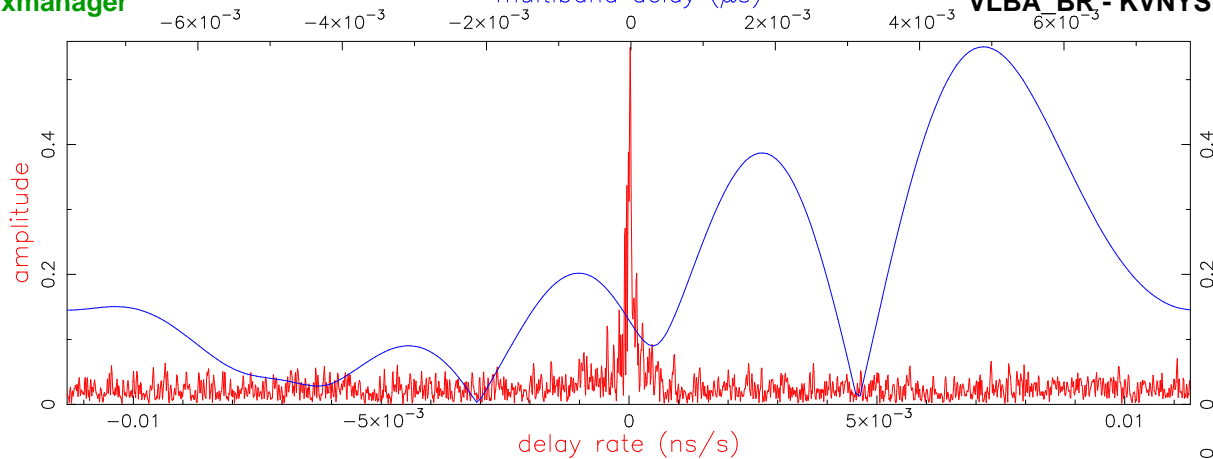
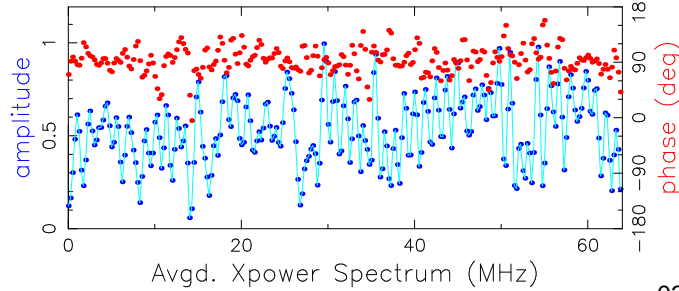
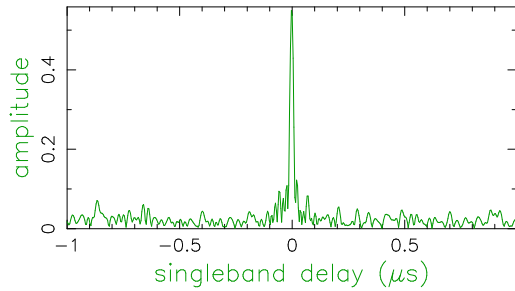


multiband delay ( $\mu$ s)



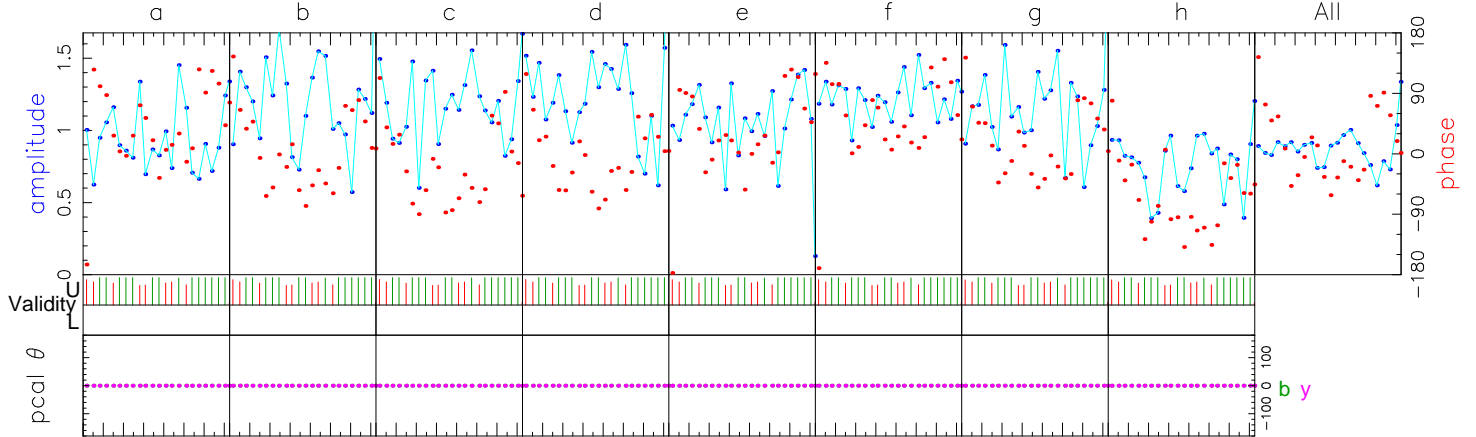
Fringe quality 4

SNR 30.1  
Int time 387.015  
Amp 0.559  
Phase 10.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.002290  
MBD 0.004963  
Fringe rate (Hz)  
0.002227  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133852  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



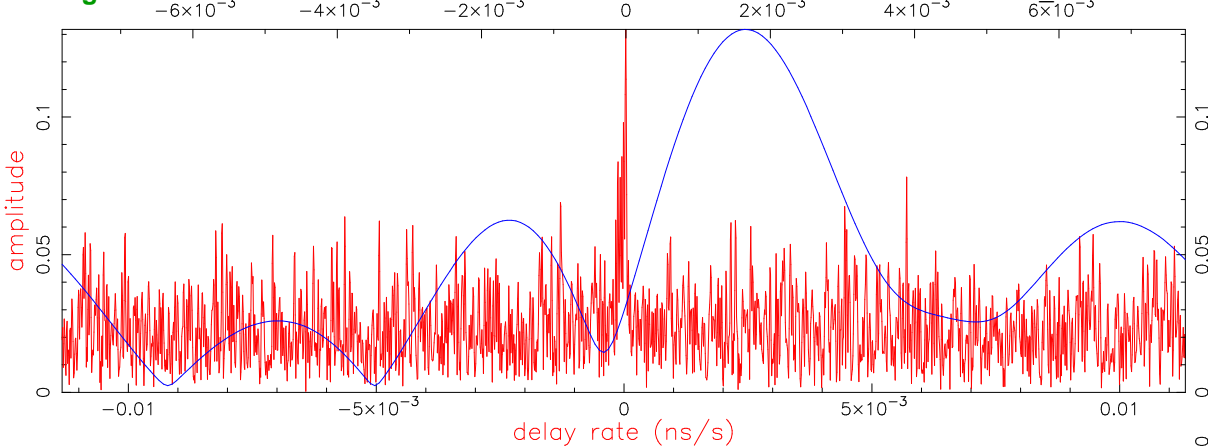
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	47.2	-2.2	-24.7	-11.2	43.7	62.3	11.0	-69.1	Phase	10.4
	0.6	0.7	0.7	0.8	0.6	0.8	0.8	0.5	Ampl.	0.7
	254.3	256.6	256.9	256.5	256.7	256.0	255.9	253.9	Sbd box	256.4
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.95396901325E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		4.96343E-03	+/- 3.6E-05
Sband delay (usec)	3.95396175982E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-2.29000E-03	+/- 2.9E-04
Phase delay (usec)	3.95396405016E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		3.36745E-07	+/- 1.2E-07
Delay rate (us/s)	-1.18776585529E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		2.58560E-08	+/- 5.4E-10
Total phase (deg)	101.0		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		10.4	+/- 3.8

	RMS	Theor.	Amplitude	0.559 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	54.3	8.8	Search (2048X32)	0.538	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	57.0	15.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	47.2	5.4	Inc. seg. avg.	0.849	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	30.6	9.4	Inc. frq. avg.	0.685	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

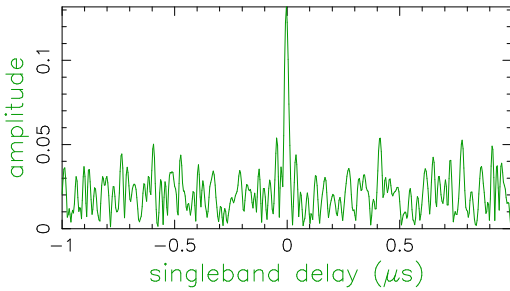
b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QE V Output file: /Exps/c211c/v1/1234/No0120/by.W.26.1X1QE V

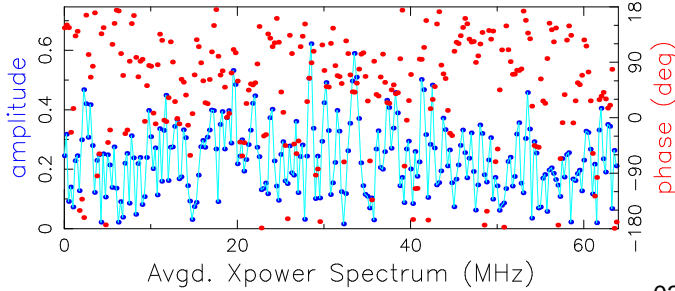
multiband delay ( $\mu$ s)



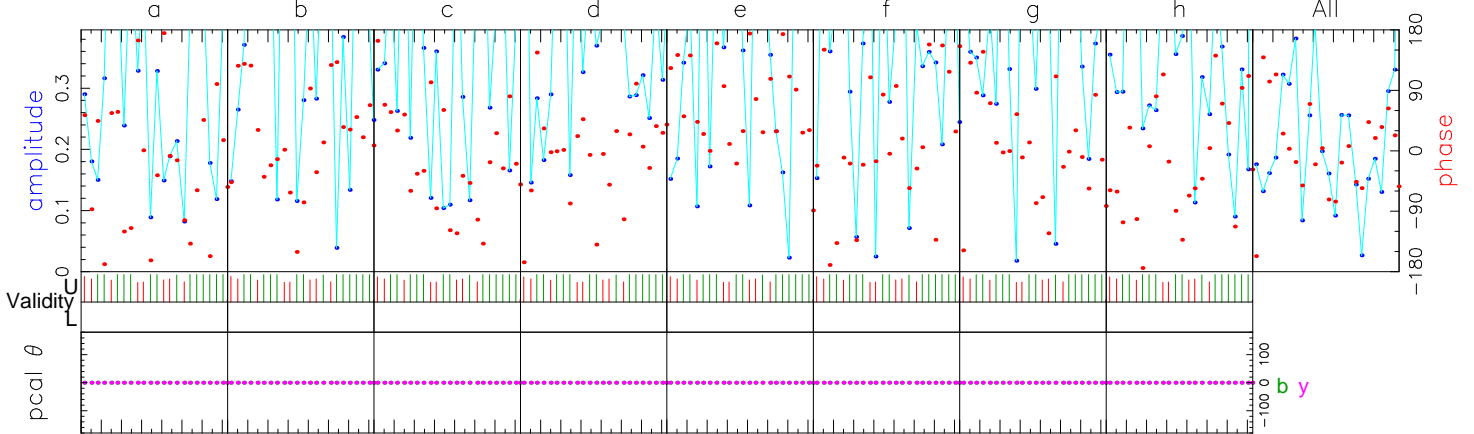
Fringe quality 0  
SNR 7.1  
Int time 387.015  
Amp 0.132  
Phase 12.8  
PFD 4.1e-04  
Delays (us)  
SBD -0.003970  
MBD 0.001655  
Fringe rate (Hz) 0.002858  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133855  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'59.161694"



delay rate (ns/s)



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

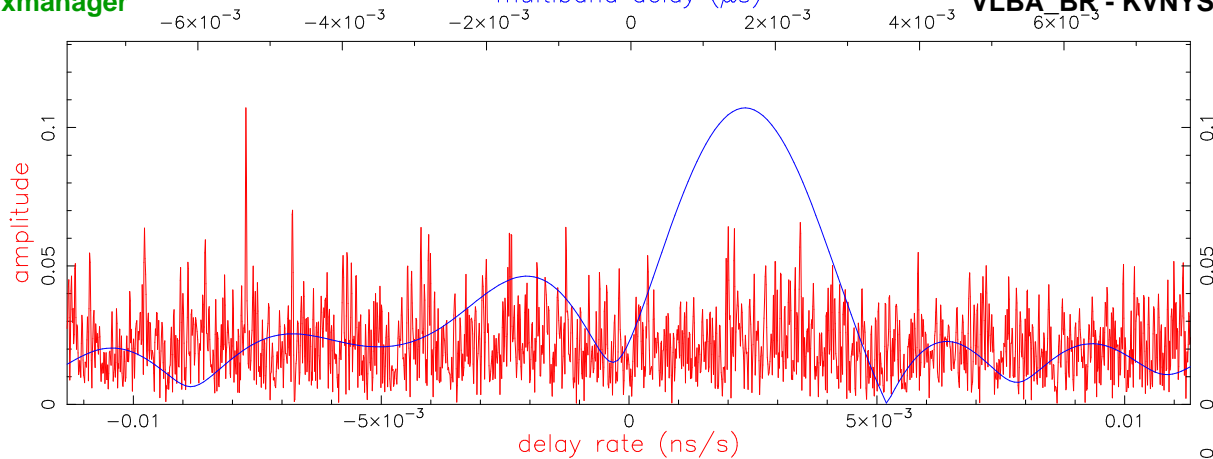


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-6.2	25.0	-25.6	-1.8	54.7	56.4	-3.0	-22.4	Phase	12.8
	0.1	0.2	0.1	0.2	0.2	0.1	0.2	0.1	Ampl.	0.1
	136.0	256.8	58.4	58.9	256.3	423.0	255.0	252.0	Sbd box	256.0
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.95396570479E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		1.65497E-03	+/- 1.5E-04
Sband delay (usec)	3.95396007982E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-3.97000E-03	+/- 1.2E-03
Phase delay (usec)	3.95396405023E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		4.12233E-07	+/- 5.2E-07
Delay rate (us/s)	-1.18776584797E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		3.31754E-08	+/- 2.3E-09
Total phase (deg)	103.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		12.8	+/- 16.2

ph/seg (deg) 67.3 37.5 Amplitude 0.132 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 97.4 65.4 Search (2048X32) 0.130 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 35.0 22.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 48.5 39.9 Inc. seg. avg. 0.172 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

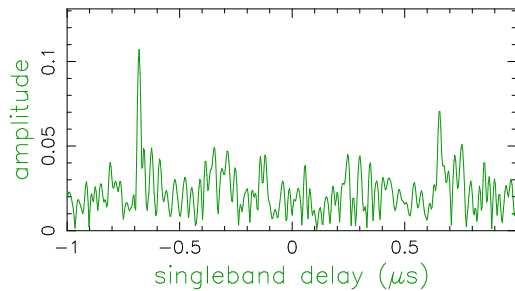
b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QE V Output file: /Exps/c211c/v1/1234/No0120/by.W.42.1X1QE V

multiband delay ( $\mu\text{s}$ )

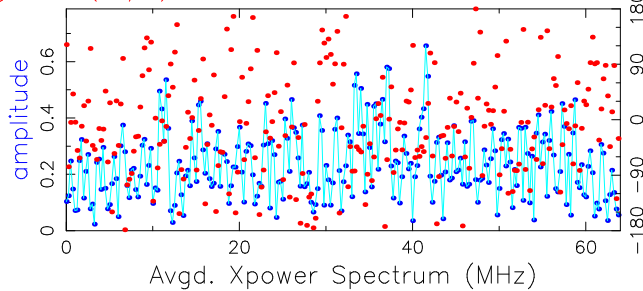


Fringe quality 0

SNR 5.8  
Int time 387.015  
Amp 0.131  
Phase 49.7  
PFD 8.5e-01  
Delays (us)  
SBD -0.680357  
MBD 0.001558  
Fringe rate (Hz)  
-0.666717  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

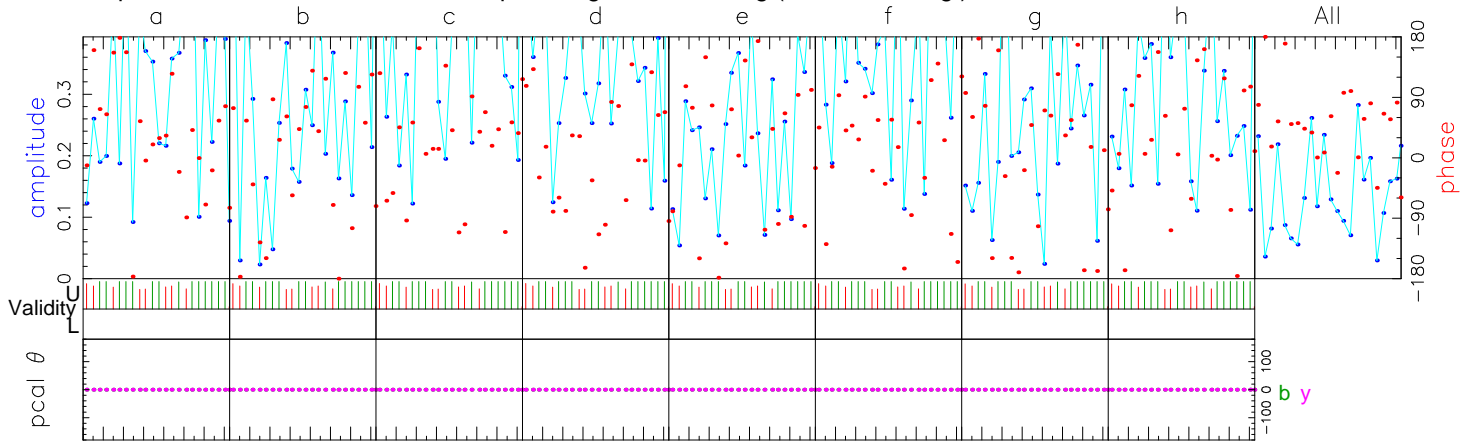


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133859  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



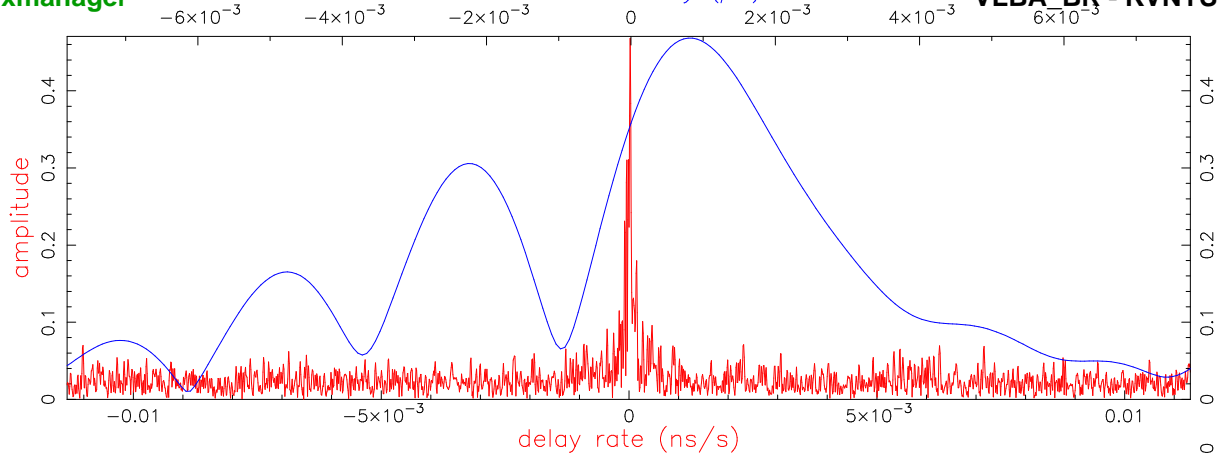
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
b	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	3.95327810775E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		1.55793E-03	+/- 1.9E-04
Sband delay (usec)	3.95328369307E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		-6.80357E-01	+/- 1.5E-03
Phase delay (usec)	3.95396405142E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		1.60365E-06	+/- 6.4E-07
Delay rate (us/s)	-1.18777362107E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		-7.73992E-06	+/- 2.8E-09
Total phase (deg)	140.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		49.7	+/- 19.8

	RMS	Theor.	Amplitude	0.131 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	51.3	46.0	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.7	80.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	23.9	28.1	Inc. seg. avg.	0.123	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	27.1	49.0	Inc. frq. avg.	0.124	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

b: az 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator

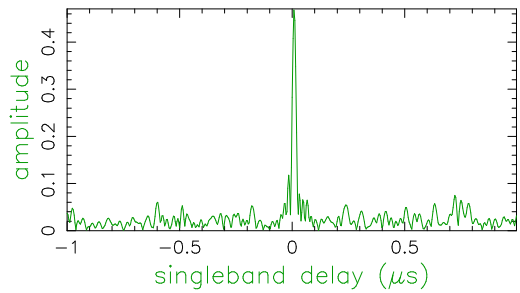
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/by.W.63.1X1QEV

multiband delay ( $\mu$ s)

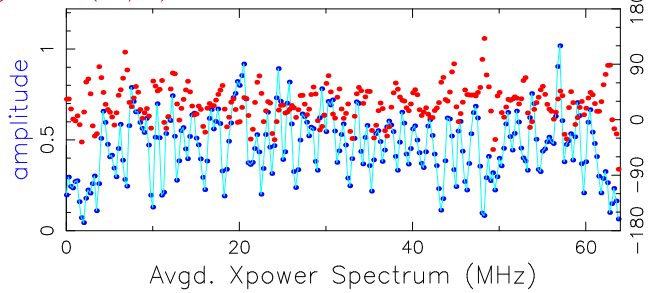


Fringe quality 6

SNR 25.3  
Int time 387.015  
Amp 0.471  
Phase 115.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.008722  
MBD 0.000858  
Fringe rate (Hz)  
0.002285  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

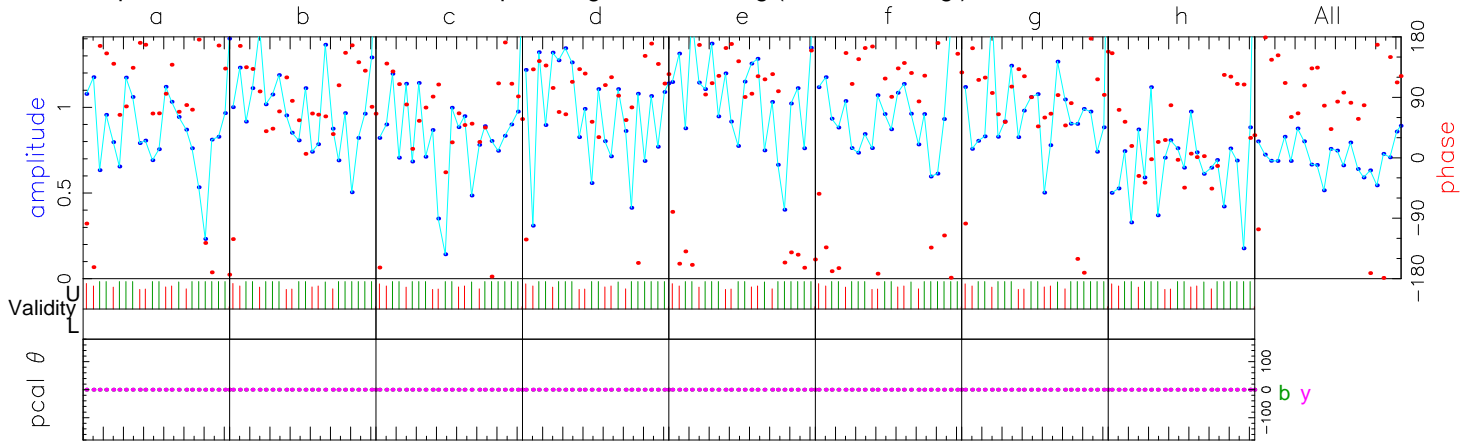


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133848  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	130.6	92.5	87.5	114.3	157.3	160.8	105.5	21.2	Phase	115.8
	0.5	0.6	0.5	0.6	0.7	0.7	0.6	0.4	Ampl.	0.6
	257.3	259.3	259.7	259.6	259.3	259.4	258.4	256.3	Sbd box	259.2
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.95398053312E+03		Apriori delay (usec)		3.95396404982E+03		Resid mbdelay (usec)		8.58300E-04	+/- 4.3E-05
Sband delay (usec)	3.95397277157E+03		Apriori clock (usec)		-3.6916122E+00		Resid sbdelay (usec)		8.72175E-03	+/- 3.4E-04
Phase delay (usec)	3.95396405355E+03		Apriori clockrate (us/s)		-9.9999998E-08		Resid phdelay (usec)		3.73341E-06	+/- 1.5E-07
Delay rate (us/s)	-1.18776585462E+00		Apriori rate (us/s)		-1.18776588115E+00		Resid rate (us/s)		2.65284E-08	+/- 6.4E-10
Total phase (deg)	206.3		Apriori accel (us/s/s)		-9.19385732287E-06		Resid phase (deg)		115.8	+/- 4.5

ph/seg (deg) 52.1 10.5 Search (2048X32) 0.449 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 54.9 18.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 48.9 6.4 Inc. seg. avg. 0.698 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 30.7 11.2 Inc. frq. avg. 0.583 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 293.2 el 60.3 pa 77.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 10791.107 -275.785 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/by..1X1QE Output file: /Exps/c211c/v1/1234/No0120/by.W.8.1X1QE

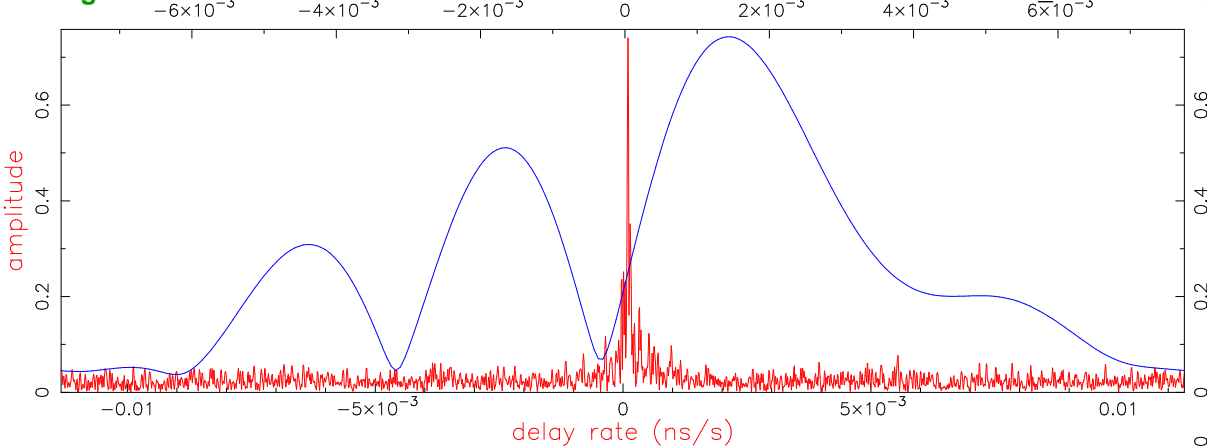
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, fy

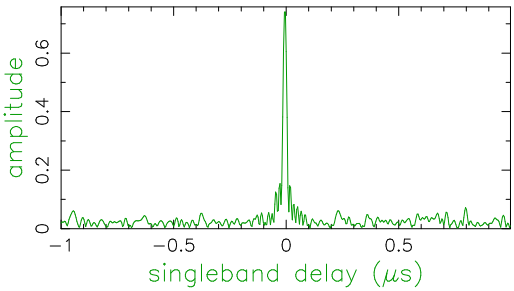
VLBA\_FD - KVNYS, fgroup W, pol RR

multiband delay ( $\mu$ s)

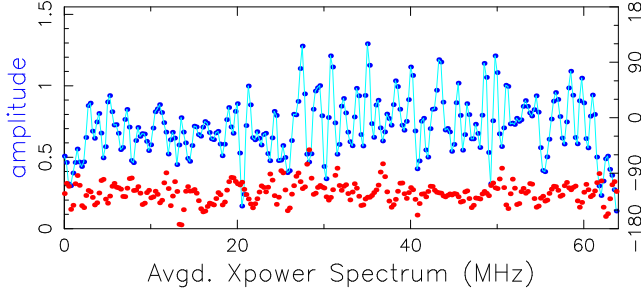


Fringe quality 5

SNR 40.9  
 Int time 388.389  
 Amp 0.758  
 Phase 153.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.005858  
 MBD 0.001542  
 Fringe rate (Hz)  
 0.008405  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

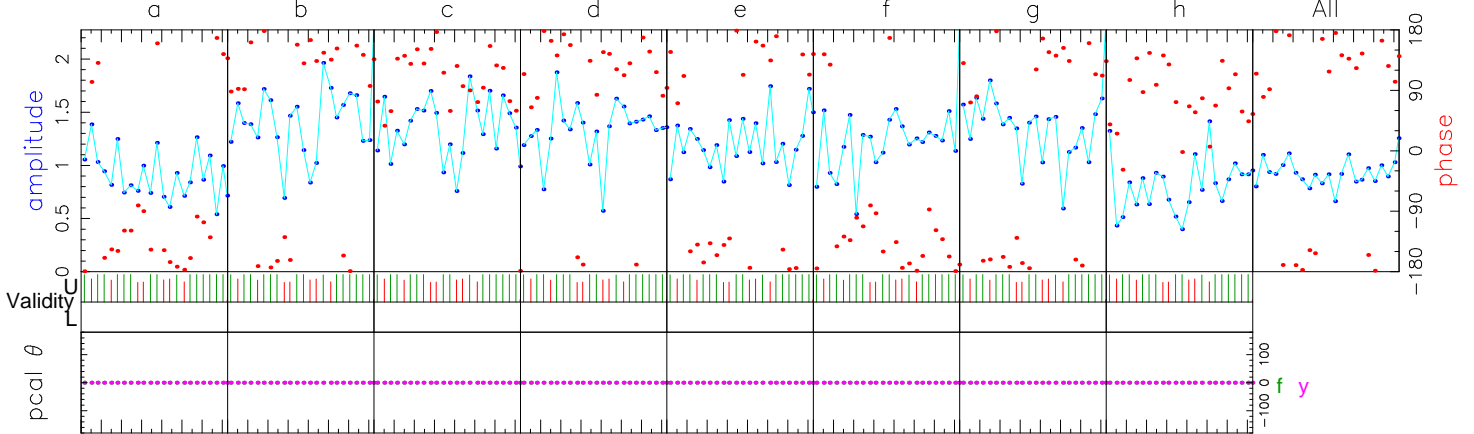


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133908  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
f	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-7.58669377529E+02	Apriori delay (usec)	-7.58670919209E+02	Resid mbdelay (usec)	1.54168E-03	+/-	2.7E-05
Sband delay (usec)	-7.58676777459E+02	Apriori clock (usec)	9.5589695E+00	Resid sbdelay (usec)	-5.85825E-03	+/-	2.1E-04
Phase delay (usec)	-7.58670914254E+02	Apriori clockrate (us/s)	5.9999999E-08	Resid phdelay (usec)	4.95549E-06	+/-	9.0E-08
Delay rate (us/s)	-1.45730648707E+00	Apriori rate (us/s)	-1.45730658464E+00	Resid rate (us/s)	9.75698E-08	+/-	4.0E-10
Total phase (deg)	-199.4	Apriori accel (us/s/s)	-4.67647004062E-06	Resid phase (deg)	153.7	+/-	2.8

ph/seg (deg)	37.2	Theor.	6.5	Amplitude	0.758 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	26.3		11.4	Search (2048X32)	0.734	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.5		4.0	Inc. seg. avg.	0.920	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.8		6.9	Inc. frq. avg.	0.929	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	

f: az 313.0 el 40.5 pa 88.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 13258.367 -1178.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/fy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/fy.W.103.1X1QEV

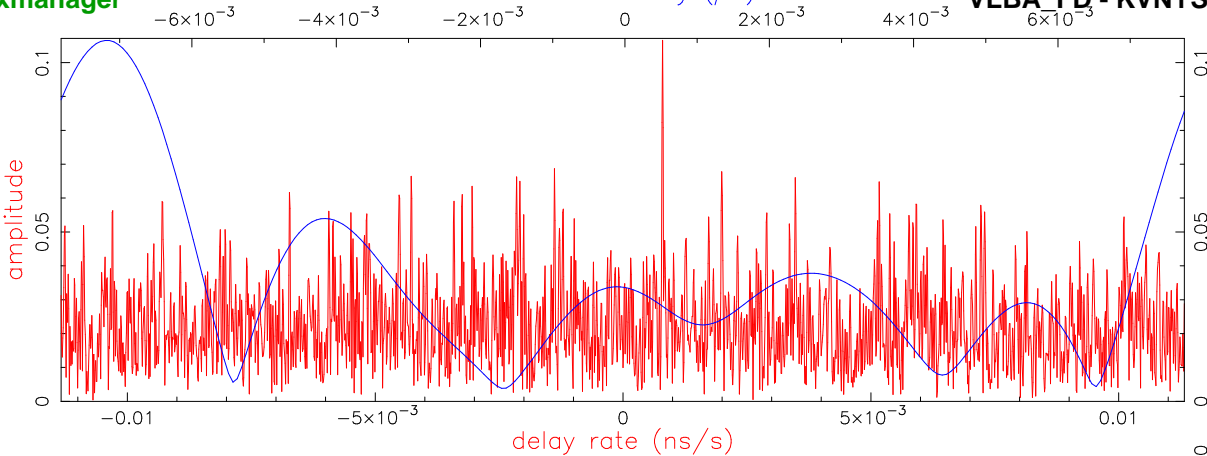
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, fy

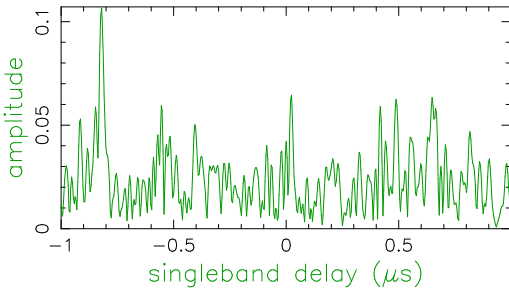
VLBA\_FD - KVNYS, fgroup W, pol LR

multiband delay ( $\mu\text{s}$ )

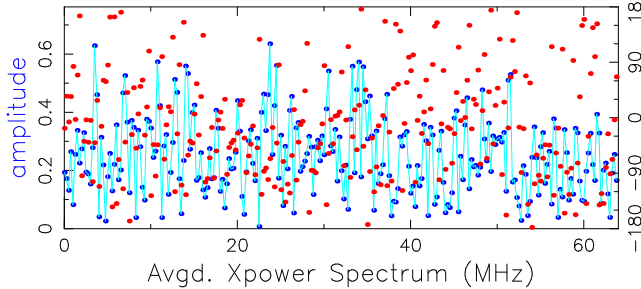


Fringe quality 0

SNR 5.8  
Int time 388.389  
Amp 0.107  
Phase -51.9  
PFD 8.7e-01  
Delays (us)  
SBD -0.821226  
MBD -0.007187  
Fringe rate (Hz)  
0.068966  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

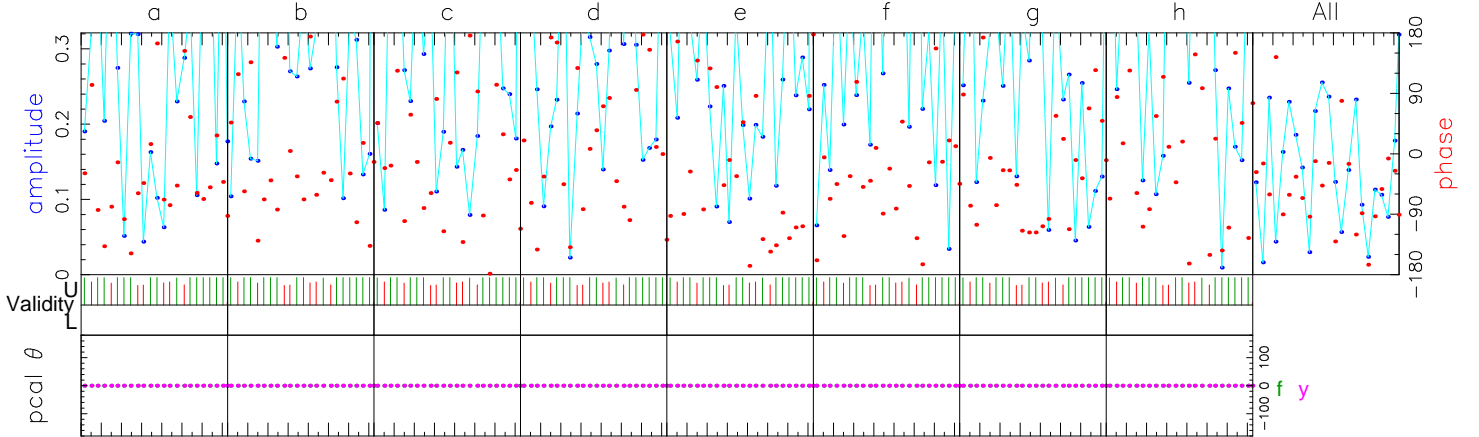


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133912  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-57.5	-52.4	-12.4	-36.1	-104.8	-34.8	-66.1	-34.9	Phase	-51.9
	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	44.3	40.6	370.4	443.4	427.9	46.0	399.9	58.9	Sbd box	46.8
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-7.59490606079E+02			Apriori delay (usec)	-7.58670919209E+02			Resid mbdelay (usec)	-7.18687E-03	+/- 1.9E-04
Sband delay (usec)	-7.59492144959E+02			Apriori clock (usec)	9.5589695E+00			Resid sbdelay (usec)	-8.21226E-01	+/- 1.5E-03
Phase delay (usec)	-7.58670920883E+02			Apriori clockrate (us/s)	5.9999999E-08			Resid phdelay (usec)	-1.67361E-06	+/- 6.4E-07
Delay rate (us/s)	-1.45730578401E+00			Apriori rate (us/s)	-1.45730658464E+00			Resid rate (us/s)	8.00630E-07	+/- 2.8E-09
Total phase (deg)		-45.0		Apriori accel (us/s/s)	-4.67647004062E-06			Resid phase (deg)	-51.9	+/- 19.9

	RMS	Theor.	Amplitude	0.107 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	61.3	46.1	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	76.3	80.5	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	30.1	28.1	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	40.2	49.1	Inc. frq. avg.	0.104	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 256	t_cohere infinite

f: az 313.0 el 40.5 pa 88.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 13258.367 -1178.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/fy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/fy.W.124.1X1QEV

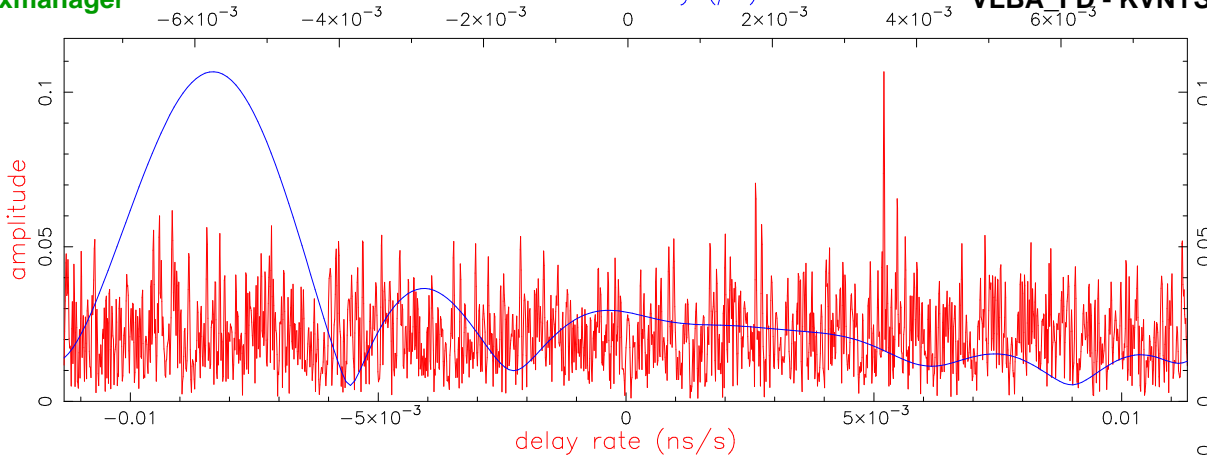
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, fy

