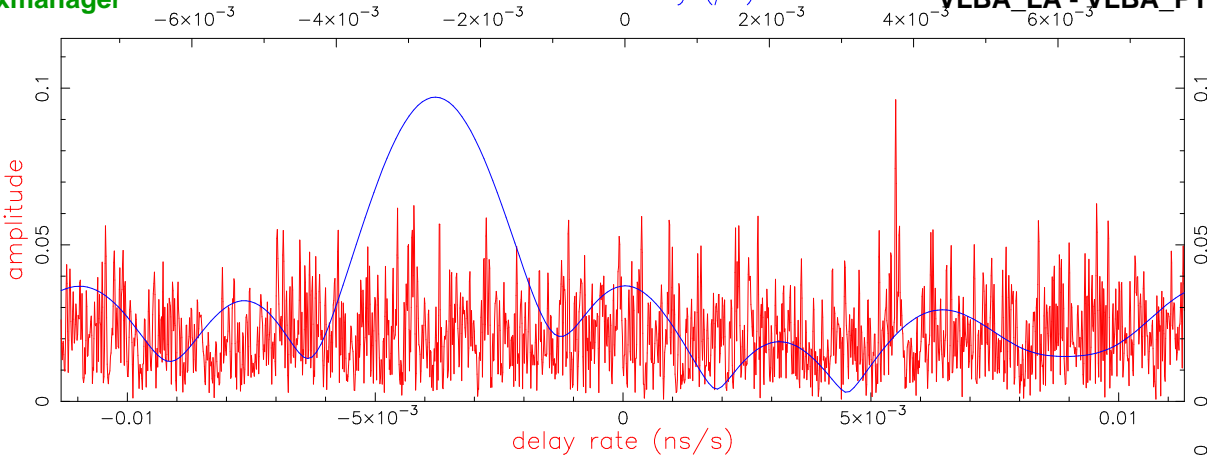
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, lp

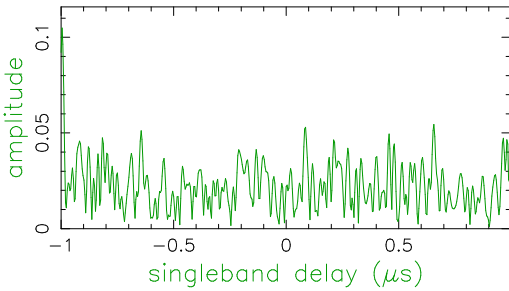
VLBA_LA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

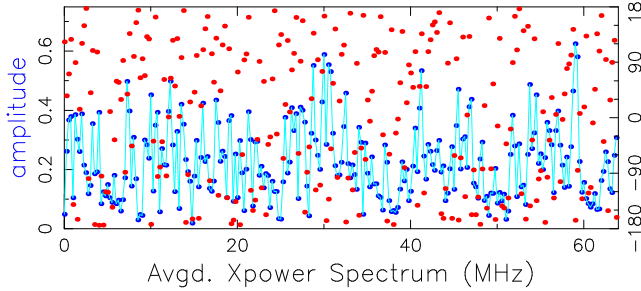


Fringe quality 0

SNR 5.9
Int time 419.821
Amp 0.116
Phase -131.9
PFD 6.4e-01
Delays (us)
SBD -0.995780
MBD -0.002757
Fringe rate (Hz)
0.474950
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

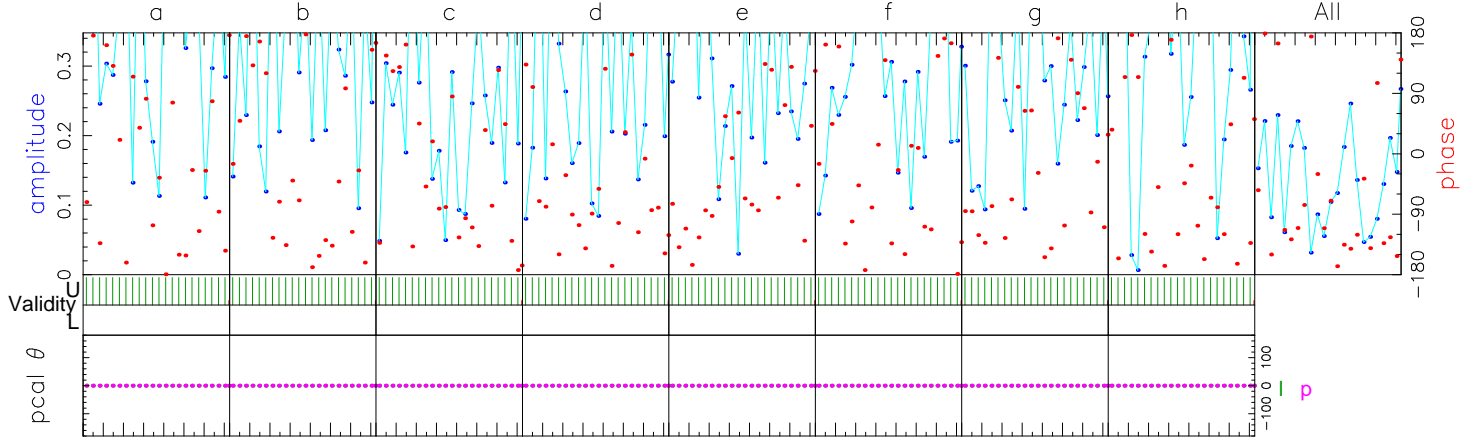


delay rate (ns/s)



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°57'50.161694"

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
	-158.2	-144.9	-155.5	-97.4	-103.8	-142.7	-112.7	-137.1	Phase	-131.9
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	286.1	506.9	425.0	279.4	108.1	21.2	307.8	1.4	Sbd box	2.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.56410815506E+01		Apriori delay (usec)		-2.46383240603E+01		Resid mbdelay (usec)		-2.75749E-03	+/- 1.8E-04
Sband delay (usec)	-2.56341040603E+01		Apriori clock (usec)		-8.1664276E+00		Resid sbdelay (usec)		-9.95780E-01	+/- 1.5E-03
Phase delay (usec)	-2.46383283150E+01		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-4.25463E-06	+/- 6.3E-07
Delay rate (us/s)	-1.3809498349E-02		Apriori rate (us/s)		-1.38150135327E-02		Resid rate (us/s)		5.51370E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.93133632659E-06		Resid phase (deg)		-131.9	+/- 19.5

	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.8	46.7	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.1	81.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	25.5	27.6	Inc. seg. avg.	0.112	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	29.0	48.1	Inc. frq. avg.	0.102	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

l: az 313.0 el 61.6 pa 110.3 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 128.632 303.469 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/lp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/lp.W.222.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

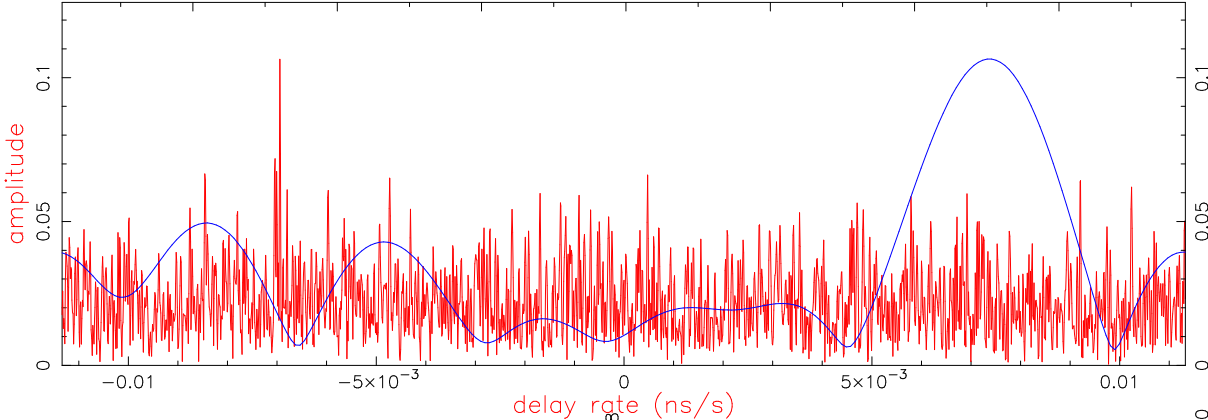
NRAO150.1X1KZS, No0113, mp

VLBA_MK - VLBA_PT, fgroup W, pol LL

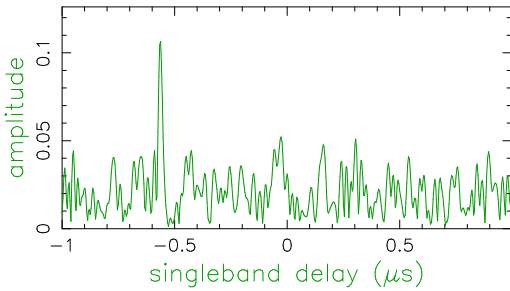
multiband delay (μ s)

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

Fringe quality 0

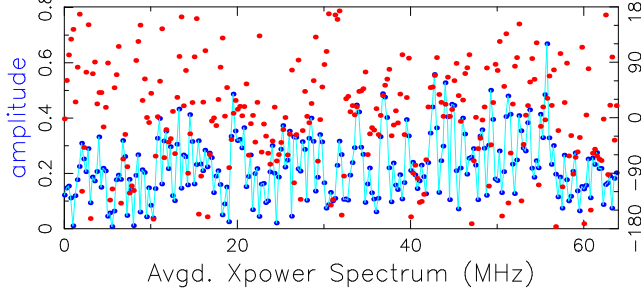


SNR 6.0
Int time 419.821
Amp 0.126
Phase -59.5
PFD 3.6e-01
Delays (us)
SBD -0.563999
MBD 0.004997
Fringe rate (Hz)
-0.598714
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



singleband delay (μ s)

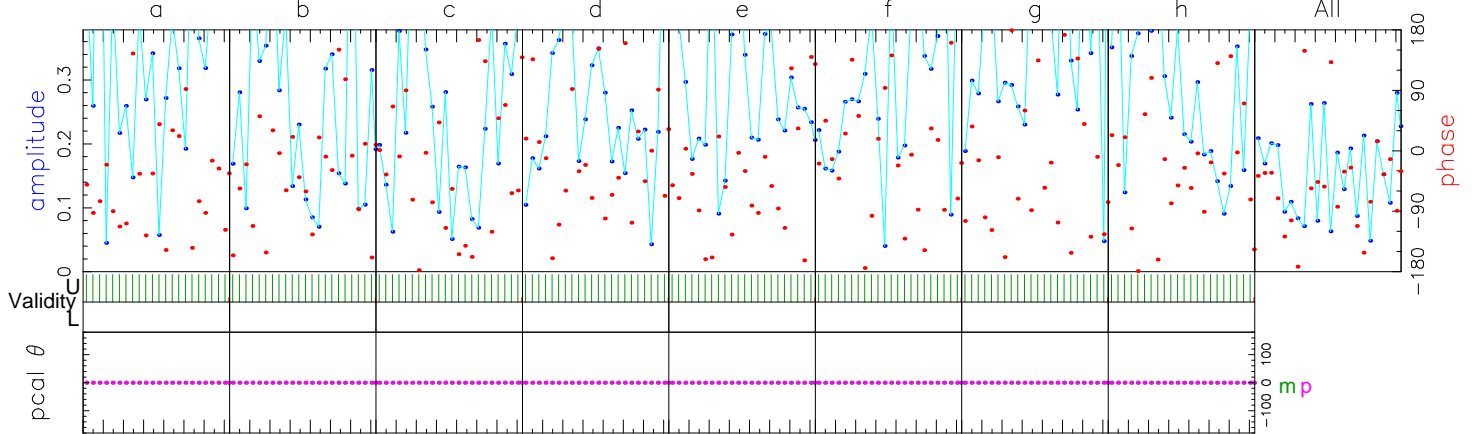
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211c
Yr:day 16383
Start 2021:116
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133117
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
	-71.2	-30.0	-71.8	-59.3	-65.6	-47.3	-90.1	-31.5	Phase	-59.5
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	112.0	446.8	428.9	323.2	163.5	293.9	486.3	162.8	Sbd box	112.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-8.19964605188E+02		Apriori delay (usec)		-8.19407101740E+02		Resid mbdelay (usec)		4.99655E-03	+/- 1.8E-04
Sband delay (usec)	-8.19971100740E+02		Apriori clock (usec)		1.0181700E+01		Resid sbdelay (usec)		-5.63999E-01	+/- 1.4E-03
Phase delay (usec)	-8.19407103658E+02		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		-1.91827E-06	+/- 6.1E-07
Delay rate (us/s)	6.68508161478E-01		Apriori rate (us/s)		6.68515111953E-01		Resid rate (us/s)		-6.95047E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.52670575992E-05		Resid phase (deg)		-59.5	+/- 19.0

	RMS	Theor.	Amplitude	0.126 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	65.9	45.6	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	78.2	79.6	Interp.	0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	22.6	26.9	Inc. seg. avg.	0.138	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
amp/frq (%)	38.4	46.9	Inc. frq. avg.	0.119					

m: az 17.8 el 56.5 pa -152.6 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -6108.169 -2676.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/mp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/mp.W.169.1X1KZS

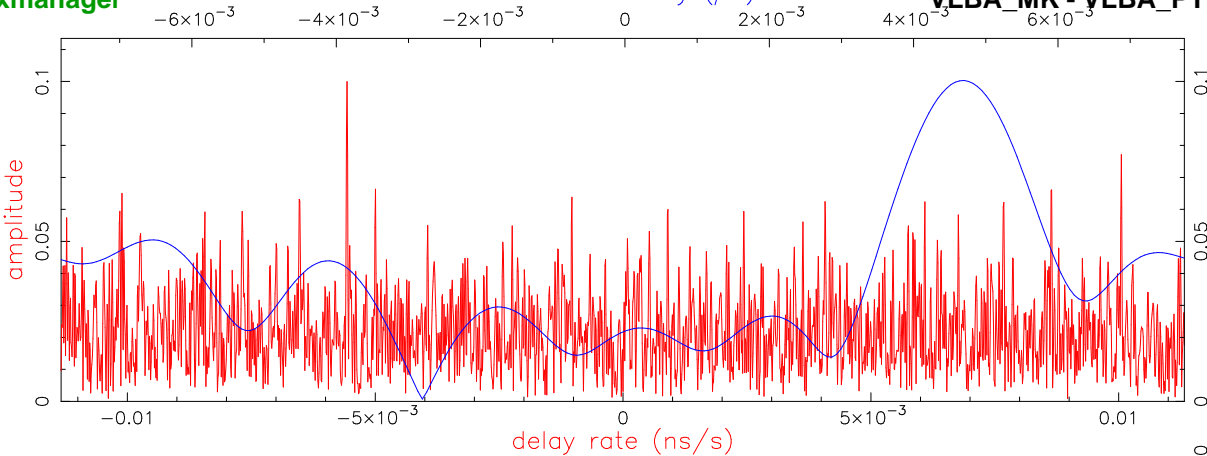
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, mp

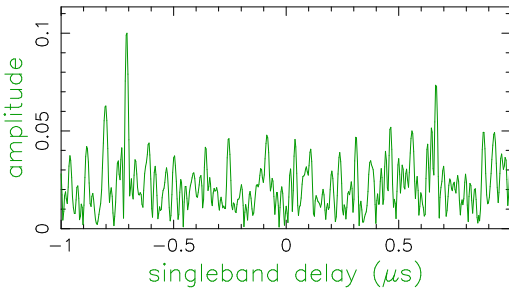
VLBA_MK - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

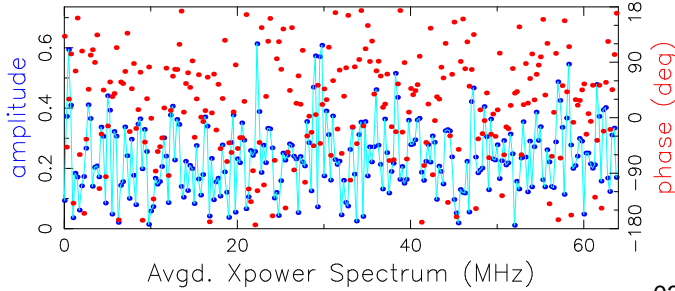


Fringe quality 0

SNR 5.7
 Int time 419.821
 Amp 0.113
 Phase 98.5
 PFD 9.0e-01
 Delays (us)
 SBD -0.708832
 MBD 0.004600
 Fringe rate (Hz)
 -0.480703
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

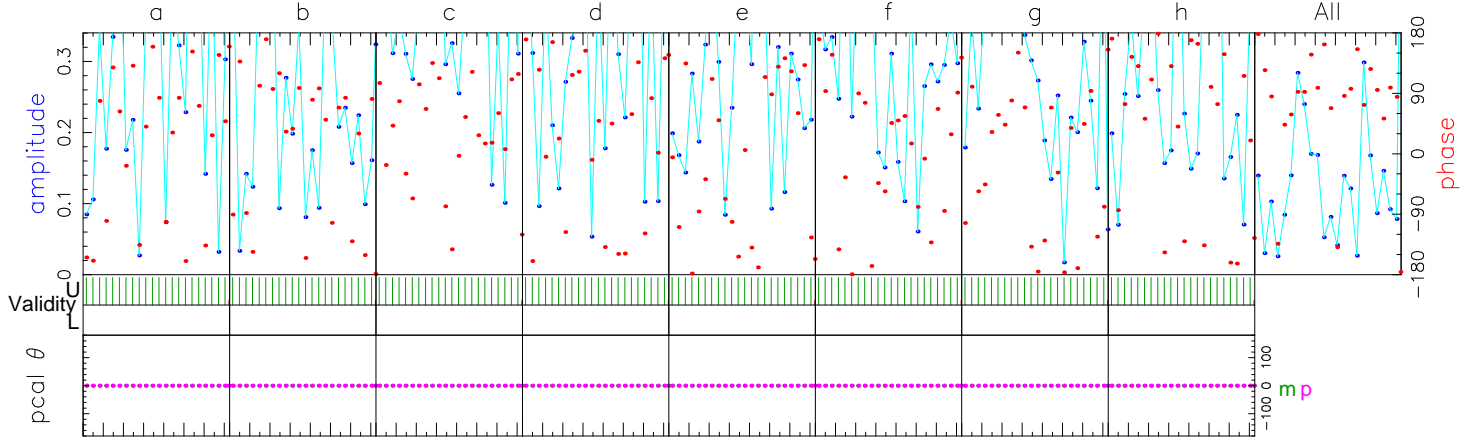


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133121
 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		
m	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.20121252089E+02									
Sband delay (usec)	-8.20115933740E+02									
Phase delay (usec)	-8.19407098565E+02									
Delay rate (us/s)	6.68509531463E-01									
Total phase (deg)			-169.3							
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)									98.5	+/- 20.0
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								

m: az 17.8 el 56.5 pa -152.6 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -6108.169 -2676.275
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/mp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/mp.W.195.1X1KZS
 simultaneous interpolator

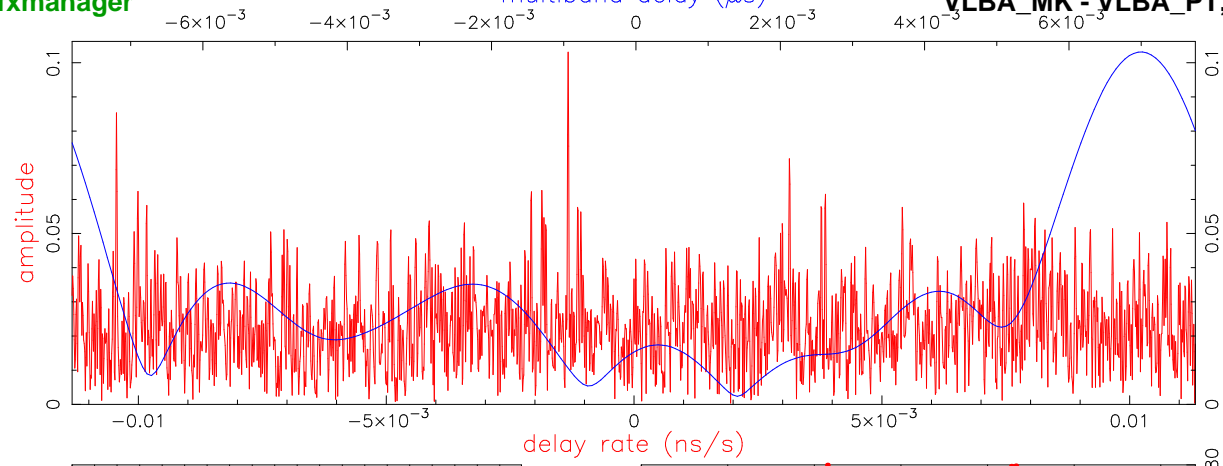
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

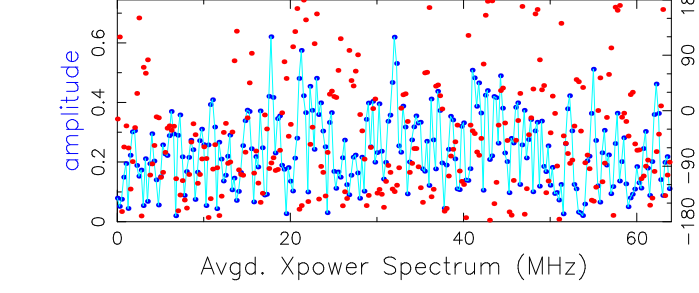
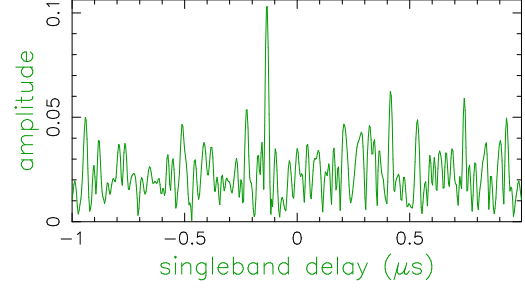
NRAO150.1X1KZS, No0113, mp

