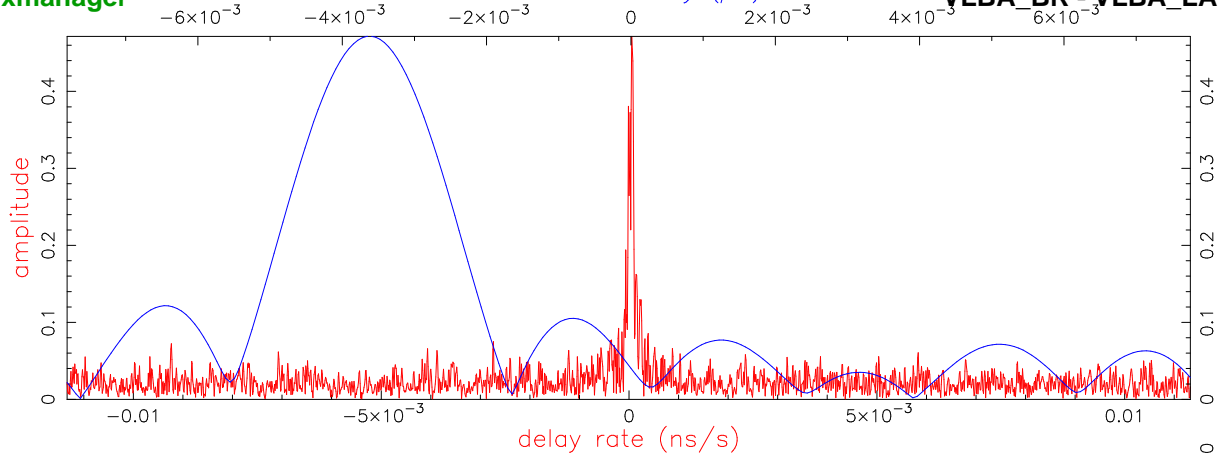
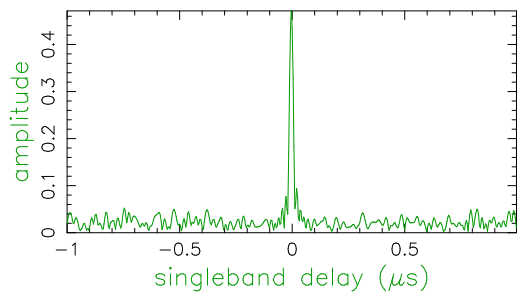


multiband delay (μ s)

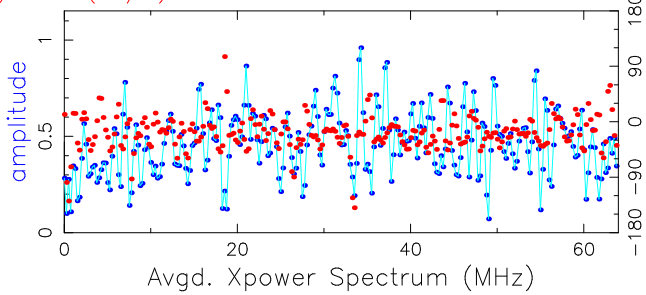


Fringe quality 7

SNR 28.2
Int time 477.984
Amp 0.471
Phase -19.4
PFD 0.0e+00
Delays (us)
SBD -0.003726
MBD -0.003618
Fringe rate (Hz) 0.004431
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

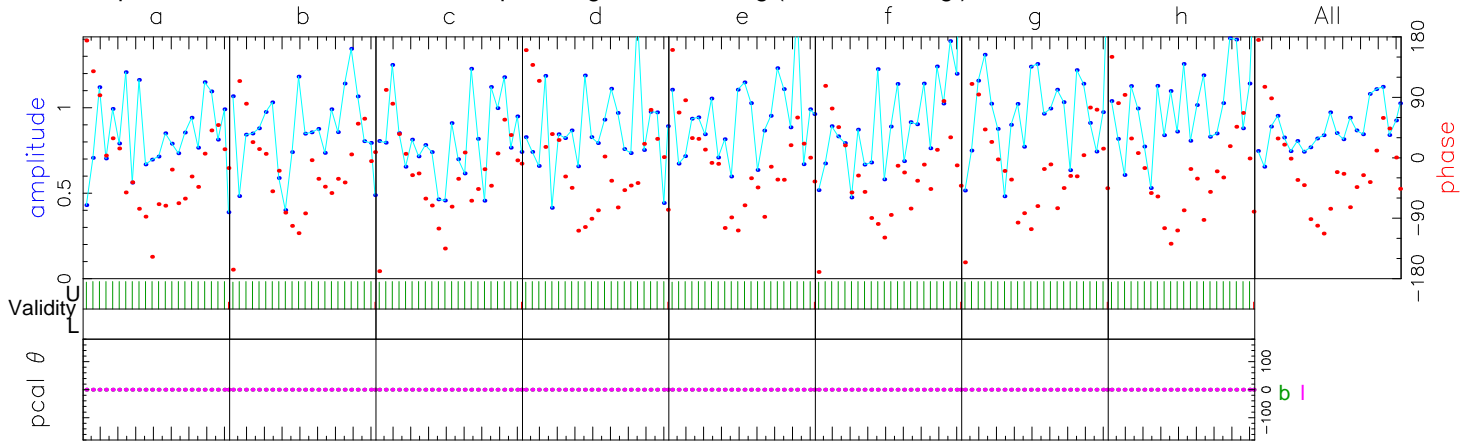


delay rate (ns/s)



Exp. c202b
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132908
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-20.6	-20.4	-15.7	-26.2	-12.9	-18.8	-17.8	-24.1	Phase	-19.4
	0.4	0.5	0.4	0.4	0.5	0.5	0.5	0.5	Ampl.	0.5
	256.2	256.0	256.6	255.8	256.0	256.1	256.0	255.5	Sbd box	256.0
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.81594232774E+03		Apriori delay (usec)		2.81594594549E+03		Resid mbdelay (usec)		-3.61775E-03	+/- 3.9E-05
Sband delay (usec)	2.81594221924E+03		Apriori clock (usec)		-1.3075867E+00		Resid sbdelay (usec)		-3.72625E-03	+/- 3.1E-04
Phase delay (usec)	2.81594594486E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-6.25947E-07	+/- 1.3E-07
Delay rate (us/s)	2.57316443590E-01		Apriori rate (us/s)		2.57316392149E-01		Resid rate (us/s)		5.14413E-08	+/- 4.7E-10
Total phase (deg)	248.6		Apriori accel (us/s/s)		-2.99975941553E-06		Resid phase (deg)		-19.4	+/- 4.1

	RMS	Theor.	Amplitude	0.471 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	66.4	9.7	Search (2048X32)	0.455	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	88.8	17.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	4.6	5.7	Inc. seg. avg.	0.860	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	6.4	10.0	Inc. frq. avg.	0.471	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

b: az 272.4 el 60.8 pa 63.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -1978.327 875.808 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl.W.16.1IM4WN

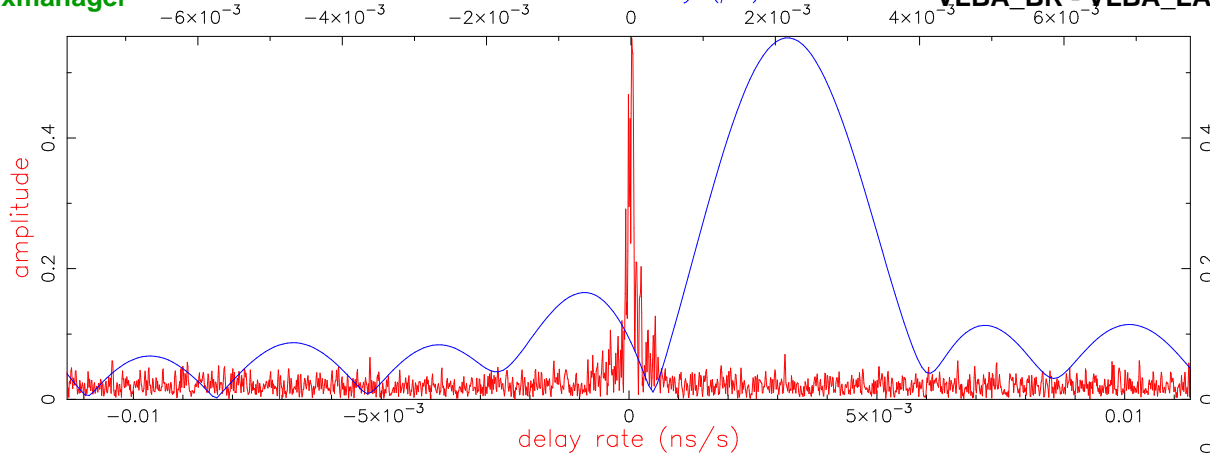
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, bl

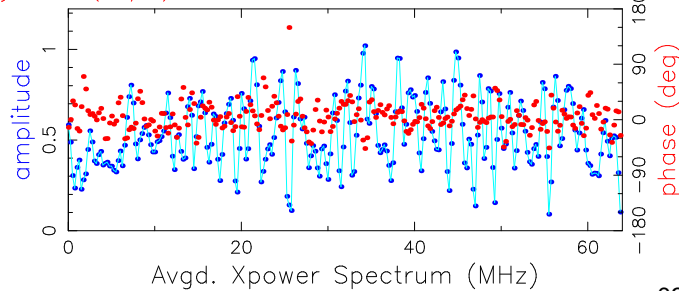
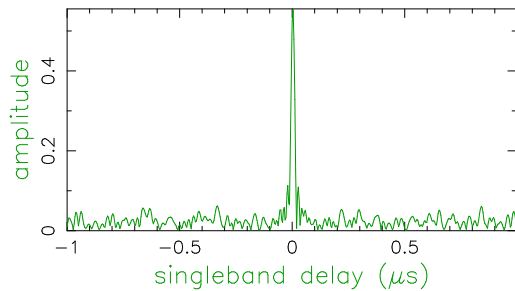
VLBA_BR - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)



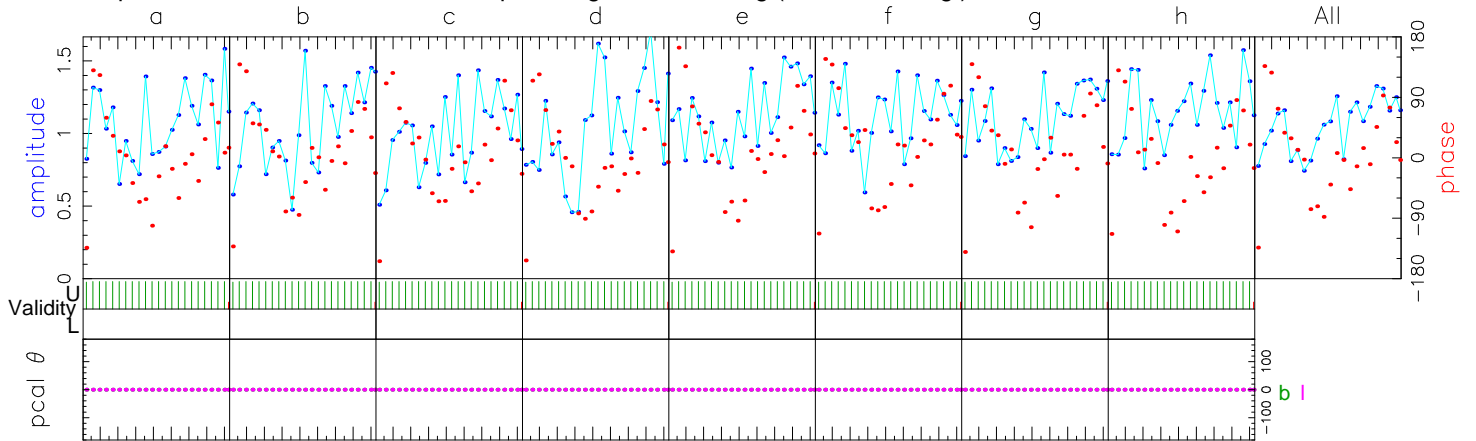
Fringe quality 7

SNR 33.2
 Int time 477.984
 Amp 0.555
 Phase 12.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.003007
 MBD 0.002147
 Fringe rate (Hz) 0.004525
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



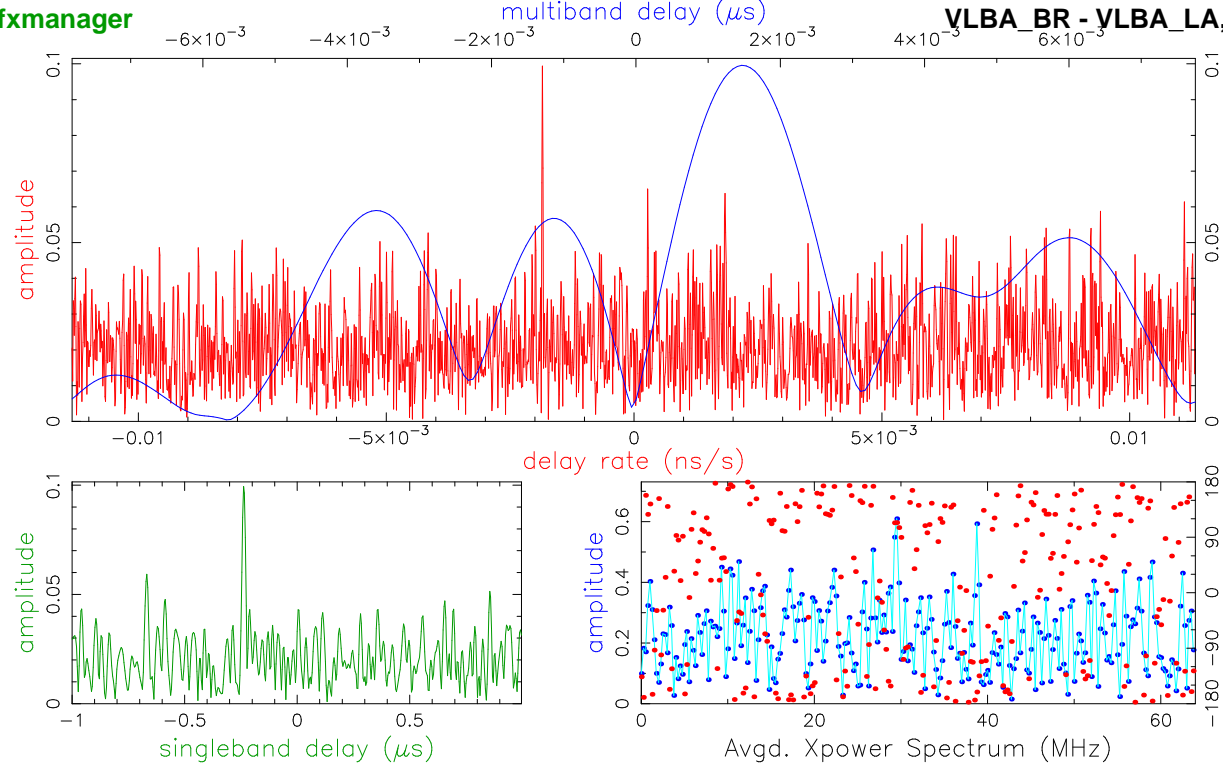
Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132913
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



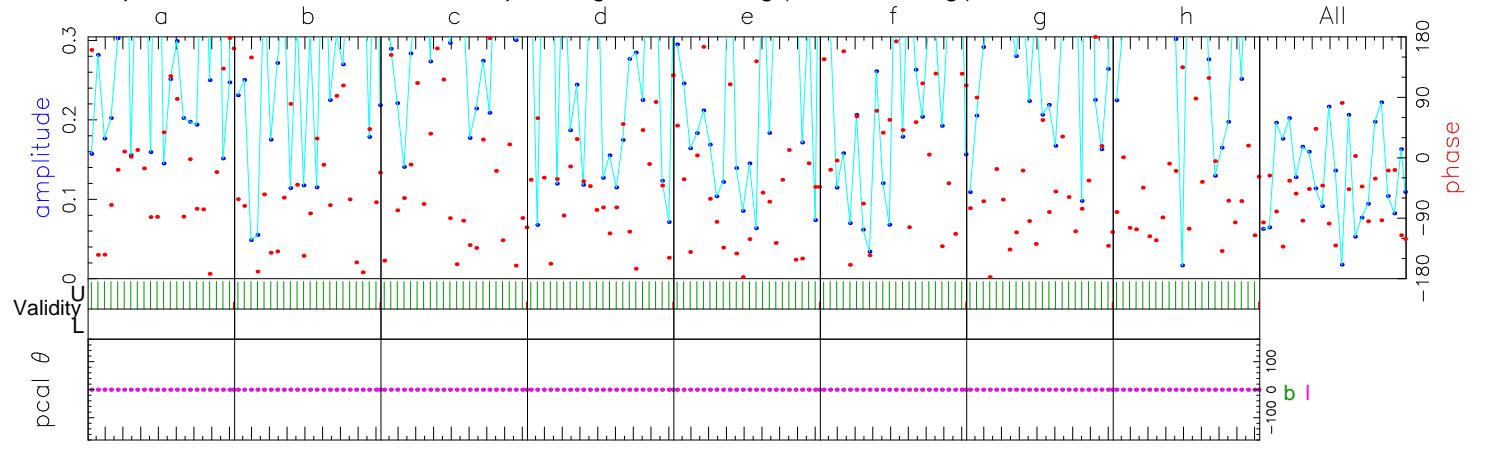
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	0:0
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	2.81594809283E+03		Apriori delay (usec)		2.81594594549E+03		Resid mbdelay (usec)		2.14734E-03	+/- 3.3E-05
Sband delay (usec)	2.81594895224E+03		Apriori clock (usec)		-1.3075867E+00		Resid sbdelay (usec)		3.00675E-03	+/- 2.6E-04
Phase delay (usec)	2.81594594590E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		4.09062E-07	+/- 1.1E-07
Delay rate (us/s)	2.57316444679E-01		Apriori rate (us/s)		2.57316392149E-01		Resid rate (us/s)		5.25303E-08	+/- 4.0E-10
Total phase (deg)	280.7		Apriori accel (us/s/s)		-2.99975941553E-06		Resid phase (deg)		12.7	+/- 3.5

ph/seg (deg) 66.6 8.3 Search (2048X32) 0.537 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 95.2 14.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.8 4.9 Inc. seg. avg. 1.043 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 5.3 8.5 Inc. frq. avg. 0.557 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 b: az 272.4 el 60.8 pa 63.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -1978.327 875.808 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl.W.39.1IM4WN



Fringe quality 0
SNR 6.0
Int time 477.984
Amp 0.102
Phase -67.6
PFD 3.9e-01
Delays (us)
SBD -0.236961
MBD 0.001536
Fringe rate (Hz)
-0.159038
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132916
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
	-41.4	-72.3	-120.9	-50.4	-62.8	108.8	-69.0	-72.0	Phase	-67.6
	0.1	0.1	0.1	0.1	0.1	0.0	0.2	0.2	Ampl.	0.1
	84.0	475.7	28.2	130.4	498.9	347.5	196.3	198.5	Sbd box	196.3
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.81571310647E+03		Apriori delay (usec)		2.81594594549E+03		Resid mbdelay (usec)		1.53599E-03	+/- 1.8E-04
Sband delay (usec)	2.81570898424E+03		Apriori clock (usec)		-1.3075867E+00		Resid sbdelay (usec)		-2.36961E-01	+/- 1.4E-03
Phase delay (usec)	2.81594594331E+03		Apriori clockrate (us/s)		9.9999998E-08		Resid phdelay (usec)		-2.18070E-06	+/- 6.2E-07
Delay rate (us/s)	2.57314545872E-01		Apriori rate (us/s)		2.57316392149E-01		Resid rate (us/s)		-1.84628E-06	+/- 2.2E-09
Total phase (deg)	200.4		Apriori accel (us/s/s)		-2.99975941553E-06		Resid phase (deg)		-67.6	+/- 19.1

ph/seg (deg) 54.4 45.8 Amplitude 0.102 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 67.1 79.9 Search (2048X32) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 76.4 27.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 51.9 47.1 Inc. seg. avg. 0.102 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
b: az 272.4 el 60.8 pa 63.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -1978.327 875.808 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/No0111/bl..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl.W.57.1IM4WN simultaneous interpolator

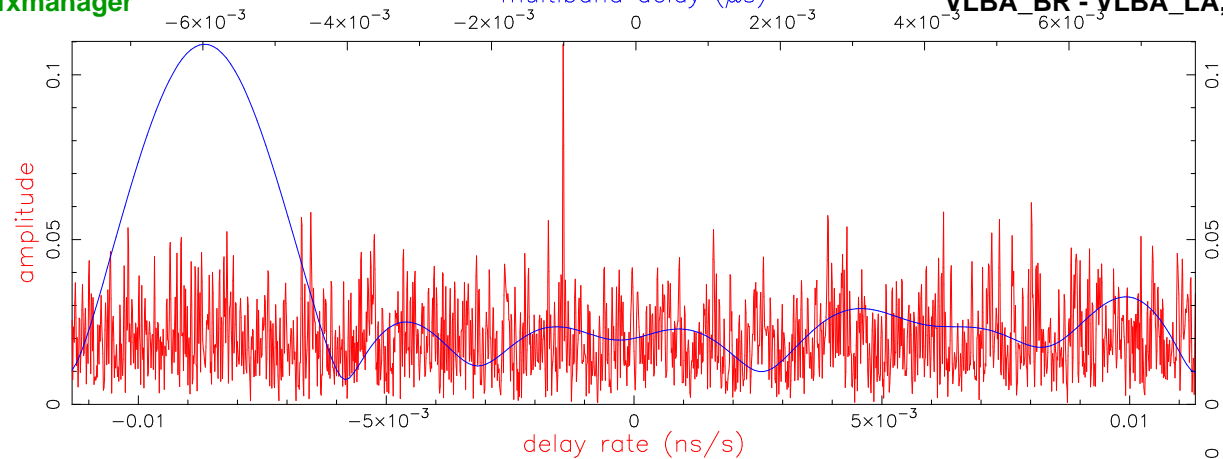
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, bl

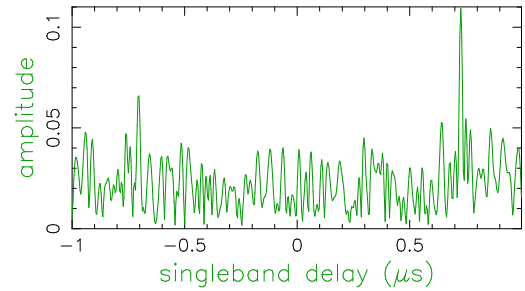
VLBA_BR - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

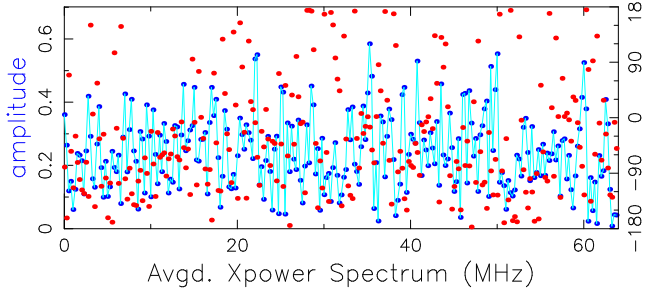


Fringe quality 0

SNR 6.5
 Int time 477.984
 Amp 0.110
 Phase 88.8
 PFD 1.7e-02
 Delays (us)
 SBD 0.727022
 MBD -0.005966
 Fringe rate (Hz)
 -0.123399
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

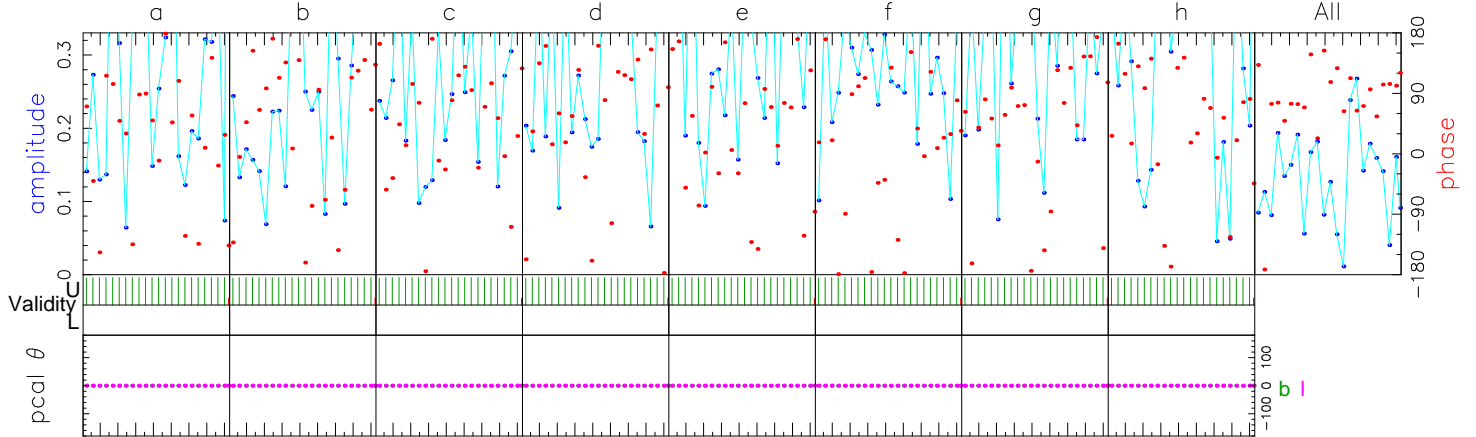


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132920
 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



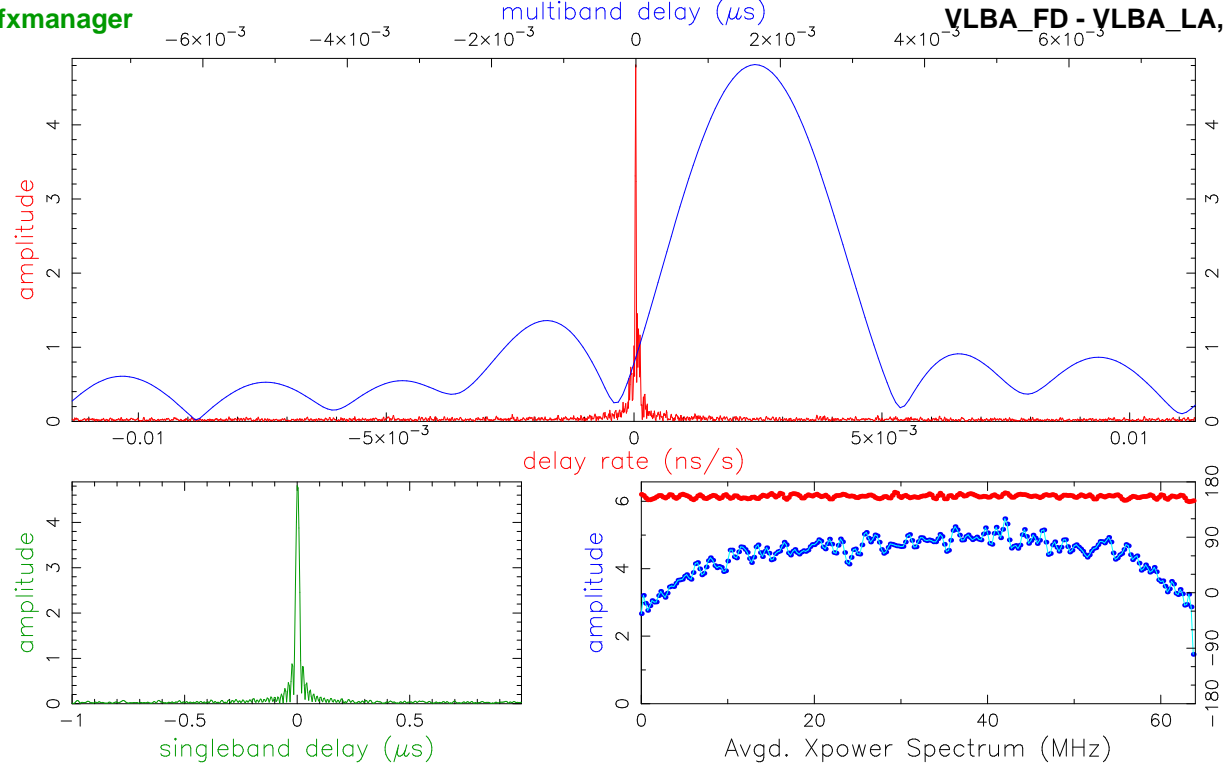
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.81667435463E+03	Apriori delay (usec)	2.81594594549E+03	Resid mbdelay (usec)	-5.96586E-03	+/-	1.7E-04
Sband delay (usec)	2.81667296699E+03	Apriori clock (usec)	-1.3075867E+00	Resid sbdelay (usec)	7.27022E-01	+/-	1.3E-03
Phase delay (usec)	2.81594594835E+03	Apriori clockrate (us/s)	9.9999998E-08	Resid phdelay (usec)	2.86391E-06	+/-	5.6E-07
Delay rate (us/s)	2.57314959613E-01	Apriori rate (us/s)	2.57316392149E-01	Resid rate (us/s)	-1.43254E-06	+/-	2.0E-09
Total phase (deg)	356.8	Apriori accel (us/s/s)	-2.99975941553E-06	Resid phase (deg)	88.8	+/-	17.5

ph/seg (deg)	38.2	Theor.	42.0	Amplitude	0.110 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	61.7	Search (2048X32)	0.100	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	19.1	Inc. seg. avg.	0.106	Inc. frq. avg.	0.105	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	23.9	Inc. frq. avg.	0.105			Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

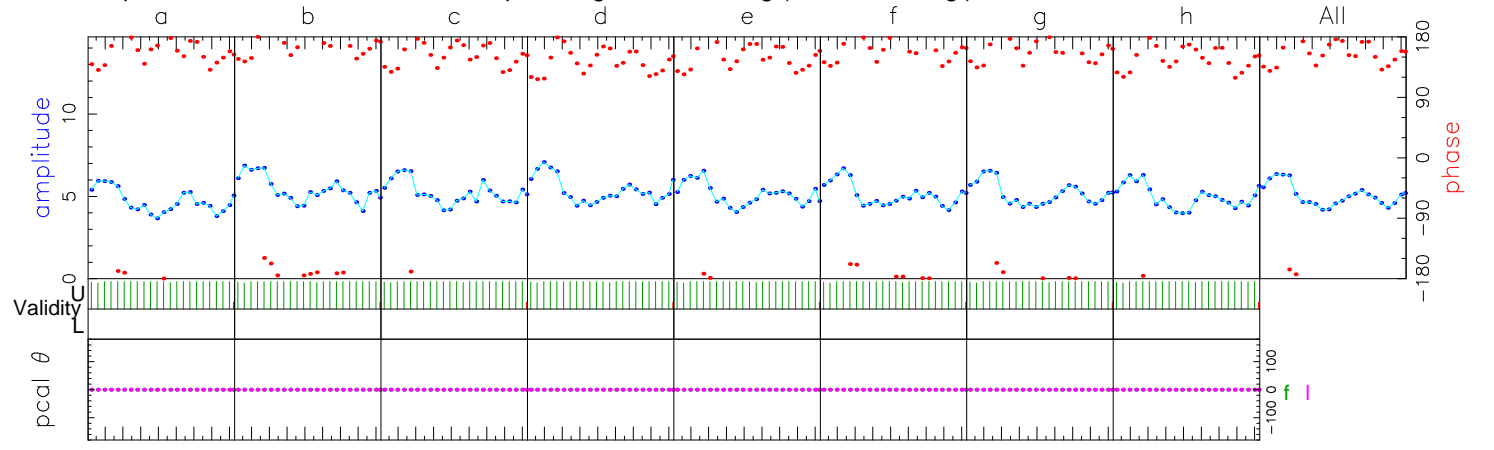
b: az 272.4 el 60.8 pa 63.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -1978.327 875.808 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/bl.W.76.1IM4WN



Fringe quality 8
SNR 292.1
Int time 476.175
Amp 4.895
Phase 157.0
PFD 0.0e+00
Delays (us)
SBD 0.001731
MBD 0.001695
Fringe rate (Hz) 0.003324
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Yr:day 16383
Start 2020:284
Stop 2021:023:085237
FRT 124901.00
2021:023:085237
2021:023:132911
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



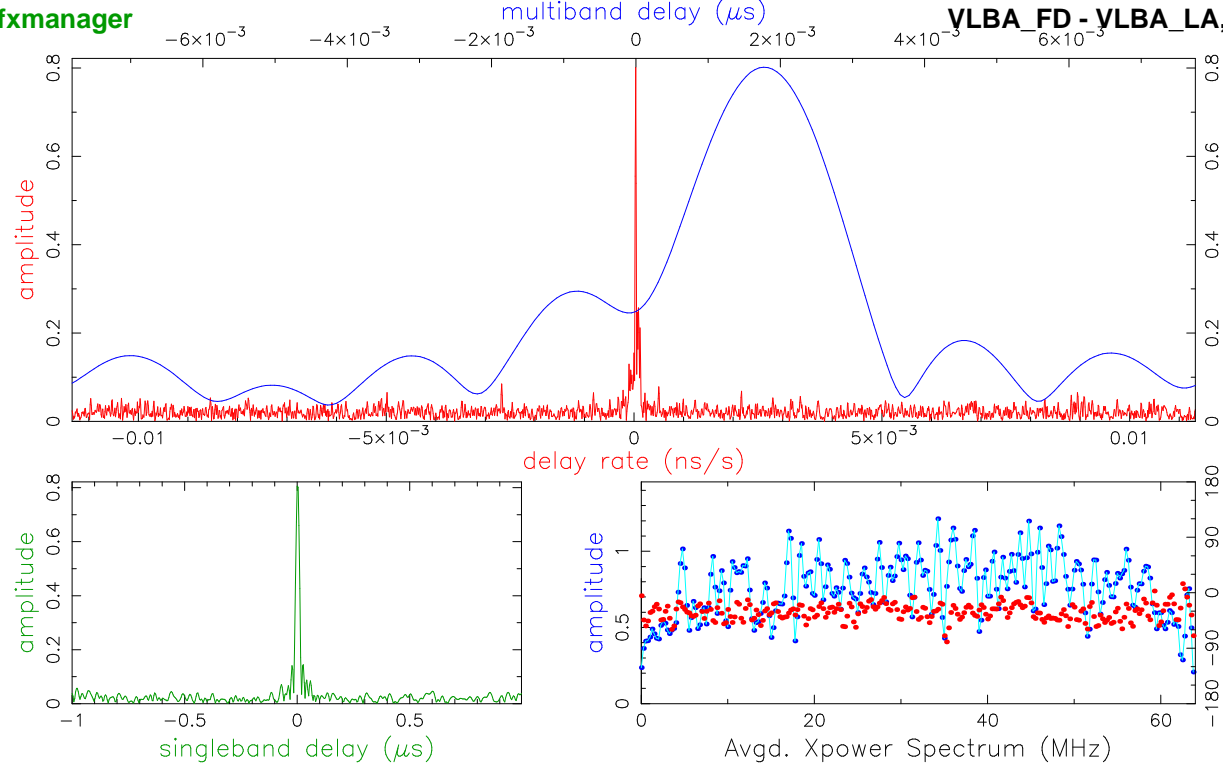
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	934/0	934/0	934/0	934/0	934/0	934/0	934/0	934/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	157.0
l	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	4.9
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.4
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.06377346709E+03				-1.06377516194E+03				Resid mbdelay (usec)	1.69485E-03 +/- 3.7E-06
Sband delay (usec)	-1.06377343069E+03				8.2760696E+00				Resid sbdelay (usec)	1.73125E-03 +/- 2.9E-05
Phase delay (usec)	-1.06377515688E+03				5.0000000E-07				Resid phdelay (usec)	5.06270E-06 +/- 1.3E-08
Delay rate (us/s)	-6.88329567726E-02				-6.88329953656E-02				Resid rate (us/s)	3.85930E-08 +/- 4.6E-11
Total phase (deg)			-4.8		8.31195732346E-08				Resid phase (deg)	157.0 +/- 0.4
	RMS	Theor.	Amplitude	4.895 +/- 0.017	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	18.1	0.9	Search (2048X32)	4.357	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	13.9	1.6	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	10.3	0.6	Inc. seg. avg.	5.069	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	4.2	1.0	Inc. frq. avg.	4.868	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
f: az 300.0 el 44.0 pa 84.3			l: az 295.0 el 48.1 pa 80.0		u,v (fr/asec) 528.113 -497.902					simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

