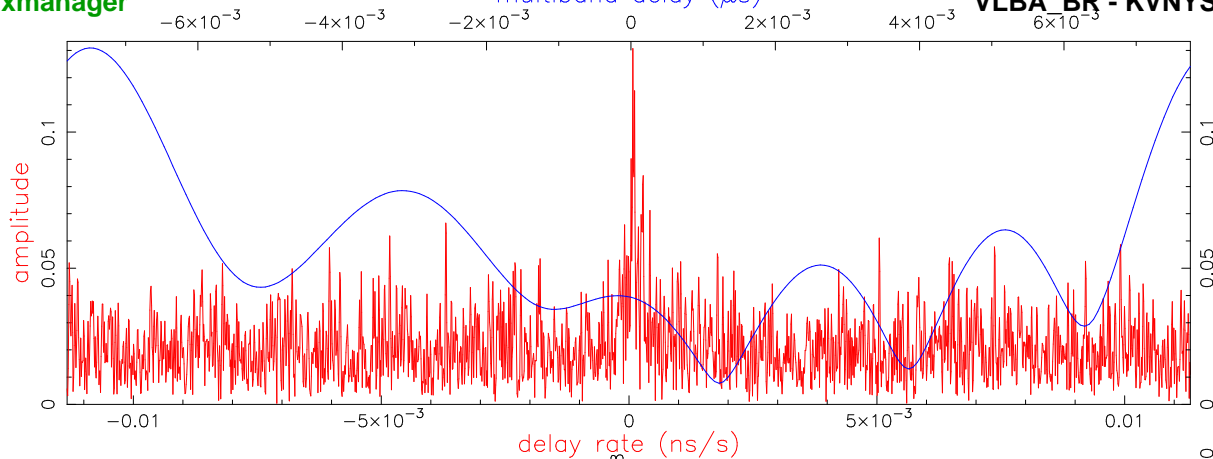
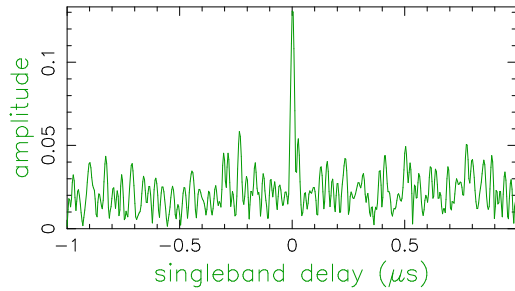


multiband delay (μ s)

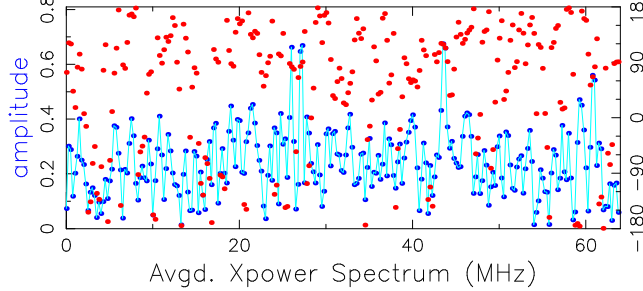


Fringe quality 9

SNR 8.0
Int time 476.983
Amp 0.133
Phase -139.5
PFD 5.8e-07
Delays (us)
SBD 0.001887
MBD -0.007418
Fringe rate (Hz)
0.006435
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

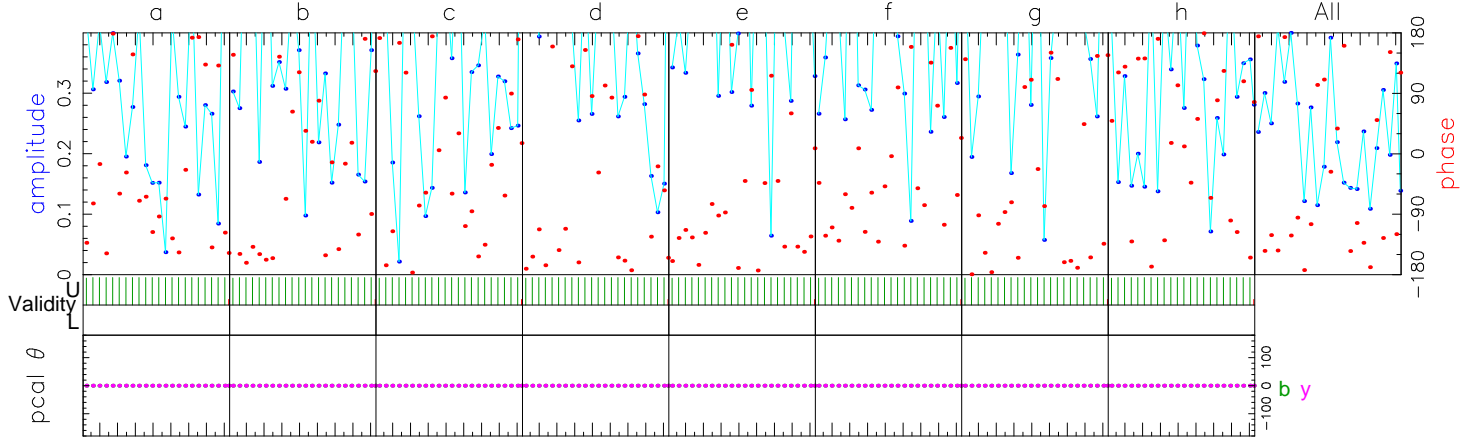


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133003.56
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133331
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-122.8	-158.4	-165.0	-175.4	-117.4	-85.0	-165.6	151.1	Phase	-139.5
	0.2	0.1	0.0	0.2	0.3	0.2	0.2	0.1	Ampl.	0.1
	255.6	264.4	232.5	256.8	257.8	257.0	256.7	104.0	Sbd box	257.5
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

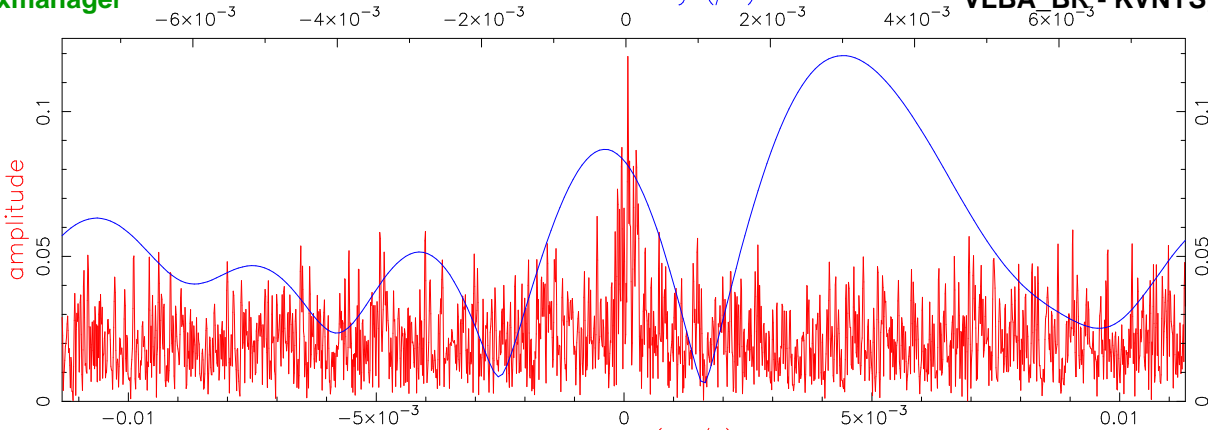
Group delay (usec)(sbd)	2.01414293151E+03	Apriori delay (usec)	2.01413472463E+03	Resid mbdelay (usec)	-7.41812E-03	+/-	1.4E-04
Sband delay (usec)	2.01413661163E+03	Apriori clock (usec)	-2.9516840E+08	Resid sbdelay (usec)	1.88700E-03	+/-	1.1E-03
Phase delay (usec)	2.01413472013E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	-4.49906E-06	+/-	4.6E-07
Delay rate (us/s)	-1.42033075620E+00	Apriori rate (us/s)	-1.42033083091E+00	Resid rate (us/s)	7.47032E-08	+/-	1.7E-09
Total phase (deg)	-74.9	Apriori accel (us/s/s)	-6.07838495772E-07	Resid phase (deg)	-139.5	+/-	14.4

ph/seg (deg)	RMS 74.1	Theor. 34.5	Amplitude Search (2048X32)	0.133 +/- 0.017	0.126	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	74.1	60.2	Interp.	0.000	0.126	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.8	20.4	Inc. seg. avg.	0.205	0.126	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	66.2	35.5	Inc. frq. avg.	0.149	0.126	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

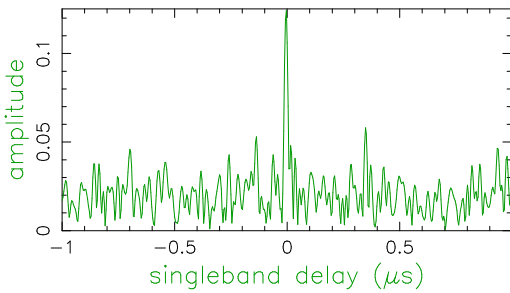
b: az 279.7 el 53.2 pa 61.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 10870.005 749.037 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/by..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/by.W.15.1M7QU

multiband delay (μ s)

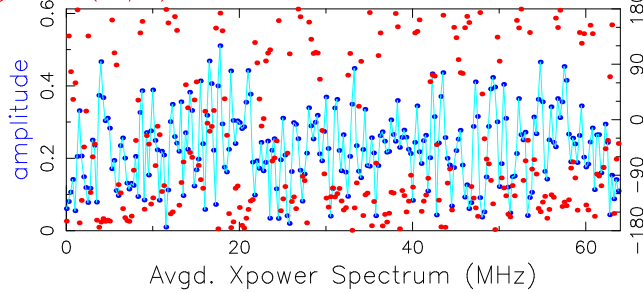
Fringe quality 9



SNR 7.5
Int time 476.983
Amp 0.125
Phase 122.9
PFD 2.4e-05
Delays (us)
SBD -0.004971
MBD 0.003109
Fringe rate (Hz) 0.006313
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

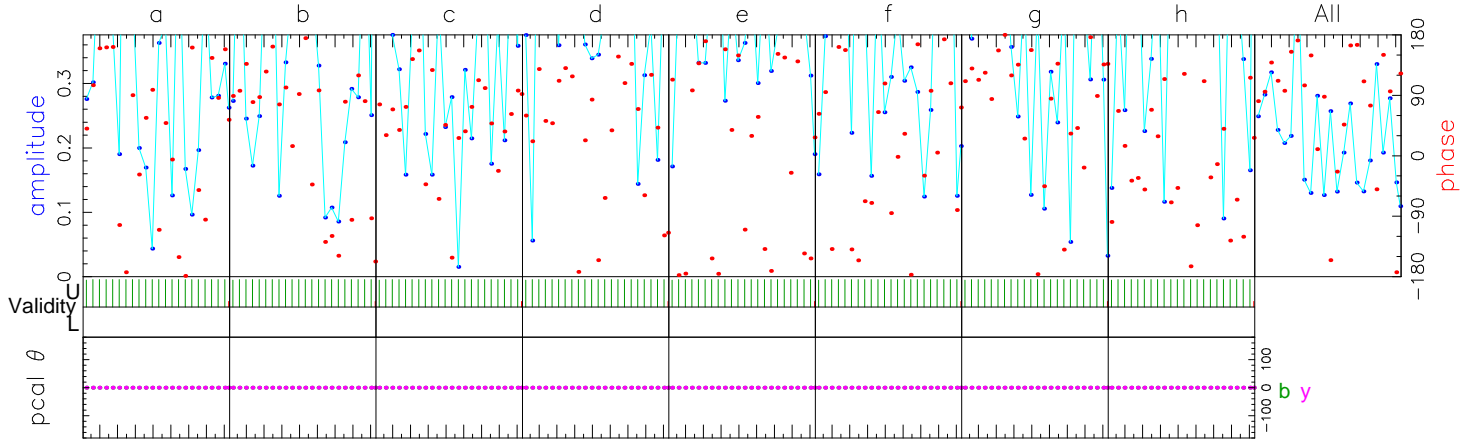


delay rate (ns/s)



Exp. c202b
Yr:day 16383
Yr:day 2020:284
Start 133003.56
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133335
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	164.2	112.3	74.0	110.9	165.8	149.7	116.8	-38.7	Phase	122.9
	0.2	0.2	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.2
	253.5	255.7	255.5	256.6	255.8	200.5	255.1	208.7	Sbd box	255.7
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.01412220885E+03		Apriori delay (usec)		2.01413472463E+03		Resid mbdelay (usec)		3.10923E-03	+/- 1.5E-04
Sband delay (usec)	2.01412975388E+03		Apriori clock (usec)		-2.9516840E+08		Resid sbdelay (usec)		-4.97075E-03	+/- 1.2E-03
Phase delay (usec)	2.01413472859E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		3.96350E-06	+/- 4.9E-07
Delay rate (us/s)	-1.42033075761E+00		Apriori rate (us/s)		-1.42033083091E+00		Resid rate (us/s)		7.32925E-08	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.07838495772E-07		Resid phase (deg)		122.9	+/- 15.3

ph/seg (deg) 66.2 36.7 Search (2048X32) 0.115 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 107.1 64.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 74.2 21.7 Inc. seg. avg. 0.186 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 50.4 37.8 Inc. frq. avg. 0.157 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 279.7 el 53.2 pa 61.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 10870.005 749.037 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/by..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/by.W.34.1M7QU

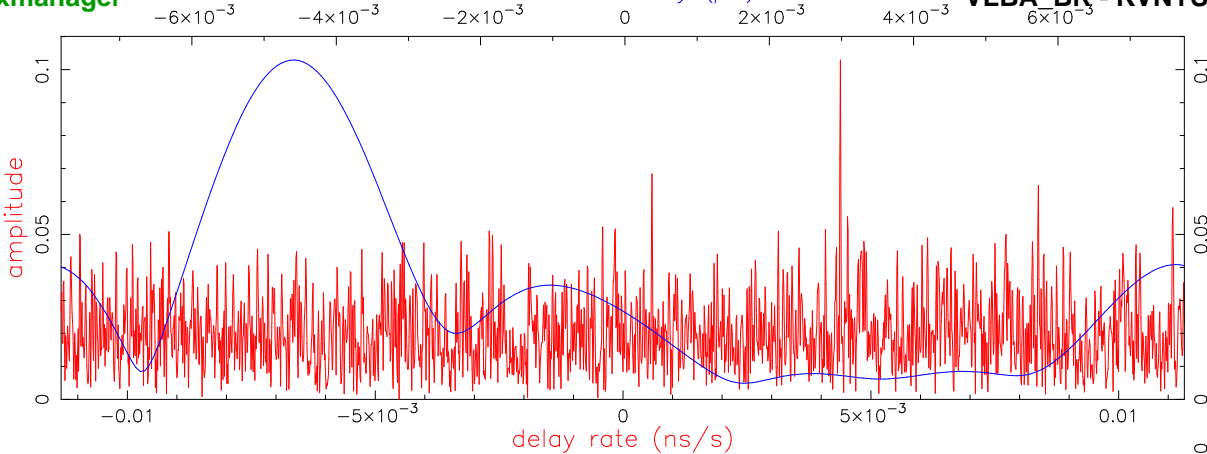
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, by

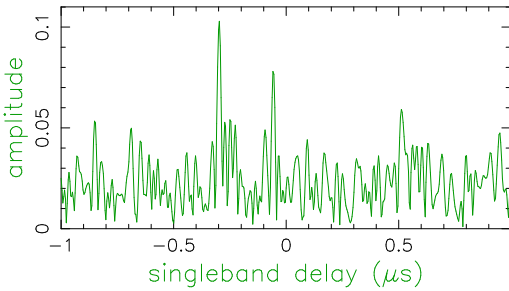
VLBA_BR - KVNYS, fgroup W, pol LR

multiband delay (μ s)

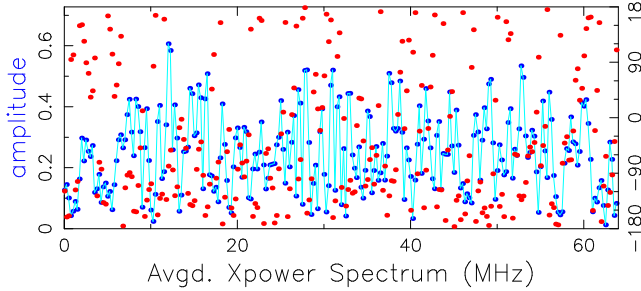


Fringe quality 0

SNR 6.2
 Int time 476.983
 Amp 0.110
 Phase 101.2
 PFD 1.6e-01
 Delays (us)
 SBD -0.297841
 MBD -0.004612
 Fringe rate (Hz)
 0.378576
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

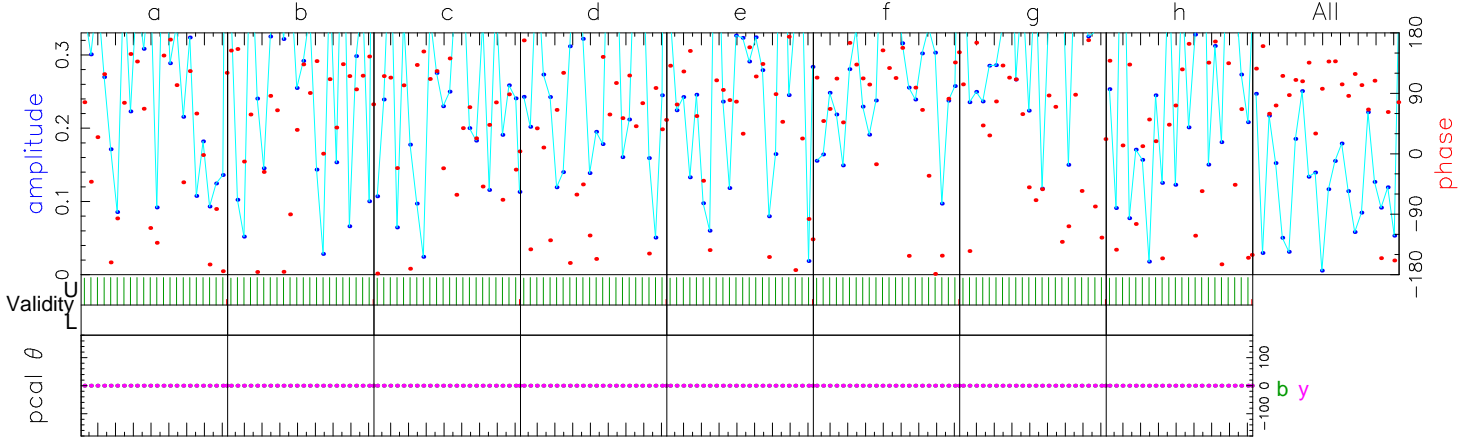


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133003.56
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133339
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	117.0	107.3	74.5	68.7	98.7	121.0	98.7	101.2	Phase	101.2
b	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.0	Ampl.	0.1
y	265.2	182.1	480.7	192.7	180.3	180.7	30.4	268.5	Sbd box	180.8
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

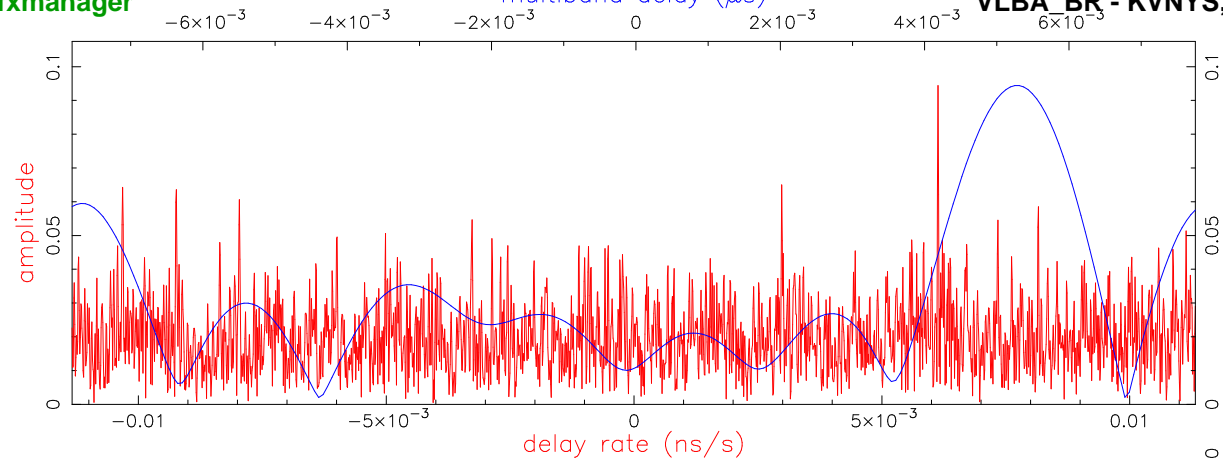
Group delay (usec)(sbd)	2.01383323743E+03	Apriori delay (usec)	2.01413472463E+03	Resid mbdelay (usec)	-4.61220E-03	+/-	1.8E-04
Sband delay (usec)	2.01383688338E+03	Apriori clock (usec)	-2.9516840E+00	Resid sbdelay (usec)	-2.97841E-01	+/-	1.4E-03
Phase delay (usec)	2.01413472789E+03	Apriori clockrate (us/s)	-9.9999991E-08	Resid phdelay (usec)	3.26234E-06	+/-	6.0E-07
Delay rate (us/s)	-1.42032643602E+00	Apriori rate (us/s)	-1.42033083091E+00	Resid rate (us/s)	4.39489E-06	+/-	2.2E-09
Total phase (deg)	165.7	Apriori accel (us/s/s)	-6.07838495772E-07	Resid phase (deg)	101.2	+/-	18.6

ph/seg (deg)	42.7	Theor.	44.5	Amplitude	0.110 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	74.0	Search (2048X32)	0.100	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	20.2	Inc. seg. avg.	0.104	Inc. frq. avg.	0.104	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	47.3	Inc. frq. avg.	0.104			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

b: az 279.7 el 53.2 pa 61.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 10870.005 749.037 simultaneous interpolator

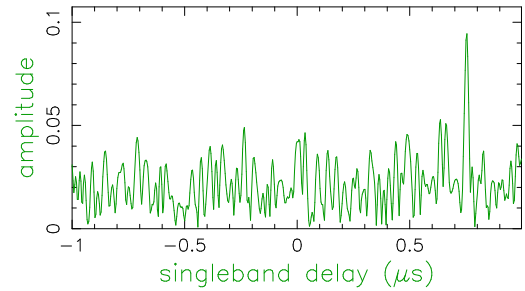
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/by..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/by.W.55.1M7QU

multiband delay (μ s)

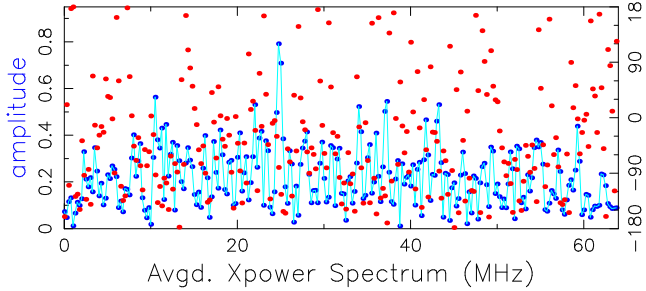


Fringe quality 0

SNR 5.7
Int time 476.983
Amp 0.107
Phase -93.7
PFD 9.7e-01
Delays (us)
SBD 0.752831
MBD 0.005286
Fringe rate (Hz)
0.529338
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

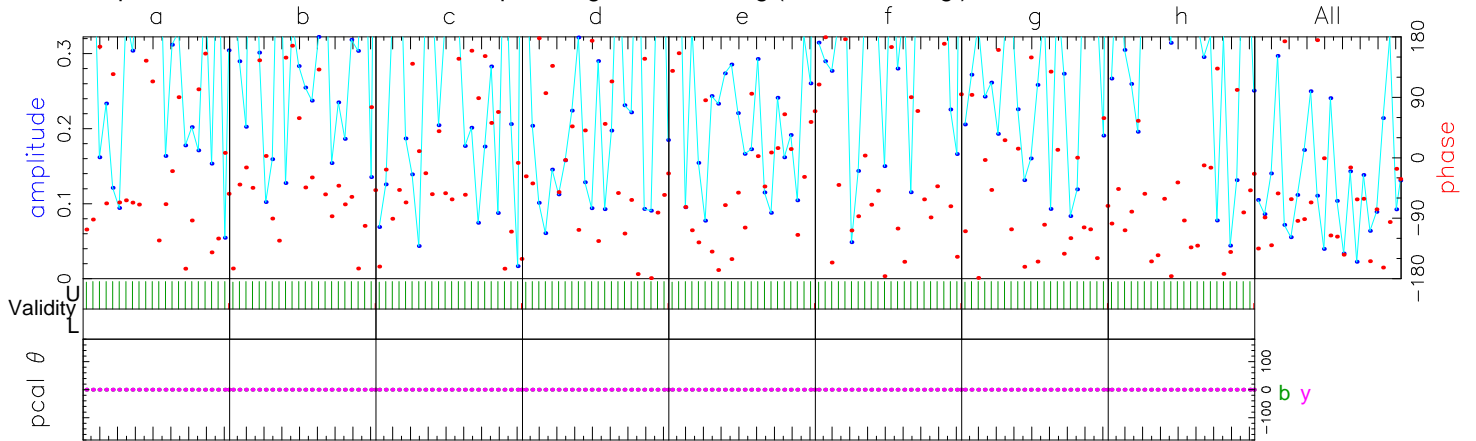


delay rate (ns/s)



Exp. c202b
Yr:day 16383
Start 2021:023:284
Stop 2021:023:284
FRT 133003.56
133801.26
133401.00
Corr/FF/build
2021:023:095356
2021:023:133343
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-116.5	-81.1	-71.6	-78.8	-82.7	-114.6	-107.8	-89.1	Phase	-93.7
	0.1	0.1	0.1	0.1	0.0	0.1	0.1	0.2	Ampl.	0.1
	445.9	170.6	30.1	267.0	275.7	380.8	65.4	448.8	Sbd box	449.7
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.01489001063E+03		Apriori delay (usec)		2.01413472463E+03		Resid mbdelay (usec)		5.28601E-03	+/- 1.9E-04
Sband delay (usec)	2.01488755588E+03		Apriori clock (usec)		-2.9516840E+08		Resid sbdelay (usec)		7.52831E-01	+/- 1.5E-03
Phase delay (usec)	2.01413472161E+03		Apriori clockrate (us/s)		-9.9999991E-08		Resid phdelay (usec)		-3.02016E-06	+/- 6.5E-07
Delay rate (us/s)	-1.42032468582E+00		Apriori rate (us/s)		-1.42033083091E+00		Resid rate (us/s)		6.14509E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.07838495772E-07		Resid phase (deg)		-93.7	+/- 20.2

	RMS	Theor.	Amplitude	0.107 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.8	48.5	Search (2048X32)	0.093	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	95.0	84.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.0	28.6	Inc. seg. avg.	0.110	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.6	49.9	Inc. frq. avg.	0.099	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 279.7 el 53.2 pa 61.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 10870.005 749.037 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/by..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/by.W.75.1M7QU

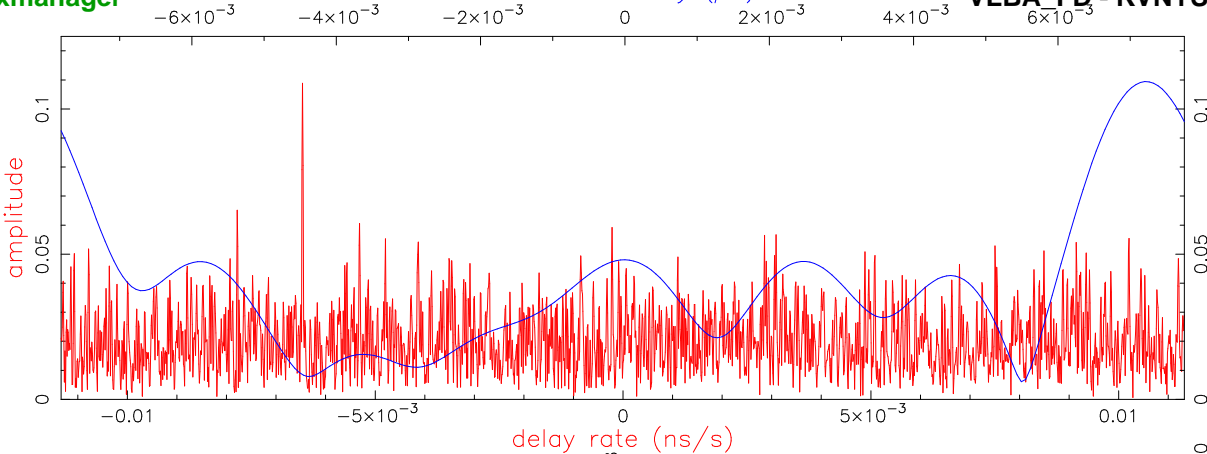
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

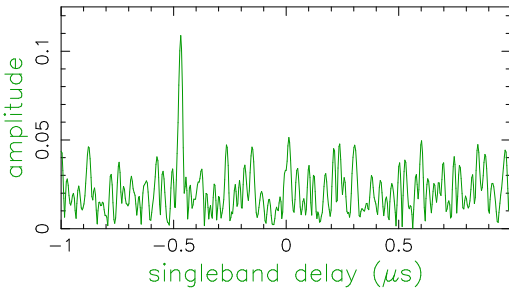
VLBA_FD - KVNYS, fgroup W, pol LR

multiband delay (μs)

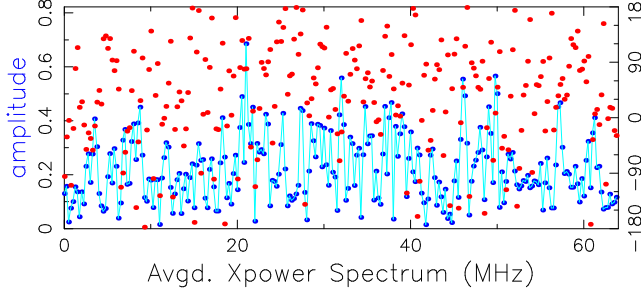


Fringe quality 0

SNR 6.5
Int time 476.246
Amp 0.125
Phase 159.1
PFD 2.2e-02
Delays (us)
SBD -0.468529
MBD -0.008301
Fringe rate (Hz)
-0.557617
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

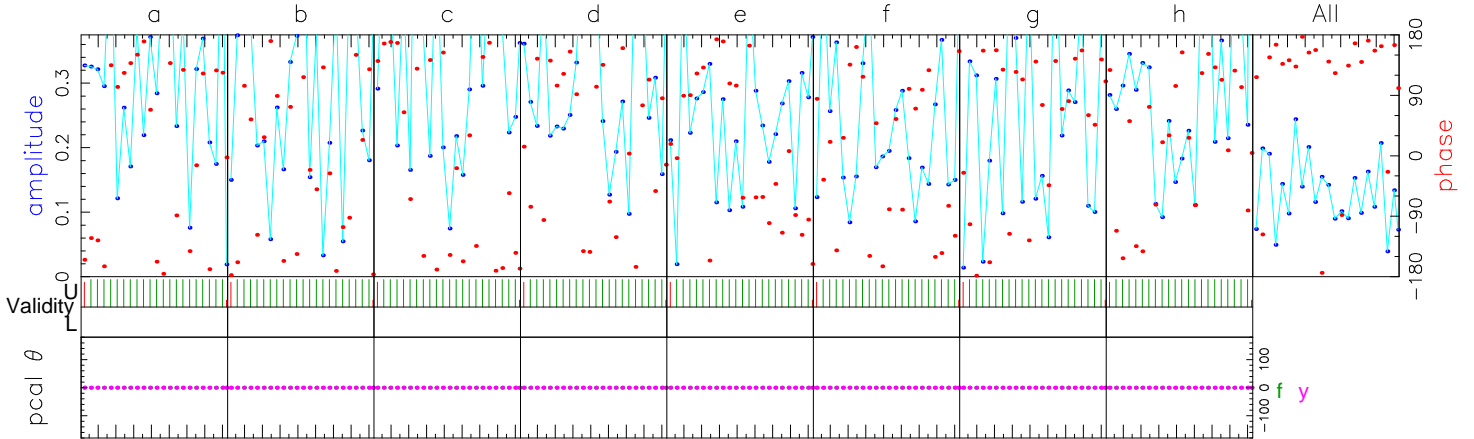


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133354
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.72977199803E+03	Apriori delay (usec)	-2.72931057224E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.7E-04
Sband delay (usec)	-2.72977910174E+03	Apriori clock (usec)	6.6330519E+00	Resid sbdelay (usec)	-4.68529E-01	+/-	1.3E-03
Phase delay (usec)	-2.72931056711E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	5.13213E-06	+/-	5.7E-07
Delay rate (us/s)	-1.73191551016E+00	Apriori rate (us/s)	-1.73190903678E+00	Resid rate (us/s)	-6.47338E-06	+/-	2.1E-09
Total phase (deg)	-90.4	Apriori accel (us/s/s)	7.06785044833E-06	Resid phase (deg)	159.1	+/-	17.6

ph/seg (deg)	51.7	Theor.	42.2	Amplitude	0.125 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	52.7		73.7	Search (2048X32)	0.105	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	27.5		24.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	59.2		43.5	Inc. seg. avg.	0.120	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.121	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.115.11M7QU

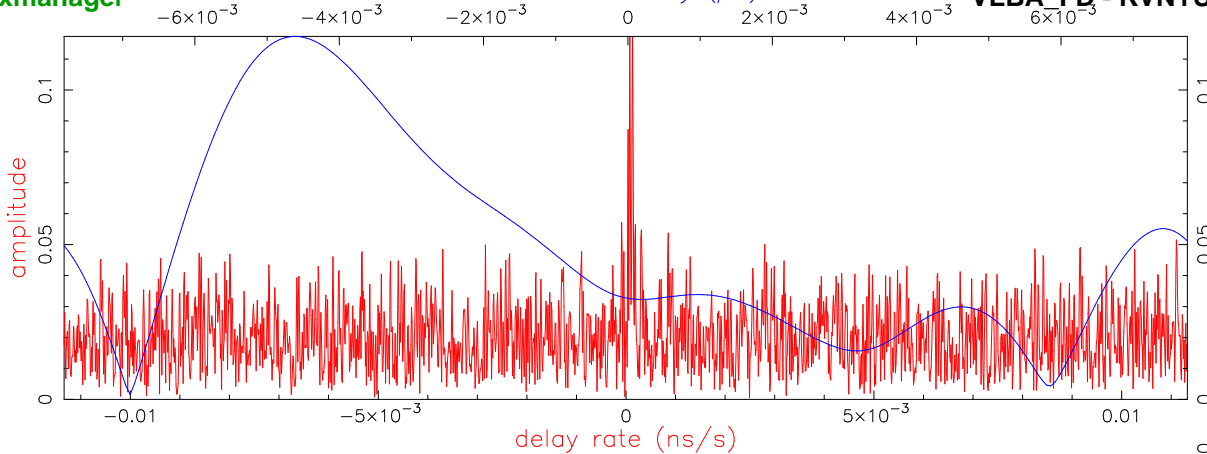
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

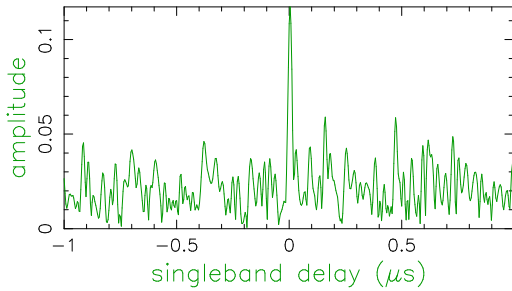
VLBA_FD - KVNYS, fgroup W, pol RL

multiband delay (μ s)