VLBA_MK - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

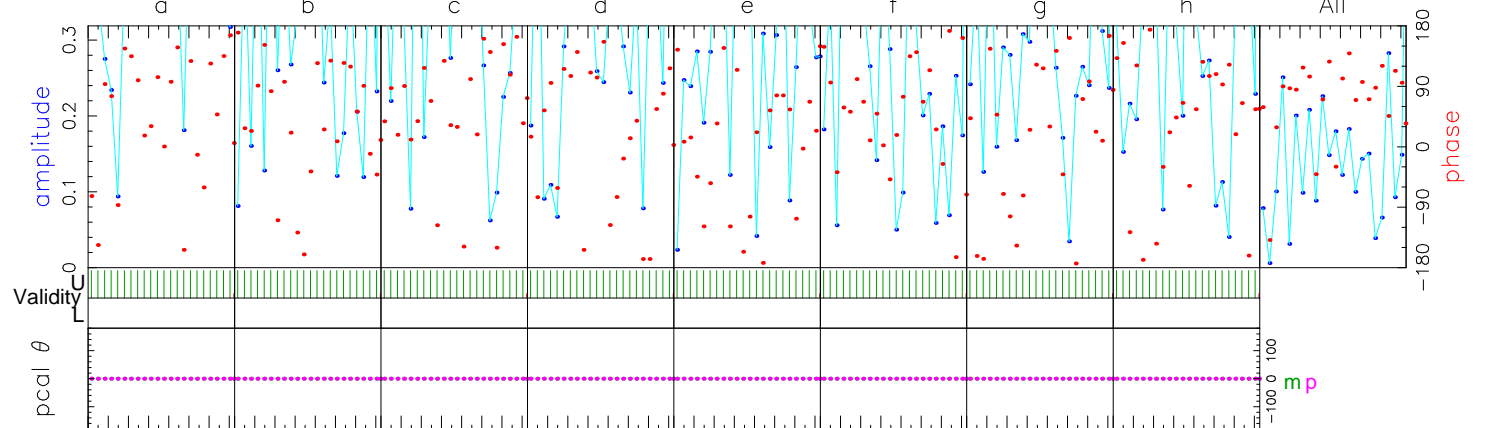


Fringe quality 0
 SNR 5.9
 Int time 419.821
 Amp 0.106
 Phase 81.6
 PFD 5.6e-01
 Delays (us)
 SBD -0.134696
 MBD 0.006965
 Fringe rate (Hz)
 -0.114564
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133126
 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
	91.5	74.3	70.7	112.9	48.3	73.7	97.5	95.9	Phase	81.6
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	341.9	67.0	222.1	199.9	171.9	37.7	314.4	349.1	Sbd box	222.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	-8.19540762051E+02		Apriori delay (usec)		-8.19407101740E+02		Resid mbdelay (usec)		6.96469E-03	+/- 1.8E-04
Sband delay (usec)	-8.19541797240E+02		Apriori clock (usec)		1.0181700E+01		Resid sbdelay (usec)		-1.34696E-01	+/- 1.5E-03
Phase delay (usec)	-8.19407099109E+02		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		2.63082E-06	+/- 6.2E-07
Delay rate (us/s)	6.68513781975E-01		Apriori rate (us/s)		6.68515111953E-01		Resid rate (us/s)		-1.32998E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.52670575992E-05		Resid phase (deg)		81.6	+/- 19.4

	RMS	Theor.	Amplitude	0.106 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.2	46.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	77.1	81.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	21.9	27.4	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	39.2	47.8	Inc. frq. avg.	0.097	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 17.8 el 56.5 pa -152.6 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -6108.169 -2676.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/mp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/mp.W.216.1X1KZS

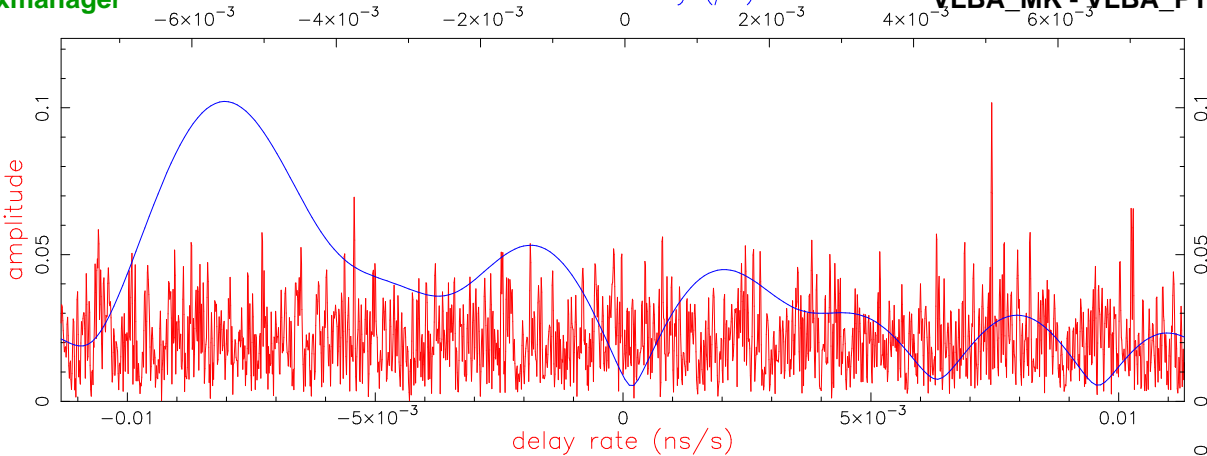
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, mp

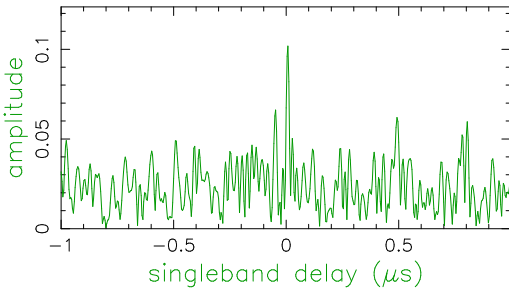
VLBA_MK - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

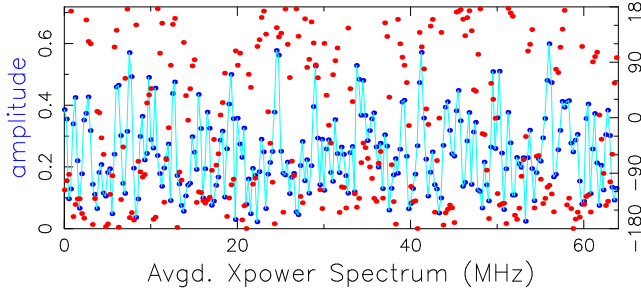


Fringe quality 0

SNR 5.8
 Int time 419.821
 Amp 0.124
 Phase -21.9
 PFD 8.7e-01
 Delays (us)
 SBD 0.006697
 MBD -0.005649
 Fringe rate (Hz) 0.641695
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

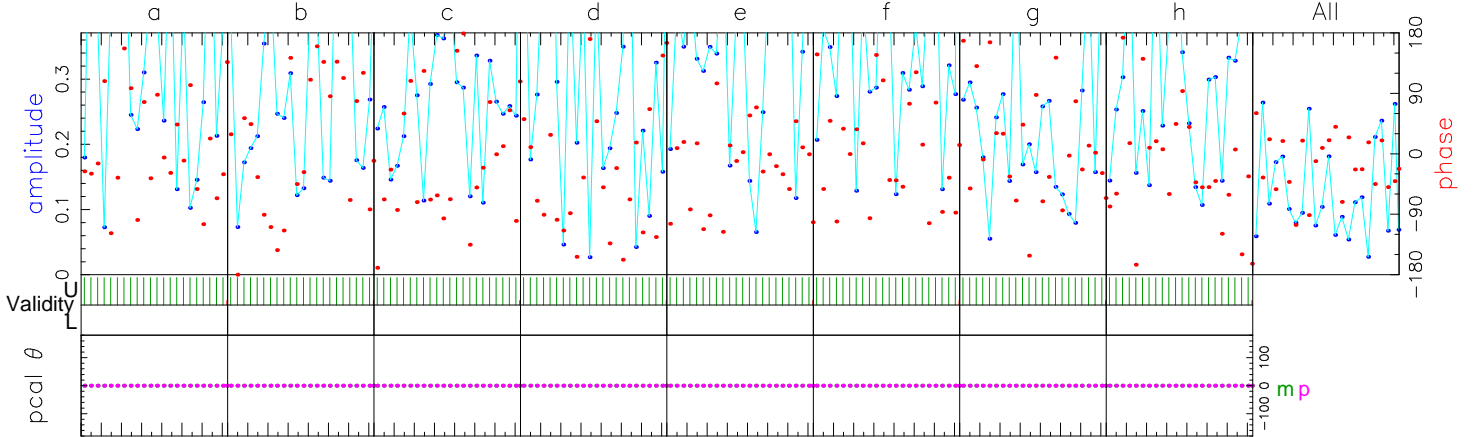


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133129
 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
	-16.6	146.1	-59.3	-53.2	-22.4	9.3	-22.5	-13.7	Phase	-21.9
	0.2	0.1	0.1	0.1	0.3	0.1	0.1	0.1	Ampl.	0.1
	258.0	131.7	253.9	392.5	258.9	318.7	8.6	212.1	Sbd box	258.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.19397125734E+02		Apriori delay (usec)		-8.19407101740E+02		Resid mbdelay (usec)		-5.64899E-03	+/- 1.9E-04
Sband delay (usec)	-8.19400404740E+02		Apriori clock (usec)		1.0181700E+01		Resid sbdelay (usec)		6.69700E-03	+/- 1.5E-03
Phase delay (usec)	-8.19407102447E+02		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		-7.07470E-07	+/- 6.4E-07
Delay rate (us/s)	6.68522561391E-01		Apriori rate (us/s)		6.68515111953E-01		Resid rate (us/s)		7.44944E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.52670575992E-05		Resid phase (deg)		-21.9	+/- 19.9

	RMS	Theor.	Amplitude	0.124 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	43.4	47.7	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.2	83.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	72.7	28.1	Inc. seg. avg.	0.118	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.4	49.1	Inc. frq. avg.	0.128	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 17.8 el 56.5 pa -152.6 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -6108.169 -2676.275 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/mp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/mp.W.237.1X1KZS

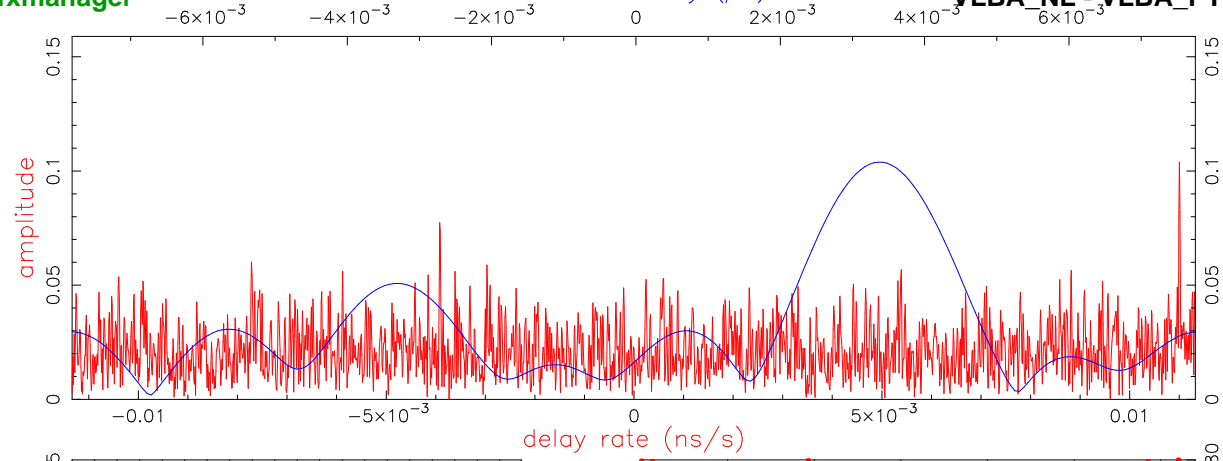
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

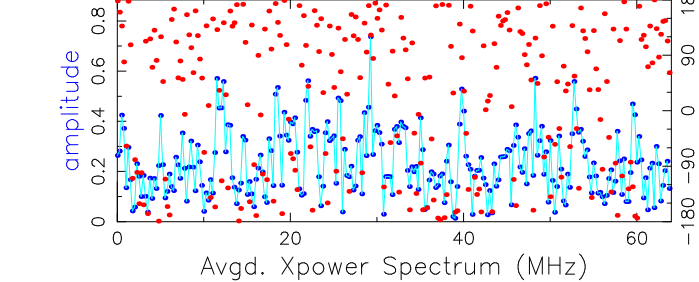
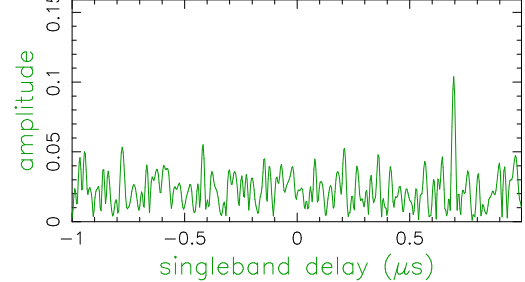
NRAO150.1X1KZS, No0113, np

VLBA_NL - VLBA_PT, fgroup W, pol LL

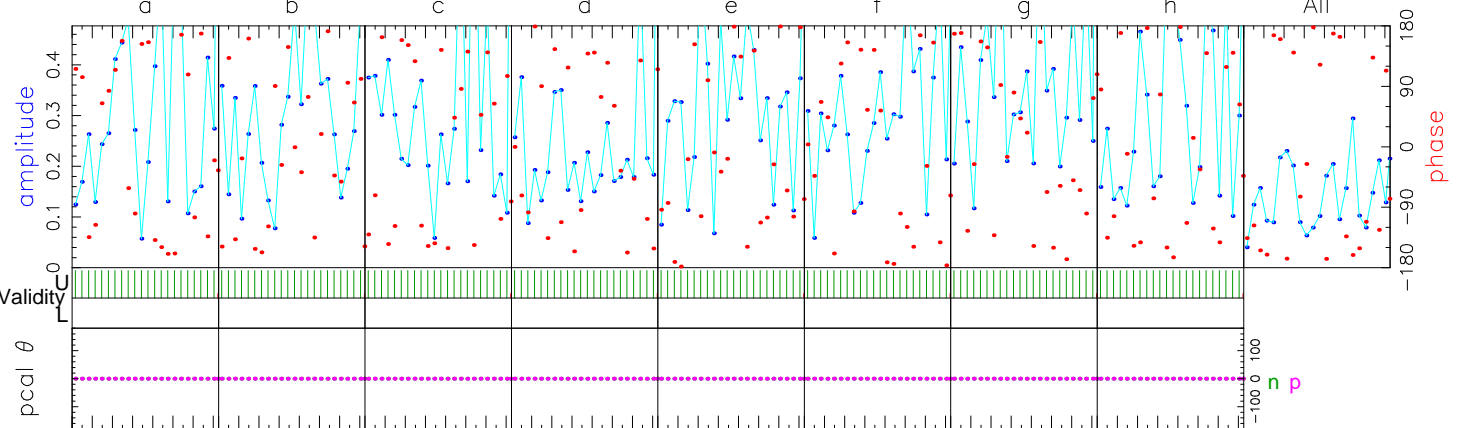
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 419.821
 Amp 0.159
 Phase -170.4
 PFD 7.6e-01
 Delays (us)
 SBD 0.695005
 MBD 0.003360
 Fringe rate (Hz) 0.949689
 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
 2021:304:133117
 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
	-165.1	158.8	-177.7	175.4	-140.6	178.6	-178.1	-167.5	Phase	-170.4
	0.2	0.1	0.2	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	499.3	97.8	9.1	96.3	258.2	294.3	503.5	436.1	Sbd box	434.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.09955039409E+03	Apriori delay (usec)	-1.10024125364E+03	Resid mbdelay (usec)	3.35955E-03	+/-	1.9E-04
Sband delay (usec)	-1.09954624814E+03	Apriori clock (usec)	-4.9879074E-02	Resid sbdelay (usec)	6.95005E-01	+/-	1.5E-03
Phase delay (usec)	-1.10024125913E+03	Apriori clockrate (us/s)	4.1999997E-07	Resid phdelay (usec)	-5.49544E-06	+/-	6.3E-07
Delay rate (us/s)	-1.16161071531E-01	Apriori rate (us/s)	-1.16172096483E-01	Resid rate (us/s)	1.10250E-05	+/-	2.6E-09
Total phase (deg)	-22.2	Apriori accel (us/s/s)	1.48329130353E-05	Resid phase (deg)	-170.4	+/-	19.7

ph/seg (deg)	53.0	Theor.	47.2	Amplitude	0.159 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	70.9	Search (2048X32)	0.102	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.6	Inc. seg. avg.	0.161	Inc. frq. avg.	0.147	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.9	Inc. frq. avg.	0.147			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

n: az 302.7 el 56.1 pa 86.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 1080.501 2000.834 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/np..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/np.W.173.1X1KZS

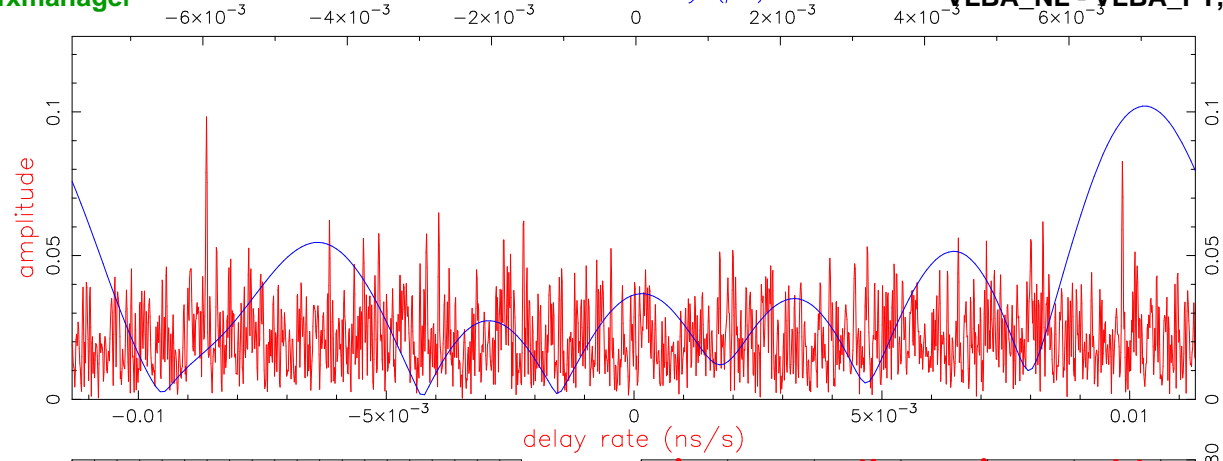
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, np

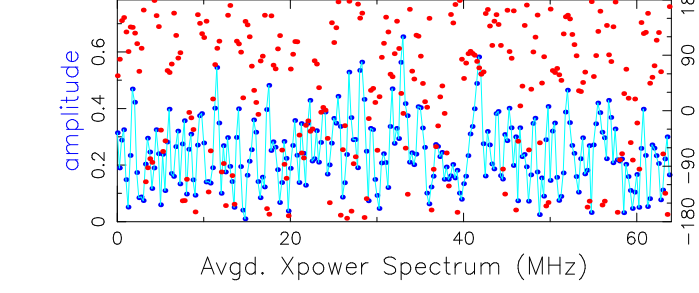
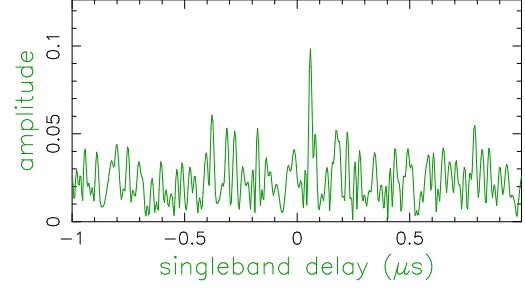
VLBA_NL - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)



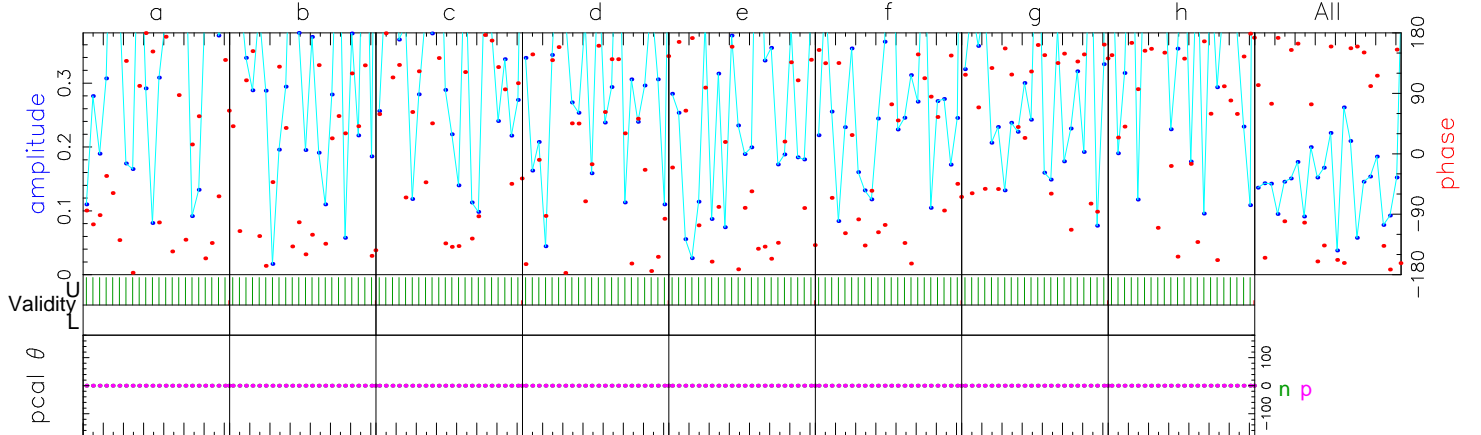
Fringe quality 0

SNR 5.5
 Int time 419.821
 Amp 0.126
 Phase 164.5
 PFD 1.0e+00
 Delays (us)
 SBD 0.058626
 MBD -0.008301
 Fringe rate (Hz)
 -0.743634
 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
 2021:304:133121
 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
	-139.6	154.1	140.7	156.8	-161.1	155.3	147.5	144.5	Phase	164.5
	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	421.2	279.2	369.5	66.8	152.7	496.5	381.1	266.1	Sbd box	272.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.10018705442E+03		Apriori delay (usec)		-1.10024125364E+03		Resid mbdelay (usec)		-8.30078E-03	+/- 2.0E-04
Sband delay (usec)	-1.10018262739E+03		Apriori clock (usec)		-4.9879074E-02		Resid sbdelay (usec)		5.86262E-02	+/- 1.6E-03
Phase delay (usec)	-1.10024124833E+03		Apriori clockrate (us/s)		4.1999997E-07		Resid phdelay (usec)		5.30513E-06	+/- 6.7E-07
Delay rate (us/s)	-1.16180729340E-01		Apriori rate (us/s)		-1.16172096483E-01		Resid rate (us/s)		-8.63286E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		1.48329130353E-05		Resid phase (deg)		164.5	+/- 20.8

ph/seg (deg) 51.1 49.9 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.2 87.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.1 29.4 Inc. seg. avg. 0.137 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 51.4 Inc. frq. avg. 0.127 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 302.7 el 56.1 pa 86.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 1080.501 2000.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/np..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/np.W.192.1X1KZS