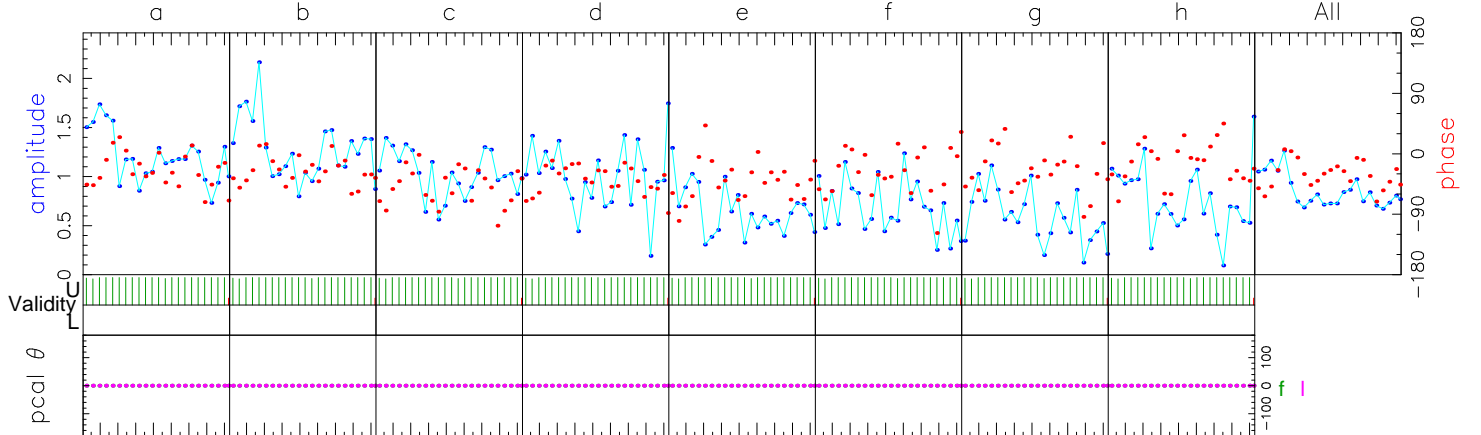
3C84.11M4WN, No0111, fl

VLBA_FD - VLBA_LA, fgroup W, pol LR



Fringe quality 5
 SNR 49.0
 Int time 476.175
 Amp 0.822
 Phase -30.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.001838
 MBD 0.001738
 Fringe rate (Hz) 0.003326
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132914
 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
	-22.2	-25.0	-49.5	-37.5	-45.7	-26.0	-19.4	-15.3	Phase	-30.2
	1.1	1.2	0.9	0.9	0.6	0.6	0.6	0.6	Ampl.	0.8
	257.8	256.8	257.4	257.6	257.9	257.9	257.4	257.4	Sbd box	257.5
U/L	934/0	934/0	934/0	934/0	934/0	934/0	934/0	934/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	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	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.06377342359E+03	Apriori delay (usec)	-1.06377516194E+03	Resid mbdelay (usec)	1.73835E-03	+/-	2.2E-05
Sband delay (usec)	-1.06377332444E+03	Apriori clock (usec)	8.2760696E+07	Resid sbdelay (usec)	1.83750E-03	+/-	1.8E-04
Phase delay (usec)	-1.06377516291E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-9.75474E-07	+/-	7.5E-08
Delay rate (us/s)	-6.88329567528E-02	Apriori rate (us/s)	-6.88329953656E-02	Resid rate (us/s)	3.86128E-08	+/-	2.7E-10
Total phase (deg)	-192.1	Apriori accel (us/s/s)	8.31195732346E-08	Resid phase (deg)	-30.2	+/-	2.3

ph/seg (deg)	20.3	5.6	Search (2048X32)	0.726	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	20.5	9.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	13.6	3.3	Inc. seg. avg.	0.854	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	29.1	5.8	Inc. frq. avg.	0.816	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

f: az 300.0 el 44.0 pa 84.3 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) 528.113 -497.902 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/fl.11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/fl.W.46.11M4WN

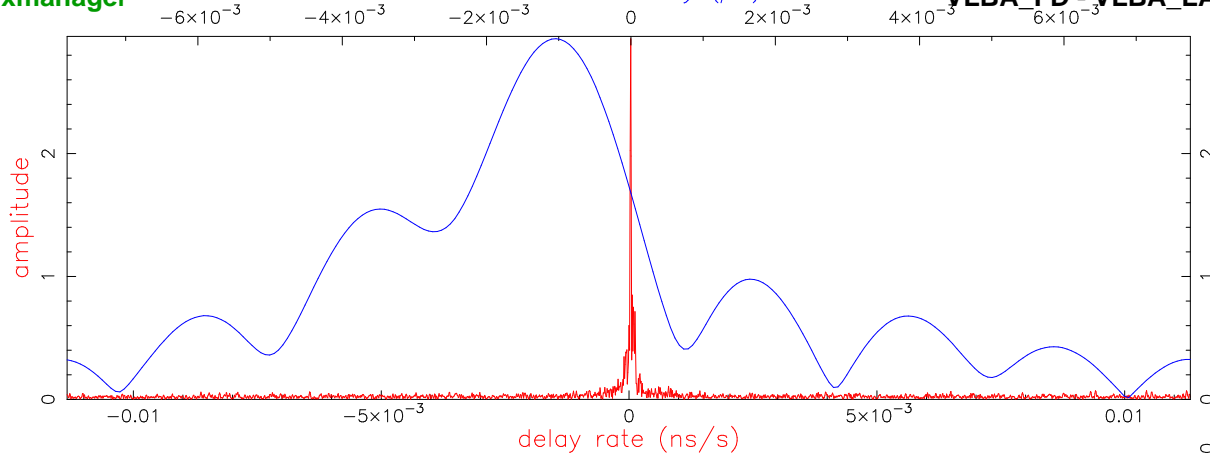
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, fl

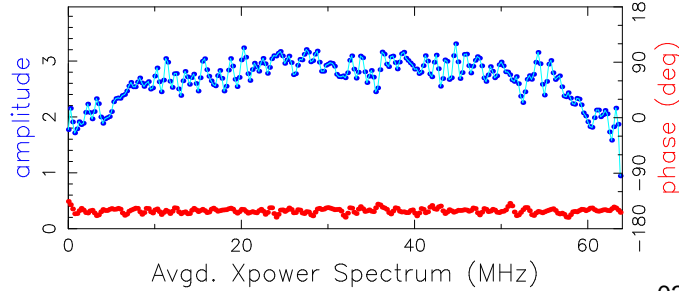
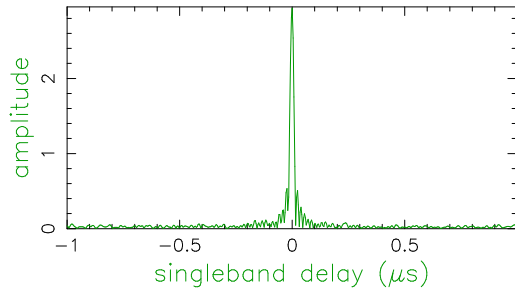
VLBA_FD - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)



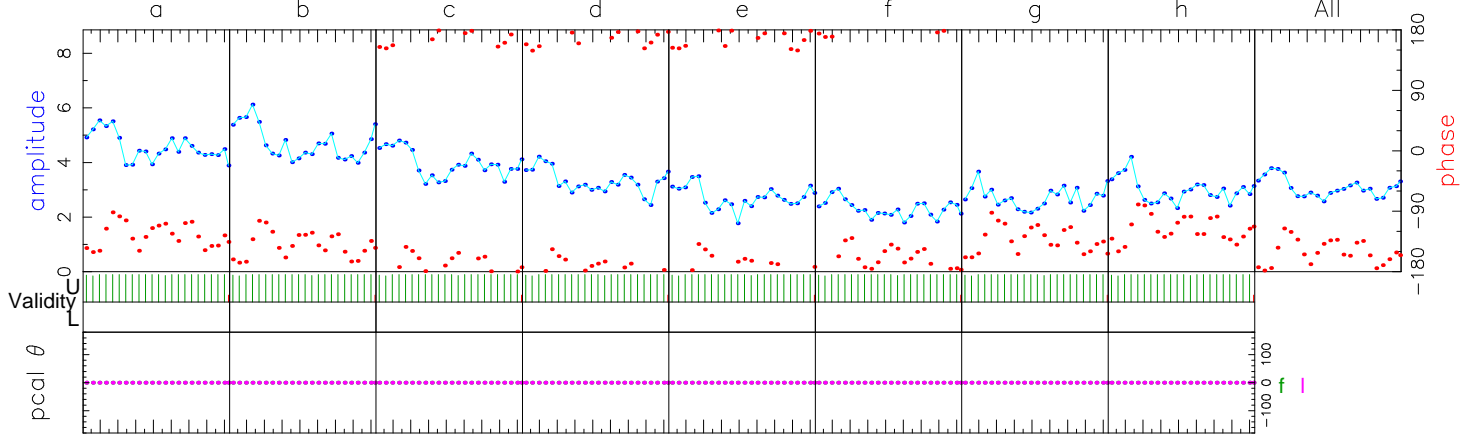
Fringe quality 5

SNR 176.2
 Int time 476.175
 Amp 2.953
 Phase -150.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.001043
 MBD -0.001061
 Fringe rate (Hz)
 0.003333
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132907
 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
	-125.0	-140.0	-177.7	178.4	178.5	-163.8	-132.1	-116.9	Phase	-150.7
	4.4	4.5	3.7	3.2	2.5	2.2	2.6	2.8	Ampl.	3.2
	257.0	256.2	256.7	256.4	257.0	257.1	256.8	257.3	Sbd box	256.7
U/L	934/0	934/0	934/0	934/0	934/0	934/0	934/0	934/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.06377622340E+03	Apriori delay (usec)	-1.06377516194E+03	Resid mbdelay (usec)	-1.06146E-03	+/-	6.2E-06
Sband delay (usec)	-1.06377620494E+03	Apriori clock (usec)	8.2760696E+00	Resid sbdelay (usec)	-1.04300E-03	+/-	4.9E-05
Phase delay (usec)	-1.06377516680E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-4.86066E-06	+/-	2.1E-08
Delay rate (us/s)	-6.88329566755E-02	Apriori rate (us/s)	-6.88329953656E-02	Resid rate (us/s)	3.86901E-08	+/-	7.6E-11
Total phase (deg)	-312.5	Apriori accel (us/s/s)	8.31195732346E-08	Resid phase (deg)	-150.7	+/-	0.7

ph/seg (deg)	17.8	Theor.	1.6	Amplitude	2.953 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	12.4	Search (2048X32)	2.681	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	29.1	Inc. seg. avg.	3.085	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	28.8	Inc. frq. avg.	3.233	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011	
f: az 300.0 el 44.0 pa 84.3		l: az 295.0 el 48.1 pa 80.0		Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	
Control file: cf_1234_gmva		Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/fl.1IM4WN		u,v (fr/asec)	528.113 -497.902	simultaneous interpolator			
		Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/fl.W.8.1IM4WN							

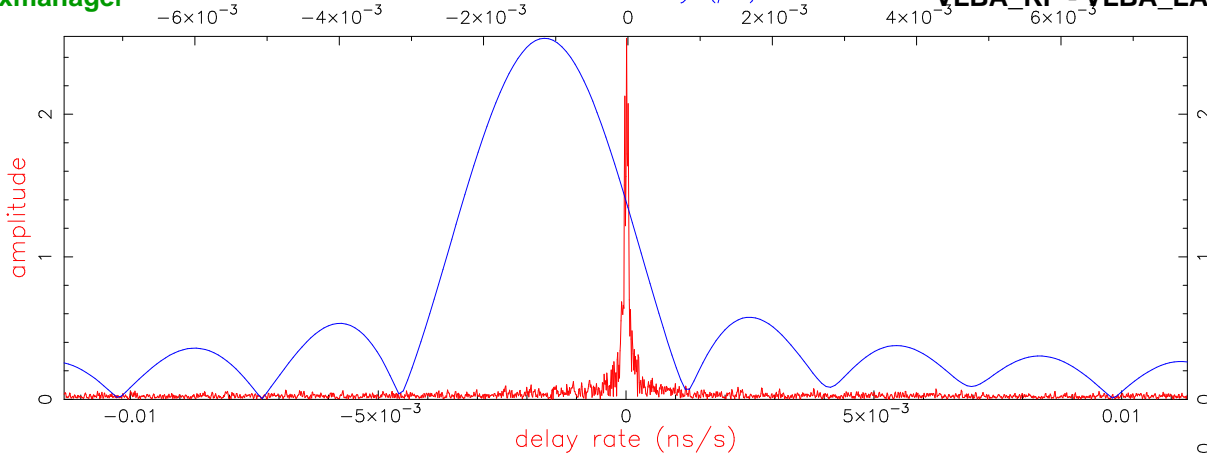
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, kl

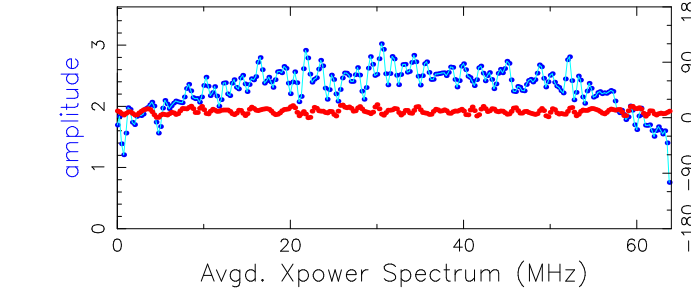
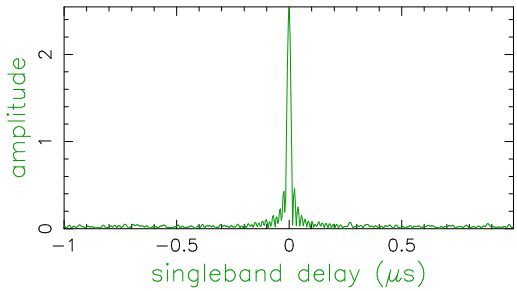
VLBA_KP - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)



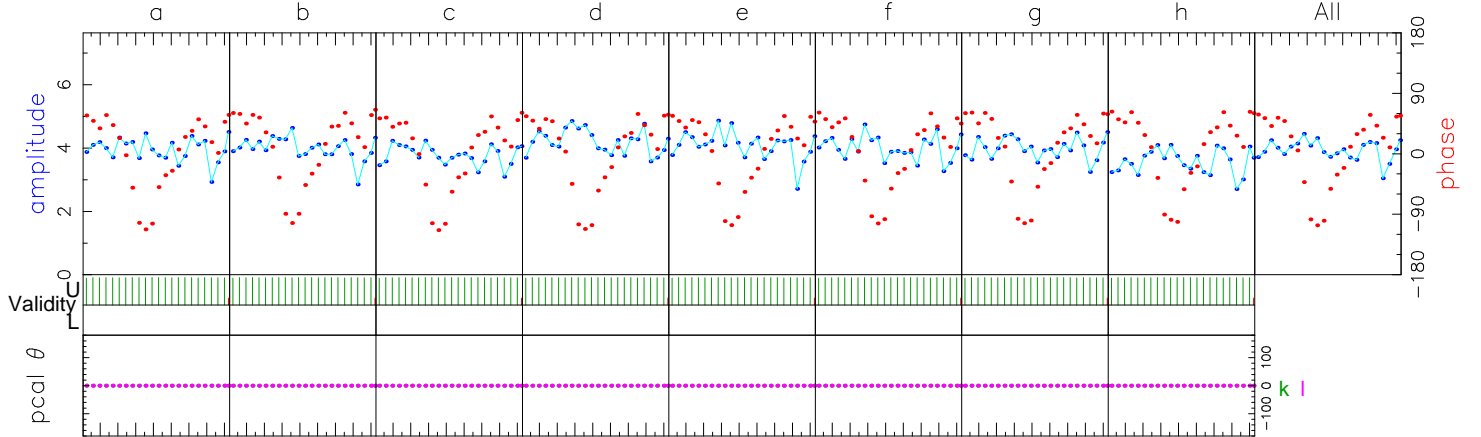
Fringe quality 5

SNR 151.8
 Int time 475.319
 Amp 2.546
 Phase 13.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.000939
 MBD -0.001176
 Fringe rate (Hz)
 0.000959
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132929
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.62860314228E+02			5.62861490028E+02				-1.17580E-03	+/- 7.1E-06
Sband delay (usec)		5.62860551028E+02			7.4082756E-01				-9.39000E-04	+/- 5.7E-05
Phase delay (usec)		5.62861490458E+02			1.9999998E-07				4.29695E-07	+/- 2.4E-08
Delay rate (us/s)		2.07478065945E-02			2.07477954581E-02				1.11364E-08	+/- 8.8E-11
Total phase (deg)			283.7		-7.13066991343E-06				13.3	+/- 0.8
	RMS	Theor.	Amplitude	2.546 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	53.4	1.8	Search (2048X32)	2.498	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	55.6	3.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	3.3	1.1	Inc. seg. avg.	3.928	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	4.6	1.9	Inc. frq. avg.	2.536	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 298.2 el 50.4 pa 87.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -173.384 -861.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl.W.102.11M4WN

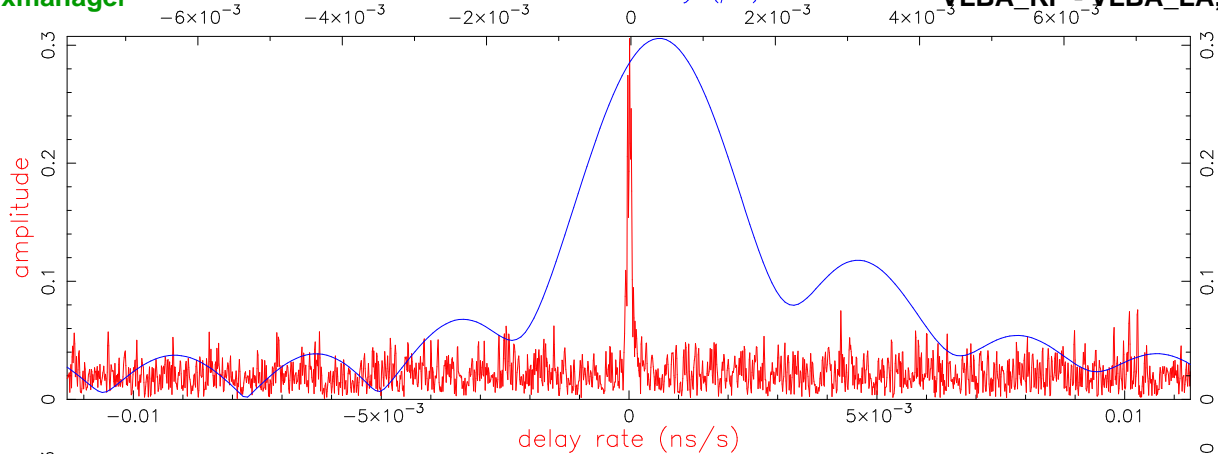
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, kl

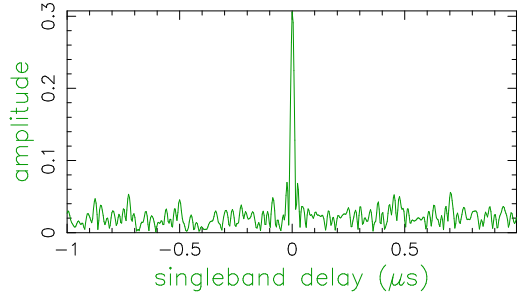
VLBA_KP - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

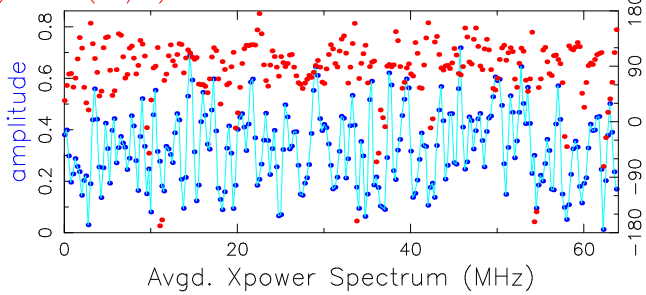


Fringe quality 9

SNR 18.3
 Int time 475.318
 Amp 0.307
 Phase 100.9
 PFD 0.0e+00
 Delays (us)
 SBD 0.000957
 MBD 0.000423
 Fringe rate (Hz) 0.001006
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

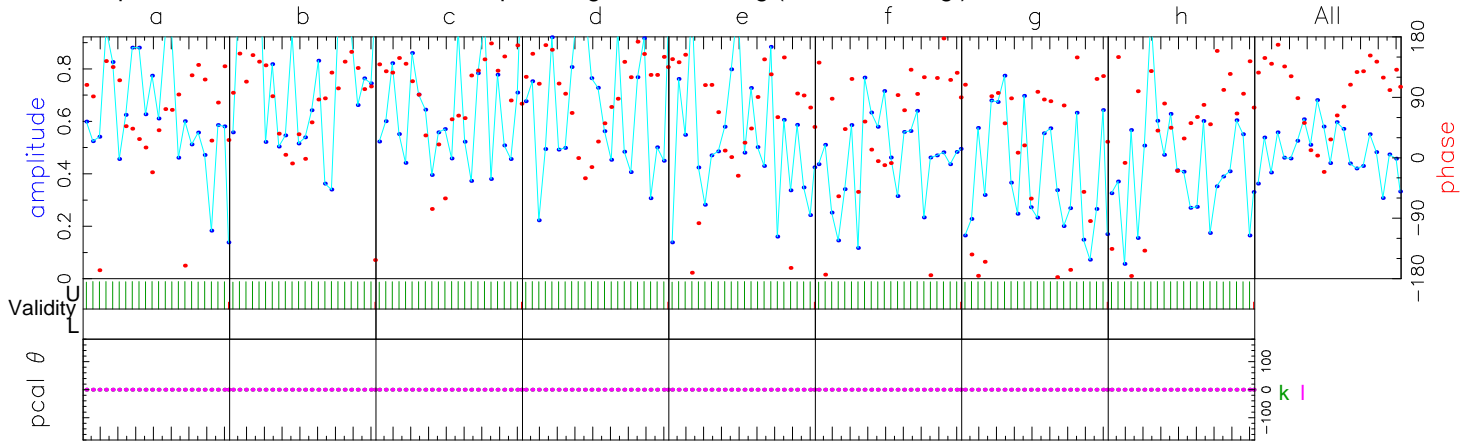


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132932
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	5.62861912884E+02	Apriori delay (usec)	5.62861490028E+02	Resid mbdelay (usec)	4.22856E-04	+/-	5.9E-05
Sband delay (usec)	5.62862447028E+02	Apriori clock (usec)	7.4082756E-01	Resid sbdelay (usec)	9.57000E-04	+/-	4.7E-04
Phase delay (usec)	5.62861493281E+02	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	3.25260E-06	+/-	2.0E-07
Delay rate (us/s)	2.07478071316E-02	Apriori rate (us/s)	2.07477954581E-02	Resid rate (us/s)	1.16735E-08	+/-	7.3E-10
Total phase (deg)		Apriori accel (us/s/s)	-7.13066991343E-06	Resid phase (deg)	100.9	+/-	6.3

ph/seg (deg)	RMS 52.0	Theor. 15.0	Amplitude Search (2048X32)	0.307 +/- 0.017	0.304	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.4	26.2	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	9.9	8.8	Inc. seg. avg.	0.476	0.476	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.5	15.4	Inc. frq. avg.	0.306	0.306	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

k: az 298.2 el 50.4 pa 87.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -173.384 -861.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl.W.120.11M4WN

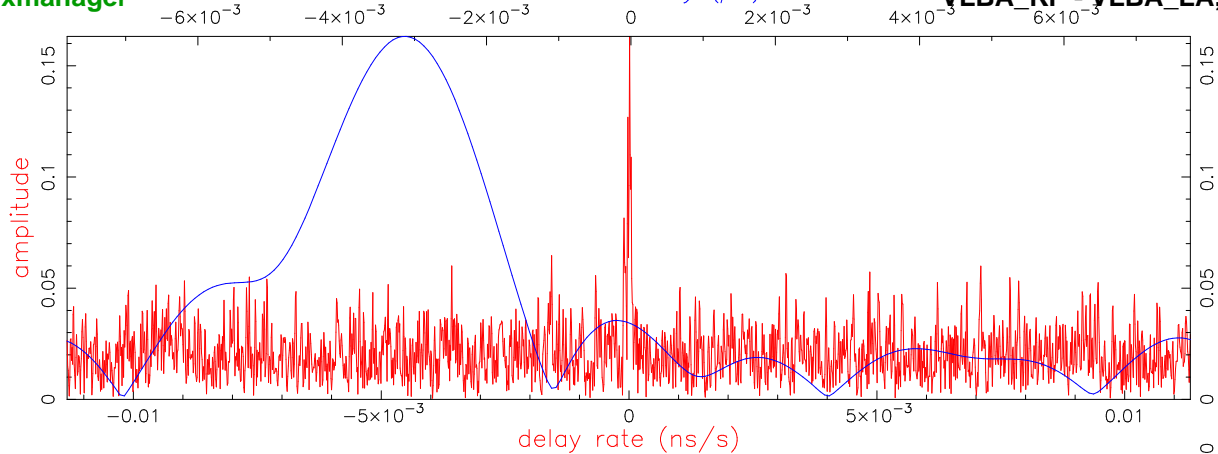
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, kl

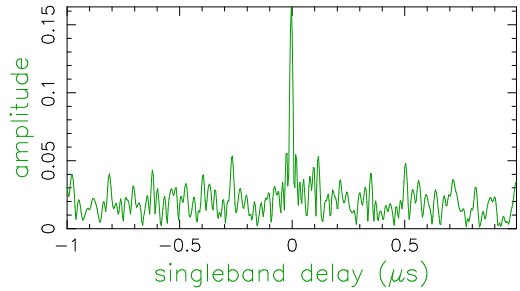
VLBA_KP - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

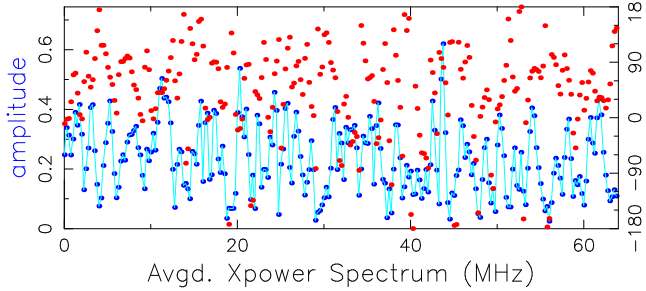


Fringe quality 9

SNR 9.7
 Int time 475.319
 Amp 0.163
 Phase 46.9
 PFD 9.4e-14
 Delays (us)
 SBD -0.003992
 MBD -0.003136
 Fringe rate (Hz) 0.001080
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

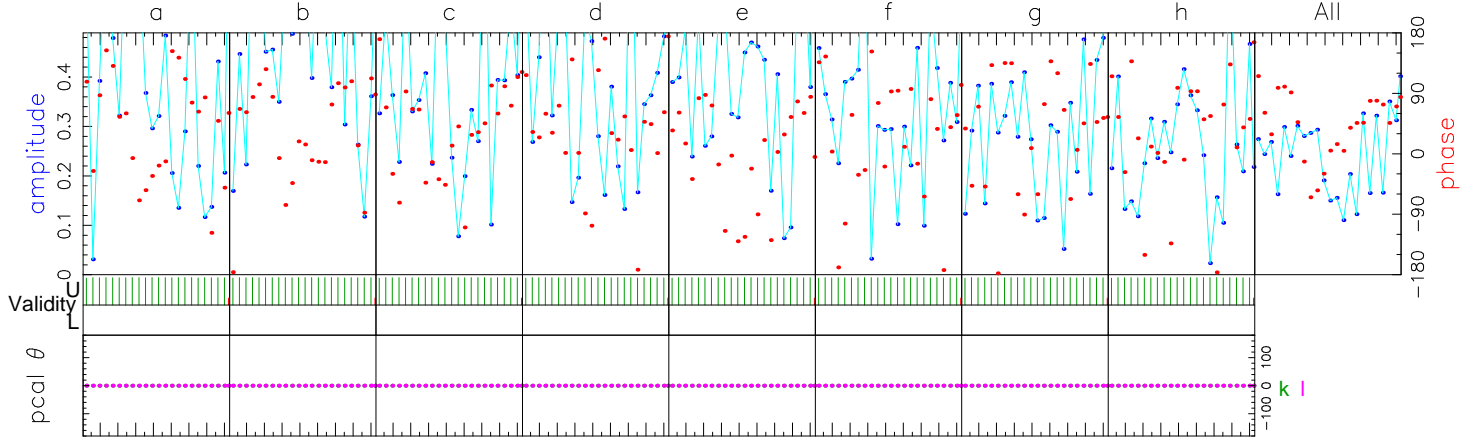


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132936
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	5.62858354384E+02	Apriori delay (usec)		5.62861490028E+02	Resid mbdelay (usec)		-3.13564E-03	+/-	1.1E-04	
Sband delay (usec)	5.62857497778E+02	Apriori clock (usec)		7.4082756E-01	Resid sbdelay (usec)		-3.99225E-03	+/-	8.9E-04	
Phase delay (usec)	5.62861491539E+02	Apriori clockrate (us/s)		1.9999998E-07	Resid phdelay (usec)		1.51104E-06	+/-	3.8E-07	
Delay rate (us/s)	2.07478079996E-02	Apriori rate (us/s)		2.07477954581E-02	Resid rate (us/s)		1.25415E-08	+/-	1.4E-09	
Total phase (deg)		317.2	Apriori accel (us/s/s)		-7.13066991343E-06	Resid phase (deg)		46.9	+/-	11.8

	RMS	Theor.	Amplitude	0.163 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	48.8	28.2	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	65.0	49.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	15.9	16.7	Inc. seg. avg.	0.214	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
amp/frq (%)	29.3	29.1	Inc. frq. avg.	0.161	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

k: az 298.2 el 50.4 pa 87.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -173.384 -861.388 simultaneous interpolator

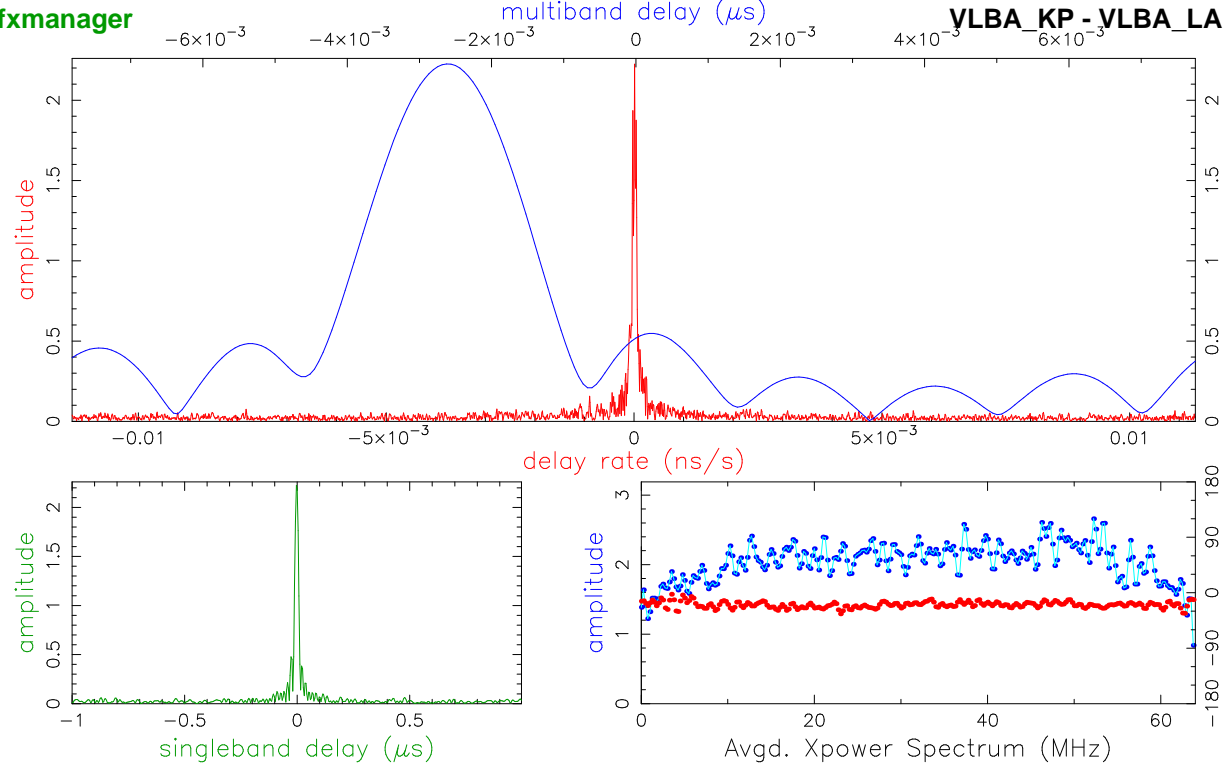
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl.W.138.11M4WN

