

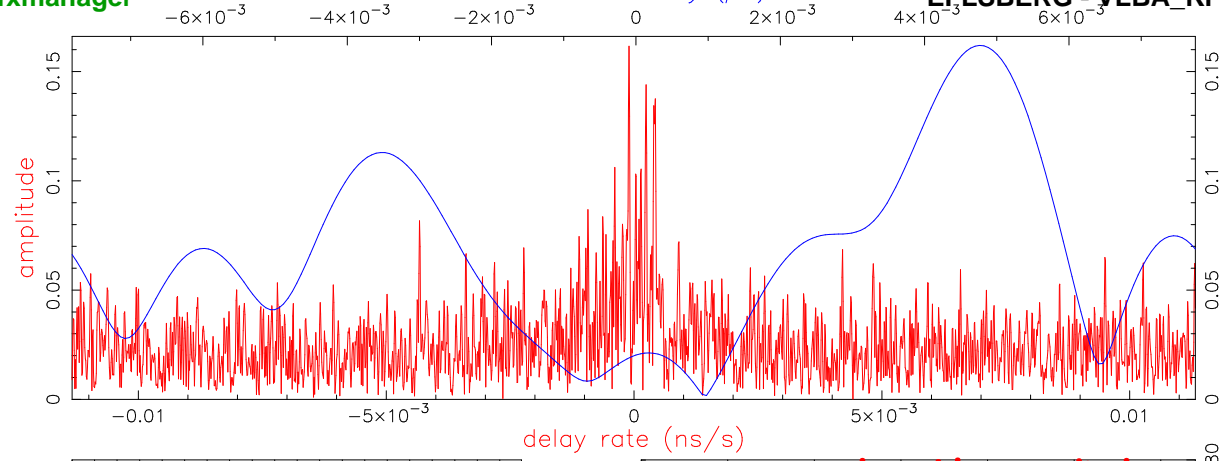
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

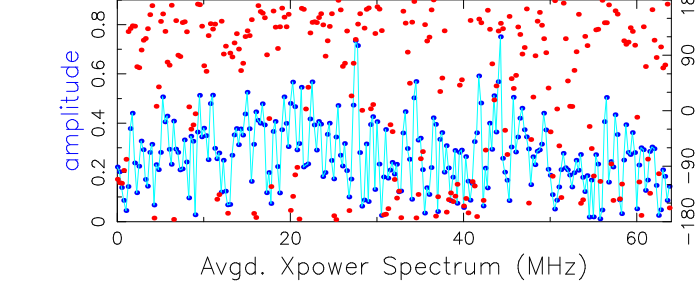
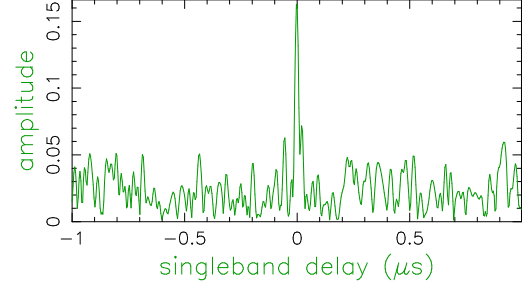
3C84.1X0KDO, No0084, Bk

EFLSBERG - VLBA_KP, fgroup W, pol LL

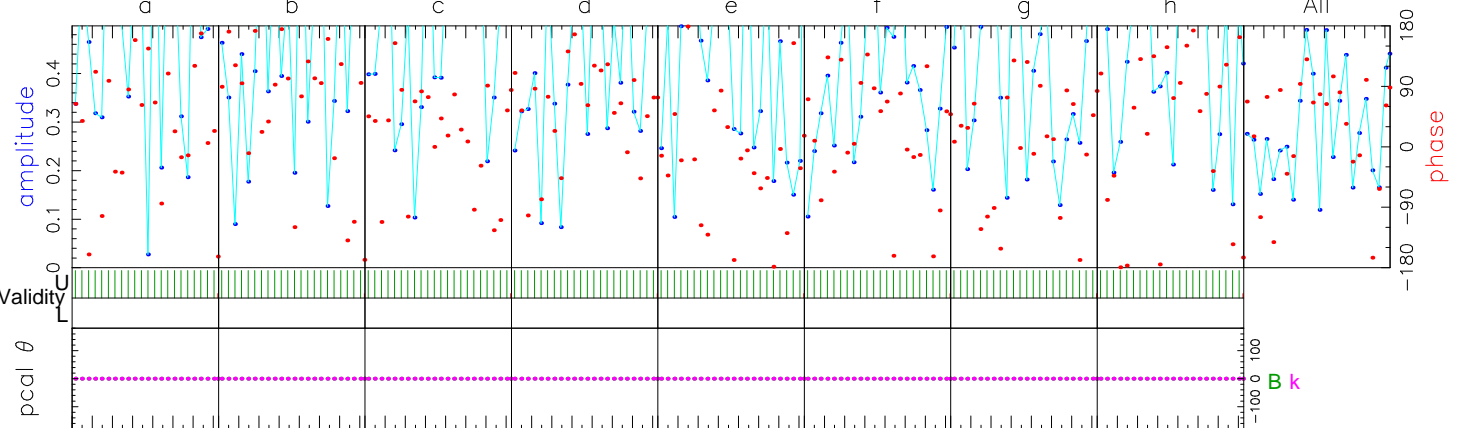
multiband delay (μ s)



Fringe quality 9
 SNR 9.3
 Int time 419.815
 Amp 0.166
 Phase 65.7
 PFD 5.2e-12
 Delays (us)
 SBD -0.002099
 MBD 0.004701
 Fringe rate (Hz)
 -0.008313
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121853
 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

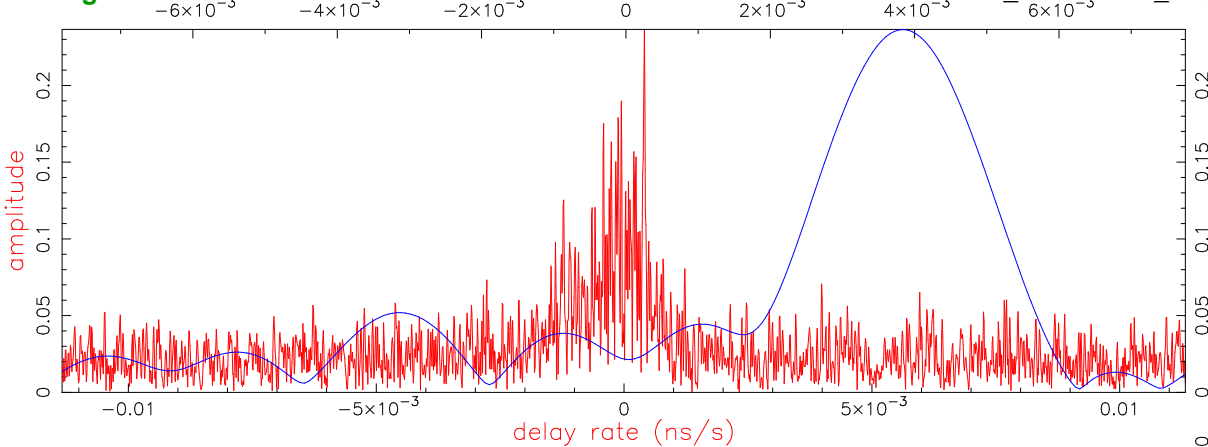


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	0	0	0	0	0	0	0	0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.45884468291E+03		Apriori delay (usec)		5.45883998224E+03		Resid mbdelay (usec)		4.70066E-03	+/- 1.2E-04
Sband delay (usec)	5.45883788374E+03		Apriori clock (usec)		-2.2383999E+01		Resid sbdelay (usec)		-2.09850E-03	+/- 9.3E-04
Phase delay (usec)	5.45883998436E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		2.11956E-06	+/- 4.0E-07
Delay rate (us/s)	-1.48013817183E+00		Apriori rate (us/s)		-1.48013807532E+00		Resid rate (us/s)		-9.65070E-08	+/- 1.6E-09
Total phase (deg)	91.1		Apriori accel (us/s/s)		-1.09793977126E-05		Resid phase (deg)		65.7	+/- 12.3

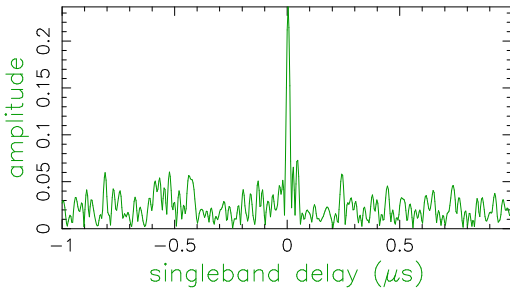
ph/seg (deg) 76.3 29.5 Search (2048X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 96.7 51.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.1 17.4 Inc. seg. avg. 0.249 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.0 30.4 Inc. frq. avg. 0.202 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 B: az 273.3 el 56.5 pa 58.0 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 11307.415 717.089 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/Bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/Bk.W.15.1X0KDO simultaneous interpolator

multiband delay (μ s)

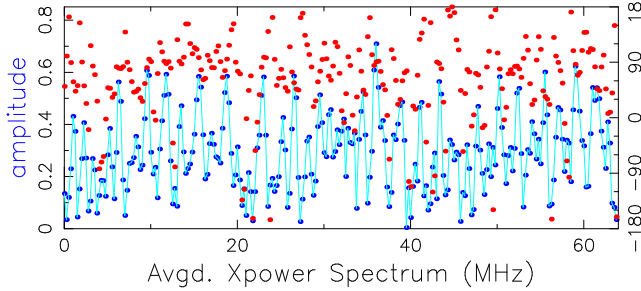
Fringe quality 9



SNR 13.2
Int time 419.827
Amp 0.237
Phase 79.3
PFD 2.7e-31
Delays (us)
SBD 0.004023
MBD 0.003841
Fringe rate (Hz) 0.035047
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

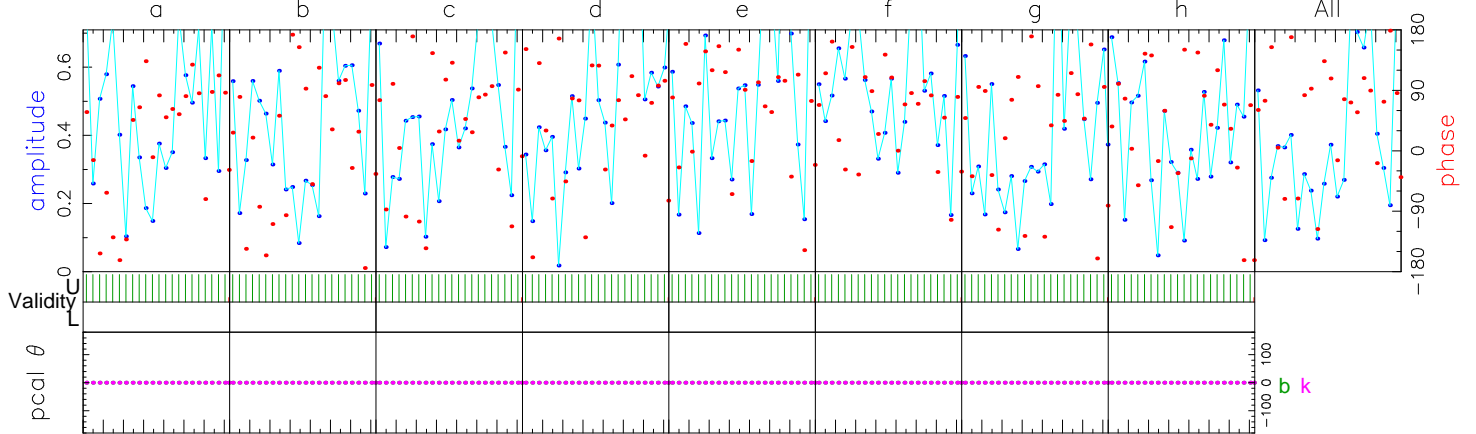


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121856
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
	77.9	60.2	83.0	83.6	92.7	74.1	86.5	62.7	Phase	79.3
	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	258.3	270.0	257.0	257.2	258.6	258.0	257.9	257.7	Sbd box	258.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	6.01493492905E+02	Apriori delay (usec)	6.01489652205E+02	Resid mbdelay (usec)	3.84070E-03	+/-	8.2E-05
Sband delay (usec)	6.01493675455E+02	Apriori clock (usec)	-3.3053703E+00	Resid sbdelay (usec)	4.02325E-03	+/-	6.5E-04
Phase delay (usec)	6.01489654762E+02	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	2.55618E-06	+/-	2.8E-07
Delay rate (us/s)	-1.66856192681E-01	Apriori rate (us/s)	-1.66856599547E-01	Resid rate (us/s)	4.06866E-07	+/-	1.2E-09
Total phase (deg)	310.0	Apriori accel (us/s/s)	1.29070767276E-05	Resid phase (deg)	79.3	+/-	8.7

ph/seg (deg)	76.0	Theor.	20.7	Amplitude	0.237 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	114.6	Search (2048X32)	0.229	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	12.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	25.6	Inc. seg. avg.	0.367	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
		Inc. frq. avg.	0.235	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 65.3 el 36.1 pa -54.2 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 1299.379 2312.246 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/bk.W.27.1X0KDO

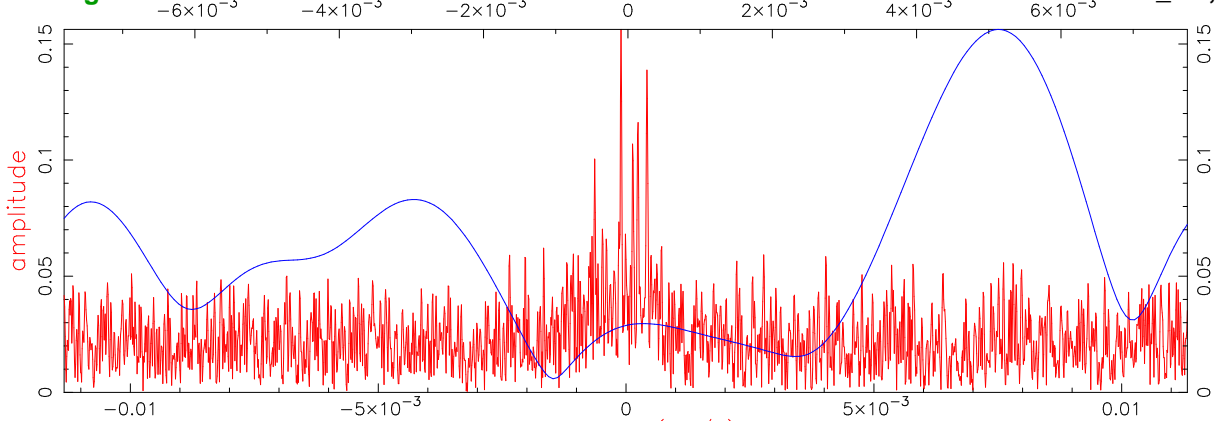
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, Bk

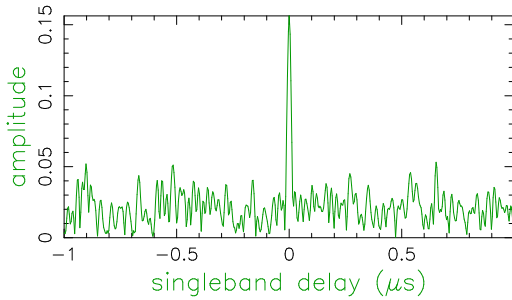
EFLSBERG - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

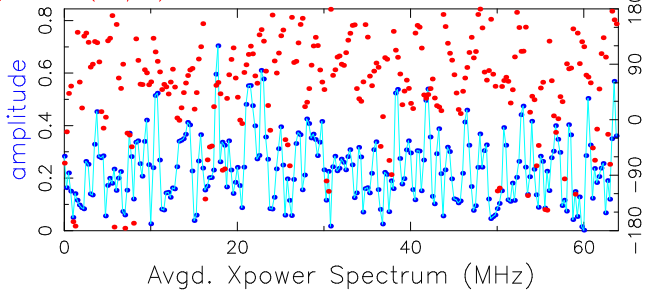


Fringe quality 9

SNR 8.8
Int time 419.815
Amp 0.156
Phase 21.2
PFD 7.6e-10
Delays (us)
SBD -0.000145
MBD 0.005132
Fringe rate (Hz)
-0.008439
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

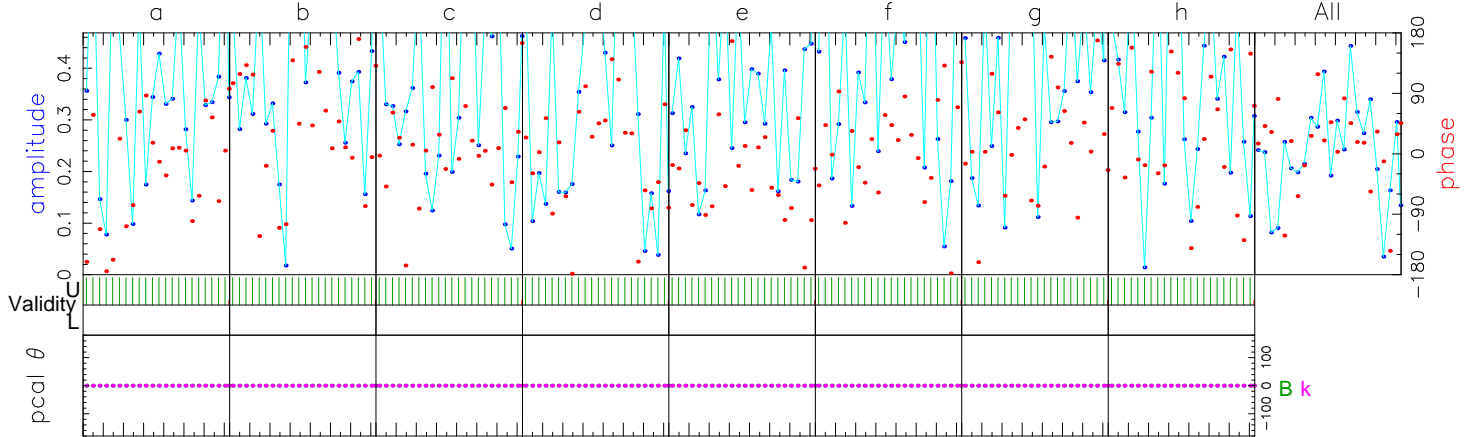


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121857
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		
k	0	0	0	0	0	0	0	0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.45884511456E+03			5.45883998224E+03				5.13232E-03	+/- 1.2E-04
Sband delay (usec)		5.45883983749E+03			-2.2383999E+01				-1.44750E-04	+/- 9.8E-04
Phase delay (usec)		5.45883998293E+03			0.0000000E+00				6.85160E-07	+/- 4.2E-07
Delay rate (us/s)		-1.48013817330E+00			-1.48013807532E+00				-9.79730E-08	+/- 1.7E-09
Total phase (deg)			46.6						21.2	+/- 13.1
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
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
simultaneous interpolator										

B: az 273.3 el 56.5 pa 58.0 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 11307.415 717.089
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/Bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/Bk.W.31.1X0KDO

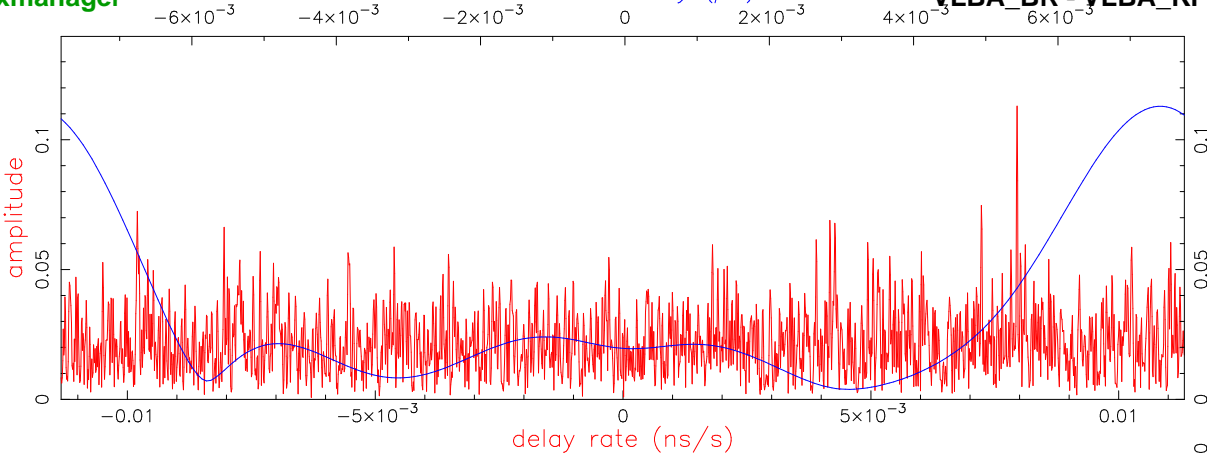
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, bk

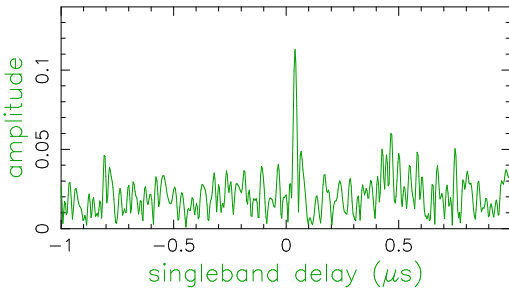
VLBA_BR - VLBA_KP, fgroup W, pol LR

multiband delay (μ s)

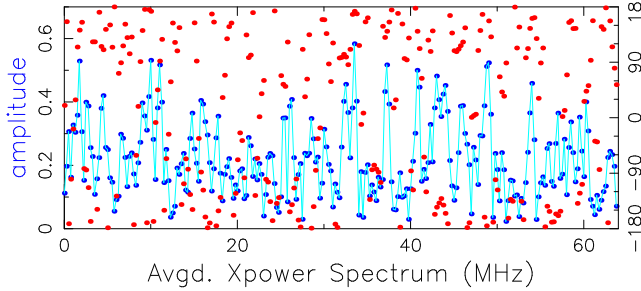


Fringe quality 0

SNR 6.3
 Int time 419.827
 Amp 0.140
 Phase 172.4
 PFD 6.2e-02
 Delays (us)
 SBD 0.039589
 MBD 0.007422
 Fringe rate (Hz)
 0.686002
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

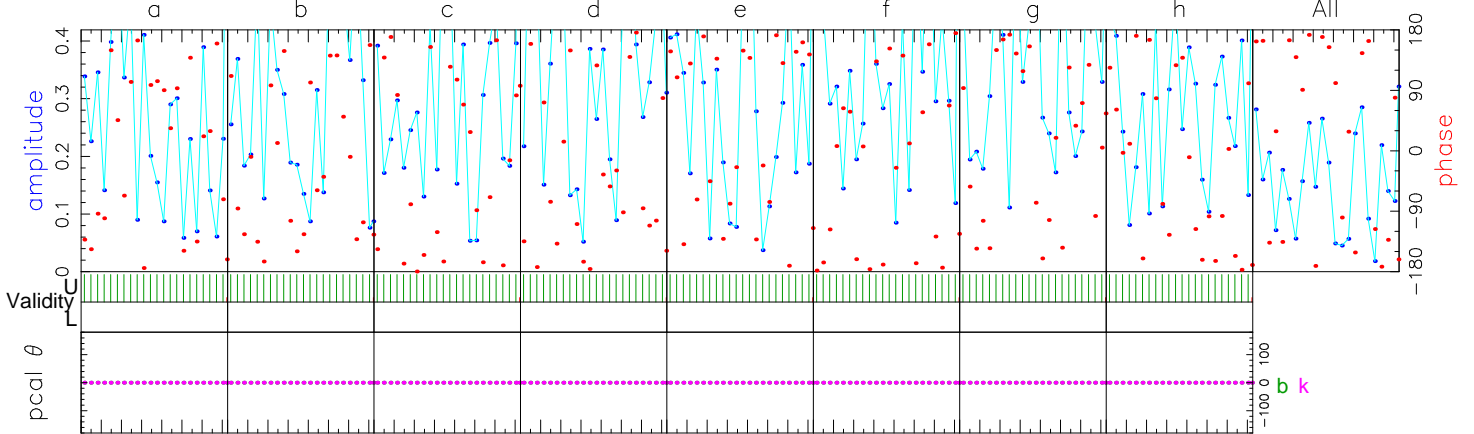


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121900
 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
	125.8	-163.8	164.2	-152.3	167.6	168.1	169.7	168.0	Phase	172.4
	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	174.1	280.2	510.9	217.9	268.6	267.2	345.9	378.8	Sbd box	267.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	6.01528324529E+02	Apriori delay (usec)	6.01489652205E+02	Resid mbdelay (usec)	7.42232E-03	+/-	1.7E-04
Sband delay (usec)	6.01529241455E+02	Apriori clock (usec)	-3.3053703E+00	Resid sbdelay (usec)	3.95892E-02	+/-	1.4E-03
Phase delay (usec)	6.01489657765E+02	Apriori clockrate (us/s)	-9.9999998E-08	Resid phdelay (usec)	5.55955E-06	+/-	5.8E-07
Delay rate (us/s)	-1.66848635739E-01	Apriori rate (us/s)	-1.66856599547E-01	Resid rate (us/s)	7.96381E-06	+/-	2.4E-09
Total phase (deg)	43.2	Apriori accel (us/s/s)	1.29070767276E-05	Resid phase (deg)	172.4	+/-	18.1

ph/seg (deg)	62.8	Theor.	43.4	Amplitude	0.140 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.3		75.7	Search (2048X32)	0.109	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	26.2		25.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.4		44.6	Inc. seg. avg.	0.148	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.133	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

b: az 65.3 el 36.1 pa -54.2 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 1299.379 2312.246 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/bk.W.47.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

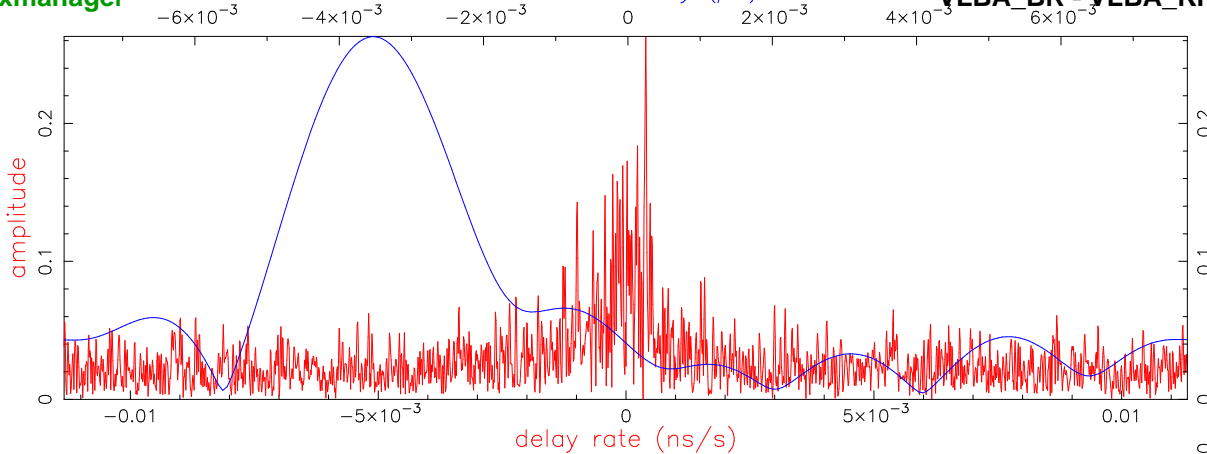
fxmanager

3C84.1X0KDO, No0084, bk

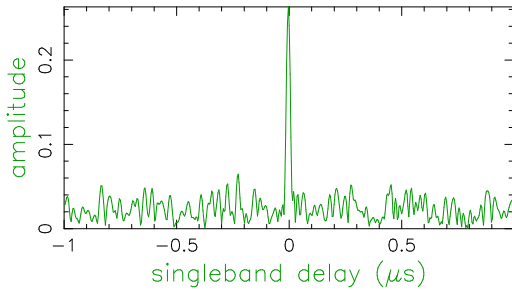
VLBA_BR - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)

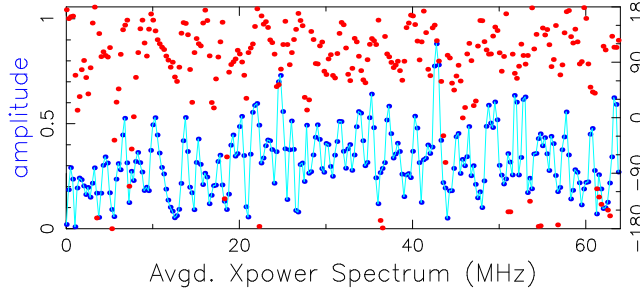
Fringe quality 9



SNR 14.7
 Int time 419.827
 Amp 0.263
 Phase 108.0
 PFD 2.5e-40
 Delays (us)
 SBD -0.004009
 MBD -0.003530
 Fringe rate (Hz)
 0.034848
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

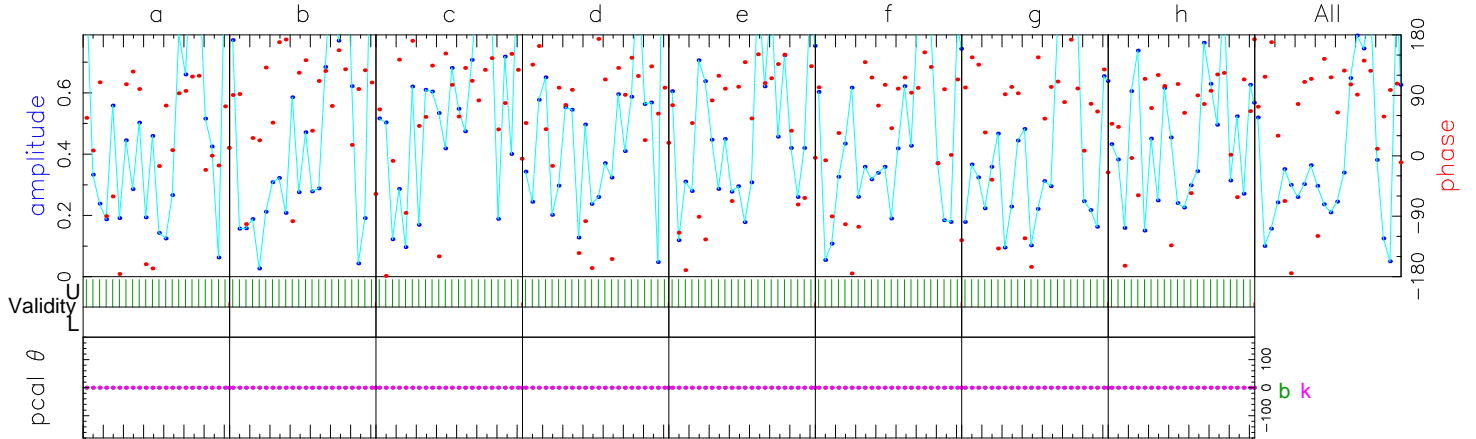


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121852
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

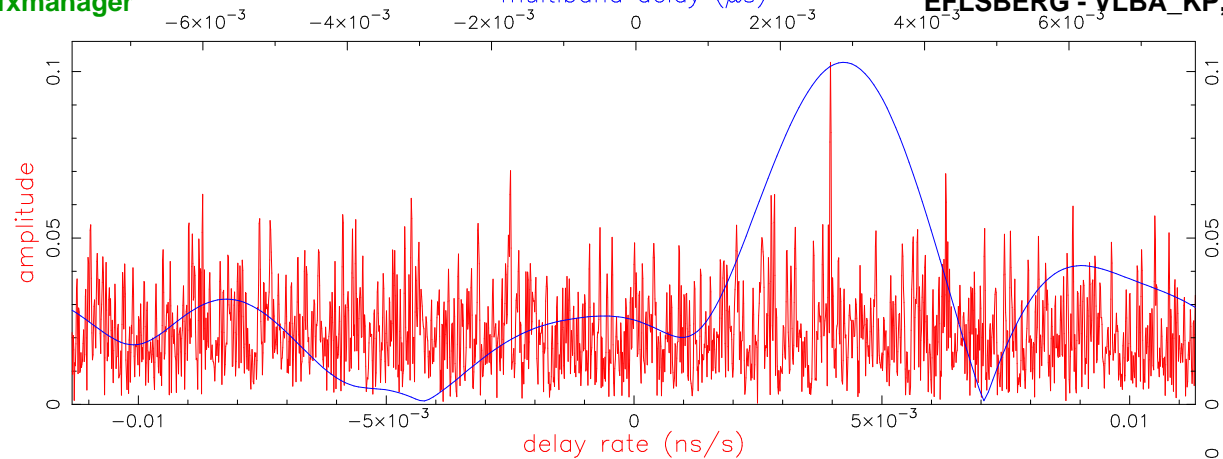
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	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	0	0	0	0	0	0	0	0	APs used		
k	0	0	0	0	0	0	0	0	PC freqs		
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
b:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec)(sbd)	6.01486122061E+02				6.01489652205E+02				Resid mbdelay (usec)	-3.53014E-03	+/- 7.4E-05
Sband delay (usec)	6.01485643455E+02				-3.3053703E+00				Resid sbdelay (usec)	-4.00875E-03	+/- 5.8E-04
Phase delay (usec)	6.01489655687E+02				-9.9999998E-08				Resid phdelay (usec)	3.48200E-06	+/- 2.5E-07
Delay rate (us/s)	-1.66856194993E-01				-1.66856599547E-01				Resid rate (us/s)	4.04553E-07	+/- 1.0E-09
Total phase (deg)		338.7			1.29070767276E-05				Resid phase (deg)	108.0	+/- 7.8
	RMS	Theor.	Amplitude	0.263 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5					
ph/seg (deg)	62.4	18.7	Search (2048X32)	0.244	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000			
amp/seg (%)	108.3	32.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	18.5	11.0	Inc. seg. avg.	0.370	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	22.7	19.2	Inc. frq. avg.	0.267	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00	

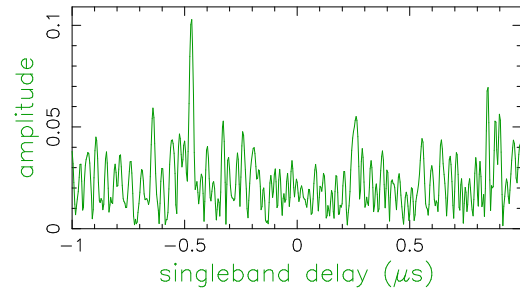
b: az 65.3 el 36.1 pa -54.2 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 1299.379 2312.246 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/bk.W.5.1X0KDO

multiband delay (μ s)

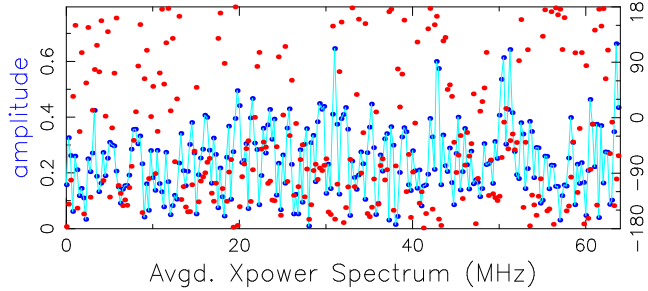


Fringe quality 0

SNR 5.8
 Int time 419.815
 Amp 0.109
 Phase -169.9
 PFD 8.0e-01
 Delays (us)
 SBD -0.470040
 MBD 0.002870
 Fringe rate (Hz)
 0.342295
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

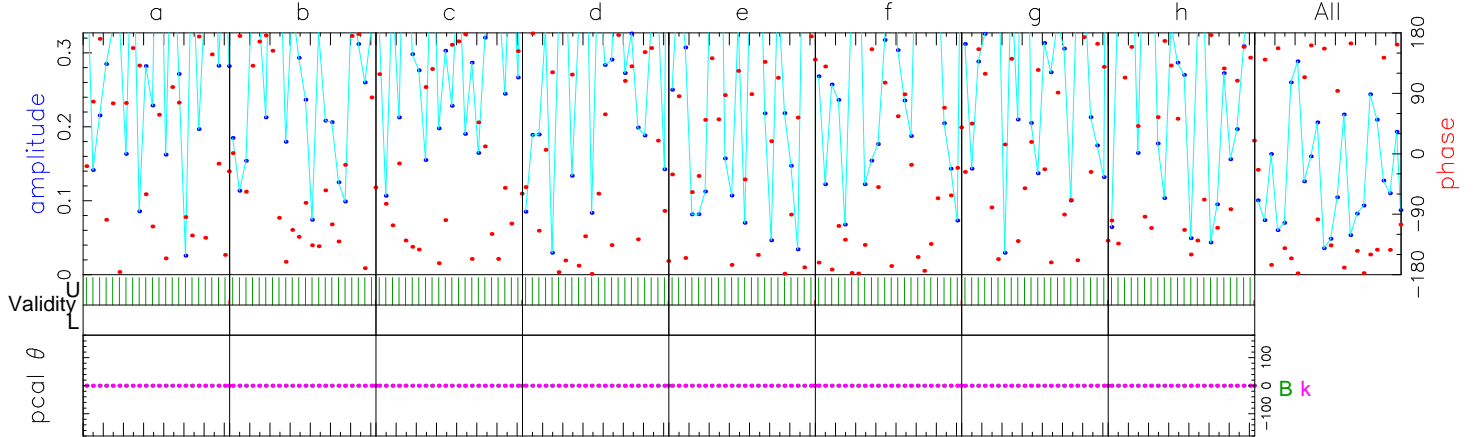


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121902
 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		
k	0	0	0	0	0	0	0	0		
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.45837410195E+03			5.45883998224E+03				2.86970E-03	+/- 1.9E-04
Sband delay (usec)		5.45836994249E+03			-2.23839999E+01				-4.70040E-01	+/- 1.5E-03
Phase delay (usec)		5.45883997676E+03			0.0000000E+00				-5.47985E-06	+/- 6.4E-07
Delay rate (us/s)		-1.48013410162E+00			-1.48013807532E+00				3.97370E-06	+/- 2.6E-09
Total phase (deg)			-144.5						-169.9	+/- 19.7
	RMS	Theor.	Amplitude	0.109 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000 1.000
ph/seg (deg)	50.5	47.3	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				mb window (us)	-0.008 0.008
amp/seg (%)	77.6	82.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled			dr window (ns/s)	-0.011 0.011
ph/frq (deg)	30.4	27.9	Inc. seg. avg.	0.108	Sample rate(MISamp/s): 128				ion window (TEC)	0.00 0.00
amp/frq (%)	31.4	48.7	Inc. frq. avg.	0.108	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite			

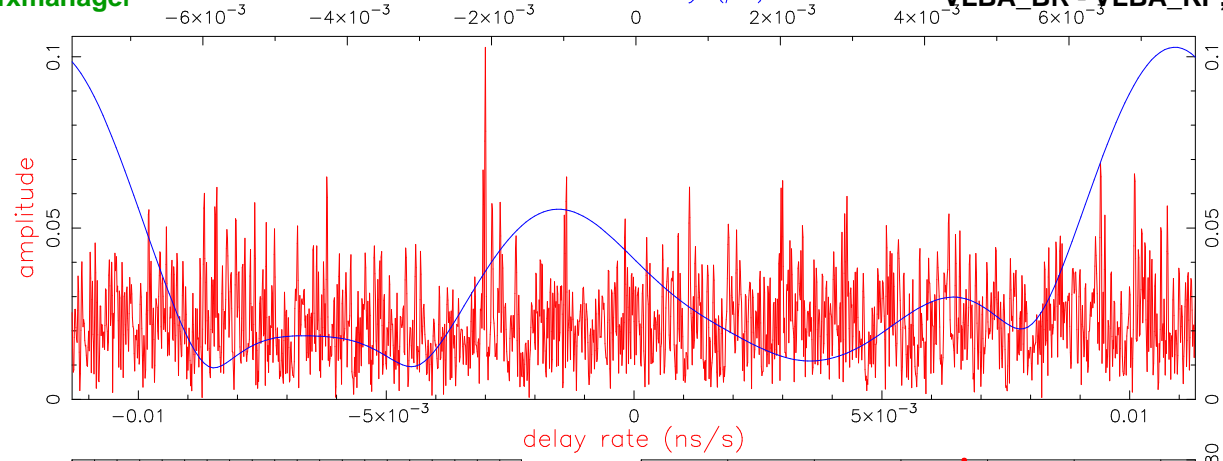
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

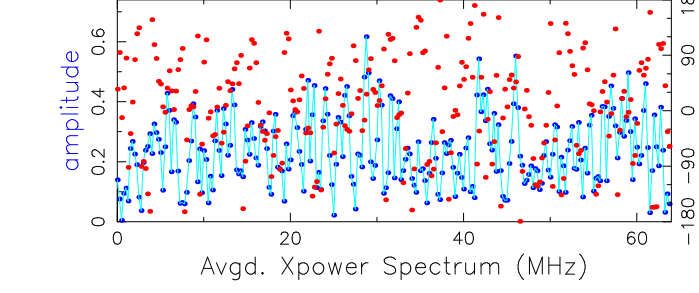
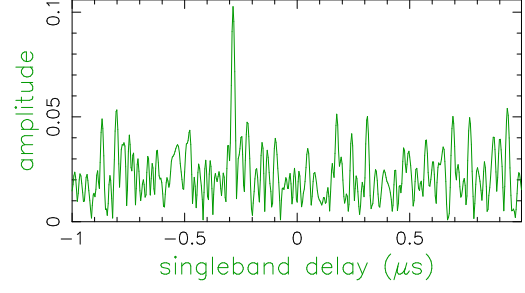
3C84.1X0KDO, No0084, bk