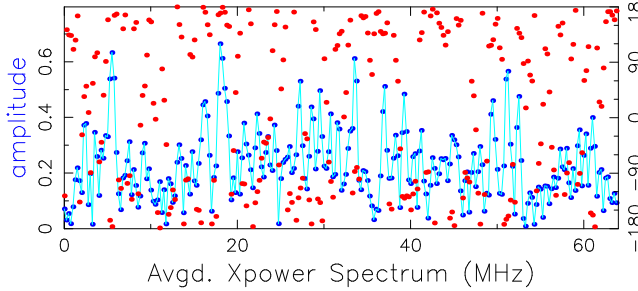


Fringe quality 0

SNR 7.0
Int time 476.246
Amp 0.117
Phase -81.7
PFD 7.6e-04
Delays (us)
SBD 0.003976
MBD -0.004611
Fringe rate (Hz)
0.011007
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

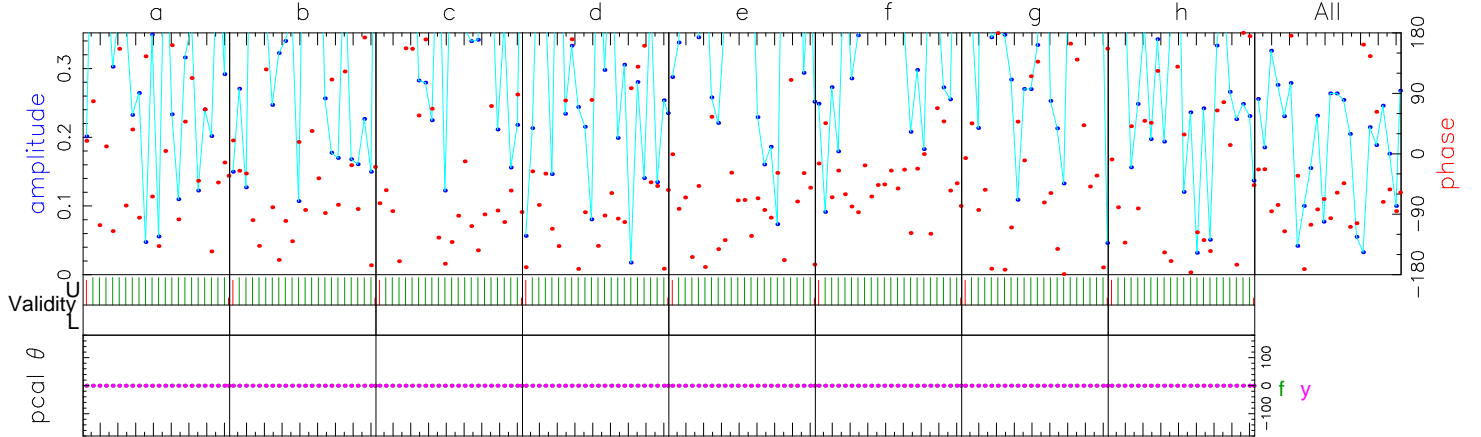


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133002.54
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133358
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.72929955779E+03	Apriori delay (usec)	-2.72931057224E+03	Resid mbdelay (usec)	-4.61054E-03	+/-	1.6E-04
Sband delay (usec)	-2.72930659599E+03	Apriori clock (usec)	6.6330519E+00	Resid sbdelay (usec)	3.97625E-03	+/-	1.2E-03
Phase delay (usec)	-2.72931057488E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-2.63490E-06	+/-	5.3E-07
Delay rate (us/s)	-1.73190890900E+00	Apriori rate (us/s)	-1.73190903678E+00	Resid rate (us/s)	1.27783E-07	+/-	1.9E-09
Total phase (deg)	-331.2	Apriori accel (us/s/s)	7.06785044833E-06	Resid phase (deg)	-81.7	+/-	16.4

ph/seg (deg)	62.2	Theor.	39.2	Amplitude	0.117 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	94.5		68.4	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	61.0		23.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	69.6		40.4	Inc. seg. avg.	0.154	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.133	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.131.11M7QU

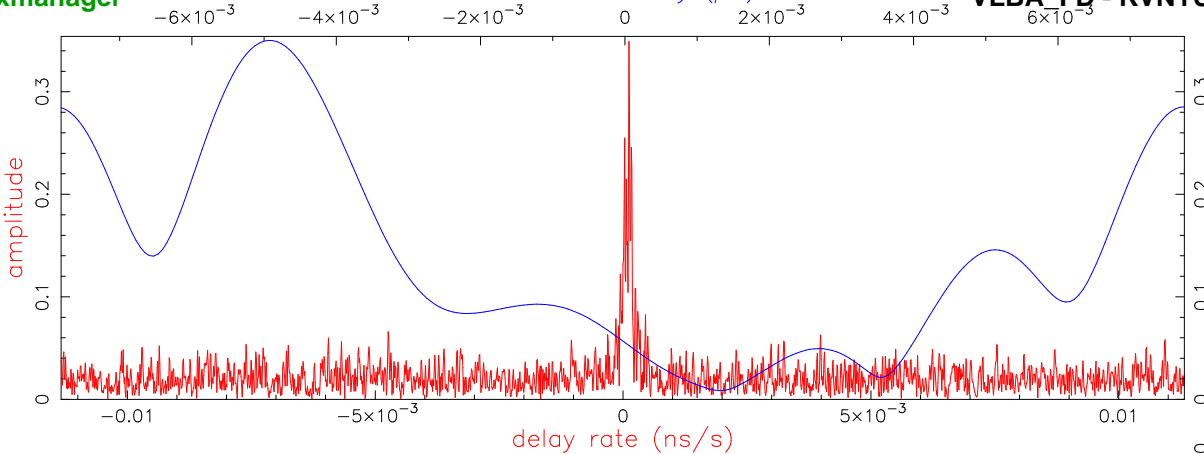
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

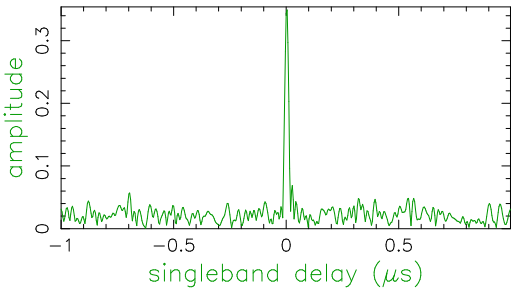
VLBA_FD - KVNYS, fgroup W, pol LL

multiband delay (μ s)

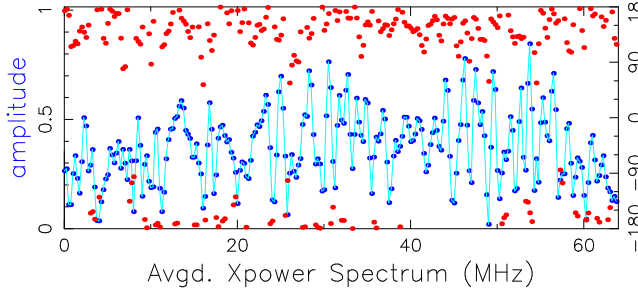


Fringe quality 7

SNR 21.1
 Int time 476.246
 Amp 0.354
 Phase -119.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.002353
 MBD -0.005011
 Fringe rate (Hz)
 0.010802
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

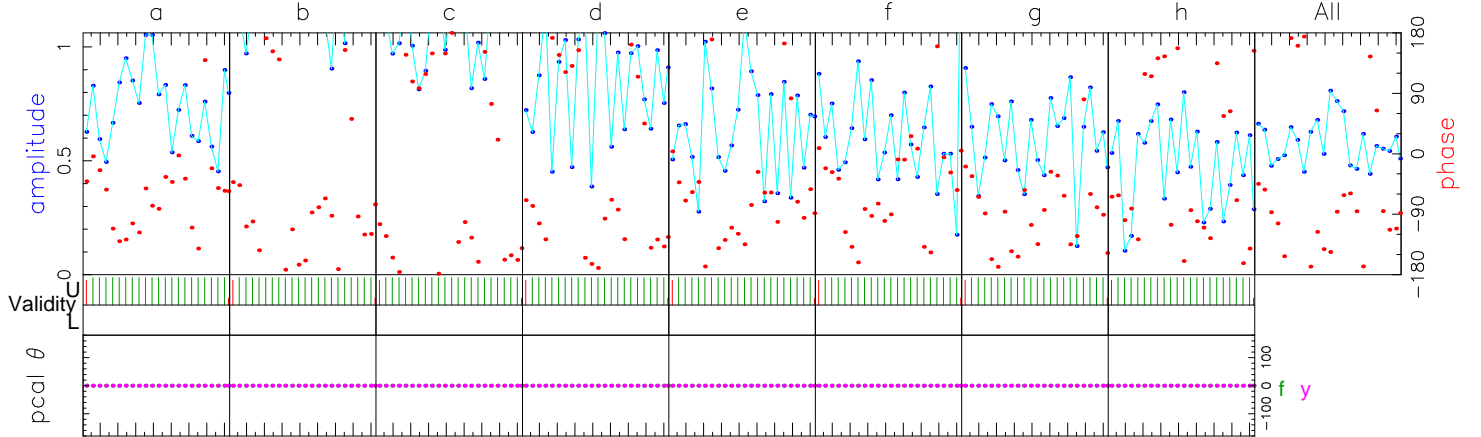


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133345
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.72931558298E+03	Apriori delay (usec)	-2.72931057224E+03	Resid mbdelay (usec)	-5.01074E-03	+/-	5.1E-05
Sband delay (usec)	-2.72930821974E+03	Apriori clock (usec)	6.6330519E+00	Resid sbdelay (usec)	2.35250E-03	+/-	4.1E-04
Phase delay (usec)	-2.72931057611E+03	Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-3.86225E-06	+/-	1.7E-07
Delay rate (us/s)	-1.73190891138E+00	Apriori rate (us/s)	-1.73190903678E+00	Resid rate (us/s)	1.25398E-07	+/-	6.3E-10
Total phase (deg)	-9.3	Apriori accel (us/s/s)	7.06785044833E-06	Resid phase (deg)	-119.8	+/-	5.4

ph/seg (deg)	61.5	Theor.	13.0	Search (2048X32)	0.338	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.0		22.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	45.0		7.7	Inc. seg. avg.	0.571	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	53.1		13.4	Inc. frq. avg.	0.443	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.77.11M7QU

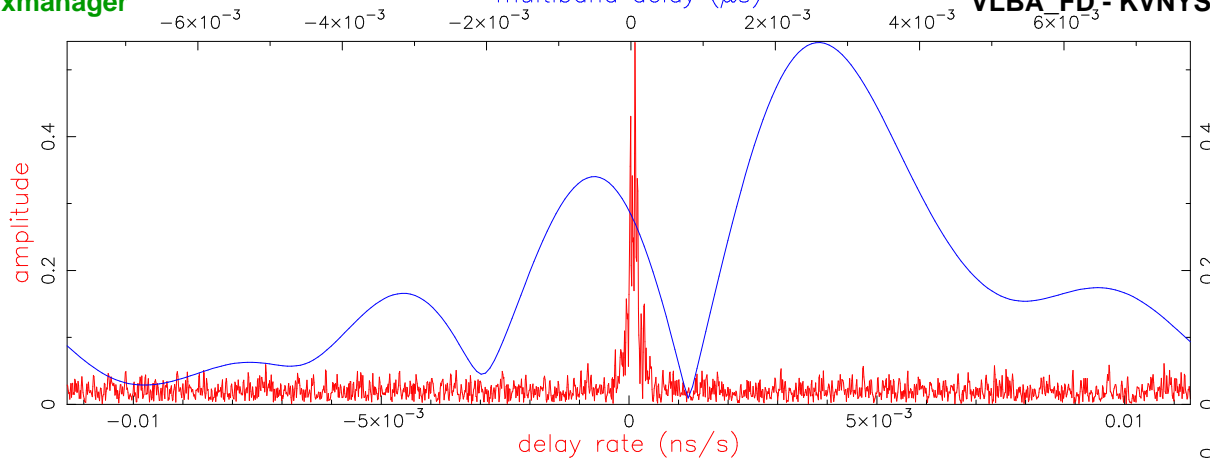
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, fy

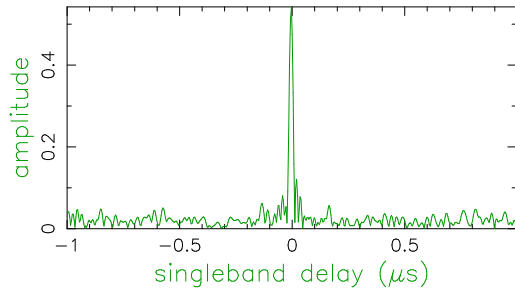
VLBA_FD - KVNYS, fgroup W, pol RR

multiband delay (μ s)

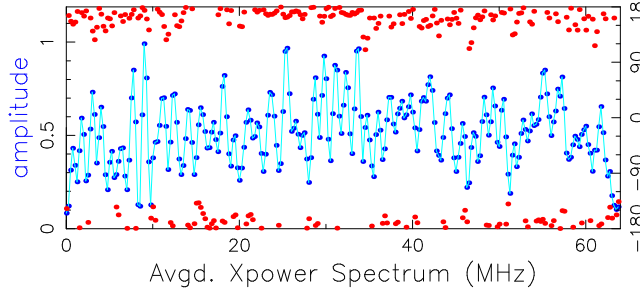


Fringe quality 4

SNR 32.4
 Int time 476.246
 Amp 0.542
 Phase 88.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.004648
 MBD 0.002564
 Fringe rate (Hz)
 0.010875
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

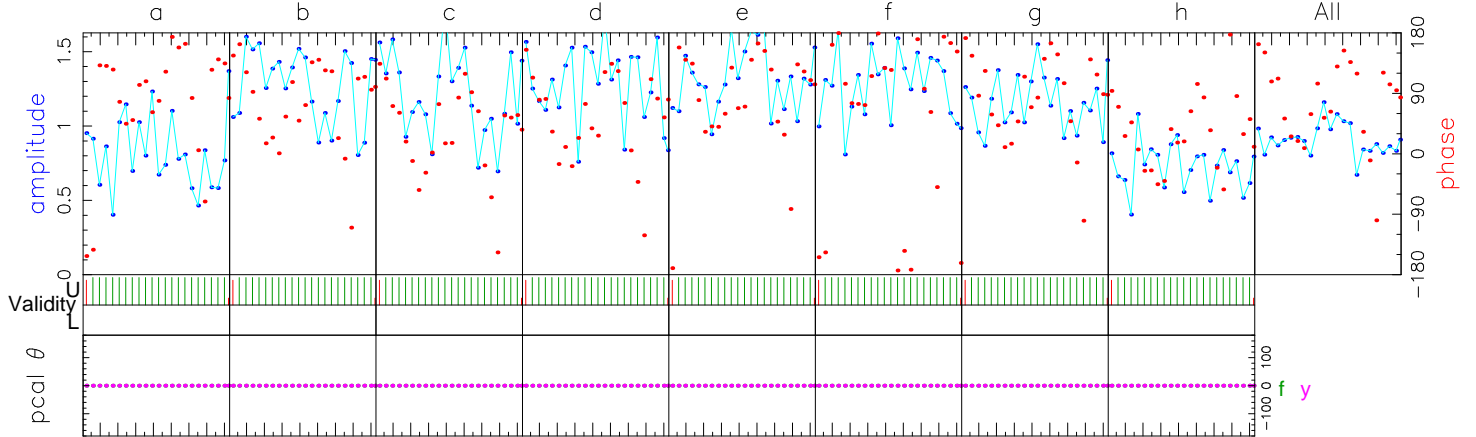


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133002.54
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133350
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.72930800777E+03									
Sband delay (usec)	-2.72931522024E+03									
Phase delay (usec)	-2.72931056940E+03									
Delay rate (us/s)	-1.73190891053E+00									
Total phase (deg)			-161.2							
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)									88.3	+/- 3.5
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

f: az 301.7 el 35.5 pa 77.7 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 13271.452 -296.293 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/fy.W.95.11M7QU

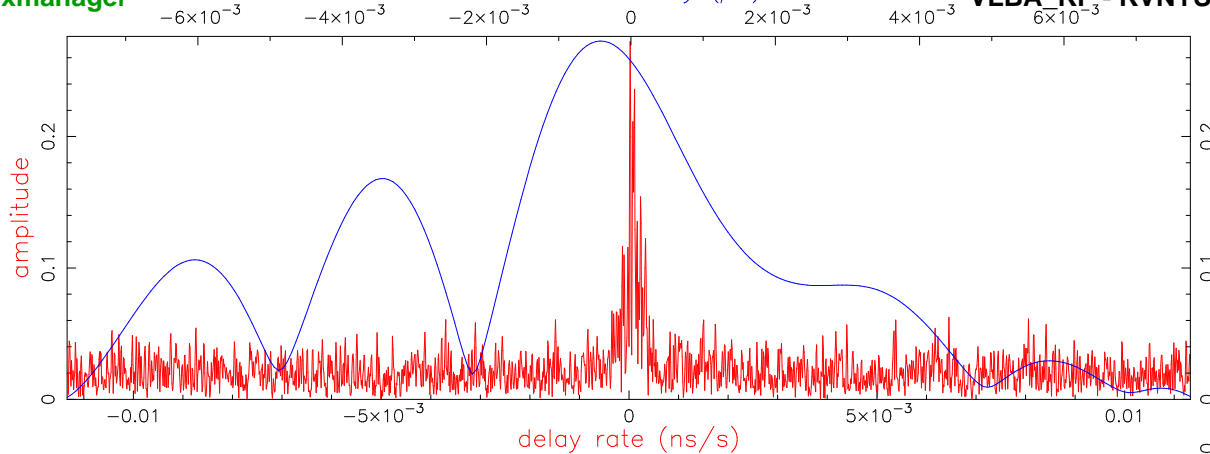
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, ky

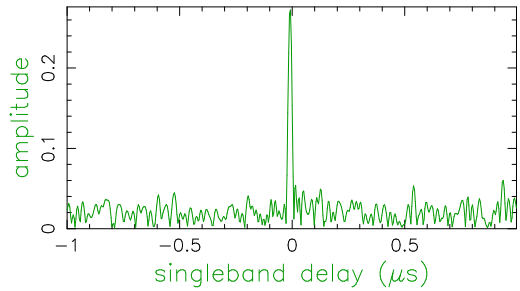
VLBA_KP - KVNYS, fgroup W, pol RR

multiband delay (μ s)

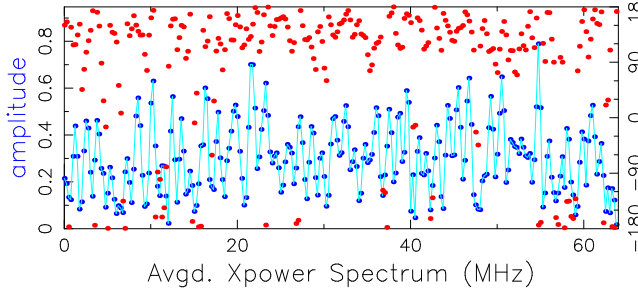


Fringe quality 8

SNR 16.5
 Int time 476.258
 Amp 0.276
 Phase 40.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.009394
 MBD -0.000494
 Fringe rate (Hz)
 0.001877
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

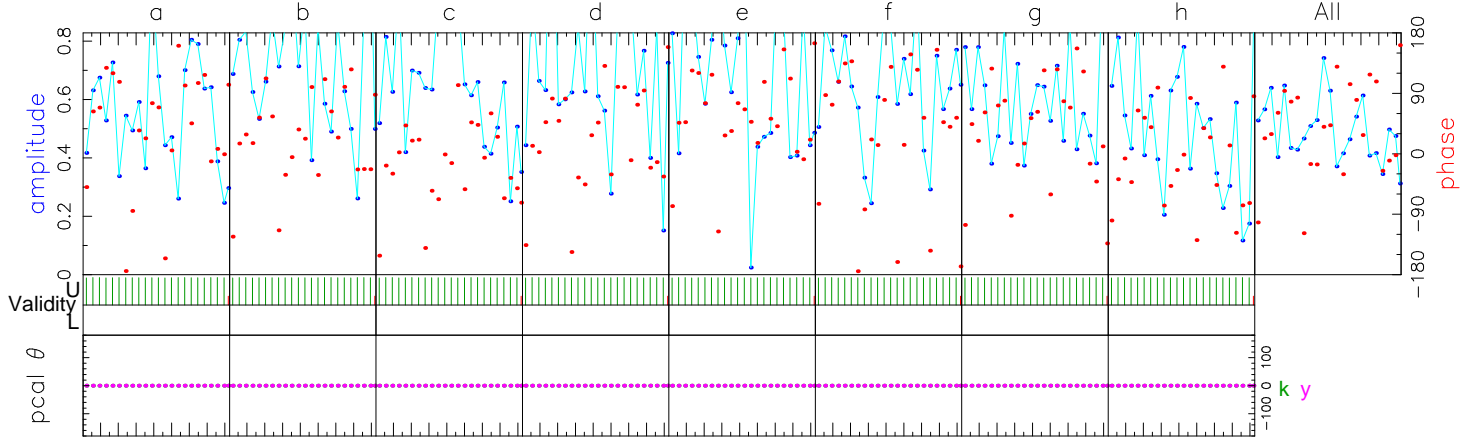


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133353
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.88590945215E+02									
Sband delay (usec)	-8.88584220024E+02									
Phase delay (usec)	-8.88574824960E+02									
Delay rate (us/s)	-1.66341051841E+00									
Total phase (deg)			-151.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									40.7	+/- 7.0
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
nlags:	256									
t_cohere:	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

k: az 299.4 el 41.8 pa 80.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 12732.677 -742.684 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky.W.110.1M7QU

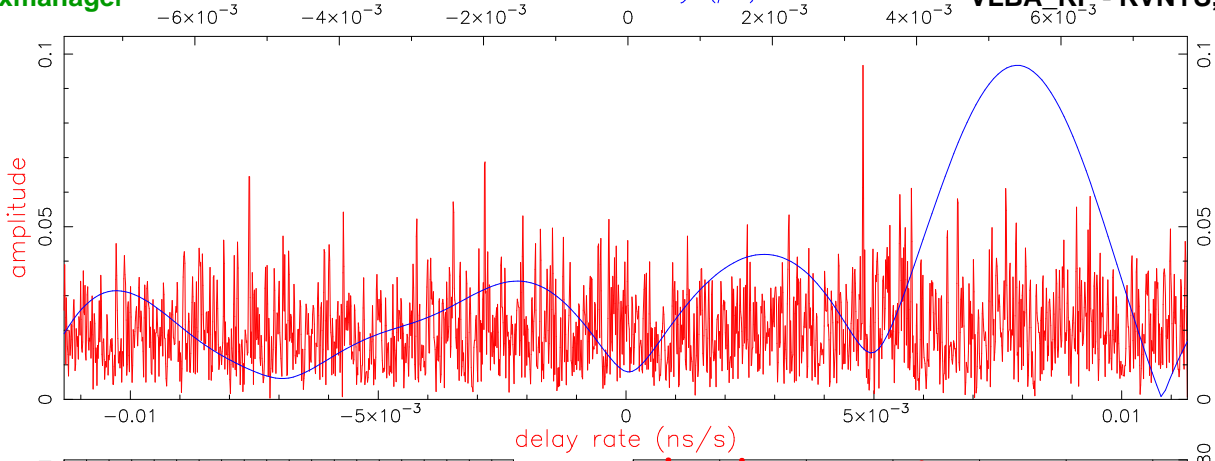
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

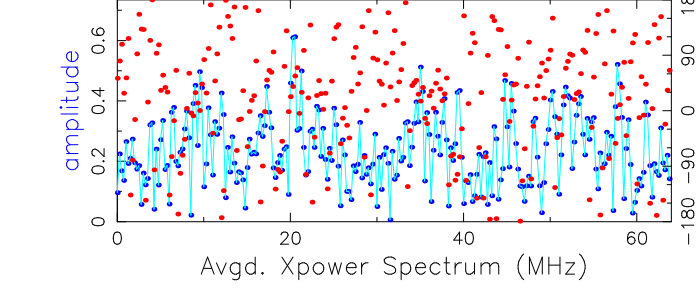
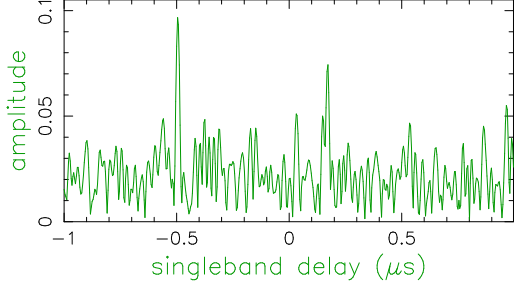
3C84.1IM7QU, No0117, ky

VLBA_KP - KVNYS, fgroup W, pol LR

multiband delay (μ s)

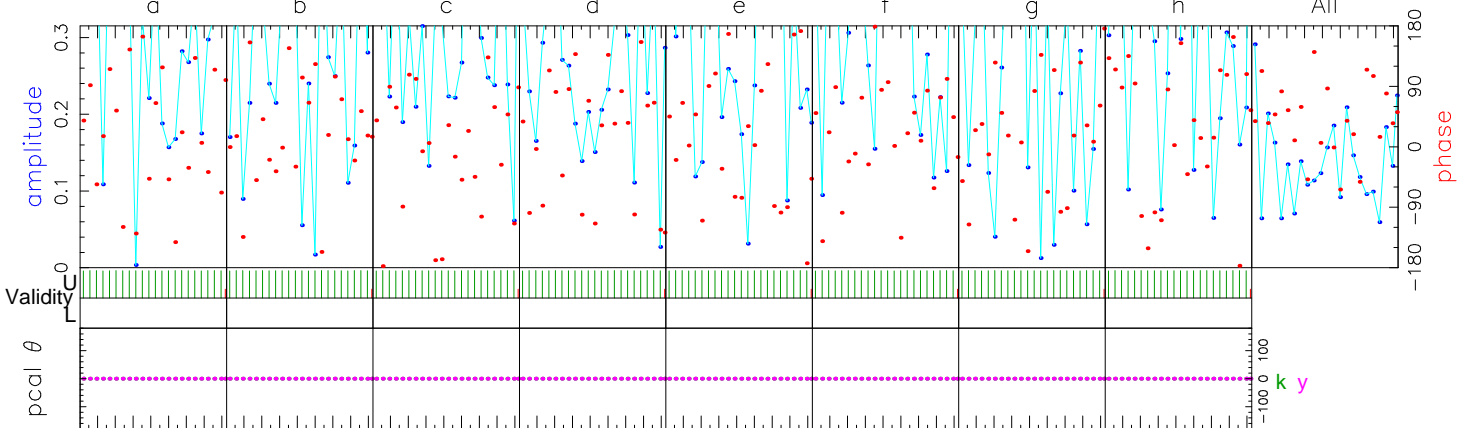


Fringe quality 0
 SNR 5.8
 Int time 476.258
 Amp 0.105
 Phase 42.2
 PFD 7.7e-01
 Delays (us)
 SBD -0.494909
 MBD 0.005394
 Fringe rate (Hz) 0.413028
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133357
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Amplitude vs. delay rate (ns/s)

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ky	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02		
Sband delay (usec)	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02	-8.89069734774E+02	-8.89069432512E+02		
Phase delay (usec)	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02	-8.88574824911E+02		
Delay rate (us/s)	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00	-1.66340574535E+00		
Total phase (deg)			-150.4							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

k: az 299.4 el 41.8 pa 80.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 12732.677 -742.684 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky.W.129.1IM7QU

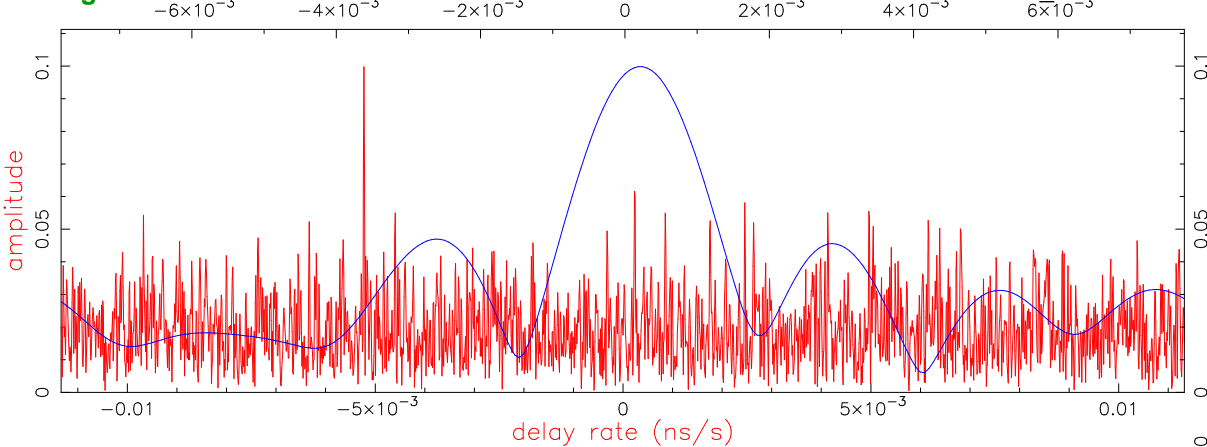
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, ky

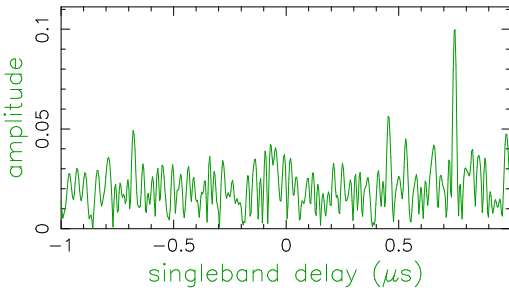
VLBA_KP - KVNYS, fgroup W, pol RL

multiband delay (μ s)

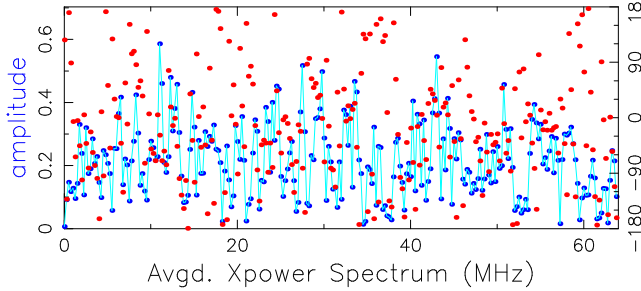


Fringe quality 0

SNR 6.1
 Int time 476.258
 Amp 0.111
 Phase -49.0
 PFD 2.8e-01
 Delays (us)
 SBD 0.748214
 MBD 0.000165
 Fringe rate (Hz)
 -0.451154
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

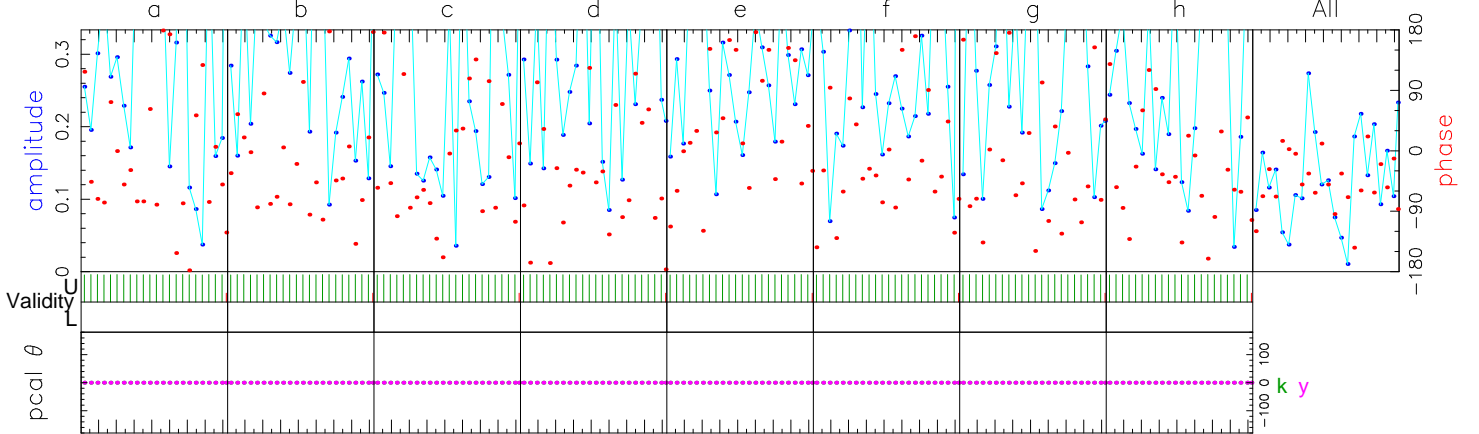


delay rate (ns/s)



Exp. c202b
 Yr:day 16383
 Start 2020:284
 Stop 2020:284
 FRT 133001.00
 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133401
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.87824661393E+02	Apriori delay (usec)	-8.88574826274E+02	Resid mbdelay (usec)	1.64880E-04	+/-	1.8E-04
Sband delay (usec)	-8.87826612524E+02	Apriori clock (usec)	-9.0300083E-01	Resid sbdelay (usec)	7.48214E-01	+/-	1.4E-03
Phase delay (usec)	-8.88574827853E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.57972E-06	+/-	6.1E-07
Delay rate (us/s)	-1.66341577765E+00	Apriori rate (us/s)	-1.66341054020E+00	Resid rate (us/s)	-5.23745E-06	+/-	2.2E-09
Total phase (deg)	-241.7	Apriori accel (us/s/s)	-1.28438873846E-06	Resid phase (deg)	-49.0	+/-	18.9

ph/seg (deg)	41.5	Theor.	45.3	Amplitude	0.111 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.5		79.0	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	37.4		26.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	35.0		46.6	Inc. seg. avg.	0.106	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

k: az 299.4 el 41.8 pa 80.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 12732.677 -742.684 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky.W.148.1IM7QU

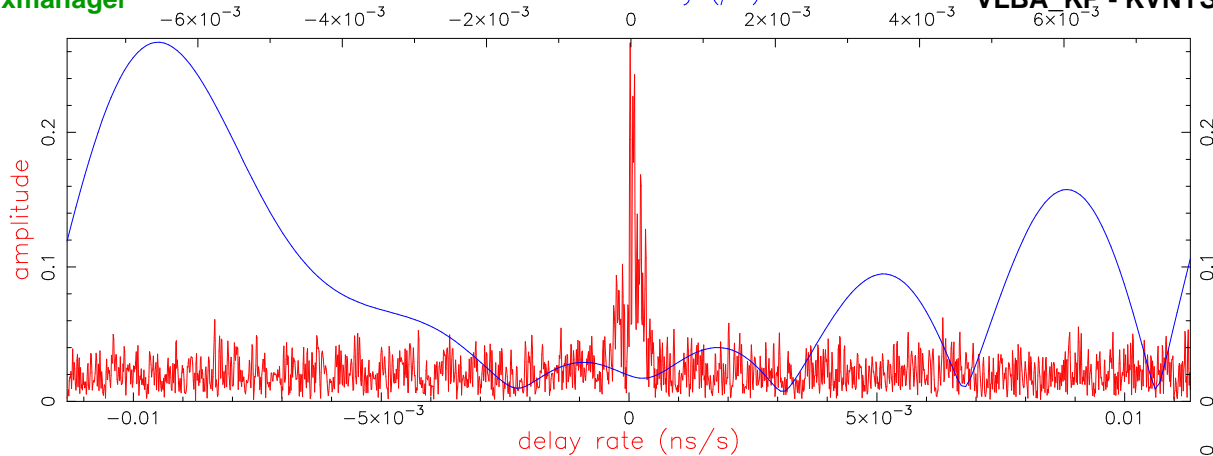
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, ky

