

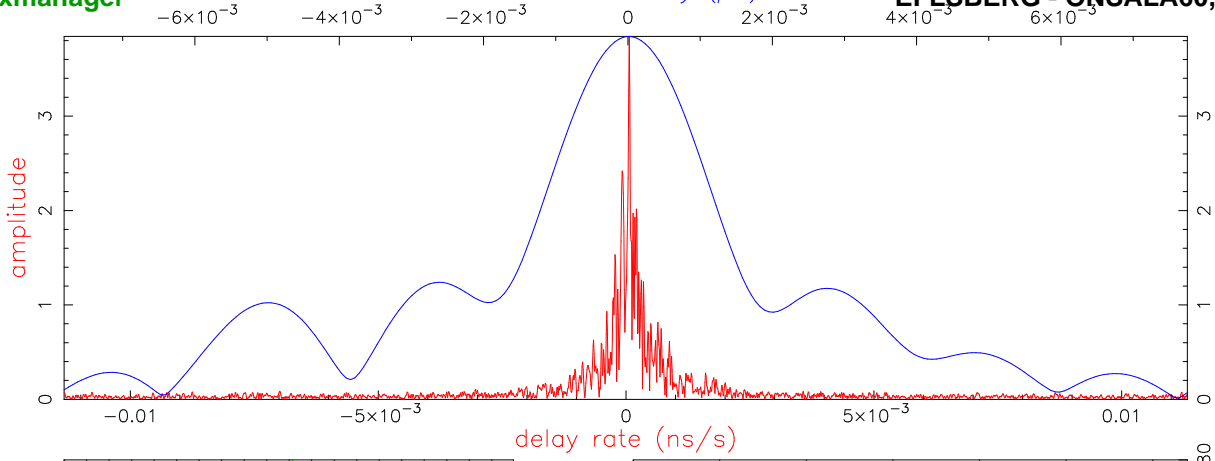
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, BX

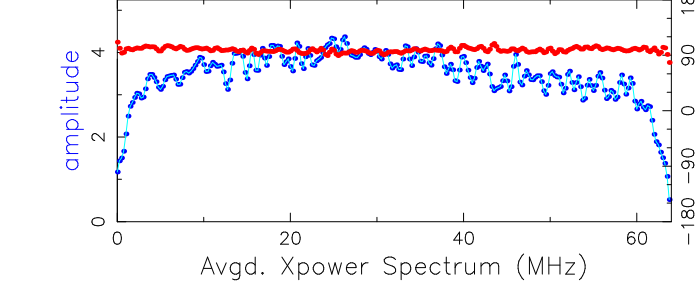
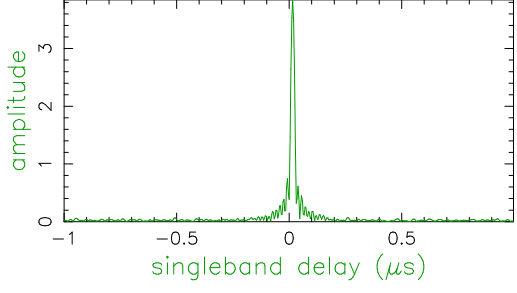
EFLSBERG - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

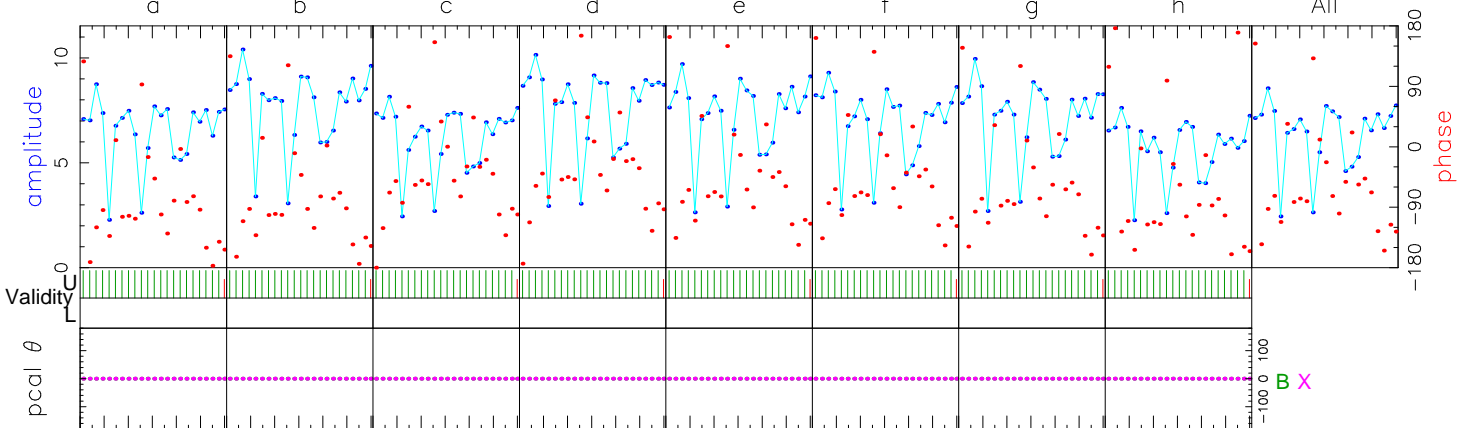


Fringe quality 3

SNR 199.4
 Int time 359.894
 Amp 3.844
 Phase -83.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.015467
 MBD 0.000008
 Fringe rate (Hz)
 0.006137
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134441
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-107.4	-103.7	-59.4	-51.3	-73.7	-73.9	-87.3	-116.6	Phase	-83.3
	3.9	4.7	3.7	4.6	4.4	4.1	4.3	3.4	Ampl.	4.1
	260.8	261.2	261.5	260.9	260.7	261.2	260.9	259.6	Sbd box	261.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 1.55722708904E+02 Apriori delay (usec) 1.55707075589E+02 Resid mbdelay (usec) 8.31490E-06 +/- 5.4E-06
 Sband delay (usec) 1.55722542339E+02 Apriori clock (usec) -7.8468414E+01 Resid sbdelay (usec) 1.54667E-02 +/- 4.3E-05
 Phase delay (usec) 1.55707072902E+02 Apriori clockrate (us/s) -5.2800001E-07 Resid phdelay (usec) -2.68749E-06 +/- 1.9E-08
 Delay rate (us/s) -8.72154217212E-02 Apriori rate (us/s) -8.72154929688E-02 Resid rate (us/s) 7.12476E-08 +/- 8.9E-11
 Total phase (deg) 93.5 Apriori accel (us/s/s) -6.61757144049E-06 Resid phase (deg) -83.3 +/- 0.6

RMS Theor. Amplitude 3.844 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.4 1.4 Search (2048X32) 3.711 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.9 2.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.5 0.8 Inc. seg. avg. 6.383 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 13.3 1.4 Inc. frq. avg. 4.135 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

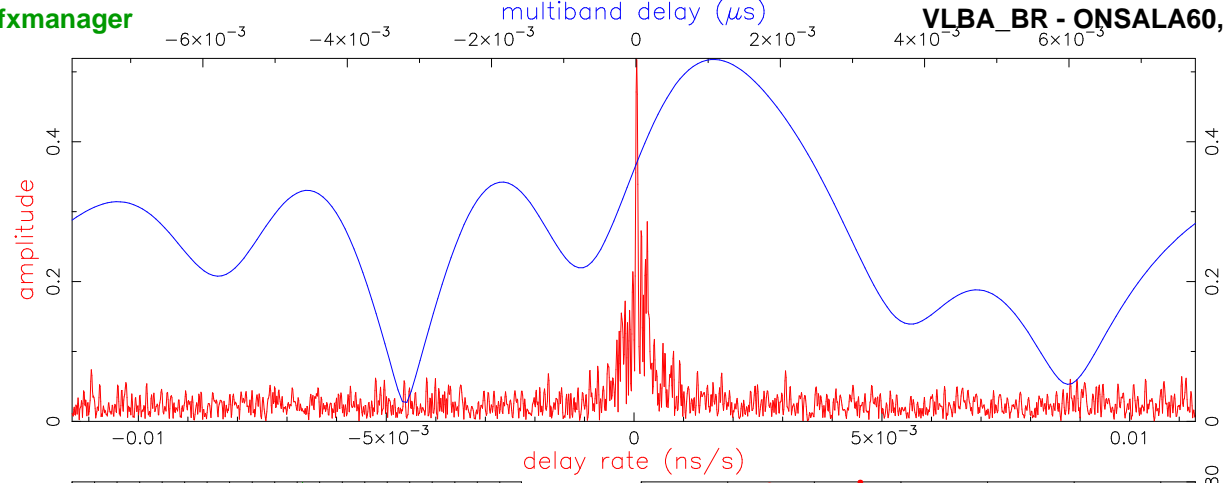
B: az 287.8 el 43.7 pa 55.0 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 665.520 -943.464 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/BX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/BX.W.106.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, bX

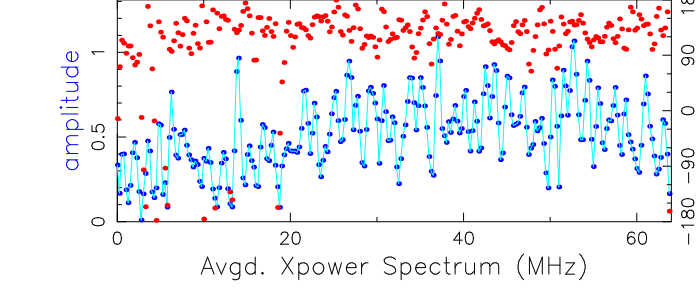
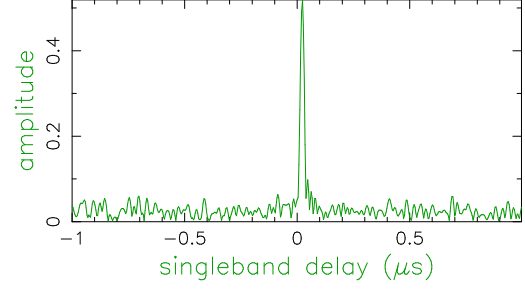
VLBA_BR - ONSALA60, fgroup W, pol RR



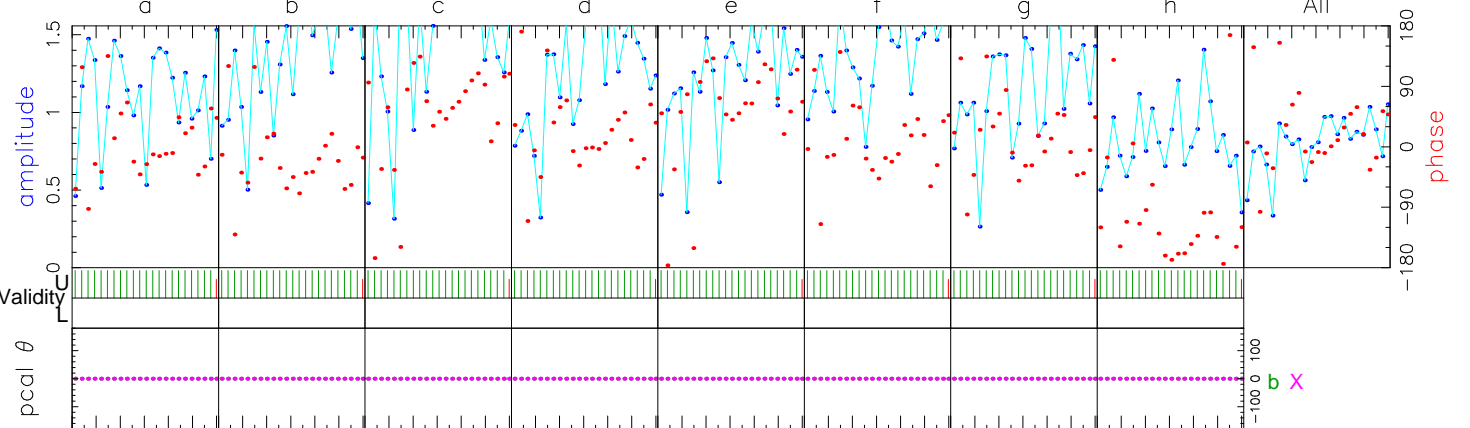
Fringe quality 5

SNR 26.9
 Int time 359.894
 Amp 0.519
 Phase 18.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.022690
 MBD 0.001070
 Fringe rate (Hz) 0.004459
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134442
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



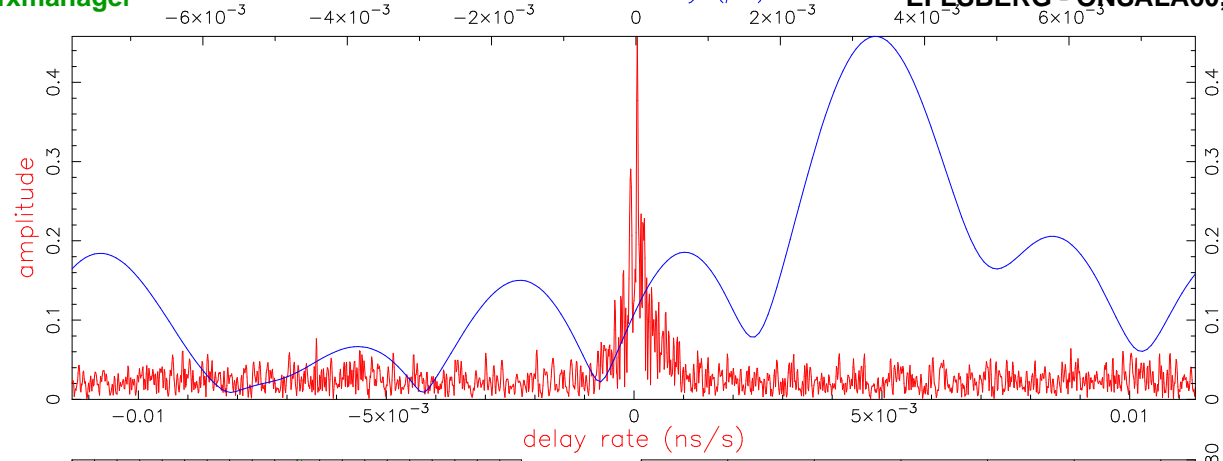
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	1.9	-27.6	79.1	18.0	81.3	5.4	8.4	-130.9	Phase	18.2
	0.7	1.0	0.9	0.9	0.8	0.9	0.7	0.6	Ampl.	0.8
	262.4	263.7	263.0	262.2	262.3	262.3	261.4	260.9	Sbd box	262.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
b	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	1.98445445788E+03		Apriori delay (usec)		1.98443776290E+03		Resid mbdelay (usec)		1.06998E-03	+/- 4.0E-05
Sband delay (usec)	1.98446045340E+03		Apriori clock (usec)		-5.9380150E+01		Resid sbdelay (usec)		2.26905E-02	+/- 3.2E-04
Phase delay (usec)	1.98443776348E+03		Apriori clockrate (us/s)		-6.2799998E-07		Resid phdelay (usec)		5.86469E-07	+/- 1.4E-07
Delay rate (us/s)	1.23999352994E+00		Apriori rate (us/s)		1.23999347818E+00		Resid rate (us/s)		5.17630E-08	+/- 6.6E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.83156249768E-05		Resid phase (deg)		18.2	+/- 4.3

ph/seg (deg) 55.9 10.2 Search (2048X32) 0.511 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.7 17.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 73.7 6.0 Inc. seg. avg. 0.790 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.6 10.5 Inc. frq. avg. 0.802 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 75.9 el 49.8 pa -61.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9639.524 -1854.806 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/bX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/bX.W.113.1W55K2

multiband delay (μ s)



Fringe quality 8

SNR 23.8

Int time 359.894

Amp 0.458

Phase -171.8

PFD 0.0e+00

Delays (us)

SBD 0.019484

MBD 0.003316

Fringe rate (Hz)

0.006187

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211a

Exper # 16383

Yr:day 2021:114

Start 120000.00

Stop 120559.94

FRT 120300.00

Corr/FF/build

2021:286:083752

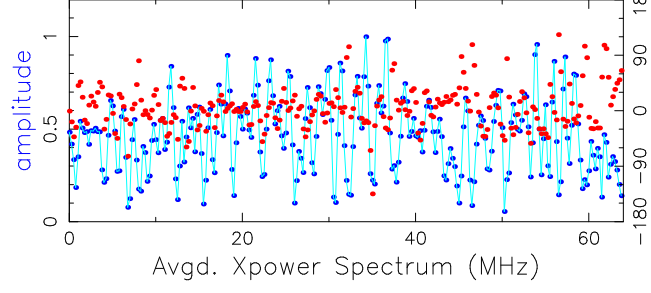
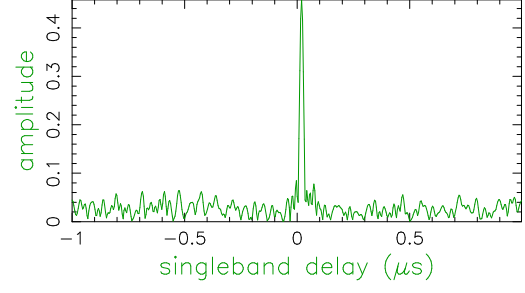
2021:286:134445

2021:252:122852

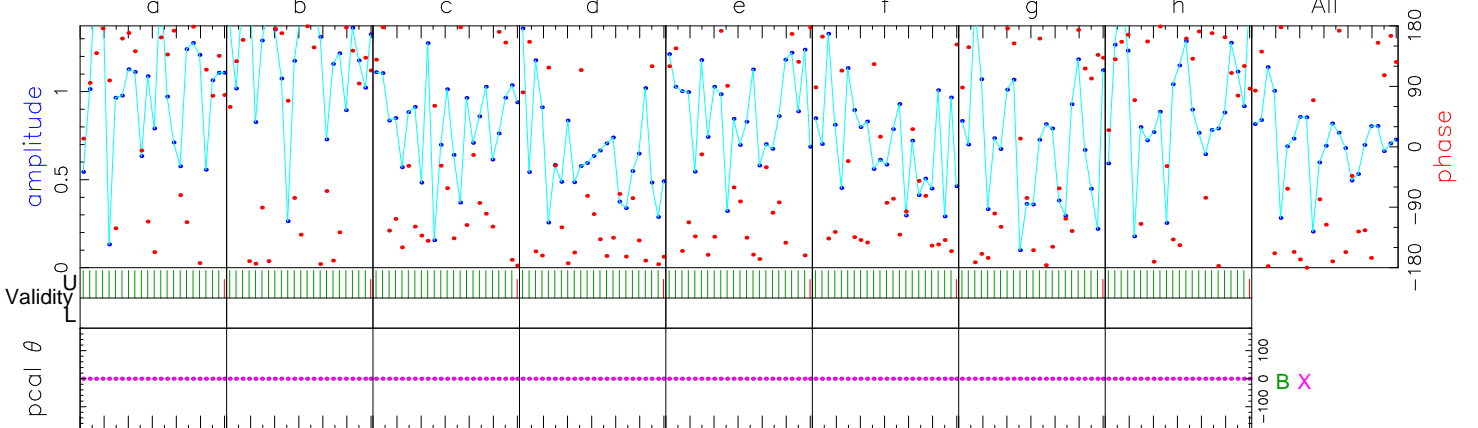
RA & Dec (J2000)

22h02m43.291370s

+42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	162.7	175.4	-131.5	-157.8	-151.1	-129.9	-177.5	156.6	Phase	-171.8
	0.6	0.8	0.5	0.4	0.5	0.3	0.6	0.6	Ampl.	0.5
	261.9	262.1	262.2	261.9	261.9	262.2	261.8	261.4	Sbd box	262.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.55726016967E+02		Apriori delay (usec)		1.55707075589E+02		Resid mbdelay (usec)		3.31638E-03	+/- 4.6E-05
Sband delay (usec)	1.55726559589E+02		Apriori clock (usec)		-7.8468414E+01		Resid sbdelay (usec)		1.94840E-02	+/- 3.6E-04
Phase delay (usec)	1.55707070049E+02		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-5.54002E-06	+/- 1.6E-07
Delay rate (us/s)	-8.72154211459E-02		Apriori rate (us/s)		-8.72154929688E-02		Resid rate (us/s)		7.18229E-08	+/- 7.5E-10
Total phase (deg)	5.1		Apriori accel (us/s/s)		-6.61757144049E-06		Resid phase (deg)		-171.8	+/- 4.8

	RMS	Theor.	Amplitude	0.458 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.9	11.6	Search (2048X32)	0.433	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	70.8	20.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	31.2	6.8	Inc. seg. avg.	0.699	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	30.4	11.9	Inc. frq. avg.	0.505	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 287.8 el 43.7 pa 55.0 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 665.520 -943.464 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/BX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/BX.W.126.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

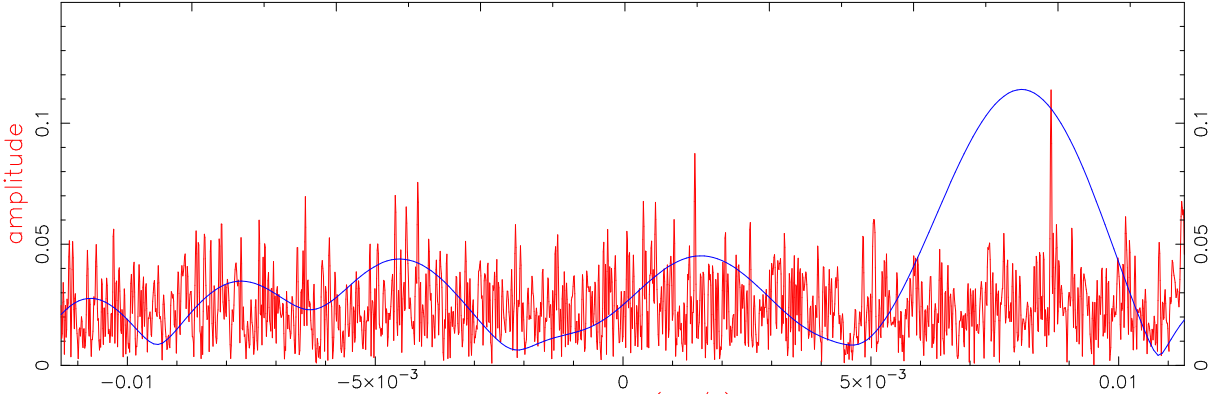
BLLAC.1W55K2, No0231, bX

VLBA_BR - ONSALA60, fgroup W, pol LR

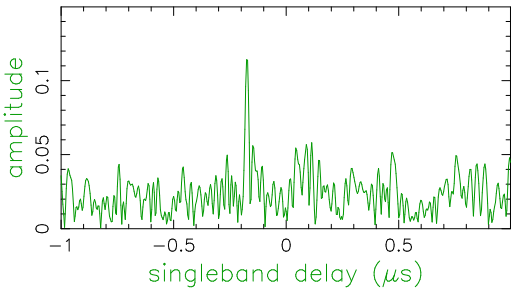
multiband delay (μ s)

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

Fringe quality 0

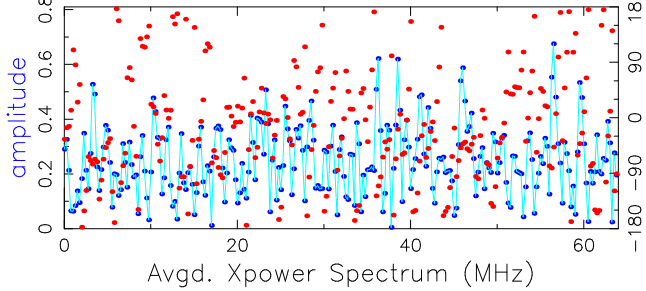


SNR 6.0
Int time 359.894
Amp 0.150
Phase 61.9
PFD 3.2e-01
Delays (us)
SBD -0.173889
MBD 0.005432
Fringe rate (Hz) 0.745008
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



singleband delay (μ s)

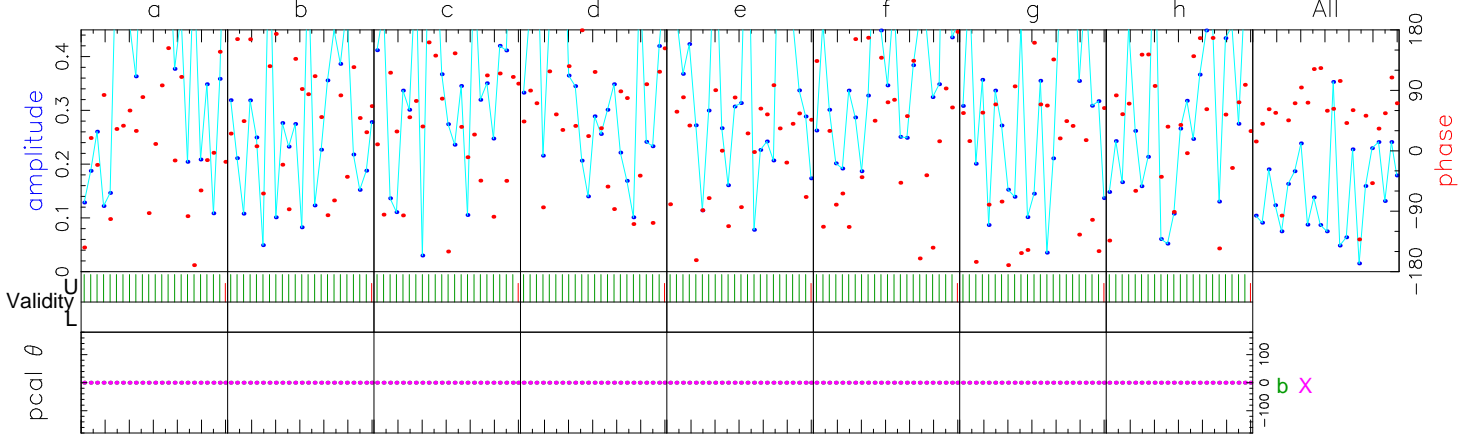
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134446
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	44.3	68.5	89.2	68.3	29.4	100.0	43.1	78.1	Phase	61.9
	0.2	0.1	0.1	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	410.8	368.3	175.3	213.4	503.9	127.0	147.1	423.2	Sbd box	212.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.98427131992E+03	Apriori delay (usec)	1.98443776290E+03	Resid mbdelay (usec)	5.43202E-03	+/-	1.8E-04
Sband delay (usec)	1.98426387440E+03	Apriori clock (usec)	-5.9380150E+01	Resid sbdelay (usec)	-1.73889E-01	+/-	1.4E-03
Phase delay (usec)	1.98443776489E+03	Apriori clockrate (us/s)	-6.2799998E-07	Resid phdelay (usec)	1.99469E-06	+/-	6.1E-07
Delay rate (us/s)	1.24000212699E+00	Apriori rate (us/s)	1.23999347818E+00	Resid rate (us/s)	8.64881E-06	+/-	2.9E-09
Total phase (deg)	24.4	Apriori accel (us/s/s)	-1.83156249768E-05	Resid phase (deg)	61.9	+/-	19.0

ph/seg (deg)	60.1	Theor.	45.5	Amplitude	0.150 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.9		79.3	Search (2048X32)	0.112	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	26.7		26.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	32.1		46.8	Inc. seg. avg.	0.146	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.144	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 75.9 el 49.8 pa -61.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9639.524 -1854.806 simultaneous interpolator

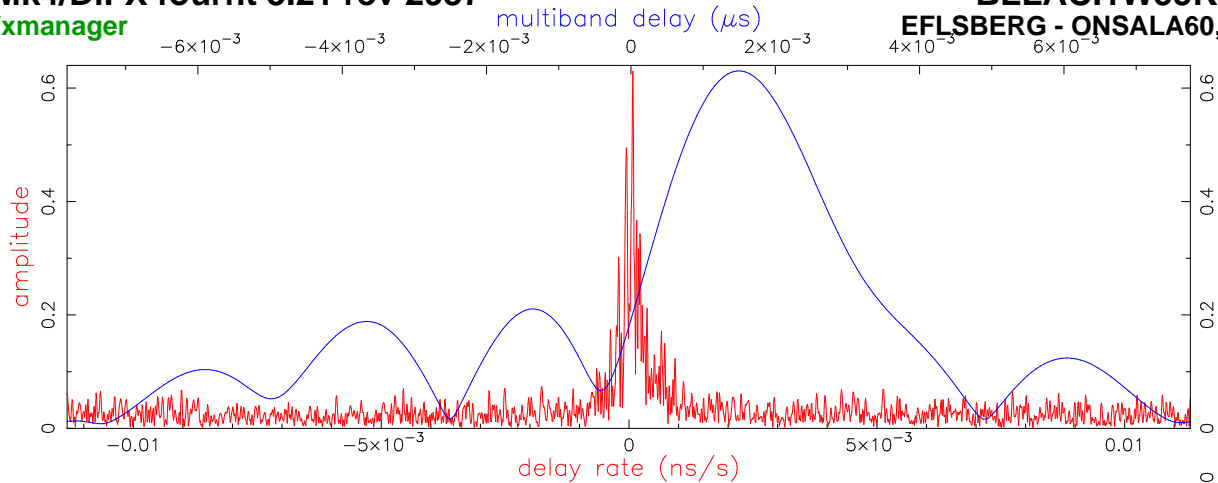
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/bX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/bX.W.132.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

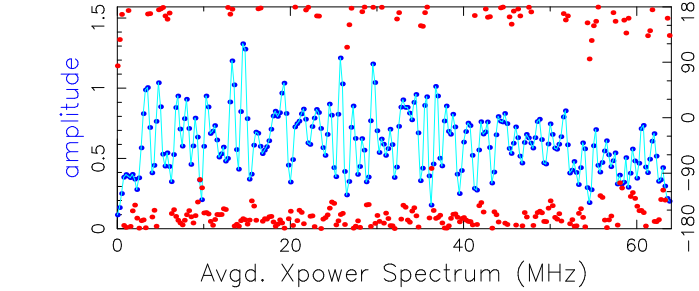
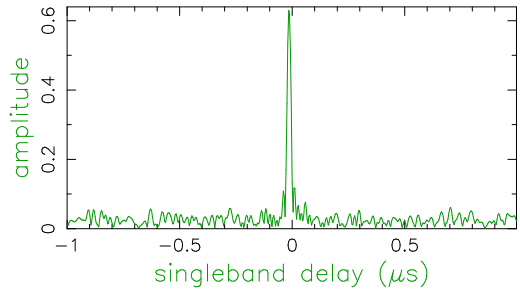
BLLAC.1W55K2, No0231, BX

EFLSBERG - ONSALA60, fgroup W, pol RL



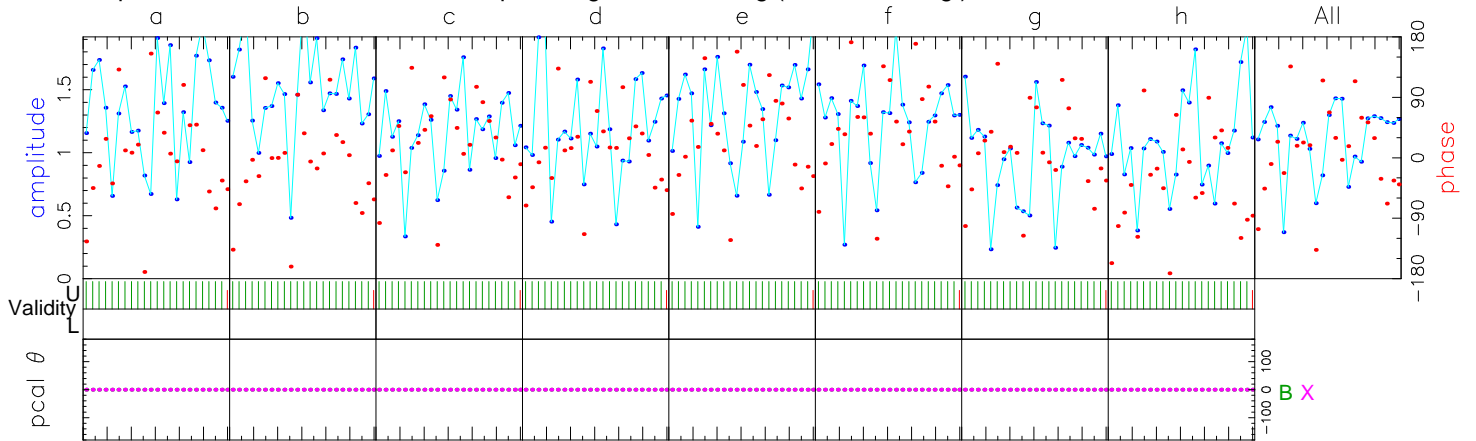
Fringe quality 5

SNR 33.2
 Int time 359.894
 Amp 0.640
 Phase 11.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.013944
 MBD 0.001550
 Fringe rate (Hz)
 0.006220
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134449
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.3	-8.4	29.6	14.9	29.8	40.8	6.7	-46.7	Phase	11.2
	0.7	0.9	0.7	0.8	0.7	0.6	0.5	0.5	Ampl.	0.7
	253.6	253.1	253.5	252.7	253.8	254.0	253.4	252.2	Sbd box	253.4
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.55693000873E+02		Apriori delay (usec)		1.55707075589E+02		Resid mbdelay (usec)		1.55028E-03	+/- 3.3E-05
Sband delay (usec)	1.55693131339E+02		Apriori clock (usec)		-7.8468414E+01		Resid sbdelay (usec)		-1.39442E-02	+/- 2.6E-04
Phase delay (usec)	1.55707075952E+02		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		3.62355E-07	+/- 1.1E-07
Delay rate (us/s)	-8.72154207632E-02		Apriori rate (us/s)		-8.72154929688E-02		Resid rate (us/s)		7.22056E-08	+/- 5.4E-10
Total phase (deg)	188.1		Apriori accel (us/s/s)		-6.61757144049E-06		Resid phase (deg)		11.2	+/- 3.5

ph/seg (deg) 65.7 8.3 Amplitude 0.640 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.4 14.4 Search (2048X32) 0.603 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.9 4.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.8 8.5 Inc. seg. avg. 1.100 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 0.684 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 287.8 el 43.7 pa 55.0 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 665.520 -943.464 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/BX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/BX.W.144.1W55K2

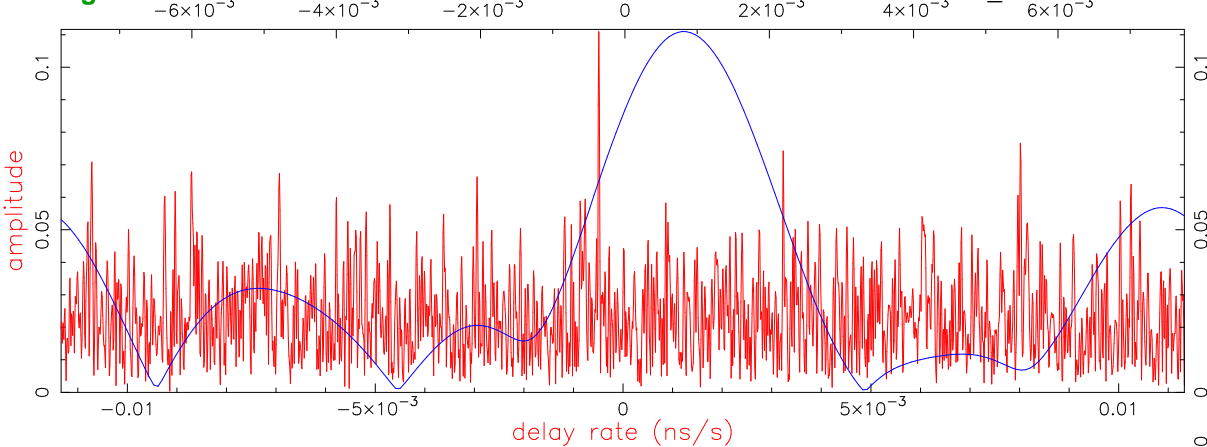
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, bX

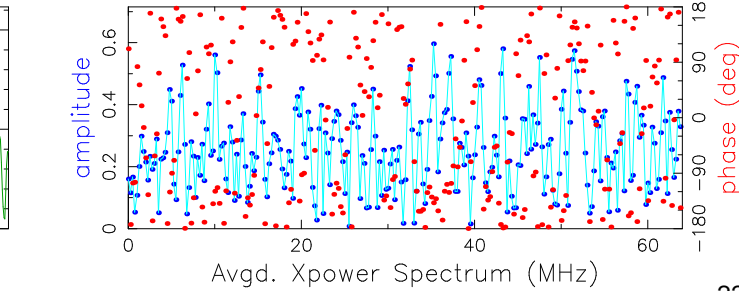
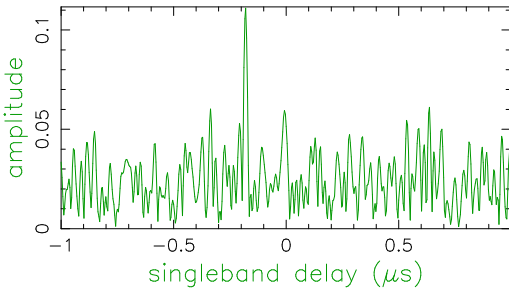
VLBA_BR - ONSALA60, fgroup W, pol RL

multiband delay (μs)



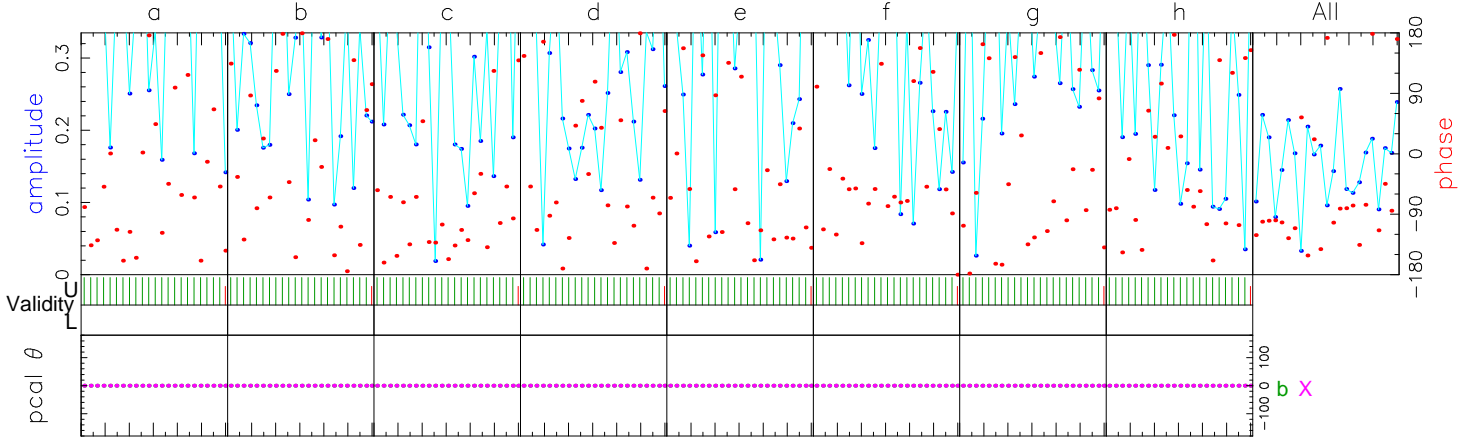
Fringe quality 0

SNR 5.8
 Int time 359.894
 Amp 0.112
 Phase -109.5
 PFD 8.3e-01
 Delays (us)
 SBD -0.180650
 MBD 0.000775
 Fringe rate (Hz)
 -0.041904
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134450
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-92.4	-179.7	-99.5	-103.9	-120.4	-74.9	-140.3	-93.7	Phase	-109.5
	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	418.9	7.7	142.1	331.4	386.4	292.1	255.9	227.0	Sbd box	210.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.98425103812E+03	Apriori delay (usec)	1.98443776290E+03	Resid mbdelay (usec)	7.75222E-04	+/-	1.9E-04
Sband delay (usec)	1.98425711315E+03	Apriori clock (usec)	-5.9380150E+01	Resid sbdelay (usec)	-1.80650E-01	+/-	1.5E-03
Phase delay (usec)	1.98443775937E+03	Apriori clockrate (us/s)	-6.2799998E-07	Resid phdelay (usec)	-3.53013E-06	+/-	6.4E-07
Delay rate (us/s)	1.23999299171E+00	Apriori rate (us/s)	1.23999347818E+00	Resid rate (us/s)	-4.86469E-07	+/-	3.1E-09
Total phase (deg)	213.1	Apriori accel (us/s/s)	-1.83156249768E-05	Resid phase (deg)	-109.5	+/-	19.8

ph/seg (deg)	RMS 56.5	Theor. 47.5	Amplitude Search (2048X32)	0.112 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.7	82.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	36.2	28.0	Inc. seg. avg.	0.115	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.8	48.9	Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

b: az 75.9 el 49.8 pa -61.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9639.524 -1854.806 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/bX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/bX.W.153.1W55K2

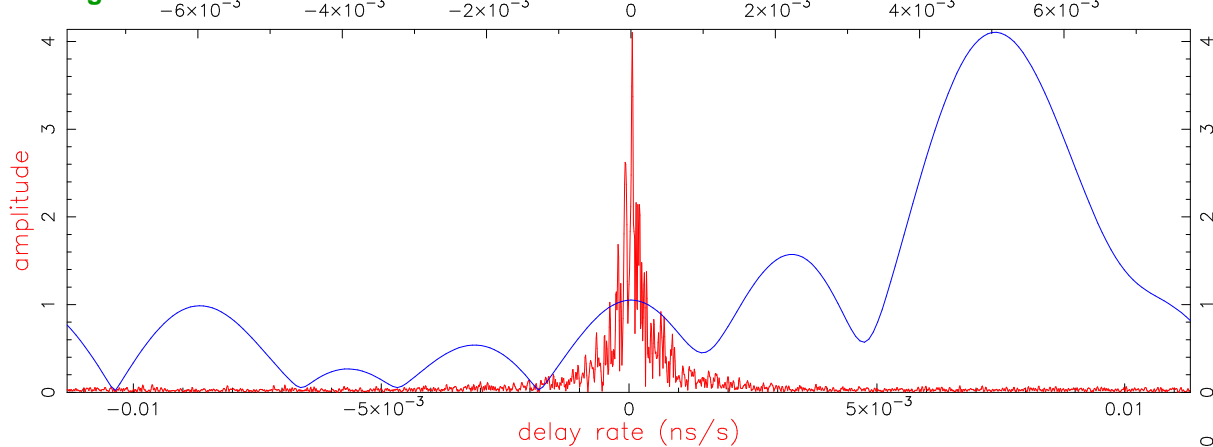
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, BX

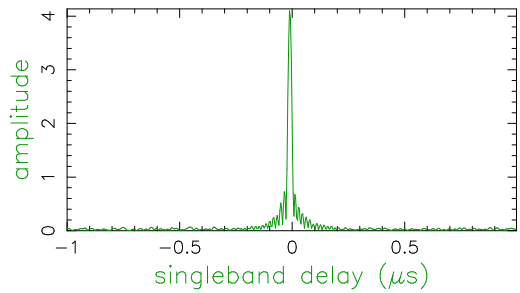
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

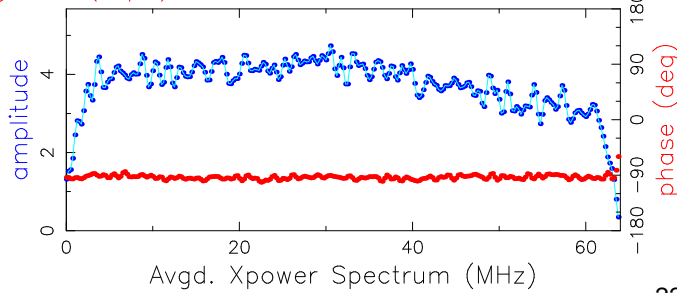


Fringe quality 3

SNR 214.6
 Int time 359.894
 Amp 4.138
 Phase 86.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010519
 MBD 0.005083
 Fringe rate (Hz)
 0.006149
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

