

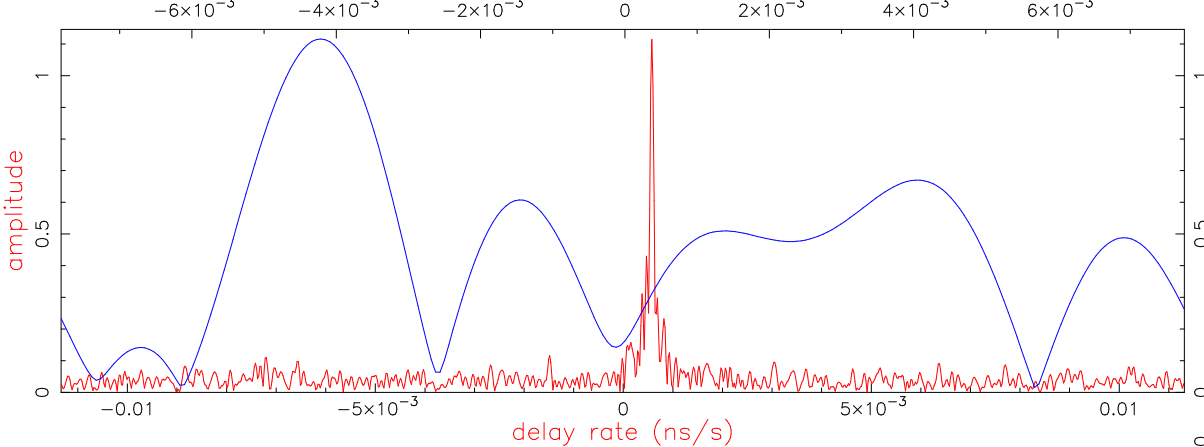
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, BX

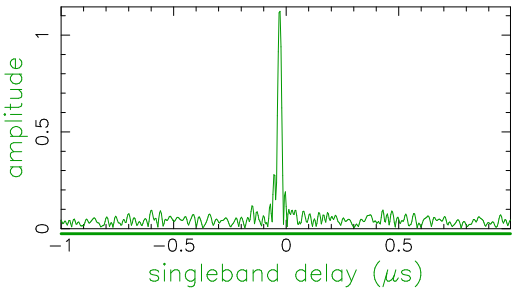
EFLSBERG - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

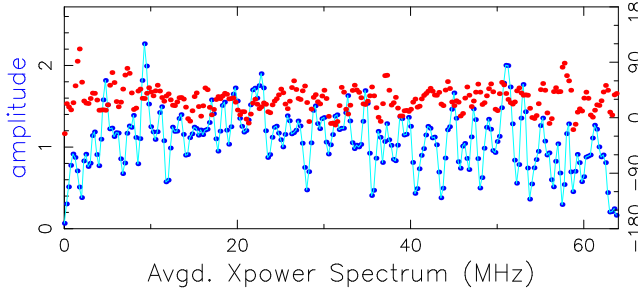


Fringe quality 5

SNR 38.3  
 Int time 149.838  
 Amp 1.146  
 Phase 100.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.029132  
 MBD -0.004170  
 Fringe rate (Hz)  
 0.050007  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

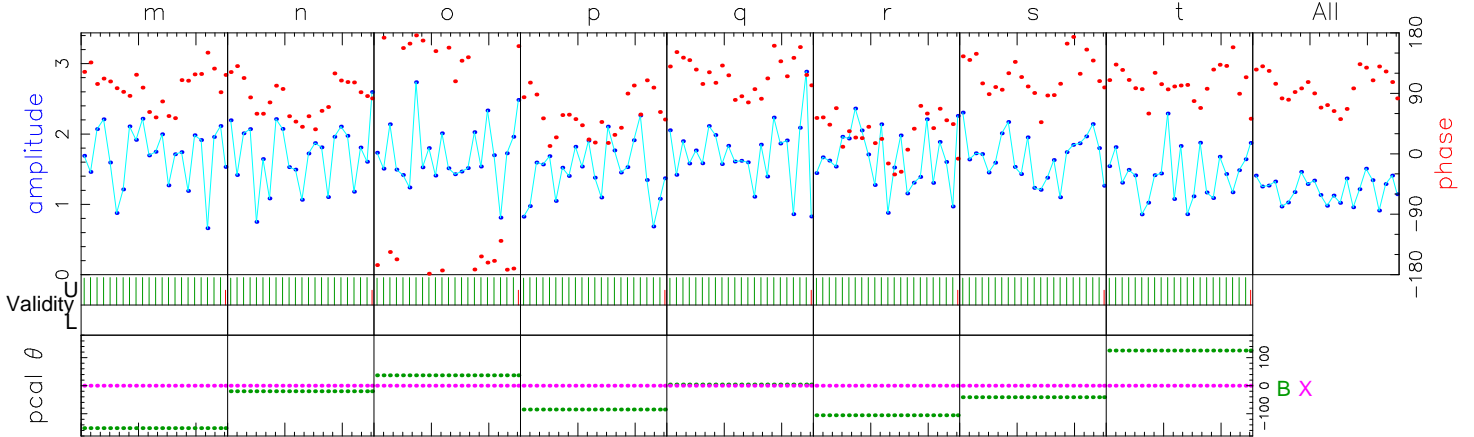


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105529  
 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		
X	0	0	0	0	0	0	0	0		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	-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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) -2.33251660878E+03 Apriori delay (usec) -2.33248118853E+03 Resid mbdelay (usec) -4.17025E-03 +/- 2.8E-05  
 Sband delay (usec) -2.33251032078E+03 Apriori clock (usec) -1.4806357E+02 Resid sbdelay (usec) -2.91323E-02 +/- 2.2E-04  
 Phase delay (usec) -2.33248118530E+03 Apriori clockrate (us/s) -1.4061621E-02 Resid phdelay (usec) 3.23245E-06 +/- 9.6E-08  
 Delay rate (us/s) -1.55097216603E-02 Apriori rate (us/s) -1.55103021915E-02 Resid rate (us/s) 5.80531E-07 +/- 1.1E-09  
 Total phase (deg) -108.6 Apriori accel (us/s/s) 4.13379404025E-06 Resid phase (deg) 100.2 +/- 3.0

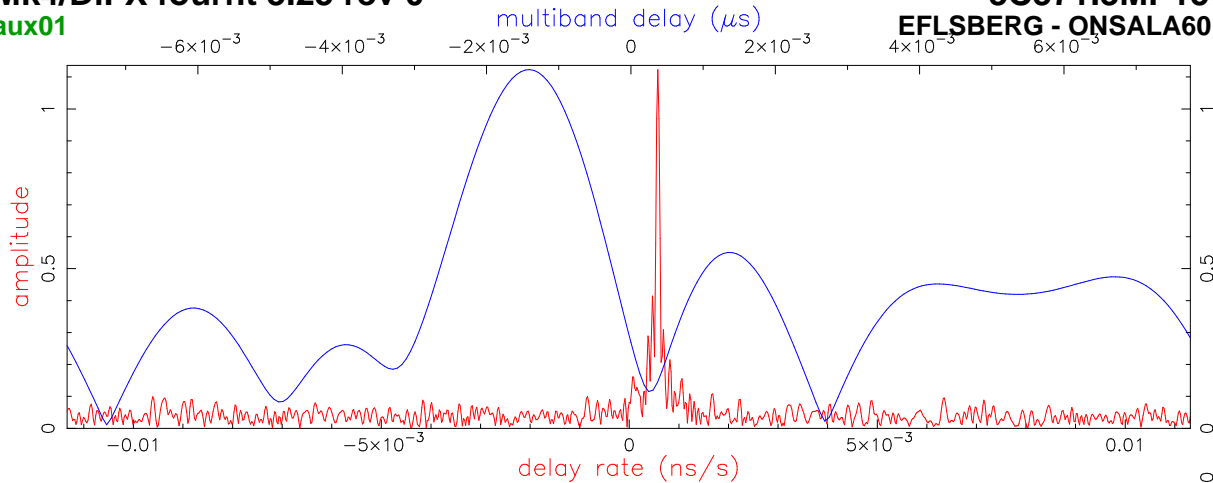
ph/seg (deg) 24.2 7.2 Search (1024X32) 1.093 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 16.2 12.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 48.5 4.2 Inc. seg. avg. 1.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 29.5 7.4 Inc. frq. avg. 1.463 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 266.943 664.363 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//BX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//BX.W.106.3MP15Q simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

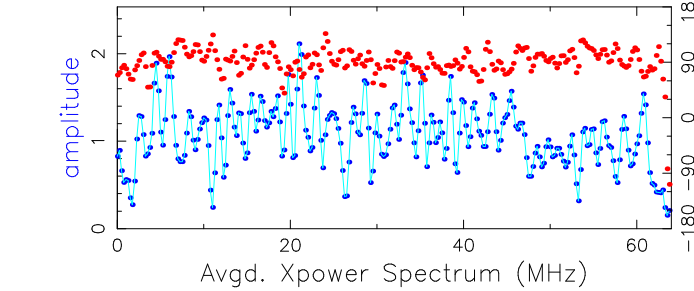
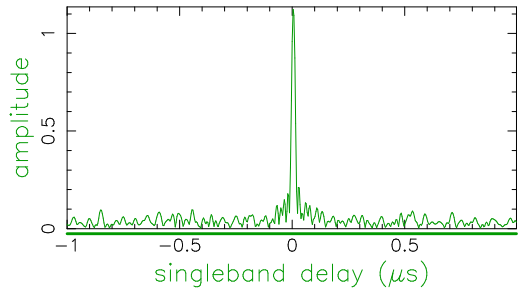
3C371.3MP15Q, No0901, BX