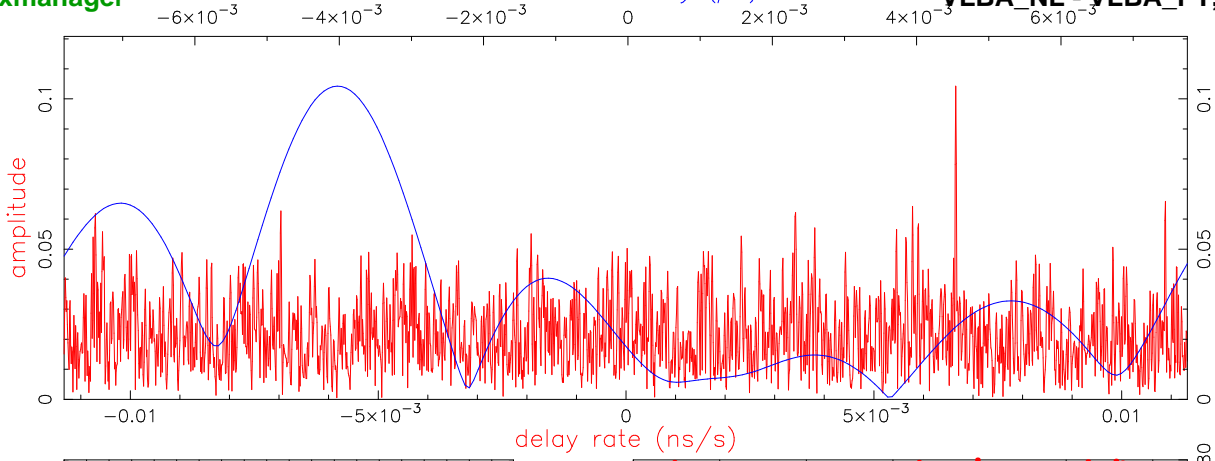
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, np

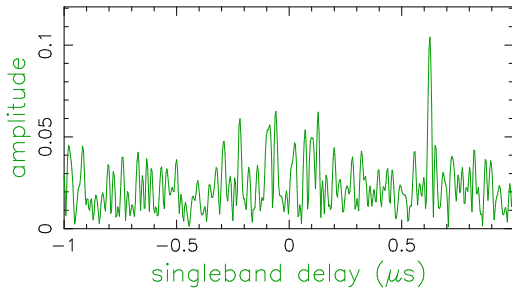
VLBA_NL - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

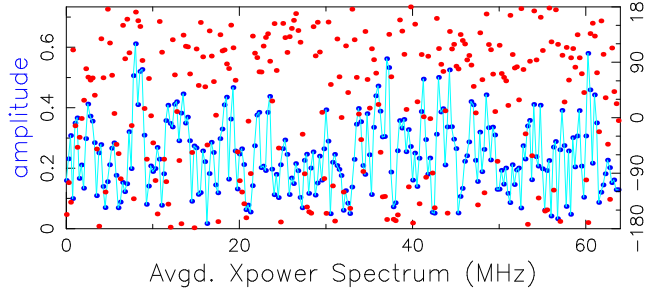


Fringe quality 0

SNR 5.8
 Int time 419.821
 Amp 0.121
 Phase 160.2
 PFD 7.2e-01
 Delays (us)
 SBD 0.624595
 MBD -0.004041
 Fringe rate (Hz)
 0.574158
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

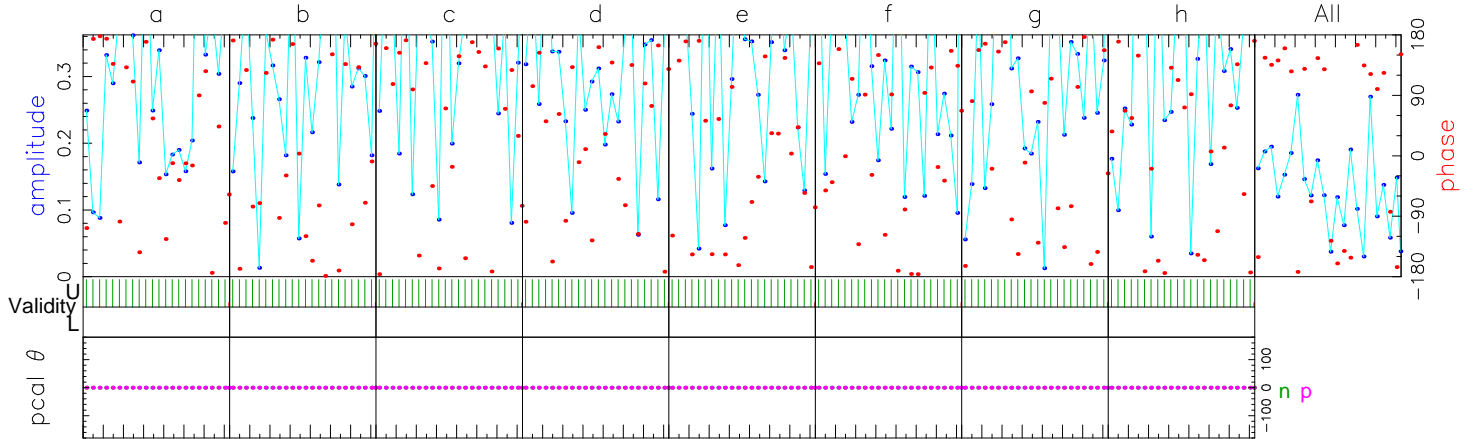


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133125
 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

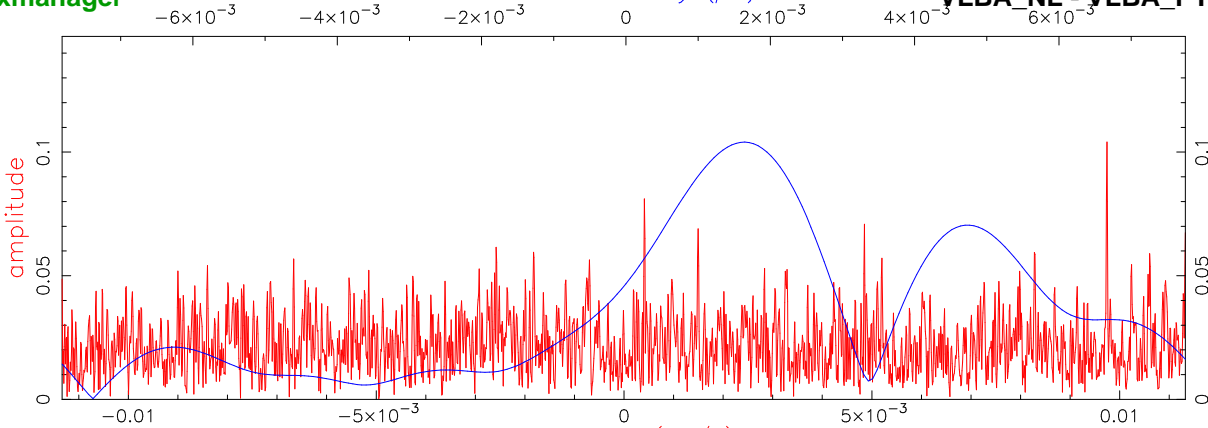


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	157.8	-176.2	148.3	118.4	146.7	148.8	-176.1	156.3	Phase	160.2
	0.1	0.2	0.2	0.1	0.0	0.1	0.2	0.1	Ampl.	0.1
	455.9	374.9	417.6	41.9	466.9	187.7	200.2	117.2	Sbd box	416.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.09962029438E+03		Apriori delay (usec)		-1.10024125364E+03		Resid mbdelay (usec)		-4.04074E-03	+/- 1.9E-04
Sband delay (usec)	-1.09961665864E+03		Apriori clock (usec)		-4.9879074E-02		Resid sbdelay (usec)		6.24595E-01	+/- 1.5E-03
Phase delay (usec)	-1.10024124847E+03		Apriori clockrate (us/s)		4.1999997E-07		Resid phdelay (usec)		5.16643E-06	+/- 6.3E-07
Delay rate (us/s)	-1.16165431078E-01		Apriori rate (us/s)		-1.16172096483E-01		Resid rate (us/s)		6.66541E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.48329130353E-05		Resid phase (deg)		160.2	+/- 19.6

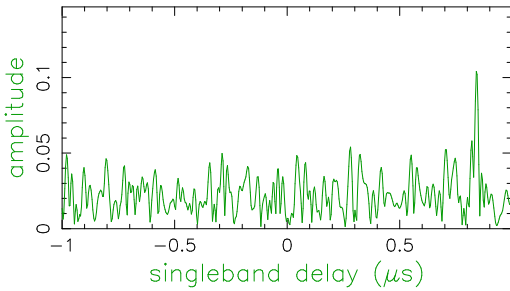
ph/seg (deg) 51.9 47.0 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 69.0 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.6 27.7 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.1 48.4 Inc. frq. avg. 0.115 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 302.7 el 56.1 pa 86.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 1080.501 2000.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/np..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/np.W.213.1X1KZS

multiband delay (μ s)

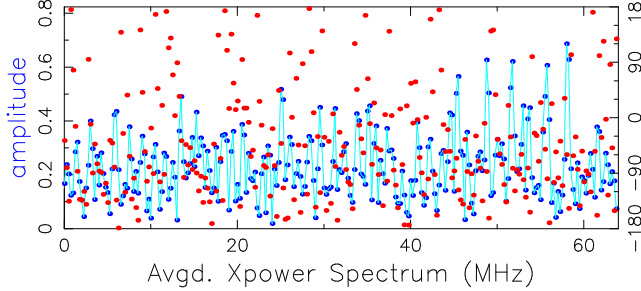
Fringe quality 0



SNR 5.9
 Int time 419.821
 Amp 0.147
 Phase -124.2
 PFD 5.2e-01
 Delays (us)
 SBD 0.841445
 MBD 0.001655
 Fringe rate (Hz)
 0.840568
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

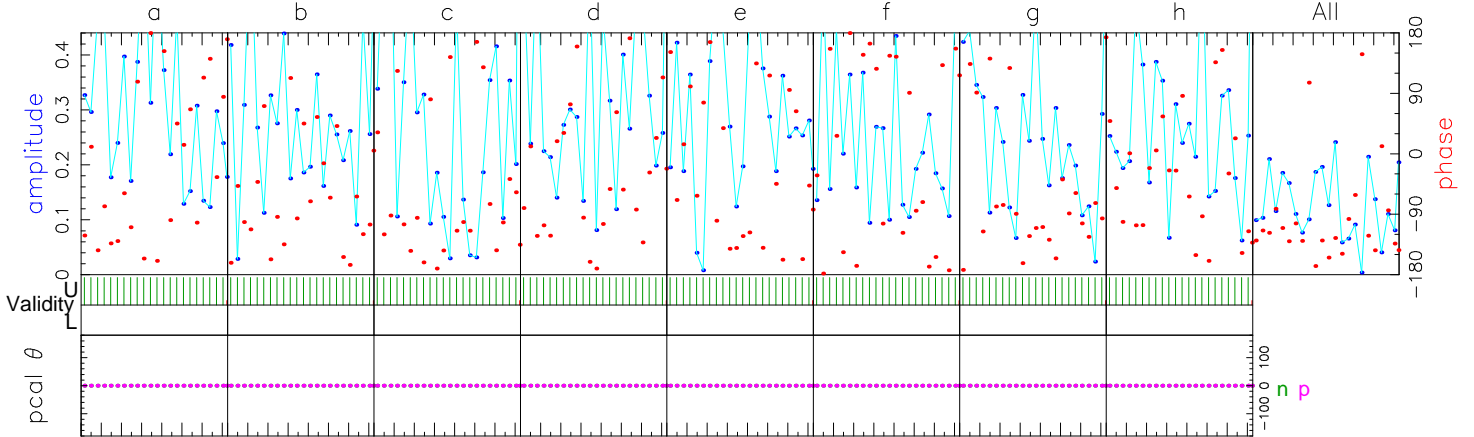


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133129
 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

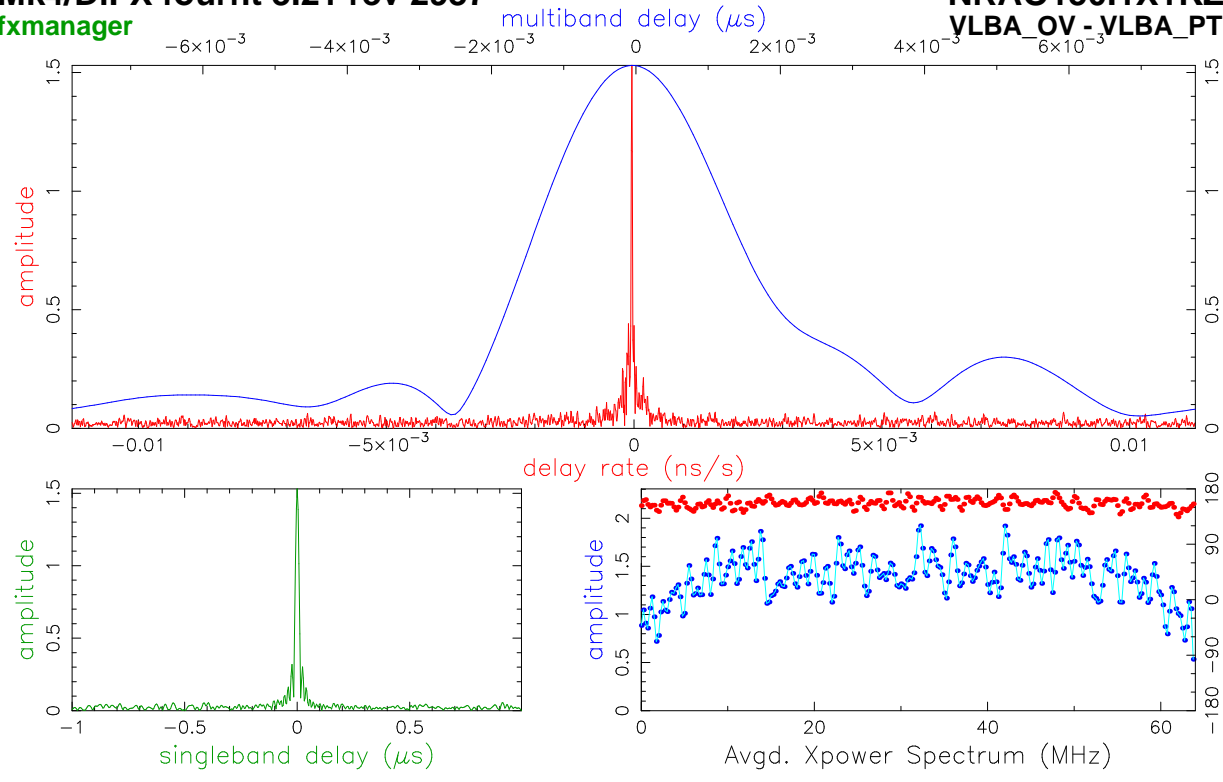


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-139.4	-108.5	-114.7	-96.2	-157.9	172.8	-129.2	-64.6	Phase	-124.2
	0.1	0.2	0.3	0.2	0.1	0.2	0.2	0.1	Ampl.	0.2
	228.0	199.2	472.0	266.3	105.7	72.4	472.2	343.4	Sbd box	472.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.09939584866E+03	Apriori delay (usec)	-1.10024125364E+03	Resid mbdelay (usec)	1.65498E-03	+/-	1.8E-04
Sband delay (usec)	-1.09939980889E+03	Apriori clock (usec)	-4.9879074E-02	Resid sbdelay (usec)	8.41445E-01	+/-	1.5E-03
Phase delay (usec)	-1.10024125764E+03	Apriori clockrate (us/s)	4.1999997E-07	Resid phdelay (usec)	-4.00391E-06	+/-	6.2E-07
Delay rate (us/s)	-1.16162338323E-01	Apriori rate (us/s)	-1.16172096483E-01	Resid rate (us/s)	9.75816E-06	+/-	2.6E-09
Total phase (deg)	-336.0	Apriori accel (us/s/s)	1.48329130353E-05	Resid phase (deg)	-124.2	+/-	19.3

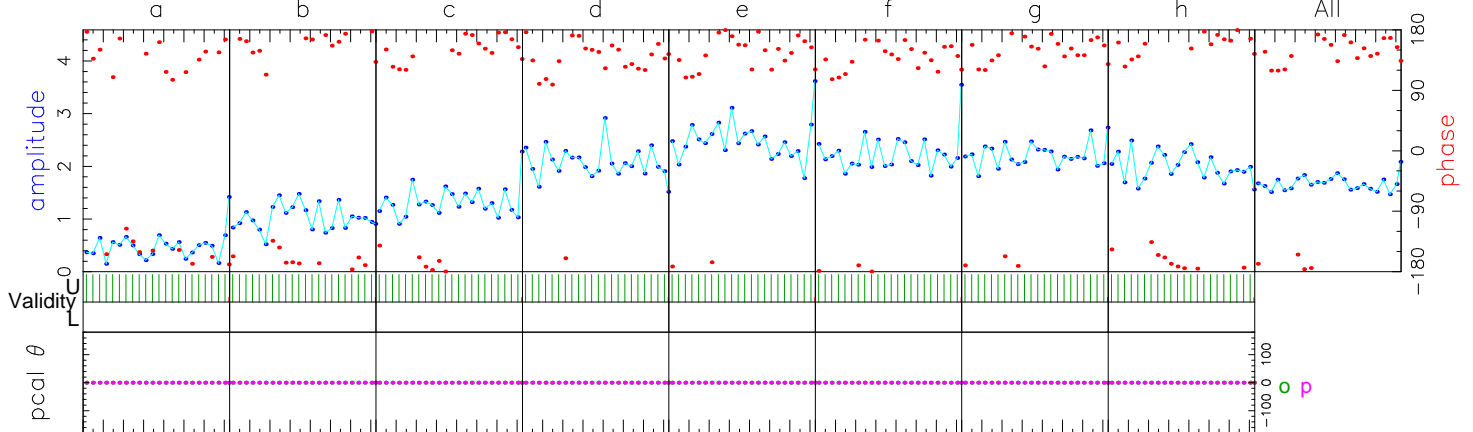
ph/seg (deg)	RMS 50.1	Theor. 46.3	Amplitude Search (2048X32)	0.147 +/- 0.025	0.098	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	59.9	80.8	Interp.	0.000	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	40.9	27.3	Inc. seg. avg.	0.130	0.130	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.1	47.6	Inc. frq. avg.	0.155	0.155	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

n: az 302.7 el 56.1 pa 86.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 1080.501 2000.834 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/np..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/np.W.234.1X1KZS



Fringe quality 4
SNR 85.7
Int time 419.820
Amp 1.530
Phase 156.8
PFD 0.0e+00
Delays (us)
SBD -0.000051
MBD -0.000052
Fringe rate (Hz)
-0.003906
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Yr:day 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133117
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		
o	0	0	0	0	0	0	0	0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)		1.21787958116E+03			1.21787963345E+03				Resid mbdelay (usec)	-5.22885E-05 +/- 1.3E-05
Sband delay (usec)		1.21787958270E+03			-1.7792912E+00				Resid sbdelay (usec)	-5.07500E-05 +/- 1.0E-04
Phase delay (usec)		1.21787963851E+03			4.7999999E-07				Resid phdelay (usec)	5.05498E-06 +/- 4.3E-08
Delay rate (us/s)		1.37881133618E-01			1.37881178959E-01				Resid rate (us/s)	-4.53413E-08 +/- 1.8E-10
Total phase (deg)			21.9		-2.85619116445E-06				Resid phase (deg)	156.8 +/- 1.3

ph/seg (deg) 23.1 3.2 Amplitude 1.530 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 11.3 5.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 15.7 1.9 Inc. seg. avg. 1.661 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 40.6 3.3 Inc. frq. avg. 1.568 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 318.8 el 69.4 pa 122.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1260.638 -35.052 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/op..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/op.W.172.1X1KZS simultaneous interpolator

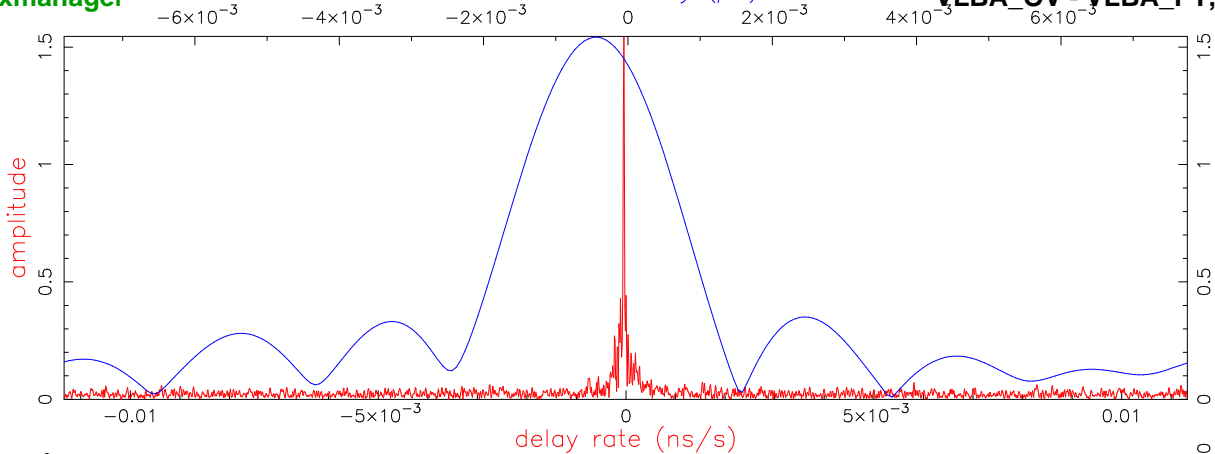
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, op

