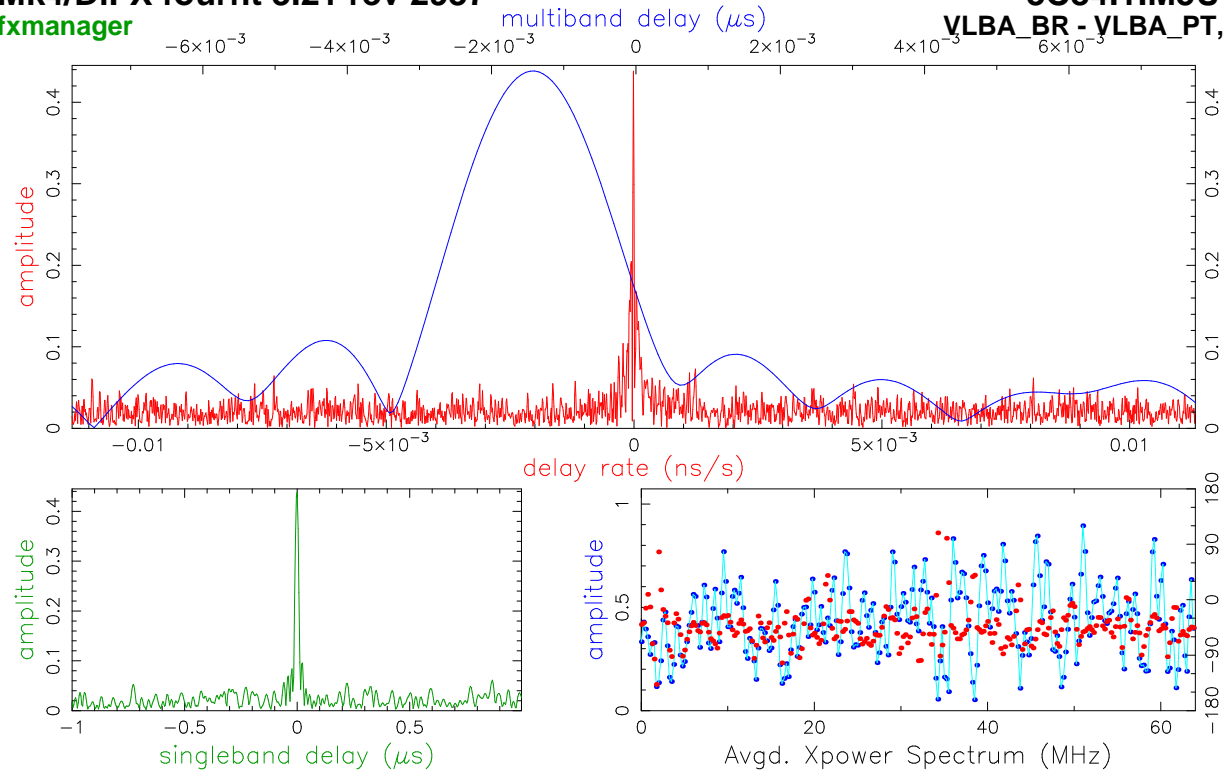


Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, bp

VLBA_BR - VLBA_PT, fgroup W, pol RR

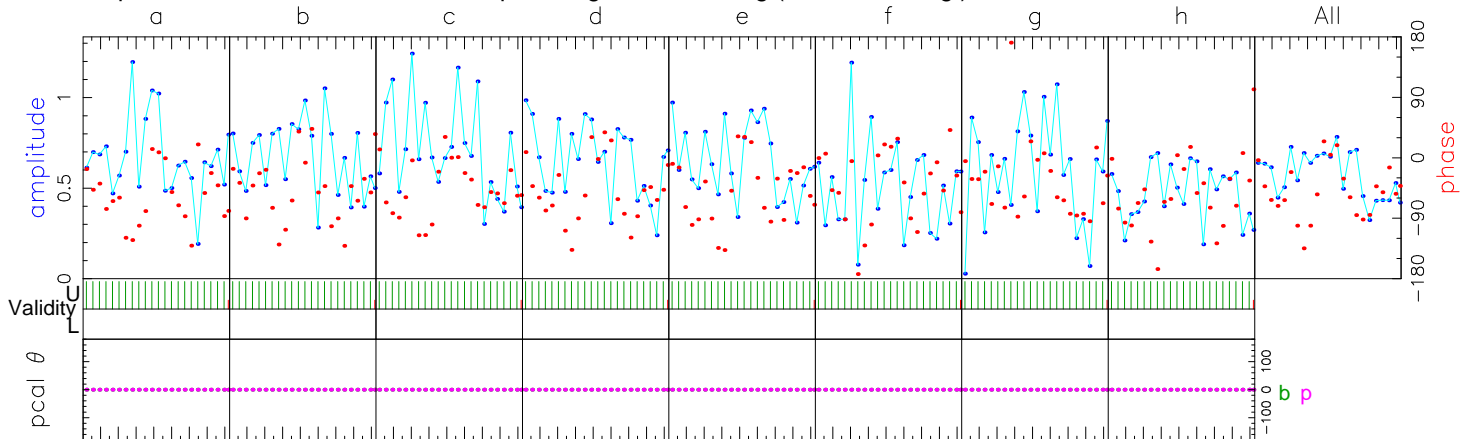


Fringe quality 7

SNR 26.7
 Int time 479.982
 Amp 0.445
 Phase -48.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.001592
 MBD -0.001464
 Fringe rate (Hz)
 -0.001206
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133038
 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
	-58.1	-49.1	-46.3	-49.8	-49.1	-33.6	-42.8	-61.3	Phase	-48.8
	0.5	0.5	0.5	0.5	0.4	0.3	0.5	0.3	Ampl.	0.4
	257.0	256.4	256.3	256.3	257.1	256.5	256.3	256.9	Sbd box	256.6
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.85524611191E+03		Apriori delay (usec)		2.85524757632E+03		Resid mbdelay (usec)		-1.46440E-03	+/- 4.1E-05
Sband delay (usec)	2.85524598457E+03		Apriori clock (usec)		-1.7950163E+00		Resid sbdelay (usec)		-1.59175E-03	+/- 3.2E-04
Phase delay (usec)	2.85524757474E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-1.57497E-06	+/- 1.4E-07
Delay rate (us/s)	2.52191076922E-01		Apriori rate (us/s)		2.52191090924E-01		Resid rate (us/s)		-1.40018E-08	+/- 5.0E-10
Total phase (deg)			Apriori accel (us/s/s)		-1.63718490182E-06		Resid phase (deg)		-48.8	+/- 4.3

ph/seg (deg) 39.9 10.3 Amplitude 0.445 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.8 18.0 Search (2048X32) 0.427 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.3 6.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 16.2 10.6 Inc. seg. avg. 0.570 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 b: az 275.1 el 58.2 pa 62.6 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1935.863 1103.952 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp.W.21.1IM5UO simultaneous interpolator

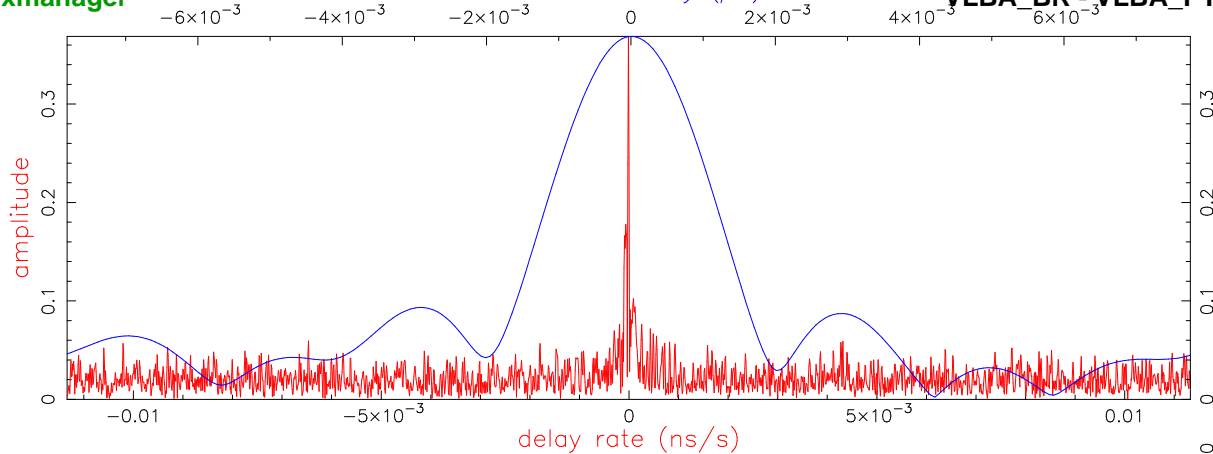
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, bp

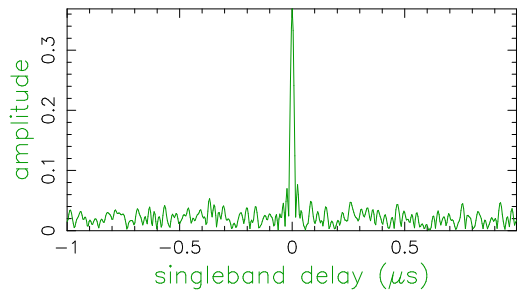
VLBA_BR - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

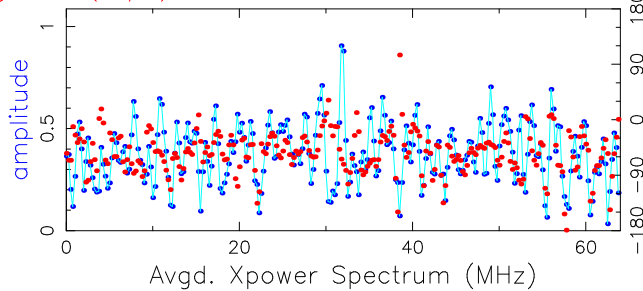


Fringe quality 9

SNR 22.1
 Int time 479.982
 Amp 0.369
 Phase -52.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.000127
 MBD 0.000004
 Fringe rate (Hz)
 -0.001261
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

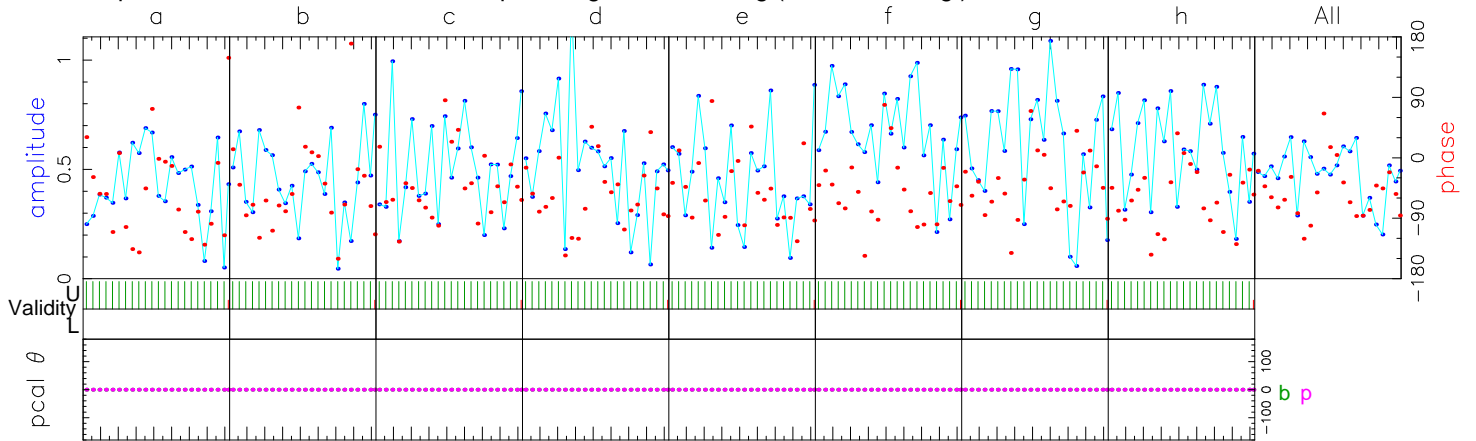


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133034
 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
	-59.3	-52.4	-44.7	-58.6	-47.4	-53.3	-43.4	-59.1	Phase	-52.1
	0.2	0.3	0.4	0.4	0.3	0.5	0.4	0.5	Ampl.	0.4
	256.1	256.6	257.7	256.7	257.0	257.0	256.7	257.2	Sbd box	257.0
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.85524758035E+03		Apriori delay (usec)		2.85524757632E+03		Resid mbdelay (usec)		4.03324E-06	+/- 4.9E-05
Sband delay (usec)	2.85524744882E+03		Apriori clock (usec)		-1.7950163E+00		Resid sbdelay (usec)		-1.27500E-04	+/- 3.9E-04
Phase delay (usec)	2.85524757464E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-1.67879E-06	+/- 1.7E-07
Delay rate (us/s)	2.52191076282E-01		Apriori rate (us/s)		2.52191090924E-01		Resid rate (us/s)		-1.46416E-08	+/- 6.0E-10
Total phase (deg)	28.6		Apriori accel (us/s/s)		-1.63718490182E-06		Resid phase (deg)		-52.1	+/- 5.2

	RMS	Theor.	Amplitude	0.369 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	40.7	12.4	Search (2048X32)	0.354	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	44.5	21.7	Interp.	0.000	Sample rate(MSamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	7.0	7.3	Inc. seg. avg.	0.466	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	22.4	12.8	Inc. frq. avg.	0.368				

b: az 275.1 el 58.2 pa 62.6 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1935.863 1103.952 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp.W.3.1IM5UO

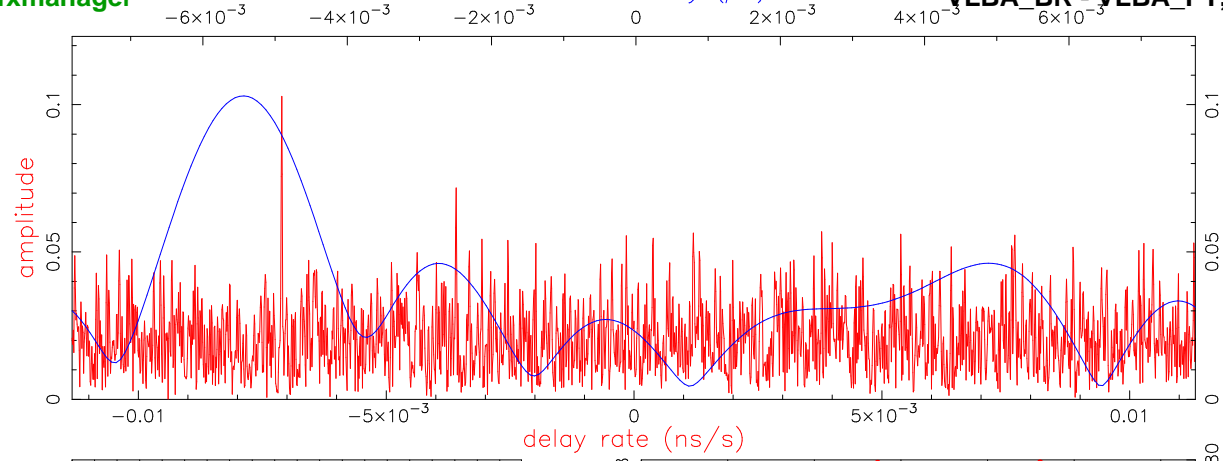
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, bp

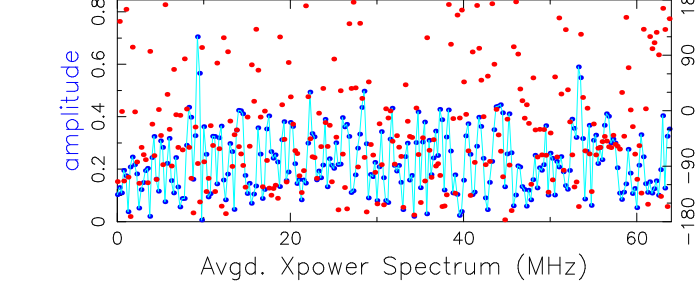
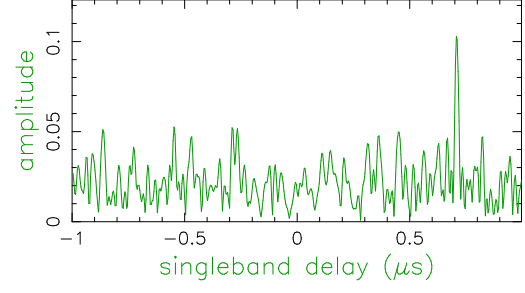
VLBA_BR - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



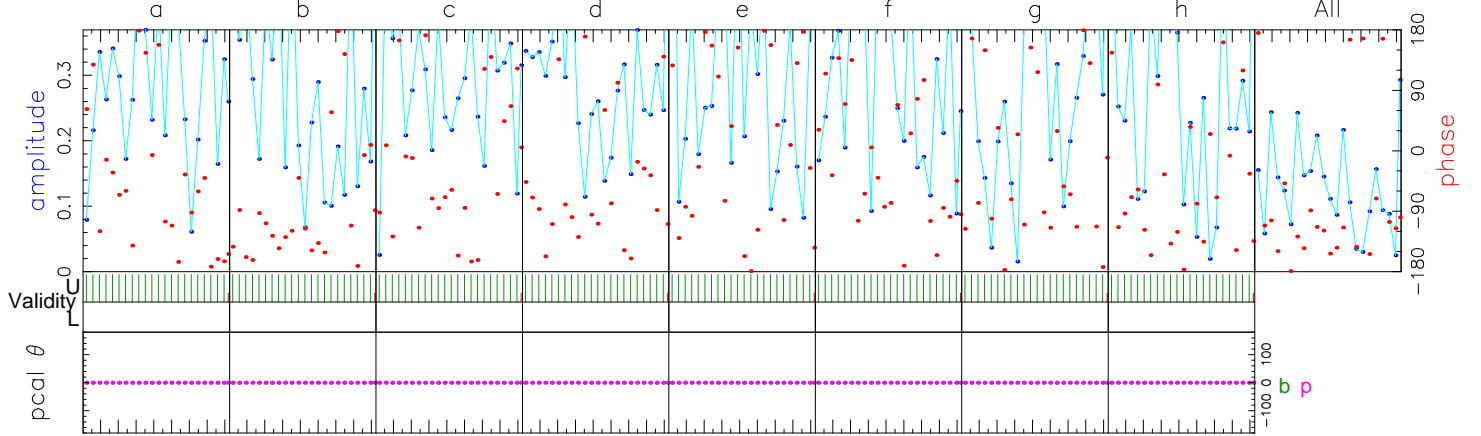
Fringe quality 0

SNR 6.2
 Int time 479.982
 Amp 0.123
 Phase -126.3
 PFD 1.1e-01
 Delays (us)
 SBD 0.708548
 MBD -0.005378
 Fringe rate (Hz)
 -0.613231
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133042
 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
	-129.0	-125.4	-113.5	-101.1	-178.8	-71.8	-144.3	-131.1	Phase	-126.3
	0.1	0.2	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	474.7	438.2	55.3	439.4	459.7	122.2	384.0	22.1	Sbd box	438.4
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.85596094829E+03	Apriori delay (usec)	2.85524757632E+03	Resid mbdelay (usec)	-5.37803E-03	+/-	1.7E-04
Sband delay (usec)	2.85595612407E+03	Apriori clock (usec)	-1.7950163E+00	Resid sbdelay (usec)	7.08548E-01	+/-	1.4E-03
Phase delay (usec)	2.85524757225E+03	Apriori clockrate (us/s)	-3.9999997E-07	Resid phdelay (usec)	-4.07183E-06	+/-	5.9E-07
Delay rate (us/s)	2.52183971925E-01	Apriori rate (us/s)	2.52191090924E-01	Resid rate (us/s)	-7.11900E-06	+/-	2.1E-09
Total phase (deg)	-45.6	Apriori accel (us/s/s)	-1.63718490182E-06	Resid phase (deg)	-126.3	+/-	18.4

ph/seg (deg)	RMS 39.7	Theor. 44.0	Amplitude 0.123 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.6	76.9	Search (2048X32) 0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	33.9	26.0	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.6	45.3	Inc. seg. avg. 0.116	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.122	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

b: az 275.1 el 58.2 pa 62.6 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1935.863 1103.952 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp.W.39.1M5UO

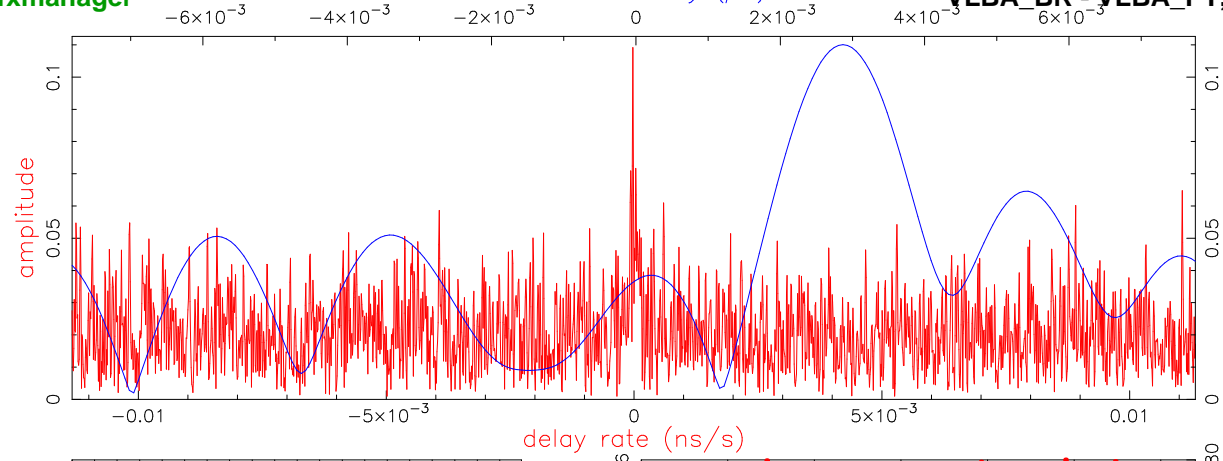
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

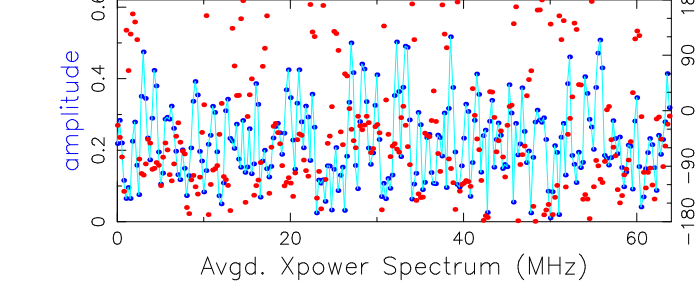
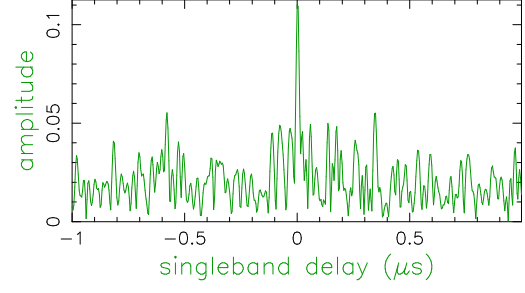
3C84.1IM5UO, No0113, bp

VLBA_BR - VLBA_PT, fgroup W, pol RL

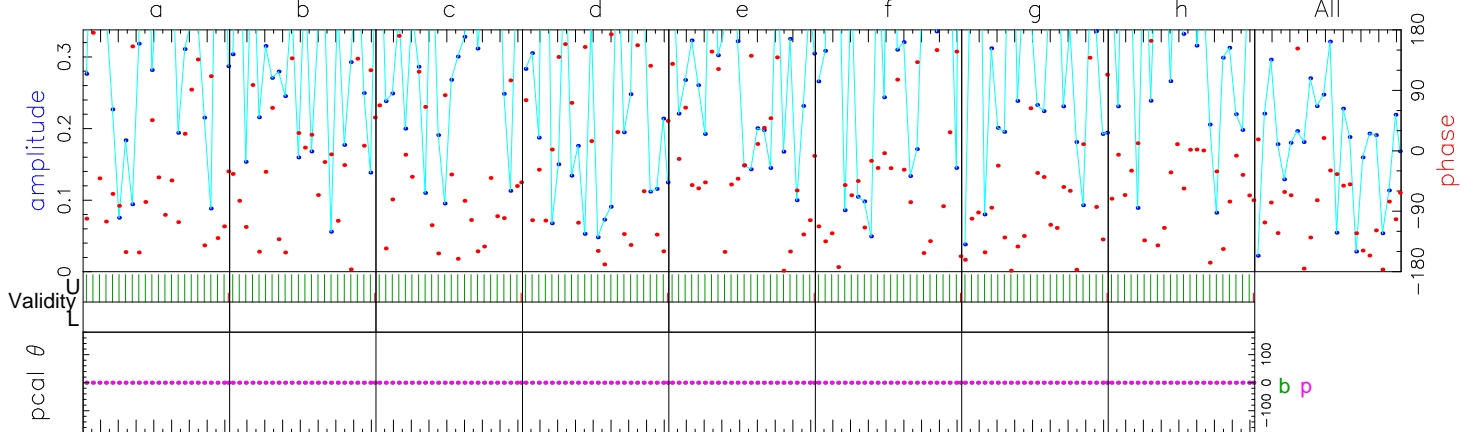
multiband delay (μ s)



Fringe quality 0
 SNR 6.7
 Int time 479.982
 Amp 0.113
 Phase -90.9
 PFD 4.4e-03
 Delays (us)
 SBD 0.001814
 MBD 0.002748
 Fringe rate (Hz) -0.001451
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133046
 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		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 2.85525032404E+03 Apriori delay (usec) 2.85524757632E+03 Resid mbdelay (usec) 2.74772E-03 +/- 1.6E-04
 Sband delay (usec) 2.85524939082E+03 Apriori clock (usec) -1.7950163E+00 Resid sbdelay (usec) 1.81450E-03 +/- 1.3E-03
 Phase delay (usec) 2.85524757339E+03 Apriori clockrate (us/s) -3.9999997E-07 Resid phdelay (usec) -2.93043E-06 +/- 5.5E-07
 Delay rate (us/s) 2.52191074075E-01 Apriori rate (us/s) 2.52191090924E-01 Resid rate (us/s) -1.68488E-08 +/- 2.0E-09
 Total phase (deg) -10.2 Apriori accel (us/s/s) -1.63718490182E-06 Resid phase (deg) -90.9 +/- 17.0

RMS Theor. Amplitude 0.113 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.6 40.7 Search (2048X32) 0.100 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 91.1 71.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 33.3 24.0 Inc. seg. avg. 0.142 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 56.2 41.9 Inc. frq. avg. 0.110 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

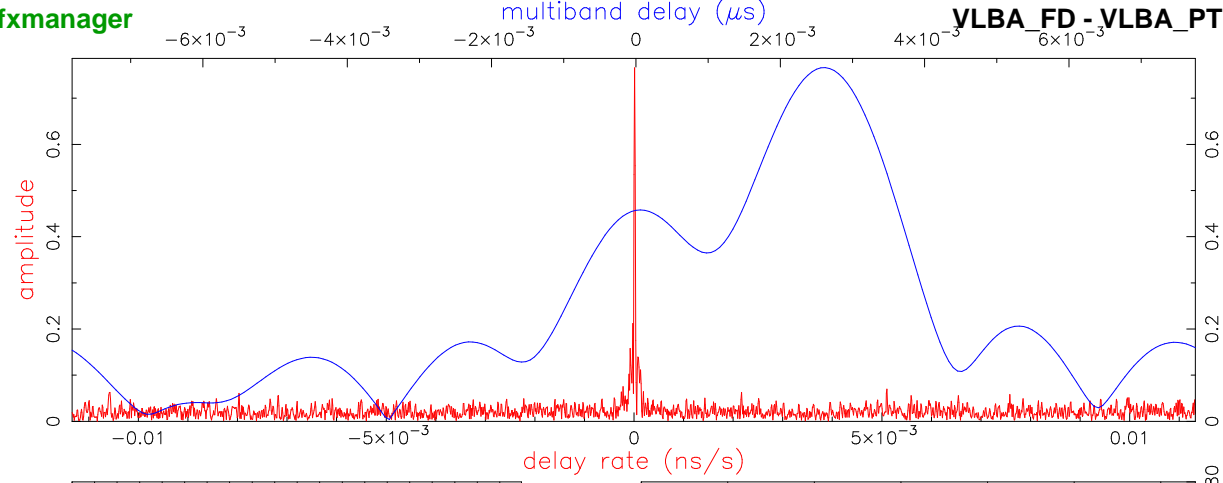
b: az 275.1 el 58.2 pa 62.6 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1935.863 1103.952 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/bp.W.59.1IM5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M5UO, No0113, fp

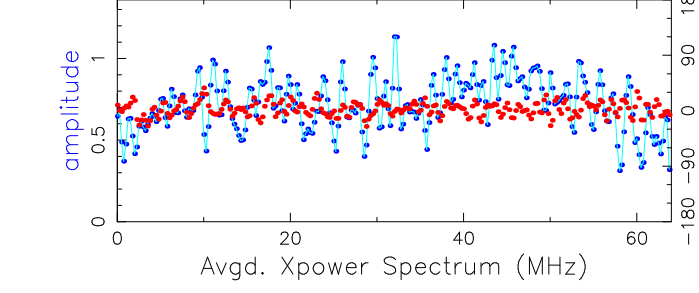
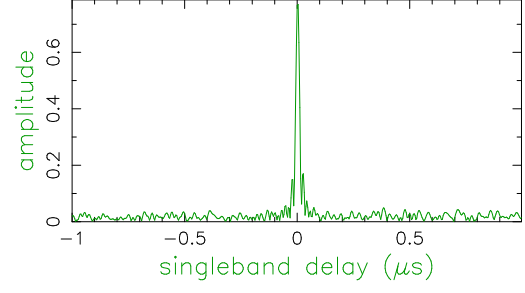
VLBA_FD - VLBA_PT, fgroup W, pol LL



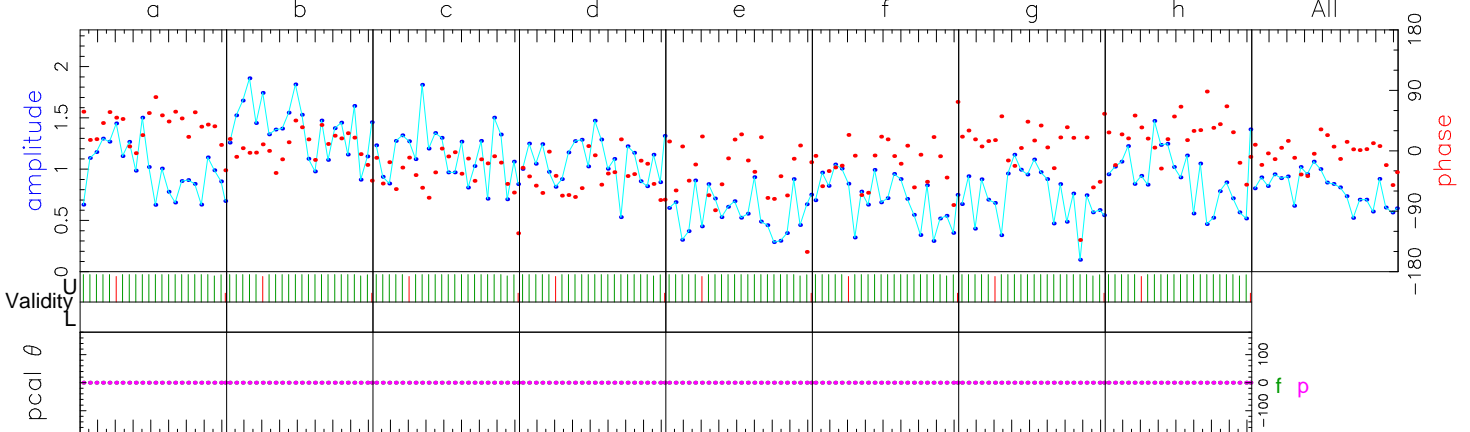
Fringe quality 6

SNR 47.0
 Int time 477.125
 Amp 0.786
 Phase -3.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.002068
 MBD 0.002649
 Fringe rate (Hz) 0.000523
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133037
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

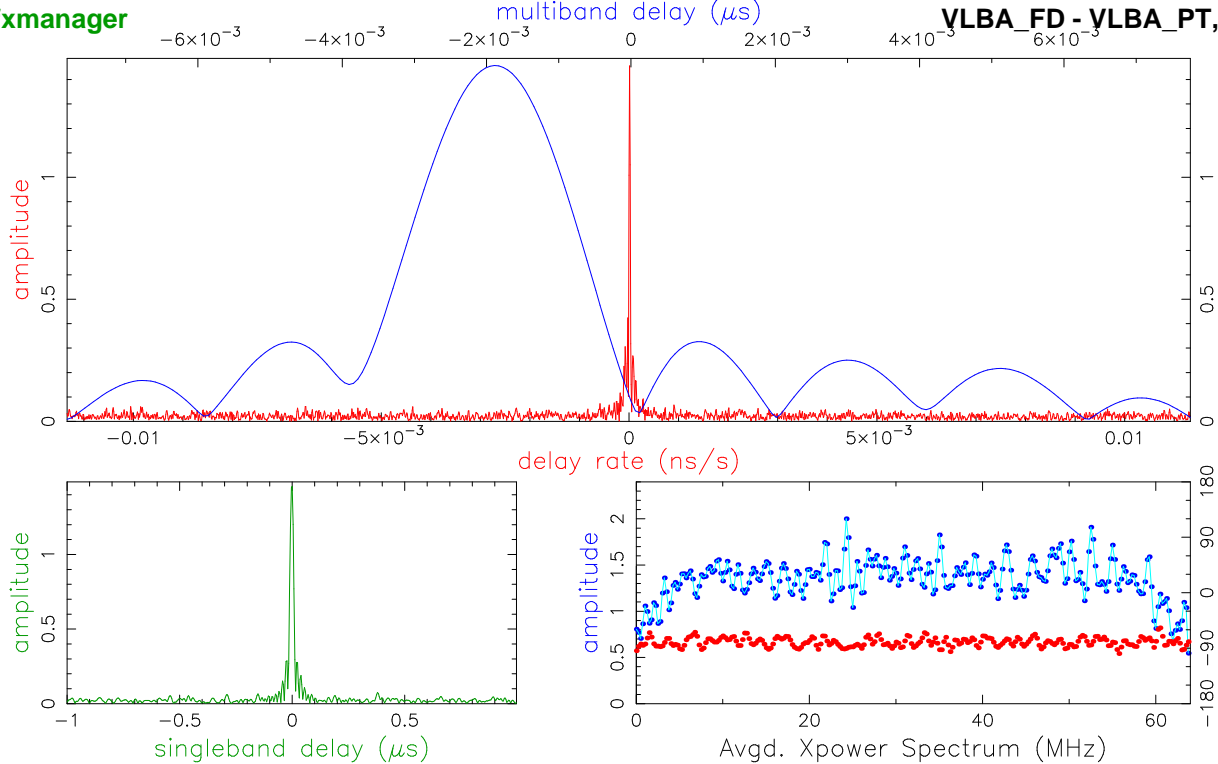


Amp. and Phase vs. time for each freq., 23 segs, 42 APs / seg (21.50 sec / seg.), time ticks 30 sec