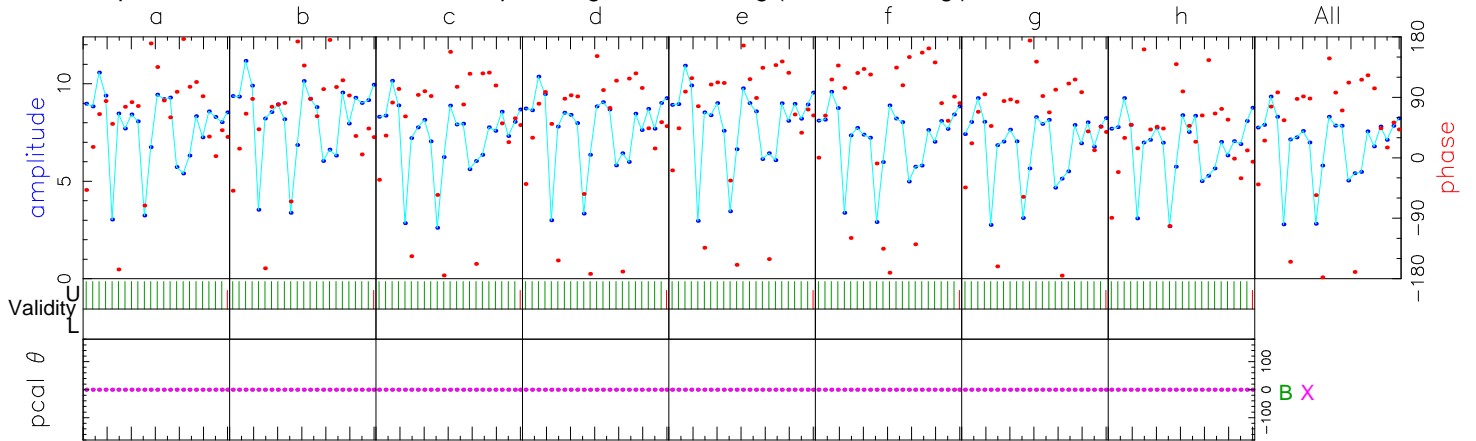


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134438
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	75.1	75.9	93.5	88.3	107.8	124.6	80.6	39.1	Phase	86.1
B	4.6	4.9	4.3	4.6	4.7	4.3	4.2	4.1	Ampl.	4.4
X	254.6	254.1	254.4	254.4	254.7	254.2	253.9	253.2	Sbd box	254.3
B	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.55696533779E+02	Apriori delay (usec)	1.55707075589E+02	Resid mbdelay (usec)	5.08319E-03	+/-	5.1E-06
Sband delay (usec)	1.55696556339E+02	Apriori clock (usec)	-7.8468414E+01	Resid sbdelay (usec)	-1.05193E-02	+/-	4.0E-05
Phase delay (usec)	1.55707078367E+02	Apriori clockrate (us/s)	-5.2800001E-07	Resid phdelay (usec)	2.77715E-06	+/-	1.7E-08
Delay rate (us/s)	-8.72154215866E-02	Apriori rate (us/s)	-8.72154929688E-02	Resid rate (us/s)	7.13822E-08	+/-	8.3E-11
Total phase (deg)	263.0	Apriori accel (us/s/s)	-6.61757144049E-06	Resid phase (deg)	86.1	+/-	0.5

ph/seg (deg)	63.5	RMS	1.3	Theor.	4.138 +/- 0.019	Amplitude	4.138 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	77.4	63.5	1.3	Search (2048X32)	3.917	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	27.3	77.4	2.2	Inc. seg. avg.	6.894	Inc. seg. avg.	6.894	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	9.8	27.3	0.8	Inc. frq. avg.	4.449	Inc. frq. avg.	4.449	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		9.8	1.3					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

B: az 287.8 el 43.7 pa 55.0 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 665.520 -943.464 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/BX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/BX.W.84.1W55K2

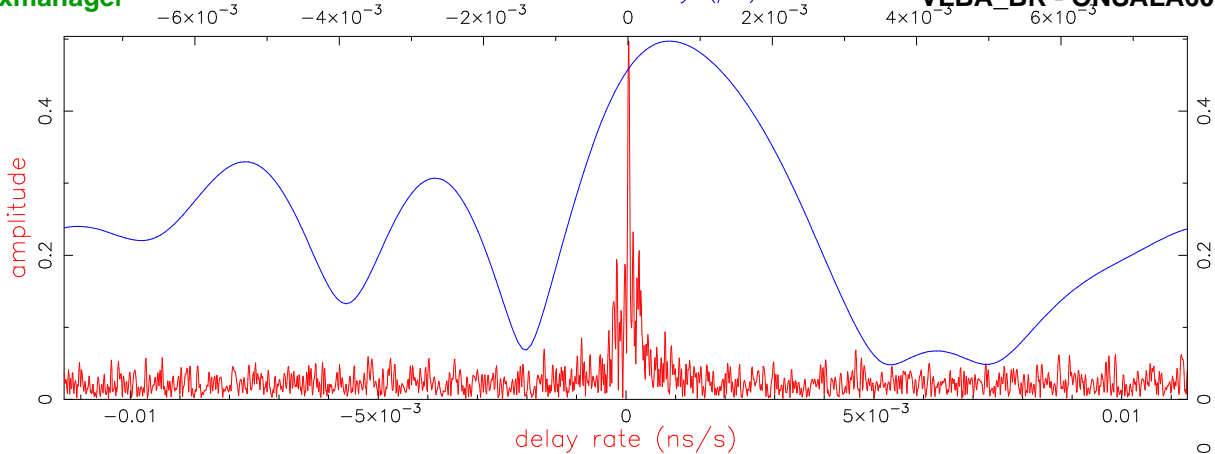
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, bX

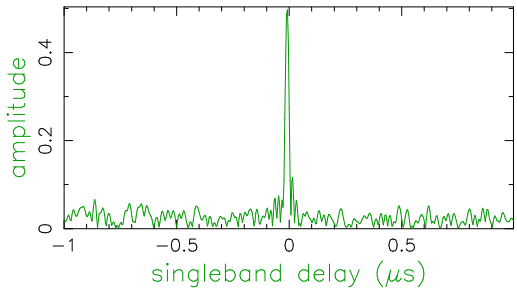
VLBA_BR - ONSALA60, fgroup W, pol LL

multiband delay (μs)

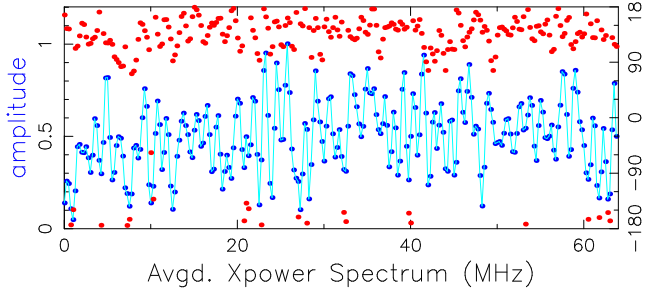


Fringe quality 5

SNR 26.1
 Int time 359.894
 Amp 0.504
 Phase 25.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.009275
 MBD 0.000606
 Fringe rate (Hz) 0.004713
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

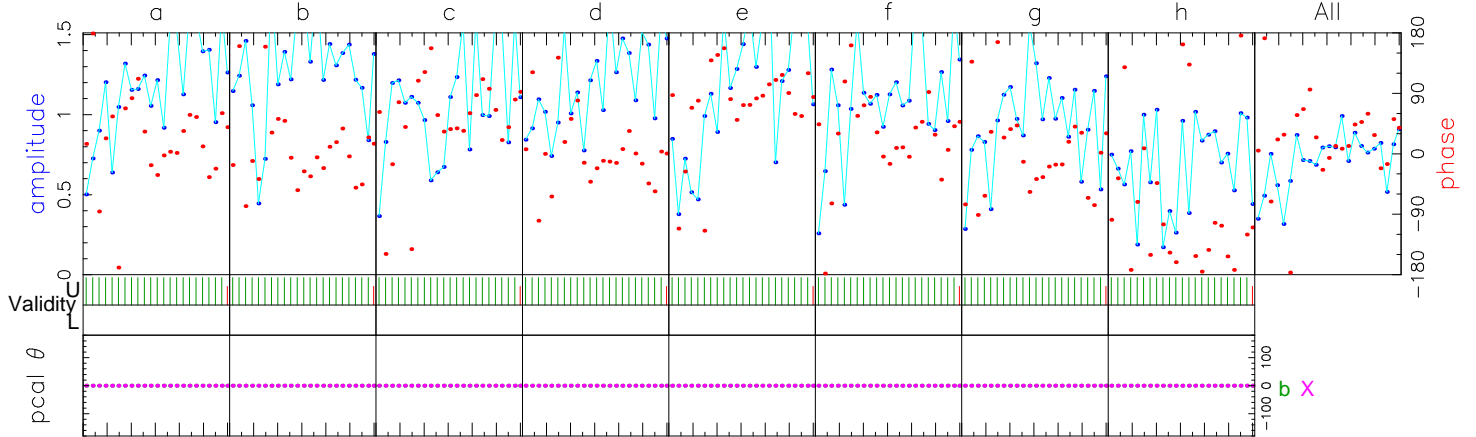


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134438
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.98442274419E+03	Apriori delay (usec)	1.98443776290E+03	Resid mbdelay (usec)	6.06294E-04	+/-	4.2E-05
Sband delay (usec)	1.98442848815E+03	Apriori clock (usec)	-5.9380150E+01	Resid sbdelay (usec)	-9.27475E-03	+/-	3.3E-04
Phase delay (usec)	1.98443776373E+03	Apriori clockrate (us/s)	-6.2799998E-07	Resid phdelay (usec)	8.36802E-07	+/-	1.4E-07
Delay rate (us/s)	1.23999353289E+00	Apriori rate (us/s)	1.23999347818E+00	Resid rate (us/s)	5.47134E-08	+/-	6.8E-10
Total phase (deg)	348.5	Apriori accel (us/s/s)	-1.83156249768E-05	Resid phase (deg)	25.9	+/-	4.4

ph/seg (deg)	57.2	RMS	10.5	Theor.	10.5	Amplitude	0.504 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.2	Search (2048X32)	0.496	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	78.5	Inc. seg. avg.	0.701	Inc. frq. avg.	0.726	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	54.9	Inc. frq. avg.	0.726	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 75.9 el 49.8 pa -61.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9639.524 -1854.806 simultaneous interpolator

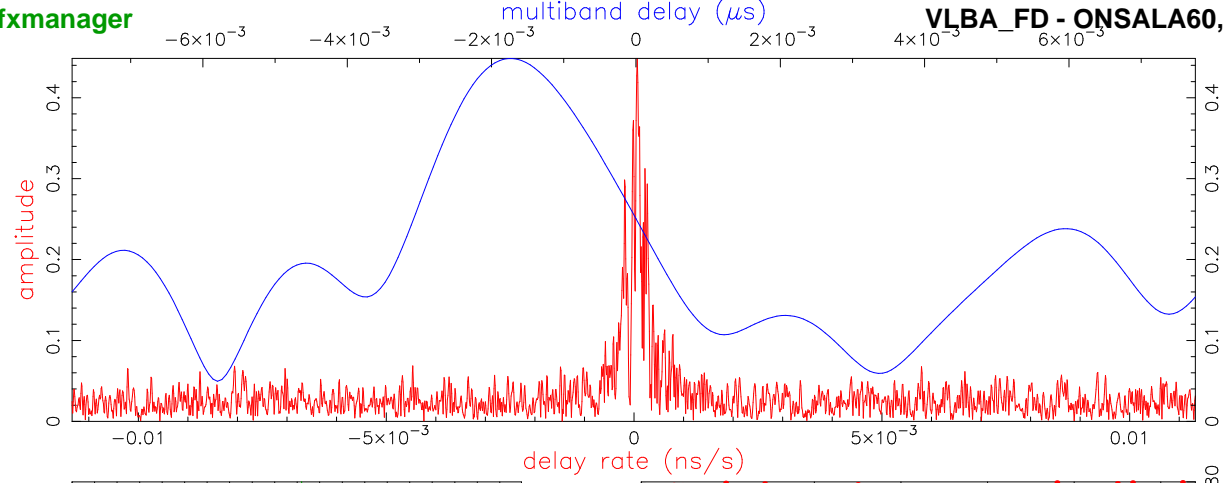
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/bX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/bX.W.91.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, fX

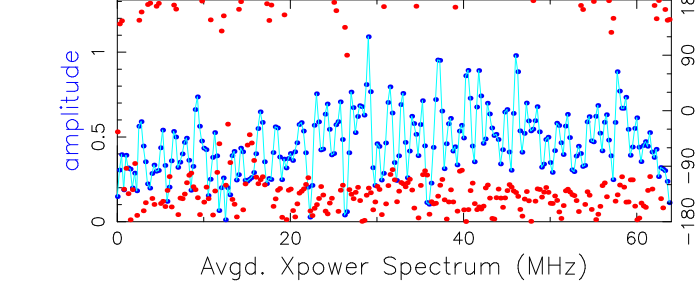
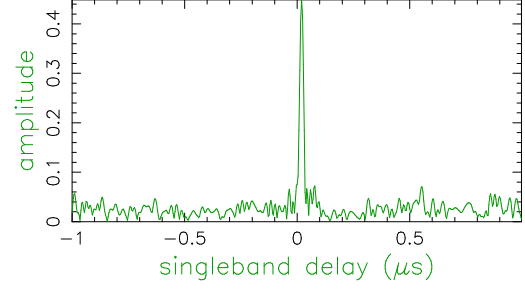
VLBA_FD - ONSALA60, fgroup W, pol RR



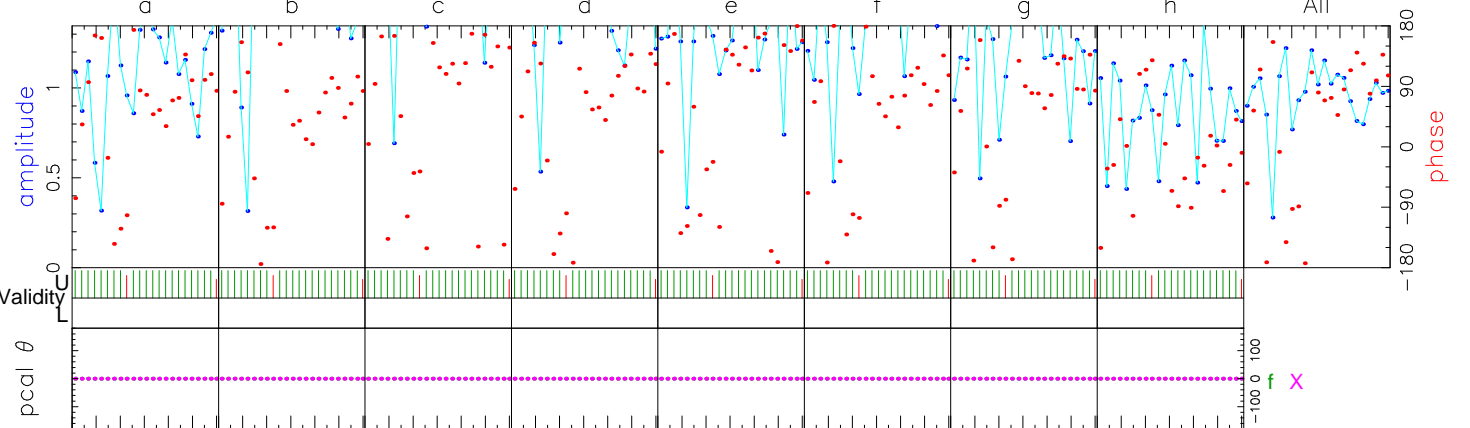
Fringe quality 7

SNR 23.2
 Int time 356.723
 Amp 0.449
 Phase 103.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.019791
 MBD -0.001735
 Fringe rate (Hz) 0.005983
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134442
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	84.7	60.1	144.1	101.7	162.0	93.8	107.8	-22.1	Phase	103.6
	0.5	0.7	0.8	0.7	0.6	0.7	0.6	0.4	Ampl.	0.6
	262.0	262.3	261.9	261.8	261.2	261.8	261.2	259.5	Sbd box	262.1
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.08983279904E+03		Apriori delay (usec)		3.08981890870E+03		Resid mbdelay (usec)		-1.73465E-03	+/- 4.7E-05
Sband delay (usec)	3.08983869920E+03		Apriori clock (usec)		-4.6175571E+01		Resid sbdelay (usec)		1.97905E-02	+/- 3.7E-04
Phase delay (usec)	3.08981891204E+03		Apriori clockrate (us/s)		-4.6799999E-07		Resid phdelay (usec)		3.34060E-06	+/- 1.6E-07
Delay rate (us/s)	1.24884064257E+00		Apriori rate (us/s)		1.24884057312E+00		Resid rate (us/s)		6.94535E-08	+/- 7.7E-10
Total phase (deg)	29.8		Apriori accel (us/s/s)		-4.19932789508E-05		Resid phase (deg)		103.6	+/- 4.9

ph/seg (deg) RMS Theor. Amplitude 0.449 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.9 11.8 Search (2048X32) 0.441 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 121.2 20.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 62.2 7.0 Inc. seg. avg. 0.939 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.0 12.2 Inc. frq. avg. 0.614 Data rate(Mb/s): 2048 nlags: 256 t_coherence infinite ion window (TEC) 0.00 0.00

f: az 58.7 el 54.6 pa -94.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9745.488 -5088.659 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/fx..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/fx.W.114.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

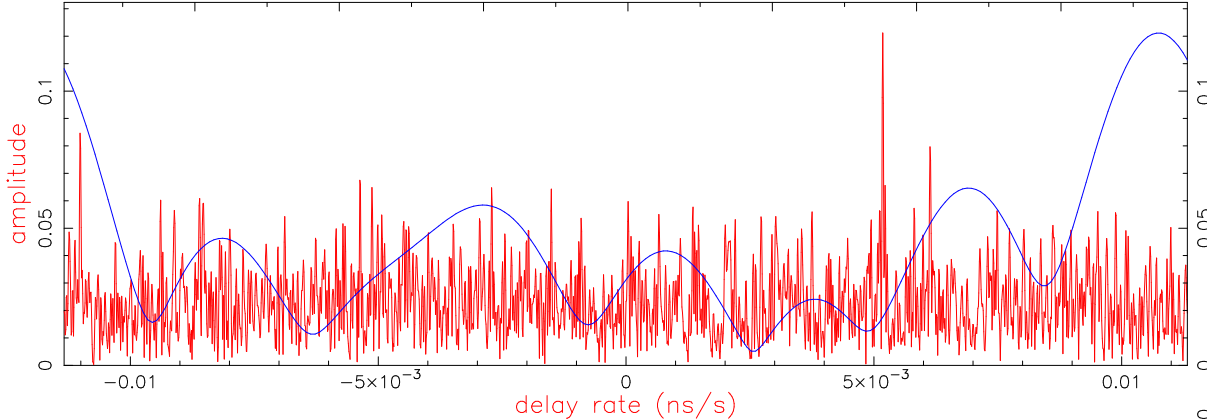
fxmanager

BLLAC.1W55K2, No0231, fX

VLBA_FD - ONSALA60, fgroup W, pol LR

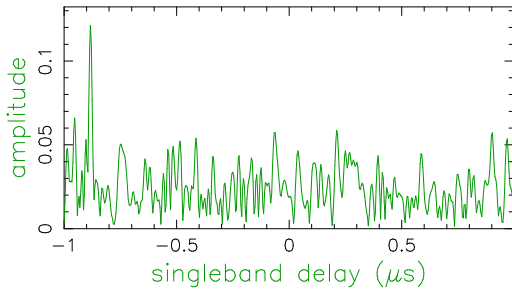
multiband delay (μ s)

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



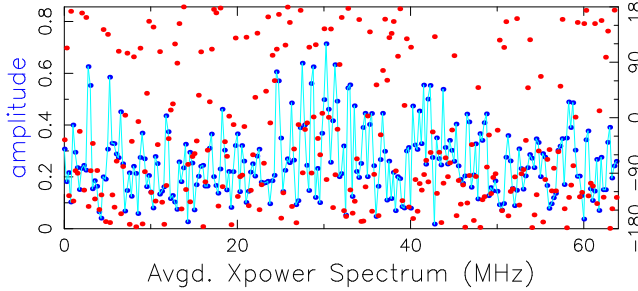
Fringe quality 0

SNR 6.3
 Int time 356.723
 Amp 0.132
 Phase 54.9
 PFD 9.9e-02
 Delays (us)
 SBD -0.882679
 MBD 0.007355
 Fringe rate (Hz)
 0.447239
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



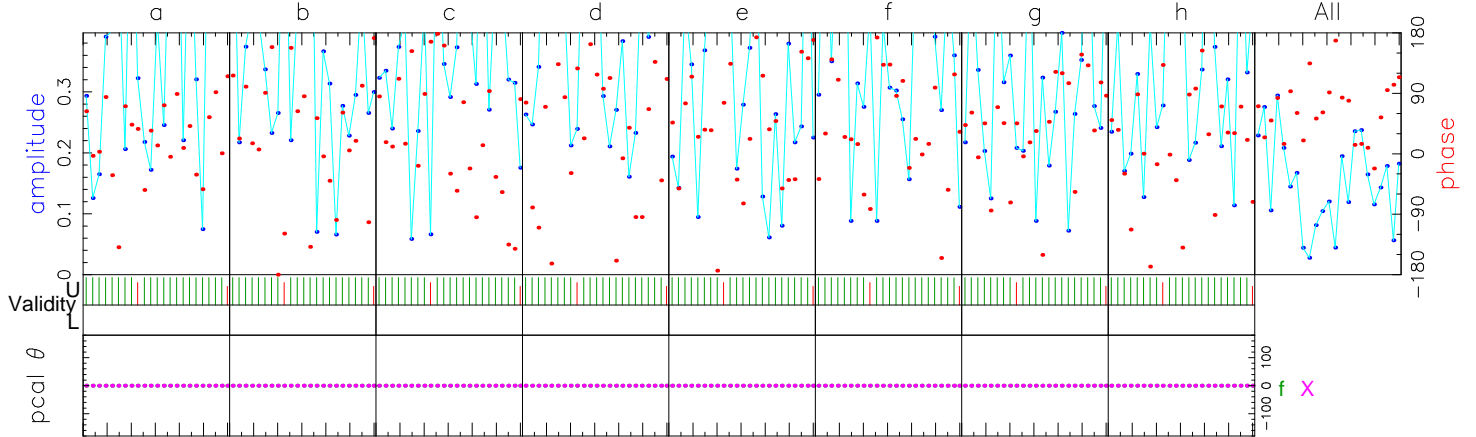
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134446
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	3.08893563906E+03	Apriori delay (usec)	3.08981890870E+03	Resid mbdelay (usec)	7.35536E-03	+/-	1.7E-04
Sband delay (usec)	3.08893623020E+03	Apriori clock (usec)	-4.6175571E+01	Resid sbdelay (usec)	-8.82679E-01	+/-	1.4E-03
Phase delay (usec)	3.08981891047E+03	Apriori clockrate (us/s)	-4.6799999E-07	Resid phdelay (usec)	1.77089E-06	+/-	5.9E-07
Delay rate (us/s)	1.24884576512E+00	Apriori rate (us/s)	1.24884057312E+00	Resid rate (us/s)	5.19200E-06	+/-	2.9E-09
Total phase (deg)	341.1	Apriori accel (us/s/s)	-4.19932789508E-05	Resid phase (deg)	54.9	+/-	18.3

ph/seg (deg)	44.6	Theor.	43.8	Amplitude	0.132 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	65.3		76.4	Search (2048X32)	0.120	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	35.2		25.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	41.3		45.2	Inc. seg. avg.	0.128	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.136	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 58.7 el 54.6 pa -94.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9745.488 -5088.659 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/fX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/fX.W.133.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

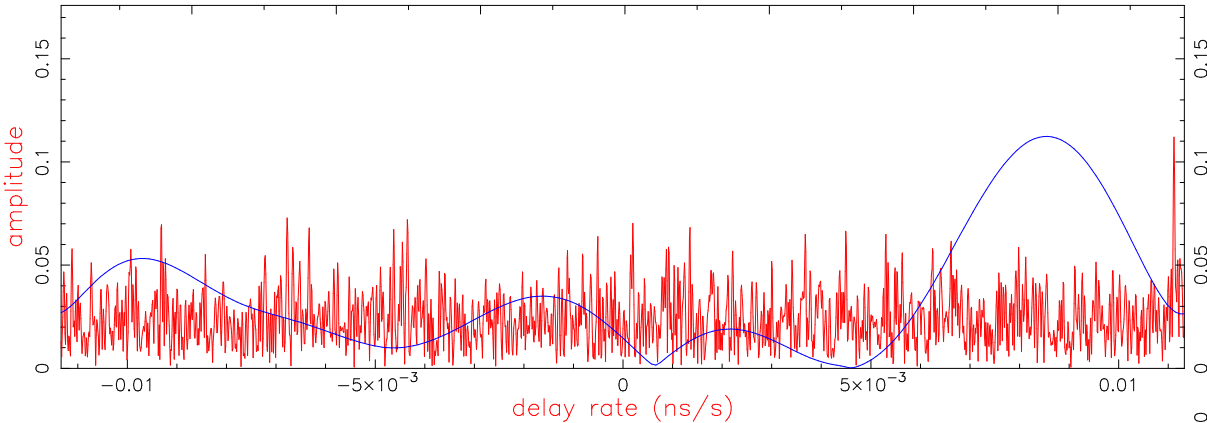
BLLAC.1W55K2, No0231, fX

VLBA_FD - ONSALA60, fgroup W, pol RL

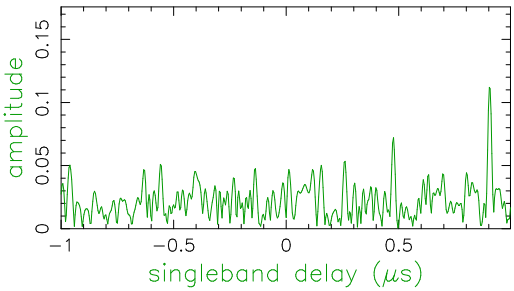
multiband delay (μ s)

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

Fringe quality 0

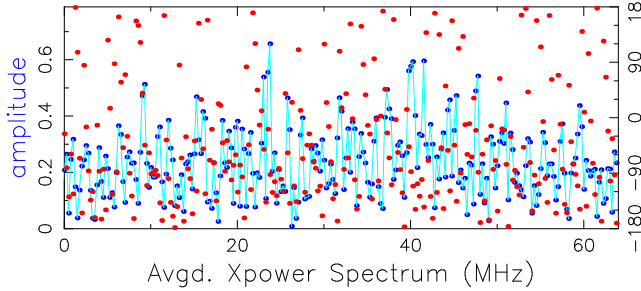


SNR 5.9
Int time 356.723
Amp 0.176
Phase 179.6
PFD 6.3e-01
Delays (us)
SBD 0.904068
MBD 0.005935
Fringe rate (Hz) 0.958515
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



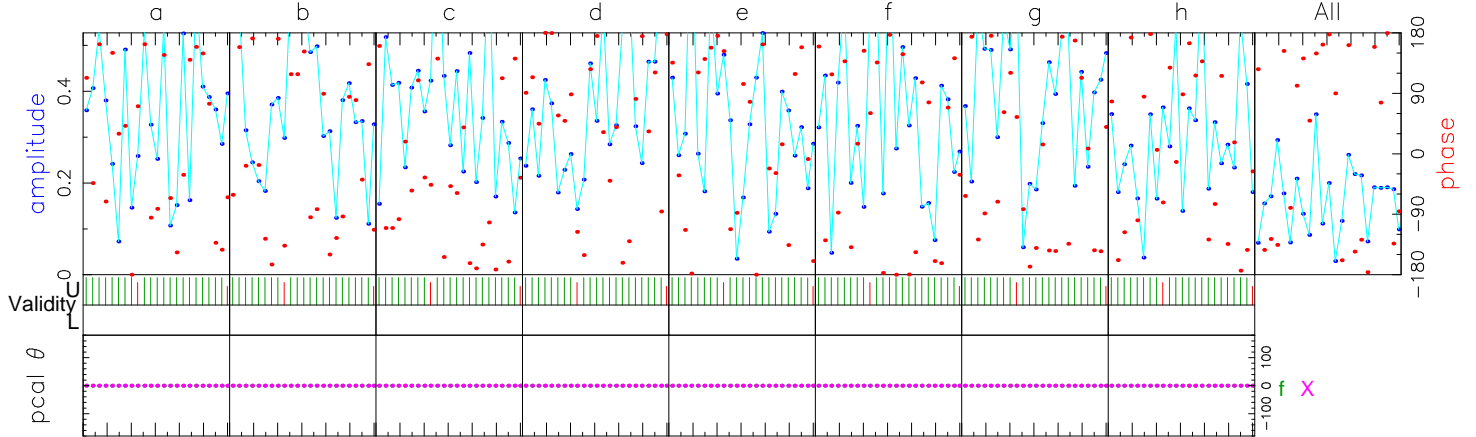
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
Yr:day 16383
Start 2021:114
Stop 2021:114
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134450
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.09071546879E+03	Apriori delay (usec)	3.08981890870E+03	Resid mbdelay (usec)	5.93509E-03	+/-	1.8E-04
Sband delay (usec)	3.09072297645E+03	Apriori clock (usec)	-4.6175571E+01	Resid sbdelay (usec)	9.04068E-01	+/-	1.5E-03
Phase delay (usec)	3.08981891449E+03	Apriori clockrate (us/s)	-4.6799999E-07	Resid phdelay (usec)	5.79229E-06	+/-	6.3E-07
Delay rate (us/s)	1.24885170053E+00	Apriori rate (us/s)	1.24884057312E+00	Resid rate (us/s)	1.11274E-05	+/-	3.0E-09
Total phase (deg)	105.8	Apriori accel (us/s/s)	-4.19932789508E-05	Resid phase (deg)	179.6	+/-	19.5

ph/seg (deg)	57.6	Theor.	46.6	Amplitude	0.176 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.3		81.3	Search (2048X32)	0.112	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.9		27.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.7		48.0	Inc. seg. avg.	0.193	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.174	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 58.7 el 54.6 pa -94.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9745.488 -5088.659 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/fX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/fX.W.151.1W55K2

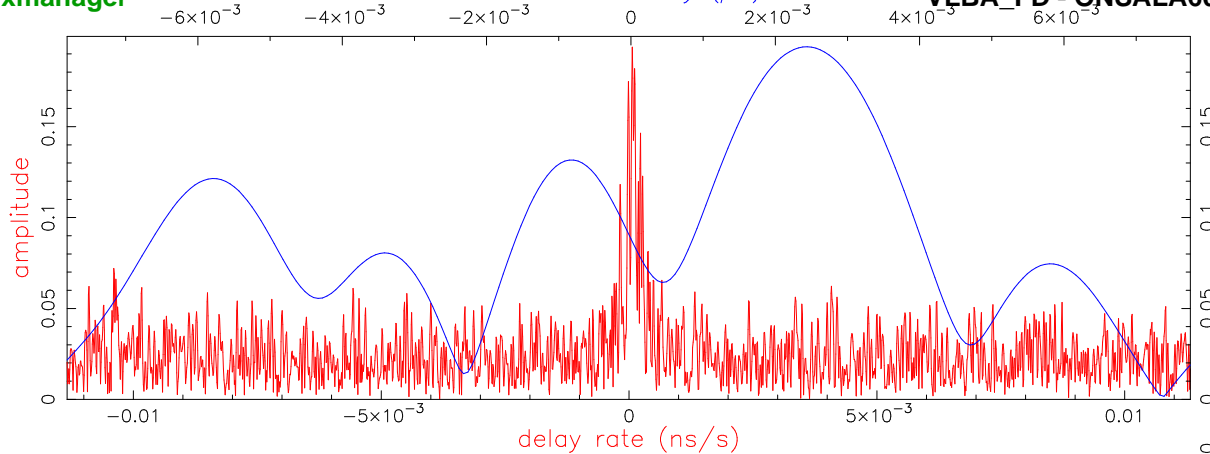
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, fX

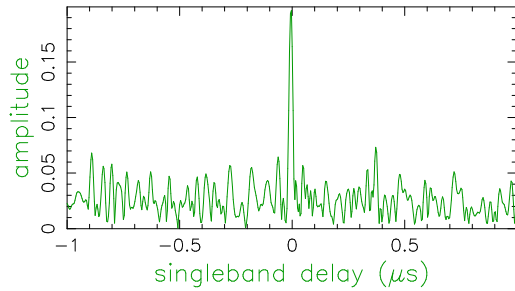
VLBA_FD - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

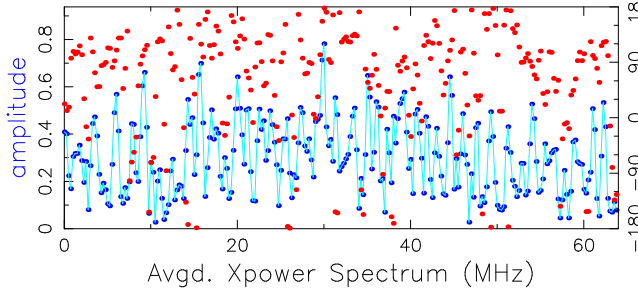


Fringe quality 9

SNR 10.3
 Int time 356.723
 Amp 0.200
 Phase 10.8
 PFD 2.7e-16
 Delays (us)
 SBD -0.005563
 MBD 0.002376
 Fringe rate (Hz) 0.005360
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

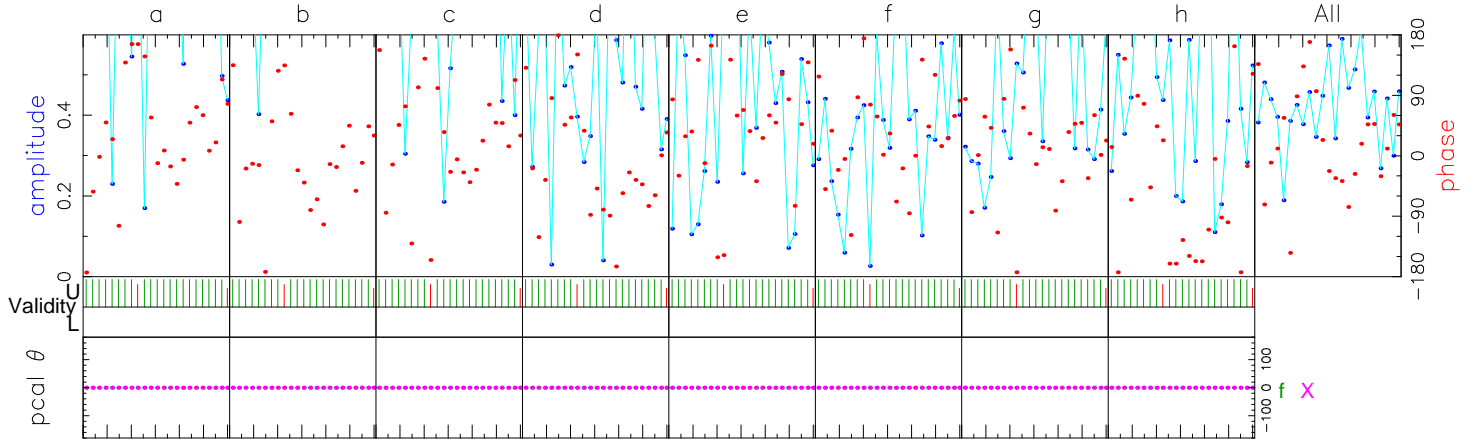


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134439
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

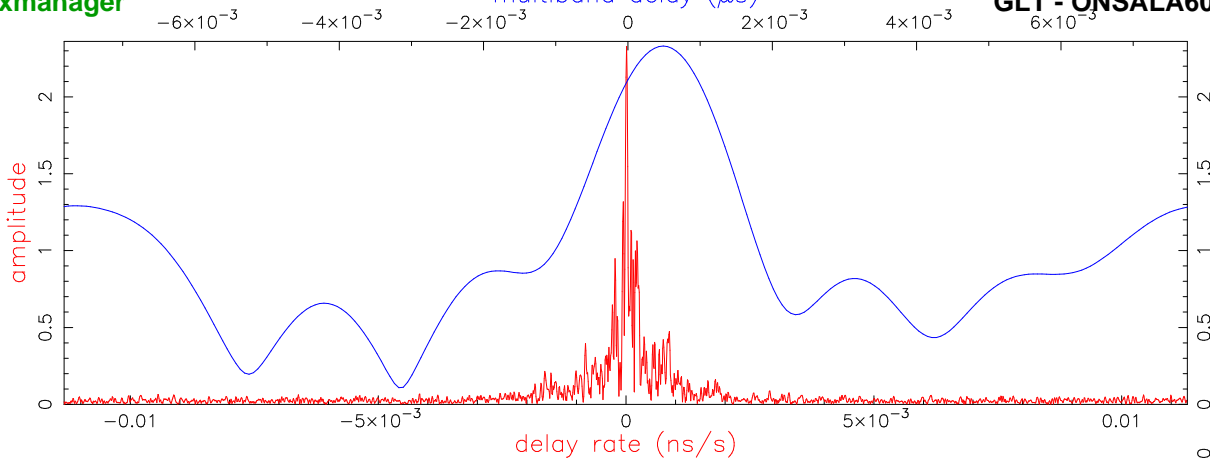
Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	700/0	700/0	700/0	700/0	700/0	700/0	700/0	700/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.08980565957E+03		Apriori delay (usec)	3.08981890870E+03		Resid mbdelay (usec)	2.37588E-03		+/- 1.1E-04
Sband delay (usec)		3.08981334520E+03		Apriori clock (usec)	-4.6175571E+01		Resid sbdelay (usec)	-5.56350E-03		+/- 8.4E-04
Phase delay (usec)		3.08981890904E+03		Apriori clockrate (us/s)	-4.6799999E-07		Resid phdelay (usec)	3.48213E-07		+/- 3.6E-07
Delay rate (us/s)		1.24884063534E+00		Apriori rate (us/s)	1.24884057312E+00		Resid rate (us/s)	6.22192E-08		+/- 1.7E-09
Total phase (deg)		297.0		Apriori accel (us/s/s)	-4.19932789508E-05		Resid phase (deg)	10.8		+/- 11.1

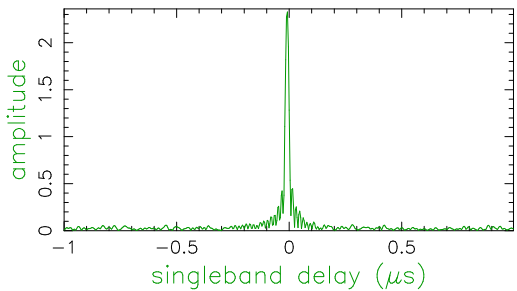
ph/seg (deg) 73.1 26.6 Search (2048X32) 0.192 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 122.1 46.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 78.3 15.7 Inc. seg. avg. 0.382 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.8 27.4 Inc. frq. avg. 0.253 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 58.7 el 54.6 pa -94.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9745.488 -5088.659 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/fX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/fX.W.96.1W55K2

multiband delay (μ s)

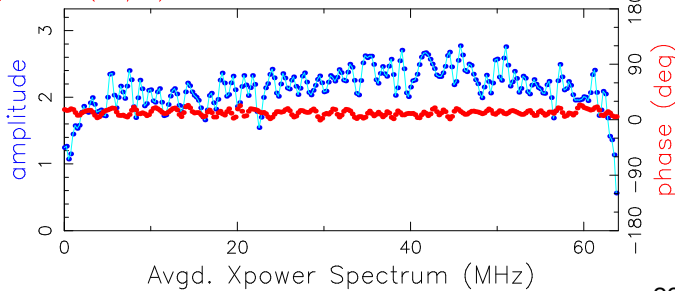


Fringe quality 2

SNR 122.5
Int time 359.894
Amp 2.361
Phase -101.3
PFD 0.0e+00
Delays (us)
SBD -0.009308
MBD 0.000443
Fringe rate (Hz)
0.000545
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

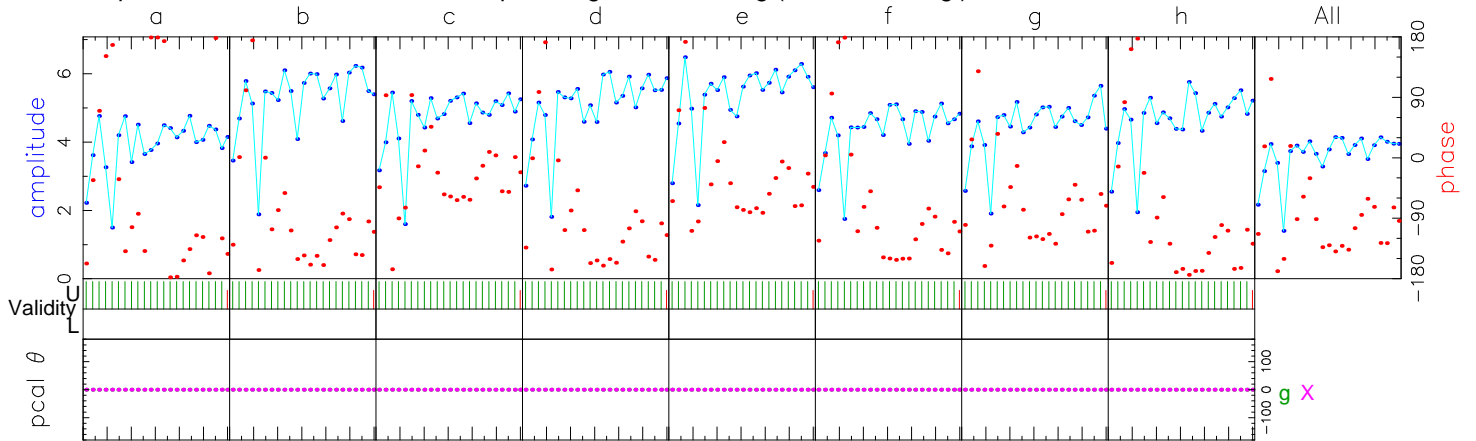


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134456
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-148.8	-119.5	-27.5	-121.7	-47.4	-117.1	-83.3	-137.3	Phase	-101.3
	2.5	3.4	3.0	3.2	3.5	2.8	2.8	3.0	Ampl.	3.0
	256.6	254.6	254.1	254.0	254.2	253.9	254.2	254.6	Sbd box	254.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.19737723392E+03		Apriori delay (usec)		3.19739241614E+03		Resid mbdelay (usec)		4.42771E-04	+/- 8.9E-06
Sband delay (usec)	3.19738310814E+03		Apriori clock (usec)		-5.5976570E+01		Resid sbdelay (usec)		-9.30800E-03	+/- 7.0E-05
Phase delay (usec)	3.19739241288E+03		Apriori clockrate (us/s)		-4.6799999E-07		Resid phdelay (usec)		-3.26553E-06	+/- 3.0E-08
Delay rate (us/s)	6.24996737665E-01		Apriori rate (us/s)		6.24996731341E-01		Resid rate (us/s)		6.32388E-09	+/- 1.5E-10
Total phase (deg)	160.3		Apriori accel (us/s/s)		-7.36369389701E-06		Resid phase (deg)		-101.3	+/- 0.9