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, kl

VLBA_KP - VLBA_LA, fgroup W, pol LL

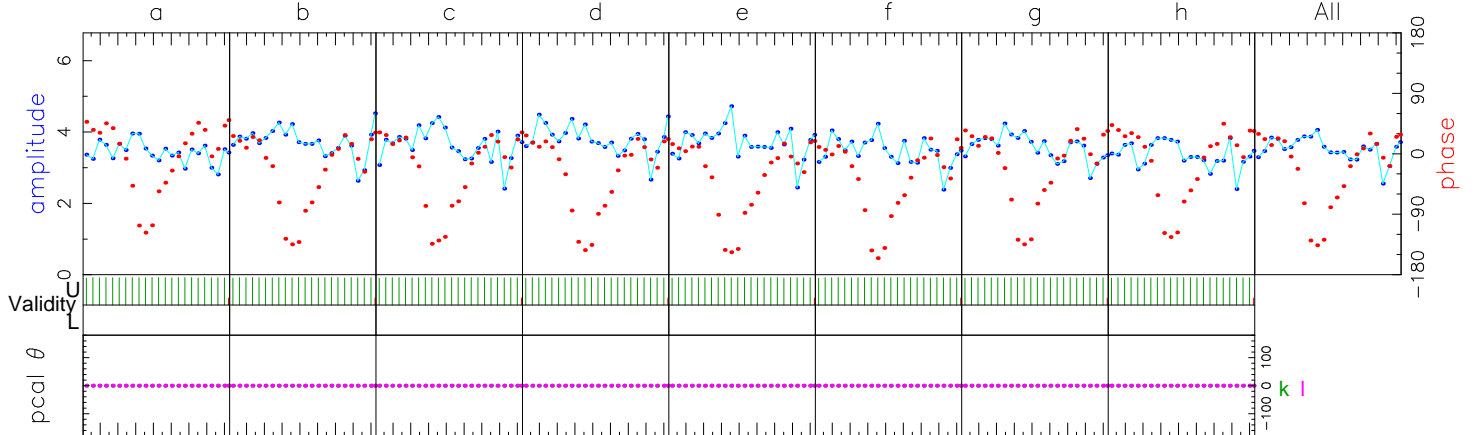


Fringe quality 4

SNR 134.8
 Int time 475.318
 Amp 2.260
 Phase -16.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.002306
 MBD -0.002573
 Fringe rate (Hz)
 0.000948
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132925
 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		
k	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	2.3
l	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	256.4
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
k:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		5.62858917416E+02				5.62861490028E+02			Resid mbdelay (usec)	-2.57261E-03 +/- 8.1E-06
Sband delay (usec)		5.62859183778E+02				7.4082756E-01			Resid sbdelay (usec)	-2.30625E-03 +/- 6.4E-05
Phase delay (usec)		5.62861489502E+02				1.9999998E-07			Resid phdelay (usec)	-5.26403E-07 +/- 2.7E-08
Delay rate (us/s)		2.07478064663E-02				2.07477954581E-02			Resid rate (us/s)	1.10082E-08 +/- 9.9E-11
Total phase (deg)			254.1			-7.13066991343E-06			Resid phase (deg)	-16.3 +/- 0.9

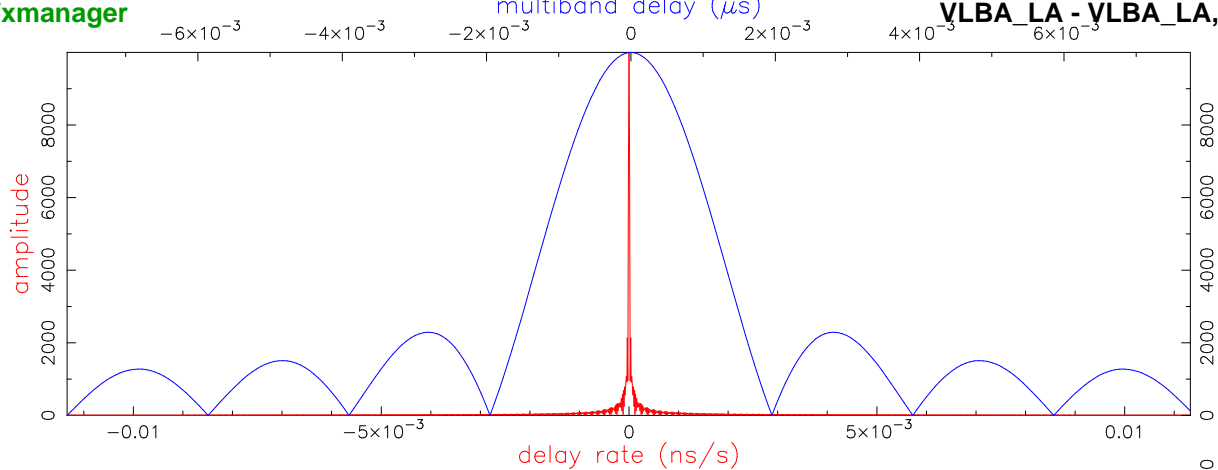
ph/seg (deg) 53.6 2.0 Search (2048X32) 2.198 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 57.5 3.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.9 1.2 Inc. seg. avg. 3.518 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 3.8 2.1 Inc. frq. avg. 2.260 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 298.2 el 50.4 pa 87.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -173.384 -861.388 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/kl.W.84.11M4WN

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, II

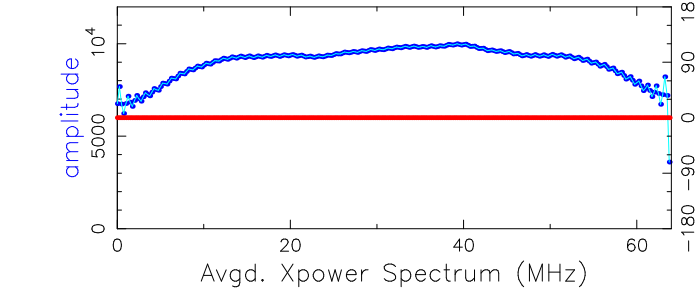
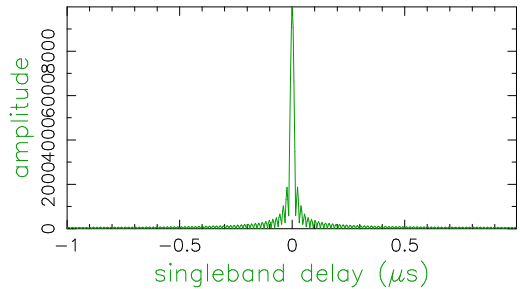
VLBA_LA - VLBA_LA, fgroup W, pol RR



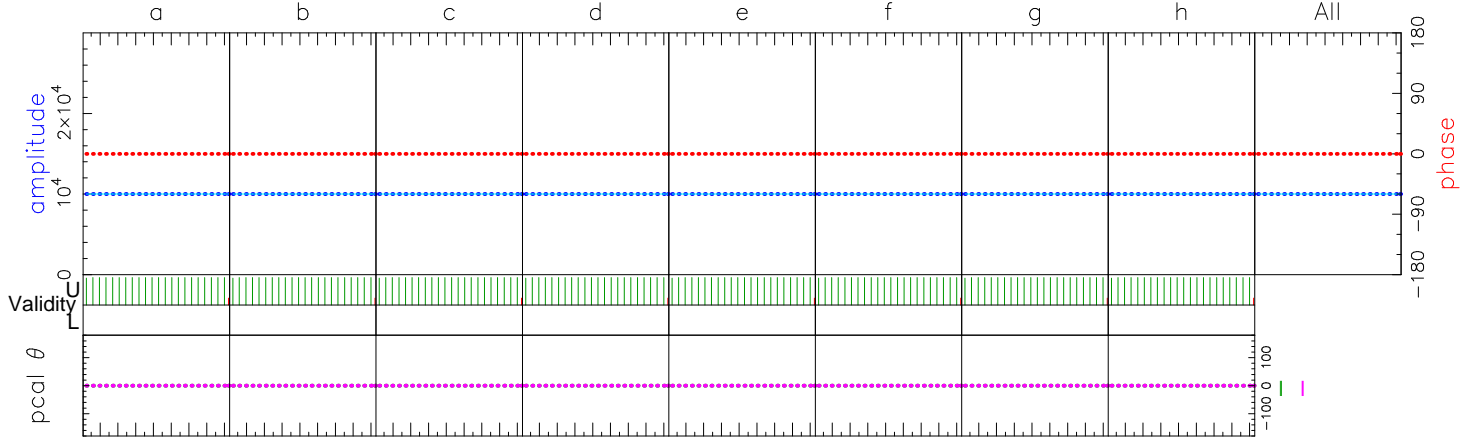
Fringe quality 9

SNR 597866.8
 Int time 477.984
 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
 Start 2020:284
 Stop 2020:284
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132928
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	10000.0
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	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) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 295.0 el 48.1 pa 80.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/II.1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/II.W.100.1M4WN

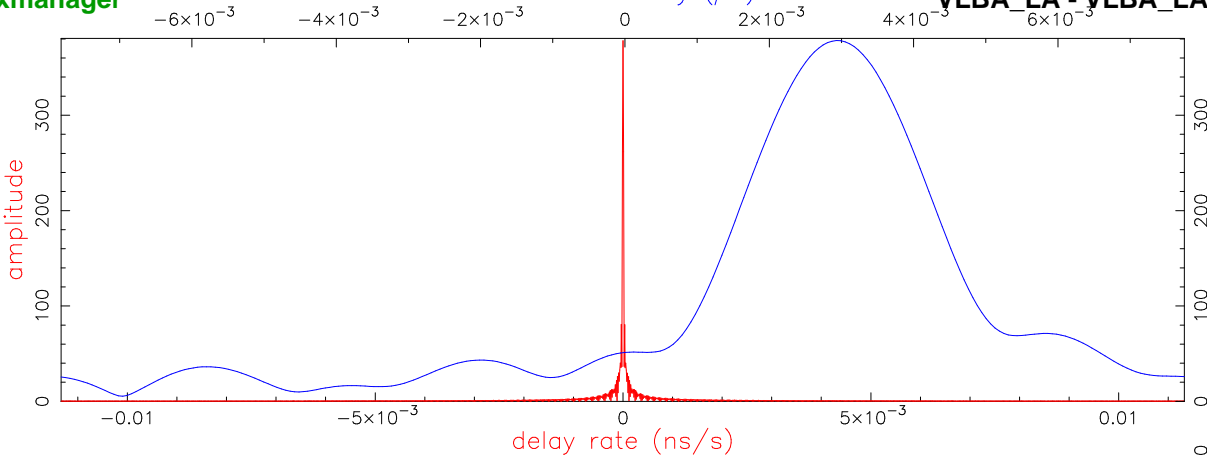
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, II

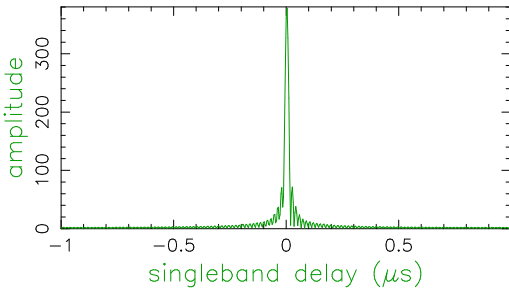
VLBA_LA - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

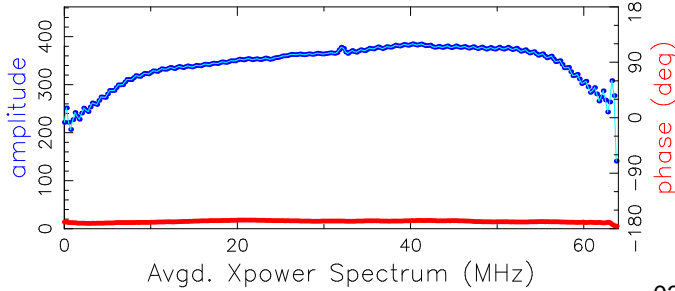


Fringe quality 7

SNR 22752.6
 Int time 477.984
 Amp 380.562
 Phase -168.7
 PFD 0.0e+00
 Delays (us)
 SBD 0.002896
 MBD 0.002914
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

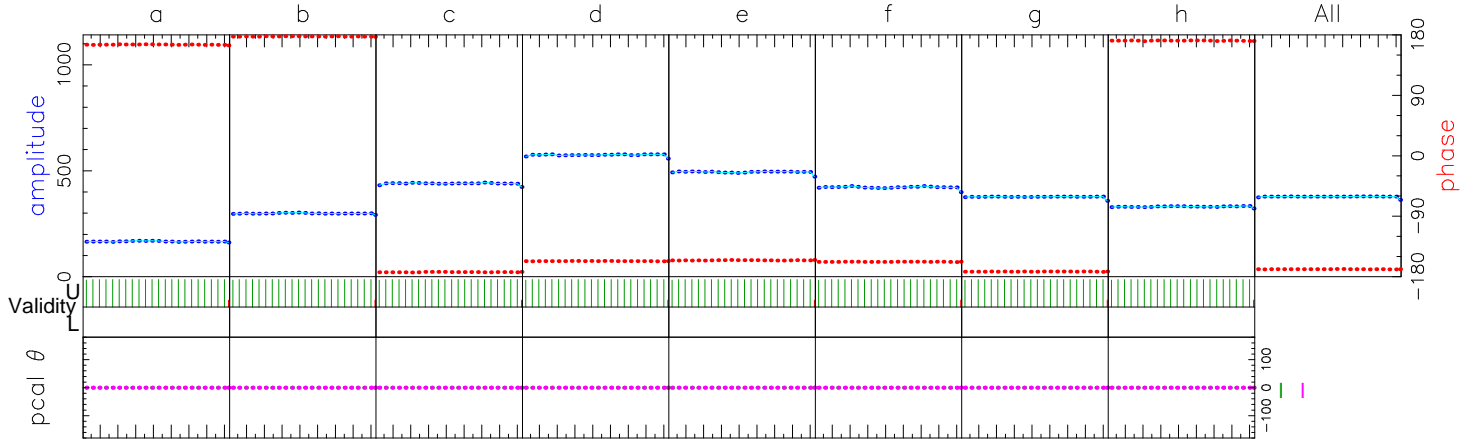


delay rate (ns/s)



Exp. c202b
 Yr:day 16383
 Start 2020:284
 Stop 2021:023:085237
 FRT 124502.54
 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132932
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
I	1000	1000	1000	1000	1000	1000	1000	1000		
W00UL	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.91353125000E-03	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.91353E-03	+/-	4.8E-08
Sband delay (usec)	2.89600000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	2.89600E-03	+/-	3.8E-07
Phase delay (usec)	-5.44155577444E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.44156E-06	+/-	1.6E-10
Delay rate (us/s)	8.50269143501E-12	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	8.50269E-12	+/-	5.9E-13
Total phase (deg)	-168.7	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-168.7	+/-	0.0

ph/seg (deg)	0.1	0.0	RMS	0.1	Theor.	0.0	Amplitude	380.562 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.8	0.0	Search (2048X32)	378.283	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	17.0	0.0	Inc. seg. avg.	378.197	Inc. frq. avg.	388.275	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	30.9	0.0	Inc. frq. avg.	388.275	Inc. frq. avg.	388.275	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
I: az 295.0 el 48.1 pa 80.0	I: az 295.0 el 48.1 pa 80.0	u,v (fr/asec)	0.000	0.000	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00

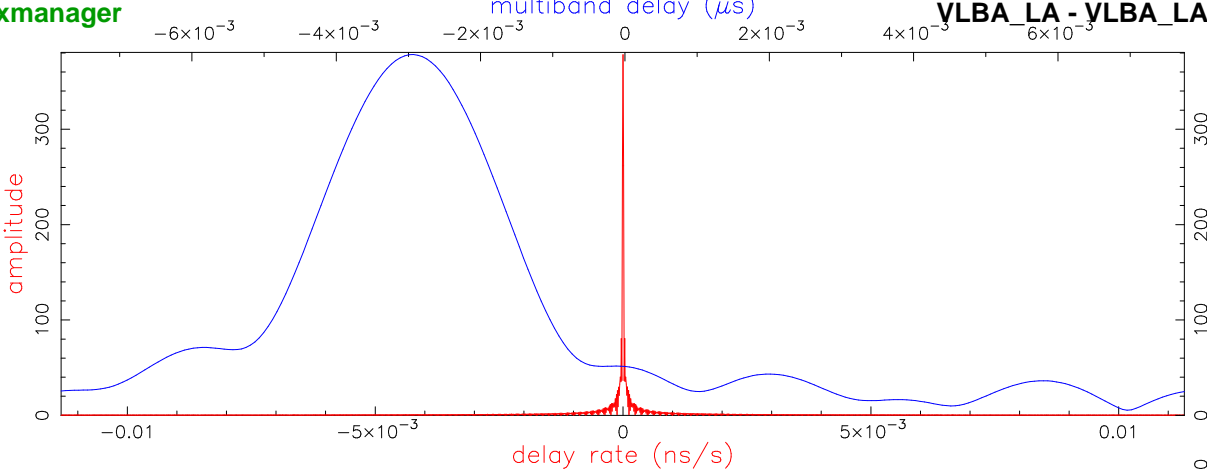
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/IL.1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/IL.W.119.1IM4WN simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

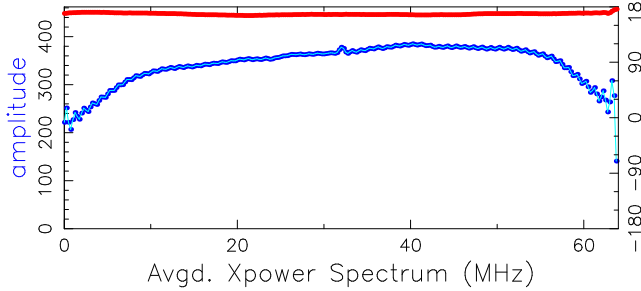
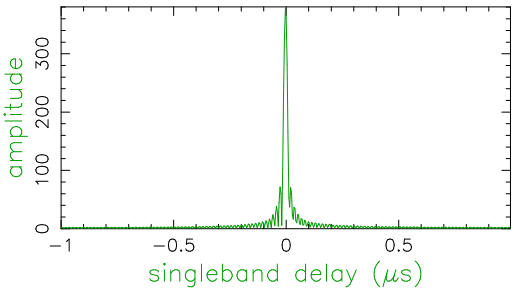
3C84.1M4WN, No0111, II

VLBA_LA - VLBA_LA, fgroup W, pol RL



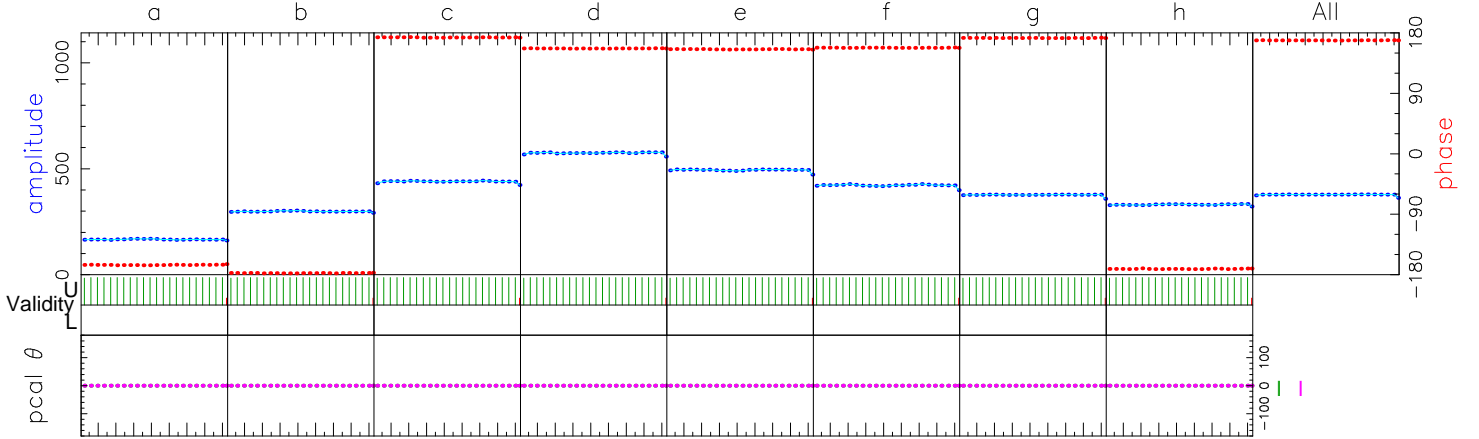
Fringe quality 7

SNR 22752.6
 Int time 477.984
 Amp 380.562
 Phase 168.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.002896
 MBD -0.002914
 Fringe rate (Hz)
 -0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



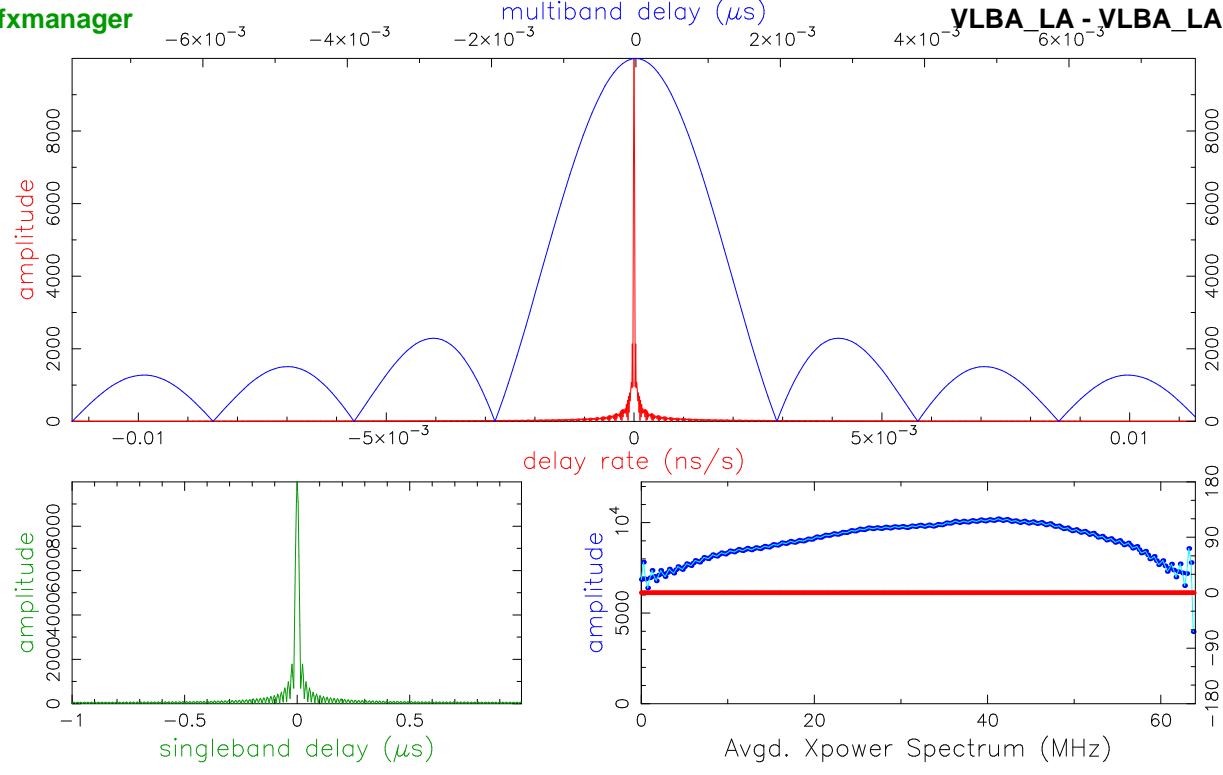
Exp. c202b
 Yr:day 16383
 Exp# 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132936
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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



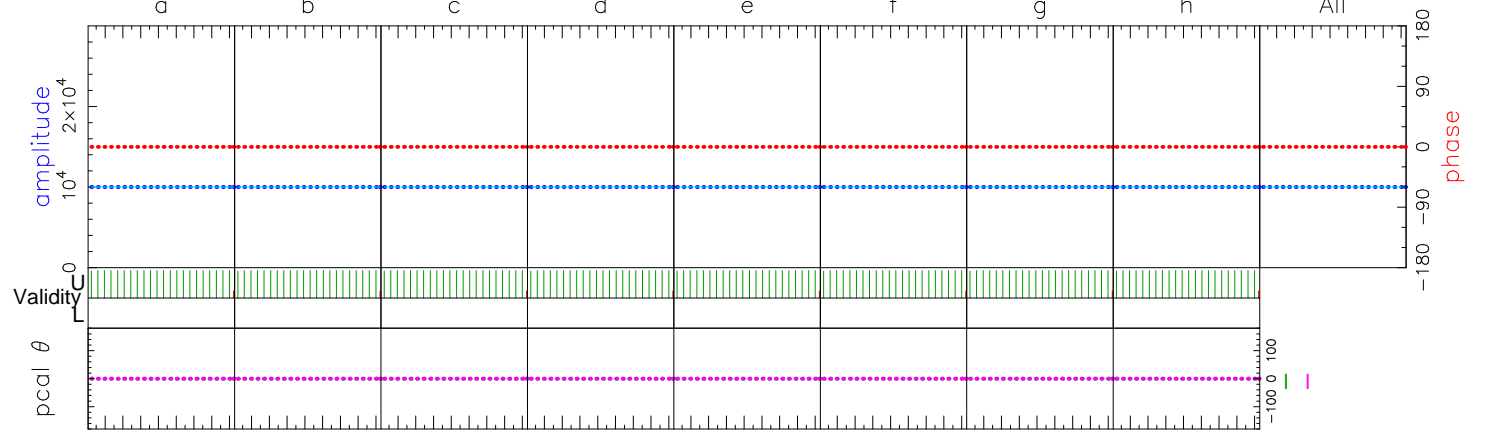
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All				
	-165.4	-177.5	173.1	156.7	155.5	157.7	172.3	-171.3	Phase	168.7				
	166.7	299.1	440.3	575.0	494.4	422.5	377.2	331.1	Ampl.	388.3				
	256.1	256.0	256.3	255.9	256.5	256.4	256.5	256.4	Sbd box	256.3				
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used					
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs					
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
:	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC					
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids					
	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks					
									Tracks					
Group delay (usec)(sbd)	-2.91353125000E-03								Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	-2.91353E-03	+/-	4.8E-08
Sband delay (usec)	-2.89600000000E-03								Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-2.89600E-03	+/-	3.8E-07
Phase delay (usec)	5.44155577452E-06								Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.44156E-06	+/-	1.6E-10
Delay rate (us/s)	-8.50269143501E-12								Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-8.50269E-12	+/-	5.9E-13
Total phase (deg)			168.7						Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	168.7	+/-	0.0

ph/seg (deg) 0.1 0.0 Theor. Amplitude 380.562 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.8 0.0 Search (2048X32) 378.283 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 30.9 0.0 Inc. seg. avg. 378.197 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 I: az 295.0 el 48.1 pa 80.0 I: az 295.0 el 48.1 pa 80.0 u, v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/IL.1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/IL.W.139.1M4WN simultaneous interpolator



Fringe quality 9
SNR 597866.8
Int time 477.984
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
Start 2020:284
Stop 2021:023:085237
FRT 124901.00
2021:023:132925
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

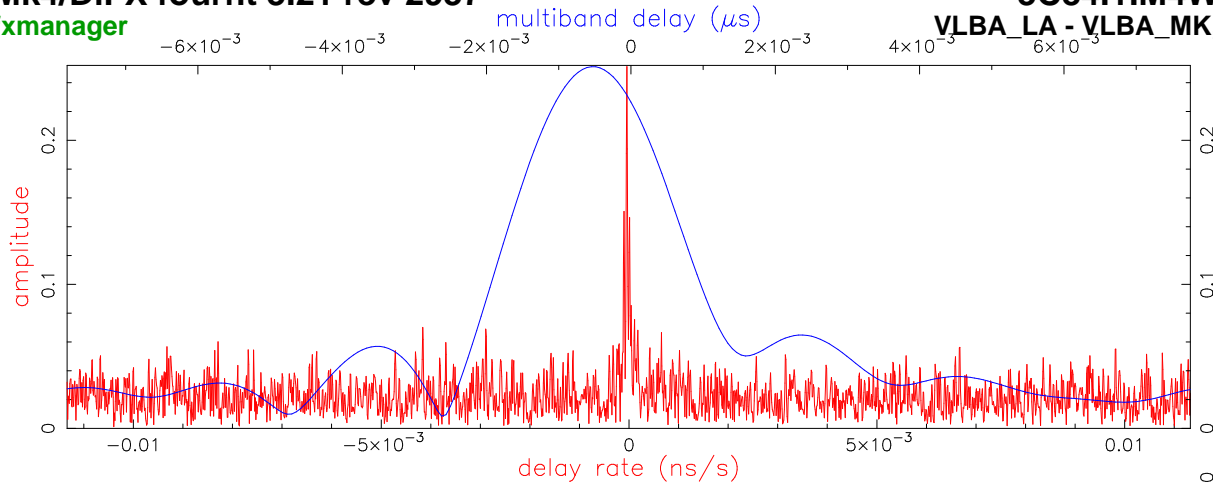


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	10000.0	10000.0
I	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
l	1000	1000	1000	1000	1000	1000	1000	1000	10000.0	10000.0
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
l:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
I	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
l	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	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

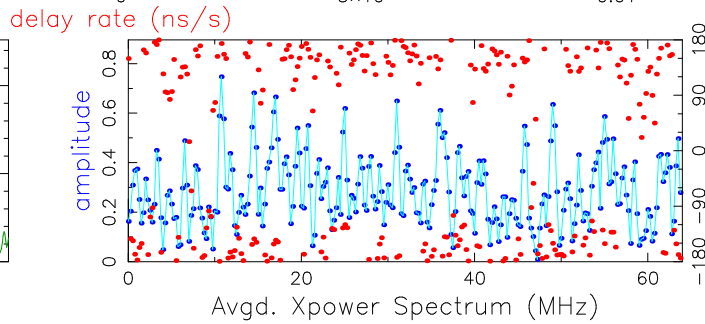
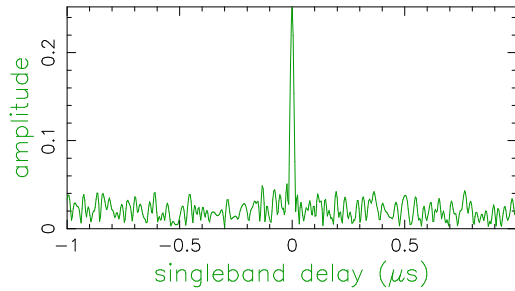
RMS Theor. Amplitude 9999.999 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 295.0 el 48.1 pa 80.0 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/II.1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/II.W.82.1M4WN



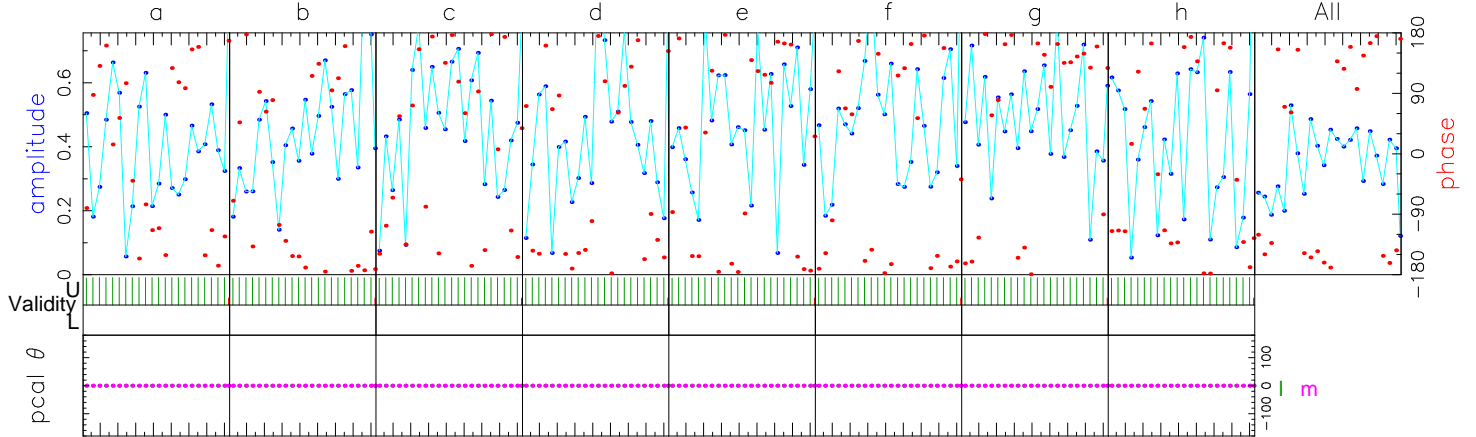
Fringe quality 9

SNR 15.1
Int time 477.984
Amp 0.252
Phase 172.6
PFD 1.6e-42
Delays (us)
SBD -0.000740
MBD -0.000543
Fringe rate (Hz)
-0.003681
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132930
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
	-162.7	169.9	162.8	171.2	163.2	171.2	166.3	-167.8	Phase	172.6
	0.1	0.3	0.2	0.3	0.3	0.3	0.4	0.3	Ampl.	0.3
	454.2	257.0	256.8	256.3	256.9	256.8	257.5	256.7	Sbd box	256.8
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.09911985546E+03		Apriori delay (usec)	-4.09911931241E+03	Resid mbdelay (usec)	-5.43049E-04	+/-	7.2E-05		
Sband delay (usec)	-4.09912005216E+03		Apriori clock (usec)	-1.3770827E+01	Resid sbdelay (usec)	-7.39750E-04	+/-	5.7E-04		
Phase delay (usec)	-4.09911930685E+03		Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	5.56463E-06	+/-	2.5E-07		
Delay rate (us/s)	-6.59257813582E-01		Apriori rate (us/s)	-6.59257770848E-01	Resid rate (us/s)	-4.27338E-08	+/-	8.9E-10		
Total phase (deg)		-33.0	Apriori accel (us/s/s)	4.00988438190E-05	Resid phase (deg)	172.6	+/-	7.6		

ph/seg (deg) 48.2 18.2 Theor. Amplitude 0.252 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 57.1 31.8 Search (2048X32) 0.249 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.3 10.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 26.4 18.8 Inc. seg. avg. 0.341 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
l: az 295.0 el 48.1 pa 80.0 m: az 350.4 el 67.8 pa 167.6 u,v (fr/asec) 5129.188 4357.232 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/No0111/Im...1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/Im.W.108.1M4WN simultaneous interpolator

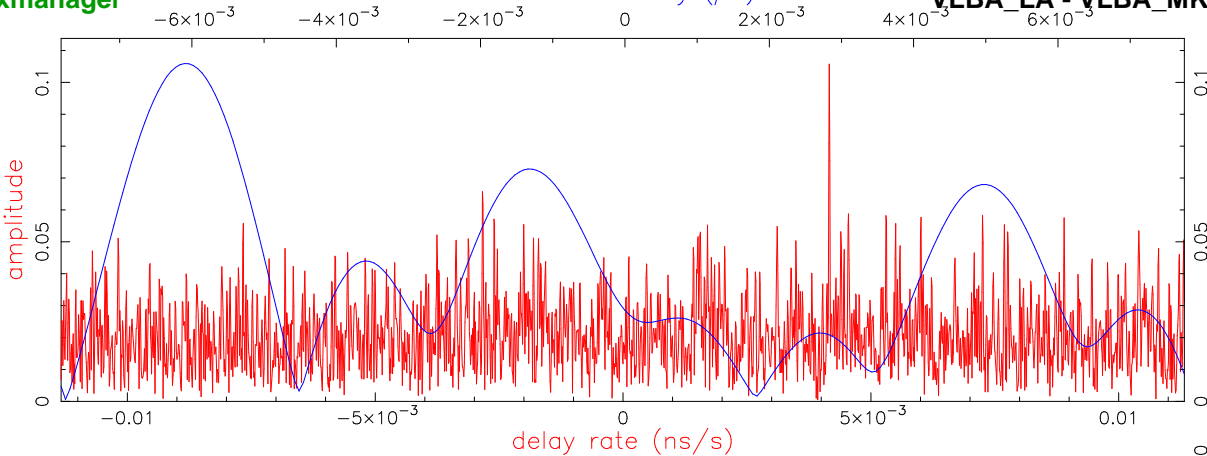
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, Im