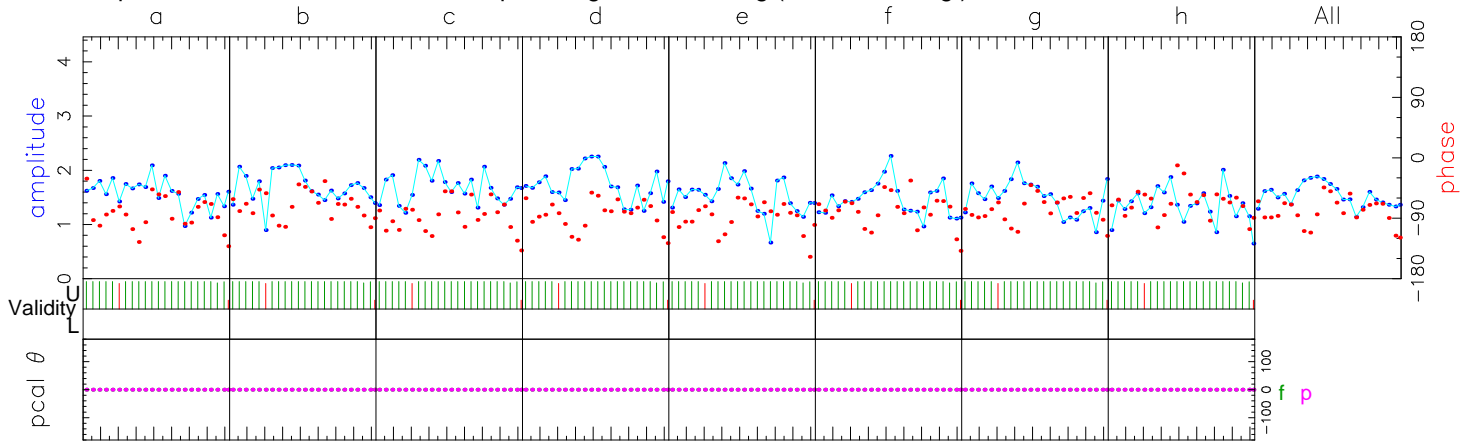
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	36.6	8.3	-29.3	-39.1	-28.3	-19.8	10.3	22.2	Phase	-3.6
	0.9	1.3	1.1	1.0	0.4	0.6	0.7	0.8	Ampl.	0.9
	257.3	257.1	257.4	257.4	258.1	258.2	257.4	257.9	Sbd box	257.5
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.31654654218E+03		Apriori delay (usec)		-1.31654919102E+03		Resid mbdelay (usec)		2.64884E-03	+/- 2.3E-05
Sband delay (usec)	-1.31654712352E+03		Apriori clock (usec)		7.7890000E+00		Resid sbdelay (usec)		2.06750E-03	+/- 1.8E-04
Phase delay (usec)	-1.31654919113E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.15849E-07	+/- 7.9E-08
Delay rate (us/s)	-7.04835552393E-02		Apriori rate (us/s)		-7.04835613124E-02		Resid rate (us/s)		6.07305E-09	+/- 2.8E-10
Total phase (deg)			Apriori accel (us/s/s)		2.99879763326E-06		Resid phase (deg)		-3.6	+/- 2.4

ph/seg (deg) 19.9 5.8 Search (2048X32) 0.708 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.9 10.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 30.0 3.5 Inc. seg. avg. 0.809 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.2 6.0 Inc. frq. avg. 0.852 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 300.5 el 41.0 pa 81.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 545.389 -154.010 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp.W.19.11M5UO



Fringe quality 8
SNR 88.8
Int time 477.125
Amp 1.487
Phase -79.1
PFD 0.0e+00
Delays (us)
SBD -0.001836
MBD -0.001929
Fringe rate (Hz) 0.000538
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133040
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	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	PC phase	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	Mani PC	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	PC amp	
f	1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	Chan ids	
p	1000	1000	1000	1000	1000	1000	1000	1000	Tracks	Tracks	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-1.31655112027E+03	-1.31655102727E+03	-1.31654919357E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	Resid mbdelay (usec)	-1.92925E-03	+/- 1.2E-05
Sband delay (usec)	-1.31655102727E+03	-1.31655102727E+03	-1.31654919357E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	-1.31654919102E+03	Resid sbdelay (usec)	-1.83625E-03	+/- 9.7E-05
Phase delay (usec)	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	-1.31654919357E+03	Resid phdelay (usec)	-2.55034E-06	+/- 4.2E-08
Delay rate (us/s)	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	-7.04835550629E-02	Resid rate (us/s)	6.24948E-09	+/- 1.5E-10
Total phase (deg)			-192.2						Resid phase (deg)	-79.1	+/- 1.3

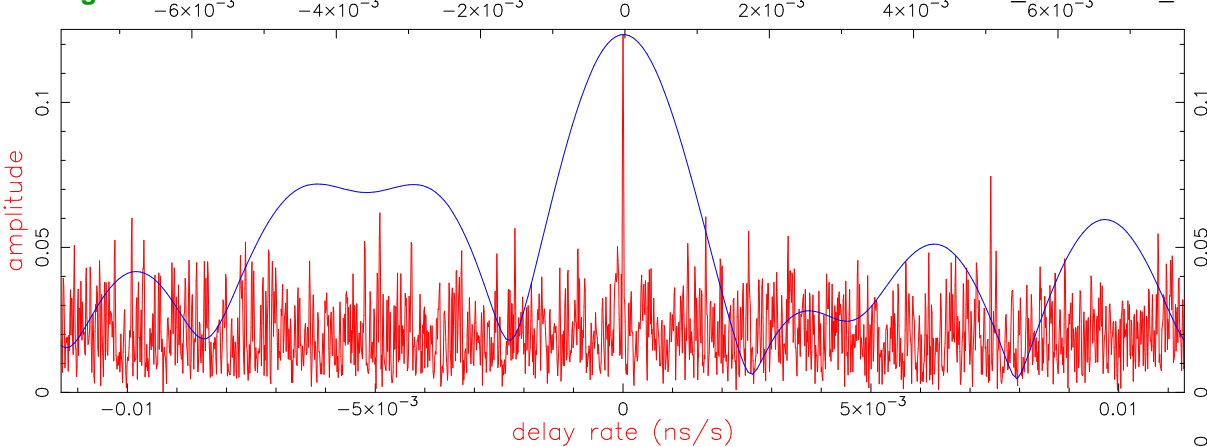
ph/seg (deg) 18.9 3.1 Search (2048X32) 1.369 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 13.9 5.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 8.2 1.8 Inc. seg. avg. 1.540 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 7.9 3.2 Inc. frq. avg. 1.467 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
f: az 300.5 el 41.0 pa 81.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 545.389 -154.010 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp.W.36.1IM5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

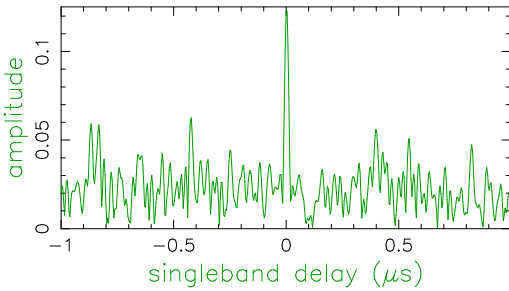
3C84.1IM5UO, No0113, fp
VLBA_FD - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

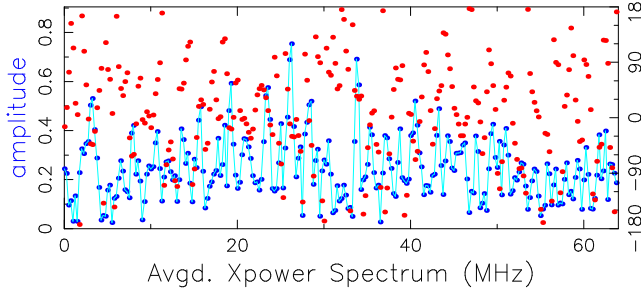


Fringe quality 9

SNR 7.5
Int time 477.125
Amp 0.125
Phase 30.9
PFD 2.4e-05
Delays (us)
SBD 0.001715
MBD -0.000005
Fringe rate (Hz)
0.000359
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

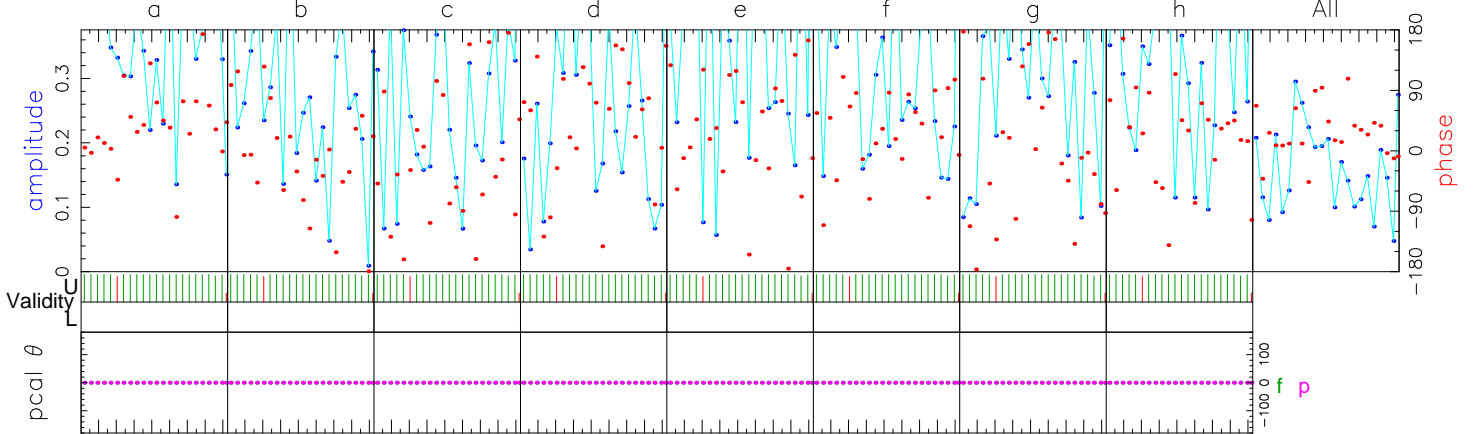


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133044
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	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.31654919561E+03	Apriori delay (usec)	-1.31654919102E+03	Resid mbdelay (usec)	-4.59375E-06	+/-	1.5E-04
Sband delay (usec)	-1.31654747602E+03	Apriori clock (usec)	7.7890000E+00	Resid sbdelay (usec)	1.71500E-03	+/-	1.2E-03
Phase delay (usec)	-1.31654919002E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	9.96834E-07	+/-	4.9E-07
Delay rate (us/s)	-7.04835571439E-02	Apriori rate (us/s)	-7.04835613124E-02	Resid rate (us/s)	4.16844E-09	+/-	1.8E-09
Total phase (deg)	-82.2	Apriori accel (us/s/s)	2.99879763326E-06	Resid phase (deg)	30.9	+/-	15.3

ph/seg (deg)	38.5	Theor.	36.7	Amplitude	0.125 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	57.8		64.0	Search (2048X32)	0.119	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	65.4		21.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	60.3		37.8	Inc. seg. avg.	0.131	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.132	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 300.5 el 41.0 pa 81.9 p: az 296.8 el 45.9 pa 79.8 u, v (fr/asec) 545.389 -154.010 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp.W.53.1IM5UO

Mk4/DiFX fourfit 3.21 rev 2937

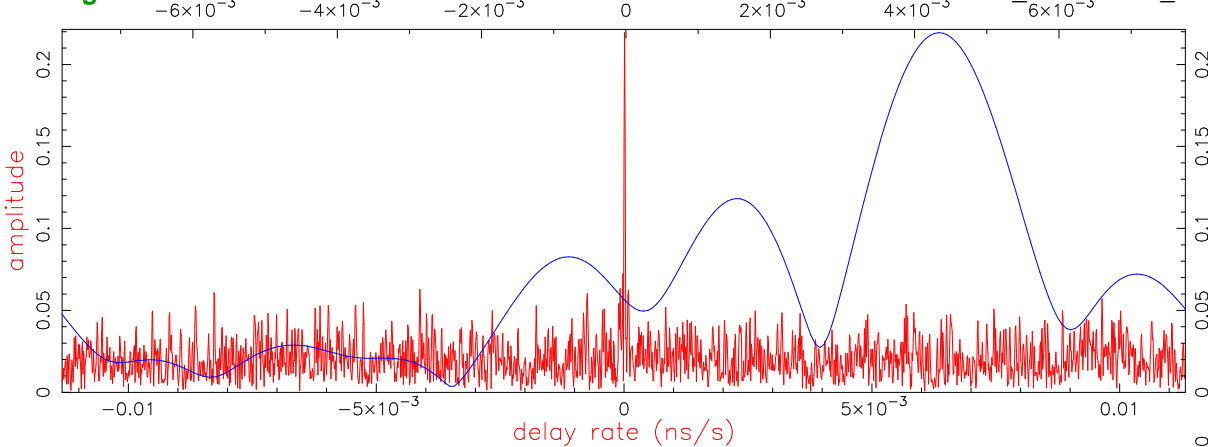
fxmanager

3C84.11M5UO, No0113, fp

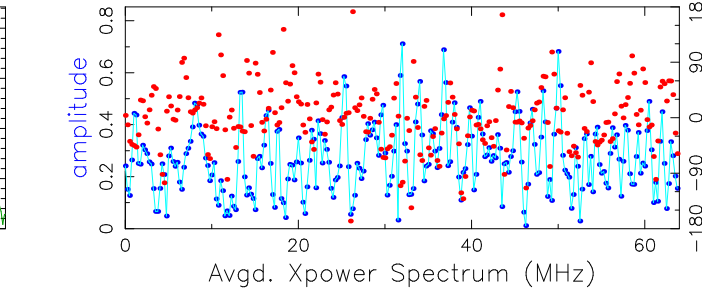
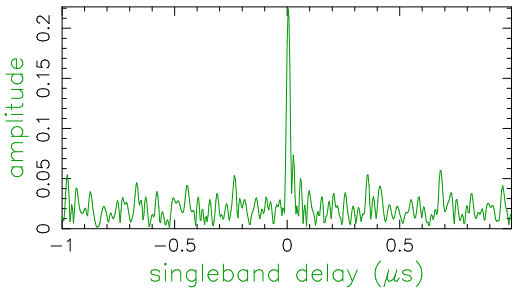
VLBA_FD - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

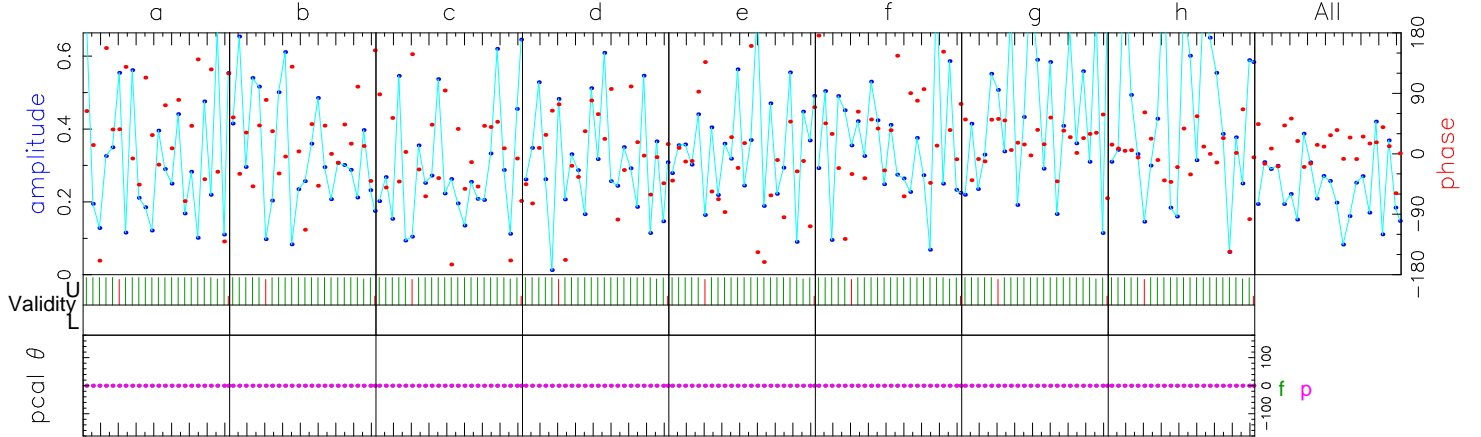


SNR 13.2
Int time 477.125
Amp 0.221
Phase 8.9
PFD 3.5e-31
Delays (us)
SBD 0.005123
MBD 0.004360
Fringe rate (Hz) 0.000753
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133048
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	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		258.3
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.31654483143E+03								4.35959E-03	+/- 8.2E-05
Sband delay (usec)	-1.31654406852E+03								5.12250E-03	+/- 6.5E-04
Phase delay (usec)	-1.31654919073E+03								2.88102E-07	+/- 2.8E-07
Delay rate (us/s)	-7.04835525680E-02								8.74431E-09	+/- 1.0E-09
Total phase (deg)			-104.2						8.9	+/- 8.7
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
RMS	25.7	20.7								
Theor.	20.7									
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
SampCntNorm: enabled										
Sample rate(MSamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

f: az 300.5 el 41.0 pa 81.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 545.389 -154.010 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/fp.W.72.11M5UO

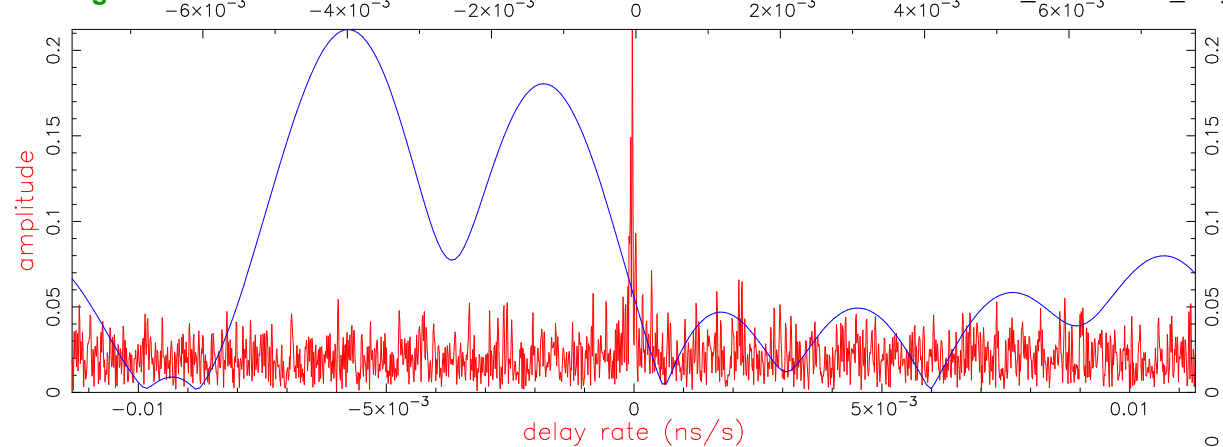
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, kp

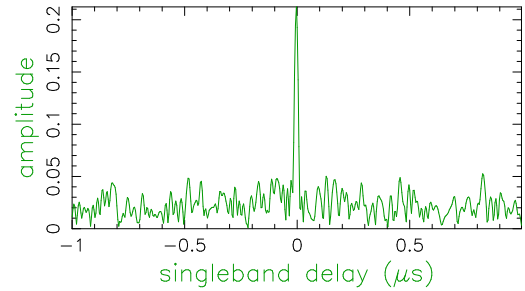
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

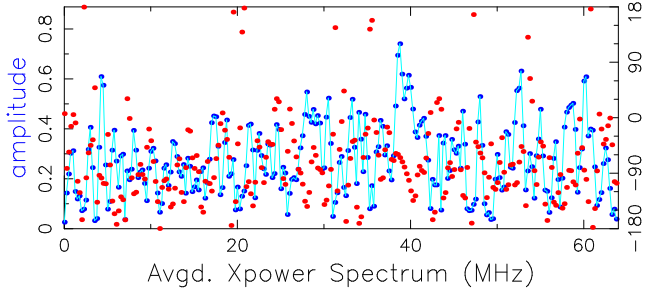


Fringe quality 9

SNR 12.6
 Int time 474.017
 Amp 0.212
 Phase -85.1
 PFD 6.9e-28
 Delays (us)
 SBD -0.004028
 MBD -0.003990
 Fringe rate (Hz)
 -0.002499
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

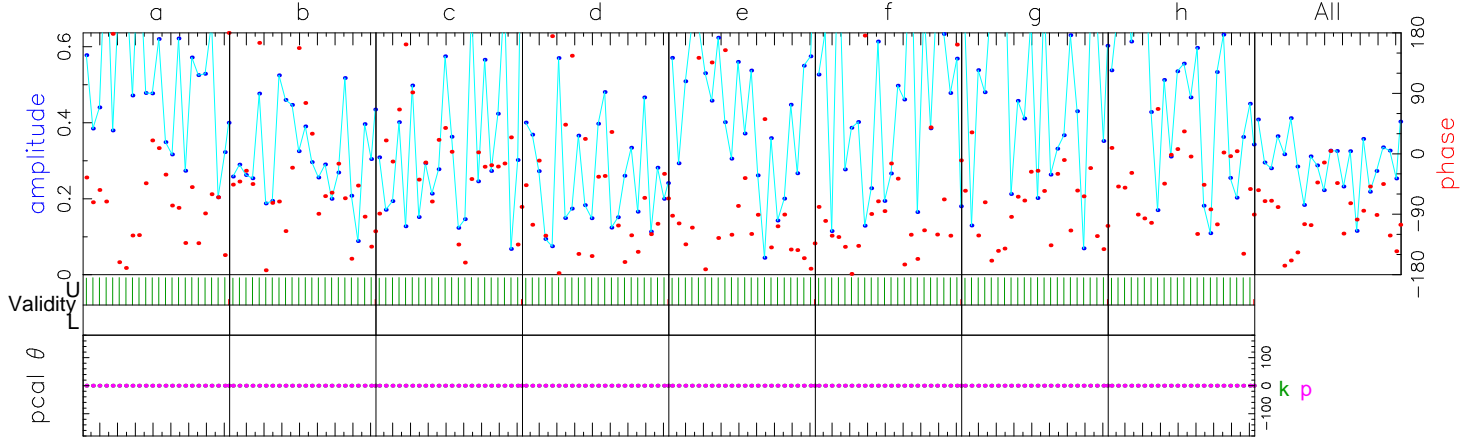


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130003.56
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133100
 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
	-87.3	-73.3	-10.4	-91.6	-135.8	-111.8	-87.5	-47.0	Phase	-85.1
	0.3	0.2	0.2	0.1	0.3	0.3	0.3	0.3	Ampl.	0.3
	255.6	256.9	255.8	307.1	257.0	256.1	255.7	256.7	Sbd box	256.0
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.87727783648E+02		Apriori delay (usec)		3.87731773338E+02		Resid mbdelay (usec)		-3.98969E-03	+/- 8.6E-05
Sband delay (usec)	3.87727745088E+02		Apriori clock (usec)		2.5348759E-01		Resid sbdelay (usec)		-4.02825E-03	+/- 6.8E-04
Phase delay (usec)	3.87731770593E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-2.74525E-06	+/- 2.9E-07
Delay rate (us/s)	1.24166003764E-02		Apriori rate (us/s)		1.24166293912E-02		Resid rate (us/s)		-2.90147E-08	+/- 1.1E-09
Total phase (deg)	258.8		Apriori accel (us/s/s)		-4.62786150259E-06		Resid phase (deg)		-85.1	+/- 9.1

ph/seg (deg) 44.6 21.7 Search (2048X32) 0.198 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.6 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.8 12.8 Inc. seg. avg. 0.275 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 43.3 22.4 Inc. frq. avg. 0.251 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 298.5 el 47.4 pa 84.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -102.407 -548.784 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp.W.116.1IM5UO

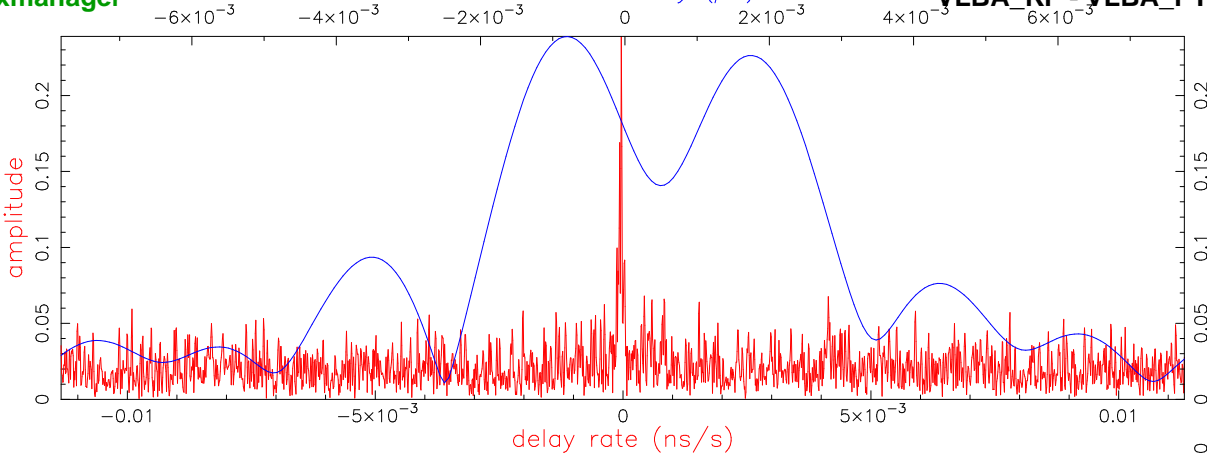
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, kp

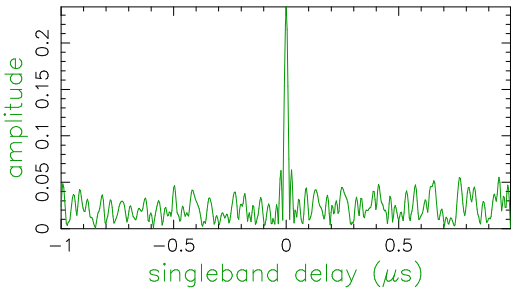
VLBA_KP - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

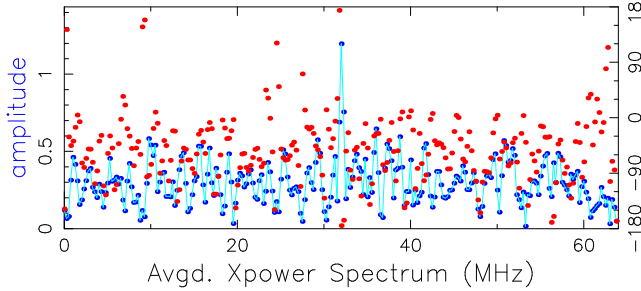


Fringe quality 7

SNR 14.2
Int time 474.017
Amp 0.239
Phase -47.6
PFD 3.9e-37
Delays (us)
SBD -0.000190
MBD -0.000808
Fringe rate (Hz) -0.002609
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 130003.56
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133103
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

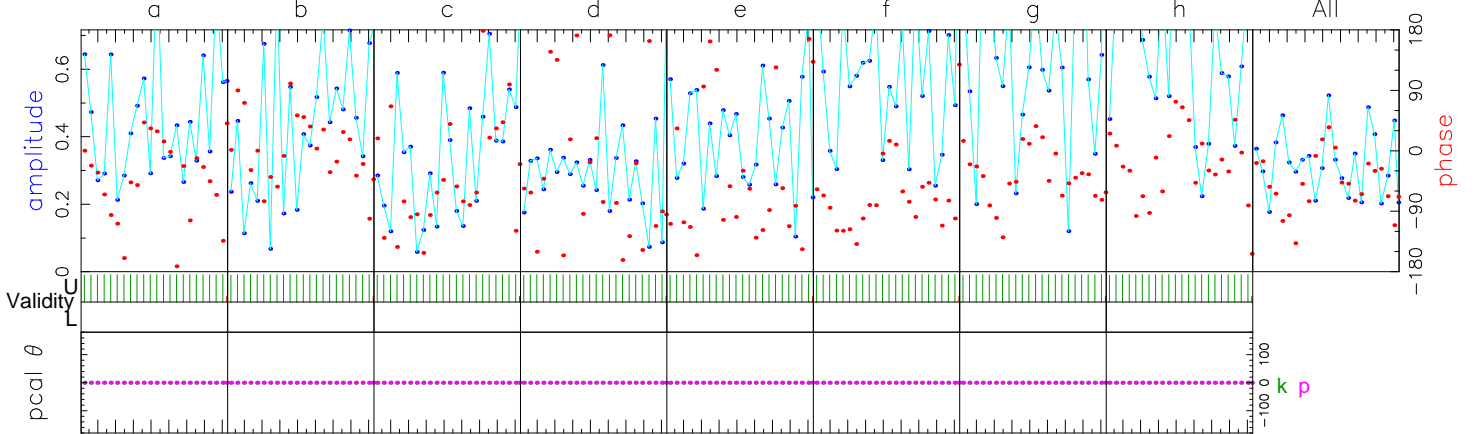


Table with 9 columns of frequency data (86012.00 to 86460.00) and 2 columns of summary statistics (Fringe quality, SNR, etc.). It lists various parameters like U/L, k, p, k:p, kp, k, p, k, p for each frequency and overall statistics for the entire observation.