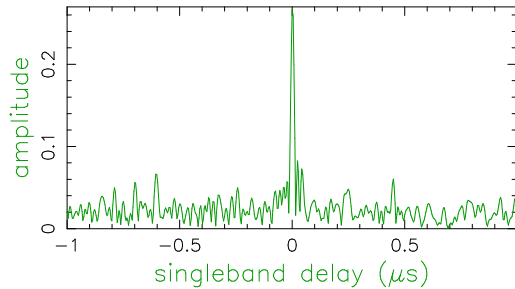
VLBA_KP - KVNYS, fgroup W, pol LL

multiband delay (μ s)

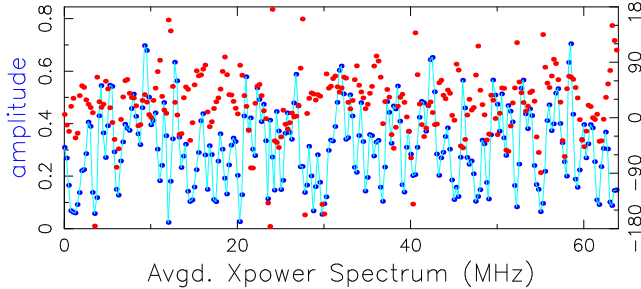


Fringe quality 8

SNR 16.1
 Int time 476.258
 Amp 0.270
 Phase 114.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.001384
 MBD -0.006474
 Fringe rate (Hz)
 0.001890
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

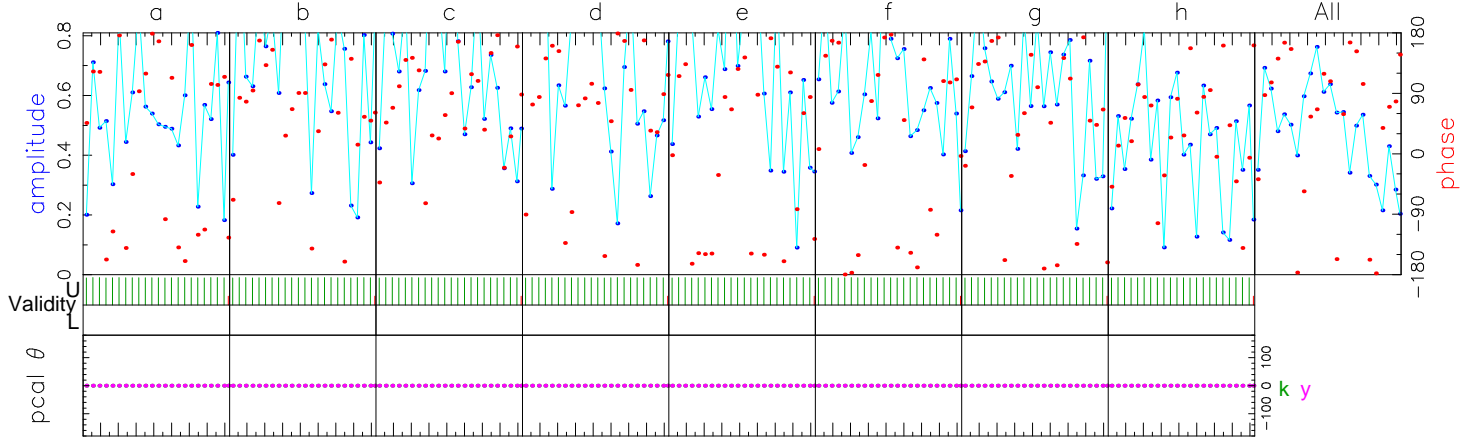


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133349
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.88565675403E+02	Apriori delay (usec)	-8.88574826274E+02	Resid mbdelay (usec)	-6.47413E-03	+/-	6.7E-05
Sband delay (usec)	-8.88573441774E+02	Apriori clock (usec)	-9.0300083E-01	Resid sbdelay (usec)	1.38450E-03	+/-	5.3E-04
Phase delay (usec)	-8.88574822576E+02	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.69767E-06	+/-	2.3E-07
Delay rate (us/s)	-1.66341051826E+00	Apriori rate (us/s)	-1.66341054020E+00	Resid rate (us/s)	2.19391E-08	+/-	8.3E-10
Total phase (deg)	-78.0	Apriori accel (us/s/s)	-1.28438873846E-06	Resid phase (deg)	114.7	+/-	7.1

ph/seg (deg)	68.8	Theor.	17.1	Amplitude	0.270 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	98.5	Search (2048X32)	0.263	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	41.9	Inc. seg. avg.	0.470	Inc. frq. avg.	0.314	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	26.9	Inc. frq. avg.	0.314			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 299.4 el 41.8 pa 80.5 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 12732.677 -742.684 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ky.W.92.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

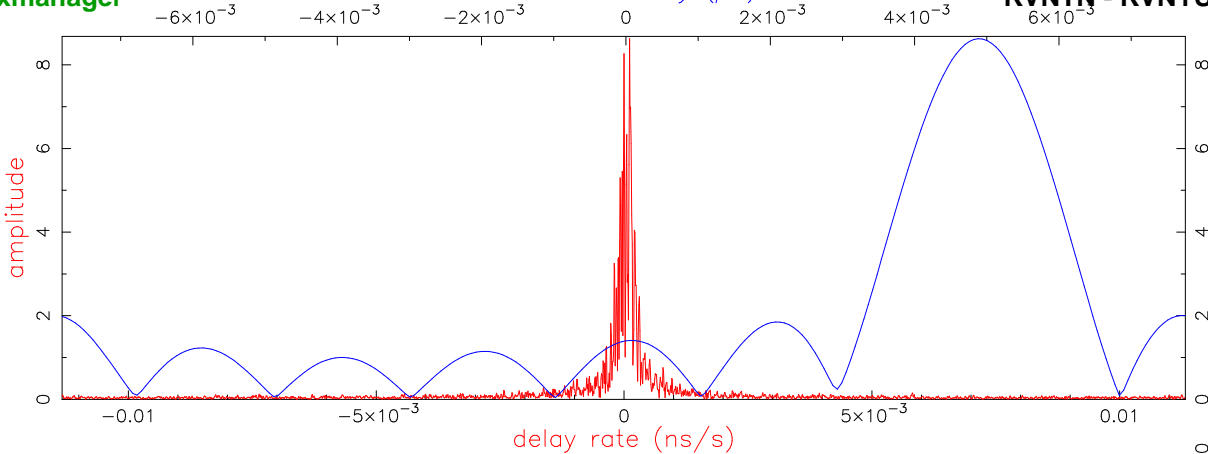
fxmanager

3C84.1IM7QU, No0117, ty

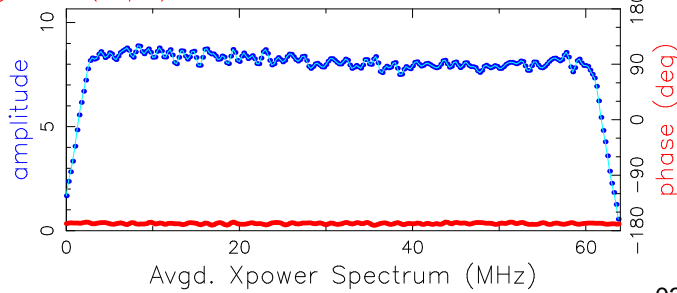
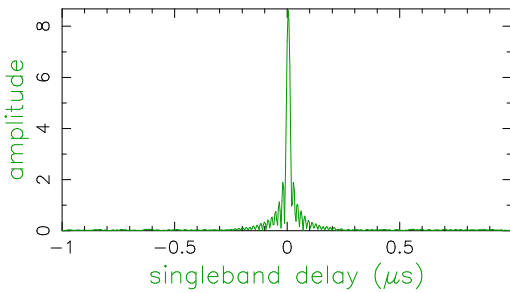
KVNTN - KVNS, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

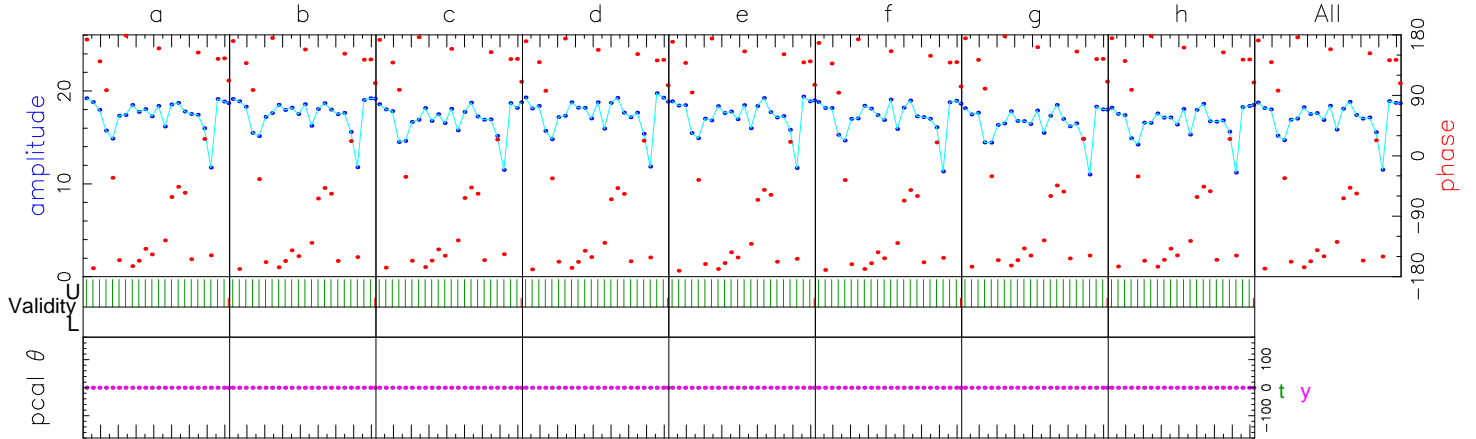


SNR 520.1
 Int time 479.985
 Amp 8.682
 Phase -168.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.004928
 MBD 0.004896
 Fringe rate (Hz)
 0.009667
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133408
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-166.4	-168.6	-166.9	-169.5	-170.8	-171.3	-166.0	-166.6	Phase	-168.3
	8.8	8.9	8.5	8.9	8.7	8.6	8.3	8.3	Ampl.	8.6
	258.3	258.2	258.3	258.2	258.3	258.3	258.3	258.2	Sbd box	258.3
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.11694602188E+02	Apriori delay (usec)	-6.11699498450E+02	Resid mbdelay (usec)	4.89626E-03	+/-	2.1E-06
Sband delay (usec)	-6.11694570200E+02	Apriori clock (usec)	1.3599968E-01	Resid sbdelay (usec)	4.92825E-03	+/-	1.7E-05
Phase delay (usec)	-6.11699503877E+02	Apriori clockrate (us/s)	0.000000E+00	Resid phdelay (usec)	-5.42700E-06	+/-	7.1E-09
Delay rate (us/s)	4.74888848927E-02	Apriori rate (us/s)	4.74887726664E-02	Resid rate (us/s)	1.12226E-07	+/-	2.6E-11
Total phase (deg)	-95.0	Apriori accel (us/s/s)	-1.29479396860E-06	Resid phase (deg)	-168.3	+/-	0.2

ph/seg (deg)	RMS 70.4	Theor. 0.5	Amplitude Search (2048X32)	8.682 +/- 0.017	8.533	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	99.3	0.9	Interp.	0.000	17.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	2.3	0.3	Inc. seg. avg.	17.137	8.631	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	2.6	0.5	Inc. frq. avg.	8.631		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

t: az 61.3 el 41.3 pa -78.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -364.882 -489.246 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty.W.168.1IM7QU

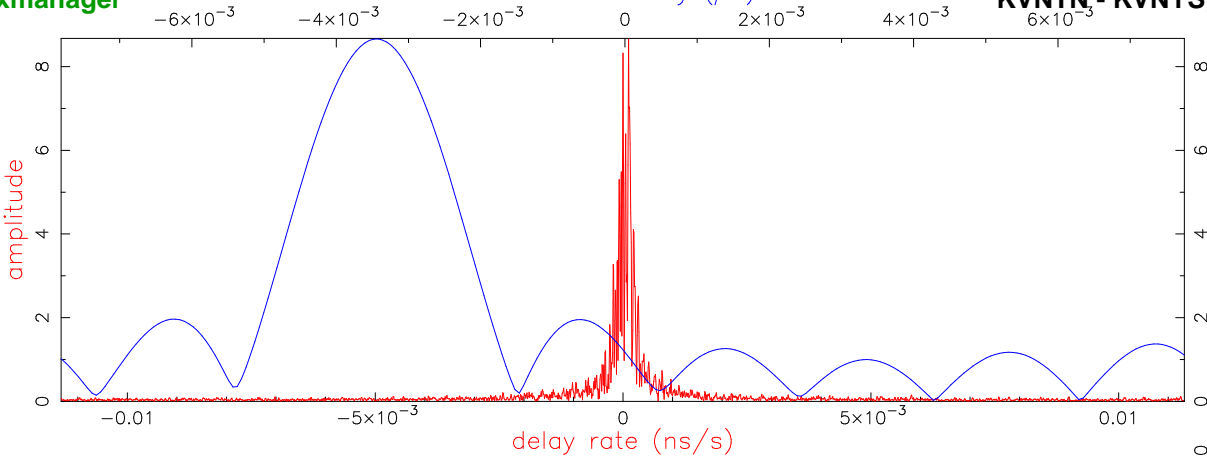
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, ty

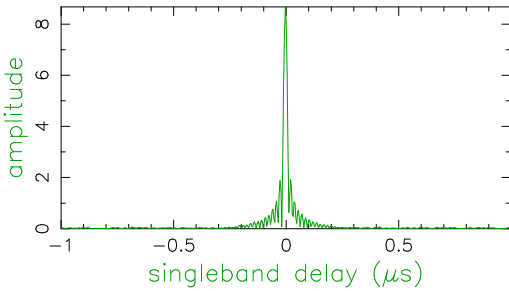
KVNTN - KVNYS, fgroup W, pol RR

multiband delay (μ s)

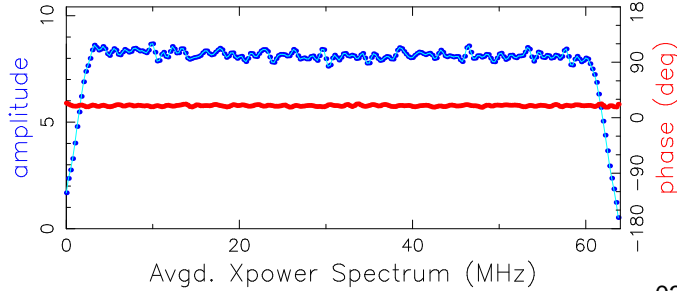


Fringe quality 5

SNR 519.8
 Int time 479.985
 Amp 8.676
 Phase 19.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.003410
 MBD -0.003443
 Fringe rate (Hz) 0.009670
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

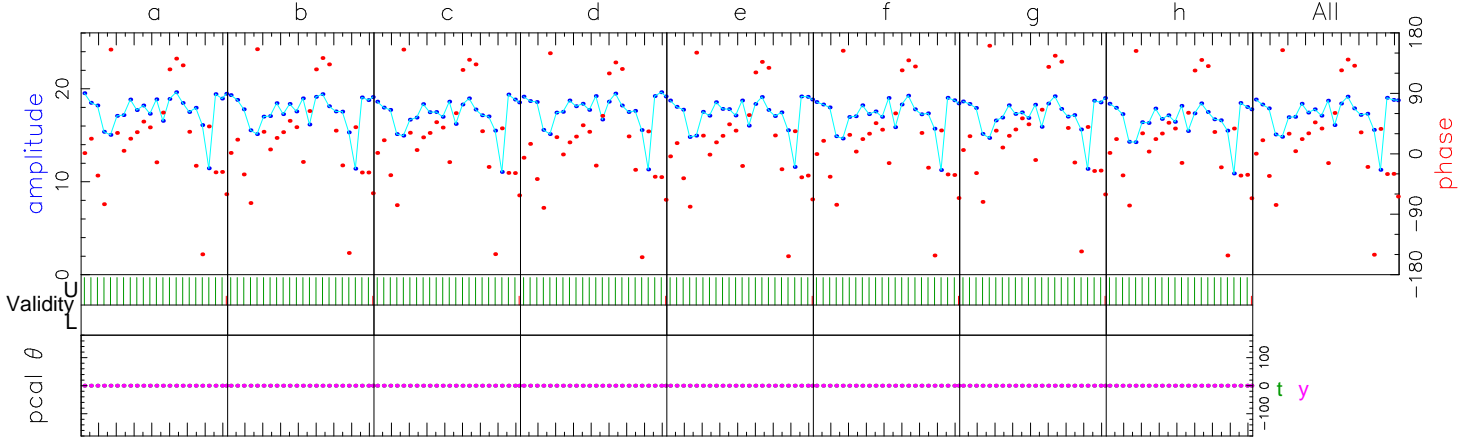


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133412
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
t	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

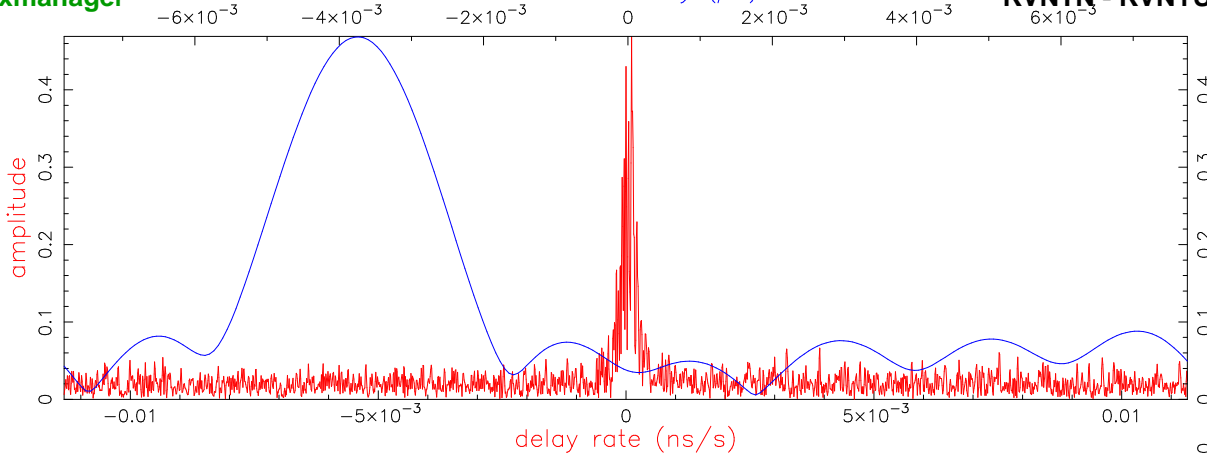
Group delay (usec)(sbd) -6.11702941626E+02 Apriori delay (usec) -6.11699498450E+02 Resid mbdelay (usec) -3.44318E-03 +/- 2.1E-06
 Sband delay (usec) -6.11702908450E+02 Apriori clock (usec) 1.3599968E-01 Resid sbdelay (usec) -3.41000E-03 +/- 1.7E-05
 Phase delay (usec) -6.11699497809E+02 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 6.40596E-07 +/- 7.1E-09
 Delay rate (us/s) 4.74888849217E-02 Apriori rate (us/s) 4.74887726664E-02 Resid rate (us/s) 1.12255E-07 +/- 2.6E-11
 Total phase (deg) -266.9 Apriori accel (us/s/s) -1.29479396860E-06 Resid phase (deg) 19.9 +/- 0.2

RMS Theor. Amplitude 8.676 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 70.4 0.5 Search (2048X32) 8.558 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 101.0 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 3.7 0.3 Inc. seg. avg. 17.257 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 2.1 0.5 Inc. frq. avg. 8.676 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 t: az 61.3 el 41.3 pa -78.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -364.882 -489.246 simultaneous interpolator

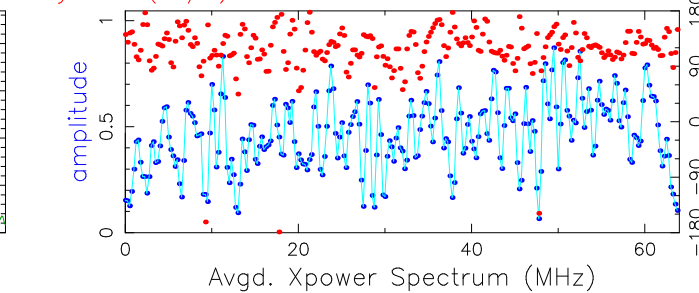
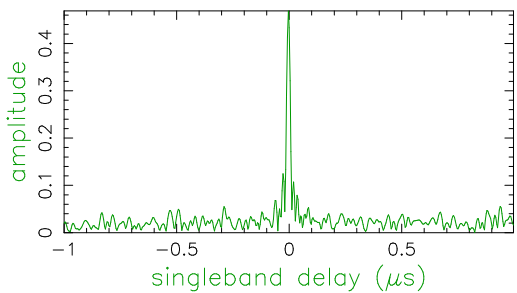
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty.W.184.1IM7QU

multiband delay (μ s)

Fringe quality 7

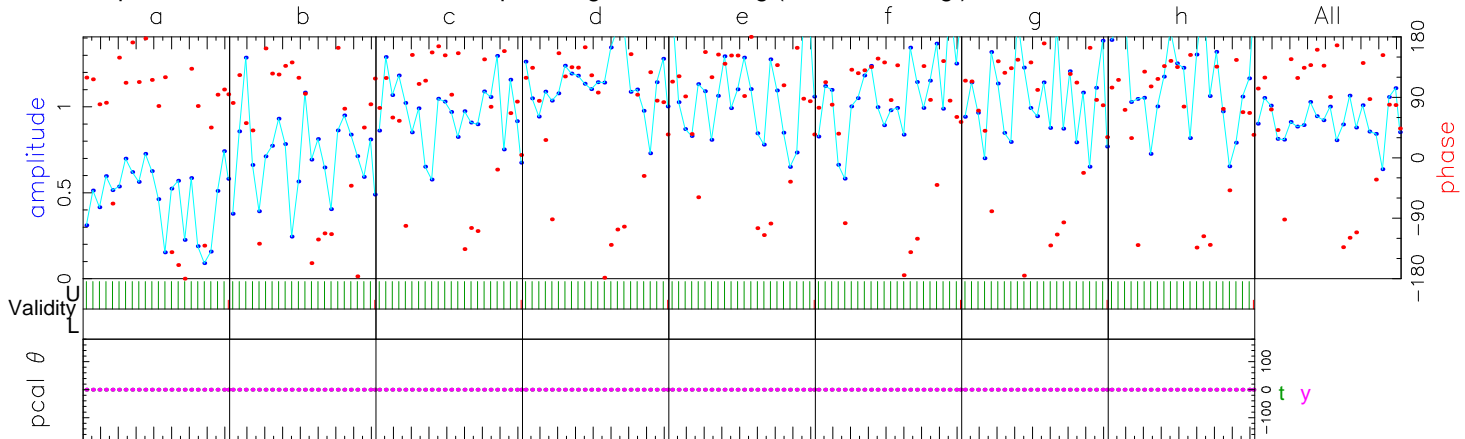


SNR 28.1
Int time 479.985
Amp 0.469
Phase 126.2
PFD 0.0e+00
Delays (us)
SBD -0.003472
MBD -0.003741
Fringe rate (Hz)
0.009620
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133416
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-6.11703239657E+02									
Sband delay (usec)	-6.11702970450E+02									
Phase delay (usec)	-6.11699494380E+02									
Delay rate (us/s)	4.74888843478E-02									
Total phase (deg)			-160.5							
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)									126.2	+/- 4.1
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

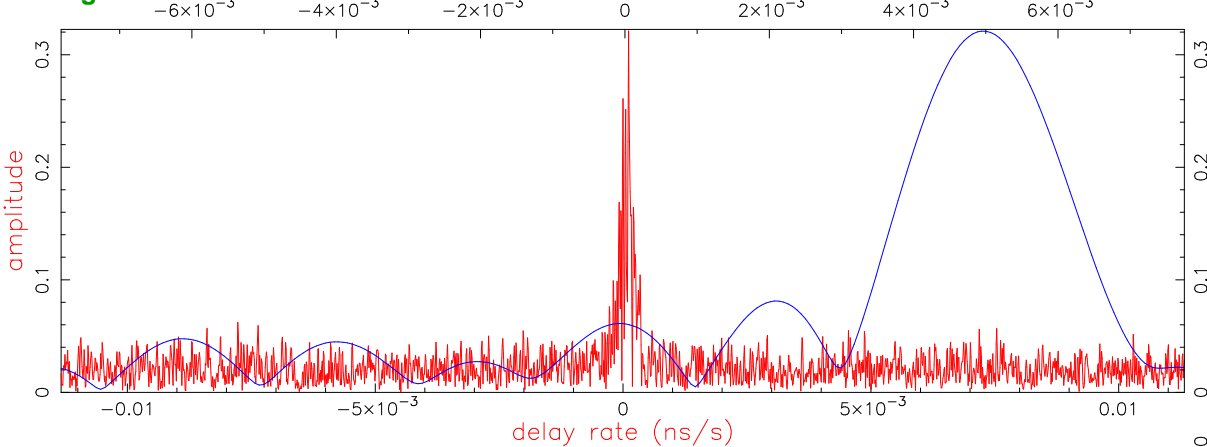
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ty

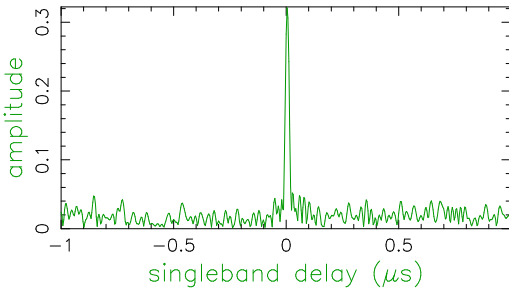
KVNTN - KVNYS, fgroup W, pol RL

multiband delay (μ s)



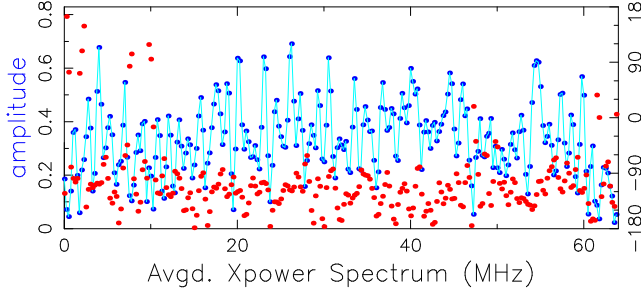
Fringe quality 9

SNR 19.3
 Int time 479.985
 Amp 0.322
 Phase -120.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.004794
 MBD 0.004973
 Fringe rate (Hz) 0.009609
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



singleband delay (μ s)

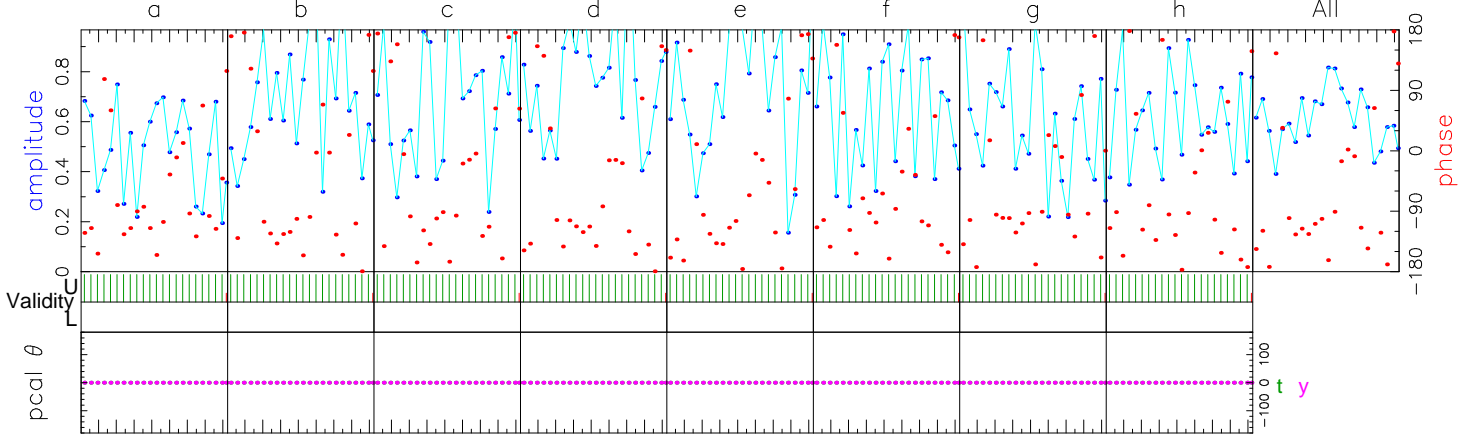
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133420
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.11694525188E+02	Apriori delay (usec)	-6.11699498450E+02	Resid mbdelay (usec)	4.97326E-03	+/-	5.6E-05
Sband delay (usec)	-6.11694704200E+02	Apriori clock (usec)	1.3599968E-01	Resid sbdelay (usec)	4.79425E-03	+/-	4.5E-04
Phase delay (usec)	-6.11699502324E+02	Apriori clockrate (us/s)	0.000000E+00	Resid phdelay (usec)	-3.87488E-06	+/-	1.9E-07
Delay rate (us/s)	4.74888842210E-02	Apriori rate (us/s)	4.74887726664E-02	Resid rate (us/s)	1.11555E-07	+/-	6.9E-10
Total phase (deg)	-46.9	Apriori accel (us/s/s)	-1.29479396860E-06	Resid phase (deg)	-120.2	+/-	5.9

ph/seg (deg)	73.4	Theor.	14.2	Amplitude	0.322 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	97.3		24.8	Search (2048X32)	0.319	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	12.9		8.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	12.7		14.6	Inc. seg. avg.	0.599	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.323	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 61.3 el 41.3 pa -78.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -364.882 -489.246 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ty.W.221.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

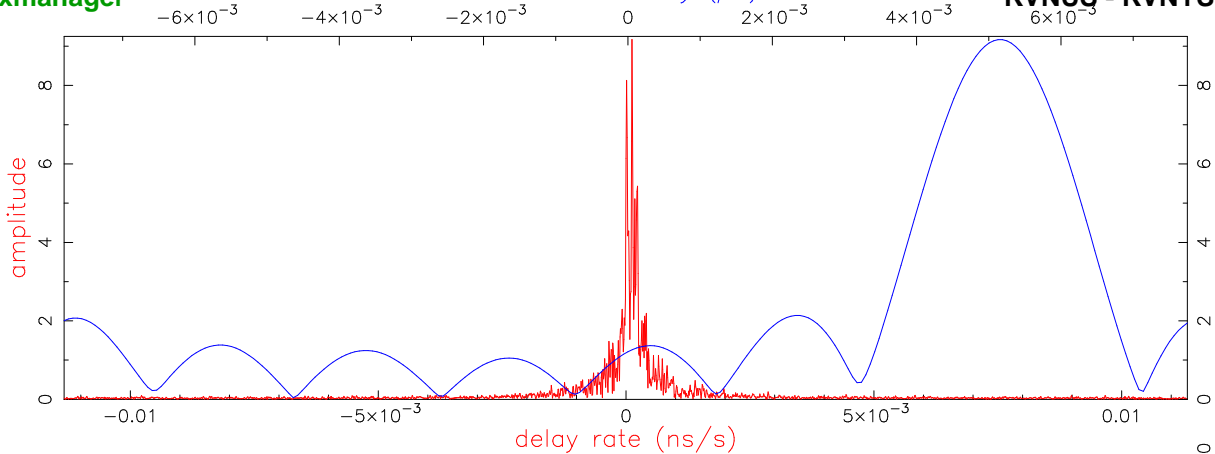
fxmanager

3C84.1IM7QU, No0117, uy

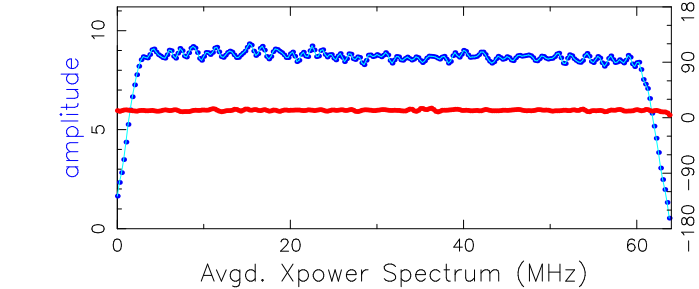
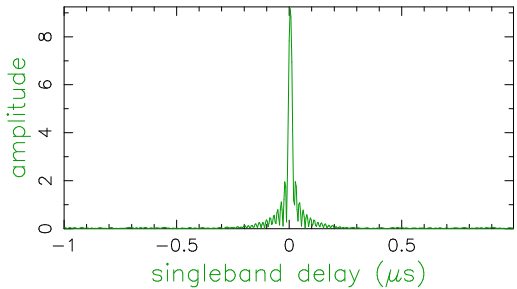
KVNU₃ - KVNY₅, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

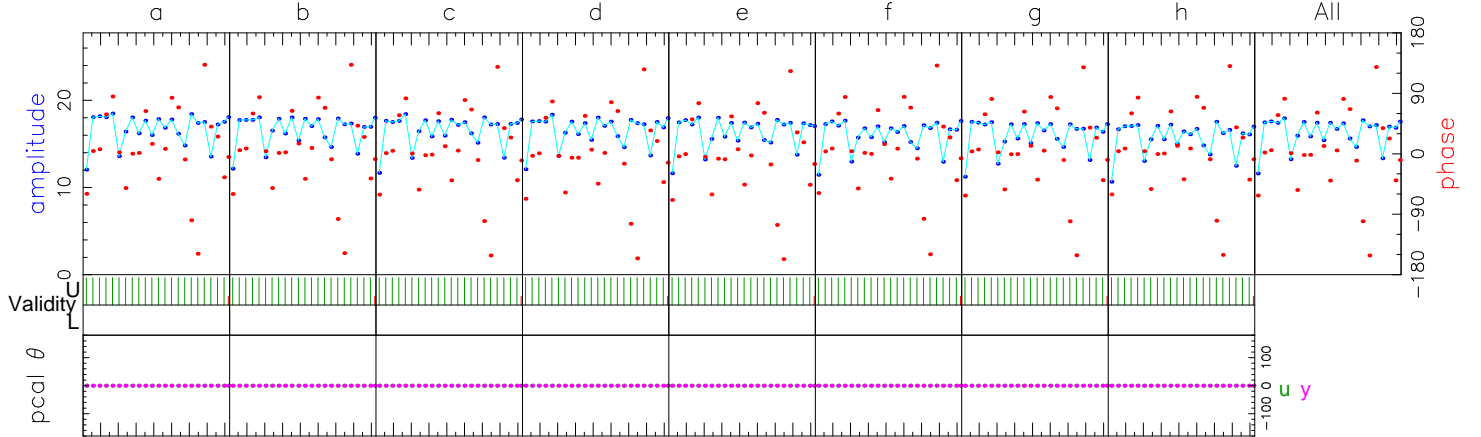


SNR 554.1
Int time 479.985
Amp 9.249
Phase 11.1
PFD 0.0e+00
Delays (us)
SBD 0.005097
MBD 0.005158
Fringe rate (Hz) 0.010768
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133423
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 2.16272772063E+02 Apriori delay (usec) 2.16267614398E+02 Resid mbdelay (usec) 5.15767E-03 +/- 2.0E-06
 Sband delay (usec) 2.16272711148E+02 Apriori clock (usec) 1.3210521E+00 Resid sbdelay (usec) 5.09675E-03 +/- 1.6E-05
 Phase delay (usec) 2.16267614755E+02 Apriori clockrate (us/s) 2.9999999E-07 Resid phdelay (usec) 3.56996E-07 +/- 6.7E-09
 Delay rate (us/s) 1.51794376571E-03 Apriori rate (us/s) 1.51781875702E-03 Resid rate (us/s) 1.25009E-07 +/- 2.4E-11
 Total phase (deg) 120.6 Apriori accel (us/s/s) -3.26198619438E-06 Resid phase (deg) 11.1 +/- 0.2

