

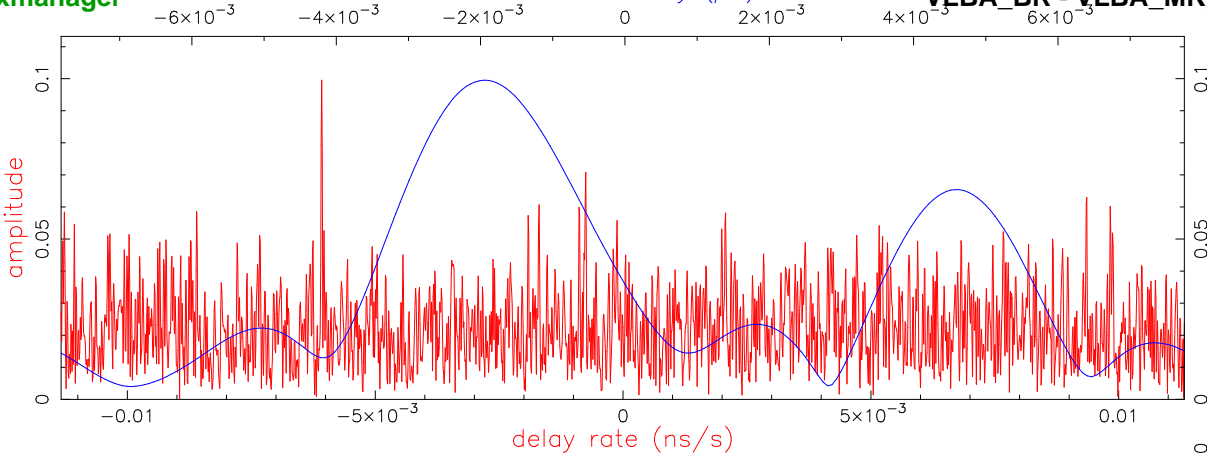
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, bm

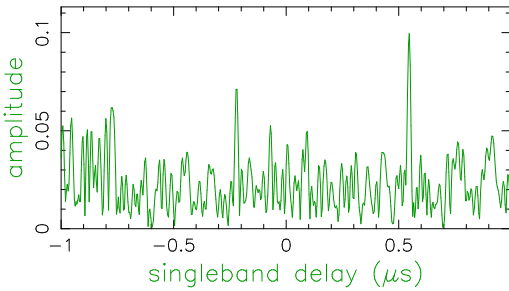
VLBA_BR - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

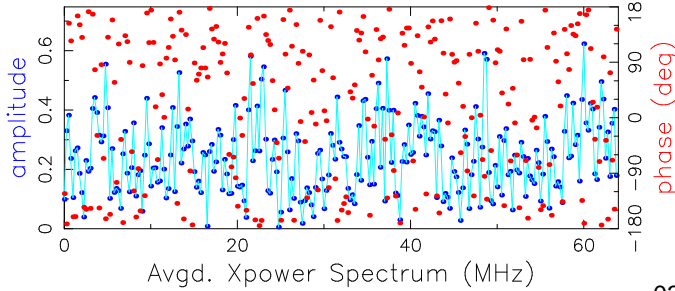


Fringe quality 0

SNR 5.6
 Int time 416.782
 Amp 0.113
 Phase -15.6
 PFD 9.9e-01
 Delays (us)
 SBD 0.545877
 MBD -0.001969
 Fringe rate (Hz)
 -0.524477
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

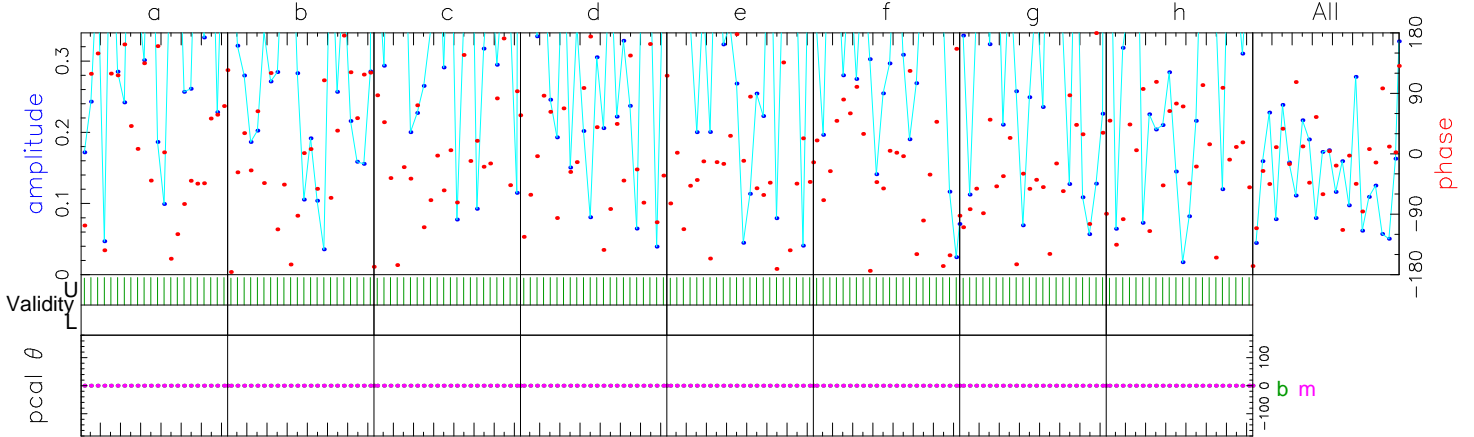


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201502.56
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131608
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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

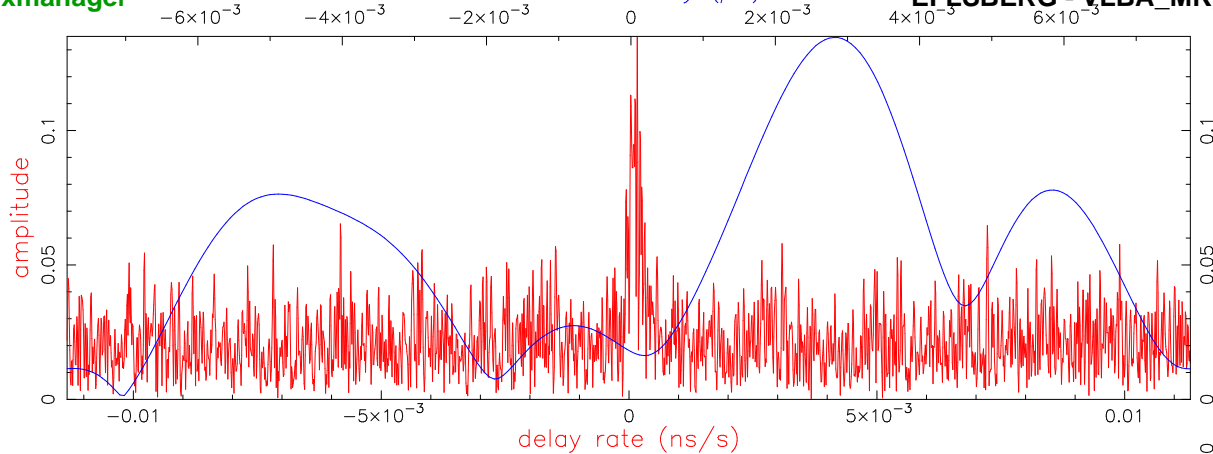


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	49.3	-78.2	-10.5	-31.8	-44.0	10.4	-44.4	16.2	Phase	-15.6
	0.1	0.0	0.2	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	447.9	36.8	200.6	92.5	26.1	2.6	205.2	365.1	Sbd box	396.7
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.76360084663E+03		Apriori delay (usec)		5.76305594062E+03		Resid mbdelay (usec)		-1.96898E-03	+/- 1.9E-04
Sband delay (usec)	5.76360181762E+03		Apriori clock (usec)		-1.8698362E+01		Resid sbdelay (usec)		5.45877E-01	+/- 1.5E-03
Phase delay (usec)	5.76305594012E+03		Apriori clockrate (us/s)		-4.1800000E-07		Resid phdelay (usec)		-5.01932E-07	+/- 6.6E-07
Delay rate (us/s)	-6.48342312185E-01		Apriori rate (us/s)		-6.48336223523E-01		Resid rate (us/s)		-6.08866E-06	+/- 2.7E-09
Total phase (deg)	245.4		Apriori accel (us/s/s)		-3.87292027921E-07		Resid phase (deg)		-15.6	+/- 20.5

	RMS	Theor.	Amplitude	0.113 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	55.3	49.1	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	75.4	85.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	44.2	29.0	Inc. seg. avg.	0.115	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	53.1	50.5	Inc. frq. avg.	0.115	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

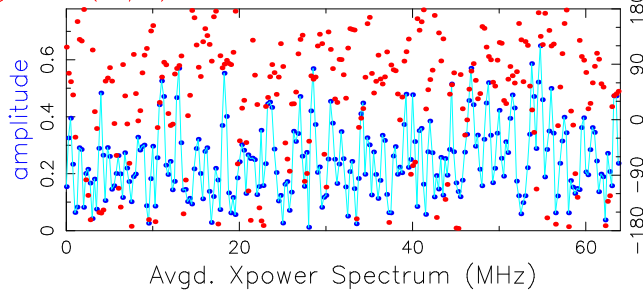
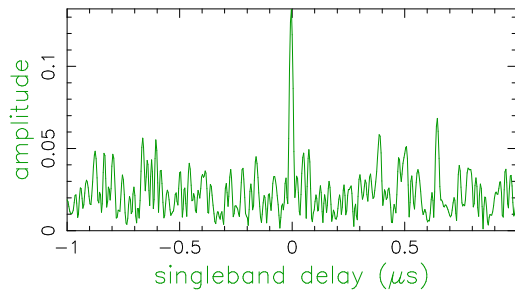
b: az 124.8 el 79.6 pa -46.8 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 4957.456 2604.614 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/bm.W.26.1X1C8Y

multiband delay (μ s)



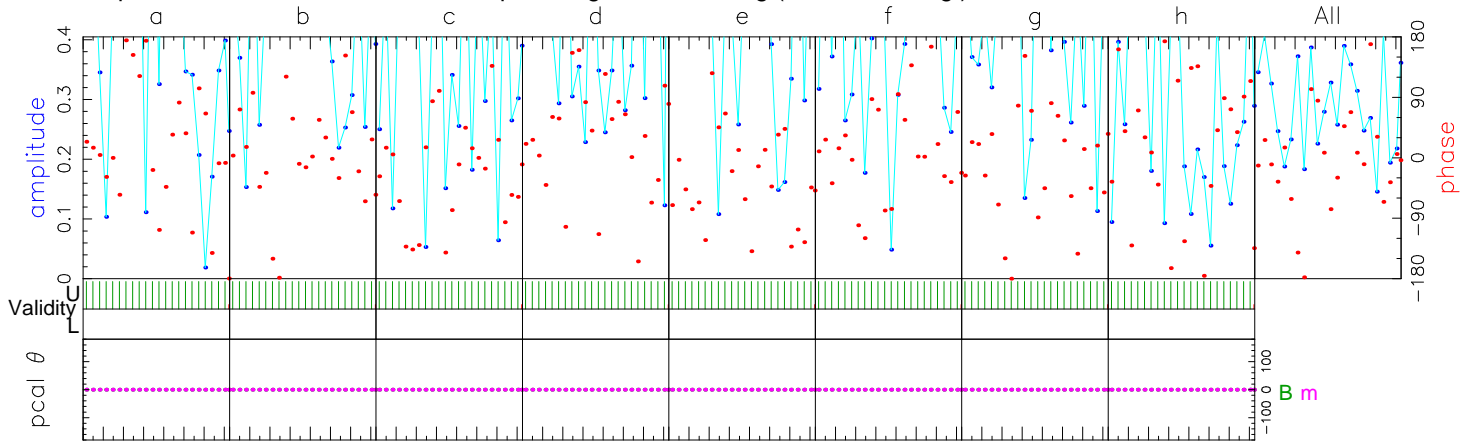
Fringe quality 9

SNR 7.6
Int time 419.825
Amp 0.135
Phase -0.3
PFD 1.3e-05
Delays (us)
SBD -0.004595
MBD 0.002813
Fringe rate (Hz)
0.014400
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131609
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.7	20.5	-32.1	15.2	-53.1	24.3	-20.5	93.6	Phase	-0.3
	0.2	0.2	0.1	0.1	0.3	0.2	0.2	0.1	Ampl.	0.2
	224.0	255.8	113.5	386.9	256.8	255.6	257.5	499.9	Sbd box	255.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.82687125098E+03		Apriori delay (usec)		-8.82687406444E+03		Resid mbdelay (usec)		2.81346E-03	+/- 1.4E-04
Sband delay (usec)	-8.82687865994E+03		Apriori clock (usec)		-3.7775372E+01		Resid sbdelay (usec)		-4.59550E-03	+/- 1.1E-03
Phase delay (usec)	-8.82687406445E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-9.75666E-09	+/- 4.9E-07
Delay rate (us/s)	-1.45002755752E+00		Apriori rate (us/s)		-1.45002772468E+00		Resid rate (us/s)		1.67169E-07	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		7.91365747080E-05		Resid phase (deg)		-0.3	+/- 15.1

	RMS	Theor.	Amplitude	0.135 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	74.9	36.3	Search (2048X32)	0.133	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	127.6	63.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	48.9	21.4	Inc. seg. avg.	0.240	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.7	37.4	Inc. frq. avg.	0.159	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 314.6 el 18.1 pa 36.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 11247.493 8259.745 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Bm.W.31.1X1C8Y

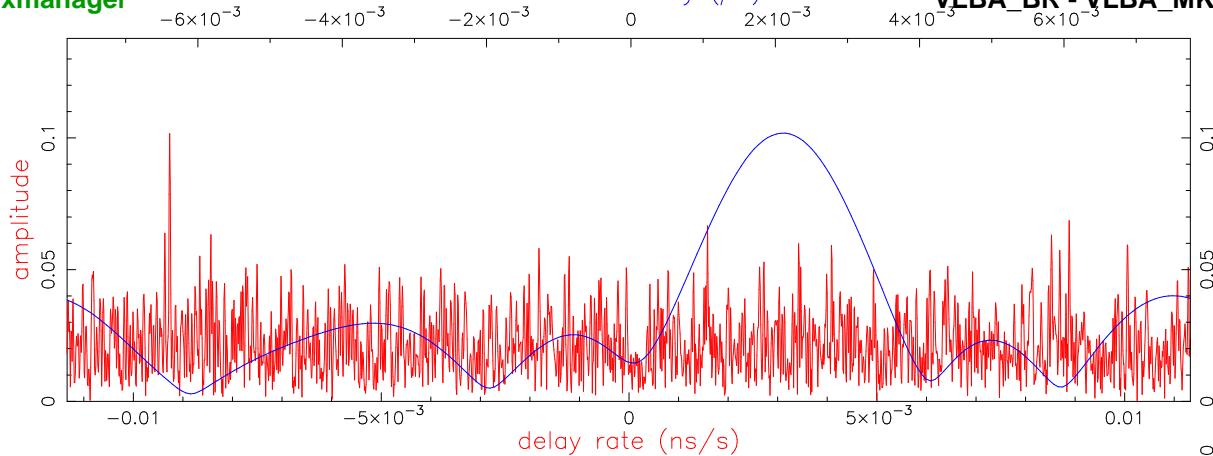
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, bm

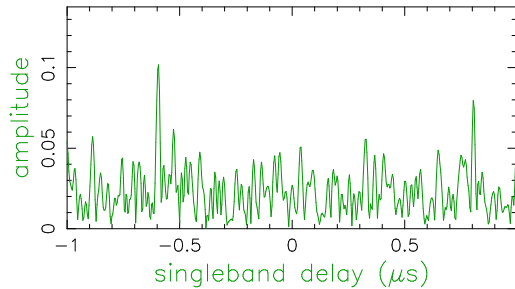
VLBA_BR - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

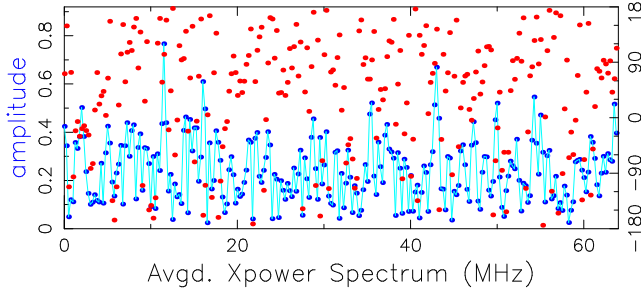


Fringe quality 0

SNR 5.7
 Int time 416.782
 Amp 0.138
 Phase 51.0
 PFD 9.0e-01
 Delays (us)
 SBD -0.595064
 MBD 0.002052
 Fringe rate (Hz)
 -0.799330
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

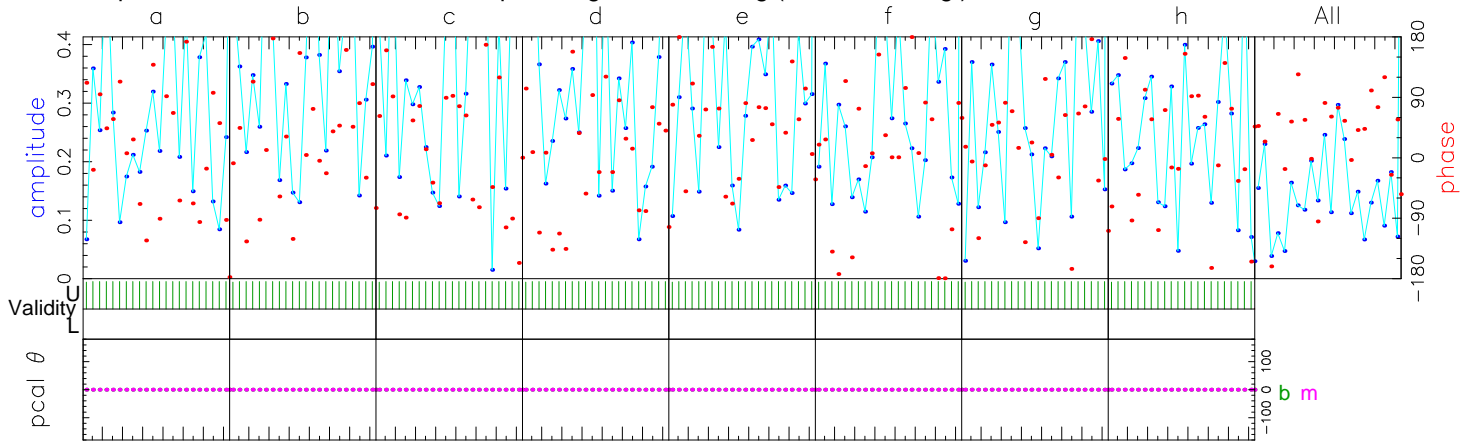


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201502.56
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131612
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	33.4	38.8	92.2	53.2	56.0	80.0	35.7	54.1	Phase	51.0
	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	463.1	105.2	339.3	60.6	102.7	166.2	338.8	4.2	Sbd box	104.7
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	5.76246424246E+03	Apriori delay (usec)	5.76305594062E+03	Resid mbdelay (usec)	2.05185E-03	+/-	1.9E-04
Sband delay (usec)	5.76246087637E+03	Apriori clock (usec)	-1.8698362E+01	Resid sbdelay (usec)	-5.95064E-01	+/-	1.5E-03
Phase delay (usec)	5.76305594226E+03	Apriori clockrate (us/s)	-4.1800000E-07	Resid phdelay (usec)	1.64495E-06	+/-	6.4E-07
Delay rate (us/s)	-6.48345502953E-01	Apriori rate (us/s)	-6.48336223523E-01	Resid rate (us/s)	-9.27943E-06	+/-	2.7E-09
Total phase (deg)	311.9	Apriori accel (us/s/s)	-3.87292027921E-07	Resid phase (deg)	51.0	+/-	20.0

ph/seg (deg)	58.5	Theor.	47.9	Amplitude	0.138 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.0	Search (2048X32)	0.100	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.3	Inc. seg. avg.	0.143	Inc. frq. avg.	0.127	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.3	Inc. frq. avg.	0.127			Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00	

b: az 124.8 el 79.6 pa -46.8 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 4957.456 2604.614 simultaneous interpolator

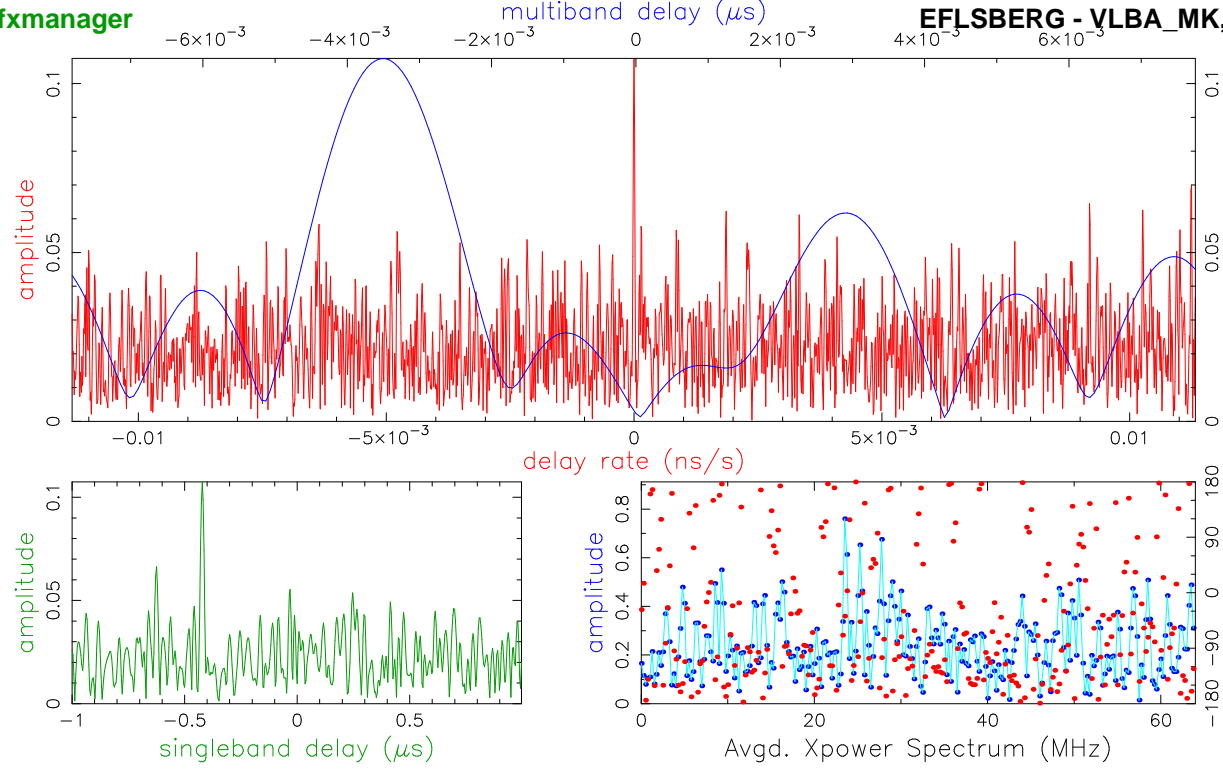
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/bm.W.46.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

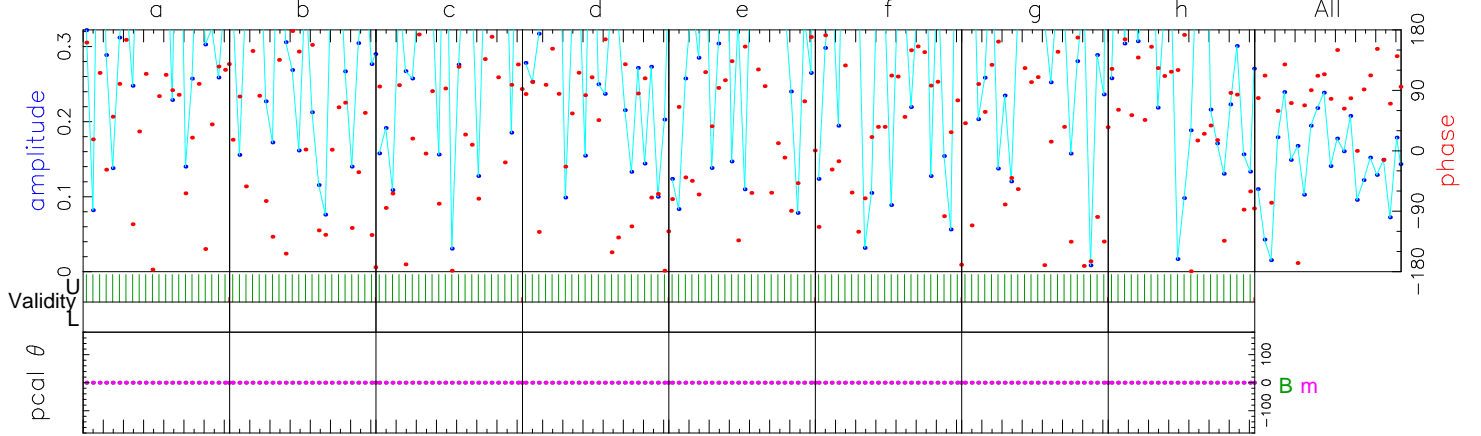
3C84.1X1C8Y, No0102, Bm

EFLSBERG - VLBA_MK, fgroup W, pol LR



Fringe quality 0
 SNR 6.0
 Int time 419.825
 Amp 0.107
 Phase 98.6
 PFD 3.6e-01
 Delays (us)
 SBD -0.421651
 MBD -0.003497
 Fringe rate (Hz)
 -0.000147
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131613
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
m	0	0	0	0	0	0	0	0		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.82729943694E+03									
Sband delay (usec)	-8.82729571519E+03									
Phase delay (usec)	-8.82687406126E+03									
Delay rate (us/s)	-1.45002772639E+00									
Total phase (deg)			-229.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									98.6	+/- 19.0
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

B: az 314.6 el 18.1 pa 36.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 11247.493 8259.745 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Bm.W.49.1X1C8Y

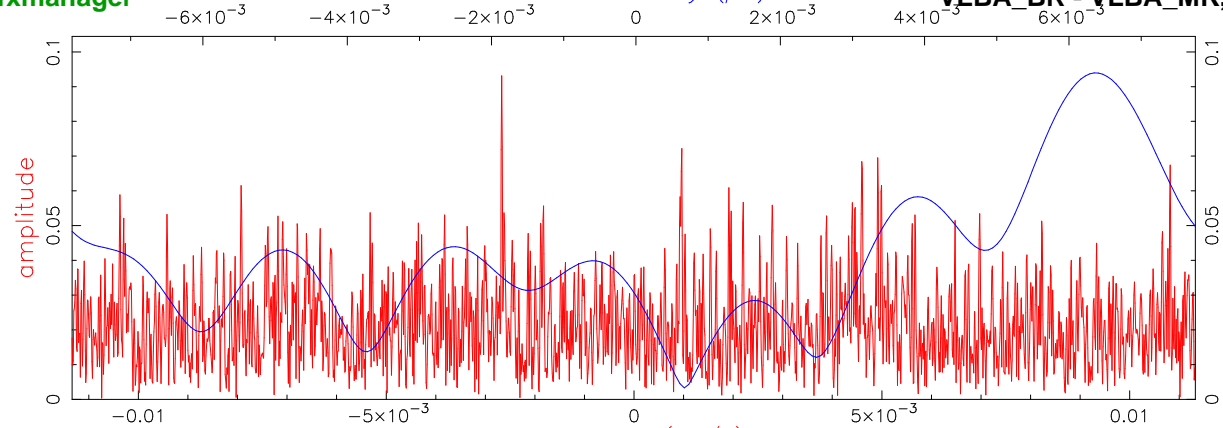
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, bm

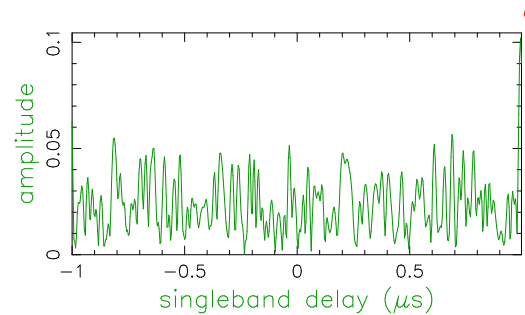
VLBA_BR - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

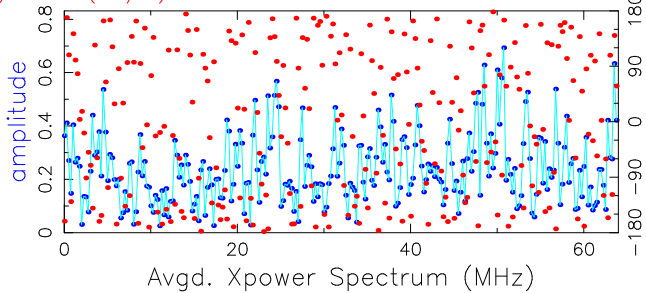


Fringe quality 0

SNR 5.7
 Int time 416.782
 Amp 0.104
 Phase -10.4
 PFD 9.5e-01
 Delays (us)
 SBD 0.991876
 MBD 0.006513
 Fringe rate (Hz)
 -0.230632
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

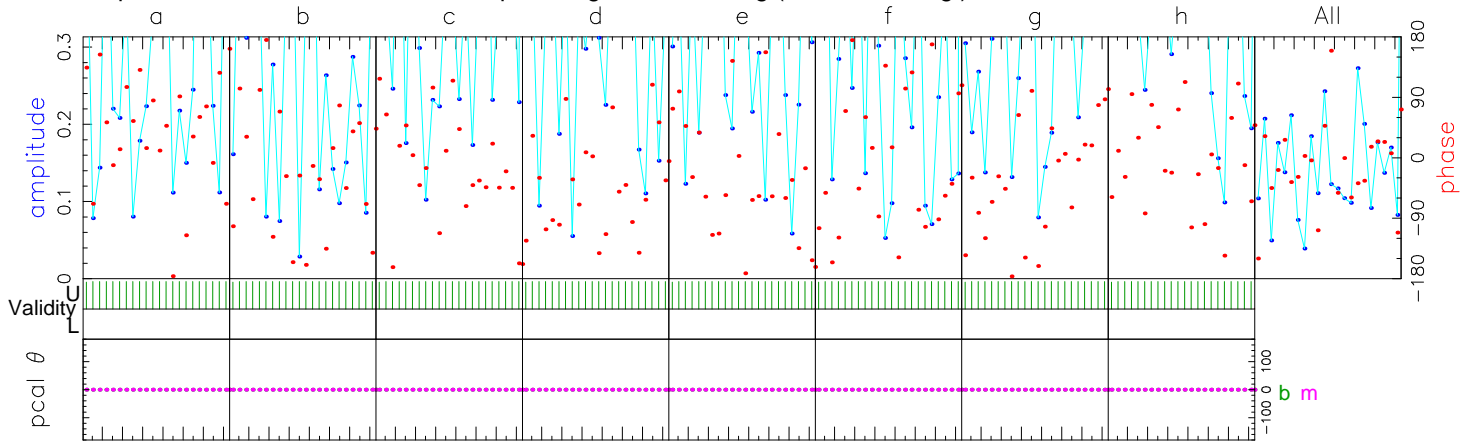


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201502.56
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131616
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	57.4	-54.8	-8.7	-50.9	-50.2	-68.6	4.7	14.9	Phase	-10.4
	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	48.3	49.8	511.5	446.1	73.1	393.2	107.1	2.4	Sbd box	510.9
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.76404682912E+03	Apriori delay (usec)		5.76305594062E+03	Resid mbdelay (usec)	6.51350E-03	+/-	1.9E-04
Sband delay (usec)	5.76404781712E+03	Apriori clock (usec)		-1.8698362E+01	Resid sbdelay (usec)	9.91876E-01	+/-	1.5E-03
Phase delay (usec)	5.76305594028E+03	Apriori clockrate (us/s)		-4.1800000E-07	Resid phdelay (usec)	-3.35590E-07	+/-	6.5E-07
Delay rate (us/s)	-6.48338900928E-01	Apriori rate (us/s)		-6.48336223523E-01	Resid rate (us/s)	-2.67741E-06	+/-	2.7E-09
Total phase (deg)	250.5	Apriori accel (us/s/s)		-3.87292027921E-07	Resid phase (deg)	-10.4	+/-	20.1

ph/seg (deg)	RMS 62.3	Theor. 48.2	Amplitude Search (2048X32)	0.104 +/- 0.018	0.098	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5
amp/seg (%)	72.7	84.2	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000
ph/frq (deg)	48.4	28.4	Inc. seg. avg.	0.107	0.111	Bits/sample: 2x2		SampCntNorm: enabled
amp/frq (%)	42.8	49.6	Inc. frq. avg.	0.111	0.111	Sample rate(MISamp/s): 128		mb window (us) -0.008 0.008
						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

b: az 124.8 el 79.6 pa -46.8 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 4957.456 2604.614 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/bm.W.66.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

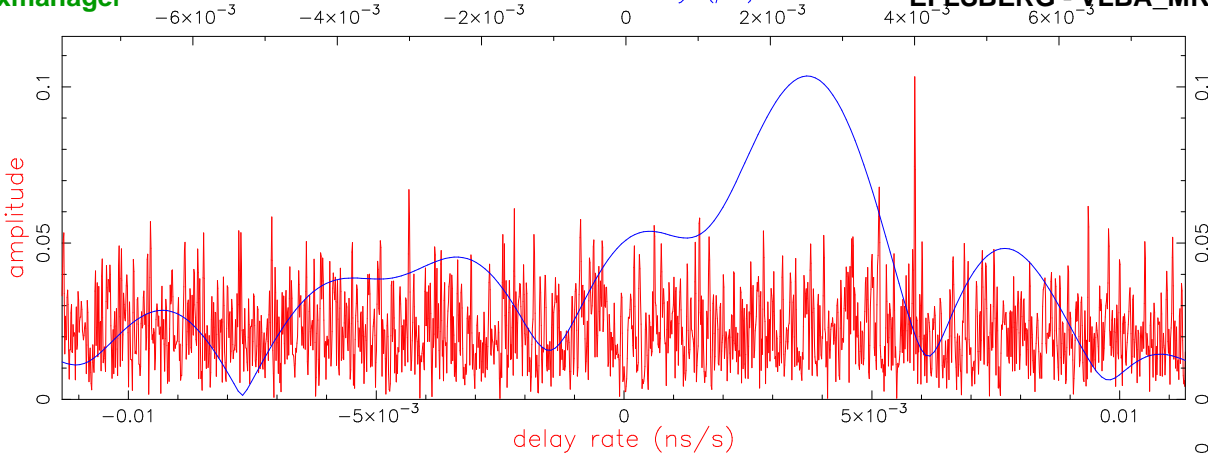
fxmanager

3C84.1X1C8Y, No0102, Bm

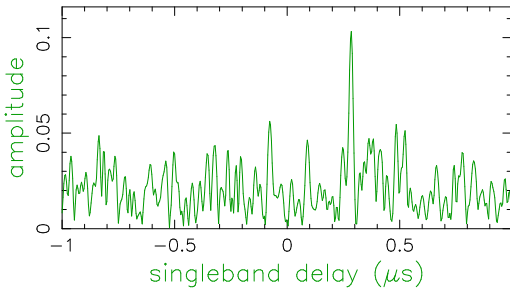
EFLSBERG - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

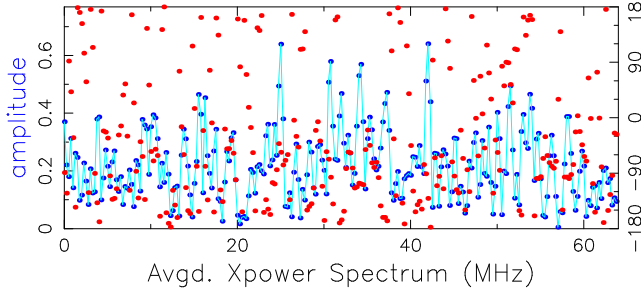
Fringe quality 0



SNR 5.8
 Int time 419.825
 Amp 0.116
 Phase -103.0
 PFD 7.9e-01
 Delays (us)
 SBD 0.284183
 MBD 0.002440
 Fringe rate (Hz)
 0.506363
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

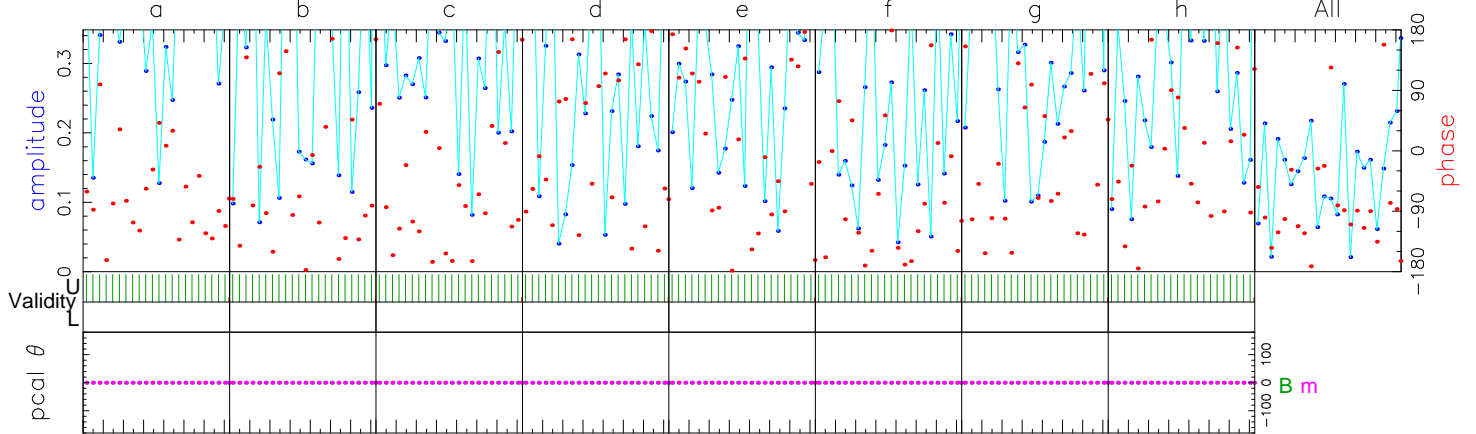


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131616
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-87.4	-124.7	-99.6	-95.4	-175.6	-105.9	-92.8	-62.9	Phase	-103.0
	0.3	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	330.8	329.6	229.3	501.0	501.7	259.9	466.9	276.9	Sbd box	329.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.82659037461E+03		Apriori delay (usec)		-8.82687406444E+03		Resid mbdelay (usec)		2.43983E-03	+/- 1.9E-04
Sband delay (usec)	-8.82658988119E+03		Apriori clock (usec)		-3.7775372E+01		Resid sbdelay (usec)		2.84183E-01	+/- 1.5E-03
Phase delay (usec)	-8.82687406776E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-3.32031E-06	+/- 6.4E-07
Delay rate (us/s)	-1.45002184632E+00		Apriori rate (us/s)		-1.45002772468E+00		Resid rate (us/s)		5.87837E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		7.91365747080E-05		Resid phase (deg)		-103.0	+/- 19.7

	RMS	Theor.	Amplitude	0.116 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.6	47.3	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.0	82.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	36.0	27.9	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	53.9	48.7	Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

B: az 314.6 el 18.1 pa 36.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 11247.493 8259.745 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Bm.W.68.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

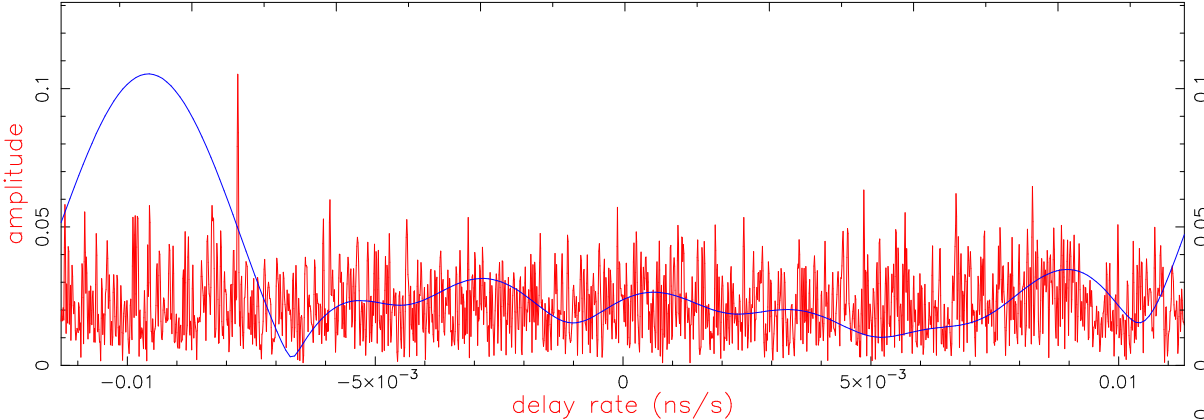
3C84.1X1C8Y, No0102, bm

VLBA_BR - VLBA_MK, fgroup W, pol LL

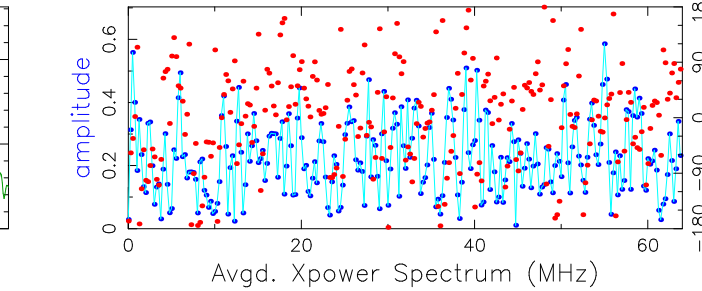
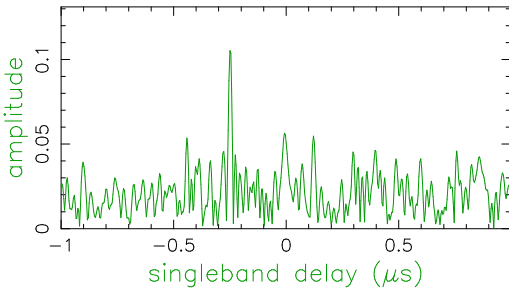
multiband delay (μ s)

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

Fringe quality 0

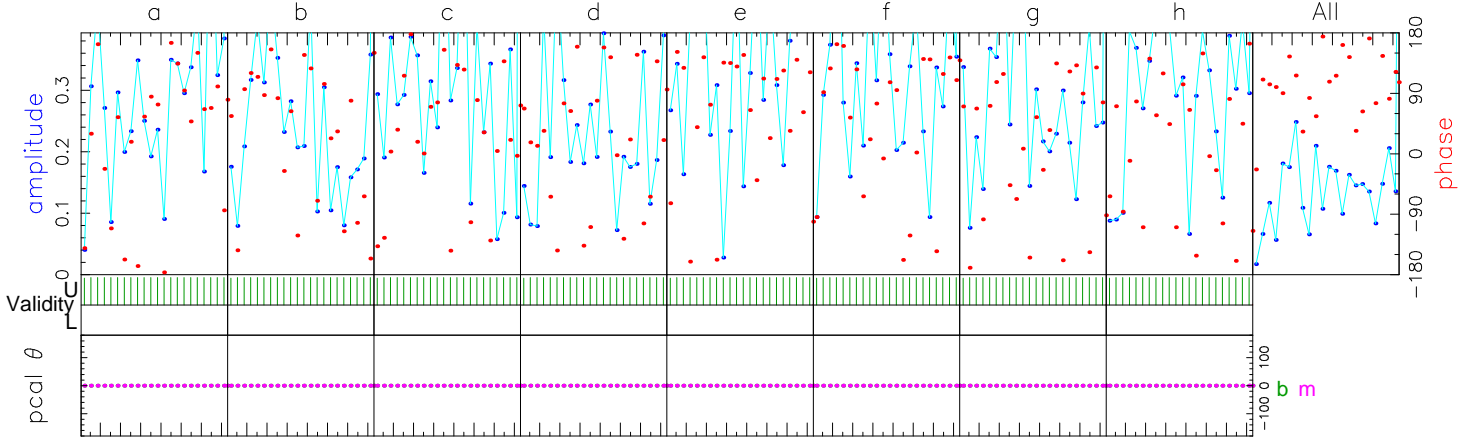


SNR 6.0
 Int time 416.782
 Amp 0.131
 Phase 106.0
 PFD 4.4e-01
 Delays (us)
 SBD -0.248303
 MBD -0.006553
 Fringe rate (Hz)
 -0.670802
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201502.56
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131605
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0		
b	0	0	0	0	0	0	0	0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.76281501225E+03	Apriori delay (usec)		5.76305594062E+03	Resid mbdelay (usec)		-6.55337E-03	+/- 1.8E-04	
Sband delay (usec)	5.76280763812E+03	Apriori clock (usec)		-1.8698362E+01	Resid sbdelay (usec)		-2.48303E-01	+/- 1.4E-03	
Phase delay (usec)	5.76305594404E+03	Apriori clockrate (us/s)		-4.1800000E-07	Resid phdelay (usec)		3.41915E-06	+/- 6.2E-07	
Delay rate (us/s)	-6.48344010869E-01	Apriori rate (us/s)		-6.48336223523E-01	Resid rate (us/s)		-7.78735E-06	+/- 2.6E-09	
Total phase (deg)		Apriori accel (us/s/s)		-3.87292027921E-07	Resid phase (deg)		106.0	+/- 19.2	

ph/seg (deg)	48.0	Theor. 45.9	Amplitude	0.131 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.0	80.2	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	15.4	27.1	Inc. seg. avg.	0.126	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.0	47.3	Inc. frq. avg.	0.118	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

b: az 124.8 el 79.6 pa -46.8 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 4957.456 2604.614 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/bm.W.7.1X1C8Y