	RMS	Theor.	Amplitude	2.361 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.6	2.2	Search (2048X32)	2.288	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	60.2	3.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	46.9	1.3	Inc. seg. avg.	3.625	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	31.0	2.3	Inc. frq. avg.	3.029	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

g: az 171.0 el 55.7 pa -2.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -4854.204 377.341 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/gX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/gX.W.176.1W55K2

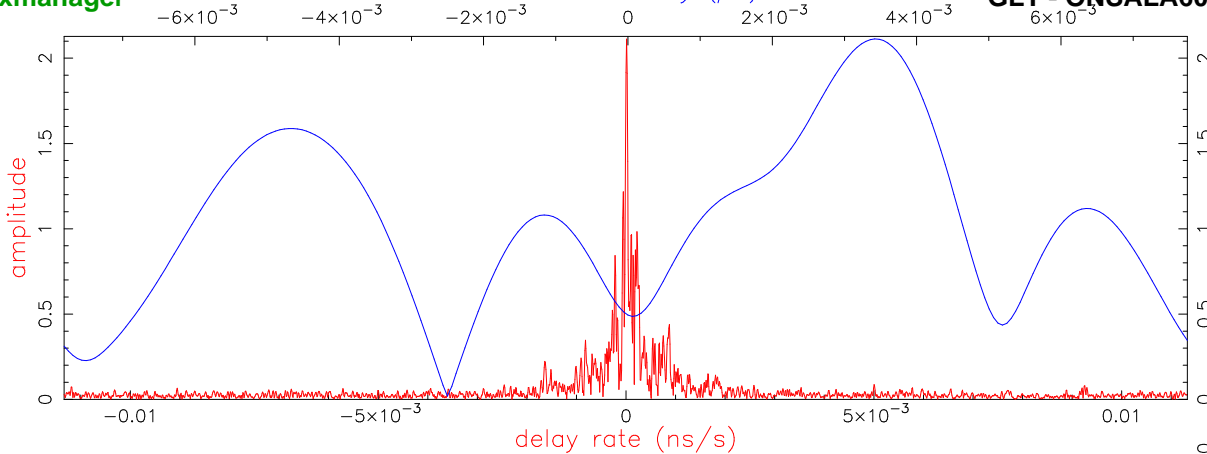
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, gX

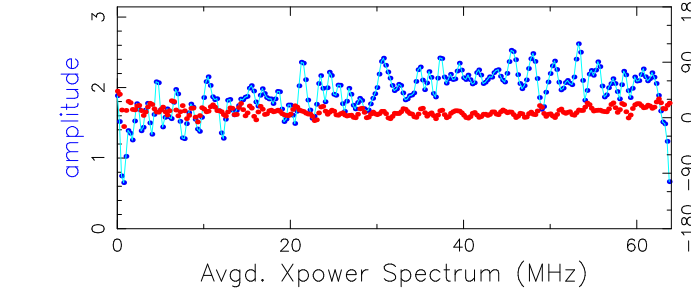
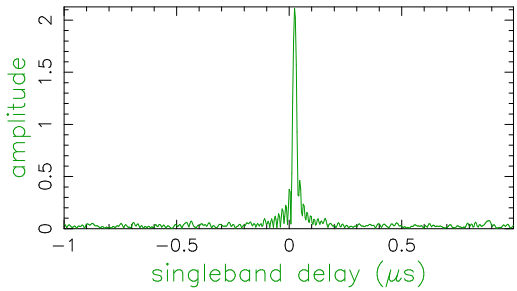
GLT - ONSALA60, fgroup W, pol RR

multiband delay (μ s)



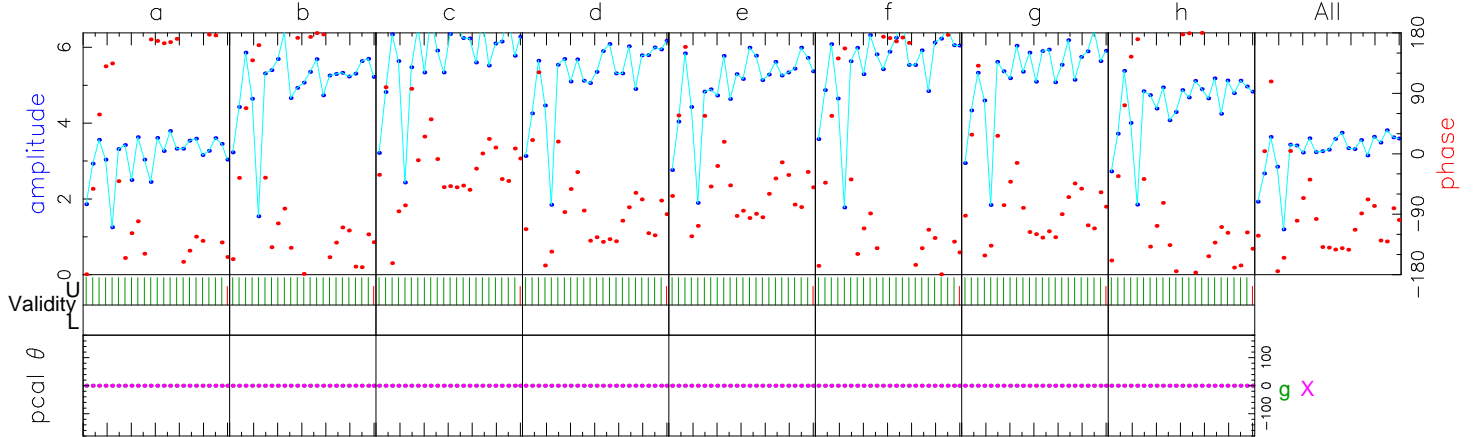
Fringe quality 1

SNR 110.4
 Int time 359.894
 Amp 2.128
 Phase -106.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.024532
 MBD 0.003472
 Fringe rate (Hz)
 0.000480
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134500
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-160.5	-145.5	-17.9	-95.7	-56.6	-155.7	-84.4	-146.3	Phase	-106.8
	2.0	3.2	3.7	3.4	3.2	3.6	3.4	2.9	Ampl.	3.2
	264.9	263.9	263.2	262.7	262.5	263.0	263.0	263.3	Sbd box	263.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.19741151268E+03		Apriori delay (usec)		3.19739241614E+03		Resid mbdelay (usec)		3.47153E-03	+/- 9.8E-06
Sband delay (usec)	3.19741694789E+03		Apriori clock (usec)		-5.5976570E+01		Resid sbdelay (usec)		2.45318E-02	+/- 7.8E-05
Phase delay (usec)	3.19739241270E+03		Apriori clockrate (us/s)		-4.6799999E-07		Resid phdelay (usec)		-3.44320E-06	+/- 3.3E-08
Delay rate (us/s)	6.24996736913E-01		Apriori rate (us/s)		6.24996731341E-01		Resid rate (us/s)		5.57139E-09	+/- 1.6E-10
Total phase (deg)	154.8		Apriori accel (us/s/s)		-7.36369389701E-06		Resid phase (deg)		-106.8	+/- 1.0

	RMS	Theor.	Amplitude	2.128 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	55.4	2.5	Search (2048X32)	2.062	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	59.2	4.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	56.8	1.5	Inc. seg. avg.	3.235	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	54.8	2.6	Inc. frq. avg.	3.181	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	
g: az 171.0 el 55.7 pa -2.8	X: az 284.9 el 42.8 pa 44.6		u,v (fr/asec) -4854.204 377.341		simultaneous interpolator		

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/gX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/gX.W.197.1W55K2

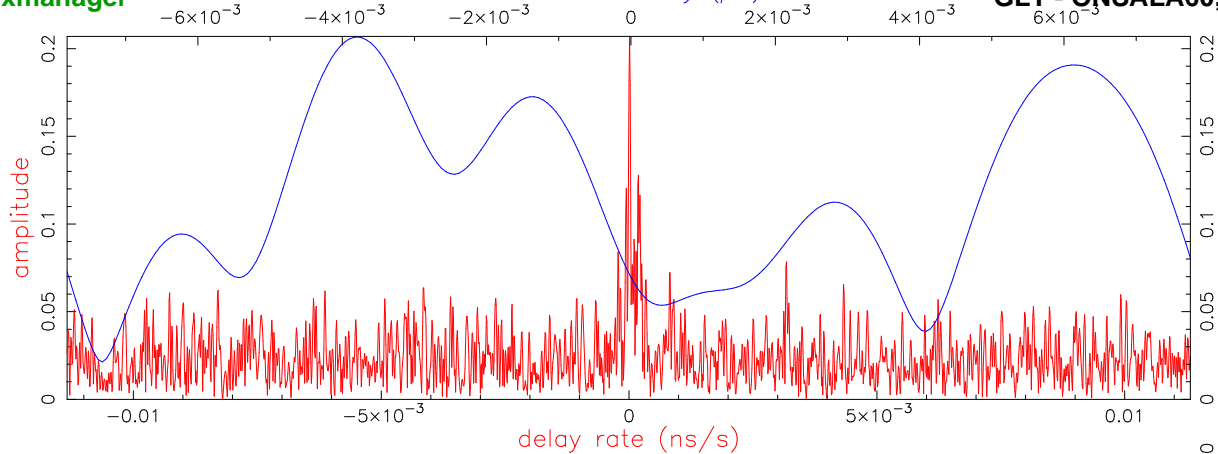
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, gX

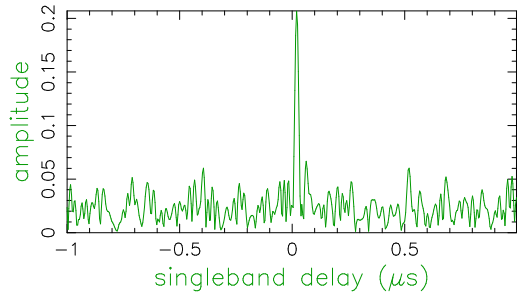
GLT - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

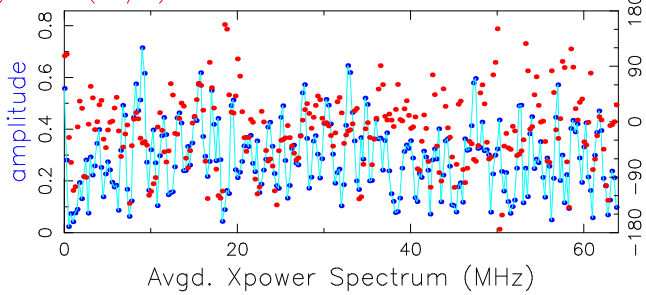


Fringe quality 9

SNR 10.7
 Int time 359.894
 Amp 0.207
 Phase -95.4
 PFD 3.1e-18
 Delays (us)
 SBD 0.020096
 MBD -0.003782
 Fringe rate (Hz)
 0.000706
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

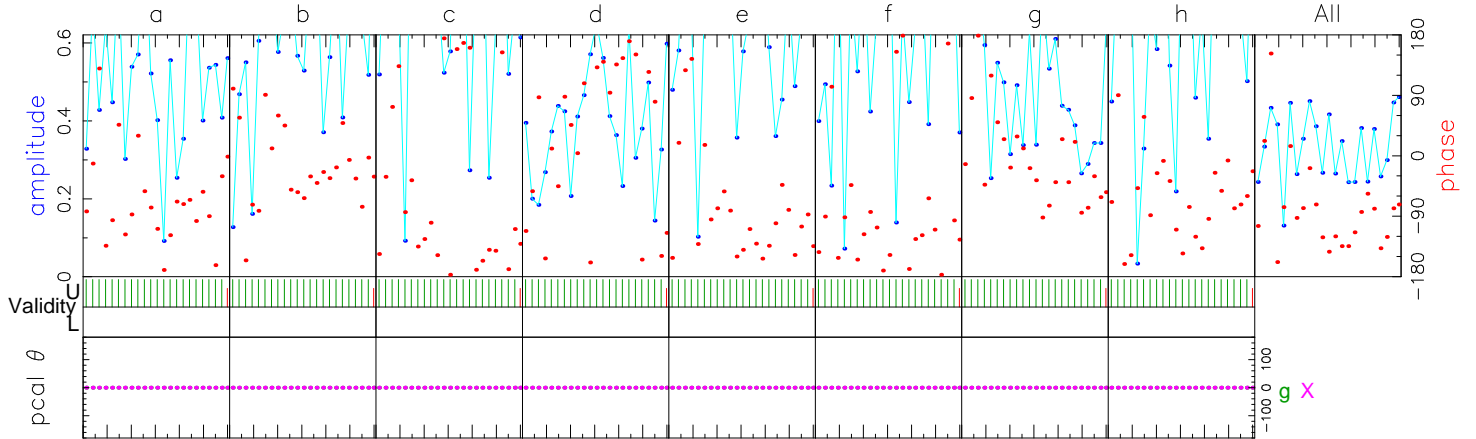


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134504
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-73.0	-18.9	-155.4	147.6	-109.5	-132.6	-19.7	-71.4	Phase	-95.4
	0.3	0.4	0.4	0.2	0.4	0.5	0.3	0.4	Ampl.	0.3
	262.9	262.6	262.3	307.3	261.4	261.7	261.2	262.1	Sbd box	262.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.19741988388E+03		Apriori delay (usec)		3.19739241614E+03		Resid mbdelay (usec)		-3.78226E-03	+/- 1.0E-04
Sband delay (usec)	3.19741251239E+03		Apriori clock (usec)		-5.5976570E+01		Resid sbdelay (usec)		2.00962E-02	+/- 8.0E-04
Phase delay (usec)	3.19739241307E+03		Apriori clockrate (us/s)		-4.6799999E-07		Resid phdelay (usec)		-3.07734E-06	+/- 3.4E-07
Delay rate (us/s)	6.24996739539E-01		Apriori rate (us/s)		6.24996731341E-01		Resid rate (us/s)		8.19730E-09	+/- 1.7E-09
Total phase (deg)	166.2		Apriori accel (us/s/s)		-7.36369389701E-06		Resid phase (deg)		-95.4	+/- 10.7

ph/seg (deg) 52.1 25.6 Search (2048X32) 0.203 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 73.8 44.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 72.5 15.1 Inc. seg. avg. 0.302 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 79.3 26.3 Inc. frq. avg. 0.330 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 171.0 el 55.7 pa -2.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -4854.204 377.341 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/gX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/gX.W.216.1W55K2

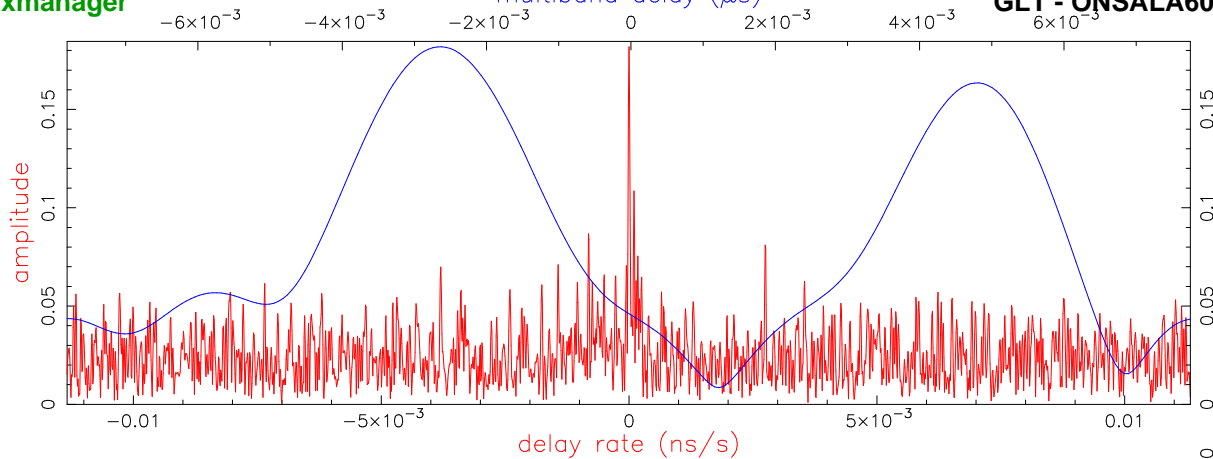
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, gX

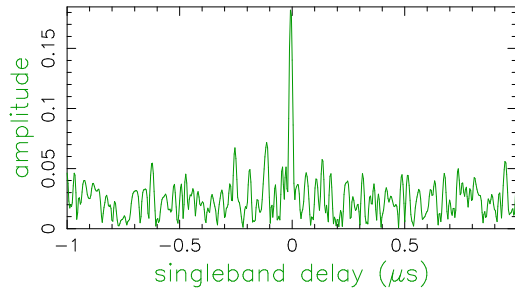
GLT - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

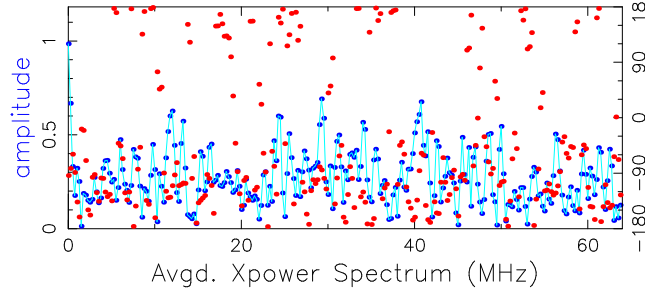


Fringe quality 9

SNR 9.6
 Int time 359.894
 Amp 0.185
 Phase -167.1
 PFD 4.0e-13
 Delays (us)
 SBD -0.006339
 MBD -0.002646
 Fringe rate (Hz)
 0.000022
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

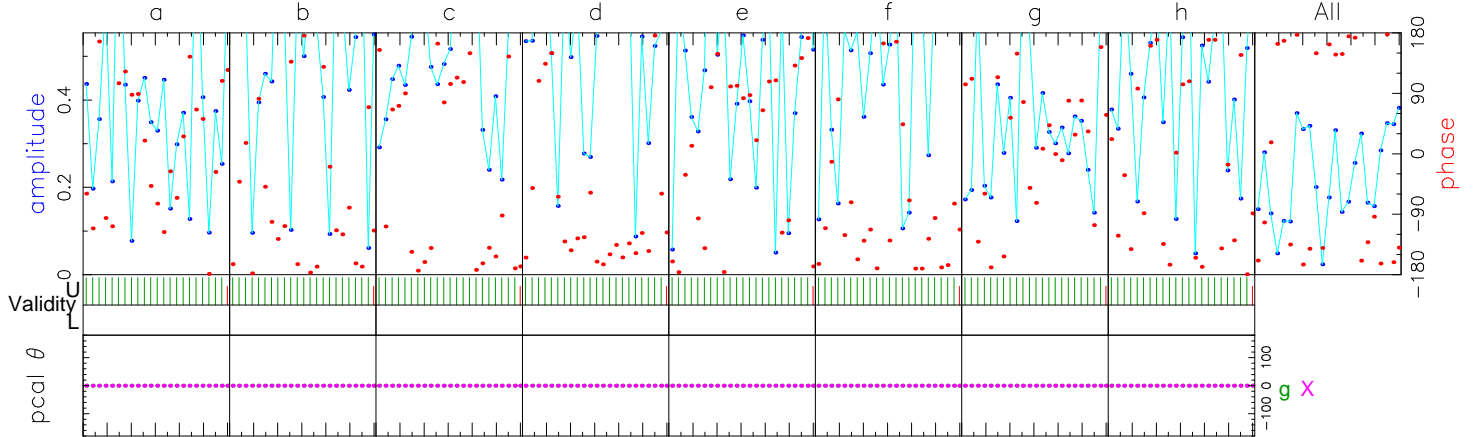


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134507
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	54.6	-137.0	161.4	-146.3	140.7	-137.5	57.5	-167.1	Phase	-167.1
	0.1	0.3	0.4	0.4	0.2	0.4	0.1	0.2	Ampl.	0.2
	192.7	255.9	255.6	254.8	255.6	255.4	429.6	256.4	Sbd box	255.4
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.19738977058E+03		Apriori delay (usec)		3.19739241614E+03		Resid mbdelay (usec)		-2.64556E-03	+/- 1.1E-04
Sband delay (usec)	3.19738607714E+03		Apriori clock (usec)		-5.5976570E+01		Resid sbdelay (usec)		-6.33900E-03	+/- 9.0E-04
Phase delay (usec)	3.19739241075E+03		Apriori clockrate (us/s)		-4.6799999E-07		Resid phdelay (usec)		-5.38988E-06	+/- 3.9E-07
Delay rate (us/s)	6.24996731595E-01		Apriori rate (us/s)		6.24996731341E-01		Resid rate (us/s)		2.53664E-10	+/- 1.9E-09
Total phase (deg)			94.5		Apriori accel (us/s/s)		-7.36369389701E-06		Resid phase (deg)	-167.1 +/- 12.0

	RMS	Theor.	Amplitude	0.185 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	49.0	28.7	Search (2048X32)	0.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.5	50.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	85.0	16.9	Inc. seg. avg.	0.199	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	71.3	29.5	Inc. frq. avg.	0.238	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

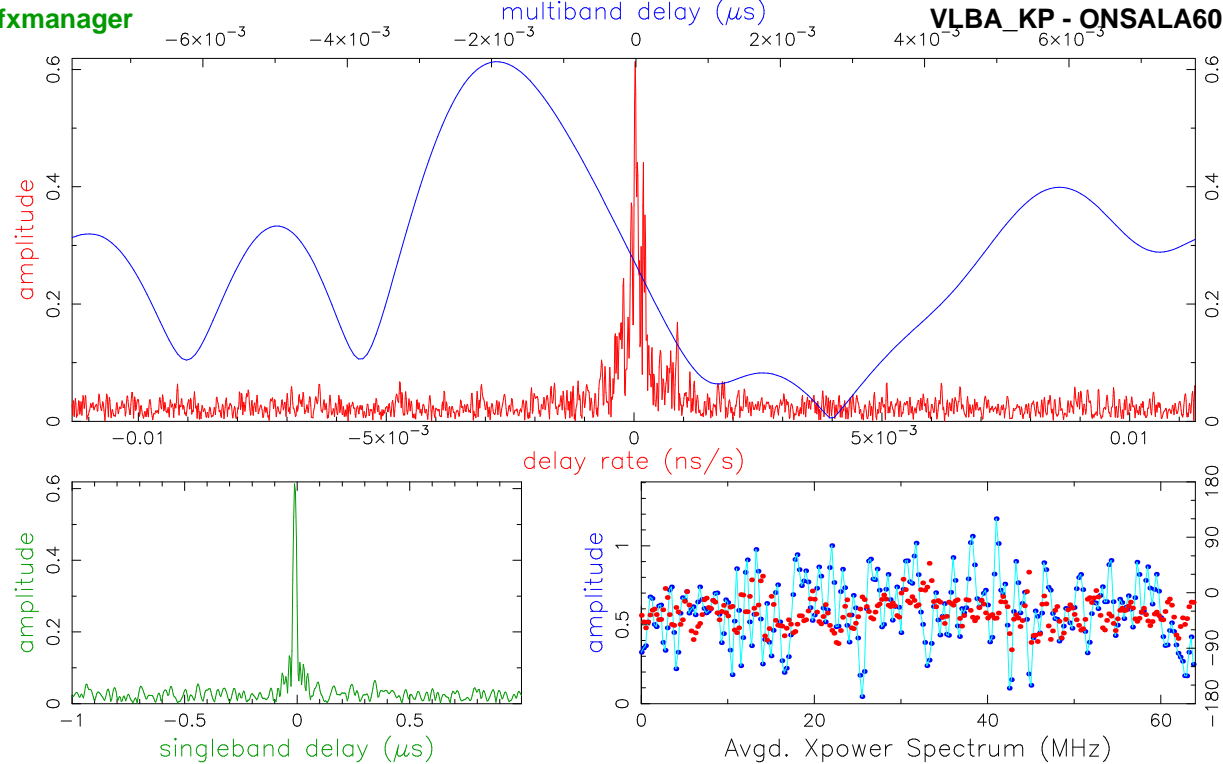
g: az 171.0 el 55.7 pa -2.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -4854.204 377.341 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/gX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/gX.W.236.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, kX

VLBA_KP - ONSALA60, fgroup W, pol LL

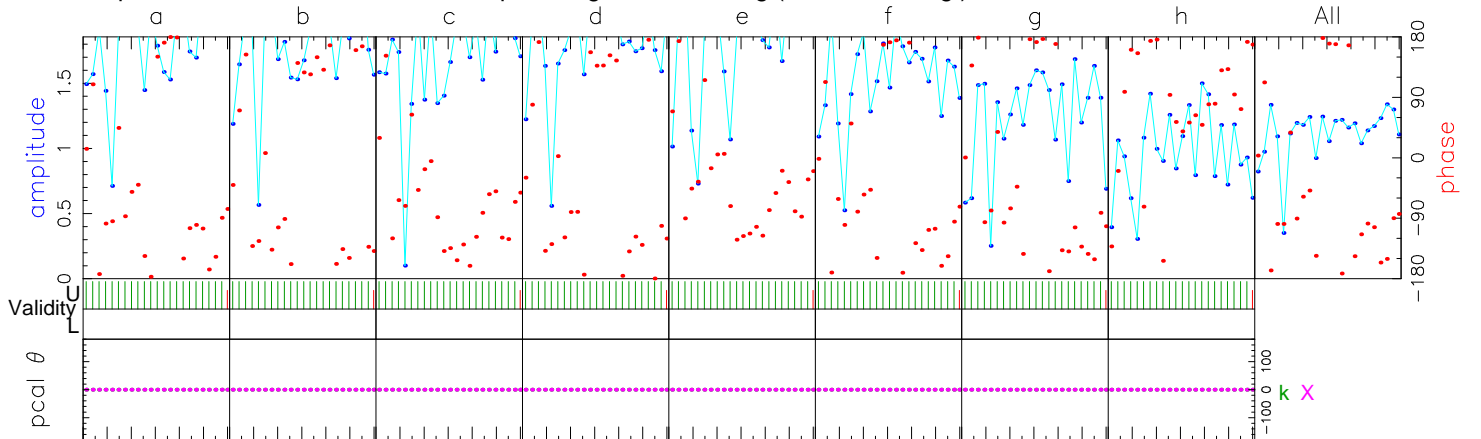


Fringe quality 3

SNR 32.1
 Int time 359.894
 Amp 0.619
 Phase -132.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.010507
 MBD -0.001903
 Fringe rate (Hz)
 0.001883
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134456
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-131.2	-174.2	-91.5	-162.6	-66.9	-135.0	-137.2	99.2	Phase	-132.3
	0.9	1.0	1.0	1.0	1.1	0.8	0.8	0.5	Ampl.	0.9
	253.9	253.8	254.1	253.8	253.8	253.9	252.8	251.7	Sbd box	254.3
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.95480051271E+03		Apriori delay (usec)		1.95481804114E+03		Resid mbdelay (usec)		-1.90343E-03	+/- 3.4E-05
Sband delay (usec)	1.95480753389E+03		Apriori clock (usec)		-5.6086414E+01		Resid sbdelay (usec)		-1.05073E-02	+/- 2.7E-04
Phase delay (usec)	1.95481803687E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-4.26774E-06	+/- 1.2E-07
Delay rate (us/s)	1.33159900270E+00		Apriori rate (us/s)		1.33159898085E+00		Resid rate (us/s)		2.18540E-08	+/- 5.5E-10
Total phase (deg)			Apriori accel (us/s/s)		-3.45119725621E-05		Resid phase (deg)		-132.3	+/- 3.6

ph/seg (deg) 66.4 8.6 Search (2048X32) 0.613 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 86.8 14.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 64.8 5.0 Inc. seg. avg. 1.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 48.7 8.8 Inc. frq. avg. 0.863 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.5 el 49.6 pa -88.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -10375.646 -4417.102 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/kX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/kX.W.173.1W55K2

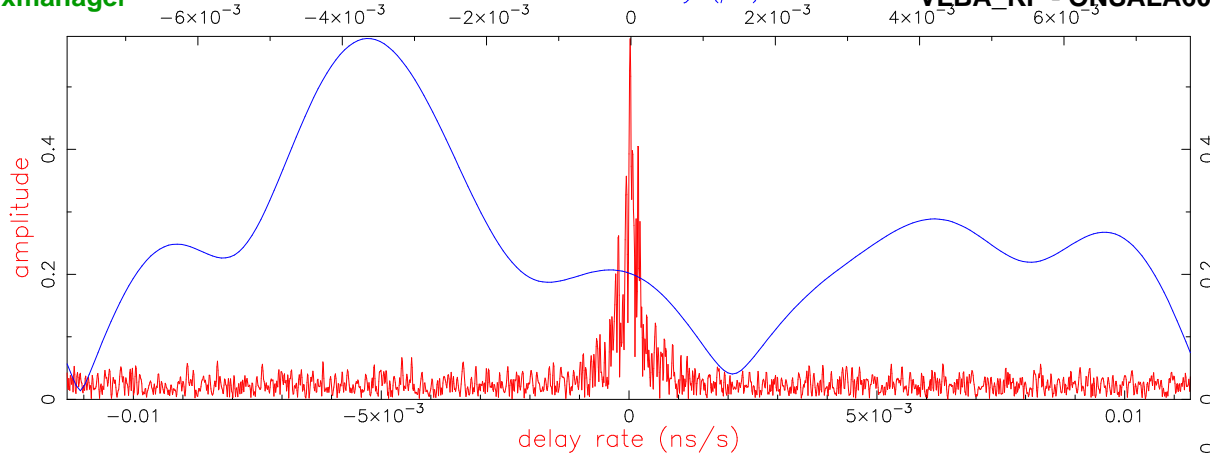
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, kX

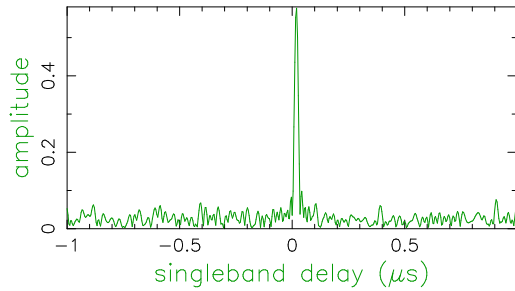
VLBA_KP - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

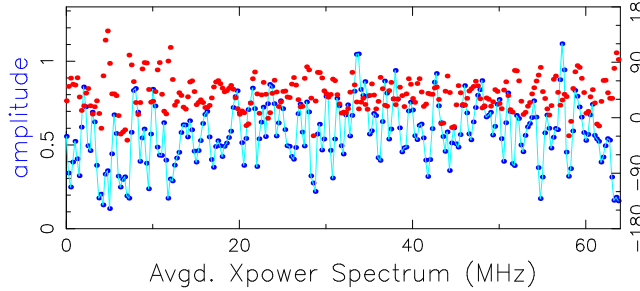


Fringe quality 3

SNR 30.1
 Int time 359.894
 Amp 0.581
 Phase -68.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.018507
 MBD -0.003681
 Fringe rate (Hz)
 0.002087
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

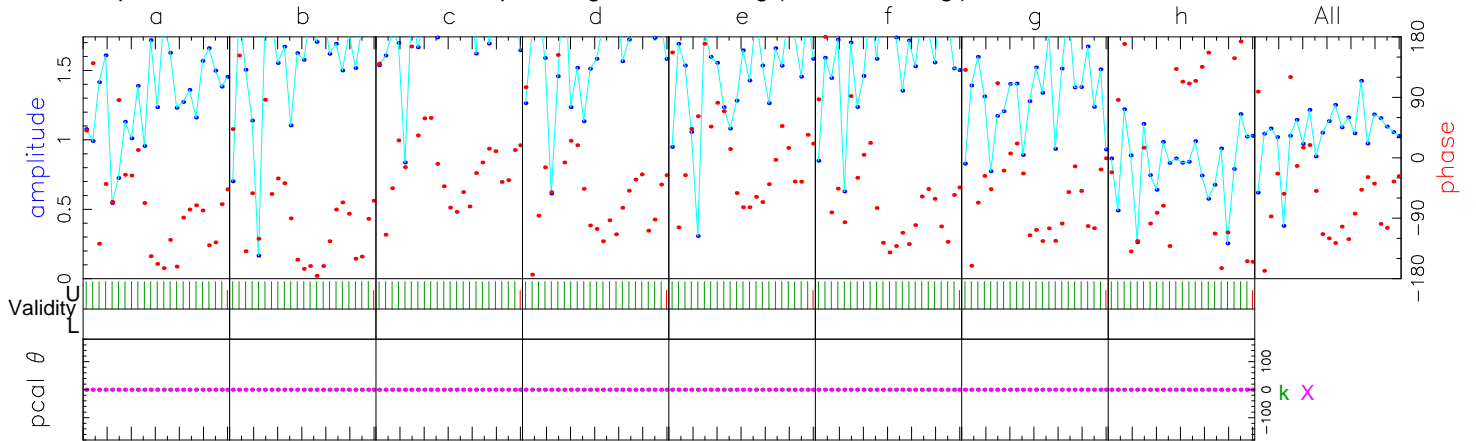


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134500
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-96.6	-116.5	-17.4	-67.5	-11.1	-85.0	-66.4	-176.3	Phase	-68.9
	0.7	0.8	1.1	0.9	0.7	0.9	0.7	0.3	Ampl.	0.8
	261.5	261.9	261.9	261.3	260.6	261.7	260.7	259.2	Sbd box	261.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.95482998518E+03		Apriori delay (usec)		1.95481804114E+03		Resid mbdelay (usec)		-3.68096E-03	+/- 3.6E-05
Sband delay (usec)	1.95483654764E+03		Apriori clock (usec)		-5.6086414E+01		Resid sbdelay (usec)		1.85065E-02	+/- 2.9E-04
Phase delay (usec)	1.95481803891E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-2.22286E-06	+/- 1.2E-07
Delay rate (us/s)	1.33159900508E+00		Apriori rate (us/s)		1.33159898085E+00		Resid rate (us/s)		-2.42298E-08	+/- 5.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-3.45119725621E-05		Resid phase (deg)		-68.9	+/- 3.8

	RMS	Theor.	Amplitude	0.581 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.8	9.1	Search (2048X32)	0.565	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	87.5	15.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	58.9	5.4	Inc. seg. avg.	1.033	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	47.5	9.4	Inc. frq. avg.	0.768	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 60.5 el 49.6 pa -88.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -10375.646 -4417.102 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/kX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/kX.W.193.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

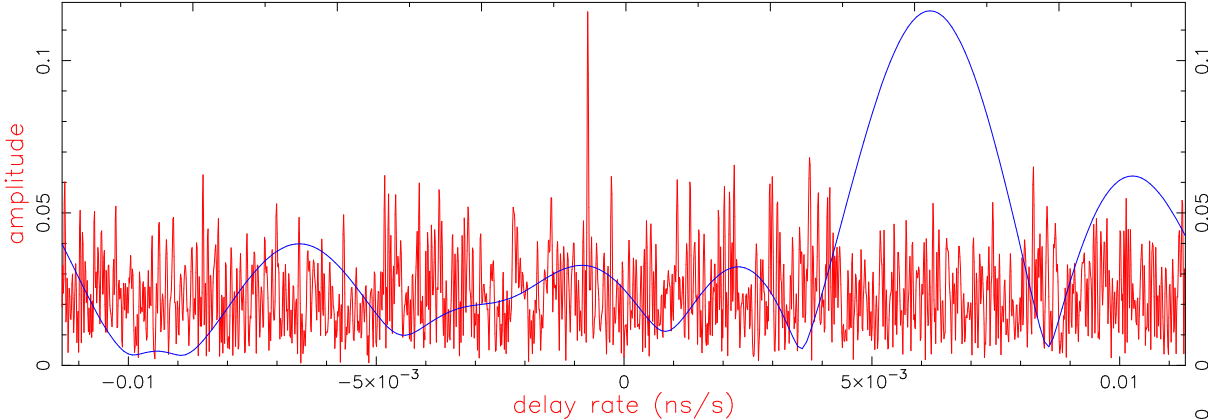
BLLAC.1W55K2, No0231, kX

VLBA_KP - ONSALA60, fgroup W, pol LR

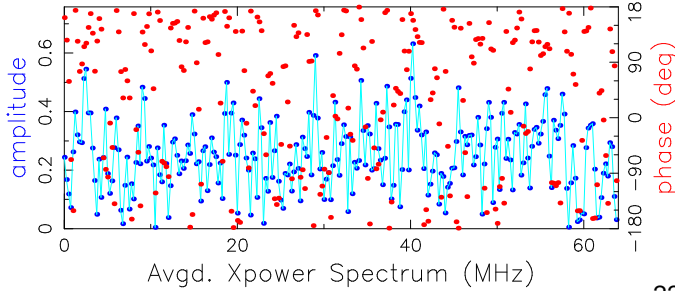
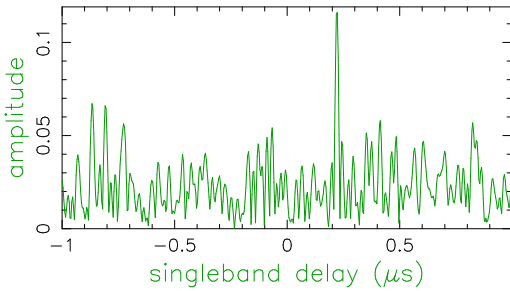
multiband delay (μ s)

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

Fringe quality 0

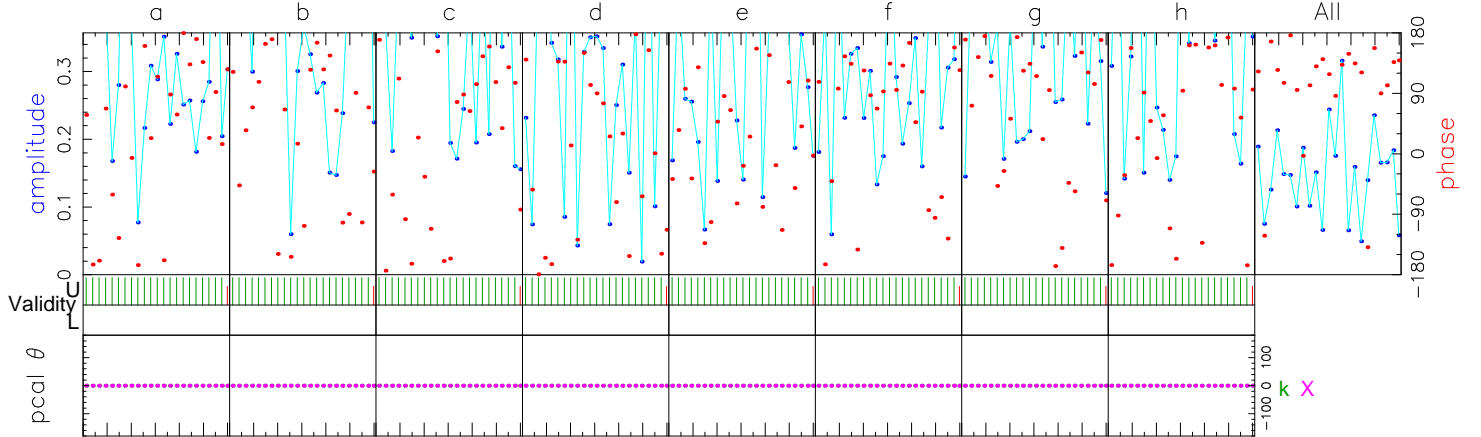


SNR 6.2
 Int time 359.894
 Amp 0.119
 Phase 127.3
 PFD 1.7e-01
 Delays (us)
 SBD 0.220837
 MBD 0.004140
 Fringe rate (Hz)
 -0.063348
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134503
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	109.4	118.8	144.9	157.7	57.8	141.0	122.4	135.5	Phase	127.3
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	35.2	401.8	213.7	234.2	474.9	353.8	50.1	454.2	Sbd box	313.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.95504093117E+03		Apriori delay (usec)		1.95481804114E+03		Resid mbdelay (usec)		4.14004E-03	+/- 1.8E-04
Sband delay (usec)	1.95503887764E+03		Apriori clock (usec)		-5.6086414E+01		Resid sbdelay (usec)		2.20837E-01	+/- 1.4E-03
Phase delay (usec)	1.95481804524E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		4.10516E-06	+/- 6.0E-07
Delay rate (us/s)	1.33159824544E+00		Apriori rate (us/s)		1.33159898085E+00		Resid rate (us/s)		-7.35408E-07	+/- 2.9E-09
Total phase (deg)	150.2		Apriori accel (us/s/s)		-3.45119725621E-05		Resid phase (deg)		127.3	+/- 18.6

	RMS	Theor.	Amplitude	0.119 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	46.9	44.6	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	60.9	77.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	33.5	26.3	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	19.4	45.9	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

k: az 60.5 el 49.6 pa -88.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -10375.646 -4417.102 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/kX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/kX.W.213.1W55K2

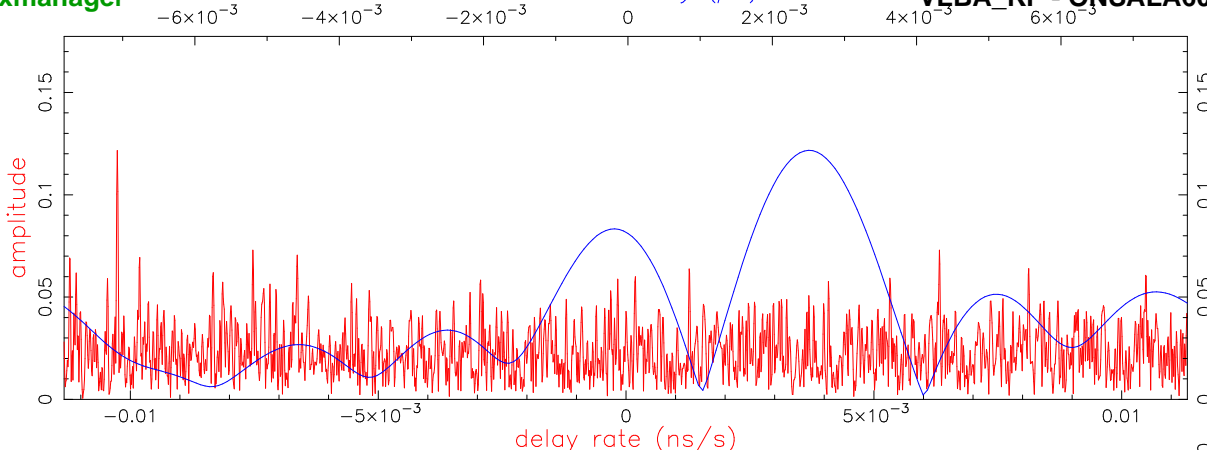
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

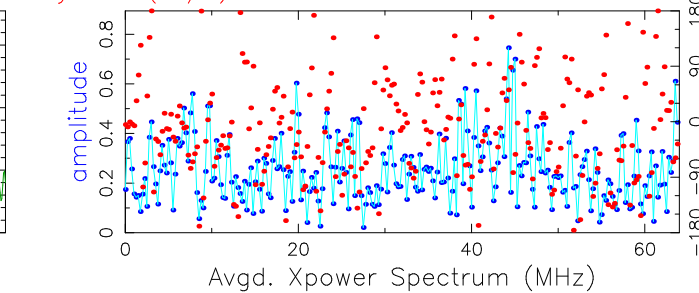
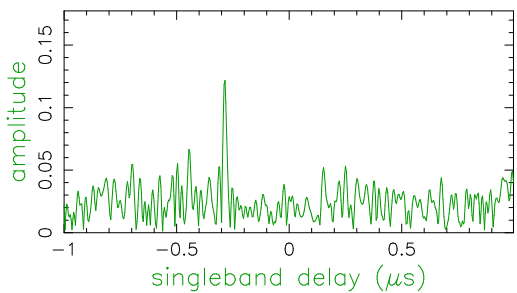
BLLAC.1W55K2, No0231, kX