RMS Theor. Amplitude 9.249 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 62.5 0.5 Search (2048X32) 8.666 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 78.4 0.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 3.7 0.3 Inc. seg. avg. 16.308 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 2.4 0.5 Inc. frq. avg. 9.184 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 63.8 el 44.4 pa -77.9 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -16.742 -414.721 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy..1IM7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy.W.230.1IM7QU

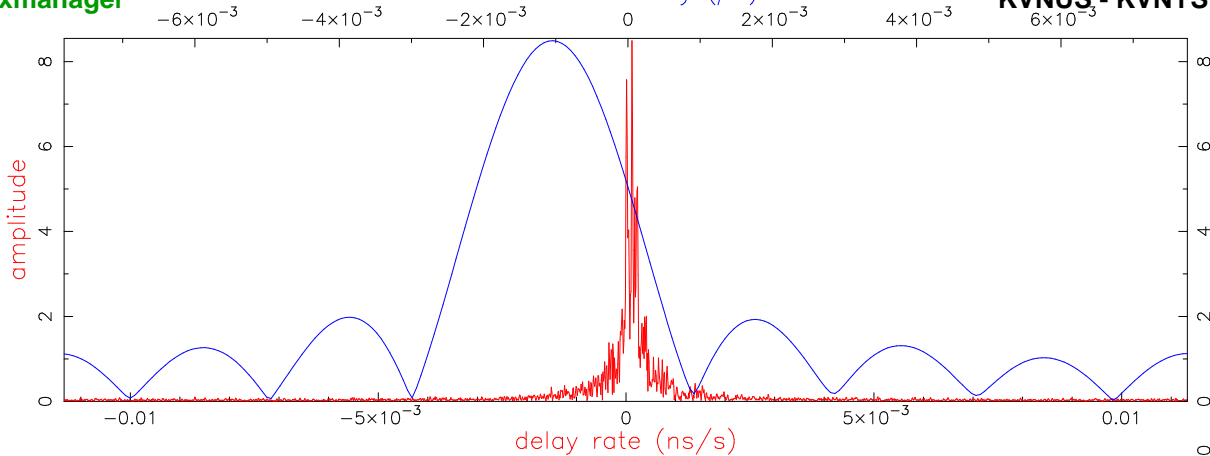
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, uy

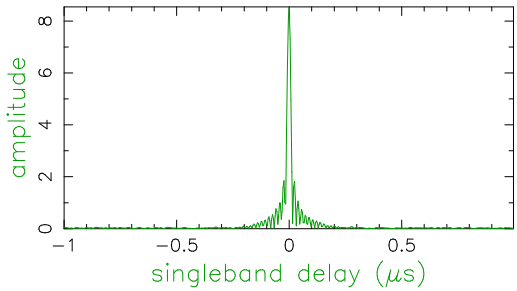
KVNU_S - KVNY_S, fgroup W, pol RR

multiband delay (μ s)

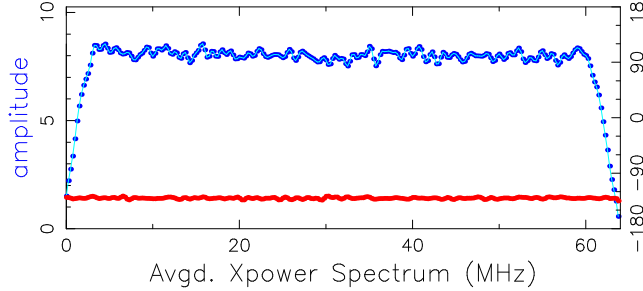


Fringe quality 5

SNR 512.0
 Int time 479.985
 Amp 8.547
 Phase -129.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.001017
 MBD -0.001048
 Fringe rate (Hz)
 0.010773
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

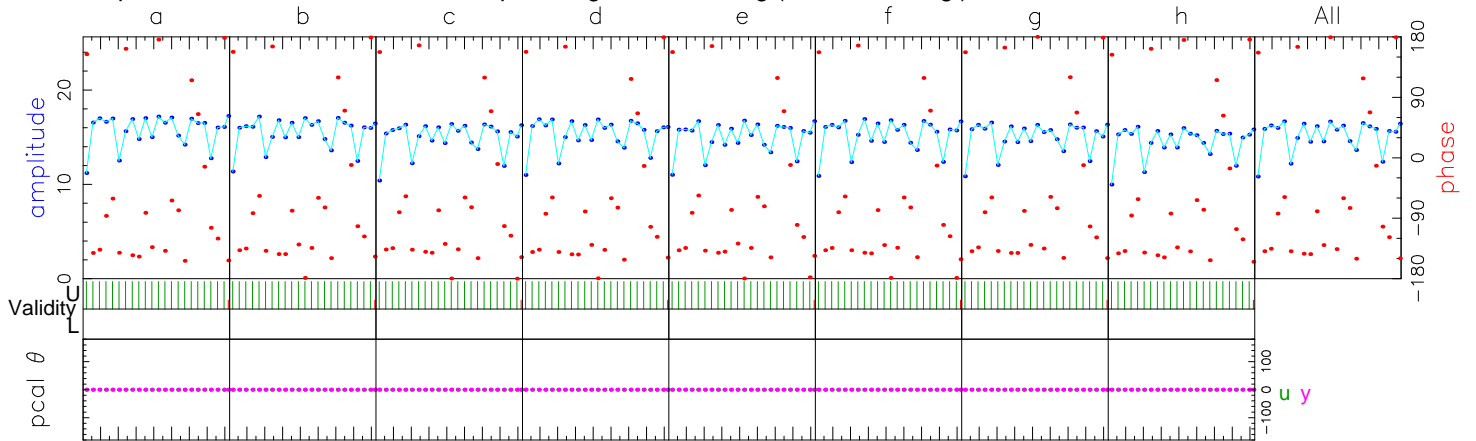


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133426
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-132.5	-129.4	-128.4	-130.4	-127.9	-128.8	-129.0	-132.9	Phase	-129.9
	8.8	8.7	8.4	8.6	8.4	8.6	8.4	8.2	Ampl.	8.5
	256.8	256.8	256.7	256.8	256.7	256.8	256.7	256.7	Sbd box	256.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.16266566501E+02		Apriori delay (usec)	2.16267614398E+02	Resid mbdelay (usec)	-1.04790E-03	+/-	2.1E-06		
Sband delay (usec)	2.16266597648E+02		Apriori clock (usec)	1.3210521E+00	Resid sbdelay (usec)	-1.01675E-03	+/-	1.7E-05		
Phase delay (usec)	2.16267610208E+02		Apriori clockrate (us/s)	2.9999999E-07	Resid phdelay (usec)	-4.18976E-06	+/-	7.2E-09		
Delay rate (us/s)	1.51794382381E-03		Apriori rate (us/s)	1.51781875702E-03	Resid rate (us/s)	1.25067E-07	+/-	2.6E-11		
Total phase (deg)		-20.4	Apriori accel (us/s/s)	-3.26198619438E-06	Resid phase (deg)	-129.9	+/-	0.2		

RMS Theor. Amplitude 8.547 +/- 0.017
 ph/seg (deg) 62.6 0.5 Search (2048X32) 8.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 79.7 0.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 2.0 0.3 Inc. seg. avg. 15.179 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 2.4 0.6 Inc. frq. avg. 8.497 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 u: az 63.8 el 44.4 pa -77.9 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -16.742 -414.721 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy.W.238.1M7QU

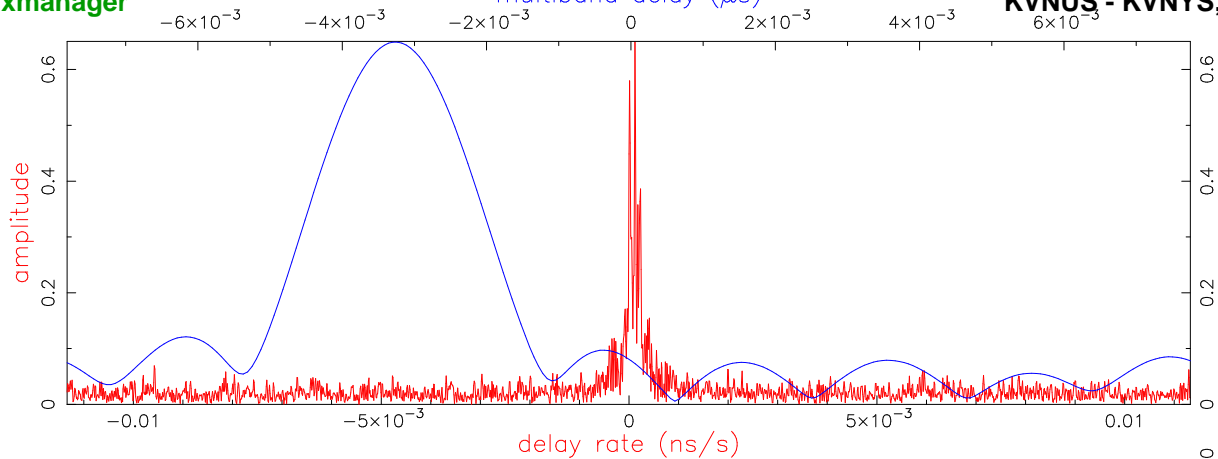
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, uy

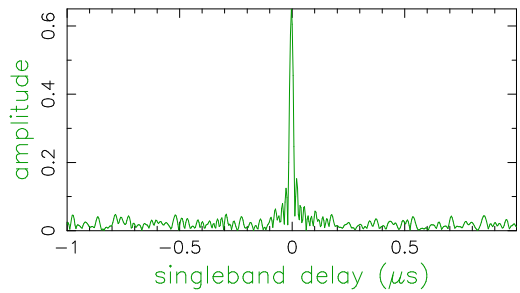
KVNU_S - KVNY_S, fgroup W, pol LR

multiband delay (μ s)

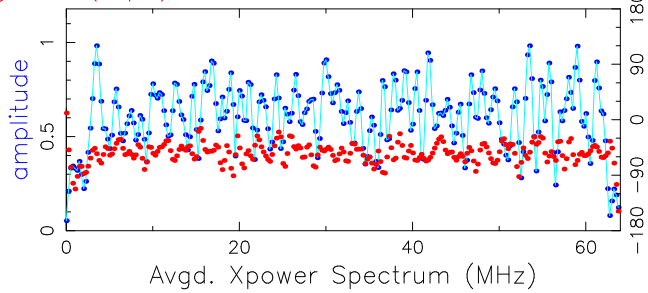


Fringe quality 7

SNR 39.0
 Int time 479.985
 Amp 0.650
 Phase -55.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.003387
 MBD -0.003266
 Fringe rate (Hz)
 0.010778
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

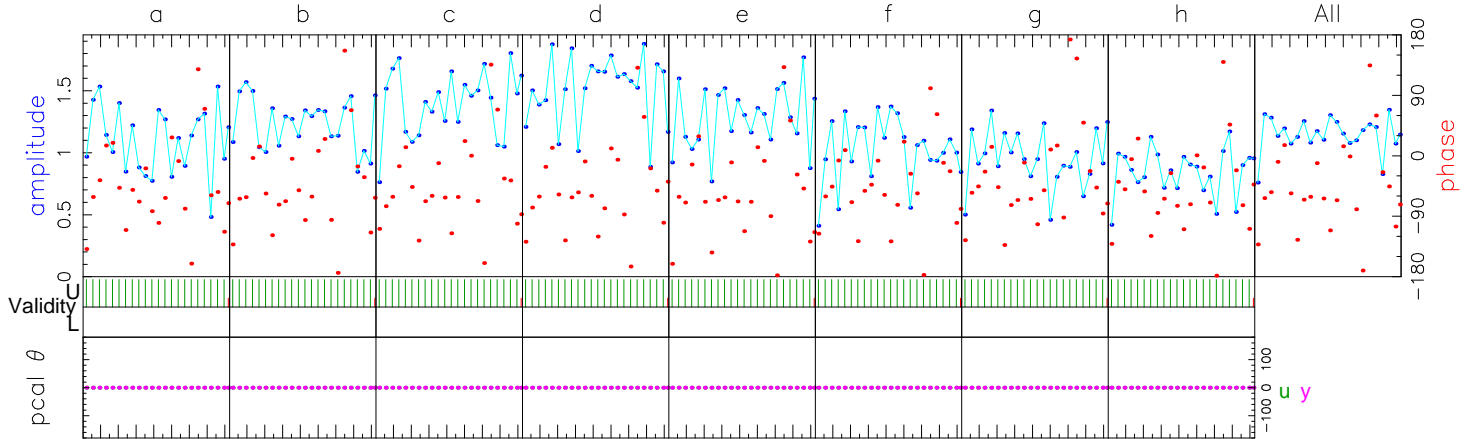


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133429
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.8	-53.9	-55.6	-56.5	-59.4	-48.1	-54.4	-56.9	Phase	-55.1
	0.6	0.6	0.8	0.8	0.7	0.6	0.6	0.5	Ampl.	0.6
	256.4	256.2	255.9	256.1	256.0	256.5	256.2	255.8	Sbd box	256.1
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.16264348720E+02 Apriori delay (usec) 2.16267614398E+02 Resid mbdelay (usec) -3.26568E-03 +/- 2.8E-05
 Sband delay (usec) 2.16264227898E+02 Apriori clock (usec) 1.3210521E+00 Resid sbdelay (usec) -3.38650E-03 +/- 2.2E-04
 Phase delay (usec) 2.16267612621E+02 Apriori clockrate (us/s) 2.9999999E-07 Resid phdelay (usec) -1.77636E-06 +/- 9.5E-08
 Delay rate (us/s) 1.51794388404E-03 Apriori rate (us/s) 1.51781875702E-03 Resid rate (us/s) 1.25127E-07 +/- 3.4E-10
 Total phase (deg) 54.4 Apriori accel (us/s/s) -3.26198619438E-06 Resid phase (deg) -55.1 +/- 2.9

RMS Theor. Amplitude 0.650 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 63.9 7.1 Search (2048X32) 0.625 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 79.4 12.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 3.5 4.2 Inc. seg. avg. 1.140 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 17.4 7.3 Inc. frq. avg. 0.649 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

u: az 63.8 el 44.4 pa -77.9 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -16.742 -414.721 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy.W.246.1M7QU

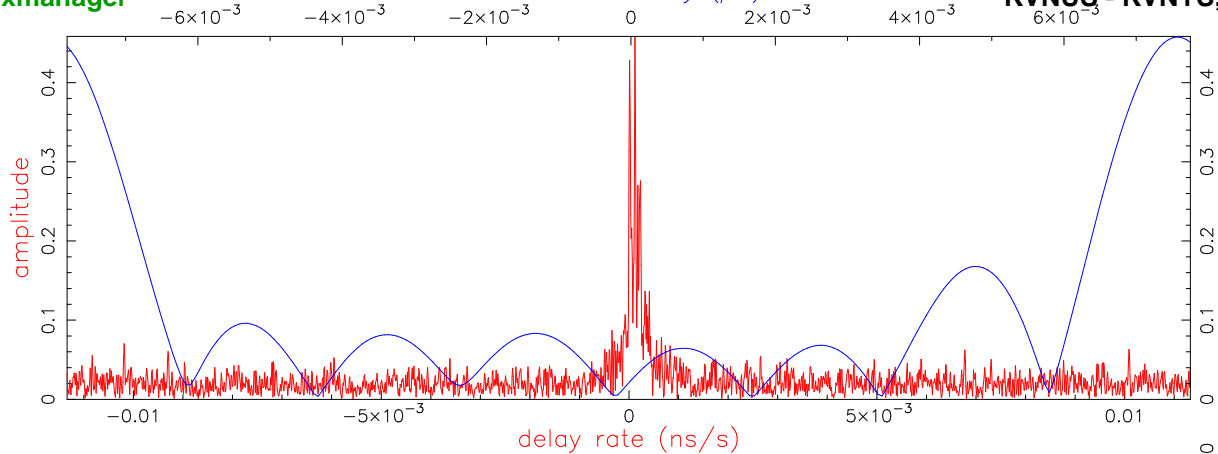
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, uy

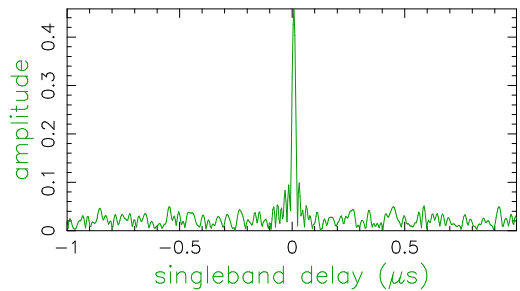
KVNU_S - KVNY_S, fgroup W, pol RL

multiband delay (μ s)

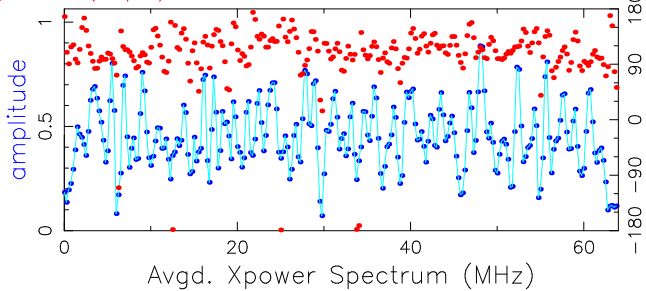


Fringe quality 7

SNR 27.5
 Int time 479.985
 Amp 0.458
 Phase 112.4
 PFD 0.0e+00
 Delays (us)
 SBD 0.007310
 MBD 0.007574
 Fringe rate (Hz) 0.010692
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

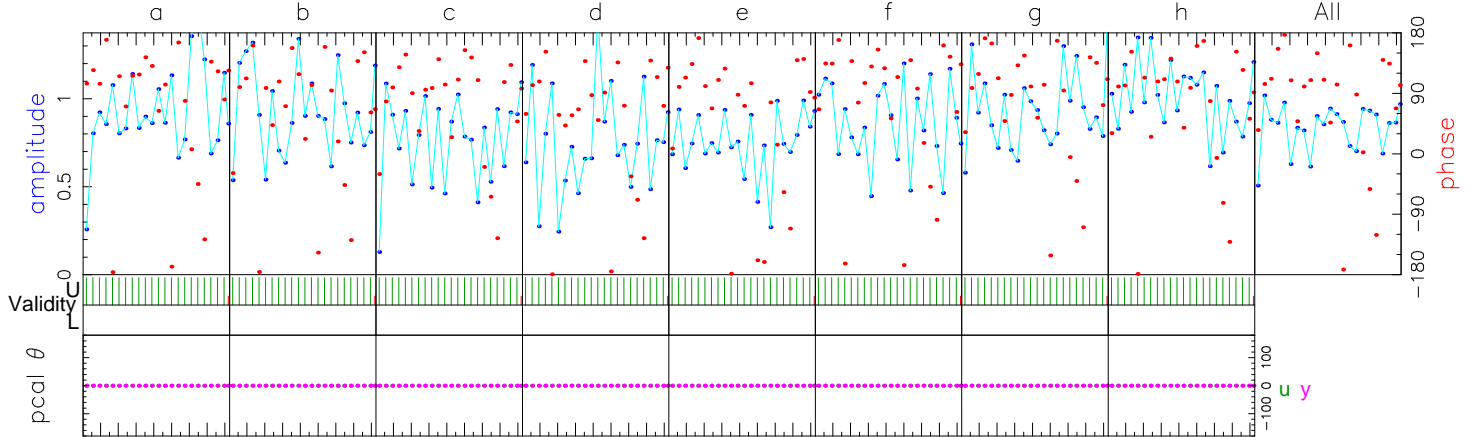


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133433
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	120.1	110.4	102.5	104.7	114.7	125.6	110.8	109.1	Phase	112.4
u	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	Ampl.	0.5
y	258.5	259.3	258.7	259.2	259.1	258.8	258.6	259.0	Sbd box	258.9
u	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.16275188376E+02		Apriori delay (usec)		2.16267614398E+02		Resid mbdelay (usec)		7.57398E-03	+/- 4.0E-05
Sband delay (usec)	2.16274923898E+02		Apriori clock (usec)		1.3210521E+00		Resid sbdelay (usec)		7.30950E-03	+/- 3.1E-04
Phase delay (usec)	2.16267618023E+02		Apriori clockrate (us/s)		2.9999999E-07		Resid phdelay (usec)		3.62575E-06	+/- 1.3E-07
Delay rate (us/s)	1.51794288072E-03		Apriori rate (us/s)		1.51781875702E-03		Resid rate (us/s)		1.24124E-07	+/- 4.9E-10
Total phase (deg)	222.0		Apriori accel (us/s/s)		-3.26198619438E-06		Resid phase (deg)		112.4	+/- 4.2

	RMS	Theor.	Amplitude	0.458 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	63.3	10.0	Search (2048X32)	0.440	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	86.2	17.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	8.3	5.9	Inc. seg. avg.	0.820	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	10.6	10.3	Inc. frq. avg.	0.459	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

u: az 63.8 el 44.4 pa -77.9 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) -16.742 -414.721 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/uy.W.254.11M7QU

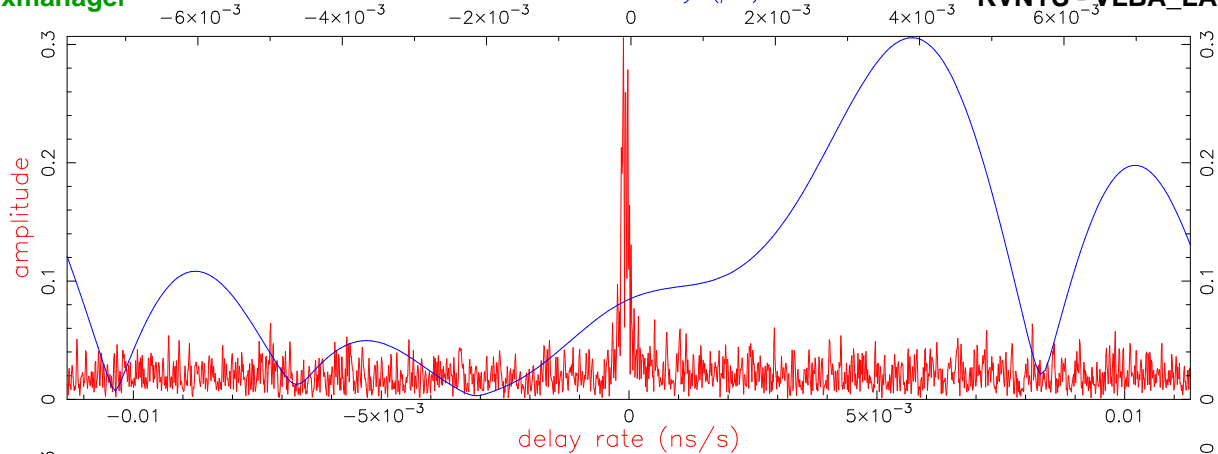
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, yl

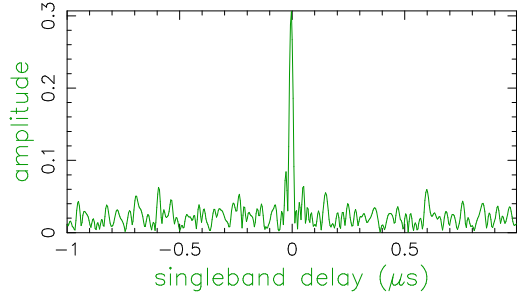
KVNS - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

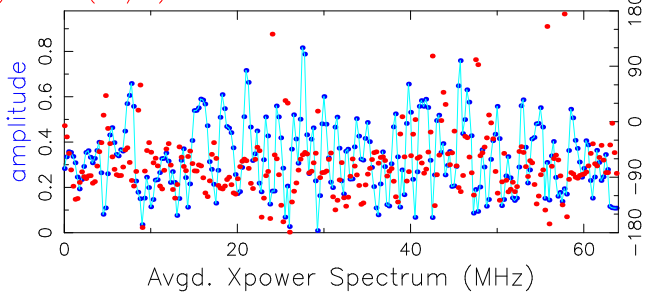


Fringe quality 8

SNR 18.4
 Int time 479.485
 Amp 0.307
 Phase -175.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.004655
 MBD 0.003853
 Fringe rate (Hz)
 -0.009849
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

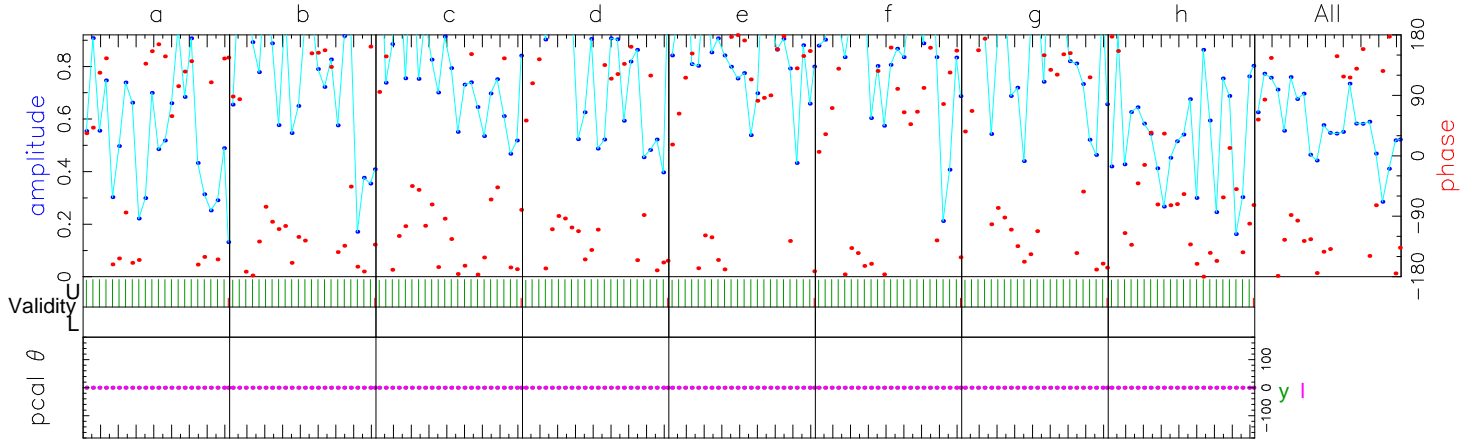


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133423
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.48117492746E+03	Apriori delay (usec)	1.48118669954E+03	Resid mbdelay (usec)	3.85293E-03	+/-	5.9E-05
Sband delay (usec)	1.48118204479E+03	Apriori clock (usec)	1.6443682E+00	Resid sbdelay (usec)	-4.65475E-03	+/-	4.7E-04
Phase delay (usec)	1.48118669386E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-5.67294E-06	+/-	2.0E-07
Delay rate (us/s)	1.66462871640E+00	Apriori rate (us/s)	1.66462883074E+00	Resid rate (us/s)	-1.14339E-07	+/-	7.3E-10
Total phase (deg)	-68.6	Apriori accel (us/s/s)	-6.00447839108E-06	Resid phase (deg)	-175.9	+/-	6.2

ph/seg (deg)	60.4	RMS	15.0	Theor.	0.307 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	98.6	Search (2048X32)	0.295	Amplitude		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	46.8	Interp.	0.000	Search		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.4	Inc. seg. avg.	0.564	Inc. seg. avg.		Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.376	Inc. frq. avg.		Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

y: az 64.9 el 43.6 pa -74.2 l: az 297.7 el 39.7 pa 74.2 u, v (fr/asec) -12753.564 -131.655 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl.W.231.11M7QU

Mk4/DiFX fourfit 3.21 rev 2937

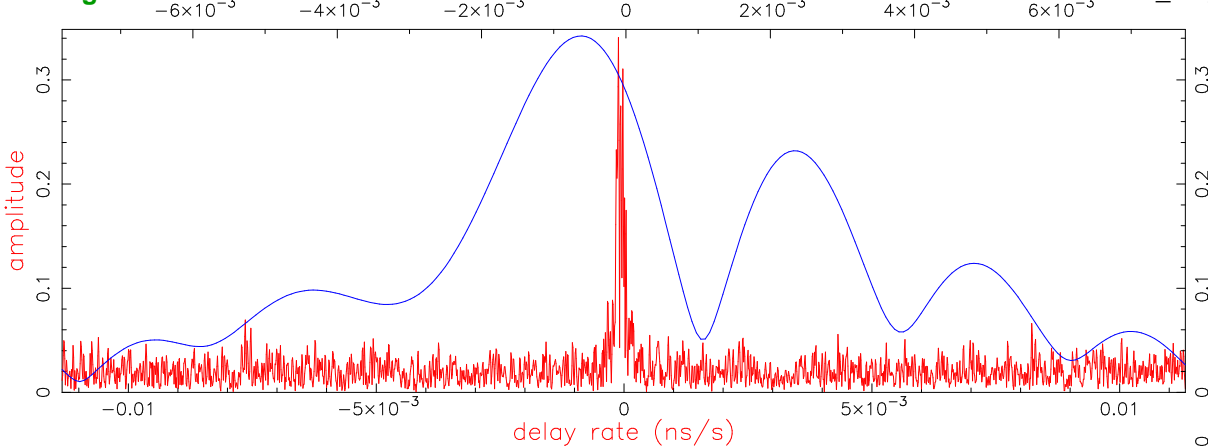
fxmanager

3C84.11M7QU, No0117, yl

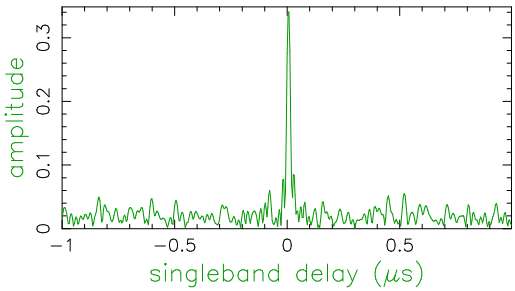
KVNYS - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

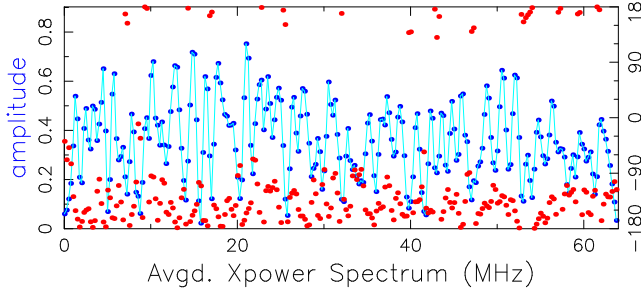
Fringe quality 8



SNR 20.9
 Int time 479.485
 Amp 0.349
 Phase -68.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.005930
 MBD -0.000733
 Fringe rate (Hz)
 -0.009967
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

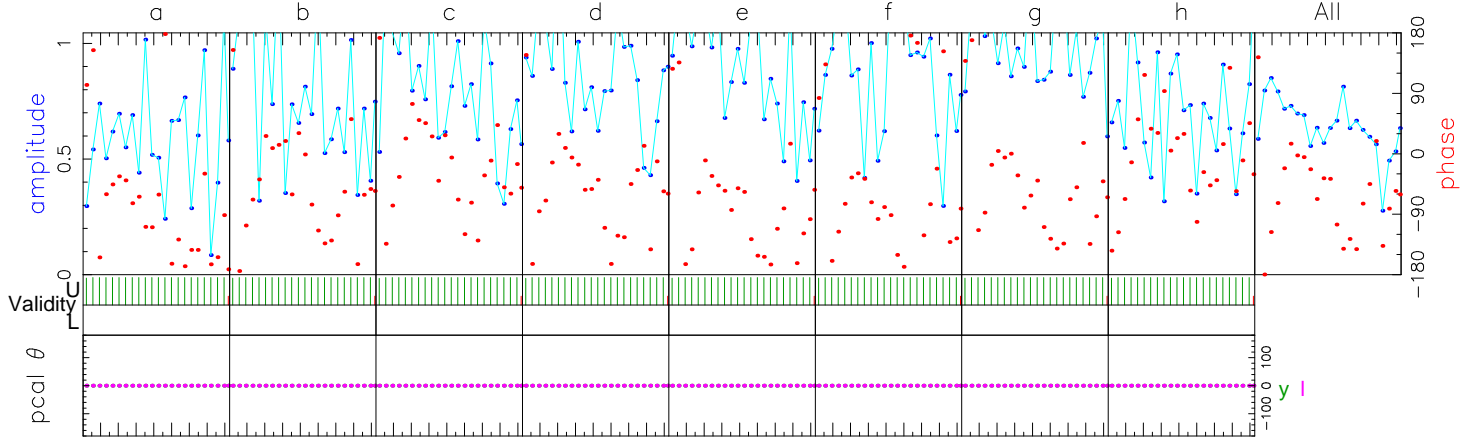


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133426
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-104.3	-56.6	-25.6	-56.3	-97.5	-114.0	-75.0	-0.8		-68.7
	0.4	0.3	0.4	0.4	0.4	0.5	0.6	0.4		0.4
	260.4	258.4	258.3	258.3	258.0	258.3	259.1	261.3		258.5
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
l	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
y	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)		1.48118596671E+03		Apriori delay (usec)	1.48118669954E+03		Resid mbdelay (usec)	-7.32822E-04		+/- 5.2E-05
Sband delay (usec)		1.48119262979E+03		Apriori clock (usec)	1.6443682E+00		Resid sbdelay (usec)	5.93025E-03		+/- 4.1E-04
Phase delay (usec)		1.48118669732E+03		Apriori clockrate (us/s)	1.9999998E-07		Resid phdelay (usec)	-2.21524E-06		+/- 1.8E-07
Delay rate (us/s)		1.66462871504E+00		Apriori rate (us/s)	1.66462883074E+00		Resid rate (us/s)	-1.15702E-07		+/- 6.4E-10
Total phase (deg)			38.6	Apriori accel (us/s/s)	-6.00447839108E-06		Resid phase (deg)	-68.7		+/- 5.5

ph/seg (deg) 62.2 13.2 Search (2048X32) 0.322 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 91.1 23.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 42.7 7.8 Inc. seg. avg. 0.625 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 29.1 13.6 Inc. frq. avg. 0.415 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 64.9 el 43.6 pa -74.2 l: az 297.7 el 39.7 pa 74.2 u, v (fr/asec) -12753.564 -131.655 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl.W.239.11M7QU