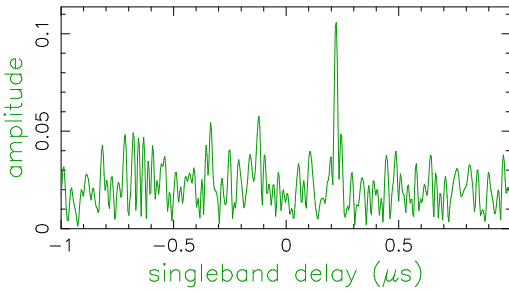
VLBA_LA - VLBA_MK, fgroup W, pol LR

multiband delay (μ s)

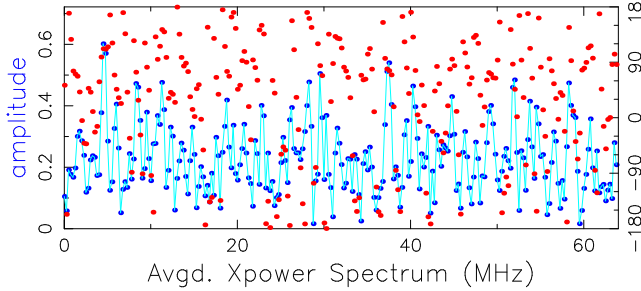


Fringe quality 0

SNR 6.4
Int time 477.984
Amp 0.114
Phase -172.4
PFD 3.5e-02
Delays (us)
SBD 0.221063
MBD -0.006144
Fringe rate (Hz)
0.358927
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

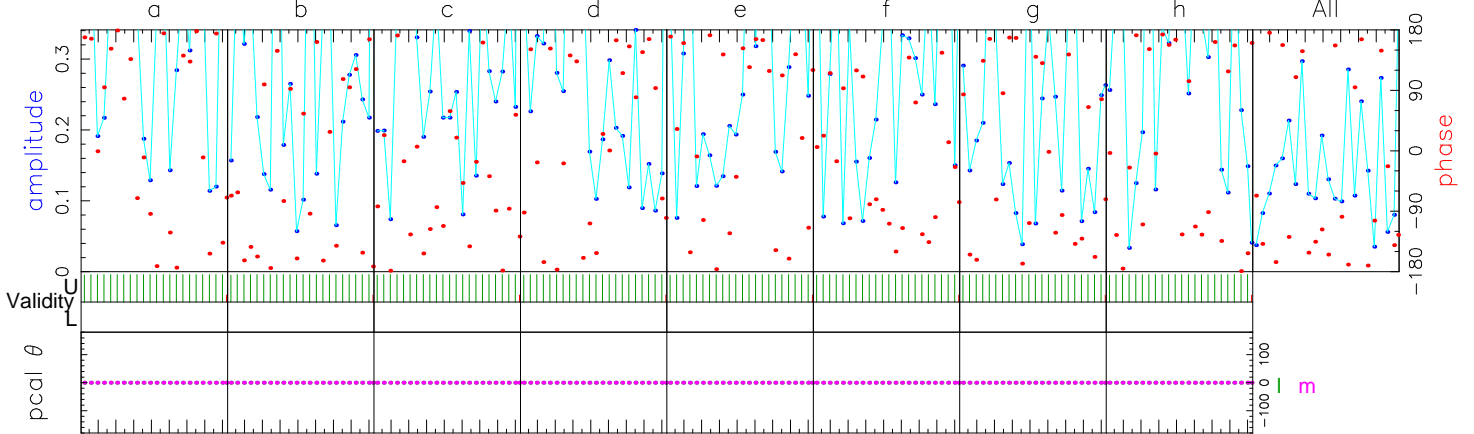


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132934
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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-4.09889108190E+03	Apriori delay (usec)	-4.09911931241E+03	Resid mbdelay (usec)	-6.14449E-03	+/-	1.7E-04
Sband delay (usec)	-4.09889824966E+03	Apriori clock (usec)	-1.3770827E+01	Resid sbdelay (usec)	2.21063E-01	+/-	1.3E-03
Phase delay (usec)	-4.09911931797E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	-5.55850E-06	+/-	5.7E-07
Delay rate (us/s)	-6.59253604064E-01	Apriori rate (us/s)	-6.59257770848E-01	Resid rate (us/s)	4.16678E-06	+/-	2.1E-09
Total phase (deg)	-18.0	Apriori accel (us/s/s)	4.00988438190E-05	Resid phase (deg)	-172.4	+/-	17.8

ph/seg (deg)	57.6	Theor.	42.7	Amplitude	0.114 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	81.0		74.6	Search (2048X32)	0.099	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	50.9		25.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	47.1		44.0	Inc. seg. avg.	0.120	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.123	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 295.0 el 48.1 pa 80.0

m: az 350.4 el 67.8 pa 167.6

u,v (fr/asec) 5129.188 4357.232

simultaneous interpolator

Control file: cf_1234_gmva

Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/Im...1M4WN

Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/Im.W.127.1M4WN

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

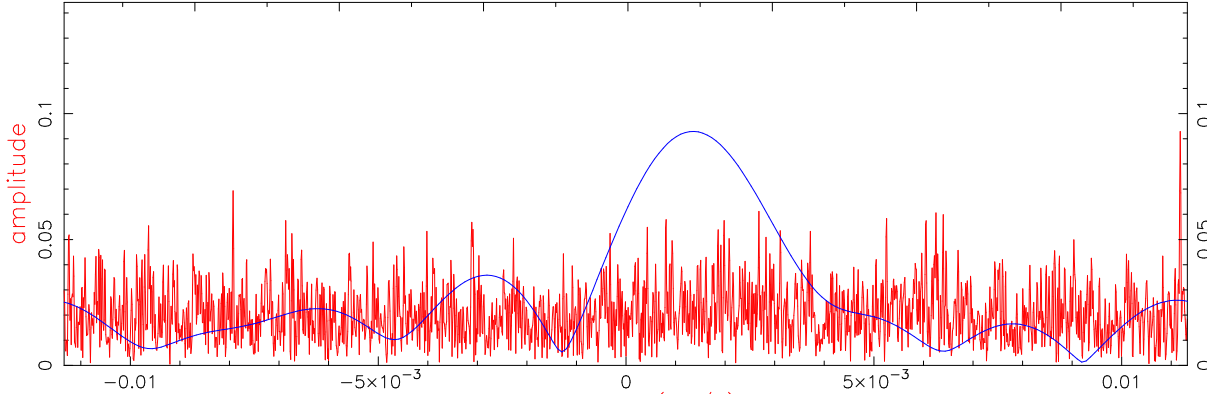
3C84.1IM4WN, No0111, Im

VLBA_LA - VLBA_MK, fgroup W, pol RL

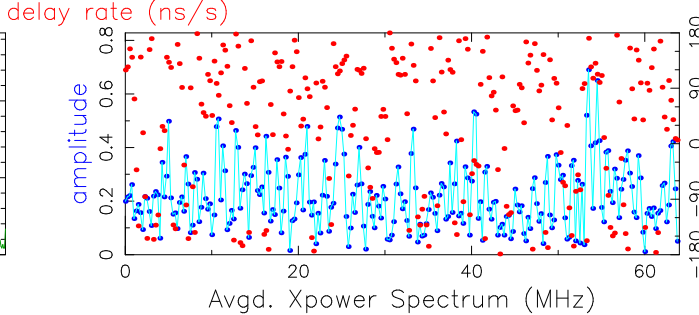
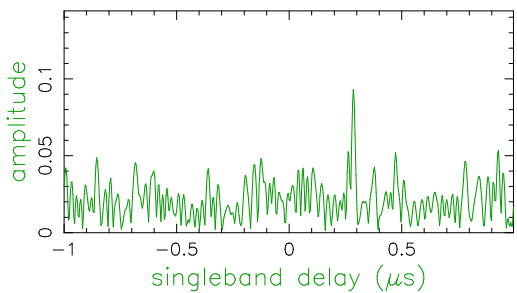
multiband delay (μ s)

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

Fringe quality 0

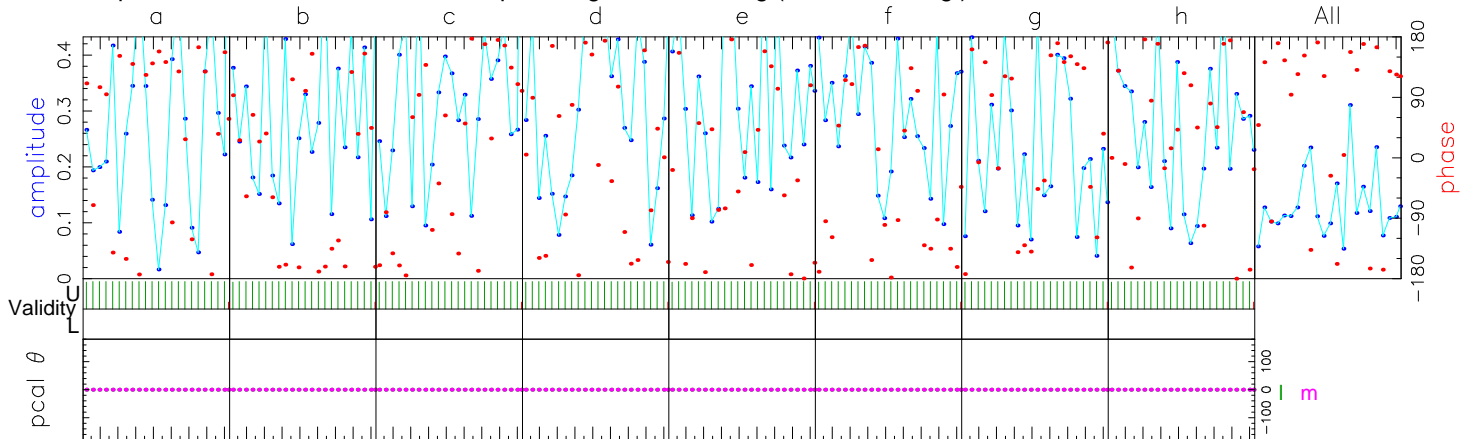


SNR 5.6
Int time 477.984
Amp 0.144
Phase 160.6
PFD 1.0e+00
Delays (us)
SBD 0.285256
MBD 0.000904
Fringe rate (Hz)
0.964167
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132938
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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-4.09883715806E+03	Apriori delay (usec)	-4.09911931241E+03	Resid mbdelay (usec)	9.04355E-04	+/-	2.0E-04
Sband delay (usec)	-4.09883405616E+03	Apriori clock (usec)	-1.3770827E+01	Resid sbdelay (usec)	2.85256E-01	+/-	1.5E-03
Phase delay (usec)	-4.09911930723E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	5.18016E-06	+/-	6.6E-07
Delay rate (us/s)	-6.59246577823E-01	Apriori rate (us/s)	-6.59257770848E-01	Resid rate (us/s)	1.11930E-05	+/-	2.4E-09
Total phase (deg)	-44.9	Apriori accel (us/s/s)	4.00988438190E-05	Resid phase (deg)	160.6	+/-	20.6

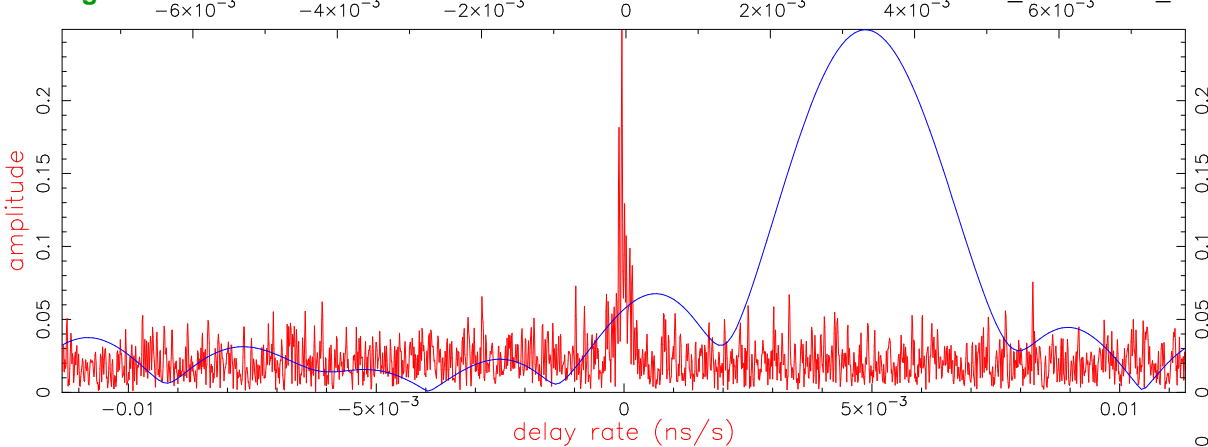
ph/seg (deg)	66.2	RMS	66.2	Theor.	49.4	Amplitude	0.144 +/- 0.026	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.0		79.0		86.3	Search (2048X32)	0.091	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	22.1		22.1		29.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	27.3		27.3		50.9	Inc. seg. avg.	0.151	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.135	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

l: az 295.0 el 48.1 pa 80.0 m: az 350.4 el 67.8 pa 167.6 u,v (fr/asec) 5129.188 4357.232 simultaneous interpolator

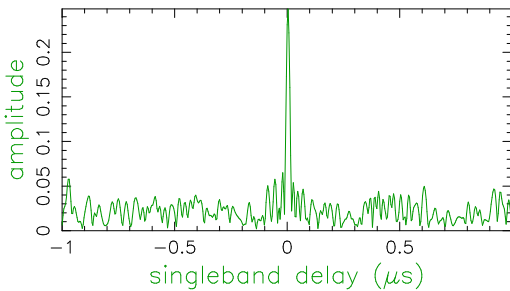
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/Im...1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/Im.W.144.1M4WN

multiband delay (μ s)

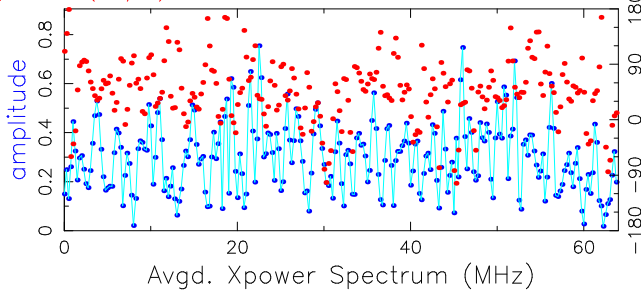
Fringe quality 9



SNR 14.9
Int time 477.984
Amp 0.249
Phase 46.8
PFD 3.0e-41
Delays (us)
SBD 0.003492
MBD 0.003309
Fringe rate (Hz)
-0.003636
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

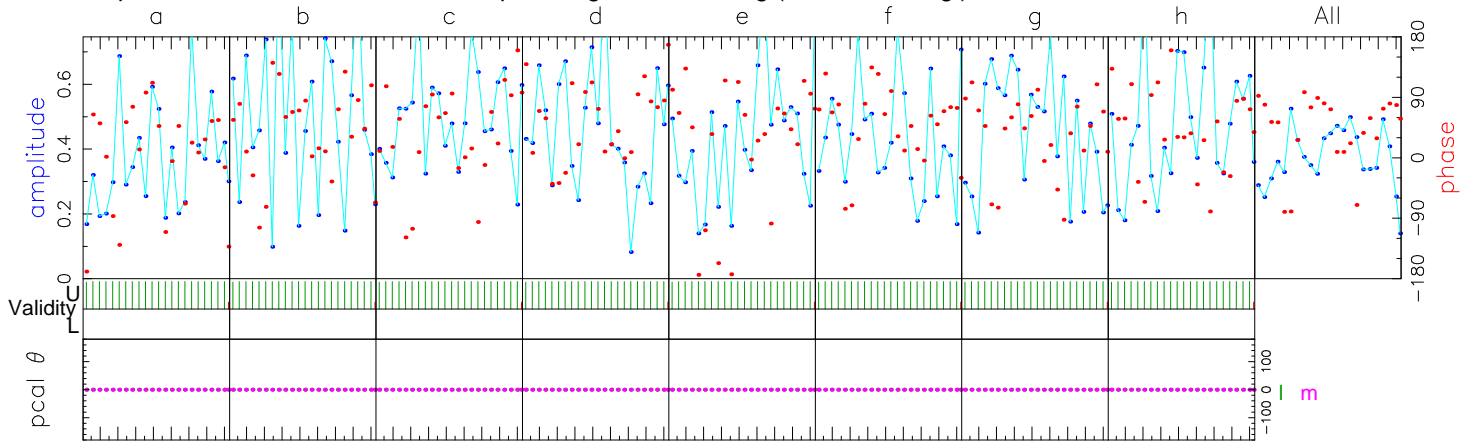


delay rate (ns/s)



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132926
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		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.09911600312E+03	Apriori delay (usec)	-4.09911931241E+03	Resid mbdelay (usec)	3.30929E-03	+/-	7.3E-05
Sband delay (usec)	-4.09911582041E+03	Apriori clock (usec)	-1.3770827E+01	Resid sbdelay (usec)	3.49200E-03	+/-	5.8E-04
Phase delay (usec)	-4.09911931090E+03	Apriori clockrate (us/s)	-1.9999998E-07	Resid phdelay (usec)	1.51066E-06	+/-	2.5E-07
Delay rate (us/s)	-6.59257813058E-01	Apriori rate (us/s)	-6.59257770848E-01	Resid rate (us/s)	-4.22102E-08	+/-	9.0E-10
Total phase (deg)	-158.7	Apriori accel (us/s/s)	4.00988438190E-05	Resid phase (deg)	46.8	+/-	7.7

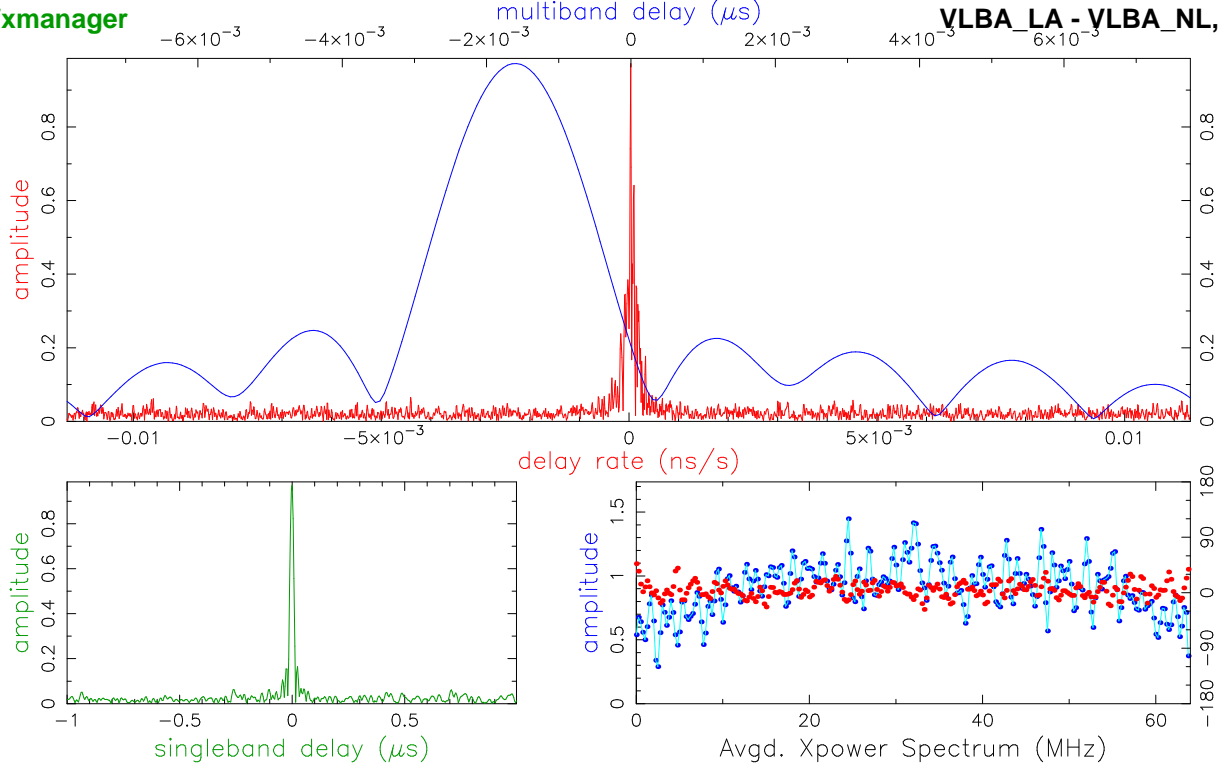
ph/seg (deg)	53.4	RMS	18.5	Theor.	18.5	Amplitude	0.249 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	62.8	Search (2048X32)	0.244	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	13.0	Inc. seg. avg.	0.363	Inc. frq. avg.	0.249	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	12.6	Inc. frq. avg.	0.249	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite
								ion window (TEC)	0.00	0.00	

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, In

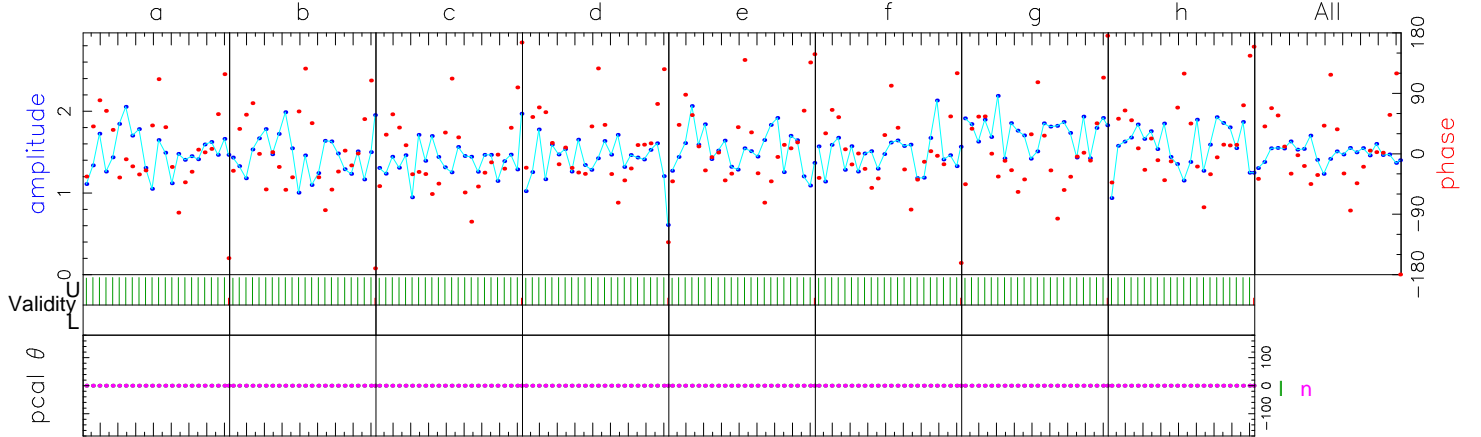
VLBA_LA - VLBA_NL, fgroup W, pol RR



Fringe quality 5

SNR 59.0
 Int time 477.984
 Amp 0.986
 Phase 4.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.001587
 MBD -0.001638
 Fringe rate (Hz) 0.002887
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132929
 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			
l	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l:n	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			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		2.14271223385E+03				2.14271387209E+03			Resid mbdelay (usec)	-1.63824E-03	+/- 1.8E-05
Sband delay (usec)		2.14271228534E+03				-5.7648373E-01			Resid sbdelay (usec)	-1.58675E-03	+/- 1.5E-04
Phase delay (usec)		2.14271387224E+03				-6.0000003E-07			Resid phdelay (usec)	1.45018E-07	+/- 6.3E-08
Delay rate (us/s)		3.92245476164E-02				3.92245140974E-02			Resid rate (us/s)	3.35190E-08	+/- 2.3E-10
Total phase (deg)			343.7			-1.74919582752E-05			Resid phase (deg)	4.5	+/- 1.9

ph/seg (deg) 54.6 4.7 Search (2048X32) 0.962 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 51.8 8.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 9.0 2.7 Inc. seg. avg. 1.482 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.5 4.8 Inc. frq. avg. 0.980 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 295.0 el 48.1 pa 80.0 n: az 294.3 el 40.1 pa 65.6 u,v (fr/asec) -336.745 -1754.459 ion window (TEC) 0.00 0.00 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/In..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/In.W.104.11M4WN

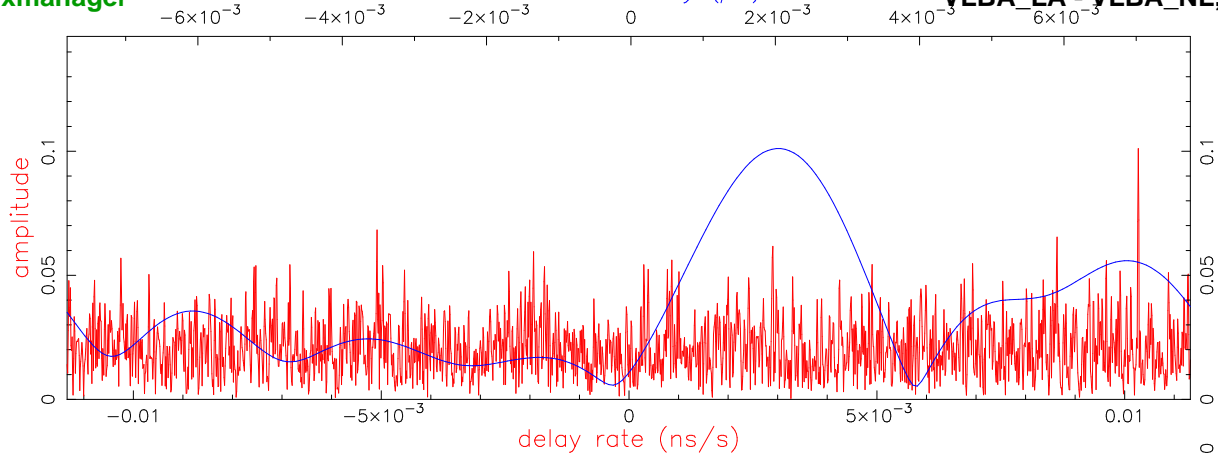
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, In

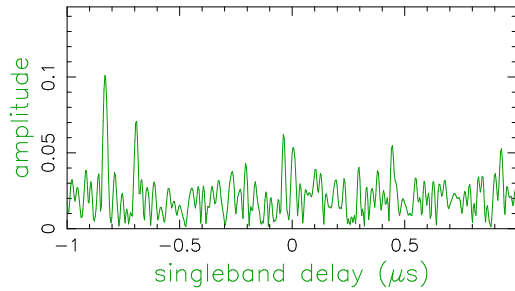
VLBA_LA - VLBA_NL, fgroup W, pol LR

multiband delay (μ s)

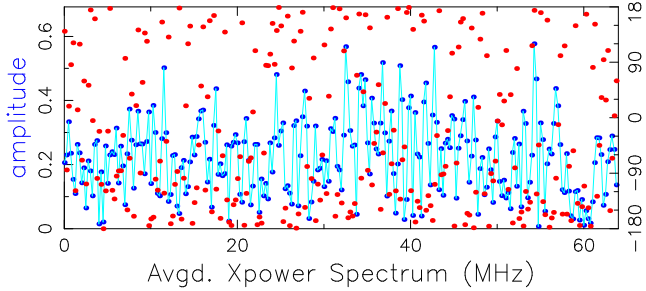


Fringe quality 0

SNR 6.1
 Int time 477.984
 Amp 0.146
 Phase -29.6
 PFD 2.9e-01
 Delays (us)
 SBD -0.831017
 MBD 0.002018
 Fringe rate (Hz)
 0.886702
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

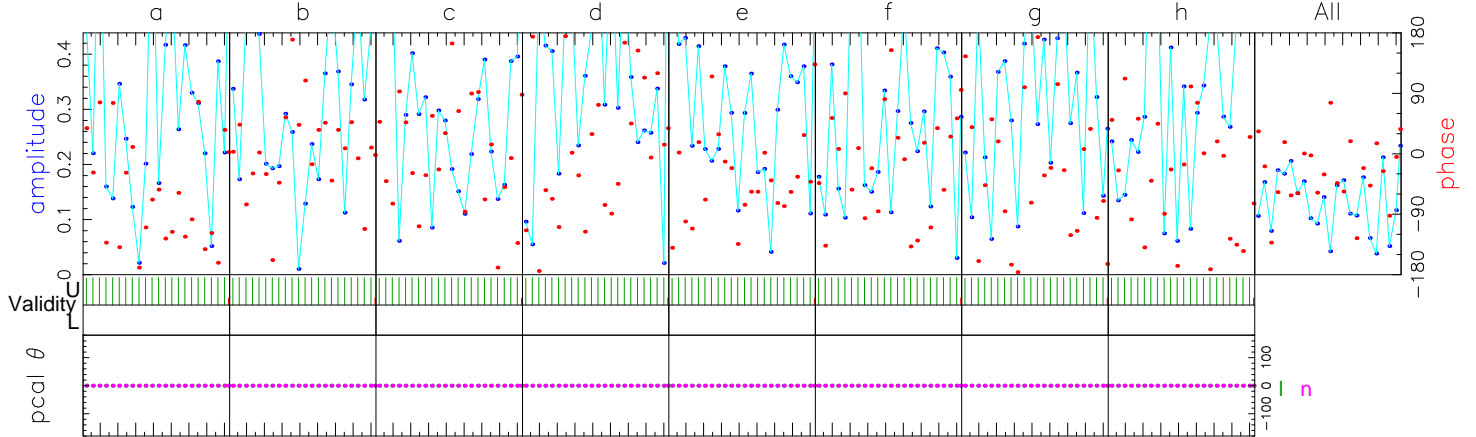


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132933
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	2.14188776489E+03	Apriori delay (usec)	2.14271387209E+03	Resid mbdelay (usec)	2.01780E-03	+/-	1.8E-04
Sband delay (usec)	2.14188285509E+03	Apriori clock (usec)	-5.7648373E-01	Resid sbdelay (usec)	-8.31017E-01	+/-	1.4E-03
Phase delay (usec)	2.14271387114E+03	Apriori clockrate (us/s)	-6.0000003E-07	Resid phdelay (usec)	-9.53175E-07	+/-	6.1E-07
Delay rate (us/s)	3.92348078262E-02	Apriori rate (us/s)	3.92245140974E-02	Resid rate (us/s)	1.02937E-05	+/-	2.2E-09
Total phase (deg)	309.6	Apriori accel (us/s/s)	-1.74919582752E-05	Resid phase (deg)	-29.6	+/-	18.9

ph/seg (deg)	49.0	RMS	45.3	Theor.	45.3	Amplitude	0.146 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	59.6	Search (2048X32)	0.098	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	34.2	Inc. seg. avg.	0.143	Inc. frq. avg.	0.147	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	51.0	Inc. frq. avg.	0.147	Data rate (Mb/s):	2048	nlags:	256	t_cohere:	infinite	ion window (TEC)	0.00	0.00		

l: az 295.0 el 48.1 pa 80.0 n: az 294.3 el 40.1 pa 65.6 u,v (fr/asec) -336.745 -1754.459 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/ln..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/ln.W.122.11M4WN

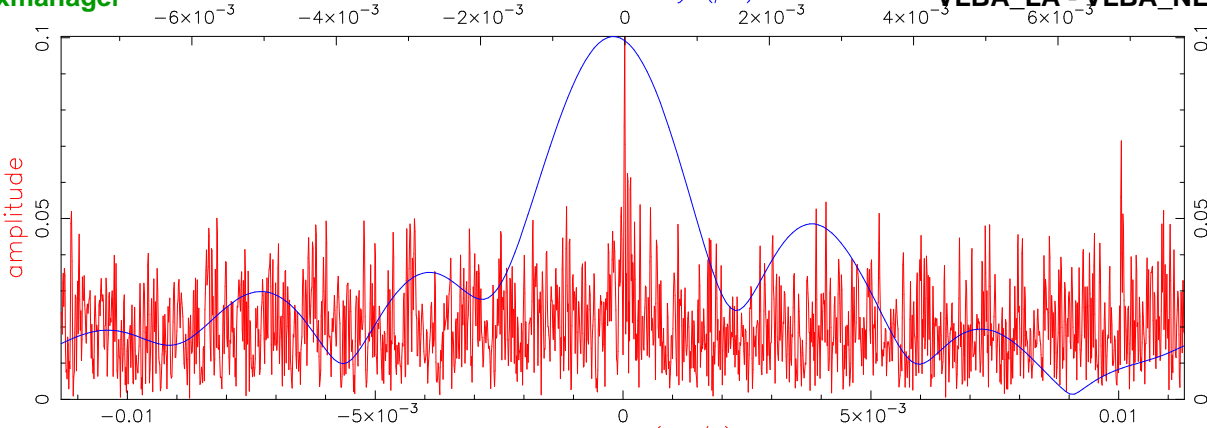
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, In

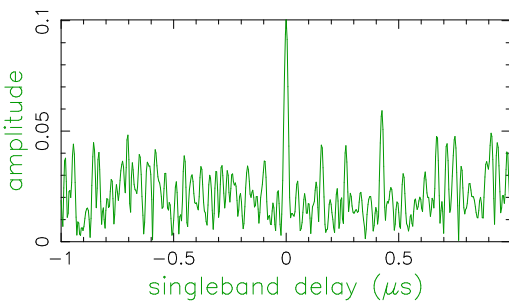
VLBA_LA - VLBA_NL, fgroup W, pol RL

multiband delay (μ s)

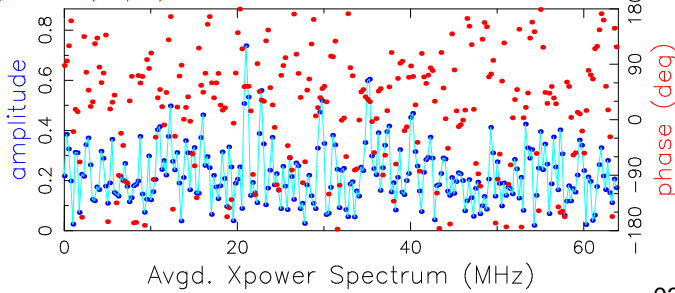


Fringe quality 0

SNR 6.0
 Int time 477.984
 Amp 0.100
 Phase 52.2
 PFD 4.0e-01
 Delays (us)
 SBD -0.000281
 MBD -0.000170
 Fringe rate (Hz)
 0.002808
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