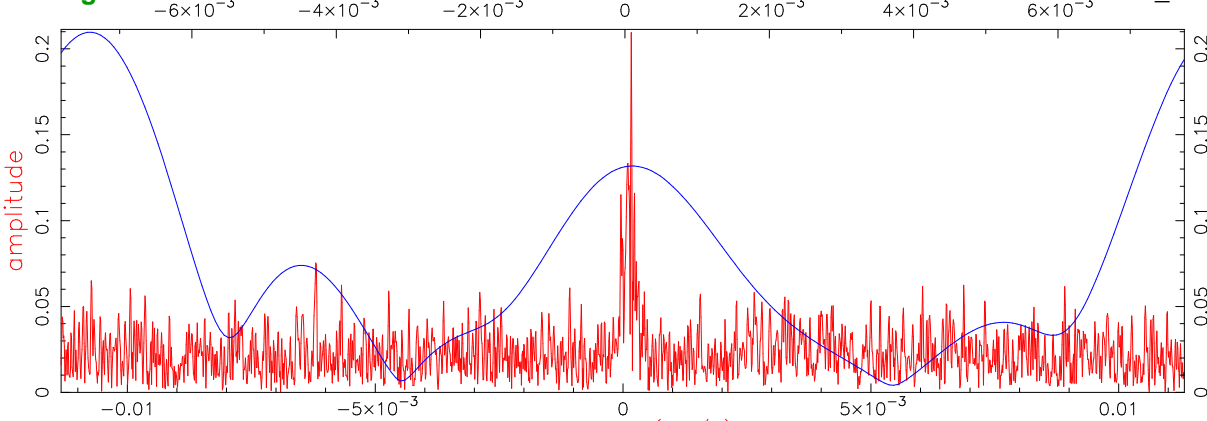
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, Bm

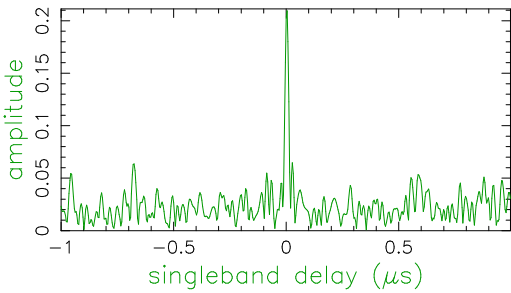
EFLSBERG - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

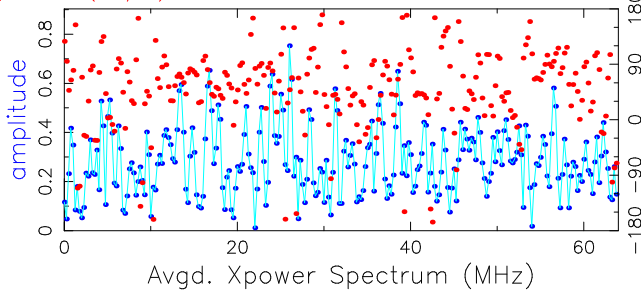


Fringe quality 9

SNR 11.8
Int time 419.825
Amp 0.211
Phase -178.4
PFD 1.2e-23
Delays (us)
SBD 0.002713
MBD -0.007457
Fringe rate (Hz) 0.014227
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

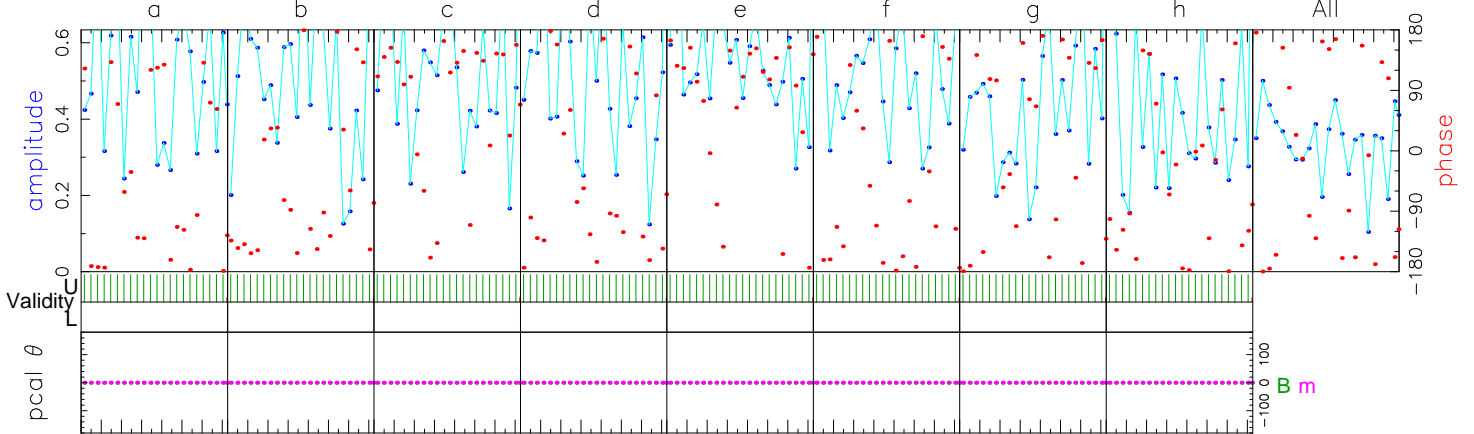


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131605
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	-8.82686589648E+03	Apriori delay (usec)	-8.82687406444E+03	Resid mbdelay (usec)	-7.45704E-03	+/-	9.2E-05
Sband delay (usec)	-8.82687135144E+03	Apriori clock (usec)	-3.7775372E+01	Resid sbdelay (usec)	2.71300E-03	+/-	7.3E-04
Phase delay (usec)	-8.82687407019E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	-5.75155E-06	+/-	3.1E-07
Delay rate (us/s)	-1.45002755953E+00	Apriori rate (us/s)	-1.45002772468E+00	Resid rate (us/s)	1.65158E-07	+/-	1.3E-09
Total phase (deg)	-146.2	Apriori accel (us/s/s)	7.91365747080E-05	Resid phase (deg)	-178.4	+/-	9.7

ph/seg (deg)	RMS 73.6	Theor. 23.2	Amplitude Search (2048X32)	0.211 +/- 0.018	0.207	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.1	40.5	Interp.	0.000		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	40.0	13.7	Inc. seg. avg.	0.314		Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.4	23.9	Inc. frq. avg.	0.247		Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

B: az 314.6 el 18.1 pa 36.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 11247.493 8259.745 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Bm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Bm.W.9.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

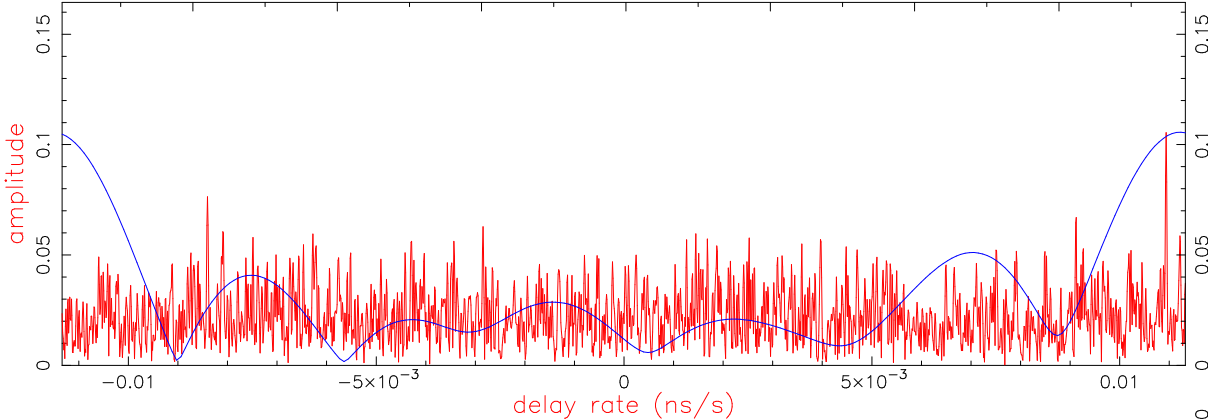
3C84.1X1C8Y, No0102, fm

VLBA_FD - VLBA_MK, fgroup W, pol RR

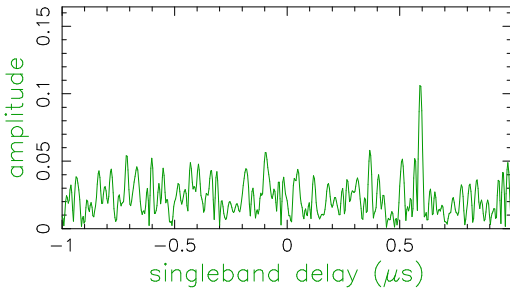
multiband delay (μ s)

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

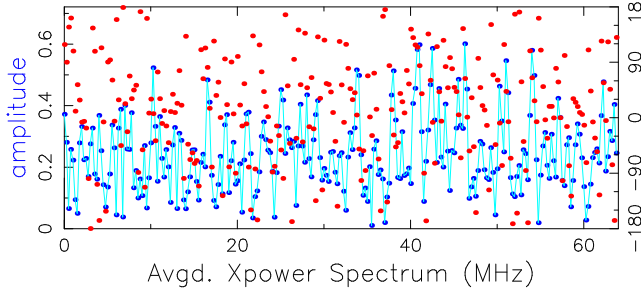
Fringe quality 0



SNR 6.0
Int time 417.476
Amp 0.164
Phase -83.7
PFD 3.2e-01
Delays (us)
SBD 0.591671
MBD 0.007624
Fringe rate (Hz)
0.943437
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

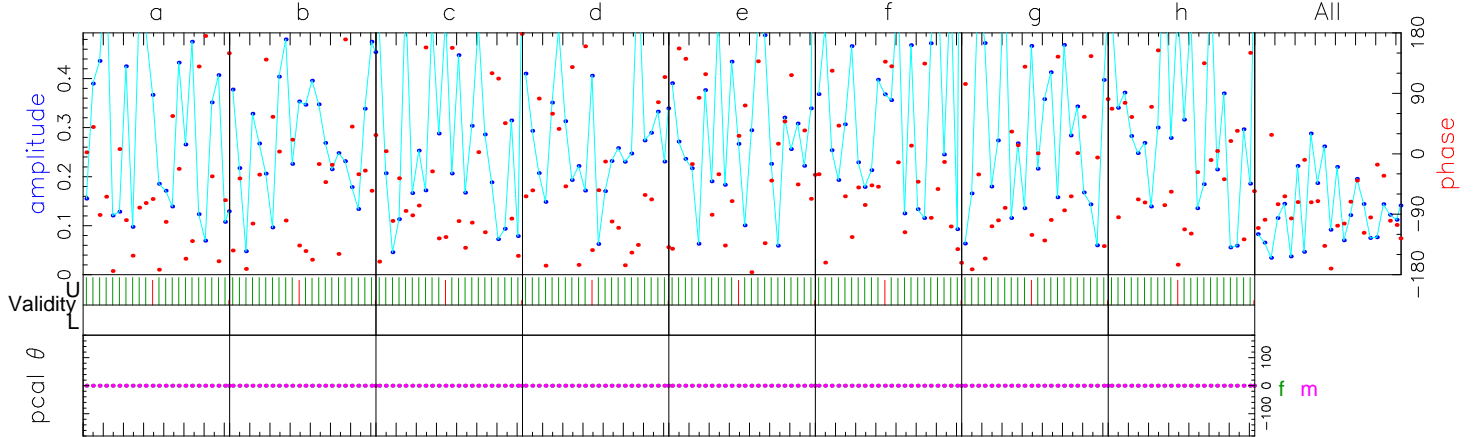


singleband delay (μ s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131627
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-82.8	-73.1	-99.9	-106.7	-88.5	-72.4	-89.0	-64.3	Phase	-83.7		
	0.2	0.2	0.2	0.1	0.0	0.2	0.2	0.1	Ampl.	0.1		
	296.0	235.3	232.3	178.3	379.6	160.3	236.0	16.7	Sbd box	408.5		
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used			
f	0	0	0	0	0	0	0	0	PC freqs			
m	0	0	0	0	0	0	0	0	PC freqs			
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:m	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			
m	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec)(sbd)	5.64359488431E+03		Apriori delay (usec)		5.64300913536E+03		Resid mbdelay (usec)		7.62395E-03	+/- 1.8E-04		
Sband delay (usec)	5.64360080661E+03		Apriori clock (usec)		-5.4503746E+00		Resid sbdelay (usec)		5.91671E-01	+/- 1.4E-03		
Phase delay (usec)	5.64300913266E+03		Apriori clockrate (us/s)		-2.5800000E-07		Resid phdelay (usec)		-2.70068E-06	+/- 6.1E-07		
Delay rate (us/s)	-8.81788695406E-01		Apriori rate (us/s)		-8.81799647776E-01		Resid rate (us/s)		1.09524E-05	+/- 2.5E-09		
Total phase (deg)	247.5		Apriori accel (us/s/s)		-1.72774953365E-05		Resid phase (deg)		-83.7	+/- 19.0		
	RMS	Theor.	Amplitude	0.164 +/- 0.027		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	44.0	45.4	Search (2048X32)	0.104		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	67.4	79.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	15.6	26.8	Inc. seg. avg.	0.150		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	39.5	46.8	Inc. frq. avg.	0.148		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 343.6 el 78.5 pa 160.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6715.477 -149.783 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/fm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/fm.W.117.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

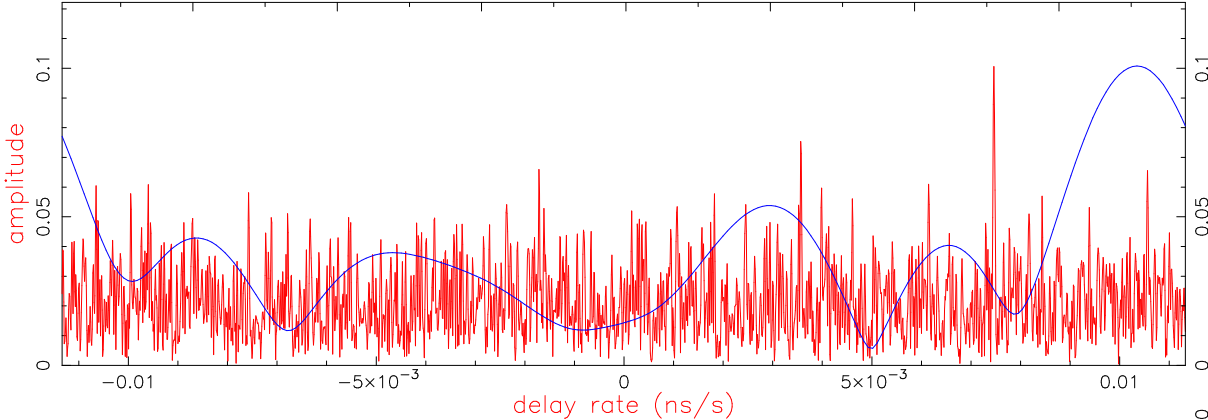
3C84.1X1C8Y, No0102, fm

VLBA_FD - VLBA_MK, fgroup W, pol LR

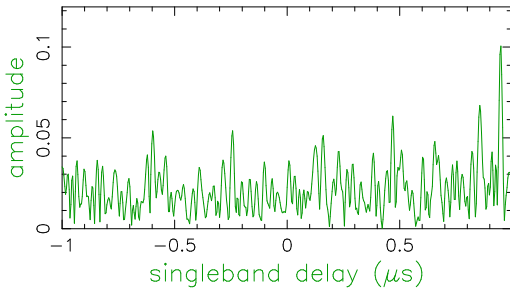
multiband delay (μ s)

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

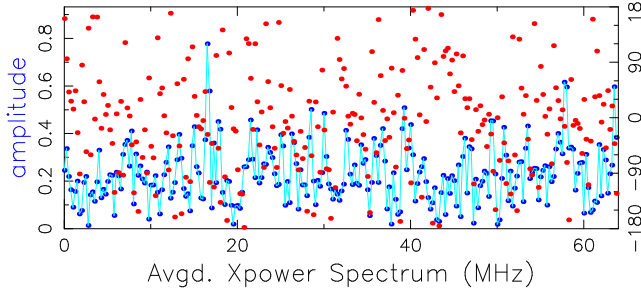
Fringe quality 0



SNR 5.7
 Int time 417.475
 Amp 0.122
 Phase 31.3
 PFD 9.7e-01
 Delays (us)
 SBD 0.948101
 MBD 0.007026
 Fringe rate (Hz)
 0.643637
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

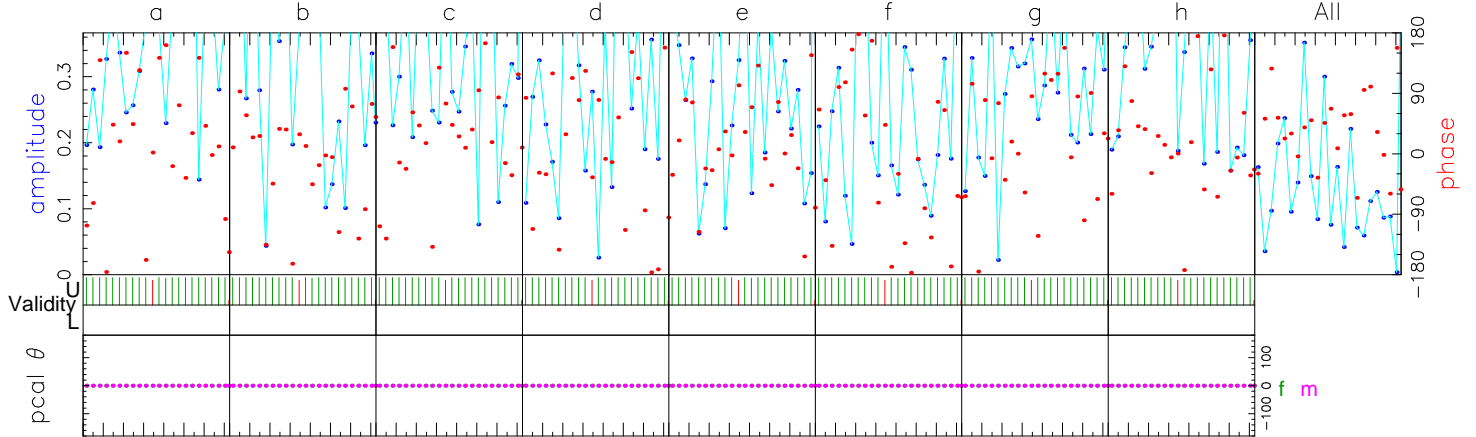


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131631
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	31.7	17.4	33.8	98.1	18.9	134.4	46.5	26.2	Phase	31.3
	0.1	0.2	0.1	0.1	0.2	0.0	0.1	0.2	Ampl.	0.1
	192.3	500.5	264.8	367.7	498.7	444.0	444.3	18.8	Sbd box	499.7
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.64395366145E+03		Apriori delay (usec)		5.64300913536E+03		Resid mbdelay (usec)		7.02609E-03	+/- 1.9E-04
Sband delay (usec)	5.64395723661E+03		Apriori clock (usec)		-5.4503746E+00		Resid sbdelay (usec)		9.48101E-01	+/- 1.5E-03
Phase delay (usec)	5.64300913637E+03		Apriori clockrate (us/s)		-2.5800000E-07		Resid phdelay (usec)		1.00978E-06	+/- 6.5E-07
Delay rate (us/s)	-8.81792175790E-01		Apriori rate (us/s)		-8.81799647776E-01		Resid rate (us/s)		7.47199E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.72774953365E-05		Resid phase (deg)		31.3	+/- 20.2

	RMS	Theor.	Amplitude	0.122 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	55.5	48.4	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	91.9	84.4	Interp.	0.000	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	51.2	28.6	Inc. seg. avg.	0.118	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	55.4	49.9	Inc. frq. avg.	0.117	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

f: az 343.6 el 78.5 pa 160.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6715.477 -149.783 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/fm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/fm.W.134.1X1C8Y

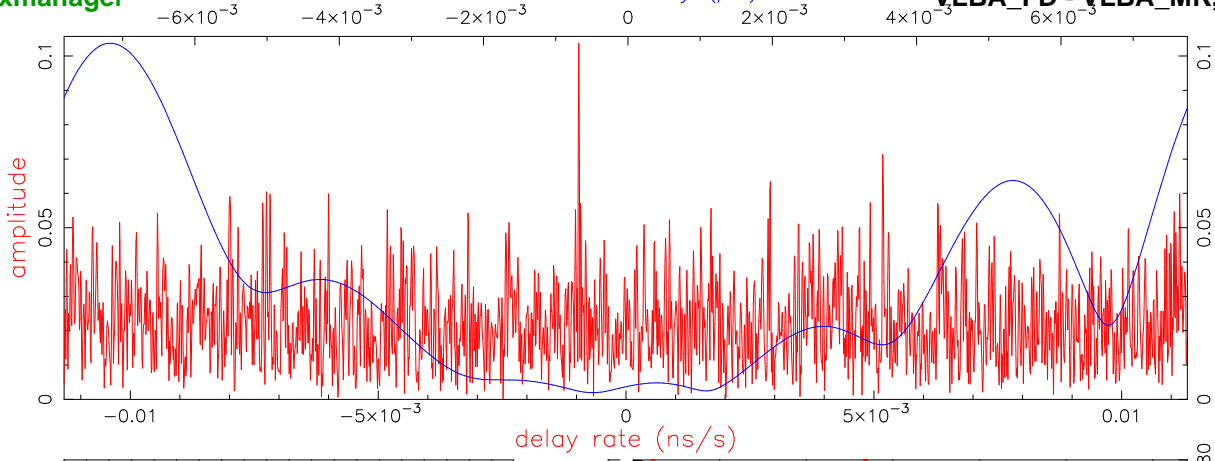
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, fm

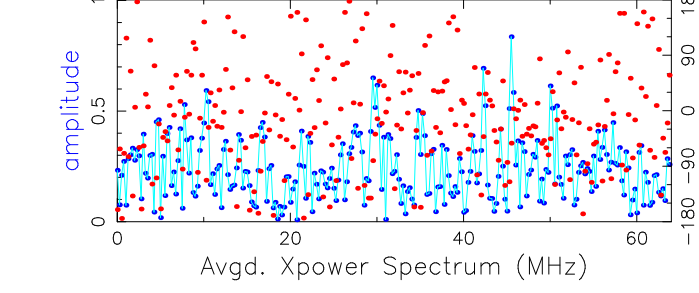
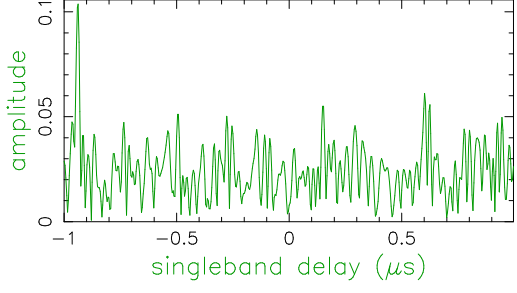
VLBA_FD - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)



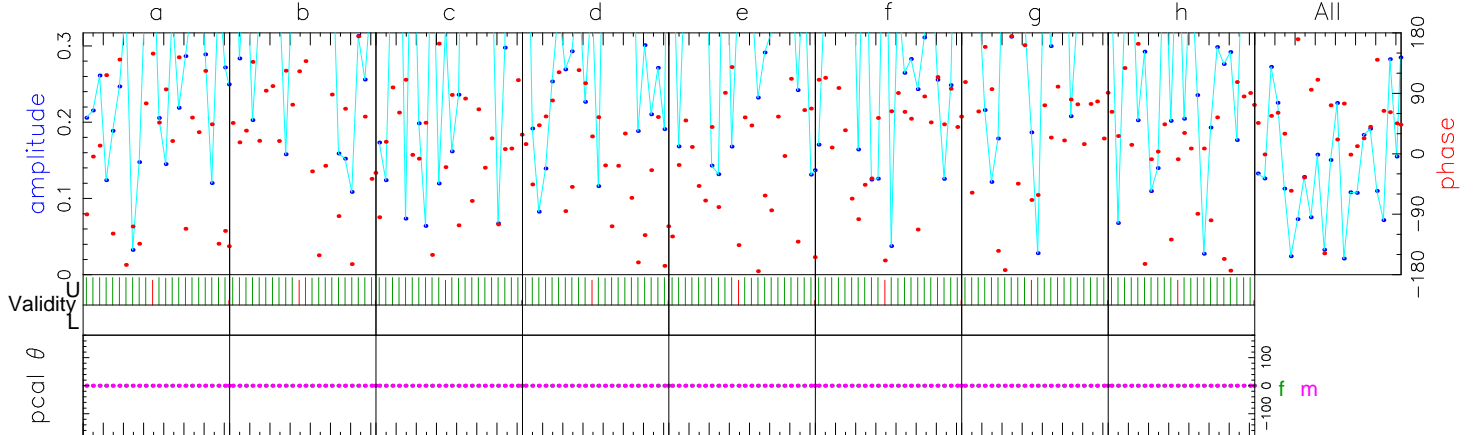
Fringe quality 0

SNR 5.9
 Int time 417.476
 Amp 0.106
 Phase 47.4
 PFD 6.2e-01
 Delays (us)
 SBD -0.939104
 MBD -0.007214
 Fringe rate (Hz)
 -0.081909
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131634
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	109.4	65.4	31.3	-14.5	19.1	52.4	70.3	57.3	Phase	47.4
	0.0	0.2	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	11.1	16.2	84.1	365.0	93.3	411.1	16.3	470.6	Sbd box	16.6
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.64206442157E+03		Apriori delay (usec)		5.64300913536E+03		Resid mbdelay (usec)		-7.21380E-03	+/- 1.8E-04
Sband delay (usec)	5.64207003111E+03		Apriori clock (usec)		-5.4503746E+00		Resid sbdelay (usec)		-9.39104E-01	+/- 1.5E-03
Phase delay (usec)	5.64300913689E+03		Apriori clockrate (us/s)		-2.5800000E-07		Resid phdelay (usec)		1.53012E-06	+/- 6.3E-07
Delay rate (us/s)	-8.81800598661E-01		Apriori rate (us/s)		-8.81799647776E-01		Resid rate (us/s)		-9.50885E-07	+/- 2.6E-09
Total phase (deg)	18.7		Apriori accel (us/s/s)		-1.72774953365E-05		Resid phase (deg)		47.4	+/- 19.5

	RMS	Theor.	Amplitude	0.106 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	60.7	46.6	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	74.8	81.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	40.2	27.5	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	40.4	48.0	Inc. frq. avg.	0.106	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 343.6 el 78.5 pa 160.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6715.477 -149.783 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/fm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/fm.W.153.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

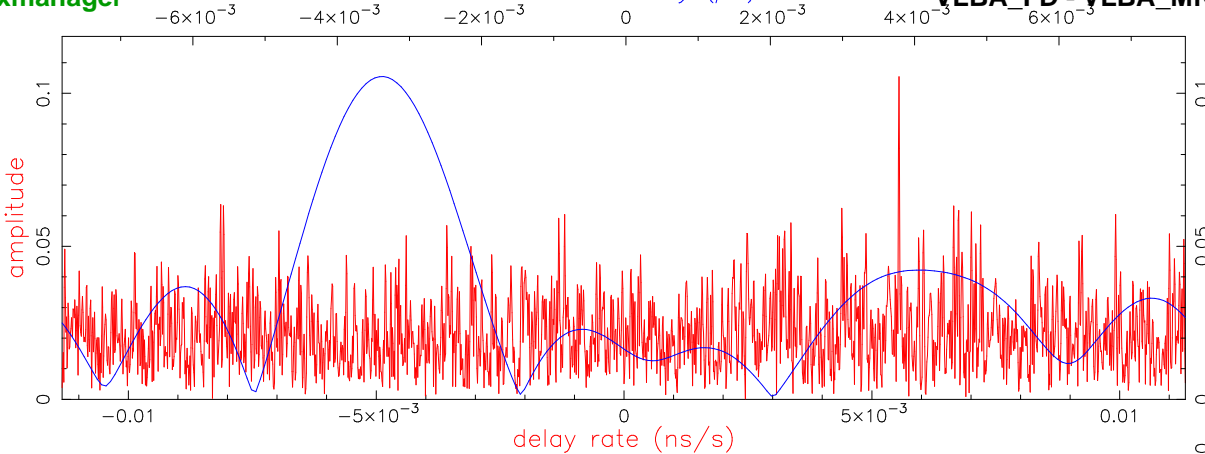
fxmanager

3C84.1X1C8Y, No0102, fm

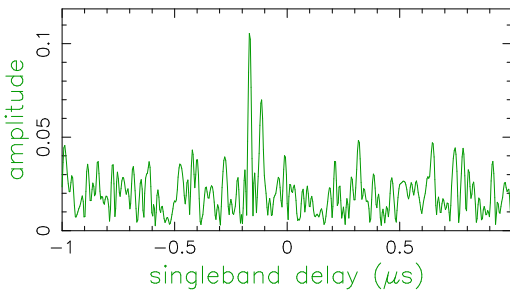
VLBA_FD - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

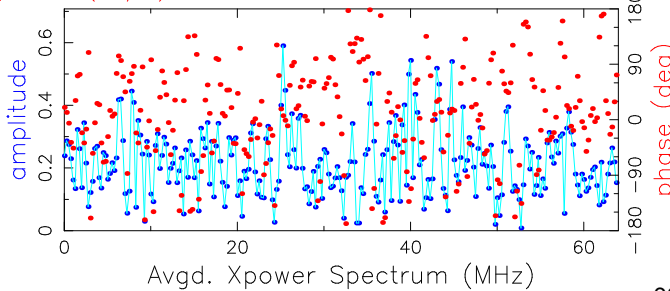
Fringe quality 0



SNR 6.0
 Int time 417.475
 Amp 0.119
 Phase -59.9
 PFD 4.2e-01
 Delays (us)
 SBD -0.166501
 MBD -0.003410
 Fringe rate (Hz)
 0.478731
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

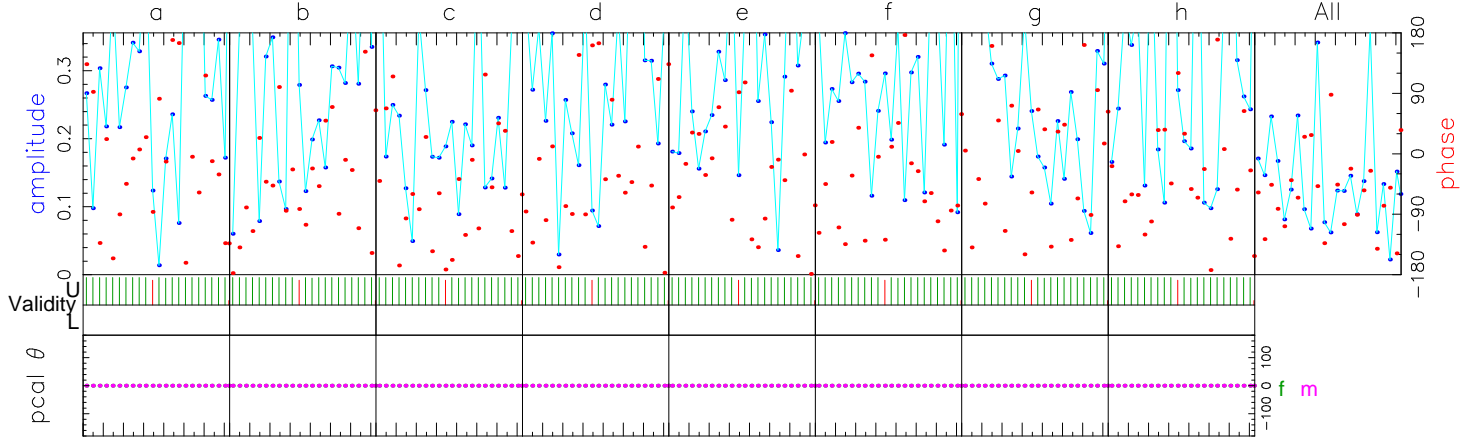


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131623
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



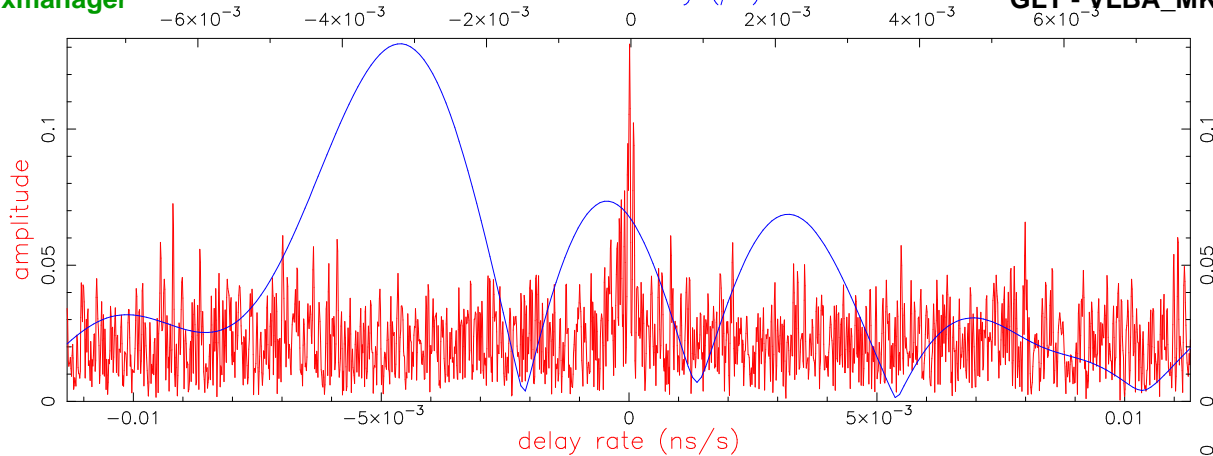
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-47.2	-62.9	-93.0	-52.2	-44.3	-64.3	-33.0	-61.2	Phase	-59.9
	0.1	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	64.1	243.4	398.1	237.8	60.8	132.1	70.1	150.3	Sbd box	214.4
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.64284947572E+03	Apriori delay (usec)	5.64300913536E+03	Resid mbdelay (usec)	-3.40964E-03	+/-	1.8E-04
Sband delay (usec)	5.64284263436E+03	Apriori clock (usec)	-5.4503746E+00	Resid sbdelay (usec)	-1.66501E-01	+/-	1.4E-03
Phase delay (usec)	5.64300913343E+03	Apriori clockrate (us/s)	-2.5800000E-07	Resid phdelay (usec)	-1.93028E-06	+/-	6.2E-07
Delay rate (us/s)	-8.81794090186E-01	Apriori rate (us/s)	-8.81799647776E-01	Resid rate (us/s)	5.55759E-06	+/-	2.6E-09
Total phase (deg)	271.4	Apriori accel (us/s/s)	-1.72774953365E-05	Resid phase (deg)	-59.9	+/-	19.1

ph/seg (deg)	57.1	Theor.	45.8	Amplitude	0.119 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	85.2	Search (2048X32)	0.103	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	19.6	Inc. seg. avg.	0.120	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	40.1	Inc. frq. avg.	0.108	Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

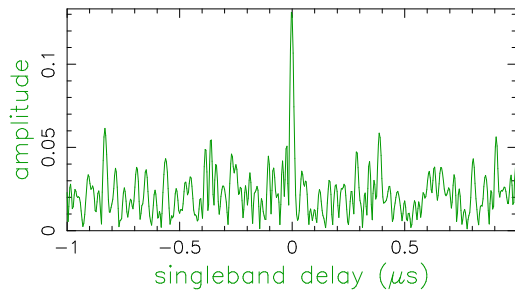
f: az 343.6 el 78.5 pa 160.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6715.477 -149.783 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/fm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/fm.W.93.1X1C8Y

multiband delay (μ s)

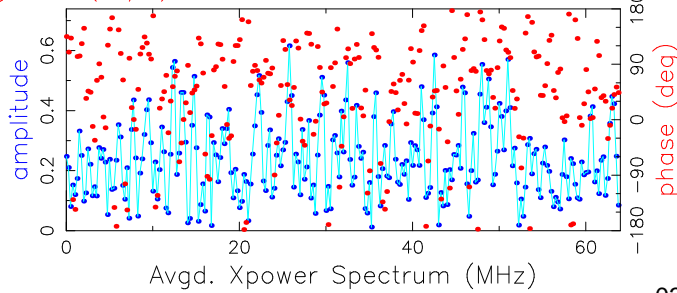


Fringe quality 9

SNR 7.5
Int time 419.823
Amp 0.133
Phase 84.3
PFD 2.6e-05
Delays (us)
SBD -0.002310
MBD -0.003151
Fringe rate (Hz)
0.000538
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

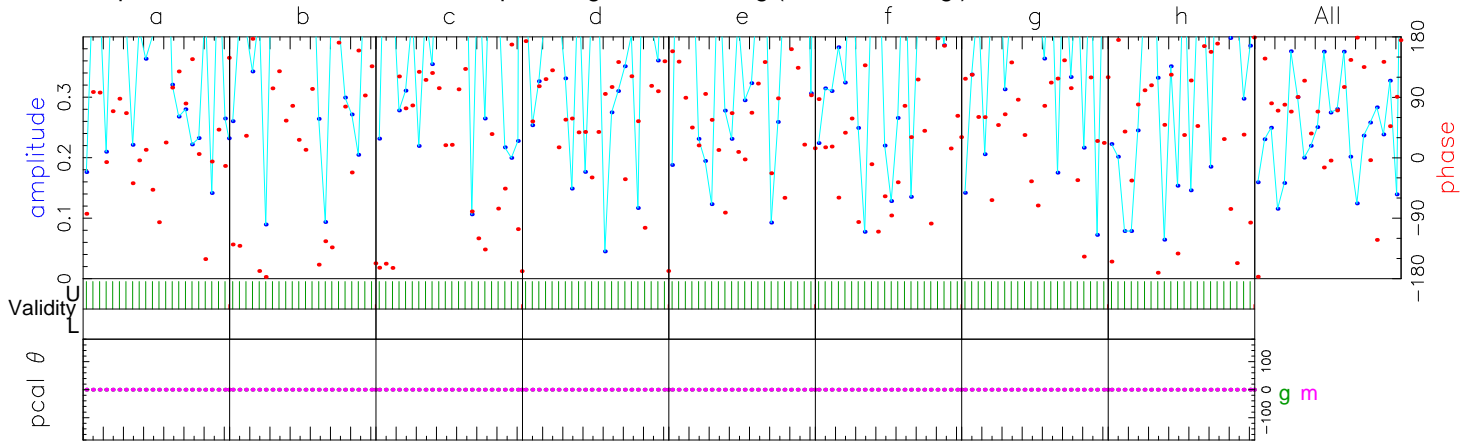


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131638
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.33504631960E+03	Apriori delay (usec)	1.33504947016E+03	Resid mbdelay (usec)	-3.15055E-03	+/-	1.5E-04
Sband delay (usec)	1.33504715991E+03	Apriori clock (usec)	-1.5272779E+01	Resid sbdelay (usec)	-2.31025E-03	+/-	1.2E-03
Phase delay (usec)	1.33504947288E+03	Apriori clockrate (us/s)	-2.4600000E-07	Resid phdelay (usec)	2.71813E-06	+/-	4.9E-07
Delay rate (us/s)	-9.63848398408E-01	Apriori rate (us/s)	-9.63848404652E-01	Resid rate (us/s)	6.24452E-09	+/-	2.0E-09
Total phase (deg)	213.7	Apriori accel (us/s/s)	4.02967858117E-05	Resid phase (deg)	84.3	+/-	15.3

ph/seg (deg)	63.3	Theor.	36.8	Amplitude	0.133 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	104.7		64.2	Search (2048X32)	0.124	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	40.5		21.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.5		37.9	Inc. seg. avg.	0.205	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.146	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

g: az 229.6 el 51.2 pa 13.1 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 7448.111 6928.333 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/gm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/gm.W.162.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

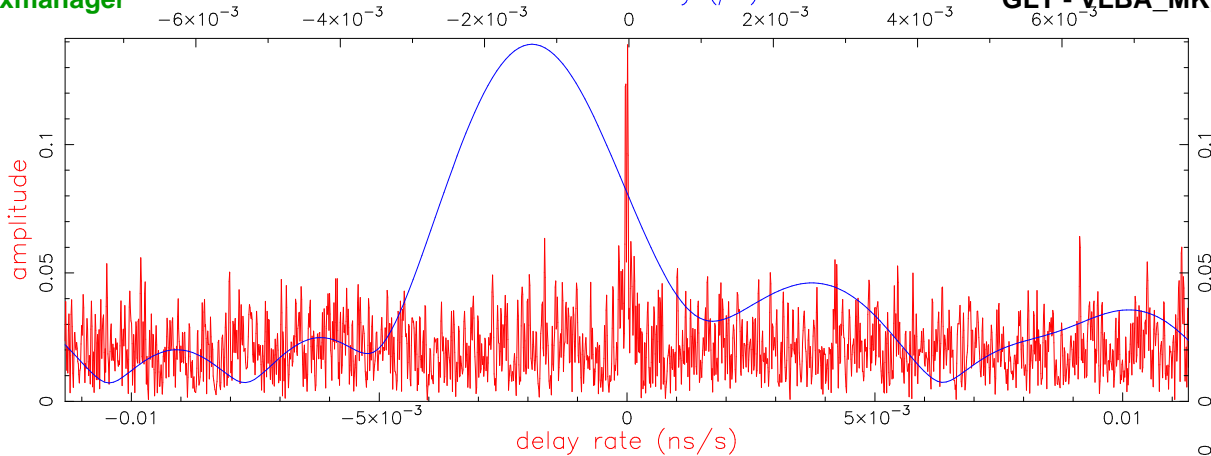
fxmanager

3C84.1X1C8Y, No0102, gm

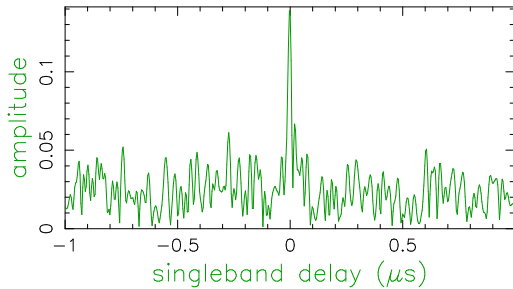
GLT - VLBA_MK, fgroup W, pol RR

multiband delay (μs)

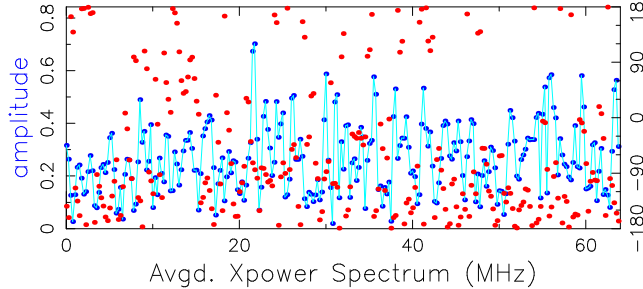
Fringe quality 9



SNR 7.9
 Int time 419.823
 Amp 0.141
 Phase -138.9
 PFD 8.1e-07
 Delays (us)
 SBD -0.002240
 MBD -0.001281
 Fringe rate (Hz)
 0.000853
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

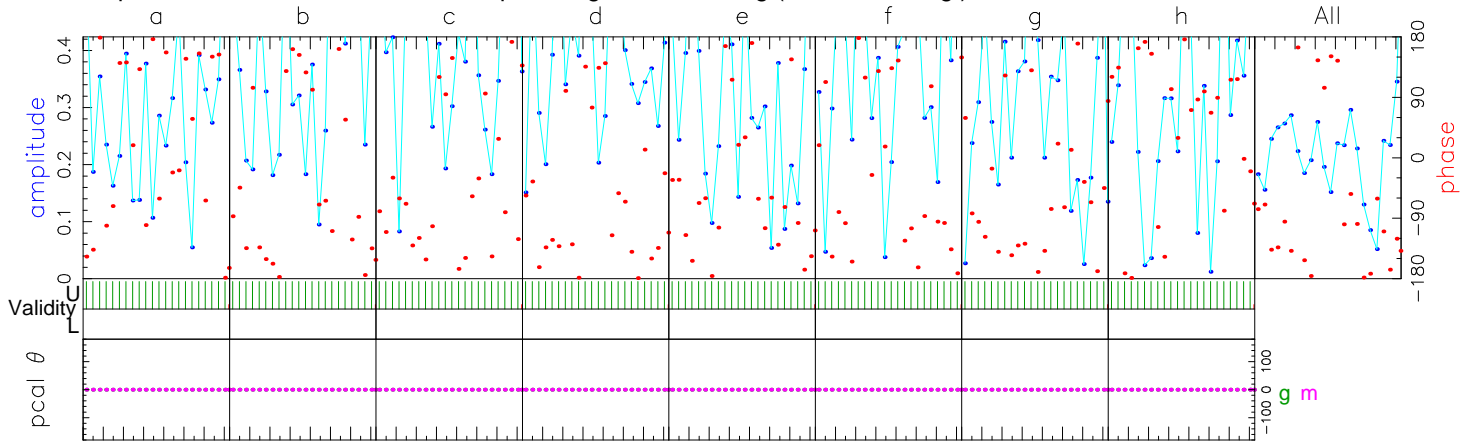


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131642
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-162.6	-150.7	-111.2	-131.1	-124.2	-148.6	-118.4	146.6	Phase	-138.9
	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	259.8	256.2	256.6	224.7	395.5	256.2	411.5	163.9	Sbd box	256.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.33504818935E+03		Apriori delay (usec)		1.33504947016E+03		Resid mbdelay (usec)		-1.28080E-03	+/- 1.4E-04
Sband delay (usec)	1.33504722991E+03		Apriori clock (usec)		-1.5272779E+01		Resid sbdelay (usec)		-2.24025E-03	+/- 1.1E-03
Phase delay (usec)	1.33504946568E+03		Apriori clockrate (us/s)		-2.4600000E-07		Resid phdelay (usec)		-4.48041E-06	+/- 4.7E-07
Delay rate (us/s)	-9.63848394752E-01		Apriori rate (us/s)		-9.63848404652E-01		Resid rate (us/s)		9.90068E-09	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		4.02967858117E-05		Resid phase (deg)		-138.9	+/- 14.5

	RMS	Theor.	Amplitude	0.141 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.0	34.7	Search (2048X32)	0.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	74.7	60.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	36.1	20.5	Inc. seg. avg.	0.184	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.5	35.7	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

g: az 229.6 el 51.2 pa 13.1 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 7448.111 6928.333 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/gm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/gm.W.183.1X1C8Y