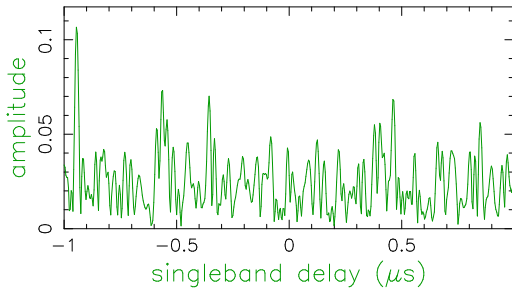
VLBA\_FD - KVNYS, fgroup W, pol RL

multiband delay ( $\mu$ s)

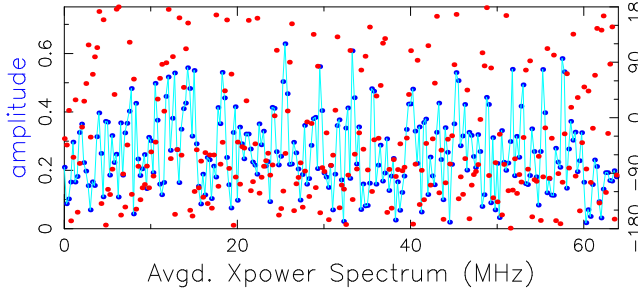


Fringe quality 0

SNR 5.8  
Int time 388.389  
Amp 0.117  
Phase -116.2  
PFD 8.2e-01  
Delays (us)  
SBD -0.944089  
MBD -0.005724  
Fringe rate (Hz)  
0.448559  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

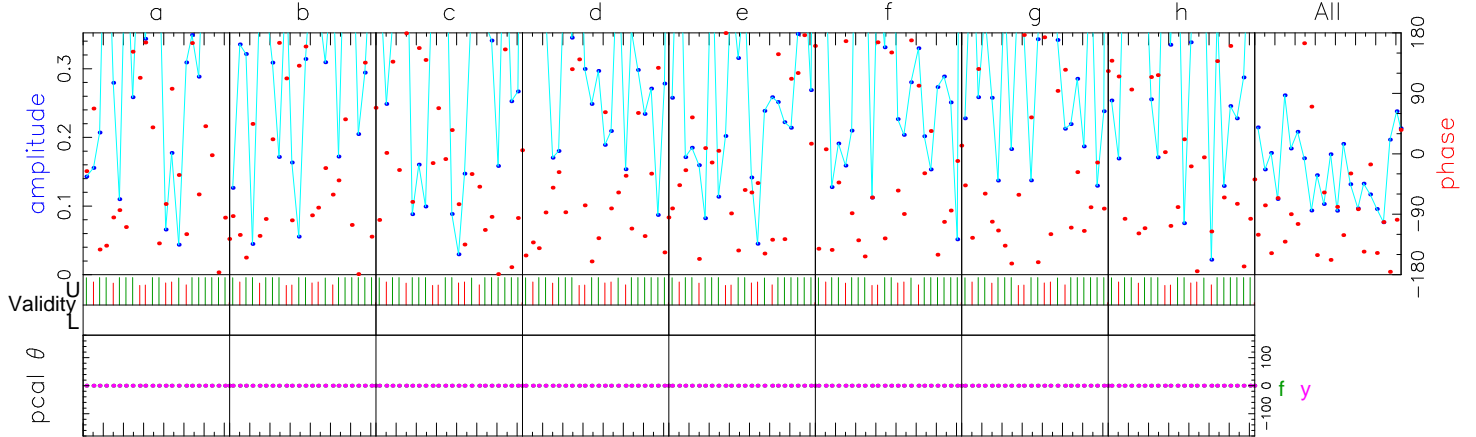


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133917  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-133.6	-111.3	-85.2	-116.8	-90.1	-134.6	-118.6	-113.7	Phase	-116.2
	0.1	0.1	0.1	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	237.5	112.3	386.1	47.3	57.2	325.3	141.6	361.4	Sbd box	15.3
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:y	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -7.59614142719E+02 Apriori delay (usec) -7.58670919209E+02 Resid mbdelay (usec) -5.72351E-03 +/- 1.9E-04  
 Sband delay (usec) -7.59615007709E+02 Apriori clock (usec) 9.5589695E+00 Resid sbdelay (usec) -9.44089E-01 +/- 1.5E-03  
 Phase delay (usec) -7.58670922958E+02 Apriori clockrate (us/s) 5.9999999E-08 Resid phdelay (usec) -3.74821E-06 +/- 6.4E-07  
 Delay rate (us/s) -1.45730137732E+00 Apriori rate (us/s) -1.45730658464E+00 Resid rate (us/s) 5.20732E-06 +/- 2.8E-09  
 Total phase (deg) -109.3 Apriori accel (us/s/s) -4.67647004062E-06 Resid phase (deg) -116.2 +/- 19.8

RMS Theor. Amplitude 0.117 +/- 0.020 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 57.2 45.9 Search (2048X32) 0.101 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 64.0 80.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 19.7 28.0 Inc. seg. avg. 0.125 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 33.7 48.8 Inc. frq. avg. 0.108 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

f: az 313.0 el 40.5 pa 88.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 13258.367 -1178.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/fy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/fy.W.143.1X1QEV

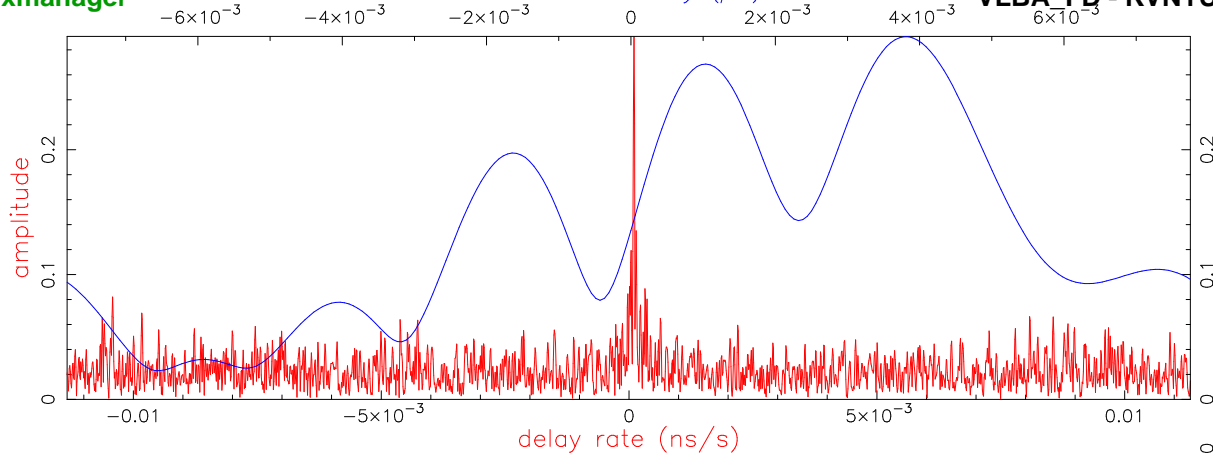
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, fy

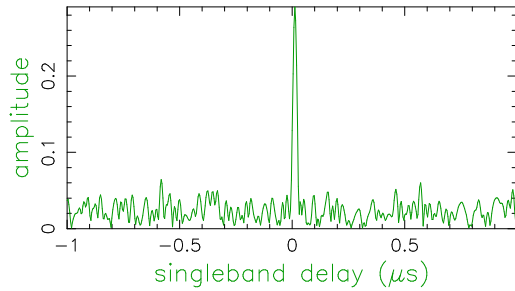
VLBA\_FD - KVNYS, fgroup W, pol LL

multiband delay ( $\mu$ s)

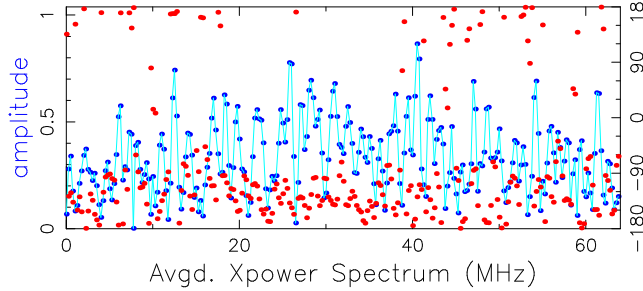


Fringe quality 7

SNR 15.7  
 Int time 388.389  
 Amp 0.291  
 Phase -39.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.012145  
 MBD 0.003831  
 Fringe rate (Hz)  
 0.008413  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

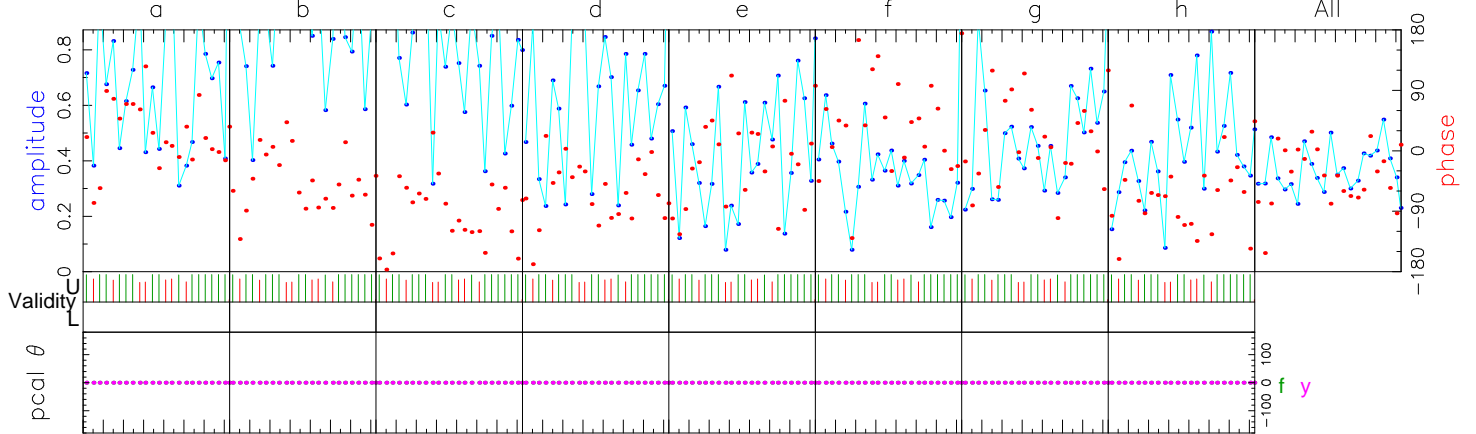


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133904  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
f	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-7.58651463185E+02	Apriori delay (usec)	-7.58670919209E+02	Resid mbdelay (usec)	3.83102E-03	+/-	6.9E-05
Sband delay (usec)	-7.58658773709E+02	Apriori clock (usec)	9.5589695E+00	Resid sbdelay (usec)	1.21455E-02	+/-	5.5E-04
Phase delay (usec)	-7.58670920471E+02	Apriori clockrate (us/s)	5.9999999E-08	Resid phdelay (usec)	-1.26129E-06	+/-	2.4E-07
Delay rate (us/s)	-1.45730648697E+00	Apriori rate (us/s)	-1.45730658464E+00	Resid rate (us/s)	9.76662E-08	+/-	1.0E-09
Total phase (deg)	-32.2	Apriori accel (us/s/s)	-4.67647004062E-06	Resid phase (deg)	-39.1	+/-	7.3

ph/seg (deg)	42.2	Theor.	17.0	Amplitude	0.291 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	40.1		29.6	Search (2048X32)	0.286	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	54.2		10.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	68.7		18.0	Inc. seg. avg.	0.359	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.402	Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 313.0 el 40.5 pa 88.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 13258.367 -1178.075 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/fy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/fy.W.83.1X1QEV



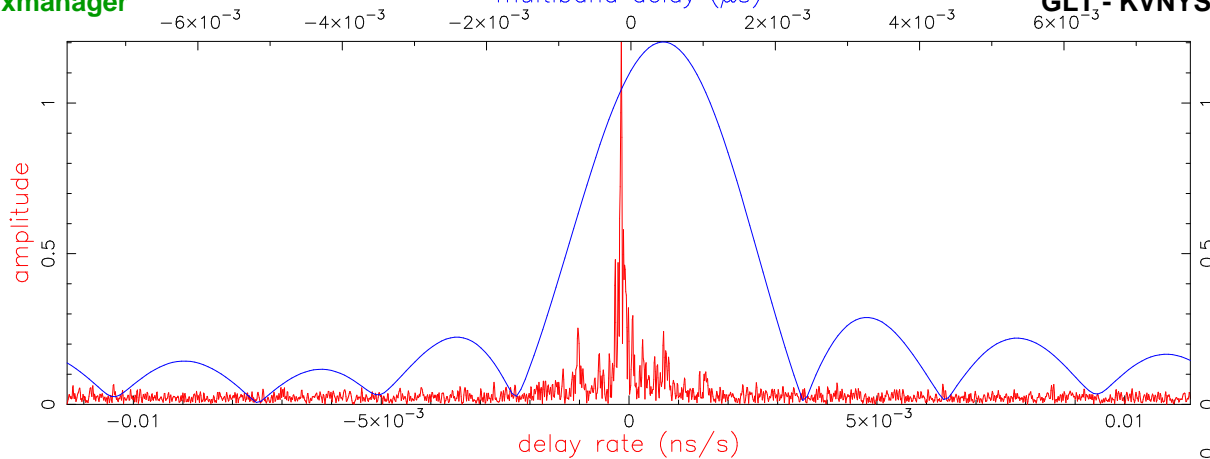
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, gy

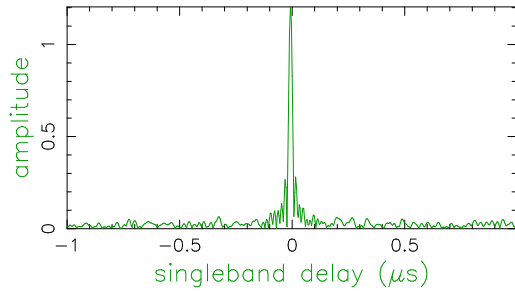
GLT - KVNYS, fgroup W, pol RR

multiband delay ( $\mu$ s)

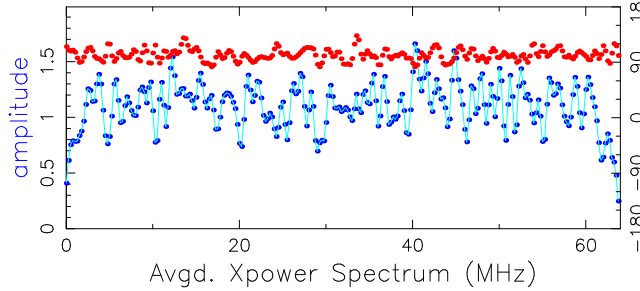


Fringe quality 5

SNR 64.9  
 Int time 388.386  
 Amp 1.205  
 Phase 12.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.007327  
 MBD 0.000445  
 Fringe rate (Hz)  
 -0.013637  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

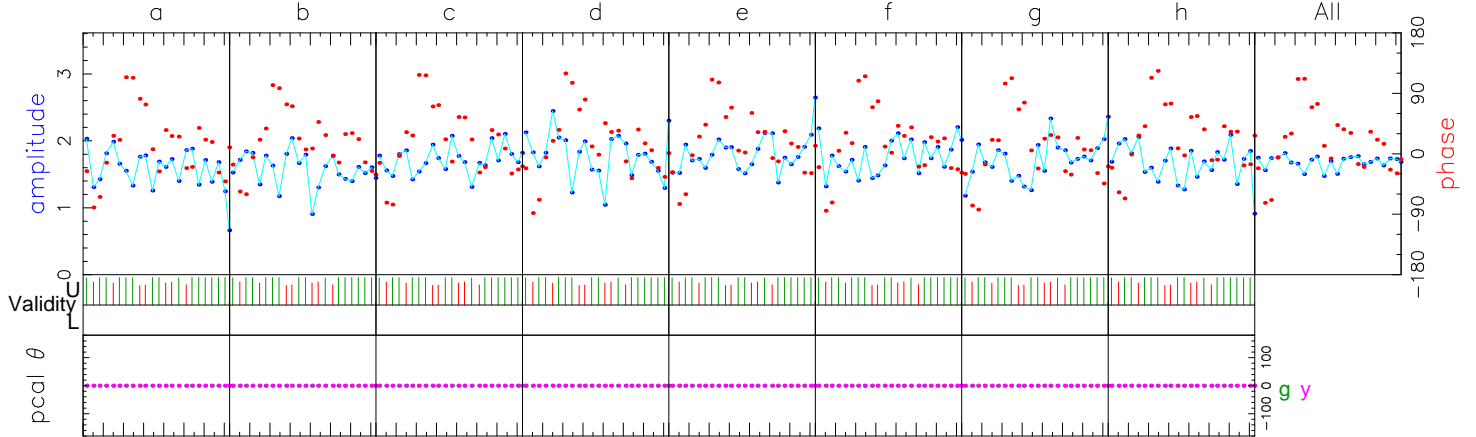


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133910  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		255.1
g	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.21549670633E+03			1.21549626083E+03				4.45490E-04	+/- 1.7E-05
Sband delay (usec)		1.21548893333E+03			-2.6324081E-01				-7.32750E-03	+/- 1.3E-04
Phase delay (usec)		1.21549626123E+03			7.2000003E-08				3.98460E-07	+/- 5.7E-08
Delay rate (us/s)		-9.32817920064E-01			-9.32817761748E-01				-1.58316E-07	+/- 2.5E-10
Total phase (deg)			339.4		2.54376608231E-05				12.4	+/- 1.8
	RMS	Theor.	Amplitude	1.205 +/- 0.019						
ph/seg (deg)	47.6	4.1	Search (2048X32)	1.166						
amp/seg (%)	40.4	7.1	Interp.	0.000						
ph/frq (deg)	5.8	2.5	Inc. seg. avg.	1.678						
amp/frq (%)	4.1	4.4	Inc. frq. avg.	1.206						
g: az 292.5 el 47.5 pa 19.9			y: az 51.1 el 41.9 pa -79.5							
					u,v (fr/asec) 8542.435 4389.027					
Control file: cf_1234_gmva			Input file: /Exps/c211c/v1/1234/No0120/gy..1X1QEV							simultaneous interpolator
					Output file: /Exps/c211c/v1/1234/No0120/gy.W.114.1X1QEV					

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 Sample rate(MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

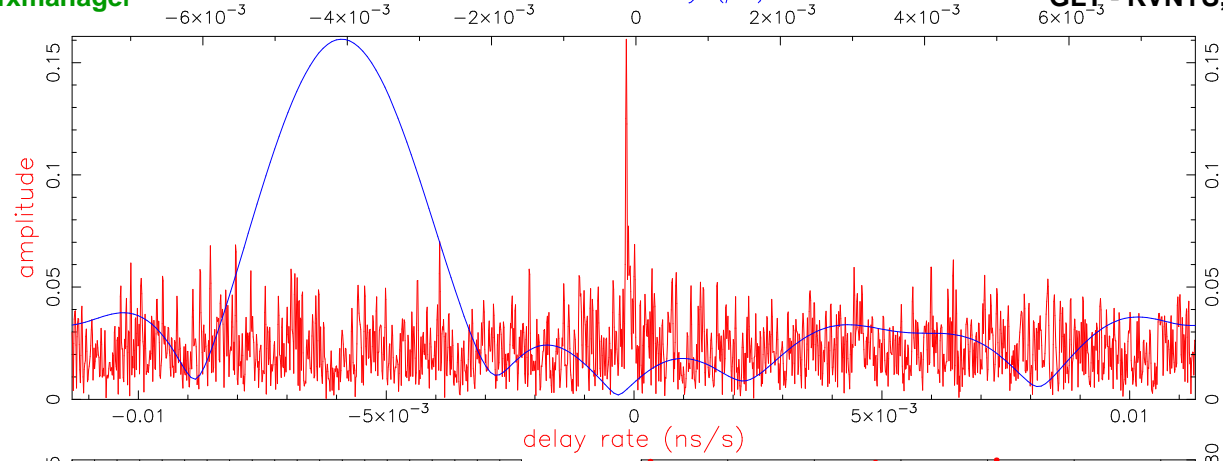
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

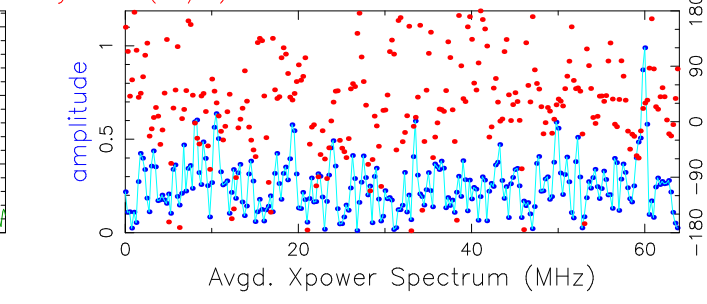
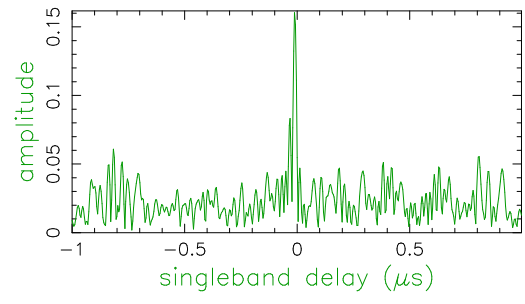
NRAO150.1X1QEV, No0120, gy

GLT - KVNYS, fgroup W, pol LR

multiband delay ( $\mu$ s)

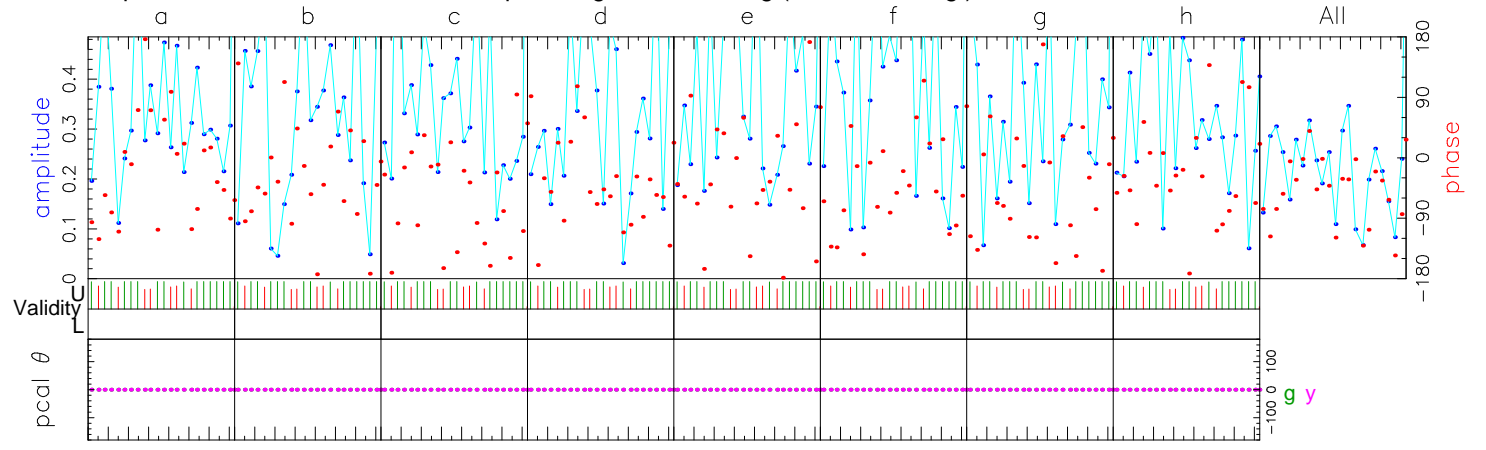


Fringe quality 9  
 SNR 8.7  
 Int time 388.387  
 Amp 0.162  
 Phase -44.8  
 PFD 1.1e-09  
 Delays (us)  
 SBD -0.010703  
 MBD -0.004047  
 Fringe rate (Hz)  
 -0.013617  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133914  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

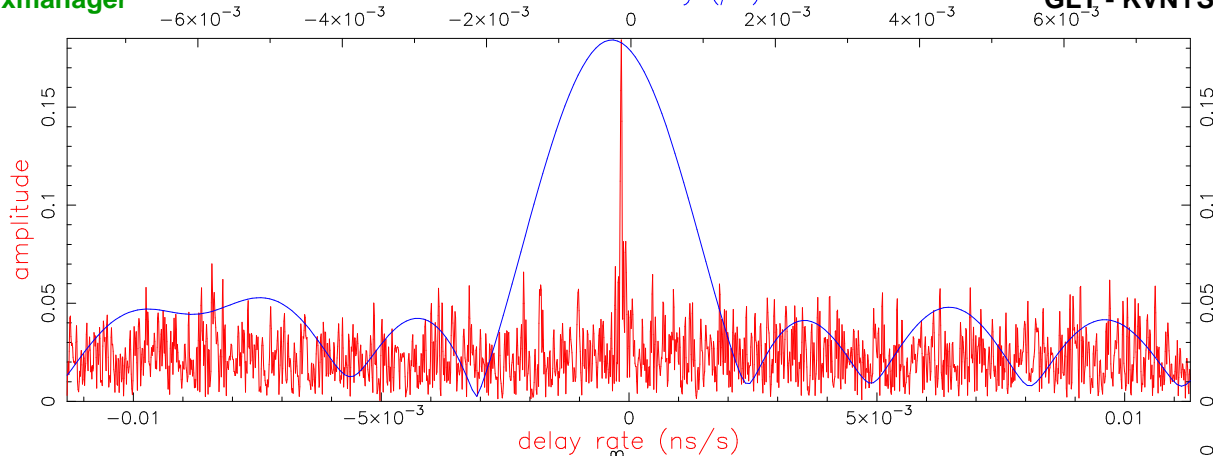
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-26.2	-40.7	-72.1	-41.8	-41.5	-50.1	-49.1	-37.3	Phase	-44.8		
	0.1	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2		
	285.3	254.3	342.9	92.8	311.4	254.2	412.6	6.4	Sbd box	254.3		
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used			
g	0	0	0	0	0	0	0	0	PC freqs			
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
y	1000	1000	1000	1000	1000	1000	1000	1000				
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec)(sbd)	1.21549221358E+03		Apriori delay (usec)		1.21549626083E+03		Resid mbdelay (usec)		-4.04726E-03	+/- 1.2E-04		
Sband delay (usec)	1.21548555808E+03		Apriori clock (usec)		-2.6324081E-01		Resid sbdelay (usec)		-1.07027E-02	+/- 9.9E-04		
Phase delay (usec)	1.21549625939E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		-1.44464E-06	+/- 4.2E-07		
Delay rate (us/s)	-9.32817919827E-01		Apriori rate (us/s)		-9.32817761748E-01		Resid rate (us/s)		-1.58078E-07	+/- 1.9E-09		
Total phase (deg)	282.2		Apriori accel (us/s/s)		2.54376608231E-05		Resid phase (deg)		-44.8	+/- 13.2		
RMS	48.4	30.5	Amplitude		0.162 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	48.4	30.5	Search (2048X32)		0.156		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	62.7	53.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	14.3	18.6	Inc. seg. avg.		0.188		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)	24.2	32.5	Inc. frq. avg.		0.156		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

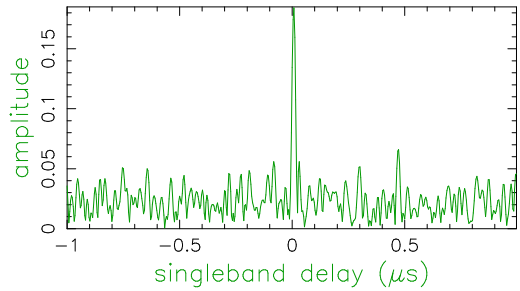
g: az 292.5 el 47.5 pa 19.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 8542.435 4389.027 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/gy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/gy.W.134.1X1QEV

multiband delay ( $\mu\text{s}$ )

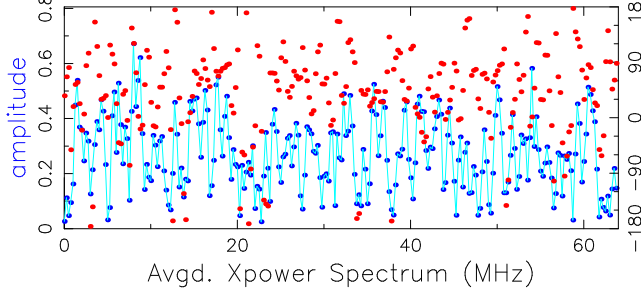


Fringe quality 9

SNR 10.0  
Int time 388.386  
Amp 0.185  
Phase 139.5  
PFD 8.7e-15  
Delays (us)  
SBD 0.006994  
MBD -0.000275  
Fringe rate (Hz)  
-0.013727  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

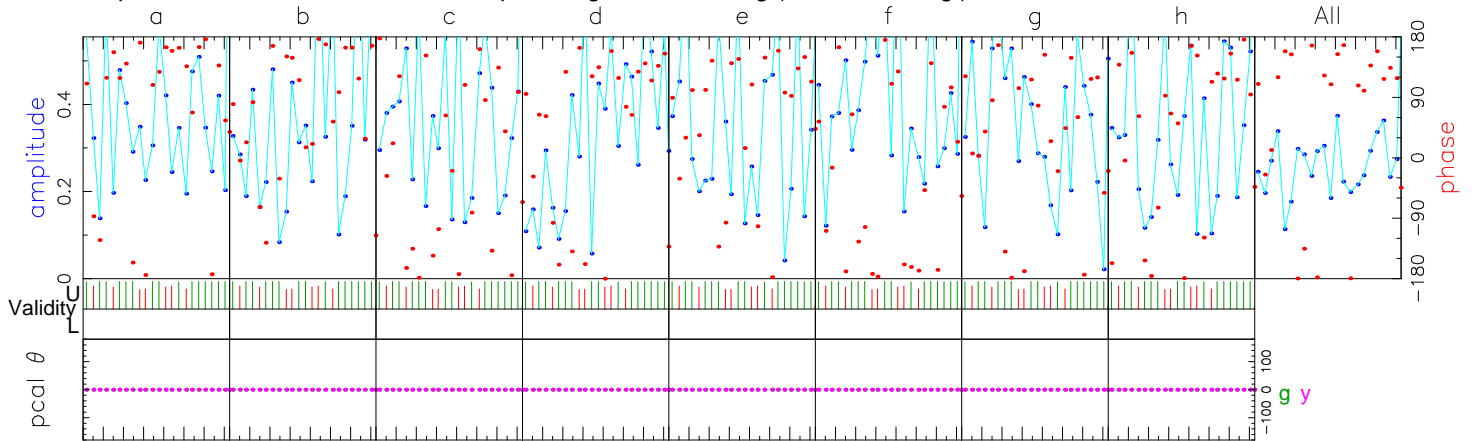


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133918  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
g	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		1.21549598633E+03				1.21549626083E+03			Resid mbdelay (usec)	-2.74510E-04 +/- 1.1E-04
Sband delay (usec)		1.21550325508E+03				-2.6324081E-01			Resid sbdelay (usec)	6.99425E-03 +/- 8.6E-04
Phase delay (usec)		1.21549626533E+03				7.2000003E-08			Resid phdelay (usec)	4.49869E-06 +/- 3.7E-07
Delay rate (us/s)		-9.32817921103E-01				-9.32817761748E-01			Resid rate (us/s)	-1.59355E-07 +/- 1.6E-09
Total phase (deg)		106.5				2.54376608231E-05			Resid phase (deg)	139.5 +/- 11.5
	RMS	Theor.	Amplitude	0.185 +/- 0.019					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	54.8	26.7	Search (2048X32)	0.172					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	54.5	46.5	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	15.7	16.3	Inc. seg. avg.	0.235					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	21.9	28.4	Inc. frq. avg.	0.182					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

g: az 292.5 el 47.5 pa 19.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 8542.435 4389.027 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/gy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/gy.W.154.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

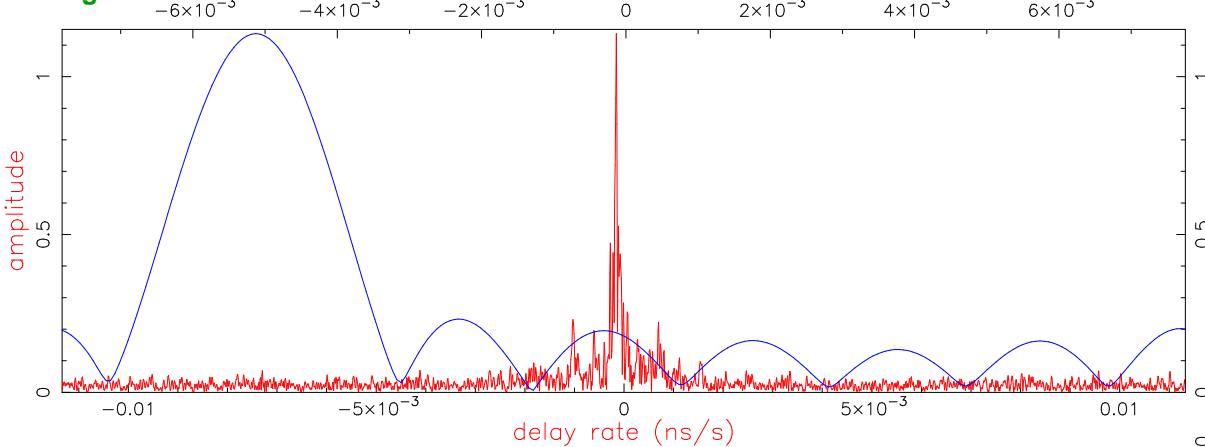
fxmanager

NRAO150.1X1QE, No0120, gy

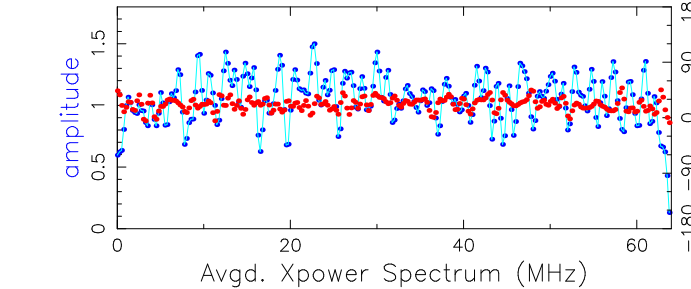
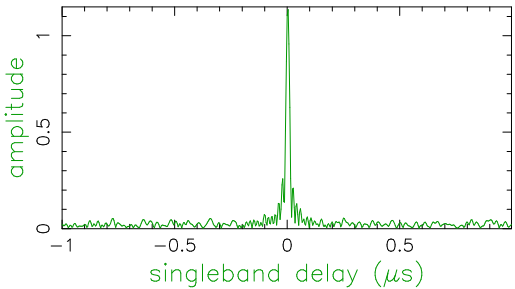
GLT - KVNYS, fgroup W, pol LL

multiband delay ( $\mu$ s)

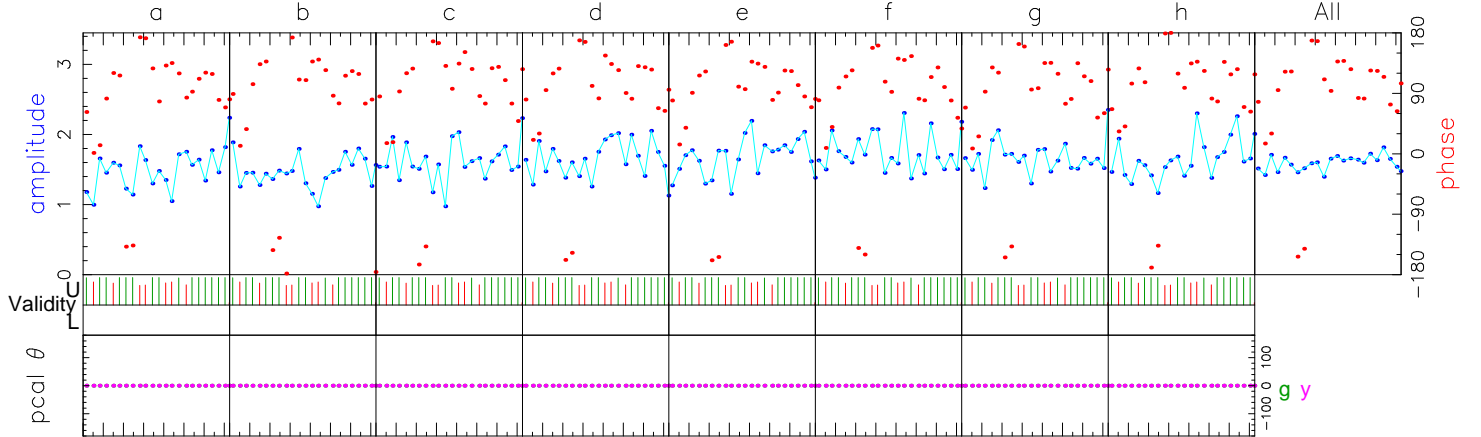
Fringe quality 6



SNR 62.0  
 Int time 388.387  
 Amp 1.150  
 Phase 110.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002535  
 MBD -0.005126  
 Fringe rate (Hz)  
 -0.013596  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133906  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	107.1	114.1	111.4	110.9	109.2	111.3	107.6	111.7	Phase	110.4
	1.0	1.0	1.1	1.2	1.3	1.2	1.1	1.2	Ampl.	1.1
	257.8	257.6	257.4	257.6	257.8	257.6	257.9	257.5	Sbd box	257.6
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.21549113489E+03		Apriori delay (usec)		1.21549626083E+03		Resid mbdelay (usec)		-5.12595E-03	+/- 1.8E-05
Sband delay (usec)	1.21549879558E+03		Apriori clock (usec)		-2.6324081E-01		Resid sbdelay (usec)		2.53475E-03	+/- 1.4E-04
Phase delay (usec)	1.21549626439E+03		Apriori clockrate (us/s)		7.2000003E-08		Resid phdelay (usec)		3.56004E-06	+/- 6.0E-08
Delay rate (us/s)	-9.32817919588E-01		Apriori rate (us/s)		-9.32817761748E-01		Resid rate (us/s)		-1.57840E-07	+/- 2.6E-10
Total phase (deg)	77.4		Apriori accel (us/s/s)		2.54376608231E-05		Resid phase (deg)		110.4	+/- 1.8

ph/seg (deg) 48.6 4.3 Search (2048X32) 1.091 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 39.9 7.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 2.5 2.6 Inc. seg. avg. 1.592 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 7.7 4.6 Inc. frq. avg. 1.136 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 g: az 292.5 el 47.5 pa 19.9 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 8542.435 4389.027 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/gy..1X1QE, Output file: /Exps/c211c/v1/1234/No0120/gy.W.93.1X1QE

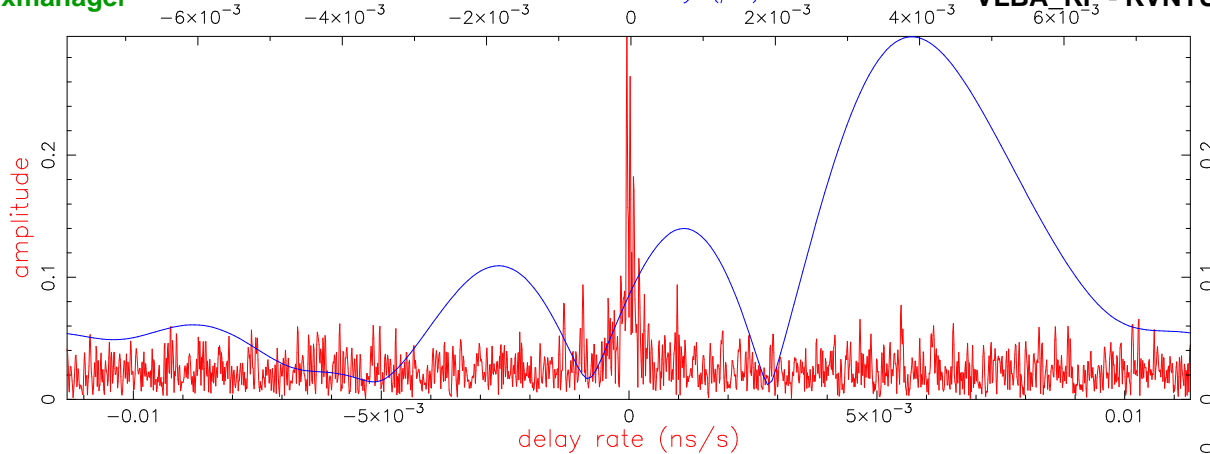
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QE, No0120, ky