Group delay (usec)(sbd) 3.87730964929E+02 Apriori delay (usec) 3.87731773338E+02 Resid mbdelay (usec) -8.08409E-04 +/- 7.6E-05
Sband delay (usec) 3.87731582838E+02 Apriori clock (usec) 2.5348759E-01 Resid sbdelay (usec) -1.90500E-04 +/- 6.1E-04
Phase delay (usec) 3.87731771804E+02 Apriori clockrate (us/s) -2.9999999E-07 Resid phdelay (usec) -1.53405E-06 +/- 2.6E-07
Delay rate (us/s) 1.24165991074E-02 Apriori rate (us/s) 1.24166293912E-02 Resid rate (us/s) -3.02838E-08 +/- 9.4E-10
Total phase (deg) 296.4 Apriori accel (us/s/s) -4.62786150259E-06 Resid phase (deg) -47.6 +/- 8.1

ph/seg (deg) 41.9 19.3 Search (2048X32) 0.229 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 54.2 33.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 46.5 11.4 Inc. seg. avg. 0.310 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 61.2 19.9 Inc. frq. avg. 0.289 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 298.5 el 47.4 pa 84.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -102.407 -548.784 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp.W.132.1M5UO

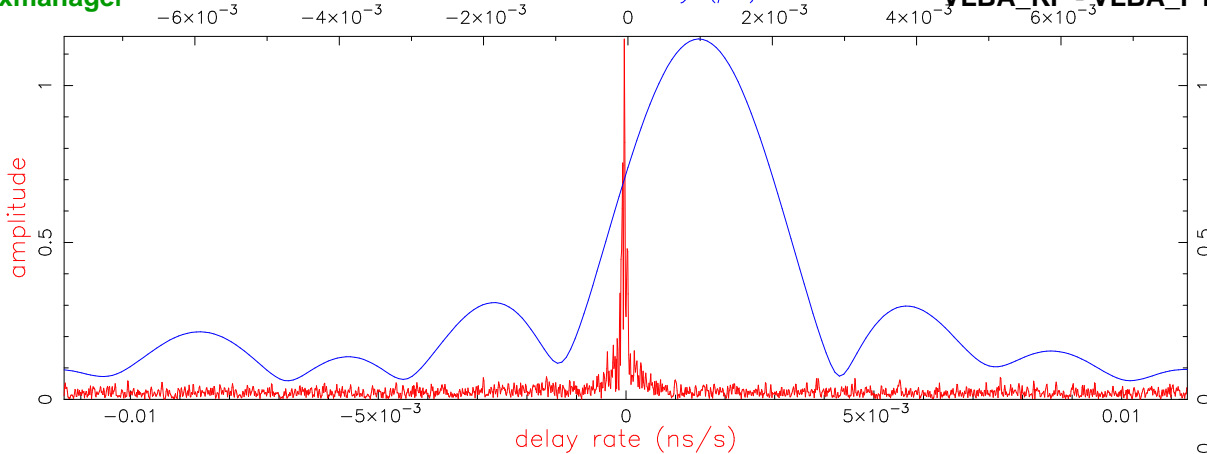
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, kp

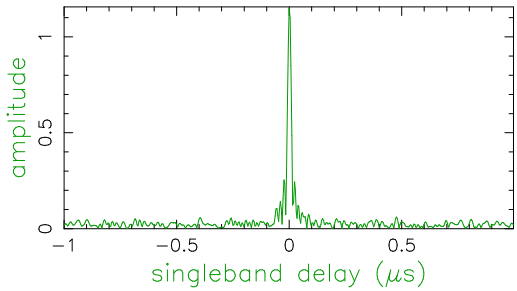
VLBA_KP - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

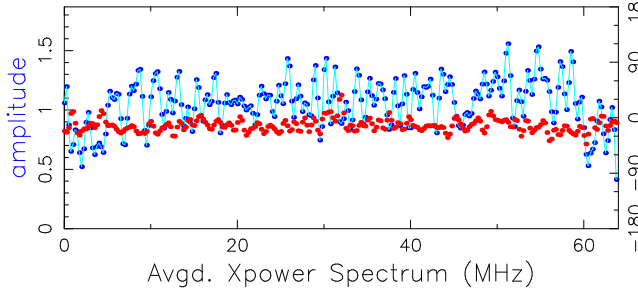


Fringe quality 6

SNR 68.9
Int time 474.017
Amp 1.157
Phase -12.1
PFD 0.0e+00
Delays (us)
SBD 0.001066
MBD 0.001009
Fringe rate (Hz)
-0.002570
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

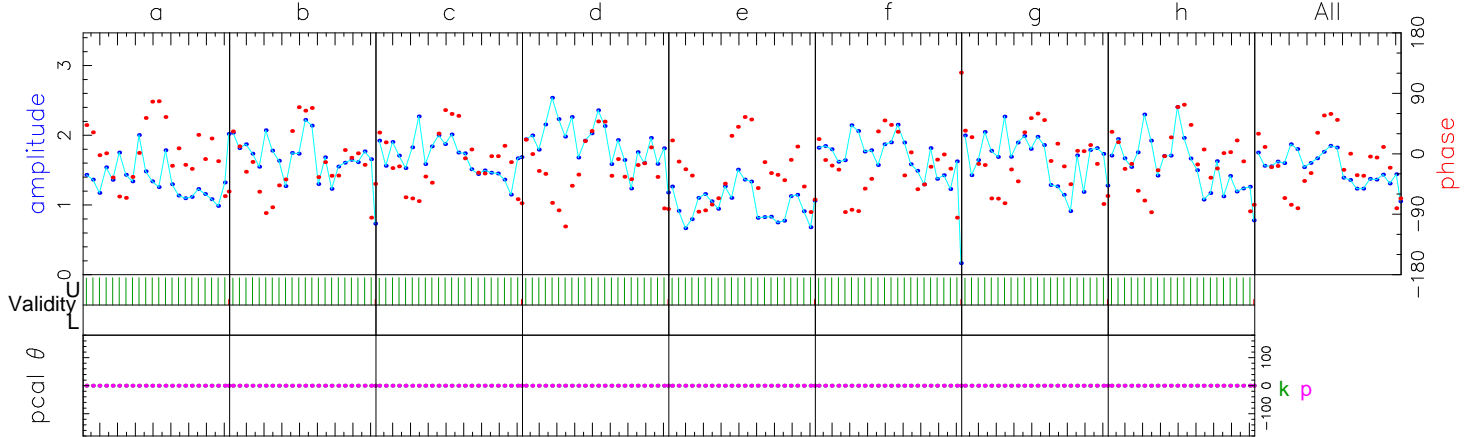


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130003.56
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133053
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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	3.87732782554E+02	Apriori delay (usec)		3.87731773338E+02	Resid mbdelay (usec)		1.00922E-03	+/-	1.6E-05	
Sband delay (usec)	3.87732839088E+02	Apriori clock (usec)		2.5348759E-01	Resid sbdelay (usec)		1.06575E-03	+/-	1.3E-04	
Phase delay (usec)	3.87731772949E+02	Apriori clockrate (us/s)		-2.9999999E-07	Resid phdelay (usec)		-3.89507E-07	+/-	5.4E-08	
Delay rate (us/s)	1.2416599552E-02	Apriori rate (us/s)		1.24166293912E-02	Resid rate (us/s)		-2.98359E-08	+/-	1.9E-10	
Total phase (deg)		331.9	Apriori accel (us/s/s)		-4.62786150259E-06	Resid phase (deg)		-12.1	+/-	1.7

ph/seg (deg)	41.3	4.0	Search (2048X32)	1.108	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
amp/seg (%)	38.1	7.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
ph/frq (deg)	9.1	2.4	Inc. seg. avg.	1.545	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	17.1	4.1	Inc. frq. avg.	1.158	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011		
					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 298.5 el 47.4 pa 84.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -102.407 -548.784 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp.W.79.1M5UO

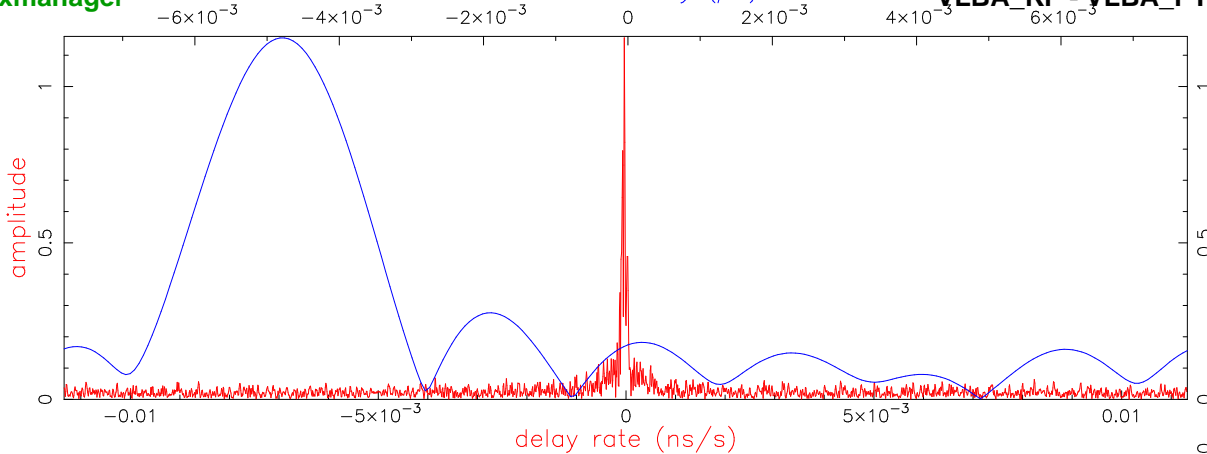
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, kp

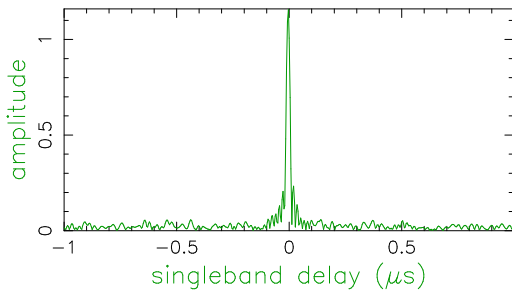
VLBA_KP - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

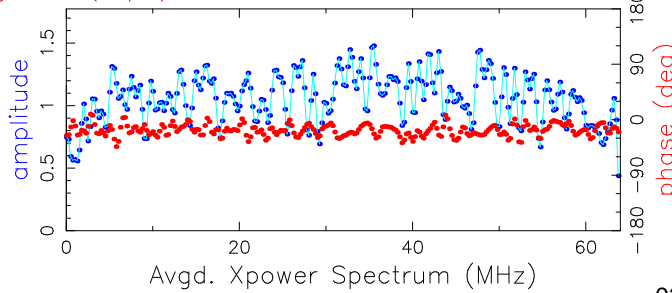


Fringe quality 6

SNR 69.1
 Int time 474.017
 Amp 1.160
 Phase -15.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.004694
 MBD -0.004808
 Fringe rate (Hz)
 -0.002566
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

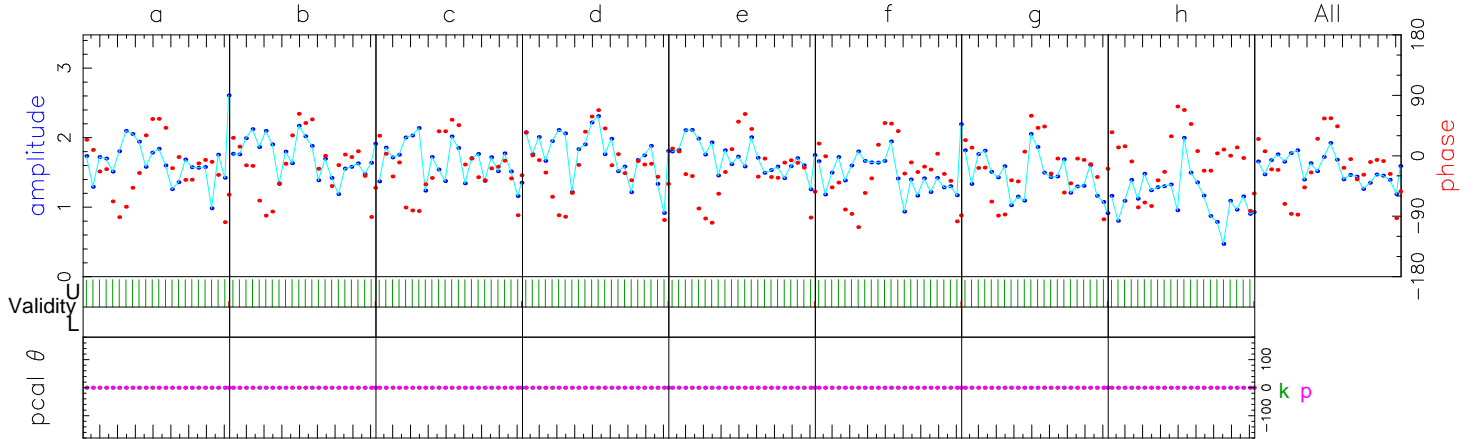


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130003.56
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133056
 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
	-18.9	-10.8	-18.9	-11.2	-21.0	-23.8	-16.6	-3.0	Phase	-15.9
	1.2	1.3	1.3	1.3	1.3	1.1	1.1	0.8	Ampl.	1.2
	255.8	255.8	255.7	255.9	255.4	256.1	255.7	256.3	Sbd box	255.8
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.87726965492E+02		Apriori delay (usec)		3.87731773338E+02		Resid mbdelay (usec)		-4.80785E-03	+/- 1.6E-05
Sband delay (usec)	3.87727079088E+02		Apriori clock (usec)		2.5348759E-01		Resid sbdelay (usec)		-4.69425E-03	+/- 1.2E-04
Phase delay (usec)	3.87731772825E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-5.13012E-07	+/- 5.3E-08
Delay rate (us/s)	1.24165996062E-02		Apriori rate (us/s)		1.24166293912E-02		Resid rate (us/s)		-2.97849E-08	+/- 1.9E-10
Total phase (deg)	328.0		Apriori accel (us/s/s)		-4.62786150259E-06		Resid phase (deg)		-15.9	+/- 1.7

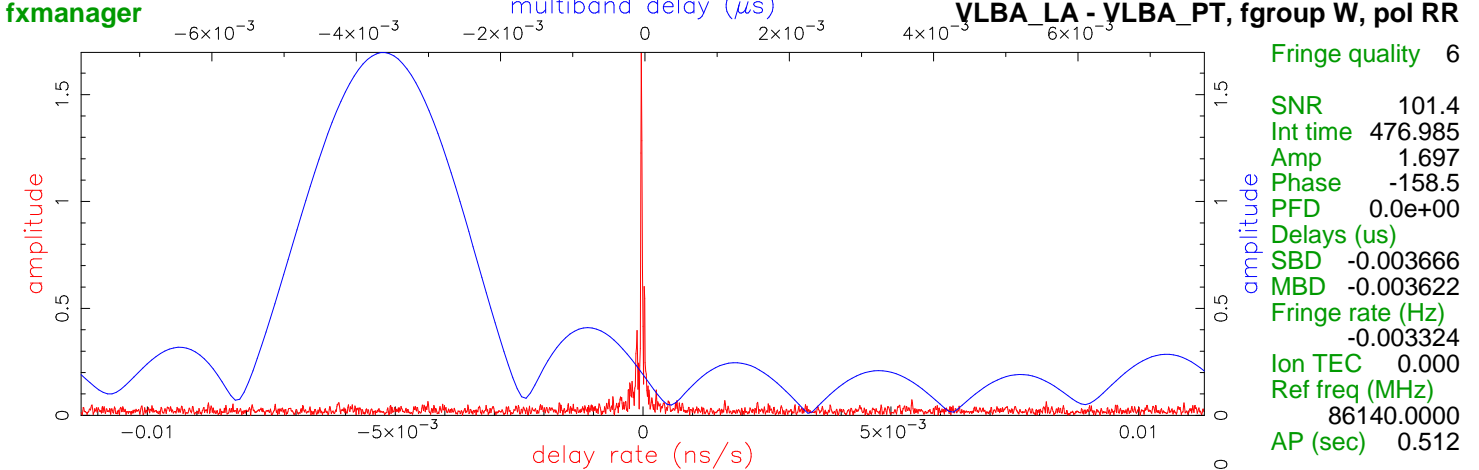
ph/seg (deg) 42.0 4.0 Search (2048X32) 1.109 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.4 6.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.3 2.3 Inc. seg. avg. 1.548 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 12.5 4.1 Inc. frq. avg. 1.161 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 298.5 el 47.4 pa 84.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -102.407 -548.784 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/kp.W.98.1M5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, lp

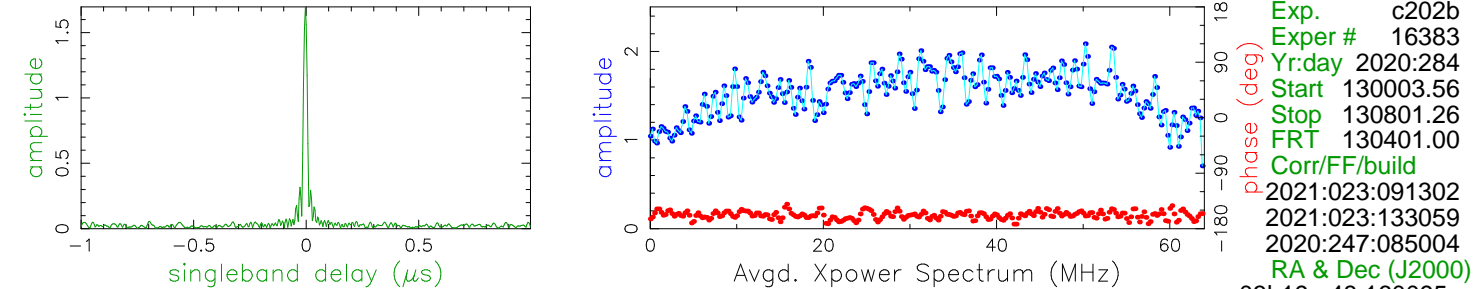
VLBA_LA - VLBA_PT, fgroup W, pol RR



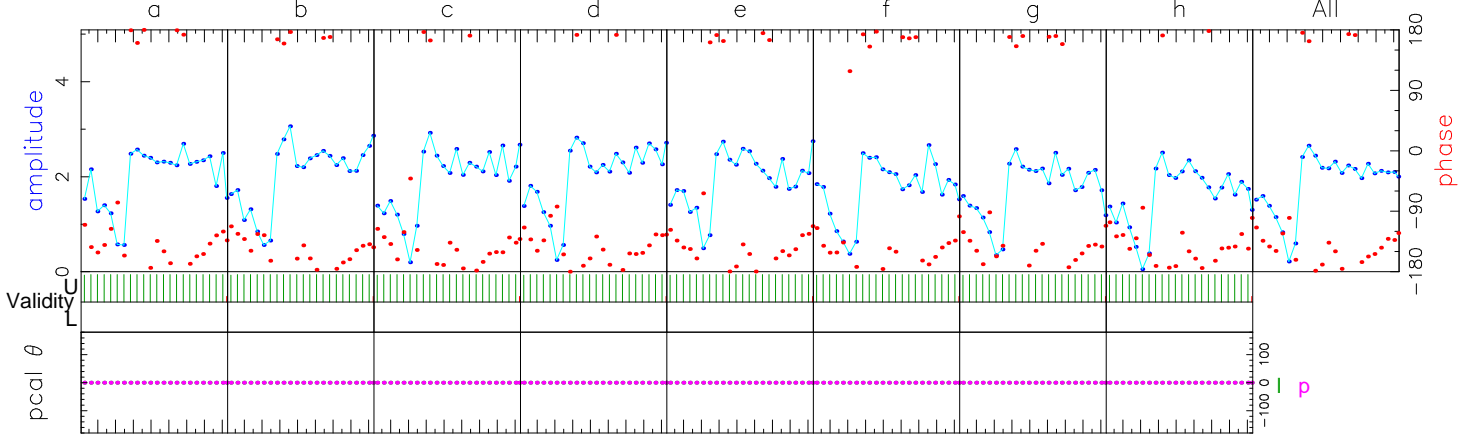
Fringe quality 6

SNR 101.4
 Int time 476.985
 Amp 1.697
 Phase -158.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.003666
 MBD -0.003622
 Fringe rate (Hz)
 -0.003324
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130003.56
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133059
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.90906067828E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02		
Sband delay (usec)	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02	-1.90906111606E+02		
Phase delay (usec)	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02	-1.90902450967E+02		
Delay rate (us/s)	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03	-1.87354131210E-03		
Total phase (deg)			-45.5							
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)										
simultaneous interpolator										

ph/seg (deg) 25.8 2.7
 amp/seg (%) 37.9 4.7
 ph/frq (deg) 5.2 1.6
 amp/frq (%) 7.7 2.8

l: az 295.8 el 45.2 pa 78.0
 p: az 296.8 el 45.9 pa 79.8
 u,v (fr/asec) 18.422 319.418

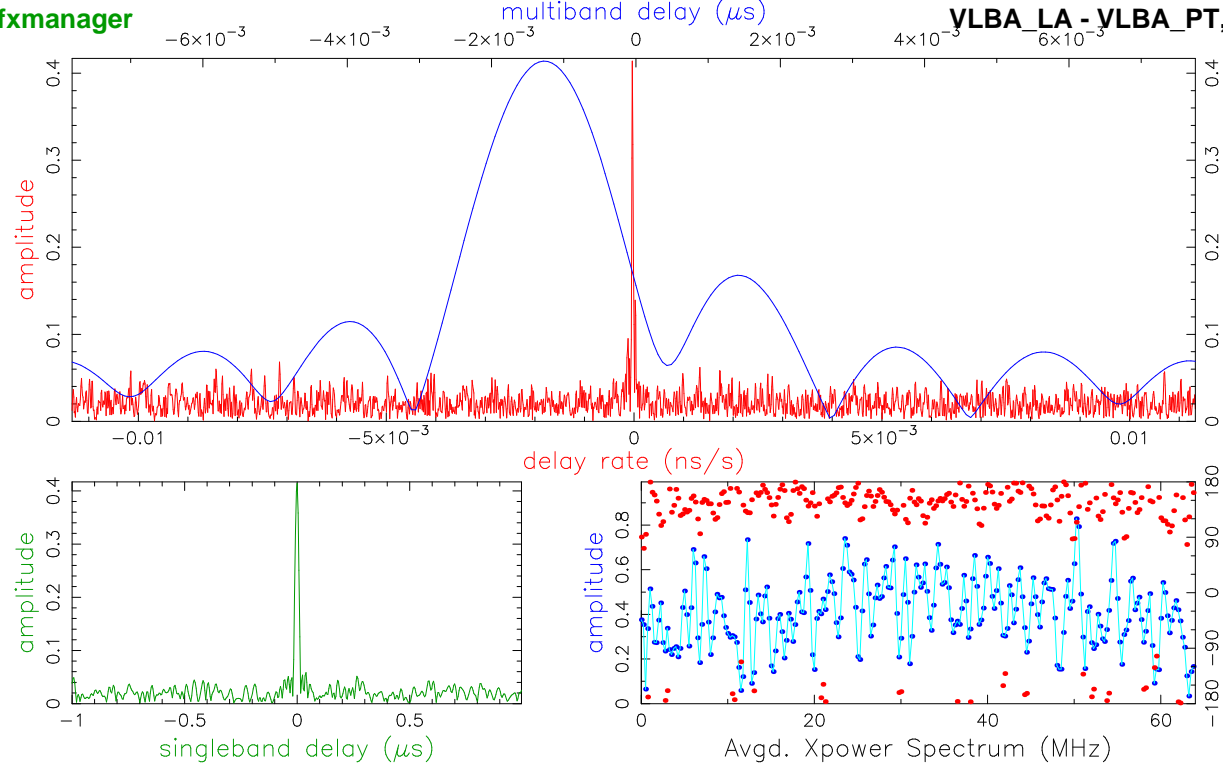
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp.W.109.1IM5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

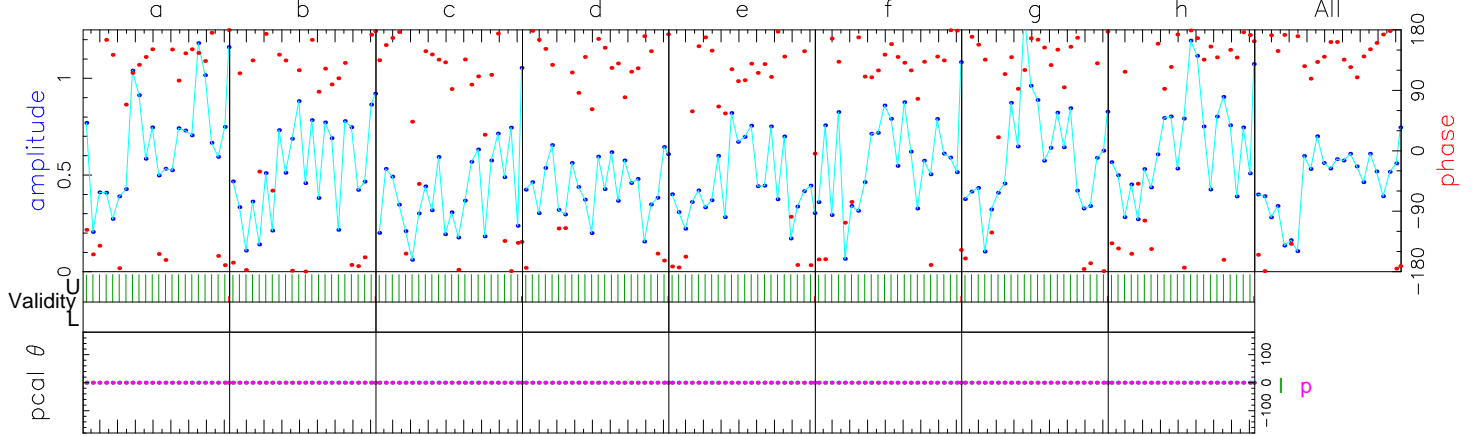
3C84.11M5UO, No0113, lp

VLBA_LA - VLBA_PT, fgroup W, pol LR



Fringe quality 7
 SNR 24.9
 Int time 476.985
 Amp 0.417
 Phase 151.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.001160
 MBD -0.001289
 Fringe rate (Hz) -0.003234
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130003.56
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133103
 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

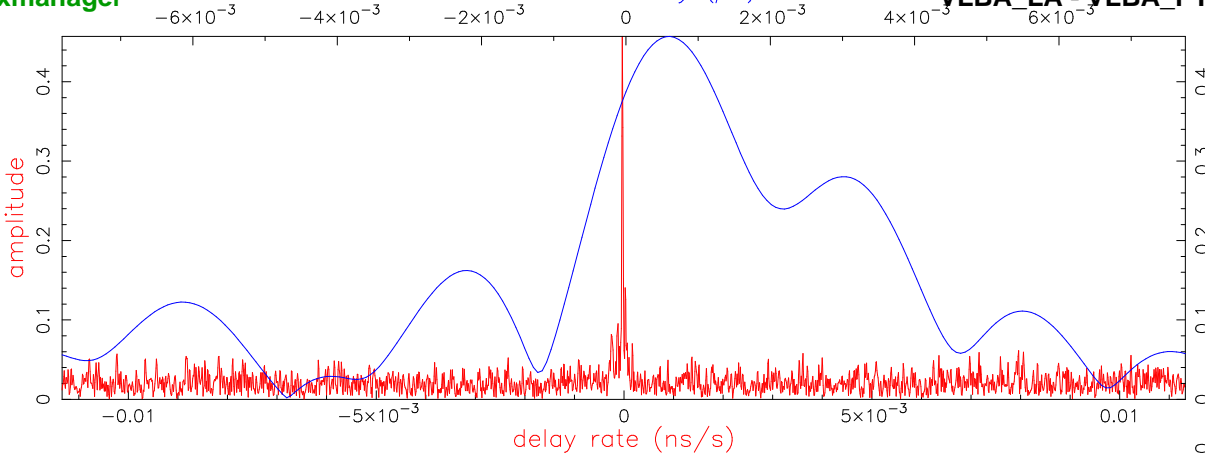


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
lp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.90903734890E+02				-1.90902445856E+02					
Sband delay (usec)	-1.90903606106E+02				-4.8752022E-01					
Phase delay (usec)	-1.90902440968E+02				-5.0000000E-07					
Delay rate (us/s)	-1.87354026131E-03				-1.87350272263E-03					
Total phase (deg)			-95.4		2.58668043294E-06					
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)									151.6	+/- 4.6
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)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

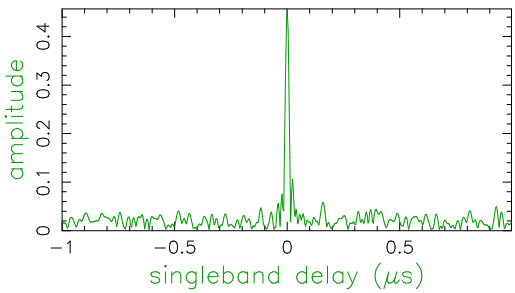
ph/seg (deg) 29.0 11.0 Search (2048X32) 0.388 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 40.6 19.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.3 6.5 Inc. seg. avg. 0.454 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.0 11.4 Inc. frq. avg. 0.417 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 295.8 el 45.2 pa 78.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 18.422 319.418 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp.W.130.11M5UO

multiband delay (μ s)

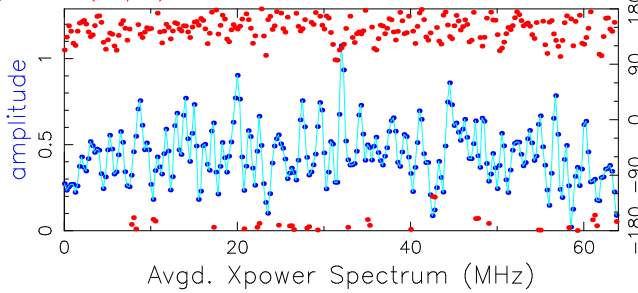
Fringe quality 6



SNR 27.3
Int time 476.985
Amp 0.457
Phase 143.0
PFD 0.0e+00
Delays (us)
SBD -0.000165
MBD 0.000590
Fringe rate (Hz)
-0.003303
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

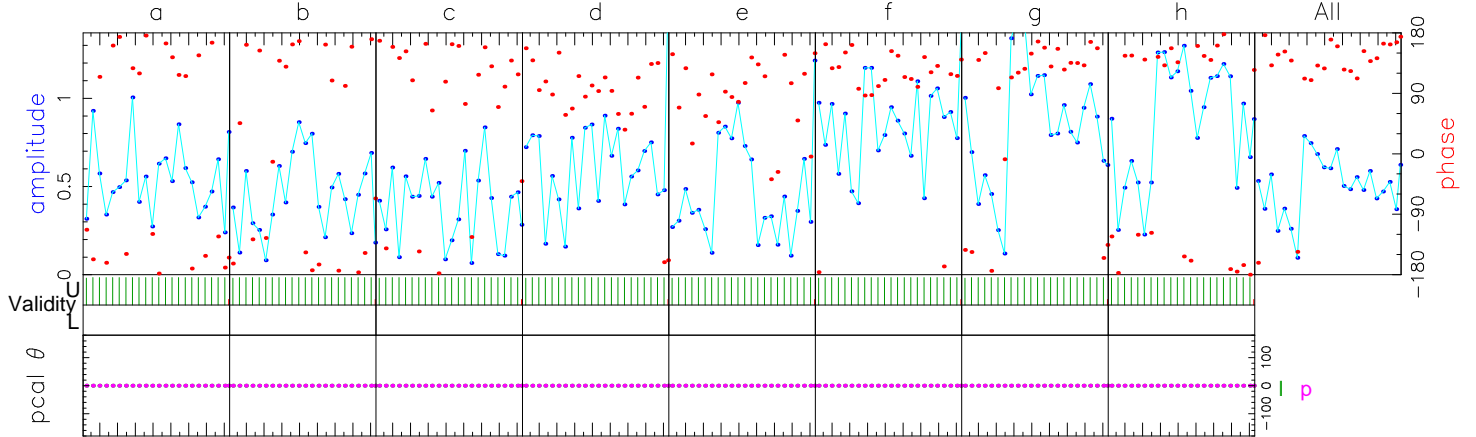


delay rate (ns/s)



Exp. c202b
Yr:day 16383
Start 2021:023:091302
Stop 2021:023:133107
FRT 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.90901855578E+02	Apriori delay (usec)	-1.90902445856E+02	Resid mbdelay (usec)	5.90279E-04	+/-	4.0E-05
Sband delay (usec)	-1.90902610356E+02	Apriori clock (usec)	-4.8752022E-01	Resid sbdelay (usec)	-1.64500E-04	+/-	3.2E-04
Phase delay (usec)	-1.90902441244E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	4.61209E-06	+/-	1.4E-07
Delay rate (us/s)	-1.87354106410E-03	Apriori rate (us/s)	-1.87350272263E-03	Resid rate (us/s)	-3.83415E-08	+/-	4.9E-10
Total phase (deg)	-104.0	Apriori accel (us/s/s)	2.58668043294E-06	Resid phase (deg)	143.0	+/-	4.2

ph/seg (deg)	27.0	Theor.	10.1	Amplitude	0.457 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	37.3		17.6	Search (2048X32)	0.427	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	33.6		5.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.0		10.4	Inc. seg. avg.	0.494	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.509	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

l: az 295.8 el 45.2 pa 78.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 18.422 319.418 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp.W.148.11M5UO

Mk4/DiFX fourfit 3.21 rev 2937

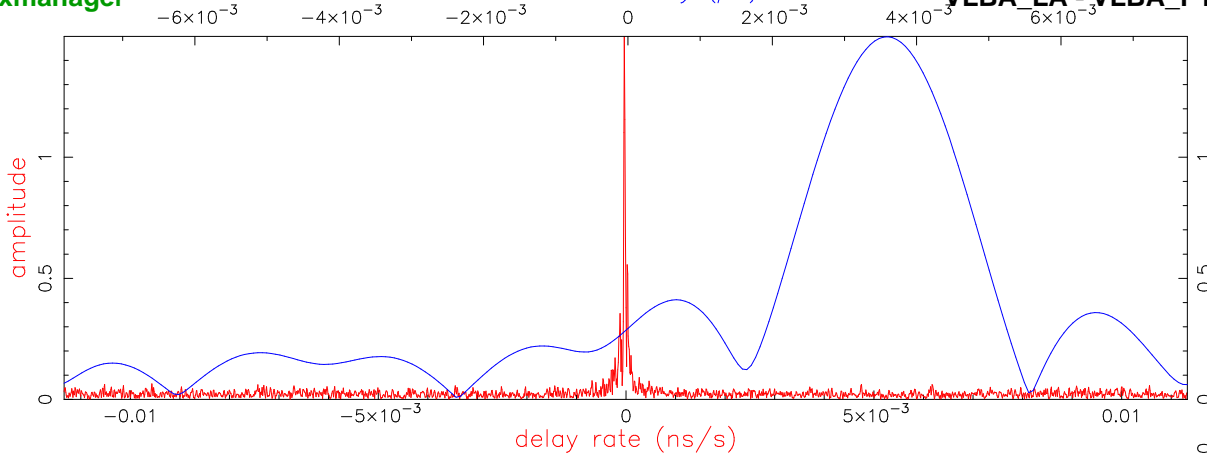
fxmanager

3C84.1IM5UO, No0113, lp

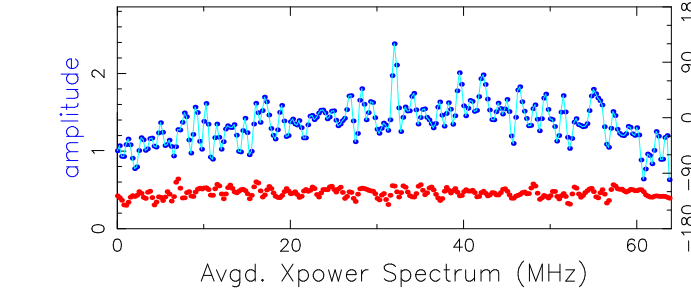
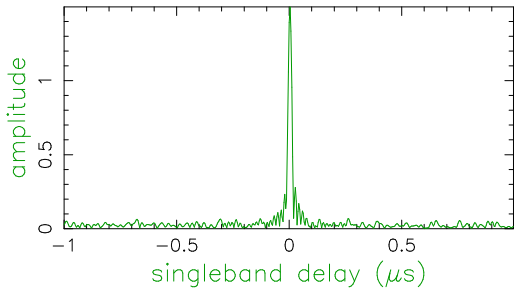
VLBA LA - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

Fringe quality 5

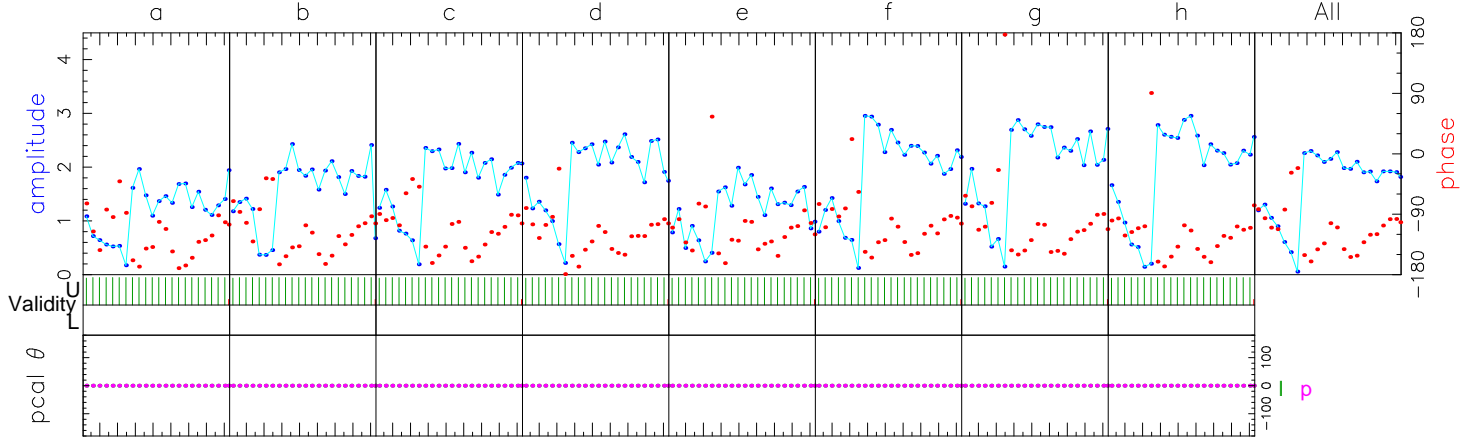


SNR 89.5
 Int time 476.985
 Amp 1.499
 Phase -123.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.003480
 MBD 0.003579
 Fringe rate (Hz)
 -0.003323
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130003.56
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133055
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.90898866734E+02	Apriori delay (usec)	-1.90902445856E+02	Resid mbdelay (usec)	3.57912E-03	+/-	1.2E-05
Sband delay (usec)	-1.90898965856E+02	Apriori clock (usec)	-4.8752022E-01	Resid sbdelay (usec)	3.48000E-03	+/-	9.6E-05
Phase delay (usec)	-1.90902449826E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-3.96992E-06	+/-	4.1E-08
Delay rate (us/s)	-1.87354130430E-03	Apriori rate (us/s)	-1.87350272263E-03	Resid rate (us/s)	-3.85817E-08	+/-	1.5E-10
Total phase (deg)	-10.1	Apriori accel (us/s/s)	2.58668043294E-06	Resid phase (deg)	-123.1	+/-	1.3