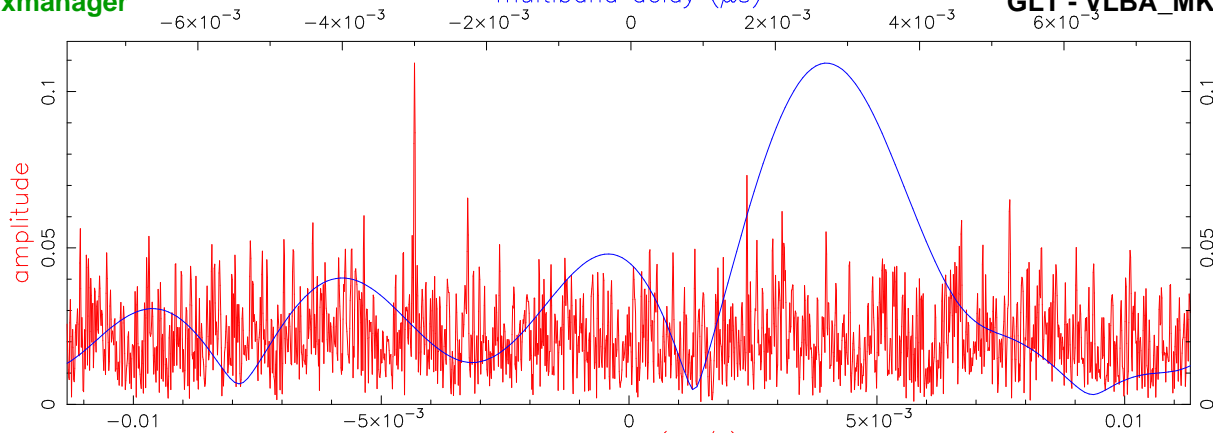
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, gm

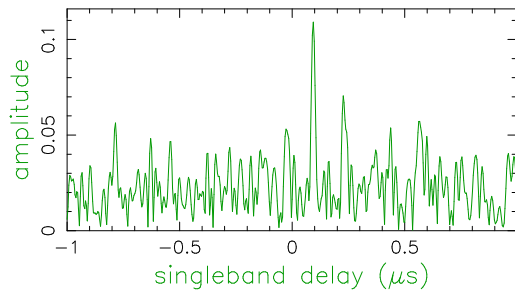
GLT - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

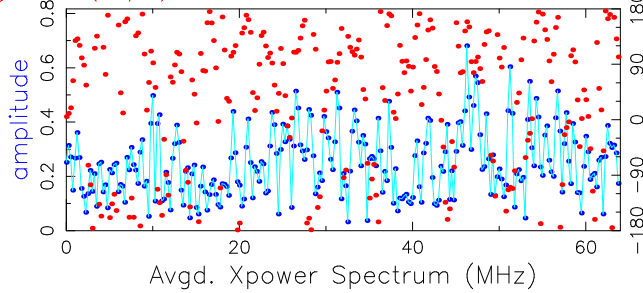


Fringe quality 0

SNR 6.1
 Int time 419.823
 Amp 0.116
 Phase 86.2
 PFD 2.2e-01
 Delays (us)
 SBD 0.093359
 MBD 0.002704
 Fringe rate (Hz)
 -0.373170
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

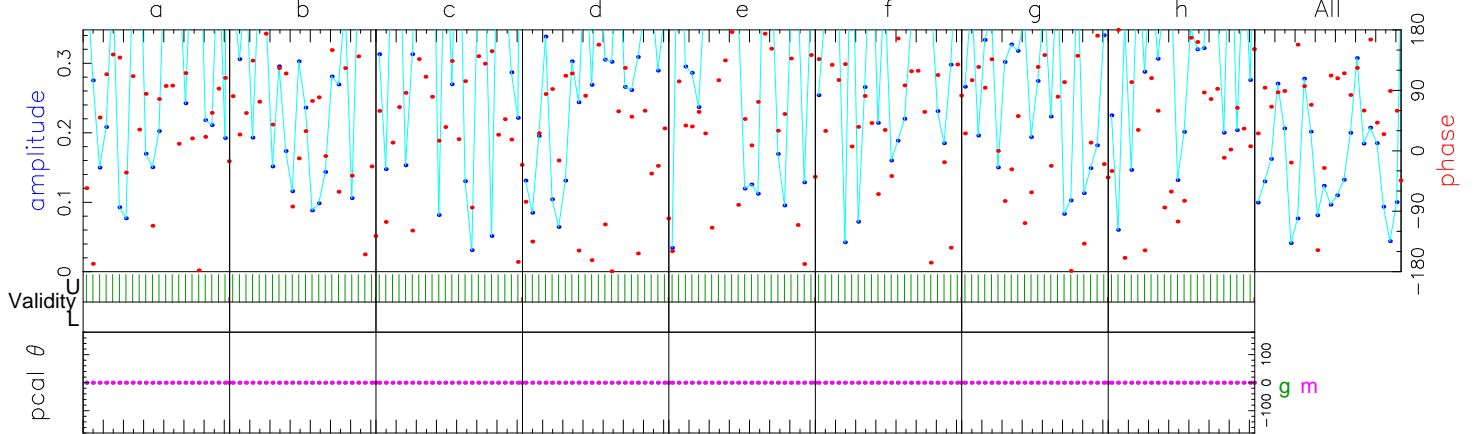


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131646
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	81.8	85.9	70.3	93.8	136.2	86.3	87.4	52.5	Phase	86.2
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	280.4	424.8	280.1	315.4	473.5	266.6	403.5	307.1	Sbd box	280.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.33514592408E+03		Apriori delay (usec)		1.33504947016E+03		Resid mbdelay (usec)		2.70393E-03	+/- 1.8E-04
Sband delay (usec)	1.33514282916E+03		Apriori clock (usec)		-1.5272779E+01		Resid sbdelay (usec)		9.33590E-02	+/- 1.4E-03
Phase delay (usec)	1.33504947294E+03		Apriori clockrate (us/s)		-2.4600000E-07		Resid phdelay (usec)		2.78131E-06	+/- 6.0E-07
Delay rate (us/s)	-9.63852736786E-01		Apriori rate (us/s)		-9.63848404652E-01		Resid rate (us/s)		-4.33213E-06	+/- 2.5E-09
Total phase (deg)	215.6		Apriori accel (us/s/s)		4.02967858117E-05		Resid phase (deg)		86.2	+/- 18.7

ph/seg (deg) 55.6 44.9 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.5 78.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.7 26.5 Inc. seg. avg. 0.124 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.7 46.2 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 g: az 229.6 el 51.2 pa 13.1 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 7448.111 6928.333 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/gm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/gm.W.204.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

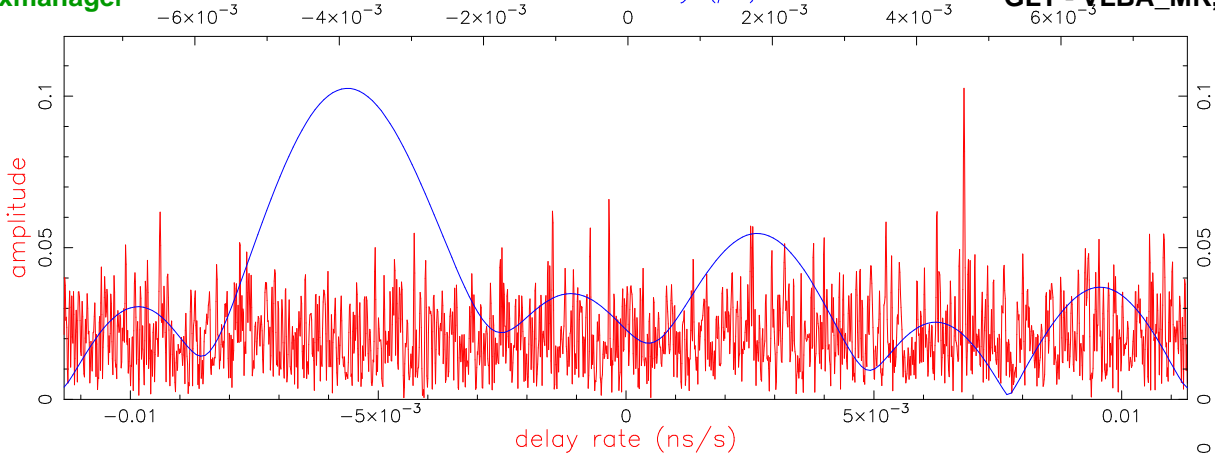
fxmanager

3C84.1X1C8Y, No0102, gm

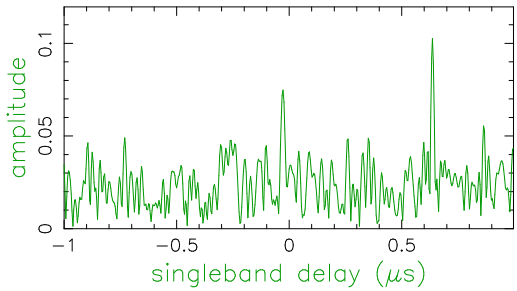
GLT - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

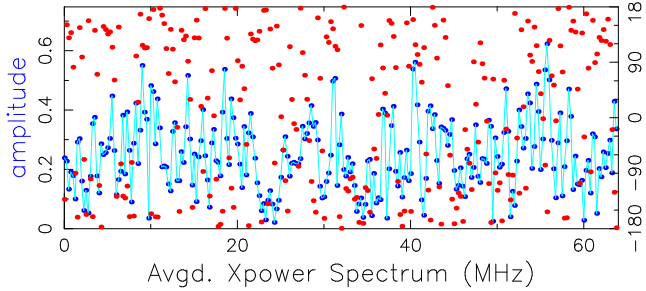
Fringe quality 0



SNR 5.8
 Int time 419.823
 Amp 0.120
 Phase -23.2
 PFD 8.9e-01
 Delays (us)
 SBD 0.636424
 MBD -0.003895
 Fringe rate (Hz)
 0.587925
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

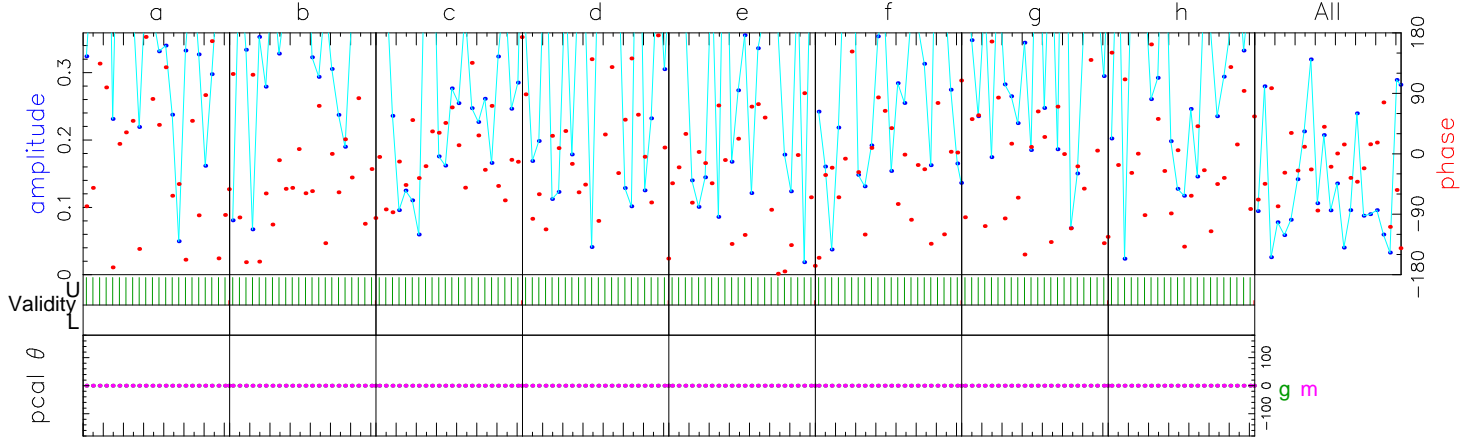


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131650
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	83.1	-53.3	-11.4	-11.9	-35.0	-7.4	-7.7	-28.7	Phase	-23.2
	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	36.0	419.5	419.0	178.9	354.5	295.9	277.1	135.5	Sbd box	419.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
g:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		1.33568619974E+03		Apriori delay (usec)	1.33504947016E+03		Resid mbdelay (usec)	-3.89542E-03		+/- 1.9E-04
Sband delay (usec)		1.33568589416E+03		Apriori clock (usec)	-1.5272779E+01		Resid sbdelay (usec)	6.36424E-01		+/- 1.5E-03
Phase delay (usec)		1.33504946941E+03		Apriori clockrate (us/s)	-2.4600000E-07		Resid phdelay (usec)	-7.47165E-07		+/- 6.4E-07
Delay rate (us/s)		-9.63841579430E-01		Apriori rate (us/s)	-9.63848404652E-01		Resid rate (us/s)	6.82522E-06		+/- 2.7E-09
Total phase (deg)		106.2		Apriori accel (us/s/s)	4.02967858117E-05		Resid phase (deg)	-23.2		+/- 19.9

	RMS	Theor.	Amplitude	0.120 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	51.1	47.8	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	88.5	83.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	46.8	28.2	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	50.3	49.2	Inc. frq. avg.	0.120	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

g: az 229.6 el 51.2 pa 13.1 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 7448.111 6928.333 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/gm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/gm.W.222.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

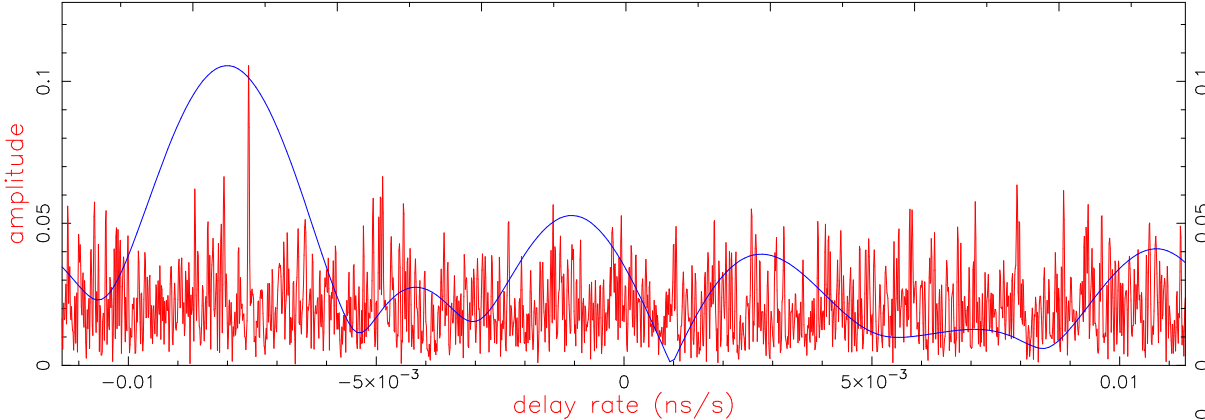
3C84.1X1C8Y, No0102, km

VLBA_KP - VLBA_MK, fgroup W, pol LL

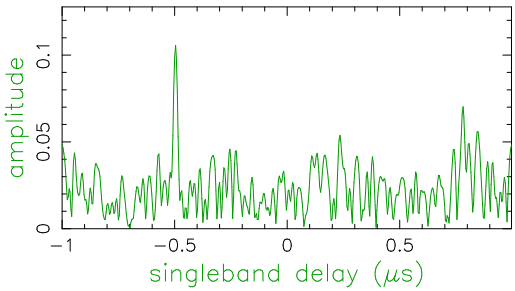
multiband delay (μ s)

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

Fringe quality 0

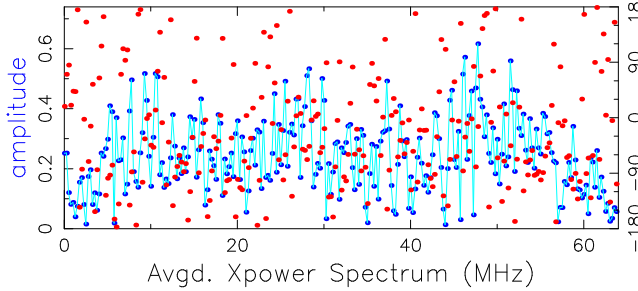


SNR 5.9
Int time 419.819
Amp 0.128
Phase 49.4
PFD 5.7e-01
Delays (us)
SBD -0.496208
MBD -0.005527
Fringe rate (Hz)
-0.653303
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



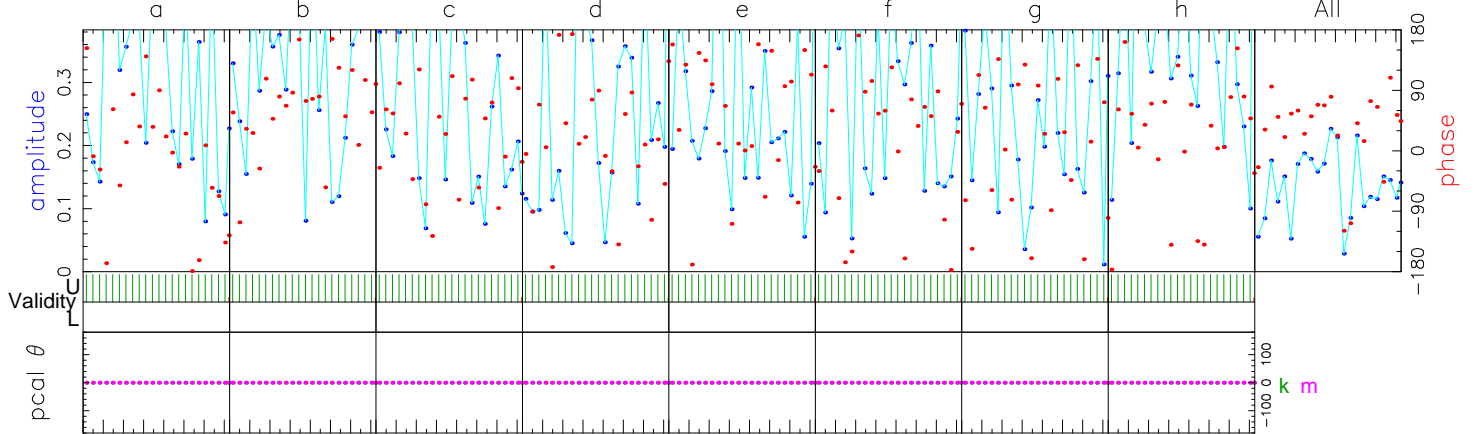
singleband delay (μ s)

delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131640
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	5.77225356779E+03	Apriori delay (usec)		5.77274347019E+03	Resid mbdelay (usec)		-5.52740E-03	+/-	1.8E-04	
Sband delay (usec)	5.77224726244E+03	Apriori clock (usec)		-1.5391373E+01	Resid sbdelay (usec)		-4.96208E-01	+/-	1.5E-03	
Phase delay (usec)	5.77274347179E+03	Apriori clockrate (us/s)		-3.1799999E-07	Resid phdelay (usec)		1.59353E-06	+/-	6.2E-07	
Delay rate (us/s)	-7.48732276994E-01	Apriori rate (us/s)		-7.48724692788E-01	Resid rate (us/s)		-7.58421E-06	+/-	2.6E-09	
Total phase (deg)	237.5		Apriori accel (us/s/s)		-1.65442200646E-05	Resid phase (deg)		49.4	+/-	19.4

ph/seg (deg)	60.0	Theor.	Amplitude	0.128 +/- 0.022	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	58.8	46.5	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	26.1	27.4	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	42.9	47.8	Inc. seg. avg.	0.125	Sample rate(MSamp/s): 128		dr window (ns/s)	-0.011 0.011		
			Inc. frq. avg.	0.122	Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 14.6 el 80.0 pa -161.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 5697.823 43.218 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/km..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/km.W.170.1X1C8Y

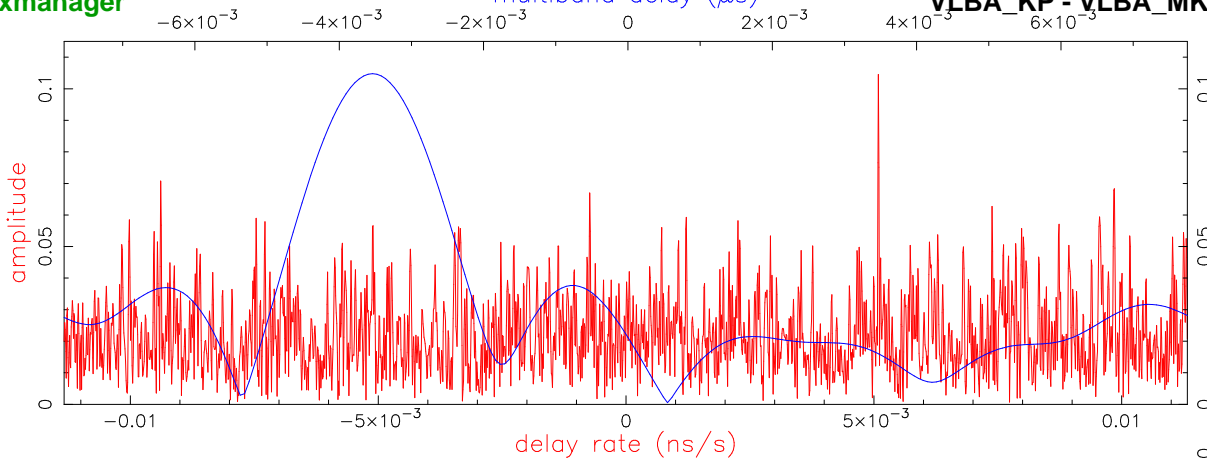
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, km

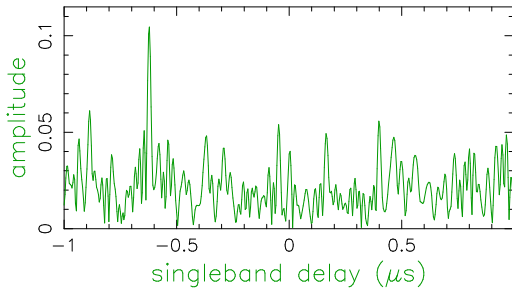
VLBA_KP - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

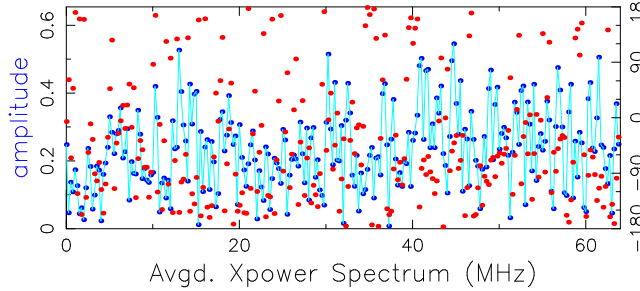


Fringe quality 0

SNR 5.9
Int time 419.819
Amp 0.115
Phase -22.0
PFD 5.6e-01
Delays (us)
SBD -0.622374
MBD -0.003605
Fringe rate (Hz)
0.439757
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

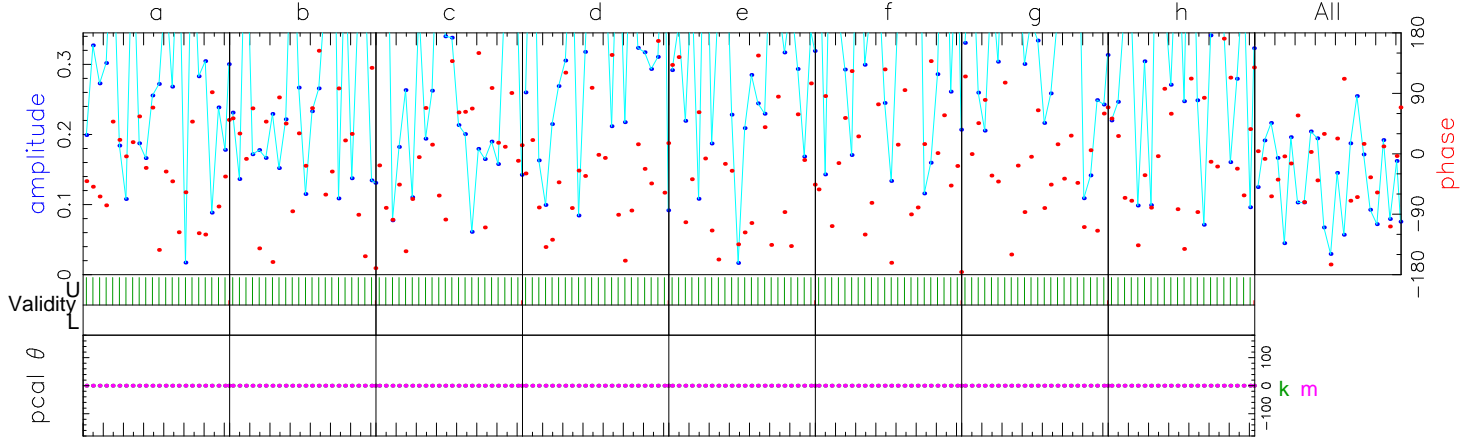


delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 2021:116
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131644
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.8	-11.0	-13.4	-40.4	-73.4	-14.1	-9.3	-18.8	Phase	-22.0
	0.1	0.1	0.1	0.2	0.0	0.1	0.2	0.1	Ampl.	0.1
	140.1	125.6	359.6	426.2	336.1	301.8	97.6	484.1	Sbd box	97.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.77211486472E+03		Apriori delay (usec)		5.77274347019E+03		Resid mbdelay (usec)		-3.60547E-03	+/- 1.8E-04
Sband delay (usec)	5.77212109644E+03		Apriori clock (usec)		-1.5391373E+01		Resid sbdelay (usec)		-6.22374E-01	+/- 1.5E-03
Phase delay (usec)	5.77274346948E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-7.09925E-07	+/- 6.2E-07
Delay rate (us/s)	-7.48719587645E-01		Apriori rate (us/s)		-7.48724692788E-01		Resid rate (us/s)		5.10514E-06	+/- 2.6E-09
Total phase (deg)	166.1		Apriori accel (us/s/s)		-1.65442200646E-05		Resid phase (deg)		-22.0	+/- 19.4

	RMS	Theor.	Amplitude	0.115 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	57.3	46.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	66.8	81.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.0	27.4	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.1	47.8	Inc. frq. avg.	0.106	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 14.6 el 80.0 pa -161.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 5697.823 43.218 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/km..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/km.W.193.1X1C8Y

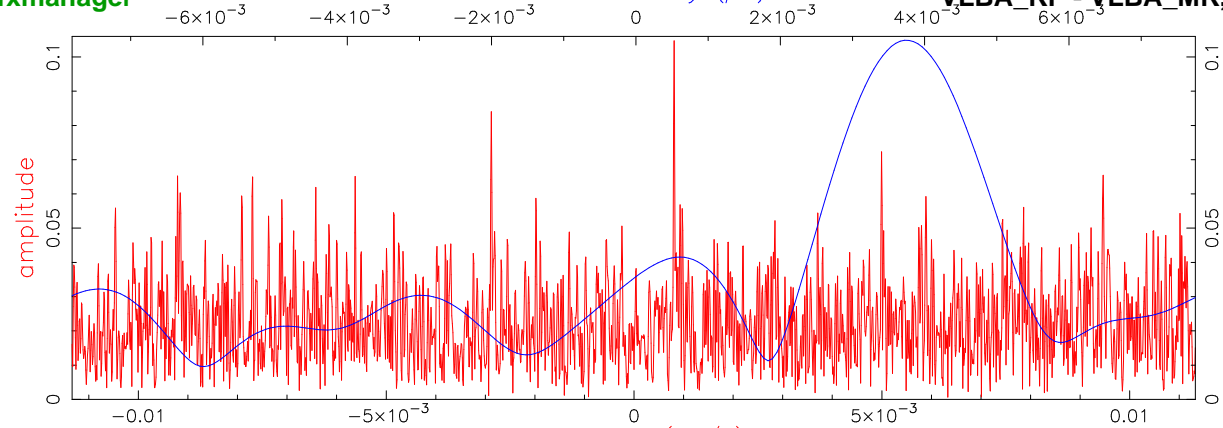
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

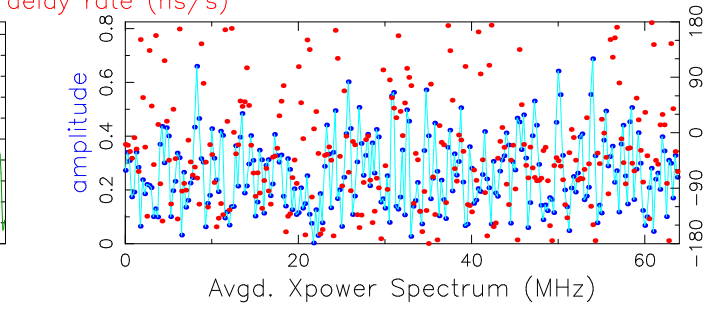
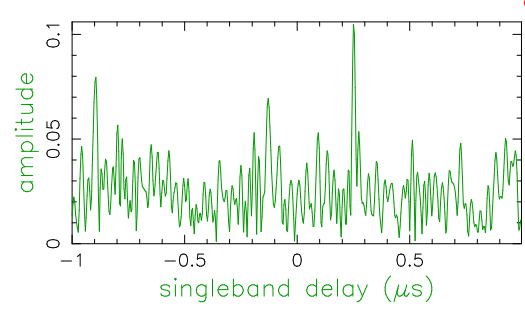
3C84.1X1C8Y, No0102, km

VLBA_KP - VLBA_MK, fgroup W, pol LR

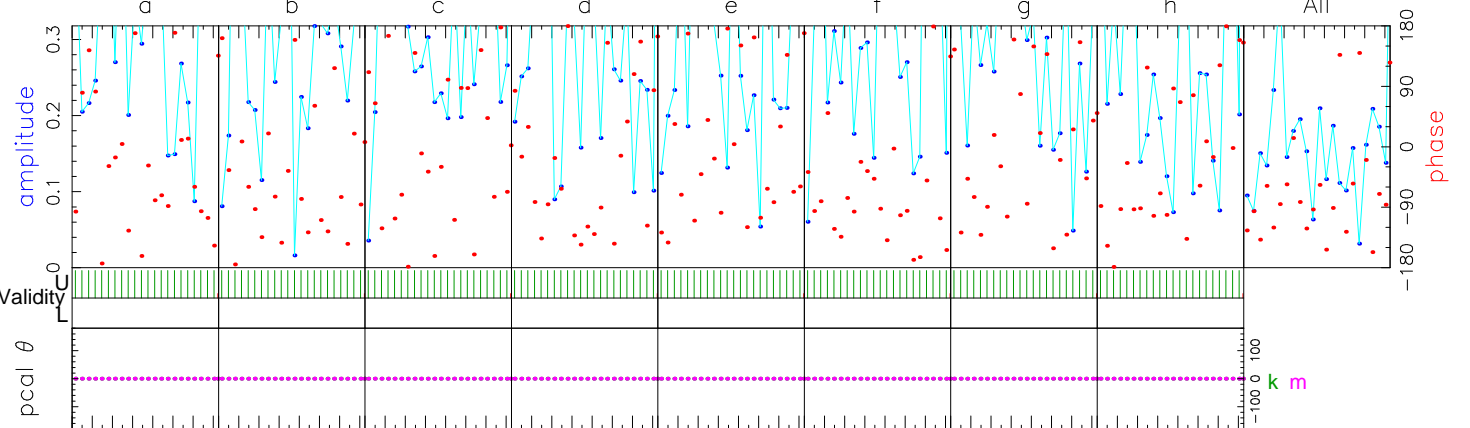
multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 419.819
 Amp 0.106
 Phase -91.6
 PFD 5.5e-01
 Delays (us)
 SBD 0.251162
 MBD 0.003811
 Fringe rate (Hz) 0.070074
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build 2021:303:174537
 2021:304:131649
 2021:252:122852
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.0	-77.4	-129.0	-120.4	-64.4	-88.9	-114.4	-96.8	Phase	-91.6
	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	91.8	311.2	393.7	495.7	78.0	27.6	296.5	221.8	Sbd box	321.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.77299728130E+03		Apriori delay (usec)		5.77274347019E+03		Resid mbdelay (usec)		3.81111E-03	+/- 1.8E-04
Sband delay (usec)	5.77299463269E+03		Apriori clock (usec)		-1.5391373E+01		Resid sbdelay (usec)		2.51162E-01	+/- 1.5E-03
Phase delay (usec)	5.77274346724E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		-2.95461E-06	+/- 6.2E-07
Delay rate (us/s)	-7.48723879298E-01		Apriori rate (us/s)		-7.48724692788E-01		Resid rate (us/s)		8.13490E-07	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.65442200646E-05		Resid phase (deg)		-91.6	+/- 19.3

ph/seg (deg) 57.5 46.4 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 83.7 80.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.2 27.3 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.7 47.7 Inc. frq. avg. 0.100 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 14.6 el 80.0 pa -161.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 5697.823 43.218 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/km..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/km.W.215.1X1C8Y

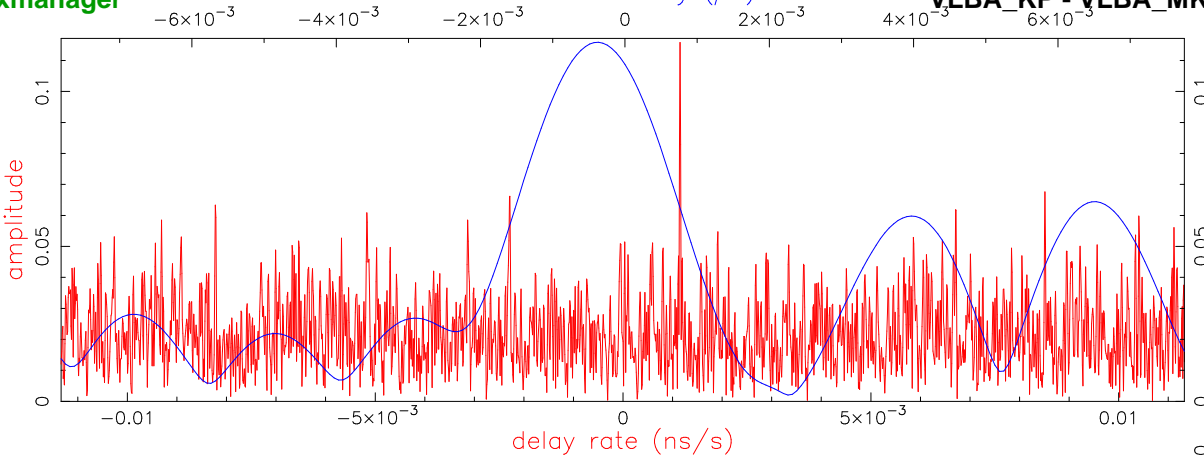
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, km

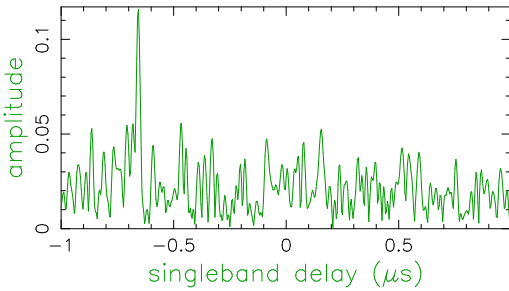
VLBA_KP - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

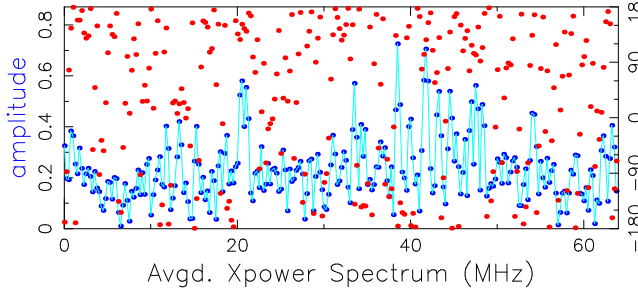


Fringe quality 0

SNR 6.5
 Int time 419.819
 Amp 0.117
 Phase 137.5
 PFD 1.8e-02
 Delays (us)
 SBD -0.657368
 MBD -0.000416
 Fringe rate (Hz)
 0.099183
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

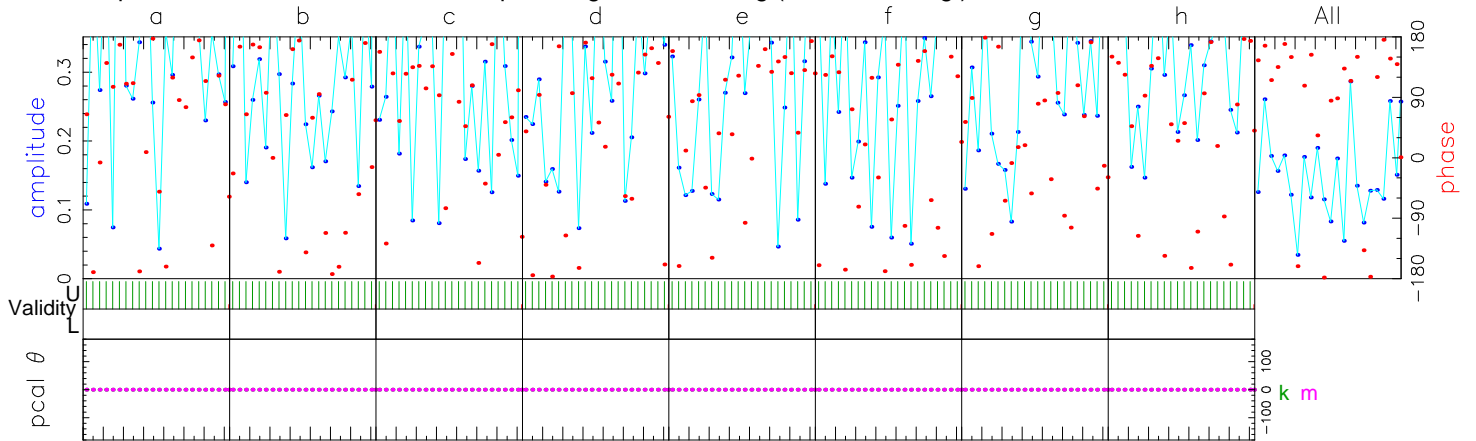


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131652
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	136.3	163.4	108.2	130.6	130.7	174.3	21.6	145.9	Phase	137.5
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	89.9	73.9	136.7	204.7	193.5	89.3	313.5	385.8	Sbd box	88.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.77208680426E+03		Apriori delay (usec)		5.77274347019E+03		Resid mbdelay (usec)		-4.15937E-04	+/- 1.7E-04
Sband delay (usec)	5.77208610244E+03		Apriori clock (usec)		-1.5391373E+01		Resid sbdelay (usec)		-6.57368E-01	+/- 1.3E-03
Phase delay (usec)	5.77274347463E+03		Apriori clockrate (us/s)		-3.1799999E-07		Resid phdelay (usec)		4.43559E-06	+/- 5.7E-07
Delay rate (us/s)	-7.48723541371E-01		Apriori rate (us/s)		-7.48724692788E-01		Resid rate (us/s)		1.15142E-06	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.65442200646E-05		Resid phase (deg)		137.5	+/- 17.5

ph/seg (deg) 42.6 42.0 Search (2048X32) 0.113 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 60.2 73.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.4 24.8 Inc. seg. avg. 0.118 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.7 43.3 Inc. frq. avg. 0.122 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 14.6 el 80.0 pa -161.9 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 5697.823 43.218 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/km..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/km.W.235.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

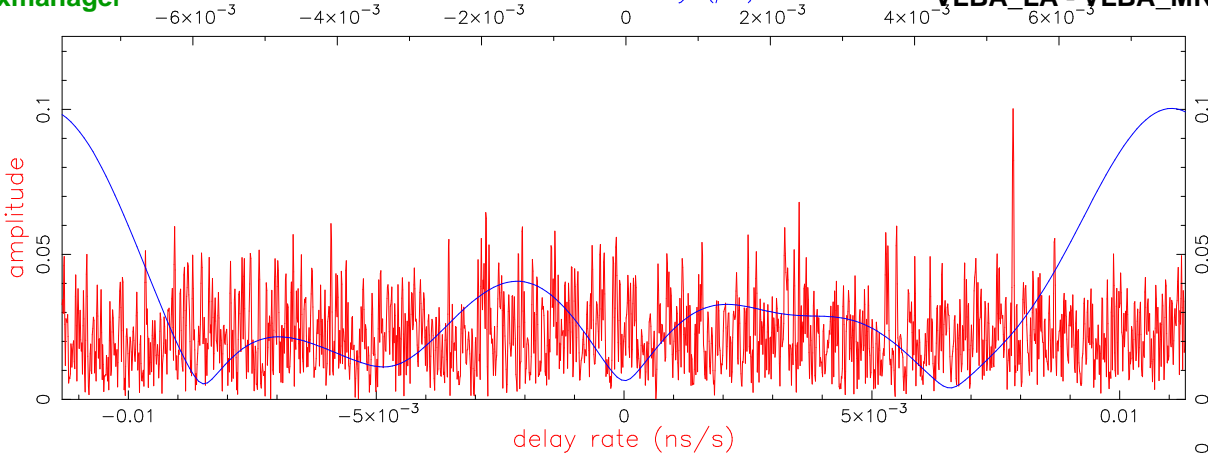
fxmanager

3C84.1X1C8Y, No0102, Im

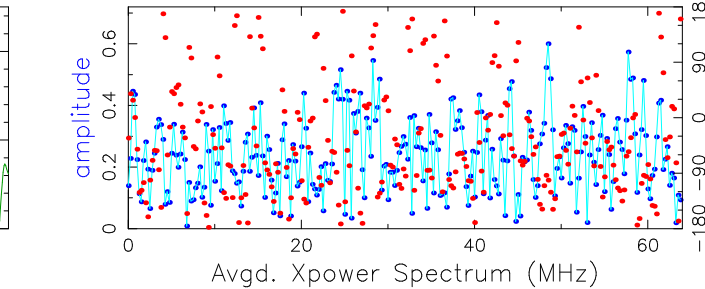
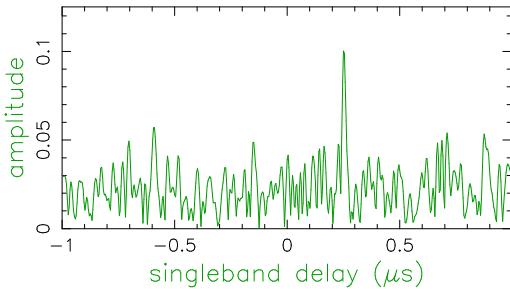
VLBA_LA - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 0

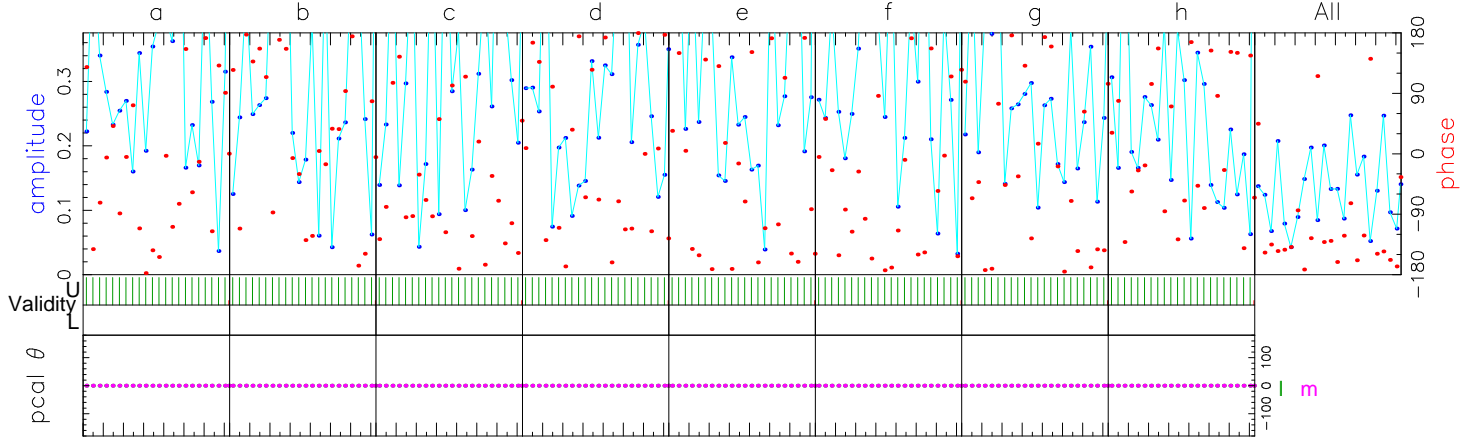


SNR 5.7
 Int time 419.819
 Amp 0.125
 Phase -138.5
 PFD 9.4e-01
 Delays (us)
 SBD 0.251632
 MBD 0.007620
 Fringe rate (Hz)
 0.677015
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131656
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.4	-176.4	-111.9	-134.1	-171.2	-135.0	-159.0	-96.0	Phase	-138.5
	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	307.5	168.7	343.7	440.1	322.5	198.0	273.5	88.9	Sbd box	321.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	5.95099115614E+03	Apriori delay (usec)	5.95073353602E+03	Resid mbdelay (usec)	7.62011E-03	+/-	1.9E-04
Sband delay (usec)	5.95098516777E+03	Apriori clock (usec)	-1.8342146E+01	Resid sbdelay (usec)	2.51632E-01	+/-	1.5E-03
Phase delay (usec)	5.95073353156E+03	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	-4.46662E-06	+/-	6.5E-07
Delay rate (us/s)	-8.38665668209E-01	Apriori rate (us/s)	-8.38673527681E-01	Resid rate (us/s)	7.85947E-06	+/-	2.7E-09
Total phase (deg)	147.0	Apriori accel (us/s/s)	-1.33646152287E-05	Resid phase (deg)	-138.5	+/-	20.1

ph/seg (deg)	53.0	Theor.	48.2	Amplitude	0.125 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	65.3	Search (2048X32)	0.099	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	33.6	Inc. seg. avg.	0.121	Inc. frq. avg.	0.125	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	34.0	Inc. frq. avg.	0.125			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 345.5 el 84.0 pa 160.6 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6391.833 623.722 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Im..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Im.W.241.1X1C8Y