VLBA_BR - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

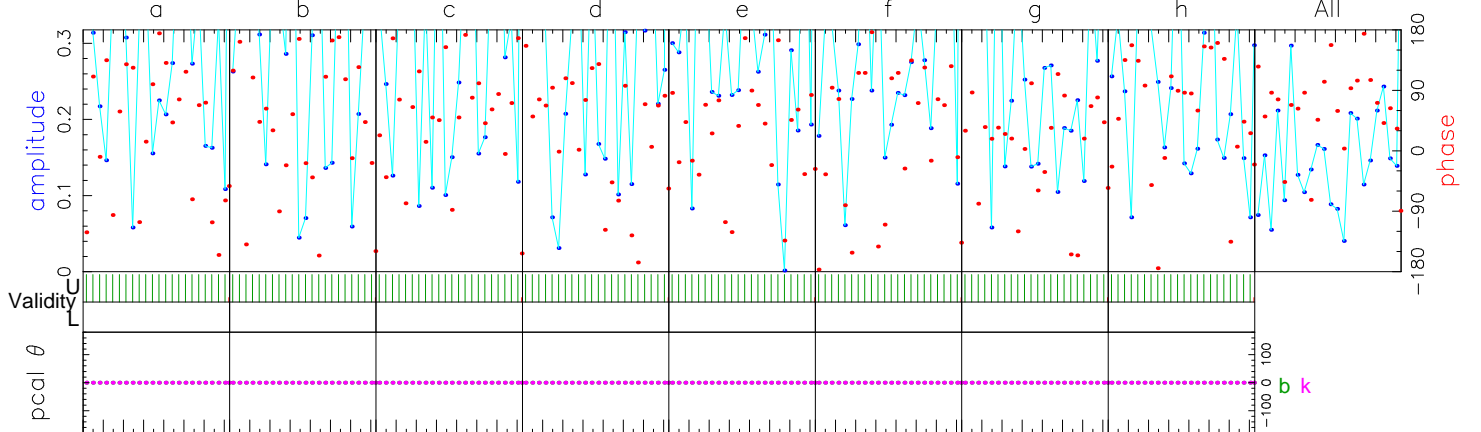


Fringe quality 0
 SNR 5.8
 Int time 419.827
 Amp 0.106
 Phase 72.3
 PFD 8.7e-01
 Delays (us)
 SBD -0.284621
 MBD -0.008122
 Fringe rate (Hz)
 -0.258615
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121904
 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		
b	0	0	0	0	0	0	0	0	Ampl.	0.1
k	0	0	0	0	0	0	0	0	Sbd box	184.1
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
b:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	6.01200280455E+02					6.01489652205E+02			Resid mbdelay (usec)	-8.12175E-03 +/- 1.9E-04
Sband delay (usec)	6.01205030955E+02					-3.3053703E+00			Resid sbdelay (usec)	-2.84621E-01 +/- 1.5E-03
Phase delay (usec)	6.01489654538E+02					-9.9999998E-08			Resid phdelay (usec)	2.33249E-06 +/- 6.4E-07
Delay rate (us/s)	-1.66859601806E-01					-1.66856599547E-01			Resid rate (us/s)	-3.00226E-06 +/- 2.6E-09
Total phase (deg)		303.1				1.29070767276E-05			Resid phase (deg)	72.3 +/- 19.9
	RMS	Theor.	Amplitude	0.106 +/- 0.018					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.2	47.7	Search (2048X32)	0.100					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	79.7	83.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	36.0	28.1	Inc. seg. avg.	0.113					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.6	49.1	Inc. frq. avg.	0.110					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 65.3 el 36.1 pa -54.2 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 1299.379 2312.246 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/bk.W.66.1X0KDO

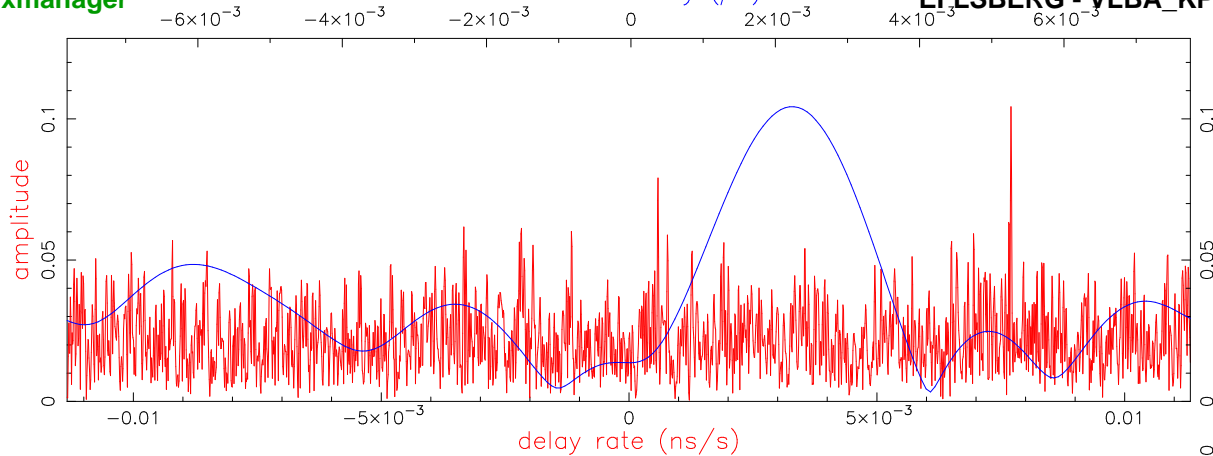
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, Bk

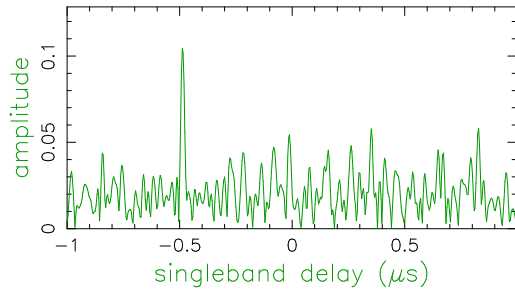
EFLSBERG - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

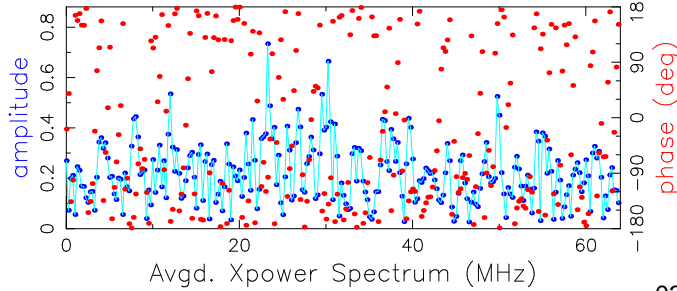


Fringe quality 0

SNR 5.9
 Int time 419.815
 Amp 0.128
 Phase -35.2
 PFD 6.0e-01
 Delays (us)
 SBD -0.486936
 MBD 0.002254
 Fringe rate (Hz)
 0.664697
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

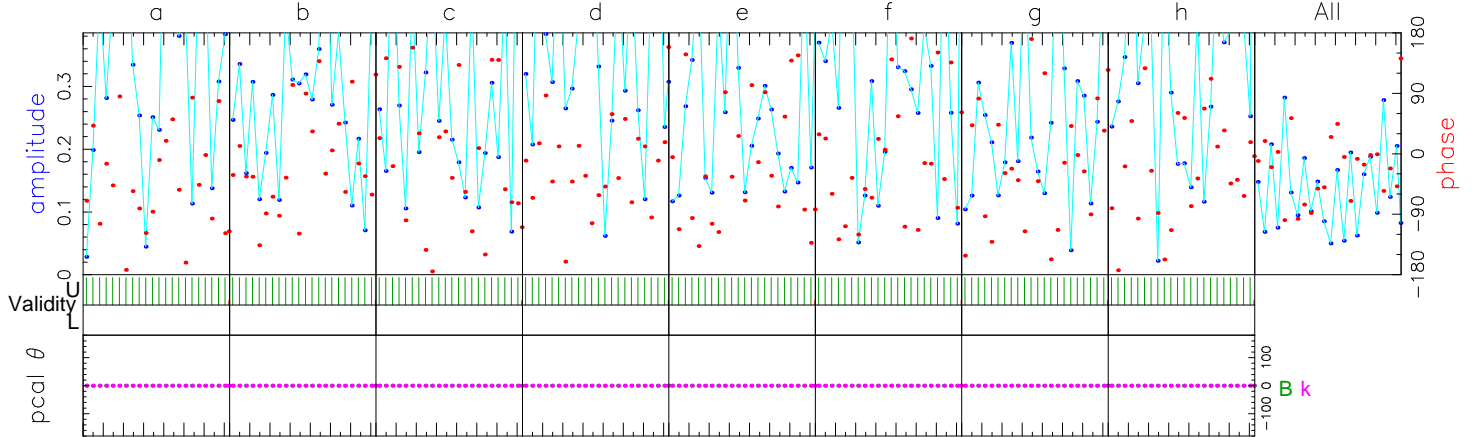


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121905
 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
	-32.8	-19.1	-89.2	-21.8	-75.3	-48.5	-45.1	-18.9	Phase	-35.2
	0.1	0.2	0.1	0.3	0.1	0.1	0.1	0.2	Ampl.	0.1
	41.2	251.5	303.5	131.5	403.7	254.0	299.0	206.9	Sbd box	132.3
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	
k	0	0	0	0	0	0	0	0	PC freqs	
B:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.45835786114E+03		Apriori delay (usec)		5.45883998224E+03		Resid mbdelay (usec)		2.25389E-03	+/- 1.8E-04
Sband delay (usec)	5.45835304599E+03		Apriori clock (usec)		-2.2383999E+01		Resid sbdelay (usec)		-4.86936E-01	+/- 1.5E-03
Phase delay (usec)	5.45883998111E+03		Apriori clockrate (us/s)		0.000000E+00		Resid phdelay (usec)		-1.13594E-06	+/- 6.3E-07
Delay rate (us/s)	-1.48013035886E+00		Apriori rate (us/s)		-1.48013807532E+00		Resid rate (us/s)		7.71647E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.09793977126E-05		Resid phase (deg)		-35.2	+/- 19.4

	RMS	Theor.	Amplitude	0.128 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	46.1	46.5	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.2	81.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	30.3	27.5	Inc. seg. avg.	0.129	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	47.9	47.9	Inc. frq. avg.	0.122	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

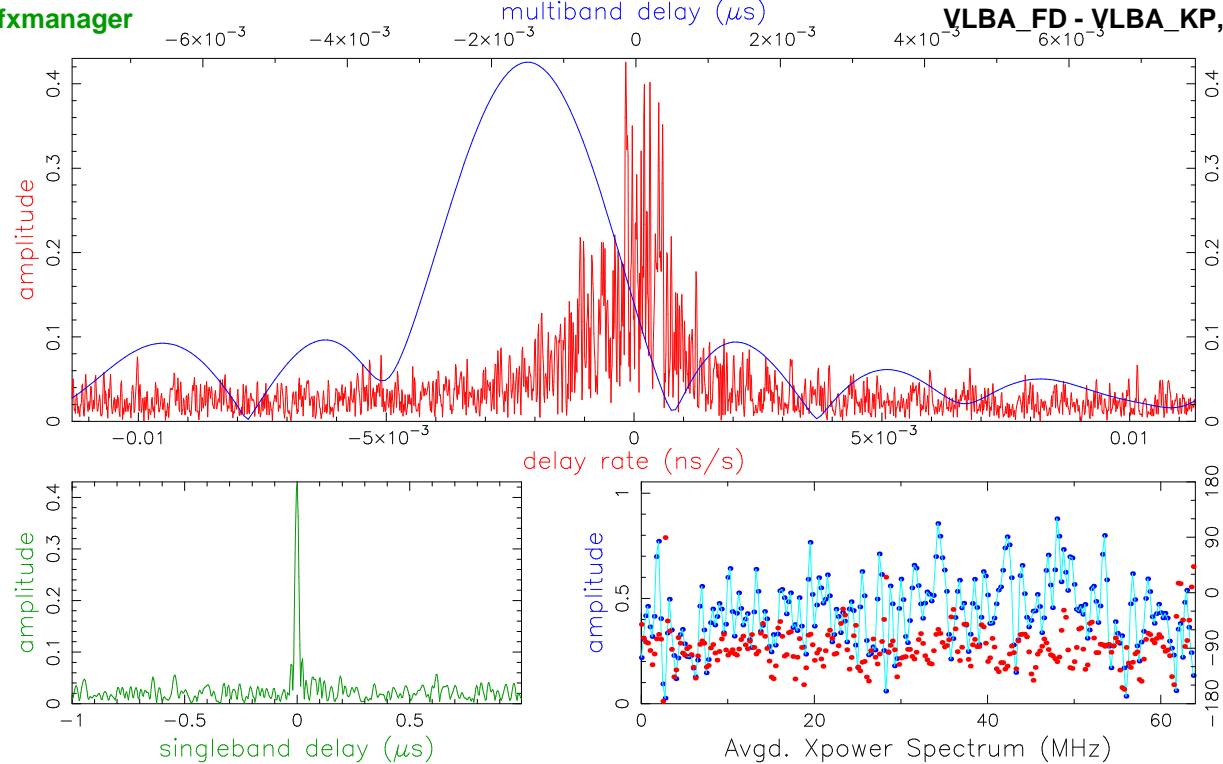
B: az 273.3 el 56.5 pa 58.0 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 11307.415 717.089 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/Bk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/Bk.W.77.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, fk

VLBA_FD - VLBA_KP, fgroup W, pol RR

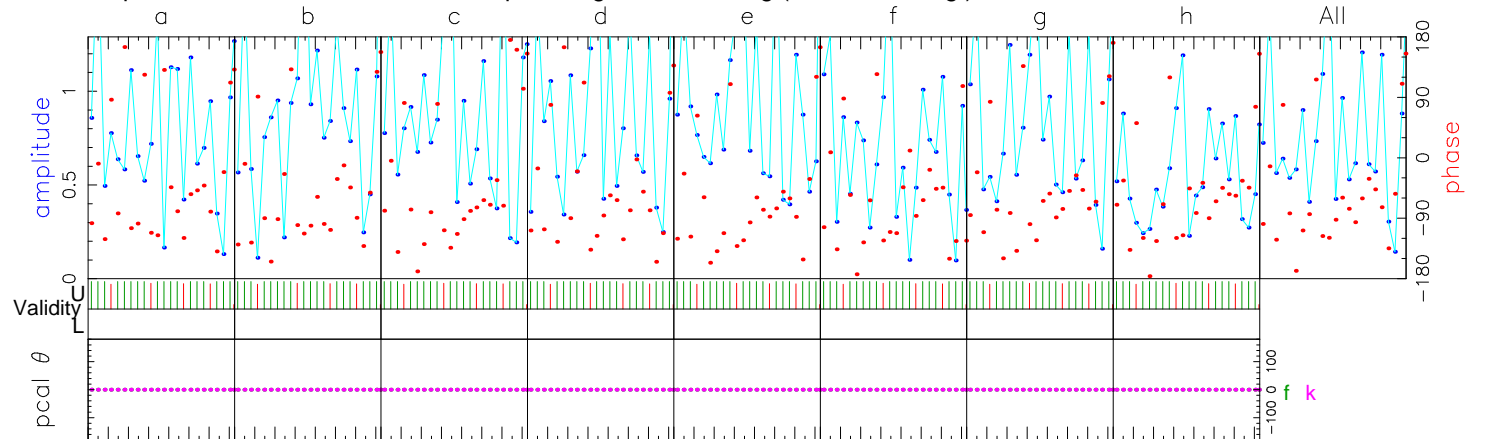


Fringe quality 7

SNR 23.9
 Int time 413.633
 Amp 0.430
 Phase -87.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.001345
 MBD -0.001532
 Fringe rate (Hz)
 -0.014379
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121913
 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
	-80.9	-87.6	-93.1	-87.4	-99.1	-85.5	-81.6	-76.6	Phase	-87.2
	0.4	0.5	0.4	0.4	0.5	0.3	0.5	0.3	Ampl.	0.4
	256.9	256.5	257.1	256.8	256.7	256.7	256.4	256.0	Sbd box	256.7
U/L	813/0	813/0	812/0	812/0	812/0	812/0	812/0	812/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.47297977705E+03		Apriori delay (usec)		1.47298130876E+03		Resid mbdelay (usec)		-1.53171E-03	+/- 4.5E-05
Sband delay (usec)	1.47297996376E+03		Apriori clock (usec)		9.9400253E+00		Resid sbdelay (usec)		-1.34500E-03	+/- 3.6E-04
Phase delay (usec)	1.47298130594E+03		Apriori clockrate (us/s)		5.9999999E-08		Resid phdelay (usec)		-2.81189E-06	+/- 1.5E-07
Delay rate (us/s)	-4.12272524314E-02		Apriori rate (us/s)		-4.12270855016E-02		Resid rate (us/s)		-1.66930E-07	+/- 6.4E-10
Total phase (deg)	249.8		Apriori accel (us/s/s)		-9.25558703927E-06		Resid phase (deg)		-87.2	+/- 4.8

ph/seg (deg) 68.9 11.4 Search (2048X32) 0.423 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 120.0 20.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.8 6.8 Inc. seg. avg. 0.756 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 17.8 11.8 Inc. frq. avg. 0.426 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 59.1 el 38.8 pa -80.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 298.107 -779.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/fk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/fk.W.105.1X0KDO

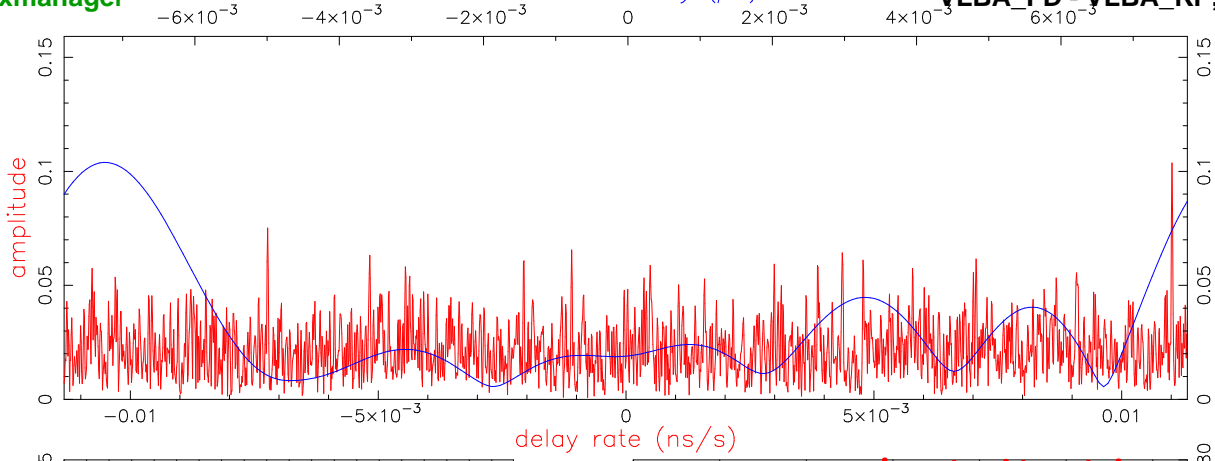
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

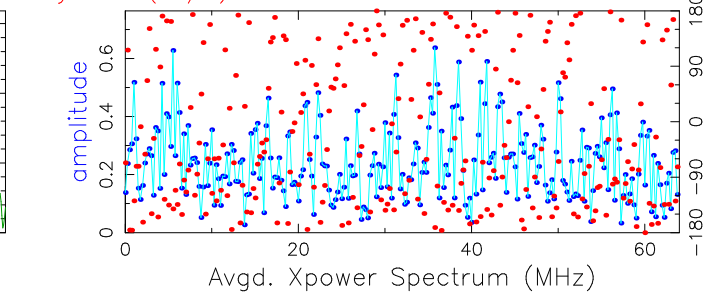
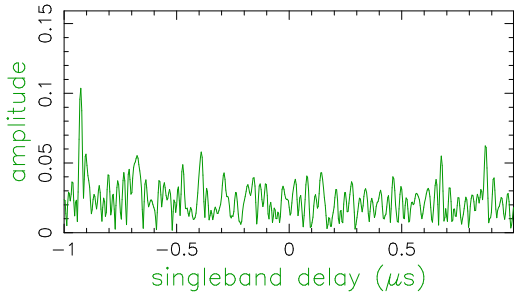
3C84.1X0KDO, No0084, fk

VLBA_FD - VLBA_KP, fgroup W, pol LR

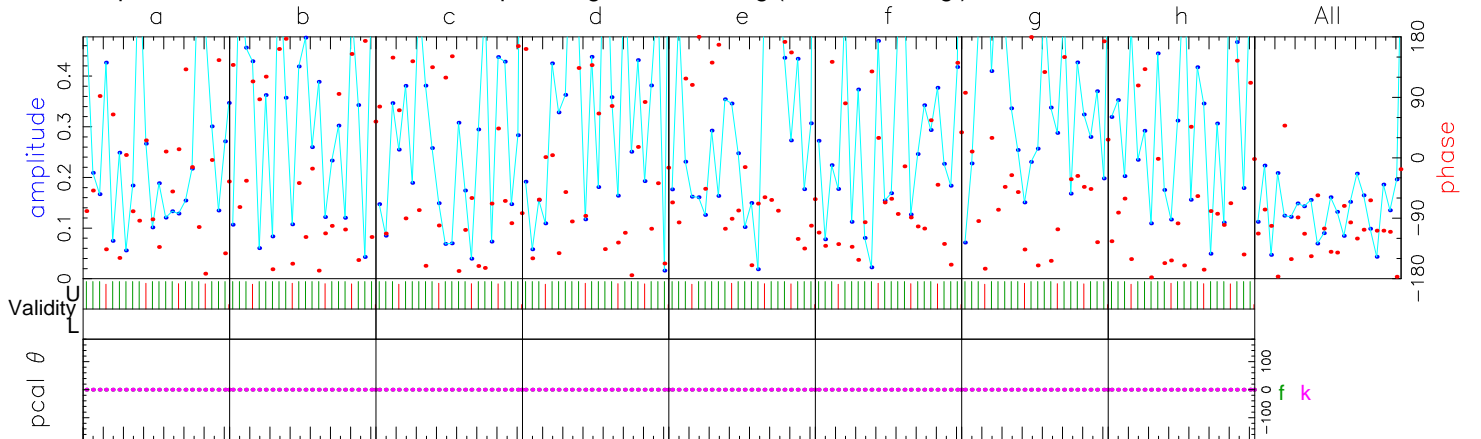
multiband delay (μ s)



Fringe quality 0
 SNR 5.8
 Int time 413.633
 Amp 0.159
 Phase -114.3
 PFD 8.3e-01
 Delays (us)
 SBD -0.926478
 MBD 0.008301
 Fringe rate (Hz) 0.950273
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build 2021:303:074338
 2021:303:121917
 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	812/0	812/0	812/0	812/0	812/0	812/0	812/0	812/0		
f	0	0	0	0	0	0	0	0		
k	0	0	0	0	0	0	0	0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.47205210954E+03	Apriori delay (usec)	1.47298130876E+03	Resid mbdelay (usec)	8.30078E-03	+/-	1.9E-04
Sband delay (usec)	1.47205483051E+03	Apriori clock (usec)	9.9400253E+00	Resid sbdelay (usec)	-9.26478E-01	+/-	1.5E-03
Phase delay (usec)	1.47298130507E+03	Apriori clockrate (us/s)	5.9999999E-08	Resid phdelay (usec)	-3.68604E-06	+/-	6.4E-07
Delay rate (us/s)	-4.12160537795E-02	Apriori rate (us/s)	-4.12270855016E-02	Resid rate (us/s)	1.10317E-05	+/-	2.7E-09
Total phase (deg)	222.7	Apriori accel (us/s/s)	-9.25558703927E-06	Resid phase (deg)	-114.3	+/-	19.8

ph/seg (deg)	47.6	Theor.	47.2	Amplitude	0.159 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.5		82.5	Search (2048X32)	0.098	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.0		28.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.0		48.9	Inc. seg. avg.	0.160	Sample rate(MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.153	Data rate(Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 59.1 el 38.8 pa -80.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 298.107 -779.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/fk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/fk.W.125.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

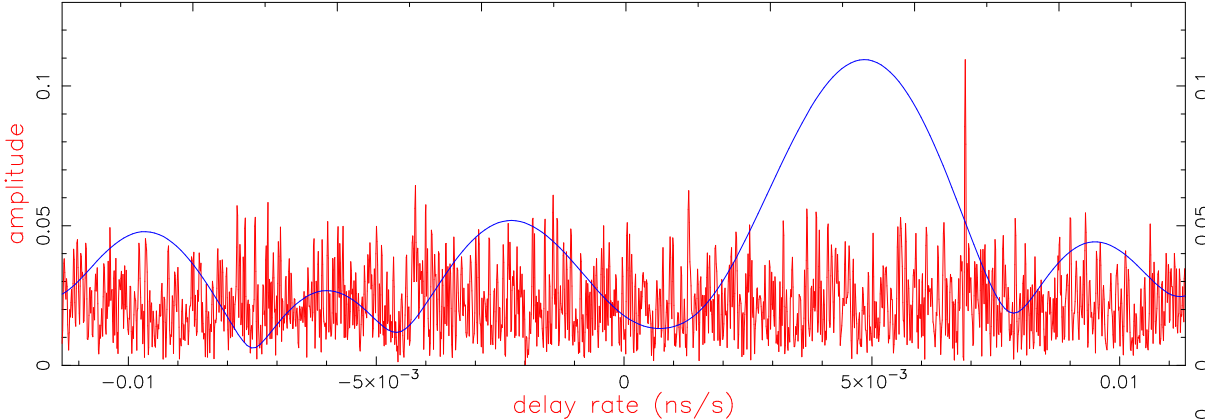
3C84.1X0KDO, No0084, fk

VLBA_FD - VLBA_KP, fgroup W, pol RL

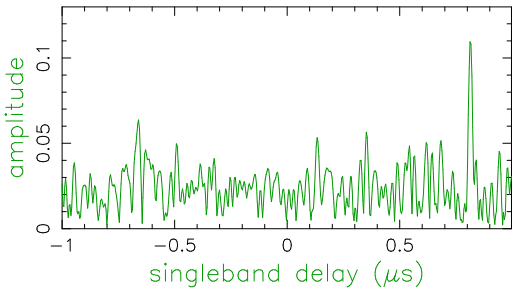
multiband delay (μ s)

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

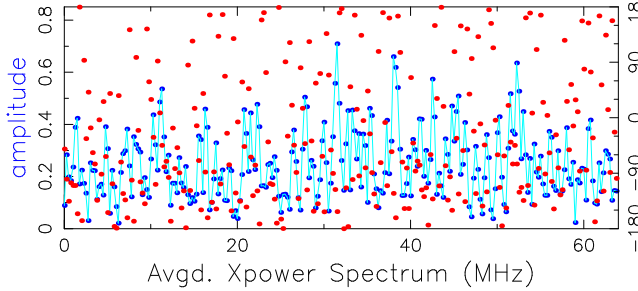
Fringe quality 0



SNR 6.2
 Int time 413.633
 Amp 0.130
 Phase -130.2
 PFD 1.6e-01
 Delays (us)
 SBD 0.814153
 MBD 0.003319
 Fringe rate (Hz)
 0.594340
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

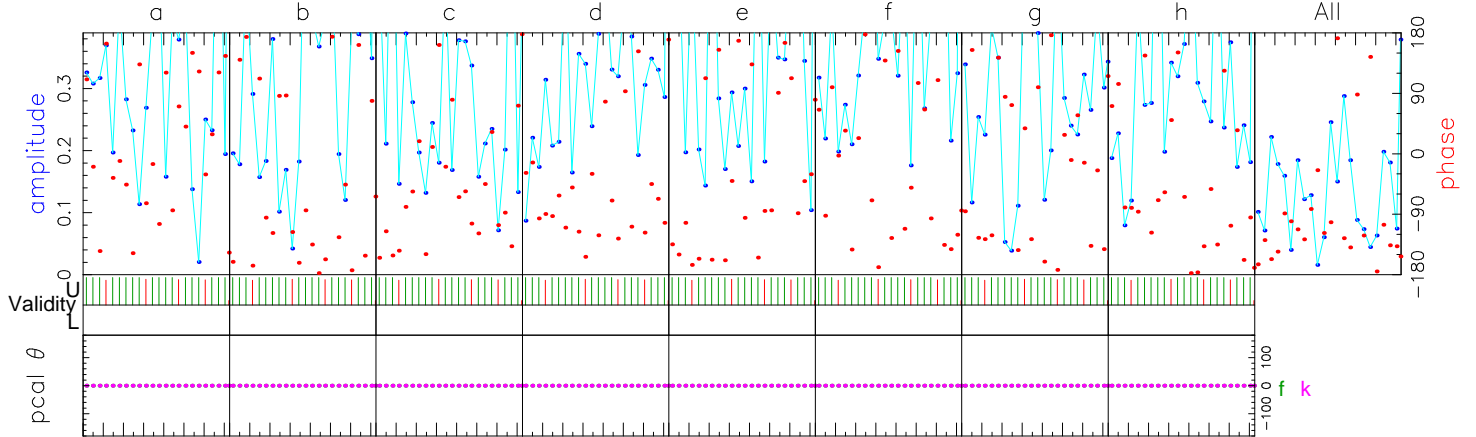


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121921
 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
	-4.7	-160.5	-97.4	-96.4	-145.8	-152.5	-134.1	-125.6	Phase	-130.2
	0.0	0.2	0.2	0.2	0.2	0.1	0.1	0.2	Ampl.	0.1
	372.1	465.4	478.6	465.8	464.0	279.0	303.9	368.5	Sbd box	465.4
U/L	813/0	813/0	812/0	812/0	812/0	812/0	812/0	812/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.47379712784E+03	Apriori delay (usec)	1.47298130876E+03	Resid mbdelay (usec)	3.31909E-03	+/-	1.8E-04
Sband delay (usec)	1.47379546176E+03	Apriori clock (usec)	9.9400253E+00	Resid sbdelay (usec)	8.14153E-01	+/-	1.4E-03
Phase delay (usec)	1.47298130456E+03	Apriori clockrate (us/s)	5.9999999E-08	Resid phdelay (usec)	-4.19825E-06	+/-	6.0E-07
Delay rate (us/s)	-4.12201857978E-02	Apriori rate (us/s)	-4.12270855016E-02	Resid rate (us/s)	6.89970E-06	+/-	2.5E-09
Total phase (deg)	206.8	Apriori accel (us/s/s)	-9.25558703927E-06	Resid phase (deg)	-130.2	+/-	18.6

ph/seg (deg)	RMS 48.9	Theor. 44.3	Amplitude Search (2048X32)	0.130 +/- 0.021	0.107	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	70.0	77.3	Interp.	0.000	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	57.3	26.2	Inc. seg. avg.	0.119	0.119	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	54.8	45.8	Inc. frq. avg.	0.132	0.132	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 59.1 el 38.8 pa -80.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 298.107 -779.159 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/fk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/fk.W.145.1X0KDO

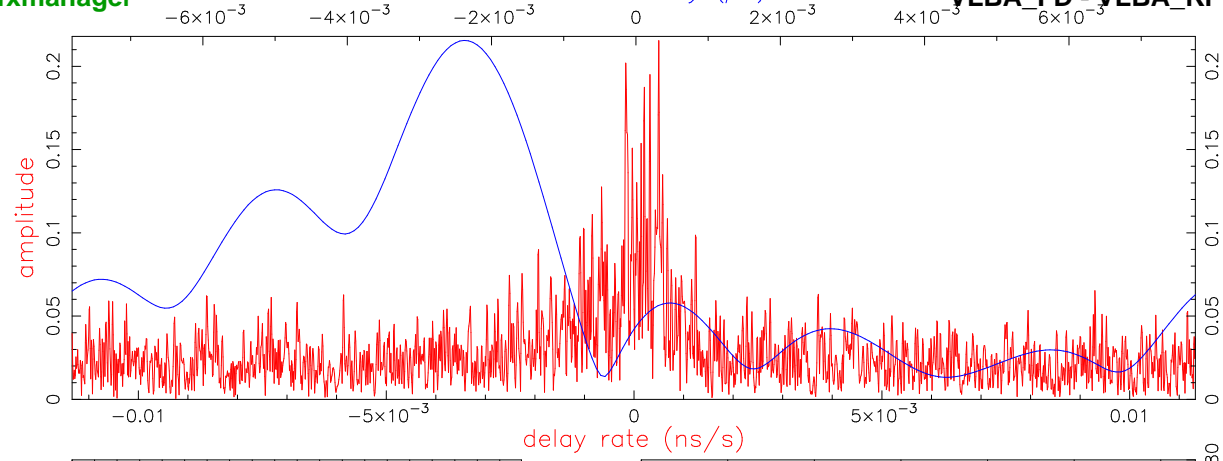
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, fk

VLBA_FD - VLBA_KP, fgroup W, pol LL

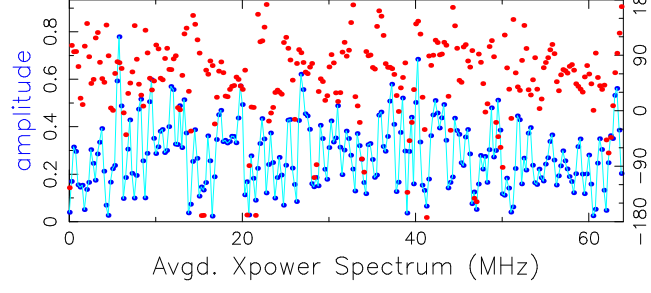
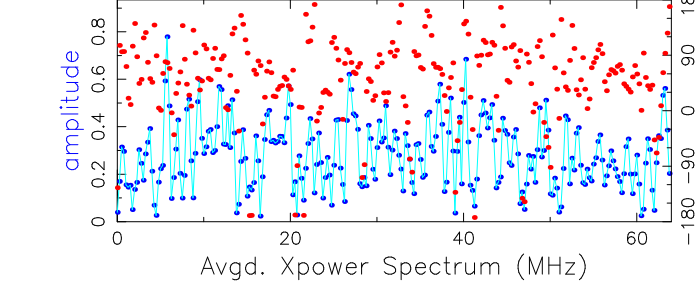
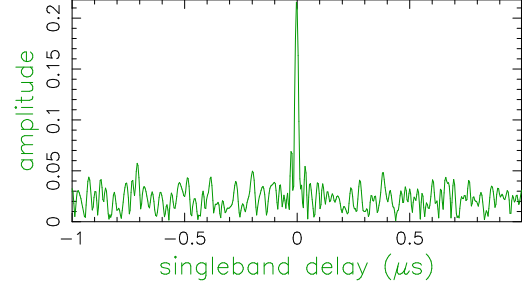
multiband delay (μ s)



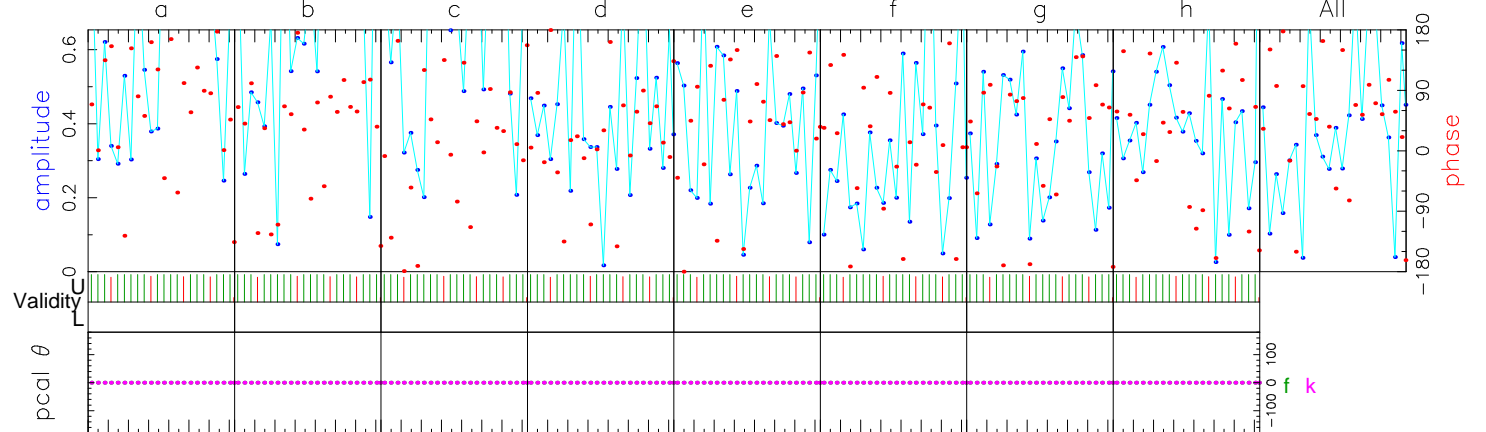
Fringe quality 9

SNR 12.1
 Int time 413.633
 Amp 0.218
 Phase 63.2
 PFD 4.7e-25
 Delays (us)
 SBD -0.002615
 MBD -0.002329
 Fringe rate (Hz) 0.042823
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build 2021:303:074338
 2021:303:121909
 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	812/0	812/0	812/0	812/0	812/0	812/0	812/0	812/0		
f	0	0	0	0	0	0	0	0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		1.47297897984E+03			Apriori delay (usec)	1.47298130876E+03			Resid mbdelay (usec)	-2.32891E-03 +/- 9.0E-05
Sband delay (usec)		1.47297869376E+03			Apriori clock (usec)	9.9400253E+00			Resid sbdelay (usec)	-2.61500E-03 +/- 7.1E-04
Phase delay (usec)		1.47298131079E+03			Apriori clockrate (us/s)	5.9999999E-08			Resid phdelay (usec)	2.03882E-06 +/- 3.1E-07
Delay rate (us/s)		-4.12265883641E-02			Apriori rate (us/s)	-4.12270855016E-02			Resid rate (us/s)	4.97137E-07 +/- 1.3E-09
Total phase (deg)			40.3		Apriori accel (us/s/s)	-9.25558703927E-06			Resid phase (deg)	63.2 +/- 9.5

ph/seg (deg) 70.7 22.6 Search (2048X32) 0.212 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 125.0 39.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.2 13.4 Inc. seg. avg. 0.361 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.2 23.4 Inc. frq. avg. 0.224 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 59.1 el 38.8 pa -80.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 298.107 -779.159 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/fk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/fk.W.87.1X0KDO

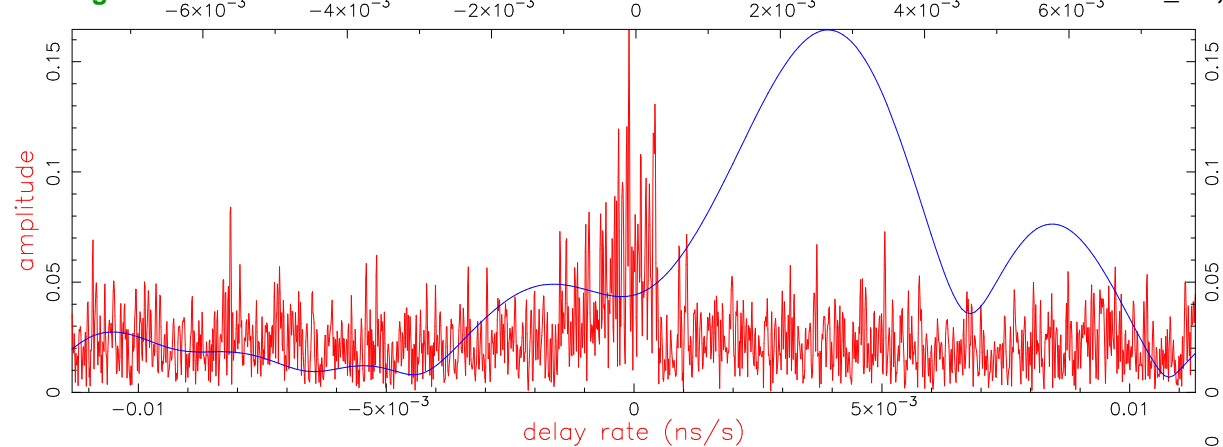
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, gk

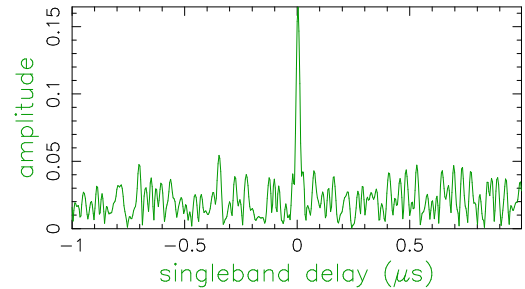
GLT - VLBA_KP, fgroup W, pol RR

multiband delay (μ s)

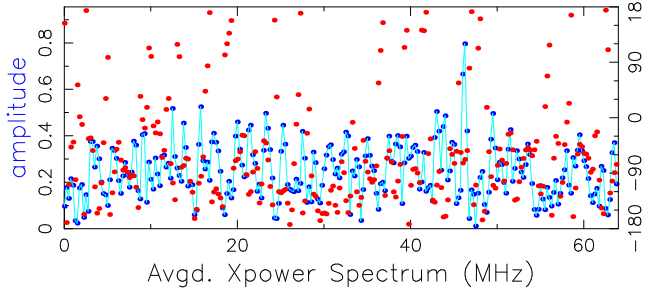


Fringe quality 9

SNR 9.2
 Int time 419.823
 Amp 0.165
 Phase -85.1
 PFD 1.1e-11
 Delays (us)
 SBD 0.003372
 MBD 0.002628
 Fringe rate (Hz) -0.008209
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

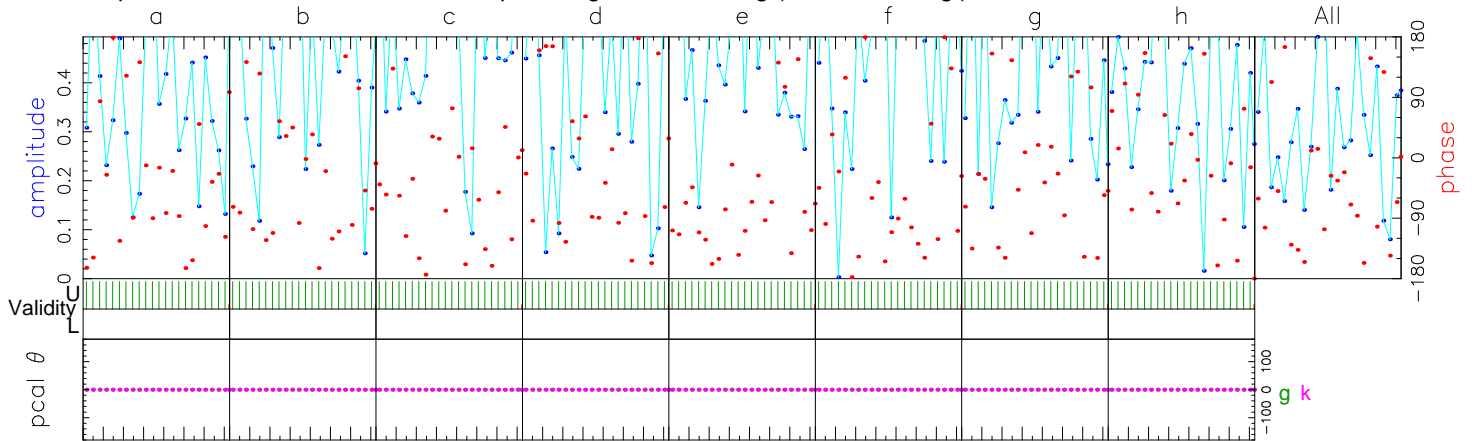


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121915
 2021:252:122852
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

