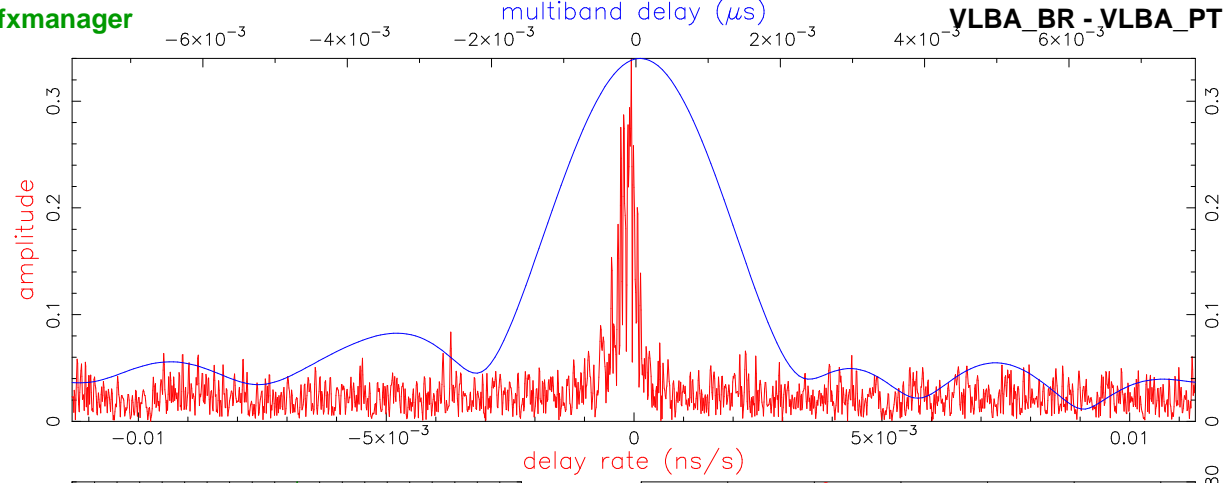


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W5O2N, No0173, bp

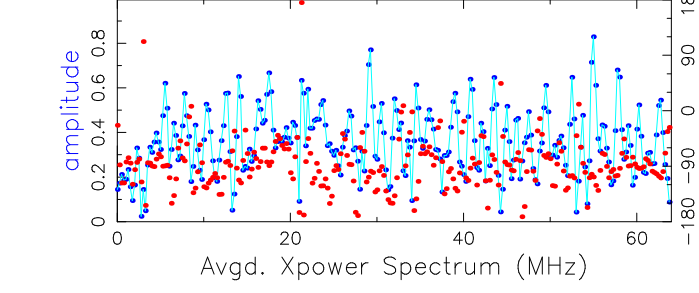
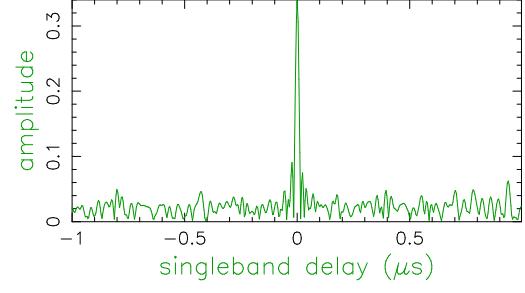
VLBA_BR - VLBA_PT, fgroup W, pol LL



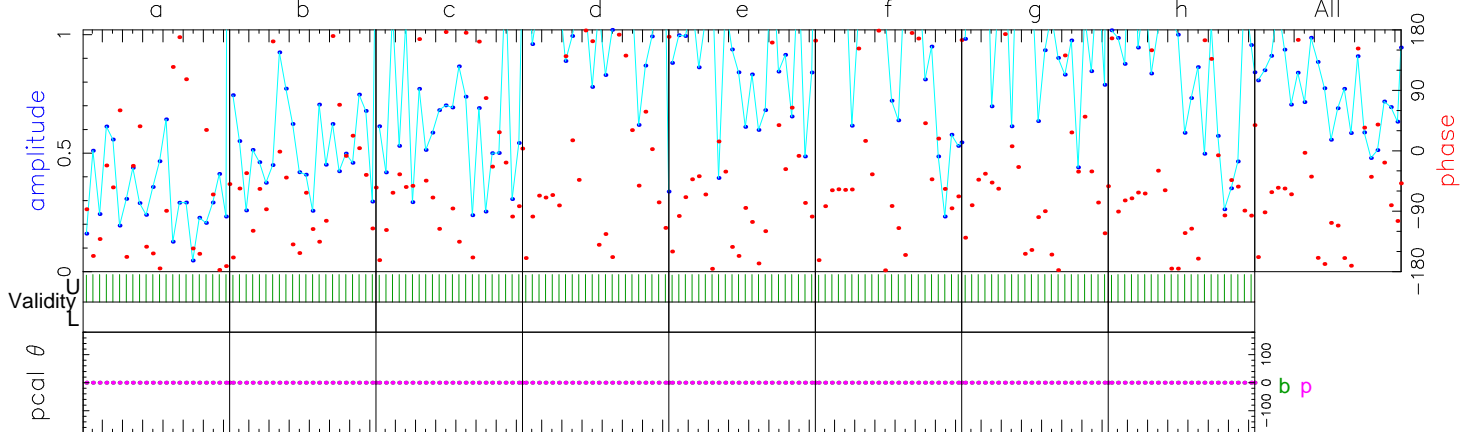
Fringe quality 9

SNR 19.0
 Int time 416.829
 Amp 0.340
 Phase -92.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.000076
 MBD 0.000056
 Fringe rate (Hz)
 -0.004631
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050002.56
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010015
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"



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
	-118.7	-75.2	-91.5	-103.7	-86.2	-94.2	-82.4	-101.3	Phase	-92.8
	0.1	0.2	0.3	0.4	0.4	0.4	0.5	0.5	Ampl.	0.3
	220.4	257.4	257.0	257.3	257.0	256.6	256.5	256.9	Sbd box	257.0
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.62867412529E+03		Apriori delay (usec)		-4.62867418160E+03		Resid mbdelay (usec)		5.63124E-05	+/- 5.7E-05
Sband delay (usec)	-4.62867425760E+03		Apriori clock (usec)		-8.5105553E+00		Resid sbdelay (usec)		-7.60000E-05	+/- 4.5E-04
Phase delay (usec)	-4.62867418459E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		-2.99329E-06	+/- 1.9E-07
Delay rate (us/s)	1.35815011125E-01		Apriori rate (us/s)		1.35815064885E-01		Resid rate (us/s)		-5.37597E-08	+/- 8.1E-10
Total phase (deg)			Apriori accel (us/s/s)		2.24665933341E-05		Resid phase (deg)		-92.8	+/- 6.0

ph/seg (deg) 69.8 14.5 Theor. Amplitude 0.340 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 131.8 25.3 Search (2048X32) 0.337 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.9 8.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.8 14.9 Inc. seg. avg. 0.735 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 148.7 el 31.1 pa -20.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -754.115 1412.234 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/bp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/bp.W.14.1W5O2N simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

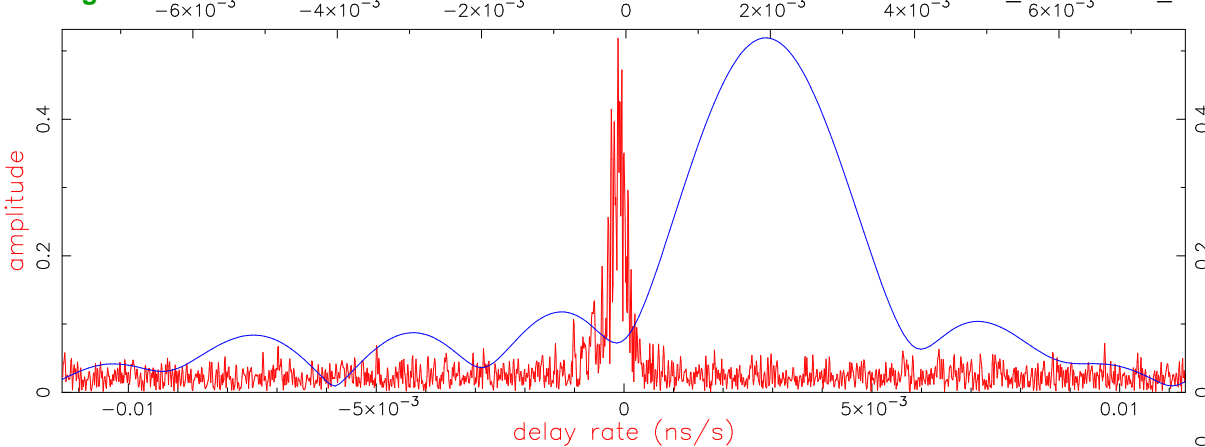
fxmanager

3C279.1W5O2N, No0173, bp

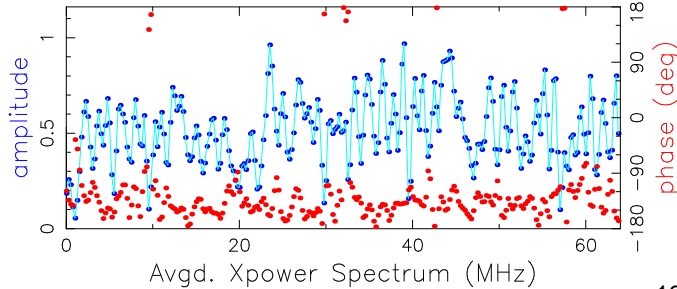
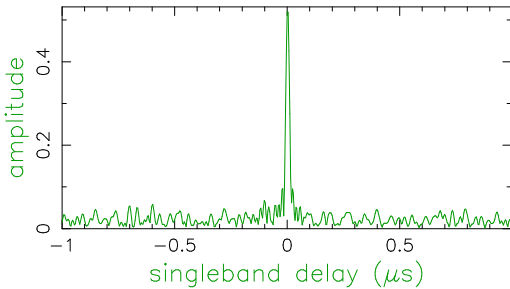
VLBA_BR - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 6

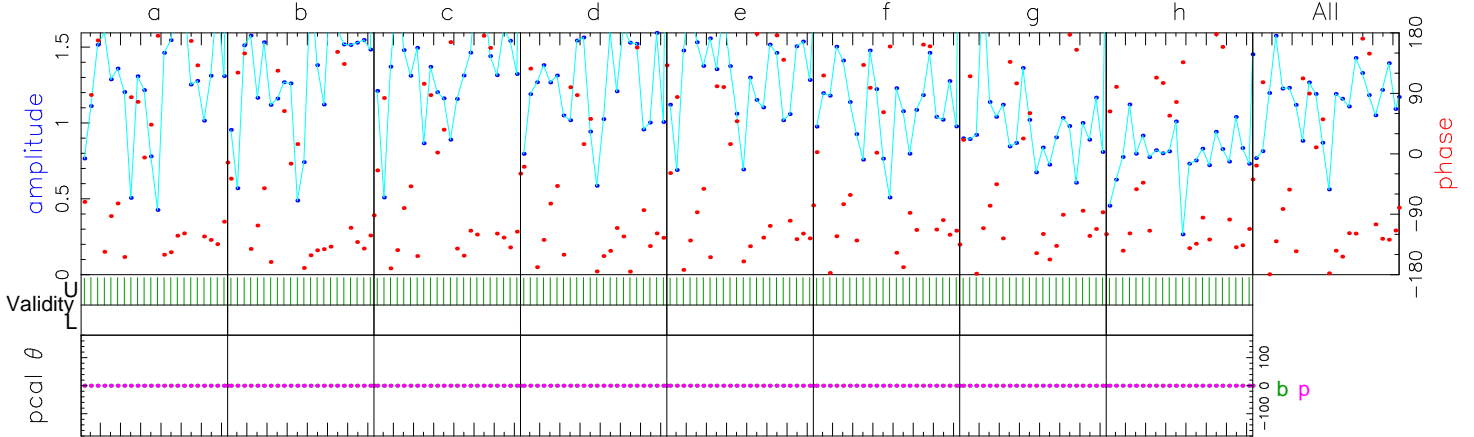


SNR 29.7
 Int time 416.829
 Amp 0.532
 Phase -140.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001912
 MBD 0.001886
 Fringe rate (Hz)
 -0.010888
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050002.56
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010019
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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
	-140.0	-148.1	-138.1	-141.6	-139.4	-140.4	-123.0	-144.6	Phase	-140.0
	0.6	0.7	0.7	0.5	0.6	0.4	0.4	0.3	Ampl.	0.5
	257.8	257.6	257.5	257.1	257.6	257.6	257.2	257.0	Sbd box	257.5
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	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)	-4.62867229552E+03		Apriori delay (usec)		-4.62867418160E+03		Resid mbdelay (usec)		1.88608E-03	+/- 3.7E-05
Sband delay (usec)	-4.62867226985E+03		Apriori clock (usec)		-8.510553E+00		Resid sbdelay (usec)		1.91175E-03	+/- 2.9E-04
Phase delay (usec)	-4.62867418611E+03		Apriori clockrate (us/s)		2.000000E-08		Resid phdelay (usec)		-4.51413E-06	+/- 1.2E-07
Delay rate (us/s)	1.35814938481E-01		Apriori rate (us/s)		1.35815064885E-01		Resid rate (us/s)		-1.26403E-07	+/- 5.2E-10
Total phase (deg)			Apriori accel (us/s/s)		2.24665933341E-05		Resid phase (deg)		-140.0	+/- 3.9

ph/seg (deg) 77.4 9.3 Search (2048X32) 0.498 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 120.6 16.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.0 5.5 Inc. seg. avg. 1.116 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.7 9.5 Inc. frq. avg. 0.519 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 148.7 el 31.1 pa -20.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -754.115 1412.234 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/bp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/bp.W.35.1W5O2N

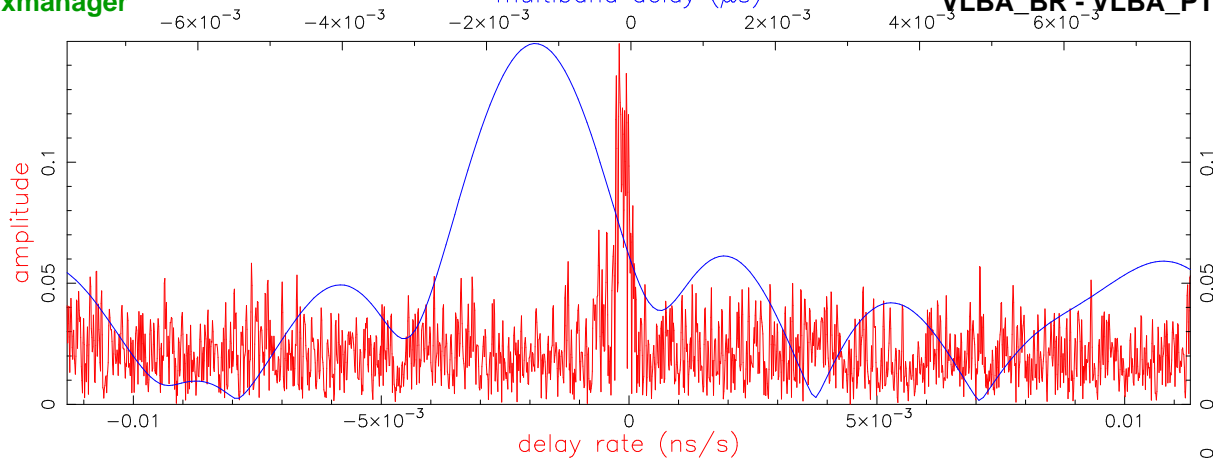
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W5O2N, No0173, bp

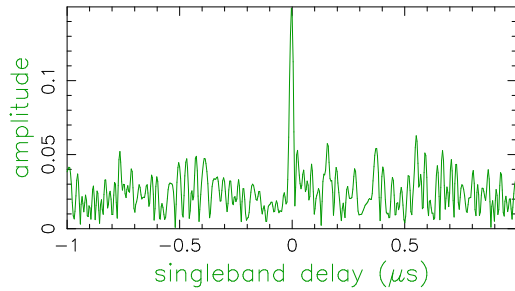
VLBA_BR - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

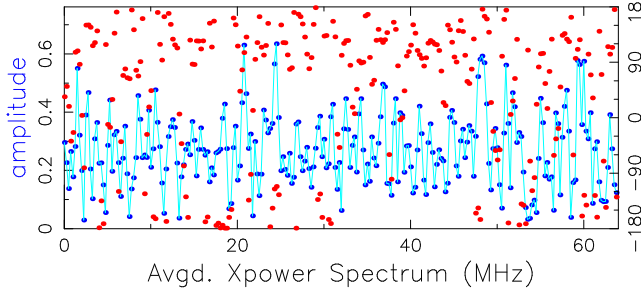


Fringe quality 9

SNR 8.4
 Int time 416.829
 Amp 0.150
 Phase 114.7
 PFD 2.1e-08
 Delays (us)
 SBD -0.002826
 MBD -0.001293
 Fringe rate (Hz)
 -0.016852
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

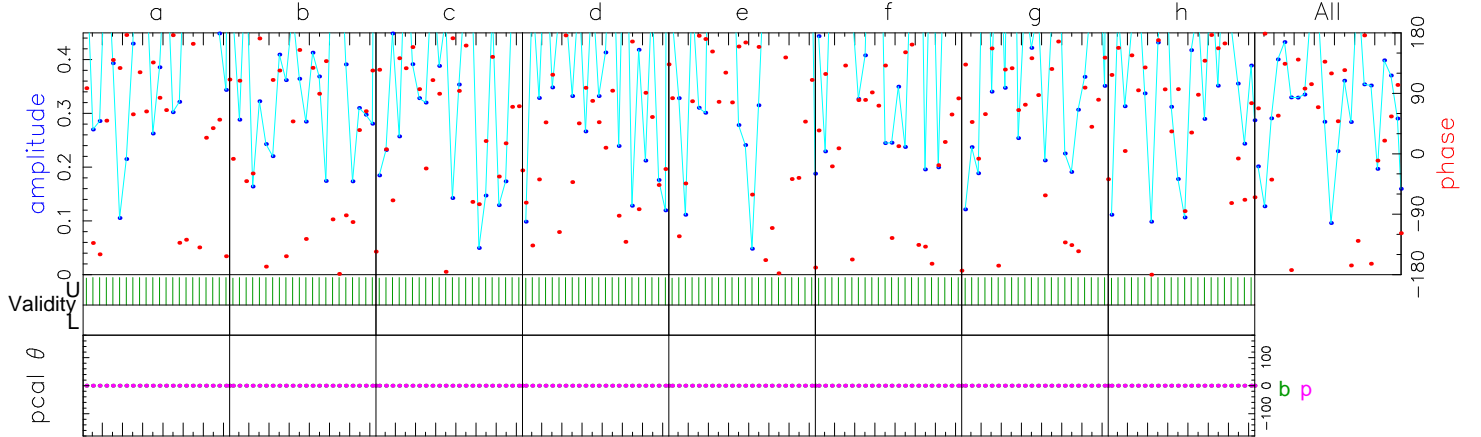


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050002.56
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010023
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.62867547414E+03		Apriori delay (usec)		-4.62867418160E+03		Resid mbdelay (usec)		-1.29254E-03	+/- 1.3E-04
Sband delay (usec)	-4.62867700810E+03		Apriori clock (usec)		-8.5105553E+00		Resid sbdelay (usec)		-2.82650E-03	+/- 1.0E-03
Phase delay (usec)	-4.62867417790E+03		Apriori clockrate (us/s)		2.0000000E-08		Resid phdelay (usec)		3.69988E-06	+/- 4.4E-07
Delay rate (us/s)	1.35814869246E-01		Apriori rate (us/s)		1.35815064885E-01		Resid rate (us/s)		-1.95638E-07	+/- 1.8E-09
Total phase (deg)	113.7		Apriori accel (us/s/s)		2.24665933341E-05		Resid phase (deg)		114.7	+/- 13.7

	RMS	Theor.	Amplitude	0.150 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	69.3	32.8	Search (2048X32)	0.142	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	140.5	57.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	30.8	19.4	Inc. seg. avg.	0.282	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.5	33.8	Inc. frq. avg.	0.148	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 148.7 el 31.1 pa -20.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -754.115 1412.234 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/bp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/bp.W.50.1W5O2N

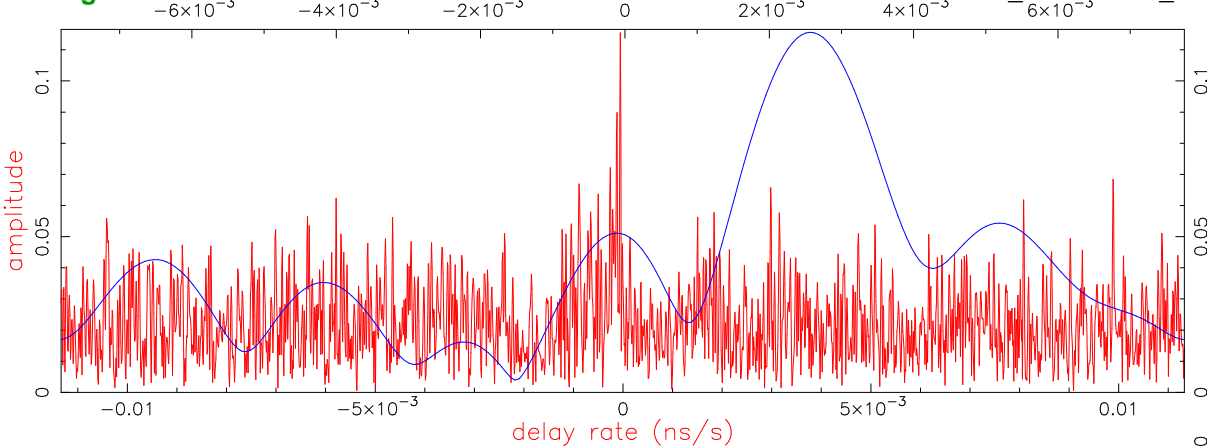
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, bp

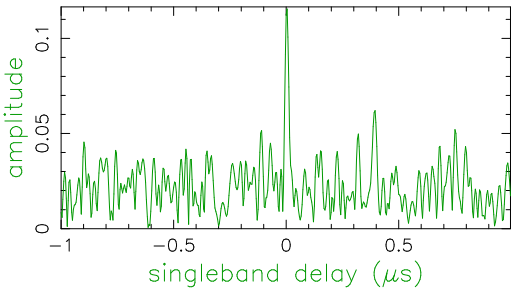
VLBA_BR - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

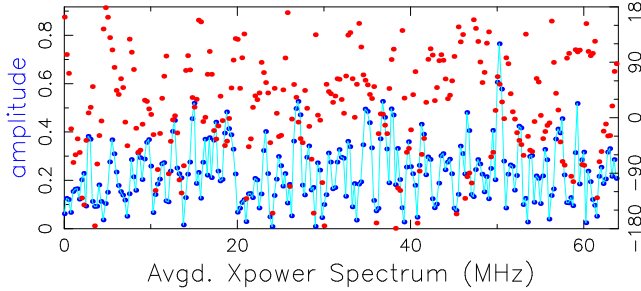


Fringe quality 0

SNR 6.5
 Int time 416.829
 Amp 0.117
 Phase 25.1
 PFD 2.1e-02
 Delays (us)
 SBD 0.002563
 MBD 0.002512
 Fringe rate (Hz)
 -0.004459
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

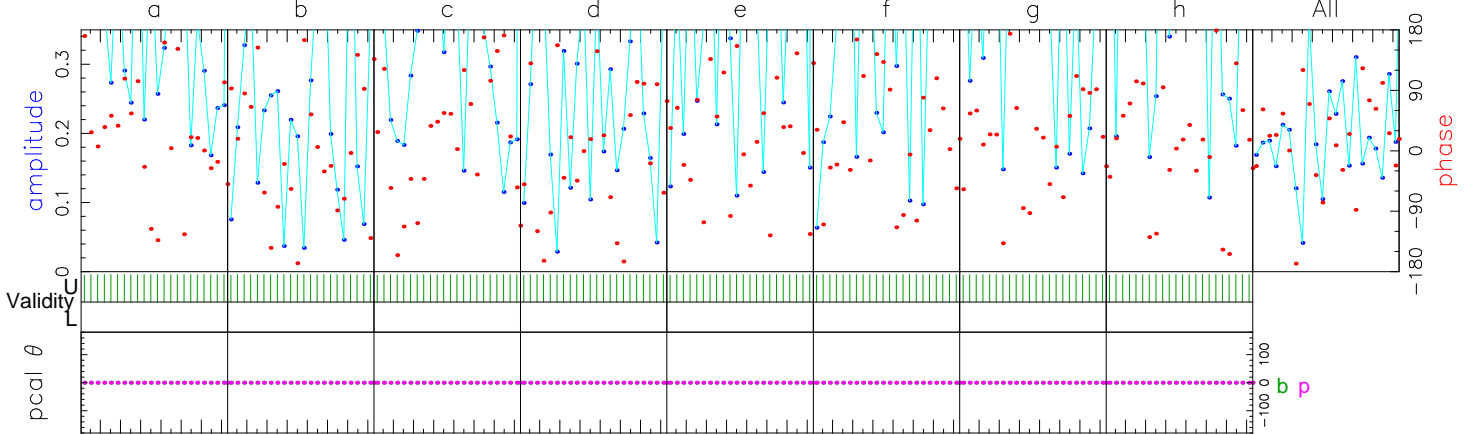


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050002.56
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010026
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.62867166944E+03	Apriori delay (usec)	-4.62867418160E+03	Resid mbdelay (usec)	2.51216E-03	+/-	1.7E-04
Sband delay (usec)	-4.62867161860E+03	Apriori clock (usec)	-8.5105553E+00	Resid sbdelay (usec)	2.56300E-03	+/-	1.3E-03
Phase delay (usec)	-4.62867418079E+03	Apriori clockrate (us/s)	2.0000000E-08	Resid phdelay (usec)	8.08347E-07	+/-	5.7E-07
Delay rate (us/s)	1.35815013121E-01	Apriori rate (us/s)	1.35815064885E-01	Resid rate (us/s)	-5.17637E-08	+/-	2.4E-09
Total phase (deg)	24.0	Apriori accel (us/s/s)	2.24665933341E-05	Resid phase (deg)	25.1	+/-	17.6

