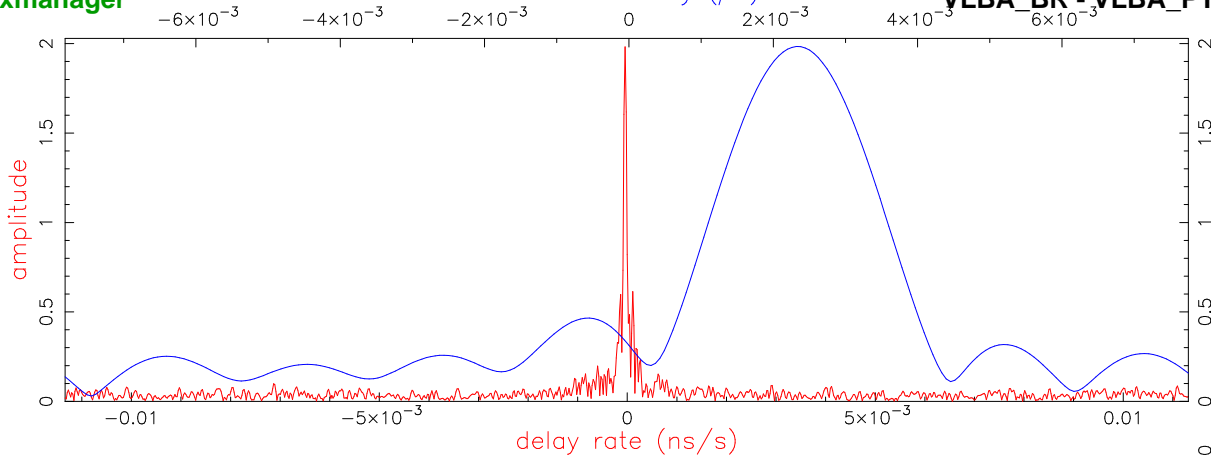
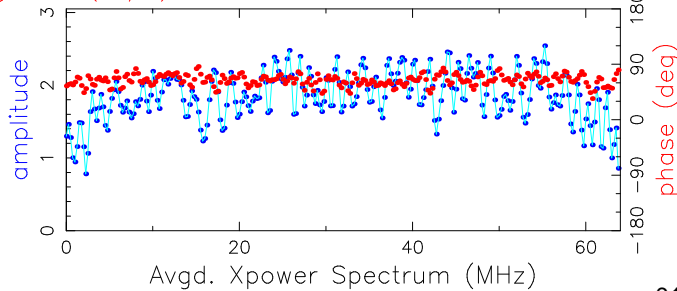
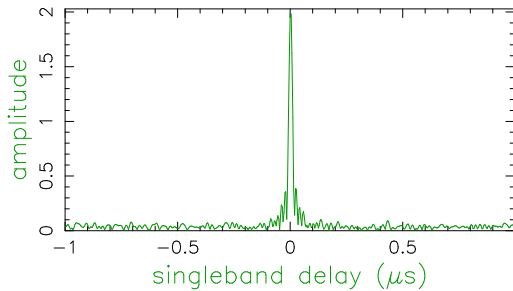


multiband delay (μ s)



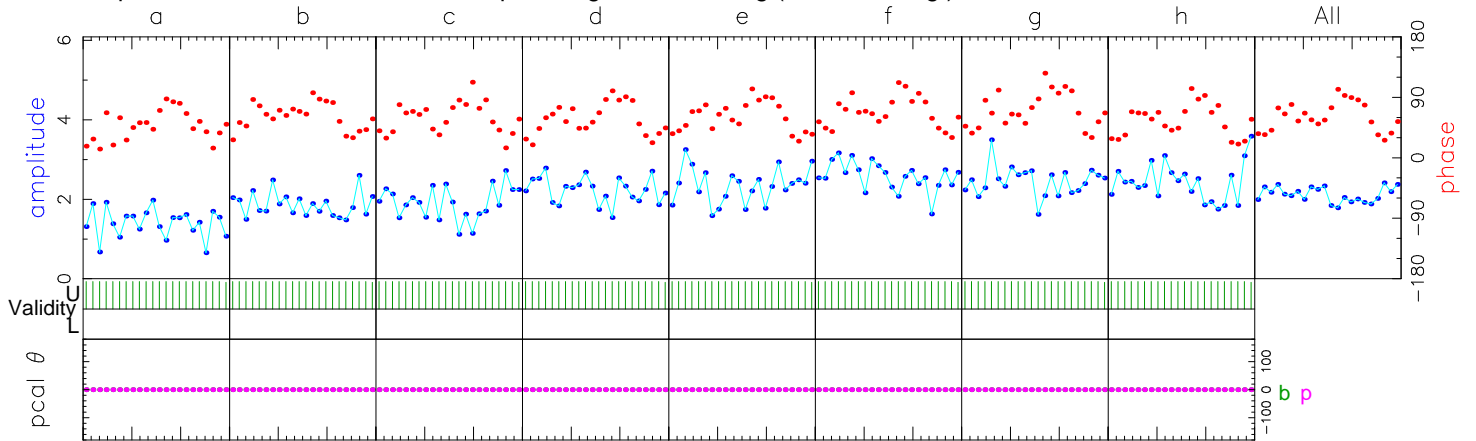
Fringe quality 8

SNR 74.5
Int time 179.976
Amp 2.029
Phase 59.9
PFD 0.0e+00
Delays (us)
SBD 0.001946
MBD 0.002281
Fringe rate (Hz)
-0.004731
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141436
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

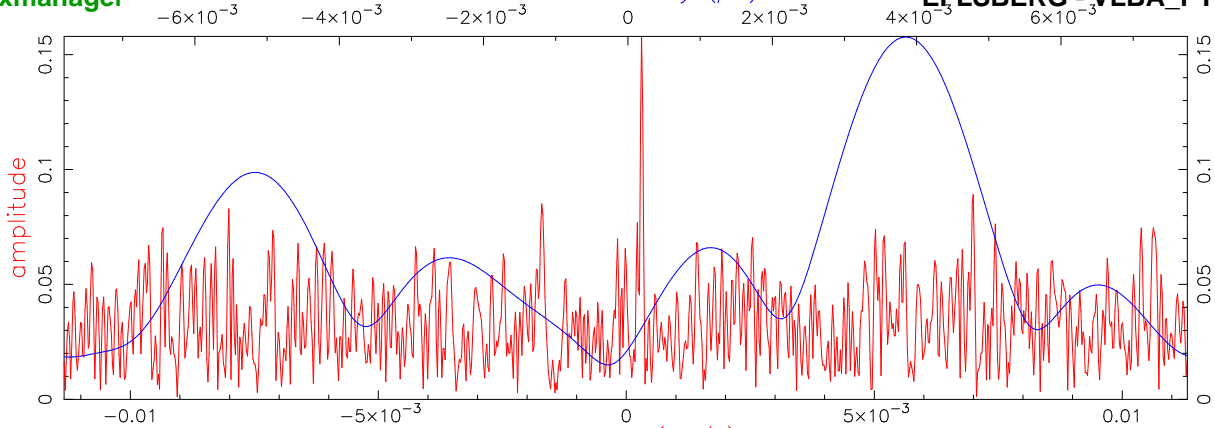
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



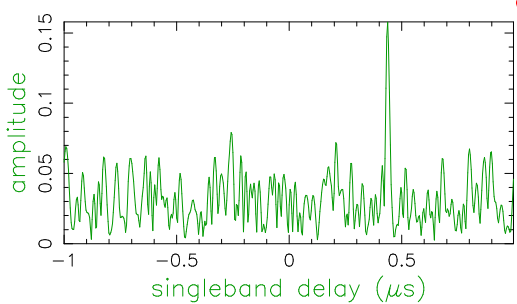
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)	3.90879333093E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		2.28084E-03	+/- 1.5E-05
Sband delay (usec)	3.90879299559E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		1.94550E-03	+/- 1.2E-04
Phase delay (usec)	3.90879105202E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		1.93210E-06	+/- 5.0E-08
Delay rate (us/s)	1.70616067578E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.49274E-08	+/- 4.8E-10
Total phase (deg)	79.6		Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		59.9	+/- 1.5

ph/seg (deg) 21.1 3.6 Search (1024X32) 1.888 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 10.1 6.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 8.0 2.2 Inc. seg. avg. 2.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 16.6 3.8 Inc. frq. avg. 1.994 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.12.1HSTEG

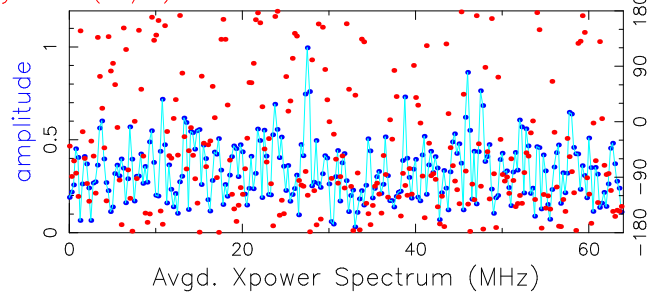
multiband delay (μ s)



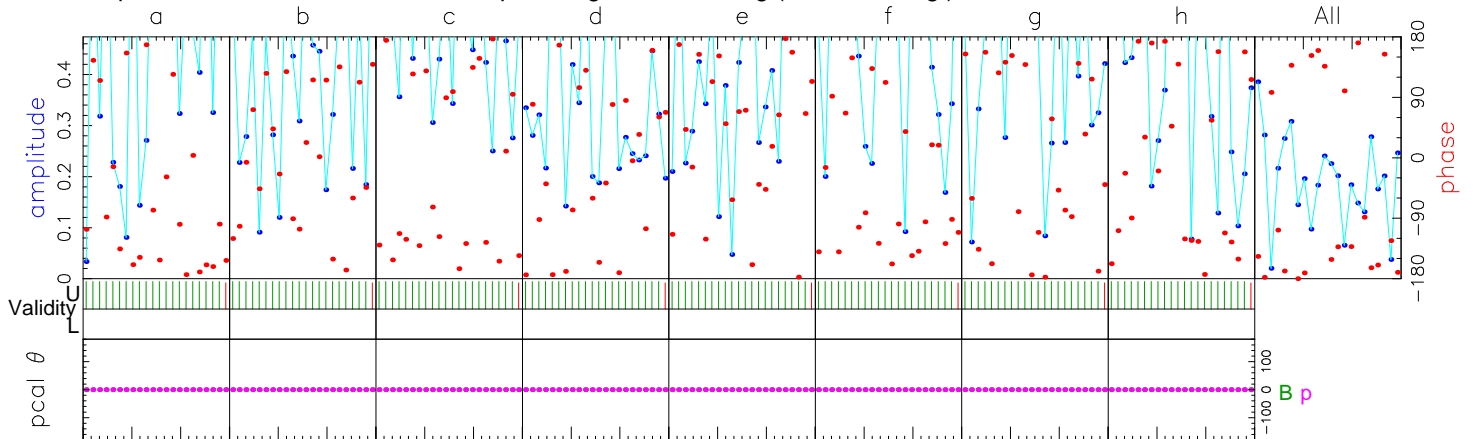
Fringe quality 0
SNR 5.8
Int time 179.778
Amp 0.158
Phase -170.5
PFD 5.9e-01
Delays (us)
SBD 0.436996
MBD 0.003827
Fringe rate (Hz) 0.026795
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202a
Yr:day 16383
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build 2021:007:125342
2021:010:141437
2020:247:085004
RA & Dec (J2000) 01h02m45.762375s +58°24'11.136621"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.6	129.2	-165.9	143.0	133.9	-147.0	-175.6	-146.0	Phase	-170.5
	0.3	0.1	0.3	0.1	0.2	0.2	0.2	0.2	Ampl.	0.2
	370.0	104.2	368.8	487.5	435.6	311.6	459.7	186.3	Sbd box	368.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-6.84323777172E+03	Apriori delay (usec)	-6.84367909848E+03	Resid mbdelay (usec)	3.82676E-03	+/-	1.9E-04
Sband delay (usec)	-6.84324210198E+03	Apriori clock (usec)	1.0070147E+01	Resid sbdelay (usec)	4.36996E-01	+/-	1.5E-03
Phase delay (usec)	-6.84367910398E+03	Apriori clockrate (us/s)	-5.9999998E-07	Resid phdelay (usec)	-5.49927E-06	+/-	6.4E-07
Delay rate (us/s)	6.38958004246E-01	Apriori rate (us/s)	6.38957693178E-01	Resid rate (us/s)	3.11068E-07	+/-	6.1E-09
Total phase (deg)	-5.9	Apriori accel (us/s/s)	5.64866891766E-05	Resid phase (deg)	-170.5	+/-	19.8

ph/seg (deg)	44.3	RMS	46.4	Theor.	46.4	Amplitude	0.158 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	59.4	Search (1024X32)	0.156	sb window (us)	-1.000	1.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	42.2	Inc. seg. avg.	0.145	dr window (ns/s)	-0.011	0.011	Bits/sample:	2x2	Sample rate (MSamp/s):	128	nlags: 256 t_cohere infinite
amp/frq (%)	49.0	Inc. frq. avg.	0.164	ion window (TEC)	0.00	0.00	Data rate (Mb/s):	2048			

B: az 1.1 el 19.0 pa -1.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -6960.614 8238.113 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp.W.21.1HSTEG

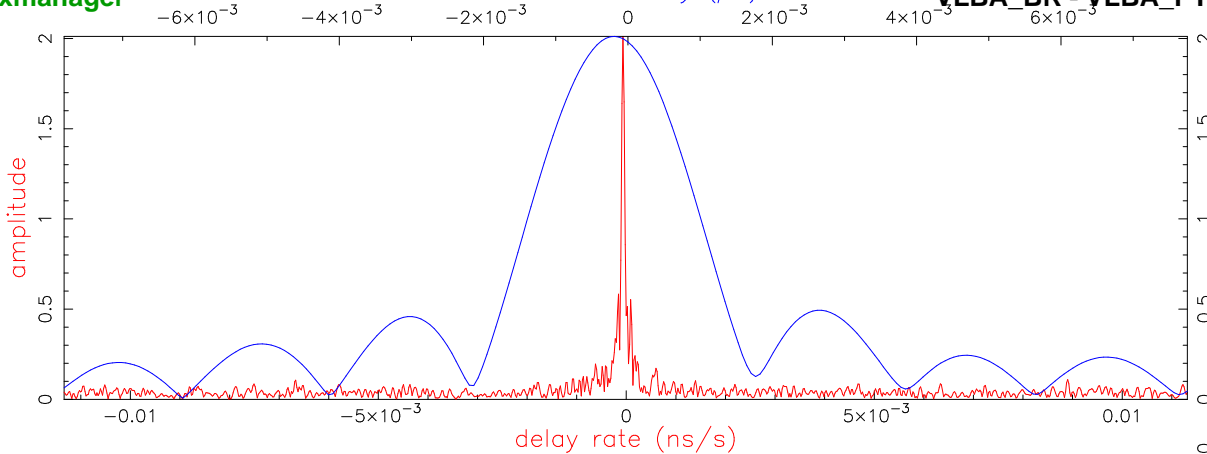
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bp

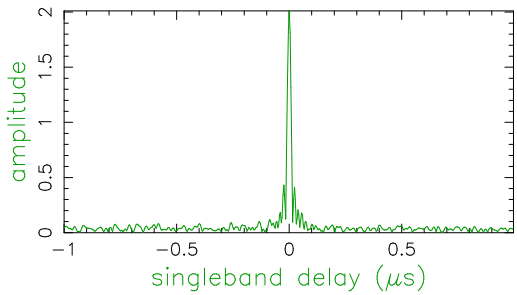
VLBA_BR - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

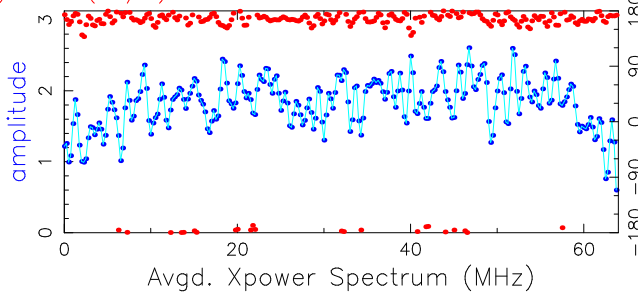


Fringe quality 8

SNR 73.8
 Int time 179.976
 Amp 2.012
 Phase 169.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.000103
 MBD -0.000193
 Fringe rate (Hz)
 -0.004778
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

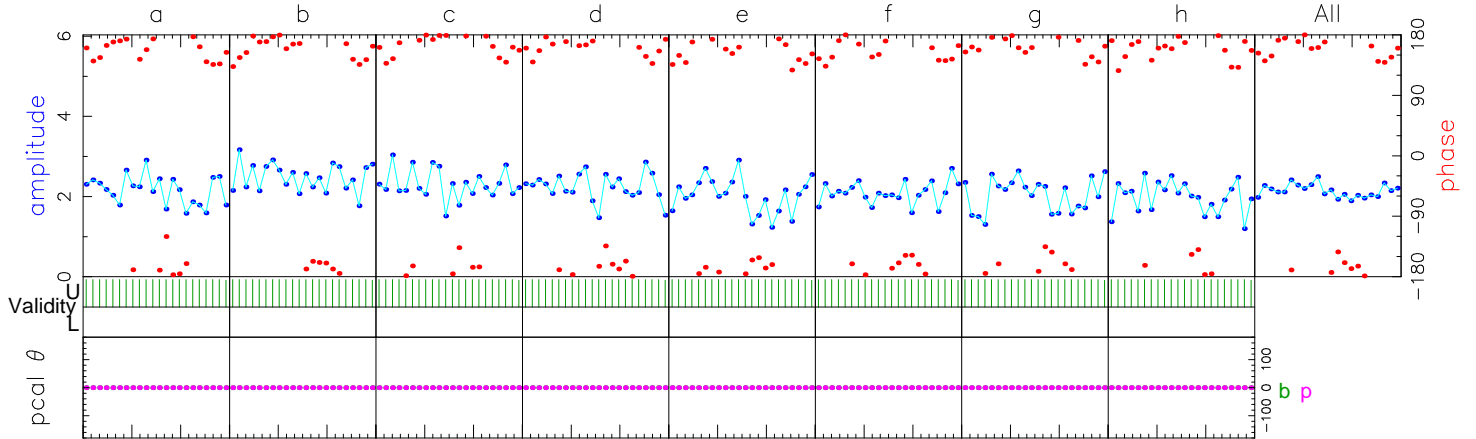


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141437
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	3.90879085688E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		-1.93211E-04	+/- 1.5E-05
Sband delay (usec)	3.90879094684E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		-1.03250E-04	+/- 1.2E-04
Phase delay (usec)	3.90879105555E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		5.46379E-06	+/- 5.0E-08
Delay rate (us/s)	1.70616067035E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.54701E-08	+/- 4.8E-10
Total phase (deg)	189.2		Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		169.4	+/- 1.6

ph/seg (deg) 20.9 3.6 Search (1024X32) 1.889 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 10.3 6.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 3.0 2.2 Inc. seg. avg. 2.142 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 8.1 3.8 Inc. frq. avg. 2.012 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.27.1HSTEG

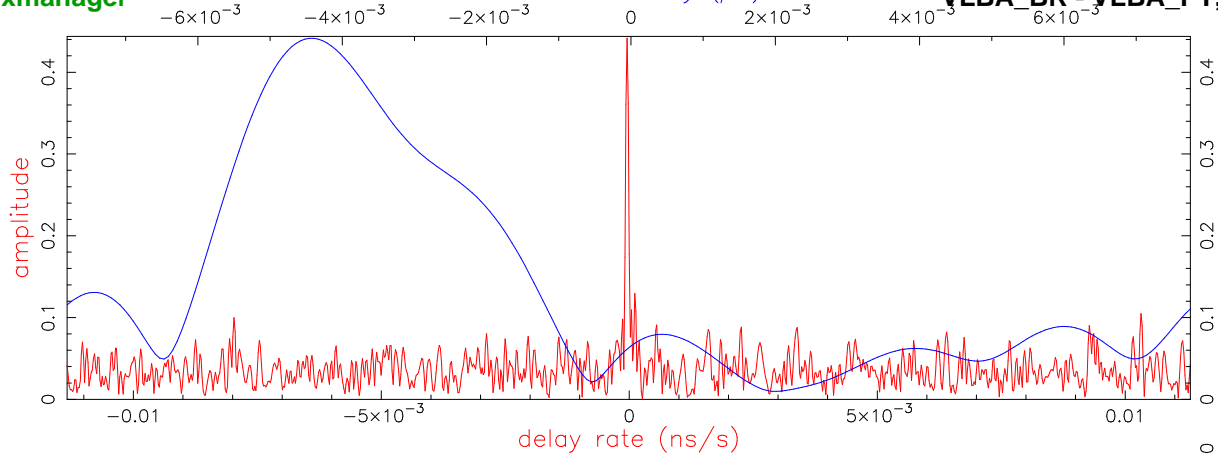
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, bp

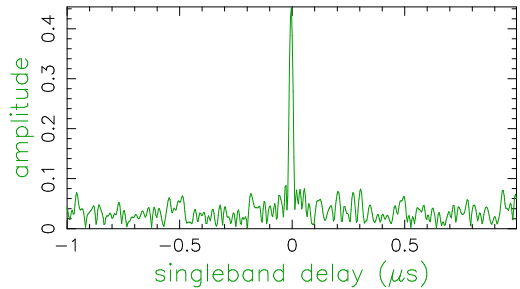
VLBA_BR - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

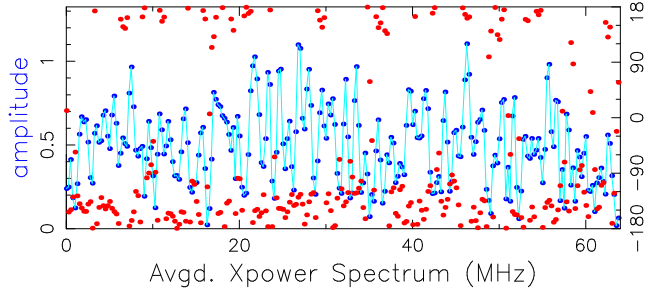


Fringe quality 7

SNR 16.3
 Int time 179.976
 Amp 0.444
 Phase -160.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.004835
 MBD -0.004432
 Fringe rate (Hz)
 -0.004711
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

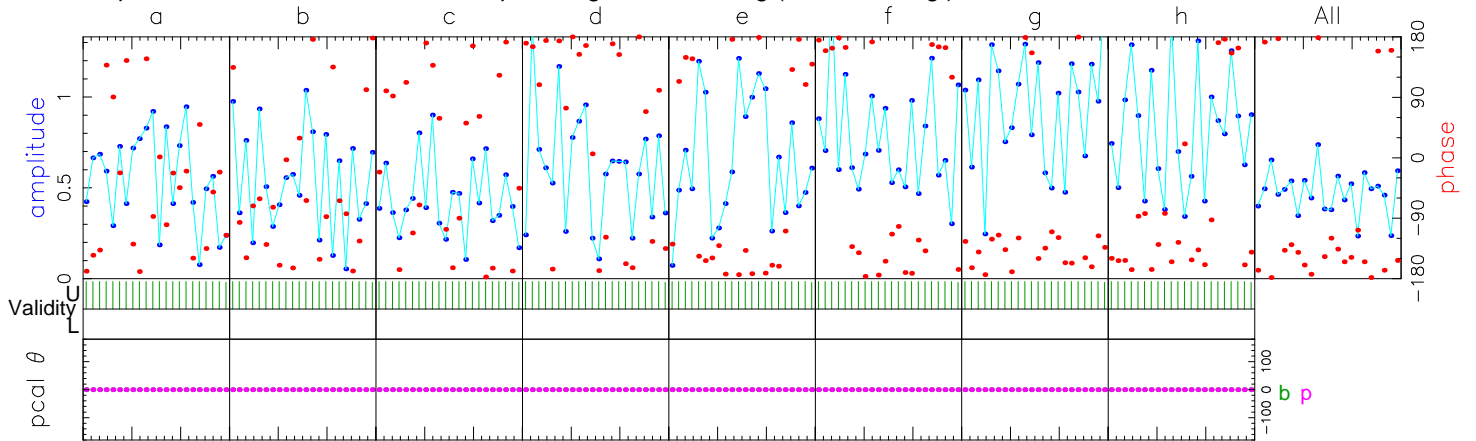


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141439
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.2	-125.9	168.9	165.2	-177.3	-173.5	-144.3	-151.3	Phase	-160.8
	0.2	0.2	0.2	0.5	0.6	0.7	0.9	0.7	Ampl.	0.5
	302.7	255.7	335.9	255.7	255.7	255.8	255.7	255.1	Sbd box	255.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	3.90878661796E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		-4.43213E-03	+/- 6.7E-05
Sband delay (usec)	3.90878621559E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		-4.83450E-03	+/- 5.3E-04
Phase delay (usec)	3.90879104491E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-5.18456E-06	+/- 2.3E-07
Delay rate (us/s)	1.70616067814E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.46907E-08	+/- 2.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		-160.8	+/- 7.0

ph/seg (deg) 24.5 16.5 Search (1024X32) 0.422 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 27.6 28.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.8 10.0 Inc. seg. avg. 0.459 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.3 17.4 Inc. frq. avg. 0.472 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 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.44.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

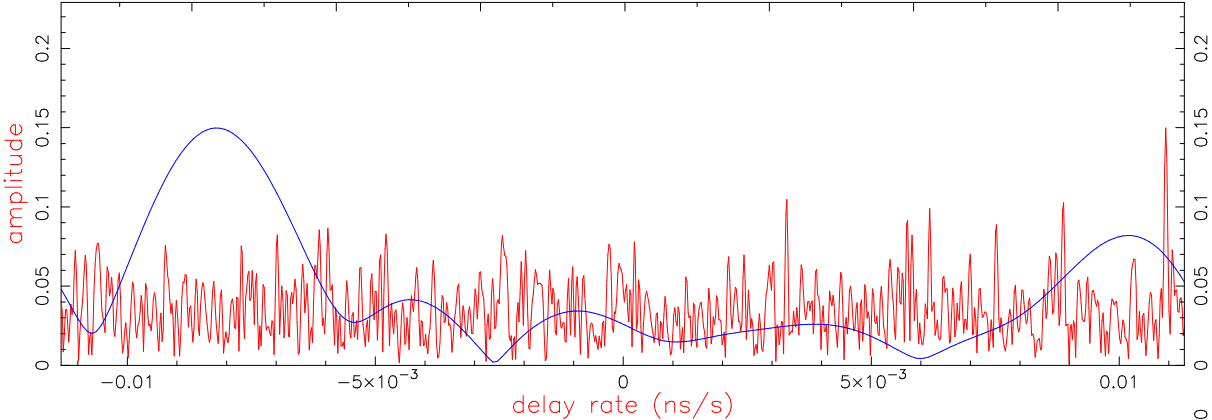
0102+584.1HSTEG, No0128, Bp

EFLSBERG - VLBA_PT, fgroup W, pol RR

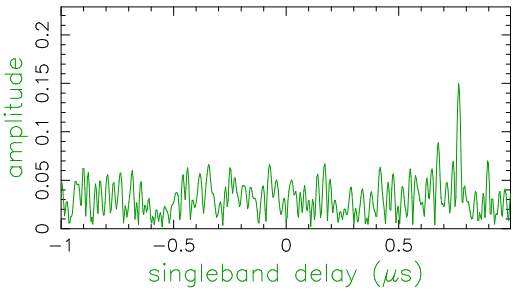
multiband delay (μ s)

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

Fringe quality 0

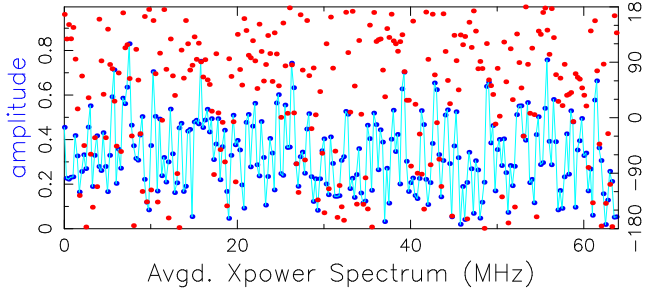


SNR 5.5
Int time 179.778
Amp 0.229
Phase -1.9
PFD 9.8e-01
Delays (us)
SBD 0.766582
MBD -0.005654
Fringe rate (Hz)
0.944188
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



singleband delay (μ s)

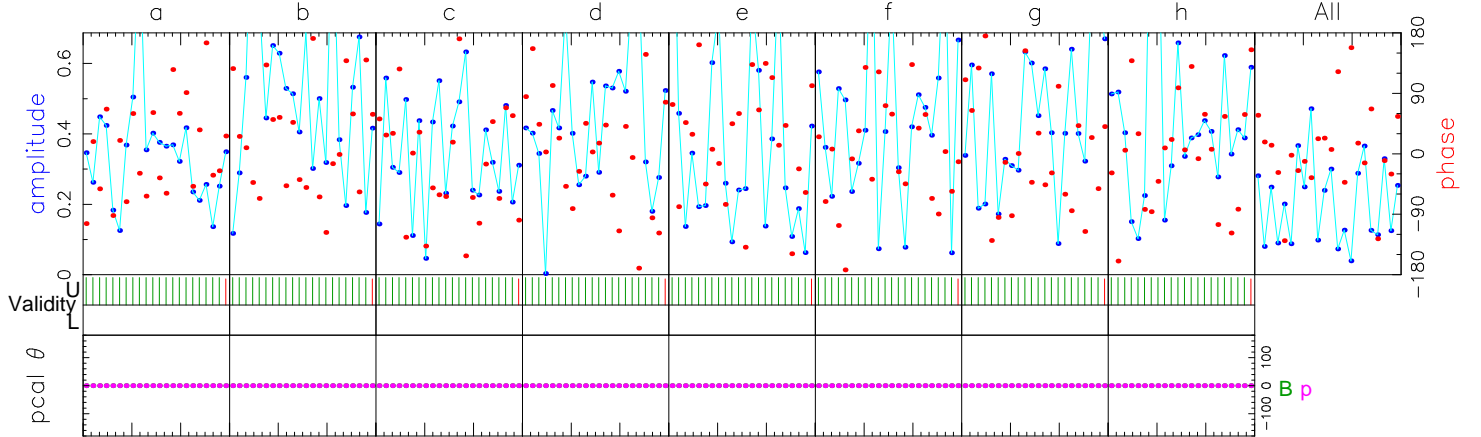
delay rate (ns/s)



Avgd. Xpower Spectrum (MHz)

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141439
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

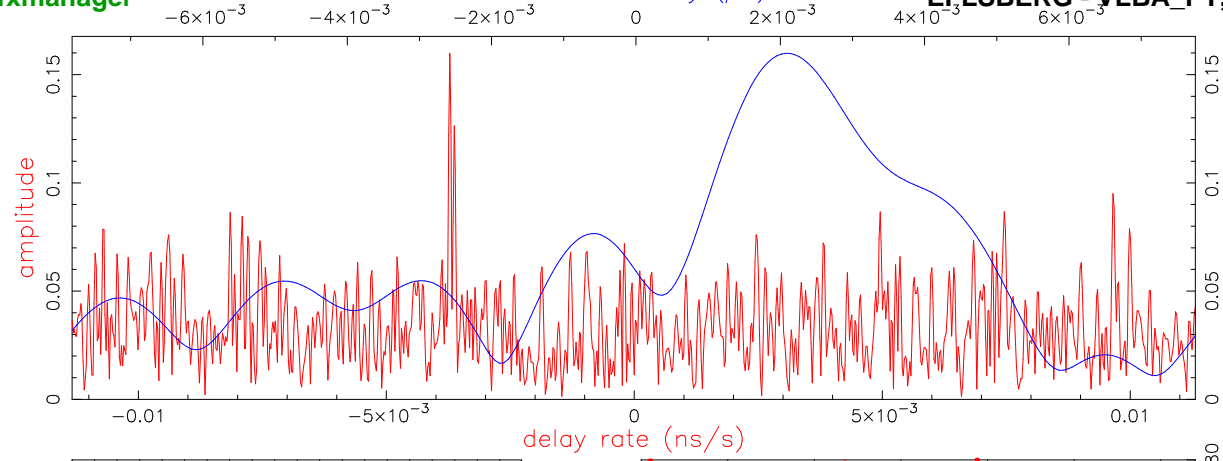
Group delay (usec)(sbd)	-6.84291912784E+03	Apriori delay (usec)	-6.84367909848E+03	Resid mbdelay (usec)	-5.65436E-03	+/-	2.0E-04
Sband delay (usec)	-6.84291251598E+03	Apriori clock (usec)	1.0070147E+01	Resid sbdelay (usec)	7.66582E-01	+/-	1.6E-03
Phase delay (usec)	-6.84367909854E+03	Apriori clockrate (us/s)	-5.9999998E-07	Resid phdelay (usec)	-6.20626E-08	+/-	6.7E-07
Delay rate (us/s)	6.38968654260E-01	Apriori rate (us/s)	6.38957693178E-01	Resid rate (us/s)	1.09611E-05	+/-	6.4E-09
Total phase (deg)		Apriori accel (us/s/s)	5.64866891766E-05	Resid phase (deg)	-1.9	+/-	20.7

ph/seg (deg)	64.5	Theor.	48.7	Amplitude	0.229 +/- 0.041	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	85.4		84.9	Search (1024X32)	0.146	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	24.6		29.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.3		51.2	Inc. seg. avg.	0.231	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.216	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

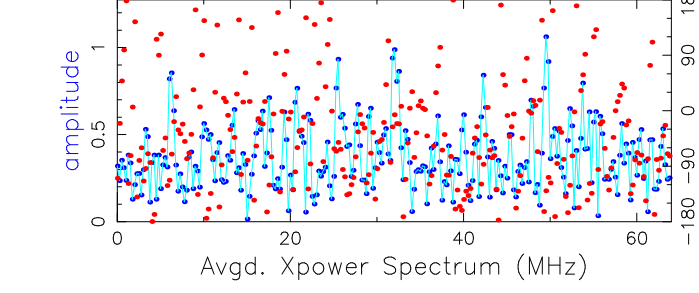
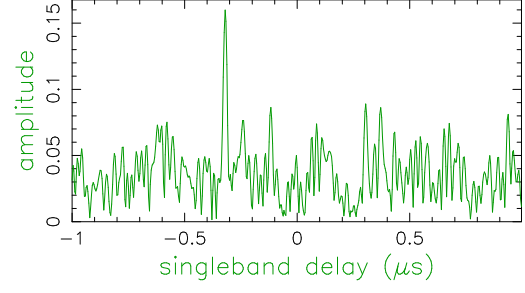
B: az 1.1 el 19.0 pa -1.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -6960.614 8238.113 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp.W.45.1HSTEG

multiband delay (μs)

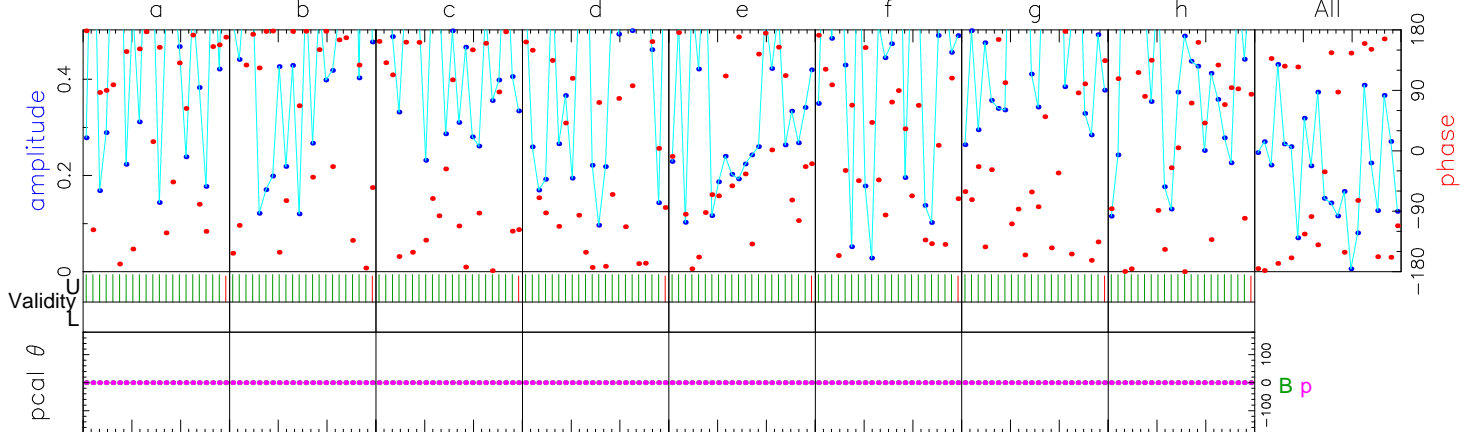


Fringe quality 0
SNR 5.9
Int time 179.778
Amp 0.168
Phase -172.1
PFD 4.1e-01
Delays (us)
SBD -0.319591
MBD 0.002100
Fringe rate (Hz) -0.320880
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141441
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

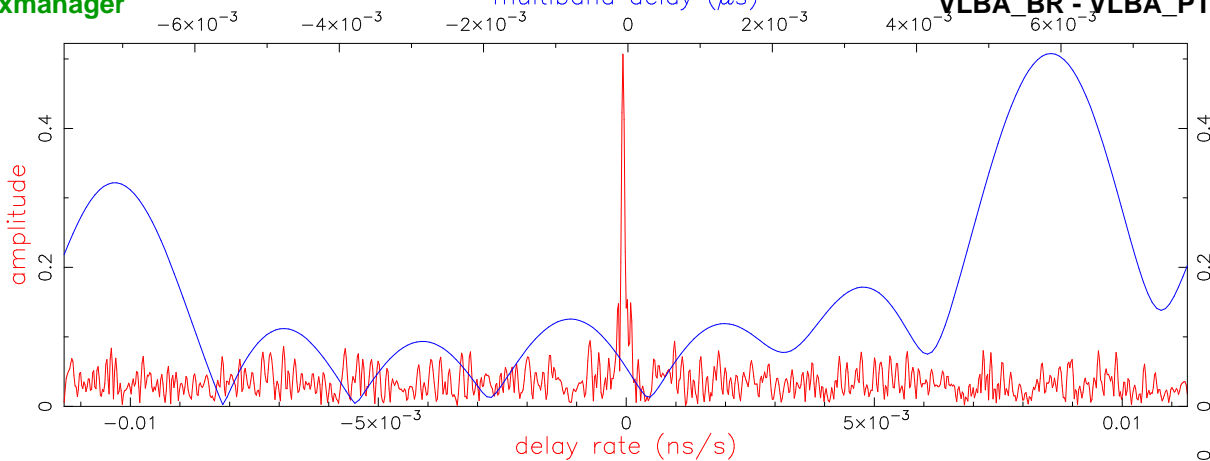


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	177.2	-172.0	-177.1	-158.9	-132.4	75.1	-116.2	135.3	Phase	-172.1
	0.3	0.3	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	176.2	174.6	174.6	35.8	505.9	424.6	222.9	34.1	Sbd box	175.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	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)	-6.84400512335E+03		Apriori delay (usec)		-6.84367909848E+03		Resid mbdelay (usec)		2.10013E-03	+/- 1.8E-04
Sband delay (usec)	-6.84399868898E+03		Apriori clock (usec)		1.0070147E+01		Resid sbdelay (usec)		-3.19591E-01	+/- 1.5E-03
Phase delay (usec)	-6.84367910403E+03		Apriori clockrate (us/s)		-5.9999998E-07		Resid phdelay (usec)		-5.55133E-06	+/- 6.3E-07
Delay rate (us/s)	6.38953968081E-01		Apriori rate (us/s)		6.38957693178E-01		Resid rate (us/s)		-3.27510E-06	+/- 6.0E-09
Total phase (deg)			Apriori accel (us/s/s)		5.64866891766E-05		Resid phase (deg)		-172.1	+/- 19.5

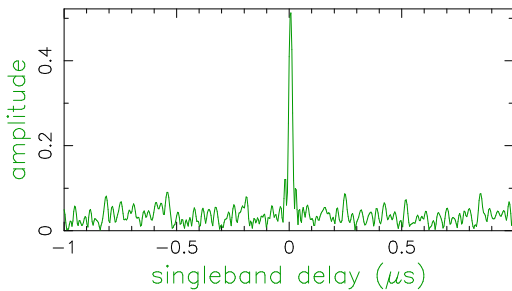
ph/seg (deg) 56.3 45.7 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 78.3 79.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 58.5 27.6 Inc. seg. avg. 0.175 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 57.5 48.1 Inc. frq. avg. 0.174 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 1.1 el 19.0 pa -1.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -6960.614 8238.113 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp.W.65.1HSTEG

multiband delay (μ s)

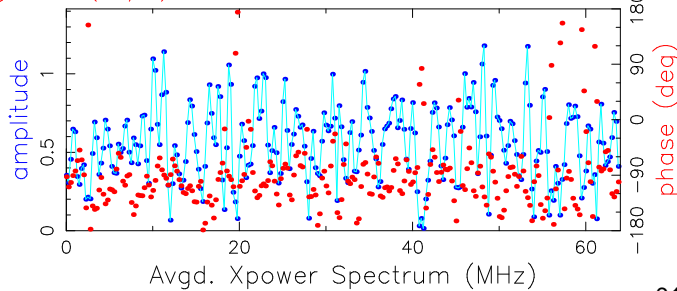
Fringe quality 7



SNR 19.2
Int time 179.976
Amp 0.522
Phase -100.3
PFD 0.0e+00
Delays (us)
SBD 0.006098
MBD 0.005915
Fringe rate (Hz) -0.004825
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

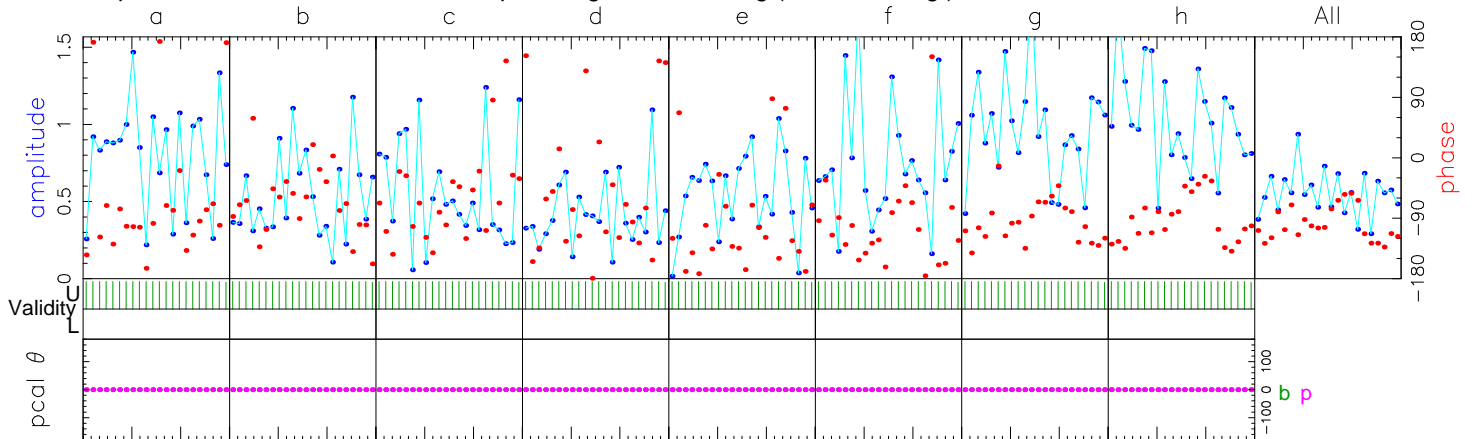


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141441
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-104.3	-76.1	-67.3	-124.8	-132.9	-114.6	-99.6	-95.8	Phase	-100.3
	0.6	0.4	0.4	0.2	0.3	0.6	0.8	0.9	Ampl.	0.5
	258.3	258.8	258.5	384.9	258.7	259.1	258.6	259.0	Sbd box	258.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.90879696507E+03		Apriori delay (usec)		3.90879105009E+03		Resid mbdelay (usec)		5.91498E-03	+/- 5.7E-05
Sband delay (usec)	3.90879714809E+03		Apriori clock (usec)		-1.7602348E+00		Resid sbdelay (usec)		6.09800E-03	+/- 4.5E-04
Phase delay (usec)	3.90879104686E+03		Apriori clockrate (us/s)		-3.9999997E-07		Resid phdelay (usec)		-3.23332E-06	+/- 1.9E-07
Delay rate (us/s)	1.70616066492E-01		Apriori rate (us/s)		1.70616122505E-01		Resid rate (us/s)		-5.60129E-08	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.37855235307E-06		Resid phase (deg)		-100.3	+/- 6.0