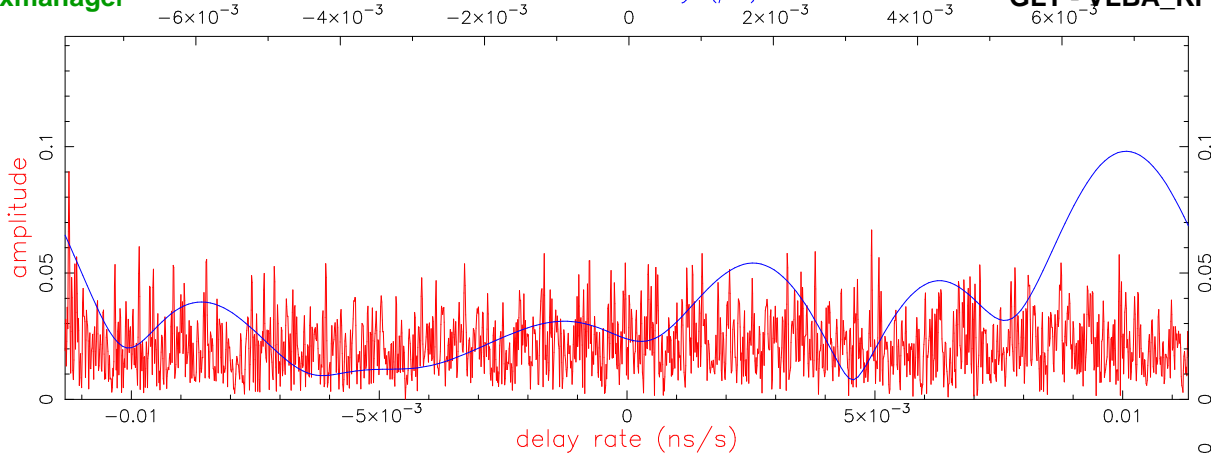
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-96.3	-82.9	-40.5	-84.7	-102.7	-114.5	-77.4	-12.6	Phase	-85.1
	0.1	0.2	0.2	0.2	0.3	0.3	0.2	0.1	Ampl.	0.2
	260.0	259.3	258.1	257.0	257.8	257.1	473.7	340.8	Sbd box	257.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.92210621703E+03		Apriori delay (usec)		4.92210358902E+03		Resid mbdelay (usec)		2.62801E-03	+/- 1.2E-04
Sband delay (usec)	4.92210696102E+03		Apriori clock (usec)		1.1742783E-01		Resid sbdelay (usec)		3.37200E-03	+/- 9.3E-04
Phase delay (usec)	4.92210358628E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		-2.74514E-06	+/- 4.0E-07
Delay rate (us/s)	-8.02793337943E-01		Apriori rate (us/s)		-8.02793242644E-01		Resid rate (us/s)		-9.52989E-08	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		7.07054101894E-06		Resid phase (deg)		-85.1	+/- 12.4

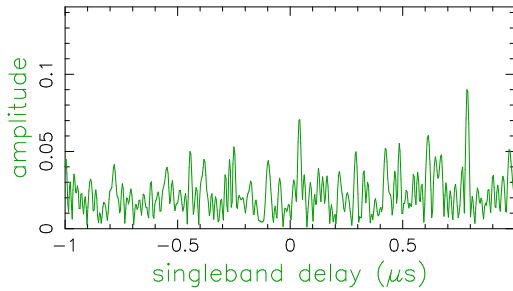
ph/seg (deg) 76.0 29.8 Amplitude 0.165 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 124.1 52.0 Search (2048X32) 0.155 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.9 17.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.7 30.7 Inc. seg. avg. 0.275 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 g: az 144.1 el 53.0 pa -10.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 6153.778 3366.669 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/gk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/gk.W.117.1X0KDO simultaneous interpolator

multiband delay (μ s)

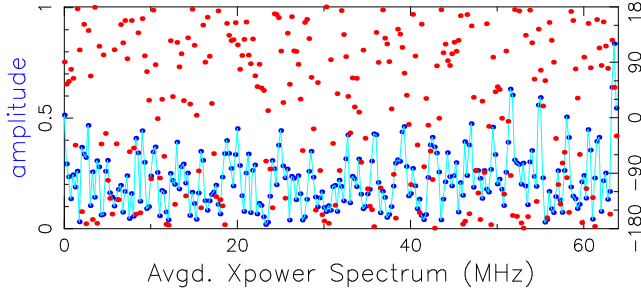


Fringe quality 0

SNR 5.2
 Int time 419.823
 Amp 0.144
 Phase -62.2
 PFD 1.0e+00
 Delays (us)
 SBD 0.786807
 MBD -0.008301
 Fringe rate (Hz)
 -0.971089
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

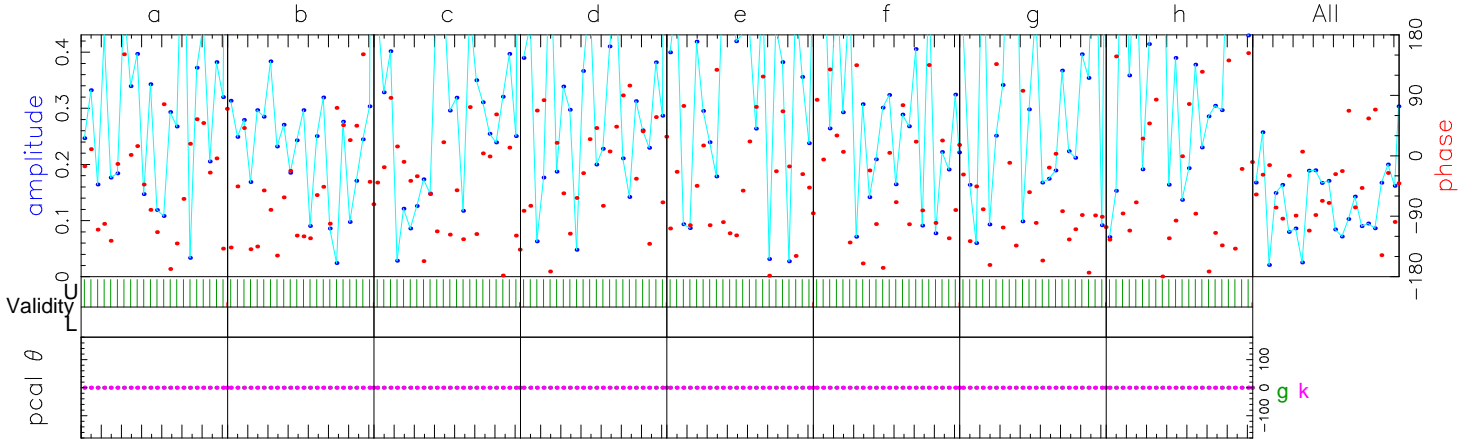


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121919
 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		
k	0	0	0	0	0	0	0	0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		4.92289216324E+03			4.92210358902E+03				Resid mbdelay (usec)	-8.30078E-03 +/- 2.1E-04
Sband delay (usec)		4.92289039652E+03			1.1742783E-01				Resid sbdelay (usec)	7.86807E-01 +/- 1.7E-03
Phase delay (usec)		4.92210358702E+03			7.2000003E-08				Resid phdelay (usec)	-2.00649E-06 +/- 7.2E-07
Delay rate (us/s)		-8.02804516024E-01			-8.02793242644E-01				Resid rate (us/s)	-1.12734E-05 +/- 3.0E-09
Total phase (deg)			-5.2		7.07054101894E-06				Resid phase (deg)	-62.2 +/- 22.2

	RMS	Theor.	Amplitude	0.144 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	58.3	53.3	Search (2048X32)	0.096	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	78.2	93.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	48.2	31.4	Inc. seg. avg.	0.144	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	52.4	54.9	Inc. frq. avg.	0.154	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

g: az 144.1 el 53.0 pa -10.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 6153.778 3366.669 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/gk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/gk.W.135.1X0KDO

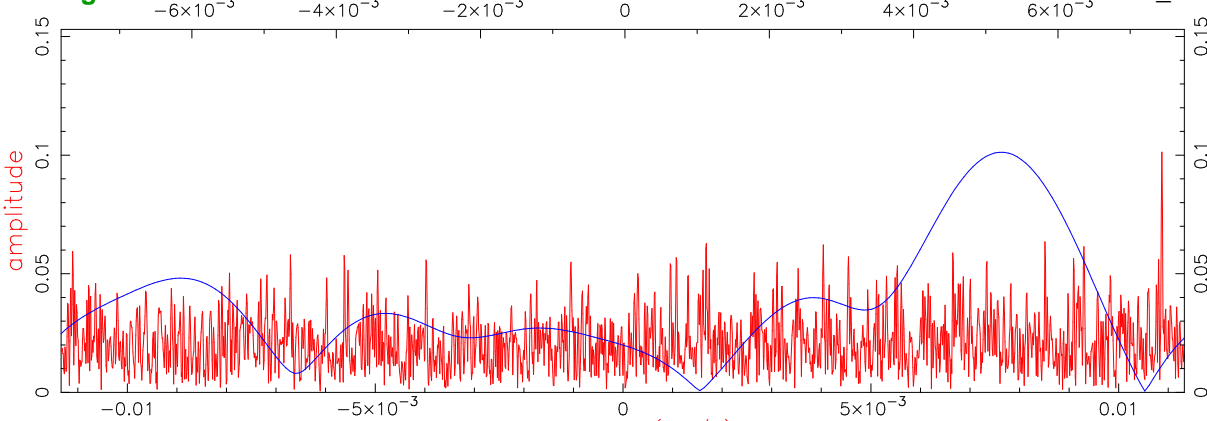
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, gk

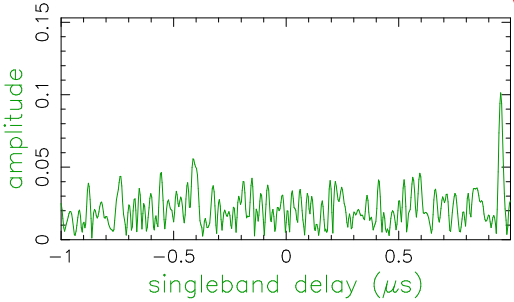
GLT - VLBA_KP, fgroup W, pol RL

multiband delay (μ s)

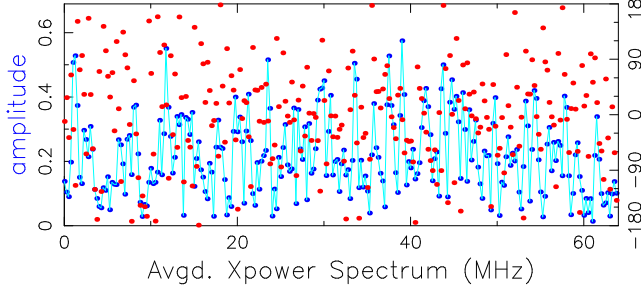


Fringe quality 0

SNR 5.7
 Int time 419.823
 Amp 0.153
 Phase 125.2
 PFD 9.7e-01
 Delays (us)
 SBD 0.953097
 MBD 0.005216
 Fringe rate (Hz) 0.937655
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

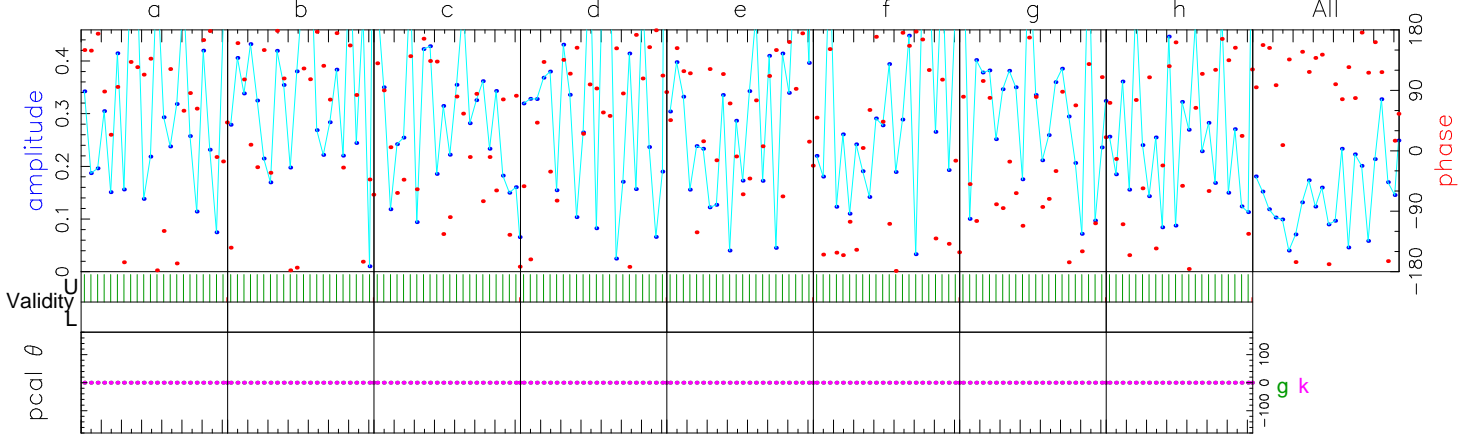


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121922
 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
	129.4	143.3	99.4	98.2	89.8	163.1	110.0	132.1	Phase	125.2
	0.3	0.3	0.1	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	259.0	501.1	26.3	500.5	97.8	240.5	282.0	350.3	Sbd box	501.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.92306193010E+03		Apriori delay (usec)		4.92210358902E+03		Resid mbdelay (usec)		5.21608E-03	+/- 1.9E-04
Sband delay (usec)	4.92305668577E+03		Apriori clock (usec)		1.1742783E-01		Resid sbdelay (usec)		9.53097E-01	+/- 1.5E-03
Phase delay (usec)	4.92210359306E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		4.03653E-06	+/- 6.5E-07
Delay rate (us/s)	-8.02782357400E-01		Apriori rate (us/s)		-8.02793242644E-01		Resid rate (us/s)		1.08852E-05	+/- 2.7E-09
Total phase (deg)	182.2		Apriori accel (us/s/s)		7.07054101894E-06		Resid phase (deg)		125.2	+/- 20.2

ph/seg (deg) 49.7 48.4 Search (2048X32) 0.099 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.9 84.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 28.0 28.6 Inc. seg. avg. 0.161 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.3 49.9 Inc. frq. avg. 0.149 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 144.1 el 53.0 pa -10.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 6153.778 3366.669 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/gk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/gk.W.155.1X0KDO

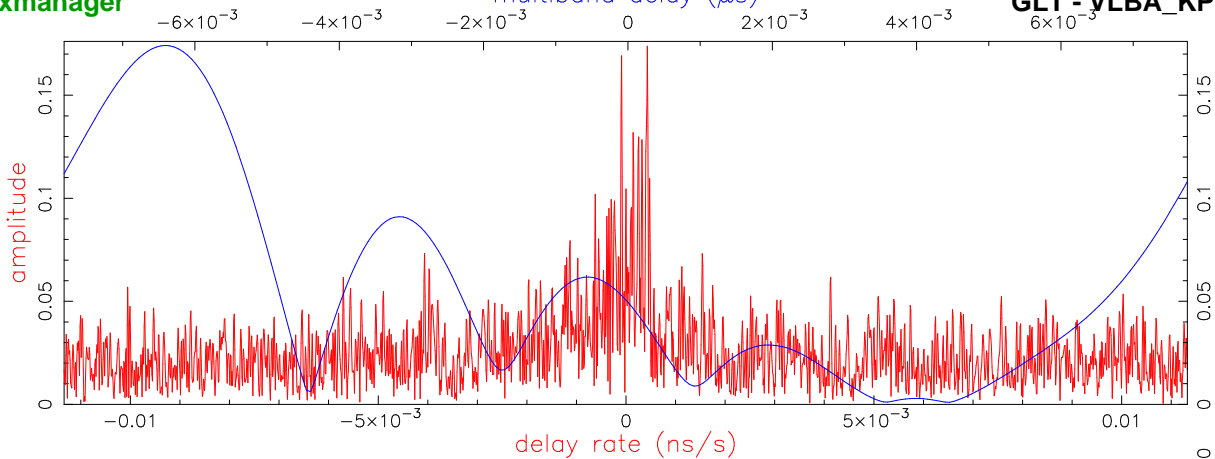
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, gk

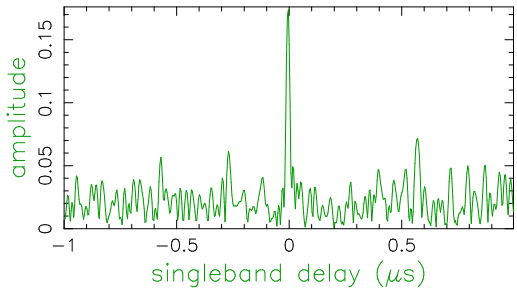
GLT - VLBA_KP, fgroup W, pol LL

multiband delay (μ s)

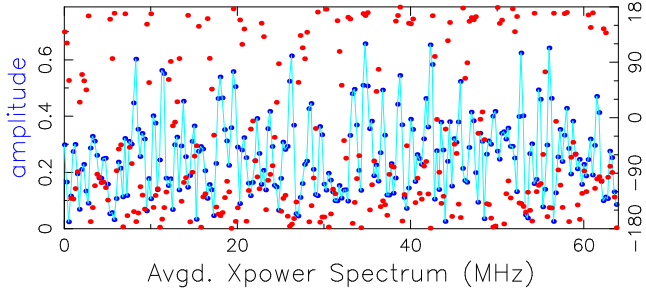


Fringe quality 9

SNR 9.9
 Int time 419.823
 Amp 0.176
 Phase -136.2
 PFD 2.5e-14
 Delays (us)
 SBD -0.005358
 MBD -0.006497
 Fringe rate (Hz) 0.036815
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

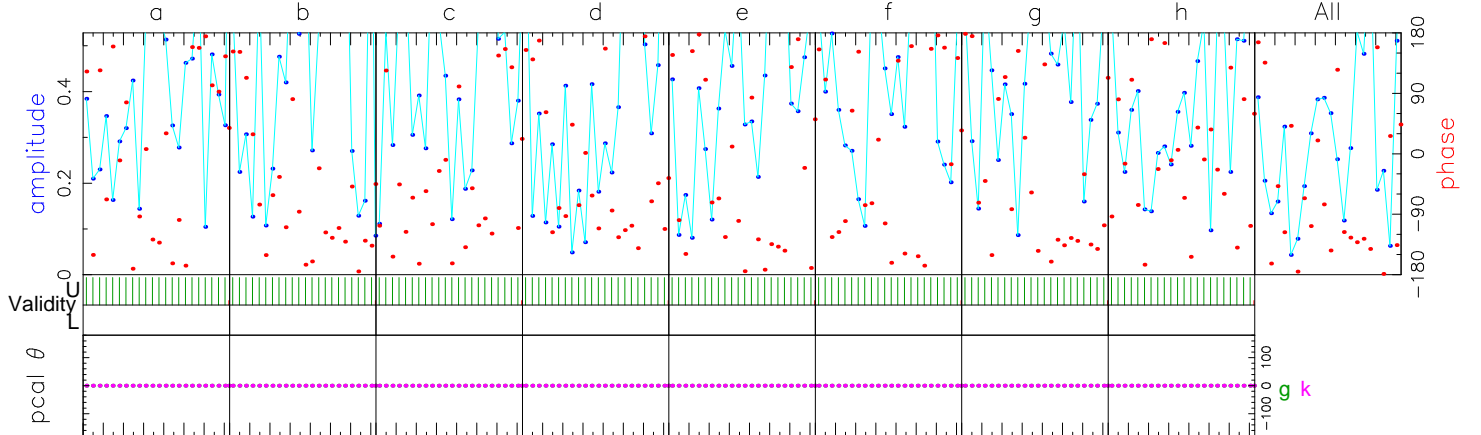


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build 2021:303:074338
 2021:303:121911
 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		
k	0	0	0	0	0	0	0	0		
g:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:k	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	4.92209709180E+03	Apriori delay (usec)	4.92210358902E+03	Resid mbdelay (usec)	-6.49722E-03	+/-	1.1E-04
Sband delay (usec)	4.92209823102E+03	Apriori clock (usec)	1.1742783E-01	Resid sbdelay (usec)	-5.35800E-03	+/-	8.7E-04
Phase delay (usec)	4.92210358463E+03	Apriori clockrate (us/s)	7.2000003E-08	Resid phdelay (usec)	-4.39170E-06	+/-	3.7E-07
Delay rate (us/s)	-8.02792815258E-01	Apriori rate (us/s)	-8.02793242644E-01	Resid rate (us/s)	4.27386E-07	+/-	1.5E-09
Total phase (deg)	-79.2	Apriori accel (us/s/s)	7.07054101894E-06	Resid phase (deg)	-136.2	+/-	11.6

ph/seg (deg)	78.1	Theor.	27.9	Amplitude	0.176 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	117.7	Search (2048X32)	0.166	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	49.5	Inc. seg. avg.	0.260	Inc. frq. avg.	0.198	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	37.3	Inc. frq. avg.	0.198			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	

g: az 144.1 el 53.0 pa -10.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 6153.778 3366.669 simultaneous interpolator

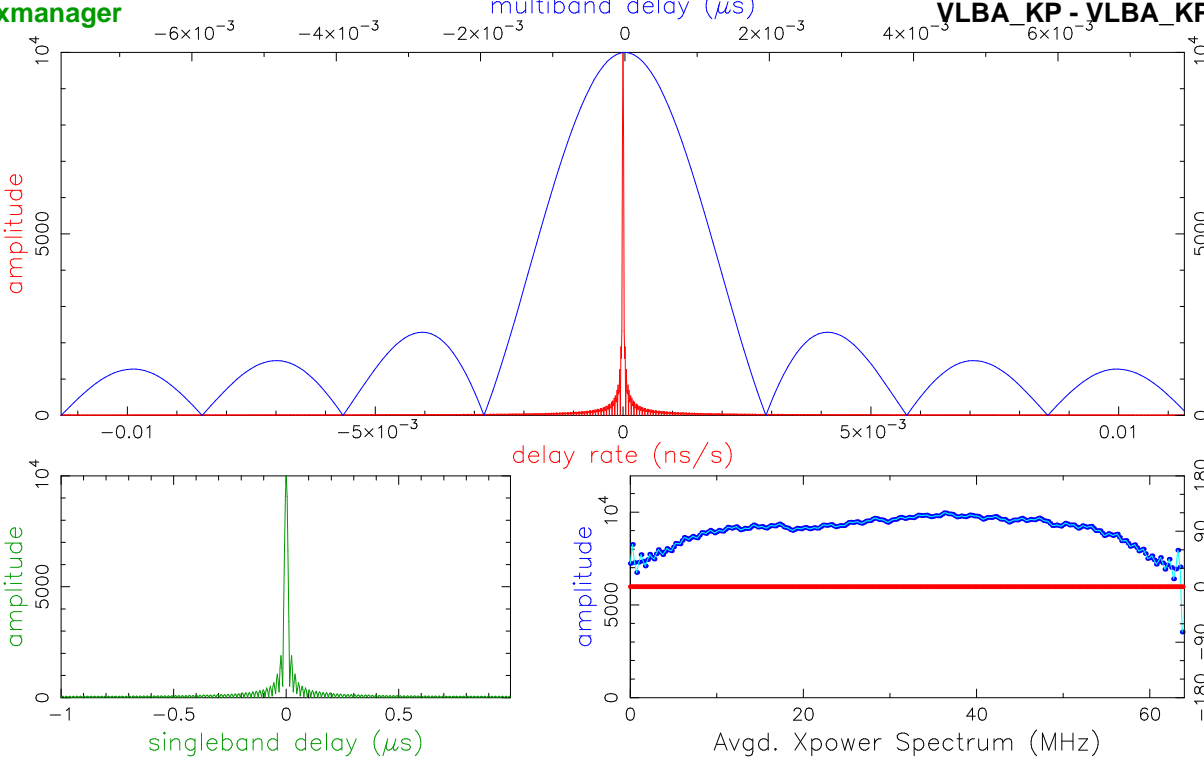
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/gk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/gk.W.97.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

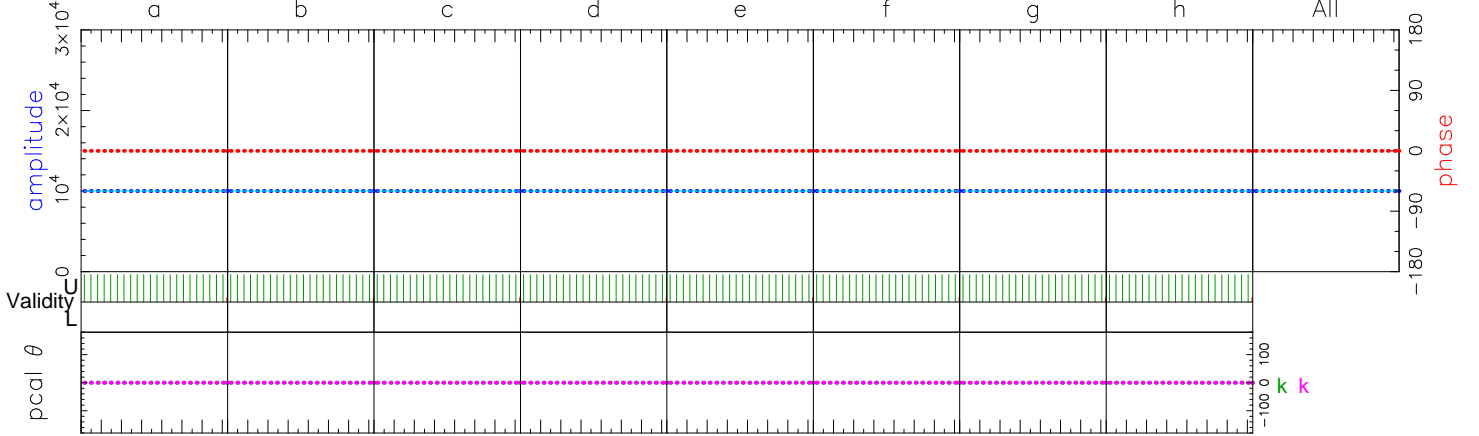
3C84.1X0KDO, No0084, kk

VLBA_KP - VLBA_KP, fgroup W, pol LL



Fringe quality 9
 SNR 560316.5
 Int time 419.828
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Yr:day 16383
 Start 2021:116
 Stop 2021:116
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121926
 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	10000.0	10000.0
k	0	0	0	0	0	0	0	0	Ampl.	10000.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC phase	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.001 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 k: az 58.4 el 33.9 pa -75.4 k: az 58.4 el 33.9 pa -75.4 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

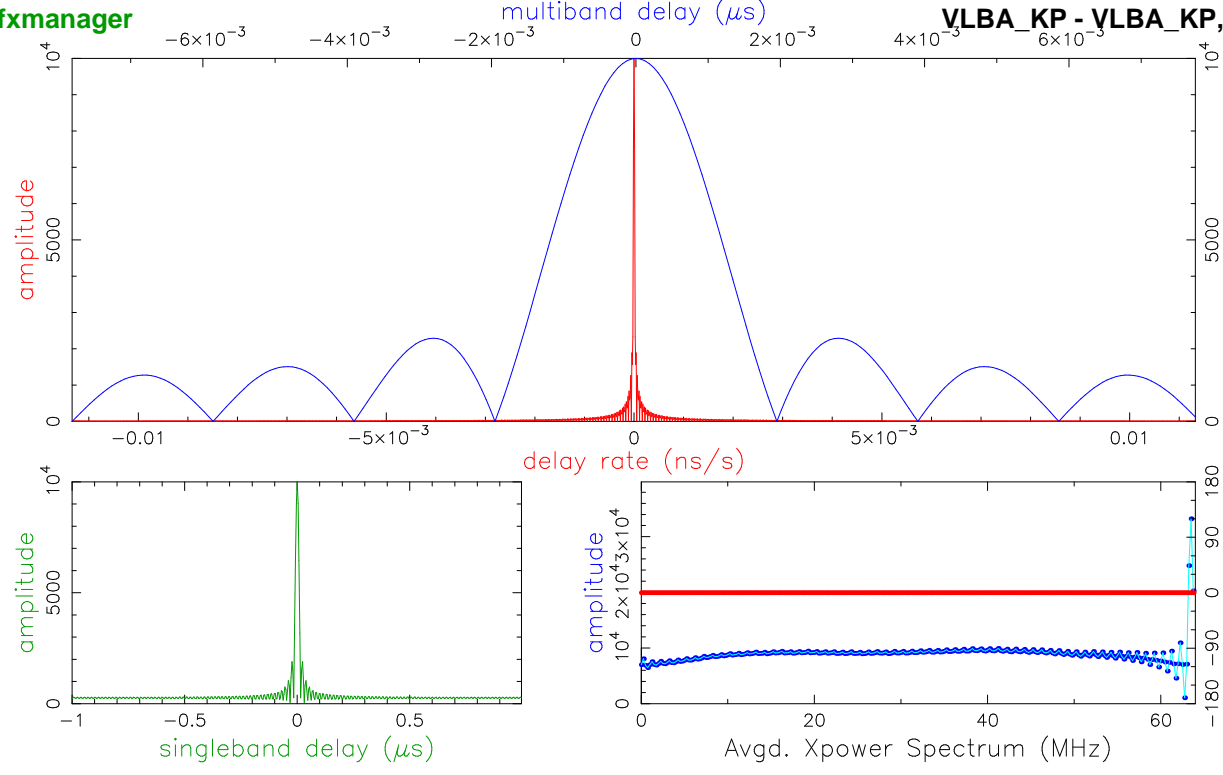
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kk.W.161.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

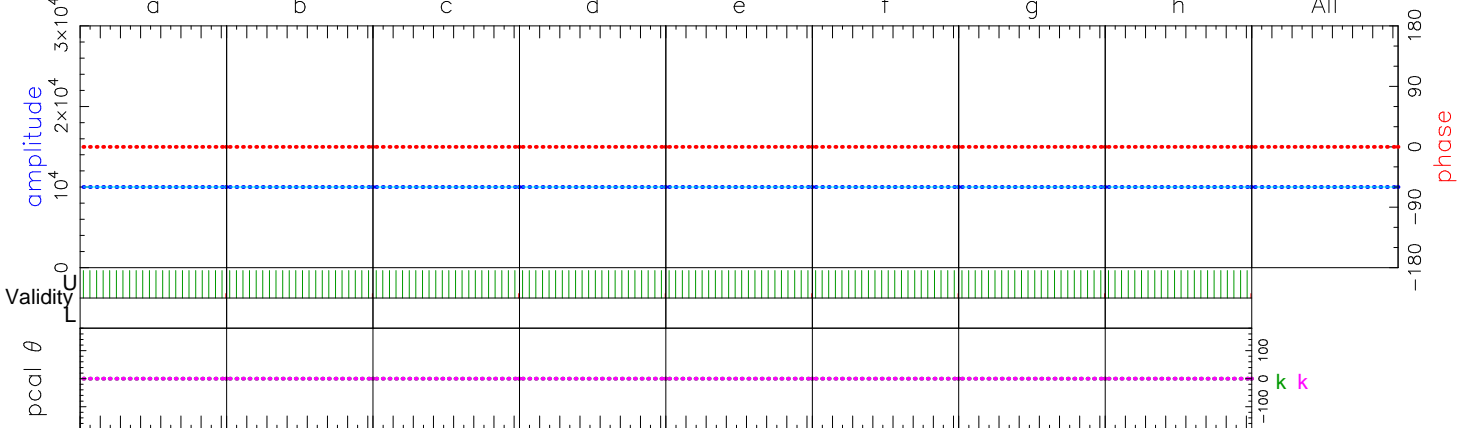
3C84.1X0KDO, No0084, kk

VLBA_KP - VLBA_KP, fgroup W, pol RR



Fringe quality 9
 SNR 560316.5
 Int time 419.828
 Amp 10000.001
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121930
 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			
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
k	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 1.9E-09	
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 1.5E-08	
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 6.6E-12	
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		+/- 2.7E-14	
Total phase (deg)			0.0								+/- 0.0

ph/seg (deg) 0.0 0.0
 amp/seg (%) 0.0 0.0
 ph/frq (deg) 0.0 0.0
 amp/frq (%) 0.0 0.0
 k: az 58.4 el 33.9 pa -75.4
 Control file: cf_1234_gmva

Amplitude 10000.001 +/- 0.018
 Search (2048X32) 10000.001
 Intp. 0.000
 Inc. seg. avg. 10000.000
 Inc. frq. avg. 10000.001
 Apriori delay (usec) 0.000000000000E+00
 Apriori clock (usec) 0.000000000000E+00
 Apriori clockrate (us/s) 0.000000000000E+00
 Apriori rate (us/s) 0.000000000000E+00
 Apriori accel (us/s/s) 0.000000000000E+00

Pcal mode: MANUAL, MANUAL
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2
 Sample rate(MISamp/s): 128
 Data rate(Mb/s): 2048

PC period (AP's) 5, 5
 PC phase 0.000E+00, 0.000E+00 (us/s)
 SampCntNorm: enabled
 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

u,v (fr/asec) 0.000 0.000
 simultaneous interpolator

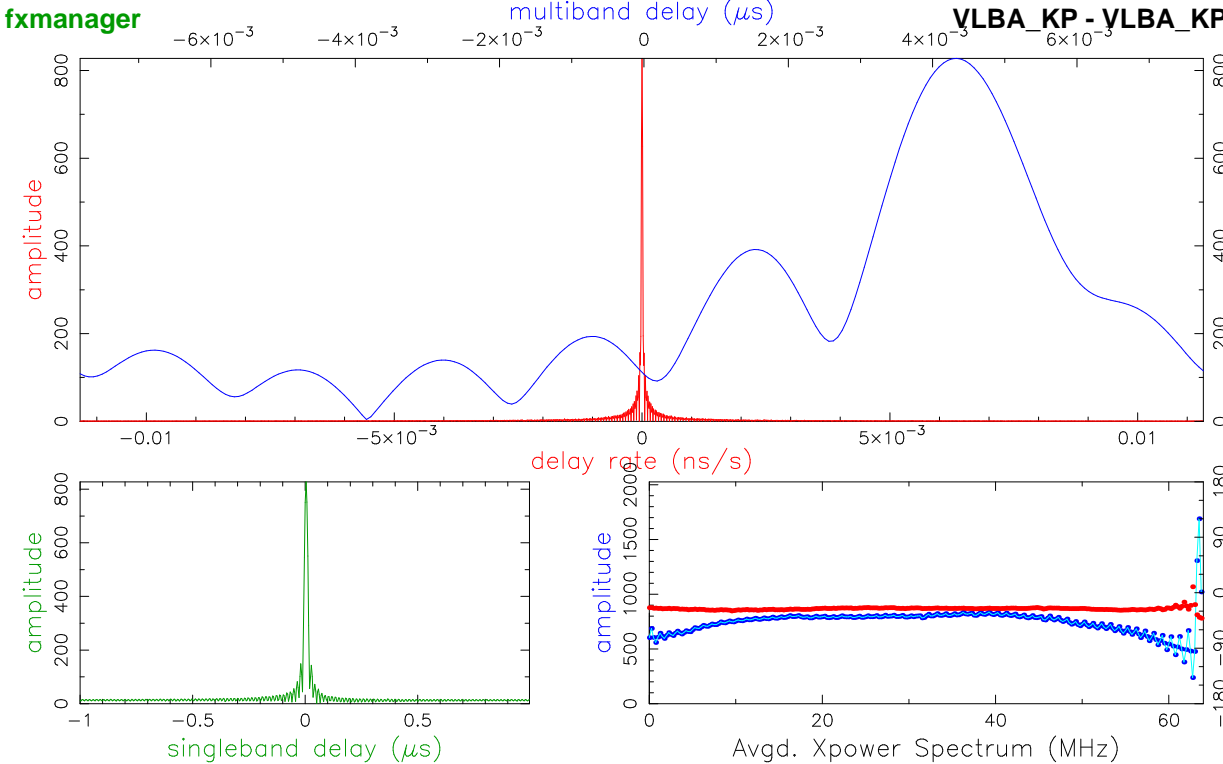
Input file: /Exps/c211c/v1/1234/No0084/kk..1X0KDO
 Output file: /Exps/c211c/v1/1234/No0084/kk.W.179.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kk

VLBA_KP - VLBA_KP, fgroup W, pol LR

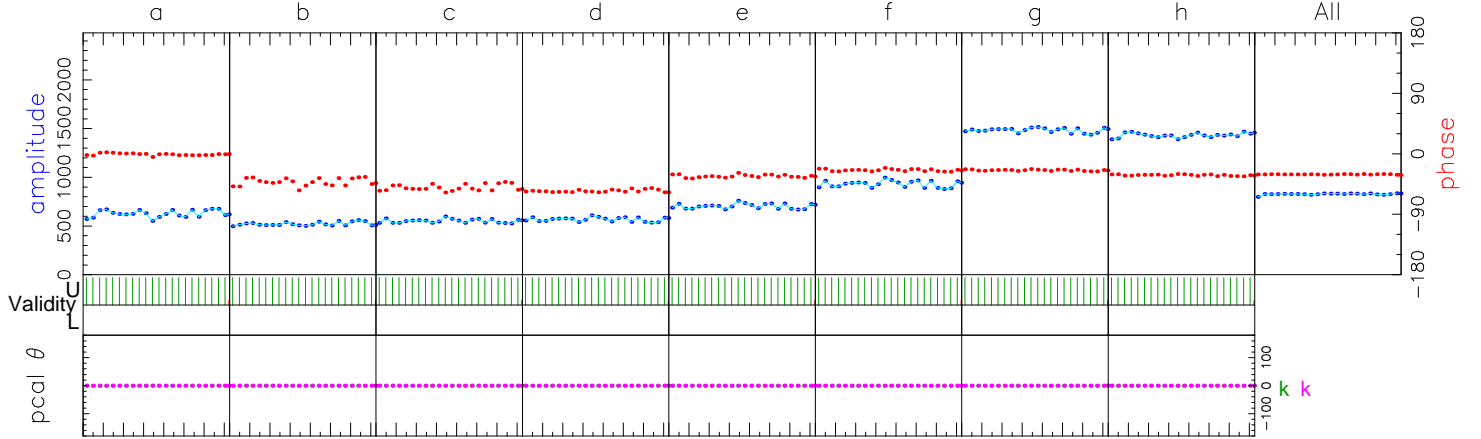


Fringe quality 6

SNR 46371.8
 Int time 419.828
 Amp 827.601
 Phase -30.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.003932
 MBD 0.004324
 Fringe rate (Hz) 0.000005
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121935
 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
	-0.7	-41.7	-50.3	-55.3	-33.2	-24.3	-24.4	-31.8	Phase	-30.7
	628.0	519.9	550.6	567.5	702.9	930.8	1482.9	1430.6	Ampl.	851.7
	257.7	257.6	258.1	258.1	258.5	258.0	258.2	257.7	Sbd box	258.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.32393750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		4.32394E-03	+/- 2.3E-08
Sband delay (usec)	3.93200000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.93200E-03	+/- 1.9E-07
Phase delay (usec)	-9.89228810209E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-9.89229E-07	+/- 8.0E-11
Delay rate (us/s)	5.24332638492E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		5.24333E-11	+/- 3.3E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-30.7	+/- 0.0

ph/seg (deg) 0.3 0.0 Search (2048X32) 825.854 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.9 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) 18.7 0.0 Inc. seg. avg. 827.614 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.8 0.0 Inc. frq. avg. 851.662 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 58.4 el 33.9 pa -75.4 k: az 58.4 el 33.9 pa -75.4 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/No0084/kk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kk.W.204.1X0KDO

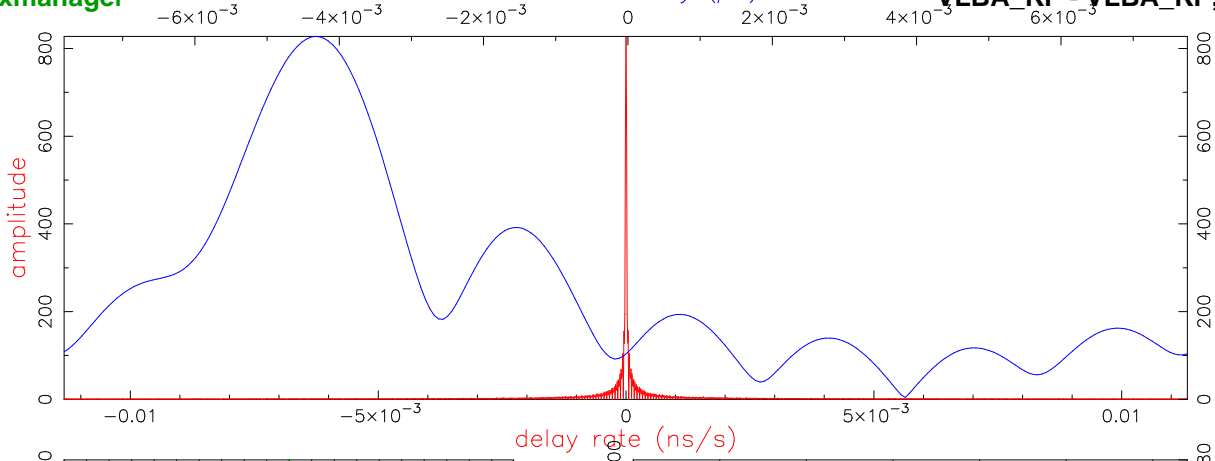
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

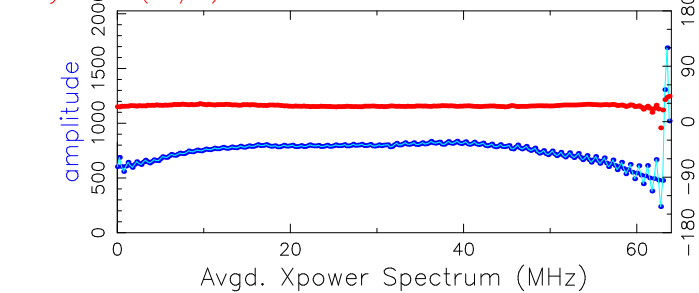
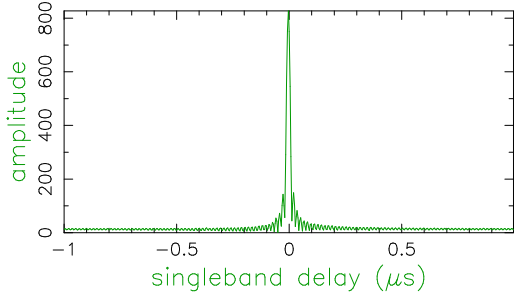
3C84.1X0KDO, No0084, kk

VLBA_KP - VLBA_KP, fgroup W, pol RL

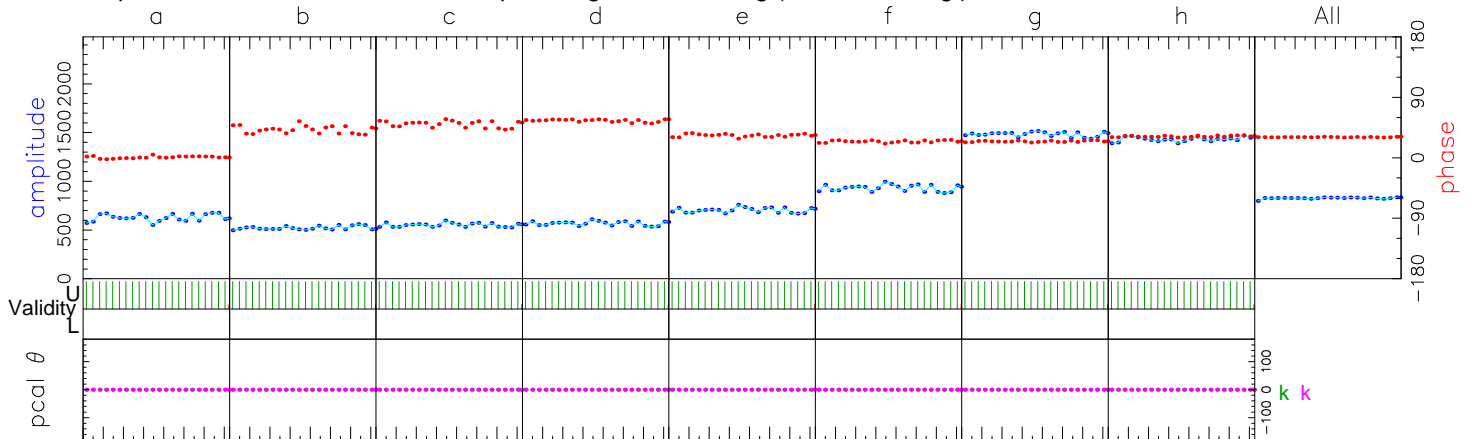
multiband delay (μ s)