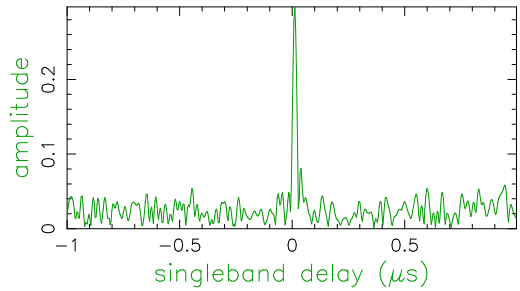
VLBA\_KP - KVNYS, fgroup W, pol LL

multiband delay ( $\mu$ s)

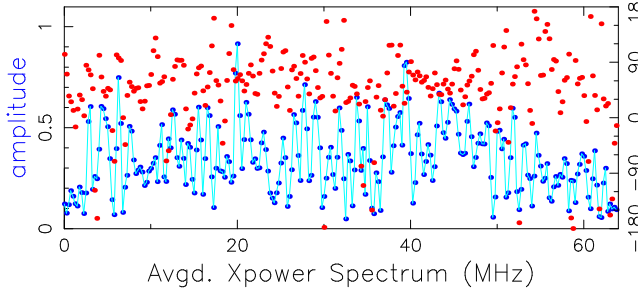


Fringe quality 8

SNR 16.0  
 Int time 388.379  
 Amp 0.297  
 Phase 146.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.011230  
 MBD 0.003871  
 Fringe rate (Hz)  
 -0.004114  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

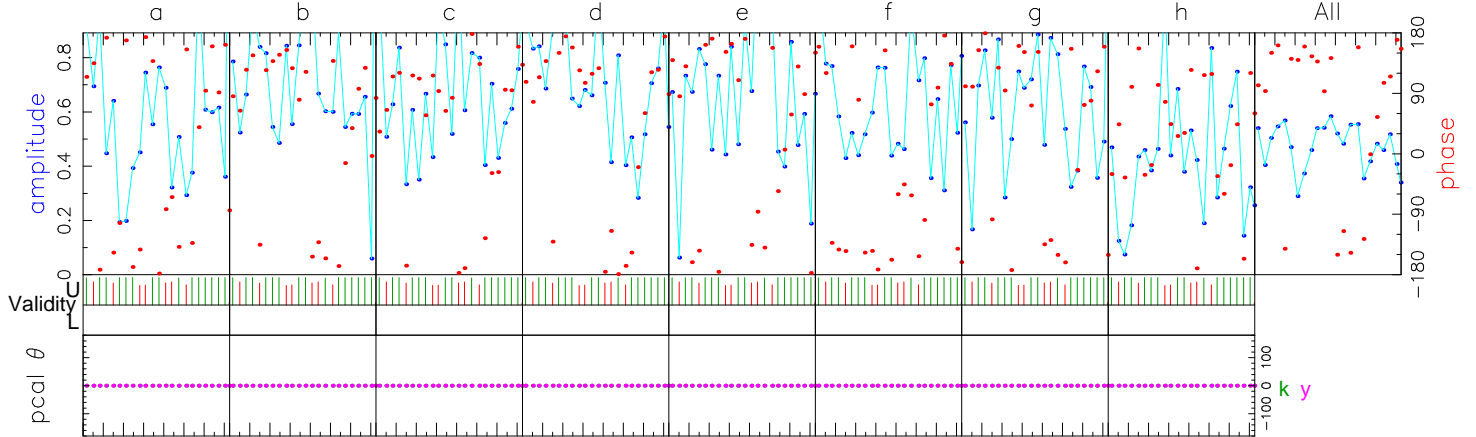


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133922  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
k	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		7.92009801978E+02				7.92005931361E+02			3.87062E-03	+/- 6.8E-05
Sband delay (usec)		7.92017161111E+02				-3.8300133E-01			1.12297E-02	+/- 5.4E-04
Phase delay (usec)		7.92005936088E+02				0.0000000E+00			4.72764E-06	+/- 2.3E-07
Delay rate (us/s)		-1.39038540065E+00				-1.39038535288E+00			-4.77639E-08	+/- 1.0E-09
Total phase (deg)			120.5						146.6	+/- 7.2
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

ph/seg (deg) 57.8 16.6 Search (2048X32) 0.289 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.2 29.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 49.1 10.1 Inc. seg. avg. 0.458 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 35.8 17.7 Inc. frq. avg. 0.345 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 312.3 el 46.3 pa 94.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 12634.459 -1698.226 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ky..1X1QE, Output file: /Exps/c211c/v1/1234/No0120/ky.W.162.1X1QE

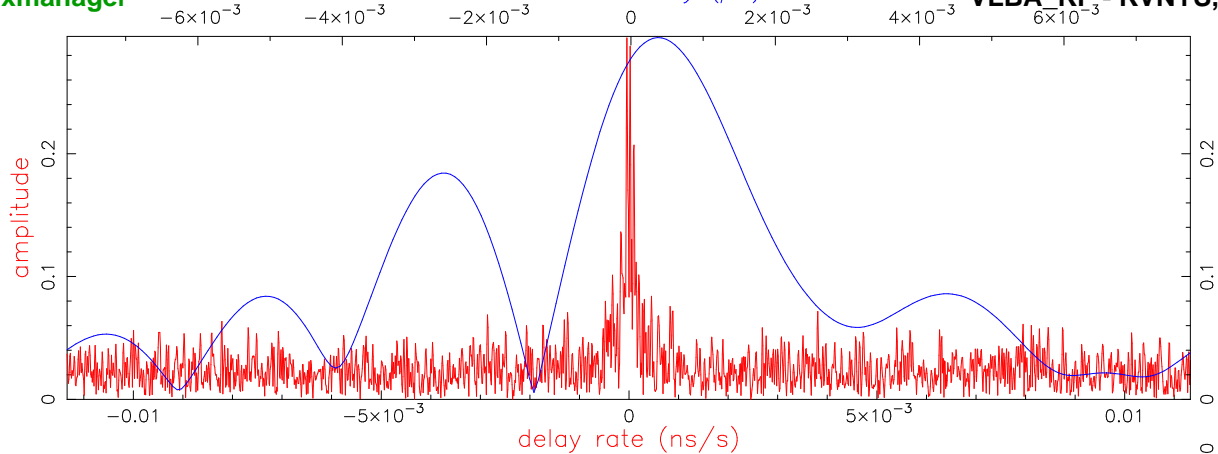
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QE, No0120, ky

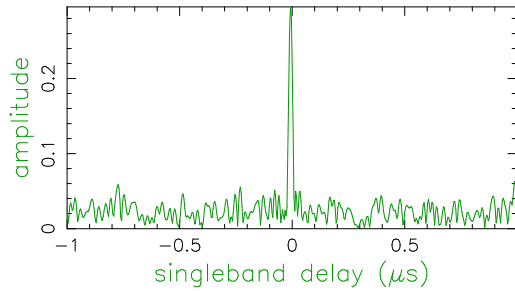
VLBA\_KP - KVNYS, fgroup W, pol RR

multiband delay ( $\mu$ s)

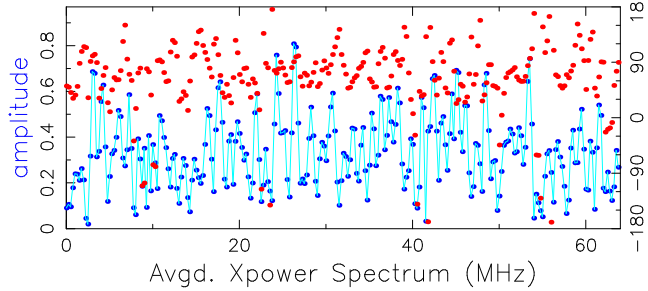


Fringe quality 8

SNR 15.9  
 Int time 388.379  
 Amp 0.296  
 Phase -8.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.006952  
 MBD 0.000428  
 Fringe rate (Hz)  
 -0.004044  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

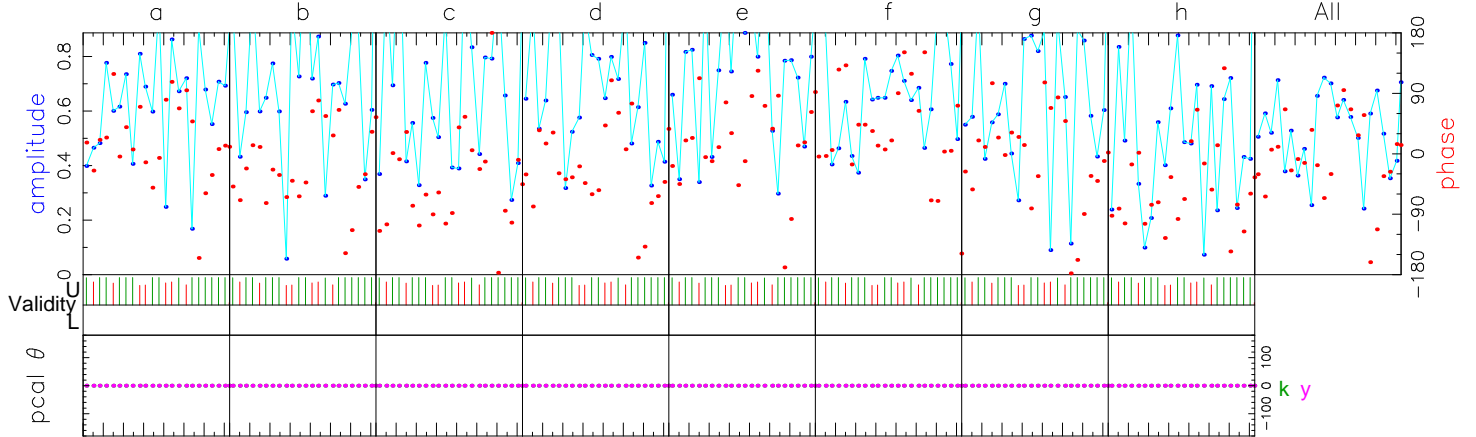


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133926  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
k	0	0	0	0	0	0	0	0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		7.92006359291E+02		Apriori delay (usec)	7.92005931361E+02		Resid mbdelay (usec)	4.27930E-04	+/-	6.8E-05
Sband delay (usec)		7.91998979611E+02		Apriori clock (usec)	-3.8300133E-01		Resid sbdelay (usec)	-6.95175E-03	+/-	5.4E-04
Phase delay (usec)		7.92005931074E+02		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	-2.86891E-07	+/-	2.3E-07
Delay rate (us/s)		-1.39038539983E+00		Apriori rate (us/s)	-1.39038535288E+00		Resid rate (us/s)	-4.69462E-08	+/-	1.0E-09
Total phase (deg)			325.0	Apriori accel (us/s/s)	-1.12463747041E-05		Resid phase (deg)	-8.9	+/-	7.2
RMS	60.1	16.7		Amplitude	0.296 +/- 0.019		Pcal mode: MANUAL, MANUAL			
amp/seg (%)	90.4	29.1		Search (2048X32)	0.289		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	38.9	10.2		Interp.	0.000		Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	25.1	17.8		Inc. seg. avg.	0.502		Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
				Inc. frq. avg.	0.341		Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
							nlags: 256		t_cohere infinite	

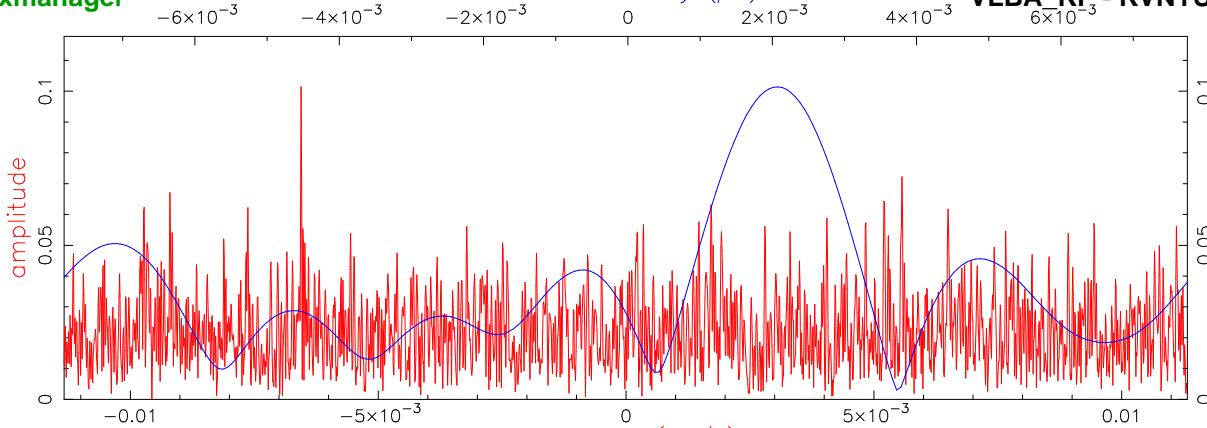
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEY, No0120, ky

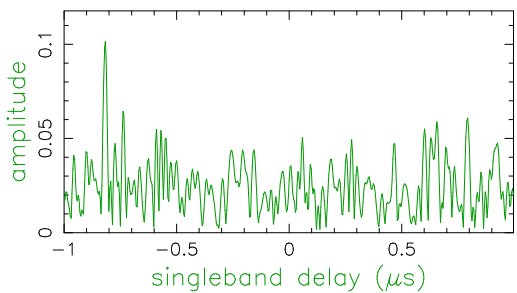
VLBA\_KP - KVNYS, fgroup W, pol LR

multiband delay ( $\mu$ s)

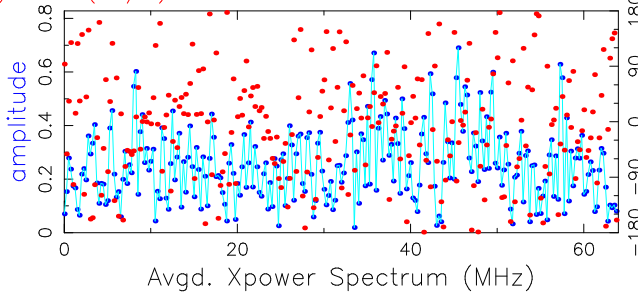


Fringe quality 0

SNR 5.5  
 Int time 388.379  
 Amp 0.118  
 Phase -88.3  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.817611  
 MBD 0.002091  
 Fringe rate (Hz)  
 -0.565732  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

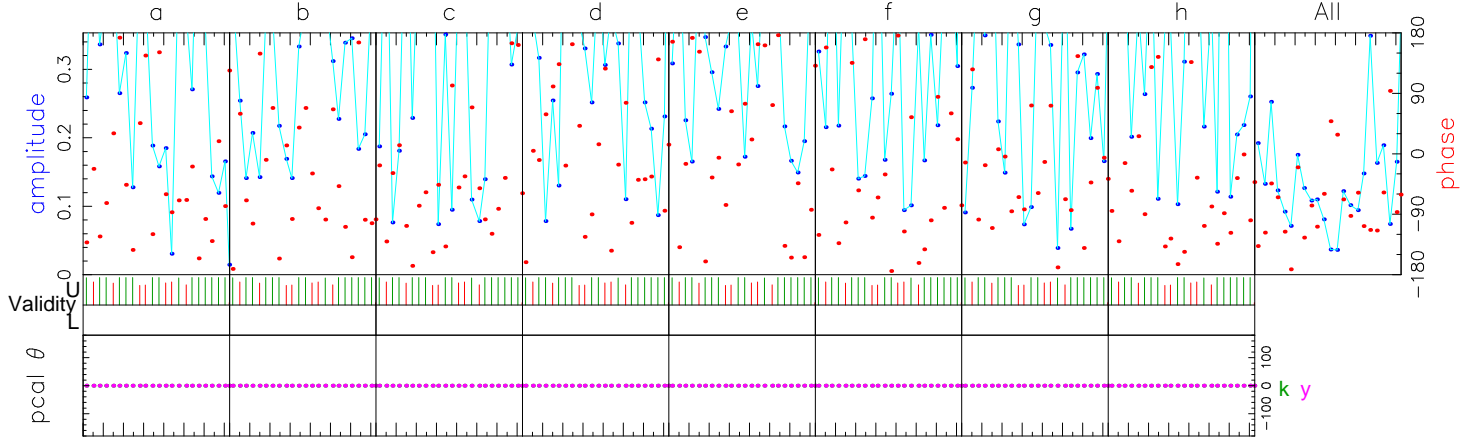


delay rate (ns/s)



Exp. c211c  
 Yr:day 16383  
 Start 2021:117  
 Stop 2021:303:225133  
 FRT 2021:304:133930  
 Corr/FF/build 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-86.1	-79.8	-95.3	-42.5	-160.4	-102.0	-60.6	-96.4	Phase	-88.3
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.2	Ampl.	0.1
	424.6	12.4	47.7	116.9	122.1	61.2	142.1	469.8	Sbd box	47.7
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ky	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	7.91195522749E+02					7.92005931361E+02			Resid mbdelay (usec)	2.09139E-03 +/- 2.0E-04
Sband delay (usec)	7.91188320611E+02					-3.8300133E-01			Resid sbdelay (usec)	-8.17611E-01 +/- 1.6E-03
Phase delay (usec)	7.92005928512E+02					0.0000000E+00			Resid phdelay (usec)	-2.84808E-06 +/- 6.7E-07
Delay rate (us/s)	-1.39039192047E+00					-1.39038535288E+00			Resid rate (us/s)	-6.56759E-06 +/- 3.0E-09
Total phase (deg)		245.5							Resid phase (deg)	-88.3 +/- 20.8
	RMS	Theor.	Amplitude	0.118 +/- 0.021					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	64.5	48.3	Search (2048X32)	0.099					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	78.8	84.2	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	37.5	29.4	Inc. seg. avg.	0.115					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	39.7	51.4	Inc. frq. avg.	0.115					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite

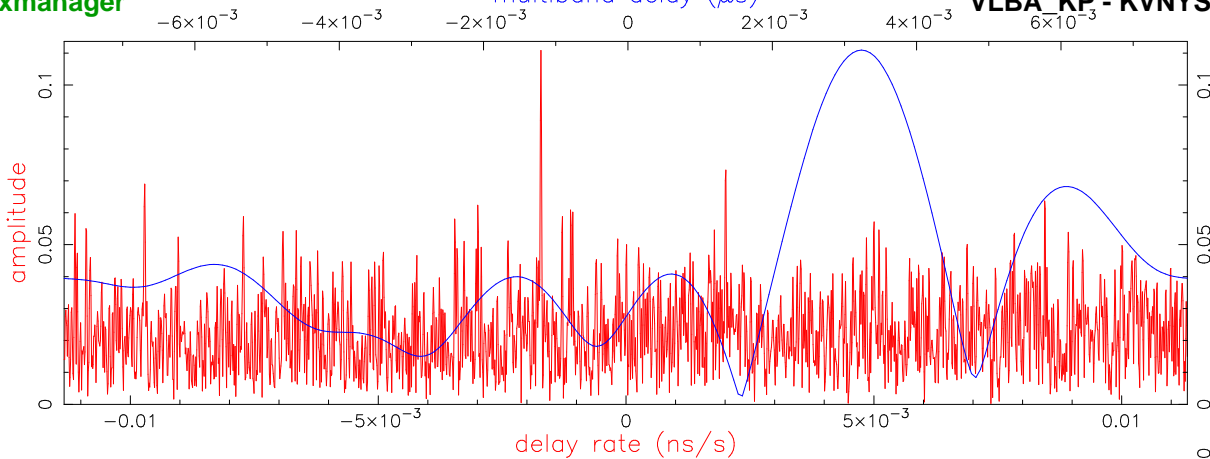
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEY, No0120, ky

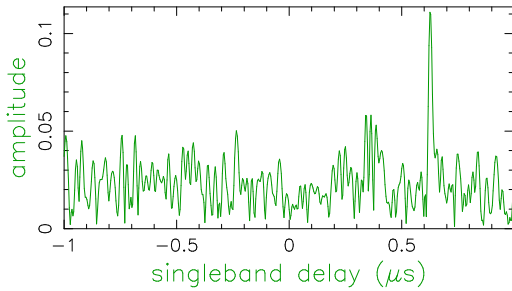
VLBA\_KP - KVNYS, fgroup W, pol RL

multiband delay ( $\mu$ s)

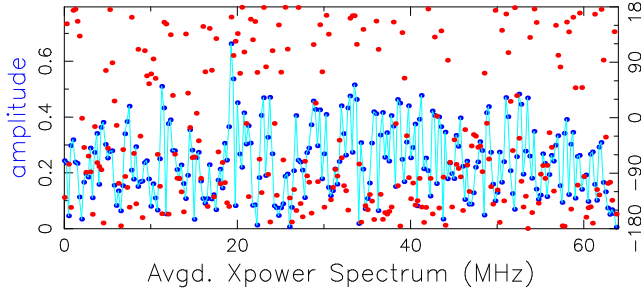


Fringe quality 0

SNR 6.1  
 Int time 388.379  
 Amp 0.114  
 Phase -165.4  
 PFD 2.9e-01  
 Delays (us)  
 SBD 0.626678  
 MBD 0.003275  
 Fringe rate (Hz)  
 -0.147740  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

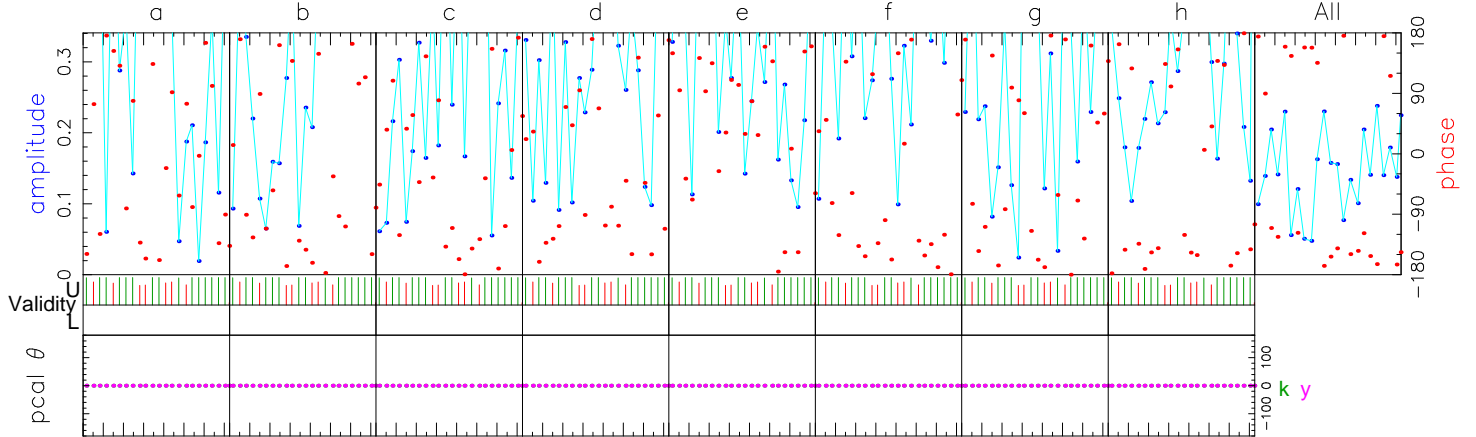


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133934  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-168.9	-168.0	-123.0	-126.8	119.1	-148.1	-154.0	-170.8	Phase	-165.4
	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1
	341.1	178.2	130.2	358.9	470.0	159.2	134.9	417.1	Sbd box	417.4
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ky	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	
y	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)		7.92634206213E+02		Apriori delay (usec)	7.92005931361E+02		Resid mbdelay (usec)	3.27485E-03	+/-	1.8E-04
Sband delay (usec)		7.92632609111E+02		Apriori clock (usec)	-3.8300133E-01		Resid sbdelay (usec)	6.26678E-01	+/-	1.4E-03
Phase delay (usec)		7.92005926026E+02		Apriori clockrate (us/s)	0.0000000E+00		Resid phdelay (usec)	-5.33421E-06	+/-	6.1E-07
Delay rate (us/s)		-1.39038706799E+00		Apriori rate (us/s)	-1.39038535288E+00		Resid rate (us/s)	-1.71511E-06	+/-	2.7E-09
Total phase (deg)		168.4		Apriori accel (us/s/s)	-1.12463747041E-05		Resid phase (deg)	-165.4	+/-	18.9

	RMS	Theor.	Amplitude	0.114 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	41.6	43.8	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	56.8	76.4	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	39.7	26.7	Inc. seg. avg.	0.111	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	38.1	46.6	Inc. frq. avg.	0.120	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

k: az 312.3 el 46.3 pa 94.2 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 12634.459 -1698.226 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ky..1X1QEY Output file: /Exps/c211c/v1/1234/No0120/ky.W.223.1X1QEY



Mk4/DiFX fourfit 3.21 rev 2937

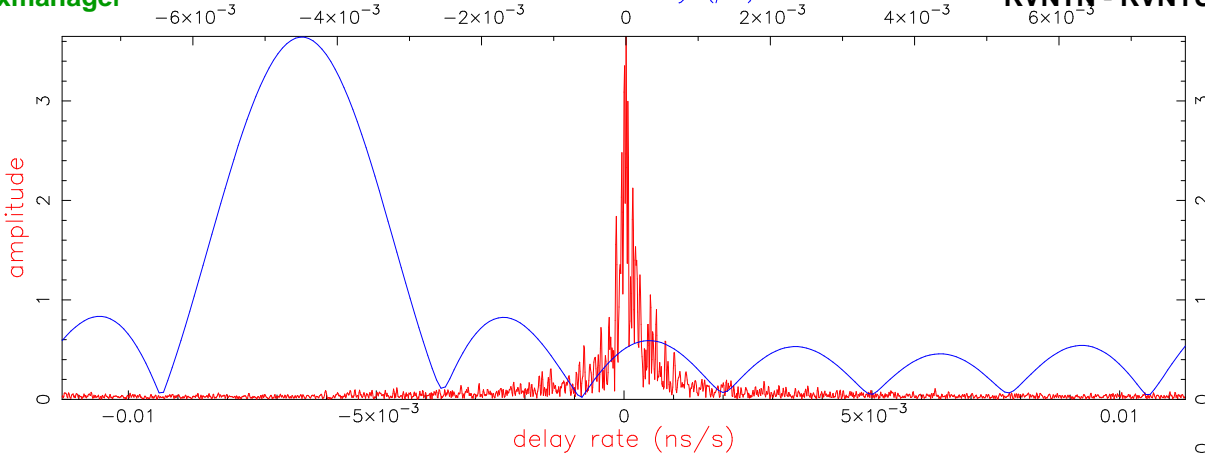
fxmanager

NRAO150.1X1QEV, No0120, ty

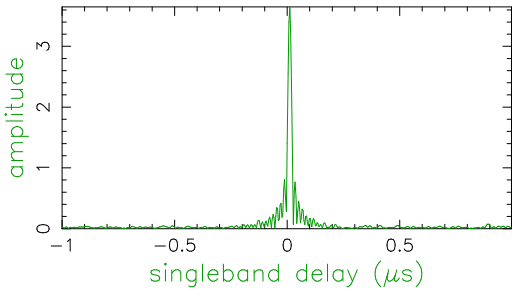
KVNTN - KVNYs, fgroup W, pol LL

multiband delay ( $\mu$ s)

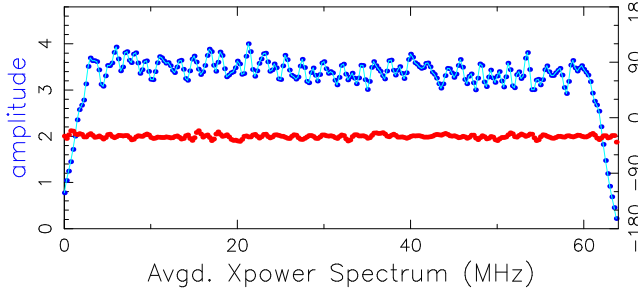
Fringe quality 5



SNR 196.7  
 Int time 388.403  
 Amp 3.650  
 Phase 150.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.011179  
 MBD -0.004491  
 Fringe rate (Hz)  
 0.003831  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

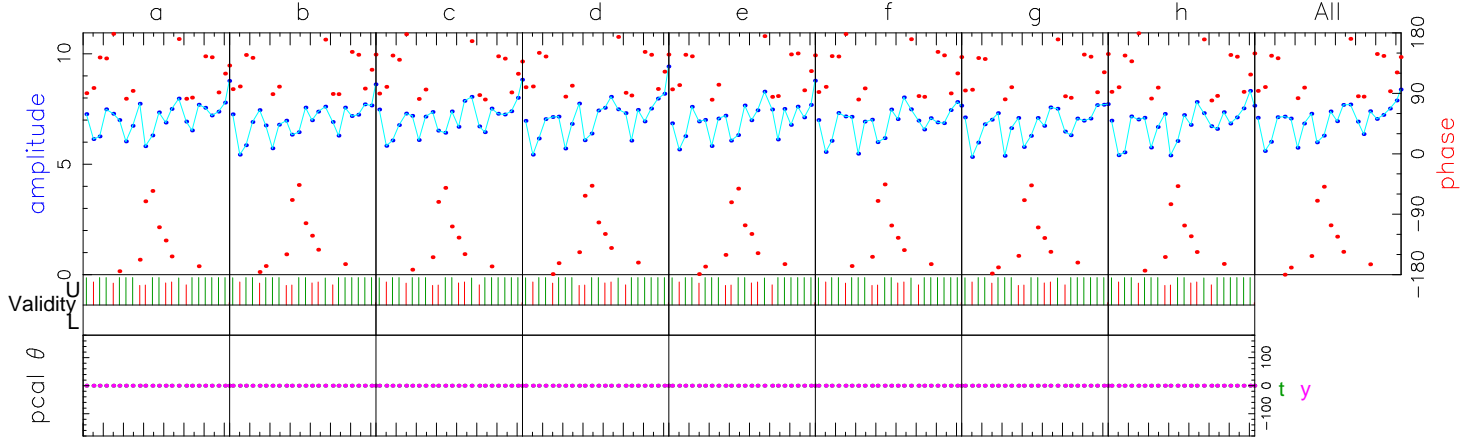


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133940  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-8.53646664983E+02				-8.53657799302E+02					
Sband delay (usec)	-8.53646620052E+02				-9.7180557E-01					
Phase delay (usec)	-8.53657794456E+02				-4.9999999E-08					
Delay rate (us/s)	4.12253166158E-02				4.12252721460E-02					
Total phase (deg)			-149.2		-7.93038096360E-07				150.3	+/- 0.6
	RMS	Theor.	Amplitude	3.650 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	66.8	1.4	Search (2048X32)	3.618	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	91.9	2.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	2.8	0.8	Inc. seg. avg.	6.939	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	2.3	1.4	Inc. frq. avg.	3.646	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

t: az 48.3 el 38.9 pa -82.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -376.134 -410.743 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ty..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/ty.W.244.1X1QEV

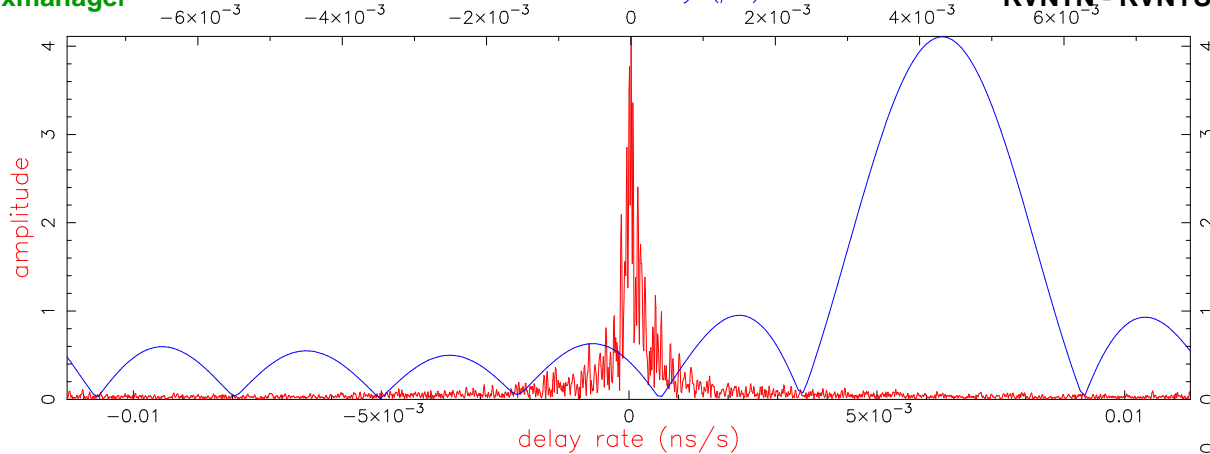
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, ty

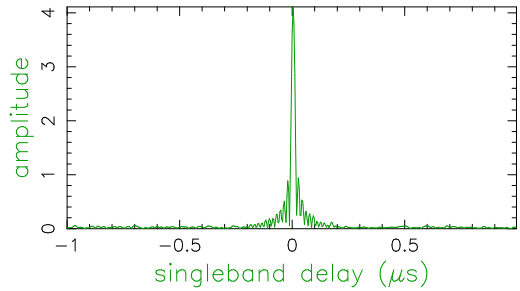
KVNTN - KVNYs, fgroup W, pol RR

multiband delay ( $\mu$ s)

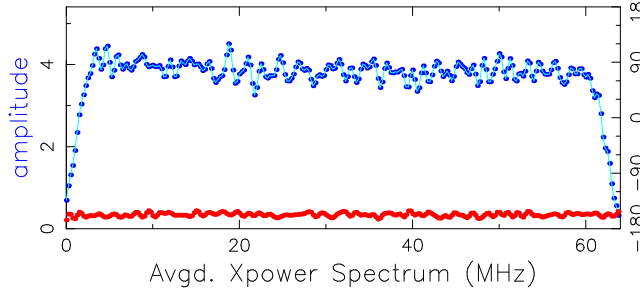


Fringe quality 5

SNR 221.6  
Int time 388.403  
Amp 4.111  
Phase -157.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.004329  
MBD 0.004311  
Fringe rate (Hz)  
0.003831  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

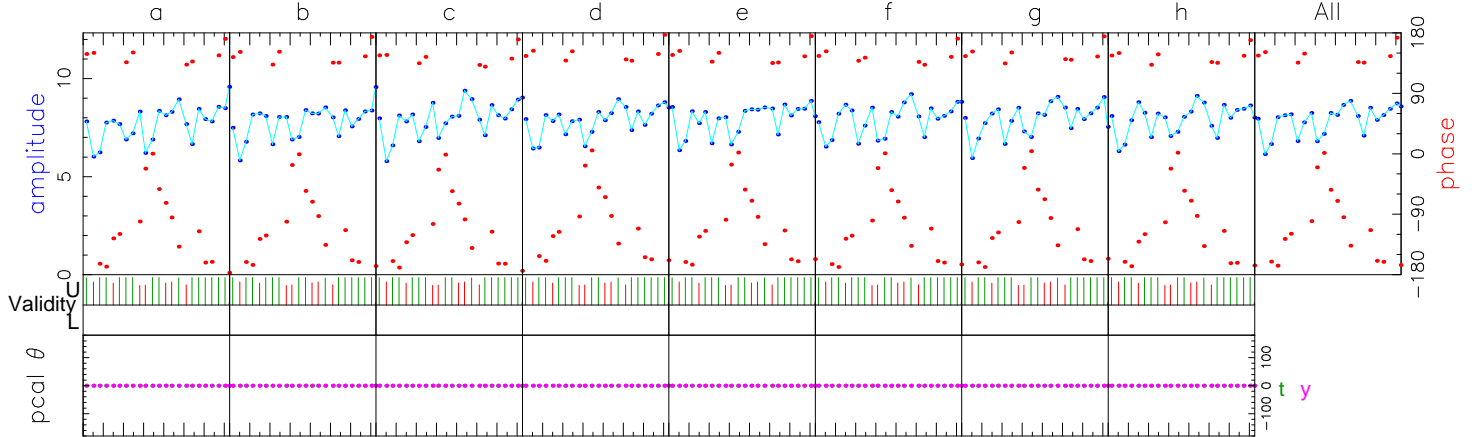


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133943  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.53653488420E+02	-8.53653469802E+02	-8.53657804372E+02	-8.53657799302E+02	-9.7180557E-01	-4.9999999E-08	4.12252721460E-02	-7.93038096360E-07	4.31088E-03	+/- 4.9E-06
Sband delay (usec)	-157.8	-156.8	-159.3	-154.7	-156.6	-157.6	-156.5	-158.4	4.32950E-03	+/- 3.9E-05
Phase delay (usec)	4.1	4.0	4.1	4.1	4.1	4.2	4.2	4.1	-5.06965E-06	+/- 1.7E-08
Delay rate (us/s)	258.1	258.2	258.0	258.3	258.0	258.2	258.1	258.0	4.44684E-08	+/- 7.4E-11
Total phase (deg)	4.1	4.0	4.1	4.1	4.1	4.2	4.2	4.1	-157.2	+/- 0.5
RMS	66.5	1.2	4.083	4.111 +/- 0.019	4.083	4.111 +/- 0.019	4.083	4.111 +/- 0.019		
Theor.	1.2	4.083	4.083	4.083	4.083	4.083	4.083	4.083		
Amplitude	Search (2048X32)	4.083	4.083	4.083	4.083	4.083	4.083	4.083		
ph/seg (deg)	66.5	1.2	4.083	4.083	4.083	4.083	4.083	4.083		
amp/seg (%)	92.9	2.1	0.000	0.000	0.000	0.000	0.000	0.000		
ph/frq (deg)	1.5	0.7	7.860	7.860	7.860	7.860	7.860	7.860		
amp/frq (%)	1.1	1.3	4.107	4.107	4.107	4.107	4.107	4.107		
PCal mode:	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL		
PCal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00		
Bits/sample:	2x2	2x2	2x2	2x2	2x2	2x2	2x2	2x2		
Sample rate (MSamp/s):	128	128	128	128	128	128	128	128		
Data rate (Mb/s):	2048	2048	2048	2048	2048	2048	2048	2048		
PC period (AP's)	5	5	5	5	5	5	5	5		
sb window (us)	-1.000	1.000	-1.000	1.000	-1.000	1.000	-1.000	1.000		
mb window (us)	-0.008	0.008	-0.008	0.008	-0.008	0.008	-0.008	0.008		
dr window (ns/s)	-0.011	0.011	-0.011	0.011	-0.011	0.011	-0.011	0.011		
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
u,v (fr/asec)	-376.134	-410.743	-376.134	-410.743	-376.134	-410.743	-376.134	-410.743		
simultaneous interpolator										

t: az 48.3 el 38.9 pa -82.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -376.134 -410.743  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ty..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/ty.W.261.1X1QEV