EFLSBERG - ONSALA60, fgroup W, pol RR



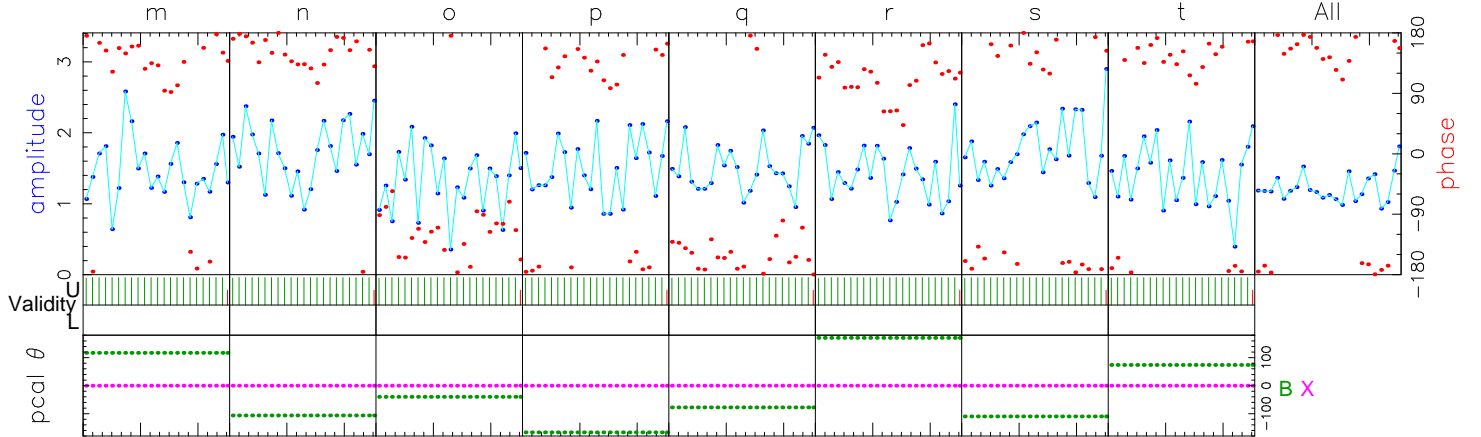
Fringe quality 5

SNR 38.0  
 Int time 149.838  
 Amp 1.136  
 Phase 167.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.005262  
 MBD -0.001380  
 Fringe rate (Hz)  
 0.050153  
 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  
 2025:041:105532  
 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		
X	0	0	0	0	0	0	0	0		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	-2.33248256862E+03	Apriori delay (usec)	-2.33248118853E+03	Resid mbdelay (usec)	-1.38009E-03	+/-	2.9E-05
Sband delay (usec)	-2.33247592628E+03	Apriori clock (usec)	-1.4806357E+02	Resid sbdelay (usec)	5.26225E-03	+/-	2.3E-04
Phase delay (usec)	-2.33248118313E+03	Apriori clockrate (us/s)	-1.4061621E-02	Resid phdelay (usec)	5.39887E-06	+/-	9.7E-08
Delay rate (us/s)	-1.55097199612E-02	Apriori rate (us/s)	-1.55103021915E-02	Resid rate (us/s)	5.82230E-07	+/-	1.1E-09
Total phase (deg)	-41.4	Apriori accel (us/s/s)	4.13379404025E-06	Resid phase (deg)	167.4	+/-	3.0

ph/seg (deg)	23.3	Theor.	7.2	Amplitude	1.136 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	17.7		12.6	Search (1024X32)	1.104	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.9		4.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	23.0		7.4	Inc. seg. avg.	1.204	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	1.347	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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 266.943 664.363 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/BX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/BX.W.117.3MP15Q

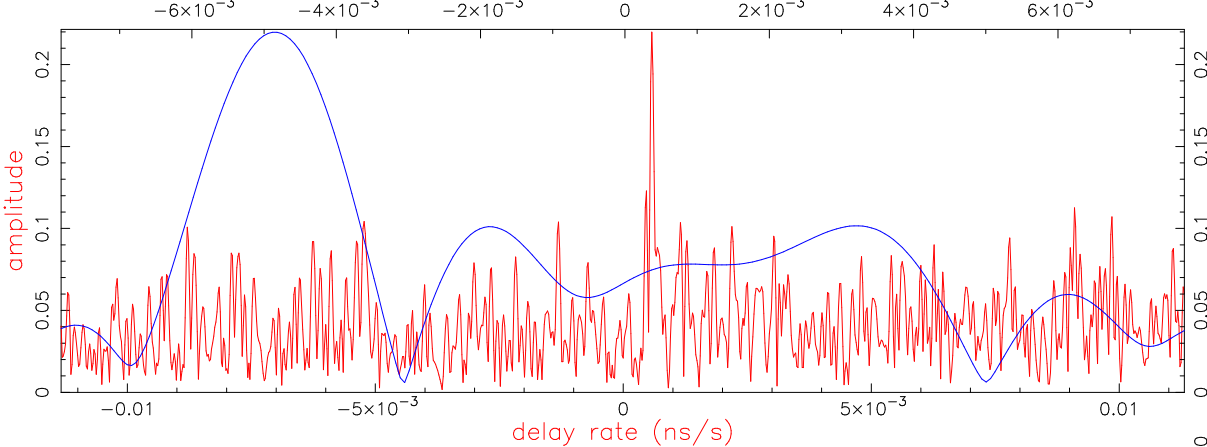
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, BX

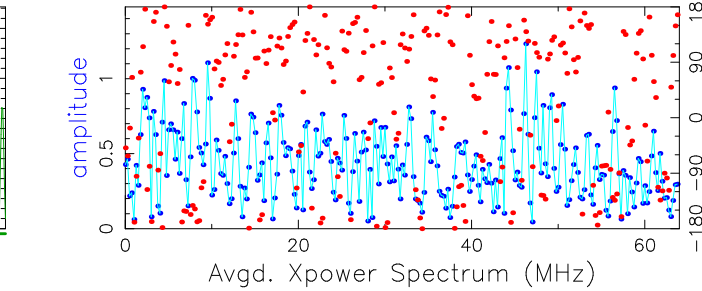
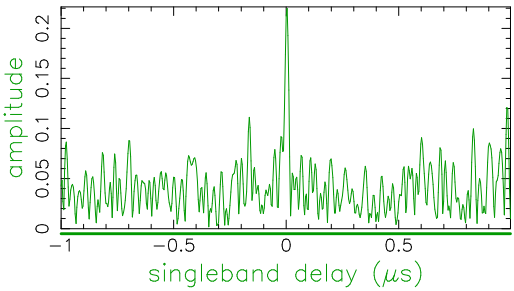
EFLSBERG - ONSALA60, fgroup W, pol LR

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



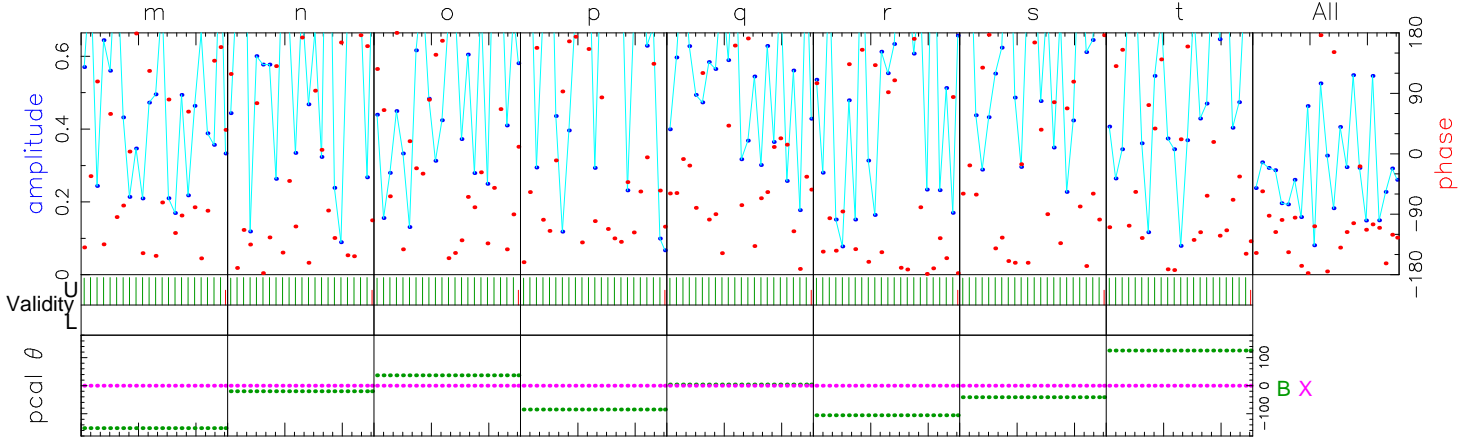
Fringe quality 9

SNR 7.4  
 Int time 149.838  
 Amp 0.221  
 Phase -127.5  
 PFD 2.1e-05  
 Delays (us)  
 SBD 0.002810  
 MBD -0.004858  
 Fringe rate (Hz)  
 0.049621  
 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  
 2025:041:105536  
 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