Fringe quality 6
 SNR 46371.8
 Int time 419.828
 Amp 827.601
 Phase 30.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003932
 MBD -0.004324
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121939
 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
	0.7	41.7	50.3	55.3	33.2	24.3	24.4	31.8	Phase	30.7
	628.0	519.9	550.6	567.5	702.9	930.8	1482.9	1430.6	Ampl.	851.7
	256.3	256.4	255.9	255.9	255.5	256.0	255.8	256.3	Sbd box	256.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
k:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:k	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	
k	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.32393750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-4.32394E-03	+/- 2.3E-08
Sband delay (usec)	-3.93200000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.93200E-03	+/- 1.9E-07
Phase delay (usec)	9.89228810223E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		9.89229E-07	+/- 8.0E-11
Delay rate (us/s)	-5.24332638492E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-5.24333E-11	+/- 3.3E-13
Total phase (deg)	30.7		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		30.7	+/- 0.0

ph/seg (deg) 0.3 0.0 Amplitude 827.601 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.9 0.0 Interp. 825.854 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.7 0.0 Inc. seg. avg. 827.614 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.8 0.0 Inc. frq. avg. 851.662 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 58.4 el 33.9 pa -75.4 k: az 58.4 el 33.9 pa -75.4 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/No0084/kk..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kk.W.224.1X0KDO

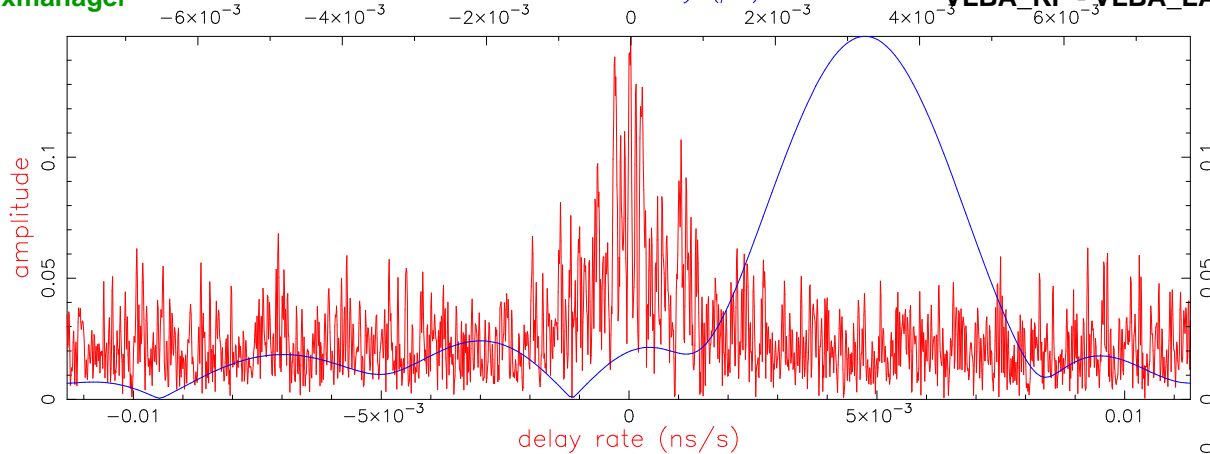
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kl

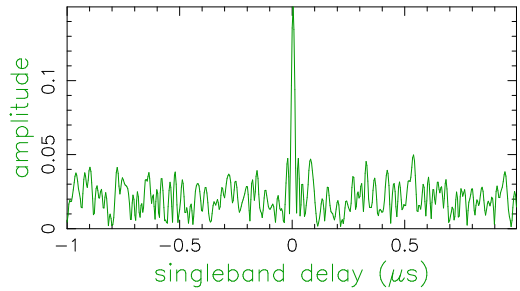
VLBA_KP - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

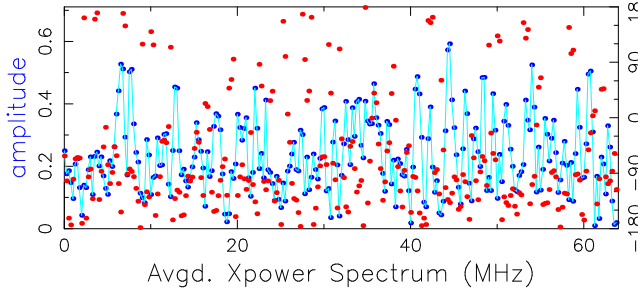


Fringe quality 9

SNR 8.4
 Int time 417.826
 Amp 0.150
 Phase -102.6
 PFD 1.9e-08
 Delays (us)
 SBD 0.003854
 MBD 0.003239
 Fringe rate (Hz) 0.003085
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

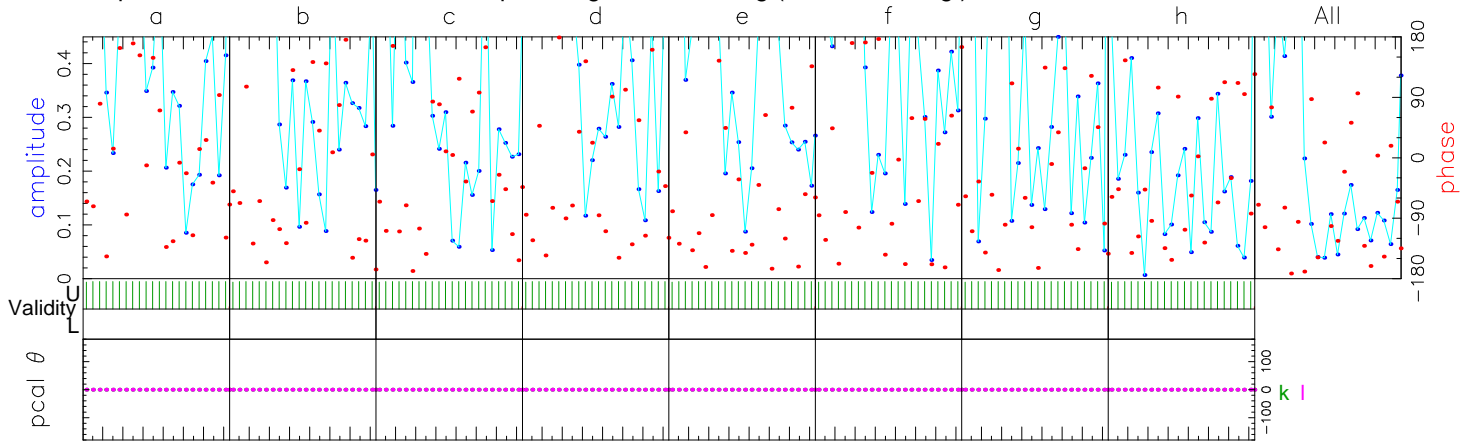


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154501.54
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121927
 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
	-82.9	-104.6	-107.5	-103.7	-114.8	-104.5	-91.1	-92.5	Phase	-102.6
	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	394.7	65.7	258.8	257.7	258.5	364.0	258.0	471.7	Sbd box	258.0
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

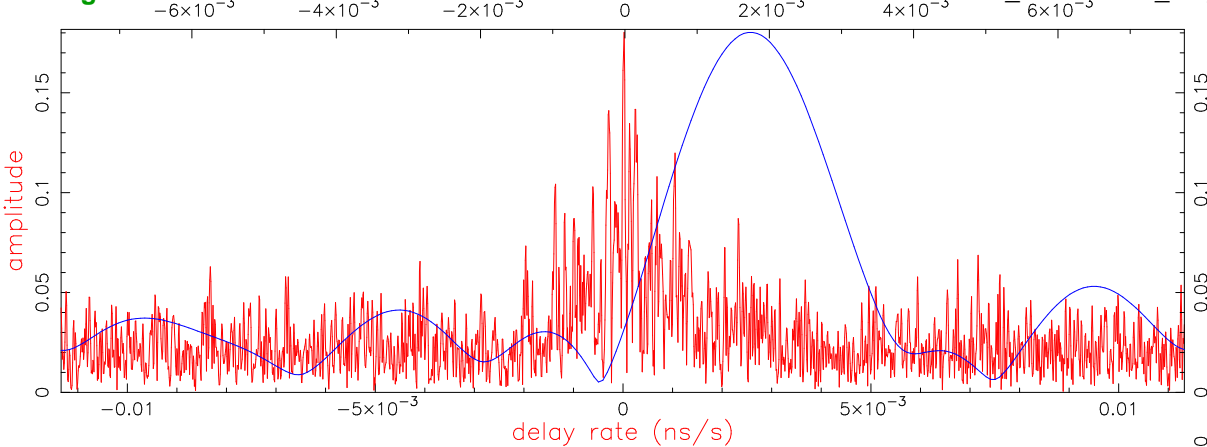
Group delay (usec)(sbd)	-1.69002470134E+03	Apriori delay (usec)	-1.69002794075E+03	Resid mbdelay (usec)	3.23942E-03	+/-	1.3E-04
Sband delay (usec)	-1.69002408625E+03	Apriori clock (usec)	2.9461403E+00	Resid sbdelay (usec)	3.85450E-03	+/-	1.0E-03
Phase delay (usec)	-1.69002794406E+03	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	-3.30996E-06	+/-	4.4E-07
Delay rate (us/s)	7.44916270725E-02	Apriori rate (us/s)	7.44915912577E-02	Resid rate (us/s)	3.58148E-08	+/-	1.8E-09
Total phase (deg)	-36.5	Apriori accel (us/s/s)	4.86057969476E-06	Resid phase (deg)	-102.6	+/-	13.7

ph/seg (deg)	RMS 90.6	Theor. 32.8	Amplitude Search (2048X32)	0.150 +/- 0.018	0.147	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	199.1	57.2	Interp.	0.000	0.147	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	11.6	19.3	Inc. seg. avg.	0.232	0.147	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	34.2	33.8	Inc. frq. avg.	0.144	0.144	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011		
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

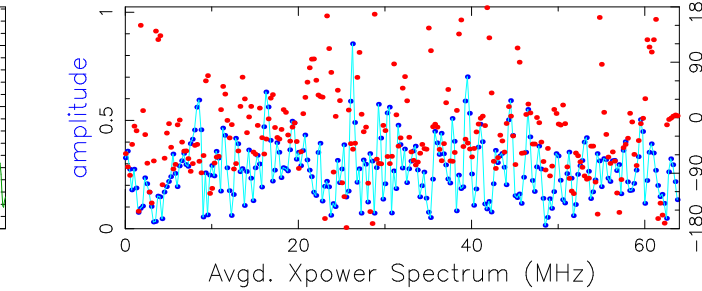
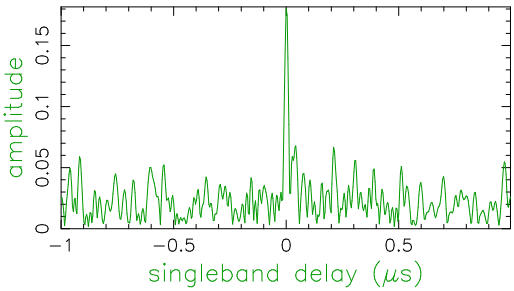
k: az 58.4 el 33.9 pa -75.4 l: az 62.3 el 39.6 pa -74.2 u,v (fr/asec) -560.223 -21.475 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kl.1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kl.W.164.1X0KDO

multiband delay (μ s)

Fringe quality 9

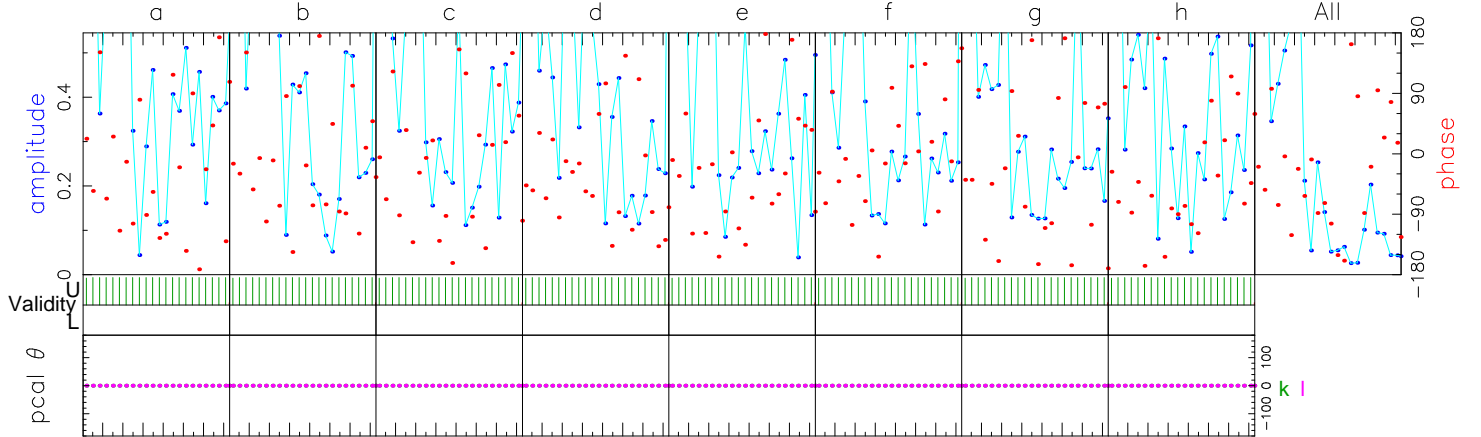


SNR 10.2
Int time 417.826
Amp 0.182
Phase -42.0
PFD 1.3e-15
Delays (us)
SBD 0.001231
MBD 0.001762
Fringe rate (Hz)
0.002279
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154501.54
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121931
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	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0		
k	0	0	0	0	0	0	0	0		
l	0	0	0	0	0	0	0	0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.69002617911E+03				-1.69002794075E+03				1.76164E-03	+/- 1.1E-04
Sband delay (usec)	-1.69002670975E+03				2.9461403E-07				1.23100E-03	+/- 8.5E-04
Phase delay (usec)	-1.69002794211E+03				2.8600001E-07				-1.35496E-06	+/- 3.6E-07
Delay rate (us/s)	7.44916177181E-02				7.44915912577E-02				2.64604E-08	+/- 1.5E-09
Total phase (deg)			-335.9		4.86057969476E-06				-42.0	+/- 11.3
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	81.7	27.1			0.175					
Theor.	27.1				0.175					
Amplitude					0.182 +/- 0.018					
Search (2048X32)					0.175					
Interp.					0.000					
Inc. seg. avg.					0.250					
Inc. frq. avg.					0.177					
PCal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					128					
Data rate (Mb/s):					2048					
PC period (AP's)					5, 5					
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

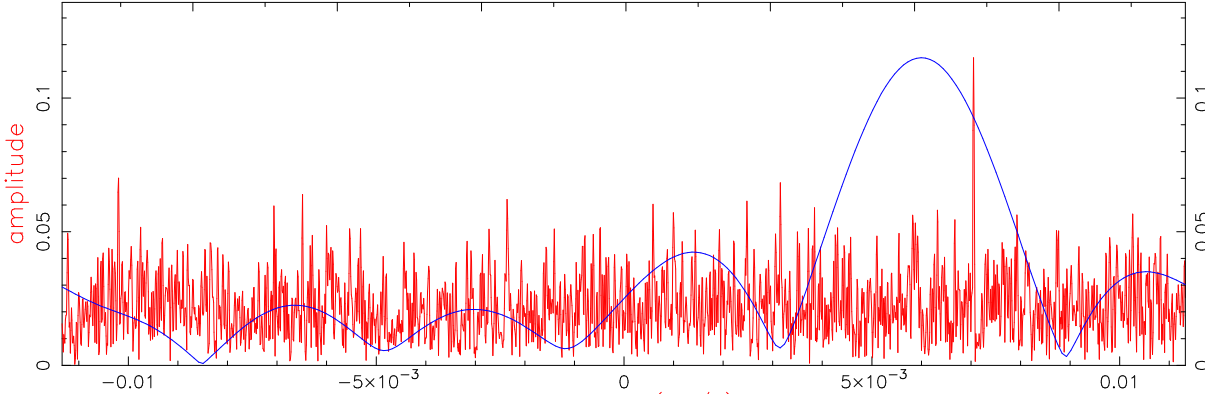
3C84.1X0KDO, No0084, kl

VLBA_KP - VLBA_LA, fgroup W, pol LR

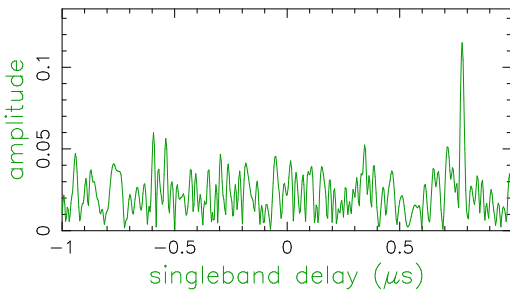
multiband delay (μ s)

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

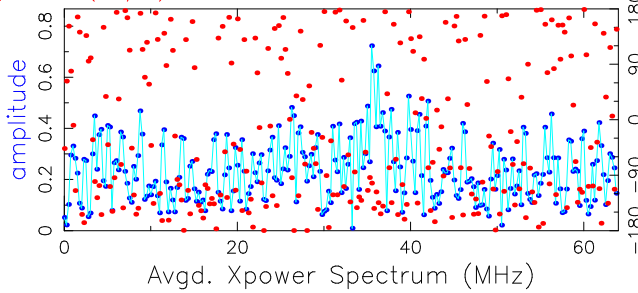
Fringe quality 0



SNR 6.4
 Int time 417.826
 Amp 0.136
 Phase 118.2
 PFD 3.3e-02
 Delays (us)
 SBD 0.777152
 MBD 0.004087
 Fringe rate (Hz)
 0.608665
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

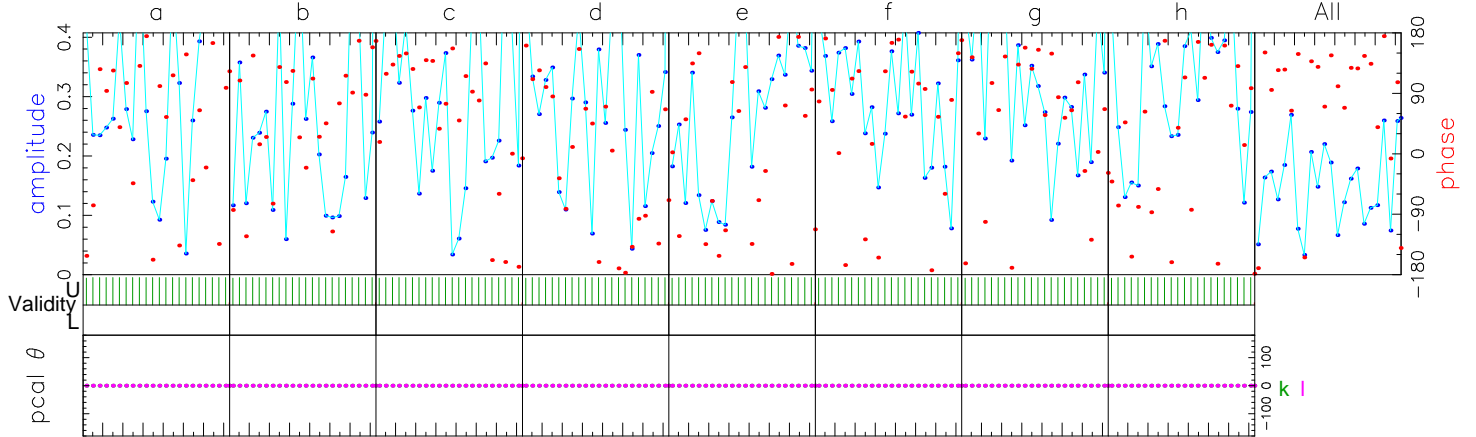


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154501.54
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121936
 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
	131.3	96.5	115.5	130.0	141.0	119.3	98.4	142.6	Phase	118.2
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	473.3	239.4	189.0	452.2	321.1	225.7	455.2	58.7	Sbd box	456.0
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.68925822921E+03	Apriori delay (usec)	-1.69002794075E+03	Resid mbdelay (usec)	4.08654E-03	+/-	1.7E-04
Sband delay (usec)	-1.68925078875E+03	Apriori clock (usec)	2.9461403E+00	Resid sbdelay (usec)	7.77152E-01	+/-	1.3E-03
Phase delay (usec)	-1.69002793694E+03	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	3.81241E-06	+/-	5.7E-07
Delay rate (us/s)	7.44986572551E-02	Apriori rate (us/s)	7.44915912577E-02	Resid rate (us/s)	7.06600E-06	+/-	2.4E-09
Total phase (deg)	-175.7	Apriori accel (us/s/s)	4.86057969476E-06	Resid phase (deg)	118.2	+/-	17.8

ph/seg (deg)	RMS 48.5	Theor. 42.7	Amplitude Search (2048X32)	0.136 +/- 0.021	0.110	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	65.9	74.5	Interp.	0.000	0.110	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	19.6	25.2	Inc. seg. avg.	0.138	0.129	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	30.1	44.0	Inc. frq. avg.	0.129	0.129	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

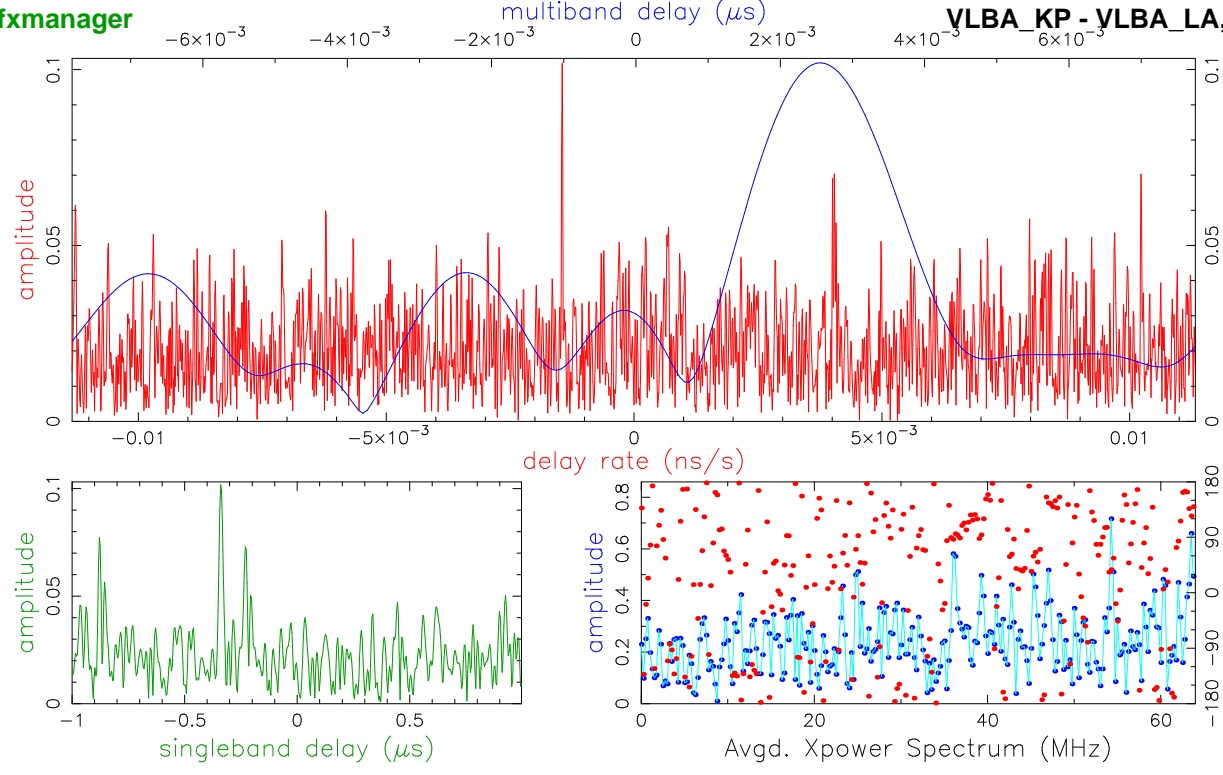
k: az 58.4 el 33.9 pa -75.4 l: az 62.3 el 39.6 pa -74.2 u,v (fr/asec) -560.223 -21.475 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kl.1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kl.W.210.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kl

VLBA_KP - VLBA_LA, fgroup W, pol RL

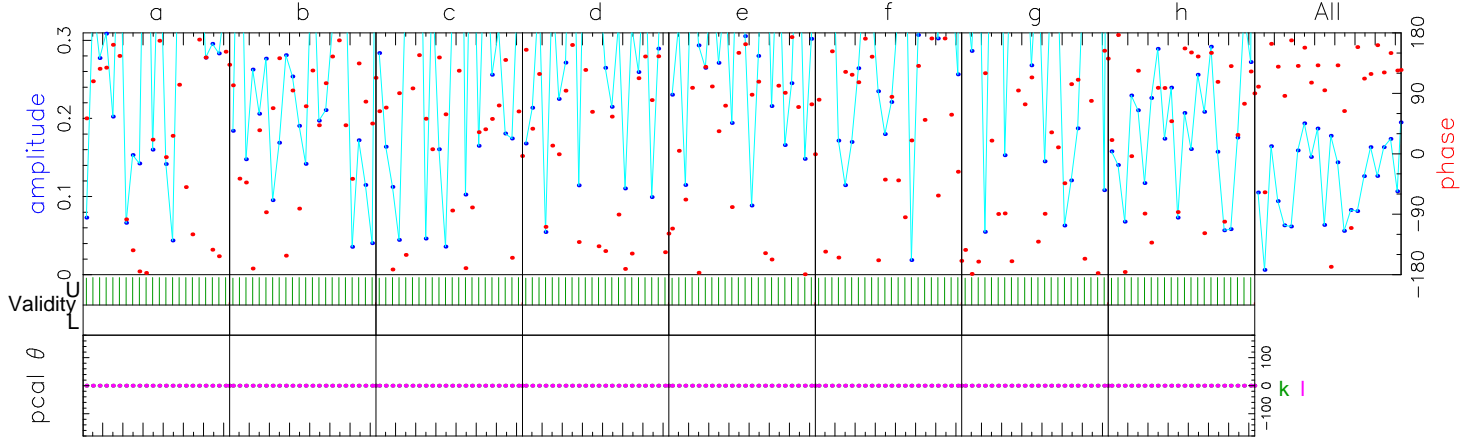


Fringe quality 0

SNR 5.7
 Int time 417.826
 Amp 0.103
 Phase 136.9
 PFD 9.2e-01
 Delays (us)
 SBD -0.338696
 MBD 0.002596
 Fringe rate (Hz)
 -0.125051
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154501.54
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121940
 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
	163.4	107.9	99.0	150.5	119.6	148.4	168.3	119.0	Phase	136.9
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	169.6	174.8	205.7	19.0	171.9	205.5	98.6	487.2	Sbd box	170.3
U/L	817/0	817/0	817/0	817/0	817/0	817/0	817/0	817/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
l	0	0	0	0	0	0	0	0	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.69036909510E+03		Apriori delay (usec)		-1.69002794075E+03		Resid mbdelay (usec)		2.59565E-03	+/- 1.9E-04
Sband delay (usec)	-1.69036663700E+03		Apriori clock (usec)		2.9461403E-07		Resid sbdelay (usec)		-3.38696E-01	+/- 1.5E-03
Phase delay (usec)	-1.69002793634E+03		Apriori clockrate (us/s)		2.8600001E-07		Resid phdelay (usec)		4.41581E-06	+/- 6.4E-07
Delay rate (us/s)	7.44901395422E-02		Apriori rate (us/s)		7.44915912577E-02		Resid rate (us/s)		-1.45172E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		4.86057969476E-06		Resid phase (deg)		136.9	+/- 20.0

	RMS	Theor.	Amplitude	0.103 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.2	48.0	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	52.4	83.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.6	28.3	Inc. seg. avg.	0.090	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.1	49.4	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 58.4 el 33.9 pa -75.4 l: az 62.3 el 39.6 pa -74.2 u,v (fr/asec) -560.223 -21.475 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kl.1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kl.W.230.1X0KDO

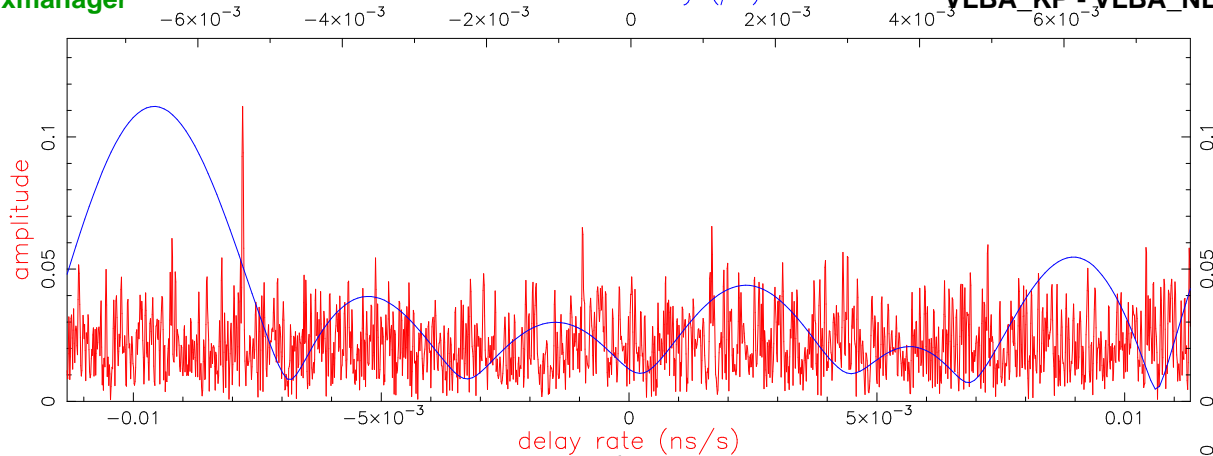
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kn

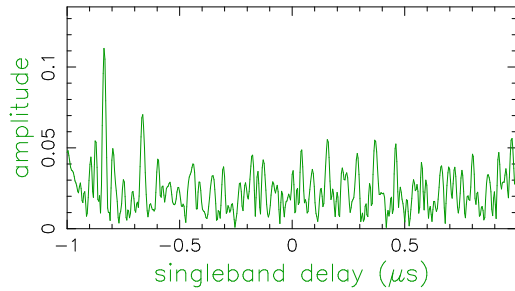
VLBA_KP - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

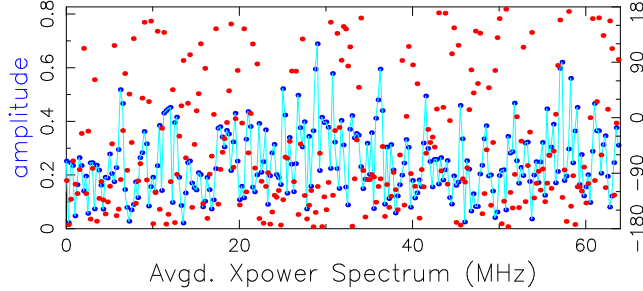


Fringe quality 0

SNR 6.3
 Int time 416.823
 Amp 0.137
 Phase 55.6
 PFD 1.0e-01
 Delays (us)
 SBD -0.835142
 MBD -0.006593
 Fringe rate (Hz)
 -0.672852
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

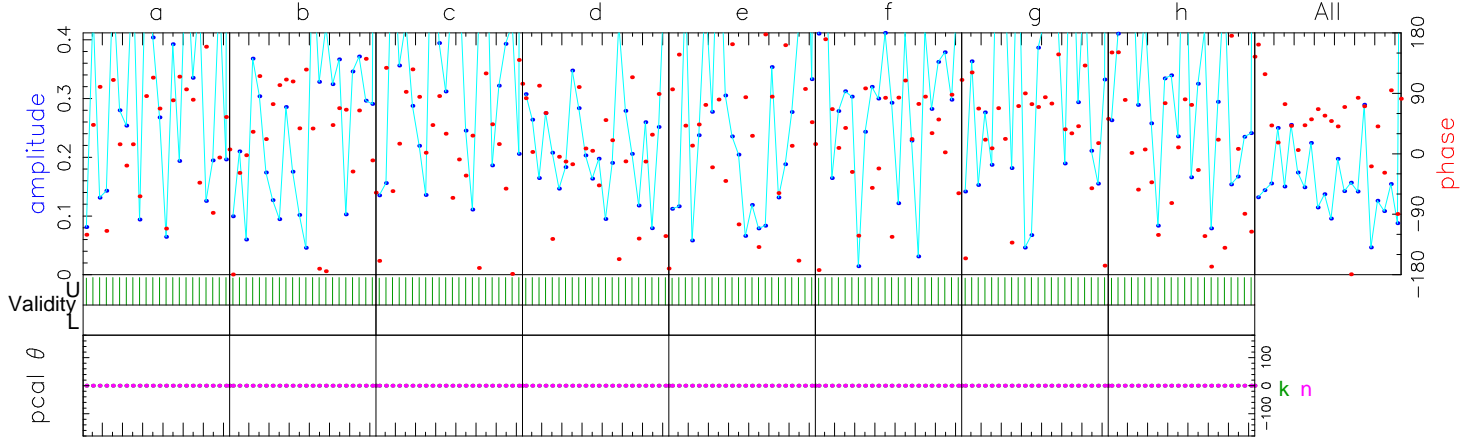


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154502.56
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121927
 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
	56.6	66.0	44.7	14.7	71.3	50.6	69.8	5.8	Phase	55.6
	0.2	0.1	0.1	0.1	0.2	0.1	0.3	0.1	Ampl.	0.1
	491.2	485.7	498.2	346.0	443.9	169.9	43.8	483.8	Sbd box	43.2
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

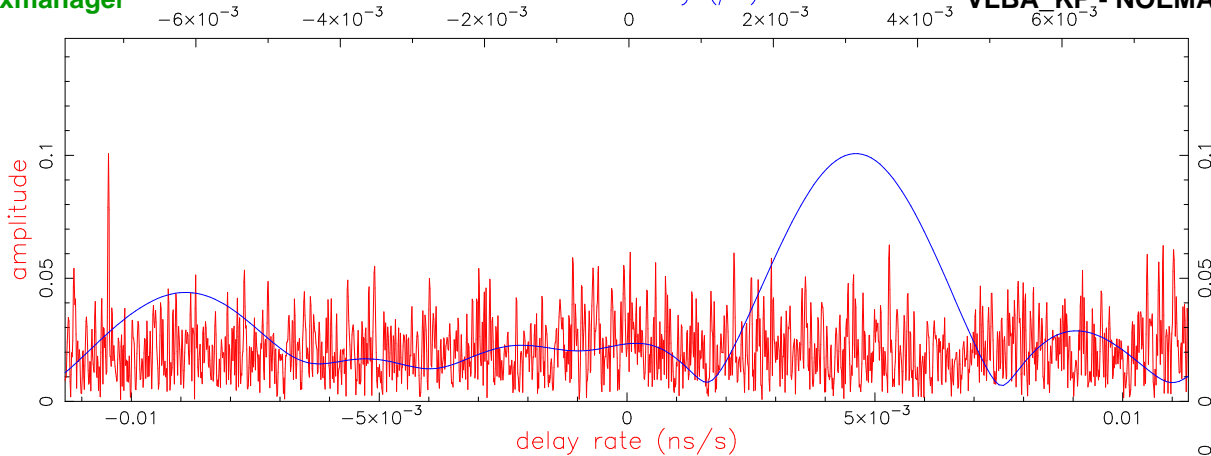
Group delay (usec)(sbd)	-4.94872610343E+03	Apriori delay (usec)	-4.94789138509E+03	Resid mbdelay (usec)	-6.59334E-03	+/-	1.7E-04
Sband delay (usec)	-4.94872652759E+03	Apriori clock (usec)	-5.1551132E+00	Resid sbdelay (usec)	-8.35142E-01	+/-	1.4E-03
Phase delay (usec)	-4.94789138329E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	1.79187E-06	+/-	5.9E-07
Delay rate (us/s)	2.63022051085E-01	Apriori rate (us/s)	2.63029862226E-01	Resid rate (us/s)	-7.81114E-06	+/-	2.5E-09
Total phase (deg)	-272.5	Apriori accel (us/s/s)	1.60458746005E-05	Resid phase (deg)	55.6	+/-	18.3

ph/seg (deg)	RMS 57.4	Theor. 43.9	Amplitude 57.4	0.137 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	70.8	76.7	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	28.4	25.9	Inc. seg. avg.	0.149	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	43.7	45.2	Inc. frq. avg.	0.131	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 58.4 el 33.9 pa -75.4 n: az 72.7 el 52.5 pa -72.0 u,v (fr/asec) -1981.082 234.617 simultaneous interpolator

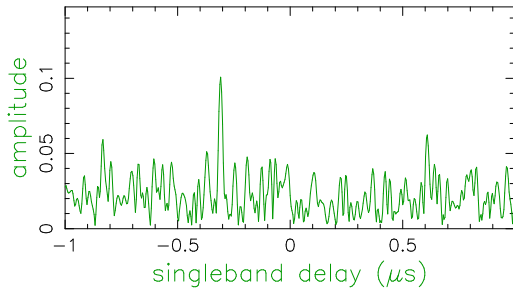
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kn..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kn.W.163.1X0KDO

multiband delay (μs)

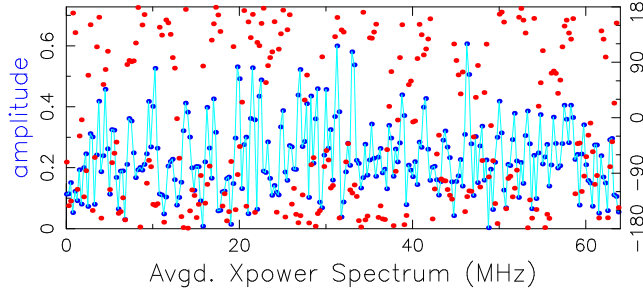


Fringe quality 0

SNR 5.7
 Int time 419.822
 Amp 0.148
 Phase -166.8
 PFD 9.8e-01
 Delays (us)
 SBD -0.309292
 MBD 0.003122
 Fringe rate (Hz)
 -0.902178
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

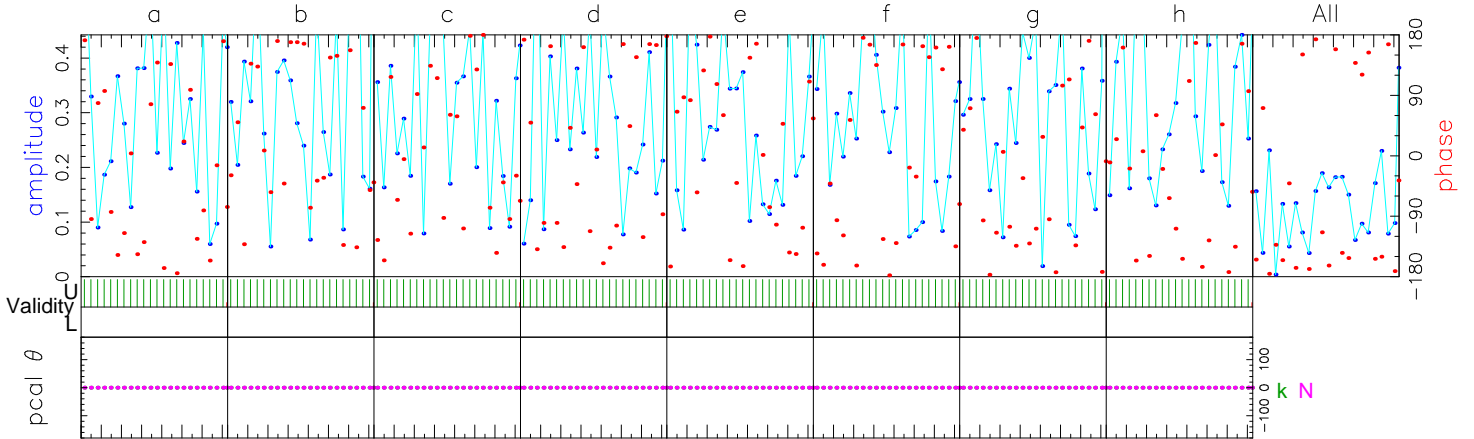


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121927
 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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.43777751578E+03	Apriori delay (usec)	-5.43746813821E+03	Resid mbdelay (usec)	3.12243E-03	+/-	1.9E-04
Sband delay (usec)	-5.43777743071E+03	Apriori clock (usec)	1.3689201E+01	Resid sbdelay (usec)	-3.09292E-01	+/-	1.5E-03
Phase delay (usec)	-5.43746814359E+03	Apriori clockrate (us/s)	4.3890000E-06	Resid phdelay (usec)	-5.37820E-06	+/-	6.5E-07
Delay rate (us/s)	1.53686232222E+00	Apriori rate (us/s)	1.53687279561E+00	Resid rate (us/s)	-1.04734E-05	+/-	2.7E-09
Total phase (deg)	-319.9	Apriori accel (us/s/s)	1.60011135111E-05	Resid phase (deg)	-166.8	+/-	20.3

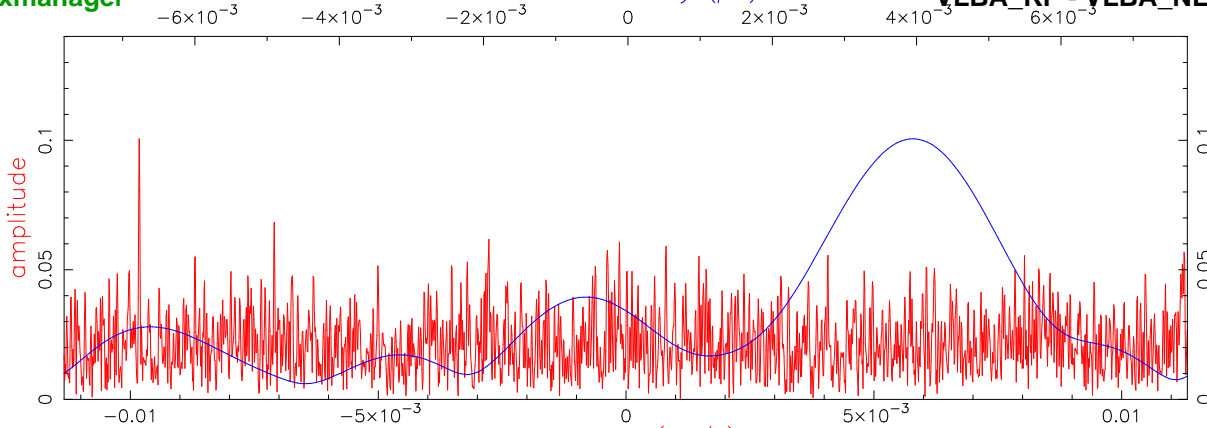
ph/seg (deg)	48.9	RMS	48.6	Theor.	48.6	Amplitude	0.148 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.1		69.1		69.1	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	20.4		20.4		20.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.4		45.4		45.4	Inc. seg. avg.	0.135	Sample rate (MSamp/s):	128			ion window (TEC)	0.00	0.00
						Inc. frq. avg.	0.136	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	

k: az 58.4 el 33.9 pa -75.4 N: az 281.5 el 56.4 pa 68.9 u,v (fr/asec) -11733.002 96.261 simultaneous interpolator