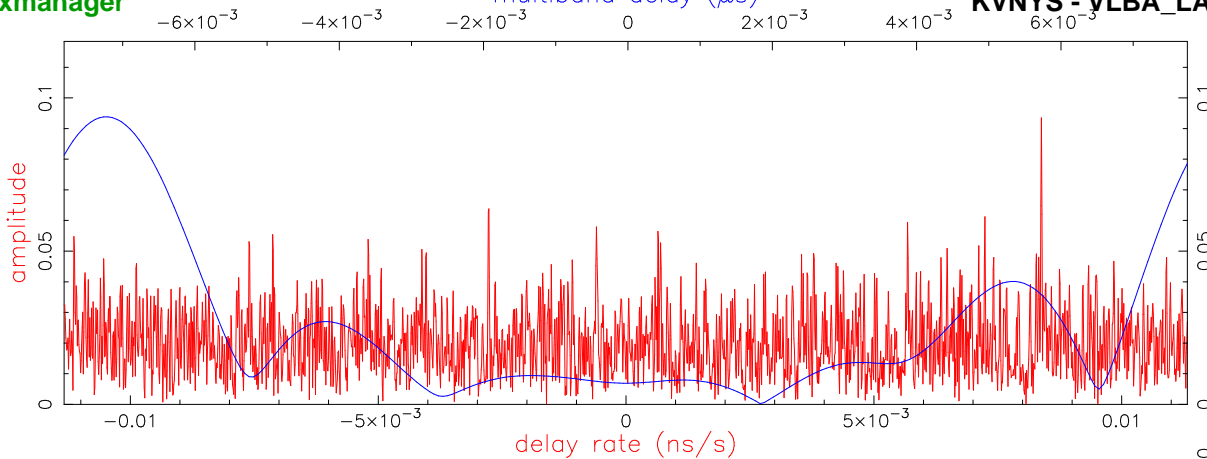
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, yl

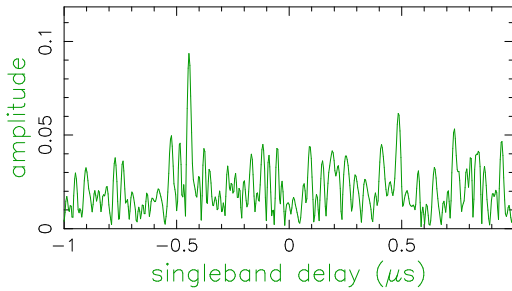
KVNYS - VLBA_LA, fgroup W, pol LR

multiband delay (μs)

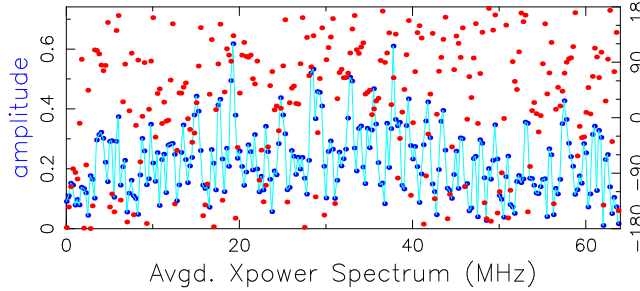


Fringe quality 0

SNR 5.6
 Int time 479.485
 Amp 0.118
 Phase -92.4
 PFD 9.9e-01
 Delays (us)
 SBD -0.445218
 MBD 0.008301
 Fringe rate (Hz)
 0.723045
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

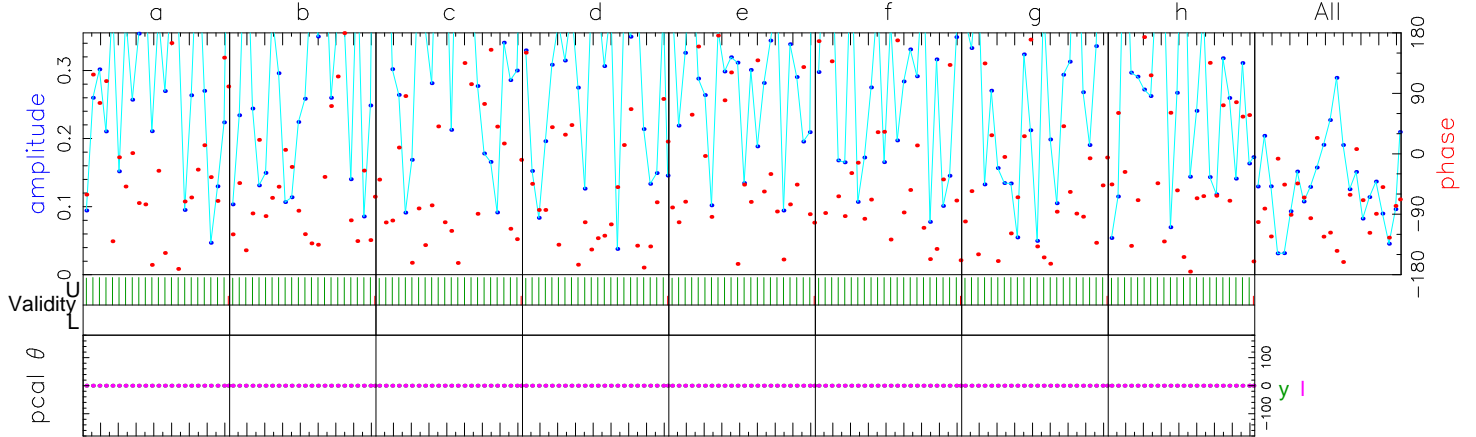


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133429
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-72.5	-100.9	-105.3	-120.8	-85.4	-90.8	-82.6	-79.8	Phase	-92.4
	0.1	0.2	0.1	0.1	0.1	0.1	0.2	0.1	Ampl.	0.1
	443.5	143.6	167.2	309.6	280.4	233.6	338.8	403.7	Sbd box	143.0
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.48074187532E+03	Apriori delay (usec)	1.48118669954E+03	Resid mbdelay (usec)	8.30078E-03	+/-	1.9E-04
Sband delay (usec)	1.48074148179E+03	Apriori clock (usec)	1.6443682E+00	Resid sbdelay (usec)	-4.45218E-01	+/-	1.5E-03
Phase delay (usec)	1.48118669656E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-2.97813E-06	+/-	6.6E-07
Delay rate (us/s)	1.66463722458E+00	Apriori rate (us/s)	1.66462883074E+00	Resid rate (us/s)	8.39384E-06	+/-	2.4E-09
Total phase (deg)	14.9	Apriori accel (us/s/s)	-6.00447839108E-06	Resid phase (deg)	-92.4	+/-	20.5

ph/seg (deg)	48.0	Theor.	49.1	Amplitude	0.118 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.4		85.7	Search (2048X32)	0.092	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	17.1		28.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.9		50.5	Inc. seg. avg.	0.123	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.108	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 64.9 el 43.6 pa -74.2 l: az 297.7 el 39.7 pa 74.2 u, v (fr/asec) -12753.564 -131.655 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl.W.247.11M7QU

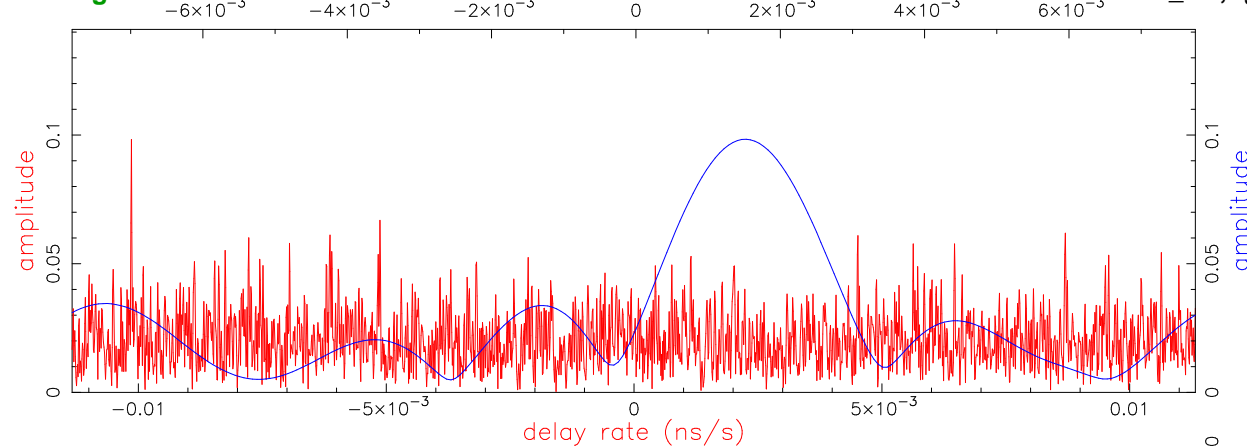
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, yl

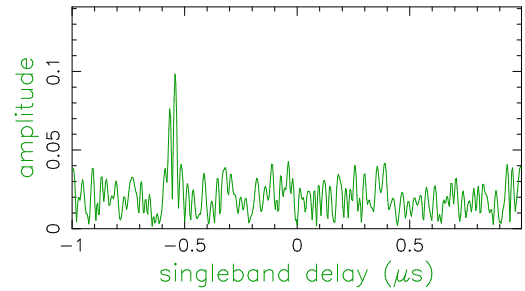
KVNYS - VLBA_LA, fgroup W, pol RL

multiband delay (μs)

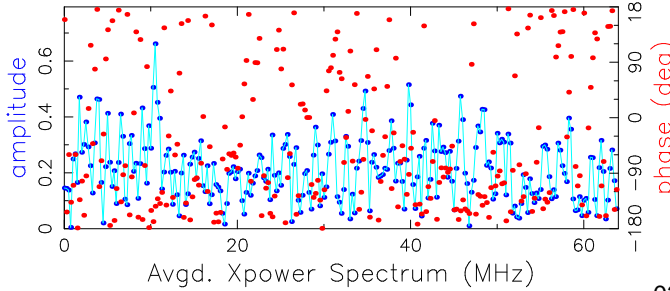


Fringe quality 0

SNR 5.9
 Int time 479.485
 Amp 0.141
 Phase 81.8
 PFD 5.6e-01
 Delays (us)
 SBD -0.542090
 MBD 0.001546
 Fringe rate (Hz)
 -0.874918
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

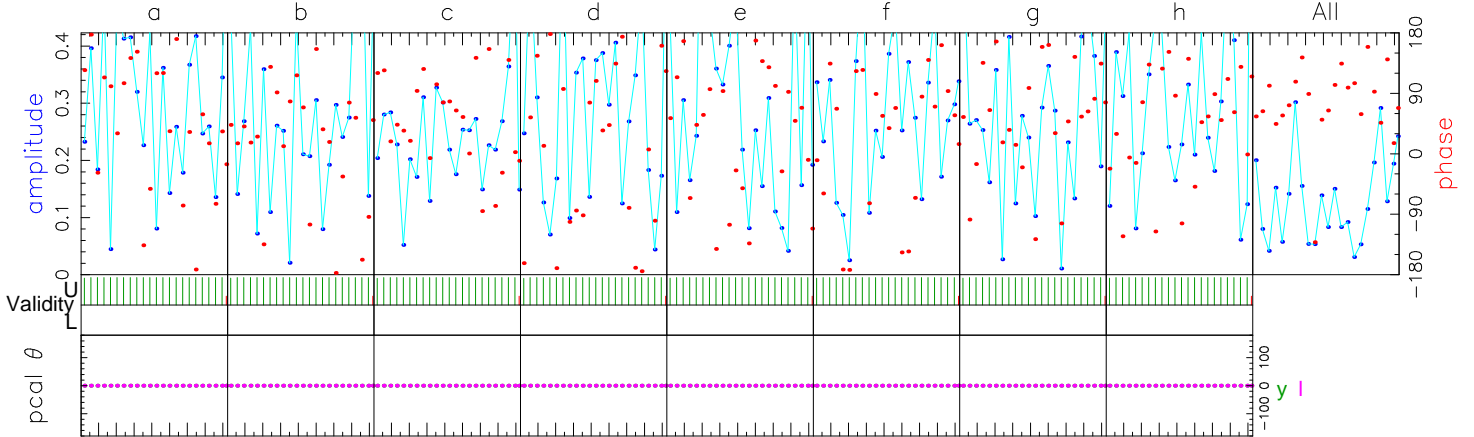


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133433
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.48064137033E+03	Apriori delay (usec)		1.48118669954E+03	Resid mbdelay (usec)		1.54580E-03	+/- 1.8E-04	
Sband delay (usec)	1.48064460954E+03	Apriori clock (usec)		1.6443682E+00	Resid sbdelay (usec)		-5.42090E-01	+/- 1.5E-03	
Phase delay (usec)	1.48118670217E+03	Apriori clockrate (us/s)		1.9999998E-07	Resid phdelay (usec)		2.63663E-06	+/- 6.2E-07	
Delay rate (us/s)	1.66461867380E+00	Apriori rate (us/s)		1.66462883074E+00	Resid rate (us/s)		-1.01569E-05	+/- 2.3E-09	
Total phase (deg)	189.1		Apriori accel (us/s/s)		-6.00447839108E-06	Resid phase (deg)		81.8	+/- 19.3

ph/seg (deg)	RMS 47.6	Theor. 46.4	Amplitude Search (2048X32)	0.141 +/- 0.024	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	81.1	81.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	25.4	27.4	Inc. seg. avg.	0.138	Bits/sample: 2x2		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	19.2	47.8	Inc. frq. avg.	0.134	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

y: az 64.9 el 43.6 pa -74.2 l: az 297.7 el 39.7 pa 74.2 u,v (fr/asec) -12753.564 -131.655 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yl.W.255.11M7QU

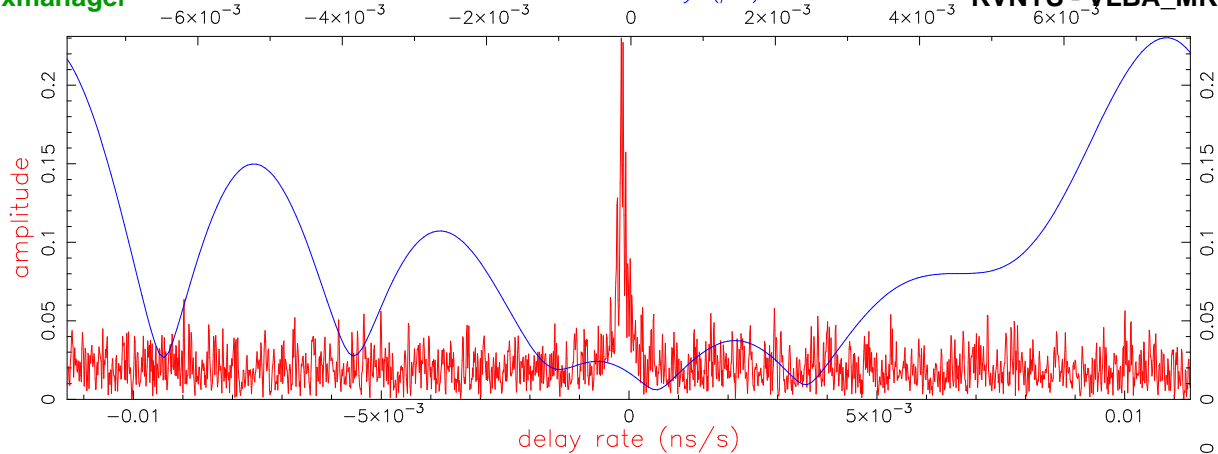
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ym

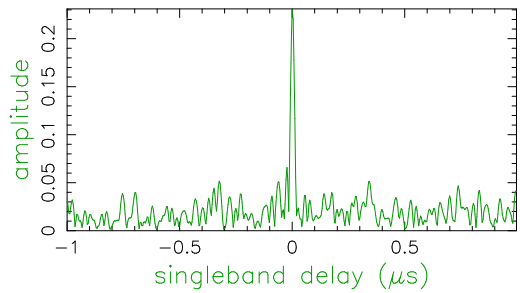
KVNYS - VLBA_MK, fgroup W, pol LL

multiband delay (μ s)

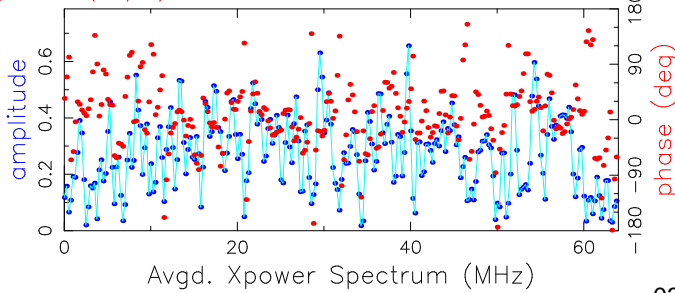


Fringe quality 9

SNR 13.8
 Int time 479.981
 Amp 0.231
 Phase -67.2
 PFD 8.0e-35
 Delays (us)
 SBD 0.000980
 MBD 0.007480
 Fringe rate (Hz)
 -0.013253
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

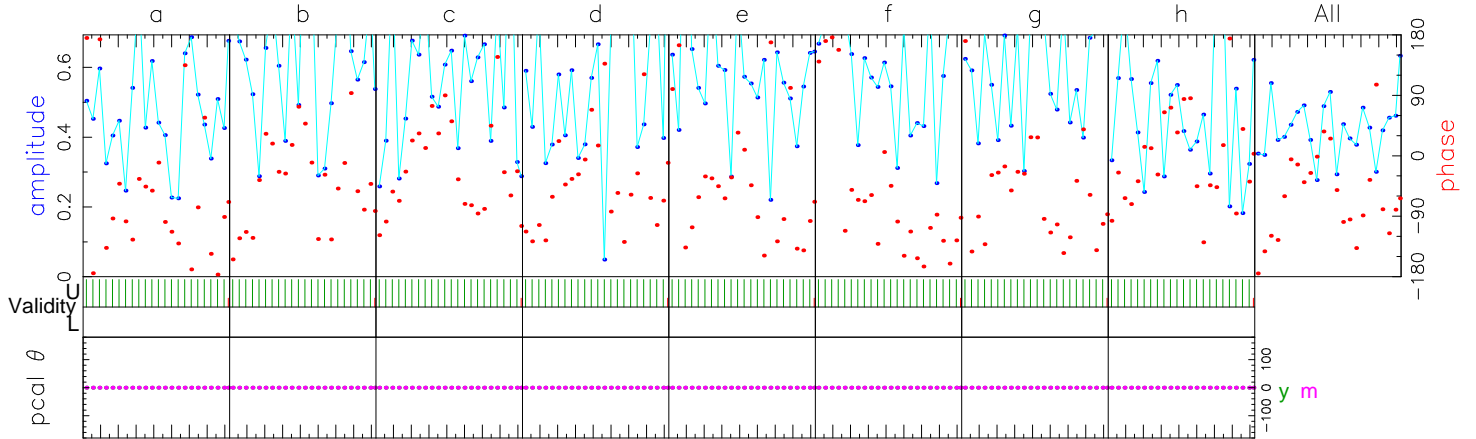


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133423
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.2	-29.2	-23.7	-62.0	-85.9	-127.6	-75.9	-21.7	86015E-03	-67.2
	0.2	0.3	0.3	0.3	0.3	0.4	0.3	0.3	Ampl.	0.3
	259.2	257.1	256.9	256.7	257.0	256.6	257.6	258.9	Sbd box	257.3
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -4.24075446251E+03 Apriori delay (usec) -4.24076194266E+03 Resid mbdelay (usec) 7.48015E-03 +/- 7.8E-05
 Sband delay (usec) -4.24076096291E+03 Apriori clock (usec) -1.2127000E+01 Resid sbdelay (usec) 9.79750E-04 +/- 6.2E-04
 Phase delay (usec) -4.24076194483E+03 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.16631E-06 +/- 2.7E-07
 Delay rate (us/s) 1.12567640386E+00 Apriori rate (us/s) 1.12567655771E+00 Resid rate (us/s) -1.53853E-07 +/- 9.6E-10
 Total phase (deg) -333.9 Apriori accel (us/s/s) 4.27237929595E-05 Resid phase (deg) -67.2 +/- 8.3

RMS Theor. Amplitude 0.231 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 66.0 19.8 Search (2048X32) 0.226 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 88.5 34.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 43.8 11.7 Inc. seg. avg. 0.397 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 32.5 20.4 Inc. frq. avg. 0.285 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) -8548.754 4850.575 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym.W.232.11M7QU

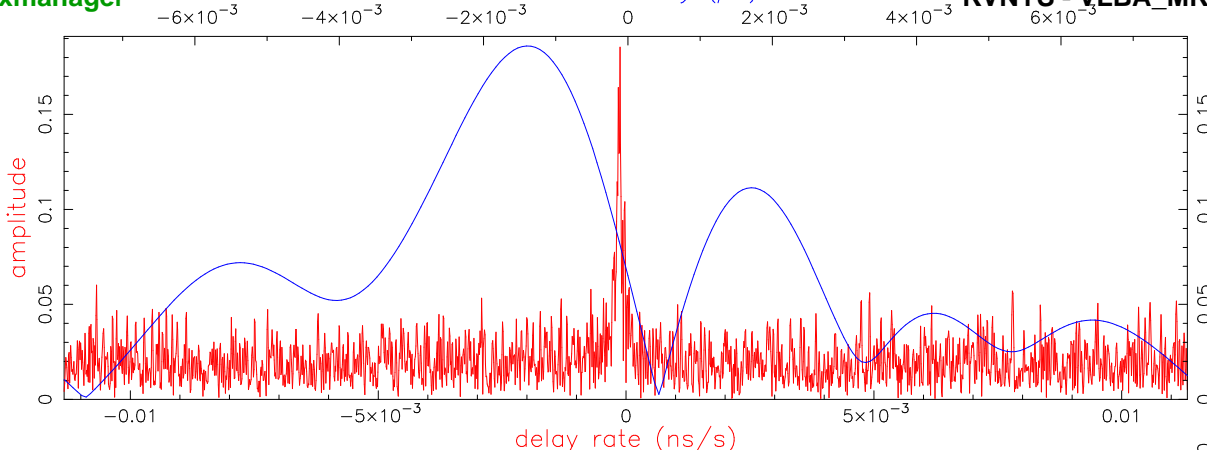
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, ym

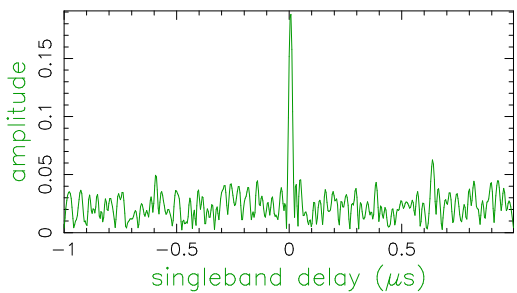
KVNS - VLBA_MK, fgroup W, pol RR

multiband delay (μ s)

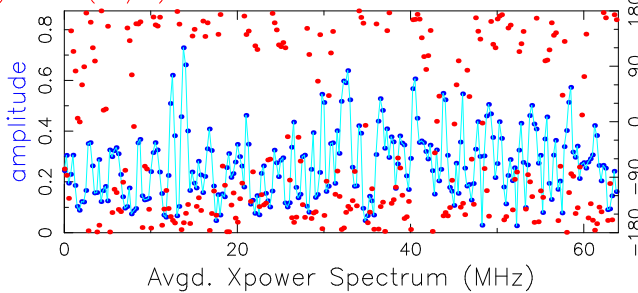


Fringe quality 9

SNR 11.4
 Int time 479.981
 Amp 0.191
 Phase -80.4
 PFD 1.2e-21
 Delays (us)
 SBD 0.006168
 MBD -0.001291
 Fringe rate (Hz)
 -0.010399
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

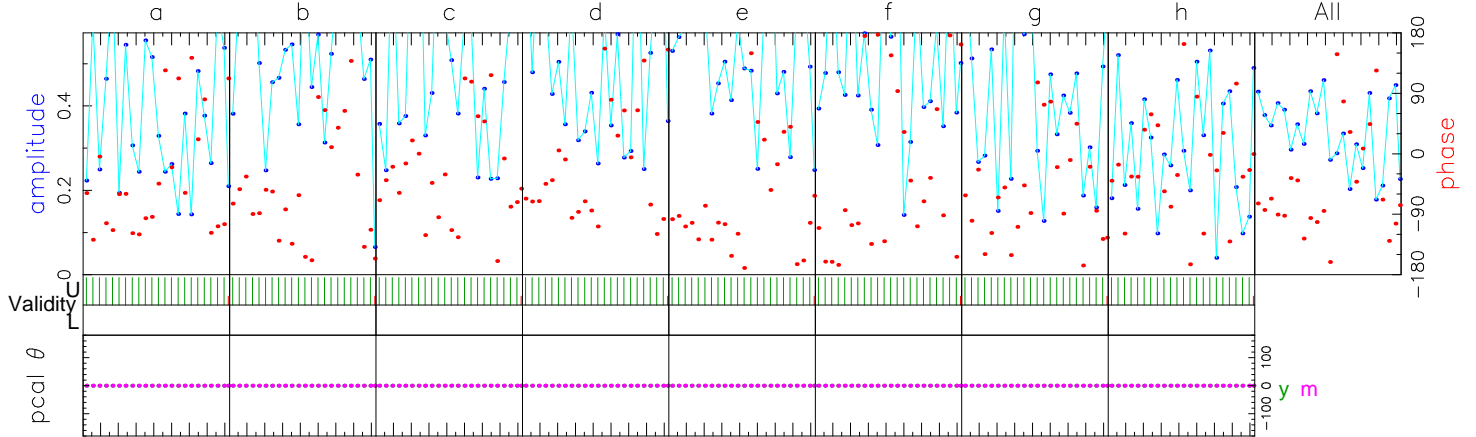


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133426
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-89.7	-74.1	-35.9	-59.5	-105.6	-144.0	-77.7	-15.7		-80.4
	0.2	0.2	0.3	0.2	0.3	0.3	0.2	0.1		0.2
	259.7	258.1	258.5	258.5	258.1	258.0	258.7	261.2		258.6
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-4.24076323326E+03	Apriori delay (usec)	-4.24076194266E+03	Resid mbdelay (usec)	-1.29060E-03	+/-	9.5E-05
Sband delay (usec)	-4.24075577491E+03	Apriori clock (usec)	-1.2127000E+01	Resid sbdelay (usec)	6.16775E-03	+/-	7.5E-04
Phase delay (usec)	-4.24076194526E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.59353E-06	+/-	3.2E-07
Delay rate (us/s)	1.12567643699E+00	Apriori rate (us/s)	1.12567655771E+00	Resid rate (us/s)	-1.20725E-07	+/-	1.2E-09
Total phase (deg)		Apriori accel (us/s/s)	4.27237929595E-05	Resid phase (deg)	-80.4	+/-	10.0

ph/seg (deg) 73.5 24.0 Search (2048X32) 0.185 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 90.0 41.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.6 14.2 Inc. seg. avg. 0.314 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 32.8 24.7 Inc. frq. avg. 0.221 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 y: az 64.9 el 43.6 pa -74.2 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) -8548.754 4850.575 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym.W.240.11M7QU

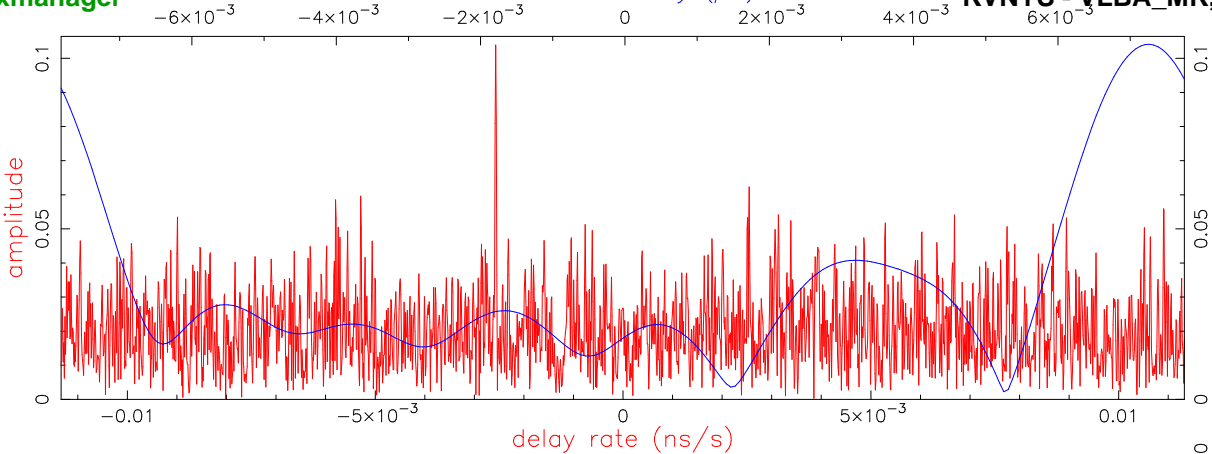
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ym

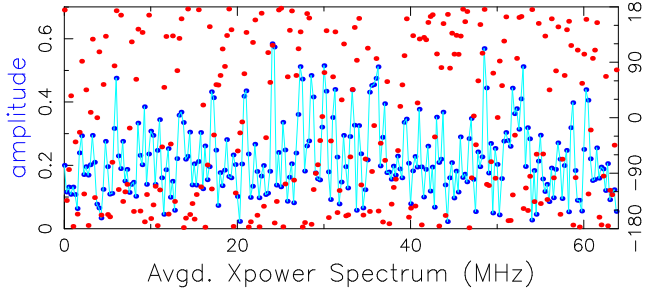
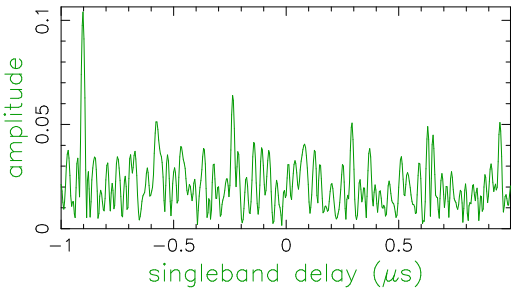
KVNYS - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)



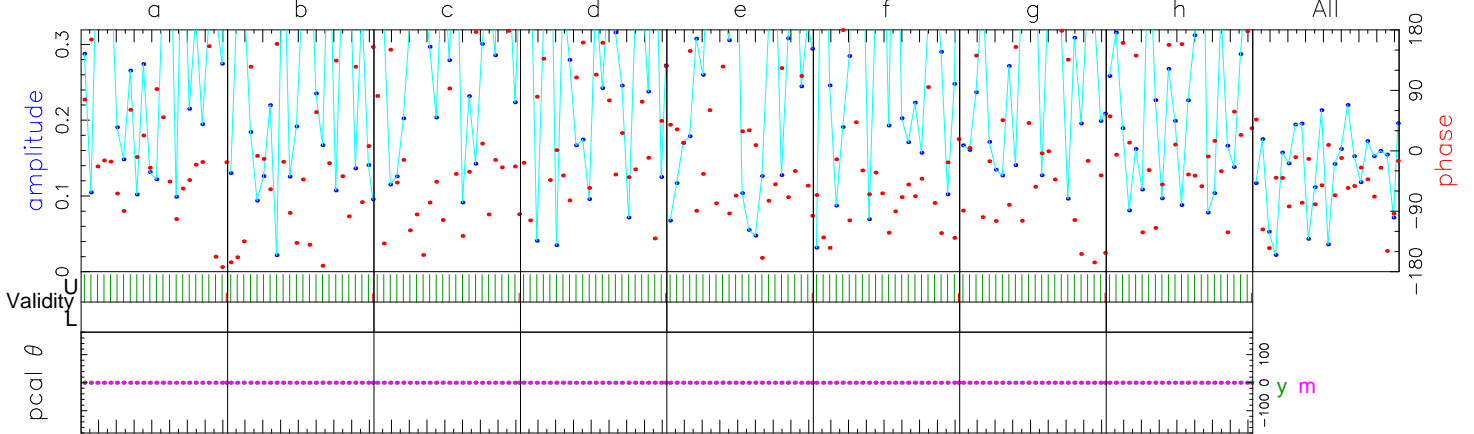
Fringe quality 0

SNR 6.2
 Int time 479.981
 Amp 0.106
 Phase -53.7
 PFD 1.1e-01
 Delays (us)
 SBD -0.903016
 MBD -0.008301
 Fringe rate (Hz)
 -0.221168
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133430
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.6	-79.4	-69.2	-19.2	-50.7	-75.2	-63.8	-27.5	Phase	-53.7
	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	420.5	18.8	389.8	281.4	389.6	26.2	510.6	194.5	Sbd box	25.8
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-4.24166086844E+03	Apriori delay (usec)	-4.24076194266E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.7E-04
Sband delay (usec)	-4.24166495841E+03	Apriori clock (usec)	-1.2127000E+01	Resid sbdelay (usec)	-9.03016E-01	+/-	1.4E-03
Phase delay (usec)	-4.24076194439E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.73193E-06	+/-	5.9E-07
Delay rate (us/s)	1.12567399017E+00	Apriori rate (us/s)	1.12567655771E+00	Resid rate (us/s)	-2.56754E-06	+/-	2.1E-09
Total phase (deg)	-320.4	Apriori accel (us/s/s)	4.27237929595E-05	Resid phase (deg)	-53.7	+/-	18.4

ph/seg (deg)	46.1	Theor.	44.0	Amplitude	0.106 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	61.8	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	27.2	Inc. seg. avg.	0.107	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	30.1	Inc. frq. avg.	0.104	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00	
				nlags: 256		t_cohere infinite		

y: az 64.9 el 43.6 pa -74.2 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) -8548.754 4850.575 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym.W.248.11M7QU

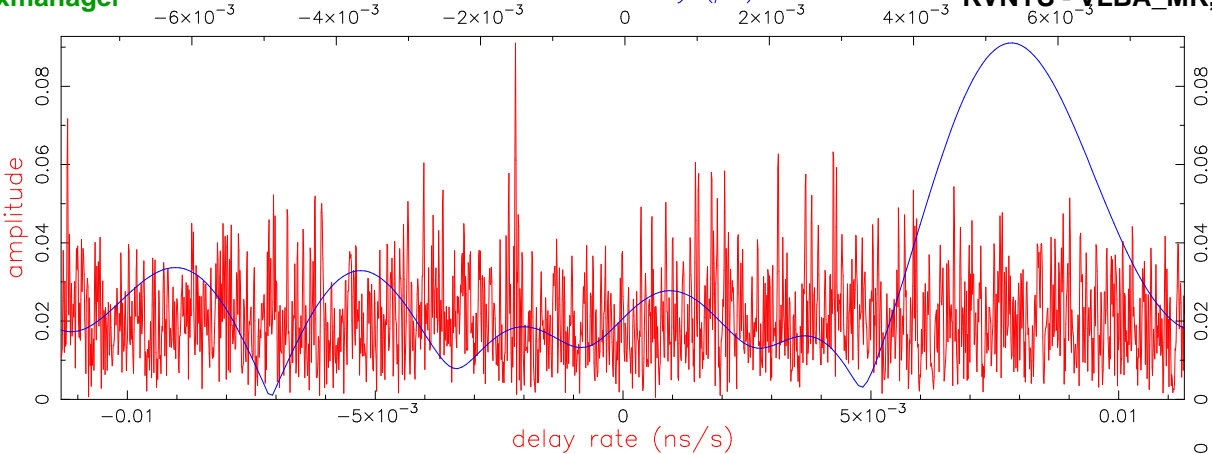
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M7QU, No0117, ym

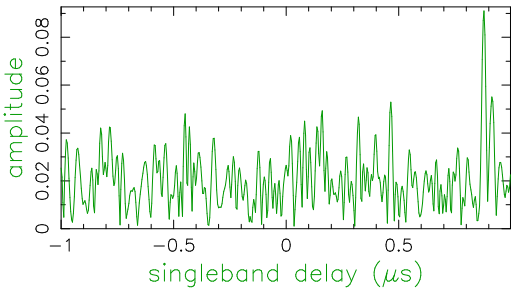
KVNYS - VLBA_MK, fgroup W, pol RL

multiband delay (μ s)

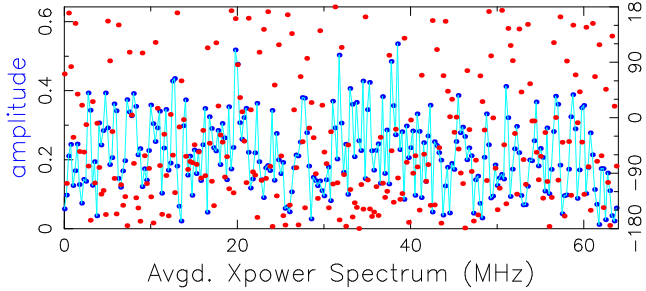


Fringe quality 0

SNR 5.5
 Int time 479.981
 Amp 0.093
 Phase -136.3
 PFD 1.0e+00
 Delays (us)
 SBD 0.878063
 MBD 0.005307
 Fringe rate (Hz)
 -0.187575
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