VLBA_KP - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

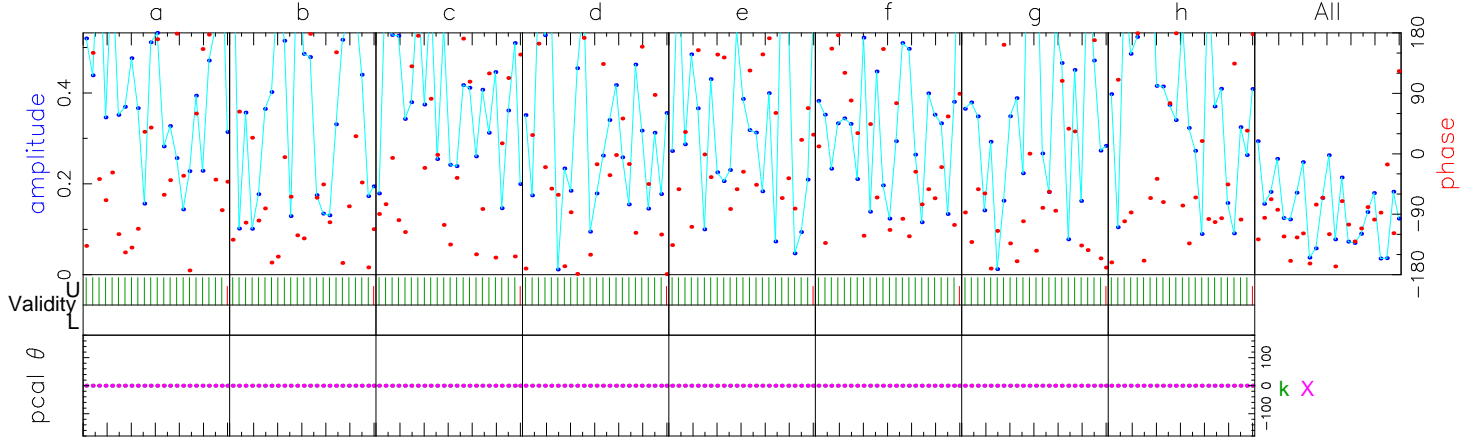


Fringe quality 0
 SNR 6.4
 Int time 359.894
 Amp 0.177
 Phase -106.2
 PFD 4.3e-02
 Delays (us)
 SBD -0.286608
 MBD 0.002489
 Fringe rate (Hz)
 -0.885227
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134507
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-93.7	-114.1	-137.8	-142.4	-53.0	-84.9	-121.3	-104.6	Phase	-106.2
	0.2	0.3	0.1	0.1	0.2	0.1	0.2	0.3	Ampl.	0.2
	428.8	184.3	43.1	441.3	135.8	511.6	233.5	183.1	Sbd box	183.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.95452365490E+03		Apriori delay (usec)		1.95481804114E+03		Resid mbdelay (usec)		2.48876E-03	+/- 1.7E-04
Sband delay (usec)	1.95453143314E+03		Apriori clock (usec)		-5.6086414E+01		Resid sbdelay (usec)		-2.86608E-01	+/- 1.3E-03
Phase delay (usec)	1.95481803771E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-3.42479E-06	+/- 5.8E-07
Delay rate (us/s)	1.33158870424E+00		Apriori rate (us/s)		1.33159898085E+00		Resid rate (us/s)		-1.02766E-05	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.45119725621E-05		Resid phase (deg)		-106.2	+/- 17.9

ph/seg (deg) 41.4 43.0 Search (2048X32) 0.177 +/- 0.028 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 64.2 75.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.7 25.3 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.8 44.2 Inc. frq. avg. 0.174 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 60.5 el 49.6 pa -88.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -10375.646 -4417.102 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/kX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/kX.W.235.1W55K2

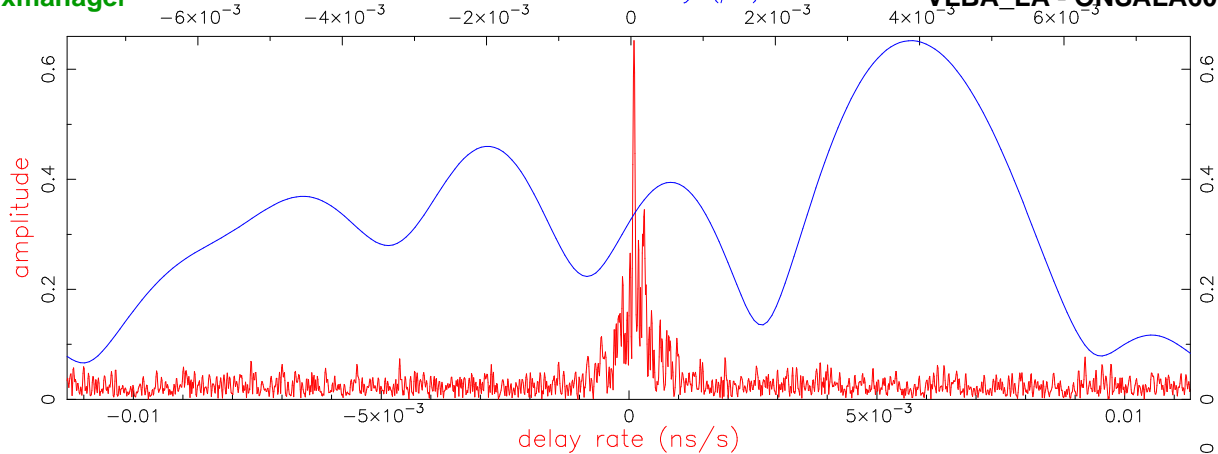
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, IX

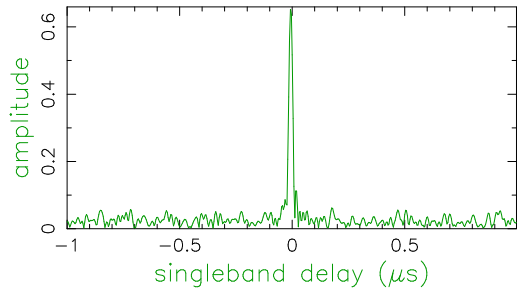
VLBA_LA - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



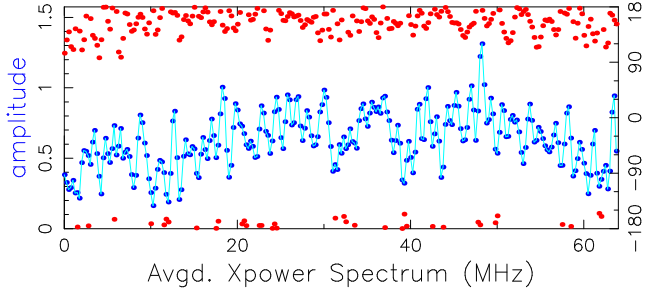
Fringe quality 3

SNR 34.2
 Int time 359.894
 Amp 0.660
 Phase 41.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.006360
 MBD 0.003856
 Fringe rate (Hz)
 0.008579
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



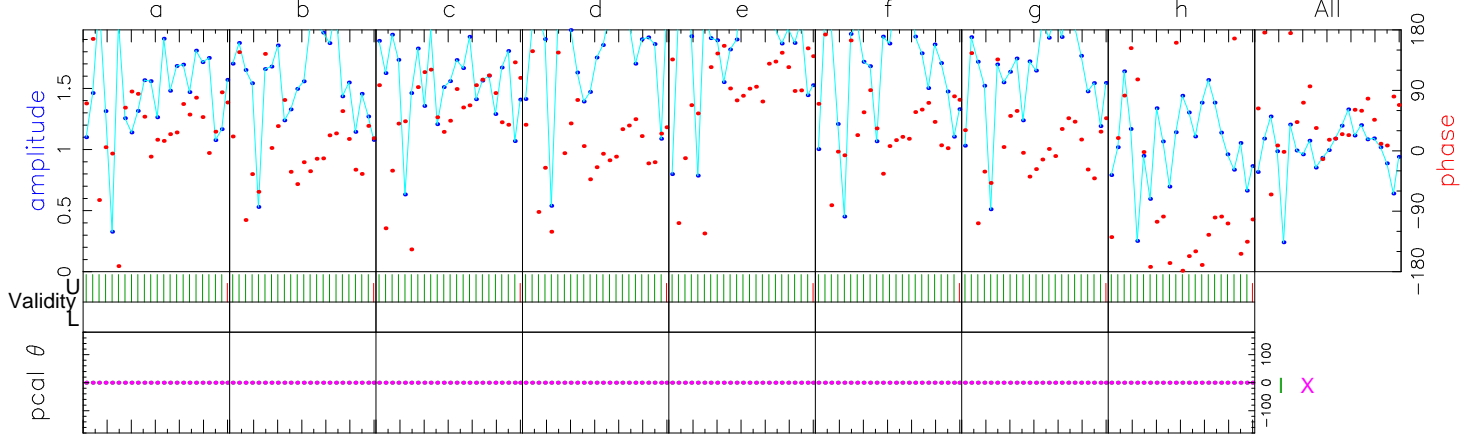
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134511
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		3.22633991985E+03				3.22635168931E+03			3.85553E-03	+/- 3.2E-05
Sband delay (usec)		3.22634532931E+03				-5.9002266E+01			-6.36000E-03	+/- 2.5E-04
Phase delay (usec)		3.22635169066E+03				-8.1400002E-07			1.34509E-06	+/- 1.1E-07
Delay rate (us/s)		1.23938015494E+00				1.23938005535E+00			9.95977E-08	+/- 5.2E-10
Total phase (deg)			227.9			-3.70833102677E-05			41.7	+/- 3.3
ph/seg (deg)	53.7	8.0		0.650						
amp/seg (%)	61.8	14.0		0.000						
ph/frq (deg)	80.7	4.7		0.991						
amp/frq (%)	56.1	8.3		0.984						
I: az 65.3 el 55.3 pa -86.2										
X: az 284.9 el 42.8 pa 44.6										
u,v (fr/asec)										
Control file: cf_1234_gmva										
Input file: /Exps/c211a/v2/1234/No0231/IX..1W55K2										
Output file: /Exps/c211a/v2/1234/No0231/IX.W.244.1W55K2										

simultaneous interpolator

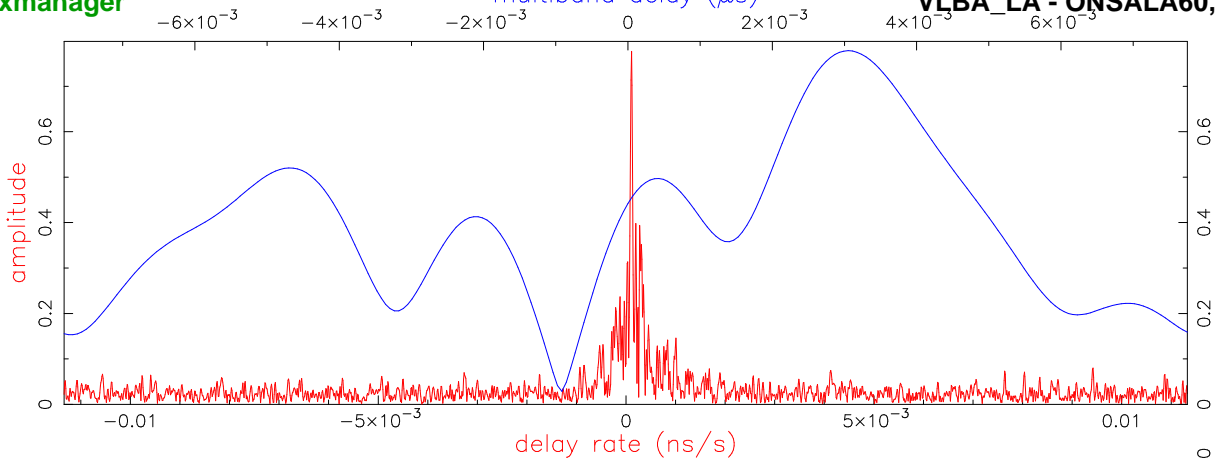
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, IX

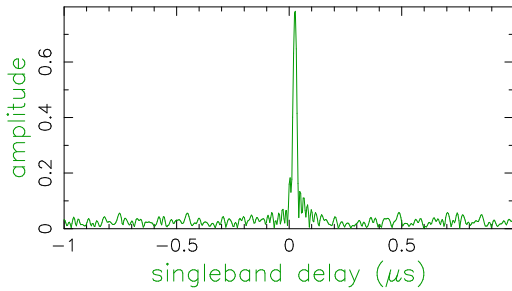
VLBA_LA - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

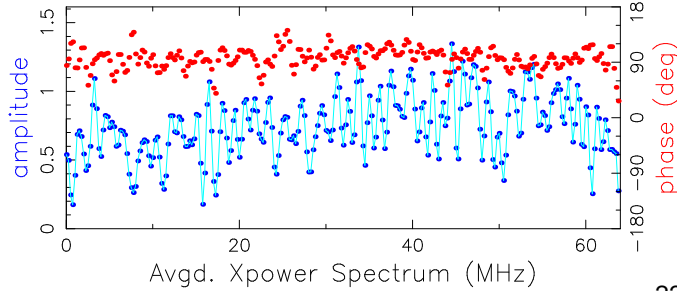


Fringe quality 3

SNR 41.4
 Int time 359.894
 Amp 0.799
 Phase -3.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.025553
 MBD 0.003130
 Fringe rate (Hz) 0.009073
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

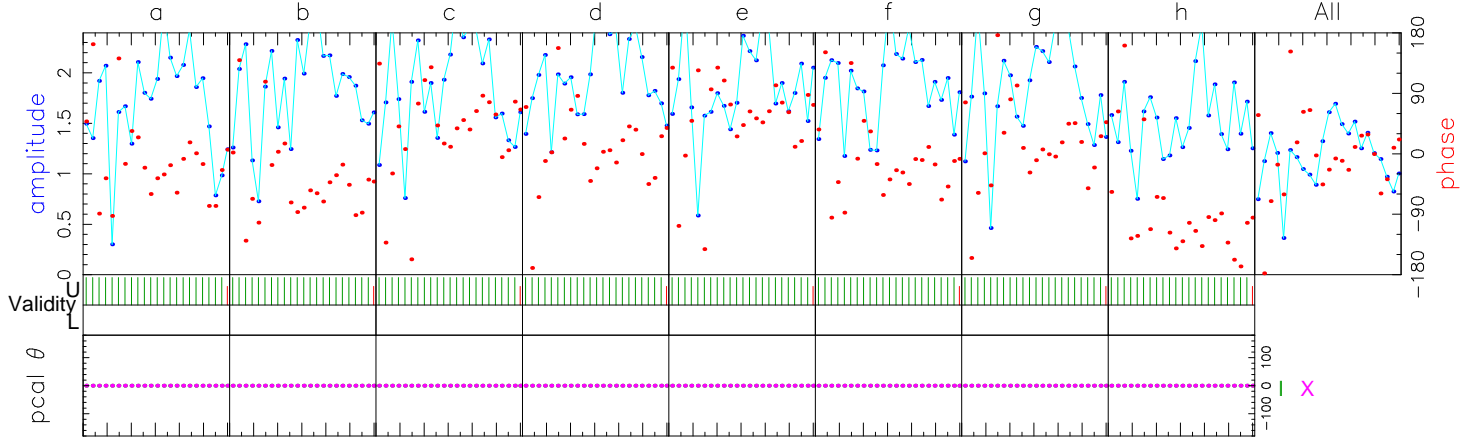


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134515
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

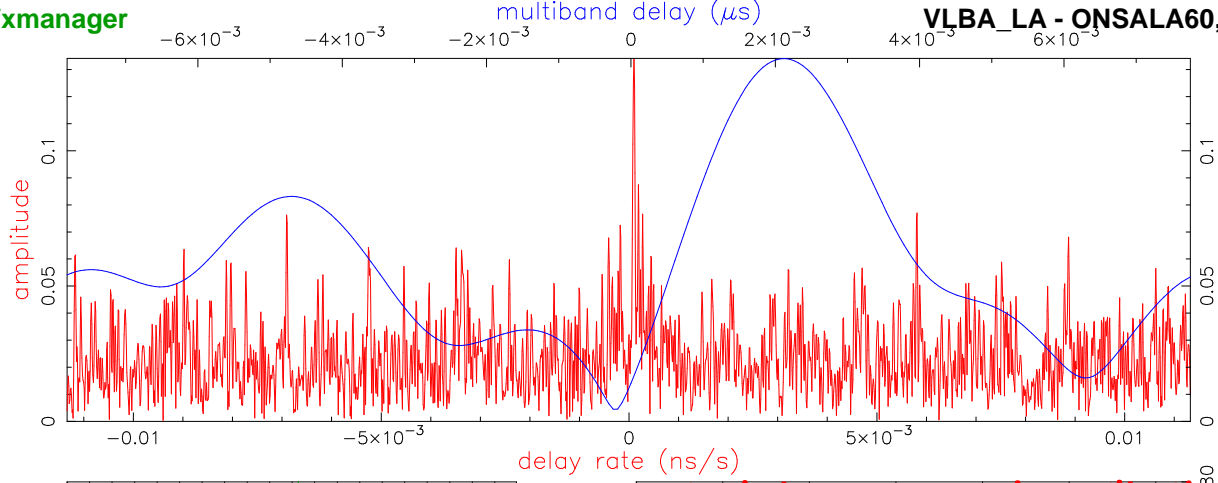


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.8	-53.2	51.8	8.3	62.8	-24.3	12.5	-115.9	Phase	-3.3
	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.0	Ampl.	1.2
	263.2	263.9	263.7	262.9	262.6	263.0	262.6	261.3	Sbd box	263.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.22637044438E+03		Apriori delay (usec)		3.22635168931E+03		Resid mbdelay (usec)		3.13007E-03	+/- 2.6E-05
Sband delay (usec)	3.22637724256E+03		Apriori clock (usec)		-5.9002266E+01		Resid sbdelay (usec)		2.55533E-02	+/- 2.1E-04
Phase delay (usec)	3.22635168921E+03		Apriori clockrate (us/s)		-8.1400002E-07		Resid phdelay (usec)		-1.05481E-02	+/- 8.9E-08
Delay rate (us/s)	1.23938016068E+00		Apriori rate (us/s)		1.23938005535E+00		Resid rate (us/s)		1.05333E-07	+/- 4.3E-10
Total phase (deg)	183.0		Apriori accel (us/s/s)		-3.70833102677E-05		Resid phase (deg)		-3.3	+/- 2.8

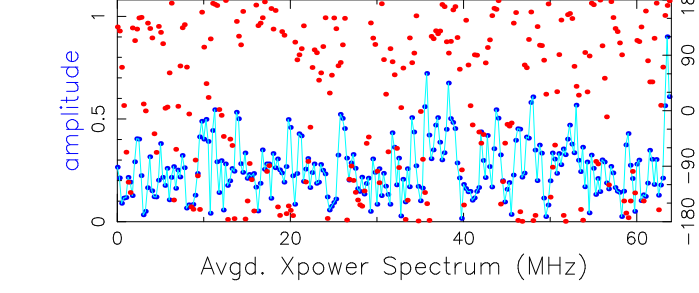
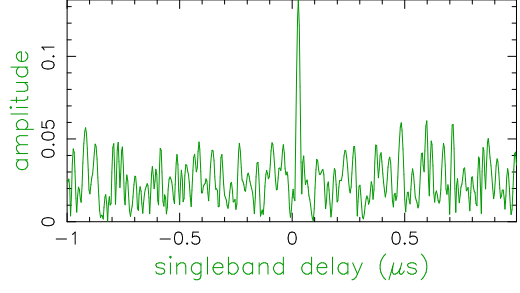
	RMS	Theor.	Amplitude	0.799 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.4	6.6	Search (2048X32)	0.756	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	60.4	11.6	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	62.9	3.9	Inc. seg. avg.	1.170	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.9	6.8	Inc. frq. avg.	1.188	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

I: az 65.3 el 55.3 pa -86.2 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9664.167 -4246.641 simultaneous interpolator

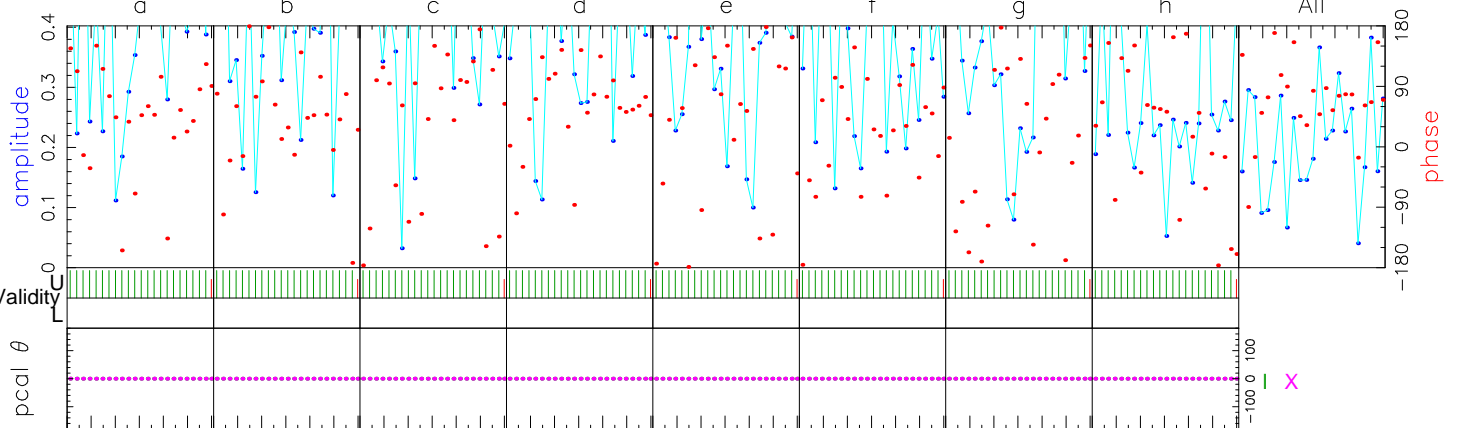
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/IX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/IX.W.263.1W55K2



Fringe quality 0
SNR 7.0
Int time 359.894
Amp 0.134
Phase 75.3
PFD 1.0e-03
Delays (us)
SBD 0.027060
MBD 0.002112
Fringe rate (Hz) 0.008953
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build 2021:286:083752
2021:286:134518
2021:252:122852
RA & Dec (J2000) 22h02m43.291370s
+42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
I	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		3.22638505100E+03				3.22635168931E+03			Resid mbdelay (usec)	2.11169E-03 +/- 1.6E-04		
Sband delay (usec)		3.22637874981E+03				-5.9002266E+01			Resid sbdelay (usec)	2.70605E-02 +/- 1.2E-03		
Phase delay (usec)		3.22635169174E+03				-8.1400002E-07			Resid phdelay (usec)	2.42955E-06 +/- 5.3E-07		
Delay rate (us/s)		1.23938015928E+00				1.23938005535E+00			Resid rate (us/s)	1.03935E-07 +/- 2.6E-09		
Total phase (deg)			261.6			-3.70833102677E-05			Resid phase (deg)	75.3 +/- 16.5		
	RMS	Theor.	Amplitude	0.134 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	57.7	39.5	Search (2048X32)	0.131					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	88.0	68.9	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	43.5	23.3	Inc. seg. avg.	0.169					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	69.1	40.6	Inc. frq. avg.	0.151					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

I: az 65.3 el 55.3 pa -86.2 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9664.167 -4246.641 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/IX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/IX.W.281.1W55K2

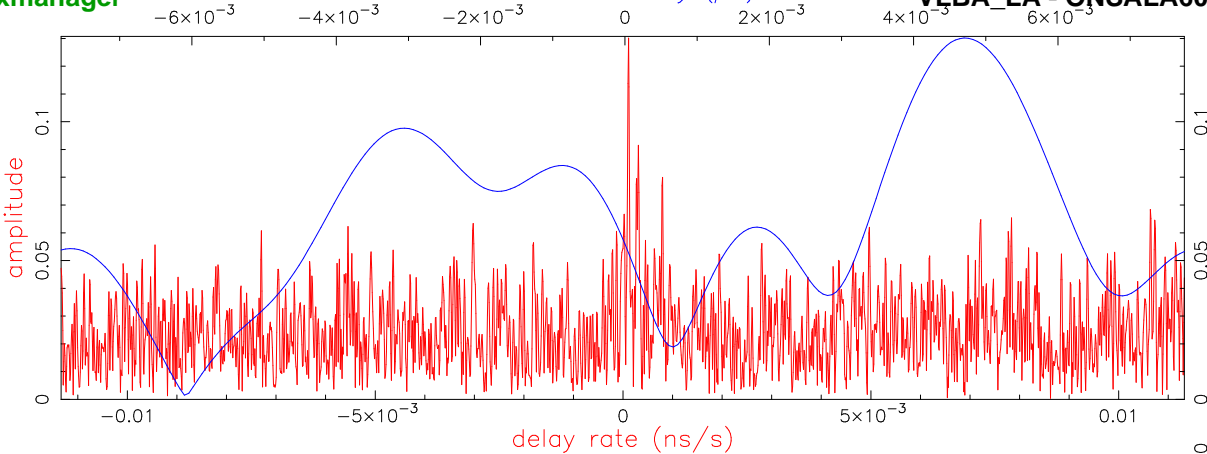
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, IX

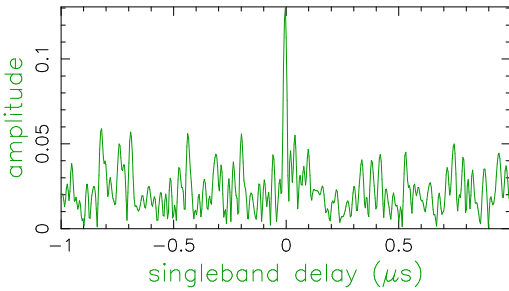
VLBA_LA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

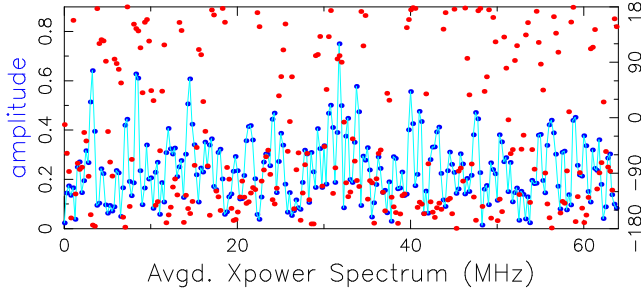


Fringe quality 0

SNR 6.8
 Int time 359.894
 Amp 0.131
 Phase 97.1
 PFD 3.4e-03
 Delays (us)
 SBD -0.004752
 MBD 0.004694
 Fringe rate (Hz)
 0.009449
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

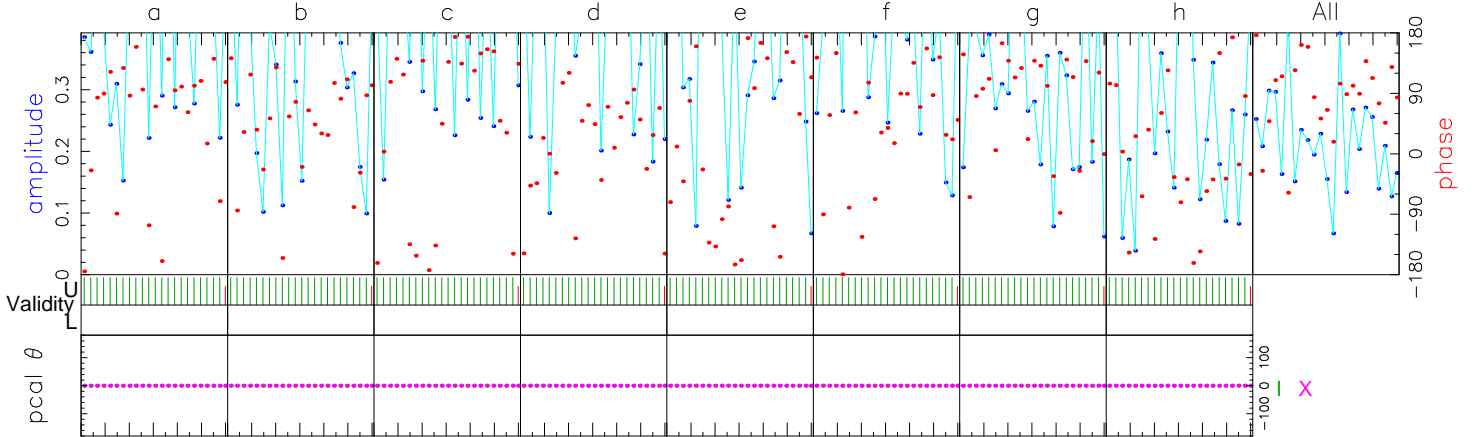


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134522
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	104.0	63.2	144.3	45.0	-174.8	90.6	114.2	-31.0	Phase	97.1
	0.3	0.3	0.3	0.2	0.1	0.1	0.2	0.1	Ampl.	0.2
	255.9	255.2	256.5	255.0	144.9	343.1	66.8	89.7	Sbd box	255.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.22634075815E+03	Apriori delay (usec)	3.22635168931E+03	Resid mbdelay (usec)	4.69384E-03	+/-	1.6E-04
Sband delay (usec)	3.22634693756E+03	Apriori clock (usec)	-5.9002266E+01	Resid sbdelay (usec)	-4.75175E-03	+/-	1.3E-03
Phase delay (usec)	3.22635169244E+03	Apriori clockrate (us/s)	-8.1400002E-07	Resid phdelay (usec)	3.13179E-06	+/-	5.4E-07
Delay rate (us/s)	1.23938016504E+00	Apriori rate (us/s)	1.23938005535E+00	Resid rate (us/s)	1.09690E-07	+/-	2.6E-09
Total phase (deg)	283.4	Apriori accel (us/s/s)	-3.70833102677E-05	Resid phase (deg)	97.1	+/-	16.9

ph/seg (deg)	56.6	RMS	40.5	Theor.	41.7	Amplitude	0.131 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	92.4		70.7	Search (2048X32)	0.128	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	71.5		23.9	Inc. seg. avg.	0.176	Inc. frq. avg.	0.167	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	73.3		41.7					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

I: az 65.3 el 55.3 pa -86.2 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -9664.167 -4246.641 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/IX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/IX.W.301.1W55K2

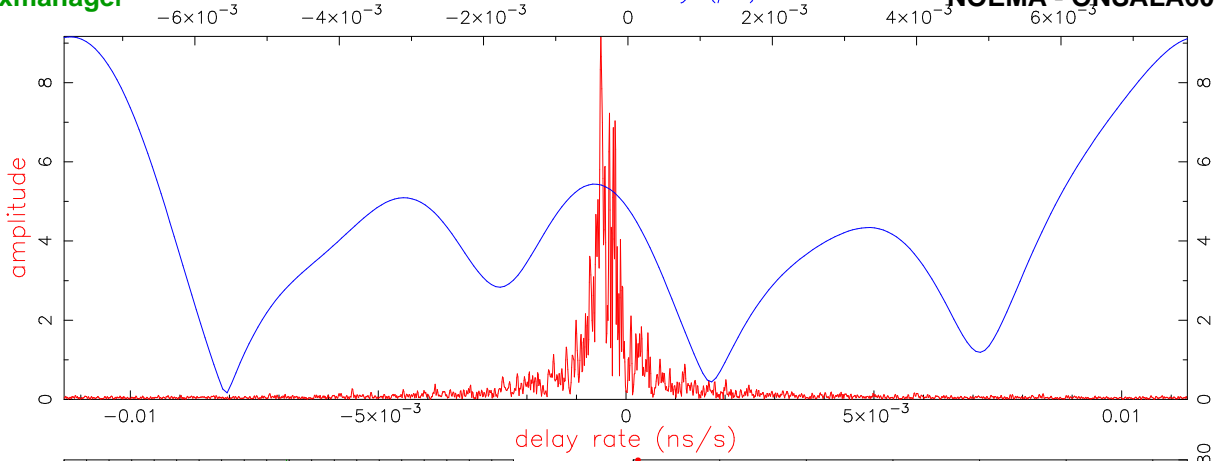
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

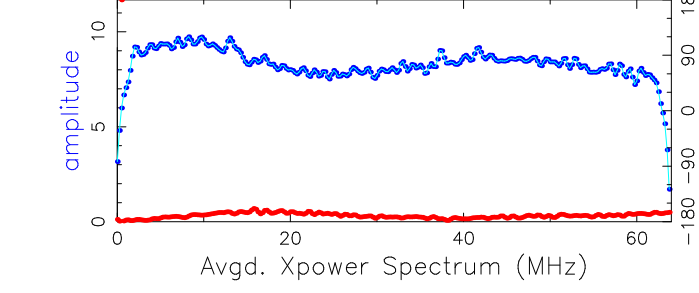
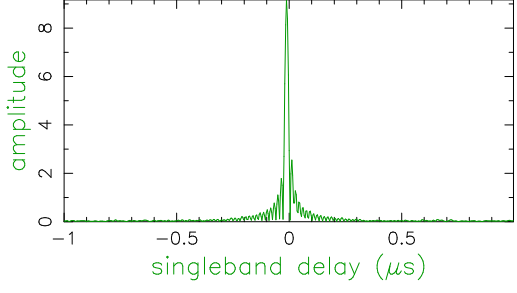
BLLAC.1W55K2, No0231, NX

NOEMA - ONSALA60, fgroup W, pol LL

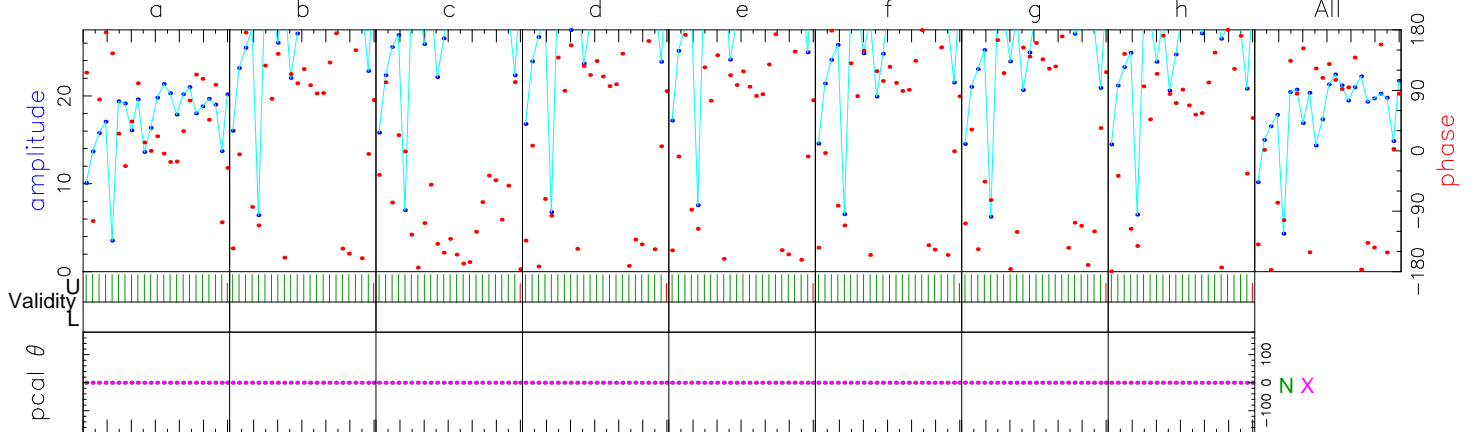
multiband delay (μ s)



Fringe quality 1
 SNR 475.4
 Int time 359.894
 Amp 9.171
 Phase 147.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.011417
 MBD -0.007723
 Fringe rate (Hz)
 -0.044037
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134512
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	38.2	139.1	-112.7	151.8	136.9	143.1	178.3	109.6	Phase	147.0
	8.7	14.3	13.9	14.8	15.4	13.3	13.0	12.9	Ampl.	13.3
	256.5	254.7	254.0	254.0	254.1	253.8	253.9	254.4	Sbd box	254.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.27642494288E+02		Apriori delay (usec)		-2.27634771288E+02		Resid mbdelay (usec)		-7.72300E-03	+/- 2.3E-06
Sband delay (usec)	-2.27646188788E+02		Apriori clock (usec)		-6.9680260E+01		Resid sbdelay (usec)		-1.14175E-02	+/- 1.8E-05
Phase delay (usec)	-2.27634766548E+02		Apriori clockrate (us/s)		8.7260000E-06		Resid phdelay (usec)		4.73990E-06	+/- 7.8E-09
Delay rate (us/s)	-1.63815149303E-01		Apriori rate (us/s)		-1.63814638078E-01		Resid rate (us/s)		-5.11226E-07	+/- 3.7E-11
Total phase (deg)	75.4		Apriori accel (us/s/s)		-9.79382644041E-06		Resid phase (deg)		147.0	+/- 0.2

ph/seg (deg) 71.4 0.6 Search (2048X32) 8.984 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 107.5 1.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.9 0.3 Inc. seg. avg. 18.102 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.5 0.6 Inc. frq. avg. 13.282 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 N: az 292.5 el 42.3 pa 63.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 1253.963 -1629.995 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/NX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/NX.W.250.1W55K2

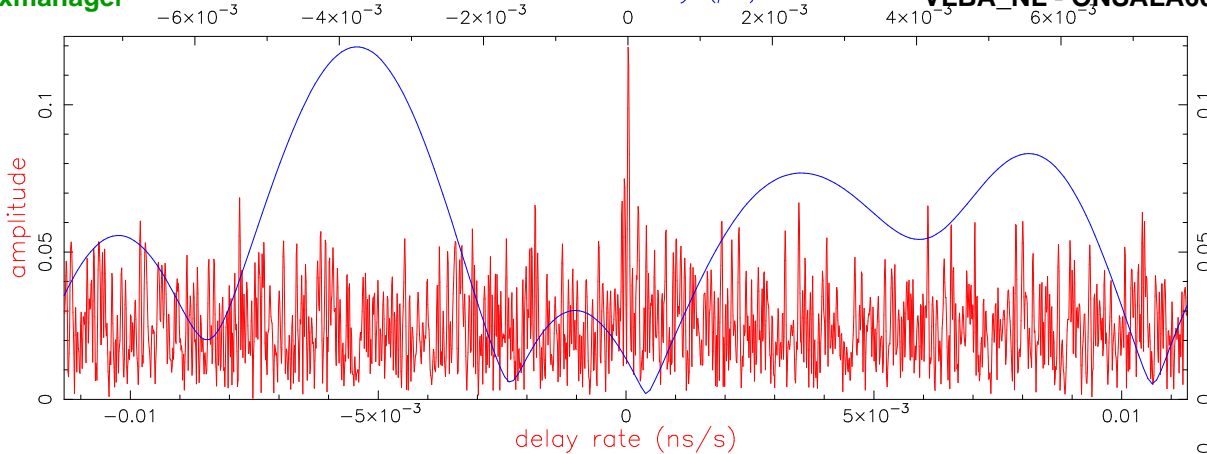
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, nX

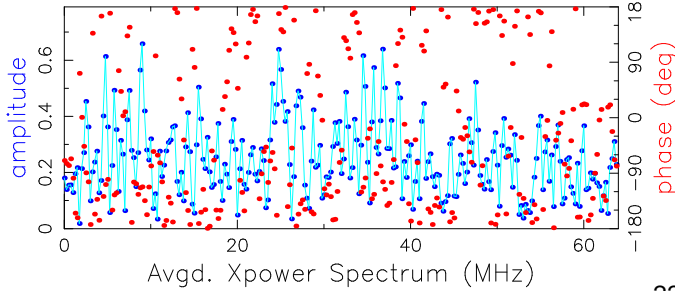
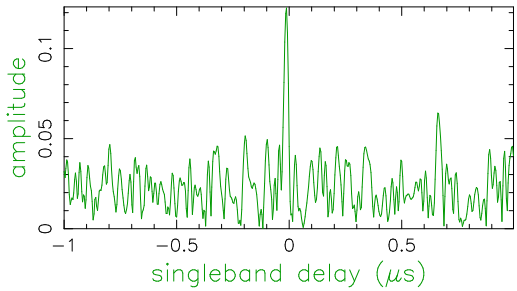
VLBA_NL - ONSALA60, fgroup W, pol LL

multiband delay (μ s)



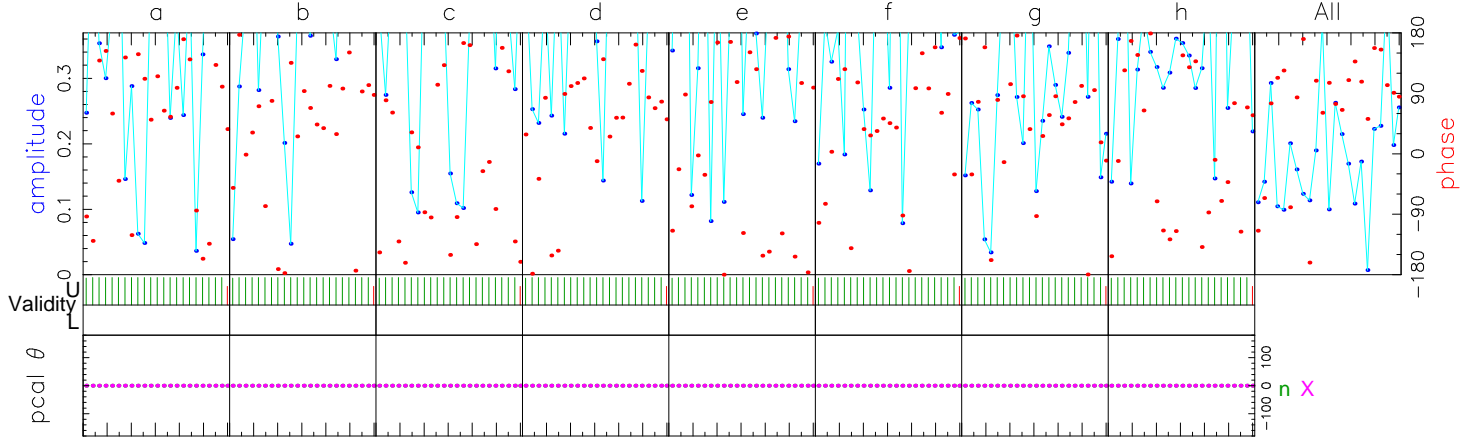
Fringe quality 0

SNR 6.4
 Int time 359.622
 Amp 0.123
 Phase 102.8
 PFD 4.5e-02
 Delays (us)
 SBD -0.012869
 MBD -0.003689
 Fringe rate (Hz)
 0.003351
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134512
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	123.9	81.8	-150.9	78.5	158.5	91.2	72.1	-149.7	Phase	102.8
	0.1	0.2	0.1	0.3	0.2	0.2	0.2	0.1	Ampl.	0.2
	500.0	253.4	254.9	253.3	386.9	251.7	252.9	166.4	Sbd box	253.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.42833677573E+03		Apriori delay (usec)		5.42835608945E+03		Resid mbdelay (usec)		-3.68873E-03	+/- 1.7E-04
Sband delay (usec)	5.42834322020E+03		Apriori clock (usec)		-5.0988197E+01		Resid sbdelay (usec)		-1.28693E-02	+/- 1.3E-03
Phase delay (usec)	5.42835609277E+03		Apriori clockrate (us/s)		-2.2800002E-07		Resid phdelay (usec)		3.31460E-06	+/- 5.8E-07
Delay rate (us/s)	1.01137009011E+00		Apriori rate (us/s)		1.01137005121E+00		Resid rate (us/s)		3.88998E-08	+/- 2.8E-09
Total phase (deg)	299.2		Apriori accel (us/s/s)		-4.25607147727E-05		Resid phase (deg)		102.8	+/- 17.9