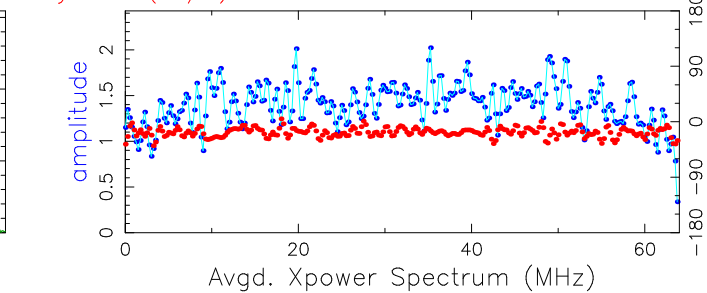
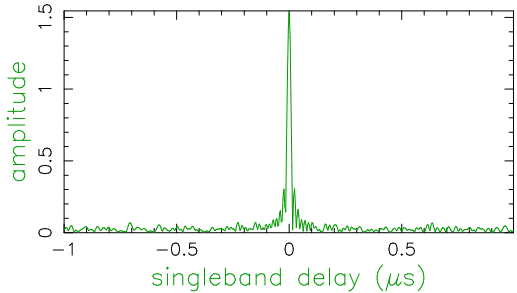
VLBA_OV - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)



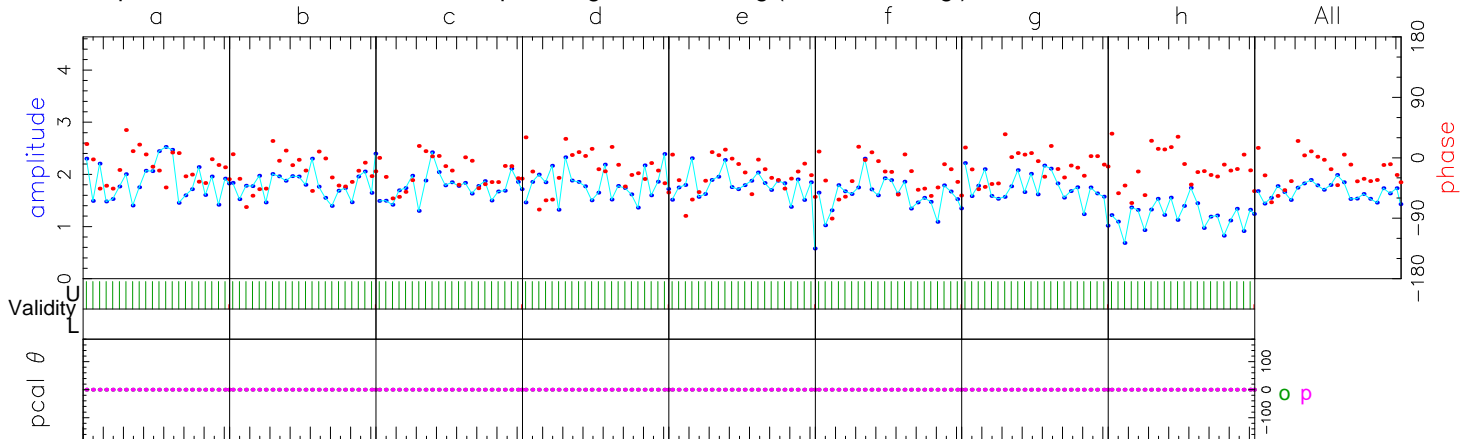
Fringe quality 7

SNR 86.6
 Int time 419.820
 Amp 1.546
 Phase -18.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000585
 MBD -0.000455
 Fringe rate (Hz)
 -0.003874
 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
 2021:304:133121
 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
	-12.6	-21.7	-21.6	-18.7	-24.0	-26.1	-10.0	-13.4	Phase	-18.6
	1.7	1.6	1.6	1.6	1.6	1.4	1.6	1.1	Ampl.	1.5
	256.6	256.9	257.0	256.8	256.8	256.9	256.7	256.8	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21787917804E+03		Apriori delay (usec)		1.21787963345E+03		Resid mbdelay (usec)		-4.55413E-04	+/- 1.3E-05
Sband delay (usec)	1.21787904870E+03		Apriori clock (usec)		-1.7792912E+00		Resid sbdelay (usec)		-5.84750E-04	+/- 9.9E-05
Phase delay (usec)	1.21787963285E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-5.99208E-07	+/- 4.3E-08
Delay rate (us/s)	1.37881133981E-01		Apriori rate (us/s)		1.37881178959E-01		Resid rate (us/s)		-4.49785E-08	+/- 1.8E-10
Total phase (deg)	206.6		Apriori accel (us/s/s)		-2.85619116445E-06		Resid phase (deg)		-18.6	+/- 1.3

ph/seg (deg) 23.4 3.2
 amp/seg (%) 12.8 5.5
 ph/frq (deg) 6.3 1.9
 amp/frq (%) 12.3 3.3

RMS Theor. Amplitude 1.546 +/- 0.018
 Search (2048X32) 1.536
 Interp. 0.000
 Inc. seg. avg. 1.677
 Inc. frq. avg. 1.549

Group delay (usec)(sbd) 1.21787917804E+03
 Sband delay (usec) 1.21787904870E+03
 Phase delay (usec) 1.21787963285E+03
 Delay rate (us/s) 1.37881133981E-01
 Total phase (deg) 206.6

Apriori delay (usec) 1.21787963345E+03
 Apriori clock (usec) -1.7792912E+00
 Apriori clockrate (us/s) 4.7999999E-07
 Apriori rate (us/s) 1.37881178959E-01
 Apriori accel (us/s/s) -2.85619116445E-06

Resid mbdelay (usec) -4.55413E-04
 Resid sbdelay (usec) -5.84750E-04
 Resid phdelay (usec) -5.99208E-07
 Resid rate (us/s) -4.49785E-08
 Resid phase (deg) -18.6

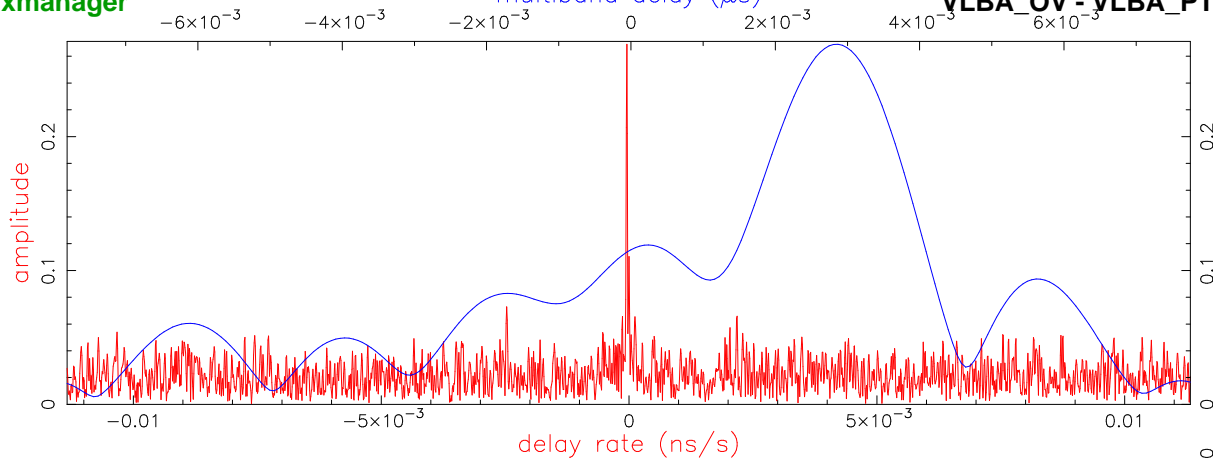
PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

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

o: az 318.8 el 69.4 pa 122.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1260.638 -35.052 simultaneous interpolator

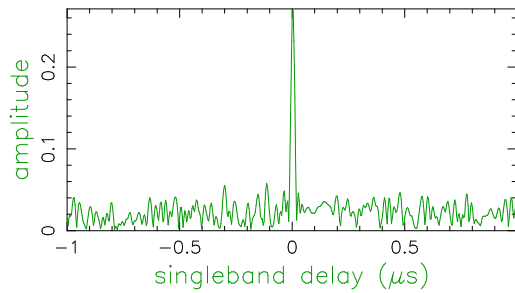
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/op..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/op.W.191.1X1KZS

multiband delay (μ s)

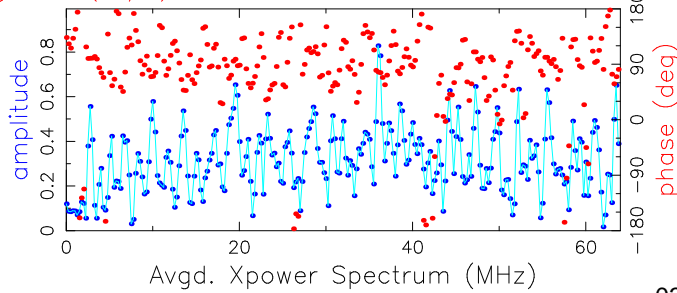


Fringe quality 8

SNR 15.2
Int time 419.820
Amp 0.271
Phase 91.3
PFD 2.6e-43
Delays (us)
SBD 0.002713
MBD 0.002820
Fringe rate (Hz)
-0.004012
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

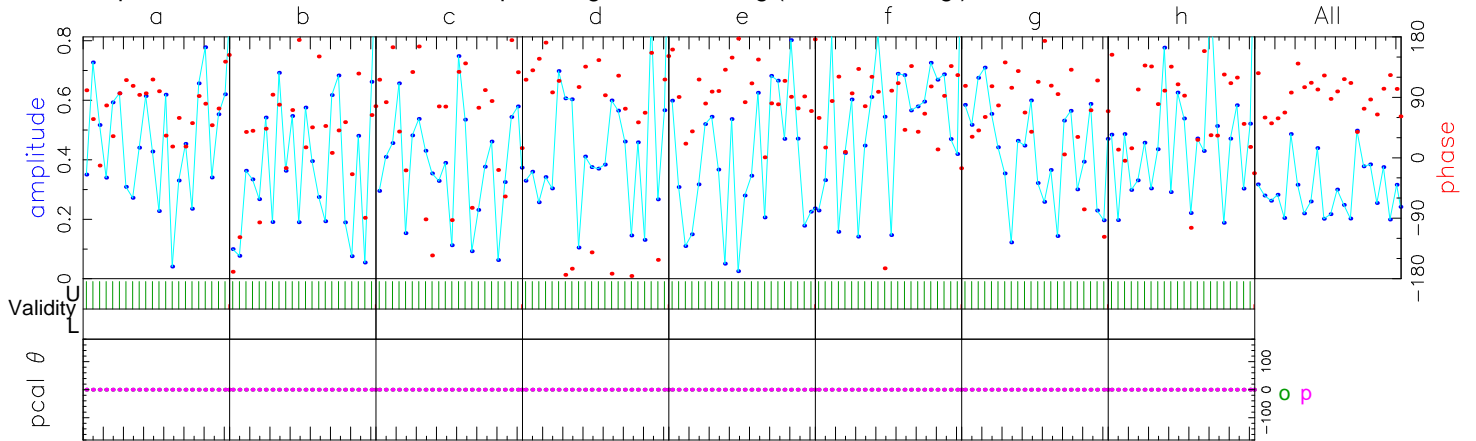


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133125
2021:252:122852
RA & Dec (J2000)
03h59m29.747267s
+50°57'50.161694"

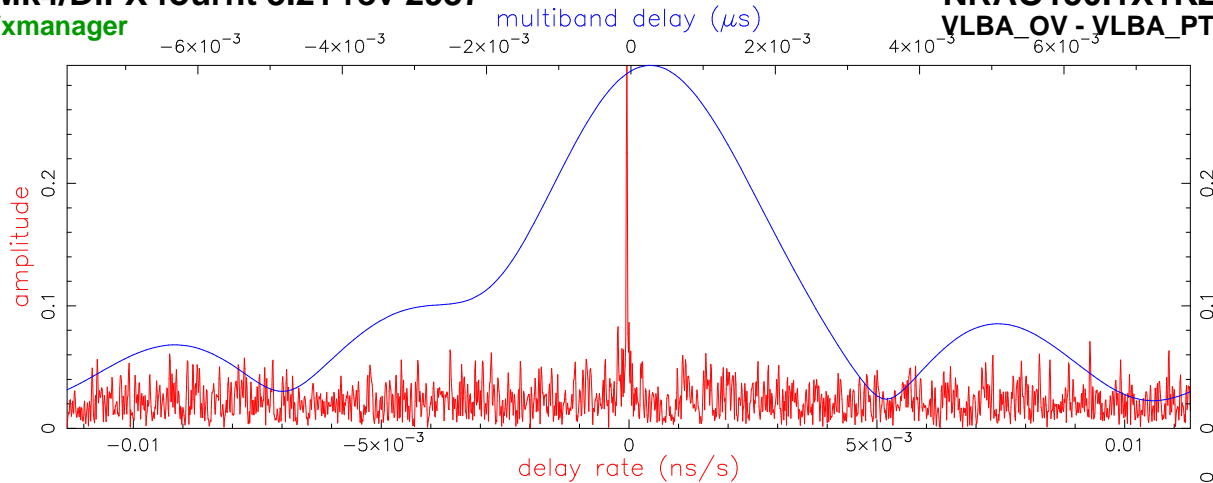
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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		
o	0	0	0	0	0	0	0	0	Ampl.	0.3
p	0	0	0	0	0	0	0	0	Sbd box	257.7
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21788245304E+03		Apriori delay (usec)		1.21787963345E+03		Resid mbdelay (usec)		2.81959E-03	+/- 7.1E-05
Sband delay (usec)	1.21788234620E+03		Apriori clock (usec)		-1.7792912E+00		Resid sbdelay (usec)		2.71275E-03	+/- 5.7E-04
Phase delay (usec)	1.21787963640E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		2.94567E-06	+/- 2.4E-07
Delay rate (us/s)	1.37881132387E-01		Apriori rate (us/s)		1.37881178959E-01		Resid rate (us/s)		-4.65721E-08	+/- 1.0E-09
Total phase (deg)	316.5		Apriori accel (us/s/s)		-2.85619116445E-06		Resid phase (deg)		91.3	+/- 7.5

	RMS	Theor.	Amplitude	0.271 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	26.8	18.1	Search (2048X32)	0.265	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	34.6	31.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	30.2	10.7	Inc. seg. avg.	0.287	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	23.0	18.6	Inc. frq. avg.	0.291	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

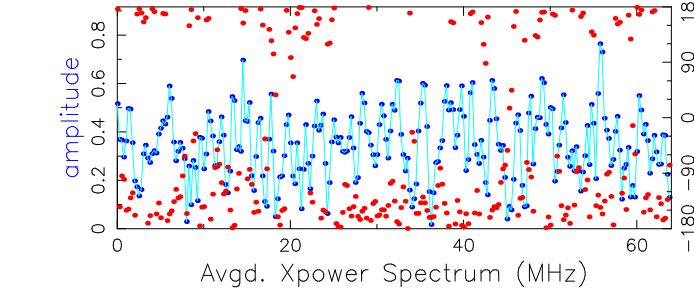
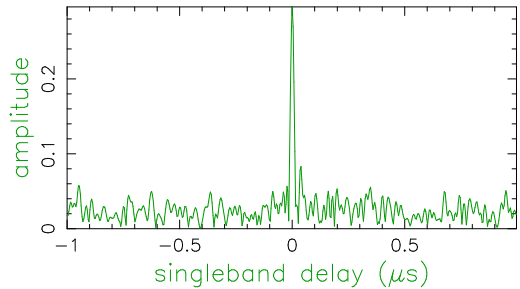
o: az 318.8 el 69.4 pa 122.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1260.638 -35.052 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/op..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/op.W.211.1X1KZS



Fringe quality 7

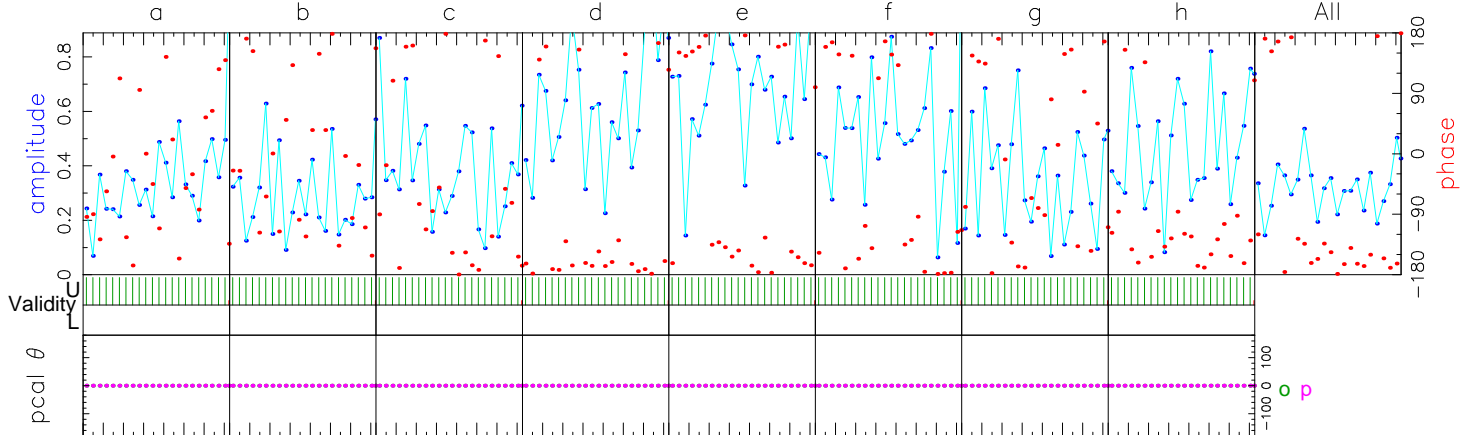
SNR 16.6
Int time 419.820
Amp 0.296
Phase -159.9
PFD 0.0e+00
Delays (us)
SBD 0.000139
MBD 0.000272
Fringe rate (Hz) -0.003942
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133129
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
	-134.1	-94.7	-136.6	-175.0	-165.4	-175.5	-173.7	-133.9	Phase	-159.9
	0.0	0.1	0.2	0.6	0.6	0.4	0.2	0.4	Ampl.	0.3
	31.9	84.0	255.8	256.8	257.1	257.2	258.0	257.2	Sbd box	257.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21787990501E+03		Apriori delay (usec)		1.21787963345E+03		Resid mbdelay (usec)		2.71555E-04	+/- 6.5E-05
Sband delay (usec)	1.21787977195E+03		Apriori clock (usec)		-1.7792912E+00		Resid sbdelay (usec)		1.38500E-04	+/- 5.2E-04
Phase delay (usec)	1.21787962830E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-5.15547E-06	+/- 2.2E-07
Delay rate (us/s)	1.37881133195E-01		Apriori rate (us/s)		1.37881178959E-01		Resid rate (us/s)		-4.57636E-08	+/- 9.2E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.85619116445E-06		Resid phase (deg)		-159.9	+/- 6.9

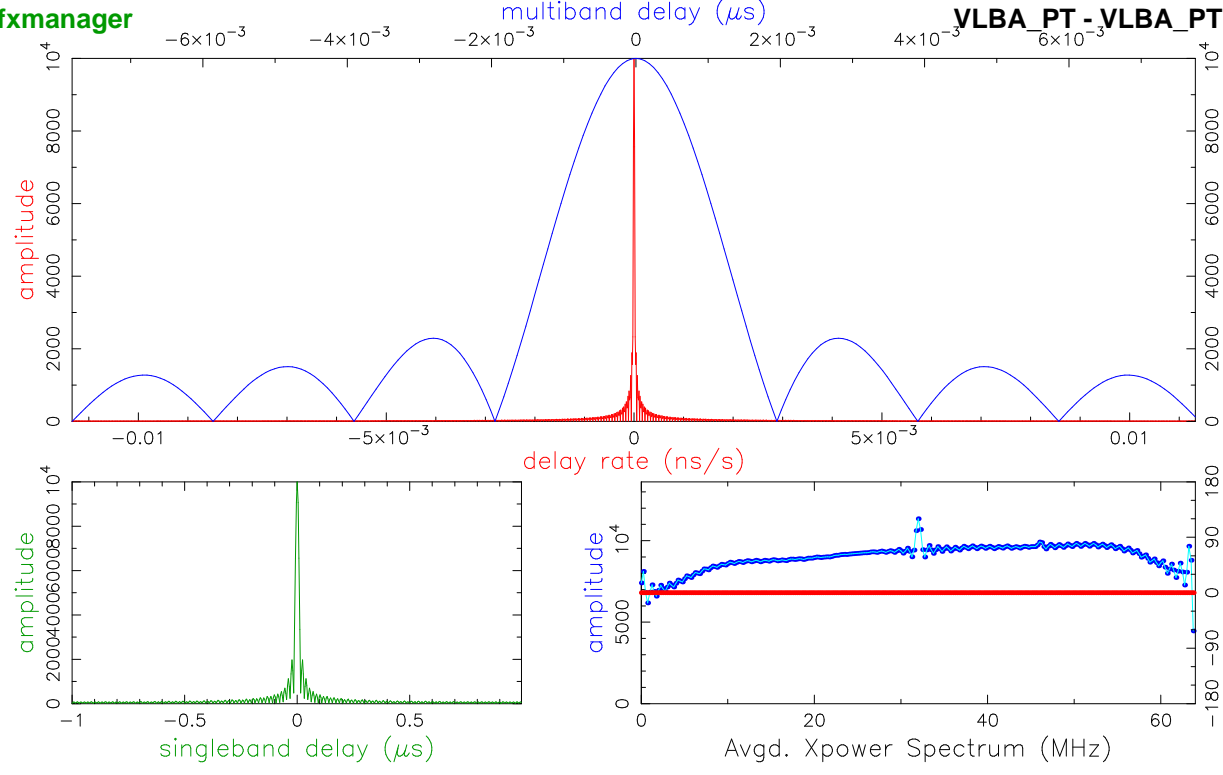
ph/seg (deg) 22.5 16.6 Theor. Amplitude 0.296 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 32.1 28.9 Search (2048X32) 0.292 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 33.7 9.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 68.6 17.0 Inc. seg. avg. 0.307 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
o: az 318.8 el 69.4 pa 122.4 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -1260.638 -35.052 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/op..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/op.W.232.1X1KZS simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, pp