	RMS	Theor.	Amplitude	0.522 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	24.8	14.0	Search (1024X32)	0.490	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	27.8	24.5	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	24.4	8.5	Inc. seg. avg.	0.538	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	42.6	14.8	Inc. frq. avg.	0.525					

b: az 309.0 el 56.4 pa 83.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -1874.503 412.673 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/bp.W.66.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

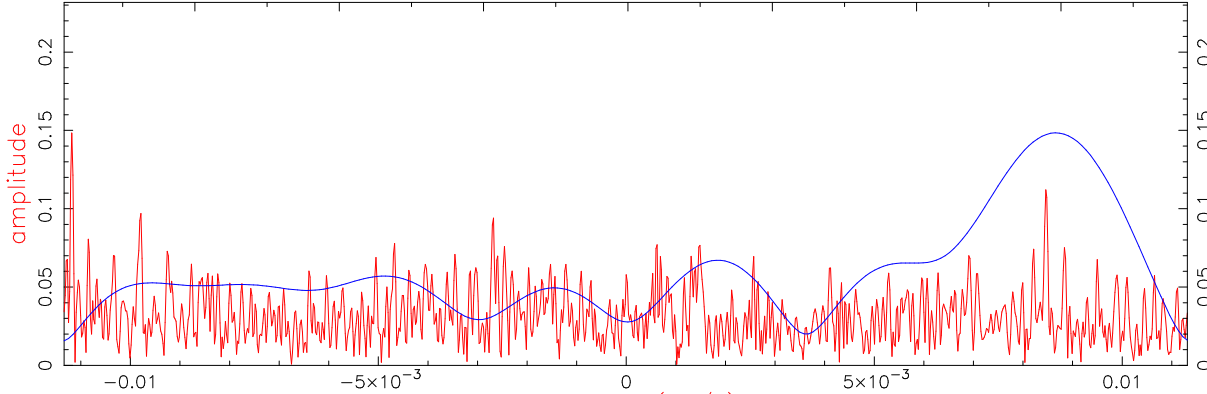
0102+584.1HSTEG, No0128, Bp

EFLSBERG - VLBA_PT, fgroup W, pol RL

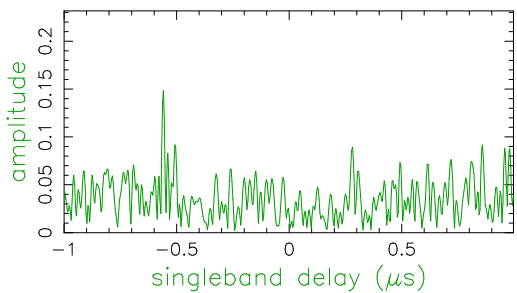
multiband delay (μ s)

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

Fringe quality 0

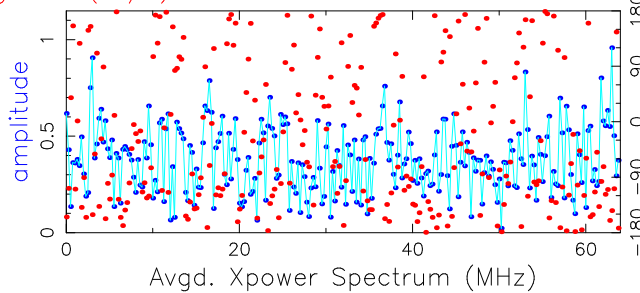


SNR 5.5
Int time 179.778
Amp 0.232
Phase -173.0
PFD 9.9e-01
Delays (us)
SBD -0.559395
MBD 0.005881
Fringe rate (Hz)
-0.964952
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



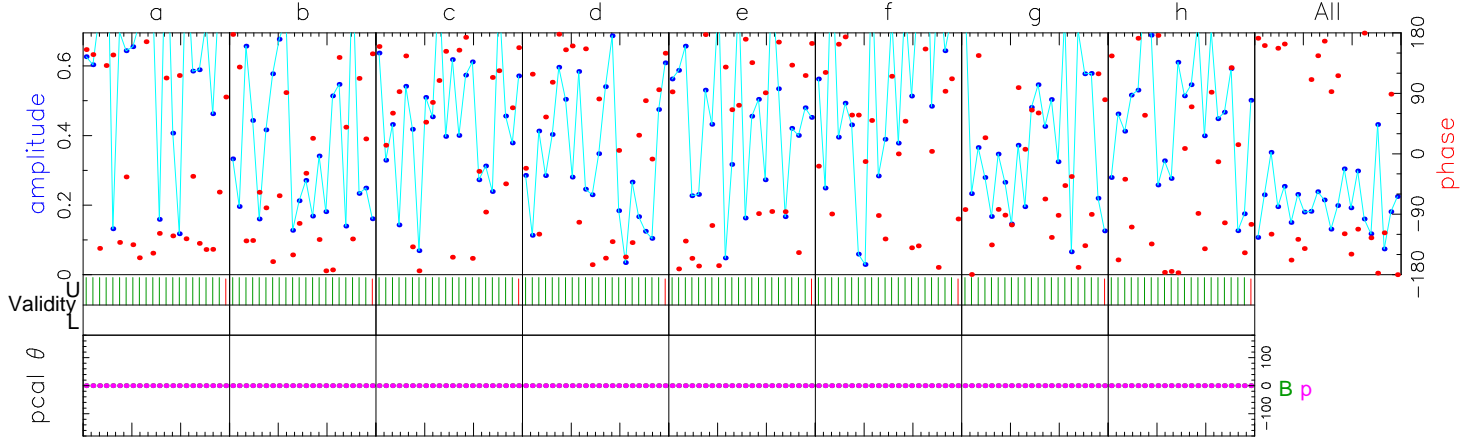
singleband delay (μ s)

delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141443
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-6.84423571747E+03	Apriori delay (usec)	-6.84367909848E+03	Resid mbdelay (usec)	5.88100E-03	+/-	2.0E-04
Sband delay (usec)	-6.84423849323E+03	Apriori clock (usec)	1.0070147E+01	Resid sbdelay (usec)	-5.59395E-01	+/-	1.6E-03
Phase delay (usec)	-6.84367910405E+03	Apriori clockrate (us/s)	-5.9999998E-07	Resid phdelay (usec)	-5.57761E-06	+/-	6.8E-07
Delay rate (us/s)	6.38946491044E-01	Apriori rate (us/s)	6.38957693178E-01	Resid rate (us/s)	-1.12021E-05	+/-	6.5E-09
Total phase (deg)	-8.4	Apriori accel (us/s/s)	5.64866891766E-05	Resid phase (deg)	-173.0	+/-	20.9

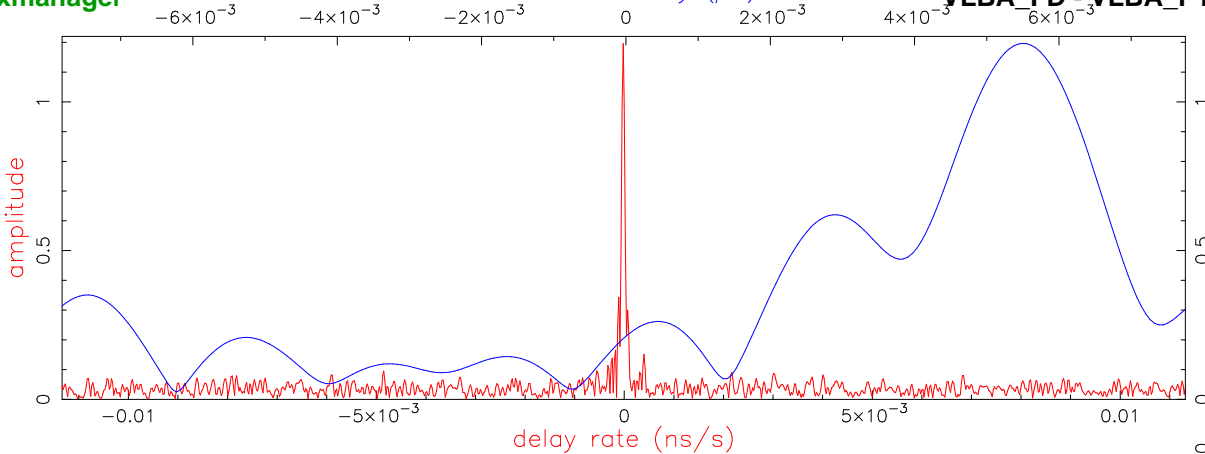
ph/seg (deg)	49.0	Theor.	49.1	Amplitude	0.232 +/- 0.042	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	68.2		85.7	Search (1024X32)	0.147	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	40.4		29.6	Inc. seg. avg.	0.240	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	51.3		51.7	Inc. frq. avg.	0.238	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

B: az 1.1 el 19.0 pa -1.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -6960.614 8238.113 simultaneous interpolator

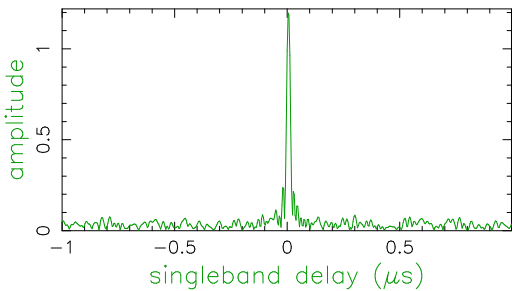
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Bp.W.80.1HSTEG

multiband delay (μ s)

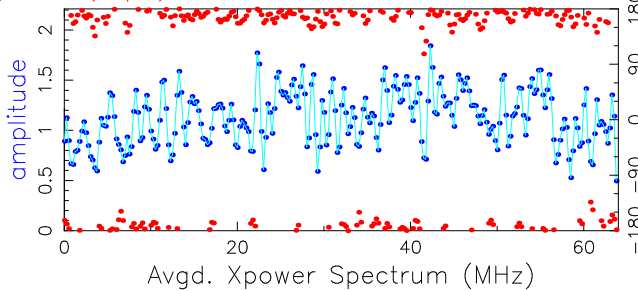
Fringe quality 6



SNR 44.8
Int time 179.980
Amp 1.220
Phase 175.6
PFD 0.0e+00
Delays (us)
SBD 0.005689
MBD 0.005540
Fringe rate (Hz)
-0.001048
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

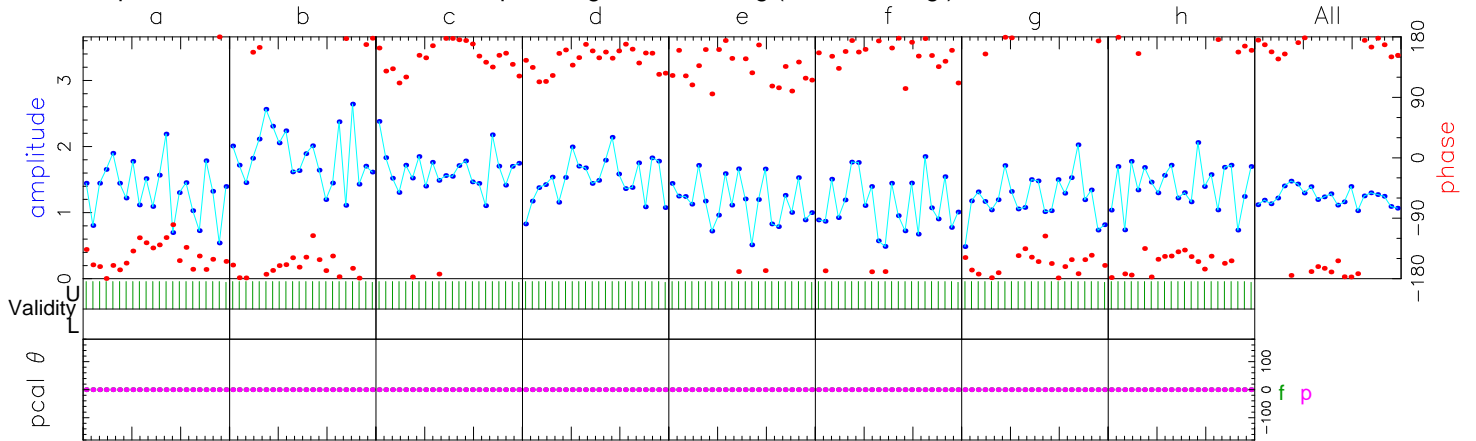


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141448
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



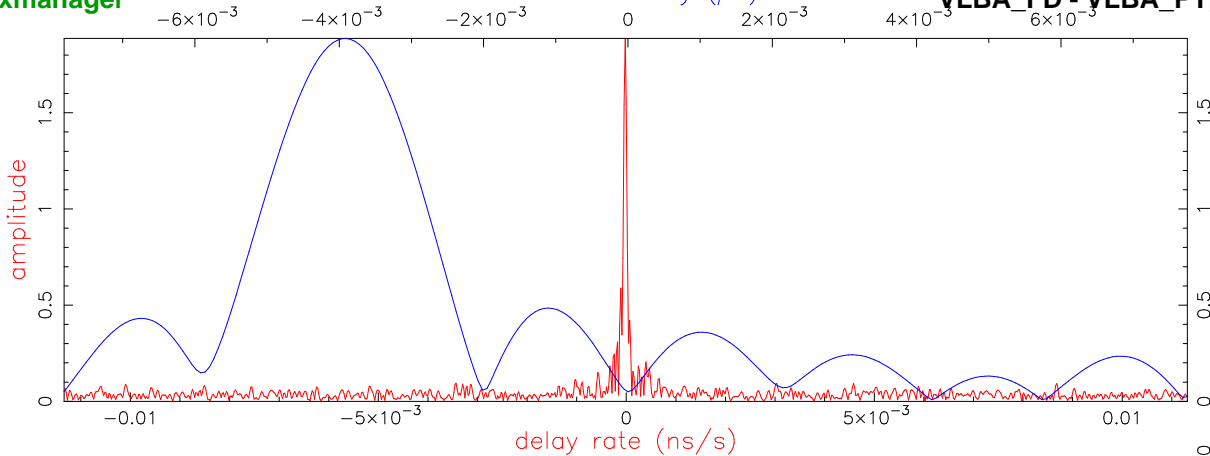
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-147.0	-167.7	153.1	146.1	142.8	160.0	-163.3	-163.9	Phase	175.6
	1.3	1.7	1.5	1.4	1.0	1.1	1.2	1.3	Ampl.	1.3
	258.5	257.7	258.3	258.2	258.9	258.9	258.4	258.8	Sbd box	258.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.47526235883E+03	Apriori delay (usec)	-1.47526789900E+03	Resid mbdelay (usec)	5.54017E-03	+/-	2.4E-05
Sband delay (usec)	-1.47526221000E+03	Apriori clock (usec)	7.7890005E+00	Resid sbdelay (usec)	5.68900E-03	+/-	1.9E-04
Phase delay (usec)	-1.47526789334E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.66411E-06	+/-	8.3E-08
Delay rate (us/s)	-4.34150964563E-02	Apriori rate (us/s)	-4.34150842946E-02	Resid rate (us/s)	-1.21617E-08	+/-	7.9E-10
Total phase (deg)	-119.5	Apriori accel (us/s/s)	2.69119651089E-06	Resid phase (deg)	175.6	+/-	2.6

ph/seg (deg)	RMS 16.1	Theor. 6.0	Amplitude Search (1024X32)	1.220 +/- 0.027	1.140	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	10.1	10.5	Interp.	0.000	1.140	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	29.6	3.6	Inc. seg. avg.	1.236	1.236	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	20.5	6.3	Inc. frq. avg.	1.319	1.319	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

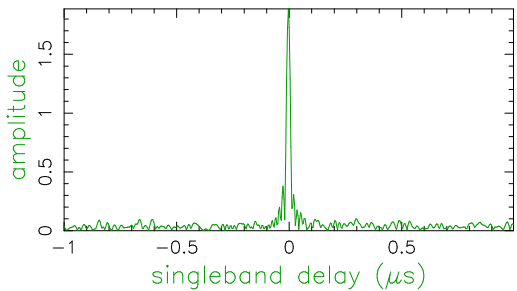
f: az 322.7 el 35.5 pa 88.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 478.533 93.132 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp.W.110.1HSTEG

multiband delay (μ s)

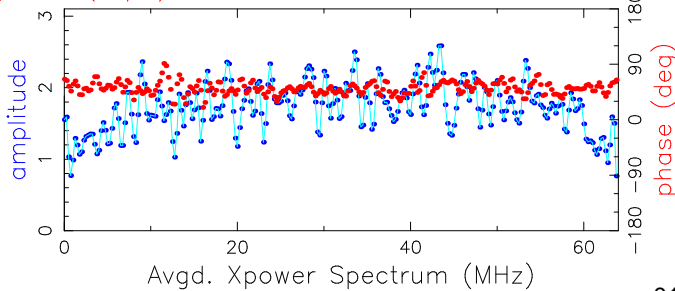


Fringe quality 8

SNR 69.2
Int time 179.980
Amp 1.887
Phase 52.8
PFD 0.0e+00
Delays (us)
SBD -0.003766
MBD -0.003916
Fringe rate (Hz)
-0.001021
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

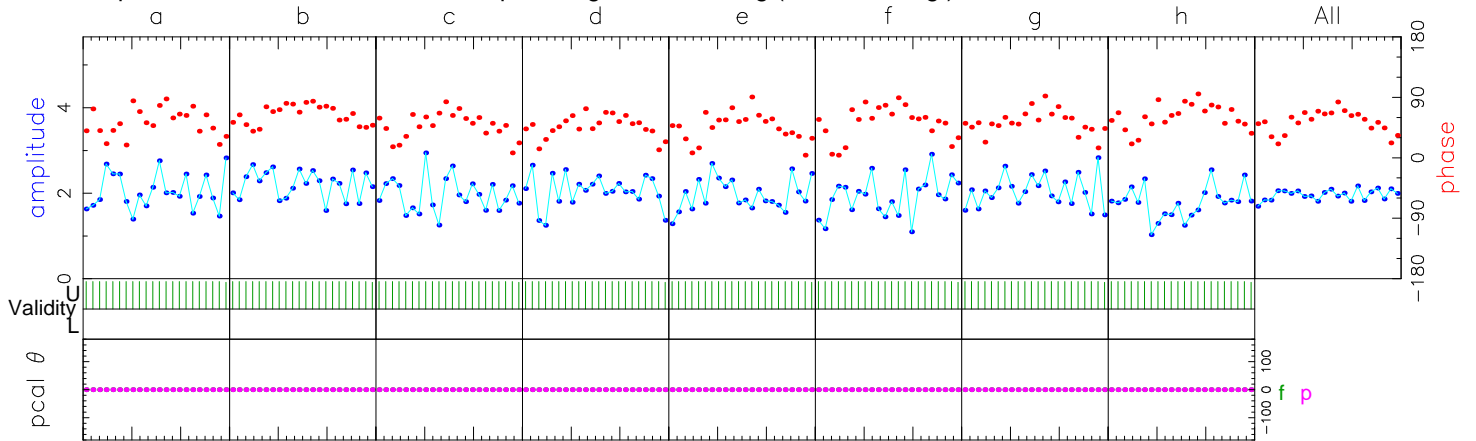


delay rate (ns/s)



Exp. c202a
Yr:day 16383
Start 2020:283
Stop 2020:283
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141450
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	-1.47527181474E+03										
Sband delay (usec)	-1.47527166475E+03										
Phase delay (usec)	-1.47526789730E+03										
Delay rate (us/s)	-4.34150961502E-02										
Total phase (deg)			-242.4								
Apriori delay (usec)					-1.47526789900E+03				Resid mbdelay (usec)	-3.91574E-03	+/- 1.6E-05
Apriori clock (usec)					7.7890005E+00				Resid sbdelay (usec)	-3.76575E-03	+/- 1.2E-04
Apriori clockrate (us/s)					0.0000000E+00				Resid phdelay (usec)	1.70165E-06	+/- 5.3E-08
Apriori rate (us/s)					-4.34150842946E-02				Resid rate (us/s)	-1.18556E-08	+/- 5.1E-10
Apriori accel (us/s/s)					2.69119651089E-06				Resid phase (deg)	52.8	+/- 1.7
RMS	16.2	3.9			1.887 +/- 0.027				PCal mode: MANUAL, MANUAL		
Theor.	6.8								PCal rate: 0.000E+00, 0.000E+00 (us/s)		
Amplitude					1.809				PC period (AP's) 5, 5		
Search (1024X32)					0.000				sb window (us)	-1.000	1.000
Interp.					1.960				Bits/sample: 2x2	-0.008	0.008
Inc. seg. avg.					1.895				SampCntNorm: enabled	-0.011	0.011
Inc. frq. avg.									Sample rate(MISamp/s): 128	0.00	0.00
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
f: az 322.7 el 35.5 pa 88.2									ion window (TEC)	0.00	0.00
p: az 320.8 el 40.5 pa 88.5											
u,v (fr/asec) 478.533 93.132											
Control file: cf_1234_gmva											
Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp..1HSTEG											
Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp.W.134.1HSTEG											

simultaneous interpolator

Mk4/DiFX fourfit 3.21 rev 2937

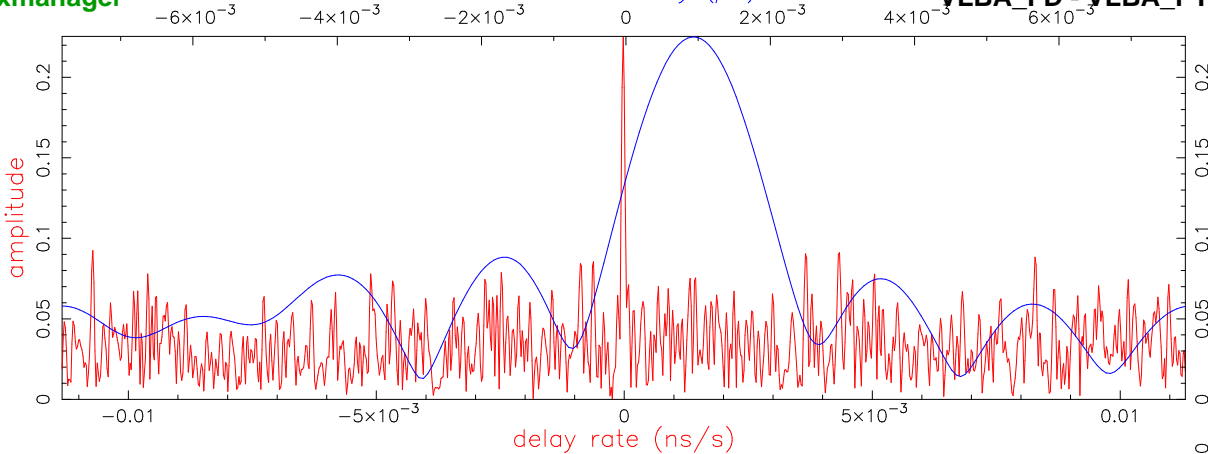
fxmanager

0102+584.1HSTEG, No0128, fp

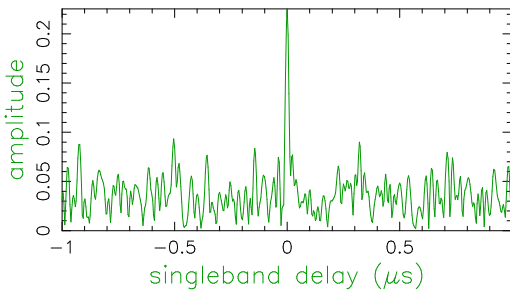
VLBA_FD - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

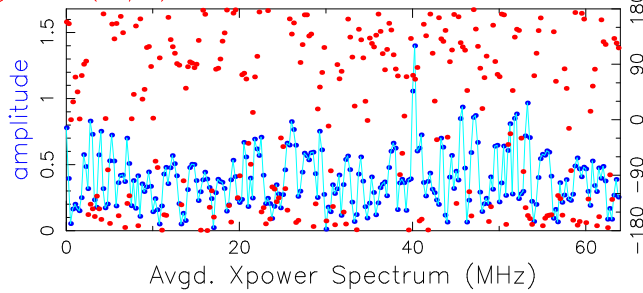
Fringe quality 9



SNR 8.3
Int time 179.980
Amp 0.225
Phase 134.7
PFD 2.4e-08
Delays (us)
SBD -0.000453
MBD 0.000931
Fringe rate (Hz)
-0.001378
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

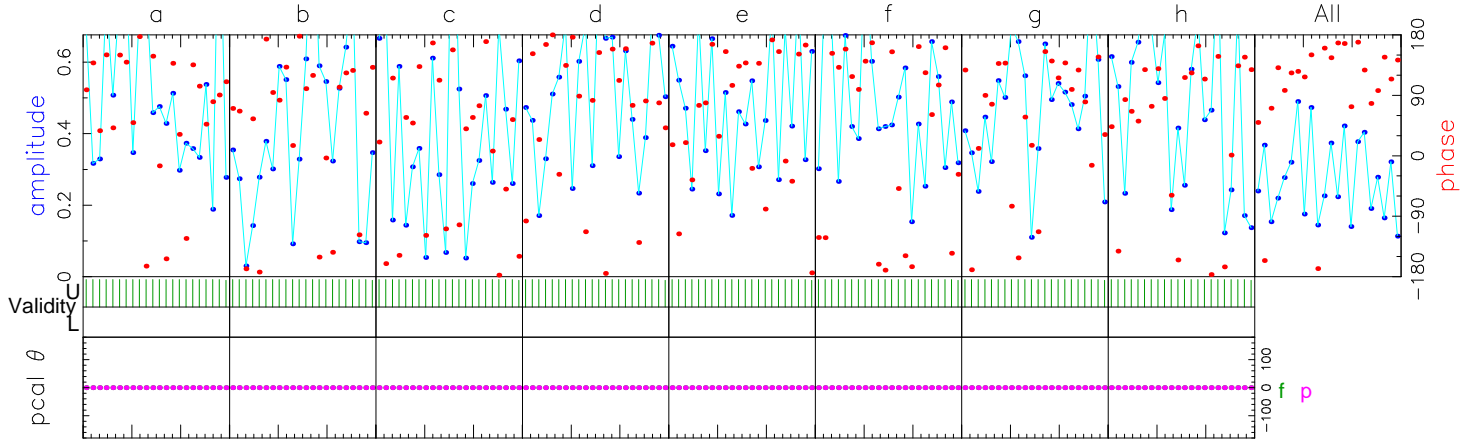


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141452
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
p	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.47526696818E+03				-1.47526789900E+03				9.30825E-04	+/- 1.3E-04
Sband delay (usec)	-1.47526835250E+03				7.7890005E+00				-4.53500E-04	+/- 1.0E-03
Phase delay (usec)	-1.47526789466E+03				0.0000000E+00				4.34420E-06	+/- 4.5E-07
Delay rate (us/s)	-4.34151002967E-02				-4.34150842946E-02				-1.60021E-08	+/- 4.3E-09
Total phase (deg)			-160.5		2.69119651089E-06				134.7	+/- 13.9
	RMS	Theor.	Amplitude	0.225 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	39.8	32.5	Search (1024X32)	0.222	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	54.3	56.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	21.0	19.6	Inc. seg. avg.	0.239	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	30.1	34.2	Inc. frq. avg.	0.224	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

f: az 322.7 el 35.5 pa 88.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 478.533 93.132 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp.W.148.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

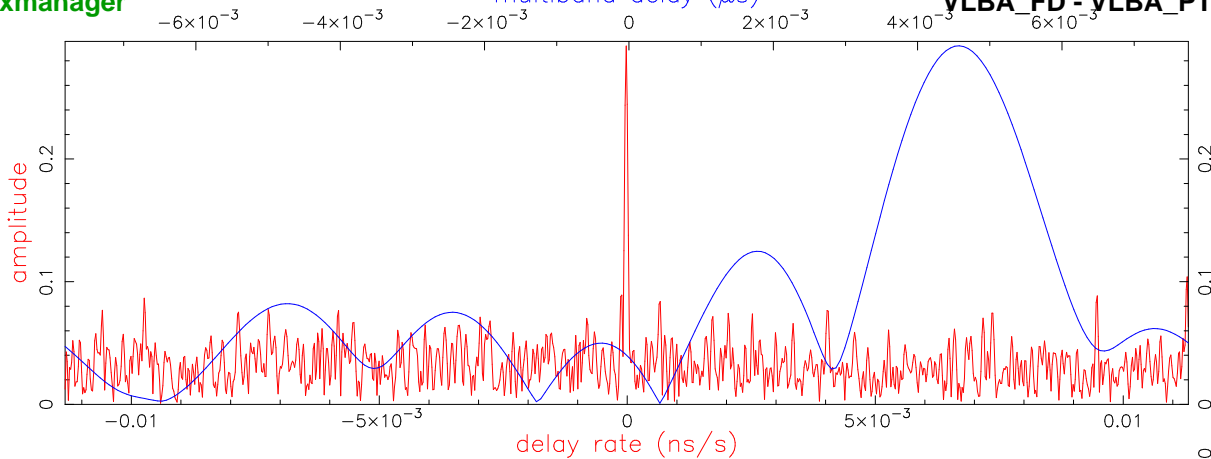
fxmanager

0102+584.1HSTEG, No0128, fp

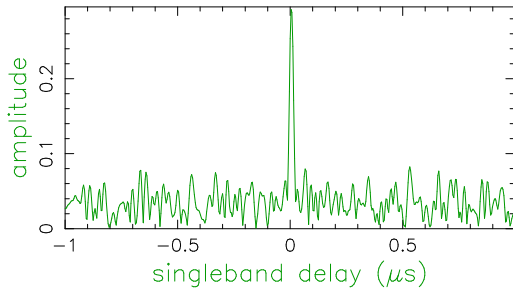
VLBA_FD - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

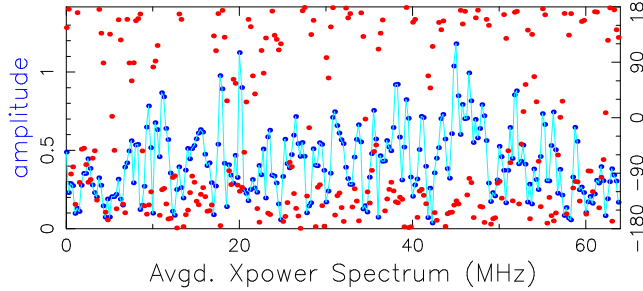
Fringe quality 9



SNR 10.9
 Int time 179.980
 Amp 0.296
 Phase -143.0
 PFD 4.4e-19
 Delays (us)
 SBD 0.005511
 MBD 0.004607
 Fringe rate (Hz)
 -0.001469
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

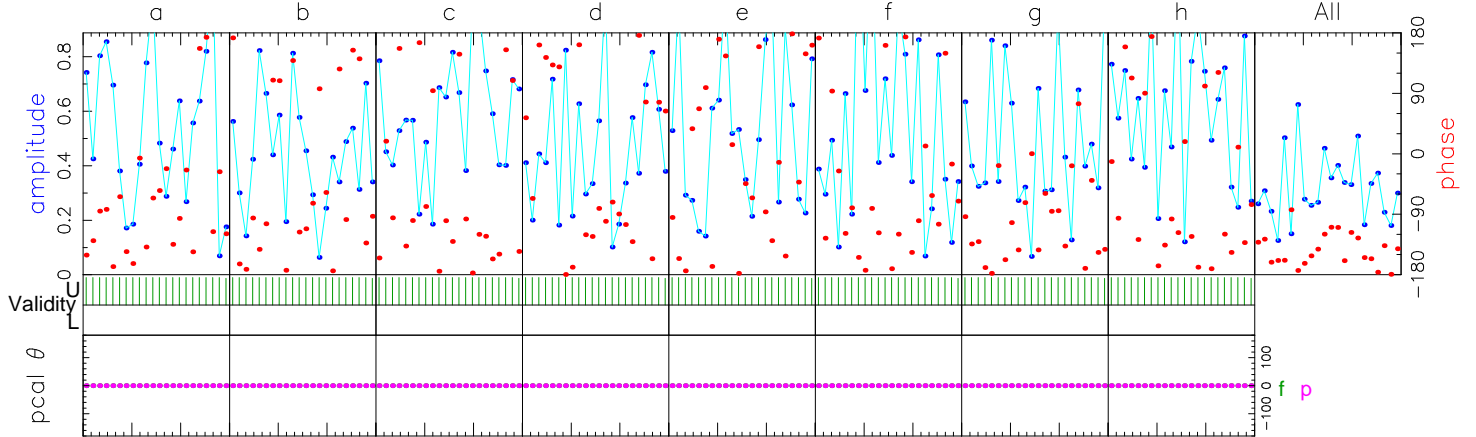


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141453
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

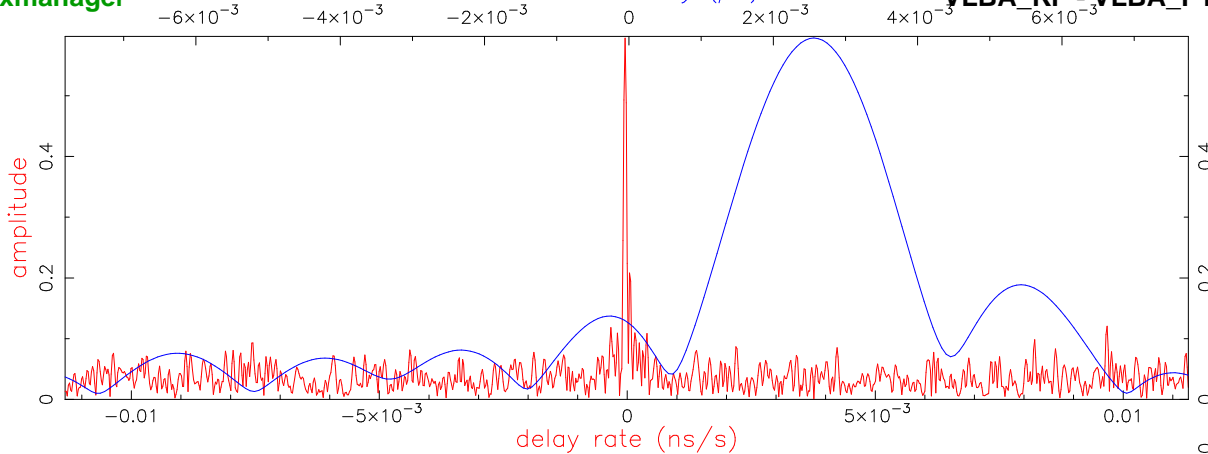


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-114.7	-157.2	-148.8	-172.9	-160.4	-134.9	-123.8	-150.5	Phase	-143.0
	0.4	0.3	0.4	0.2	0.3	0.4	0.3	0.3	Ampl.	0.3
	258.6	101.3	258.1	260.4	259.7	258.9	257.3	258.9	Sbd box	258.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
fp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.47526329180E+03		Apriori delay (usec)		-1.47526789900E+03		Resid mbdelay (usec)		4.60720E-03	+/- 1.0E-04
Sband delay (usec)	-1.47526238750E+03		Apriori clock (usec)		7.7890005E+00		Resid sbdelay (usec)		5.51150E-03	+/- 7.9E-04
Phase delay (usec)	-1.47526790361E+03		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.61071E-06	+/- 3.4E-07
Delay rate (us/s)	-4.34151013425E-02		Apriori rate (us/s)		-4.34150842946E-02		Resid rate (us/s)		-1.70479E-08	+/- 3.3E-09
Total phase (deg)			Apriori accel (us/s/s)		2.69119651089E-06		Resid phase (deg)		-143.0	+/- 10.6

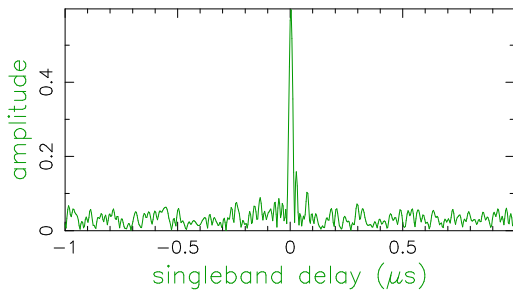
RMS Theor. Amplitude 0.296 +/- 0.027
 ph/seg (deg) 24.3 24.8 Search (1024X32) 0.286 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.0 43.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 21.3 14.9 Inc. seg. avg. 0.291 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.8 26.1 Inc. frq. avg. 0.296 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 322.7 el 35.5 pa 88.2 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 478.533 93.132 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/fp.W.161.1HSTEG

multiband delay (μ s)

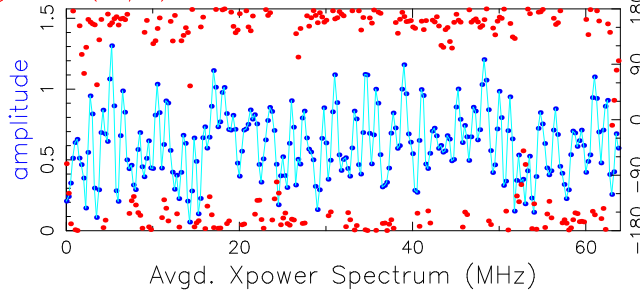
Fringe quality 9



SNR 21.9
Int time 179.859
Amp 0.598
Phase -179.6
PFD 0.0e+00
Delays (us)
SBD 0.003029
MBD 0.002545
Fringe rate (Hz)
-0.003024
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

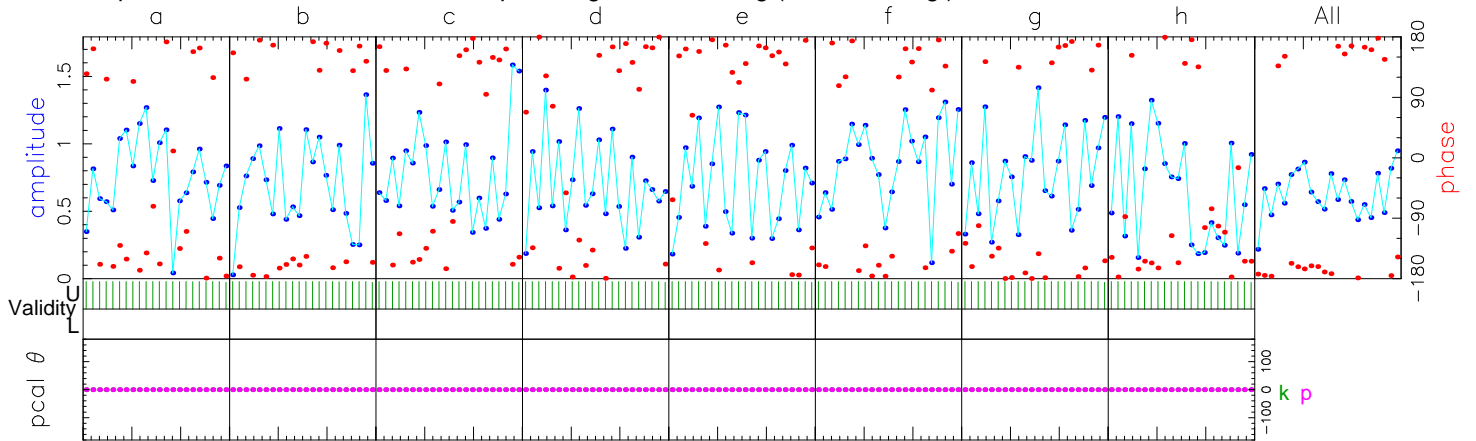


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141455
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-169.6	176.5	-176.0	174.2	163.0	176.5	-176.8	-163.0	Phase	-179.6
	0.6	0.6	0.6	0.5	0.6	0.7	0.7	0.5	Ampl.	0.6
	258.0	258.1	257.6	258.0	257.1	257.8	257.3	258.3	Sbd box	257.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-9.16765912245E-01	Apriori delay (usec)	-9.19310875445E-01	Resid mbdelay (usec)	2.54496E-03	+/-	5.0E-05
Sband delay (usec)	-9.16281375445E-01	Apriori clock (usec)	2.7907372E-01	Resid sbdelay (usec)	3.02950E-03	+/-	3.9E-04
Phase delay (usec)	-9.19316665804E-01	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-5.79036E-06	+/-	1.7E-07
Delay rate (us/s)	7.60246320991E-04	Apriori rate (us/s)	7.60281431438E-04	Resid rate (us/s)	-3.51104E-08	+/-	1.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-3.29232441059E-06	Resid phase (deg)	-179.6	+/-	5.2

ph/seg (deg)	19.8	Theor.	12.3	Amplitude	0.598 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	28.7		21.4	Search (1024X32)	0.573	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	11.3		7.4	Inc. seg. avg.	0.620	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	10.1		12.9	Inc. frq. avg.	0.598	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

k: az 322.1 el 40.5 pa 93.4 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -10.861 -580.785 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp.W.171.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

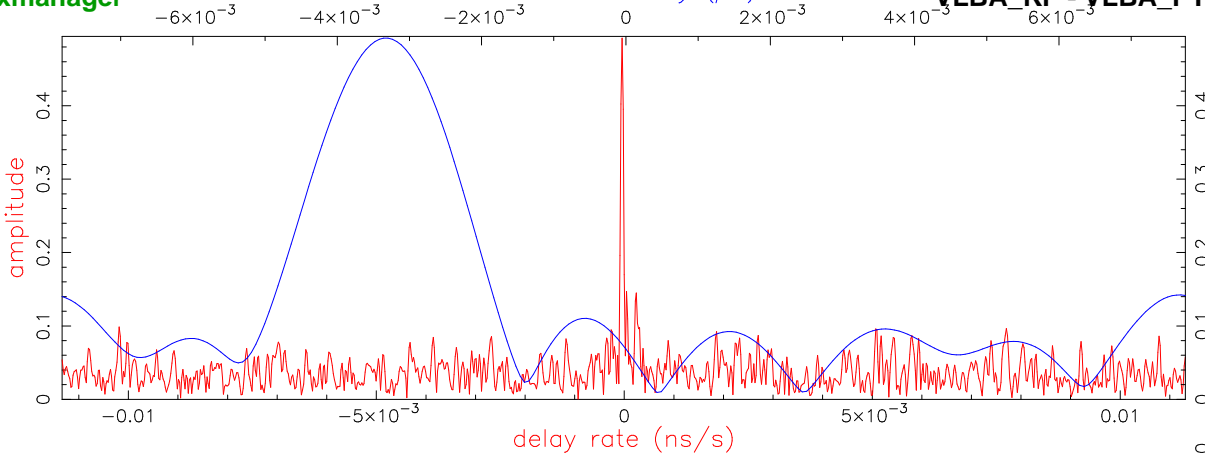
fxmanager

0102+584.1HSTEG, No0128, kp

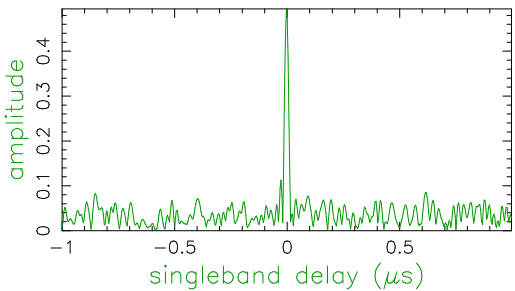
VLBA_KP - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

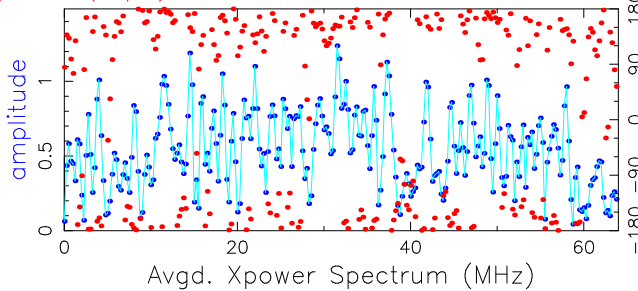
Fringe quality 9



SNR 18.1
 Int time 179.859
 Amp 0.495
 Phase 171.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002974
 MBD -0.003306
 Fringe rate (Hz)
 -0.002877
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