	RMS	Theor.	Amplitude	0.123 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	69.5	43.0	Search (2048X32)	0.118	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	94.0	75.1	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	68.9	25.4	Inc. seg. avg.	0.146	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	61.5	44.3	Inc. frq. avg.	0.150	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

n: az 78.4 el 68.0 pa -81.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -7904.232 -4124.416 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/nX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/nX.W.252.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

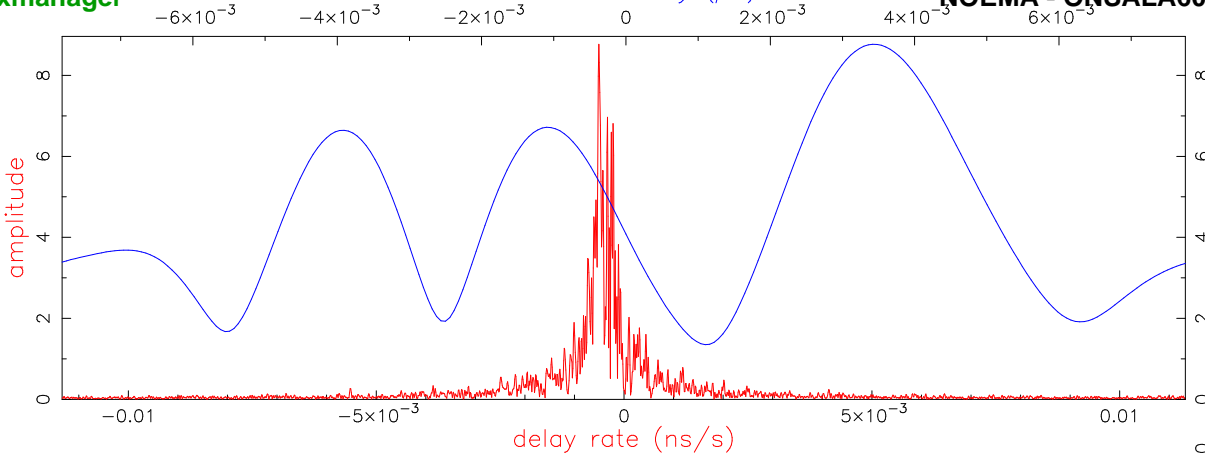
fxmanager

BLLAC.1W55K2, No0231, NX

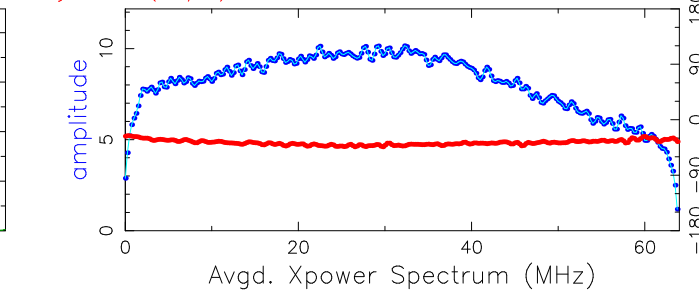
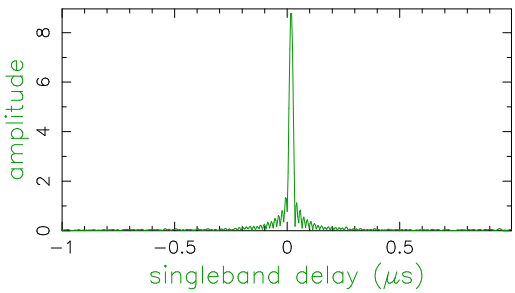
NOEMA - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 1

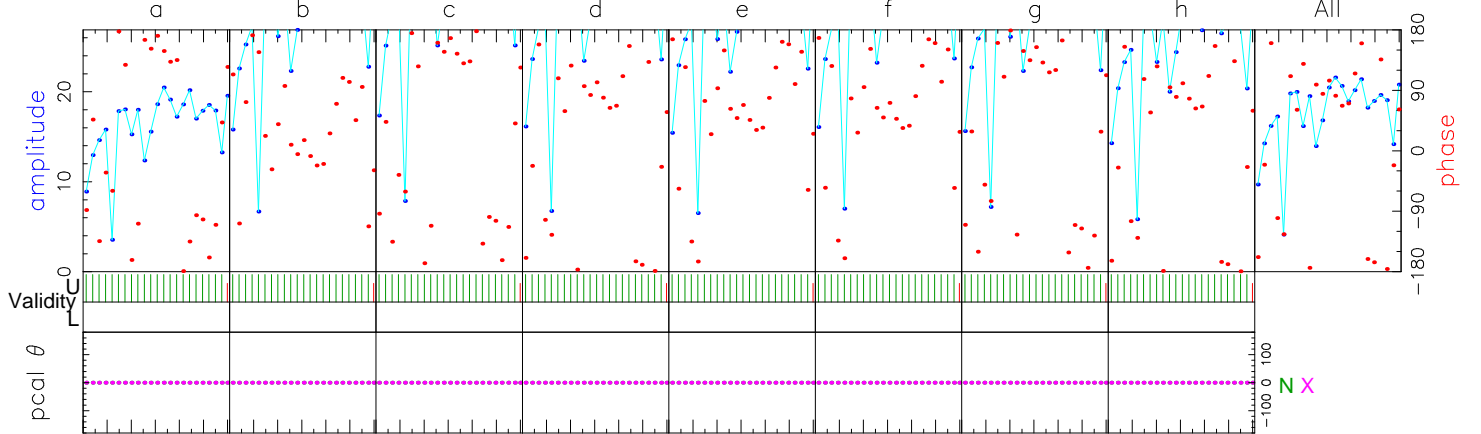


SNR 464.6
 Int time 359.894
 Amp 8.962
 Phase 123.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.017575
 MBD 0.003476
 Fringe rate (Hz)
 -0.044013
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134516
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-170.5	33.9	-174.0	120.1	86.7	89.3	172.9	119.6	Phase	123.2
	8.1	14.0	15.7	14.6	13.9	14.6	14.0	12.6	Ampl.	13.5
	263.2	261.9	261.4	261.0	260.5	261.1	261.1	261.4	Sbd box	261.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.27615669890E+02	Apriori delay (usec)	-2.27634771288E+02	Resid mbdelay (usec)	3.47640E-03	+/-	2.3E-06
Sband delay (usec)	-2.27617196538E+02	Apriori clock (usec)	-6.9680260E+01	Resid sbdelay (usec)	1.75747E-02	+/-	1.9E-05
Phase delay (usec)	-2.27634767314E+02	Apriori clockrate (us/s)	8.7260000E-06	Resid phdelay (usec)	3.97363E-06	+/-	8.0E-09
Delay rate (us/s)	-1.63815149023E-01	Apriori rate (us/s)	-1.63814638078E-01	Resid rate (us/s)	-5.10945E-07	+/-	3.8E-11
Total phase (deg)	51.7	Apriori accel (us/s/s)	-9.79382644041E-06	Resid phase (deg)	123.2	+/-	0.2

ph/seg (deg)	RMS 71.9	Theor. 0.6	Amplitude 8.962 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	104.8	1.0	Search (2048X32) 8.642	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	59.6	0.3	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	55.7	0.6	Inc. seg. avg. 17.441	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
			Inc. frq. avg. 13.453	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	

N: az 292.5 el 42.3 pa 63.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 1253.963 -1629.995 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/NX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/NX.W.269.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

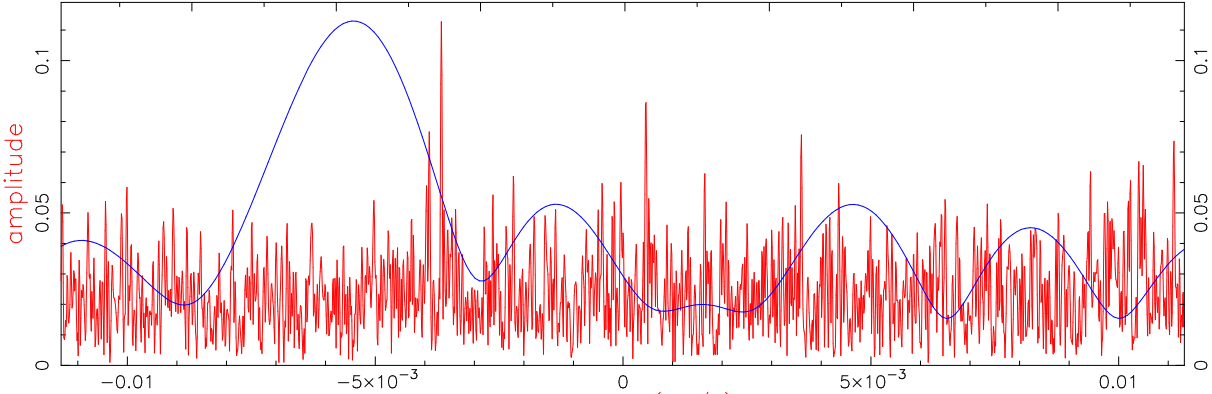
fxmanager

BLLAC.1W55K2, No0231, nX

VLBA_NL - ONSALA60, fgroup W, pol RR

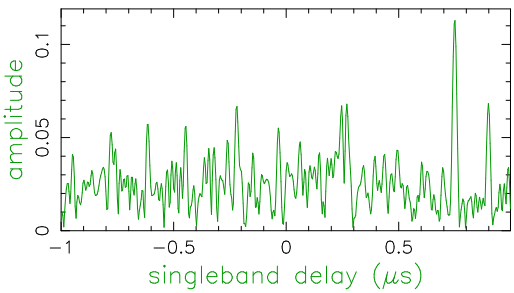
multiband delay (μ s)

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



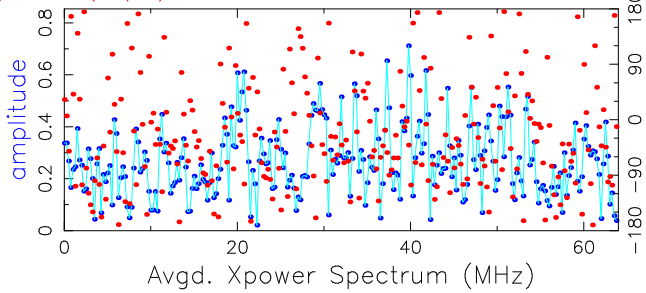
Fringe quality 0

SNR 5.9
Int time 359.622
Amp 0.119
Phase -18.8
PFD 5.8e-01
Delays (us)
SBD 0.748482
MBD -0.003833
Fringe rate (Hz)
-0.316609
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



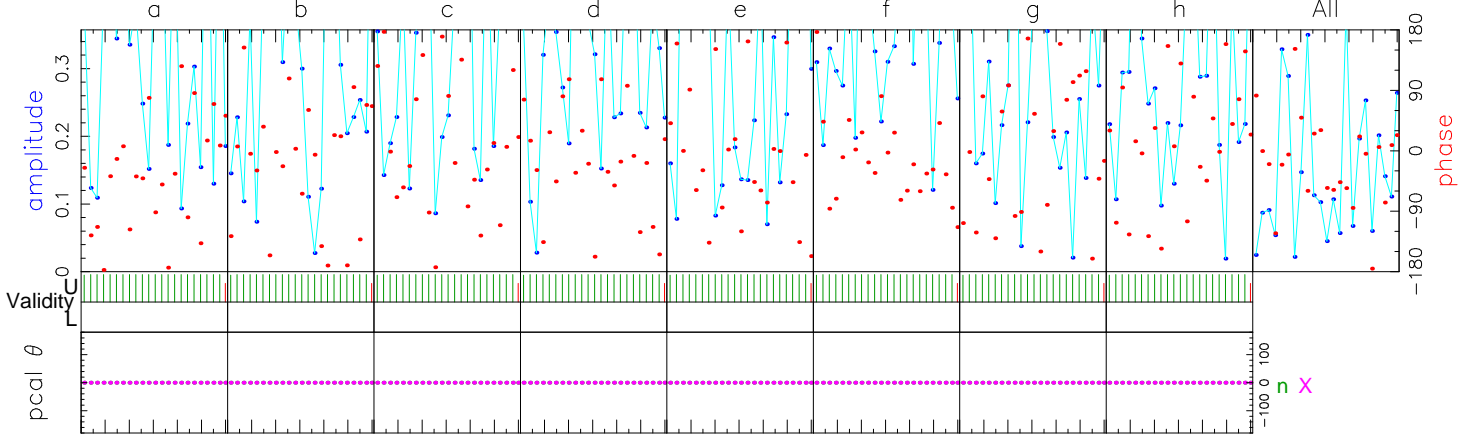
singleband delay (μ s)

delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134517
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-30.8	27.6	-23.4	-11.9	-35.2	-28.2	-69.9	29.7	Phase	-18.8
	0.2	0.1	0.1	0.1	0.2	0.3	0.0	0.1	Ampl.	0.1
	200.1	270.8	366.6	485.0	236.5	450.3	88.4	43.6	Sbd box	448.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.42910225631E+03		Apriori delay (usec)		5.42835608945E+03		Resid mbdelay (usec)		-3.83314E-03	+/- 1.8E-04
Sband delay (usec)	5.42910457145E+03		Apriori clock (usec)		-5.0988197E+01		Resid sbdelay (usec)		7.48482E-01	+/- 1.5E-03
Phase delay (usec)	5.42835608885E+03		Apriori clockrate (us/s)		-2.2800002E-07		Resid phdelay (usec)		-6.06361E-07	+/- 6.2E-07
Delay rate (us/s)	1.01136637570E+00		Apriori rate (us/s)		1.01137005121E+00		Resid rate (us/s)		-3.67551E-06	+/- 3.0E-09
Total phase (deg)	177.6		Apriori accel (us/s/s)		-4.25607147727E-05		Resid phase (deg)		-18.8	+/- 19.4

ph/seg (deg) 67.3 46.5 Amplitude 0.119 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 100.4 81.1 Search (2048X32) 0.112 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 35.8 27.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 57.8 47.8 Inc. seg. avg. 0.119 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
n: az 78.4 el 68.0 pa -81.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -7904.232 -4124.416 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/nX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/nX.W.275.1W55K2 simultaneous interpolator

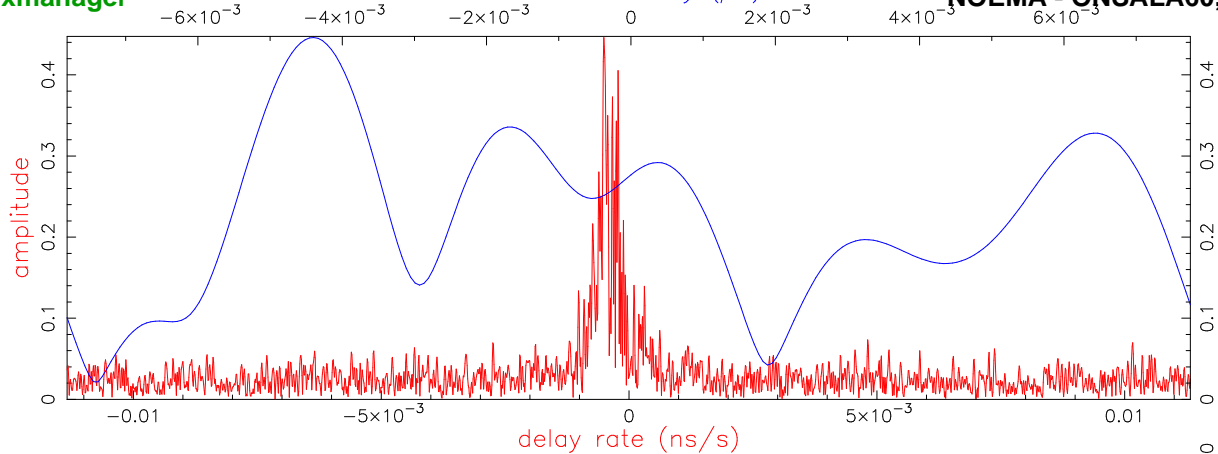
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, NX

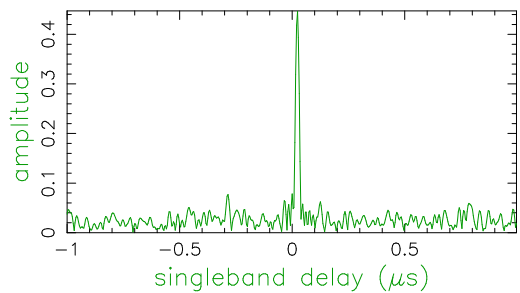
NOEMA - ONSALA60, fgroup W, pol LR

multiband delay (μ s)

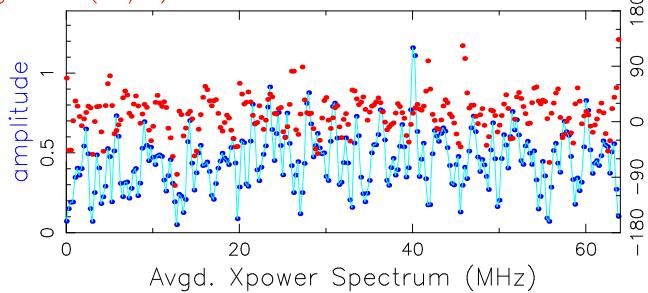


Fringe quality 7

SNR 23.2
 Int time 359.894
 Amp 0.447
 Phase -33.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.022821
 MBD -0.004424
 Fringe rate (Hz)
 -0.043896
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

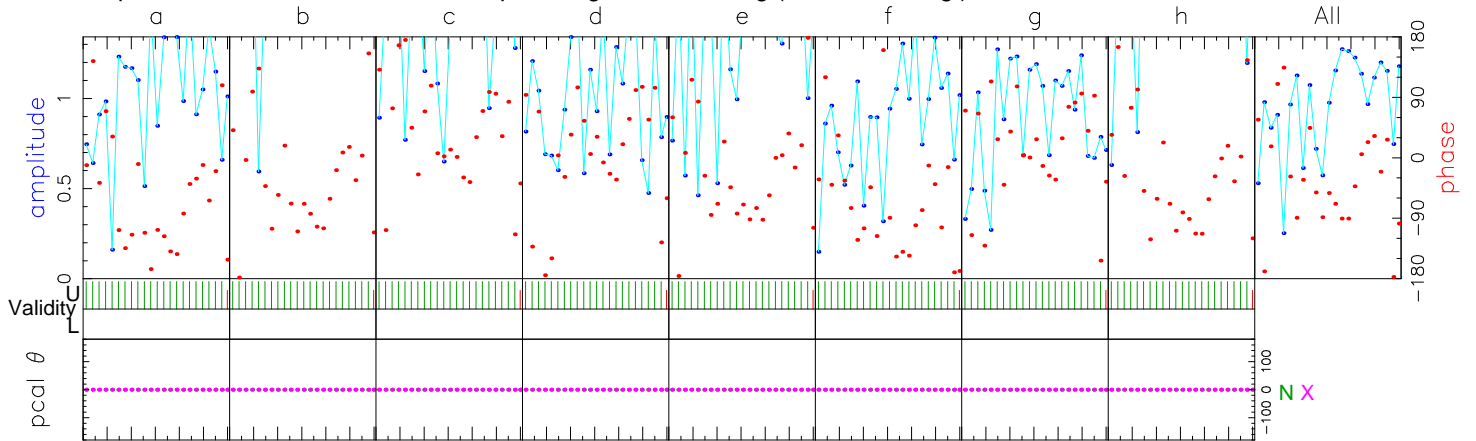


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134520
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-89.3	-50.7	36.6	44.1	-40.6	-92.0	34.8	-57.1	Phase	-33.7
	0.5	1.1	0.7	0.4	0.7	0.5	0.5	0.9	Ampl.	0.7
	264.3	263.1	262.9	261.5	261.6	262.2	262.3	262.8	Sbd box	262.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.27607944984E+02	Apriori delay (usec)	-2.27634771288E+02	Resid mbdelay (usec)	-4.42370E-03	+/-	4.7E-05
Sband delay (usec)	-2.27611950788E+02	Apriori clock (usec)	-6.9680260E+01	Resid sbdelay (usec)	2.28205E-02	+/-	3.7E-04
Phase delay (usec)	-2.27634772374E+02	Apriori clockrate (us/s)	8.7260000E-06	Resid phdelay (usec)	-1.08625E-06	+/-	1.6E-07
Delay rate (us/s)	-1.63815147665E-01	Apriori rate (us/s)	-1.63814638078E-01	Resid rate (us/s)	-5.09588E-07	+/-	7.7E-10
Total phase (deg)	-105.2	Apriori accel (us/s/s)	-9.79382644041E-06	Resid phase (deg)	-33.7	+/-	4.9

ph/seg (deg)	77.2	Theor.	11.8	Amplitude	0.447 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	127.7	Search (2048X32)	0.440	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	62.0	Inc. seg. avg.	0.933	Inc. frq. avg.	0.655	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	67.8	Inc. frq. avg.	0.655			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

N: az 292.5 el 42.3 pa 63.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 1253.963 -1629.995 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/NX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/NX.W.291.1W55K2

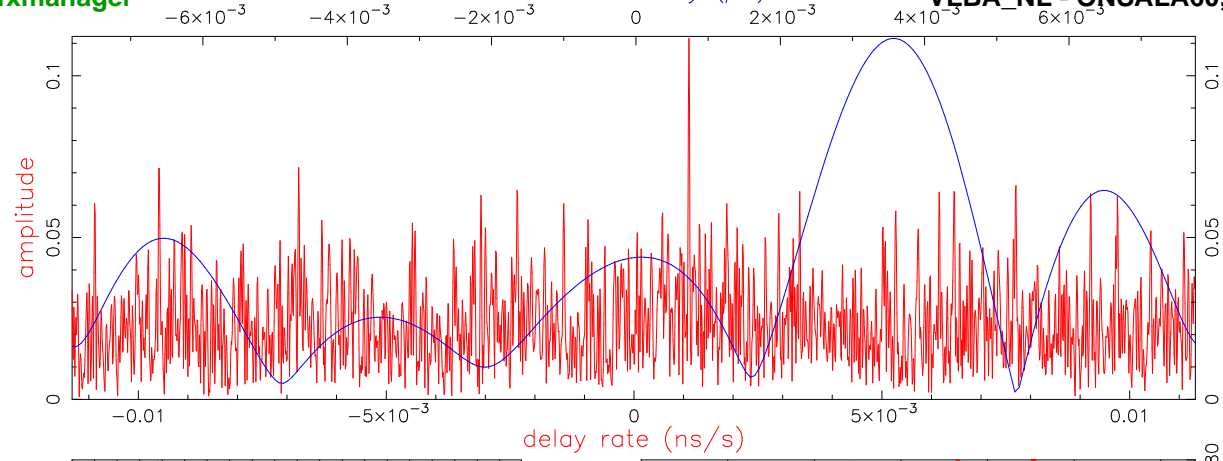
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, nX

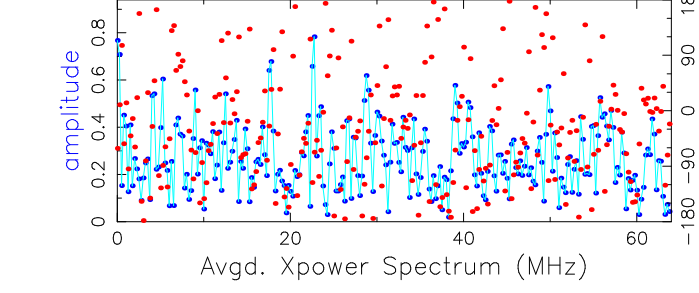
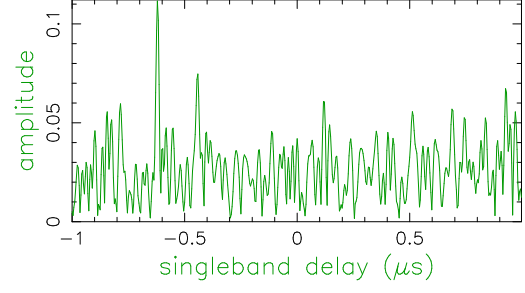
VLBA_NL - ONSALA60, fgroup W, pol LR

multiband delay (μ s)



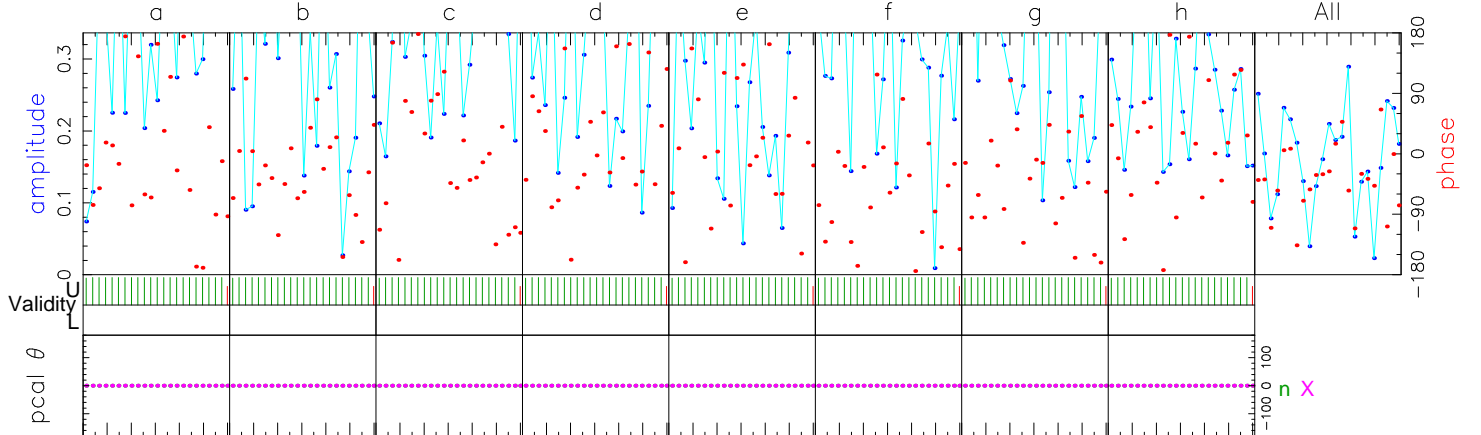
Fringe quality 0

SNR 5.8
 Int time 359.622
 Amp 0.112
 Phase -32.9
 PFD 8.2e-01
 Delays (us)
 SBD -0.620637
 MBD 0.003591
 Fringe rate (Hz)
 0.095520
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134520
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.4	-28.6	-49.2	-4.7	-4.4	-62.8	-57.8	14.3	Phase	-32.9
	0.1	0.2	0.0	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	154.8	98.3	293.2	317.2	461.6	375.4	99.0	144.4	Sbd box	98.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.42773468030E+03		Apriori delay (usec)		5.42835608945E+03		Resid mbdelay (usec)		3.59084E-03	+/- 1.9E-04
Sband delay (usec)	5.42773545220E+03		Apriori clock (usec)		-5.0988197E+01		Resid sbdelay (usec)		-6.20637E-01	+/- 1.5E-03
Phase delay (usec)	5.42835608839E+03		Apriori clockrate (us/s)		-2.2800002E-07		Resid phdelay (usec)		-1.06114E-06	+/- 6.4E-07
Delay rate (us/s)	1.01137116010E+00		Apriori rate (us/s)		1.01137005121E+00		Resid rate (us/s)		1.10889E-06	+/- 3.1E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.25607147727E-05		Resid phase (deg)		-32.9	+/- 19.8

ph/seg (deg) 49.5 47.4 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 76.2 82.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.8 28.0 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.3 48.8 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 78.4 el 68.0 pa -81.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -7904.232 -4124.416 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/nX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/nX.W.293.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

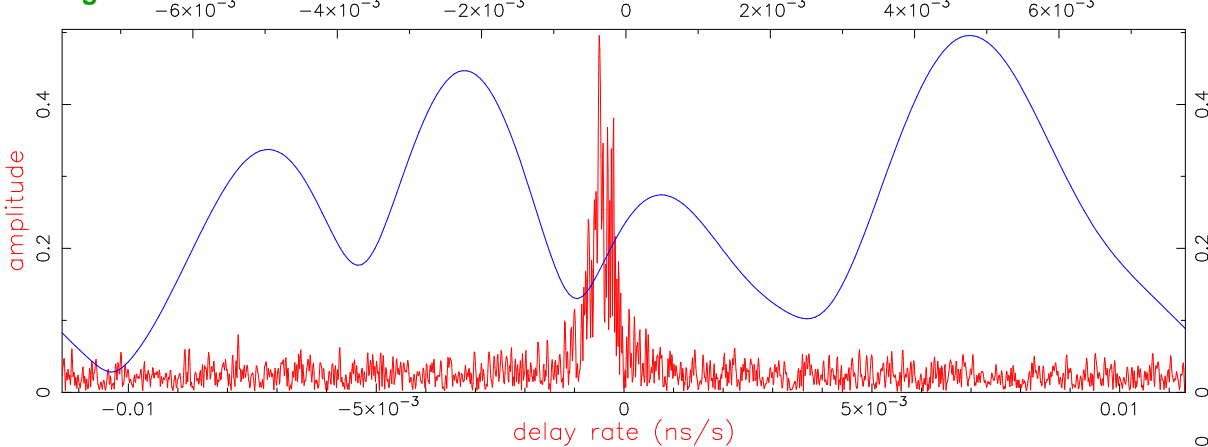
fxmanager

BLLAC.1W55K2, No0231, NX

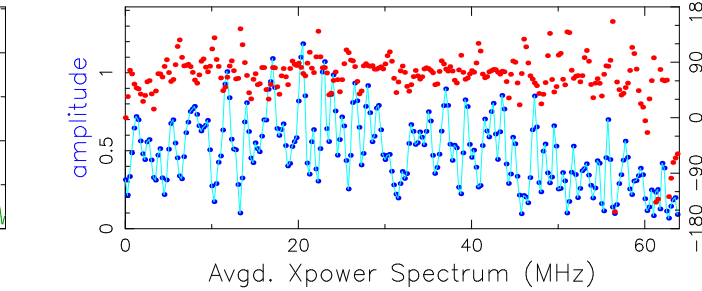
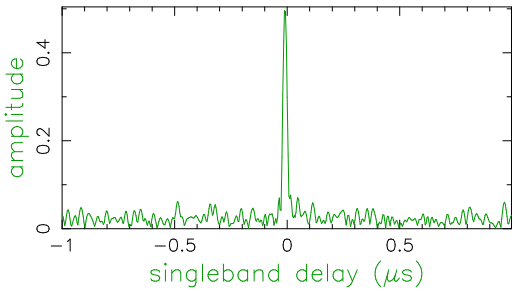
NOEMA - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 5

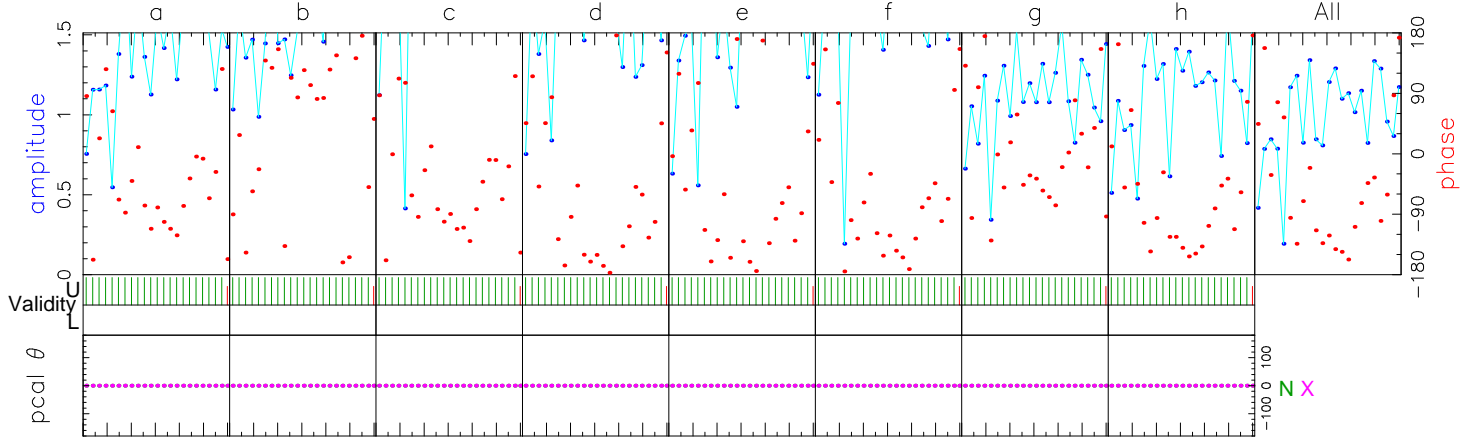


SNR 26.1
 Int time 359.894
 Amp 0.504
 Phase -101.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.009922
 MBD 0.004759
 Fringe rate (Hz)
 -0.043415
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134523
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-65.0	133.9	-68.2	-135.1	-127.5	-108.6	-20.9	-106.7	Phase	-101.0
	0.7	0.7	1.2	0.7	0.8	0.8	0.5	0.6	Ampl.	0.8
	256.7	253.5	253.9	253.1	253.5	253.6	253.6	254.9	Sbd box	254.5
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.27645637587E+02	Apriori delay (usec)	-2.27634771288E+02	Resid mbdelay (usec)	4.75870E-03	+/-	4.2E-05
Sband delay (usec)	-2.27644693288E+02	Apriori clock (usec)	-6.9680260E+01	Resid sbdelay (usec)	-9.92200E-03	+/-	3.3E-04
Phase delay (usec)	-2.27634774546E+02	Apriori clockrate (us/s)	8.7260000E-06	Resid phdelay (usec)	-3.25814E-06	+/-	1.4E-07
Delay rate (us/s)	-1.63815142083E-01	Apriori rate (us/s)	-1.63814638078E-01	Resid rate (us/s)	-5.04006E-07	+/-	6.8E-10
Total phase (deg)	-172.6	Apriori accel (us/s/s)	-9.79382644041E-06	Resid phase (deg)	-101.0	+/-	4.4

ph/seg (deg)	82.3	Theor.	10.5	Amplitude	0.504 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	110.2		18.3	Search (2048X32)	0.487	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	66.3		6.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	64.7		10.8	Inc. seg. avg.	0.965	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.758	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 292.5 el 42.3 pa 63.1 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 1253.963 -1629.995 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/NX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/NX.W.308.1W55K2

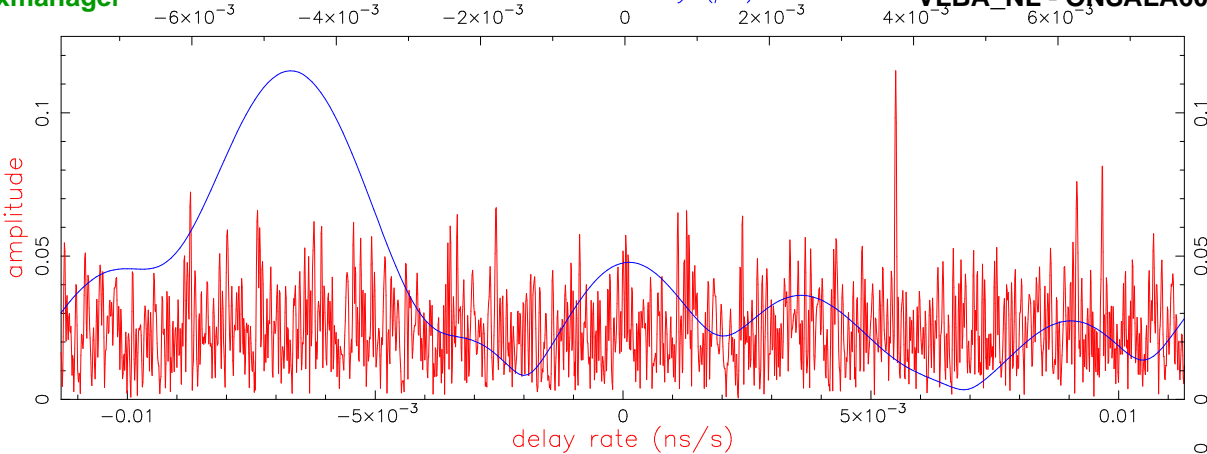
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, nX

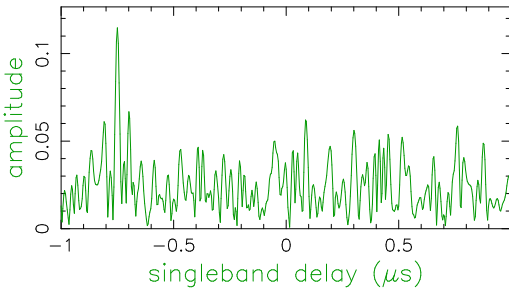
VLBA_NL - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

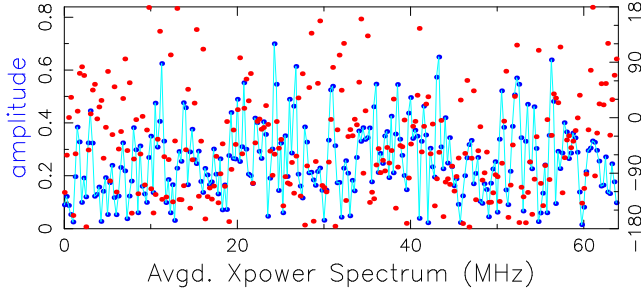


Fringe quality 0

SNR 5.9
 Int time 359.622
 Amp 0.127
 Phase -7.7
 PFD 5.0e-01
 Delays (us)
 SBD -0.750111
 MBD -0.004637
 Fringe rate (Hz)
 0.475085
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

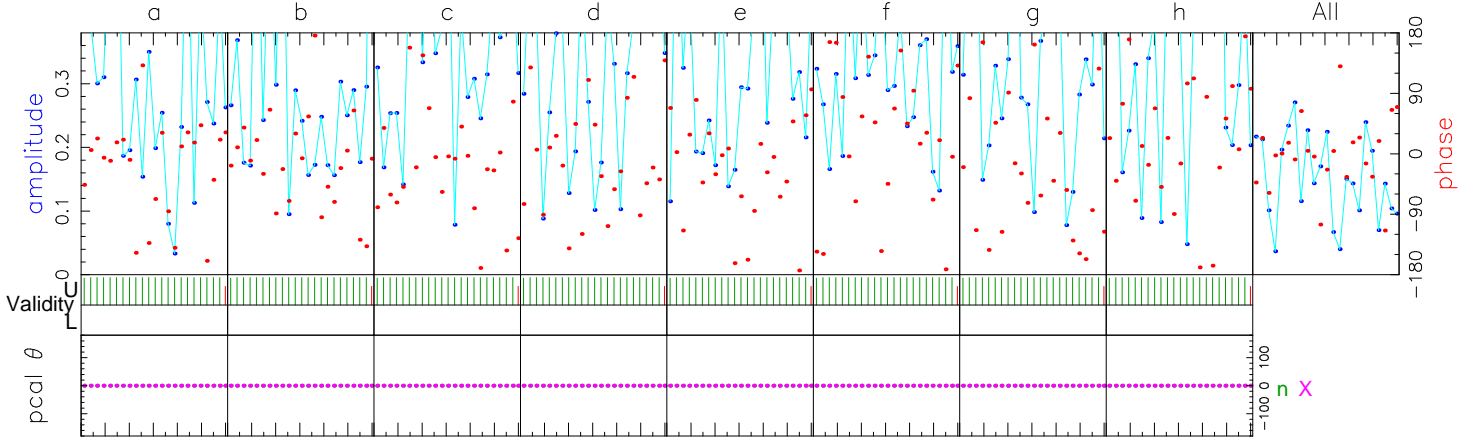


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134523
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.42760145293E+03			5.42835608945E+03					
Sband delay (usec)		5.42760597845E+03			-5.0988197E+01					
Phase delay (usec)		5.42835608921E+03			-2.2800002E-07					
Delay rate (us/s)		1.01137556647E+00			1.01137005121E+00					
Total phase (deg)			188.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	53.2	46.2								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
n: az 78.4 el 68.0 pa -81.1										
X: az 284.9 el 42.8 pa 44.6										
u,v (fr/asec)										
simultaneous interpolator										

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/nX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/nX.W.311.1W55K2

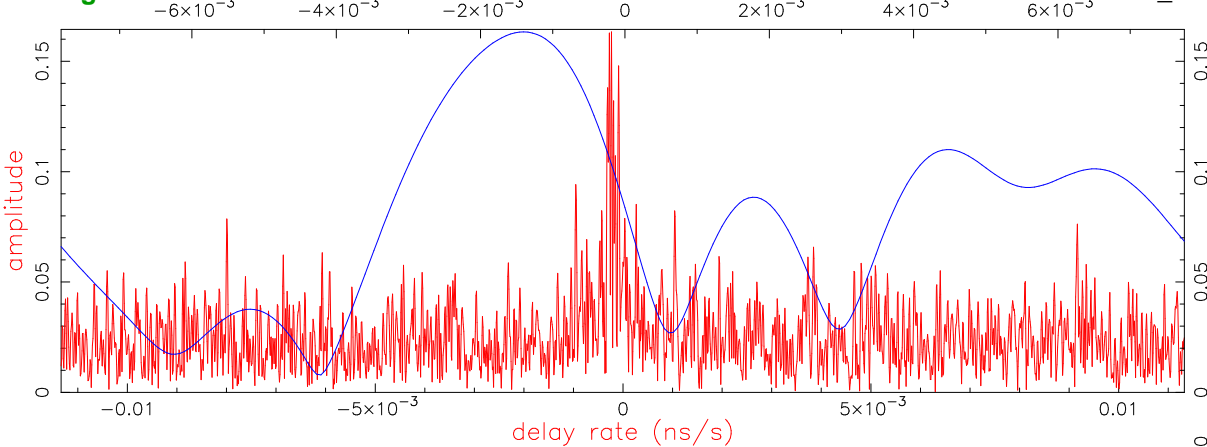
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, Xo

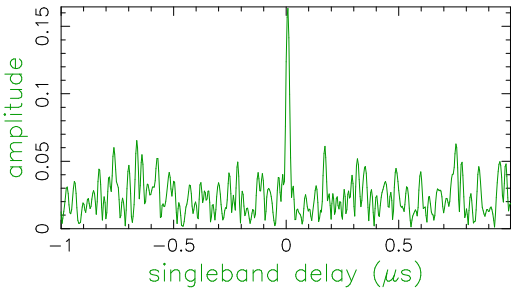
ONSALA60 - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

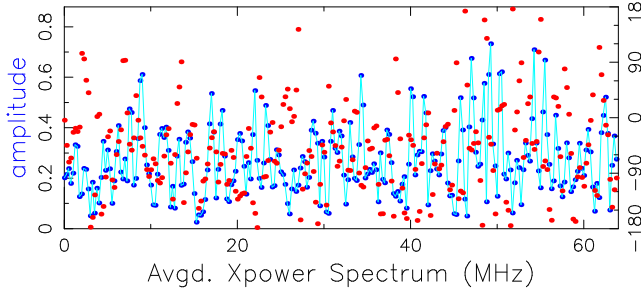


Fringe quality 9

SNR 8.5
 Int time 359.888
 Amp 0.164
 Phase 36.4
 PFD 5.3e-09
 Delays (us)
 SBD 0.006735
 MBD -0.001442
 Fringe rate (Hz)
 -0.019822
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