VLBA_PT - VLBA_PT, fgroup W, pol LL

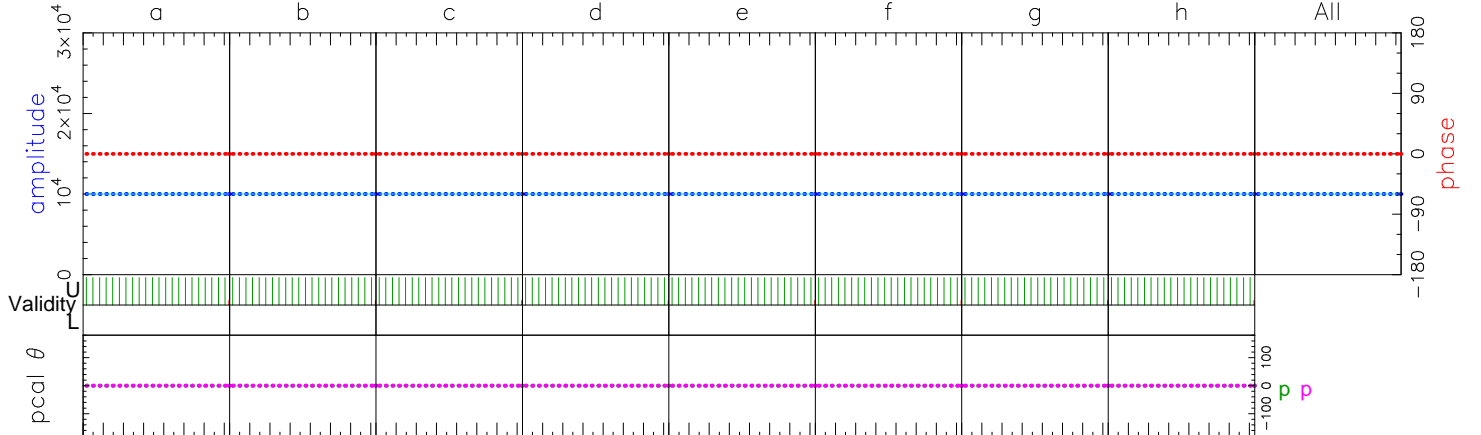


Fringe quality 9

SNR 560311.9
 Int time 419.821
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133117
 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
p	0	0	0	0	0	0	0	0	0.0	0.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0	257.0
p	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
p	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	0.0	0.0
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	0.0	0.0
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.9E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.5E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

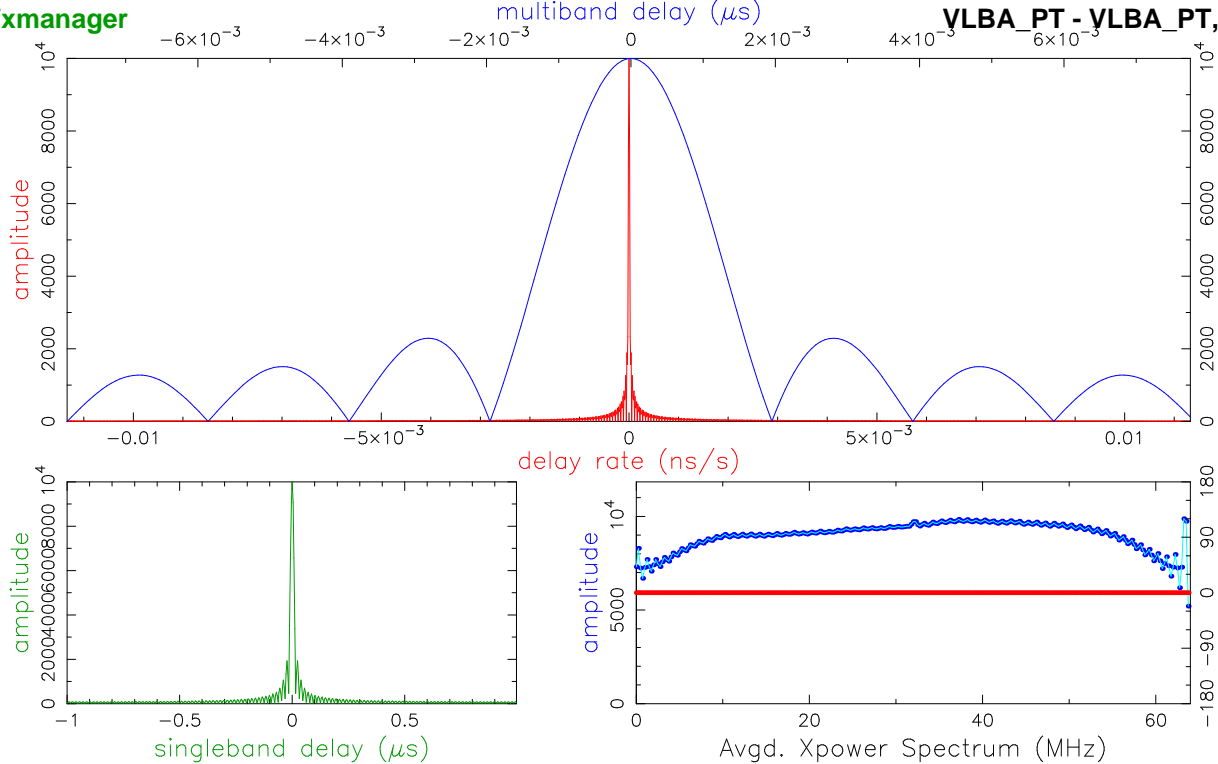
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011

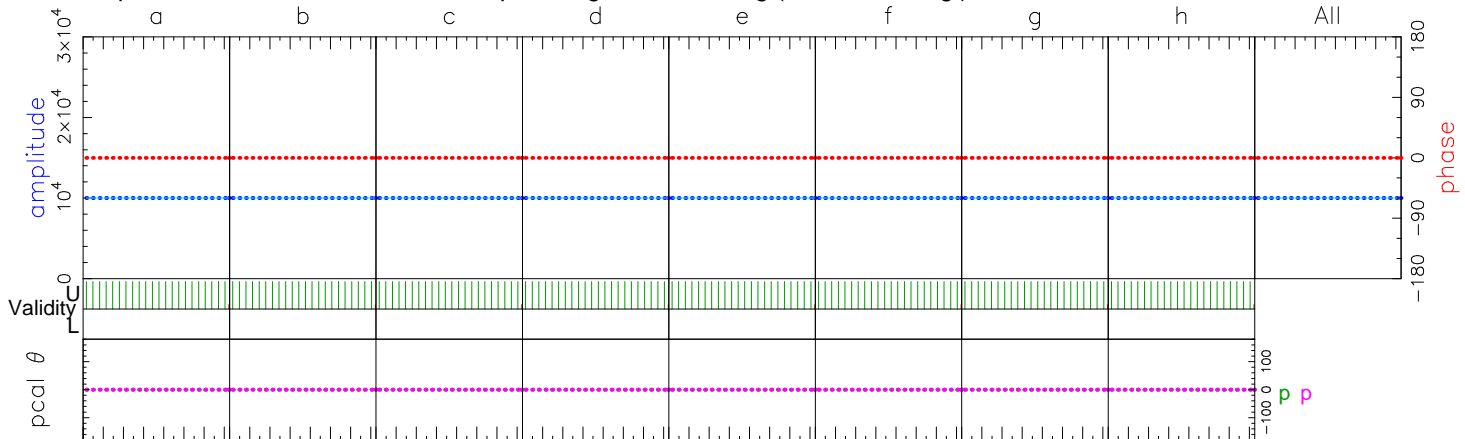
p: az 315.8 el 61.6 pa 112.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/pp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/pp.W.171.1X1KZS simultaneous interpolator



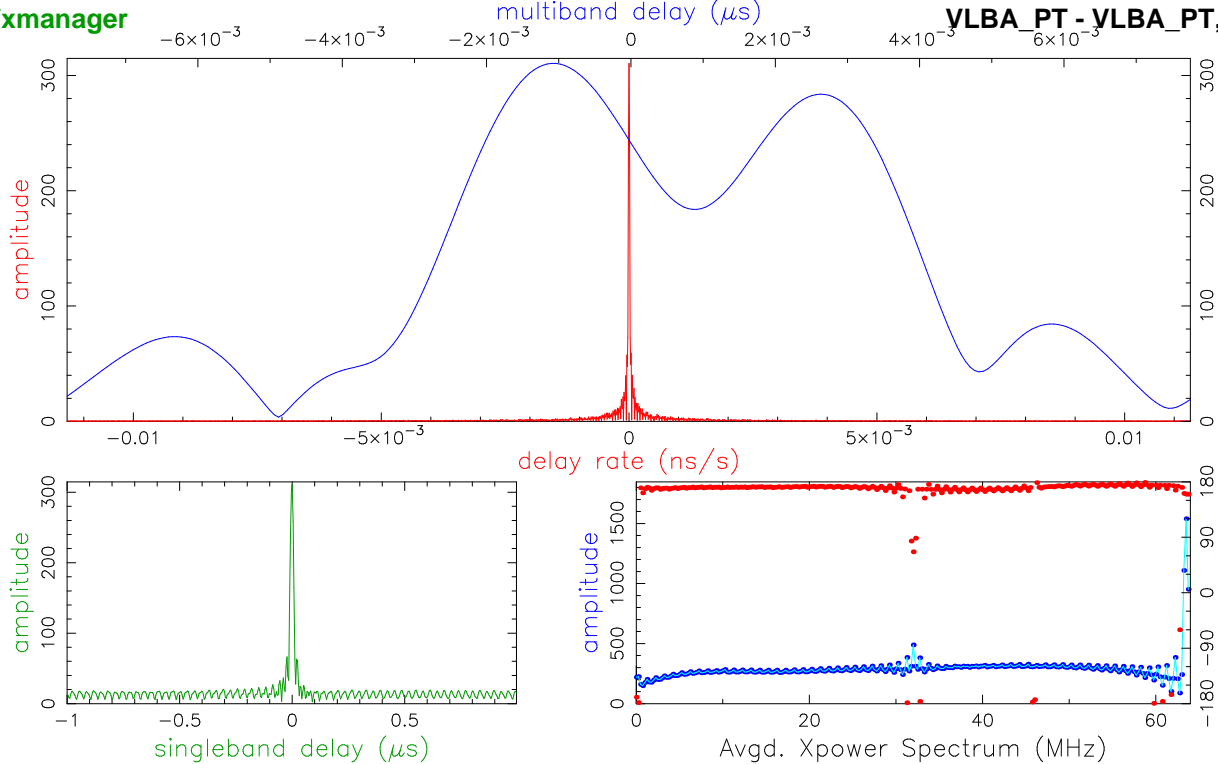
Fringe quality 9
SNR 560311.9
Int time 419.821
Amp 10000.000
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Yr:day 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133121
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
p	0	0	0	0	0	0	0	0	0.0	0.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	10000.0	10000.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	257.0	257.0
p	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
p	1000	1000	1000	1000	1000	1000	1000	1000	0.0	0.0
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	0.0	0.0
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	0.0	0.0
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.9E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 1.5E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
p: az 315.8 el 61.6 pa 112.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/pp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/pp.W.190.1X1KZS simultaneous interpolator

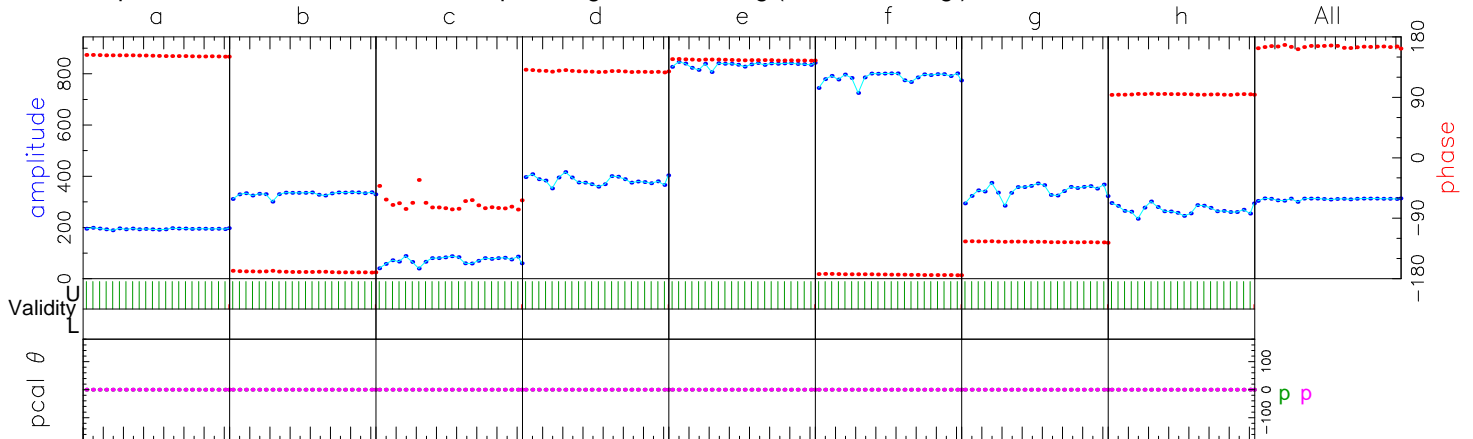


Fringe quality 5

SNR 17636.8
Int time 419.821
Amp 314.767
Phase 165.1
PFD 0.0e+00
Delays (us)
SBD -0.001434
MBD -0.001087
Fringe rate (Hz) 0.000012
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
2021:304:133125
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		
p	0	0	0	0	0	0	0	0	Ampl.	401.8
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	256.6
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
									PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.08709375000E-03								Resid mbdelay (usec)	-1.08709E-03 +/- 6.2E-08
Sband delay (usec)	-1.43375000000E-03								Resid sbdelay (usec)	-1.43375E-03 +/- 4.9E-07
Phase delay (usec)	5.32560783766E-06								Resid phdelay (usec)	5.32561E-06 +/- 2.1E-10
Delay rate (us/s)	1.43128639156E-10								Resid rate (us/s)	1.43129E-10 +/- 8.6E-13
Total phase (deg)			165.1						Resid phase (deg)	165.1 +/- 0.0

ph/seg (deg) 1.4 0.0
amp/seg (%) 1.7 0.0
ph/frq (deg) 68.7 0.0
amp/frq (%) 85.1 0.0

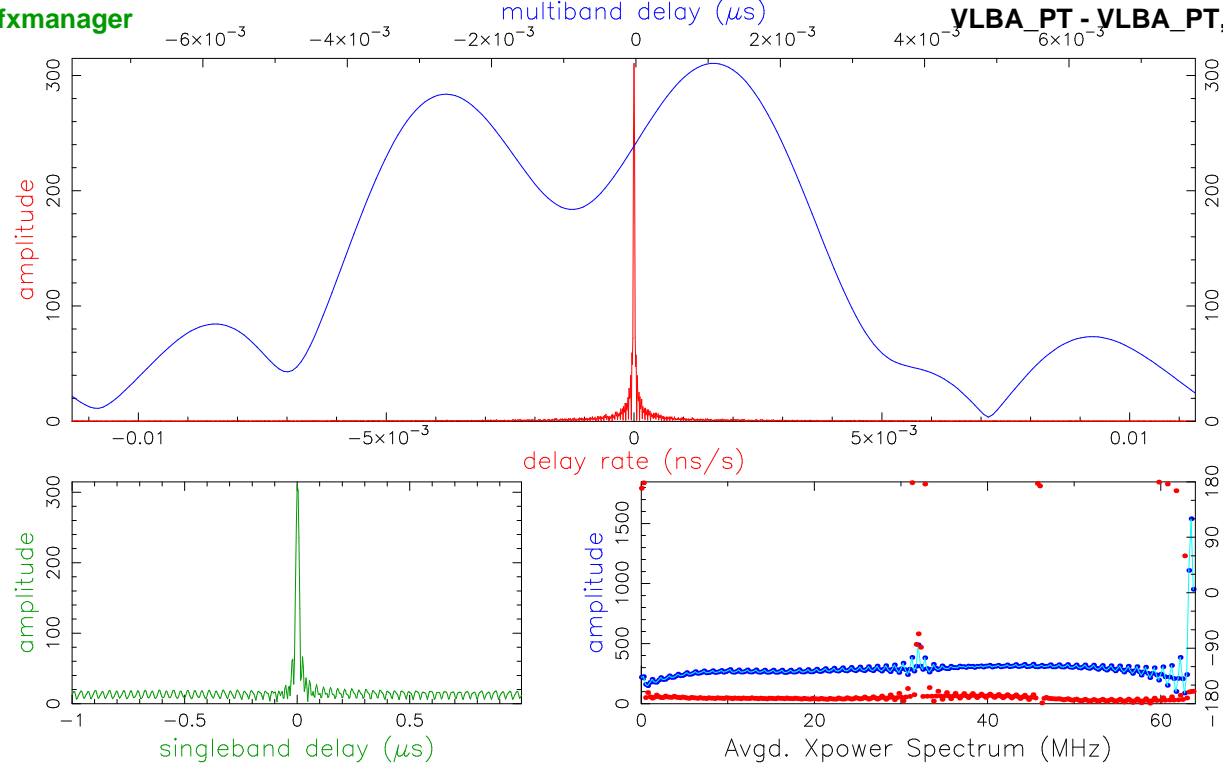
RMS Theor. Amplitude 314.767 +/- 0.018
Search (2048X32) 309.750
Interp. 0.000
Inc. seg. avg. 310.583
Inc. frq. avg. 401.795

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

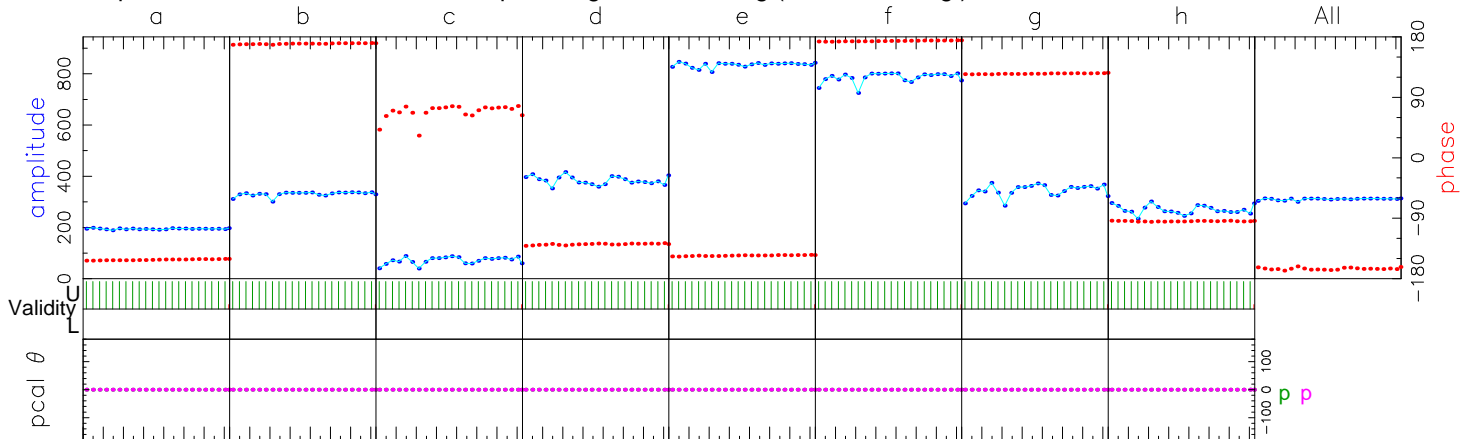
p: az 315.8 el 61.6 pa 112.7
p: az 315.8 el 61.6 pa 112.7
u,v (fr/asec) 0.000 0.000

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/pp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/pp.W.210.1X1KZS simultaneous interpolator



Fringe quality 5
SNR 17636.8
Int time 419.821
Amp 314.767
Phase -165.1
PFD 0.0e+00
Delays (us)
SBD 0.001434
MBD 0.001087
Fringe rate (Hz)
-0.000012
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
2021:304:133128
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
	-151.7	169.7	70.5	-128.7	-145.5	173.7	125.1	-94.4	Phase	-165.1
	194.6	330.8	71.3	383.0	834.8	786.2	345.1	268.7	Ampl.	401.8
	256.1	256.8	254.8	256.6	257.1	256.7	256.8	255.7	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
p	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.08709375000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		1.08709E-03	+/- 6.2E-08
Sband delay (usec)	1.43375000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.43375E-03	+/- 4.9E-07
Phase delay (usec)	-5.32560783782E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.32561E-06	+/- 2.1E-10
Delay rate (us/s)	-1.43128639156E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.43129E-10	+/- 8.6E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-165.1	+/- 0.0

ph/seg (deg) 1.4 0.0 Amplitude 314.767 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 1.7 0.0 Search (2048X32) 309.750 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 68.7 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 85.1 0.0 Inc. seg. avg. 310.583 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
p: az 315.8 el 61.6 pa 112.7 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/pp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/pp.W.229.1X1KZS simultaneous interpolator

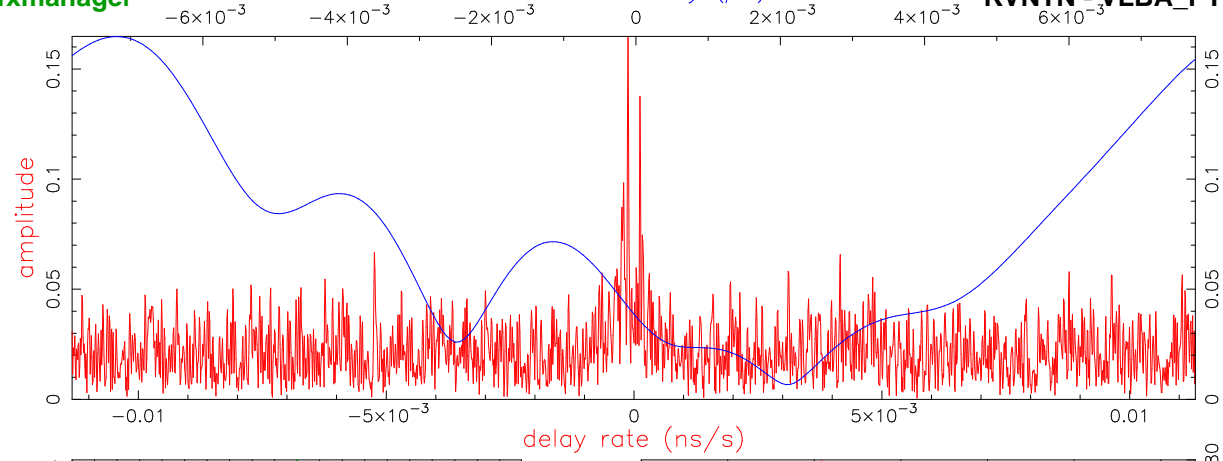
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