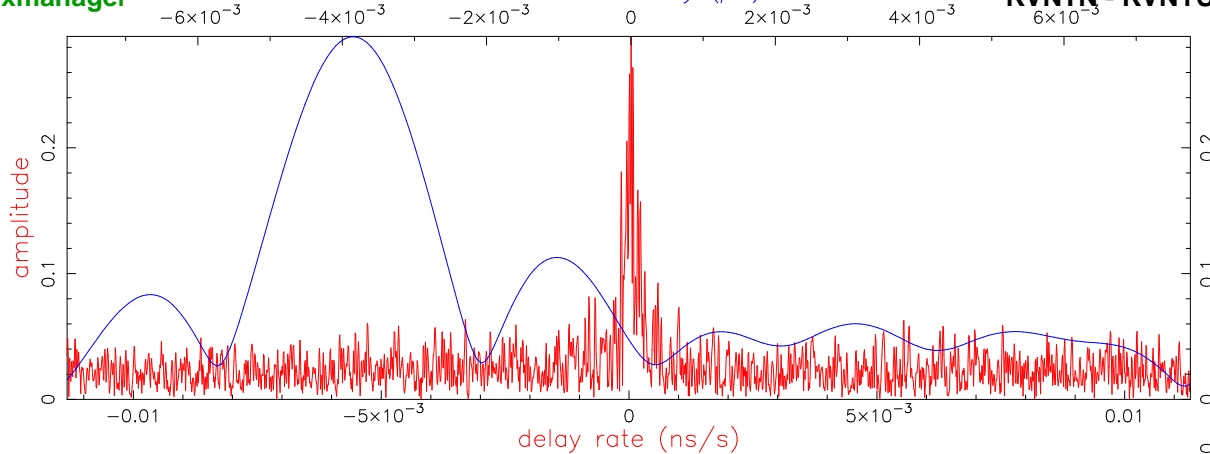
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, ty

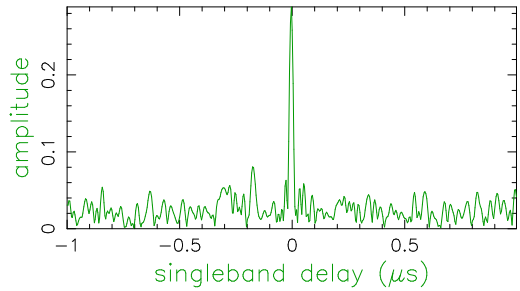
KVNTN - KVNYS, fgroup W, pol LR

multiband delay ( $\mu$ s)

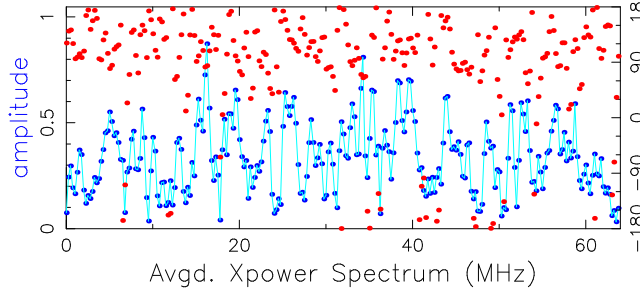


Fringe quality 9

SNR 15.6  
 Int time 388.403  
 Amp 0.289  
 Phase 111.2  
 PFD 1.4e-45  
 Delays (us)  
 SBD -0.004296  
 MBD -0.003850  
 Fringe rate (Hz) 0.003751  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

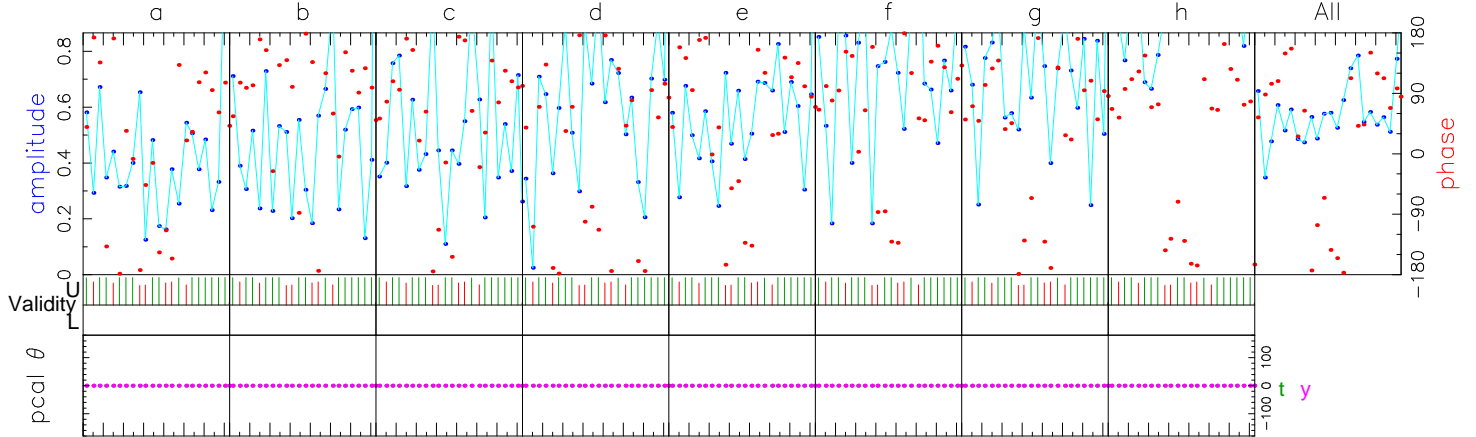


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133947  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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

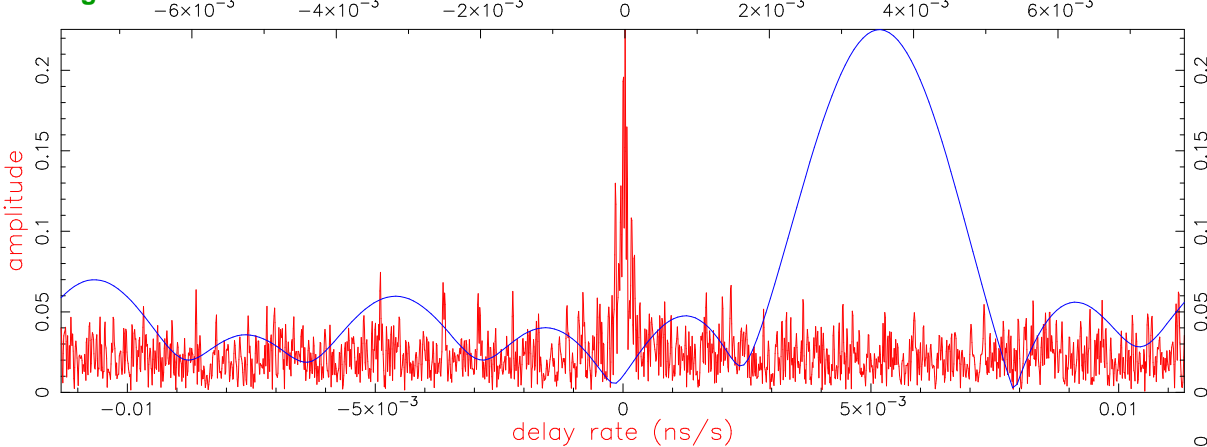


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
t	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-8.53661649014E+02									
Sband delay (usec)	-8.53662095302E+02									
Phase delay (usec)	-8.53657795718E+02									
Delay rate (us/s)	4.12253156897E-02									
Total phase (deg)			-188.3							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									111.2	+/- 7.4
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

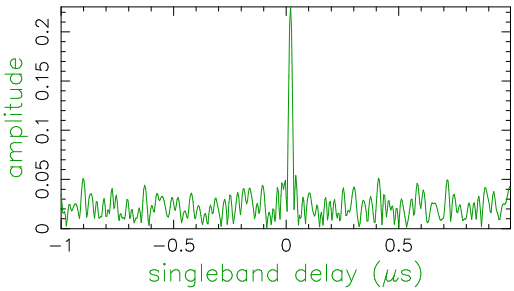
ph/seg (deg) 70.1 17.1 Search (2048X32) 0.287 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 104.5 29.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 6.7 10.4 Inc. seg. avg. 0.547 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.2 18.2 Inc. frq. avg. 0.285 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 t: az 48.3 el 38.9 pa -82.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -376.134 -410.743 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ty..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/ty.W.277.1X1QEV

multiband delay ( $\mu$ s)

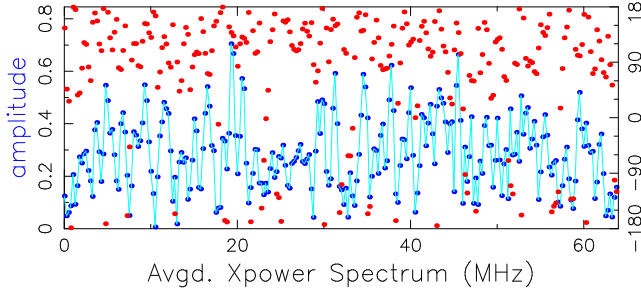
Fringe quality 9



SNR 12.1  
 Int time 388.403  
 Amp 0.225  
 Phase -50.9  
 PFD 3.0e-25  
 Delays (us)  
 SBD 0.019265  
 MBD 0.003521  
 Fringe rate (Hz) 0.003996  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

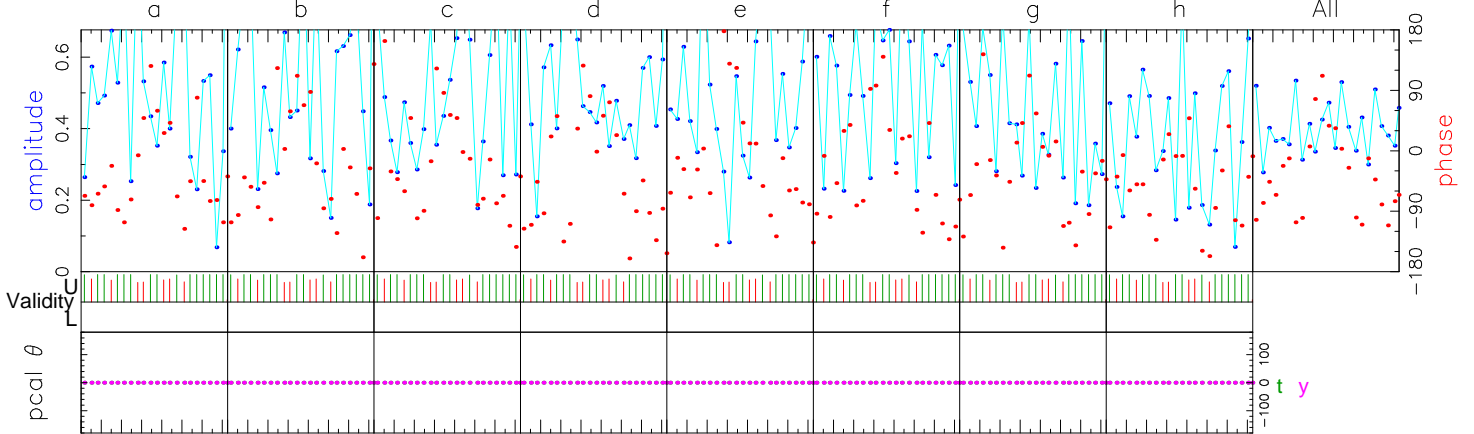


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133950  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.1	-41.3	-43.6	-77.6	-48.4	-54.4	-49.4	-46.6	Phase	-50.9
	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	261.5	261.2	262.5	75.4	262.3	261.4	439.8	262.2	Sbd box	261.9
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
ty	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
t	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
t	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.53638653451E+02		Apriori delay (usec)		-8.53657799302E+02		Resid mbdelay (usec)		3.52085E-03	+/- 8.9E-05
Sband delay (usec)	-8.53638534052E+02		Apriori clock (usec)		-9.7180557E-01		Resid sbdelay (usec)		1.92652E-02	+/- 7.1E-04
Phase delay (usec)	-8.53657800944E+02		Apriori clockrate (us/s)		-4.9999999E-08		Resid phdelay (usec)		-1.64140E-06	+/- 3.0E-07
Delay rate (us/s)	4.12253185332E-02		Apriori rate (us/s)		4.12252721460E-02		Resid rate (us/s)		4.63871E-08	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-7.93038096360E-07		Resid phase (deg)		-50.9	+/- 9.4

	RMS	Theor.	Amplitude	0.225 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.5	21.9	Search (2048X32)	0.221	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	84.8	38.2	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	12.3	13.3	Inc. seg. avg.	0.373	Sample rate(MSamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	23.0	23.3	Inc. frq. avg.	0.222	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
					nlags: 256	t_cohere infinite

t: az 48.3 el 38.9 pa -82.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -376.134 -410.743 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ty..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/ty.W.292.1X1QEV

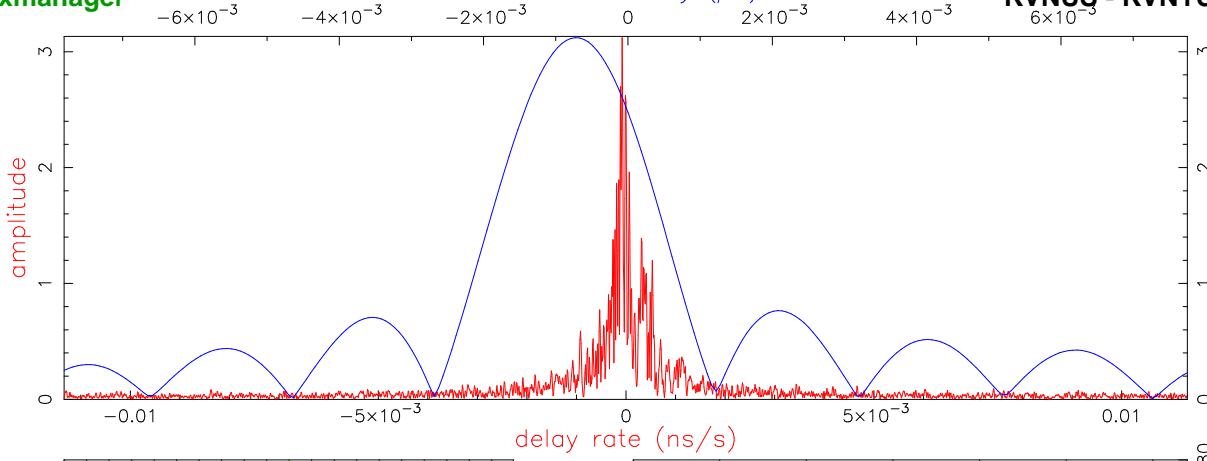
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

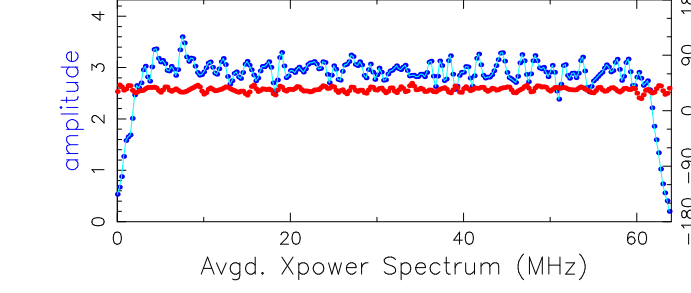
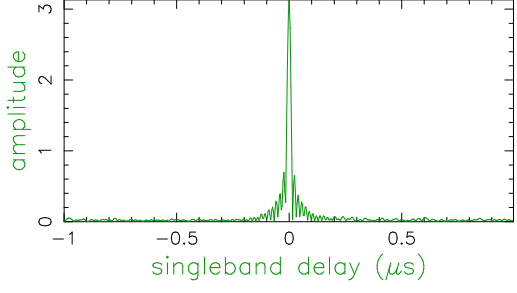
NRAO150.1X1QEV, No0120, uy

KVNU\$ - KVNY\$, fgroup W, pol LL

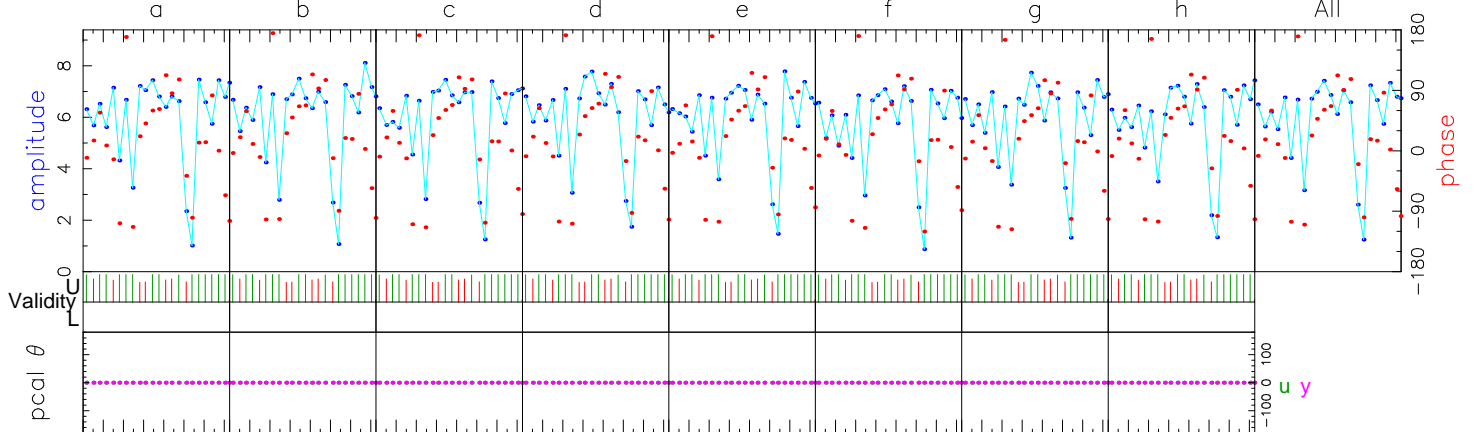
multiband delay ( $\mu$ s)



Fringe quality 5  
 SNR 168.8  
 Int time 388.403  
 Amp 3.132  
 Phase 34.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000702  
 MBD -0.000718  
 Fringe rate (Hz)  
 -0.006378  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133941  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
u	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.88687086405E+01					5.88694269579E+01			Resid mbdelay (usec)	-7.18317E-04 +/- 6.4E-06
Sband delay (usec)	5.88687244579E+01					1.4061255E+01			Resid sbdelay (usec)	-7.02500E-04 +/- 5.1E-05
Phase delay (usec)	5.88694280775E+01					1.1270000E-06			Resid phdelay (usec)	1.11963E-06 +/- 2.2E-08
Delay rate (us/s)	5.02204783489E-03					5.02212187916E-03			Resid rate (us/s)	-7.40443E-08 +/- 9.7E-11
Total phase (deg)		192.5				-2.72020145876E-06			Resid phase (deg)	34.7 +/- 0.7

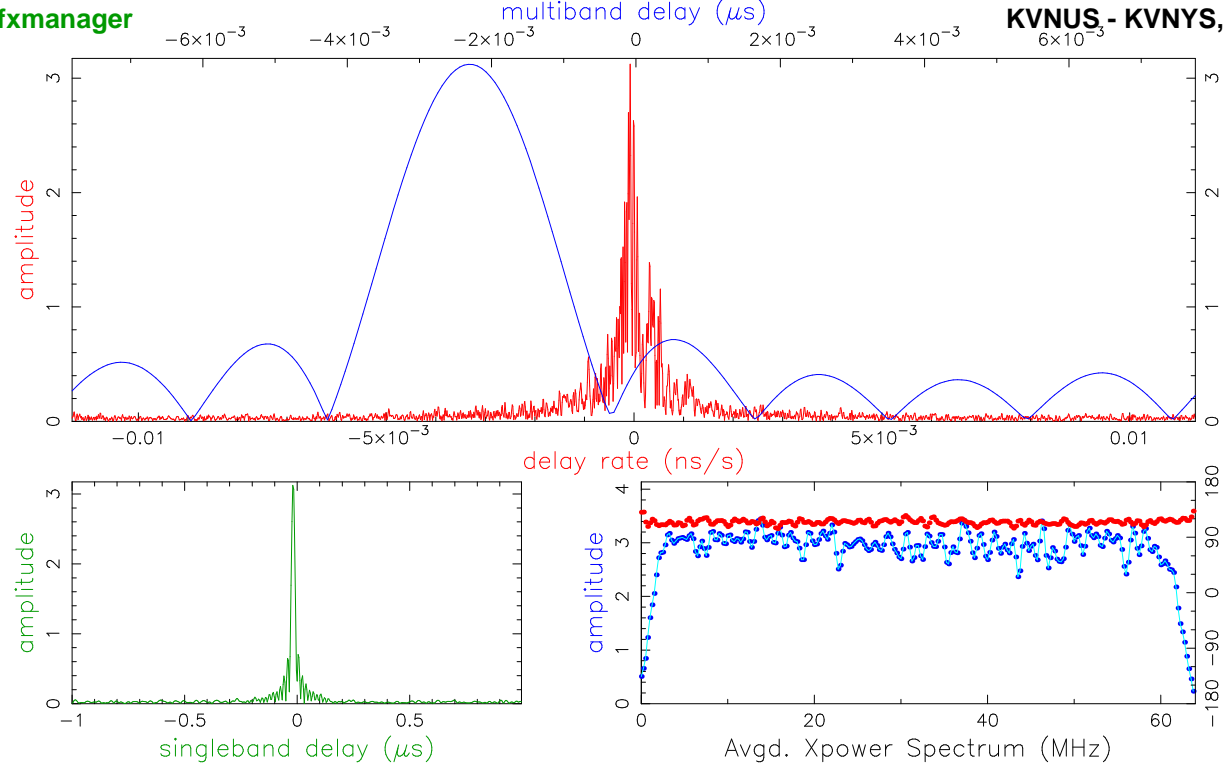
ph/seg (deg) 74.2 1.6 Search (2048X32) 2.961 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 102.8 2.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 2.9 1.0 Inc. seg. avg. 5.923 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 2.3 1.7 Inc. frq. avg. 3.124 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 u: az 50.0 el 42.1 pa -83.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -51.237 -421.161 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/uy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/uy.W.250.1X1QEV

Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, uy

KVNU<sub>3</sub> - KVNY<sub>5</sub>, fgroup W, pol RR

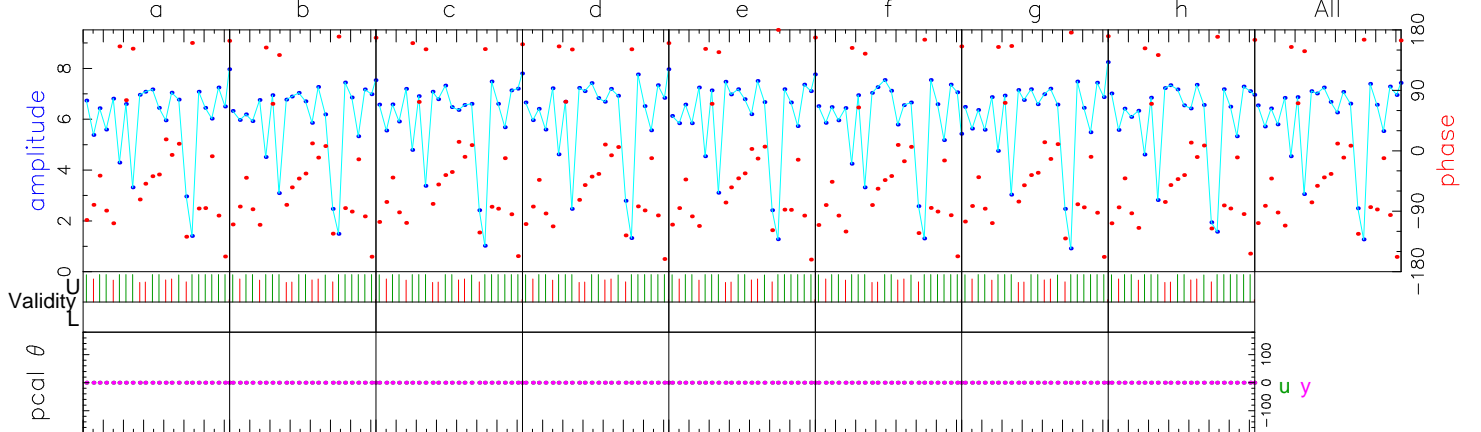


Fringe quality 5

SNR 171.0  
 Int time 388.403  
 Amp 3.173  
 Phase -66.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.017935  
 MBD -0.002303  
 Fringe rate (Hz)  
 -0.006369  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

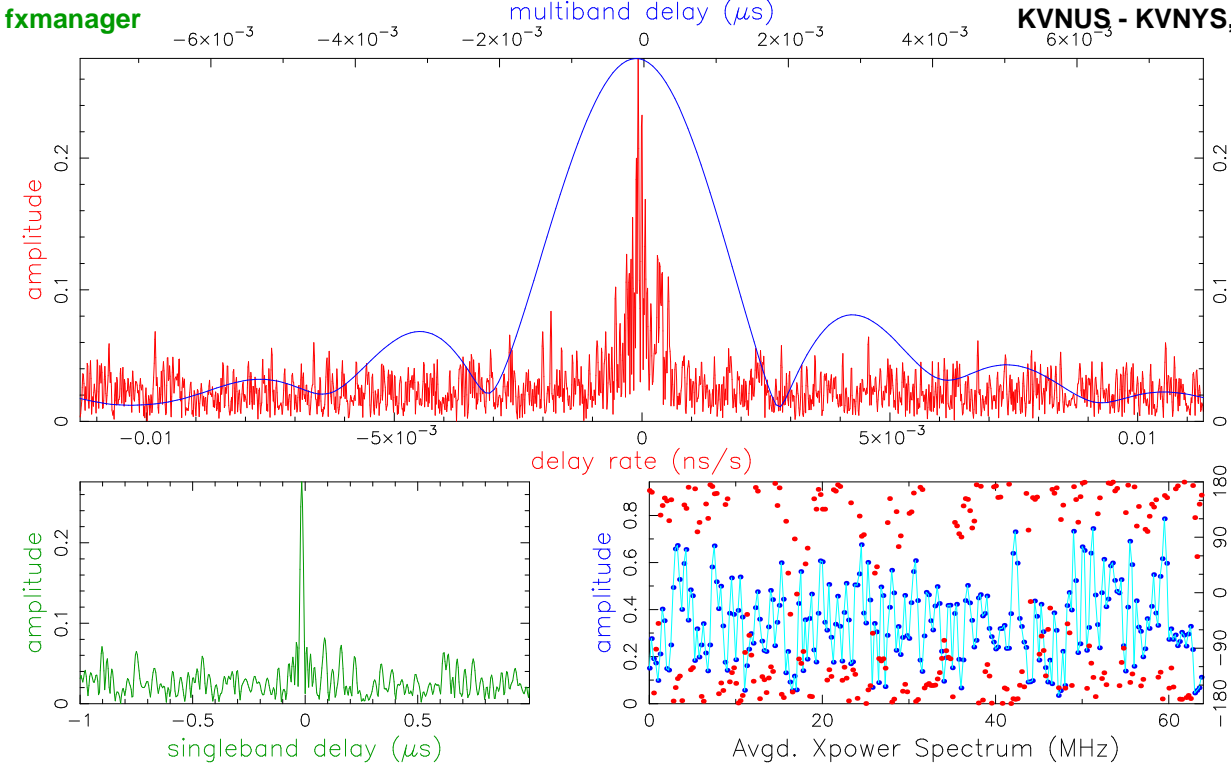
Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133944  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



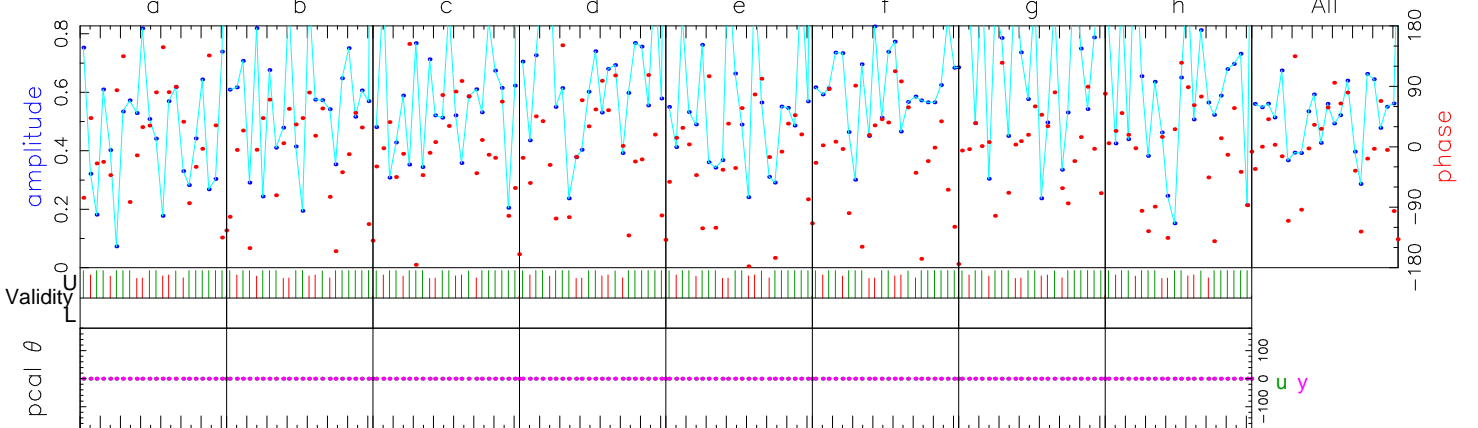
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-63.9	-67.6	-65.1	-65.6	-67.5	-69.3	-63.0	-65.5	Phase	-66.0
	3.0	3.1	3.1	3.2	3.2	3.2	3.1	3.1	Ampl.	3.1
	252.5	252.4	252.4	252.5	252.3	252.4	252.4	252.4	Sbd box	252.4
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.88514987968E+01		Apriori delay (usec)		5.88694269579E+01		Resid mbdelay (usec)		-2.30316E-03	+/- 6.3E-06
Sband delay (usec)	5.88514919579E+01		Apriori clock (usec)		1.4061255E+01		Resid sbdelay (usec)		-1.79350E-02	+/- 5.0E-05
Phase delay (usec)	5.88694248307E+01		Apriori clockrate (us/s)		1.1270000E-06		Resid phdelay (usec)		-2.12719E-06	+/- 2.2E-08
Delay rate (us/s)	5.02204794684E-03		Apriori rate (us/s)		5.02212187916E-03		Resid rate (us/s)		-7.39323E-08	+/- 9.5E-11
Total phase (deg)	91.8		Apriori accel (us/s/s)		-2.72020145876E-06		Resid phase (deg)		-66.0	+/- 0.7

ph/seg (deg) 74.0 1.6 Search (2048X32) 2.982 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 102.0 2.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 2.3 0.9 Inc. seg. avg. 5.971 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 2.2 1.7 Inc. frq. avg. 3.124 Sample rate(MISamp/s): 128 Resid rate (us/s) dr window (ns/s) -0.011 0.011  
 u: az 50.0 el 42.1 pa -83.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -51.237 -421.161 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/uy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/uy.W.266.1X1QEV simultaneous interpolator



Fringe quality 9  
SNR 14.9  
Int time 388.403  
Amp 0.276  
Phase 9.6  
PFD 3.6e-41  
Delays (us)  
SBD -0.015482  
MBD -0.000108  
Fringe rate (Hz)  
-0.006283  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133948  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.88536935468E+01				5.88694269579E+01			Resid mbdelay (usec)	-1.08411E-04 +/- 7.3E-05
Sband delay (usec)		5.88539447079E+01				1.4061255E+01			Resid sbdelay (usec)	-1.54822E-02 +/- 5.8E-04
Phase delay (usec)		5.88694272678E+01				1.1270000E-06			Resid phdelay (usec)	3.09910E-07 +/- 2.5E-07
Delay rate (us/s)		5.02204894237E-03				5.02212187916E-03			Resid rate (us/s)	-7.29368E-08 +/- 1.1E-09
Total phase (deg)			167.3						Resid phase (deg)	9.6 +/- 7.7

ph/seg (deg) 69.1 17.9 Search (2048X32) 0.260 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 95.9 31.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 4.9 10.9 Inc. seg. avg. 0.492 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 26.0 19.0 Inc. frq. avg. 0.272 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
u: az 50.0 el 42.1 pa -83.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -51.237 -421.161 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/uy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/uy.W.284.1X1QEV

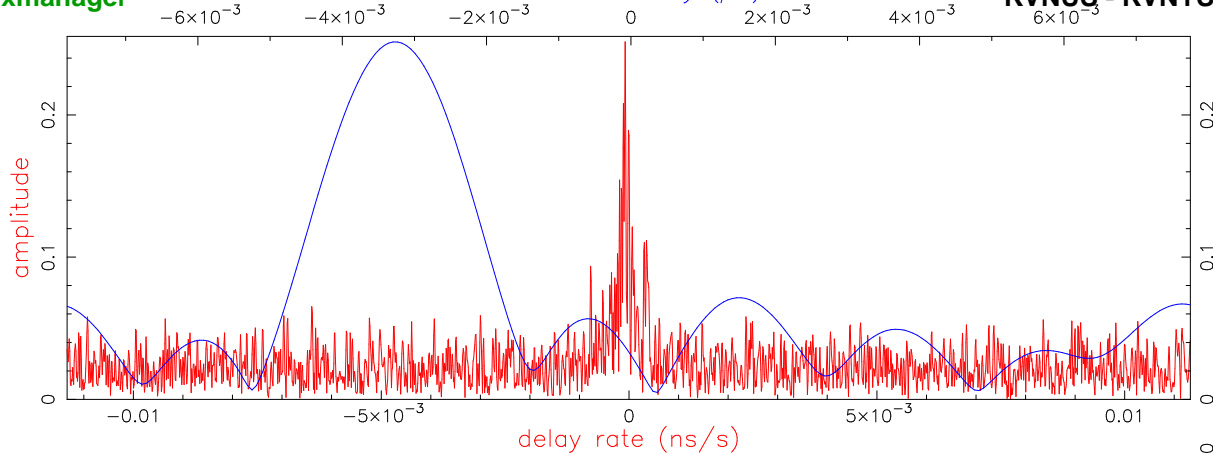
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, uy

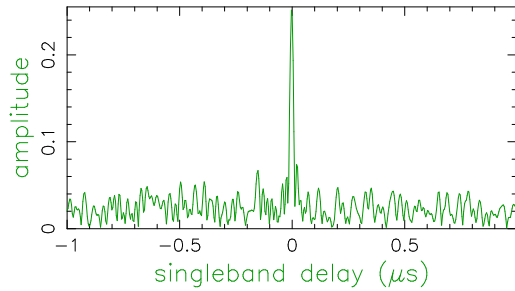
KVNU5 - KVNY5, fgroup W, pol RL

multiband delay ( $\mu$ s)

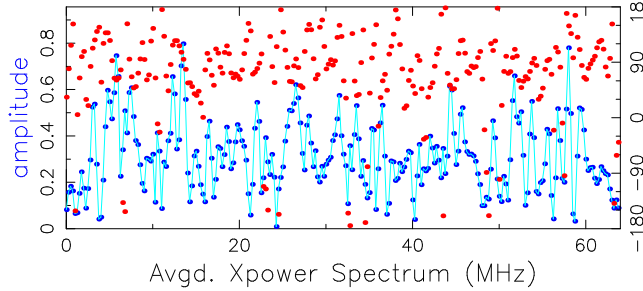


Fringe quality 9

SNR 13.8  
Int time 388.403  
Amp 0.255  
Phase 101.2  
PFD 2.8e-34  
Delays (us)  
SBD -0.002399  
MBD -0.003272  
Fringe rate (Hz)  
-0.006377  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

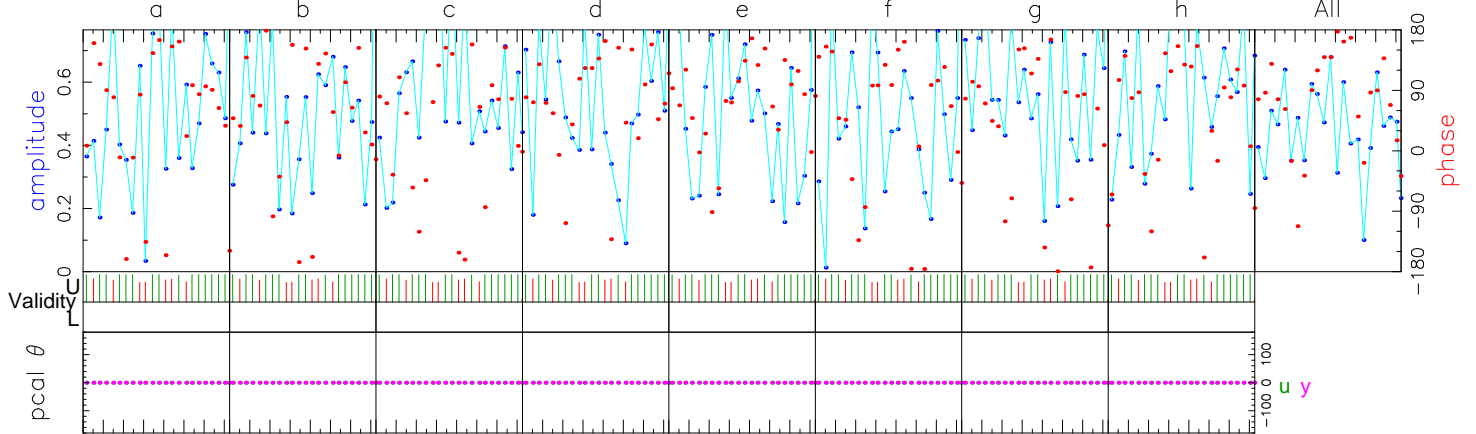


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133951  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'59.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0				
u	1000	1000	1000	1000	1000	1000	1000	1000				
y	1000	1000	1000	1000	1000	1000	1000	1000				
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
u:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
u	1000	1000	1000	1000	1000	1000	1000	1000				
y	1000	1000	1000	1000	1000	1000	1000	1000				
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	5.88661548593E+01		Apriori delay (usec)		5.88694269579E+01		Resid mbdelay (usec)		-3.27210E-03	+/- 7.9E-05		
Sband delay (usec)	5.88670274579E+01		Apriori clock (usec)		1.4061255E+01		Resid sbdelay (usec)		-2.39950E-03	+/- 6.3E-04		
Phase delay (usec)	5.88694302223E+01		Apriori clockrate (us/s)		1.1270000E-06		Resid phdelay (usec)		3.26444E-06	+/- 2.7E-07		
Delay rate (us/s)	5.02204785190E-03		Apriori rate (us/s)		5.02212187916E-03		Resid rate (us/s)		-7.40273E-08	+/- 1.2E-09		
Total phase (deg)	259.0		Apriori accel (us/s/s)		-2.72020145876E-06		Resid phase (deg)		101.2	+/- 8.3		
RMS	70.1	19.3	Amplitude		0.255 +/- 0.019		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	93.6	33.7	Search (2048X32)		0.242		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	10.9	11.8	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	18.9	20.6	Inc. seg. avg.		0.429		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011	
amp/frq (%)			Inc. frq. avg.		0.250		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

u: az 50.0 el 42.1 pa -83.3 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) -51.237 -421.161 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/uy..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/uy.W.299.1X1QEV



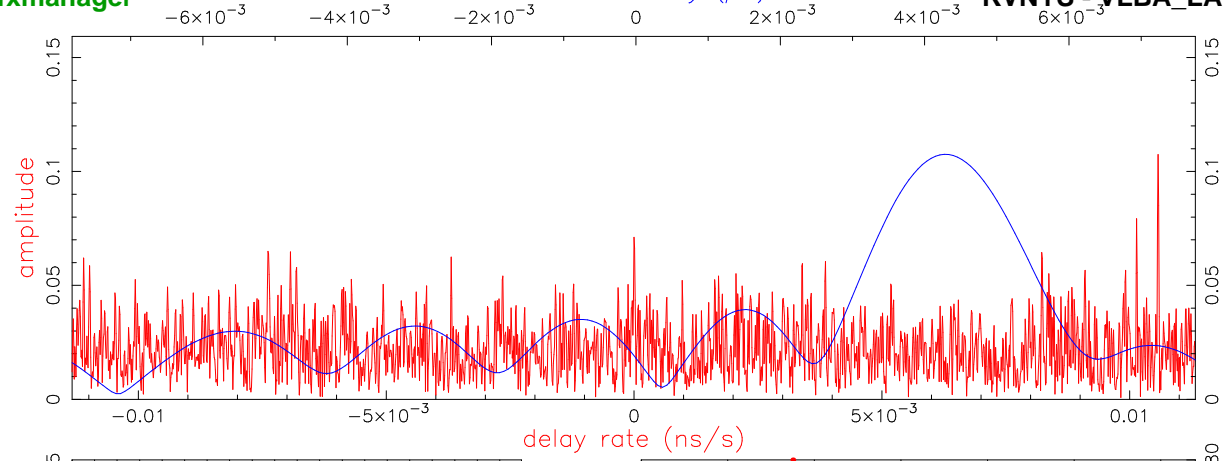
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