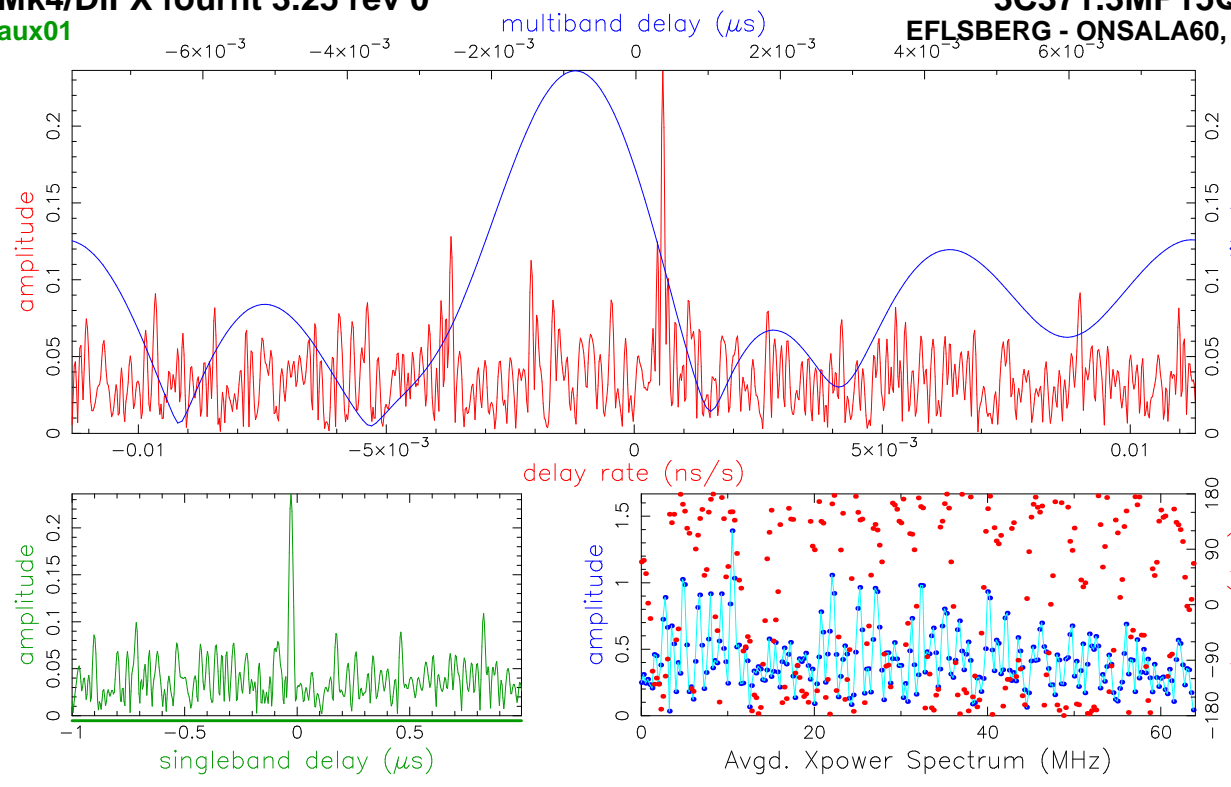


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.1	-147.5	-84.2	-126.3	-63.6	-175.7	-121.9	-117.4	Phase	-127.5
	0.2	0.3	0.1	0.3	0.2	0.3	0.3	0.2	Ampl.	0.2
	281.2	257.1	373.0	255.9	60.9	257.3	144.3	488.6	Sbd box	257.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.33248604687E+03	Apriori delay (usec)	-2.33248118853E+03	Resid mbdelay (usec)	-4.85834E-03	+/-	1.5E-04
Sband delay (usec)	-2.33247837903E+03	Apriori clock (usec)	-1.4806357E+02	Resid sbdelay (usec)	2.80950E-03	+/-	1.2E-03
Phase delay (usec)	-2.33248119264E+03	Apriori clockrate (us/s)	-1.4061621E-02	Resid phdelay (usec)	-4.11132E-06	+/-	5.0E-07
Delay rate (us/s)	-1.55097261384E-02	Apriori rate (us/s)	-1.55103021915E-02	Resid rate (us/s)	5.76053E-07	+/-	5.8E-09
Total phase (deg)	-336.3	Apriori accel (us/s/s)	4.13379404025E-06	Resid phase (deg)	-127.5	+/-	15.5

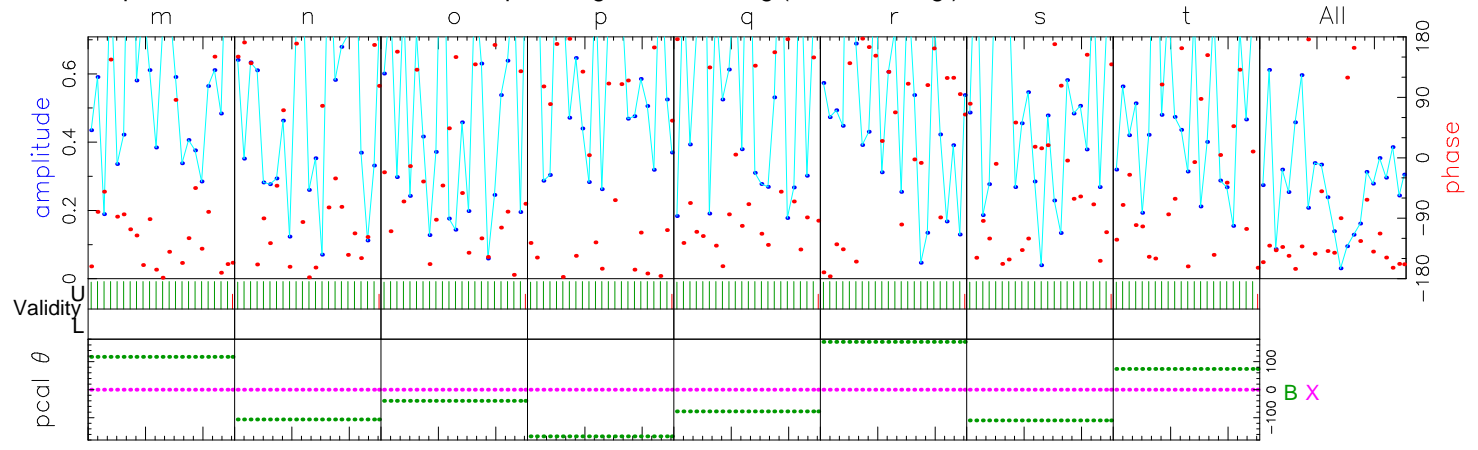
ph/seg (deg)	RMS 42.5	Theor. 37.1	Amplitude Search (1024X32)	0.221 +/- 0.030	0.219	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	66.1	64.8	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	38.4	21.9	Inc. seg. avg.	0.241	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	37.6	38.2	Inc. frq. avg.	0.240	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00	

B: az 4.0 el 30.6 pa -7.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 266.943 664.363 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//BX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//BX.W.129.3MP15Q



Fringe quality 9  
SNR 7.9  
Int time 149.838  
Amp 0.236  
Phase -138.6  
PFD 4.8e-07  
Delays (us)  
SBD -0.027546  
MBD -0.000845  
Fringe rate (Hz)  
0.049977  
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  
2025:041:105537  
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	
	-139.8	-136.5	-98.1	-170.4	-109.9	151.2	-111.8	-116.9	Phase	-138.6	
	0.4	0.3	0.2	0.4	0.4	0.3	0.2	0.2	Ampl.	0.3	
	250.4	70.6	229.3	249.0	251.1	249.3	504.4	177.1	Sbd box	249.9	
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		
X	0	0	0	0	0	0	0	0	PC freqs		
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
B:X	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Manl PC		
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks		
									Tracks		
Group delay (usec) (SBD)	-2.33251328341E+03		Apriori delay (usec)		-2.33248118853E+03		Resid mbdelay (usec)		-8.44876E-04	+/- 1.4E-04	
Sband delay (usec)	-2.33250873478E+03		Apriori clock (usec)		-1.4806357E+02		Resid sbdelay (usec)		-2.75462E-02	+/- 1.1E-03	
Phase delay (usec)	-2.33248119300E+03		Apriori clockrate (us/s)		-1.4061621E-06		Resid phdelay (usec)		-4.47091E-06	+/- 4.7E-07	
Delay rate (us/s)	-1.55097220047E-02		Apriori rate (us/s)		-1.55103021915E-02		Resid rate (us/s)		5.80187E-07	+/- 5.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		4.13379404025E-06		Resid phase (deg)		-138.6	+/- 14.5	
	RMS	Theor.	Amplitude	0.236 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	39.6	34.8	Search (1024X32)	0.233		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000 1.000	
amp/seg (%)	63.9	60.7	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled		mb window (us)	-0.008 0.008
ph/frq (deg)	40.0	20.5	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 (%)	43.8	35.8	Inc. frq. avg.	0.266		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	X: az 6.5 el 37.7 pa -10.4		u,v (fr/asec) 266.943 664.363						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//BX..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//BX.W.138.3MP15Q								

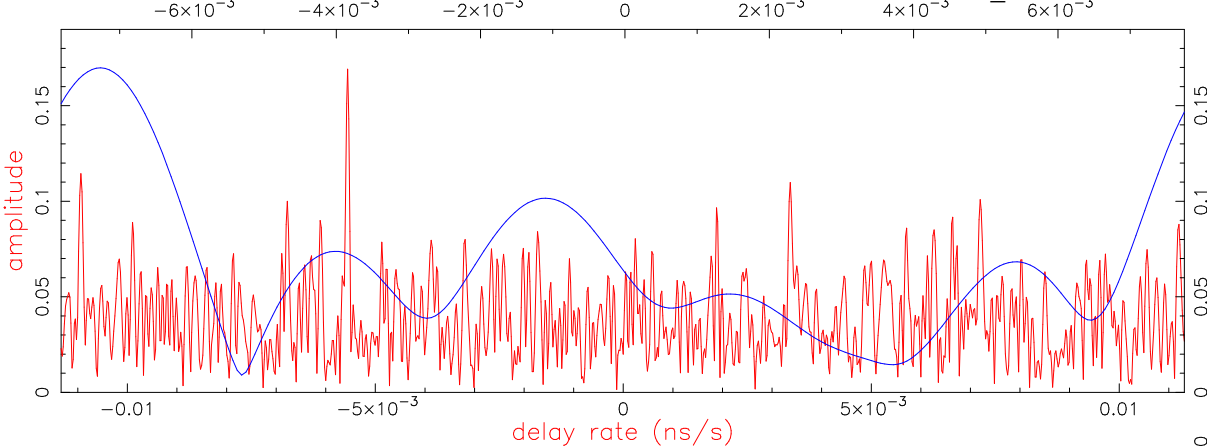
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, bX

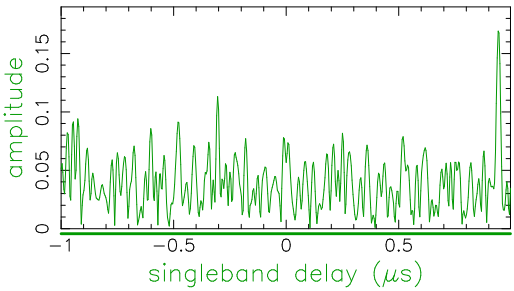
VLBA\_BR - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

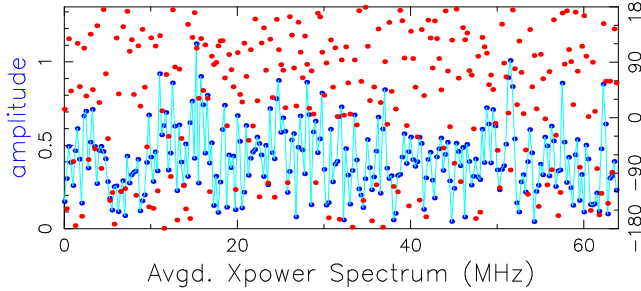


Fringe quality 0

SNR 5.7  
 Int time 149.127  
 Amp 0.190  
 Phase -104.8  
 PFD 7.0e-01  
 Delays (us)  
 SBD 0.943129  
 MBD -0.007171  
 Fringe rate (Hz)  
 -0.478792  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