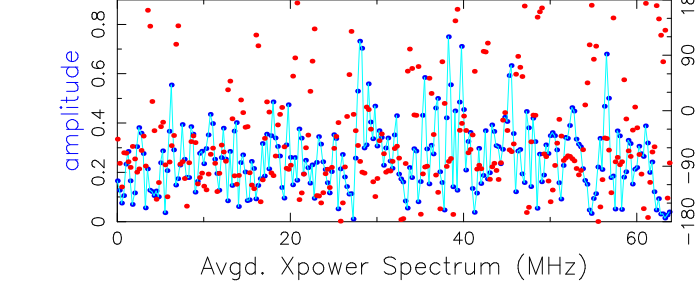
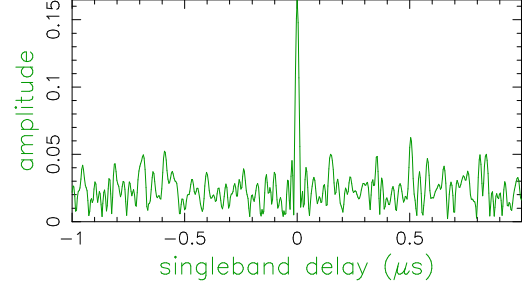
NRAO150.1X1KZS, No0113, tp

KVNTN - VLBA_PT, fgroup W, pol LL

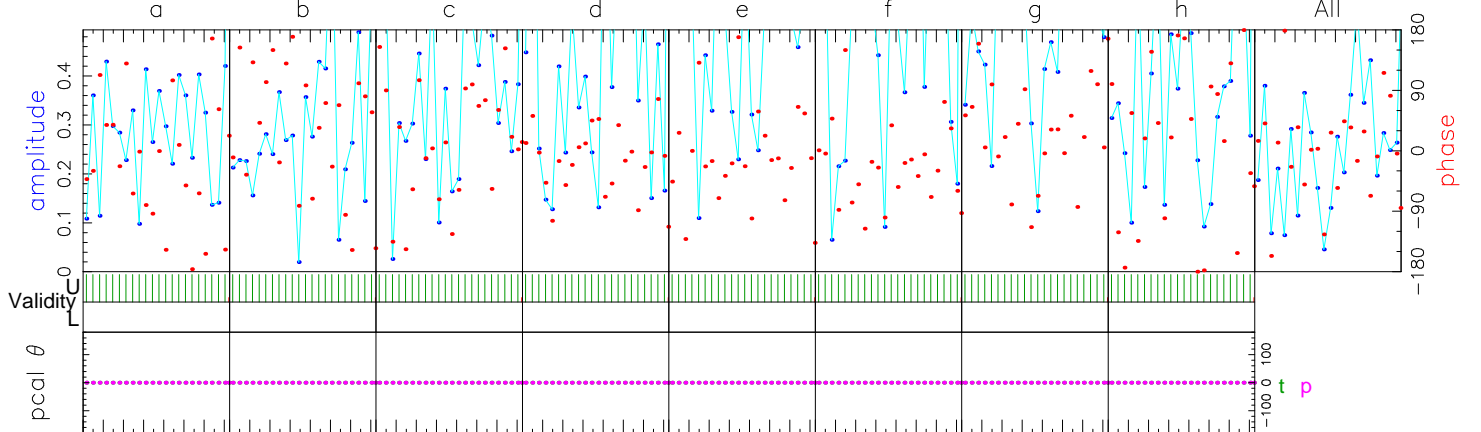
multiband delay (μ s)



Fringe quality 9
 SNR 9.2
 Int time 419.821
 Amp 0.165
 Phase 2.1
 PFD 1.0e-11
 Delays (us)
 SBD -0.000235
 MBD -0.007196
 Fringe rate (Hz)
 -0.010978
 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
 2021:304:133129
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

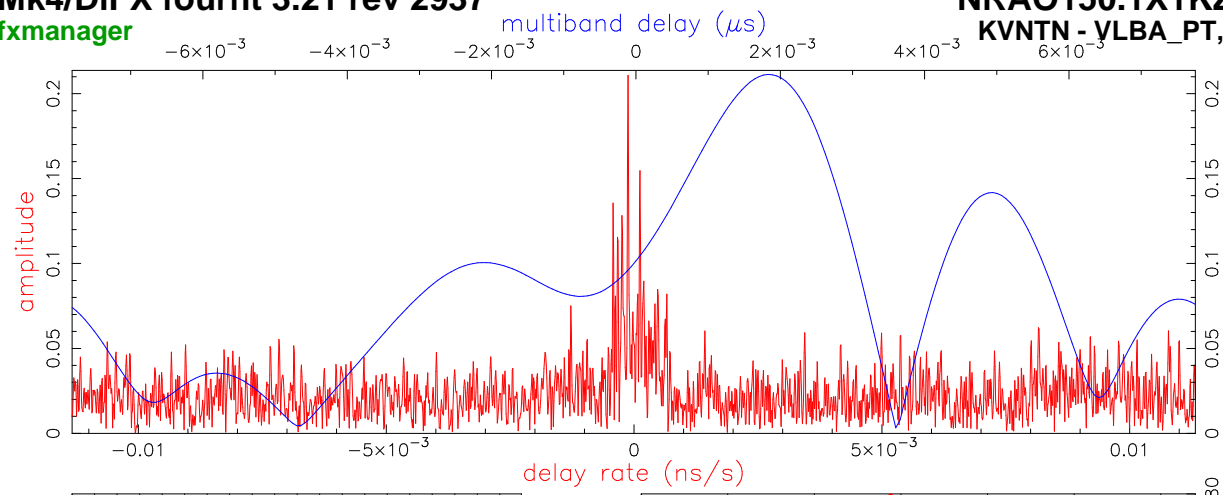


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

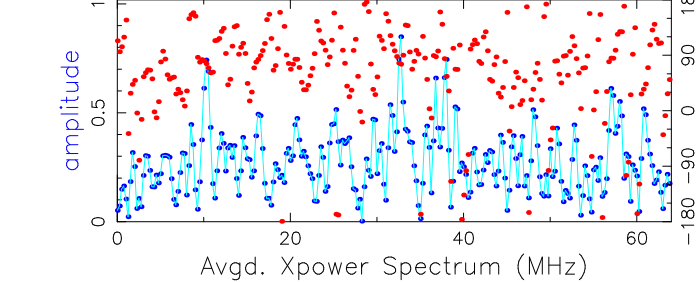
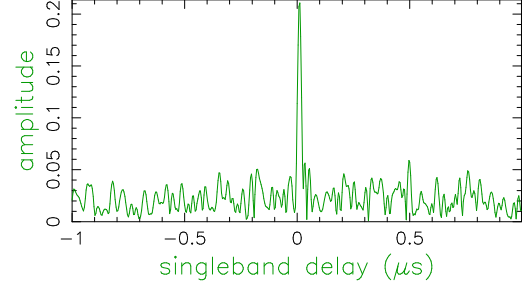


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.5	60.5	59.5	-4.6	-19.3	-27.5	29.0	150.9	Phase	2.1
	0.1	0.1	0.2	0.3	0.3	0.3	0.3	0.1	Ampl.	0.2
	348.6	61.5	284.7	256.5	257.1	257.1	257.7	472.2	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.01113943414E+04								Resid mbdelay (usec)	-7.19617E-03 +/- 1.2E-04
Sband delay (usec)	-1.01113873804E+04								Resid sbdelay (usec)	-2.35250E-04 +/- 9.3E-04
Phase delay (usec)	-1.01113871451E+04								Resid phdelay (usec)	6.66342E-08 +/- 4.0E-07
Delay rate (us/s)	1.25126679195E+00								Resid rate (us/s)	-1.27446E-07 +/- 1.7E-09
Total phase (deg)		-245.4							Resid phase (deg)	2.1 +/- 12.4
									Apriori delay (usec)	-1.01113871452E+04
									Apriori clock (usec)	-5.8013134E+00
									Apriori clockrate (us/s)	6.9999995E-08
									Apriori rate (us/s)	1.25126691940E+00
									Apriori accel (us/s/s)	5.24345297187E-05
									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	
t: az 43.1 el 23.2 pa -64.6										simultaneous interpolator
Control file: cf_1234_gmva	Input file: /Exps/c211c/v1/1234/No0113/tp..1X1KZS								Output file: /Exps/c211c/v1/1234/No0113/tp.W.231.1X1KZS	

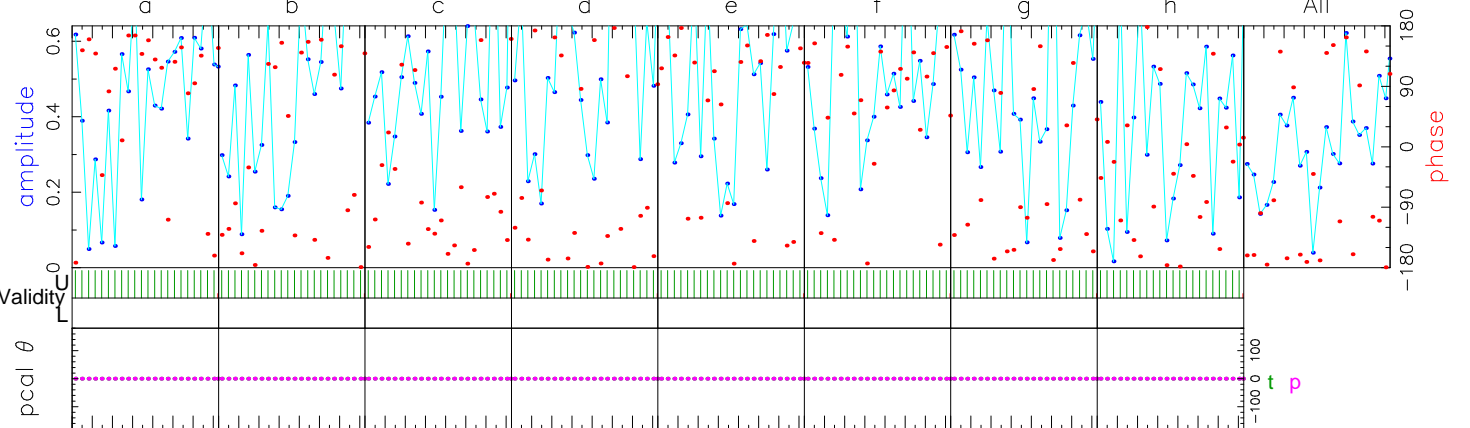
ph/seg (deg) 71.0 29.8 Search (2048X32) 0.154
 amp/seg (%) 92.0 51.9 Interp. 0.000
 ph/frq (deg) 74.1 17.6 Inc. seg. avg. 0.222
 amp/frq (%) 74.8 30.6 Inc. frq. avg. 0.208



Fringe quality 9
SNR 12.0
Int time 419.821
Amp 0.214
Phase -179.4
PFD 2.5e-24
Delays (us)
SBD 0.010169
MBD 0.001752
Fringe rate (Hz) -0.010965
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
2021:304:133132
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		
p	0	0	0	0	0	0	0	0		
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.01113697684E+04									
Sband delay (usec)	-1.01113769759E+04									
Phase delay (usec)	-1.01113871510E+04									
Delay rate (us/s)	1.25126679211E+00									
Total phase (deg)			-66.9							
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)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
RMS	58.6	22.9								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.214 +/- 0.018										
0.200										
0.000										
0.298										
0.270										
PCal period (AP's) 5, 5										
simultaneous interpolator										

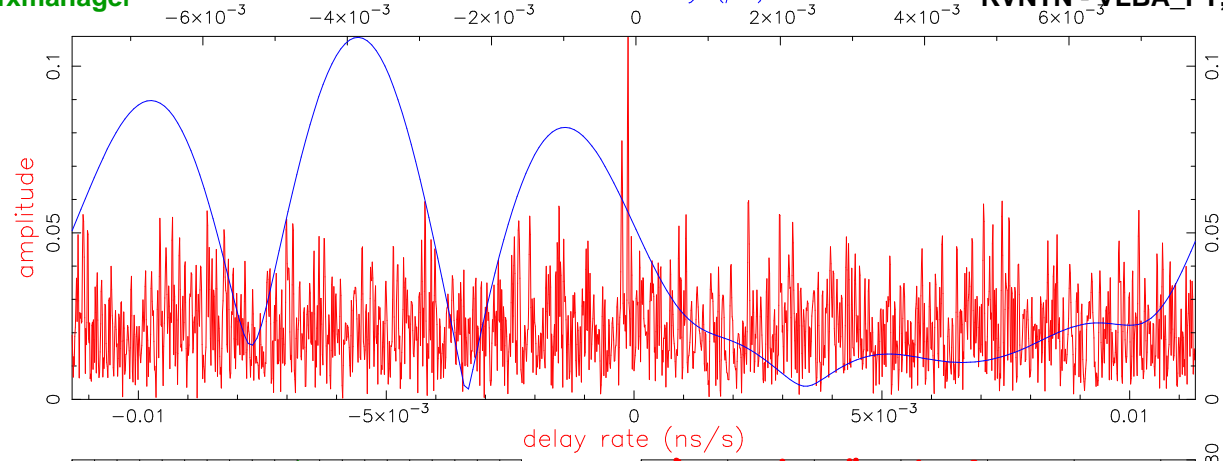
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

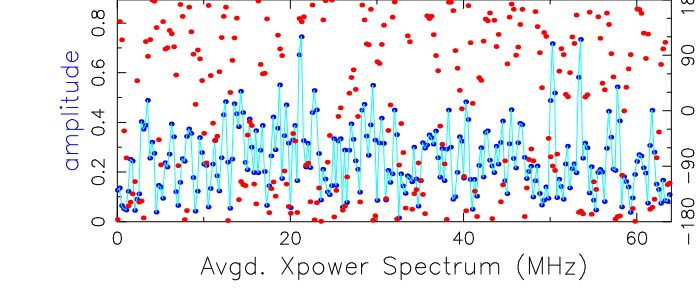
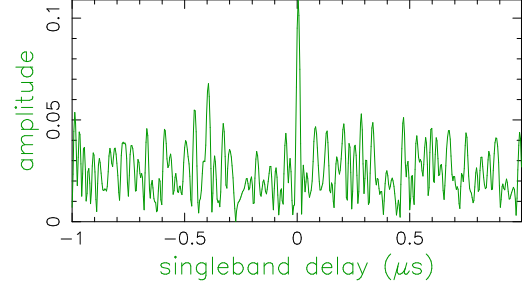
NRAO150.1X1KZS, No0113, tp

KVNTN - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

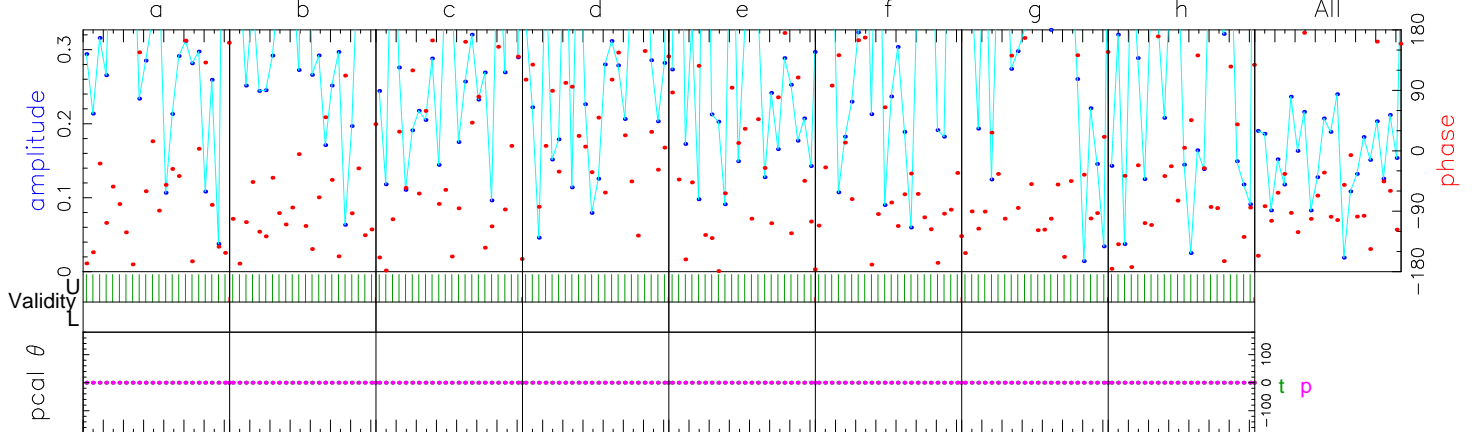


Fringe quality 0
 SNR 6.1
 Int time 419.821
 Amp 0.109
 Phase -98.5
 PFD 2.4e-01
 Delays (us)
 SBD 0.004522
 MBD -0.003840
 Fringe rate (Hz)
 -0.010782
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133135
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	0	0	0	0	0	0	0	0		
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.01113753600E+04	-1.01113826234E+04	-1.01113871484E+04	-1.01113871452E+04	-1.01113871452E+04	-1.01113871452E+04	-1.01113871452E+04	-1.01113871452E+04		
Sband delay (usec)	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04	-1.01113826234E+04		
Phase delay (usec)	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04	-1.01113871484E+04		
Delay rate (us/s)	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00	1.25126679424E+00		
Total phase (deg)			-346.0							
Apriori delay (usec)				0.109 +/- 0.018						
Apriori clock (usec)				0.105						
Apriori clockrate (us/s)				0.000						
Apriori rate (us/s)				0.122						
Apriori accel (us/s/s)				0.120						
Resid mbdelay (usec)									-3.83982E-03	+/- 1.8E-04
Resid sbdelay (usec)									4.52175E-03	+/- 1.4E-03
Resid phdelay (usec)									-3.17595E-06	+/- 6.1E-07
Resid rate (us/s)									-1.25163E-07	+/- 2.5E-09
Resid phase (deg)									-98.5	+/- 18.8
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
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) 48.2 45.0
 amp/seg (%) 70.2 78.6
 ph/frq (deg) 61.9 26.5
 amp/frq (%) 64.9 46.3
 t: az 43.1 el 23.2 pa -64.6
 p: az 315.8 el 61.6 pa 112.7
 u,v (fr/asec) -11305.817 5112.017
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/tp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/tp.W.257.1X1KZS
 simultaneous interpolator

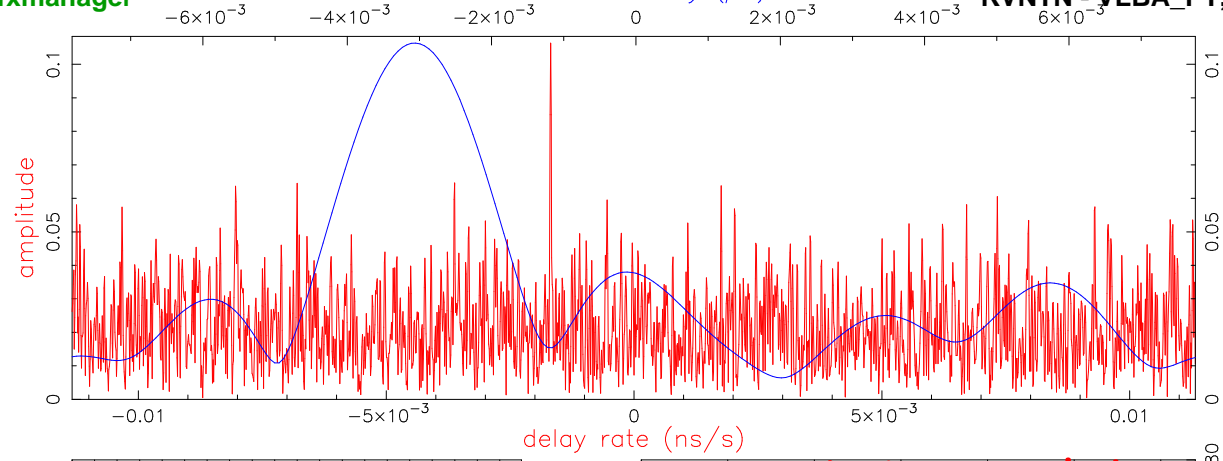
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, tp

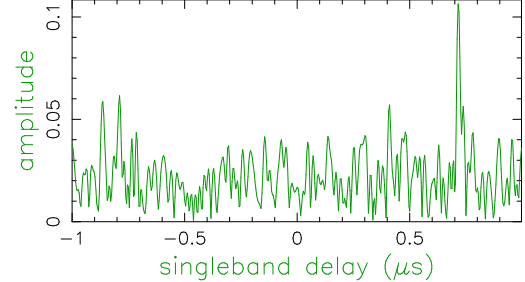
KVNTN - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

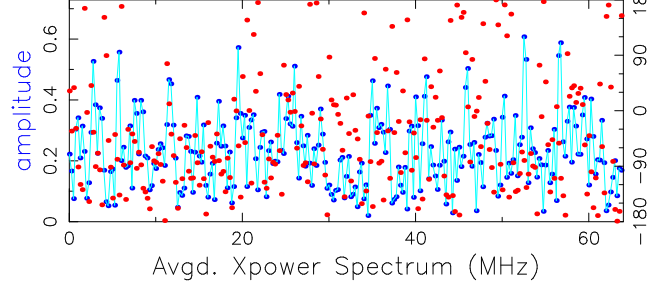


Fringe quality 0

SNR 6.0
 Int time 419.821
 Amp 0.108
 Phase -73.9
 PFD 3.7e-01
 Delays (us)
 SBD 0.716049
 MBD -0.003032
 Fringe rate (Hz)
 -0.145164
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