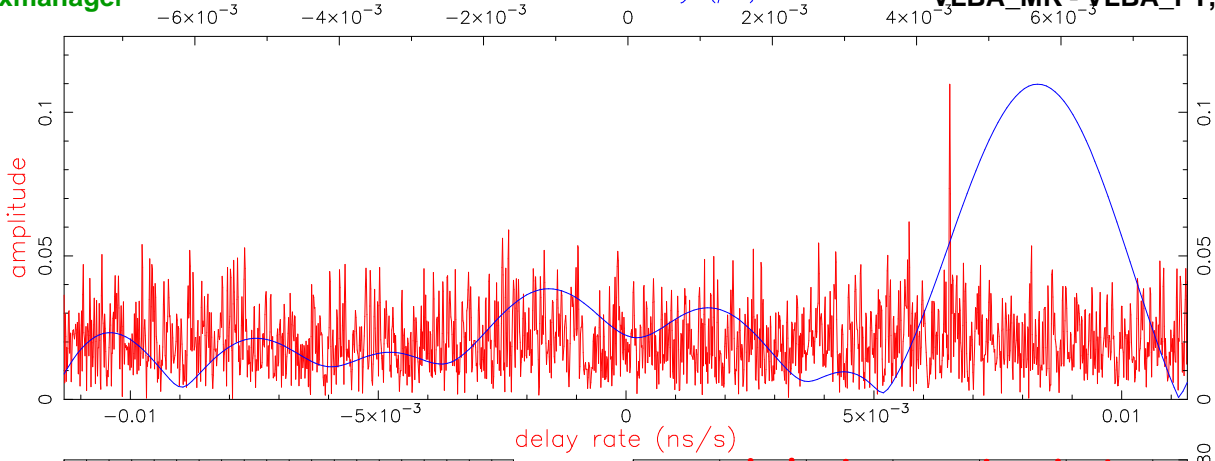
ph/seg (deg)	37.2	RMS	3.1	Theor.	3.1	Amplitude	1.499 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	43.9	Search (2048X32)	1.385	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	5.2	Inc. seg. avg.	1.646	Inc. frq. avg.	1.502	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	19.3	Inc. frq. avg.	1.502	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

l: az 295.8 el 45.2 pa 78.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 18.422 319.418 simultaneous interpolator

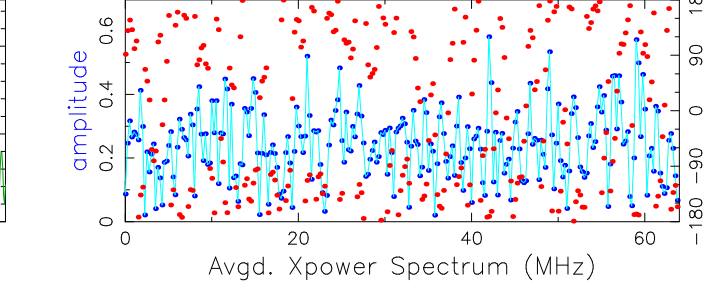
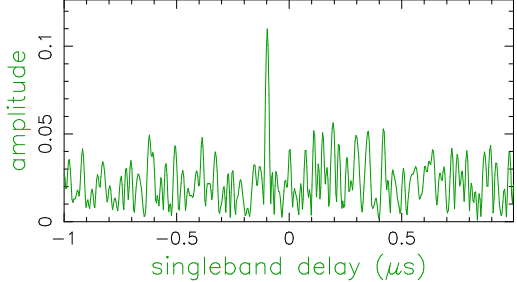
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/lp.W.90.1IM5UO

multiband delay (μ s)

Fringe quality 0

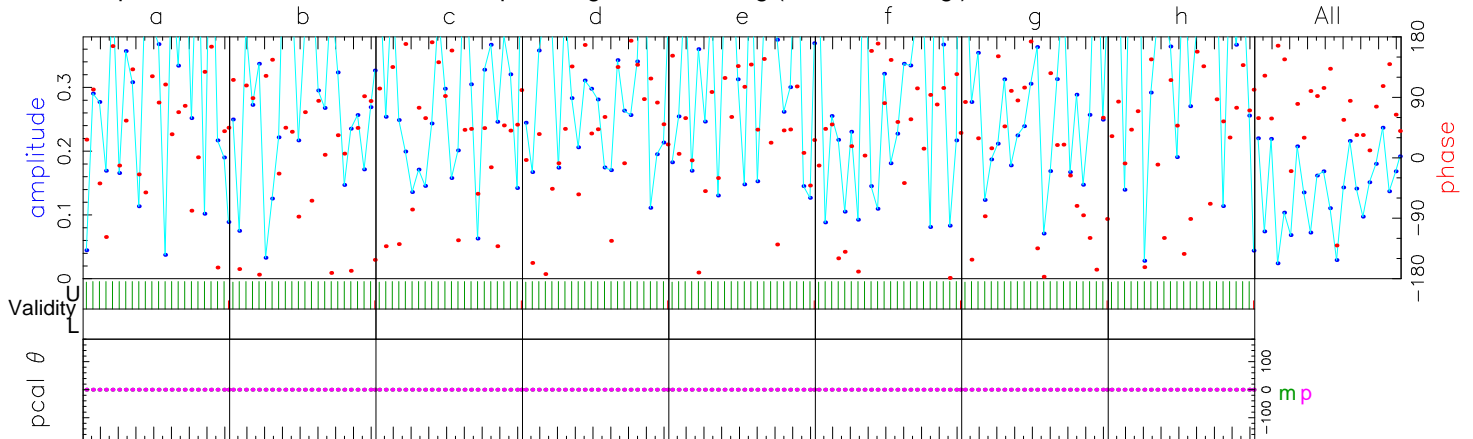


SNR 6.6
Int time 478.980
Amp 0.126
Phase 76.4
PFD 1.4e-02
Delays (us)
SBD -0.097403
MBD 0.005683
Fringe rate (Hz)
0.563346
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.51
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133114
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	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	4.48478512401E+03	Apriori delay (usec)	4.48488881597E+03	Resid mbdelay (usec)	5.68303E-03	+/-	1.7E-04
Sband delay (usec)	4.48479141297E+03	Apriori clock (usec)	1.3283487E+01	Resid sbdelay (usec)	-9.74030E-02	+/-	1.3E-03
Phase delay (usec)	4.48488881844E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	2.46347E-06	+/-	5.6E-07
Delay rate (us/s)	6.19908484286E-01	Apriori rate (us/s)	6.19901944392E-01	Resid rate (us/s)	6.53989E-06	+/-	2.0E-09
Total phase (deg)	295.3	Apriori accel (us/s/s)	-4.05786293515E-05	Resid phase (deg)	76.4	+/-	17.4

ph/seg (deg)	55.7	Theor.	41.8	Amplitude	0.126 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	61.3		72.9	Search (2048X32)	0.102	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	12.8		24.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	32.8		43.0	Inc. seg. avg.	0.127	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.118	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 342.9 el 67.0 pa 157.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -4811.006 -4269.100 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp.W.171.11M5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

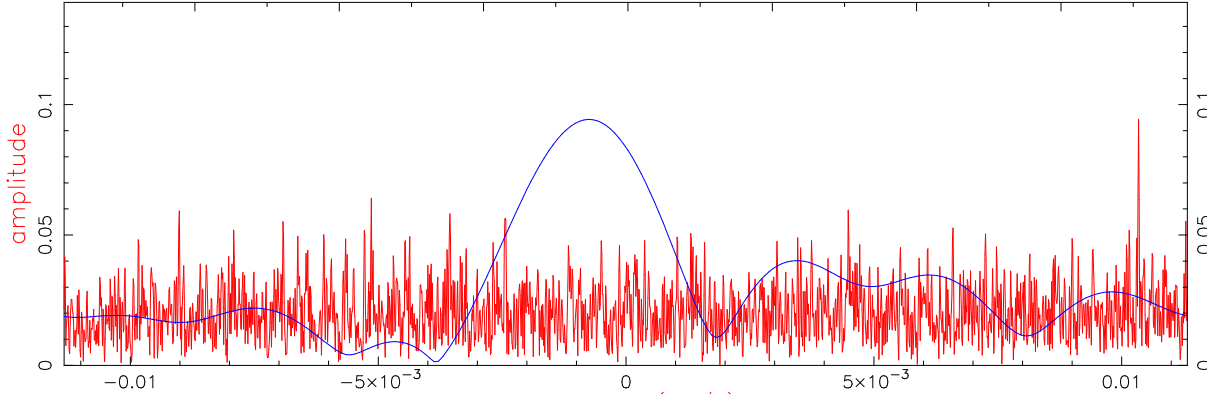
3C84.1M5UO, No0113, mp

VLBA_MK - VLBA_PT, fgroup W, pol LR

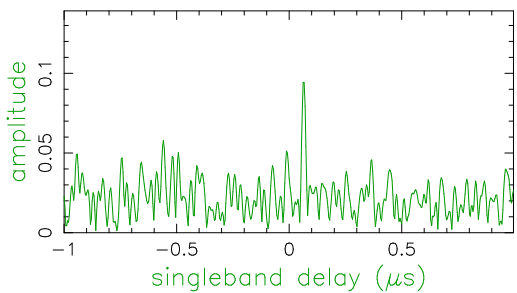
multiband delay (μ s)

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

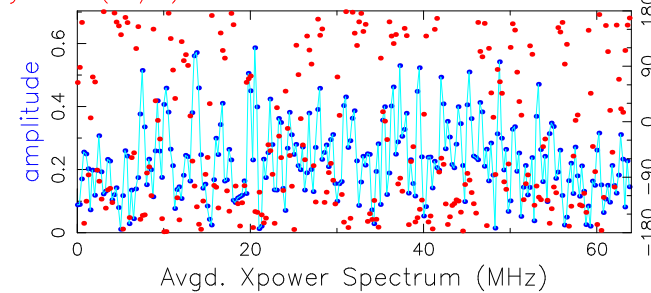
Fringe quality 0



SNR 5.8
 Int time 478.980
 Amp 0.139
 Phase -127.3
 PFD 8.8e-01
 Delays (us)
 SBD 0.064389
 MBD -0.000512
 Fringe rate (Hz)
 0.891817
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

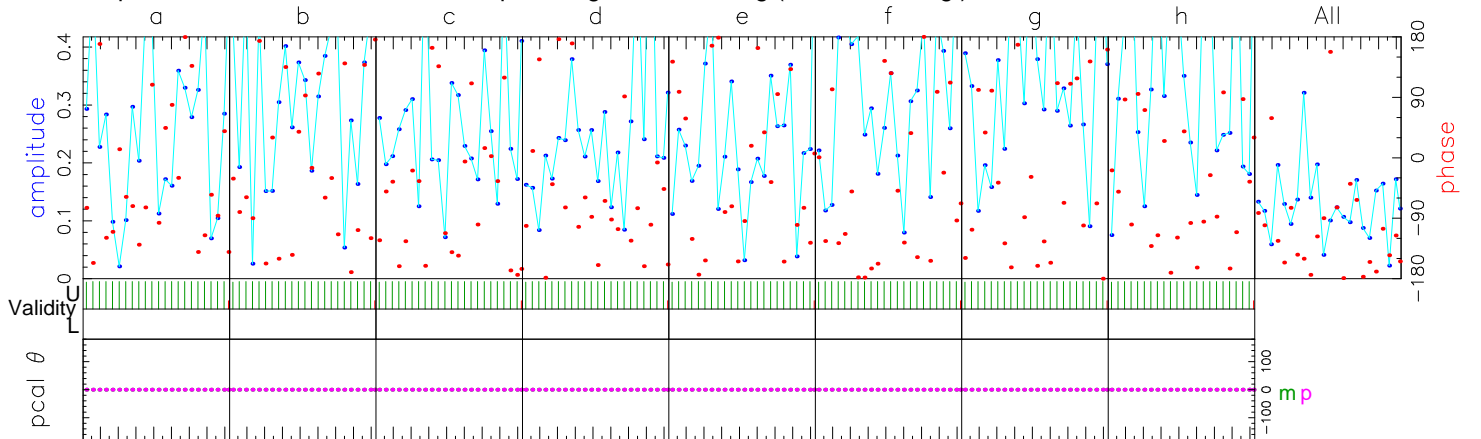


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.51
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133119
 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
	-122.0	-126.4	-138.9	-101.5	-165.8	-148.1	-146.8	-99.8	Phase	-127.3
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	275.5	452.4	256.0	272.7	239.0	405.9	272.3	45.2	Sbd box	273.5
U/L	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 4.48495080356E+03 Apriori delay (usec) 4.48488881597E+03 Resid mbdelay (usec) -5.12414E-04 +/- 1.9E-04
 Sband delay (usec) 4.48495320522E+03 Apriori clock (usec) 1.3283487E+01 Resid sbdelay (usec) 6.43893E-02 +/- 1.5E-03
 Phase delay (usec) 4.48488881187E+03 Apriori clockrate (us/s) -2.9999999E-07 Resid phdelay (usec) -4.10612E-06 +/- 6.4E-07
 Delay rate (us/s) 6.19912297508E-01 Apriori rate (us/s) 6.19901944392E-01 Resid rate (us/s) 1.03531E-05 +/- 2.3E-09
 Total phase (deg) 91.5 Apriori accel (us/s/s) -4.05786293515E-05 Resid phase (deg) -127.3 +/- 19.9

RMS Theor. Amplitude 0.139 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.2 47.7 Search (2048X32) 0.093 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 72.4 83.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 25.4 28.2 Inc. seg. avg. 0.138 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.7 49.1 Inc. frq. avg. 0.131 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 342.9 el 67.0 pa 157.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -4811.006 -4269.100 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp.W.192.11M5UO

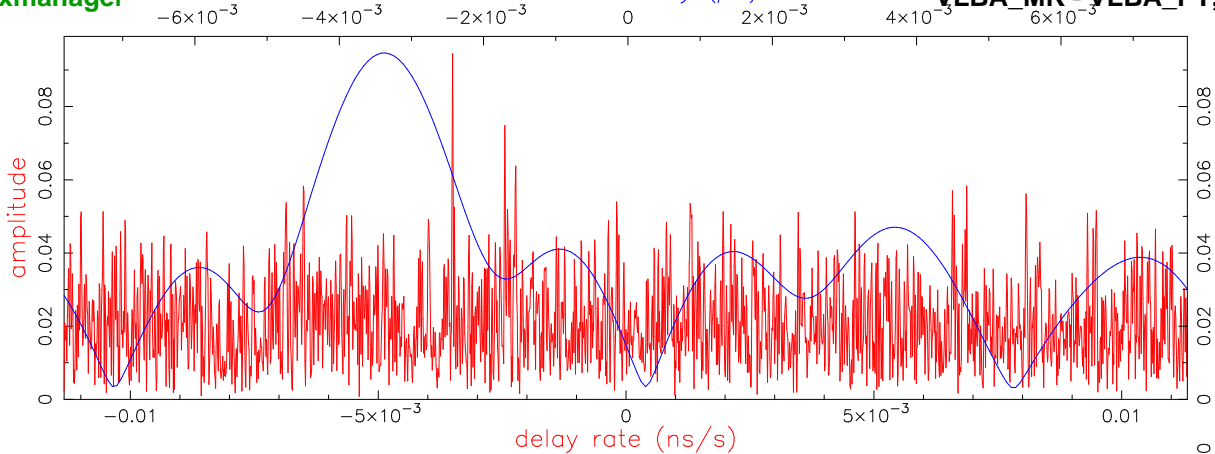
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, mp

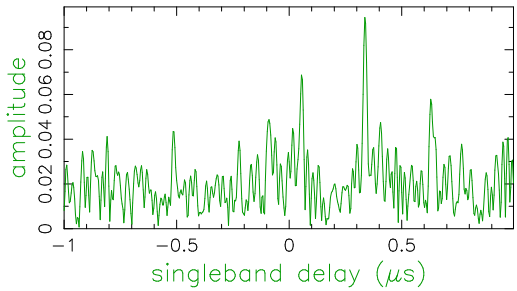
VLBA_MK - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

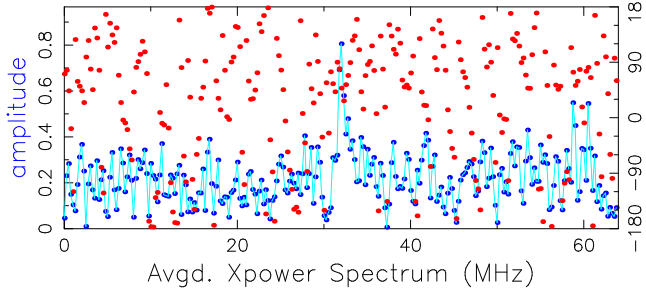


Fringe quality 0

SNR 5.7
 Int time 478.980
 Amp 0.099
 Phase 42.8
 PFD 9.4e-01
 Delays (us)
 SBD 0.337220
 MBD -0.003310
 Fringe rate (Hz)
 -0.302177
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

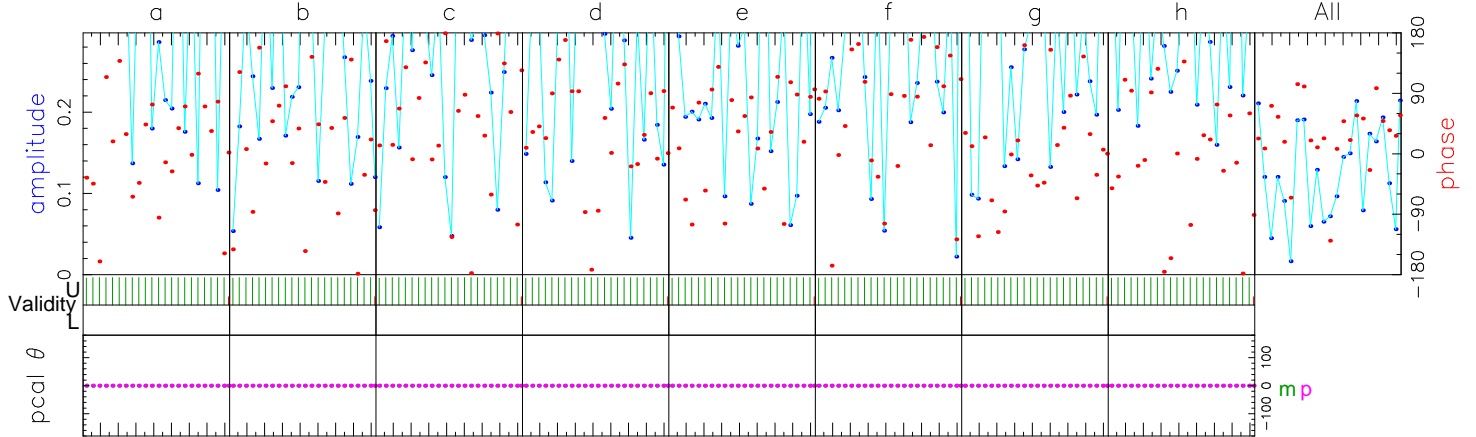


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.51
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133123
 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	937/0	937/0	937/0	937/0	937/0	937/0	937/0	937/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	4.48522925631E+03	Apriori delay (usec)	4.48488881597E+03	Resid mbdelay (usec)	-3.30967E-03	+/-	1.9E-04
Sband delay (usec)	4.48522603572E+03	Apriori clock (usec)	1.3283487E+01	Resid sbdelay (usec)	3.37220E-01	+/-	1.5E-03
Phase delay (usec)	4.48488881735E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	1.38171E-06	+/-	6.5E-07
Delay rate (us/s)	6.19898436411E-01	Apriori rate (us/s)	6.19901944392E-01	Resid rate (us/s)	-3.50798E-06	+/-	2.3E-09
Total phase (deg)	261.7	Apriori accel (us/s/s)	-4.05786293515E-05	Resid phase (deg)	42.8	+/-	20.1

ph/seg (deg)	53.4	RMS	48.2	Theor.	48.2	Amplitude	0.099 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.1	Search (2048X32)	0.092	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	40.3	Inc. seg. avg.	0.095	Inc. frq. avg.	0.107	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	36.5	Inc. frq. avg.	0.107	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 342.9 el 67.0 pa 157.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -4811.006 -4269.100 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/mp.W.212.11M5UO

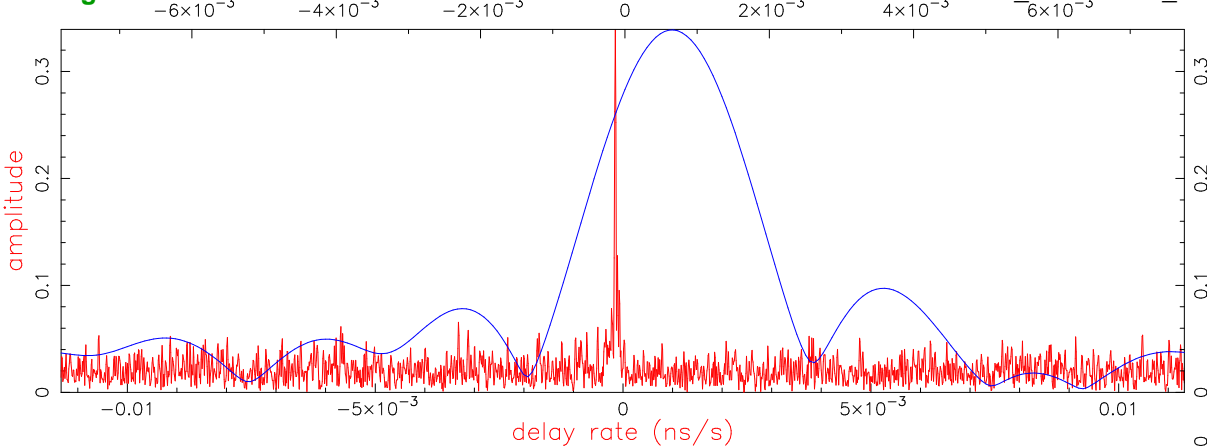
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, np

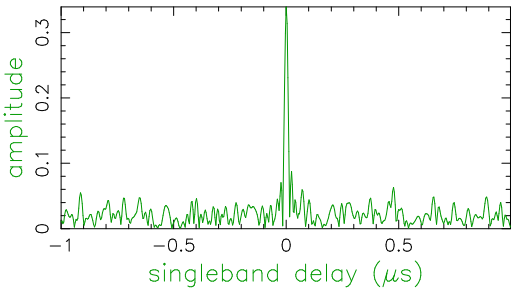
VLBA_NL - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

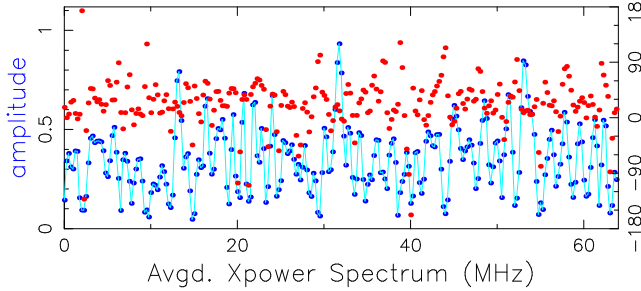


Fringe quality 9

SNR 20.3
 Int time 479.985
 Amp 0.339
 Phase 22.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.000457
 MBD 0.000666
 Fringe rate (Hz)
 -0.013783
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

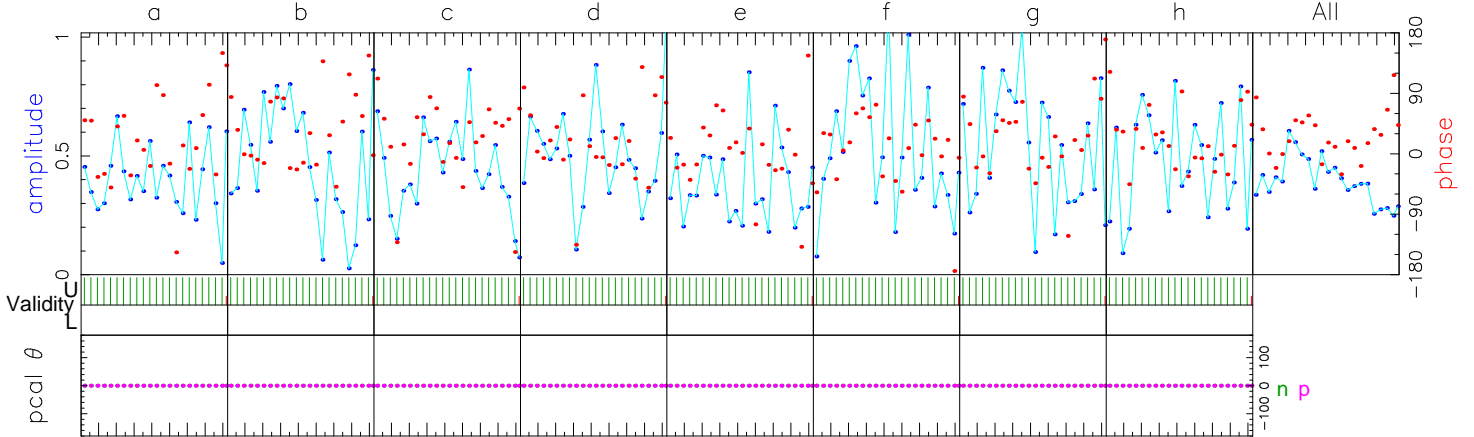


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133110
 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



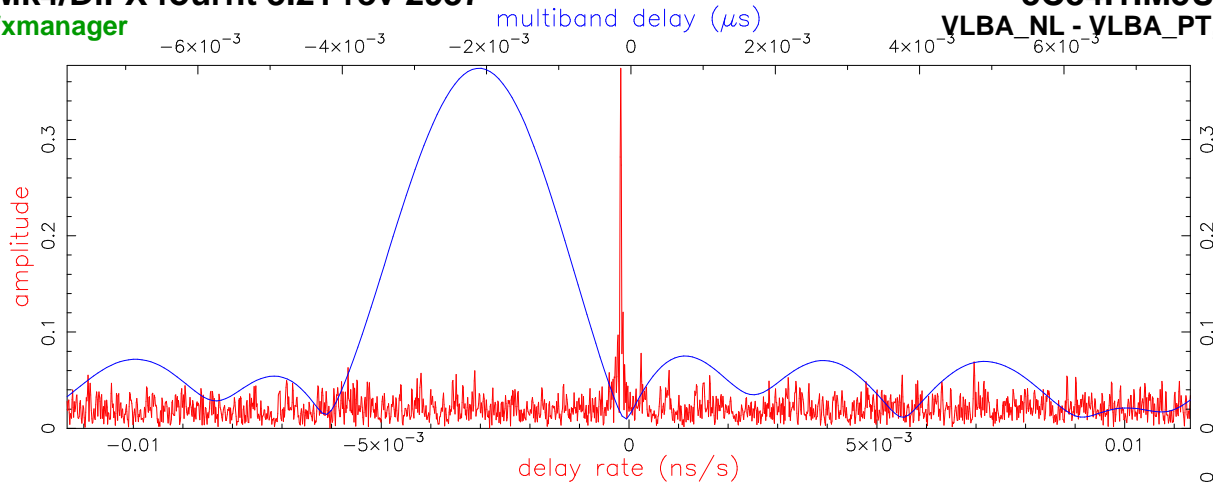
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
p	1000	1000	1000	1000	1000	1000	1000	1000		1000
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.36181067818E+03	Apriori delay (usec)	-2.36181134386E+03	Resid mbdelay (usec)	6.65684E-04	+/-	5.3E-05
Sband delay (usec)	-2.36181088711E+03	Apriori clock (usec)	8.9504242E-02	Resid sbdelay (usec)	4.56750E-04	+/-	4.2E-04
Phase delay (usec)	-2.36181134313E+03	Apriori clockrate (us/s)	1.0000003E-07	Resid phdelay (usec)	7.32608E-07	+/-	1.8E-07
Delay rate (us/s)	-2.52822717606E-02	Apriori rate (us/s)	-2.52821117534E-02	Resid rate (us/s)	-1.60007E-07	+/-	6.6E-10
Total phase (deg)	-35.0	Apriori accel (us/s/s)	2.02285612328E-05	Resid phase (deg)	22.7	+/-	5.6

ph/seg (deg)	34.9	Theor.	13.5	Amplitude	0.339 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	32.4		23.6	Search (2048X32)	0.314	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	8.6		8.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	18.3		13.9	Inc. seg. avg.	0.387	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.338	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

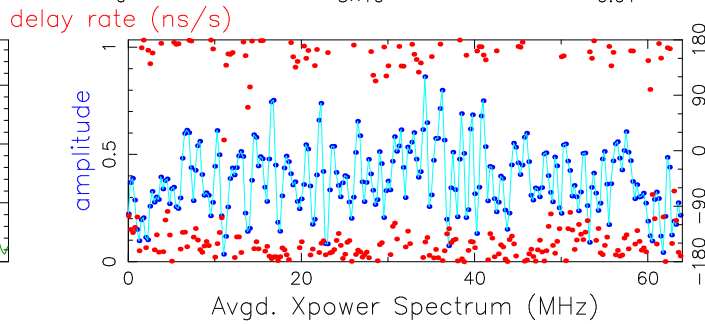
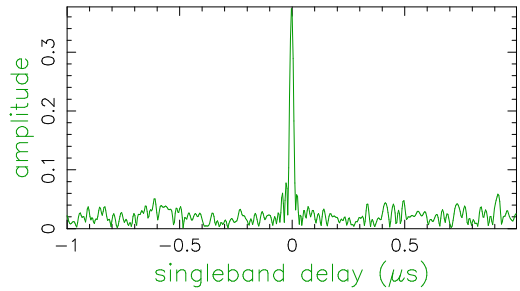
n: az 295.9 el 37.4 pa 63.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 226.336 2086.443 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/np..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/np.W.156.1M5UO



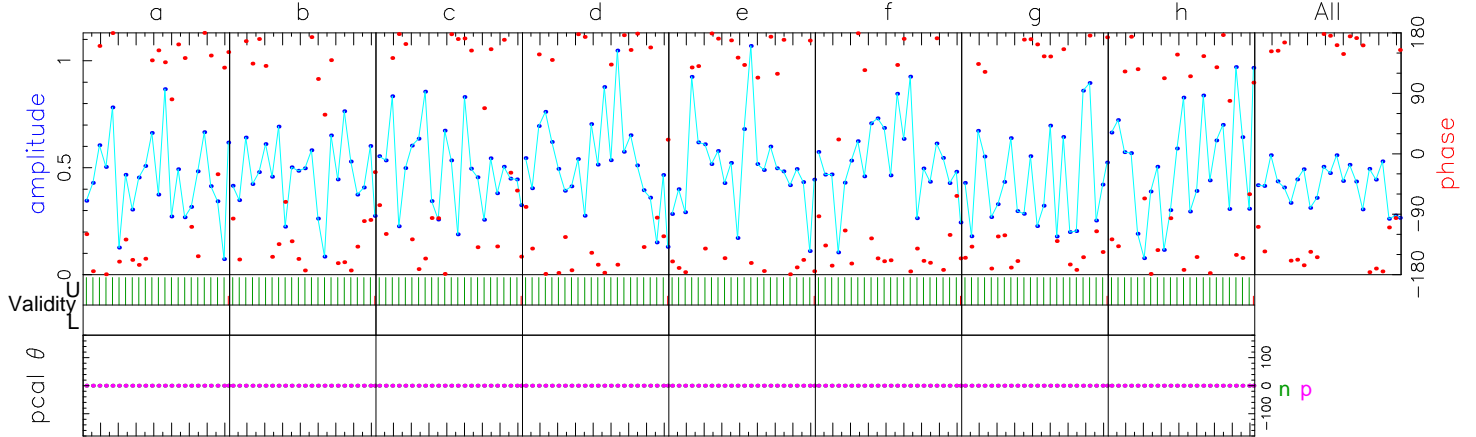
Fringe quality 9

SNR 22.6
Int time 479.985
Amp 0.377
Phase -174.5
PFD 0.0e+00
Delays (us)
SBD -0.002728
MBD -0.002078
Fringe rate (Hz)
-0.013882
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133114
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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.36181342199E+03									
Sband delay (usec)	-2.36181407186E+03									
Phase delay (usec)	-2.36181134949E+03									
Delay rate (us/s)	-2.52822729134E-02									
Total phase (deg)			-232.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
ion window (TEC)										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 32.3 12.2 Search (2048X32) 0.352 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 26.6 21.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.4 7.2 Inc. seg. avg. 0.417 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 11.5 12.5 Inc. frq. avg. 0.377 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
n: az 295.9 el 37.4 pa 63.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 226.336 2086.443 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/np..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/np.W.169.1M5UO

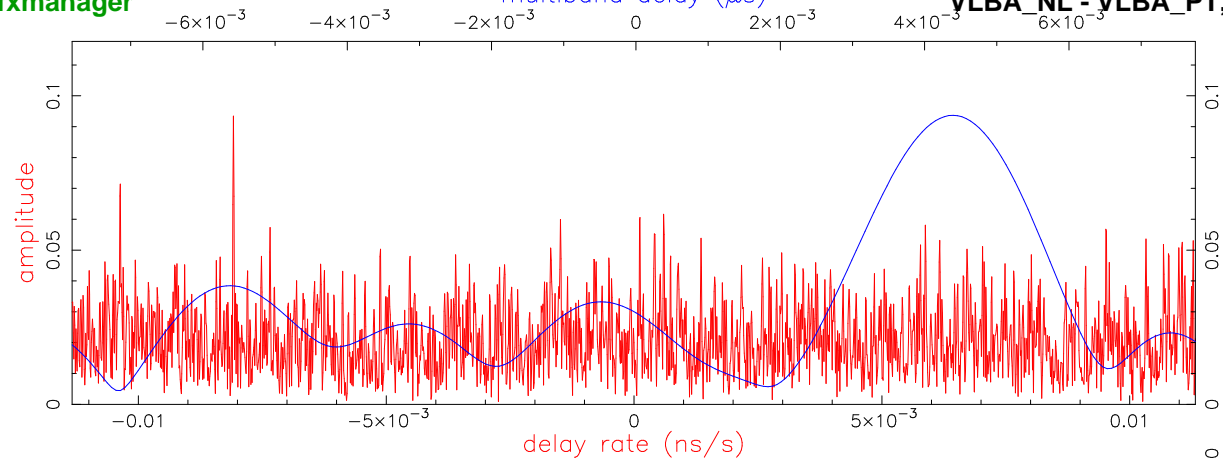
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, np

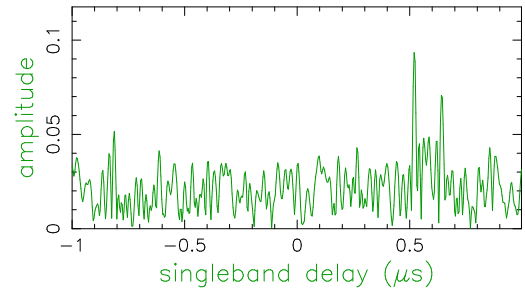
VLBA_NL - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

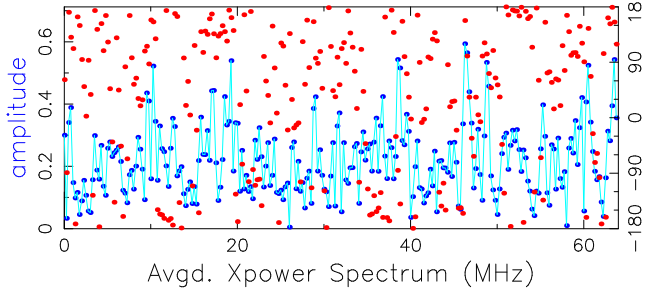


Fringe quality 0

SNR 5.7
 Int time 479.985
 Amp 0.118
 Phase -34.3
 PFD 9.8e-01
 Delays (us)
 SBD 0.520698
 MBD 0.004485
 Fringe rate (Hz)
 -0.697399
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