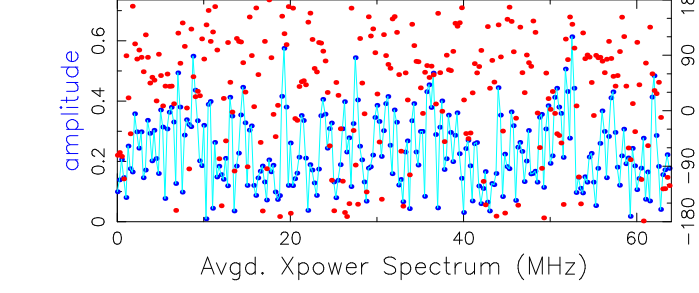
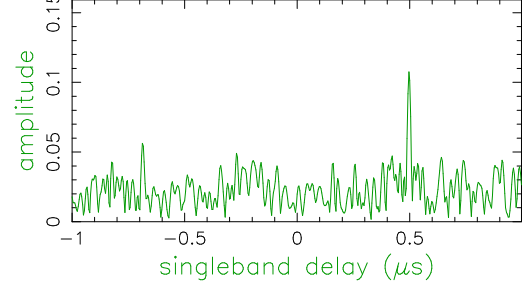
NRAO150.1X1QEV, No0120, yl

KVNYS - VLBA\_LA, fgroup W, pol LL

multiband delay ( $\mu$ s)

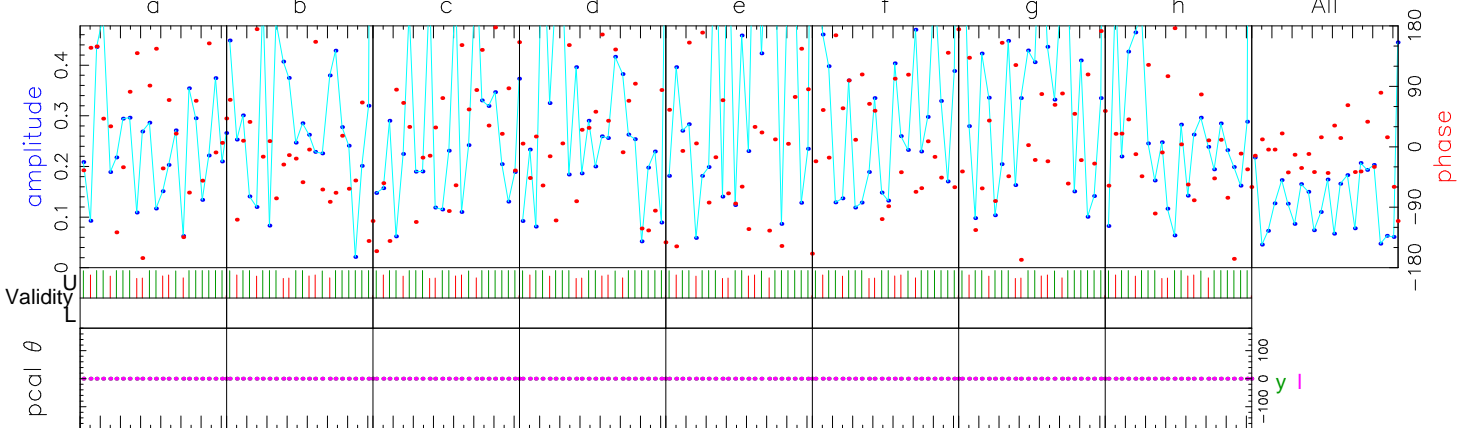


Fringe quality 0  
 SNR 5.8  
 Int time 388.387  
 Amp 0.159  
 Phase -7.3  
 PFD 7.7e-01  
 Delays (us)  
 SBD 0.496950  
 MBD 0.004308  
 Fringe rate (Hz) 0.911674  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133940  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.55238397055E+02	Apriori delay (usec)	-5.55742704595E+02	Resid mbdelay (usec)	4.30754E-03	+/-	1.9E-04
Sband delay (usec)	-5.55245754345E+02	Apriori clock (usec)	3.3384075E+00	Resid sbdelay (usec)	4.96950E-01	+/-	1.5E-03
Phase delay (usec)	-5.55742704831E+02	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	-2.35125E-07	+/-	6.3E-07
Delay rate (us/s)	1.39979738315E+00	Apriori rate (us/s)	1.39978679953E+00	Resid rate (us/s)	1.05836E-05	+/-	2.8E-09
Total phase (deg)	-213.9	Apriori accel (us/s/s)	5.15484642493E-06	Resid phase (deg)	-7.3	+/-	19.7

ph/seg (deg)	36.1	Theor.	45.7	Amplitude	0.159 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	59.5		79.7	Search (2048X32)	0.106	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	26.7		27.8	Inc. seg. avg.	0.143	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.9		48.6	Inc. frq. avg.	0.151	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 51.1 el 41.9 pa -79.5 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -12732.543 799.811 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yl..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yl.W.247.1X1QEV

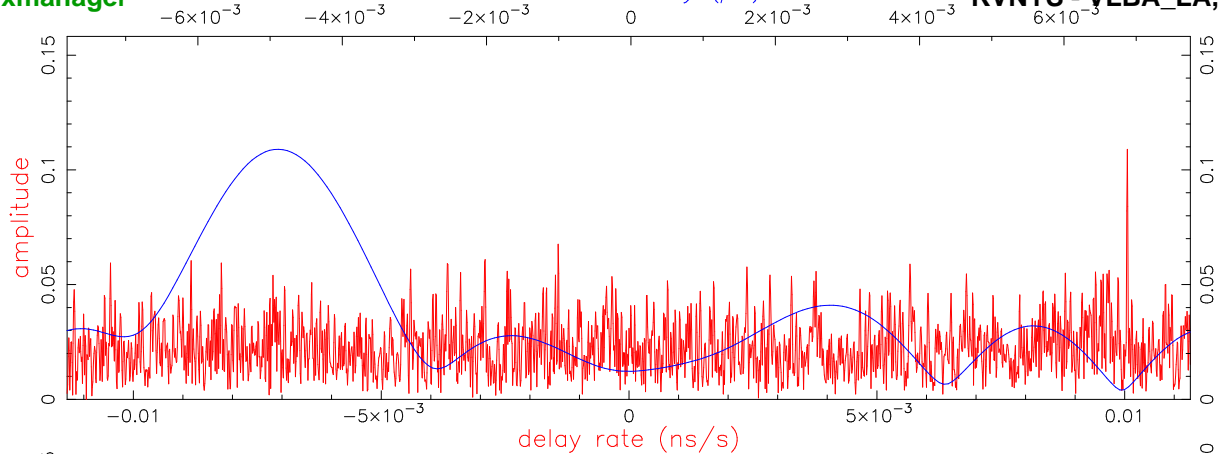
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yl

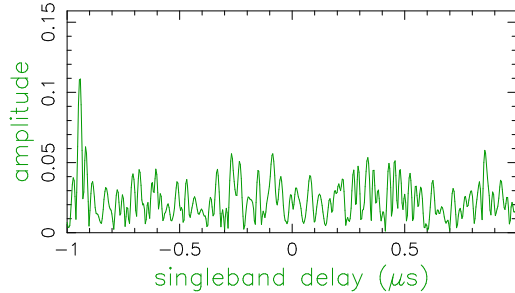
KVNYS - VLBA\_LA, fgroup W, pol RR

multiband delay ( $\mu$ s)

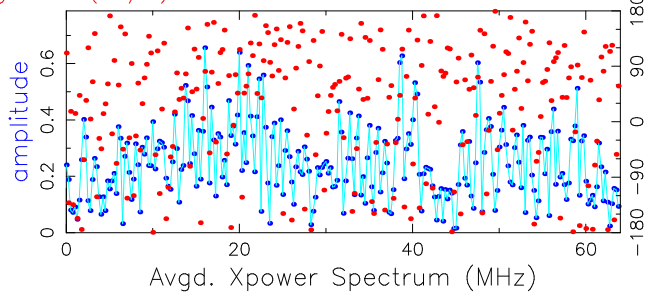


Fringe quality 0

SNR 6.0  
 Int time 388.387  
 Amp 0.158  
 Phase 80.3  
 PFD 3.7e-01  
 Delays (us)  
 SBD -0.943254  
 MBD -0.004900  
 Fringe rate (Hz)  
 0.867669  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

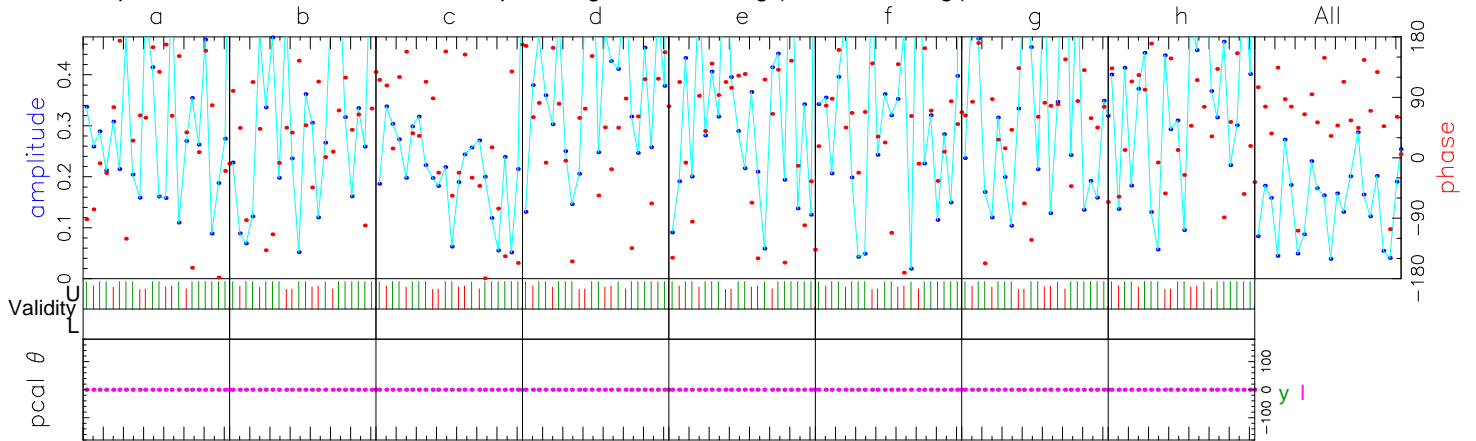


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133944  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.56685104153E+02				-5.55742704595E+02					
Sband delay (usec)	-5.56685958845E+02				3.3384075E+00					
Phase delay (usec)	-5.55742702006E+02				2.8600001E-07					
Delay rate (us/s)	1.39979687231E+00				1.39978679953E+00					
Total phase (deg)		-126.3			5.15484642493E-06					
			Apriori delay (usec)			Resid mbdelay (usec)			-4.89956E-03	+/- 1.8E-04
			Apriori clock (usec)			Resid sbdelay (usec)			-9.43254E-01	+/- 1.4E-03
			Apriori clockrate (us/s)			Resid phdelay (usec)			2.58976E-06	+/- 6.1E-07
			Apriori rate (us/s)			Resid rate (us/s)			1.00728E-05	+/- 2.7E-09
			Apriori accel (us/s/s)			Resid phase (deg)			80.3	+/- 19.1
ph/seg (deg)	64.3	44.2	Search (2048X32)	0.106	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			sb window (us)	-1.000 1.000
amp/seg (%)	69.7	77.1	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)	24.8	26.9	Inc. seg. avg.	0.153	Bits/sample: 2x2	Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	42.1	47.0	Inc. frq. avg.	0.150	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			ion window (TEC)	0.00 0.00

y: az 51.1 el 41.9 pa -79.5 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -12732.543 799.811 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yl..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yl.W.265.1X1QEV

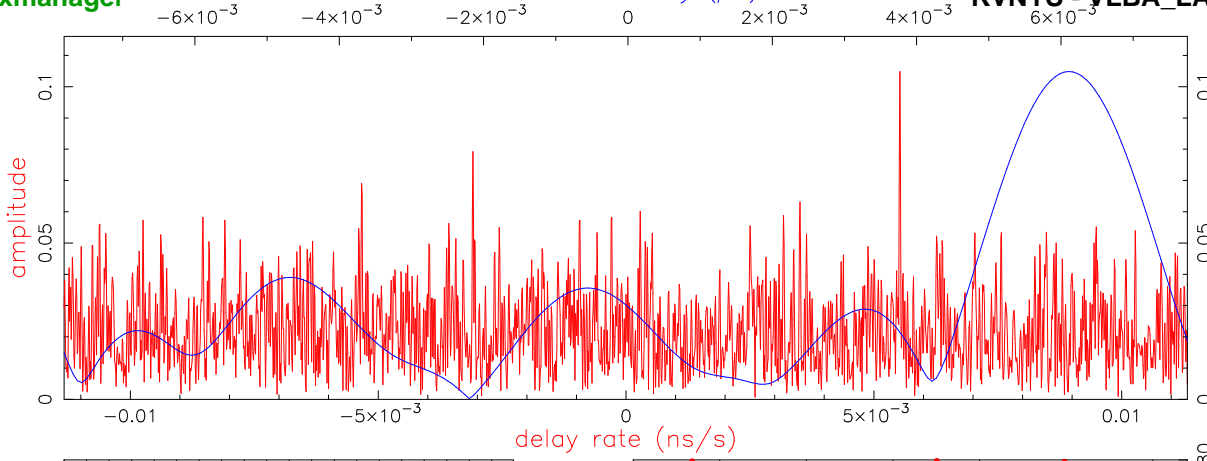
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yl

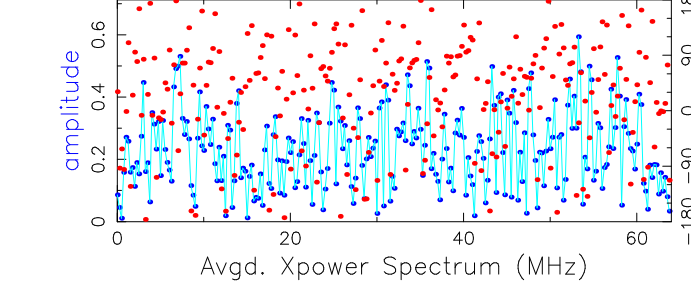
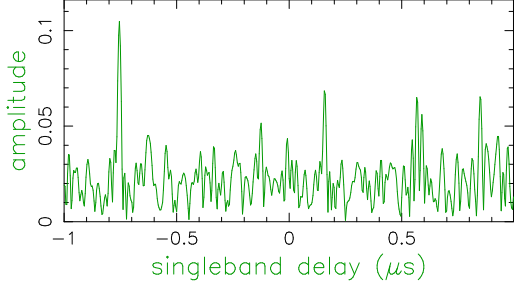
KVNYS - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)



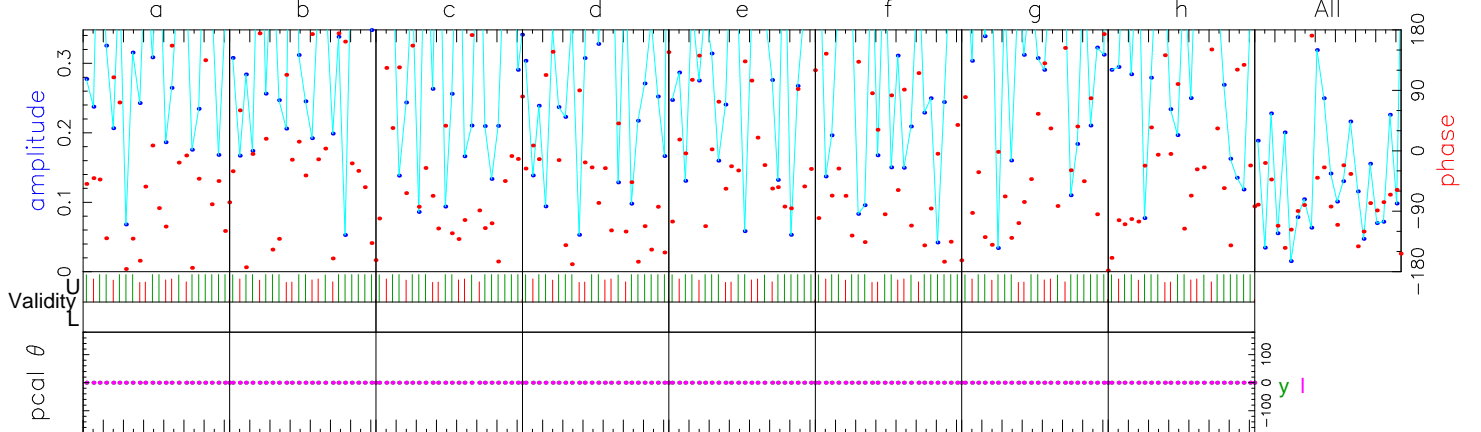
Fringe quality 0

SNR 5.7  
 Int time 388.387  
 Amp 0.116  
 Phase -68.5  
 PFD 9.8e-01  
 Delays (us)  
 SBD -0.754447  
 MBD 0.006100  
 Fringe rate (Hz)  
 0.476718  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133947  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) -5.56502229254E+02 Apriori delay (usec) -5.55742704595E+02 Resid mbdelay (usec) 6.10034E-03 +/- 1.9E-04  
 Sband delay (usec) -5.56497151095E+02 Apriori clock (usec) 0.103 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 Phase delay (usec) -5.55742706805E+02 Apriori clockrate (us/s) 2.8600001E-07 Resid sbdelay (usec) -7.54447E-01 +/- 1.5E-03  
 Delay rate (us/s) 1.39979233376E+00 Apriori rate (us/s) 1.39978679953E+00 Resid phdelay (usec) -2.20970E-06 +/- 6.5E-07  
 Total phase (deg) -275.1 Apriori accel (us/s/s) 5.15484642493E-06 Resid rate (us/s) 5.53423E-06 +/- 2.9E-09  
 Resid phase (deg) -68.5 +/- 20.2

ph/seg (deg) 42.9 46.9 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 80.1 81.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.7 28.6 Inc. seg. avg. 0.108 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 15.3 50.0 Inc. frq. avg. 0.111 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 y: az 51.1 el 41.9 pa -79.5 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -12732.543 799.811 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yl..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yl.W.282.1X1QEV

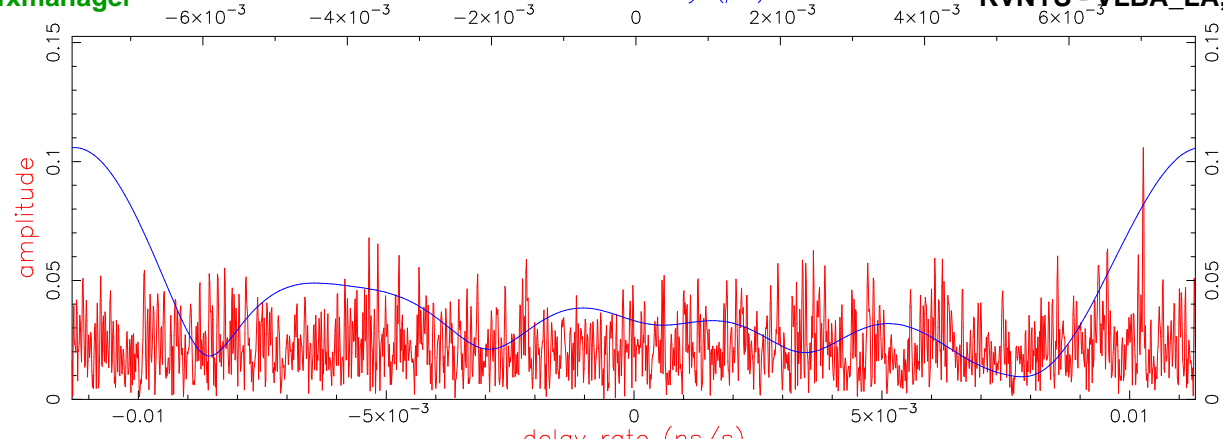
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

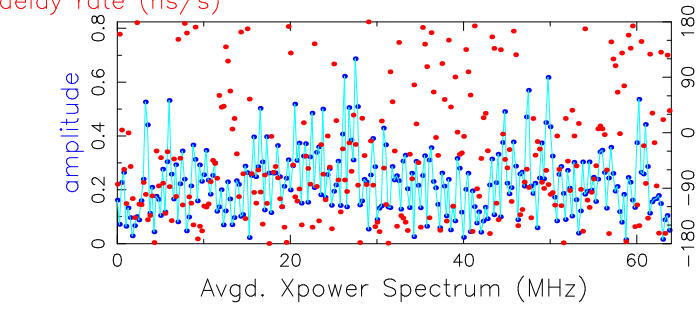
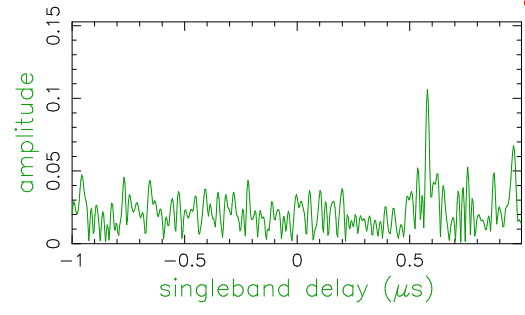
NRAO150.1X1QEV, No0120, yl

KVNYS - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu$ s)

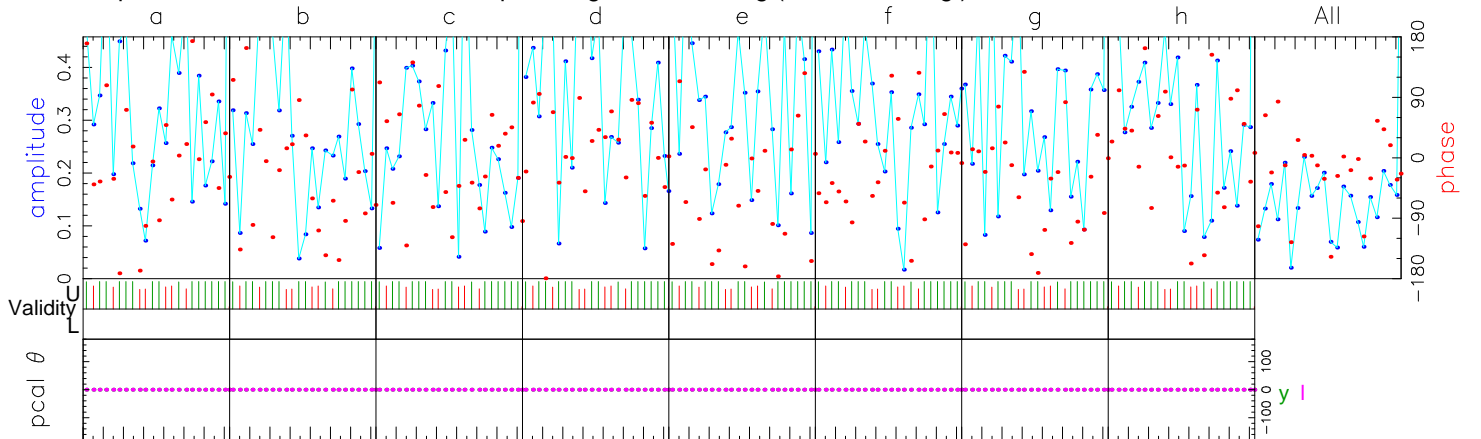


Fringe quality 0  
 SNR 5.7  
 Int time 388.387  
 Amp 0.153  
 Phase -2.3  
 PFD 9.4e-01  
 Delays (us)  
 SBD 0.578434  
 MBD 0.007851  
 Fringe rate (Hz) 0.886085  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133951  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



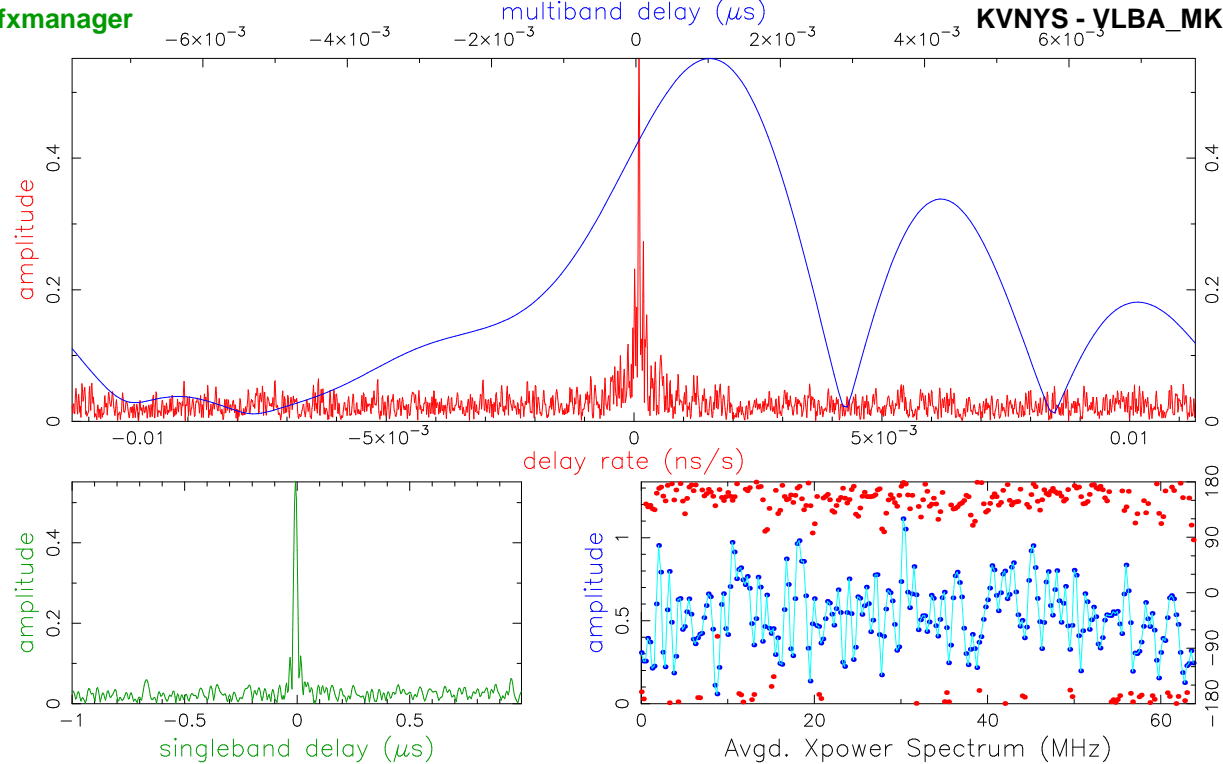
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	0	0	0	0	0	0	0	0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
l	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-5.55156728252E+02	Apriori delay (usec)	-5.55742704595E+02	Resid mbdelay (usec)	7.85134E-03	+/-	1.9E-04
Sband delay (usec)	-5.55164270595E+02	Apriori clock (usec)	3.3384075E+00	Resid sbdelay (usec)	5.78434E-01	+/-	1.5E-03
Phase delay (usec)	-5.55742704668E+02	Apriori clockrate (us/s)	2.8600001E-07	Resid phdelay (usec)	-7.29565E-08	+/-	6.5E-07
Delay rate (us/s)	1.39979708610E+00	Apriori rate (us/s)	1.39978679953E+00	Resid rate (us/s)	1.02866E-05	+/-	2.9E-09
Total phase (deg)	-208.8	Apriori accel (us/s/s)	5.15484642493E-06	Resid phase (deg)	-2.3	+/-	20.1

ph/seg (deg)	62.7	Theor.	46.5	Amplitude	0.153 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	73.6	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	35.6	Inc. seg. avg.	0.151	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	44.0	Inc. frq. avg.	0.158	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
				Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

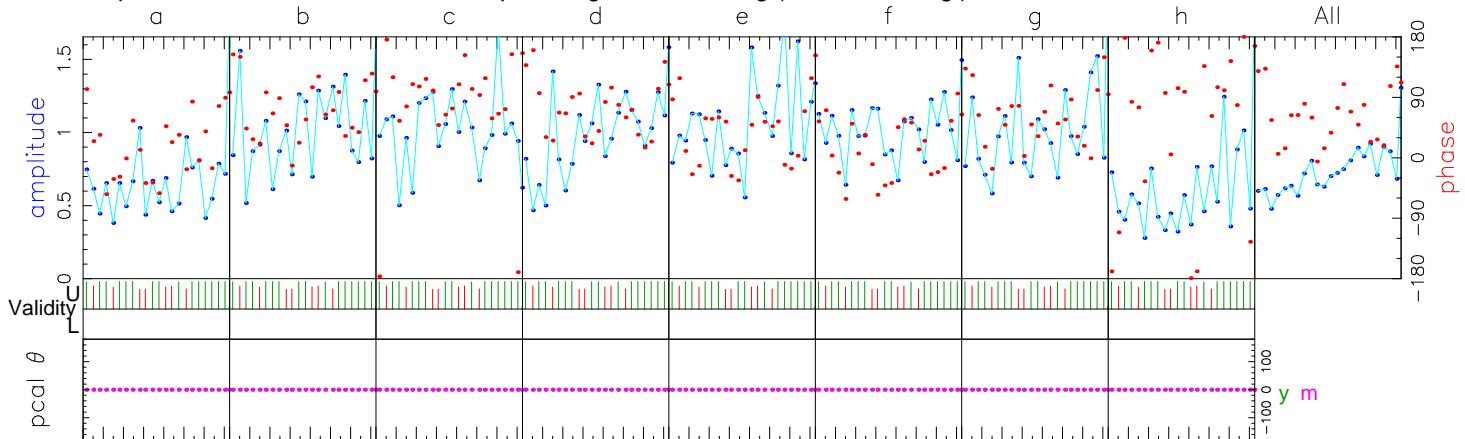
y: az 51.1 el 41.9 pa -79.5 l: az 309.3 el 45.4 pa 86.6 u,v (fr/asec) -12732.543 799.811 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yl..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yl.W.301.1X1QEV



Fringe quality 5  
SNR 29.7  
Int time 388.382  
Amp 0.552  
Phase 60.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.007541  
MBD 0.001040  
Fringe rate (Hz) 0.008138  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133942  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

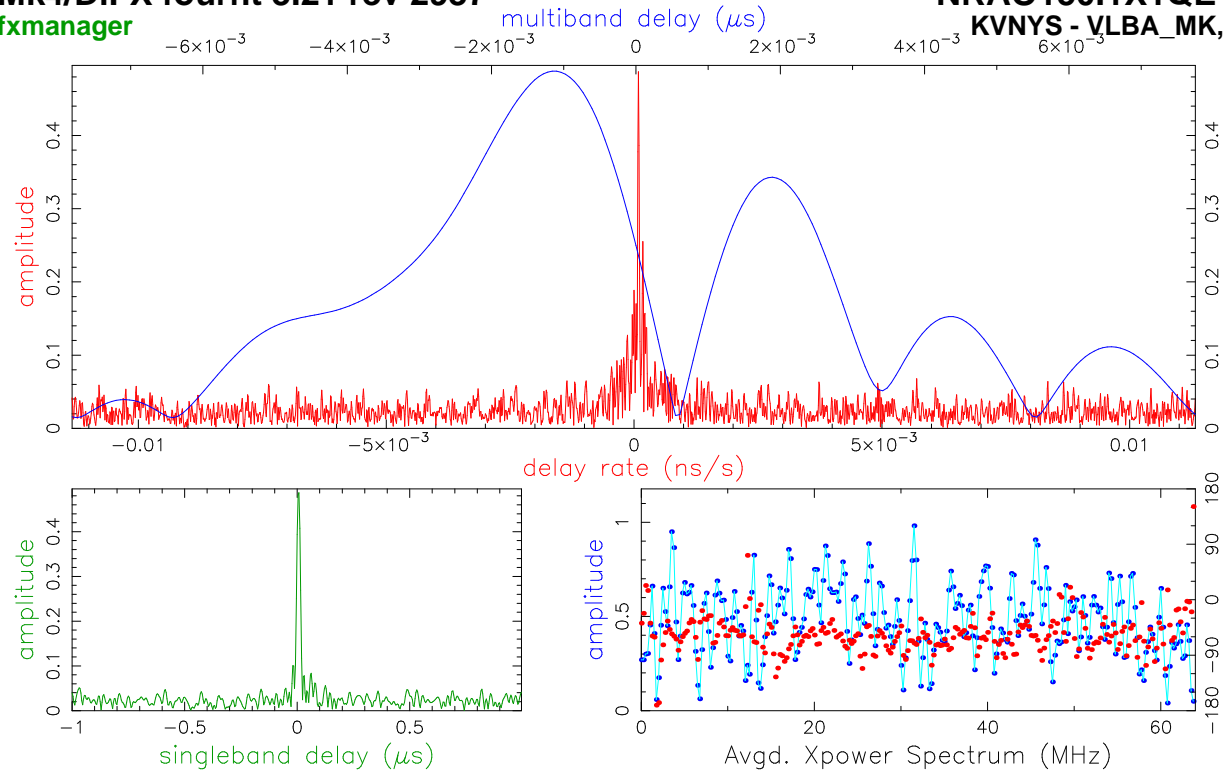
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	0	0	0	0	0	0	0	0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

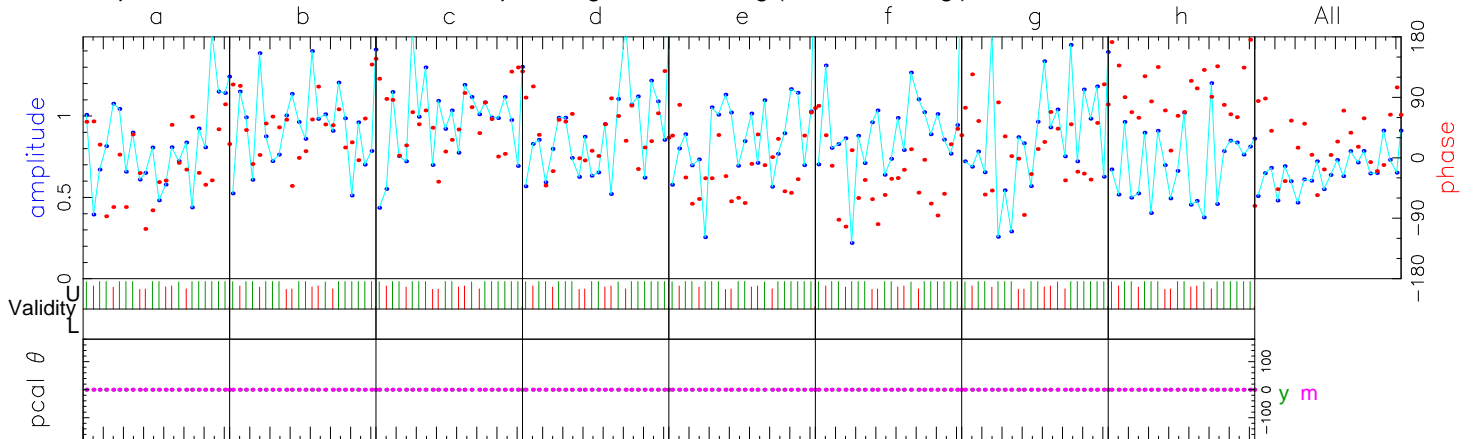
Group delay (usec)(sbd)	-3.57470739233E+03	Apriori delay (usec)	-3.57469280764E+03	Resid mbdelay (usec)	1.04031E-03	+/-	3.7E-05
Sband delay (usec)	-3.57470034864E+03	Apriori clock (usec)	-1.5013525E+01	Resid sbdelay (usec)	-7.54100E-03	+/-	2.9E-04
Phase delay (usec)	-3.57469280568E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	1.95531E-06	+/-	1.2E-07
Delay rate (us/s)	8.92781317609E-01	Apriori rate (us/s)	8.92781223135E-01	Resid rate (us/s)	9.44734E-08	+/-	5.5E-10
Total phase (deg)	-101.3	Apriori accel (us/s/s)	4.26326922836E-05	Resid phase (deg)	60.6	+/-	3.9

ph/seg (deg)	41.2	RMS	41.2	Theor.	8.9	Amplitude	0.552 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	37.5	Search (2048X32)	0.524	Apriori clock (usec)	0.524	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	44.9	Inc. seg. avg.	0.706	Apriori clockrate (us/s)	-3.1799999E-07	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	36.5	Inc. frq. avg.	0.662	Apriori rate (us/s)	8.92781223135E-01	Sample rate (MSamp/s):	128	nlags:	256	t_cohere	infinite
y: az 51.1 el 41.9 pa -79.5		m: az 347.6 el 57.7 pa 160.9		u,v (fr/asec)	-8038.532 5746.814	Data rate (Mb/s):	2048	ion window (TEC)	0.00	0.00	



Fringe quality 7  
SNR 26.7  
Int time 388.382  
Amp 0.496  
Phase 25.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.006091  
MBD -0.001202  
Fringe rate (Hz) 0.008031  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133945  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-7.9	44.0	55.6	41.1	-15.8	-30.5	16.9	98.5		Phase	
	0.5	0.7	0.7	0.7	0.6	0.6	0.6	0.5		Ampl.	
	260.4	258.5	258.3	258.3	258.4	258.3	259.1	260.5		Sbd box	
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		258.6	
y	1000	1000	1000	1000	1000	1000	1000	1000		APs used	
m	0	0	0	0	0	0	0	0		PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000		Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
										Chan ids	
										Tracks	
Group delay (usec)(sbd)	-3.57469401003E+03				-3.57469280764E+03				Resid mbdelay (usec)	-1.20239E-03	+/- 4.1E-05
Sband delay (usec)	-3.57468671639E+03				-1.5013525E+01				Resid sbdelay (usec)	6.09125E-03	+/- 3.2E-04
Phase delay (usec)	-3.57469280681E+03				-3.1799999E-07				Resid phdelay (usec)	8.24647E-07	+/- 1.4E-07
Delay rate (us/s)	8.92781316365E-01				8.92781223135E-01				Resid rate (us/s)	9.32299E-08	+/- 6.1E-10
Total phase (deg)		-136.3			4.26326922836E-05				Resid phase (deg)	25.6	+/- 4.3

RMS Theor. Amplitude 0.496 +/- 0.019  
ph/seg (deg) 43.8 9.9 Search (2048X32) 0.463  
amp/seg (%) 38.6 17.4 Interp. 0.000  
ph/frq (deg) 46.3 6.1 Inc. seg. avg. 0.645  
amp/frq (%) 28.7 10.6 Inc. frq. avg. 0.616  
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
y: az 51.1 el 41.9 pa -79.5 m: az 347.6 el 57.7 pa 160.9 u,v (fr/asec) -8038.532 5746.814 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/ym..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/ym.W.273.1X1QEV

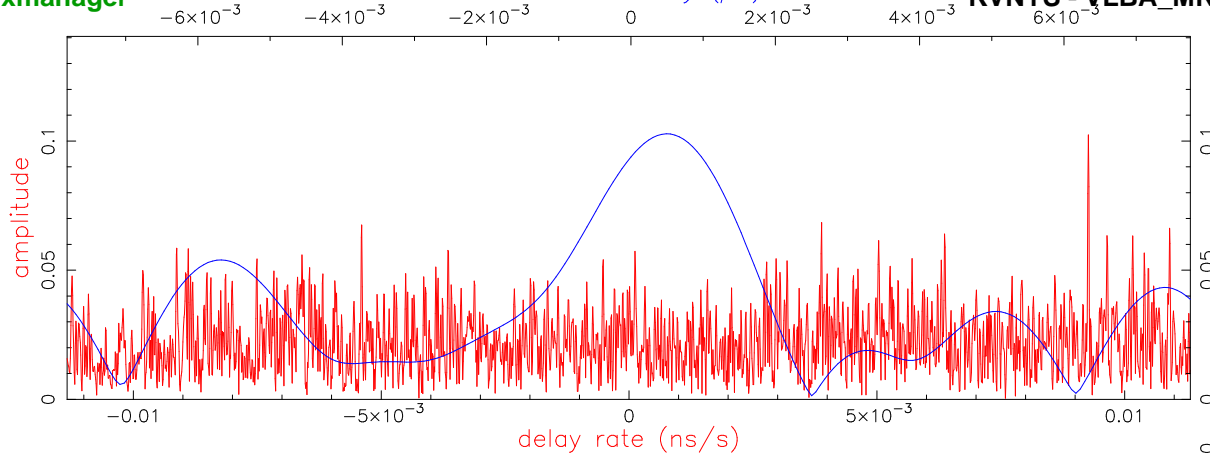
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, ym