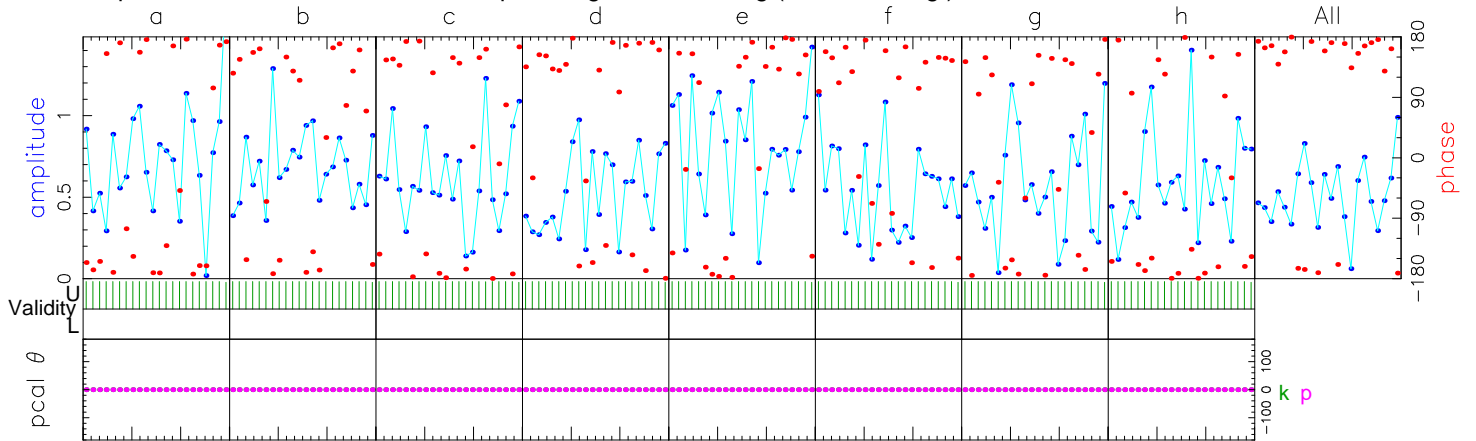


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141457
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-174.6	165.5	165.5	176.3	168.6	151.0	170.9	-173.2	Phase	171.9
	0.6	0.5	0.5	0.4	0.7	0.4	0.4	0.5	Ampl.	0.5
	256.0	255.4	255.7	256.9	255.9	256.8	256.4	257.3	Sbd box	256.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-9.22616912245E-01		Apriori delay (usec)		-9.19310875445E-01		Resid mbdelay (usec)		-3.30604E-03	+/- 6.0E-05
Sband delay (usec)	-9.22285375445E-01		Apriori clock (usec)		2.7907372E-01		Resid sbdelay (usec)		-2.97450E-03	+/- 4.7E-04
Phase delay (usec)	-9.19305333322E-01		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		5.54212E-06	+/- 2.0E-07
Delay rate (us/s)	7.60248027198E-04		Apriori rate (us/s)		7.60281431438E-04		Resid rate (us/s)		-3.34042E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.29232441059E-06		Resid phase (deg)		171.9	+/- 6.3

	RMS	Theor.	Amplitude	0.495 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	18.8	14.8	Search (1024X32)	0.467	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/seg (%)	39.9	25.9	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	12.6	8.9	Inc. seg. avg.	0.501	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	19.0	15.6	Inc. frq. avg.	0.495					

k: az 322.1 el 40.5 pa 93.4 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -10.861 -580.785 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp.W.183.1HSTEG

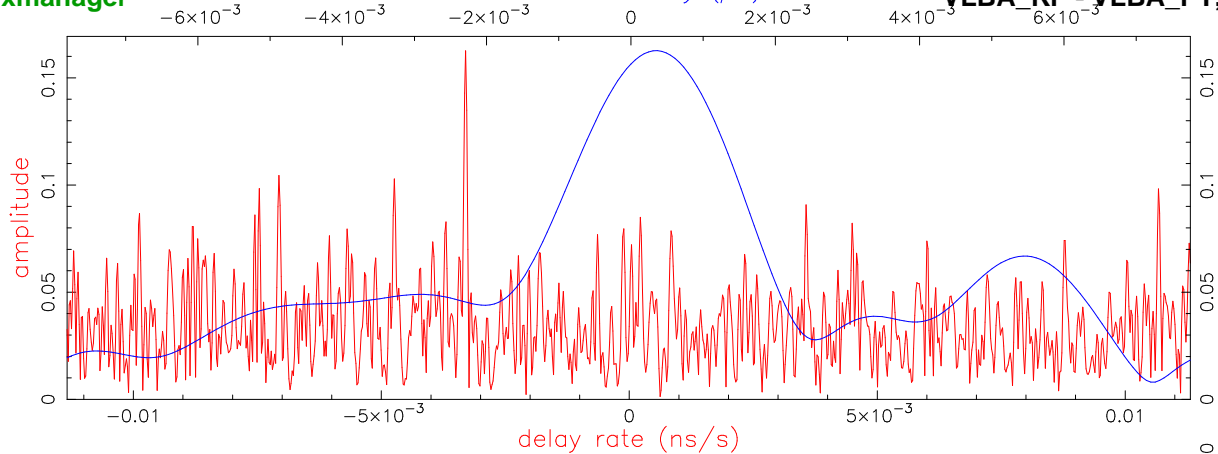
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, kp

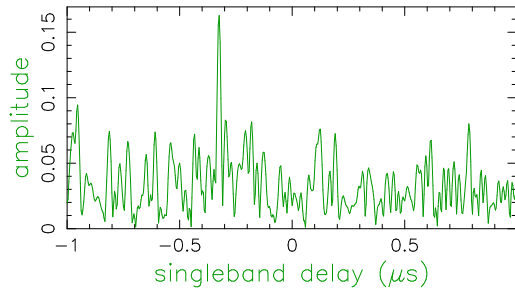
VLBA_KP - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

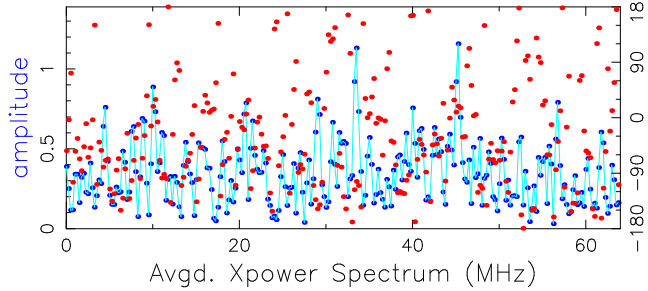


Fringe quality 0

SNR 6.0
 Int time 179.859
 Amp 0.169
 Phase 155.5
 PFD 2.3e-01
 Delays (us)
 SBD -0.325149
 MBD 0.000325
 Fringe rate (Hz)
 -0.284416
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

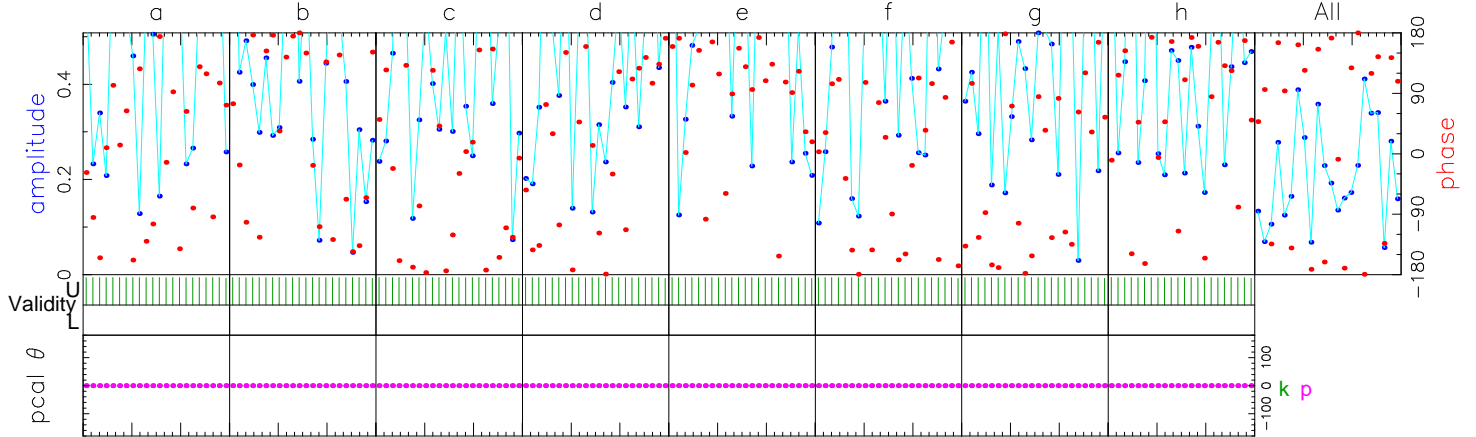


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141459
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.24711099202E+00									
Sband delay (usec)	-1.24445987545E+00									
Phase delay (usec)	-9.19305861537E-01									
Delay rate (us/s)	7.56979640792E-04									
Total phase (deg)			-2.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
PC period (AP's) 5, 5										
SampCntNorm: enabled										
nlags: 256 t_cohere infinite										
simultaneous interpolator										

ph/seg (deg) 56.9 44.8 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.4 78.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.1 27.0 Inc. seg. avg. 0.169 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 51.2 47.2 Inc. frq. avg. 0.165 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 322.1 el 40.5 pa 93.4 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -10.861 -580.785 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp.W.200.1HSTEG

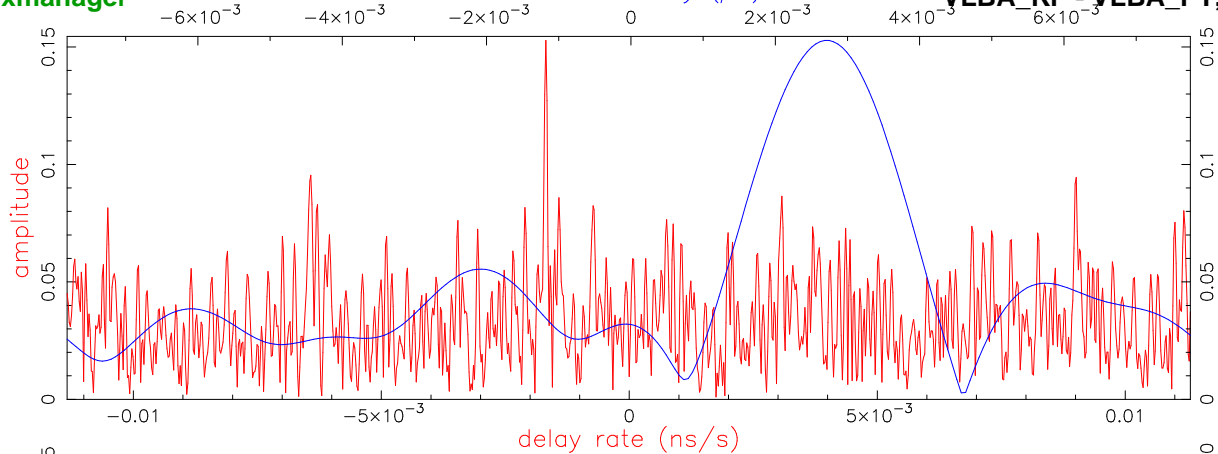
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, kp

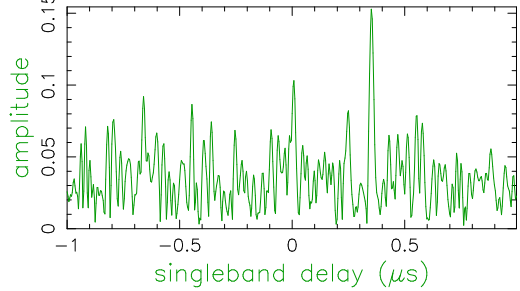
VLBA_KP - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

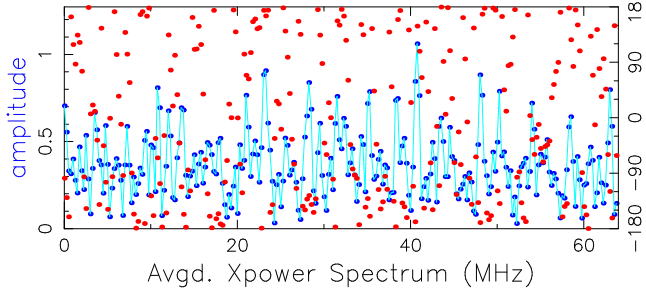


Fringe quality 0

SNR 5.6
 Int time 179.859
 Amp 0.155
 Phase -106.9
 PFD 9.1e-01
 Delays (us)
 SBD 0.352214
 MBD 0.002723
 Fringe rate (Hz)
 -0.145226
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

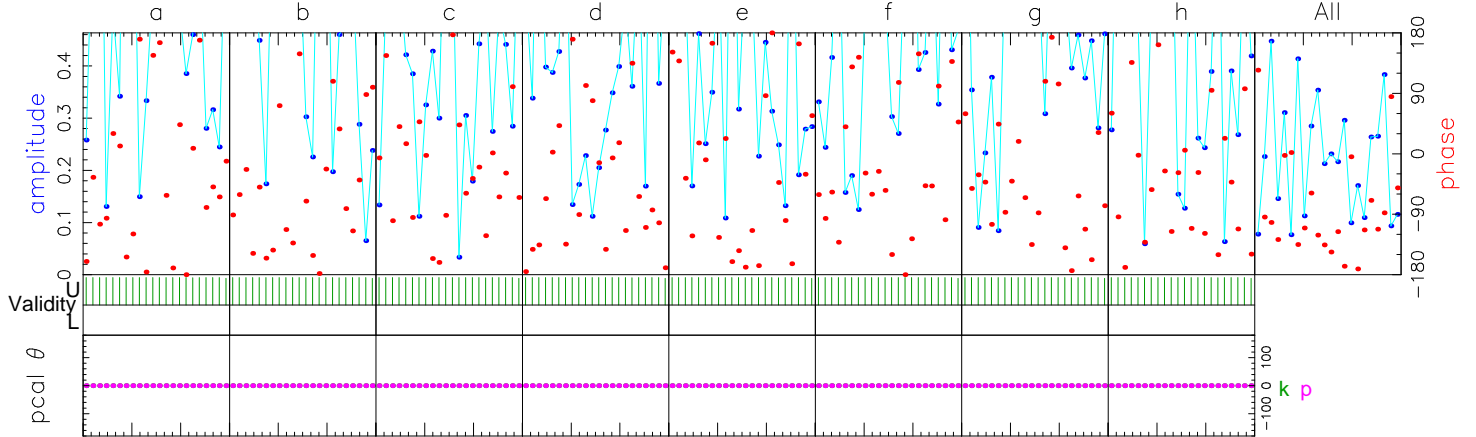


delay rate (ns/s)



Exp. c202a
 Yr:day 16383
 Start 2021:007:125342
 Stop 2021:010:141501
 FRT 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
kp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		-5.72837680084E-01								
Sband delay (usec)		-5.67097375445E-01								
Phase delay (usec)		-9.19314322478E-01								
Delay rate (us/s)		7.58595502192E-04								
Total phase (deg)			-264.9							
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										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.155 +/- 0.028										
0.151										
0.000										
0.167										
0.150										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

k: az 322.1 el 40.5 pa 93.4 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -10.861 -580.785 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/kp.W.218.1HSTEG

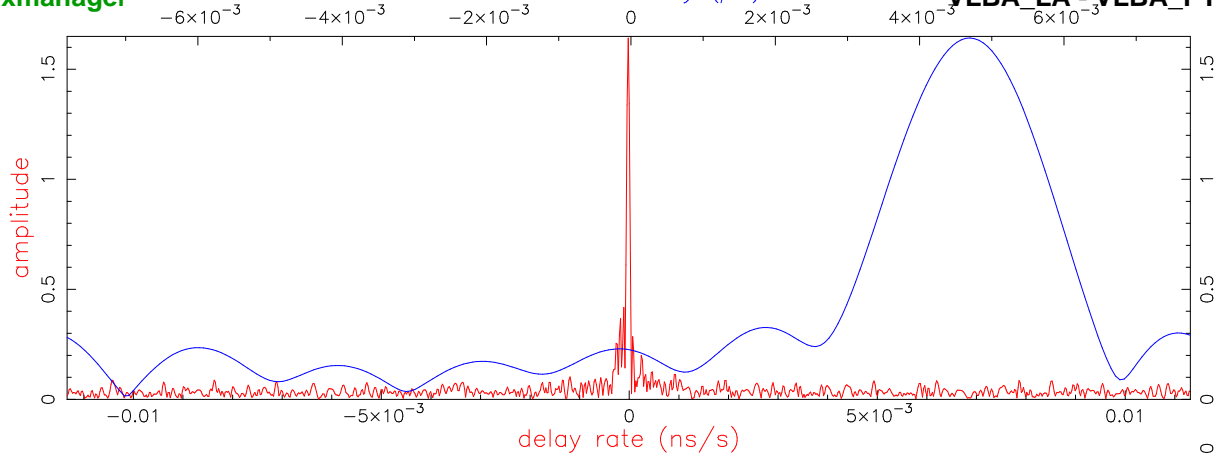
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, lp

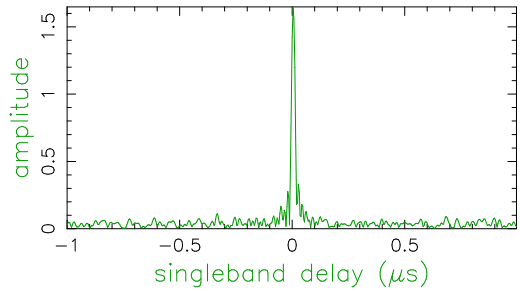
VLBA_LA - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

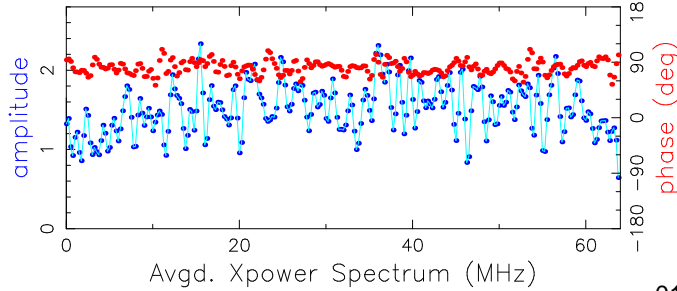


Fringe quality 7

SNR 60.5
 Int time 179.980
 Amp 1.649
 Phase 82.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.004781
 MBD 0.004718
 Fringe rate (Hz) -0.001455
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

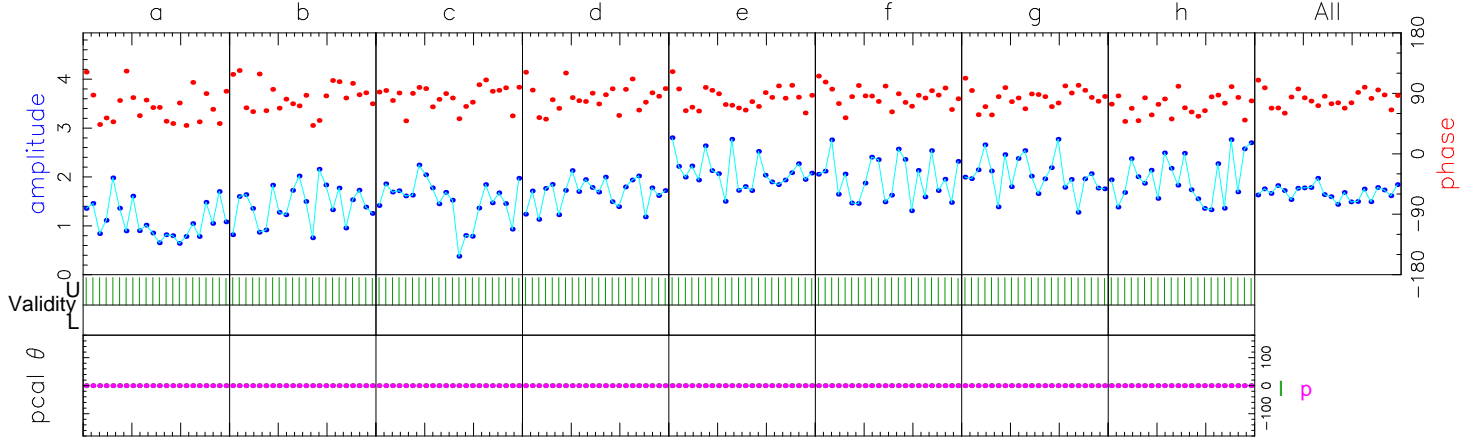


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141457
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

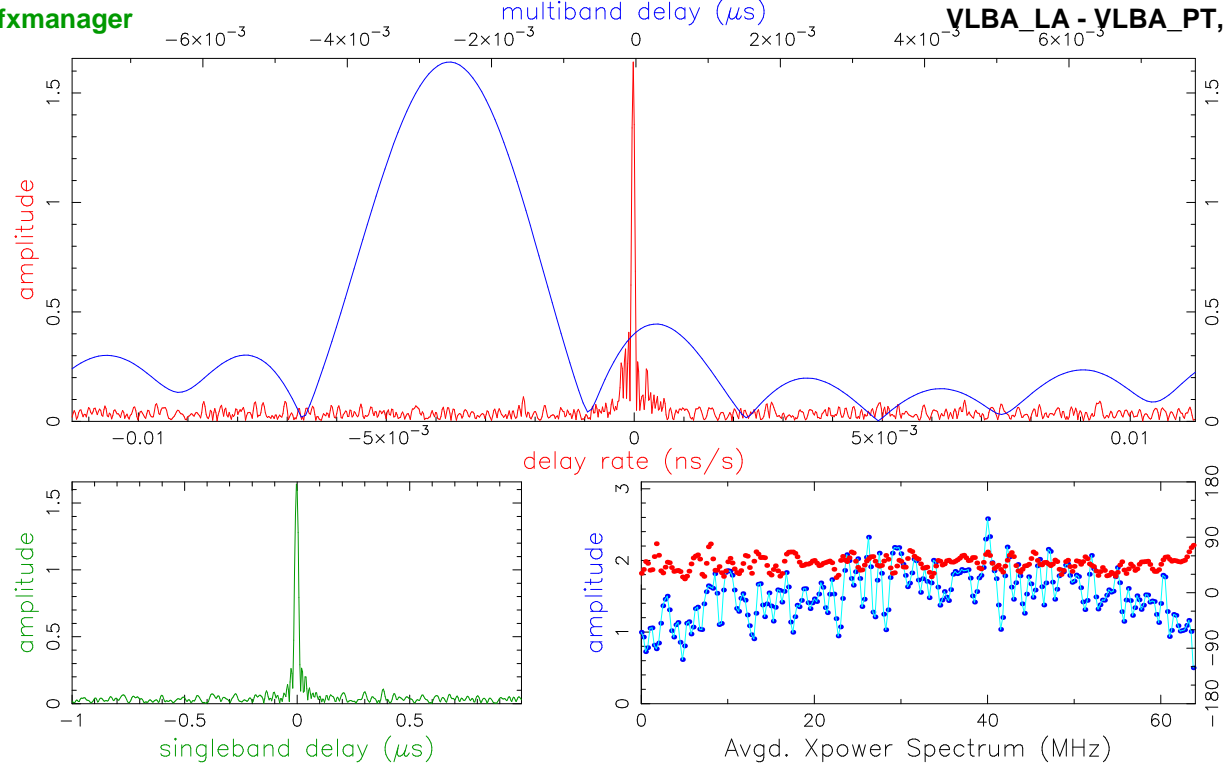


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	4.23620684366E+01	Apriori delay (usec)		4.23573500800E+01	Resid mbdelay (usec)		4.71836E-03	+/-	1.8E-05
Sband delay (usec)	4.23621305800E+01	Apriori clock (usec)		-4.3854427E-01	Resid sbdelay (usec)		4.78050E-03	+/-	1.4E-04
Phase delay (usec)	4.23573527256E+01	Apriori clockrate (us/s)		-5.0000000E-07	Resid phdelay (usec)		2.64554E-06	+/-	6.1E-08
Delay rate (us/s)	3.05782461399E-03	Apriori rate (us/s)		3.05784150317E-03	Resid rate (us/s)		-1.68892E-08	+/-	5.9E-10
Total phase (deg)	131.0	Apriori accel (us/s/s)		1.79492861891E-06	Resid phase (deg)		82.0	+/-	1.9

ph/seg (deg)	RMS 12.5	Theor. 4.4	Amplitude Search (1024X32)	1.649 +/- 0.027	1.602	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
amp/seg (%)	8.3	7.8	Interp.	0.000	1.677	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	6.7	2.7	Inc. seg. avg.	1.677	1.647	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	20.5	4.7	Inc. frq. avg.	1.647	1.647	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

l: az 320.1 el 40.7 pa 86.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -32.172 327.583 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp.W.184.1HSTEG

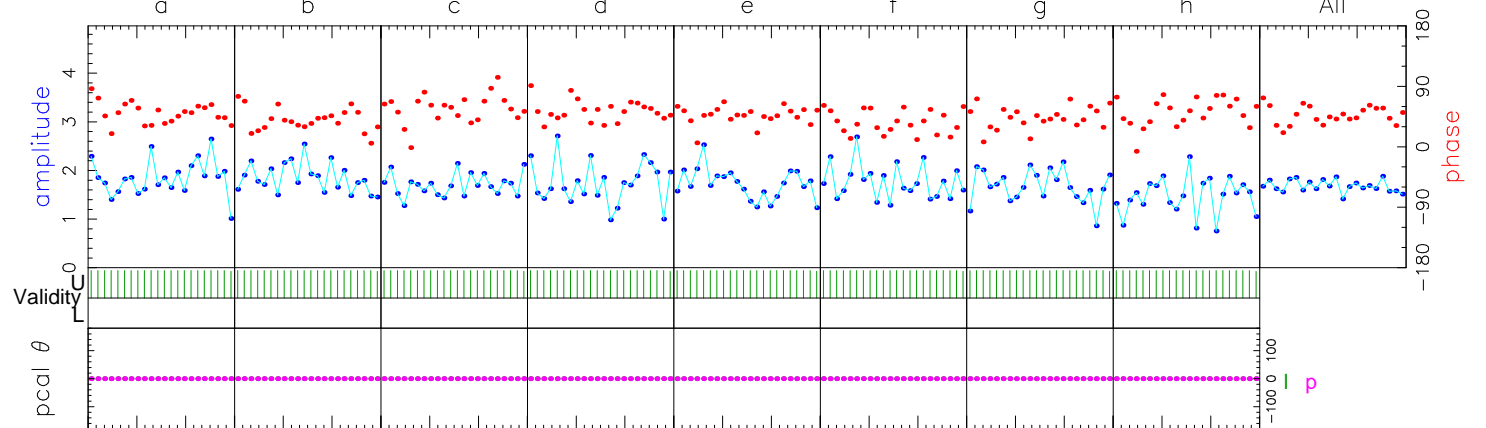


Fringe quality 8

SNR 60.8
Int time 179.980
Amp 1.658
Phase 47.3
PFD 0.0e+00
Delays (us)
SBD -0.002577
MBD -0.002556
Fringe rate (Hz)
-0.001489
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141459
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		4.23547943741E+01				4.23573500800E+01			Resid mbdelay (usec)	-2.55571E-03 +/- 1.8E-05
Sband delay (usec)		4.23547728300E+01				-4.3854427E-01			Resid sbdelay (usec)	-2.57725E-03 +/- 1.4E-04
Phase delay (usec)		4.23573516046E+01				-5.0000000E-07			Resid phdelay (usec)	1.52456E-06 +/- 6.1E-08
Delay rate (us/s)		3.05782422003E-03				3.05784150317E-03			Resid rate (us/s)	-1.72831E-08 +/- 5.8E-10
Total phase (deg)			96.2			1.79492861891E-06			Resid phase (deg)	47.3 +/- 1.9

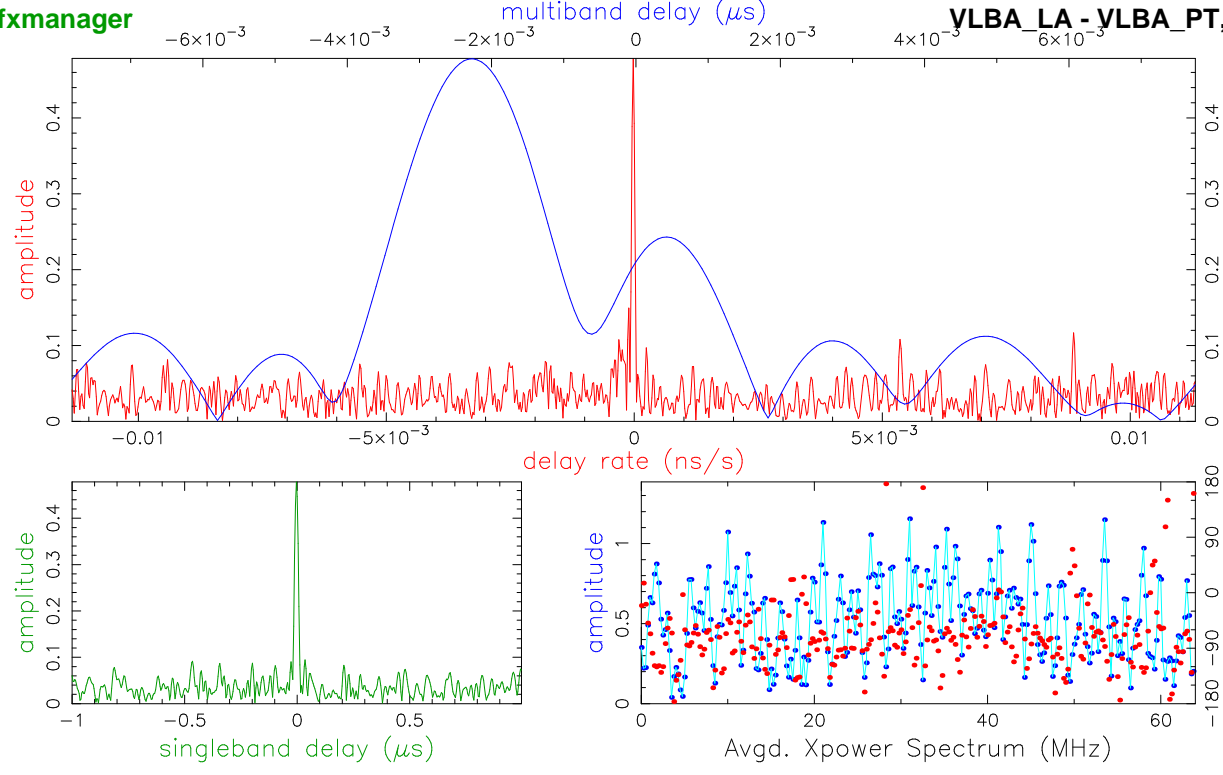
ph/seg (deg) 12.9 4.4 Search (1024X32) 1.612 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 7.5 7.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.7 2.7 Inc. seg. avg. 1.678 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 7.2 4.6 Inc. frq. avg. 1.651 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 320.1 el 40.7 pa 86.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -32.172 327.583 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp.W.199.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, lp

VLBA_LA - VLBA_PT, fgroup W, pol LR

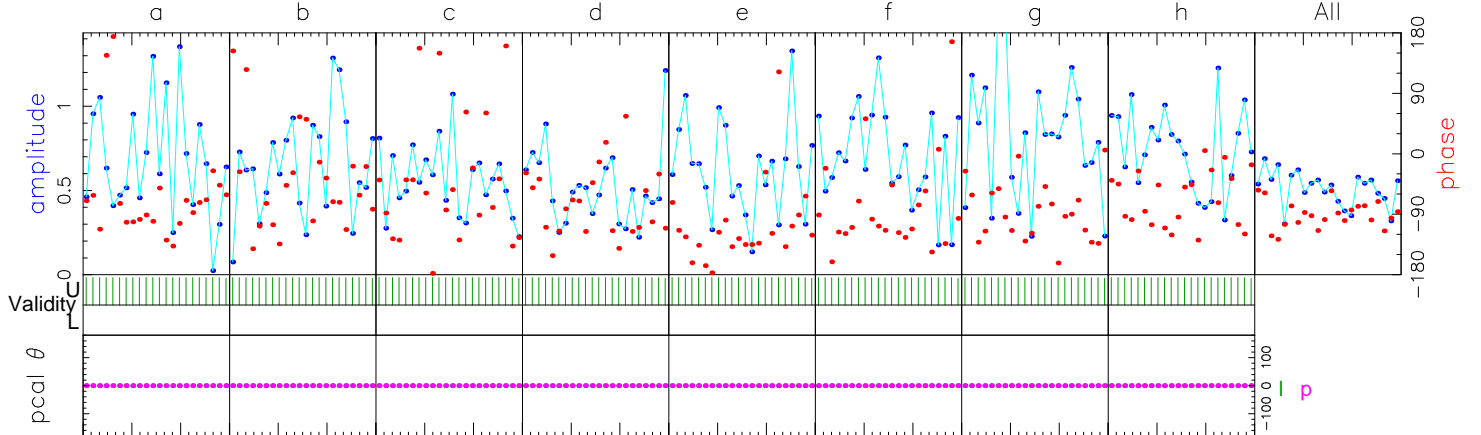


Fringe quality 9

SNR 17.6
 Int time 179.980
 Amp 0.479
 Phase -89.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.003435
 MBD -0.002264
 Fringe rate (Hz)
 -0.001828
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

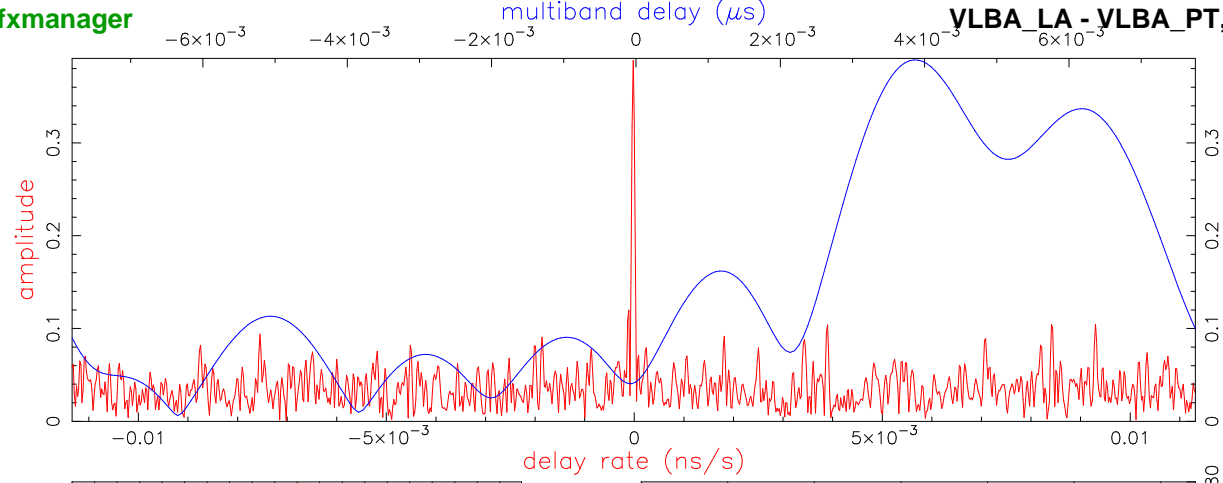
Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141500
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

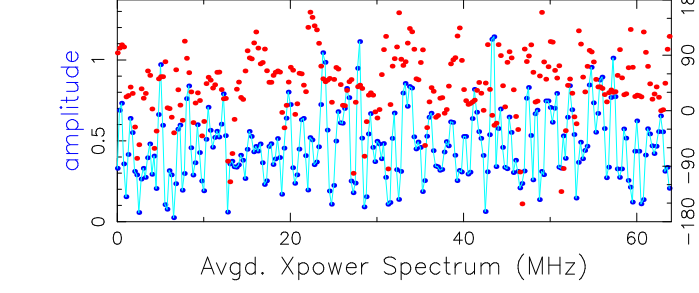
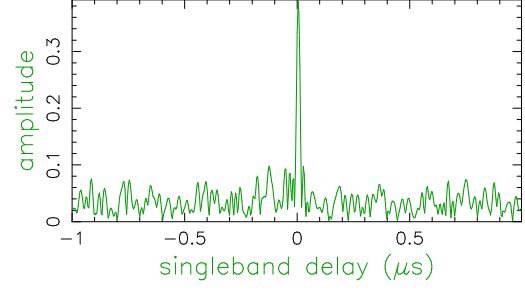


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-93.3	-68.4	-83.1	-77.3	-119.8	-102.9	-90.3	-73.7	Phase	-89.9
	0.6	0.4	0.2	0.4	0.5	0.6	0.7	0.6	Ampl.	0.5
	255.8	256.7	74.0	256.2	256.2	256.4	256.7	256.7	Sbd box	256.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	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	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.23550865616E+01		Apriori delay (usec)		4.23573500800E+01		Resid mbdelay (usec)		-2.26352E-03	+/- 6.2E-05
Sband delay (usec)	4.23539150800E+01		Apriori clock (usec)		-4.3854427E-01		Resid sbdelay (usec)		-3.43500E-03	+/- 4.9E-04
Phase delay (usec)	4.23573471820E+01		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-2.89802E-06	+/- 2.1E-07
Delay rate (us/s)	3.05782028470E-03		Apriori rate (us/s)		3.05784150317E-03		Resid rate (us/s)		-2.12185E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		1.79492861891E-06		Resid phase (deg)		-89.9	+/- 6.5

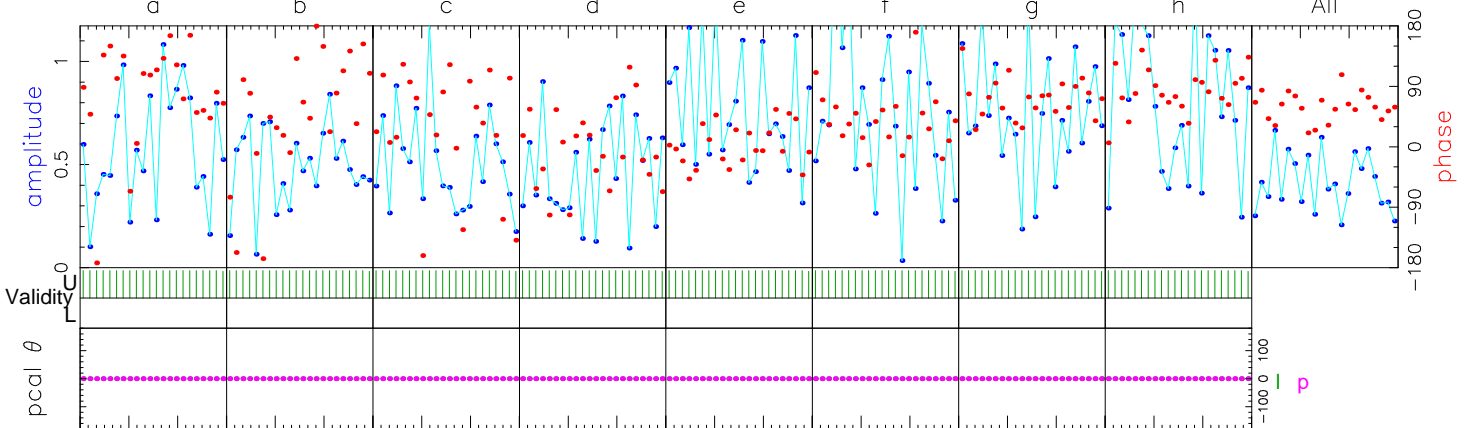
ph/seg (deg) 19.8 15.3 Search (1024X32) 0.479 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 22.1 26.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.3 9.2 Inc. seg. avg. 0.493 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.9 16.1 Inc. frq. avg. 0.490 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 320.1 el 40.7 pa 86.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -32.172 327.583 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp.W.215.1HSTEG



Fringe quality 7
SNR 14.3
Int time 179.980
Amp 0.391
Phase 59.0
PFD 3.4e-38
Delays (us)
SBD 0.004781
MBD 0.003915
Fringe rate (Hz) -0.001617
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141502
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
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)		4.23612648741E+01				4.23573500800E+01			3.91479E-03	+/- 7.6E-05
Sband delay (usec)		4.23621310800E+01				-4.3854427E-01			4.78100E-03	+/- 6.0E-04
Phase delay (usec)		4.23573519815E+01				-5.0000000E-07			1.90142E-06	+/- 2.6E-07
Delay rate (us/s)		3.05782272781E-03				3.05784150317E-03			-1.87754E-08	+/- 2.5E-09
Total phase (deg)			107.9			1.79492861891E-06			59.0	+/- 8.0
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										
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)	21.0	18.7								
amp/seg (%)	34.5	32.7								
ph/frq (deg)	47.2	11.3								
amp/frq (%)	54.0	19.7								
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.391 +/- 0.027										
0.387										
0.000										
0.394										
0.487										
PCal mode: MANUAL, MANUAL										
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
l: az 320.1 el 40.7 pa 86.3										
p: az 320.8 el 40.5 pa 88.5										
u,v (fr/asec) -32.172 327.583										
Control file: cf_1234_gmva										
Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp..1HSTEG										
Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/lp.W.232.1HSTEG										

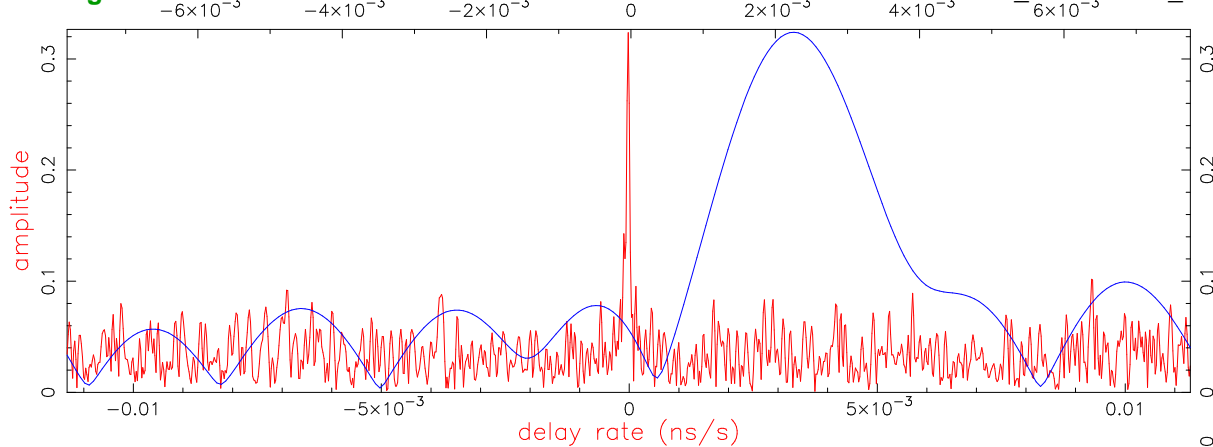
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, mp

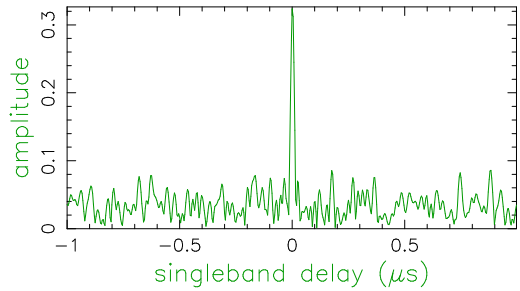
VLBA_MK - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

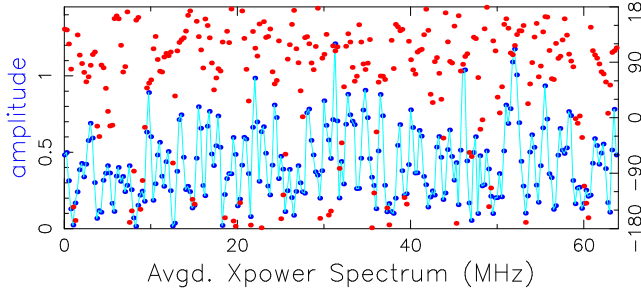


Fringe quality 9

SNR 12.0
 Int time 179.978
 Amp 0.327
 Phase 99.4
 PFD 1.1e-24
 Delays (us)
 SBD 0.001204
 MBD 0.002301
 Fringe rate (Hz) -0.001667
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