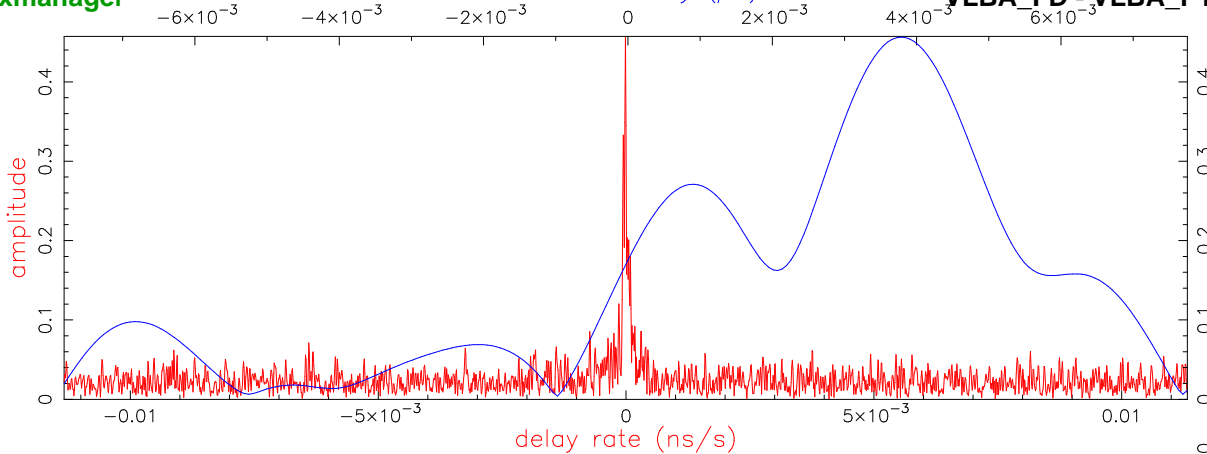
ph/seg (deg)	66.1	Theor.	42.2	Amplitude	0.117 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	91.7	Search (2048X32)	0.111	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.5	Inc. seg. avg.	0.154	Inc. frq. avg.	0.112	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.0	Inc. frq. avg.	0.112			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	

b: az 148.7 el 31.1 pa -20.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -754.115 1412.234 simultaneous interpolator

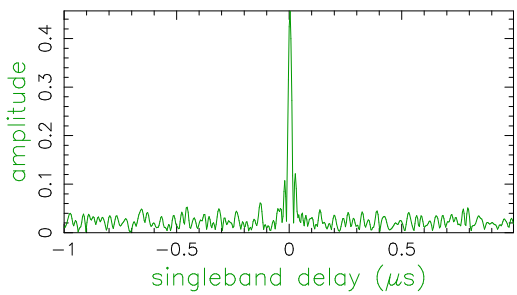
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/bp..1W502N Output file: /Exps/c211a/v2/1234/No0173/bp.W.70.1W502N

multiband delay (μ s)

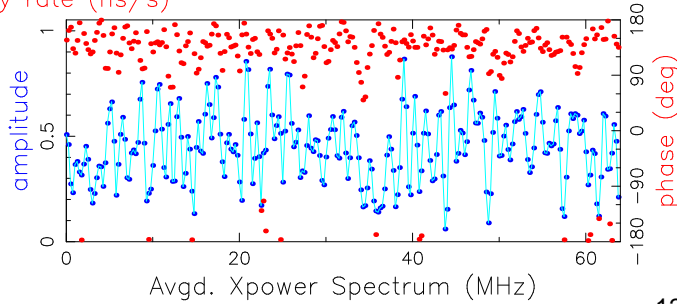
Fringe quality 6



SNR 25.2
Int time 406.231
Amp 0.457
Phase 135.2
PFD 0.0e+00
Delays (us)
SBD 0.003353
MBD 0.003770
Fringe rate (Hz)
-0.000749
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

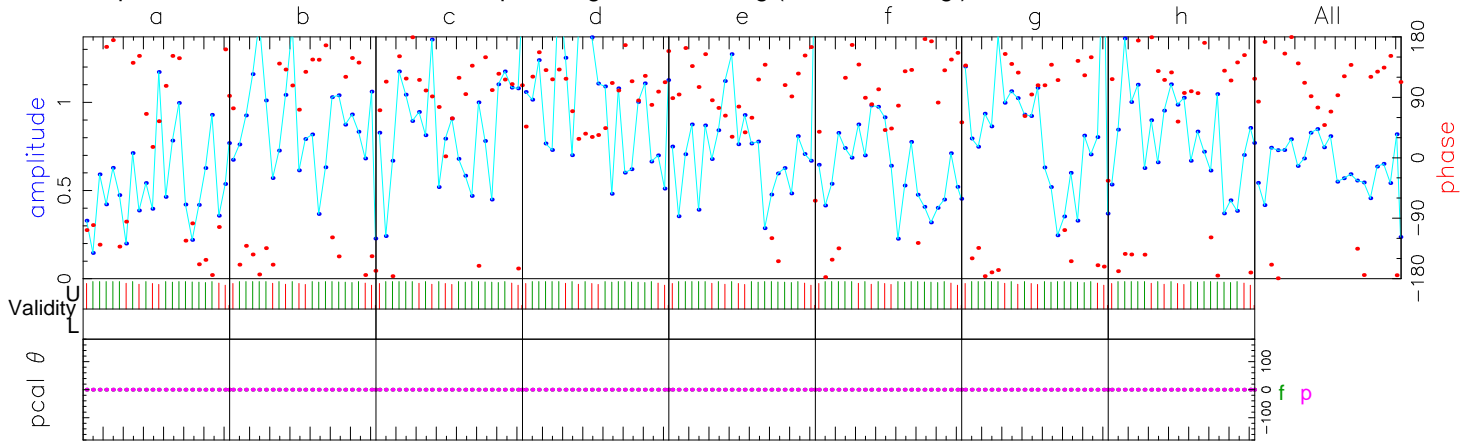


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.51
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010016
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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

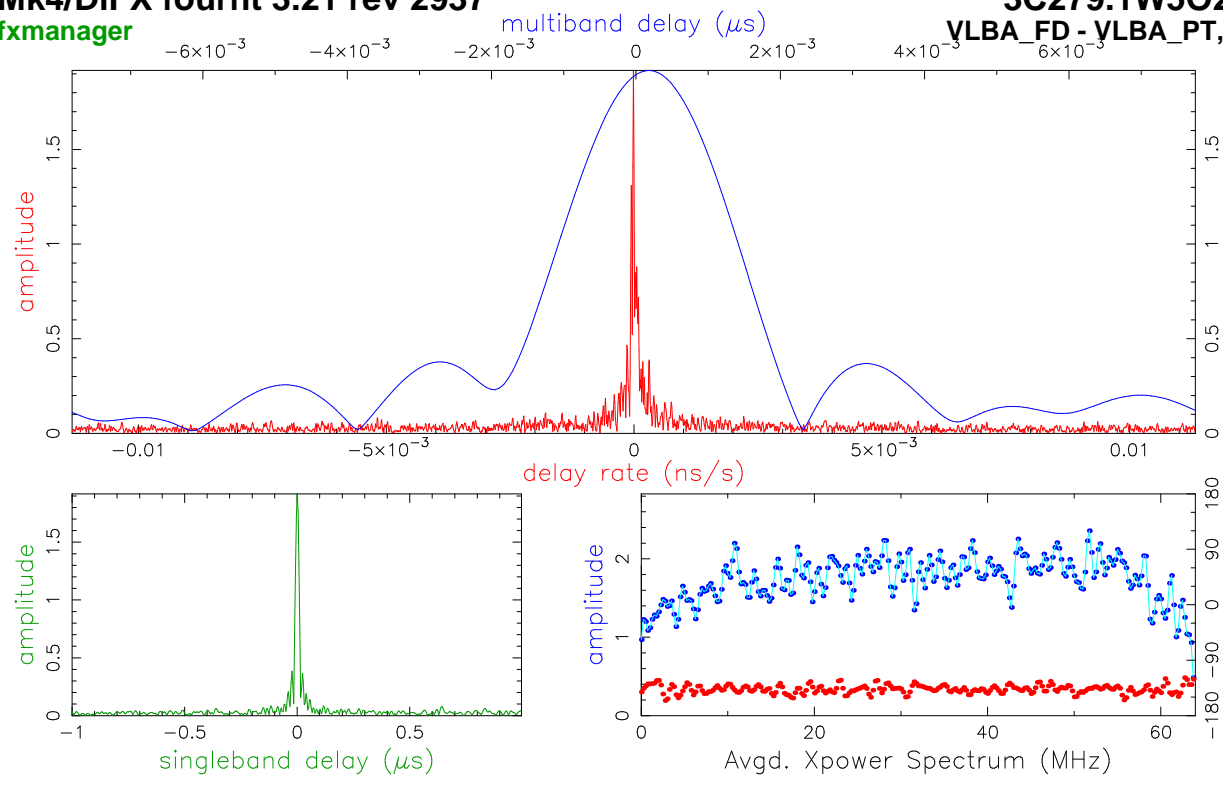


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.09960409200E+03	Apriori delay (usec)		1.09960032151E+03	Resid mbdelay (usec)		3.77050E-03	+/-	4.3E-05	
Sband delay (usec)	1.09960367426E+03	Apriori clock (usec)		4.6899967E+00	Resid sbdelay (usec)		3.35275E-03	+/-	3.4E-04	
Phase delay (usec)	1.09960032587E+03	Apriori clockrate (us/s)		1.8000000E-07	Resid phdelay (usec)		4.36022E-06	+/-	1.5E-07	
Delay rate (us/s)	-8.18552564676E-02	Apriori rate (us/s)		-8.18552477680E-02	Resid rate (us/s)		-8.69967E-09	+/-	6.1E-10	
Total phase (deg)	25.3		Apriori accel (us/s/s)		-5.19549530836E-06	Resid phase (deg)		135.2	+/-	4.5

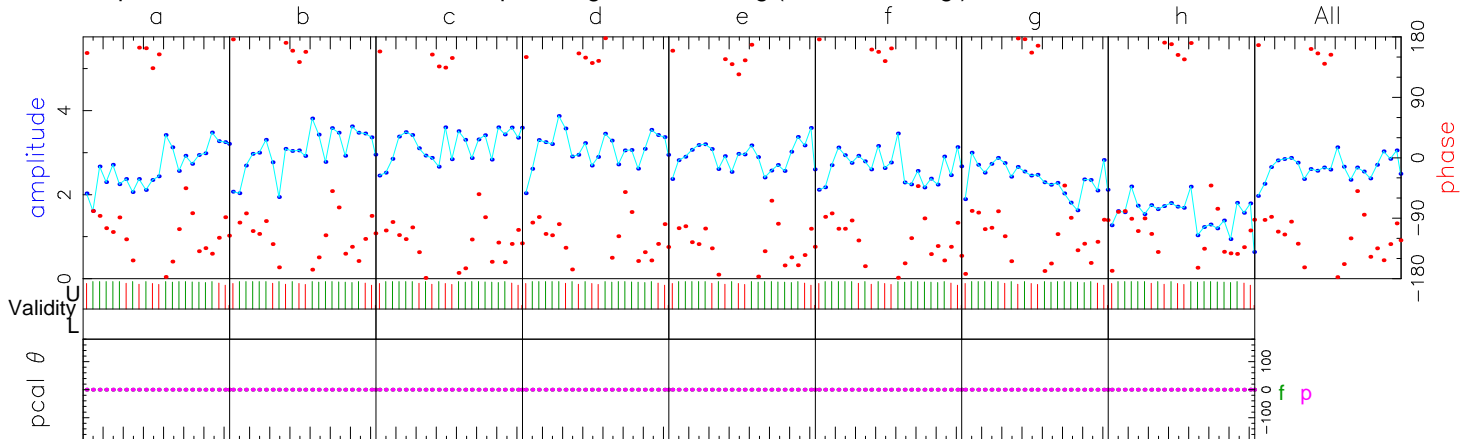
ph/seg (deg)	RMS 45.7	Theor. 10.8	Amplitude 0.457 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	50.6	18.9	Search (2048X32) 0.448	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	33.9	6.4	Inc. seg. avg. 0.640	Bits/sample: 2x2	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.8	11.2	Inc. frq. avg. 0.523	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

f: az 162.3 el 52.0 pa -14.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 464.769 -433.223 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/fp..1W502N Output file: /Exps/c211a/v2/1234/No0173/fp.W.17.1W502N



Fringe quality 5
SNR 105.7
Int time 406.231
Amp 1.918
Phase -136.8
PFD 0.0e+00
Delays (us)
SBD 0.000204
MBD 0.000183
Fringe rate (Hz)
-0.000605
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.51
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010020
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	-131.1	-132.3	-141.7	-137.8	-149.6	-136.6	-128.3	-134.0	Phase	-136.8
	1.9	2.2	2.3	2.2	2.1	1.9	1.8	1.1	Ampl.	1.9
	257.1	256.7	257.1	257.1	257.0	257.1	257.1	257.1	Sbd box	257.1
U/L	808/0	808/0	808/0	808/0	808/0	808/0	807/0	807/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.09960050435E+03		Apriori delay (usec)		1.09960032151E+03		Resid mbdelay (usec)		1.82840E-04	+/- 1.0E-05
Sband delay (usec)	1.09960052551E+03		Apriori clock (usec)		4.6899967E+00		Resid sbdelay (usec)		2.04000E-04	+/- 8.1E-05
Phase delay (usec)	1.09960031709E+03		Apriori clockrate (us/s)		1.8000000E-07		Resid phdelay (usec)		-4.41299E-06	+/- 3.5E-08
Delay rate (us/s)	-8.18552547898E-02		Apriori rate (us/s)		-8.18552477680E-02		Resid rate (us/s)		-7.02181E-09	+/- 1.5E-10
Total phase (deg)	113.2		Apriori accel (us/s/s)		-5.19549530836E-06		Resid phase (deg)		-136.8	+/- 1.1

ph/seg (deg) 45.4 2.6 Search (2048X32) 1.827 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 40.7 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.3 1.5 Inc. seg. avg. 2.648 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 18.3 2.7 Inc. frq. avg. 1.929 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 162.3 el 52.0 pa -14.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 464.769 -433.223 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/fp..1W502N Output file: /Exps/c211a/v2/1234/No0173/fp.W.40.1W502N simultaneous interpolator

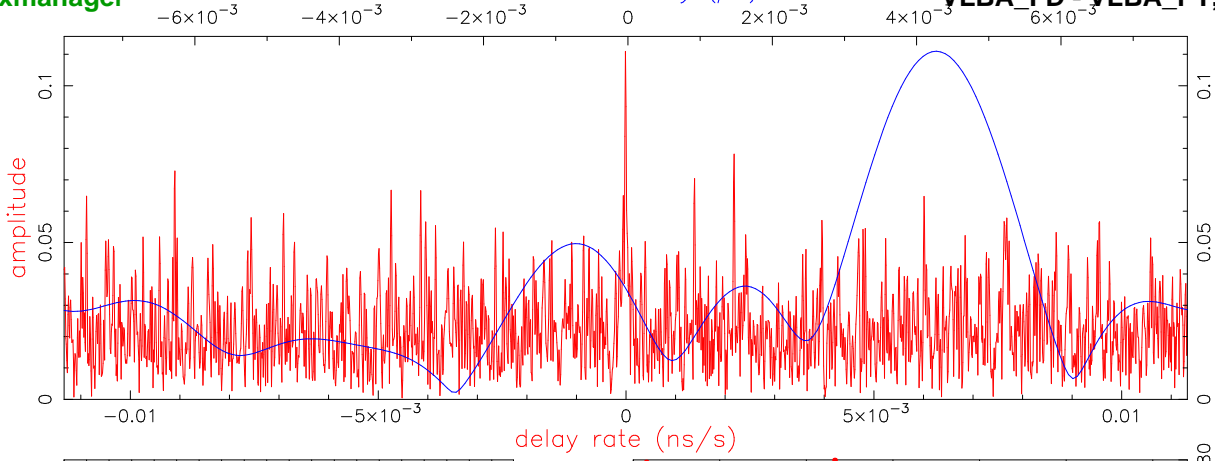
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

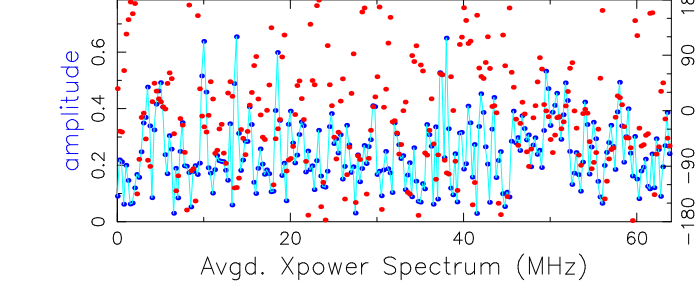
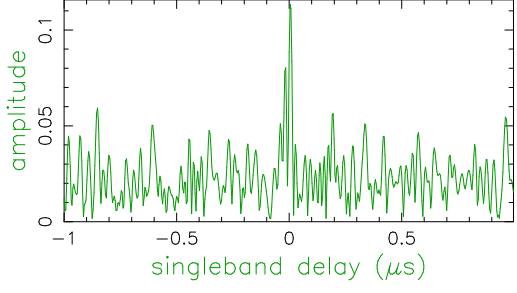
3C279.1W502N, No0173, fp

VLBA_FD - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

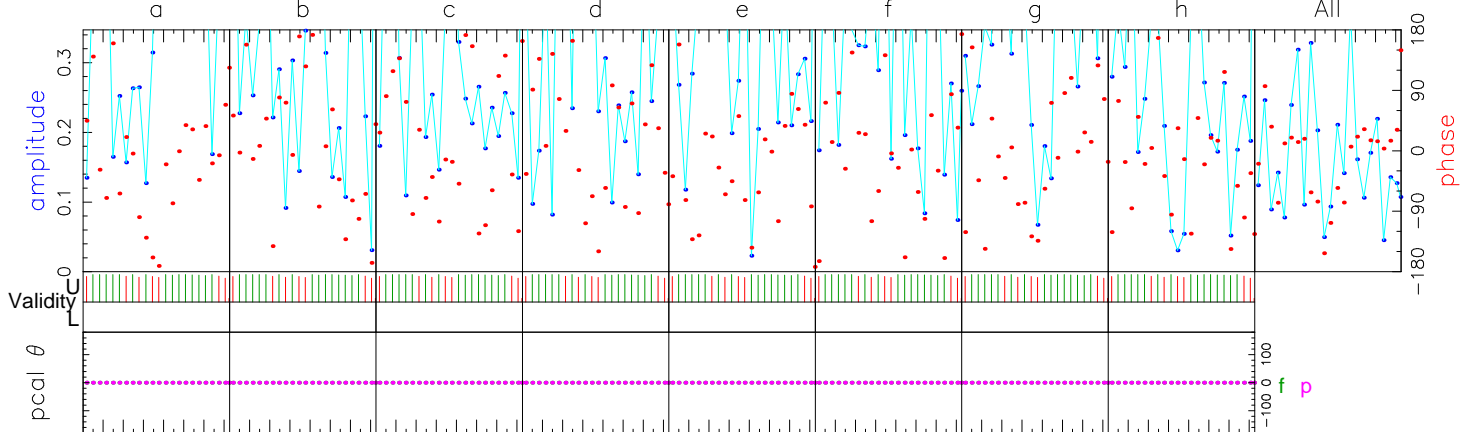


Fringe quality 0
 SNR 6.4
 Int time 406.231
 Amp 0.116
 Phase -4.9
 PFD 4.8e-02
 Delays (us)
 SBD 0.005513
 MBD 0.004253
 Fringe rate (Hz) -0.000488
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.51
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010025
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"



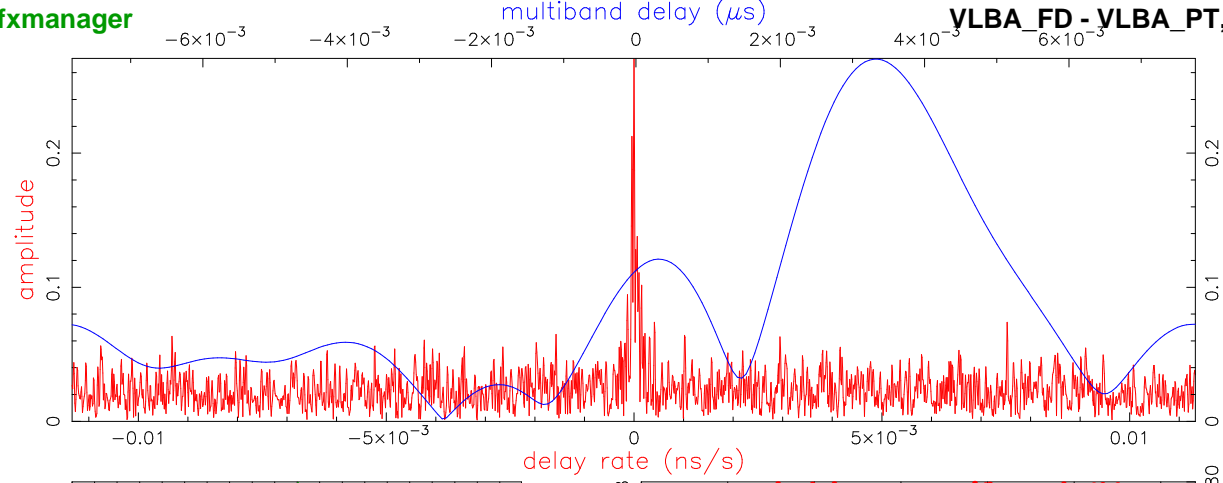
Avgd. Xpower Spectrum (MHz)

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

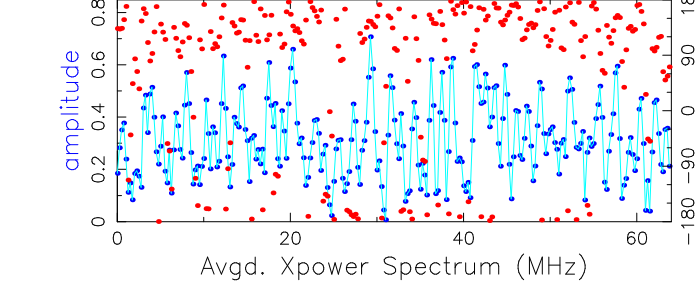
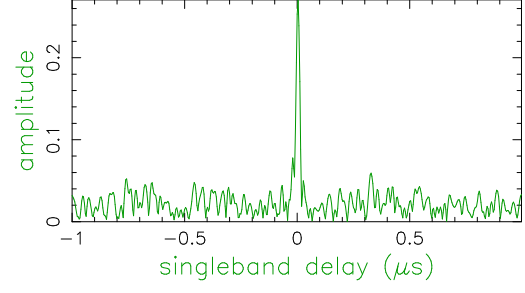


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-11.9	-7.8	29.7	2.6	-16.2	17.1	-1.0	-26.1	Phase	-4.9
	0.2	0.1	0.0	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	402.9	504.7	466.7	138.5	6.7	306.3	404.5	326.4	Sbd box	258.4
U/L	808/0	808/0	808/0	808/0	808/0	808/0	808/0	808/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Tracks	
Group delay (usec)(sbd)	1.09960457485E+03		Apriori delay (usec)		1.09960032151E+03		Resid mbdelay (usec)		4.25334E-03	+/- 1.7E-04
Sband delay (usec)	1.09960583401E+03		Apriori clock (usec)		4.6899967E+00		Resid sbdelay (usec)		5.51250E-03	+/- 1.4E-03
Phase delay (usec)	1.09960032135E+03		Apriori clockrate (us/s)		1.8000000E-07		Resid phdelay (usec)		-1.58426E-07	+/- 5.8E-07
Delay rate (us/s)	-8.18552534357E-02		Apriori rate (us/s)		-8.18552477680E-02		Resid rate (us/s)		-5.66775E-09	+/- 2.4E-09
Total phase (deg)	245.2		Apriori accel (us/s/s)		-5.19549530836E-06		Resid phase (deg)		-4.9	+/- 18.0
	RMS	Theor.	Amplitude	0.116 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		
ph/seg (deg)	57.9	42.8	Search (2048X32)	0.107		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000
amp/seg (%)	88.3	74.7	Interp.	0.000		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	20.0	25.4	Inc. seg. avg.	0.131		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.0	44.3	Inc. frq. avg.	0.104		Data rate(Mb/s): 2048		lags: 256	t_cohere infinite	ion window (TEC)
f: az 162.3 el 52.0 pa -14.4	p: az 157.7 el 47.4 pa -17.5		u,v (fr/asec) 464.769 -433.223						simultaneous interpolator	

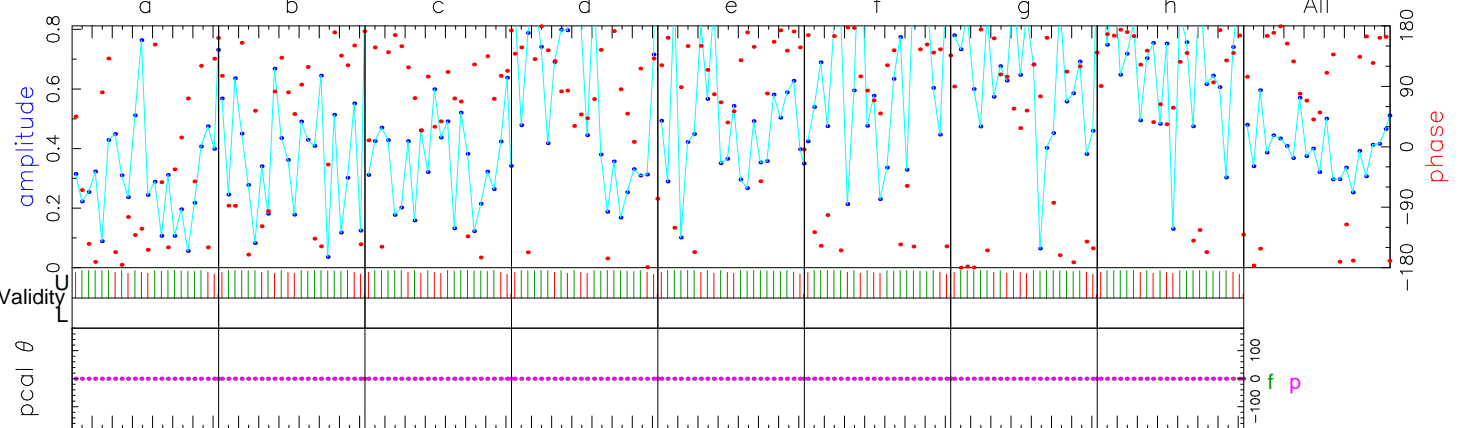
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/fp..1W502N Output file: /Exps/c211a/v2/1234/No0173/fp.W.64.1W502N



Fringe quality 8
SNR 14.9
Int time 406.231
Amp 0.271
Phase 145.4
PFD 1.6e-41
Delays (us)
SBD 0.003297
MBD 0.003298
Fringe rate (Hz)
-0.000429
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.51
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010028
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"