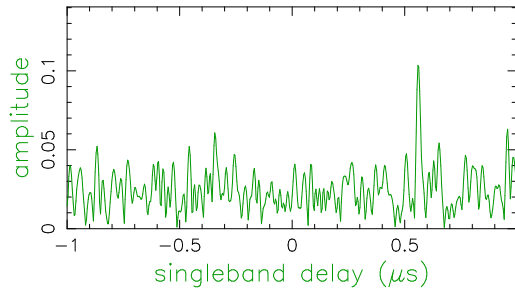
KVNYS - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

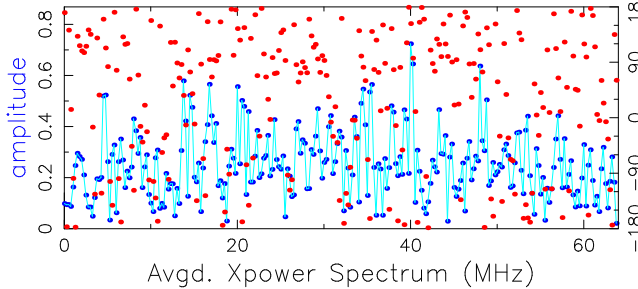


Fringe quality 0

SNR 5.7  
 Int time 388.382  
 Amp 0.140  
 Phase 87.5  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.560284  
 MBD 0.000390  
 Fringe rate (Hz)  
 0.799100  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

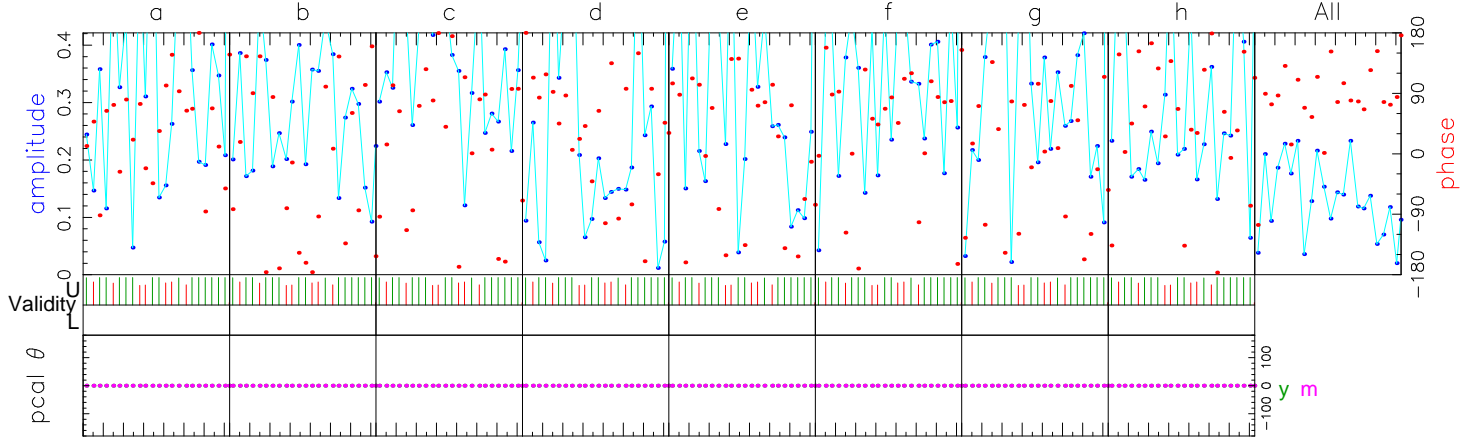


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133949  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec)(sbd)	43.1	169.7	102.8	81.2	97.9	91.9	43.8	95.9	Phase	87.5
Sband delay (usec)	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.2	Ampl.	0.1
Phase delay (usec)	169.2	357.1	481.9	113.8	259.2	415.1	106.1	398.6	Sbd box	400.4
Delay rate (us/s)	U/L 767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
	y 1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
	m 0	0	0	0	0	0	0	0	PC freqs	
	y:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
	y:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
	y 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
	m 1000	1000	1000	1000	1000	1000	1000	1000		
	y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
	m W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-3.57412991770E+03	Apriori delay (usec)	-3.57469280764E+03	Resid mbdelay (usec)	3.89937E-04	+/-	1.9E-04
Sband delay (usec)	-3.57413252389E+03	Apriori clock (usec)	-1.5013525E+01	Resid sbdelay (usec)	5.60284E-01	+/-	1.5E-03
Phase delay (usec)	-3.57469280482E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	2.82098E-06	+/-	6.5E-07
Delay rate (us/s)	8.92790499895E-01	Apriori rate (us/s)	8.92781223135E-01	Resid rate (us/s)	9.27676E-06	+/-	2.9E-09
Total phase (deg)	-74.4	Apriori accel (us/s/s)	4.26326922836E-05	Resid phase (deg)	87.5	+/-	20.3

ph/seg (deg)	RMS 52.3	Theor. 47.0	Amplitude Search (2048X32)	0.140 +/- 0.025	0.102	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.2	82.1	Interp.	0.000	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.0	28.7	Inc. seg. avg.	0.129	0.102	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	39.7	50.0	Inc. frq. avg.	0.141	0.141	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00

y: az 51.1 el 41.9 pa -79.5      m: az 347.6 el 57.7 pa 160.9      u,v (fr/asec) -8038.532 5746.814      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c211c/v1/1234/No0120/ym..1X1QEV      Output file: /Exps/c211c/v1/1234/No0120/ym.W.290.1X1QEV

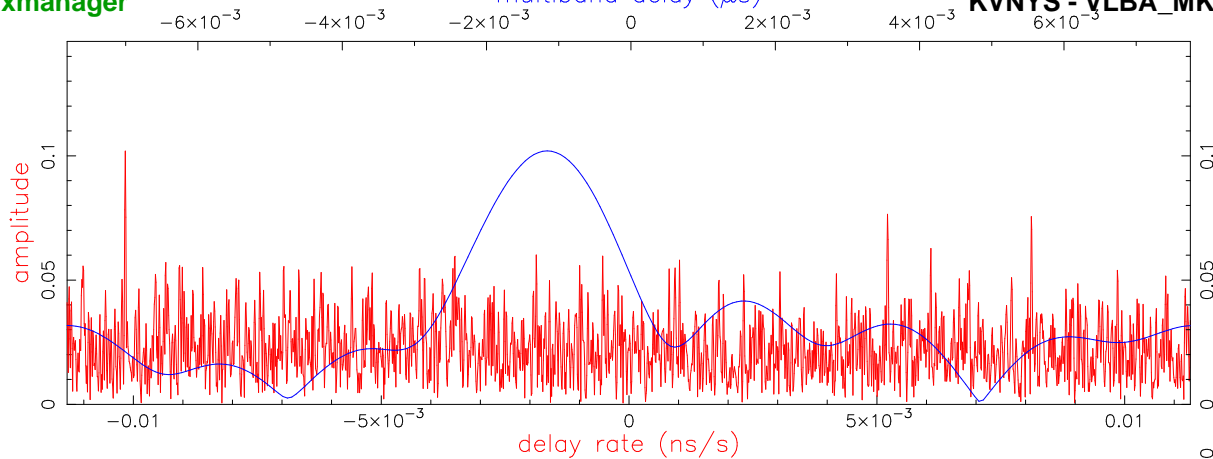
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, ym

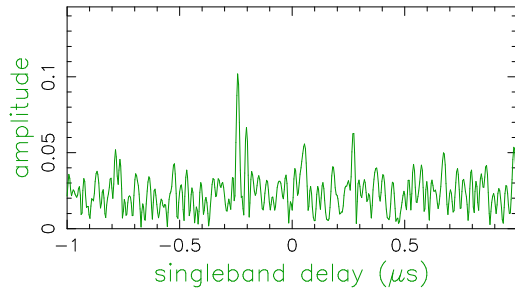
KVNYS - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

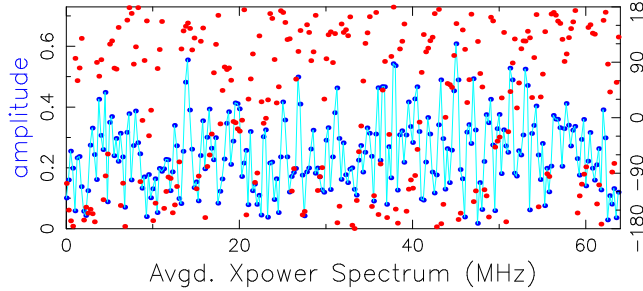


Fringe quality 0

SNR 5.5  
 Int time 388.382  
 Amp 0.146  
 Phase -95.4  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.241532  
 MBD -0.001128  
 Fringe rate (Hz)  
 -0.876541  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

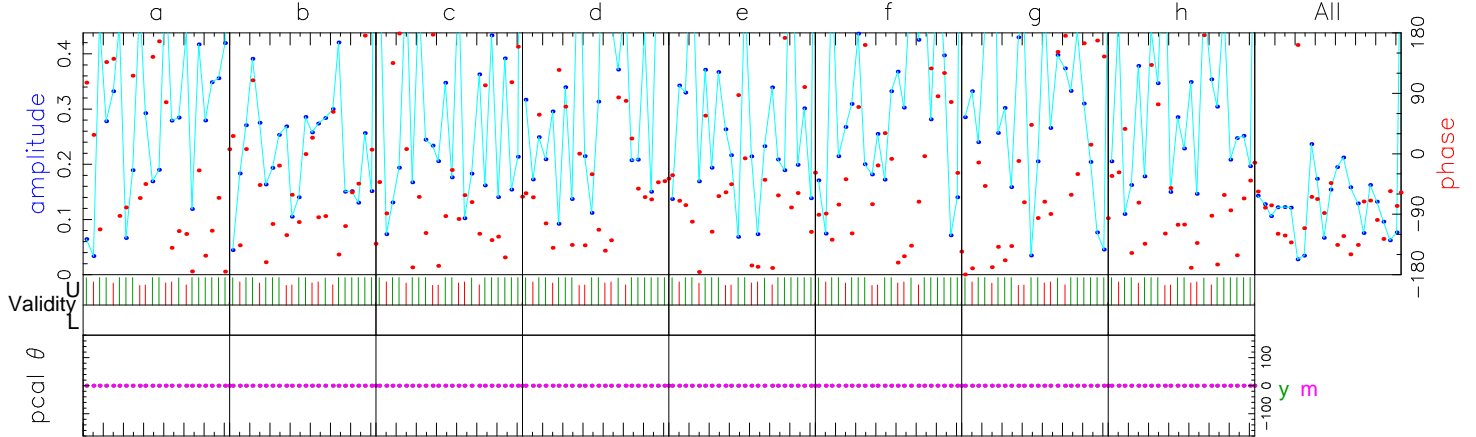


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133952  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.4	-77.1	-103.1	-58.9	-73.4	-99.4	-115.3	-107.9	Phase	-95.4
	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	329.0	65.3	271.9	444.2	462.5	282.4	101.5	168.0	Sbd box	195.2
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	0	0	0	0	0	0	0	0	PC freqs	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.57492831020E+03	Apriori delay (usec)	-3.57469280764E+03	Resid mbdelay (usec)	-1.12756E-03	+/-	2.0E-04
Sband delay (usec)	-3.57493433939E+03	Apriori clock (usec)	-1.5013525E+01	Resid sbdelay (usec)	-2.41532E-01	+/-	1.6E-03
Phase delay (usec)	-3.57469281071E+03	Apriori clockrate (us/s)	-3.1799999E-07	Resid phdelay (usec)	-3.07703E-06	+/-	6.7E-07
Delay rate (us/s)	8.92771047360E-01	Apriori rate (us/s)	8.92781223135E-01	Resid rate (us/s)	-1.01758E-05	+/-	3.0E-09
Total phase (deg)	-257.3	Apriori accel (us/s/s)	4.26326922836E-05	Resid phase (deg)	-95.4	+/-	20.8

ph/seg (deg)	38.0	Theor.	48.2	Amplitude	0.146 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	63.6	Search (2048X32)	0.100	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	24.6	Inc. seg. avg.	0.127	Inc. frq. avg.	0.139	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	35.3	Inc. frq. avg.	0.139			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

y: az 51.1 el 41.9 pa -79.5      m: az 347.6 el 57.7 pa 160.9      u,v (fr/asec) -8038.532 5746.814      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c211c/v1/1234/No0120/ym..1X1QEV      Output file: /Exps/c211c/v1/1234/No0120/ym.W.305.1X1QEV



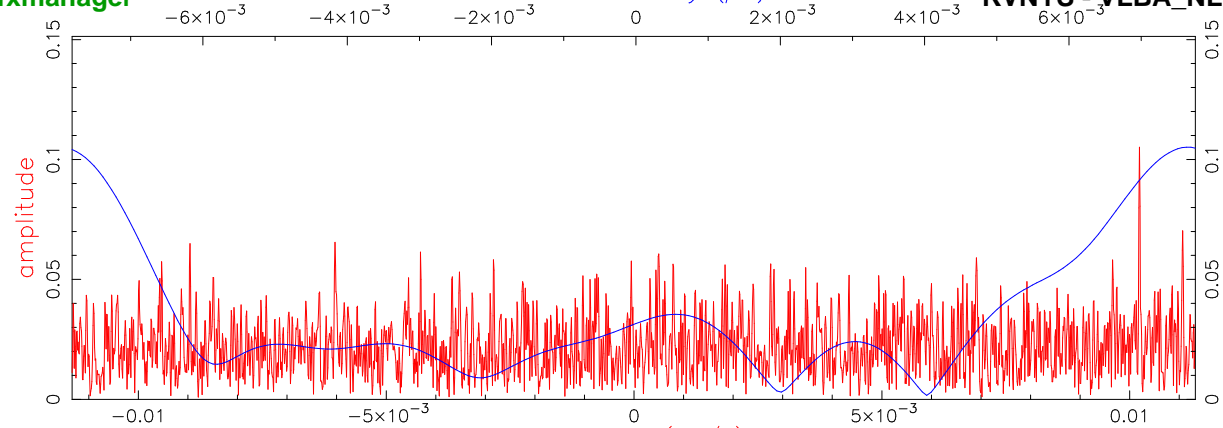
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

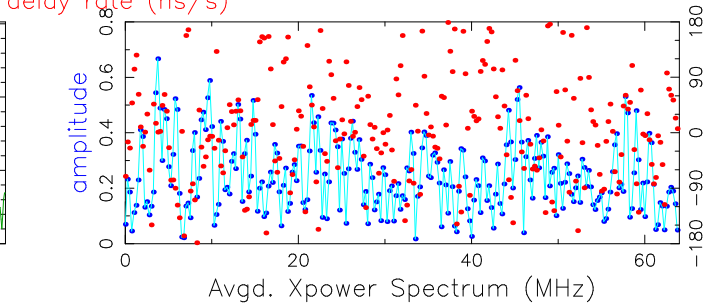
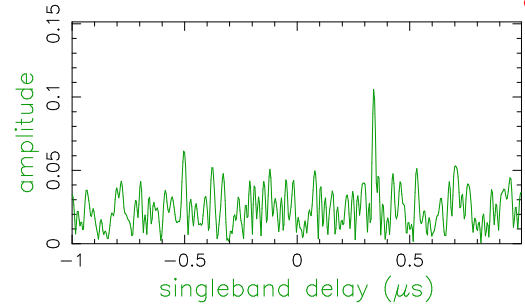
NRAO150.1X1QEV, No0120, yn

KVNYS - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

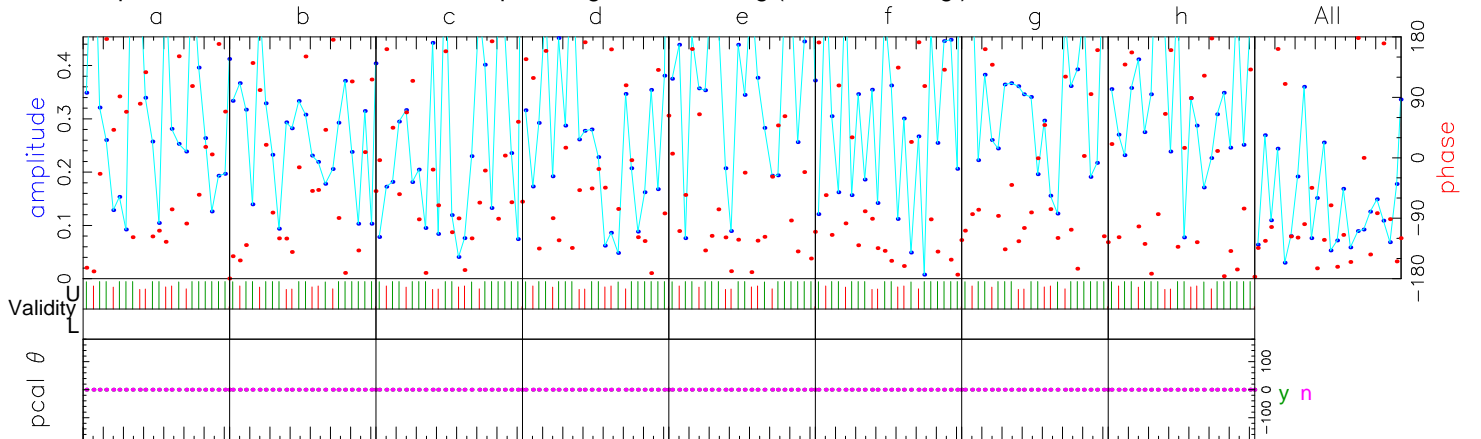


Fringe quality 0  
 SNR 5.7  
 Int time 388.389  
 Amp 0.151  
 Phase -127.4  
 PFD 9.5e-01  
 Delays (us)  
 SBD 0.340692  
 MBD 0.007671  
 Fringe rate (Hz) 0.879222  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133941  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-161.3	-139.1	-61.4	-139.2	-109.6	-132.8	-110.1	-157.9	Phase	-127.4
	0.1	0.1	0.1	0.1	0.2	0.3	0.2	0.2	Ampl.	0.1
	133.6	198.9	46.9	173.4	170.1	344.1	10.5	59.8	Sbd box	344.2
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.91040443206E+02		Apriori delay (usec)		8.90704647054E+02		Resid mbdelay (usec)		7.67115E-03	+/- 1.9E-04
Sband delay (usec)	8.91045338554E+02		Apriori clock (usec)		-4.7818317E+00		Resid sbdelay (usec)		3.40692E-01	+/- 1.5E-03
Phase delay (usec)	8.90704642948E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-4.10673E-06	+/- 6.5E-07
Delay rate (us/s)	1.41309039668E+00		Apriori rate (us/s)		1.41308018978E+00		Resid rate (us/s)		1.02069E-05	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-9.71872505876E-06		Resid phase (deg)		-127.4	+/- 20.1

	RMS	Theor.	Amplitude	0.151 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	52.4	46.7	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	85.7	81.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	35.0	28.5	Inc. seg. avg.	0.147	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	42.4	49.7	Inc. frq. avg.	0.149	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

y: az 51.1 el 41.9 pa -79.5 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -12884.887 -1095.944 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yn.W.253.1X1QEV

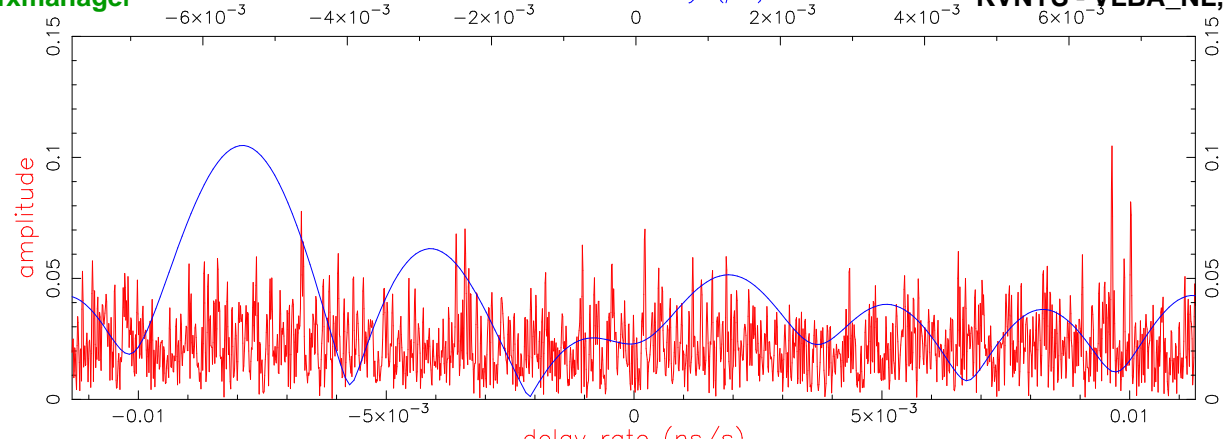
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

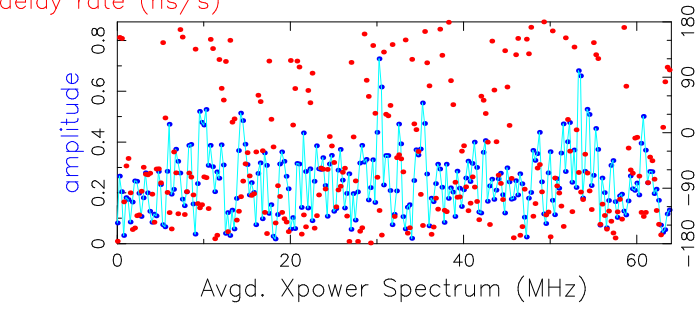
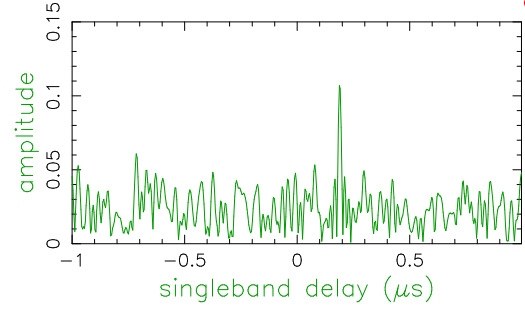
NRAO150.1X1QEY, No0120, yn

KVNYS - VLBA\_NL, fgroup W, pol RR

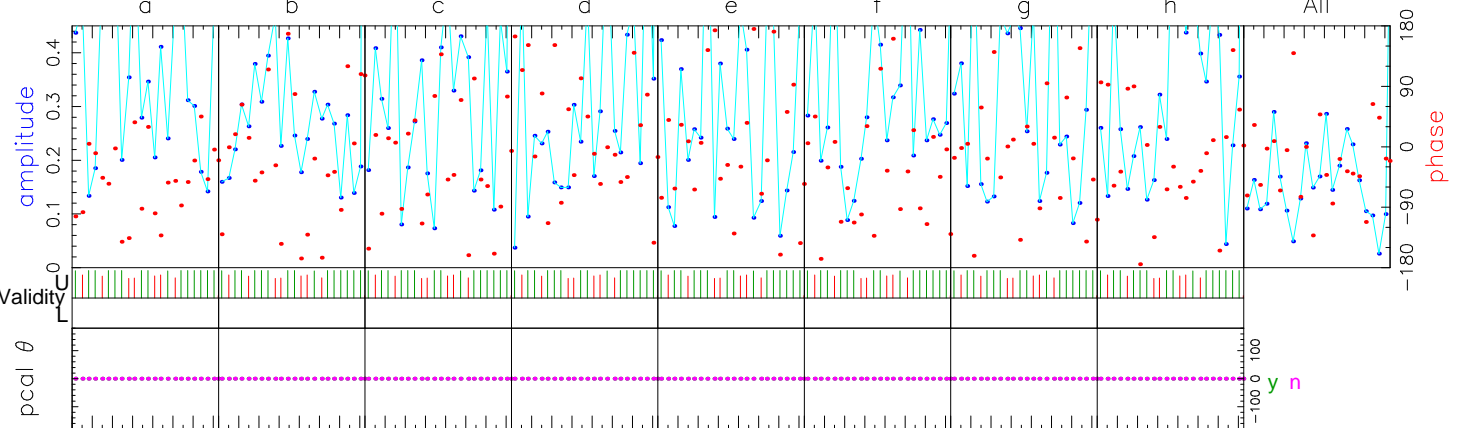
multiband delay ( $\mu$ s)



Fringe quality 0  
 SNR 5.9  
 Int time 388.389  
 Amp 0.150  
 Phase -29.1  
 PFD 6.5e-01  
 Delays (us)  
 SBD 0.189125  
 MBD -0.005517  
 Fringe rate (Hz) 0.831776  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133945  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-48.8	-0.1	-25.1	31.0	-38.5	-41.8	-25.4	-29.1	Phase	-29.1
	0.3	0.1	0.1	0.1	0.1	0.2	0.2	0.2	Ampl.	0.1
	306.1	359.6	439.7	365.5	149.6	249.3	94.5	366.4	Sbd box	305.4
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.90886630412E+02		Apriori delay (usec)		8.90704647054E+02		Resid mbdelay (usec)		-5.51664E-03	+/- 1.8E-04
Sband delay (usec)	8.90893772054E+02		Apriori clock (usec)		-4.7818317E+00		Resid sbdelay (usec)		1.89125E-01	+/- 1.5E-03
Phase delay (usec)	8.90704646116E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		-9.38803E-07	+/- 6.3E-07
Delay rate (us/s)	1.41308984588E+00		Apriori rate (us/s)		1.41308018978E+00		Resid rate (us/s)		9.65610E-06	+/- 2.8E-09
Total phase (deg)	77.9		Apriori accel (us/s/s)		-9.71872505876E-06		Resid phase (deg)		-29.1	+/- 19.5

	RMS	Theor.	Amplitude	0.150 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	62.6	45.2	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	77.9	78.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	29.2	27.6	Inc. seg. avg.	0.156	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.8	48.1	Inc. frq. avg.	0.139	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 51.1 el 41.9 pa -79.5 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -12884.887 -1095.944 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yn..1X1QEY Output file: /Exps/c211c/v1/1234/No0120/yn.W.271.1X1QEY

Mk4/DiFX fourfit 3.21 rev 2937

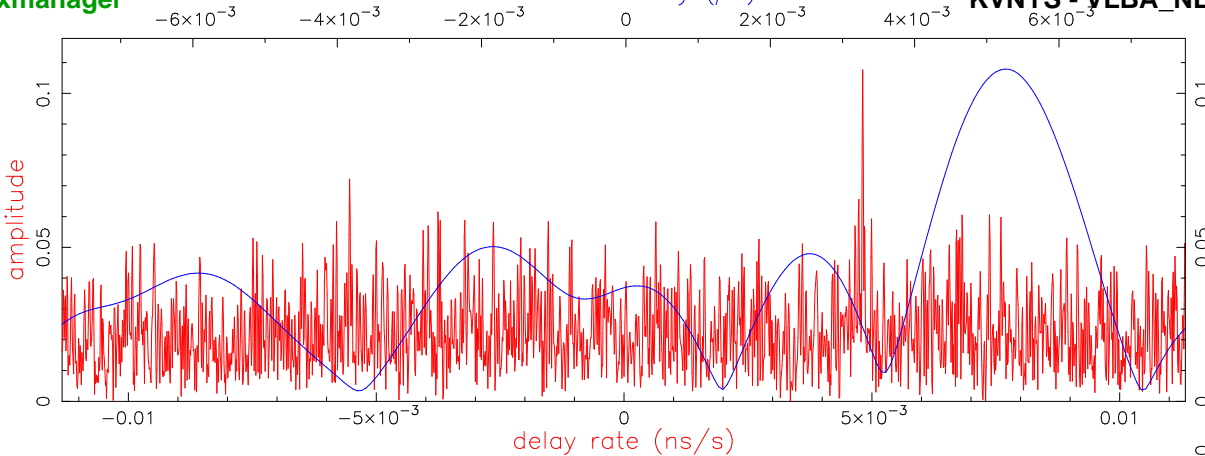
fxmanager

NRAO150.1X1QEV, No0120, yn

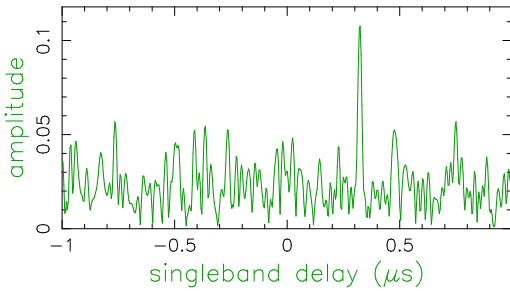
KVNYS - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

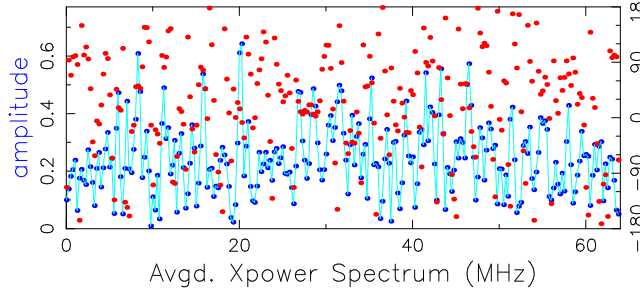
Fringe quality 0



SNR 5.9  
 Int time 388.389  
 Amp 0.118  
 Phase 103.6  
 PFD 6.3e-01  
 Delays (us)  
 SBD 0.322500  
 MBD 0.005187  
 Fringe rate (Hz)  
 0.414992  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

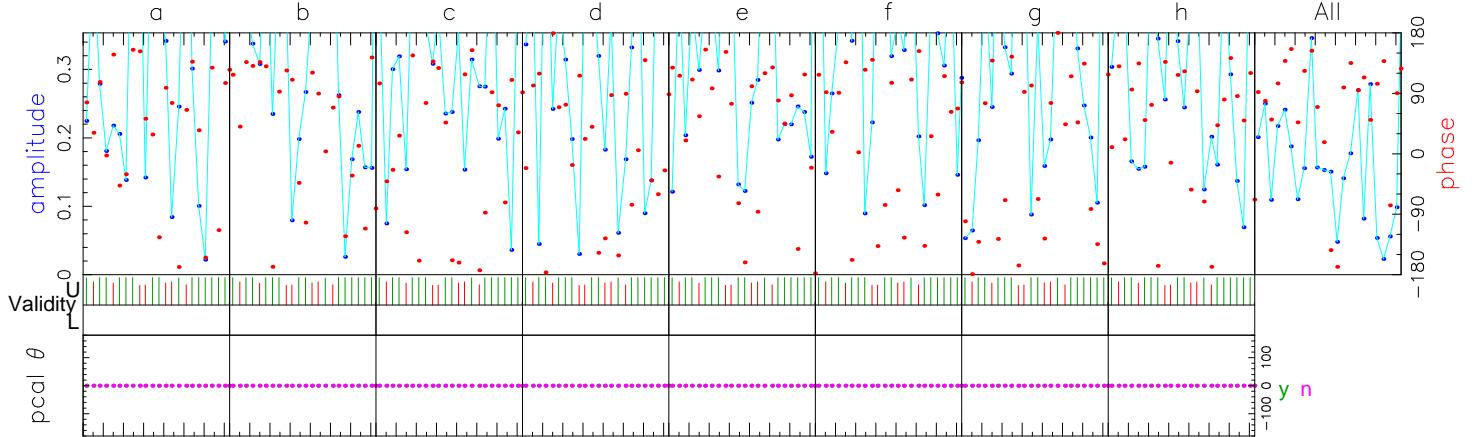


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133948  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	107.0	96.4	113.8	18.0	109.7	99.1	164.7	88.8	Phase	103.6
y	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
n	484.3	61.1	242.2	158.9	340.3	197.4	154.9	380.8	Sbd box	339.6
y	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	8.91022333896E+02		Apriori delay (usec)		8.90704647054E+02		Resid mbdelay (usec)		5.18684E-03	+/- 1.8E-04
Sband delay (usec)	8.91027146554E+02		Apriori clock (usec)		-4.7818317E+00		Resid sbdelay (usec)		3.22500E-01	+/- 1.5E-03
Phase delay (usec)	8.90704650394E+02		Apriori clockrate (us/s)		-2.9999999E-07		Resid phdelay (usec)		3.34012E-06	+/- 6.3E-07
Delay rate (us/s)	1.41308500743E+00		Apriori rate (us/s)		1.41308018978E+00		Resid rate (us/s)		4.81765E-06	+/- 2.8E-09
Total phase (deg)	210.6		Apriori accel (us/s/s)		-9.71872505876E-06		Resid phase (deg)		103.6	+/- 19.5

	RMS	Theor.	Amplitude	0.118 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	61.5	45.1	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/seg (%)	85.9	78.8	Interp.	0.000	Sample rate(MISamp/s): 128	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	43.8	27.5	Inc. seg. avg.	0.126	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00
amp/frq (%)	30.4	48.0	Inc. frq. avg.	0.121				

y: az 51.1 el 41.9 pa -79.5 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -12884.887 -1095.944 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yn..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yn.W.288.1X1QEV

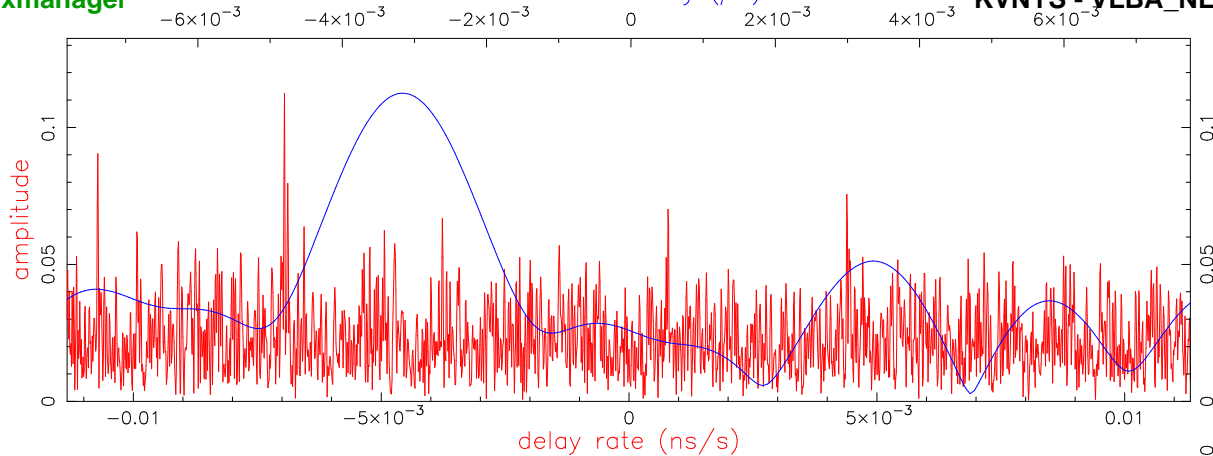
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QE, No0120, yn

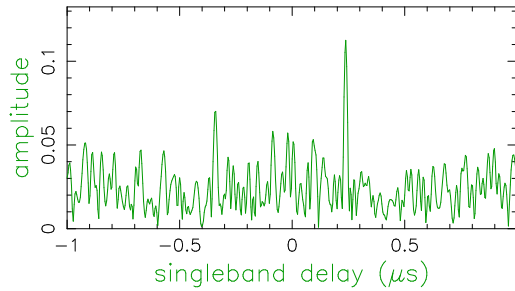
KVNYS - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)

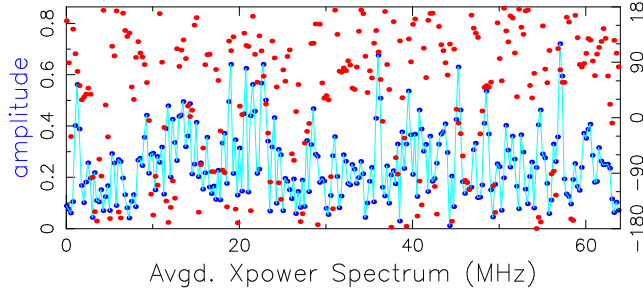


Fringe quality 0

SNR 6.1  
 Int time 388.389  
 Amp 0.133  
 Phase 7.4  
 PFD 2.6e-01  
 Delays (us)  
 SBD 0.237556  
 MBD -0.003190  
 Fringe rate (Hz)  
 -0.599747  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

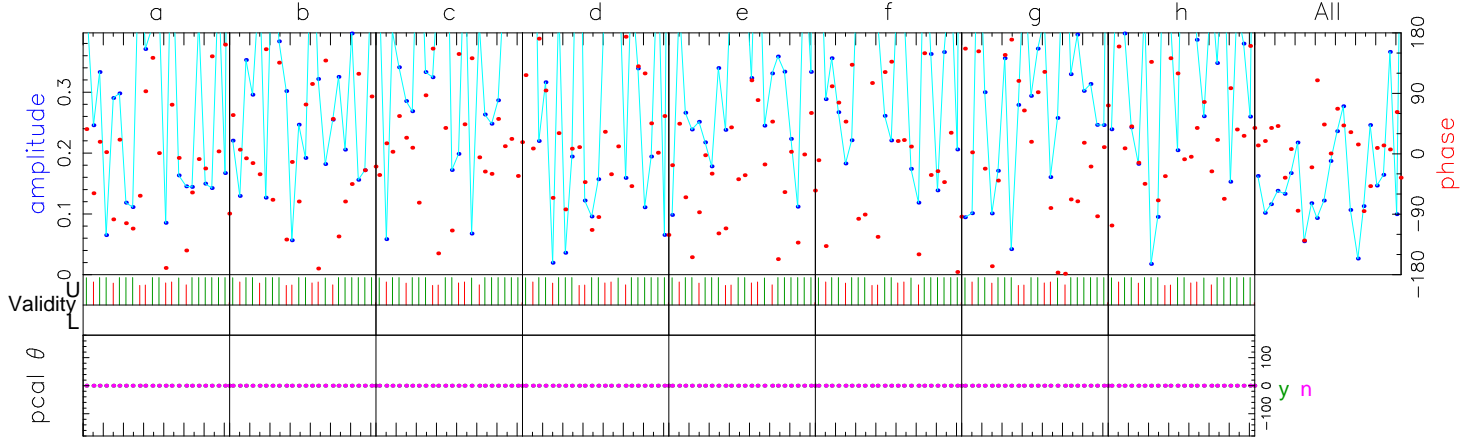


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133952  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0				
y	1000	1000	1000	1000	1000	1000	1000	1000				
n	0	0	0	0	0	0	0	0				
y:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
y:n	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				
n	1000	1000	1000	1000	1000	1000	1000	1000				
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)		8.90935832159E+02			8.90704647054E+02				Resid mbdelay (usec)	-3.18990E-03 +/- 1.8E-04		
Sband delay (usec)		8.90942203304E+02			-4.7818317E+00				Resid sbdelay (usec)	2.37556E-01 +/- 1.4E-03		
Phase delay (usec)		8.90704647292E+02			-2.9999999E-07				Resid phdelay (usec)	2.37981E-07 +/- 6.1E-07		
Delay rate (us/s)		1.41307322731E+00			1.41308018978E+00				Resid rate (us/s)	-6.96247E-06 +/- 2.7E-09		
Total phase (deg)			114.4		-9.71872505876E-06				Resid phase (deg)	7.4 +/- 18.8		
	RMS	Theor.	Amplitude	0.133 +/- 0.022					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	53.9	43.7	Search (2048X32)	0.109					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	81.4	76.2	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	34.8	26.6	Inc. seg. avg.	0.141					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	56.7	46.5	Inc. frq. avg.	0.124					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

y: az 51.1 el 41.9 pa -79.5 n: az 307.6 el 40.1 pa 70.0 u,v (fr/asec) -12884.887 -1095.944 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yn..1X1QE V Output file: /Exps/c211c/v1/1234/No0120/yn.W.304.1X1QE V