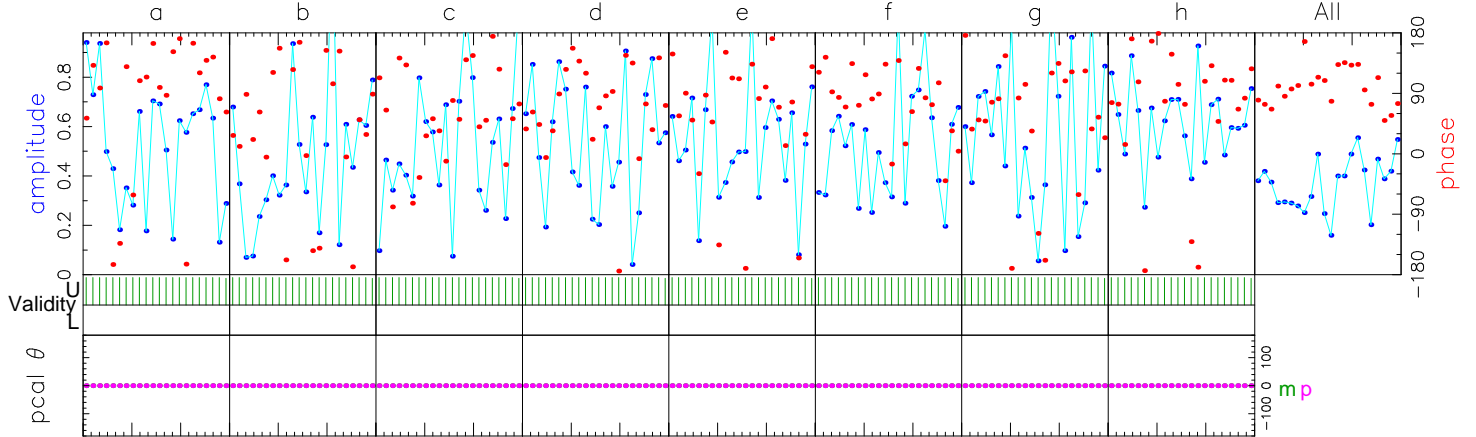


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141500
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	130.6	97.1	71.9	86.6	98.8	89.1	93.8	114.7	Phase	99.4
m	0.4	0.2	0.2	0.4	0.4	0.4	0.3	0.4	Ampl.	0.3
p	256.7	304.5	352.1	257.7	257.8	257.7	257.9	257.7	Sbd box	257.3
m	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.24133322255E+03	Apriori delay (usec)	2.24133092201E+03	Resid mbdelay (usec)	2.30054E-03	+/-	9.1E-05
Sband delay (usec)	2.24133212601E+03	Apriori clock (usec)	1.3309073E+01	Resid sbdelay (usec)	1.20400E-03	+/-	7.2E-04
Phase delay (usec)	2.24133092522E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	3.20457E-06	+/-	3.1E-07
Delay rate (us/s)	3.57969983663E-01	Apriori rate (us/s)	3.57970003016E-01	Resid rate (us/s)	-1.93535E-08	+/-	3.0E-09
Total phase (deg)	323.3	Apriori accel (us/s/s)	-3.34337321111E-05	Resid phase (deg)	99.4	+/-	9.6

ph/seg (deg)	28.6	Theor.	22.4	Amplitude	0.327 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	34.5	Search (1024X32)	0.318	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)	19.5	Inc. seg. avg.	0.341	Inc. frq. avg.	0.329	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	22.0	Inc. frq. avg.	0.329			Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

m: az 344.6 el 48.8 pa 151.9 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -3951.283 -5308.001 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp.W.211.1HSTEG

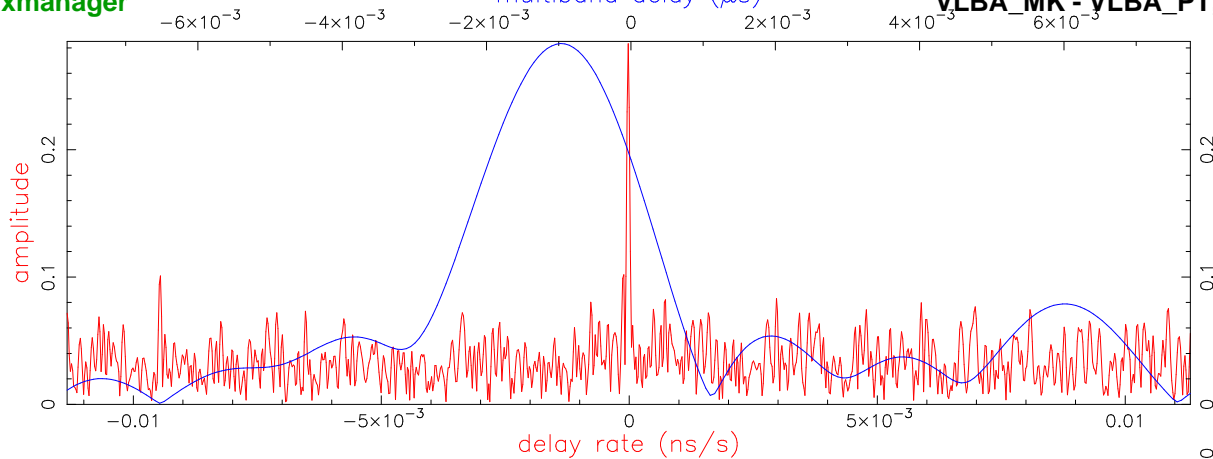
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, mp

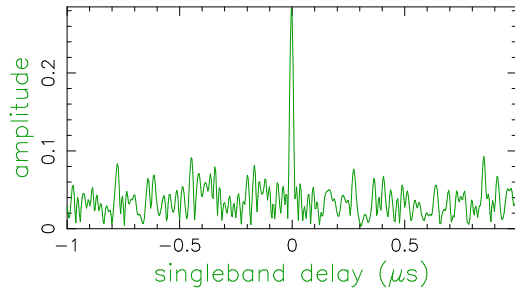
VLBA_MK - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

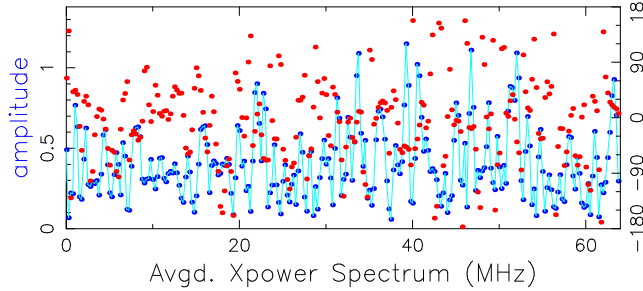


Fringe quality 9

SNR 10.5
 Int time 179.978
 Amp 0.285
 Phase -29.2
 PFD 3.0e-17
 Delays (us)
 SBD -0.002918
 MBD -0.000939
 Fringe rate (Hz)
 -0.001500
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

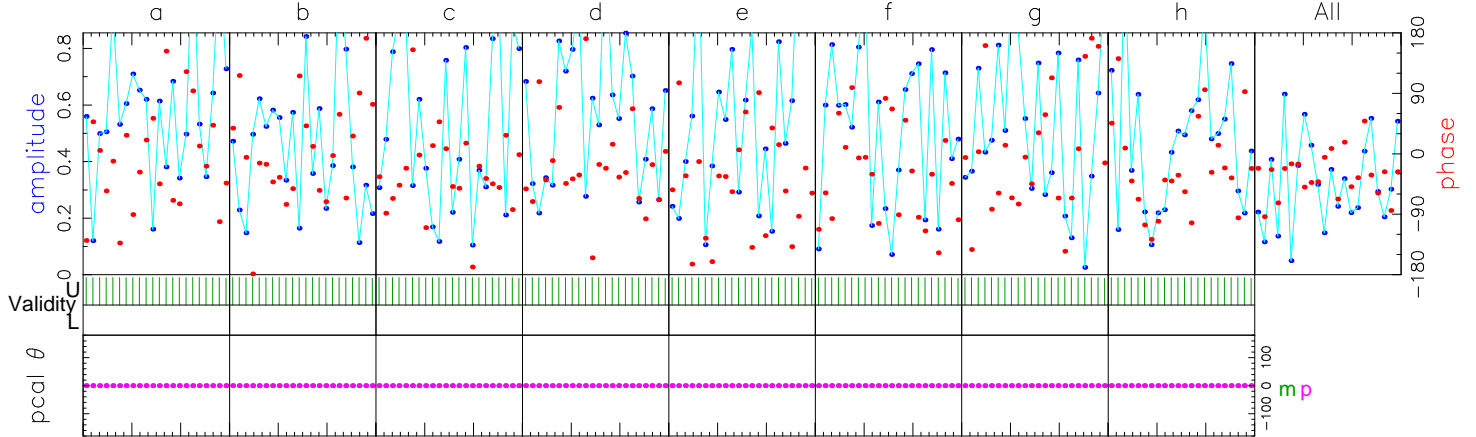


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141501
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-28.3	-5.3	-35.4	-24.0	-53.9	-28.9	-34.3	-17.3	Phase	-29.2
	0.2	0.2	0.4	0.4	0.3	0.3	0.2	0.3	Ampl.	0.3
	321.1	257.0	256.4	256.4	256.1	256.4	163.7	254.4	Sbd box	256.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) 2.24132998268E+03 Apriori delay (usec) 2.24133092201E+03 Resid mbdelay (usec) -9.39331E-04 +/- 1.0E-04
 Sband delay (usec) 2.24132800401E+03 Apriori clock (usec) 1.3309073E+01 Resid sbdelay (usec) -2.91800E-03 +/- 8.2E-04
 Phase delay (usec) 2.24133092107E+03 Apriori clockrate (us/s) -2.9999999E-07 Resid phdelay (usec) -9.40339E-07 +/- 3.5E-07
 Delay rate (us/s) 3.57969985600E-01 Apriori rate (us/s) 3.57970003016E-01 Resid rate (us/s) -1.74163E-08 +/- 3.4E-09
 Total phase (deg) 194.8 Apriori accel (us/s/s) -3.34337321111E-05 Resid phase (deg) -29.2 +/- 11.0

RMS Theor. Amplitude 0.285 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 32.6 25.7 Search (1024X32) 0.281 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 56.7 44.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.3 15.5 Inc. seg. avg. 0.297 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 21.5 27.0 Inc. frq. avg. 0.280 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 344.6 el 48.8 pa 151.9 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -3951.283 -5308.001 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp.W.225.1HSTEG

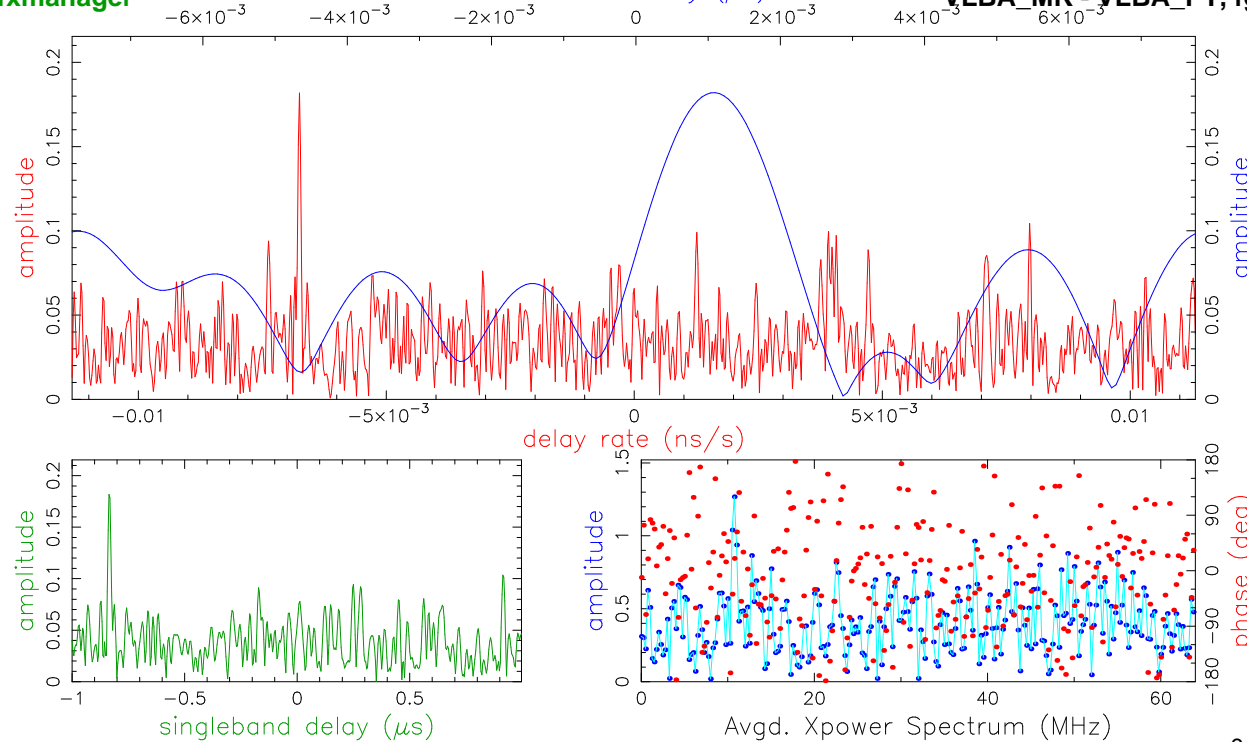
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, mp

VLBA_MK - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

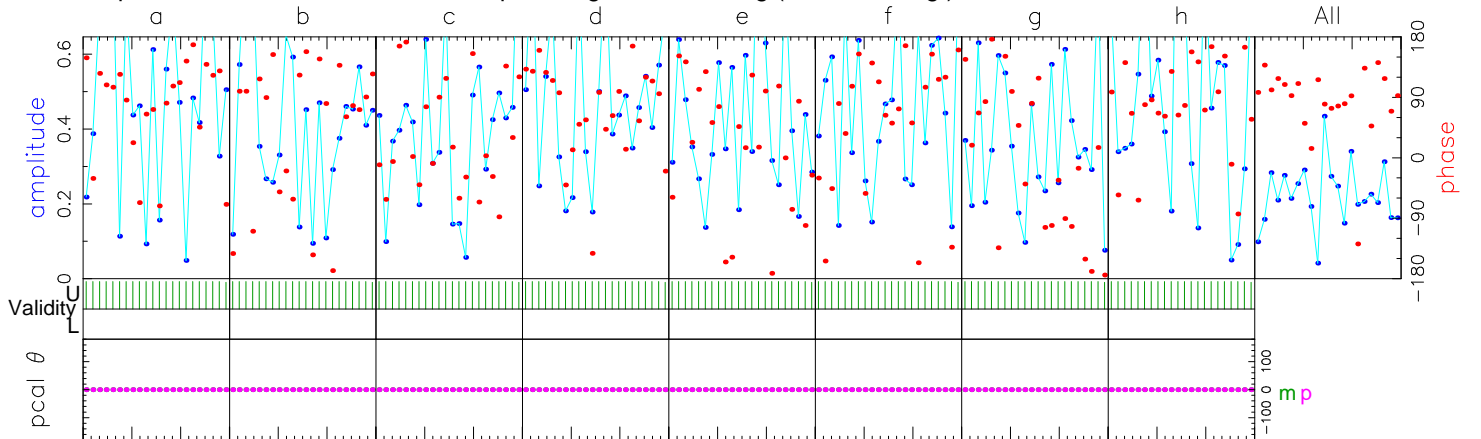


Fringe quality 0

SNR 6.8
 Int time 179.978
 Amp 0.215
 Phase 93.8
 PFD 1.6e-03
 Delays (us)
 SBD -0.834321
 MBD 0.001135
 Fringe rate (Hz)
 -0.583384
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141503
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.24050393197E+03		Apriori delay (usec)		2.24133092201E+03		Resid mbdelay (usec)		1.13496E-03	+/- 1.6E-04
Sband delay (usec)	2.24049660101E+03		Apriori clock (usec)		1.3309073E+01		Resid sbdelay (usec)		-8.34321E-01	+/- 1.3E-03
Phase delay (usec)	2.24133092504E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		3.02509E-06	+/- 5.4E-07
Delay rate (us/s)	3.57963230508E-01		Apriori rate (us/s)		3.57970003016E-01		Resid rate (us/s)		-6.77251E-06	+/- 5.2E-09
Total phase (deg)			317.7		Apriori accel (us/s/s)		-3.34337321111E-05		93.8	+/- 16.9

ph/seg (deg) 42.2 39.6 Search (1024X32) 0.176 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.3 69.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 43.1 23.9 Inc. seg. avg. 0.211 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 59.6 41.6 Inc. frq. avg. 0.207 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 344.6 el 48.8 pa 151.9 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -3951.283 -5308.001 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp.W.239.1HSTEG

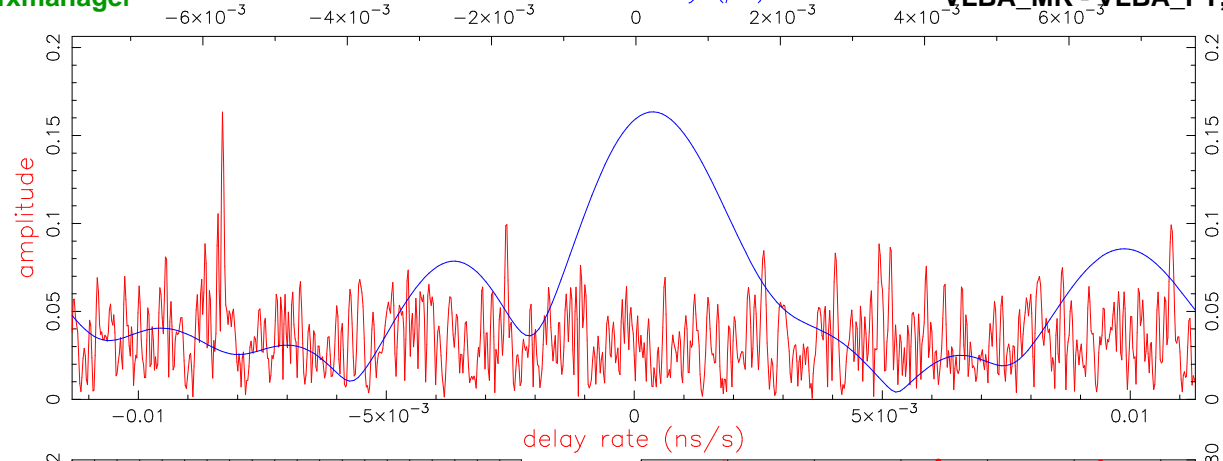
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

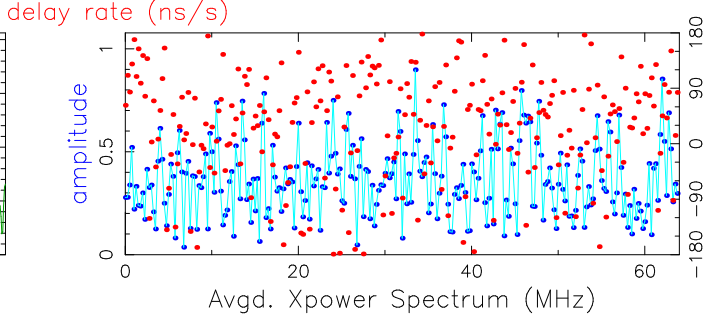
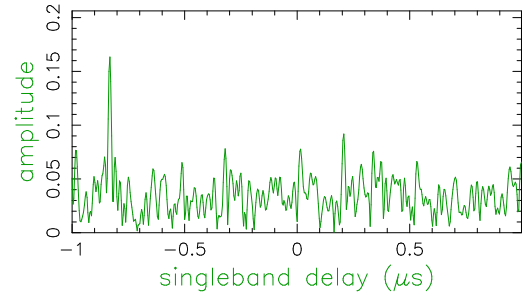
0102+584.1HSTEG, No0128, mp

VLBA_MK - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

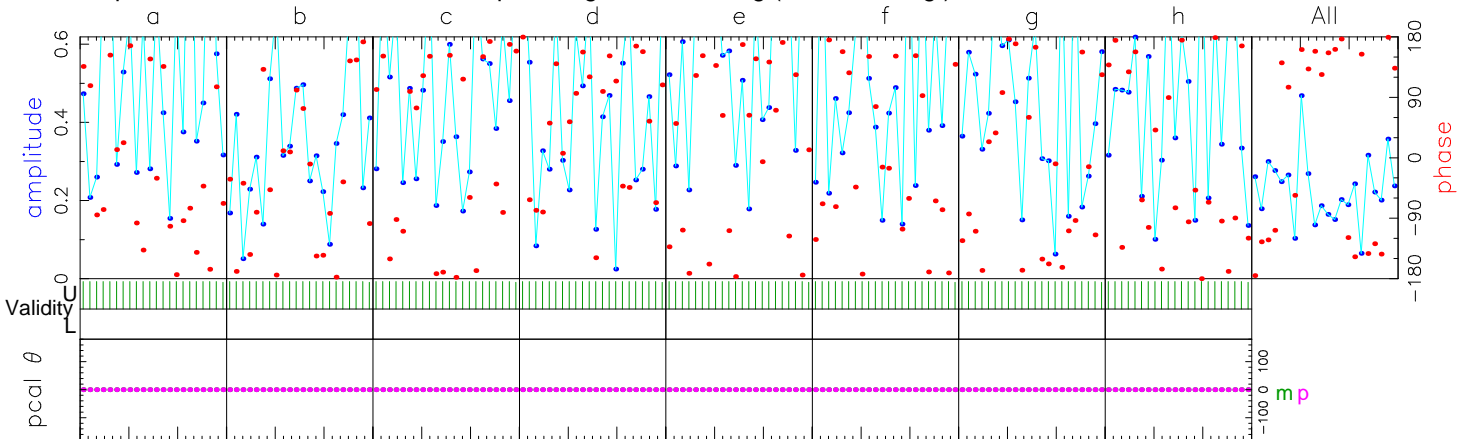


Fringe quality 0
 SNR 6.0
 Int time 179.978
 Amp 0.206
 Phase -175.8
 PFD 2.2e-01
 Delays (us)
 SBD -0.832550
 MBD 0.000198
 Fringe rate (Hz)
 -0.715810
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141505
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.3	-177.9	173.0	123.1	162.4	-146.7	-162.4	-162.0	Phase	-175.8
	0.2	0.1	0.4	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	50.6	110.8	43.9	266.8	44.6	343.6	353.8	366.0	Sbd box	43.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.24050299539E+03	Apriori delay (usec)	2.24133092201E+03	Resid mbdelay (usec)	1.98381E-04	+/-	1.8E-04
Sband delay (usec)	2.24049837226E+03	Apriori clock (usec)	1.3309073E+01	Resid sbdelay (usec)	-8.32550E-01	+/-	1.4E-03
Phase delay (usec)	2.24133091634E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-5.67039E-06	+/-	6.2E-07
Delay rate (us/s)	3.57961693173E-01	Apriori rate (us/s)	3.57970003016E-01	Resid rate (us/s)	-8.30984E-06	+/-	5.9E-09
Total phase (deg)	48.1	Apriori accel (us/s/s)	-3.34337321111E-05	Resid phase (deg)	-175.8	+/-	19.1

ph/seg (deg)	49.4	Theor.	44.8	Amplitude	0.206 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.0		78.1	Search (1024X32)	0.159	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	34.2		27.0	Inc. seg. avg.	0.222	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.8		47.1	Inc. frq. avg.	0.207	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

m: az 344.6 el 48.8 pa 151.9 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -3951.283 -5308.001 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/mp.W.253.1HSTEG

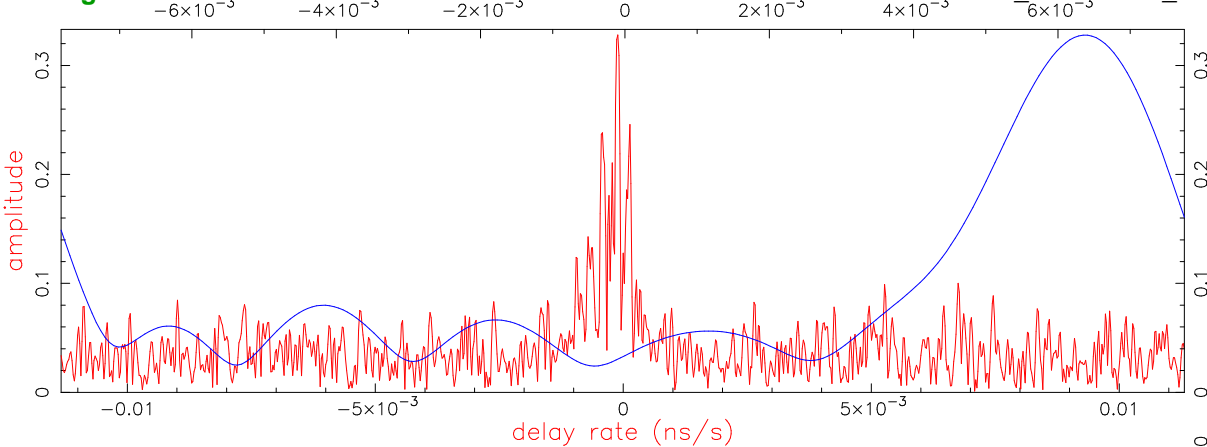
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, np

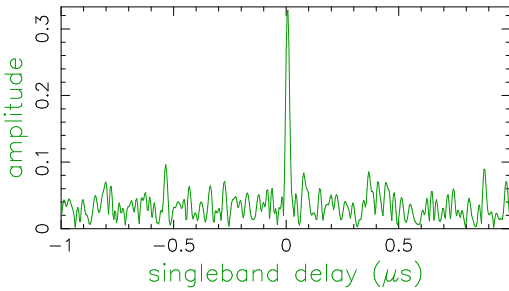
VLBA_NL - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

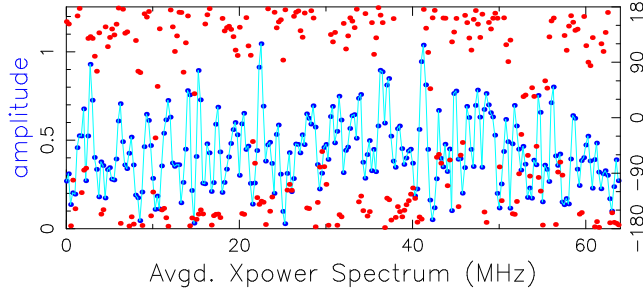


Fringe quality 9

SNR 12.2
 Int time 179.980
 Amp 0.333
 Phase 176.2
 PFD 6.2e-26
 Delays (us)
 SBD 0.006138
 MBD 0.006371
 Fringe rate (Hz)
 -0.009334
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

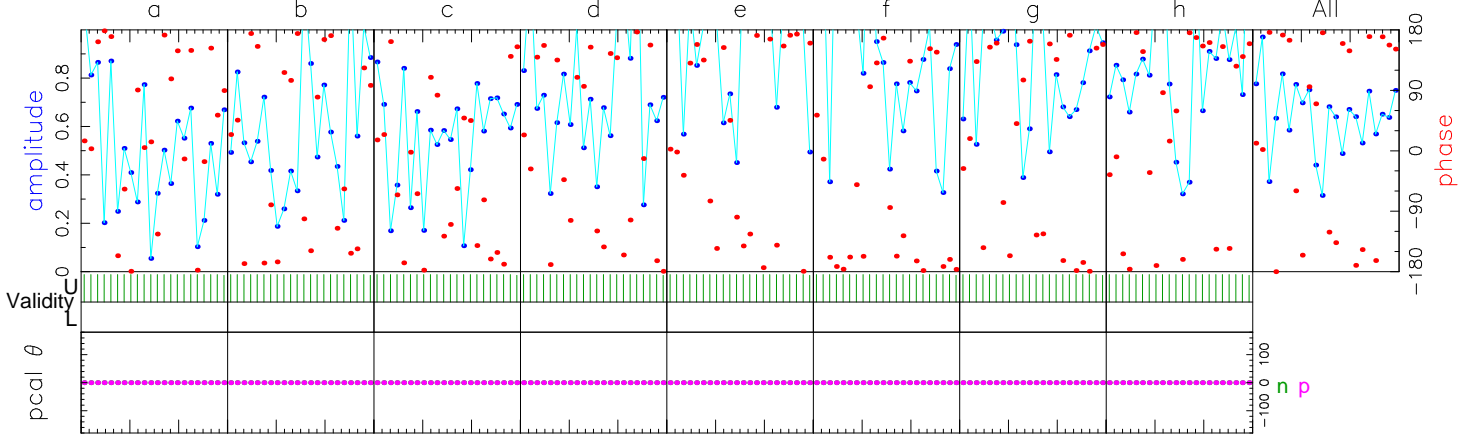


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141503
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-8.04488275681E+02	Apriori delay (usec)	-8.04494646621E+02	Resid mbdelay (usec)	6.37094E-03	+/-	8.9E-05
Sband delay (usec)	-8.04488508621E+02	Apriori clock (usec)	8.5309982E-02	Resid sbdelay (usec)	6.13800E-03	+/-	7.0E-04
Phase delay (usec)	-8.04494640939E+02	Apriori clockrate (us/s)	1.0000003E-07	Resid phdelay (usec)	5.68134E-06	+/-	3.0E-07
Delay rate (us/s)	1.66062787913E-02	Apriori rate (us/s)	1.66063871510E-02	Resid rate (us/s)	-1.08360E-07	+/-	2.9E-09
Total phase (deg)	-133.4	Apriori accel (us/s/s)	1.41318612575E-05	Resid phase (deg)	176.2	+/-	9.4

ph/seg (deg)	68.2	RMS	22.0	Theor.	Amplitude	0.333 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	102.9	68.2	22.0	Search (1024X32)	0.327		Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	30.8	102.9	38.4	Interp.	0.000		Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	42.6	30.8	13.3	Inc. seg. avg.	0.598		Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00
		42.6	23.1	Inc. frq. avg.	0.333			t_cohere infinite			

n: az 319.0 el 37.8 pa 69.7 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -171.018 2286.825 simultaneous interpolator

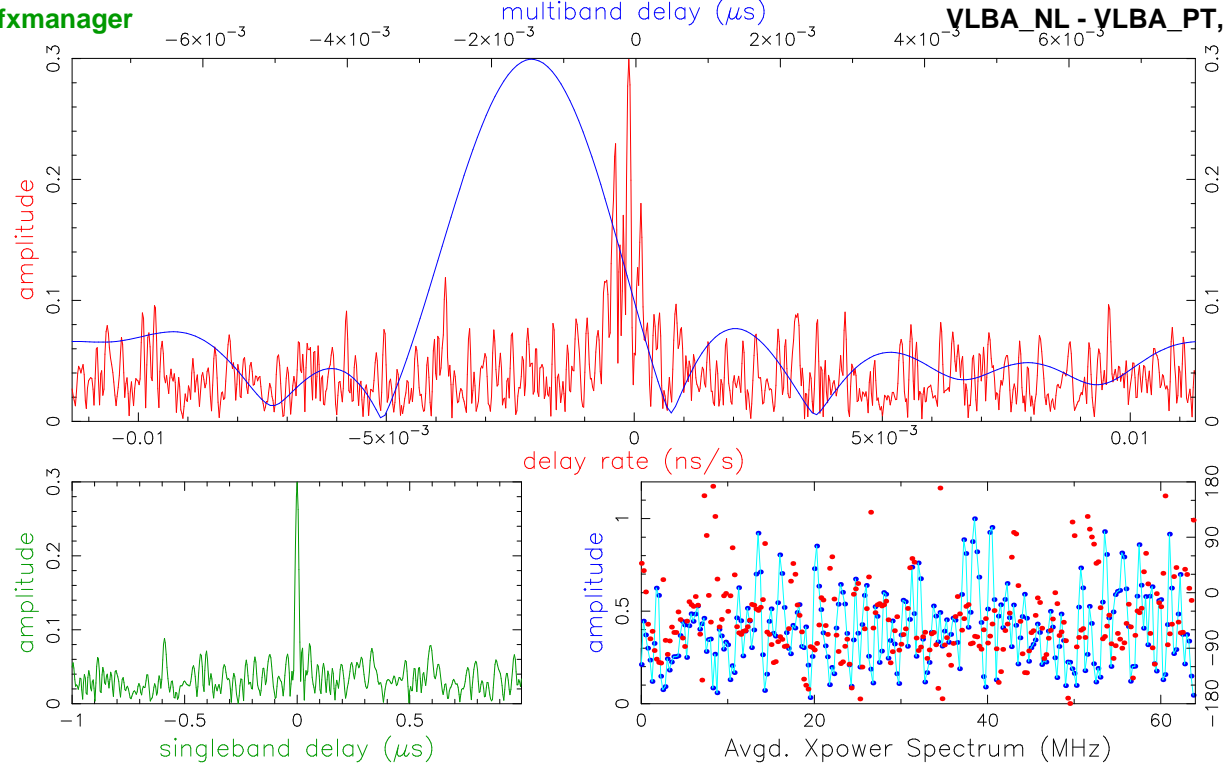
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/np..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/np.W.244.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, np

VLBA_NL - VLBA_PT, fgroup W, pol RR

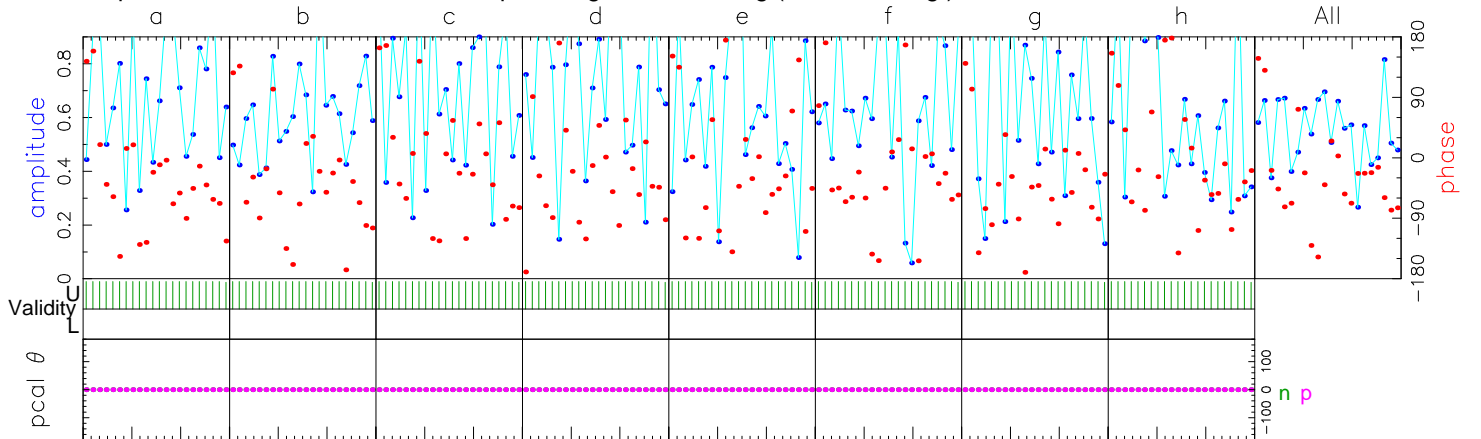


Fringe quality 9

SNR 11.0
 Int time 179.980
 Amp 0.300
 Phase -46.7
 PFD 8.0e-20
 Delays (us)
 SBD -0.000621
 MBD -0.001469
 Fringe rate (Hz)
 -0.009645
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141505
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-48.9	-51.8	-32.0	-44.2	-62.0	-46.1	-50.6	-35.3	Phase	-46.7	
	0.4	0.3	0.2	0.4	0.2	0.3	0.2	0.2	Ampl.	0.3	
	257.5	257.3	402.9	257.3	255.5	256.5	256.0	258.4	Sbd box	256.8	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec)(sbd)	-8.04496115650E+02		Apriori delay (usec)		-8.04494646621E+02		Resid mbdelay (usec)		-1.46903E-03	+/- 9.9E-05	
Sband delay (usec)	-8.04495267871E+02		Apriori clock (usec)		8.5309982E-02		Resid sbdelay (usec)		-6.21250E-04	+/- 7.8E-04	
Phase delay (usec)	-8.04494648128E+02		Apriori clockrate (us/s)		1.0000003E-07		Resid phdelay (usec)		-1.50686E-06	+/- 3.4E-07	
Delay rate (us/s)	1.66062751791E-02		Apriori rate (us/s)		1.66063871510E-02		Resid rate (us/s)		-1.11972E-07	+/- 3.2E-09	
Total phase (deg)			Apriori accel (us/s/s)		1.41318612575E-05		Resid phase (deg)		-46.7	+/- 10.4	
	RMS	Theor.	Amplitude	0.300 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	69.2	24.4	Search (1024X32)	0.299	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	94.2	42.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	10.3	14.7	Inc. seg. avg.	0.508	Sample rate(MISamp/s): 128		dr window (ns/s)		-0.011	0.011	
amp/frq (%)	26.0	25.7	Inc. frq. avg.	0.292	Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00
n: az 319.0 el 37.8 pa 69.7	p: az 320.8 el 40.5 pa 88.5		u,v (fr/asec) -171.018 2286.825						simultaneous interpolator		
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/np..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/np.W.256.1HSTEG											

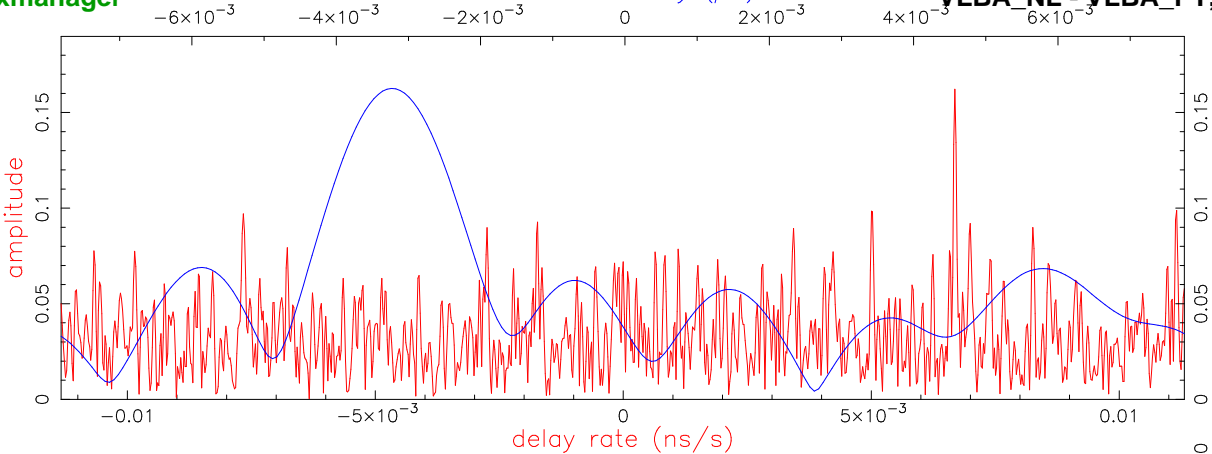
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, np

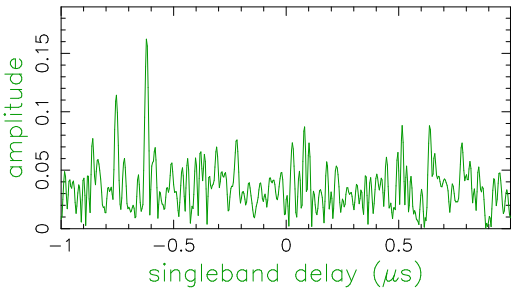
VLBA_NL - VLBA_PT, fgroup W, pol RL

multiband delay (μs)

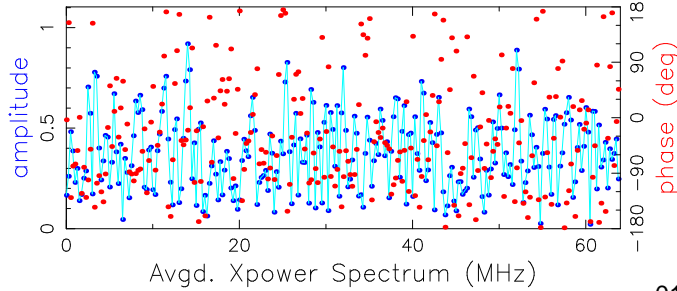


Fringe quality 0

SNR 6.0
 Int time 179.980
 Amp 0.190
 Phase 31.0
 PFD 2.2e-01
 Delays (us)
 SBD -0.619871
 MBD -0.003160
 Fringe rate (Hz) 0.576590
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

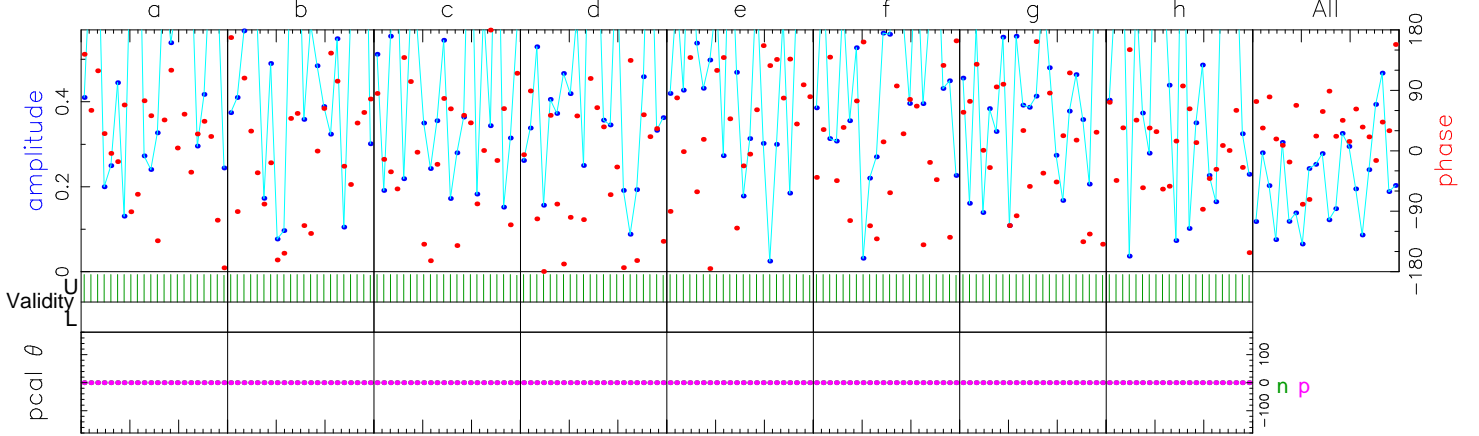


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141510
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