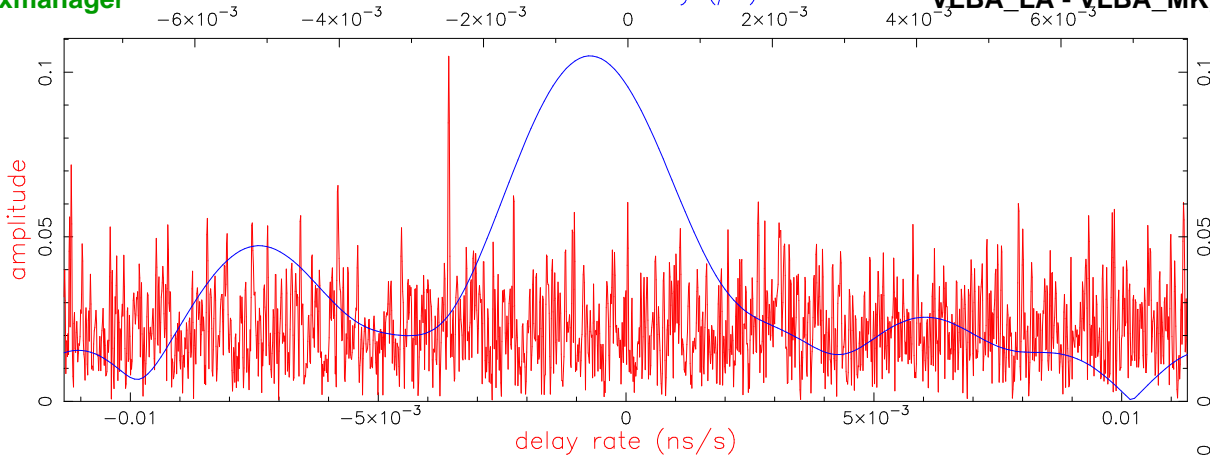
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, Im

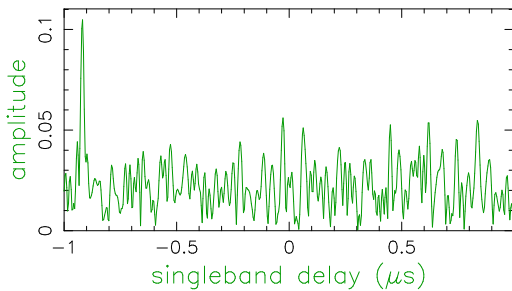
VLBA_LA - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

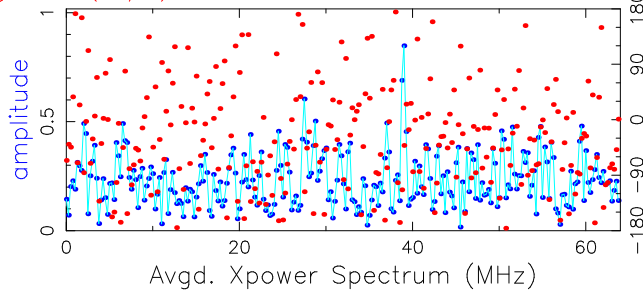


Fringe quality 0

SNR 5.9
Int time 419.819
Amp 0.110
Phase 171.9
PFD 5.4e-01
Delays (us)
SBD -0.919132
MBD -0.000587
Fringe rate (Hz)
-0.308201
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

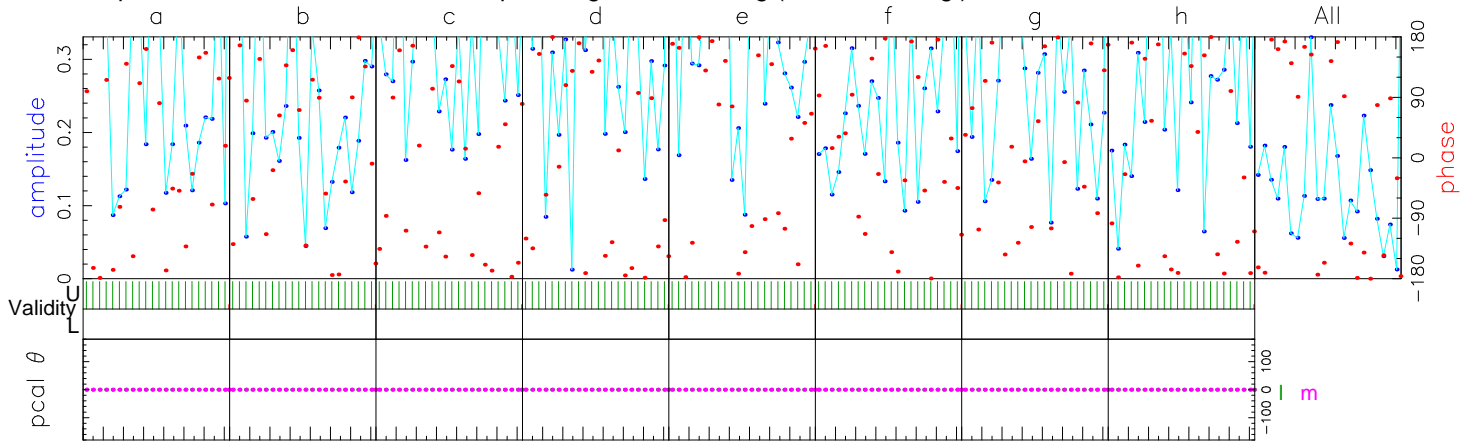


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131659
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0			
l	0	0	0	0	0	0	0	0	APs used		
m	0	0	0	0	0	0	0	0	PC freqs		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
m	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	165.8	153.3	-175.6	175.8	163.9	-156.8	-138.8	165.0			
Sband delay (usec)	0.1	0.1	0.1	0.2	0.2	0.0	0.0	0.1	Phase	171.9	
Phase delay (usec)	355.5	111.4	116.8	21.6	22.0	16.0	194.5	83.3	Ampl.	0.1	
Delay rate (us/s)									Sbd box	21.7	
Total phase (deg)			97.4								
Apriori delay (usec)		5.94981107395E+03			5.95073353602E+03				Resid mbdelay (usec)	-5.87076E-04	+/- 1.8E-04
Apriori clock (usec)		5.94981440352E+03		0.103	-1.8342146E+01				Resid sbdelay (usec)	-9.19132E-01	+/- 1.5E-03
Apriori clockrate (us/s)		5.95073354157E+03		0.000	-6.0400003E-07				Resid phdelay (usec)	5.54189E-06	+/- 6.2E-07
Apriori rate (us/s)		-8.38677105587E-01		0.100	-8.38673527681E-01				Resid rate (us/s)	-3.57791E-06	+/- 2.6E-09
Apriori accel (us/s/s)				0.101	-1.33646152287E-05				Resid phase (deg)	171.9	+/- 19.3
ph/seg (deg)	54.6	46.3	Search (2048X32)	0.110 +/- 0.019					PCal mode: MANUAL, MANUAL		
amp/seg (%)	75.2	80.9	Interp.	0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	26.1	27.3	Inc. seg. avg.	0.100					Bits/sample: 2x2	sb window (us)	-1.000 1.000
amp/frq (%)	54.8	47.7	Inc. frq. avg.	0.101					SampCntNorm: enabled	mb window (us)	-0.008 0.008
									Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011
									Data rate(Mb/s): 2048	ion window (TEC)	0.00 0.00
									nlags: 256		
									t_cohere infinite		

l: az 345.5 el 84.0 pa 160.6 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6391.833 623.722 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/lm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/lm.W.261.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

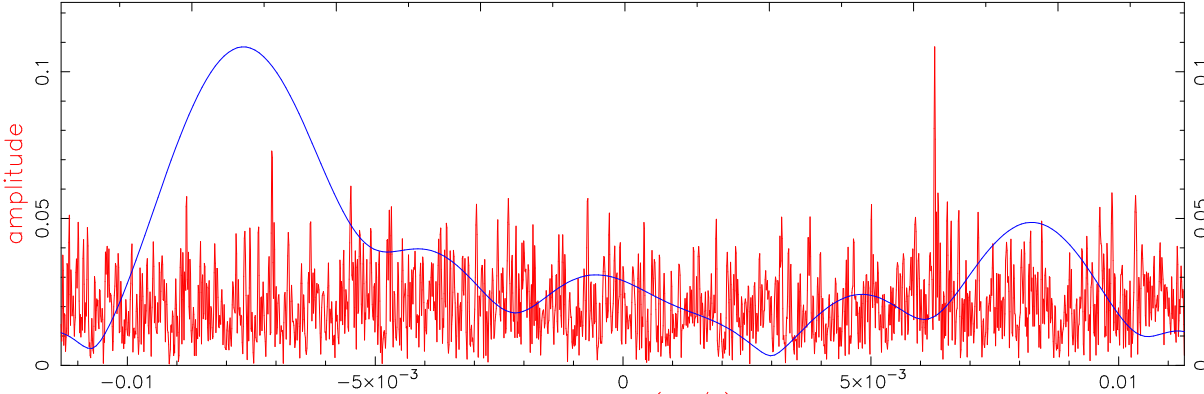
3C84.1X1C8Y, No0102, Im

VLBA_LA - VLBA_MK, fgroup W, pol LR

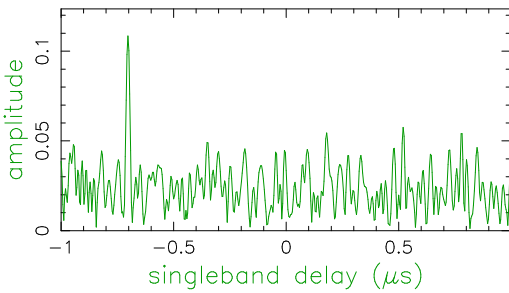
multiband delay (μ s)

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

Fringe quality 0

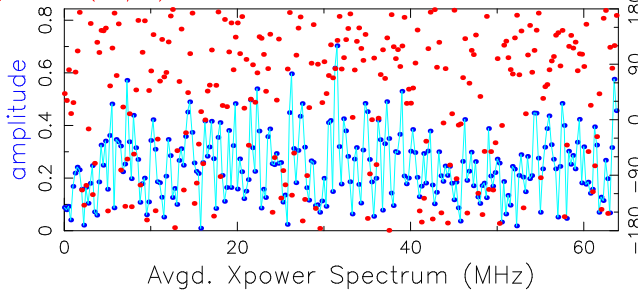


SNR 6.1
Int time 419.819
Amp 0.124
Phase 4.3
PFD 2.7e-01
Delays (us)
SBD -0.702885
MBD -0.005280
Fringe rate (Hz)
0.542550
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



singleband delay (μ s)

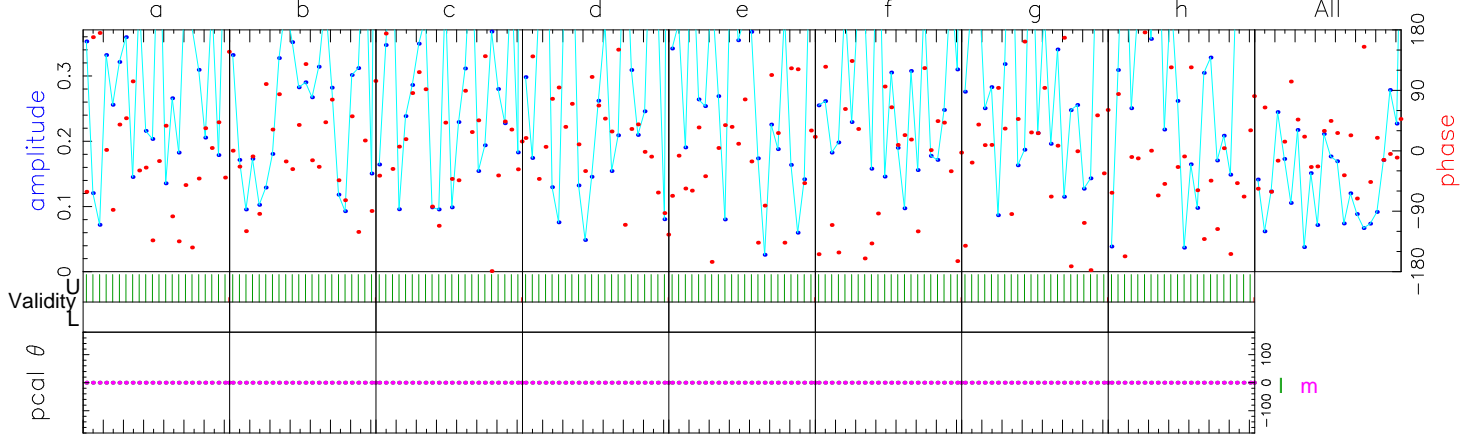
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131704
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.0	12.4	35.8	16.1	-1.7	57.2	13.5	-38.6	86012.00	4.3
	0.2	0.2	0.1	0.2	0.1	0.0	0.1	0.1	86076.00	0.1
	381.1	447.6	180.0	178.1	303.0	457.0	298.3	351.3	86140.00	77.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
l	0	0	0	0	0	0	0	0		
m	0	0	0	0	0	0	0	0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	5.95002513087E+03	Apriori delay (usec)	5.95073353602E+03	Resid mbdelay (usec)	-5.28015E-03	+/-	1.8E-04
Sband delay (usec)	5.95003065077E+03	Apriori clock (usec)	-1.8342146E+01	Resid sbdelay (usec)	-7.02885E-01	+/-	1.4E-03
Phase delay (usec)	5.95073353616E+03	Apriori clockrate (us/s)	-6.0400003E-07	Resid phdelay (usec)	1.38306E-07	+/-	6.1E-07
Delay rate (us/s)	-8.38667229214E-01	Apriori rate (us/s)	-8.38673527681E-01	Resid rate (us/s)	6.29847E-06	+/-	2.5E-09
Total phase (deg)	289.8	Apriori accel (us/s/s)	-1.33646152287E-05	Resid phase (deg)	4.3	+/-	18.9

ph/seg (deg)	53.0	Theor.	45.2	Amplitude	0.124 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	74.8	Search (2048X32)	0.105	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.3	Inc. seg. avg.	0.124	Inc. frq. avg.	0.123	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	38.0	Inc. frq. avg.	0.123	Sample rate(MSamp/s): 128		Data rate(Mb/s): 2048	nlags: 256
							t_cohere infinite

l: az 345.5 el 84.0 pa 160.6 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6391.833 623.722 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Im..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Im.W.283.1X1C8Y

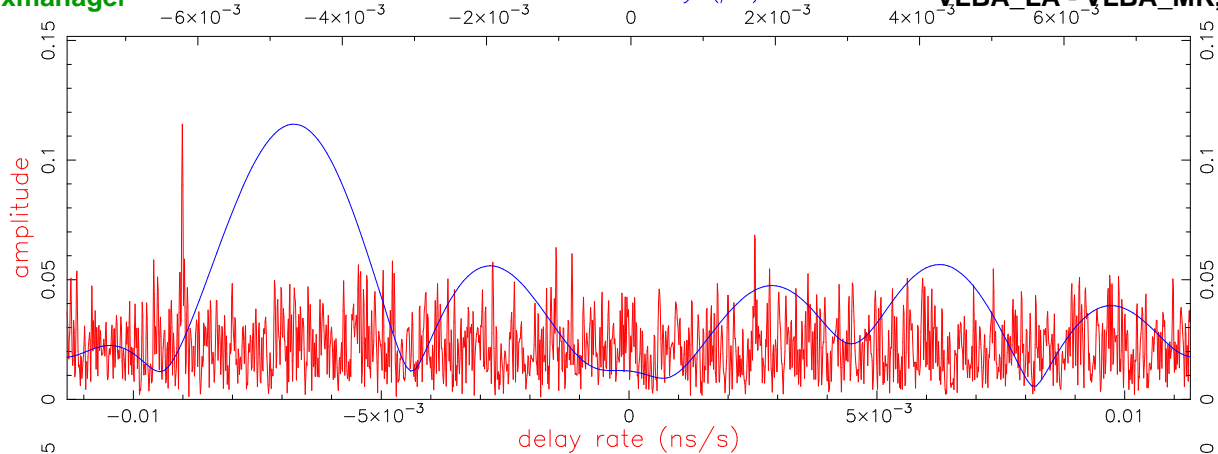
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, Im

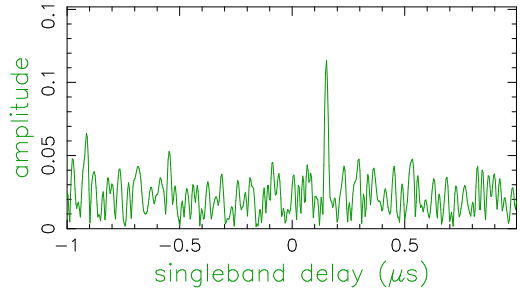
VLBA_LA - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

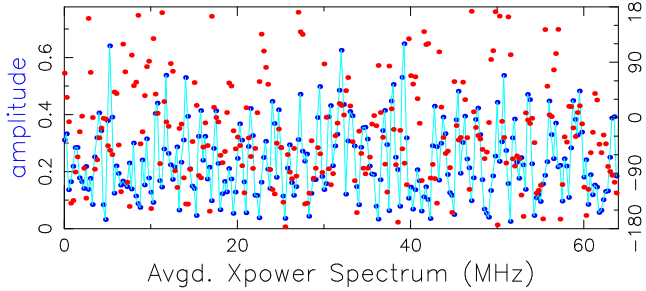


Fringe quality 0

SNR 6.5
 Int time 419.819
 Amp 0.152
 Phase -38.4
 PFD 3.0e-02
 Delays (us)
 SBD 0.151856
 MBD -0.004690
 Fringe rate (Hz)
 -0.777002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

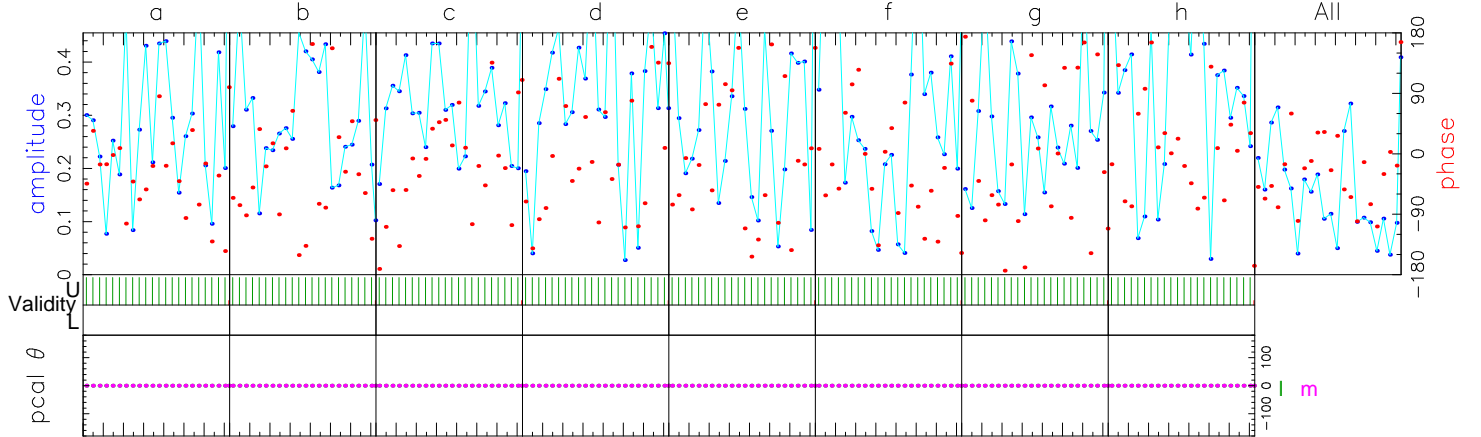


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131708
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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

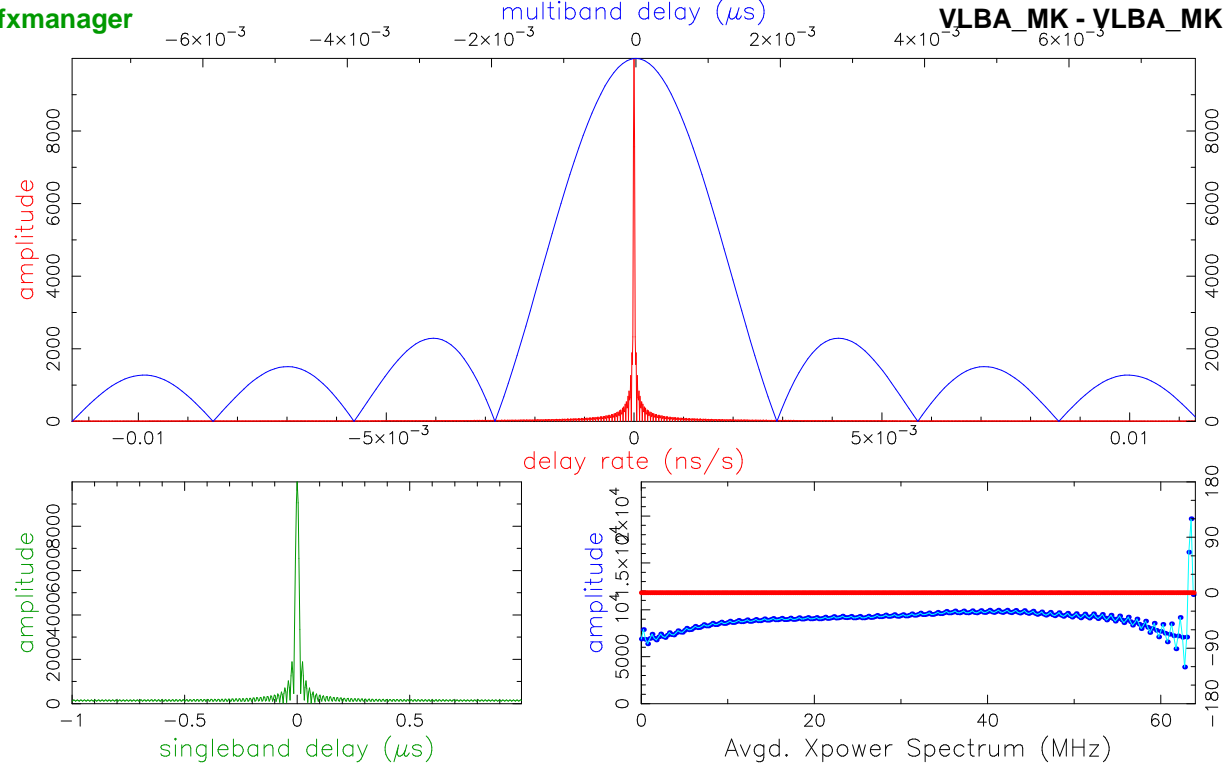


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-31.5	-67.5	-21.5	-10.2	-62.1	-46.0	-105.9	-16.8	Phase	-38.4
	0.2	0.2	0.2	0.2	0.1	0.2	0.1	0.2	Ampl.	0.2
	227.9	7.2	370.7	28.9	390.5	466.8	374.4	295.9	Sbd box	295.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
l	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.95088509600E+03		Apriori delay (usec)		5.95073353602E+03		Resid mbdelay (usec)		-4.69003E-03	+/- 1.7E-04
Sband delay (usec)	5.95088539177E+03		Apriori clock (usec)		-1.8342146E+01		Resid sbdelay (usec)		1.51856E-01	+/- 1.3E-03
Phase delay (usec)	5.95073353479E+03		Apriori clockrate (us/s)		-6.0400003E-07		Resid phdelay (usec)		-1.23727E-06	+/- 5.7E-07
Delay rate (us/s)	-8.38682547903E-01		Apriori rate (us/s)		-8.38673527681E-01		Resid rate (us/s)		-9.02022E-06	+/- 2.4E-09
Total phase (deg)	247.2		Apriori accel (us/s/s)		-1.33646152287E-05		Resid phase (deg)		-38.4	+/- 17.8

	RMS	Theor.	Amplitude	0.152 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	47.4	42.6	Search (2048X32)	0.111	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	83.5	74.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	35.6	25.1	Inc. seg. avg.	0.159	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.1	43.8	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

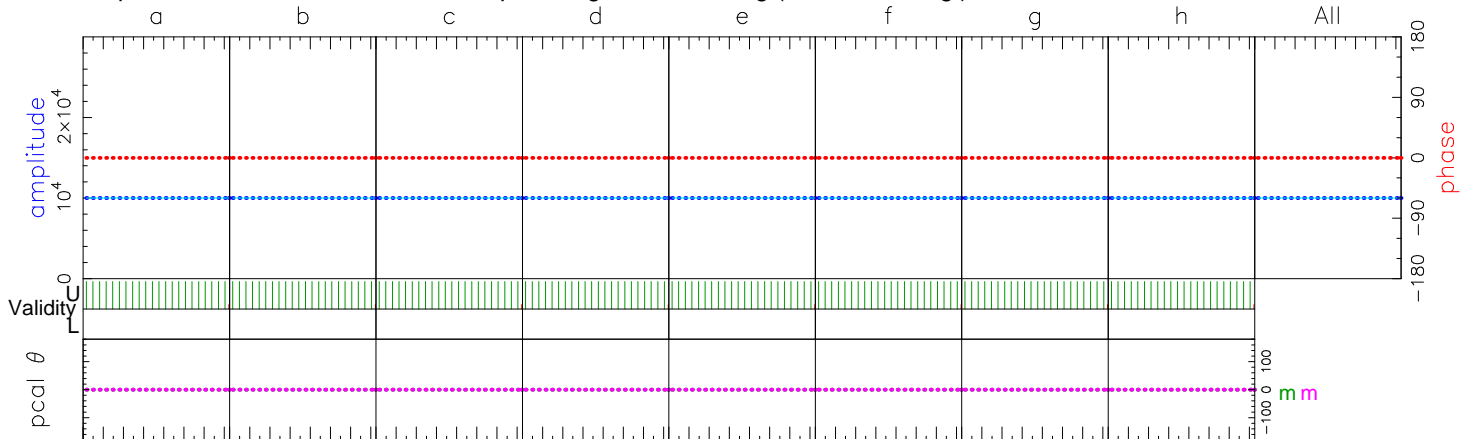
l: az 345.5 el 84.0 pa 160.6 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 6391.833 623.722 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/lm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/lm.W.302.1X1C8Y



Fringe quality 9
SNR 560314.3
Int time 419.825
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131656
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

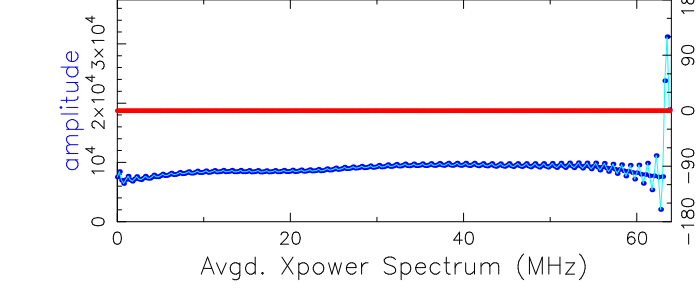
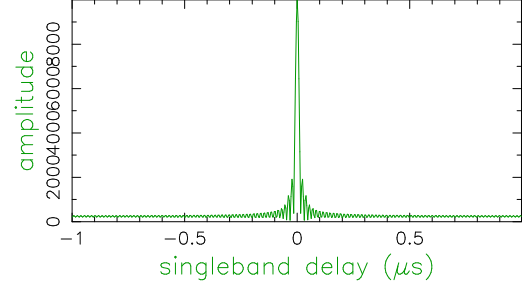
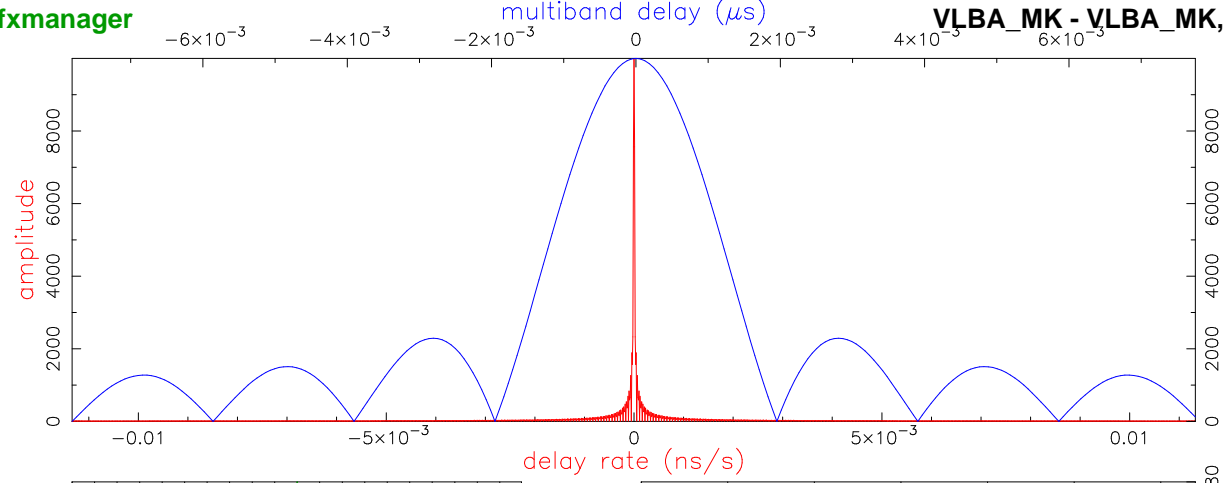
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



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

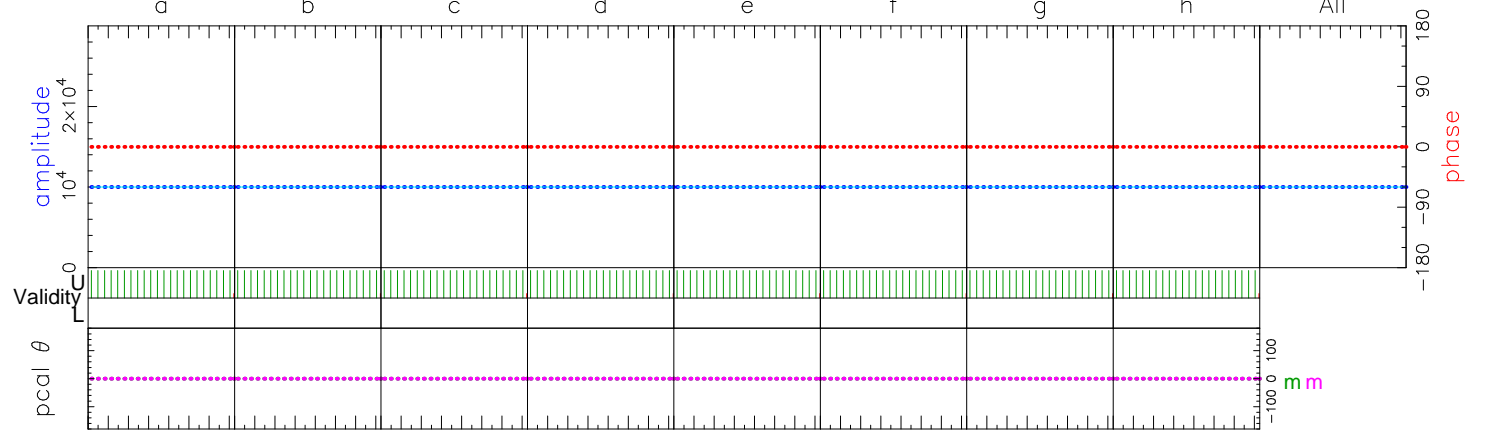
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.9E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.5E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.7E-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	RMS	Theor.	Amplitude	9999.999 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.999	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00



Fringe quality 9
SNR 560314.3
Int time 419.825
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131700
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	Ampl.	10000.0
m	0	0	0	0	0	0	0	0	Sbd box	257.0
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC phase	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 1.9E-09
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.5E-08
Phase delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 6.6E-12
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 2.7E-14
Total phase (deg)			0.0						Resid phase (deg)	0.0 +/- 0.0

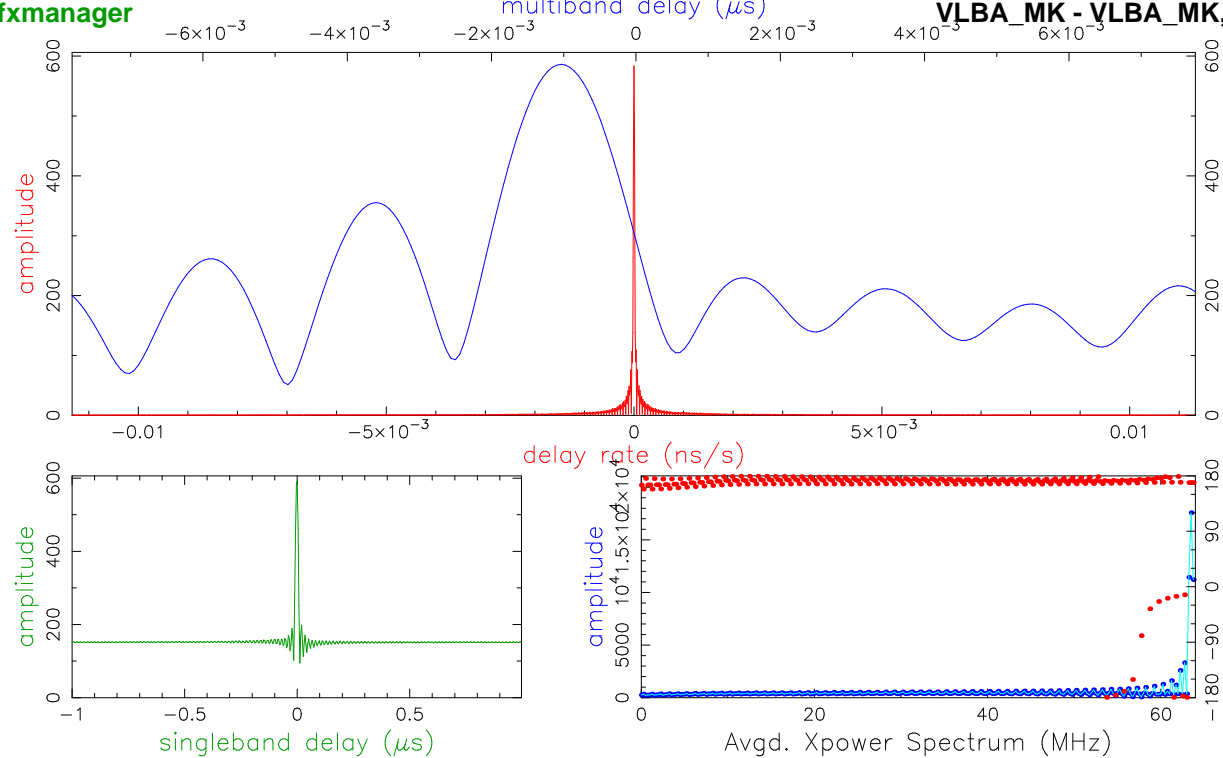
RMS Theor. Amplitude 9999.999 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 m: az 50.5 el 44.7 pa -103.5 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mm.W.263.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mm

VLBA_MK - VLBA_MK, fgroup W, pol LR

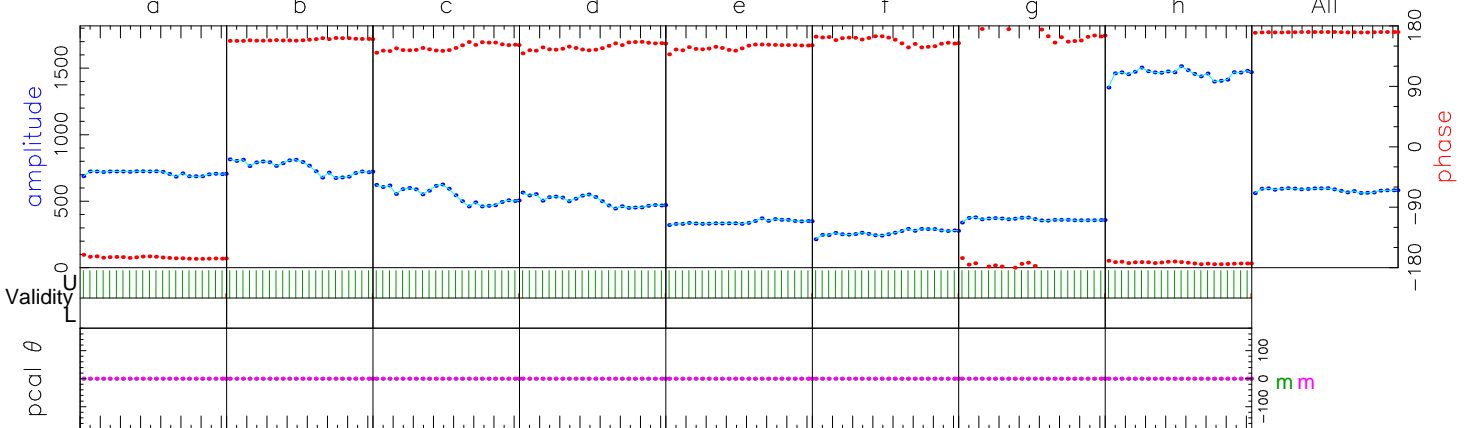


Fringe quality 6

SNR 33967.2
 Int time 419.825
 Amp 606.217
 Phase 170.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001740
 MBD -0.001119
 Fringe rate (Hz)
 -0.000006
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131704
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-164.7	159.2	147.3	148.3	148.0	157.3	173.8	-172.7	Phase	170.5
	710.9	755.0	545.4	499.6	341.4	262.3	356.1	1457.2	Ampl.	616.0
	256.2	256.1	256.6	256.9	256.6	257.1	256.8	256.1	Sbd box	256.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.11921875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.11922E-03	+/- 3.2E-08
Sband delay (usec)	-1.74025000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.74025E-03	+/- 2.5E-07
Phase delay (usec)	5.49731010181E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.49731E-06	+/- 1.1E-10
Delay rate (us/s)	-7.22728771976E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-7.22729E-11	+/- 4.5E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		170.5	+/- 0.0

ph/seg (deg) 0.3 0.0 Search (2048X32) 584.997 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.2 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.4 0.0 Inc. seg. avg. 583.863 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.0 0.0 Inc. frq. avg. 615.984 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 50.5 el 44.7 pa -103.5 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 simultaneous interpolator

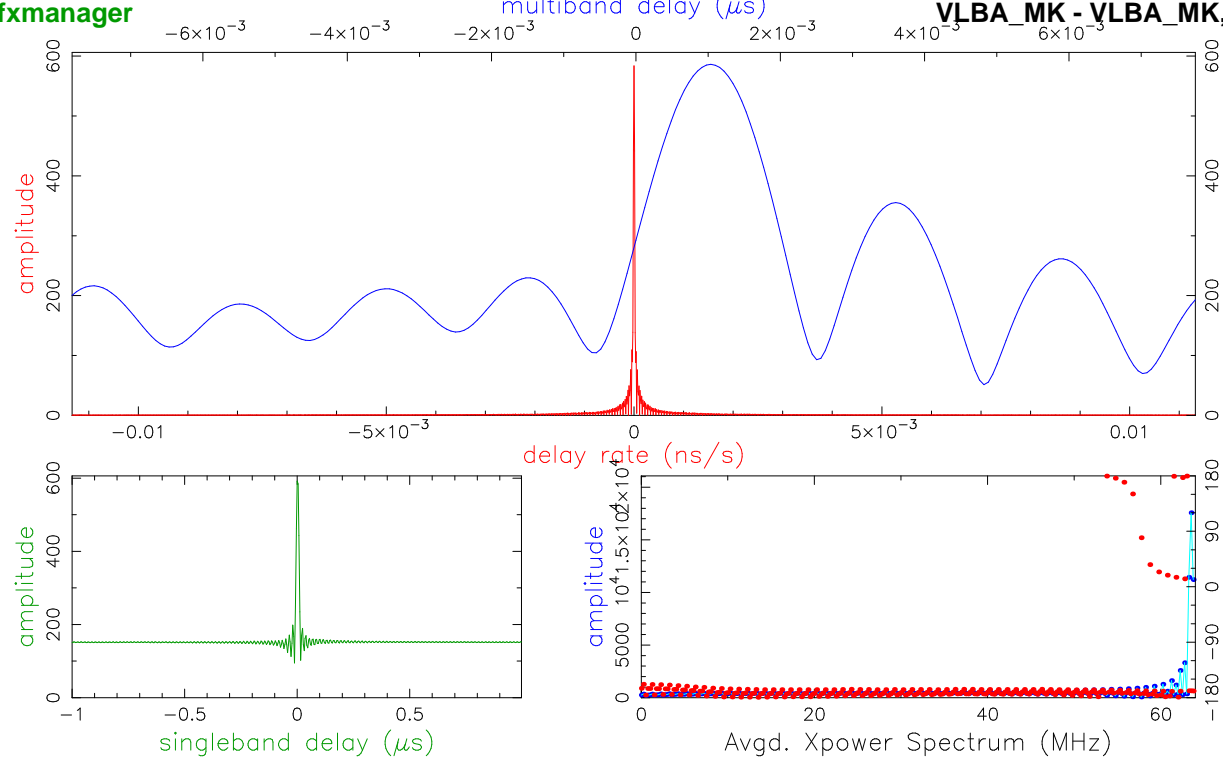
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mm.W.282.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mm

VLBA_MK - VLBA_MK, fgroup W, pol RL

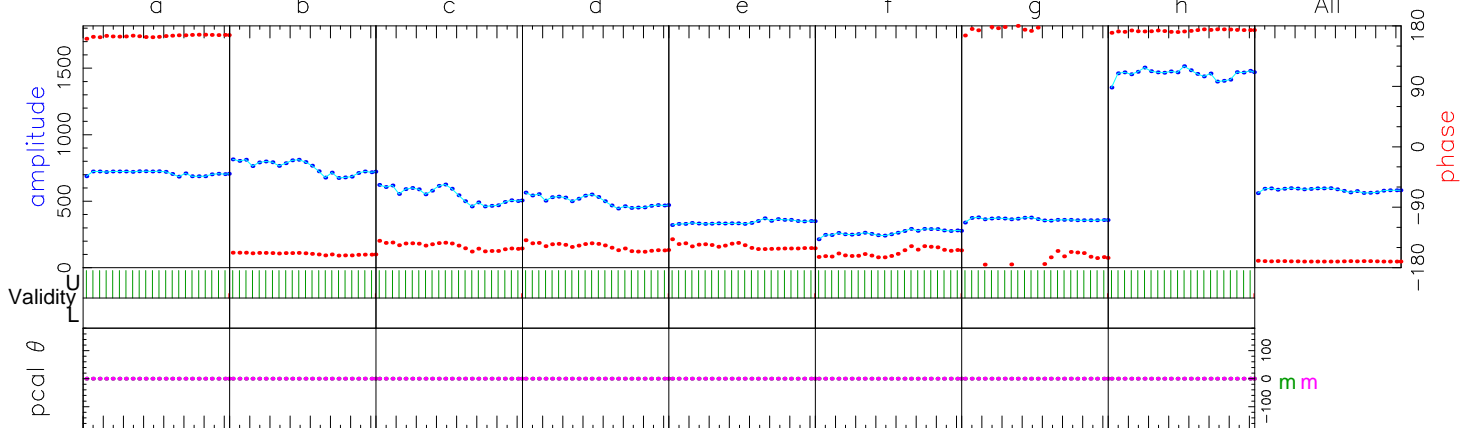


Fringe quality 6

SNR 33967.2
 Int time 419.825
 Amp 606.217
 Phase -170.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.001740
 MBD 0.001119
 Fringe rate (Hz) 0.000006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Yr:day 16383
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131707
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	164.7	-159.2	-147.3	-148.3	-148.0	-157.3	-173.8	172.7	Phase	-170.5
	710.9	755.0	545.4	499.6	341.4	262.3	356.1	1457.2	Ampl.	616.0
	257.8	257.9	257.4	257.1	257.4	256.9	257.2	257.9	Sbd box	257.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.11921875000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		1.11922E-03	+/- 3.2E-08
Sband delay (usec)	1.74025000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.74025E-03	+/- 2.5E-07
Phase delay (usec)	-5.49731010180E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.49731E-06	+/- 1.1E-10
Delay rate (us/s)	7.22728771976E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		7.22729E-11	+/- 4.5E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-170.5	+/- 0.0

ph/seg (deg) 0.3 0.0 Amplitude 606.217 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 4.2 0.0 Search (2048X32) 584.997 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.4 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.0 0.0 Inc. seg. avg. 583.863 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 m: az 50.5 el 44.7 pa -103.5 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mm.W.299.1X1C8Y simultaneous interpolator

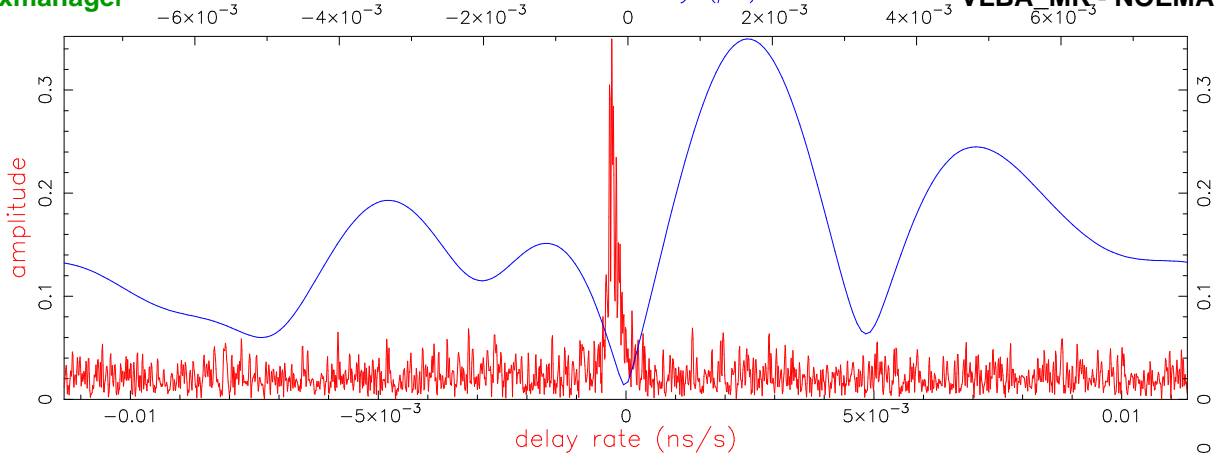
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mN

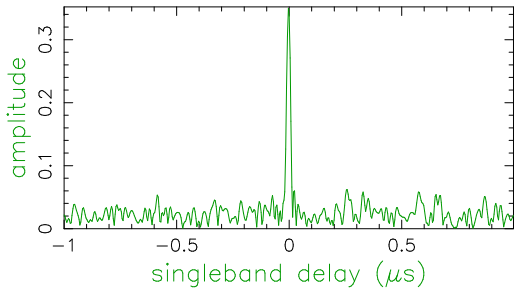
VLBA_MK- NOEMA, fgroup W, pol LL

multiband delay (μ s)