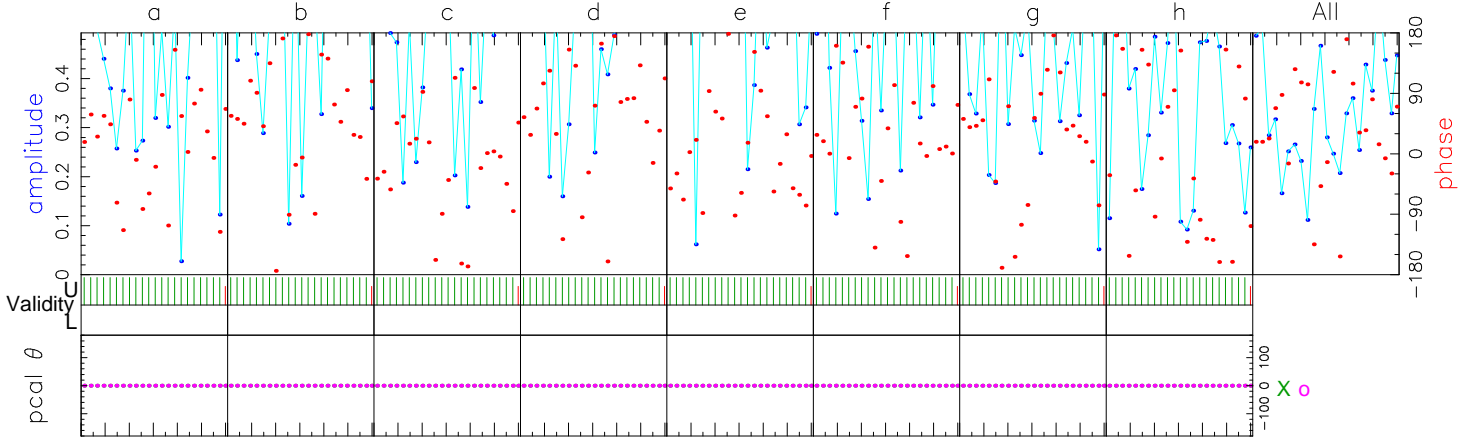


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134524
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	86524.00	All
86012.00	29.9	76.0	-13.6	71.4	-19.5	32.3	59.4	-167.2		36.4
0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.1	0.1		0.2
259.9	259.0	258.4	259.3	258.3	259.7	271.3	261.3			258.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		703/0
X	1000	1000	1000	1000	1000	1000	1000	1000		1000
o	1000	1000	1000	1000	1000	1000	1000	1000		1000
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		0:0
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		0:0
X	1000	1000	1000	1000	1000	1000	1000	1000		1000
o	1000	1000	1000	1000	1000	1000	1000	1000		1000
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		W07UL
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		W07UL
Group delay (usec)(sbd)	-1.34881358595E+03		Apriori delay (usec)		-1.34882776856E+03		Resid mbdelay (usec)		-1.44238E-03 +/- 1.3E-04	
Sband delay (usec)	-1.34882103406E+03		Apriori clock (usec)		5.2746357E+01		Resid sbdelay (usec)		6.73450E-03 +/- 1.0E-03	
Phase delay (usec)	-1.34882776739E+03		Apriori clockrate (us/s)		1.6800000E-07		Resid phdelay (usec)		1.17228E-06 +/- 4.3E-07	
Delay rate (us/s)	-1.35134251225E+00		Apriori rate (us/s)		-1.35134228213E+00		Resid rate (us/s)		-2.30114E-07 +/- 2.1E-09	
Total phase (deg)	-317.9		Apriori accel (us/s/s)		2.55183650188E-05		Resid phase (deg)		36.4 +/- 13.4	
RMS	76.2	32.2	Amplitude		0.164 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	76.2	32.2	Search (2048X32)		0.160		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	125.2	56.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	74.7	19.0	Inc. seg. avg.		0.289		Sample rate(MISamp/s): 128		mb window (us) -0.008 0.008	
amp/frq (%)	59.7	33.2	Inc. frq. avg.		0.229		Data rate(Mb/s): 2048		dr window (ns/s) -0.011 0.011	
X: az 284.9 el 42.8 pa 44.6	o: az 64.8 el 47.1 pa -77.0		u,v (fr/asec) 10514.598 3275.953				nlags: 256 t_cohere infinite		ion window (TEC) 0.00 0.00	
simultaneous interpolator										

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xo..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xo.W.314.1W55K2

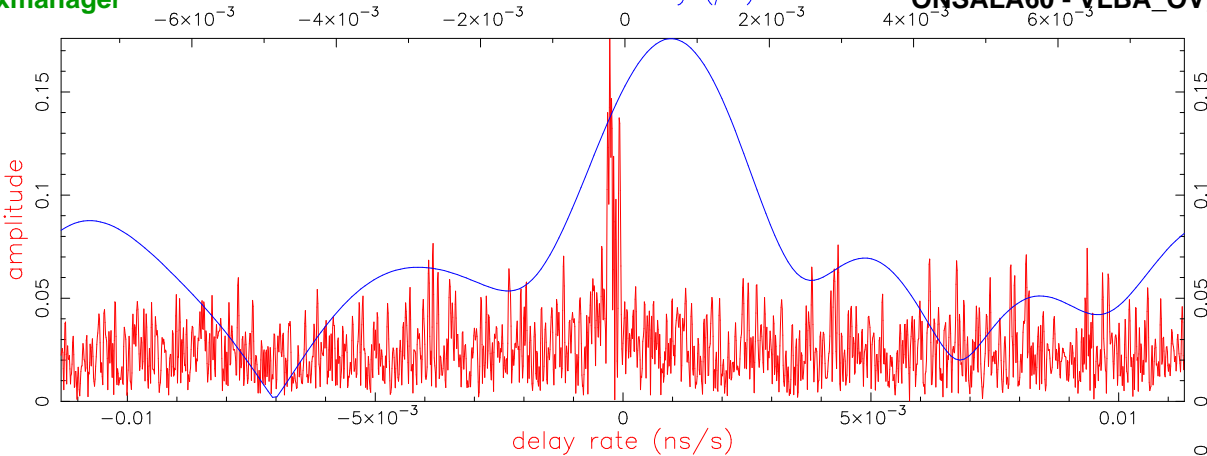
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, Xo

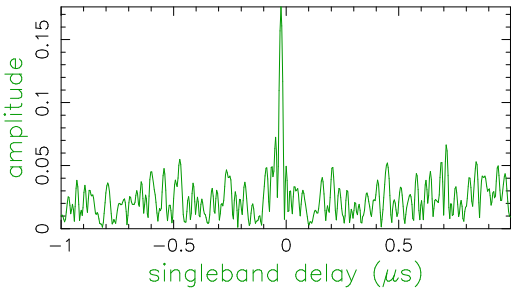
ONSALA60 - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

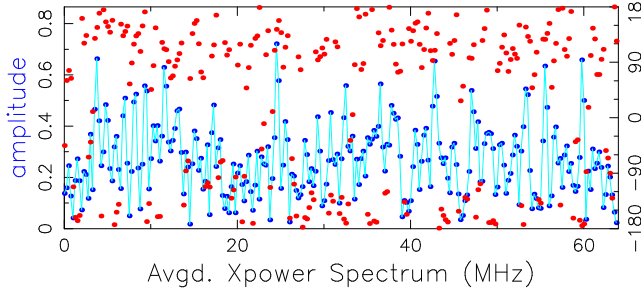


Fringe quality 9

SNR 9.1
 Int time 359.888
 Amp 0.176
 Phase -130.3
 PFD 2.7e-11
 Delays (us)
 SBD -0.023216
 MBD 0.000642
 Fringe rate (Hz)
 -0.023254
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

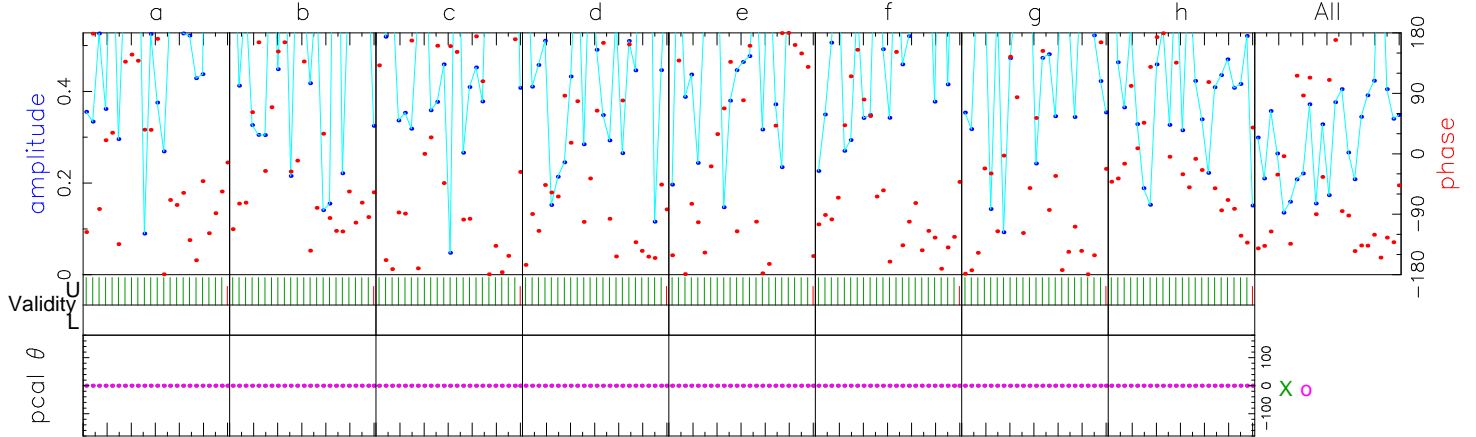


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134527
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-100.8	-95.1	-172.6	-125.1	175.0	-119.8	-142.5	-53.3		-130.3
	0.2	0.2	0.3	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
	252.1	251.9	251.4	251.7	252.7	250.9	252.4	191.2	Sbd box	251.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.34885837617E+03		Apriori delay (usec)		-1.34882776856E+03		Resid mbdelay (usec)		6.42397E-04	+/- 1.2E-04
Sband delay (usec)	-1.34885098406E+03		Apriori clock (usec)		5.2746357E+01		Resid sbdelay (usec)		-2.32155E-02	+/- 9.4E-04
Phase delay (usec)	-1.34882777277E+03		Apriori clockrate (us/s)		1.6800000E-07		Resid phdelay (usec)		-4.20324E-06	+/- 4.0E-07
Delay rate (us/s)	-1.35134255209E+00		Apriori rate (us/s)		-1.35134228213E+00		Resid rate (us/s)		-2.69953E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		2.55183650188E-05		Resid phase (deg)		-130.3	+/- 12.6

	RMS	Theor.	Amplitude	0.176 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	70.0	30.1	Search (2048X32)	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	109.9	52.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	46.7	17.8	Inc. seg. avg.	0.274	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	40.2	31.0	Inc. frq. avg.	0.210	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

X: az 284.9 el 42.8 pa 44.6 o: az 64.8 el 47.1 pa -77.0 u,v (fr/asec) 10514.598 3275.953 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xo..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xo.W.317.1W55K2

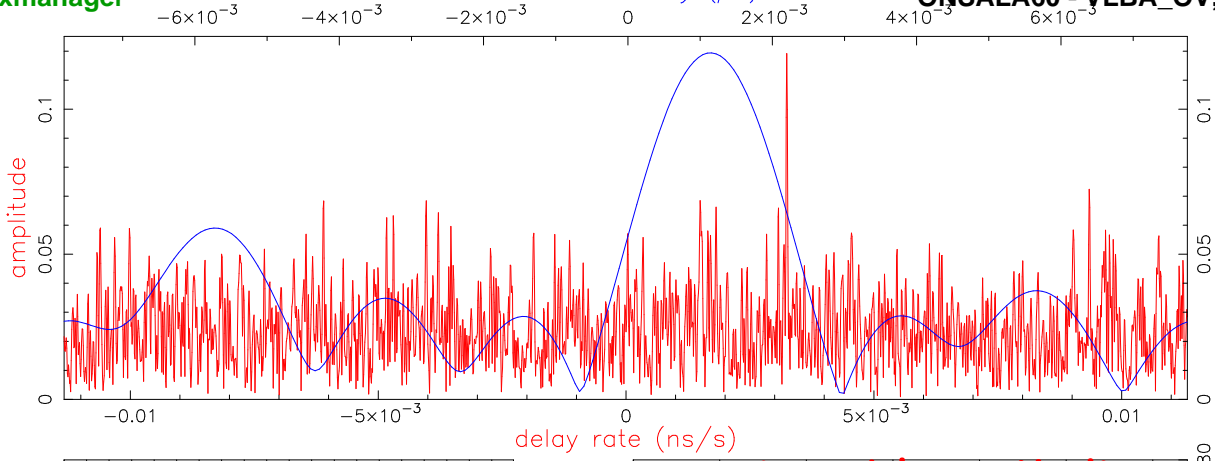
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

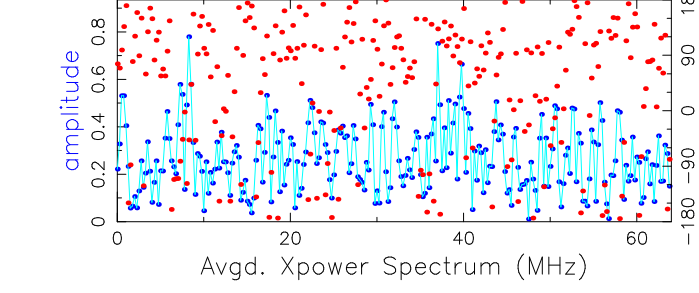
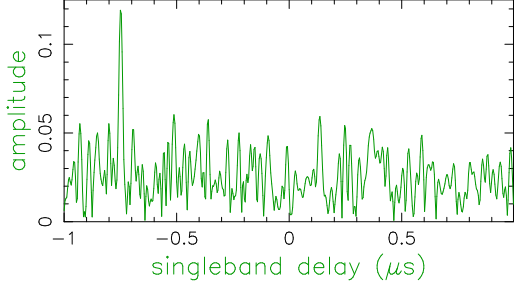
BLLAC.1W55K2, No0231, Xo

ONSALA60 - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

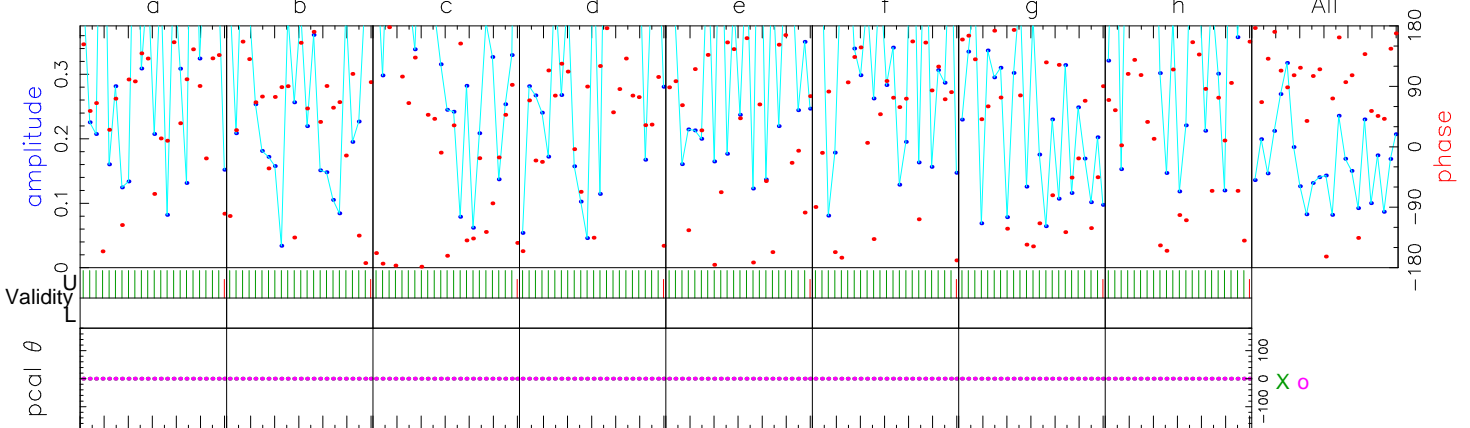


Fringe quality 0
 SNR 6.3
 Int time 359.888
 Amp 0.125
 Phase 117.9
 PFD 9.2e-02
 Delays (us)
 SBD -0.748432
 MBD 0.001204
 Fringe rate (Hz)
 0.279558
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134530
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.34957656422E+03	Apriori delay (usec)	-1.34882776856E+03	Resid mbdelay (usec)	1.20435E-03	+/-	1.7E-04
Sband delay (usec)	-1.34957620056E+03	Apriori clock (usec)	5.2746357E+01	Resid sbdelay (usec)	-7.48432E-01	+/-	1.4E-03
Phase delay (usec)	-1.34882776476E+03	Apriori clockrate (us/s)	1.6800000E-07	Resid phdelay (usec)	3.80149E-06	+/-	5.9E-07
Delay rate (us/s)	-1.35133903674E+00	Apriori rate (us/s)	-1.35134228213E+00	Resid rate (us/s)	3.24540E-06	+/-	2.8E-09
Total phase (deg)	-236.4	Apriori accel (us/s/s)	2.55183650188E-05	Resid phase (deg)	117.9	+/-	18.3

ph/seg (deg)	50.2	Theor.	43.8	Amplitude	0.125 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.5		76.5	Search (2048X32)	0.118	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	25.0		25.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.7		45.1	Inc. seg. avg.	0.131	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.118	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

X: az 284.9 el 42.8 pa 44.6 o: az 64.8 el 47.1 pa -77.0 u,v (fr/asec) 10514.598 3275.953 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xo..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xo.W.328.1W55K2

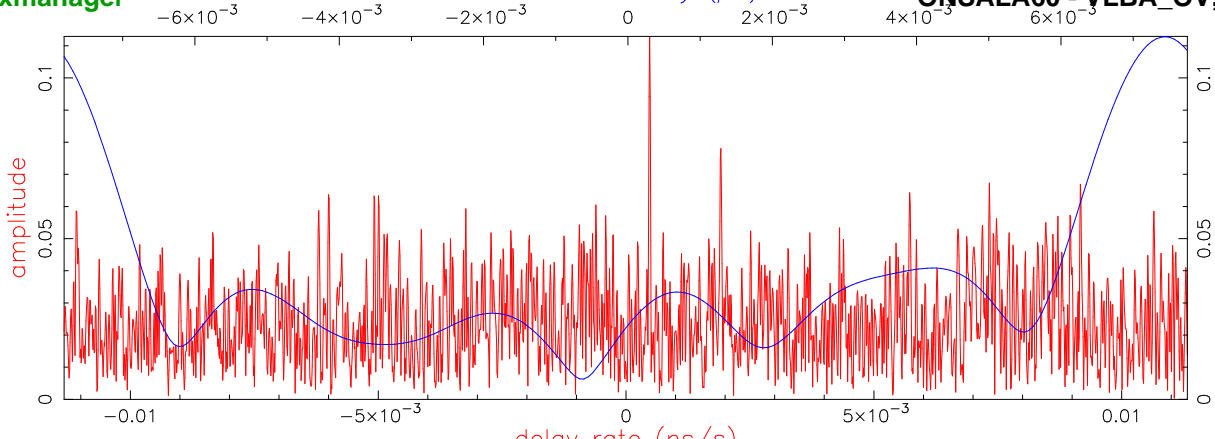
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

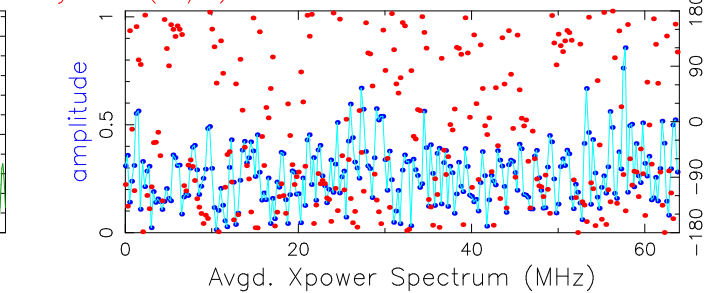
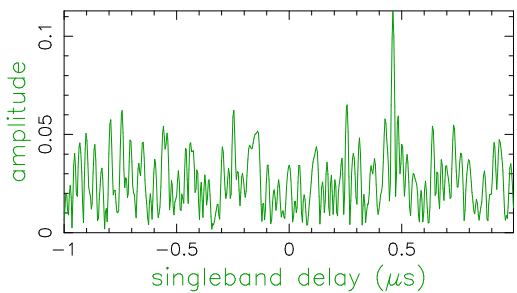
BLLAC.1W55K2, No0231, Xo

ONSALA60 - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

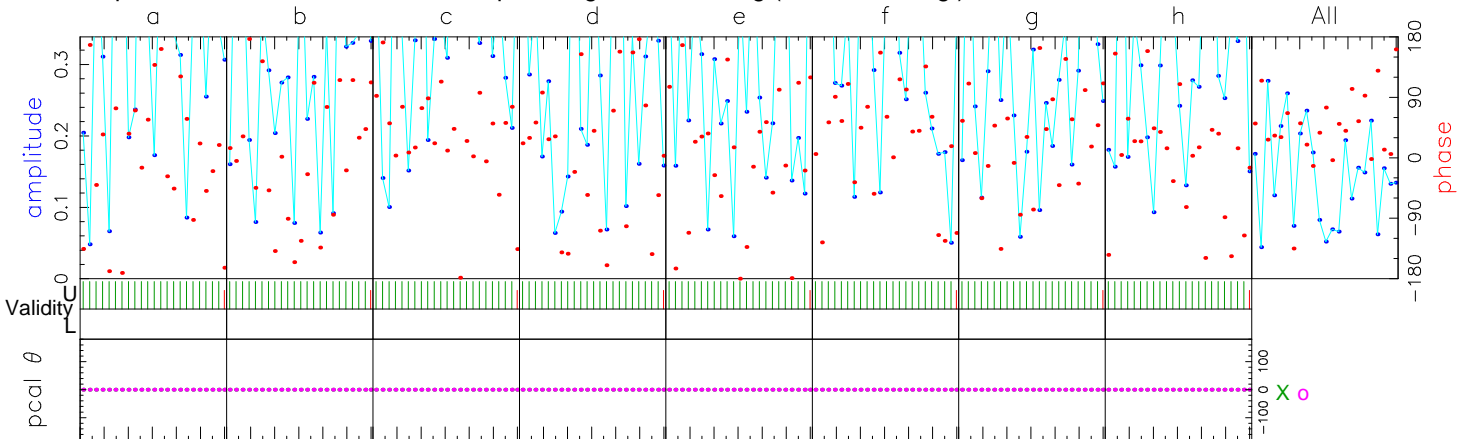


Fringe quality 0
 SNR 5.9
 Int time 359.888
 Amp 0.113
 Phase 39.7
 PFD 7.0e-01
 Delays (us)
 SBD 0.461055
 MBD 0.007443
 Fringe rate (Hz) 0.040730
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134533
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	10.0	41.4	46.4	48.3	59.6	51.5	48.2	6.9	Phase	39.7
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	499.0	329.6	374.6	248.0	286.5	376.0	119.4	420.0	Sbd box	375.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.34836720093E+03		Apriori delay (usec)		-1.34882776856E+03		Resid mbdelay (usec)		7.44263E-03	+/- 1.9E-04
Sband delay (usec)	-1.34836671306E+03		Apriori clock (usec)		5.2746357E+01		Resid sbdelay (usec)		4.61055E-01	+/- 1.5E-03
Phase delay (usec)	-1.34882776728E+03		Apriori clockrate (us/s)		1.6800000E-07		Resid phdelay (usec)		1.27899E-06	+/- 6.3E-07
Delay rate (us/s)	-1.35134180930E+00		Apriori rate (us/s)		-1.35134228213E+00		Resid rate (us/s)		4.72832E-07	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.55183650188E-05		Resid phase (deg)		39.7	+/- 19.6

ph/seg (deg) 56.5 46.9 Search (2048X32) 0.110 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 67.5 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.2 27.7 Inc. seg. avg. 0.110 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.2 48.3 Inc. frq. avg. 0.106 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 284.9 el 42.8 pa 44.6 o: az 64.8 el 47.1 pa -77.0 u,v (fr/asec) 10514.598 3275.953 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xo..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xo.W.339.1W55K2

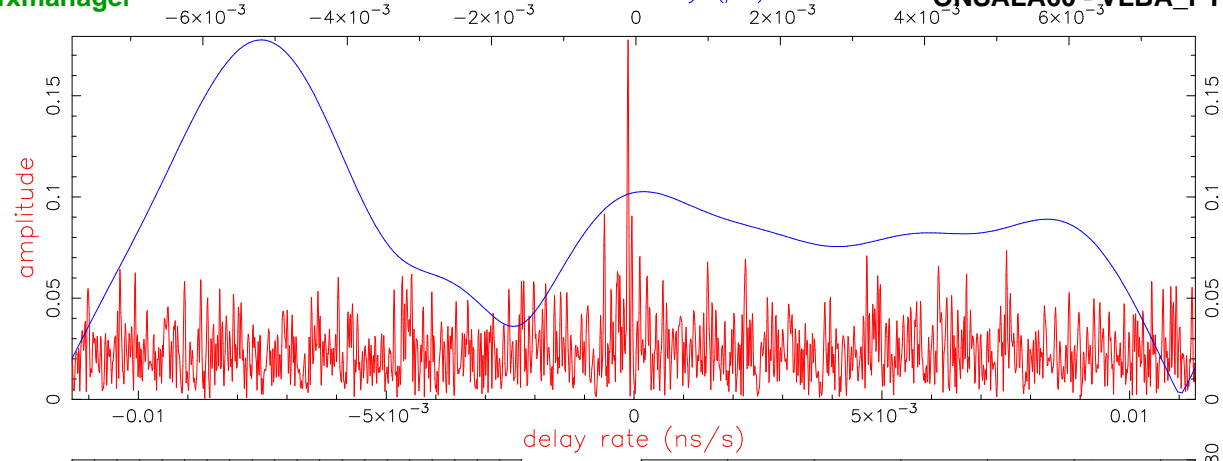
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, Xp

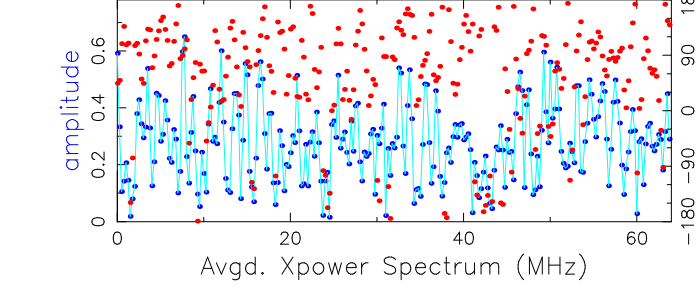
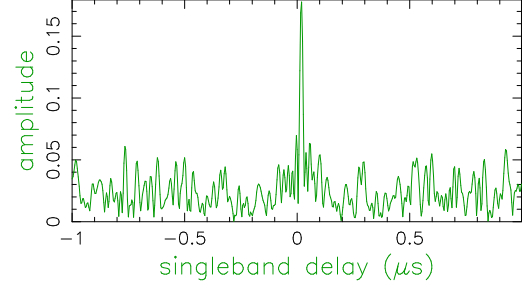
ONSALA60 - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



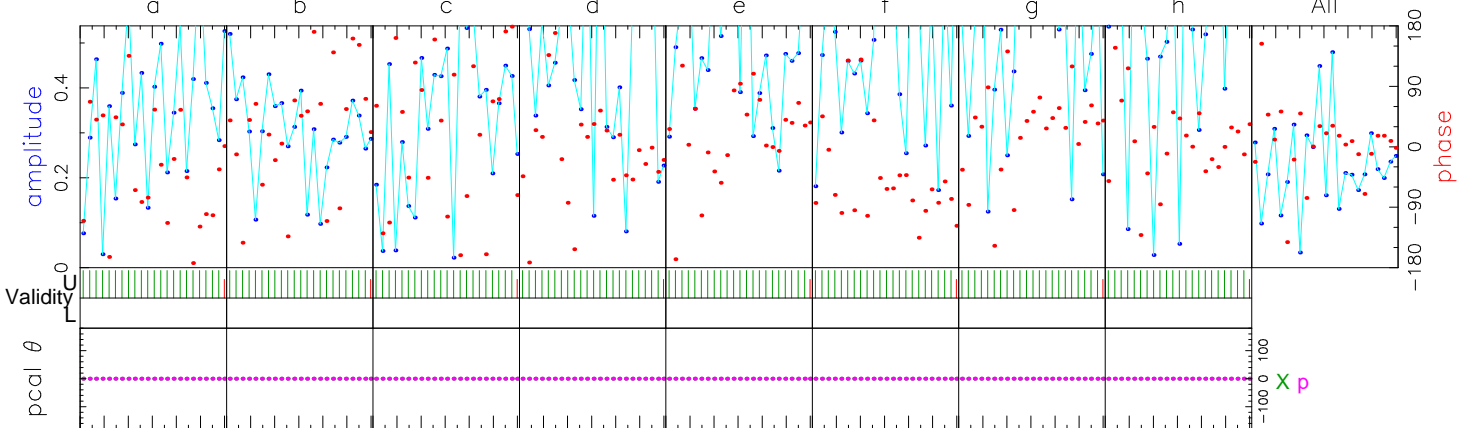
Fringe quality 9

SNR 9.3
 Int time 359.894
 Amp 0.179
 Phase 3.5
 PFD 5.4e-12
 Delays (us)
 SBD 0.018395
 MBD -0.005232
 Fringe rate (Hz)
 -0.010154
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134526
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-38.6	39.8	162.7	-5.4	32.7	-65.9	29.8	1.9	Phase	3.5
	0.1	0.1	0.1	0.3	0.3	0.3	0.4	0.4	Ampl.	0.2
	272.4	316.4	380.8	260.3	260.7	259.6	261.0	261.8	Sbd box	261.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.80342709997E+03		Apriori delay (usec)		-2.80345311773E+03		Resid mbdelay (usec)		-5.23223E-03	+/- 1.2E-04
Sband delay (usec)	-2.80343472248E+03		Apriori clock (usec)		5.0870102E+01		Resid sbdelay (usec)		1.83953E-02	+/- 9.3E-04
Phase delay (usec)	-2.80345311762E+03		Apriori clockrate (us/s)		6.4799999E-07		Resid phdelay (usec)		1.11370E-07	+/- 4.0E-07
Delay rate (us/s)	-1.27315033008E+00		Apriori rate (us/s)		-1.27315021220E+00		Resid rate (us/s)		-1.17874E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		3.63897594060E-05		Resid phase (deg)		3.5	+/- 12.3

	RMS	Theor.	Amplitude	0.179 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.9	29.5	Search (2048X32)	0.171	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	63.1	51.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	76.2	17.4	Inc. seg. avg.	0.205	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	76.7	30.4	Inc. frq. avg.	0.221					

X: az 284.9 el 42.8 pa 44.6 p: az 63.3 el 53.3 pa -87.4 u,v (fr/asec) 9925.084 4331.863 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xp..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xp.W.316.1W55K2

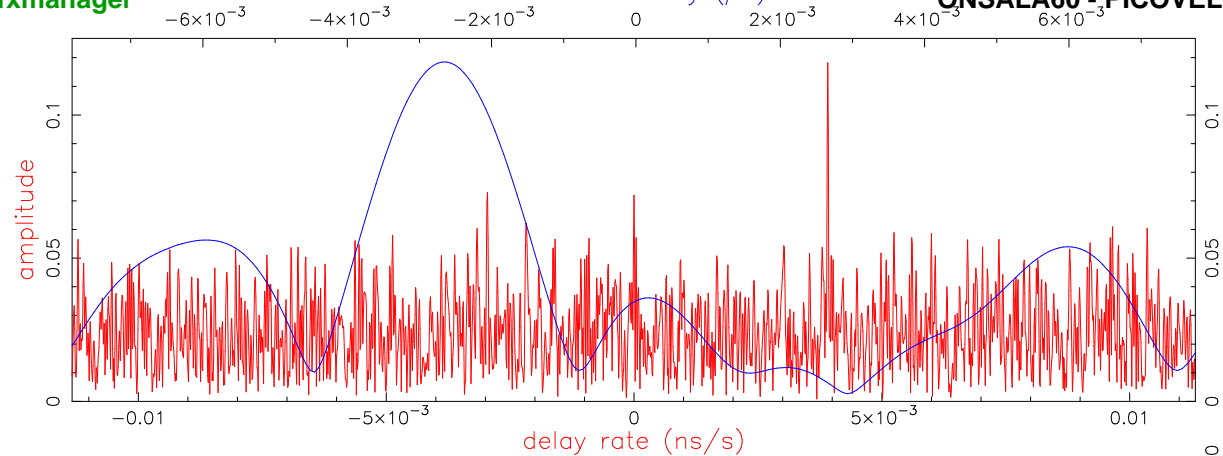
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XP

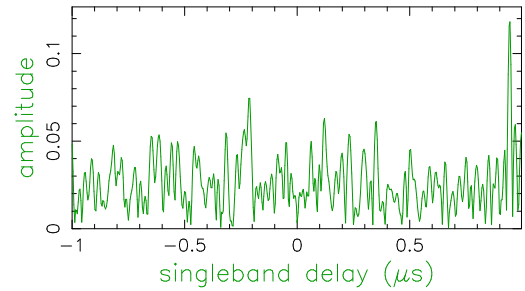
ONSALA60 - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

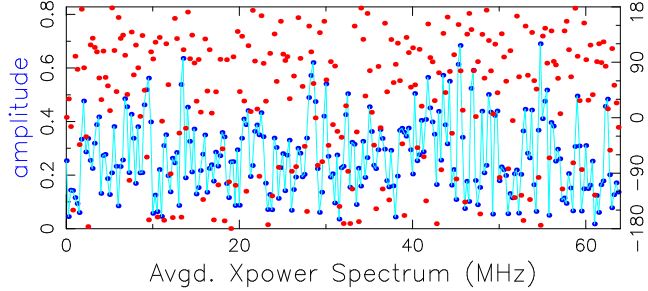


Fringe quality 0

SNR 6.3
 Int time 359.894
 Amp 0.127
 Phase -153.9
 PFD 1.0e-01
 Delays (us)
 SBD 0.943687
 MBD -0.002732
 Fringe rate (Hz)
 0.337476
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

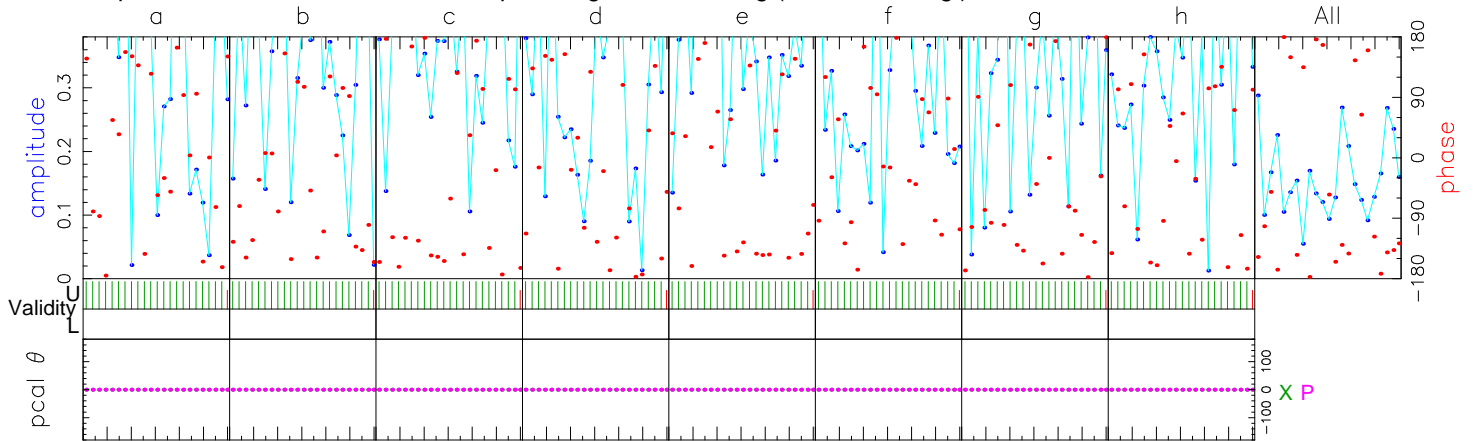


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134528
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	176.7	-121.2	-156.6	-168.7	-177.9	-103.9	-130.1	-171.9	Phase	-153.9
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	402.7	346.2	499.1	237.4	148.9	213.8	240.9	428.4	Sbd box	498.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.80213395809E+02	Apriori delay (usec)	-6.81163789170E+02	Resid mbdelay (usec)	-2.73164E-03	+/-	1.7E-04
Sband delay (usec)	-6.80220101670E+02	Apriori clock (usec)	5.7368843E+01	Resid sbdelay (usec)	9.43687E-01	+/-	1.4E-03
Phase delay (usec)	-6.81163794132E+02	Apriori clockrate (us/s)	1.1280000E-06	Resid phdelay (usec)	-4.96267E-06	+/-	5.9E-07
Delay rate (us/s)	1.90287720456E-01	Apriori rate (us/s)	1.90283802699E-01	Resid rate (us/s)	3.91776E-06	+/-	2.8E-09
Total phase (deg)	-81.6	Apriori accel (us/s/s)	2.21555239999E-05	Resid phase (deg)	-153.9	+/-	18.3

ph/seg (deg)	53.4	Theor.	43.9	Amplitude	0.127 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	60.5		76.7	Search (2048X32)	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	31.9		25.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.3		45.2	Inc. seg. avg.	0.130	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

X: az 284.9 el 42.8 pa 44.6 P: az 295.8 el 45.6 pa 76.8 u,v (fr/asec) -1439.741 3171.451 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XP..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XP.W.318.1W55K2

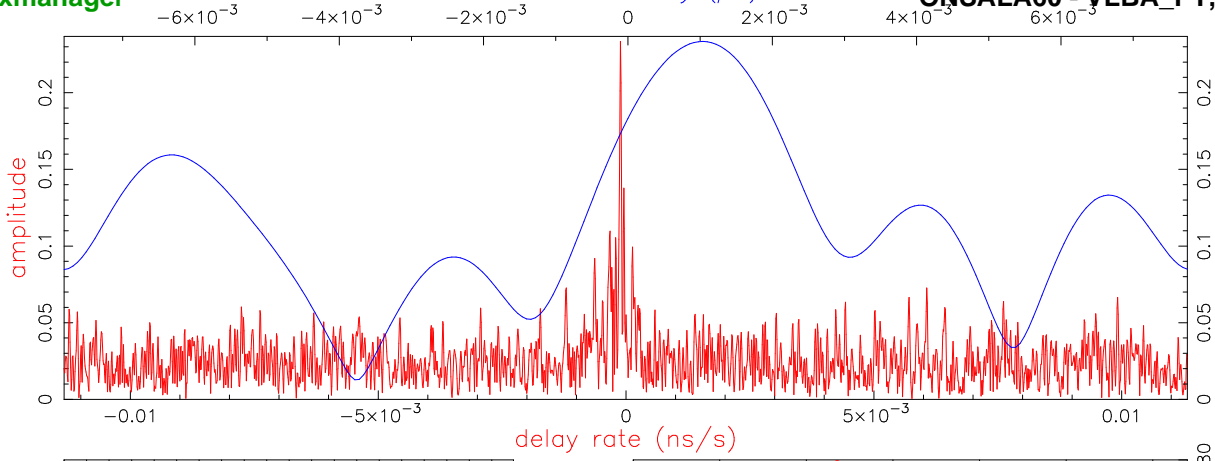
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

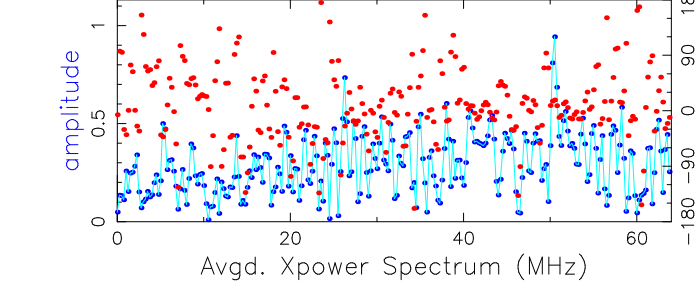
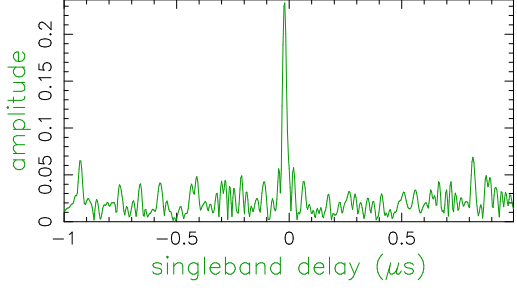
BLLAC.1W55K2, No0231, Xp

ONSALA60 - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

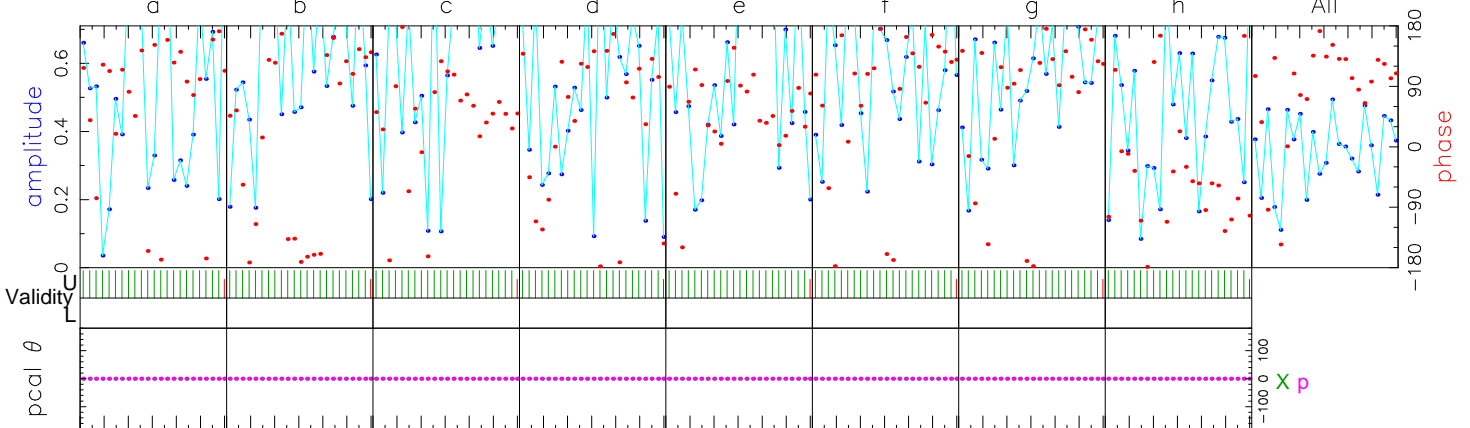


Fringe quality 9
 SNR 12.3
 Int time 359.894
 Amp 0.237
 Phase 109.7
 PFD 5.9e-26
 Delays (us)
 SBD -0.021148
 MBD 0.001035
 Fringe rate (Hz)
 -0.009510
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134529
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	124.3	155.2	61.4	131.4	64.4	132.1	129.6	-70.4	Phase	109.7
	0.3	0.3	0.5	0.3	0.4	0.3	0.4	0.2	Ampl.	0.3
	252.2	251.5	251.5	251.8	251.9	252.4	252.8	253.4	Sbd box	251.6
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-2.80346770763E+03		Apriori delay (usec)		-2.80345311773E+03		Resid mbdelay (usec)		1.03510E-03	+/- 8.8E-05
Sband delay (usec)	-2.80347426623E+03		Apriori clock (usec)		5.0870102E+01		Resid sbdelay (usec)		-2.11485E-02	+/- 7.0E-04
Phase delay (usec)	-2.80345311420E+03		Apriori clockrate (us/s)		6.4799999E-07		Resid phdelay (usec)		3.53644E-06	+/- 3.0E-07
Delay rate (us/s)	-1.27315032260E+00		Apriori rate (us/s)		-1.27315021220E+00		Resid rate (us/s)		-1.10398E-07	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		3.63897594060E-05		Resid phase (deg)		109.7	+/- 9.3

ph/seg (deg) 54.4 22.4 Search (2048X32) 0.232 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.8 39.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 82.1 13.2 Inc. seg. avg. 0.320 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.6 23.0 Inc. frq. avg. 0.339 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 284.9 el 42.8 pa 44.6 p: az 63.3 el 53.3 pa -87.4 u,v (fr/asec) 9925.084 4331.863 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xp..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xp.W.327.1W55K2