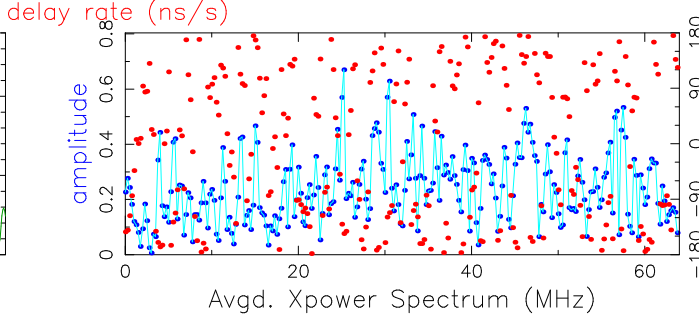
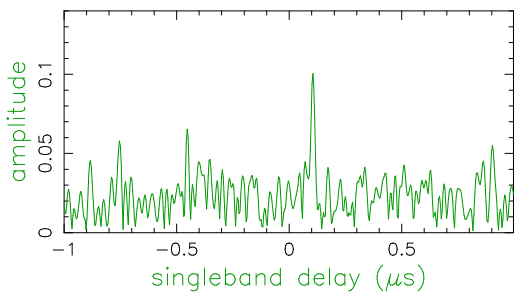
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kN..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kN.W.170.1X0KDO

multiband delay (μ s)

Fringe quality 0

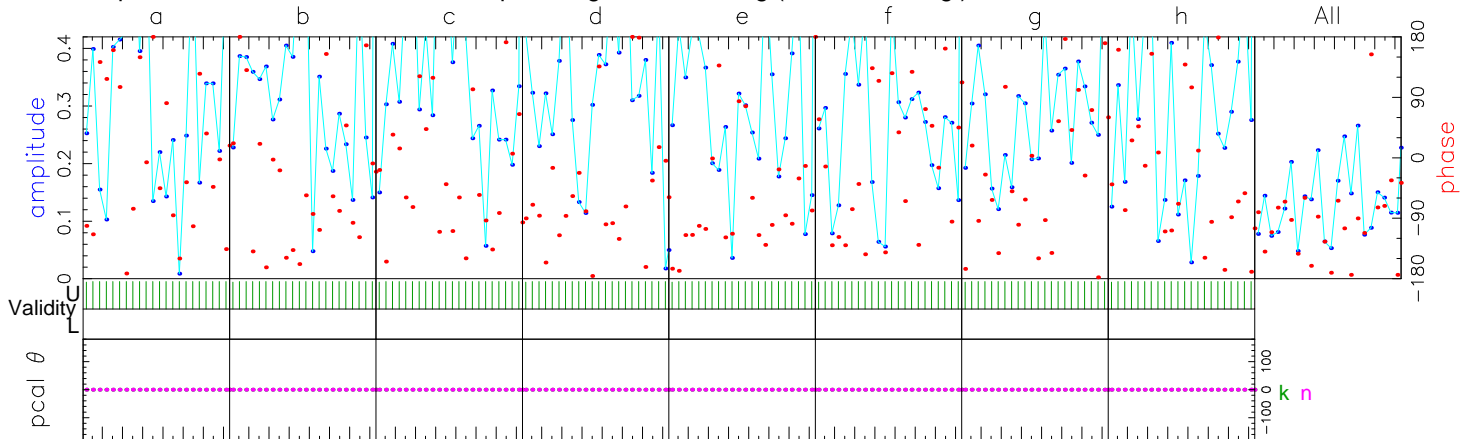


SNR 5.6
Int time 416.823
Amp 0.140
Phase -100.6
PFD 9.9e-01
Delays (us)
SBD 0.105212
MBD 0.003947
Fringe rate (Hz)
-0.846955
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154502.56
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121930
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
	-104.5	-119.4	-68.5	-100.8	-103.8	-119.4	-108.8	-98.3	Phase	-100.6
	0.1	0.2	0.2	0.3	0.2	0.0	0.1	0.1	Ampl.	0.1
	479.7	187.2	64.2	282.9	283.4	245.3	280.3	412.3	Sbd box	283.9
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.94779368777E+03	Apriori delay (usec)	-4.94789138509E+03	Resid mbdelay (usec)	3.94731E-03	+/-	1.9E-04
Sband delay (usec)	-4.94778617309E+03	Apriori clock (usec)	-5.1551132E+00	Resid sbdelay (usec)	1.05212E-01	+/-	1.5E-03
Phase delay (usec)	-4.94789138833E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-3.24550E-06	+/-	6.6E-07
Delay rate (us/s)	2.63020029920E-01	Apriori rate (us/s)	2.63029862226E-01	Resid rate (us/s)	-9.83231E-06	+/-	2.7E-09
Total phase (deg)	-68.7	Apriori accel (us/s/s)	1.60458746005E-05	Resid phase (deg)	-100.6	+/-	20.4

ph/seg (deg)	46.0	Theor.	48.9	Amplitude	0.140 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.2	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)	17.5	Inc. seg. avg.	0.134	Inc. frq. avg.	0.128	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	54.2	Inc. frq. avg.	0.128			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	

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

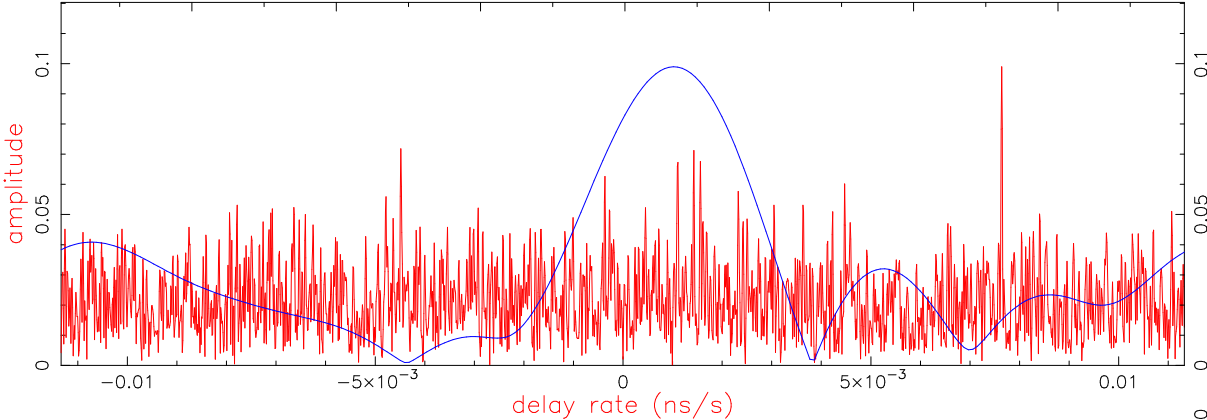
3C84.1X0KDO, No0084, kN

VLBA_KP - NOEMA, fgroup W, pol RR

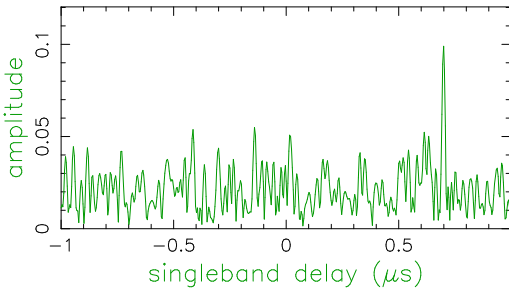
multiband delay (μ s)

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

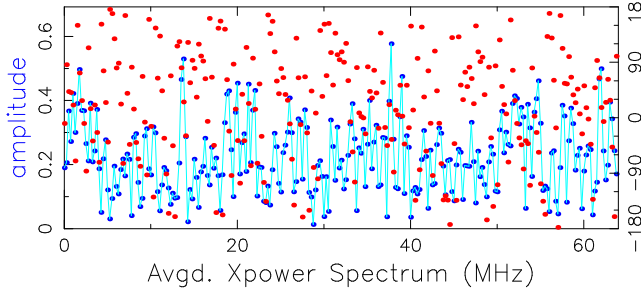
Fringe quality 0



SNR 5.5
 Int time 419.822
 Amp 0.120
 Phase 152.9
 PFD 1.0e+00
 Delays (us)
 SBD 0.698973
 MBD 0.000665
 Fringe rate (Hz)
 0.658981
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

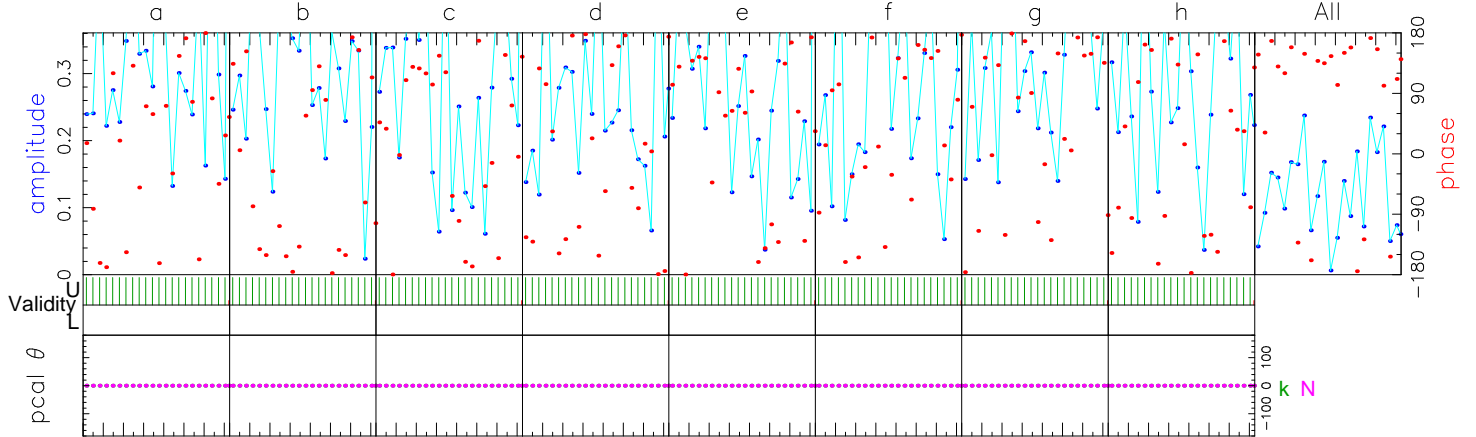


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121931
 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
	134.3	-171.4	125.0	-173.2	127.0	138.1	150.9	178.6	Phase	152.9
	0.1	0.2	0.2	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	140.7	60.1	449.0	122.3	245.0	511.6	312.2	405.6	Sbd box	435.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:N	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	
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	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)	-5.43676434772E+03		Apriori delay (usec)		-5.43746813821E+03		Resid mbdelay (usec)		6.65492E-04	+/- 2.0E-04
Sband delay (usec)	-5.43676916546E+03		Apriori clock (usec)		1.3689201E+01		Resid sbdelay (usec)		6.98973E-01	+/- 1.6E-03
Phase delay (usec)	-5.43746813328E+03		Apriori clockrate (us/s)		4.3890000E-06		Resid phdelay (usec)		4.93096E-06	+/- 6.7E-07
Delay rate (us/s)	1.53688044572E+00		Apriori rate (us/s)		1.53687279561E+00		Resid rate (us/s)		7.65012E-06	+/- 2.7E-09
Total phase (deg)			Apriori accel (us/s/s)		1.60011135111E-05		Resid phase (deg)		152.9	+/- 20.7

ph/seg (deg) 44.0 49.5 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.0 86.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 29.2 29.2 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 25.0 51.0 Inc. frq. avg. 0.118 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 58.4 el 33.9 pa -75.4 N: az 281.5 el 56.4 pa 68.9 u,v (fr/asec) -11733.002 96.261 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kN..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kN.W.188.1X0KDO simultaneous interpolator

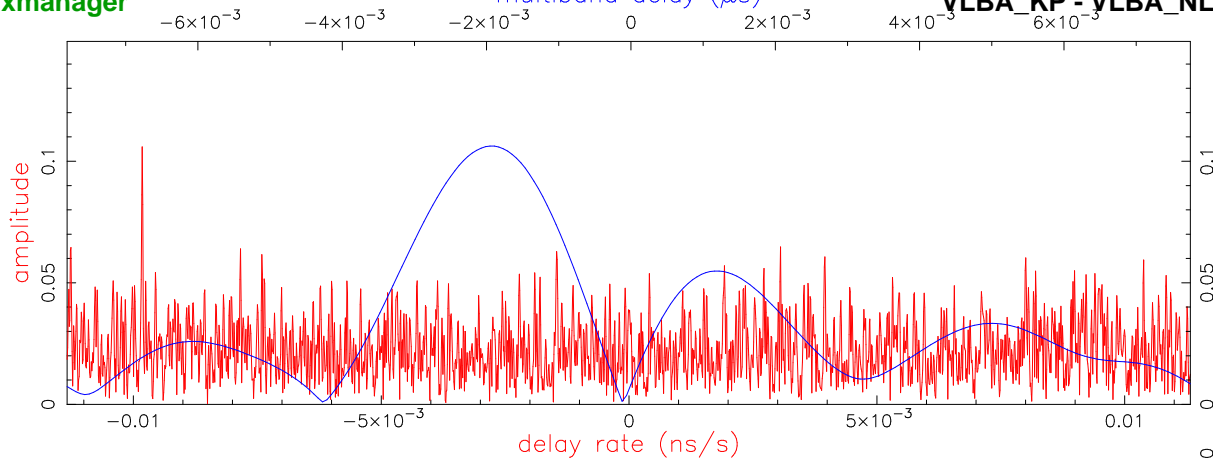
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kn

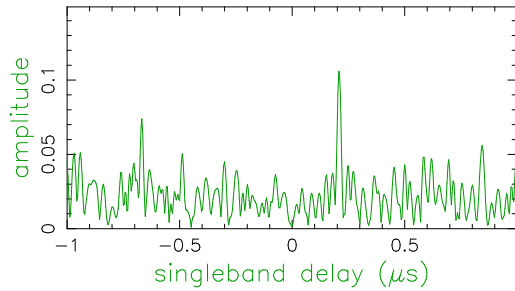
VLBA_KP - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

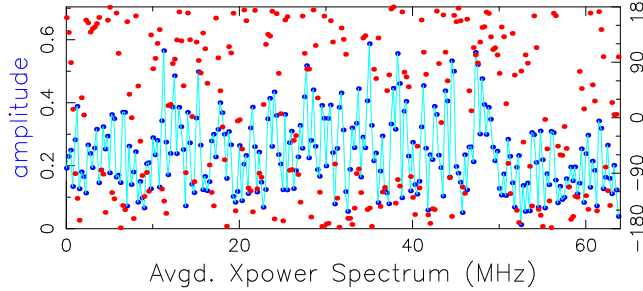


Fringe quality 0

SNR 6.0
 Int time 416.823
 Amp 0.149
 Phase 70.9
 PFD 4.3e-01
 Delays (us)
 SBD 0.208521
 MBD -0.001843
 Fringe rate (Hz)
 -0.847181
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

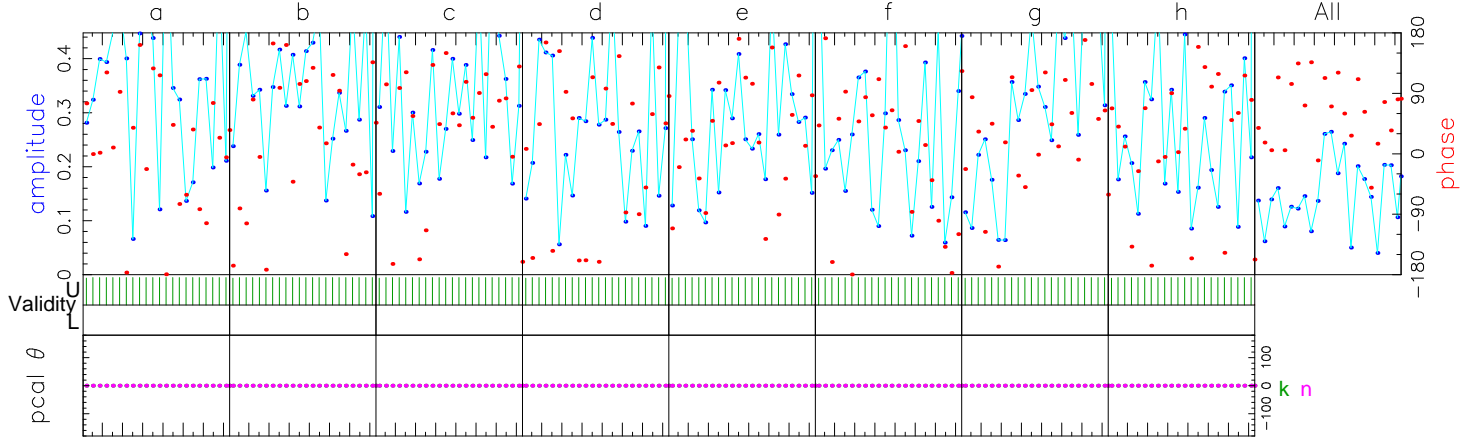


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154502.56
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121934
 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
	50.6	70.6	88.3	111.8	35.6	60.0	61.9	72.0	Phase	70.9
	0.1	0.1	0.3	0.1	0.1	0.1	0.2	0.2	Ampl.	0.1
	12.0	2.8	310.1	413.4	195.2	384.1	308.8	296.6	Sbd box	310.4
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.94769010280E+03		Apriori delay (usec)		-4.94789138509E+03		Resid mbdelay (usec)		-1.84272E-03	+/- 1.8E-04
Sband delay (usec)	-4.94768286384E+03		Apriori clock (usec)		-5.1551132E+00		Resid sbdelay (usec)		2.08521E-01	+/- 1.4E-03
Phase delay (usec)	-4.94789138280E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		2.28715E-06	+/- 6.2E-07
Delay rate (us/s)	2.63020027291E-01		Apriori rate (us/s)		2.63029862226E-01		Resid rate (us/s)		-9.83494E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		1.60458746005E-05		Resid phase (deg)		70.9	+/- 19.1

ph/seg (deg) 51.1 45.9 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.4 80.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 25.3 27.1 Inc. seg. avg. 0.157 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.1 47.3 Inc. frq. avg. 0.142 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 58.4 el 33.9 pa -75.4 n: az 72.7 el 52.5 pa -72.0 u,v (fr/asec) -1981.082 234.617 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kn..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kn.W.202.1X0KDO

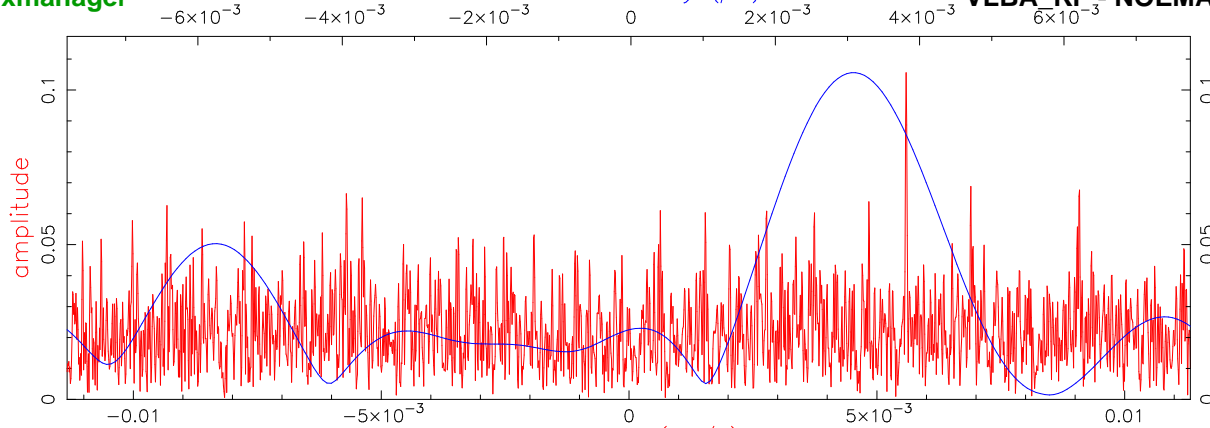
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kN

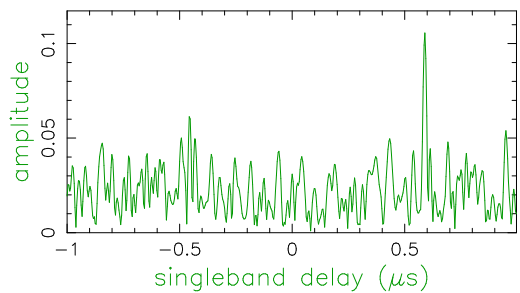
VLBA_KP - NOEMA, fgroup W, pol LR

multiband delay (μ s)

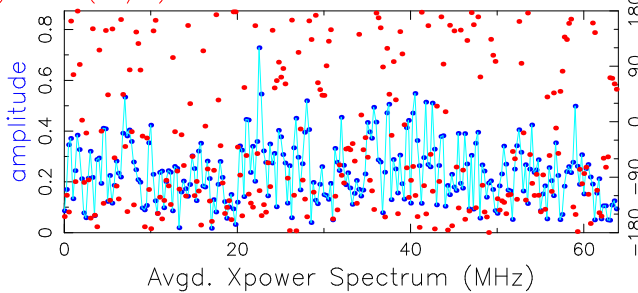


Fringe quality 0

SNR 5.9
Int time 419.822
Amp 0.117
Phase 134.3
PFD 5.3e-01
Delays (us)
SBD 0.589175
MBD 0.003056
Fringe rate (Hz) 0.482502
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

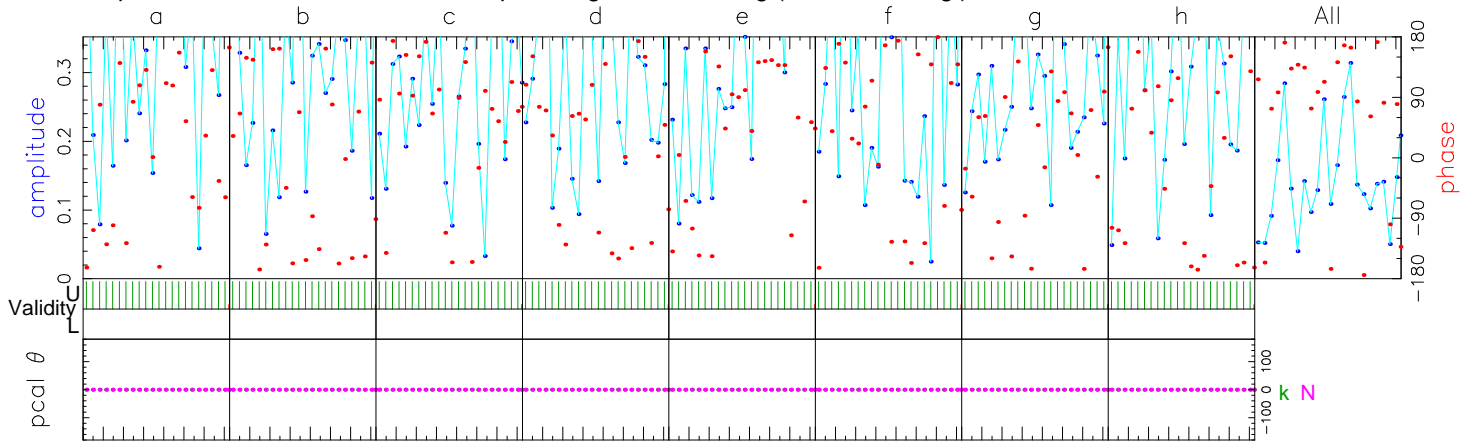


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121936
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



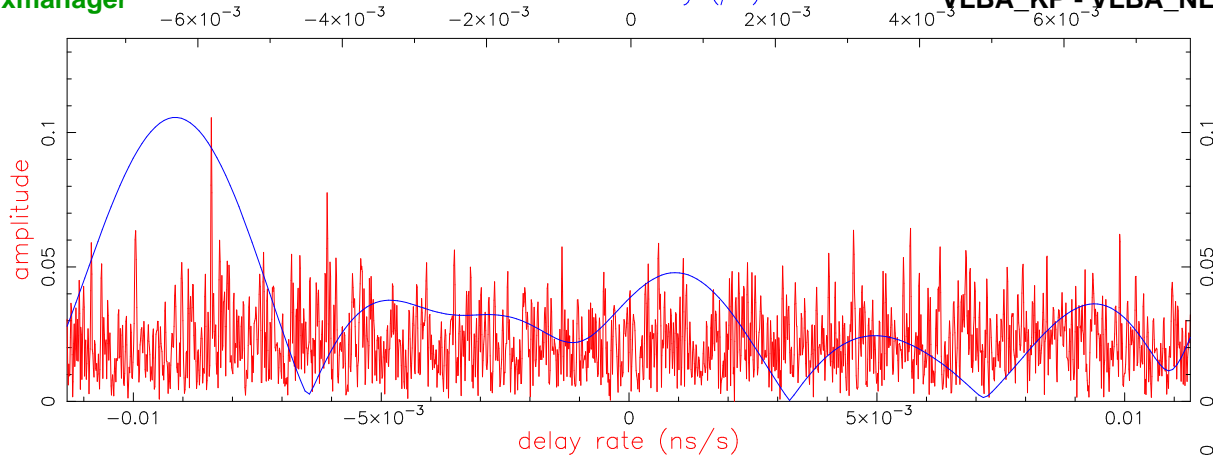
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
k	0	0	0	0	0	0	0	0		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000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

Group delay (usec)(sbd)	-5.43687133262E+03	Apriori delay (usec)	-5.43746813821E+03	Resid mbdelay (usec)	3.05559E-03	+/-	1.8E-04
Sband delay (usec)	-5.43687896371E+03	Apriori clock (usec)	1.3689201E+01	Resid sbdelay (usec)	5.89175E-01	+/-	1.5E-03
Phase delay (usec)	-5.43746813388E+03	Apriori clockrate (us/s)	4.3890000E-06	Resid phdelay (usec)	4.32944E-06	+/-	6.2E-07
Delay rate (us/s)	1.53687839697E+00	Apriori rate (us/s)	1.53687279561E+00	Resid rate (us/s)	5.60137E-06	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	1.60011135111E-05	Resid phase (deg)	134.3	+/-	19.3

ph/seg (deg)	51.1	Theor.	46.3	Amplitude	0.117 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.0		80.8	Search (2048X32)	0.105	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	26.7		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.2		47.7	Inc. seg. avg.	0.120	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.113	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

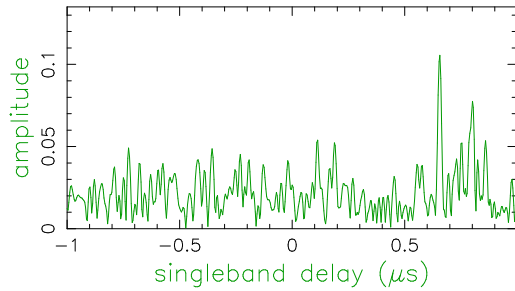
k: az 58.4 el 33.9 pa -75.4 N: az 281.5 el 56.4 pa 68.9 u,v (fr/asec) -11733.002 96.261 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kN..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kN.W.213.1X0KDO

multiband delay (μ s)

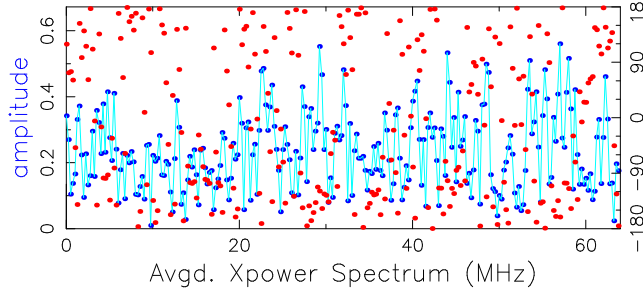


Fringe quality 0

SNR 5.9
 Int time 416.823
 Amp 0.135
 Phase -103.2
 PFD 5.3e-01
 Delays (us)
 SBD 0.655132
 MBD -0.006359
 Fringe rate (Hz)
 -0.726647
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

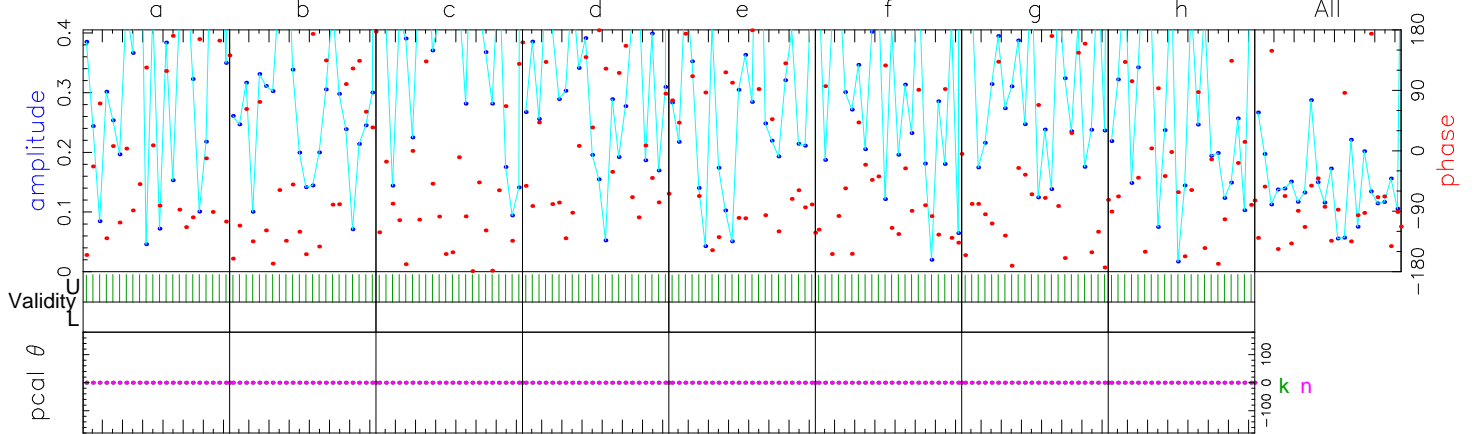


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154502.56
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121939
 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
	-89.5	-130.0	-114.2	-72.4	-150.6	-91.7	-118.1	-68.1	Phase	-103.2
	0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	471.6	125.4	425.5	433.1	347.8	81.3	402.9	318.4	Sbd box	424.7
U/L	815/0	815/0	815/0	815/0	815/0	815/0	815/0	815/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.94724149416E+03	Apriori delay (usec)	-4.94789138509E+03	Resid mbdelay (usec)	-6.35908E-03	+/-	1.8E-04
Sband delay (usec)	-4.94723625284E+03	Apriori clock (usec)	-5.1551132E+00	Resid sbdelay (usec)	6.55132E-01	+/-	1.5E-03
Phase delay (usec)	-4.94789138841E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-3.32655E-06	+/-	6.2E-07
Delay rate (us/s)	2.63021426572E-01	Apriori rate (us/s)	2.63029862226E-01	Resid rate (us/s)	-8.43565E-06	+/-	2.6E-09
Total phase (deg)	-71.2	Apriori accel (us/s/s)	1.60458746005E-05	Resid phase (deg)	-103.2	+/-	19.3

ph/seg (deg)	55.9	Theor.	46.3	Amplitude	0.135 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.3		80.8	Search (2048X32)	0.103	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.1		27.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	39.6		47.6	Inc. seg. avg.	0.141	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.130	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 58.4 el 33.9 pa -75.4 n: az 72.7 el 52.5 pa -72.0 u,v (fr/asec) -1981.082 234.617 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kn..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kn.W.225.1X0KDO

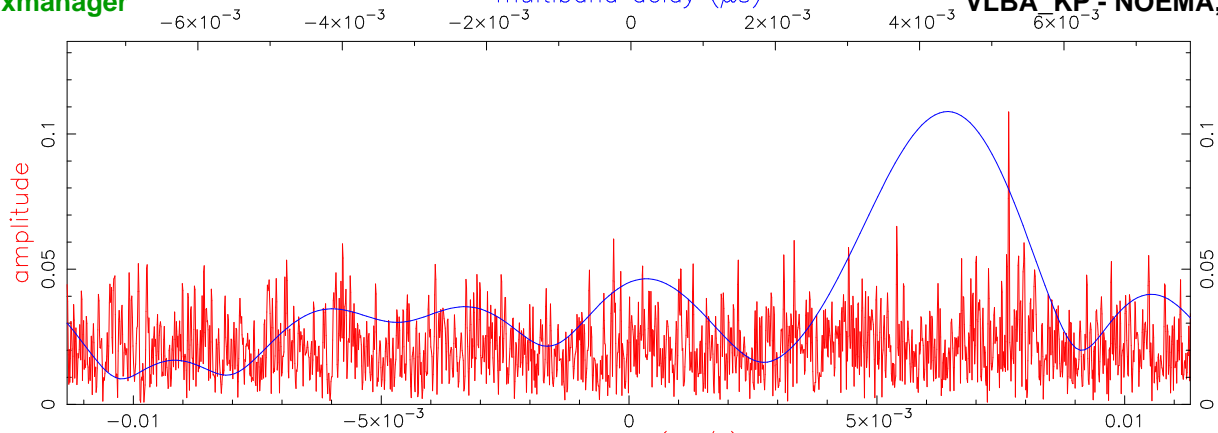
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kN

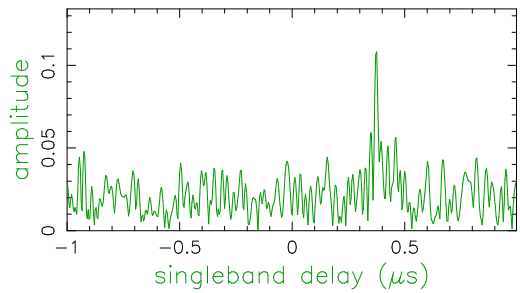
VLBA_KP - NOEMA, fgroup W, pol RL

multiband delay (μ s)

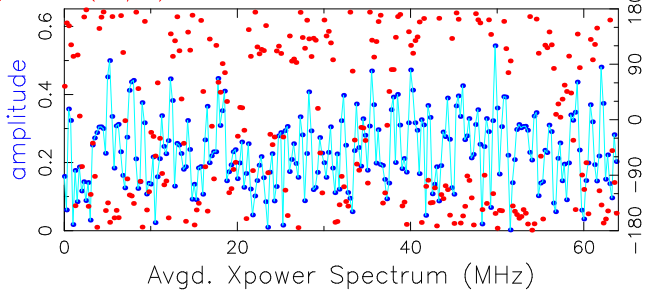


Fringe quality 0

SNR 6.2
 Int time 419.822
 Amp 0.134
 Phase 108.2
 PFD 1.5e-01
 Delays (us)
 SBD 0.373308
 MBD 0.004336
 Fringe rate (Hz)
 0.660517
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

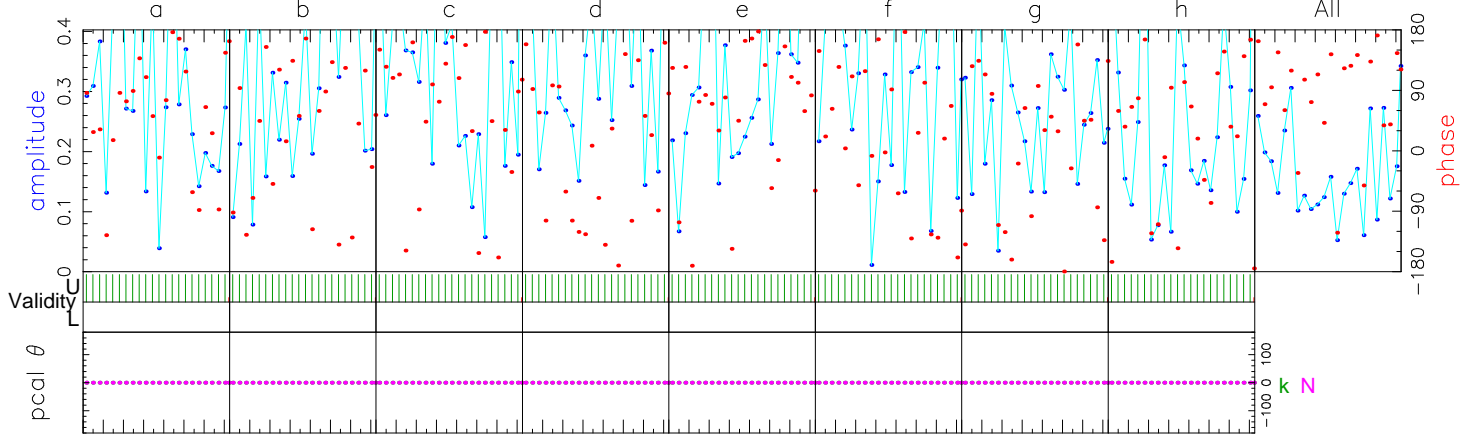


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121940
 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		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:N	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
N	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

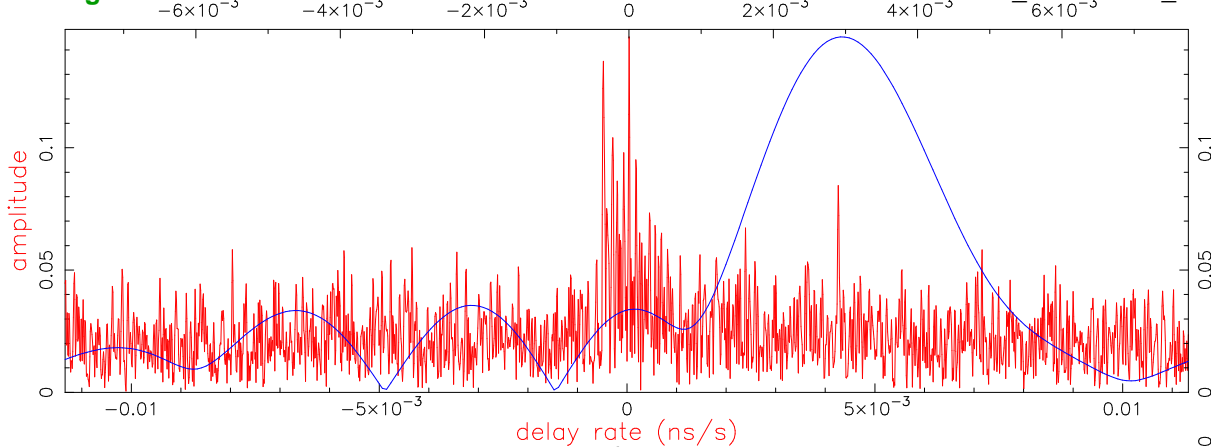
Group delay (usec)(sbd)	-5.43708880179E+03	Apriori delay (usec)	-5.43746813821E+03	Resid mbdelay (usec)	4.33642E-03	+/-	1.8E-04
Sband delay (usec)	-5.43709482996E+03	Apriori clock (usec)	1.3689201E+01	Resid sbdelay (usec)	3.73308E-01	+/-	1.4E-03
Phase delay (usec)	-5.43746813472E+03	Apriori clockrate (us/s)	4.3890000E-06	Resid phdelay (usec)	3.48972E-06	+/-	6.0E-07
Delay rate (us/s)	1.53688046355E+00	Apriori rate (us/s)	1.53687279561E+00	Resid rate (us/s)	7.66795E-06	+/-	2.5E-09
Total phase (deg)	-45.0	Apriori accel (us/s/s)	1.60011135111E-05	Resid phase (deg)	108.2	+/-	18.5

ph/seg (deg)	65.6	Theor.	44.4	Amplitude	0.134 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	79.3		77.6	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	31.7		26.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	47.0		45.7	Inc. seg. avg.	0.151	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	0.131	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

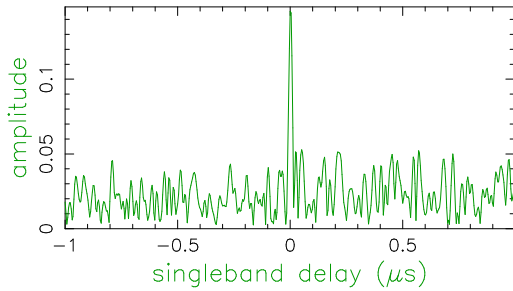
k: az 58.4 el 33.9 pa -75.4 N: az 281.5 el 56.4 pa 68.9 u,v (fr/asec) -11733.002 96.261 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kN..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kN.W.235.1X0KDO

multiband delay (μ s)

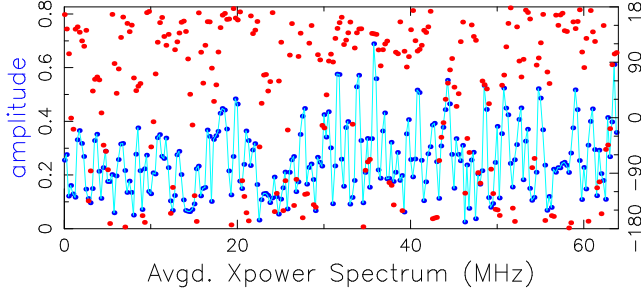
Fringe quality 9



SNR 8.3
Int time 419.828
Amp 0.148
Phase 123.9
PFD 3.2e-08
Delays (us)
SBD 0.001815
MBD 0.002947
Fringe rate (Hz)
0.003349
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