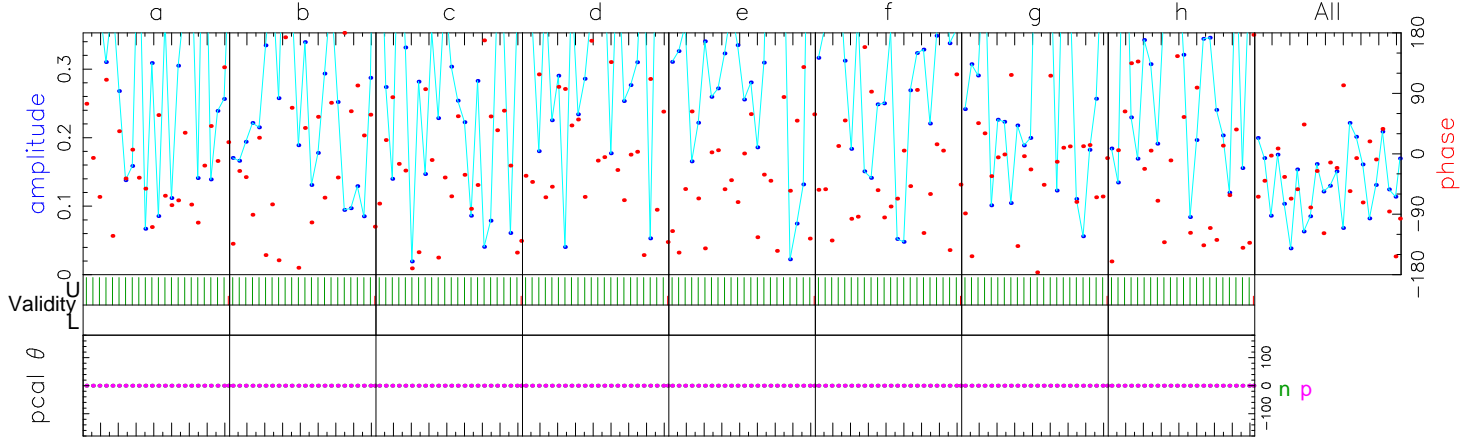


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133118
 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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-2.36129123353E+03	Apriori delay (usec)	-2.36181134386E+03	Resid mbdelay (usec)	4.48533E-03	+/-	1.9E-04
Sband delay (usec)	-2.36129064586E+03	Apriori clock (usec)	8.9504242E-02	Resid sbdelay (usec)	5.20698E-01	+/-	1.5E-03
Phase delay (usec)	-2.36181134497E+03	Apriori clockrate (us/s)	1.0000003E-07	Resid phdelay (usec)	-1.10693E-06	+/-	6.5E-07
Delay rate (us/s)	-2.52902078688E-02	Apriori rate (us/s)	-2.52821117534E-02	Resid rate (us/s)	-8.09612E-06	+/-	2.4E-09
Total phase (deg)	-92.0	Apriori accel (us/s/s)	2.02285612328E-05	Resid phase (deg)	-34.3	+/-	20.2

ph/seg (deg)	55.5	Theor.	48.5	Amplitude	0.118 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	67.6		84.7	Search (2048X32)	0.090	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	20.7		28.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	56.7		50.0	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

n: az 295.9 el 37.4 pa 63.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 226.336 2086.443 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/np..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/np.W.188.1M5UO

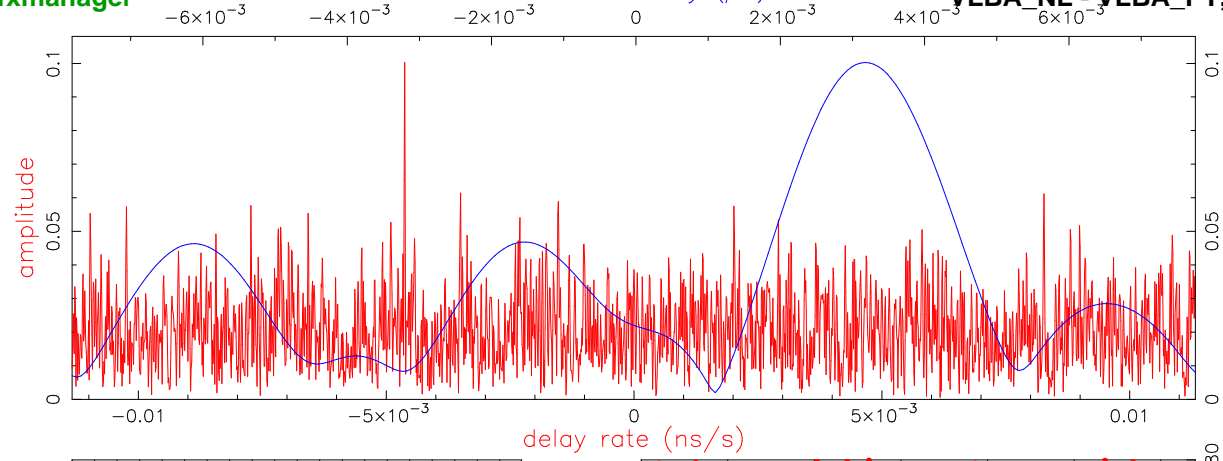
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, np

VLBA_NL - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0

SNR 6.0

Int time 479.985

Amp 0.108

Phase -120.3

PFD 3.4e-01

Delays (us)

SBD 0.604454

MBD 0.003164

Fringe rate (Hz)

-0.399447

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c202b

Exper # 16383

Yr:day 2020:284

Start 130001.00

Stop 130801.26

FRT 130401.00

Corr/FF/build

2021:023:091302

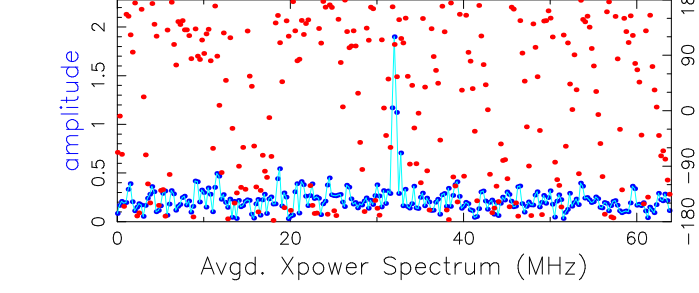
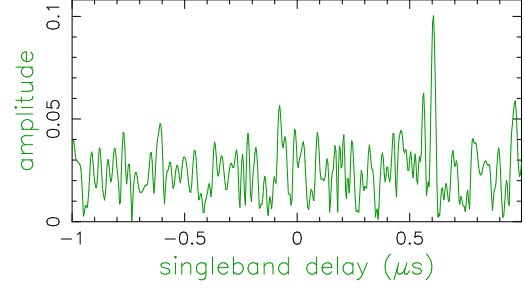
2021:023:133122

2020:247:085004

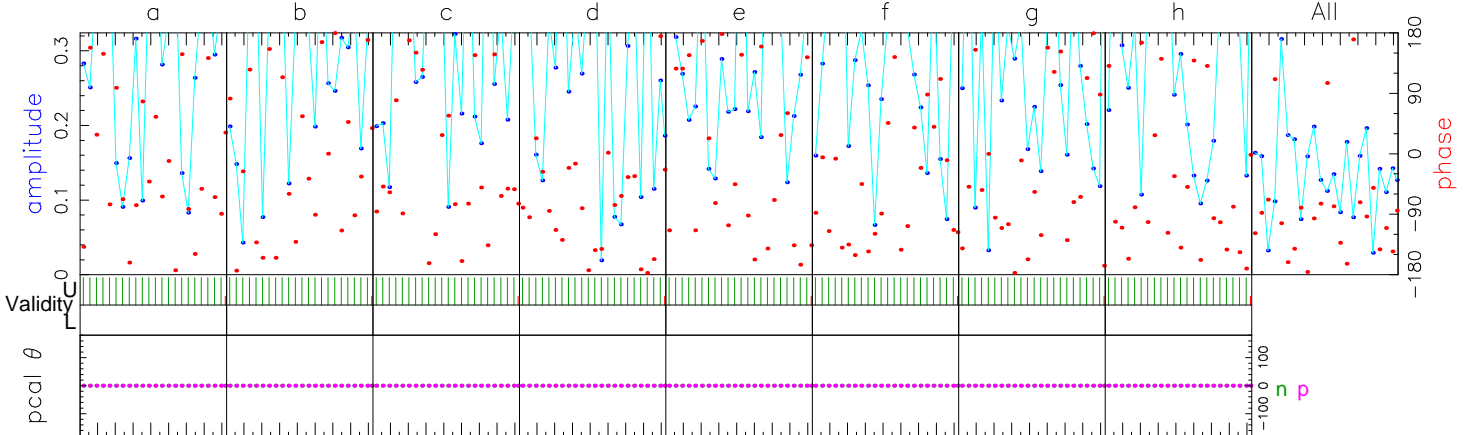
RA & Dec (J2000)

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
Group delay (usec)(sbd)	-86.9	-175.8	-112.4	-92.7	-163.6	-101.0	-115.2	-117.9		-120.3
Sband delay (usec)	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2		0.1
Phase delay (usec)	48.6	273.2	238.0	502.6	503.9	191.6	421.5	411.7		411.7
Delay rate (us/s)	U/L 938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
	n 1000	1000	1000	1000	1000	1000	1000	1000		
	p 1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Apriori delay (usec)					-2.36181134386E+03				3.16409E-03	+/- 1.8E-04
Apriori clock (usec)					8.9504242E-02				6.04454E-01	+/- 1.4E-03
Apriori clockrate (us/s)					1.0000003E-07				-3.88002E-06	+/- 6.1E-07
Apriori rate (us/s)					-2.52821117534E-02				-4.63718E-06	+/- 2.2E-09
Apriori accel (us/s/s)					2.02285612328E-05				-120.3	+/- 19.0
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

ph/seg (deg) 54.5 45.5 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 71.5 79.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

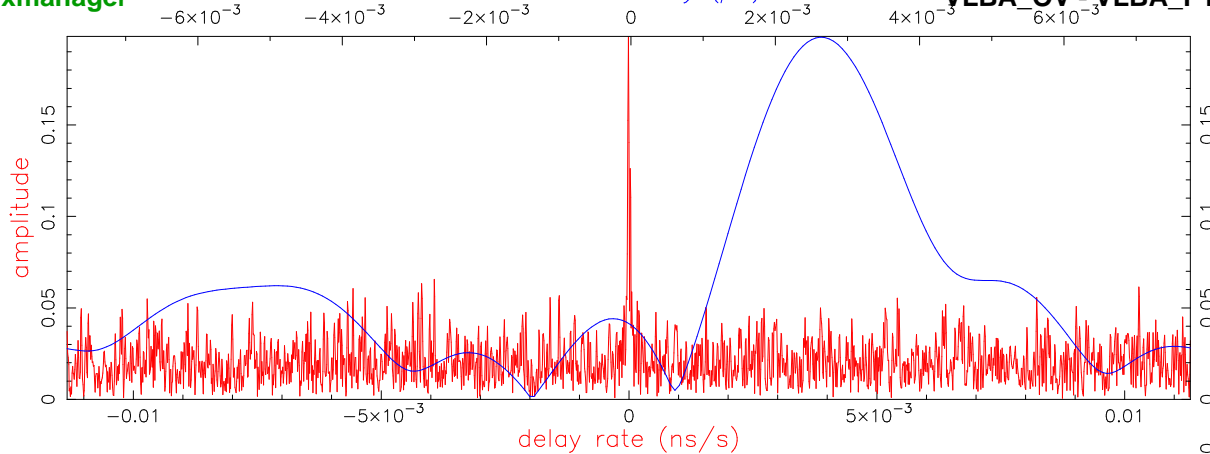
ph/frq (deg) 34.9 26.8 Inc. seg. avg. 0.113 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 39.8 46.9 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011

n: az 295.9 el 37.4 pa 63.9 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 226.336 2086.443 simultaneous interpolator

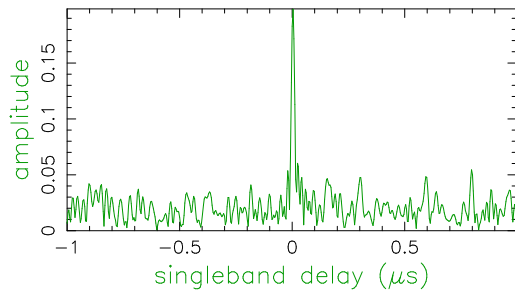
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/np..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/np.W.208.1M5UO

multiband delay (μ s)

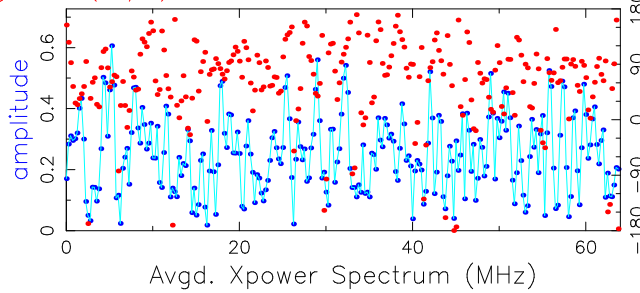


Fringe quality 9

SNR 11.9
Int time 476.982
Amp 0.198
Phase 88.6
PFD 1.1e-23
Delays (us)
SBD 0.003359
MBD 0.002620
Fringe rate (Hz)
-0.000981
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

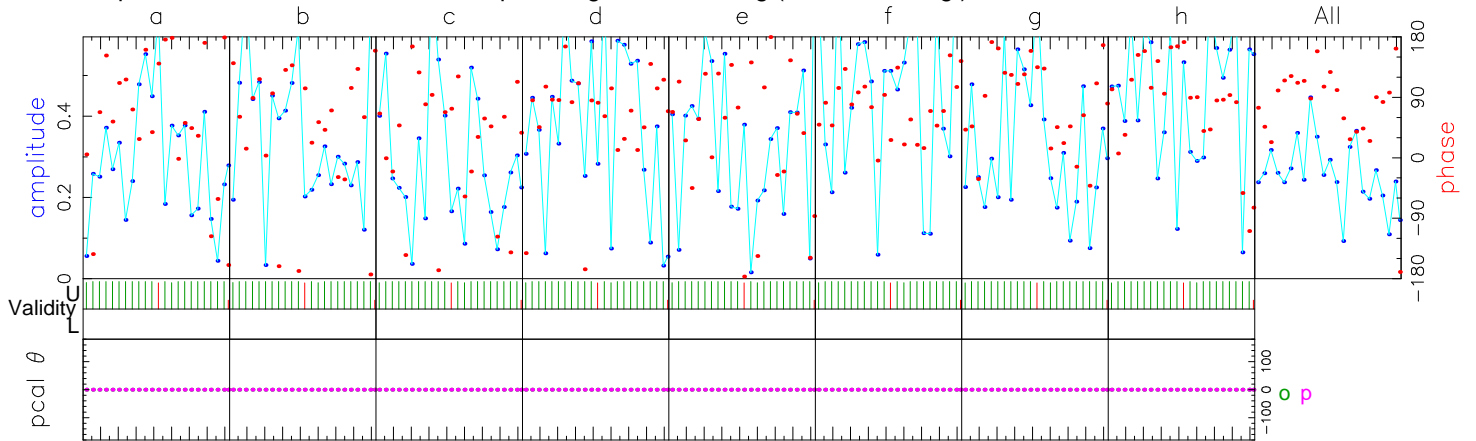


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133110
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	111.6	105.1	66.2	77.3	68.6	77.0	105.3	102.6	Phase	88.6
o	0.1	0.2	0.1	0.3	0.1	0.4	0.2	0.3	Ampl.	0.2
p	301.0	360.2	266.7	257.5	257.7	258.2	257.9	257.7	Sbd box	257.9
o	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.11842944142E+03	Apriori delay (usec)	2.11842682145E+03	Resid mbdelay (usec)	2.61997E-03	+/-	9.2E-05
Sband delay (usec)	2.11843017995E+03	Apriori clock (usec)	2.1313480E+01	Resid sbdelay (usec)	3.35850E-03	+/-	7.3E-04
Phase delay (usec)	2.11842682431E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	2.85822E-06	+/-	3.1E-07
Delay rate (us/s)	1.29834586230E-01	Apriori rate (us/s)	1.29834597620E-01	Resid rate (us/s)	-1.13908E-08	+/-	1.1E-09
Total phase (deg)	232.6	Apriori accel (us/s/s)	-8.05275148452E-06	Resid phase (deg)	88.6	+/-	9.7

ph/seg (deg)	41.5	RMS	41.6	Theor.	23.2	Amplitude	0.198 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	50.7	Search (2048X32)	0.195	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	20.2	Inc. seg. avg.	0.242	Inc. frq. avg.	0.200	Sample rate (MSamp/s):	128	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00	
amp/frq (%)	41.6	u,v (fr/asec)	-1008.112 -277.421			Data rate (Mb/s):	2048								

o: az 291.7 el 54.6 pa 81.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1008.112 -277.421 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/op...1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/op.W.155.1M5UO

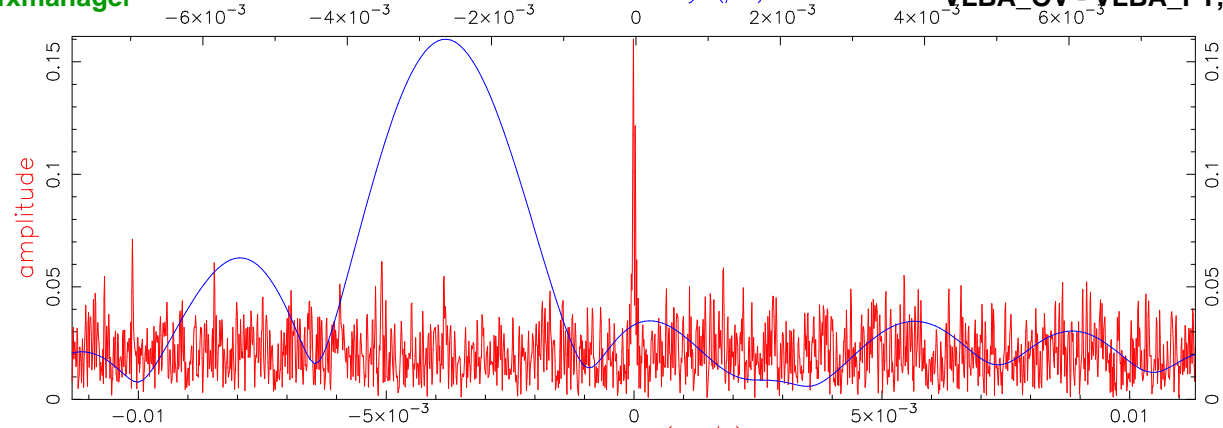
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

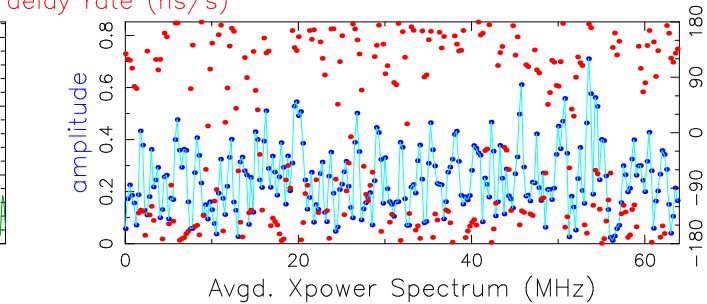
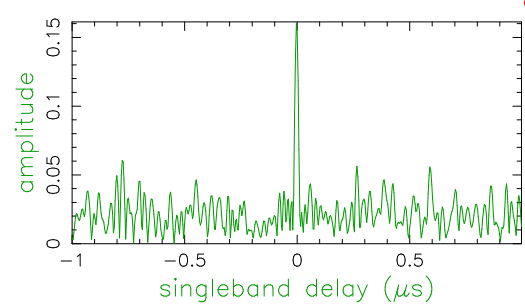
3C84.1IM5UO, No0113, op

VLBA_OV - VLBA_PT, fgroup W, pol RR

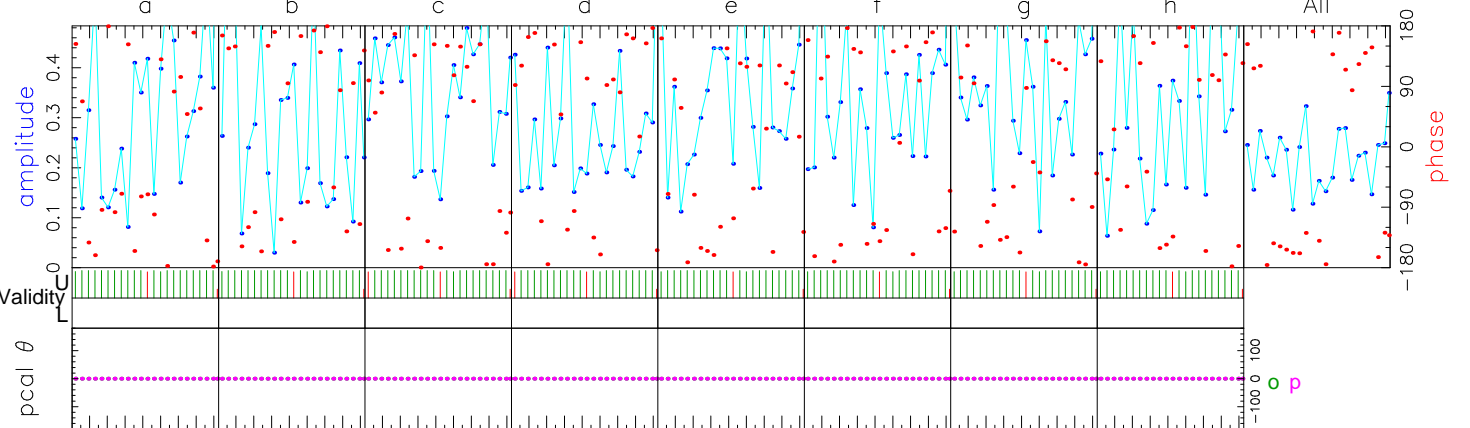
multiband delay (μ s)



Fringe quality 9
 SNR 9.6
 Int time 476.982
 Amp 0.161
 Phase 175.3
 PFD 2.4e-13
 Delays (us)
 SBD -0.002805
 MBD -0.002613
 Fringe rate (Hz) -0.001068
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133114
 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
	-168.1	-177.8	167.9	158.8	154.8	178.3	-159.5	166.9	Phase	175.3
	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2
	330.1	256.3	255.6	75.9	26.6	256.6	257.2	256.2	Sbd box	256.3
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.11842420817E+03		Apriori delay (usec)		2.11842682145E+03		Resid mbdelay (usec)		-2.61328E-03	+/- 1.1E-04
Sband delay (usec)	2.11842401670E+03		Apriori clock (usec)		2.1313480E+01		Resid sbdelay (usec)		-2.80475E-03	+/- 8.9E-04
Phase delay (usec)	2.11842682711E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		5.65428E-06	+/- 3.8E-07
Delay rate (us/s)	1.29834585226E-01		Apriori rate (us/s)		1.29834597620E-01		Resid rate (us/s)		-1.23941E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-8.05275148452E-06		Resid phase (deg)		175.3	+/- 11.9

ph/seg (deg) 42.7 28.5 Search (2048X32) 0.156 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 48.9 49.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.2 16.8 Inc. seg. avg. 0.193 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 17.5 29.4 Inc. frq. avg. 0.158 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 291.7 el 54.6 pa 81.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1008.112 -277.421 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/op..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/op.W.166.1M5UO

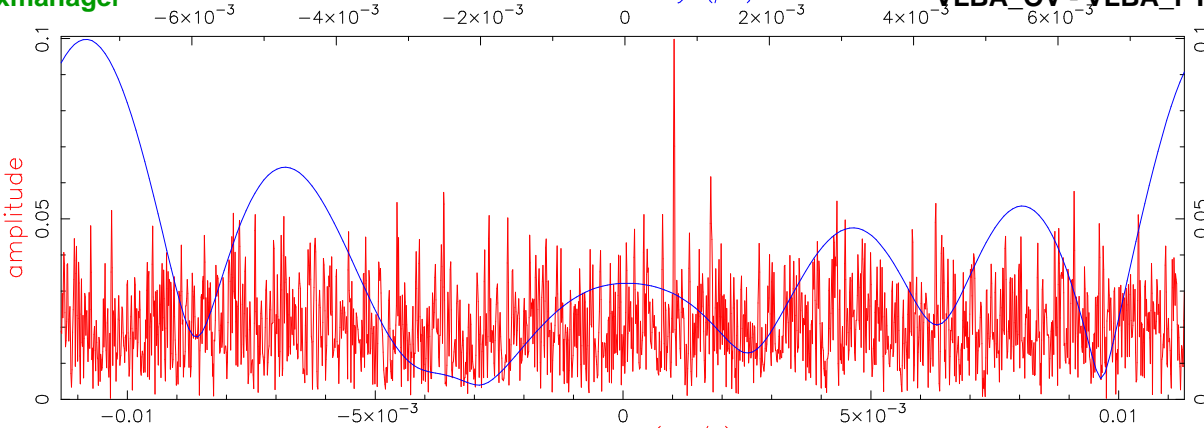
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, op

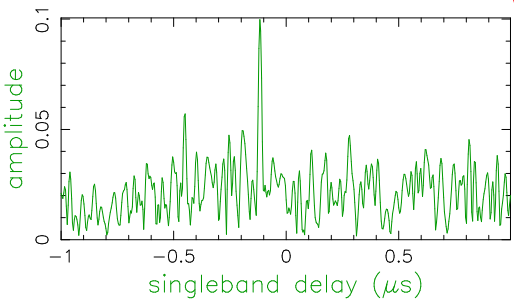
VLBA_OV - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

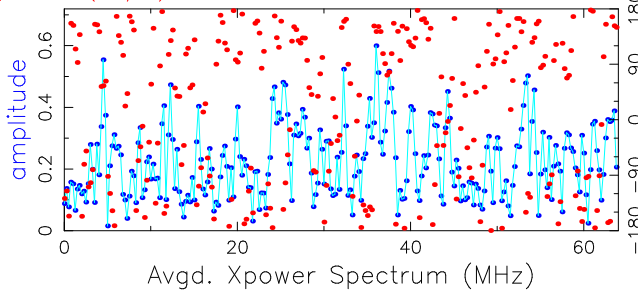


Fringe quality 0

SNR 6.0
 Int time 476.982
 Amp 0.101
 Phase -17.5
 PFD 4.2e-01
 Delays (us)
 SBD -0.116308
 MBD -0.007456
 Fringe rate (Hz)
 0.088915
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

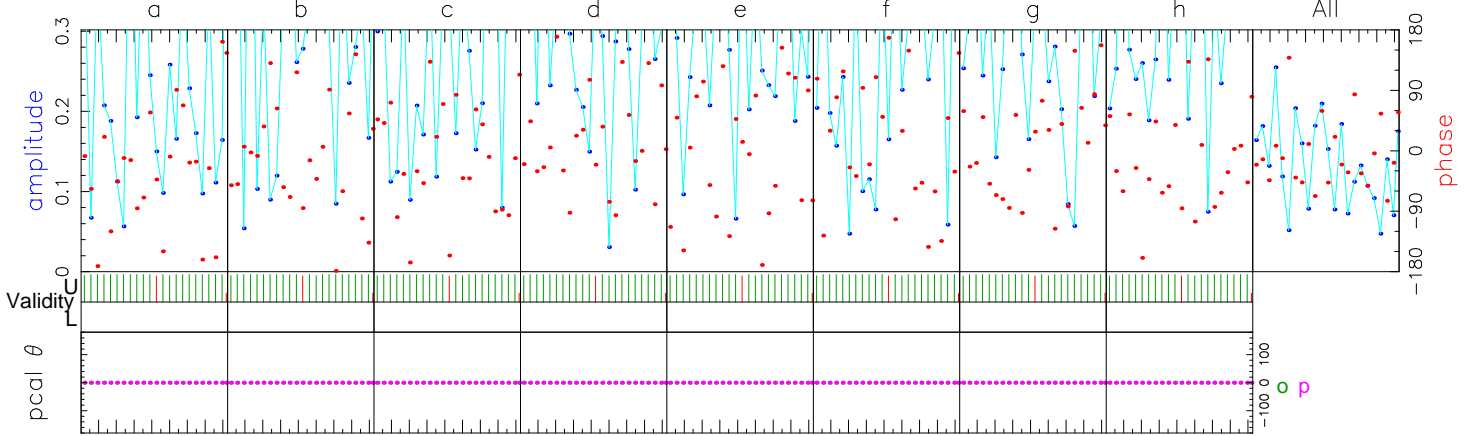


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133118
 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
	-23.3	-29.1	-15.3	12.6	104.5	-66.5	8.4	-34.1	Phase	-17.5
	0.1	0.2	0.1	0.1	0.0	0.1	0.1	0.2	Ampl.	0.1
	356.0	226.7	251.8	296.2	75.8	481.0	329.9	227.7	Sbd box	227.2
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.11830999017E+03	Apriori delay (usec)	2.11842682145E+03	Resid mbdelay (usec)	-7.45628E-03	+/-	1.8E-04
Sband delay (usec)	2.11831051345E+03	Apriori clock (usec)	2.1313480E+01	Resid sbdelay (usec)	-1.16308E-01	+/-	1.4E-03
Phase delay (usec)	2.11842682089E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-5.63710E-07	+/-	6.2E-07
Delay rate (us/s)	1.29835629839E-01	Apriori rate (us/s)	1.29834597620E-01	Resid rate (us/s)	1.03222E-06	+/-	2.2E-09
Total phase (deg)	126.5	Apriori accel (us/s/s)	-8.05275148452E-06	Resid phase (deg)	-17.5	+/-	19.1

ph/seg (deg)	52.4	Theor.	45.8	Amplitude	0.101 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	63.8	Search (2048X32)	0.096	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	56.7	Inc. seg. avg.	0.101	Inc. frq. avg.	0.100	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	57.2	Inc. frq. avg.	0.100			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

o: az 291.7 el 54.6 pa 81.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1008.112 -277.421 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/op..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/op.W.185.1IM5UO

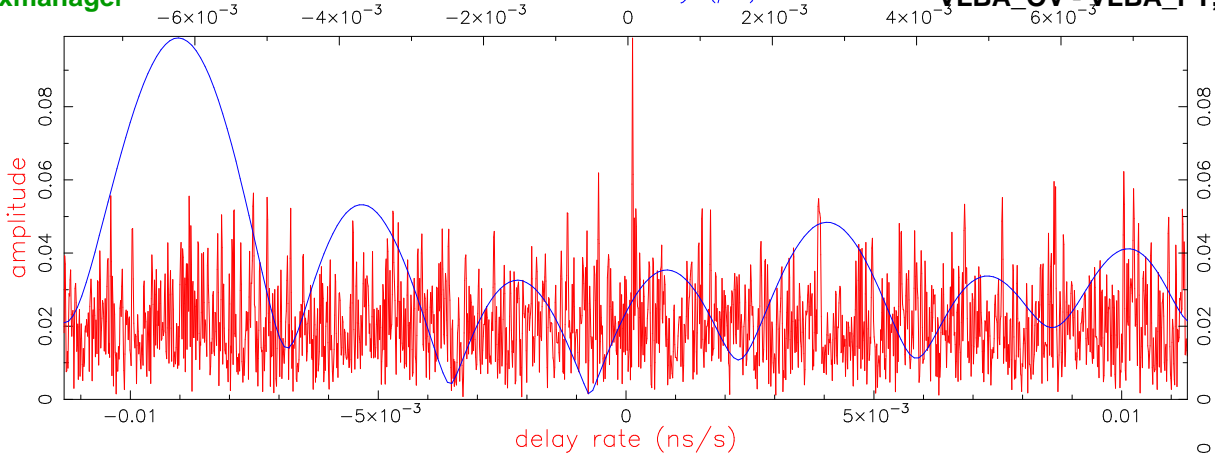
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, op

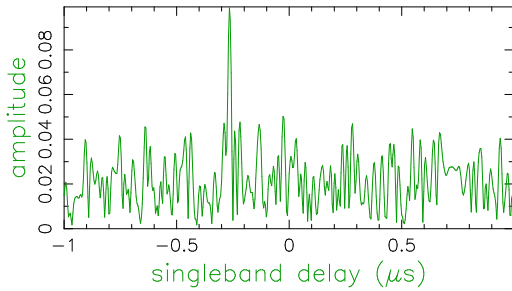
VLBA_OV - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

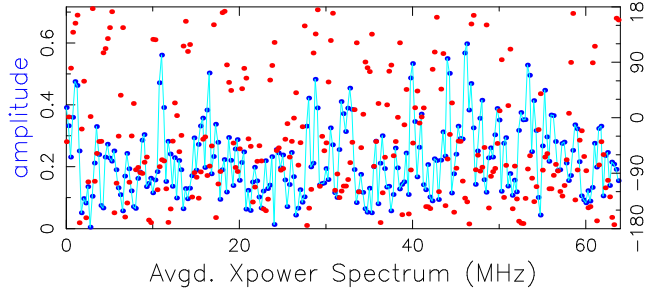


Fringe quality 0

SNR 5.9
Int time 476.982
Amp 0.099
Phase 165.4
PFD 5.5e-01
Delays (us)
SBD -0.264765
MBD -0.006204
Fringe rate (Hz)
0.011567
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

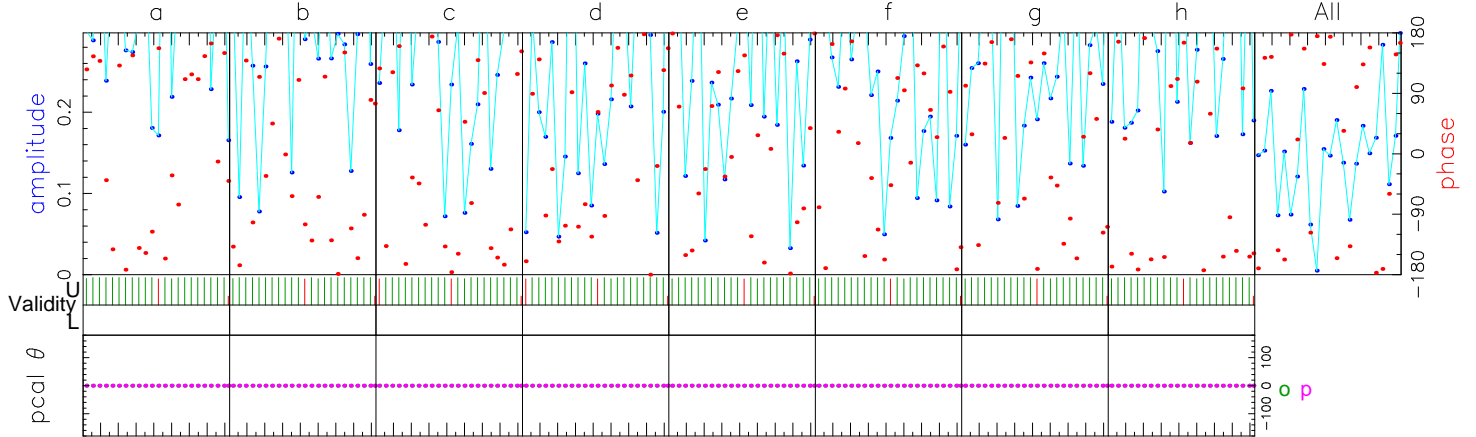


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133121
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