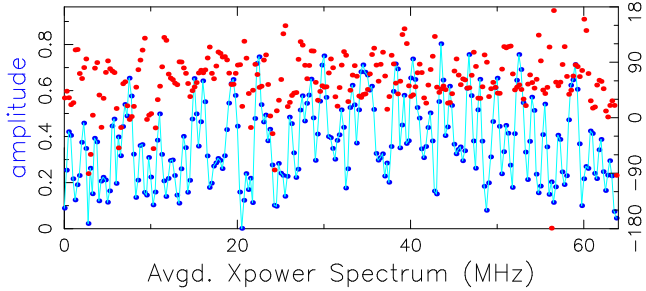


Fringe quality 7

SNR 19.7
 Int time 419.791
 Amp 0.352
 Phase 10.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.002768
 MBD 0.001699
 Fringe rate (Hz)
 -0.024413
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

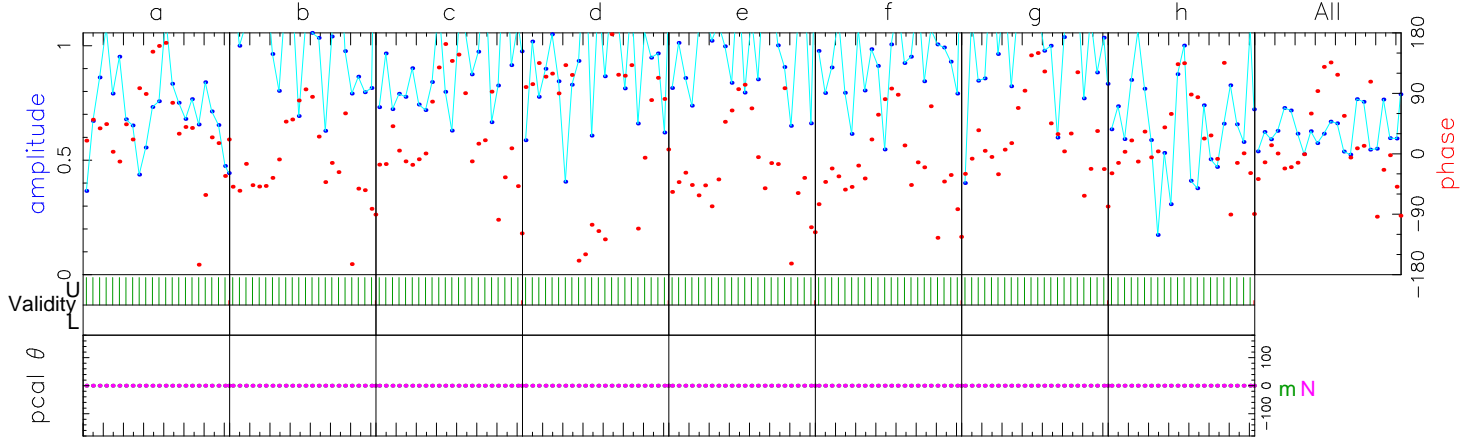


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131657
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



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

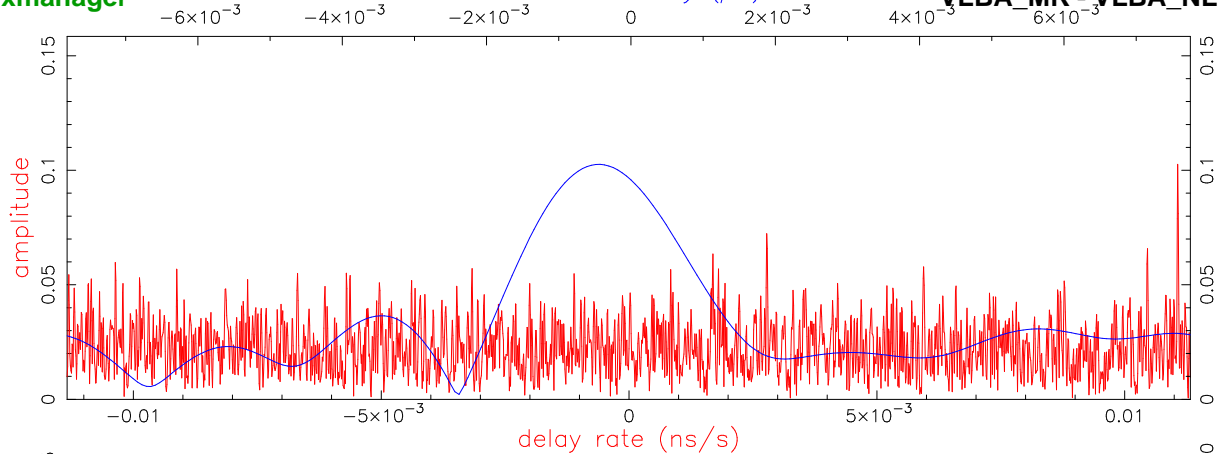
Group delay (usec)(sbd)	1.01535629655E+04	Apriori delay (usec)	1.01535612663E+04	Resid mbdelay (usec)	1.69912E-03	+/-	5.5E-05
Sband delay (usec)	1.01535584981E+04	Apriori clock (usec)	2.8894119E+01	Resid sbdelay (usec)	-2.76825E-03	+/-	4.4E-04
Phase delay (usec)	1.01535612667E+04	Apriori clockrate (us/s)	-8.0020001E-06	Resid phdelay (usec)	3.29020E-07	+/-	1.9E-07
Delay rate (us/s)	1.53526810813E+00	Apriori rate (us/s)	1.53526839154E+00	Resid rate (us/s)	-2.83410E-07	+/-	7.7E-10
Total phase (deg)	183.8	Apriori accel (us/s/s)	-8.10564693983E-05	Resid phase (deg)	10.2	+/-	5.8

ph/seg (deg)	62.1	Theor.	13.9	Search (2048X32)	0.319	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	81.0		24.3	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)	58.8		8.2	Inc. seg. avg.	0.608	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	43.9		14.3	Inc. frq. avg.	0.477	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 N: az 315.2 el 14.4 pa 41.7 u,v (fr/asec) -11904.745 -7927.781 simultaneous interpolator

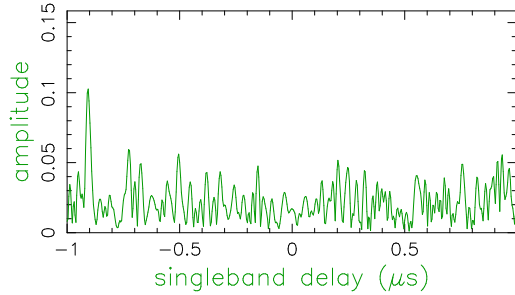
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mN..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mN.W.246.1X1C8Y

multiband delay (μ s)

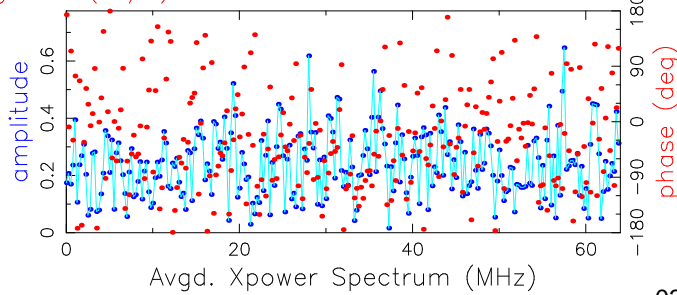


Fringe quality 0

SNR 5.8
 Int time 419.819
 Amp 0.158
 Phase -43.3
 PFD 8.6e-01
 Delays (us)
 SBD -0.907316
 MBD -0.000464
 Fringe rate (Hz)
 0.955490
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

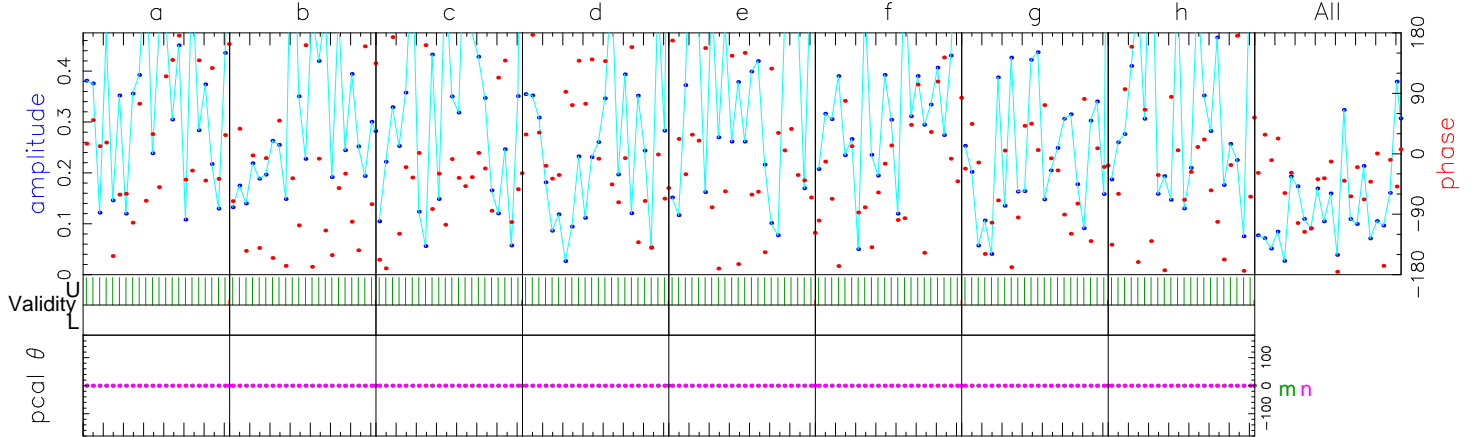


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131658
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-3.1	-87.5	-52.1	-21.1	-31.7	-35.9	-31.7	-66.3	Phase	-43.3
	0.1	0.2	0.3	0.1	0.2	0.1	0.2	0.1	Ampl.	0.2
	332.6	185.2	24.1	300.8	281.8	364.4	146.3	279.8	Sbd box	24.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.51283210492E+03		Apriori delay (usec)		-5.51192539109E+03		Resid mbdelay (usec)		-4.63829E-04	+/- 1.9E-04
Sband delay (usec)	-5.51283270684E+03		Apriori clock (usec)		1.0231400E+01		Resid sbdelay (usec)		-9.07316E-01	+/- 1.5E-03
Phase delay (usec)	-5.51192539249E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		-1.39516E-06	+/- 6.4E-07
Delay rate (us/s)	1.05217478131E+00		Apriori rate (us/s)		1.05216368902E+00		Resid rate (us/s)		1.10923E-05	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		4.89309140129E-06		Resid phase (deg)		-43.3	+/- 19.8

	RMS	Theor.	Amplitude	0.158 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	53.6	47.6	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	88.4	83.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.8	28.1	Inc. seg. avg.	0.153	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	35.9	49.0	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

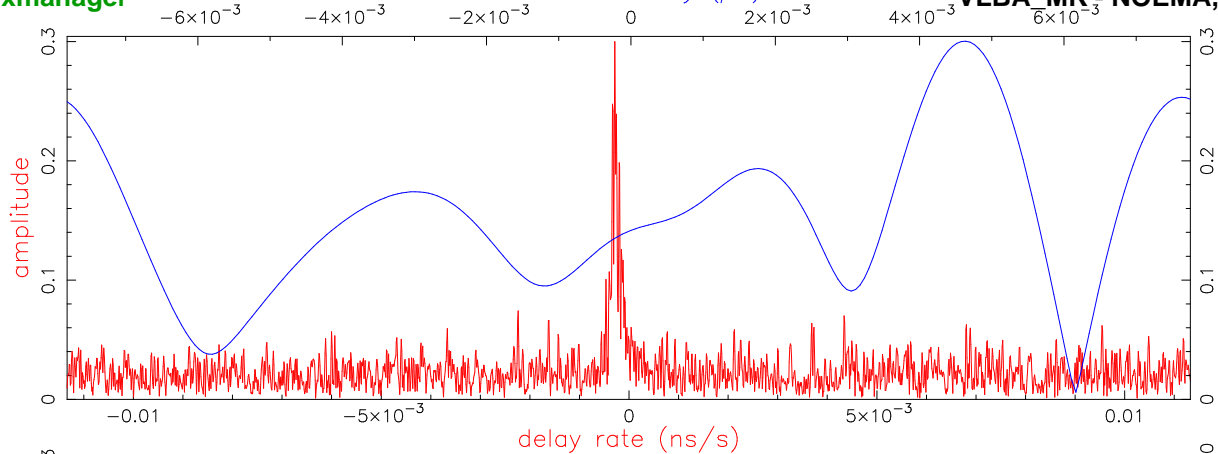
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mN

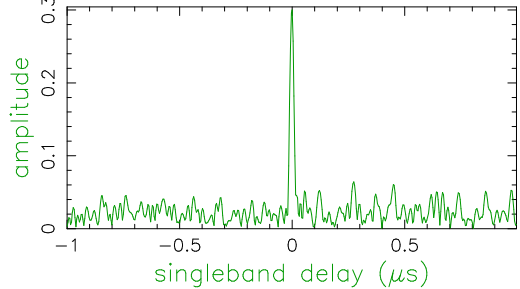
VLBA_MK - NOEMA, fgroup W, pol RR

multiband delay (μ s)

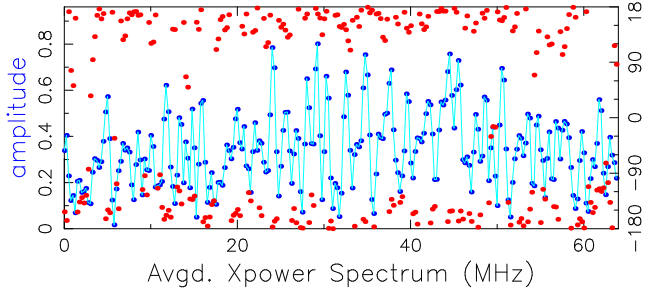


Fringe quality 7

SNR 17.0
 Int time 419.825
 Amp 0.304
 Phase 106.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.001616
 MBD 0.004579
 Fringe rate (Hz)
 -0.024569
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

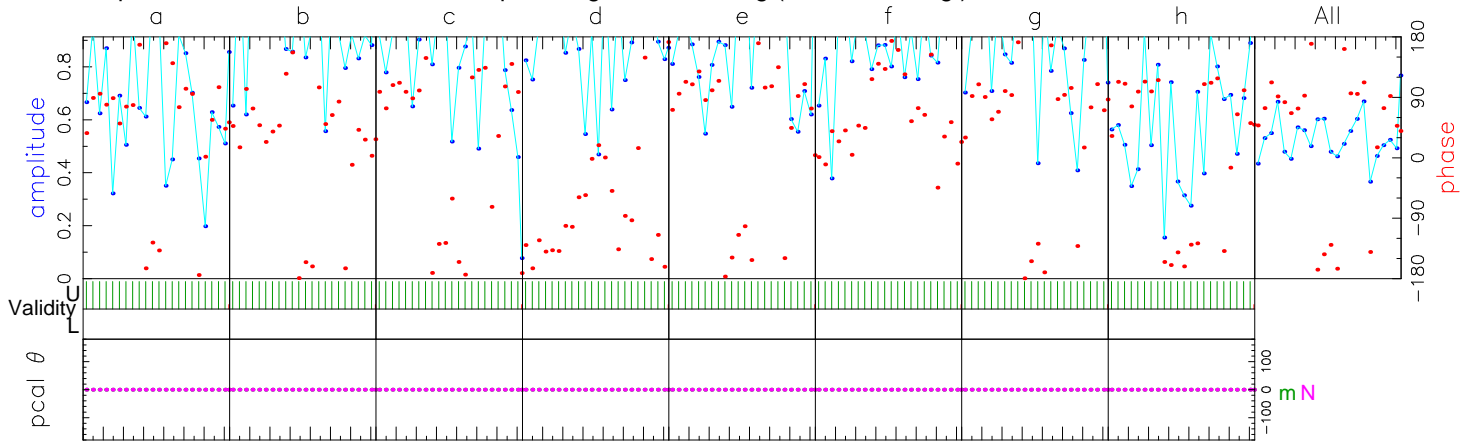


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131701
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.01535658456E+04	Apriori delay (usec)	1.01535612663E+04	Resid mbdelay (usec)	4.57922E-03	+/-	6.4E-05
Sband delay (usec)	1.01535596506E+04	Apriori clock (usec)	2.8894119E+01	Resid sbdelay (usec)	-1.61575E-03	+/-	5.1E-04
Phase delay (usec)	1.01535612698E+04	Apriori clockrate (us/s)	-8.0020001E-06	Resid phdelay (usec)	3.42279E-06	+/-	2.2E-07
Delay rate (us/s)	1.53526810632E+00	Apriori rate (us/s)	1.53526839154E+00	Resid rate (us/s)	-2.85219E-07	+/-	8.9E-10
Total phase (deg)	279.8	Apriori accel (us/s/s)	-8.10564693983E-05	Resid phase (deg)	106.1	+/-	6.7

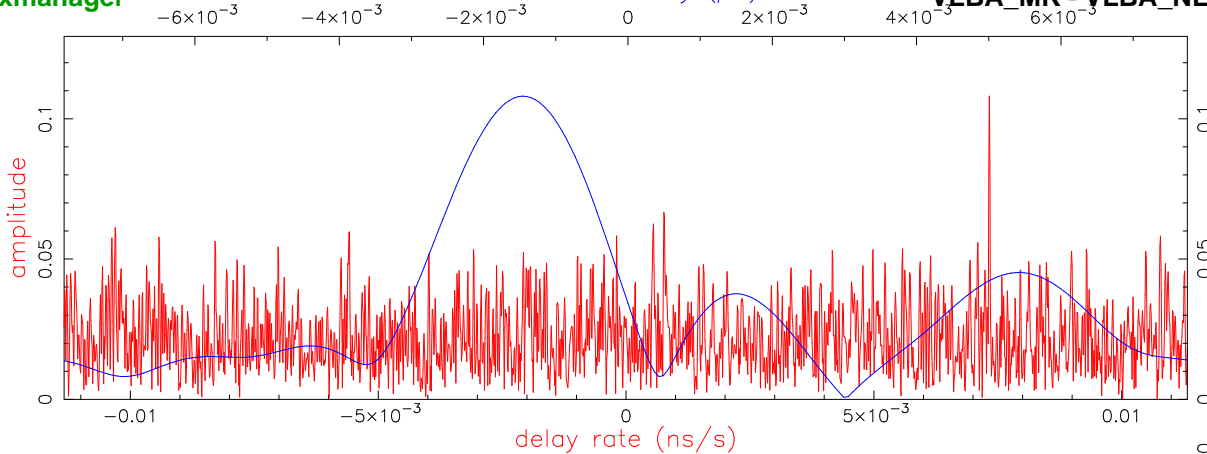
ph/seg (deg)	61.9	Theor.	16.1	Search (2048X32)	0.286	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.7		28.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	65.5		9.5	Inc. seg. avg.	0.508	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	59.0		16.6	Inc. frq. avg.	0.455	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 N: az 315.2 el 14.4 pa 41.7 u,v (fr/asec) -11904.745 -7927.781 simultaneous interpolator

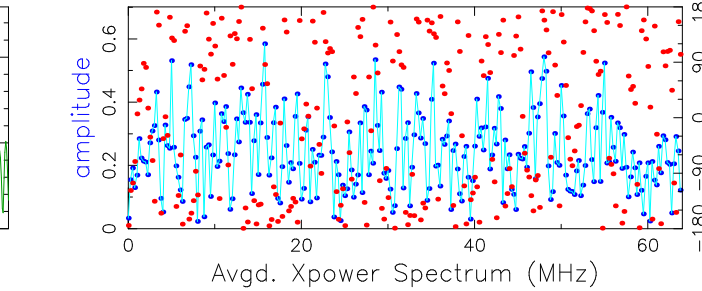
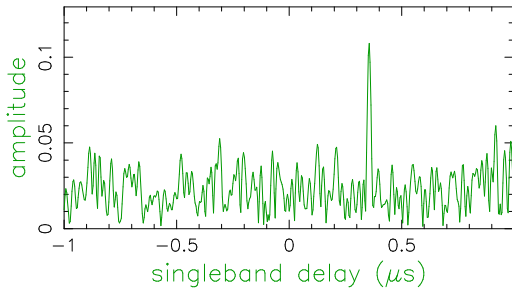
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mN..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mN.W.267.1X1C8Y

multiband delay (μ s)

Fringe quality 0

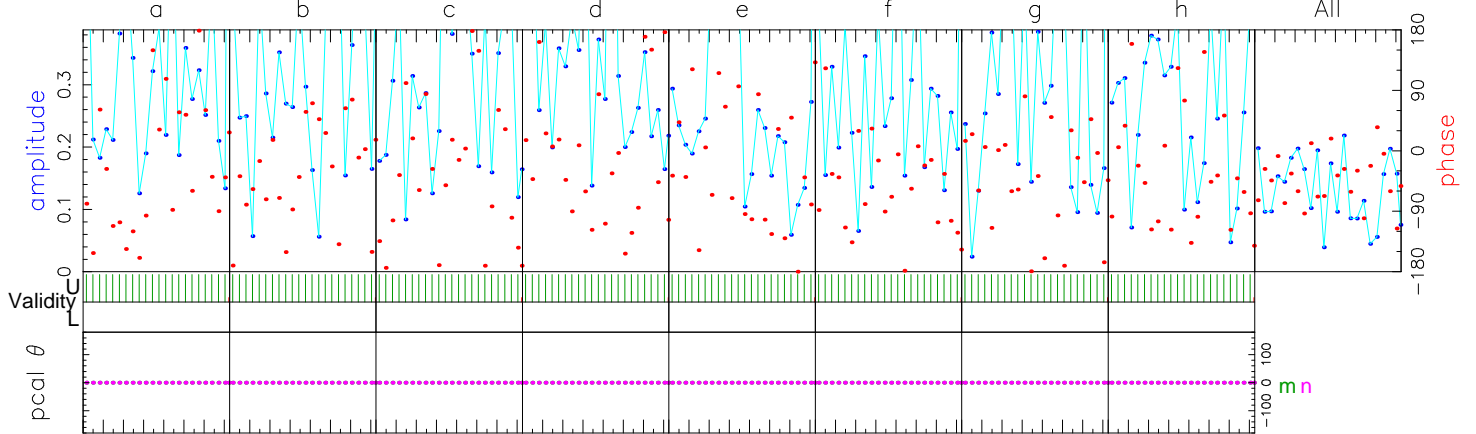


SNR 6.1
 Int time 419.819
 Amp 0.129
 Phase -46.9
 PFD 3.0e-01
 Delays (us)
 SBD 0.355011
 MBD -0.001466
 Fringe rate (Hz)
 0.632443
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131702
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-84.0	-30.6	-38.6	-39.2	-14.3	-54.5	-38.0	-60.1	Phase	-46.9
	0.1	0.2	0.1	0.2	0.0	0.2	0.1	0.1	Ampl.	0.1
	132.5	217.0	238.8	357.6	48.9	348.8	162.3	263.9	Sbd box	347.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.51156748240E+03		Apriori delay (usec)		-5.51192539109E+03		Resid mbdelay (usec)		-1.46631E-03	+/- 1.8E-04
Sband delay (usec)	-5.51157037959E+03		Apriori clock (usec)		1.0231400E+01		Resid sbdelay (usec)		3.55011E-01	+/- 1.4E-03
Phase delay (usec)	-5.51192539260E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		-1.51344E-06	+/- 6.1E-07
Delay rate (us/s)	1.05217103105E+00		Apriori rate (us/s)		1.05216368902E+00		Resid rate (us/s)		7.34203E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.89309140129E-06		Resid phase (deg)		-46.9	+/- 18.9

	RMS	Theor.	Amplitude	0.129 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	38.3	45.3	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	54.8	79.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	22.9	26.7	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	39.8	46.7	Inc. frq. avg.	0.122	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

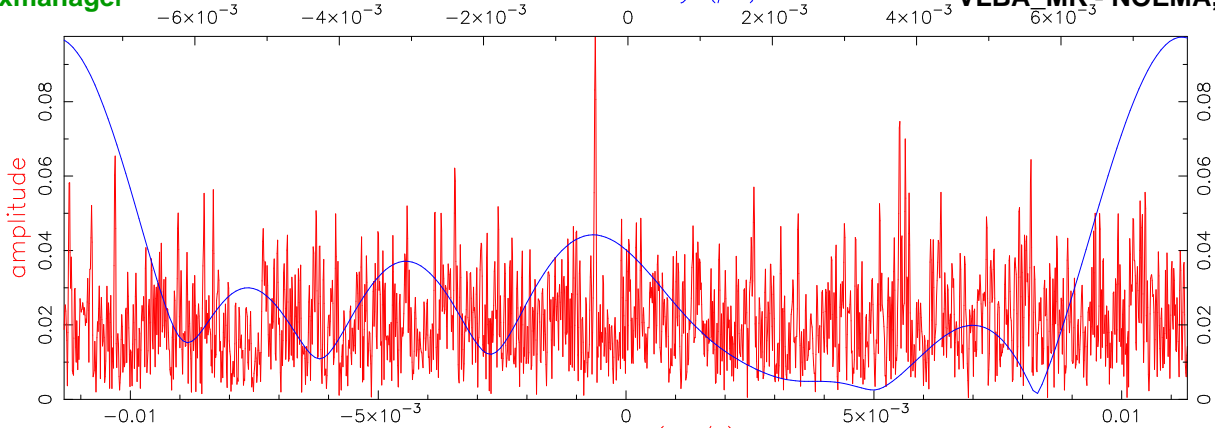
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mN

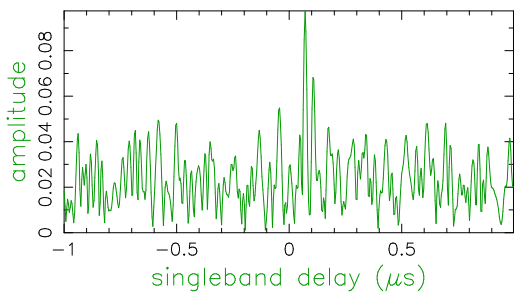
VLBA_MK- NOEMA, fgroup W, pol LR

multiband delay (μ s)

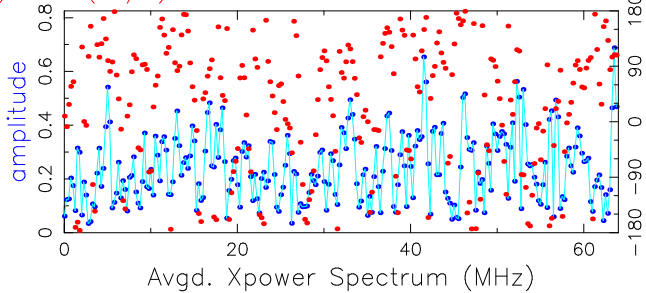


Fringe quality 0

SNR 5.5
 Int time 419.825
 Amp 0.098
 Phase -77.4
 PFD 1.0e+00
 Delays (us)
 SBD 0.070597
 MBD -0.007940
 Fringe rate (Hz)
 -0.053551
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

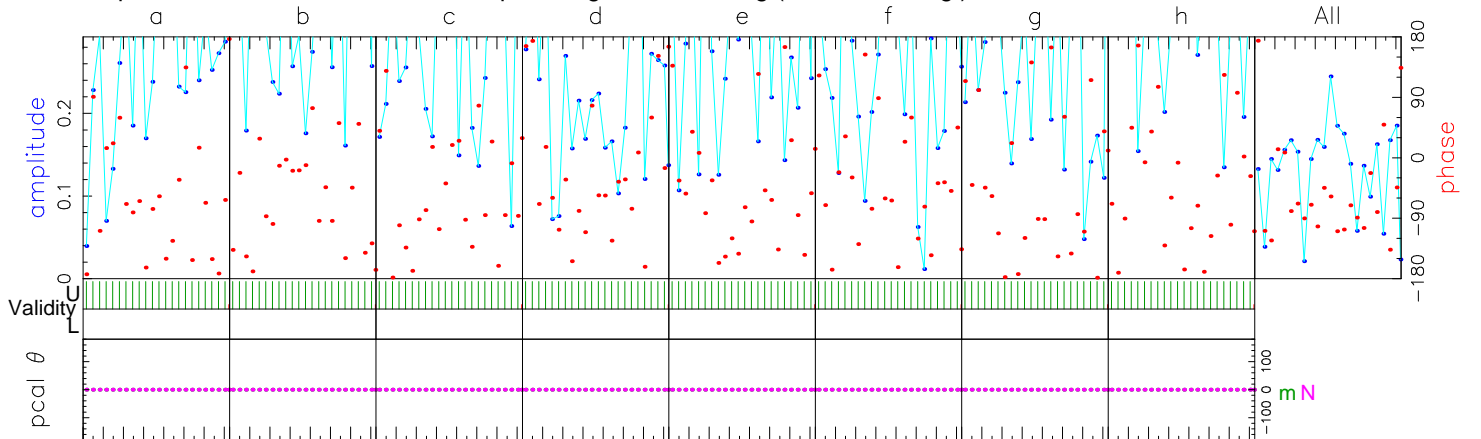


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131704
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.01536314517E+04	Apriori delay (usec)	1.01535612663E+04	Resid mbdelay (usec)	-7.93966E-03	+/-	2.0E-04
Sband delay (usec)	1.01536318633E+04	Apriori clock (usec)	2.8894119E+01	Resid sbdelay (usec)	7.05970E-02	+/-	1.6E-03
Phase delay (usec)	1.01535612638E+04	Apriori clockrate (us/s)	-8.0020001E-06	Resid phdelay (usec)	-2.49721E-06	+/-	6.8E-07
Delay rate (us/s)	1.53526776987E+00	Apriori rate (us/s)	1.53526839154E+00	Resid rate (us/s)	-6.21669E-07	+/-	2.8E-09
Total phase (deg)	96.2	Apriori accel (us/s/s)	-8.10564693983E-05	Resid phase (deg)	-77.4	+/-	21.0

ph/seg (deg)	53.2	Theor.	50.3	Search (2048X32)	0.096	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.7		87.9	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)	29.4		29.7	Inc. seg. avg.	0.099	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.6		51.8	Inc. frq. avg.	0.094	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 N: az 315.2 el 14.4 pa 41.7 u,v (fr/asec) -11904.745 -7927.781 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mN..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mN.W.285.1X1C8Y

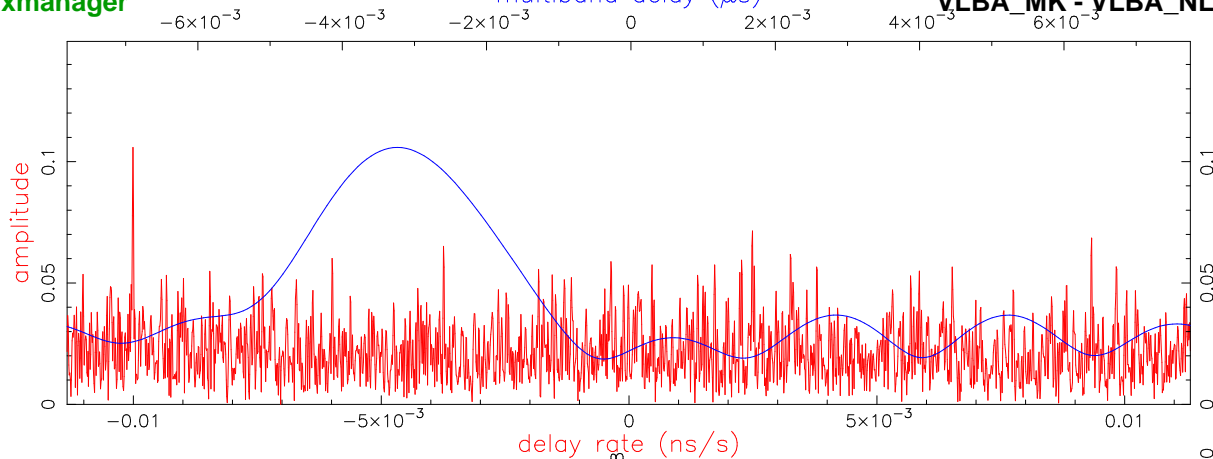
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mn

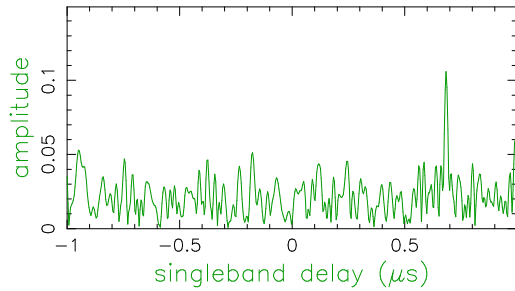
VLBA_MK - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

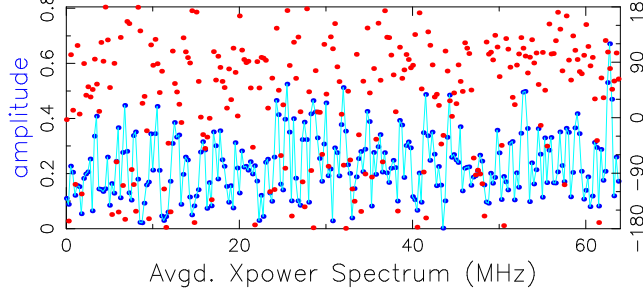


Fringe quality 0

SNR 5.9
 Int time 419.819
 Amp 0.150
 Phase 84.0
 PFD 5.4e-01
 Delays (us)
 SBD 0.683716
 MBD -0.003230
 Fringe rate (Hz)
 -0.863805
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

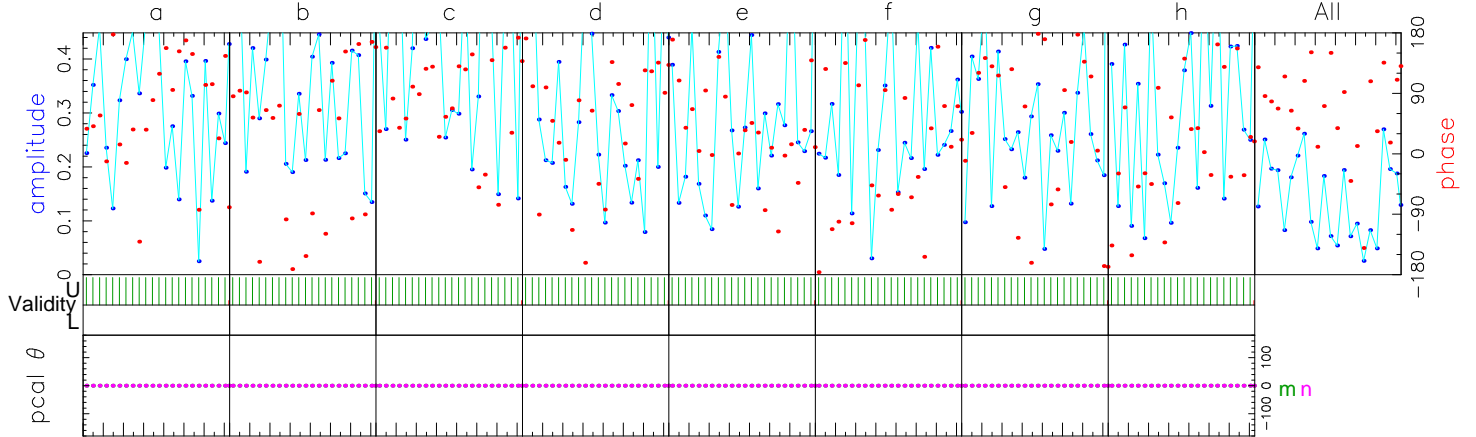


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131706
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	74.9	95.1	81.6	102.1	40.1	116.6	138.4	-0.2	Phase	84.0
	0.2	0.2	0.3	0.2	0.2	0.1	0.2	0.1	Ampl.	0.2
	37.1	280.4	431.5	445.2	64.6	43.5	27.1	409.4	Sbd box	432.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.51124112100E+03	Apriori delay (usec)	-5.51192539109E+03	Resid mbdelay (usec)	-3.22990E-03	+/-	1.8E-04
Sband delay (usec)	-5.51124167484E+03	Apriori clock (usec)	1.0231400E+01	Resid sbdelay (usec)	6.83716E-01	+/-	1.5E-03
Phase delay (usec)	-5.51192538838E+03	Apriori clockrate (us/s)	1.8000006E-08	Resid phdelay (usec)	2.70728E-06	+/-	6.2E-07
Delay rate (us/s)	1.05215366110E+00	Apriori rate (us/s)	1.05216368902E+00	Resid rate (us/s)	-1.00279E-05	+/-	2.6E-09
Total phase (deg)	16.1	Apriori accel (us/s/s)	4.89309140129E-06	Resid phase (deg)	84.0	+/-	19.3

ph/seg (deg)	RMS 57.6	Theor. 46.3	Amplitude Search (2048X32)	0.150 +/- 0.025	0.103	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.1	80.9	Interp.	0.000	0.152	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	47.6	27.3	Inc. seg. avg.	0.152	0.159	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.7	47.7	Inc. frq. avg.	0.159		Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 n: az 274.7 el 77.6 pa 83.5 u,v (fr/asec) -8041.485 -1735.454 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mn..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mn.W.294.1X1C8Y

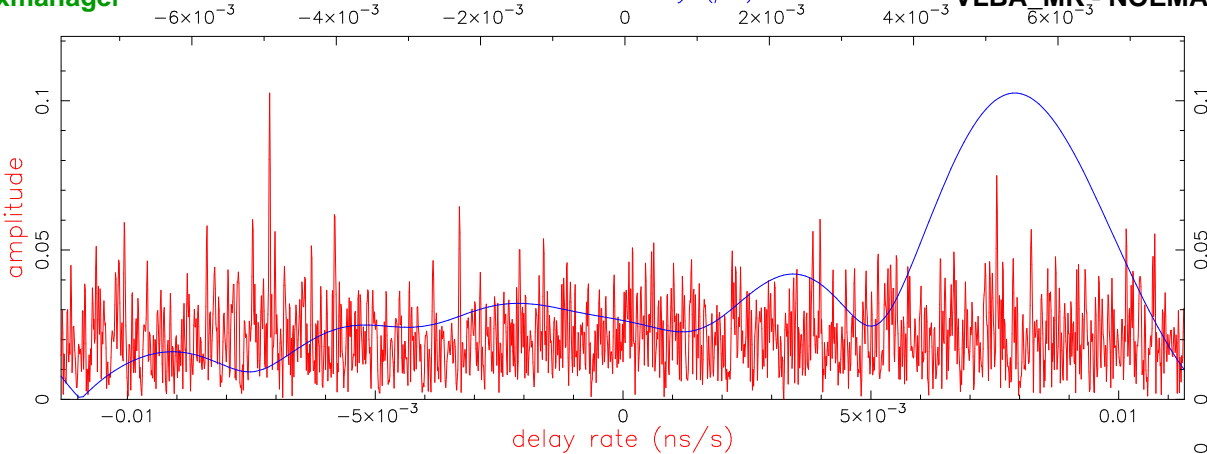
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mN

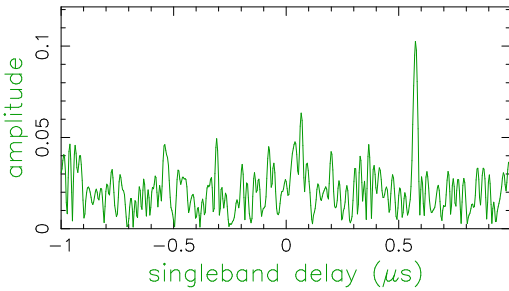
VLBA_MK- NOEMA, fgroup W, pol RL

multiband delay (μ s)

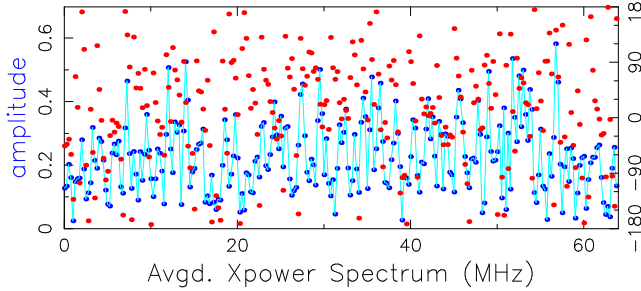


Fringe quality 0

SNR 5.8
Int time 419.791
Amp 0.122
Phase 113.9
PFD 8.9e-01
Delays (us)
SBD 0.574685
MBD 0.005416
Fringe rate (Hz)
-0.614678
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

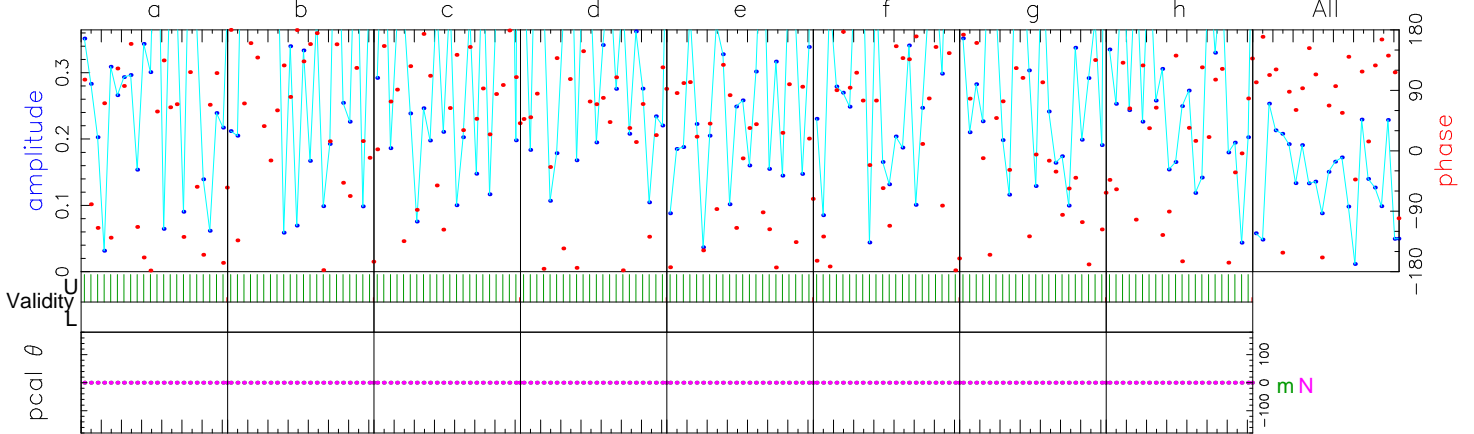


delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131708
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



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

Group delay (usec)(sbd)	1.01541291827E+04	Apriori delay (usec)	1.01535612663E+04	Resid mbdelay (usec)	5.41636E-03	+/-	1.9E-04
Sband delay (usec)	1.01541359513E+04	Apriori clock (usec)	2.8894119E+01	Resid sbdelay (usec)	5.74685E-01	+/-	1.5E-03
Phase delay (usec)	1.01535612700E+04	Apriori clockrate (us/s)	-8.0020001E-06	Resid phdelay (usec)	3.67186E-06	+/-	6.4E-07
Delay rate (us/s)	1.53526125574E+00	Apriori rate (us/s)	1.53526839154E+00	Resid rate (us/s)	-7.13580E-06	+/-	2.6E-09
Total phase (deg)	287.5	Apriori accel (us/s/s)	-8.10564693983E-05	Resid phase (deg)	113.9	+/-	19.9

ph/seg (deg)	57.6	Theor.	47.8	Amplitude	0.122 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	73.6		83.4	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.6		28.2	Inc. seg. avg.	0.124	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.1		49.2	Inc. frq. avg.	0.115	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 50.5 el 44.7 pa -103.5 N: az 315.2 el 14.4 pa 41.7 u,v (fr/asec) -11904.745 -7927.781 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mN..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mN.W.303.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

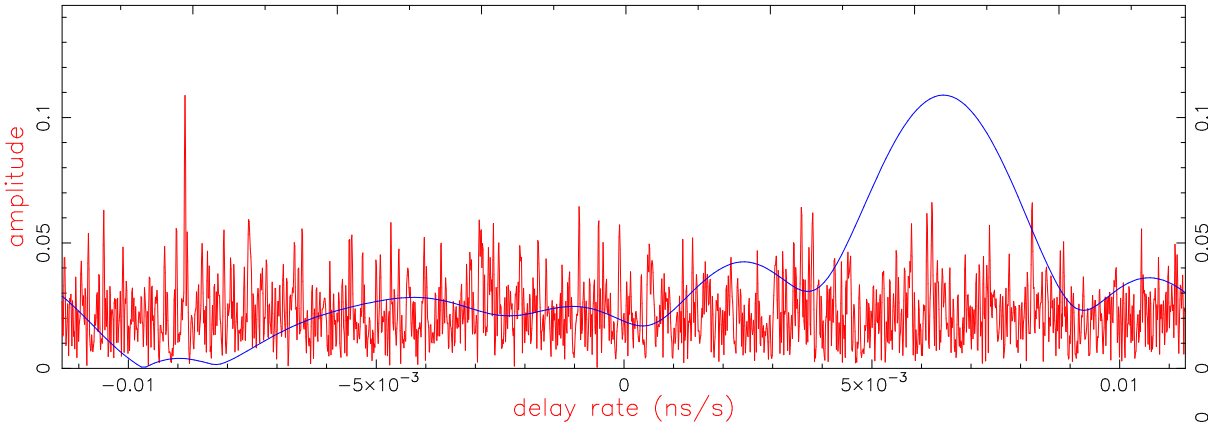
3C84.1X1C8Y, No0102, mn

VLBA_MK - VLBA_NL, fgroup W, pol RL

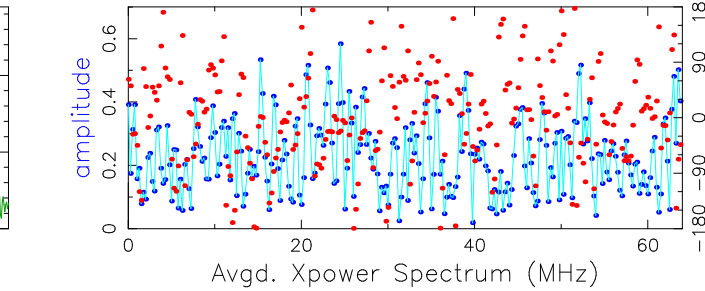
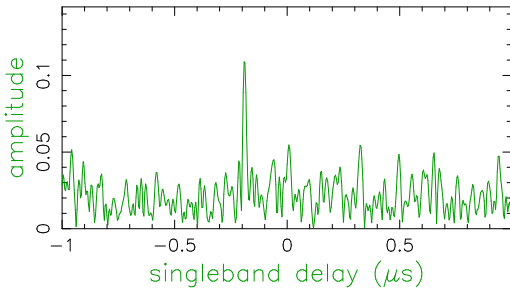
multiband delay (μ s)