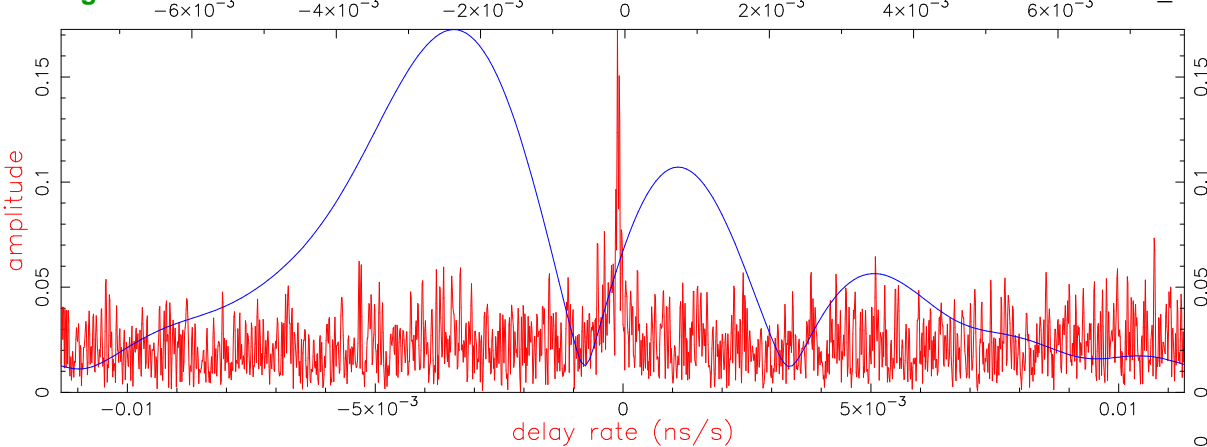
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yo

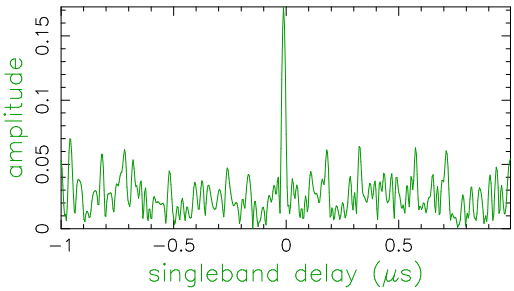
KVNYS - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)

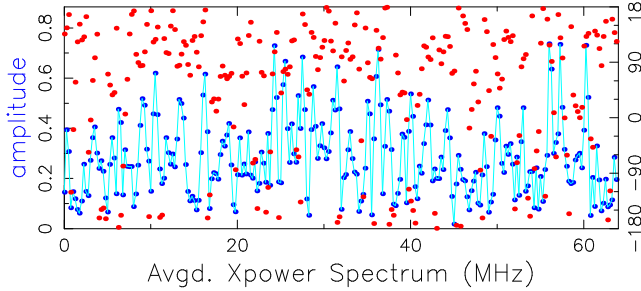


Fringe quality 9

SNR 9.3  
 Int time 388.385  
 Amp 0.173  
 Phase 14.5  
 PFD 5.4e-12  
 Delays (us)  
 SBD -0.011597  
 MBD -0.002364  
 Fringe rate (Hz)  
 -0.009825  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

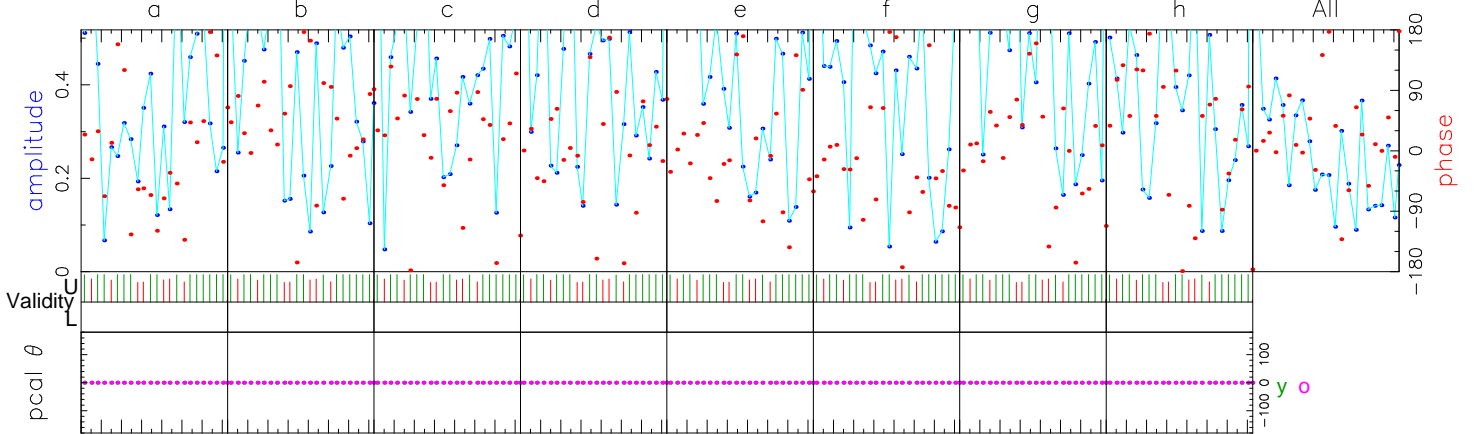


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133941  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.62735189537E+03	Apriori delay (usec)	-2.62733390589E+03	Resid mbdelay (usec)	-2.36447E-03	+/-	1.2E-04
Sband delay (usec)	-2.62734550264E+03	Apriori clock (usec)	-3.0527992E+00	Resid sbdelay (usec)	-1.15967E-02	+/-	9.3E-04
Phase delay (usec)	-2.62733390543E+03	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	4.68687E-07	+/-	4.0E-07
Delay rate (us/s)	1.29293040654E+00	Apriori rate (us/s)	1.29293052060E+00	Resid rate (us/s)	-1.14064E-07	+/-	1.8E-09
Total phase (deg)	-220.8	Apriori accel (us/s/s)	1.43509636402E-05	Resid phase (deg)	14.5	+/-	12.3

ph/seg (deg)	64.7	Theor.	28.6	Amplitude	0.173 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	95.0		49.9	Search (2048X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	43.4		17.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	33.3		30.4	Inc. seg. avg.	0.232	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.201	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 51.1 el 41.9 pa -79.5 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -11739.323 1566.660 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yo.W.249.1X1QEV

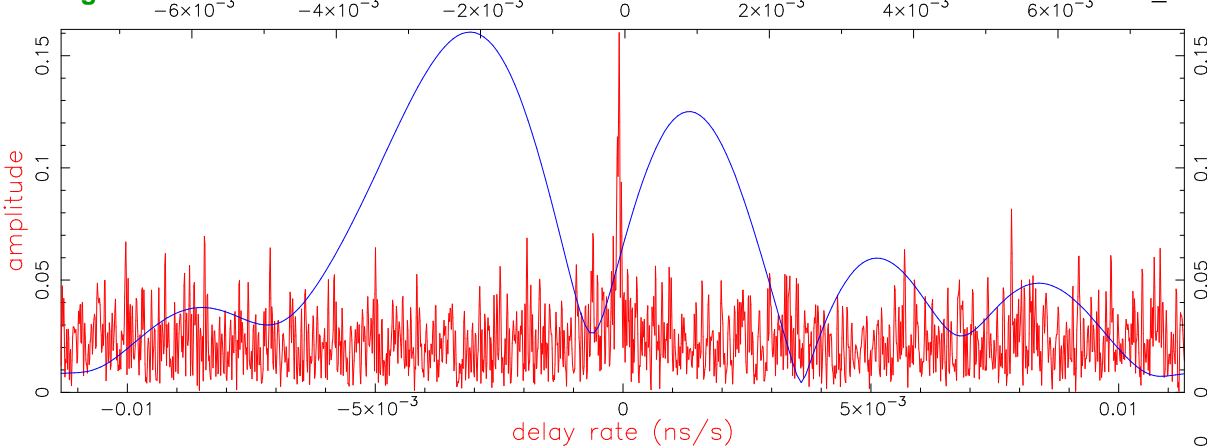
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yo

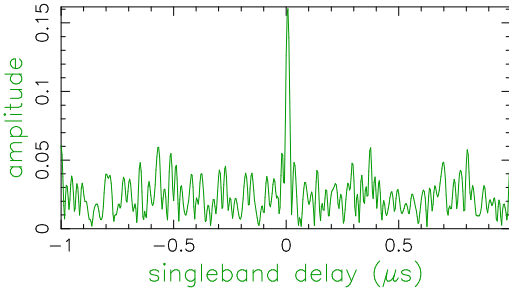
KVNYS - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

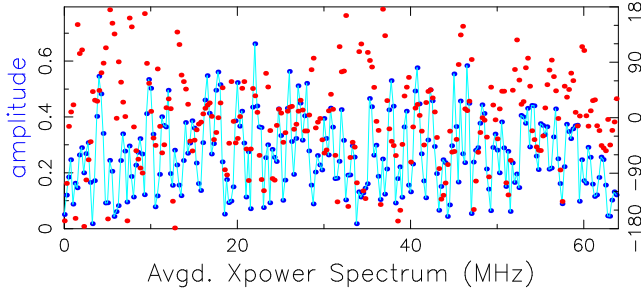


Fringe quality 9

SNR 8.7  
 Int time 388.385  
 Amp 0.162  
 Phase 106.9  
 PFD 1.1e-09  
 Delays (us)  
 SBD 0.006510  
 MBD -0.002215  
 Fringe rate (Hz)  
 -0.007010  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

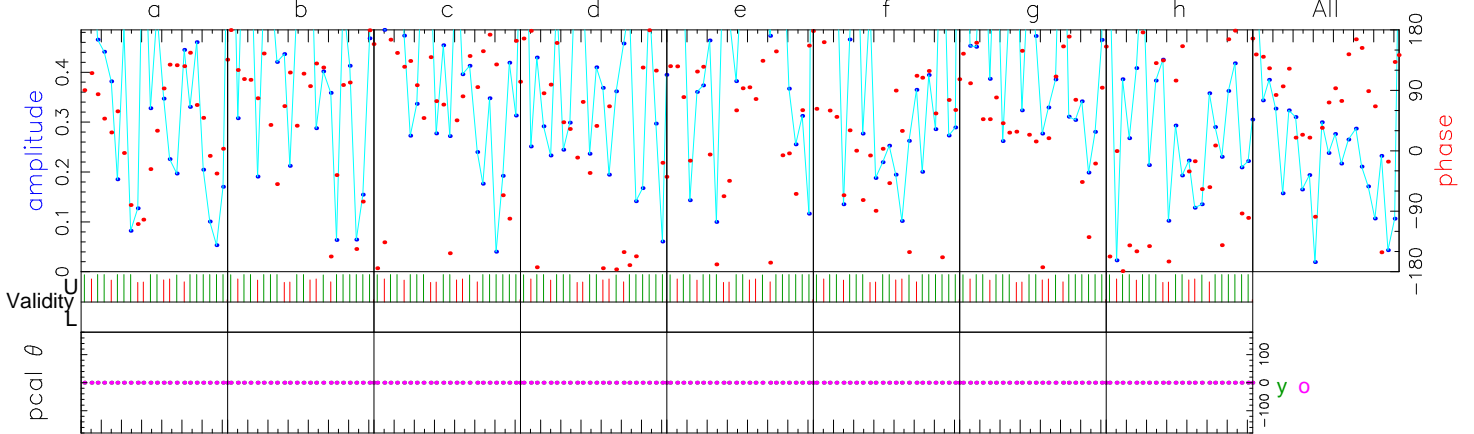


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133944  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.62732049618E+03									
Sband delay (usec)	-2.62732739639E+03									
Phase delay (usec)	-2.62733390245E+03									
Delay rate (us/s)	1.29293043922E+00									
Total phase (deg)			-128.4							
Apriori delay (usec)					-2.62733390589E+03					
Apriori clock (usec)					-3.0527992E+00					
Apriori clockrate (us/s)					-3.6000001E-07					
Apriori rate (us/s)					1.29293052060E+00					
Apriori accel (us/s/s)					1.43509636402E-05					
Resid mbdelay (usec)									-2.21529E-03	+/- 1.2E-04
Resid sbdelay (usec)									6.50950E-03	+/- 9.9E-04
Resid phdelay (usec)									3.44819E-06	+/- 4.2E-07
Resid rate (us/s)									-8.13800E-08	+/- 1.9E-09
Resid phase (deg)									106.9	+/- 13.2

	RMS	Theor.	Amplitude	0.162 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.5	30.5	Search (2048X32)	0.154	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	94.0	53.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	49.6	18.6	Inc. seg. avg.	0.212	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	37.1	32.5	Inc. frq. avg.	0.195	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

y: az 51.1 el 41.9 pa -79.5 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -11739.323 1566.660 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yo.W.267.1X1QEV

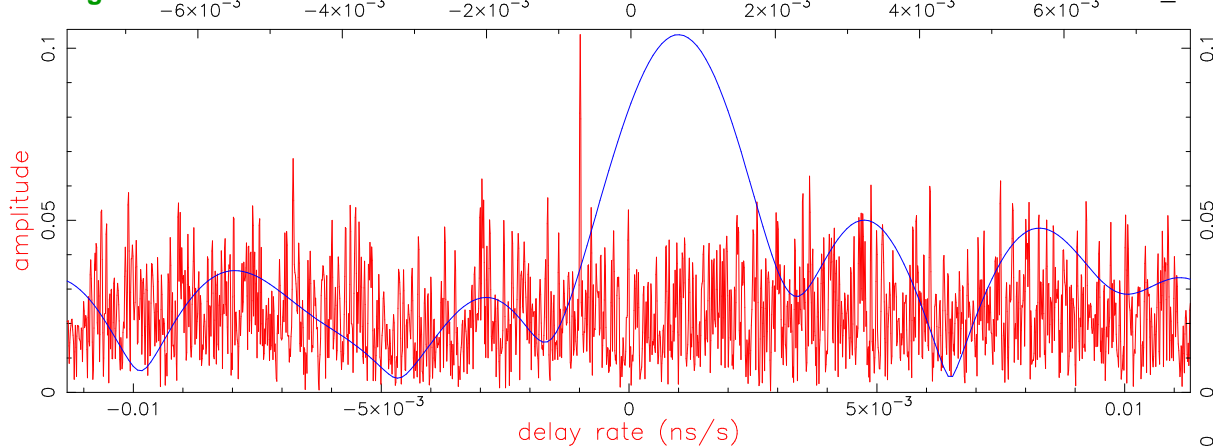
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yo

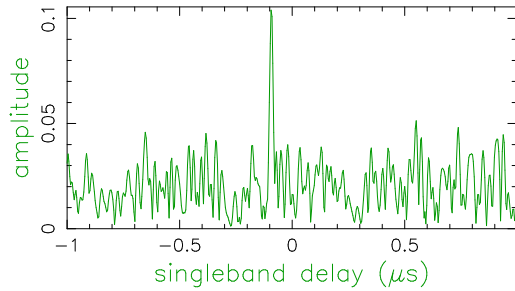
KVNYS - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

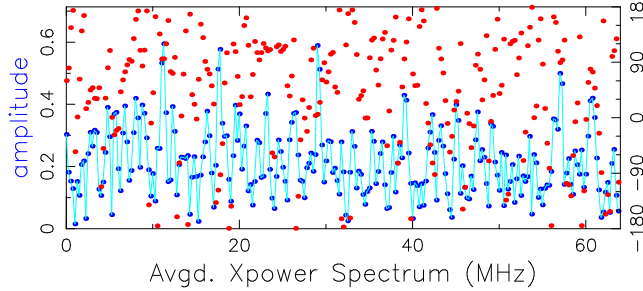


Fringe quality 0

SNR 5.7  
 Int time 388.385  
 Amp 0.105  
 Phase 92.1  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.092399  
 MBD 0.000665  
 Fringe rate (Hz)  
 -0.084840  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

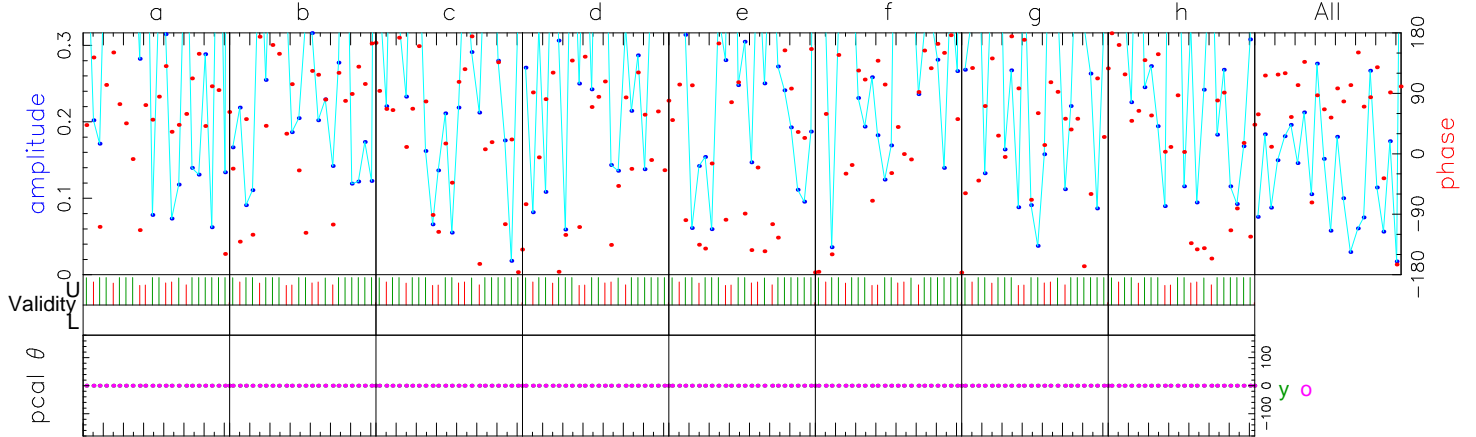


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133947  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-2.62742699041E+03		Apriori delay (usec)		-2.62733390589E+03		Resid mbdelay (usec)		6.65488E-04	+/- 1.9E-04
Sband delay (usec)	-2.62742630439E+03		Apriori clock (usec)		-3.0527992E+00		Resid sbdelay (usec)		-9.23985E-02	+/- 1.5E-03
Phase delay (usec)	-2.62733390292E+03		Apriori clockrate (us/s)		-3.6000001E-07		Resid phdelay (usec)		2.97076E-06	+/- 6.5E-07
Delay rate (us/s)	1.29292953569E+00		Apriori rate (us/s)		1.29293052060E+00		Resid rate (us/s)		-9.84912E-07	+/- 2.9E-09
Total phase (deg)			Apriori accel (us/s/s)		1.43509636402E-05		Resid phase (deg)		92.1	+/- 20.2

	RMS	Theor.	Amplitude	0.105 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.9	46.9	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	78.6	81.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	33.1	28.6	Inc. seg. avg.	0.098	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	46.5	49.9	Inc. frq. avg.	0.100	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

y: az 51.1 el 41.9 pa -79.5 o: az 308.0 el 53.8 pa 92.9 u,v (fr/asec) -11739.323 1566.660 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yo.W.283.1X1QEV

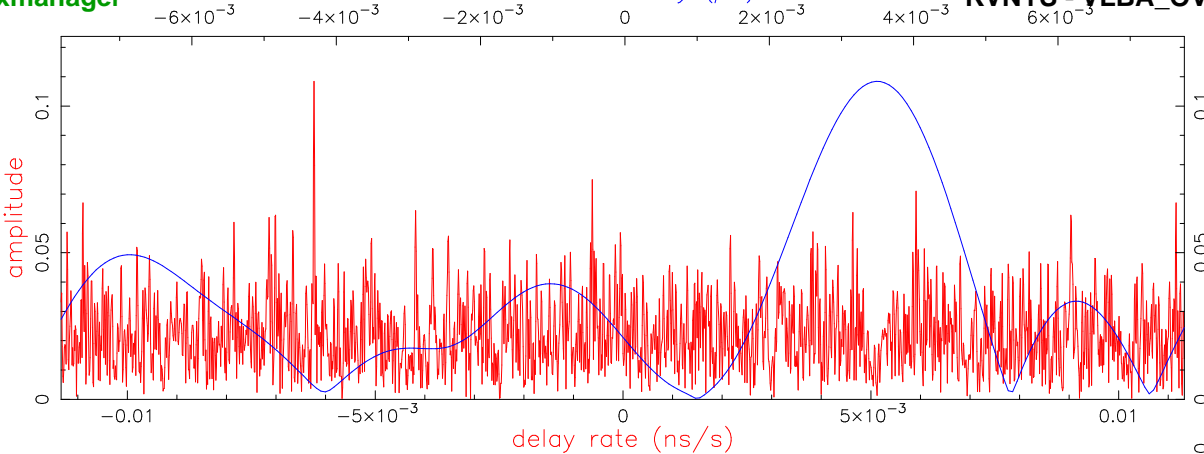
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QE, No0120, yo

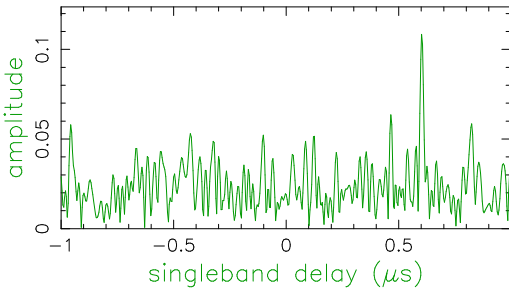
KVNYS - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

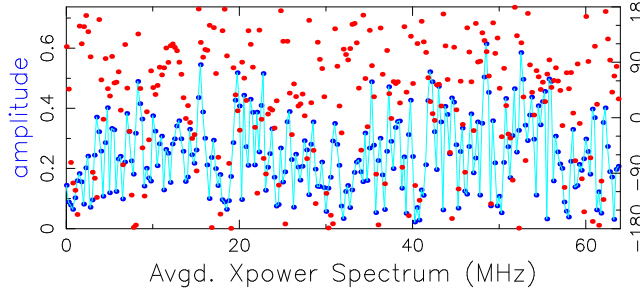


Fringe quality 0

SNR 5.9  
 Int time 388.385  
 Amp 0.124  
 Phase 136.2  
 PFD 6.7e-01  
 Delays (us)  
 SBD 0.602375  
 MBD 0.003497  
 Fringe rate (Hz)  
 -0.538161  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

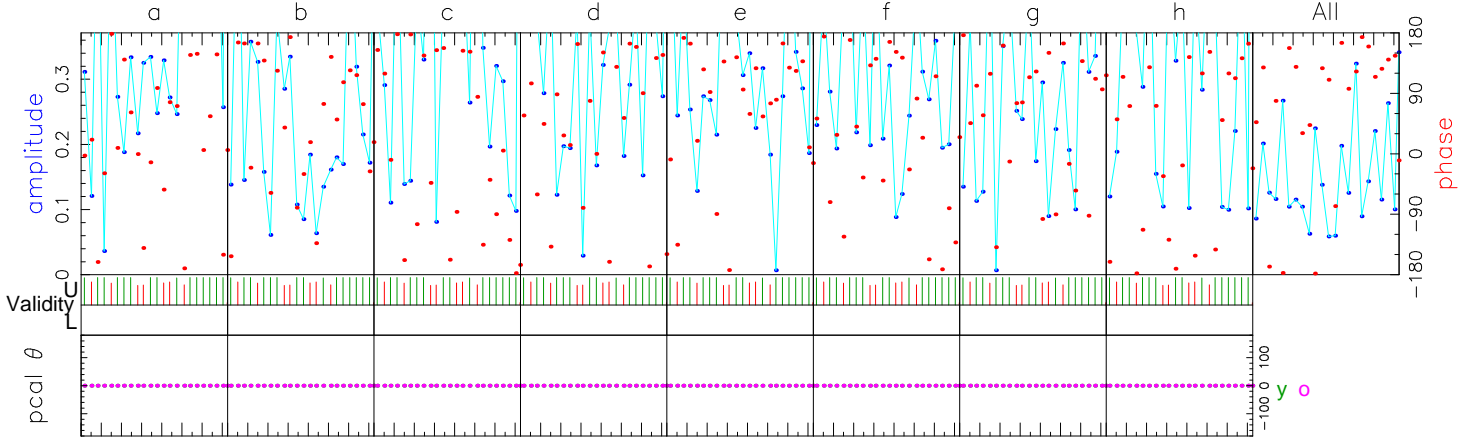


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133951  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	0	0	0	0	0	0	0	0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.62673665891E+03	Apriori delay (usec)	-2.62733390589E+03	Resid mbdelay (usec)	3.49698E-03	+/-	1.8E-04
Sband delay (usec)	-2.62673153064E+03	Apriori clock (usec)	-3.0527992E+00	Resid sbdelay (usec)	6.02375E-01	+/-	1.5E-03
Phase delay (usec)	-2.62733390150E+03	Apriori clockrate (us/s)	-3.6000001E-07	Resid phdelay (usec)	4.39268E-06	+/-	6.3E-07
Delay rate (us/s)	1.29292427309E+00	Apriori rate (us/s)	1.29293052060E+00	Resid rate (us/s)	-6.24751E-06	+/-	2.8E-09
Total phase (deg)	-99.1	Apriori accel (us/s/s)	1.43509636402E-05	Resid phase (deg)	136.2	+/-	19.5

ph/seg (deg)	54.1	Theor.	45.3	Amplitude	0.124 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.6		79.0	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	30.1		27.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.8		48.2	Inc. seg. avg.	0.124	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.121	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

y: az 51.1 el 41.9 pa -79.5

o: az 308.0 el 53.8 pa 92.9

u,v (fr/asec) -11739.323 1566.660

simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yo..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yo.W.297.1X1QE



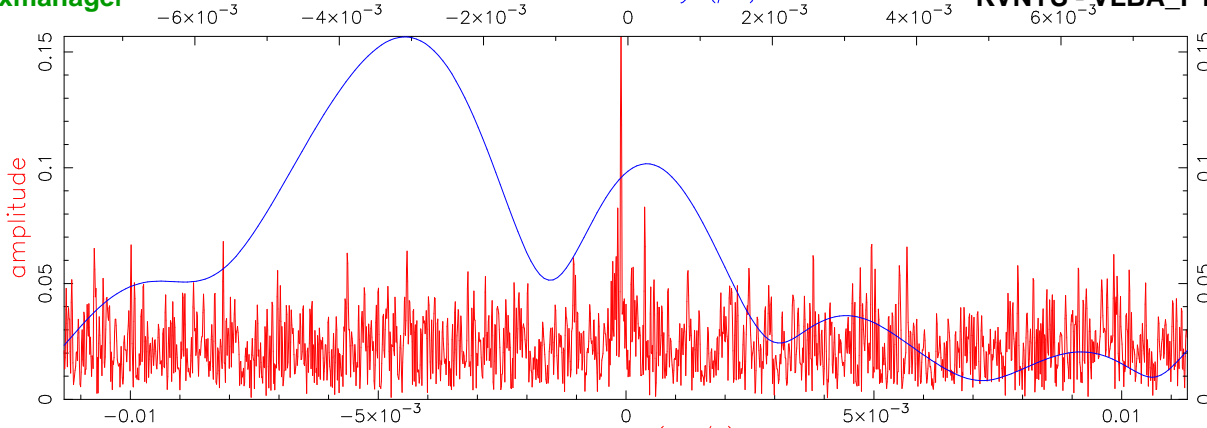
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

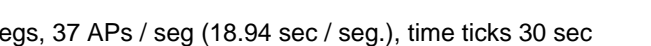
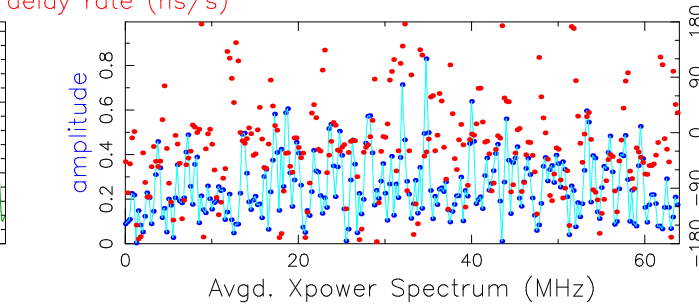
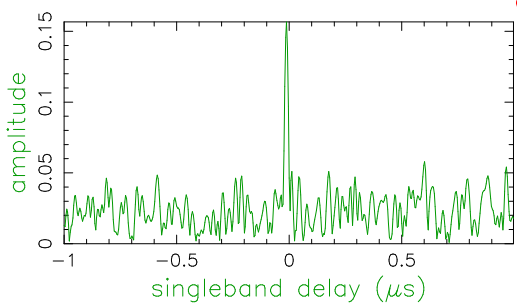
NRAO150.1X1QEV, No0120, yp

KVNYS - VLBA\_PT, fgroup W, pol LL

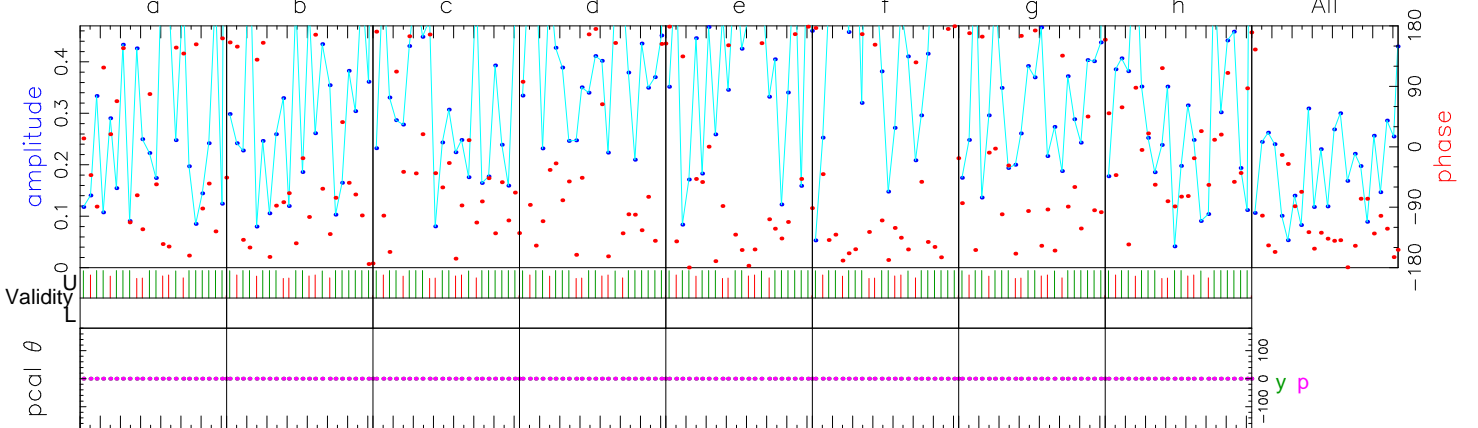
multiband delay ( $\mu$ s)



Fringe quality 9  
 SNR 8.4  
 Int time 388.387  
 Amp 0.157  
 Phase -129.9  
 PFD 1.1e-08  
 Delays (us)  
 SBD -0.012194  
 MBD -0.003106  
 Fringe rate (Hz)  
 -0.008695  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133941  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'59.161694"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-141.2	-123.1	-90.8	-125.5	-150.0	-152.0	-113.0	2.1	Phase	-129.9
	0.1	0.2	0.1	0.2	0.3	0.4	0.2	0.1	Ampl.	0.2
	222.2	254.4	311.6	252.5	254.3	254.2	256.5	257.5	Sbd box	253.9
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	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	
									Tracks	
Group delay (usec)(sbd)	-6.26747022498E+02		Apriori delay (usec)		-6.26728291005E+02		Resid mbdelay (usec)		-3.10649E-03	+/- 1.3E-04
Sband delay (usec)	-6.26740485005E+02		Apriori clock (usec)		-4.8290672E+00		Resid sbdelay (usec)		-1.21940E-02	+/- 1.0E-03
Phase delay (usec)	-6.26728295195E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-4.19045E-06	+/- 4.4E-07
Delay rate (us/s)	1.39914798264E+00		Apriori rate (us/s)		1.39914808358E+00		Resid rate (us/s)		-1.00942E-07	+/- 1.9E-09
Total phase (deg)			Apriori accel (us/s/s)		7.33263257033E-06		Resid phase (deg)		-129.9	+/- 13.6

ph/seg (deg) 48.0 31.5 Search (2048X32) 0.155 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.6 54.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 58.2 19.2 Inc. seg. avg. 0.163 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 61.7 33.5 Inc. frq. avg. 0.182 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 51.1 el 41.9 pa -79.5 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -12722.281 1128.275 ion window (TEC) 0.00 0.00 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yp.W.255.1X1QEV

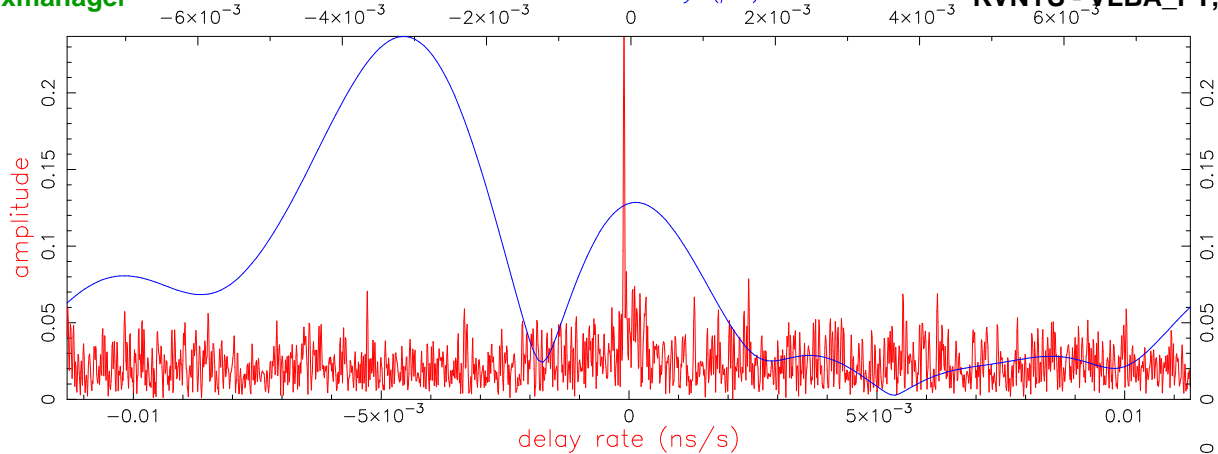
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QE, No0120, yp

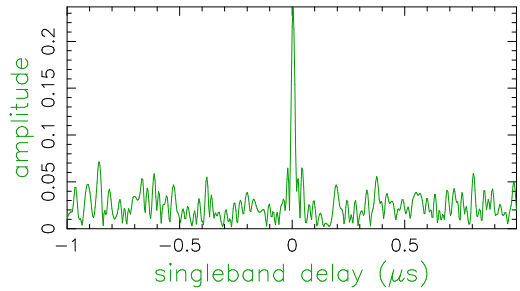
KVNYS - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

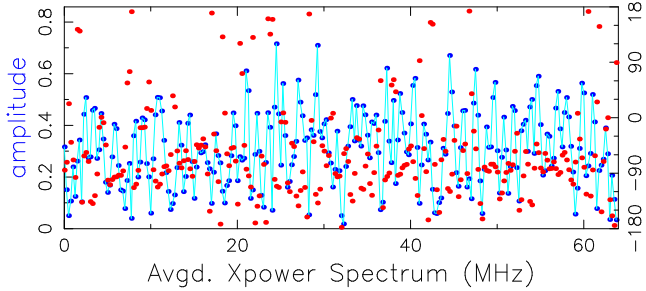


Fringe quality 9

SNR 12.8  
 Int time 388.387  
 Amp 0.237  
 Phase -2.6  
 PFD 1.4e-28  
 Delays (us)  
 SBD 0.003768  
 MBD -0.003158  
 Fringe rate (Hz)  
 -0.008813  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

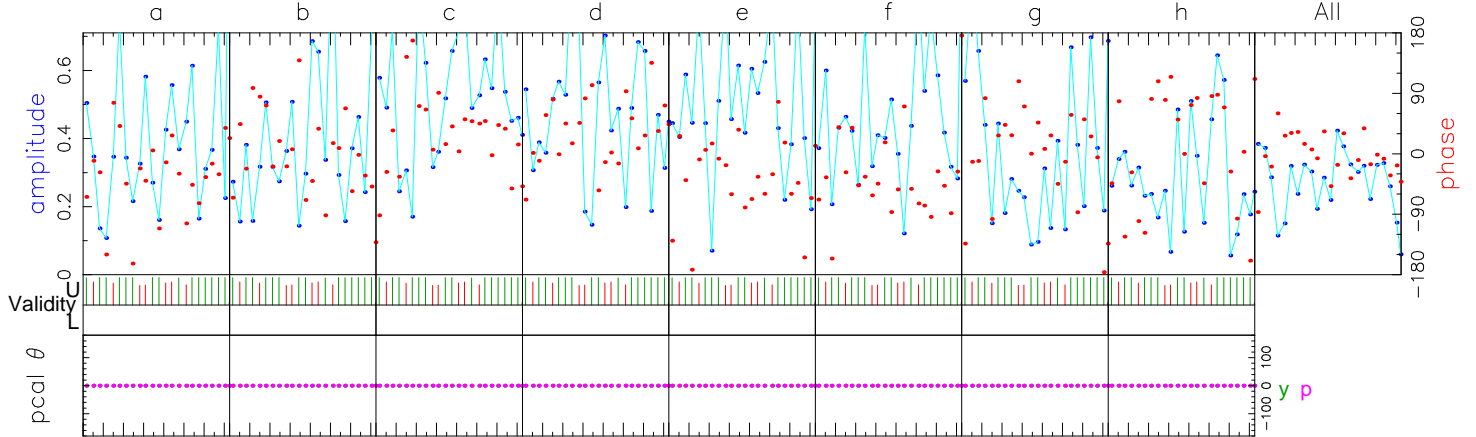


delay rate (ns/s)



Exp. c211c  
 Exper # 16383  
 Yr:day 2021:117  
 Start 004500.00  
 Stop 005159.84  
 FRT 004830.00  
 Corr/FF/build  
 2021:303:225133  
 2021:304:133945  
 2021:252:122852  
 RA & Dec (J2000)  
 03h59m29.747267s  
 +50°57'50.161694"

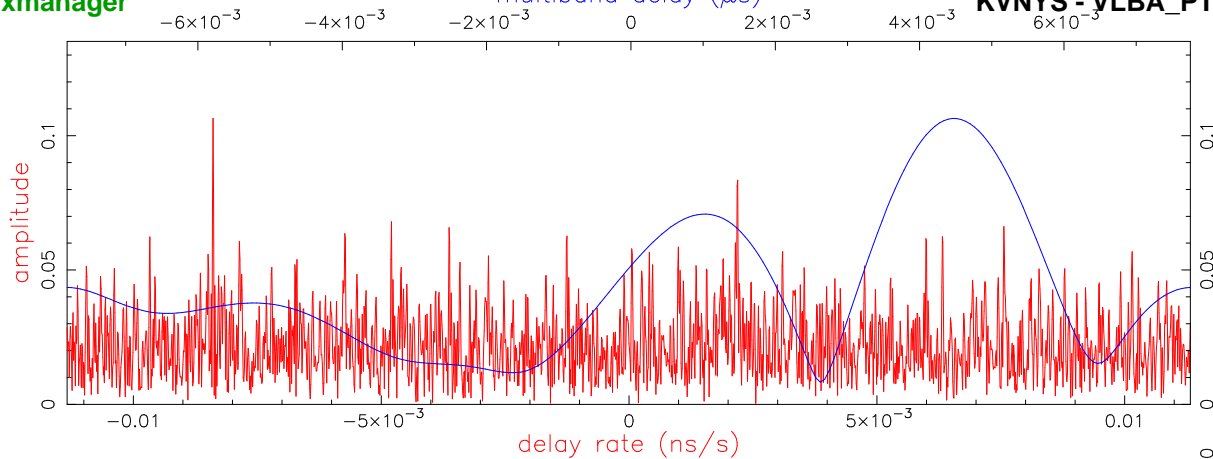
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-22.5	-7.3	31.4	19.0	-33.6	-48.3	12.1	61.1	Phase	-2.6
	0.3	0.3	0.4	0.4	0.3	0.3	0.2	0.1	Ampl.	0.3
	259.7	257.8	257.8	257.4	258.0	258.9	259.3	260.8	Sbd box	258.0
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.26731449060E+02		Apriori delay (usec)		-6.26728291005E+02		Resid mbdelay (usec)		-3.15806E-03	+/- 8.5E-05
Sband delay (usec)	-6.26724523255E+02		Apriori clock (usec)		-4.8290672E+00		Resid sbdelay (usec)		3.76775E-03	+/- 6.7E-04
Phase delay (usec)	-6.26728291089E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		-8.44957E-08	+/- 2.9E-07
Delay rate (us/s)	1.39914798127E+00		Apriori rate (us/s)		1.39914808358E+00		Resid rate (us/s)		-1.02311E-07	+/- 1.3E-09
Total phase (deg)			Apriori accel (us/s/s)		7.33263257033E-06		Resid phase (deg)		-2.6	+/- 9.0