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	808/0	808/0	808/0	808/0	808/0	808/0	807/0	807/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.09960361969E+03				1.09960032151E+03			3.29819E-03	+/- 7.3E-05
Sband delay (usec)		1.09960361851E+03				4.6899967E+00			3.29700E-03	+/- 5.8E-04
Phase delay (usec)		1.09960032620E+03				1.8000000E-07			4.68900E-06	+/- 2.5E-07
Delay rate (us/s)		-8.18552527506E-02				-8.18552477680E-02			-4.98258E-09	+/- 1.0E-09
Total phase (deg)			35.5			-5.19549530836E-06			145.4	+/- 7.7
Apriori delay (usec)				0.271 +/- 0.018						
Apriori clock (usec)				0.251						
Apriori clockrate (us/s)				0.000						
Apriori rate (us/s)				0.380						
Apriori accel (us/s/s)				0.291						
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				

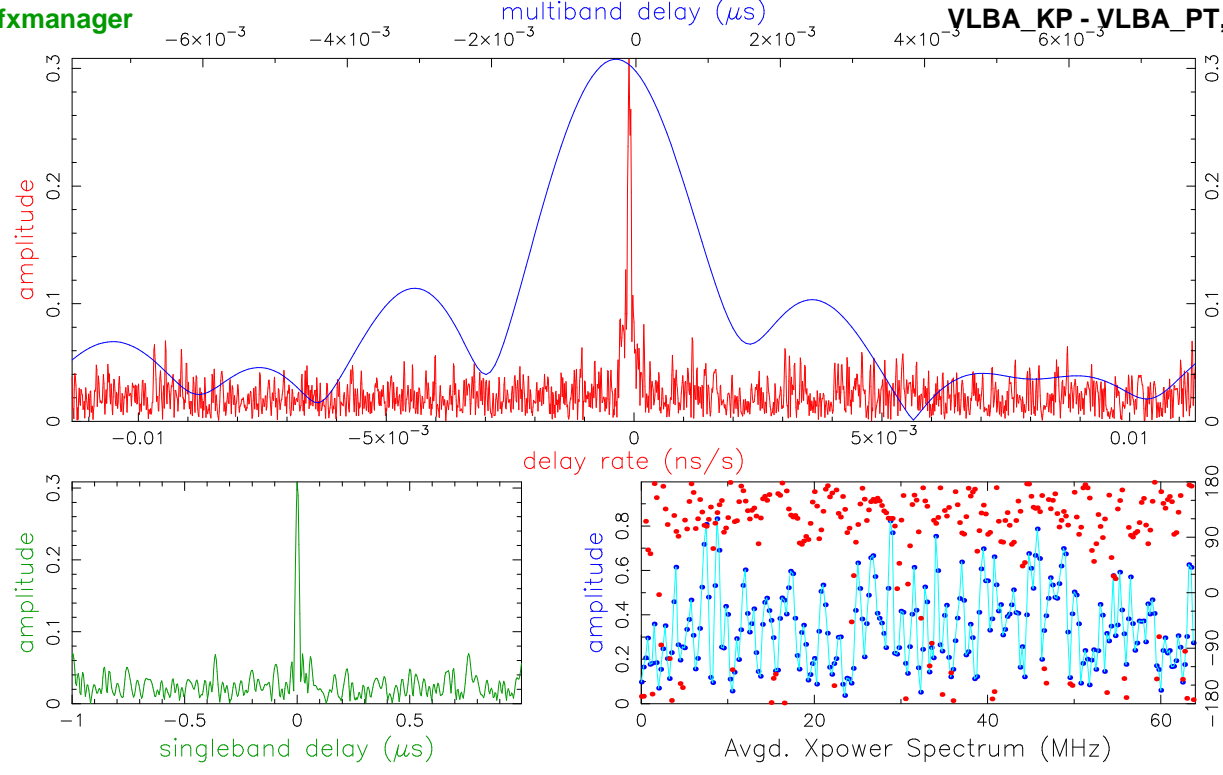
ph/seg (deg) 50.3 18.3 Search (2048X32) 0.251 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.2 31.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 32.4 10.9 Inc. seg. avg. 0.380 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 39.8 19.0 Inc. frq. avg. 0.291 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 162.3 el 52.0 pa -14.4 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 464.769 -433.223 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/fp..1W502N Output file: /Exps/c211a/v2/1234/No0173/fp.W.80.1W502N simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W5O2N, No0173, kp

VLBA_KP - VLBA_PT, fgroup W, pol LR

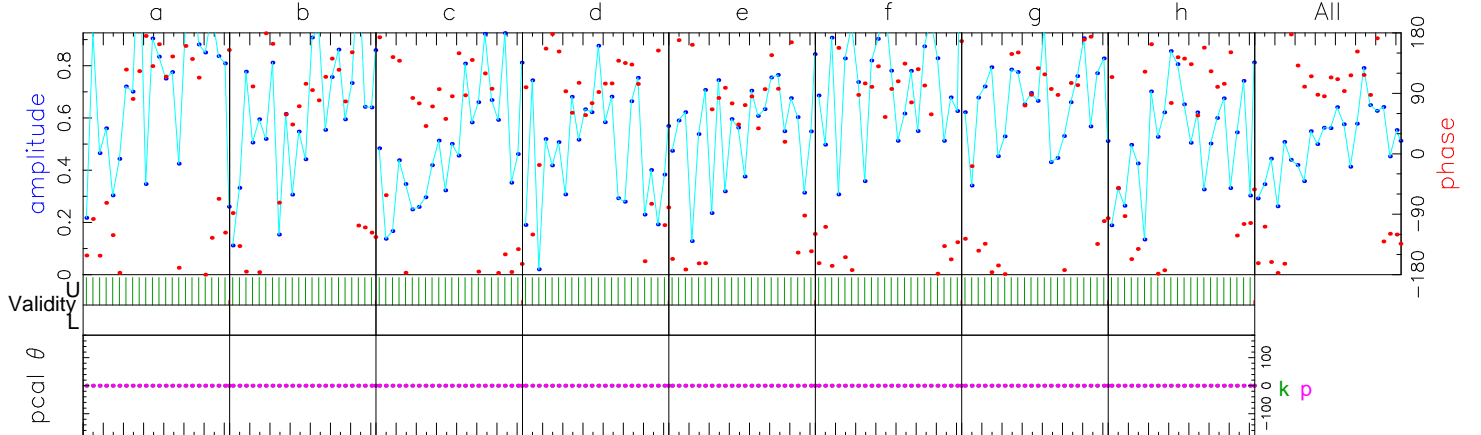


Fringe quality 9

SNR 17.3
 Int time 419.792
 Amp 0.309
 Phase 145.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.000635
 MBD -0.000264
 Fringe rate (Hz)
 -0.008760
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010035
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
k	1000	1000	1000	1000	1000	1000	1000	1000				
p	1000	1000	1000	1000	1000	1000	1000	1000				
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
k	1000	1000	1000	1000	1000	1000	1000	1000				
p	1000	1000	1000	1000	1000	1000	1000	1000				
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)	2.26224239124E+02					2.26224502992E+02			Resid mbdelay (usec)	-2.63868E-04	+/- 6.3E-05	
Sband delay (usec)	2.26225137742E+02					-5.2193356E+00			Resid sbdelay (usec)	6.34750E-04	+/- 5.0E-04	
Phase delay (usec)	2.26224507682E+02					1.2000000E-07			Resid phdelay (usec)	4.68965E-06	+/- 2.1E-07	
Delay rate (us/s)	8.52359101006E-02					8.52360117978E-02			Resid rate (us/s)	-1.01697E-07	+/- 8.8E-10	
Total phase (deg)			33.0			-8.32746074139E-07			Resid phase (deg)	145.4	+/- 6.6	
	RMS	Theor.	Amplitude	0.309 +/- 0.018		PCal mode: MANUAL, MANUAL			PC period (AP's)	5, 5		
ph/seg (deg)	55.7	15.9	Search (2048X32)	0.297		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000	1.000	
amp/seg (%)	76.4	27.7	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	18.1	9.4	Inc. seg. avg.	0.489		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011	
amp/frq (%)	20.8	16.4	Inc. frq. avg.	0.315		Data rate(Mb/s): 2048			ion window (TEC)	0.00	0.00	

k: az 151.7 el 48.2 pa -22.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -491.856 -295.964 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/kp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/kp.W.111.1W5O2N

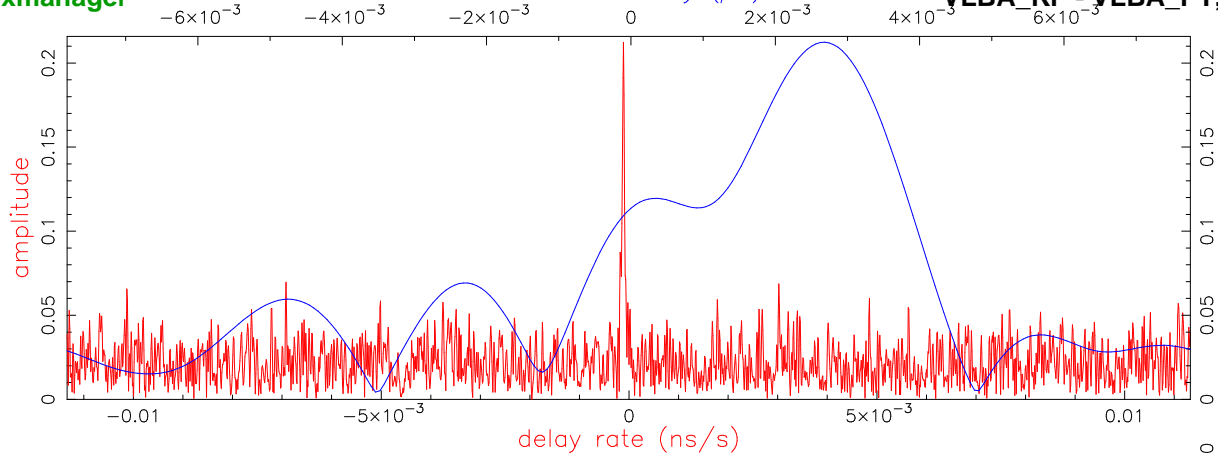
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, kp

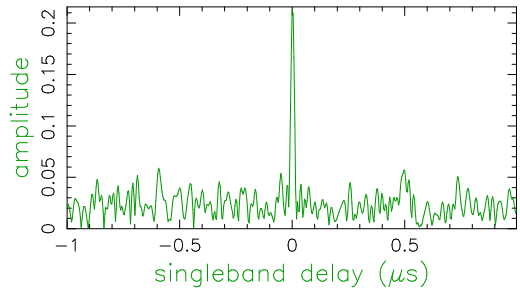
VLBA_KP - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

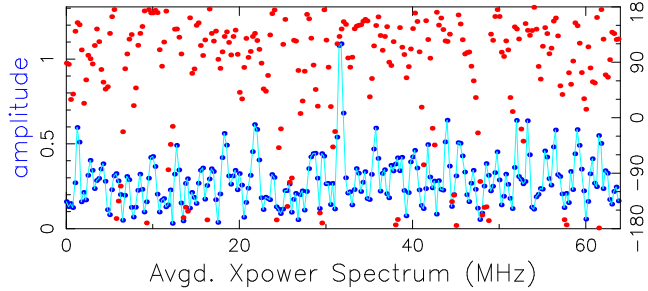


Fringe quality 9

SNR 12.1
 Int time 419.792
 Amp 0.216
 Phase 118.1
 PFD 5.9e-25
 Delays (us)
 SBD 0.001619
 MBD 0.002709
 Fringe rate (Hz)
 -0.009277
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

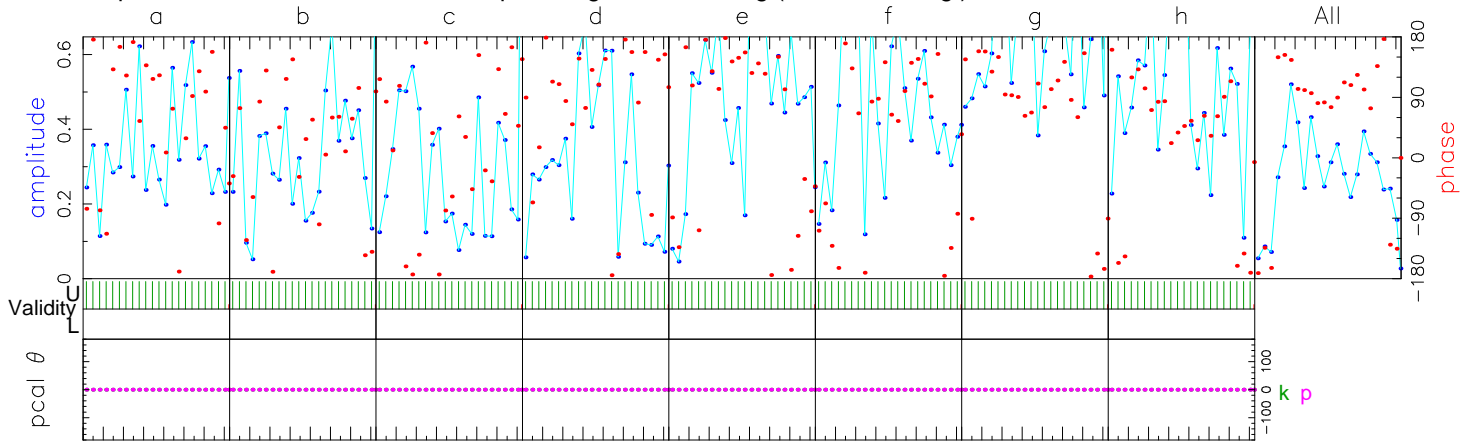


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010038
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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
	112.7	66.3	141.2	130.2	154.3	122.6	120.5	85.4	Phase	118.1
	0.2	0.2	0.1	0.2	0.3	0.3	0.4	0.3	Ampl.	0.2
	256.2	388.6	19.8	256.8	257.8	258.4	256.5	257.7	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.26227211802E+02		Apriori delay (usec)		2.26224502992E+02		Resid mbdelay (usec)		2.70881E-03	+/- 9.0E-05
Sband delay (usec)	2.26226122492E+02		Apriori clock (usec)		-5.2193356E+00		Resid sbdelay (usec)		1.61950E-03	+/- 7.1E-04
Phase delay (usec)	2.26224506801E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		3.80888E-06	+/- 3.1E-07
Delay rate (us/s)	8.52359040956E-02		Apriori rate (us/s)		8.52360117978E-02		Resid rate (us/s)		-1.07702E-07	+/- 1.3E-09
Total phase (deg)	5.7		Apriori accel (us/s/s)		-8.32746074139E-07		Resid phase (deg)		118.1	+/- 9.5

	RMS	Theor.	Amplitude	0.216 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.9	22.7	Search (2048X32)	0.206	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	61.0	39.7	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	31.1	13.4	Inc. seg. avg.	0.258	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	44.8	23.4	Inc. frq. avg.	0.228	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 151.7 el 48.2 pa -22.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -491.856 -295.964 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/kp..1W502N Output file: /Exps/c211a/v2/1234/No0173/kp.W.127.1W502N

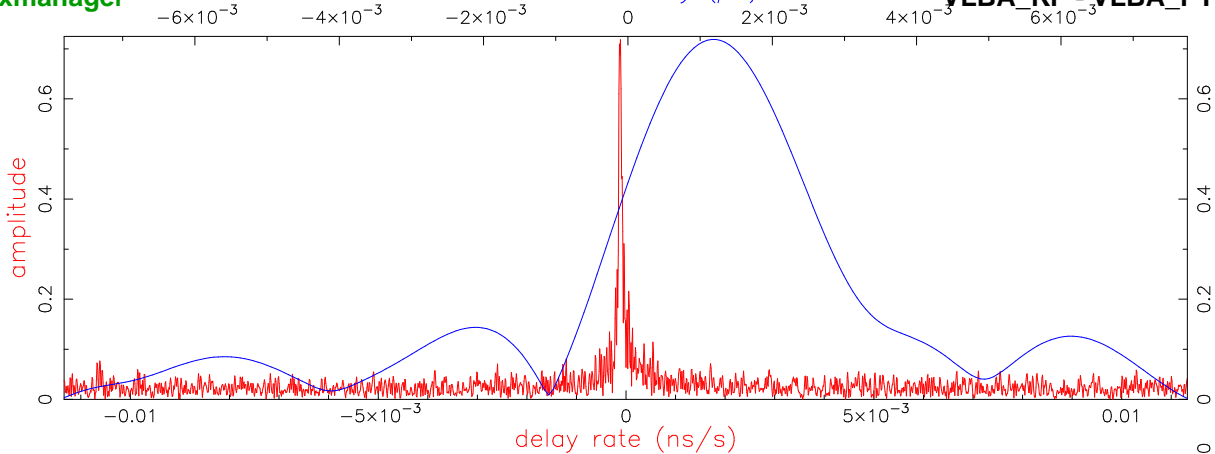
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, kp

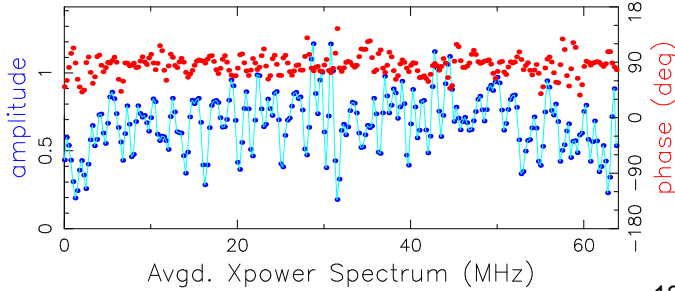
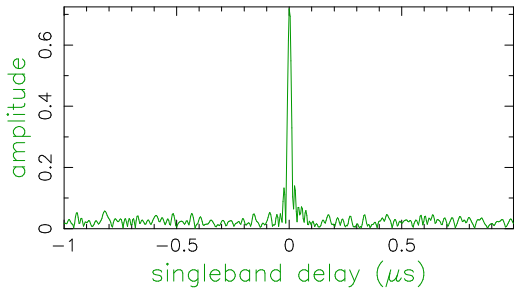
VLBA_KP - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



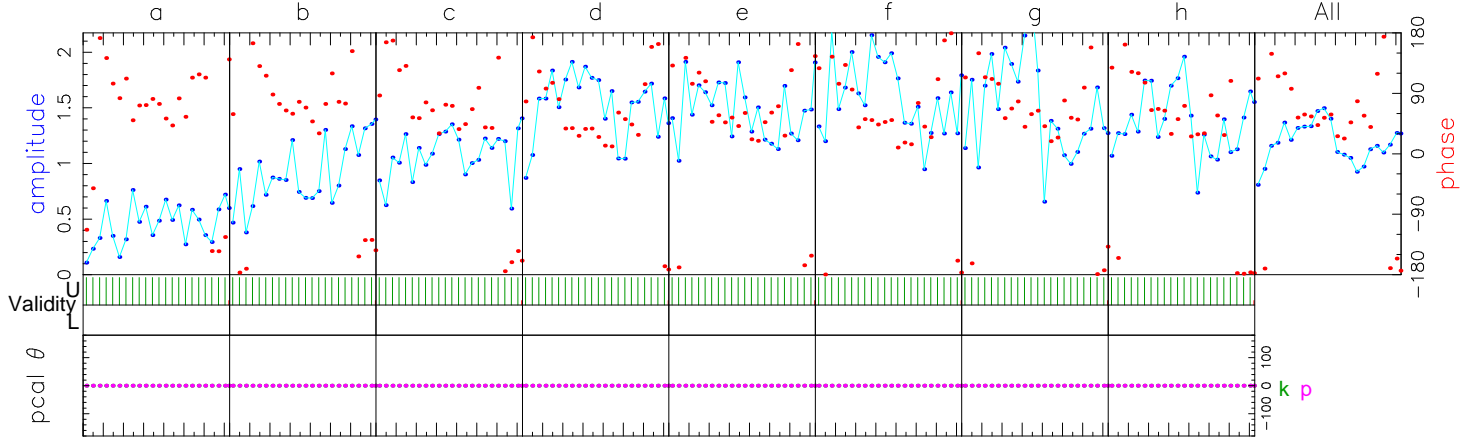
Fringe quality 5

SNR 40.6
 Int time 419.792
 Amp 0.725
 Phase 84.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.001228
 MBD 0.001229
 Fringe rate (Hz)
 -0.009466
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010028
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 --5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	2.26225731802E+02		Apriori delay (usec)		2.26224502992E+02		Resid mbdelay (usec)		1.22881E-03	+/- 2.7E-05
Sband delay (usec)	2.26225730492E+02		Apriori clock (usec)		-5.2193356E+00		Resid sbdelay (usec)		1.22750E-03	+/- 2.1E-04
Phase delay (usec)	2.26224505719E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		2.72724E-06	+/- 9.1E-08
Delay rate (us/s)	8.52359019061E-02		Apriori rate (us/s)		8.52360117978E-02		Resid rate (us/s)		-1.09892E-07	+/- 3.8E-10
Total phase (deg)	332.2		Apriori accel (us/s/s)		-8.32746074139E-07		Resid phase (deg)		84.6	+/- 2.8

	RMS	Theor.	Amplitude	0.725 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.9	6.8	Search (2048X32)	0.704	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	67.7	11.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	14.2	4.0	Inc. seg. avg.	1.175	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.6	7.0	Inc. frq. avg.	0.730	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 151.7 el 48.2 pa -22.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -491.856 -295.964 simultaneous interpolator

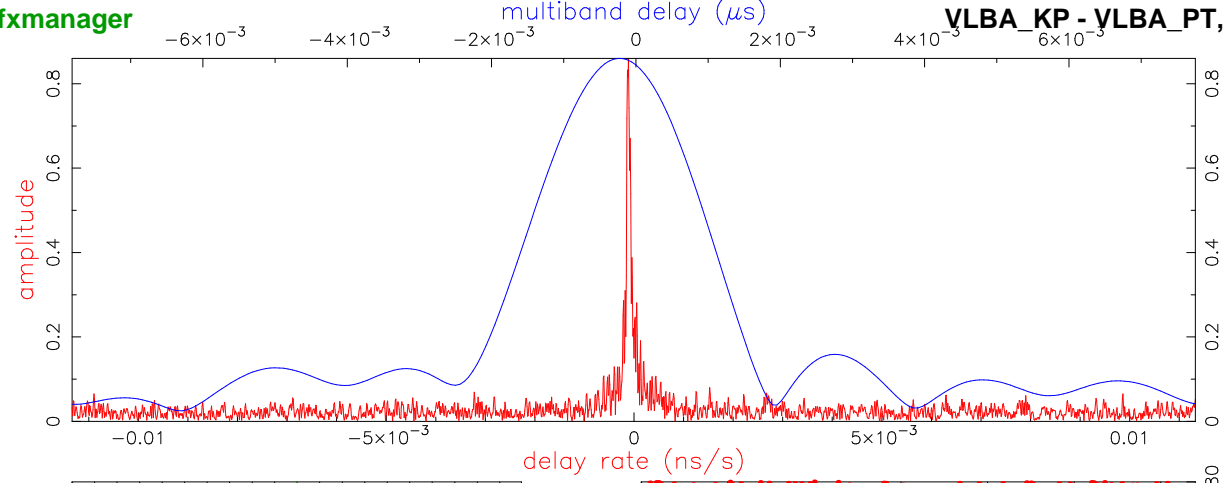
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/kp..1W502N Output file: /Exps/c211a/v2/1234/No0173/kp.W.81.1W502N

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, kp

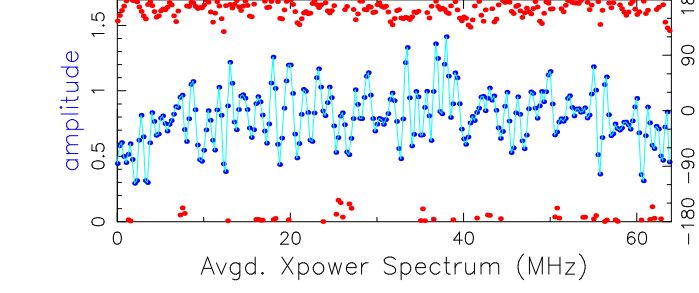
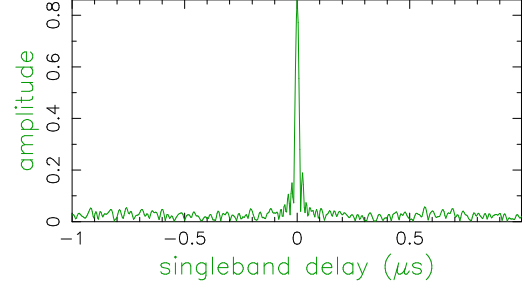
VLBA_KP - VLBA_PT, fgroup W, pol RR



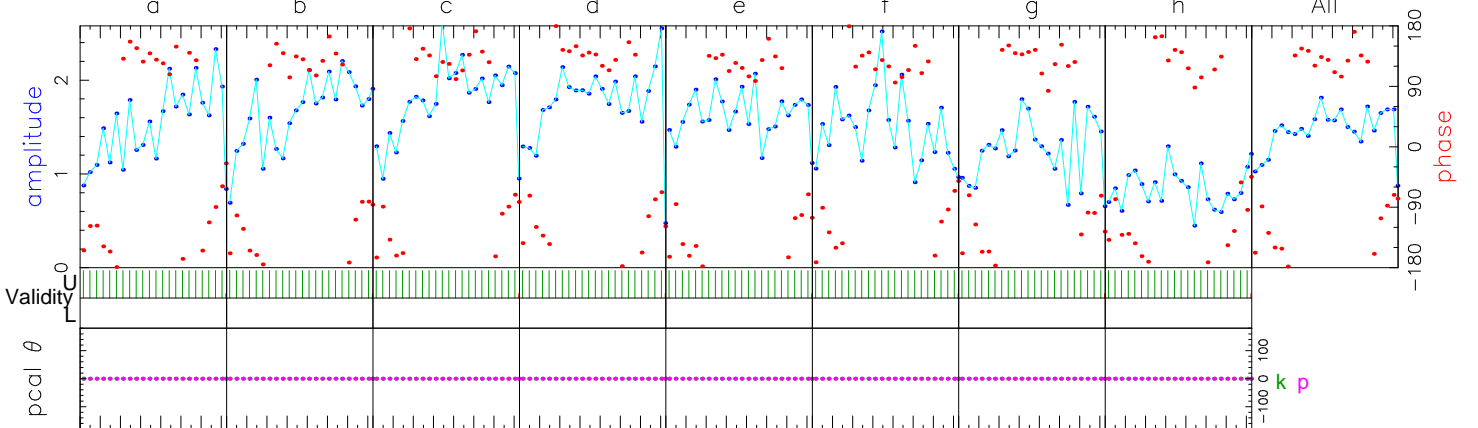
Fringe quality 4

SNR 48.2
 Int time 419.792
 Amp 0.860
 Phase 168.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.000260
 MBD -0.000233
 Fringe rate (Hz)
 -0.009277
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010032
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.26224270490E+02		Apriori delay (usec)		2.26224502992E+02		Resid mbdelay (usec)		-2.32502E-04	+/- 2.3E-05
Sband delay (usec)	2.26224243242E+02		Apriori clock (usec)		-5.2193356E+00		Resid sbdelay (usec)		-2.59750E-04	+/- 1.8E-04
Phase delay (usec)	2.26224508408E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		5.41623E-06	+/- 7.7E-08
Delay rate (us/s)	8.52359041062E-02		Apriori rate (us/s)		8.52360117978E-02		Resid rate (us/s)		-1.07692E-07	+/- 3.2E-10
Total phase (deg)	55.5		Apriori accel (us/s/s)		-8.32746074139E-07		Resid phase (deg)		168.0	+/- 2.4