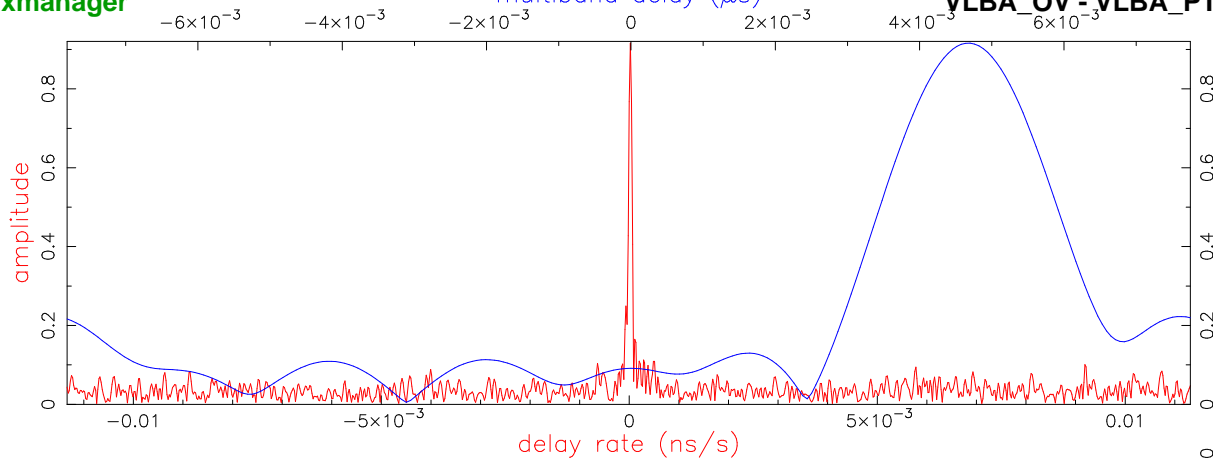
Group delay (usec)(sbd)	-8.05107182064E+02	Apriori delay (usec)	-8.04494646621E+02	Resid mbdelay (usec)	-3.16044E-03	+/-	1.8E-04
Sband delay (usec)	-8.05114517871E+02	Apriori clock (usec)	8.5309982E-02	Resid sbdelay (usec)	-6.19871E-01	+/-	1.4E-03
Phase delay (usec)	-8.04494645622E+02	Apriori clockrate (us/s)	1.0000003E-07	Resid phdelay (usec)	9.98943E-07	+/-	6.2E-07
Delay rate (us/s)	1.66130807872E-02	Apriori rate (us/s)	1.66063871510E-02	Resid rate (us/s)	6.69364E-06	+/-	5.9E-09
Total phase (deg)	-278.6	Apriori accel (us/s/s)	1.41318612575E-05	Resid phase (deg)	31.0	+/-	19.1

ph/seg (deg)	50.1	Theor.	44.7	Amplitude	0.190 +/- 0.032	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.1		78.1	Search (1024X32)	0.159	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	23.9		27.0	Inc. seg. avg.	0.192	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.5		47.1	Inc. frq. avg.	0.183	Data rate (Mb/s):	2048	nlags:	256	ion window (TEC)	0.00	0.00

n: az 319.0 el 37.8 pa 69.7 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -171.018 2286.825 simultaneous interpolator

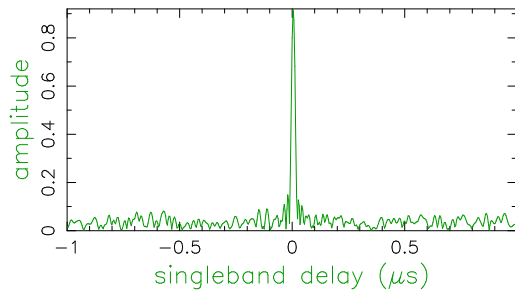
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/np..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/np.W.299.1HSTEG

multiband delay (μ s)

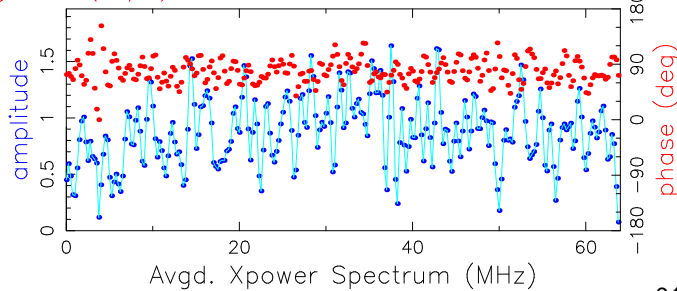


Fringe quality 8

SNR 33.8
Int time 179.978
Amp 0.920
Phase 80.1
PFD 0.0e+00
Delays (us)
SBD 0.004810
MBD 0.004700
Fringe rate (Hz)
0.001994
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

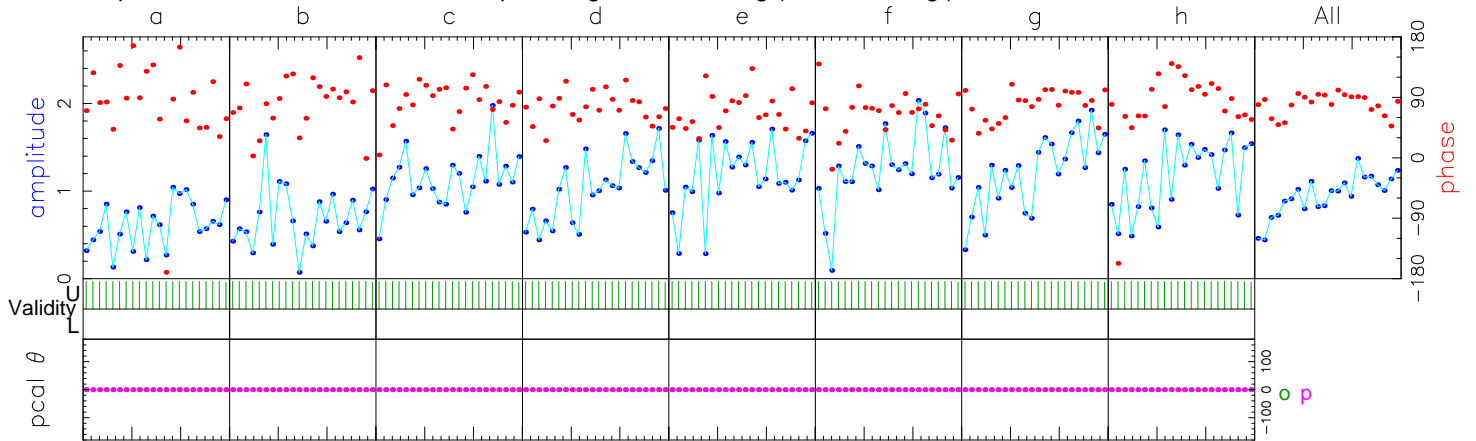


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141504
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

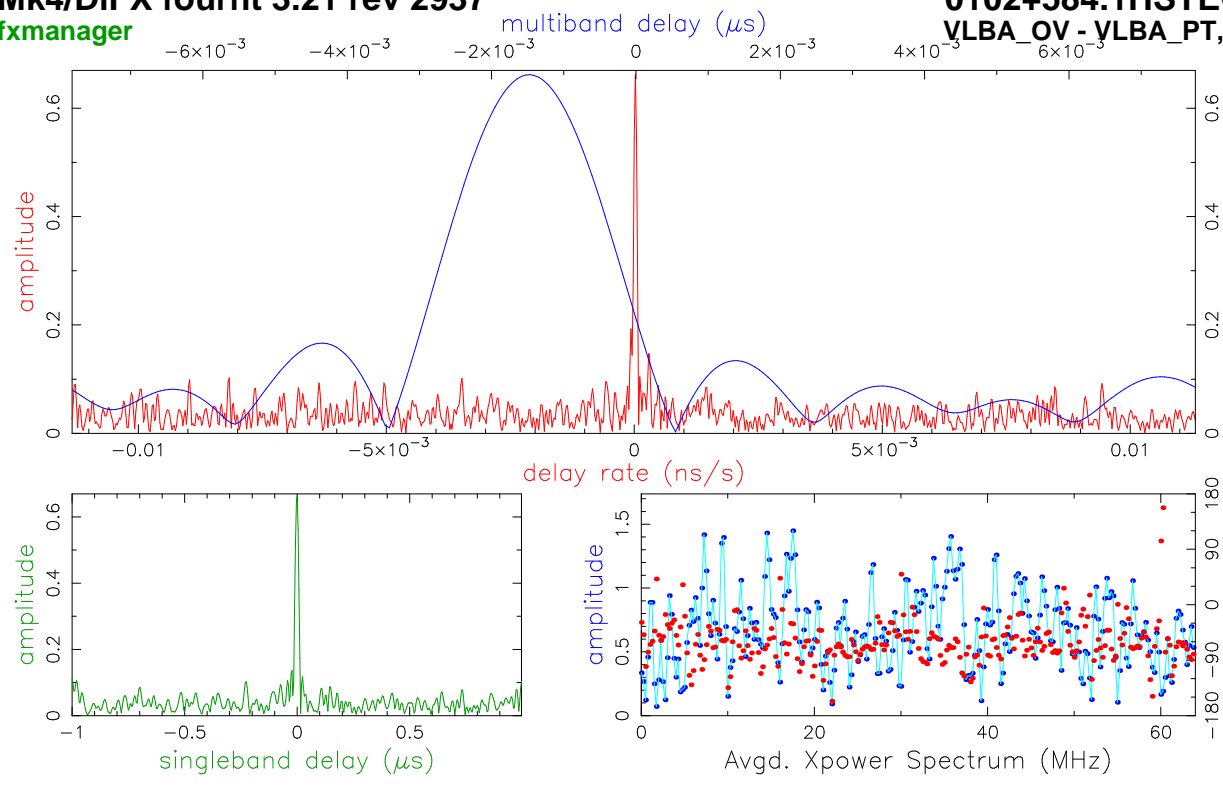


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.02924217800E+03	Apriori delay (usec)	2.02923747760E+03	Resid mbdelay (usec)	4.70039E-03	+/-	3.2E-05
Sband delay (usec)	2.02924228760E+03	Apriori clock (usec)	2.1354454E+01	Resid sbdelay (usec)	4.81000E-03	+/-	2.6E-04
Phase delay (usec)	2.02923748019E+03	Apriori clockrate (us/s)	-5.0000000E-07	Resid phdelay (usec)	2.58213E-06	+/-	1.1E-07
Delay rate (us/s)	7.57241575271E-02	Apriori rate (us/s)	7.57241343814E-02	Resid rate (us/s)	2.31457E-08	+/-	1.1E-09
Total phase (deg)	195.6	Apriori accel (us/s/s)	-6.69575129799E-06	Resid phase (deg)	80.1	+/-	3.4

ph/seg (deg)	15.7	RMS	8.0	Theor.	15.7	Amplitude	0.920 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	24.9	Search (1024X32)	0.901	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	9.7	Inc. seg. avg.	0.941	Inc. frq. avg.	0.923	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	25.2	Inc. frq. avg.	0.923	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

o: az 319.2 el 48.1 pa 95.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -836.021 -663.436 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/op..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/op.W.250.1HSTEG

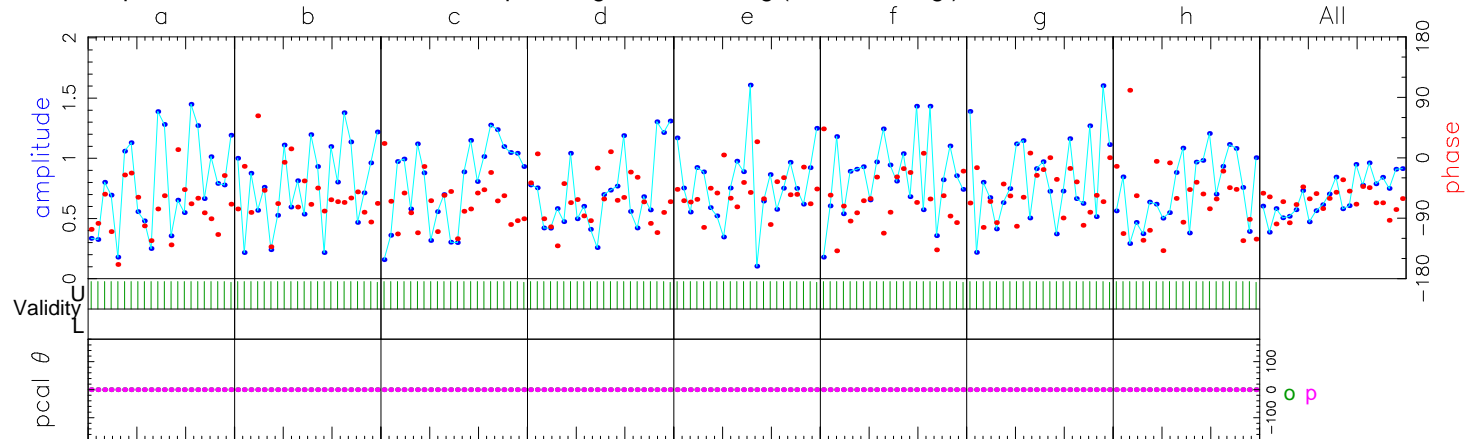


Fringe quality 9

SNR 24.6
Int time 179.978
Amp 0.670
Phase -62.7
PFD 0.0e+00
Delays (us)
SBD -0.001425
MBD -0.001508
Fringe rate (Hz) 0.001990
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141506
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-66.3	-59.3	-70.5	-64.9	-55.3	-66.4	-53.3	-66.9	Phase	-62.7
	0.7	0.7	0.7	0.6	0.7	0.7	0.6	0.6	Ampl.	0.7
	256.3	256.3	256.3	256.5	256.7	257.1	257.1	256.7	Sbd box	256.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.02923596975E+03		Apriori delay (usec)		2.02923747760E+03		Resid mbdelay (usec)		-1.50786E-03	+/- 4.4E-05
Sband delay (usec)	2.02923605310E+03		Apriori clock (usec)		2.1354454E+01		Resid sbdelay (usec)		-1.42450E-03	+/- 3.5E-04
Phase delay (usec)	2.02923747558E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-2.02054E-06	+/- 1.5E-07
Delay rate (us/s)	7.57241574874E-02		Apriori rate (us/s)		7.57241343814E-02		Resid rate (us/s)		2.31061E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.69575129799E-06		Resid phase (deg)		-62.7	+/- 4.7

ph/seg (deg) 17.1 10.9 Search (1024X32) 0.661 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 24.5 19.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 6.7 6.6 Inc. seg. avg. 0.678 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 8.0 11.5 Inc. frq. avg. 0.661 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
o: az 319.2 el 48.1 pa 95.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -836.021 -663.436 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/op...1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/op.W.261.1HSTEG

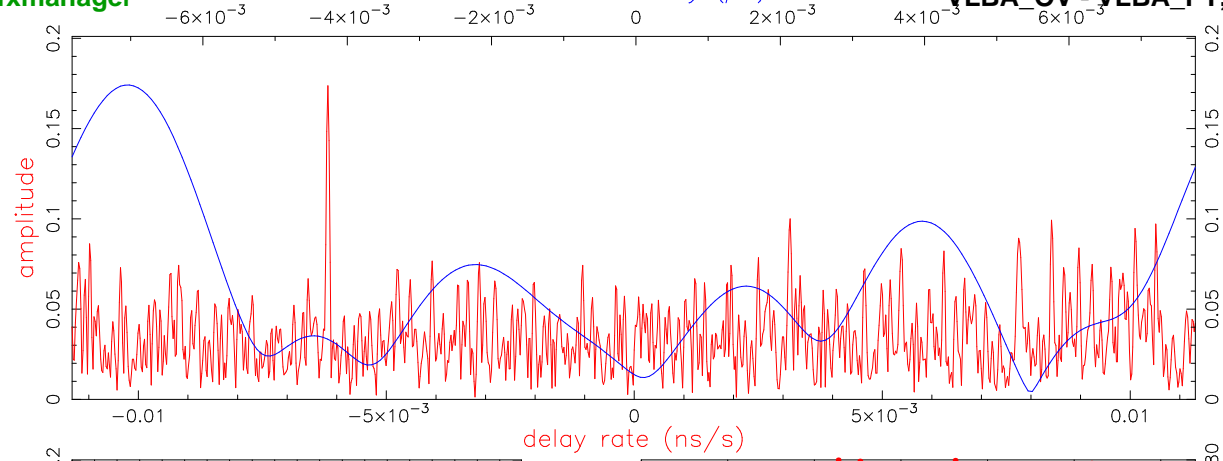
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, op

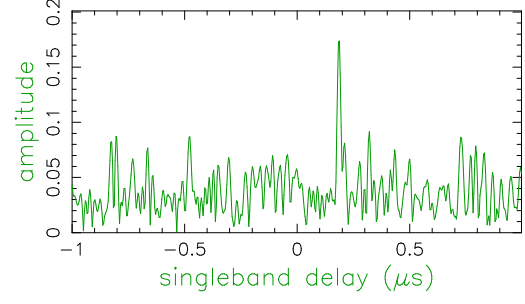
VLBA_OV - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

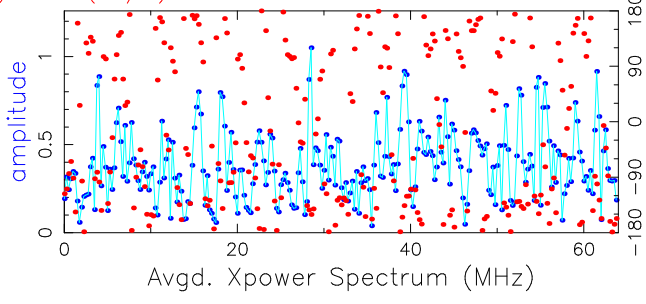


Fringe quality 0

SNR 6.5
 Int time 179.978
 Amp 0.201
 Phase -104.7
 PFD 1.1e-02
 Delays (us)
 SBD 0.185646
 MBD -0.007119
 Fringe rate (Hz)
 -0.532045
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

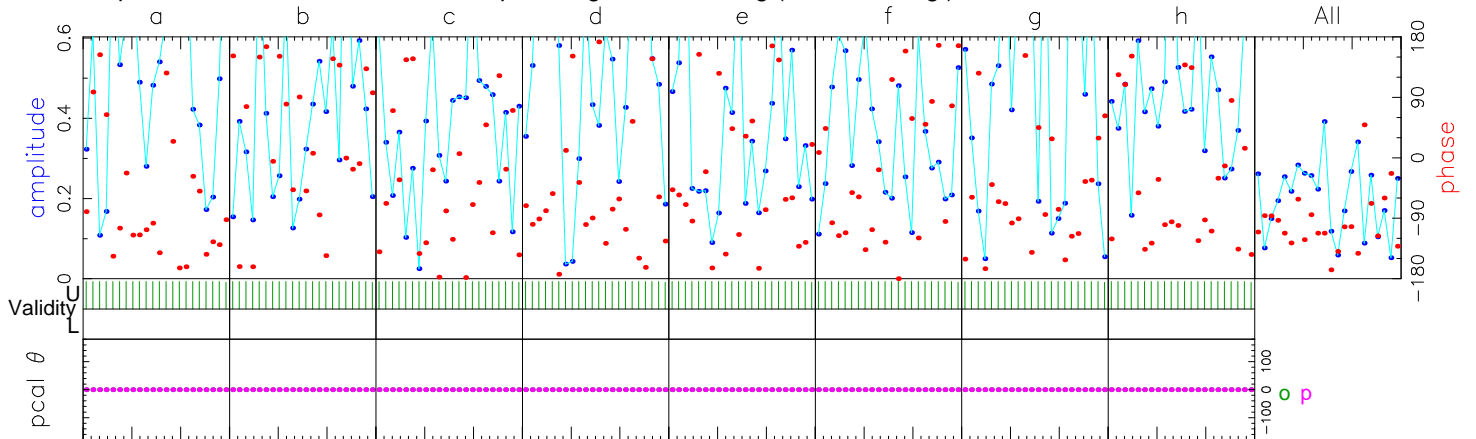


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141508
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.1	90.8	-81.8	-105.9	-92.6	-124.1	-91.9	-109.8	Phase	-104.7
	0.3	0.1	0.1	0.3	0.2	0.2	0.3	0.2	Ampl.	0.2
	313.7	318.4	492.9	304.3	6.4	134.5	305.0	383.8	Sbd box	304.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	2.02941785910E+03		Apriori delay (usec)		2.02923747760E+03		Resid mbdelay (usec)		-7.11851E-03	+/- 1.7E-04
Sband delay (usec)	2.02942312335E+03		Apriori clock (usec)		2.1354454E+01		Resid sbdelay (usec)		1.85646E-01	+/- 1.3E-03
Phase delay (usec)	2.02923747423E+03		Apriori clockrate (us/s)		-5.0000000E-07		Resid phdelay (usec)		-3.37595E-06	+/- 5.7E-07
Delay rate (us/s)	7.57179578662E-02		Apriori rate (us/s)		7.57241343814E-02		Resid rate (us/s)		-6.17652E-06	+/- 5.5E-09
Total phase (deg)	10.8		Apriori accel (us/s/s)		-6.69575129799E-06		Resid phase (deg)		-104.7	+/- 17.6

ph/seg (deg) 45.2 41.3 Search (1024X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 52.7 72.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 68.9 24.9 Inc. seg. avg. 0.182 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.3 43.5 Inc. frq. avg. 0.202 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 319.2 el 48.1 pa 95.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -836.021 -663.436 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/op..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/op.W.276.1HSTEG

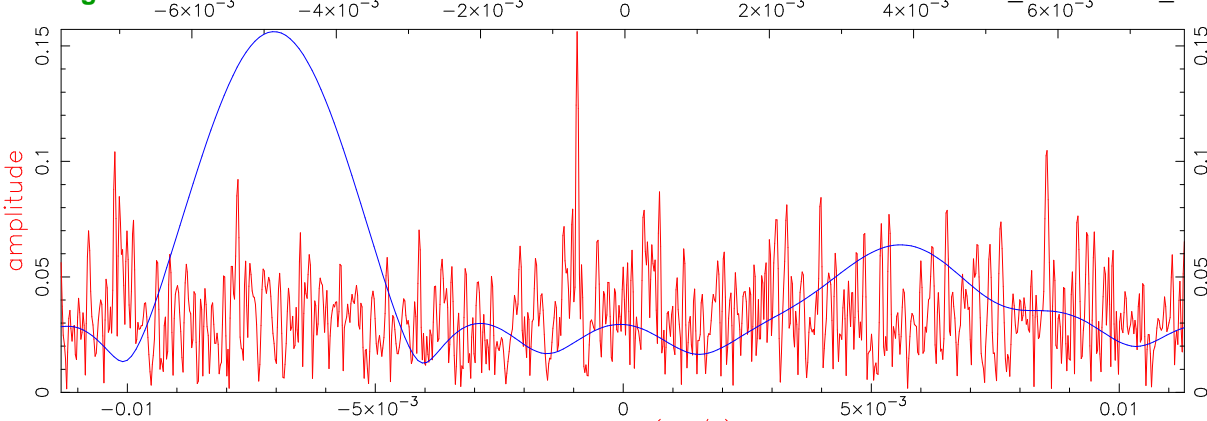
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, op

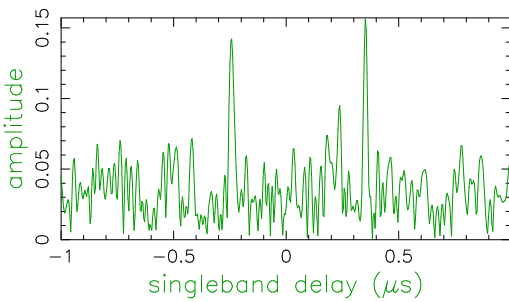
VLBA_OV - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

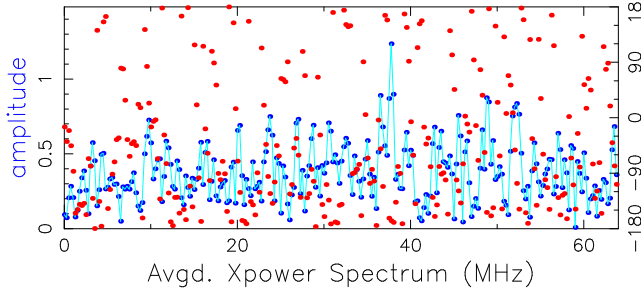


Fringe quality 0

SNR 5.8
Int time 179.978
Amp 0.157
Phase 35.2
PFD 6.7e-01
Delays (us)
SBD 0.352383
MBD -0.004838
Fringe rate (Hz)
-0.079286
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

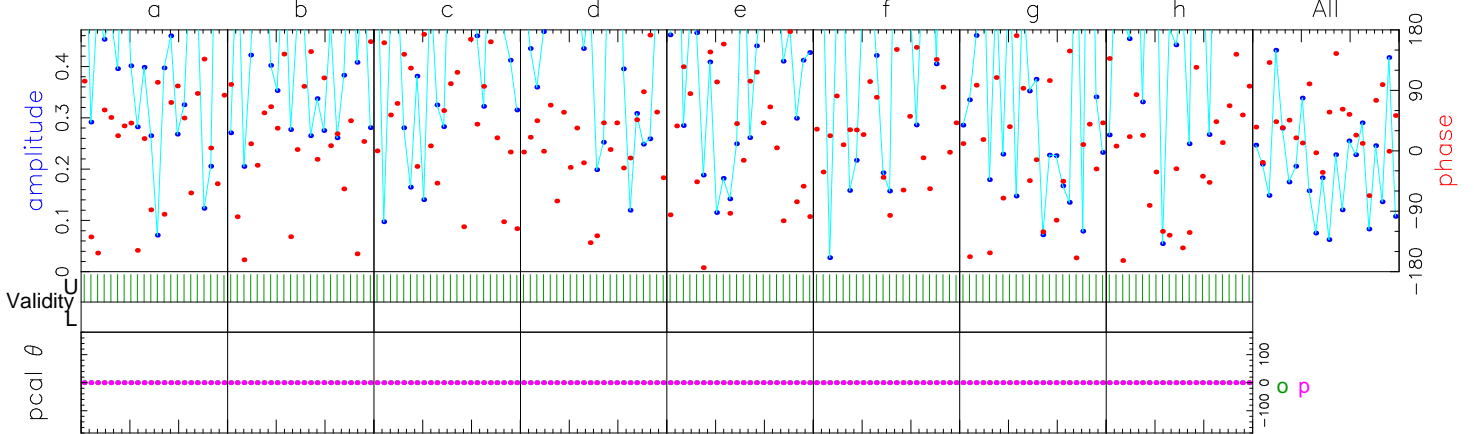


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141510
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

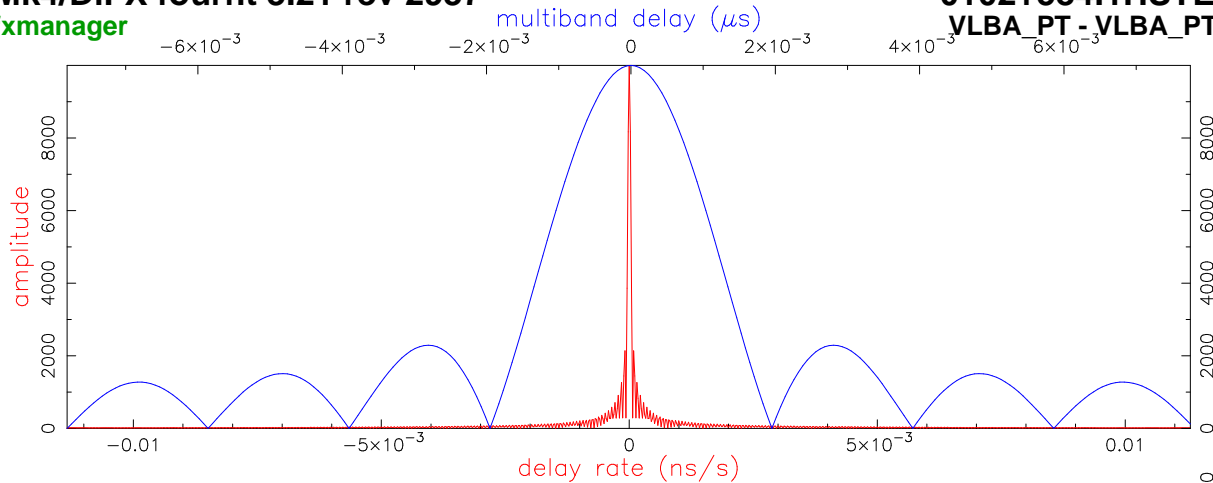
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



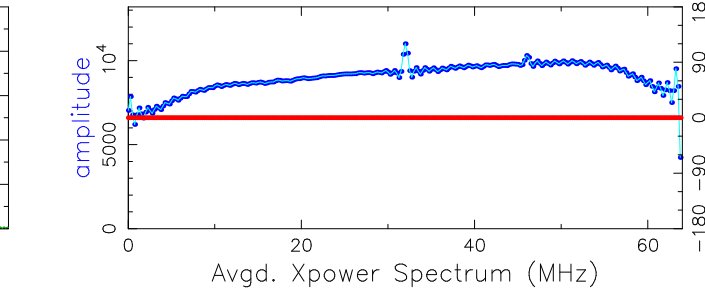
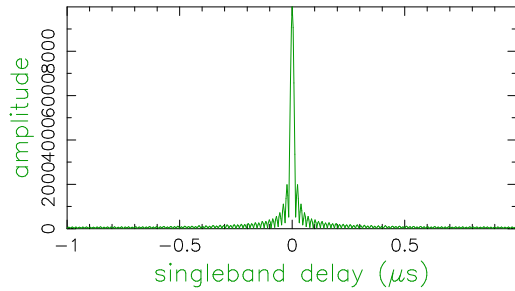
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
o	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd) 2.02959201443E+03 Apriori delay (usec) 2.02923747760E+03 Resid mbdelay (usec) -4.83818E-03 +/- 1.9E-04
 Sband delay (usec) 2.02958986085E+03 Apriori clock (usec) 2.1354454E+01 Resid sbdelay (usec) 3.52383E-01 +/- 1.5E-03
 Phase delay (usec) 2.02923747874E+03 Apriori clockrate (us/s) -5.0000000E-07 Resid phdelay (usec) 1.13515E-06 +/- 6.4E-07
 Delay rate (us/s) 7.57232139509E-02 Apriori rate (us/s) 7.57241343814E-02 Resid rate (us/s) -9.20431E-07 +/- 6.2E-09
 Total phase (deg) 150.7 Apriori accel (us/s/s) -6.69575129799E-06 Resid phase (deg) 35.2 +/- 19.9

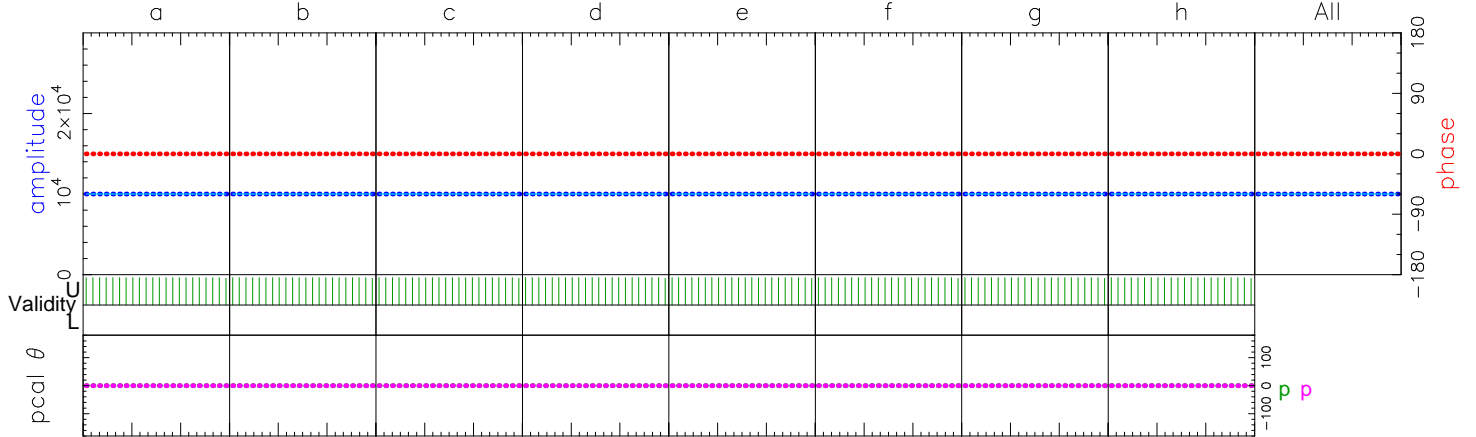
ph/seg (deg) 50.0 46.7 Search (1024X32) 0.148 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 71.6 81.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 18.8 28.2 Inc. seg. avg. 0.158 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.9 49.2 Inc. frq. avg. 0.145 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 o: az 319.2 el 48.1 pa 95.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -836.021 -663.436 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/op..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/op.W.292.1HSTEG



Fringe quality 9
SNR 366867.7
Int time 179.980
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. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141504
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



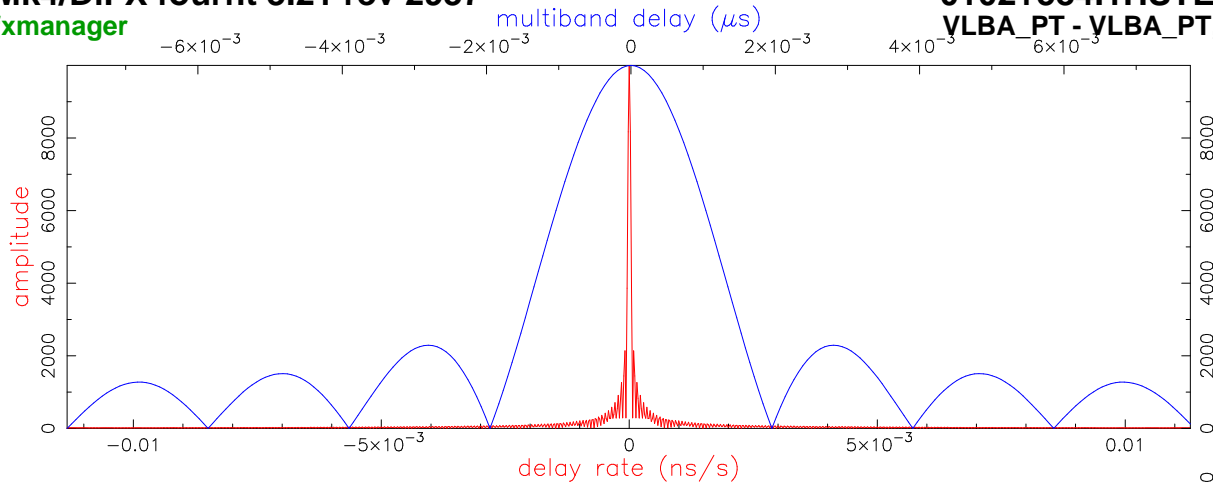
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	3.0E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	2.3E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	1.0E-11
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	9.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

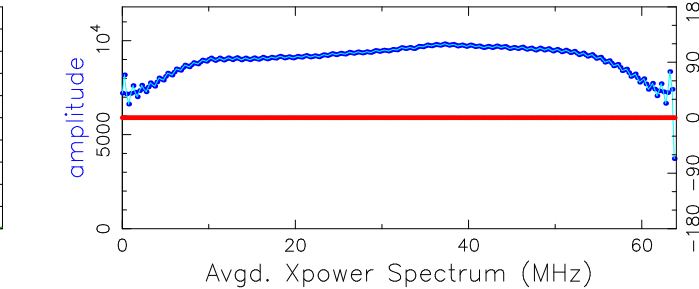
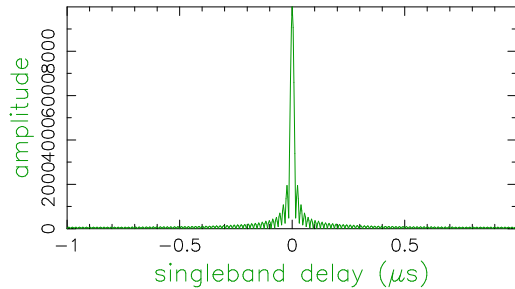
	RMS	Theor.	Amplitude	9999.999 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	0.0	0.0	Search (1024X32)	9999.999	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	0.0	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	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

p: az 320.8 el 40.5 pa 88.5 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

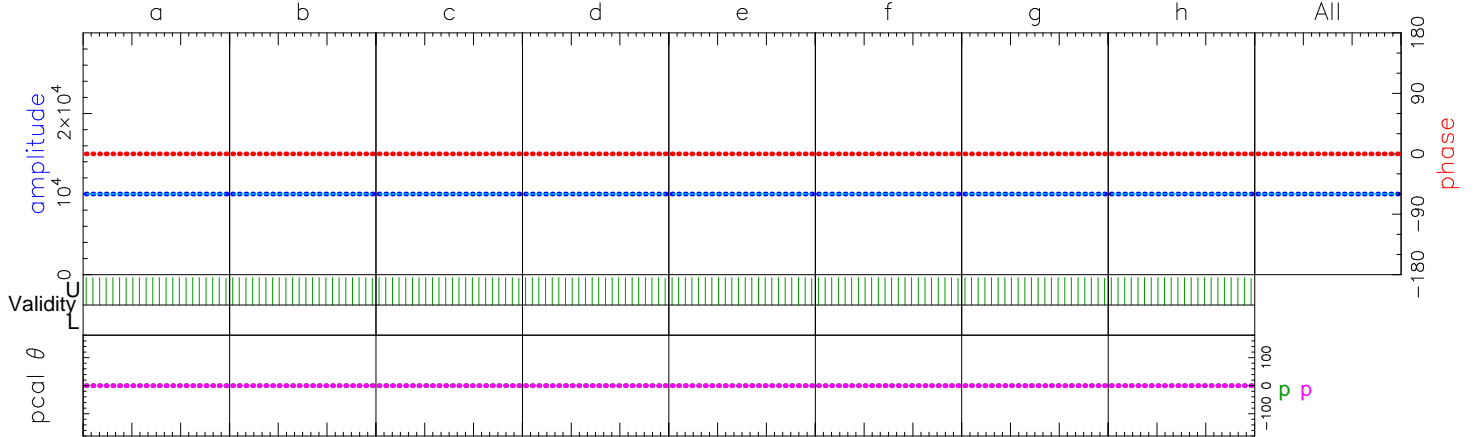
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp.W.248.1HSTEG



Fringe quality 9
SNR 366867.7
Int time 179.980
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. c202a
Yr:day 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141506
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"



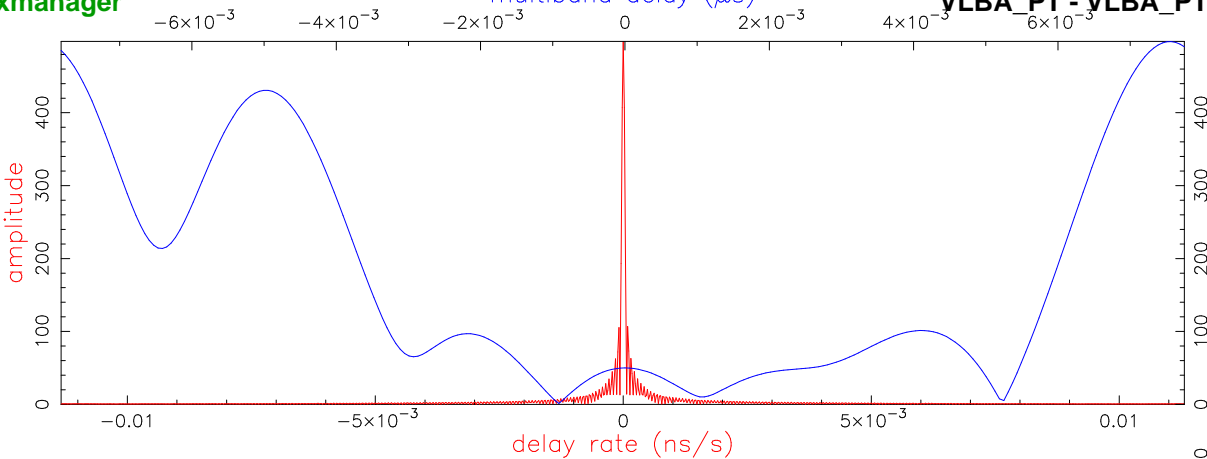
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00		
Total phase (deg)			0.0							
ph/seg (deg)	0.0	0.0								
amp/seg (%)	0.0	0.0								
ph/frq (deg)	0.0	0.0								
amp/frq (%)	0.0	0.0								
p: az 320.8 el 40.5 pa 88.5										
Control file: cf_1234_gmva										

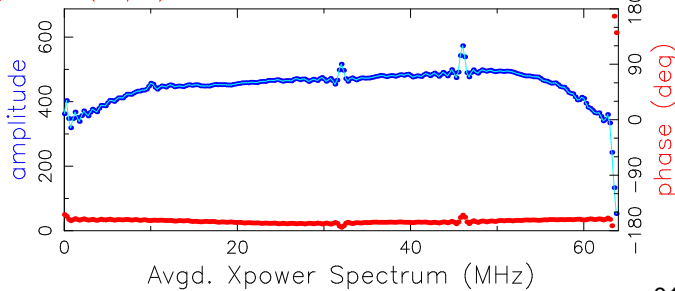
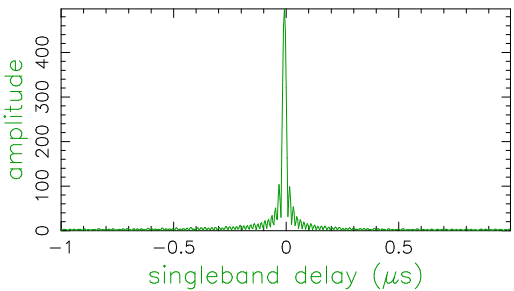
Group delay (usec)(sbd) 0.000000000000E+00 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 0.000000E+00 +/- 3.0E-09
 Sband delay (usec) 0.000000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.000000E+00 +/- 2.3E-08
 Phase delay (usec) 0.000000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.000000E+00 +/- 1.0E-11
 Delay rate (us/s) 0.000000000000E+00 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) 0.000000E+00 +/- 9.7E-14
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) 0.0 +/- 0.0
 RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (1024X32) 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
 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp.W.258.1HSTEG

multiband delay (μ s)



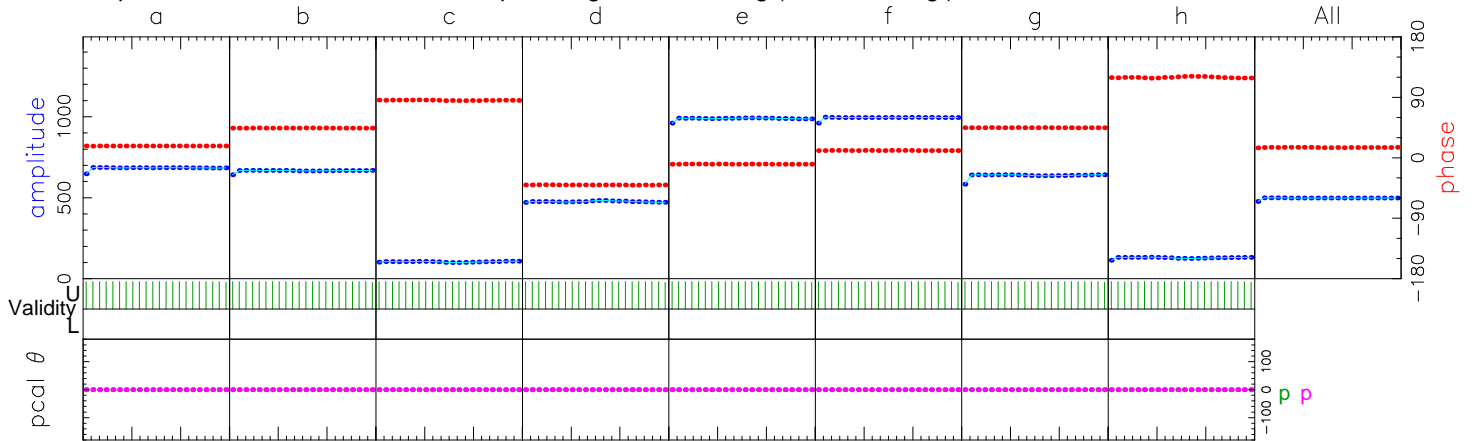
Fringe quality 5

SNR 18265.6
Int time 179.980
Amp 497.878
Phase 15.3
PFD 0.0e+00
Delays (us)
SBD -0.008051
MBD 0.007544
Fringe rate (Hz)
-0.000001
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141507
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.08068750000E-03									
Sband delay (usec)	-8.05050000000E-03									
Phase delay (usec)	4.93537125787E-07									
Delay rate (us/s)	-1.13369219133E-11									
Total phase (deg)			15.3							
Apriori delay (usec)					0.00000000000E+00				7.54431E-03	+/- 5.9E-08
Apriori clock (usec)					0.0000000E+00				-8.05050E-03	+/- 4.7E-07
Apriori clockrate (us/s)					0.0000000E+00				4.93537E-07	+/- 2.0E-10
Apriori rate (us/s)					0.00000000000E+00				-1.13369E-11	+/- 1.9E-12
Apriori accel (us/s/s)					0.00000000000E+00				15.3	+/- 0.0
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-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
pcal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00
pcal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 0.2 0.0 Search (1024X32) 488.747 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 0.9 0.0 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.5 0.0 Inc. seg. avg. 497.708 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 65.9 0.0 Inc. frq. avg. 585.101 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
p: az 320.8 el 40.5 pa 88.5 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp.W.271.1HSTEG