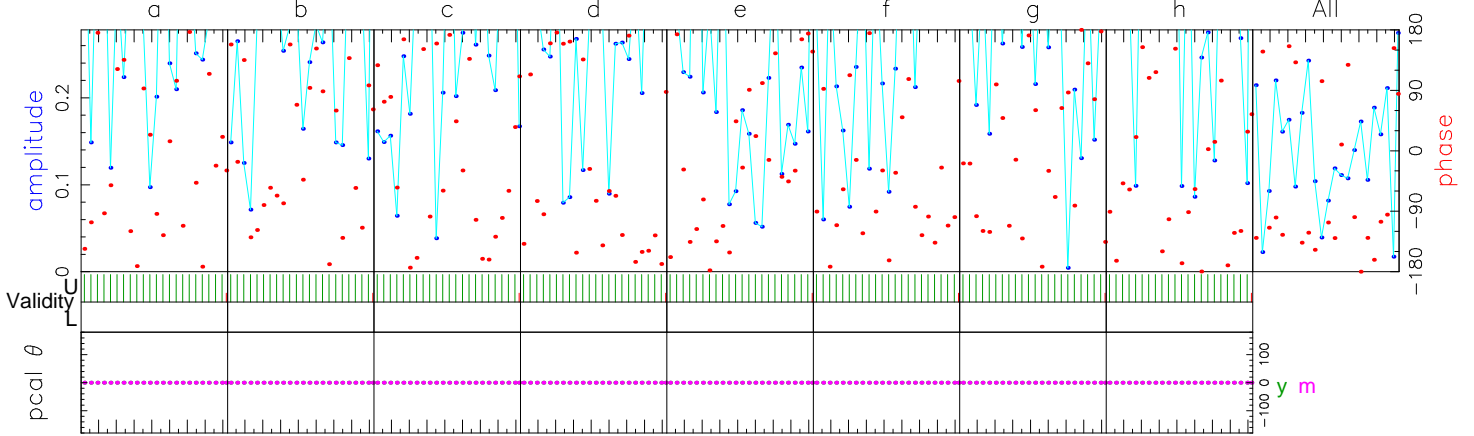


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133433
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.6	-128.1	-148.5	-144.2	-137.2	-98.9	-114.3	-161.5	Phase	-136.3
	0.1	0.0	0.1	0.2	0.1	0.1	0.0	0.1	Ampl.	0.1
	510.0	173.5	350.8	480.2	492.4	100.3	468.3	371.4	Sbd box	481.8
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.23988163521E+03	Apriori delay (usec)	-4.24076194266E+03	Resid mbdelay (usec)	5.30746E-03	+/-	2.0E-04
Sband delay (usec)	-4.23988387991E+03	Apriori clock (usec)	-1.2127000E+01	Resid sbdelay (usec)	8.78063E-01	+/-	1.6E-03
Phase delay (usec)	-4.24076194706E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.39650E-06	+/-	6.8E-07
Delay rate (us/s)	1.12567438015E+00	Apriori rate (us/s)	1.12567655771E+00	Resid rate (us/s)	-2.17756E-06	+/-	2.4E-09
Total phase (deg)		Apriori accel (us/s/s)	4.27237929595E-05	Resid phase (deg)	-136.3	+/-	20.9

ph/seg (deg)	61.7	Theor.	50.2	Amplitude	0.093 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	86.0		87.6	Search (2048X32)	0.087	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	21.7		29.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.4		51.7	Inc. seg. avg.	0.100	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.086	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 64.9 el 43.6 pa -74.2 m: az 331.1 el 64.2 pa 141.7 u,v (fr/asec) -8548.754 4850.575 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/ym.W.256.11M7QU

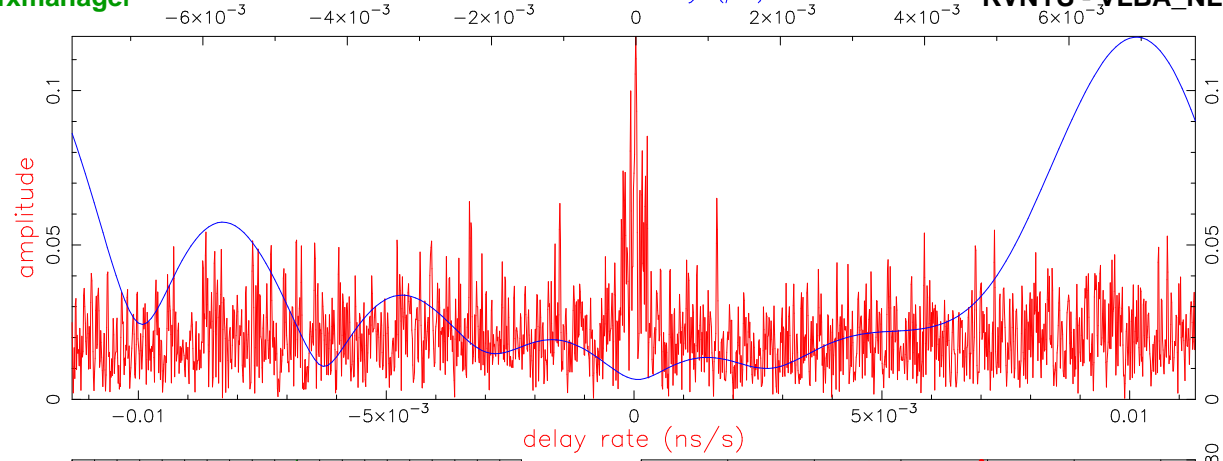
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

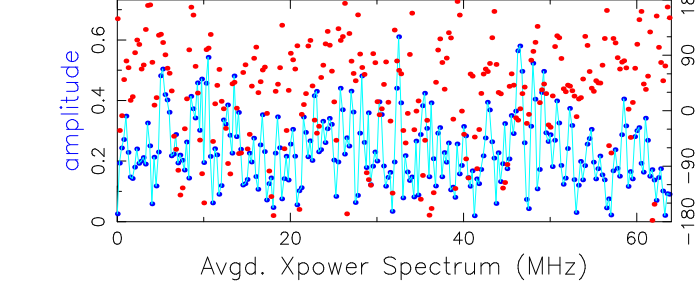
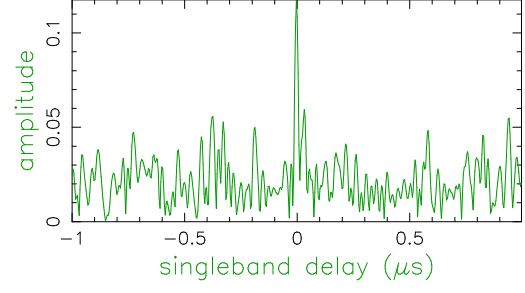
3C84.1IM7QU, No0117, yn

KVNYS - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)

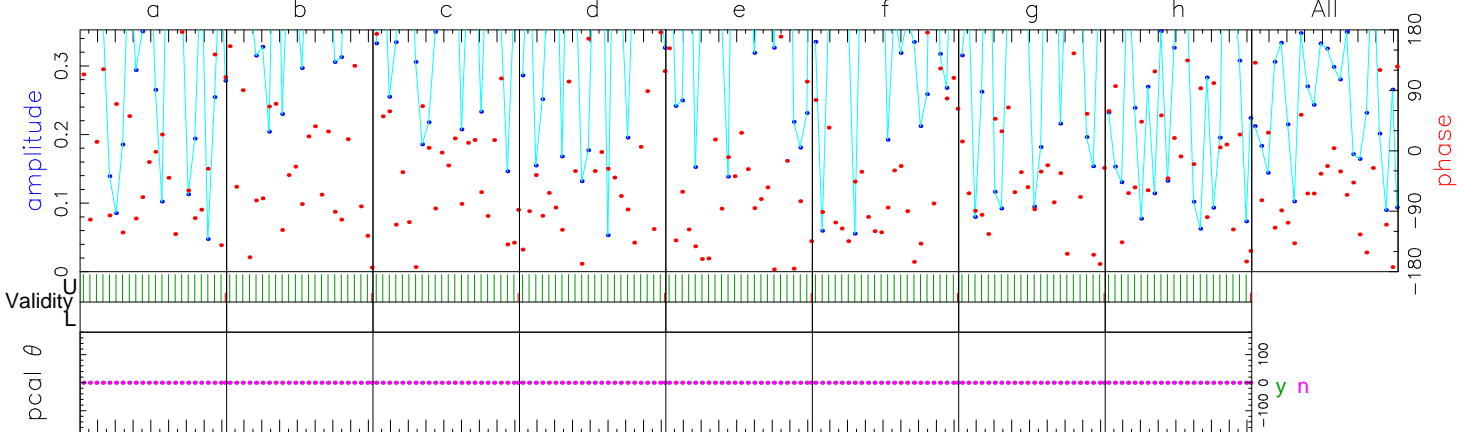


Fringe quality 0
 SNR 7.0
 Int time 479.985
 Amp 0.118
 Phase -60.0
 PFD 5.7e-04
 Delays (us)
 SBD -0.003360
 MBD 0.006963
 Fringe rate (Hz) 0.003039
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133423
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec

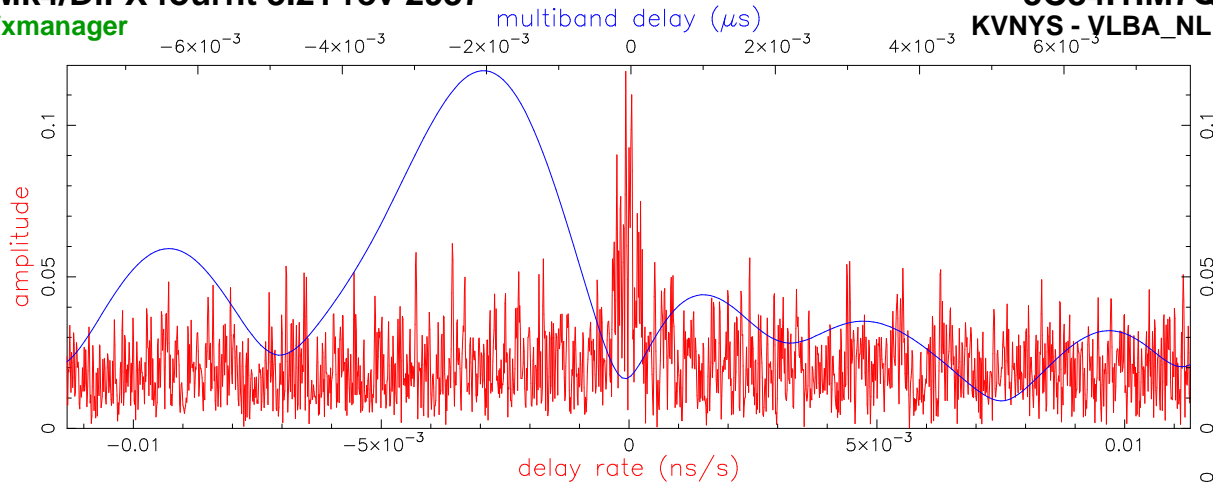


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-77.5	-30.6	-27.2	-67.8	-81.8	-98.3	-66.9	-6.5	Phase	-60.0
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.1	Ampl.	0.1
	258.5	504.0	13.6	256.2	255.2	302.0	257.3	260.1	Sbd box	256.1
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 3.66556271634E+03 Apriori delay (usec) 3.66557137844E+03 Resid mbdelay (usec) 6.96290E-03 +/- 1.5E-04
 Sband delay (usec) 3.66556801844E+03 Apriori clock (usec) 1.0662642E+00 Resid sbdelay (usec) -3.36000E-03 +/- 1.2E-03
 Phase delay (usec) 3.66557137650E+03 Apriori clockrate (us/s) -4.0000002E-07 Resid phdelay (usec) -1.93498E-06 +/- 5.2E-07
 Delay rate (us/s) 1.65617184918E+00 Apriori rate (us/s) 1.65617181390E+00 Resid rate (us/s) 3.52812E-08 +/- 1.9E-09
 Total phase (deg) 133.9 Apriori accel (us/s/s) -2.37179978163E-05 Resid phase (deg) -60.0 +/- 16.3

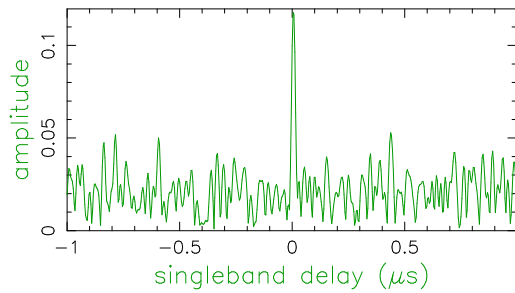
RMS Theor. Amplitude 0.118 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 79.0 39.0 Search (2048X32) 0.117 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 136.3 68.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 34.5 23.0 Inc. seg. avg. 0.203 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 27.4 40.2 Inc. frq. avg. 0.123 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) -12717.661 -1906.008 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn.W.233.1M7QU

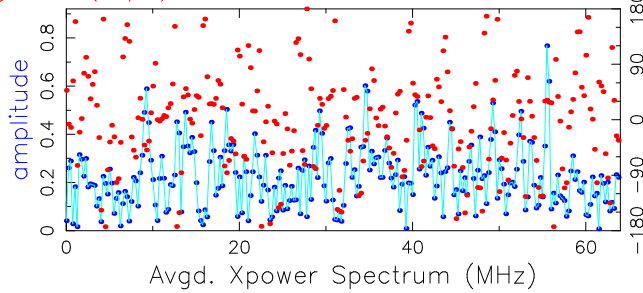


Fringe quality 0

SNR 7.2
Int time 479.985
Amp 0.120
Phase 85.8
PFD 2.2e-04
Delays (us)
SBD 0.005620
MBD -0.001967
Fringe rate (Hz)
-0.005908
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

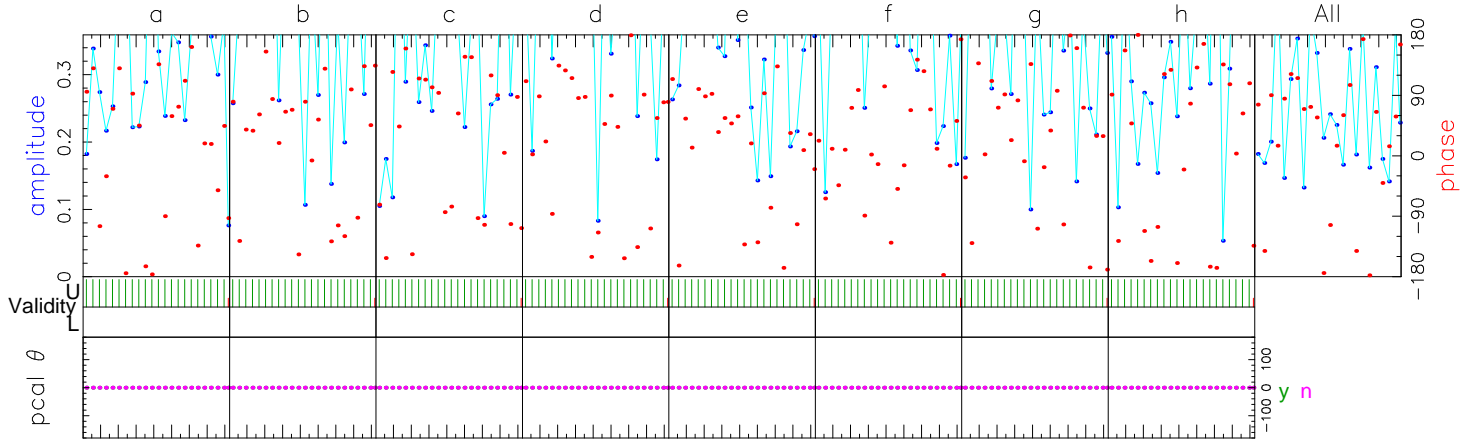


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133427
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	117.8	80.9	109.2	100.8	69.3	29.9	72.3	140.5	Phase	85.8
y	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
n	261.3	257.7	336.2	257.3	258.9	49.1	93.1	392.9	Sbd box	258.4
y	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	3.66556941098E+03	Apriori delay (usec)	3.66557137844E+03	Resid mbdelay (usec)	-1.96746E-03	+/-	1.5E-04
Sband delay (usec)	3.66557699869E+03	Apriori clock (usec)	1.0662642E+00	Resid sbdelay (usec)	5.62025E-03	+/-	1.2E-03
Phase delay (usec)	3.66557138120E+03	Apriori clockrate (us/s)	-4.0000002E-07	Resid phdelay (usec)	2.76557E-06	+/-	5.2E-07
Delay rate (us/s)	1.65617174531E+00	Apriori rate (us/s)	1.65617181390E+00	Resid rate (us/s)	-6.85891E-08	+/-	1.9E-09
Total phase (deg)	279.7	Apriori accel (us/s/s)	-2.37179978163E-05	Resid phase (deg)	85.8	+/-	16.0

ph/seg (deg)	76.4	Theor.	38.3	Amplitude	0.120 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	136.5	Search (2048X32)	0.116	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	37.4	Inc. seg. avg.	0.206	Inc. frq. avg.	0.129	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.129	u,v (fr/asec)	-12717.661 -1906.008	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
y: az 64.9 el 43.6 pa -74.2	n: az 299.1 el 32.5 pa 60.7					Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

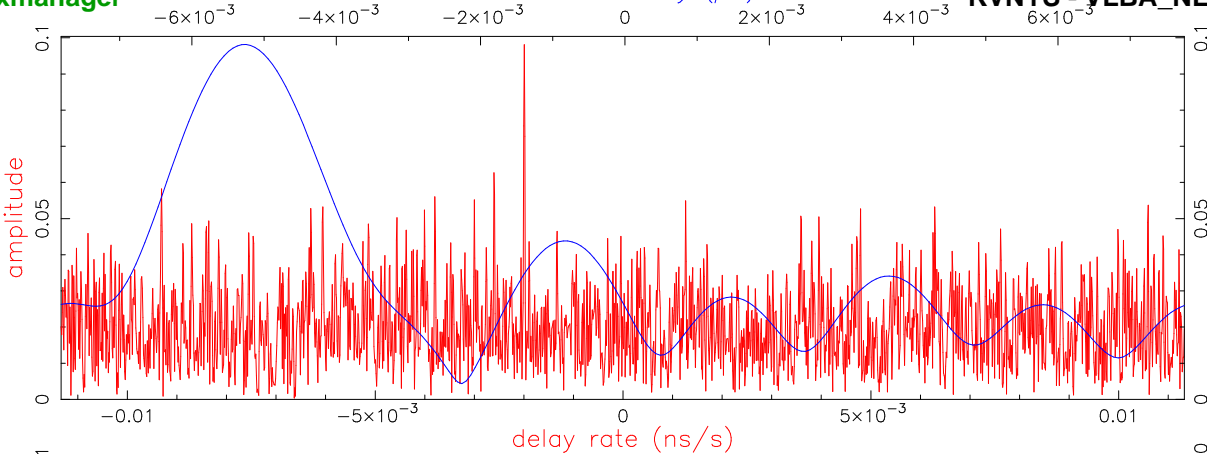
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, yn

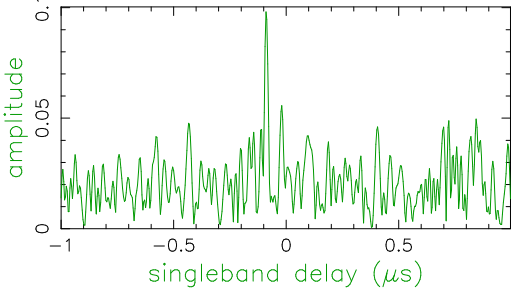
KVNS - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

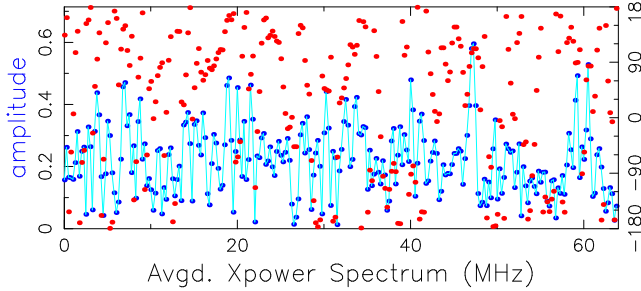


Fringe quality 0

SNR 5.9
 Int time 479.985
 Amp 0.100
 Phase -124.1
 PFD 5.2e-01
 Delays (us)
 SBD -0.088610
 MBD -0.005245
 Fringe rate (Hz)
 -0.171678
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

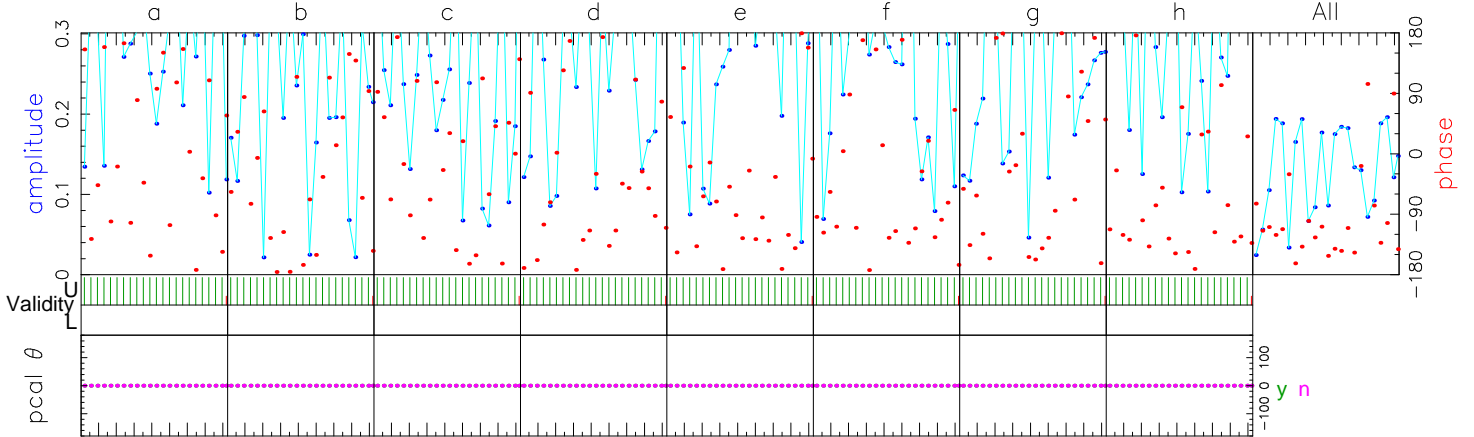


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133430
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-110.8	-123.9	-169.9	-135.9	-108.6	-122.0	-149.0	-121.5	Phase	-124.1
	0.1	0.0	0.0	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	264.9	418.3	345.0	68.3	234.6	253.1	205.1	233.1	Sbd box	234.3
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	3.66548800826E+03	Apriori delay (usec)	3.66557137844E+03	Resid mbdelay (usec)	-5.24517E-03	+/-	1.8E-04
Sband delay (usec)	3.66548276844E+03	Apriori clock (usec)	1.0662642E+00	Resid sbdelay (usec)	-8.86100E-02	+/-	1.5E-03
Phase delay (usec)	3.66557137443E+03	Apriori clockrate (us/s)	-4.0000002E-07	Resid phdelay (usec)	-4.00304E-06	+/-	6.2E-07
Delay rate (us/s)	1.65616982089E+00	Apriori rate (us/s)	1.65617181390E+00	Resid rate (us/s)	-1.99301E-06	+/-	2.2E-09
Total phase (deg)	69.8	Apriori accel (us/s/s)	-2.37179978163E-05	Resid phase (deg)	-124.1	+/-	19.3

ph/seg (deg)	55.7	Theor.	46.3	Amplitude	0.100 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	64.5		80.8	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	23.4		27.3	Inc. seg. avg.	0.099	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.5		47.6	Inc. frq. avg.	0.093	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 64.9 el 43.6 pa -74.2 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) -12717.661 -1906.008 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn.W.249.1M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

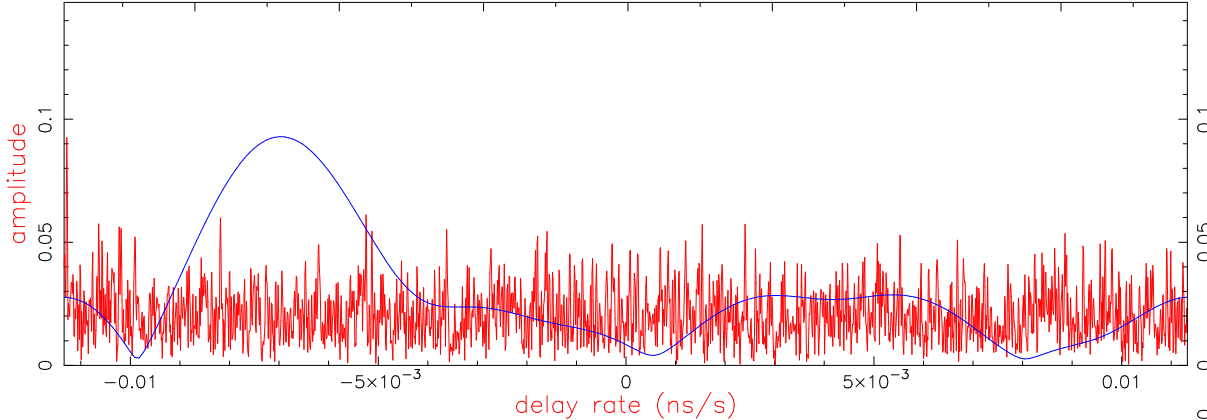
3C84.1IM7QU, No0117, yn

KVNS - VLBA_NL, fgroup W, pol RL

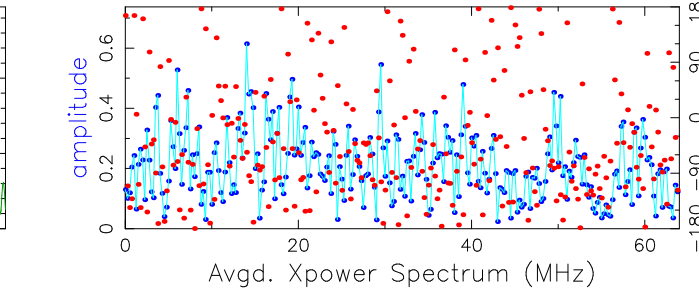
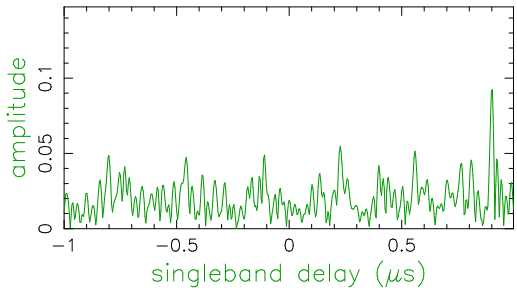
multiband delay (μ s)

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

Fringe quality 0

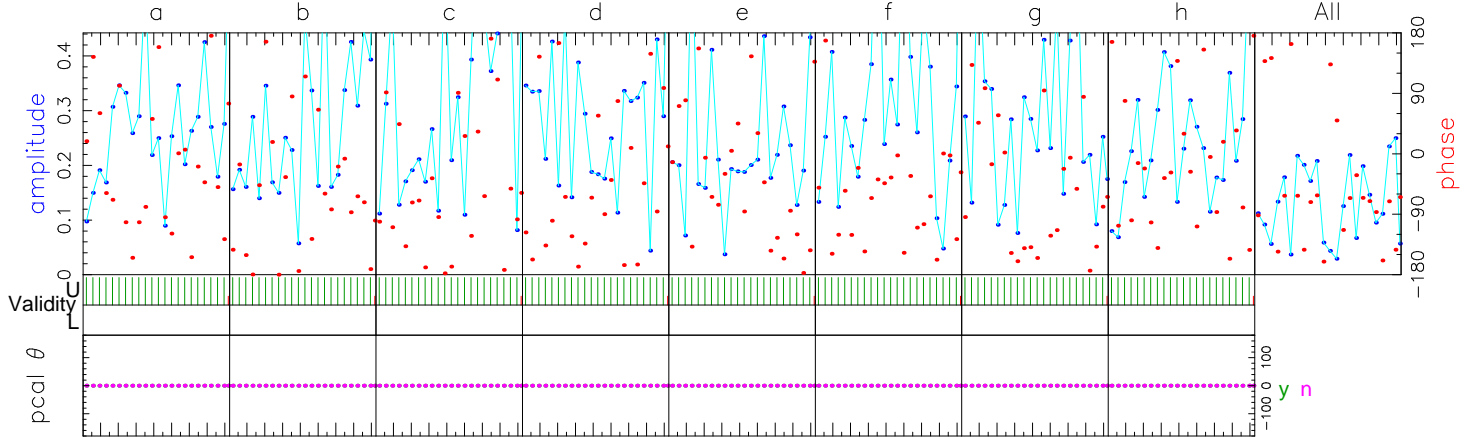


SNR 5.6
Int time 479.985
Amp 0.147
Phase -93.8
PFD 9.8e-01
Delays (us)
SBD 0.900661
MBD -0.004917
Fringe rate (Hz)
-0.972937
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133433
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.9	-91.8	-124.9	-115.4	-108.1	-80.4	-78.3	-82.7	Phase	-93.8
	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.1	Ampl.	0.1
	152.7	72.5	456.2	343.5	330.8	487.9	257.0	111.5	Sbd box	487.6
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.66647271138E+03	Apriori delay (usec)	3.66557137844E+03	Resid mbdelay (usec)	-4.91706E-03	+/-	1.9E-04
Sband delay (usec)	3.66647203894E+03	Apriori clock (usec)	1.0662642E+00	Resid sbdelay (usec)	9.00661E-01	+/-	1.5E-03
Phase delay (usec)	3.66557137541E+03	Apriori clockrate (us/s)	-4.0000002E-07	Resid phdelay (usec)	-3.02517E-06	+/-	6.5E-07
Delay rate (us/s)	1.65616051907E+00	Apriori rate (us/s)	1.65617181390E+00	Resid rate (us/s)	-1.12948E-05	+/-	2.4E-09
Total phase (deg)	100.1	Apriori accel (us/s/s)	-2.37179978163E-05	Resid phase (deg)	-93.8	+/-	20.3

ph/seg (deg)	69.4	Theor.	48.7	Amplitude	0.147 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	84.9		85.0	Search (2048X32)	0.091	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	20.0		28.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.2		50.1	Inc. seg. avg.	0.155	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.134	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 64.9 el 43.6 pa -74.2 n: az 299.1 el 32.5 pa 60.7 u,v (fr/asec) -12717.661 -1906.008 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yn.W.257.1M7QU

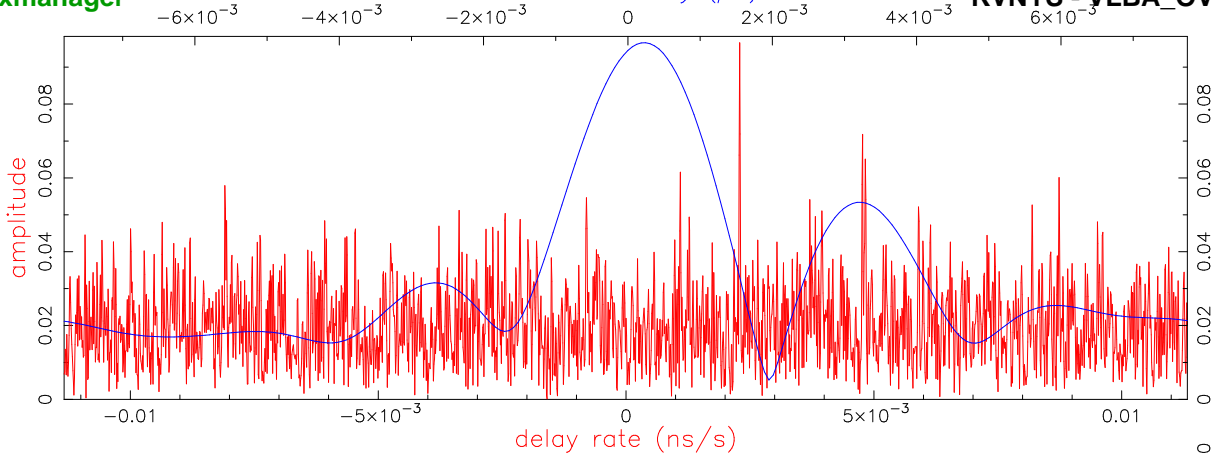
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yo

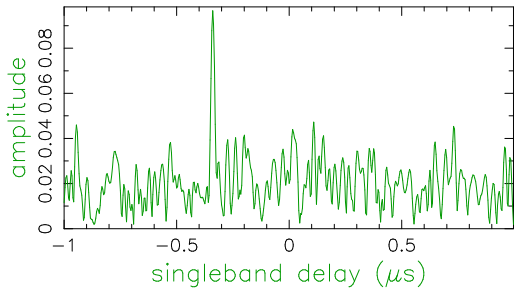
KVNYS - VLBA_OV, fgroup W, pol LL

multiband delay (μ s)

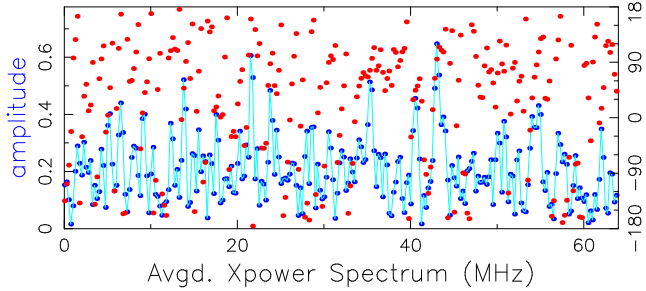


Fringe quality 0

SNR 5.8
 Int time 478.457
 Amp 0.098
 Phase 133.8
 PFD 8.4e-01
 Delays (us)
 SBD -0.339467
 MBD 0.000242
 Fringe rate (Hz)
 0.197397
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