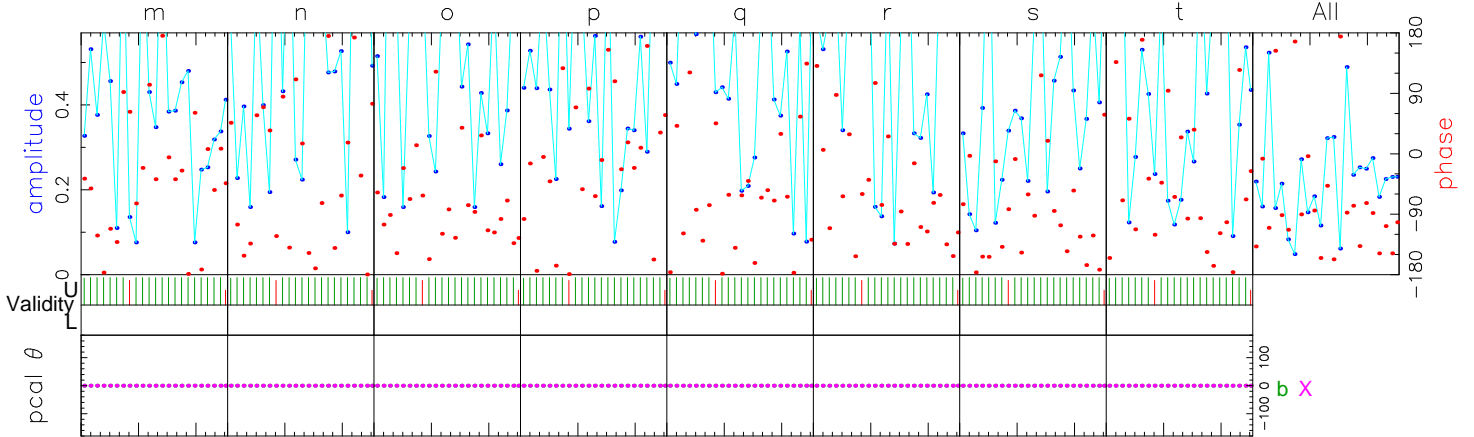


delay rate (ns/s)



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
	-54.1	-153.7	-94.4	25.4	-92.7	-95.0	-123.6	-116.7	Phase	-104.8
	0.1	0.2	0.4	0.1	0.2	0.2	0.2	0.3	Ampl.	0.2
	316.9	476.9	497.0	83.1	37.4	511.6	475.6	178.3	Sbd box	498.4
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	
X	0	0	0	0	0	0	0	0	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.93558716400E+03	Apriori delay (usec)	3.93464121003E+03	Resid mbdelay (usec)	-7.17103E-03	+/-	1.9E-04
Sband delay (usec)	3.93558433878E+03	Apriori clock (usec)	-1.0802608E+02	Resid sbdelay (usec)	9.43129E-01	+/-	1.5E-03
Phase delay (usec)	3.93464120665E+03	Apriori clockrate (us/s)	-6.4018213E-07	Resid phdelay (usec)	-3.37895E-06	+/-	6.4E-07
Delay rate (us/s)	-3.97507007992E-01	Apriori rate (us/s)	-3.97501449689E-01	Resid rate (us/s)	-5.55830E-06	+/-	7.4E-09
Total phase (deg)	194.8	Apriori accel (us/s/s)	-3.18689871121E-05	Resid phase (deg)	-104.8	+/-	20.0

ph/seg (deg)	RMS 52.7	Theor. 47.9	Amplitude Search (1024X32)	0.190 +/- 0.033	0.169	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	73.6	83.6	Interp.	0.000	0.169	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	61.6	28.3	Inc. seg. avg.	0.185	0.169	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.3	49.3	Inc. frq. avg.	0.196	0.169	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00

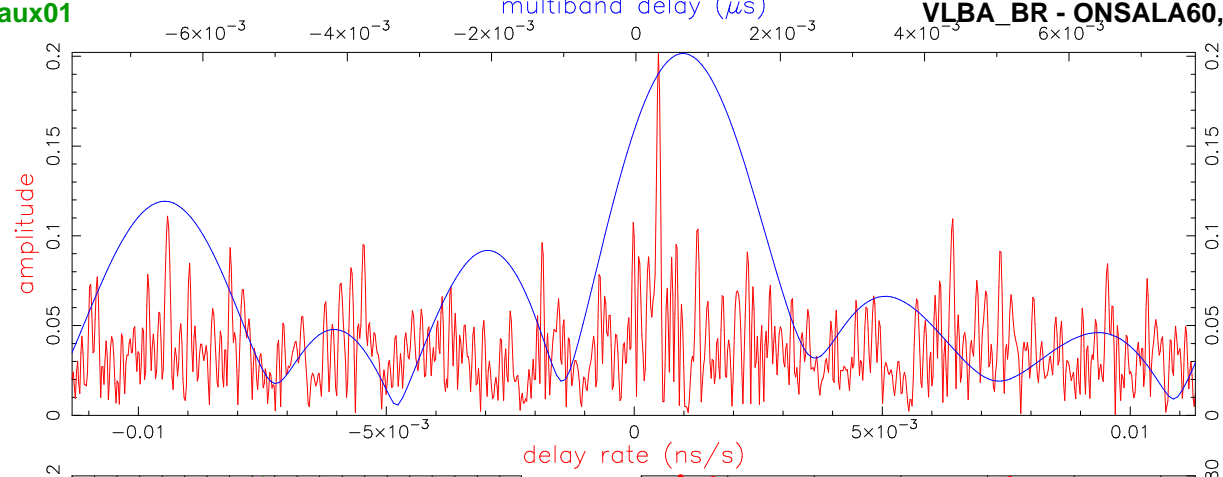
b: az 328.9 el 53.3 pa 92.4 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 6512.651 -7187.319 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//bX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//bX.W.37.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

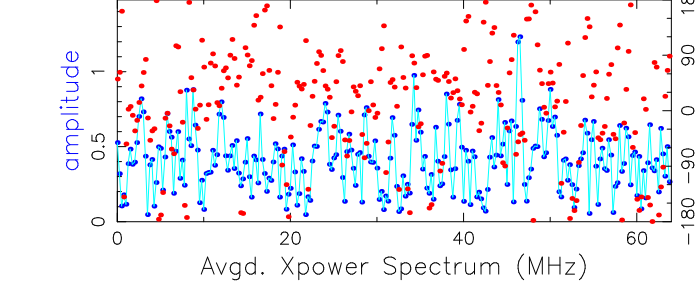
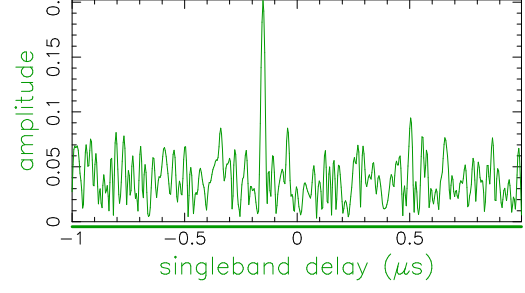
aux01

3C371.3MP15Q, No0901, bX

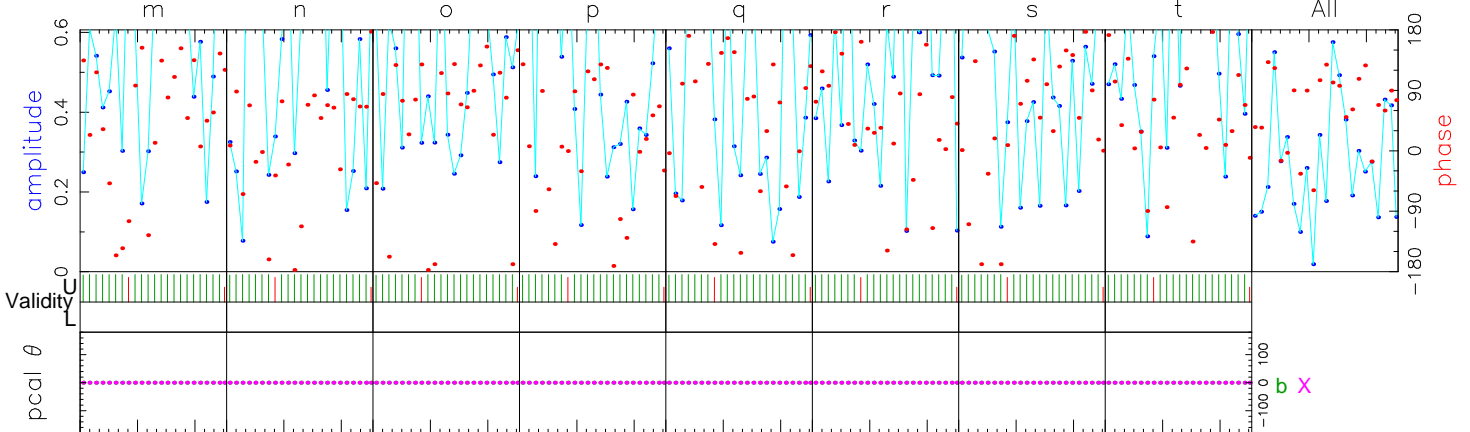
VLBA\_BR - ONSALA60, fgroup W, pol RR



Fringe quality 0  
 SNR 6.7  
 Int time 149.127  
 Amp 0.202  
 Phase 80.2  
 PFD 2.2e-03  
 Delays (us)  
 SBD -0.151604  
 MBD 0.000695  
 Fringe rate (Hz)  
 0.042648  
 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  
 2025:041:105510  
 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
	107.0	45.7	104.0	57.8	128.1	71.9	108.0	63.8	Phase	80.2
	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.3	Ampl.	0.2
	52.3	218.2	219.1	59.3	105.1	305.4	56.7	95.0	Sbd box	218.2
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	
X	0	0	0	0	0	0	0	0	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.93448565463E+03	Apriori delay (usec)		3.93464121003E+03	Resid mbdelay (usec)		6.94598E-04	+/-	1.6E-04	
Sband delay (usec)	3.93448960653E+03	Apriori clock (usec)		-1.0802608E+02	Resid sbdelay (usec)		-1.51604E-01	+/-	1.3E-03	
Phase delay (usec)	3.93464121262E+03	Apriori clockrate (us/s)		-6.4018213E-07	Resid phdelay (usec)		2.58783E-06	+/-	5.5E-07	
Delay rate (us/s)	-3.97500954586E-01	Apriori rate (us/s)		-3.97501449689E-01	Resid rate (us/s)		4.95103E-07	+/-	6.3E-09	
Total phase (deg)	19.8		Apriori accel (us/s/s)		-3.18689871121E-05	Resid phase (deg)		80.2	+/-	17.0

ph/seg (deg)	57.2	40.7	Search (1024X32)	0.196	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	81.0	71.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	32.6	24.0	Inc. seg. avg.	0.223	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 (%)	40.0	41.9	Inc. frq. avg.	0.207	Data rate(Mb/s): 2048		ion window (TEC)		ion window (TEC)	0.00	0.00

b: az 328.9 el 53.3 pa 92.4 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 6512.651 -7187.319 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//bX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//bX.W.44.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

