

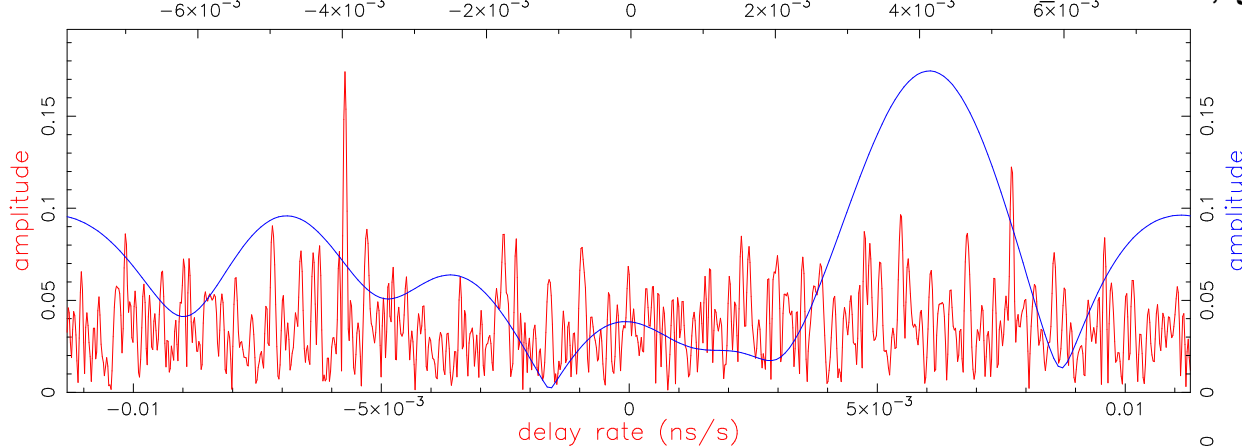
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, bL

VLBA\_BR - KVNPC, fgroup W, pol RR

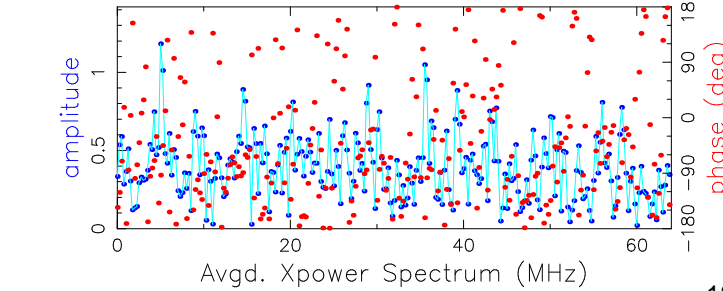
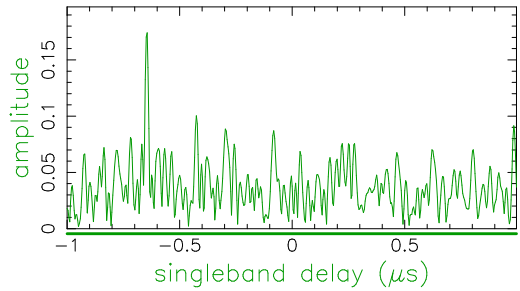
multiband delay ( $\mu\text{s}$ )



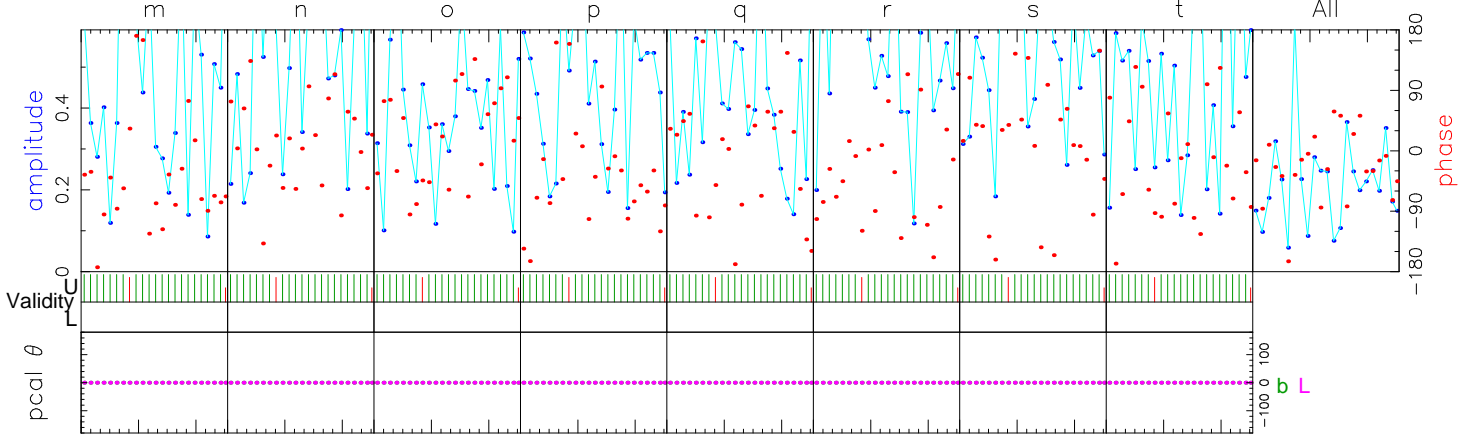
Fringe quality 0

SNR 5.9  
 Int time 149.131  
 Amp 0.197  
 Phase -23.6  
 PFD 3.5e-01  
 Delays (us)  
 SBD -0.646083  
 MBD 0.004053  
 Fringe rate (Hz)  
 -0.494424  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105459  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"



Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-61.7	3.0	28.1	-51.3	-27.9	-42.5	49.8	-40.6		Phase	-23.6
	0.3	0.3	0.2	0.3	0.1	0.3	0.2	0.2		Ampl.	0.2
	266.7	92.1	486.9	165.4	507.7	82.5	149.0	157.5		Sbd box	91.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		APs used	
b	0	0	0	0	0	0	0	0		PC freqs	
L	0	0	60000	0	0	0	4000	0		PC freqs	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000			
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks	
										Chan ids	
										Tracks	
Group delay (usec) (SBD)	1.00870227996E+03					1.00935447707E+03			Resid mbdelay (usec)	4.05288E-03	+/- 1.8E-04
Sband delay (usec)	1.00870839407E+03					3.0004761E+01			Resid sbdelay (usec)	-6.46083E-01	+/- 1.5E-03
Phase delay (usec)	1.00935447631E+03					8.0179795E-06			Resid phdelay (usec)	-7.62034E-07	+/- 6.3E-07
Delay rate (us/s)	-6.37351810956E-01					-6.37346071187E-01			Resid rate (us/s)	-5.73977E-06	+/- 7.2E-09
Total phase (deg)			212.2			9.14313014498E-06			Resid phase (deg)	-23.6	+/- 19.4

ph/seg (deg) 51.1 46.5 Amplitude 0.197 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.6 81.1 Search (1024X32) 0.171 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.1 27.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 41.9 47.8 Inc. seg. avg. 0.186 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.214 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 328.9 el 53.3 pa 92.4 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 10607.622 2242.727 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/bL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/bL.W.14.3MP15Q

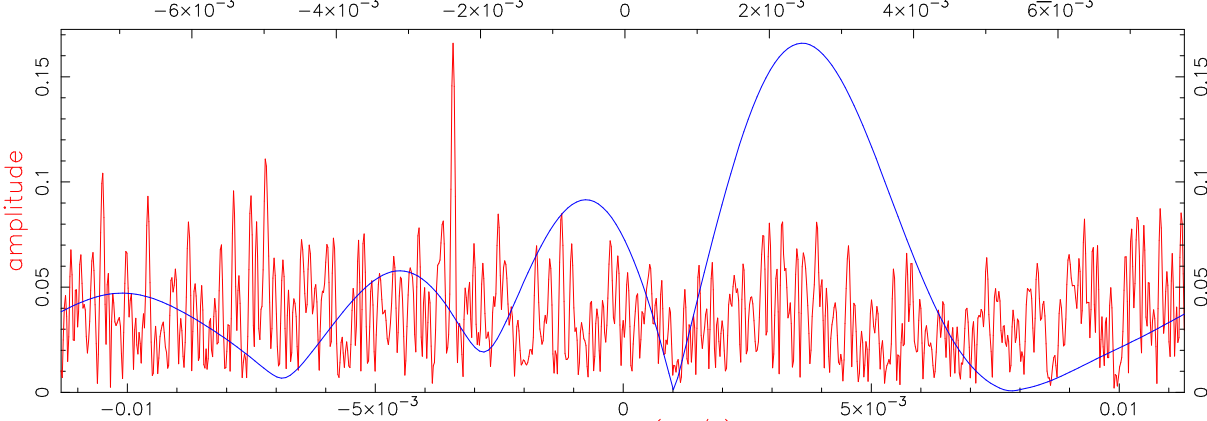
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, bL

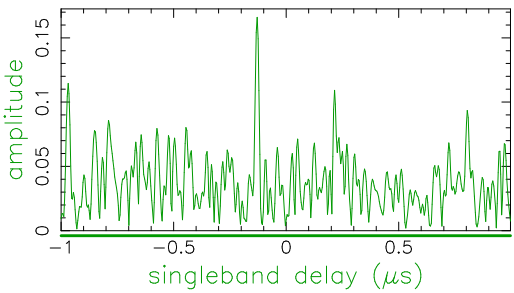
VLBA BR - KVNPC, fgroup W, pol LR

multiband delay ( $\mu$ s)

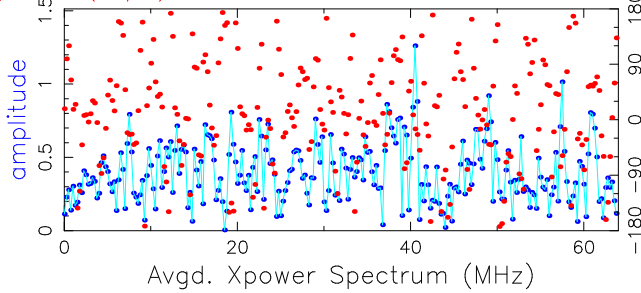


Fringe quality 0

SNR 5.5  
 Int time 149.131  
 Amp 0.173  
 Phase -61.8  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.129243  
 MBD 0.002459  
 Fringe rate (Hz)  
 -0.296124  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

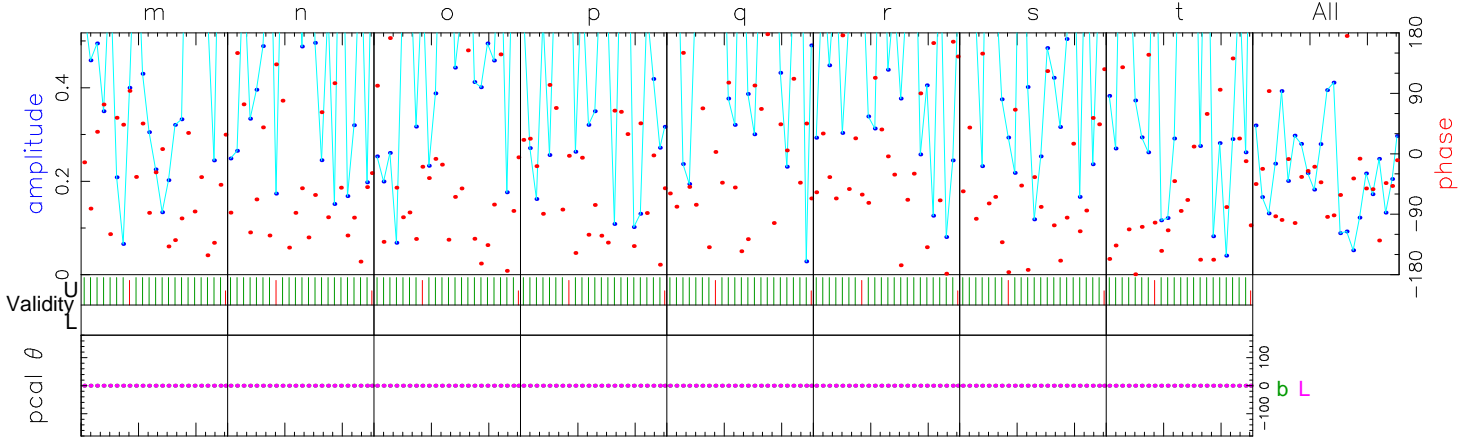


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105503  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.9	-92.6	-97.1	-32.3	-67.1	-33.1	-61.8	-100.8	Phase	-61.8
	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.1	Ampl.	0.2
	214.0	289.1	143.4	222.1	366.1	433.2	19.1	141.7	Sbd box	223.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.00923193608E+03	Apriori delay (usec)	1.00935447707E+03	Resid mbdelay (usec)	2.45900E-03	+/-	2.0E-04
Sband delay (usec)	1.00922523382E+03	Apriori clock (usec)	3.0004761E+01	Resid sbdelay (usec)	-1.29243E-01	+/-	1.6E-03
Phase delay (usec)	1.00935447508E+03	Apriori clockrate (us/s)	8.0179795E-06	Resid phdelay (usec)	-1.99275E-06	+/-	6.7E-07
Delay rate (us/s)	-6.37349508896E-01	Apriori rate (us/s)	-6.37346071187E-01	Resid rate (us/s)	-3.43771E-06	+/-	7.7E-09
Total phase (deg)	174.0	Apriori accel (us/s/s)	9.14313014498E-06	Resid phase (deg)	-61.8	+/-	20.7

ph/seg (deg)	RMS 53.5	Theor. 49.5	Amplitude Search (1024X32)	0.173 +/- 0.031	0.162	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.1	86.5	Interp.	0.000	0.162	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	32.6	29.2	Inc. seg. avg.	0.168	0.172	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.3	51.0	Inc. frq. avg.	0.172	0.172	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

b: az 328.9 el 53.3 pa 92.4 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 10607.622 2242.727 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/bL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/bL.W.24.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

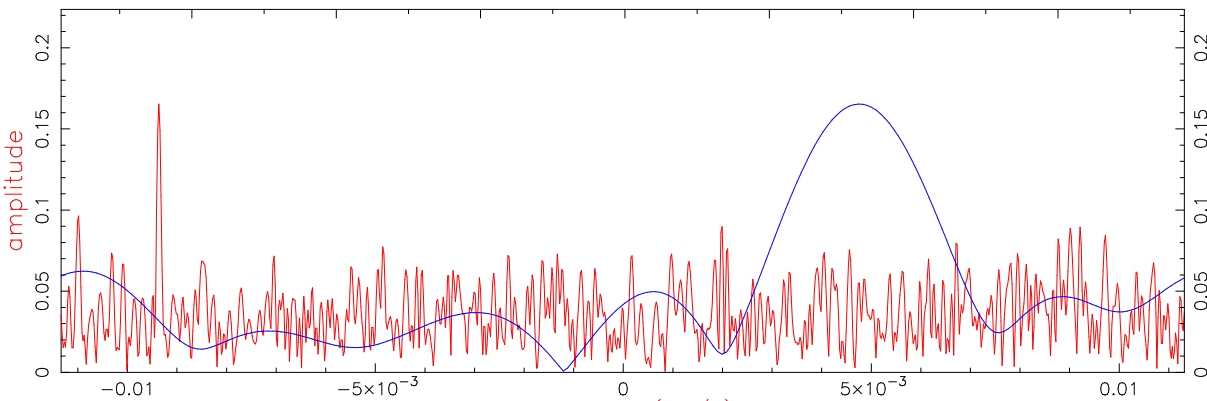
aux01

3C371.3MP15Q, No0901, bL

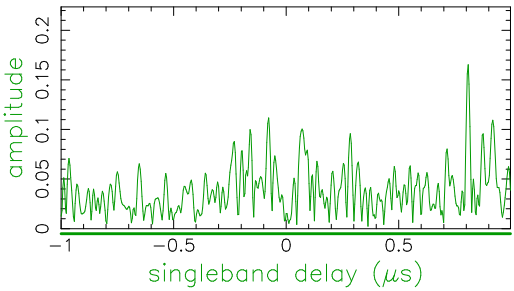
VLBA\_BR - KVNPC, fgroup W, pol RL

multiband delay ( $\mu$ s)

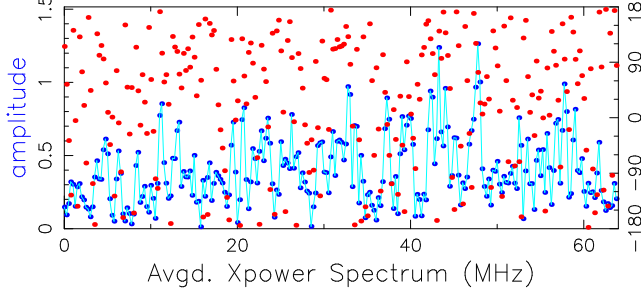
Fringe quality 0



SNR 5.5  
 Int time 149.131  
 Amp 0.224  
 Phase 7.5  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.807897  
 MBD 0.003237  
 Fringe rate (Hz) -0.807992  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

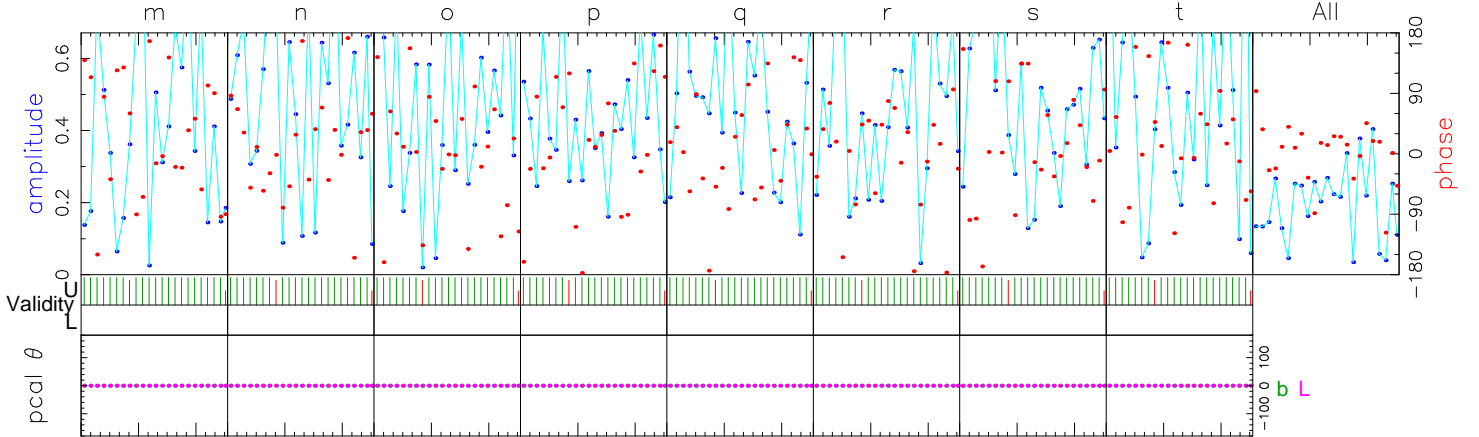


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105505  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-15.3	7.1	22.3	25.5	-4.1	39.2	0.7	-9.2		7.5
	0.2	0.4	0.2	0.2	0.3	0.2	0.2	0.2		0.2
	293.4	111.9	196.5	66.7	489.1	33.7	243.6	96.1		463.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
b	0	0	0	0	0	0	0	0		
L	0	0	60000	0	0	0	4000	0		
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
L	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 1.01015458944E+03 Apriori delay (usec) 1.00935447707E+03 Resid mbdelay (usec) 3.23737E-03 +/- 2.0E-04  
 Sband delay (usec) 1.01016237382E+03 Apriori clock (usec) 3.0004761E+01 Resid sbdelay (usec) 8.07897E-01 +/- 1.6E-03  
 Phase delay (usec) 1.00935447731E+03 Apriori clockrate (us/s) 8.0179795E-06 Resid phdelay (usec) 2.40990E-07 +/- 6.7E-07  
 Delay rate (us/s) -6.37355451174E-01 Apriori rate (us/s) -6.37346071187E-01 Resid rate (us/s) -9.37999E-06 +/- 7.7E-09  
 Total phase (deg) 243.3 Apriori accel (us/s/s) 9.14313014498E-06 Resid phase (deg) 7.5 +/- 20.7

RMS Theor. Amplitude 0.224 +/- 0.040 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 44.5 49.6 Search (1024X32) 0.162 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 64.5 86.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 20.5 29.3 Inc. seg. avg. 0.195 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 31.8 51.1 Inc. frq. avg. 0.206 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

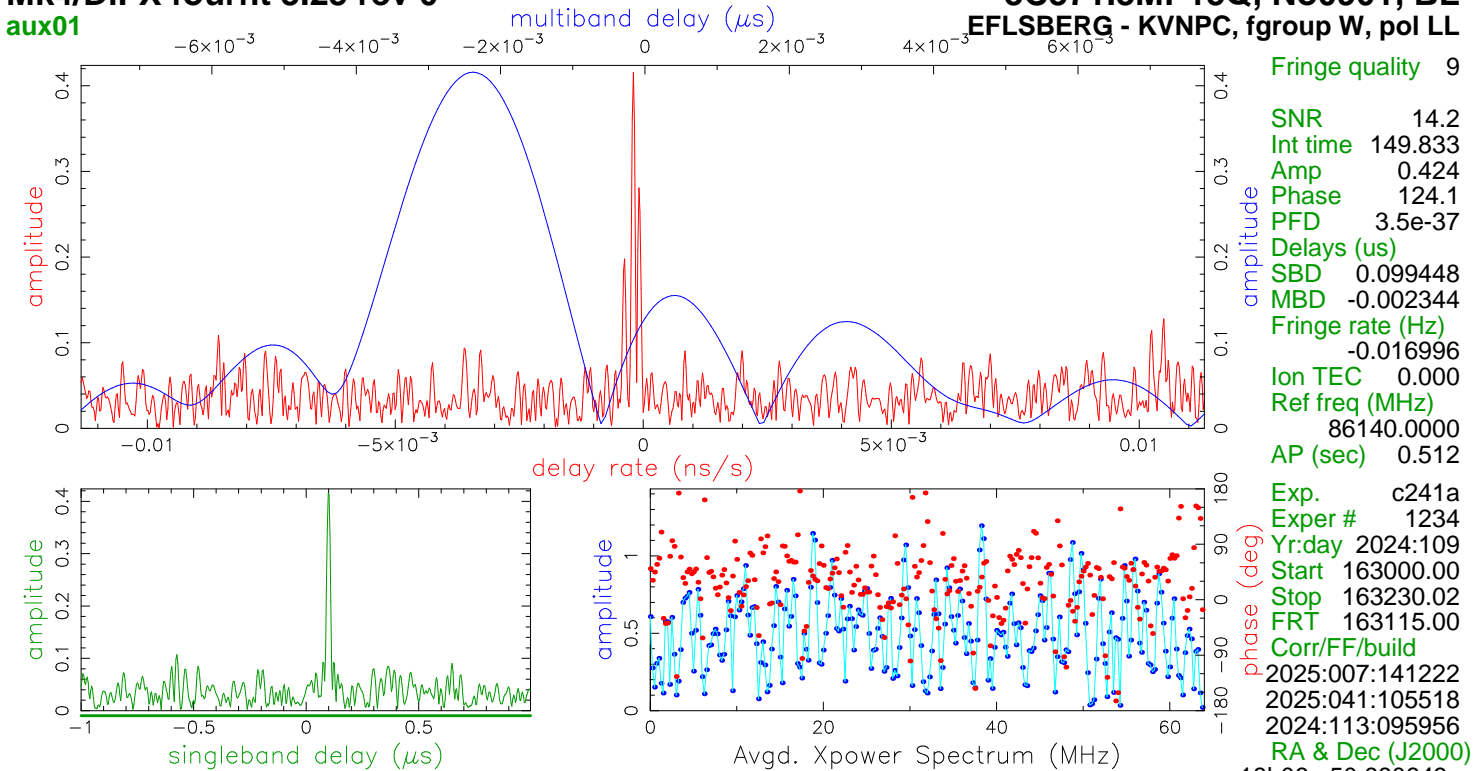
b: az 328.9 el 53.3 pa 92.4 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 10607.622 2242.727 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/bL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/bL.W.36.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, BL

EFLSBERG - KVNPC, fgroup W, pol LL

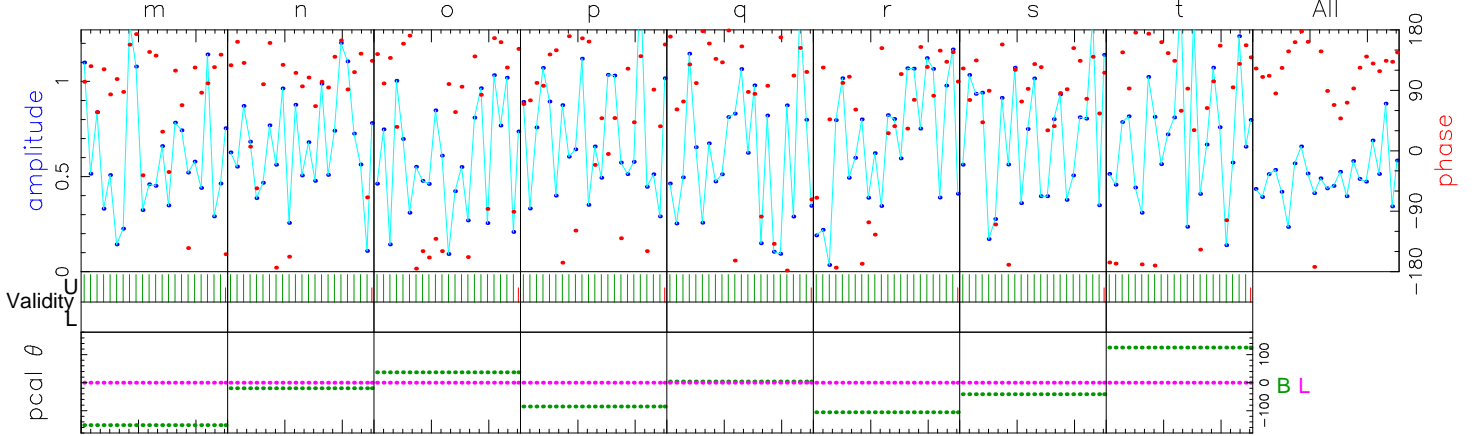


Fringe quality 9

SNR 14.2  
 Int time 149.833  
 Amp 0.424  
 Phase 124.1  
 PFD 3.5e-37  
 Delays (us)  
 SBD 0.099448  
 MBD -0.002344  
 Fringe rate (Hz)  
 -0.016996  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105518  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
B	0	0	0	0	0	0	0	0		
L	0	0	60000	0	0	0	4000	0		
B:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:L	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
L	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-5.25766089070E+03	Apriori delay (usec)	-5.25776792149E+03	Resid mbdelay (usec)	-2.34421E-03	+/-	7.7E-05
Sband delay (usec)	-5.25766847349E+03	Apriori clock (usec)	-1.0032734E+01	Resid sbdelay (usec)	9.94480E-02	+/-	6.1E-04
Phase delay (usec)	-5.25776791749E+03	Apriori clockrate (us/s)	7.2519998E-06	Resid phdelay (usec)	4.00274E-06	+/-	2.6E-07
Delay rate (us/s)	-2.55355121000E-01	Apriori rate (us/s)	-2.55354923689E-01	Resid rate (us/s)	-1.97311E-07	+/-	3.0E-09
Total phase (deg)	-148.4	Apriori accel (us/s/s)	4.51459112973E-05	Resid phase (deg)	124.1	+/-	8.1

ph/seg (deg) 34.9 19.4 Search (1024X32) 0.414 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 35.2 33.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 14.6 11.4 Inc. seg. avg. 0.473 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 17.0 19.9 Inc. frq. avg. 0.417 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 B: az 4.0 el 30.6 pa -7.6 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 4361.914 10094.409 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//BL...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//BL.W.73.3MP15Q

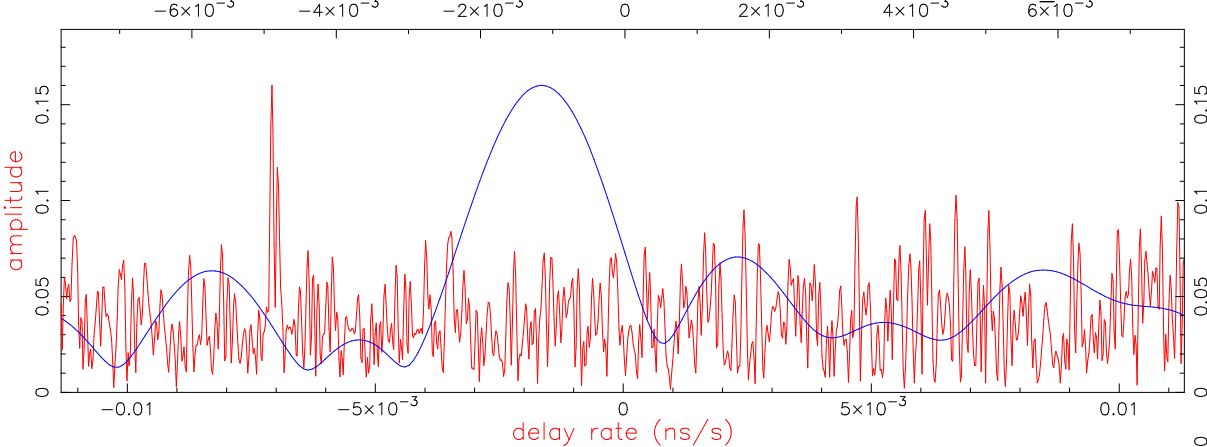
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, bL

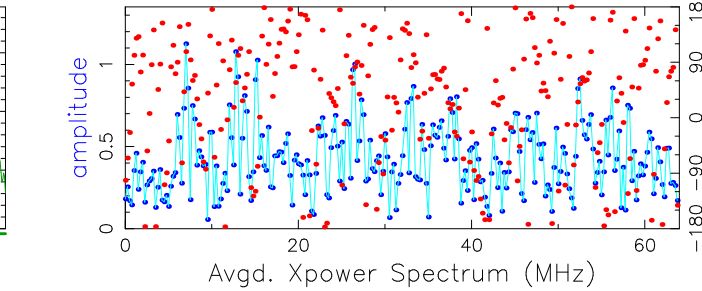
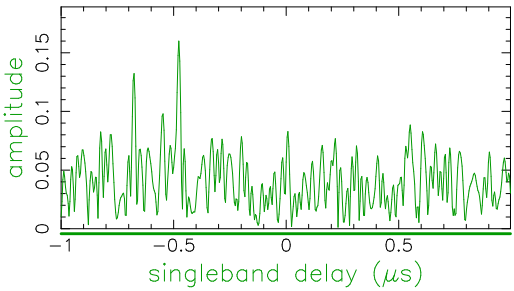
VLBA\_BR - KVNPC, fgroup W, pol LL

multiband delay ( $\mu$ s)



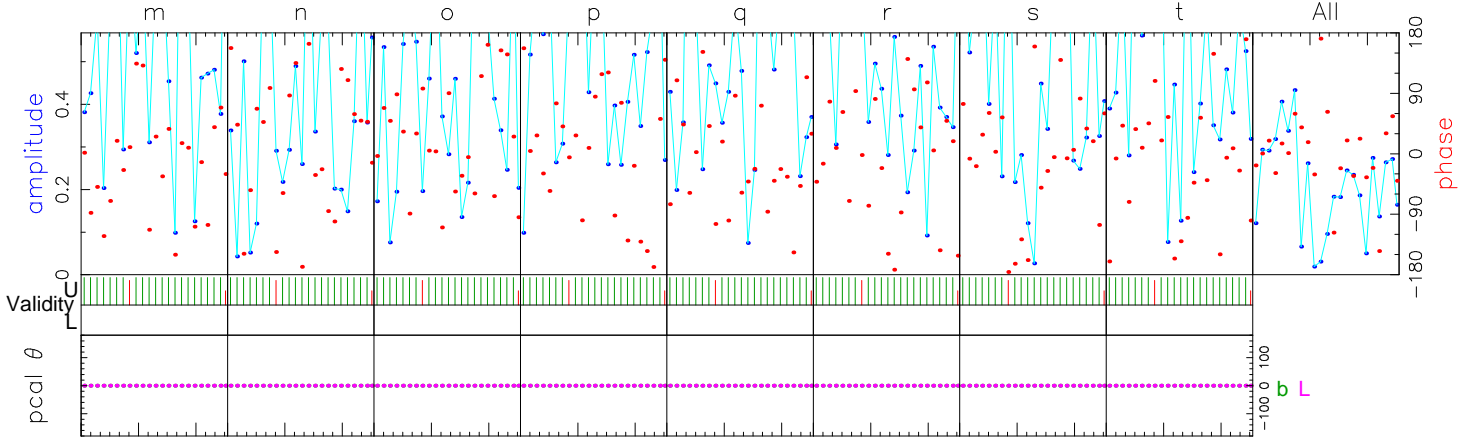
Fringe quality 0

SNR 5.3  
 Int time 149.131  
 Amp 0.189  
 Phase 7.8  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.476784  
 MBD -0.001158  
 Fringe rate (Hz)  
 -0.612137  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105458  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-4.3	85.9	16.2	11.9	-25.7	15.0	18.2	6.2	Phase	7.8
	0.3	0.1	0.2	0.2	0.2	0.2	0.3	0.2	Ampl.	0.2
	205.7	260.3	297.1	52.0	452.7	411.7	67.4	167.5	Sbd box	134.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
b	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.00888456900E+03 Apriori delay (usec) 1.00935447707E+03 Resid mbdelay (usec) -1.15807E-03 +/- 2.0E-04  
 Sband delay (usec) 1.00887769307E+03 Apriori clock (usec) 3.0004761E+01 Resid sbdelay (usec) -4.76784E-01 +/- 1.6E-03  
 Phase delay (usec) 1.00935447732E+03 Apriori clockrate (us/s) 8.0179795E-06 Resid phdelay (usec) 2.50309E-07 +/- 6.9E-07  
 Delay rate (us/s) -6.37353177486E-01 Apriori rate (us/s) -6.37346071187E-01 Resid rate (us/s) -7.10630E-06 +/- 8.0E-09  
 Total phase (deg) 243.6 Apriori accel (us/s/s) 9.14313014498E-06 Resid phase (deg) 7.8 +/- 21.4

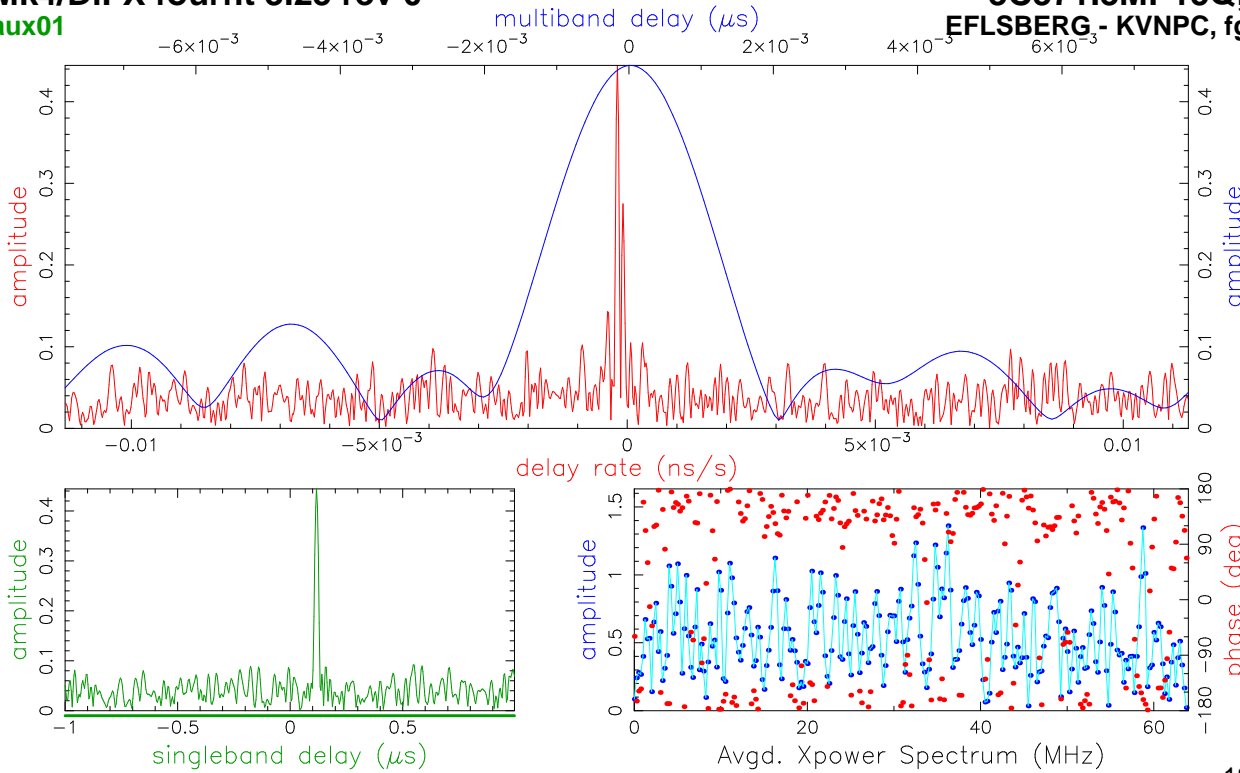
RMS Theor. Amplitude 0.189 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 61.8 51.4 Search (1024X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 78.1 89.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 35.6 30.3 Inc. seg. avg. 0.180 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 36.7 52.9 Inc. frq. avg. 0.182 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

b: az 328.9 el 53.3 pa 92.4 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 10607.622 2242.727 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/bL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/bL.W.7.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, BL EFLSBERG<sub>3</sub>- KVNPC, fgroup W, pol RR

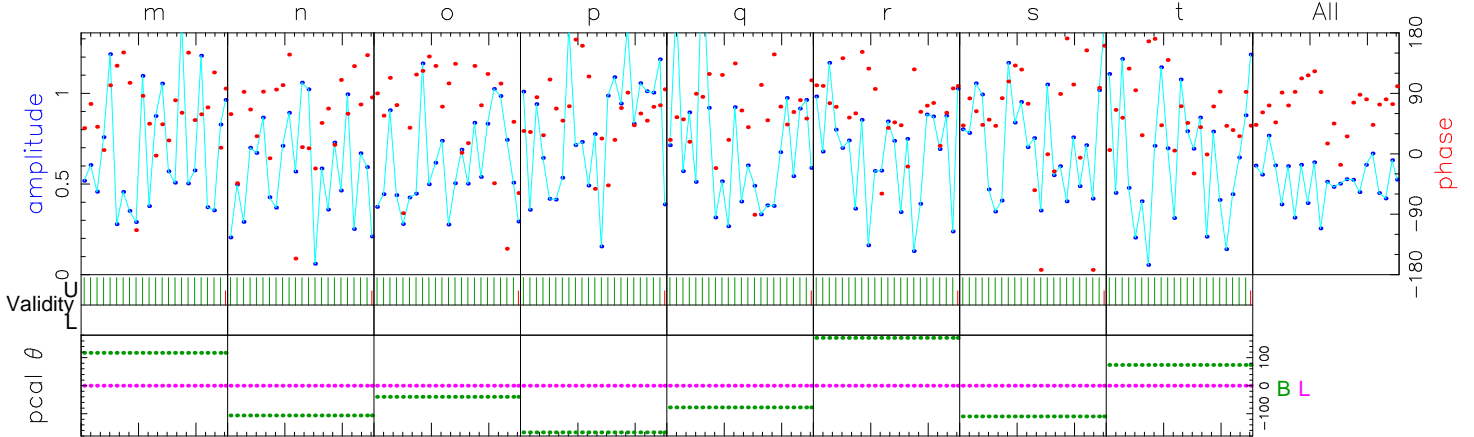


Fringe quality 9

SNR 14.9  
 Int time 149.833  
 Amp 0.444  
 Phase 68.8  
 PFD 1.5e-41  
 Delays (us)  
 SBD 0.117207  
 MBD 0.000021  
 Fringe rate (Hz) -0.016950  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105519  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	62.4	63.1	95.7	61.1	68.3	71.8	84.1	54.6	Phase	68.8
	0.5	0.3	0.3	0.6	0.5	0.5	0.4	0.5	Ampl.	0.4
	285.2	286.8	288.0	287.5	287.2	286.6	287.3	286.7	Sbd box	287.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
B:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:L	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-5.25765852576E+03		Apriori delay (usec)		-5.25776792149E+03		Resid mbdelay (usec)		2.07299E-05 +/- 7.3E-05	
Sband delay (usec)	-5.25765071424E+03		Apriori clock (usec)		-1.0032734E+01		Resid sbdelay (usec)		1.17207E-01 +/- 5.8E-04	
Phase delay (usec)	-5.25776791927E+03		Apriori clockrate (us/s)		7.2519998E-06		Resid phdelay (usec)		2.21855E-06 +/- 2.5E-07	
Delay rate (us/s)	-2.55355120460E-01		Apriori rate (us/s)		-2.55354923689E-01		Resid rate (us/s)		-1.96771E-07 +/- 2.9E-09	
Total phase (deg)			Apriori accel (us/s/s)		4.51459112973E-05		Resid phase (deg)		68.8 +/- 7.7	
RMS	Theor.		Amplitude		0.444 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	32.9	18.5	Search (1024X32)		0.443		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	31.5	32.2	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled mb window (us) -0.008 0.008	
ph/frq (deg)	14.7	10.9	Inc. seg. avg.		0.496		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s) -0.011 0.011	
amp/frq (%)	17.9	19.0	Inc. frq. avg.		0.446		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00	
B: az 4.0 el 30.6 pa -7.6	L: az 23.1 el 48.9 pa -116.3		u, v (fr/asec) 4361.914 10094.409						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//BL...3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//BL.W.84.3MP15Q							

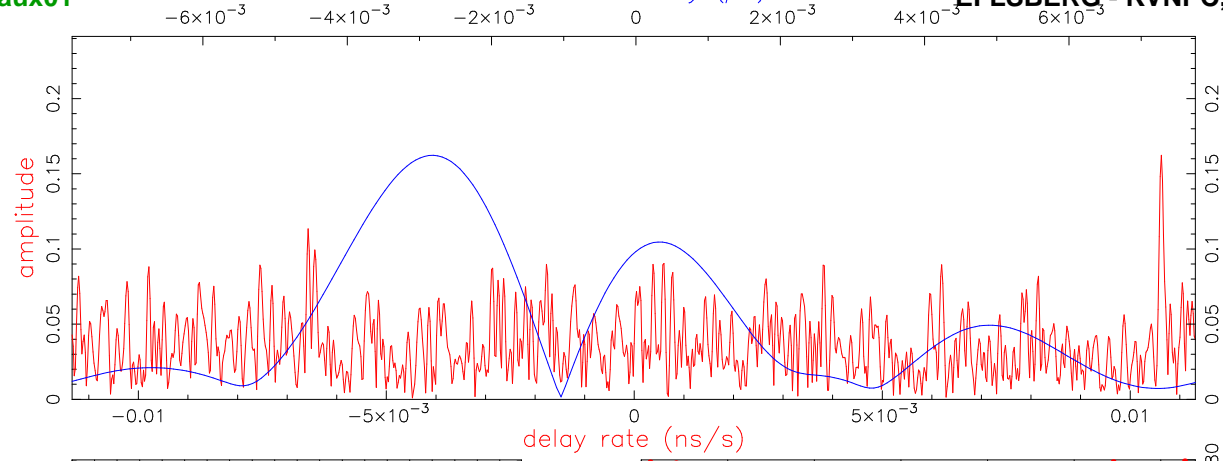
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, BL

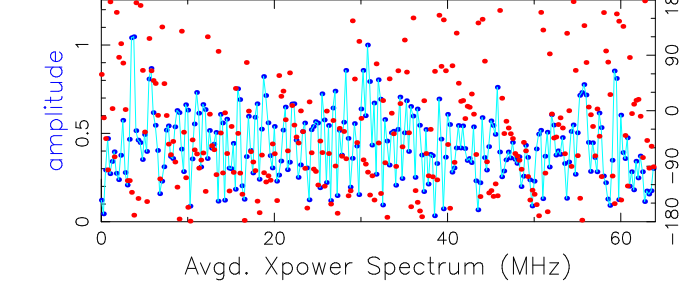
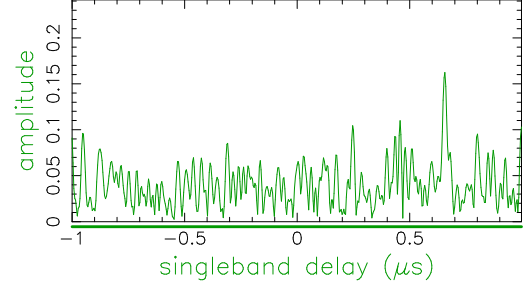
EFLSBERG - KVNPC, fgroup W, pol LR

multiband delay (μs)



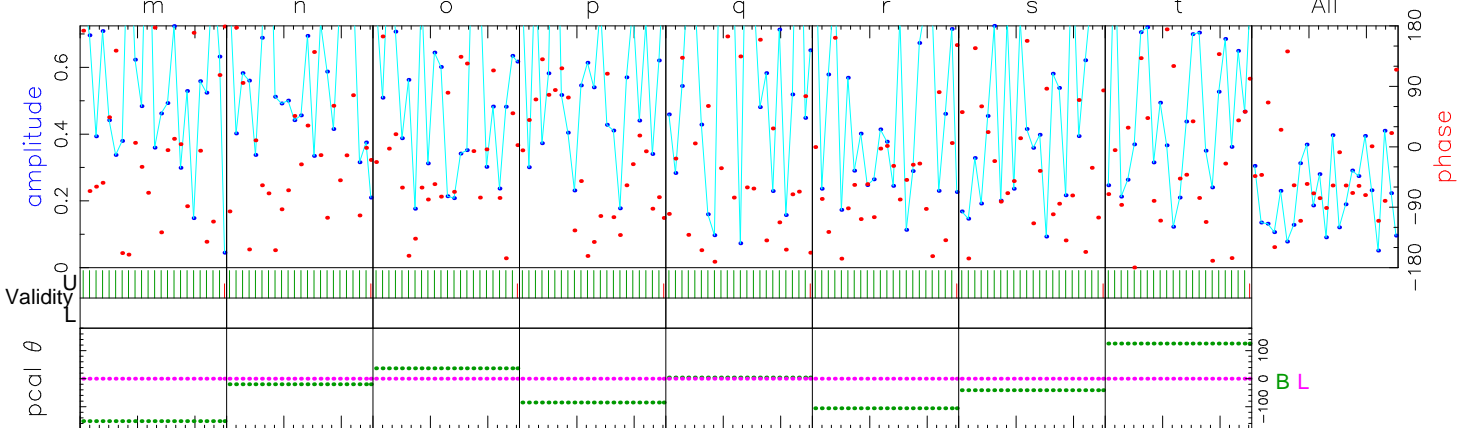
Fringe quality 0

SNR 5.4  
 Int time 149.833  
 Amp 0.241  
 Phase -56.6  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.655377  
 MBD -0.002833  
 Fringe rate (Hz) 0.917671  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105523  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-81.5	-41.2	-34.5	-2.2	-88.3	-72.1	-60.3	1.3	Phase	-56.6
	0.3	0.3	0.3	0.1	0.4	0.3	0.3	0.1	Ampl.	0.2
	66.2	459.4	105.5	14.7	235.0	480.2	40.0	363.6	Sbd box	424.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
B:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:L	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-5.25711450415E+03		Apriori delay (usec)		-5.25776792149E+03		Resid mbdelay (usec)		-2.83266E-03	+/- 2.0E-04
Sband delay (usec)	-5.25711254449E+03		Apriori clock (usec)		-1.0032734E+01		Resid sbdelay (usec)		6.55377E-01	+/- 1.6E-03
Phase delay (usec)	-5.25776792331E+03		Apriori clockrate (us/s)		7.2519998E-06		Resid phdelay (usec)		-1.82552E-06	+/- 6.8E-07
Delay rate (us/s)	-2.55344270443E-01		Apriori rate (us/s)		-2.55354923689E-01		Resid rate (us/s)		1.06532E-05	+/- 7.8E-09
Total phase (deg)			Apriori accel (us/s/s)		4.51459112973E-05		Resid phase (deg)		-56.6	+/- 21.0

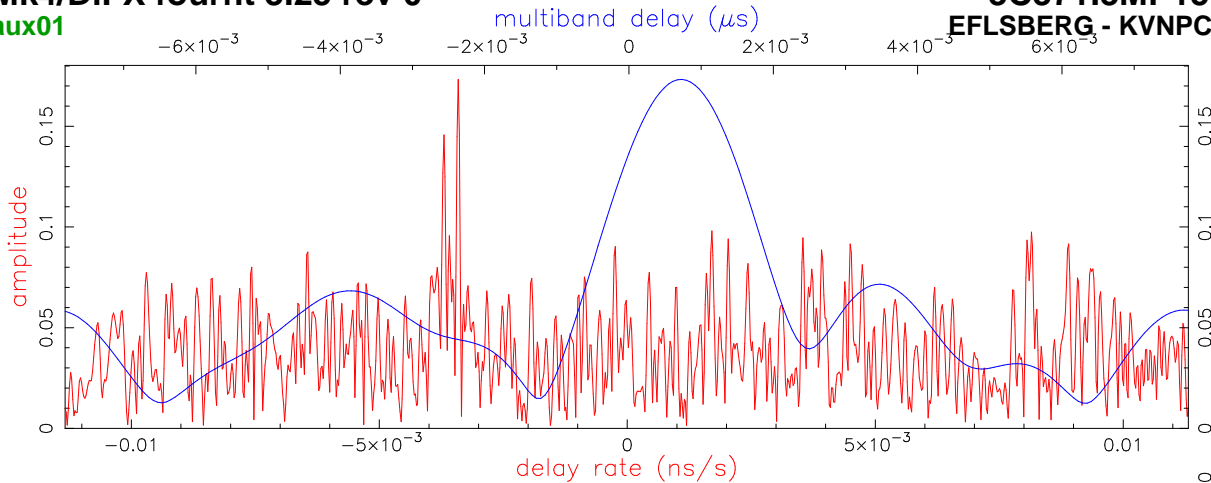
ph/seg (deg) RMS Theor. Amplitude 0.241 +/- 0.044 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 63.9 50.4 Search (1024X32) 0.159 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 76.2 88.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.6 29.7 Inc. seg. avg. 0.237 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 39.1 51.9 Inc. frq. avg. 0.239 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 B: az 4.0 el 30.6 pa -7.6 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 4361.914 10094.409 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//BL...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//BL.W.89.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

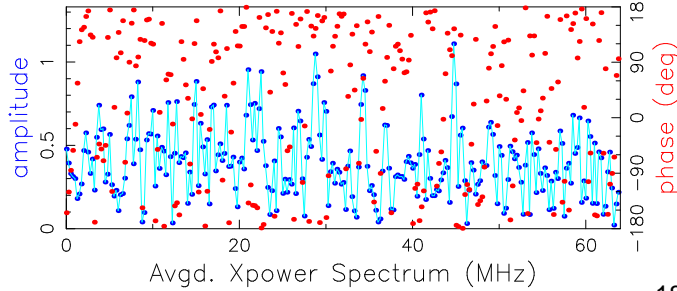
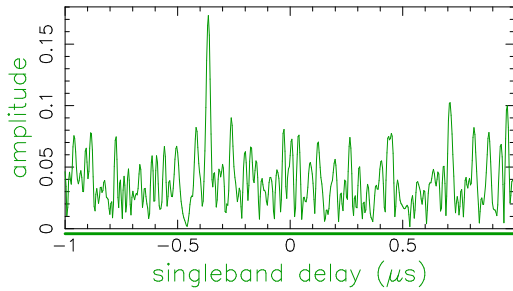
3C371.3MP15Q, No0901, BL

EFLSBERG - KVNPC, fgroup W, pol RL



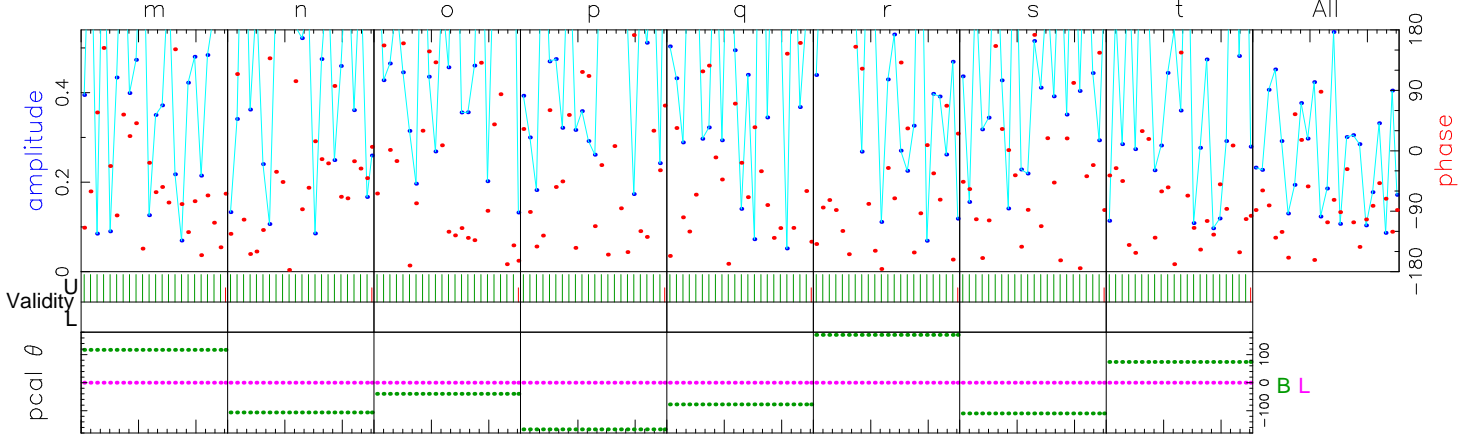
Fringe quality 0

SNR 5.8  
 Int time 149.833  
 Amp 0.180  
 Phase -90.2  
 PFD 5.4e-01  
 Delays (us)  
 SBD -0.363903  
 MBD 0.000712  
 Fringe rate (Hz)  
 -0.294818  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105525  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.8	-68.8	-147.4	-59.9	-95.2	-103.7	-82.8	-75.5	Phase	-90.2
	0.2	0.2	0.1	0.1	0.3	0.3	0.1	0.2	Ampl.	0.2
	176.8	346.6	432.5	496.0	306.9	163.4	24.8	505.3	Sbd box	163.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
B:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:L	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.25812658408E+03	Apriori delay (usec)	-5.25776792149E+03	Resid mbdelay (usec)	7.12410E-04	+/-	1.9E-04
Sband delay (usec)	-5.25813182449E+03	Apriori clock (usec)	-1.0032734E+01	Resid sbdelay (usec)	-3.63903E-01	+/-	1.5E-03
Phase delay (usec)	-5.25776792440E+03	Apriori clockrate (us/s)	7.2519998E-06	Resid phdelay (usec)	-2.90733E-06	+/-	6.4E-07
Delay rate (us/s)	-2.55358346229E-01	Apriori rate (us/s)	-2.55354923689E-01	Resid rate (us/s)	-3.42254E-06	+/-	7.3E-09
Total phase (deg)	-2.7	Apriori accel (us/s/s)	4.51459112973E-05	Resid phase (deg)	-90.2	+/-	19.7

ph/seg (deg)	63.1	Theor.	47.3	Amplitude	0.180 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	90.0	Search (1024X32)	0.167	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.2	Inc. seg. avg.	0.209	Inc. frq. avg.	0.171	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	44.5	Inc. frq. avg.	0.171	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
B: az 4.0 el 30.6 pa -7.6		L: az 23.1 el 48.9 pa -116.3		u,v (fr/asec) 4361.914 10094.409				ion window (TEC)	0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//BL...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//BL.W.95.3MP15Q



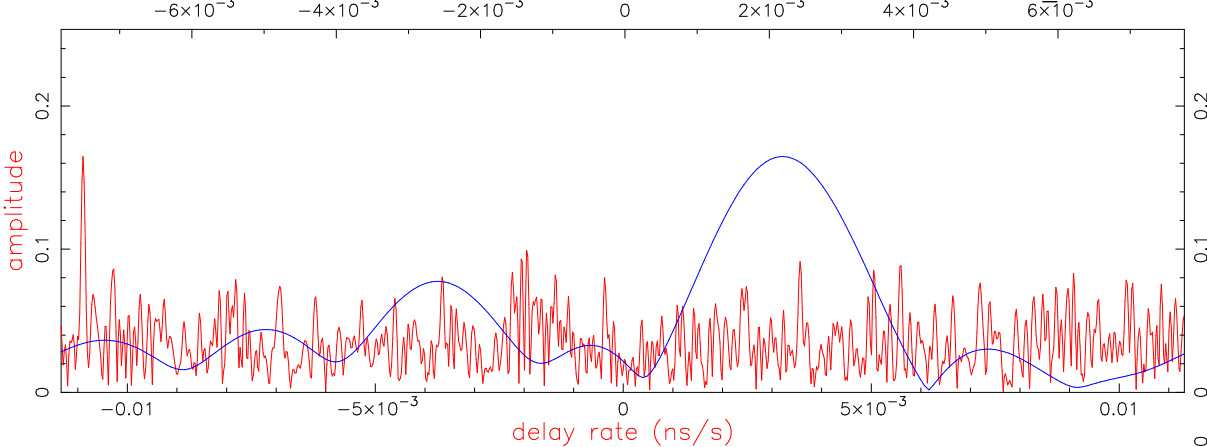
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fL

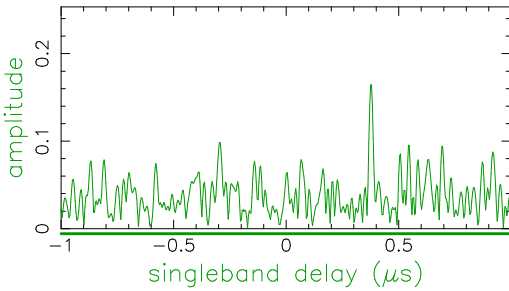
VLBA\_FD - KVNPC, fgroup W, pol LL

multiband delay ( $\mu$ s)