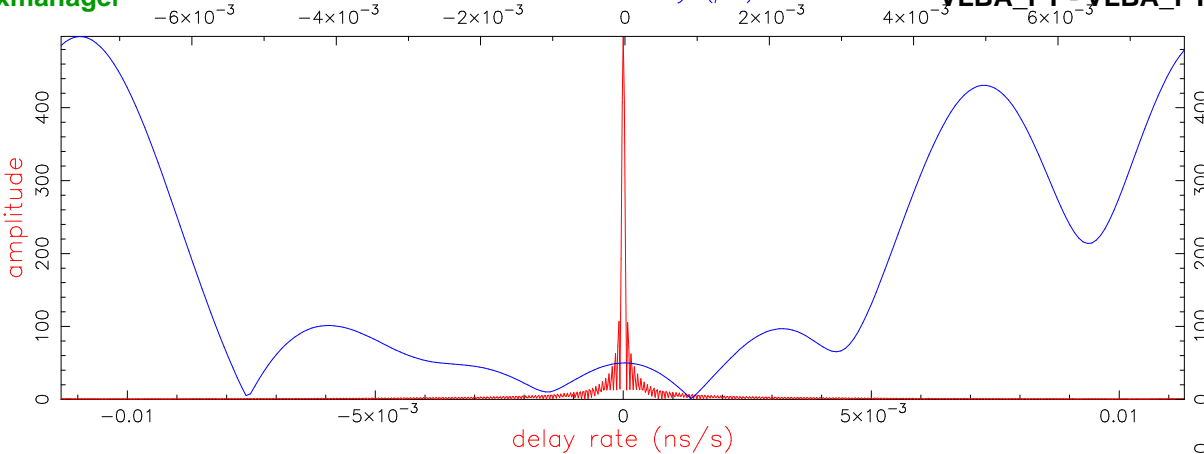
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, pp

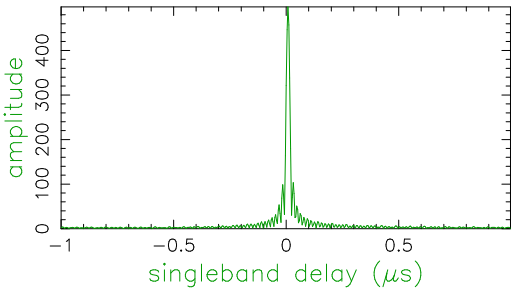
VLBA_PT - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

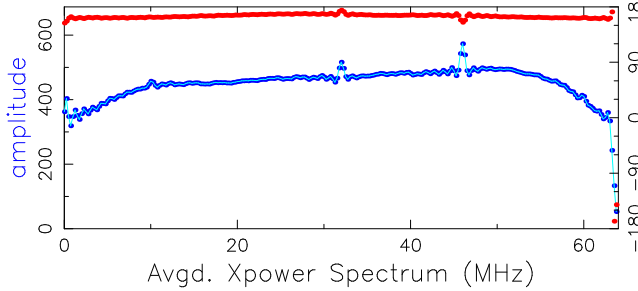


Fringe quality 5

SNR 18265.6
 Int time 179.980
 Amp 497.878
 Phase -15.3
 PFD 0.0e+00
 Delays (us)
 SBD 0.008051
 MBD -0.007544
 Fringe rate (Hz)
 0.000001
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

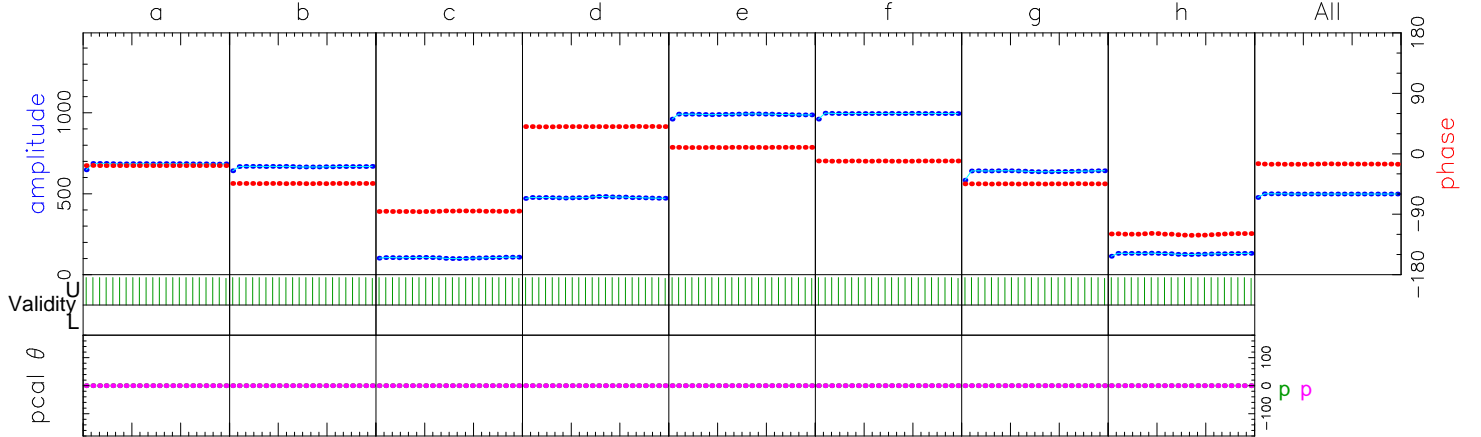


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141510
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-17.5	-44.2	-85.6	40.4	9.5	-10.8	-44.7	-119.6	Phase	-15.3
	683.6	666.6	104.9	476.4	988.8	994.0	637.1	129.4	Ampl.	585.1
	258.5	258.6	256.3	258.4	258.9	258.8	258.6	257.1	Sbd box	259.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
p:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.08068750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-7.54431E-03	+/- 5.9E-08
Sband delay (usec)	8.05050000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		8.05050E-03	+/- 4.7E-07
Phase delay (usec)	-4.93537125569E-07		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.93537E-07	+/- 2.0E-10
Delay rate (us/s)	1.13369219133E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.13369E-11	+/- 1.9E-12
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-15.3	+/- 0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 497.878 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.9 0.0 Search (1024X32) 488.747 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 59.5 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 65.9 0.0 Inc. seg. avg. 497.708 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 p: az 320.8 el 40.5 pa 88.5 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/pp.W.293.1HSTEG

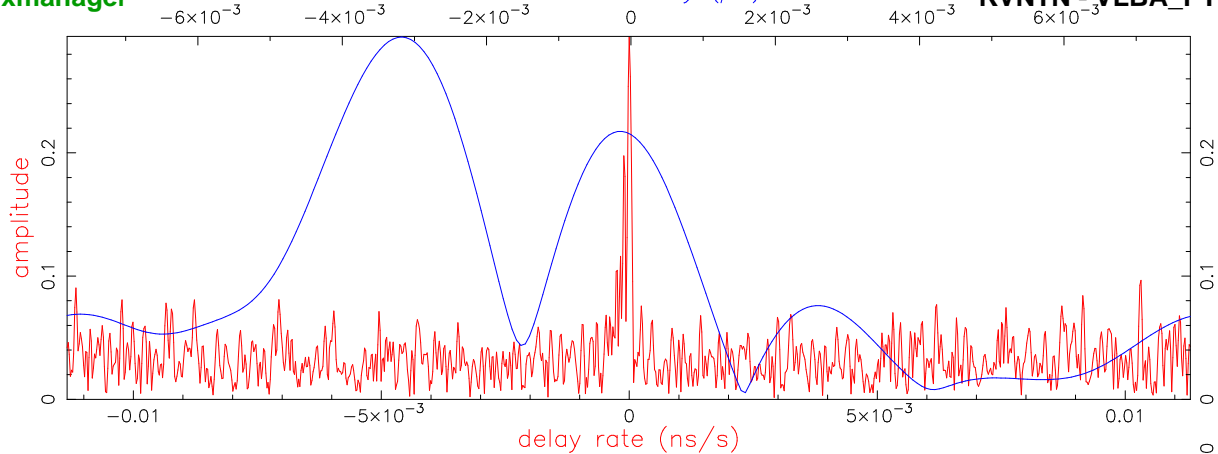
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, tp

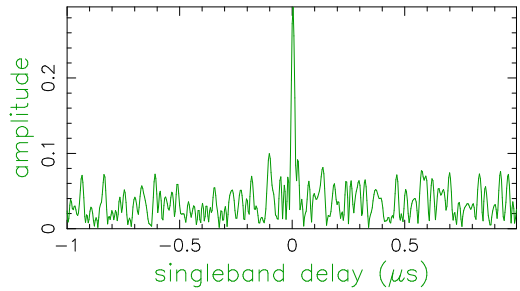
KVNTN - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

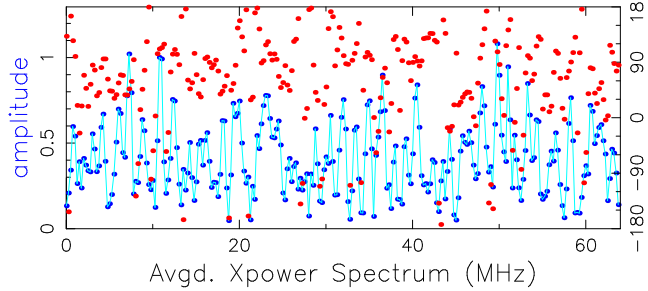


Fringe quality 9

SNR 10.8
 Int time 179.979
 Amp 0.295
 Phase 159.5
 PFD 7.5e-19
 Delays (us)
 SBD 0.003358
 MBD -0.003200
 Fringe rate (Hz)
 -0.000715
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

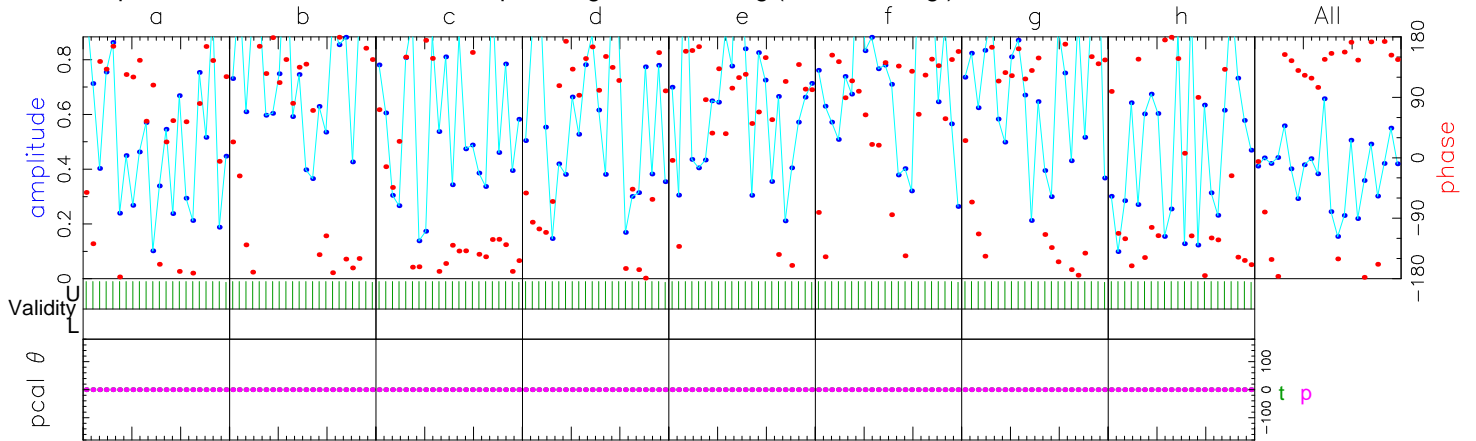


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141507
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	139.2	169.3	-157.4	166.8	114.8	111.4	168.4	-149.1	Phase	159.5
	0.2	0.5	0.4	0.3	0.4	0.4	0.4	0.3	Ampl.	0.3
	259.1	257.9	257.7	257.5	257.7	257.7	258.8	261.2	Sbd box	257.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	1.09213022984E+03	Apriori delay (usec)	1.09213342990E+03	Resid mbdelay (usec)	-3.20006E-03	+/-	1.0E-04
Sband delay (usec)	1.09213678740E+03	Apriori clock (usec)	1.3240738E+00	Resid sbdelay (usec)	3.35750E-03	+/-	8.0E-04
Phase delay (usec)	1.09213343504E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	5.14488E-06	+/-	3.4E-07
Delay rate (us/s)	1.19421794916E+00	Apriori rate (us/s)	1.19421795746E+00	Resid rate (us/s)	-8.30146E-09	+/-	3.3E-09
Total phase (deg)	34.1	Apriori accel (us/s/s)	-7.22809786877E-06	Resid phase (deg)	159.5	+/-	10.6

ph/seg (deg)	51.2	Theor.	24.9	Amplitude	0.295 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	53.5	Search (1024X32)	0.282	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
ph/frq (deg)	39.7	Inc. seg. avg.	0.364	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.0	Inc. frq. avg.	0.341	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011		
				Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 38.3 el 44.1 pa -96.6 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -13100.009 -937.574 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp.W.266.1HSTEG

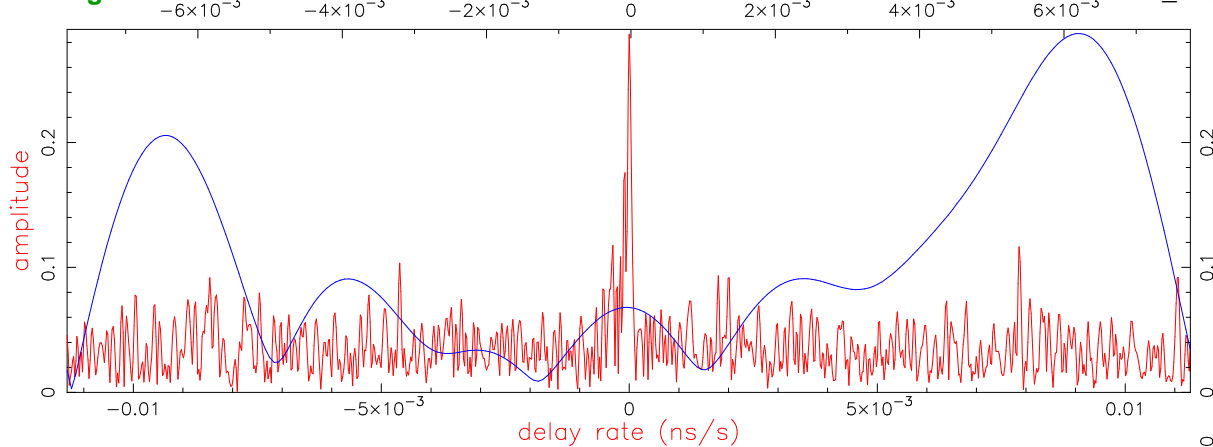
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, tp

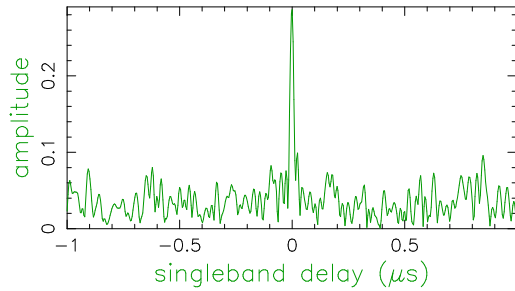
KVNTN - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

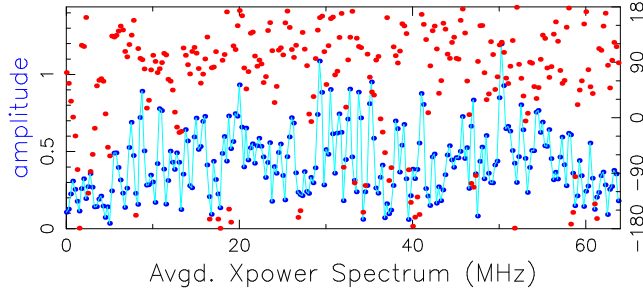


Fringe quality 9

SNR 10.7
 Int time 179.979
 Amp 0.290
 Phase 19.0
 PFD 3.7e-18
 Delays (us)
 SBD -0.001547
 MBD 0.006131
 Fringe rate (Hz)
 -0.000504
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

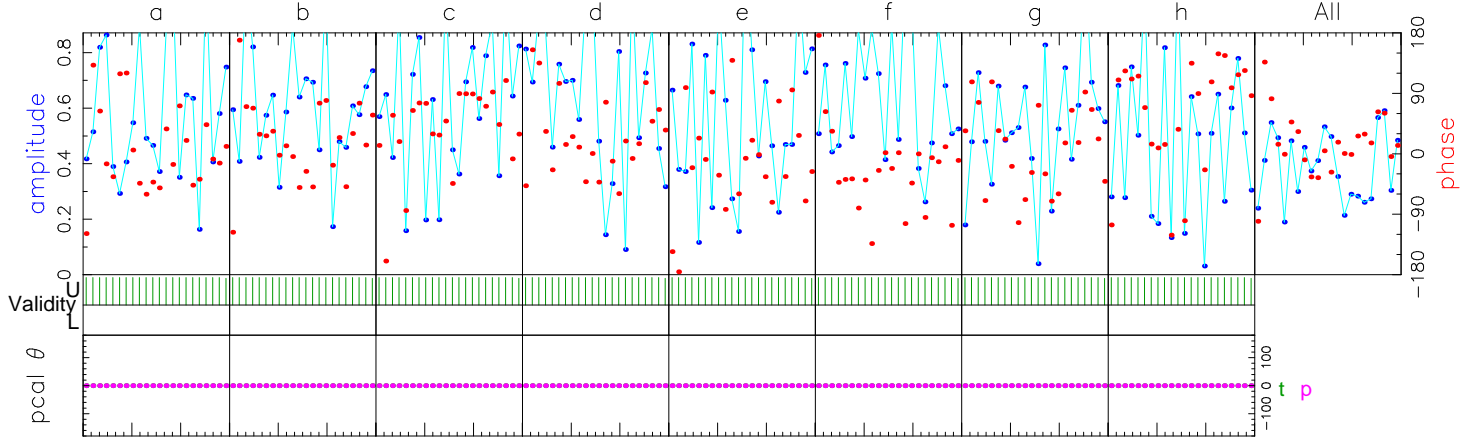


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141509
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0			
t	1000	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000	1000			
t:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
t	1000	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000	1000			
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)		1.09213956115E+03				1.09213342990E+03			6.13125E-03	+/- 1.0E-04	
Sband delay (usec)		1.09213188265E+03				1.3240738E+00			-1.54725E-03	+/- 8.1E-04	
Phase delay (usec)		1.09213343051E+03				-2.9999999E-07			6.11987E-07	+/- 3.5E-07	
Delay rate (us/s)		1.19421795161E+00				1.19421795746E+00			-5.85127E-09	+/- 3.3E-09	
Total phase (deg)			253.6			-7.22809786877E-06			19.0	+/- 10.8	
	RMS	Theor.	Amplitude	0.290 +/- 0.027		Pcal mode: MANUAL, MANUAL			PC period (AP's) 5, 5		
ph/seg (deg)	46.5	25.2	Search (1024X32)	0.282		Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000	
amp/seg (%)	53.8	44.0	Interp.	0.000		Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	45.1	15.2	Inc. seg. avg.	0.355		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)	30.7	26.5	Inc. frq. avg.	0.352		Data rate(Mb/s): 2048			nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

t: az 38.3 el 44.1 pa -96.6 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -13100.009 -937.574 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp.W.289.1HSTEG

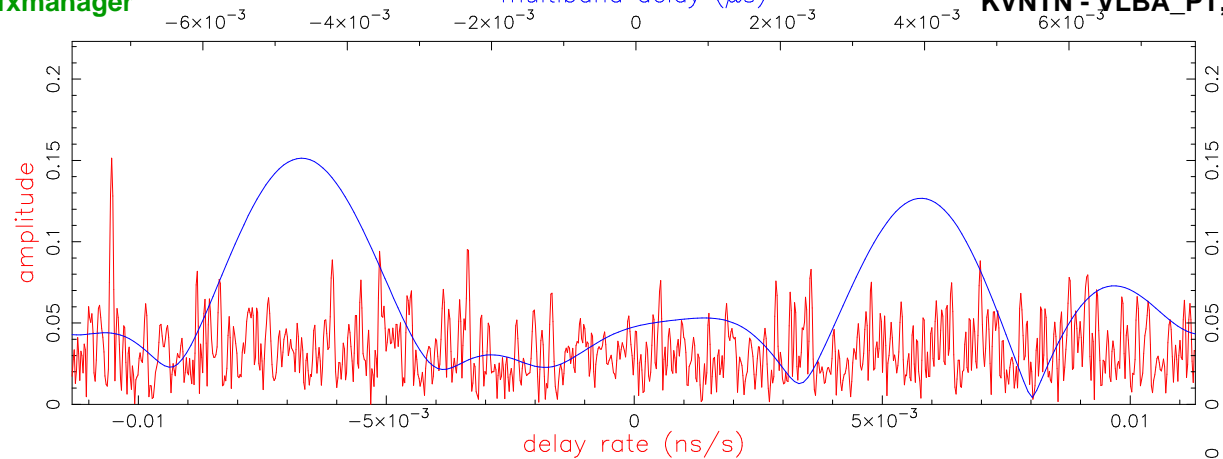
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, tp

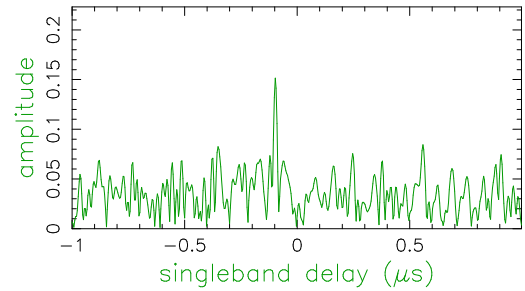
KVNTN - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

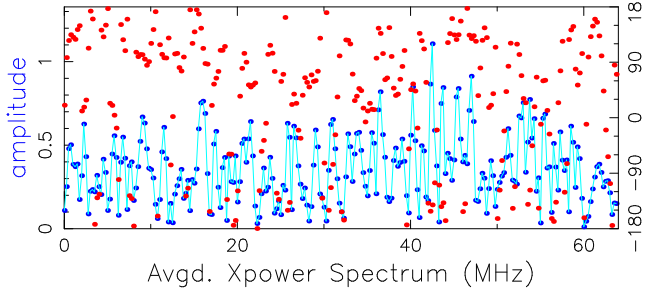


Fringe quality 0

SNR 5.6
 Int time 179.979
 Amp 0.223
 Phase 116.9
 PFD 9.6e-01
 Delays (us)
 SBD -0.097012
 MBD -0.004617
 Fringe rate (Hz)
 -0.908747
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

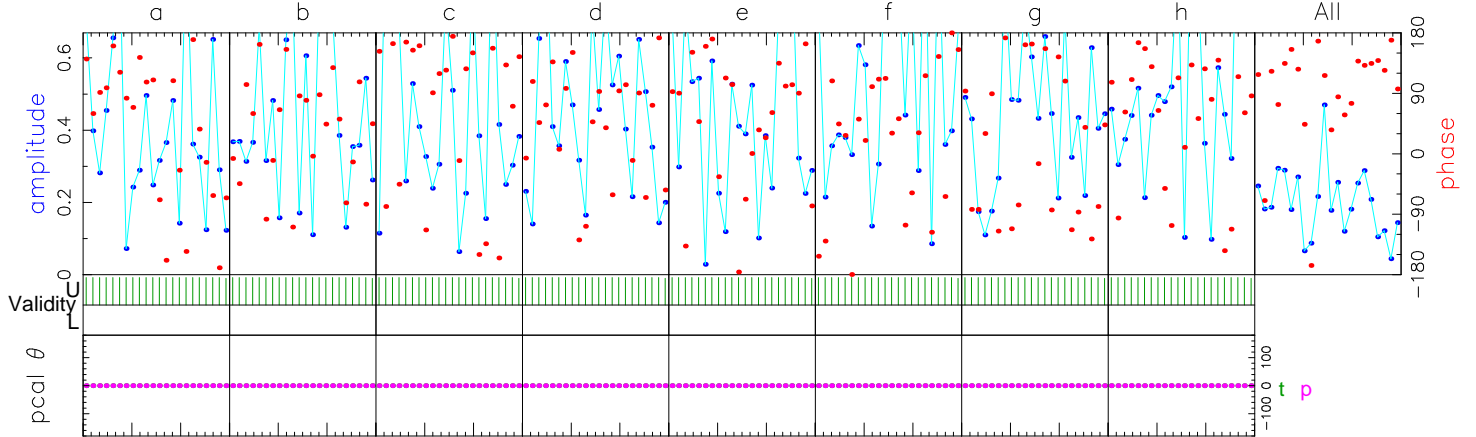


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141511
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.09203506317E+03			1.09213342990E+03					
Sband delay (usec)		1.09203641815E+03			1.3240738E+03					
Phase delay (usec)		1.09213343367E+03			-2.9999999E-07					
Delay rate (us/s)		1.19420740781E+00			1.19421795746E+00					
Total phase (deg)			351.4		-7.22809786877E-06					
				Apriori delay (usec)					Resid mbdelay (usec)	-4.61673E-03 +/- 1.9E-04
				Apriori clock (usec)	0.145				Resid sbdelay (usec)	-9.70118E-02 +/- 1.5E-03
				Apriori clockrate (us/s)	0.217				Resid phdelay (usec)	3.76886E-06 +/- 6.6E-07
				Apriori rate (us/s)	0.256				Resid rate (us/s)	-1.05496E-05 +/- 6.4E-09
				Apriori accel (us/s/s)					Resid phase (deg)	116.9 +/- 20.6
ph/seg (deg)	RMS 54.5	Theor. 48.3	Amplitude Search (1024X32)	0.223 +/- 0.040					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	69.2	84.2	Interp.	0.000					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	51.6	29.1	Inc. seg. avg.	0.217					Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%)	46.2	50.8	Inc. frq. avg.	0.256					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
									Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
t: az 38.3 el 44.1 pa -96.6										
p: az 320.8 el 40.5 pa 88.5										
u,v (fr/asec) -13100.009 -937.574										simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp.W.306.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

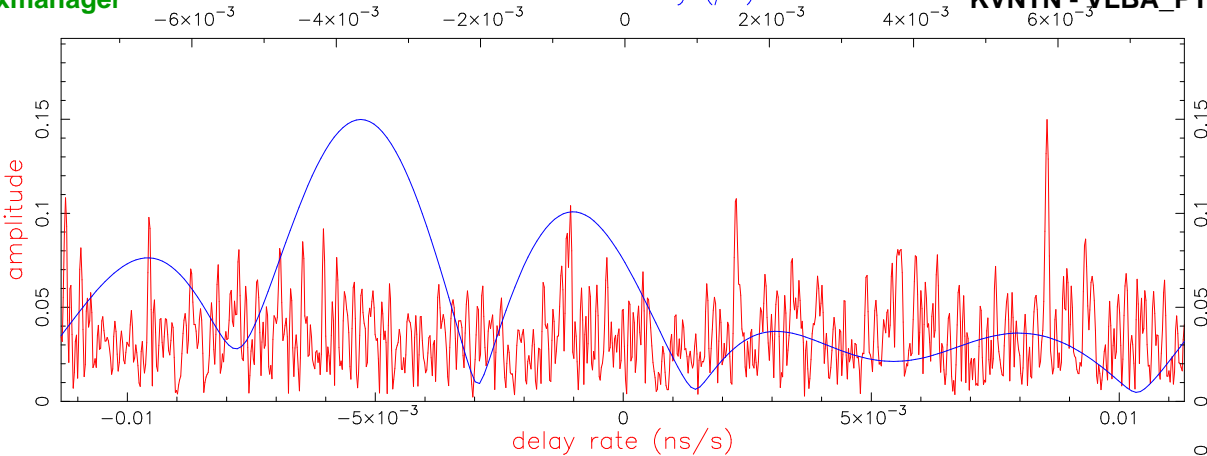
fxmanager

0102+584.1HSTEG, No0128, tp

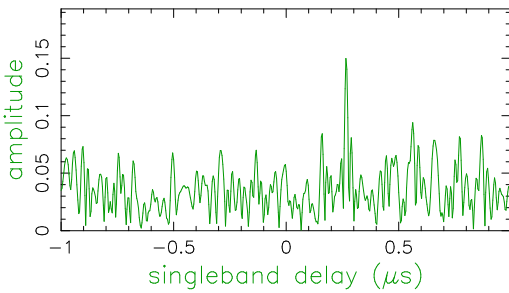
KVNTN - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

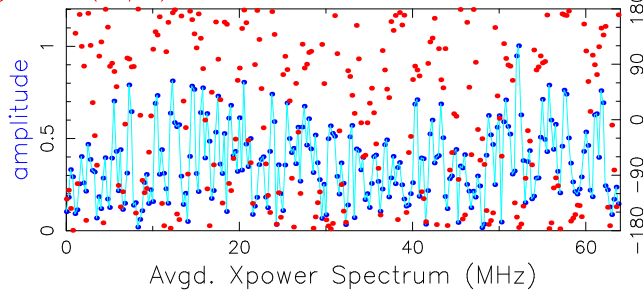
Fringe quality 0



SNR 5.5
Int time 179.979
Amp 0.193
Phase 22.8
PFD 9.8e-01
Delays (us)
SBD 0.266591
MBD -0.003624
Fringe rate (Hz) 0.736725
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

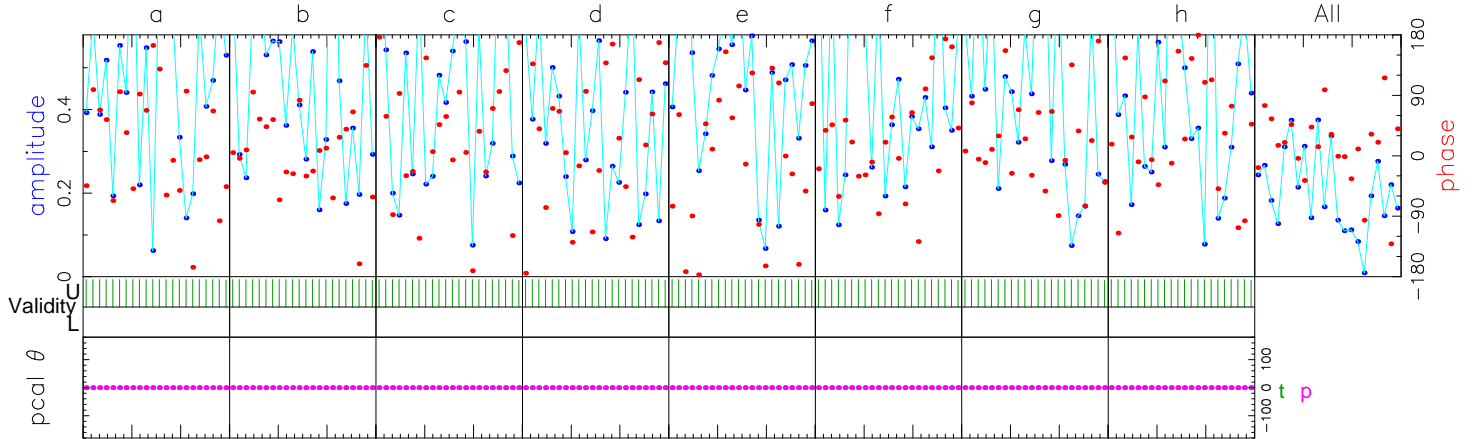


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141513
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
tp	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.09239543110E+03			1.09213342990E+03				-3.62380E-03	+/- 2.0E-04
Sband delay (usec)		1.09240002090E+03			1.3240738E+03				2.66591E-01	+/- 1.6E-03
Phase delay (usec)		1.09213343063E+03			-2.9999999E-07				7.34680E-07	+/- 6.7E-07
Delay rate (us/s)		1.19422651011E+00			1.19421795746E+00				8.55265E-06	+/- 6.4E-09
Total phase (deg)			257.4		-7.22809786877E-06				22.8	+/- 20.7
ph/seg (deg)	RMS 55.5	Theor. 48.5	Amplitude 55.5	0.193 +/- 0.035	Search (1024X32) 0.148	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.8	84.7	Interp. 72.8	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	35.8	29.3	Inc. seg. avg. 35.8	0.193	Sample rate(MISamp/s): 128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	51.1	51.1	Inc. frq. avg. 51.1	0.190	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00	

t: az 38.3 el 44.1 pa -96.6 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -13100.009 -937.574 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/tp.W.322.1HSTEG

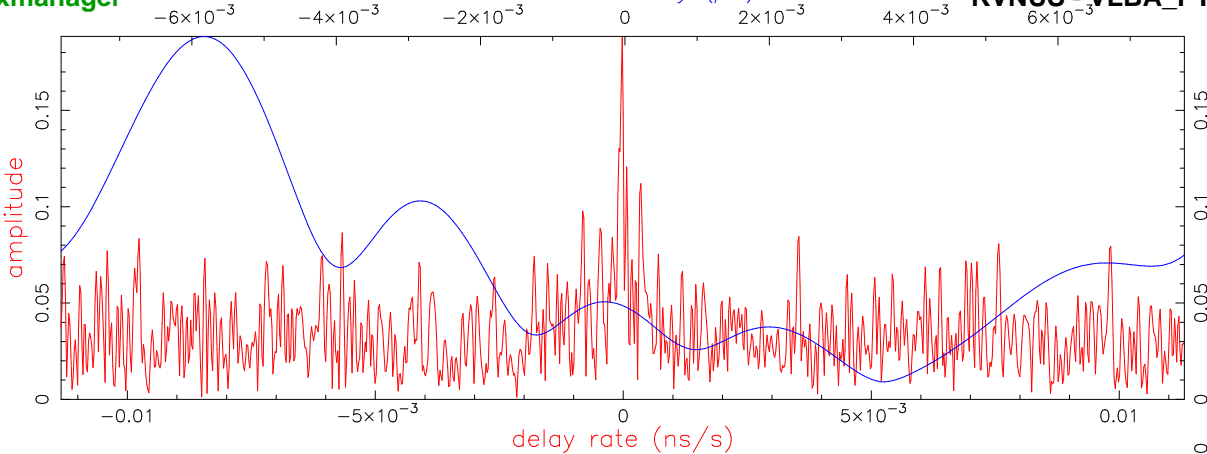
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, up

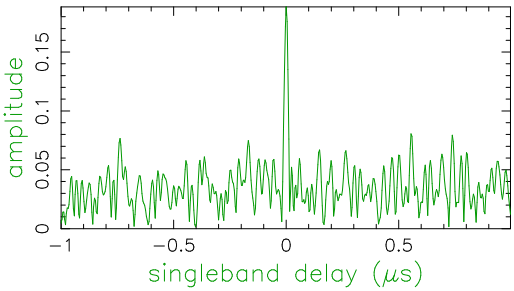
KVNUS - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

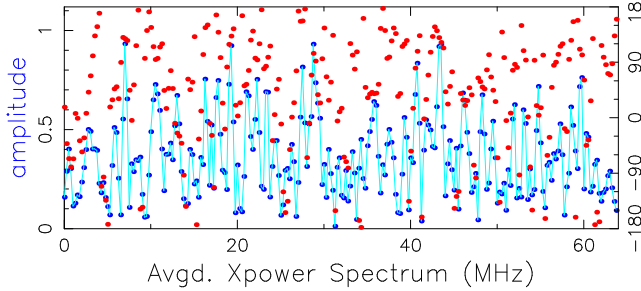


Fringe quality 0

SNR 6.9
 Int time 179.978
 Amp 0.188
 Phase 155.3
 PFD 7.1e-04
 Delays (us)
 SBD 0.000361
 MBD -0.005803
 Fringe rate (Hz)
 -0.001347
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

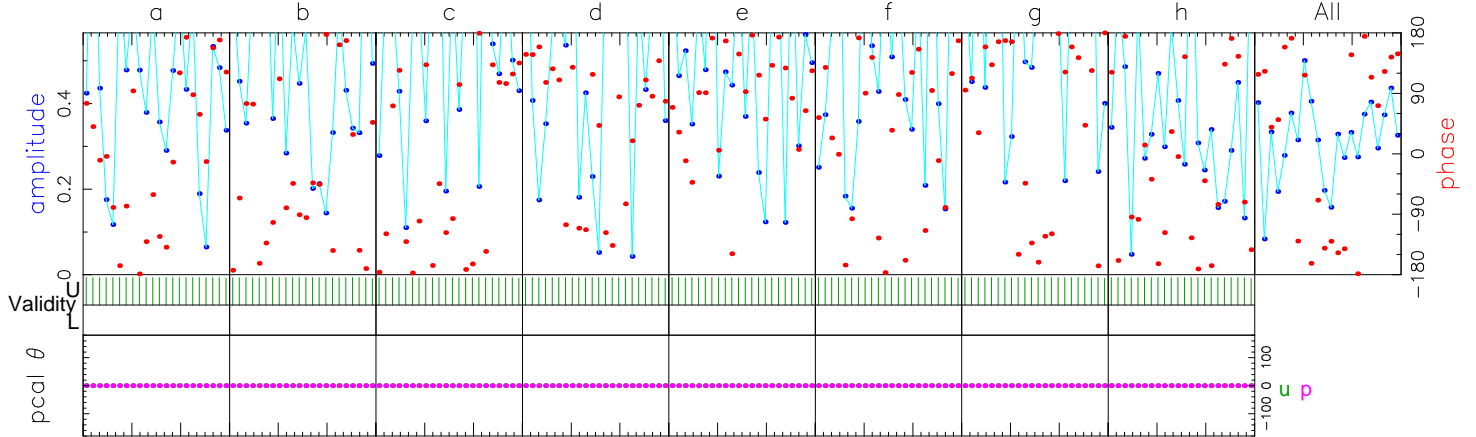


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141512
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

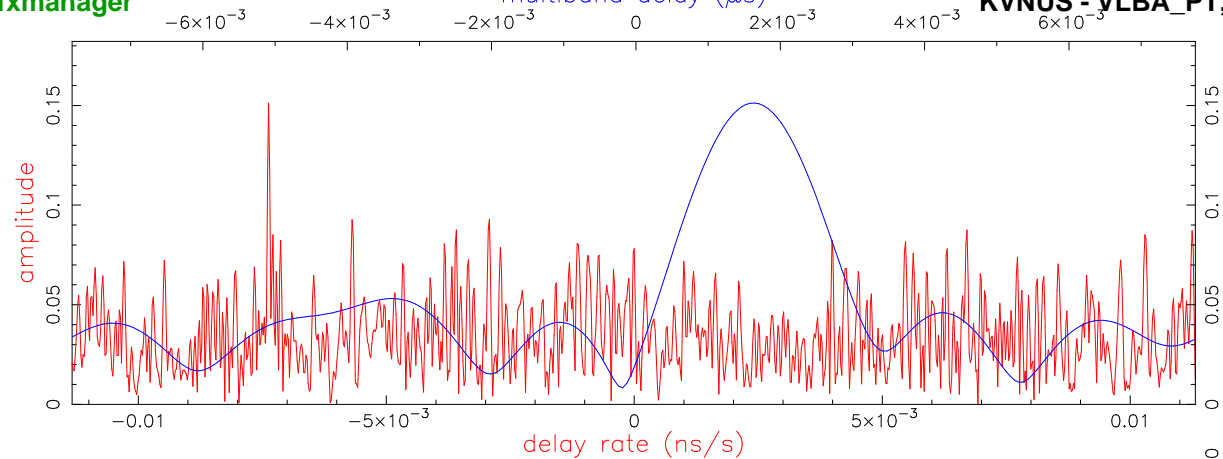
Group delay (usec)(sbd)	1.91843606984E+03	Apriori delay (usec)	1.91844187261E+03	Resid mbdelay (usec)	-5.80277E-03	+/-	1.6E-04
Sband delay (usec)	1.91844223411E+03	Apriori clock (usec)	2.4750009E+00	Resid sbdelay (usec)	3.61500E-04	+/-	1.2E-03
Phase delay (usec)	1.91844187762E+03	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	5.00732E-06	+/-	5.3E-07
Delay rate (us/s)	1.16130087566E+00	Apriori rate (us/s)	1.16130089129E+00	Resid rate (us/s)	-1.56322E-08	+/-	5.1E-09
Total phase (deg)	121.8	Apriori accel (us/s/s)	-8.49478947526E-06	Resid phase (deg)	155.3	+/-	16.6

ph/seg (deg)	61.3	Theor.	38.9	Amplitude	0.188 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	84.8	Search (1024X32)	0.185	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	Inc. seg. avg.	0.258	Inc. frq. avg.	0.211	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	46.9	Inc. frq. avg.	0.211			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

u: az 39.5 el 47.3 pa -97.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12740.300 -951.489 simultaneous interpolator

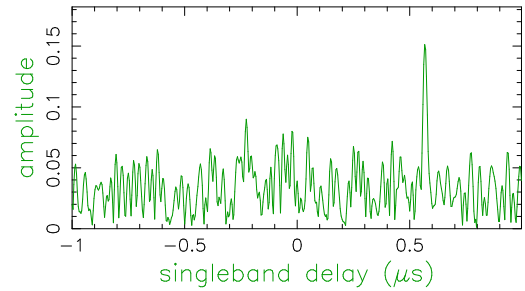
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/up...1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/up.W.312.1HSTEG

multiband delay (μs)

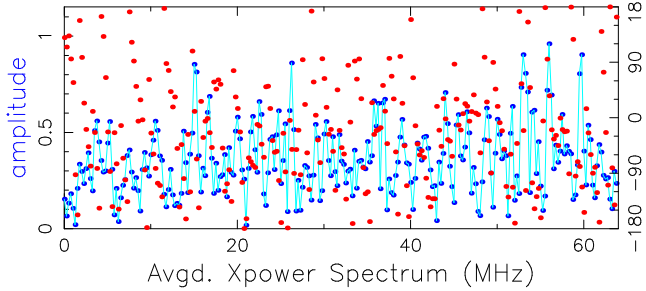


Fringe quality 0

SNR 5.6
Int time 179.978
Amp 0.182
Phase 1.3
PFD 9.5e-01
Delays (us)
SBD 0.567557
MBD 0.001669
Fringe rate (Hz)
-0.635321
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

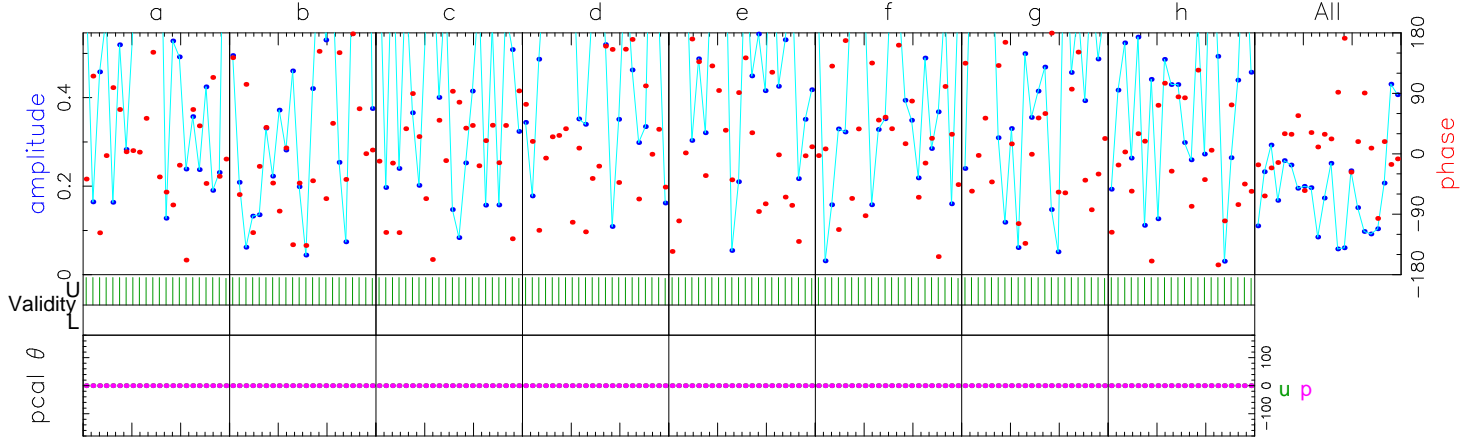


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141516
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-1.3	1.6	8.8	1.7	14.3	14.3	-11.1	-7.0		1.3
	0.3	0.1	0.2	0.3	0.1	0.1	0.2	0.2	Ampl.	0.2
	401.8	3.1	234.2	321.5	138.2	495.8	405.0	406.8	Sbd box	402.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.91900604183E+03	Apriori delay (usec)	1.91844187261E+03	Resid mbdelay (usec)	1.66922E-03	+/-	1.9E-04
Sband delay (usec)	1.91900942961E+03	Apriori clock (usec)	2.4750009E+00	Resid sbdelay (usec)	5.67557E-01	+/-	1.5E-03
Phase delay (usec)	1.91844187265E+03	Apriori clockrate (us/s)	0.000000E+00	Resid phdelay (usec)	4.05319E-08	+/-	6.6E-07
Delay rate (us/s)	1.16129351585E+00	Apriori rate (us/s)	1.16130089129E+00	Resid rate (us/s)	-7.37544E-06	+/-	6.4E-09
Total phase (deg)	327.7	Apriori accel (us/s/s)	-8.49478947526E-06	Resid phase (deg)	1.3	+/-	20.5

ph/seg (deg)	57.1	Theor.	48.2	Amplitude	0.182 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	69.6		84.1	Search (1024X32)	0.149	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	10.2		29.0	Inc. seg. avg.	0.171	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	44.8		50.7	Inc. frq. avg.	0.162	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

u: az 39.5 el 47.3 pa -97.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12740.300 -951.489 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/up..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/up.W.344.1HSTEG