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

Fringe quality 0

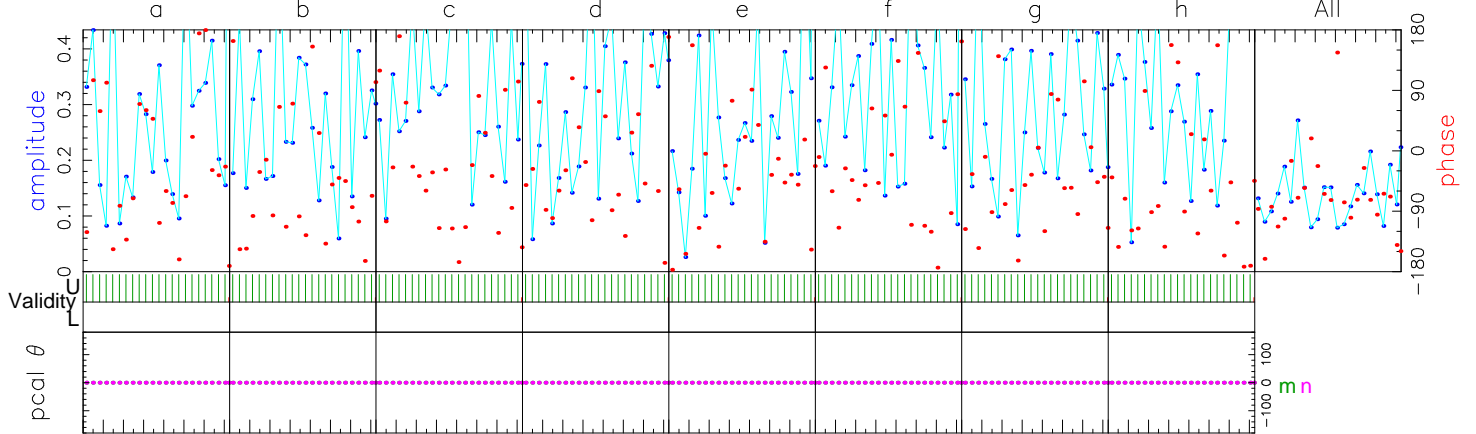


SNR 6.2
Int time 419.819
Amp 0.145
Phase -76.5
PFD 1.3e-01
Delays (us)
SBD -0.189667
MBD 0.004453
Fringe rate (Hz)
-0.764193
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131710
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.3	-93.1	-72.7	-59.9	-35.5	-78.7	-61.1	-114.3	Phase	-76.5
	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	163.5	321.2	318.8	458.4	445.6	289.0	497.0	341.3	Sbd box	208.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.51210843858E+03		Apriori delay (usec)		-5.51192539109E+03		Resid mbdelay (usec)		4.45251E-03	+/- 1.7E-04
Sband delay (usec)	-5.51211505834E+03		Apriori clock (usec)		1.0231400E+01		Resid sbdelay (usec)		-1.89667E-01	+/- 1.4E-03
Phase delay (usec)	-5.51192539356E+03		Apriori clockrate (us/s)		1.8000006E-08		Resid phdelay (usec)		-2.46783E-06	+/- 5.9E-07
Delay rate (us/s)	1.05215481749E+00		Apriori rate (us/s)		1.05216368902E+00		Resid rate (us/s)		-8.87153E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.89309140129E-06		Resid phase (deg)		-76.5	+/- 18.4

	RMS	Theor.	Amplitude	0.145 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	48.9	44.2	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	49.2	77.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.9	26.1	Inc. seg. avg.	0.138	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	29.2	45.5	Inc. frq. avg.	0.141	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 50.5 el 44.7 pa -103.5 n: az 274.7 el 77.6 pa 83.5 u,v (fr/asec) -8041.485 -1735.454 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mn..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mn.W.315.1X1C8Y

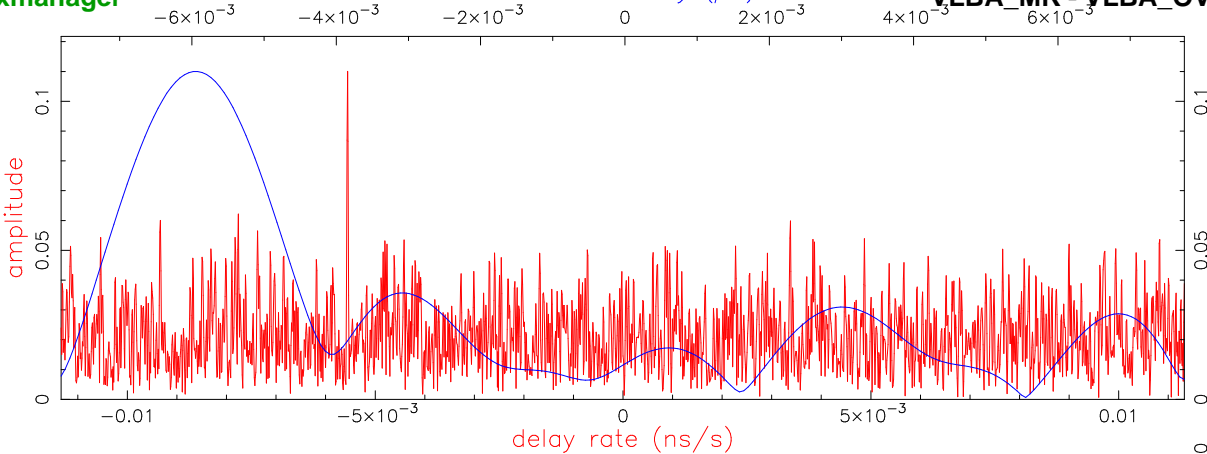
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mo

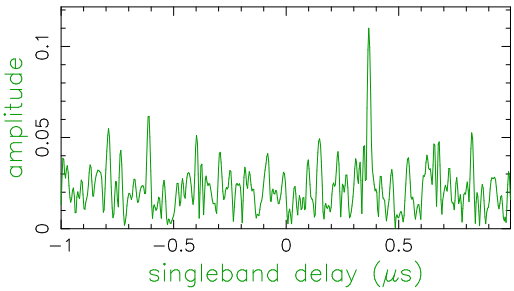
VLBA_MK - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

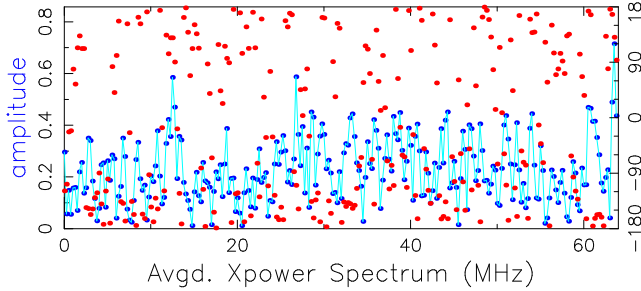


Fringe quality 0

SNR 6.2
 Int time 419.819
 Amp 0.122
 Phase 168.3
 PFD 1.7e-01
 Delays (us)
 SBD 0.367222
 MBD -0.005946
 Fringe rate (Hz)
 -0.479880
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

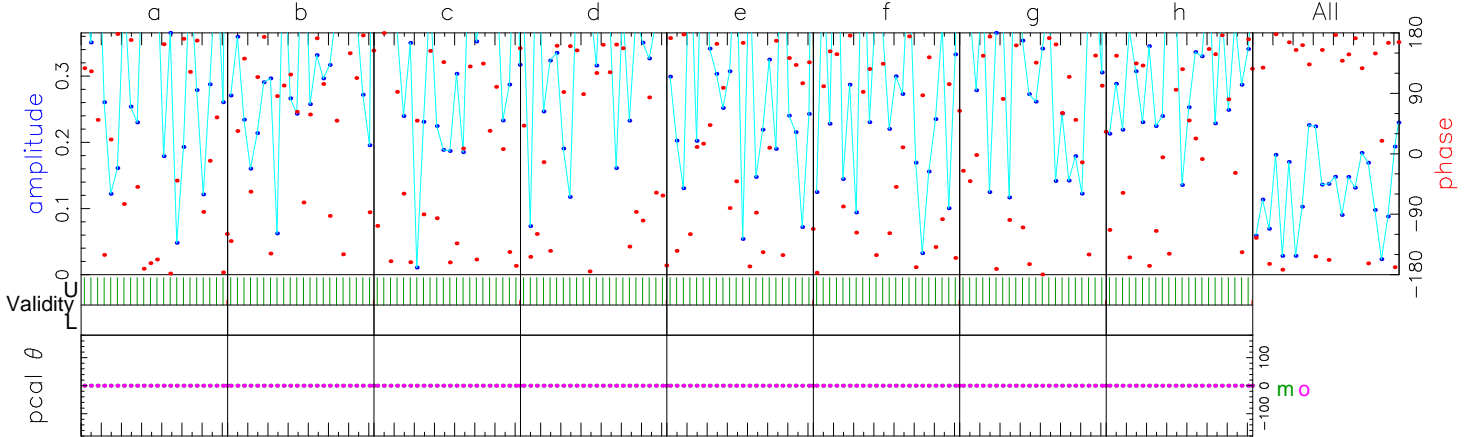


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131658
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	165.7	147.8	177.4	177.9	-158.9	164.2	156.4	165.3	Phase	168.3
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	145.2	101.4	321.8	467.4	101.2	351.1	152.0	30.1	Sbd box	351.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-5.86868639310E+03	Apriori delay (usec)	-5.86905544741E+03	Resid mbdelay (usec)	-5.94568E-03	+/-	1.8E-04
Sband delay (usec)	-5.86868822491E+03	Apriori clock (usec)	1.1961405E+01	Resid sbdelay (usec)	3.67222E-01	+/-	1.4E-03
Phase delay (usec)	-5.86905544199E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	5.42639E-06	+/-	6.0E-07
Delay rate (us/s)	6.44025105569E-01	Apriori rate (us/s)	6.44030676505E-01	Resid rate (us/s)	-5.57094E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	1.13719367175E-05	Resid phase (deg)	168.3	+/-	18.6

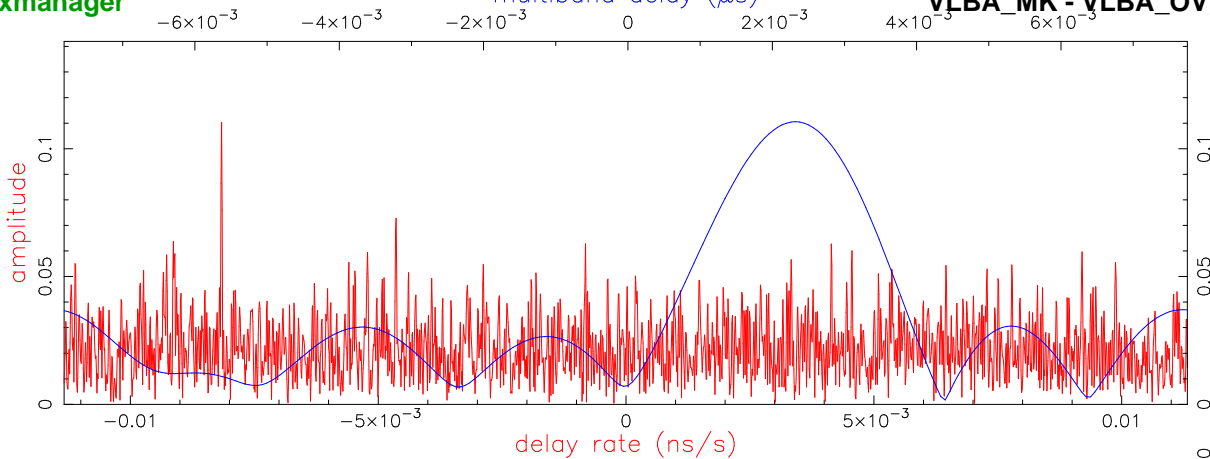
ph/seg (deg)	RMS 41.8	Theor. 44.6	Amplitude Search (2048X32)	0.122 +/- 0.020	0.108	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	56.0	77.8	Interp.	0.000	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	17.5	26.3	Inc. seg. avg.	0.107	0.107	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	22.0	45.9	Inc. frq. avg.	0.113	0.113	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 o: az 57.5 el 81.1 pa -114.6 u,v (fr/asec) -4905.240 -914.023 simultaneous interpolator

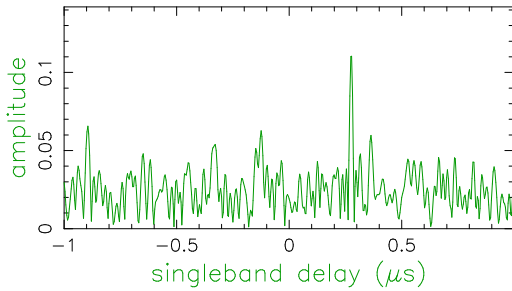
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mo..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mo.W.252.1X1C8Y

multiband delay (μ s)

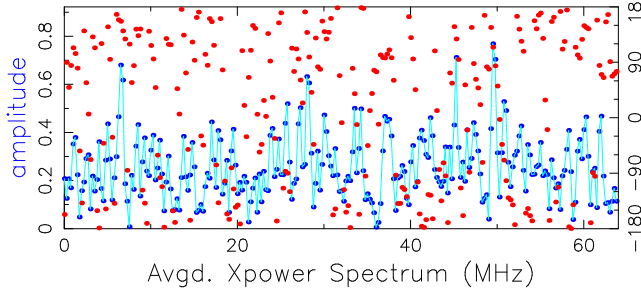
Fringe quality 0



SNR 6.4
Int time 419.819
Amp 0.142
Phase 51.6
PFD 5.3e-02
Delays (us)
SBD 0.275416
MBD 0.002236
Fringe rate (Hz)
-0.703719
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

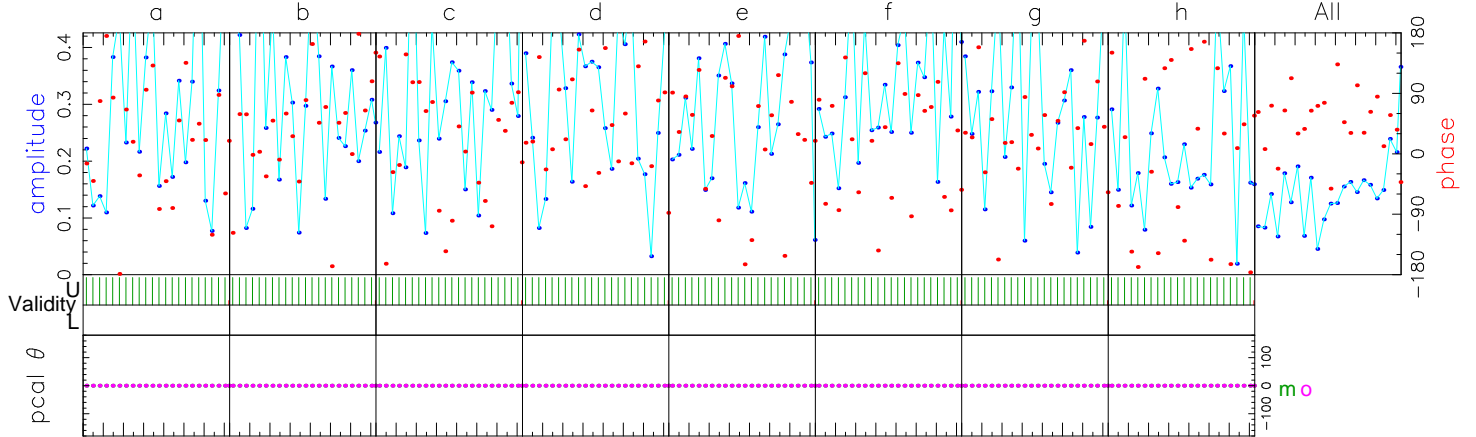


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131702
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	41.9	50.2	67.3	41.0	62.7	52.9	28.7	142.5	Phase	51.6
	0.1	0.2	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	26.5	120.6	256.1	29.6	263.9	302.8	326.9	100.5	Sbd box	327.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-5.86878758648E+03	Apriori delay (usec)	-5.86905544741E+03	Resid mbdelay (usec)	2.23593E-03	+/-	1.7E-04
Sband delay (usec)	-5.86878003141E+03	Apriori clock (usec)	1.1961405E+01	Resid sbdelay (usec)	2.75416E-01	+/-	1.4E-03
Phase delay (usec)	-5.86905544575E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	1.66406E-06	+/-	5.8E-07
Delay rate (us/s)	6.44022507029E-01	Apriori rate (us/s)	6.44030676505E-01	Resid rate (us/s)	-8.16948E-06	+/-	2.4E-09
Total phase (deg)		Apriori accel (us/s/s)	1.13719367175E-05	Resid phase (deg)	51.6	+/-	18.0

ph/seg (deg)	41.9	Theor.	43.2	Amplitude	0.142 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	50.9	Search (2048X32)	0.109	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	39.5	Inc. seg. avg.	0.136	Inc. frq. avg.	0.137	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.6	Inc. frq. avg.	0.137			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	

m: az 50.5 el 44.7 pa -103.5 o: az 57.5 el 81.1 pa -114.6 u,v (fr/asec) -4905.240 -914.023 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mo..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mo.W.275.1X1C8Y

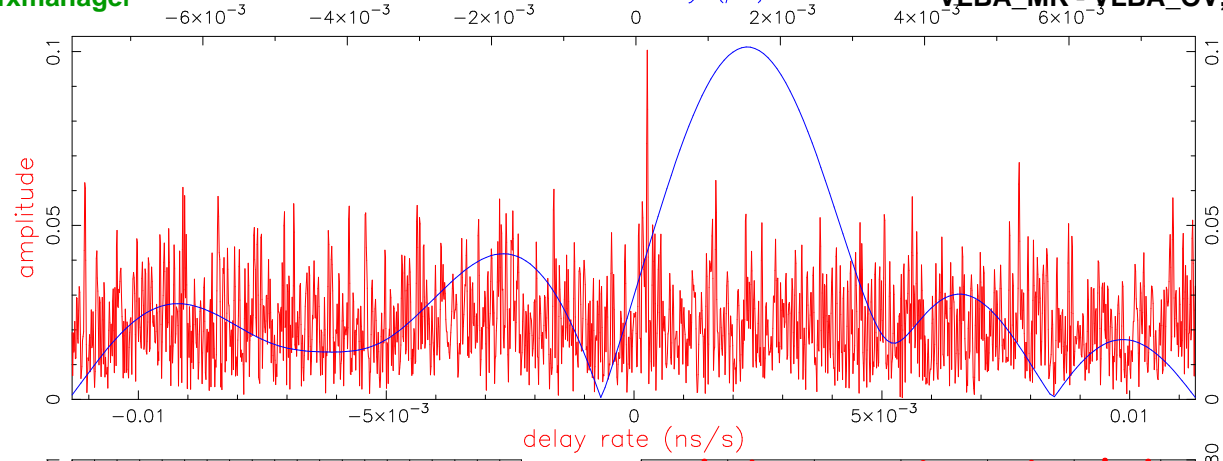
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mo

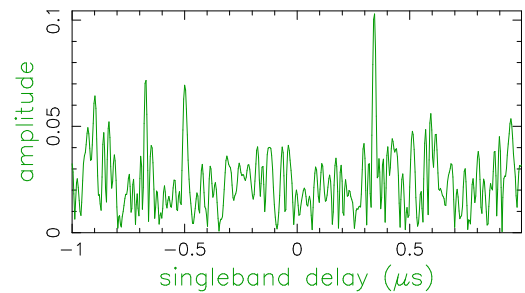
VLBA_MK - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

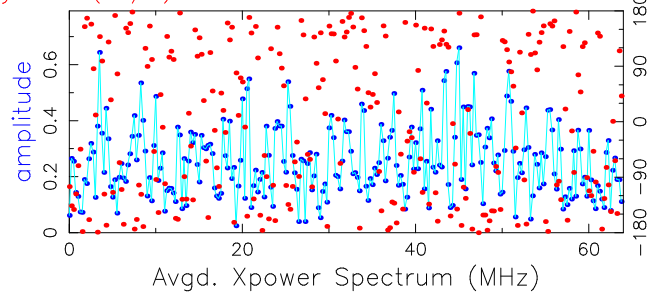


Fringe quality 0

SNR 5.8
 Int time 419.819
 Amp 0.104
 Phase 137.5
 PFD 7.2e-01
 Delays (us)
 SBD 0.342285
 MBD 0.001703
 Fringe rate (Hz)
 0.022612
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

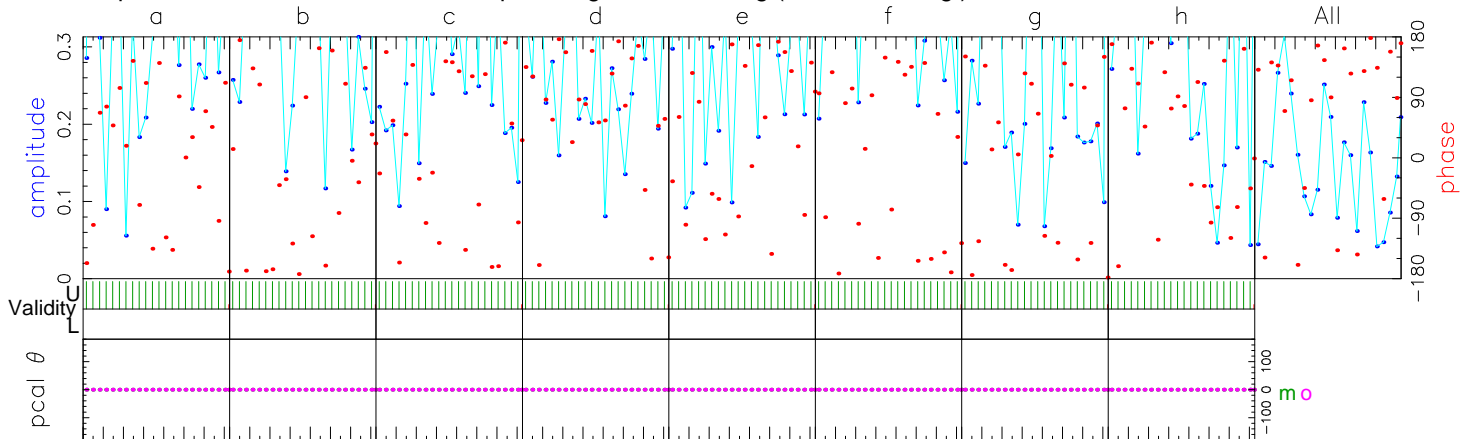


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131706
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



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

Group delay (usec)(sbd)	-5.86870999459E+03	Apriori delay (usec)	-5.86905544741E+03	Resid mbdelay (usec)	1.70282E-03	+/-	1.9E-04
Sband delay (usec)	-5.86871316291E+03	Apriori clock (usec)	1.1961405E+01	Resid sbdelay (usec)	3.42285E-01	+/-	1.5E-03
Phase delay (usec)	-5.86905544298E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	4.43508E-06	+/-	6.3E-07
Delay rate (us/s)	6.44030939012E-01	Apriori rate (us/s)	6.44030676505E-01	Resid rate (us/s)	2.62508E-07	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	1.13719367175E-05	Resid phase (deg)	137.5	+/-	19.6

ph/seg (deg)	RMS 66.1	Theor. 47.0	Amplitude Search (2048X32)	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	84.6	82.0	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)	22.6	27.7	Inc. seg. avg.	0.111	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.2	48.4	Inc. frq. avg.	0.095	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 o: az 57.5 el 81.1 pa -114.6 u,v (fr/asec) -4905.240 -914.023 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mo..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mo.W.293.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

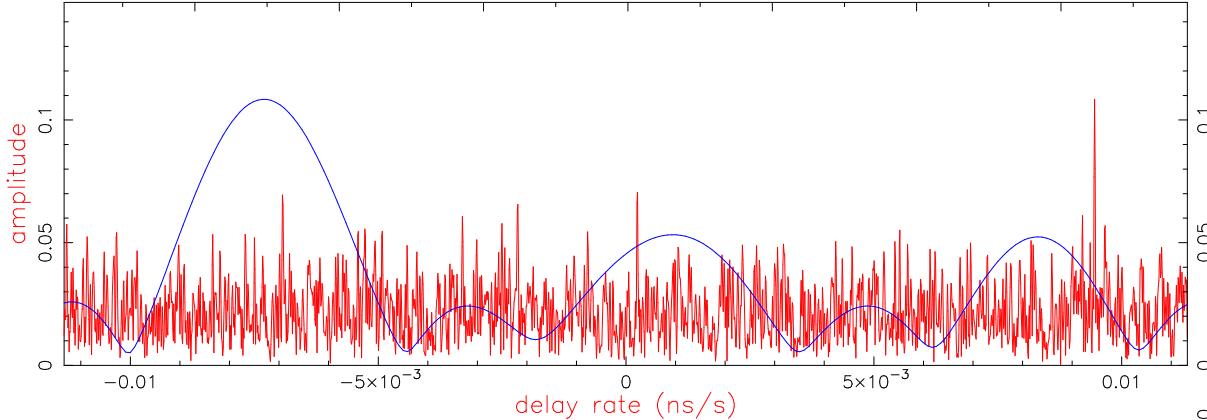
3C84.1X1C8Y, No0102, mo

VLBA_MK - VLBA_OV, fgroup W, pol RL

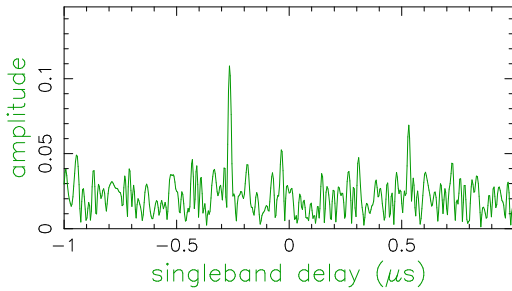
multiband delay (μ s)

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

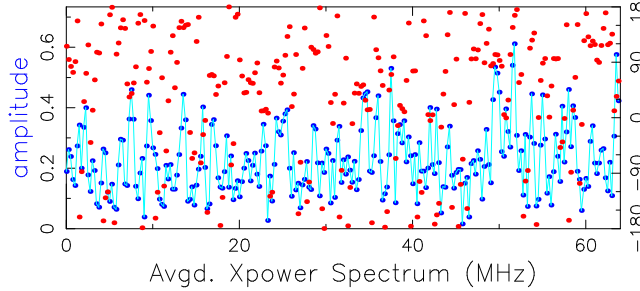
Fringe quality 0



SNR 6.1
 Int time 419.819
 Amp 0.148
 Phase -15.3
 PFD 2.3e-01
 Delays (us)
 SBD -0.264777
 MBD -0.005026
 Fringe rate (Hz)
 0.815784
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

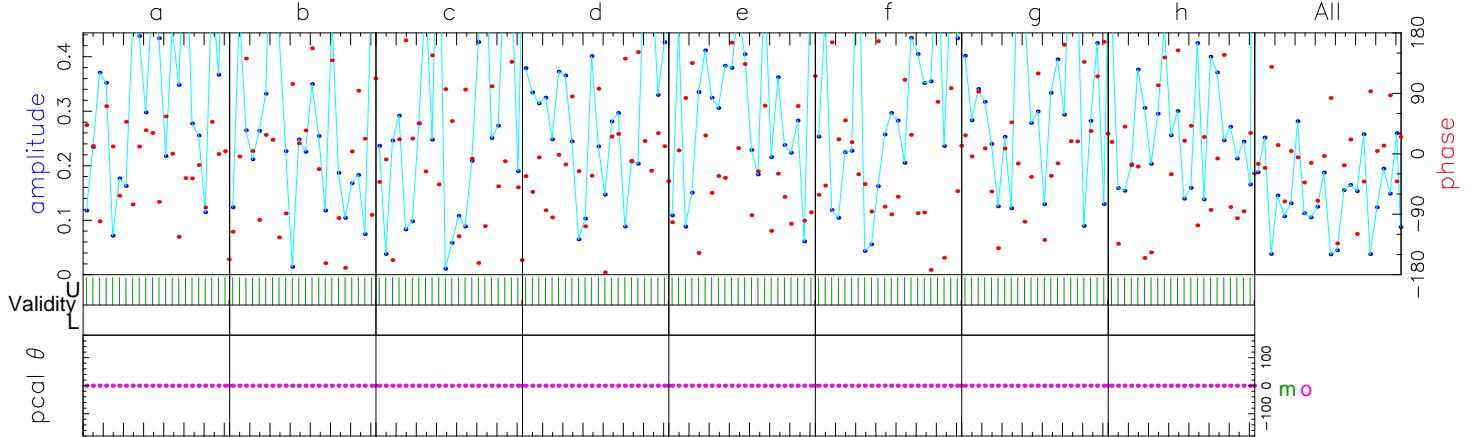


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131709
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-9.9	-13.2	-43.5	-7.7	-28.5	-32.8	11.0	-45.9	Phase	-15.3
	0.3	0.1	0.1	0.3	0.1	0.1	0.2	0.1	Ampl.	0.1
	15.4	393.7	13.5	189.7	397.9	497.9	188.3	456.1	Sbd box	189.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

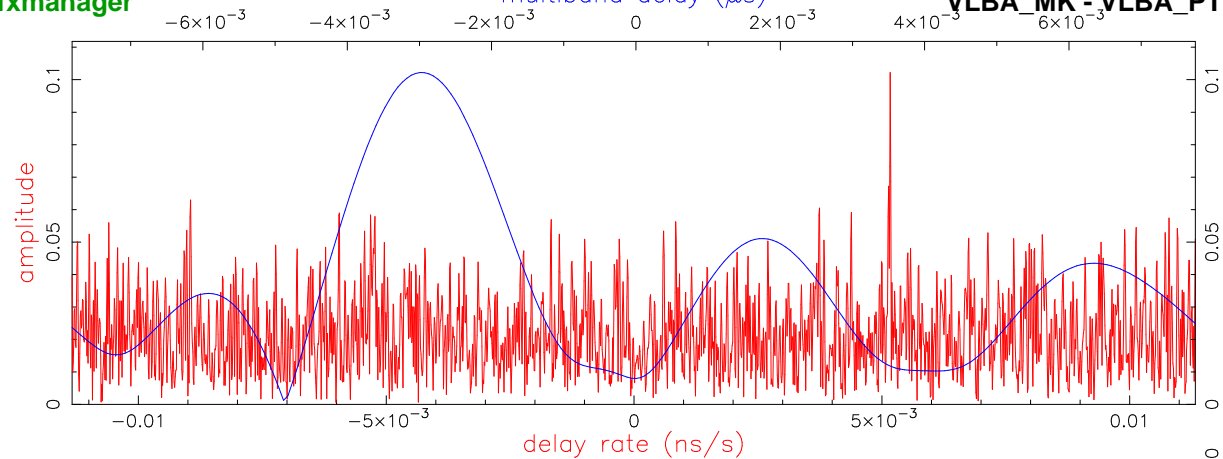
Group delay (usec)(sbd)	-5.86932609881E+03	Apriori delay (usec)	-5.86905544741E+03	Resid mbdelay (usec)	-5.02640E-03	+/-	1.8E-04
Sband delay (usec)	-5.86932022466E+03	Apriori clock (usec)	1.1961405E+01	Resid sbdelay (usec)	-2.64777E-01	+/-	1.4E-03
Phase delay (usec)	-5.86905544791E+03	Apriori clockrate (us/s)	-4.2000013E-08	Resid phdelay (usec)	-4.94571E-07	+/-	6.1E-07
Delay rate (us/s)	6.44040146943E-01	Apriori rate (us/s)	6.44030676505E-01	Resid rate (us/s)	9.47044E-06	+/-	2.5E-09
Total phase (deg)	-101.8	Apriori accel (us/s/s)	1.13719367175E-05	Resid phase (deg)	-15.3	+/-	18.8

ph/seg (deg)	63.7	Theor.	45.0	Amplitude	0.148 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	74.3		78.5	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	22.3		26.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	52.1		46.3	Inc. seg. avg.	0.153	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.139	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 50.5 el 44.7 pa -103.5 o: az 57.5 el 81.1 pa -114.6 u,v (fr/asec) -4905.240 -914.023 simultaneous interpolator

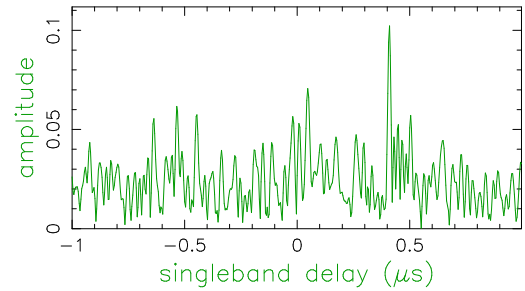
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mo..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mo.W.310.1X1C8Y

multiband delay (μ s)

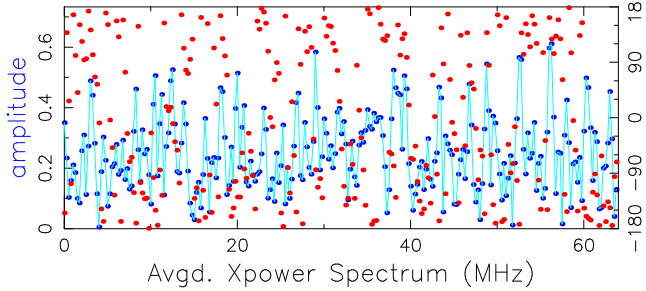


Fringe quality 0

SNR 5.7
Int time 419.819
Amp 0.112
Phase -100.7
PFD 9.0e-01
Delays (us)
SBD 0.409629
MBD -0.002985
Fringe rate (Hz)
0.446292
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

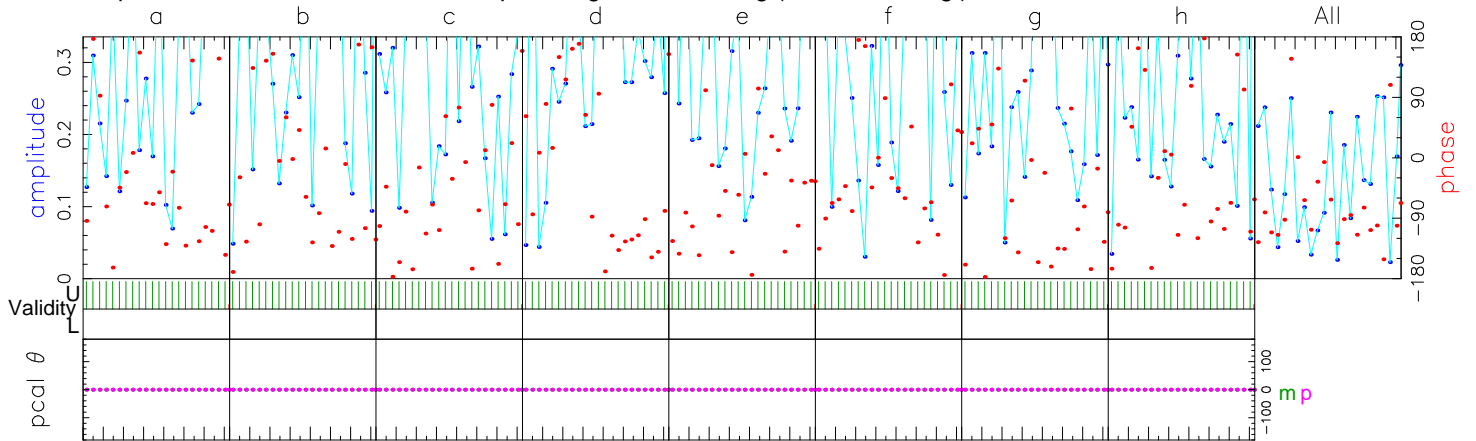


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131657
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-109.7	-99.6	-74.8	-148.8	-61.4	-70.0	-139.2	-107.7	Phase	-100.7
	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	370.6	14.1	270.8	447.1	483.9	383.0	375.0	410.3	Sbd box	361.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-5.91375740250E+03	Apriori delay (usec)	-5.91416066722E+03	Resid mbdelay (usec)	-2.98528E-03	+/-	1.9E-04
Sband delay (usec)	-5.91375103822E+03	Apriori clock (usec)	1.0177361E+01	Resid sbdelay (usec)	4.09629E-01	+/-	1.5E-03
Phase delay (usec)	-5.91416067047E+03	Apriori clockrate (us/s)	4.3800001E-07	Resid phdelay (usec)	-3.24814E-06	+/-	6.4E-07
Delay rate (us/s)	8.08250027280E-01	Apriori rate (us/s)	8.08244846267E-01	Resid rate (us/s)	5.18101E-06	+/-	2.7E-09
Total phase (deg)		Apriori accel (us/s/s)	1.47009190659E-05	Resid phase (deg)	-100.7	+/-	20.0

ph/seg (deg)	RMS 55.3	Theor. 47.9	Amplitude Search (2048X32)	0.112 +/- 0.019	0.100	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	86.2	83.5	Interp.	0.000	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	34.4	28.2	Inc. seg. avg.	0.113	0.113	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.9	49.3	Inc. frq. avg.	0.116	0.116	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 50.5 el 44.7 pa -103.5 p: az 359.2 el 82.7 pa 176.5 u,v (fr/asec) -6156.587 -393.856 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mp..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mp.W.250.1X1C8Y

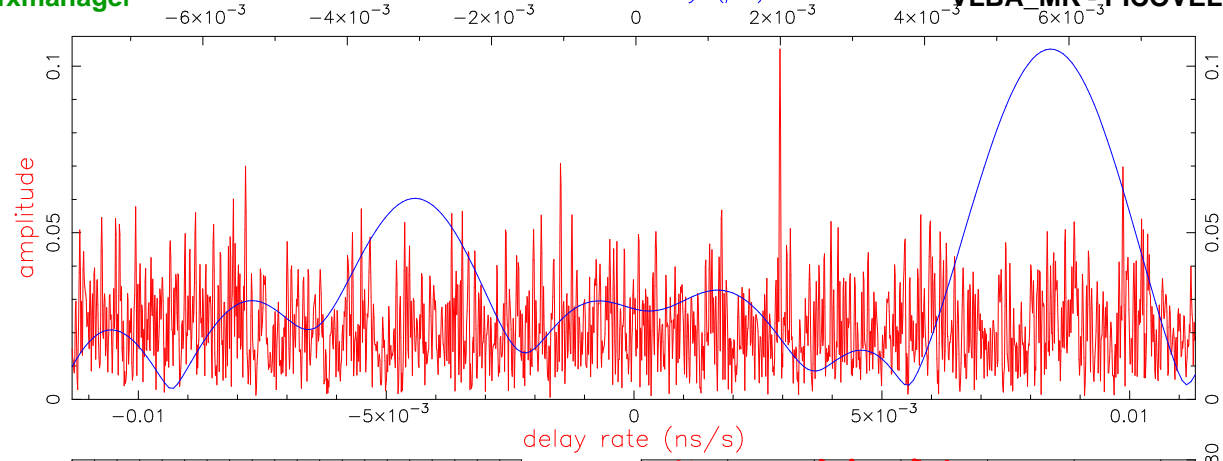
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

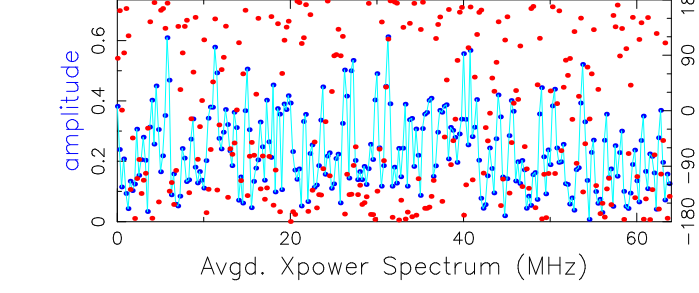
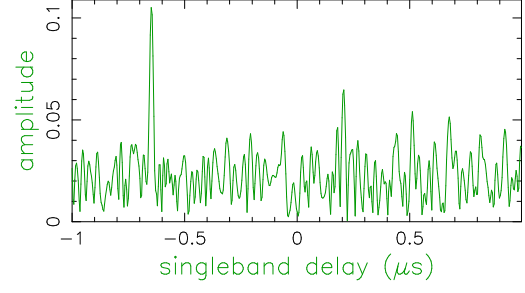
3C84.1X1C8Y, No0102, mP

VLBA_MK - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

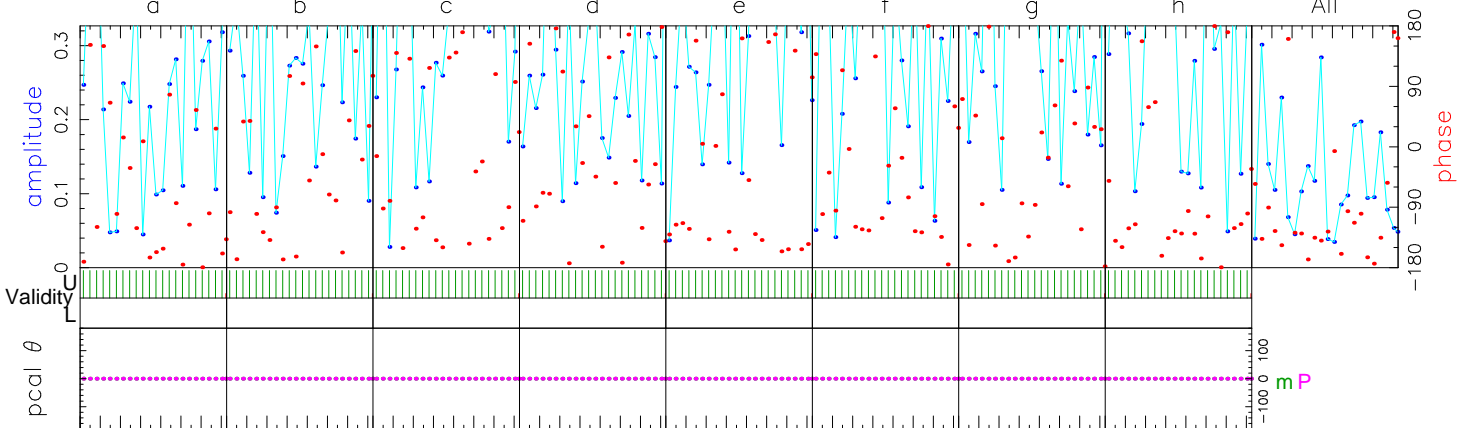


Fringe quality 0
 SNR 5.9
 Int time 419.825
 Amp 0.109
 Phase -132.0
 PFD 5.3e-01
 Delays (us)
 SBD -0.647260
 MBD 0.005765
 Fringe rate (Hz)
 0.254394
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131657
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.7	-96.5	-145.9	-89.6	-153.2	-113.5	-135.9	-134.7	Phase	-132.0
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	180.1	511.6	25.7	266.6	91.5	229.3	377.8	91.7	Sbd box	91.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

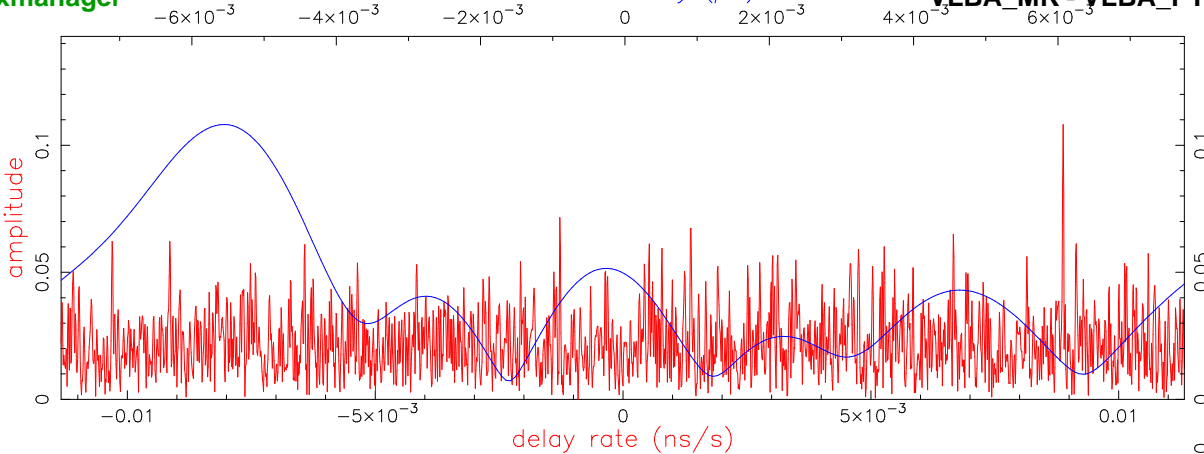
Group delay (usec)(sbd)	1.02035380810E+04	Apriori delay (usec)	1.02041885656E+04	Resid mbdelay (usec)	5.76538E-03	+/-	1.8E-04
Sband delay (usec)	1.02035413054E+04	Apriori clock (usec)	1.6778316E+01	Resid sbdelay (usec)	-6.47260E-01	+/-	1.5E-03
Phase delay (usec)	1.02041885614E+04	Apriori clockrate (us/s)	9.1799994E-07	Resid phdelay (usec)	-4.25638E-06	+/-	6.2E-07
Delay rate (us/s)	1.67871244659E+00	Apriori rate (us/s)	1.67870949333E+00	Resid rate (us/s)	2.95326E-06	+/-	2.6E-09
Total phase (deg)	-117.1	Apriori accel (us/s/s)	-7.39102675618E-05	Resid phase (deg)	-132.0	+/-	19.3

ph/seg (deg)	RMS 45.6	Theor. 46.3	Amplitude Search (2048X32)	0.109 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	73.2	80.8	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)	26.3	27.3	Inc. seg. avg.	0.096	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	45.2	47.7	Inc. frq. avg.	0.104	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

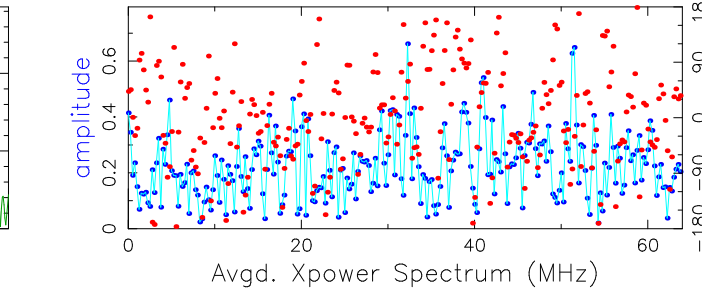
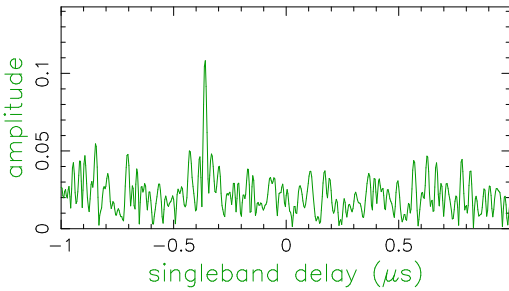
m: az 50.5 el 44.7 pa -103.5 P: az 311.8 el 14.3 pa 54.6 u,v (fr/asec) -12990.429 -6755.696 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mP..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mP.W.251.1X1C8Y

multiband delay (μ s)