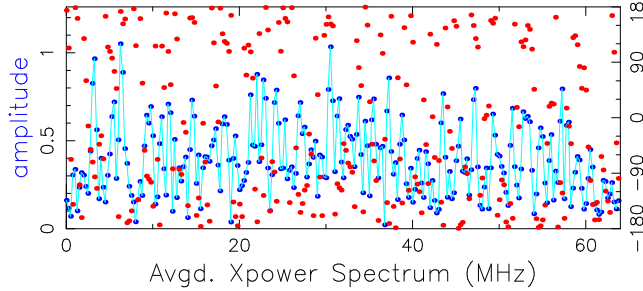


Fringe quality 0

SNR 5.6  
 Int time 149.848  
 Amp 0.253  
 Phase -168.5  
 PFD 9.2e-01  
 Delays (us)  
 SBD 0.377077  
 MBD 0.002158  
 Fringe rate (Hz)  
 -0.940100  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

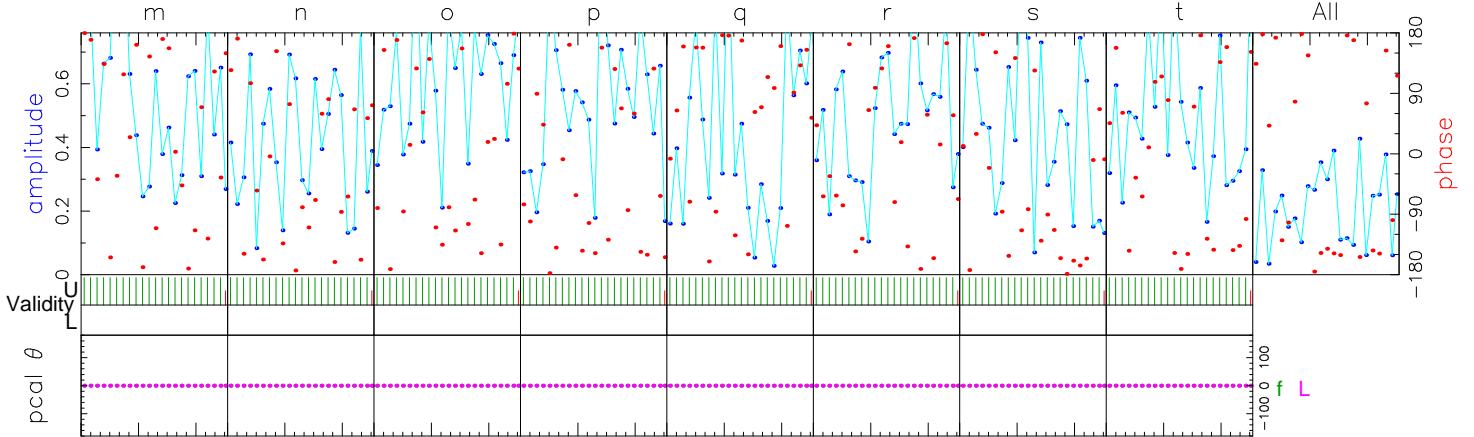


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105533  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-172.2	170.9	-166.1	-149.6	172.0	-172.2	-139.8	168.9	Phase	-168.5
	0.3	0.1	0.3	0.3	0.3	0.2	0.4	0.3	Ampl.	0.2
	433.6	420.2	374.7	134.4	280.2	194.8	240.8	34.4	Sbd box	353.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
f	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-4.69221695025E+03	Apriori delay (usec)	-4.69259410836E+03	Resid mbdelay (usec)	2.15811E-03	+/-	1.9E-04
Sband delay (usec)	-4.69221703086E+03	Apriori clock (usec)	2.5425074E+01	Resid sbdelay (usec)	3.77077E-01	+/-	1.5E-03
Phase delay (usec)	-4.69259411379E+03	Apriori clockrate (us/s)	7.4917589E-06	Resid phdelay (usec)	-5.43384E-06	+/-	6.6E-07
Delay rate (us/s)	-7.69659209749E-01	Apriori rate (us/s)	-7.69648296119E-01	Resid rate (us/s)	-1.09136E-05	+/-	7.6E-09
Total phase (deg)	-346.4	Apriori accel (us/s/s)	1.45518231532E-05	Resid phase (deg)	-168.5	+/-	20.5

ph/seg (deg) 57.4 49.1 Search (1024X32) 0.163 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.5 85.6 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.5 28.9 Inc. seg. avg. 0.234 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 28.1 50.5 Inc. frq. avg. 0.233 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 f: az 336.4 el 32.3 pa 88.6 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 12813.438 2654.292 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//fL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//fL.W.122.3MP15Q

# Mk4/DiFX fourfit 3.25 rev 0

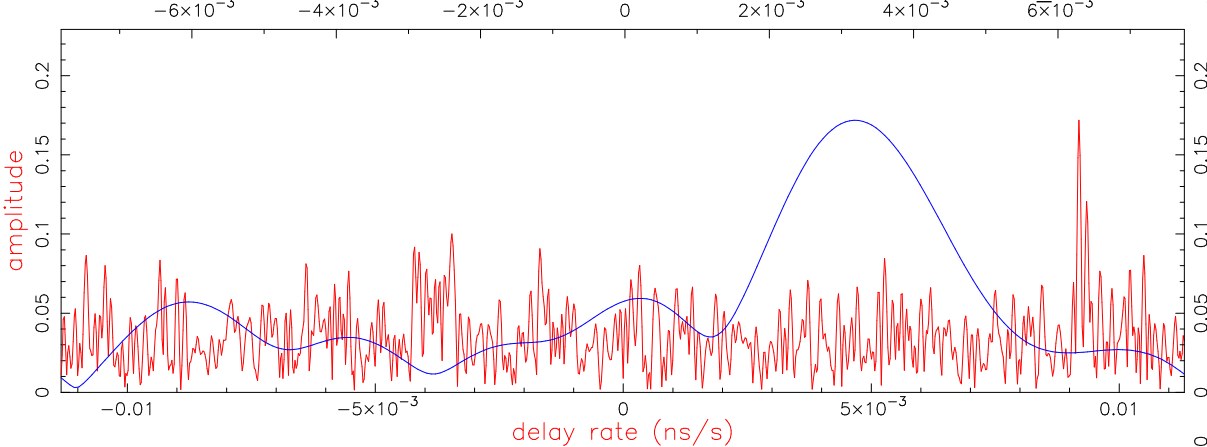
aux01

# 3C371.3MP15Q, No0901, fL

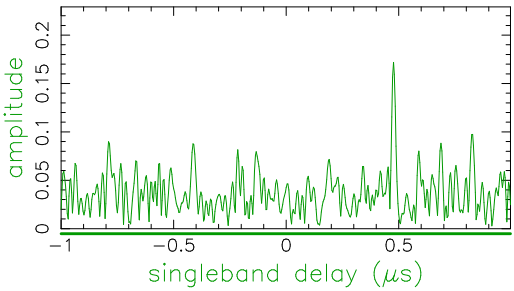
VLBA\_FD- KVNPC, fgroup W, pol RR

multiband delay ( $\mu$ s)

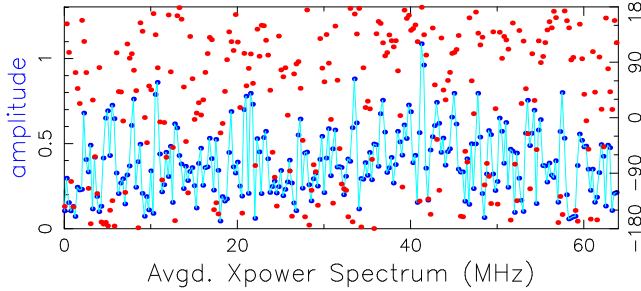
Fringe quality 0



SNR 5.8  
 Int time 149.848  
 Amp 0.229  
 Phase -173.3  
 PFD 6.6e-01  
 Delays (us)  
 SBD 0.476722  
 MBD 0.003187  
 Fringe rate (Hz) 0.793435  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

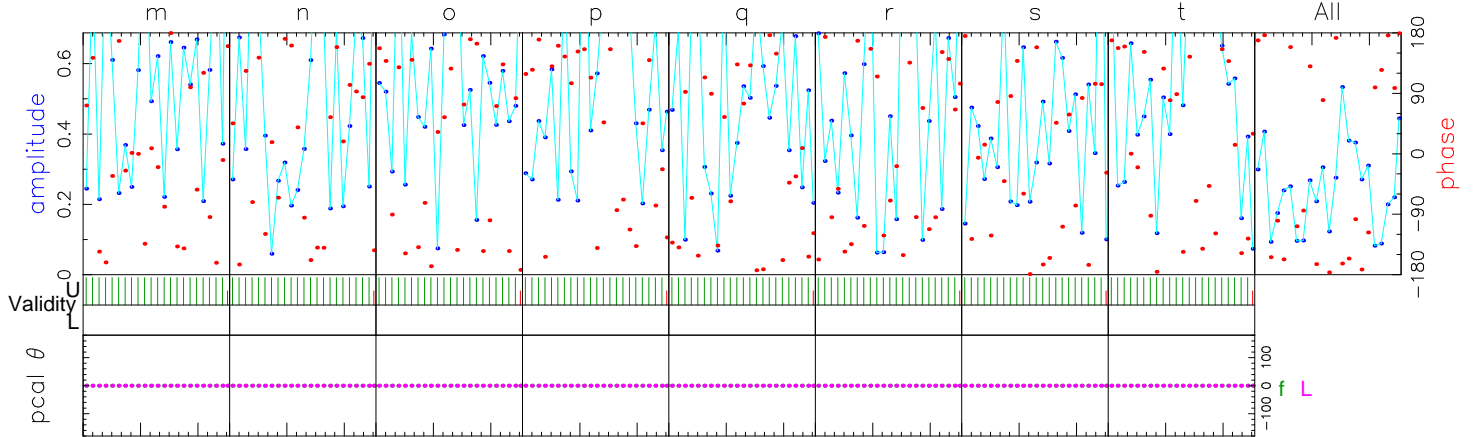


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105536  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-134.7	-179.8	161.6	-179.2	-169.0	-154.2	167.4	-176.2	Phase	-173.3		
	0.2	0.3	0.4	0.3	0.2	0.3	0.0	0.2	Ampl.	0.2		
	502.1	26.8	320.4	312.2	26.4	316.2	136.3	201.1	Sbd box	379.0		
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used			
f	0	0	0	0	0	0	0	0	PC freqs			
L	0	0	60000	0	0	0	4000	0	PC freqs			
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC			
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
L	1000	1000	1000	1000	1000	1000	1000	1000				
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	-4.69212217159E+03		Apriori delay (usec)		-4.69259410836E+03		Resid mbdelay (usec)		3.18677E-03	+/- 1.9E-04		
Sband delay (usec)	-4.69211738661E+03		Apriori clock (usec)		2.5425074E+01		Resid sbdelay (usec)		4.76722E-01	+/- 1.5E-03		
Phase delay (usec)	-4.69259411395E+03		Apriori clockrate (us/s)		7.4917589E-06		Resid phdelay (usec)		-5.58836E-06	+/- 6.4E-07		
Delay rate (us/s)	-7.69639085122E-01		Apriori rate (us/s)		-7.69648296119E-01		Resid rate (us/s)		9.21100E-06	+/- 7.4E-09		
Total phase (deg)			Apriori accel (us/s/s)		1.45518231532E-05		Resid phase (deg)		-173.3	+/- 19.9		
RMS	53.0	47.8	Amplitude		0.229 +/- 0.040		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	53.0	47.8	Search (1024X32)		0.171		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000		
amp/seg (%)	81.6	83.4	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	22.2	28.2	Inc. seg. avg.		0.243		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011 0.011		
amp/frq (%)	43.8	49.2	Inc. frq. avg.		0.216		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
f: az 336.4 el 32.3 pa 88.6	L: az 23.1 el 48.9 pa -116.3		u,v (fr/asec)		12813.438 2654.292				simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//fL..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//fL.W.131.3MP15Q									

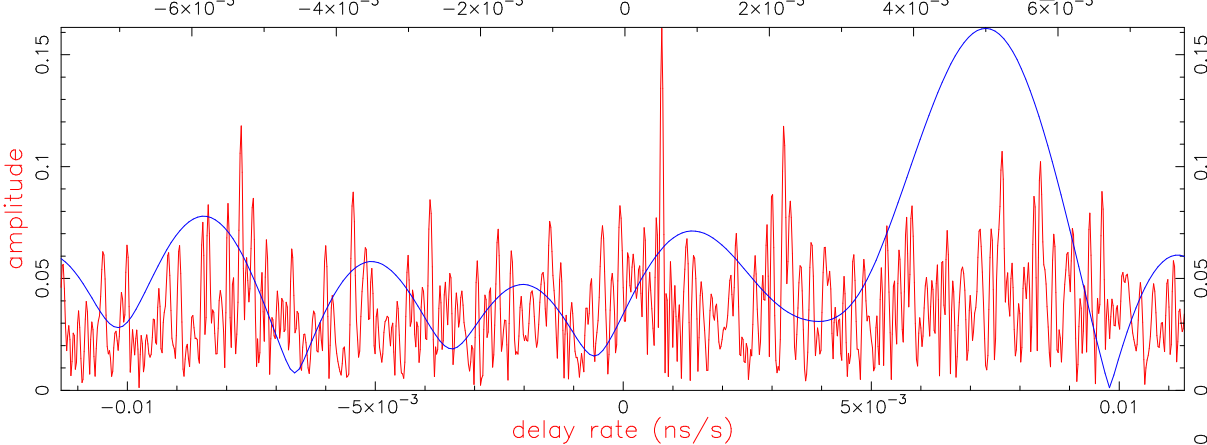
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fL

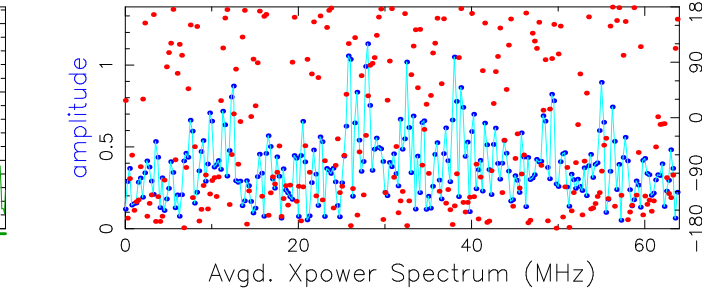
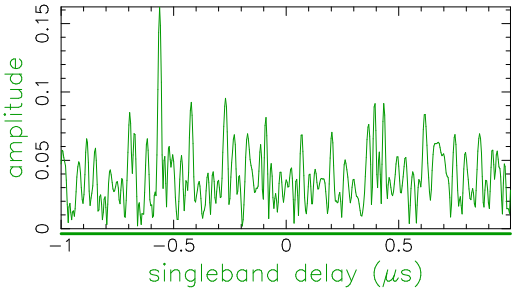
VLBA\_FD - KVNPC, fgroup W, pol LR

multiband delay ( $\mu$ s)



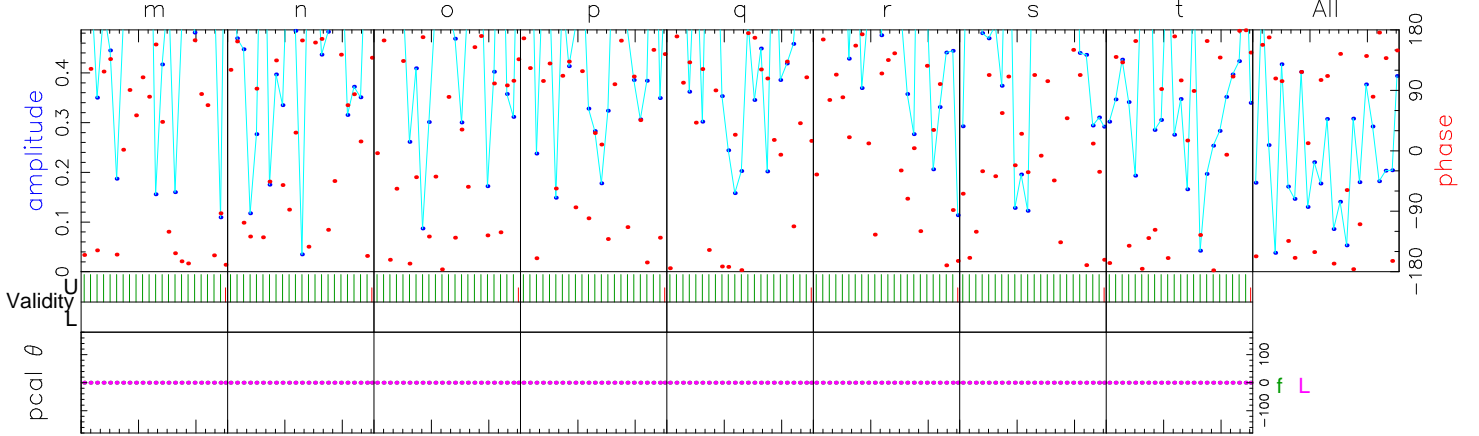
Fringe quality 0

SNR 5.4  
 Int time 149.848  
 Amp 0.162  
 Phase 151.4  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.562154  
 MBD 0.005004  
 Fringe rate (Hz)  
 0.066790  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105538  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
f	0	0	0	0	0	0	0	0		
L	0	0	60000	0	0	0	4000	0		
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:L	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		
L	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) -4.69315160393E+03 Apriori delay (usec) -4.69259410836E+03 Resid mbdelay (usec) 5.00443E-03 +/- 2.0E-04  
 Sband delay (usec) -4.69315626211E+03 Apriori clock (usec) 2.5425074E+01 Resid sbdelay (usec) -5.62154E-01 +/- 1.6E-03  
 Phase delay (usec) -4.69259410348E+03 Apriori clockrate (us/s) 7.4917589E-06 Resid phdelay (usec) 4.88067E-06 +/- 6.8E-07  
 Delay rate (us/s) -7.69647520757E-01 Apriori rate (us/s) -7.69648296119E-01 Resid rate (us/s) 7.75362E-07 +/- 7.9E-09  
 Total phase (deg) -26.5 Apriori accel (us/s/s) 1.45518231532E-05 Resid phase (deg) 151.4 +/- 21.1

ph/seg (deg) 61.9 50.7 Search (1024X32) 0.161 Pcd mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 89.5 88.5 Interp. 0.000 Pcd rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.1 29.9 Inc. seg. avg. 0.168 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.8 52.2 Inc. frq. avg. 0.159 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us 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

f: az 336.4 el 32.3 pa 88.6 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 12813.438 2654.292 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//fL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//fL.W.139.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

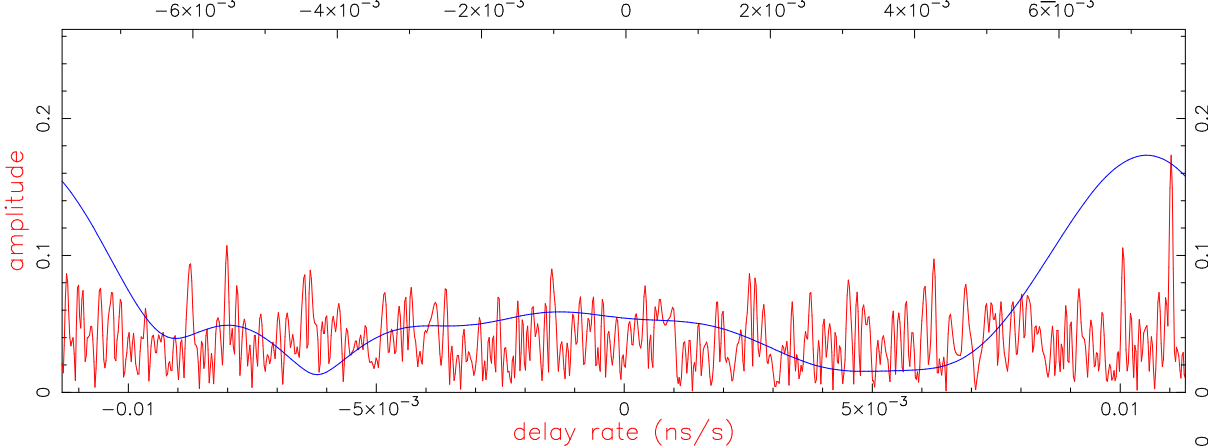
aux01

3C371.3MP15Q, No0901, fL

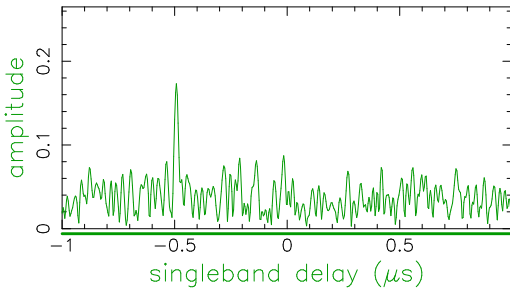
VLBA\_FD - KVNPC, fgroup W, pol RL

multiband delay ( $\mu$ s)

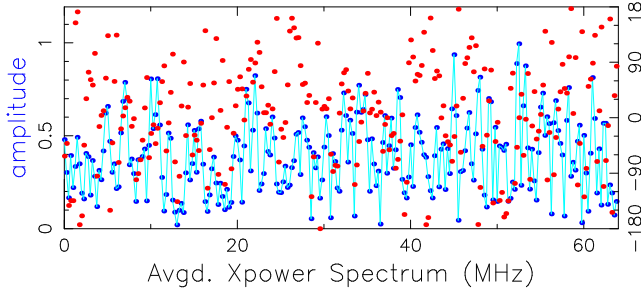
Fringe quality 0



SNR 5.8  
 Int time 149.848  
 Amp 0.265  
 Phase 19.0  
 PFD 5.7e-01  
 Delays (us)  
 SBD -0.492428  
 MBD 0.007216  
 Fringe rate (Hz)  
 0.950738  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

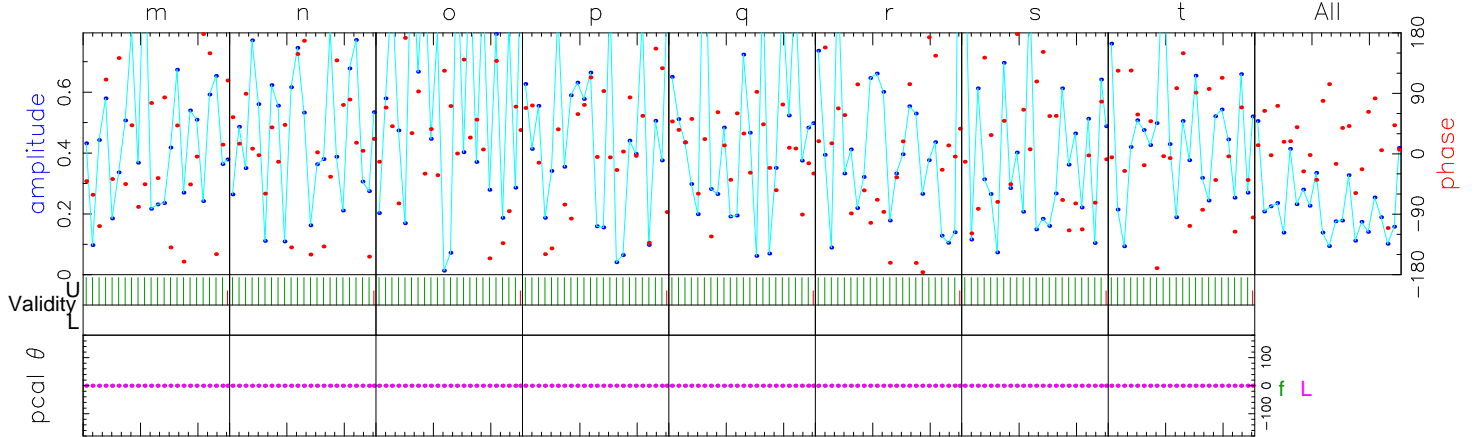


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105540  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-27.0	29.2	20.6	46.9	18.6	13.9	-9.0	29.1	Phase	19.0	
	0.1	0.2	0.5	0.3	0.6	0.1	0.2	0.2	Ampl.	0.2	
	490.7	60.9	130.2	464.0	132.3	173.4	409.7	189.8	Sbd box	130.9	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
f	0	0	0	0	0	0	0	0	PC freqs		
L	0	0	60000	0	0	0	4000	0	PC freqs		
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
L	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	-4.69308689204E+03		Apriori delay (usec)		-4.69259410836E+03		Resid mbdelay (usec)		7.21632E-03	+/- 1.9E-04	
Sband delay (usec)	-4.69308653636E+03		Apriori clock (usec)		2.5425074E+01		Resid sbdelay (usec)		-4.92428E-01	+/- 1.5E-03	
Phase delay (usec)	-4.69259410775E+03		Apriori clockrate (us/s)		7.4917589E-06		Resid phdelay (usec)		6.12273E-07	+/- 6.4E-07	
Delay rate (us/s)	-7.69637258988E-01		Apriori rate (us/s)		-7.69648296119E-01		Resid rate (us/s)		1.10371E-05	+/- 7.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		1.45518231532E-05		Resid phase (deg)		19.0	+/- 19.8	
	RMS	Theor.	Amplitude	0.265 +/- 0.046		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	49.7	47.4	Search (1024X32)	0.167		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	66.6	82.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	25.6	28.0	Inc. seg. avg.	0.256		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	57.9	48.8	Inc. frq. avg.	0.249		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
f: az 336.4 el 32.3 pa 88.6	L: az 23.1 el 48.9 pa -116.3		u,v (fr/asec) 12813.438 2654.292						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//fL..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//fL.W.150.3MP15Q								

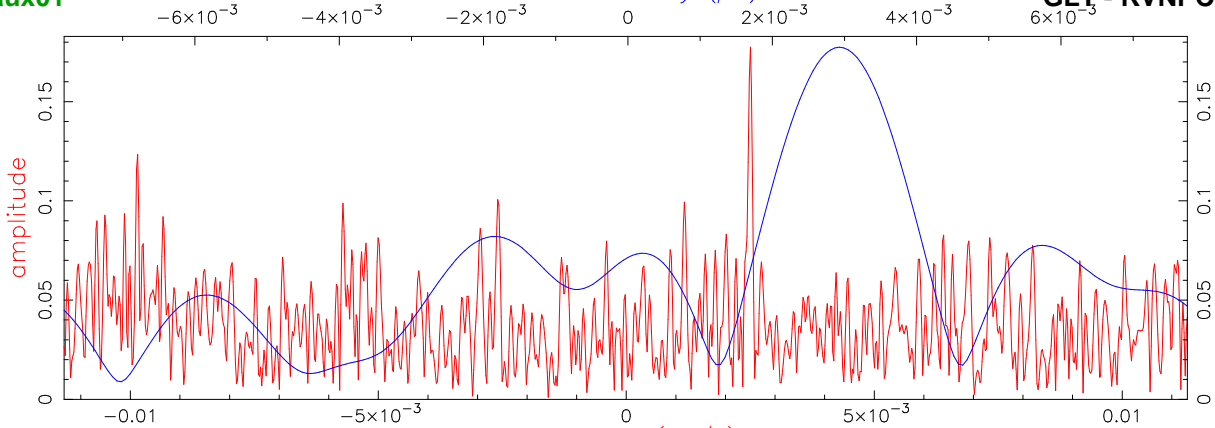
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gL

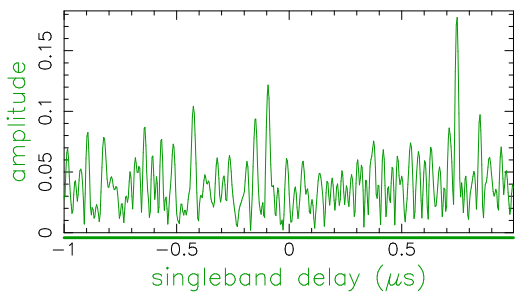
GLT - KVNPC, fgroup W, pol LL

multiband delay ( $\mu$ s)

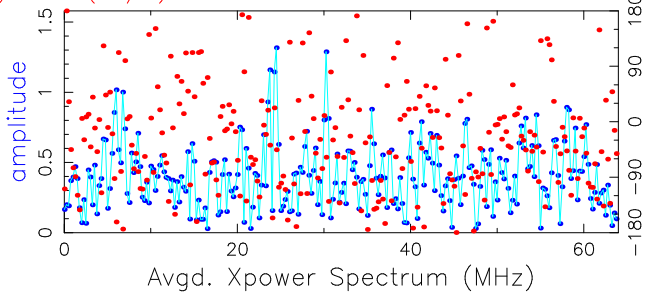


Fringe quality 0

SNR 6.0  
 Int time 149.840  
 Amp 0.183  
 Phase -140.5  
 PFD 2.2e-01  
 Delays (us)  
 SBD 0.744844  
 MBD 0.002931  
 Fringe rate (Hz)  
 0.214922  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

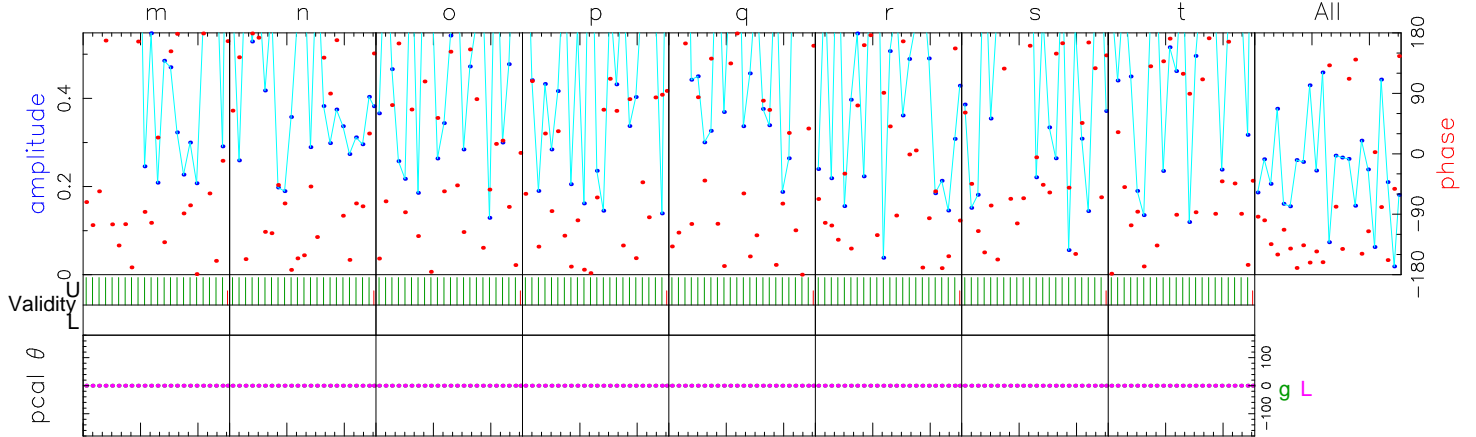


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105551  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-128.9	-152.4	-177.8	-134.7	-161.0	-123.8	-137.4	-133.1	Phase	-140.5
	0.4	0.2	0.0	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	447.4	263.3	393.3	224.4	234.6	395.6	287.3	78.9	Sbd box	447.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
g	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	

Group delay (usec) (SBD)	2.67037565076E+03	Apriori delay (usec)	2.66963834478E+03	Resid mbdelay (usec)	2.93099E-03	+/-	1.8E-04
Sband delay (usec)	2.67038318903E+03	Apriori clock (usec)	2.5831570E+01	Resid sbdelay (usec)	7.44844E-01	+/-	1.4E-03
Phase delay (usec)	2.66963834025E+03	Apriori clockrate (us/s)	7.5214999E-06	Resid phdelay (usec)	-4.53009E-06	+/-	6.2E-07
Delay rate (us/s)	-4.29926220209E-01	Apriori rate (us/s)	-4.29928715238E-01	Resid rate (us/s)	2.49503E-06	+/-	7.1E-09
Total phase (deg)	-133.6	Apriori accel (us/s/s)	2.45020437680E-05	Resid phase (deg)	-140.5	+/-	19.1

ph/seg (deg) 56.5 45.8 Search (1024X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.2 79.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.3 27.0 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 55.7 47.1 Inc. frq. avg. 0.168 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 g: az 318.7 el 61.6 pa 26.5 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 7209.565 6264.097 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gL.W.195.3MP15Q

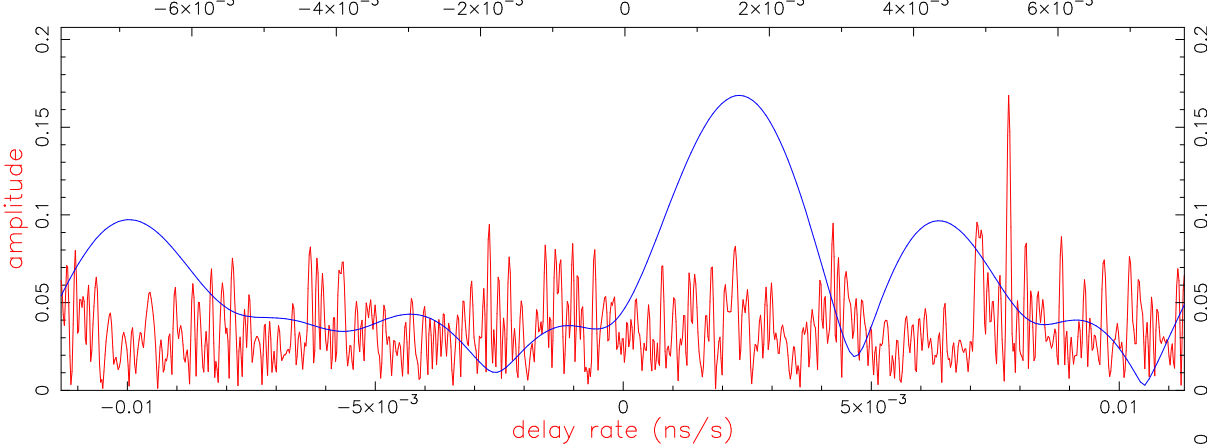
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gL

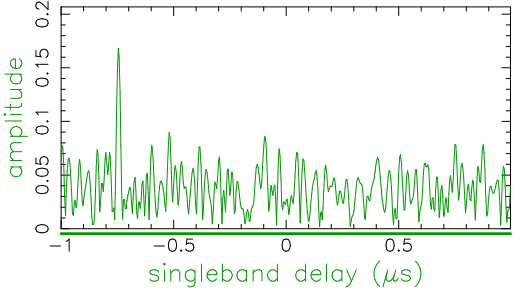
GLT - KVNPC, fgroup W, pol RR

multiband delay ( $\mu$ s)

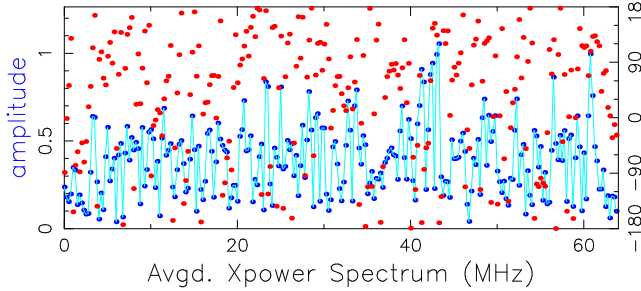


Fringe quality 0

SNR 5.7  
 Int time 149.840  
 Amp 0.207  
 Phase 147.0  
 PFD 8.4e-01  
 Delays (us)  
 SBD -0.745083  
 MBD 0.001592  
 Fringe rate (Hz)  
 0.669630  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

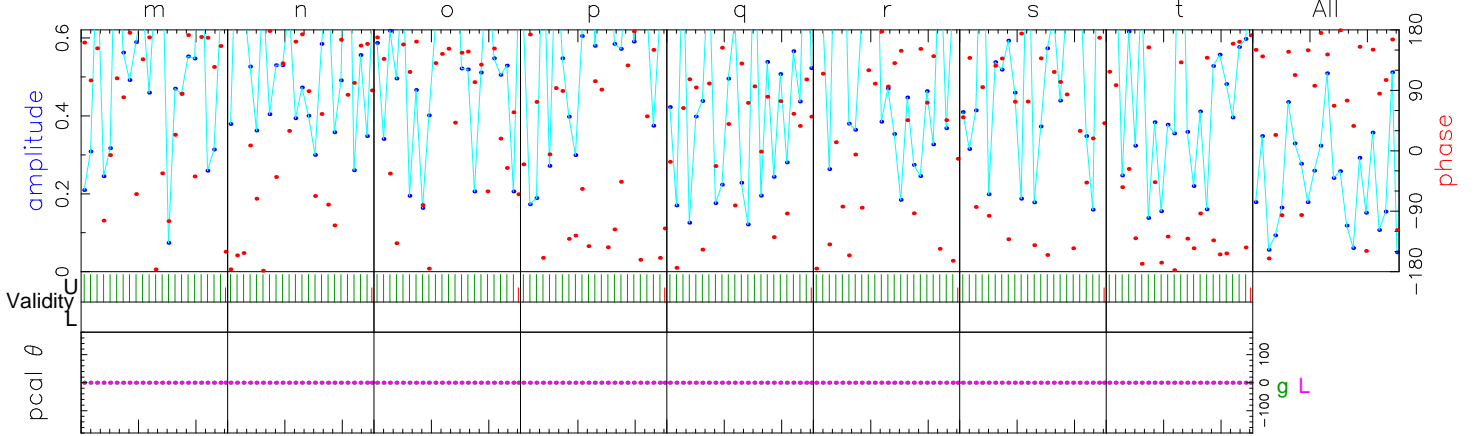


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105555  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
g	0	0	0	0	0	0	0	0		
L	0	0	60000	0	0	0	4000	0		
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:L	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		
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	2.66888993634E+03								1.59157E-03	+/- 1.9E-04
Sband delay (usec)	2.66889326153E+03								-7.45083E-01	+/- 1.5E-03
Phase delay (usec)	2.66963834952E+03								4.73955E-06	+/- 6.5E-07
Delay rate (us/s)	-4.29920941495E-01								7.77374E-06	+/- 7.5E-09
Total phase (deg)			153.9						147.0	+/- 20.2
ph/seg (deg)	63.1	48.5								
amp/seg (%)	89.2	84.7								
ph/frq (deg)	37.9	28.6								
amp/frq (%)	31.2	49.9								
g: az 318.7 el 61.6 pa 26.5	L: az 23.1 el 48.9 pa -116.3		u,v (fr/asec) 7209.565 6264.097		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//gL..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//gL.W.204.3MP15Q		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		sb window (us) -1.000 1.000	
						Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		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 3.25 rev 0

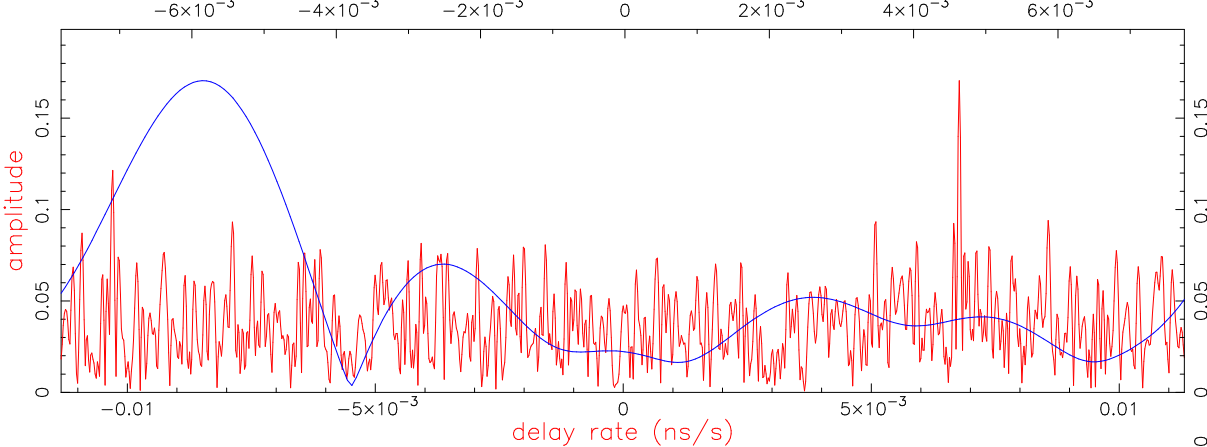
aux01

3C371.3MP15Q, No0901, gL

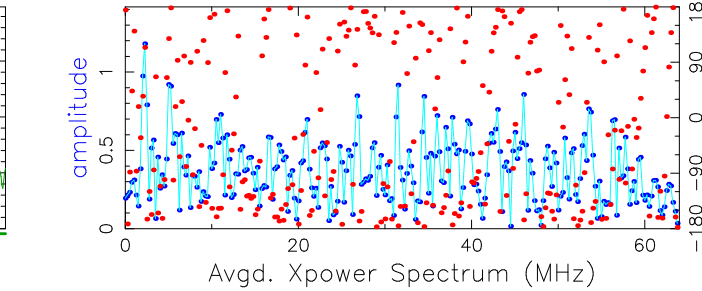
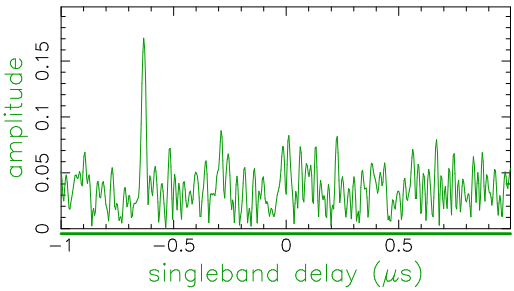
GLT - KVNPC, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

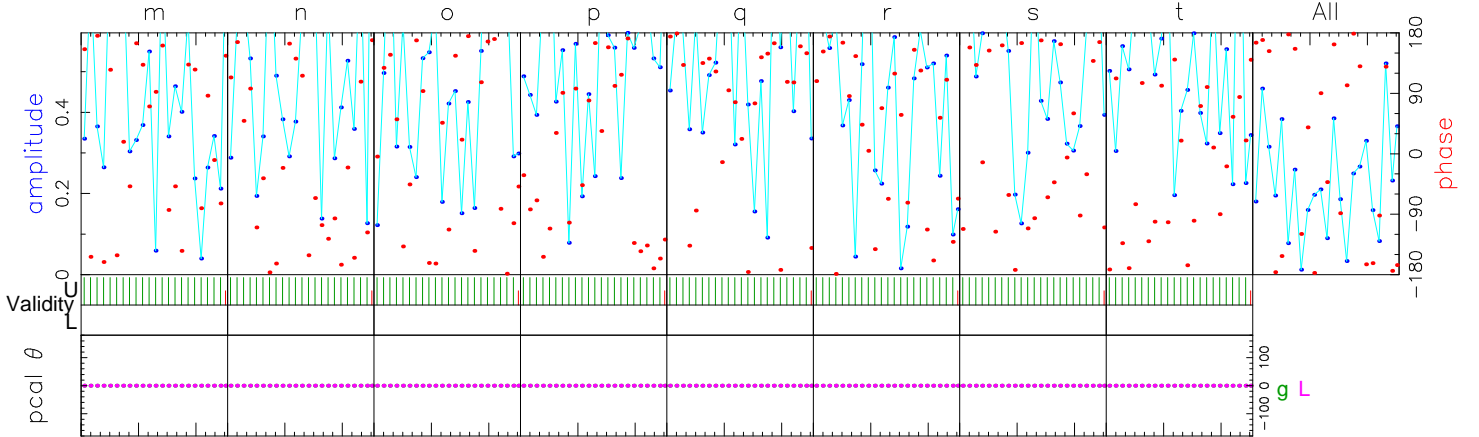


SNR 5.7  
 Int time 149.840  
 Amp 0.199  
 Phase 169.4  
 PFD 7.5e-01  
 Delays (us)  
 SBD -0.632466  
 MBD -0.005846  
 Fringe rate (Hz)  
 0.584488  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105558  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
g	0	0	0	0	0	0	0	0		
L	0	0	60000	0	0	0	4000	0		
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
g:L	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		
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	2.66900749843E+03	Apriori delay (usec)	2.66963834478E+03	Resid mbdelay (usec)	-5.84635E-03	+/-	1.9E-04
Sband delay (usec)	2.66900587853E+03	Apriori clock (usec)	2.5831570E+01	Resid sbdelay (usec)	-6.32466E-01	+/-	1.5E-03
Phase delay (usec)	2.66963835024E+03	Apriori clockrate (us/s)	7.5214999E-06	Resid phdelay (usec)	5.46408E-06	+/-	6.5E-07
Delay rate (us/s)	-4.29921929909E-01	Apriori rate (us/s)	-4.29928715238E-01	Resid rate (us/s)	6.78533E-06	+/-	7.5E-09
Total phase (deg)	176.4	Apriori accel (us/s/s)	2.45020437680E-05	Resid phase (deg)	169.4	+/-	20.1

ph/seg (deg)	60.6	RMS	48.1	Theor.	48.1	Amplitude	0.199 +/- 0.035	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	83.7	Search (1024X32)	0.164	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	27.9	Inc. seg. avg.	0.198	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	43.8	Inc. frq. avg.	0.194	u, v (fr/asec)	7209.565 6264.097	simultaneous interpolator							

g: az 318.7 el 61.6 pa 26.5 L: az 23.1 el 48.9 pa -116.3 u, v (fr/asec) 7209.565 6264.097 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gL.W.216.3MP15Q

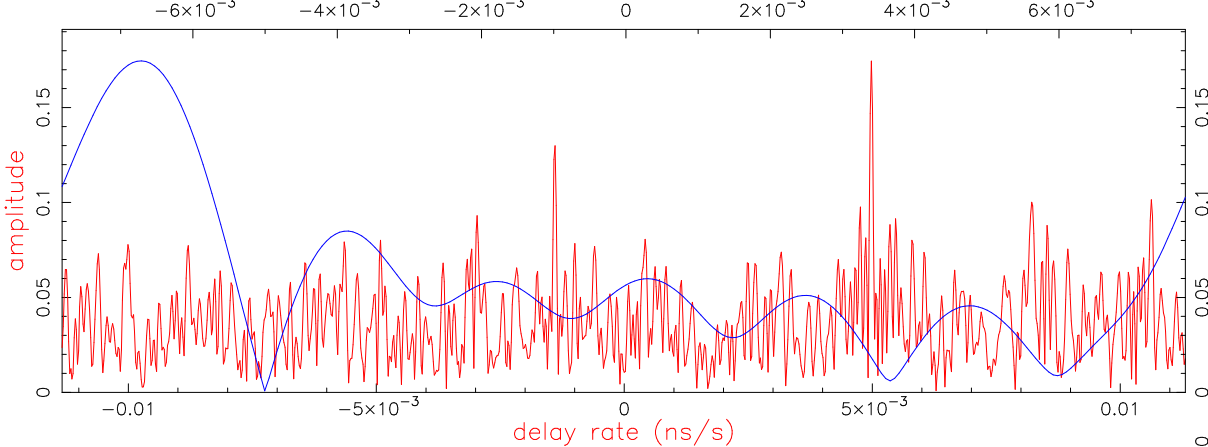
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gL

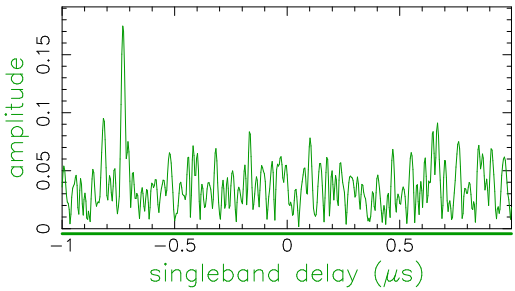
GLT - KVNPC, fgroup W, pol RL

multiband delay ( $\mu$ s)

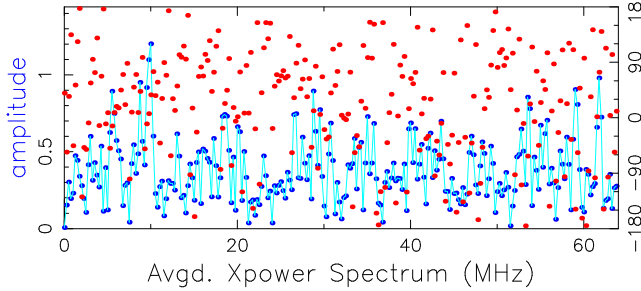


Fringe quality 0

SNR 5.9  
Int time 149.840  
Amp 0.191  
Phase -4.8  
PFD 3.6e-01  
Delays (us)  
SBD -0.729113  
MBD -0.006686  
Fringe rate (Hz)  
0.429305  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

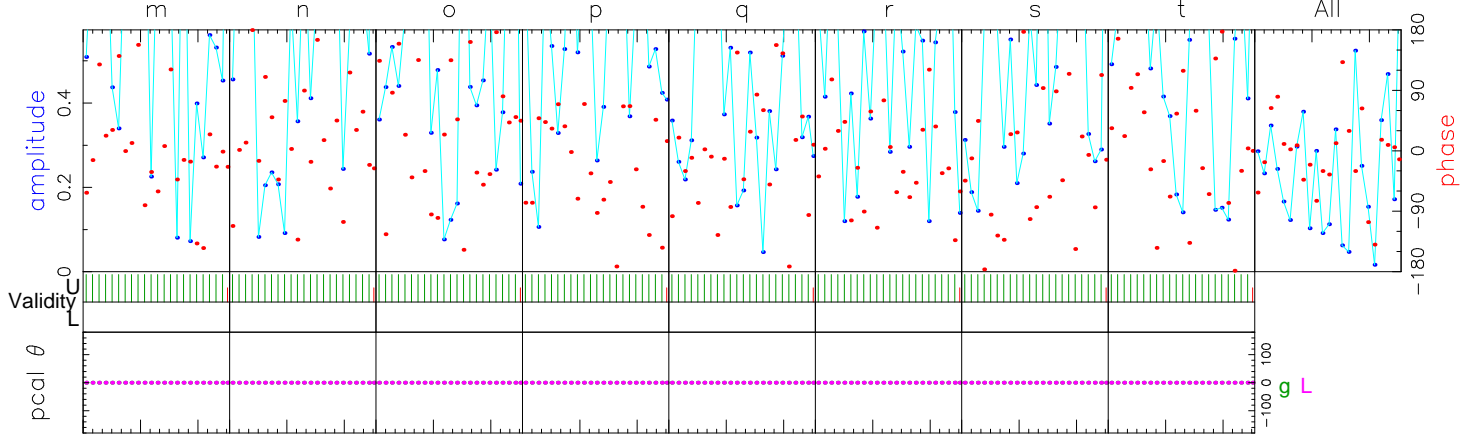


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105600  
2024:113:095956  
RA & Dec (J2000)  
18h06m50.680649s  
+69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-7.4	21.6	6.2	-14.1	-34.5	-20.4	-29.7	30.9	Phase	-4.8
	0.4	0.3	0.1	0.2	0.2	0.3	0.1	0.2	Ampl.	0.2
	70.7	69.0	271.4	488.1	177.2	363.1	154.7	414.3	Sbd box	70.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
g	0	0	0	0	0	0	0	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
g:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:L	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	
L	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.66891290878E+03 Apriori delay (usec) 2.66963834478E+03 Resid mbdelay (usec) -6.68600E-03 +/- 1.8E-04  
 Sband delay (usec) 2.66890923203E+03 Apriori clock (usec) 2.5831570E+01 Resid sbdelay (usec) -7.29113E-01 +/- 1.5E-03  
 Phase delay (usec) 2.66963834462E+03 Apriori clockrate (us/s) 7.5214999E-06 Resid phdelay (usec) -1.53663E-07 +/- 6.3E-07  
 Delay rate (us/s) -4.29923731430E-01 Apriori rate (us/s) -4.29928715238E-01 Resid rate (us/s) 4.98381E-06 +/- 7.2E-09  
 Total phase (deg) 2.1 Apriori accel (us/s/s) 2.45020437680E-05 Resid phase (deg) -4.8 +/- 19.4

ph/seg (deg) RMS Theor. Amplitude 0.191 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 59.1 46.5 Search (1024X32) 0.169 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 92.2 81.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.6 27.5 Inc. seg. avg. 0.196 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 48.3 47.9 Inc. frq. avg. 0.181 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

g: az 318.7 el 61.6 pa 26.5 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 7209.565 6264.097 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gL.W.226.3MP15Q



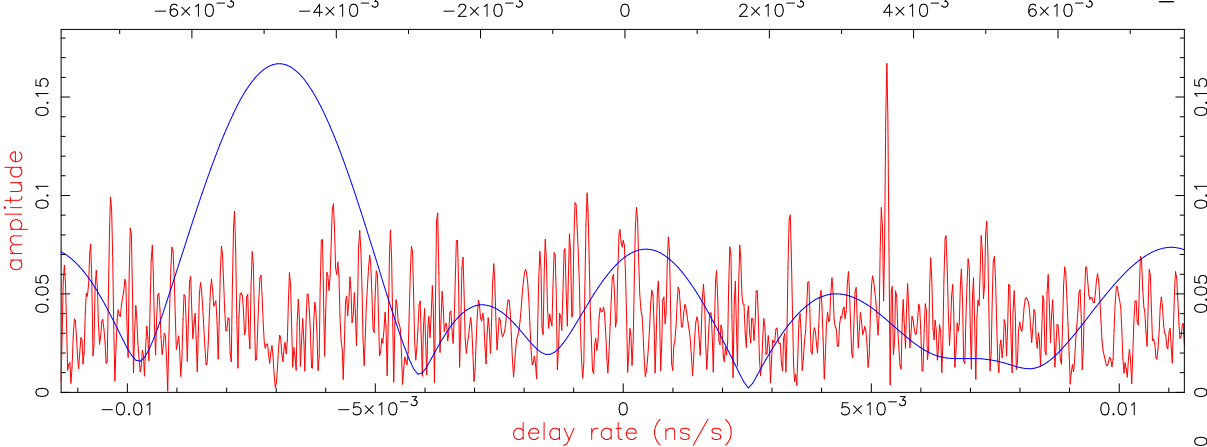
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lk

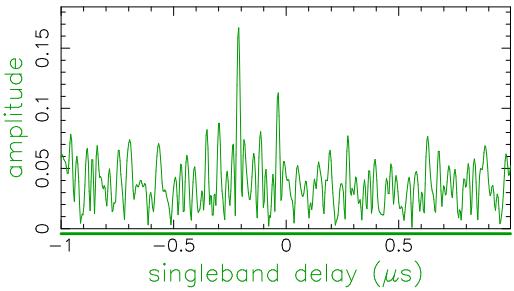
KVNPC - VLBA\_KP, fgroup W, pol LL

multiband delay ( $\mu$ s)

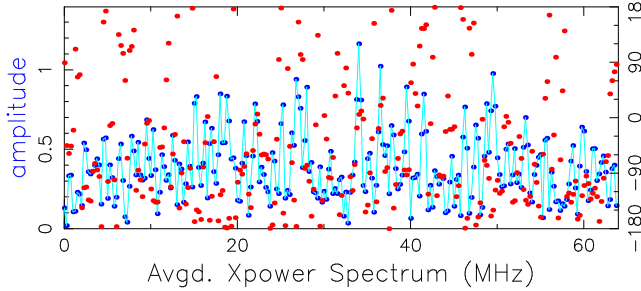


Fringe quality 0

SNR 5.6  
 Int time 149.847  
 Amp 0.184  
 Phase 19.1  
 PFD 8.9e-01  
 Delays (us)  
 SBD -0.211945  
 MBD -0.004799  
 Fringe rate (Hz)  
 0.458313  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

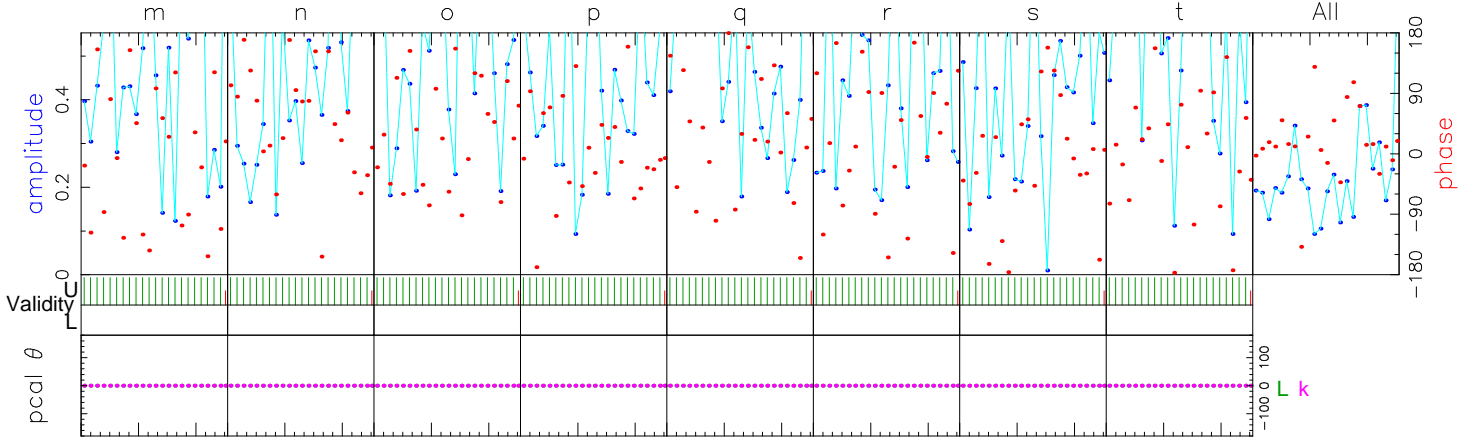


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105604  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-35.4	40.1	26.4	-4.3	24.8	54.2	-4.9	23.2	Phase	19.1
	0.1	0.3	0.2	0.3	0.1	0.2	0.2	0.3	Ampl.	0.2
	241.1	76.8	508.7	11.4	164.3	222.2	65.6	203.4	Sbd box	202.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
k	0	0	0	0	0	0	0	0	PC freqs	
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.50801011108E+03	Apriori delay (usec)	3.50821803469E+03	Resid mbdelay (usec)	-4.79861E-03	+/-	1.9E-04
Sband delay (usec)	3.50800608994E+03	Apriori clock (usec)	-2.5520485E+01	Resid sbdelay (usec)	-2.11945E-01	+/-	1.5E-03
Phase delay (usec)	3.50821803531E+03	Apriori clockrate (us/s)	-7.5937451E-06	Resid phdelay (usec)	6.15696E-07	+/-	6.6E-07
Delay rate (us/s)	7.48328545564E-01	Apriori rate (us/s)	7.48323225004E-01	Resid rate (us/s)	5.32056E-06	+/-	7.6E-09
Total phase (deg)	202.1	Apriori accel (us/s/s)	-1.03415781153E-05	Resid phase (deg)	19.1	+/-	20.4

ph/seg (deg)	52.7	RMS	48.8	Theor.	0.184 +/- 0.033	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	68.6	Search (1024X32)	0.162	Search	0.162	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.3	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	41.8	Inc. seg. avg.	0.179	Inc. seg. avg.	0.179	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.176	Inc. frq. avg.	0.176	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 k: az 336.1 el 36.1 pa 95.2 u, v (fr/asec) -12448.700 -1819.045 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lk..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lk.W.241.3MP15Q