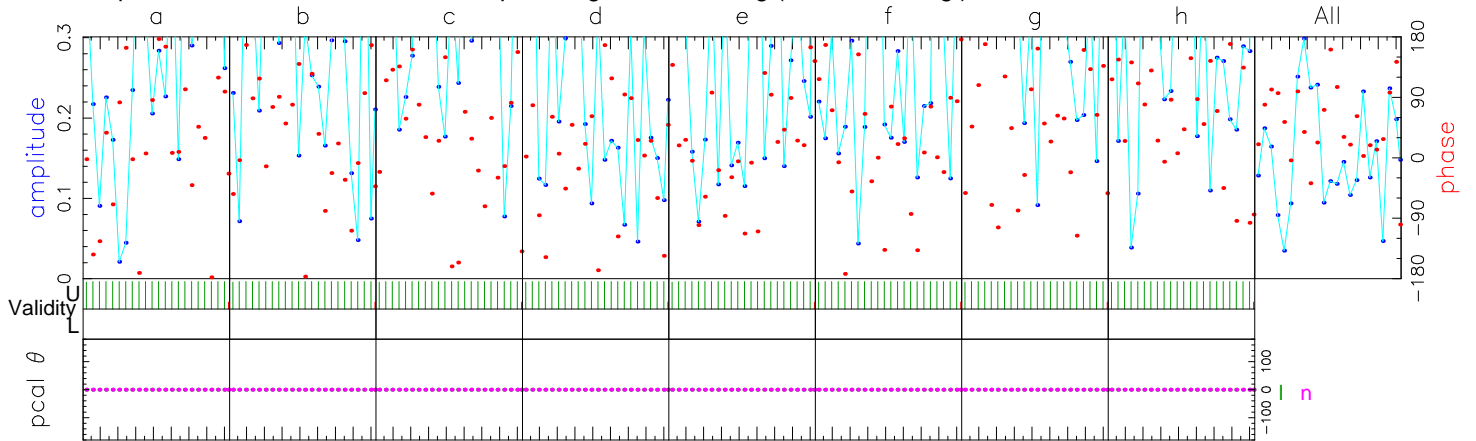


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132937
 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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 2.14271370197E+03 Apriori delay (usec) 2.14271387209E+03 Resid mbdelay (usec) -1.70119E-04 +/- 1.8E-04
 Sband delay (usec) 2.14271359059E+03 Apriori clock (usec) -5.7648373E-01 Resid sbdelay (usec) -2.81500E-04 +/- 1.4E-03
 Phase delay (usec) 2.14271387378E+03 Apriori clockrate (us/s) -6.0000003E-07 Resid phdelay (usec) 1.68262E-06 +/- 6.2E-07
 Delay rate (us/s) 3.92245466960E-02 Apriori rate (us/s) 3.92245140974E-02 Resid rate (us/s) 3.25986E-08 +/- 2.2E-09
 Total phase (deg) 31.4 Apriori accel (us/s/s) -1.74919582752E-05 Resid phase (deg) 52.2 +/- 19.1

RMS Theor. Amplitude 0.100 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 51.5 45.8 Search (2048X32) 0.099 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 88.8 79.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 27.9 27.0 Inc. seg. avg. 0.118 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 25.4 47.1 Inc. frq. avg. 0.099 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 295.0 el 48.1 pa 80.0 n: az 294.3 el 40.1 pa 65.6 u,v (fr/asec) -336.745 -1754.459 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/In..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/In.W.141.1M4WN

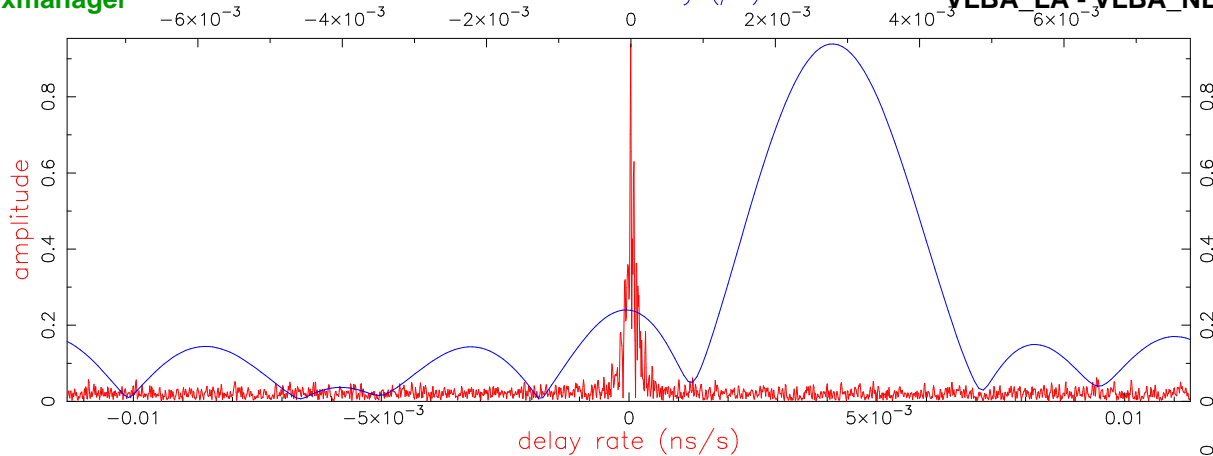
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, In

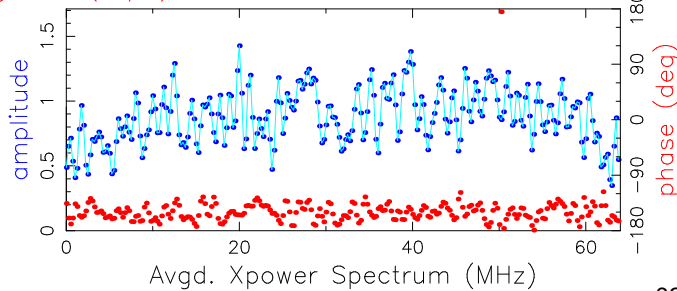
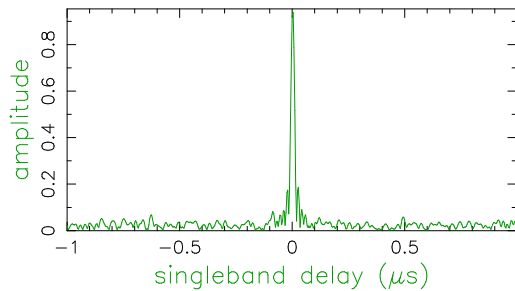
VLBA_LA - VLBA_NL, fgroup W, pol LL

multiband delay (μ s)



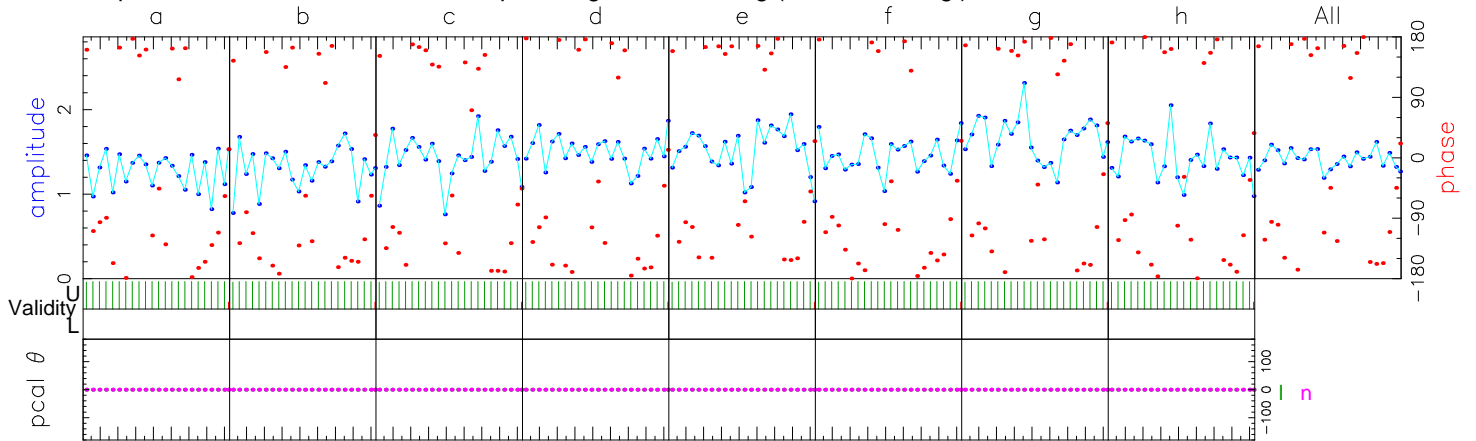
Fringe quality 5

SNR 57.0
 Int time 477.984
 Amp 0.954
 Phase -156.1
 PFD 0.0e+00
 Delays (us)
 SBD 0.002302
 MBD 0.002757
 Fringe rate (Hz)
 0.002898
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132926
 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

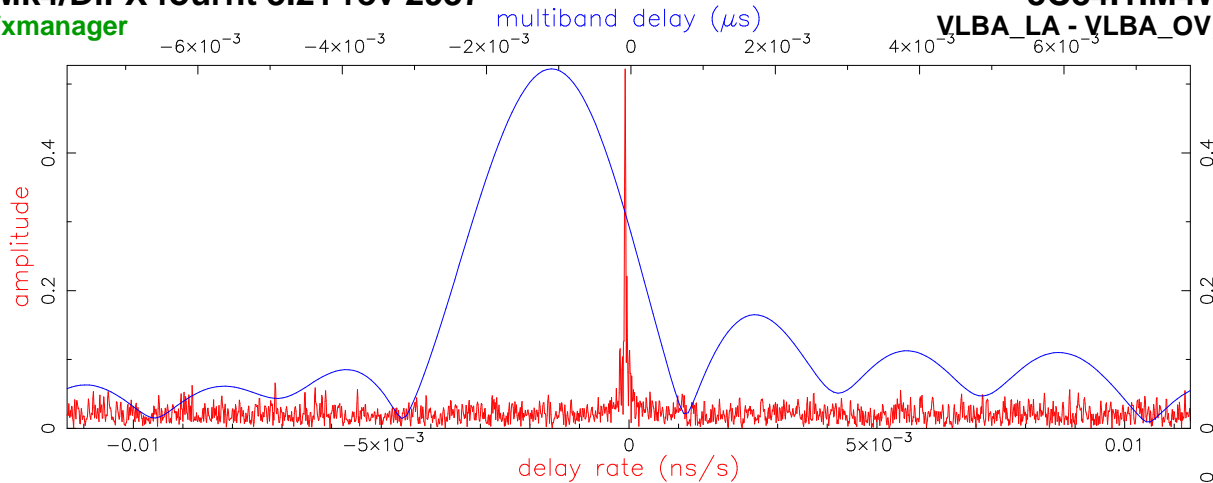


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-155.9	-156.0	-171.5	-152.4	-155.2	-144.9	-158.7	-154.9	Phase	-156.1
	0.8	0.9	0.9	1.0	1.0	0.9	1.1	1.0	Ampl.	0.9
	257.3	257.8	257.4	257.8	257.5	257.8	257.8	257.3	Sbd box	257.6
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.14271662910E+03		Apriori delay (usec)		2.14271387209E+03		Resid mbdelay (usec)		2.75701E-03	+/- 1.9E-05
Sband delay (usec)	2.14271617384E+03		Apriori clock (usec)		-5.7648373E-01		Resid sbdelay (usec)		2.30175E-03	+/- 1.5E-04
Phase delay (usec)	2.14271386706E+03		Apriori clockrate (us/s)		-6.0000003E-07		Resid phdelay (usec)		-5.03315E-06	+/- 6.5E-08
Delay rate (us/s)	3.92245477426E-02		Apriori rate (us/s)		3.92245140974E-02		Resid rate (us/s)		3.36452E-08	+/- 2.3E-10
Total phase (deg)	183.1		Apriori accel (us/s/s)		-1.74919582752E-05		Resid phase (deg)		-156.1	+/- 2.0

	RMS	Theor.	Amplitude	0.954 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	54.2	4.8	Search (2048X32)	0.929	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	50.5	8.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	8.0	2.8	Inc. seg. avg.	1.418	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	9.2	5.0	Inc. frq. avg.	0.944	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

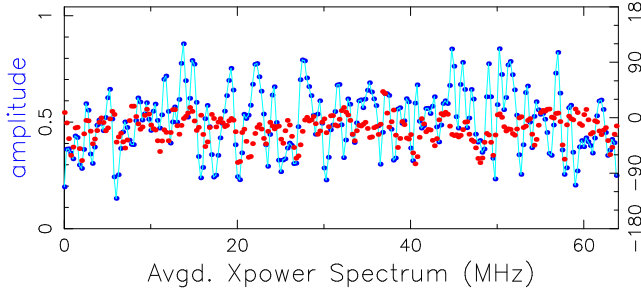
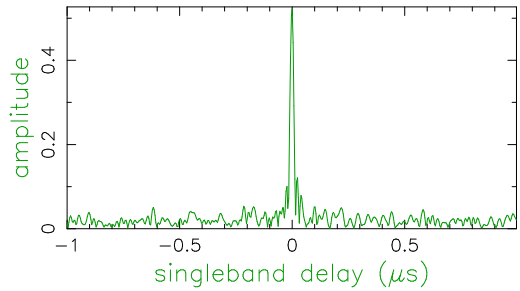
l: az 295.0 el 48.1 pa 80.0 n: az 294.3 el 40.1 pa 65.6 u,v (fr/asec) -336.745 -1754.459 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/In..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/In.W.87.1IM4WN



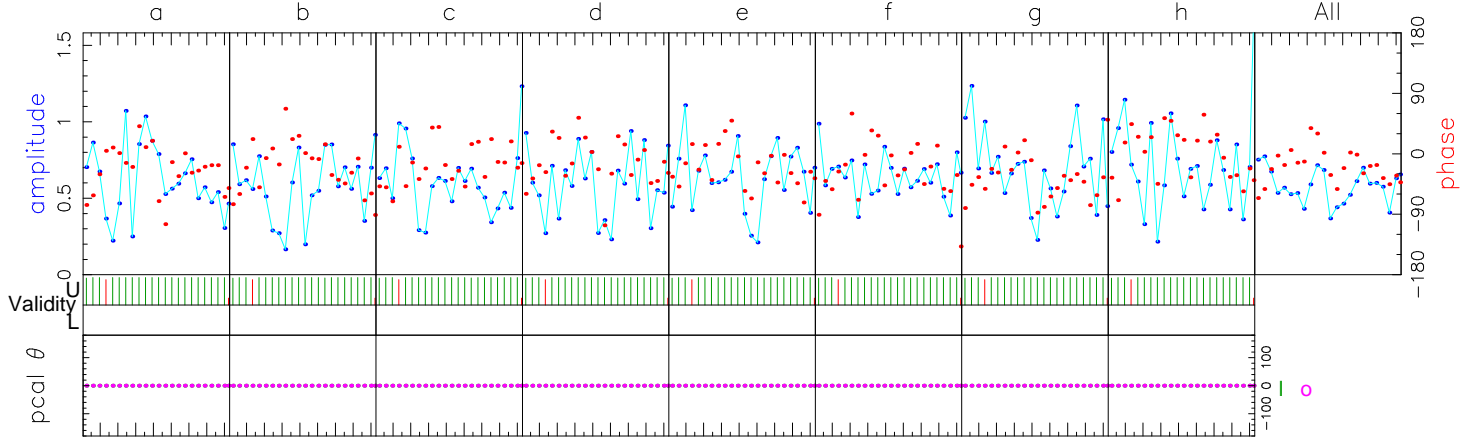
Fringe quality 7

SNR 31.5
Int time 475.899
Amp 0.527
Phase -18.3
PFD 0.0e+00
Delays (us)
SBD -0.001261
MBD -0.001130
Fringe rate (Hz)
-0.006214
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



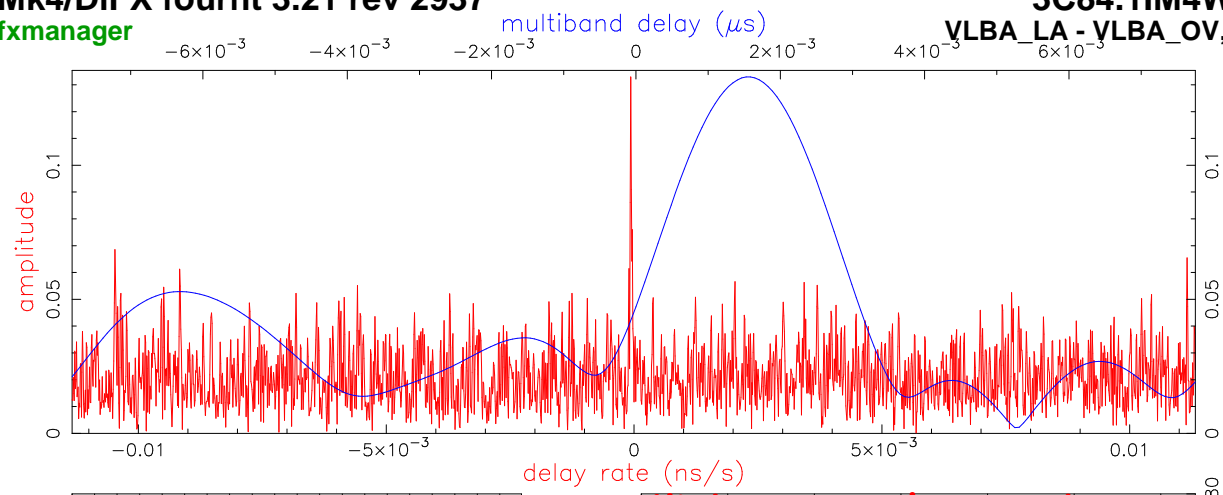
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132930
2020:247:085004
RA & Dec (J2000)
03h19m48.160095s
+41°30'42.104042"

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

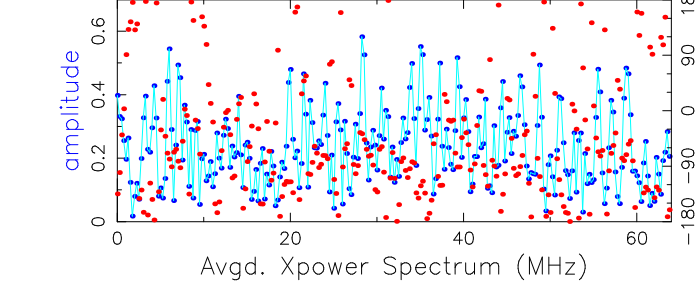
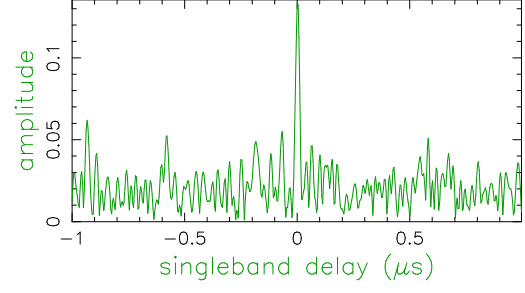


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All				
U/L	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0						
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000				
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000				
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0				
l:o	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				
o	1000	1000	1000	1000	1000	1000	1000	1000		1000				
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids					
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Chan ids					
									Tracks					
Group delay (usec)(sbd)	-2.18657075871E+03	-2.18657088987E+03	-2.18657092103E+03	-2.18657105219E+03	-2.18657118335E+03	-2.18657131451E+03	-2.18657144567E+03	-2.18657157683E+03	Apriori delay (usec)	-2.18656962837E+03	Resid mbdelay (usec)	-1.13034E-03	+/-	3.5E-05
Sband delay (usec)	-2.18657088987E+03	-2.18657102103E+03	-2.18657115219E+03	-2.18657128335E+03	-2.18657141451E+03	-2.18657154567E+03	-2.18657167683E+03	-2.18657180799E+03	Apriori clock (usec)	-2.1800999E+01	Resid sbdelay (usec)	-1.26150E-03	+/-	2.7E-04
Phase delay (usec)	-2.18656962896E+03	-2.18656975912E+03	-2.18656988928E+03	-2.18656991944E+03	-2.18657004960E+03	-2.18657017976E+03	-2.18657030992E+03	-2.18657044008E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-5.90917E-07	+/-	1.2E-07
Delay rate (us/s)	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	-1.40993246404E-01	Apriori rate (us/s)	-1.40993174265E-01	Resid rate (us/s)	-7.21390E-08	+/-	4.3E-10
Total phase (deg)			-302.1						Apriori accel (us/s/s)	9.98665876717E-06	Resid phase (deg)	-18.3	+/-	3.6

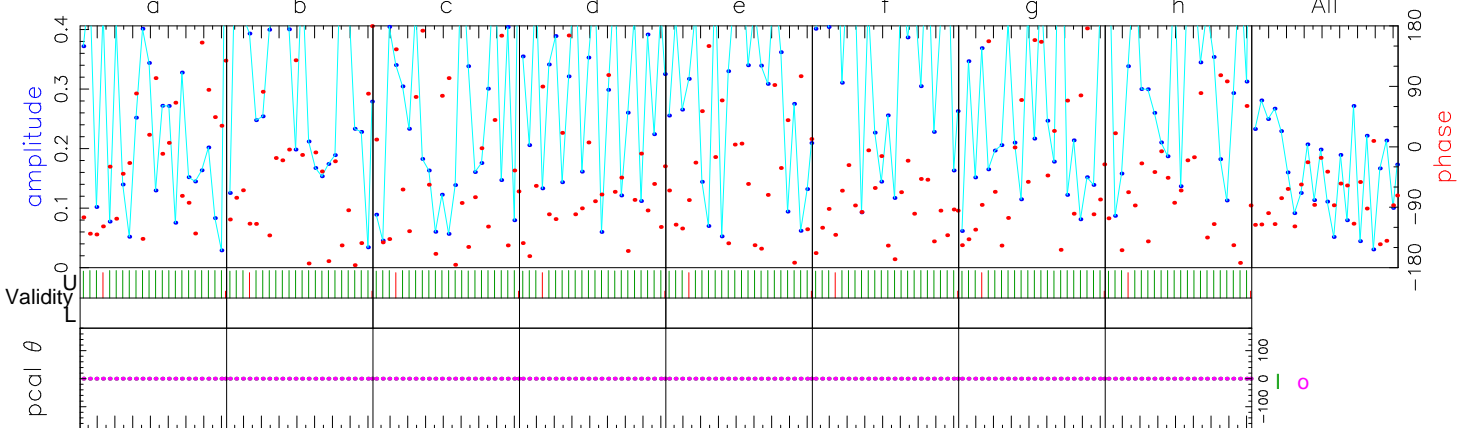
RMS 24.9 Theor. 8.7 Amplitude 0.527 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 24.9 8.7 Search (2048X32) 0.475 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 22.9 15.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 13.3 5.2 Inc. seg. avg. 0.572 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 8.5 9.0 Inc. frq. avg. 0.531 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 l: az 295.0 el 48.1 pa 80.0 o: az 291.0 el 57.6 pa 83.0 u,v (fr/asec) 1101.009 547.487 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo..1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo.W.110.1M4WN



Fringe quality 9
SNR 8.1
Int time 475.899
Amp 0.135
Phase -88.5
PFD 2.3e-07
Delays (us)
SBD 0.001890
MBD 0.001573
Fringe rate (Hz) -0.006143
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132934
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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -2.18656805492E+03 Apriori delay (usec) -2.18656962837E+03 Resid mbdelay (usec) 1.57346E-03 +/- 1.3E-04
 Sband delay (usec) -2.18656773862E+03 Apriori clock (usec) -2.1800999E+01 Resid sbdelay (usec) 1.88975E-03 +/- 1.1E-03
 Phase delay (usec) -2.18656963123E+03 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.85375E-06 +/- 4.6E-07
 Delay rate (us/s) -1.40993245583E-01 Apriori rate (us/s) -1.40993174265E-01 Resid rate (us/s) -7.13177E-08 +/- 1.7E-09
 Total phase (deg) -12.2 Apriori accel (us/s/s) 9.98665876717E-06 Resid phase (deg) -88.5 +/- 14.2

RMS Theor. Amplitude 0.135 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 40.7 34.0 Search (2048X32) 0.123 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 60.4 59.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 21.6 20.1 Inc. seg. avg. 0.140 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 45.5 35.0 Inc. frq. avg. 0.130 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

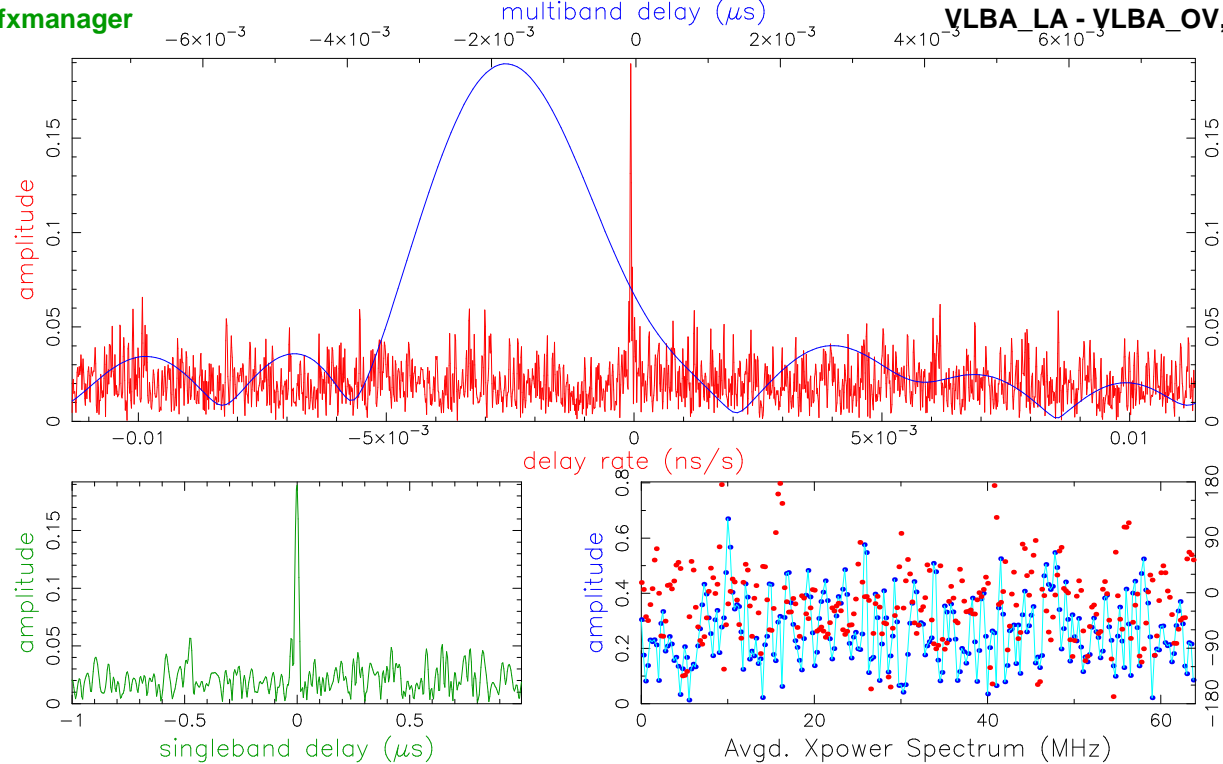
l: az 295.0 el 48.1 pa 80.0 o: az 291.0 el 57.6 pa 83.0 u,v (fr/asec) 1101.009 547.487 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo.W.126.1IM4WN

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, lo

VLBA_LA - VLBA_OV, fgroup W, pol RL

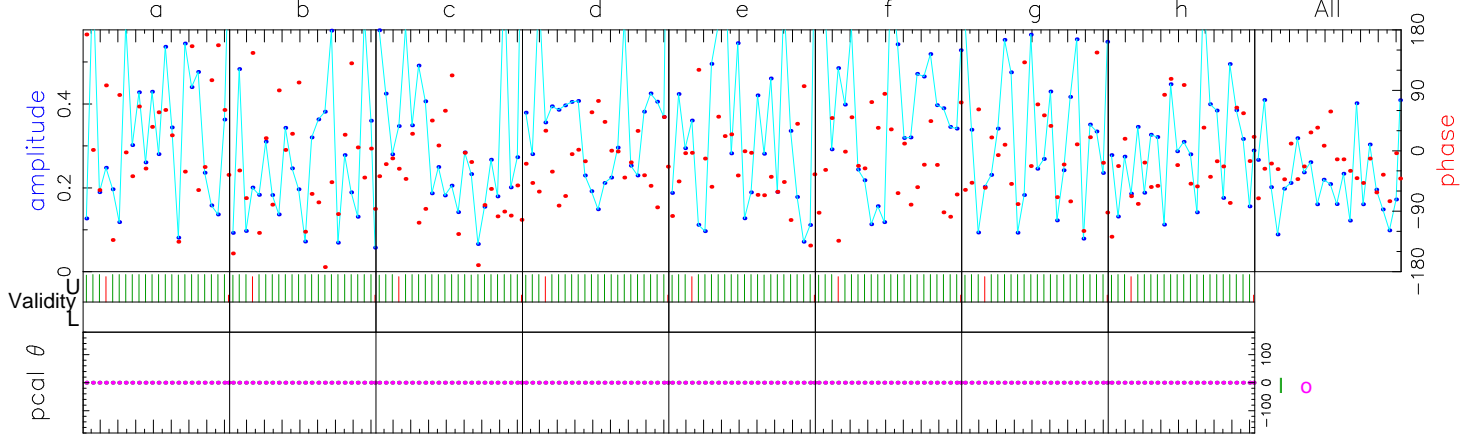


Fringe quality 9

SNR 11.5
 Int time 475.899
 Amp 0.192
 Phase -21.5
 PFD 9.3e-22
 Delays (us)
 SBD -0.001586
 MBD -0.001797
 Fringe rate (Hz)
 -0.006049
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

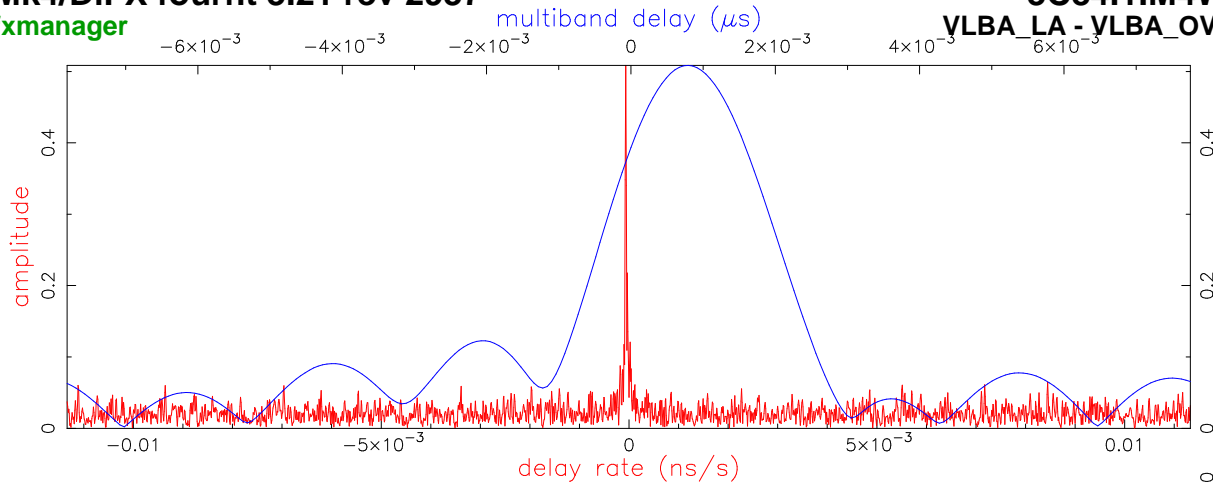
Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132938
 2020:247:085004
 RA & Dec (J2000)
 03h19m48.160095s
 +41°30'42.104042"

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

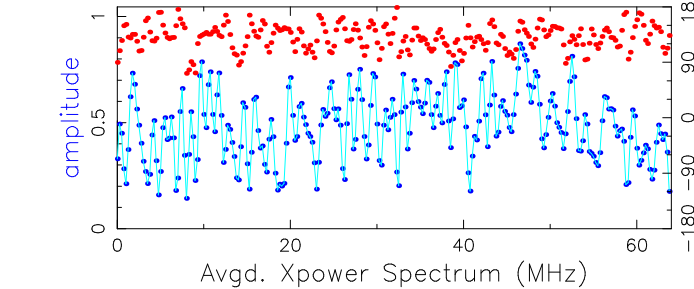
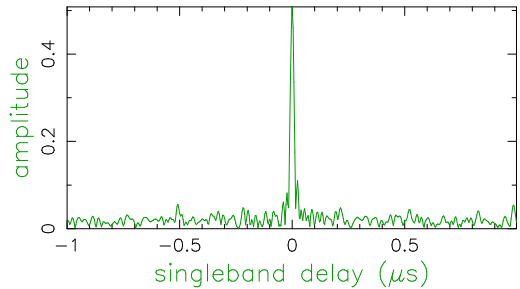


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	15.6	-31.8	-48.3	-24.1	-25.3	-23.7	-13.2	-13.1	15.6	-21.5
Sband delay (usec)	0.2	0.1	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2
Phase delay (usec)	258.1	246.4	256.2	256.4	256.0	257.0	256.5	133.4	258.1	256.6
Delay rate (us/s)	U/L 933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0	933/0
Total phase (deg)	l 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	l: 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
	l: 0:0	0:0	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	1000	1000
	o 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	Tracks
	o W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	Tracks
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)										

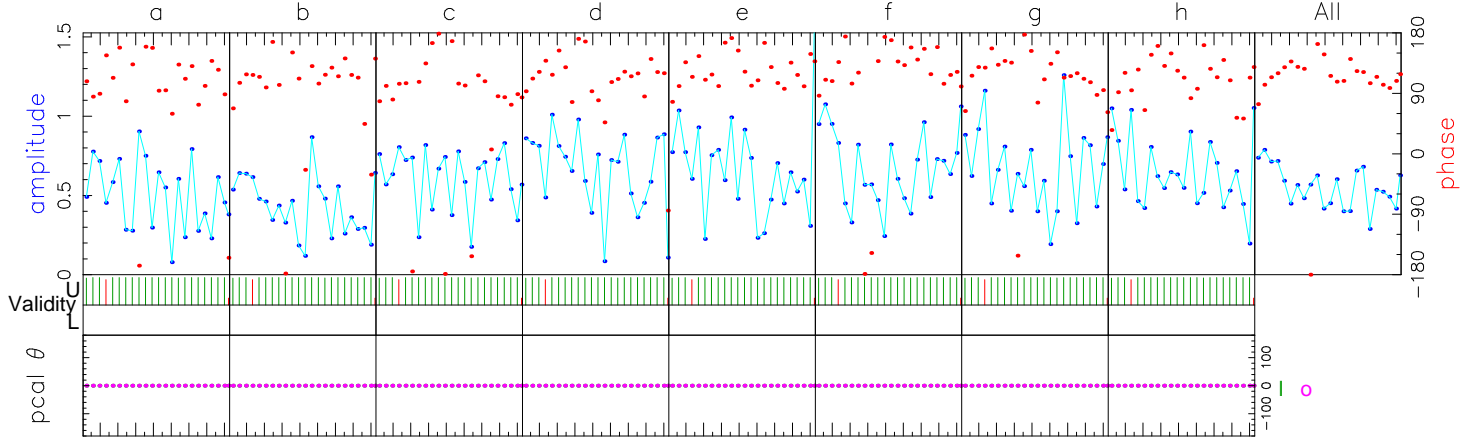
ph/seg (deg) 32.7 23.9 Search (2048X32) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 46.3 41.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 19.9 14.1 Inc. seg. avg. 0.202 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.0 24.7 Inc. frq. avg. 0.191 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 295.0 el 48.1 pa 80.0 o: az 291.0 el 57.6 pa 83.0 u,v (fr/asec) 1101.009 547.487 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lo.W.146.1IM4WN