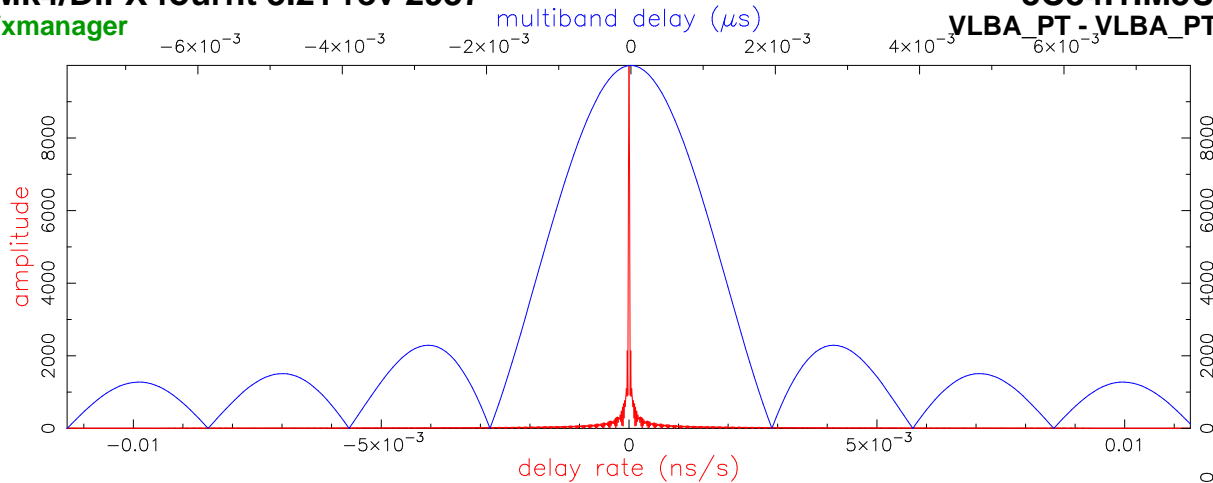
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	161.1	-175.2	-176.3	138.4	134.0	148.3	170.2	167.4	Phase	165.4
	0.2	0.1	0.1	0.1	0.0	0.0	0.1	0.2	Ampl.	0.1
	187.5	376.1	451.2	57.5	20.4	413.6	64.7	190.2	Sbd box	189.2
U/L	936/0	936/0	936/0	936/0	936/0	936/0	936/0	936/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.11815499290E+03	Apriori delay (usec)	2.11842682145E+03	Resid mbdelay (usec)	-6.20356E-03	+/-	1.8E-04
Sband delay (usec)	2.11816205670E+03	Apriori clock (usec)	2.1313480E+01	Resid sbdelay (usec)	-2.64765E-01	+/-	1.5E-03
Phase delay (usec)	2.11842682679E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	5.33390E-06	+/-	6.2E-07
Delay rate (us/s)	1.29834731902E-01	Apriori rate (us/s)	1.29834597620E-01	Resid rate (us/s)	1.34282E-07	+/-	2.3E-09
Total phase (deg)	309.4	Apriori accel (us/s/s)	-8.05275148452E-06	Resid phase (deg)	165.4	+/-	19.3

ph/seg (deg)	60.0	Theor.	46.3	Amplitude	0.099 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.9		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)	21.5		27.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.0		47.7	Inc. seg. avg.	0.109	Sample rate(MSamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.092	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

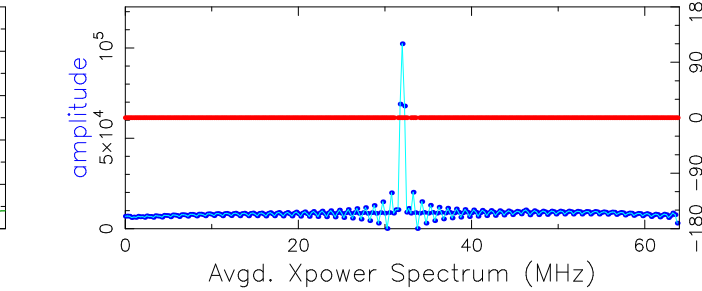
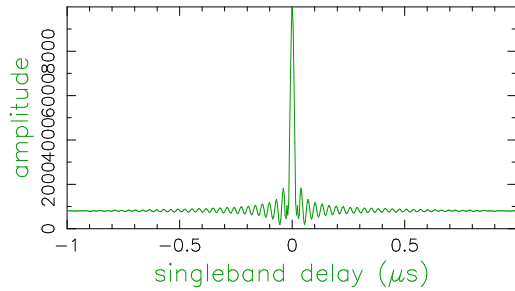
o: az 291.7 el 54.6 pa 81.0 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -1008.112 -277.421 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/op...1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/op.W.205.1M5UO



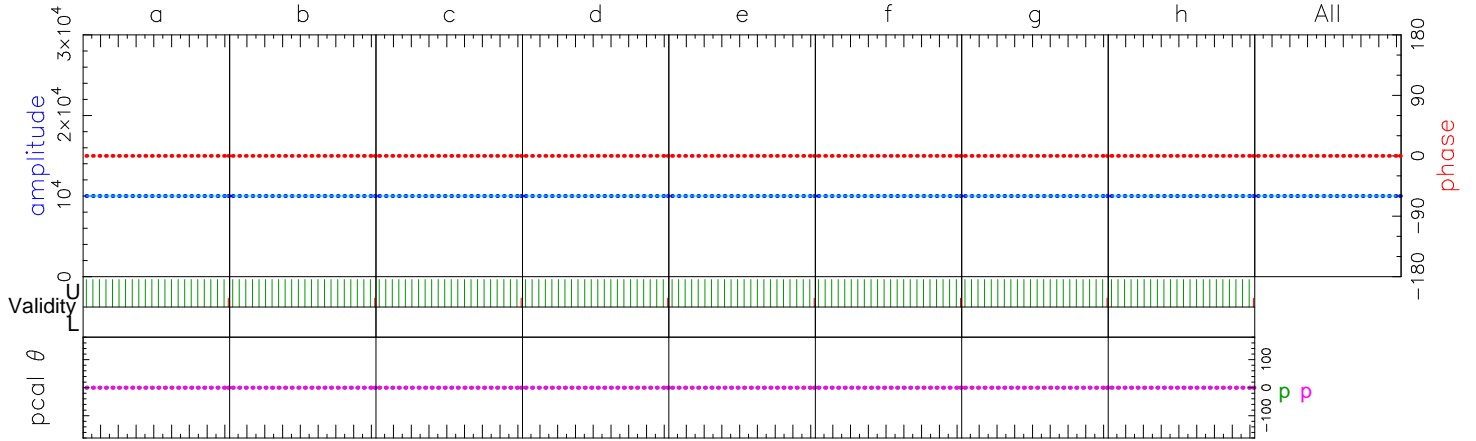
Fringe quality 9

SNR 599116.6
Int time 479.985
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133112
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

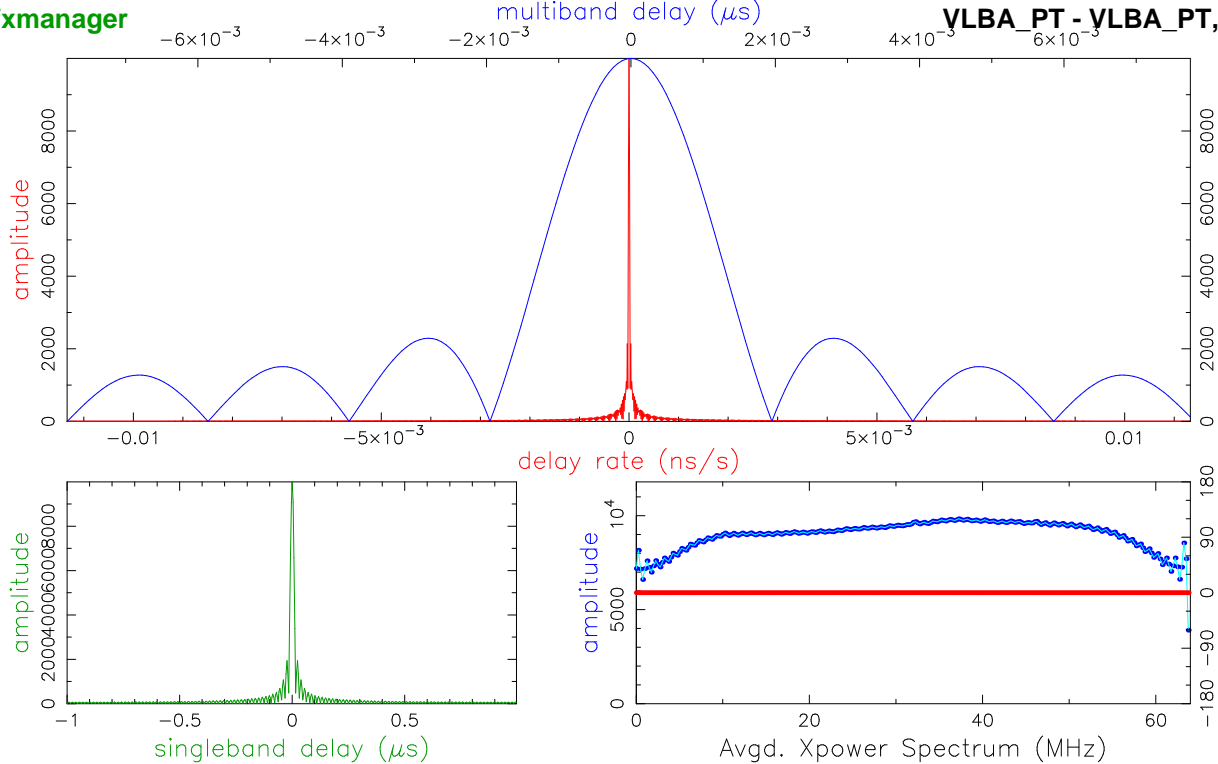


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.8E-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

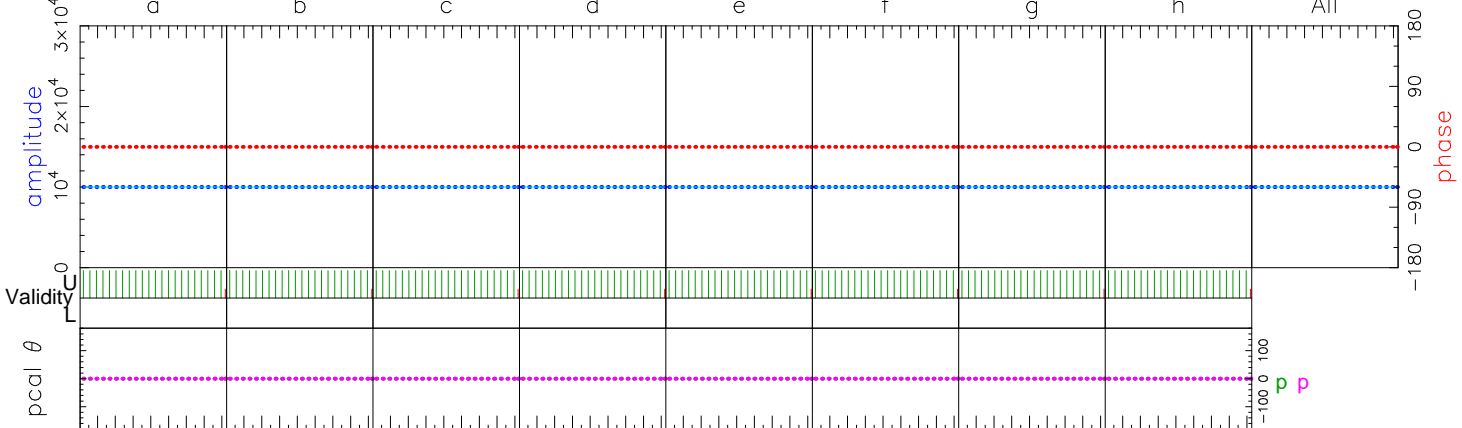
RMS Theor. Amplitude 9999.999 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

p: az 296.8 el 45.9 pa 79.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp.W.159.1IM5UO



Fringe quality 9
SNR 599116.6
Int time 479.985
Amp 9999.999
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz) 0.000000
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Yr:day # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133115
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		
p	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

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

RMS Theor. Amplitude 9999.999 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

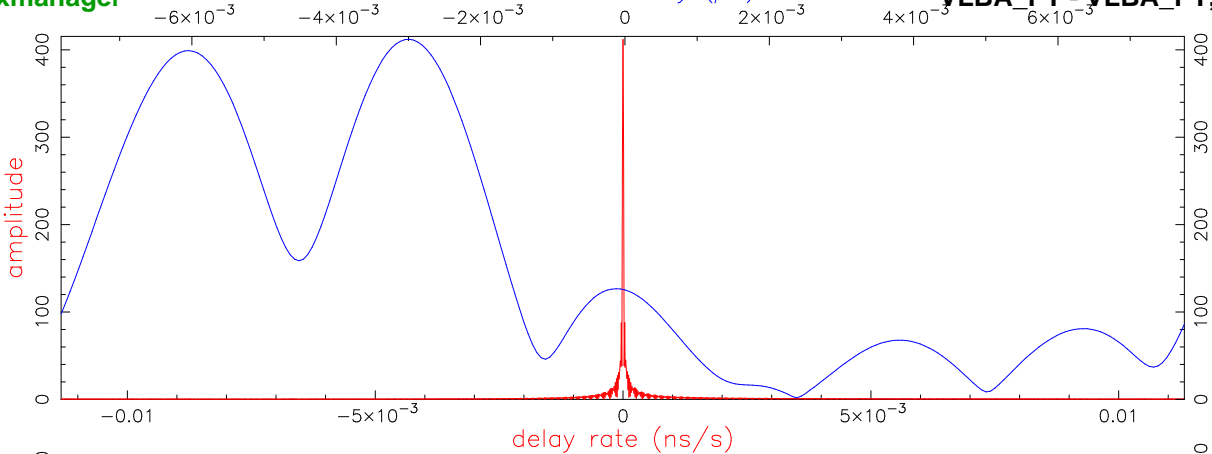
p: az 296.8 el 45.9 pa 79.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp.W.178.1M5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

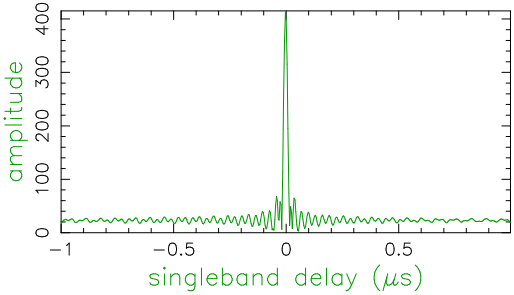
3C84.1M5UO, No0113, pp
VLBA_PT - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

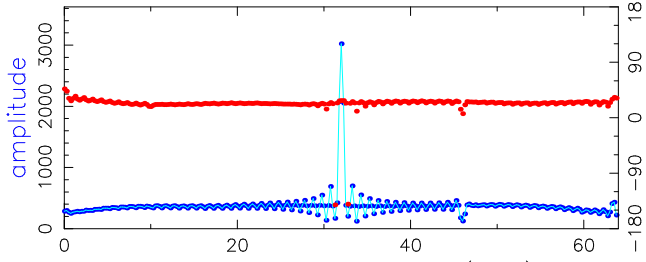


Fringe quality 5

SNR 24883.4
Int time 479.985
Amp 415.335
Phase 27.3
PFD 0.0e+00
Delays (us)
SBD -0.002717
MBD -0.002970
Fringe rate (Hz)
0.000006
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

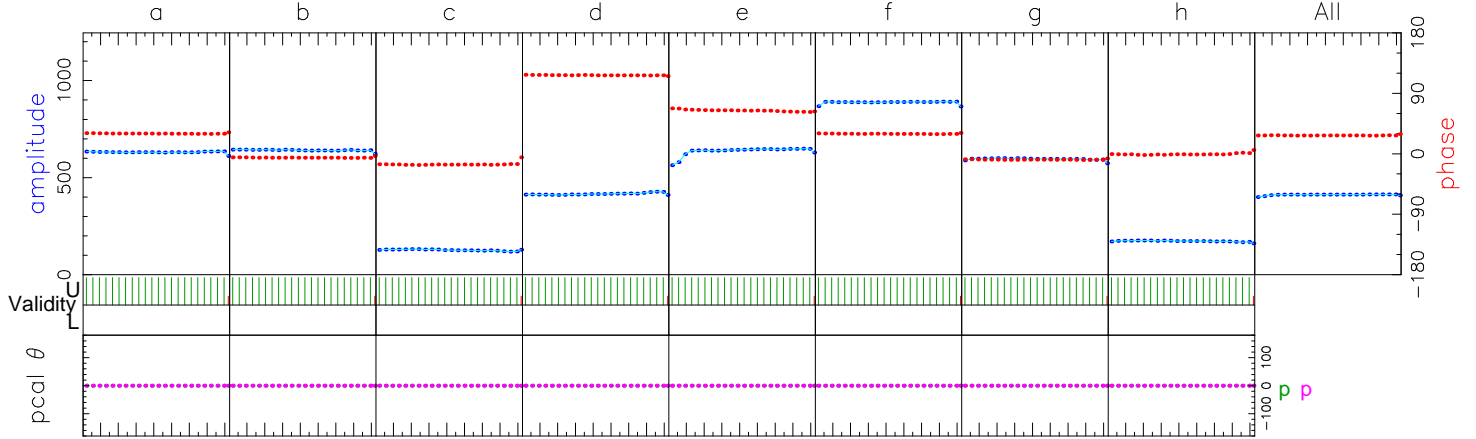


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133119
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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -2.97040625000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -2.97041E-03 +/- 4.4E-08
 Sband delay (usec) -2.71725000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -2.71725E-03 +/- 3.5E-07
 Phase delay (usec) 8.79994116301E-07 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 8.79994E-07 +/- 1.5E-10
 Delay rate (us/s) 6.73129738605E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 6.73130E-11 +/- 5.4E-13
 Total phase (deg) 27.3 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 27.3 +/- 0.0

RMS Theor. Amplitude 415.335 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.3 0.0 Search (2048X32) 411.071 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 49.1 0.0 Inc. seg. avg. 411.845 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 62.8 0.0 Inc. frq. avg. 513.888 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 p: az 296.8 el 45.9 pa 79.8 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

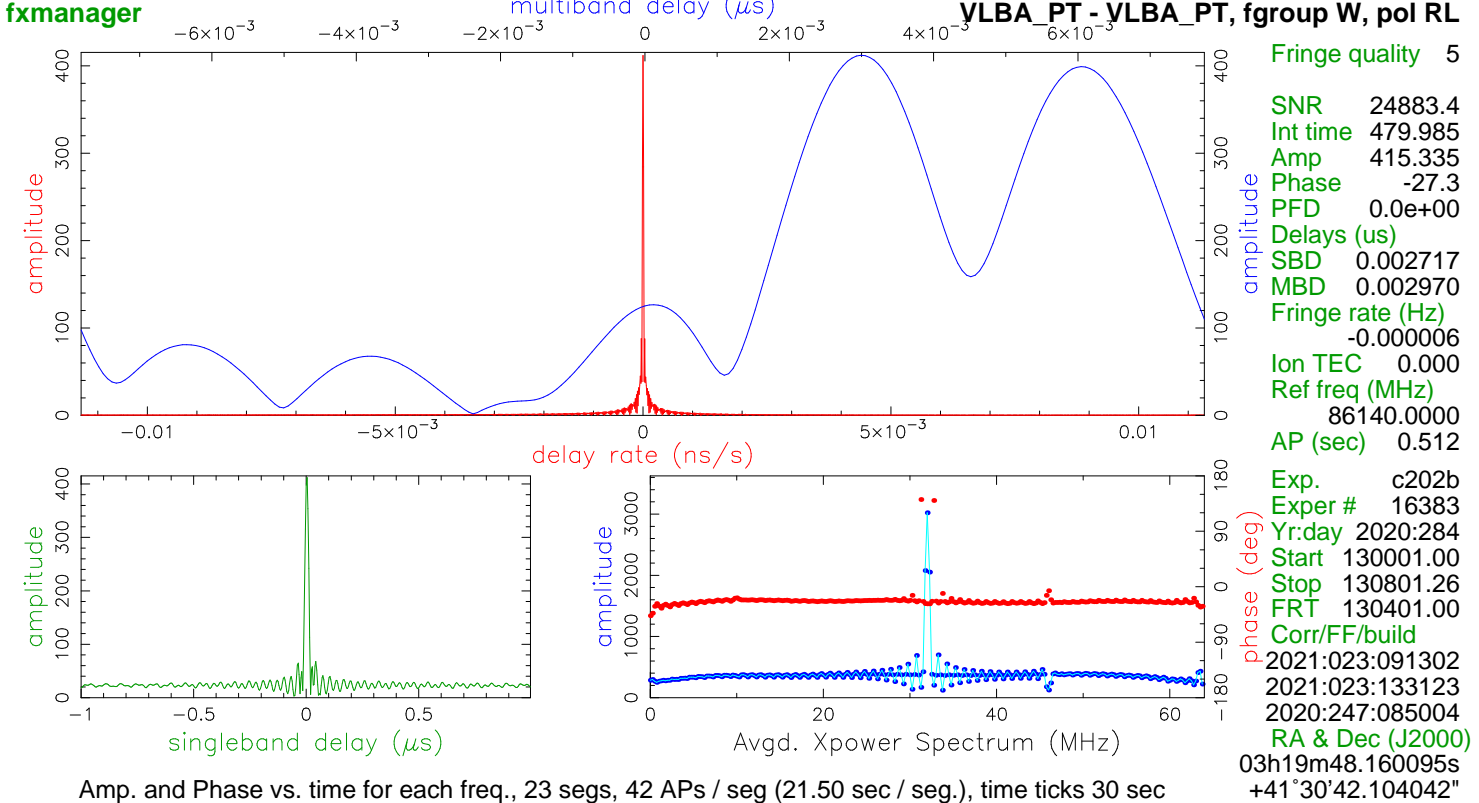
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp.W.194.1M5UO

Mk4/DiFX fourfit 3.21 rev 2937

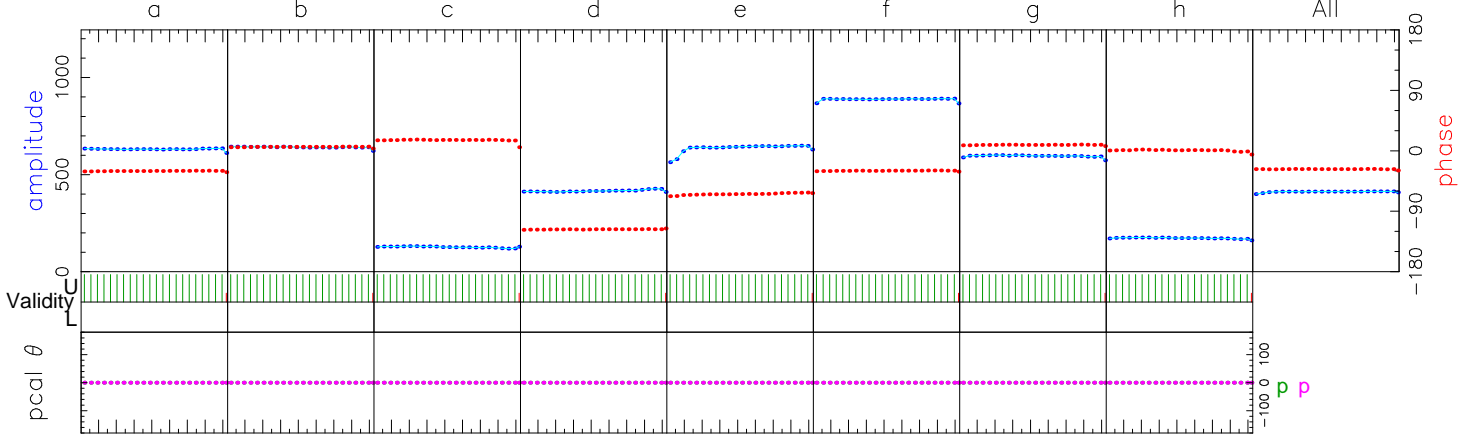
fxmanager

3C84.1M5UO, No0113, pp

VLBA_PT - VLBA_PT, fgroup W, pol RL



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
	-30.1	5.8	15.8	-116.9	-64.4	-29.7	8.7	0.6	Phase	-27.3
	631.7	641.6	127.0	416.5	636.3	888.2	596.6	173.2	Ampl.	513.9
	257.9	258.1	256.4	257.9	258.3	258.3	258.0	256.6	Sbd box	257.7
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	2.97040625000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.97041E-03	+/-	4.4E-08
Sband delay (usec)	2.71725000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.71725E-03	+/-	3.5E-07
Phase delay (usec)	-8.79994116385E-07	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-8.79994E-07	+/-	1.5E-10
Delay rate (us/s)	-6.73129738605E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-6.73130E-11	+/-	5.4E-13
Total phase (deg)		Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-27.3	+/-	0.0

ph/seg (deg)	0.3	0.0	RMS	415.335 +/- 0.017	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	1.1	0.0	Theor.		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	49.1	0.0	Search (2048X32)	411.071	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	62.8	0.0	Interp.	0.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
			Inc. seg. avg.	411.845	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
			Inc. frq. avg.	513.888						
p: az 296.8 el 45.9 pa 79.8		p: az 296.8 el 45.9 pa 79.8		u, v (fr/asec)	0.000 0.000					simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/pp.W.211.1M5UO

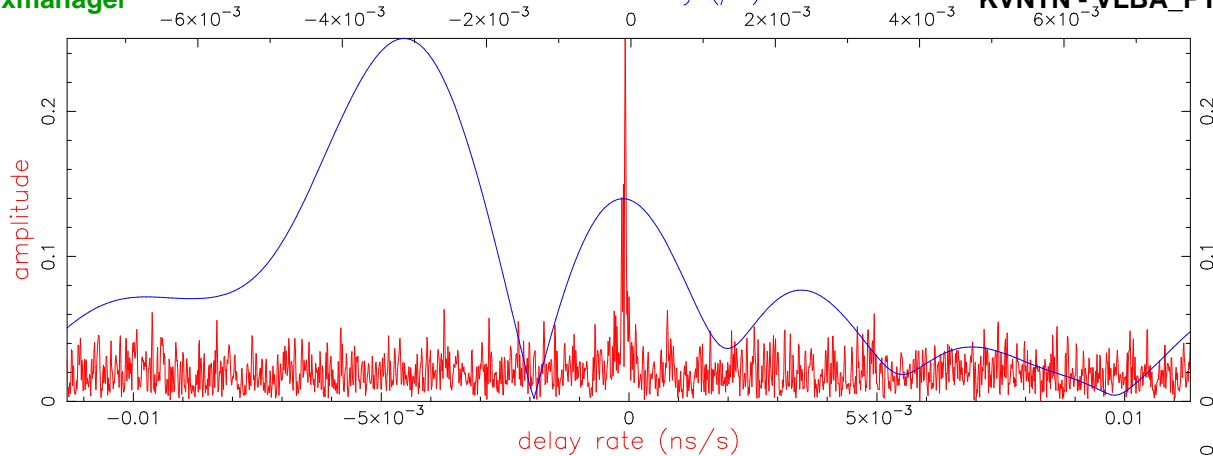
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M5UO, No0113, tp

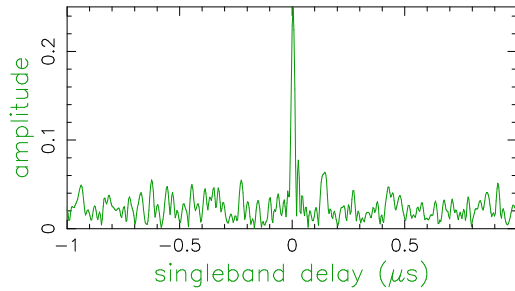
KVNTN - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

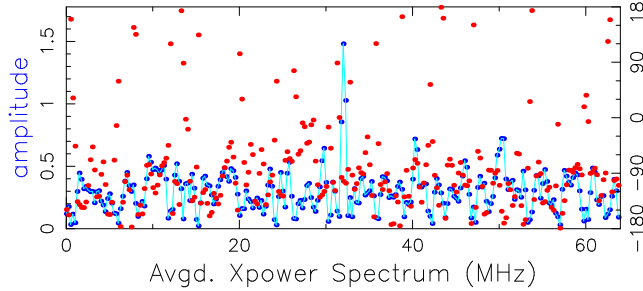


Fringe quality 8

SNR 15.0
 Int time 479.985
 Amp 0.250
 Phase -27.2
 PFD 4.6e-42
 Delays (us)
 SBD 0.003733
 MBD -0.003151
 Fringe rate (Hz)
 -0.006209
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

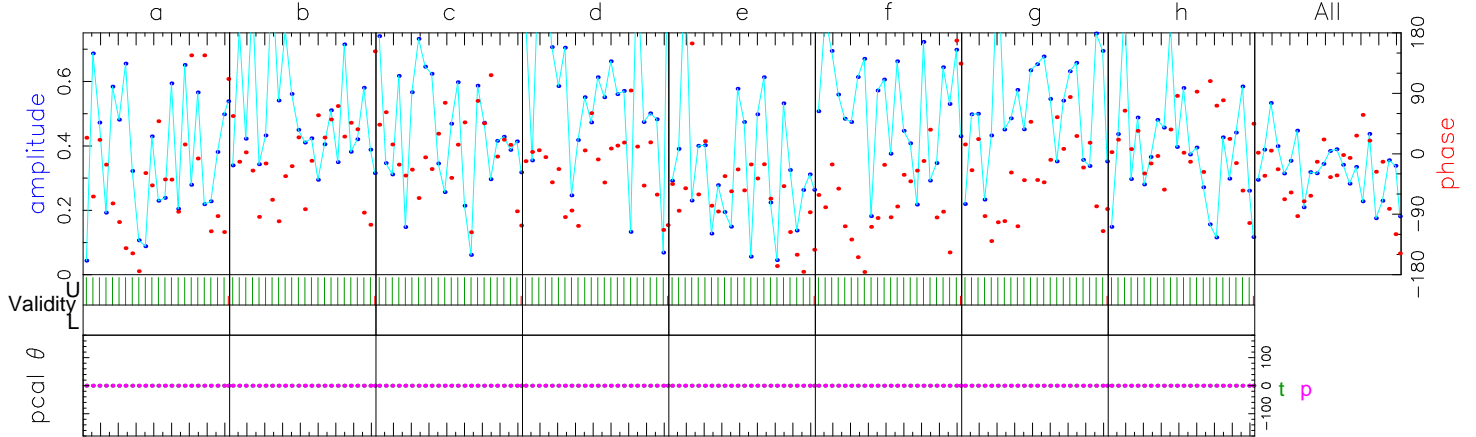


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133113
 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
	-64.1	-15.4	6.0	-14.9	-55.3	-81.8	-36.3	15.7	Phase	-27.2
	0.2	0.3	0.3	0.4	0.3	0.3	0.3	0.3	Ampl.	0.3
	259.9	257.9	257.6	257.9	257.5	257.9	258.2	261.0	Sbd box	258.0
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.40619636891E+03	Apriori delay (usec)	-2.40619321811E+03	Resid mbdelay (usec)	-3.15080E-03	+/-	7.2E-05
Sband delay (usec)	-2.40618948461E+03	Apriori clock (usec)	1.2924881E+00	Resid sbdelay (usec)	3.73350E-03	+/-	5.7E-04
Phase delay (usec)	-2.40619321898E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-8.76825E-07	+/-	2.5E-07
Delay rate (us/s)	1.70861753199E+00	Apriori rate (us/s)	1.70861760407E+00	Resid rate (us/s)	-7.20759E-08	+/-	8.9E-10
Total phase (deg)	-318.0	Apriori accel (us/s/s)	1.16905867717E-05	Resid phase (deg)	-27.2	+/-	7.6

ph/seg (deg)	44.6	RMS	18.3	Theor.	44.6	Amplitude	0.250 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	47.2	Search (2048X32)	0.229	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	37.5	Inc. seg. avg.	0.319	Inc. frq. avg.	0.287	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	31.9	Inc. frq. avg.	0.287	Sample rate(MISamp/s): 128		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011
									ion window (TEC)	0.00 0.00	

t: az 59.7 el 35.9 pa -74.2 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -13059.820 841.436 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp..11M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp.W.164.11M5UO

Mk4/DiFX fourfit 3.21 rev 2937

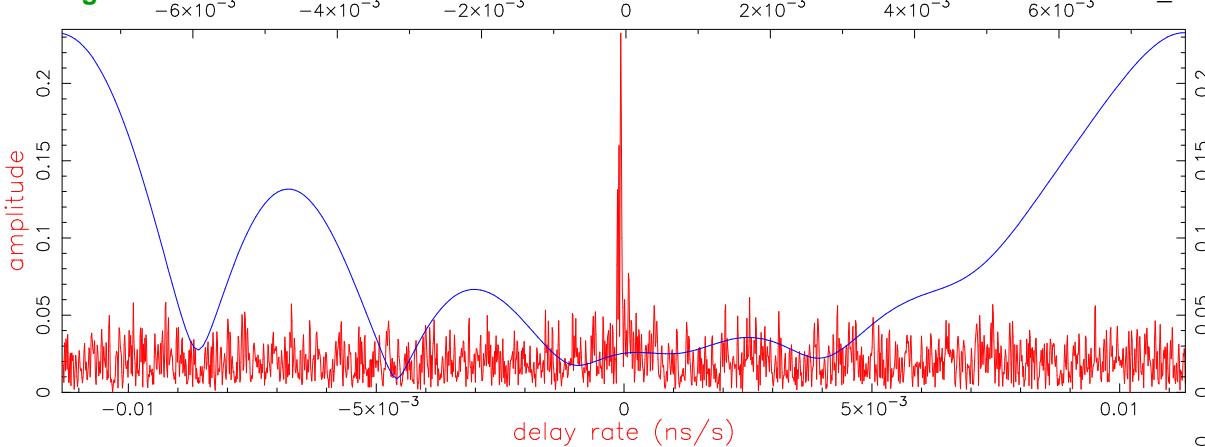
fxmanager

3C84.1M5UO, No0113, tp

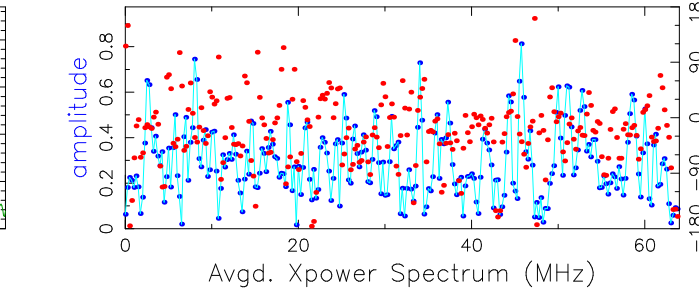
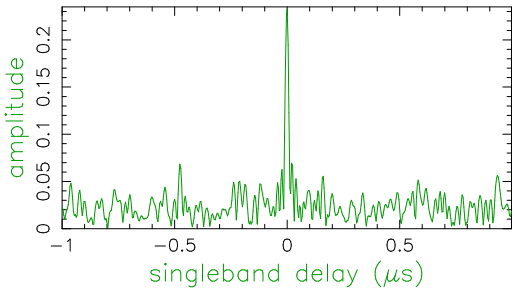
KVNTN - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 9