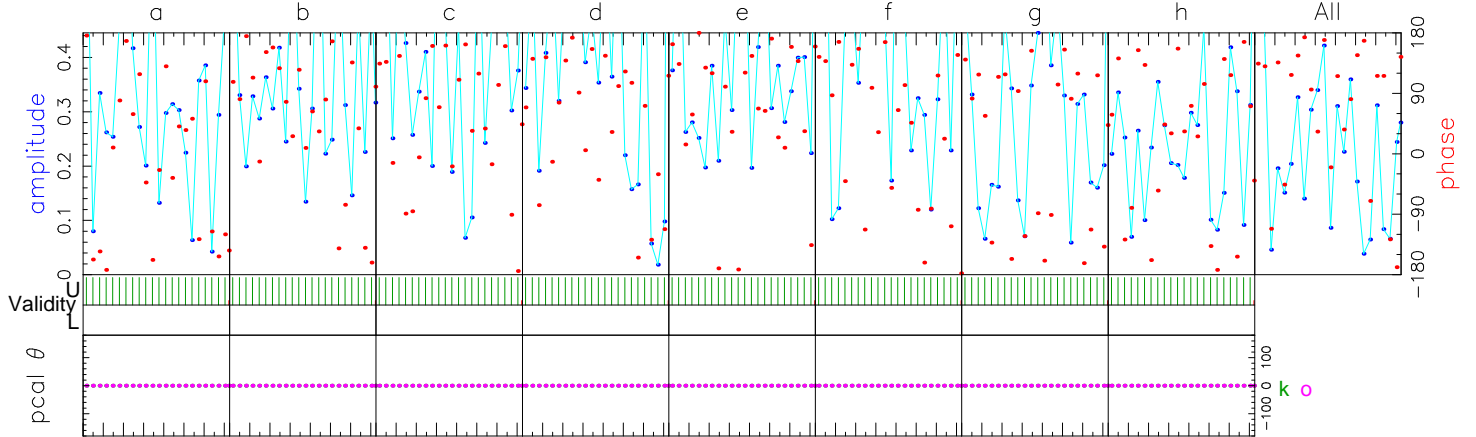


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121928
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		
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	6.28521066519E+02		Apriori delay (usec)		6.28518119428E+02		Resid mbdelay (usec)		2.94709E-03	+/- 1.3E-04
Sband delay (usec)	6.28519934928E+02		Apriori clock (usec)		-3.4241371E+00		Resid sbdelay (usec)		1.81550E-03	+/- 1.0E-03
Phase delay (usec)	6.28518123423E+02		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		3.99488E-06	+/- 4.4E-07
Delay rate (us/s)	2.58656950176E-02		Apriori rate (us/s)		2.58656561404E-02		Resid rate (us/s)		3.88771E-08	+/- 1.8E-09
Total phase (deg)	54.6		Apriori accel (us/s/s)		-9.02655237054E-06		Resid phase (deg)		123.9	+/- 13.8
ph/seg (deg)	RMS 78.2	Theor. 33.0	Amplitude 0.148 +/- 0.018	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000 1.000
amp/seg (%)	103.9	57.7	Search (2048X32) 0.136	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.008 0.008
ph/frq (deg)	27.9	19.5	Interp. 0.000	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011 0.011
amp/frq (%)	27.0	34.0	Inc. seg. avg. 0.196	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)		0.00 0.00
k: az 58.4 el 33.9 pa -75.4		o: az 59.4 el 31.9 pa -66.3		u,v (fr/asec) -214.369 -1128.346						simultaneous interpolator

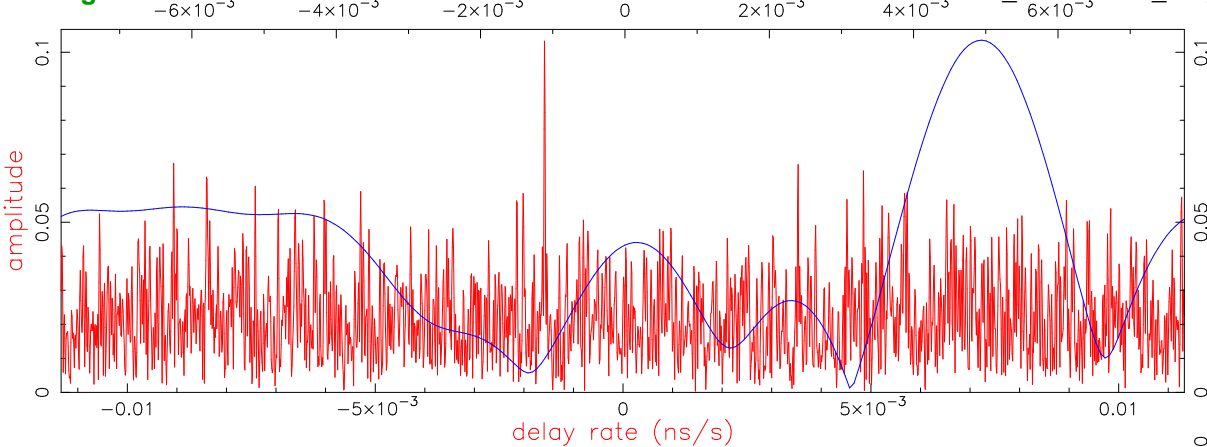
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, ko

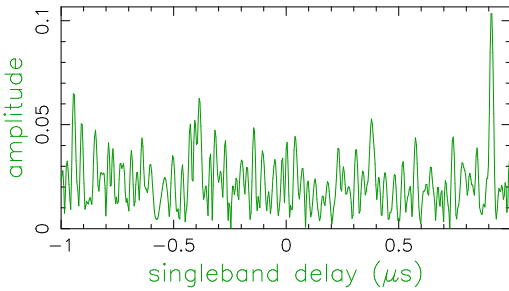
VLBA_KP - VLBA_OV, fgroup W, pol RR

multiband delay (μ s)

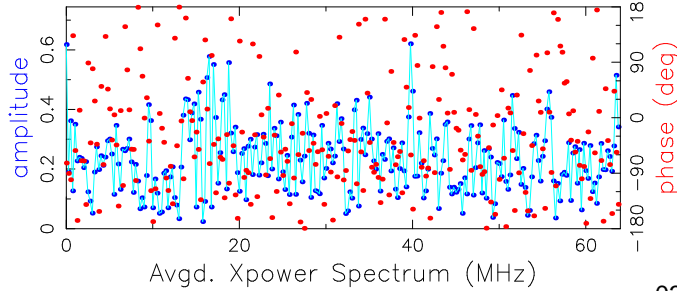


Fringe quality 0

SNR 5.9
 Int time 419.828
 Amp 0.107
 Phase -49.8
 PFD 5.4e-01
 Delays (us)
 SBD 0.912082
 MBD 0.004863
 Fringe rate (Hz)
 -0.136451
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

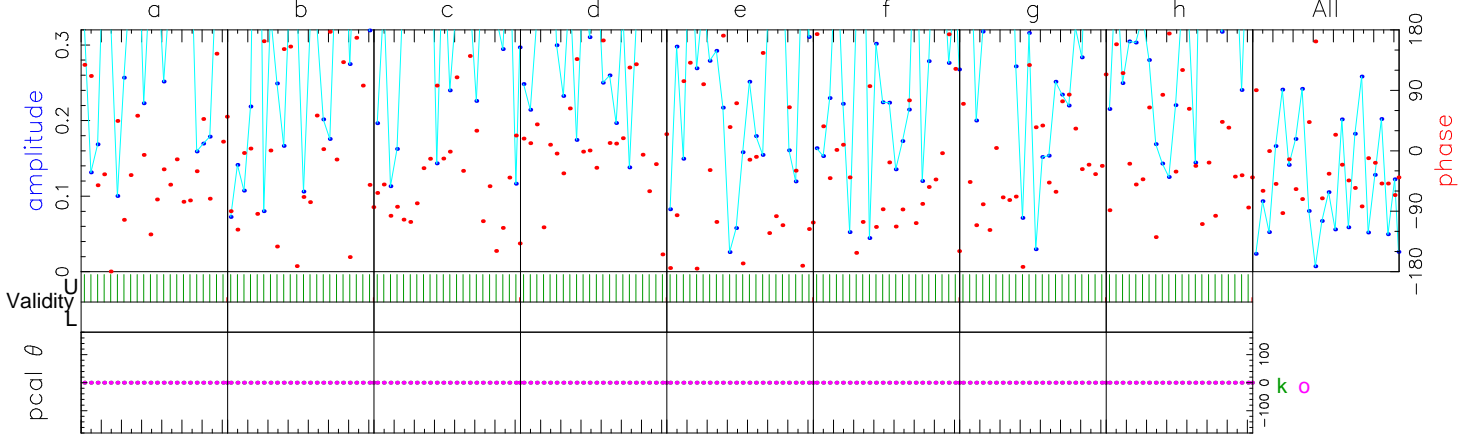


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121932
 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
	-43.4	-129.1	-56.1	0.0	-134.3	-69.6	-32.8	-39.2	Phase	-49.8
	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	505.8	105.1	491.6	257.4	158.8	133.9	489.9	316.9	Sbd box	490.5
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	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.29429232458E+02		Apriori delay (usec)		6.28518119428E+02		Resid mbdelay (usec)		4.86303E-03	+/- 1.8E-04
Sband delay (usec)	6.29430201428E+02		Apriori clock (usec)		-3.4241371E+00		Resid sbdelay (usec)		9.12082E-01	+/- 1.5E-03
Phase delay (usec)	6.28518117823E+02		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		-1.60474E-06	+/- 6.2E-07
Delay rate (us/s)	2.58640720819E-02		Apriori rate (us/s)		2.58656561404E-02		Resid rate (us/s)		-1.58406E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-9.02655237054E-06		Resid phase (deg)		-49.8	+/- 19.3

	RMS	Theor.	Amplitude	0.107 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.0	46.3	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	71.9	80.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	52.9	27.3	Inc. seg. avg.	0.093	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.0	47.7	Inc. frq. avg.	0.116	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 58.4 el 33.9 pa -75.4 o: az 59.4 el 31.9 pa -66.3 u,v (fr/asec) -214.369 -1128.346 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/ko..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/ko.W.193.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

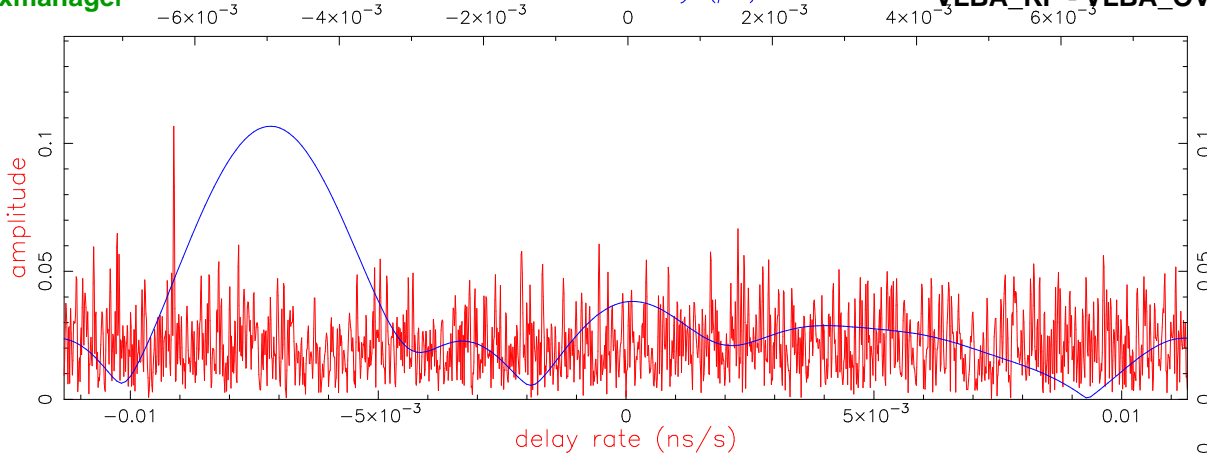
fxmanager

3C84.1X0KDO, No0084, ko

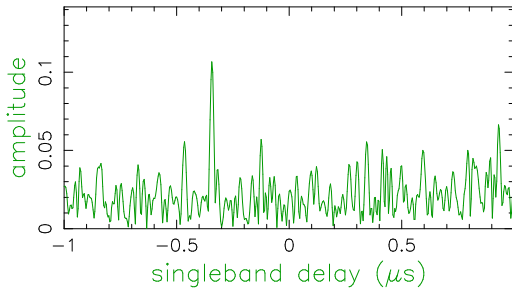
VLBA_KP - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

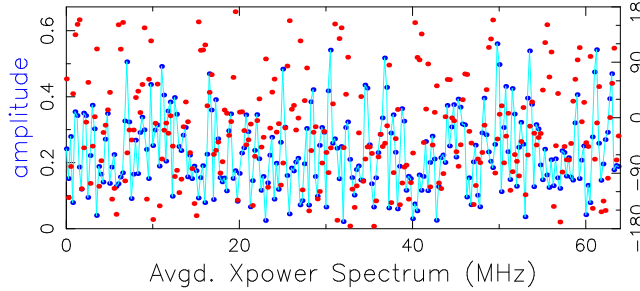
Fringe quality 0



SNR 6.0
 Int time 419.828
 Amp 0.142
 Phase 30.4
 PFD 4.2e-01
 Delays (us)
 SBD -0.343222
 MBD -0.004930
 Fringe rate (Hz)
 -0.786954
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

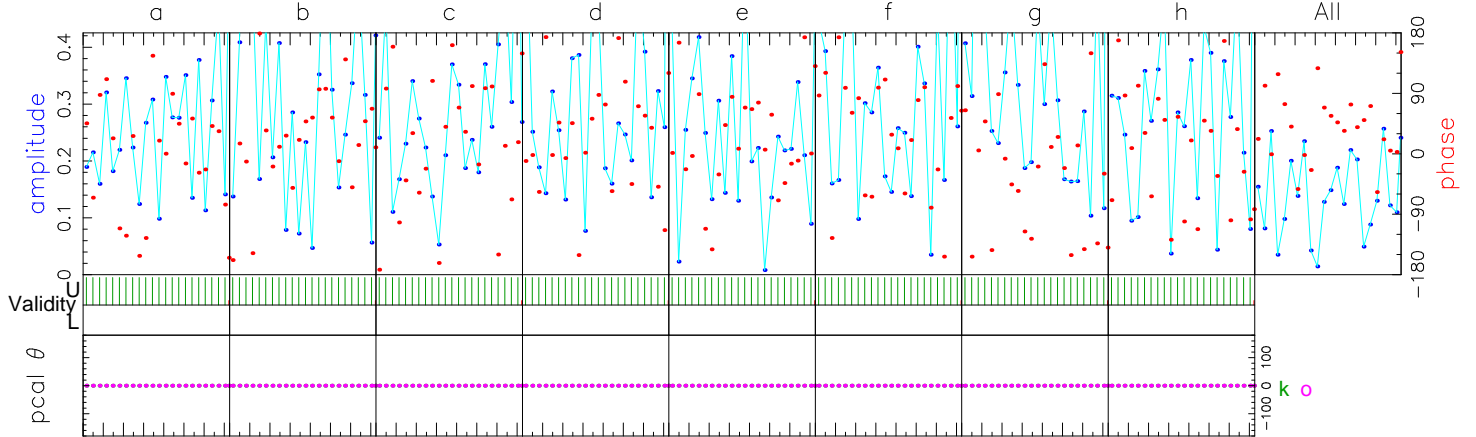


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121936
 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
	17.3	26.8	45.6	36.5	22.3	66.6	-19.9	28.9	Phase	30.4
	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	497.3	273.7	437.4	91.0	400.8	168.4	485.3	405.6	Sbd box	169.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.28169439116E+02		Apriori delay (usec)		6.28518119428E+02		Resid mbdelay (usec)		-4.93031E-03	+/- 1.8E-04
Sband delay (usec)	6.28174897178E+02		Apriori clock (usec)		-3.4241371E+00		Resid sbdelay (usec)		-3.43222E-01	+/- 1.4E-03
Phase delay (usec)	6.28518120407E+02		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		9.78707E-07	+/- 6.2E-07
Delay rate (us/s)	2.58565203903E-02		Apriori rate (us/s)		2.58656561404E-02		Resid rate (us/s)		-9.13575E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-9.02655237054E-06		Resid phase (deg)		30.4	+/- 19.1

ph/seg (deg) 49.4 45.9 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.4 80.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 27.0 27.1 Inc. seg. avg. 0.139 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 23.9 47.2 Inc. frq. avg. 0.138 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 58.4 el 33.9 pa -75.4 o: az 59.4 el 31.9 pa -66.3 u,v (fr/asec) -214.369 -1128.346 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/ko..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/ko.W.211.1X0KDO

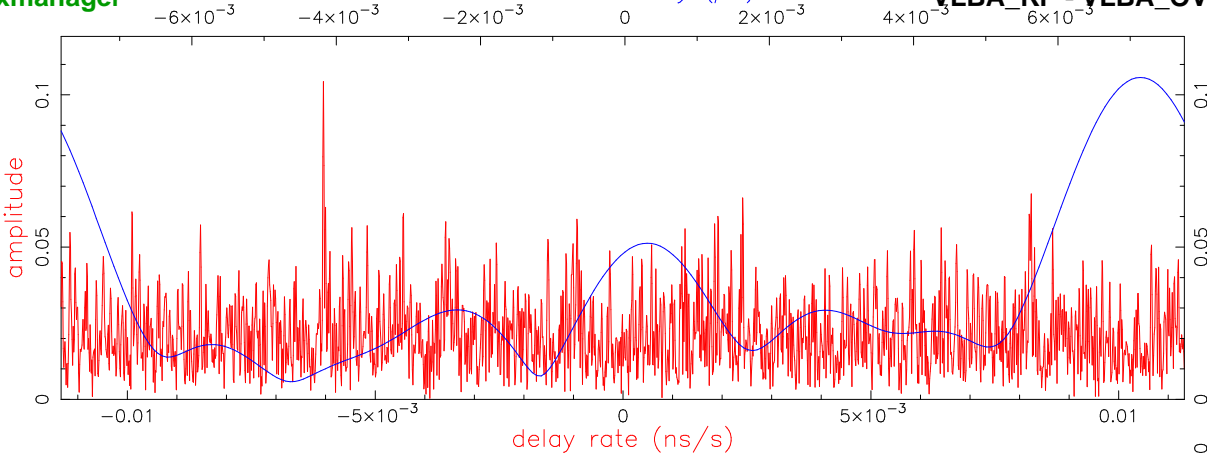
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, ko

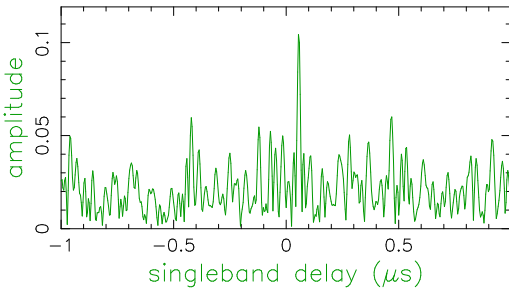
VLBA_KP - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

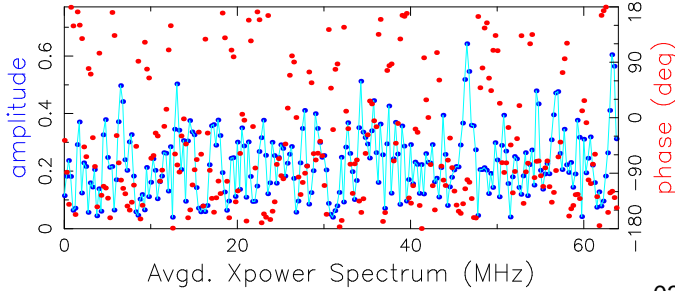


Fringe quality 0

SNR 5.9
Int time 419.828
Amp 0.119
Phase -89.0
PFD 5.5e-01
Delays (us)
SBD 0.055960
MBD -0.008301
Fringe rate (Hz)
-0.521051
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

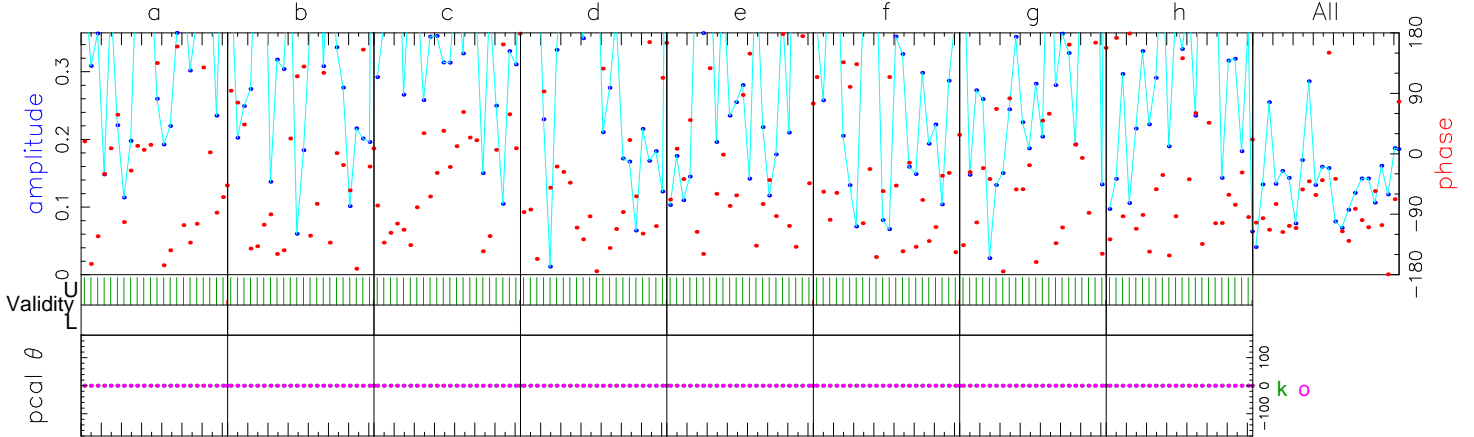


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121940
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
	-47.0	-111.9	-46.5	-103.3	-118.3	-91.0	-109.6	-87.5	Phase	-89.0
	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	119.4	283.7	377.1	272.8	509.0	22.6	465.3	271.0	Sbd box	271.3
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	
o	0	0	0	0	0	0	0	0	PC freqs	
k:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	6.28572318647E+02	Apriori delay (usec)		6.28518119428E+02	Resid mbdelay (usec)		-8.30078E-03	+/-	1.8E-04	
Sband delay (usec)	6.28574079428E+02	Apriori clock (usec)		-3.4241371E+00	Resid sbdelay (usec)		5.59600E-02	+/-	1.5E-03	
Phase delay (usec)	6.28518116557E+02	Apriori clockrate (us/s)		-3.6000001E-07	Resid phdelay (usec)		-2.87049E-06	+/-	6.2E-07	
Delay rate (us/s)	2.58596072584E-02	Apriori rate (us/s)		2.58656561404E-02	Resid rate (us/s)		-6.04888E-06	+/-	2.6E-09	
Total phase (deg)	201.7		Apriori accel (us/s/s)		-9.02655237054E-06	Resid phase (deg)		-89.0	+/-	19.3

ph/seg (deg)	RMS 44.6	Theor. 46.4	Amplitude Search (2048X32)	0.119 +/- 0.020	0.100	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	60.8	81.0	Interp.	0.000	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	30.5	27.4	Inc. seg. avg.	0.119	0.119	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	37.1	47.7	Inc. frq. avg.	0.116	0.116	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 58.4 el 33.9 pa -75.4 o: az 59.4 el 31.9 pa -66.3 u,v (fr/asec) -214.369 -1128.346 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/ko..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/ko.W.229.1X0KDO

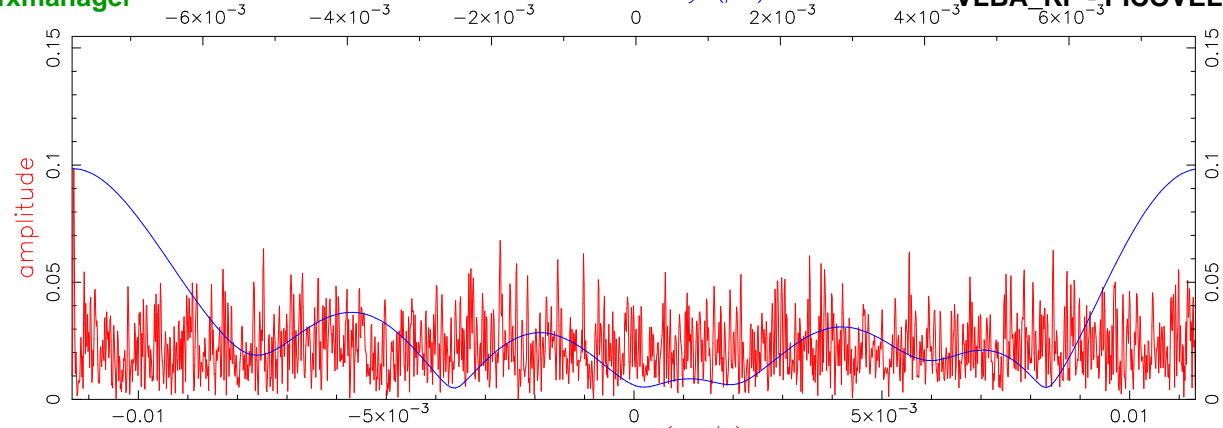
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

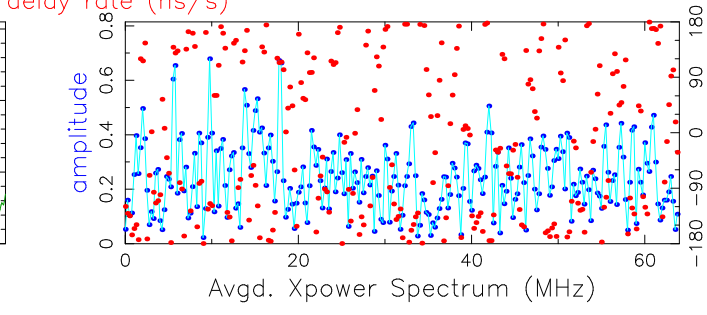
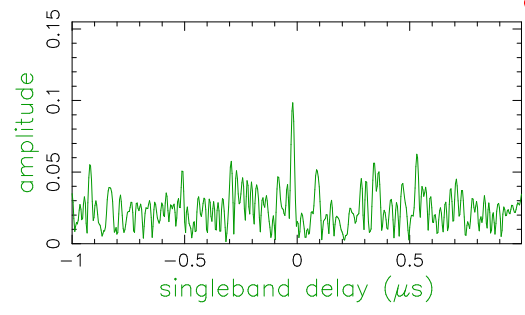
3C84.1X0KDO, No0084, kP

VLBA_KP - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

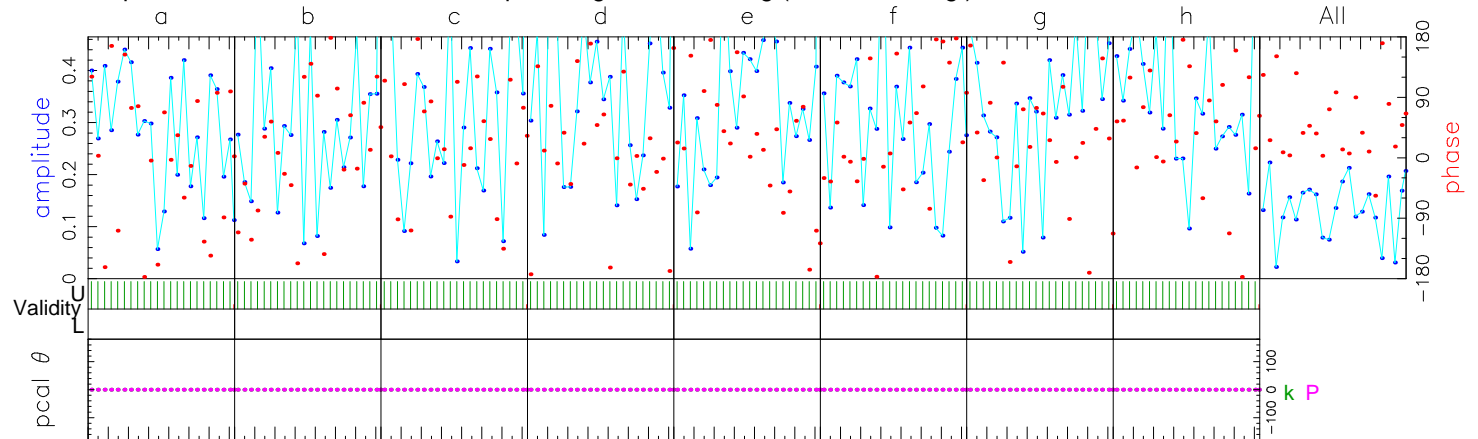


Fringe quality 0
 SNR 5.5
 Int time 419.821
 Amp 0.155
 Phase 40.9
 PFD 1.0e+00
 Delays (us)
 SBD -0.020309
 MBD -0.007814
 Fringe rate (Hz)
 -0.974683
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121927
 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		
k	0	0	0	0	0	0	0	0		
P	1000	1000	1000	1000	1000	1000	1000	1000		
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.37312133929E+03	Apriori delay (usec)	-6.37309789980E+03	Resid mbdelay (usec)	-7.81449E-03	+/-	2.0E-04
Sband delay (usec)	-6.37311820905E+03	Apriori clock (usec)	1.3772240E+00	Resid sbdelay (usec)	-2.03093E-02	+/-	1.6E-03
Phase delay (usec)	-6.37309789848E+03	Apriori clockrate (us/s)	5.999998E-07	Resid phdelay (usec)	1.31749E-06	+/-	6.7E-07
Delay rate (us/s)	1.50066422914E+00	Apriori rate (us/s)	1.50067554424E+00	Resid rate (us/s)	-1.13151E-05	+/-	2.8E-09
Total phase (deg)		Apriori accel (us/s/s)	2.83902696096E-05	Resid phase (deg)	40.9	+/-	20.7

ph/seg (deg)	55.6	Theor.	49.6	Amplitude	0.155 +/- 0.028	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.7		86.6	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	35.8		29.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.7		51.1	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.148	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 58.4 el 33.9 pa -75.4 P: az 290.7 el 61.1 pa 87.0 u,v (fr/asec) -11433.429 1618.537 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kP..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kP.W.166.1X0KDO

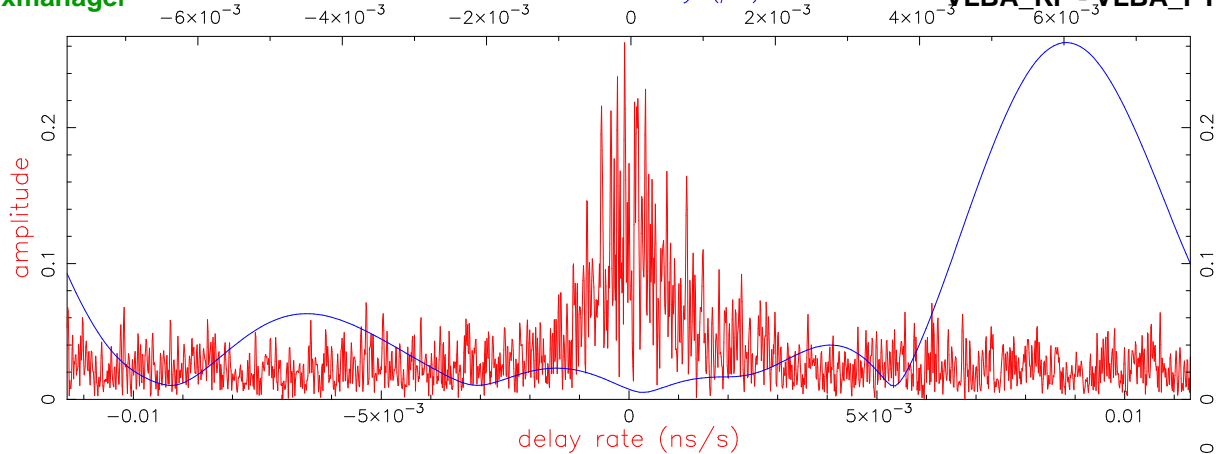
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kp

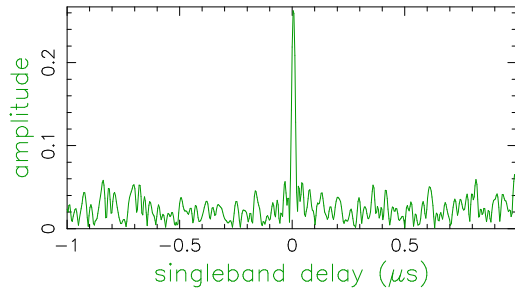
VLBA_KP - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

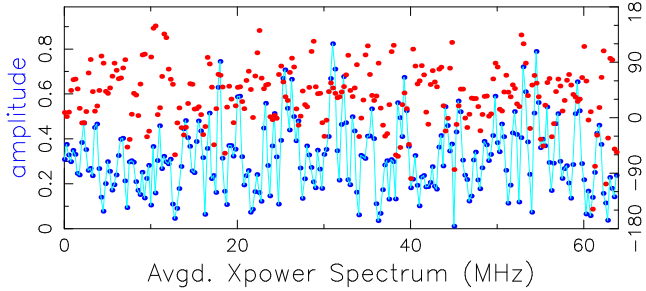


Fringe quality 9

SNR 15.0
 Int time 419.827
 Amp 0.267
 Phase 33.6
 PFD 6.9e-42
 Delays (us)
 SBD 0.005586
 MBD 0.006076
 Fringe rate (Hz)
 -0.007198
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

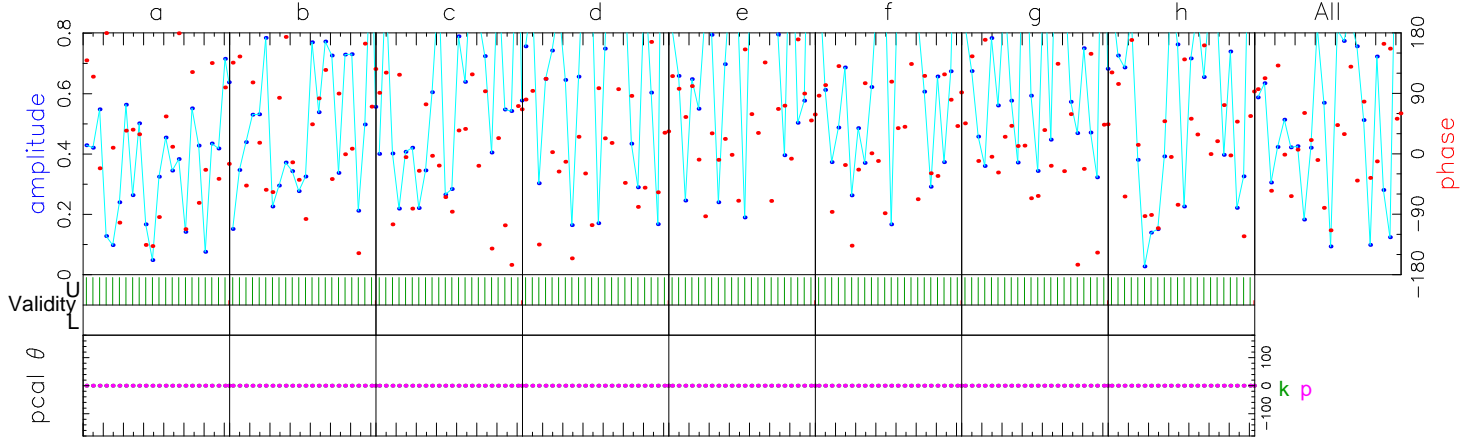


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121928
 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		
p	0	0	0	0	0	0	0	0		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.11153247481E+03				-1.11153855126E+03				6.07645E-03	+/- 7.2E-05
Sband delay (usec)	-1.11153296576E+03				-5.2159557E+00				5.58550E-03	+/- 5.8E-04
Phase delay (usec)	-1.11153855018E+03				1.2000000E-07				1.08195E-06	+/- 2.5E-07
Delay rate (us/s)	4.59845326314E-02				4.59846161987E-02				-8.35673E-08	+/- 1.0E-09
Total phase (deg)			-256.6		3.31528127216E-06				33.6	+/- 7.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 77.3 18.4
 amp/seg (%) 152.8 32.0
 ph/frq (deg) 14.0 10.8
 amp/frq (%) 38.1 18.9

RMS Theor. Amplitude 0.267 +/- 0.018
 Search (2048X32) 0.245
 Interp. 0.000
 Inc. seg. avg. 0.512
 Inc. frq. avg. 0.262

Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 SampCntNorm: enabled
 nlags: 256 t_cohere infinite

k: az 58.4 el 33.9 pa -75.4 p: az 60.7 el 37.6 pa -74.9 u,v (fr/asec) -345.226 7.728

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kp..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kp.W.173.1X0KDO simultaneous interpolator

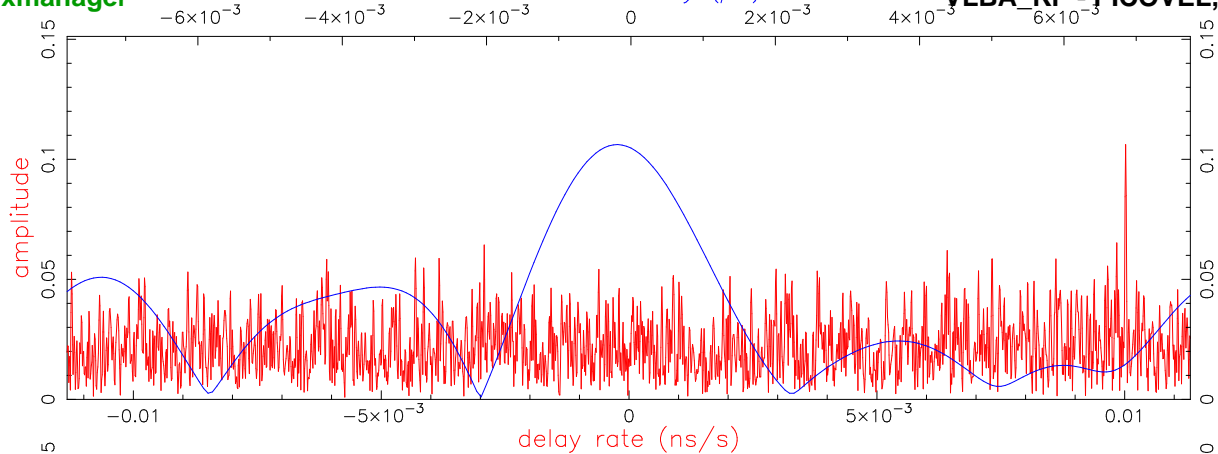
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kP

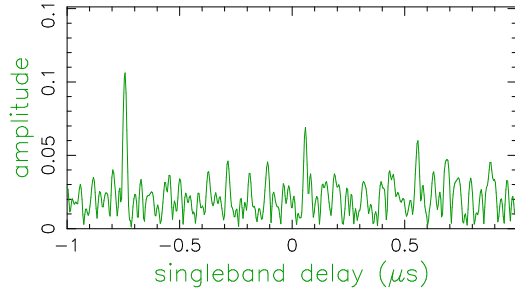
VLBA_KP - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

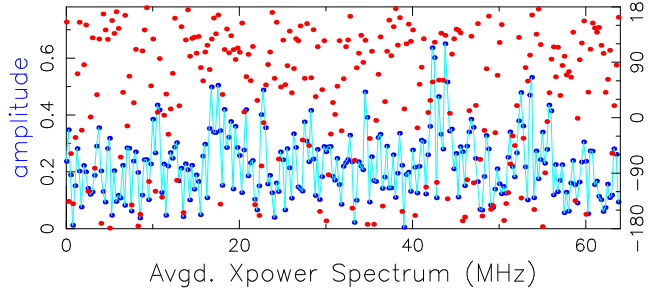


Fringe quality 0

SNR 6.0
 Int time 419.821
 Amp 0.151
 Phase -167.6
 PFD 4.2e-01
 Delays (us)
 SBD -0.743381
 MBD -0.000181
 Fringe rate (Hz) 0.864698
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

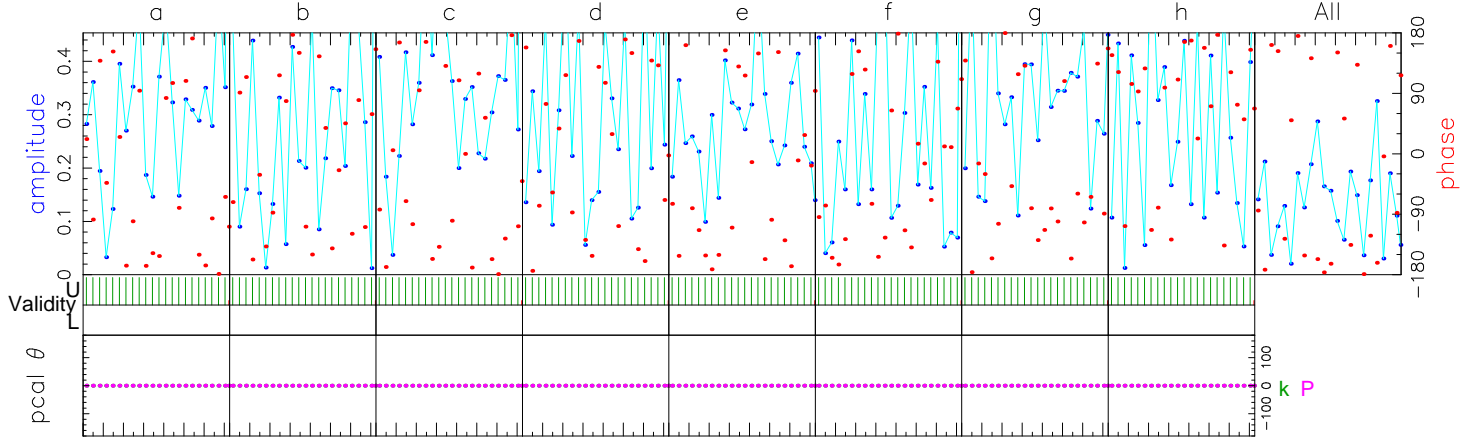


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build 2021:303:074338
 2021:303:121932
 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
	-177.8	-153.6	-157.8	150.5	-159.2	-153.4	-129.6	137.4	Phase	-167.6
	0.1	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	85.5	60.4	481.4	381.8	296.5	271.5	66.7	220.0	Sbd box	66.7
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	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.37384808032E+03		Apriori delay (usec)		-6.37309789980E+03		Resid mbdelay (usec)		-1.80524E-04	+/- 1.8E-04
Sband delay (usec)	-6.37384128080E+03		Apriori clock (usec)		1.3772240E+00		Resid sbdelay (usec)		-7.43381E-01	+/- 1.4E-03
Phase delay (usec)	-6.37309790520E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		-5.40452E-06	+/- 6.2E-07
Delay rate (us/s)	1.50068558253E+00		Apriori rate (us/s)		1.50067554424E+00		Resid rate (us/s)		1.00383E-05	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		2.83902696096E-05		Resid phase (deg)		-167.6	+/- 19.1

	RMS	Theor.	Amplitude	0.151 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	66.5	45.9	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	80.3	80.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	33.9	27.0	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.2	47.2	Inc. frq. avg.	0.155	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 58.4 el 33.9 pa -75.4 P: az 290.7 el 61.1 pa 87.0 u,v (fr/asec) -11433.429 1618.537 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kP..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kP.W.190.1X0KDO