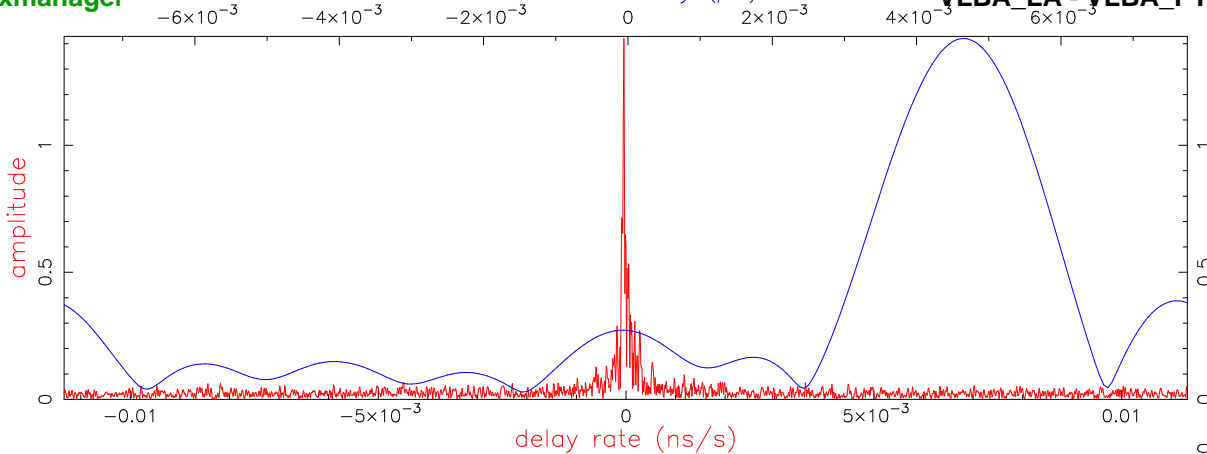
	RMS	Theor.	Amplitude	0.860 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.9	5.7	Search (2048X32)	0.838	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	76.3	10.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	9.1	3.4	Inc. seg. avg.	1.477	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	21.5	5.9	Inc. frq. avg.	0.865	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 151.7 el 48.2 pa -22.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -491.856 -295.964 simultaneous interpolator

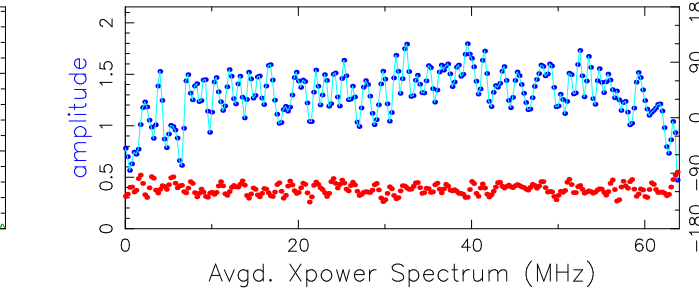
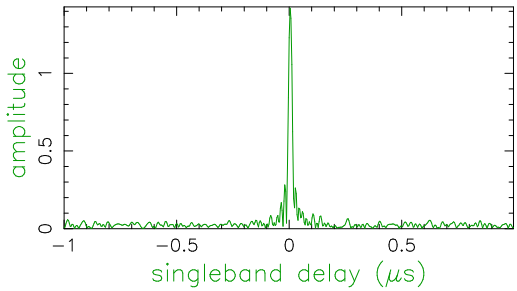
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/kp..1W502N Output file: /Exps/c211a/v2/1234/No0173/kp.W.94.1W502N

multiband delay (μ s)

Fringe quality 5

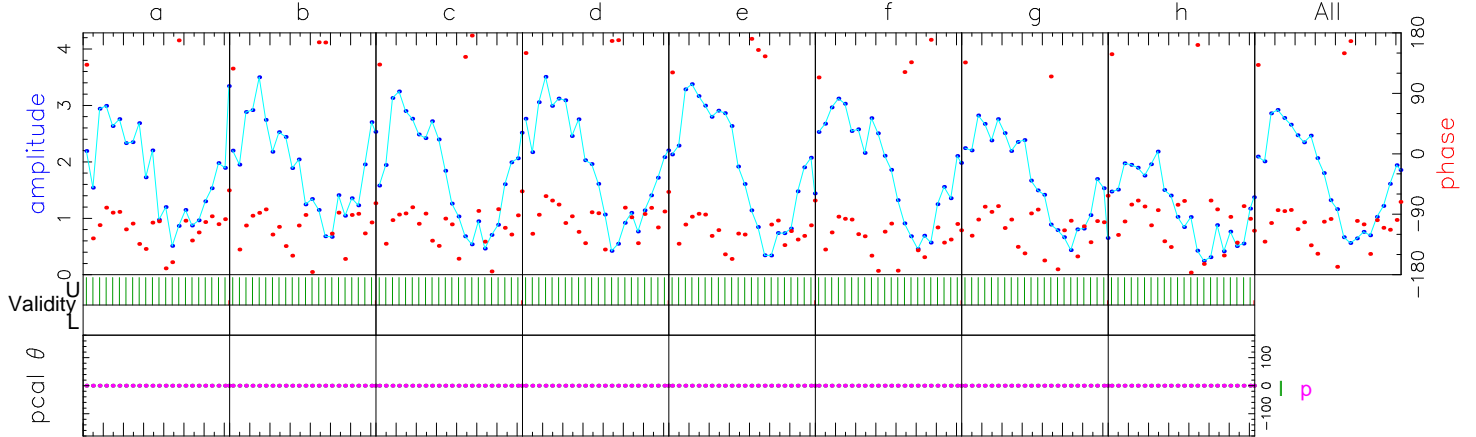


SNR 80.1
Int time 419.824
Amp 1.429
Phase -113.5
PFD 0.0e+00
Delays (us)
SBD 0.004889
MBD 0.004676
Fringe rate (Hz)
-0.004002
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010034
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

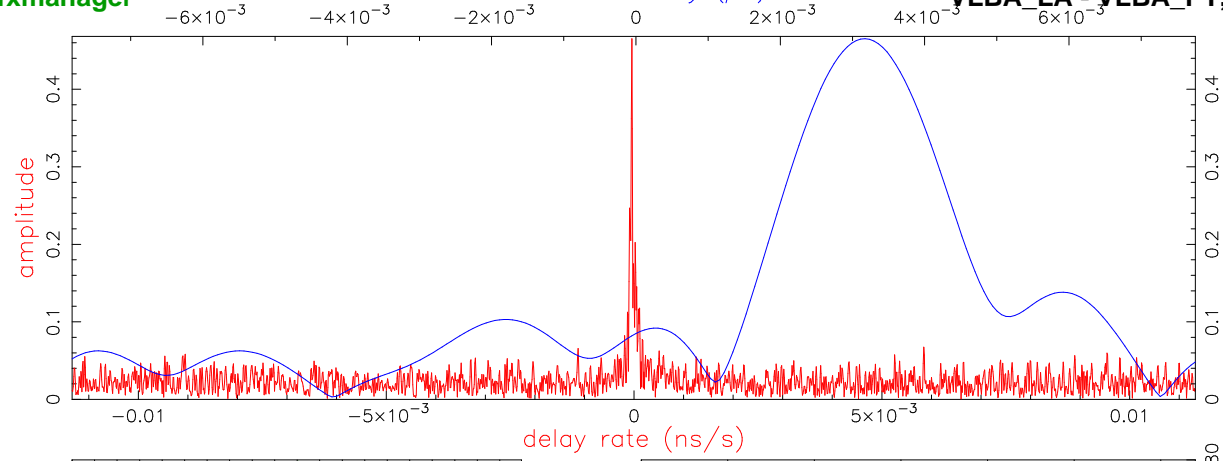
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



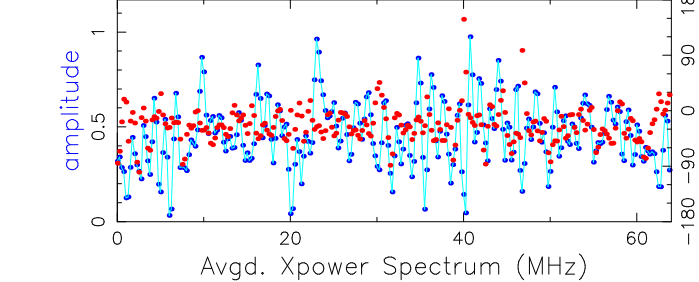
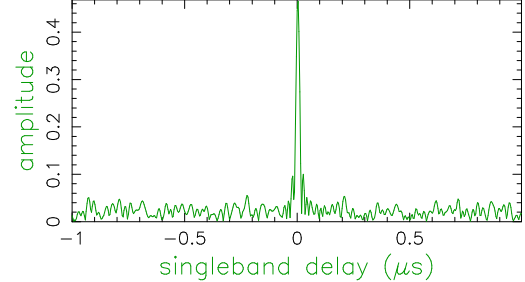
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.3	-116.0	-109.4	-99.1	-122.2	-129.8	-113.2	-104.0	Phase	-113.5
	1.5	1.5	1.5	1.6	1.6	1.5	1.3	0.9	Ampl.	1.4
	258.1	258.1	258.5	258.1	258.2	258.3	258.5	258.7	Sbd box	258.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	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)	-2.29074281887E+02		Apriori delay (usec)		-2.29078957817E+02		Resid mbdelay (usec)		4.67593E-03	+/- 1.4E-05
Sband delay (usec)	-2.29074068817E+02		Apriori clock (usec)		-8.1279869E+00		Resid sbdelay (usec)		4.88900E-03	+/- 1.1E-04
Phase delay (usec)	-2.29078961476E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-3.65913E-06	+/- 4.6E-08
Delay rate (us/s)	-4.54810572748E-02		Apriori rate (us/s)		-4.54810108111E-02		Resid rate (us/s)		-4.64637E-08	+/- 1.9E-10
Total phase (deg)			Apriori accel (us/s/s)		9.30901110723E-07		Resid phase (deg)		-113.5	+/- 1.4

ph/seg (deg) 42.1 3.4 Search (2048X32) 1.380 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.5 6.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.6 2.0 Inc. seg. avg. 1.729 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 14.3 3.5 Inc. frq. avg. 1.438 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 160.8 el 46.5 pa -14.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 263.045 178.008 ion window (TEC) 0.00 0.00
 simultaneous interpolator

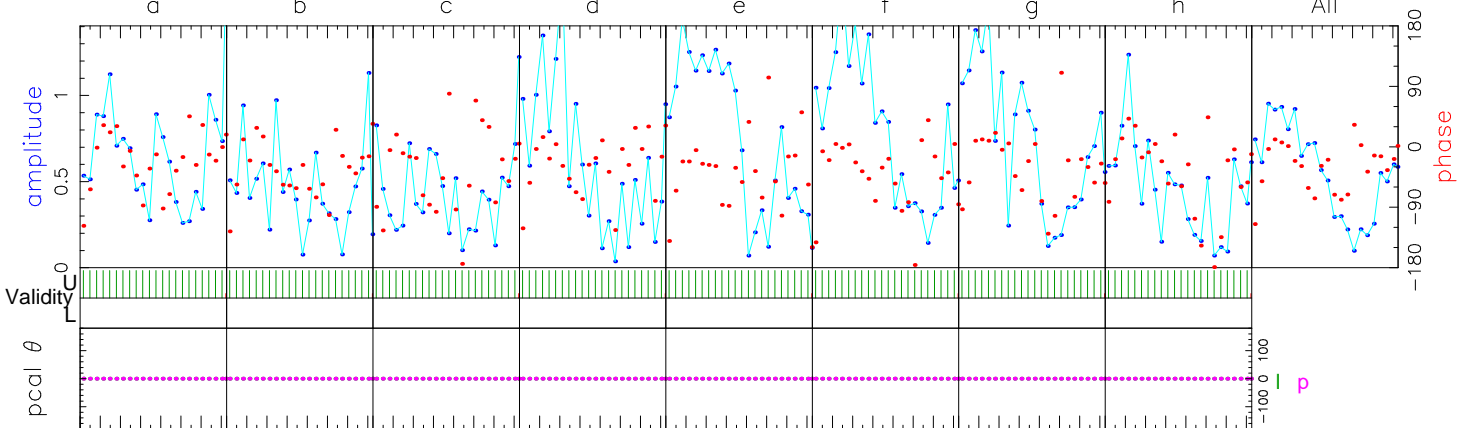
multiband delay (μ s)



Fringe quality 7
SNR 26.2
Int time 419.824
Amp 0.468
Phase -27.9
PFD 0.0e+00
Delays (us)
SBD 0.002871
MBD 0.003145
Fringe rate (Hz) -0.003661
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010038
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"



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
	-16.7	-32.2	-43.5	-21.9	-44.0	-29.7	-23.8	-9.9	Phase	-27.9
	0.5	0.4	0.3	0.5	0.6	0.6	0.6	0.3	Ampl.	0.5
	258.0	257.2	257.9	257.8	257.8	257.7	257.6	258.2	Sbd box	257.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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)	-2.29075812668E+02		Apriori delay (usec)		-2.29078957817E+02		Resid mbdelay (usec)		3.14515E-03	+/- 4.1E-05
Sband delay (usec)	-2.29076087067E+02		Apriori clock (usec)		-8.1279869E+00		Resid sbdelay (usec)		2.87075E-03	+/- 3.3E-04
Phase delay (usec)	-2.29078958716E+02		Apriori clockrate (us/s)		-1.6600001E-07		Resid phdelay (usec)		-8.99005E-07	+/- 1.4E-07
Delay rate (us/s)	-4.54810533062E-02		Apriori rate (us/s)		-4.54810108111E-02		Resid rate (us/s)		-4.24950E-08	+/- 5.8E-10
Total phase (deg)			Apriori accel (us/s/s)		9.30901110723E-07		Resid phase (deg)		-27.9	+/- 4.4

ph/seg (deg) 35.3 10.5 Search (2048X32) 0.452 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 59.3 18.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 13.1 6.2 Inc. seg. avg. 0.550 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 26.3 10.8 Inc. frq. avg. 0.471 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
l: az 160.8 el 46.5 pa -14.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 263.045 178.008 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/lp..1W502N Output file: /Exps/c211a/v2/1234/No0173/lp.W.120.1W502N

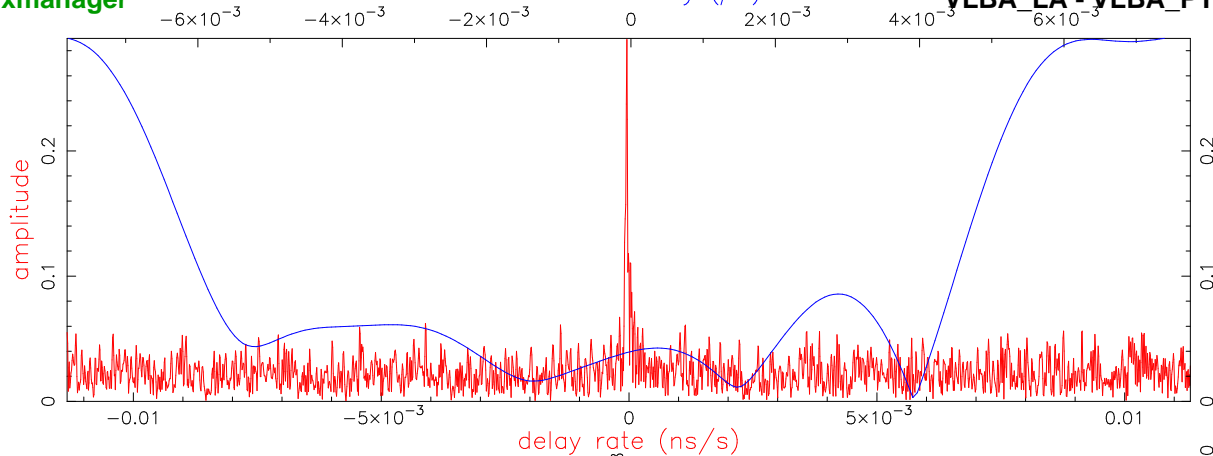
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, lp

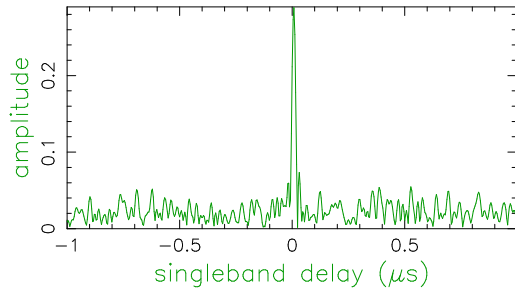
VLBA_LA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

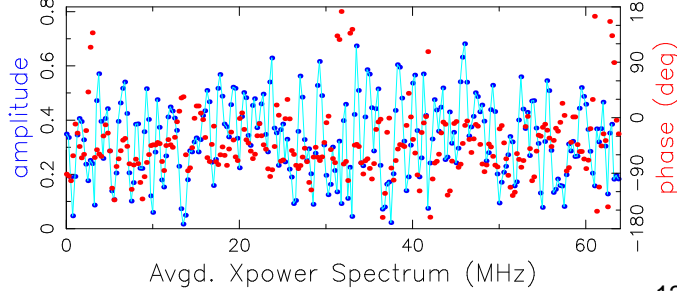


Fringe quality 7

SNR 16.2
Int time 419.824
Amp 0.290
Phase -41.7
PFD 0.0e+00
Delays (us)
SBD 0.007069
MBD 0.006297
Fringe rate (Hz)
-0.004003
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

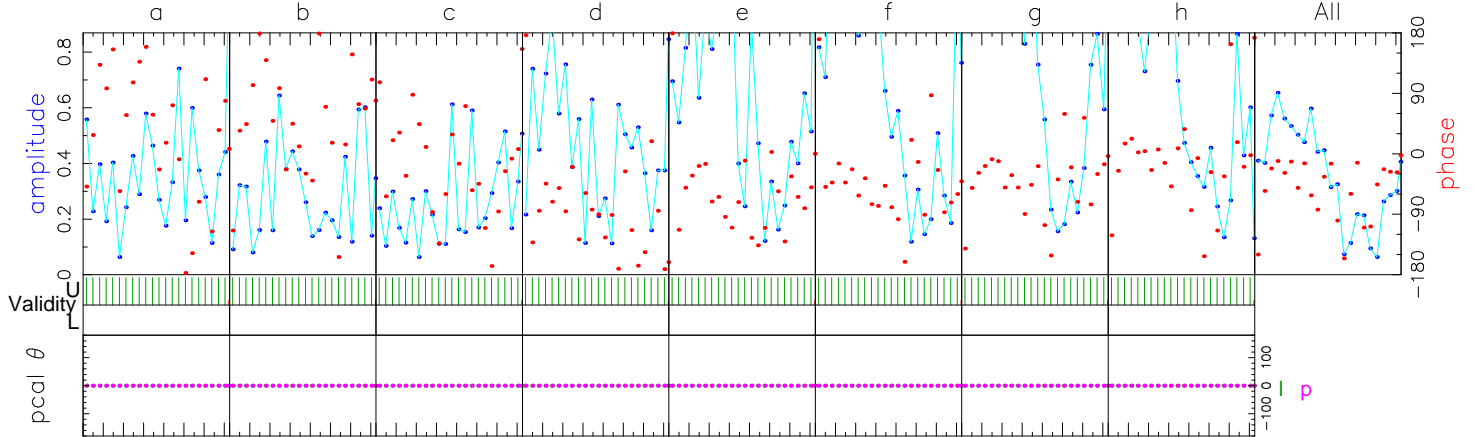


delay rate (ns/s)



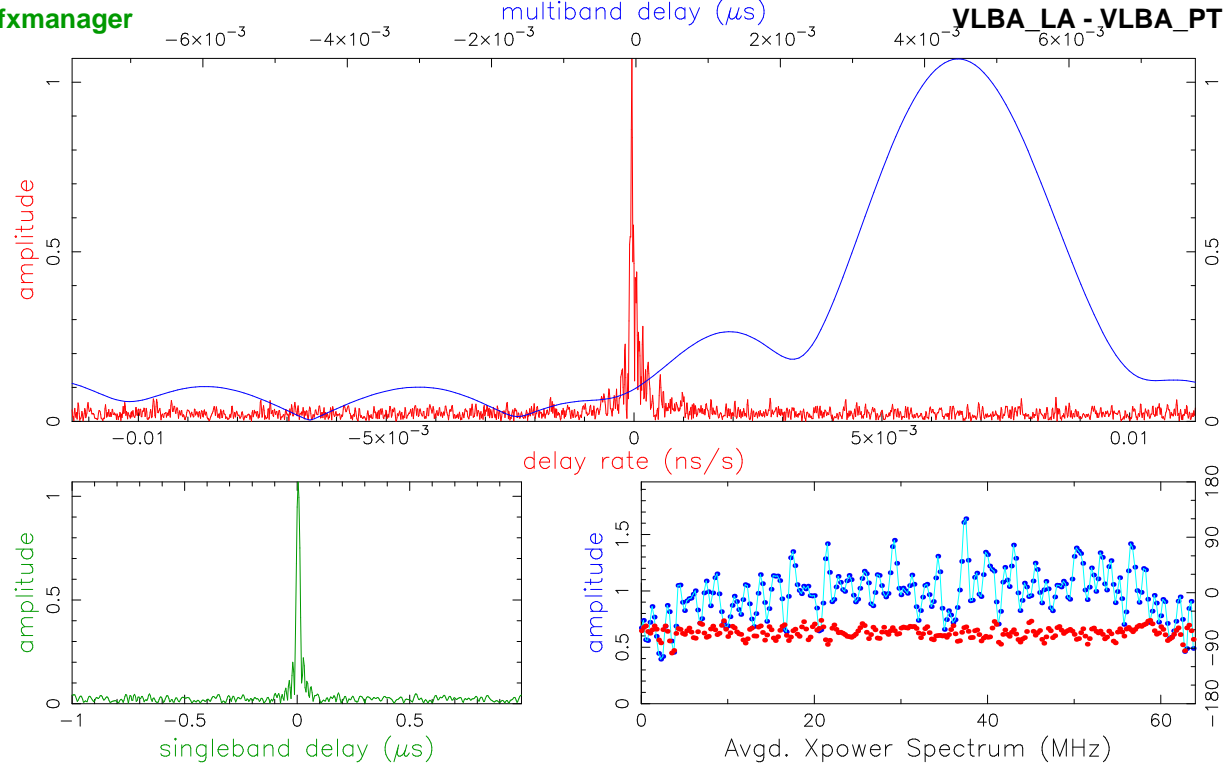
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010041
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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



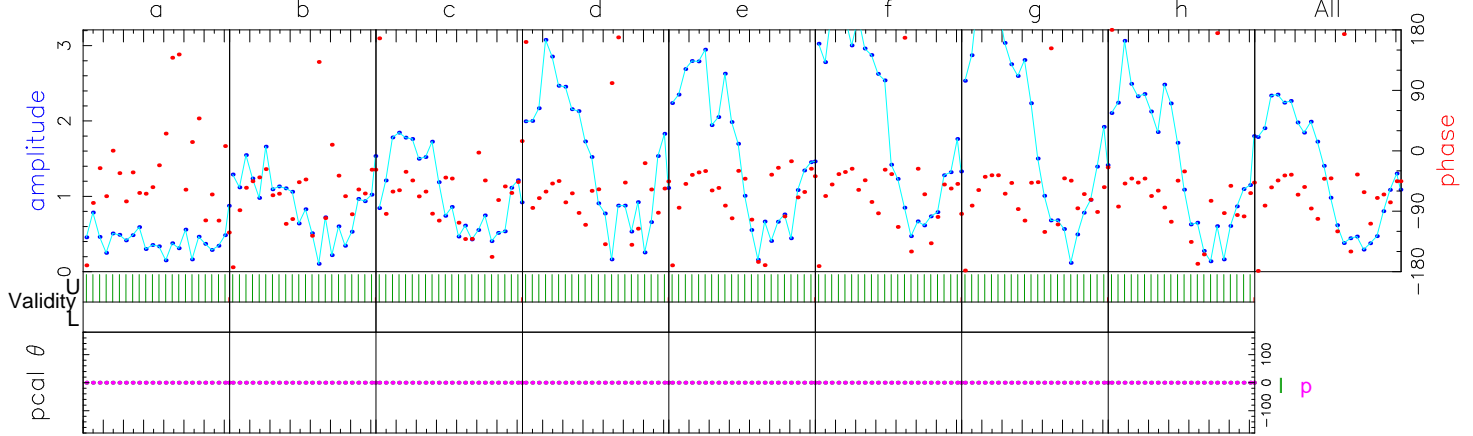
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-2.29072661262E+02				-2.29078957817E+02				Resid mbdelay (usec)	6.29656E-03 +/- 6.7E-05
Sband delay (usec)	-2.29071889067E+02				-8.1279869E+00				Resid sbdelay (usec)	7.06875E-03 +/- 5.3E-04
Phase delay (usec)	-2.29078959162E+02				-1.6600001E-07				Resid phdelay (usec)	-1.34482E-06 +/- 2.3E-07
Delay rate (us/s)	-4.54810572812E-02				-4.54810108111E-02				Resid rate (us/s)	-4.64700E-08 +/- 9.4E-10
Total phase (deg)		-195.2			9.30901110723E-07				Resid phase (deg)	-41.7 +/- 7.1
	RMS	Theor.	Amplitude	0.290 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	45.3	16.9	Search (2048X32)	0.286					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	64.7	29.5	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	69.8	10.0	Inc. seg. avg.	0.343					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	76.5	17.4	Inc. frq. avg.	0.361					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 160.8 el 46.5 pa -14.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 263.045 178.008 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/lp..1W502N Output file: /Exps/c211a/v2/1234/No0173/lp.W.136.1W502N