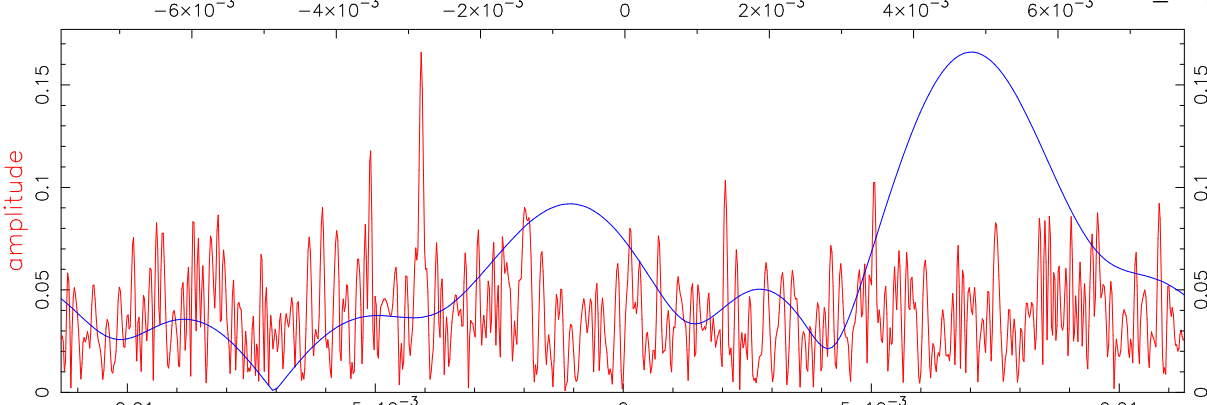
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lk

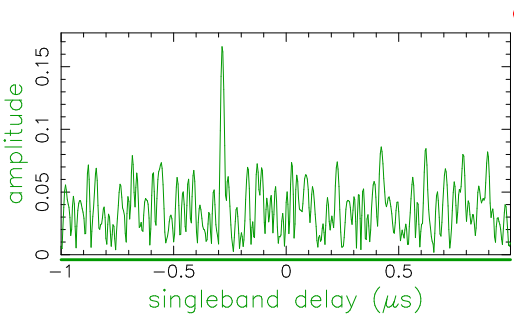
KVNPC - VLBA\_KP, fgroup W, pol RR

multiband delay ( $\mu$ s)

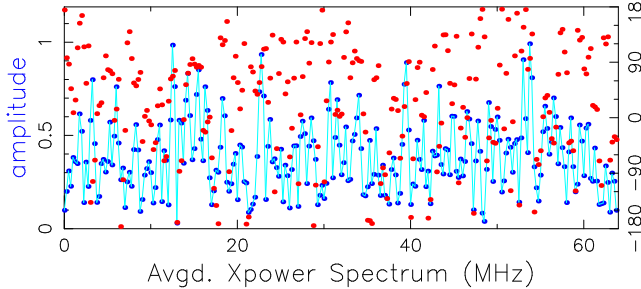


Fringe quality 0

SNR 5.6  
 Int time 149.847  
 Amp 0.177  
 Phase -22.5  
 PFD 9.1e-01  
 Delays (us)  
 SBD -0.283766  
 MBD 0.004767  
 Fringe rate (Hz)  
 -0.351844  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

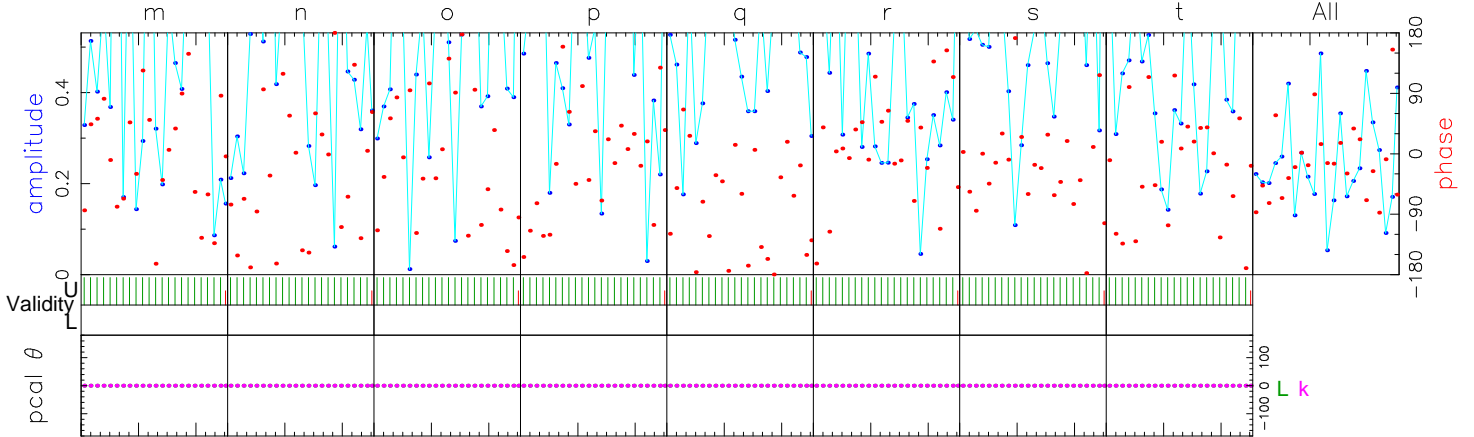


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
k	0	0	0	0	0	0	0	0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	3.50794155139E+03	Apriori delay (usec)	3.50821803469E+03	Resid mbdelay (usec)	4.76670E-03	+/-	1.9E-04
Sband delay (usec)	3.50793426844E+03	Apriori clock (usec)	-2.5520485E+01	Resid sbdelay (usec)	-2.83766E-01	+/-	1.5E-03
Phase delay (usec)	3.50821803396E+03	Apriori clockrate (us/s)	-7.5937451E-06	Resid phdelay (usec)	-7.26592E-07	+/-	6.6E-07
Delay rate (us/s)	7.48319140438E-01	Apriori rate (us/s)	7.48323225004E-01	Resid rate (us/s)	-4.08457E-06	+/-	7.6E-09
Total phase (deg)	160.5	Apriori accel (us/s/s)	-1.03415781153E-05	Resid phase (deg)	-22.5	+/-	20.4

ph/seg (deg)	58.1	Theor.	48.9	Amplitude	0.177 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.0		85.4	Search (1024X32)	0.158	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	29.6		28.9	Inc. seg. avg.	0.190	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	58.9		50.4	Inc. frq. avg.	0.171	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3 k: az 336.1 el 36.1 pa 95.2 u,v (fr/asec) -12448.700 -1819.045 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lk..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lk.W.248.3MP15Q

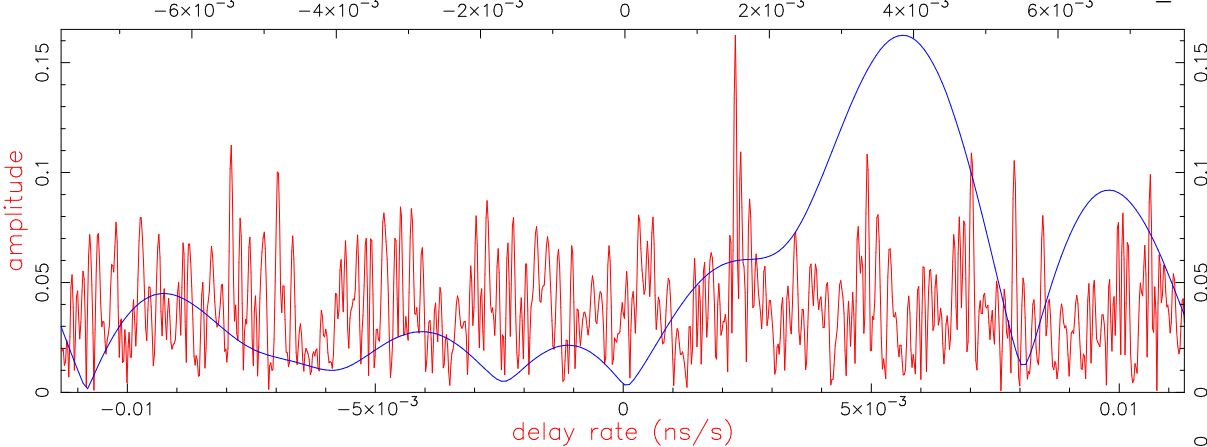
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lk

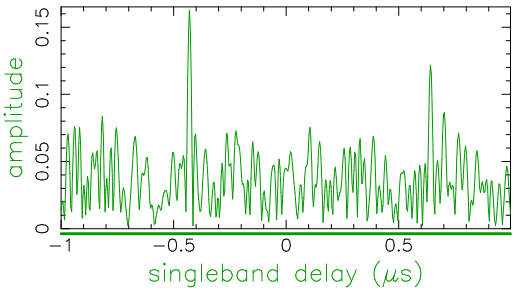
KVNPC - VLBA\_KP, fgroup W, pol LR

multiband delay ( $\mu$ s)

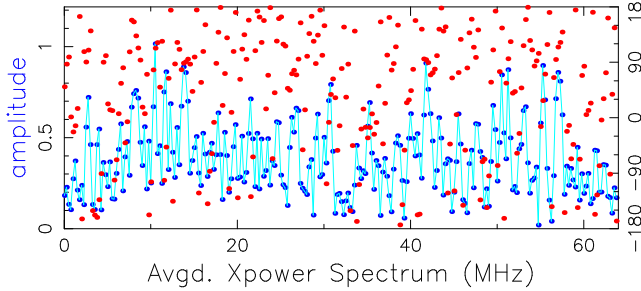


Fringe quality 0

SNR 5.4  
 Int time 149.847  
 Amp 0.165  
 Phase 148.9  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.429661  
 MBD 0.003849  
 Fringe rate (Hz)  
 0.194338  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

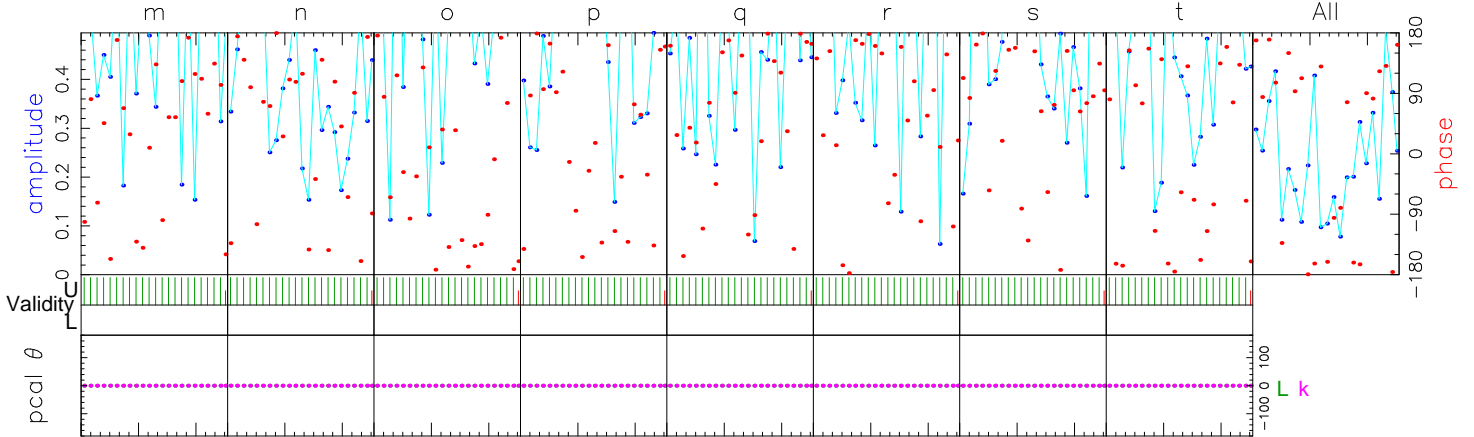


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
k	0	0	0	0	0	0	0	0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	3.50778438385E+03									
Sband delay (usec)	3.50778837394E+03									
Phase delay (usec)	3.50821803949E+03									
Delay rate (us/s)	7.48325481078E-01									
Total phase (deg)			331.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
Data rate(Mb/s): 2048										
nlags: 256 t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

L: az 23.1 el 48.9 pa -116.3 k: az 336.1 el 36.1 pa 95.2 u,v (fr/asec) -12448.700 -1819.045 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lk..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lk.W.261.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

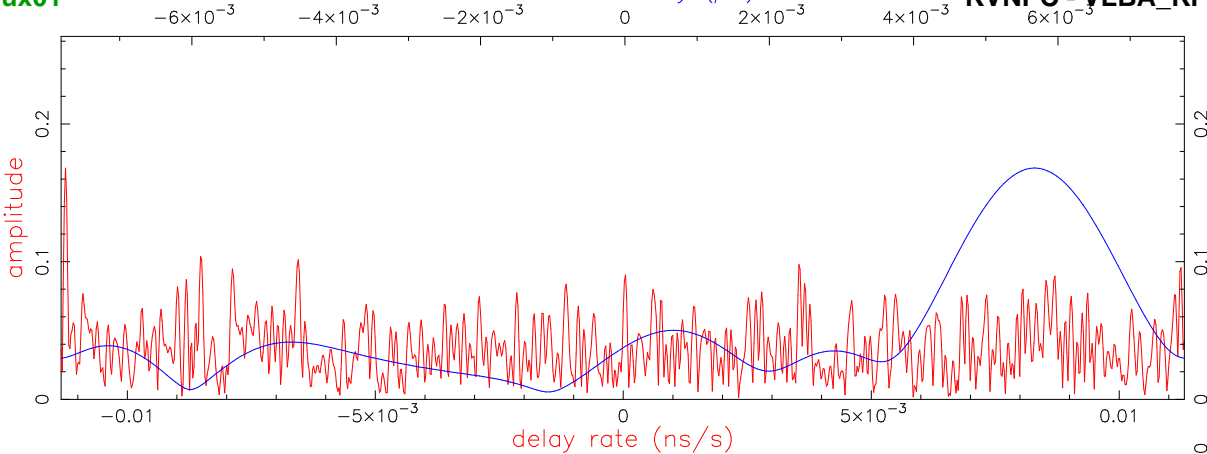
aux01

3C371.3MP15Q, No0901, Lk

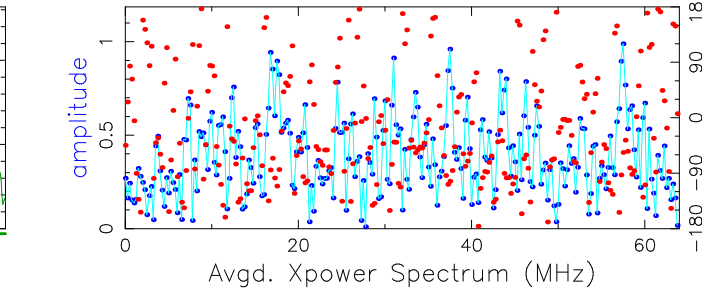
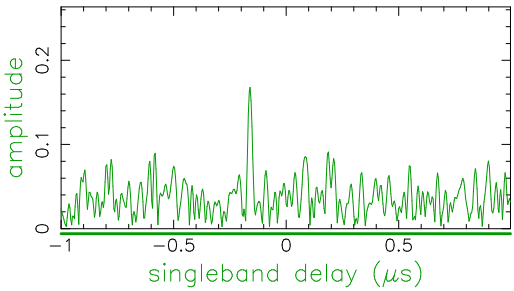
KVNPC - VLBA\_KP, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

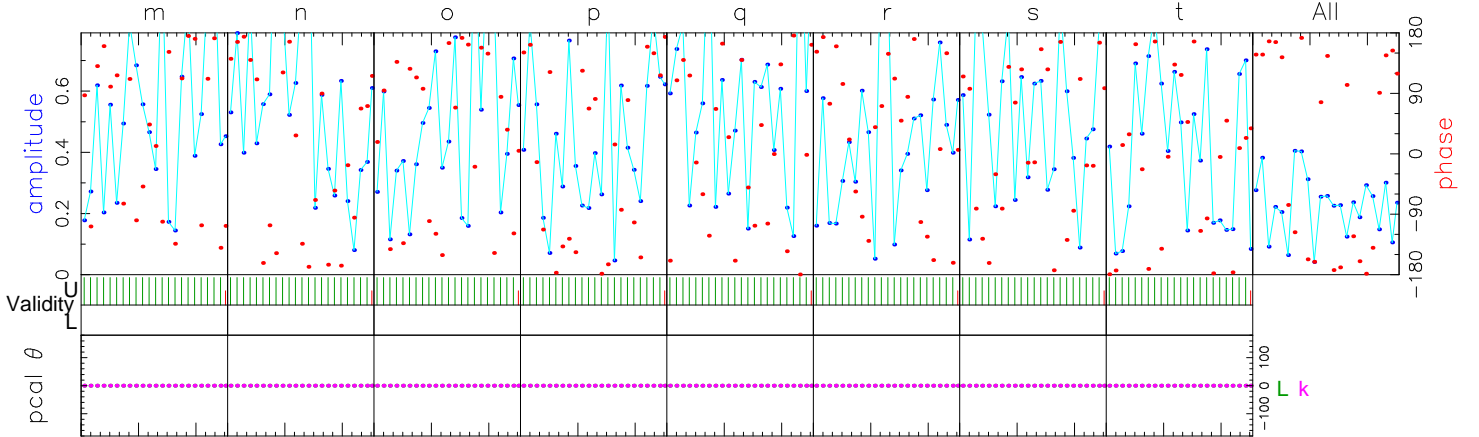


SNR 5.6  
 Int time 149.847  
 Amp 0.264  
 Phase 172.2  
 PFD 8.6e-01  
 Delays (us)  
 SBD -0.161194  
 MBD 0.005664  
 Fringe rate (Hz)  
 -0.971224  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105614  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec

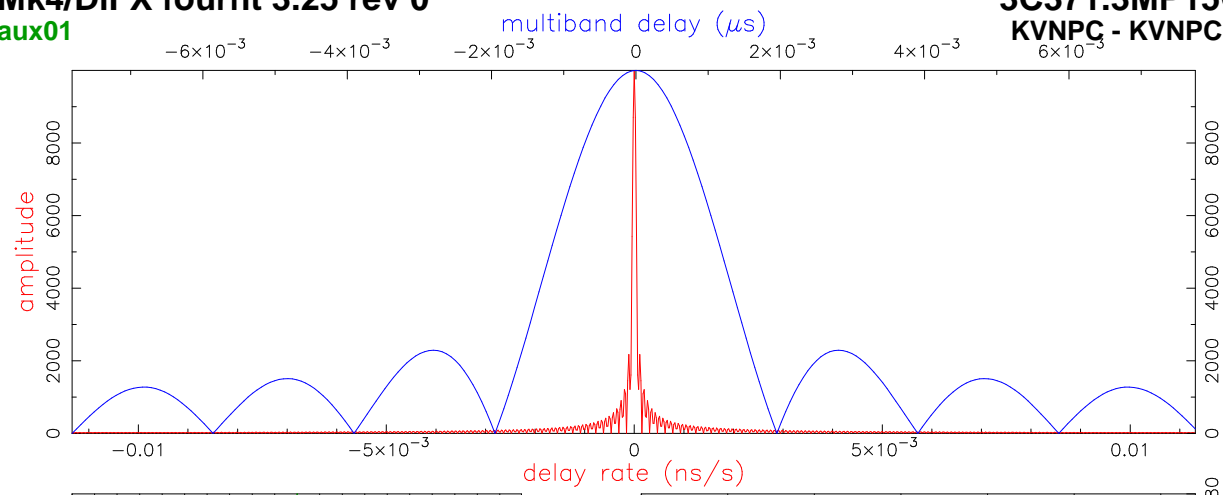


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
k	0	0	0	0	0	0	0	0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:k	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
k	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

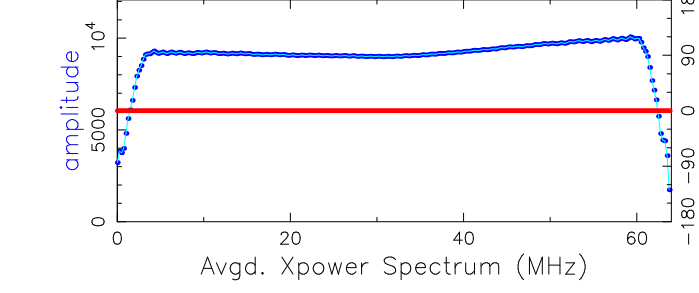
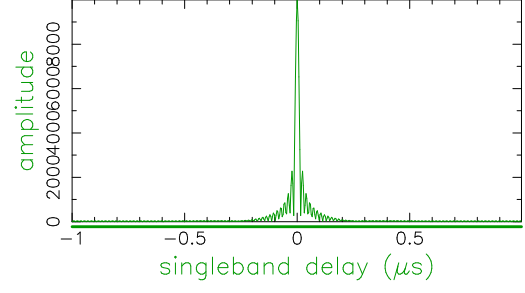
Group delay (usec) (SBD)	3.50805182370E+03	Apriori delay (usec)	3.50821803469E+03	Resid mbdelay (usec)	5.66400E-03	+/-	1.9E-04
Sband delay (usec)	3.50805684094E+03	Apriori clock (usec)	-2.5520485E+01	Resid sbdelay (usec)	-1.61194E-01	+/-	1.5E-03
Phase delay (usec)	3.50821804024E+03	Apriori clockrate (us/s)	-7.5937451E-06	Resid phdelay (usec)	5.55163E-06	+/-	6.5E-07
Delay rate (us/s)	7.48311950061E-01	Apriori rate (us/s)	7.48323225004E-01	Resid rate (us/s)	-1.12749E-05	+/-	7.6E-09
Total phase (deg)	355.1	Apriori accel (us/s/s)	-1.03415781153E-05	Resid phase (deg)	172.2	+/-	20.3

ph/seg (deg)	48.6	Theor.	48.7	Amplitude	0.264 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	68.7	Search (1024X32)	0.164	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	13.5	Inc. seg. avg.	0.262	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	39.7	Inc. frq. avg.	0.237	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
				Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

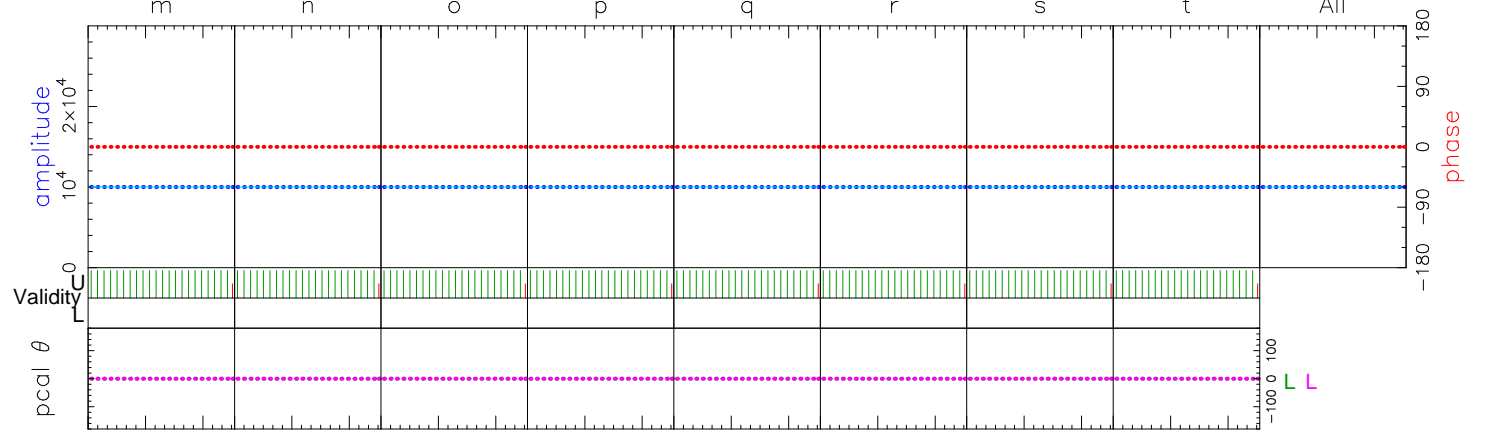
L: az 23.1 el 48.9 pa -116.3 k: az 336.1 el 36.1 pa 95.2 u,v (fr/asec) -12448.700 -1819.045 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lk..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lk.W.271.3MP15Q



Fringe quality 9  
SNR 334764.7  
Int time 149.859  
Amp 9999.999  
Phase 0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c241a  
Yr:day 1234  
Start 2024:109  
Stop 2024:109  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105604  
2024:113:095956  
RA & Dec (J2000) 18h06m50.680649s +69°49'28.108492"



Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.2E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.6E-08  
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.1E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.3E-13  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

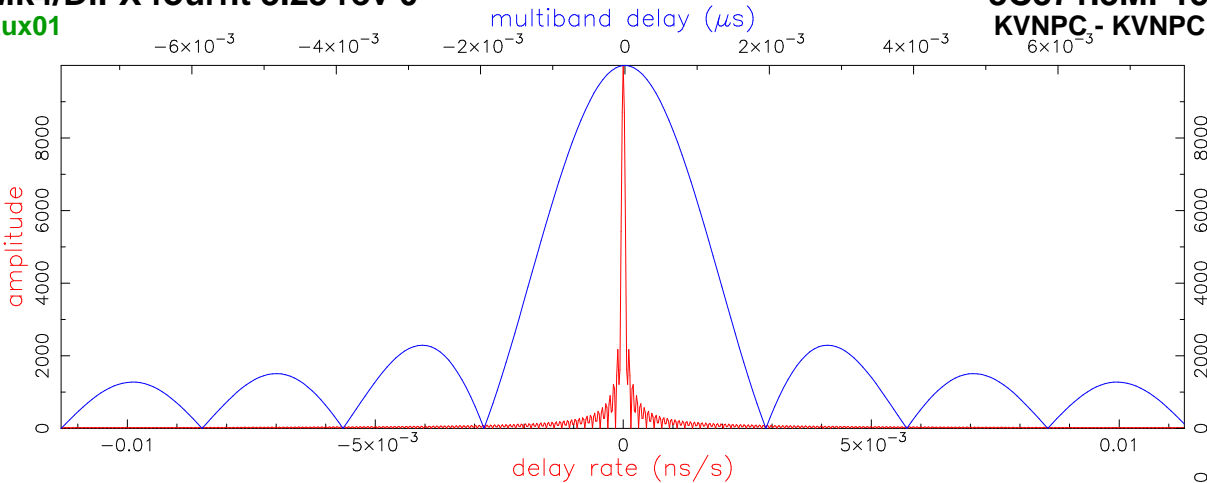
L: az 23.1 el 48.9 pa -116.3 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LL.W.242.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

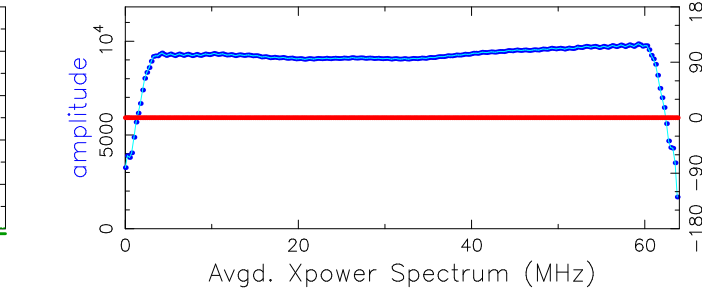
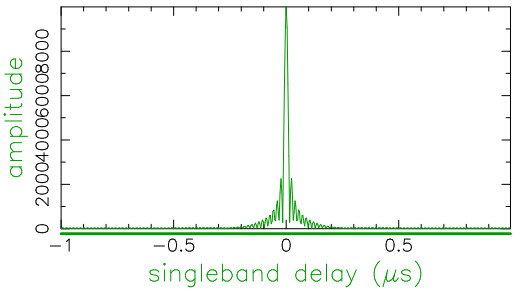
3C371.3MP15Q, No0901, LL

KVNPC- KVNPC, fgroup W, pol RR



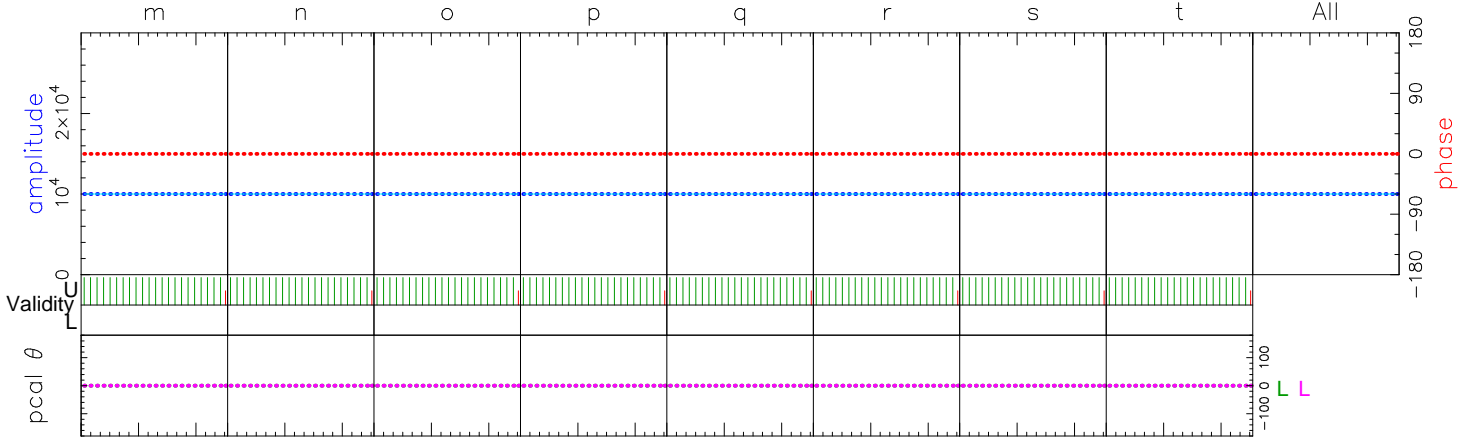
Fringe quality 9

SNR 334764.7  
 Int time 149.859  
 Amp 9999.999  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	10000.0	10000.0
L	0	0	60000	0	0	0	4000	0	APs used	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 3.2E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 2.6E-08  
 Phase delay (usec) 0.0000000000E+00 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 0.00000E+00 +/- 1.1E-11  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 1.3E-13  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 9999.999 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (1024X32) 9999.999 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.999 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LL.W.250.3MP15Q

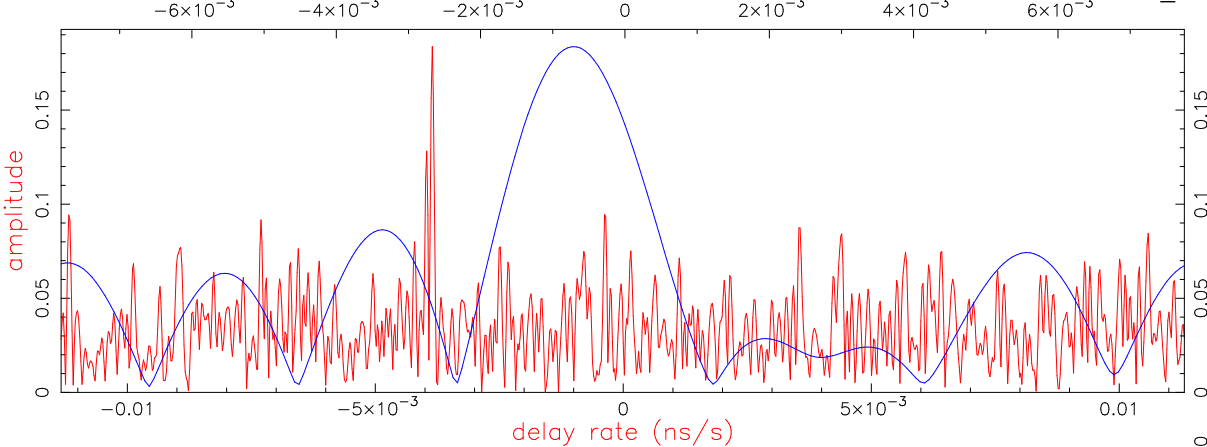
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LI

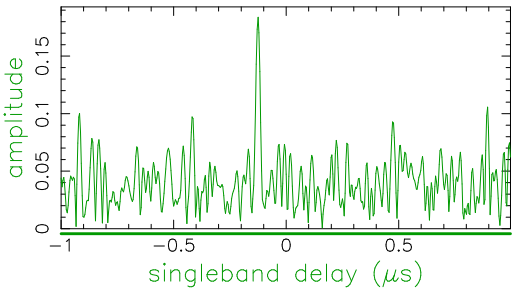
KVNPC - VLBA\_LA, fgroup W, pol LL

multiband delay ( $\mu$ s)

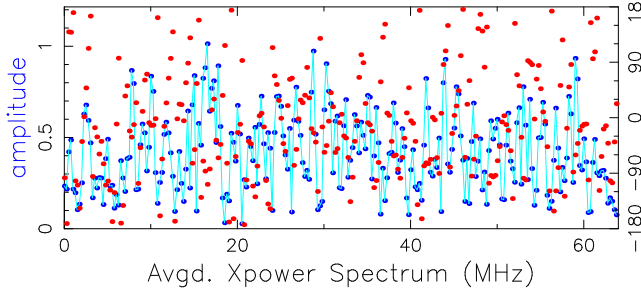


Fringe quality 0

SNR 6.2  
 Int time 149.846  
 Amp 0.193  
 Phase -22.0  
 PFD 9.6e-02  
 Delays (us)  
 SBD -0.125260  
 MBD -0.000709  
 Fringe rate (Hz)  
 -0.332711  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

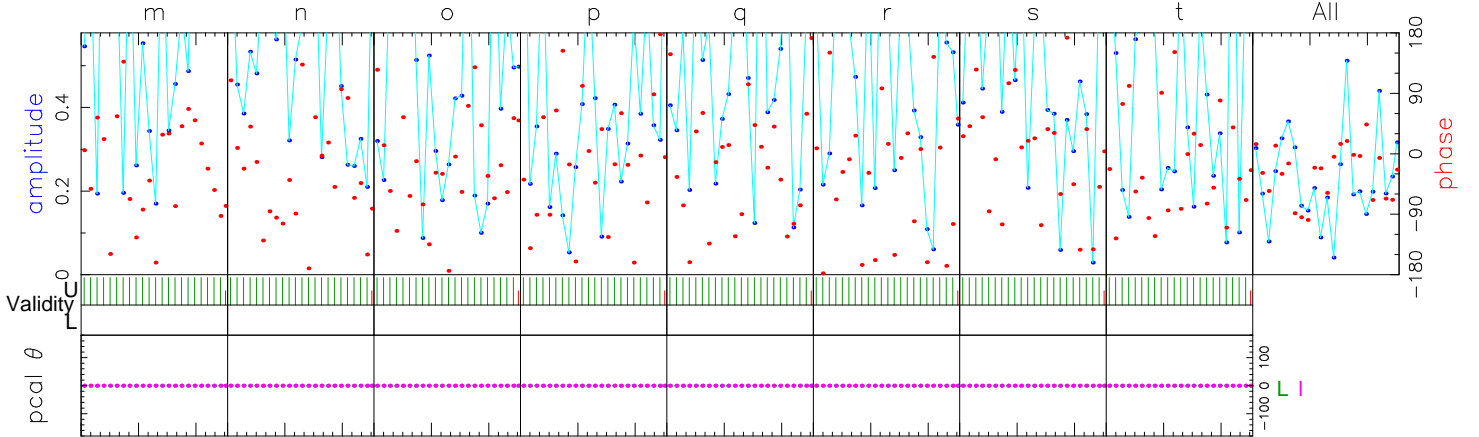


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-12.3	-47.0	-33.5	-20.7	-28.0	-10.0	16.4	-46.5	Phase	-22.0
	0.3	0.1	0.2	0.1	0.1	0.2	0.2	0.3	Ampl.	0.2
	225.6	16.0	307.9	128.0	488.4	210.0	4.9	149.7	Sbd box	224.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
I	0	0	0	0	0	0	0	0	PC freqs	
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.03789384898E+03	Apriori delay (usec)	3.03801955845E+03	Resid mbdelay (usec)	-7.09472E-04	+/-	1.8E-04
Sband delay (usec)	3.03789429870E+03	Apriori clock (usec)	-1.7060011E+01	Resid sbdelay (usec)	-1.25260E-01	+/-	1.4E-03
Phase delay (usec)	3.03801955774E+03	Apriori clockrate (us/s)	-7.2075375E-06	Resid phdelay (usec)	-7.09595E-07	+/-	6.0E-07
Delay rate (us/s)	7.40384393075E-01	Apriori rate (us/s)	7.40388255523E-01	Resid rate (us/s)	-3.86245E-06	+/-	6.9E-09
Total phase (deg)	253.4	Apriori accel (us/s/s)	-1.36531926191E-05	Resid phase (deg)	-22.0	+/-	18.6

ph/seg (deg)	39.8	Theor.	44.7	Amplitude	0.193 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	65.1	Search (1024X32)	0.177	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.7	Inc. seg. avg.	0.186	Inc. seg. avg.	0.186	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	33.5	Inc. frq. avg.	0.185	Inc. frq. avg.	0.185	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 I: az 334.9 el 37.8 pa 88.1 u,v (fr/asec) -12326.851 -2697.268 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LI..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LI.W.251.3MP15Q

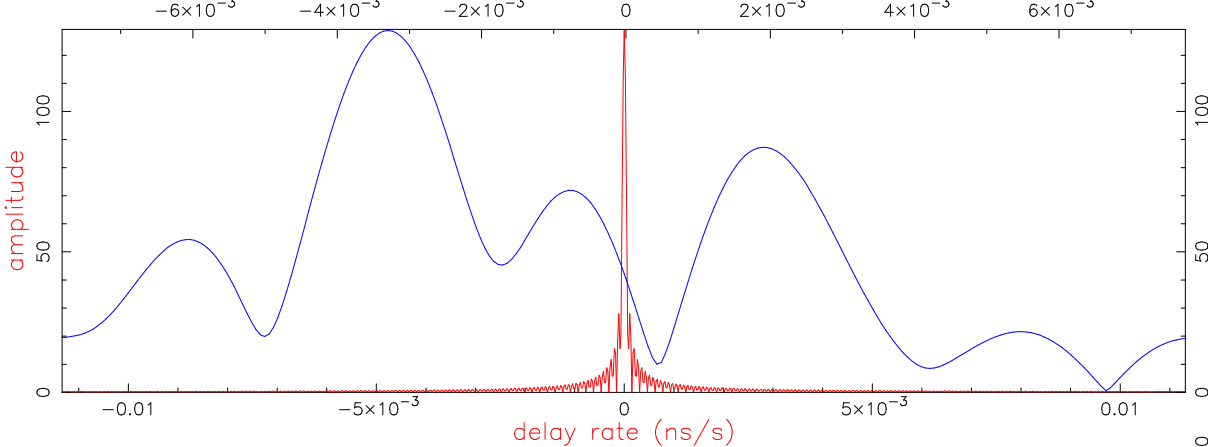
Mk4/DiFX fourfit 3.25 rev 0

aux01

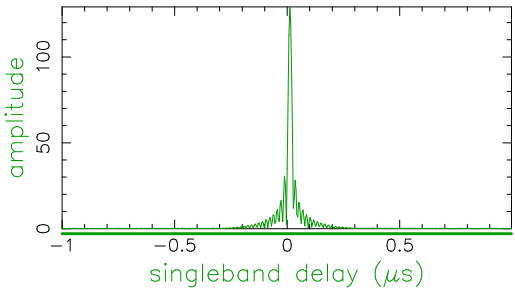
3C371.3MP15Q, No0901, LL

KVNPC - KVNPC, fgroup W, pol LR

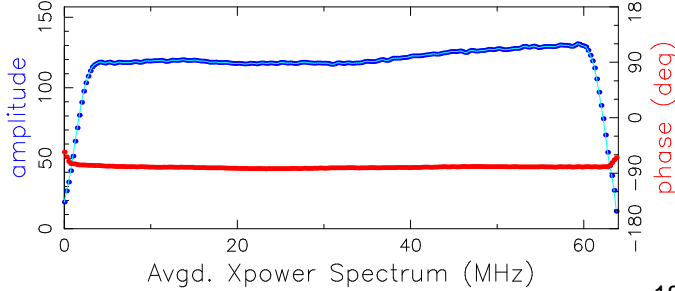
multiband delay ( $\mu$ s)



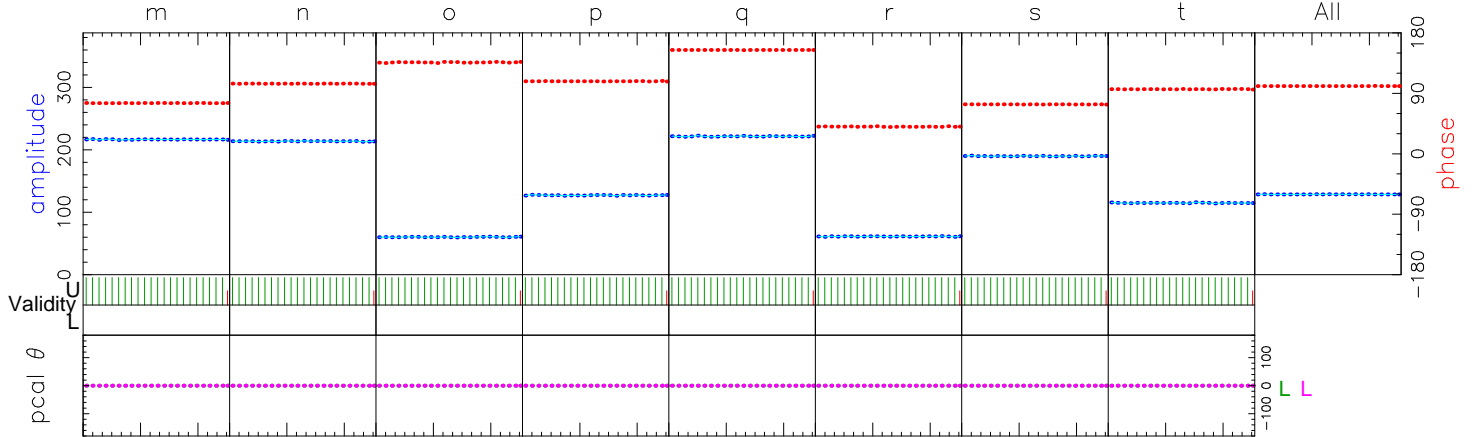
Fringe quality 5  
 Error code G  
 SNR 4325.6  
 Int time 149.859  
 Amp 129.213  
 Phase 100.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.012412  
 MBD -0.003293  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"



delay rate (ns/s)



Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	0	0	APs used	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 1.23318125000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -3.29319E-03 +/- 2.5E-07  
 Sband delay (usec) 1.24122500000E-02 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 1.24123E-02 +/- 2.0E-06  
 Phase delay (usec) 3.24963632122E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.24964E-06 +/- 8.5E-10  
 Delay rate (us/s) 4.25134571751E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 4.25135E-12 +/- 9.9E-12  
 Total phase (deg) 100.8 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 100.8 +/- 0.0

RMS Theor. Amplitude 129.213 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.1 0.1 Search (1024X32) 127.898 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 39.2 0.0 Inc. seg. avg. 128.825 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 52.4 0.1 Inc. frq. avg. 150.834 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LL.W.259.3MP15Q



Mk4/DiFX fourfit 3.25 rev 0

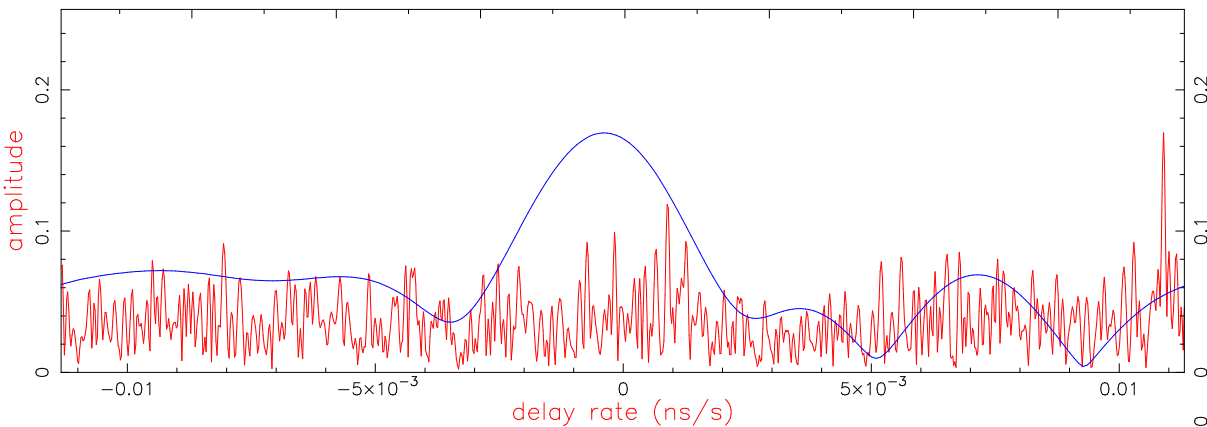
aux01

3C371.3MP15Q, No0901, LI

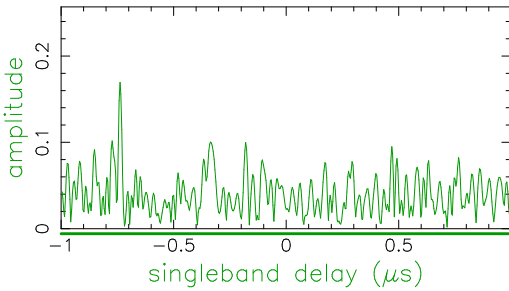
KVNPC - VLBA\_LA, fgroup W, pol RR

multiband delay ( $\mu$ s)

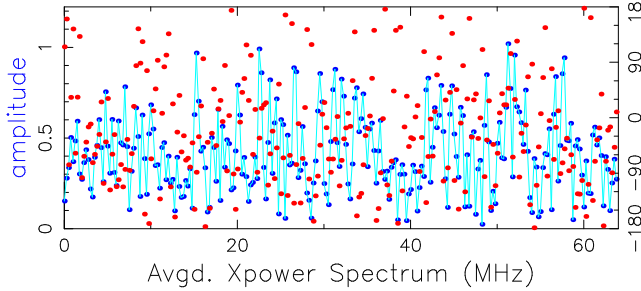
Fringe quality 0



SNR 5.7  
 Int time 149.846  
 Amp 0.257  
 Phase 99.2  
 PFD 8.1e-01  
 Delays (us)  
 SBD -0.737883  
 MBD -0.000285  
 Fringe rate (Hz)  
 0.939580  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

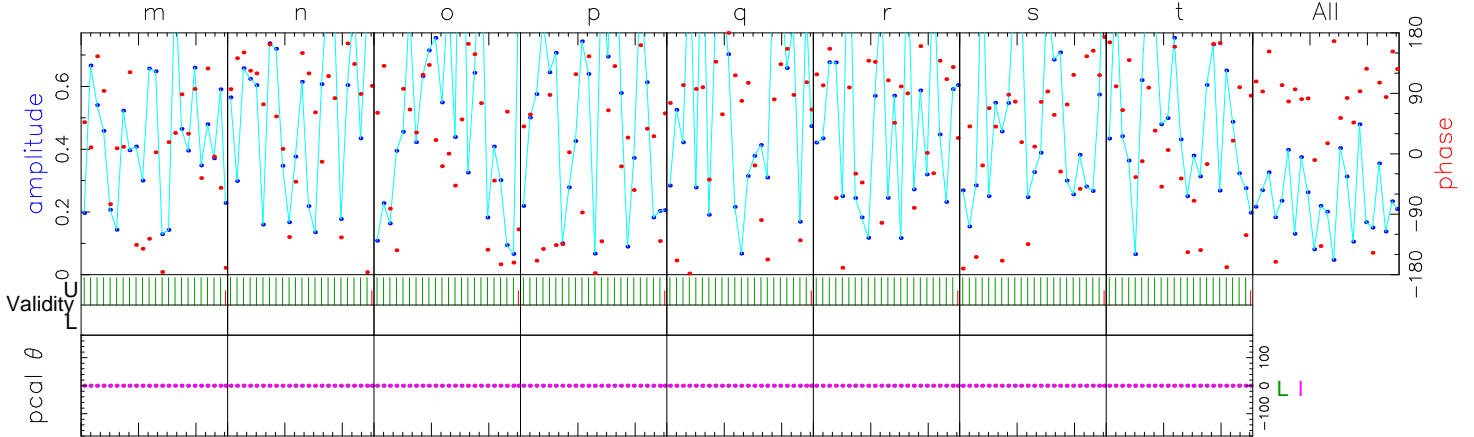


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	38.4	120.0	63.8	156.1	120.0	106.0	66.8	91.9	Phase	99.2
	0.2	0.5	0.3	0.2	0.5	0.2	0.3	0.2	Ampl.	0.3
	162.7	67.7	36.2	426.2	68.5	210.8	8.2	173.6	Sbd box	68.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
I	0	0	0	0	0	0	0	0	PC freqs	
L:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:l	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.03728489859E+03	Apriori delay (usec)	3.03801955845E+03	Resid mbdelay (usec)	-2.84860E-04	+/-	1.9E-04
Sband delay (usec)	3.03728167570E+03	Apriori clock (usec)	-1.7060011E+01	Resid sbdelay (usec)	-7.37883E-01	+/-	1.5E-03
Phase delay (usec)	3.03801956165E+03	Apriori clockrate (us/s)	-7.2075375E-06	Resid phdelay (usec)	3.19975E-06	+/-	6.5E-07
Delay rate (us/s)	7.40399163120E-01	Apriori rate (us/s)	7.40388255523E-01	Resid rate (us/s)	1.09076E-05	+/-	7.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.36531926191E-05	Resid phase (deg)	99.2	+/-	20.2

ph/seg (deg)	57.7	Theor.	48.4	Amplitude	0.257 +/- 0.045	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.3		84.4	Search (1024X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	41.2		28.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.8		49.8	Inc. seg. avg.	0.268	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.268	Data rate(Mb/s): 2048	t_cohere infinite			

L: az 23.1 el 48.9 pa -116.3      I: az 334.9 el 37.8 pa 88.1      u, v (fr/asec) -12326.851 -2697.268      simultaneous interpolator

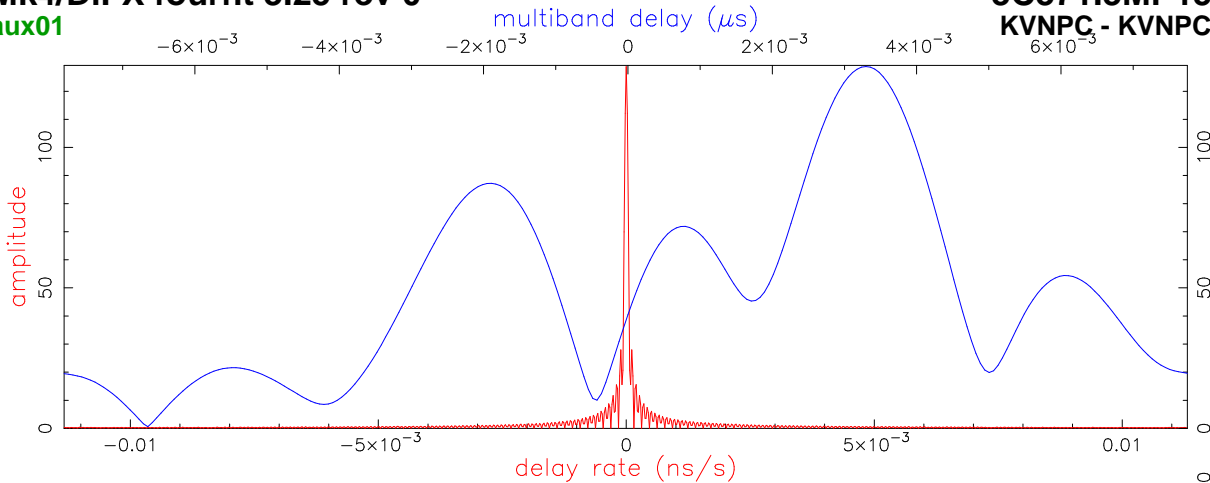
Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/LI..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/LI.W.260.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

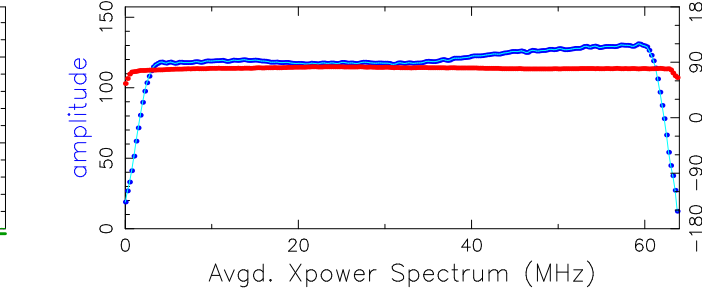
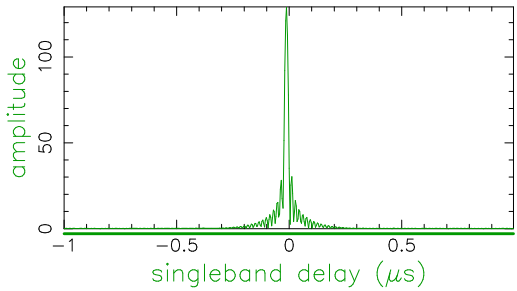
aux01

3C371.3MP15Q, No0901, LL

KVNPC - KVNPC, fgroup W, pol RL

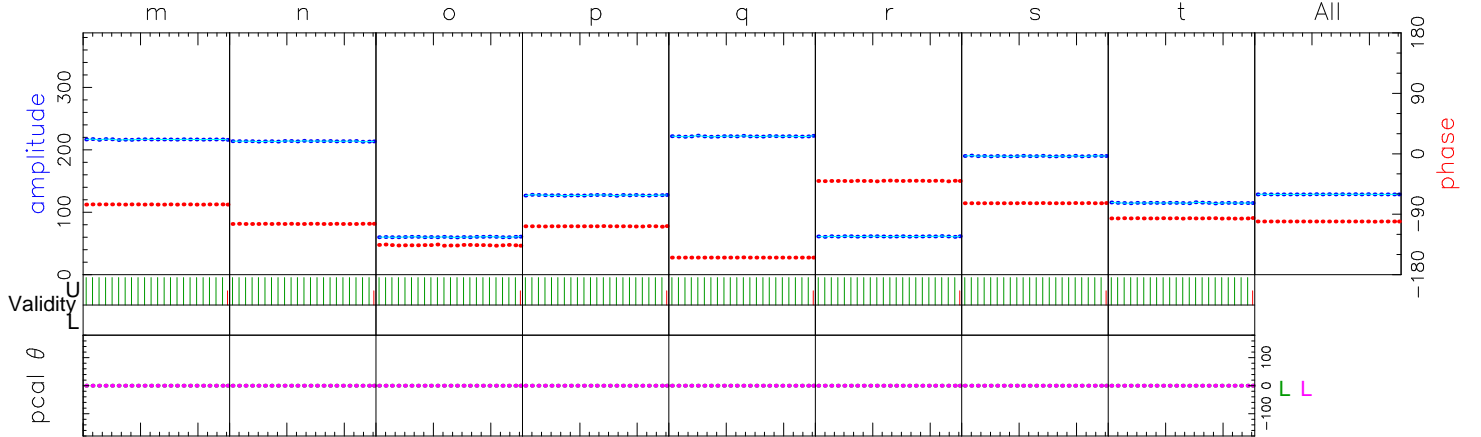


Fringe quality 5  
 Error code G  
 SNR 4325.6  
 Int time 149.859  
 Amp 129.213  
 Phase -100.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.012412  
 MBD 0.003293  
 Fringe rate (Hz)  
 -0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105614  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.4	-104.3	-136.0	-107.9	-154.4	-40.4	-73.5	-96.1	Phase	-100.8
	216.7	213.9	60.4	127.4	221.8	61.4	190.1	115.0	Ampl.	150.8
	253.5	253.4	253.8	253.6	253.0	251.1	253.3	254.0	Sbd box	253.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
L	0	0	60000	0	0	0	4000	0	PC freqs	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:L	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -1.233181250000E-02 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) 3.29319E-03 +/- 2.5E-07  
 Sband delay (usec) -1.241225000000E-02 Apriori clock (usec) 0.000000000000E+00 Resid sbdelay (usec) -1.24123E-02 +/- 2.0E-06  
 Phase delay (usec) -3.24963632122E-06 Apriori clockrate (us/s) 0.000000000000E+00 Resid phdelay (usec) -3.24964E-06 +/- 8.5E-10  
 Delay rate (us/s) -4.25134571751E-12 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) -4.25135E-12 +/- 9.9E-12  
 Total phase (deg) -100.8 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) -100.8 +/- 0.0