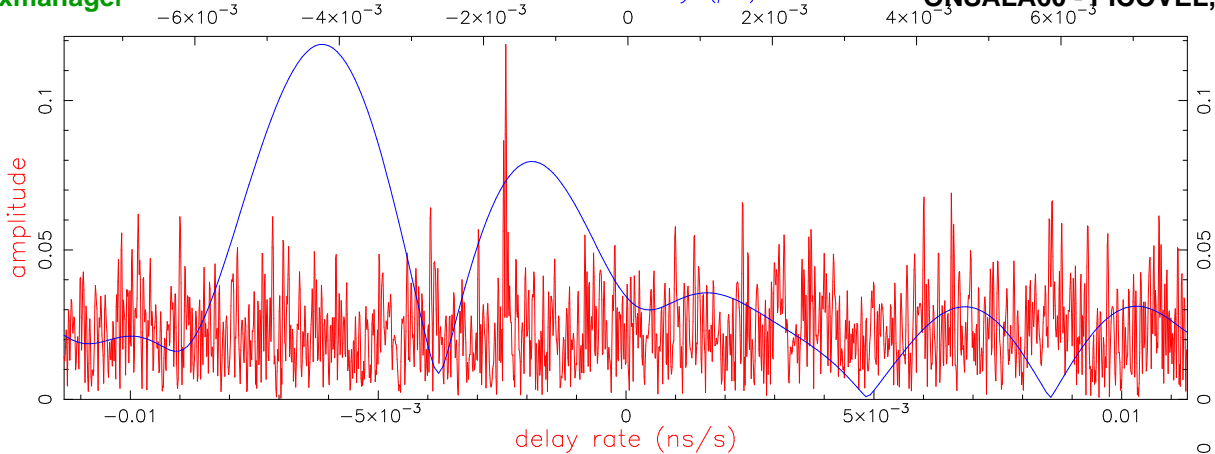
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XP

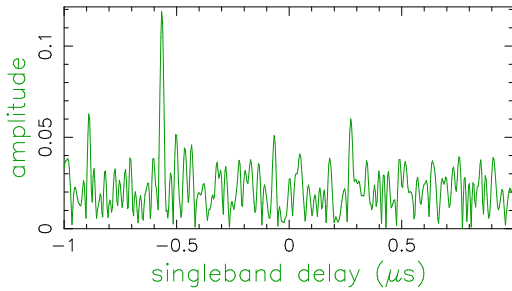
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

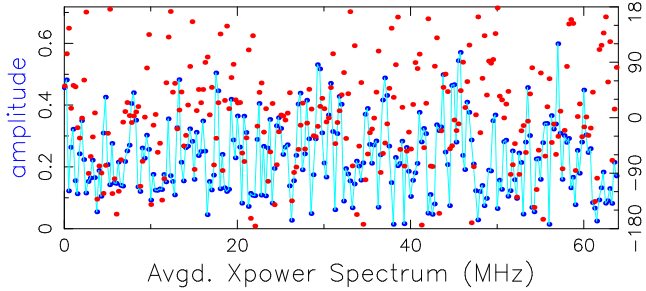


Fringe quality 0

SNR 6.2
Int time 359.894
Amp 0.121
Phase 13.6
PFD 1.6e-01
Delays (us)
SBD -0.565640
MBD -0.004215
Fringe rate (Hz)
-0.209212
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

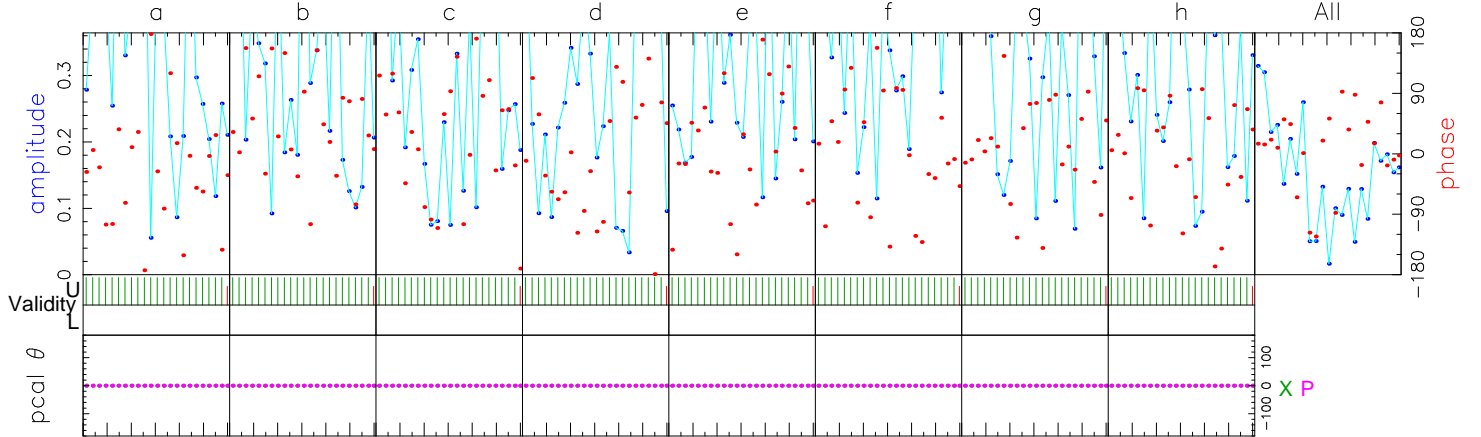


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134531
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-28.8	36.9	59.7	8.4	3.2	-8.6	20.9	0.3	Phase	13.6
	0.2	0.2	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	110.0	113.3	199.2	494.2	338.7	141.3	111.2	13.3	Sbd box	112.2
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

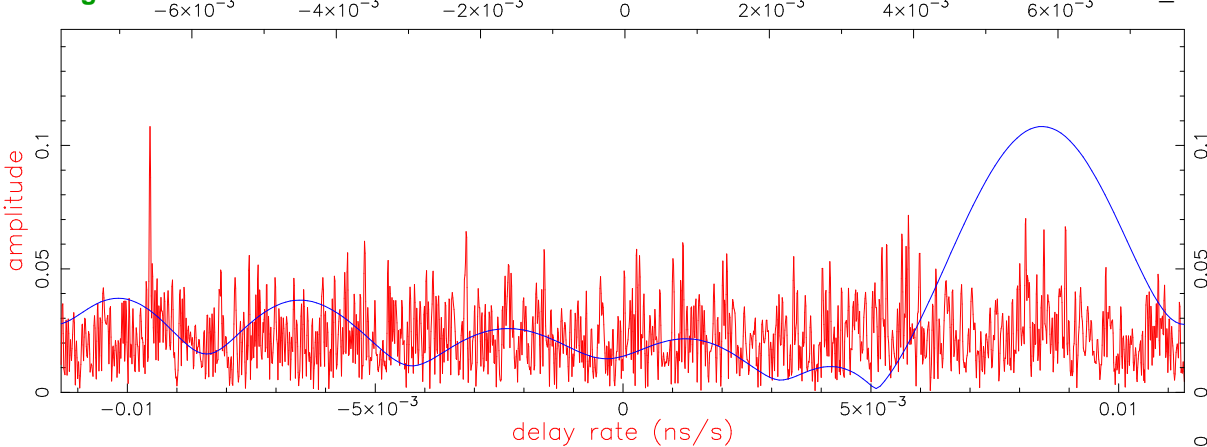
Group delay (usec)(sbd)	-6.81730503820E+02	Apriori delay (usec)	-6.81163789170E+02	Resid mbdelay (usec)	-4.21465E-03	+/-	1.8E-04
Sband delay (usec)	-6.81729429420E+02	Apriori clock (usec)	5.7368843E+01	Resid sbdelay (usec)	-5.65640E-01	+/-	1.4E-03
Phase delay (usec)	-6.81163788732E+02	Apriori clockrate (us/s)	1.1280000E-06	Resid phdelay (usec)	4.37694E-07	+/-	6.0E-07
Delay rate (us/s)	1.90281373952E-01	Apriori rate (us/s)	1.90283802699E-01	Resid rate (us/s)	-2.42875E-06	+/-	2.9E-09
Total phase (deg)	-274.1	Apriori accel (us/s/s)	2.21555239999E-05	Resid phase (deg)	13.6	+/-	18.5

ph/seg (deg)	58.0	Theor.	44.4	Amplitude	0.121 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.5	Search (2048X32)	0.112	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	29.8	Inc. seg. avg.	0.120	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	38.3	Inc. frq. avg.	0.123	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011	0.011
				Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00		

X: az 284.9 el 42.8 pa 44.6 P: az 295.8 el 45.6 pa 76.8 u,v (fr/asec) -1439.741 3171.451 simultaneous interpolator

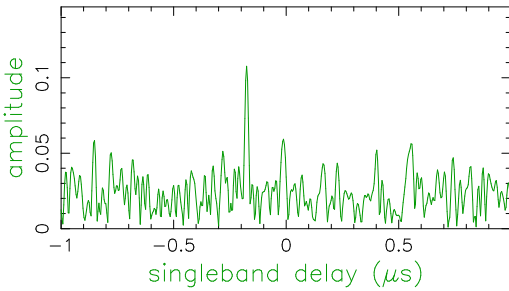
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XP..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XP.W.331.1W55K2

multiband delay (μ s)

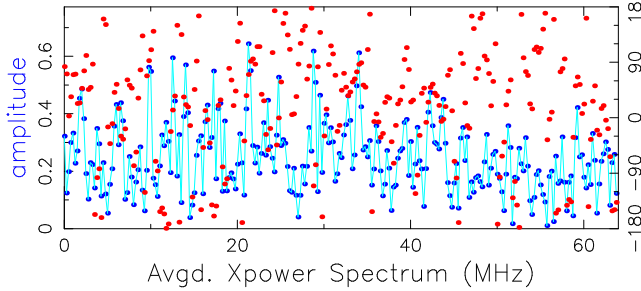


Fringe quality 0

SNR 5.6
 Int time 359.894
 Amp 0.147
 Phase 120.0
 PFD 1.0e+00
 Delays (us)
 SBD -0.175776
 MBD 0.005780
 Fringe rate (Hz)
 -0.822997
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

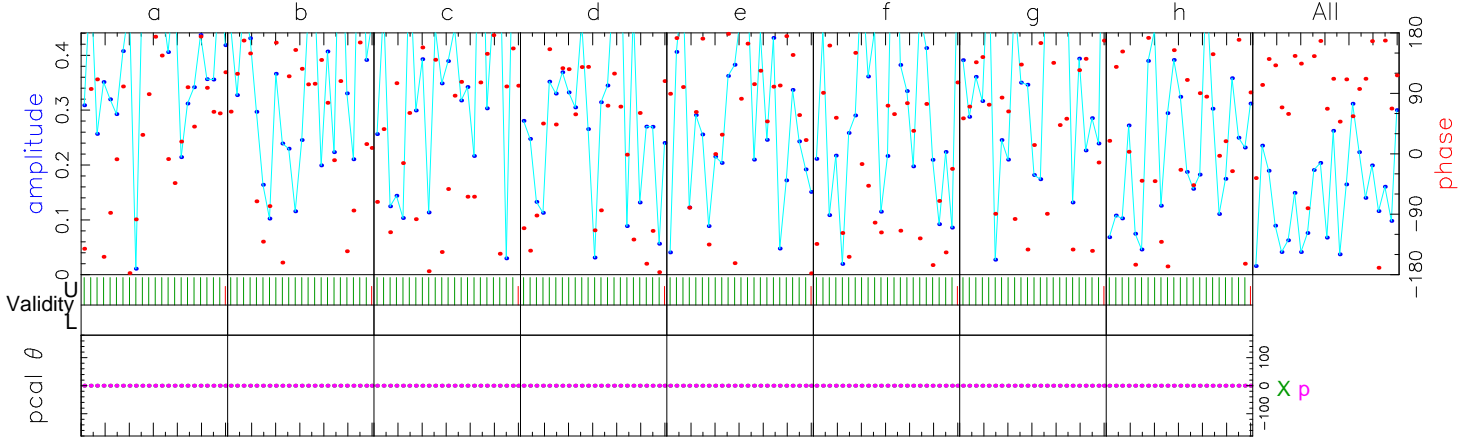


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134532
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	96.7	127.7	140.9	129.2	121.7	86.8	113.9	116.0	Phase	120.0
	0.2	0.2	0.2	0.1	0.2	0.0	0.2	0.1	Ampl.	0.1
	154.9	278.2	120.9	60.8	183.4	38.9	77.4	254.2	Sbd box	212.0
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-2.80363483753E+03		Apriori delay (usec)		-2.80345311773E+03		Resid mbdelay (usec)		5.78021E-03	+/- 1.9E-04
Sband delay (usec)	-2.80362889373E+03		Apriori clock (usec)		5.0870102E+01		Resid sbdelay (usec)		-1.75776E-01	+/- 1.5E-03
Phase delay (usec)	-2.80345311386E+03		Apriori clockrate (us/s)		6.4799999E-07		Resid phdelay (usec)		3.86941E-06	+/- 6.6E-07
Delay rate (us/s)	-1.27315976638E+00		Apriori rate (us/s)		-1.27315021220E+00		Resid rate (us/s)		-9.55418E-06	+/- 3.2E-09
Total phase (deg)			Apriori accel (us/s/s)		3.63897594060E-05		Resid phase (deg)		120.0	+/- 20.5

	RMS	Theor.	Amplitude	0.147 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	61.5	49.2	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	84.5	85.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	19.5	29.0	Inc. seg. avg.	0.144	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	45.2	50.6	Inc. frq. avg.	0.135	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

X: az 284.9 el 42.8 pa 44.6 p: az 63.3 el 53.3 pa -87.4 u,v (fr/asec) 9925.084 4331.863 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xp..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xp.W.338.1W55K2

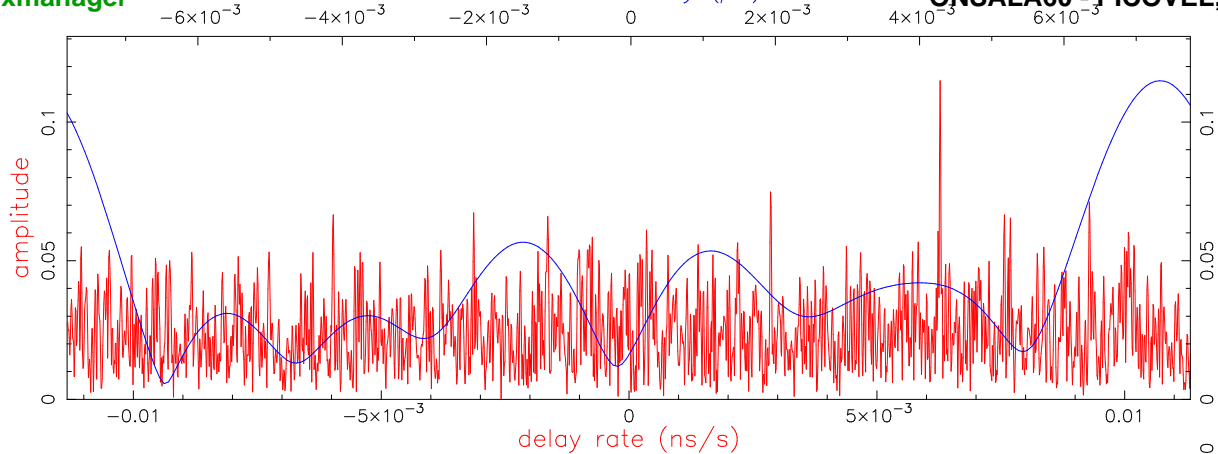
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XP

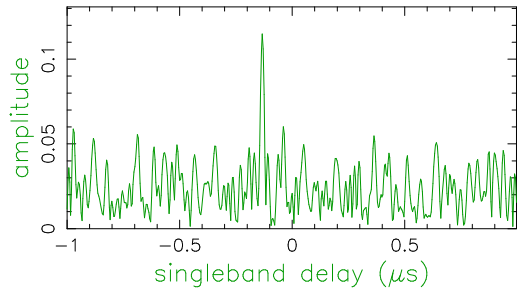
ONSALA60 - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

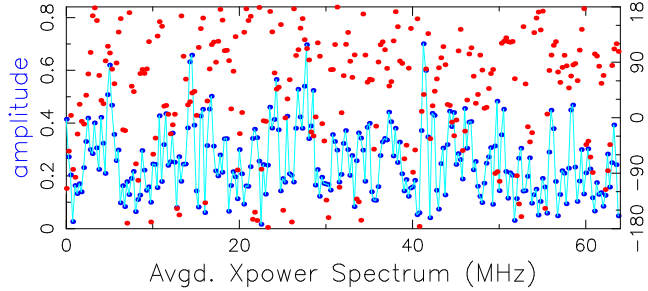


Fringe quality 0

SNR 6.0
 Int time 359.894
 Amp 0.131
 Phase -85.5
 PFD 4.7e-01
 Delays (us)
 SBD -0.132596
 MBD 0.007333
 Fringe rate (Hz) 0.541648
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

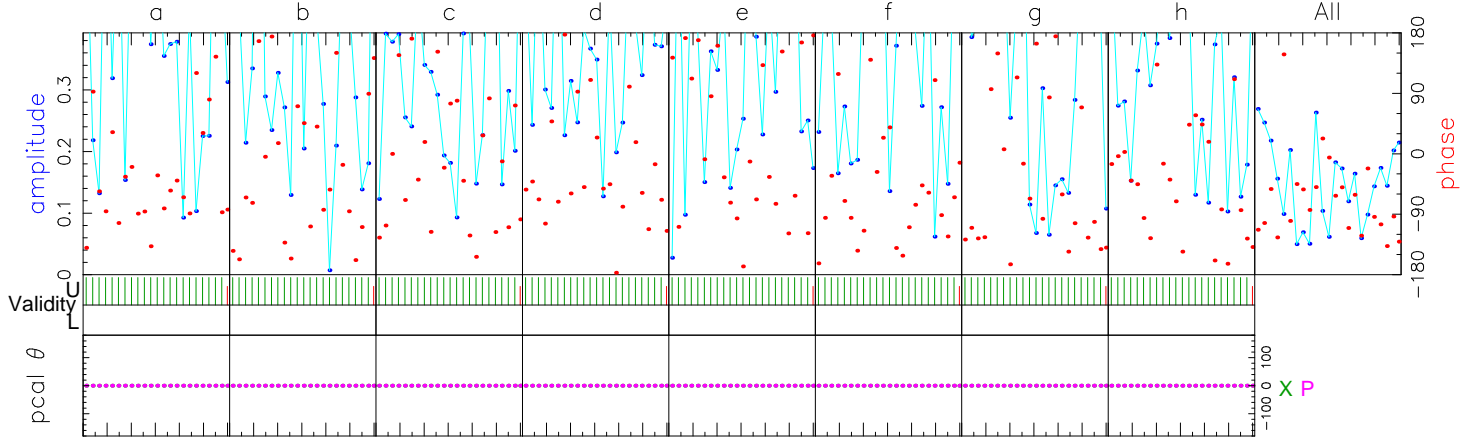


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134534
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.4	-153.9	-83.0	-54.5	-107.2	-82.2	-127.6	-56.3	Phase	-85.5
	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	222.9	164.9	209.9	224.2	126.4	243.6	225.8	485.2	Sbd box	223.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-6.81297080952E+02		Apriori delay (usec)		-6.81163789170E+02		Resid mbdelay (usec)		7.33322E-03	+/- 1.8E-04
Sband delay (usec)	-6.81296385170E+02		Apriori clock (usec)		5.7368843E+01		Resid sbdelay (usec)		-1.32596E-01	+/- 1.4E-03
Phase delay (usec)	-6.81163791928E+02		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		-2.75843E-06	+/- 6.2E-07
Delay rate (us/s)	1.90290090696E-01		Apriori rate (us/s)		1.90283802699E-01		Resid rate (us/s)		6.28800E-06	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.21555239999E-05		Resid phase (deg)		-85.5	+/- 19.2

	RMS	Theor.	Amplitude	0.131 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	49.2	46.1	Search (2048X32)	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	65.8	80.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	38.3	27.2	Inc. seg. avg.	0.129	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.5	47.4	Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

X: az 284.9 el 42.8 pa 44.6 P: az 295.8 el 45.6 pa 76.8 u,v (fr/asec) -1439.741 3171.451 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XP..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XP.W.343.1W55K2

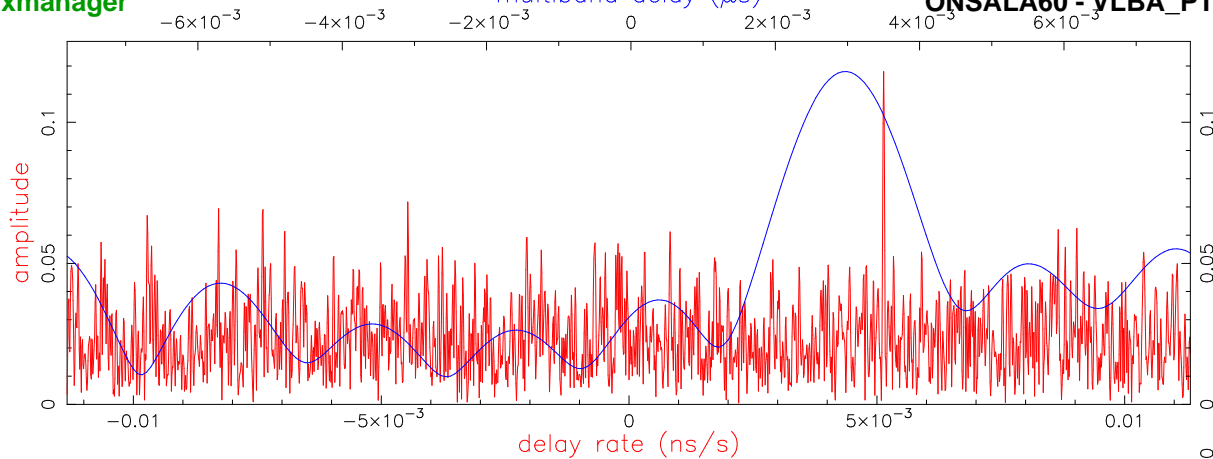
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, Xp

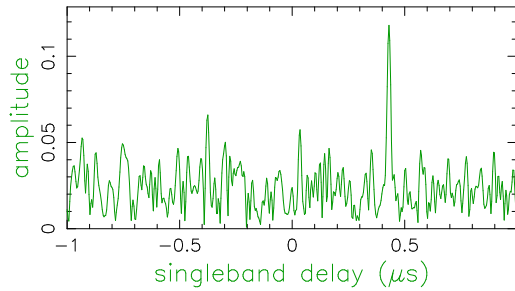
ONSALA60 - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

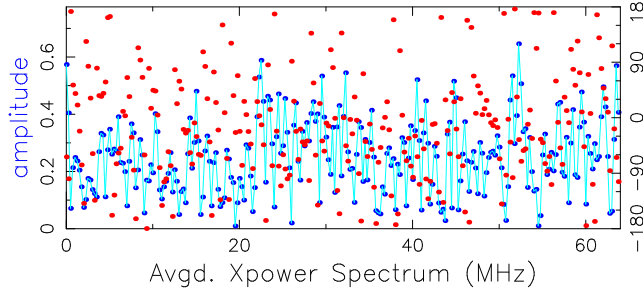


Fringe quality 0

SNR 6.1
 Int time 359.894
 Amp 0.129
 Phase -149.4
 PFD 2.1e-01
 Delays (us)
 SBD 0.429909
 MBD 0.002979
 Fringe rate (Hz)
 0.443579
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

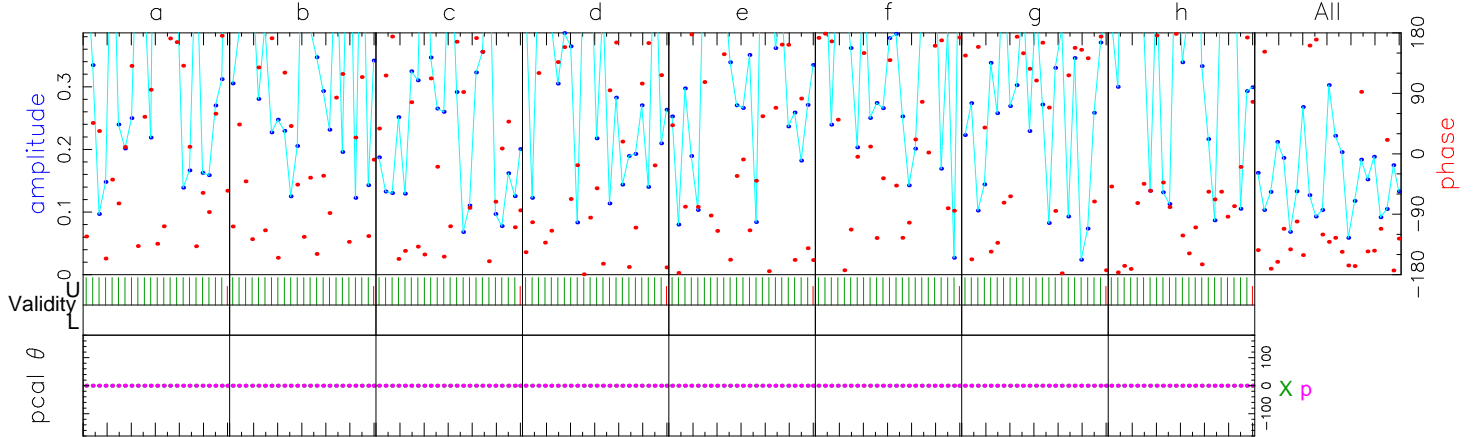


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134535
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.6	-126.1	-163.5	-154.7	-174.6	178.2	-174.8	-121.4	Phase	-149.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.3	Ampl.	0.1
	212.0	434.7	265.6	237.4	189.8	434.9	305.0	366.6	Sbd box	367.1
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-2.80302826408E+03		Apriori delay (usec)		-2.80345311773E+03		Resid mbdelay (usec)		2.97866E-03	+/- 1.8E-04
Sband delay (usec)	-2.80302320823E+03		Apriori clock (usec)		5.0870102E+01		Resid sbdelay (usec)		4.29909E-01	+/- 1.4E-03
Phase delay (usec)	-2.80345312255E+03		Apriori clockrate (us/s)		6.4799999E-07		Resid phdelay (usec)		-4.81793E-06	+/- 6.0E-07
Delay rate (us/s)	-1.27314506269E+00		Apriori rate (us/s)		-1.27315021220E+00		Resid rate (us/s)		5.14952E-06	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		3.63897594060E-05		Resid phase (deg)		-149.4	+/- 18.7

ph/seg (deg) 51.4 44.9 Search (2048X32) 0.117 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 59.2 78.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.7 26.5 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.8 46.2 Inc. frq. avg. 0.127 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 284.9 el 42.8 pa 44.6 p: az 63.3 el 53.3 pa -87.4 u,v (fr/asec) 9925.084 4331.863 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/Xp..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/Xp.W.349.1W55K2

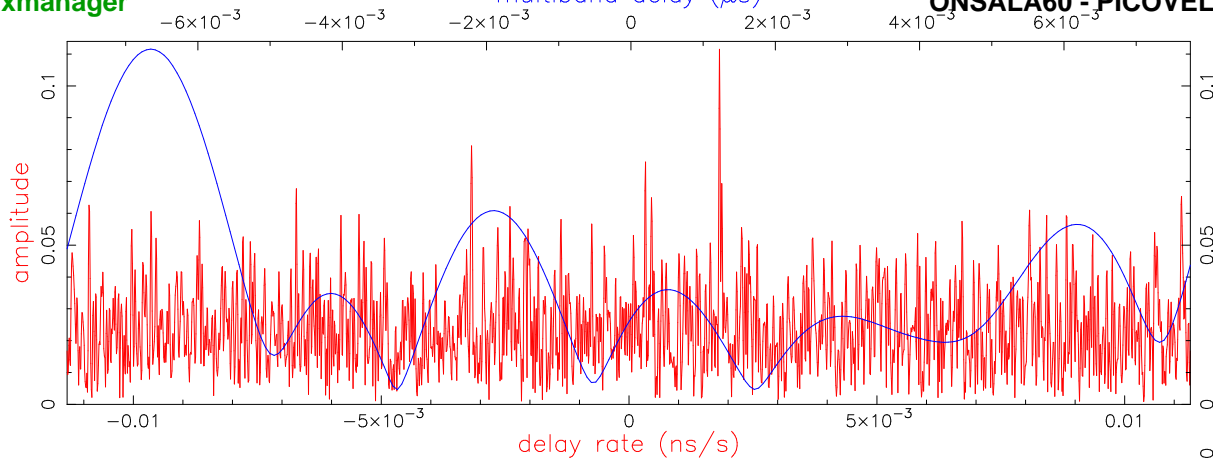
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XP

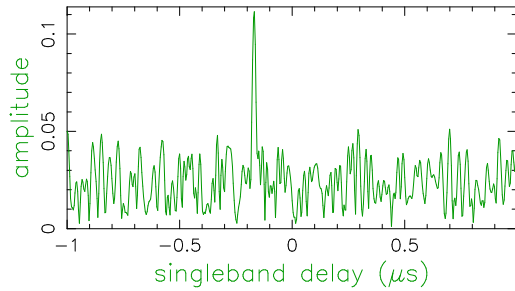
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

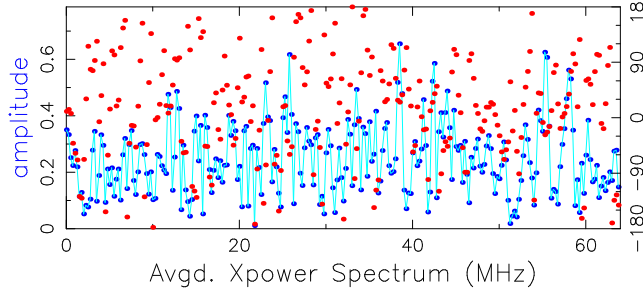


Fringe quality 0

SNR 5.8
Int time 359.894
Amp 0.114
Phase -57.5
PFD 7.1e-01
Delays (us)
SBD -0.169327
MBD -0.006689
Fringe rate (Hz)
0.158030
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

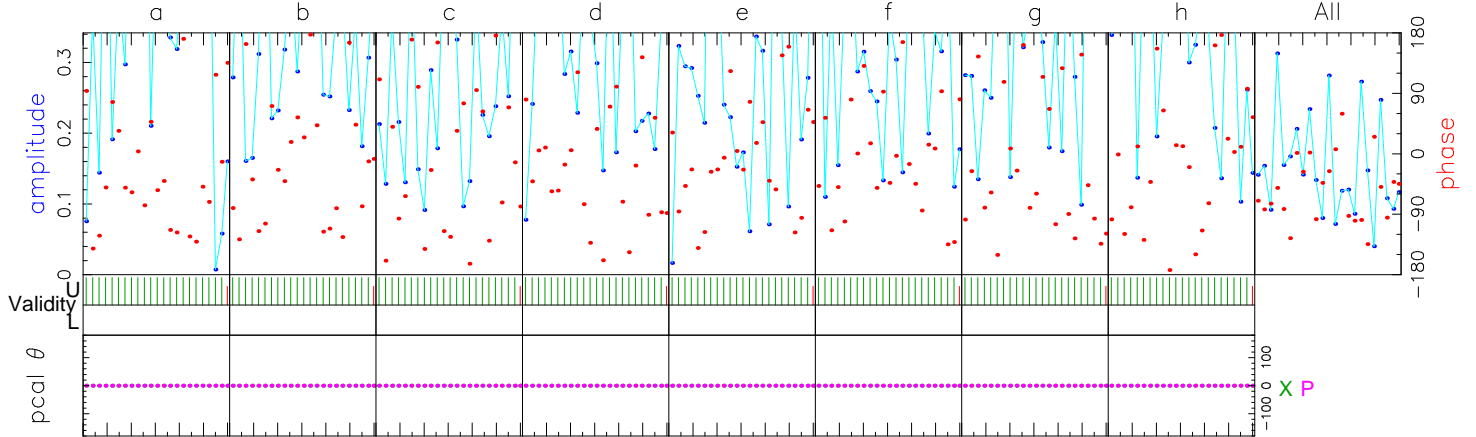


delay rate (ns/s)



Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120000.00
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134537
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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
	-69.7	-57.2	-100.3	-41.3	-27.9	-33.3	-97.7	-49.7	Phase	-57.5
	0.2	0.1	0.0	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	211.3	409.0	283.2	436.4	155.1	361.3	333.2	444.4	Sbd box	213.7
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	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)	-6.81326727832E+02		Apriori delay (usec)		-6.81163789170E+02		Resid mbdelay (usec)		-6.68866E-03	+/- 1.9E-04
Sband delay (usec)	-6.81333116170E+02		Apriori clock (usec)		5.7368843E+01		Resid sbdelay (usec)		-1.69327E-01	+/- 1.5E-03
Phase delay (usec)	-6.81163791024E+02		Apriori clockrate (us/s)		1.1280000E-06		Resid phdelay (usec)		-1.85415E-06	+/- 6.3E-07
Delay rate (us/s)	1.90285637266E-01		Apriori rate (us/s)		1.90283802699E-01		Resid rate (us/s)		1.83457E-06	+/- 3.0E-09
Total phase (deg)			Apriori accel (us/s/s)		2.21555239999E-05		Resid phase (deg)		-57.5	+/- 19.6

	RMS	Theor.	Amplitude	0.114 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	48.9	47.0	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	73.3	82.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	29.9	27.7	Inc. seg. avg.	0.116	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	46.3	48.4	Inc. frq. avg.	0.110	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

X: az 284.9 el 42.8 pa 44.6 P: az 295.8 el 45.6 pa 76.8 u,v (fr/asec) -1439.741 3171.451 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XP..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XP.W.354.1W55K2

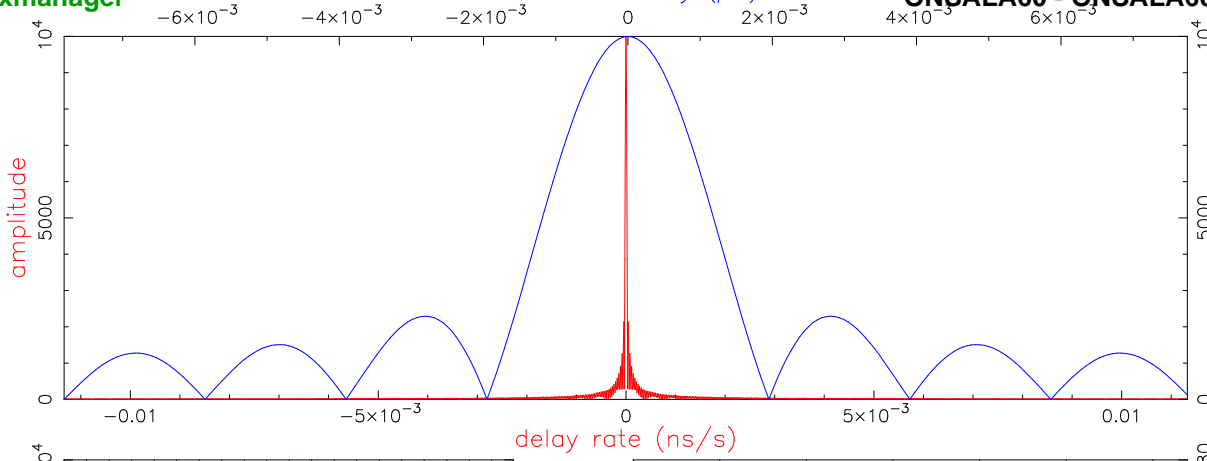
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

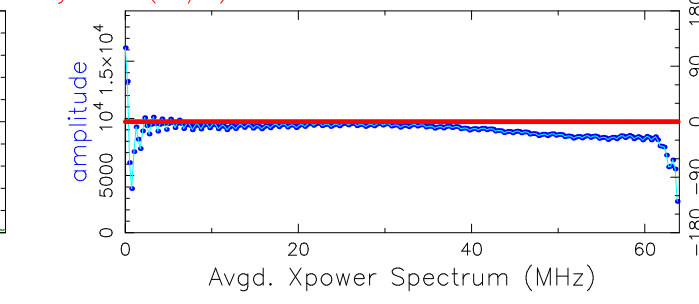
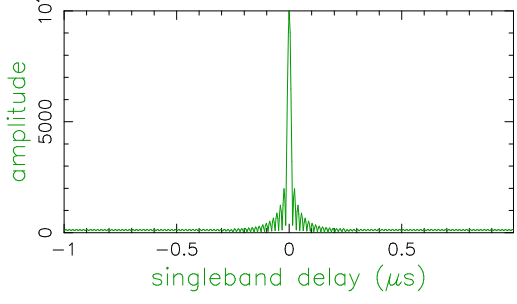
BLLAC.1W55K2, No0231, XX

ONSALA60 - ONSALA60, fgroup W, pol LL

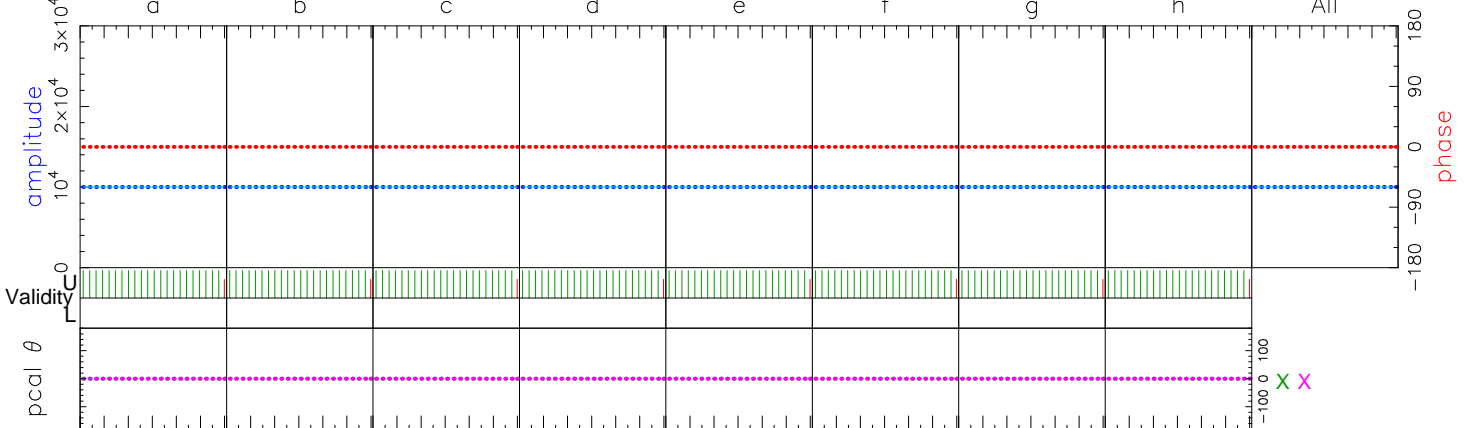
multiband delay (μ s)



Fringe quality 9
 SNR 518782.2
 Int time 359.894
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134528
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
X	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	2.1E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.7E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	7.1E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	3.4E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	0.0	Theor.	0.0	Amplitude	10000.001 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	Search (2048X32)	10000.001	Interp.	0.000	Inc. seg. avg.	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	Inc. frq. avg.	10000.001	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.001	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	u,v (fr/asec)	0.000 0.000	Inc. frq. avg.	10000.001	Inc. frq. avg.	10000.001	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
								Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00		0.00 0.00

X: az 284.9 el 42.8 pa 44.6 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

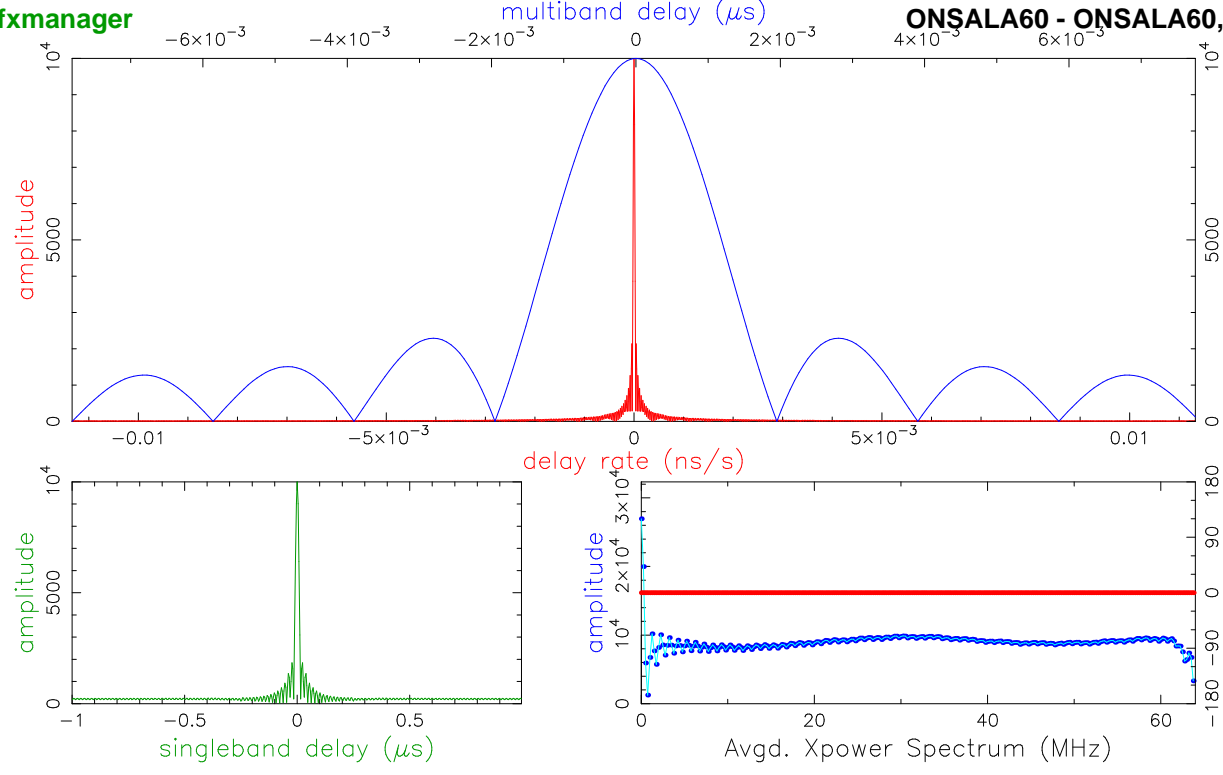
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XX.W.322.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