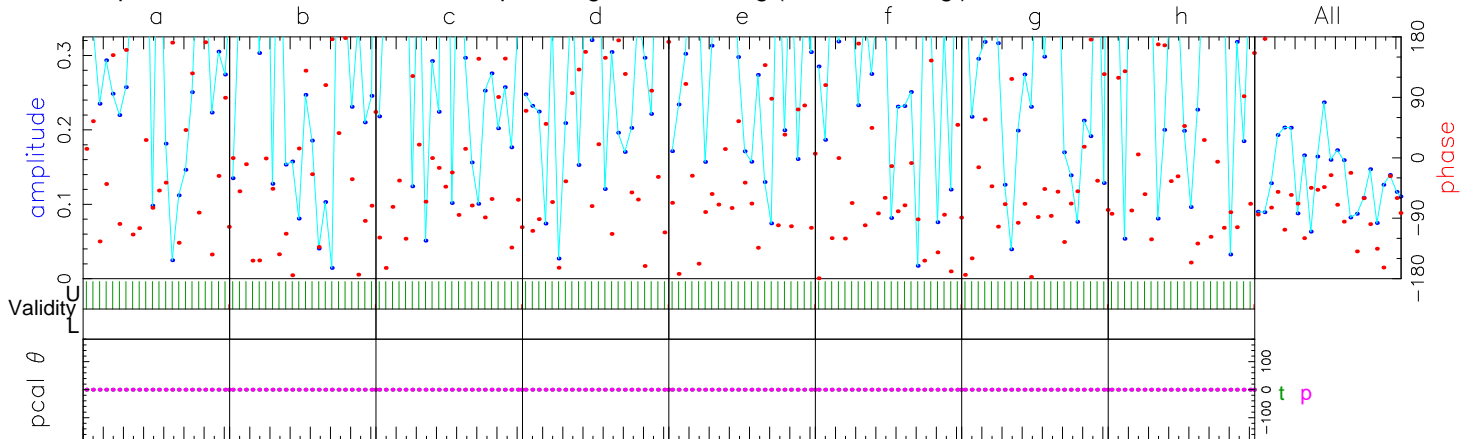


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133139
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'59.161694"

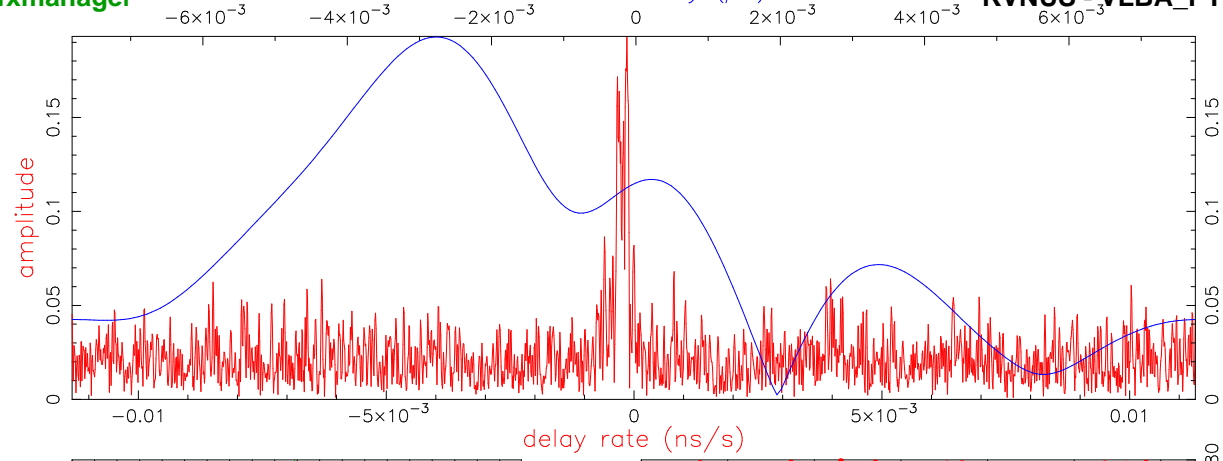
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-62.0	-93.7	-63.3	-87.0	-66.9	-92.0	-72.7	-72.6	Phase	-73.9
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	25.4	346.9	501.7	426.1	268.7	296.1	61.0	442.4	Sbd box	440.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.01106714274E+04		Apriori delay (usec)		-1.01113871452E+04		Resid mbdelay (usec)		-3.03224E-03	+/- 1.8E-04
Sband delay (usec)	-1.01106710962E+04		Apriori clock (usec)		-5.8013134E+00		Resid sbdelay (usec)		7.16049E-01	+/- 1.4E-03
Phase delay (usec)	-1.01113871476E+04		Apriori clockrate (us/s)		6.9999995E-08		Resid phdelay (usec)		-2.38287E-06	+/- 6.1E-07
Delay rate (us/s)	1.25126523420E+00		Apriori rate (us/s)		1.25126691940E+00		Resid rate (us/s)		-1.68520E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		5.24345297187E-05		Resid phase (deg)		-73.9	+/- 19.0

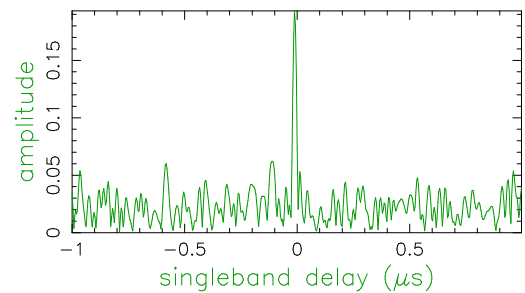
ph/seg (deg) 44.2 45.7 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.3 79.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.1 26.9 Inc. seg. avg. 0.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.4 47.0 Inc. frq. avg. 0.098 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 43.1 el 23.2 pa -64.6 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -11305.817 5112.017 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/tp..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/tp.W.274.1X1KZS simultaneous interpolator

multiband delay (μ s)

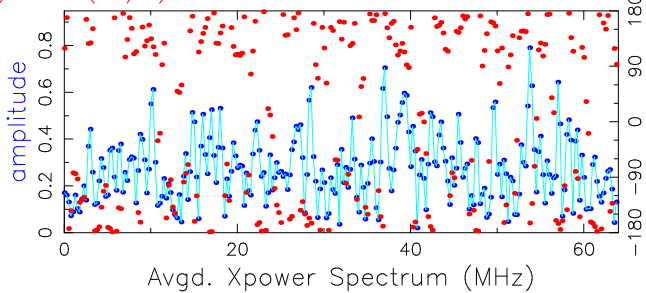


Fringe quality 9

SNR 10.8
Int time 419.785
Amp 0.193
Phase 70.0
PFD 1.3e-18
Delays (us)
SBD -0.011191
MBD -0.002752
Fringe rate (Hz)
-0.012844
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

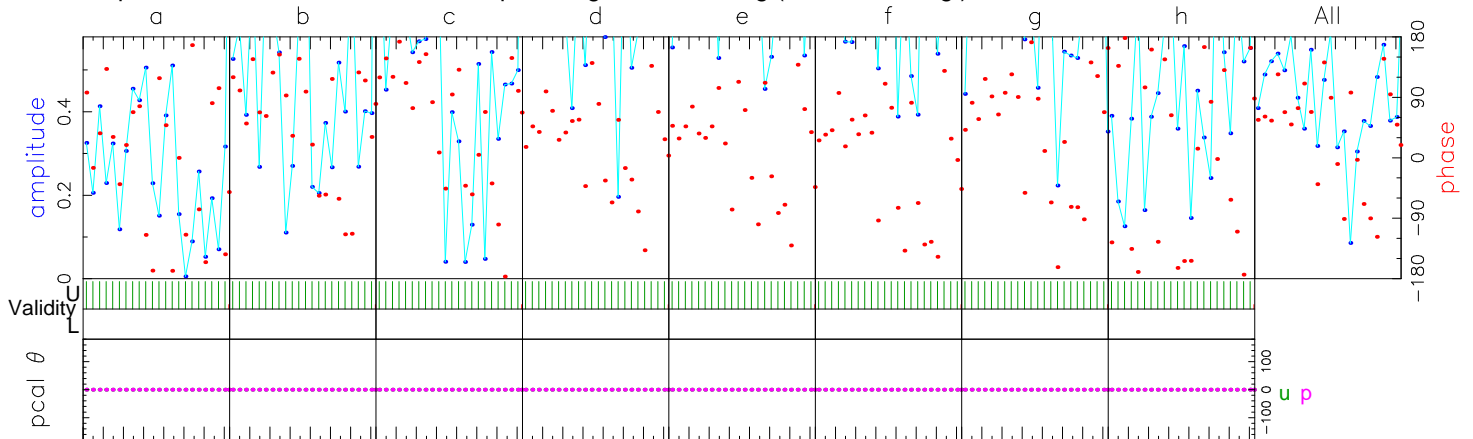


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133133
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		
p	0	0	0	0	0	0	0	0		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-9.01631350640E+03	Apriori delay (usec)	-9.01629512978E+03	Resid mbdelay (usec)	-2.75163E-03	+/-	1.0E-04
Sband delay (usec)	-9.01630632028E+03	Apriori clock (usec)	9.2243328E+00	Resid sbdelay (usec)	-1.11905E-02	+/-	8.0E-04
Phase delay (usec)	-9.01629512752E+03	Apriori clockrate (us/s)	1.2470000E-06	Resid phdelay (usec)	2.25848E-06	+/-	3.4E-07
Delay rate (us/s)	1.23053572537E+00	Apriori rate (us/s)	1.23053587448E+00	Resid rate (us/s)	-1.49109E-07	+/-	1.4E-09
Total phase (deg)	-102.4	Apriori accel (us/s/s)	4.95366322051E-05	Resid phase (deg)	70.0	+/-	10.6

ph/seg (deg)	80.4	Theor.	25.4	Amplitude	0.193 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	135.6	Search (2048X32)	0.186	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	55.2	Inc. seg. avg.	0.389	Inc. frq. avg.	0.246	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	62.8	Inc. frq. avg.	0.246			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

u: az 44.6 el 26.4 pa -65.9 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -11122.306 5009.773 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/up..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/up.W.244.1X1KZS

Mk4/DiFX fourfit 3.21 rev 2937

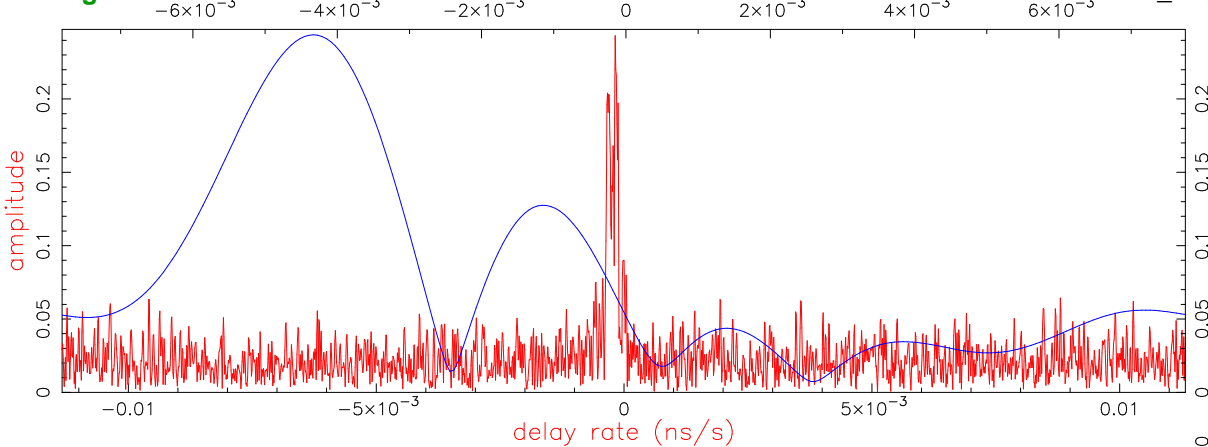
fxmanager

NRAO150.1X1KZS, No0113, up

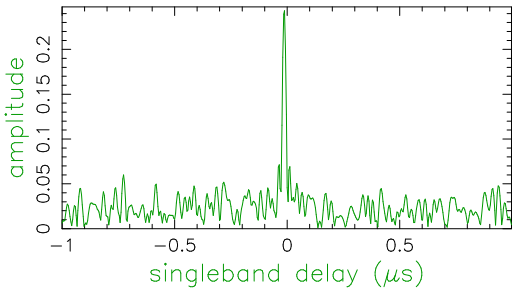
KVNUS - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

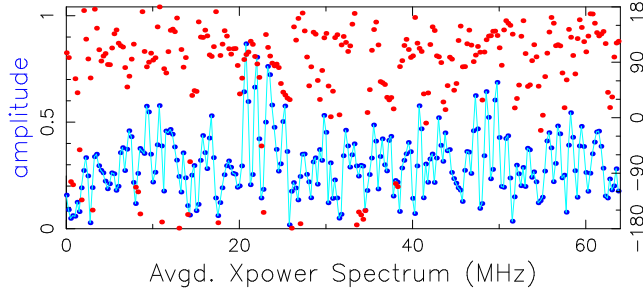
Fringe quality 9



SNR 13.9
 Int time 419.785
 Amp 0.247
 Phase 7.2
 PFD 6.2e-35
 Delays (us)
 SBD -0.013360
 MBD -0.004420
 Fringe rate (Hz)
 -0.015153
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

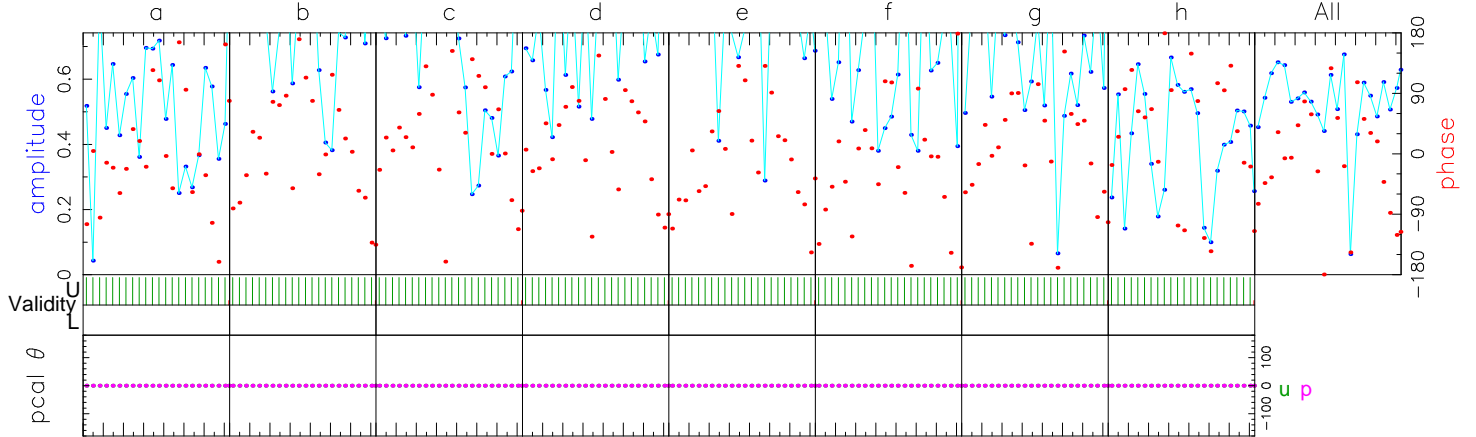


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133136
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"

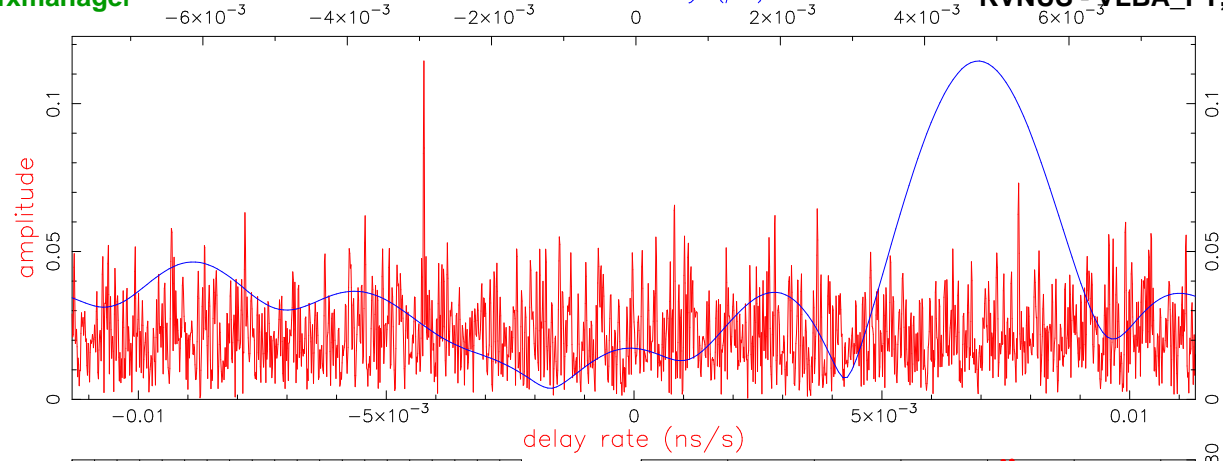
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



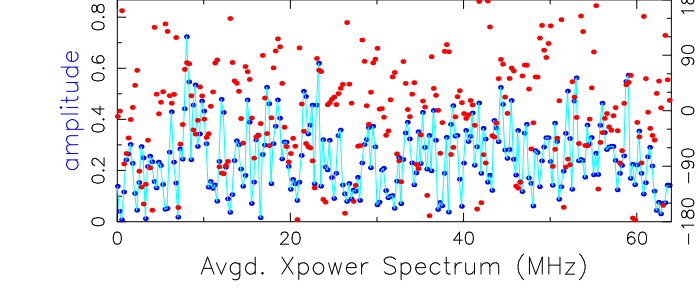
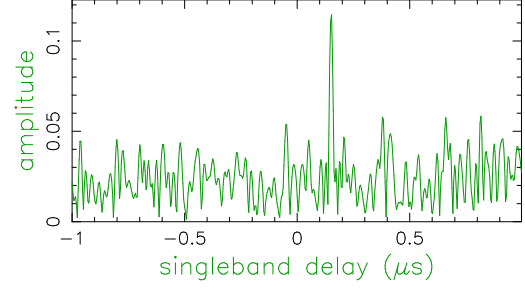
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.4	11.1	33.4	29.3	-20.5	-31.4	15.8	71.3	Phase	7.2
	0.2	0.3	0.3	0.3	0.4	0.3	0.3	0.2	Ampl.	0.3
	256.1	252.9	253.8	253.2	253.5	253.5	253.8	256.7	Sbd box	253.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.01631517512E+03		Apriori delay (usec)		-9.01629512978E+03		Resid mbdelay (usec)		-4.42034E-03	+/- 7.8E-05
Sband delay (usec)	-9.01630848978E+03		Apriori clock (usec)		9.2243328E+00		Resid sbdelay (usec)		-1.33600E-02	+/- 6.2E-04
Phase delay (usec)	-9.01629512955E+03		Apriori clockrate (us/s)		1.2470000E-06		Resid phdelay (usec)		2.30948E-07	+/- 2.7E-07
Delay rate (us/s)	1.23053569857E+00		Apriori rate (us/s)		1.23053587448E+00		Resid rate (us/s)		-1.75906E-07	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		4.95366322051E-05		Resid phase (deg)		7.2	+/- 8.3

ph/seg (deg) 78.3 19.8 Search (2048X32) 0.241 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 123.3 34.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.7 11.7 Inc. seg. avg. 0.498 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.5 20.4 Inc. frq. avg. 0.273 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 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -11122.306 5009.773 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/up..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/up.W.260.1X1KZS

multiband delay (μ s)

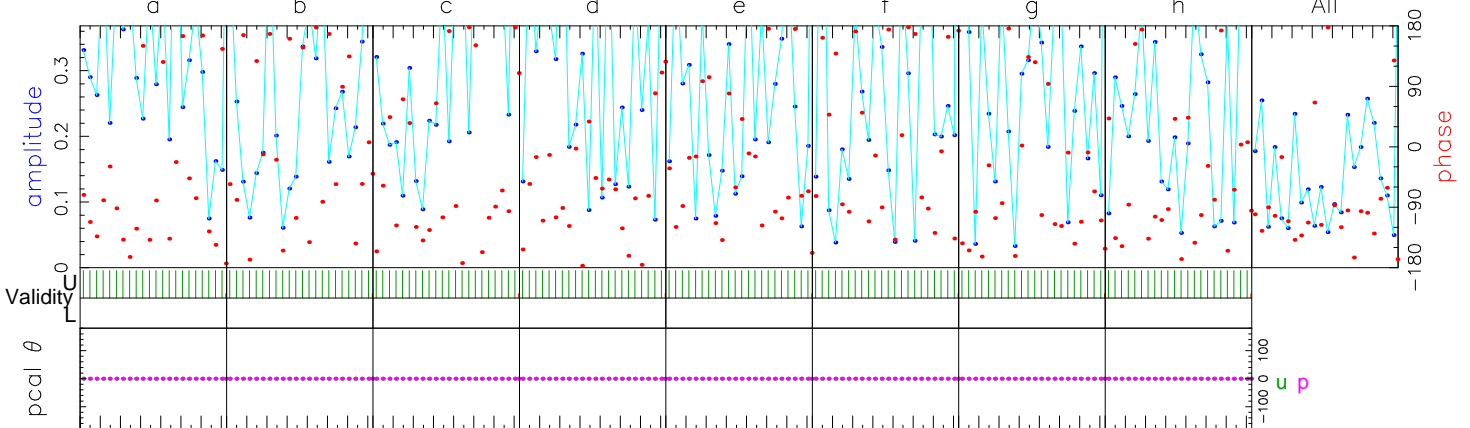


Fringe quality 0
SNR 6.5
Int time 419.785
Amp 0.123
Phase -112.1
PFD 2.4e-02
Delays (us)
SBD 0.151008
MBD 0.004732
Fringe rate (Hz)
-0.366132
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 230000.00
Stop 230659.84
FRT 230330.00
Corr/FF/build
2021:303:205431
2021:304:133140
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
	-115.0	-118.3	-138.7	-76.8	-80.5	-124.2	-127.5	-109.5	Phase	-112.1
	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	320.2	463.7	86.9	103.4	33.1	436.9	103.7	54.1	Sbd box	295.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.01614977322E+03		Apriori delay (usec)		-9.01629512978E+03		Resid mbdelay (usec)		4.73156E-03	+/- 1.7E-04
Sband delay (usec)	-9.01614412153E+03		Apriori clock (usec)		9.2243328E+00		Resid sbdelay (usec)		1.51008E-01	+/- 1.3E-03
Phase delay (usec)	-9.01629513339E+03		Apriori clockrate (us/s)		1.2470000E-06		Resid phdelay (usec)		-3.61612E-06	+/- 5.7E-07
Delay rate (us/s)	1.23053162405E+00		Apriori rate (us/s)		1.23053587448E+00		Resid rate (us/s)		-4.25042E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		4.95366322051E-05		Resid phase (deg)		-112.1	+/- 17.7

ph/seg (deg) 56.6 42.4 Search (2048X32) 0.111 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 66.8 73.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 23.8 25.0 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 35.7 43.6 Inc. frq. avg. 0.119 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 p: az 315.8 el 61.6 pa 112.7 u,v (fr/asec) -11122.306 5009.773 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0113/up..1X1KZS Output file: /Exps/c211c/v1/1234/No0113/up.W.277.1X1KZS