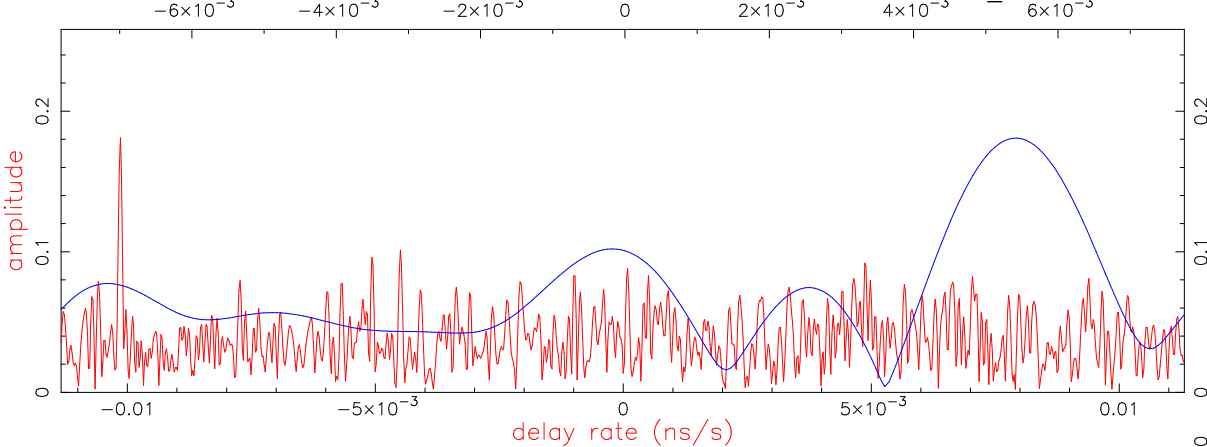
aux01

3C371.3MP15Q, No0901, bX

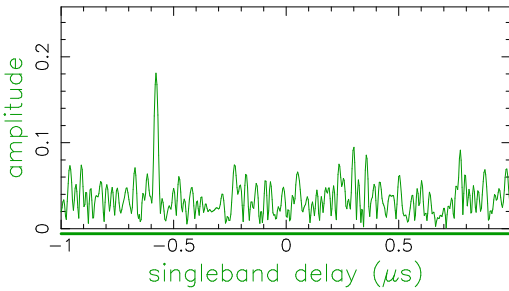
VLBA\_BR - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

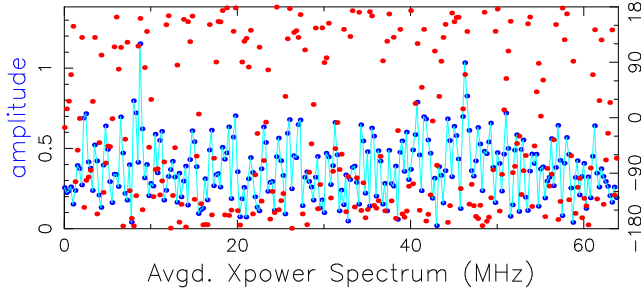
Fringe quality 0



SNR 6.0  
Int time 149.127  
Amp 0.258  
Phase -46.3  
PFD 1.8e-01  
Delays (us)  
SBD -0.578156  
MBD 0.005416  
Fringe rate (Hz)  
-0.875413  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

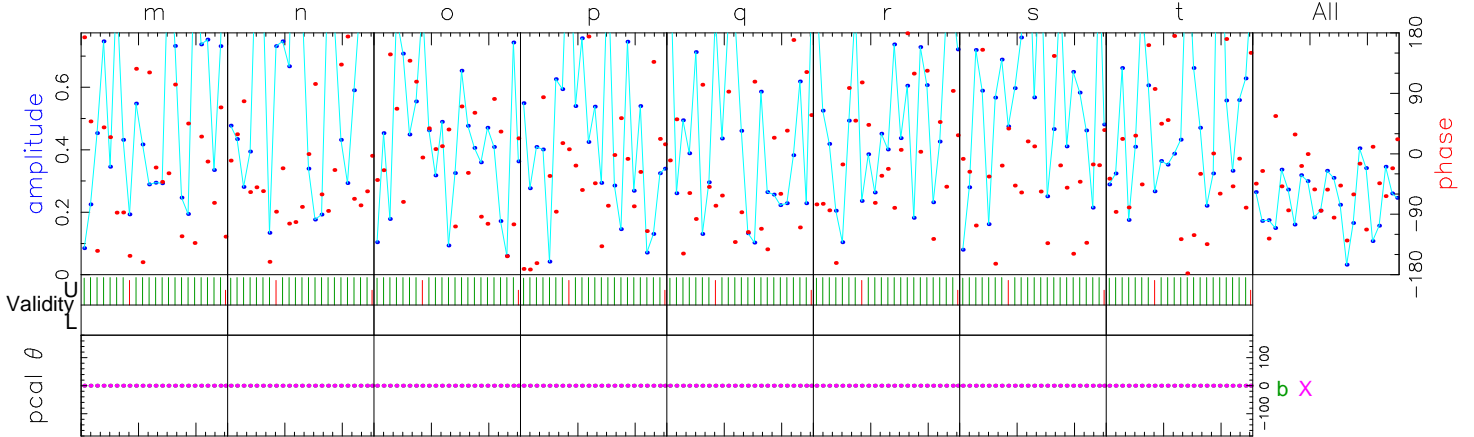


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105513  
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
	-42.8	-60.7	11.0	-38.5	-83.0	-6.9	-40.1	-73.3	Phase	-46.3
	0.1	0.7	0.2	0.3	0.2	0.2	0.4	0.2	Ampl.	0.3
	339.1	108.7	61.7	483.0	90.3	221.4	97.1	474.6	Sbd box	109.0
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	
X	0	0	0	0	0	0	0	0	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.93406850066E+03	Apriori delay (usec)	3.93464121003E+03	Resid mbdelay (usec)	5.41563E-03	+/-	1.8E-04
Sband delay (usec)	3.93406305353E+03	Apriori clock (usec)	-1.0802608E+02	Resid sbdelay (usec)	-5.78156E-01	+/-	1.4E-03
Phase delay (usec)	3.93464120854E+03	Apriori clockrate (us/s)	-6.4018213E-07	Resid phdelay (usec)	-1.49376E-06	+/-	6.1E-07
Delay rate (us/s)	-3.97511612363E-01	Apriori rate (us/s)	-3.97501449689E-01	Resid rate (us/s)	-1.01627E-05	+/-	7.1E-09
Total phase (deg)	253.3	Apriori accel (us/s/s)	-3.18689871121E-05	Resid phase (deg)	-46.3	+/-	19.0

ph/seg (deg)	47.3	Theor.	45.5	Amplitude	0.258 +/- 0.043	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	58.9	Search (1024X32)	0.177	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)	34.7	Inc. seg. avg.	0.257	Inc. frq. avg.	0.259	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	61.6	Inc. frq. avg.	0.259			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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 6512.651 -7187.319 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//bX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//bX.W.52.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

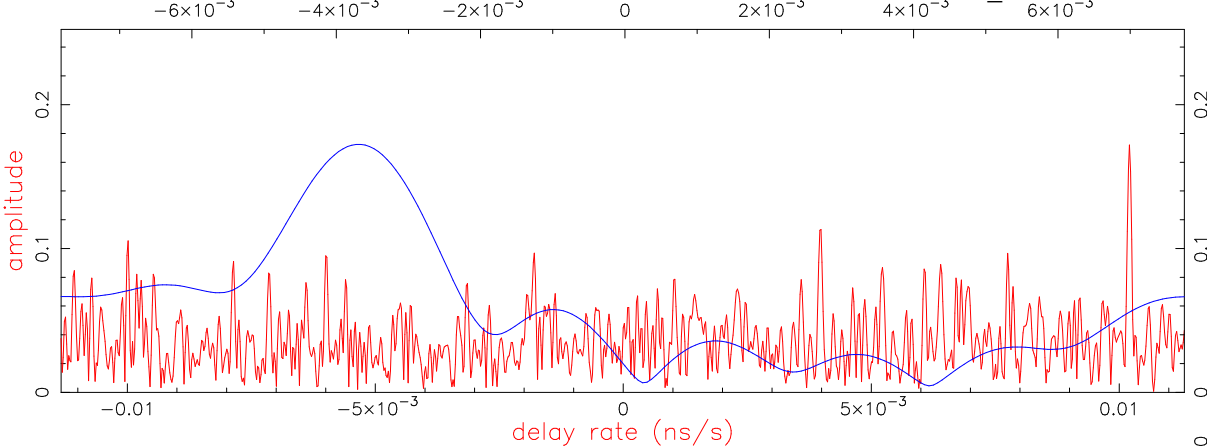
aux01

3C371.3MP15Q, No0901, bX

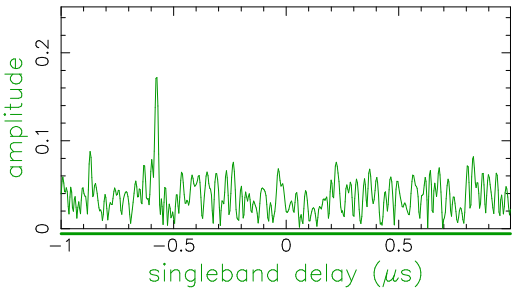
VLBA\_BR - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