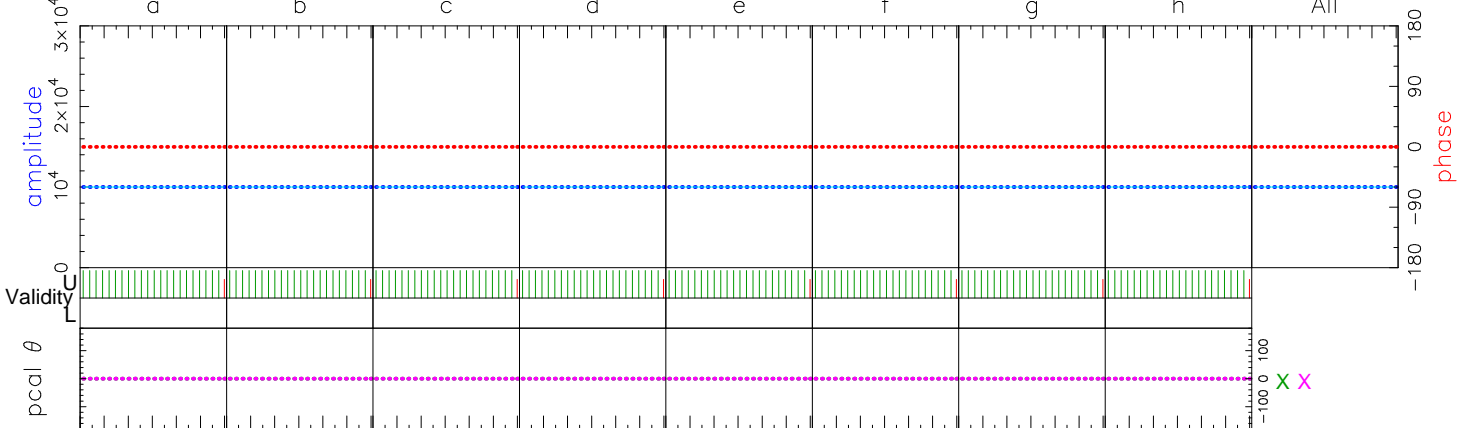
BLLAC.1W55K2, No0231, XX

ONŞALA60 - ONŞALA60, fgroup W, pol RR



Fringe quality 9
 SNR 518782.2
 Int time 359.894
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134531
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 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	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 2.1E-09
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.7E-08
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 7.1E-12
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 3.4E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 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

X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XX.W.332.1W55K2

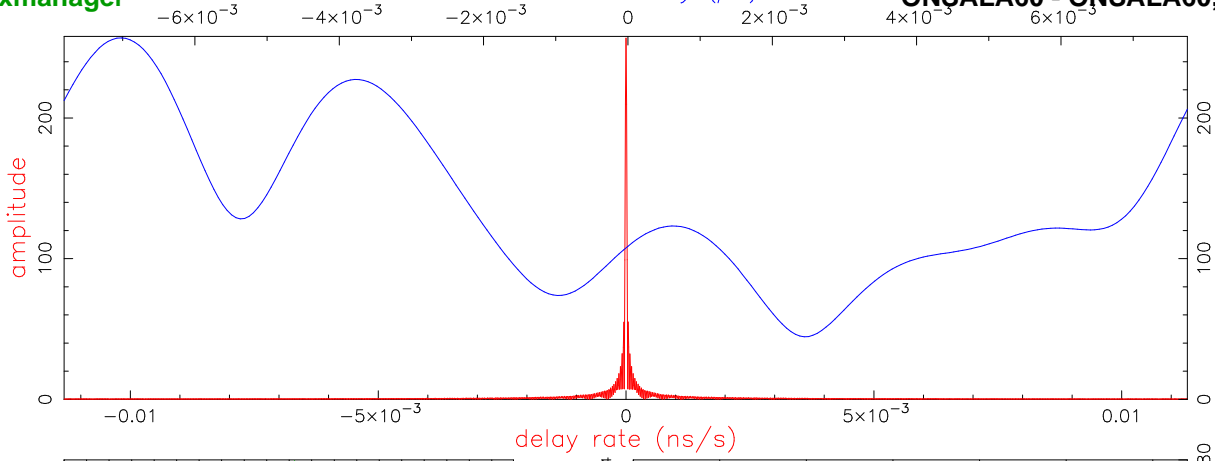
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XX

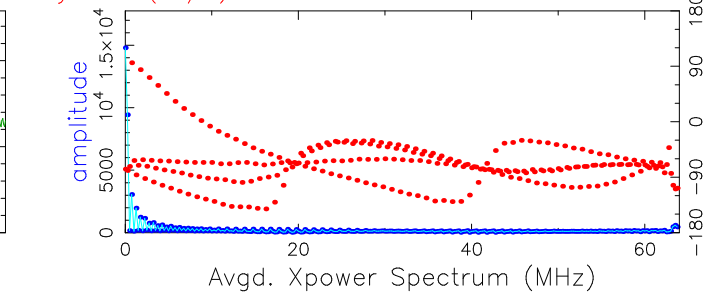
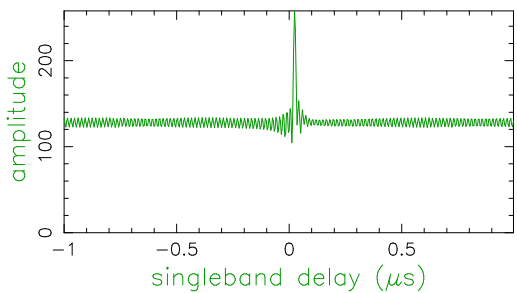
ONSALA60 - ONSALA60, fgroup W, pol LR

multiband delay (μs)



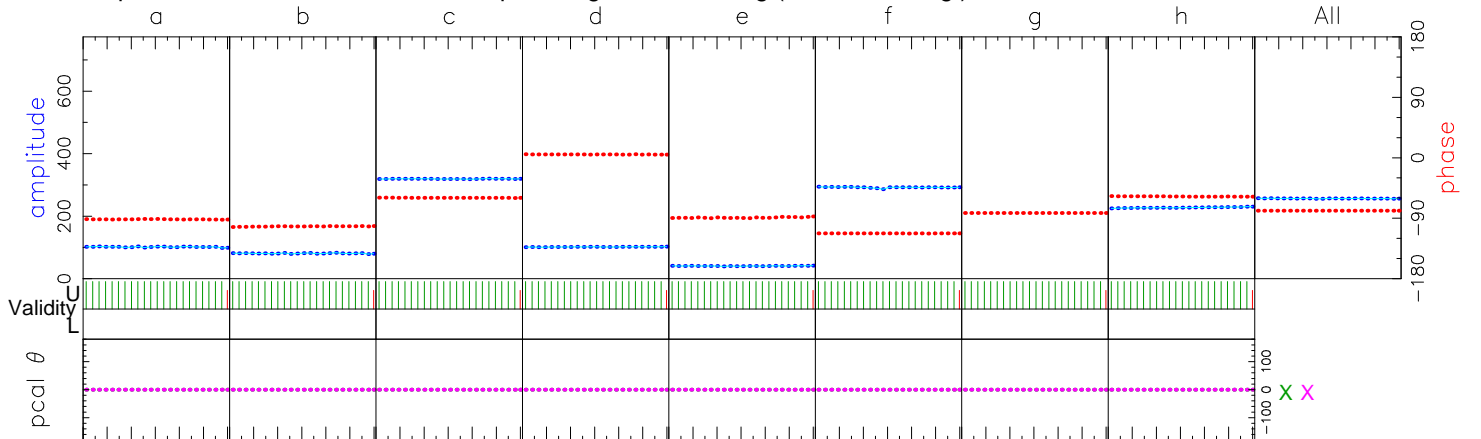
Fringe quality 5

SNR 13383.1
 Int time 359.894
 Amp 257.971
 Phase -78.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.024177
 MBD -0.006975
 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 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134534
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-91.6	-102.1	-59.5	4.9	-89.0	-112.5	-82.2	-57.5		Phase
	101.8	81.2	319.4	101.9	40.9	292.4	1073.4	227.8		Ampl.
	268.1	267.4	264.8	261.1	266.8	264.7	268.0	262.4		Sbd box
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0		APs used
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000		PC phase
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		Chan ids
X	1000	1000	1000	1000	1000	1000	1000	1000		Tracks
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	2.427475000000E-02		Apriori delay (usec)		0.000000000000E+00		Resid mbdelay (usec)		-6.97525E-03	+/- 8.1E-08
Sband delay (usec)	2.417750000000E-02		Apriori clock (usec)		0.000000000000E+00		Resid sbdelay (usec)		2.41775E-02	+/- 6.4E-07
Phase delay (usec)	-2.53940060387E-06		Apriori clockrate (us/s)		0.000000000000E+00		Resid phdelay (usec)		-2.53940E-06	+/- 2.8E-10
Delay rate (us/s)	-4.95990333709E-12		Apriori rate (us/s)		0.000000000000E+00		Resid rate (us/s)		-4.95990E-12	+/- 1.3E-12
Total phase (deg)			Apriori accel (us/s/s)		0.000000000000E+00		Resid phase (deg)		-78.7	+/- 0.0

RMS Theor. Amplitude 257.971 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 253.902 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 40.4 0.0 Inc. seg. avg. 256.725 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 122.4 0.0 Inc. frq. avg. 279.844 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 X: az 284.9 el 42.8 pa 44.6 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XX.W.342.1W55K2

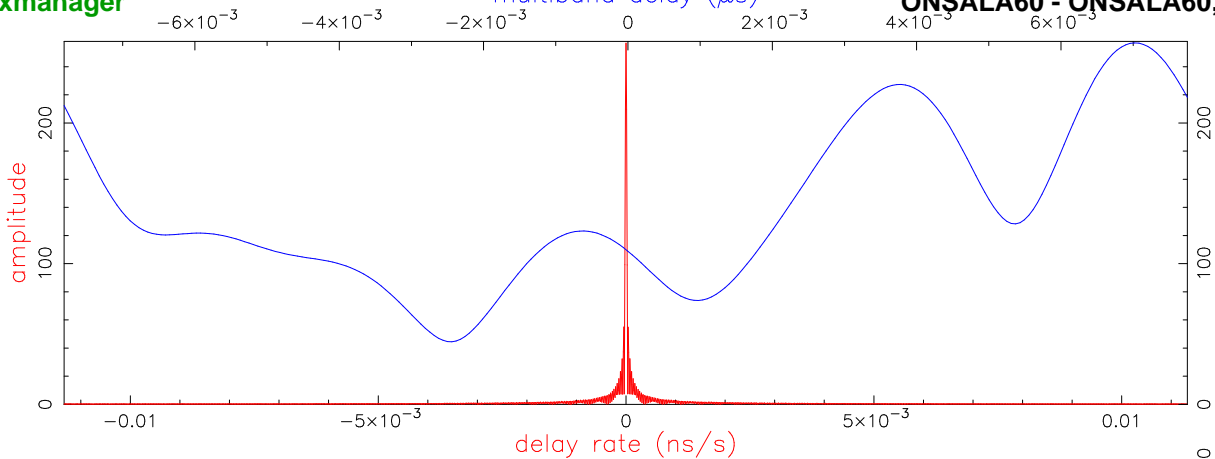
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

BLLAC.1W55K2, No0231, XX

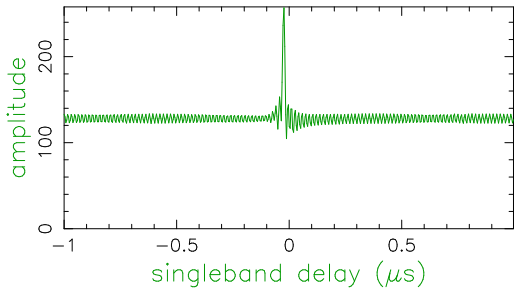
ONSALA60 - ONSALA60, fgroup W, pol RL

multiband delay (μ s)

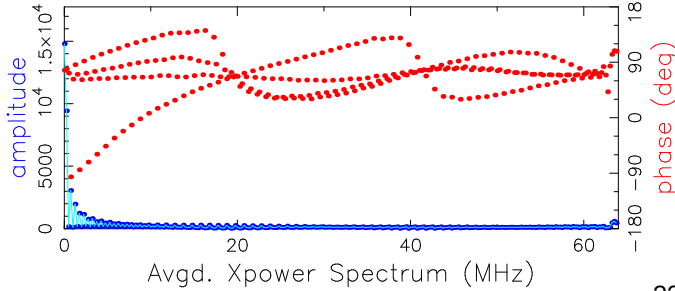


Fringe quality 5

SNR 13383.1
 Int time 359.894
 Amp 257.971
 Phase 78.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.024177
 MBD 0.006975
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

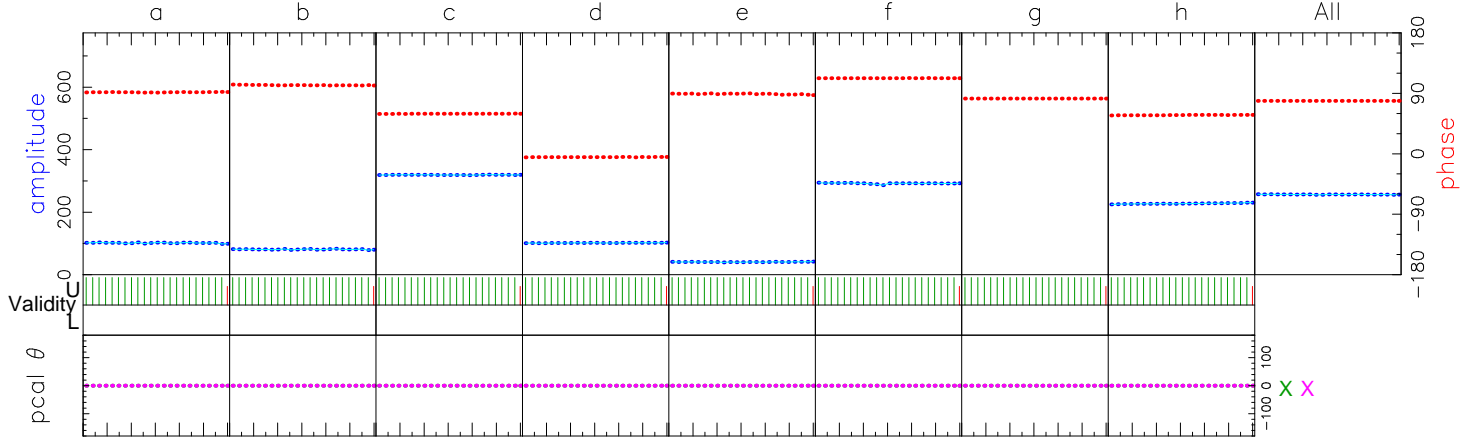


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120000.00
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134537
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 31 APs / seg (15.87 sec / seg.), time ticks 30 sec

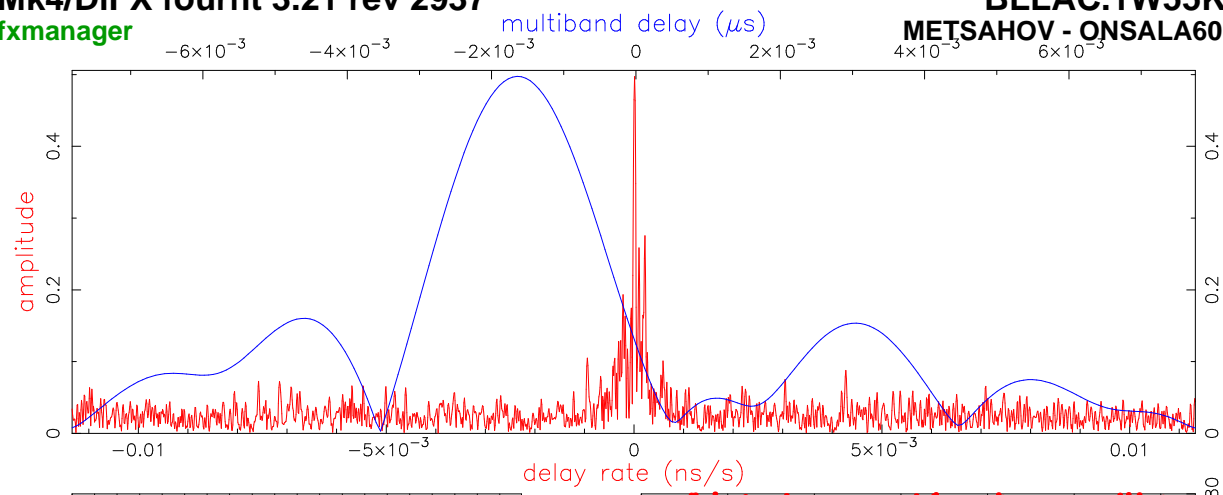


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.6	102.1	59.5	-4.9	89.0	112.5	82.2	57.5		78.7
	101.8	81.2	319.4	101.9	40.9	292.4	1073.4	227.8	Ampl.	279.8
	245.9	246.6	249.2	252.9	247.2	249.3	246.0	251.6	Sbd box	250.8
U/L	703/0	703/0	703/0	703/0	703/0	703/0	703/0	703/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.42747500000E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		6.97525E-03	+/- 8.1E-08
Sband delay (usec)	-2.41775000000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-2.41775E-02	+/- 6.4E-07
Phase delay (usec)	2.53940060378E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.53940E-06	+/- 2.8E-10
Delay rate (us/s)	4.95990333709E-12		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		4.95990E-12	+/- 1.3E-12
Total phase (deg)	78.7		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		78.7	+/- 0.0

	RMS	Theor.	Amplitude	257.971 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	0.0	0.0	Search (2048X32)	253.902	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	0.5	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	40.4	0.0	Inc. seg. avg.	256.725	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	122.4	0.0	Inc. frq. avg.	279.844	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

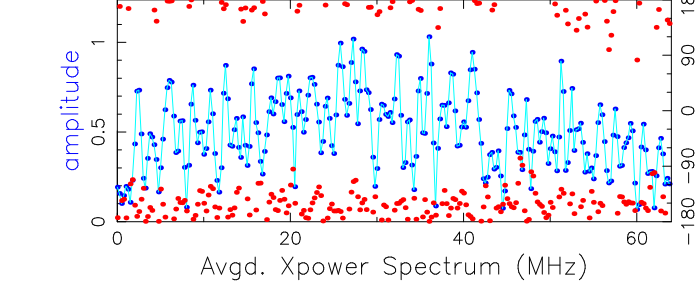
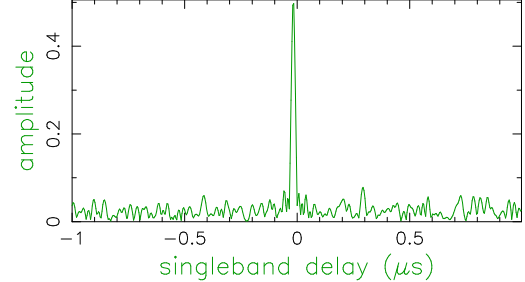
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/XX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/XX.W.352.1W55K2



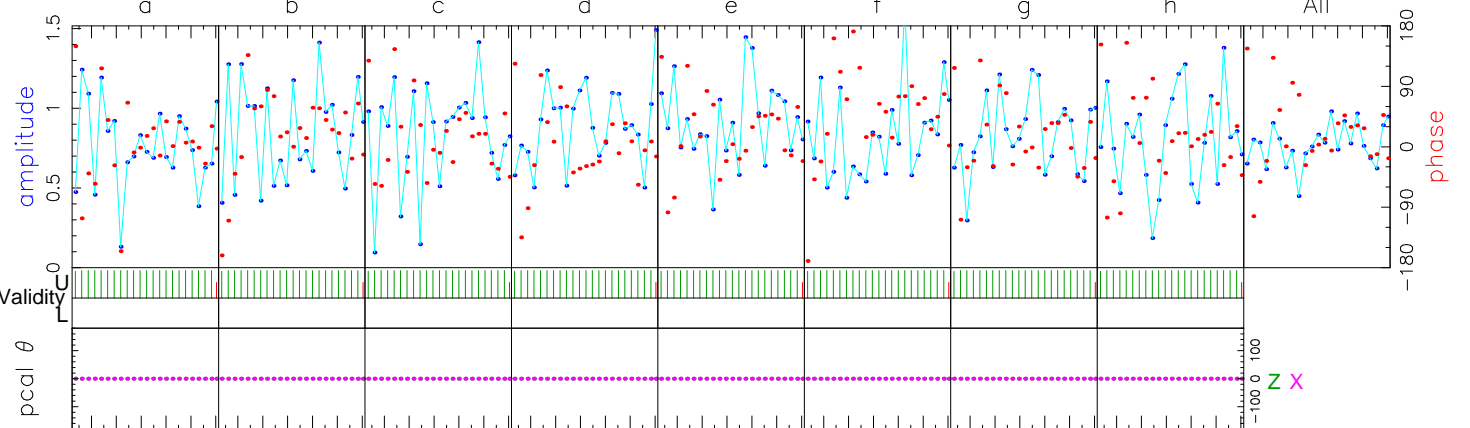
Fringe quality 7

SNR 25.7
Int time 345.840
Amp 0.506
Phase 18.2
PFD 0.0e+00
Delays (us)
SBD -0.017389
MBD -0.001675
Fringe rate (Hz)
0.001400
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c211a
Exper # 16383
Yr:day 2021:114
Start 120013.31
Stop 120559.94
FRT 120300.00
Corr/FF/build
2021:286:083752
2021:286:134529
2021:252:122852
RA & Dec (J2000)
22h02m43.291370s
+42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 sec / seg.), time ticks 30 sec



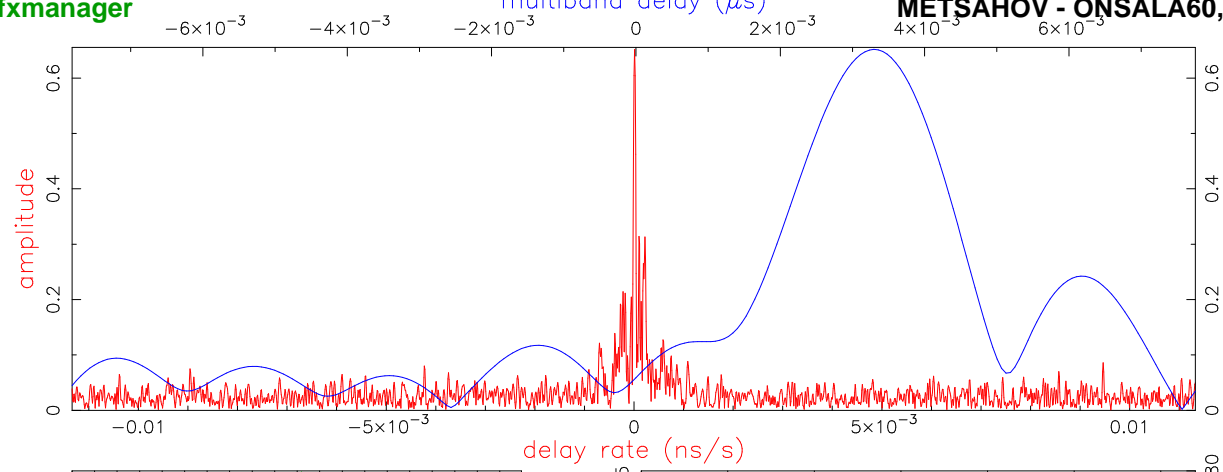
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.54548349272E+03									
Sband delay (usec)	-1.54548358113E+03									
Phase delay (usec)	-1.54546619204E+03									
Delay rate (us/s)	2.66439569836E-02									
Total phase (deg)			-281.6							
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										
RMS	55.6	10.7								
Theor.	10.7									
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.506 +/- 0.020										
0.484										
0.000										
0.757										
0.519										
PCal mode: MANUAL, MANUAL										
PCal 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										
Z: az 291.7 el 37.5 pa 38.8										
X: az 284.9 el 42.8 pa 44.6										
u,v (fr/asec) -191.616 876.085										
simultaneous interpolator										

Mk4/DiFX fourfit 3.21 rev 2937

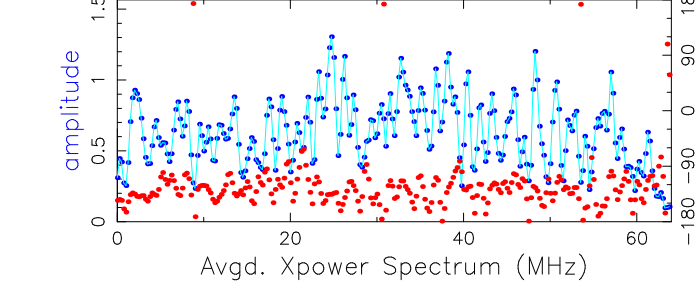
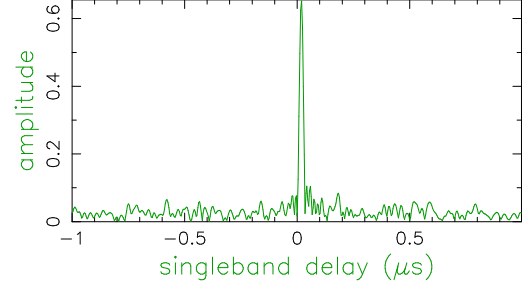
fxmanager

BLLAC.1W55K2, No0231, ZX

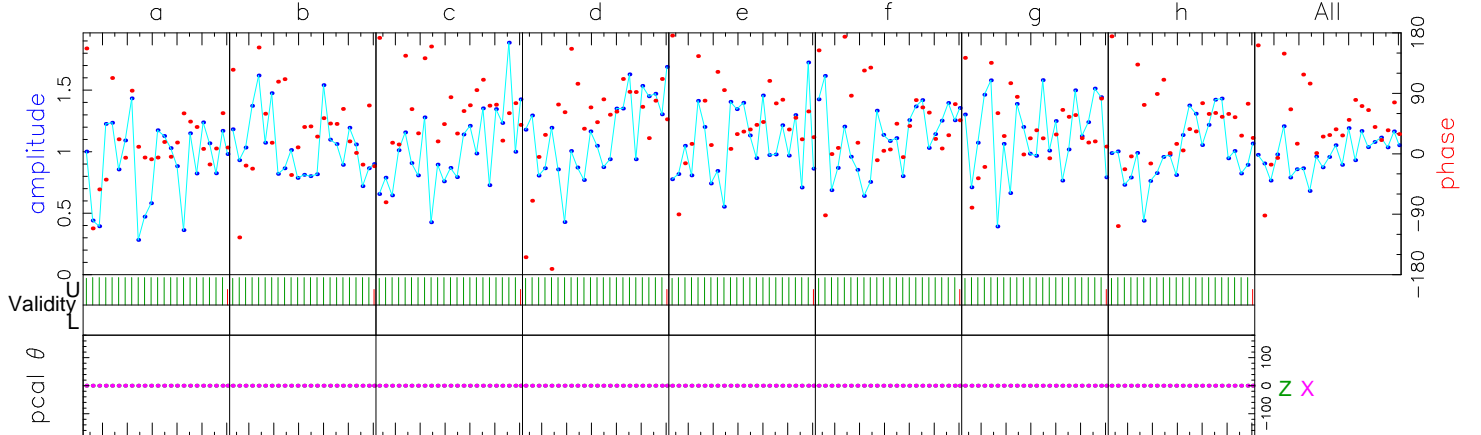
METSAHOV - ONSALA60, fgroup W, pol RR



Fringe quality 6
 SNR 33.3
 Int time 345.840
 Amp 0.655
 Phase 48.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.018537
 MBD 0.003276
 Fringe rate (Hz) 0.001222
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120013.31
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134532
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.54544729150E+03				-1.54546619263E+03				3.27612E-03	+/- 3.3E-05
Sband delay (usec)	-1.54544765538E+03				-5.7120857E+01				1.85372E-02	+/- 2.6E-04
Phase delay (usec)	-1.54546619108E+03				-5.1200000E-07				1.55053E-06	+/- 1.1E-07
Delay rate (us/s)	2.66439549118E-02				2.66439407286E-02				1.41832E-08	+/- 5.5E-10
Total phase (deg)			-251.8		9.86054864045E-06				48.1	+/- 3.4
	RMS	Theor.	Amplitude	0.655 +/- 0.020	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	54.2	8.2	Search (2048X32)	0.645	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	53.7	14.4	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	19.3	4.9	Inc. seg. avg.	0.969	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	9.3	8.5	Inc. frq. avg.	0.677	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
Z: az 291.7 el 37.5 pa 38.8			X: az 284.9 el 42.8 pa 44.6		u,v (fr/asec) -191.616 876.085					simultaneous interpolator

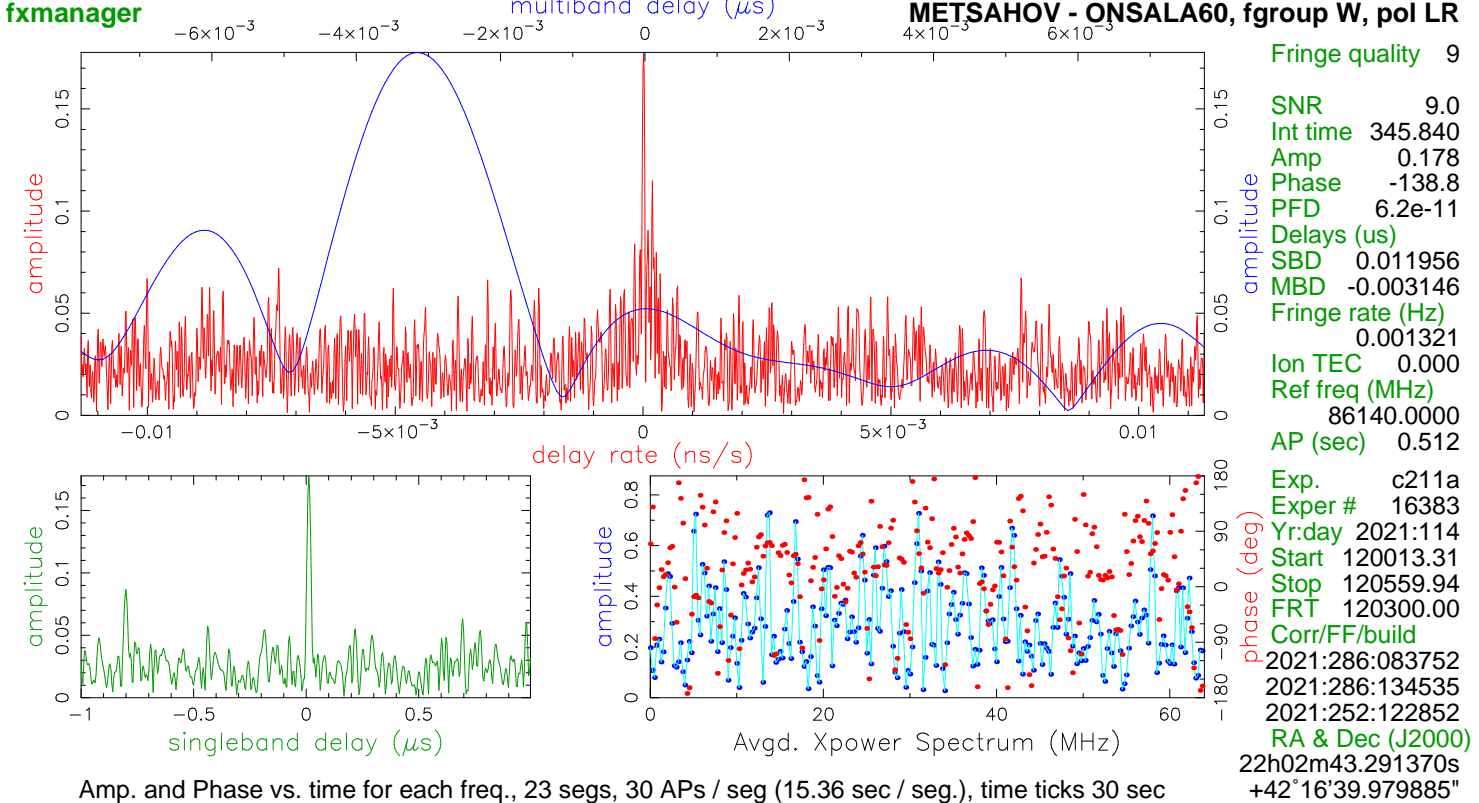
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/ZX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/ZX.W.336.1W55K2

Mk4/DiFX fourfit 3.21 rev 2937

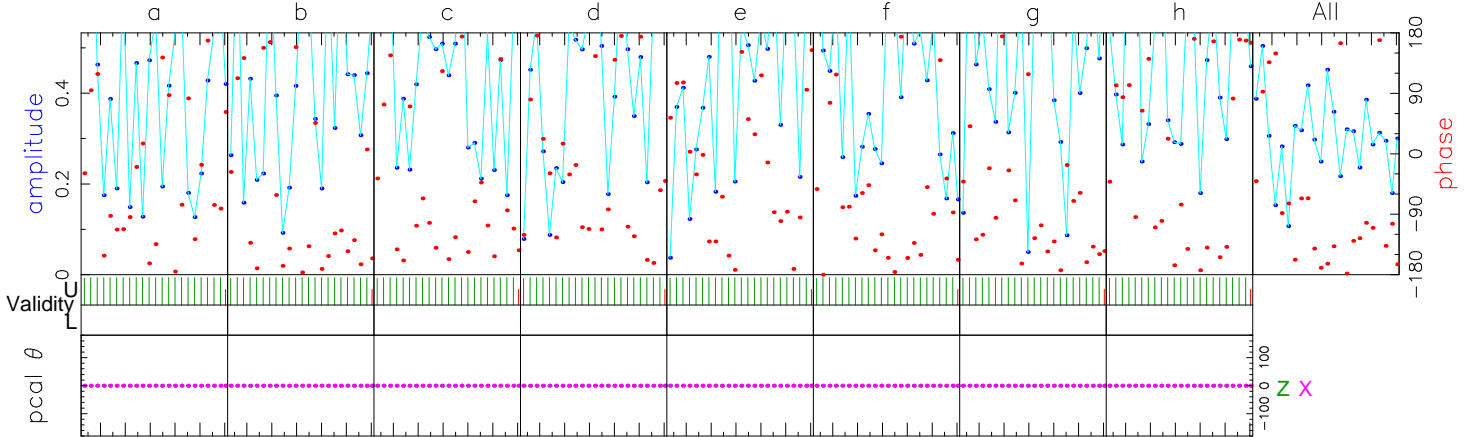
fxmanager

BLLAC.1W55K2, No0231, ZX

METSAHOV - ONSALA60, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	-119.2	-157.3	-139.0	-130.4	-138.8	-126.5	-123.3	-169.1	Phase	-138.8
	0.1	0.2	0.2	0.2	0.1	0.2	0.3	0.2	Ampl.	0.2
	417.8	260.2	52.0	11.4	179.7	261.1	259.9	258.5	Sbd box	260.1
U/L	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.54545371363E+03		Apriori delay (usec)	-1.54546619263E+03	Resid mbdelay (usec)	-3.14600E-03	+/-	1.2E-04		
Sband delay (usec)	-1.54545423663E+03		Apriori clock (usec)	-5.7120857E+01	Resid sbdelay (usec)	1.19560E-02	+/-	9.5E-04		
Phase delay (usec)	-1.54546619710E+03		Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-4.47746E-06	+/-	4.1E-07		
Delay rate (us/s)	2.66439560675E-02		Apriori rate (us/s)	2.66439407286E-02	Resid rate (us/s)	1.53389E-08	+/-	2.0E-09		
Total phase (deg)		-78.7	Apriori accel (us/s/s)	9.86054864045E-06	Resid phase (deg)	-138.8	+/-	12.7		

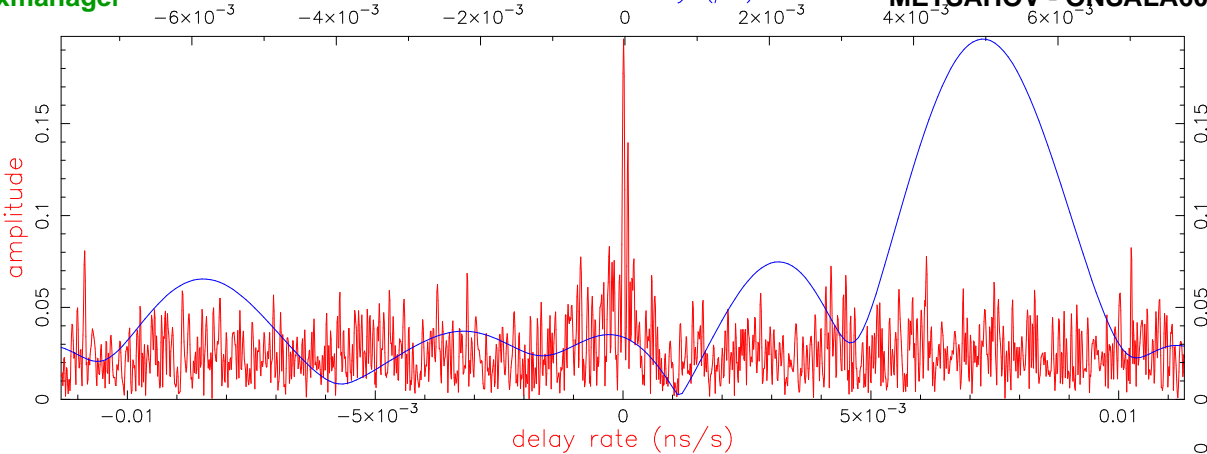
	RMS	Theor.	Amplitude	0.178 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.3	30.4	Search (2048X32)	0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	87.9	53.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	18.7	17.9	Inc. seg. avg.	0.267	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	40.0	31.3	Inc. frq. avg.	0.177	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

Z: az 291.7 el 37.5 pa 38.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -191.616 876.085 simultaneous interpolator

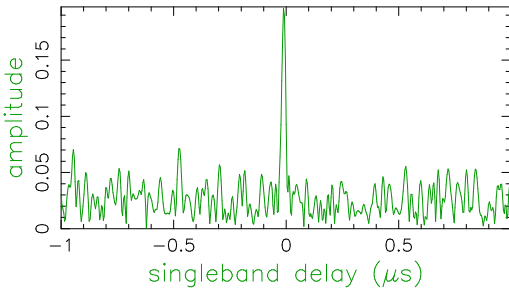
Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/ZX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/ZX.W.346.1W55K2

multiband delay (μ s)

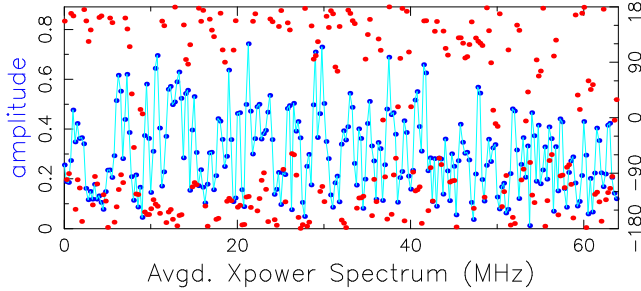
Fringe quality 9



SNR 10.0
 Int time 345.840
 Amp 0.197
 Phase 12.8
 PFD 4.3e-15
 Delays (us)
 SBD -0.010534
 MBD 0.004980
 Fringe rate (Hz)
 0.001427
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

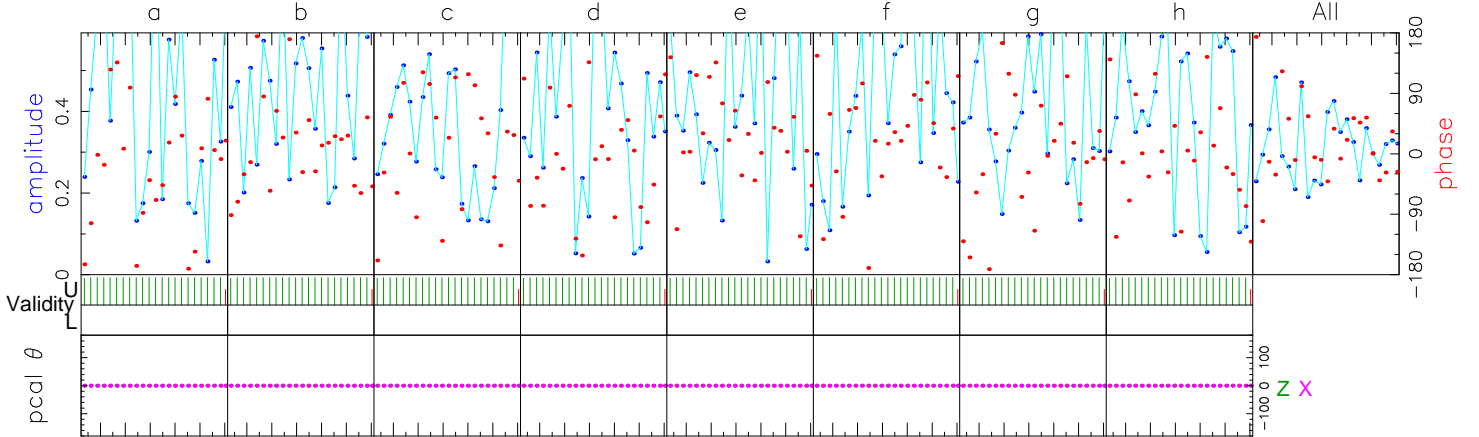


delay rate (ns/s)



Exp. c211a
 Exper # 16383
 Yr:day 2021:114
 Start 120013.31
 Stop 120559.94
 FRT 120300.00
 Corr/FF/build
 2021:286:083752
 2021:286:134538
 2021:252:122852
 RA & Dec (J2000)
 22h02m43.291370s
 +42°16'39.979885"

Amp. and Phase vs. time for each freq., 23 segs, 30 APs / seg (15.36 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
	8.4	-0.5	40.4	4.3	24.3	39.1	-0.8	-11.7		Phase 12.8
	0.2	0.3	0.1	0.2	0.2	0.3	0.2	0.2		Ampl. 0.2
	408.9	254.5	485.1	254.3	253.9	254.3	248.5	254.5		Sbd box 254.3
U/L	677/0	677/0	677/0	677/0	677/0	677/0	677/0	677/0		APs used
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-1.54547683782E+03	Apriori delay (usec)	-1.54546619263E+03	Resid mbdelay (usec)	4.97981E-03	+/-	1.1E-04
Sband delay (usec)	-1.54547672688E+03	Apriori clock (usec)	-5.7120857E+01	Resid sbdelay (usec)	-1.05343E-02	+/-	8.6E-04
Phase delay (usec)	-1.54546619221E+03	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	4.13839E-07	+/-	3.7E-07
Delay rate (us/s)	2.66439573004E-02	Apriori rate (us/s)	2.66439407286E-02	Resid rate (us/s)	1.65717E-08	+/-	1.8E-09
Total phase (deg)	-287.0	Apriori accel (us/s/s)	9.86054864045E-06	Resid phase (deg)	12.8	+/-	11.4

ph/seg (deg)	RMS 59.3	Theor. 27.4	Amplitude Search (2048X32)	0.191	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.0	47.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	21.0	16.1	Inc. seg. avg.	0.283	Bits/sample: 2x2	Sample rate(MSamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.0	28.2	Inc. frq. avg.	0.198	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

Z: az 291.7 el 37.5 pa 38.8 X: az 284.9 el 42.8 pa 44.6 u,v (fr/asec) -191.616 876.085 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211a/v2/1234/No0231/ZX..1W55K2 Output file: /Exps/c211a/v2/1234/No0231/ZX.W.355.1W55K2