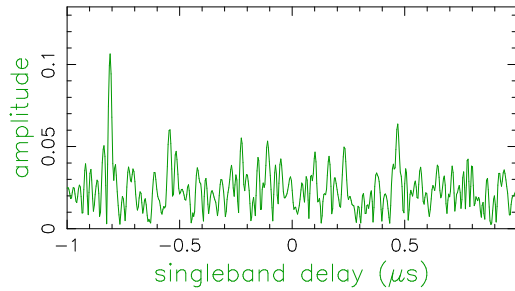
ph/seg (deg) 33.7 20.8 Amplitude 0.237 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 38.3 36.3 Search (2048X32) 0.231 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.5 12.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.6 22.2 Inc. seg. avg. 0.263 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 y: az 51.1 el 41.9 pa -79.5 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -12722.281 1128.275 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yp..1X1QE V Output file: /Exps/c211c/v1/1234/No0120/yp.W.274.1X1QE V simultaneous interpolator

multiband delay ( $\mu\text{s}$ )

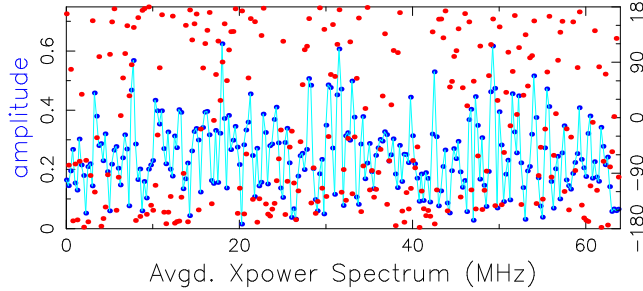


Fringe quality 0

SNR 5.7  
Int time 388.387  
Amp 0.135  
Phase 174.6  
PFD 9.0e-01  
Delays (us)  
SBD -0.809153  
MBD 0.004449  
Fringe rate (Hz)  
-0.723586  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

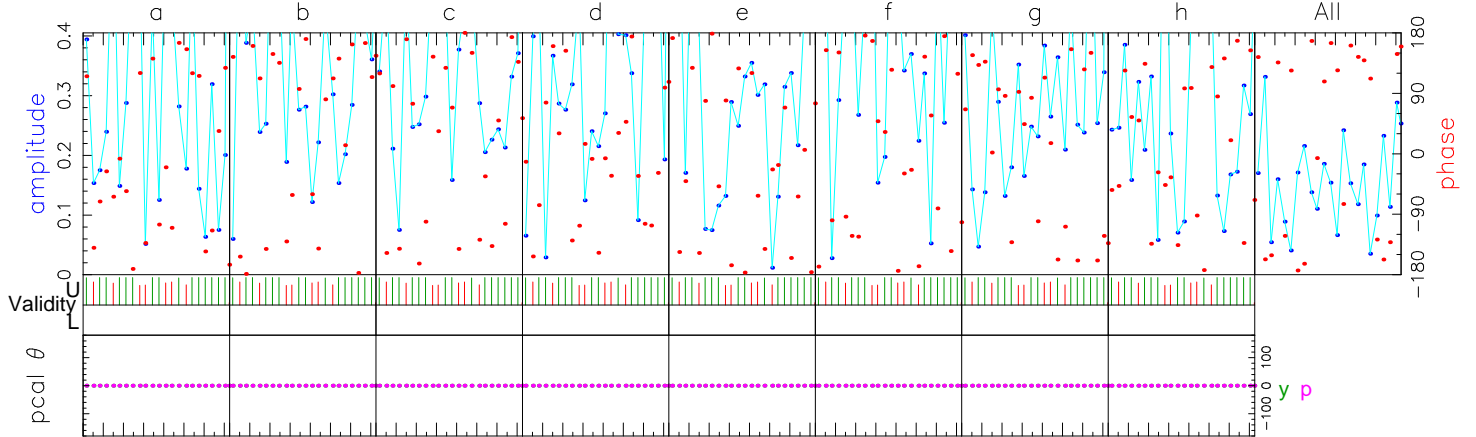


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133949  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.9	157.8	160.9	-67.8	178.7	-172.5	143.6	-174.8	Phase	174.6
	0.1	0.3	0.2	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	175.4	50.1	118.8	65.5	394.6	50.7	102.5	272.1	Sbd box	49.9
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	0	0	0	0	0	0	0	0	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	
									Tracks	
Group delay (usec)(sbd)	-6.27536341557E+02		Apriori delay (usec)		-6.26728291005E+02		Resid mbdelay (usec)		4.44945E-03	+/- 1.9E-04
Sband delay (usec)	-6.27537444255E+02		Apriori clock (usec)		-4.8290672E+00		Resid sbdelay (usec)		-8.09153E-01	+/- 1.5E-03
Phase delay (usec)	-6.26728285374E+02		Apriori clockrate (us/s)		1.2000000E-07		Resid phdelay (usec)		5.63105E-06	+/- 6.4E-07
Delay rate (us/s)	1.39913968346E+00		Apriori rate (us/s)		1.39914808358E+00		Resid rate (us/s)		-8.40012E-06	+/- 2.8E-09
Total phase (deg)			Apriori accel (us/s/s)		7.33263257033E-06		Resid phase (deg)		174.6	+/- 19.9

	RMS	Theor.	Amplitude	0.135 +/- 0.024	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	56.1	46.3	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	83.6	80.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	51.4	28.2	Inc. seg. avg.	0.144	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	56.3	49.2	Inc. frq. avg.	0.145	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

y: az 51.1 el 41.9 pa -79.5 p: az 310.4 el 45.6 pa 88.4 u,v (fr/asec) -12722.281 1128.275 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yp..1X1QEV Output file: /Exps/c211c/v1/1234/No0120/yp.W.291.1X1QEV

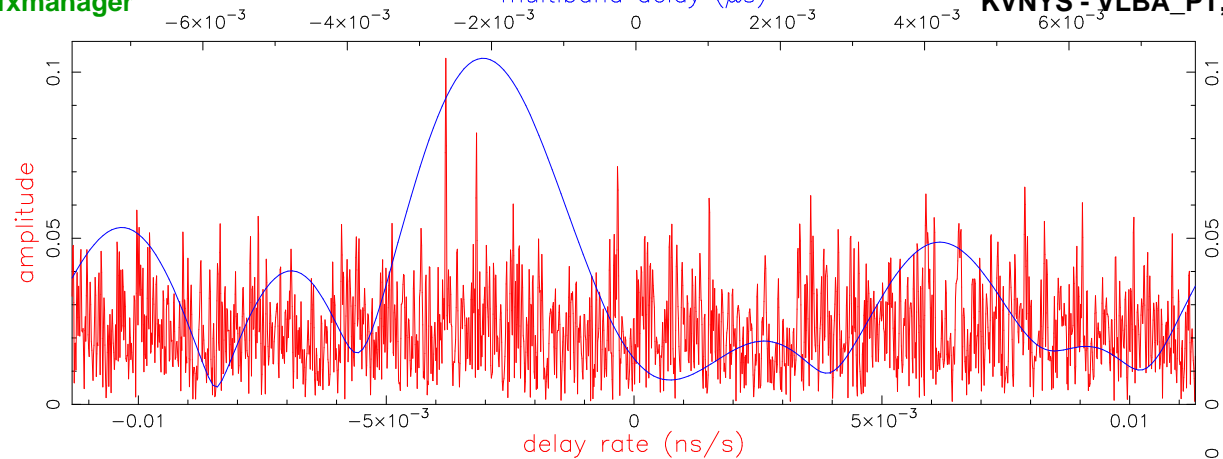
Mk4/DiFX fourfit 3.21 rev 2937

fxmanager

NRAO150.1X1QEV, No0120, yp

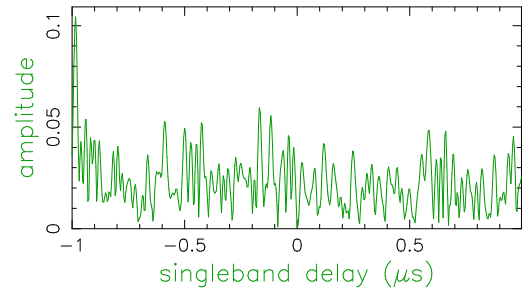
KVNYS - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

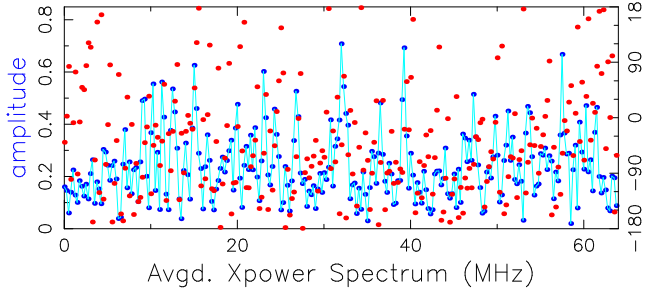


Fringe quality 0

SNR 5.6  
Int time 388.387  
Amp 0.109  
Phase 140.4  
PFD 9.9e-01  
Delays (us)  
SBD -0.984753  
MBD -0.002122  
Fringe rate (Hz)  
-0.327982  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

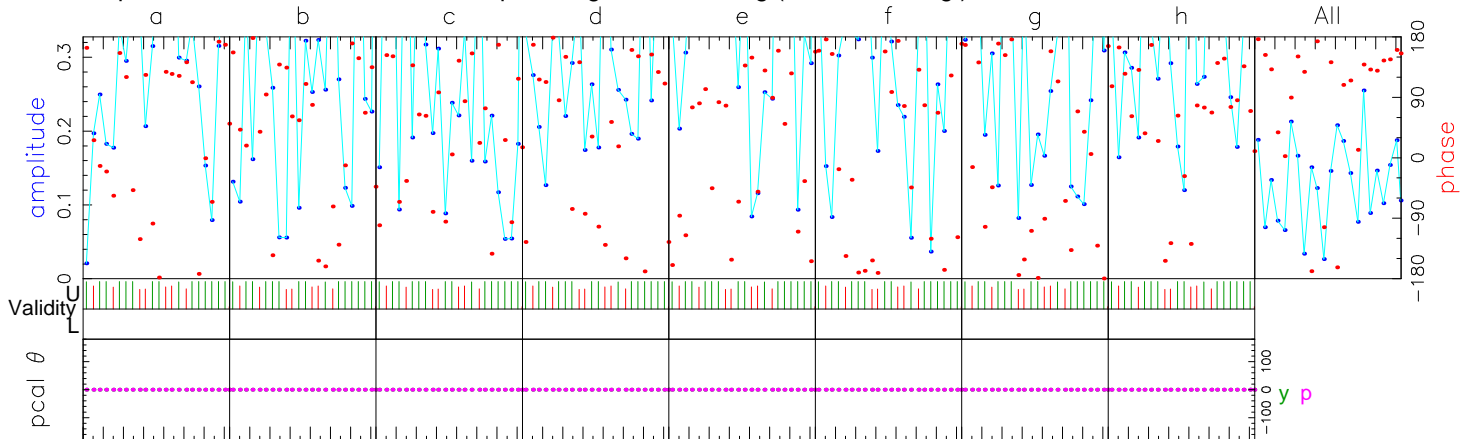


delay rate (ns/s)

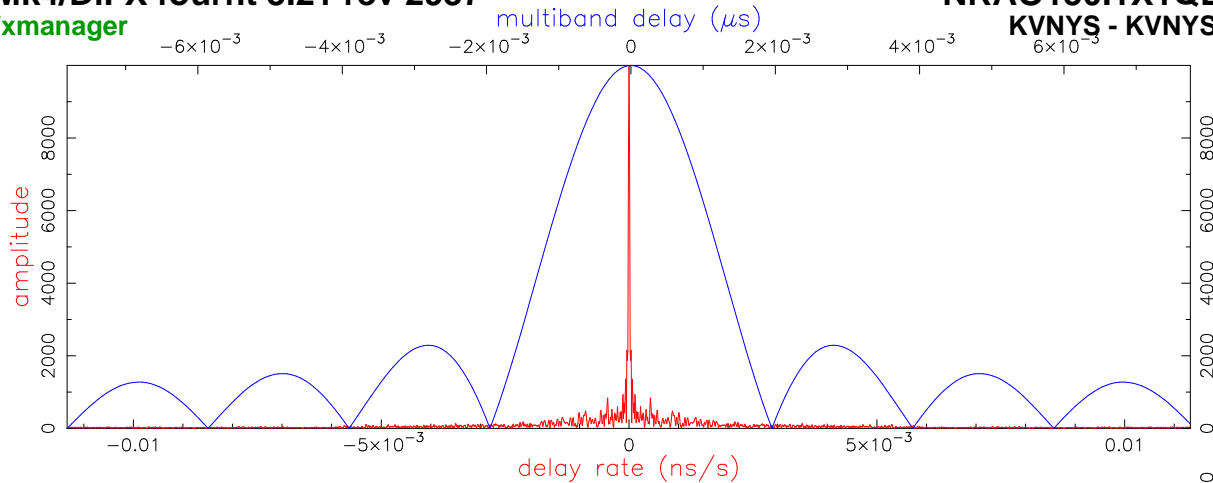


Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133952  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

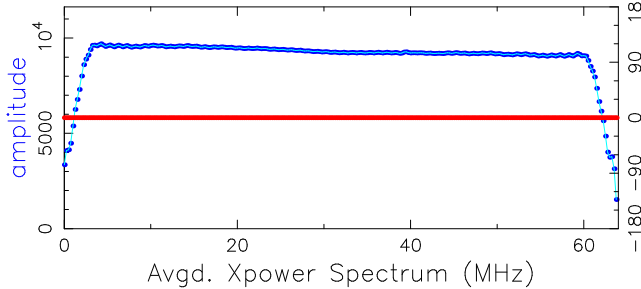
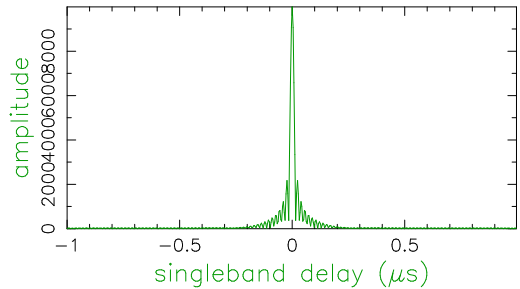
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



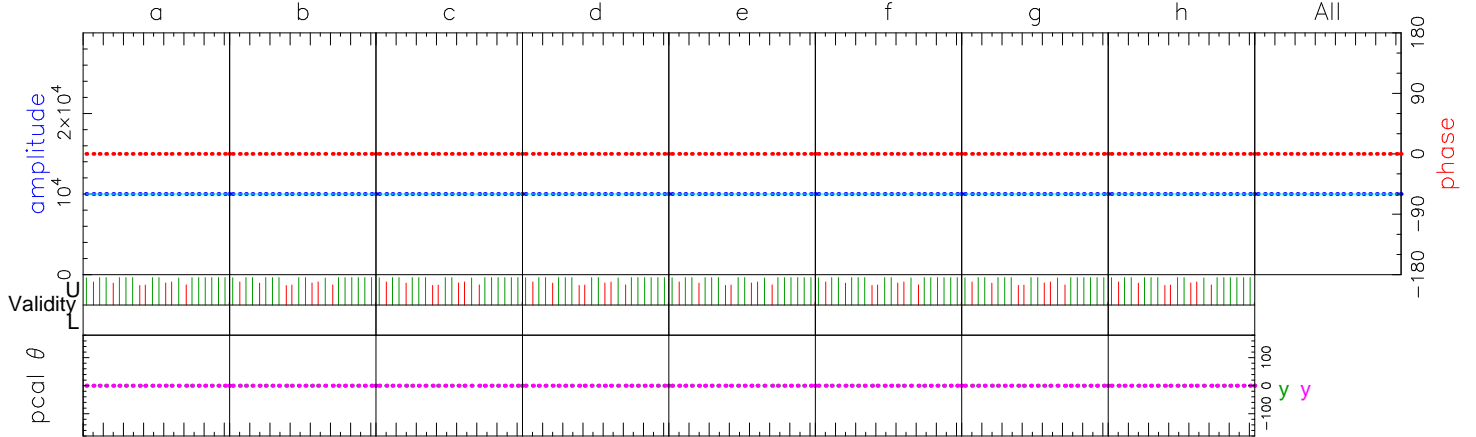
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	0	0	0	0	0	0	0	0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-6.27714787752E+02									
Sband delay (usec)	-6.27713044505E+02									
Phase delay (usec)	-6.26728286477E+02									
Delay rate (us/s)	1.39914427604E+00									
Total phase (deg)			-215.0							
Apriori delay (usec)					-6.26728291005E+02					
Apriori clock (usec)					-4.8290672E+00					
Apriori clockrate (us/s)					1.2000000E-07					
Apriori rate (us/s)					1.39914808358E+00					
Apriori accel (us/s/s)					7.33263257033E-06					
Resid mbdelay (usec)									-2.12175E-03	+/- 1.9E-04
Resid sbdelay (usec)									-9.84753E-01	+/- 1.5E-03
Resid phdelay (usec)									4.52777E-06	+/- 6.6E-07
Resid rate (us/s)									-3.80755E-06	+/- 2.9E-09
Resid phase (deg)									140.4	+/- 20.4
Pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
Pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/s):	128		dr window (ns/s)		-0.011		0.011			
Data rate (Mb/s):	2048		nlags: 256		t_cohere infinite		ion window (TEC)		0.00	
ph/seg (deg)	RMS	Theor.	Amplitude	0.109 +/- 0.019						
amp/seg (%)	55.5	47.3	Search (2048X32)	0.103						
ph/frq (deg)	64.1	82.6	Interp.	0.000						
amp/frq (%)	30.7	50.3	Inc. seg. avg.	0.103						
			Inc. frq. avg.	0.112						
y: az 51.1 el 41.9 pa -79.5	p: az 310.4 el 45.6 pa 88.4		u, v (fr/asec) -12722.281 1128.275						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c211c/v1/1234/No0120/yp..1X1QEV		Output file: /Exps/c211c/v1/1234/No0120/yp.W.306.1X1QEV							



Fringe quality 9  
SNR 538937.6  
Int time 388.403  
Amp 9999.996  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Yr:day 16383  
Start 2021:117  
Stop 2021:117  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133941  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

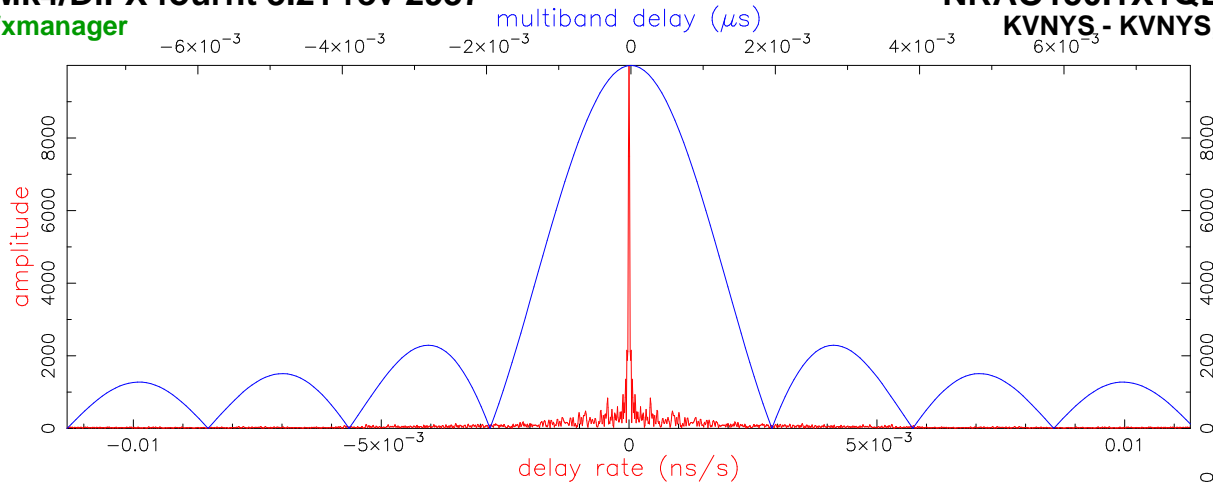


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

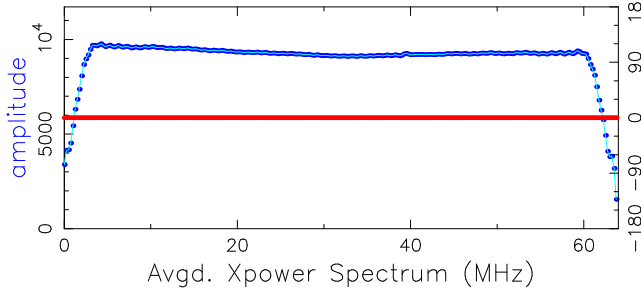
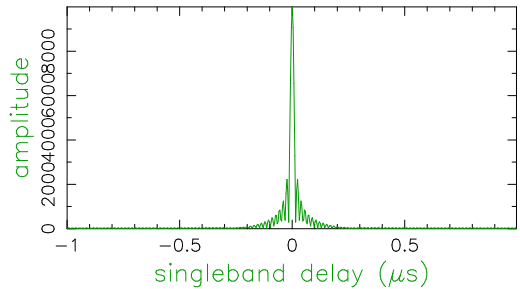


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	Ampl.	10000.0
y	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
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	Resid mbdelay (usec)	0.00000E+00 +/- 2.0E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.6E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid phdelay (usec)	0.00000E+00 +/- 6.9E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 3.0E-14
Total phase (deg)		0.0							Resid phase (deg)	0.0 +/- 0.0

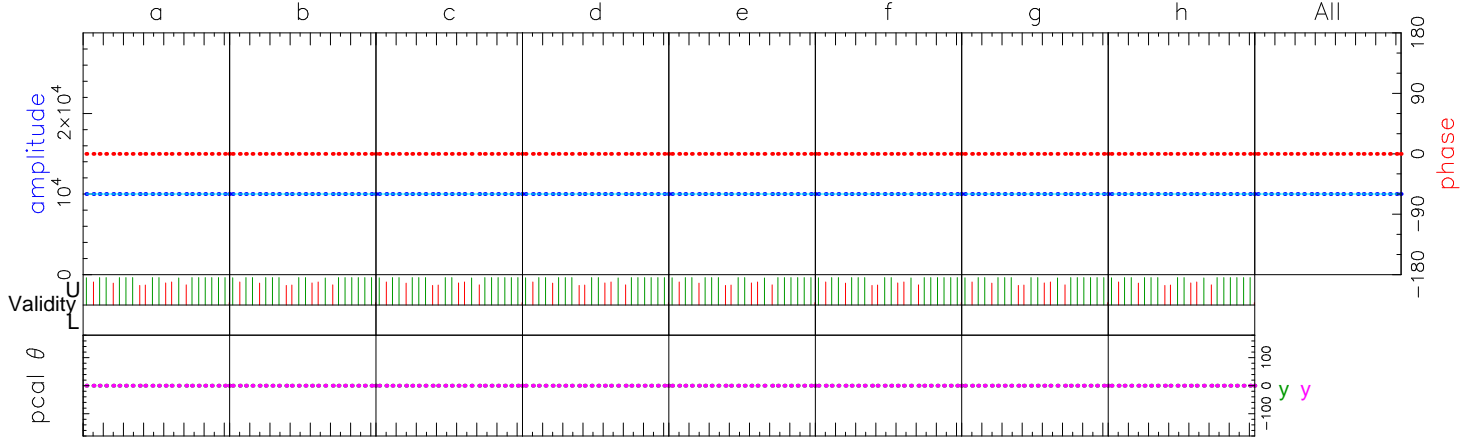
RMS Theor. Amplitude 9999.996 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.997 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 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. 9999.997 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



Fringe quality 9  
SNR 538937.6  
Int time 388.403  
Amp 9999.996  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz)  
0.000000  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c211c  
Yr:day 16383  
Start 2021:117  
Stop 2021:117  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133945  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

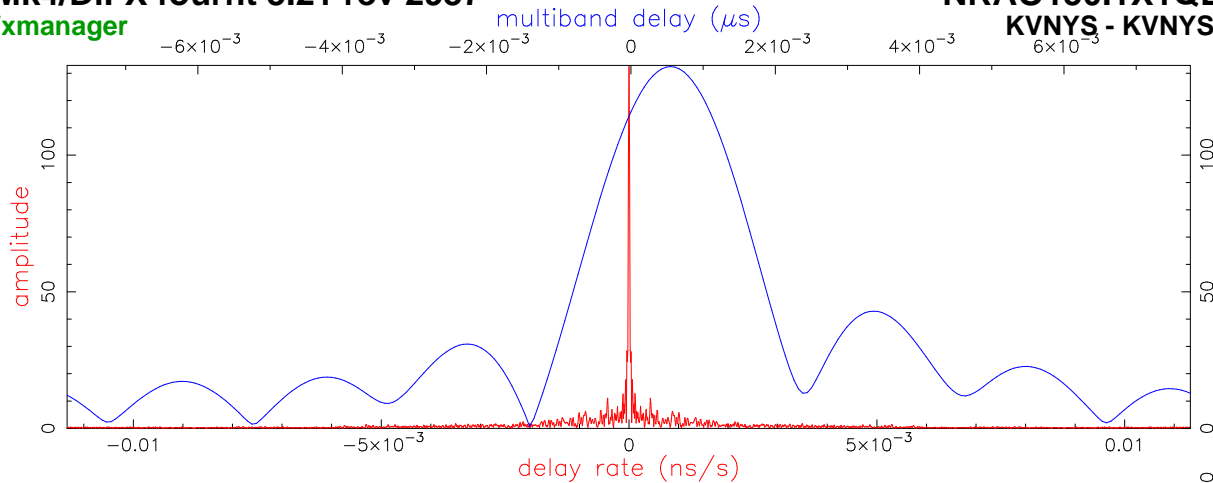


Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec

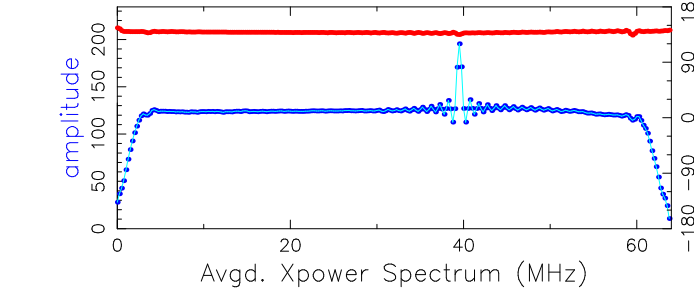
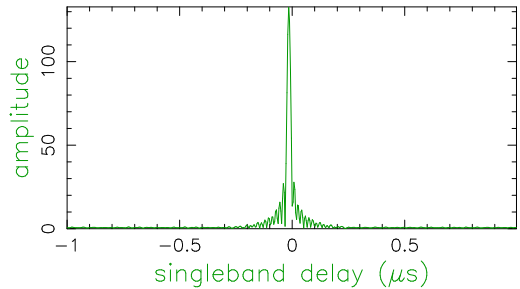


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	Ampl.	10000.0
y	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
									Tracks	
									Tracks	
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	Resid mbdelay (usec)	+/- 2.0E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	+/- 1.6E-08
Phase delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid phdelay (usec)	+/- 6.9E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	+/- 3.0E-14
Total phase (deg)		0.0							Resid phase (deg)	+/- 0.0

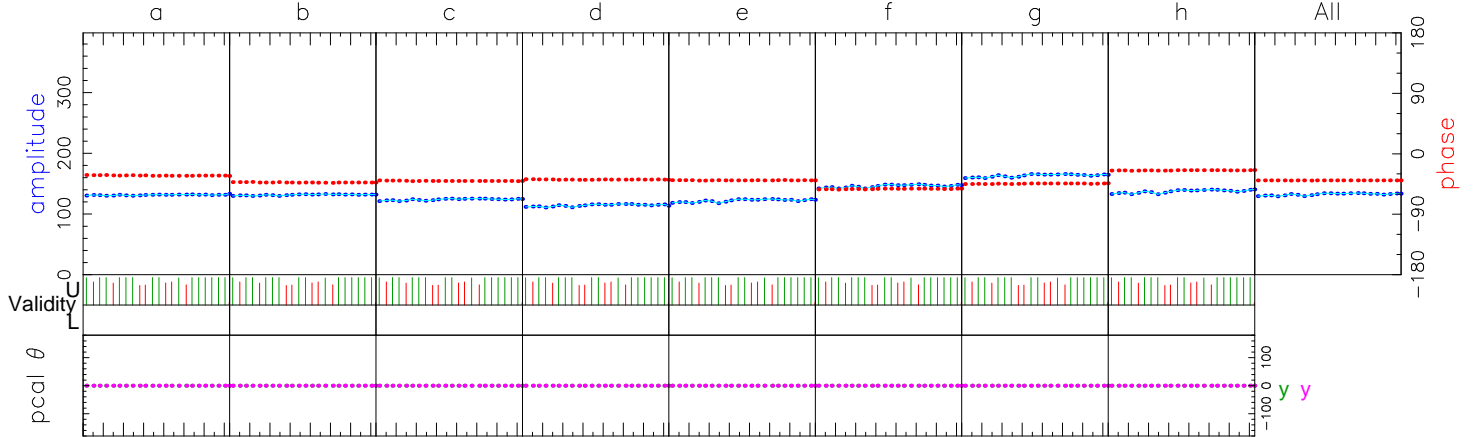
RMS Theor. Amplitude 9999.996 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 9999.997 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 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. 9999.997 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 y: az 51.1 el 41.9 pa -79.5 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yy..1X1QEY Output file: /Exps/c211c/v1/1234/No0120/yy.W.270.1X1QEY



Fringe quality 9  
SNR 7159.9  
Int time 388.403  
Amp 132.853  
Phase -39.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.014922  
MBD 0.000548  
Fringe rate (Hz) 0.000001  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133948  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"



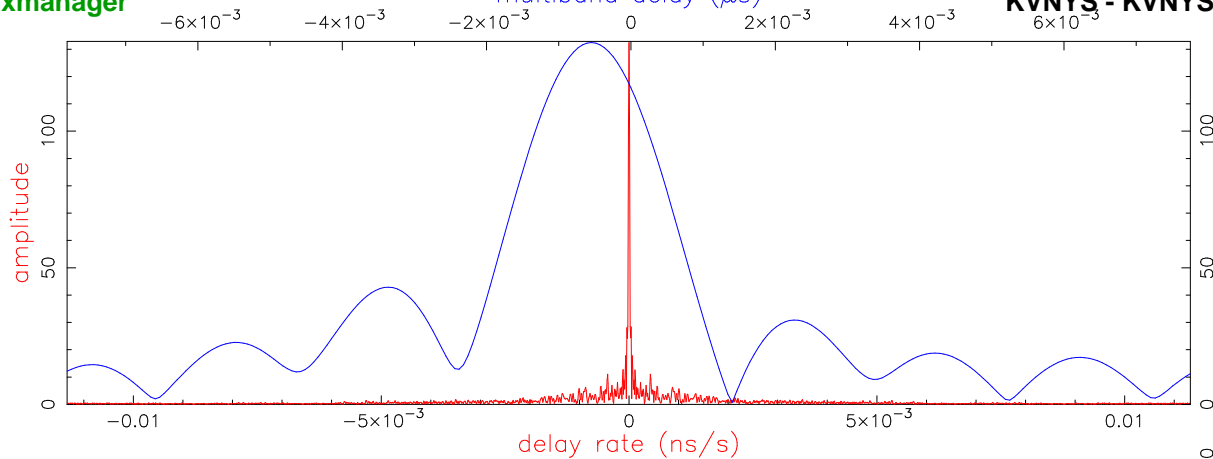
Amp. and Phase vs. time for each freq., 23 segs, 37 APs / seg (18.94 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-32.3	-42.6	-40.3	-38.3	-39.5	-52.4	-44.5	-24.7	Phase	-39.6
	131.4	131.6	123.9	114.3	122.1	146.0	163.2	137.2	Ampl.	133.7
	253.1	253.1	253.2	253.2	253.0	253.2	253.2	253.6	Sbd box	253.2
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0	APs used	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.50770937500E-02		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		5.47906E-04	+/- 1.5E-07
Sband delay (usec)	-1.49222500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-1.49223E-02	+/- 1.2E-06
Phase delay (usec)	-1.27663164551E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.27663E-06	+/- 5.2E-10
Delay rate (us/s)	1.41711523917E-11		Apriori rate (us/s)		0.0000000000E+00		Resid rate (us/s)		1.41712E-11	+/- 2.3E-12
Total phase (deg)			Apriori accel (us/s/s)		0.0000000000E+00		Resid phase (deg)		-39.6	+/- 0.0

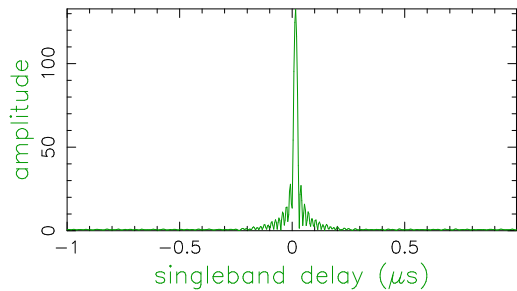
ph/seg (deg) 0.1 0.0 Theor. Amplitude 132.853 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 1.3 0.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 8.9 0.0 Inc. seg. avg. 132.453 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 10.8 0.0 Inc. frq. avg. 133.714 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 51.1 el 41.9 pa -79.5 y: az 51.1 el 41.9 pa -79.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c211c/v1/1234/No0120/yy..1X1QEY Output file: /Exps/c211c/v1/1234/No0120/yy.W.285.1X1QEY

multiband delay ( $\mu$ s)

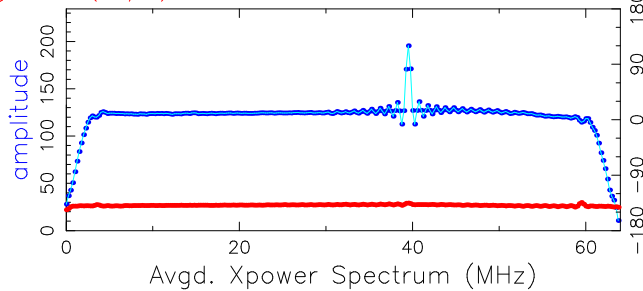


Fringe quality 9

SNR 7159.9  
Int time 388.403  
Amp 132.853  
Phase 39.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.014922  
MBD -0.000548  
Fringe rate (Hz)  
-0.000001  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

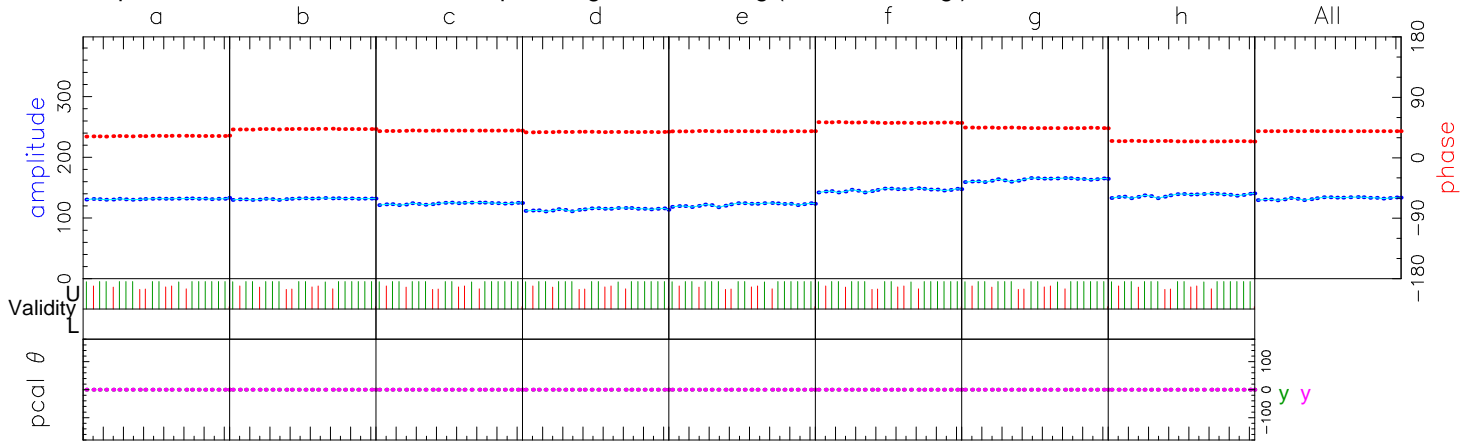


delay rate (ns/s)



Exp. c211c  
Exper # 16383  
Yr:day 2021:117  
Start 004500.00  
Stop 005159.84  
FRT 004830.00  
Corr/FF/build  
2021:303:225133  
2021:304:133951  
2021:252:122852  
RA & Dec (J2000)  
03h59m29.747267s  
+50°57'50.161694"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	767/0	767/0	767/0	767/0	767/0	767/0	767/0	767/0			
y	1000	1000	1000	1000	1000	1000	1000	1000	APs used		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
y:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
y	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC		
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
Group delay (usec)(sbd)	1.50770937500E-02										
Sband delay (usec)	1.49222500000E-02										
Phase delay (usec)	1.27663164557E-06										
Delay rate (us/s)	-1.41711523917E-11										
Total phase (deg)			39.6								
Apriori delay (usec)					0.00000000000E+00				Resid mbdelay (usec)	-5.47906E-04	+/- 1.5E-07
Apriori clock (usec)					0.0000000E+00				Resid sbdelay (usec)	1.49223E-02	+/- 1.2E-06
Apriori clockrate (us/s)					0.0000000E+00				Resid phdelay (usec)	1.27663E-06	+/- 5.2E-10
Apriori rate (us/s)					0.00000000000E+00				Resid rate (us/s)	-1.41712E-11	+/- 2.3E-12
Apriori accel (us/s/s)					0.00000000000E+00				Resid phase (deg)	39.6	+/- 0.0
RMS	0.1	0.0							PCal mode: MANUAL, MANUAL		
Theor.	0.0								PCal rate: 0.000E+00, 0.000E+00 (us/s)		
Amplitude	132.853 +/- 0.019								PC period (AP's) 5, 5		
Search (2048X32)	0.000								sb window (us)	-1.000	1.000
Interp.	0.000								mb window (us)	-0.008	0.008
Inc. seg. avg.	132.453								Sample rate(MISamp/s): 128		
Inc. frq. avg.	133.714								SampCntNorm: enabled		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
									ion window (TEC)	0.00	0.00

ph/seg (deg) 8.9 0.0  
amp/seg (%) 1.3 0.1  
ph/frq (deg) 8.9 0.0  
amp/frq (%) 10.8 0.0

y: az 51.1 el 41.9 pa -79.5  
Control file: cf\_1234\_gmva

y: az 51.1 el 41.9 pa -79.5  
Input file: /Exps/c211c/v1/1234/No0120/yy..1X1QEY

u,v (fr/asec) 0.000 0.000  
Output file: /Exps/c211c/v1/1234/No0120/yy.W.303.1X1QEY

simultaneous interpolator