RMS Theor. Amplitude 129.213 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.1 0.1 Search (1024X32) 127.898 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.3 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 39.2 0.0 Inc. seg. avg. 128.825 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 52.4 0.1 Inc. frq. avg. 150.834 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 L: az 23.1 el 48.9 pa -116.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LL..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LL.W.269.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

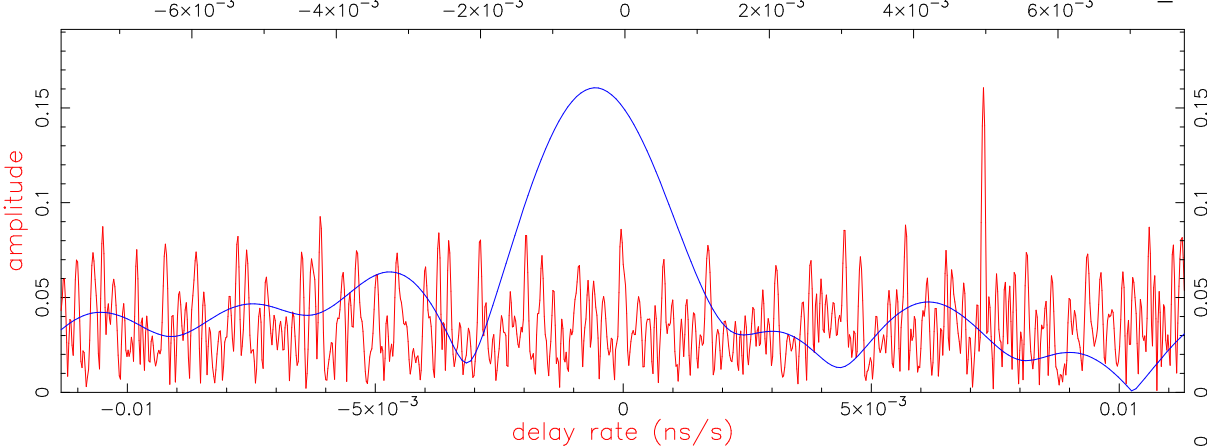
aux01

3C371.3MP15Q, No0901, LI

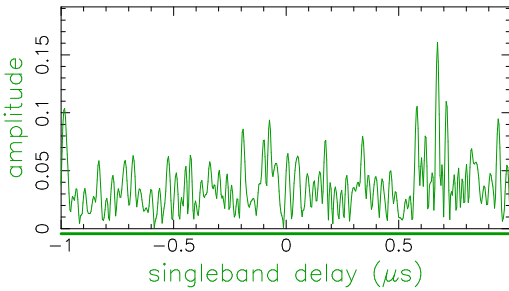
KVNPC - VLBA\_LA, fgroup W, pol LR

multiband delay ( $\mu$ s)

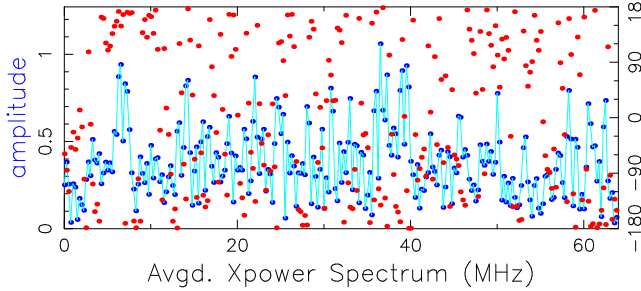
Fringe quality 0



SNR 5.4  
 Int time 149.846  
 Amp 0.191  
 Phase 12.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.671996  
 MBD -0.000413  
 Fringe rate (Hz)  
 0.625984  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

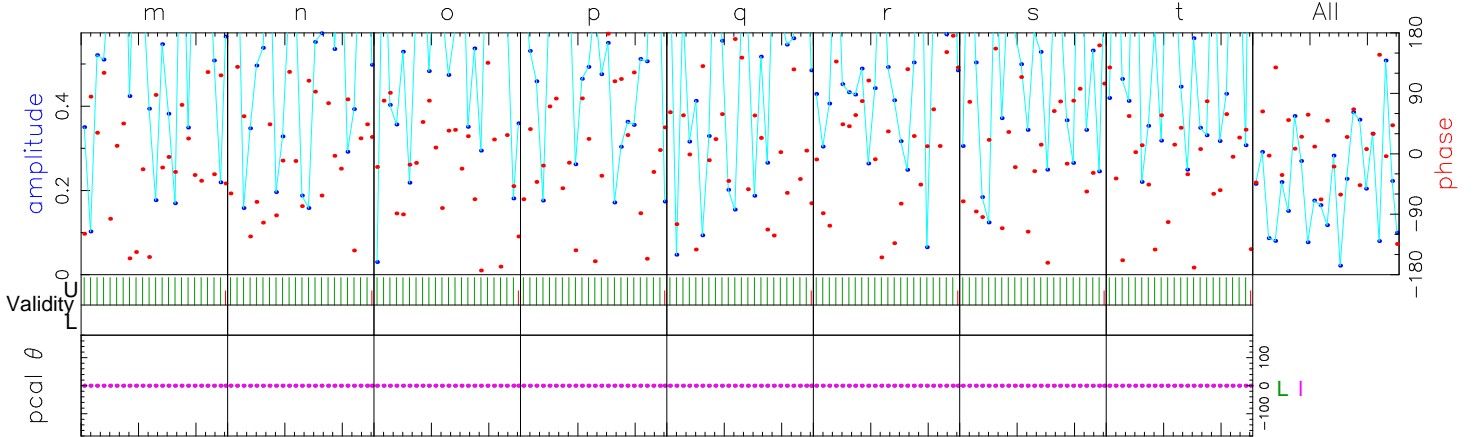


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105614  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		APs used
I	0	0	0	0	0	0	0	0		PC freqs
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
L	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
I	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	3.03869101995E+03	Apriori delay (usec)	3.03801955845E+03	Resid mbdelay (usec)	-4.13499E-04	+/-	2.0E-04
Sband delay (usec)	3.03869155470E+03	Apriori clock (usec)	-1.7060011E+01	Resid sbdelay (usec)	6.71996E-01	+/-	1.6E-03
Phase delay (usec)	3.03801955884E+03	Apriori clockrate (us/s)	-7.2075375E-06	Resid phdelay (usec)	3.90327E-07	+/-	6.9E-07
Delay rate (us/s)	7.40395522574E-01	Apriori rate (us/s)	7.40388255523E-01	Resid rate (us/s)	7.26705E-06	+/-	7.9E-09
Total phase (deg)	287.5	Apriori accel (us/s/s)	-1.36531926191E-05	Resid phase (deg)	12.1	+/-	21.3

ph/seg (deg)	58.3	Theor.	51.1	Amplitude	0.191 +/- 0.036	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	83.1		89.2	Search (1024X32)	0.160	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	27.8		30.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.9		52.6	Inc. seg. avg.	0.186	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.180	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 I: az 334.9 el 37.8 pa 88.1 u, v (fr/asec) -12326.851 -2697.268 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LI..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LI.W.270.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

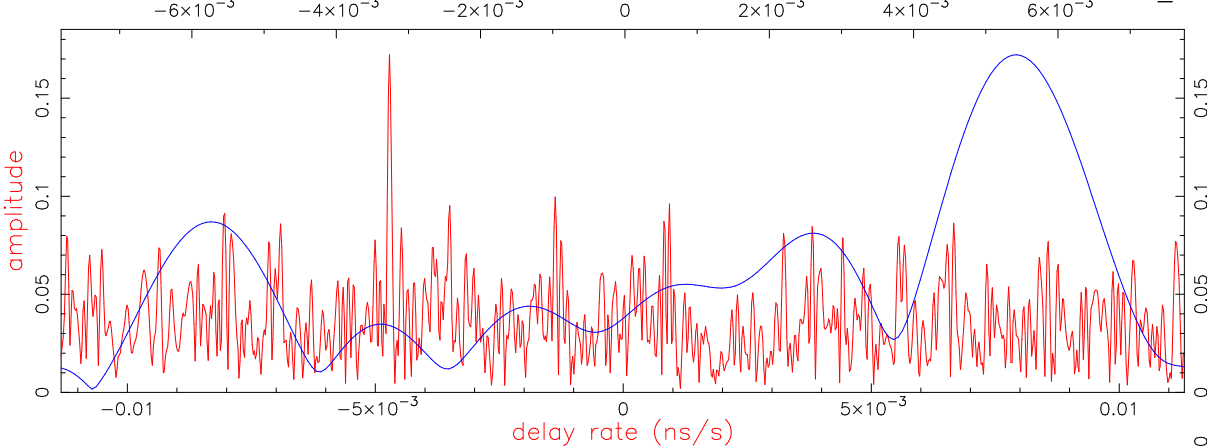
aux01

3C371.3MP15Q, No0901, LI

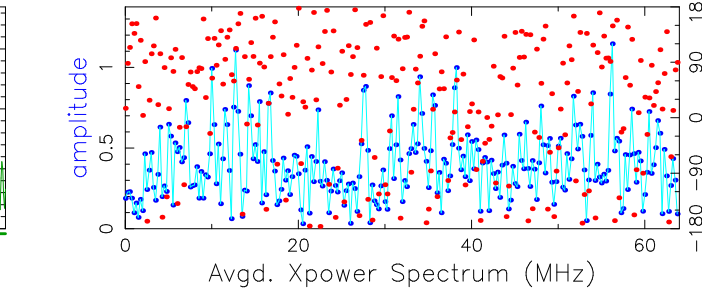
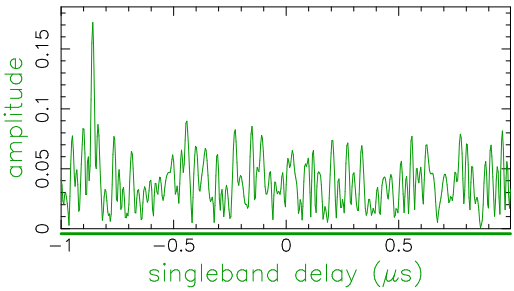
KVNPC - VLBA\_LA, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

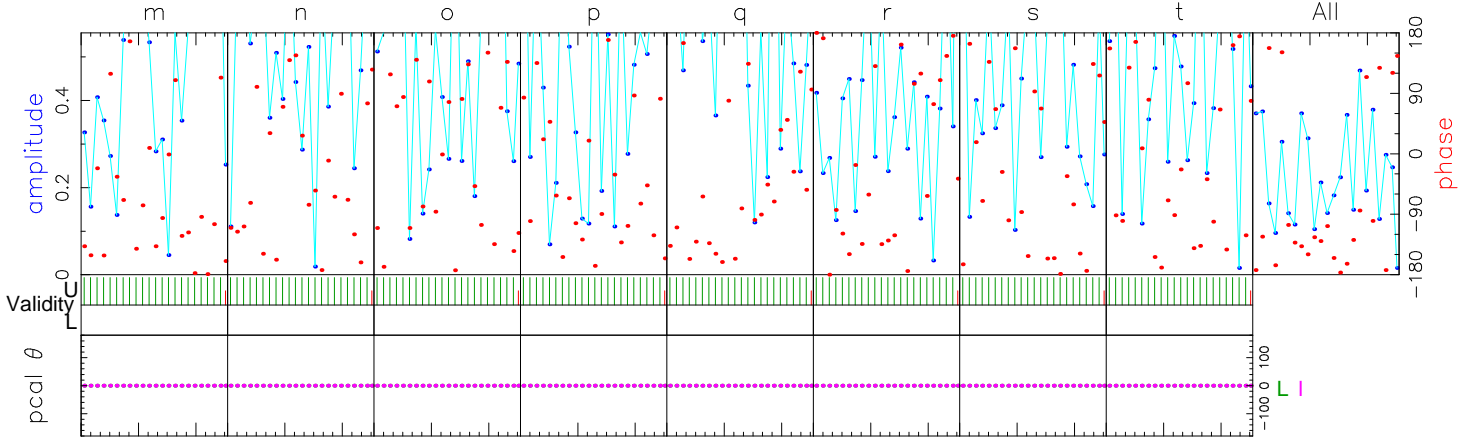


SNR 5.8  
 Int time 149.846  
 Amp 0.185  
 Phase -151.1  
 PFD 6.4e-01  
 Delays (us)  
 SBD -0.859501  
 MBD 0.005416  
 Fringe rate (Hz)  
 -0.407002  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105617  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.4	-150.1	145.8	-152.8	-118.2	-153.7	-166.6	-151.7	Phase	-151.1
	0.3	0.1	0.2	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	61.8	279.2	42.1	310.5	37.8	503.9	200.2	441.0	Sbd box	37.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
I	0	0	0	0	0	0	0	0	PC freqs	
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:I	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 3.03716559943E+03 Apriori delay (usec) 3.03801955845E+03 Resid mbdelay (usec) 5.41598E-03 +/- 1.9E-04  
 Sband delay (usec) 3.03716005720E+03 Apriori clock (usec) -1.7060011E+01 Resid sbdelay (usec) -8.59501E-01 +/- 1.5E-03  
 Phase delay (usec) 3.03801955358E+03 Apriori clockrate (us/s) -7.2075375E-06 Resid phdelay (usec) -4.87243E-06 +/- 6.4E-07  
 Delay rate (us/s) 7.40383530632E-01 Apriori rate (us/s) 7.40388255523E-01 Resid rate (us/s) -4.72489E-06 +/- 7.4E-09  
 Total phase (deg) 124.3 Apriori accel (us/s/s) -1.36531926191E-05 Resid phase (deg) -151.1 +/- 19.9

RMS Theor. Amplitude 0.185 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 45.9 47.7 Search (1024X32) 0.168 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 75.2 83.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 30.2 28.1 Inc. seg. avg. 0.189 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 37.6 49.1 Inc. frq. avg. 0.185 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 I: az 334.9 el 37.8 pa 88.1 u, v (fr/asec) -12326.851 -2697.268 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LI..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LI.W.276.3MP15Q

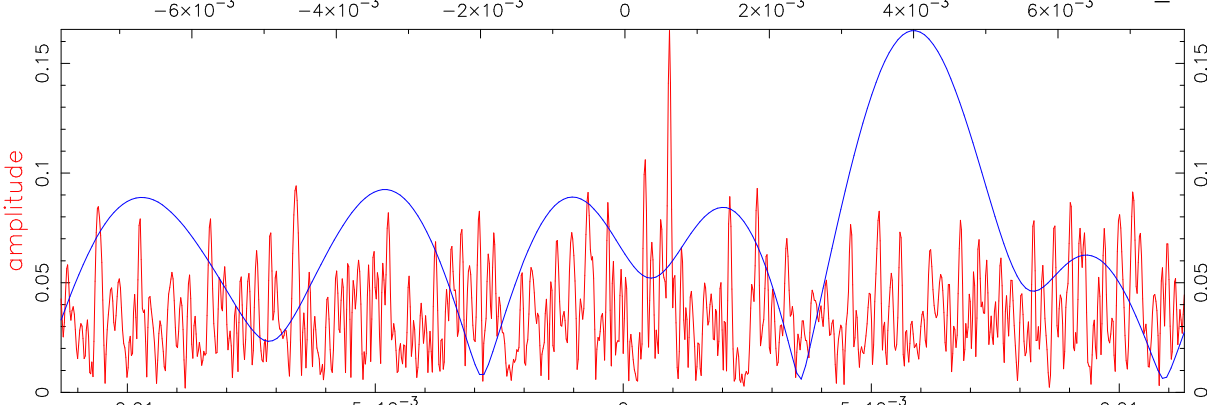
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lm

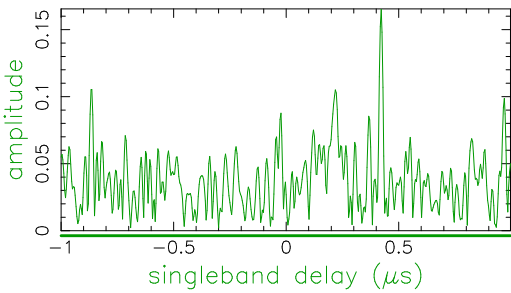
KVNPC - VLBA\_MK, fgroup W, pol LL

multiband delay ( $\mu$ s)

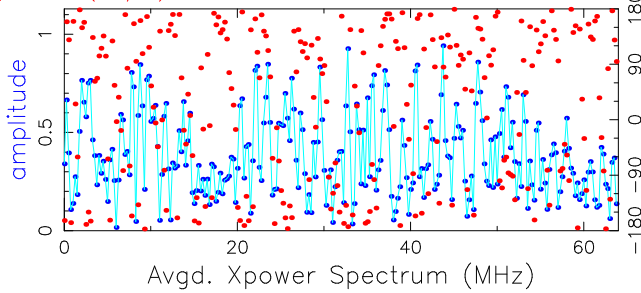


Fringe quality 0

SNR 5.5  
 Int time 149.847  
 Amp 0.166  
 Phase -70.9  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.421612  
 MBD 0.003991  
 Fringe rate (Hz)  
 0.080673  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

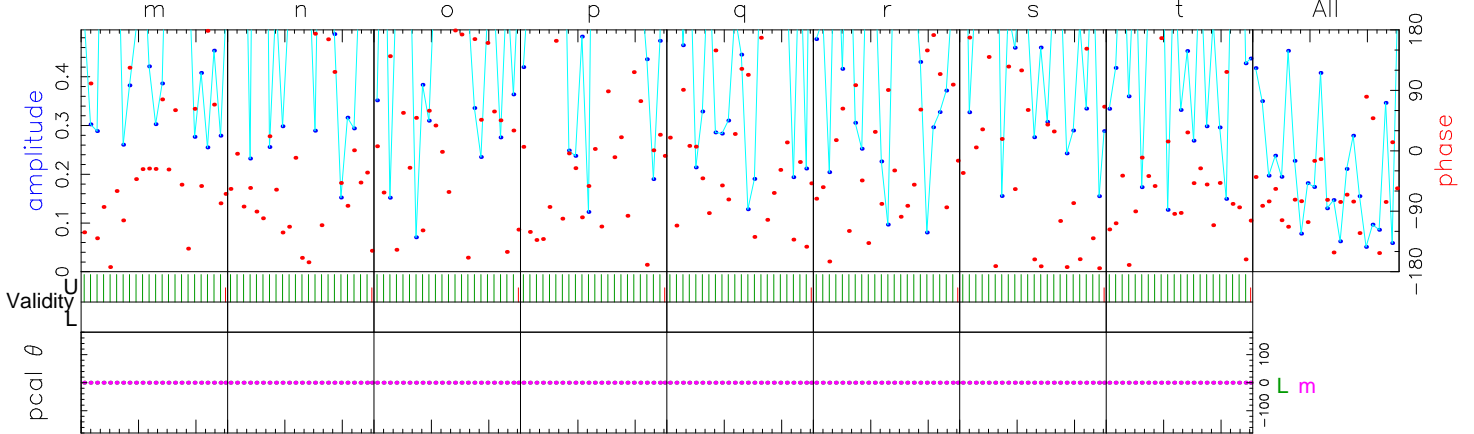


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105611  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-58.5	-92.5	-28.0	-65.0	-43.8	-47.6	161.3	-79.3	Phase	-70.9
	0.2	0.4	0.0	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	479.5	364.7	429.4	310.9	368.9	314.5	425.4	364.0	Sbd box	364.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
M	0	0	0	0	0	0	0	0	PC freqs	
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.13483185329E+03	Apriori delay (usec)	3.13440598769E+03	Resid mbdelay (usec)	3.99060E-03	+/-	2.0E-04
Sband delay (usec)	3.13482759969E+03	Apriori clock (usec)	-2.5909523E+01	Resid sbdelay (usec)	4.21612E-01	+/-	1.6E-03
Phase delay (usec)	3.13440598540E+03	Apriori clockrate (us/s)	-7.4270390E-06	Resid phdelay (usec)	-2.28507E-06	+/-	6.7E-07
Delay rate (us/s)	5.52821792355E-01	Apriori rate (us/s)	5.52820855825E-01	Resid rate (us/s)	9.36530E-07	+/-	7.7E-09
Total phase (deg)	209.7	Apriori accel (us/s/s)	1.17726845009E-05	Resid phase (deg)	-70.9	+/-	20.7

ph/seg (deg)	56.6	Theor.	49.7	Amplitude	0.166 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.9		86.8	Search (1024X32)	0.162	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	58.0		29.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	70.2		51.2	Inc. seg. avg.	0.155	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.165	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3      m: az 348.4 el 37.3 pa 146.6      u, v (fr/asec) -9140.833 3448.941      simultaneous interpolator

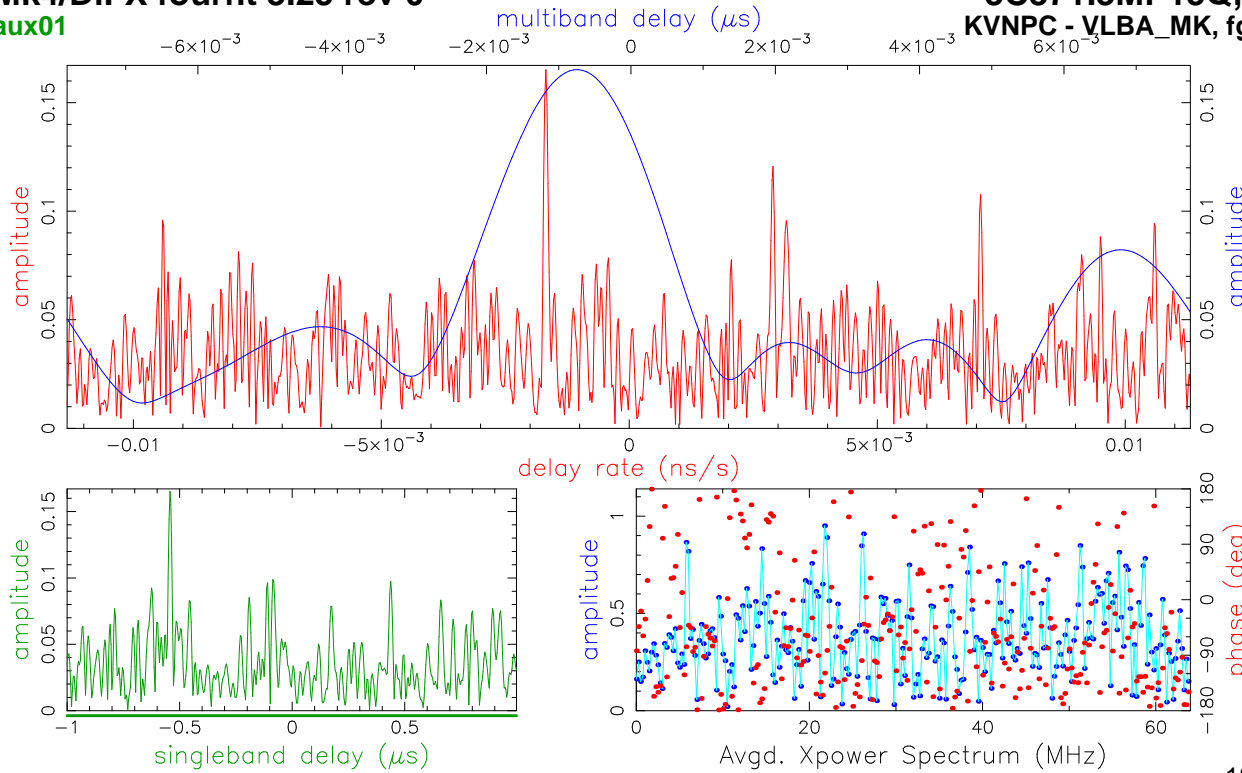
Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/Lm..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/Lm.W.256.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

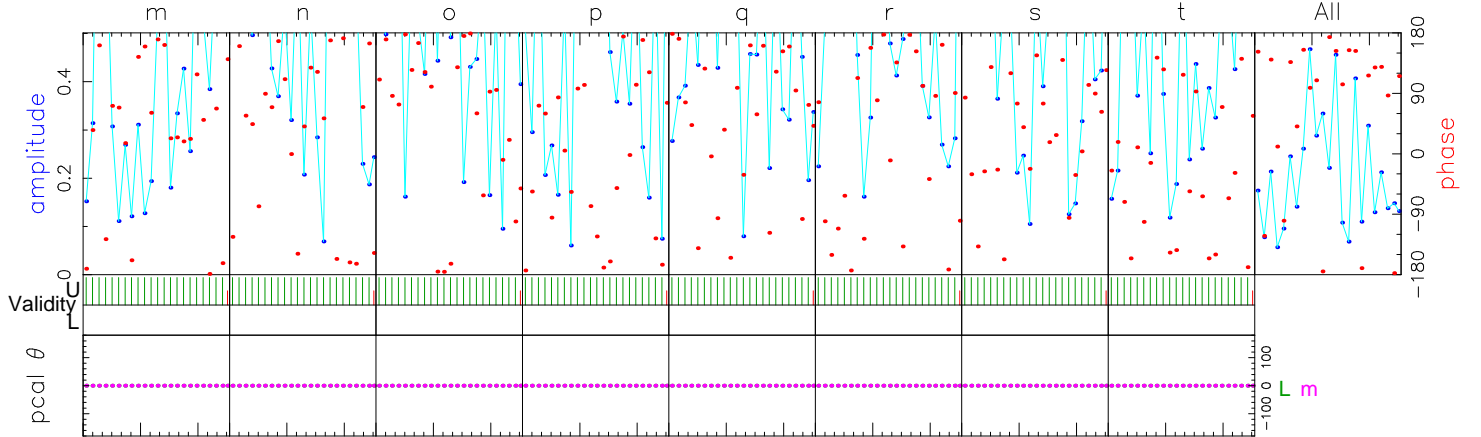
3C371.3MP15Q, No0901, Lm

KVNPC - VLBA\_MK, fgroup W, pol RR



Fringe quality 0  
 SNR 5.5  
 Int time 149.847  
 Amp 0.167  
 Phase 139.5  
 PFD 9.7e-01  
 Delays (us)  
 SBD -0.542287  
 MBD -0.000718  
 Fringe rate (Hz)  
 -0.144482  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	127.4	163.8	124.1	149.8	117.5	173.1	87.2	-176.0	Phase	139.5		
	0.2	0.3	0.3	0.1	0.2	0.2	0.2	0.1	Ampl.	0.2		
	141.3	167.9	277.2	49.6	124.8	210.2	305.4	101.5	Sbd box	118.2		
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used			
L	0	0	60000	0	0	0	4000	0	PC freqs			
M	0	0	0	0	0	0	0	0	PC freqs			
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
m	1000	1000	1000	1000	1000	1000	1000	1000				
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	3.13385839513E+03		Apriori delay (usec)		3.13440598769E+03		Resid mbdelay (usec)		-7.17562E-04	+/- 2.0E-04		
Sband delay (usec)	3.13386370069E+03		Apriori clock (usec)		-2.5909523E+01		Resid sbdelay (usec)		-5.42287E-01	+/- 1.6E-03		
Phase delay (usec)	3.13440599219E+03		Apriori clockrate (us/s)		-7.4270390E-06		Resid phdelay (usec)		4.49727E-06	+/- 6.7E-07		
Delay rate (us/s)	5.52819178535E-01		Apriori rate (us/s)		5.52820855825E-01		Resid rate (us/s)		-1.67729E-06	+/- 7.7E-09		
Total phase (deg)	60.1		Apriori accel (us/s/s)		1.17726845009E-05		Resid phase (deg)		139.5	+/- 20.7		
	RMS	Theor.	Amplitude	0.167 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	54.5	49.6	Search (1024X32)	0.163		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	76.8	86.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	35.2	29.2	Inc. seg. avg.	0.154		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	37.2	51.0	Inc. frq. avg.	0.168		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
L: az 23.1 el 48.9 pa -116.3	m: az 348.4 el 37.3 pa 146.6		u, v (fr/asec) -9140.833 3448.941						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901/Lm..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/Lm.W.263.3MP15Q									

Mk4/DiFX fourfit 3.25 rev 0

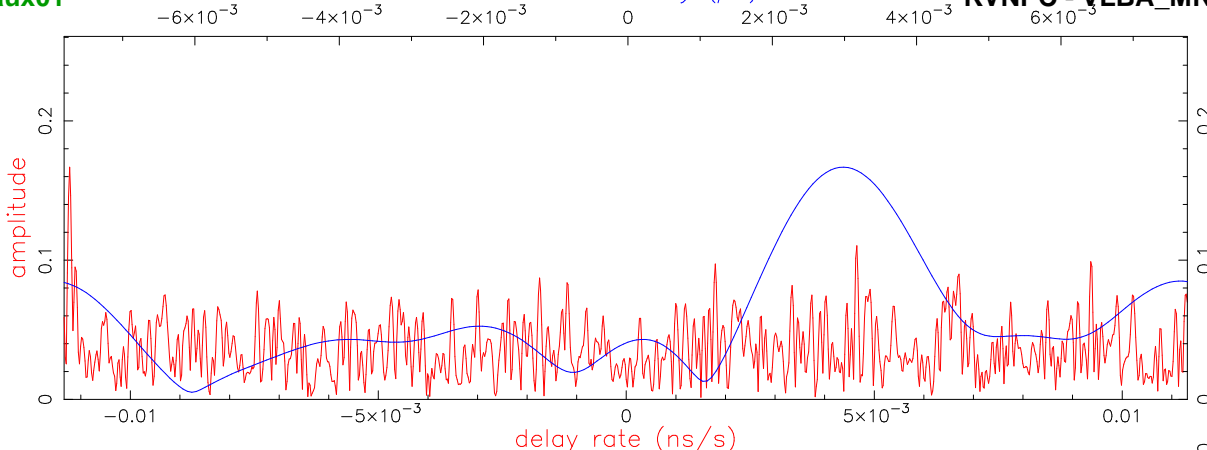
aux01

3C371.3MP15Q, No0901, Lm

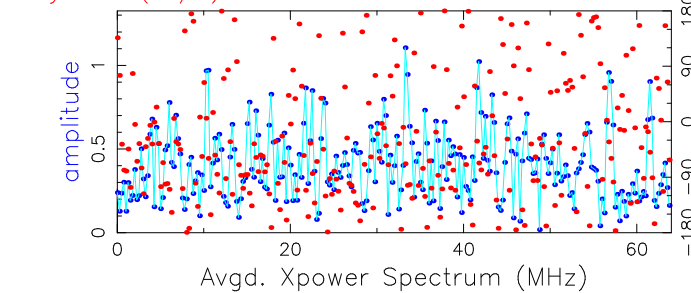
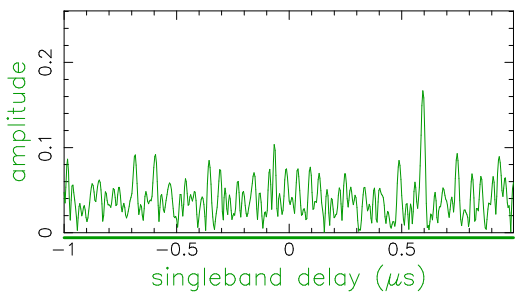
KVNPC - VLBA\_MK, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

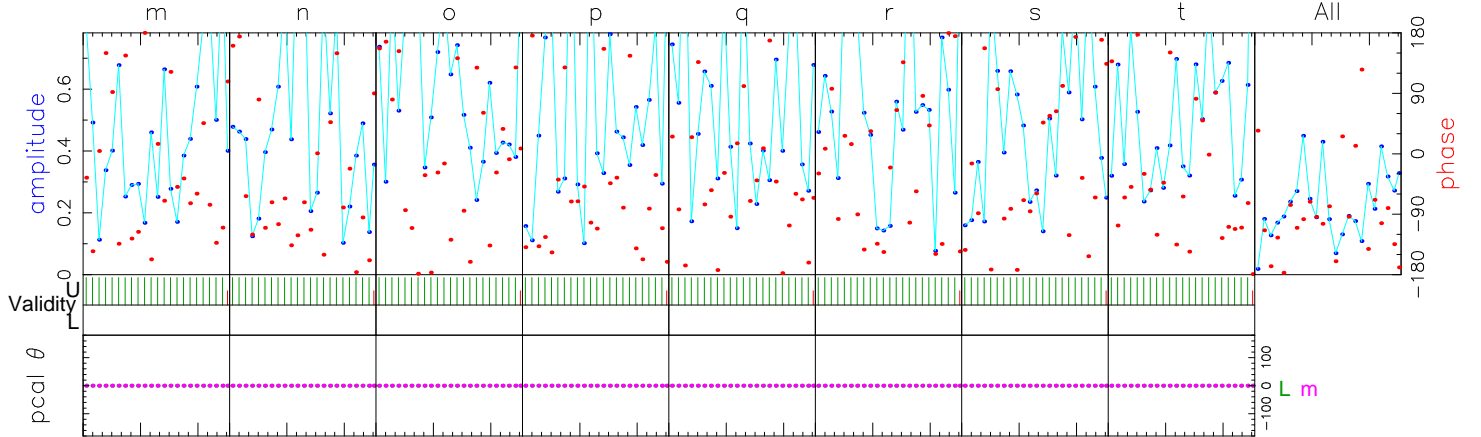


SNR 5.6  
 Int time 149.847  
 Amp 0.261  
 Phase -104.9  
 PFD 9.3e-01  
 Delays (us)  
 SBD 0.594500  
 MBD 0.003006  
 Fringe rate (Hz)  
 -0.969206  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105618  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
Group delay (usec) (SBD)	-93.9	-115.2	-140.5	-103.3	-75.8	-48.6	-145.8	-106.3		-104.9
Sband delay (usec)	0.3	0.4	0.1	0.5	0.3	0.1	0.2	0.3		0.3
Phase delay (usec)	292.7	196.0	432.8	409.7	441.1	166.1	501.1	40.9		409.2
Delay rate (us/s)	U/L 293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
Total phase (deg)	L 0	0	60000	0	0	0	4000	0		
	M 0	0	0	0	0	0	0	0		
	L:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
	L:m 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
	L 1000	1000	1000	1000	1000	1000	1000	1000		
	m 1000	1000	1000	1000	1000	1000	1000	1000		
	L W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
	m W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 3.13500274400E+03 Apriori delay (usec) 3.13440598769E+03 Resid mbdelay (usec) 3.00632E-03 +/- 1.9E-04  
 Sband delay (usec) 3.13500048769E+03 Apriori clock (usec) -2.5909523E+01 Resid sbdelay (usec) 5.94500E-01 +/- 1.5E-03  
 Phase delay (usec) 3.13440598430E+03 Apriori clockrate (us/s) -7.4270390E-06 Resid phdelay (usec) -3.38373E-06 +/- 6.6E-07  
 Delay rate (us/s) 5.52809604308E-01 Apriori rate (us/s) 5.52820855825E-01 Resid rate (us/s) -1.12515E-05 +/- 7.6E-09  
 Total phase (deg) 175.7 Apriori accel (us/s/s) 1.17726845009E-05 Resid phase (deg) -104.9 +/- 20.5

ph/seg (deg) 62.8 49.1 Search (1024X32) 0.165 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.0 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.6 29.0 Inc. seg. avg. 0.255 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.5 50.5 Inc. frq. avg. 0.251 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 m: az 348.4 el 37.3 pa 146.6 u,v (fr/asec) -9140.833 3448.941 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lm..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lm.W.280.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

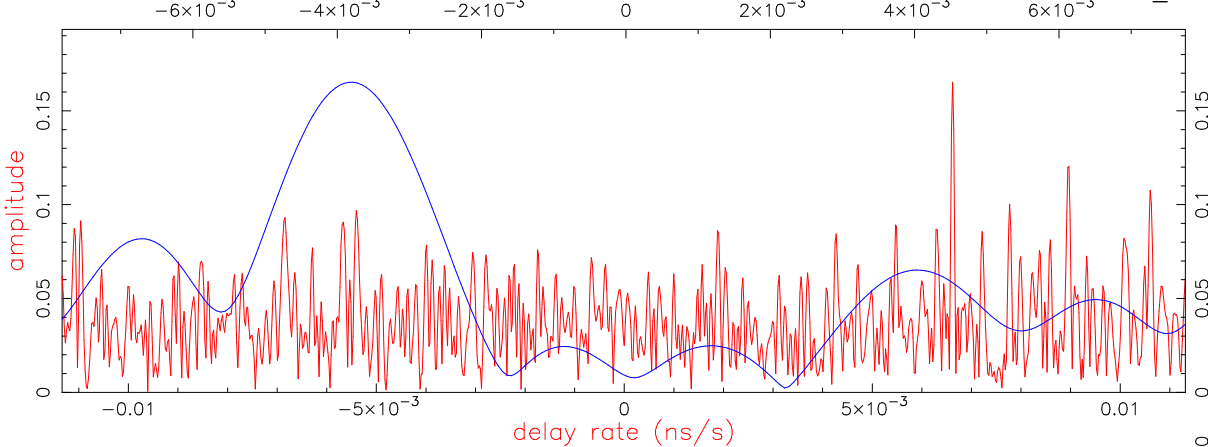
aux01

3C371.3MP15Q, No0901, Lm

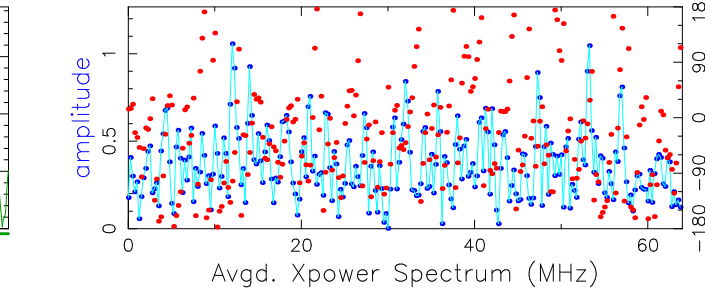
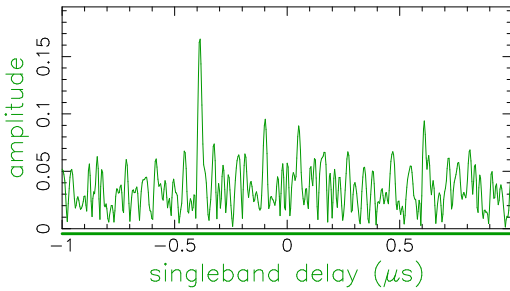
KVNPC - VLBA\_MK, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

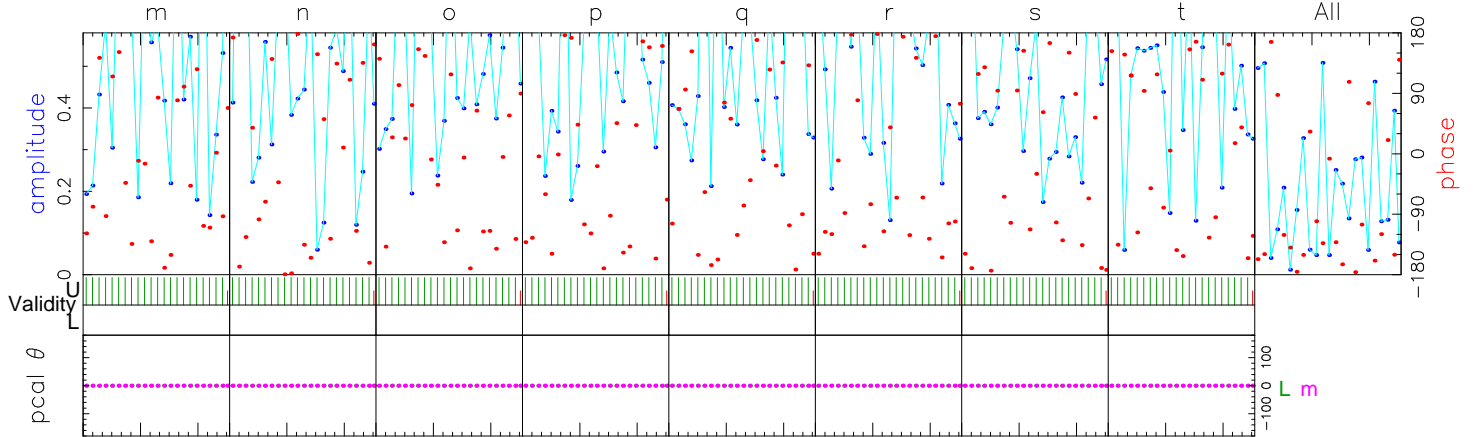


SNR 5.6  
 Int time 149.847  
 Amp 0.193  
 Phase -150.3  
 PFD 9.2e-01  
 Delays (us)  
 SBD -0.388263  
 MBD -0.003797  
 Fringe rate (Hz) 0.570693  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-118.4	-163.5	140.0	-130.8	-125.6	-135.9	-158.8	-168.1	Phase	-150.3
	0.1	0.3	0.1	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	185.3	174.6	310.6	31.6	285.7	157.1	251.7	358.7	Sbd box	157.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
M	0	0	0	0	0	0	0	0	PC freqs	
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.13401156601E+03	Apriori delay (usec)	3.13440598769E+03	Resid mbdelay (usec)	-3.79668E-03	+/-	1.9E-04
Sband delay (usec)	3.13401772469E+03	Apriori clock (usec)	-2.5909523E+01	Resid sbdelay (usec)	-3.88263E-01	+/-	1.5E-03
Phase delay (usec)	3.13440598284E+03	Apriori clockrate (us/s)	-7.4270390E-06	Resid phdelay (usec)	-4.84814E-06	+/-	6.6E-07
Delay rate (us/s)	5.52827481003E-01	Apriori rate (us/s)	5.52820855825E-01	Resid rate (us/s)	6.62518E-06	+/-	7.6E-09
Total phase (deg)	130.3	Apriori accel (us/s/s)	1.17726845009E-05	Resid phase (deg)	-150.3	+/-	20.5

ph/seg (deg)	RMS 78.1	Theor. 49.1	Amplitude Search (1024X32)	0.193 +/- 0.035	0.162	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	101.0	85.6	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	35.7	28.9	Inc. seg. avg.	0.184	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011
amp/frq (%)	43.9	50.5	Inc. frq. avg.	0.185	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3      m: az 348.4 el 37.3 pa 146.6      u, v (fr/asec) -9140.833 3448.941      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/Lm..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/Lm.W.287.3MP15Q



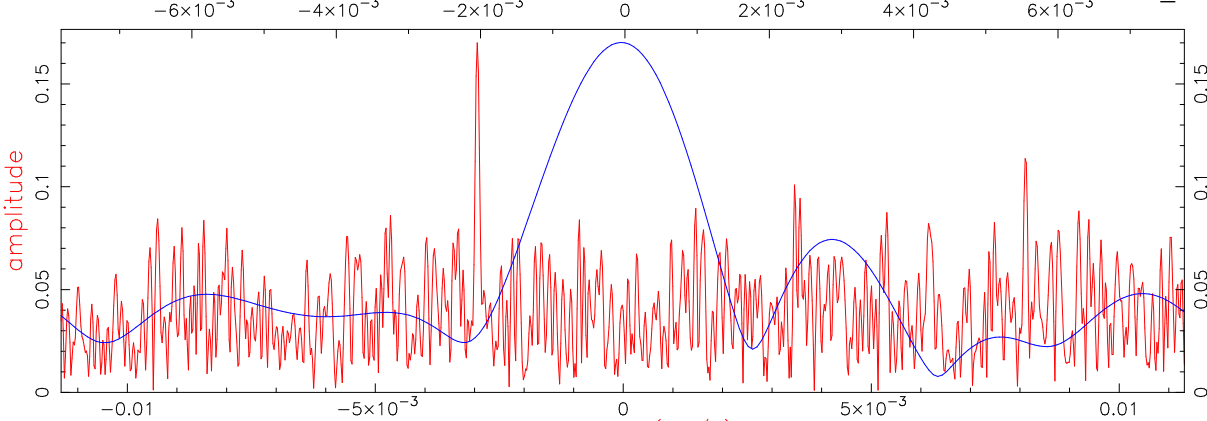
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ln

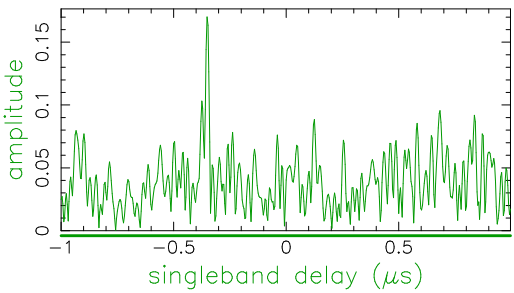
KVNPC - VLBA\_NL, fgroup W, pol LL

multiband delay ( $\mu$ s)

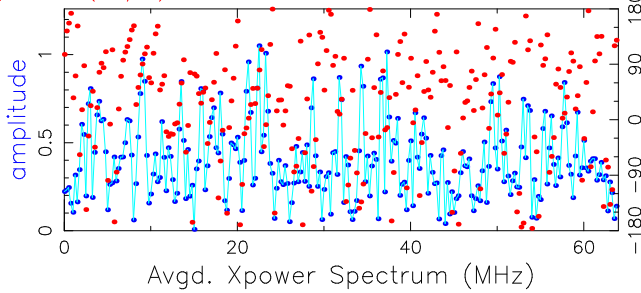


Fringe quality 0

SNR 5.7  
 Int time 149.816  
 Amp 0.177  
 Phase -26.1  
 PFD 6.8e-01  
 Delays (us)  
 SBD -0.350359  
 MBD 0.000001  
 Fringe rate (Hz)  
 -0.254986  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

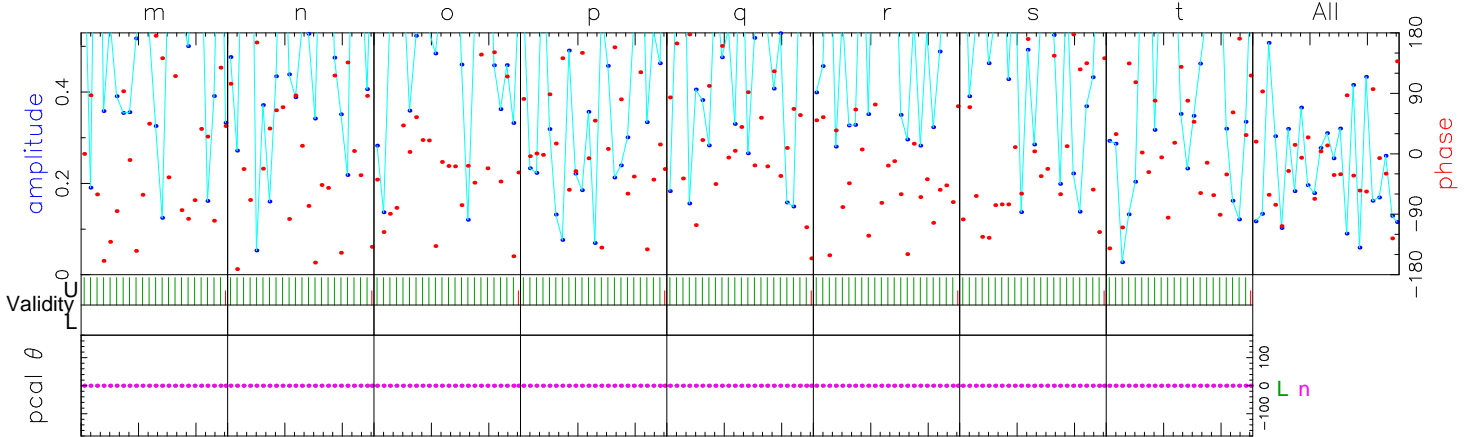


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-54.0	-19.9	-22.3	3.7	4.5	-29.1	-78.5	-14.9	Phase	-26.1
	0.1	0.2	0.2	0.1	0.1	0.3	0.2	0.2	Ampl.	0.2
	108.9	426.4	479.7	381.1	132.5	166.4	475.0	372.7	Sbd box	167.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.90889403221E+03	Apriori delay (usec)	2.90923778089E+03	Resid mbdelay (usec)	1.32195E-06	+/-	1.9E-04
Sband delay (usec)	2.90888742189E+03	Apriori clock (usec)	-2.5087271E+01	Resid sbdelay (usec)	-3.50359E-01	+/-	1.5E-03
Phase delay (usec)	2.90923778005E+03	Apriori clockrate (us/s)	-7.7387992E-06	Resid phdelay (usec)	-8.42301E-07	+/-	6.4E-07
Delay rate (us/s)	7.15924883735E-01	Apriori rate (us/s)	7.15927843872E-01	Resid rate (us/s)	-2.96014E-06	+/-	7.4E-09
Total phase (deg)	134.5	Apriori accel (us/s/s)	-2.16304518486E-05	Resid phase (deg)	-26.1	+/-	19.9

ph/seg (deg)	62.7	RMS	47.8	Theor.	Amplitude	0.177 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.4	62.7	47.8	Search (1024X32)	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	30.4	79.4	83.5	Interp.	0.000	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	29.8	30.4	28.2	Inc. seg. avg.	0.181	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00	
		29.8	49.2	Inc. frq. avg.	0.171						

L: az 23.1 el 48.9 pa -116.3 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -11943.544 -4655.437 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ln..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ln.W.253.3MP15Q

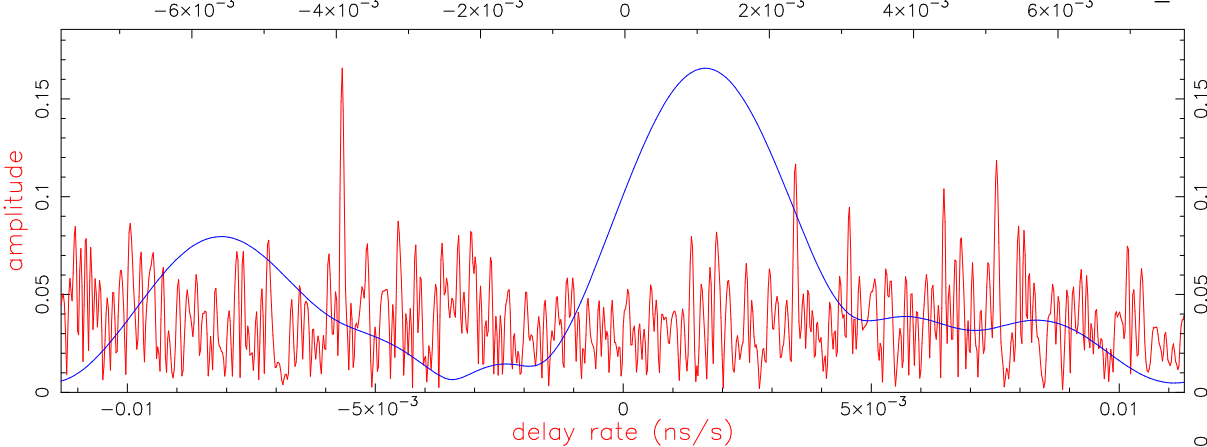
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ln

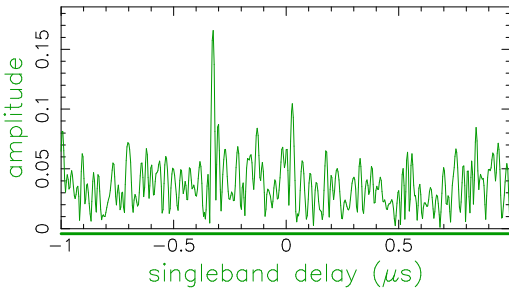
KVNPC - VLBA\_NL, fgroup W, pol RR

multiband delay ( $\mu$ s)

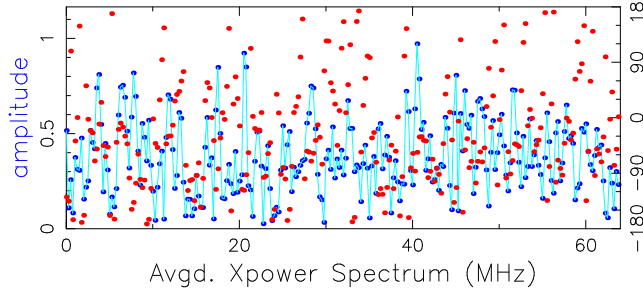


Fringe quality 0

SNR 5.6  
 Int time 149.816  
 Amp 0.186  
 Phase 146.9  
 PFD 9.4e-01  
 Delays (us)  
 SBD -0.325279  
 MBD 0.001097  
 Fringe rate (Hz)  
 -0.488116  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

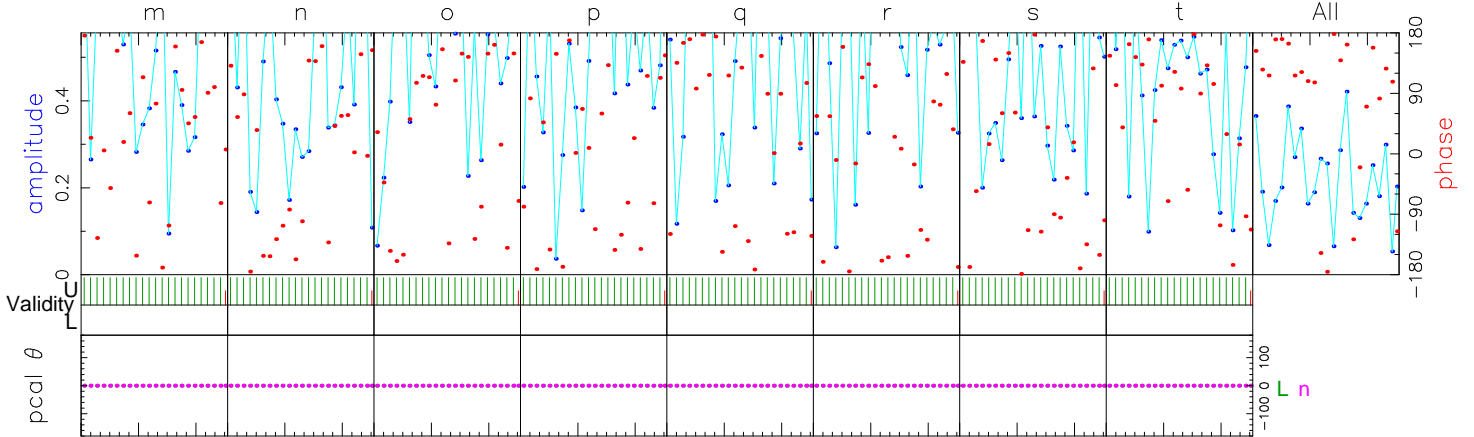


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105613  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	109.8	140.6	159.6	168.7	159.1	119.8	-168.9	113.0	Phase	146.9
	0.1	0.2	0.3	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	223.5	195.2	173.6	473.7	174.2	370.0	490.8	12.5	Sbd box	173.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.90891075249E+03	Apriori delay (usec)	2.90923778089E+03	Resid mbdelay (usec)	1.09660E-03	+/-	1.9E-04
Sband delay (usec)	2.90891250189E+03	Apriori clock (usec)	-2.5087271E+01	Resid sbdelay (usec)	-3.25279E-01	+/-	1.5E-03
Phase delay (usec)	2.90923778563E+03	Apriori clockrate (us/s)	-7.7387992E-06	Resid phdelay (usec)	4.73719E-06	+/-	6.6E-07
Delay rate (us/s)	7.15922177329E-01	Apriori rate (us/s)	7.15927843872E-01	Resid rate (us/s)	-5.66654E-06	+/-	7.6E-09
Total phase (deg)	307.5	Apriori accel (us/s/s)	-2.16304518486E-05	Resid phase (deg)	146.9	+/-	20.5

ph/seg (deg)	54.5	Theor.	49.2	Amplitude	0.186 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.5		85.8	Search (1024X32)	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	31.7		29.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	37.7		50.6	Inc. seg. avg.	0.179	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.180	Data rate(Mb/s): 2048				

L: az 23.1 el 48.9 pa -116.3 n: az 334.0 el 38.2 pa 71.8 u,v (fr/asec) -11943.544 -4655.437 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ln..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ln.W.265.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

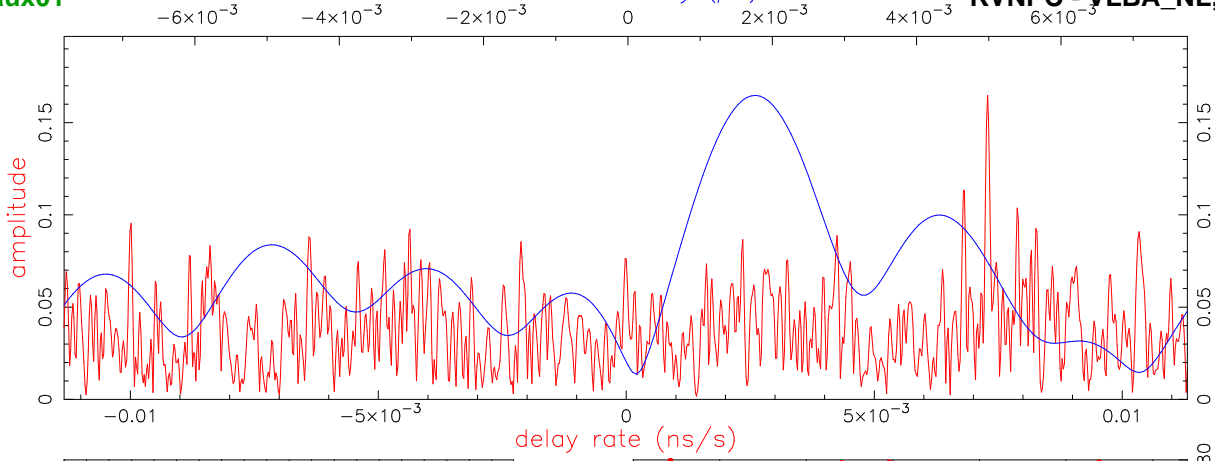
aux01

3C371.3MP15Q, No0901, Ln

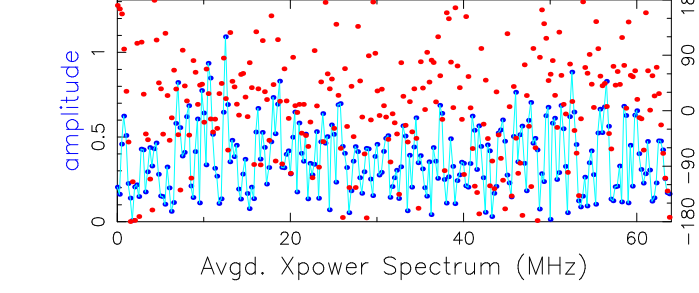
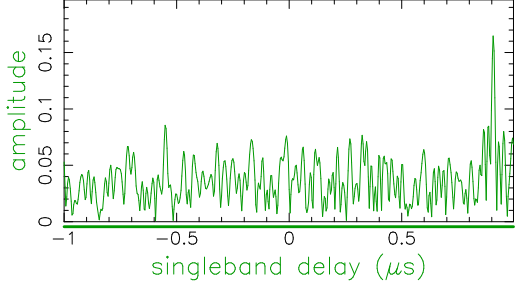
KVNPC - VLBA\_NL, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