Fringe quality 9
SNR 30.3
Int time 475.899
Amp 0.509
Phase 120.3
PFD 0.0e+00
Delays (us)
SBD -0.000069
MBD 0.000786
Fringe rate (Hz)
-0.006154
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132927
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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:o	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		
o	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.18656884270E+03	Apriori delay (usec)	-2.18656962837E+03	Resid mbdelay (usec)	7.85676E-04	+/-	3.6E-05
Sband delay (usec)	-2.18656969712E+03	Apriori clock (usec)	-2.1800999E+01	Resid sbdelay (usec)	-6.87500E-05	+/-	2.8E-04
Phase delay (usec)	-2.18656962450E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.87814E-06	+/-	1.2E-07
Delay rate (us/s)	-1.40993245705E-01	Apriori rate (us/s)	-1.40993174265E-01	Resid rate (us/s)	-7.14396E-08	+/-	4.4E-10
Total phase (deg)	-163.5	Apriori accel (us/s/s)	9.98665876717E-06	Resid phase (deg)	120.3	+/-	3.8

ph/seg (deg)	22.4	Theor.	9.0	Amplitude	0.509 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	26.5		15.8	Search (2048X32)	0.463	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	8.4		5.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	16.6		9.3	Inc. seg. avg.	0.544	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.511	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

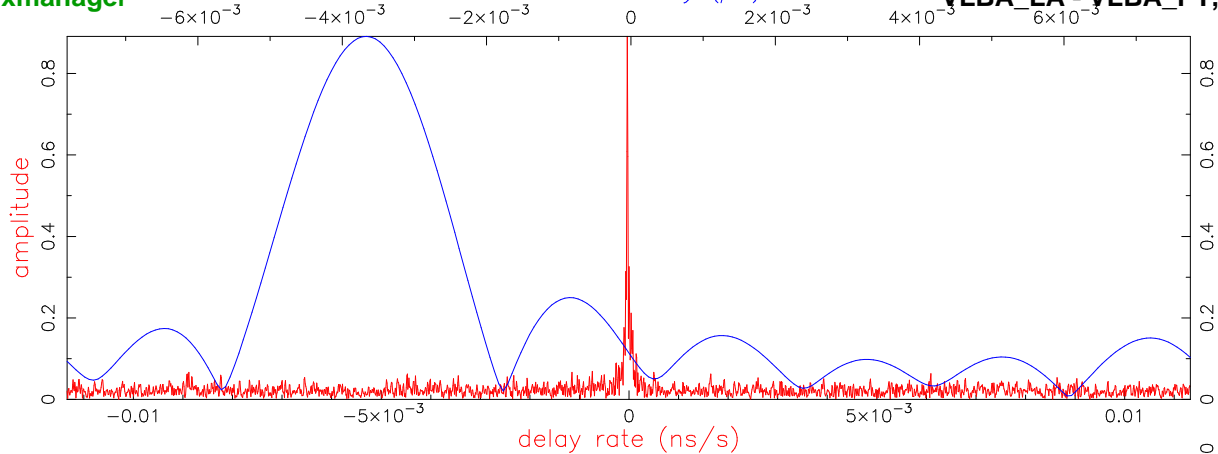
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, Ip

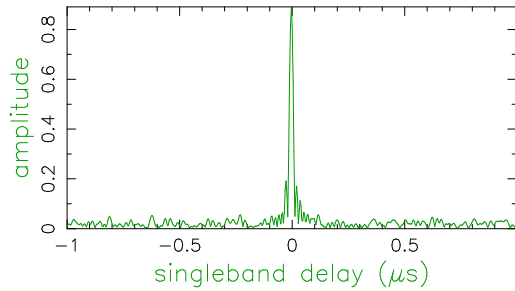
VLBA_LA - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

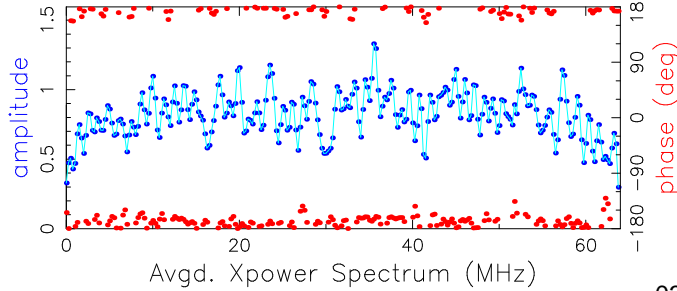


Fringe quality 7

SNR 53.3
 Int time 477.984
 Amp 0.891
 Phase -176.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.003904
 MBD -0.003669
 Fringe rate (Hz)
 -0.002582
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

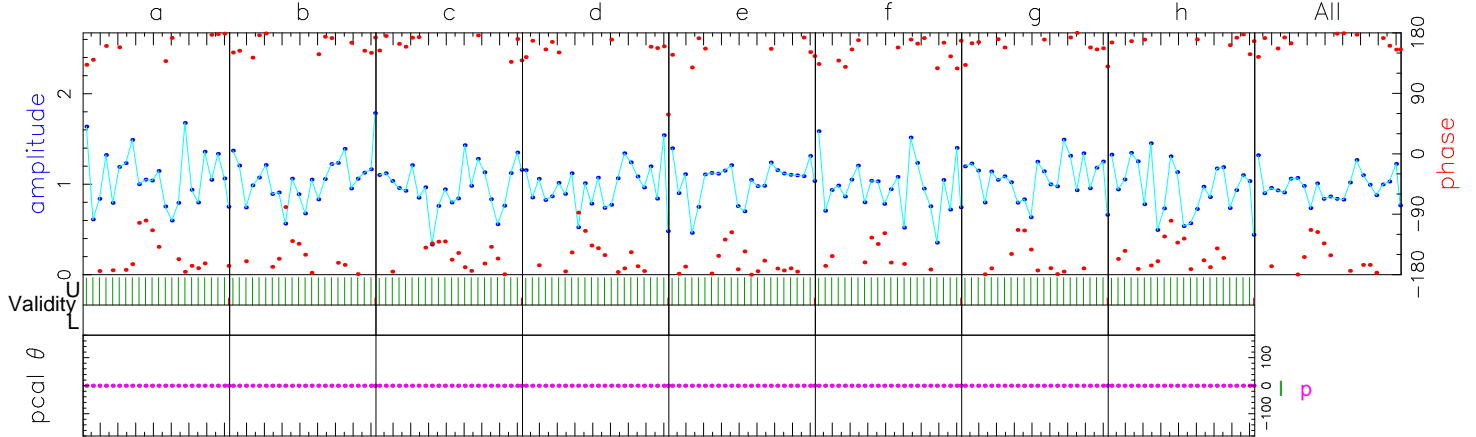


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132930
 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		
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)	-1.88173942758E+02	Apriori delay (usec)	-1.88170273565E+02	Resid mbdelay (usec)	-3.66919E-03	+/-	2.0E-05
Sband delay (usec)	-1.88174177065E+02	Apriori clock (usec)	-4.8706913E-01	Resid sbdelay (usec)	-3.90350E-03	+/-	1.6E-04
Phase delay (usec)	-1.88170279262E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	-5.69798E-06	+/-	6.9E-08
Delay rate (us/s)	-4.19584220370E-03	Apriori rate (us/s)	-4.19581222817E-03	Resid rate (us/s)	-2.99755E-08	+/-	2.5E-10
Total phase (deg)	-308.0	Apriori accel (us/s/s)	2.57215472066E-06	Resid phase (deg)	-176.7	+/-	2.2

ph/seg (deg)	RMS 26.5	Theor. 5.2	Amplitude Search (2048X32)	0.891 +/- 0.017	0.842	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	19.4	9.0	Interp.	0.000	0.983	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	7.4	3.0	Inc. seg. avg.	0.983	0.895	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	5.2	5.3	Inc. frq. avg.	0.895		Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

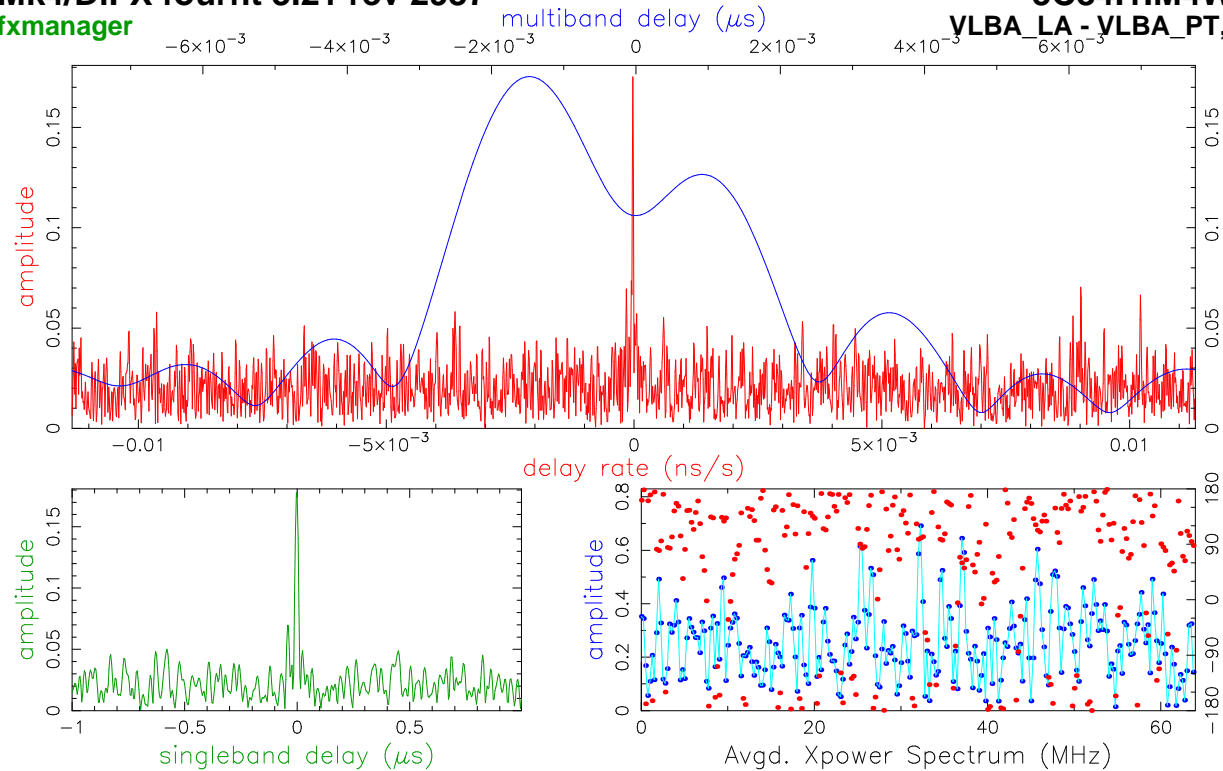
l: az 295.0 el 48.1 pa 80.0 p: az 296.1 el 48.9 pa 82.0 u,v (fr/asec) 37.354 318.130 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp.W.111.11M4WN

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, lp

VLBA_LA - VLBA_PT, fgroup W, pol LR

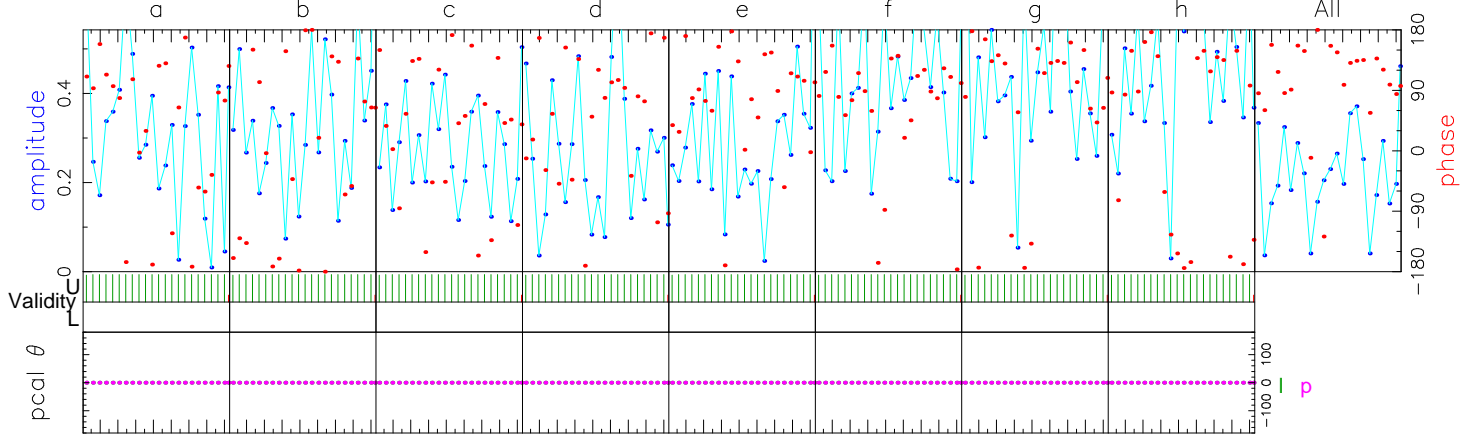


Fringe quality 9

SNR 10.8
 Int time 477.984
 Amp 0.181
 Phase 125.4
 PFD 1.3e-18
 Delays (us)
 SBD -0.002242
 MBD -0.001532
 Fringe rate (Hz)
 -0.002360
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132934
 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	130.1	167.0	103.4	93.2	95.3	99.9	132.3	151.7	Phase	125.4
l	0.2	0.1	0.1	0.1	0.2	0.3	0.3	0.3	Ampl.	0.2
p	255.8	255.6	136.9	139.0	257.0	256.6	256.5	257.1	Sbd box	256.4
l	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.88171805527E+02			Apriori delay (usec)	-1.88170273565E+02			Resid mbdelay (usec)	-1.53196E-03	+/- 1.0E-04
Sband delay (usec)	-1.88172516065E+02			Apriori clock (usec)	-4.8706913E-01			Resid sbdelay (usec)	-2.24250E-03	+/- 8.0E-04
Phase delay (usec)	-1.88170269519E+02			Apriori clockrate (us/s)	-5.0000000E-07			Resid phdelay (usec)	4.04533E-06	+/- 3.4E-07
Delay rate (us/s)	-4.19583962242E-03			Apriori rate (us/s)	-4.19581222817E-03			Resid rate (us/s)	-2.73943E-08	+/- 1.2E-09
Total phase (deg)		-5.9		Apriori accel (us/s/s)	2.57215472066E-06			Resid phase (deg)	125.4	+/- 10.6

RMS Theor. Amplitude 0.181 +/- 0.017
 ph/seg (deg) 49.2 25.4 Search (2048X32) 0.163
 amp/seg (%) 56.7 44.3 Interp. 0.000
 ph/frq (deg) 30.5 15.0 Inc. seg. avg. 0.196
 amp/frq (%) 56.0 26.1 Inc. frq. avg. 0.186

Group delay (usec)(sbd) -1.88171805527E+02 Apriori delay (usec) -1.88170273565E+02 Resid mbdelay (usec) -1.53196E-03 +/- 1.0E-04
 Sband delay (usec) -1.88172516065E+02 Apriori clock (usec) -4.8706913E-01 Resid sbdelay (usec) -2.24250E-03 +/- 8.0E-04
 Phase delay (usec) -1.88170269519E+02 Apriori clockrate (us/s) -5.0000000E-07 Resid phdelay (usec) 4.04533E-06 +/- 3.4E-07
 Delay rate (us/s) -4.19583962242E-03 Apriori rate (us/s) -4.19581222817E-03 Resid rate (us/s) -2.73943E-08 +/- 1.2E-09
 Total phase (deg) -5.9 Apriori accel (us/s/s) 2.57215472066E-06 Resid phase (deg) 125.4 +/- 10.6

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 295.0 el 48.1 pa 80.0 p: az 296.1 el 48.9 pa 82.0 u,v (fr/asec) 37.354 318.130 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp.W.130.11M4WN

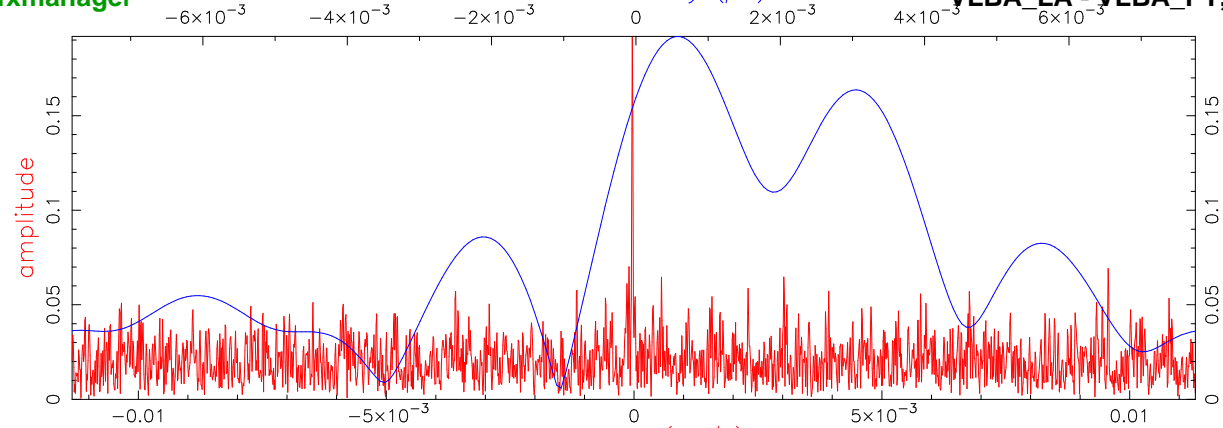
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, lp

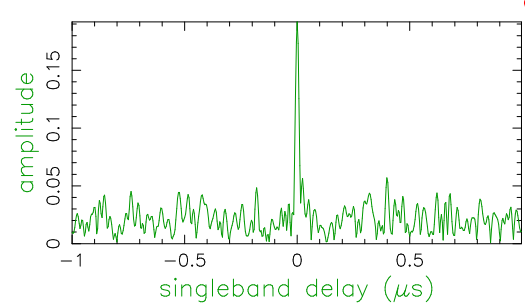
VLBA_LA - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

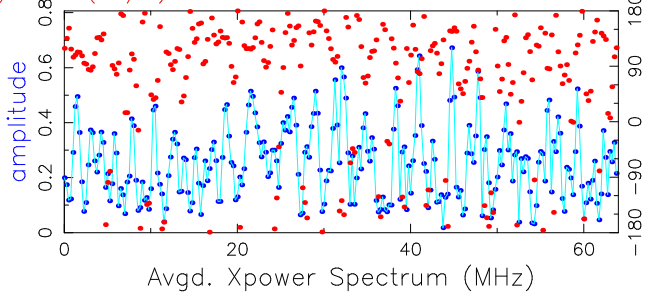


Fringe quality 9

SNR 11.5
 Int time 477.984
 Amp 0.192
 Phase 114.5
 PFD 8.5e-22
 Delays (us)
 SBD -0.000065
 MBD 0.000579
 Fringe rate (Hz)
 -0.002405
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

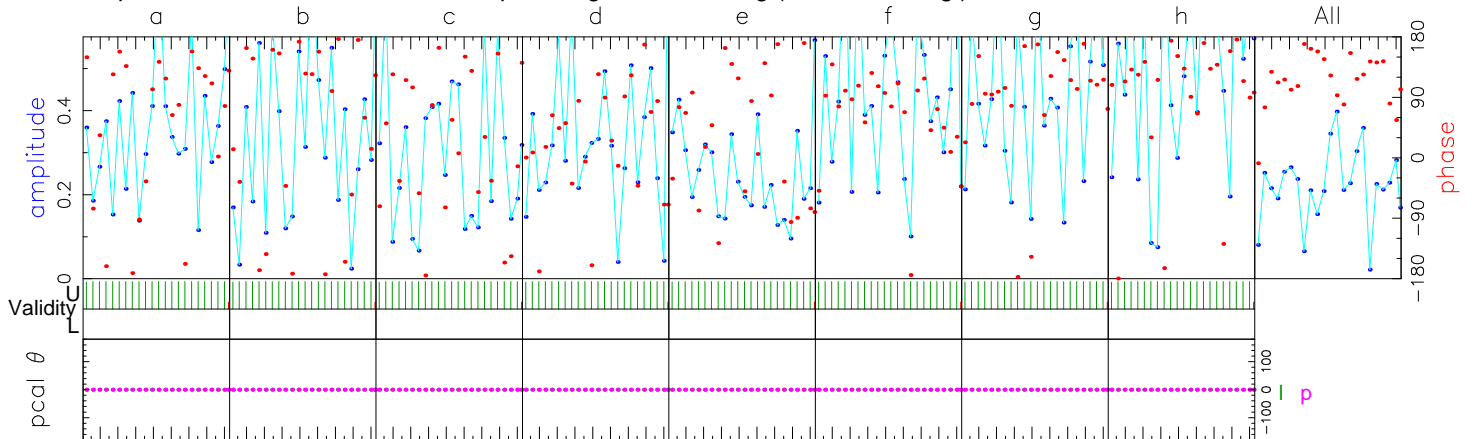


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132938
 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		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

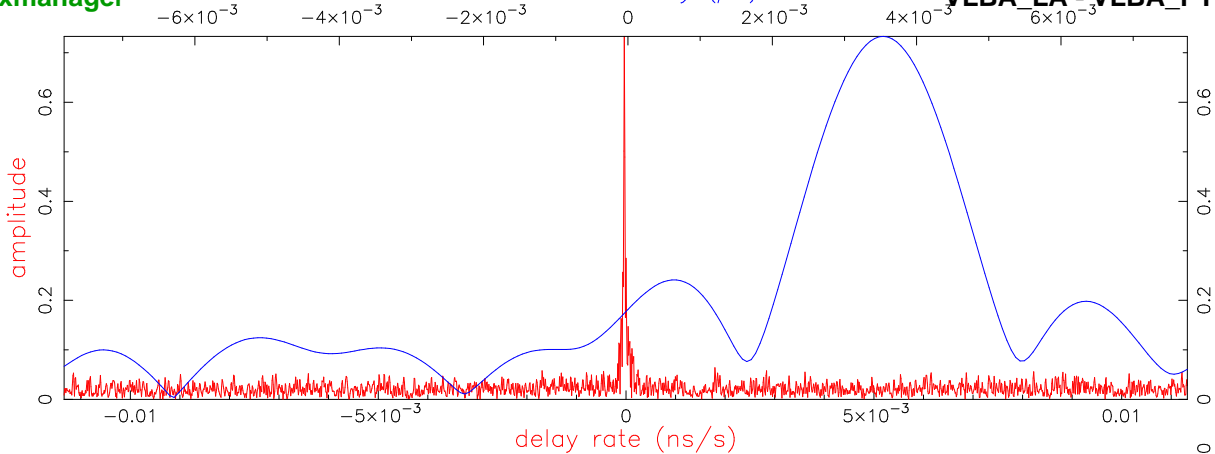
Group delay (usec)(sbd)	-1.88169694883E+02	Apriori delay (usec)	-1.88170273565E+02	Resid mbdelay (usec)	5.78682E-04	+/-	9.5E-05
Sband delay (usec)	-1.88170338565E+02	Apriori clock (usec)	-4.8706913E-01	Resid sbdelay (usec)	-6.50000E-05	+/-	7.5E-04
Phase delay (usec)	-1.88170269871E+02	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	3.69357E-06	+/-	3.2E-07
Delay rate (us/s)	-4.19584015030E-03	Apriori rate (us/s)	-4.19581222817E-03	Resid rate (us/s)	-2.79221E-08	+/-	1.2E-09
Total phase (deg)	-16.8	Apriori accel (us/s/s)	2.57215472066E-06	Resid phase (deg)	114.5	+/-	10.0

ph/seg (deg)	39.9	RMS	23.9	Theor.	Amplitude	0.192 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	48.6		41.8		Search (2048X32)	0.179	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	46.5		14.1		Inc. seg. avg.	0.206	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	68.5		24.6		Inc. frq. avg.	0.218	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

l: az 295.0 el 48.1 pa 80.0 p: az 296.1 el 48.9 pa 82.0 u,v (fr/asec) 37.354 318.130 simultaneous interpolator

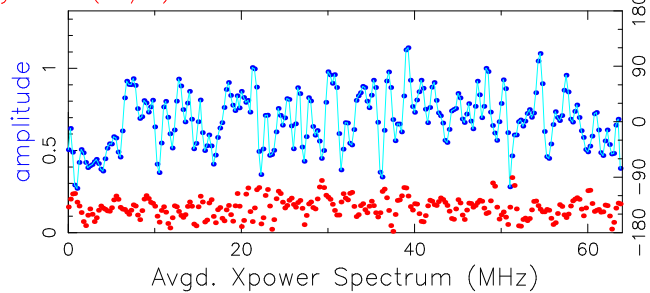
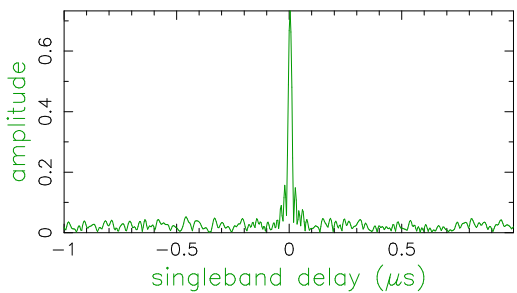
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp..1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp.W.150.1M4WN

multiband delay (μs)



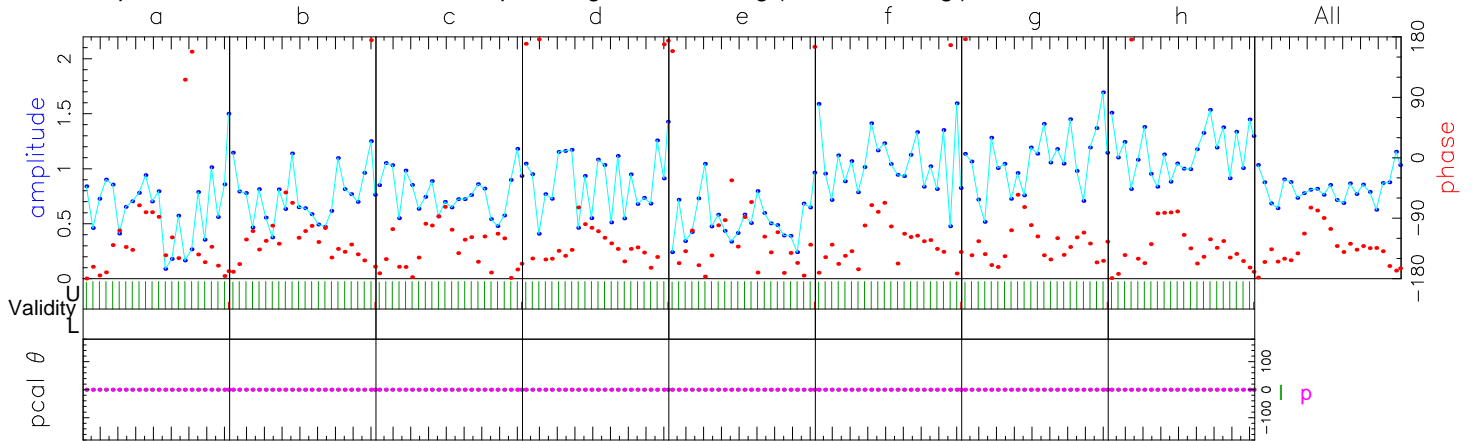
Fringe quality 7

SNR 43.8
Int time 477.984
Amp 0.733
Phase -135.8
PFD 0.0e+00
Delays (us)
SBD 0.003839
MBD 0.003533
Fringe rate (Hz)
-0.002561
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132927
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		
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.88166740508E+02				-1.88170273565E+02				3.53306E-03	+/- 2.5E-05
Sband delay (usec)	-1.88166435065E+02				-4.8706913E-01				3.83850E-03	+/- 2.0E-04
Phase delay (usec)	-1.88170277943E+02				-5.0000000E-07				-4.37863E-06	+/- 8.4E-08
Delay rate (us/s)	-4.19584195500E-03				-4.19581222817E-03				-2.97268E-08	+/- 3.1E-10
Total phase (deg)			-267.1		2.57215472066E-06				-135.8	+/- 2.6
Apriori delay (usec)					0.700					
Apriori clock (usec)					0.700					
Apriori clockrate (us/s)					0.815					
Apriori rate (us/s)					0.733					
Apriori accel (us/s/s)					0.733					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 26.5 6.3 Search (2048X32) 0.733 +/- 0.017 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 20.3 10.9 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 4.6 3.7 Inc. seg. avg. 0.815 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 26.9 6.5 Inc. frq. avg. 0.733 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 295.0 el 48.1 pa 80.0 p: az 296.1 el 48.9 pa 82.0 u,v (fr/asec) 37.354 318.130 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/lp.W.92.1IM4WN

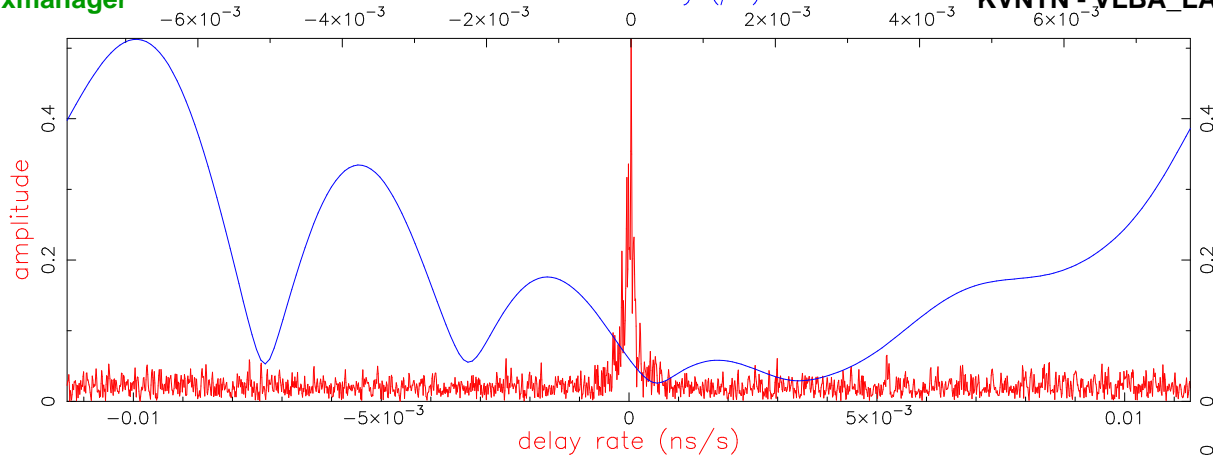
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, tl

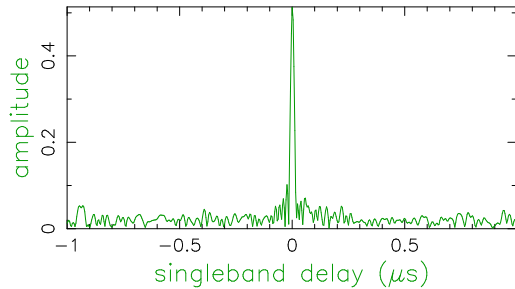
KVNTN - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

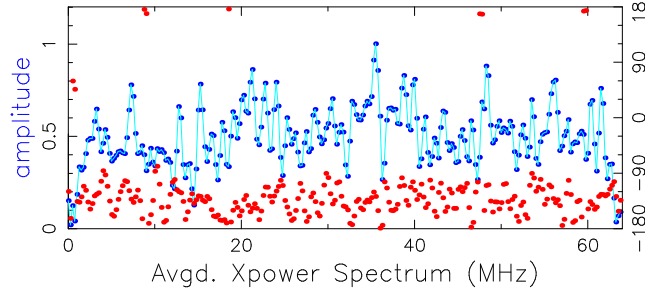


Fringe quality 4

SNR 30.7
 Int time 477.960
 Amp 0.514
 Phase -47.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000698
 MBD -0.006823
 Fringe rate (Hz)
 0.003391
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

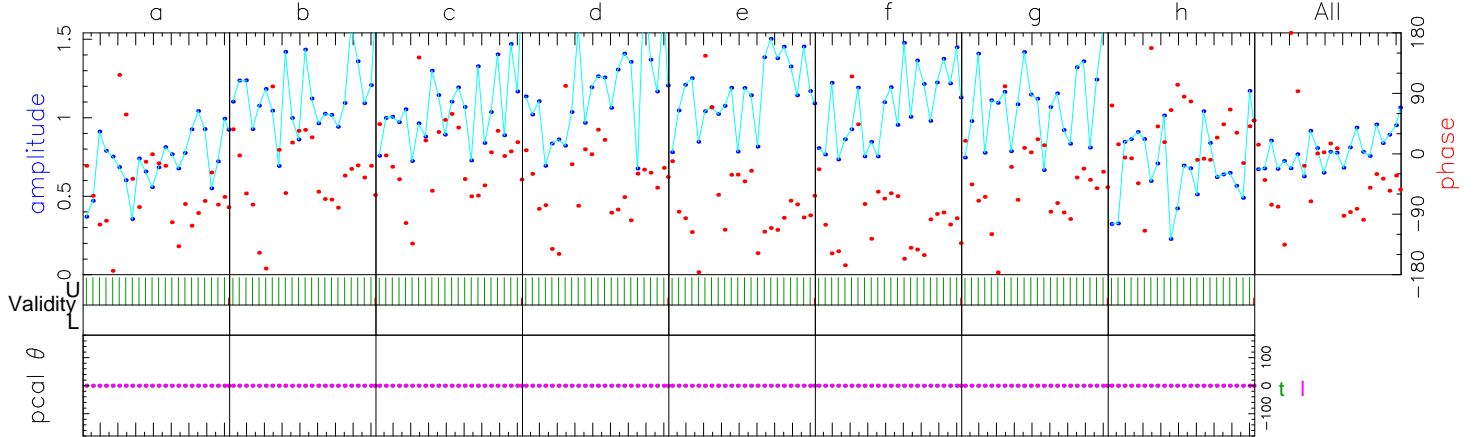


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132942
 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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.74994897157E+03	Apriori delay (usec)	-3.74994214903E+03	Resid mbdelay (usec)	-6.82254E-03	+/-	3.5E-05
Sband delay (usec)	-3.74994145103E+03	Apriori clock (usec)	1.7798281E+00	Resid sbdelay (usec)	6.98000E-04	+/-	2.8E-04
Phase delay (usec)	-3.74994215057E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-1.54052E-06	+/-	1.2E-07
Delay rate (us/s)	1.69862117148E+00	Apriori rate (us/s)	1.69862113211E+00	Resid rate (us/s)	3.93653E-08	+/-	4.4E-10
Total phase (deg)	-306.0	Apriori accel (us/s/s)	1.72643459340E-05	Resid phase (deg)	-47.8	+/-	3.7

ph/seg (deg)	56.8	RMS	Theor.	Amplitude	0.514 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	56.8	56.8	8.9	Search (2048X32)	0.476	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	46.7	46.7	5.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	35.4	35.4	9.2	Inc. seg. avg.	0.777	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.647	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 58.6 el 33.0 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u, v (fr/asec) -12964.597 1127.477 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.W.156.11M4WN