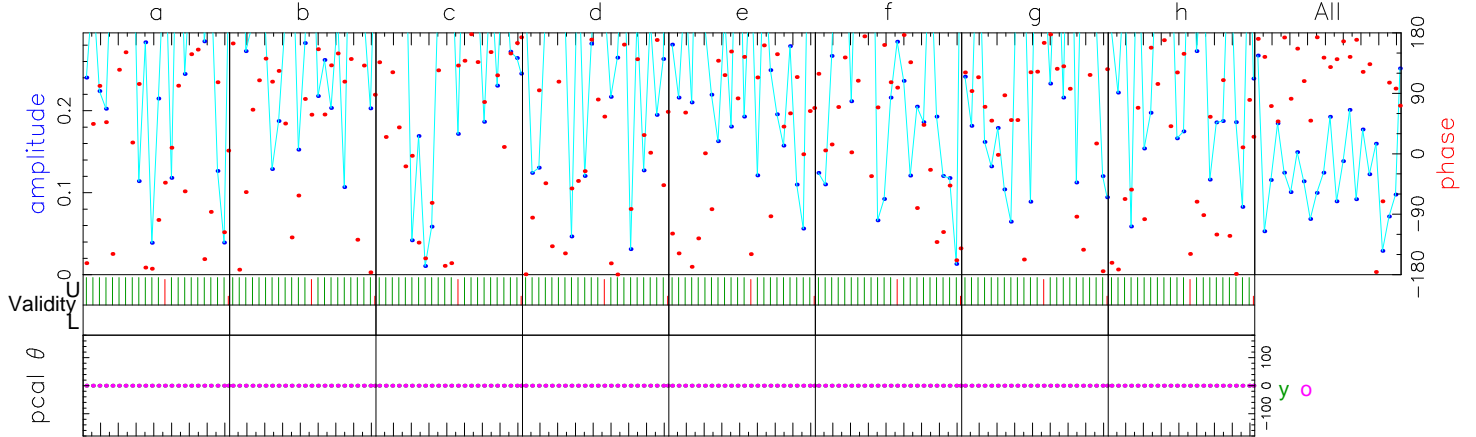


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133423
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	143.4	135.9	128.9	162.2	127.1	85.3	120.4	172.1	Phase	133.8
y	0.1	0.2	0.1	0.1	0.1	0.0	0.2	0.1	Ampl.	0.1
o	362.9	169.5	485.9	237.0	445.1	295.0	169.6	330.3	Sbd box	170.1
y	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.04766934929E+03	Apriori delay (usec)	-1.04732584151E+03	Resid mbdelay (usec)	2.42212E-04	+/-	1.9E-04
Sband delay (usec)	-1.04766530851E+03	Apriori clock (usec)	-2.0156631E+01	Resid sbdelay (usec)	-3.39467E-01	+/-	1.5E-03
Phase delay (usec)	-1.04732583719E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	4.31605E-06	+/-	6.4E-07
Delay rate (us/s)	1.55315200221E+00	Apriori rate (us/s)	1.55314971062E+00	Resid rate (us/s)	2.29159E-06	+/-	2.3E-09
Total phase (deg)	-221.6	Apriori accel (us/s/s)	5.80045229032E-06	Resid phase (deg)	133.8	+/-	19.8

ph/seg (deg)	51.8	Theor.	47.5	Search (2048X32)	0.094	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.9		82.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	28.8		28.0	Inc. seg. avg.	0.097	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	48.5		48.9	Inc. frq. avg.	0.093	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 64.9 el 43.6 pa -74.2 o: az 293.3 el 49.1 pa 77.3 u,v (fr/asec) -11879.916 547.882 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo.W.234.1M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

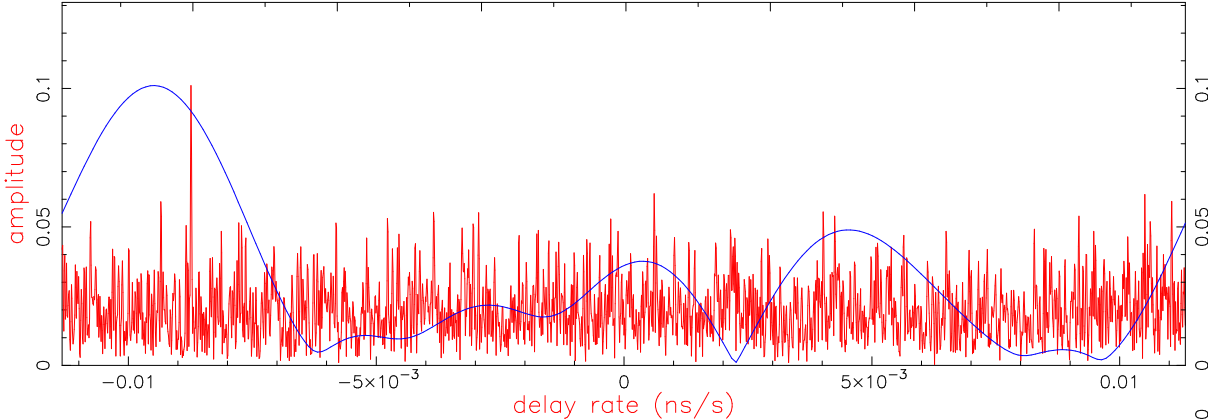
3C84.1IM7QU, No0117, yo

KVNYS - VLBA_OV, fgroup W, pol RR

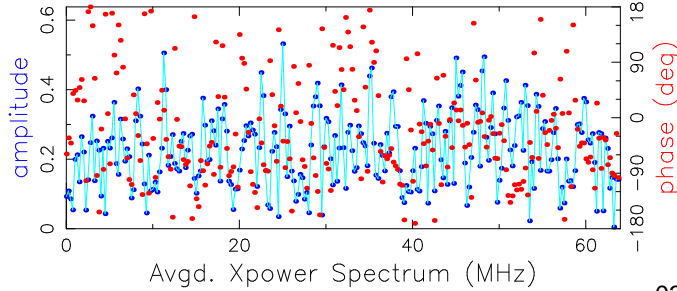
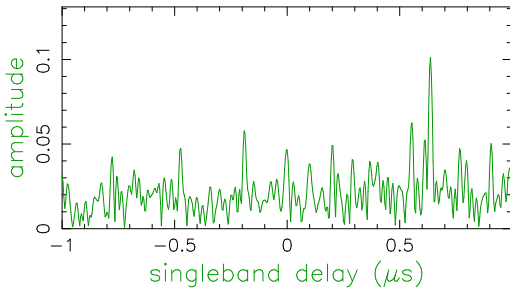
multiband delay (μ s)

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

Fringe quality 0

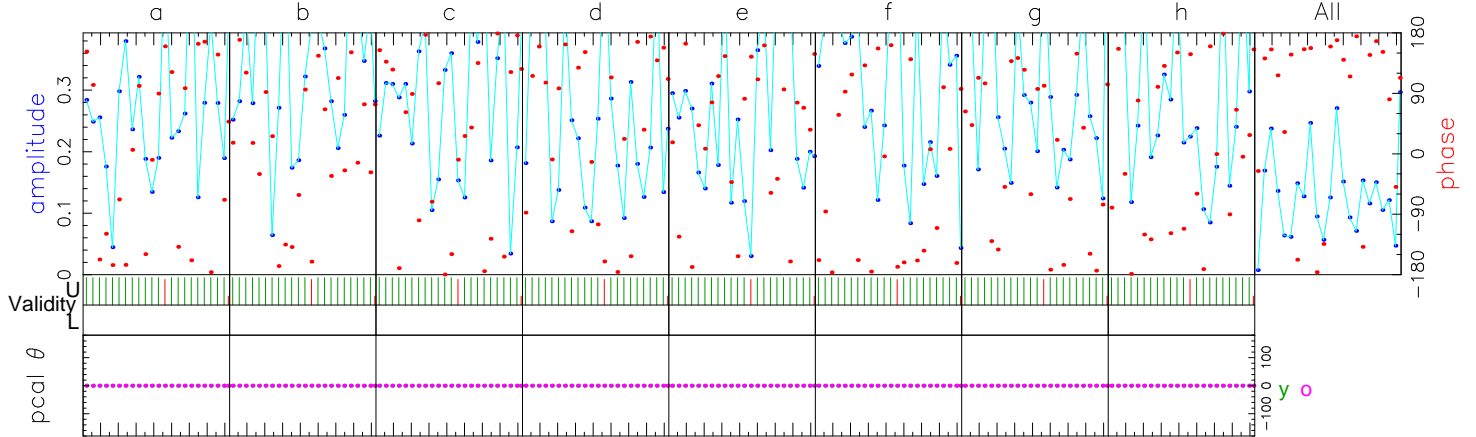


SNR 6.1
 Int time 478.457
 Amp 0.131
 Phase 155.6
 PFD 3.1e-01
 Delays (us)
 SBD 0.636122
 MBD -0.006542
 Fringe rate (Hz)
 -0.753862
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133427
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	170.1	87.5	165.3	157.0	124.0	168.8	127.3	-164.1	Phase	155.6
	0.2	0.1	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	253.0	382.2	368.2	312.5	159.7	226.6	23.5	246.9	Sbd box	419.8
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.04669175824E+03			Apriori delay (usec)	-1.04732584151E+03			Resid mbdelay (usec)	-6.54174E-03	+/- 1.8E-04
Sband delay (usec)	-1.04668971926E+03			Apriori clock (usec)	-2.0156631E+01			Resid sbdelay (usec)	6.36122E-01	+/- 1.4E-03
Phase delay (usec)	-1.04732583649E+03			Apriori clockrate (us/s)	1.9999998E-07			Resid phdelay (usec)	5.01824E-06	+/- 6.1E-07
Delay rate (us/s)	1.55314095903E+00			Apriori rate (us/s)	1.55314971062E+00			Resid rate (us/s)	-8.75159E-06	+/- 2.2E-09
Total phase (deg)		-199.8		Apriori accel (us/s/s)	5.80045229032E-06			Resid phase (deg)	155.6	+/- 18.9

	RMS	Theor.	Amplitude	0.131 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	65.0	45.3	Search (2048X32)	0.094	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	70.8	79.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	37.7	26.8	Inc. seg. avg.	0.126	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	41.9	46.7	Inc. frq. avg.	0.130	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 o: az 293.3 el 49.1 pa 77.3 u,v (fr/asec) -11879.916 547.882 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo.W.242.1M7QU

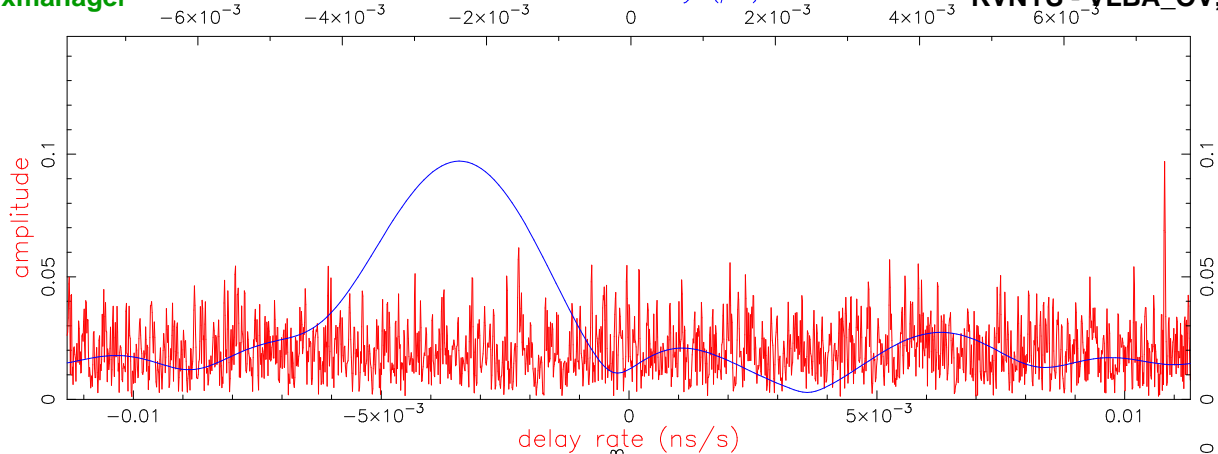
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yo

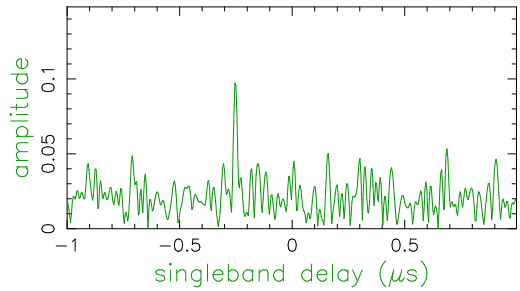
KVNYS - VLBA_OV, fgroup W, pol LR

multiband delay (μ s)

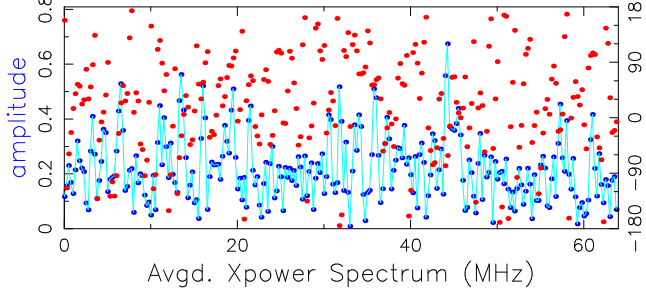


Fringe quality 0

SNR 5.9
 Int time 478.457
 Amp 0.148
 Phase 36.0
 PFD 6.2e-01
 Delays (us)
 SBD -0.252295
 MBD -0.002325
 Fringe rate (Hz)
 0.931998
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

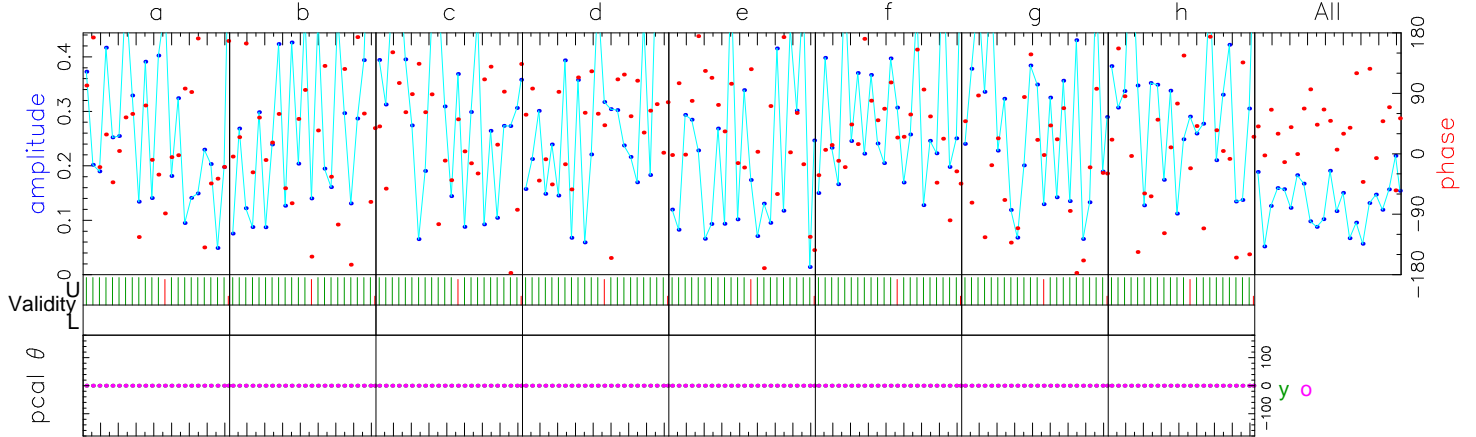


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133430
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.04757816642E+03									
Sband delay (usec)	-1.04757813676E+03									
Phase delay (usec)	-1.04732584035E+03									
Delay rate (us/s)	1.55316053019E+00									
Total phase (deg)			-319.5							
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

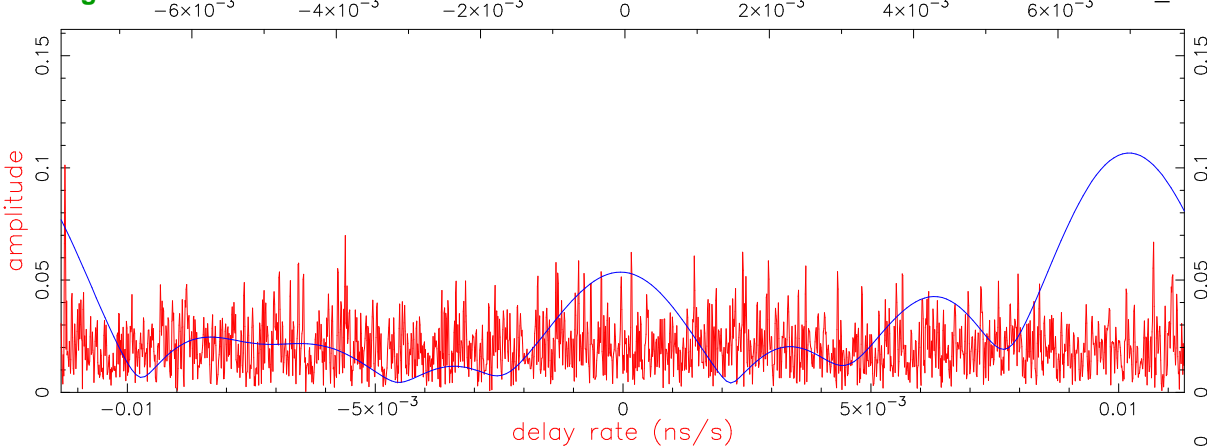
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yo

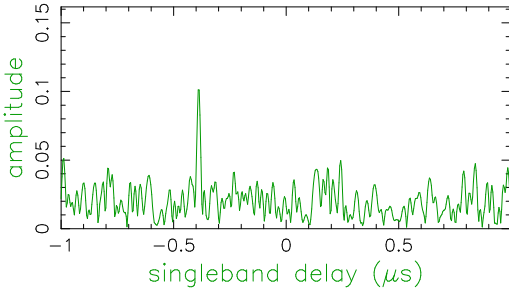
KVNYS - VLBA_OV, fgroup W, pol RL

multiband delay (μ s)

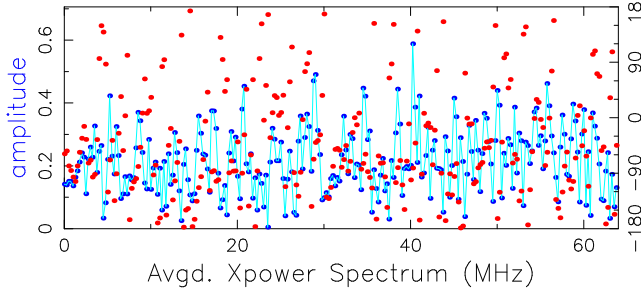


Fringe quality 0

SNR 6.2
 Int time 478.457
 Amp 0.162
 Phase -133.5
 PFD 1.5e-01
 Delays (us)
 SBD -0.388702
 MBD -0.008301
 Fringe rate (Hz)
 -0.971573
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

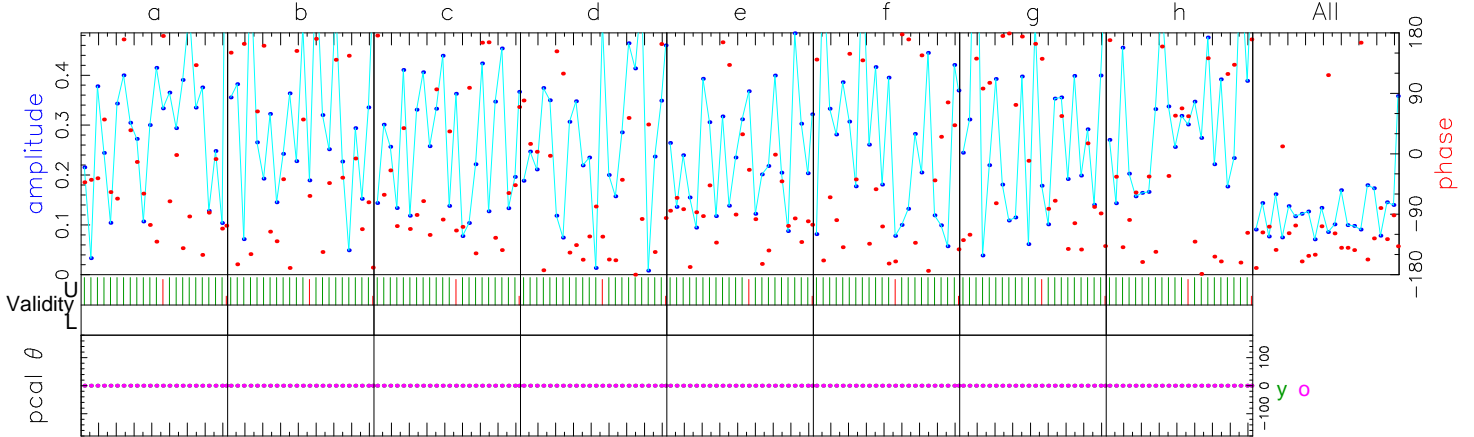


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133434
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-89.8	-162.6	-107.7	-138.2	-88.3	-153.6	-154.6	-168.7	Phase	-133.5
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	294.2	215.6	247.7	1.5	502.9	257.4	229.2	47.3	Sbd box	157.5
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

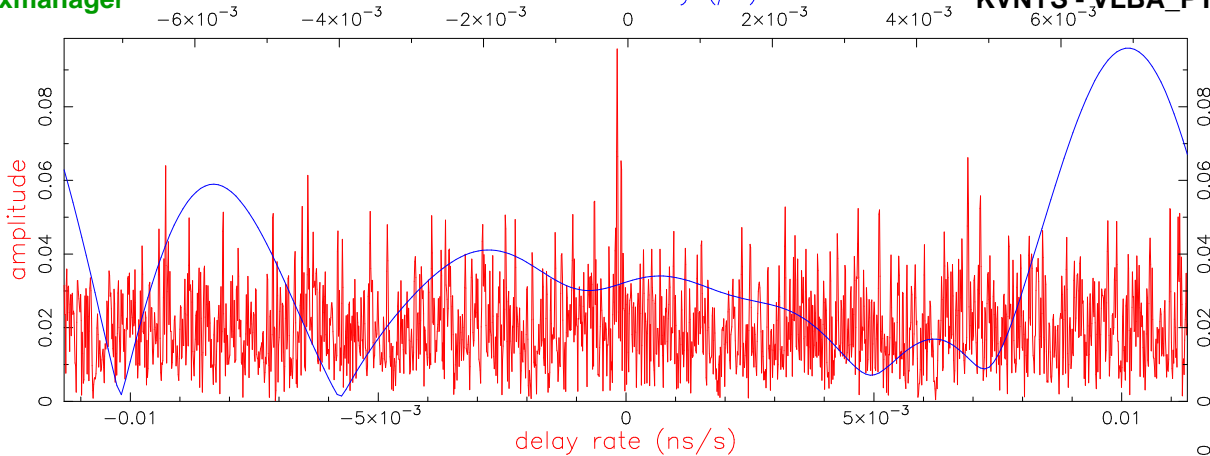
Group delay (usec)(sbd)	-1.04770914229E+03	Apriori delay (usec)	-1.04732584151E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.8E-04
Sband delay (usec)	-1.04771454326E+03	Apriori clock (usec)	-2.0156631E+01	Resid sbdelay (usec)	-3.88702E-01	+/-	1.4E-03
Phase delay (usec)	-1.04732584581E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-4.30515E-06	+/-	6.0E-07
Delay rate (us/s)	1.55313843162E+00	Apriori rate (us/s)	1.55314971062E+00	Resid rate (us/s)	-1.12790E-05	+/-	2.2E-09
Total phase (deg)	-129.0	Apriori accel (us/s/s)	5.80045229032E-06	Resid phase (deg)	-133.5	+/-	18.5

ph/seg (deg)	46.2	Theor.	44.4	Amplitude	0.162 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	46.3		77.4	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	35.5		26.2	Inc. seg. avg.	0.147	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	21.3		45.7	Inc. frq. avg.	0.168	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 64.9 el 43.6 pa -74.2 o: az 293.3 el 49.1 pa 77.3 u,v (fr/asec) -11879.916 547.882 simultaneous interpolator

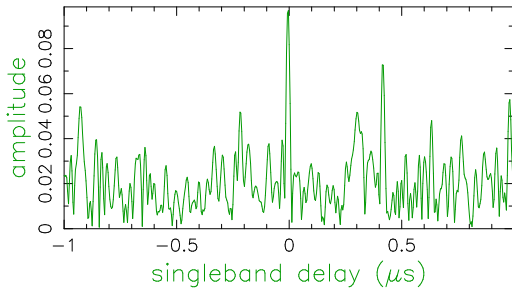
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yo.W.259.1M7QU

multiband delay (μ s)

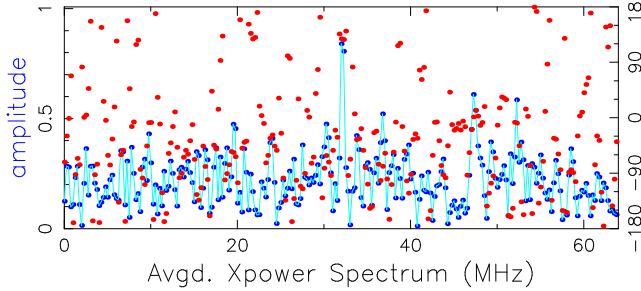


Fringe quality 0

SNR 5.9
Int time 479.985
Amp 0.099
Phase 152.2
PFD 5.9e-01
Delays (us)
SBD -0.005604
MBD 0.007002
Fringe rate (Hz)
-0.015184
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

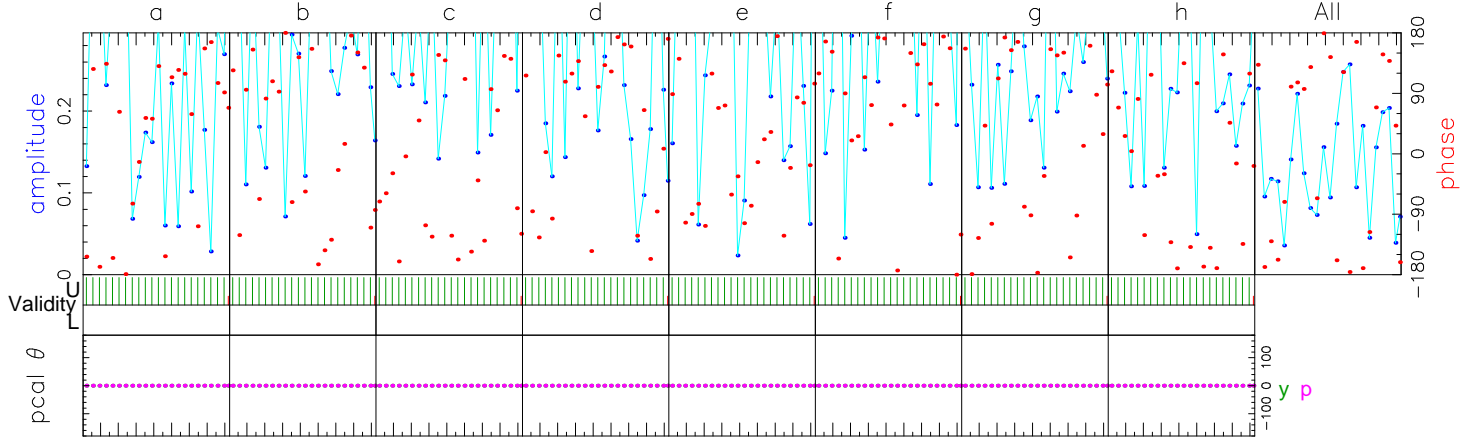


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133424
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	132.3	168.9	-151.2	151.2	7.2	137.5	156.8	146.5	Phase	152.2
y	0.1	0.1	0.1	0.1	0.0	0.2	0.1	0.1	Ampl.	0.1
p	170.3	440.5	313.4	492.7	66.8	256.2	363.9	134.8	Sbd box	255.6
y:1000	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y:p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.29109740704E+03	Apriori delay (usec)	1.29110603051E+03	Resid mbdelay (usec)	7.00153E-03	+/-	1.8E-04
Sband delay (usec)	1.29110042701E+03	Apriori clock (usec)	1.1559486E+00	Resid sbdelay (usec)	-5.60350E-03	+/-	1.5E-03
Phase delay (usec)	1.29110603541E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	4.90868E-06	+/-	6.3E-07
Delay rate (us/s)	1.66741392948E+00	Apriori rate (us/s)	1.66741410575E+00	Resid rate (us/s)	-1.76275E-07	+/-	2.3E-09
Total phase (deg)	320.6	Apriori accel (us/s/s)	-3.42217384026E-06	Resid phase (deg)	152.2	+/-	19.4

ph/seg (deg)	64.4	RMS	46.5	Theor.	0.099 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	79.1	Search (2048X32)	0.095	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	64.8	Inc. seg. avg.	0.105	Inc. seg. avg.	0.105	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	45.5	Inc. frq. avg.	0.099	Inc. frq. avg.	0.099	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
						Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 64.9 el 43.6 pa -74.2 p: az 298.3 el 40.4 pa 75.9 u,v (fr/asec) -12770.814 187.800 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp..11M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp.W.236.11M7QU

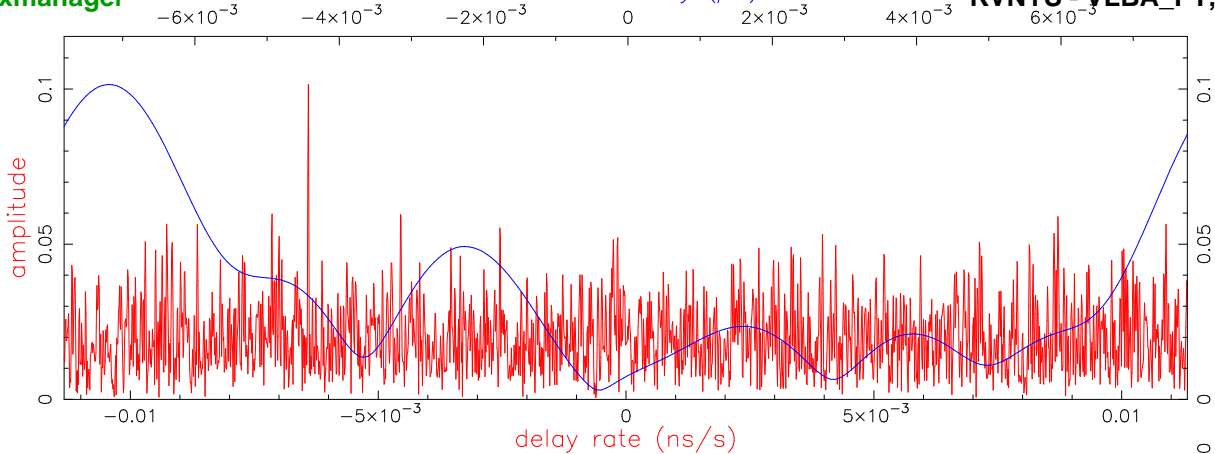
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yp

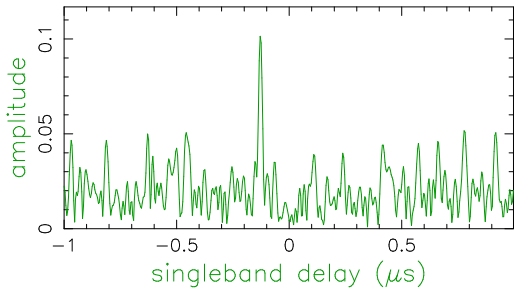
KVNYS - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

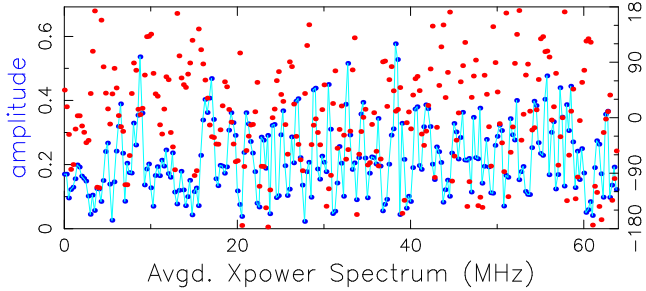


Fringe quality 0

SNR 6.1
 Int time 479.985
 Amp 0.117
 Phase 51.7
 PFD 2.2e-01
 Delays (us)
 SBD -0.127788
 MBD -0.007155
 Fringe rate (Hz)
 -0.553351
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

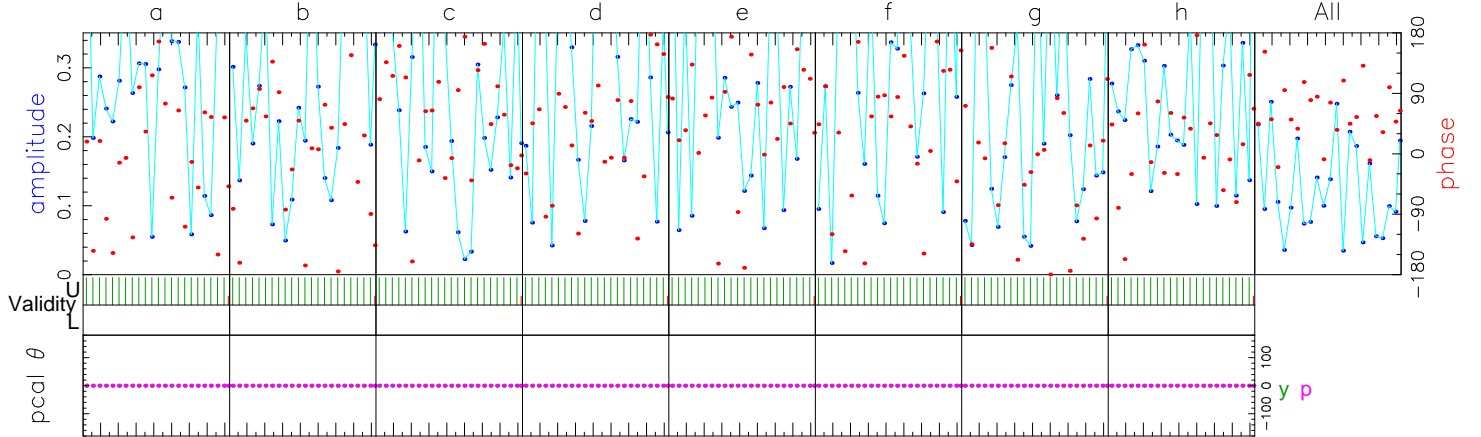


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133427
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.29097387522E+03	Apriori delay (usec)	1.29110603051E+03	Resid mbdelay (usec)	-7.15528E-03	+/-	1.8E-04
Sband delay (usec)	1.29097824201E+03	Apriori clock (usec)	1.1559486E+00	Resid sbdelay (usec)	-1.27788E-01	+/-	1.4E-03
Phase delay (usec)	1.29110603217E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	1.66804E-06	+/-	6.0E-07
Delay rate (us/s)	1.66740768190E+00	Apriori rate (us/s)	1.66741410575E+00	Resid rate (us/s)	-6.42385E-06	+/-	2.2E-09
Total phase (deg)	220.1	Apriori accel (us/s/s)	-3.42217384026E-06	Resid phase (deg)	51.7	+/-	18.7

ph/seg (deg)	43.8	Theor.	44.9	Amplitude	0.117 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	69.2	Search (2048X32)	0.097	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	34.0	Inc. seg. avg.	0.109	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	38.8	Inc. frq. avg.	0.119	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

y: az 64.9 el 43.6 pa -74.2 p: az 298.3 el 40.4 pa 75.9 u,v (fr/asec) -12770.814 187.800 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp.W.245.1M7QU