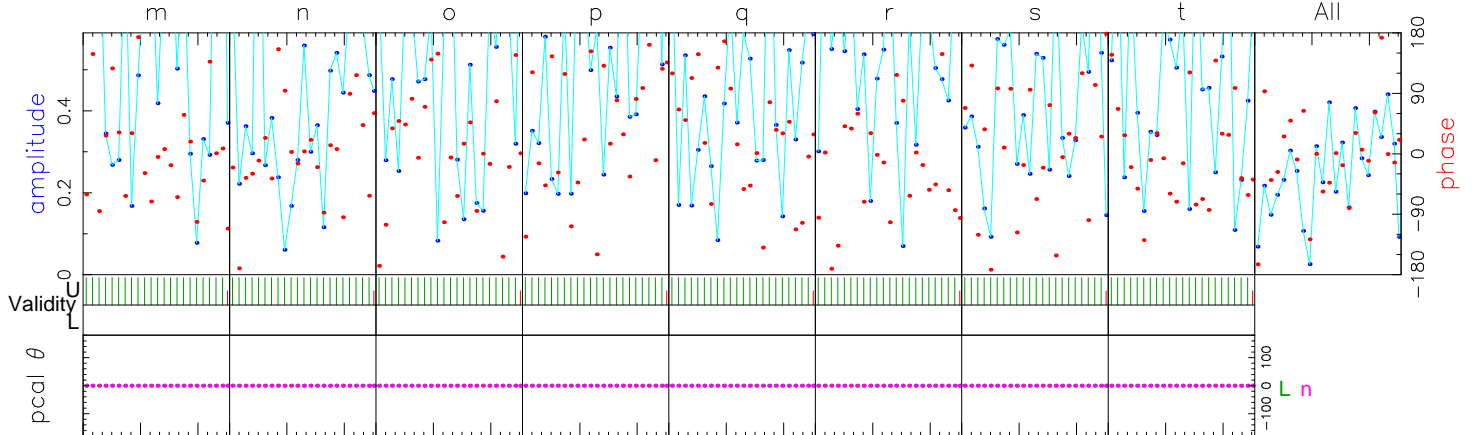


SNR 5.5  
 Int time 149.816  
 Amp 0.197  
 Phase 3.0  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.906640  
 MBD 0.001776  
 Fringe rate (Hz)  
 0.628488  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105618  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-18.3	4.3	23.8	61.9	43.1	-40.6	62.3	-19.3		Phase 3.0
	0.4	0.3	0.2	0.2	0.2	0.3	0.1	0.3		Ampl. 0.2
	272.0	191.7	285.9	263.7	330.4	307.4	207.0	487.4		Sbd box 489.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		APs used
L	0	0	60000	0	0	0	4000	0		PC freqs
n	0	0	0	0	0	0	0	0		PC freqs
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Manl PC
L	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks
										Chan ids
										Tracks
Group delay (usec) (SBD)	2.91014580667E+03			Apriori delay (usec)	2.90923778089E+03			Resid mbdelay (usec)	1.77578E-03	+/- 2.0E-04
Sband delay (usec)	2.91014442089E+03			Apriori clock (usec)	-2.5087271E+01			Resid sbdelay (usec)	9.06640E-01	+/- 1.6E-03
Phase delay (usec)	2.90923778099E+03			Apriori clockrate (us/s)	-7.7387992E-06			Resid phdelay (usec)	9.62995E-08	+/- 6.7E-07
Delay rate (us/s)	7.15935139992E-01			Apriori rate (us/s)	7.15927843872E-01			Resid rate (us/s)	7.29612E-06	+/- 7.7E-09
Total phase (deg)		163.6		Apriori accel (us/s/s)	-2.16304518486E-05			Resid phase (deg)	3.0	+/- 20.8

ph/seg (deg) 69.5 49.8 Search (1024X32) 0.157 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 85.6 86.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 44.5 29.4 Inc. seg. avg. 0.218 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.6 51.2 Inc. frq. avg. 0.210 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 L: az 23.1 el 48.9 pa -116.3 n: az 334.0 el 38.2 pa 71.8 u, v (fr/asec) -11943.544 -4655.437 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ln..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ln.W.278.3MP15Q

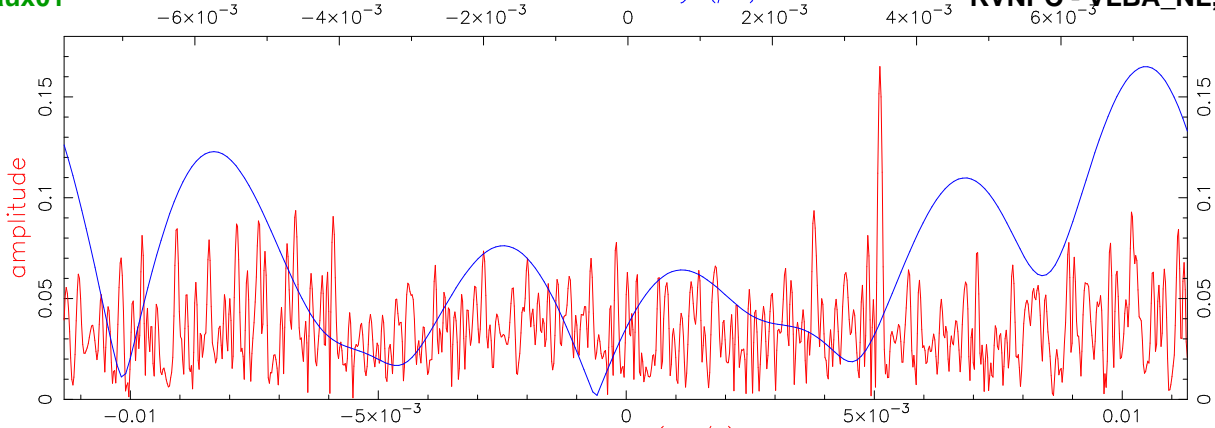
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ln

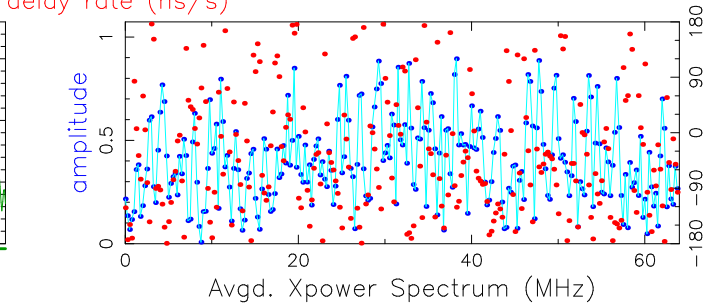
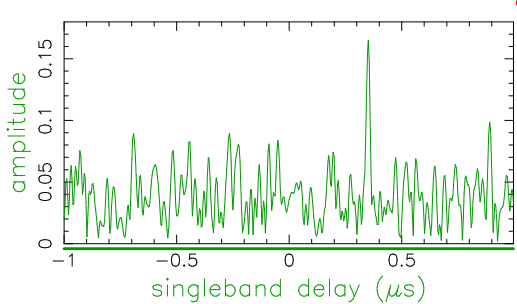
KVNPC - VLBA\_NL, fgroup W, pol RL

multiband delay ( $\mu$ s)



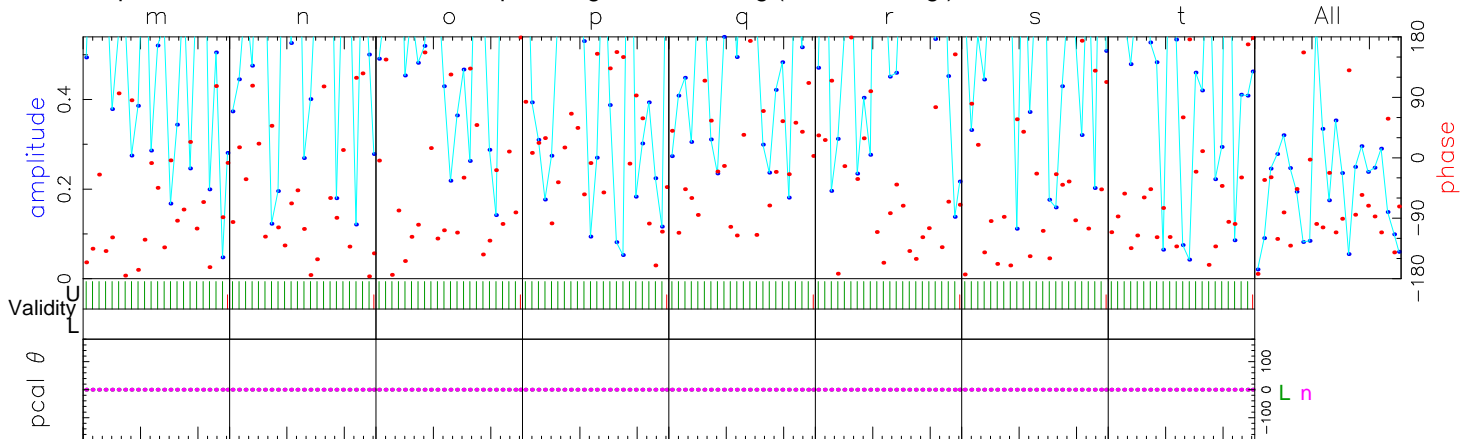
Fringe quality 0

SNR 5.5  
 Int time 149.816  
 Amp 0.180  
 Phase -87.2  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.351014  
 MBD 0.007151  
 Fringe rate (Hz)  
 0.440990  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-111.2	-93.2	-108.5	7.0	-1.1	-105.0	-92.6	-96.1	Phase	-87.2
	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.4	Ampl.	0.2
	348.4	165.2	199.9	237.2	243.6	392.7	73.8	346.3	Sbd box	346.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
n	0	0	0	0	0	0	0	0	PC freqs	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.90958868223E+03	Apriori delay (usec)	2.90923778089E+03	Resid mbdelay (usec)	7.15134E-03	+/-	2.0E-04
Sband delay (usec)	2.90958879439E+03	Apriori clock (usec)	-2.5087271E+01	Resid sbdelay (usec)	3.51014E-01	+/-	1.6E-03
Phase delay (usec)	2.90923777808E+03	Apriori clockrate (us/s)	-7.7387992E-06	Resid phdelay (usec)	-2.81171E-06	+/-	6.7E-07
Delay rate (us/s)	7.15932963327E-01	Apriori rate (us/s)	7.15927843872E-01	Resid rate (us/s)	5.11945E-06	+/-	7.7E-09
Total phase (deg)	73.4	Apriori accel (us/s/s)	-2.16304518486E-05	Resid phase (deg)	-87.2	+/-	20.7

ph/seg (deg)	63.4	Theor.	49.7	Amplitude	0.180 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	80.5		86.7	Search (1024X32)	0.164	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	54.4		29.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	46.9		51.1	Inc. seg. avg.	0.172	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.205	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

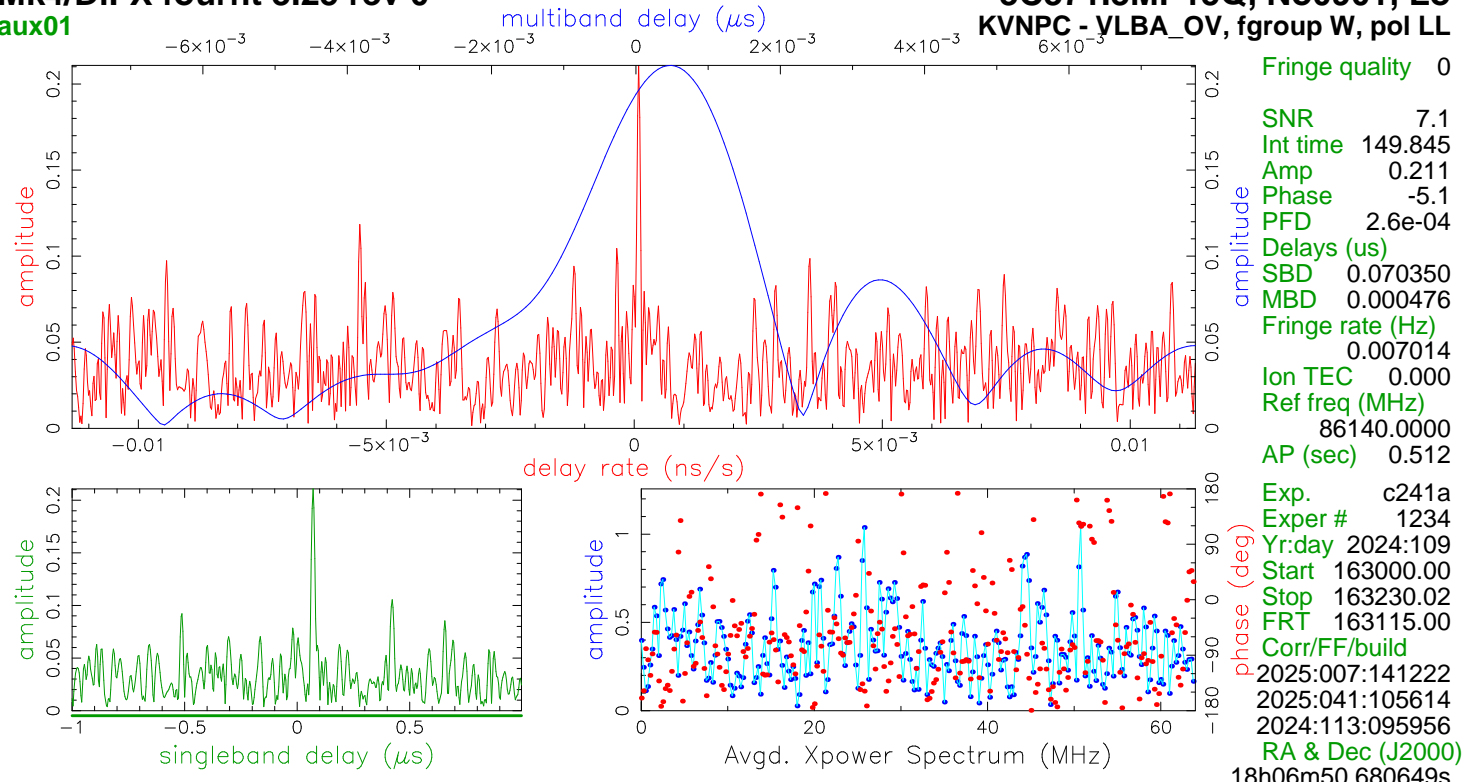
L: az 23.1 el 48.9 pa -116.3      n: az 334.0 el 38.2 pa 71.8      u,v (fr/asec) -11943.544 -4655.437      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/Ln..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/Ln.W.284.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

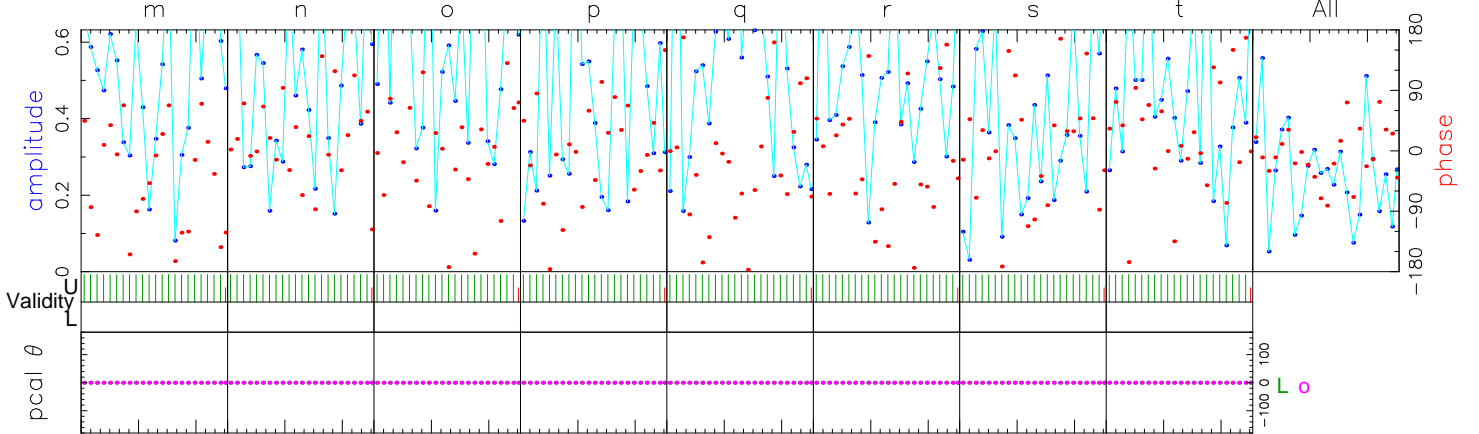
aux01

3C371.3MP15Q, No0901, Lo

KVNPC - VLBA\_OV, fgroup W, pol LL



Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-18.5	24.3	4.2	-8.8	-39.8	-30.7	-1.4	31.0		-5.1
	0.2	0.3	0.2	0.3	0.2	0.2	0.1	0.2	Ampl.	0.2
	257.7	275.9	295.3	276.2	273.7	468.9	201.9	364.9	Sbd box	275.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	1.46312835009E+03					1.46306537379E+03			4.76308E-04	+/- 1.5E-04
Sband delay (usec)	1.46313572429E+03					-5.0432774E+01			7.03505E-02	+/- 1.2E-03
Phase delay (usec)	1.46306537362E+03					-7.9228108E-06			-1.64359E-07	+/- 5.2E-07
Delay rate (us/s)	7.03599977224E-01					7.03599895799E-01			8.14246E-08	+/- 6.0E-09
Total phase (deg)			102.2			-7.61170463565E-06			-5.1	+/- 16.2
	RMS	Theor.	Amplitude	0.211 +/- 0.030						
ph/seg (deg)	40.0	38.9	Search (1024X32)	0.207						
amp/seg (%)	64.2	68.0	Interp.	0.000						
ph/frq (deg)	26.8	23.0	Inc. seg. avg.	0.209						
amp/frq (%)	22.0	40.1	Inc. frq. avg.	0.212						
L: az 23.1 el 48.9 pa -116.3			o: az 334.6 el 43.2 pa 98.8							
			u, v (fr/asec) -11700.591 -1475.733							simultaneous interpolator
Control file: cf_1234_gmva			Input file: /Exps/c241a/v2/3mm/1234/No0901/Lo..3MP15Q							Output file: /Exps/c241a/v2/3mm/1234/No0901/Lo.W.272.3MP15Q

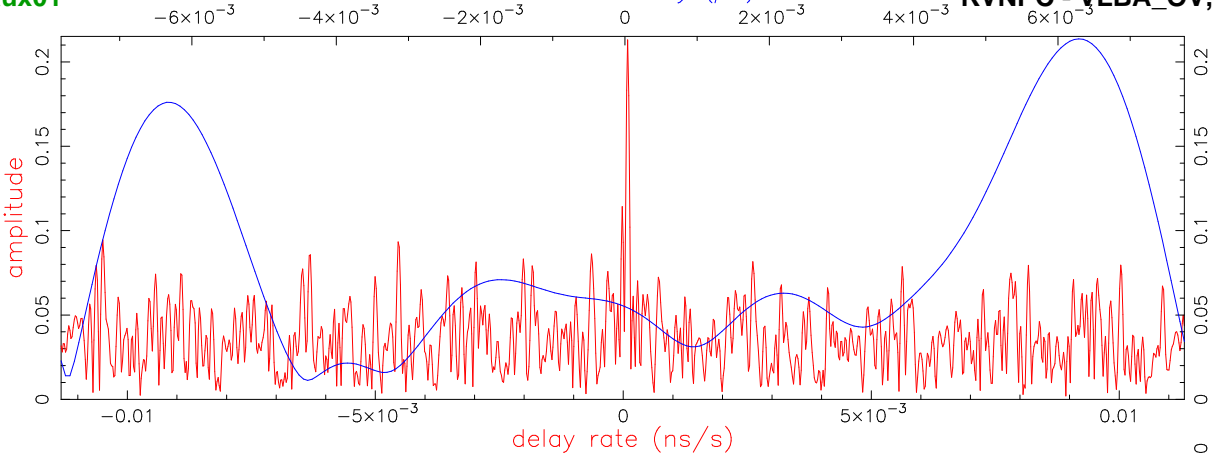
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lo

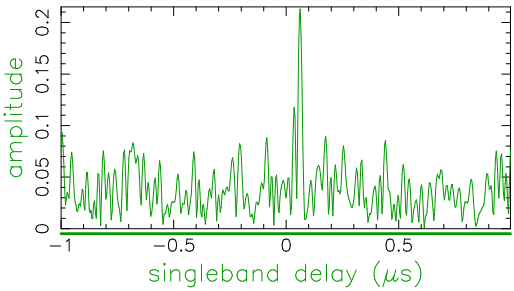
KVNPC - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

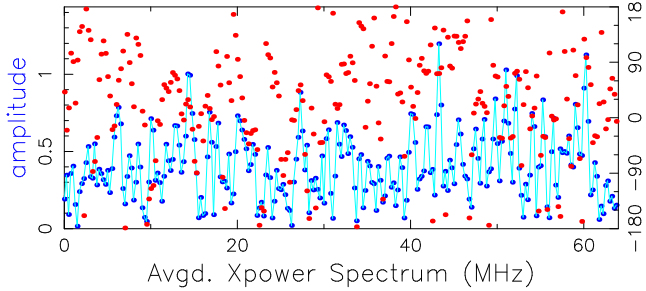


Fringe quality 9

SNR 7.2  
 Int time 149.845  
 Amp 0.215  
 Phase -36.7  
 PFD 9.1e-05  
 Delays (us)  
 SBD 0.061205  
 MBD 0.006213  
 Fringe rate (Hz) 0.008028  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

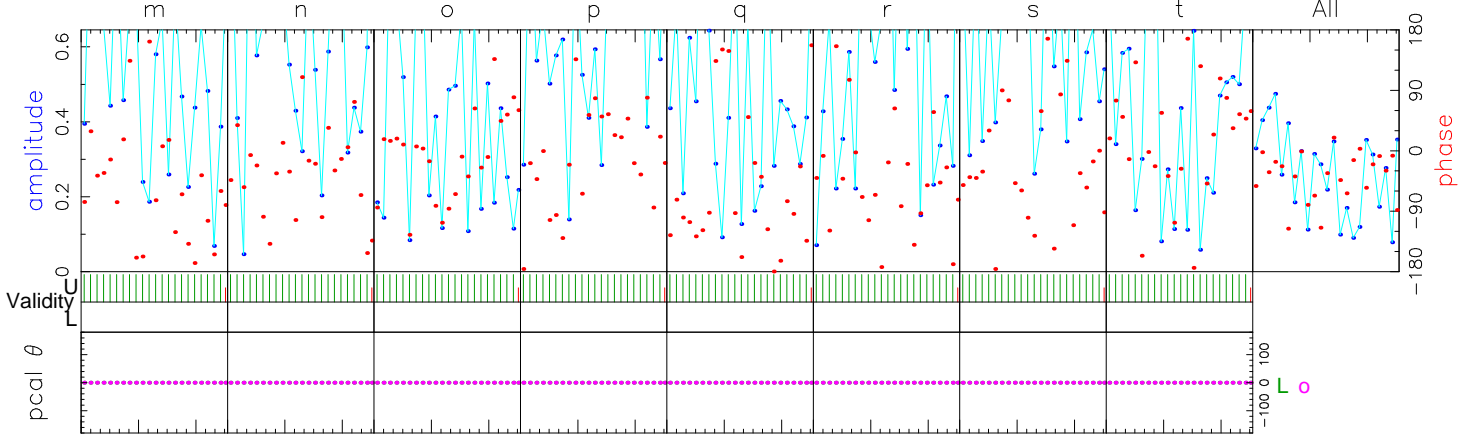


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105616  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.4	-33.5	0.7	-5.7	-113.5	-67.3	-46.4	26.1	Phase	-36.7
	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.3
	275.0	272.8	233.7	271.9	272.9	271.9	491.5	433.9	Sbd box	272.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
L:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.46313408634E+03	Apriori delay (usec)	1.46306537379E+03	Resid mbdelay (usec)	6.21256E-03	+/-	1.5E-04
Sband delay (usec)	1.46312657879E+03	Apriori clock (usec)	-5.0432774E+01	Resid sbdelay (usec)	6.12050E-02	+/-	1.2E-03
Phase delay (usec)	1.46306537260E+03	Apriori clockrate (us/s)	-7.9228108E-06	Resid phdelay (usec)	-1.18409E-06	+/-	5.1E-07
Delay rate (us/s)	7.0359988993E-01	Apriori rate (us/s)	7.03599895799E-01	Resid rate (us/s)	9.31937E-08	+/-	5.9E-09
Total phase (deg)	70.5	Apriori accel (us/s/s)	-7.61170463565E-06	Resid phase (deg)	-36.7	+/-	15.9

ph/seg (deg)	35.4	Theor.	38.2	Amplitude	0.215 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.6		66.6	Search (1024X32)	0.212	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	47.9		22.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.8		39.3	Inc. seg. avg.	0.216	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.259	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

L: az 23.1 el 48.9 pa -116.3      o: az 334.6 el 43.2 pa 98.8      u, v (fr/asec) -11700.591 -1475.733      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/Lo..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/Lo.W.273.3MP15Q

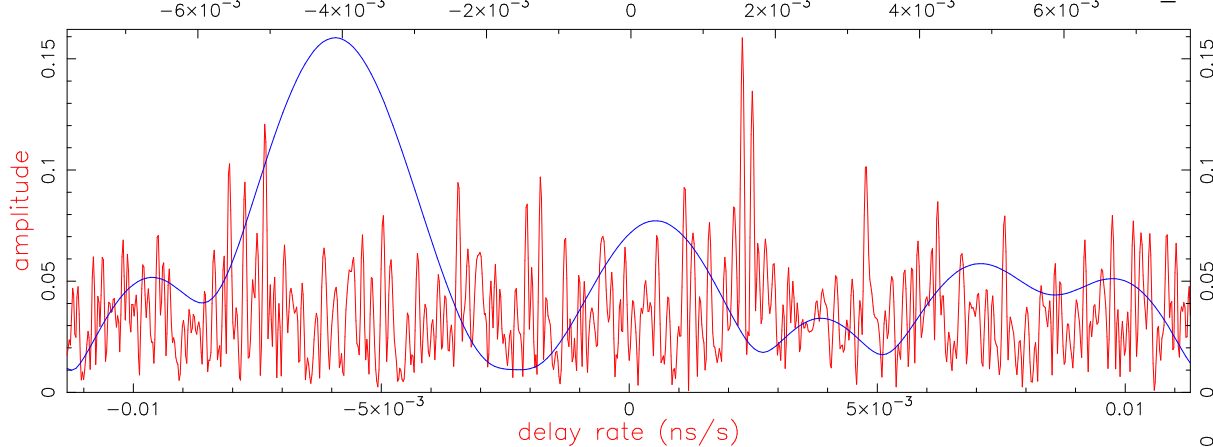
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lo

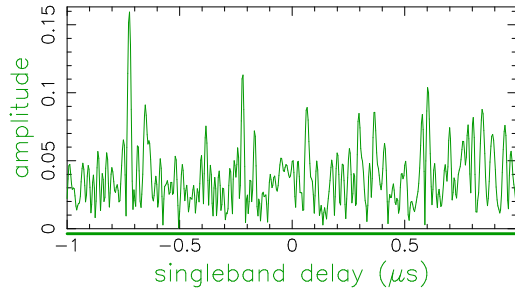
KVNPC - VLBA\_OV, fgroup W, pol LR

multiband delay ( $\mu$ s)

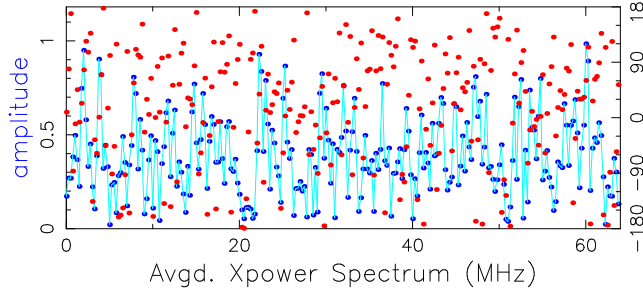


Fringe quality 0

SNR 5.4  
 Int time 149.845  
 Amp 0.163  
 Phase 42.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.723676  
 MBD -0.004133  
 Fringe rate (Hz)  
 0.196347  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

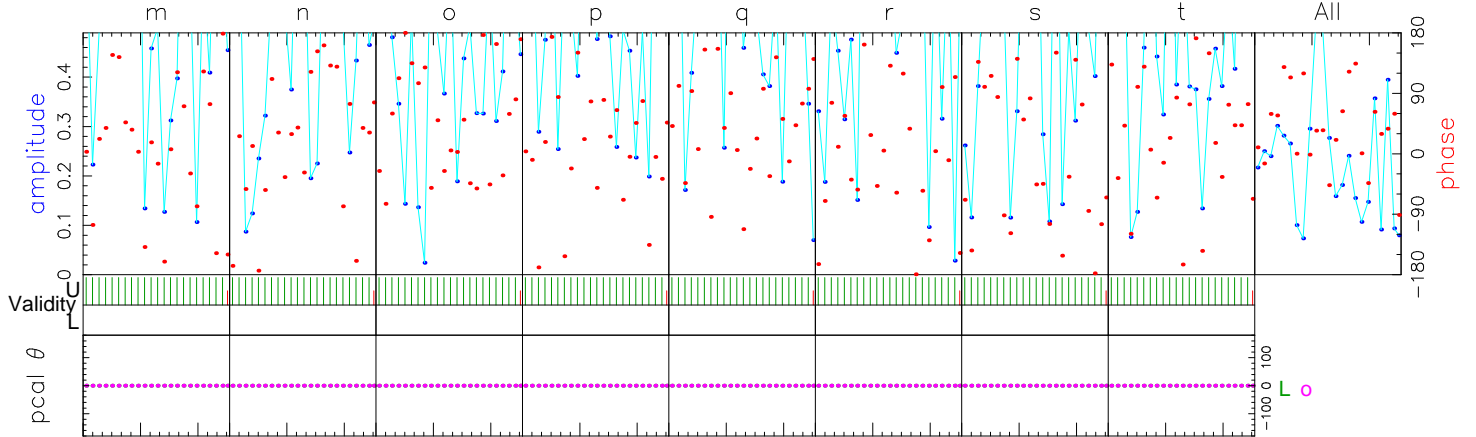


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
o	0	0	0	0	0	0	0	0		
L: o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L: o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	1.46234249035E+03	Apriori delay (usec)	1.46306537379E+03	Resid mbdelay (usec)	-4.13344E-03	+/-	2.0E-04
Sband delay (usec)	1.46234169779E+03	Apriori clock (usec)	-5.0432774E+01	Resid sbdelay (usec)	-7.23676E-01	+/-	1.6E-03
Phase delay (usec)	1.46306537514E+03	Apriori clockrate (us/s)	-7.9228108E-06	Resid phdelay (usec)	1.35669E-06	+/-	6.9E-07
Delay rate (us/s)	7.03602175195E-01	Apriori rate (us/s)	7.03599895799E-01	Resid rate (us/s)	2.27940E-06	+/-	7.9E-09
Total phase (deg)	149.3	Apriori accel (us/s/s)	-7.61170463565E-06	Resid phase (deg)	42.1	+/-	21.3

ph/seg (deg)	55.8	Theor.	51.1	Amplitude	0.163 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	89.8		89.2	Search (1024X32)	0.158	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.6		30.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.9		52.6	Inc. seg. avg.	0.171	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.158	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3      o: az 334.6 el 43.2 pa 98.8      u, v (fr/asec) -11700.591 -1475.733      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/Lo..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/Lo.W.288.3MP15Q

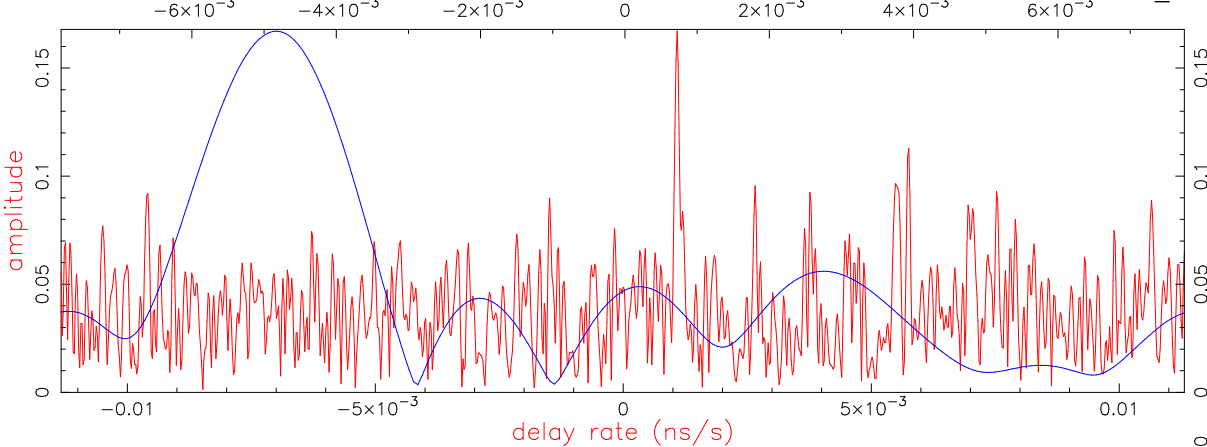
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lo

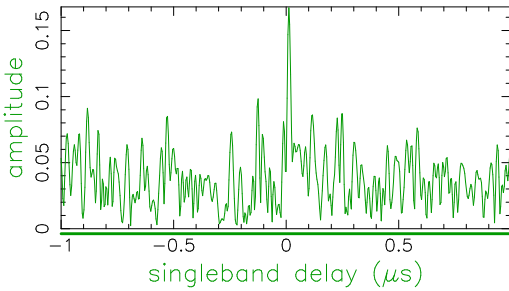
KVNPC - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)

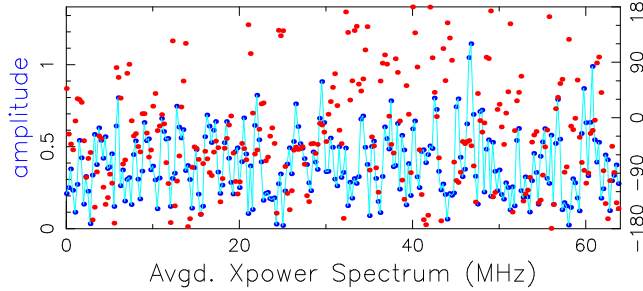


Fringe quality 0

SNR 5.6  
 Int time 149.845  
 Amp 0.168  
 Phase 152.8  
 PFD 9.3e-01  
 Delays (us)  
 SBD 0.012134  
 MBD -0.004836  
 Fringe rate (Hz) 0.094293  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

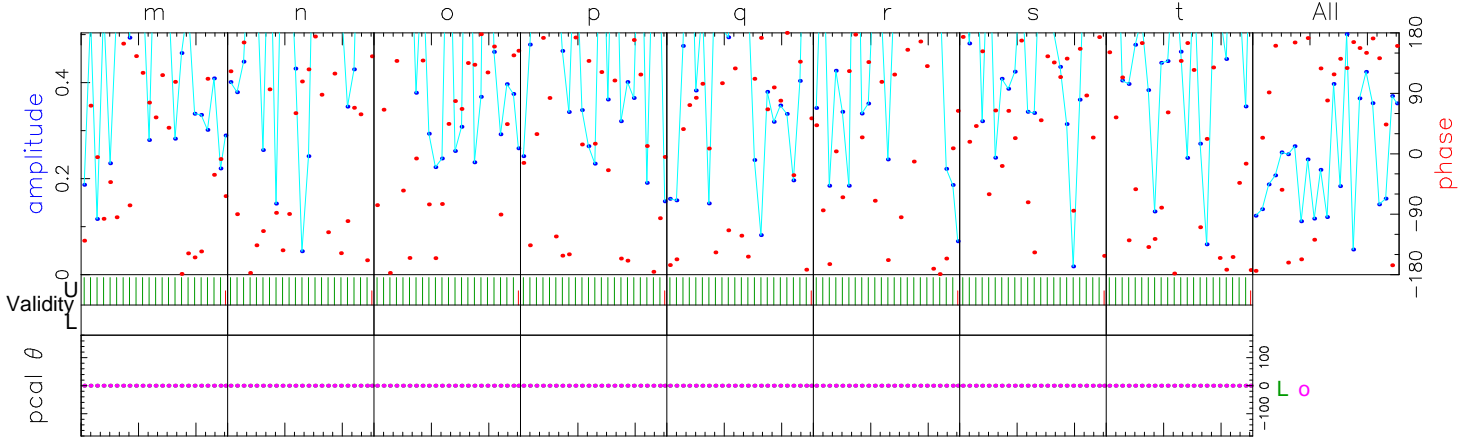


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105625  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
o	0	0	0	0	0	0	0	0		
L: 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L: 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	1.46307616254E+03	Apriori delay (usec)	1.46306537379E+03	Resid mbdelay (usec)	-4.83625E-03	+/-	1.9E-04
Sband delay (usec)	1.46307750754E+03	Apriori clock (usec)	-5.0432774E+01	Resid sbdelay (usec)	1.21338E-02	+/-	1.5E-03
Phase delay (usec)	1.46306537871E+03	Apriori clockrate (us/s)	-7.9228108E-06	Resid phdelay (usec)	4.92664E-06	+/-	6.6E-07
Delay rate (us/s)	7.03600990452E-01	Apriori rate (us/s)	7.03599895799E-01	Resid rate (us/s)	1.09465E-06	+/-	7.6E-09
Total phase (deg)	260.0	Apriori accel (us/s/s)	-7.61170463565E-06	Resid phase (deg)	152.8	+/-	20.5

ph/seg (deg)	59.2	Theor.	49.1	Amplitude	0.168 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	82.1		85.7	Search (1024X32)	0.163	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	22.9		28.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	22.0		50.5	Inc. seg. avg.	0.175	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.158	Data rate(Mb/s): 2048	t_cohere infinite			

L: az 23.1 el 48.9 pa -116.3 o: az 334.6 el 43.2 pa 98.8 u, v (fr/asec) -11700.591 -1475.733 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lo.W.293.3MP15Q



Mk4/DiFX fourfit 3.25 rev 0

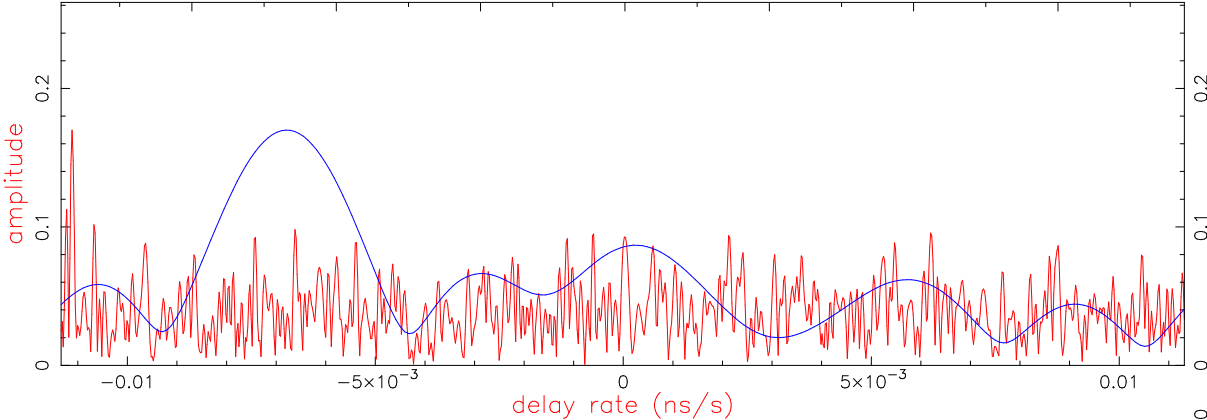
aux01

3C371.3MP15Q, No0901, Lp

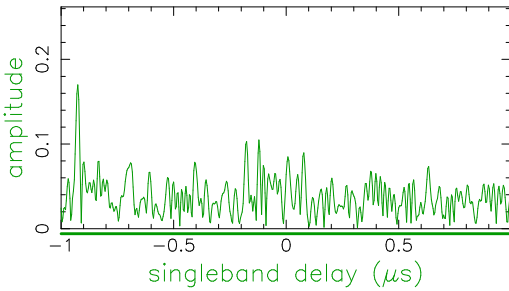
KVNPC - VLBA\_PT, fgroup W, pol LL

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

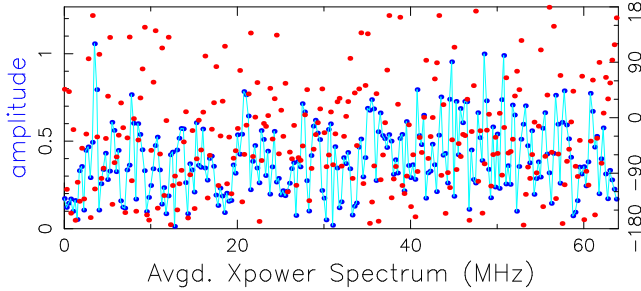
Fringe quality 0



SNR 5.7  
 Int time 149.840  
 Amp 0.262  
 Phase 133.1  
 PFD 7.9e-01  
 Delays (us)  
 SBD -0.926179  
 MBD -0.004692  
 Fringe rate (Hz)  
 -0.958058  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

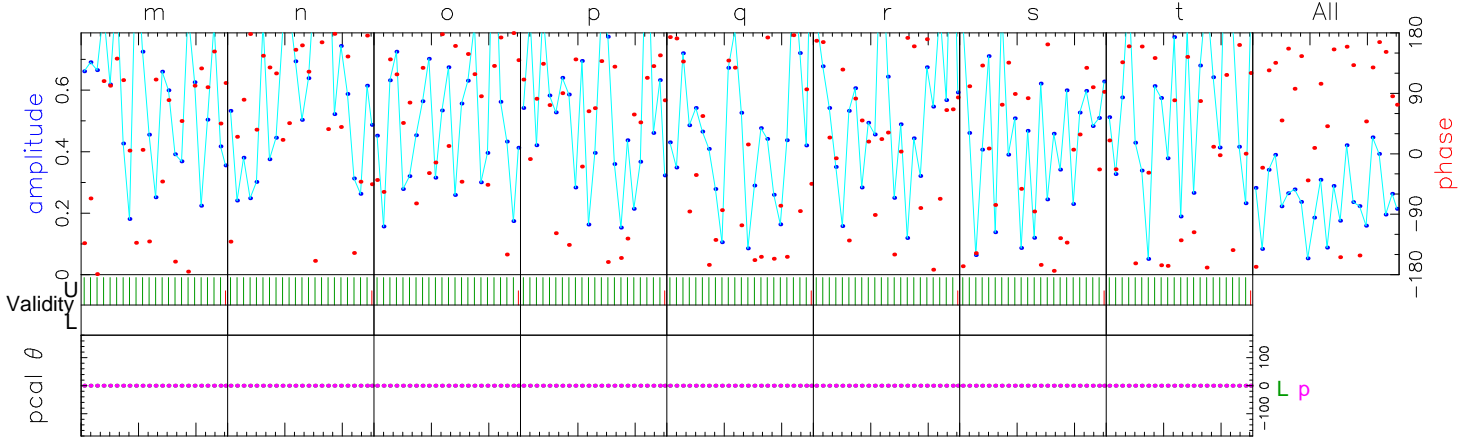


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105618  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	141.2	127.6	125.1	118.5	-166.5	68.2	118.5	143.8	Phase	133.1
	0.3	0.4	0.2	0.4	0.3	0.2	0.2	0.4	Ampl.	0.3
	145.1	231.2	365.8	289.2	224.4	331.0	389.3	274.9	Sbd box	19.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.22482156215E+03	Apriori delay (usec)	3.22574812925E+03	Resid mbdelay (usec)	-4.69210E-03	+/-	1.9E-04
Sband delay (usec)	3.22482195025E+03	Apriori clock (usec)	-3.1077412E+01	Resid sbdelay (usec)	-9.26179E-01	+/-	1.5E-03
Phase delay (usec)	3.22574813354E+03	Apriori clockrate (us/s)	-7.8202358E-06	Resid phdelay (usec)	4.29322E-06	+/-	6.5E-07
Delay rate (us/s)	7.44646287478E-01	Apriori rate (us/s)	7.44657409584E-01	Resid rate (us/s)	-1.11221E-05	+/-	7.5E-09
Total phase (deg)	80.4	Apriori accel (us/s/s)	-1.24998727168E-05	Resid phase (deg)	133.1	+/-	20.1

ph/seg (deg)	RMS 71.7	Theor. 48.3	Amplitude Search (1024X32)	0.262 +/- 0.046	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.0	84.3	Interp.	0.167	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	37.8	28.5	Inc. seg. avg.	0.285	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.0	49.7	Inc. frq. avg.	0.266	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

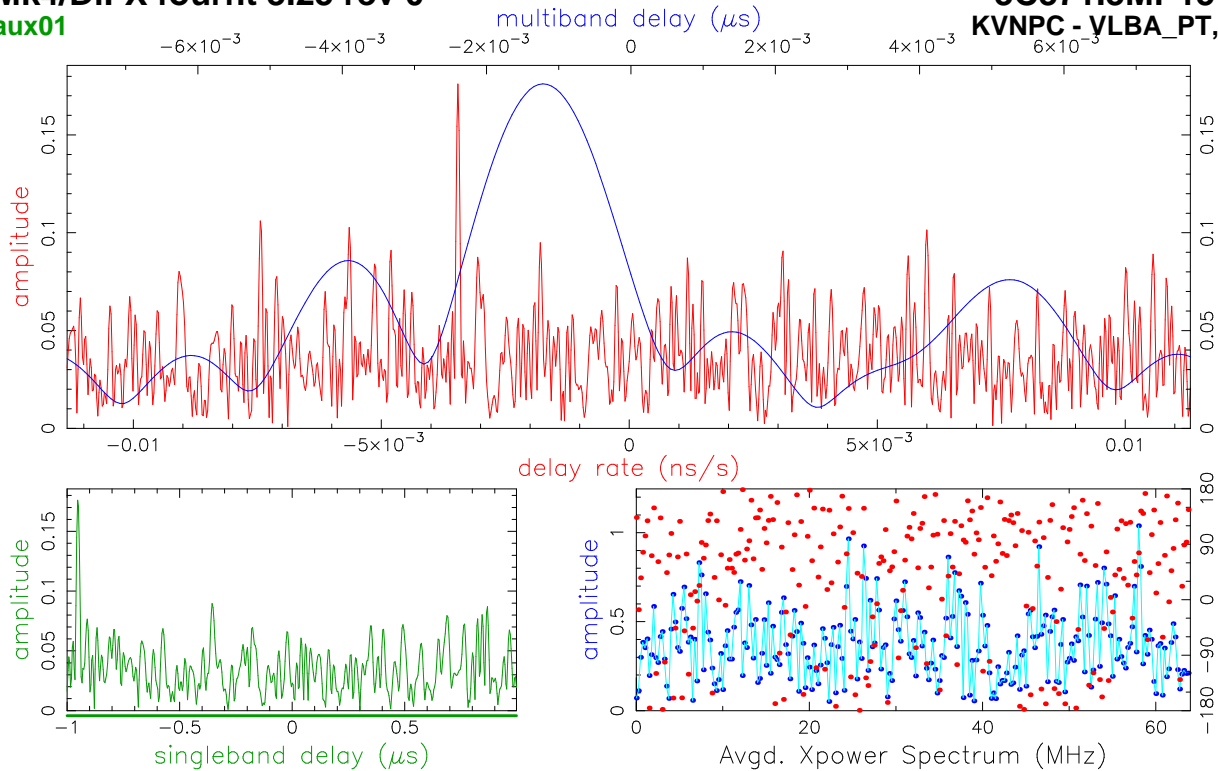
L: az 23.1 el 48.9 pa -116.3 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12394.255 -2385.739 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lp.W.281.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

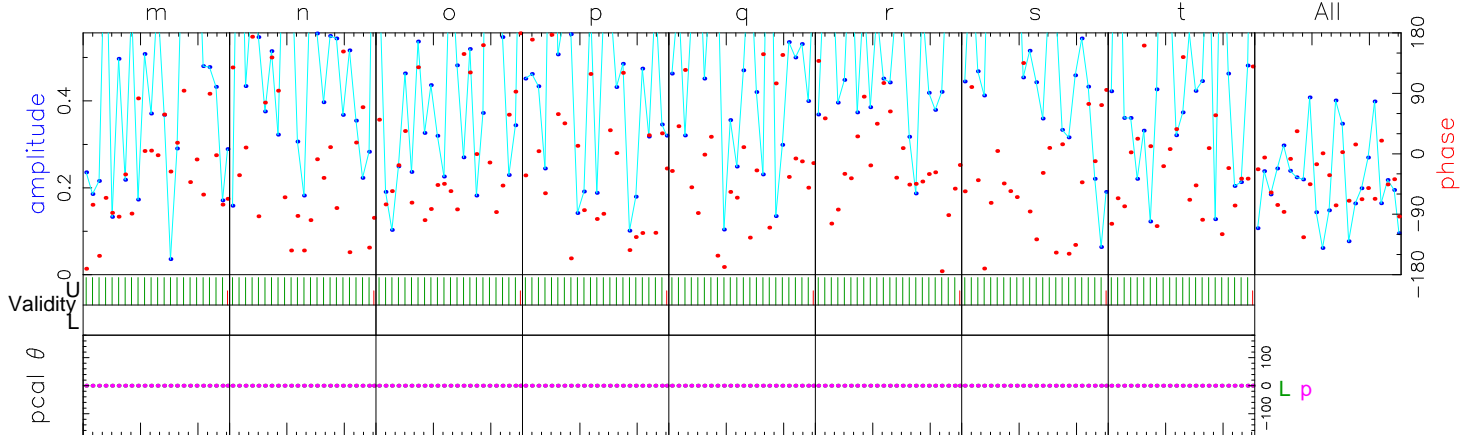
3C371.3MP15Q, No0901, Lp

KVNPC - VLBA\_PT, fgroup W, pol RR



Fringe quality 0  
 SNR 6.0  
 Int time 149.840  
 Amp 0.186  
 Phase -42.7  
 PFD 2.5e-01  
 Delays (us)  
 SBD -0.951695  
 MBD -0.001189  
 Fringe rate (Hz)  
 -0.297531  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-24.0	-78.6	-35.5	-58.9	-48.9	-21.1	-55.4	-46.4	Phase	-42.7	
	0.2	0.2	0.2	0.0	0.2	0.3	0.2	0.3	Ampl.	0.2	
	136.3	271.9	474.4	144.2	183.7	14.0	234.0	337.6	Sbd box	13.4	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
L	0	0	60000	0	0	0	4000	0	PC freqs		
p	0	0	0	0	0	0	0	0	PC freqs		
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
p	1000	1000	1000	1000	1000	1000	1000	1000			
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	3.22479381488E+03		Apriori delay (usec)		3.22574812925E+03		Resid mbdelay (usec)		-1.18937E-03	+/- 1.8E-04	
Sband delay (usec)	3.22479643400E+03		Apriori clock (usec)		-3.1077412E+01		Resid sbdelay (usec)		-9.51695E-01	+/- 1.4E-03	
Phase delay (usec)	3.22574812787E+03		Apriori clockrate (us/s)		-7.8202358E-06		Resid phdelay (usec)		-1.37766E-06	+/- 6.2E-07	
Delay rate (us/s)	7.4465395545E-01		Apriori rate (us/s)		7.44657409584E-01		Resid rate (us/s)		-3.45404E-06	+/- 7.1E-09	
Total phase (deg)	264.5		Apriori accel (us/s/s)		-1.24998727168E-05		Resid phase (deg)		-42.7	+/- 19.2	
	RMS	Theor.	Amplitude	0.186 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	39.5	46.0	Search (1024X32)	0.175		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	59.5	80.2	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	20.9	27.1	Inc. seg. avg.	0.175		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	42.3	47.3	Inc. frq. avg.	0.173		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
L: az 23.1 el 48.9 pa -116.3	p: az 335.3 el 37.1 pa 90.7		u,v (fr/asec)		-12394.255 -2385.739		simultaneous interpolator				
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901/Lp..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/Lp.W.286.3MP15Q								

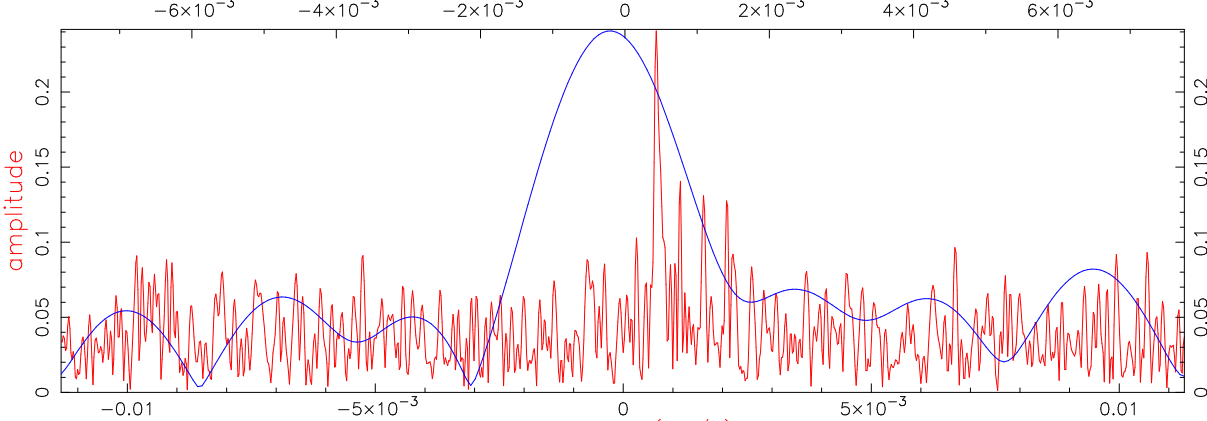
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LP

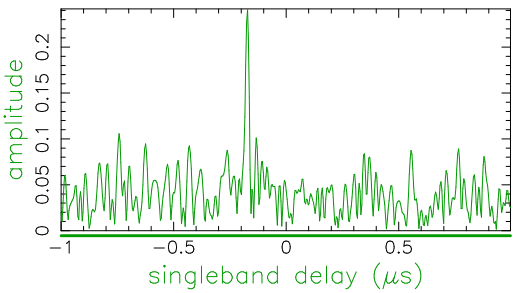
KVNPC - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

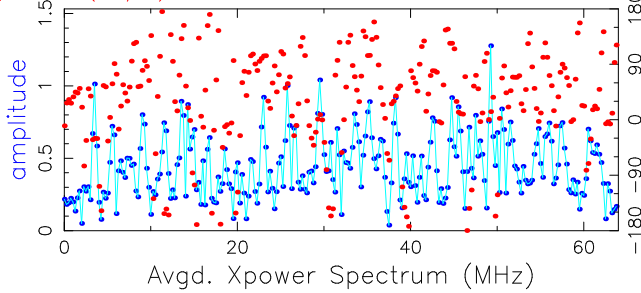


Fringe quality 9

SNR 8.1  
 Int time 149.853  
 Amp 0.242  
 Phase -129.3  
 PFD 1.1e-07  
 Delays (us)  
 SBD -0.172567  
 MBD -0.000209  
 Fringe rate (Hz)  
 0.056659  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