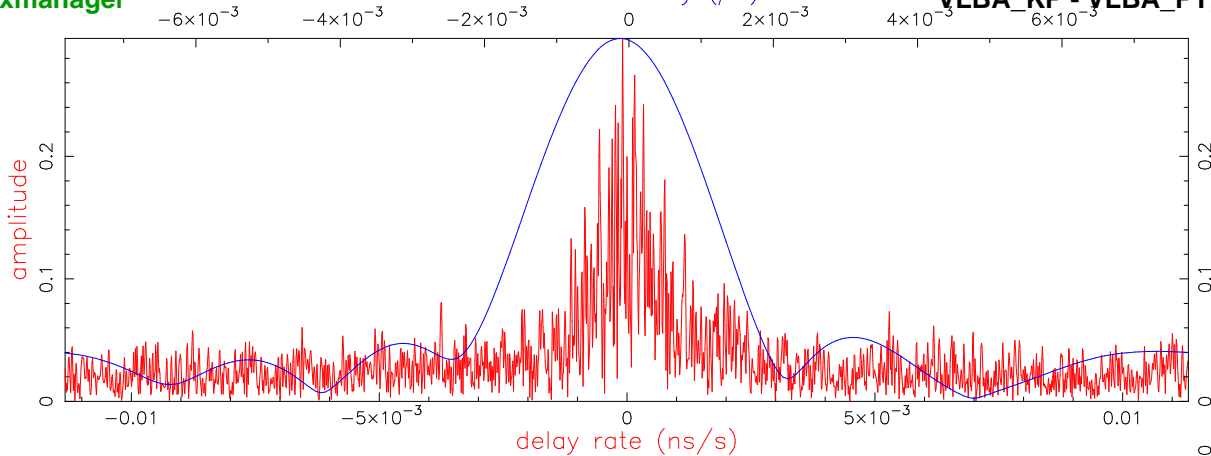
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kp

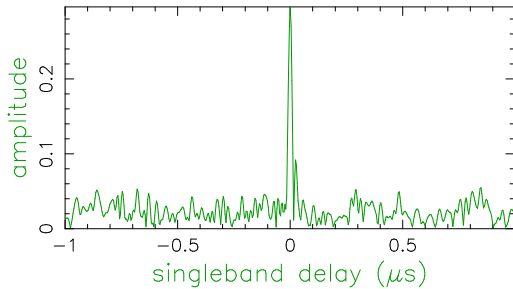
VLBA_KP - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

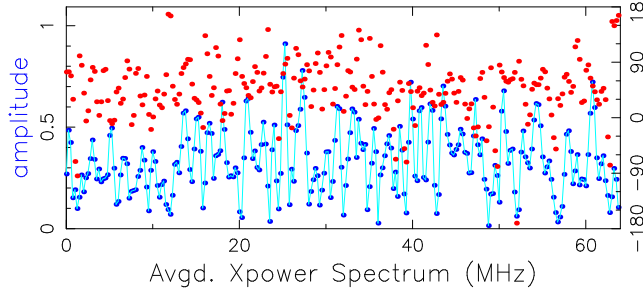


Fringe quality 9

SNR 16.6
 Int time 419.827
 Amp 0.296
 Phase 53.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000052
 MBD -0.000119
 Fringe rate (Hz)
 -0.007164
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

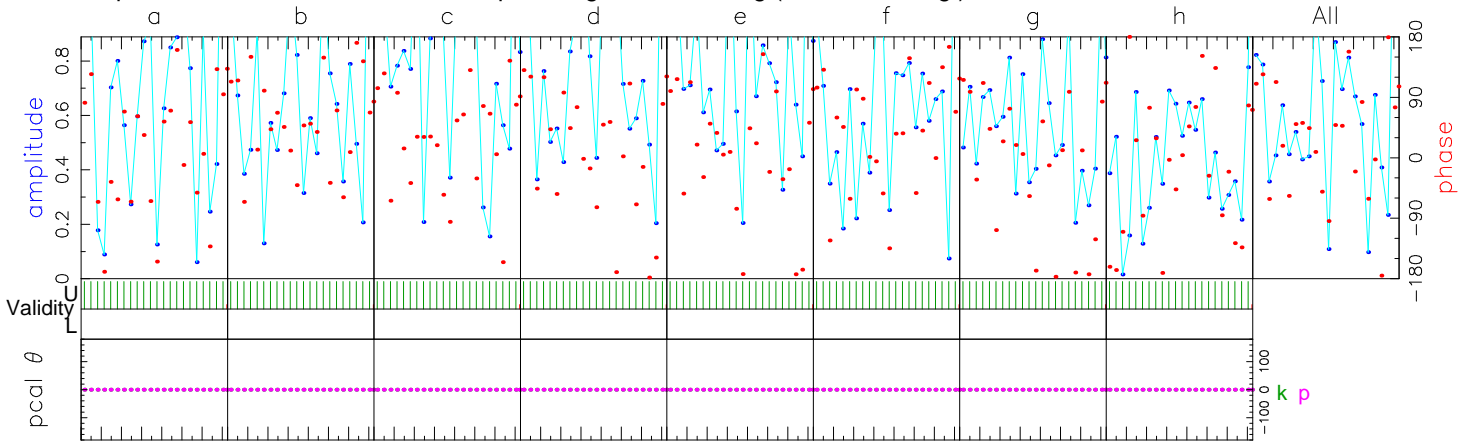


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121932
 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		
p	0	0	0	0	0	0	0	0		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.11153867049E+03									
Sband delay (usec)	-1.11153849901E+03									
Phase delay (usec)	-1.11153854956E+03									
Delay rate (us/s)	4.59845330297E-02									
Total phase (deg)			-237.2							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									53.0	+/- 6.9
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MSamp/s):	128									
Data rate(Mb/s):	2048									
PC period (AP's)	5	5								
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 79.5 16.6
 amp/seg (%) 150.6 28.9
 ph/frq (deg) 7.9 9.8
 amp/frq (%) 31.9 17.0

RMS Theor. Amplitude 0.296 +/- 0.018
 Search (2048X32) 0.275
 Interp. 0.000
 Inc. seg. avg. 0.588
 Inc. frq. avg. 0.294

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

sb window (us) -1.000 1.000
 mb window (us) -0.008 0.008
 dr window (ns/s) -0.011 0.011
 ion window (TEC) 0.00 0.00

k: az 58.4 el 33.9 pa -75.4 p: az 60.7 el 37.6 pa -74.9 u,v (fr/asec) -345.226 7.728 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kp..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kp.W.192.1X0KDO

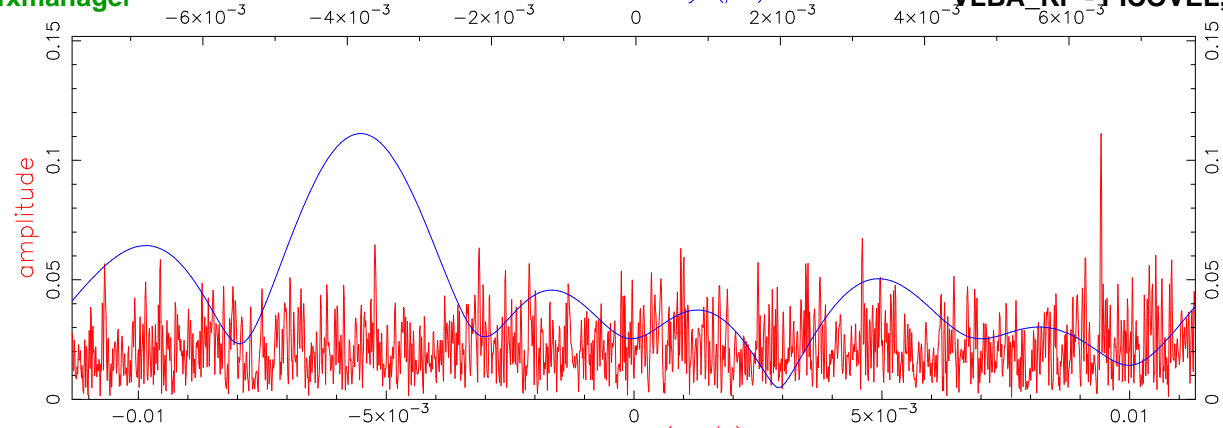
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kP

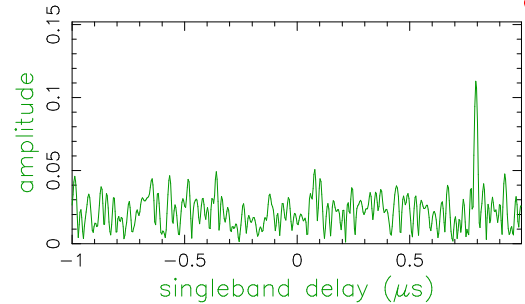
VLBA_KP - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

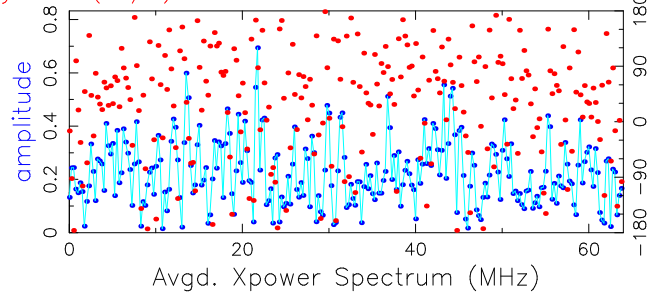


Fringe quality 0

SNR 6.3
 Int time 419.821
 Amp 0.152
 Phase -104.8
 PFD 8.6e-02
 Delays (us)
 SBD 0.794084
 MBD -0.003795
 Fringe rate (Hz)
 0.812850
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

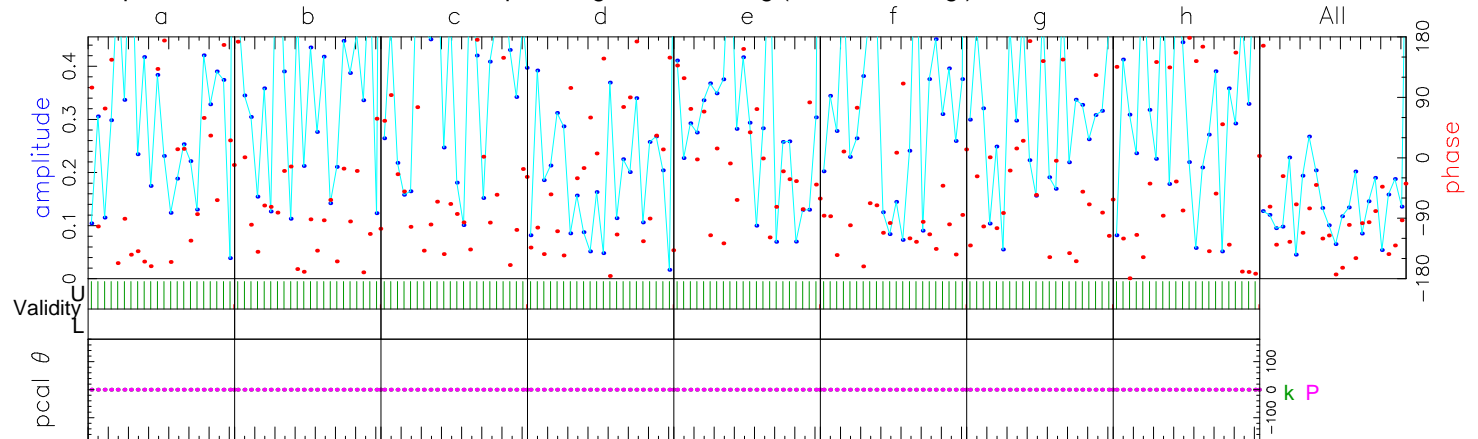


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121936
 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
	-151.6	-94.8	-101.2	-120.4	-23.7	-93.5	-90.0	-136.3	Phase	-104.8
	0.1	0.3	0.2	0.1	0.1	0.3	0.1	0.3	Ampl.	0.2
	370.4	461.5	454.8	496.1	400.1	460.7	68.7	459.6	Sbd box	460.3
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	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.37230481960E+03		Apriori delay (usec)		-6.37309789980E+03		Resid mbdelay (usec)		-3.79480E-03	+/- 1.7E-04
Sband delay (usec)	-6.37230381555E+03		Apriori clock (usec)		1.3772240E+07		Resid sbdelay (usec)		7.94084E-01	+/- 1.4E-03
Phase delay (usec)	-6.37309790318E+03		Apriori clockrate (us/s)		5.9999998E-07		Resid phdelay (usec)		-3.37900E-06	+/- 5.9E-07
Delay rate (us/s)	1.50068498063E+00		Apriori rate (us/s)		1.50067554424E+00		Resid rate (us/s)		9.43638E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.83902696096E-05		Resid phase (deg)		-104.8	+/- 18.2

	RMS	Theor.	Amplitude	0.152 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	42.6	43.7	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	71.1	76.3	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	41.8	25.8	Inc. seg. avg.	0.151	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	51.6	45.0	Inc. frq. avg.	0.157	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 58.4 el 33.9 pa -75.4 P: az 290.7 el 61.1 pa 87.0 u,v (fr/asec) -11433.429 1618.537 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kP..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kP.W.207.1X0KDO

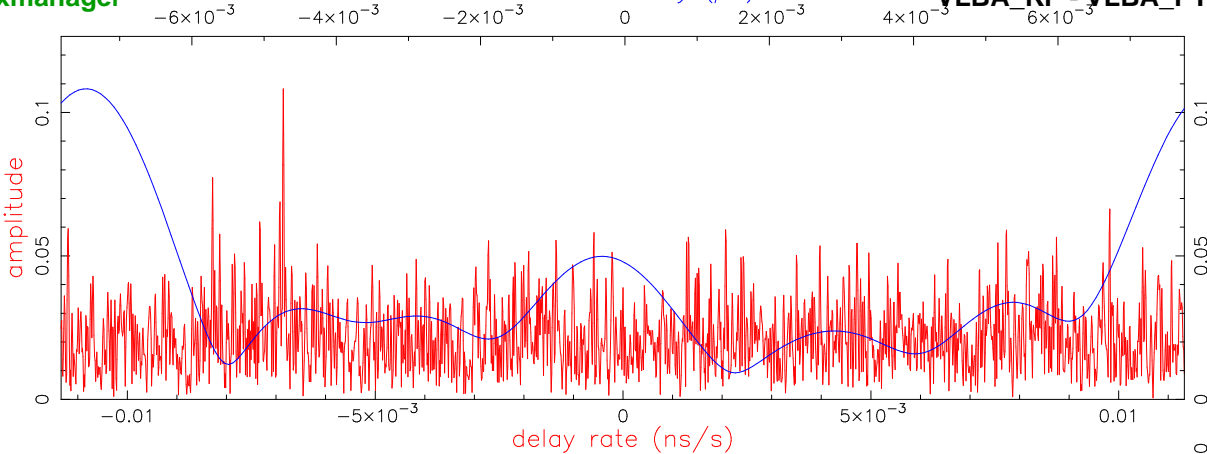
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kp

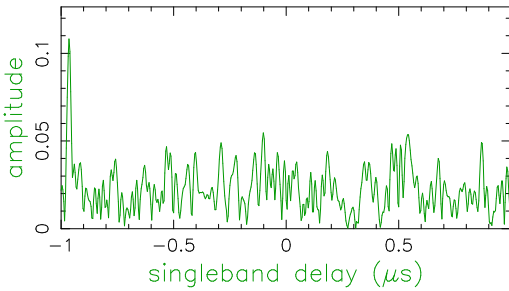
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

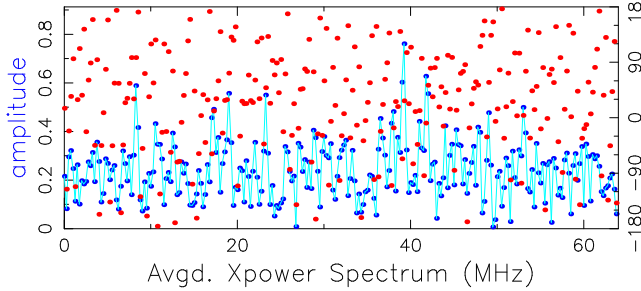


Fringe quality 0

SNR 6.1
 Int time 419.827
 Amp 0.127
 Phase 178.0
 PFD 2.9e-01
 Delays (us)
 SBD -0.964534
 MBD -0.007448
 Fringe rate (Hz)
 -0.591351
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

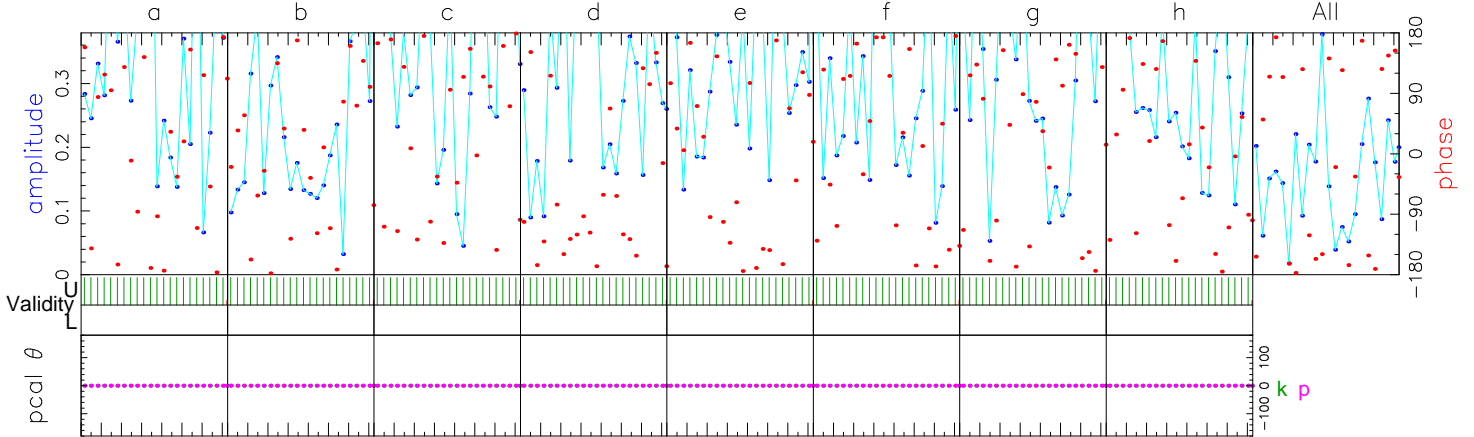


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121936
 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
	171.8	146.8	162.0	-135.3	168.9	-173.7	149.8	-172.9	Phase	178.0
	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	14.5	112.6	393.8	10.0	41.1	501.7	9.1	247.3	Sbd box	10.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.11249912473E+03	Apriori delay (usec)	-1.11153855126E+03	Resid mbdelay (usec)	-7.44846E-03	+/-	1.8E-04
Sband delay (usec)	-1.11250308551E+03	Apriori clock (usec)	-5.2159557E+00	Resid sbdelay (usec)	-9.64534E-01	+/-	1.4E-03
Phase delay (usec)	-1.11153854552E+03	Apriori clockrate (us/s)	1.2000000E-07	Resid phdelay (usec)	5.74119E-06	+/-	6.1E-07
Delay rate (us/s)	4.59777512015E-02	Apriori rate (us/s)	4.59846161987E-02	Resid rate (us/s)	-6.86500E-06	+/-	2.5E-09
Total phase (deg)	-112.1	Apriori accel (us/s/s)	3.31528127216E-06	Resid phase (deg)	178.0	+/-	18.9

ph/seg (deg)	65.6	RMS	45.3	Theor.	45.3	Amplitude	0.127 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	88.0	Search (2048X32)	0.105	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)	27.3	Inc. seg. avg.	0.137	Inc. frq. avg.	0.127	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	41.0	u,v (fr/asec)	-345.226	7.728	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00	

k: az 58.4 el 33.9 pa -75.4

p: az 60.7 el 37.6 pa -74.9

u,v (fr/asec) -345.226 7.728

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kp..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kp.W.209.1X0KDO

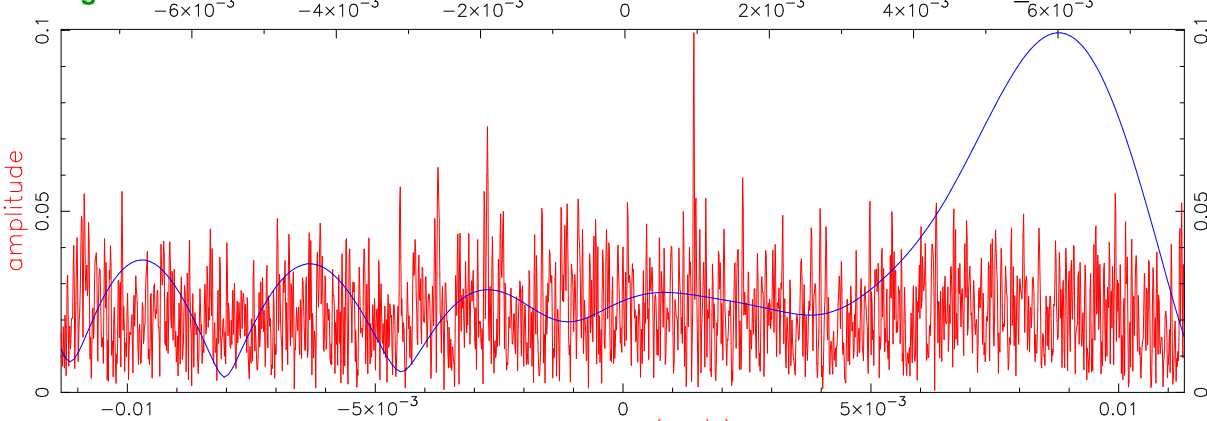
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kP

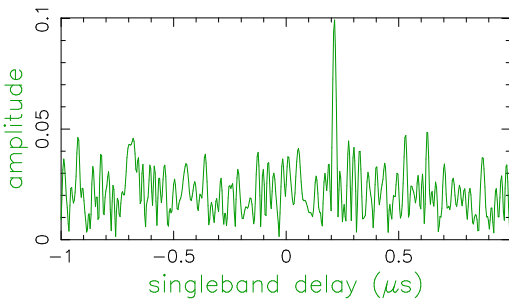
VLBA_KP - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

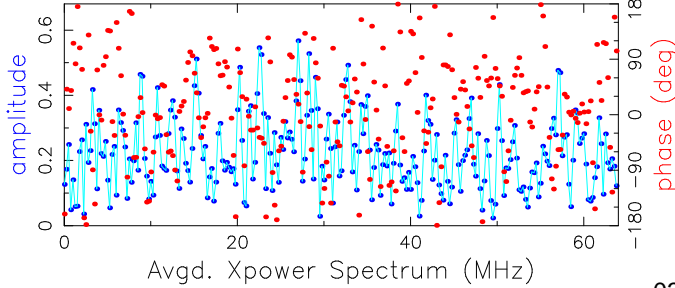


Fringe quality 0

SNR 5.6
 Int time 419.821
 Amp 0.100
 Phase -110.0
 PFD 1.0e+00
 Delays (us)
 SBD 0.214121
 MBD 0.005982
 Fringe rate (Hz)
 0.122870
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

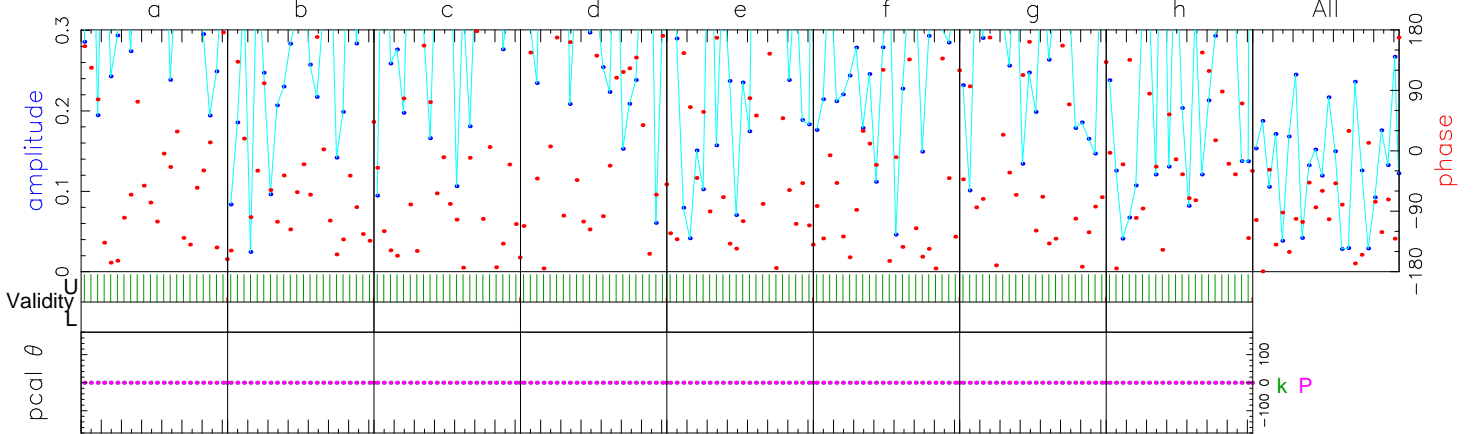


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121940
 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
	-110.6	-73.9	-117.6	-151.8	-106.3	-139.4	-115.2	-25.3	Phase	-110.0
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	358.6	270.1	311.2	242.4	497.2	259.8	77.4	163.9	Sbd box	311.8
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.37288879309E+03	Apriori delay (usec)	-6.37309789980E+03	Resid mbdelay (usec)	5.98171E-03	+/-	1.9E-04
Sband delay (usec)	-6.37288377855E+03	Apriori clock (usec)	1.3772240E+00	Resid sbdelay (usec)	2.14121E-01	+/-	1.5E-03
Phase delay (usec)	-6.37309790335E+03	Apriori clockrate (us/s)	5.999998E-07	Resid phdelay (usec)	-3.54706E-06	+/-	6.6E-07
Delay rate (us/s)	1.50067697064E+00	Apriori rate (us/s)	1.50067554424E+00	Resid rate (us/s)	1.42640E-06	+/-	2.7E-09
Total phase (deg)	-141.9	Apriori accel (us/s/s)	2.83902696096E-05	Resid phase (deg)	-110.0	+/-	20.5

ph/seg (deg)	56.3	Theor.	49.2	Amplitude	0.100 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.4		85.9	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	43.2		29.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	34.4		50.7	Inc. seg. avg.	0.100	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.104	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 58.4 el 33.9 pa -75.4 P: az 290.7 el 61.1 pa 87.0 u,v (fr/asec) -11433.429 1618.537 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kP..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kP.W.228.1X0KDO

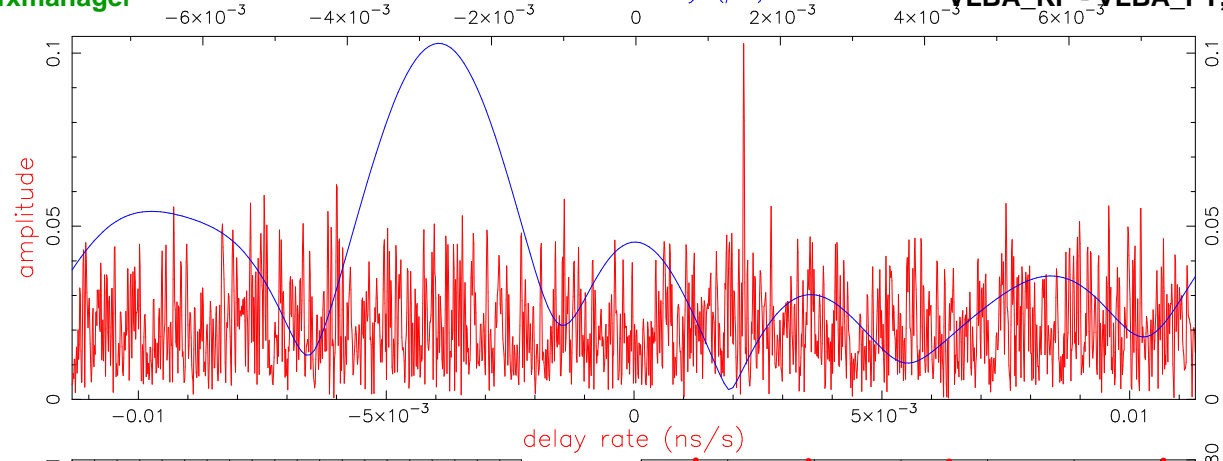
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kp

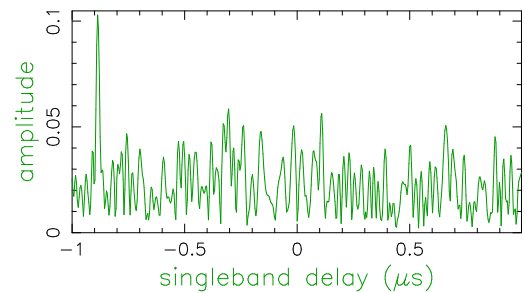
VLBA_KP - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

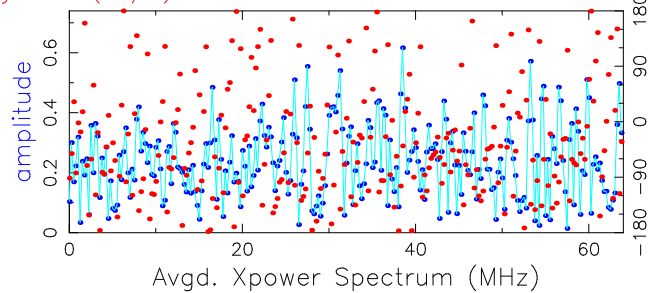


Fringe quality 0

SNR 5.8
 Int time 419.827
 Amp 0.105
 Phase -170.1
 PFD 8.4e-01
 Delays (us)
 SBD -0.885961
 MBD -0.002706
 Fringe rate (Hz)
 0.190778
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

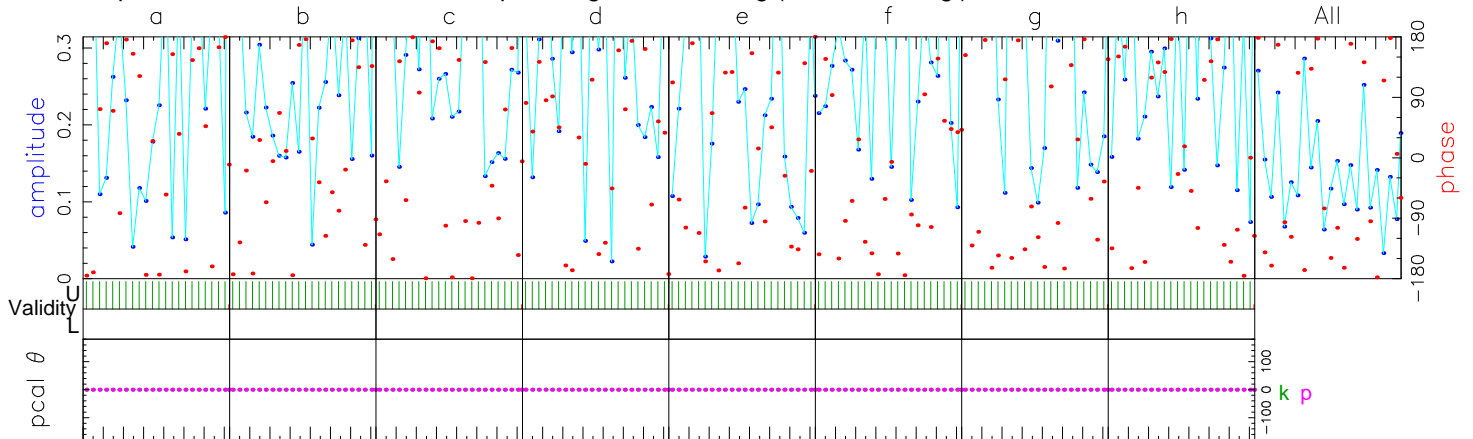


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121940
 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
	171.3	-116.5	-146.7	129.6	-168.4	-153.4	-167.2	-177.5	Phase	-170.1
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	391.7	1.7	373.9	423.3	311.0	203.4	30.3	299.8	Sbd box	30.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.11243188228E+03		Apriori delay (usec)		-1.11153855126E+03		Resid mbdelay (usec)		-2.70601E-03	+/- 1.9E-04
Sband delay (usec)	-1.11242451276E+03		Apriori clock (usec)		-5.2159557E+00		Resid sbdelay (usec)		-8.85961E-01	+/- 1.5E-03
Phase delay (usec)	-1.11153855675E+03		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-5.48558E-06	+/- 6.4E-07
Delay rate (us/s)	4.59868309380E-02		Apriori rate (us/s)		4.59846161987E-02		Resid rate (us/s)		2.21474E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		3.31528127216E-06		Resid phase (deg)		-170.1	+/- 19.8

ph/seg (deg) 60.4 47.5 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 75.6 82.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.9 28.0 Inc. seg. avg. 0.107 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.5 48.9 Inc. frq. avg. 0.106 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 58.4 el 33.9 pa -75.4 p: az 60.7 el 37.6 pa -74.9 u,v (fr/asec) -345.226 7.728 ion window (TEC) 0.00 0.00
 simultaneous interpolator

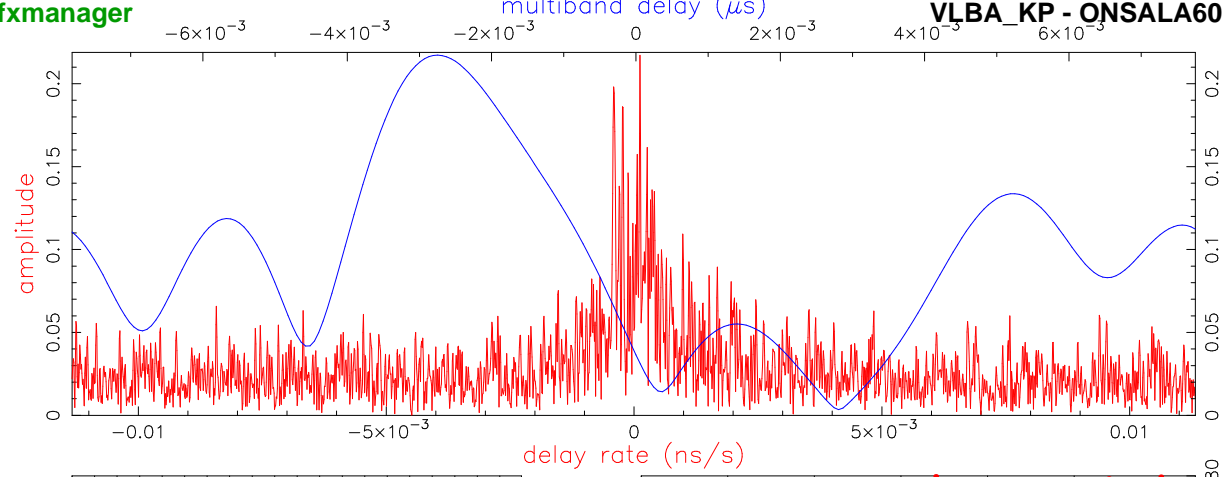
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kp..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kp.W.232.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kX

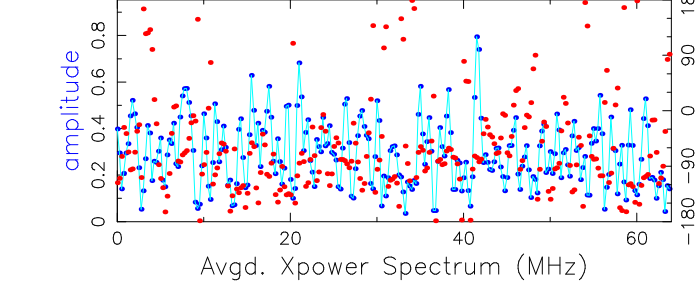
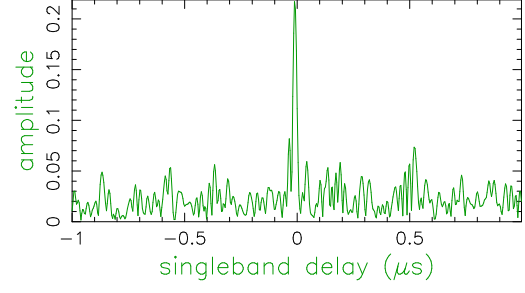
VLBA_KP - ONSALA60, fgroup W, pol LL



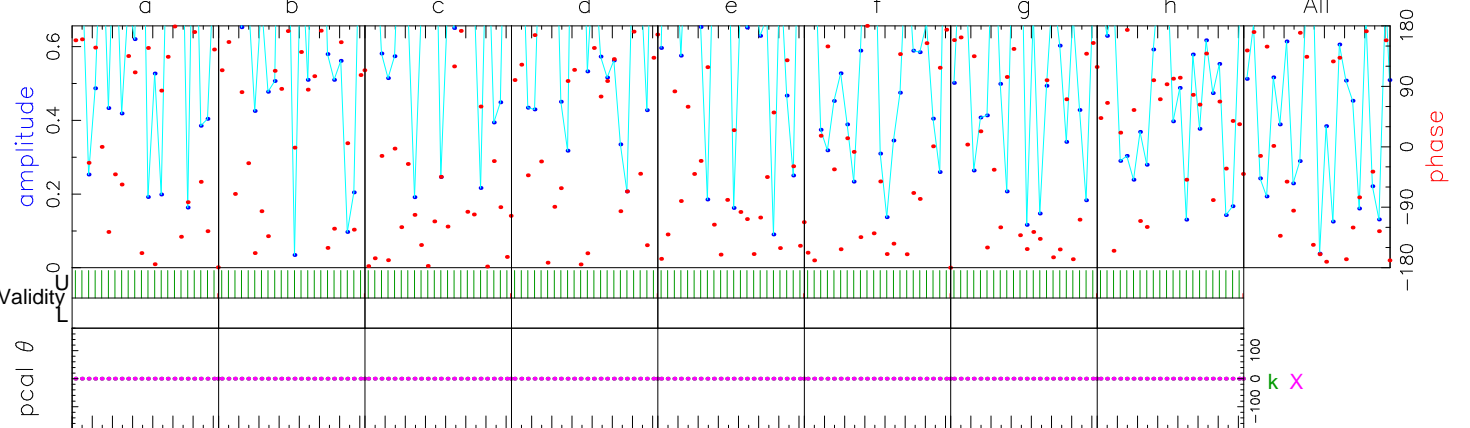
Fringe quality 9

SNR 12.3
 Int time 419.788
 Amp 0.219
 Phase -174.4
 PFD 7.4e-26
 Delays (us)
 SBD -0.010568
 MBD -0.002720
 Fringe rate (Hz) 0.010750
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build 2021:303:074338
 2021:303:121928
 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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-4.92337289338E+03				-4.92335454799E+03					
Sband delay (usec)	-4.92336511624E+03				-5.6172802E+01					
Phase delay (usec)	-4.92335455361E+03				-5.2800001E-07					
Delay rate (us/s)	1.43041783857E+00				1.43041771377E+00					
Total phase (deg)			-89.4		2.42338670153E-06					
Apriori delay (usec)									-2.72039E-03	+/- 8.9E-05
Apriori clock (usec)									-1.05682E-02	+/- 7.0E-04
Apriori clockrate (us/s)									-5.62522E-06	+/- 3.0E-07
Apriori rate (us/s)									1.24793E-07	+/- 1.2E-09
Apriori accel (us/s/s)									-174.4	+/- 9.3
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
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
ph/seg (deg)	76.1	22.4			0.219 +/- 0.018					
amp/seg (%)	139.7	39.1			0.000					
ph/frq (deg)	57.1	13.2			0.392					
amp/frq (%)	44.7	23.1			0.296					
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
Sample rate (MSamp/s): 128										
Data rate (Mb/s): 2048										
nlags: 256										
t_cohere infinite										
k: az 58.4 el 33.9 pa -75.4										
X: az 267.5 el 53.6 pa 46.0										
u,v (fr/asec) -10942.270 -1785.822										
Control file: cf_1234_gmva										
Input file: /Exps/c211c/v1/1234/No0084/kX..1X0KDO										
Output file: /Exps/c211c/v1/1234/No0084/kX.W.175.1X0KDO										

simultaneous interpolator

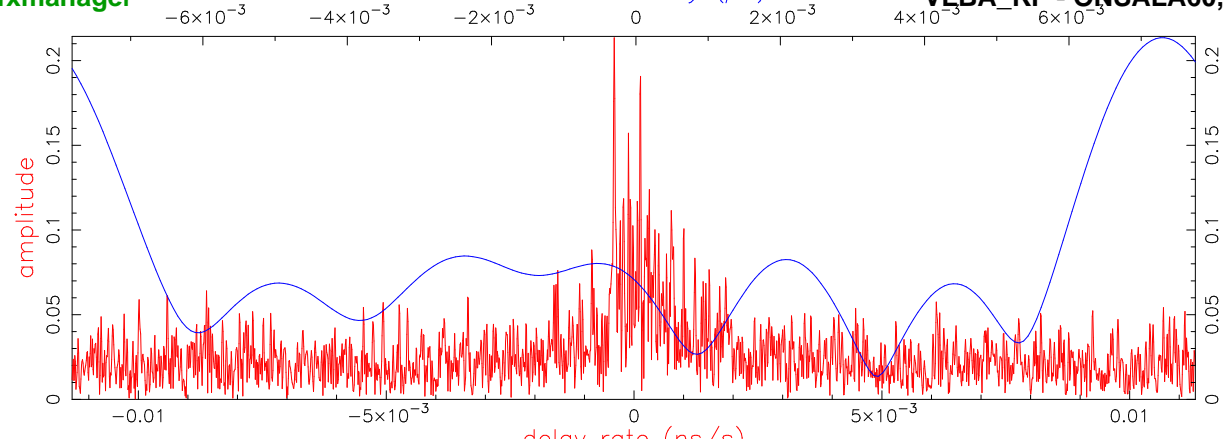
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kX

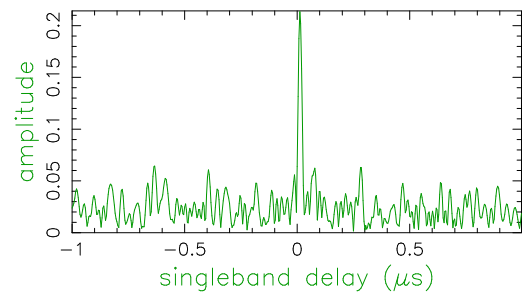
VLBA_KP - ONSALA60, fgroup W, pol RR

multiband delay (μ s)

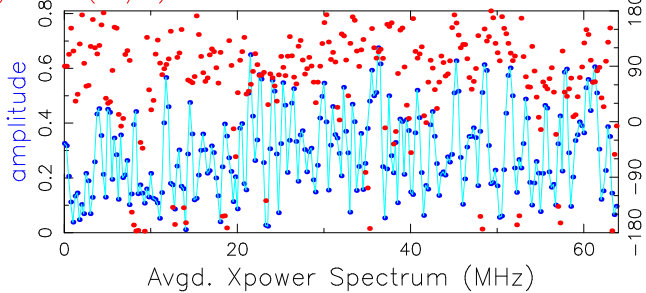


Fringe quality 9

SNR 12.0
Int time 419.788
Amp 0.214
Phase 162.1
PFD 1.8e-24
Delays (us)
SBD 0.012465
MBD 0.007319
Fringe rate (Hz)
-0.034659
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