Fringe quality 0

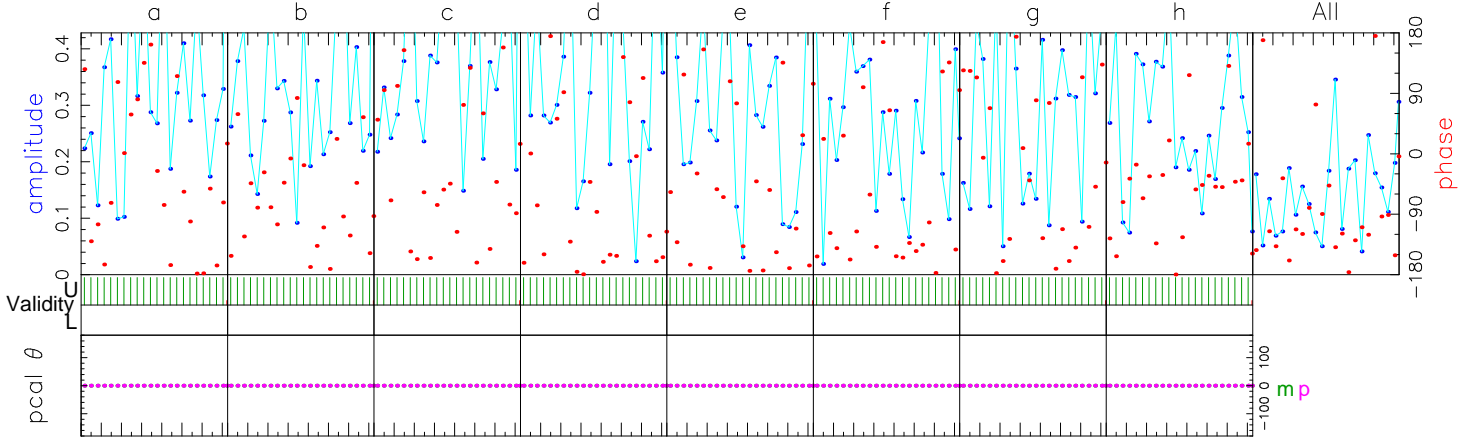


SNR 6.1
 Int time 419.819
 Amp 0.143
 Phase -126.7
 PFD 2.1e-01
 Delays (us)
 SBD -0.360647
 MBD -0.005558
 Fringe rate (Hz)
 0.766361
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131702
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.5	-75.3	-125.7	-152.4	-135.3	-151.3	-155.1	-54.1	Phase	-126.7
	0.1	0.2	0.2	0.3	0.1	0.2	0.2	0.2	Ampl.	0.2
	426.1	98.1	416.6	165.3	285.4	386.2	73.5	171.8	Sbd box	164.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.91452560049E+03		Apriori delay (usec)		-5.91416066722E+03		Resid mbdelay (usec)		-5.55827E-03	+/- 1.8E-04
Sband delay (usec)	-5.91452131447E+03		Apriori clock (usec)		1.0177361E+01		Resid sbdelay (usec)		-3.60647E-01	+/- 1.4E-03
Phase delay (usec)	-5.91416067131E+03		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		-4.08685E-06	+/- 6.0E-07
Delay rate (us/s)	8.08253742954E-01		Apriori rate (us/s)		8.08244846267E-01		Resid rate (us/s)		8.89669E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.47009190659E-05		Resid phase (deg)		-126.7	+/- 18.7

	RMS	Theor.	Amplitude	0.143 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	52.6	44.9	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	74.5	78.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	41.7	26.5	Inc. seg. avg.	0.144	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	43.9	46.2	Inc. frq. avg.	0.158	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 50.5 el 44.7 pa -103.5 p: az 359.2 el 82.7 pa 176.5 u,v (fr/asec) -6156.587 -393.856 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mp..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mp.W.272.1X1C8Y

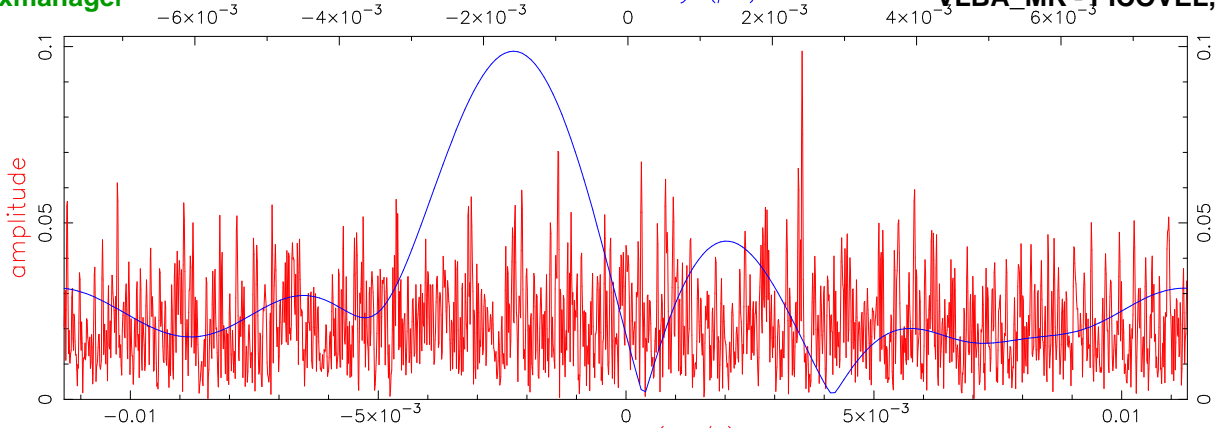
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mP

VLBA_MK - PICOVEL, fgroup W, pol RR

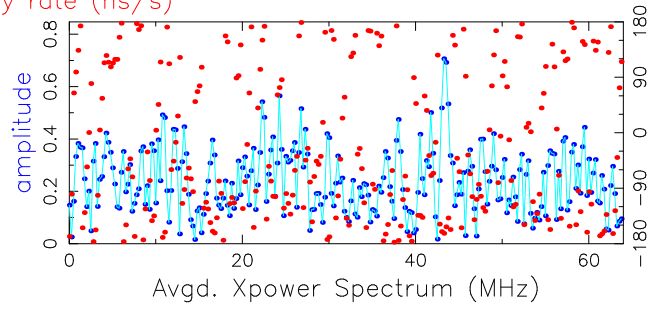
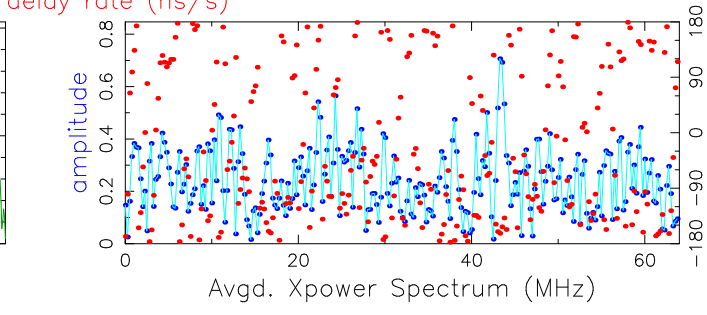
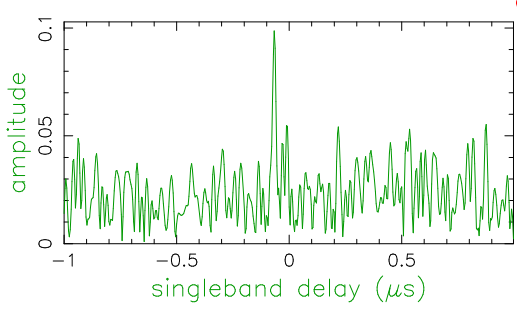
multiband delay (μ s)



Fringe quality 0

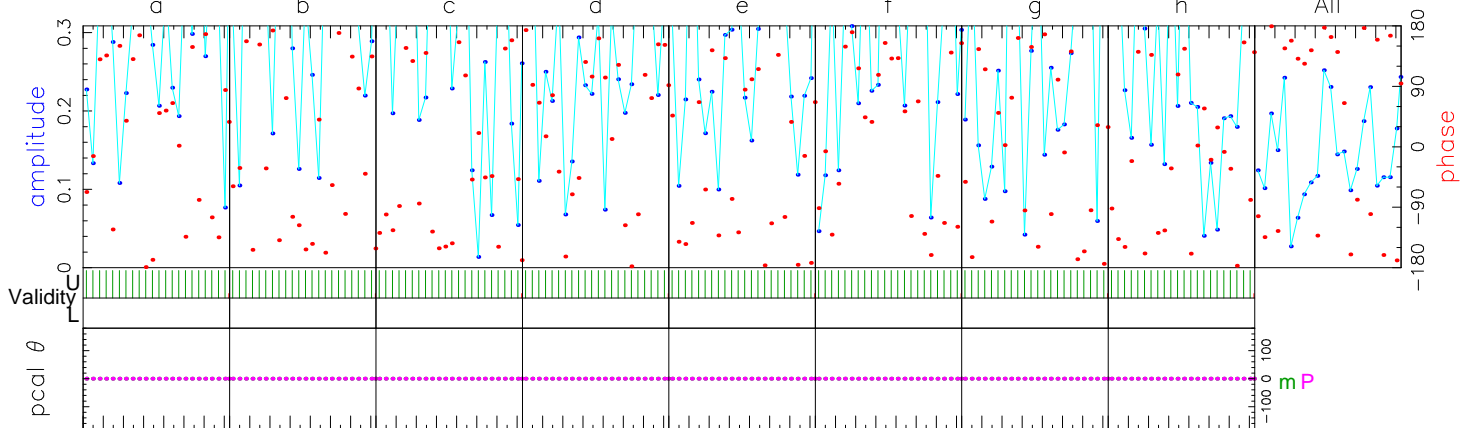
SNR 5.5
 Int time 419.825
 Amp 0.103
 Phase -177.4
 PFD 1.0e+00
 Delays (us)
 SBD -0.066052
 MBD -0.001570
 Fringe rate (Hz) 0.306754
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131702
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

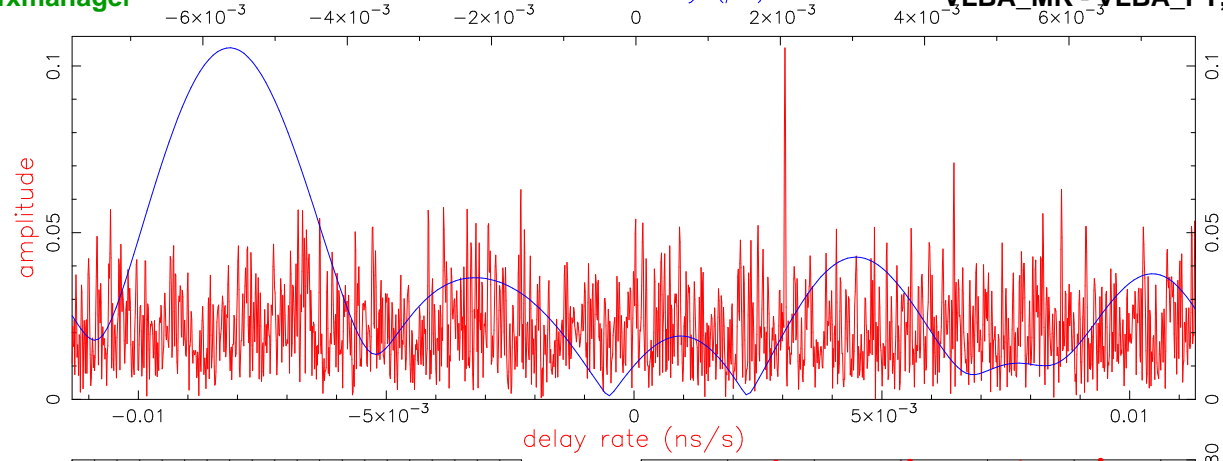
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.02041244955E+04			1.02041885656E+04				1.57009E-03	+/- 2.0E-04
Sband delay (usec)		1.02041225139E+04			1.6778316E+01				-6.60518E-02	+/- 1.6E-03
Phase delay (usec)		1.02041885599E+04			9.1799994E-07				-5.72017E-06	+/- 6.7E-07
Delay rate (us/s)		1.67871305444E+00			1.67870949333E+00				3.56111E-06	+/- 2.8E-09
Total phase (deg)			-162.5		-7.39102675618E-05				-177.4	+/- 20.7
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)										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
Bits/sample: 2x2									mb window (us)	-0.008 0.008
SampCntNorm: enabled									dr window (ns/s)	-0.011 0.011
Sample rate(MISamp/s): 128									ion window (TEC)	0.00 0.00
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										

ph/seg (deg) 50.3 49.6 Search (2048X32) 0.095 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.1 86.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.5 29.3 Inc. seg. avg. 0.109 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 33.8 51.1 Inc. frq. avg. 0.100 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 50.5 el 44.7 pa -103.5 P: az 311.8 el 14.3 pa 54.6 u,v (fr/asec) -12990.429 -6755.696 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mP..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mP.W.273.1X1C8Y simultaneous interpolator

multiband delay (μ s)



Fringe quality 0

SNR 5.9

Int time 419.819

Amp 0.109

Phase -106.1

PFD 5.6e-01

Delays (us)

SBD 0.116602

MBD -0.005656

Fringe rate (Hz)

0.262481

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c211c

Exper # 16383

Yr:day 2021:116

Start 201500.00

Stop 202159.84

FRT 201830.00

Corr/FF/build

2021:303:174537

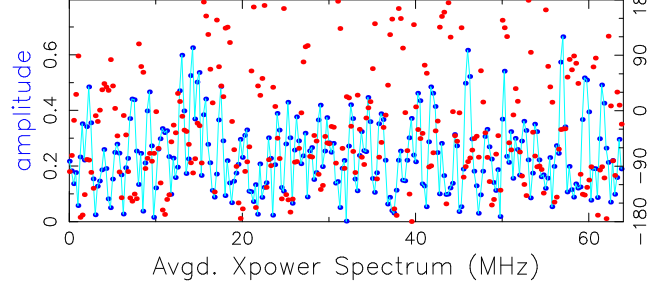
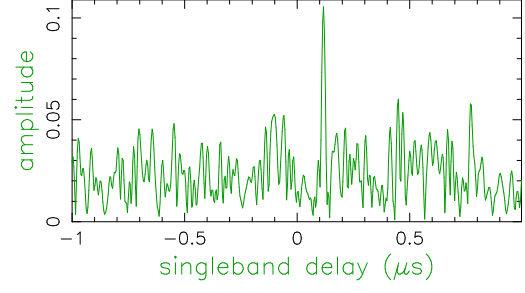
2021:304:131705

2021:252:122852

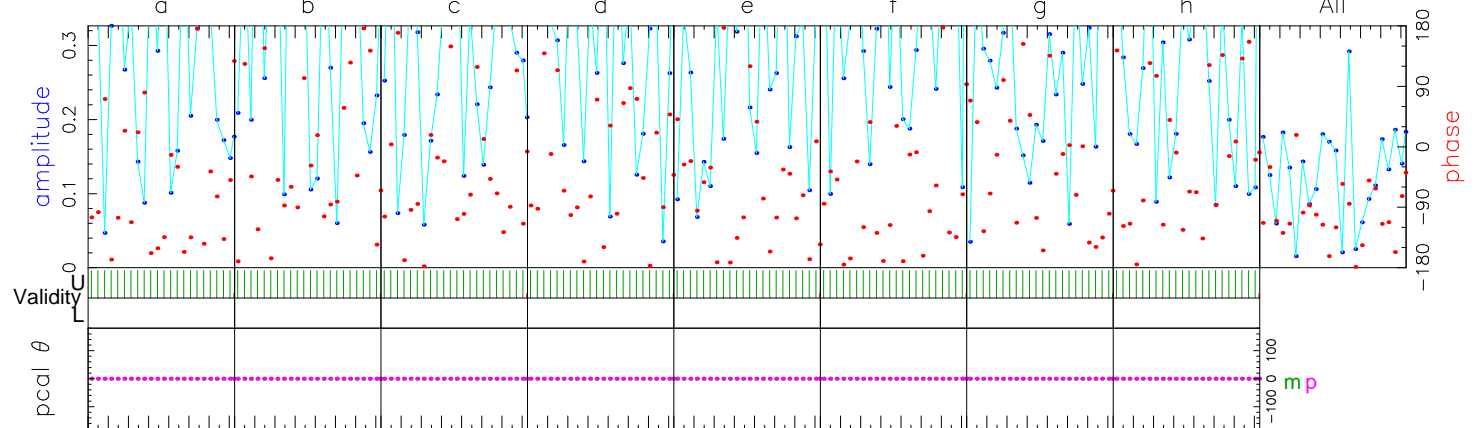
RA & Dec (J2000)

03h19m48.160095s

+41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.9	-111.7	-83.4	-101.8	-87.2	-113.5	-83.3	-149.3	Phase	-106.1
	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	286.6	323.4	414.8	127.9	428.1	343.5	423.5	220.8	Sbd box	286.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	-5.91404132280E+03		Apriori delay (usec)		-5.91416066722E+03		Resid mbdelay (usec)		-5.65557E-03	+/- 1.8E-04
Sband delay (usec)	-5.91404406547E+03		Apriori clock (usec)		1.0177361E+01		Resid sbdelay (usec)		1.16602E-01	+/- 1.5E-03
Phase delay (usec)	-5.91416067064E+03		Apriori clockrate (us/s)		4.3800001E-07		Resid phdelay (usec)		-3.42131E-06	+/- 6.2E-07
Delay rate (us/s)	8.08247893415E-01		Apriori rate (us/s)		8.08244846267E-01		Resid rate (us/s)		3.04715E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.47009190659E-05		Resid phase (deg)		-106.1	+/- 19.4

ph/seg (deg) 45.1 46.4 Search (2048X32) 0.109 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 64.0 81.0 Interp. 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.7 27.4 Inc. seg. avg. 0.098 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 39.9 47.8 Inc. frq. avg. 0.103 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

m: az 50.5 el 44.7 pa -103.5 p: az 359.2 el 82.7 pa 176.5 u,v (fr/asec) -6156.587 -393.856 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mp..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mp.W.291.1X1C8Y

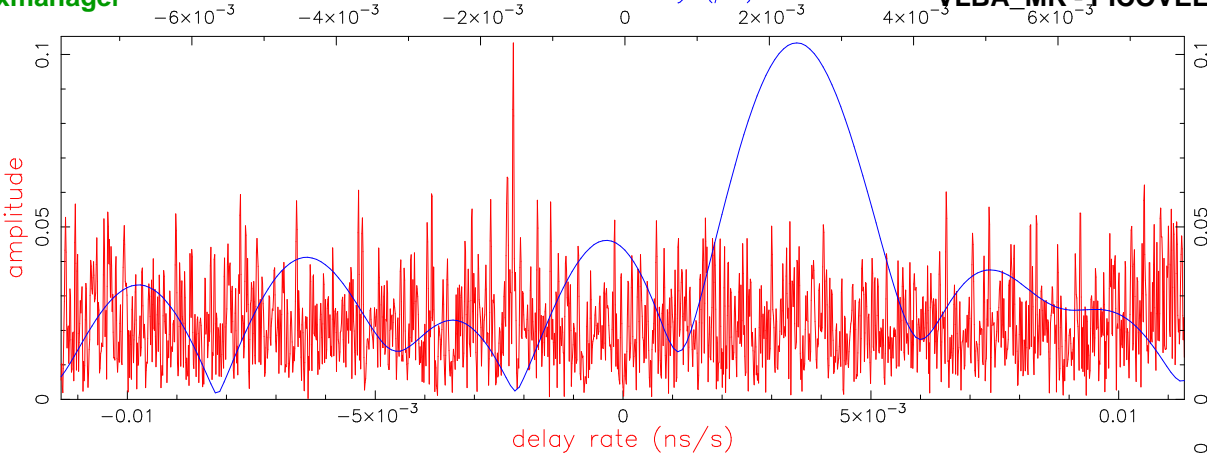
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mP

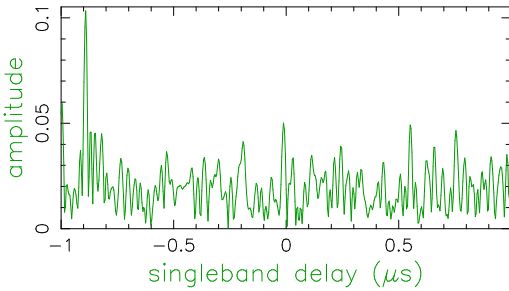
VLBA_MK - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

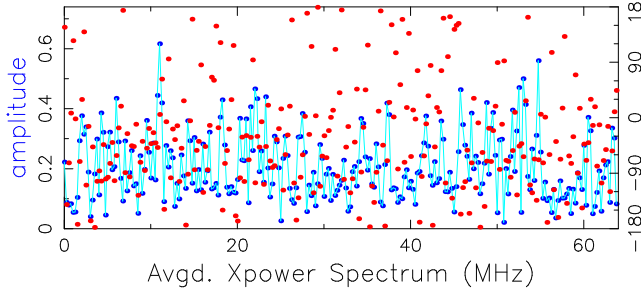


Fringe quality 0

SNR 5.8
 Int time 419.825
 Amp 0.105
 Phase 88.8
 PFD 8.0e-01
 Delays (us)
 SBD -0.891210
 MBD 0.002357
 Fringe rate (Hz)
 -0.190609
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

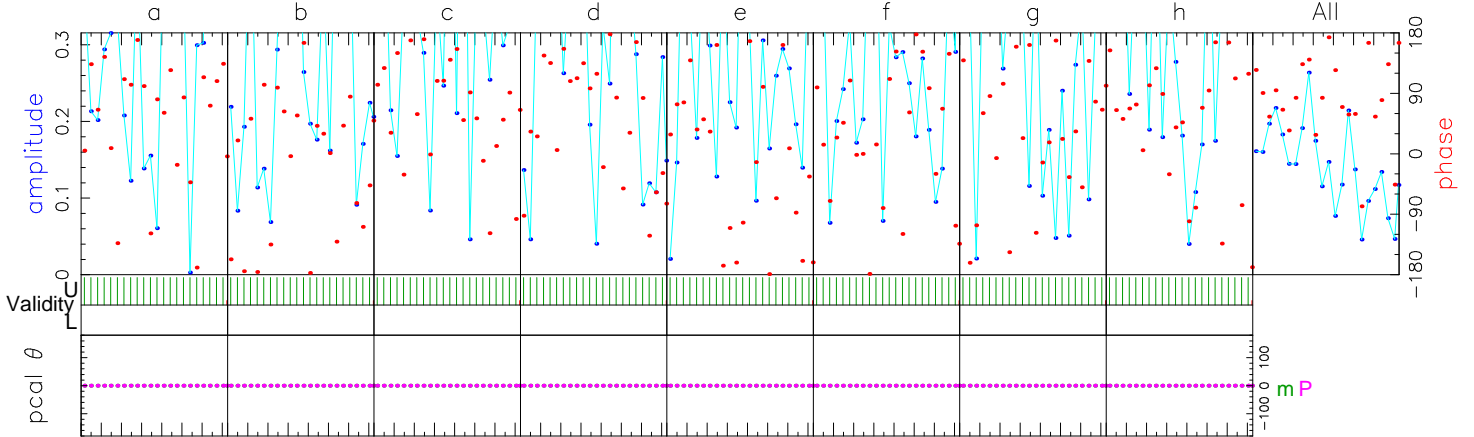


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131705
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.02033002975E+04				1.02041885656E+04			Resid mbdelay (usec)	2.35689E-03 +/- 1.9E-04
Sband delay (usec)		1.02032973551E+04				1.6778316E+01			Resid sbdelay (usec)	-8.91210E-01 +/- 1.5E-03
Phase delay (usec)		1.02041885685E+04				9.1799994E-07			Resid phdelay (usec)	2.86308E-06 +/- 6.4E-07
Delay rate (us/s)		1.67870728054E+00				1.67870949333E+00			Resid rate (us/s)	-2.21278E-06 +/- 2.6E-09
Total phase (deg)		103.7				-7.39102675618E-05			Resid phase (deg)	88.8 +/- 19.7
	RMS	Theor.	Amplitude	0.105 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	60.4	47.3	Search (2048X32)	0.102					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	65.3	82.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	27.8	27.9	Inc. seg. avg.	0.109					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.4	48.7	Inc. frq. avg.	0.098					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 50.5 el 44.7 pa -103.5 P: az 311.8 el 14.3 pa 54.6 u,v (fr/asec) -12990.429 -6755.696 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mP..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mP.W.292.1X1C8Y

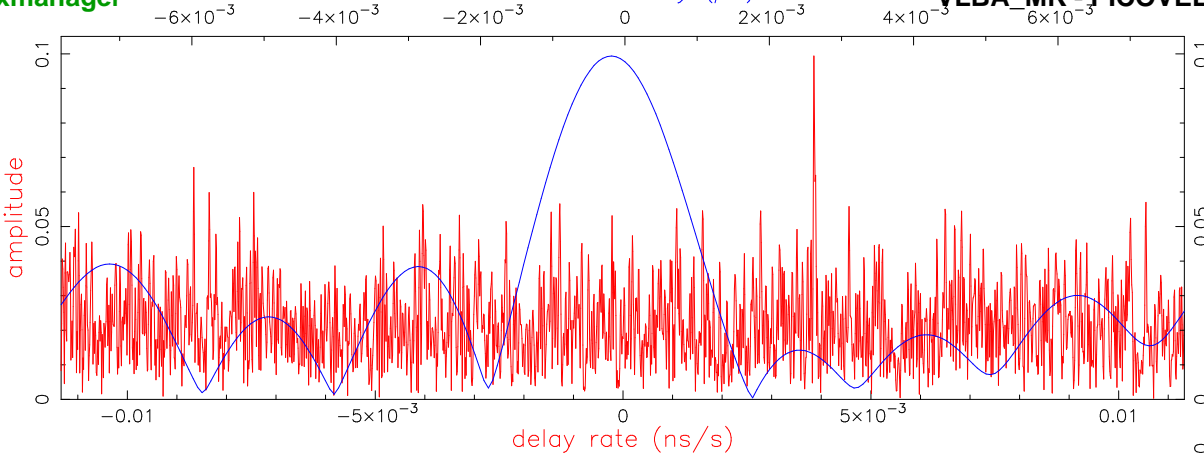
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mP

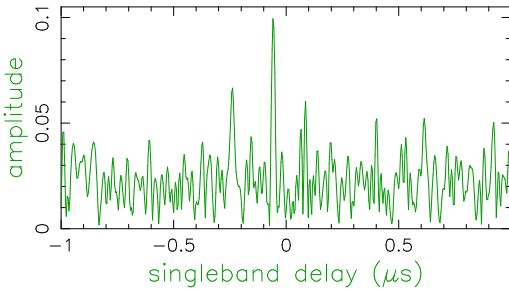
VLBA_MK - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

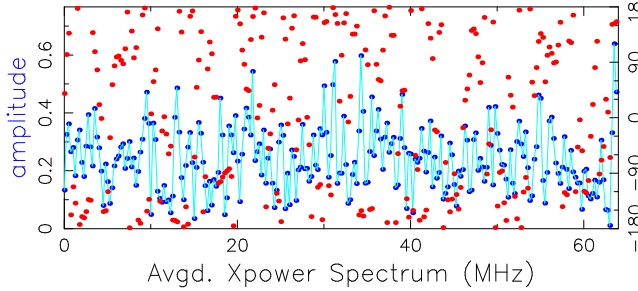


Fringe quality 0

SNR 5.6
 Int time 419.825
 Amp 0.105
 Phase -137.4
 PFD 9.9e-01
 Delays (us)
 SBD -0.057534
 MBD -0.000196
 Fringe rate (Hz)
 0.332783
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

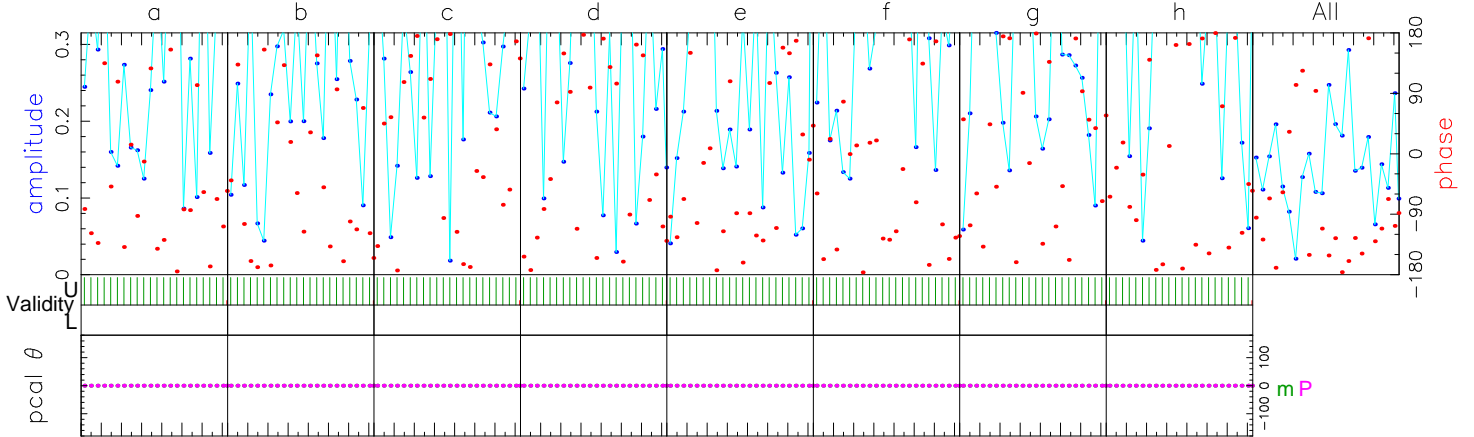


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131709
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-127.3	-149.7	-150.3	-148.3	-117.5	-136.4	-103.3	-148.4	Phase	-137.4
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	38.4	232.8	409.7	12.5	29.4	194.5	356.2	145.1	Sbd box	242.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.02041258698E+04		Apriori delay (usec)		1.02041885656E+04		Resid mbdelay (usec)		-1.95830E-04	+/- 1.9E-04
Sband delay (usec)	1.02041310319E+04		Apriori clock (usec)		1.6778316E+01		Resid sbdelay (usec)		-5.75337E-02	+/- 1.5E-03
Phase delay (usec)	1.02041885612E+04		Apriori clockrate (us/s)		9.1799994E-07		Resid phdelay (usec)		-4.42918E-06	+/- 6.6E-07
Delay rate (us/s)	1.67871335661E+00		Apriori rate (us/s)		1.67870949333E+00		Resid rate (us/s)		3.86328E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.39102675618E-05		Resid phase (deg)		-137.4	+/- 20.4

	RMS	Theor.	Amplitude	0.105 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	66.2	49.0	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	76.9	85.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.2	28.9	Inc. seg. avg.	0.114	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	29.1	50.4	Inc. frq. avg.	0.096	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 50.5 el 44.7 pa -103.5 P: az 311.8 el 14.3 pa 54.6 u,v (fr/asec) -12990.429 -6755.696 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mP..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mP.W.311.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

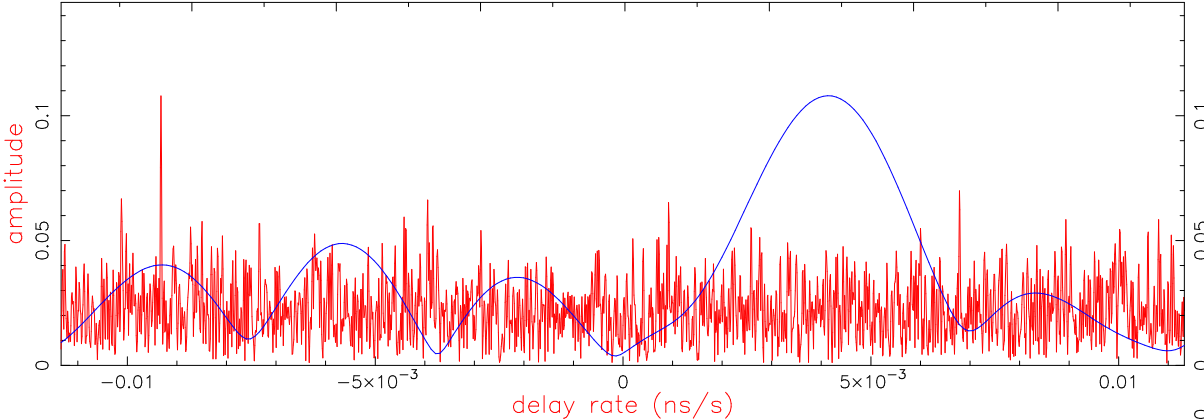
3C84.1X1C8Y, No0102, mp

VLBA_MK - VLBA_PT, fgroup W, pol RL

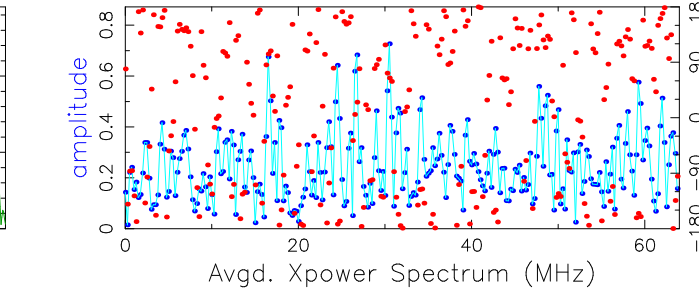
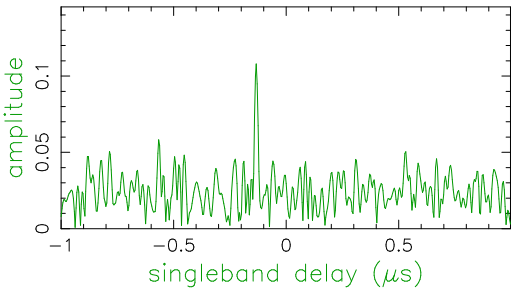
multiband delay (μ s)

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

Fringe quality 0



SNR 6.1
Int time 419.819
Amp 0.145
Phase 23.8
PFD 3.0e-01
Delays (us)
SBD -0.133341
MBD 0.002774
Fringe rate (Hz)
-0.803976
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



amplitude

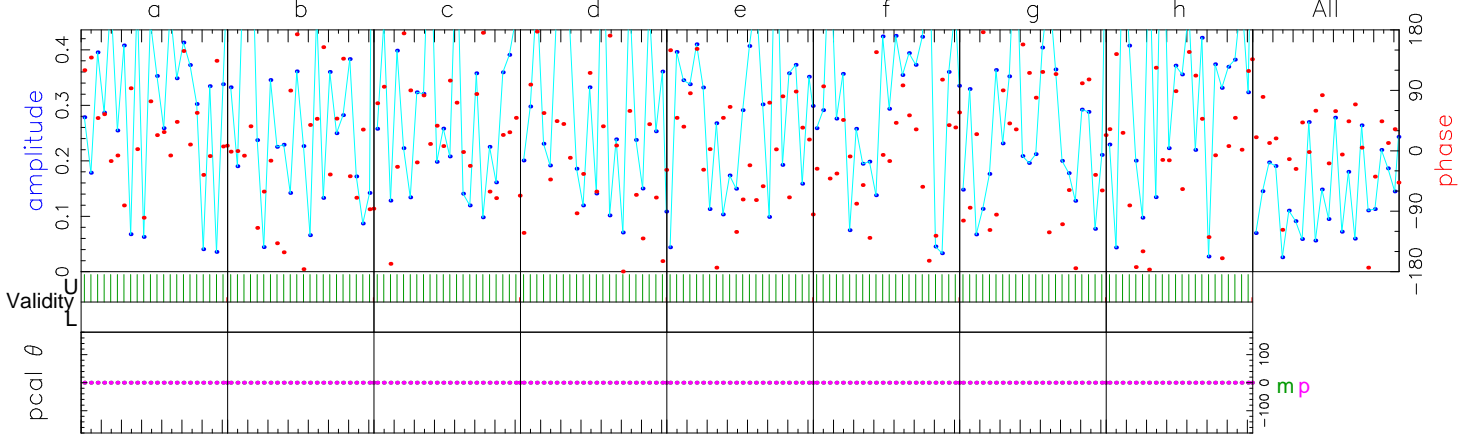
amplitude

singleband delay (μ s)

Avgd. Xpower Spectrum (MHz)

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131709
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
m	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.91429851811E+03									
Sband delay (usec)	-5.91429400822E+03									
Phase delay (usec)	-5.91416066646E+03									
Delay rate (us/s)	8.08235512907E-01									
Total phase (deg)			-291.0							
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	56.8	45.4								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.145 +/- 0.024										
0.107										
0.000										
0.144										
0.139										
PC period (AP's) 5, 5										
PCamp										
PC freqs										
PC phase										
Mani PC										
PC amp										
Chan ids										
Tracks										
Chan ids										
Tracks										
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
simultaneous interpolator										

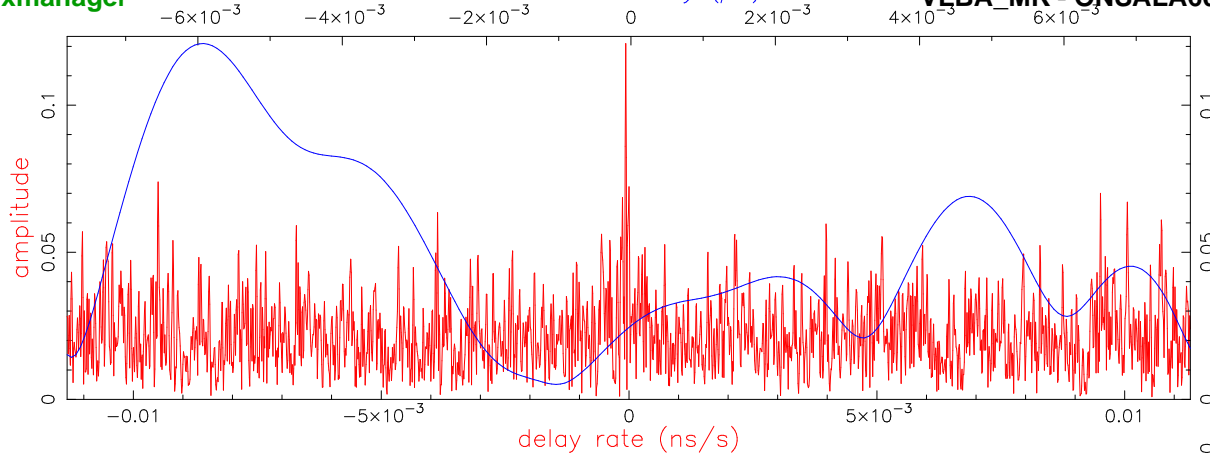
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, mX

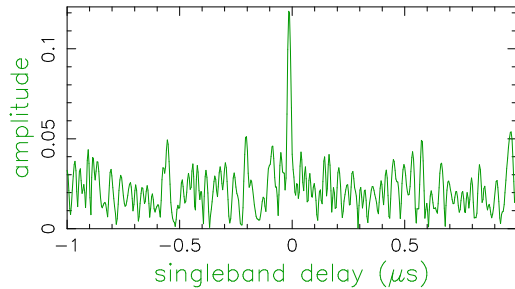
VLBA_MK - ONSALA60, fgroup W, pol LL

multiband delay (μ s)

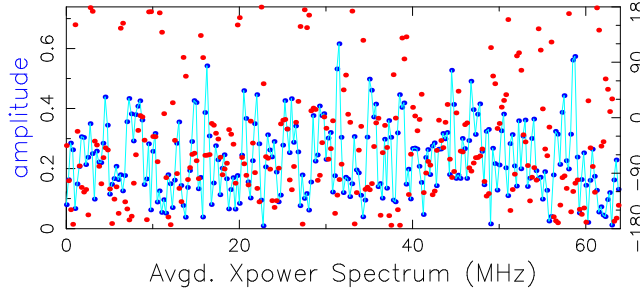


Fringe quality 0

SNR 6.9
 Int time 419.797
 Amp 0.123
 Phase -175.2
 PFD 1.4e-03
 Delays (us)
 SBD -0.013834
 MBD -0.005915
 Fringe rate (Hz)
 -0.005718
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

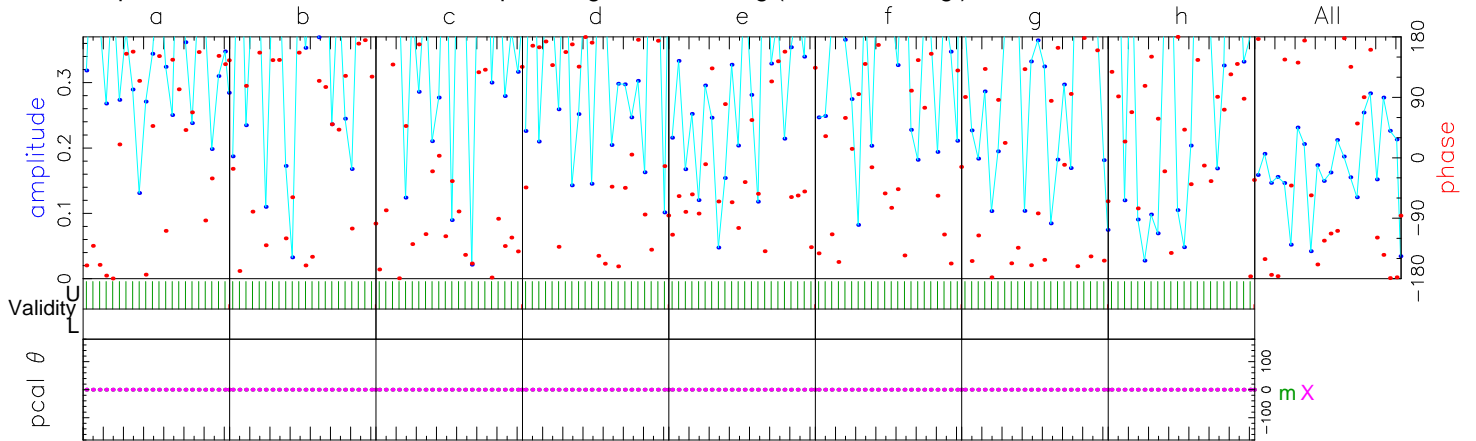


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131659
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	160.4	157.2	-142.1	-170.2	-88.0	-139.5	-170.9	108.3	Phase	-175.2
	0.2	0.2	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	332.2	252.6	253.4	253.7	499.1	391.4	461.8	270.6	Sbd box	253.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	7.73348074495E+03		Apriori delay (usec)		7.73350228448E+03		Resid mbdelay (usec)		-5.91453E-03	+/- 1.6E-04
Sband delay (usec)	7.73348844998E+03		Apriori clock (usec)		-4.0789982E+01		Resid sbdelay (usec)		-1.38345E-02	+/- 1.2E-03
Phase delay (usec)	7.73350227883E+03		Apriori clockrate (us/s)		-2.1000001E-07		Resid phdelay (usec)		-5.65060E-06	+/- 5.3E-07
Delay rate (us/s)	1.32260245468E+00		Apriori rate (us/s)		1.32260252107E+00		Resid rate (us/s)		-6.63833E-08	+/- 2.2E-09
Total phase (deg)	107.4		Apriori accel (us/s/s)		-7.90314363045E-05		Resid phase (deg)		-175.2	+/- 16.6

	RMS	Theor.	Amplitude	0.123 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	61.2	39.8	Search (2048X32)	0.120	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	65.1	69.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	53.6	23.4	Inc. seg. avg.	0.142	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.3	40.9	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 50.5 el 44.7 pa -103.5 X: az 316.2 el 20.9 pa 29.6 u,v (fr/asec) -10270.818 -8731.436 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mX..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mX.W.260.1X1C8Y

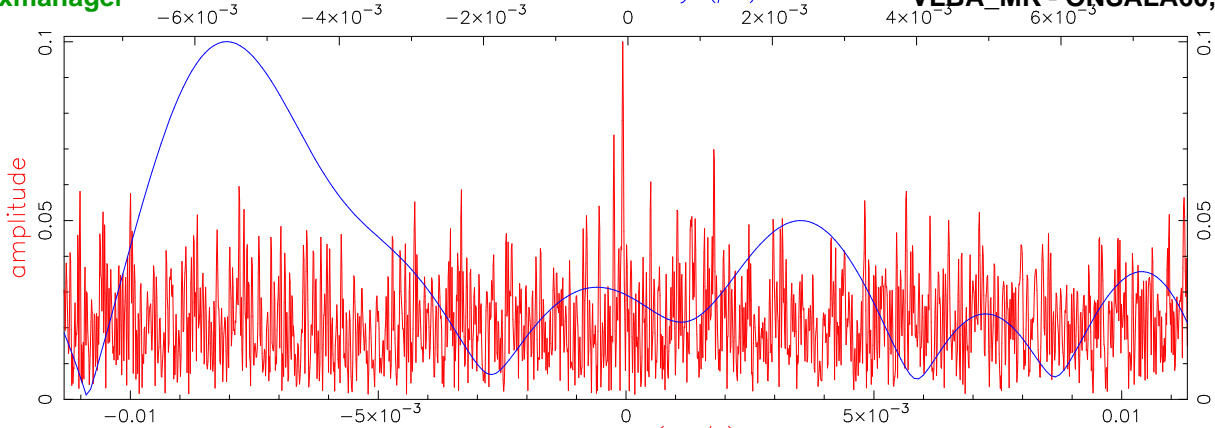
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