Fringe quality 3
SNR 60.0
Int time 419.824
Amp 1.070
Phase -65.5
PFD 0.0e+00
Delays (us)
SBD 0.004380
MBD 0.004478
Fringe rate (Hz)
-0.004126
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010031
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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
	-50.5	-65.7	-66.4	-76.5	-59.2	-59.3	-65.4	-71.7	Phase	-65.5
	0.2	0.7	0.9	1.2	1.3	1.6	1.6	1.1	Ampl.	1.1
	257.2	257.8	258.0	258.4	258.3	258.0	258.1	258.3	Sbd box	258.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.29074479762E+02	Apriori delay (usec)	-2.29078957817E+02	Resid mbdelay (usec)	4.47806E-03	+/-	1.8E-05
Sband delay (usec)	-2.29074577567E+02	Apriori clock (usec)	-8.1279869E+00	Resid sbdelay (usec)	4.38025E-03	+/-	1.4E-04
Phase delay (usec)	-2.29078959928E+02	Apriori clockrate (us/s)	-1.6600001E-07	Resid phdelay (usec)	-2.11114E-06	+/-	6.2E-08
Delay rate (us/s)	-4.54810587125E-02	Apriori rate (us/s)	-4.54810108111E-02	Resid rate (us/s)	-4.79013E-08	+/-	2.5E-10
Total phase (deg)	-219.0	Apriori accel (us/s/s)	9.30901110723E-07	Resid phase (deg)	-65.5	+/-	1.9

ph/seg (deg)	45.8	Theor.	4.6	Search (2048X32)	1.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	71.8	Amplitude	1.070 +/- 0.018	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	8.8	Search	1.037	Inc. seg. avg.	1.315	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	40.1	Inc. frq. avg.	1.074	Inc. frq. avg.	1.074	Sample rate(MISamp/s): 128	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

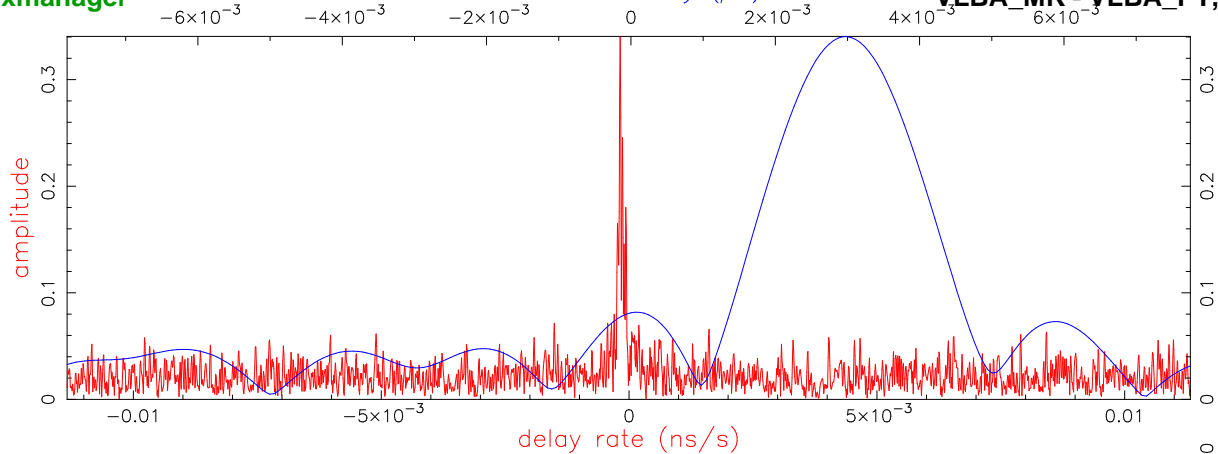
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, mp

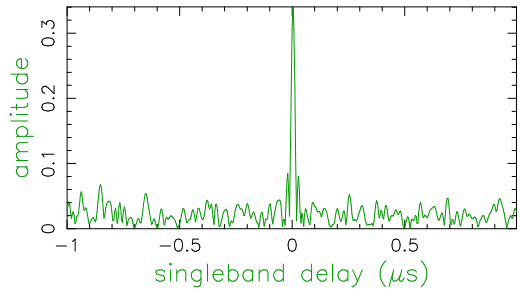
VLBA_MK - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

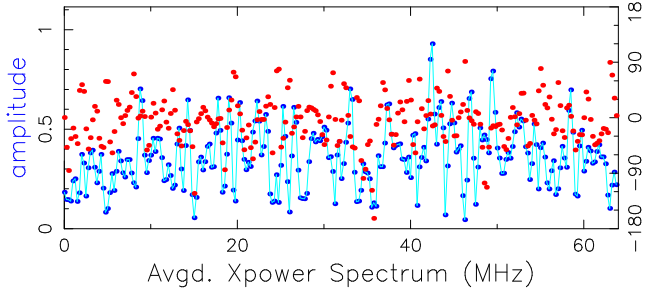


Fringe quality 9

SNR 19.1
 Int time 419.824
 Amp 0.341
 Phase 3.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.003643
 MBD 0.002967
 Fringe rate (Hz)
 -0.015395
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

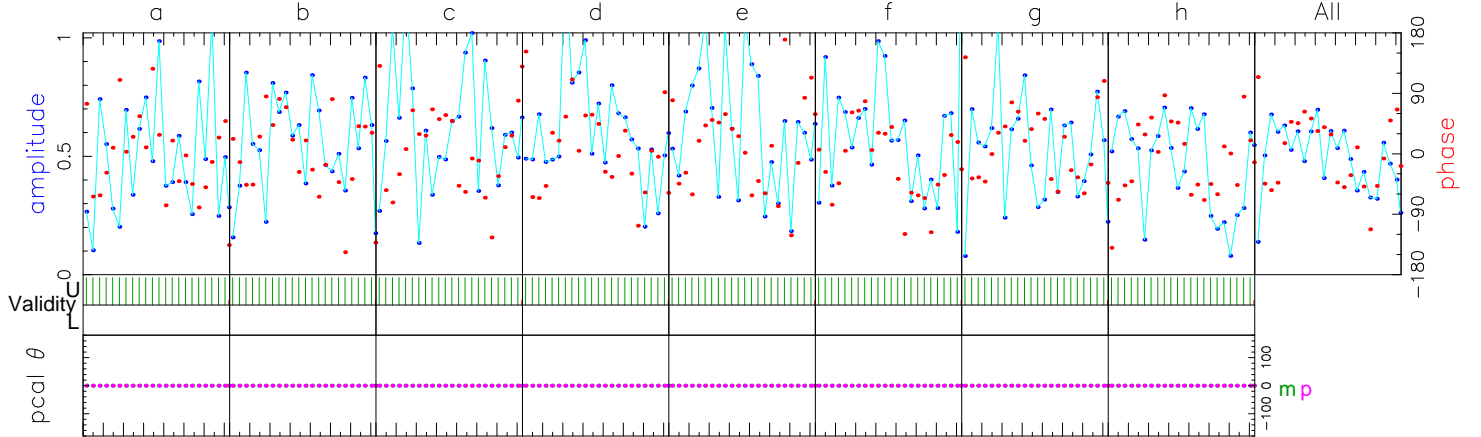


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010035
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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
	-4.9	6.6	-5.9	15.5	12.2	-4.3	13.0	-11.7		3.1
	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.3	Ampl.	0.3
	257.6	258.1	258.3	257.3	257.5	258.1	258.2	258.5	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-6.95438483497E+03	Apriori delay (usec)	-6.95438780188E+03	Resid mbdelay (usec)	2.96691E-03	+/-	5.7E-05
Sband delay (usec)	-6.95438415913E+03	Apriori clock (usec)	1.0114626E+01	Resid sbdelay (usec)	3.64275E-03	+/-	4.5E-04
Phase delay (usec)	-6.95438780178E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	9.94370E-03	+/-	1.9E-07
Delay rate (us/s)	9.65281178752E-01	Apriori rate (us/s)	9.65281357468E-01	Resid rate (us/s)	-1.78716E-07	+/-	8.0E-10
Total phase (deg)	-88.3	Apriori accel (us/s/s)	3.96373571394E-05	Resid phase (deg)	3.1	+/-	6.0

ph/seg (deg)	53.7	RMS	14.4	Theor.	14.4	Amplitude	0.341 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	60.5		25.1		25.1	Search (2048X32)	0.336	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	11.3		8.5		8.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	10.1		14.8		14.8	Inc. seg. avg.	0.482	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.341	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 106.0 el 23.6 pa -65.2 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -5510.527 -2305.333 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/mp..1W502N Output file: /Exps/c211a/v2/1234/No0173/mp.W.106.1W502N

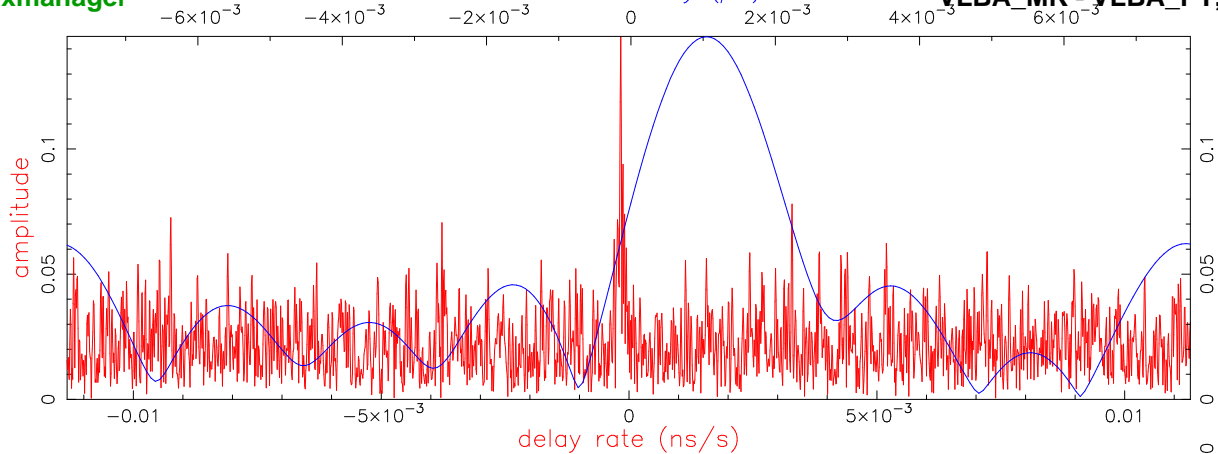
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, mp

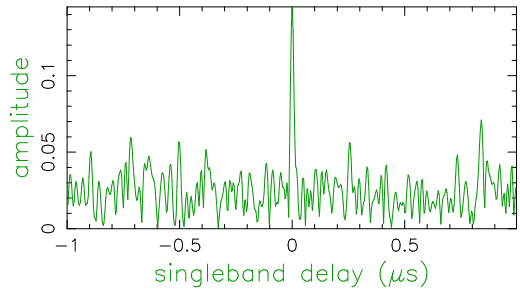
VLBA_MK - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

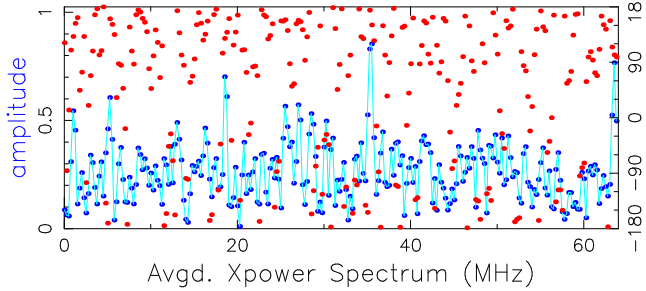


Fringe quality 9

SNR 8.1
 Int time 419.824
 Amp 0.145
 Phase 128.6
 PFD 1.6e-07
 Delays (us)
 SBD -0.000348
 MBD 0.001034
 Fringe rate (Hz)
 -0.014702
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

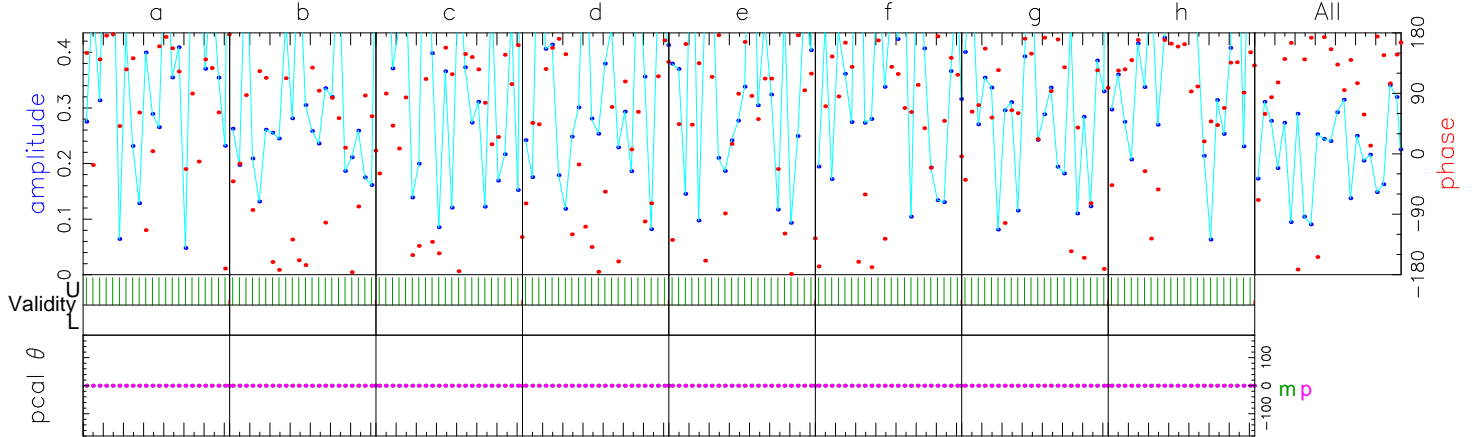


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010038
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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

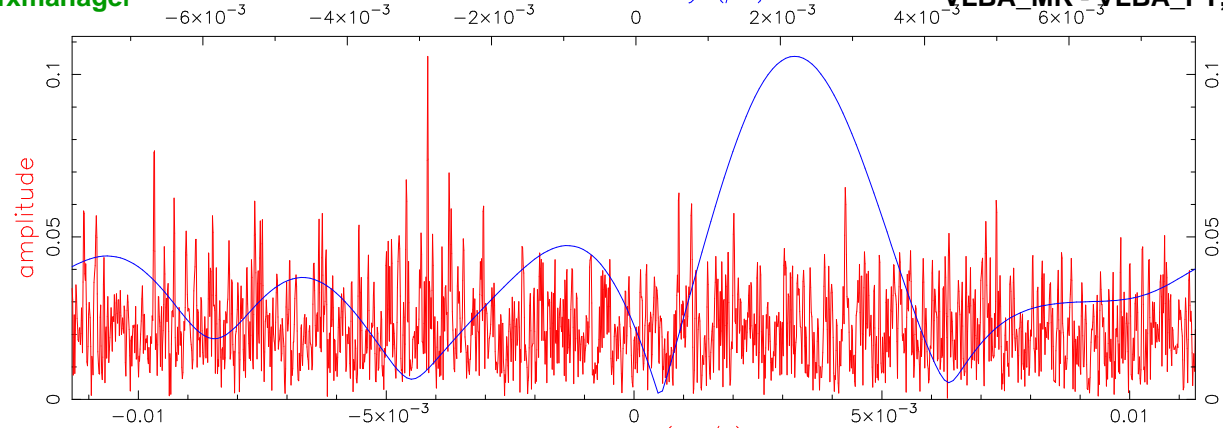
Group delay (usec)(sbd)	-6.9543867699E+03	Apriori delay (usec)	-6.95438780188E+03	Resid mbdelay (usec)	1.03389E-03	+/-	1.3E-04
Sband delay (usec)	-6.95438814963E+03	Apriori clock (usec)	1.0114626E+01	Resid sbdelay (usec)	-3.47750E-04	+/-	1.1E-03
Phase delay (usec)	-6.95438779773E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	4.14662E-06	+/-	4.5E-07
Delay rate (us/s)	9.65281186798E-01	Apriori rate (us/s)	9.65281357468E-01	Resid rate (us/s)	-1.70670E-07	+/-	1.9E-09
Total phase (deg)	37.2	Apriori accel (us/s/s)	3.96373571394E-05	Resid phase (deg)	128.6	+/-	14.1

ph/seg (deg)	57.6	Theor.	33.8	Amplitude	0.145 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.2		59.0	Search (2048X32)	0.138	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	11.9		19.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.3		34.8	Inc. seg. avg.	0.191	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.139	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

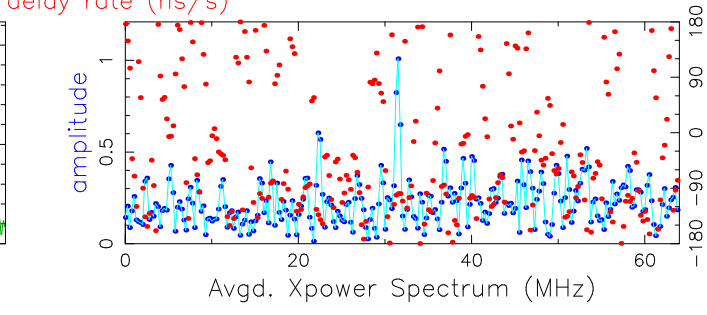
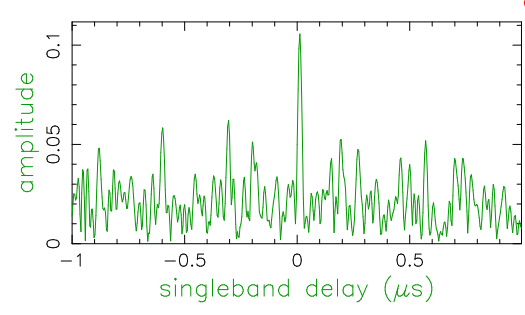
m: az 106.0 el 23.6 pa -65.2 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -5510.527 -2305.333 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/mp..1W502N Output file: /Exps/c211a/v2/1234/No0173/mp.W.124.1W502N

multiband delay (μ s)

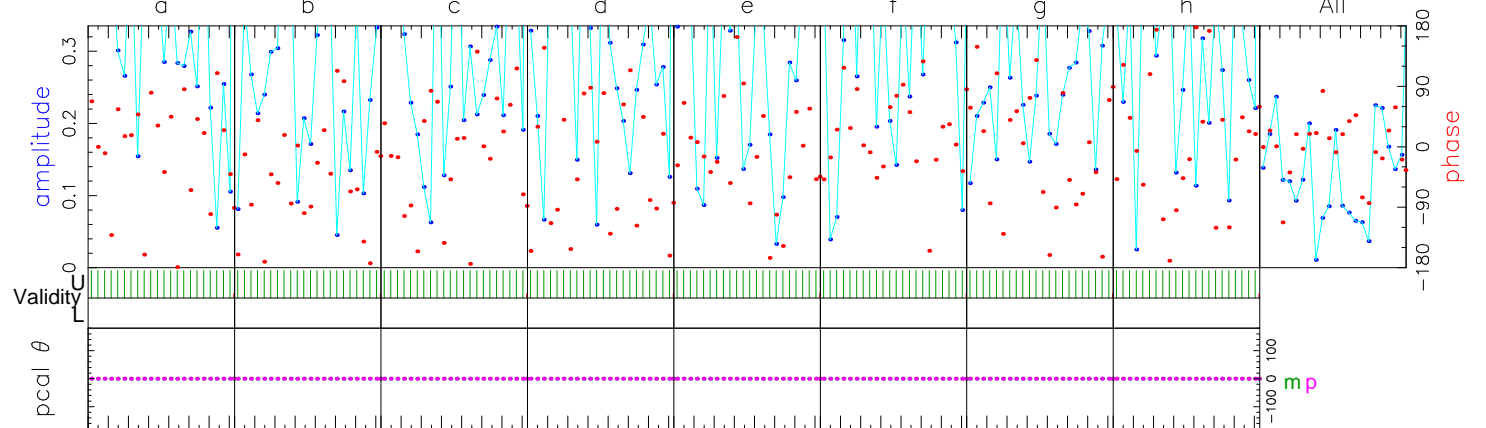


Fringe quality 0
SNR 5.9
Int time 419.824
Amp 0.112
Phase 1.8
PFD 5.7e-01
Delays (us)
SBD 0.011561
MBD 0.002191
Fringe rate (Hz)
-0.359529
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010041
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"



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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-6.95436998582E+03								2.19106E-03	+/- 1.8E-04
Sband delay (usec)	-6.95437624088E+03								1.15610E-02	+/- 1.5E-03
Phase delay (usec)	-6.95438780182E+03								5.90800E-08	+/- 6.2E-07
Delay rate (us/s)	9.65277183690E-01								-4.17378E-06	+/- 2.6E-09
Total phase (deg)			-89.5						1.8	+/- 19.4
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
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 106.0 el 23.6 pa -65.2 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -5510.527 -2305.333 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/mp..1W502N Output file: /Exps/c211a/v2/1234/No0173/mp.W.140.1W502N

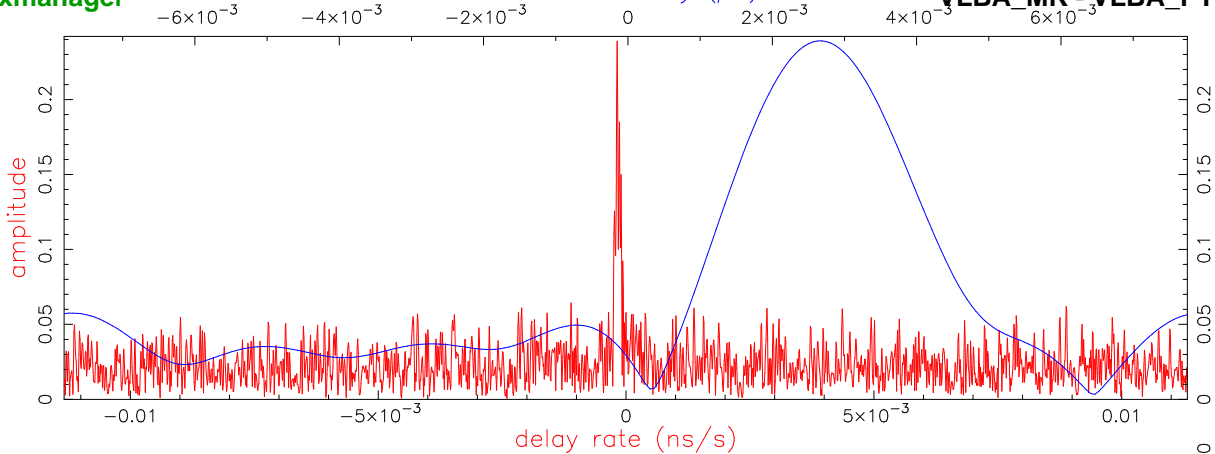
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W502N, No0173, mp

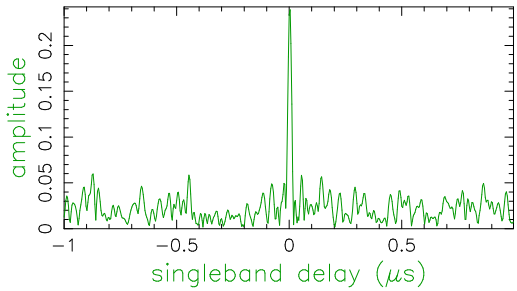
VLBA_MK - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

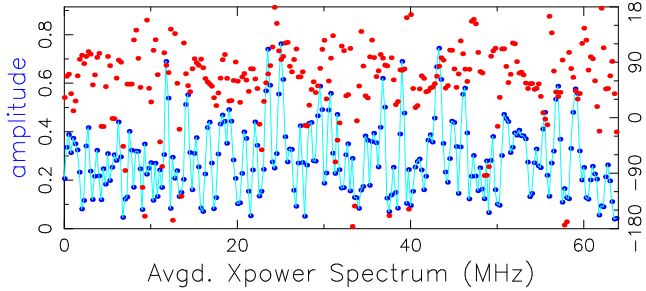


Fringe quality 9

SNR 13.6
 Int time 419.824
 Amp 0.242
 Phase 70.9
 PFD 3.8e-33
 Delays (us)
 SBD 0.002443
 MBD 0.002606
 Fringe rate (Hz)
 -0.015547
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

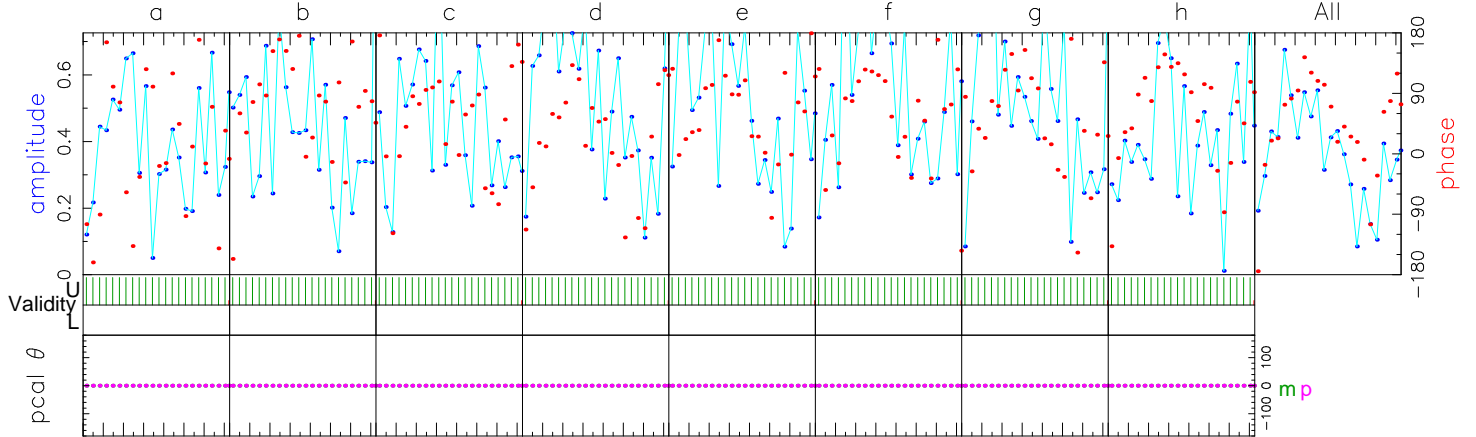


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010031
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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