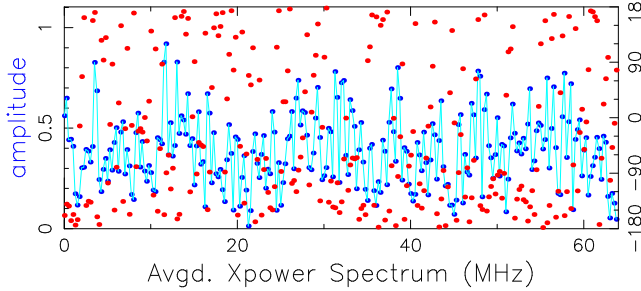
Fringe quality 0



SNR 5.9  
Int time 149.127  
Amp 0.252  
Phase 103.3  
PFD 4.2e-01  
Delays (us)  
SBD -0.576066  
MBD -0.003777  
Fringe rate (Hz)  
0.881478  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

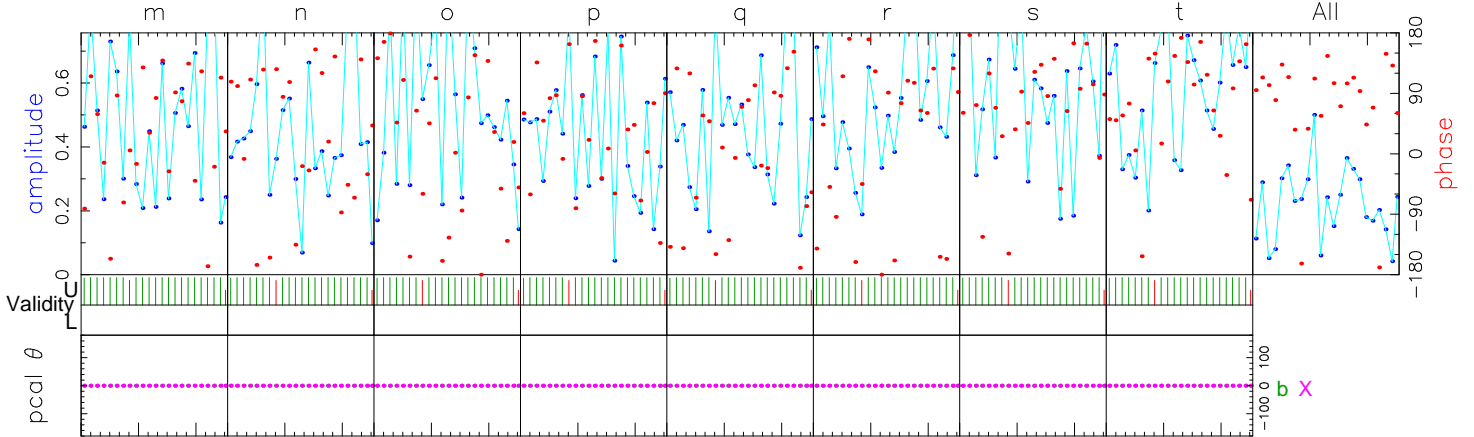


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105514  
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
	69.2	112.2	121.0	71.1	115.6	127.1	99.3	99.6	Phase	103.3
	0.2	0.1	0.2	0.2	0.1	0.4	0.5	0.4	Ampl.	0.2
	42.3	5.0	86.7	8.8	473.6	111.1	109.3	33.8	Sbd box	109.5
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	
X	0	0	0	0	0	0	0	0	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.93405930799E+03	Apriori delay (usec)	3.93464121003E+03	Resid mbdelay (usec)	-3.77704E-03	+/-	1.8E-04
Sband delay (usec)	3.93406514403E+03	Apriori clock (usec)	-1.0802608E+02	Resid sbdelay (usec)	-5.76066E-01	+/-	1.5E-03
Phase delay (usec)	3.93464121336E+03	Apriori clockrate (us/s)	-6.4018213E-07	Resid phdelay (usec)	3.33073E-06	+/-	6.3E-07
Delay rate (us/s)	-3.97491216608E-01	Apriori rate (us/s)	-3.97501449689E-01	Resid rate (us/s)	1.02331E-05	+/-	7.3E-09
Total phase (deg)		Apriori accel (us/s/s)	-3.18689871121E-05	Resid phase (deg)	103.3	+/-	19.5

ph/seg (deg)	42.2	RMS	46.8	Theor.	0.252 +/- 0.043	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.2	Search (1024X32)	0.172	Amplitude		PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	23.6	Interp.	0.239	Inc. seg. avg.		Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	53.7	Inc. frq. avg.	0.233	Inc. frq. avg.		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

b: az 328.9 el 53.3 pa 92.4 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 6512.651 -7187.319 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/bX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/bX.W.63.3MP15Q



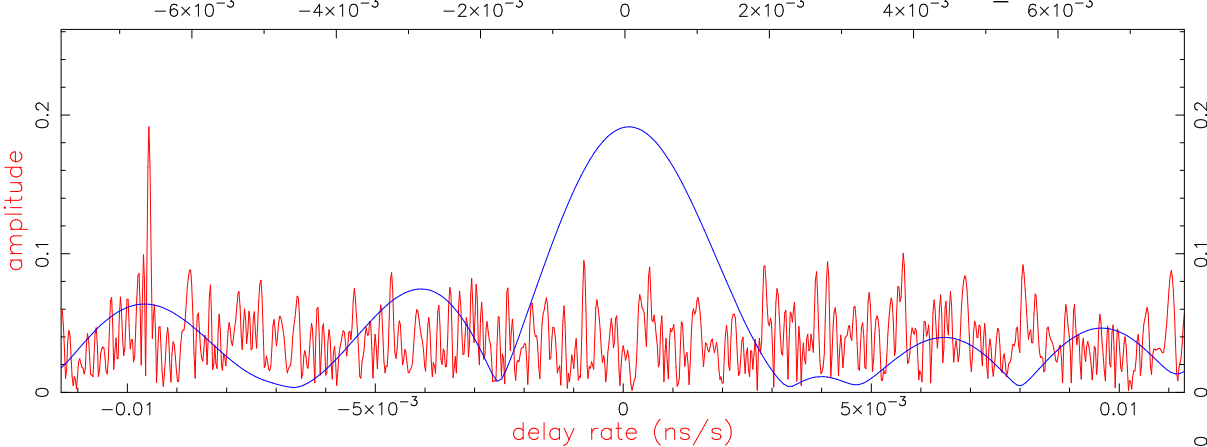
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fX

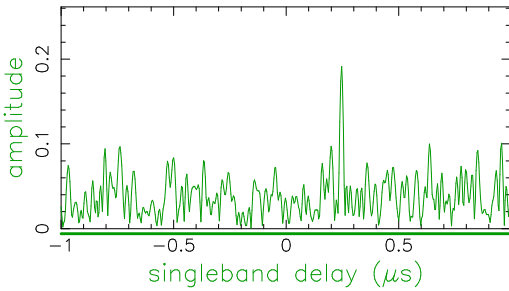
VLBA\_FD - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

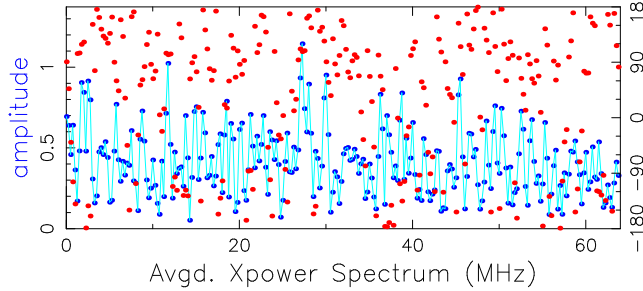


Fringe quality 0

SNR 6.4  
 Int time 149.838  
 Amp 0.262  
 Phase 74.3  
 PFD 2.0e-02  
 Delays (us)  
 SBD 0.245972  
 MBD 0.000050  
 Fringe rate (Hz)  
 -0.824467  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

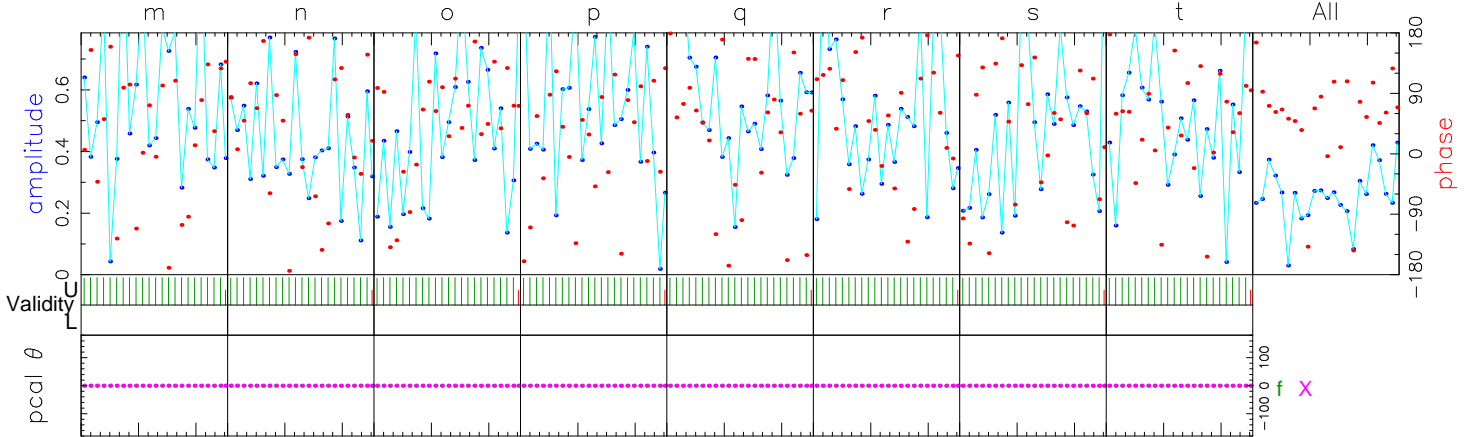


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105545  
 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
	79.7	84.0	59.2	42.4	95.3	87.5	81.7	61.3	Phase	74.3
	0.3	0.2	0.4	0.2	0.3	0.3	0.2	0.3	Ampl.	0.2
	103.4	297.3	319.4	488.1	29.8	496.5	224.4	162.3	Sbd box	320.0
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	
X	0	0	0	0	0	0	0	0	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.76705732584E+03	Apriori delay (usec)	-1.76730737540E+03	Resid mbdelay (usec)	4.95654E-05	+/-	1.7E-04
Sband delay (usec)	-1.76706140390E+03	Apriori clock (usec)	-1.1260577E+02	Resid sbdelay (usec)	2.45972E-01	+/-	1.3E-03
Phase delay (usec)	-1.76730737301E+03	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	2.39578E-06	+/-	5.8E-07
Delay rate (us/s)	-5.29813245863E-01	Apriori rate (us/s)	-5.29803674621E-01	Resid rate (us/s)	-9.57124E-06	+/-	6.7E-09
Total phase (deg)	-39.8	Apriori accel (us/s/s)	-2.64602941039E-05	Resid phase (deg)	74.3	+/-	17.9