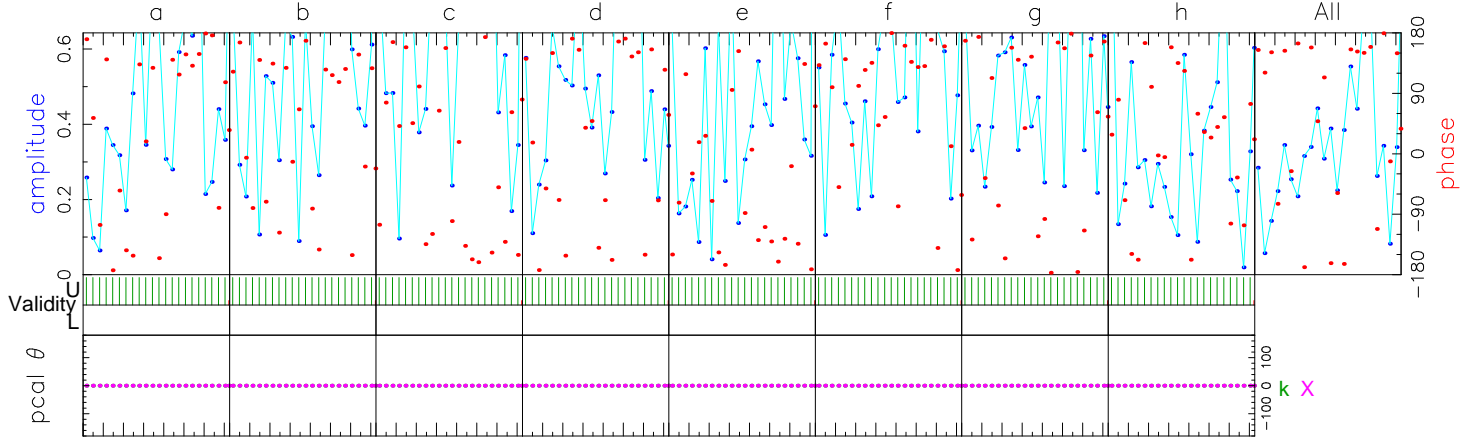


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121932
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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-4.92334722937E+03				-4.92335454799E+03				7.31862E-03	+/- 9.0E-05
Sband delay (usec)	-4.92334208299E+03				-5.6172802E+01				1.24650E-02	+/- 7.2E-04
Phase delay (usec)	-4.92335454276E+03				-5.2800001E-07				5.22817E-06	+/- 3.1E-07
Delay rate (us/s)	1.43041731141E+00				1.43041771377E+00				-4.02362E-07	+/- 1.3E-09
Total phase (deg)			-112.8		2.42338670153E-06				162.1	+/- 9.5
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

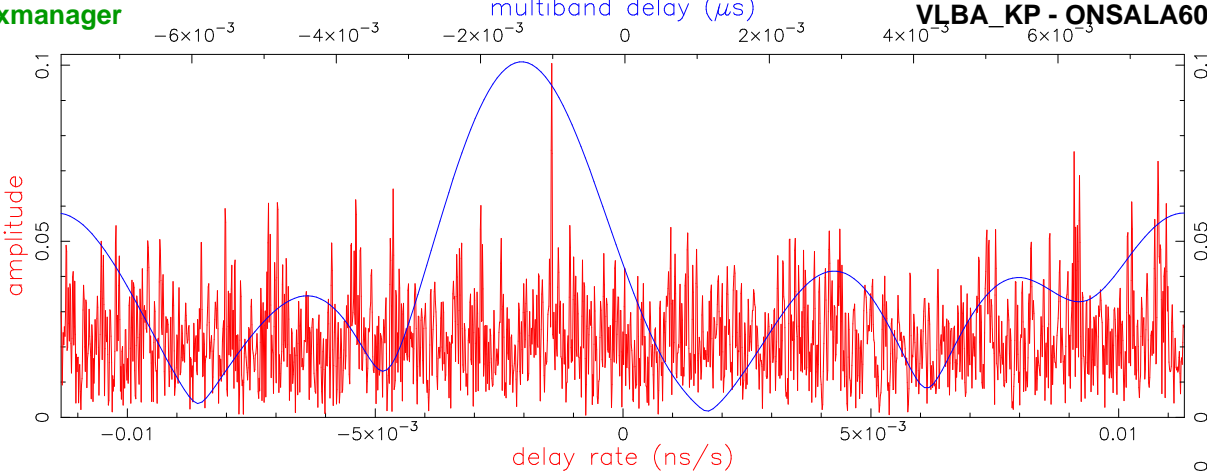
ph/seg (deg) 75.3 22.9 Search (2048X32) 0.206 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 100.3 40.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 53.2 13.5 Inc. seg. avg. 0.315 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 39.4 23.6 Inc. frq. avg. 0.248 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 58.4 el 33.9 pa -75.4 X: az 267.5 el 53.6 pa 46.0 u,v (fr/asec) -10942.270 -1785.822 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kX..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kX.W.196.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

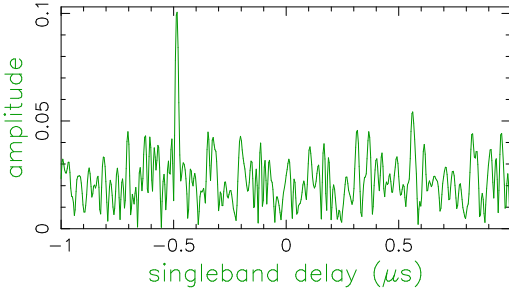
3C84.1X0KDO, No0084, kX

VLBA_KP - ONSALA60, fgroup W, pol LR

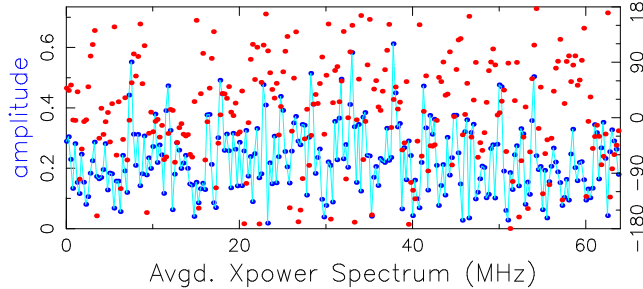


Fringe quality 0

SNR 5.7
 Int time 419.788
 Amp 0.103
 Phase -156.7
 PFD 9.1e-01
 Delays (us)
 SBD -0.486097
 MBD -0.001539
 Fringe rate (Hz)
 -0.123958
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

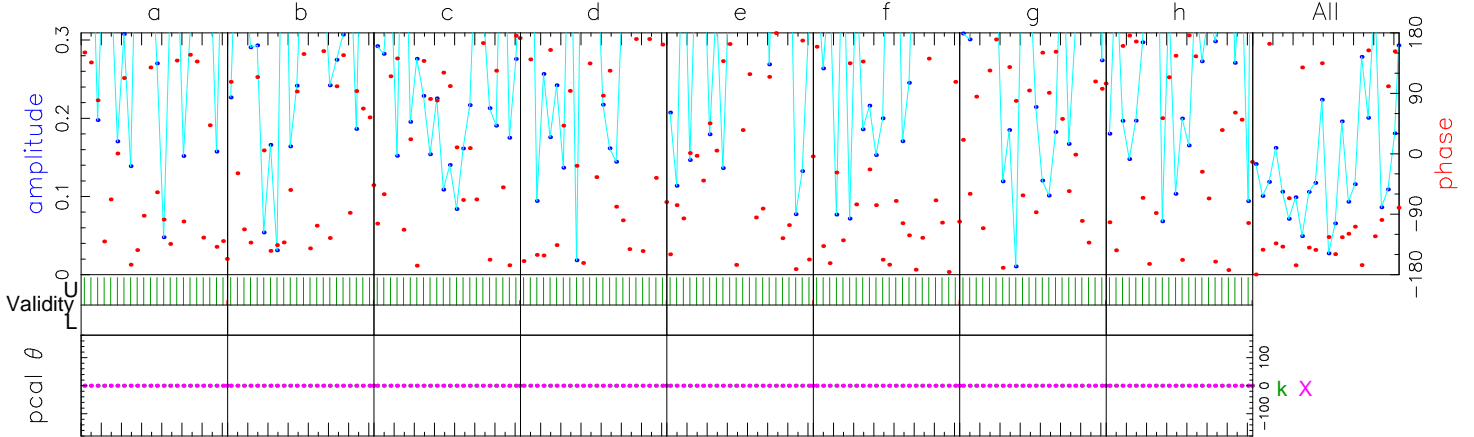


delay rate (ns/s)



Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154500.00
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121937
 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



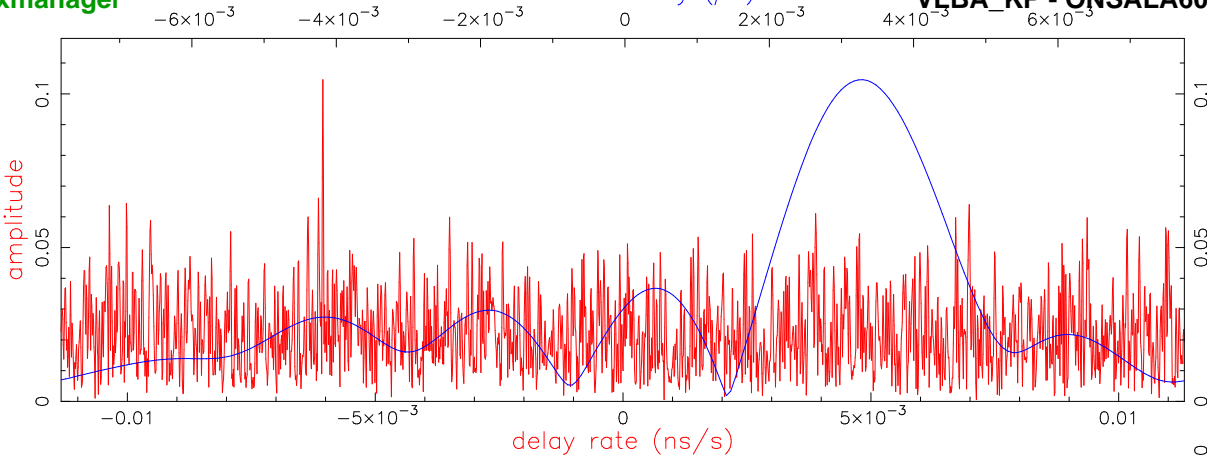
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-172.5	-160.2	-146.5	-172.4	-107.9	-138.3	115.6	-157.2	Phase	-156.7		
	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1		
	131.8	496.2	424.5	132.8	117.1	132.7	263.2	187.0	Sbd box	132.6		
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used			
k	0	0	0	0	0	0	0	0	PC freqs			
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
X	1000	1000	1000	1000	1000	1000	1000	1000				
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec)(sbd)	-4.92384046240E+03		Apriori delay (usec)		-4.92335454799E+03		Resid mbdelay (usec)		-1.53941E-03	+/- 1.9E-04		
Sband delay (usec)	-4.92384064474E+03		Apriori clock (usec)		-5.6172802E+01		Resid sbdelay (usec)		-4.86097E-01	+/- 1.5E-03		
Phase delay (usec)	-4.92335455304E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-5.05232E-06	+/- 6.4E-07		
Delay rate (us/s)	1.43041627474E+00		Apriori rate (us/s)		1.43041771377E+00		Resid rate (us/s)		-1.43903E-06	+/- 2.7E-09		
Total phase (deg)			Apriori accel (us/s/s)		2.42338670153E-06		Resid phase (deg)		-156.7	+/- 20.0		
	RMS	Theor.	Amplitude	0.103 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	47.2	47.9	Search (2048X32)	0.099		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	82.4	83.6	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	42.9	28.2	Inc. seg. avg.	0.103		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011	0.011	
amp/frq (%)	55.7	49.3	Inc. frq. avg.	0.103		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 58.4 el 33.9 pa -75.4 X: az 267.5 el 53.6 pa 46.0 u,v (fr/asec) -10942.270 -1785.822 simultaneous interpolator

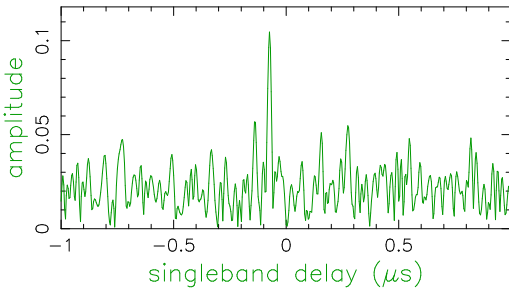
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kX..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kX.W.215.1X0KDO

multiband delay (μ s)

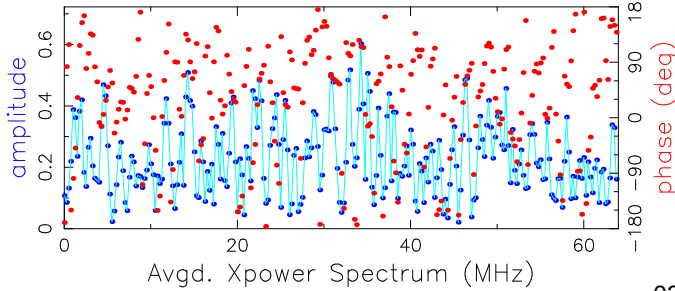
Fringe quality 0



SNR 5.9
Int time 419.788
Amp 0.118
Phase -107.1
PFD 6.9e-01
Delays (us)
SBD -0.074216
MBD 0.003274
Fringe rate (Hz)
-0.522672
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

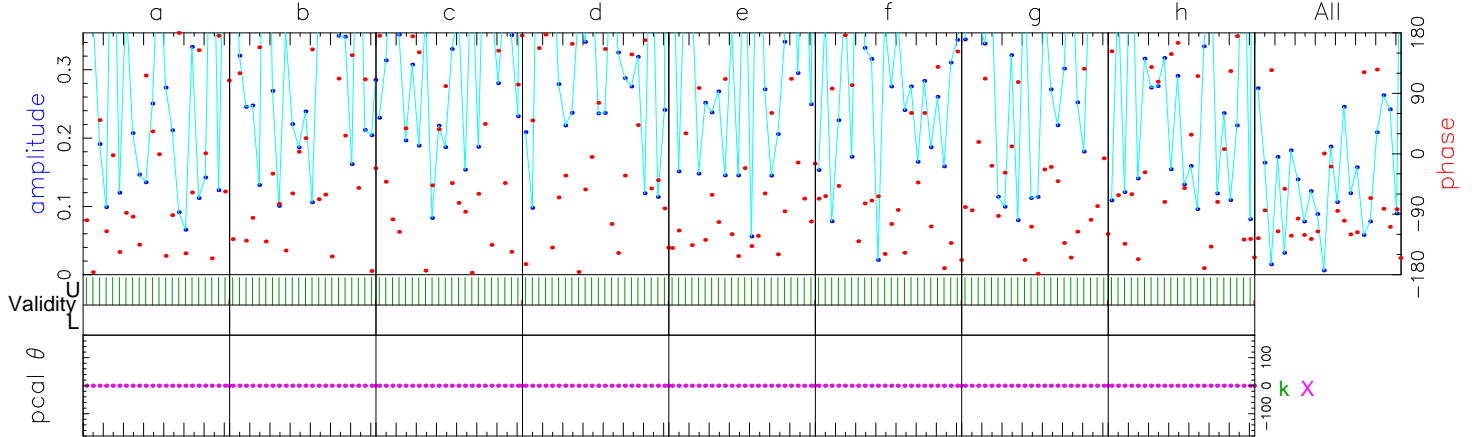


delay rate (ns/s)



Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154500.00
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121940
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
	-88.3	-108.4	-126.4	-128.4	-98.2	-123.0	-75.8	-126.6	Phase	-107.1
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	252.0	239.8	34.7	272.7	296.6	474.1	504.5	73.9	Sbd box	238.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.92342939860E+03		Apriori delay (usec)		-4.92335454799E+03		Resid mbdelay (usec)		3.27438E-03	+/- 1.9E-04
Sband delay (usec)	-4.92342876374E+03		Apriori clock (usec)		-5.6172802E+01		Resid sbdelay (usec)		-7.42157E-02	+/- 1.5E-03
Phase delay (usec)	-4.92335455144E+03		Apriori clockrate (us/s)		-5.2800001E-07		Resid phdelay (usec)		-3.45363E-06	+/- 6.3E-07
Delay rate (us/s)	1.43041164606E+00		Apriori rate (us/s)		1.43041771377E+00		Resid rate (us/s)		-6.06771E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		2.42338670153E-06		Resid phase (deg)		-107.1	+/- 19.6

	RMS	Theor.	Amplitude	0.118 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.5	46.9	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	89.7	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	21.9	27.7	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	20.9	48.3	Inc. frq. avg.	0.112	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 58.4 el 33.9 pa -75.4 X: az 267.5 el 53.6 pa 46.0 u,v (fr/asec) -10942.270 -1785.822 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kX..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kX.W.234.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

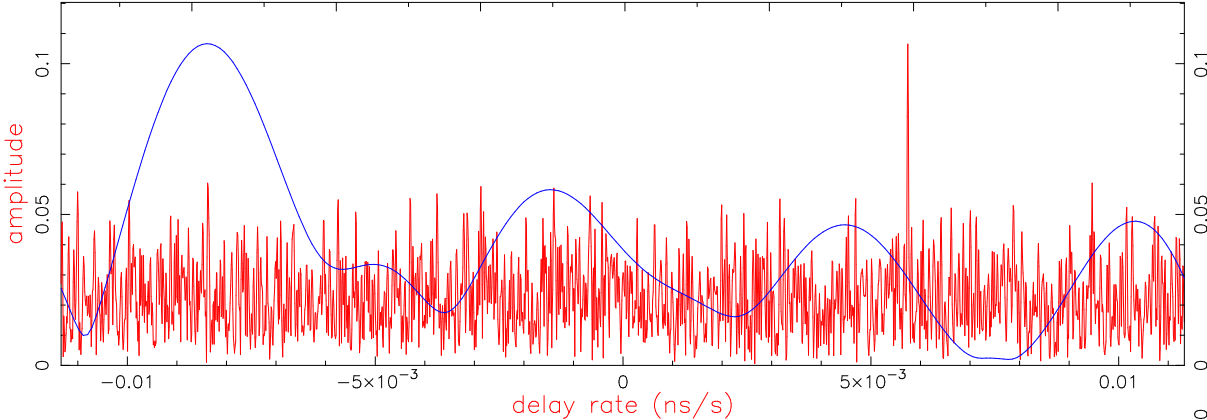
3C84.1X0KDO, No0084, kZ

VLBA_KP - METSAHOV, fgroup W, pol LL

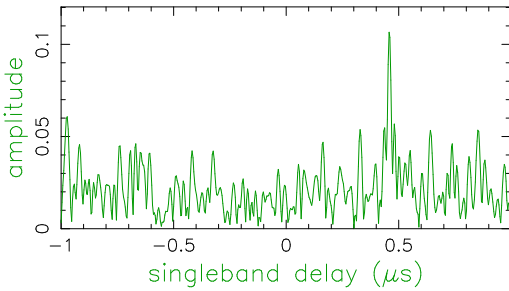
multiband delay (μ s)

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

Fringe quality 0

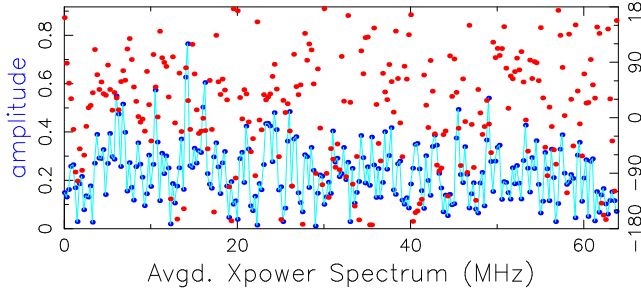


SNR 5.9
Int time 405.498
Amp 0.120
Phase -18.2
PFD 5.1e-01
Delays (us)
SBD 0.458462
MBD -0.005741
Fringe rate (Hz)
0.495724
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



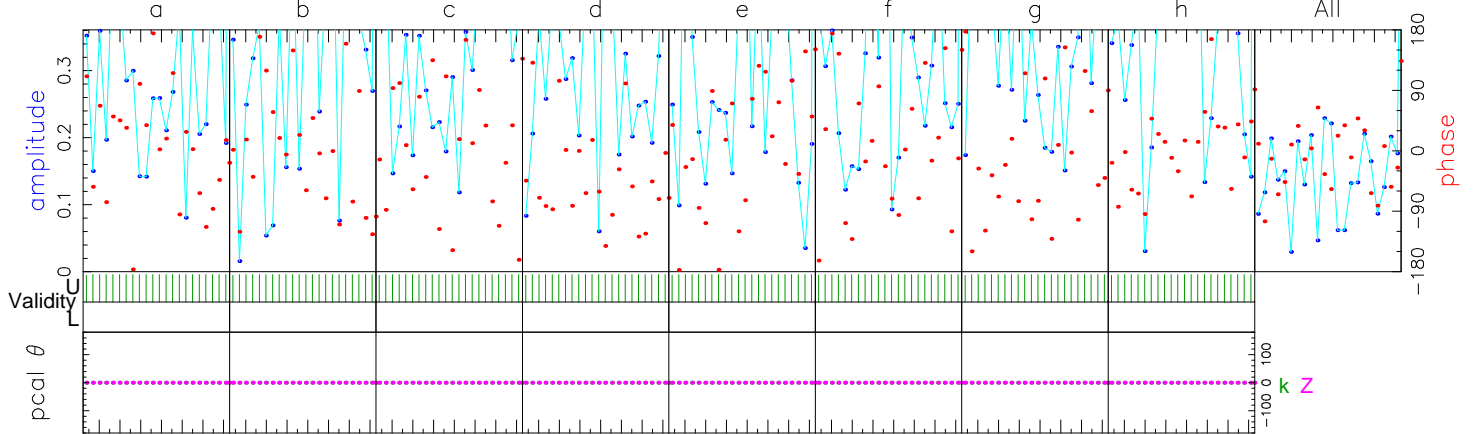
singleband delay (μ s)

delay rate (ns/s)



Exp. c211c
Yr:day 16383
Start 2021:116
Stop 2021:116
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121928
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
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
k	0	0	0	0	0	0	0	0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.34023496692E+03	Apriori delay (usec)	-3.34069797607E+03	Resid mbdelay (usec)	-5.74085E-03	+/-	1.8E-04
Sband delay (usec)	-3.34023951407E+03	Apriori clock (usec)	1.0364609E+08	Resid sbdelay (usec)	4.58462E-01	+/-	1.4E-03
Phase delay (usec)	-3.34069797665E+03	Apriori clockrate (us/s)	-1.6000000E-08	Resid phdelay (usec)	-5.86040E-07	+/-	6.2E-07
Delay rate (us/s)	1.45405564164E+00	Apriori rate (us/s)	1.45404988678E+00	Resid rate (us/s)	5.75487E-06	+/-	2.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-7.60492983909E-06	Resid phase (deg)	-18.2	+/-	19.3

ph/seg (deg)	45.2	Theor.	46.2	Amplitude	0.120 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.5		80.7	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.6		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	51.5		47.6	Inc. seg. avg.	0.119	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.119	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 58.4 el 33.9 pa -75.4 Z: az 274.6 el 47.2 pa 41.4 u,v (fr/asec) -11142.119 -2652.344 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kZ..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kZ.W.174.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

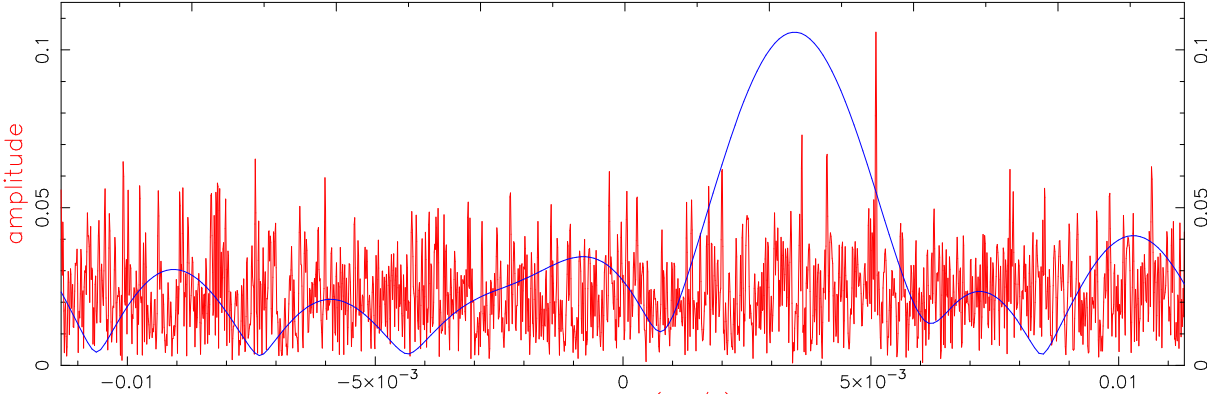
3C84.1X0KDO, No0084, kZ

VLBA_KP - METSAHOV, fgroup W, pol RR

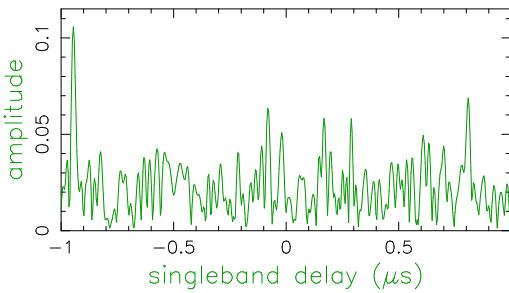
multiband delay (μ s)

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

Fringe quality 0

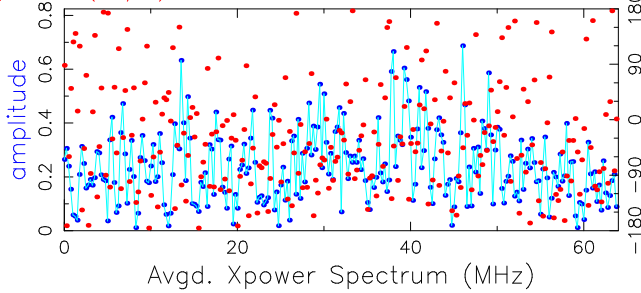


SNR 5.8
Int time 405.498
Amp 0.115
Phase -177.7
PFD 7.7e-01
Delays (us)
SBD -0.945662
MBD 0.002343
Fringe rate (Hz)
0.440377
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



singleband delay (μ s)

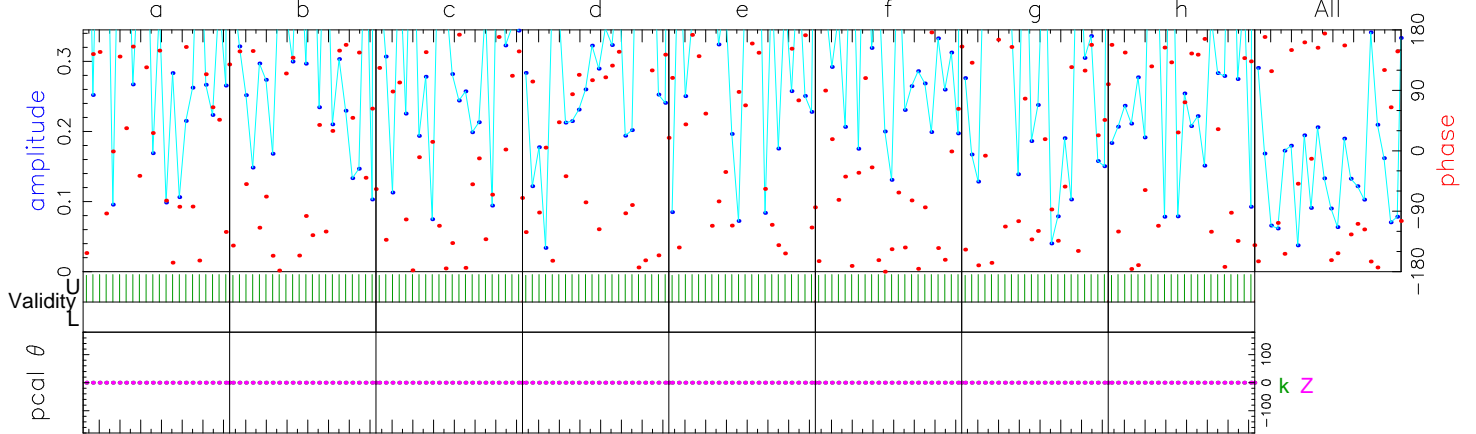
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c211c
Exper # 16383
Yr:day 2021:116
Start 154513.31
Stop 155159.84
FRT 154830.00
Corr/FF/build
2021:303:074338
2021:303:121932
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
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0		
k	0	0	0	0	0	0	0	0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
Group delay (usec)(sbd)	-3.34164875759E+03									
Sband delay (usec)	-3.34164363807E+03									
Phase delay (usec)	-3.34069798180E+03									
Delay rate (us/s)	1.45405499911E+00									
Total phase (deg)			-54.8							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	63.4	47.2								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)										
amp/seg (%)										
ph/frq (deg)										
amp/frq (%)										
k: az 58.4 el 33.9 pa -75.4										
Z: az 274.6 el 47.2 pa 41.4										
u, v (fr/asec)										
simultaneous interpolator										

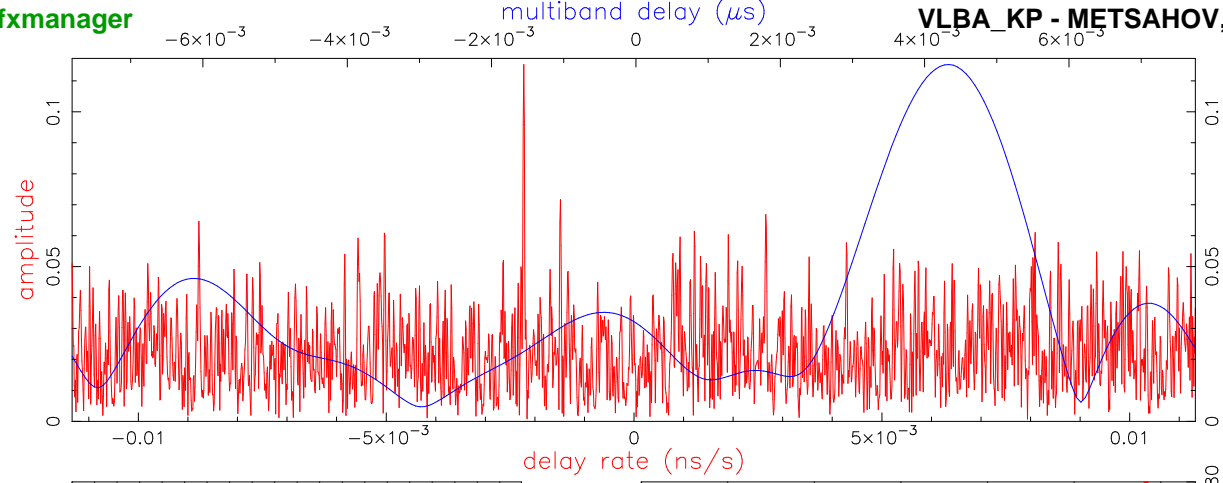
Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kZ..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kZ.W.195.1X0KDO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kZ

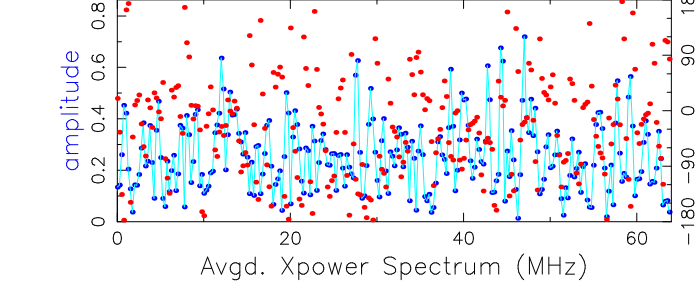
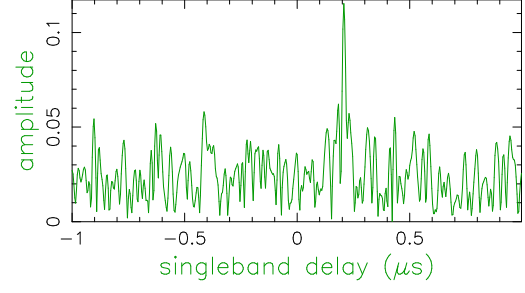
VLBA_KP - METSAHOV, fgroup W, pol LR



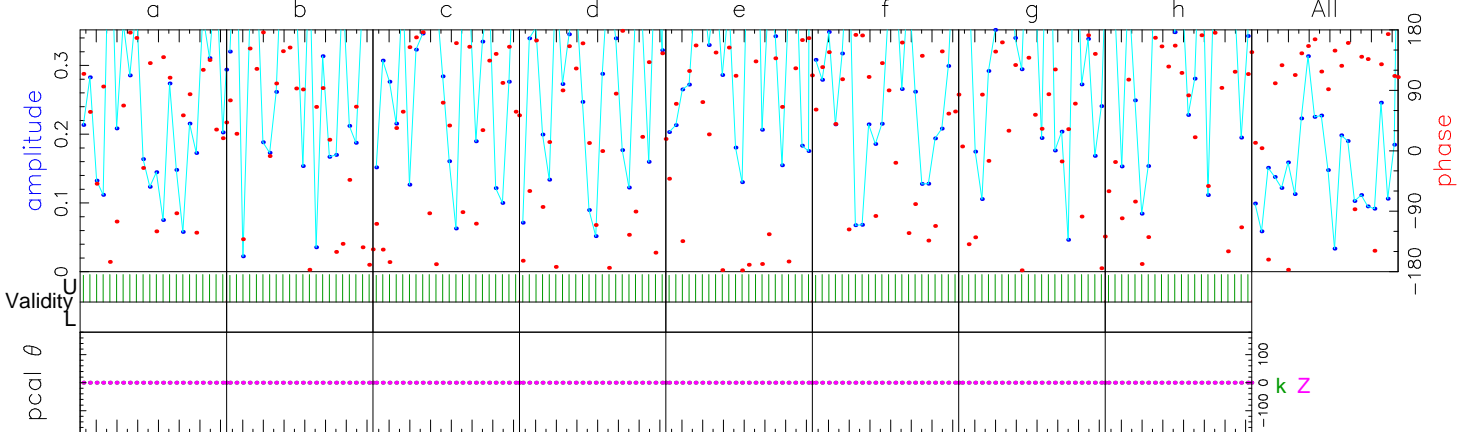
Fringe quality 0

SNR 6.4
 Int time 405.498
 Amp 0.117
 Phase 141.1
 PFD 5.5e-02
 Delays (us)
 SBD 0.207425
 MBD 0.004340
 Fringe rate (Hz)
 -0.191933
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154513.31
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121936
 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
123.6	139.1	150.2	168.6	149.7	124.1	111.1	149.5	149.5	Phase	141.1
0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
258.3	367.6	72.8	58.8	309.7	176.7	458.0	483.7	483.7	Sbd box	310.1
U/L 794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
k 0	0	0	0	0	0	0	0	0	PC freqs	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z 0:0	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	1000	PC amp	
Z 1000	1000	1000	1000	1000	1000	1000	1000	1000		
k W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
Z W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.34049051097E+03		Apriori delay (usec)	-3.34069797607E+03	Resid mbdelay (usec)	4.34010E-03	+/-	1.7E-04		
Sband delay (usec)	-3.34049055157E+03		Apriori clock (usec)	1.0364609E+08	Resid sbdelay (usec)	2.07425E-01	+/-	1.4E-03		
Phase delay (usec)	-3.34069797152E+03		Apriori clockrate (us/s)	-1.6000000E-08	Resid phdelay (usec)	4.55121E-06	+/-	5.8E-07		
Delay rate (us/s)	1.45404765862E+00		Apriori rate (us/s)	1.45404988678E+00	Resid rate (us/s)	-2.22815E-06	+/-	2.5E-09		
Total phase (deg)		-95.9	Apriori accel (us/s/s)	-7.60492983909E-06	Resid phase (deg)	141.1	+/-	18.0		

ph/seg (deg) 57.1 43.2 Search (2048X32) 0.112 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.0 75.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 20.4 25.5 Inc. seg. avg. 0.121 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 38.4 44.5 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 58.4 el 33.9 pa -75.4 Z: az 274.6 el 47.2 pa 41.4 u,v (fr/asec) -11142.119 -2652.344 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kZ..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kZ.W.214.1X0KDO simultaneous interpolator

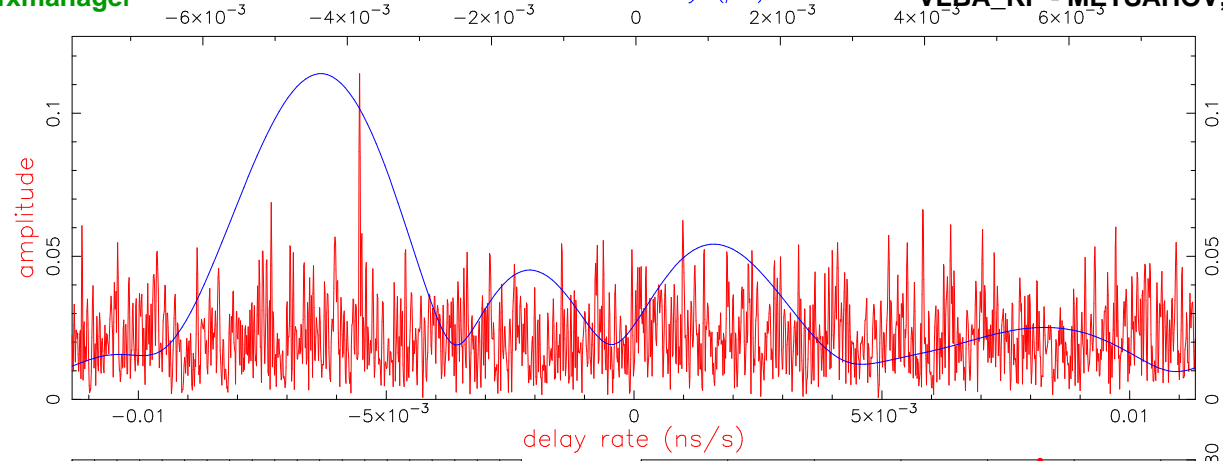
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1X0KDO, No0084, kZ

VLBA_KP - METSAHOV, fgroup W, pol RL

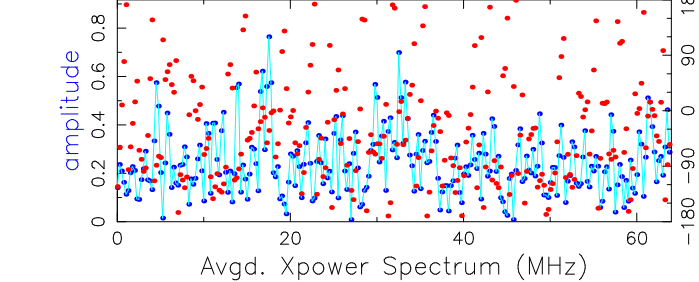
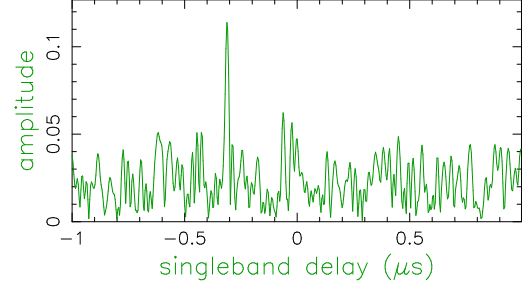
multiband delay (μ s)



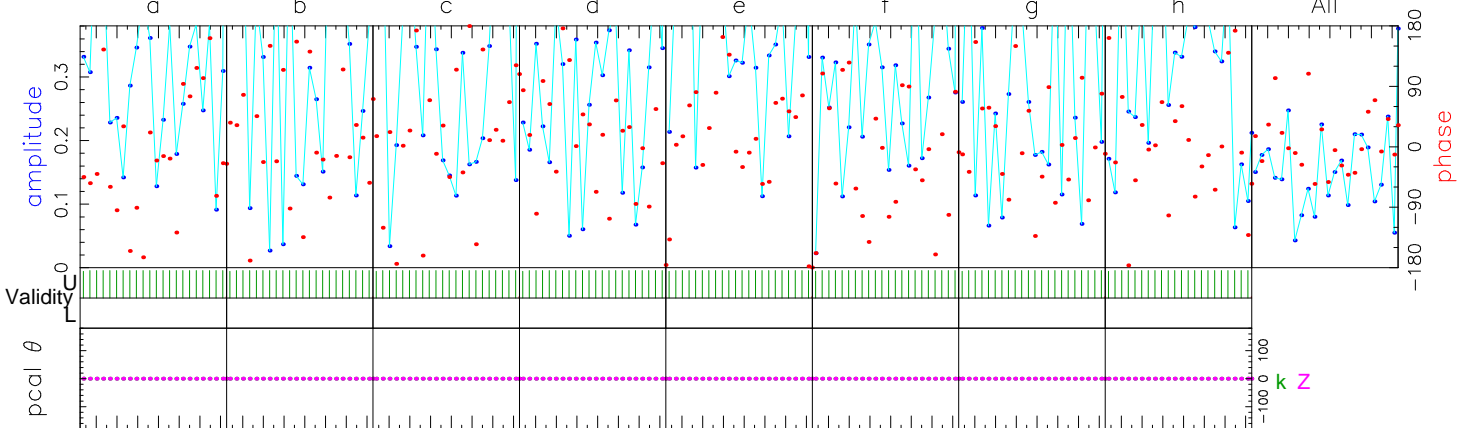
Fringe quality 0

SNR 6.3
 Int time 405.498
 Amp 0.127
 Phase 8.2
 PFD 6.9e-02
 Delays (us)
 SBD -0.311338
 MBD -0.004361
 Fringe rate (Hz)
 -0.477180
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c211c
 Exper # 16383
 Yr:day 2021:116
 Start 154513.31
 Stop 155159.84
 FRT 154830.00
 Corr/FF/build
 2021:303:074338
 2021:303:121940
 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
	-41.0	1.7	27.1	4.5	40.6	-21.8	-21.7	12.6	Phase	8.2
	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	254.8	177.8	188.5	355.7	177.6	240.6	388.2	148.3	Sbd box	177.3
U/L	794/0	794/0	794/0	794/0	794/0	794/0	794/0	794/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:Z	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	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.34101483747E+03		Apriori delay (usec)		-3.34069797607E+03		Resid mbdelay (usec)		-4.36140E-03	+/- 1.7E-04
Sband delay (usec)	-3.34100931407E+03		Apriori clock (usec)		1.0364609E+08		Resid sbdelay (usec)		-3.11338E-01	+/- 1.4E-03
Phase delay (usec)	-3.34069797580E+03		Apriori clockrate (us/s)		-1.6000000E-08		Resid phdelay (usec)		2.62983E-07	+/- 5.8E-07
Delay rate (us/s)	1.45404434719E+00		Apriori rate (us/s)		1.45404988678E+00		Resid rate (us/s)		-5.53959E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.60492983909E-06		Resid phase (deg)		8.2	+/- 18.1

ph/seg (deg) 44.7 43.5 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 58.6 75.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.8 25.6 Inc. seg. avg. 0.128 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.8 44.8 Inc. frq. avg. 0.125 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 58.4 el 33.9 pa -75.4 Z: az 274.6 el 47.2 pa 41.4 u,v (fr/asec) -11142.119 -2652.344 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c211c/v1/1234/No0084/kZ..1X0KDO Output file: /Exps/c211c/v1/1234/No0084/kZ.W.231.1X0KDO