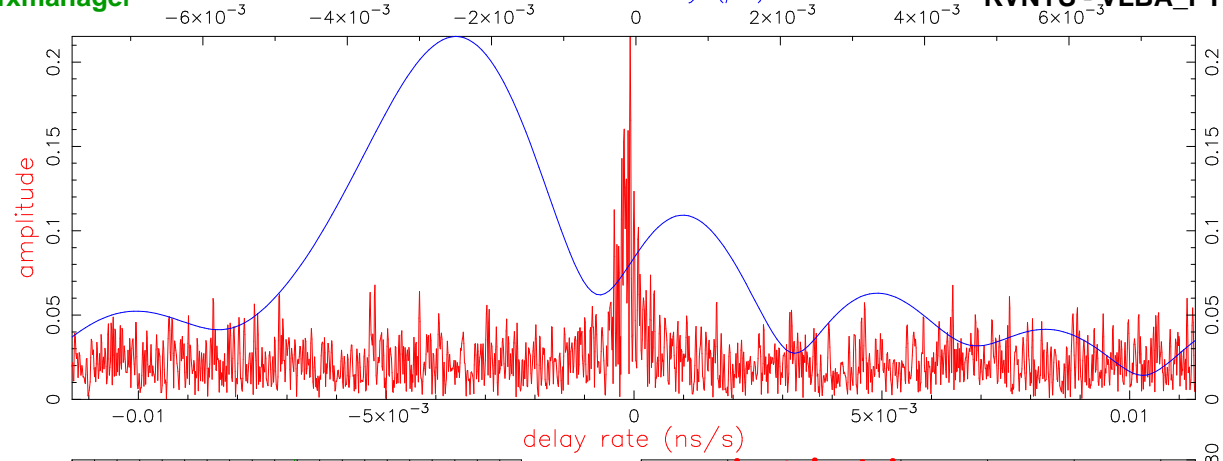
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

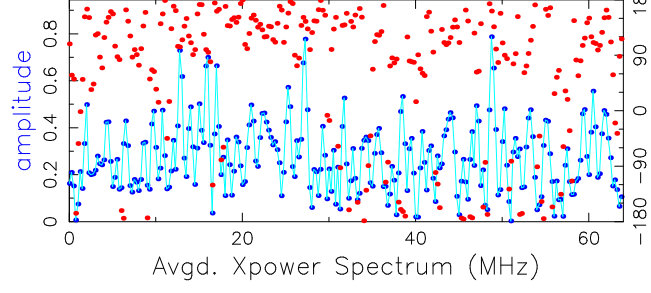
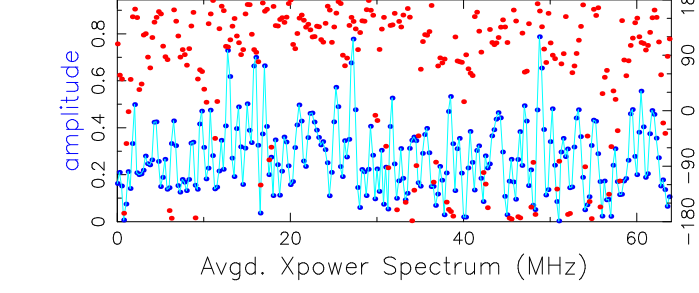
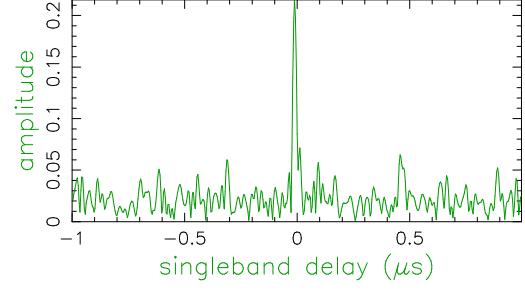
NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

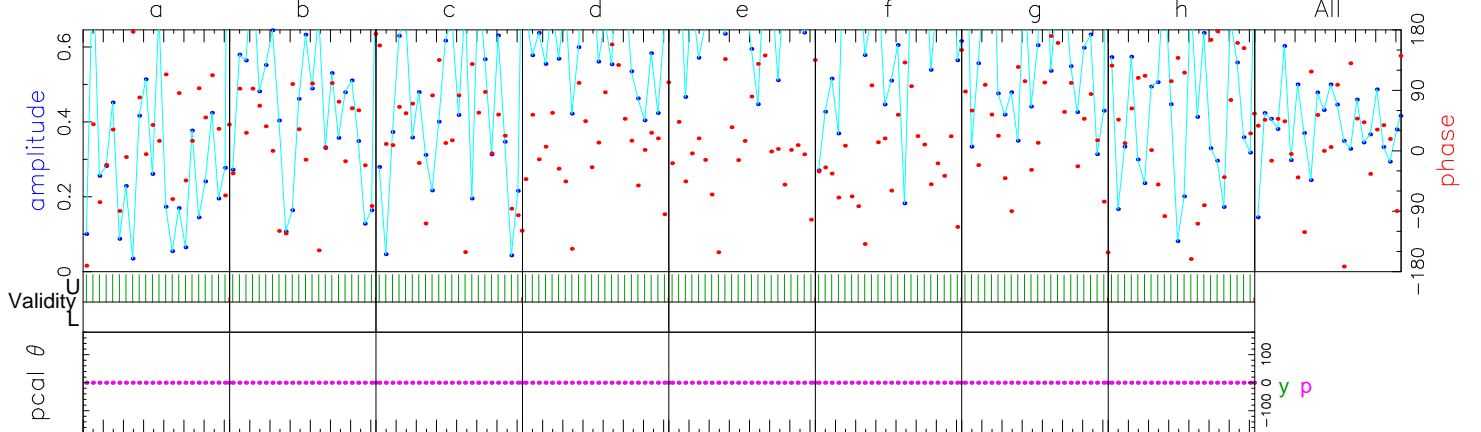


Fringe quality 9
 SNR 12.0
 Int time 418.918
 Amp 0.215
 Phase 27.3
 PFD 1.0e-24
 Delays (us)
 SBD -0.011541
 MBD -0.002490
 Fringe rate (Hz) -0.006651
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 230000.00
 Stop 230659.84
 FRT 230330.00
 Corr/FF/build
 2021:303:205431
 2021:304:133134
 2021:252:122852
 RA & Dec (J2000)
 03h59m29.747267s
 +50°57'50.161694"



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					
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		
	RMS	Theor.	Amplitude	0.215 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	68.0	22.8	Search (2048X32)	0.215					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
amp/seg (%)	92.8	39.8	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	50.1	13.5	Inc. seg. avg.	0.361					Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
amp/frq (%)	47.3	23.5	Inc. frq. avg.	0.246					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 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.253.1X1KZS

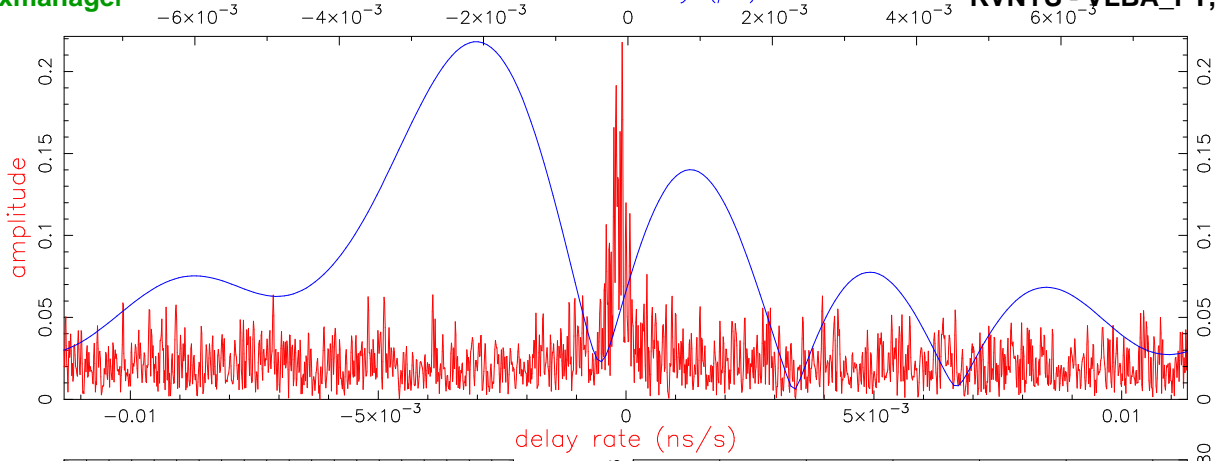
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

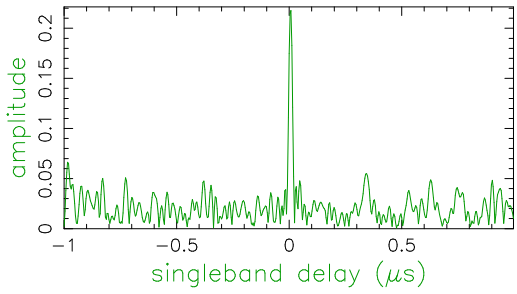


Fringe quality 9

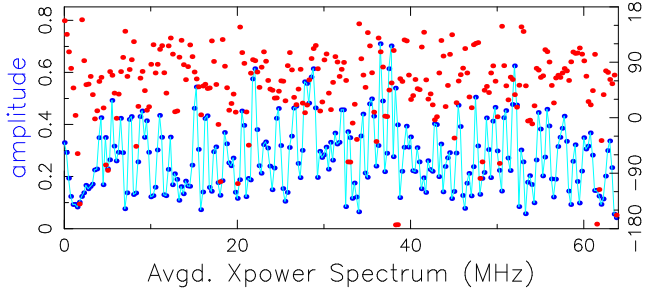
SNR 12.4
 Int time 418.918
 Amp 0.221
 Phase 162.1
 PFD 1.5e-26
 Delays (us)
 SBD 0.006141
 MBD -0.002173
 Fringe rate (Hz)
 -0.006658
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

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"

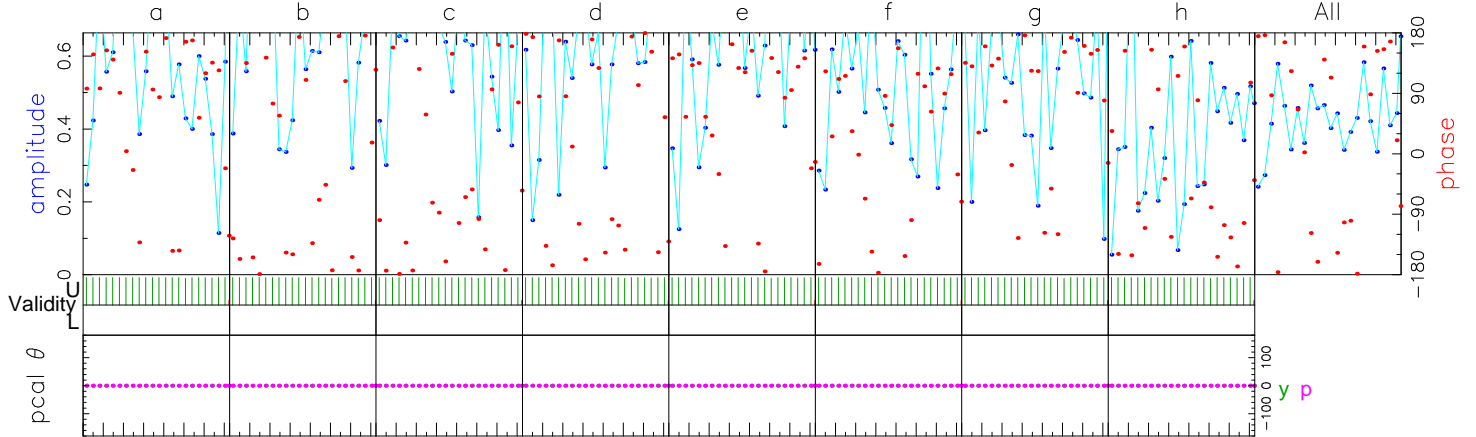
delay rate (ns/s)



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 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

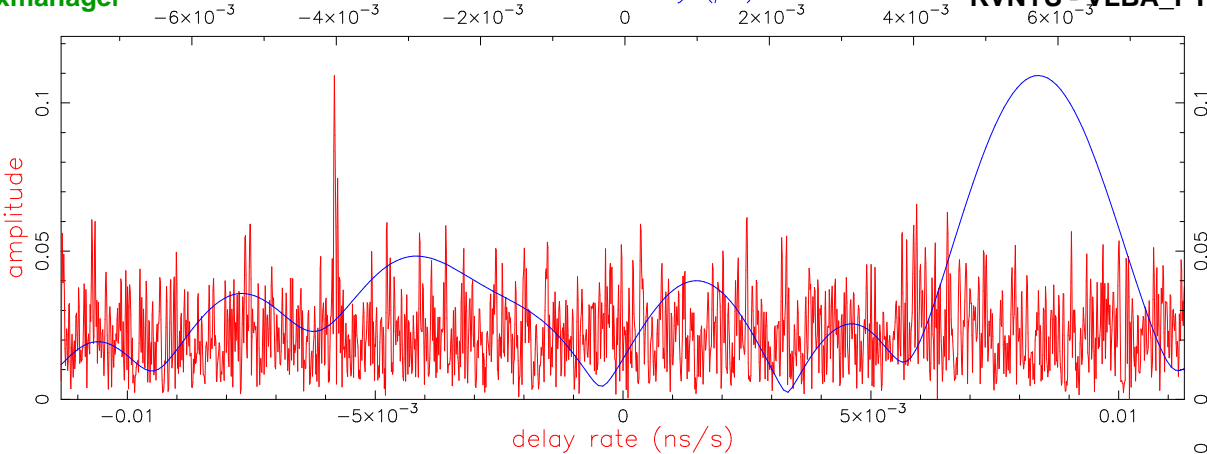
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1KZS, No0113, yp

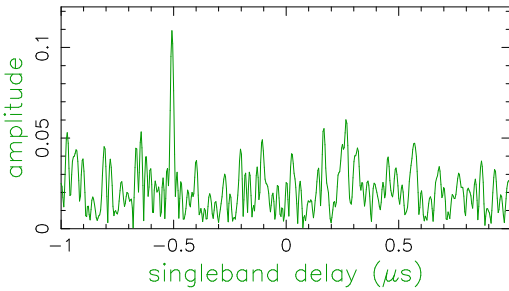
KVNYS - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

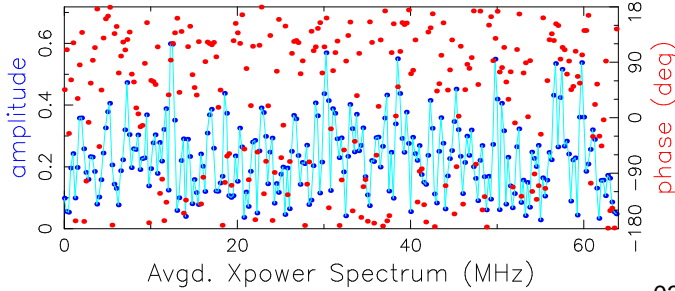


Fringe quality 0

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

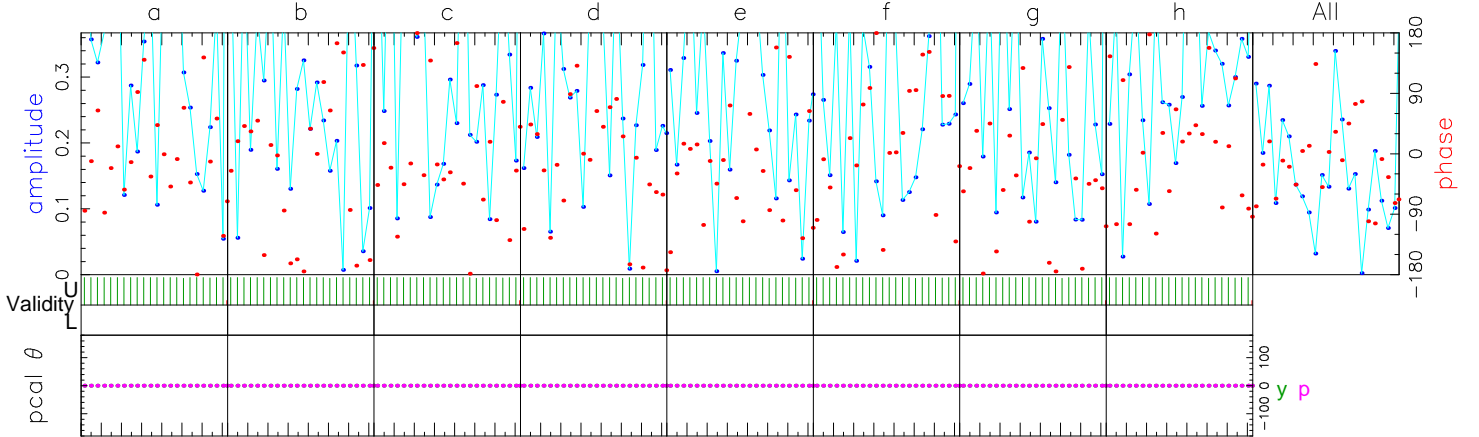


delay rate (ns/s)



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

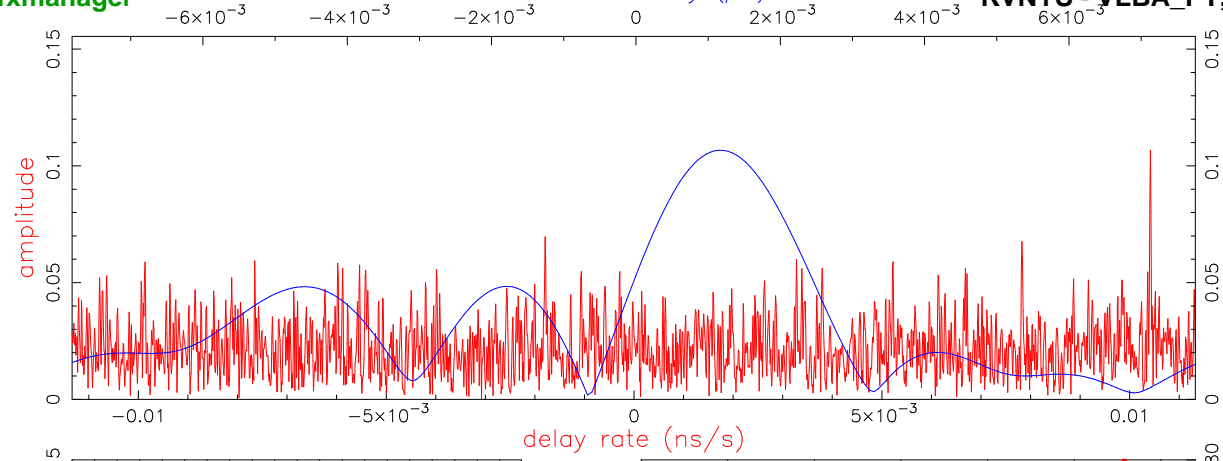
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

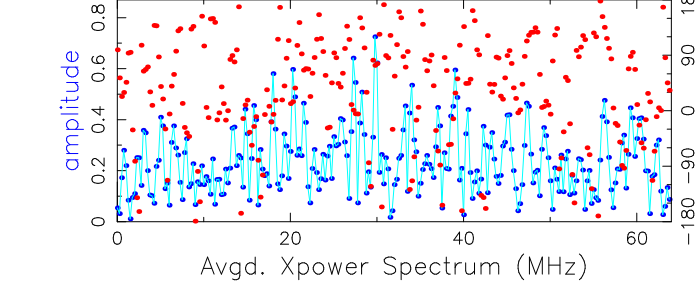
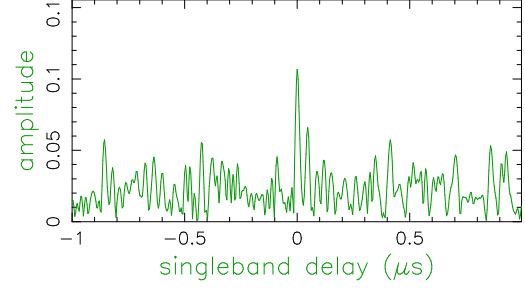
NRAO150.1X1KZS, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol RL

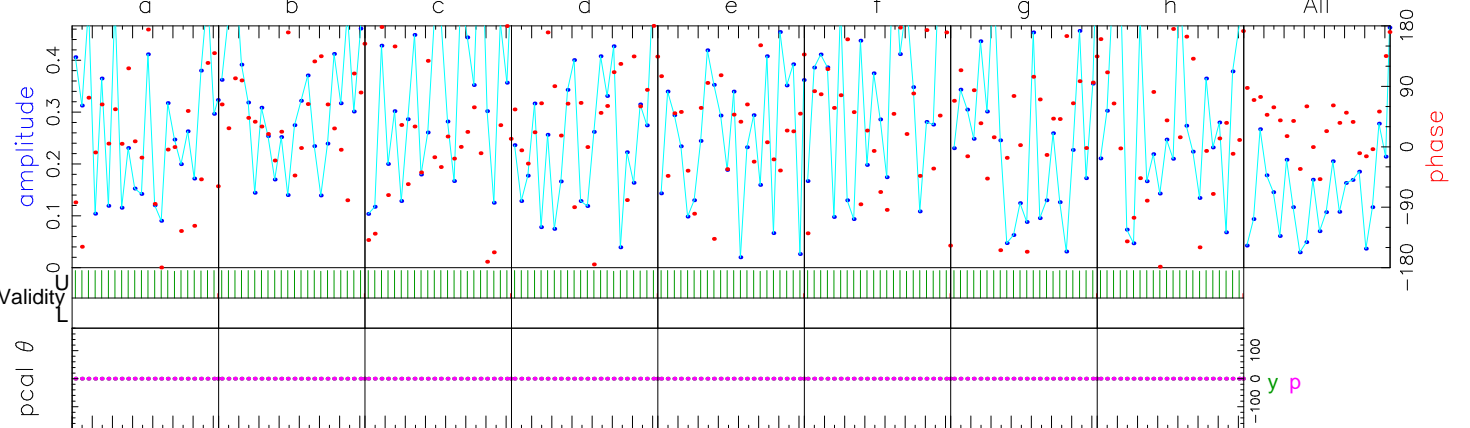
multiband delay (μ s)



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