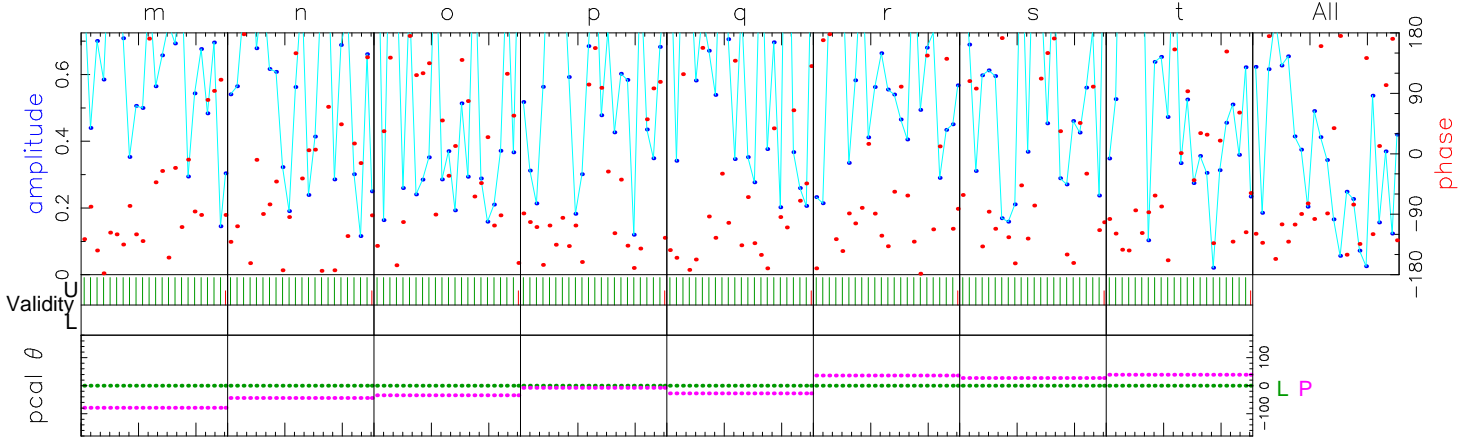


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-115.8	-117.3	-167.5	-135.8	-139.9	-126.7	-121.4	-119.5	Phase	-129.3
	0.3	0.1	0.2	0.3	0.3	0.4	0.1	0.3	Ampl.	0.2
	213.1	235.1	27.7	480.3	213.8	213.2	506.2	335.7	Sbd box	212.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
L:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.85631090202E+03	Apriori delay (usec)	9.85648298609E+03	Resid mbdelay (usec)	-2.09068E-04	+/-	1.3E-04
Sband delay (usec)	9.85631041909E+03	Apriori clock (usec)	-2.4358923E+01	Resid sbdelay (usec)	-1.72567E-01	+/-	1.1E-03
Phase delay (usec)	9.85648298192E+03	Apriori clockrate (us/s)	-8.0397754E-06	Resid phdelay (usec)	-4.16815E-06	+/-	4.6E-07
Delay rate (us/s)	3.16114739384E-01	Apriori rate (us/s)	3.16114081626E-01	Resid rate (us/s)	6.57758E-07	+/-	5.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-5.18783665178E-05	Resid phase (deg)	-129.3	+/-	14.2

ph/seg (deg)	RMS 66.5	Theor. 34.0	Amplitude 0.242 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	99.3	59.4	Search (1024X32) 0.233	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	18.7	20.1	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	35.3	35.0	Inc. seg. avg. 0.299	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011	
			Inc. frq. avg. 0.234	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 P: az 359.9 el 16.9 pa -0.0 u,v (fr/asec) -5384.920 -11004.393 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LP.W.289.3MP15Q

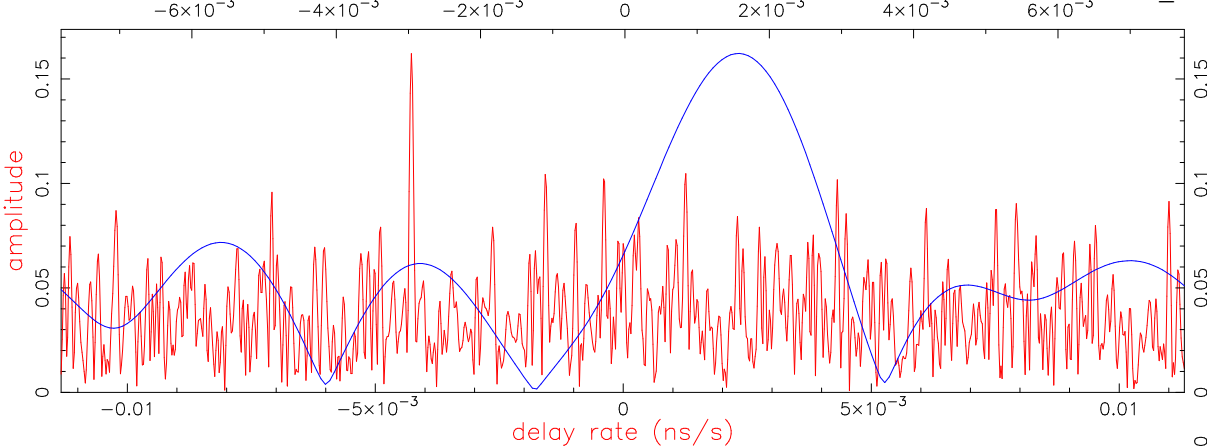
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lp

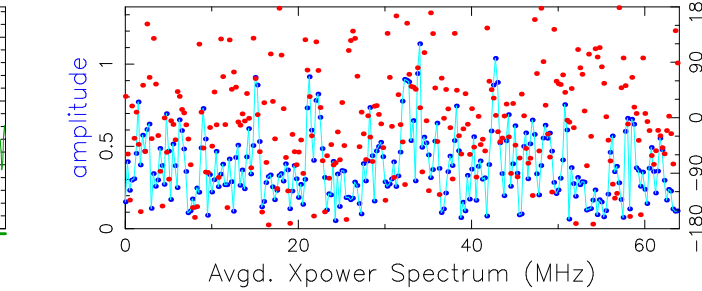
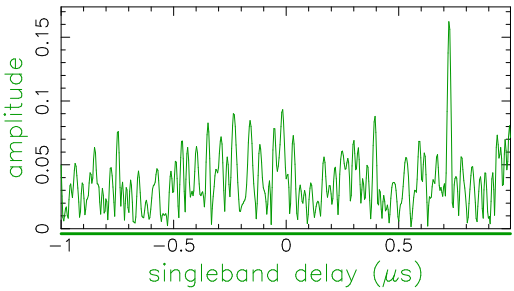
KVNPC - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)



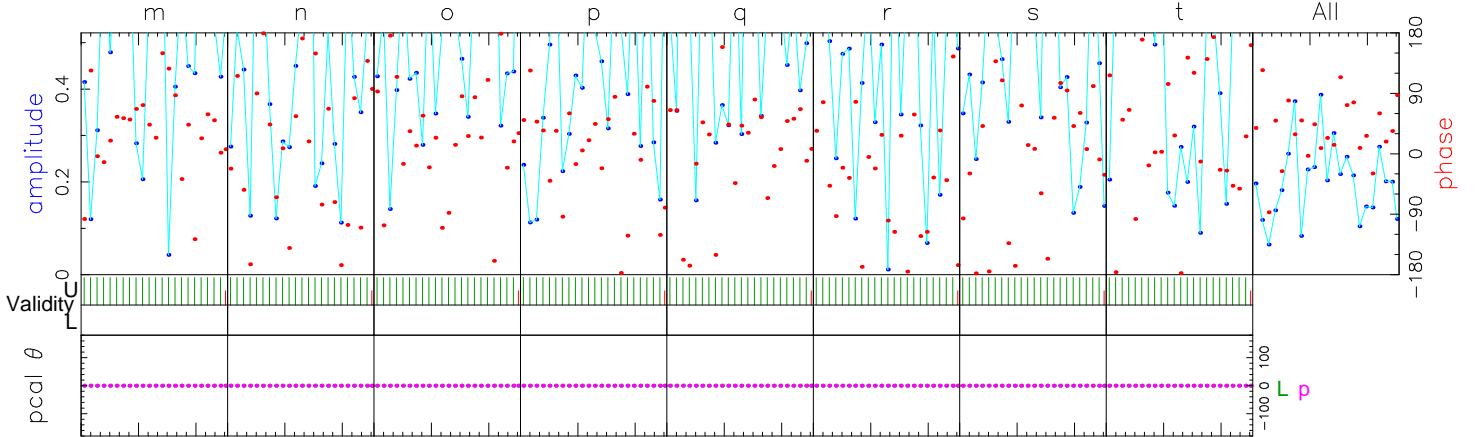
Fringe quality 0

SNR 5.5  
 Int time 149.840  
 Amp 0.174  
 Phase 36.6  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.723861  
 MBD 0.001548  
 Fringe rate (Hz)  
 -0.369238  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105625  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	34.9	79.5	27.1	30.4	32.8	-7.4	85.2	44.4	Phase	36.6
	0.4	0.1	0.2	0.2	0.3	0.1	0.1	0.1	Ampl.	0.2
	442.3	386.6	429.9	199.3	473.8	80.4	237.6	197.0	Sbd box	442.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 3.22646842692E+03 Apriori delay (usec) 3.22574812925E+03 Resid mbdelay (usec) 1.54768E-03 +/- 2.0E-04  
 Sband delay (usec) 3.22647198975E+03 Apriori clock (usec) -3.1077412E+01 Resid sbdelay (usec) 7.23861E-01 +/- 1.6E-03  
 Phase delay (usec) 3.22574813043E+03 Apriori clockrate (us/s) -7.8202358E-06 Resid phdelay (usec) 1.17871E-06 +/- 6.7E-07  
 Delay rate (us/s) 7.44653123101E-01 Apriori rate (us/s) 7.44657409584E-01 Resid rate (us/s) -4.28648E-06 +/- 7.8E-09  
 Total phase (deg) 343.8 Apriori accel (us/s/s) -1.24998727168E-05 Resid phase (deg) 36.6 +/- 20.9

RMS Theor. Amplitude 0.174 +/- 0.032 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 46.4 50.1 Search (1024X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 55.8 87.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 32.5 29.6 Inc. seg. avg. 0.157 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 57.8 51.6 Inc. frq. avg. 0.165 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 p: az 335.3 el 37.1 pa 90.7 u, v (fr/asec) -12394.255 -2385.739 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lp.W.298.3MP15Q

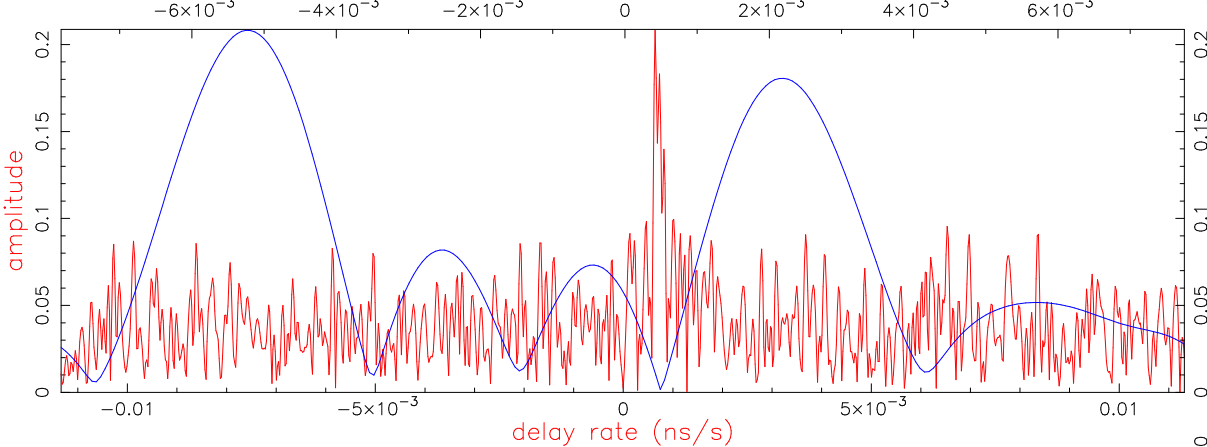
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LP

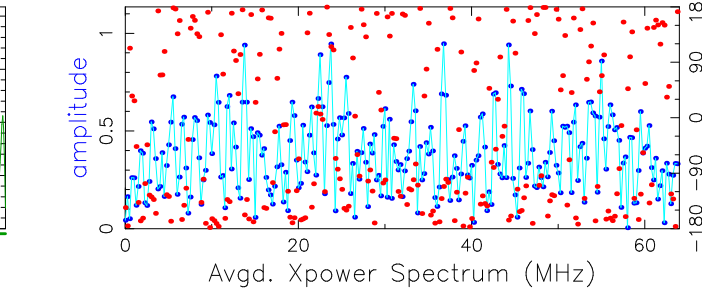
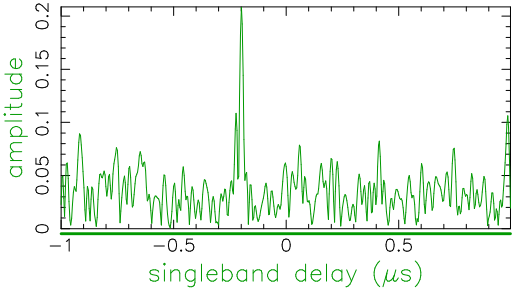
KVNPC - PICOVEL, fgroup W, pol RR

multiband delay ( $\mu$ s)



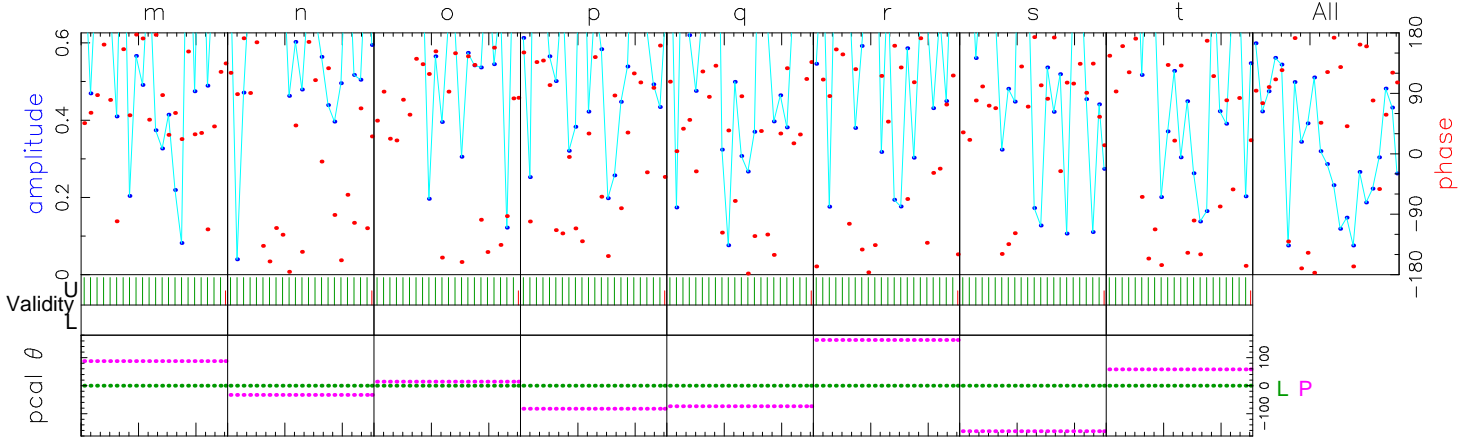
Fringe quality 0

SNR 7.0  
 Int time 149.853  
 Amp 0.209  
 Phase 124.3  
 PFD 4.5e-04  
 Delays (us)  
 SBD -0.198787  
 MBD -0.005221  
 Fringe rate (Hz) 0.054611  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105626  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
P	0	0	0	0	0	0	0	0		
L:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
L	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	9.85629026552E+03	Apriori delay (usec)	9.85648298609E+03	Resid mbdelay (usec)	-5.22057E-03	+/-	1.6E-04
Sband delay (usec)	9.85628419884E+03	Apriori clock (usec)	-2.4358923E+01	Resid sbdelay (usec)	-1.98787E-01	+/-	1.2E-03
Phase delay (usec)	9.85648299010E+03	Apriori clockrate (us/s)	-8.0397754E-06	Resid phdelay (usec)	4.00697E-06	+/-	5.3E-07
Delay rate (us/s)	3.16114715606E-01	Apriori rate (us/s)	3.16114081626E-01	Resid rate (us/s)	6.33981E-07	+/-	6.1E-09
Total phase (deg)	276.1	Apriori accel (us/s/s)	-5.18783665178E-05	Resid phase (deg)	124.3	+/-	16.4

ph/seg (deg)	64.5	Theor.	39.4	Amplitude	0.209 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	98.0	Search (1024X32)	0.202	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	47.2	Inc. seg. avg.	0.275	Inc. frq. avg.	0.251	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	38.8	Inc. frq. avg.	0.251			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5384.920 -11004.393 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LP.W.299.3MP15Q

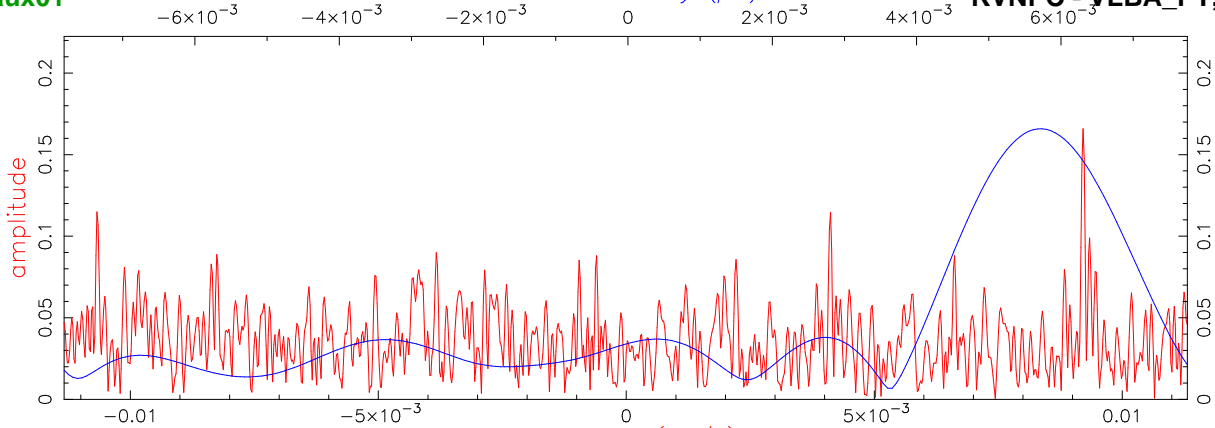
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lp

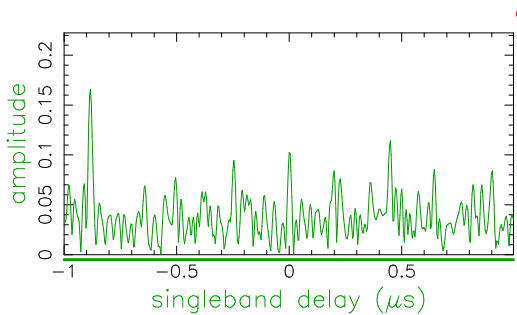
KVNPC - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

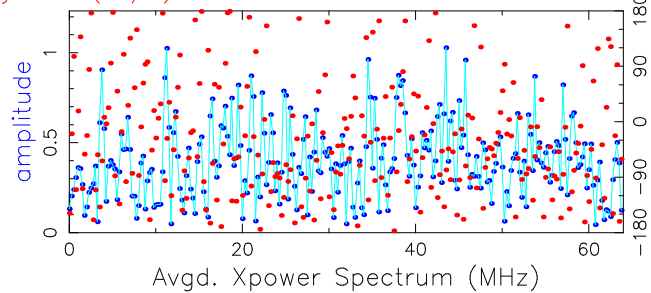


Fringe quality 0

SNR 5.6  
Int time 149.840  
Amp 0.222  
Phase 122.8  
PFD 9.5e-01  
Delays (us)  
SBD -0.883777  
MBD 0.005703  
Fringe rate (Hz) 0.795457  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

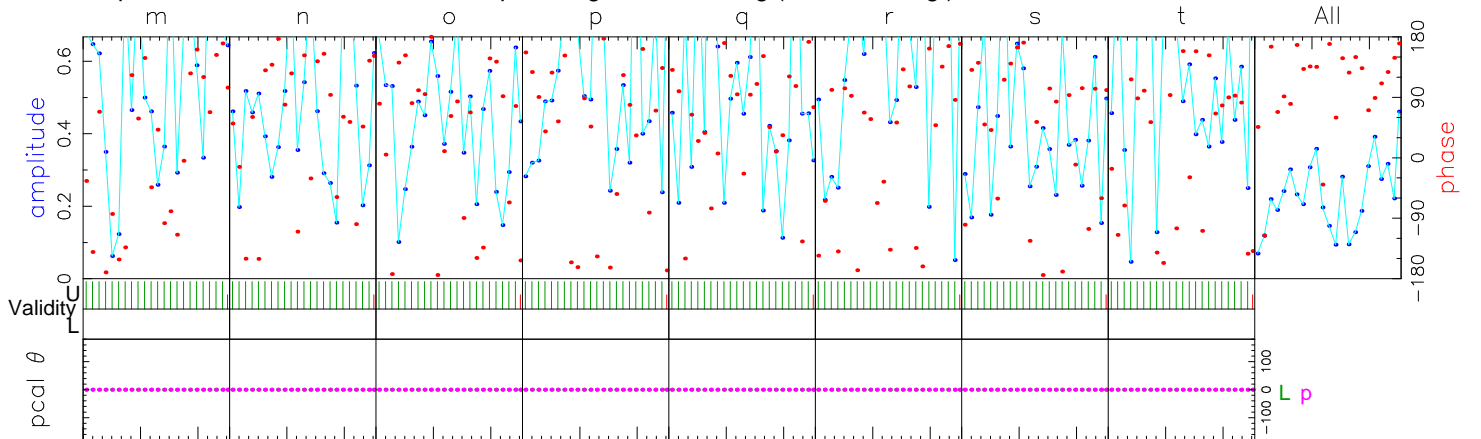


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105629  
2024:113:095956  
RA & Dec (J2000)  
18h06m50.680649s  
+69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
p	0	0	0	0	0	0	0	0		
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec) (SBD)	3.22486320739E+03					3.22574812925E+03			5.70314E-03	+/- 1.9E-04
Sband delay (usec)	3.22486435225E+03					-3.1077412E+01			-8.83777E-01	+/- 1.5E-03
Phase delay (usec)	3.22574813321E+03					-7.8202358E-06			3.96053E-06	+/- 6.6E-07
Delay rate (us/s)	7.44666644048E-01					7.44657409584E-01			9.23446E-06	+/- 7.7E-09
Total phase (deg)			70.0			-1.24998727168E-05			122.8	+/- 20.6
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us										
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
simultaneous interpolator										

L: az 23.1 el 48.9 pa -116.3 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -12394.255 -2385.739  
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lp.W.306.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

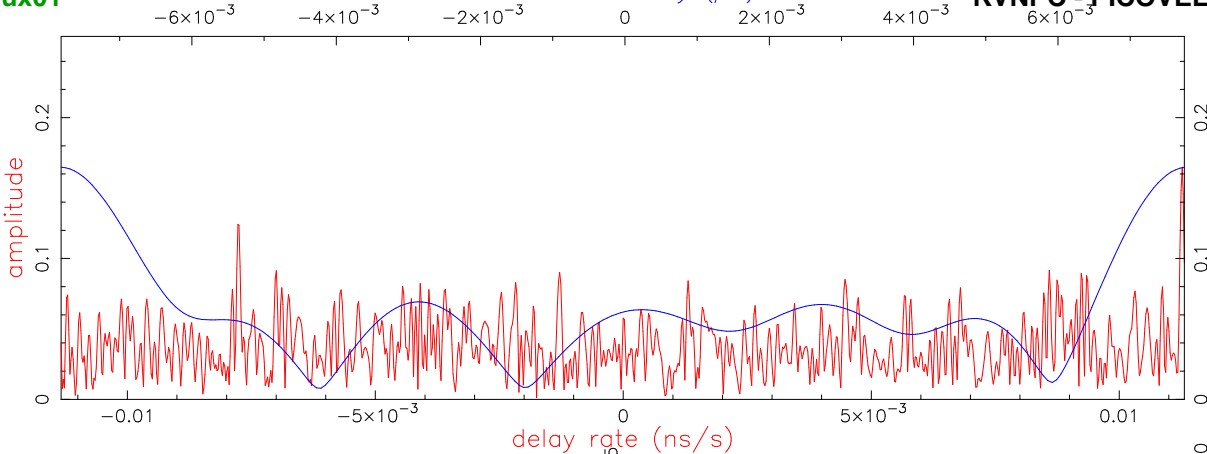
aux01

3C371.3MP15Q, No0901, LP

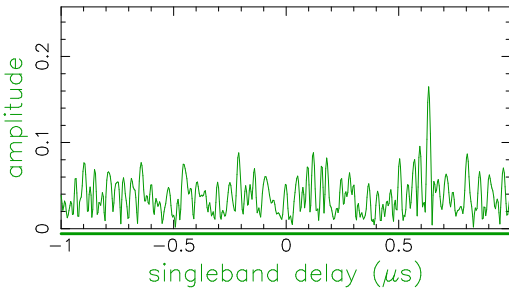
KVNPC - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

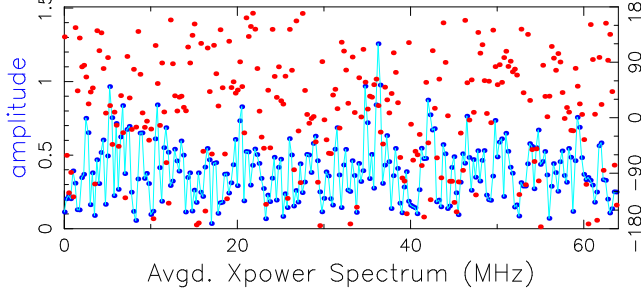
Fringe quality 0



SNR 5.5  
 Int time 149.853  
 Amp 0.258  
 Phase 50.5  
 PFD 9.8e-01  
 Delays (us)  
 SBD 0.633105  
 MBD 0.007804  
 Fringe rate (Hz)  
 0.971418  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

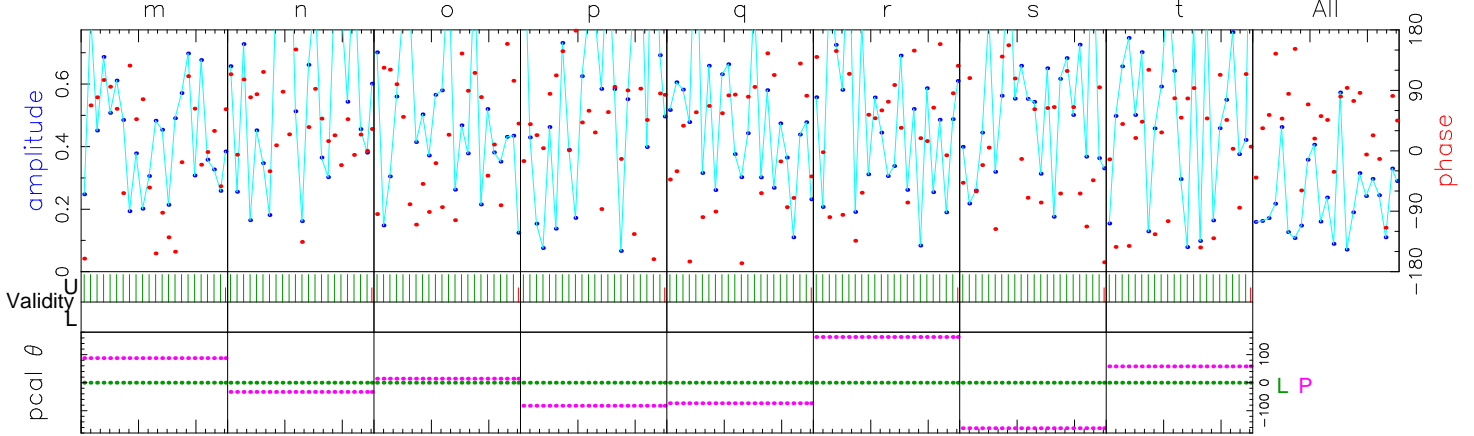


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105630  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
P	0	0	0	0	0	0	0	0		
L:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
L	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	9.85711579046E+03	Apriori delay (usec)		9.85648298609E+03	Resid mbdelay (usec)		7.80437E-03	+/- 2.0E-04	
Sband delay (usec)	9.85711609059E+03	Apriori clock (usec)		-2.4358923E+01	Resid sbdelay (usec)		6.33105E-01	+/- 1.6E-03	
Phase delay (usec)	9.85648298772E+03	Apriori clockrate (us/s)		-8.0397754E-06	Resid phdelay (usec)		1.62777E-06	+/- 6.7E-07	
Delay rate (us/s)	3.16125358826E-01	Apriori rate (us/s)		3.16114081626E-01	Resid rate (us/s)		1.12772E-05	+/- 7.7E-09	
Total phase (deg)		202.3	Apriori accel (us/s/s)		-5.18783665178E-05	Resid phase (deg)		50.5	+/- 20.8

ph/seg (deg)	63.0	Theor. 49.8	Amplitude Search (1024X32)	0.161	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	87.5	86.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	34.6	29.4	Inc. seg. avg.	0.268	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011
amp/frq (%)	60.8	51.2	Inc. frq. avg.	0.247	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3 P: az 359.9 el 16.9 pa -0.0 u, v (fr/asec) -5384.920 -11004.393 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LP.W.309.3MP15Q

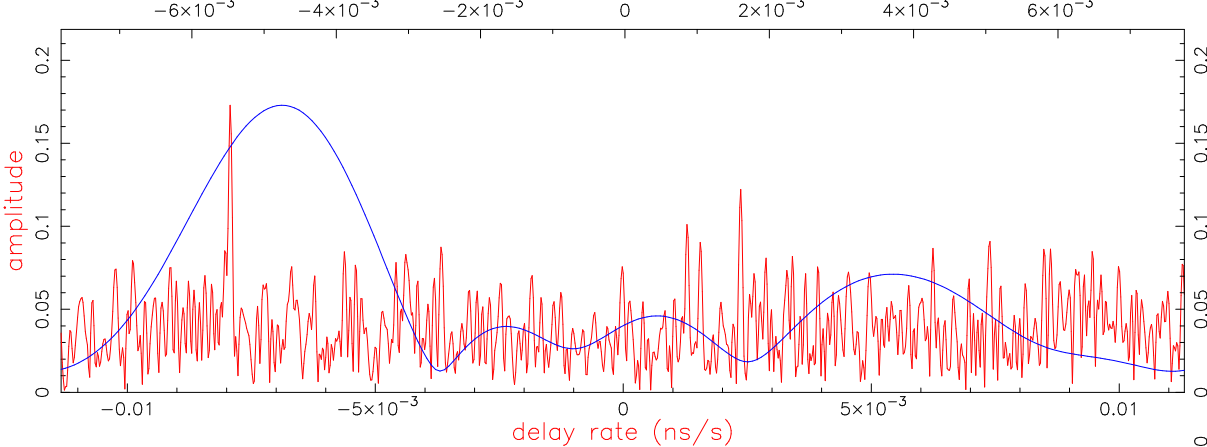
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LP

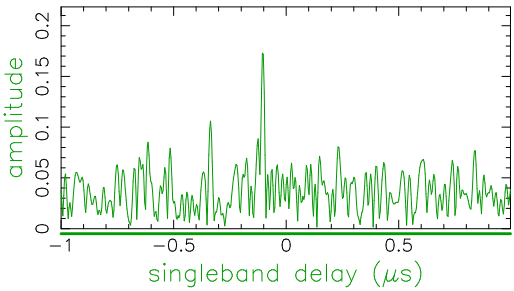
KVNPC - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

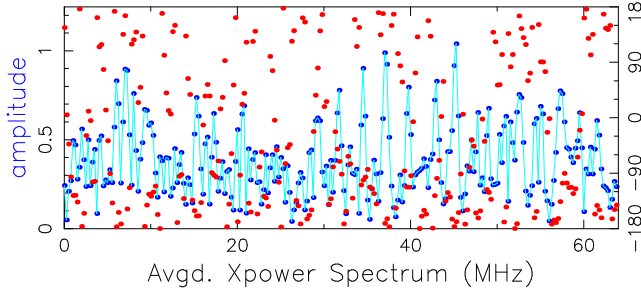


Fringe quality 0

SNR 5.9  
 Int time 149.853  
 Amp 0.219  
 Phase 146.8  
 PFD 3.2e-01  
 Delays (us)  
 SBD -0.103637  
 MBD -0.004716  
 Fringe rate (Hz)  
 -0.683103  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

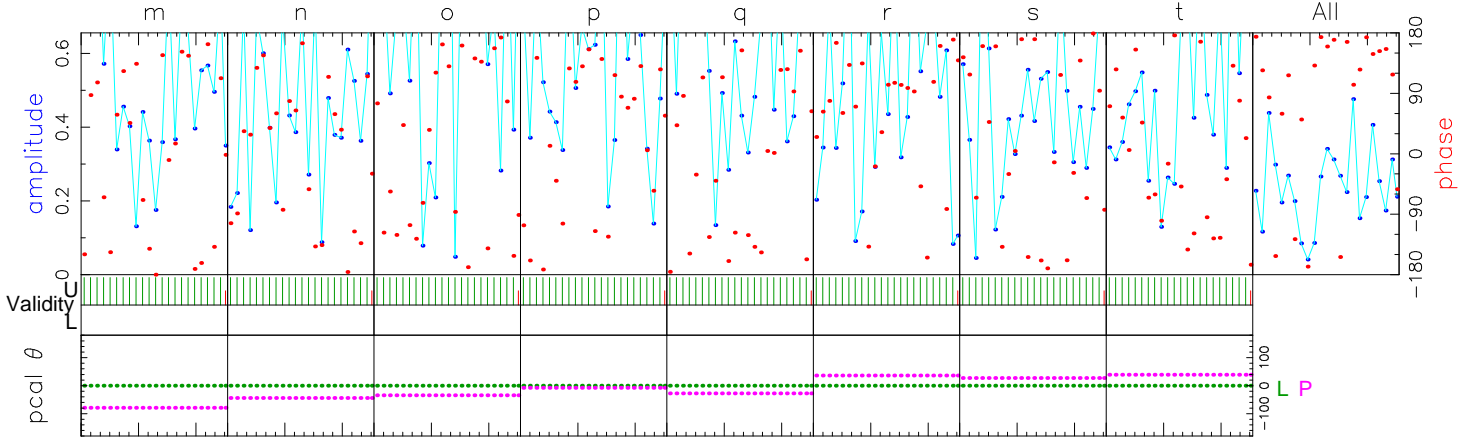


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105632  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	154.4	133.8	167.8	126.6	157.7	107.0	162.2	-159.3	Phase	146.8
	0.2	0.1	0.4	0.3	0.2	0.3	0.2	0.1	Ampl.	0.2
	150.4	279.2	229.7	171.3	29.0	417.8	29.3	315.9	Sbd box	230.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
L:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.85638452016E+03	Apriori delay (usec)	9.85648298609E+03	Resid mbdelay (usec)	-4.71593E-03	+/-	1.8E-04
Sband delay (usec)	9.85637934884E+03	Apriori clock (usec)	-2.4358923E+01	Resid sbdelay (usec)	-1.03637E-01	+/-	1.5E-03
Phase delay (usec)	9.85648299082E+03	Apriori clockrate (us/s)	-8.0397754E-06	Resid phdelay (usec)	4.73376E-06	+/-	6.2E-07
Delay rate (us/s)	3.16106151476E-01	Apriori rate (us/s)	3.16114081626E-01	Resid rate (us/s)	-7.93015E-06	+/-	7.2E-09
Total phase (deg)	298.6	Apriori accel (us/s/s)	-5.18783665178E-05	Resid phase (deg)	146.8	+/-	19.3

ph/seg (deg)	51.2	Theor.	46.3	Amplitude	0.219 +/- 0.037	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.9	Search (1024X32)	0.169	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.4	Inc. seg. avg.	0.226	Inc. frq. avg.	0.209	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.209			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 P: az 359.9 el 16.9 pa -0.0 u,v (fr/asec) -5384.920 -11004.393 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LP.W.319.3MP15Q

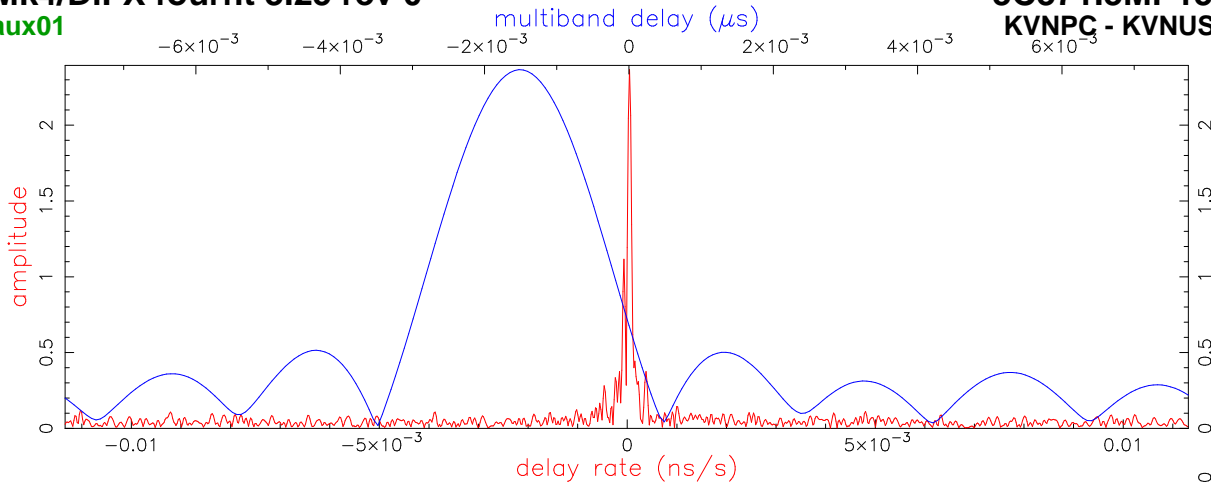


Mk4/DiFX fourfit 3.25 rev 0

aux01

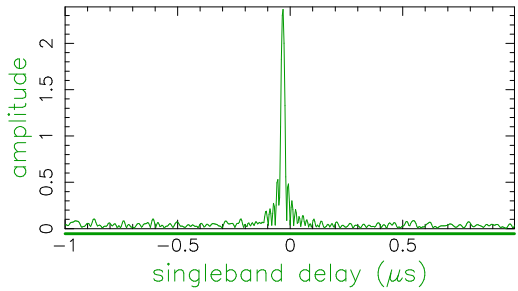
3C371.3MP15Q, No0901, Lu

KVNPC - KVNU, fgroup W, pol LL

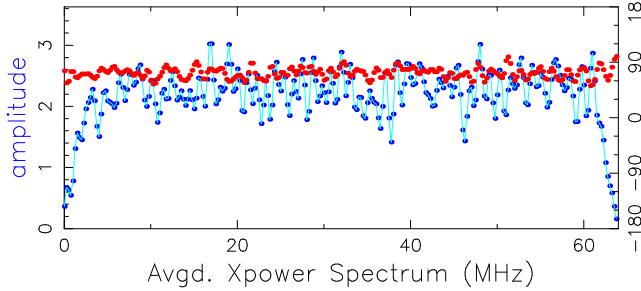


Fringe quality 8

SNR 80.2  
 Int time 149.859  
 Amp 2.394  
 Phase 73.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.032635  
 MBD -0.001511  
 Fringe rate (Hz)  
 0.004516  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

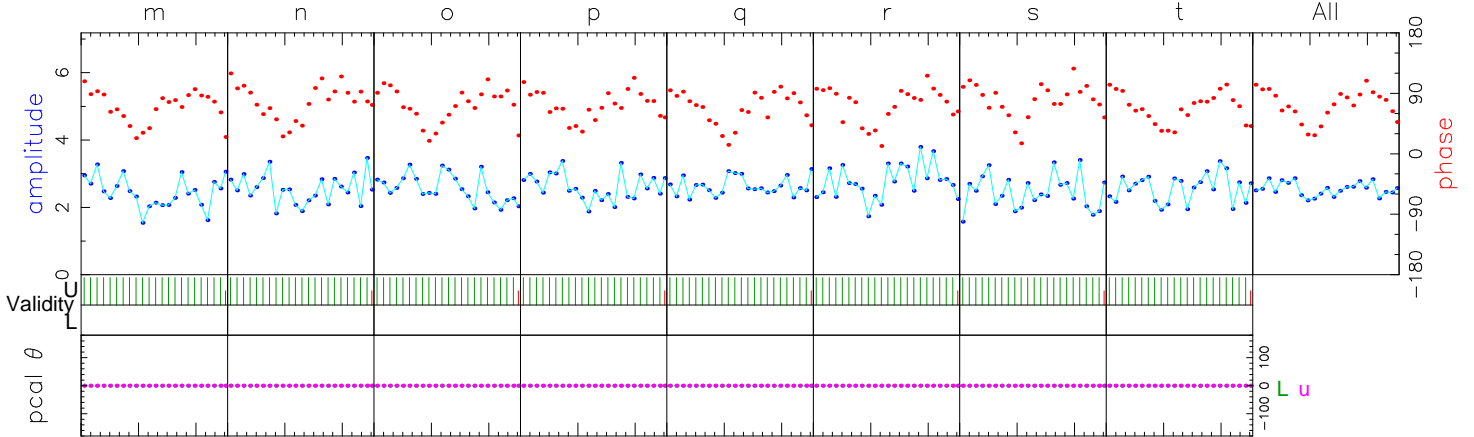


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105603  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	71.4	79.6	72.8	73.2	68.1	75.6	80.8	70.3	Phase	73.9
	2.3	2.3	2.4	2.5	2.4	2.5	2.3	2.4	Ampl.	2.4
	248.7	248.7	248.5	248.7	248.7	248.8	248.5	248.5	Sbd box	248.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
u	0	0	60000	0	0	0	4000	0	PC freqs	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 3.66394127932E+02 Apriori delay (usec) 3.66426888590E+02 Resid mbdelay (usec) -1.51066E-03 +/- 1.4E-05  
 Sband delay (usec) 3.66394253090E+02 Apriori clock (usec) -2.6705597E+01 Resid sbdelay (usec) -3.26355E-02 +/- 1.1E-04  
 Phase delay (usec) 3.66426890974E+02 Apriori clockrate (us/s) -7.6043000E-06 Resid phdelay (usec) 2.38359E-06 +/- 4.6E-08  
 Delay rate (us/s) -4.09162897965E-03 Apriori rate (us/s) -4.09168141008E-03 Resid rate (us/s) 5.24304E-08 +/- 5.3E-10  
 Total phase (deg) 139.9 Apriori accel (us/s/s) 8.63977367401E-07 Resid phase (deg) 73.9 +/- 1.4

RMS Theor. Amplitude 2.394 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 22.4 3.4 Search (1024X32) 2.320 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 10.3 6.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 4.8 2.0 Inc. seg. avg. 2.541 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 3.8 3.5 Inc. frq. avg. 2.371 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

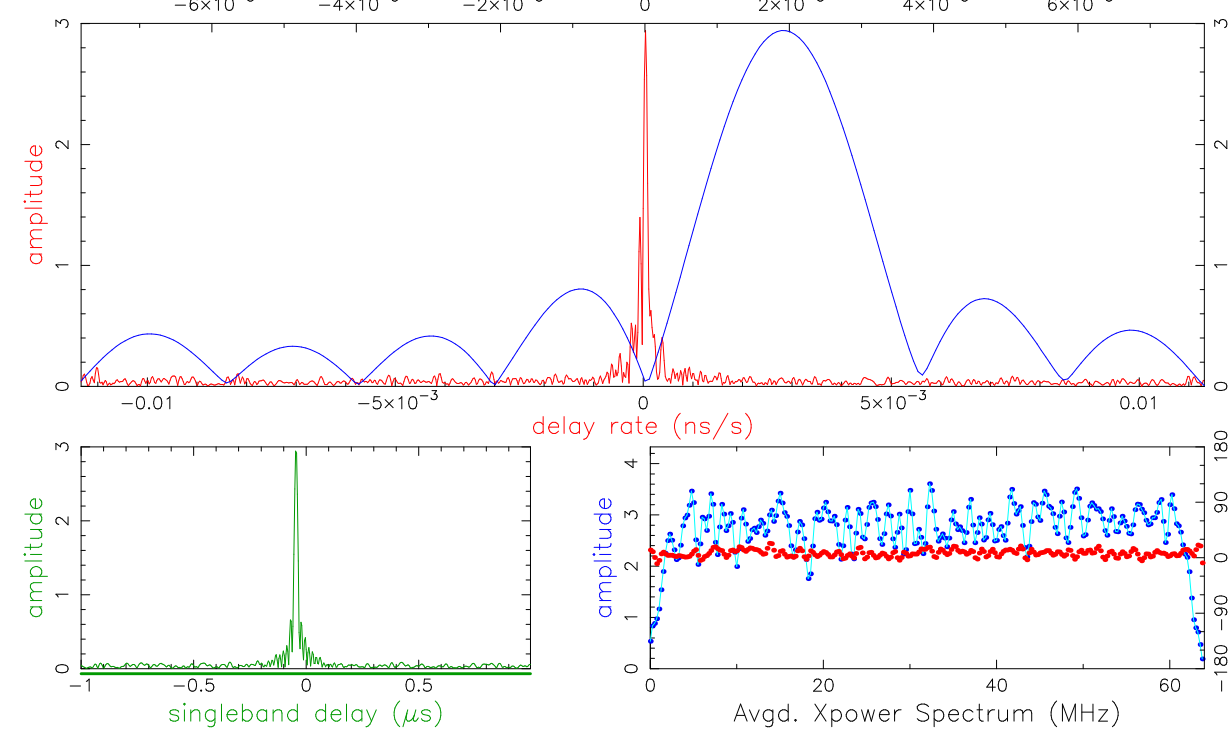
L: az 23.1 el 48.9 pa -116.3 u: az 22.1 el 47.3 pa -118.3 u,v (fr/asec) 70.654 269.079 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lu..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lu.W.236.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

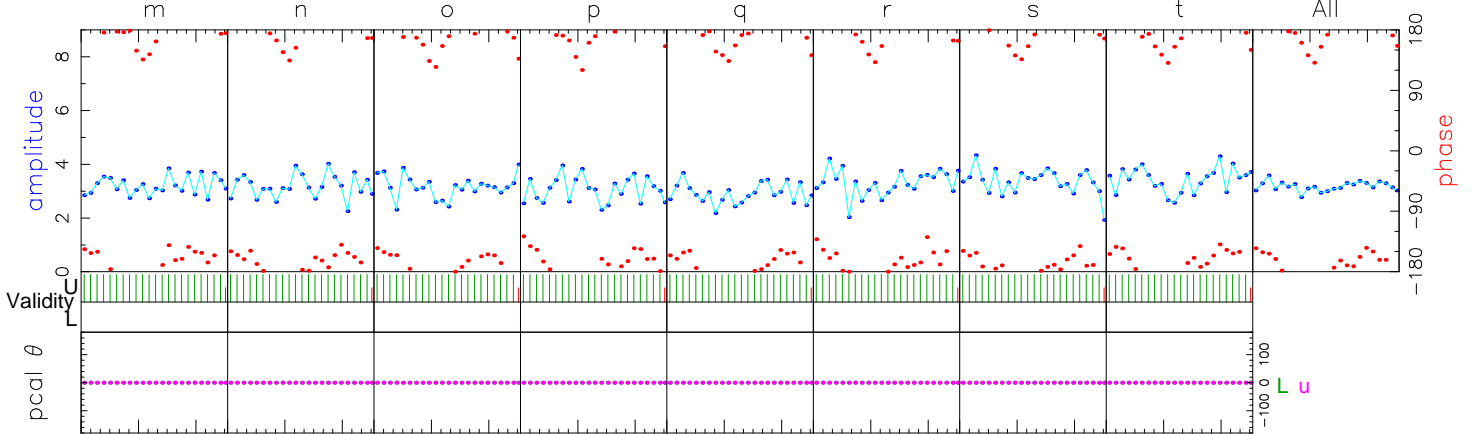
3C371.3MP15Q, No0901, Lu

KVNPC- KVNUS, fgroup W, pol RR



Fringe quality 8  
 SNR 100.5  
 Int time 149.859  
 Amp 3.002  
 Phase -174.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.045104  
 MBD 0.001914  
 Fringe rate (Hz)  
 0.004542  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105605  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-171.5	-173.1	-178.8	-175.1	-175.9	-171.4	-175.7	-171.9	Phase	-174.1
	2.9	3.0	2.9	2.8	2.7	3.0	3.2	3.1	Ampl.	2.9
	245.3	245.5	245.4	245.7	245.6	245.3	245.5	245.3	Sbd box	245.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
u	0	0	60000	0	0	0	4000	0	PC freqs	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 3.66381927807E+02 Apriori delay (usec) 3.66426888590E+02 Resid mbdelay (usec) 1.91422E-03 +/- 1.1E-05  
 Sband delay (usec) 3.66381784590E+02 Apriori clock (usec) -2.6705597E+01 Resid sbdelay (usec) -4.51040E-02 +/- 8.6E-05  
 Phase delay (usec) 3.66426882976E+02 Apriori clockrate (us/s) -7.6043000E-06 Resid phdelay (usec) -5.61466E-06 +/- 3.7E-08  
 Delay rate (us/s) -4.09162868206E-03 Apriori rate (us/s) -4.09168141008E-03 Resid rate (us/s) 5.27280E-08 +/- 4.2E-10  
 Total phase (deg) -108.2 Apriori accel (us/s/s) 8.63977367401E-07 Resid phase (deg) -174.1 +/- 1.1

RMS Theor. Amplitude 3.002 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 22.8 2.7 Search (1024X32) 2.880 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 8.3 4.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 2.9 1.6 Inc. seg. avg. 3.179 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 5.4 2.8 Inc. frq. avg. 2.945 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

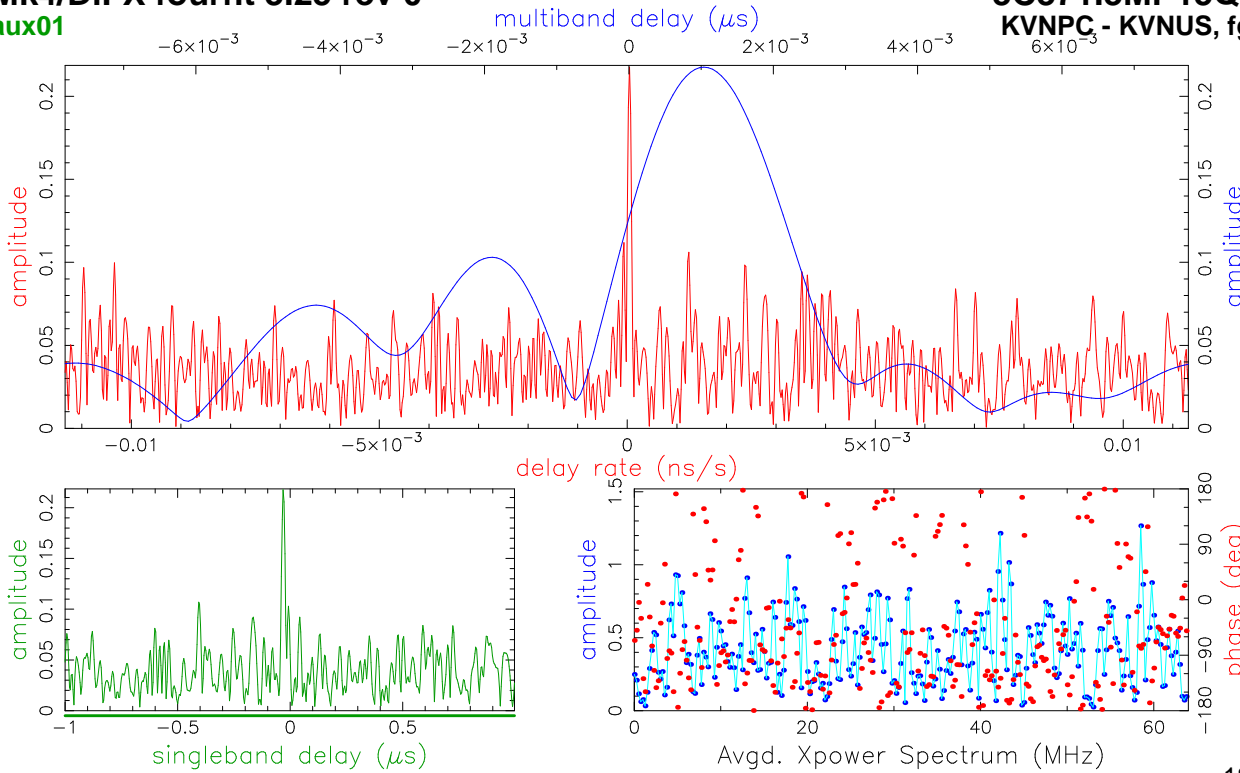
L: az 23.1 el 48.9 pa -116.3 u: az 22.1 el 47.3 pa -118.3 u,v (fr/asec) 70.654 269.079 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Lu..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Lu.W.244.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lu

KVNPC - KVNU, fgroup W, pol LR

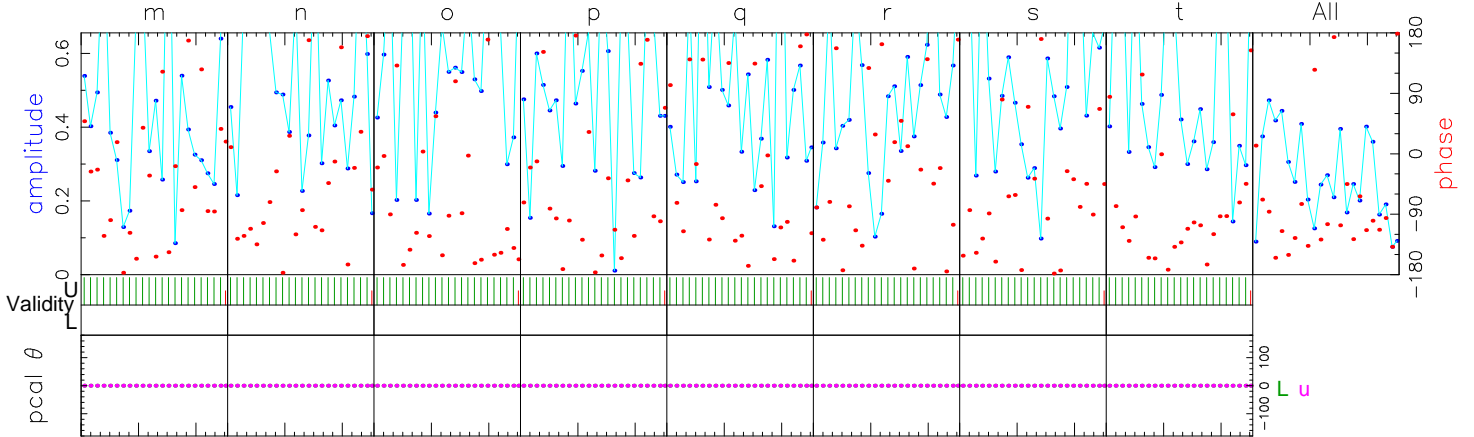


Fringe quality 9

SNR 7.3  
 Int time 149.859  
 Amp 0.219  
 Phase -110.5  
 PFD 3.9e-05  
 Delays (us)  
 SBD -0.030373  
 MBD 0.001025  
 Fringe rate (Hz) 0.004474  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105611  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



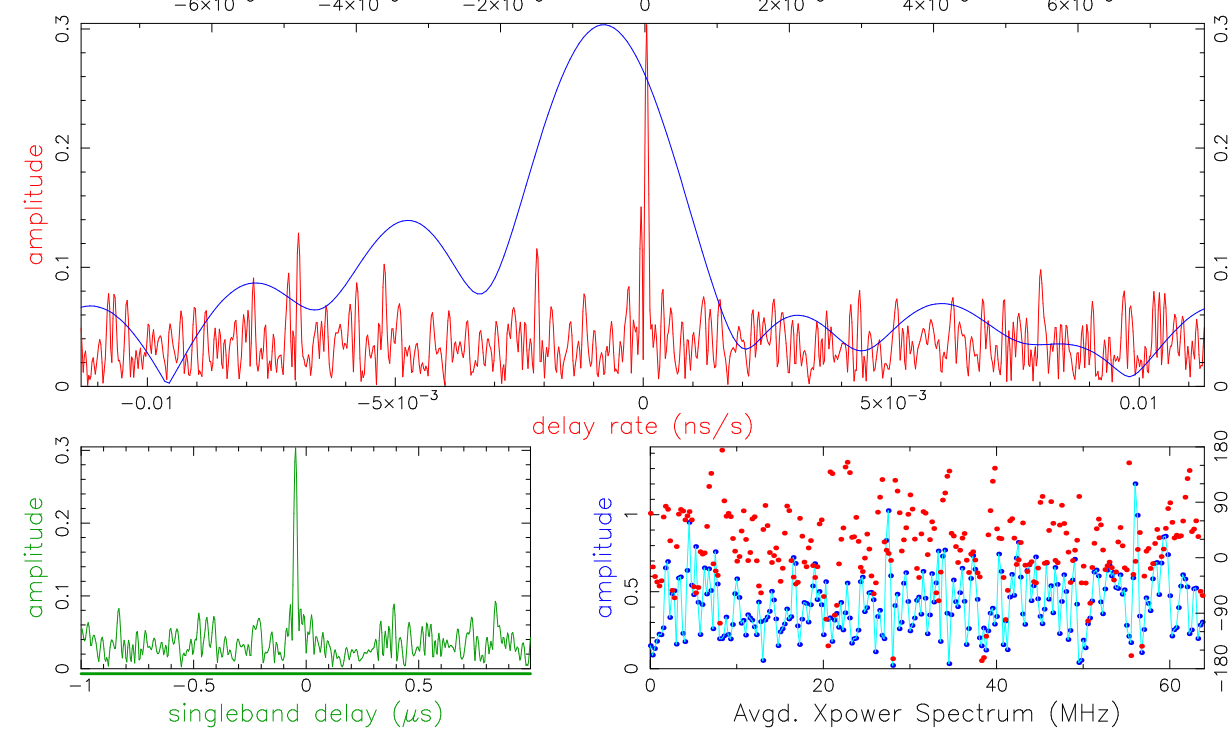
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	-83.3	-99.9	-130.4	-113.6	-143.8	-90.5	-87.0	-115.0	Phase	-110.5	
	0.1	0.3	0.2	0.2	0.2	0.2	0.3	0.3	Ampl.	0.2	
	9.4	250.0	53.2	80.1	365.8	219.0	500.2	248.1	Sbd box	249.2	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
L	0	0	60000	0	0	0	4000	0	PC freqs		
u	0	0	60000	0	0	0	4000	0	PC freqs		
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC		
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
u	1000	1000	1000	1000	1000	1000	1000	1000			
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec) (SBD)	3.66396663463E+02		Apriori delay (usec)		3.66426888590E+02		Resid mbdelay (usec)		1.02487E-03	+/- 1.5E-04	
Sband delay (usec)	3.66396515590E+02		Apriori clock (usec)		-2.6705597E+01		Resid sbdelay (usec)		-3.03730E-02	+/- 1.2E-03	
Phase delay (usec)	3.66426885027E+02		Apriori clockrate (us/s)		-7.6043000E-06		Resid phdelay (usec)		-3.56301E-06	+/- 5.0E-07	
Delay rate (us/s)	-4.09162947139E-03		Apriori rate (us/s)		-4.09168141008E-03		Resid rate (us/s)		5.19387E-08	+/- 5.8E-09	
Total phase (deg)			Apriori accel (us/s/s)		8.63977367401E-07		Resid phase (deg)		-110.5	+/- 15.7	
	RMS	Theor.	Amplitude	0.219 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	49.6	37.5	Search (1024X32)	0.215		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	59.0	65.5	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	23.6	22.1	Inc. seg. avg.	0.222		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)		-0.011 0.011	
amp/frq (%)	31.8	38.6	Inc. frq. avg.	0.215		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite		ion window (TEC)	0.00 0.00
L: az 23.1 el 48.9 pa -116.3		u: az 22.1 el 47.3 pa -118.3		u, v (fr/asec) 70.654 269.079						simultaneous interpolator	
Control file: cf_1234_gmva		Input file: /Exps/c241a/v2/3mm/1234/No0901/Lu..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/Lu.W.255.3MP15Q							