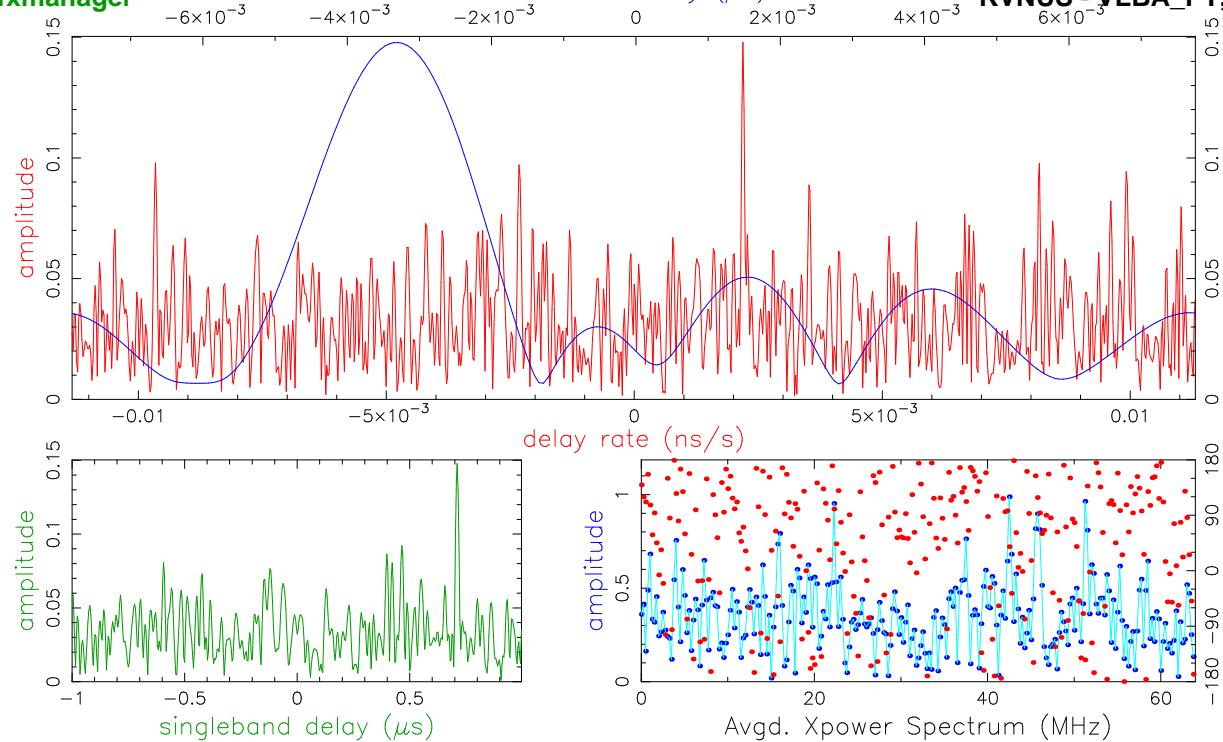
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, up

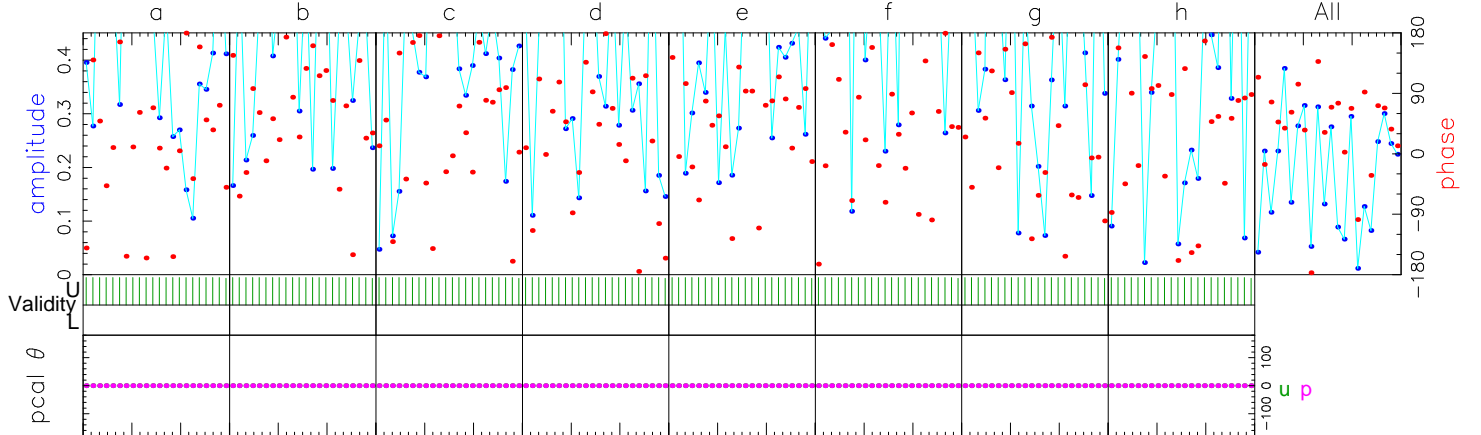
KVNUS - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)



Fringe quality 0
 SNR 5.4
 Int time 179.978
 Amp 0.150
 Phase 57.7
 PFD 1.0e+00
 Delays (us)
 SBD 0.710491
 MBD -0.003313
 Fringe rate (Hz)
 0.188503
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141517
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
u	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
Group delay (usec)(sbd)		1.91915730993E+03		Apriori delay (usec)	1.91844187261E+03		Resid mbdelay (usec)	-3.31268E-03		+/- 2.0E-04
Sband delay (usec)		1.91915236311E+03		Apriori clock (usec)	2.4750009E+00		Resid sbdelay (usec)	7.10491E-01		+/- 1.6E-03
Phase delay (usec)		1.91844187447E+03		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	1.85929E-06		+/- 6.8E-07
Delay rate (us/s)		1.16130307963E+00		Apriori rate (us/s)	1.16130089129E+00		Resid rate (us/s)	2.18834E-06		+/- 6.5E-09
Total phase (deg)			24.1	Apriori accel (us/s/s)	-8.49478947526E-06		Resid phase (deg)	57.7		+/- 21.1

ph/seg (deg) 58.3 76.6
 amp/seg (%) 58.3 76.6
 ph/frq (deg) 15.0 29.8
 amp/frq (%) 38.2 52.1
 u: az 39.5 el 47.3 pa -97.8
 p: az 320.8 el 40.5 pa 88.5
 u,v (fr/asec) -12740.300 -951.489
 Control file: cf_1234_gmva
 Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/up..1HSTEG
 Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/up.W.356.1HSTEG

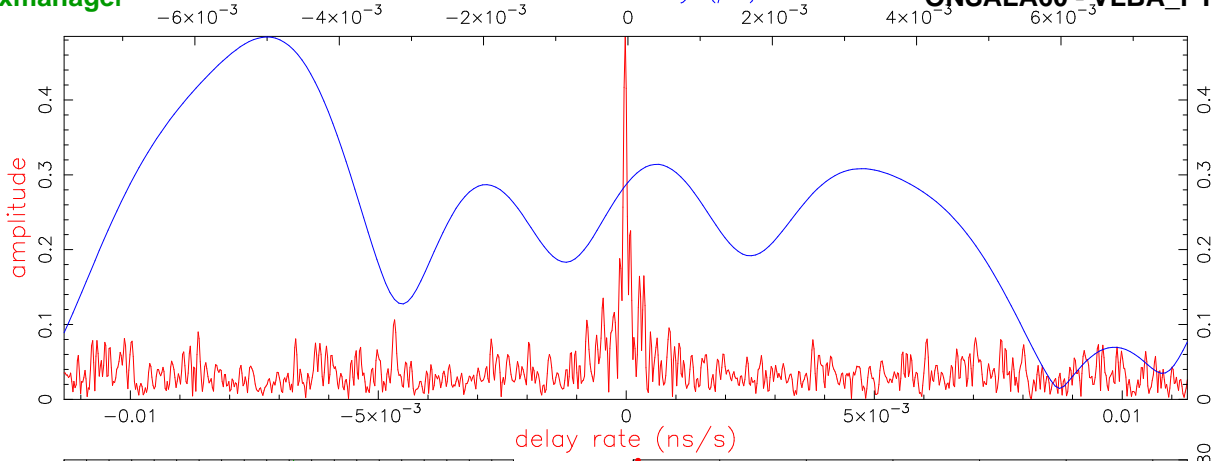
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, Xp

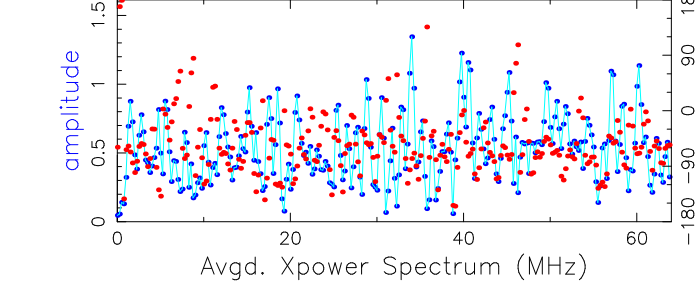
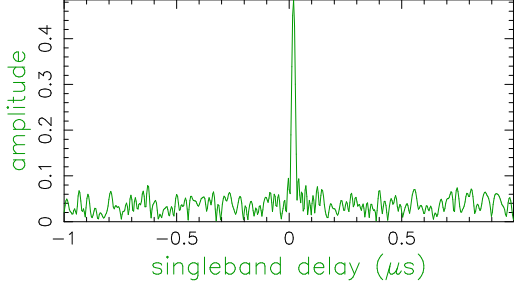
ONSALA60 - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)



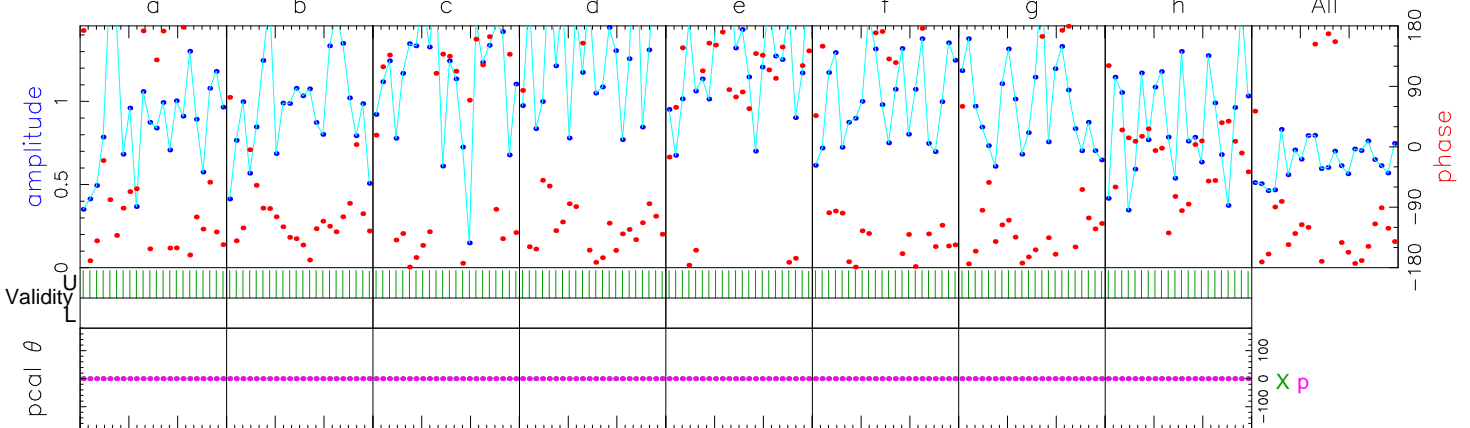
Fringe quality 7

SNR 17.8
 Int time 179.966
 Amp 0.485
 Phase -146.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.019033
 MBD -0.004996
 Fringe rate (Hz)
 -0.002753
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141514
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-132.3	-111.4	174.6	-124.3	131.2	-155.3	-146.6	-18.8	Phase	-146.0
	0.6	0.8	0.7	1.0	0.9	0.8	0.7	0.6	Ampl.	0.7
	262.0	261.9	262.2	262.2	262.3	263.0	263.2	264.4	Sbd box	261.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-4.40659296863E+03		Apriori delay (usec)		-4.40661922223E+03		Resid mbdelay (usec)		-4.99639E-03	+/- 6.1E-05
Sband delay (usec)	-4.40660018898E+03		Apriori clock (usec)		4.8245865E+01		Resid sbdelay (usec)		1.90332E-02	+/- 4.8E-04
Phase delay (usec)	-4.40661922694E+03		Apriori clockrate (us/s)		1.2800004E-07		Resid phdelay (usec)		-4.70721E-06	+/- 2.1E-07
Delay rate (us/s)	6.74192624612E-01		Apriori rate (us/s)		6.74192656570E-01		Resid rate (us/s)		-3.19588E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		5.05280879577E-05		Resid phase (deg)		-146.0	+/- 6.4

ph/seg (deg) 48.6 15.1 Search (1024X32) 0.468 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 39.1 26.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 66.5 9.1 Inc. seg. avg. 0.621 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 61.2 15.9 Inc. frq. avg. 0.745 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 4.0 el 26.0 pa -4.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -7352.226 7802.699 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp.W.334.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

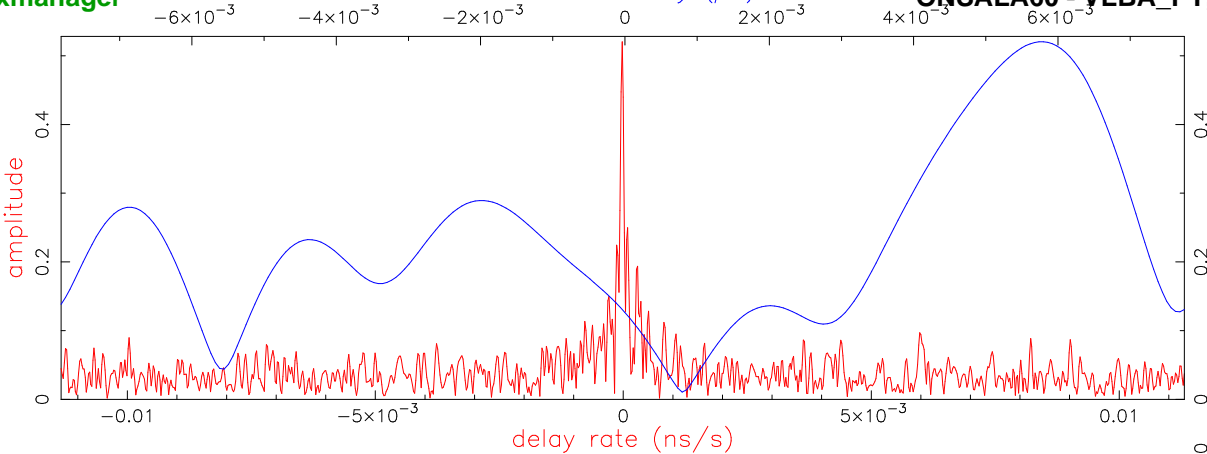
fxmanager

0102+584.1HSTEG, No0128, Xp

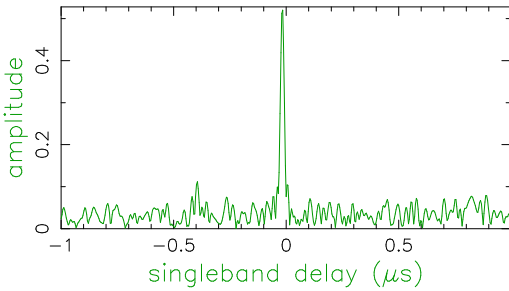
ONSALA60 - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

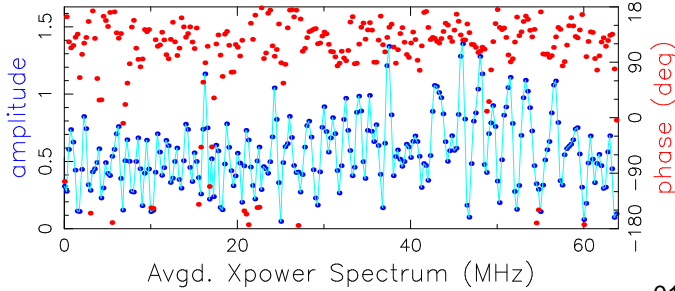
Fringe quality 7



SNR 19.4
 Int time 179.966
 Amp 0.528
 Phase -139.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.017234
 MBD 0.005736
 Fringe rate (Hz)
 -0.002777
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

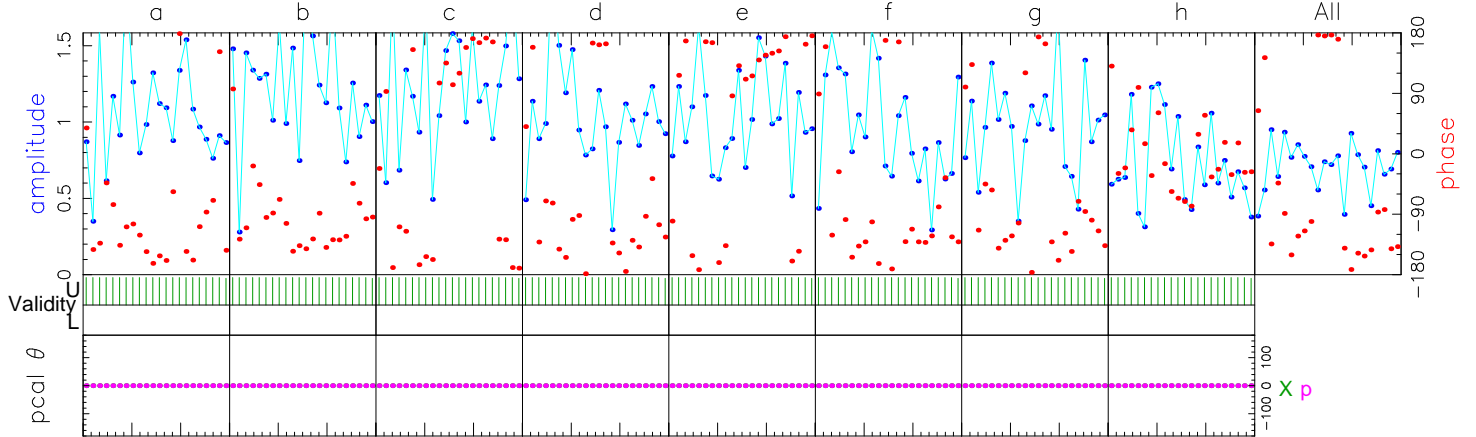


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141516
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.8	-103.9	178.0	-130.0	163.1	-130.5	-136.9	-7.3	Phase	-139.4
	0.8	0.9	0.8	0.7	0.8	0.7	0.6	0.5	Ampl.	0.7
	253.0	252.5	252.5	253.1	253.5	253.0	253.8	255.0	Sbd box	252.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-4.40662911097E+03		Apriori delay (usec)		-4.40661922223E+03		Resid mbdelay (usec)		5.73626E-03	+/- 5.6E-05
Sband delay (usec)	-4.40663645598E+03		Apriori clock (usec)		4.8245865E+01		Resid sbdelay (usec)		-1.72337E-02	+/- 4.4E-04
Phase delay (usec)	-4.40661922673E+03		Apriori clockrate (us/s)		1.2800004E-07		Resid phdelay (usec)		-4.49667E-06	+/- 1.9E-07
Delay rate (us/s)	6.74192624331E-01		Apriori rate (us/s)		6.74192656570E-01		Resid rate (us/s)		-3.22394E-08	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		5.05280879577E-05		Resid phase (deg)		-139.4	+/- 5.9

ph/seg (deg) 52.4 13.9 Search (1024X32) 0.501 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 45.3 24.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 63.4 8.4 Inc. seg. avg. 0.689 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 44.0 14.6 Inc. frq. avg. 0.717 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 4.0 el 26.0 pa -4.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -7352.226 7802.699 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp.W.348.1HSTEG

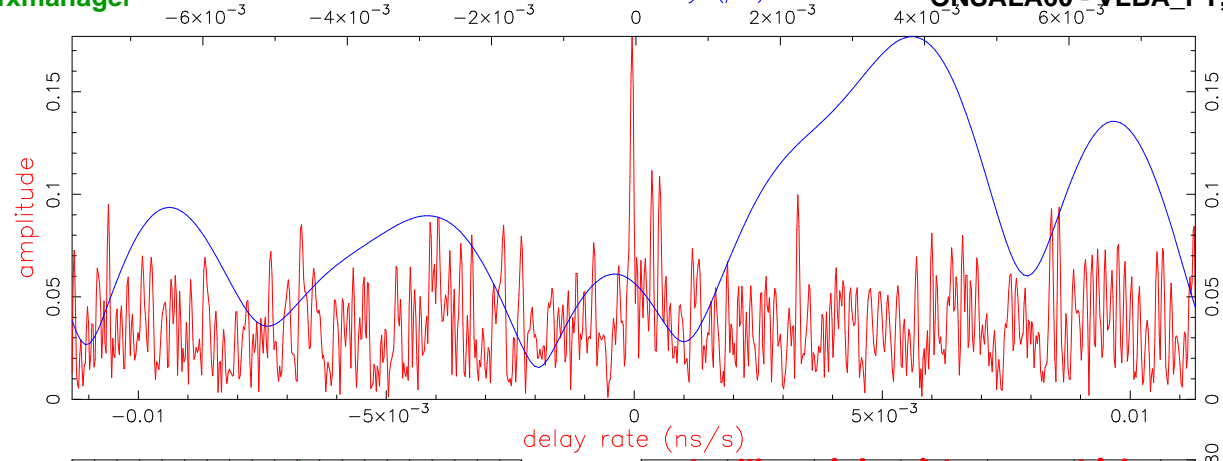
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, Xp

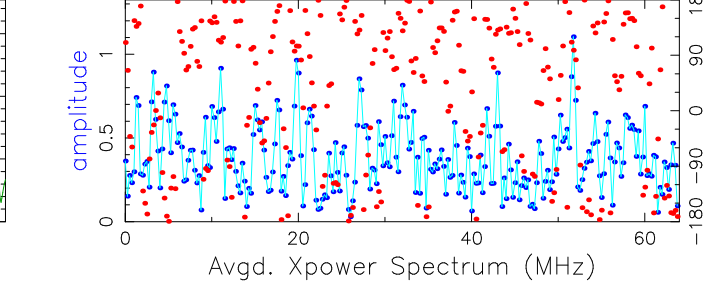
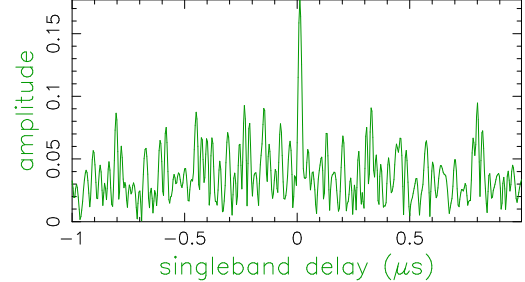
ONSALA60 - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)



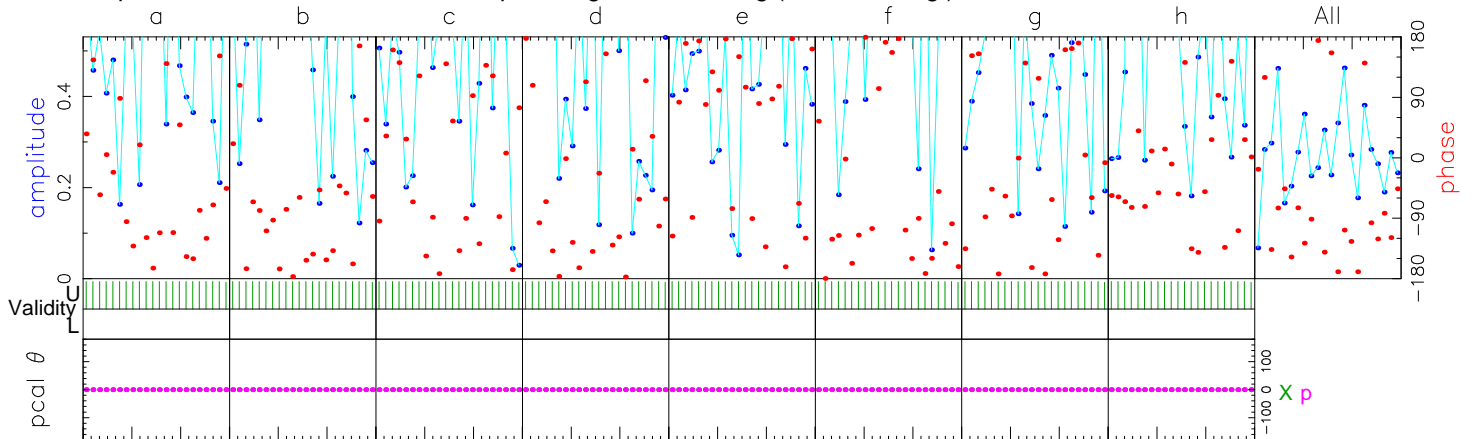
Fringe quality 0

SNR 6.5
 Int time 179.966
 Amp 0.177
 Phase -126.1
 PFD 1.2e-02
 Delays (us)
 SBD 0.012056
 MBD 0.003828
 Fringe rate (Hz)
 -0.003615
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141520
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-101.6	-98.8	-173.4	-143.1	151.7	-145.2	-138.8	-28.1		-126.1
	0.3	0.3	0.1	0.3	0.2	0.3	0.2	0.3		0.2
	260.5	259.6	511.6	260.5	249.9	261.5	370.9	262.2		260.1
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
p	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
X	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	-4.40659976908E+03		Apriori delay (usec)		-4.40661922223E+03		Resid mbdelay (usec)		3.82815E-03	+/- 1.7E-04
Sband delay (usec)	-4.40660716648E+03		Apriori clock (usec)		4.8245865E+01		Resid sbdelay (usec)		1.20558E-02	+/- 1.3E-03
Phase delay (usec)	-4.40661922630E+03		Apriori clockrate (us/s)		1.2800004E-07		Resid phdelay (usec)		-4.06495E-06	+/- 5.7E-07
Delay rate (us/s)	6.74192614608E-01		Apriori rate (us/s)		6.74192656570E-01		Resid rate (us/s)		-4.19622E-08	+/- 5.5E-09
Total phase (deg)			Apriori accel (us/s/s)		5.05280879577E-05		Resid phase (deg)		-126.1	+/- 17.7

ph/seg (deg) 56.5 41.4 Search (1024X32) 0.176 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 74.8 72.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 58.8 25.0 Inc. seg. avg. 0.217 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 58.2 43.6 Inc. frq. avg. 0.234 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 X: az 4.0 el 26.0 pa -4.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -7352.226 7802.699 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp.W.376.1HSTEG

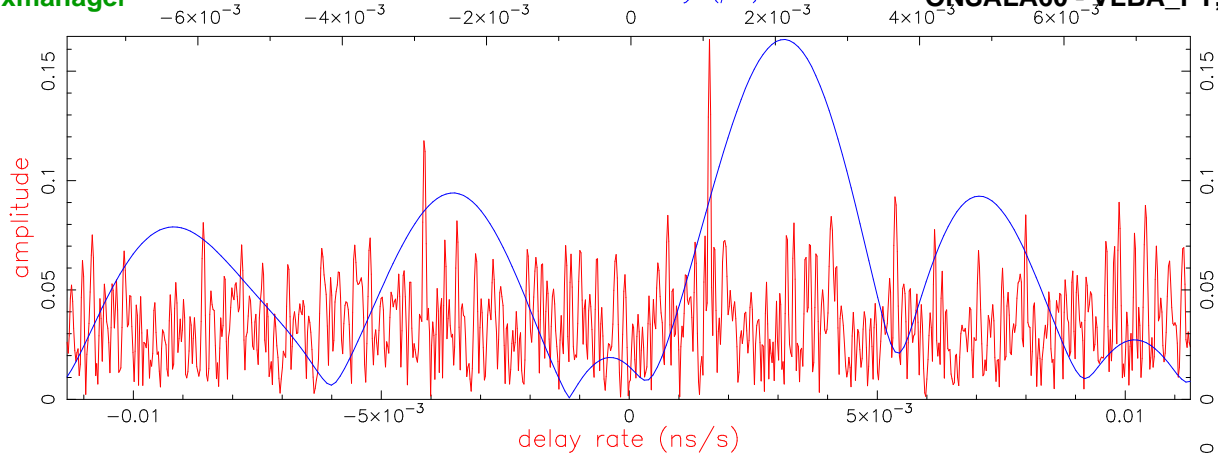
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, Xp

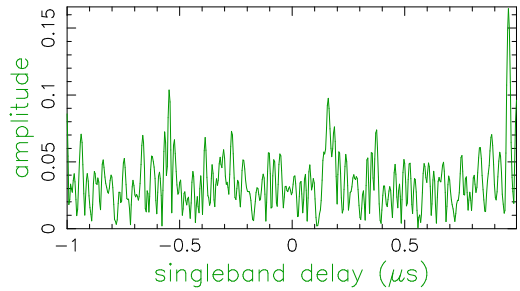
ONSALA60 - VLBA_PT, fgroup W, pol RL

multiband delay (μ s)

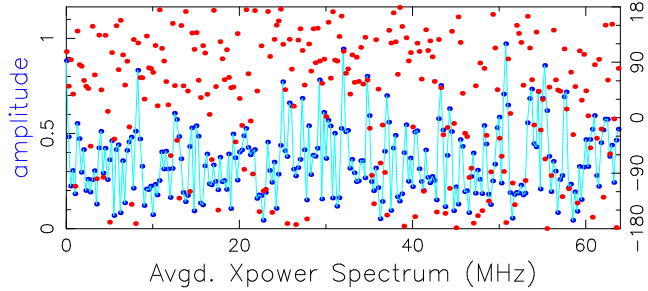


Fringe quality 0

SNR 6.0
 Int time 179.966
 Amp 0.166
 Phase -11.1
 PFD 1.9e-01
 Delays (us)
 SBD 0.960939
 MBD 0.002119
 Fringe rate (Hz)
 0.140329
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

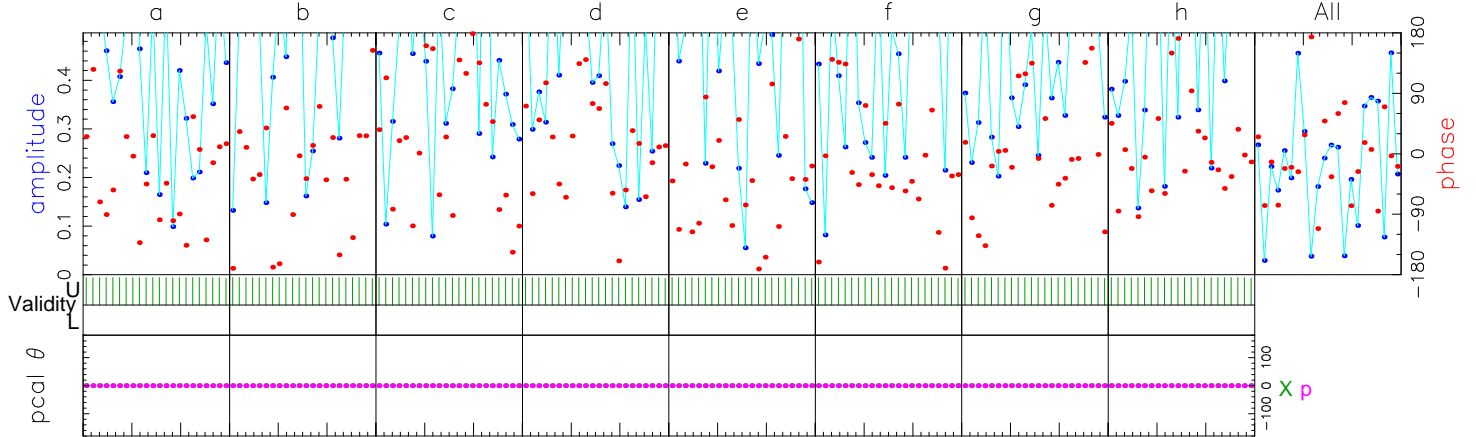


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141521
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



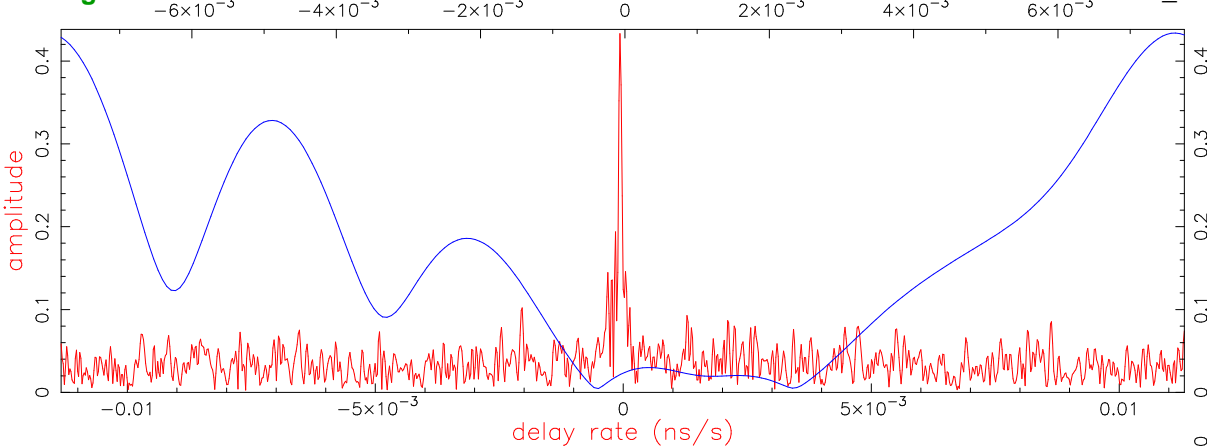
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-21.8	-8.8	49.6	31.9	-62.3	-30.6	-3.2	-2.0	Phase	-11.1
	0.2	0.2	0.0	0.2	0.2	0.2	0.1	0.3	Ampl.	0.2
	114.6	32.6	299.7	480.0	347.3	293.5	103.4	504.1	Sbd box	503.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-4.40566397796E+03	Apriori delay (usec)	-4.40661922223E+03	Resid mbdelay (usec)	2.11927E-03	+/-	1.8E-04
Sband delay (usec)	-4.40565828373E+03	Apriori clock (usec)	4.8245865E+01	Resid sbdelay (usec)	9.60939E-01	+/-	1.4E-03
Phase delay (usec)	-4.40661922259E+03	Apriori clockrate (us/s)	1.2800004E-07	Resid phdelay (usec)	-3.59453E-07	+/-	6.1E-07
Delay rate (us/s)	6.74194285654E-01	Apriori rate (us/s)	6.74192656570E-01	Resid rate (us/s)	1.62908E-06	+/-	5.9E-09
Total phase (deg)	-300.3	Apriori accel (us/s/s)	5.05280879577E-05	Resid phase (deg)	-11.1	+/-	19.0

ph/seg (deg)	63.0	Theor.	44.5	Amplitude	0.166 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	83.2	Search (1024X32)	0.157	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	38.3	Inc. seg. avg.	0.177	Inc. frq. avg.	0.170	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.9	Inc. frq. avg.	0.170			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

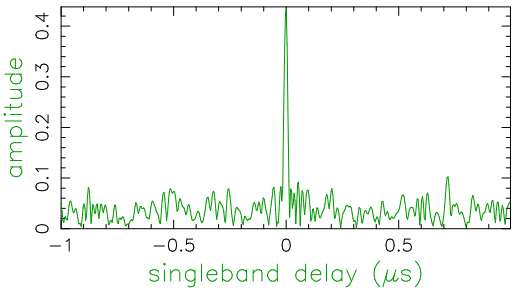
X: az 4.0 el 26.0 pa -4.3 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -7352.226 7802.699 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Xp.W.390.1HSTEG

multiband delay (μ s)

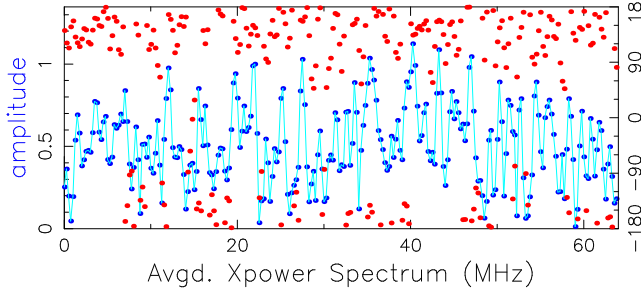


Fringe quality 7

SNR 16.1
 Int time 179.978
 Amp 0.438
 Phase -127.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.001355
 MBD -0.008080
 Fringe rate (Hz)
 -0.005634
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

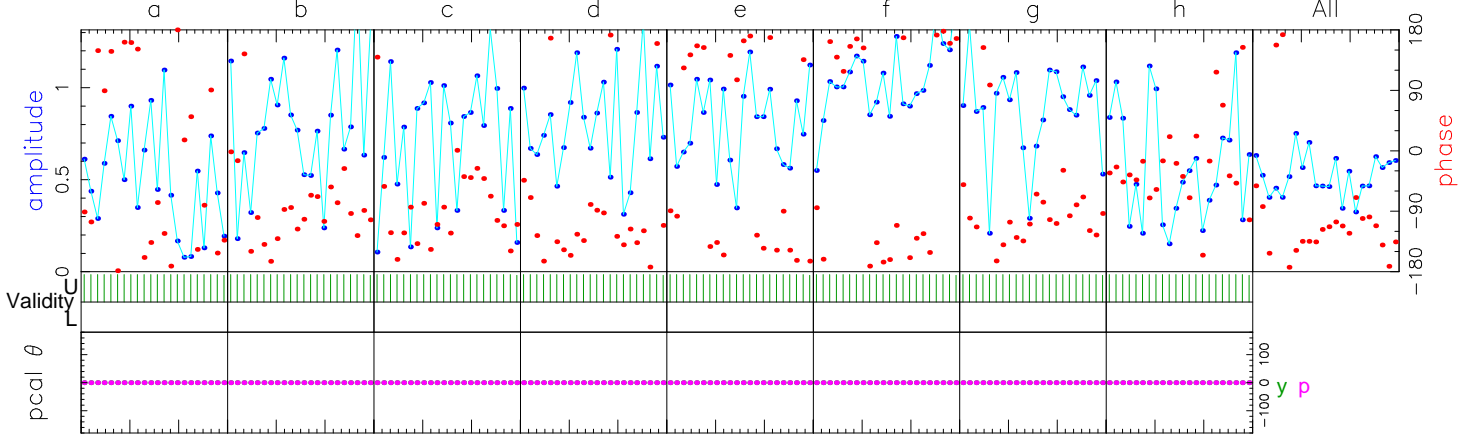


delay rate (ns/s)



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141517
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.4	-97.0	-91.8	-129.3	-170.1	-175.7	-105.3	-38.4	Phase	-127.6
	0.3	0.6	0.5	0.6	0.6	0.9	0.7	0.4	Ampl.	0.6
	258.7	256.6	257.0	255.7	256.2	256.9	257.1	259.6	Sbd box	256.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	2.00057411572E+03	Apriori delay (usec)	2.00058219581E+03	Resid mbdelay (usec)	-8.08009E-03	+/-	6.8E-05
Sband delay (usec)	2.00058084081E+03	Apriori clock (usec)	1.1900740E+00	Resid sbdelay (usec)	-1.35500E-03	+/-	5.4E-04
Phase delay (usec)	2.00058219170E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-4.11492E-06	+/-	2.3E-07
Delay rate (us/s)	1.16165050515E+00	Apriori rate (us/s)	1.16165057055E+00	Resid rate (us/s)	-6.54070E-08	+/-	2.2E-09
Total phase (deg)	-2.5	Apriori accel (us/s/s)	-6.21585402613E-06	Resid phase (deg)	-127.6	+/-	7.1

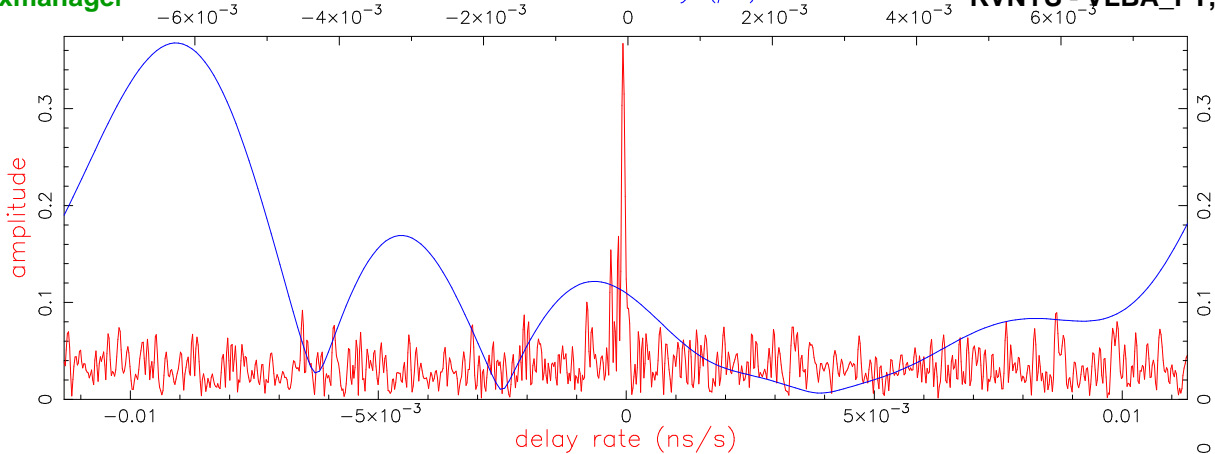
ph/seg (deg)	RMS 36.1	Theor. 16.7	Amplitude Search (1024X32)	0.438 +/- 0.027	0.428	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	31.1	29.2	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	52.2	10.1	Inc. seg. avg.	0.501	0.501	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	48.3	17.6	Inc. frq. avg.	0.568	0.568	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 41.1 el 47.7 pa -93.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12742.417 -528.304 simultaneous interpolator

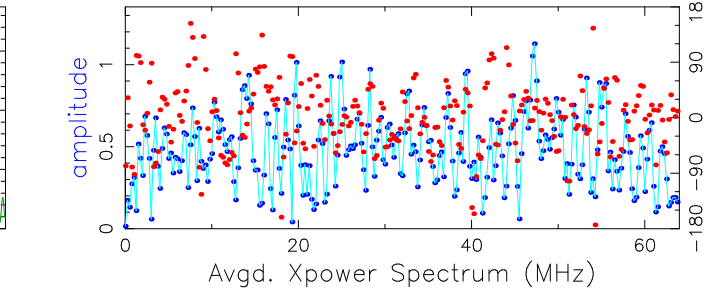
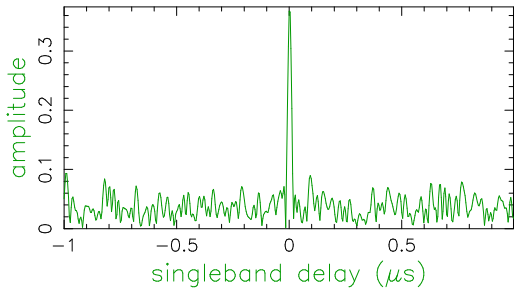
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp.W.355.1HSTEG

multiband delay (μ s)