Group delay (usec)(sbd)	-6.95438519578E+03	Apriori delay (usec)	-6.95438780188E+03	Resid mbdelay (usec)	2.60610E-03	+/-	8.0E-05
Sband delay (usec)	-6.95438535938E+03	Apriori clock (usec)	1.0114626E+01	Resid sbdelay (usec)	2.44250E-03	+/-	6.4E-04
Phase delay (usec)	-6.95438779959E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	2.28473E-06	+/-	2.7E-07
Delay rate (us/s)	9.65281176985E-01	Apriori rate (us/s)	9.65281357468E-01	Resid rate (us/s)	-1.80484E-07	+/-	1.1E-09
Total phase (deg)	-20.5	Apriori accel (us/s/s)	3.96373571394E-05	Resid phase (deg)	70.9	+/-	8.4

ph/seg (deg)	65.7	RMS	20.3	Theor.	Amplitude	0.242 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.2		35.4		Search (2048X32)	0.230	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	19.2		11.9		Interp.	0.000	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.8		20.9		Inc. seg. avg.	0.340	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
					Inc. frq. avg.	0.244		t_cohere infinite			

m: az 106.0 el 23.6 pa -65.2 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -5510.527 -2305.333 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/mp..1W502N Output file: /Exps/c211a/v2/1234/No0173/mp.W.90.1W502N

Mk4/DiFX fourfit 3.21 rev 2937

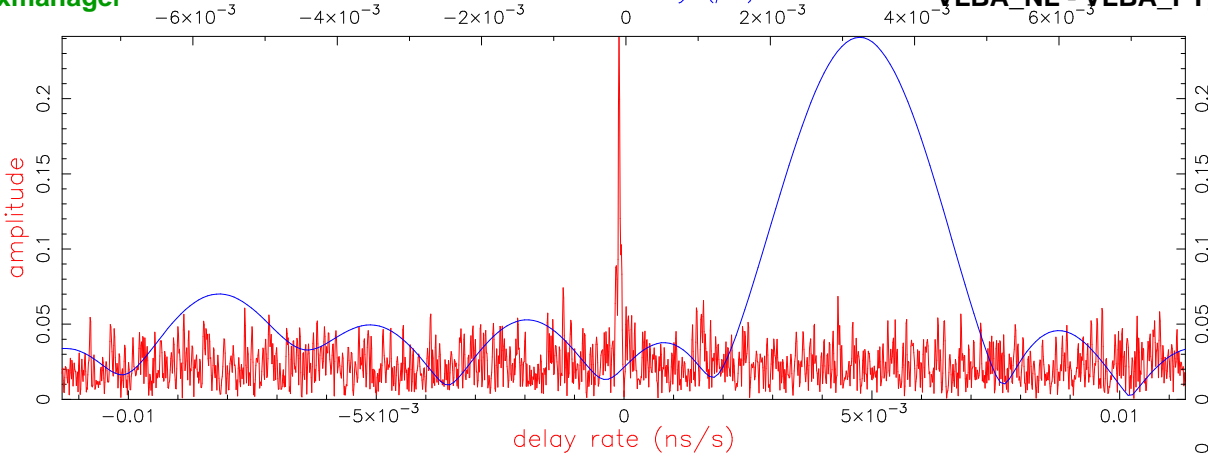
fxmanager

3C279.1W5O2N, No0173, np

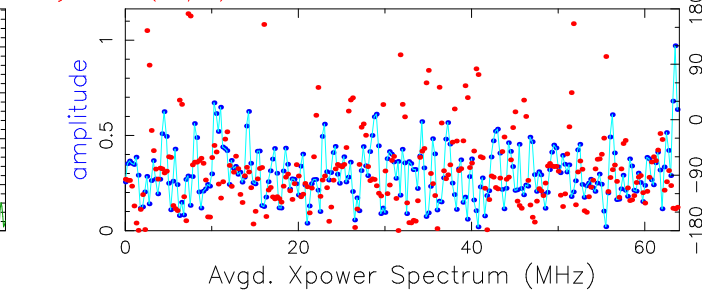
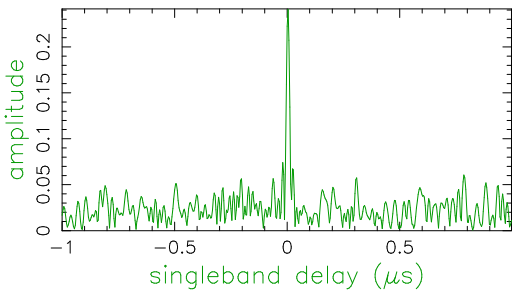
VLBA_NL - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

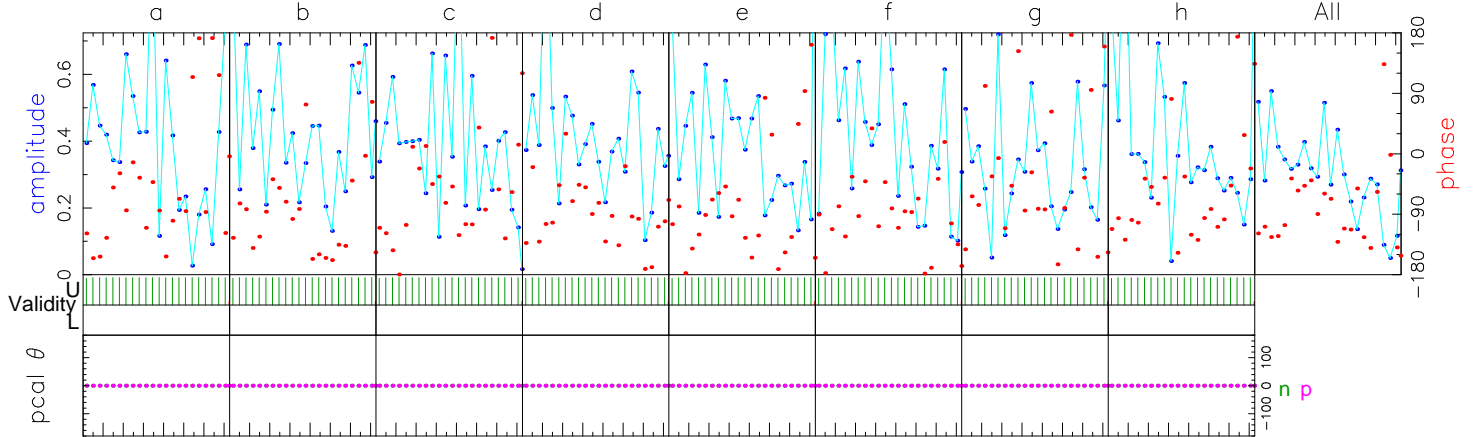


SNR 13.5
 Int time 418.826
 Amp 0.241
 Phase -93.6
 PFD 7.8e-33
 Delays (us)
 SBD 0.003307
 MBD 0.003223
 Fringe rate (Hz)
 -0.008718
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.51
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010035
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.40904059940E+03				-1.40904382271E+03				3.22331E-03	+/- 8.0E-05
Sband delay (usec)	-1.40904051571E+03				-1.2867165E-01				3.30700E-03	+/- 6.4E-04
Phase delay (usec)	-1.40904382573E+03				4.199997E-07				-3.01924E-06	+/- 2.7E-07
Delay rate (us/s)	-3.60207579657E-01				-3.60207478454E-01				-1.01203E-07	+/- 1.1E-09
Total phase (deg)			-53.3		6.30307457772E-06				-93.6	+/- 8.5
	RMS	Theor.	Amplitude	0.241 +/- 0.018						
ph/seg (deg)	48.2	20.3	Search (2048X32)	0.237						
amp/seg (%)	59.4	35.5	Interp.	0.000						
ph/frq (deg)	9.1	12.0	Inc. seg. avg.	0.284						
amp/frq (%)	22.9	20.9	Inc. frq. avg.	0.238						
n: az 182.1 el 42.3 pa 1.8			p: az 157.7 el 47.4 pa -17.5							
Control file: cf_1234_gmva			Input file: /Exps/c211a/v2/1234/No0173/np..1W5O2N							
			Output file: /Exps/c211a/v2/1234/No0173/np.W.112.1W5O2N							

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

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

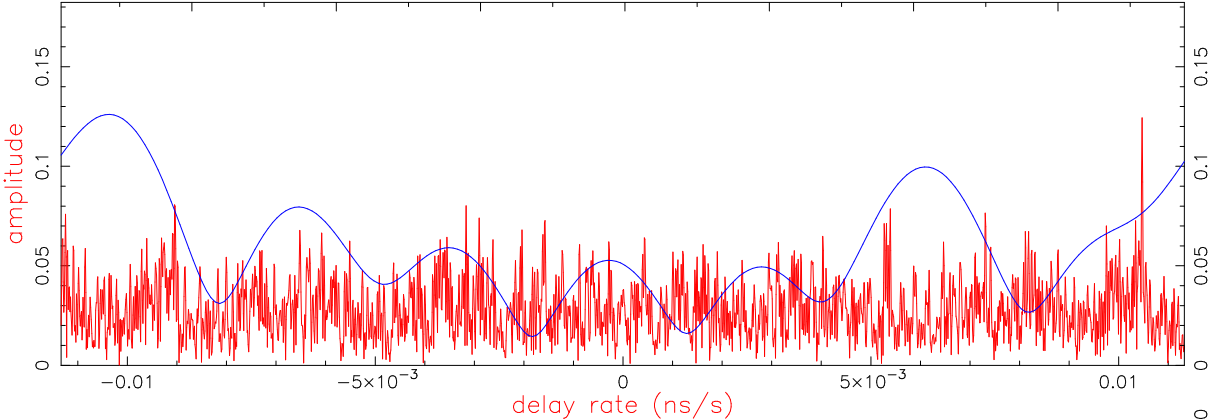
3C279.1W5O2N, No0173, np

VLBA_NL - VLBA_PT, fgroup W, pol LR

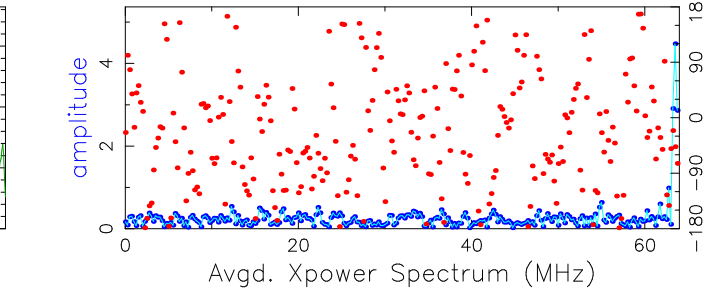
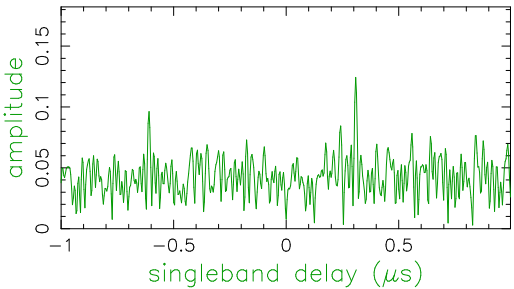
multiband delay (μ s)

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

Fringe quality 0

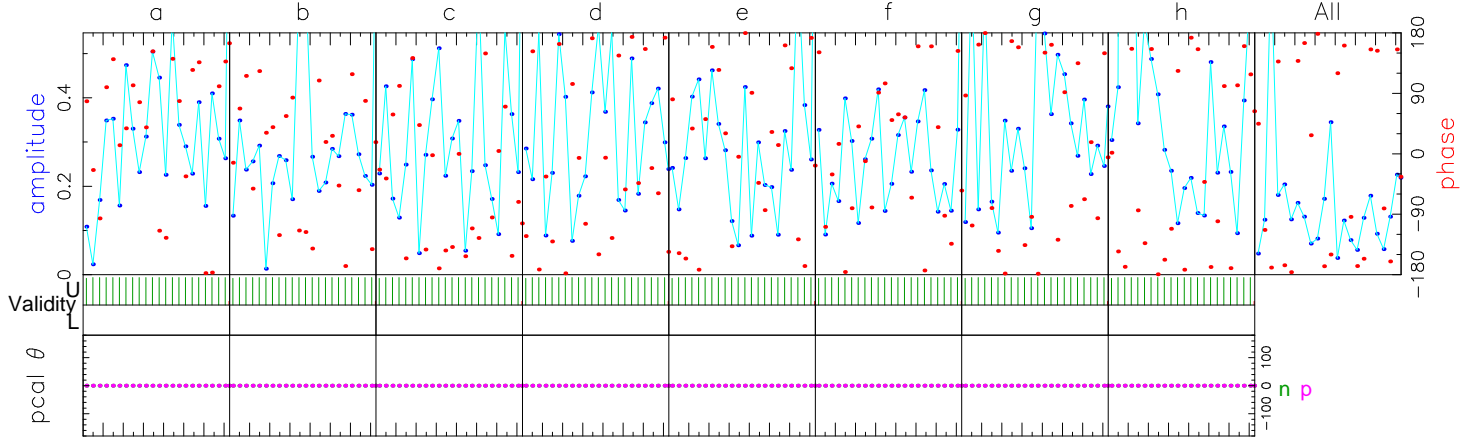


SNR 7.0
 Int time 418.826
 Amp 0.182
 Phase -176.7
 PFD 9.5e-04
 Delays (us)
 SBD 0.309035
 MBD 0.008301
 Fringe rate (Hz)
 0.903844
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.51
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010039
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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	123.9	-138.2	-131.0	-152.6	168.6	140.3	-165.2	-175.5	Phase	-176.7
n	0.2	0.0	0.1	0.2	0.1	0.0	0.3	0.6	Ampl.	0.2
p	383.7	381.5	207.4	336.0	364.8	365.1	336.3	202.8	Sbd box	336.1
n	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	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	

Group delay (usec)(sbd)	-1.40873864692E+03	Apriori delay (usec)	-1.40904382271E+03	Resid mbdelay (usec)	8.30078E-03	+/-	1.6E-04
Sband delay (usec)	-1.40873478796E+03	Apriori clock (usec)	-1.2867165E-01	Resid sbdelay (usec)	3.09035E-01	+/-	1.2E-03
Phase delay (usec)	-1.40904382840E+03	Apriori clockrate (us/s)	4.199997E-07	Resid phdelay (usec)	-5.69795E-06	+/-	5.3E-07
Delay rate (us/s)	-3.60196985720E-01	Apriori rate (us/s)	-3.60207478454E-01	Resid rate (us/s)	1.04927E-05	+/-	2.2E-09
Total phase (deg)	-136.3	Apriori accel (us/s/s)	6.30307457772E-06	Resid phase (deg)	-176.7	+/-	16.4

ph/seg (deg)	59.8	RMS	39.4	Theor.	Amplitude	0.182 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	112.8	59.8	39.4	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.6	68.8	39.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	97.7	40.6	39.4	Inc. seg. avg.	0.186	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.190	Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

n: az 182.1 el 42.3 pa 1.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 2081.749 853.755 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/np..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/np.W.129.1W5O2N

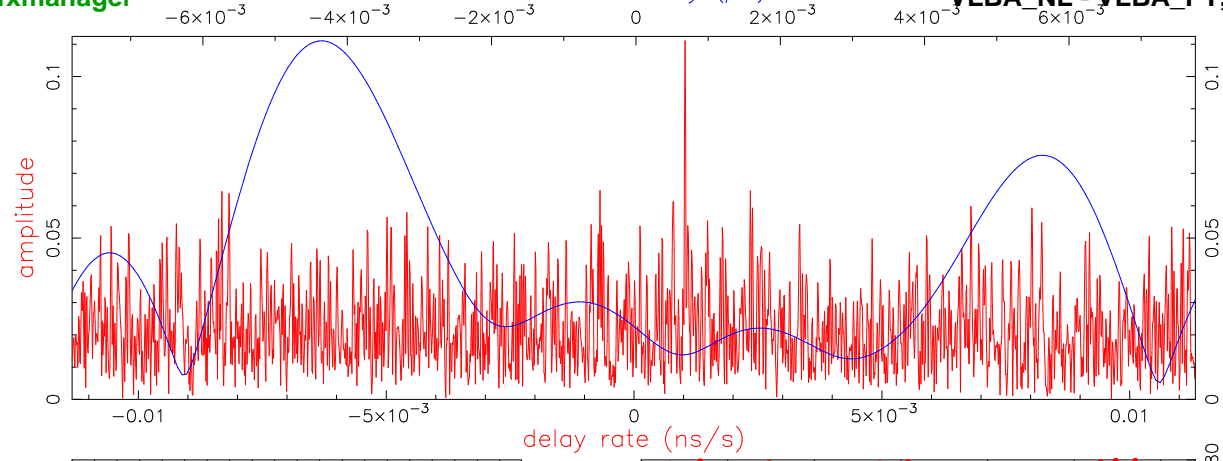
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

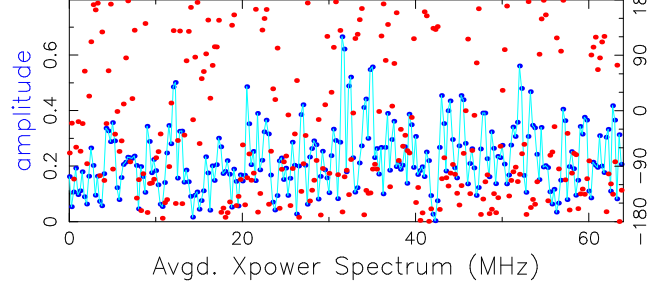
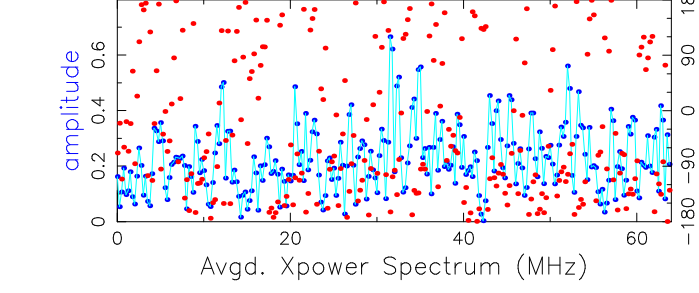
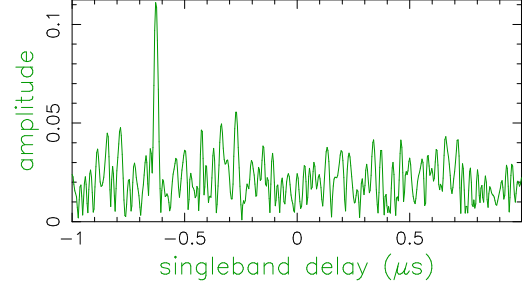
3C279.1W5O2N, No0173, np

VLBA_NL - VLBA_PT, fgroup W, pol RL

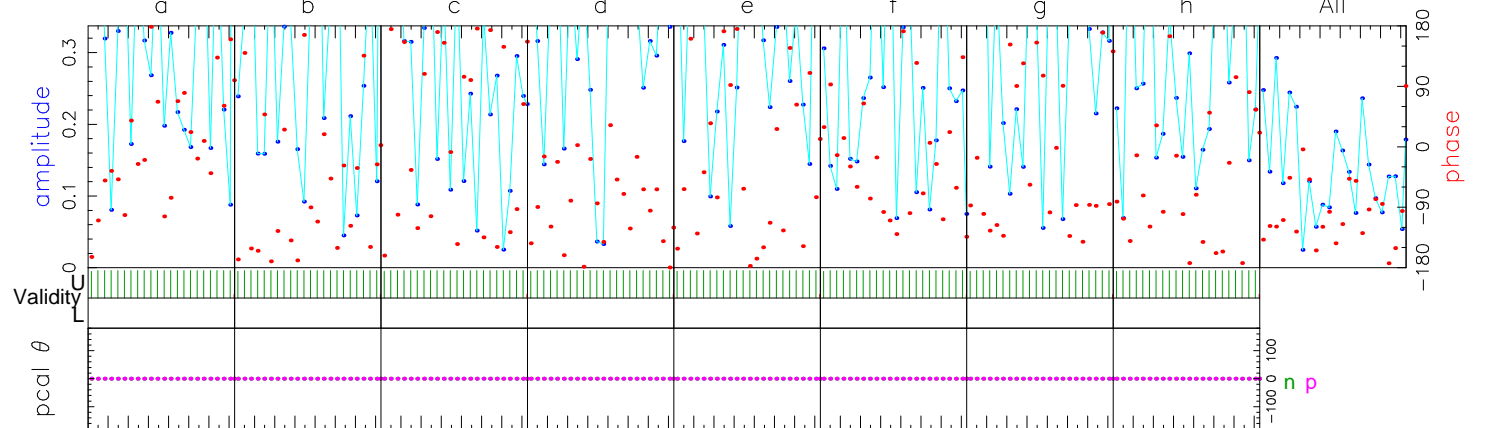
multiband delay (μ s)



Fringe quality 0
 SNR 6.3
 Int time 418.826
 Amp 0.112
 Phase -110.0
 PFD 9.2e-02
 Delays (us)
 SBD -0.627567
 MBD -0.004332
 Fringe rate (Hz) 0.088884
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.51
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010042
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.40967315503E+03	-1.40967138921E+03	-1.40967315503E+03	-1.40967138921E+03	-1.40904382271E+03	-1.40904382271E+03	-1.40904382271E+03	-1.40904382271E+03	-4.33232E-03	+/- 1.7E-04
Sband delay (usec)	-1.40967138921E+03	-1.40967315503E+03	-1.40967138921E+03	-1.40967315503E+03	-1.2867165E-01	-1.2867165E-01	-1.2867165E-01	-1.2867165E-01	-6.27567E-01	+/- 1.4E-03
Phase delay (usec)	-1.40904382271E+03	-1.40904382271E+03	-1.40904382271E+03	-1.40904382271E+03	4.199997E-07	4.199997E-07	4.199997E-07	4.199997E-07	-3.54643E-06	+/- 5.9E-07
Delay rate (us/s)	-3.60206446603E-01	-3.60206446603E-01	-3.60206446603E-01	-3.60206446603E-01	-3.60207478454E-01	-3.60207478454E-01	-3.60207478454E-01	-3.60207478454E-01	1.03185E-06	+/- 2.4E-09
Total phase (deg)			-69.6		6.30307457772E-06	6.30307457772E-06	6.30307457772E-06	6.30307457772E-06	-110.0	+/- 18.3
Apriori delay (usec)					0.109	0.109	0.109	0.109		
Apriori clock (usec)					0.109	0.109	0.109	0.109		
Apriori clockrate (us/s)					0.108	0.108	0.108	0.108		
Apriori rate (us/s)					0.127	0.127	0.127	0.127		
Apriori accel (us/s/s)					0.112 +/- 0.018	0.112 +/- 0.018	0.112 +/- 0.018	0.112 +/- 0.018		
PCal mode:					MANUAL	MANUAL	MANUAL	MANUAL		
PCal rate:					0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Bits/sample:					2x2	2x2	2x2	2x2		
Sample rate (MSamp/s):					128	128	128	128		
Data rate (Mb/s):					2048	2048	2048	2048		
nlags:					256	256	256	256		
t_cohere:					infinite	infinite	infinite	infinite		
sb window (us)					-1.000	-1.000	-1.000	-1.000		1.000
mb window (us)					-0.008	-0.008	-0.008	-0.008		0.008
dr window (ns/s)					-0.011	-0.011	-0.011	-0.011		0.011
ion window (TEC)					0.00	0.00	0.00	0.00		0.00

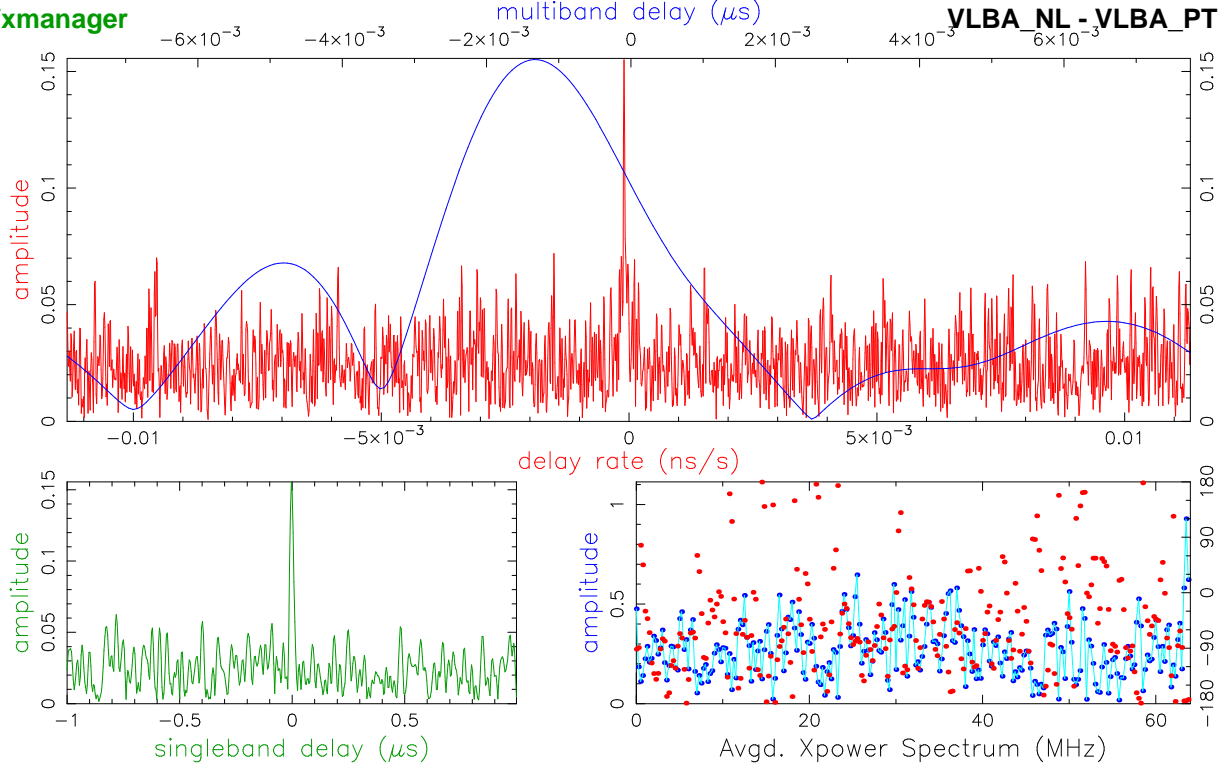
n: az 182.1 el 42.3 pa 1.8 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 2081.749 853.755 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/np..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/np.W.144.1W5O2N