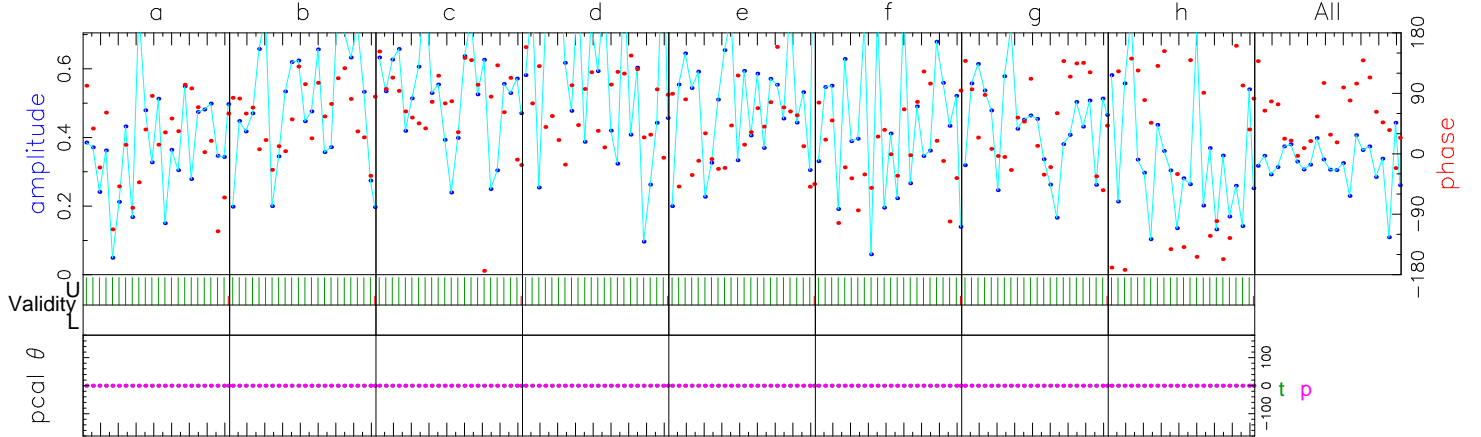


SNR 14.1
 Int time 479.985
 Amp 0.235
 Phase 57.1
 PFD 3.0e-36
 Delays (us)
 SBD -0.001278
 MBD -0.007976
 Fringe rate (Hz)
 -0.006127
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133117
 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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.40620119389E+03									
Sband delay (usec)	-2.40619449636E+03									
Phase delay (usec)	-2.40619321626E+03									
Delay rate (us/s)	1.70861753295E+00									
Total phase (deg)			-233.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									57.1	+/- 8.1
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Bits/sample:	2x2									
Sample rate(MISamp/s):	128									
Data rate(Mb/s):	2048									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								

ph/seg (deg) 44.2 19.5 Search (2048X32) 0.221 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 47.9 34.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.8 11.5 Inc. seg. avg. 0.308 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 39.8 20.1 Inc. frq. avg. 0.286 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 t: az 59.7 el 35.9 pa -74.2 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -13059.820 841.436 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp.W.183.1IM5UO

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

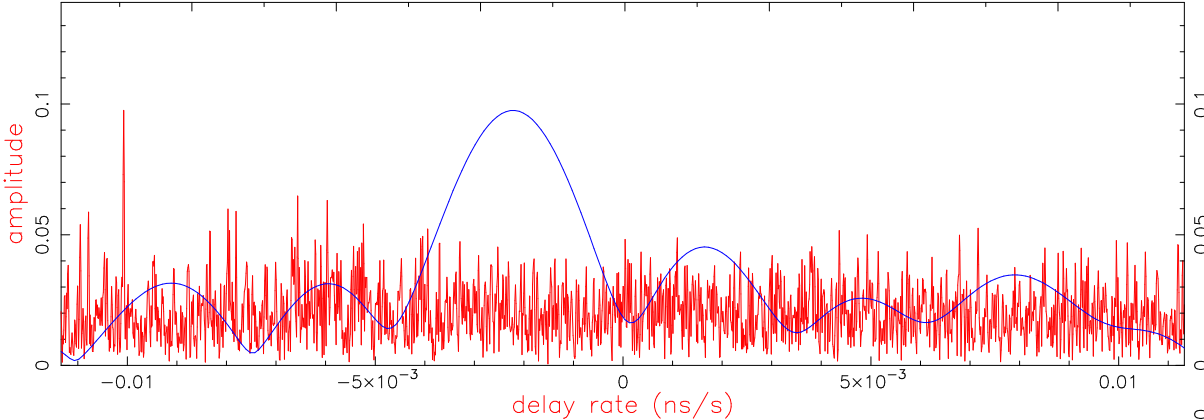
3C84.1IM5UO, No0113, tp

KVNTN - VLBA_PT, fgroup W, pol LR

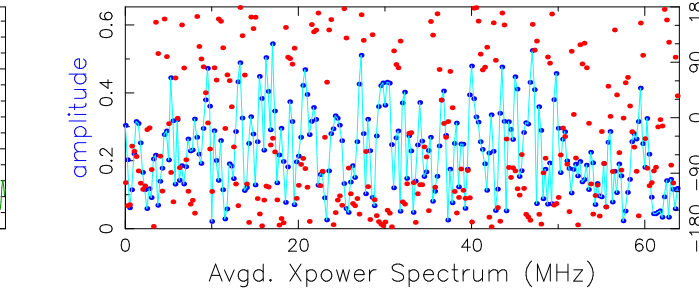
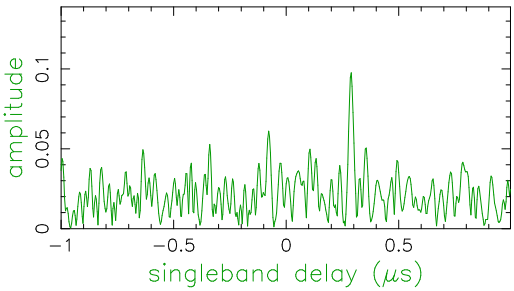
multiband delay (μ s)

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

Fringe quality 0

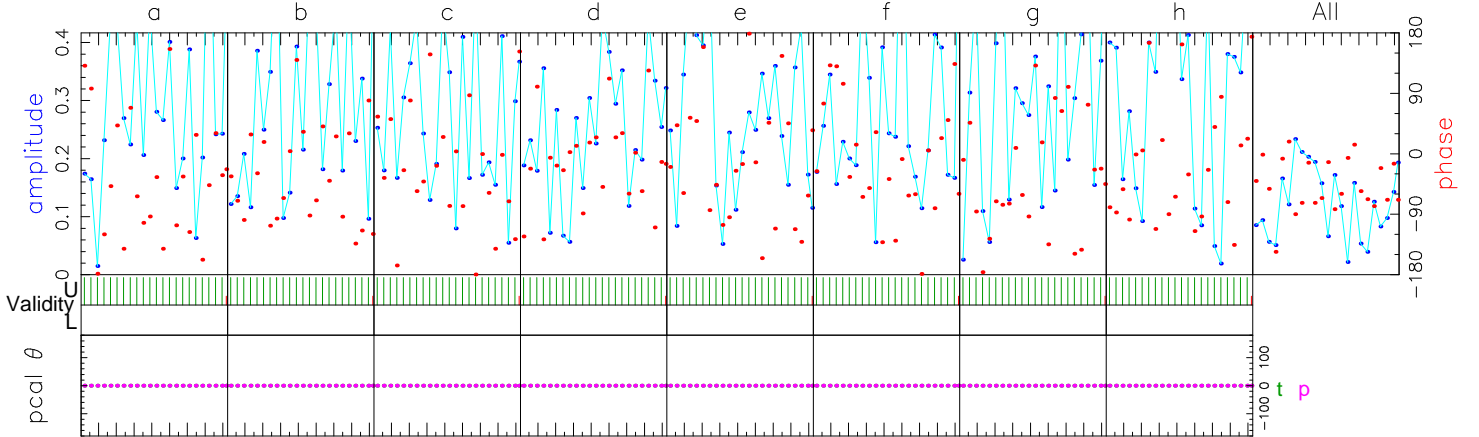


SNR 5.9
Int time 479.985
Amp 0.139
Phase -47.2
PFD 6.8e-01
Delays (us)
SBD 0.288133
MBD -0.001558
Fringe rate (Hz)
-0.868777
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133121
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
	-69.3	-54.3	-24.3	-9.0	-72.8	-31.4	-47.1	-59.7	Phase	-47.2
	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.2	Ampl.	0.1
	80.2	387.9	457.0	190.0	131.1	379.0	170.2	329.5	Sbd box	330.8
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-2.40589790107E+03	Apriori delay (usec)	-2.40619321811E+03	Resid mbdelay (usec)	-1.55797E-03	+/-	1.9E-04
Sband delay (usec)	-2.40590508511E+03	Apriori clock (usec)	1.2924881E+00	Resid sbdelay (usec)	2.88133E-01	+/-	1.5E-03
Phase delay (usec)	-2.40619321963E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-1.52051E-06	+/-	6.3E-07
Delay rate (us/s)	1.70860751843E+00	Apriori rate (us/s)	1.70861760407E+00	Resid rate (us/s)	-1.00856E-05	+/-	2.3E-09
Total phase (deg)		Apriori accel (us/s/s)	1.16905867717E-05	Resid phase (deg)	-47.2	+/-	19.5

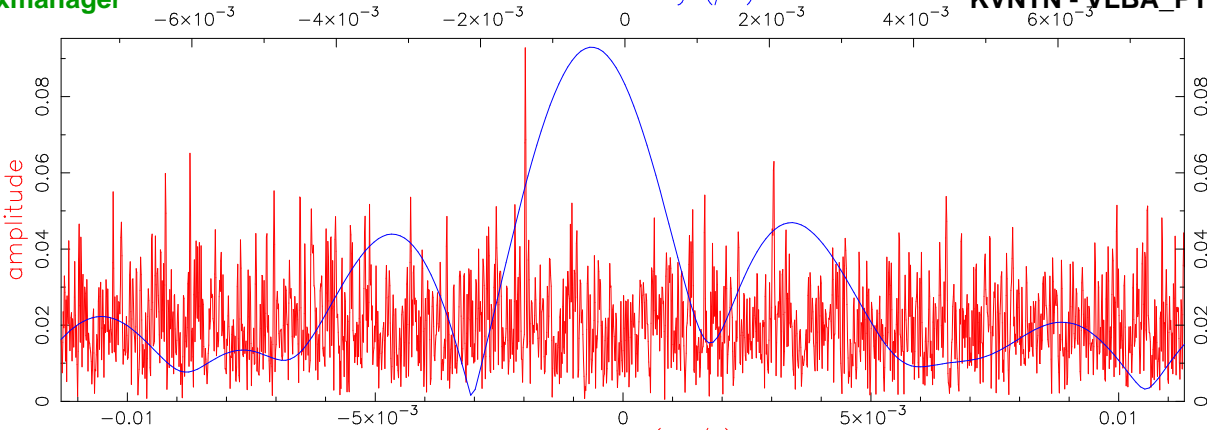
ph/seg (deg)	39.1	Theor.	46.8	Amplitude	0.139 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	65.6	Search (2048X32)	0.095	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	24.4	Inc. seg. avg.	0.129	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	32.5	Inc. frq. avg.	0.132	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

t: az 59.7 el 35.9 pa -74.2 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -13059.820 841.436 simultaneous interpolator

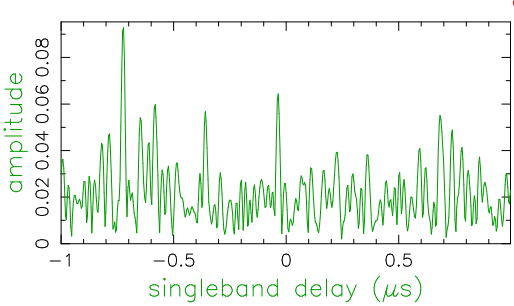
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp.W.202.1IM5UO

multiband delay (μ s)

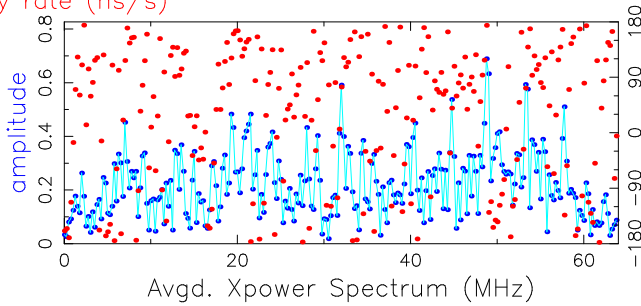
Fringe quality 0



SNR 5.6
Int time 479.985
Amp 0.095
Phase 62.9
PFD 9.8e-01
Delays (us)
SBD -0.724193
MBD -0.000520
Fringe rate (Hz)
-0.169786
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

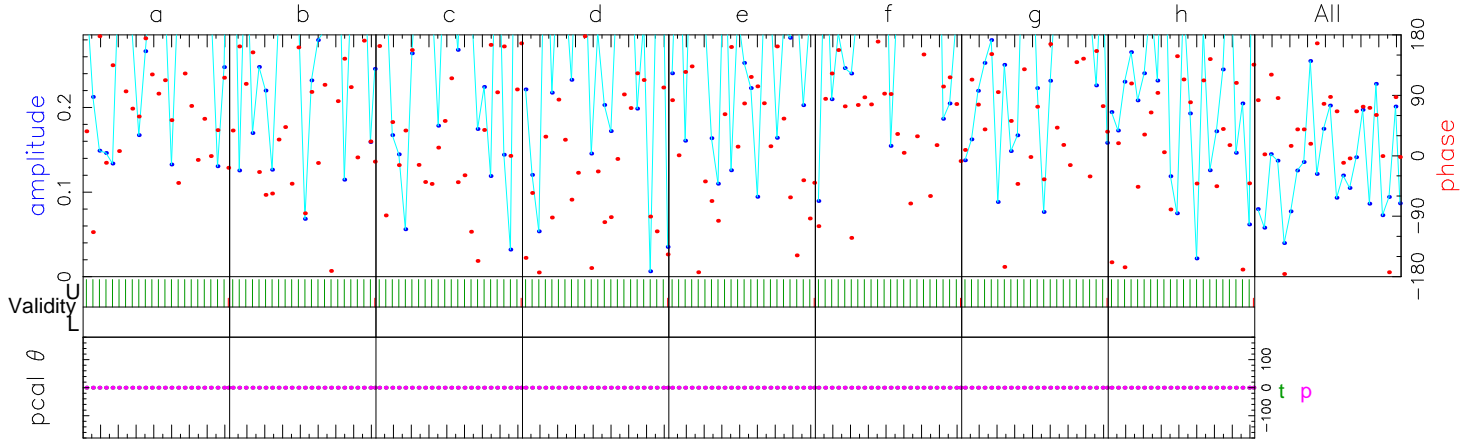


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133125
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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.40691248785E+03	Apriori delay (usec)	-2.40619321811E+03	Resid mbdelay (usec)	-5.19739E-04	+/-	1.9E-04
Sband delay (usec)	-2.40691741061E+03	Apriori clock (usec)	1.2924881E+00	Resid sbdelay (usec)	-7.24193E-01	+/-	1.5E-03
Phase delay (usec)	-2.40619321608E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	2.02916E-01	+/-	6.6E-07
Delay rate (us/s)	1.70861563302E+00	Apriori rate (us/s)	1.70861760407E+00	Resid rate (us/s)	-1.97105E-06	+/-	2.4E-09
Total phase (deg)	-227.9	Apriori accel (us/s/s)	1.16905867717E-05	Resid phase (deg)	62.9	+/-	20.3

ph/seg (deg)	56.5	Theor.	48.7	Amplitude	0.095 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.2		56.5	Search (2048X32)	0.092	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	17.0		28.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	44.2		50.2	Inc. seg. avg.	0.097	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.085	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

t: az 59.7 el 35.9 pa -74.2 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -13059.820 841.436 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/tp.W.222.1IM5UO

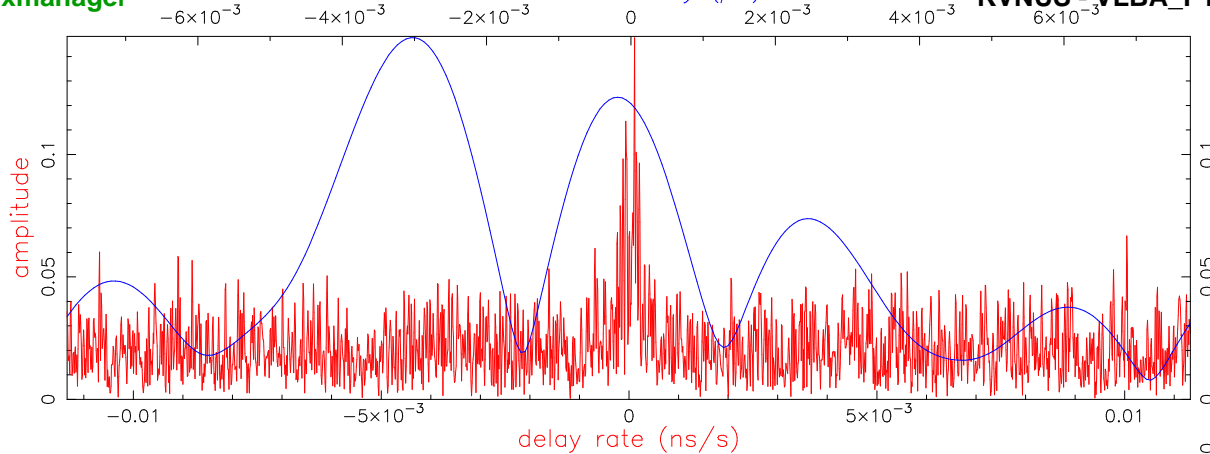
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, up

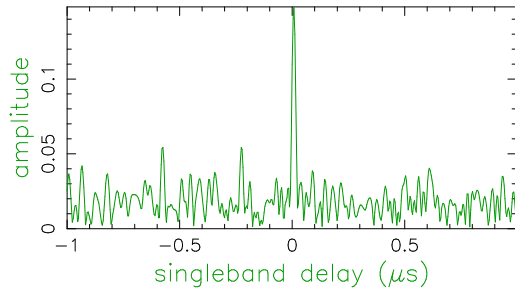
KVNUS - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

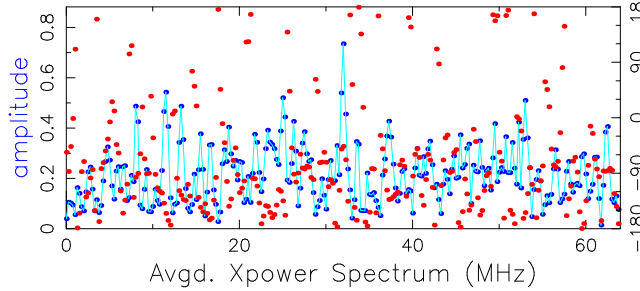


Fringe quality 9

SNR 8.9
 Int time 479.985
 Amp 0.148
 Phase 2.7
 PFD 2.5e-10
 Delays (us)
 SBD 0.006987
 MBD -0.003060
 Fringe rate (Hz)
 0.009365
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

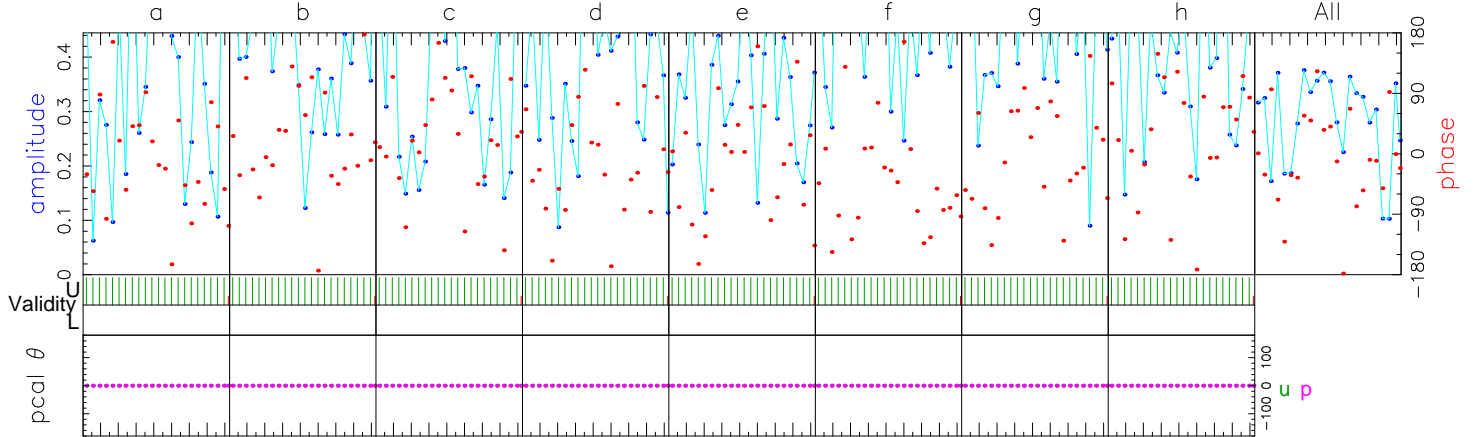


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133114
 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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.49888549652E+03	Apriori delay (usec)	-1.49889806110E+03	Resid mbdelay (usec)	-3.06043E-03	+/-	1.2E-04
Sband delay (usec)	-1.49889107385E+03	Apriori clock (usec)	2.4770002E+00	Resid sbdelay (usec)	6.98725E-03	+/-	9.7E-04
Phase delay (usec)	-1.49889806101E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	8.60544E-08	+/-	4.2E-07
Delay rate (us/s)	1.66657297579E+00	Apriori rate (us/s)	1.66657286707E+00	Resid rate (us/s)	1.08721E-07	+/-	1.5E-09
Total phase (deg)	-351.1	Apriori accel (us/s/s)	9.30158162900E-06	Resid phase (deg)	2.7	+/-	12.9

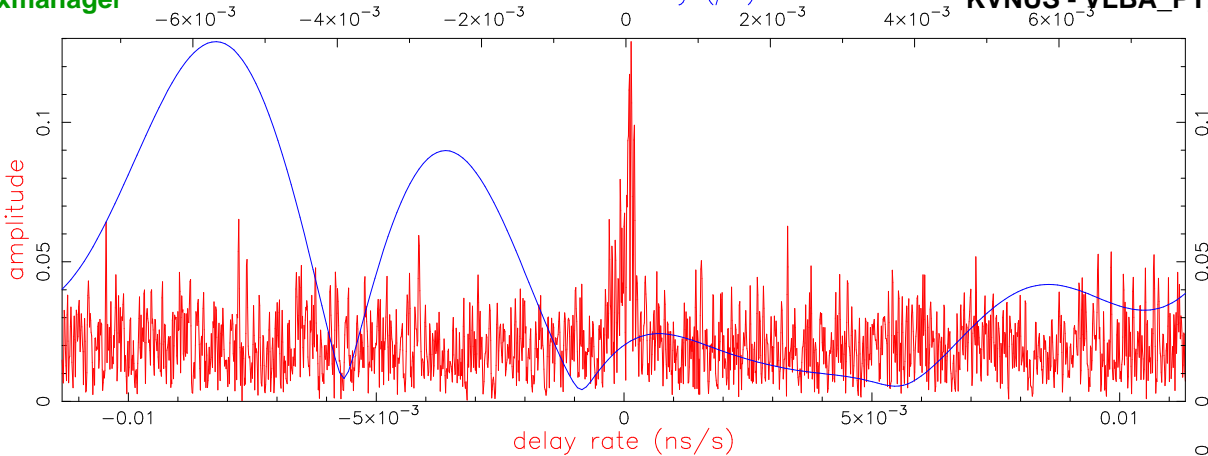
ph/seg (deg)	71.8	Theor.	30.9	Amplitude	0.148 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	108.7	Search (2048X32)	0.144	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	42.4	Inc. seg. avg.	0.250	Inc. frq. avg.	0.179	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	40.6	Inc. frq. avg.	0.179	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011

u: az 61.9 el 39.0 pa -74.1 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -12742.451 886.855 simultaneous interpolator

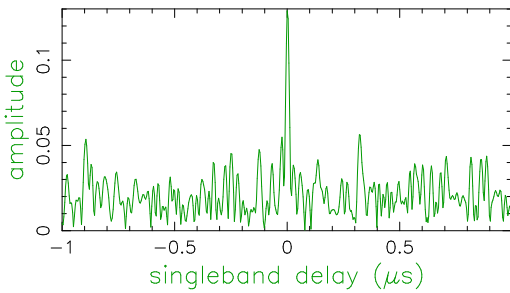
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/up..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/up.W.173.1M5UO

multiband delay (μ s)

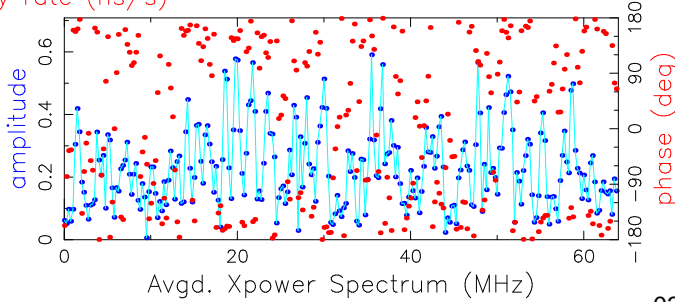
Fringe quality 9



SNR 7.8
Int time 479.985
Amp 0.130
Phase -113.7
PFD 2.2e-06
Delays (us)
SBD 0.001191
MBD -0.005658
Fringe rate (Hz)
0.012470
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

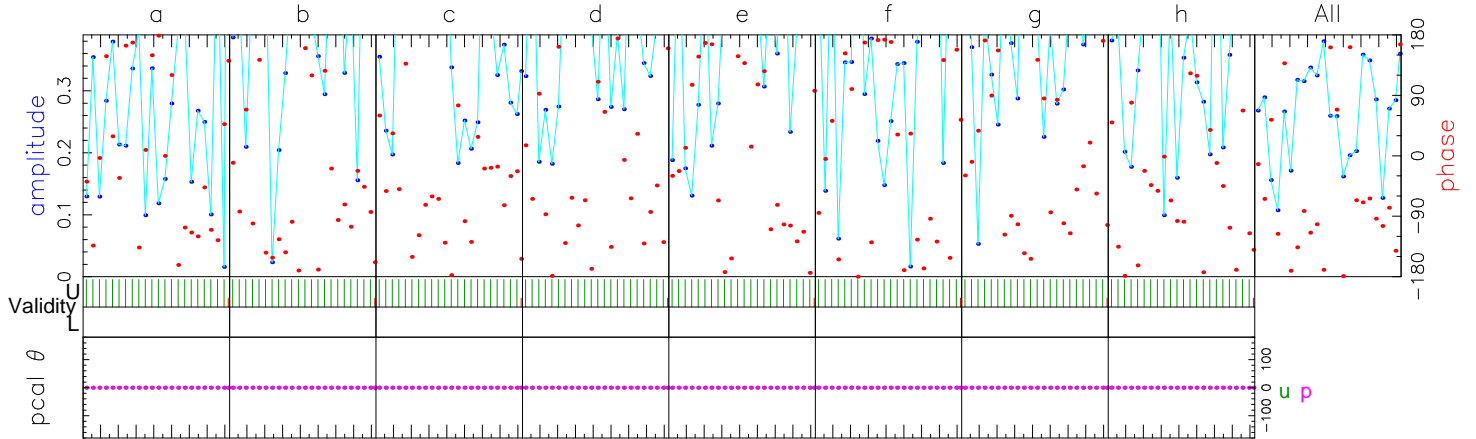


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133119
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
	-148.5	-112.9	-66.9	-92.8	-158.2	-163.7	-100.5	-77.1	Phase	-113.7
	0.1	0.2	0.2	0.2	0.1	0.2	0.1	0.1	Ampl.	0.1
	25.6	257.6	258.0	257.3	286.3	258.3	256.9	259.7	Sbd box	257.3
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	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:p	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	
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.49890371897E+03				-1.49889806110E+03				Resid mbdelay (usec)	-5.65787E-03 +/- 1.4E-04
Sband delay (usec)	-1.49889687010E+03				2.4770002E+00				Resid sbdelay (usec)	1.19100E-03 +/- 1.1E-03
Phase delay (usec)	-1.49889806476E+03				0.0000000E+00				Resid phdelay (usec)	-3.66626E-06 +/- 4.7E-07
Delay rate (us/s)	1.66657301184E+00				1.66657286707E+00				Resid rate (us/s)	1.44769E-07 +/- 1.7E-09
Total phase (deg)			-107.5		9.30158162900E-06				Resid phase (deg)	-113.7 +/- 14.7
									PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	74.0	35.3		Search (2048X32)	0.127				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	116.0	61.5		Interp.	0.000				Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	40.5	20.8		Inc. seg. avg.	0.219				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	37.2	36.3		Inc. frq. avg.	0.147				Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
u: az 61.9 el 39.0 pa -74.1									nlags: 256	t_cohere infinite
p: az 296.8 el 45.9 pa 79.8										
u, v (fr/asec) -12742.451 886.855										simultaneous interpolator

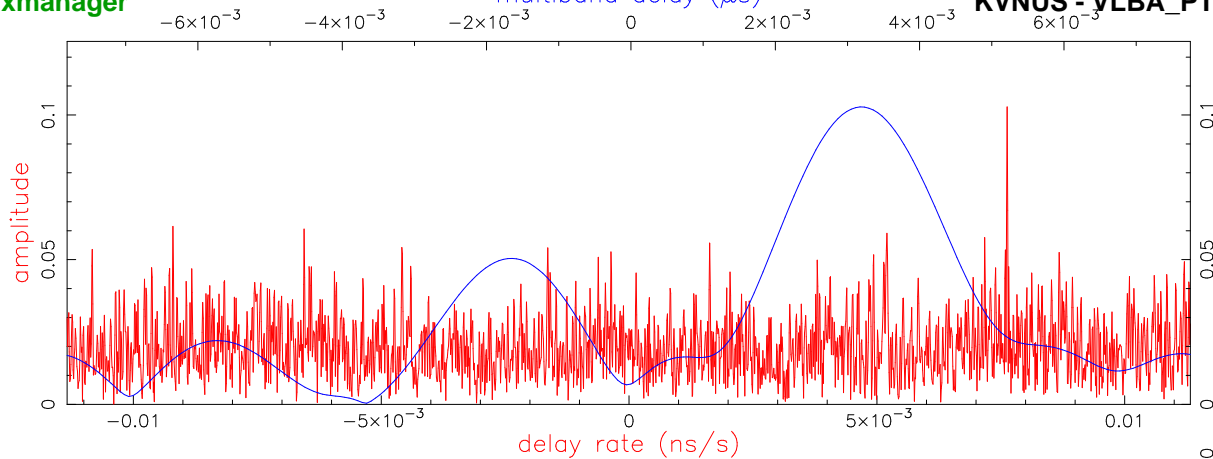
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M5UO, No0113, up

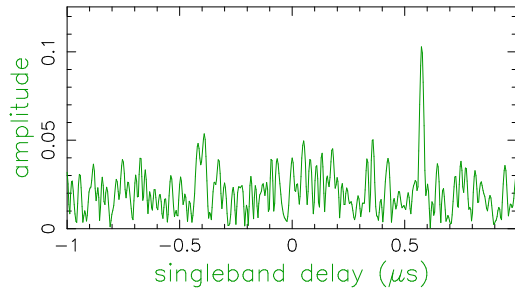
KVNUS - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

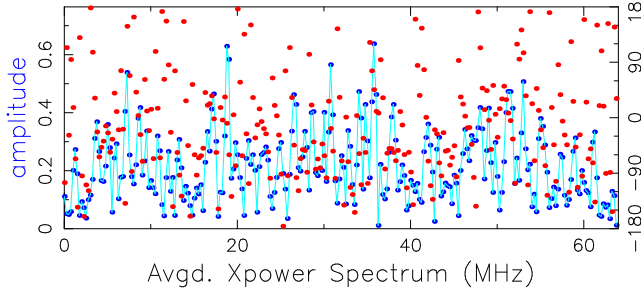


Fringe quality 0

SNR 6.2
 Int time 479.985
 Amp 0.125
 Phase 80.2
 PFD 1.5e-01
 Delays (us)
 SBD 0.575221
 MBD 0.003192
 Fringe rate (Hz)
 0.658408
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