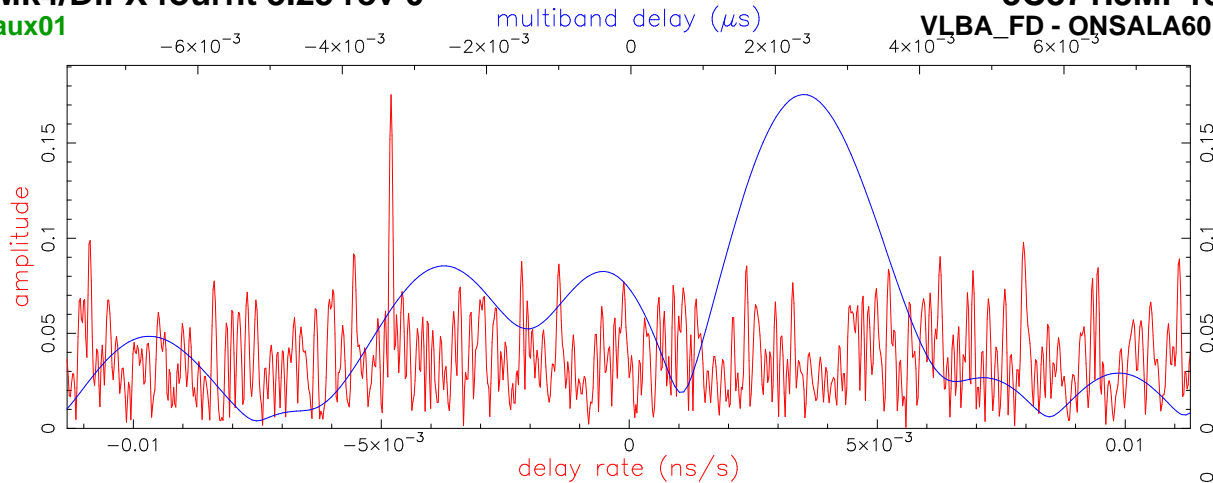
ph/seg (deg) 56.2 42.9 Search (1024X32) 0.185 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 56.9 74.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 19.2 25.3 Inc. seg. avg. 0.274 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.7 44.1 Inc. frq. avg. 0.248 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8718.466 -6775.754 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//fX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//fX.W.166.3MP15Q simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

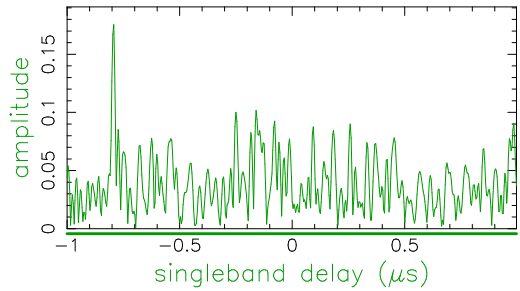
3C371.3MP15Q, No0901, fX

VLBA\_FD - ONSALA60, fgroup W, pol RR

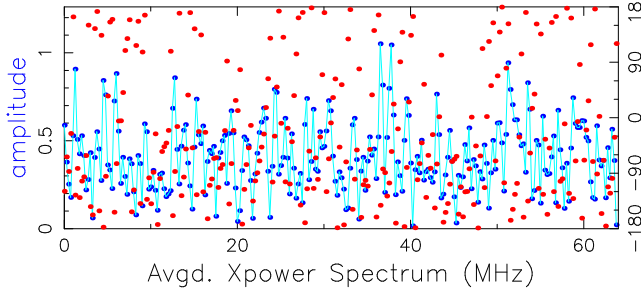


Fringe quality 0

SNR 5.9  
 Int time 149.838  
 Amp 0.191  
 Phase 77.4  
 PFD 3.3e-01  
 Delays (us)  
 SBD -0.794068  
 MBD 0.002348  
 Fringe rate (Hz)  
 -0.415451  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

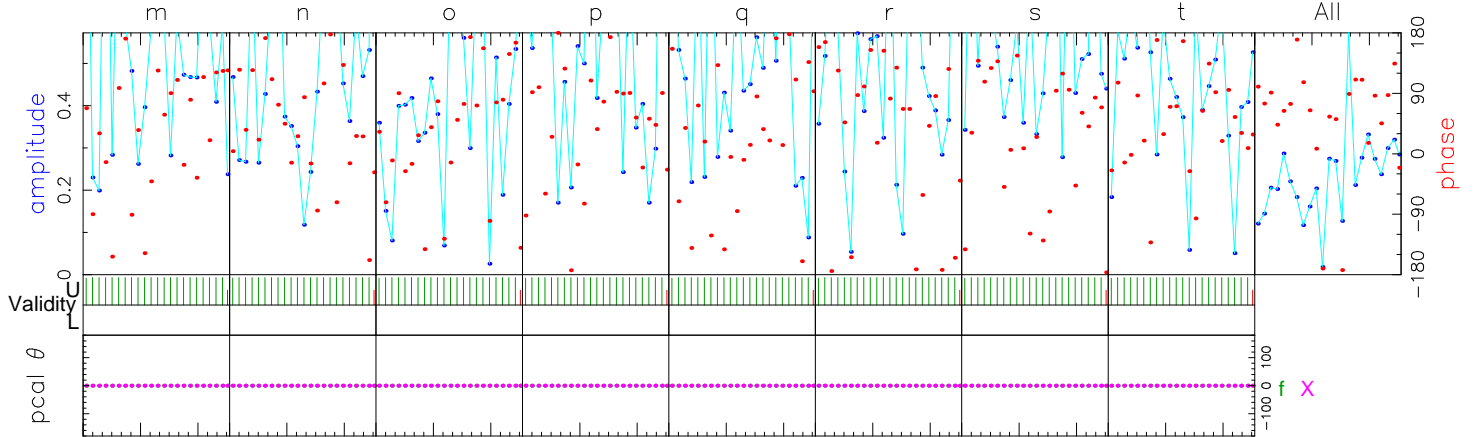


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105546  
 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		
X	0	0	0	0	0	0	0	0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec) (SBD)	-1.76810190207E+03									
Sband delay (usec)	-1.76810144365E+03									
Phase delay (usec)	-1.76730737291E+03									
Delay rate (us/s)	-5.29808497594E-01									
Total phase (deg)			-36.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
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)										
pcal θ										
RMS	50.7	46.4								
Theor.	46.4									
Amplitude										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
ph/seg (deg)	50.7	46.4								
amp/seg (%)	67.2	81.0								
ph/frq (deg)	27.9	27.4								
amp/frq (%)	33.0	47.7								
f: az 336.4 el 32.3 pa 88.6										
X: az 6.5 el 37.7 pa -10.4										
u, v (fr/asec) 8718.466 -6775.754										
Control file: cf_1234_gmva										
Input file: /Exps/c241a/v2/3mm/1234/No0901/fX..3MP15Q										
Output file: /Exps/c241a/v2/3mm/1234/No0901/fX.W.177.3MP15Q										

simultaneous interpolator

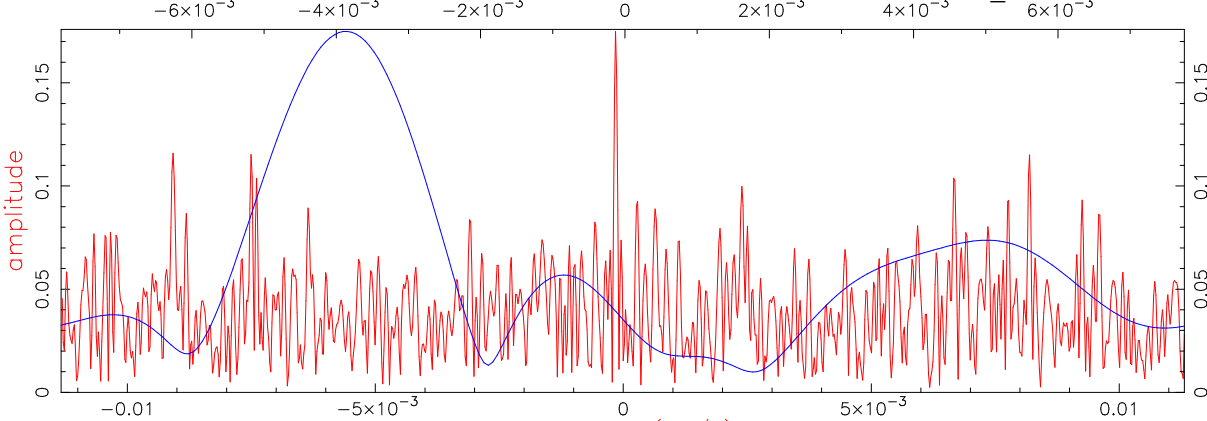
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fX

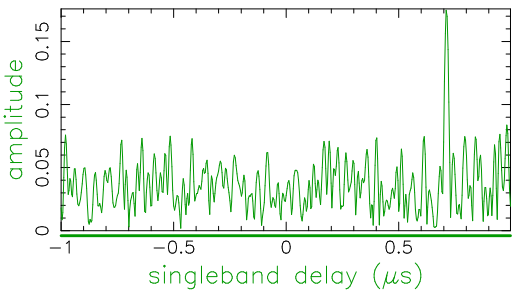
VLBA\_FD - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

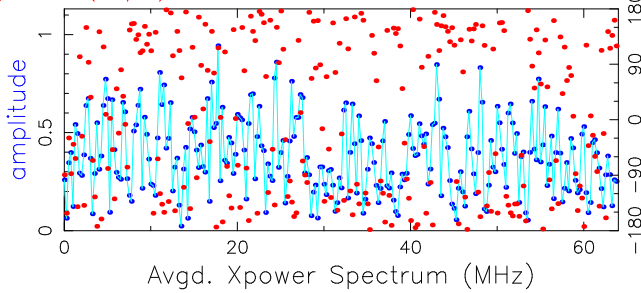


Fringe quality 0

SNR 5.9  
 Int time 149.838  
 Amp 0.176  
 Phase 147.1  
 PFD 3.9e-01  
 Delays (us)  
 SBD 0.712085  
 MBD -0.003831  
 Fringe rate (Hz)  
 -0.013902  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