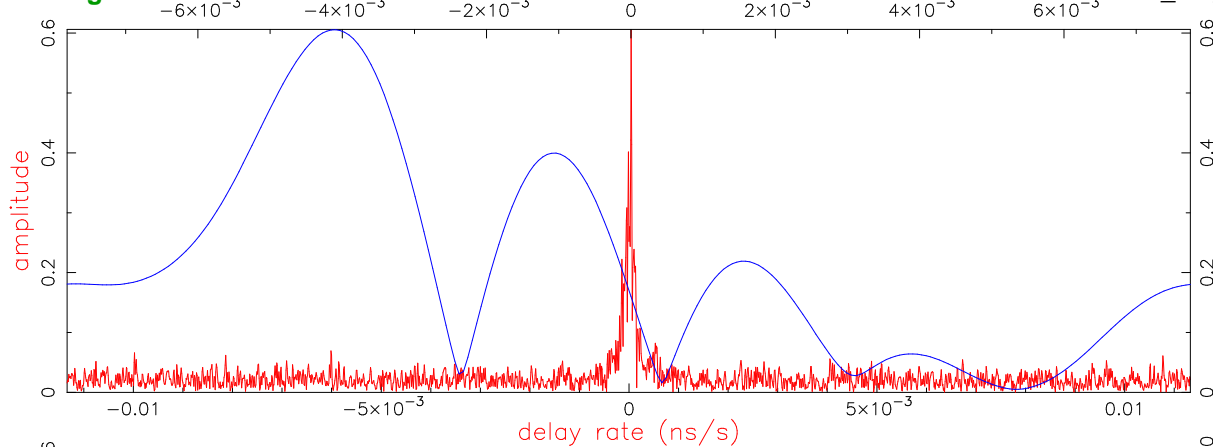
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, tl

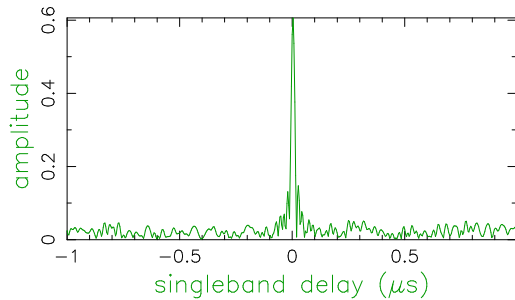
KVNTN - VLBA_LA, fgroup W, pol RR

multiband delay (μ s)

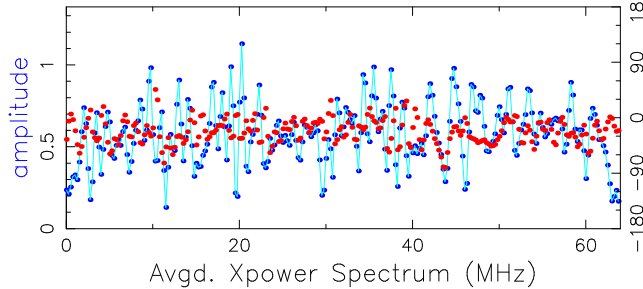


Fringe quality 4

SNR 36.2
 Int time 477.960
 Amp 0.606
 Phase 65.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.003480
 MBD -0.004130
 Fringe rate (Hz)
 0.003480
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

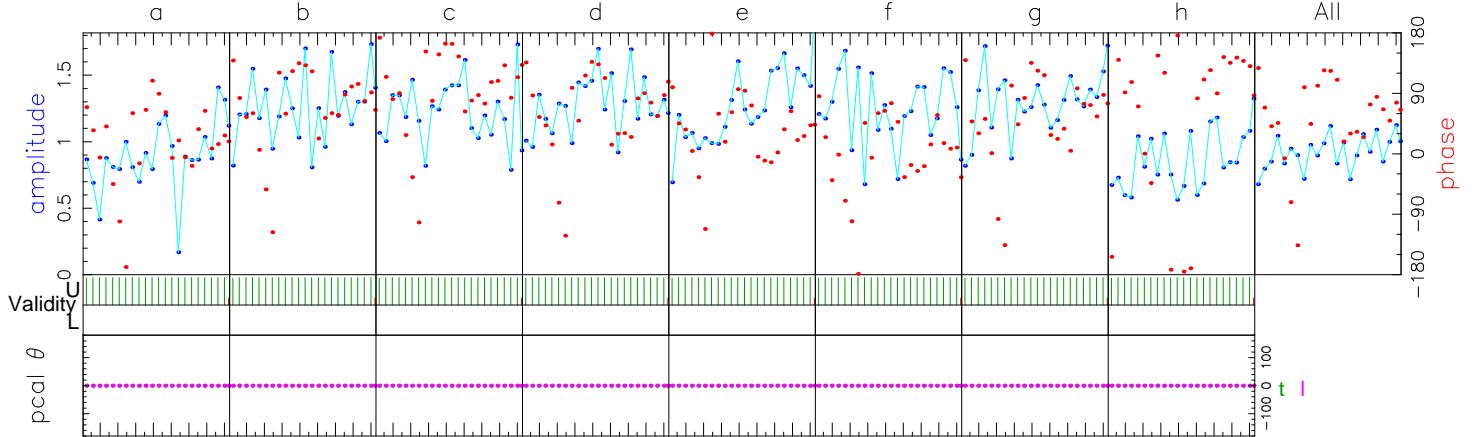


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132947
 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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.74994627879E+03				-3.74994214903E+03					
Sband delay (usec)	-3.74993866878E+03				1.7798281E+00					
Phase delay (usec)	-3.74994214693E+03				1.9999998E-07					
Delay rate (us/s)	1.69862117252E+00				1.69862113211E+00					
Total phase (deg)			-193.3		1.72643459340E-05					
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)									65.0	+/- 3.0E-05
Pcal mode:	MANUAL	MANUAL								
Pcal rate:	0.000E+00	0.000E+00								
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
Sample rate (MSamp/s):	128									
Data rate (Mb/s):	2048									
nlags:	256									
t_cohere	infinite									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
PC period (AP's)	5	5								
simultaneous interpolator										

t: az 58.6 el 33.0 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12964.597 1127.477 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.W.178.1IM4WN

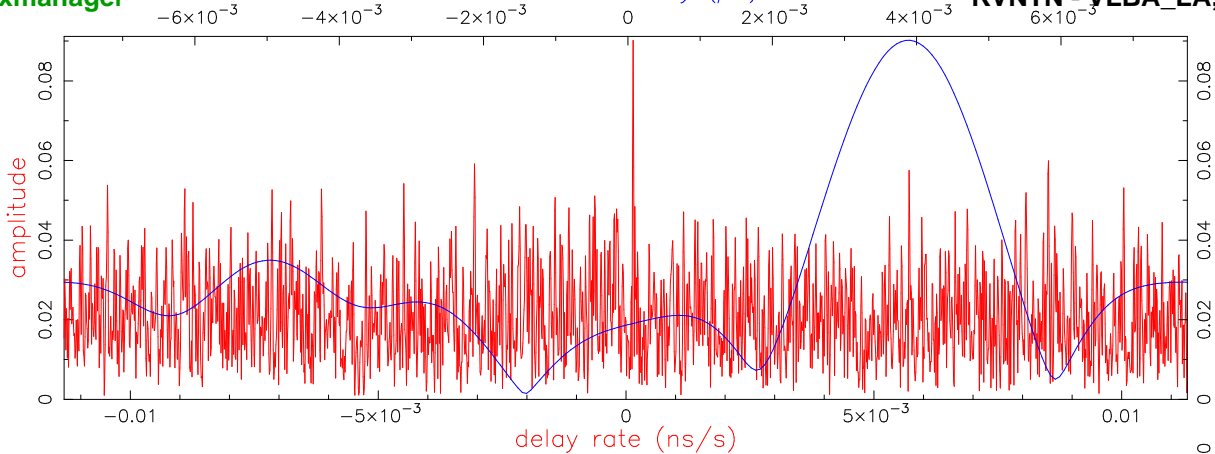
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1IM4WN, No0111, tl

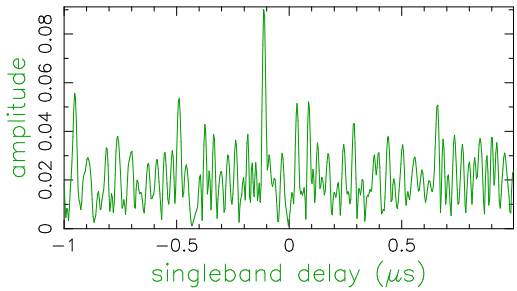
KVNTN - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)

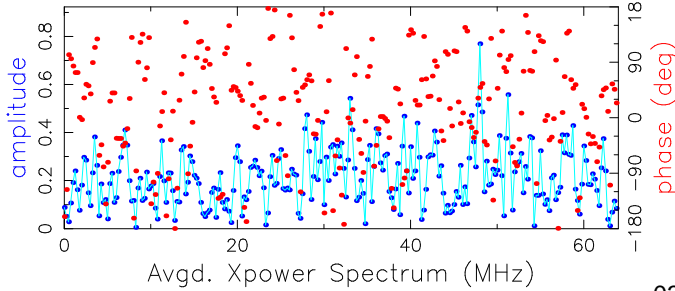


Fringe quality 0

SNR 5.5
 Int time 477.960
 Amp 0.091
 Phase 139.5
 PFD 1.0e+00
 Delays (us)
 SBD -0.111984
 MBD 0.003923
 Fringe rate (Hz)
 0.012391
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

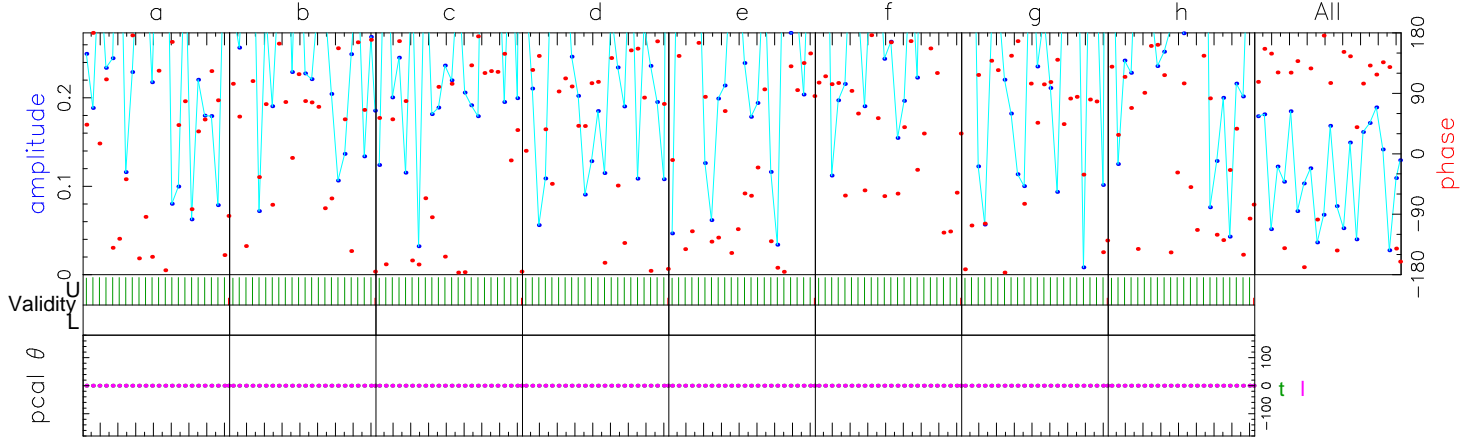


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132951
 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	179.6	111.1	149.8	114.5	170.4	103.7	118.9	177.4	Phase	139.5
t	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
l	28.7	492.7	260.5	47.9	487.2	326.2	320.1	246.6	Sbd box	228.3
t:l	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
t:l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
t	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.75004760056E+03	Apriori delay (usec)	-3.74994214903E+03	Resid mbdelay (usec)	3.92347E-03	+/-	2.0E-04
Sband delay (usec)	-3.75005413253E+03	Apriori clock (usec)	1.7798281E+00	Resid sbdelay (usec)	-1.11984E-01	+/-	1.6E-03
Phase delay (usec)	-3.74994214453E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	4.49724E-06	+/-	6.8E-07
Delay rate (us/s)	1.69862127596E+00	Apriori rate (us/s)	1.69862113211E+00	Resid rate (us/s)	1.43842E-07	+/-	2.5E-09
Total phase (deg)	-118.8	Apriori accel (us/s/s)	1.72643459340E-05	Resid phase (deg)	139.5	+/-	21.0

ph/seg (deg)	49.3	Theor.	50.4	Search (2048X32)	0.091 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	63.3		88.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	34.8		29.7	Inc. seg. avg.	0.082	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	23.6		51.9	Inc. frq. avg.	0.091	Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
t: az 58.6 el 33.0 pa -72.2		l: az 295.0 el 48.1 pa 80.0		u, v (fr/asec) -12964.597 1127.477		Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
Control file: cf_1234_gmva		Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.1IM4WN		Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.W.198.1IM4WN		nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

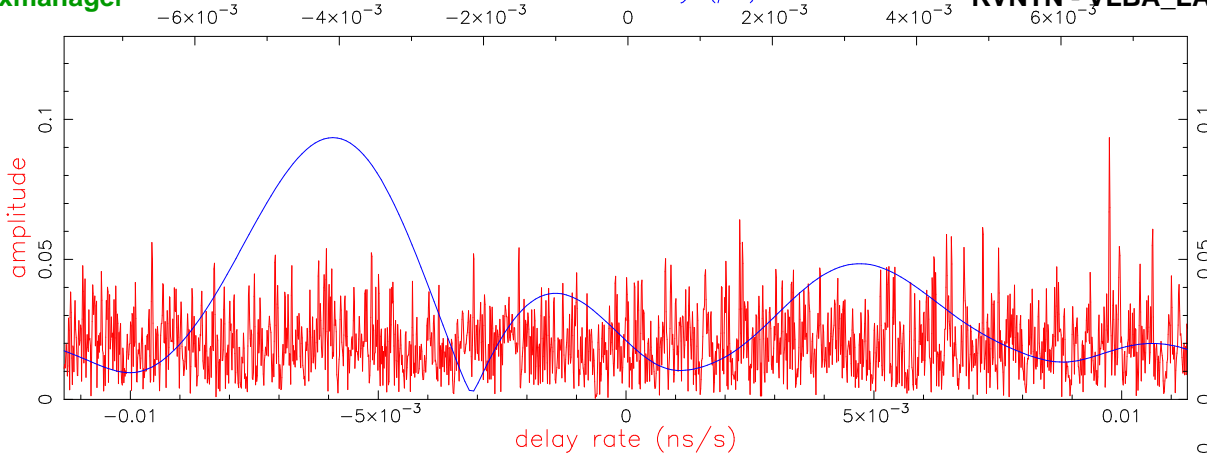
fxmanager

3C84.1IM4WN, No0111, tl

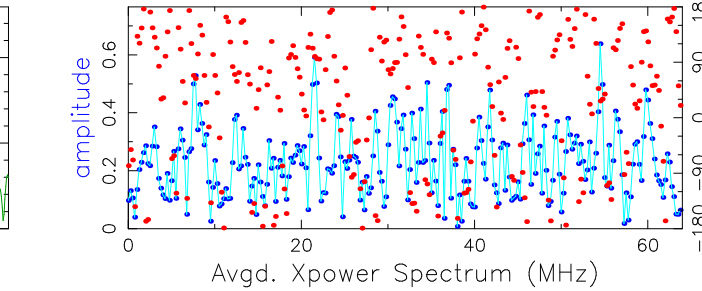
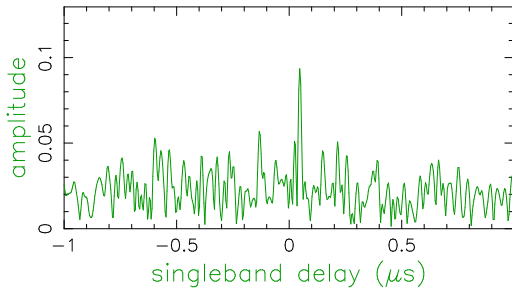
KVNTN - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 0

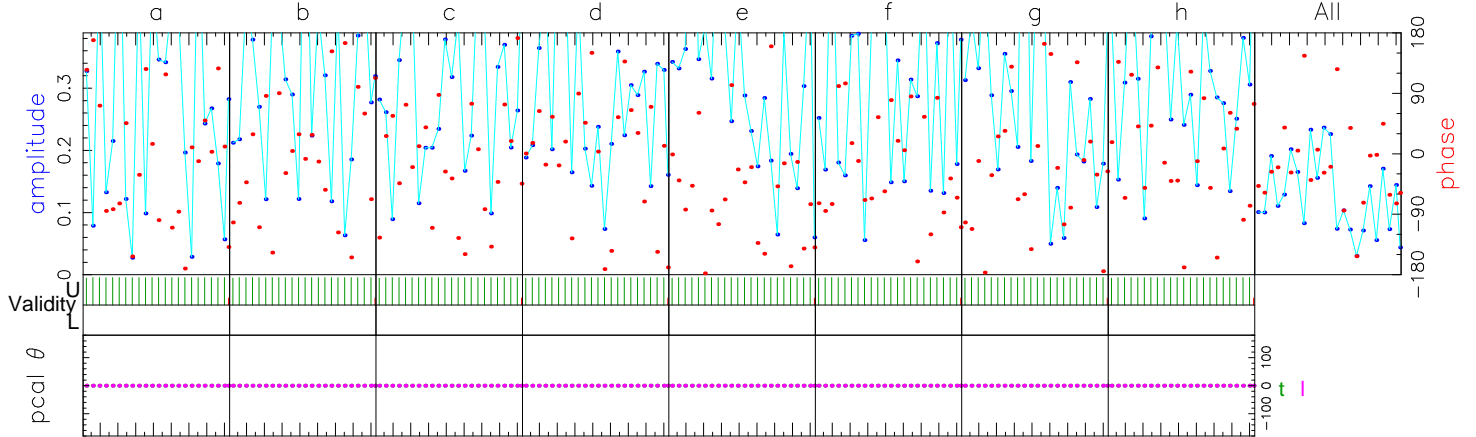


SNR 5.6
Int time 477.960
Amp 0.130
Phase -20.6
PFD 1.0e+00
Delays (us)
SBD 0.047154
MBD -0.004083
Fringe rate (Hz)
0.841384
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132955
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		
t	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-3.74989935726E+03									
Sband delay (usec)	-3.74989499503E+03									
Phase delay (usec)	-3.74994214969E+03									
Delay rate (us/s)	1.69863089975E+00									
Total phase (deg)			-278.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.130 +/- 0.023										
0.091										
0.000										
0.131										
0.136										
0.000E+00										
4.71540E-02										
-6.63806E-07										
9.76764E-06										
-20.6										
+/- 1.9E-04										
+/- 1.5E-03										
+/- 6.6E-07										
+/- 2.4E-09										
+/- 20.5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
simultaneous interpolator										

t: az 58.6 el 33.0 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12964.597 1127.477

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/tl.W.216.1IM4WN

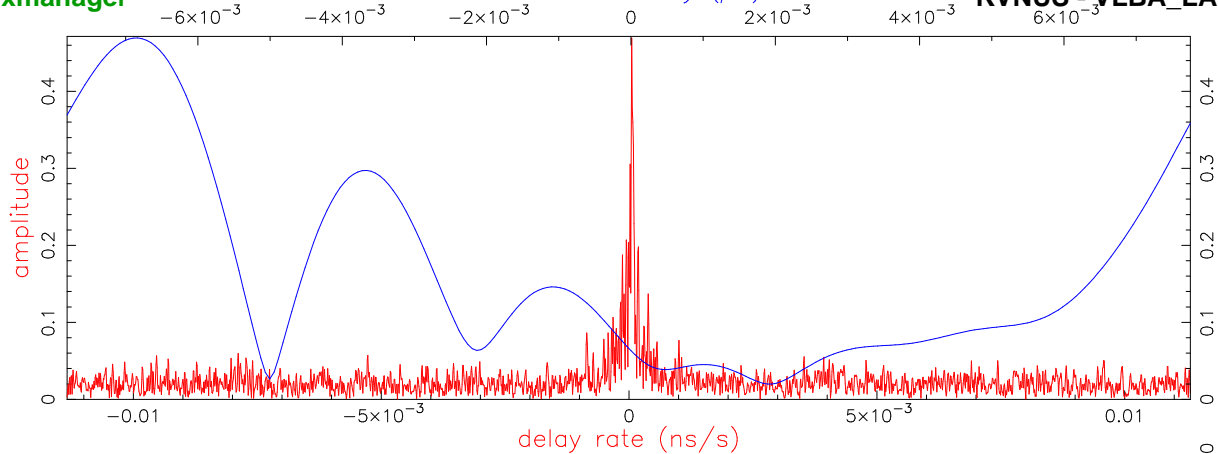
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, ul

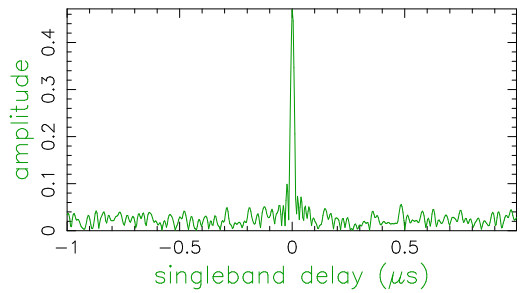
KVNUS - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

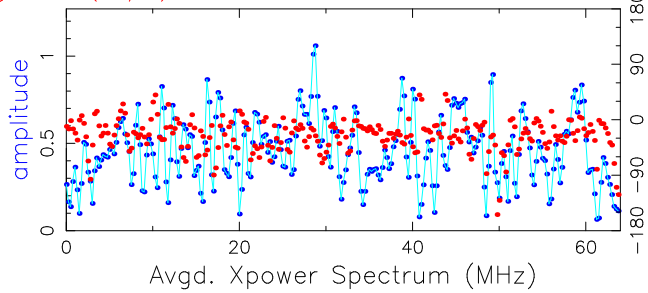


Fringe quality 6

SNR 28.2
 Int time 477.984
 Amp 0.471
 Phase 63.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.000858
 MBD -0.006819
 Fringe rate (Hz)
 0.005162
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

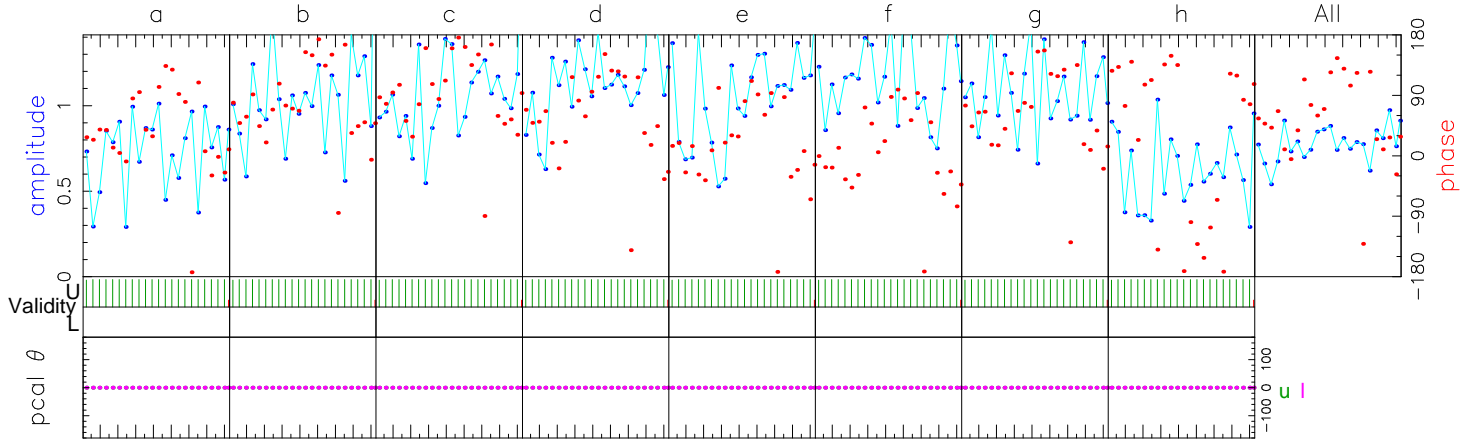


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132946
 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

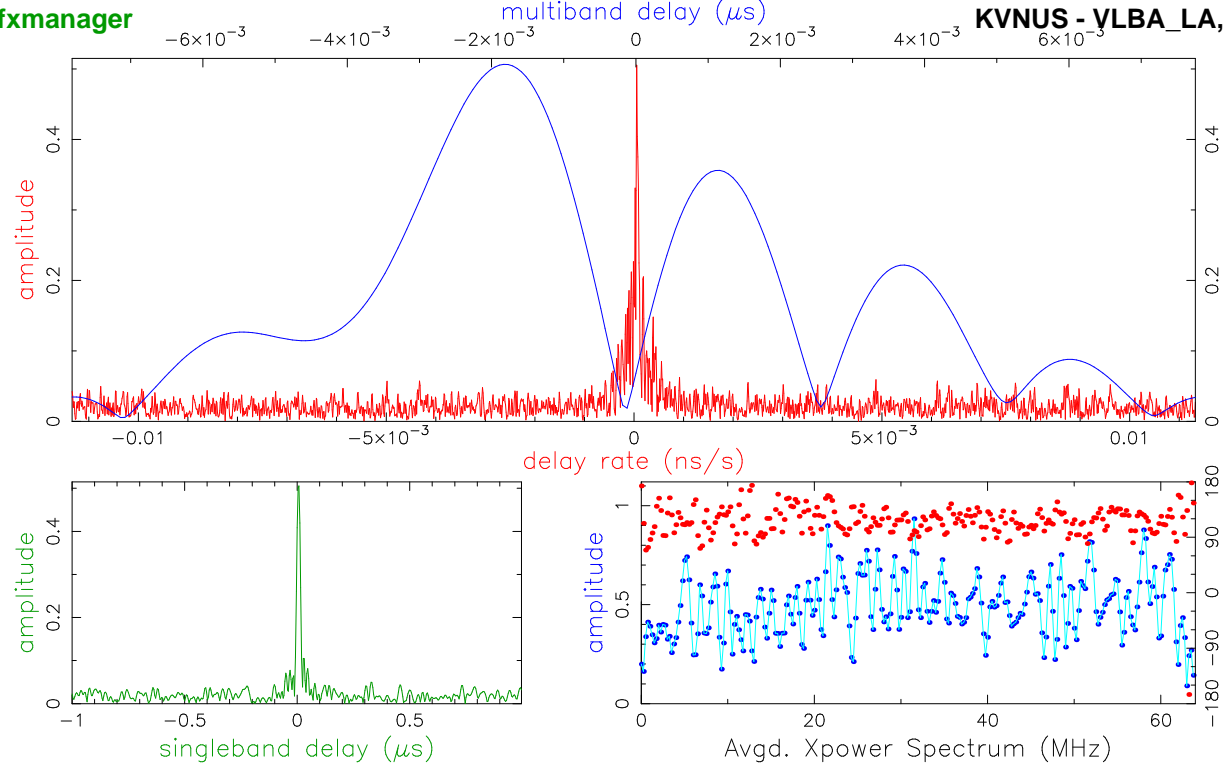


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.80580790475E+03	Apriori delay (usec)	-2.80580108550E+03	Resid mbdelay (usec)	-6.81925E-03	+/-	3.9E-05
Sband delay (usec)	-2.80580022775E+03	Apriori clock (usec)	2.9640703E+00	Resid sbdelay (usec)	8.57750E-04	+/-	3.1E-04
Phase delay (usec)	-2.80580108345E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	2.05049E-06	+/-	1.3E-07
Delay rate (us/s)	1.65881552654E+00	Apriori rate (us/s)	1.65881546662E+00	Resid rate (us/s)	5.99227E-08	+/-	4.7E-10
Total phase (deg)	-118.3	Apriori accel (us/s/s)	1.46794232078E-05	Resid phase (deg)	63.6	+/-	4.1

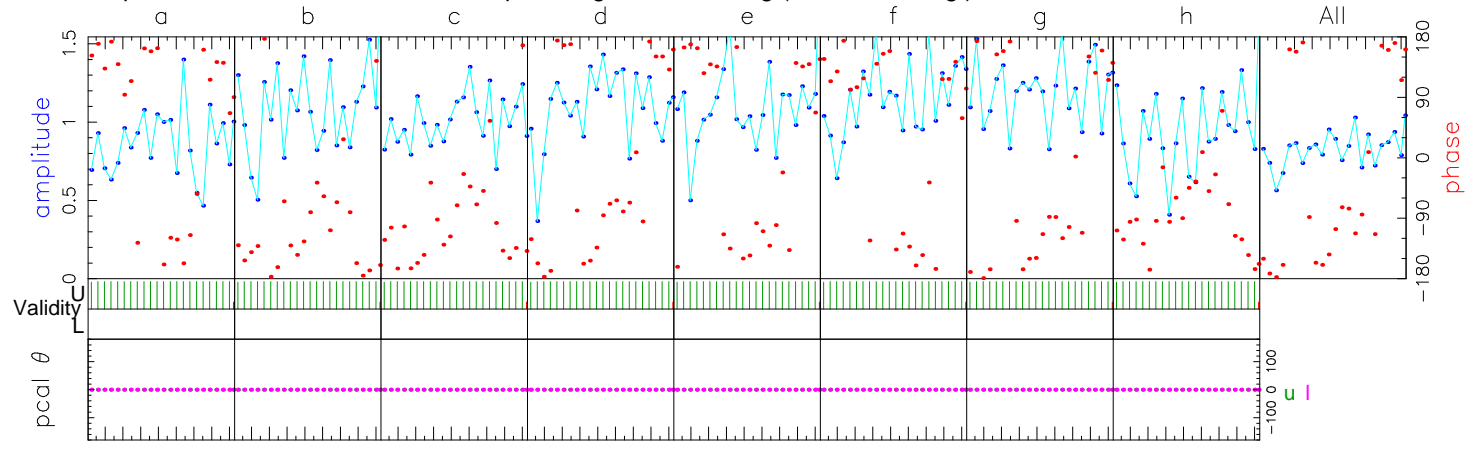
ph/seg (deg)	58.9	RMS	Theor.	Amplitude	0.471 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.5	58.9	9.8	Search (2048X32)	0.439	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.1	67.5	17.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.3	48.1	5.8	Inc. seg. avg.	0.763	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
		33.3	10.0	Inc. frq. avg.	0.574	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

u: az 60.8 el 36.1 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12665.912 1158.534 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul.W.175.11M4WN



Fringe quality 4
SNR 30.8
Int time 477.984
Amp 0.515
Phase -152.2
PFD 0.0e+00
Delays (us)
SBD 0.006072
MBD -0.001888
Fringe rate (Hz) 0.005203
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:132950
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		
u	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.80578734857E+03	-2.80579501375E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03		
Sband delay (usec)	-2.80578734857E+03	-2.80579501375E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03		
Phase delay (usec)	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03	-2.80580109041E+03		
Delay rate (us/s)	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00	1.65881552702E+00		
Total phase (deg)			-334.0							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 57.4 8.9 Search (2048X32) 0.466 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 63.0 15.6 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 43.2 5.3 Inc. seg. avg. 0.813 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 24.3 9.2 Inc. frq. avg. 0.621 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
u: az 60.8 el 36.1 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12665.912 1158.534 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul.W.190.11M4WN

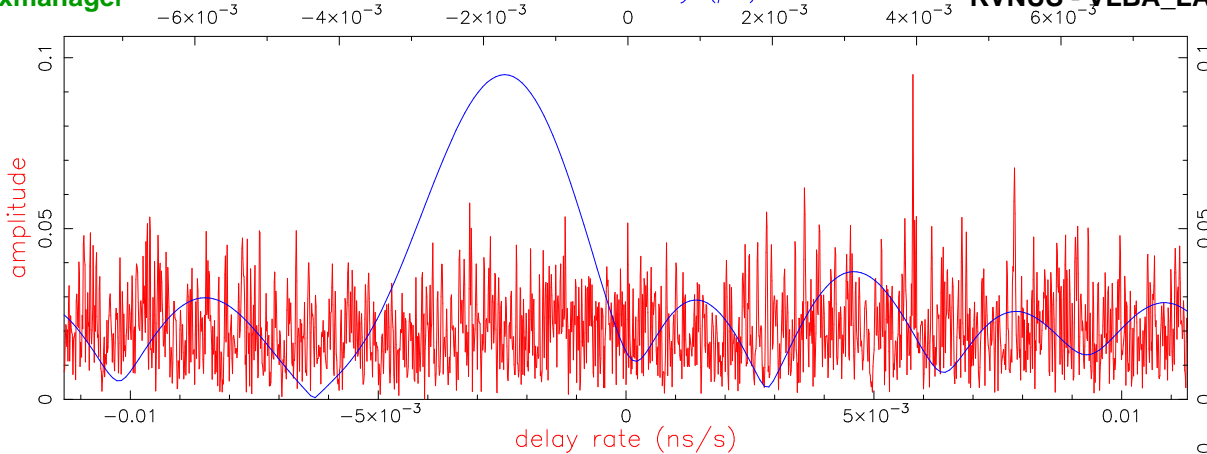
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, ul

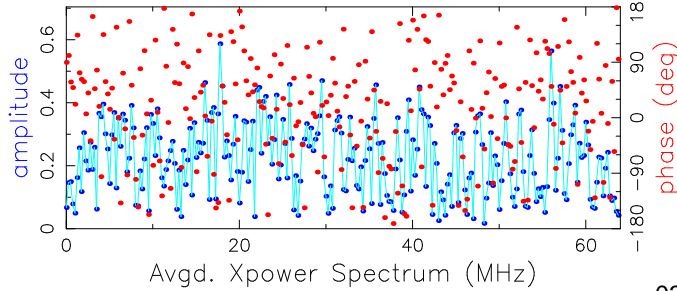
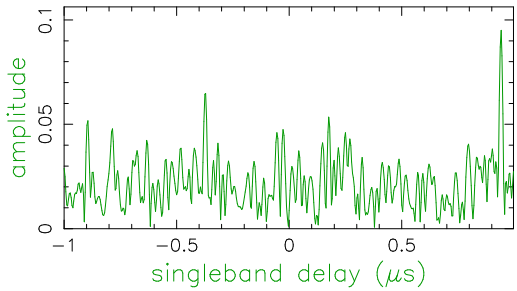
KVNUS - VLBA_LA, fgroup W, pol LR

multiband delay (μ s)



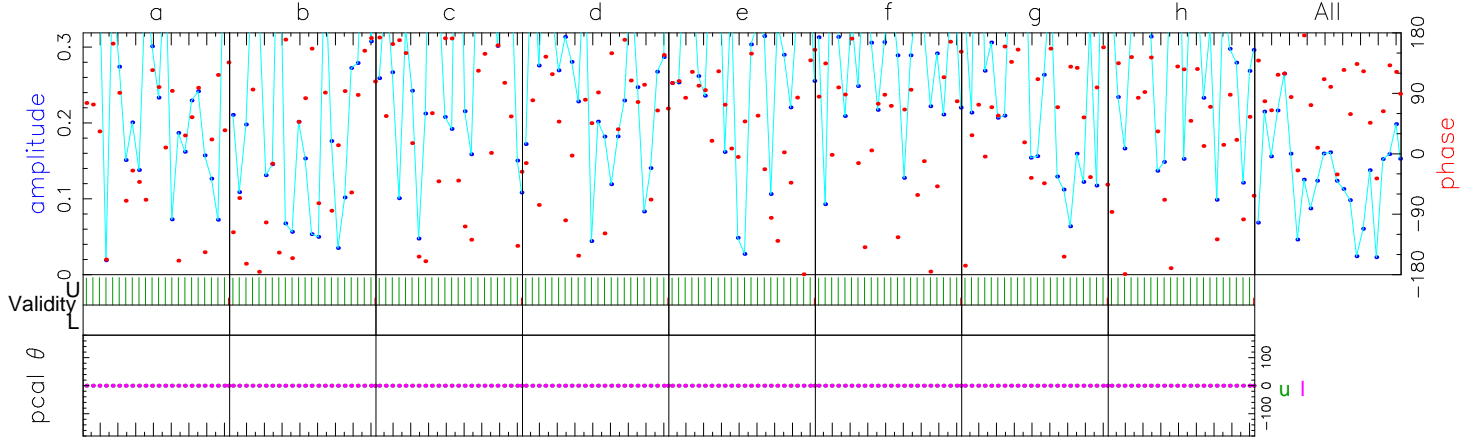
Fringe quality 0

SNR 5.7
 Int time 477.984
 Amp 0.106
 Phase 94.2
 PFD 9.6e-01
 Delays (us)
 SBD 0.940977
 MBD -0.001712
 Fringe rate (Hz)
 0.499744
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132954
 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		
u	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:l	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		
l	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.80486529740E+03									
Sband delay (usec)	-2.80486010825E+03									
Phase delay (usec)	-2.80580108246E+03									
Delay rate (us/s)	1.65882126815E+00									
Total phase (deg)			-87.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

u: az 60.8 el 36.1 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12665.912 1158.534 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul..1IM4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul.W.210.1M4WN