Fringe quality 9

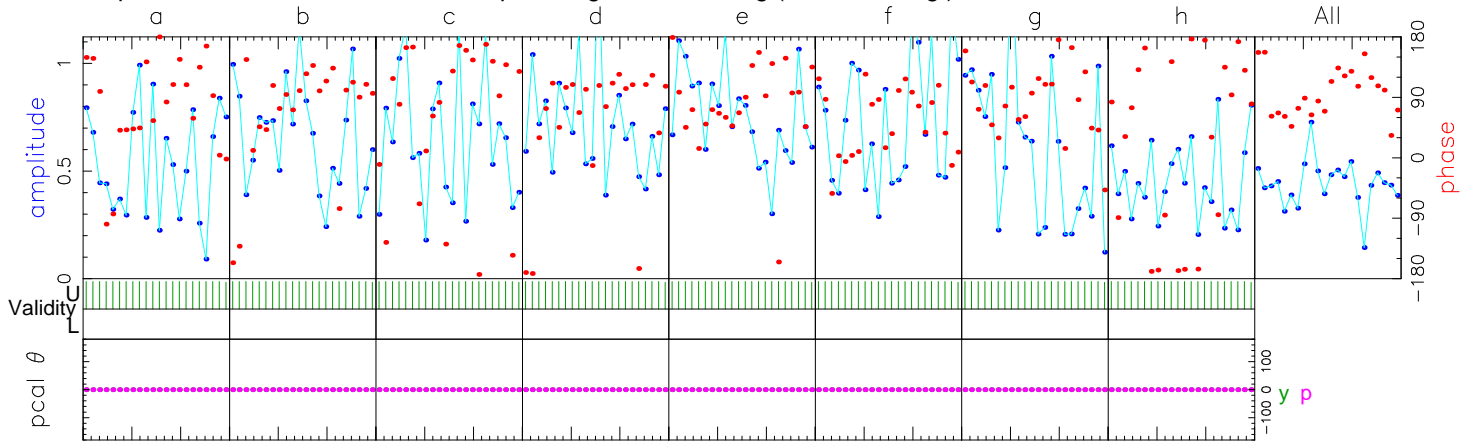


SNR 13.7
Int time 179.978
Amp 0.375
Phase 95.5
PFD 1.7e-34
Delays (us)
SBD 0.001869
MBD -0.006194
Fringe rate (Hz)
-0.005496
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141519
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

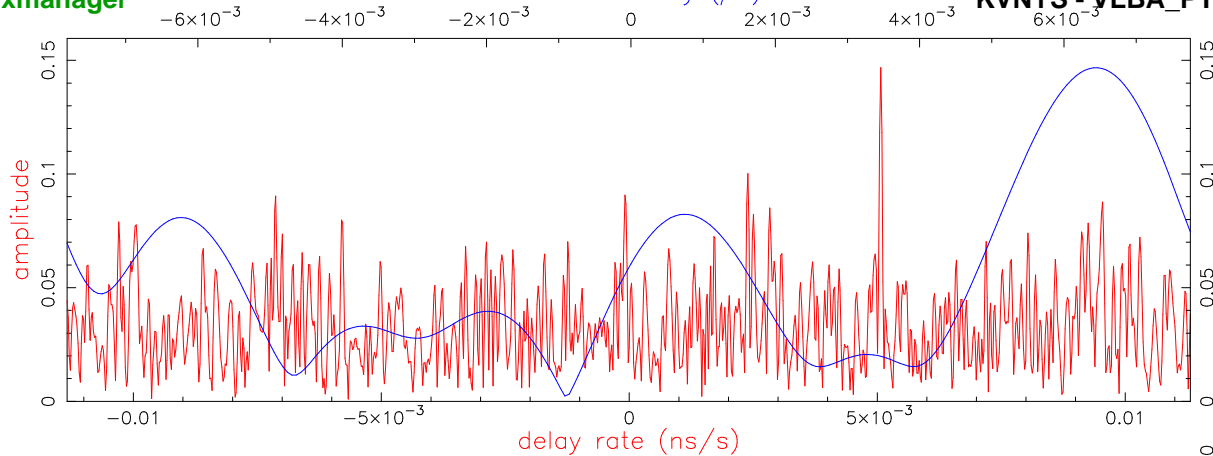
Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.00059162657E+03		Apriori delay (usec)		2.00058219581E+03		Resid mbdelay (usec)		-6.19424E-03	+/- 7.9E-05
Sband delay (usec)	2.00058406506E+03		Apriori clock (usec)		1.1900740E+07		Resid sbdelay (usec)		1.86925E-03	+/- 6.3E-04
Phase delay (usec)	2.00058219889E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		3.07848E-06	+/- 2.7E-07
Delay rate (us/s)	1.16165050675E+00		Apriori rate (us/s)		1.16165057055E+00		Resid rate (us/s)		-6.37999E-08	+/- 2.6E-09
Total phase (deg)	220.5		Apriori accel (us/s/s)		-6.21585402613E-06		Resid phase (deg)		95.5	+/- 8.3

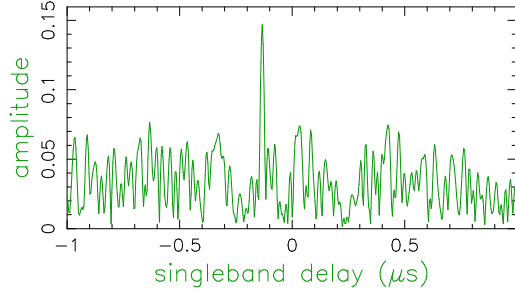
ph/seg (deg) 35.5 19.6 Search (1024X32) 0.366 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 33.6 34.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.9 11.8 Inc. seg. avg. 0.418 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 32.4 20.6 Inc. frq. avg. 0.410 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
y: az 41.1 el 47.7 pa -93.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12742.417 -528.304 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp.W.370.1HSTEG

multiband delay (μ s)

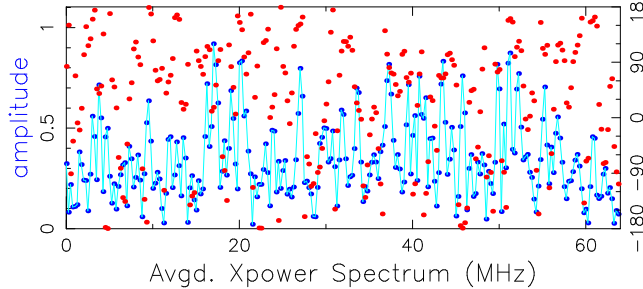


Fringe quality 0

SNR 5.4
Int time 179.978
Amp 0.160
Phase -71.1
PFD 1.0e+00
Delays (us)
SBD -0.133062
MBD 0.006437
Fringe rate (Hz)
0.436947
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

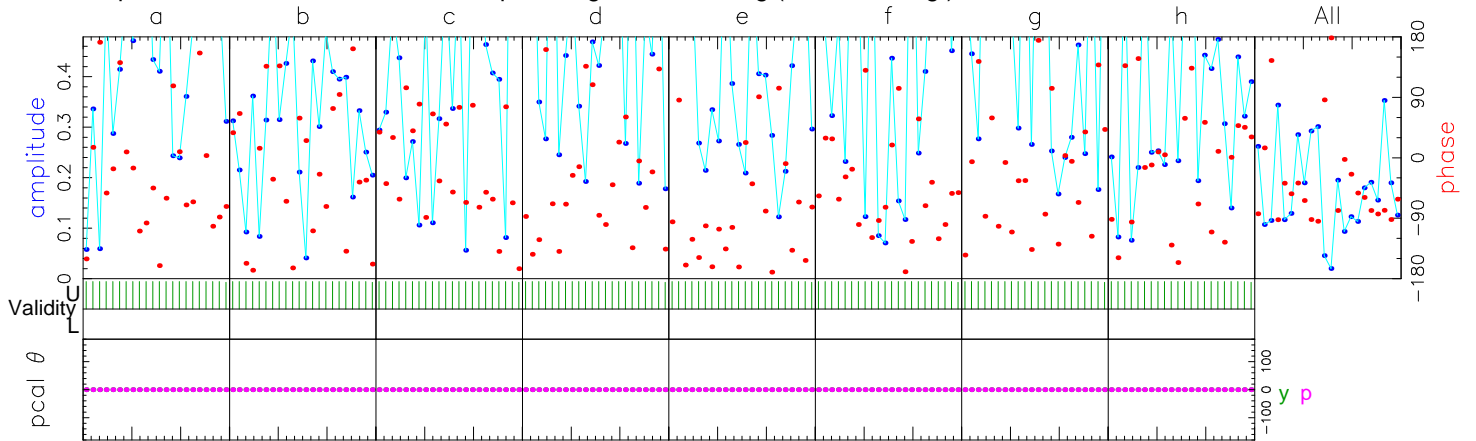


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141520
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec

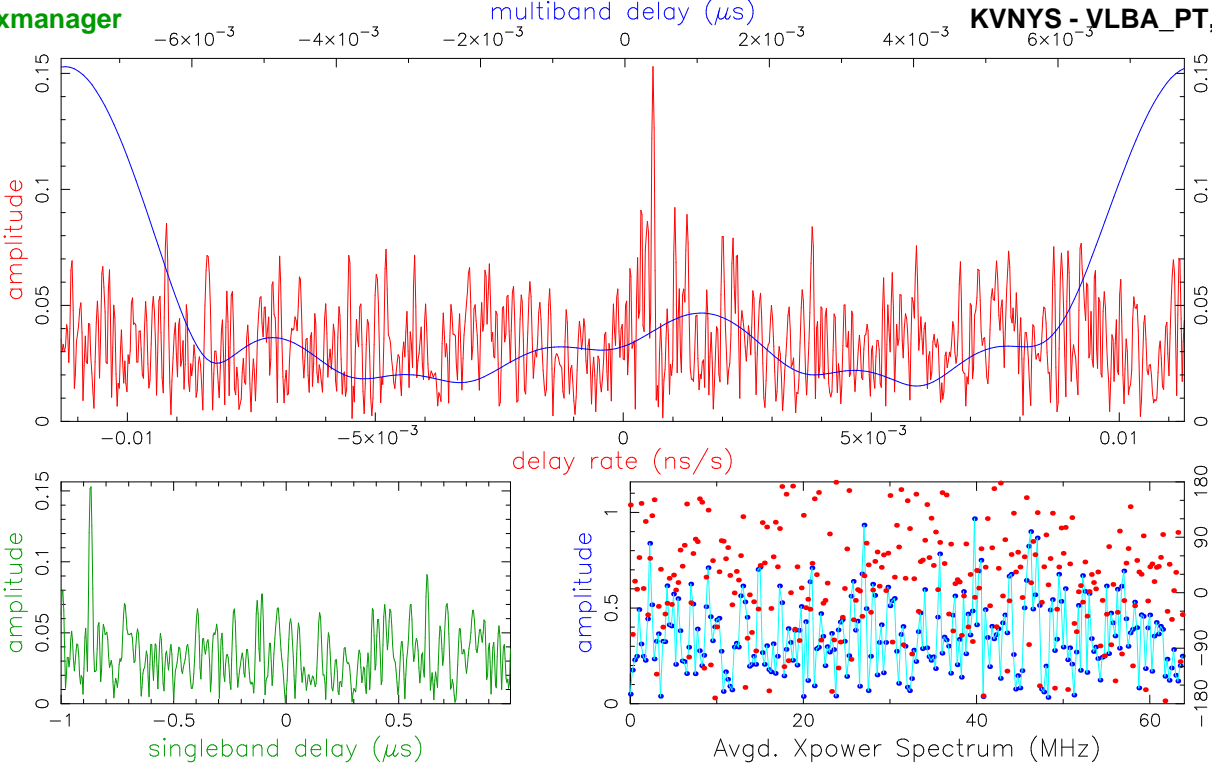


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-65.6	-84.5	-34.3	-80.9	-118.3	-65.4	-73.2	39.4	Phase	-71.1
	0.3	0.0	0.2	0.2	0.2	0.3	0.2	0.1	Ampl.	0.2
	222.0	187.3	46.3	264.9	372.4	251.3	376.4	389.7	Sbd box	222.9
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	2.00044800818E+03	Apriori delay (usec)	2.00058219581E+03	Resid mbdelay (usec)	6.43737E-03	+/-	2.0E-04
Sband delay (usec)	2.00044913331E+03	Apriori clock (usec)	1.1900740E+07	Resid sbdelay (usec)	-1.33062E-01	+/-	1.6E-03
Phase delay (usec)	2.00058219352E+03	Apriori clockrate (us/s)	-2.9999999E-07	Resid phdelay (usec)	-2.29342E-06	+/-	6.9E-07
Delay rate (us/s)	1.16165564308E+00	Apriori rate (us/s)	1.16165057055E+00	Resid rate (us/s)	5.07252E-06	+/-	6.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-6.21585402613E-06	Resid phase (deg)	-71.1	+/-	21.3

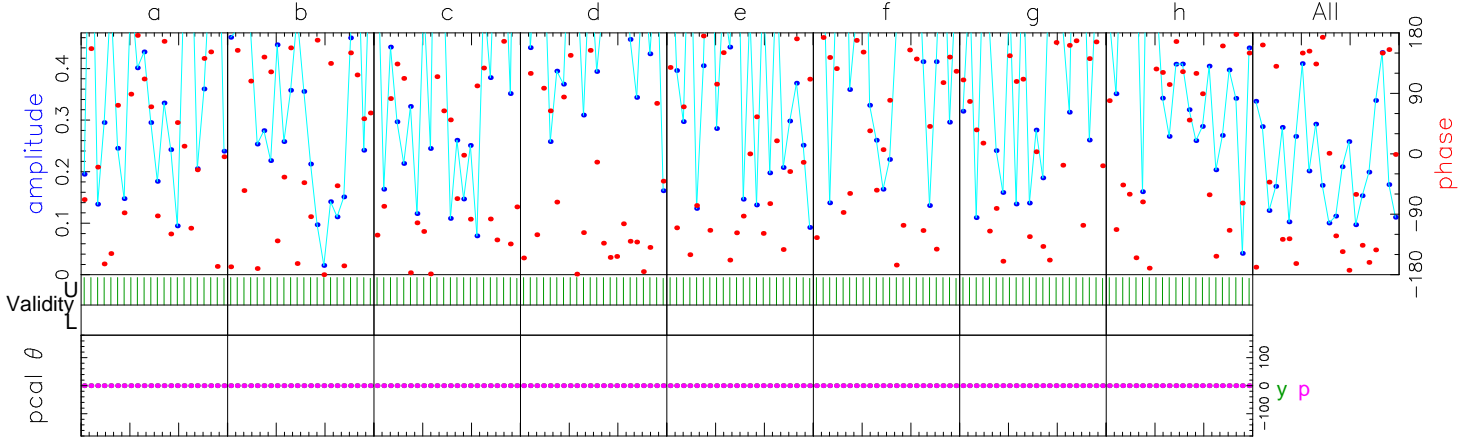
ph/seg (deg)	59.4	RMS	59.4	Theor.	49.9	Amplitude	0.160 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.5		65.5		87.1	Search (1024X32)	0.145	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	51.9		51.9		30.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.3		55.3		52.5	Inc. seg. avg.	0.141	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Inc. frq. avg.	0.164	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 41.1 el 47.7 pa -93.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12742.417 -528.304 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp.W.383.1HSTEG



Fringe quality 0
SNR 5.7
Int time 179.978
Amp 0.156
Phase -176.6
PFD 7.1e-01
Delays (us)
SBD -0.869006
MBD -0.007761
Fringe rate (Hz)
0.051858
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141522
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	170.2	156.5	-160.8	-164.5	-141.8	176.4	166.0	174.7	Phase	-176.6
	0.1	0.1	0.1	0.3	0.1	0.2	0.1	0.1	Ampl.	0.1
	443.6	445.8	229.0	34.5	18.7	312.0	368.9	503.4	Sbd box	34.5
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.99971505994E+03		Apriori delay (usec)		2.00058219581E+03		Resid mbdelay (usec)		-7.76088E-03	+/- 1.9E-04
Sband delay (usec)	1.99971319006E+03		Apriori clock (usec)		1.1900740E+00		Resid sbdelay (usec)		-8.69006E-01	+/- 1.5E-03
Phase delay (usec)	2.00058219012E+03		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-5.69561E-06	+/- 6.4E-07
Delay rate (us/s)	1.16165117258E+00		Apriori rate (us/s)		1.16165057055E+00		Resid rate (us/s)		6.02025E-07	+/- 6.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-6.21585402613E-06		Resid phase (deg)		-176.6	+/- 20.0

RMS Theor. Amplitude 0.156 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 72.3 46.9 Search (1024X32) 0.151 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 75.1 81.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 22.1 28.3 Inc. seg. avg. 0.165 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 33.6 49.3 Inc. frq. avg. 0.143 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 y: az 41.1 el 47.7 pa -93.8 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -12742.417 -528.304 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/yp.W.398.1HSTEG

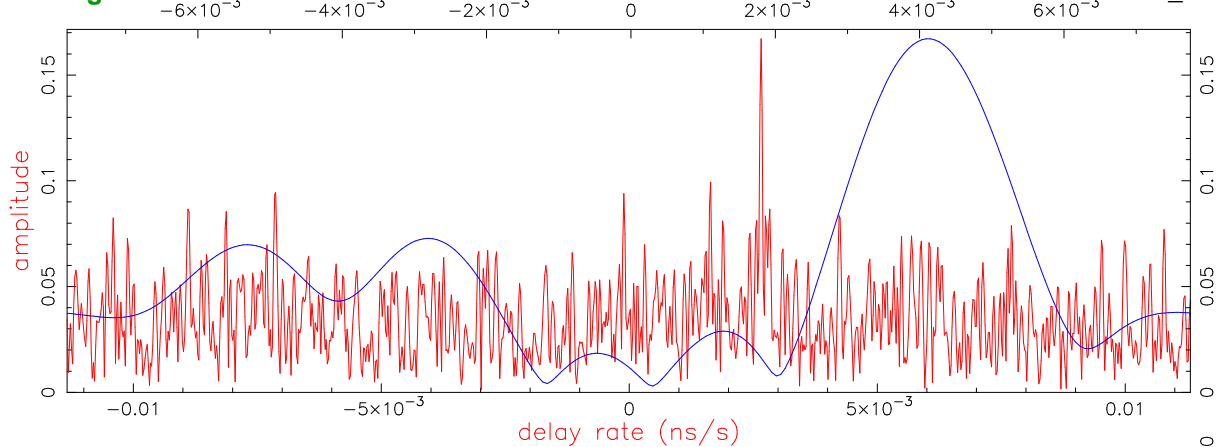
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

0102+584.1HSTEG, No0128, Zp

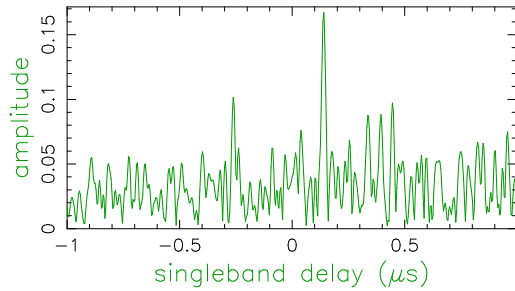
ME TSAHOV - VLBA_PT, fgroup W, pol LL

multiband delay (μ s)

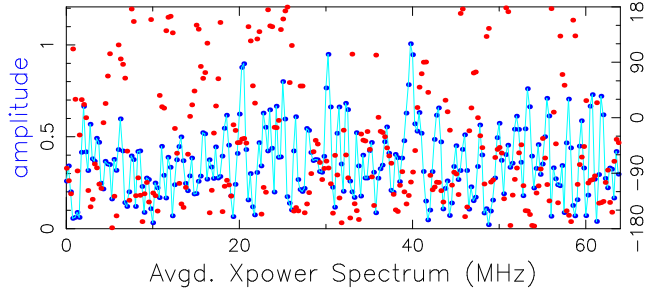


Fringe quality 0

SNR 6.1
Int time 179.618
Amp 0.172
Phase 16.4
PFD 1.0e-01
Delays (us)
SBD 0.139767
MBD 0.004086
Fringe rate (Hz)
0.229443
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

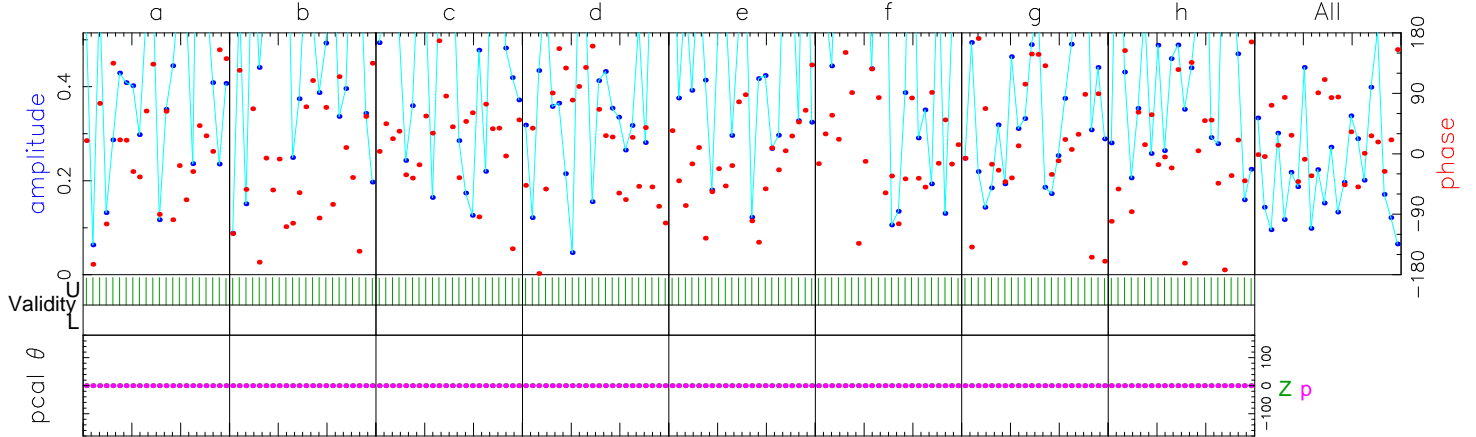


delay rate (ns/s)



Exp. c202a
Exper # 16383
Yr:day 2020:283
Start 113000.00
Stop 113300.22
FRT 113130.00
Corr/FF/build
2021:007:125342
2021:010:141520
2020:247:085004
RA & Dec (J2000)
01h02m45.762375s
+58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.24510058392E+03	Apriori delay (usec)	-3.24524529503E+03	Resid mbdelay (usec)	4.08611E-03	+/-	1.8E-04
Sband delay (usec)	-3.24510552753E+03	Apriori clock (usec)	9.6722603E-02	Resid sbdelay (usec)	1.39767E-01	+/-	1.4E-03
Phase delay (usec)	-3.24524529450E+03	Apriori clockrate (us/s)	-3.8399996E-07	Resid phdelay (usec)	5.29916E-07	+/-	6.0E-07
Delay rate (us/s)	7.55014173694E-01	Apriori rate (us/s)	7.55011510091E-01	Resid rate (us/s)	2.66360E-06	+/-	5.8E-09
Total phase (deg)	-240.7	Apriori accel (us/s/s)	4.65590230229E-05	Resid phase (deg)	16.4	+/-	18.6

ph/seg (deg)	55.6	Theor.	43.7	Amplitude	0.172 +/- 0.028	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	79.1	Search (1024X32)	0.163	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.8	Inc. seg. avg.	0.181	Inc. seg. avg.	0.181	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	47.9	Inc. frq. avg.	0.165	Inc. frq. avg.	0.165	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

Z: az 11.5 el 29.7 pa -11.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -8241.781 7416.117 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp.W.382.1HSTEG

Mk4/DiFX fourfit 3.21 rev 2937

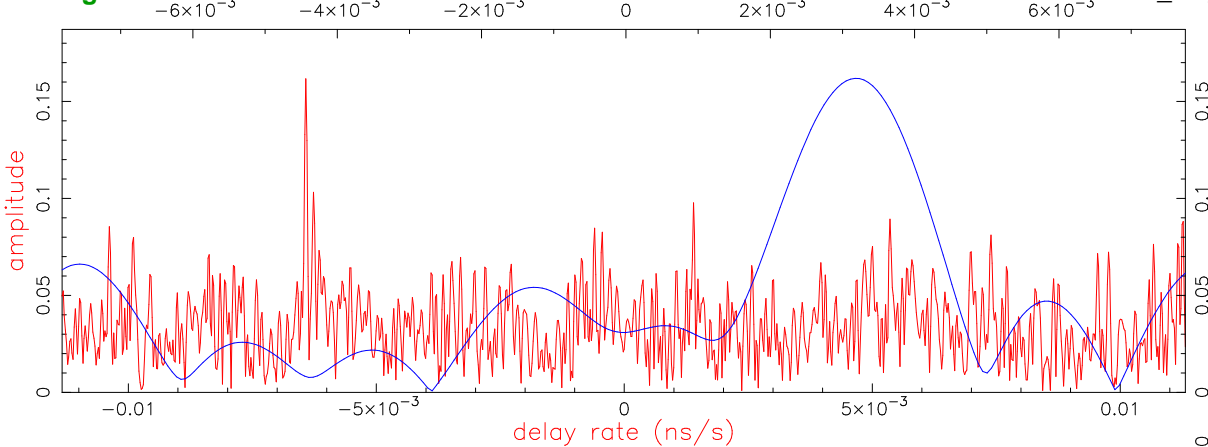
fxmanager

0102+584.1HSTEG, No0128, Zp

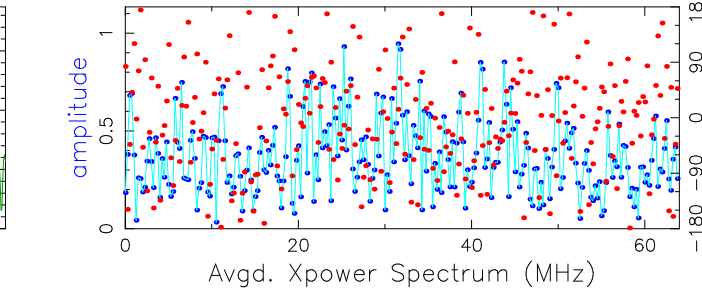
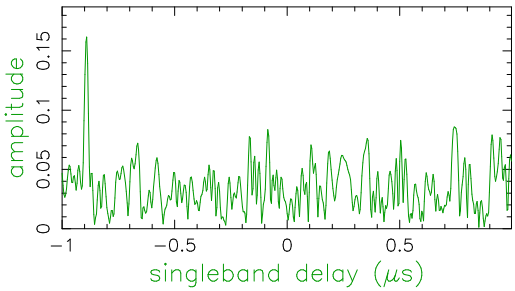
ME TSAHOV - VLBA_PT, fgroup W, pol RR

multiband delay (μ s)

Fringe quality 0

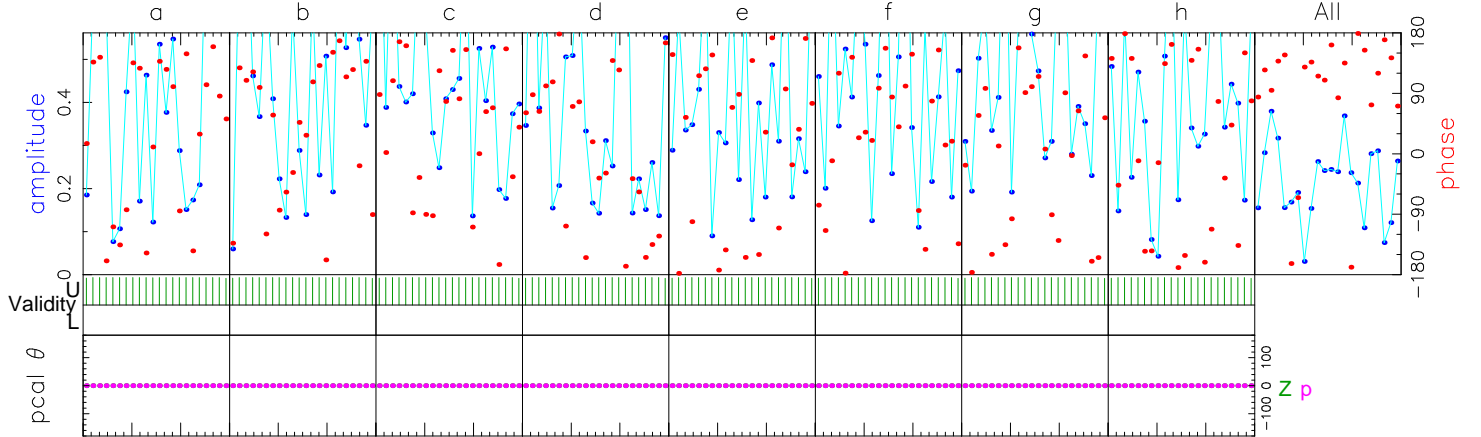


SNR 6.0
 Int time 179.618
 Amp 0.187
 Phase 126.3
 PFD 2.4e-01
 Delays (us)
 SBD -0.891960
 MBD 0.003125
 Fringe rate (Hz)
 -0.554861
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141522
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.24613279501E+03									
Sband delay (usec)	-3.24613725528E+03									
Phase delay (usec)	-3.24524529096E+03									
Delay rate (us/s)	7.55005068703E-01									
Total phase (deg)			-130.8							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									126.3	+/- 19.1
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										

ph/seg (deg) 50.5 44.9 Search (1024X32) 0.159 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 63.2 78.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 24.2 27.1 Inc. seg. avg. 0.190 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 24.1 47.3 Inc. frq. avg. 0.176 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 11.5 el 29.7 pa -11.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -8241.781 7416.117 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp.W.400.1HSTEG

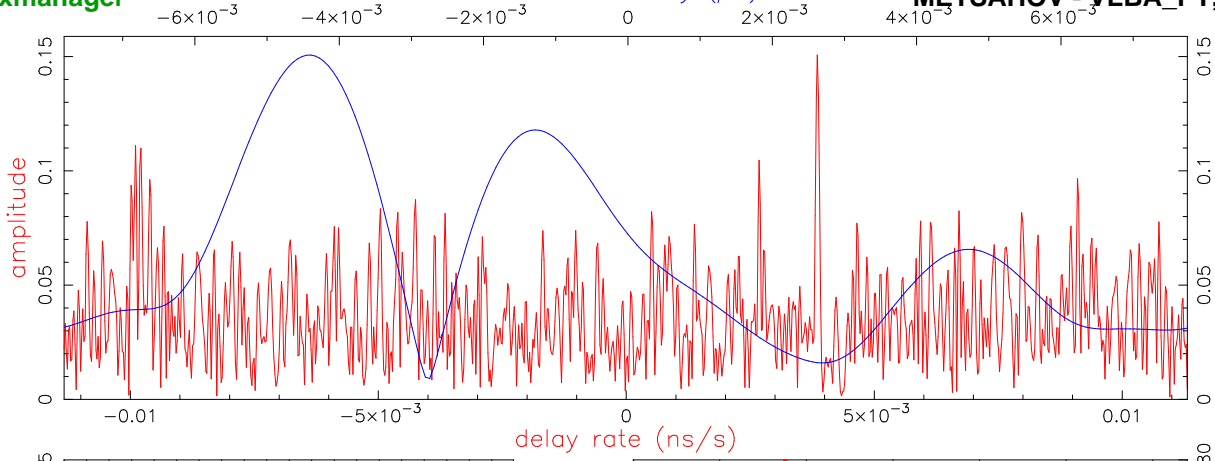
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

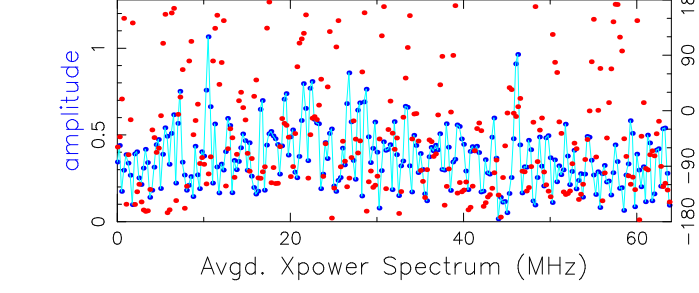
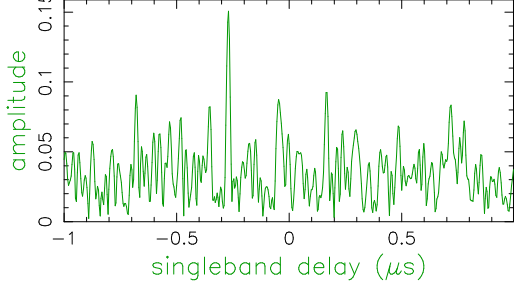
0102+584.1HSTEG, No0128, Zp

MEṬSAHOV - VLBA_PT, fgroup W, pol LR

multiband delay (μ s)

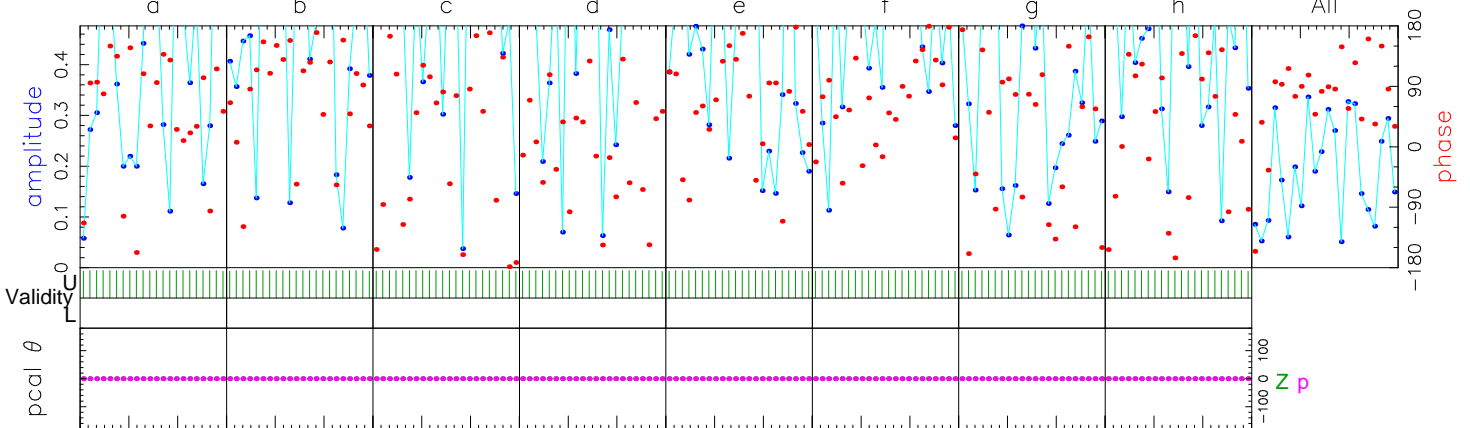


Fringe quality 0
 SNR 5.5
 Int time 179.618
 Amp 0.159
 Phase 89.1
 PFD 9.7e-01
 Delays (us)
 SBD -0.270383
 MBD -0.004425
 Fringe rate (Hz) 0.332673
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build 2021:007:125342
 2021:010:141524
 2020:247:085004
 RA & Dec (J2000) 01h02m45.762375s
 +58°24'11.136621"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.24551534499E+03	Apriori delay (usec)	-3.24524529503E+03	Resid mbdelay (usec)	-4.42495E-03	+/-	2.0E-04
Sband delay (usec)	-3.24551567828E+03	Apriori clock (usec)	9.6722603E-02	Resid sbdelay (usec)	-2.70383E-01	+/-	1.6E-03
Phase delay (usec)	-3.24524529216E+03	Apriori clockrate (us/s)	-3.8399996E-07	Resid phdelay (usec)	2.87310E-06	+/-	6.7E-07
Delay rate (us/s)	7.55015372094E-01	Apriori rate (us/s)	7.55011510091E-01	Resid rate (us/s)	3.86200E-06	+/-	6.4E-09
Total phase (deg)	-168.0	Apriori accel (us/s/s)	4.65590230229E-05	Resid phase (deg)	89.1	+/-	20.7

ph/seg (deg)	51.2	Theor.	48.5	Amplitude	0.159 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.7	Search (1024X32)	0.145	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.0	Inc. seg. avg.	0.147	Inc. frq. avg.	0.178	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.0	Inc. frq. avg.	0.178			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

Z: az 11.5 el 29.7 pa -11.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -8241.781 7416.117 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp.W.410.1HSTEG

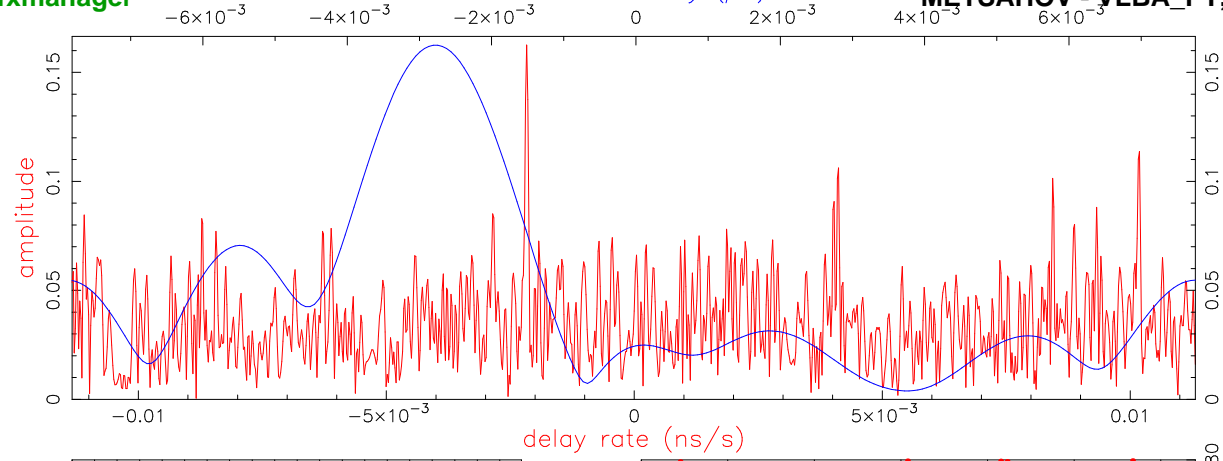
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

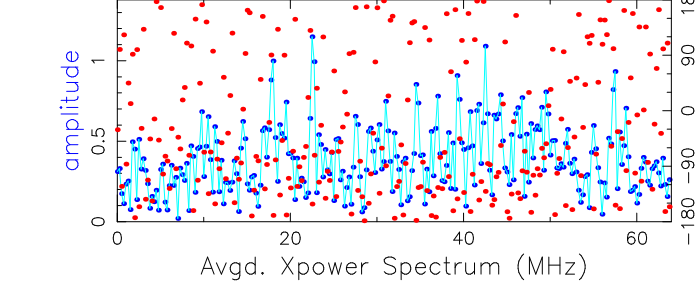
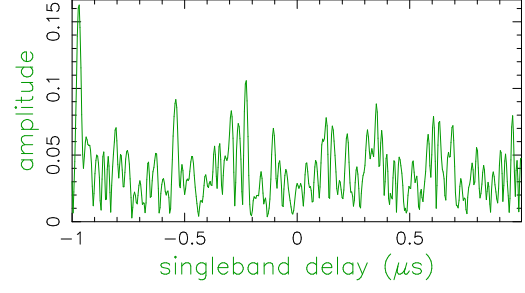
0102+584.1HSTEG, No0128, Zp

MEṬSAHOV - VLBA_PT, fgroup W, pol RL

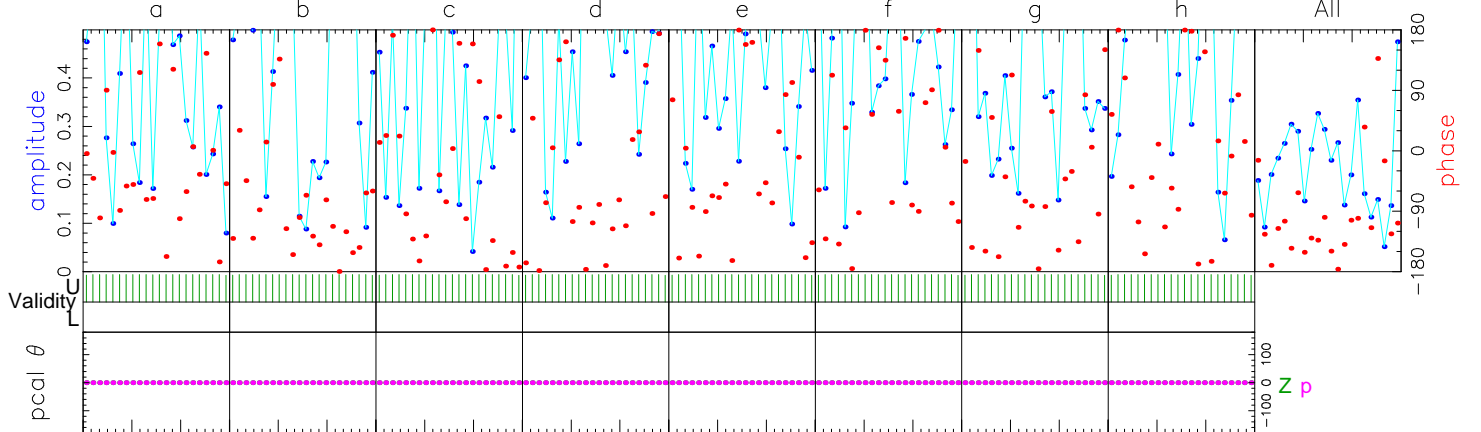
multiband delay (μ s)



Fringe quality 0
 SNR 6.0
 Int time 179.618
 Amp 0.166
 Phase -119.9
 PFD 2.1e-01
 Delays (us)
 SBD -0.970258
 MBD -0.002765
 Fringe rate (Hz)
 -0.187018
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c202a
 Exper # 16383
 Yr:day 2020:283
 Start 113000.00
 Stop 113300.22
 FRT 113130.00
 Corr/FF/build
 2021:007:125342
 2021:010:141525
 2020:247:085004
 RA & Dec (J2000)
 01h02m45.762375s
 +58°24'11.136621"



Amp. and Phase vs. time for each freq., 22 segs, 16 APs / seg (8.19 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-80.0	-127.8	-147.9	-127.0	-122.9	-137.7	-102.8	-112.7	Phase	-119.9
	0.2	0.3	0.2	0.2	0.1	0.1	0.2	0.2	Ampl.	0.2
	357.2	126.2	175.7	476.1	408.8	408.3	485.1	6.6	Sbd box	8.6
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.24621680981E+03		Apriori delay (usec)		-3.24524529503E+03		Resid mbdelay (usec)		-2.76477E-03	+/- 1.8E-04
Sband delay (usec)	-3.24621555303E+03		Apriori clock (usec)		9.6722603E-02		Resid sbdelay (usec)		-9.70258E-01	+/- 1.4E-03
Phase delay (usec)	-3.24524529890E+03		Apriori clockrate (us/s)		-3.8399996E-07		Resid phdelay (usec)		-3.86745E-06	+/- 6.1E-07
Delay rate (us/s)	7.55009338998E-01		Apriori rate (us/s)		7.55011510091E-01		Resid rate (us/s)		-2.17109E-06	+/- 5.9E-09
Total phase (deg)			Apriori accel (us/s/s)		4.65590230229E-05		Resid phase (deg)		-119.9	+/- 19.1

ph/seg (deg) 56.6 44.7 Search (1024X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.0 78.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 22.9 27.0 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 26.0 47.1 Inc. frq. avg. 0.158 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 11.5 el 29.7 pa -11.0 p: az 320.8 el 40.5 pa 88.5 u,v (fr/asec) -8241.781 7416.117 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp..1HSTEG Output file: /Exps/c202a/v1/v1_3mm/1234/No0128/Zp.W.415.1HSTEG