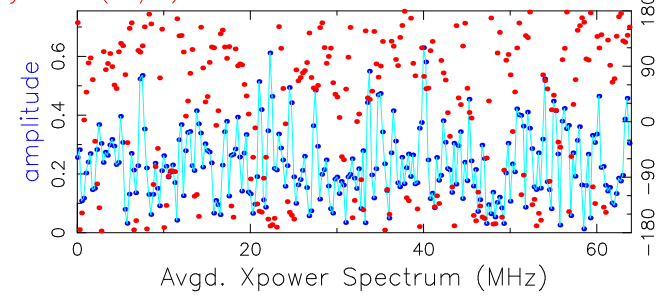
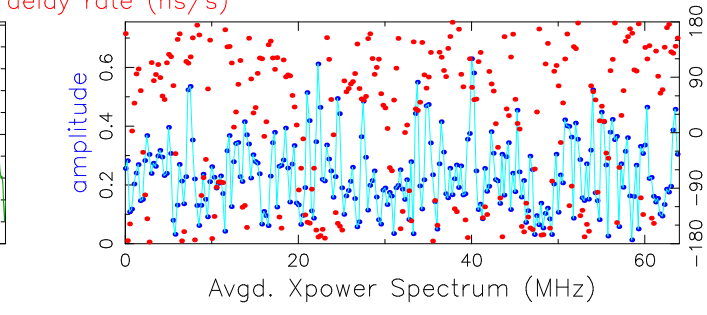
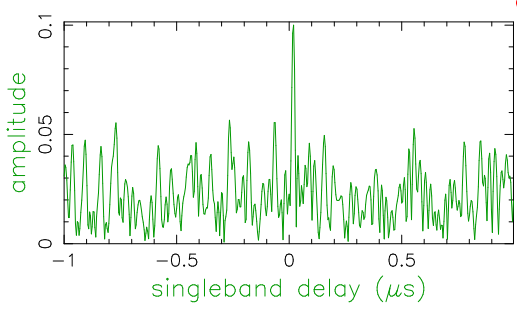
3C84.1X1C8Y, No0102, mX

VLBA_MK - ONSALA60, fgroup W, pol RR

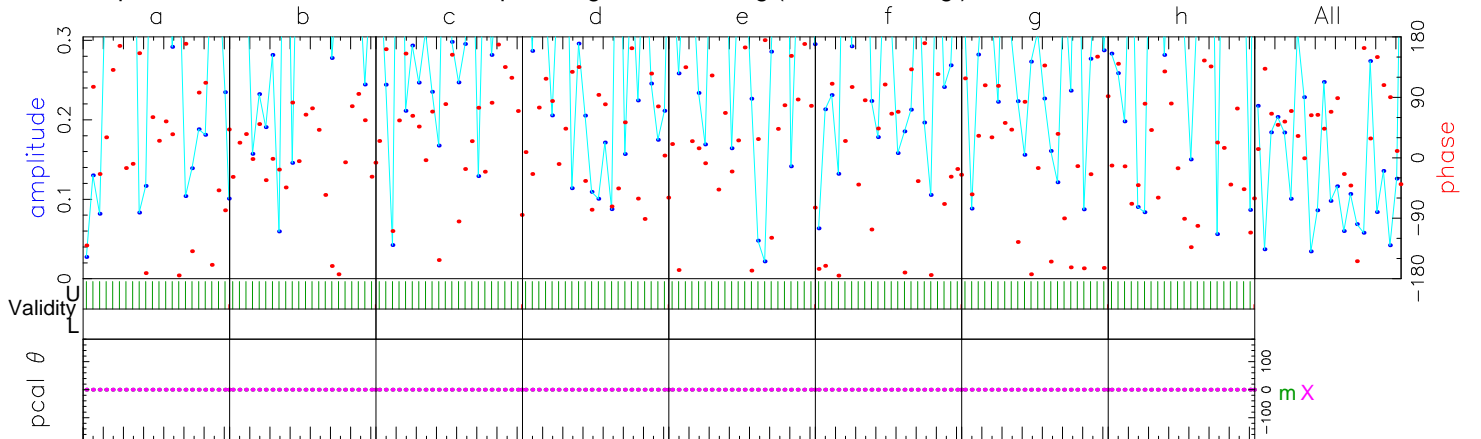
multiband delay (μ s)



Fringe quality 0
 SNR 5.7
 Int time 419.797
 Amp 0.101
 Phase 42.8
 PFD 9.6e-01
 Delays (us)
 SBD 0.018183
 MBD -0.005584
 Fringe rate (Hz)
 -0.005619
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131703
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0				
m	0	0	0	0	0	0	0	0				
X	1000	1000	1000	1000	1000	1000	1000	1000				
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
m	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Group delay (usec)(sbd)		7.73352795086E+03				7.73350228448E+03			Resid mbdelay (usec)	-5.58362E-03	+/- 1.9E-04	
Sband delay (usec)		7.73352046798E+03				-4.0789982E+01			Resid sbdelay (usec)	1.81835E-02	+/- 1.5E-03	
Phase delay (usec)		7.73350228586E+03				-2.1000001E-07			Resid phdelay (usec)	1.37964E-06	+/- 6.5E-07	
Delay rate (us/s)		1.32260245583E+00				1.32260252107E+00			Resid rate (us/s)	-6.52362E-08	+/- 2.7E-09	
Total phase (deg)			325.4			-7.90314363045E-05			Resid phase (deg)	42.8	+/- 20.2	
ph/seg (deg)	RMS 63.4	Theor. 48.3	Amplitude 0.101 +/- 0.018			Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5			
amp/seg (%)	90.7	84.3	Search (2048X32) 0.098			Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000	1.000	
ph/frq (deg)	34.3	28.5	Interp. 0.000			Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	49.2	49.7	Inc. seg. avg. 0.102			Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011	0.011
			Inc. frq. avg. 0.103			Data rate(Mb/s): 2048				ion window (TEC)	0.00	0.00
						nlags: 256						
m: az 50.5 el 44.7 pa -103.5			X: az 316.2 el 20.9 pa 29.6			u,v (fr/asec) -10270.818 -8731.436						simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

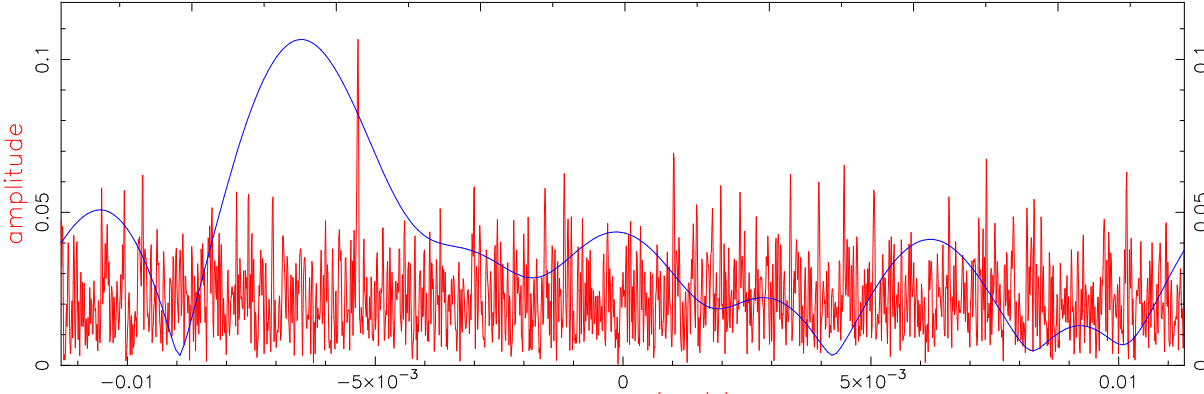
3C84.1X1C8Y, No0102, mX

VLBA_MK - ONSALA60, fgroup W, pol LR

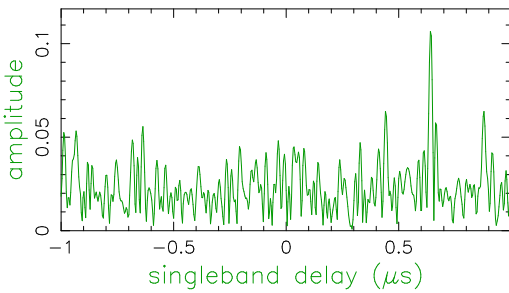
multiband delay (μ s)

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

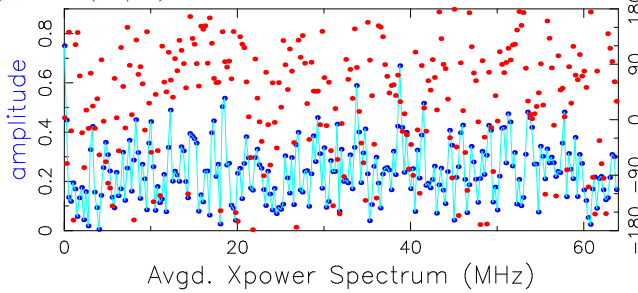
Fringe quality 0



SNR 6.1
Int time 419.797
Amp 0.119
Phase -45.5
PFD 3.1e-01
Delays (us)
SBD 0.642142
MBD -0.004474
Fringe rate (Hz)
-0.461225
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

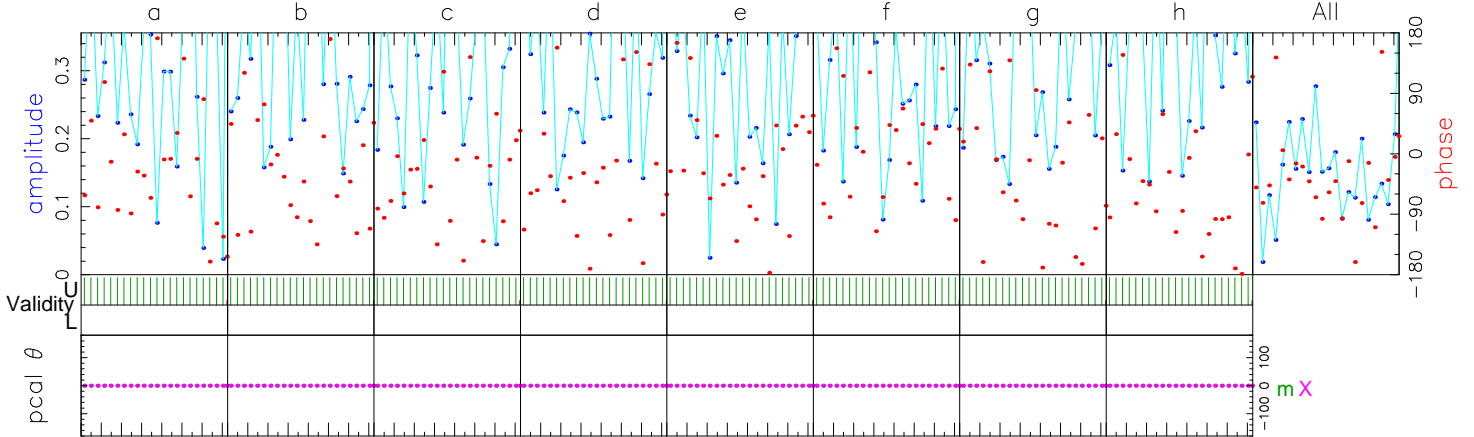


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201500.00
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131707
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.4	-58.5	-52.8	-70.1	-5.1	5.9	-48.5	-73.0	Phase	-45.5
	0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.2	Ampl.	0.1
	458.1	69.1	234.1	426.3	420.4	385.6	254.9	371.9	Sbd box	421.4
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	7.73413843532E+03	Apriori delay (usec)	7.73350228448E+03	Resid mbdelay (usec)	-4.47416E-03	+/-	1.8E-04
Sband delay (usec)	7.73414442623E+03	Apriori clock (usec)	-4.0789982E+01	Resid sbdelay (usec)	6.42142E-01	+/-	1.4E-03
Phase delay (usec)	7.73350228301E+03	Apriori clockrate (us/s)	-2.1000001E-07	Resid phdelay (usec)	-1.46708E-06	+/-	6.1E-07
Delay rate (us/s)	1.32259716670E+00	Apriori rate (us/s)	1.32260252107E+00	Resid rate (us/s)	-5.35437E-06	+/-	2.5E-09
Total phase (deg)	237.1	Apriori accel (us/s/s)	-7.90314363045E-05	Resid phase (deg)	-45.5	+/-	18.9

ph/seg (deg)	RMS 63.6	Theor. 45.4	Amplitude 45.4	0.119 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	63.6	45.4	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	71.0	79.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.3	26.8	Inc. seg. avg.	0.125	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
	39.9	46.7	Inc. frq. avg.	0.119	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

m: az 50.5 el 44.7 pa -103.5 X: az 316.2 el 20.9 pa 29.6 u,v (fr/asec) -10270.818 -8731.436 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mX..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mX.W.298.1X1C8Y

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

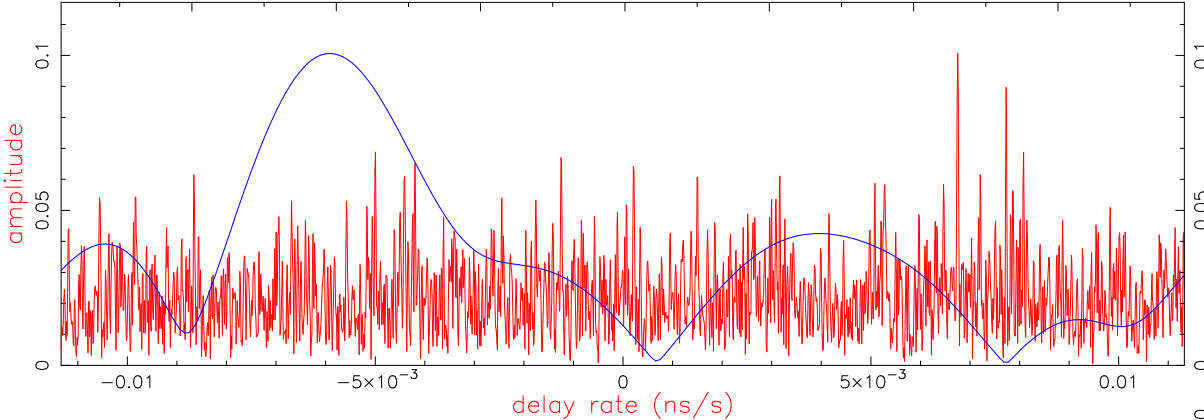
3C84.1X1C8Y, No0102, mX

VLBA_MK - ONSALA60, fgroup W, pol RL

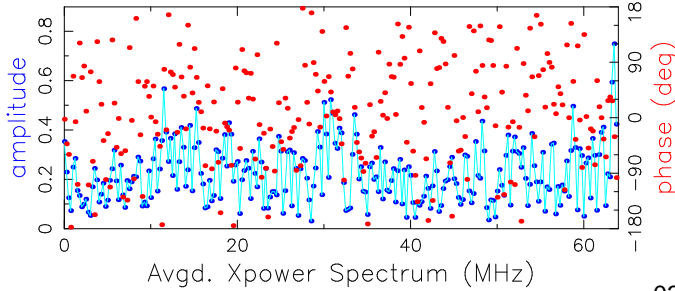
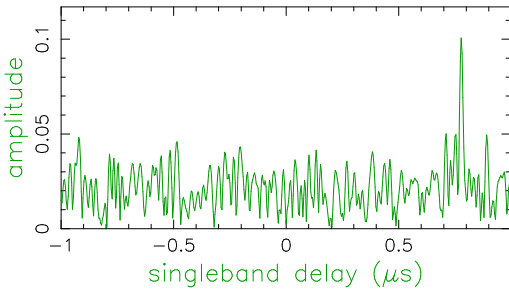
multiband delay (μ s)

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

Fringe quality 0

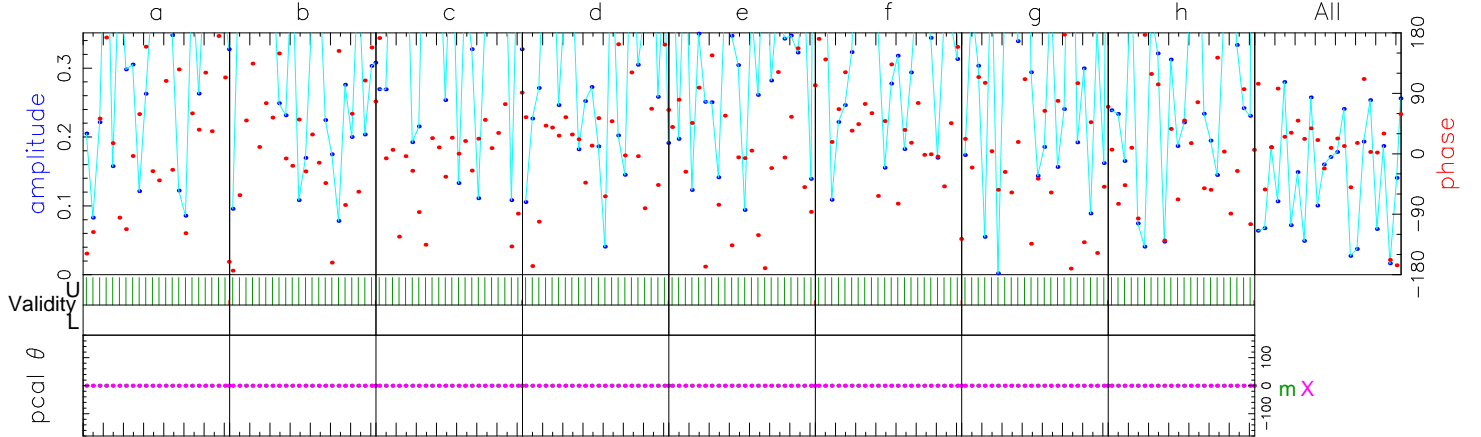


SNR 5.6
 Int time 419.797
 Amp 0.117
 Phase 26.1
 PFD 9.8e-01
 Delays (us)
 SBD 0.777695
 MBD -0.004093
 Fringe rate (Hz)
 0.582518
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201500.00
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131711
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



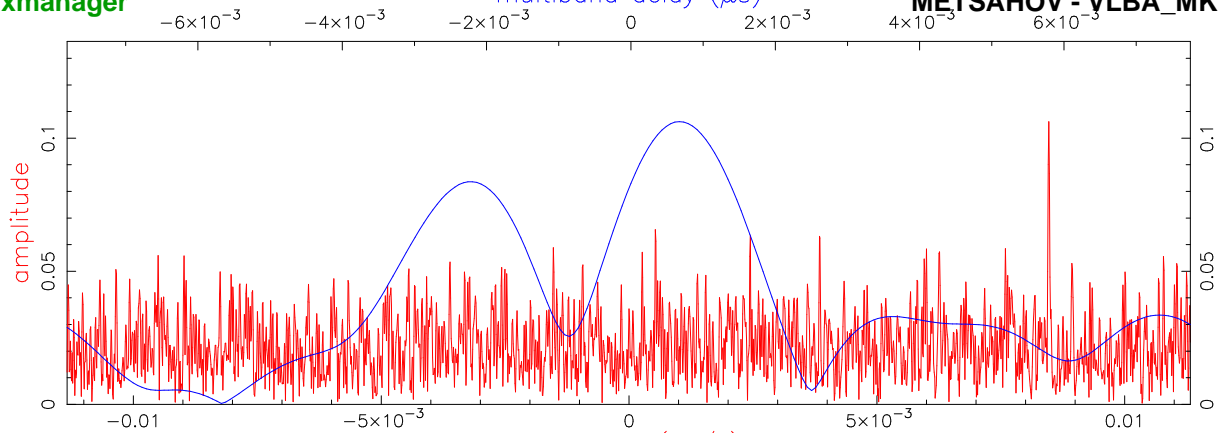
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	68.9	22.4	-1.8	40.8	32.6	52.4	-2.6	8.1	Phase	26.1
	0.0	0.1	0.2	0.2	0.1	0.2	0.0	0.1	Ampl.	0.1
	448.9	125.0	456.3	202.2	356.2	157.2	211.0	204.7	Sbd box	456.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	7.73427944170E+03		Apriori delay (usec)		7.73350228448E+03		Resid mbdelay (usec)		-4.09278E-03	+/- 1.9E-04
Sband delay (usec)	7.73427997973E+03		Apriori clock (usec)		-4.0789982E+01		Resid sbdelay (usec)		7.77695E-01	+/- 1.5E-03
Phase delay (usec)	7.73350228532E+03		Apriori clockrate (us/s)		-2.1000001E-07		Resid phdelay (usec)		8.43025E-07	+/- 6.5E-07
Delay rate (us/s)	1.32260928353E+00		Apriori rate (us/s)		1.32260252107E+00		Resid rate (us/s)		6.76246E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.90314363045E-05		Resid phase (deg)		26.1	+/- 20.3

	RMS	Theor.	Amplitude	0.117 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	65.5	48.7	Search (2048X32)	0.099	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	86.6	85.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.0	28.7	Inc. seg. avg.	0.117	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	58.4	50.1	Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 50.5 el 44.7 pa -103.5 X: az 316.2 el 20.9 pa 29.6 u,v (fr/asec) -10270.818 -8731.436 simultaneous interpolator

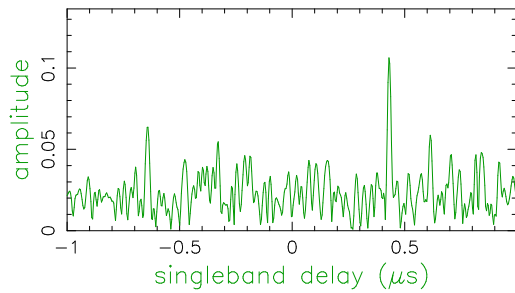
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/mX..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/mX.W.318.1X1C8Y

multiband delay (μ s)

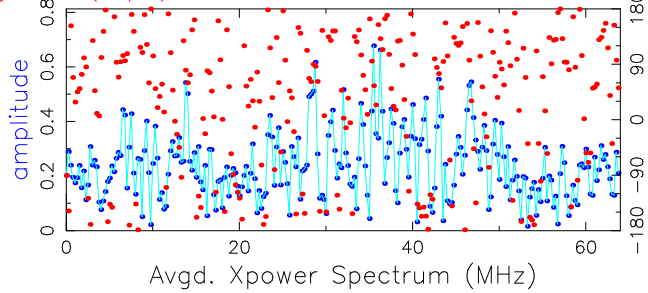


Fringe quality 0

SNR 5.9
 Int time 405.671
 Amp 0.136
 Phase 20.1
 PFD 6.1e-01
 Delays (us)
 SBD 0.430876
 MBD 0.000701
 Fringe rate (Hz) 0.730378
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

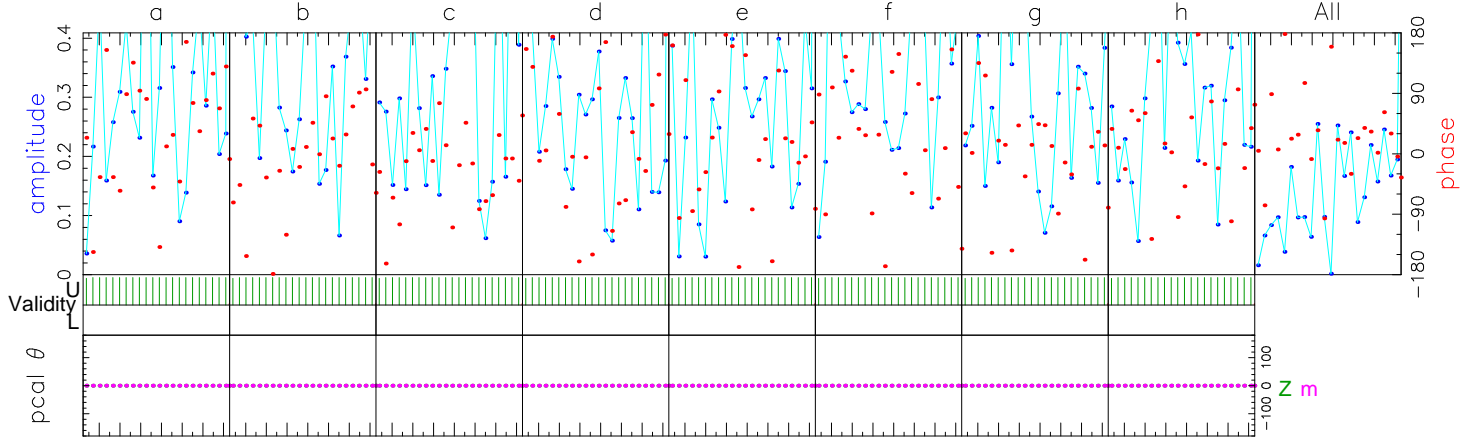


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201513.31
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build 2021:303:174537
 2021:304:131716
 2021:252:122852
 RA & Dec (J2000) 03h19m48.160095s +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	58.0	12.0	-9.1	36.9	72.4	38.1	12.7	24.4	Phase	20.1
	0.2	0.2	0.3	0.0	0.0	0.1	0.2	0.1	Ampl.	0.1
	115.0	463.7	367.0	158.1	431.3	93.7	267.1	170.3	Sbd box	367.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.445702672E+03	Apriori delay (usec)	-8.44614087724E+03	Resid mbdelay (usec)	7.00976E-04	+/-	1.8E-04
Sband delay (usec)	-8.44571000174E+03	Apriori clock (usec)	-1.6427574E+01	Resid sbdelay (usec)	4.30876E-01	+/-	1.5E-03
Phase delay (usec)	-8.44614087659E+03	Apriori clockrate (us/s)	-3.0199999E-07	Resid phdelay (usec)	6.49622E-07	+/-	6.3E-07
Delay rate (us/s)	-1.20434382477E+00	Apriori rate (us/s)	-1.20435230374E+00	Resid rate (us/s)	8.47897E-06	+/-	2.7E-09
Total phase (deg)	-39.5	Apriori accel (us/s/s)	8.44334579409E-05	Resid phase (deg)	20.1	+/-	19.4

ph/seg (deg)	62.7	RMS	46.6	Theor.	0.136 +/- 0.023	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.9	Search (2048X32)	0.104	Interp.	0.000	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.0	Inc. seg. avg.	0.130	Inc. frq. avg.	0.133	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	62.2	Inc. frq. avg.	0.133			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
Z: az 324.4 el 18.9 pa 25.0		m: az 50.5 el 44.7 pa -103.5		u,v (fr/asec)	9375.549 9287.565	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Zm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Zm.W.337.1X1C8Y

simultaneous interpolator

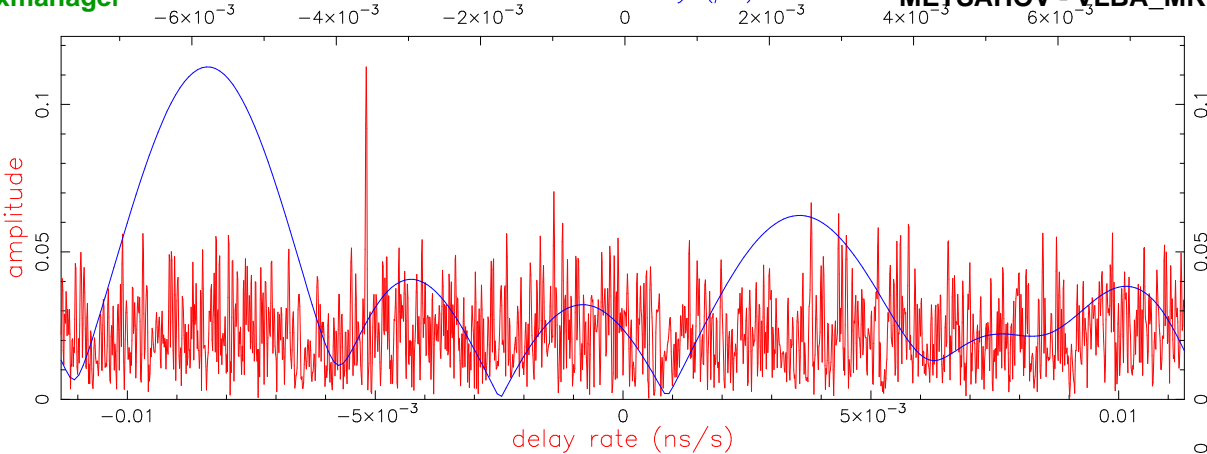
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X1C8Y, No0102, Zm

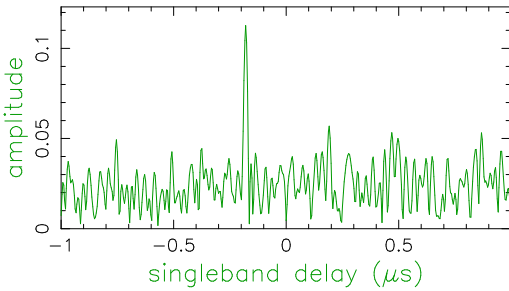
METSAROV - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

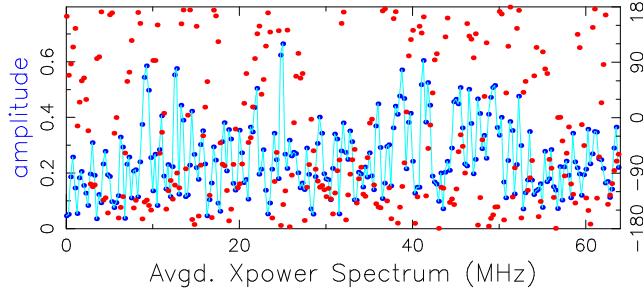


Fringe quality 0

SNR 6.2
Int time 405.671
Amp 0.123
Phase 12.7
PFD 1.3e-01
Delays (us)
SBD -0.179746
MBD -0.005783
Fringe rate (Hz)
-0.446826
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

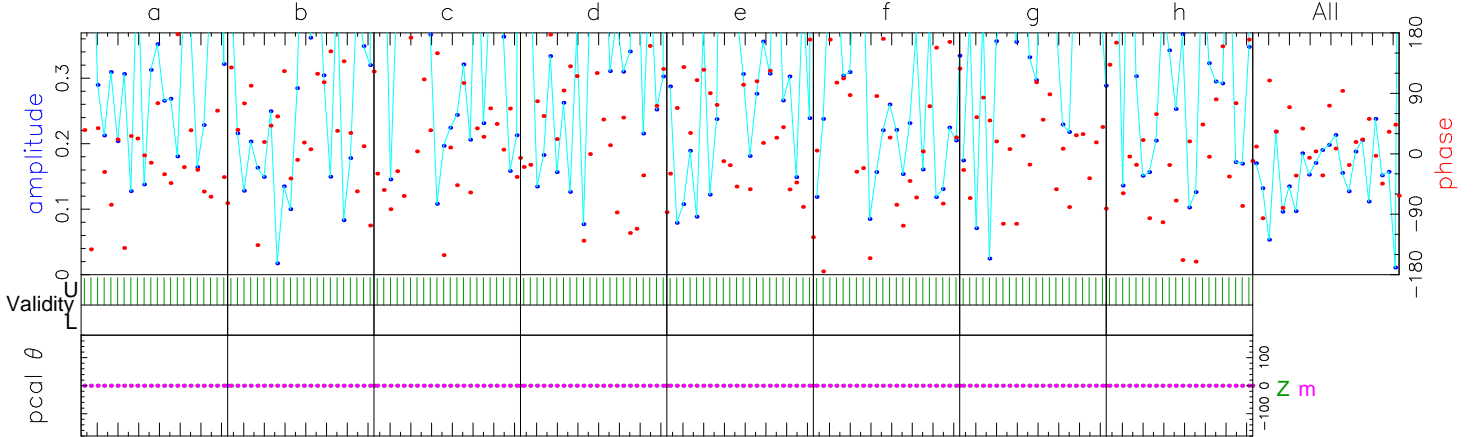


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 201513.31
Stop 202159.84
FRT 201830.00
Corr/FF/build
2021:303:174537
2021:304:131720
2021:252:122852
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-7.9	45.4	2.2	42.9	12.5	45.0	11.6	-9.9		Phase 12.7
	0.2	0.1	0.2	0.1	0.1	0.0	0.2	0.1		Ampl. 0.1
	67.8	415.8	210.6	295.5	222.1	366.1	210.9	448.2		Sbd box 211.0
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		APs used
Z	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
m	0	0	0	0	0	0	0	0		PC freqs
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
Z:m	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
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	-8.44631853573E+03	Apriori delay (usec)	-8.44614087724E+03	Resid mbdelay (usec)	-5.78348E-03	+/-	1.7E-04
Sband delay (usec)	-8.44632062299E+03	Apriori clock (usec)	-1.6427574E+01	Resid sbdelay (usec)	-1.79746E-01	+/-	1.4E-03
Phase delay (usec)	-8.44614087683E+03	Apriori clockrate (us/s)	-3.0199999E-07	Resid phdelay (usec)	4.09776E-07	+/-	6.0E-07
Delay rate (us/s)	-1.20435749094E+00	Apriori rate (us/s)	-1.20435230374E+00	Resid rate (us/s)	-5.18721E-06	+/-	2.5E-09
Total phase (deg)		Apriori accel (us/s/s)	8.44334579409E-05	Resid phase (deg)	12.7	+/-	18.5

ph/seg (deg)	RMS 50.5	Theor. 44.2	Amplitude Search (2048X32)	0.123 +/- 0.020	0.106	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.9	77.2	Interp.	0.000	0.106	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	26.0	26.1	Inc. seg. avg.	0.130	0.106	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.7	45.5	Inc. frq. avg.	0.118	0.118	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

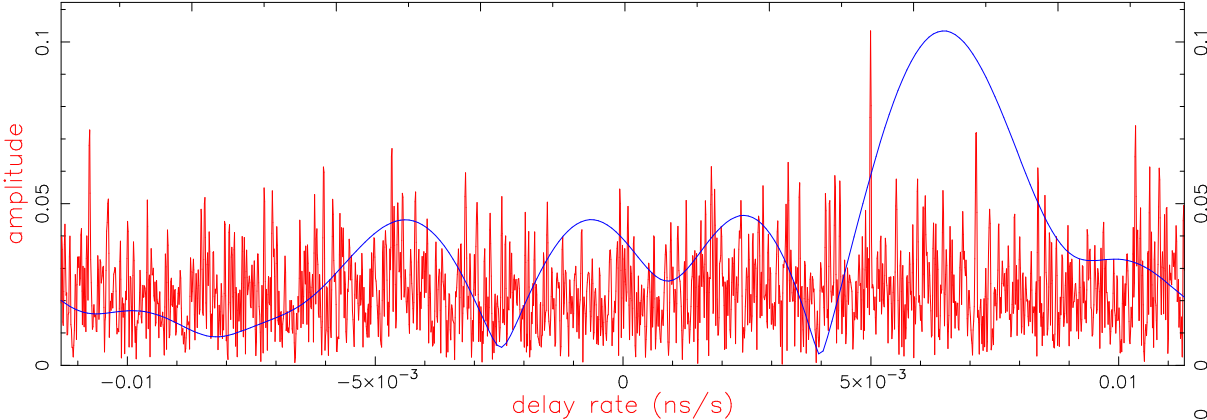
Z: az 324.4 el 18.9 pa 25.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 9375.549 9287.565 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Zm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Zm.W.357.1X1C8Y

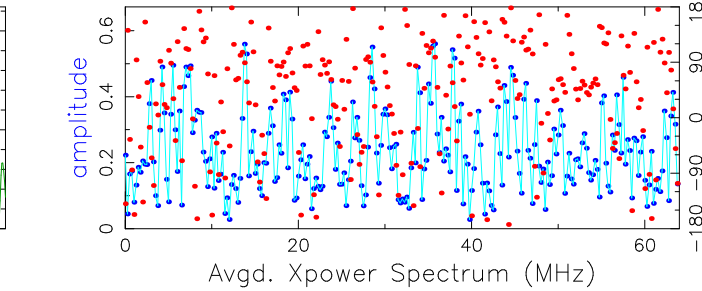
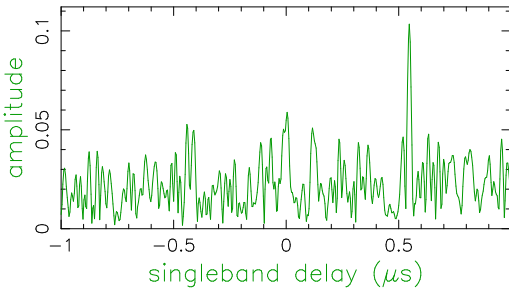
multiband delay (μ s)

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

Fringe quality 0

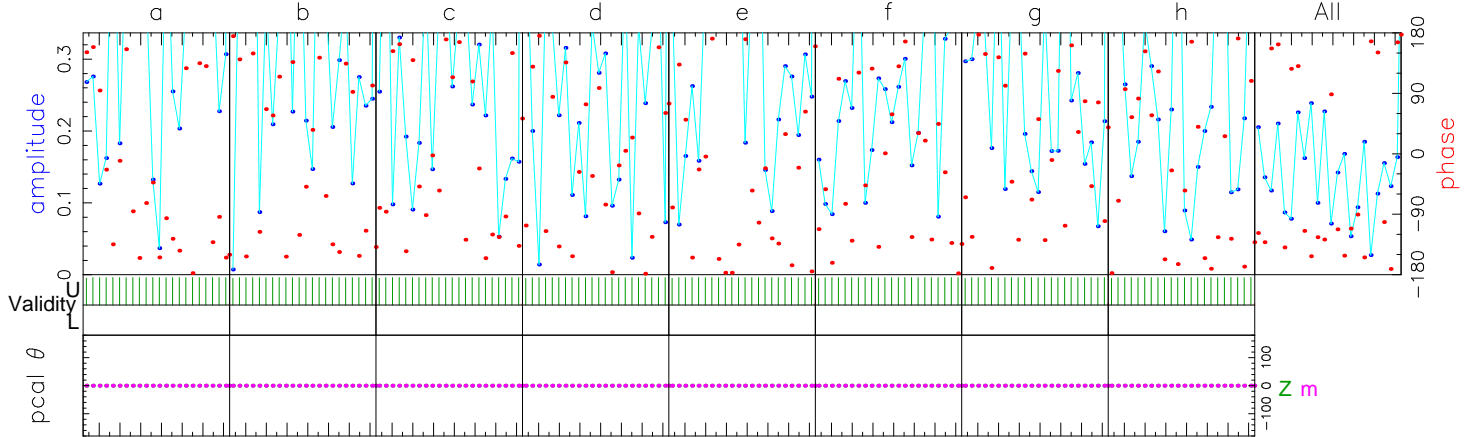


SNR 5.7
 Int time 405.671
 Amp 0.112
 Phase -155.5
 PFD 9.5e-01
 Delays (us)
 SBD 0.546677
 MBD 0.004411
 Fringe rate (Hz)
 0.431085
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201513.31
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131724
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-152.7	169.5	-128.5	-126.6	-139.7	-158.0	-140.1	166.2	Phase	-155.5
	0.2	0.2	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	395.5	396.7	339.1	28.0	272.2	452.7	460.7	227.0	Sbd box	396.9
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-8.44558959160E+03	Apriori delay (usec)	-8.44614087724E+03	Resid mbdelay (usec)	4.41064E-03	+/-	1.9E-04
Sband delay (usec)	-8.44559420024E+03	Apriori clock (usec)	-1.6427574E+01	Resid sbdelay (usec)	5.46677E-01	+/-	1.5E-03
Phase delay (usec)	-8.44614088226E+03	Apriori clockrate (us/s)	-3.0199999E-07	Resid phdelay (usec)	-5.01377E-06	+/-	6.5E-07
Delay rate (us/s)	-1.20434729927E+00	Apriori rate (us/s)	-1.20435230374E+00	Resid rate (us/s)	5.00447E-06	+/-	2.8E-09
Total phase (deg)	-215.1	Apriori accel (us/s/s)	8.44334579409E-05	Resid phase (deg)	-155.5	+/-	20.1

ph/seg (deg)	48.4	Theor.	48.2	Amplitude	0.112 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.5	Search (2048X32)	0.102	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	28.2	Inc. seg. avg.	0.113	Inc. frq. avg.	0.109	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.2	Inc. frq. avg.	0.109			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
Z: az 324.4 el 18.9 pa 25.0		m: az 50.5 el 44.7 pa -103.5		u,v (fr/asec)	9375.549 9287.565	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Zm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Zm.W.374.1X1C8Y

simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

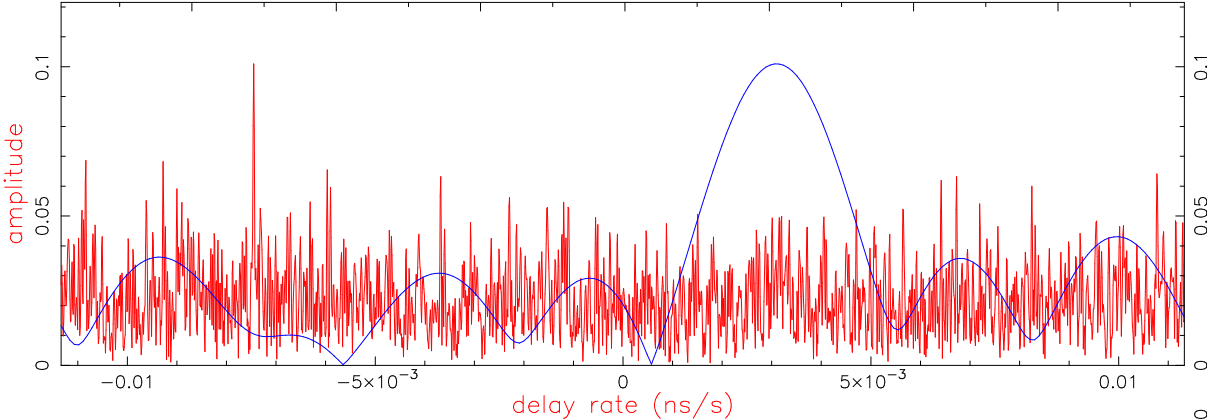
3C84.1X1C8Y, No0102, Zm

METSAHOV - VLBA_MK, fgroup W, pol RL

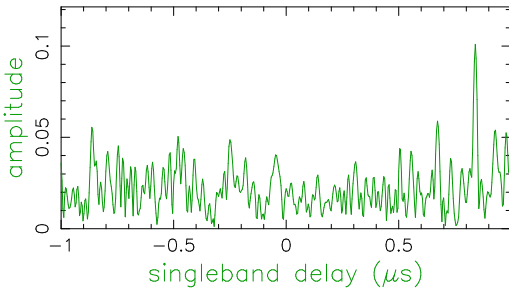
multiband delay (μ s)

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

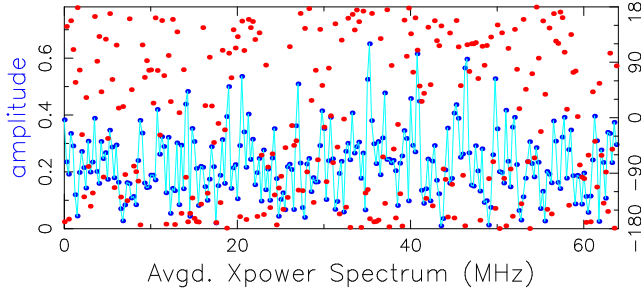
Fringe quality 0



SNR 5.6
 Int time 405.671
 Amp 0.122
 Phase 99.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.840096
 MBD 0.002109
 Fringe rate (Hz)
 -0.642876
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

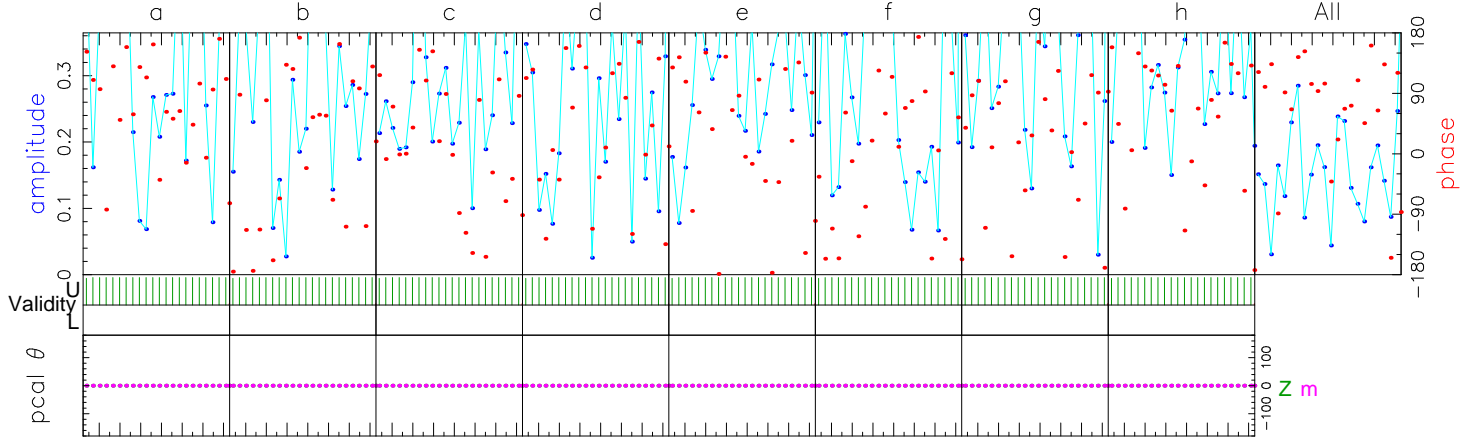


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 201513.31
 Stop 202159.84
 FRT 201830.00
 Corr/FF/build
 2021:303:174537
 2021:304:131727
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	93.8	112.5	78.8	124.2	102.5	113.0	79.1	103.0	Phase	99.9
	0.2	0.1	0.1	0.1	0.1	0.0	0.1	0.2	Ampl.	0.1
	186.6	180.9	271.0	141.0	477.8	236.9	508.9	388.1	Sbd box	472.1
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -8.44529501802E+03 Apriori delay (usec) -8.44614087724E+03 Resid mbdelay (usec) 2.10922E-03 +/- 2.0E-04
 Sband delay (usec) -8.44530078174E+03 Apriori clock (usec) -1.6427574E+01 Resid sbdelay (usec) 8.40096E-01 +/- 1.5E-03
 Phase delay (usec) -8.44614087402E+03 Apriori clockrate (us/s) -3.0199999E-07 Resid phdelay (usec) 3.22042E-06 +/- 6.6E-07
 Delay rate (us/s) -1.20435976689E+00 Apriori rate (us/s) -1.20435230374E+00 Resid rate (us/s) -7.46315E-06 +/- 2.8E-09
 Total phase (deg) 40.2 Apriori accel (us/s/s) 8.44334579409E-05 Resid phase (deg) 99.9 +/- 20.6

RMS Theor. Amplitude 0.122 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.9 49.4 Search (2048X32) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 84.6 86.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 17.6 29.1 Inc. seg. avg. 0.135 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 35.0 50.8 Inc. frq. avg. 0.111 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 324.4 el 18.9 pa 25.0 m: az 50.5 el 44.7 pa -103.5 u,v (fr/asec) 9375.549 9287.565 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0102/Zm..1X1C8Y Output file: /Exps/c211c/v1/1234/No0102/Zm.W.393.1X1C8Y