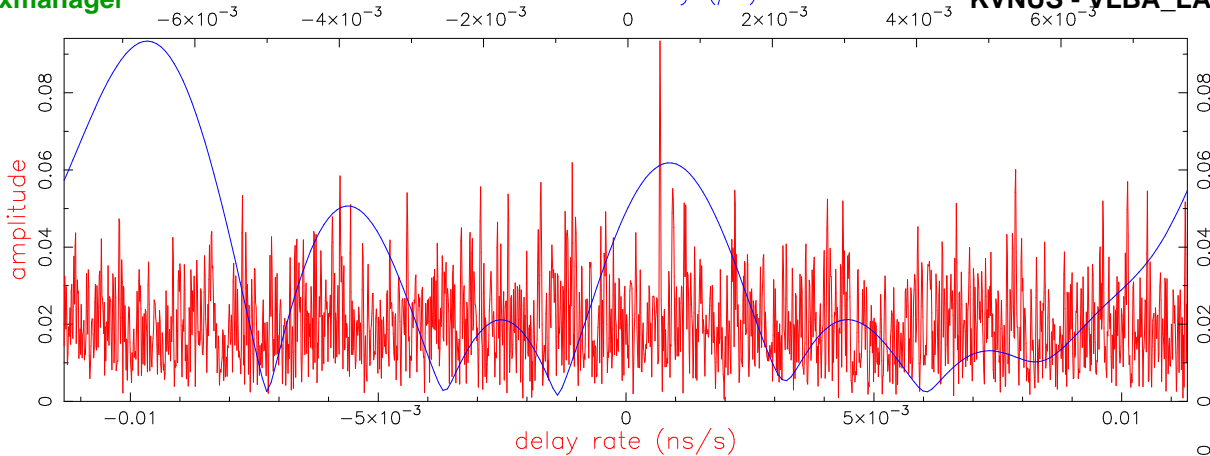
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.1M4WN, No0111, ul

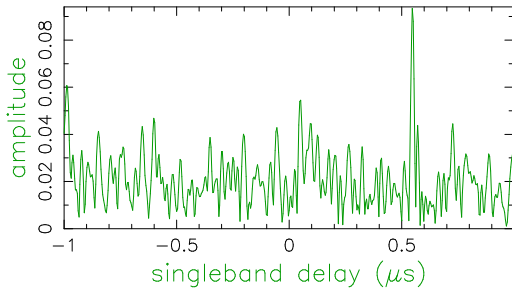
KVNUS - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

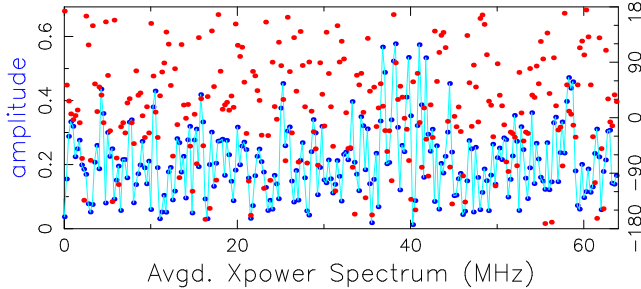


Fringe quality 0

SNR 5.6
 Int time 477.984
 Amp 0.094
 Phase -76.4
 PFD 9.9e-01
 Delays (us)
 SBD 0.547794
 MBD -0.006648
 Fringe rate (Hz)
 0.059120
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

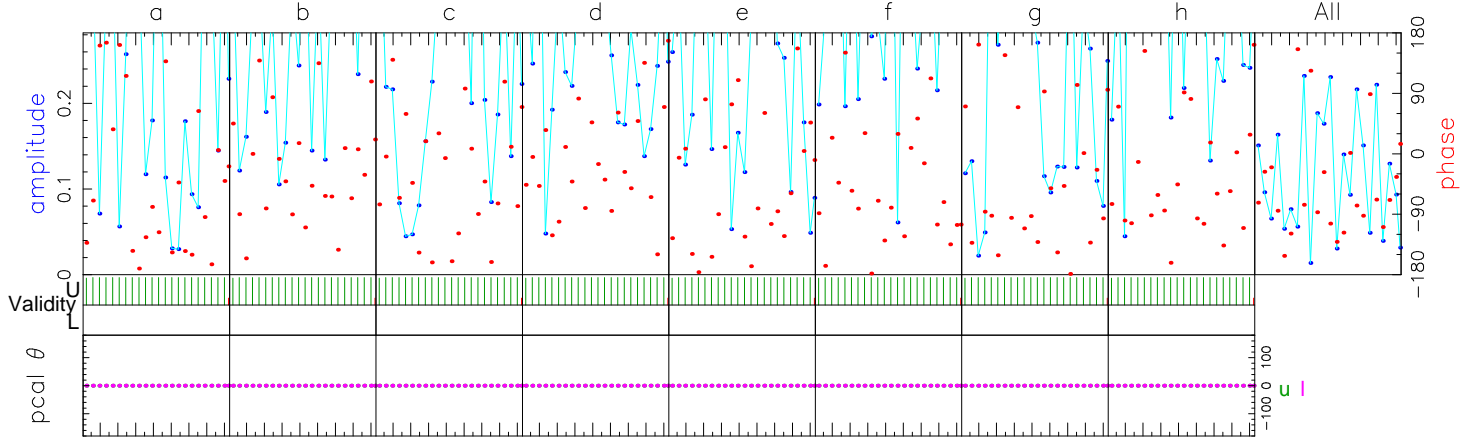


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132958
 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
	-127.0	-34.5	-62.8	-29.9	-102.7	-76.3	-124.0	-68.6	Phase	-76.4
	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	26.3	181.8	306.9	329.3	361.7	246.3	442.6	223.1	Sbd box	397.2
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.80526085812E+03	Apriori delay (usec)	-2.80580108550E+03	Resid mbdelay (usec)	-6.64762E-03	+/-	1.9E-04
Sband delay (usec)	-2.80525329125E+03	Apriori clock (usec)	2.9640703E+00	Resid sbdelay (usec)	5.47794E-01	+/-	1.5E-03
Phase delay (usec)	-2.80580108797E+03	Apriori clockrate (us/s)	5.0000000E-07	Resid phdelay (usec)	-2.46445E-06	+/-	6.6E-07
Delay rate (us/s)	1.65881615294E+00	Apriori rate (us/s)	1.65881546662E+00	Resid rate (us/s)	6.86329E-07	+/-	2.4E-09
Total phase (deg)	-258.3	Apriori accel (us/s/s)	1.46794232078E-05	Resid phase (deg)	-76.4	+/-	20.4

ph/seg (deg)	67.7	Theor.	48.9	Amplitude	0.094 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	78.2		85.4	Search (2048X32)	0.092	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	40.2		28.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	38.0		50.3	Inc. seg. avg.	0.088	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.100	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

u: az 60.8 el 36.1 pa -72.2 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12665.912 1158.534 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul..1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/ul.W.226.1M4WN

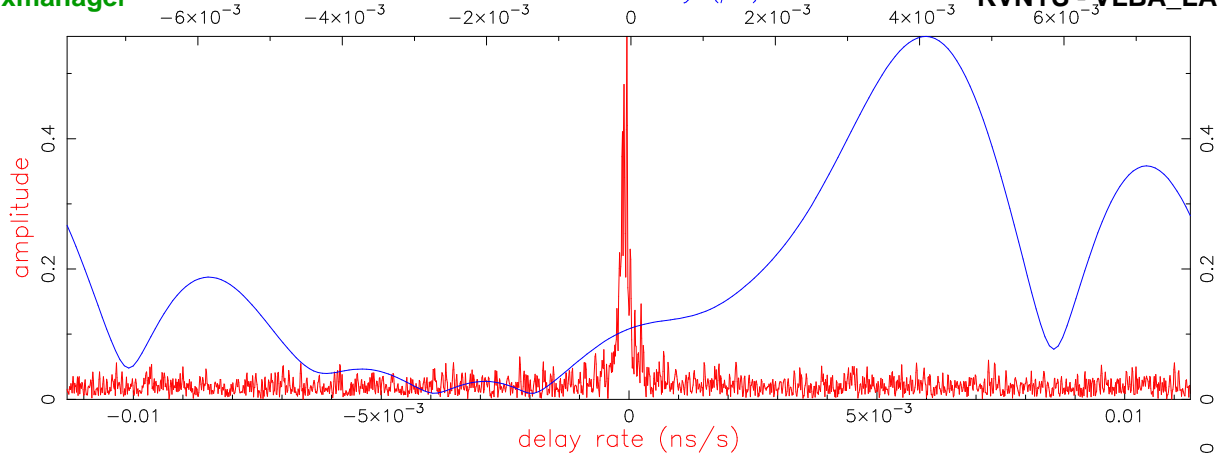
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, yl

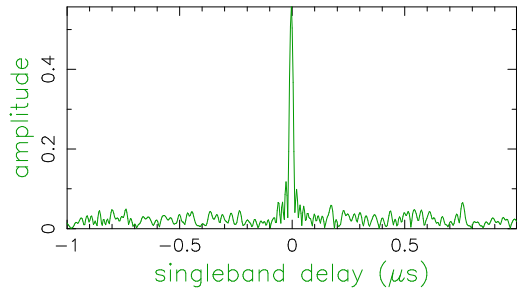
KVNS - VLBA_LA, fgroup W, pol LL

multiband delay (μ s)

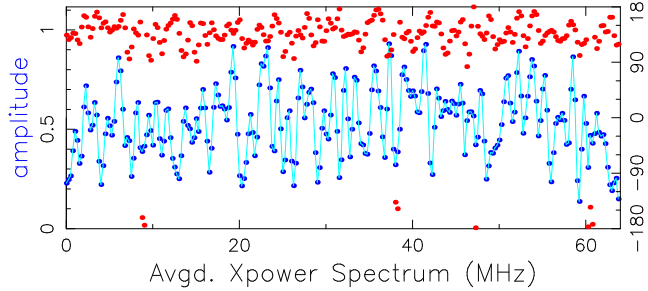


Fringe quality 4

SNR 33.3
 Int time 477.984
 Amp 0.557
 Phase 46.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.003995
 MBD 0.004079
 Fringe rate (Hz)
 -0.003572
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

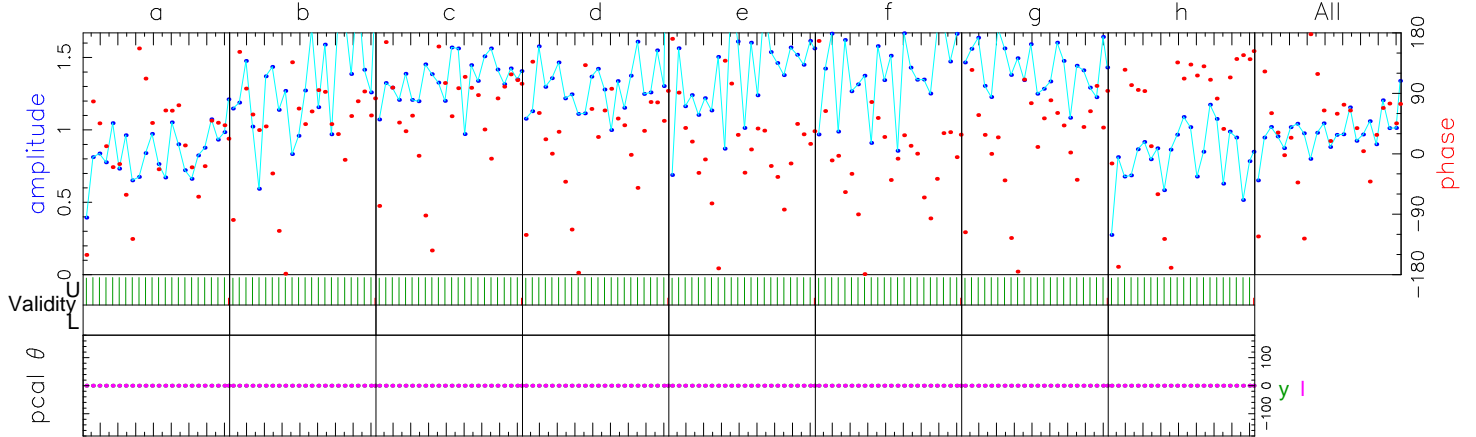


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:132959
 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



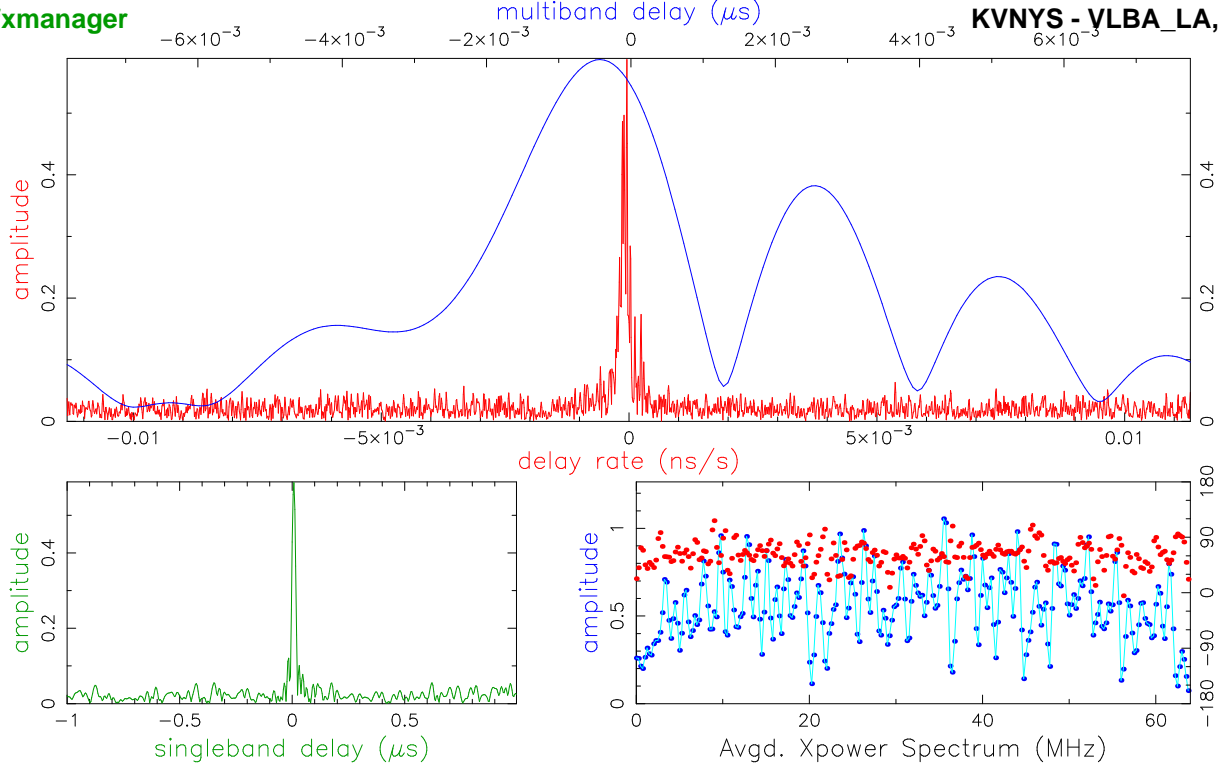
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.00615697631E+03	Apriori delay (usec)	-3.00614543073E+03	Resid mbdelay (usec)	4.07942E-03	+/-	3.3E-05
Sband delay (usec)	-3.00614942598E+03	Apriori clock (usec)	1.6438274E+00	Resid sbdelay (usec)	-3.99525E-03	+/-	2.6E-04
Phase delay (usec)	-3.00614542924E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	1.49457E-06	+/-	1.1E-07
Delay rate (us/s)	1.64857635514E+00	Apriori rate (us/s)	1.64857639660E+00	Resid rate (us/s)	-4.14627E-08	+/-	4.0E-10
Total phase (deg)	-98.8	Apriori accel (us/s/s)	1.78567410680E-05	Resid phase (deg)	46.3	+/-	3.4

ph/seg (deg)	70.7	RMS	70.7	Theor.	8.3	Amplitude	0.557 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.1		78.1		14.4	Search (2048X32)	0.540	Pcal rate:	0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.008	0.008
ph/frq (deg)	42.9		42.9		4.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled		dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.2		30.2		8.5	Inc. seg. avg.	0.966	Sample rate (MSamp/s):	128			ion window (TEC)	0.00	0.00
						Inc. frq. avg.	0.678	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite			

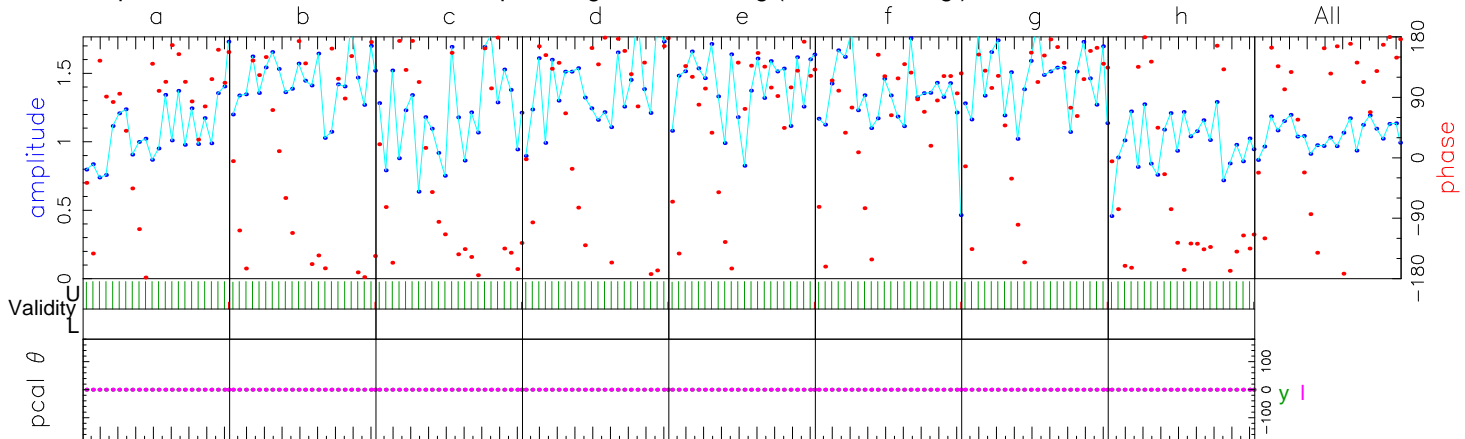
y: az 61.3 el 35.5 pa -68.9 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12581.097 1566.473 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl.W.230.11M4WN



Fringe quality 4
SNR 35.2
Int time 477.984
Amp 0.589
Phase 148.6
PFD 0.0e+00
Delays (us)
SBD 0.007066
MBD -0.000459
Fringe rate (Hz)
-0.003514
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202b
Exper # 16383
Yr:day 2020:284
Start 124502.54
Stop 125301.26
FRT 124901.00
Corr/FF/build
2021:023:085237
2021:023:133002
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	115.7	167.9	-168.1	162.3	123.8	98.7	137.8	-146.2	Phase	148.6
y	0.6	0.7	0.6	0.8	0.8	0.8	0.9	0.6	Ampl.	0.7
l	260.8	258.8	258.4	258.5	258.6	258.7	259.2	260.7	Sbd box	258.8
y	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -3.00614589022E+03 Apriori delay (usec) -3.00614543073E+03 Resid mbdelay (usec) -4.59487E-04 +/- 3.1E-05
 Sband delay (usec) -3.00613836448E+03 Apriori clock (usec) 1.6438274E+00 Resid sbdelay (usec) 7.06625E-03 +/- 2.4E-04
 Phase delay (usec) -3.00614542594E+03 Apriori clockrate (us/s) 1.9999998E-07 Resid phdelay (usec) 4.79349E-06 +/- 1.0E-07
 Delay rate (us/s) 1.64857635581E+00 Apriori rate (us/s) 1.64857639660E+00 Resid rate (us/s) -4.07902E-08 +/- 3.8E-10
 Total phase (deg) 3.5 Apriori accel (us/s/s) 1.78567410680E-05 Resid phase (deg) 148.6 +/- 3.3

RMS Theor. Amplitude 0.589 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 70.8 7.8 Search (2048X32) 0.570 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 81.1 13.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 42.8 4.6 Inc. seg. avg. 1.047 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 26.9 8.0 Inc. frq. avg. 0.714 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

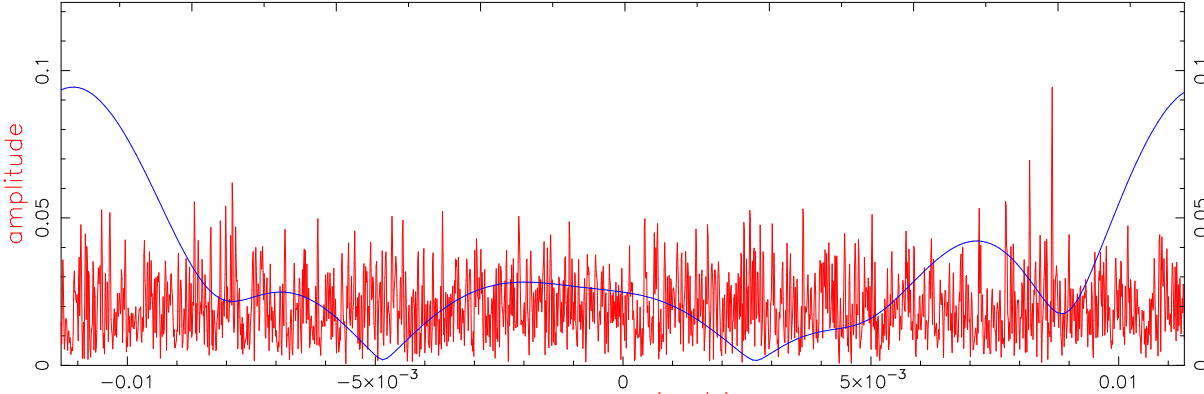
3C84.11M4WN, No0111, yl

KVNYS - VLBA_LA, fgroup W, pol LR

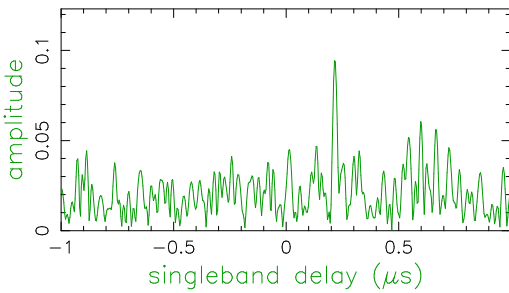
multiband delay (μ s)

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

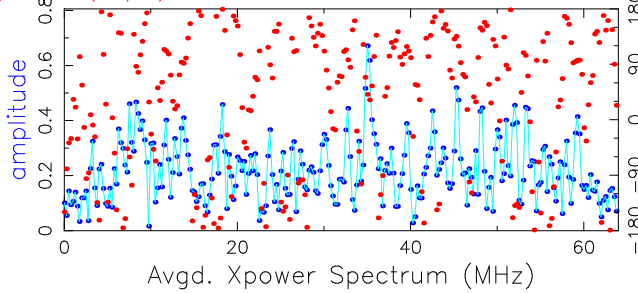
Fringe quality 0



SNR 5.7
 Int time 477.984
 Amp 0.123
 Phase 6.1
 PFD 9.4e-01
 Delays (us)
 SBD 0.216576
 MBD 0.007947
 Fringe rate (Hz)
 0.746827
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

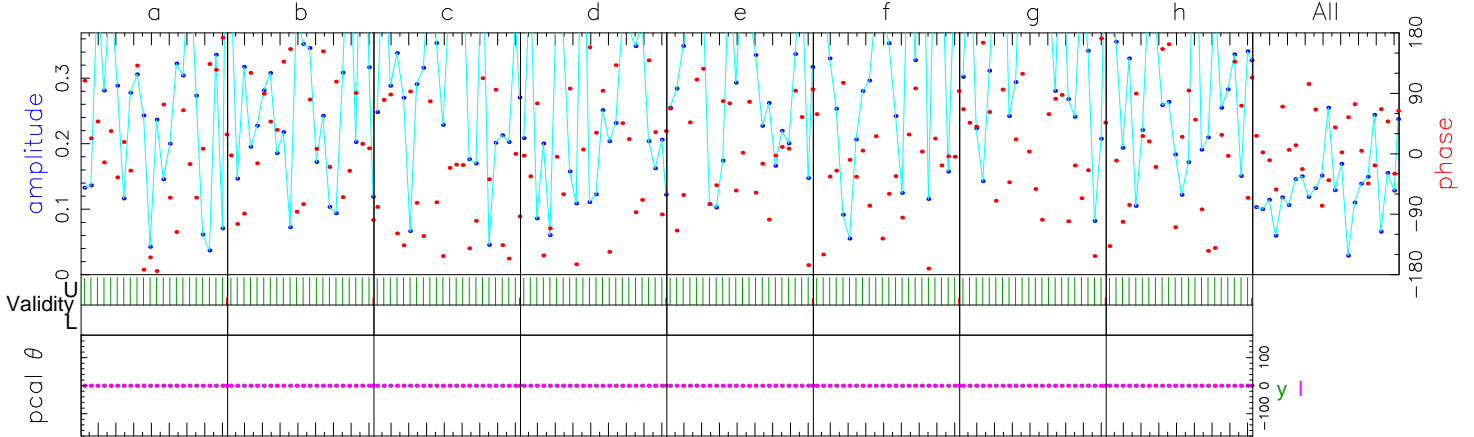


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:133005
 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		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.00593435901E+03	Apriori delay (usec)	-3.00614543073E+03	Resid mbdelay (usec)	7.94672E-03	+/-	1.9E-04
Sband delay (usec)	-3.00592885473E+03	Apriori clock (usec)	1.6438274E+00	Resid sbdelay (usec)	2.16576E-01	+/-	1.5E-03
Phase delay (usec)	-3.00614543053E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	1.96532E-07	+/-	6.5E-07
Delay rate (us/s)	1.64858506653E+00	Apriori rate (us/s)	1.64857639660E+00	Resid rate (us/s)	8.66992E-06	+/-	2.3E-09
Total phase (deg)	-139.0	Apriori accel (us/s/s)	1.78567410680E-05	Resid phase (deg)	6.1	+/-	20.1

ph/seg (deg)	47.4	RMS	48.1	Theor.	48.1	Amplitude	0.123 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	65.4	Search (2048X32)	0.093	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	28.3	Inc. seg. avg.	0.126	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
amp/frq (%)	46.7	Inc. frq. avg.	0.116									

y: az 61.3 el 35.5 pa -68.9 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12581.097 1566.473 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl..1M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl.W.246.1M4WN

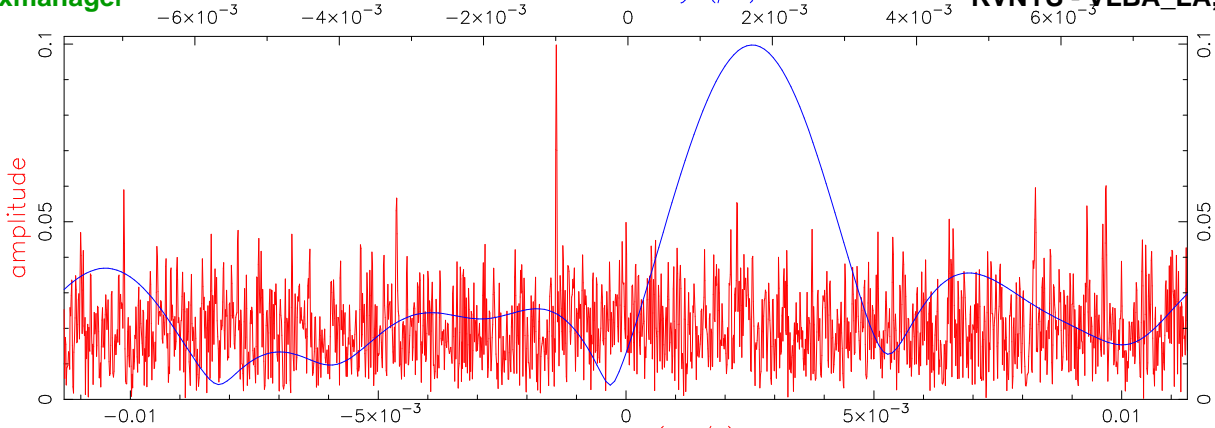
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

3C84.11M4WN, No0111, yl

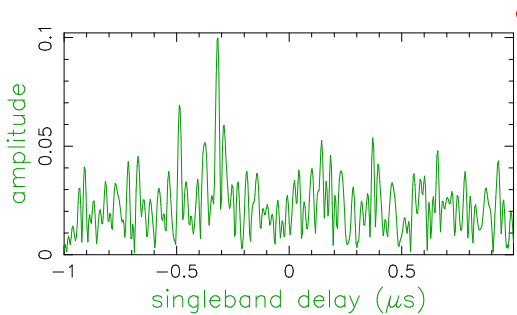
KVNYS - VLBA_LA, fgroup W, pol RL

multiband delay (μ s)

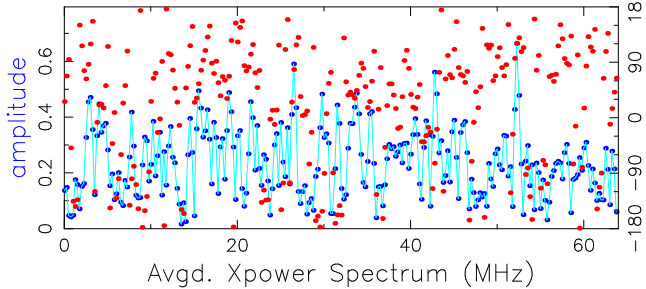


Fringe quality 0

SNR 6.1
 Int time 477.984
 Amp 0.102
 Phase -7.6
 PFD 2.8e-01
 Delays (us)
 SBD -0.318137
 MBD 0.001708
 Fringe rate (Hz)
 -0.120988
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

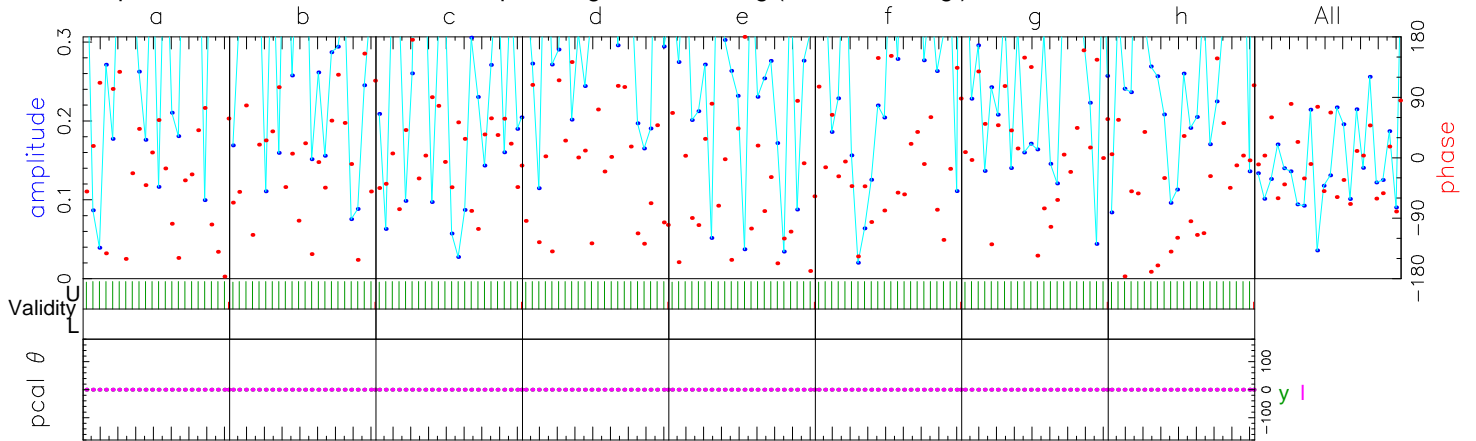


delay rate (ns/s)



Exp. c202b
 Exper # 16383
 Yr:day 2020:284
 Start 124502.54
 Stop 125301.26
 FRT 124901.00
 Corr/FF/build
 2021:023:085237
 2021:023:133009
 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
	-32.5	4.6	-3.2	19.6	-59.7	0.7	23.5	-28.3		-7.6
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	129.8	159.9	133.4	352.4	37.9	232.3	268.3	434.4	Sbd box	175.6
U/L	935/0	935/0	935/0	935/0	935/0	935/0	935/0	935/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.00645622322E+03	Apriori delay (usec)	-3.00614543073E+03	Resid mbdelay (usec)	1.70751E-03	+/-	1.8E-04
Sband delay (usec)	-3.00646356773E+03	Apriori clock (usec)	1.6438274E+00	Resid sbdelay (usec)	-3.18137E-01	+/-	1.4E-03
Phase delay (usec)	-3.00614543098E+03	Apriori clockrate (us/s)	1.9999998E-07	Resid phdelay (usec)	-2.46305E-07	+/-	6.1E-07
Delay rate (us/s)	1.64857499205E+00	Apriori rate (us/s)	1.64857639660E+00	Resid rate (us/s)	-1.40455E-06	+/-	2.2E-09
Total phase (deg)	-152.8	Apriori accel (us/s/s)	1.78567410680E-05	Resid phase (deg)	-7.6	+/-	18.9

ph/seg (deg)	49.9	Theor.	45.3	Amplitude	0.102 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	69.3		79.0	Search (2048X32)	0.097	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	30.8		26.7	Inc. seg. avg.	0.111	Sample rate (MSamp/s):	128	nlags:	256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	17.7		46.6	Inc. frq. avg.	0.100	Data rate (Mb/s):	2048	t_cohere	infinite	ion window (TEC)	0.00	0.00

y: az 61.3 el 35.5 pa -68.9 l: az 295.0 el 48.1 pa 80.0 u,v (fr/asec) -12581.097 1566.473 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl..11M4WN Output file: /Exps/c202b/v1/v1_3mm/1234/No0111/yl.W.254.11M4WN