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

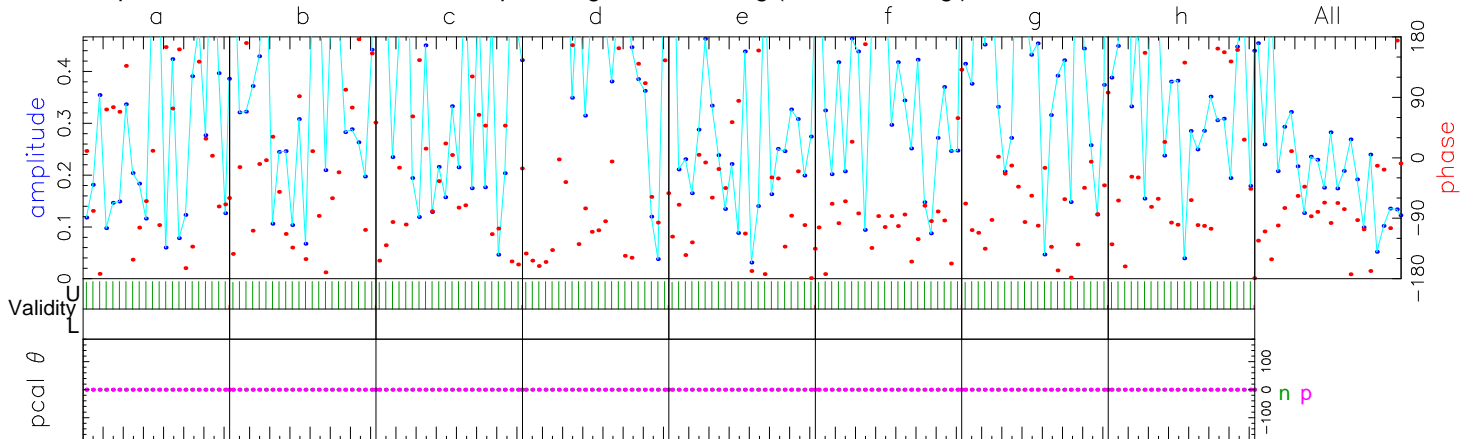
3C279.1W5O2N, No0173, np

VLBA_NL - VLBA_PT, fgroup W, pol LL



Fringe quality 9
 SNR 8.7
 Int time 418.826
 Amp 0.156
 Phase -99.8
 PFD 1.2e-09
 Delays (us)
 SBD -0.003079
 MBD -0.001280
 Fringe rate (Hz)
 -0.008711
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.51
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010032
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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

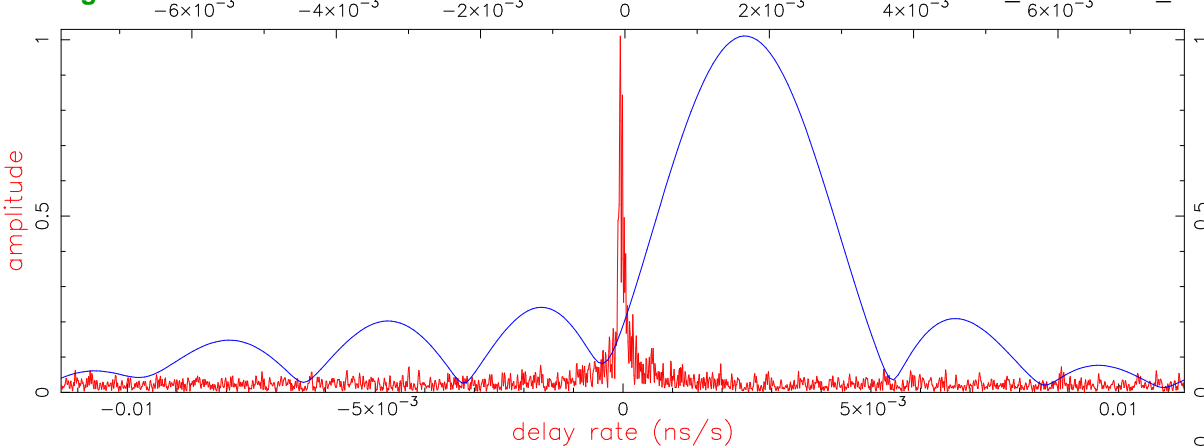


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	819/0	819/0	819/0	819/0	819/0	819/0	819/0	819/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.40904510302E+03									
Sband delay (usec)	-1.40904690196E+03									
Phase delay (usec)	-1.40904382593E+03									
Delay rate (us/s)	-3.60207579585E-01									
Total phase (deg)			-59.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.156 +/- 0.018										
0.153										
0.000										
0.195										
0.159										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
n: az 182.1 el 42.3 pa 1.8										
p: az 157.7 el 47.4 pa -17.5										
u,v (fr/asec) 2081.749 853.755										
simultaneous interpolator										

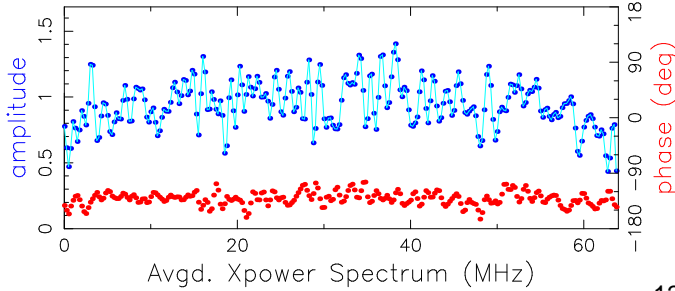
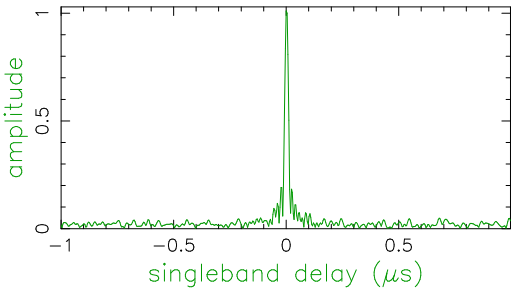
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/np..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/np.W.96.1W5O2N

multiband delay (μ s)

Fringe quality 5

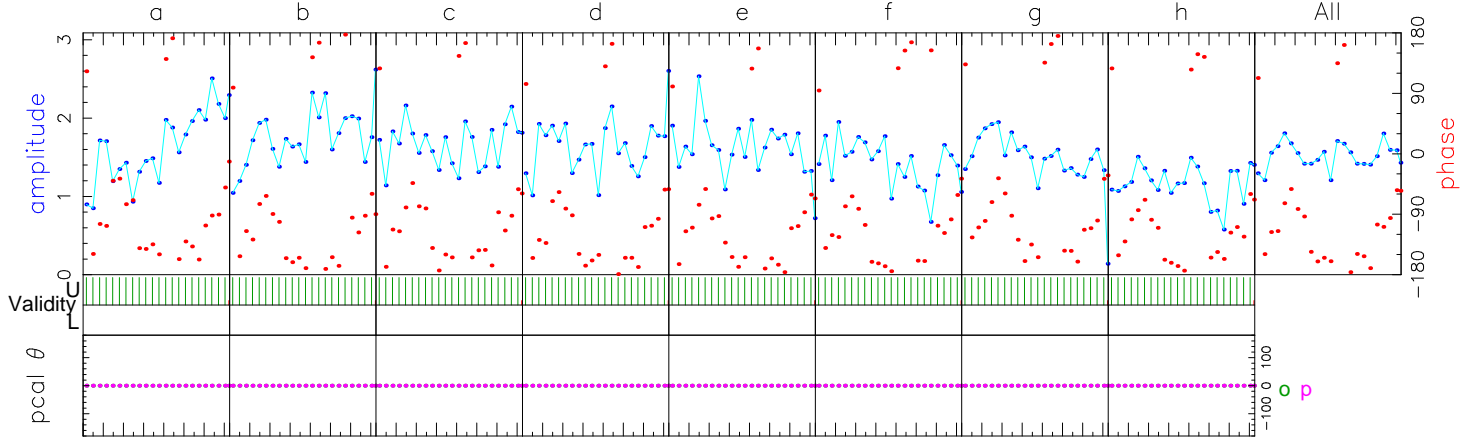


SNR 57.7
Int time 419.815
Amp 1.030
Phase -130.8
PFD 0.0e+00
Delays (us)
SBD 0.001735
MBD 0.001705
Fringe rate (Hz)
-0.005060
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010035
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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
	-119.9	-137.6	-126.2	-133.1	-134.4	-136.2	-123.0	-139.0	Phase	-130.8
	1.1	1.2	1.1	1.0	1.0	0.9	1.0	0.7	Ampl.	1.0
	257.1	257.4	257.6	257.6	257.5	257.6	257.2	257.5	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.68923531698E+03		Apriori delay (usec)		-1.68923702227E+03		Resid mbdelay (usec)		1.70530E-03	+/- 1.9E-05
Sband delay (usec)	-1.68923528702E+03		Apriori clock (usec)		-1.8883400E+00		Resid sbdelay (usec)		1.73525E-03	+/- 1.5E-04
Phase delay (usec)	-1.68923702649E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-4.21953E-06	+/- 6.4E-08
Delay rate (us/s)	1.94464684415E-01		Apriori rate (us/s)		1.94464743161E-01		Resid rate (us/s)		-5.87465E-08	+/- 2.6E-10
Total phase (deg)			Apriori accel (us/s/s)		8.49217805076E-06		Resid phase (deg)		-130.8	+/- 2.0

ph/seg (deg) 50.7 4.8
amp/seg (%) 50.4 8.3
ph/frq (deg) 7.7 2.8
amp/frq (%) 12.2 4.9

RMS Theor. Amplitude 1.030 +/- 0.018
Search (2048X32) 0.966
Interp. 0.000
Inc. seg. avg. 1.517
Inc. frq. avg. 1.016

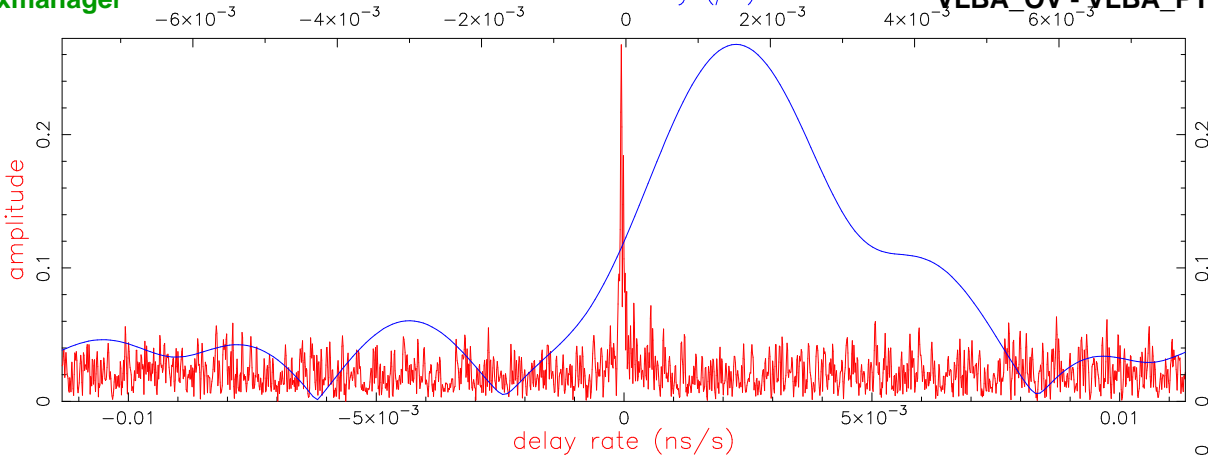
pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s)
Bits/sample: 2x2 SampCntNorm: enabled
Sample rate(MISamp/s): 128
Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite

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

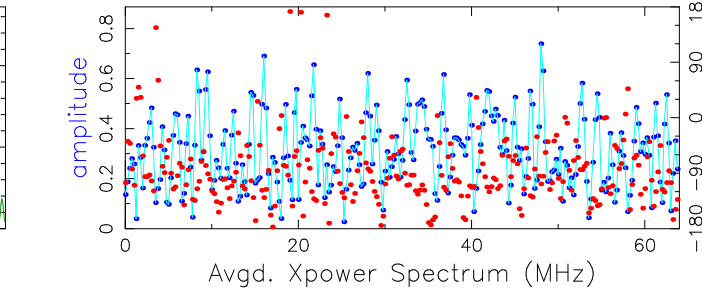
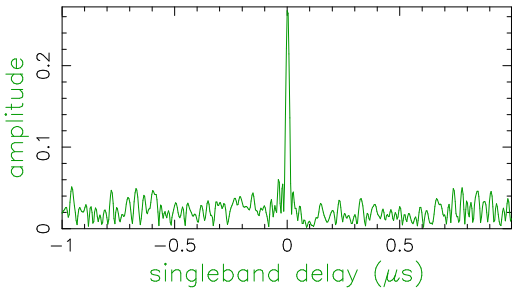
o: az 146.0 el 40.9 pa -26.0 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -1109.157 294.565 simultaneous interpolator

multiband delay (μ s)

Fringe quality 8

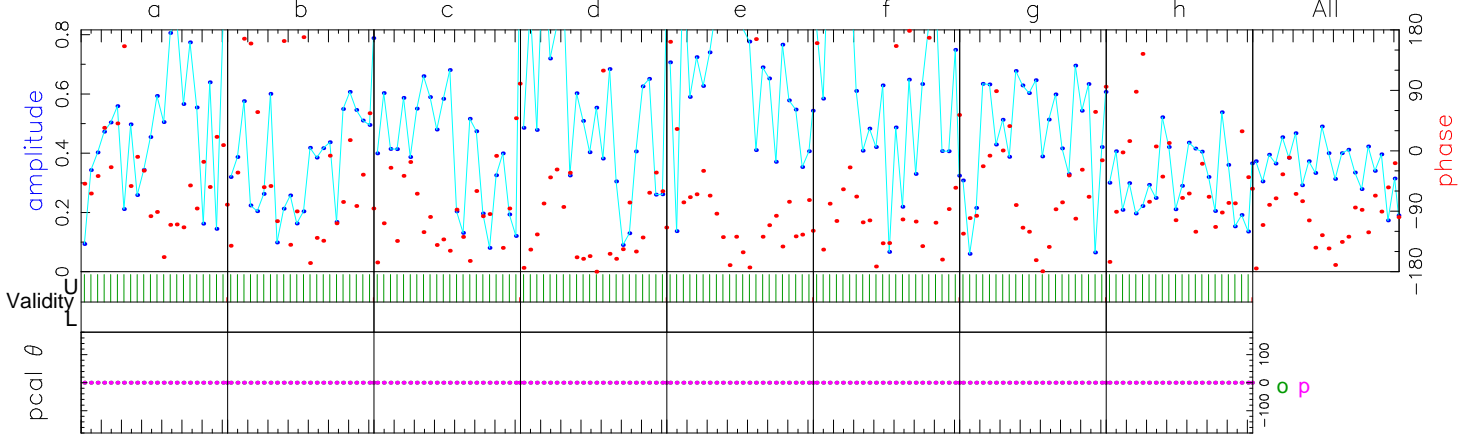


SNR 15.2
Int time 419.815
Amp 0.272
Phase -97.1
PFD 1.1e-43
Delays (us)
SBD 0.001698
MBD 0.001592
Fringe rate (Hz)
-0.004482
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010039
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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



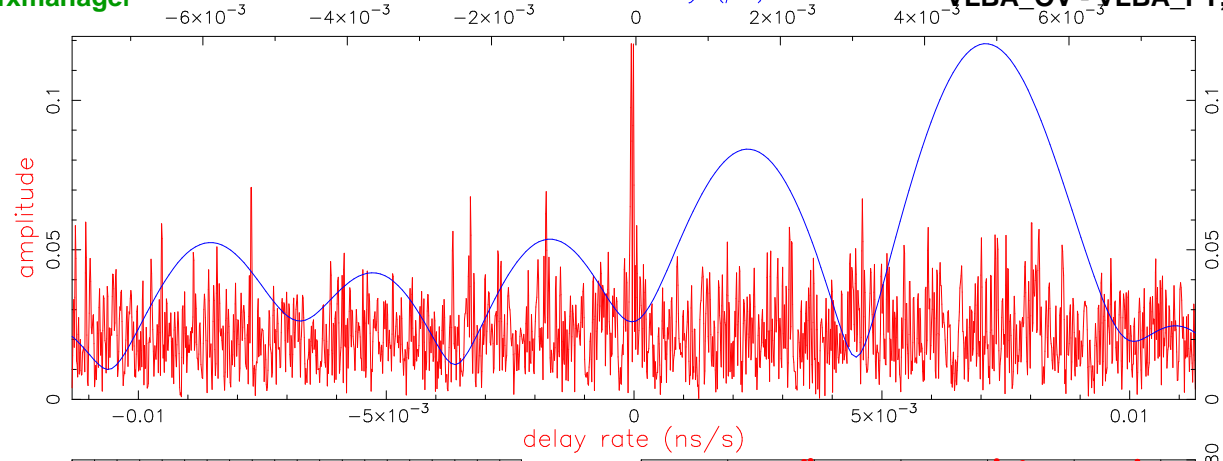
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-60.8	-85.2	-104.5	-113.4	-116.7	-114.2	-75.1	-60.2	Phase	-97.1
	0.3	0.1	0.3	0.3	0.5	0.4	0.2	0.2	Ampl.	0.3
	257.7	105.0	257.4	257.0	257.3	257.9	258.0	256.5	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	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)	-1.68923543016E+03		Apriori delay (usec)		-1.68923702227E+03		Resid mbdelay (usec)		1.59211E-03	+/- 7.1E-05
Sband delay (usec)	-1.68923532477E+03		Apriori clock (usec)		-1.8883400E+00		Resid sbdelay (usec)		1.69750E-03	+/- 5.6E-04
Phase delay (usec)	-1.68923702540E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		-3.13163E-06	+/- 2.4E-07
Delay rate (us/s)	1.94464691131E-01		Apriori rate (us/s)		1.94464743161E-01		Resid rate (us/s)		-5.20301E-08	+/- 1.0E-09
Total phase (deg)			Apriori accel (us/s/s)		8.49217805076E-06		Resid phase (deg)		-97.1	+/- 7.5

	RMS	Theor.	Amplitude	0.272 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.1	18.0	Search (2048X32)	0.261	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	42.3	31.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.8	10.6	Inc. seg. avg.	0.346	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	39.4	18.5	Inc. frq. avg.	0.284	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

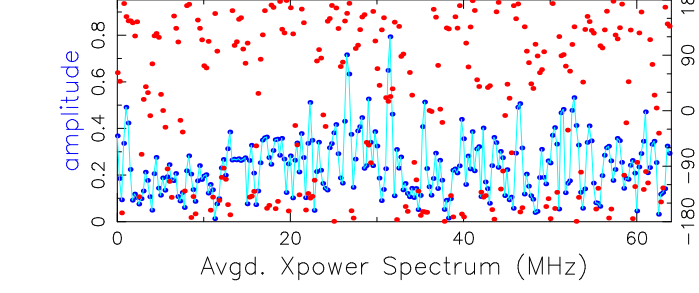
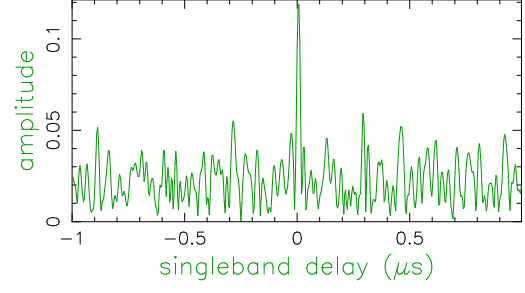
o: az 146.0 el 40.9 pa -26.0 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -1109.157 294.565 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/op..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/op.W.128.1W5O2N

multiband delay (μ s)

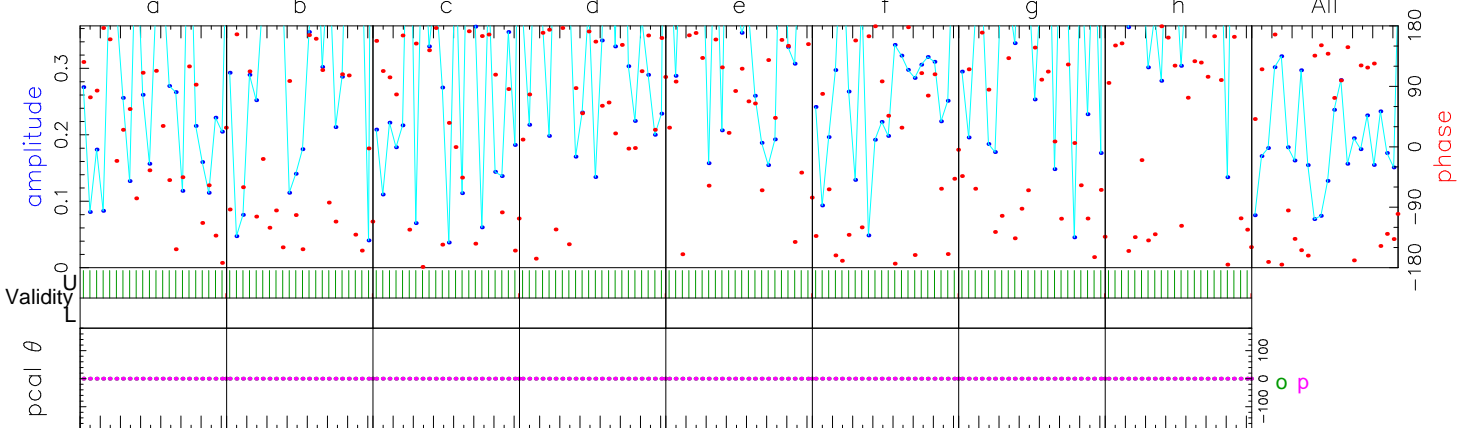


Fringe quality 0
SNR 6.8
Int time 419.815
Amp 0.121
Phase 168.2
PFD 3.0e-03
Delays (us)
SBD 0.006031
MBD 0.004864
Fringe rate (Hz)
-0.004941
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010042
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"



Avgd. Xpower Spectrum (MHz)

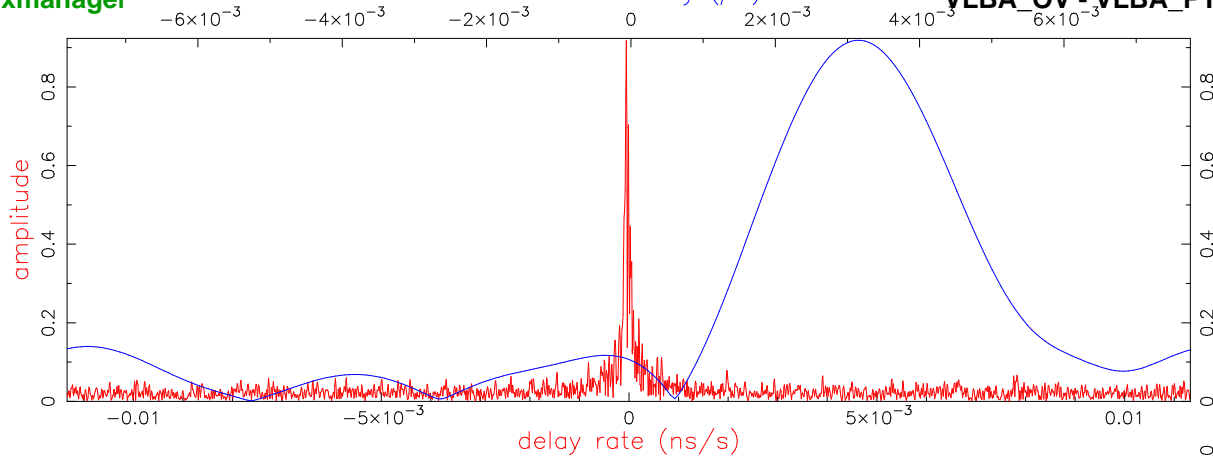
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
100.1	-145.6	176.0	135.6	132.0	132.0	-169.0	-135.6	160.8	Phase	168.2
0.0	0.2	0.2	0.1	0.2	0.2	0.1	0.1	0.3	Ampl.	0.1
493.9	28.5	297.2	452.0	258.5	150.6	3.3	258.7	258.7	Sbd box	258.5
U/L 820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.68923215826E+03		Apriori delay (usec)		-1.68923702227E+03		Resid mbdelay (usec)		4.86401E-03	+/- 1.6E-04
Sband delay (usec)	-1.68923099127E+03		Apriori clock (usec)		-1.8883400E+00		Resid sbdelay (usec)		6.03100E-03	+/- 1.3E-03
Phase delay (usec)	-1.68923701685E+03		Apriori clockrate (us/s)		4.7999999E-07		Resid phdelay (usec)		5.42550E-06	+/- 5.4E-07
Delay rate (us/s)	1.94464685800E-01		Apriori rate (us/s)		1.94464743161E-01		Resid rate (us/s)		-5.73613E-08	+/- 2.2E-09
Total phase (deg)	132.8		Apriori accel (us/s/s)		8.49217805076E-06		Resid phase (deg)		168.2	+/- 16.8

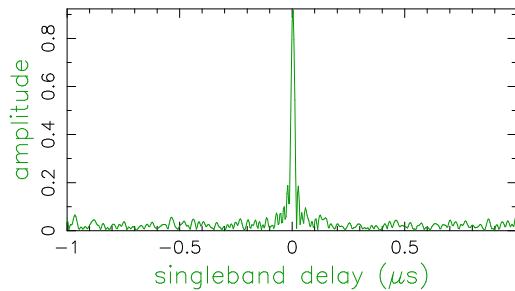
ph/seg (deg) 55.5 40.4 Search (2048X32) 0.118 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 80.2 70.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.4 23.8 Inc. seg. avg. 0.151 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 57.8 41.6 Inc. frq. avg. 0.131 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 146.0 el 40.9 pa -26.0 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -1109.157 294.565 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/op..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/op.W.142.1W5O2N

multiband delay (μ s)

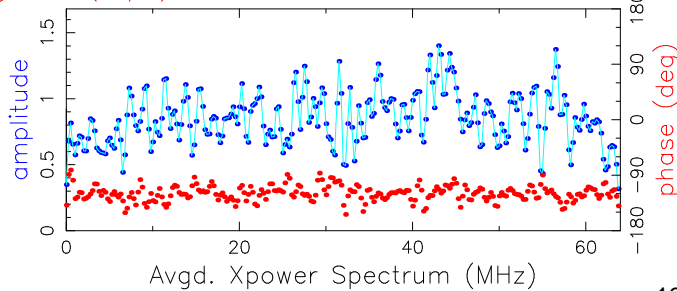


Fringe quality 3

SNR 51.7
Int time 419.815
Amp 0.924
Phase -121.3
PFD 0.0e+00
Delays (us)
SBD 0.002970
MBD 0.003118
Fringe rate (Hz)
-0.005247
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