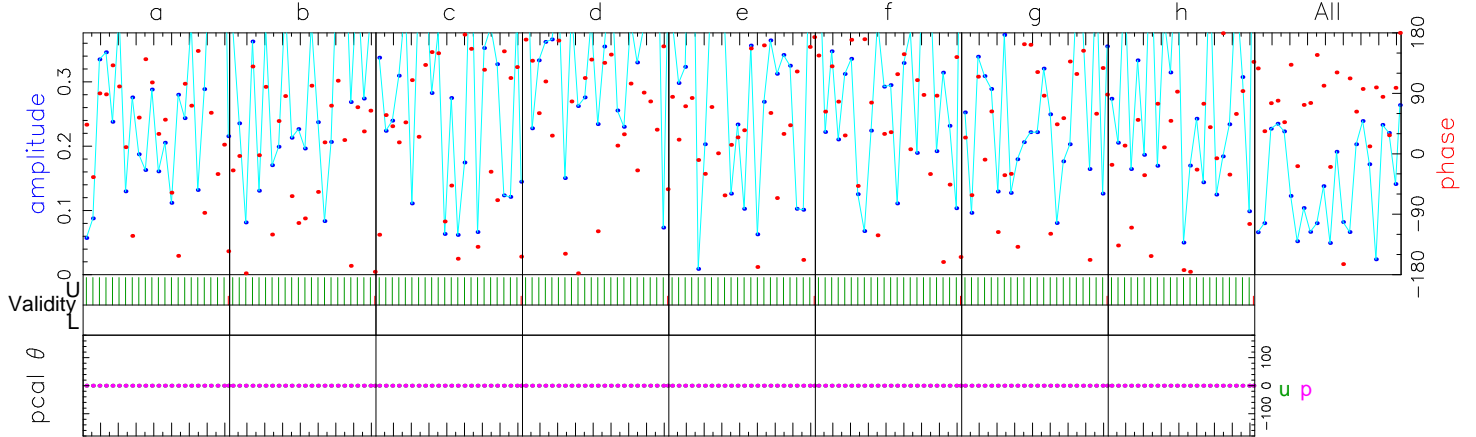


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133123
 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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.49831674394E+03	Apriori delay (usec)	-1.49889806110E+03	Resid mbdelay (usec)	3.19216E-03	+/-	1.8E-04
Sband delay (usec)	-1.49832284035E+03	Apriori clock (usec)	2.4770002E+00	Resid sbdelay (usec)	5.75221E-01	+/-	1.4E-03
Phase delay (usec)	-1.49889805851E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.58757E-06	+/-	6.0E-07
Delay rate (us/s)	1.66658051053E+00	Apriori rate (us/s)	1.66657286707E+00	Resid rate (us/s)	7.64346E-06	+/-	2.2E-09
Total phase (deg)	-273.6	Apriori accel (us/s/s)	9.30158162900E-06	Resid phase (deg)	80.2	+/-	18.5

ph/seg (deg)	52.2	Theor.	44.4	Amplitude	0.125 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	78.6		77.5	Search (2048X32)	0.095	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	27.2		26.2	Inc. seg. avg.	0.130	Bits/sample: 2x2	mb window (us) -0.008 0.008
amp/frq (%)	31.4		45.7	Inc. frq. avg.	0.123	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

u: az 61.9 el 39.0 pa -74.1 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -12742.451 886.855 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/up..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/up.W.214.1M5UO

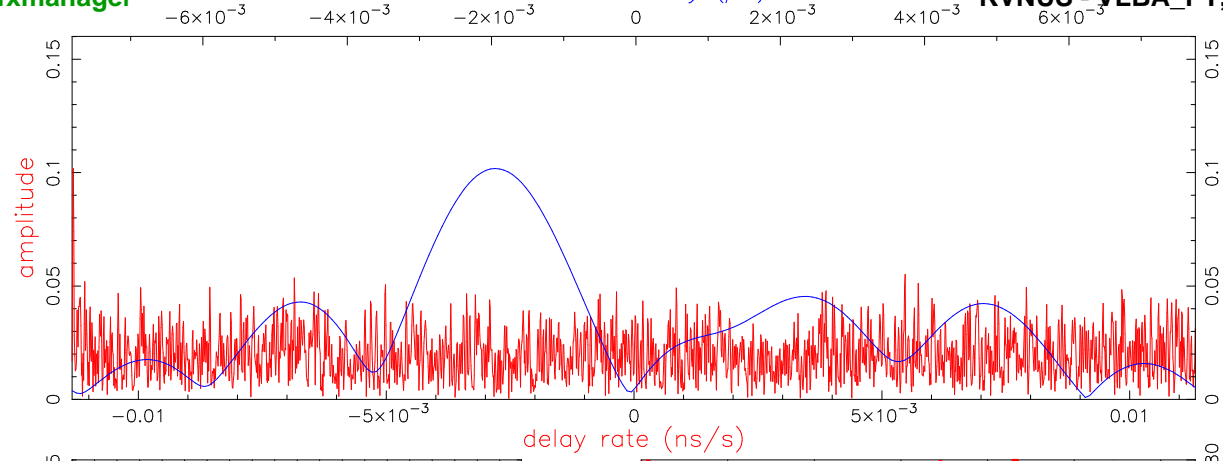
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, up

KVNUS - VLBA_PT, fgroup W, pol RL

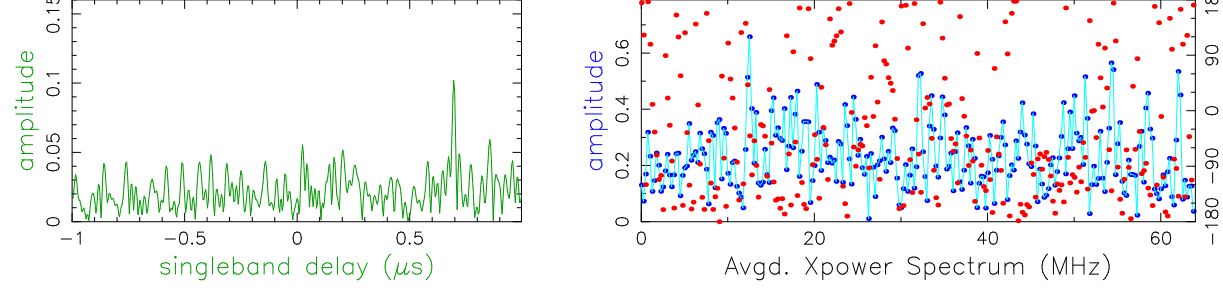
multiband delay (μ s)



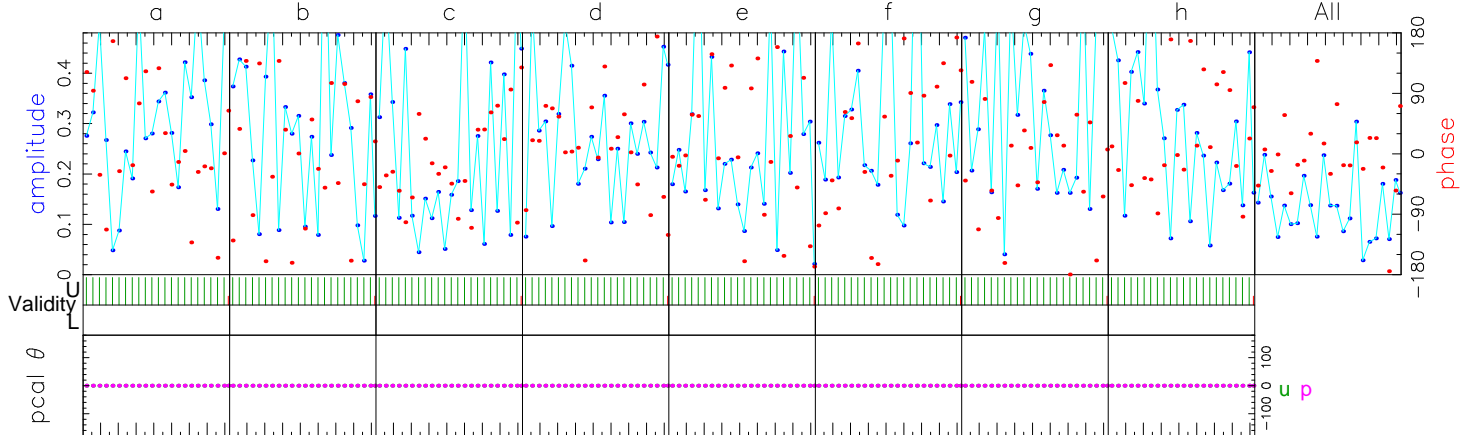
Fringe quality 0

SNR 6.1
Int time 479.985
Amp 0.160
Phase -0.9
PFD 2.3e-01
Delays (us)
SBD 0.695740
MBD -0.001936
Fringe rate (Hz)
-0.976360
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133127
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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.49819687174E+03									
Sband delay (usec)	-1.49820232135E+03									
Phase delay (usec)	-1.49889806112E+03									
Delay rate (us/s)	1.66656153250E+00									
Total phase (deg)			-354.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
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)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
u: az 61.9 el 39.0 pa -74.1										
p: az 296.8 el 45.9 pa 79.8										
u,v (fr/asec) -12742.451 886.855										
simultaneous interpolator										

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/up...1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/up.W.229.1M5UO

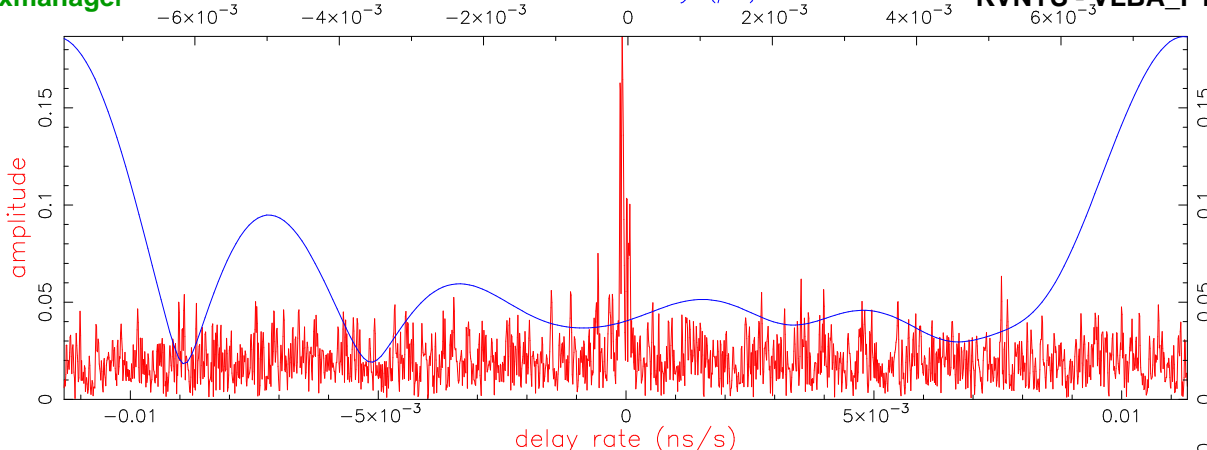
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, yp

KVNYS - VLBA_PT, fgroup W, pol LL

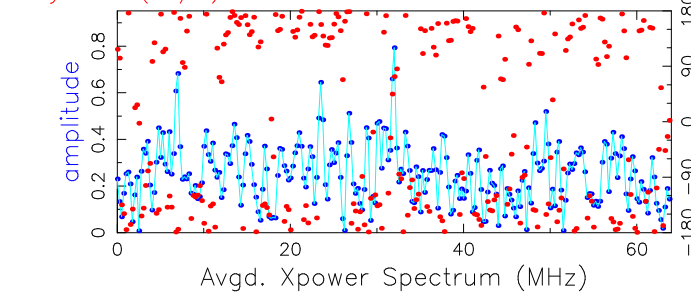
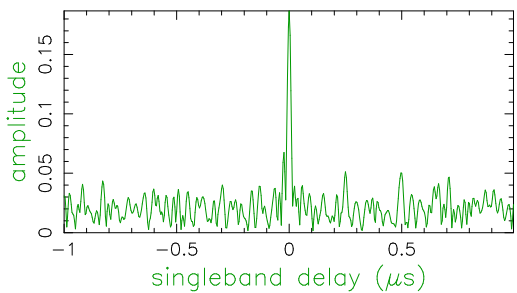
multiband delay (μ s)



Fringe quality 9

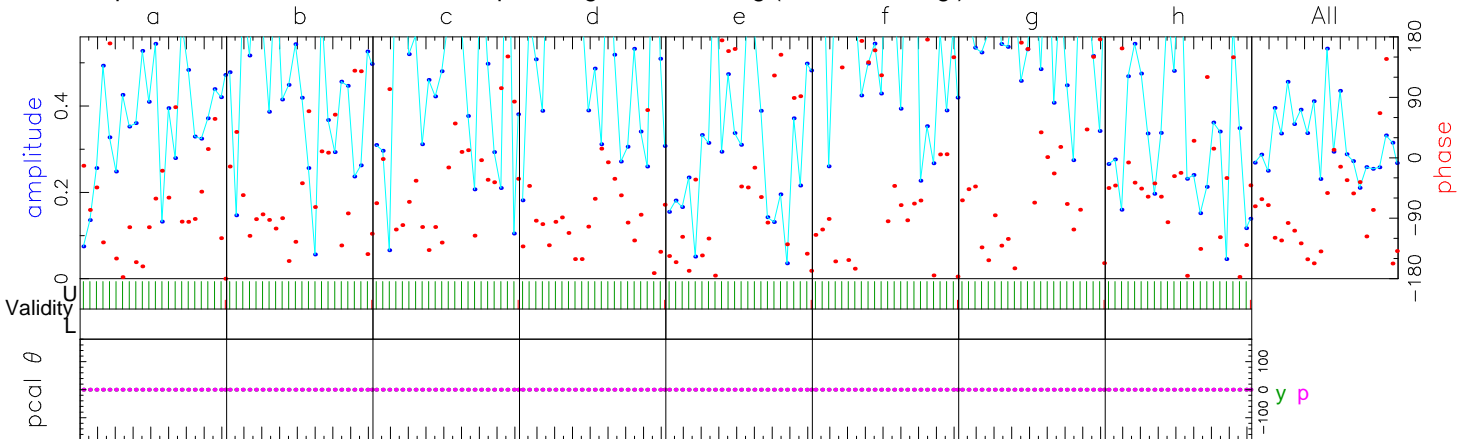
SNR 11.2
 Int time 479.985
 Amp 0.187
 Phase -94.3
 PFD 2.1e-20
 Delays (us)
 SBD -0.000425
 MBD -0.007941
 Fringe rate (Hz) -0.006741
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133129
 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.70717254457E+03	Apriori delay (usec)	-1.70716460382E+03	Resid mbdelay (usec)	-7.94075E-03	+/-	9.7E-05
Sband delay (usec)	-1.70716502882E+03	Apriori clock (usec)	1.1564875E+00	Resid sbdelay (usec)	-4.25000E-04	+/-	7.7E-04
Phase delay (usec)	-1.70716460686E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-3.04002E-06	+/-	3.3E-07
Delay rate (us/s)	1.65921329467E+00	Apriori rate (us/s)	1.65921337293E+00	Resid rate (us/s)	-7.82616E-08	+/-	1.2E-09
Total phase (deg)	-84.6	Apriori accel (us/s/s)	1.25210241869E-05	Resid phase (deg)	-94.3	+/-	10.2

ph/seg (deg)	62.7	RMS	24.6	Theor.	0.187 +/- 0.017	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	85.7	Search (2048X32)	0.186	Amplitude	0.187 +/- 0.017	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	36.6	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	36.9	Inc. seg. avg.	0.298	Inc. seg. avg.	0.298	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
		Inc. frq. avg.	0.204	Inc. frq. avg.	0.204	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 62.6 el 38.3 pa -70.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -12681.061 1298.183 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp..1IM5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp.W.236.1IM5UO

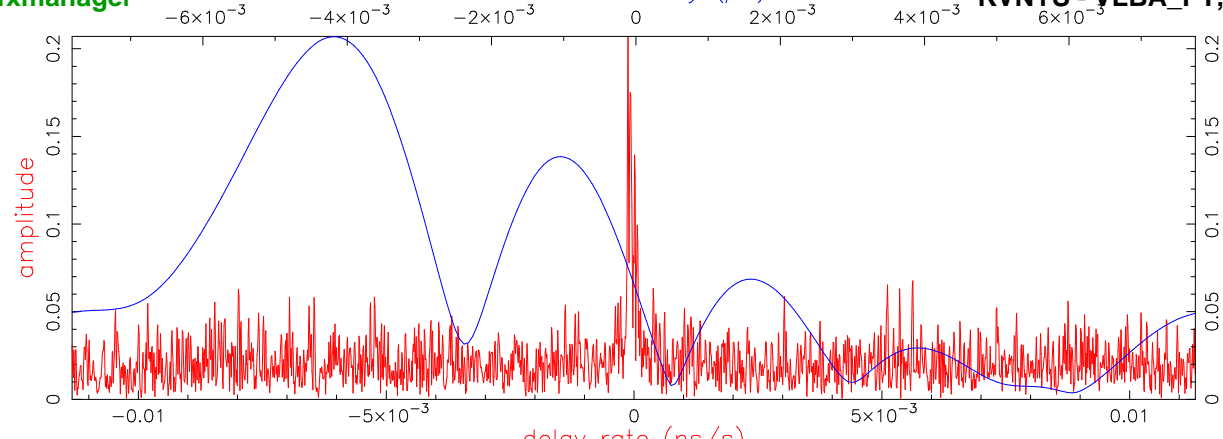
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, yp

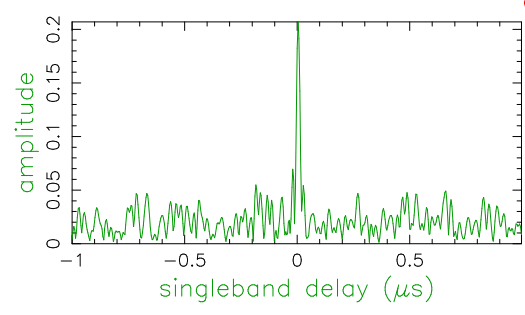
KVNYS - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

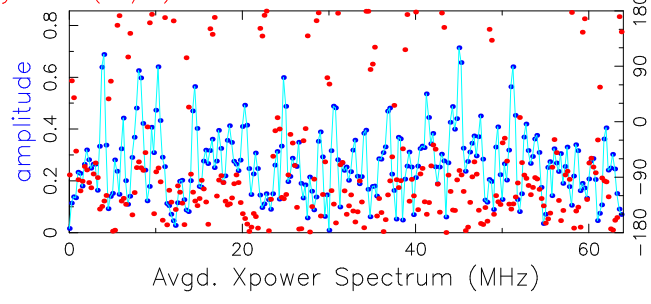


Fringe quality 9

SNR 12.4
 Int time 479.985
 Amp 0.207
 Phase -25.5
 PFD 1.3e-26
 Delays (us)
 SBD 0.004320
 MBD -0.004163
 Fringe rate (Hz)
 -0.010186
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

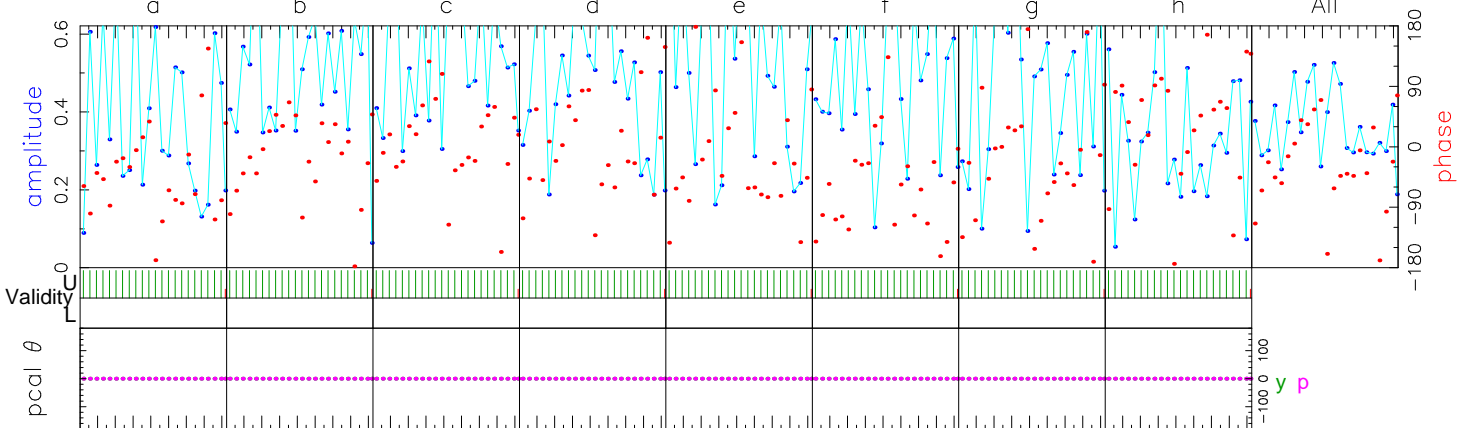


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133133
 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
	-58.6	-11.4	10.1	-6.3	-46.8	-82.2	-30.0	58.7		Phase
	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.1		Ampl.
	259.7	257.5	258.1	257.8	256.9	258.5	259.1	260.2		Sbd box
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
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		Mani PC
y	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec)(sbd)	-1.70715314161E+03	Apriori delay (usec)	-1.70716460382E+03	Resid mbdelay (usec)	-4.16279E-03	+/-	8.7E-05
Sband delay (usec)	-1.70716028432E+03	Apriori clock (usec)	1.1564875E+00	Resid sbdelay (usec)	4.31950E-03	+/-	6.9E-04
Phase delay (usec)	-1.70716460464E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-8.21327E-07	+/-	3.0E-07
Delay rate (us/s)	1.65921325469E+00	Apriori rate (us/s)	1.65921337293E+00	Resid rate (us/s)	-1.18244E-07	+/-	1.1E-09
Total phase (deg)	-15.8	Apriori accel (us/s/s)	1.25210241869E-05	Resid phase (deg)	-25.5	+/-	9.2

ph/seg (deg)	62.7	RMS	22.2	Theor.	0.207 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	87.5	Search (2048X32)	0.197	Amplitude	0.207 +/- 0.017	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	47.8	Inc. seg. avg.	0.341	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)
amp/frq (%)	36.1	Inc. frq. avg.	0.249	Inc. seg. avg.	0.341	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.249	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00

y: az 62.6 el 38.3 pa -70.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -12681.061 1298.183 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp.W.244.1M5UO

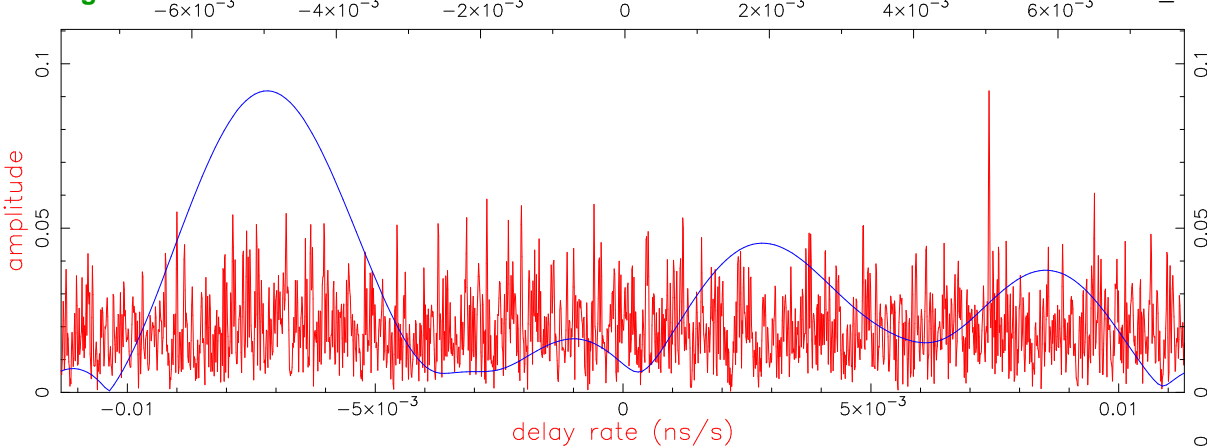
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM5UO, No0113, yp

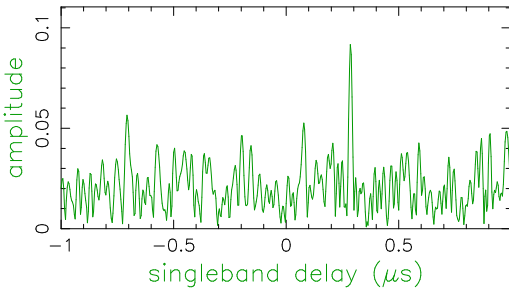
KVNS - VLBA_PT, fgroup W, pol LR

multiband delay (μs)

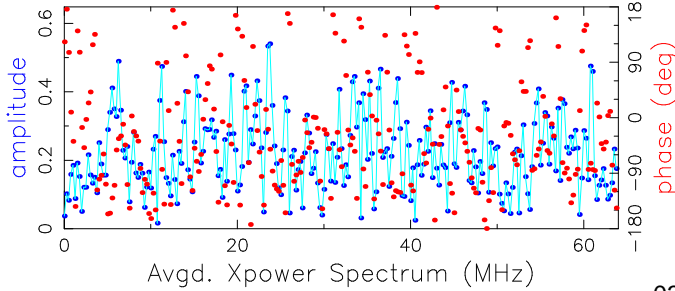


Fringe quality 0

SNR 5.5
 Int time 479.985
 Amp 0.110
 Phase 46.7
 PFD 1.0e+00
 Delays (us)
 SBD 0.285975
 MBD -0.004928
 Fringe rate (Hz)
 0.636905
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

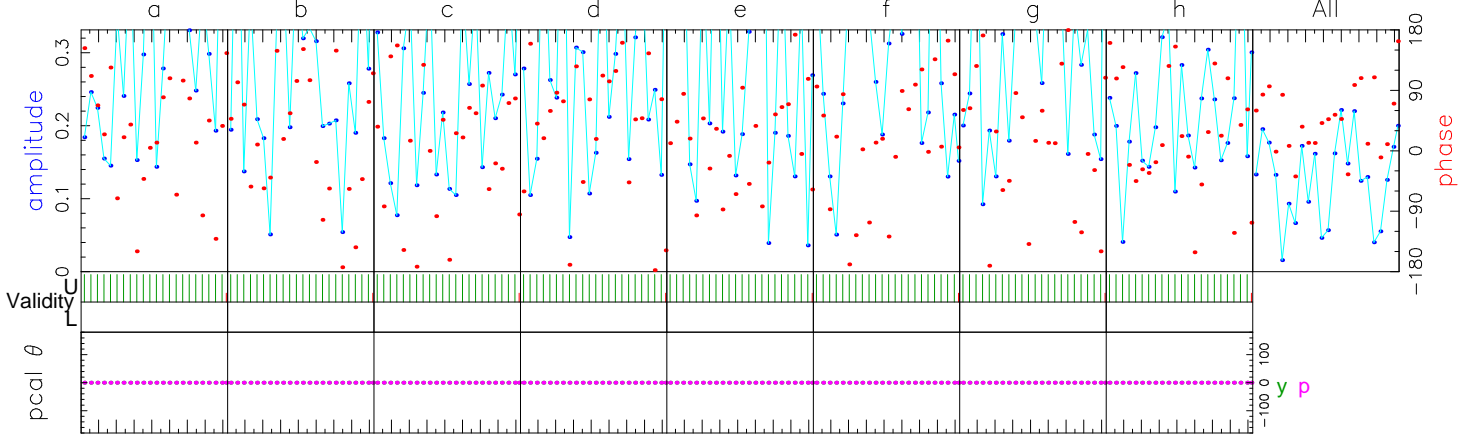


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 130001.00
 Stop 130801.26
 FRT 130401.00
 Corr/FF/build
 2021:023:091302
 2021:023:133136
 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



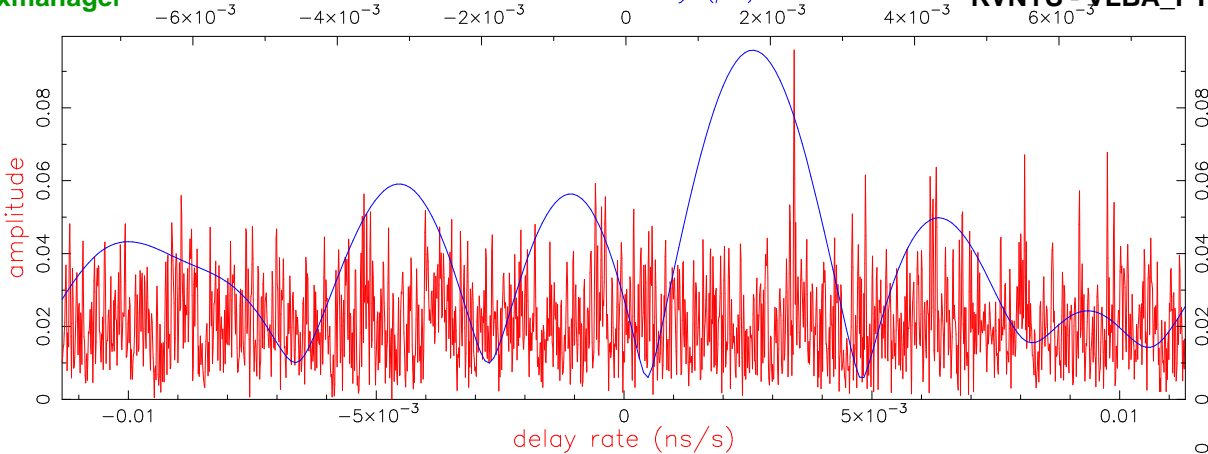
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	43.0	53.8	31.8	82.7	15.6	85.6	49.9	27.1	Phase	46.7
	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.1	Ampl.	0.1
	477.9	290.9	438.8	508.2	330.3	206.5	440.8	139.2	Sbd box	330.2
U/L	938/0	938/0	938/0	938/0	938/0	938/0	938/0	938/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
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	Mani 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.70687265728E+03	Apriori delay (usec)	-1.70716460382E+03	Resid mbdelay (usec)	-4.92846E-03	+/-	2.0E-04
Sband delay (usec)	-1.70687862857E+03	Apriori clock (usec)	1.1564875E+00	Resid sbdelay (usec)	2.85975E-01	+/-	1.6E-03
Phase delay (usec)	-1.70716460231E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	1.50688E-06	+/-	6.7E-07
Delay rate (us/s)	1.65922076676E+00	Apriori rate (us/s)	1.65921337293E+00	Resid rate (us/s)	7.39383E-06	+/-	2.4E-09
Total phase (deg)	-303.6	Apriori accel (us/s/s)	1.25210241869E-05	Resid phase (deg)	46.7	+/-	20.8

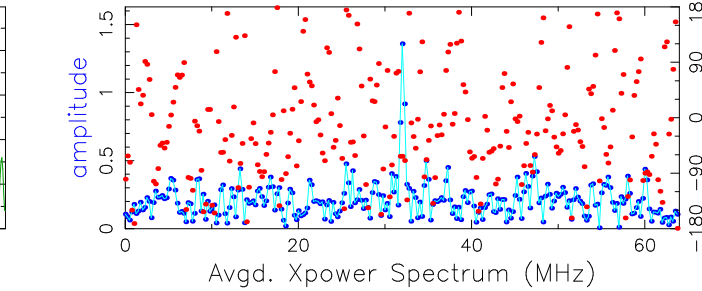
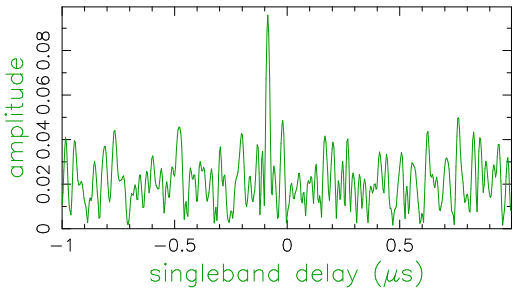
ph/seg (deg)	45.8	Theor.	49.8	Amplitude	0.110 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	73.0		86.9	Search (2048X32)	0.091	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	27.2		29.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	40.2		51.2	Inc. seg. avg.	0.110	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
				Inc. frq. avg.	0.108	Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
y: az 62.6 el 38.3 pa -70.7		p: az 296.8 el 45.9 pa 79.8		u,v (fr/asec)	-12681.061 1298.183	nlags: 256	t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp..1M5UO					ion window (TEC) 0.00 0.00
							simultaneous interpolator
							Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp.W.252.1M5UO

multiband delay (μ s)

Fringe quality 0

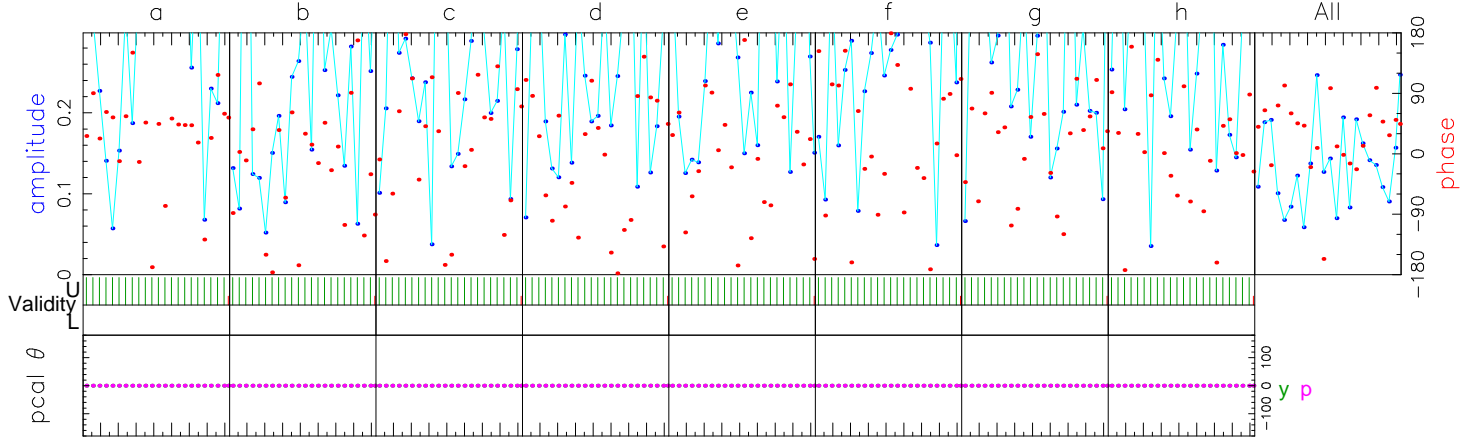


SNR 5.7
Int time 479.985
Amp 0.100
Phase 31.8
PFD 9.0e-01
Delays (us)
SBD -0.086180
MBD 0.001749
Fringe rate (Hz)
0.296538
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 130001.00
Stop 130801.26
FRT 130401.00
Corr/FF/build
2021:023:091302
2021:023:133140
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.70725660447E+03	Apriori delay (usec)		-1.70716460382E+03	Resid mbdelay (usec)		1.74935E-03	+/-	1.9E-04
Sband delay (usec)	-1.70725078332E+03	Apriori clock (usec)		0.094	Resid sbdelay (usec)		-8.61795E-02	+/-	1.5E-03
Phase delay (usec)	-1.70716460280E+03	Apriori clockrate (us/s)		-2.9999999E-07	Resid phdelay (usec)		1.02426E-06	+/-	6.4E-07
Delay rate (us/s)	1.65921681544E+00	Apriori rate (us/s)		1.65921337293E+00	Resid rate (us/s)		3.44251E-06	+/-	2.3E-09
Total phase (deg)	-318.5	Apriori accel (us/s/s)		1.25210241869E-05	Resid phase (deg)		31.8	+/-	20.0

ph/seg (deg)	52.3	Theor.	47.8	Amplitude	0.100 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	65.4	Search (2048X32)	0.094	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	51.1	Inc. seg. avg.	0.103	Inc. frq. avg.	0.098	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	65.5	Inc. frq. avg.	0.098			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 62.6 el 38.3 pa -70.7 p: az 296.8 el 45.9 pa 79.8 u,v (fr/asec) -12681.061 1298.183 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp..1M5UO Output file: /Exps/c202b/v1/v1_3mm/1234/No0113/yp.W.260.1M5UO