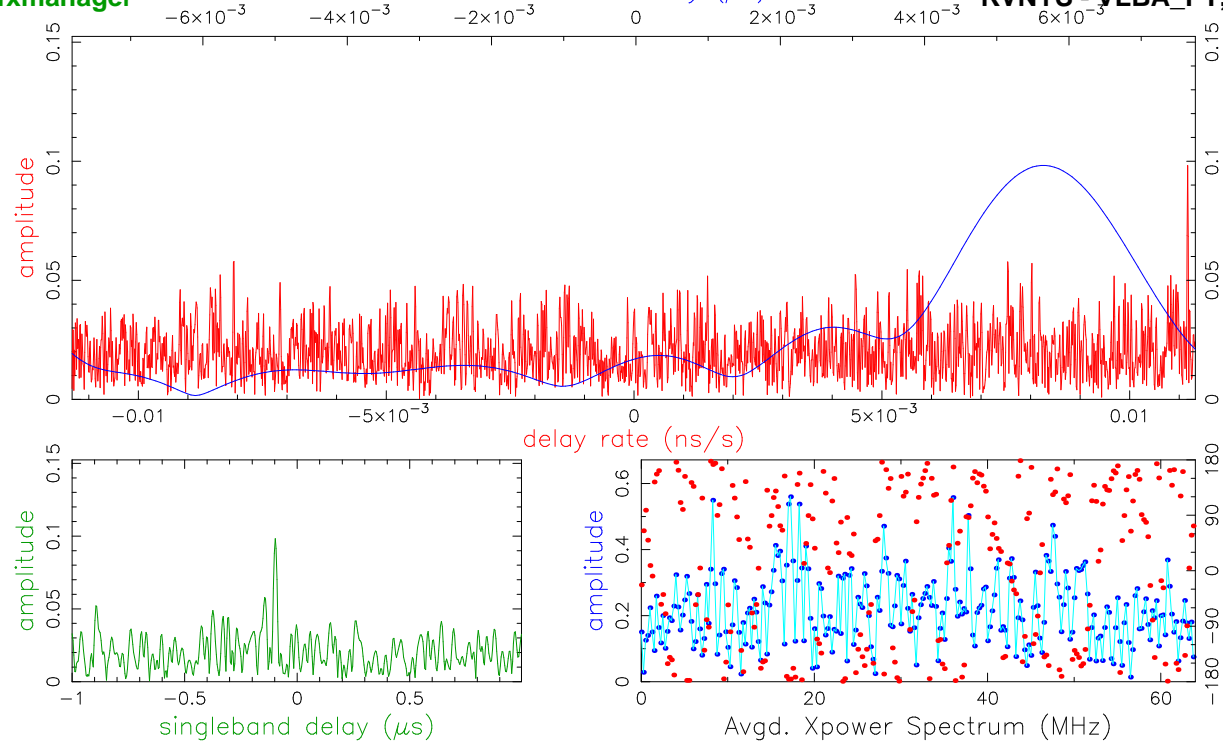
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yp

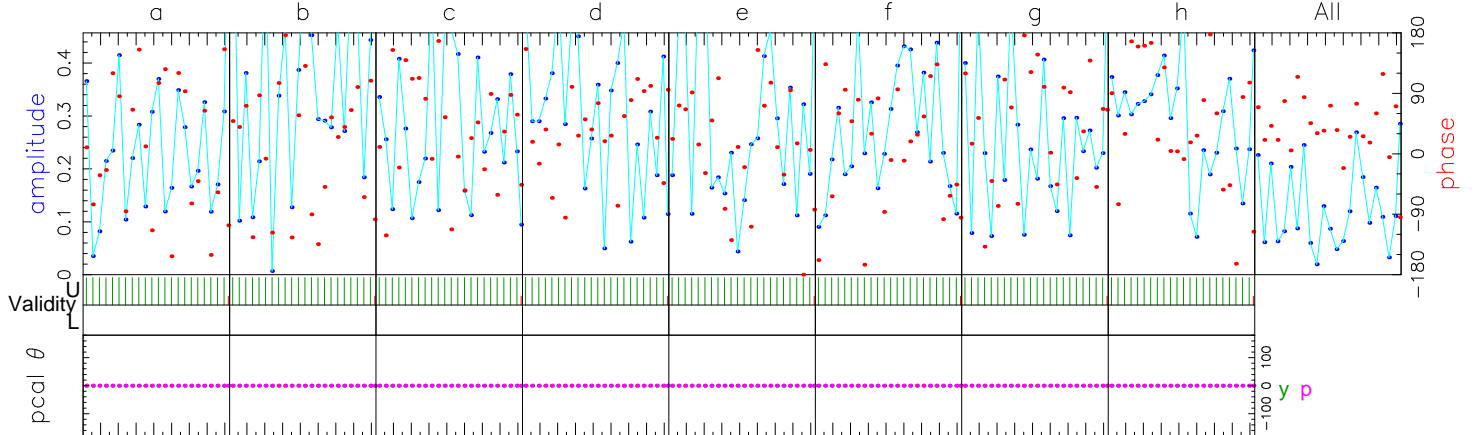
KVNYS - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



Fringe quality 0
 SNR 5.9
 Int time 479.985
 Amp 0.152
 Phase 50.8
 PFD 6.3e-01
 Delays (us)
 SBD -0.097268
 MBD 0.005655
 Fringe rate (Hz)
 0.963443
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133431
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 1.29100231012E+03 Apriori delay (usec) 1.29110603051E+03 Resid mbdelay (usec) 5.65461E-03 +/- 1.8E-04
 Sband delay (usec) 1.29100876251E+03 Apriori clock (usec) 1.1559486E+00 Resid sbdelay (usec) -9.72680E-02 +/- 1.5E-03
 Phase delay (usec) 1.29110603214E+03 Apriori clockrate (us/s) -2.9999999E-07 Resid phdelay (usec) 1.63910E-06 +/- 6.3E-07
 Delay rate (us/s) 1.66742529037E+00 Apriori rate (us/s) 1.66741410575E+00 Resid rate (us/s) 1.11846E-05 +/- 2.3E-09
 Total phase (deg) 219.2 Apriori accel (us/s/s) -3.42217384026E-06 Resid phase (deg) 50.8 +/- 19.5

RMS Theor. Amplitude 0.152 +/- 0.026 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 39.5 46.7 Search (2048X32) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 78.9 81.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.1 27.5 Inc. seg. avg. 0.144 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.5 48.0 Inc. frq. avg. 0.144 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 p: az 298.3 el 40.4 pa 75.9 u,v (fr/asec) -12770.814 187.800 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp.W.253.1M7QU

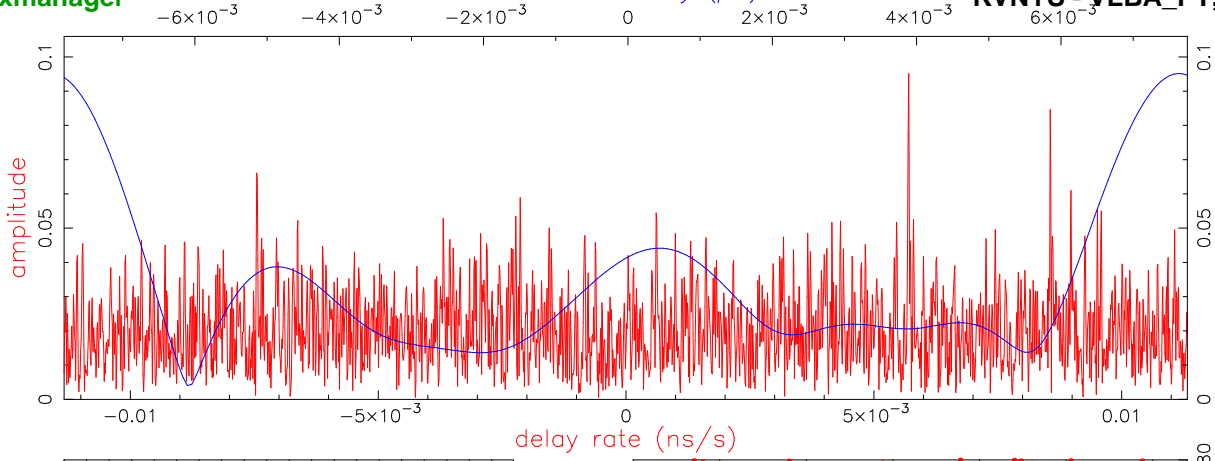
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

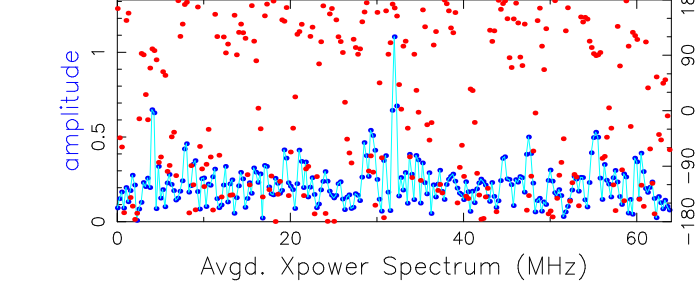
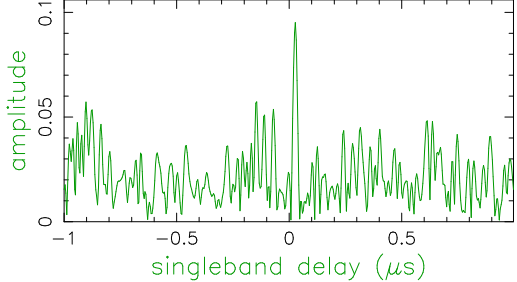
3C84.1M7QU, No0117, yp

KVNS - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

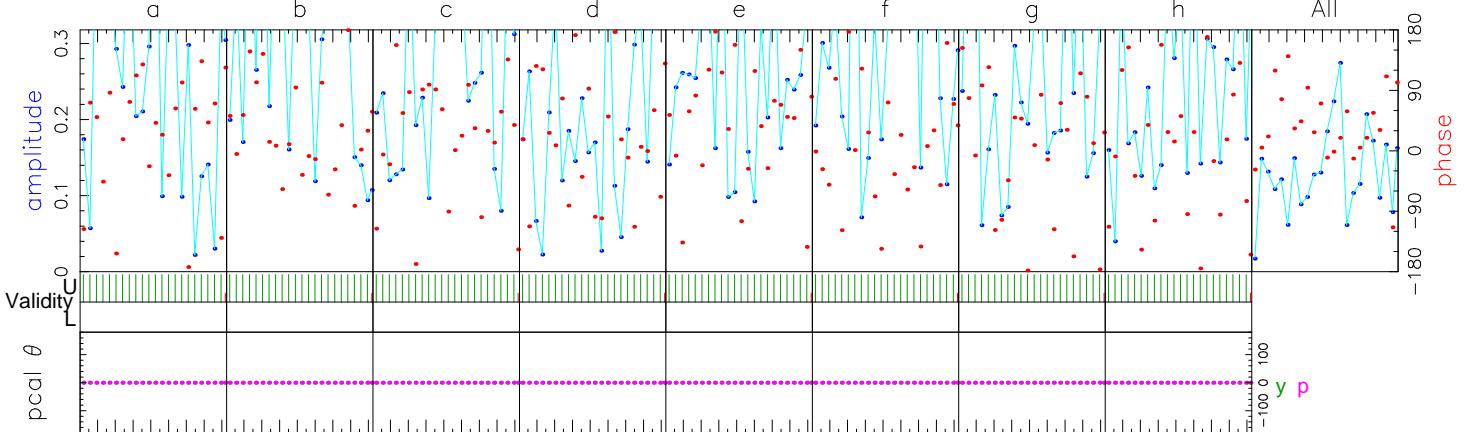


Fringe quality 0
 SNR 5.7
 Int time 479.985
 Amp 0.106
 Phase 35.1
 PFD 9.4e-01
 Delays (us)
 SBD 0.026823
 MBD 0.007636
 Fringe rate (Hz)
 0.492247
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133435
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	1.29112929129E+03	Apriori delay (usec)		1.29110603051E+03	Resid mbdelay (usec)		7.63578E-03	+/-	1.9E-04
Sband delay (usec)	1.29113285326E+03	Apriori clock (usec)		1.1559486E+00	Resid sbdelay (usec)		2.68227E-02	+/-	1.5E-03
Phase delay (usec)	1.29110603164E+03	Apriori clockrate (us/s)		-2.9999999E-07	Resid phdelay (usec)		1.13214E-06	+/-	6.5E-07
Delay rate (us/s)	1.66741982025E+00	Apriori rate (us/s)		1.66741410575E+00	Resid rate (us/s)		5.71450E-06	+/-	2.3E-09
Total phase (deg)	203.5	Apriori accel (us/s/s)		-3.42217384026E-06	Resid phase (deg)		35.1	+/-	20.1

ph/seg (deg)	54.9	RMS	48.2	Theor.	0.106 +/- 0.019	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	70.7	Search (2048X32)	0.093	Amplitude	0.106 +/- 0.019	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	32.4	Interp.	0.000	Search (2048X32)	0.093	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	39.3	Inc. seg. avg.	0.108	Interp.	0.000	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011		
		Inc. frq. avg.	0.107	Inc. seg. avg.	0.108	Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 64.9 el 43.6 pa -74.2 p: az 298.3 el 40.4 pa 75.9 u,v (fr/asec) -12770.814 187.800 simultaneous interpolator

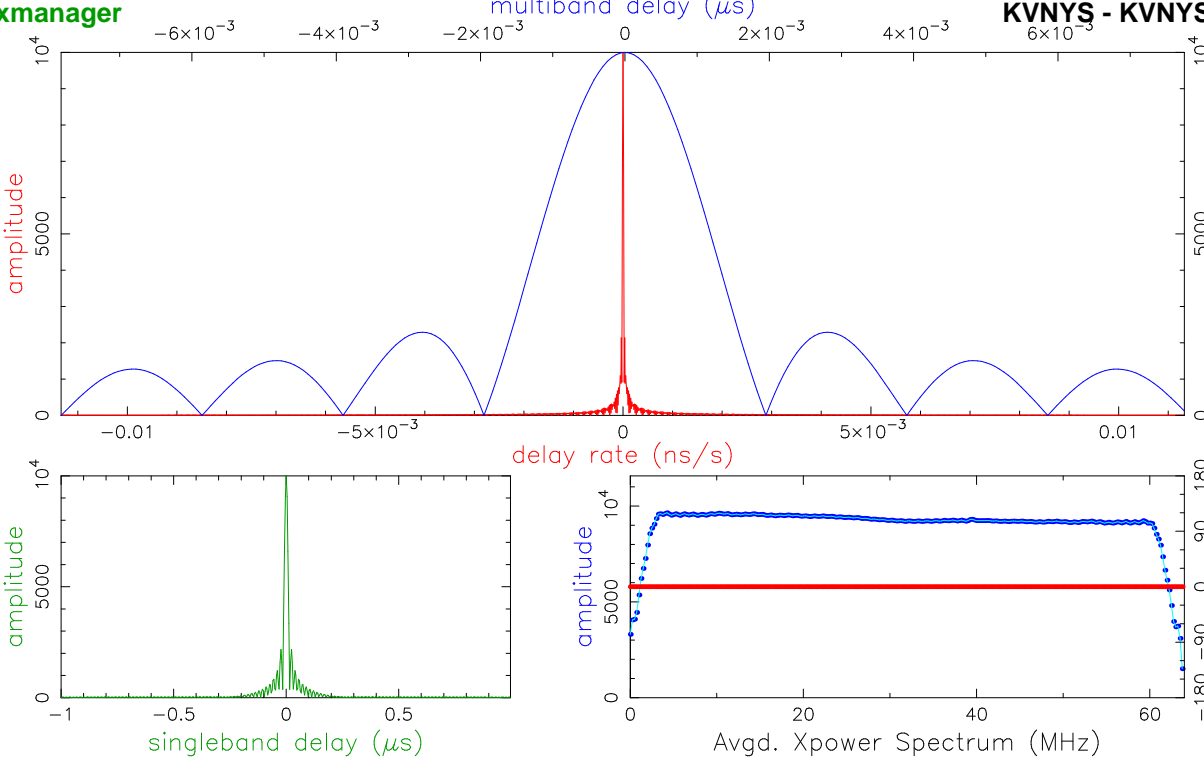
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yp.W.260.1M7QU

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

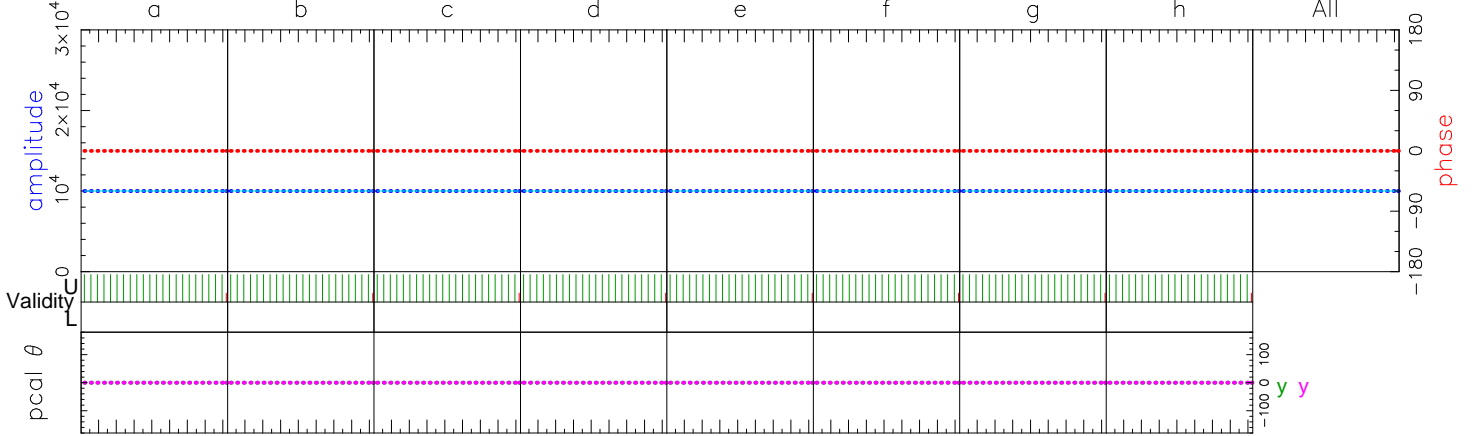
3C84.1M7QU, No0117, yy

KVNY5 - KVNY5, fgroup W, pol LL



Fringe quality 9
 SNR 599117.0
 Int time 479.985
 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. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133423
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.000000000000E+00 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 1.8E-09
 Sband delay (usec) 0.000000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 1.4E-08
 Phase delay (usec) 0.000000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 6.2E-12
 Delay rate (us/s) 0.000000000000E+00 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 2.2E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.001 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 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
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy.W.235.1M7QU

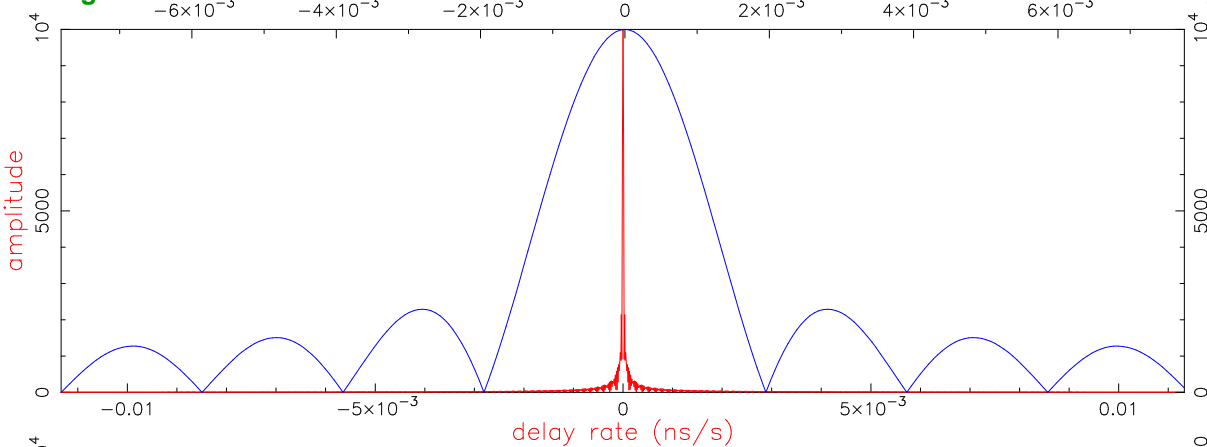
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M7QU, No0117, yy

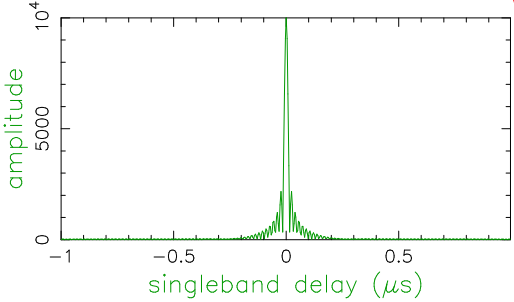
KVNS - KVNS, fgroup W, pol RR

multiband delay (μ s)

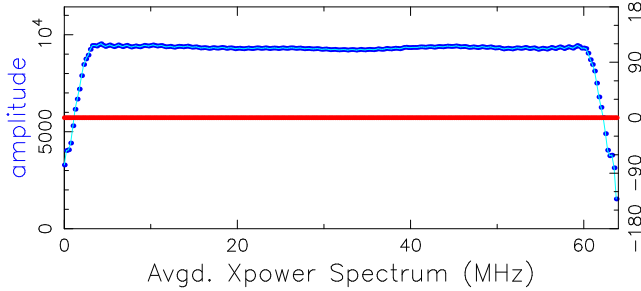


Fringe quality 9

SNR 599117.0
 Int time 479.985
 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

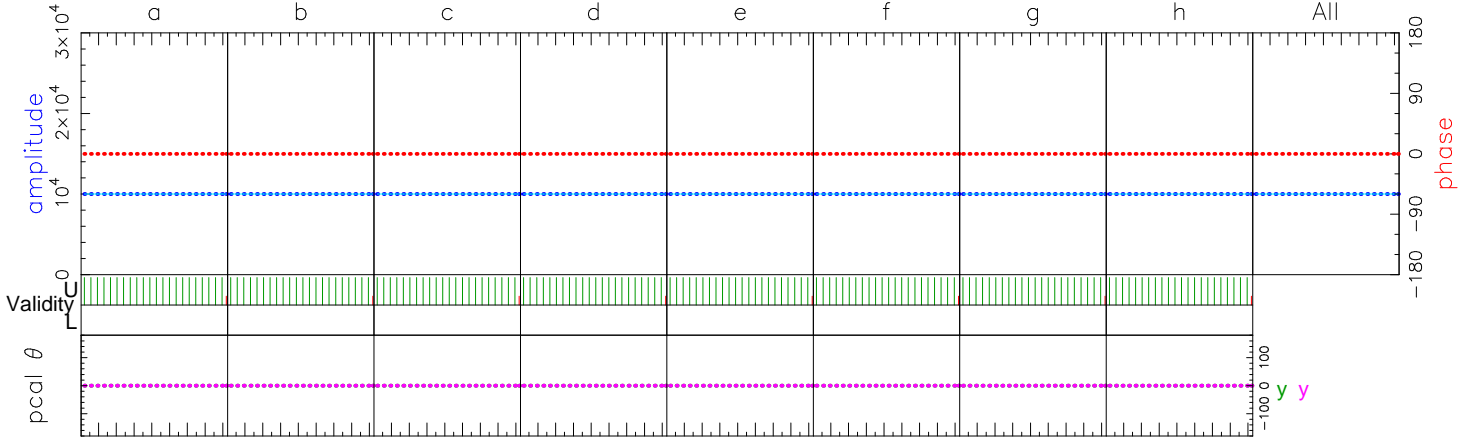


delay rate (ns/s)



Exp. c202b
 Yr:day 16383
 Start 2020:284
 Stop 2020:284
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133427
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

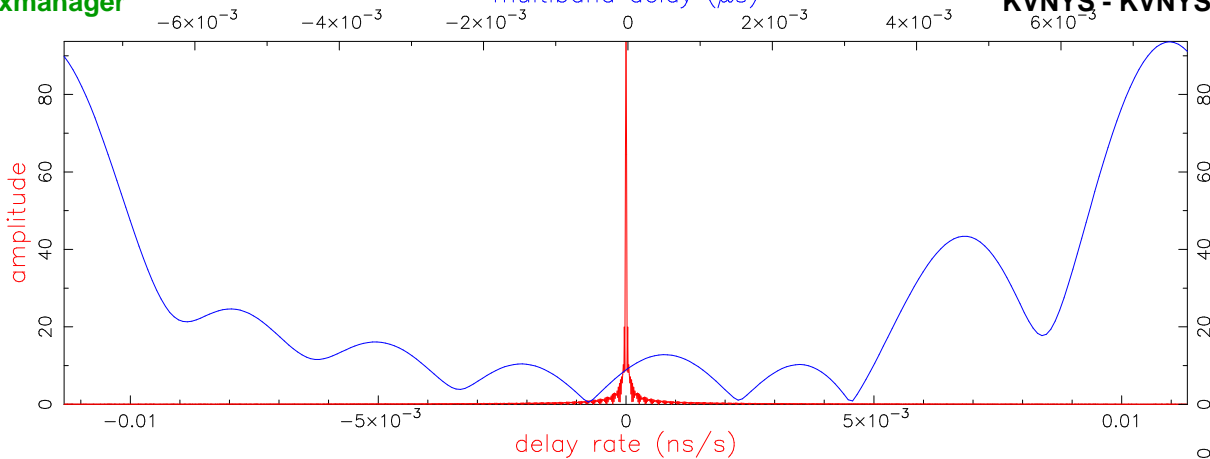
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	1.8E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	1.4E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	6.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.2E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	10000.001 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	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	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	10000.001	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 64.9 el 43.6 pa -74.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

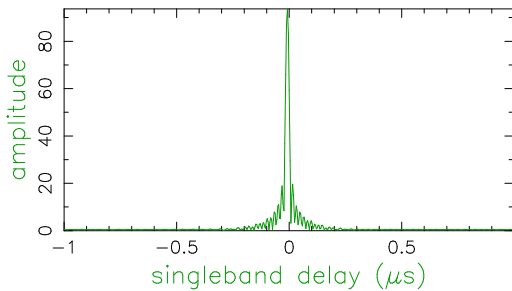
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy.W.243.1M7QU

multiband delay (μ s)

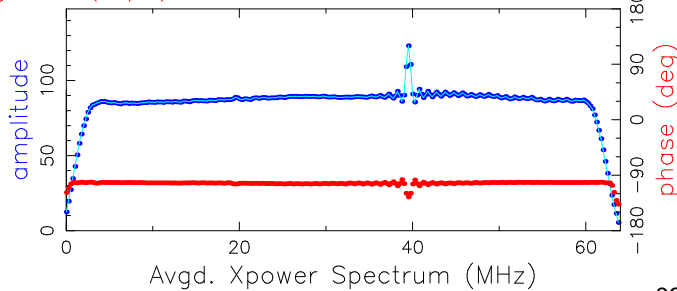


Fringe quality 7

SNR 5614.1
Int time 479.985
Amp 93.707
Phase 75.2
PFD 0.0e+00
Delays (us)
SBD -0.008279
MBD 0.007504
Fringe rate (Hz)
-0.000001
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

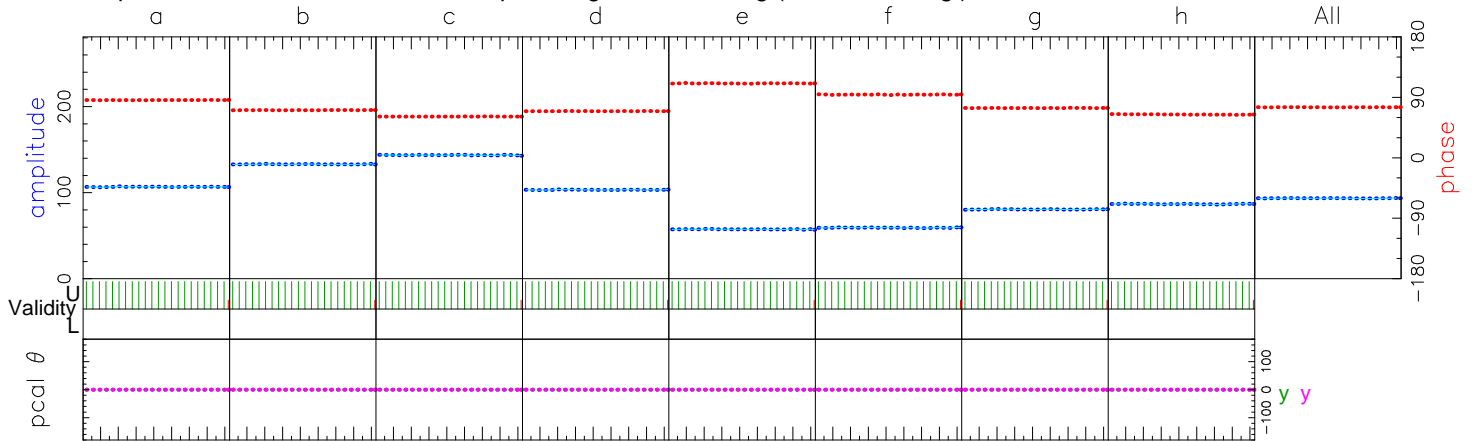


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 133001.00
Stop 133801.26
FRT 133401.00
Corr/FF/build
2021:023:095356
2021:023:133430
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.120750000000E-03									
Sband delay (usec)	-8.279250000000E-03									
Phase delay (usec)	2.42351525680E-06									
Delay rate (us/s)	-1.55882676309E-11									
Total phase (deg)			75.2							
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					
Resid mbdelay (usec)									7.50425E-03	+/- 1.9E-07
Resid sbdelay (usec)									-8.27925E-03	+/- 1.5E-06
Resid phdelay (usec)									2.42352E-06	+/- 6.6E-10
Resid rate (us/s)									-1.55883E-11	+/- 2.4E-12
Resid phase (deg)									75.2	+/- 0.0
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/s):	128		dr window (ns/s)		-0.011		0.011			
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	
			u,v (fr/asec) 0.000		0.000				simultaneous interpolator	

y: az 64.9 el 43.6 pa -74.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy.W.251.1M7QU

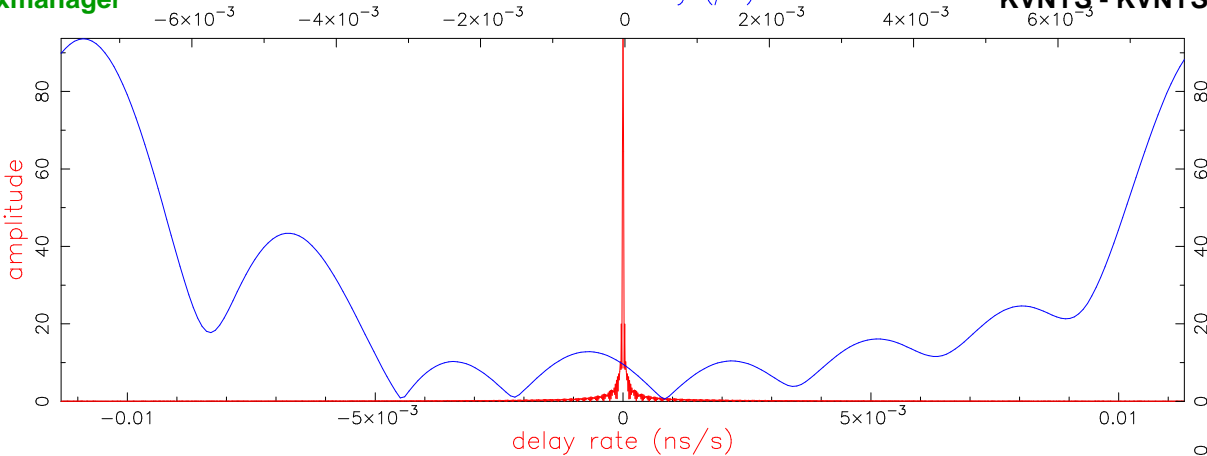
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM7QU, No0117, yy

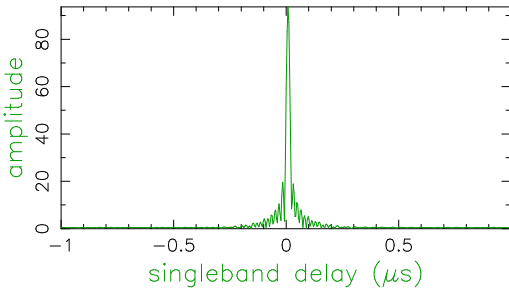
KVNS - KVNS, fgroup W, pol RL

multiband delay (μ s)

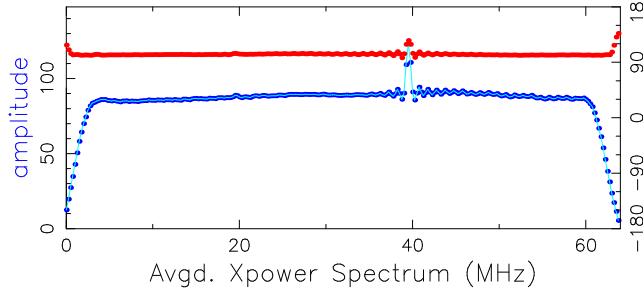


Fringe quality 7

SNR 5614.1
 Int time 479.985
 Amp 93.707
 Phase -75.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.008279
 MBD -0.007504
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

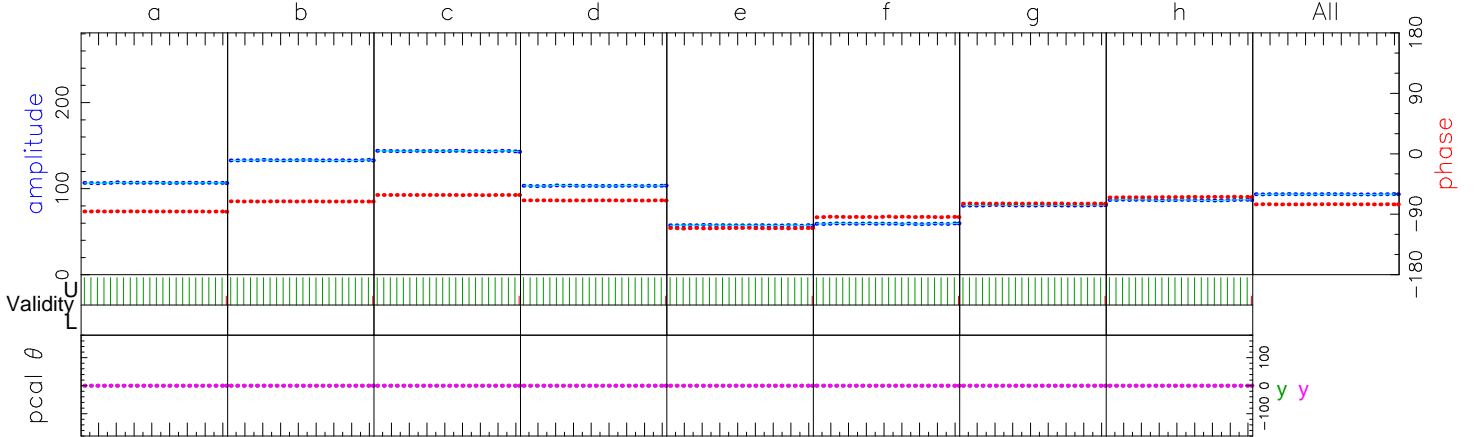


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 133001.00
 Stop 133801.26
 FRT 133401.00
 Corr/FF/build
 2021:023:095356
 2021:023:133433
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 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
	-85.8	-70.9	-61.3	-69.4	-110.7	-94.0	-74.0	-64.4	Phase	-75.2
	106.8	133.1	143.7	103.3	57.5	59.3	80.6	86.8	Ampl.	96.4
	259.2	259.2	259.2	258.7	258.8	259.5	259.2	259.0	Sbd box	259.1
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd) 8.12075000000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -7.50425E-03 +/- 1.9E-07
 Sband delay (usec) 8.27925000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 8.27925E-03 +/- 1.5E-06
 Phase delay (usec) -2.42351525673E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.42352E-06 +/- 6.6E-10
 Delay rate (us/s) 1.55882676309E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 1.55883E-11 +/- 2.4E-12
 Total phase (deg) -75.2 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -75.2 +/- 0.0

RMS Theor. Amplitude 93.707 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.1 0.0 Search (2048X32) 92.303 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.2 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 18.7 0.0 Inc. seg. avg. 93.583 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 31.6 0.1 Inc. frq. avg. 96.373 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

y: az 64.9 el 43.6 pa -74.2 y: az 64.9 el 43.6 pa -74.2 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy..1M7QU Output file: /Exps/c202b/v1/v1_3mm/1234/No0117/yy.W.258.1M7QU