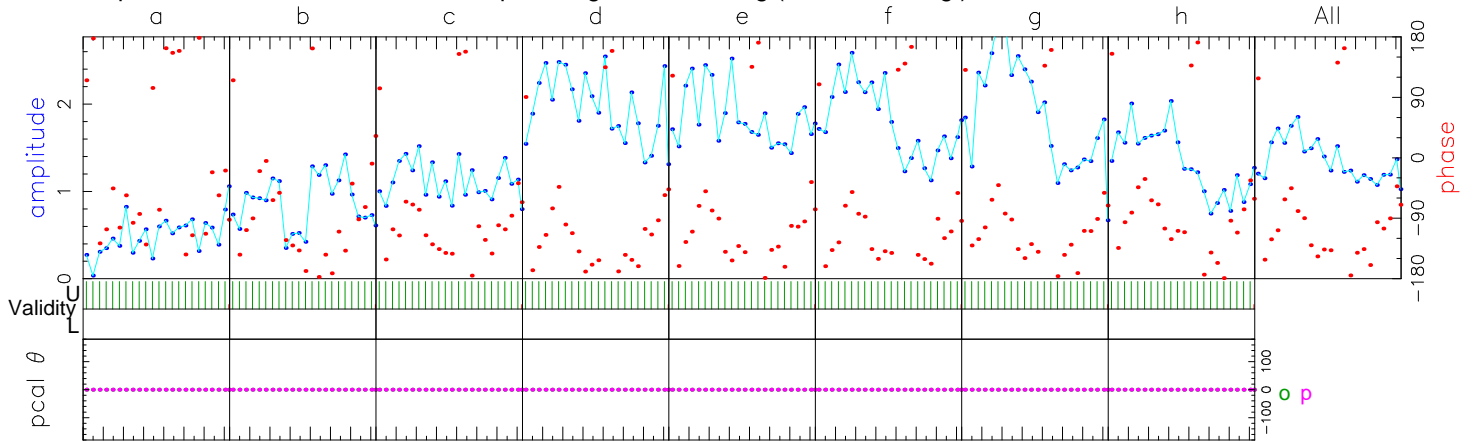


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010032
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
-5°47'21.525129"

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

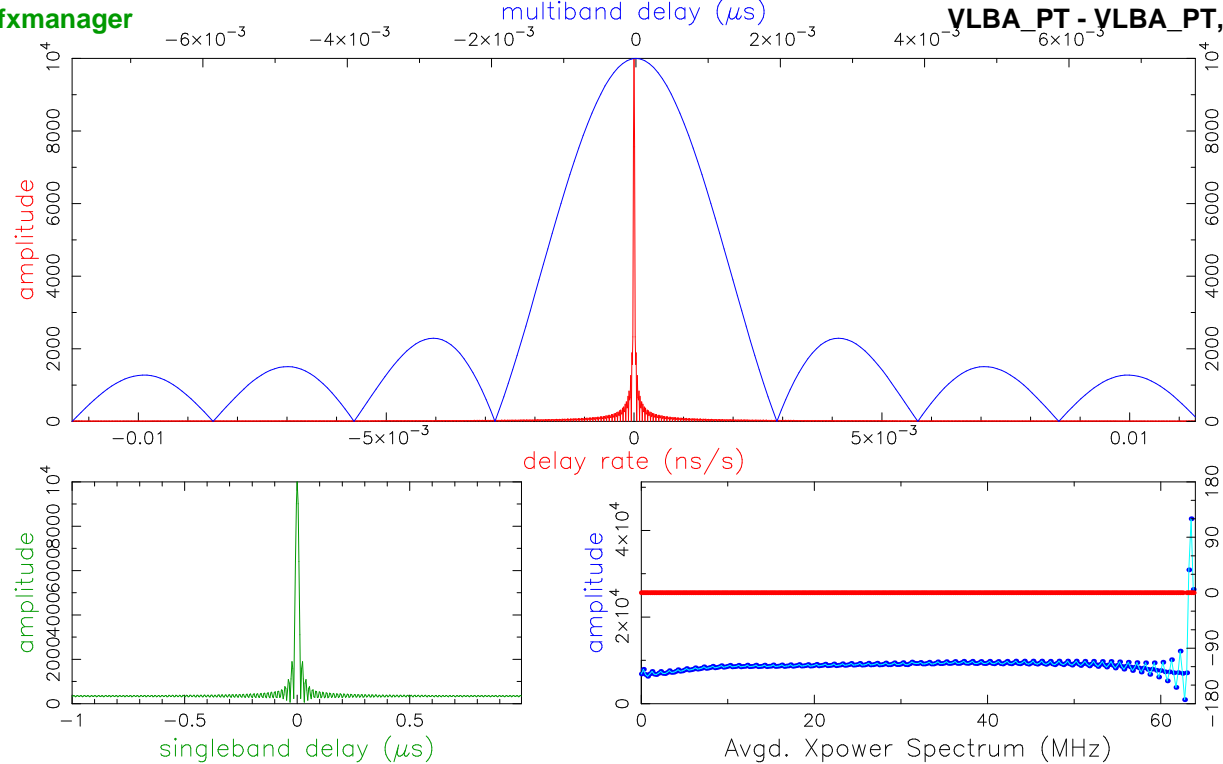


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-1.68923390461E+03	Apriori delay (usec)	-1.68923702227E+03	Resid mbdelay (usec)	3.11766E-03	+/-	2.1E-05
Sband delay (usec)	-1.68923405252E+03	Apriori clock (usec)	-1.8883400E+00	Resid sbdelay (usec)	2.96975E-03	+/-	1.7E-04
Phase delay (usec)	-1.68923702619E+03	Apriori clockrate (us/s)	4.7999999E-07	Resid phdelay (usec)	-3.91286E-06	+/-	7.1E-08
Delay rate (us/s)	1.94464682245E-01	Apriori rate (us/s)	1.94464743161E-01	Resid rate (us/s)	-6.09161E-08	+/-	2.9E-10
Total phase (deg)	-156.8	Apriori accel (us/s/s)	8.49217805076E-06	Resid phase (deg)	-121.3	+/-	2.2

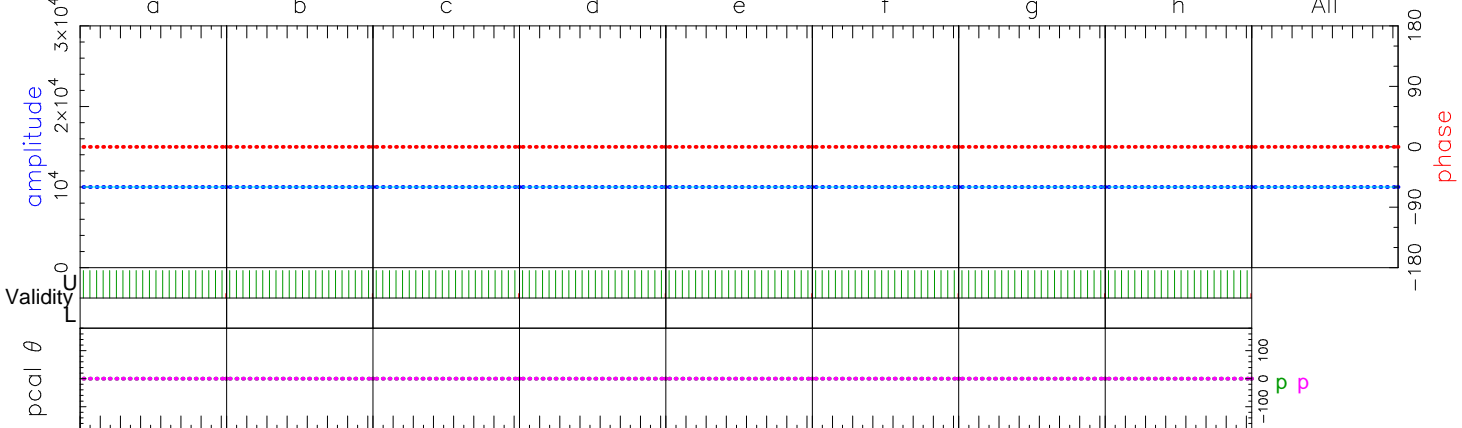
ph/seg (deg)	51.0	RMS	5.3	Theor.	5.3	Amplitude	0.924 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	54.4	Search (2048X32)	0.862	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	11.2	Inc. seg. avg.	1.366	Inc. frq. avg.	0.928	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	41.5	Inc. frq. avg.	0.928	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 146.0 el 40.9 pa -26.0 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) -1109.157 294.565 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/op..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/op.W.97.1W5O2N



Fringe quality 9
SNR 560313.9
Int time 419.824
Amp 10000.000
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 050000.00
Stop 050659.84
FRT 050330.00
Corr/FF/build
2021:286:151750
2021:287:010035
2021:252:122852
RA & Dec (J2000)
12h56m11.166577s
--5°47'21.525129"

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	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p:p	0:0	0:0	0:0	0:0	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	0.0	0.0
p	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 1.5E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 6.6E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.00000E+00	+/- 2.7E-14
Total phase (deg)			0.0						0.0	+/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 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 157.7 el 47.4 pa -17.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/pp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/pp.W.107.1W5O2N simultaneous interpolator

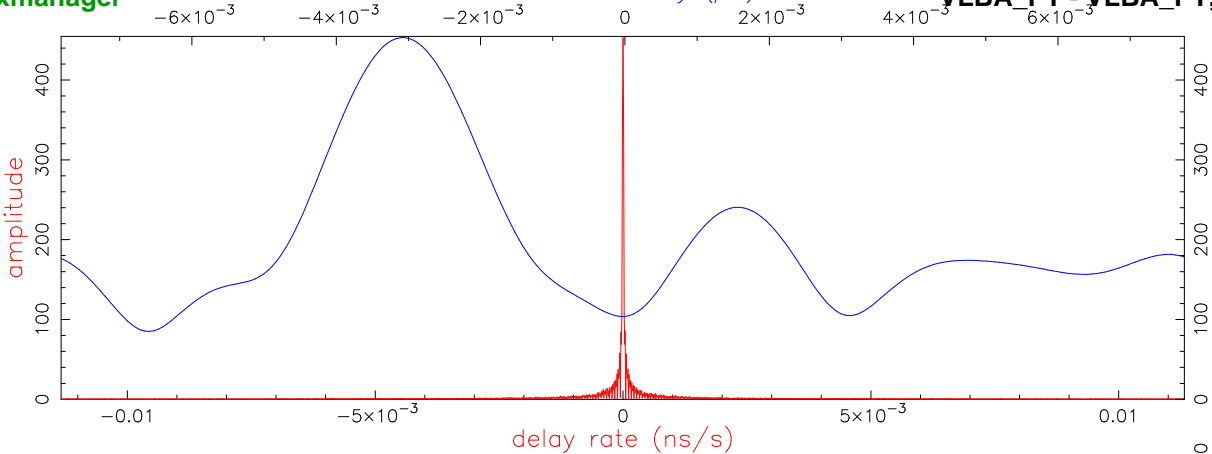
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W5O2N, No0173, pp

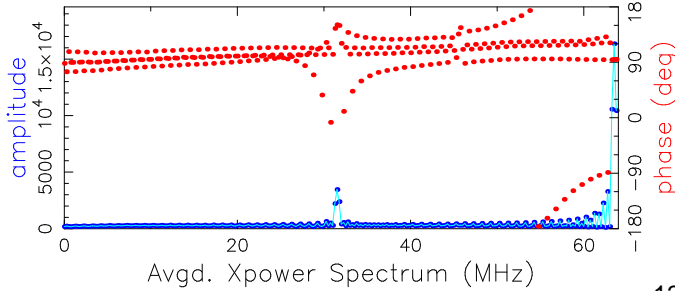
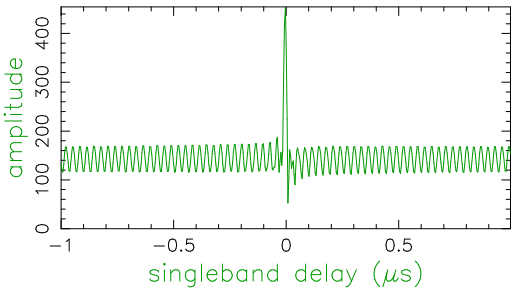
VLBA_PT - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



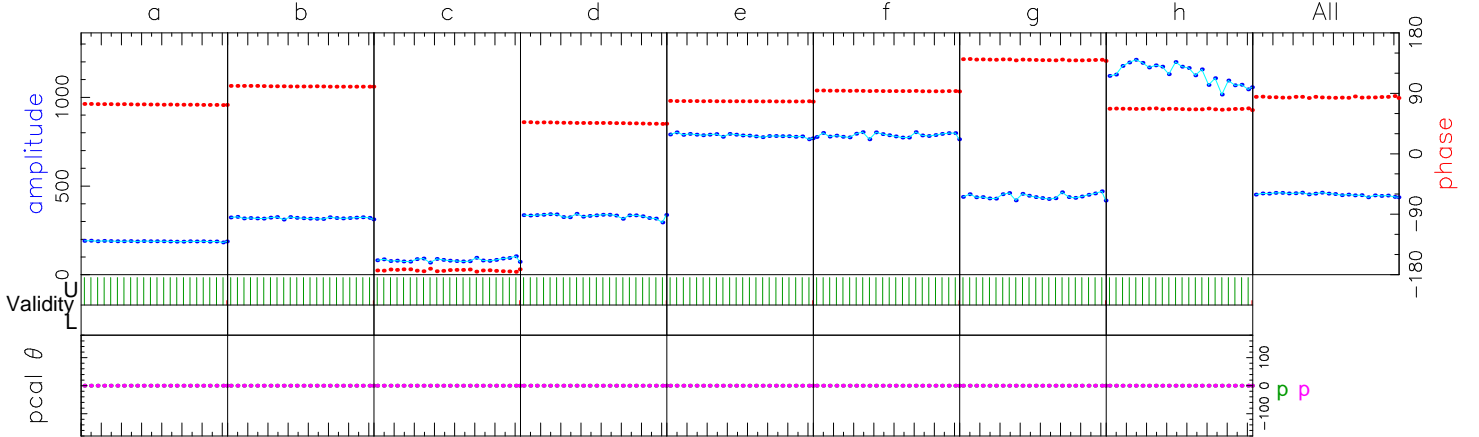
Fringe quality 5

SNR 25470.4
 Int time 419.824
 Amp 454.574
 Phase 84.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.004584
 MBD -0.003039
 Fringe rate (Hz)
 0.000010
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Yr:day 16383
 Start 2021:114
 Stop 050000.00
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010038
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.03871875000E-03									
Sband delay (usec)	-4.58425000000E-03									
Phase delay (usec)	2.71465149820E-06									
Delay rate (us/s)	1.18329122471E-10									
Total phase (deg)			84.2							
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)			84.2							
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)	-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) 0.7 0.0 Search (2048X32) 449.657 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.7 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.3 0.0 Inc. seg. avg. 452.912 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 74.8 0.0 Inc. frq. avg. 508.806 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 p: az 157.7 el 47.4 pa -17.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/pp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/pp.W.121.1W5O2N

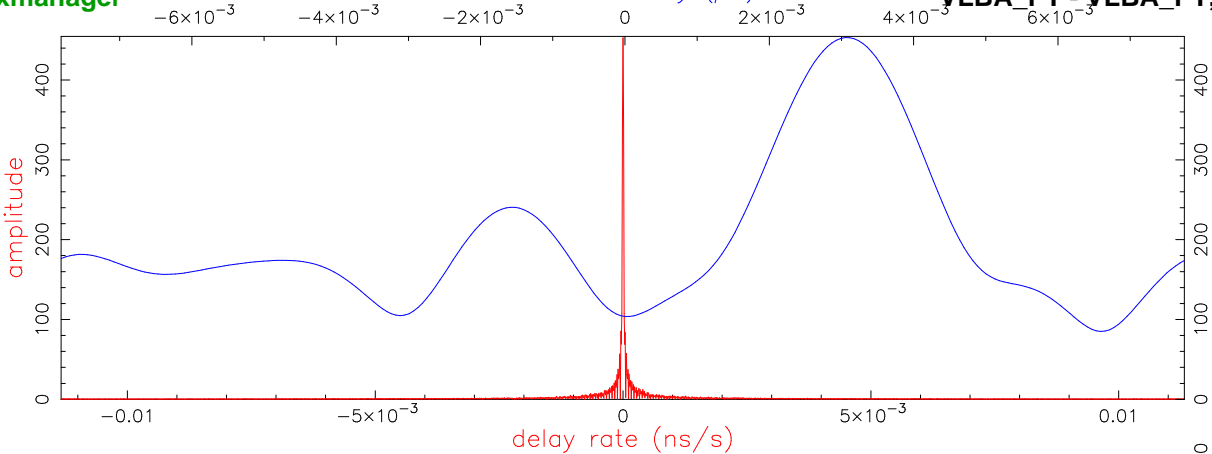
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C279.1W5O2N, No0173, pp

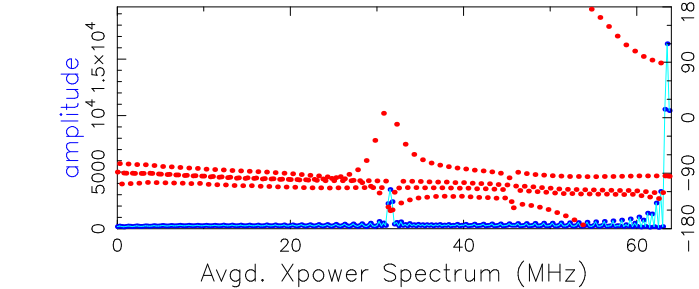
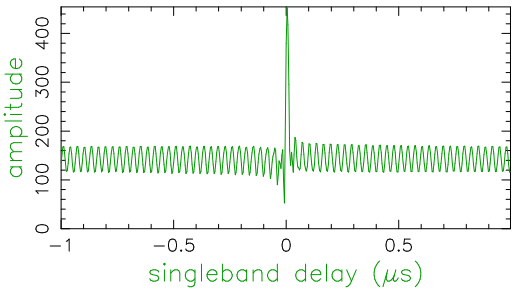
VLBA_PT - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



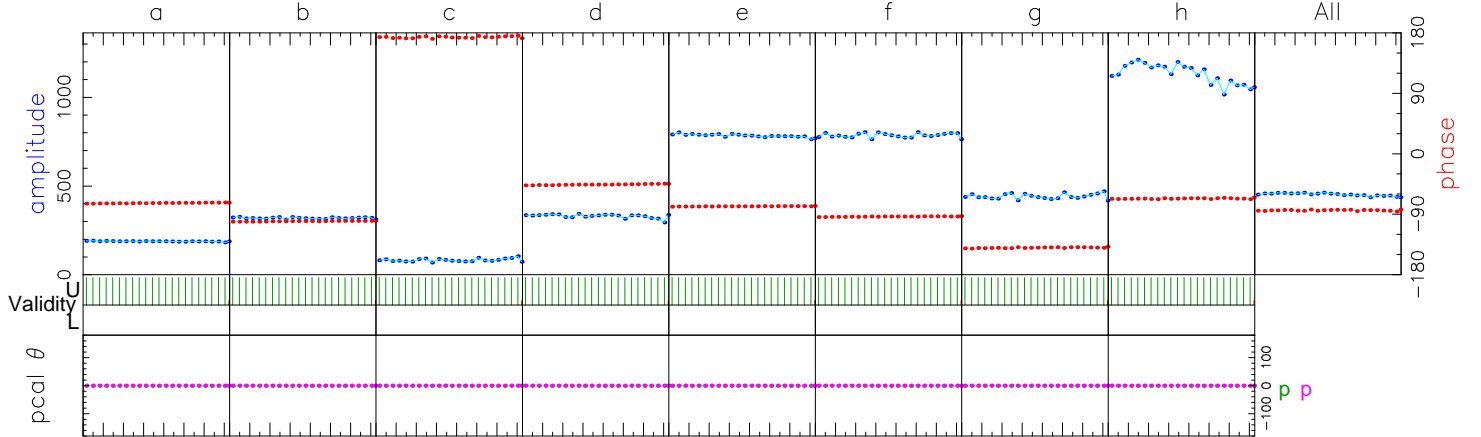
Fringe quality 5

SNR 25470.4
 Int time 419.824
 Amp 454.574
 Phase -84.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.004584
 MBD 0.003039
 Fringe rate (Hz)
 -0.000010
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010041
 2021:252:122852
 RA & Dec (J2000)
 12h56m11.166577s
 -5°47'21.525129"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-73.4	-100.3	173.6	-45.9	-78.2	-93.5	-139.8	-66.7	Phase	-84.2
	188.5	319.9	83.2	330.4	784.6	786.5	442.7	1134.5	Ampl.	508.8
	256.8	257.2	255.8	257.1	257.8	257.2	257.2	255.1	Sbd box	258.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	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: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	PC amp	
p	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)	3.03871875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		3.03872E-03	+/- 4.3E-08
Sband delay (usec)	4.58425000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		4.58425E-03	+/- 3.4E-07
Phase delay (usec)	-2.71465149816E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-2.71465E-06	+/- 1.5E-10
Delay rate (us/s)	-1.18329122471E-10		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.18329E-10	+/- 6.0E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-84.2	+/- 0.0

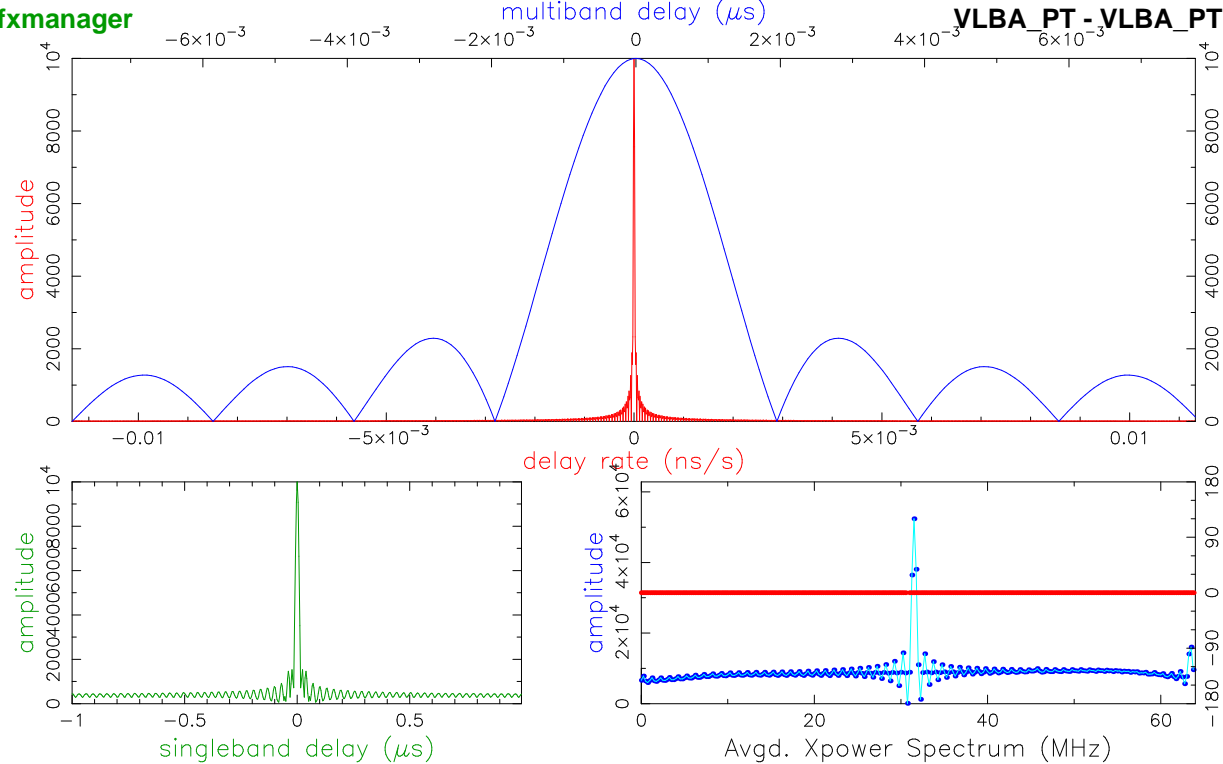
ph/seg (deg) 0.7 0.0 Search (2048X32) 449.657 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.7 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 51.3 0.0 Inc. seg. avg. 452.912 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 74.8 0.0 Inc. frq. avg. 508.806 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 p: az 157.7 el 47.4 pa -17.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/pp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/pp.W.138.1W5O2N

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

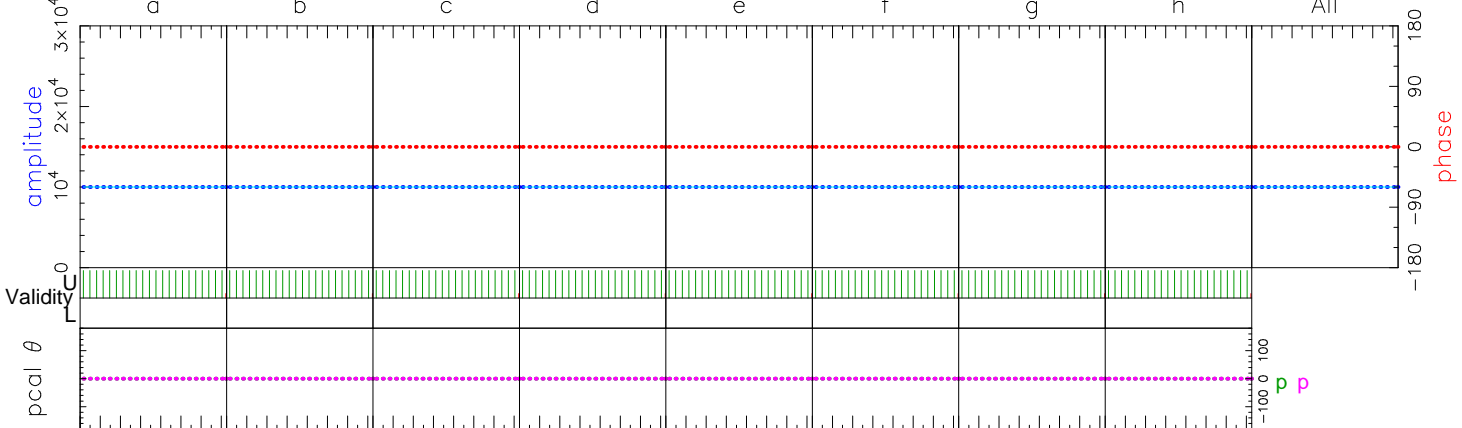
3C279.1W5O2N, No0173, pp

VLBA_PT - VLBA_PT, fgroup W, pol LL



Fringe quality 9
 SNR 560313.9
 Int time 419.824
 Amp 10000.000
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 050000.00
 Stop 050659.84
 FRT 050330.00
 Corr/FF/build
 2021:286:151750
 2021:287:010032
 2021:252:122852
 RA & Dec (J2000) 12h56m11.166577s --5°47'21.525129"

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	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p:p	0:0	0:0	0:0	0:0	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	0.0	0.0
p	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.00000000000E+00 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09
 Sband delay (usec) 0.00000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08
 Phase delay (usec) 0.00000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 6.6E-12
 Delay rate (us/s) 0.00000000000E+00 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 157.7 el 47.4 pa -17.5 p: az 157.7 el 47.4 pa -17.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0173/pp..1W5O2N Output file: /Exps/c211a/v2/1234/No0173/pp.W.95.1W5O2N