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Lu

KVNPC - KVNU, fgroup W, pol RL

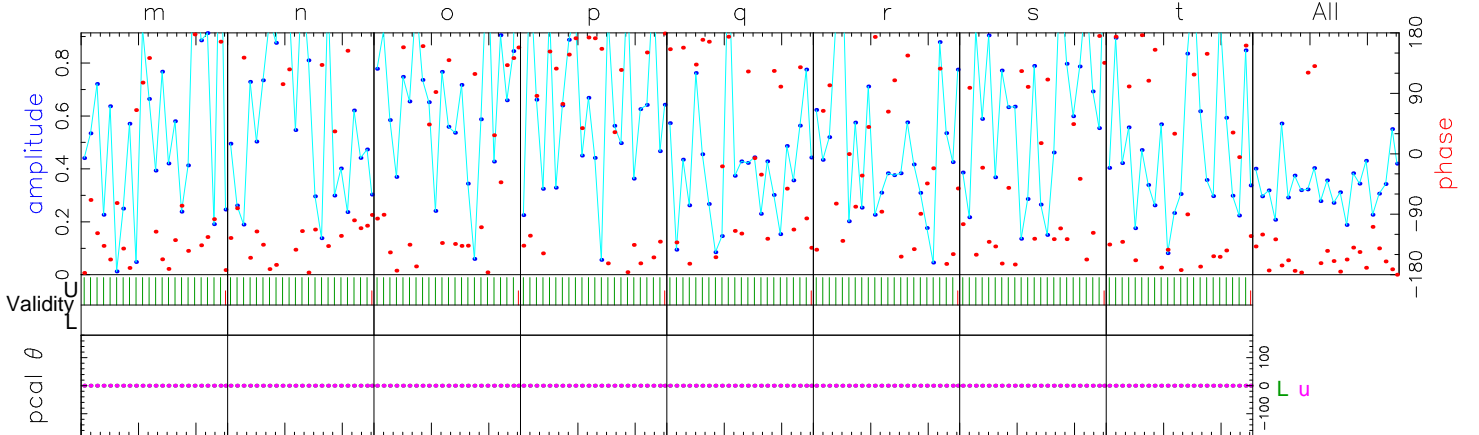


Fringe quality 9

SNR 10.2  
 Int time 149.859  
 Amp 0.305  
 Phase -162.5  
 PFD 4.2e-16  
 Delays (us)  
 SBD -0.047626  
 MBD -0.000571  
 Fringe rate (Hz)  
 0.004906  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



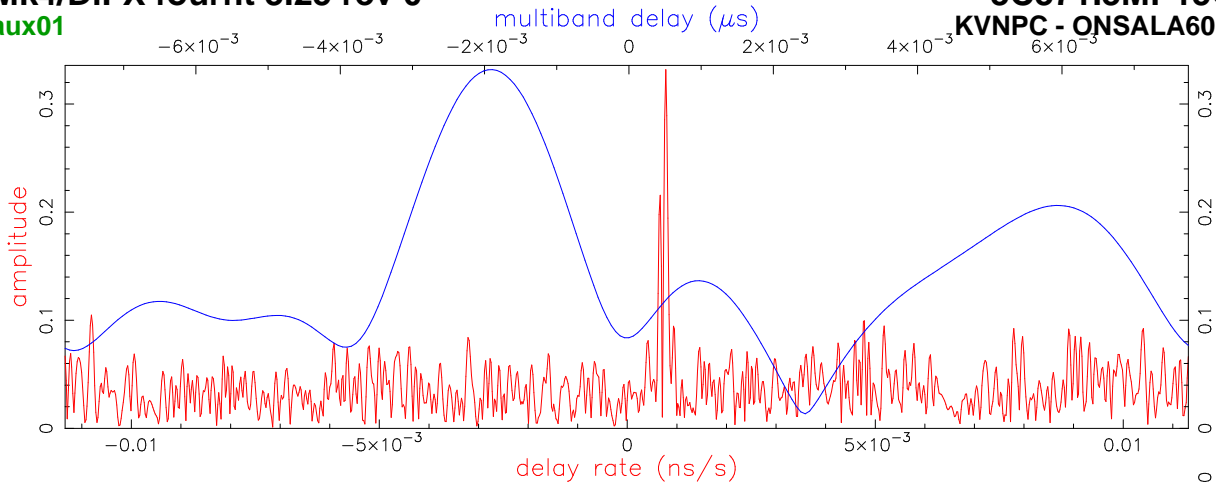
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-159.5	-153.4	-162.2	173.2	-171.7	-141.5	-133.3	-179.2	Phase	-162.5
	0.4	0.4	0.4	0.4	0.2	0.1	0.3	0.3	Ampl.	0.3
	244.8	244.8	245.1	244.2	407.9	372.6	244.6	245.2	Sbd box	244.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
u	0	0	60000	0	0	0	4000	0	PC freqs	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	3.66379442962E+02					3.66426888590E+02			Resid mbdelay (usec)	-5.70629E-04 +/- 1.1E-04
Sband delay (usec)	3.66379262840E+02					-2.6705597E+01			Resid sbdelay (usec)	-4.76258E-02 +/- 8.4E-04
Phase delay (usec)	3.66426883349E+02					-7.6043000E-06			Resid phdelay (usec)	-5.24146E-06 +/- 3.6E-07
Delay rate (us/s)	-4.09162445905E-03					-4.09168141008E-03			Resid rate (us/s)	5.69510E-08 +/- 4.2E-09
Total phase (deg)			-96.6			8.63977367401E-07			Resid phase (deg)	-162.5 +/- 11.2
	RMS	Theor.	Amplitude	0.305 +/- 0.030					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	29.4	26.9	Search (1024X32)	0.294					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	32.6	47.0	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	19.8	15.9	Inc. seg. avg.	0.309					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
amp/frq (%)	33.1	27.7	Inc. frq. avg.	0.305					Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00
									nlags: 256	t_cohere infinite
L: az 23.1 el 48.9 pa -116.3										simultaneous interpolator
u: az 22.1 el 47.3 pa -118.3										
u, v (fr/asec) 70.654 269.079										
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901/Lu..3MP15Q									Output file: /Exps/c241a/v2/3mm/1234/No0901/Lu.W.262.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

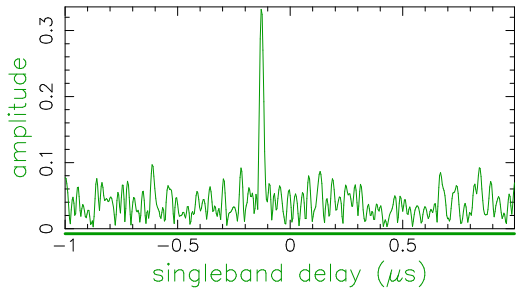
3C371.3MP15Q, No0901, LX

KVNPC - ONSALA60, fgroup W, pol LL

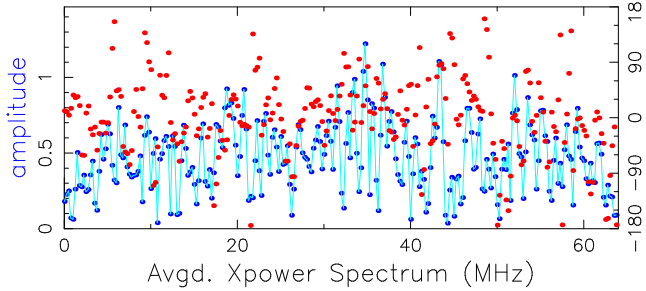


Fringe quality 9

SNR 11.2  
 Int time 149.697  
 Amp 0.336  
 Phase 0.6  
 PFD 8.4e-21  
 Delays (us)  
 SBD -0.127535  
 MBD -0.001885  
 Fringe rate (Hz)  
 0.066208  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

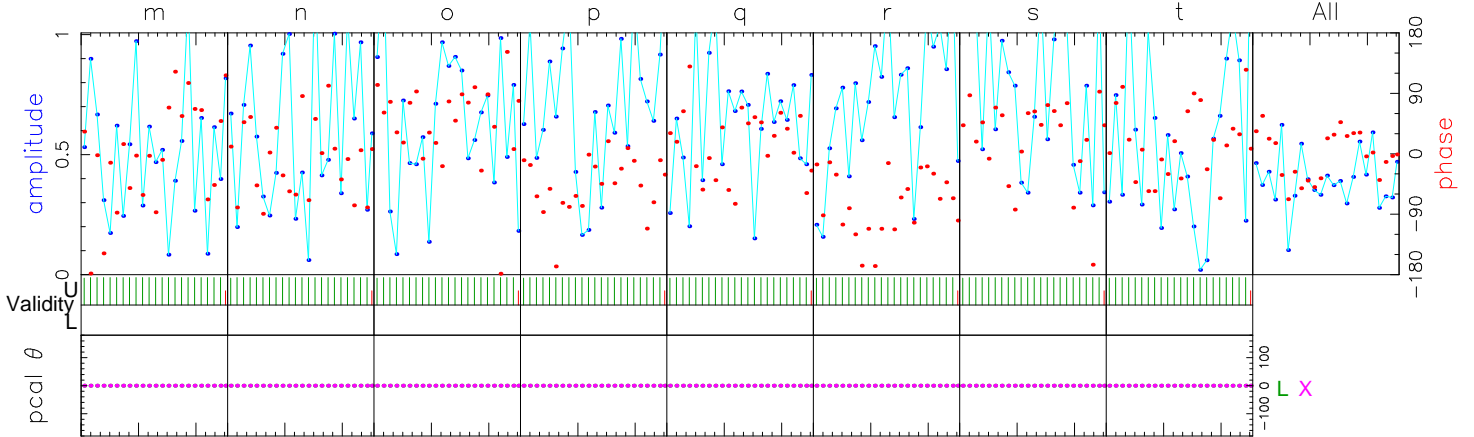


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105613  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	17.0	0.6	58.6	-42.3	7.4	-67.7	42.1	6.2	Phase	0.6
	0.2	0.4	0.4	0.6	0.5	0.5	0.6	0.4	Ampl.	0.4
	231.6	223.9	223.3	224.0	224.5	223.7	223.9	224.2	Sbd box	224.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.92515984813E+03	Apriori delay (usec)	2.92528673296E+03	Resid mbdelay (usec)	-1.88482E-03	+/-	9.7E-05
Sband delay (usec)	2.92515919796E+03	Apriori clock (usec)	-1.3803084E+02	Resid sbdelay (usec)	-1.27535E-01	+/-	7.7E-04
Phase delay (usec)	2.92528673298E+03	Apriori clockrate (us/s)	-8.6581619E-02	Resid phdelay (usec)	1.87184E-08	+/-	3.3E-07
Delay rate (us/s)	2.39845390103E-01	Apriori rate (us/s)	2.39844621498E-01	Resid rate (us/s)	7.68605E-07	+/-	3.8E-09
Total phase (deg)	64.3	Apriori accel (us/s/s)	-4.10121172570E-05	Resid phase (deg)	0.6	+/-	10.2

ph/seg (deg)	34.8	Theor.	24.5	Amplitude	0.336 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	38.0	Search (1024X32)	0.326	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000	
ph/frq (deg)	44.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.7	Inc. seg. avg.	0.362	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	0.422	Data rate(Mb/s): 2048			ion window (TEC)	0.00 0.00

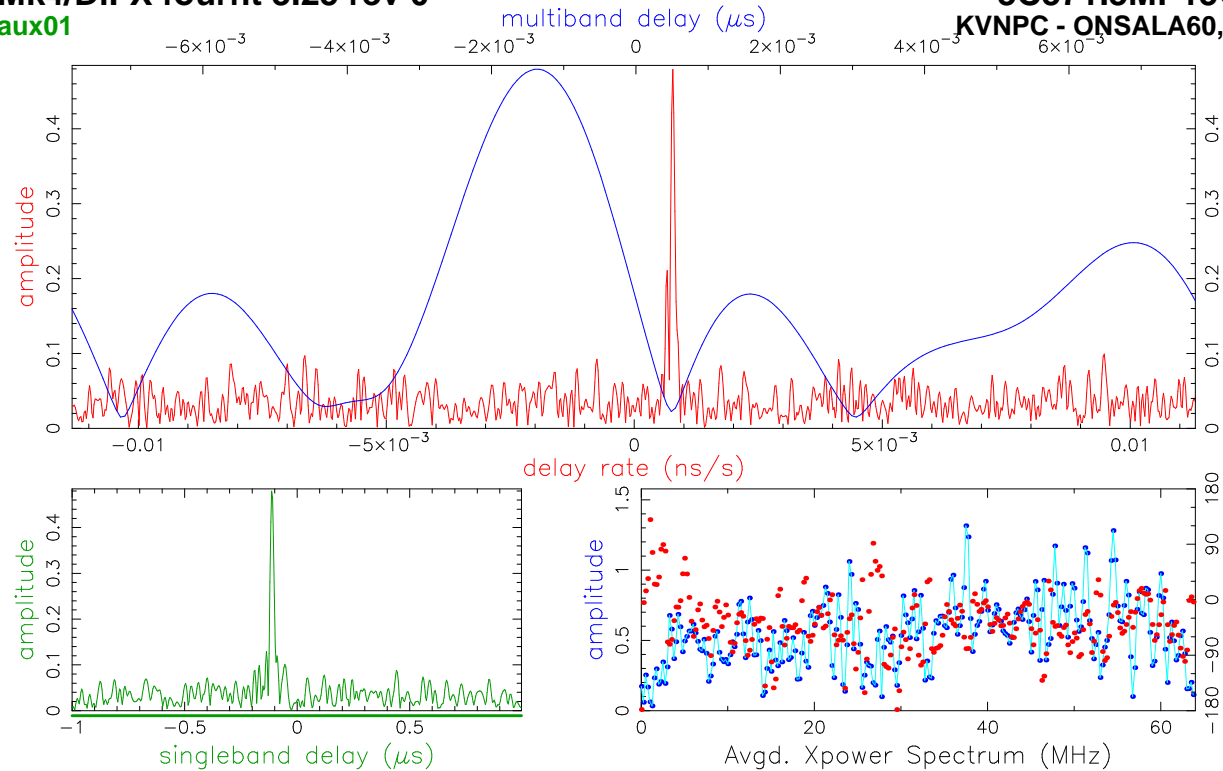
L: az 23.1 el 48.9 pa -116.3 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) -4094.972 -9430.046 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LX.W.268.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

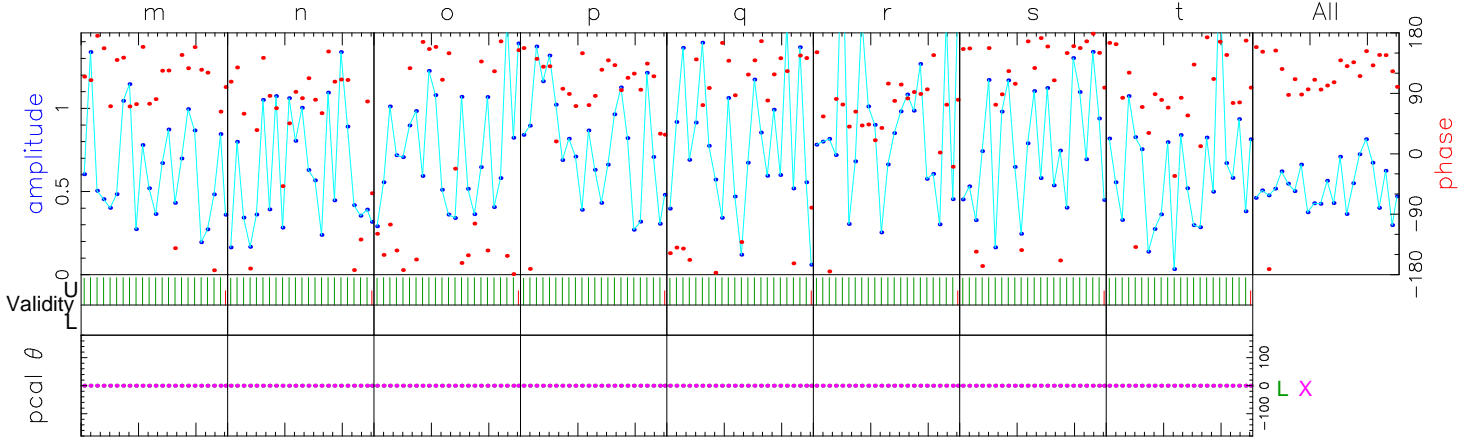
KVNPC - ONSALA60, fgroup W, pol RR



Fringe quality 8

SNR 16.2  
 Int time 149.697  
 Amp 0.485  
 Phase 126.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.112026  
 MBD -0.001335  
 Fringe rate (Hz)  
 0.067165  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105617  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	123.4	101.3	-174.7	114.5	144.9	76.2	152.9	119.8	Phase	126.9
	0.5	0.5	0.6	0.6	0.6	0.7	0.7	0.4	Ampl.	0.6
	230.0	228.6	227.9	227.4	227.2	227.9	228.6	229.0	Sbd box	228.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.92517602323E+03 Apriori delay (usec) 2.92528673296E+03 Resid mbdelay (usec) -1.33473E-03 +/- 6.7E-05  
 Sband delay (usec) 2.92517470646E+03 Apriori clock (usec) -1.3803084E+02 Resid sbdelay (usec) -1.12026E-01 +/- 5.3E-04  
 Phase delay (usec) 2.92528673705E+03 Apriori clockrate (us/s) -8.6581619E-02 Resid phdelay (usec) 4.09375E-06 +/- 2.3E-07  
 Delay rate (us/s) 2.39845401214E-01 Apriori rate (us/s) 2.39844621498E-01 Resid rate (us/s) 7.79717E-07 +/- 2.6E-09  
 Total phase (deg) 190.7 Apriori accel (us/s/s) -4.10121172570E-05 Resid phase (deg) 126.9 +/- 7.1

RMS Theor. Amplitude 0.485 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 25.8 17.0 Search (1024X32) 0.474 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 28.2 29.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 36.2 10.0 Inc. seg. avg. 0.509 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 26.3 17.5 Inc. frq. avg. 0.559 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) -4094.972 -9430.046 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LX.W.277.3MP15Q

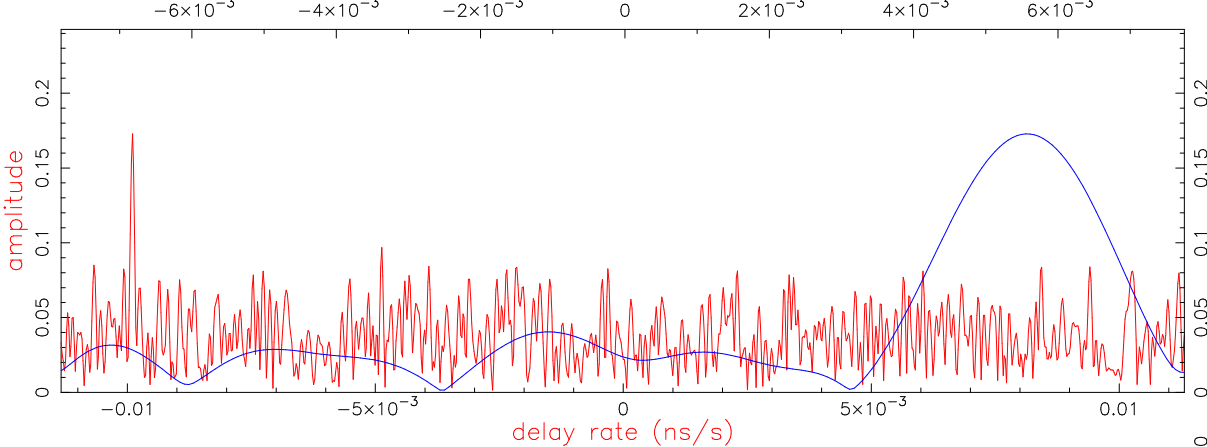
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

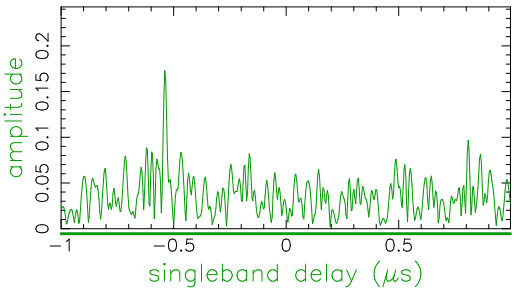
KVNPC - ONSALA60, fgroup W, pol LR

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

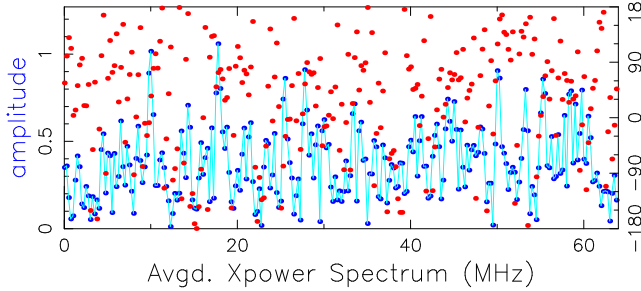


Fringe quality 0

SNR 5.8  
 Int time 149.697  
 Amp 0.243  
 Phase -88.0  
 PFD 5.8e-01  
 Delays (us)  
 SBD -0.538530  
 MBD 0.005579  
 Fringe rate (Hz)  
 -0.854792  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

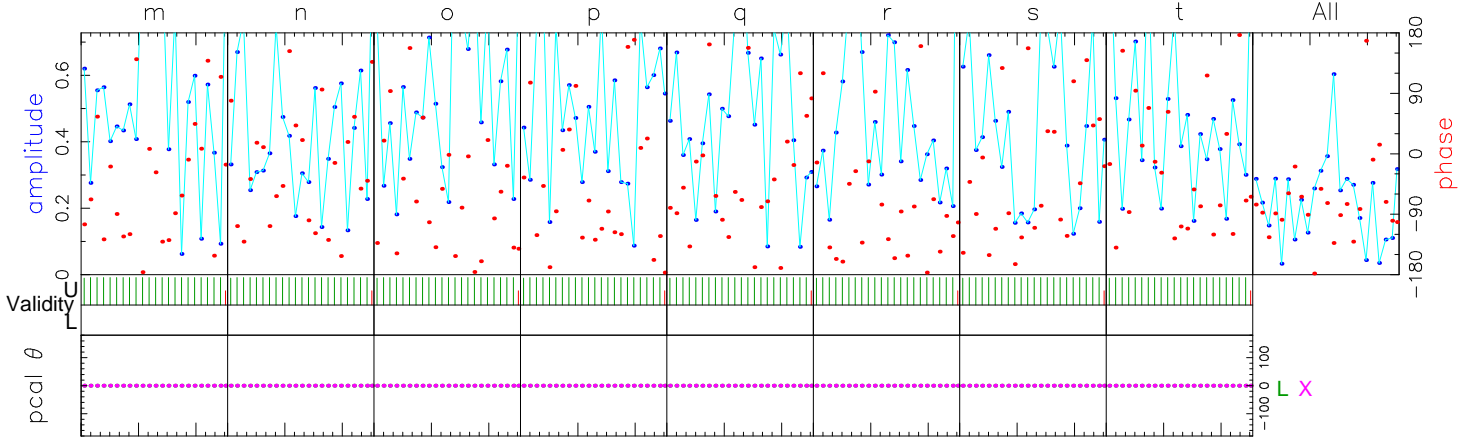


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105621  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.1	-75.6	-95.5	-89.4	-78.7	-111.4	-75.9	-73.2	Phase	-88.0
	0.2	0.2	0.3	0.3	0.3	0.4	0.2	0.2	Ampl.	0.2
	110.1	281.4	76.0	380.5	105.3	97.7	78.7	465.0	Sbd box	119.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.92474543745E+03	Apriori delay (usec)	2.92528673296E+03	Resid mbdelay (usec)	5.57949E-03	+/-	1.9E-04
Sband delay (usec)	2.92474820296E+03	Apriori clock (usec)	-1.3803084E+02	Resid sbdelay (usec)	-5.38530E-01	+/-	1.5E-03
Phase delay (usec)	2.92528673012E+03	Apriori clockrate (us/s)	-8.6581619E-02	Resid phdelay (usec)	-2.83781E-06	+/-	6.4E-07
Delay rate (us/s)	2.39834698209E-01	Apriori rate (us/s)	2.39844621498E-01	Resid rate (us/s)	-9.92329E-06	+/-	7.4E-09
Total phase (deg)	-24.3	Apriori accel (us/s/s)	-4.10121172570E-05	Resid phase (deg)	-88.0	+/-	19.8

ph/seg (deg)	46.8	Theor.	47.4	Amplitude	0.243 +/- 0.042	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	78.2		82.8	Search (1024X32)	0.171	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	14.3		28.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.4		48.8	Inc. seg. avg.	0.231	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.222	Data rate(Mb/s): 2048	t_cohere infinite			

L: az 23.1 el 48.9 pa -116.3 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4094.972 -9430.046 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LX.W.283.3MP15Q

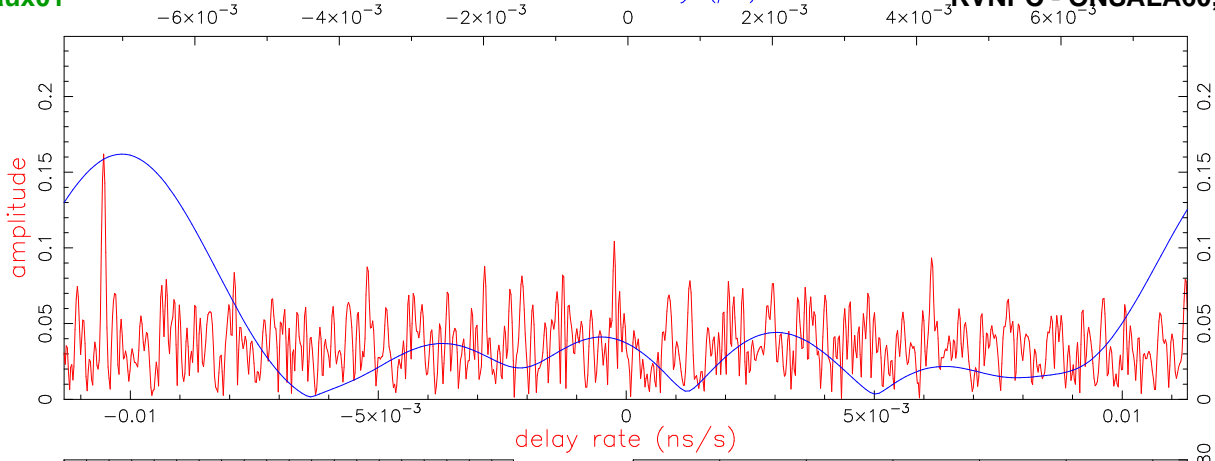
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

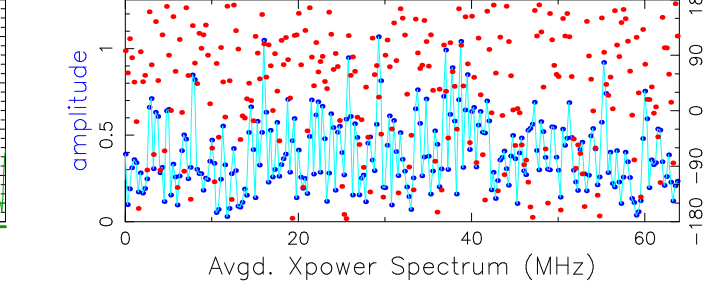
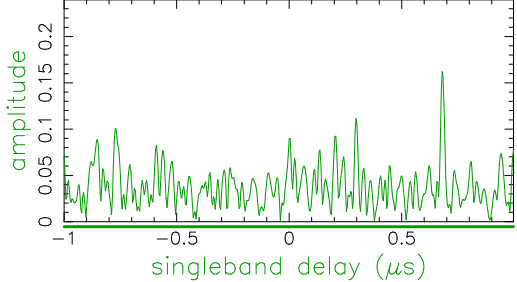
KVNPC - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)



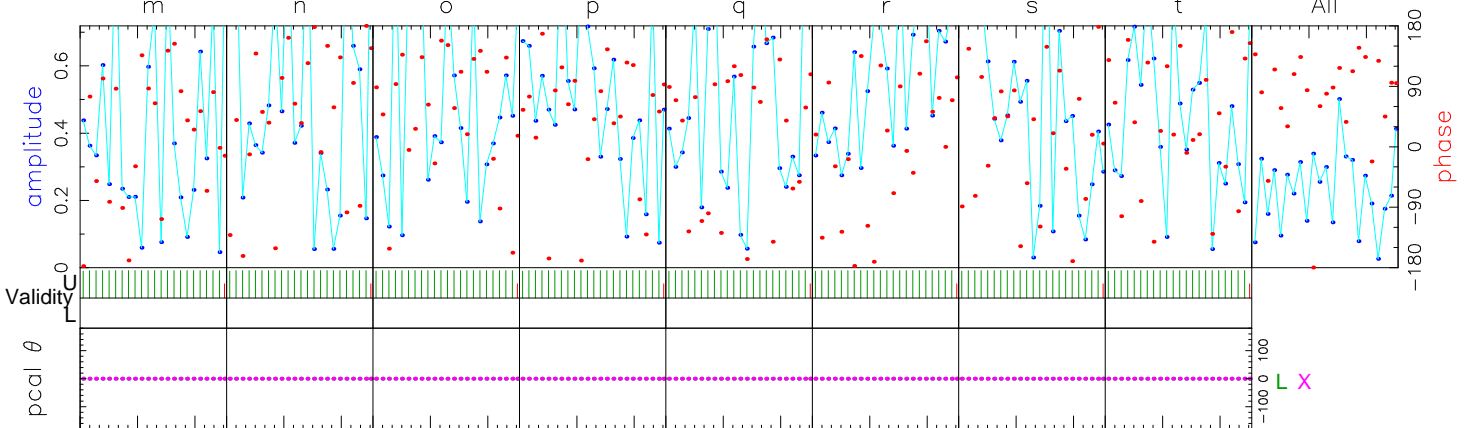
Fringe quality 0

SNR 5.5  
 Int time 149.697  
 Amp 0.240  
 Phase 94.0  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.680756  
 MBD -0.006991  
 Fringe rate (Hz)  
 -0.908628  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105625  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	83.2	130.8	91.8	86.6	95.8	88.6	123.7	84.5	Phase	94.0
	0.3	0.2	0.3	0.4	0.3	0.2	0.1	0.2	Ampl.	0.2
	318.4	6.1	310.4	278.2	146.0	414.2	297.7	180.2	Sbd box	431.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.92596724148E+03 Apriori delay (usec) 2.92528673296E+03 Resid mbdelay (usec) -6.99147E-03 +/- 2.0E-04  
 Sband delay (usec) 2.92596748896E+03 Apriori clock (usec) -1.3803084E+02 Resid sbdelay (usec) 6.80756E-01 +/- 1.6E-03  
 Phase delay (usec) 2.92528673599E+03 Apriori clockrate (us/s) -8.6581619E-02 Resid phdelay (usec) 3.03147E-06 +/- 6.8E-07  
 Delay rate (us/s) 2.39834073232E-01 Apriori rate (us/s) 2.39844621498E-01 Resid rate (us/s) -1.05483E-05 +/- 7.8E-09  
 Total phase (deg) 157.8 Apriori accel (us/s/s) -4.10121172570E-05 Resid phase (deg) 94.0 +/- 21.0

ph/seg (deg) RMS Theor. Amplitude 0.240 +/- 0.044 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 53.8 50.4 Search (1024X32) 0.158 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 81.2 87.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 20.6 29.7 Inc. seg. avg. 0.247 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4094.972 -9430.046 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LX.W.296.3MP15Q



Mk4/DiFX fourfit 3.25 rev 0

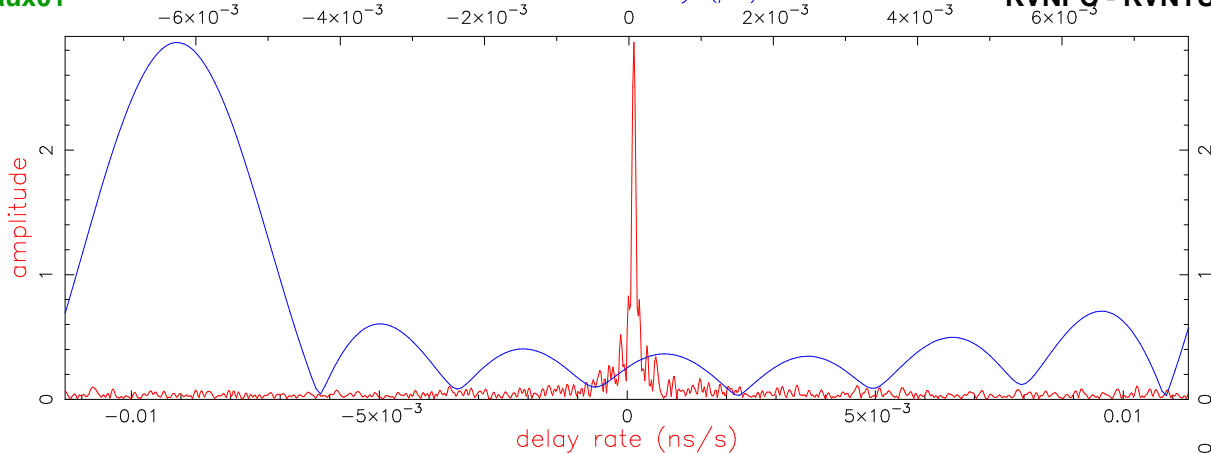
aux01

3C371.3MP15Q, No0901, Ly

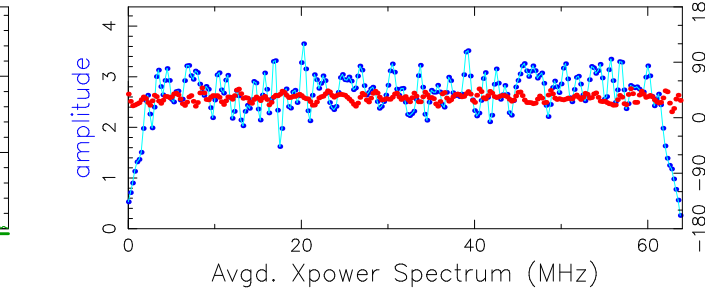
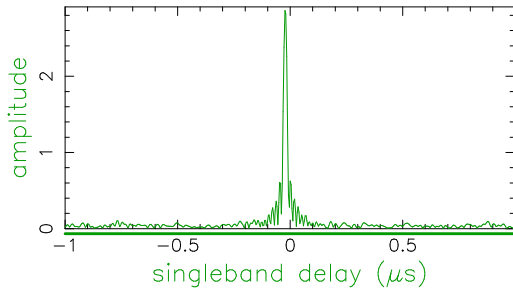
KVNPQ - KVNYs, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 8

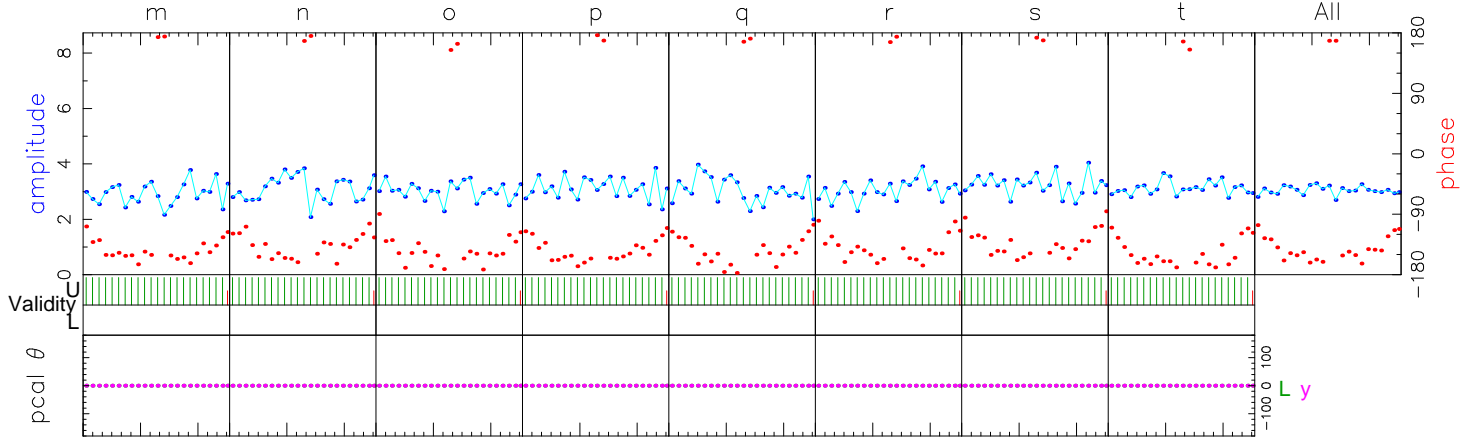


SNR 97.5  
 Int time 149.859  
 Amp 2.911  
 Phase -146.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.021800  
 MBD -0.006259  
 Fringe rate (Hz)  
 0.011154  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-147.4	-142.4	-149.4	-148.4	-149.6	-145.8	-138.4	-152.8	Phase	-146.7
	2.8	2.9	2.8	3.0	2.8	2.8	3.0	2.9	Ampl.	2.9
	251.4	251.4	251.3	251.5	251.4	251.6	251.3	251.3	Sbd box	251.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	0	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 7.76149049477E+01 Apriori delay (usec) 7.76367892364E+01 Resid mbdelay (usec) -6.25929E-03 +/- 1.1E-05  
 Sband delay (usec) 7.76149889864E+01 Apriori clock (usec) -3.1797340E+01 Resid sbdelay (usec) -2.18002E-02 +/- 8.8E-05  
 Phase delay (usec) 7.76367845047E+01 Apriori clockrate (us/s) -7.4410998E-06 Resid phdelay (usec) -4.73165E-06 +/- 3.8E-08  
 Delay rate (us/s) -7.20188446063E-03 Apriori rate (us/s) -7.20201394812E-03 Resid rate (us/s) 1.29487E-07 +/- 4.4E-10  
 Total phase (deg) -137.8 Apriori accel (us/s/s) -6.24094164810E-07 Resid phase (deg) -146.7 +/- 1.2

RMS Theor. Amplitude 2.911 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 21.0 2.8 Search (1024X32) 2.843 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 7.1 4.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 4.9 1.7 Inc. seg. avg. 3.053 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 2.9 2.9 Inc. frq. avg. 2.870 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.249.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

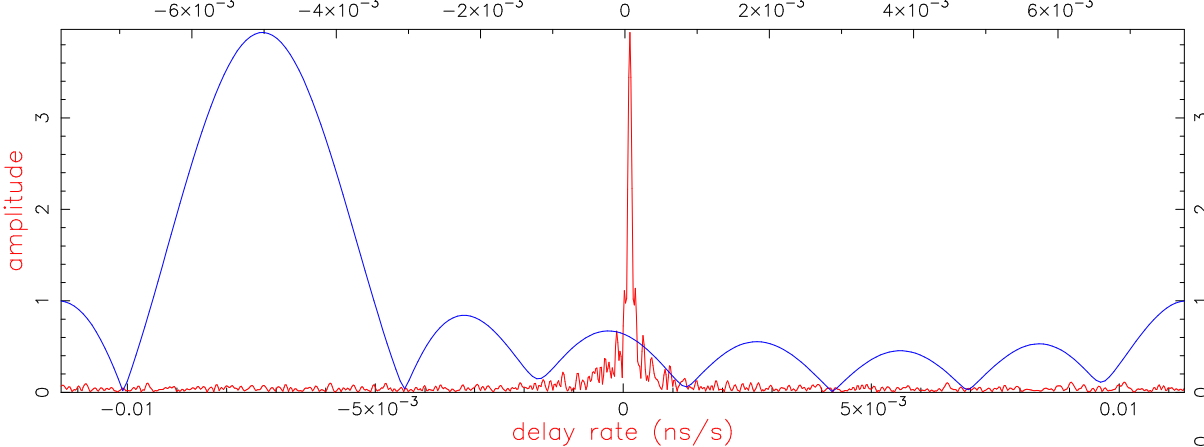
aux01

3C371.3MP15Q, No0901, Ly

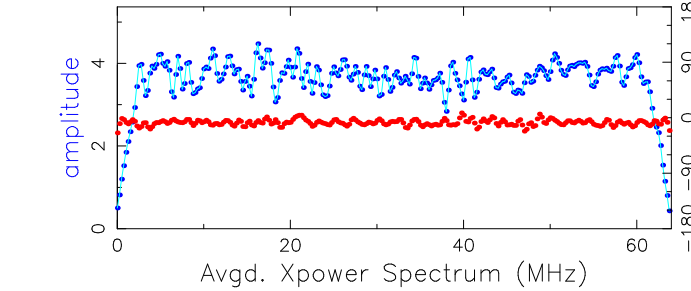
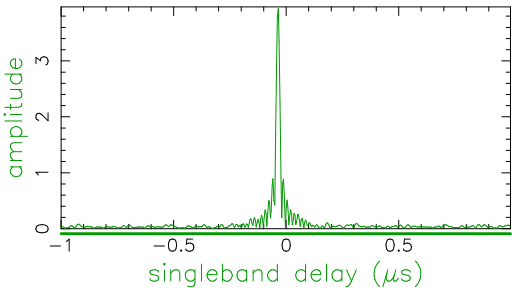
KVNPC - KVNY5, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 8

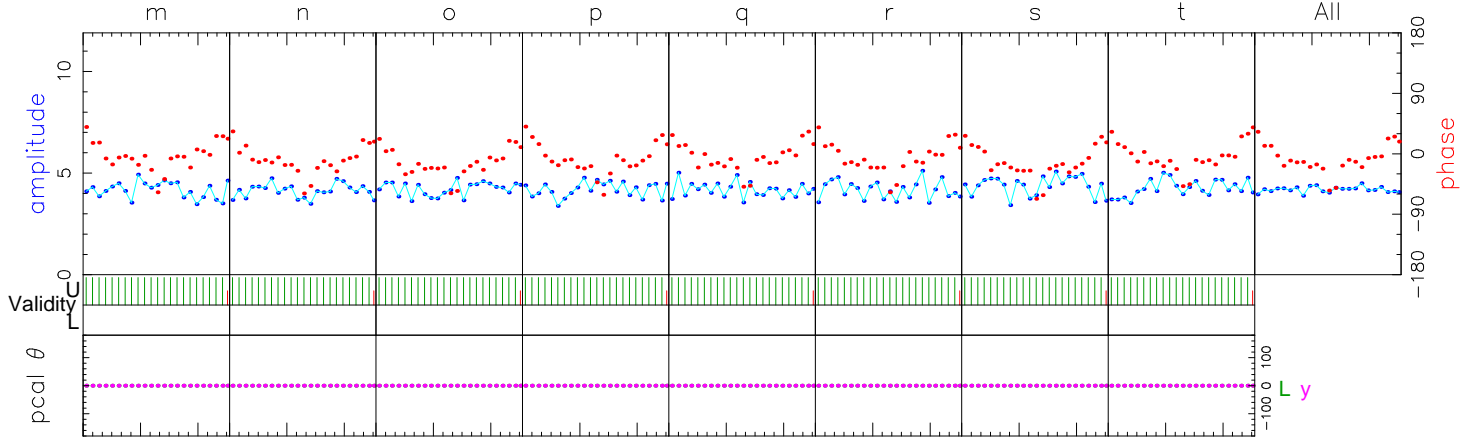


SNR 132.8  
 Int time 149.859  
 Amp 3.967  
 Phase -8.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.036303  
 MBD -0.005020  
 Fringe rate (Hz)  
 0.011115  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105613  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-3.8	-9.5	-13.7	-8.1	-4.7	-5.8	-13.6	-5.1	Phase	-8.1
	3.9	3.9	4.0	3.9	3.9	4.1	4.1	4.0	Ampl.	3.9
	247.7	247.7	247.6	247.9	247.7	247.7	247.7	247.7	Sbd box	247.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	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) 7.76005192289E+01 Apriori delay (usec) 7.76367892364E+01 Resid mbdelay (usec) -5.02001E-03 +/- 8.2E-06  
 Sband delay (usec) 7.76004862364E+01 Apriori clock (usec) -3.1797340E+01 Resid sbdelay (usec) -3.63030E-02 +/- 6.5E-05  
 Phase delay (usec) 7.76367889765E+01 Apriori clockrate (us/s) -7.4410998E-06 Resid phdelay (usec) -2.59845E-07 +/- 2.8E-08  
 Delay rate (us/s) -7.20188491411E-03 Apriori rate (us/s) -7.20201394812E-03 Resid rate (us/s) 1.29034E-07 +/- 3.2E-10  
 Total phase (deg) 0.9 Apriori accel (us/s/s) -6.24094164810E-07 Resid phase (deg) -8.1 +/- 0.9

RMS Theor. Amplitude 3.967 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 20.7 2.1 Search (1024X32) 3.877 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 6.7 3.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 4.2 1.2 Inc. seg. avg. 4.192 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 1.6 2.1 Inc. frq. avg. 3.941 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u,v (fr/asec) 117.779 -135.991 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.267.3MP15Q

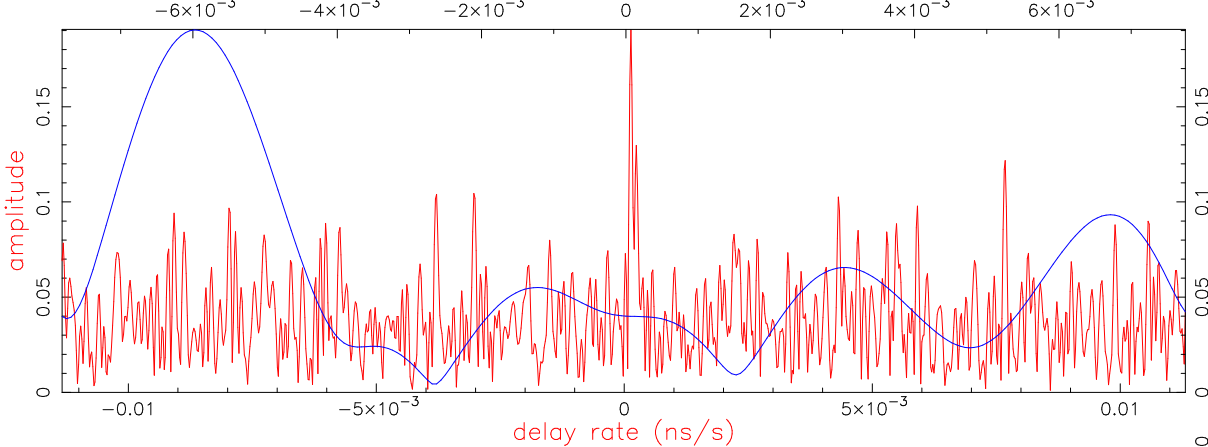
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ly

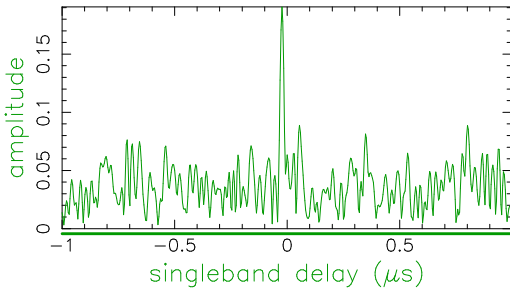
KVNPC - KVNY, fgroup W, pol LR

multiband delay ( $\mu$ s)

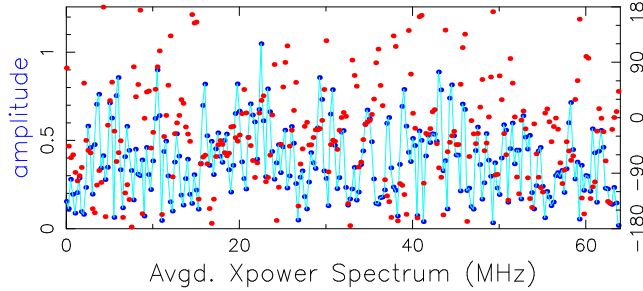


Fringe quality 0

SNR 6.4  
 Int time 149.859  
 Amp 0.191  
 Phase 125.5  
 PFD 2.4e-02  
 Delays (us)  
 SBD -0.022931  
 MBD -0.005966  
 Fringe rate (Hz)  
 0.010652  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

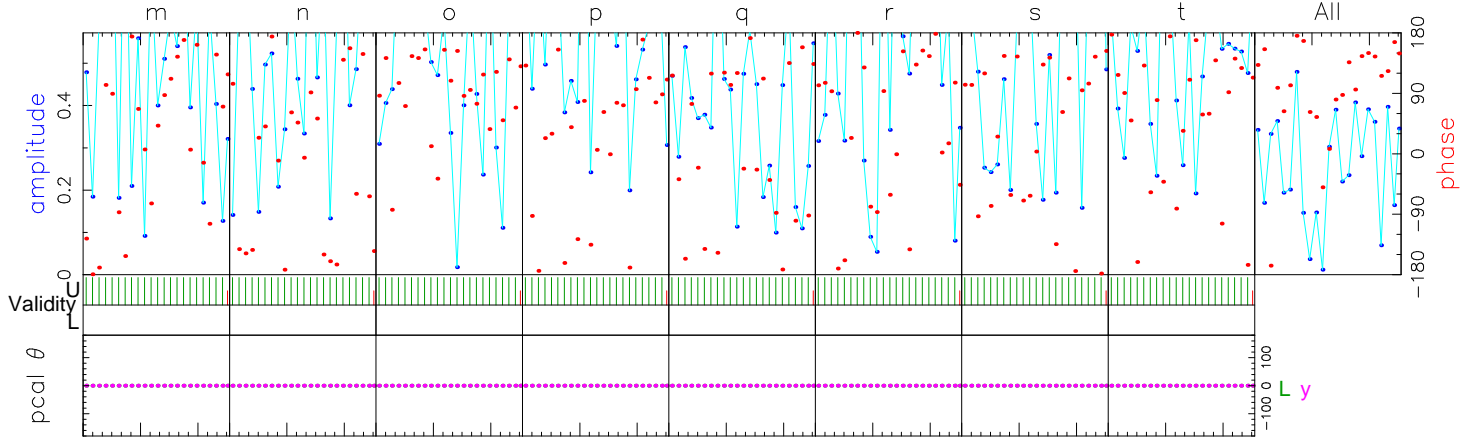


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105617  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
y	0	0	60000	0	0	0	4000	0		
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	7.76151984164E+01									
Sband delay (usec)	7.76138584864E+01									
Phase delay (usec)	7.76367932822E+01									
Delay rate (us/s)	-7.20189029065E-03									
Total phase (deg)			134.4							
Apriori delay (usec)					7.76367892364E+01					
Apriori clock (usec)					-3.1797340E+01					
Apriori clockrate (us/s)					-7.4410998E-06					
Apriori rate (us/s)					-7.20201394812E-03					
Apriori accel (us/s/s)					-6.24094164810E-07					
Resid mbdelay (usec)									-5.96582E-03	+/- 1.7E-04
Resid sbdelay (usec)									-2.29308E-02	+/- 1.3E-03
Resid phdelay (usec)									4.04586E-06	+/- 5.8E-07
Resid rate (us/s)									1.23657E-07	+/- 6.7E-09
Resid phase (deg)									125.5	+/- 18.0
Pcal mode:	MANUAL, MANUAL								PC period (AP's) 5, 5	
Pcal rate:	0.000E+00, 0.000E+00 (us/s)								sb window (us) -1.000 1.000	
Bits/sample:	2x2								SampCntNorm: enabled mb window (us) -0.008 0.008	
Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us								dr window (ns/s) -0.011 0.011	
Data rate(Mb/s):	2048								nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00	
L: az 23.1 el 48.9 pa -116.3	y: az 23.5 el 48.4 pa -114.6		u, v (fr/asec) 117.779 -135.991						simultaneous interpolator	
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.275.3MP15Q							

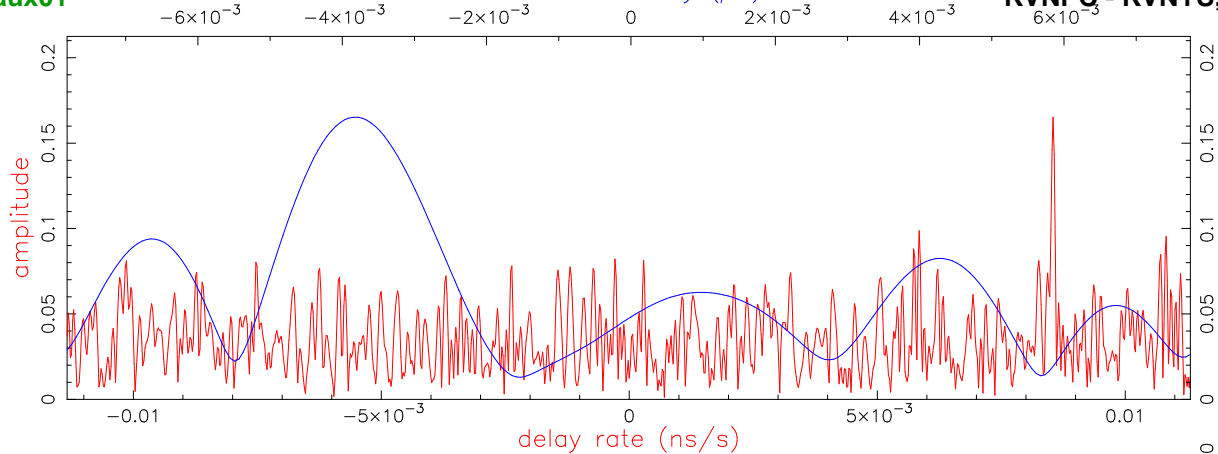
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Ly

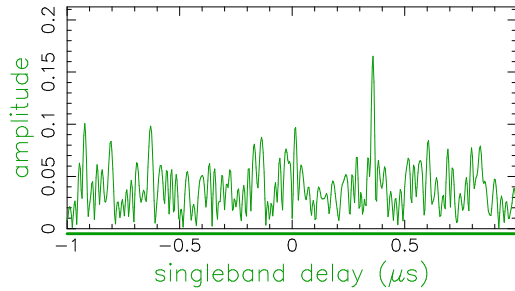
KVNPC - KVNY, fgroup W, pol RL

multiband delay ( $\mu$ s)

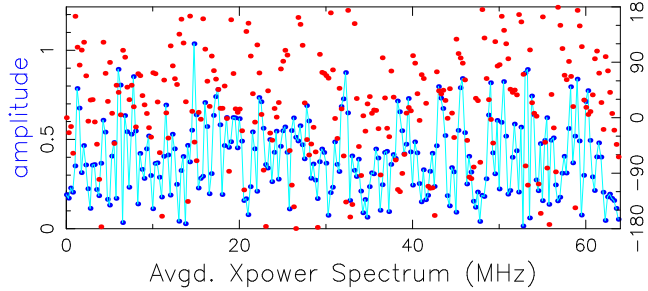


Fringe quality 0

SNR 5.6  
 Int time 149.859  
 Amp 0.212  
 Phase -107.5  
 PFD 9.6e-01  
 Delays (us)  
 SBD 0.358565  
 MBD -0.003805  
 Fringe rate (Hz)  
 0.738061  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

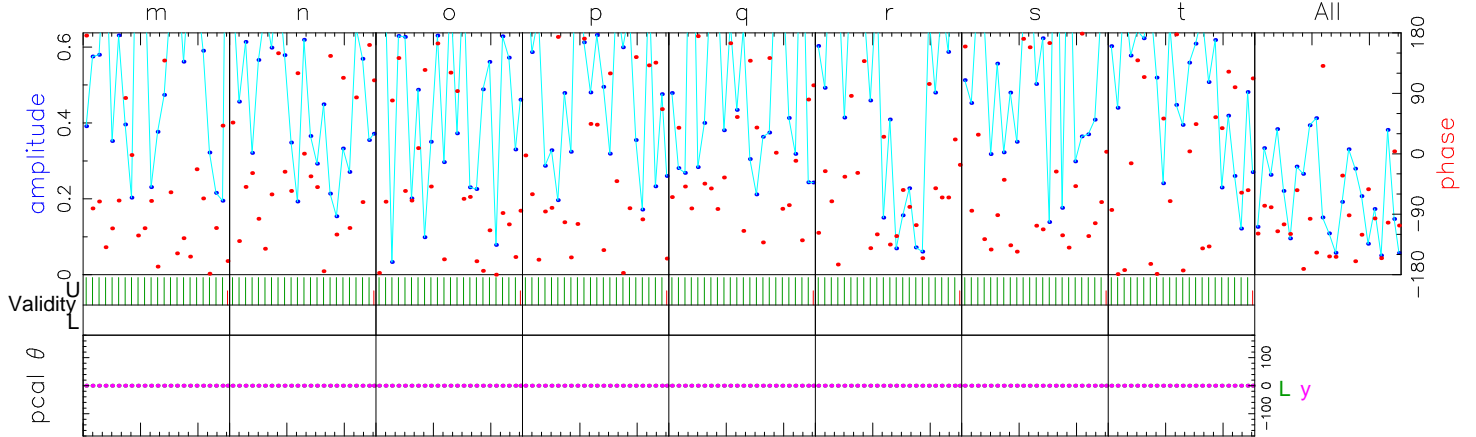


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105621  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-115.7	-73.3	-127.2	-124.2	-76.8	-69.2	-113.3	178.5	Phase	-107.5
	0.4	0.1	0.2	0.2	0.3	0.2	0.3	0.1	Ampl.	0.2
	349.6	324.7	105.9	68.0	259.7	256.2	494.6	417.8	Sbd box	348.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 7.79923594141E+01 Apriori delay (usec) 7.76367892364E+01 Resid mbdelay (usec) -3.80482E-03 +/- 2.0E-04  
 Sband delay (usec) 7.79953542364E+01 Apriori clock (usec) -3.1797340E+01 Resid sbdelay (usec) 3.58565E-01 +/- 1.6E-03  
 Phase delay (usec) 7.76367857709E+01 Apriori clockrate (us/s) -7.4410998E-06 Resid phdelay (usec) -3.46544E-06 +/- 6.7E-07  
 Delay rate (us/s) -7.19344578738E-03 Apriori rate (us/s) -7.20201394812E-03 Resid rate (us/s) 8.56816E-06 +/- 7.7E-09  
 Total phase (deg) -98.5 Apriori accel (us/s/s) -6.24094164810E-07 Resid phase (deg) -107.5 +/- 20.6

RMS Theor. Amplitude 0.212 +/- 0.038 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 49.9 49.5 Search (1024X32) 0.164 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 76.4 86.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 40.4 29.2 Inc. seg. avg. 0.206 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 52.2 50.9 Inc. frq. avg. 0.212 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 y: az 23.5 el 48.4 pa -114.6 u, v (fr/asec) 117.779 -135.991 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Ly..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Ly.W.282.3MP15Q

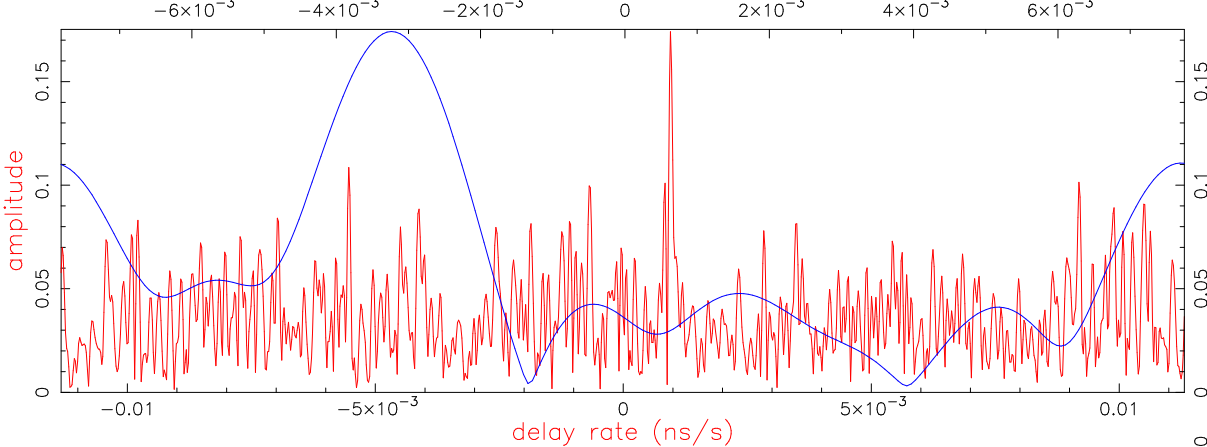
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LY

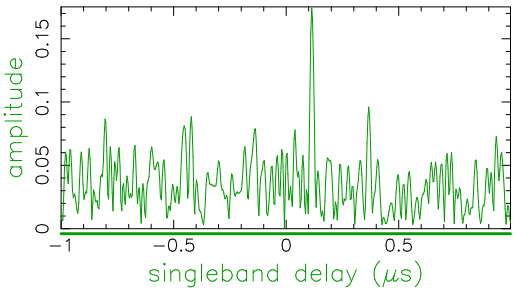
KVNPC - YEBES40M, fgroup W, pol LL

multiband delay ( $\mu$ s)

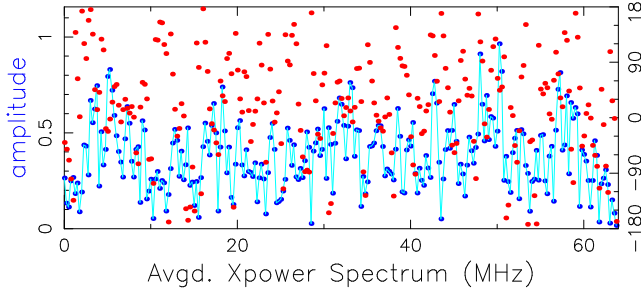


Fringe quality 0

SNR 5.8  
 Int time 149.662  
 Amp 0.175  
 Phase -51.2  
 PFD 4.7e-01  
 Delays (us)  
 SBD 0.114072  
 MBD -0.003208  
 Fringe rate (Hz)  
 0.081805  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

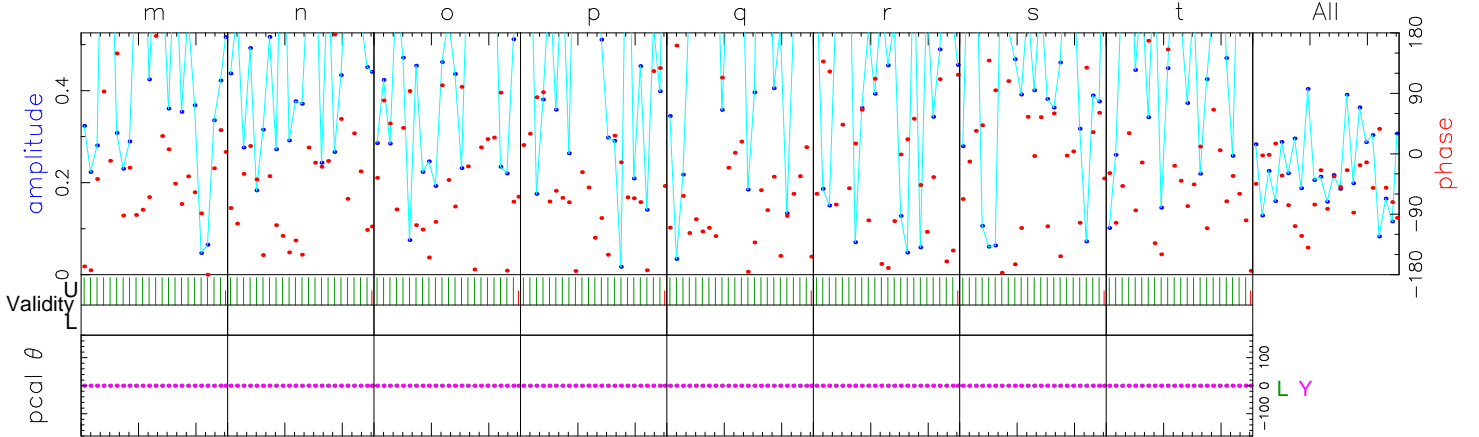


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105625  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.4	-57.0	-16.6	-54.0	-77.2	-111.0	16.2	-51.4	Phase	-51.2
	0.2	0.2	0.2	0.2	0.3	0.1	0.1	0.3	Ampl.	0.2
	187.8	330.1	455.7	466.4	286.2	104.1	445.8	286.3	Sbd box	286.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	8.75423596322E+03	Apriori delay (usec)	8.75411417117E+03	Resid mbdelay (usec)	-3.20796E-03	+/-	1.9E-04
Sband delay (usec)	8.75422824267E+03	Apriori clock (usec)	8.5177483E+01	Resid sbdelay (usec)	1.14072E-01	+/-	1.5E-03
Phase delay (usec)	8.75411416952E+03	Apriori clockrate (us/s)	-6.2278698E-06	Resid phdelay (usec)	-1.65217E-06	+/-	6.3E-07
Delay rate (us/s)	3.13955994557E-01	Apriori rate (us/s)	3.13955044883E-01	Resid rate (us/s)	9.49674E-07	+/-	7.3E-09
Total phase (deg)	202.6	Apriori accel (us/s/s)	-5.03965481040E-05	Resid phase (deg)	-51.2	+/-	19.6

ph/seg (deg)	43.6	Theor.	47.0	Amplitude	0.175 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	58.7	Search (1024X32)	0.172	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	41.2	Inc. seg. avg.	0.175	Inc. seg. avg.	0.175	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	42.5	Inc. frq. avg.	0.178	Inc. frq. avg.	0.178	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 Y: az 0.0 el 20.3 pa -0.2 u, v (fr/asec) -5346.091 -10831.389 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LY.W.291.3MP15Q

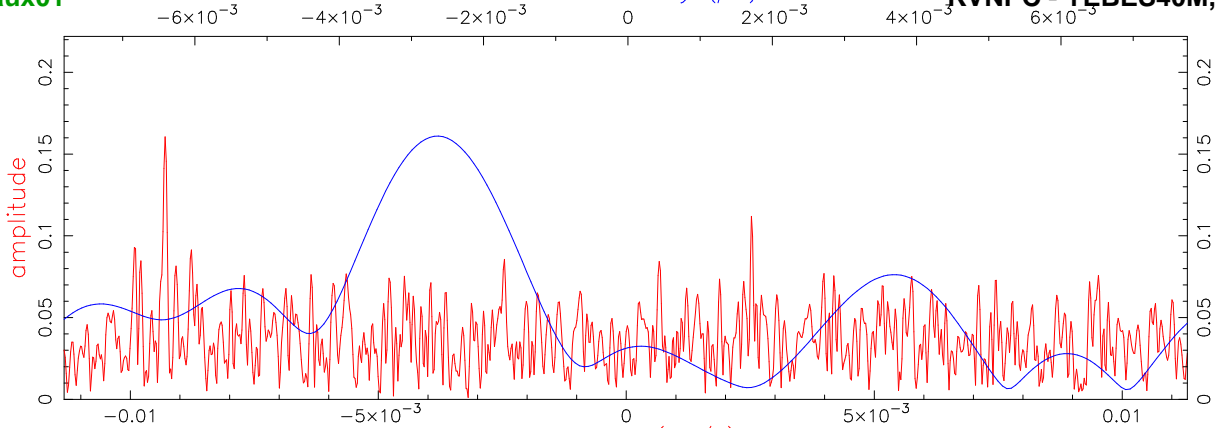
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LY

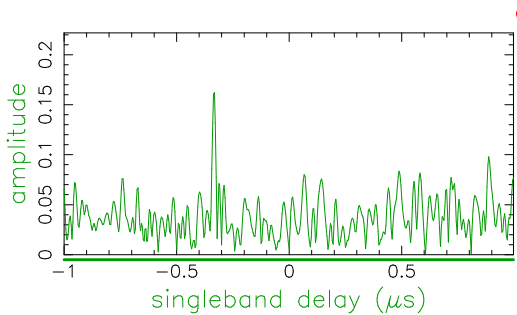
KVNPC - YEBES40M, fgroup W, pol RR

multiband delay ( $\mu$ s)

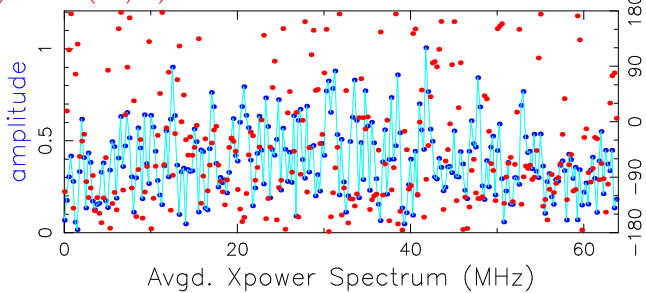


Fringe quality 0

SNR 5.5  
 Int time 149.662  
 Amp 0.222  
 Phase 45.8  
 PFD 9.8e-01  
 Delays (us)  
 SBD -0.333763  
 MBD -0.002561  
 Fringe rate (Hz)  
 -0.801721  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

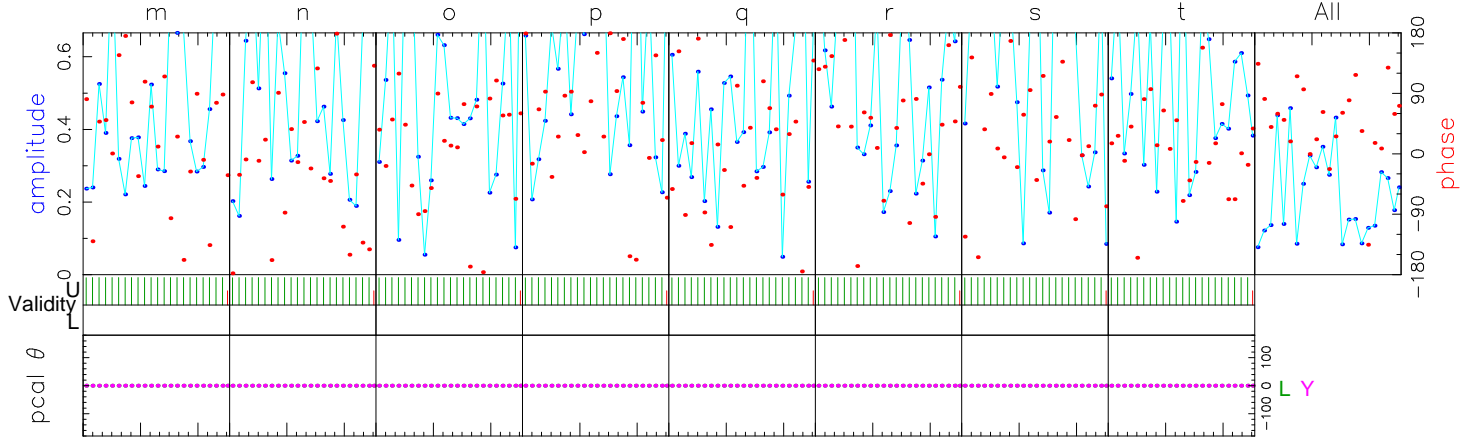


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105626  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	46.5	6.8	43.8	73.4	22.0	75.3	53.5	8.8	Phase	45.8
	0.2	0.1	0.3	0.2	0.1	0.3	0.3	0.3	Ampl.	0.2
	433.9	397.1	13.3	238.7	394.8	25.1	291.1	335.4	Sbd box	171.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	8.75378348535E+03	Apriori delay (usec)	8.75411417117E+03	Resid mbdelay (usec)	-2.56082E-03	+/-	2.0E-04
Sband delay (usec)	8.75378040842E+03	Apriori clock (usec)	8.5177483E+01	Resid sbdelay (usec)	-3.33763E-01	+/-	1.6E-03
Phase delay (usec)	8.75411417265E+03	Apriori clockrate (us/s)	-6.2278698E-06	Resid phdelay (usec)	1.47825E-06	+/-	6.7E-07
Delay rate (us/s)	3.13945737698E-01	Apriori rate (us/s)	3.13955044883E-01	Resid rate (us/s)	-9.30718E-06	+/-	7.7E-09
Total phase (deg)	299.6	Apriori accel (us/s/s)	-5.03965481040E-05	Resid phase (deg)	45.8	+/-	20.7

ph/seg (deg)	57.2	RMS	49.7	Theor.	57.2	Amplitude	0.222 +/- 0.040	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	79.6	Search (1024X32)	0.160	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	29.3	Inc. seg. avg.	0.216	Inc. frq. avg.	0.209	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	41.8	Inc. frq. avg.	0.209	u, v (fr/asec)	-5346.091 -10831.389	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011	
L: az 23.1 el 48.9 pa -116.3	Y: az 0.0 el 20.3 pa -0.2			simultaneous interpolator							

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LY.W.300.3MP15Q

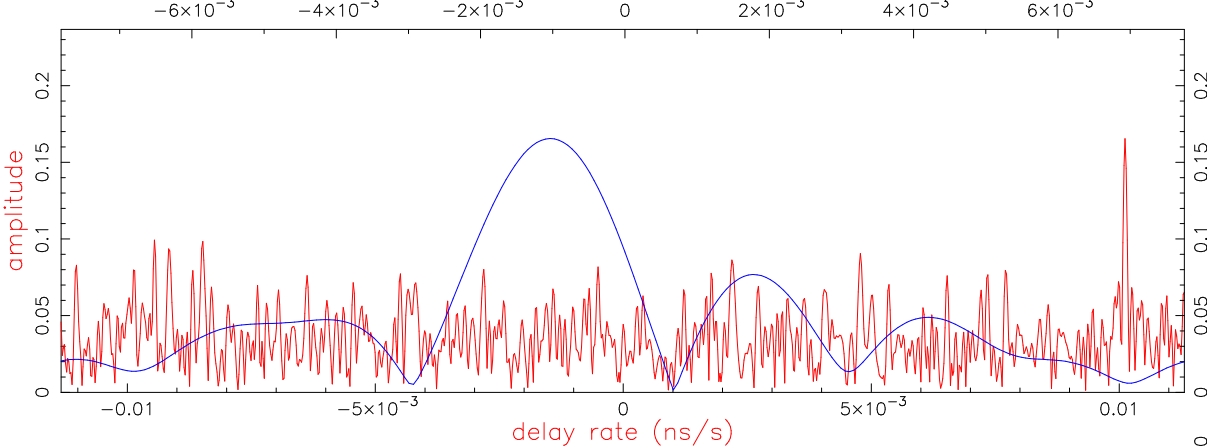
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LY

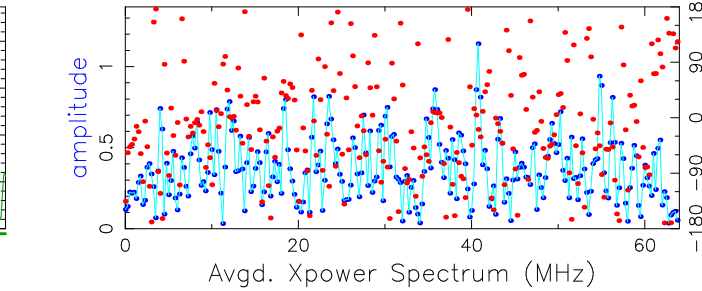
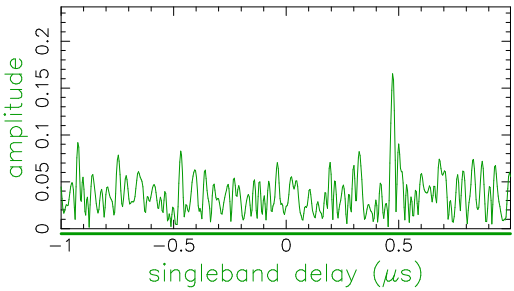
KVNPC - YEBES40M, fgroup W, pol LR

multiband delay ( $\mu$ s)



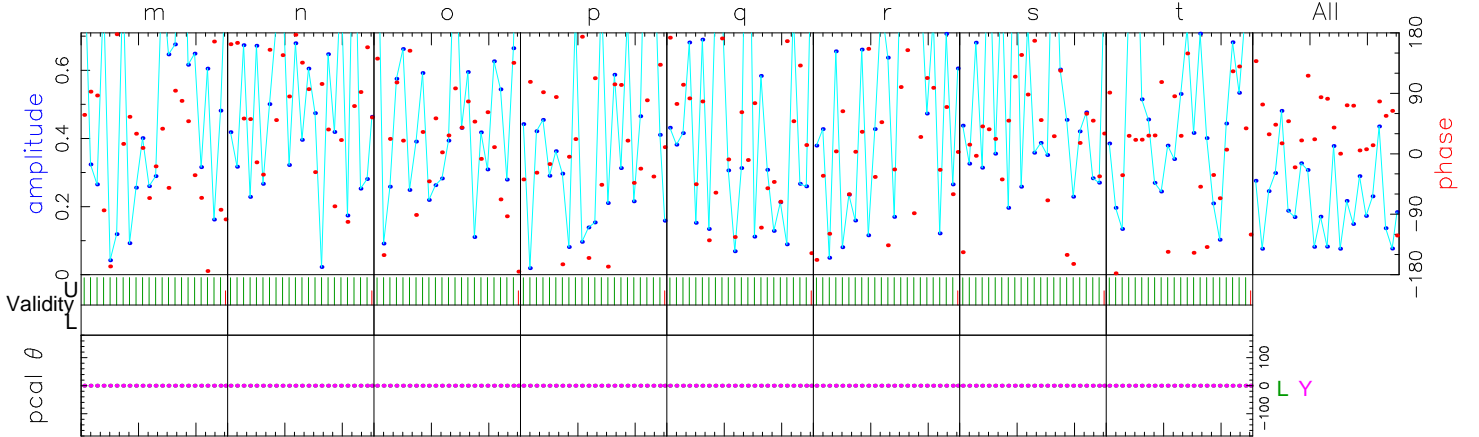
Fringe quality 0

SNR 5.6  
 Int time 149.662  
 Amp 0.237  
 Phase 45.8  
 PFD 9.6e-01  
 Delays (us)  
 SBD 0.473596  
 MBD -0.000990  
 Fringe rate (Hz)  
 0.873793  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105630  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	22.3	77.0	67.6	26.4	29.9	39.6	46.1	44.2	Phase	45.8
	0.3	0.3	0.3	0.3	0.1	0.2	0.3	0.2	Ampl.	0.2
	314.3	196.1	500.9	437.8	392.4	58.3	383.4	170.0	Sbd box	378.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	8.75458193098E+03	Apriori delay (usec)	8.75411417117E+03	Resid mbdelay (usec)	-9.90191E-04	+/-	2.0E-04
Sband delay (usec)	8.75458776742E+03	Apriori clock (usec)	8.5177483E+01	Resid sbdelay (usec)	4.73596E-01	+/-	1.6E-03
Phase delay (usec)	8.75411417265E+03	Apriori clockrate (us/s)	-6.2278698E-06	Resid phdelay (usec)	1.47790E-06	+/-	6.7E-07
Delay rate (us/s)	3.13965188750E-01	Apriori rate (us/s)	3.1395504883E-01	Resid rate (us/s)	1.01439E-05	+/-	7.7E-09
Total phase (deg)	299.6	Apriori accel (us/s/s)	-5.03965481040E-05	Resid phase (deg)	45.8	+/-	20.6

ph/seg (deg)	45.9	RMS	49.5	Theor.	0.237 +/- 0.043	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.1	45.9	86.3	Search (1024X32)	0.163	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.1	29.2	29.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.0	50.9	50.9	Inc. seg. avg.	0.229	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.220	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3 Y: az 0.0 el 20.3 pa -0.2 u, v (fr/asec) -5346.091 -10831.389 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LY.W.310.3MP15Q

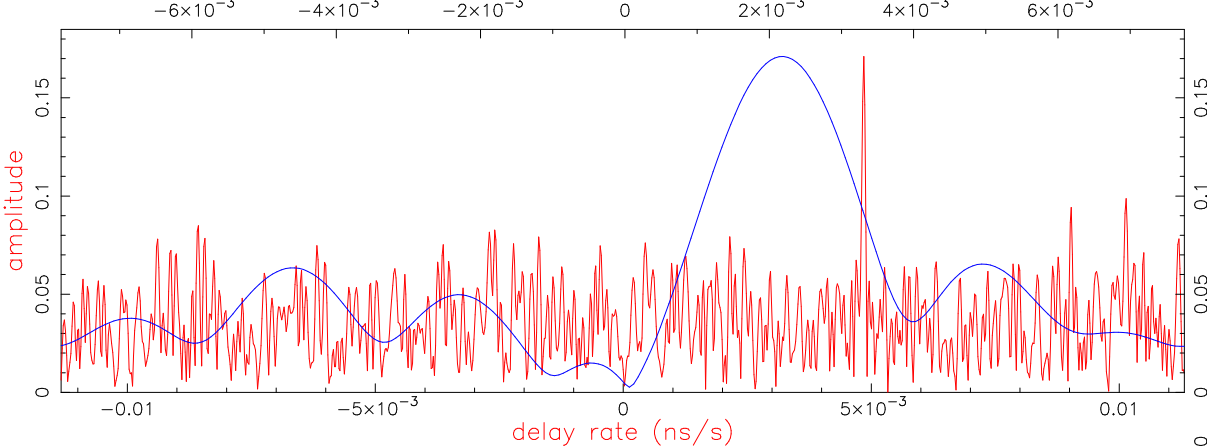
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LY

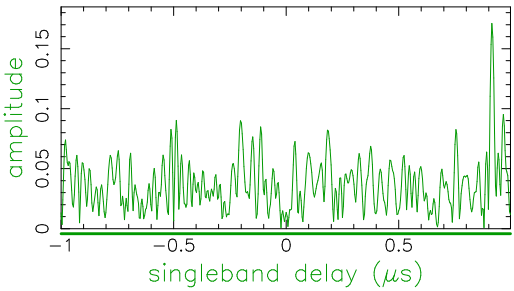
KVNPC - YEYES40M, fgroup W, pol RL

multiband delay ( $\mu$ s)

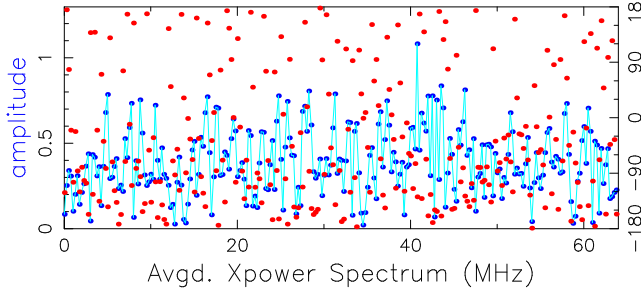


Fringe quality 0

SNR 5.7  
 Int time 149.662  
 Amp 0.185  
 Phase -54.2  
 PFD 7.2e-01  
 Delays (us)  
 SBD 0.914434  
 MBD 0.002189  
 Fringe rate (Hz) 0.418957  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

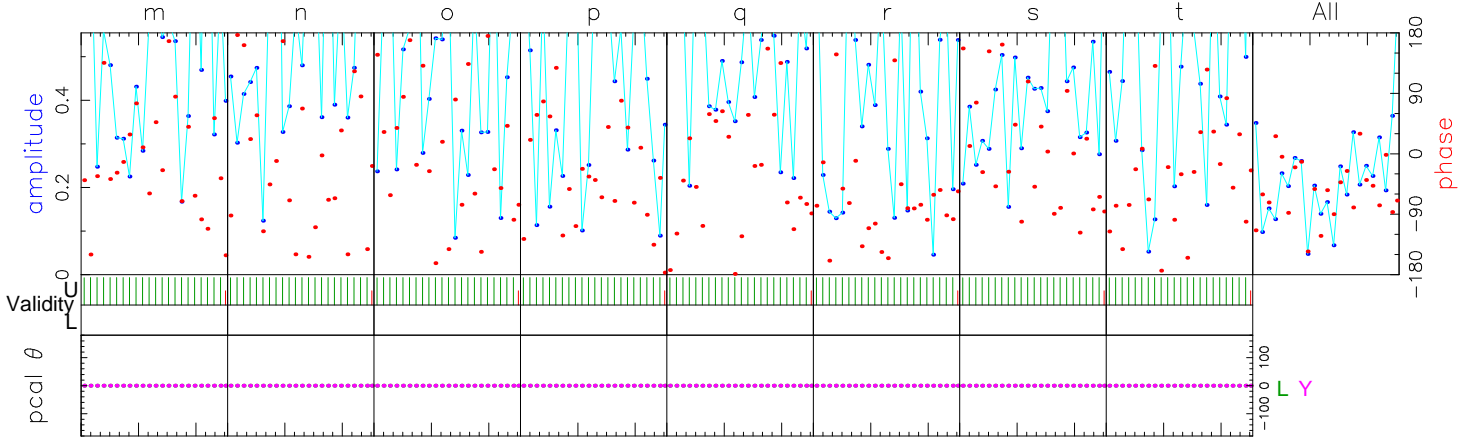


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105632  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.7	-61.5	-50.2	-41.7	-55.2	-84.5	-40.9	-38.5	Phase	-54.2
	0.2	0.1	0.2	0.2	0.1	0.3	0.1	0.3	Ampl.	0.2
	330.6	368.7	9.3	126.5	197.1	490.9	145.4	206.8	Sbd box	491.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	8.75502260993E+03	Apriori delay (usec)	8.75411417117E+03	Resid mbdelay (usec)	2.18876E-03	+/-	1.9E-04
Sband delay (usec)	8.75502860567E+03	Apriori clock (usec)	8.5177483E+01	Resid sbdelay (usec)	9.14434E-01	+/-	1.5E-03
Phase delay (usec)	8.75411416943E+03	Apriori clockrate (us/s)	-6.2278698E-06	Resid phdelay (usec)	-1.74896E-06	+/-	6.5E-07
Delay rate (us/s)	3.13959908557E-01	Apriori rate (us/s)	3.13955044883E-01	Resid rate (us/s)	4.86367E-06	+/-	7.4E-09
Total phase (deg)	199.6	Apriori accel (us/s/s)	-5.03965481040E-05	Resid phase (deg)	-54.2	+/-	20.0

ph/seg (deg)	RMS 44.5	Theor. 48.0	Amplitude Search (1024X32)	0.166	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	65.5	83.7	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)	16.7	28.3	Inc. seg. avg.	0.175	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.2	49.4	Inc. frq. avg.	0.172	Data rate(Mb/s): 2048	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3 Y: az 0.0 el 20.3 pa -0.2 u, v (fr/asec) -5346.091 -10831.389 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LY.W.318.3MP15Q



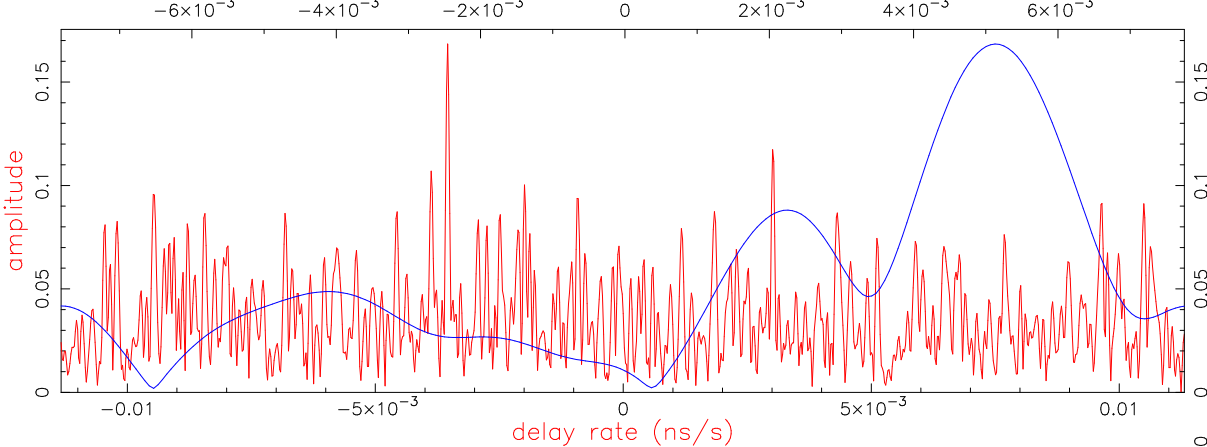
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LZ

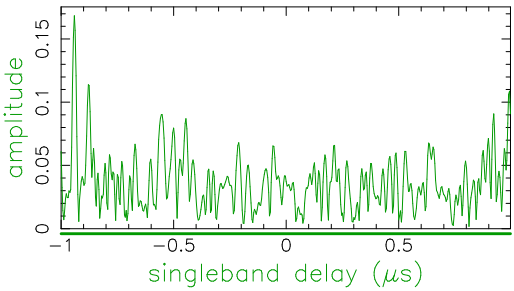
KVNPC - METSAHOV, fgroup W, pol LL

multiband delay ( $\mu$ s)

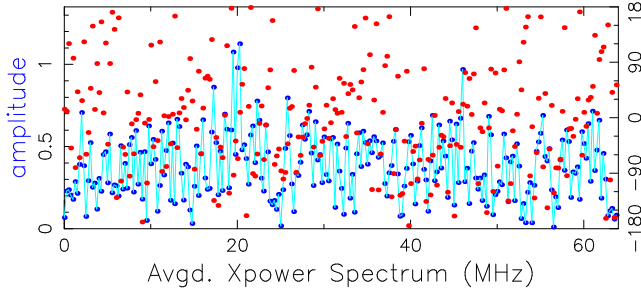


Fringe quality 0

SNR 5.6  
 Int time 149.813  
 Amp 0.175  
 Phase -109.6  
 PFD 8.8e-01  
 Delays (us)  
 SBD -0.941021  
 MBD 0.005131  
 Fringe rate (Hz)  
 -0.305082  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

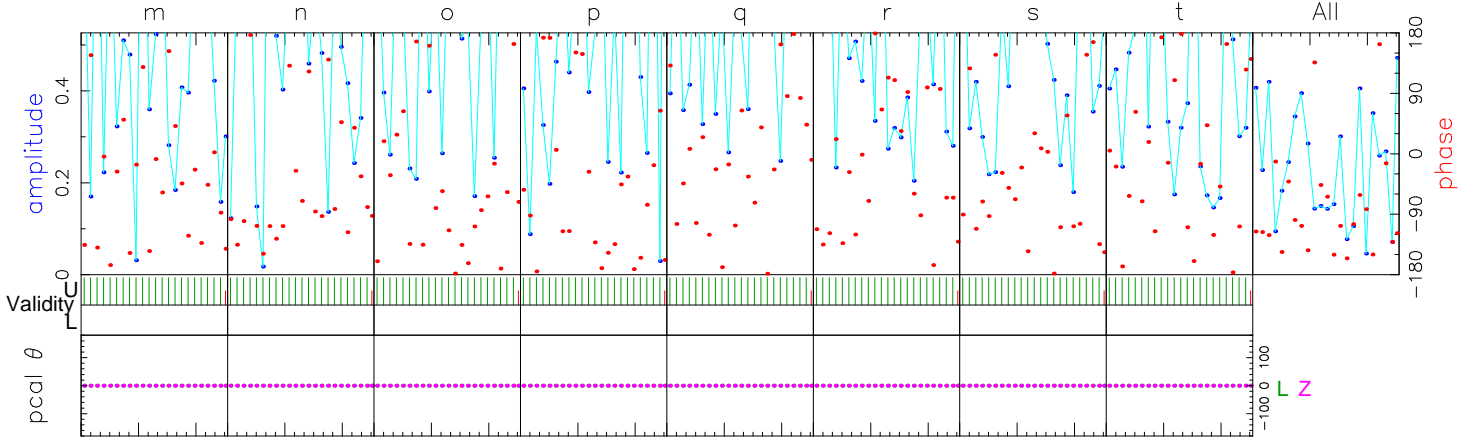


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105610  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-109.5	-97.7	-126.6	-128.6	-42.5	-120.5	-83.1	-130.1	Phase	-109.6
	0.2	0.3	0.3	0.2	0.1	0.1	0.2	0.1	Ampl.	0.2
	31.7	17.1	504.7	111.9	212.3	205.9	88.0	307.0	Sbd box	16.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.93680751178E+03	Apriori delay (usec)	1.93775550562E+03	Resid mbdelay (usec)	5.13117E-03	+/-	1.9E-04
Sband delay (usec)	1.93681448437E+03	Apriori clock (usec)	-2.5481943E+01	Resid sbdelay (usec)	-9.41021E-01	+/-	1.5E-03
Phase delay (usec)	1.93775550208E+03	Apriori clockrate (us/s)	-8.0513990E-06	Resid phdelay (usec)	-3.53555E-06	+/-	6.6E-07
Delay rate (us/s)	1.92004506401E-01	Apriori rate (us/s)	1.92008048100E-01	Resid rate (us/s)	-3.54170E-06	+/-	7.6E-09
Total phase (deg)		Apriori accel (us/s/s)	-3.78729581835E-05	Resid phase (deg)	-109.6	+/-	20.3

ph/seg (deg)	RMS 52.5	Theor. 48.7	Amplitude Search (1024X32)	0.175 +/- 0.031	0.168	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.1	85.0	Interp.	0.000	0.168	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	33.0	28.7	Inc. seg. avg.	0.181	0.168	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	40.8	50.2	Inc. frq. avg.	0.168	0.168	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

L: az 23.1 el 48.9 pa -116.3      Z: az 12.3 el 41.5 pa -18.1      u,v (fr/asec) -3293.056 -8846.875      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/LZ..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/LZ.W.254.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

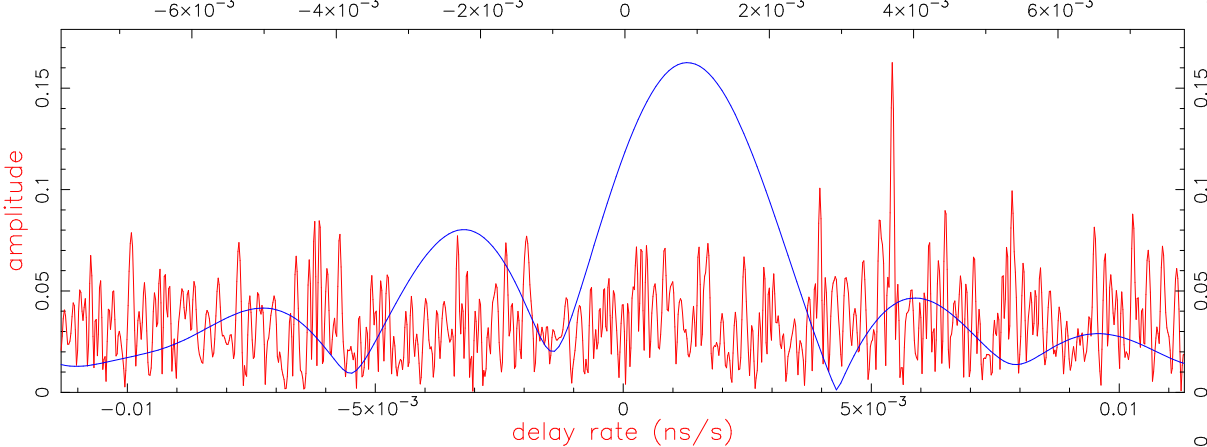
aux01

3C371.3MP15Q, No0901, LZ

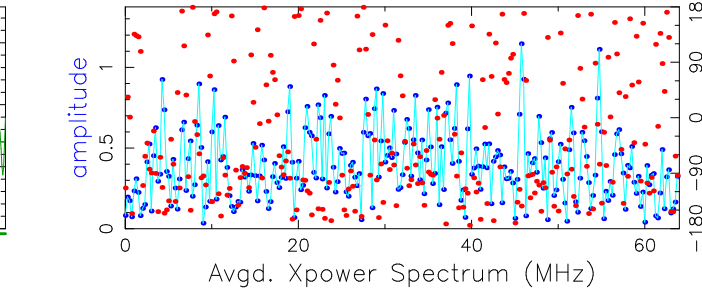
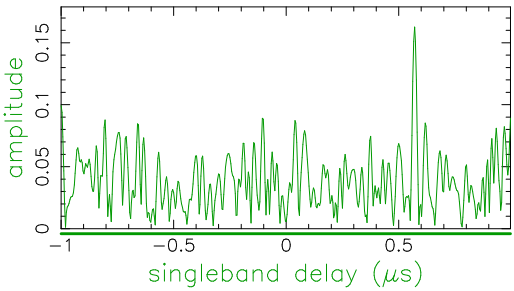
KVNPC - METSAHOV, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 0

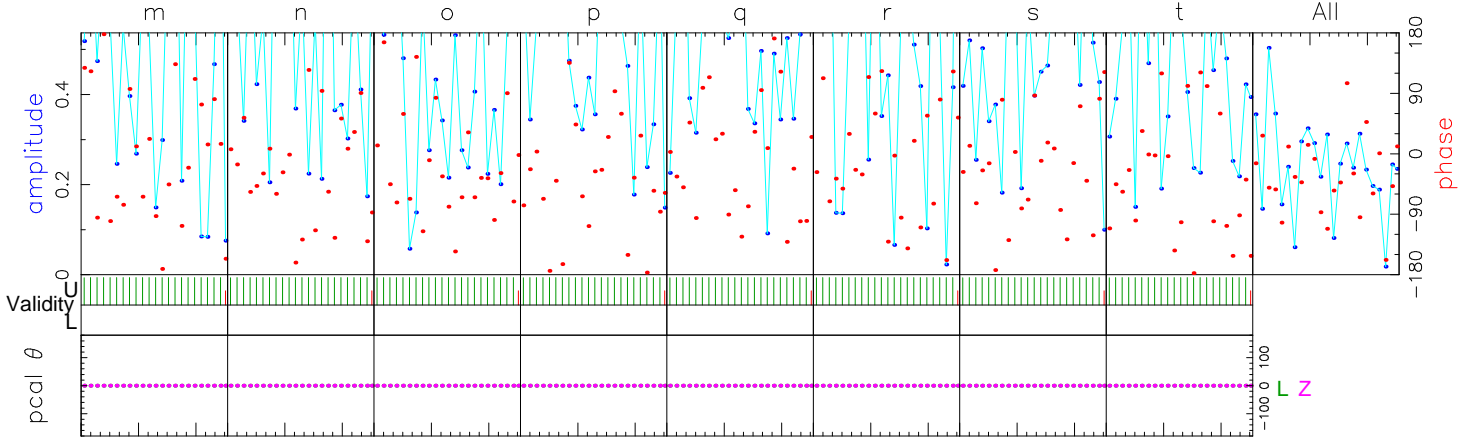


SNR 5.4  
 Int time 149.813  
 Amp 0.179  
 Phase -34.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.570303  
 MBD 0.000865  
 Fringe rate (Hz)  
 0.467151  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105612  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		
L	0	0	60000	0	0	0	4000	0		
Z	0	0	0	0	0	0	0	0		
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
L	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	1.93831887016E+03	Apriori delay (usec)	1.93775550562E+03	Resid mbdelay (usec)	8.64541E-04	+/-	2.0E-04
Sband delay (usec)	1.93832580887E+03	Apriori clock (usec)	-2.5481943E+01	Resid sbdelay (usec)	5.70303E-01	+/-	1.6E-03
Phase delay (usec)	1.93775550452E+03	Apriori clockrate (us/s)	-8.0513990E-06	Resid phdelay (usec)	-1.09823E-06	+/-	6.8E-07
Delay rate (us/s)	1.92013471257E-01	Apriori rate (us/s)	1.92008048100E-01	Resid rate (us/s)	5.42316E-06	+/-	7.8E-09
Total phase (deg)	57.3	Apriori accel (us/s/s)	-3.78729581835E-05	Resid phase (deg)	-34.1	+/-	21.1

ph/seg (deg)	56.5	RMS	50.5	Theor.	0.179 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	80.9	Search (1024X32)	0.162	Amplitude	0.179 +/- 0.033	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	22.2	Interp.	0.000	Search	0.162	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.7	Inc. seg. avg.	0.191	Inc. seg. avg.	0.191	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
		Inc. frq. avg.	0.162	Inc. frq. avg.	0.162	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3      Z: az 12.3 el 41.5 pa -18.1      u,v (fr/asec) -3293.056 -8846.875      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/LZ..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/LZ.W.264.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

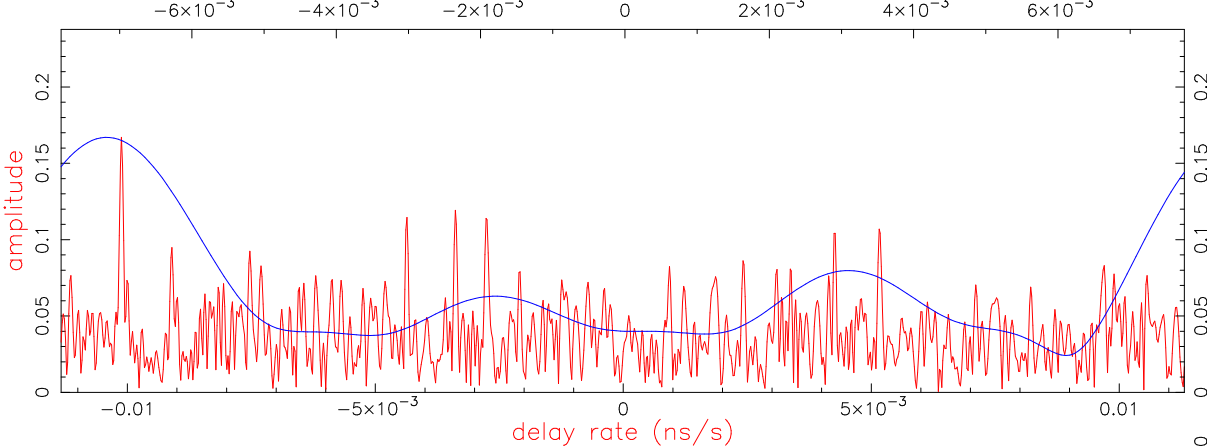
aux01

3C371.3MP15Q, No0901, LZ

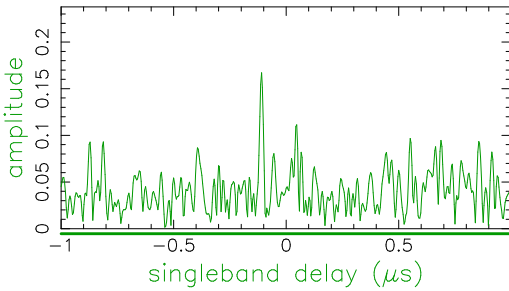
KVNPC - METSAHOV, fgroup W, pol LR

multiband delay ( $\mu$ s)

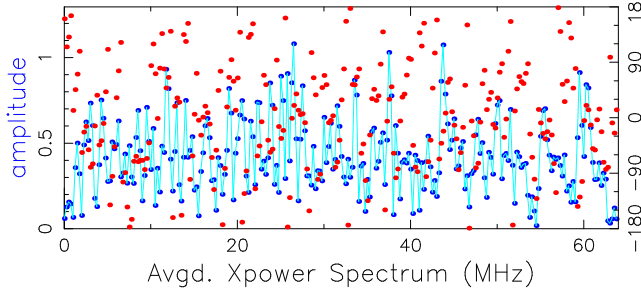
Fringe quality 0



SNR 5.6  
 Int time 149.813  
 Amp 0.238  
 Phase -97.2  
 PFD 9.3e-01  
 Delays (us)  
 SBD -0.109594  
 MBD -0.007189  
 Fringe rate (Hz)  
 -0.872326  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

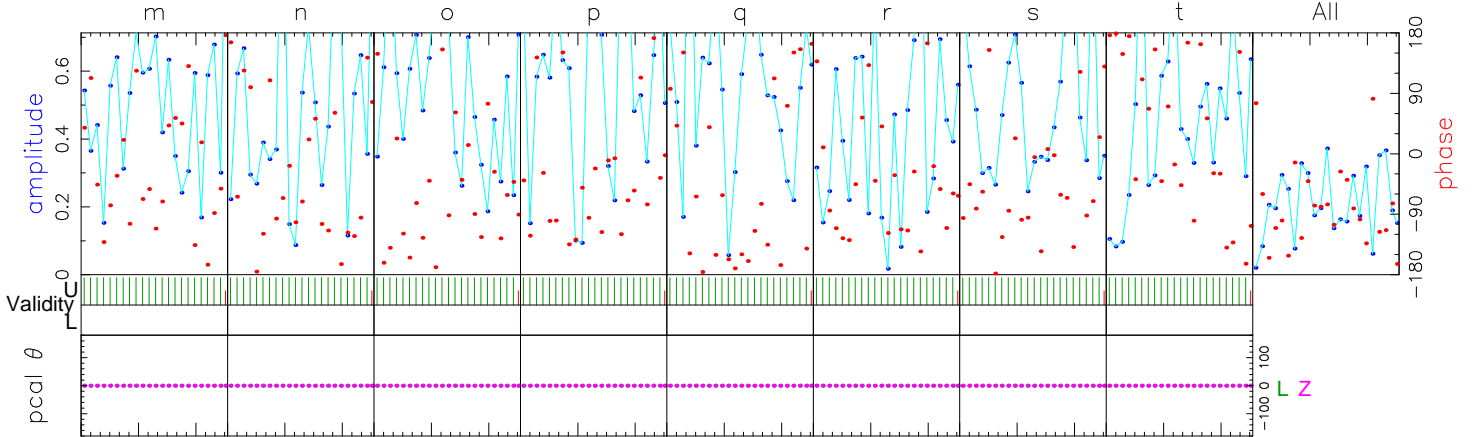


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105618  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-73.5	-97.4	-106.1	-84.1	-157.8	-75.6	-78.4	-142.6	Phase	-97.2
	0.2	0.1	0.3	0.4	0.4	0.3	0.4	0.0	Ampl.	0.2
	431.1	269.8	446.6	228.4	229.5	99.9	179.9	18.0	Sbd box	228.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 1.93763894174E+03 Apriori delay (usec) 1.93775550562E+03 Resid mbdelay (usec) -7.18887E-03 +/- 1.9E-04  
 Sband delay (usec) 1.93764591162E+03 Apriori clock (usec) -2.5481943E+01 Resid sbdelay (usec) -1.09594E-01 +/- 1.5E-03  
 Phase delay (usec) 1.93775550248E+03 Apriori clockrate (us/s) -8.0513990E-06 Resid phdelay (usec) -3.13592E-06 +/- 6.6E-07  
 Delay rate (us/s) 1.91997921260E-01 Apriori rate (us/s) 1.92008048100E-01 Resid rate (us/s) -1.01268E-05 +/- 7.6E-09  
 Total phase (deg) -5.9 Apriori accel (us/s/s) -3.78729581835E-05 Resid phase (deg) -97.2 +/- 20.5

RMS Theor. Amplitude 0.238 +/- 0.043 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 65.1 49.1 Search (1024X32) 0.163 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 66.1 85.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 35.0 29.0 Inc. seg. avg. 0.222 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 60.5 50.6 Inc. frq. avg. 0.242 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

L: az 23.1 el 48.9 pa -116.3 Z: az 12.3 el 41.5 pa -18.1 u,v (fr/asec) -3293.056 -8846.875 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LZ..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LZ.W.279.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

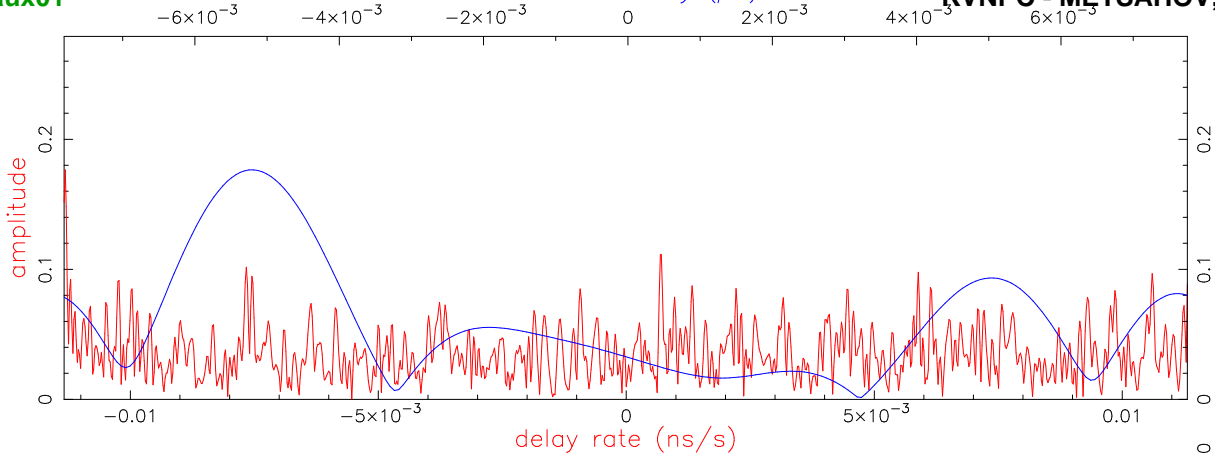
aux01

3C371.3MP15Q, No0901, LZ

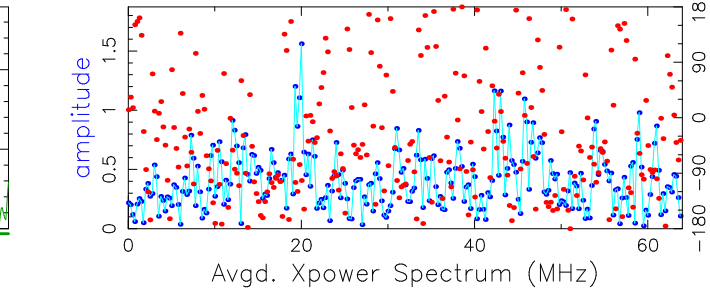
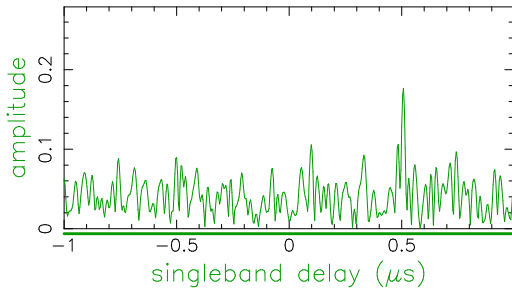
KVNPC - METSAHOV, fgroup W, pol RL

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

Fringe quality 0

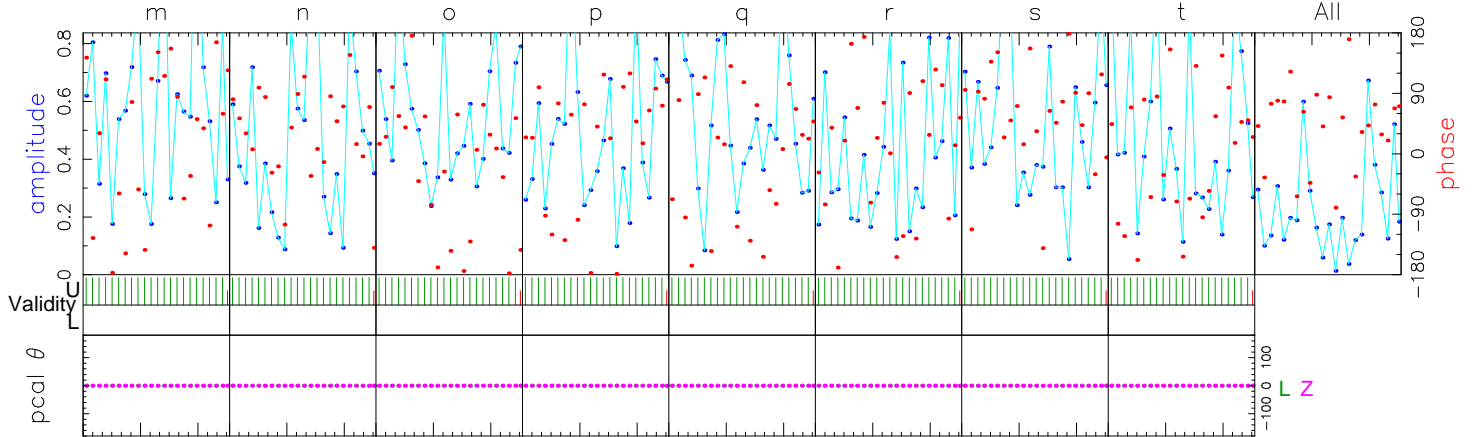


SNR 5.9  
 Int time 149.813  
 Amp 0.279  
 Phase 51.7  
 PFD 2.9e-01  
 Delays (us)  
 SBD 0.506791  
 MBD -0.005200  
 Fringe rate (Hz)  
 -0.976562  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105622  
 2024:113:095956  
 RA & Dec (J2000)  
 18h06m50.680649s  
 +69°49'28.108492"

Amp. and Phase vs. time for each freq., 23 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	91.4	38.7	28.4	69.4	24.5	15.6	72.9	37.2	Phase	51.7
	0.2	0.4	0.3	0.4	0.2	0.1	0.5	0.3	Ampl.	0.3
	174.5	381.6	108.0	159.0	90.9	39.4	386.6	310.4	Sbd box	386.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
L	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
L:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
L	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
L	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.93826593037E+03	Apriori delay (usec)	1.93775550562E+03	Resid mbdelay (usec)	-5.20024E-03	+/-	1.8E-04
Sband delay (usec)	1.93826229687E+03	Apriori clock (usec)	-2.5481943E+01	Resid sbdelay (usec)	5.06791E-01	+/-	1.4E-03
Phase delay (usec)	1.93775550728E+03	Apriori clockrate (us/s)	-8.0513990E-06	Resid phdelay (usec)	1.66588E-06	+/-	6.2E-07
Delay rate (us/s)	1.91996711179E-01	Apriori rate (us/s)	1.92008048100E-01	Resid rate (us/s)	-1.13369E-05	+/-	7.2E-09
Total phase (deg)	143.0	Apriori accel (us/s/s)	-3.78729581835E-05	Resid phase (deg)	51.7	+/-	19.3

ph/seg (deg)	60.0	RMS	46.2	Theor.	29.7	Amplitude	0.279 +/- 0.047	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	100.4		80.6		27.2	Search (1024X32)	0.175	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	29.7		27.2		47.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.0		47.6			Inc. seg. avg.	0.275	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.270	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

L: az 23.1 el 48.9 pa -116.3      Z: az 12.3 el 41.5 pa -18.1      u,v (fr/asec) -3293.056 -8846.875      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241a/v2/3mm/1234/No0901/LZ..3MP15Q      Output file: /Exps/c241a/v2/3mm/1234/No0901/LZ.W.285.3MP15Q