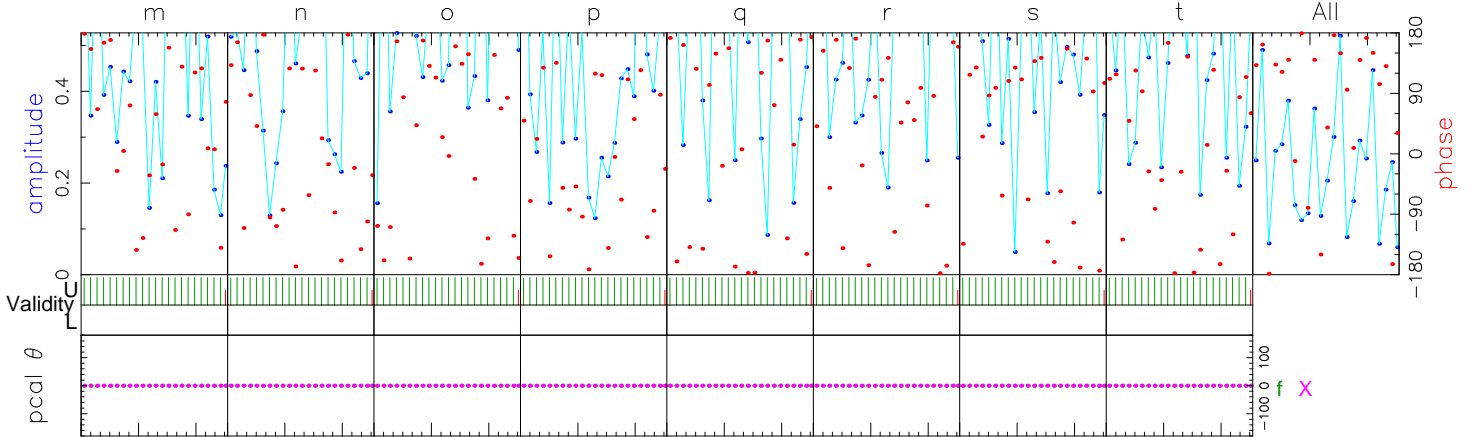


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105550  
 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
	141.4	161.5	151.8	91.6	167.7	123.2	137.4	164.6	Phase	147.1
	0.1	0.1	0.3	0.0	0.3	0.2	0.2	0.1	Ampl.	0.2
	80.4	33.9	438.5	259.1	440.9	380.8	193.0	10.6	Sbd box	439.3
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	
X	0	0	0	0	0	0	0	0	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.76659245683E+03	Apriori delay (usec)	-1.76730737540E+03	Resid mbdelay (usec)	-3.83143E-03	+/-	1.8E-04
Sband delay (usec)	-1.76659529040E+03	Apriori clock (usec)	-1.1260577E+02	Resid sbdelay (usec)	7.12085E-01	+/-	1.5E-03
Phase delay (usec)	-1.76730737066E+03	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	4.74242E-06	+/-	6.3E-07
Delay rate (us/s)	-5.29803836011E-01	Apriori rate (us/s)	-5.29803674621E-01	Resid rate (us/s)	-1.61390E-07	+/-	7.2E-09
Total phase (deg)		Apriori accel (us/s/s)	-2.64602941039E-05	Resid phase (deg)	147.1	+/-	19.5

ph/seg (deg) 65.6 46.7 Search (1024X32) 0.174 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.2 81.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 28.1 27.5 Inc. seg. avg. 0.181 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 52.3 48.0 Inc. frq. avg. 0.164 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8718.466 -6775.754 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/fX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/fX.W.185.3MP15Q

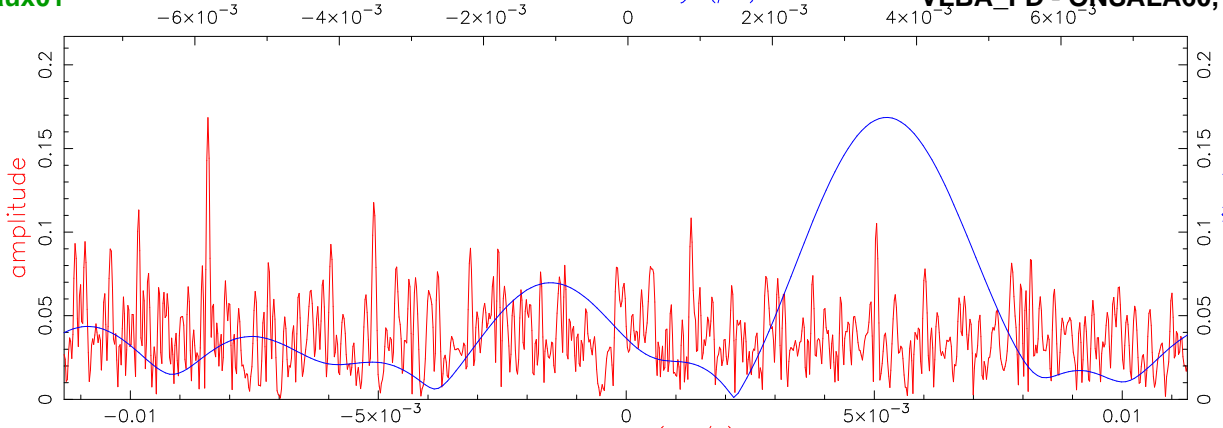
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, fX

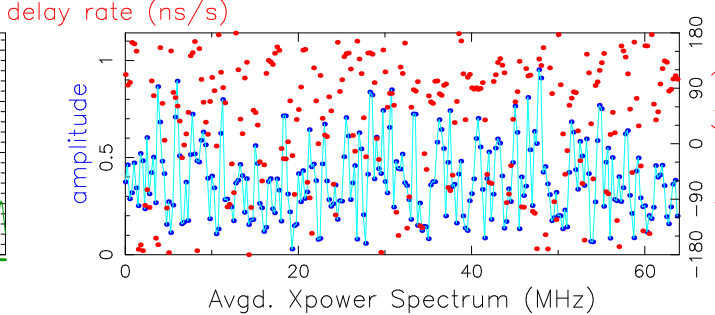
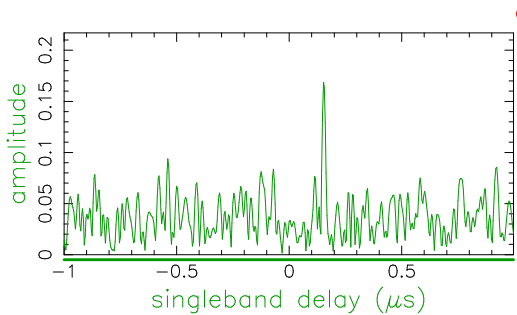
VLBA\_FD - ONSALA60, fgroup W, pol RL

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



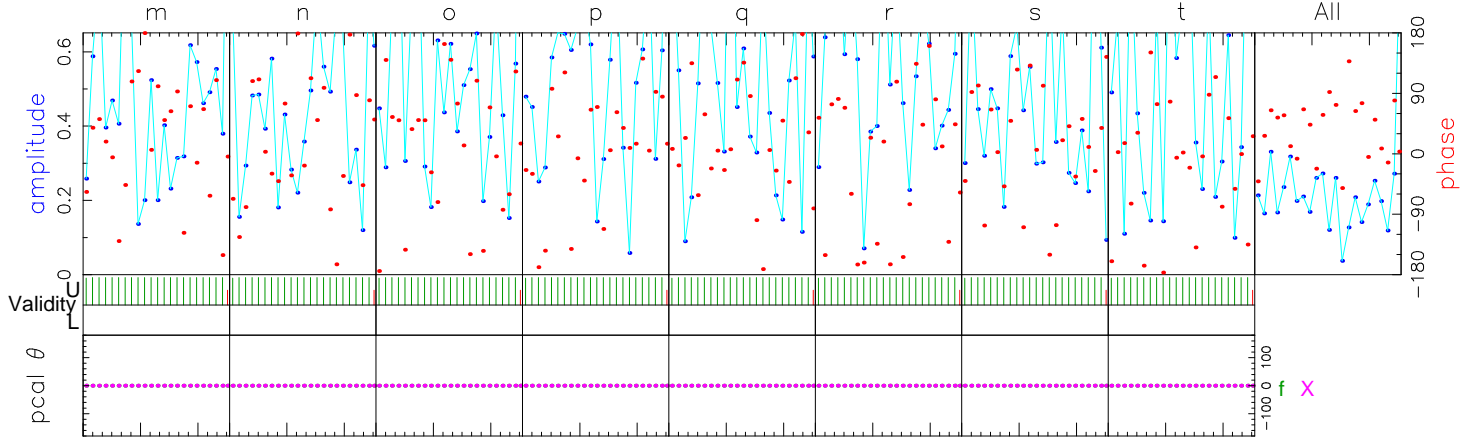
Fringe quality 0

SNR 5.7  
 Int time 149.838  
 Amp 0.217  
 Phase 36.8  
 PFD 7.4e-01  
 Delays (us)  
 SBD 0.153732  
 MBD 0.003624  
 Fringe rate (Hz)  
 -0.727723  
 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  
 2025:041:105551  
 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
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		
X	0	0	0	0	0	0	0	0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-1.76714750108E+03	Apriori delay (usec)	-1.76730737540E+03	Resid mbdelay (usec)	3.62432E-03	+/-	1.9E-04
Sband delay (usec)	-1.76715364290E+03	Apriori clock (usec)	-1.1260577E+02	Resid sbdelay (usec)	1.53732E-01	+/-	1.5E-03
Phase delay (usec)	-1.76730737421E+03	Apriori clockrate (us/s)	-1.1664031E-06	Resid phdelay (usec)	1.18693E-06	+/-	6.5E-07
Delay rate (us/s)	-5.29812122765E-01	Apriori rate (us/s)	-5.29803674621E-01	Resid rate (us/s)	-8.44814E-06	+/-	7.5E-09
Total phase (deg)	-77.3	Apriori accel (us/s/s)	-2.64602941039E-05	Resid phase (deg)	36.8	+/-	20.0

ph/seg (deg) 45.6 48.1 Search (1024X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.4 83.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 23.4 28.3 Inc. seg. avg. 0.204 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 25.6 49.5 Inc. frq. avg. 0.202 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8718.466 -6775.754 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/fX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/fX.W.193.3MP15Q

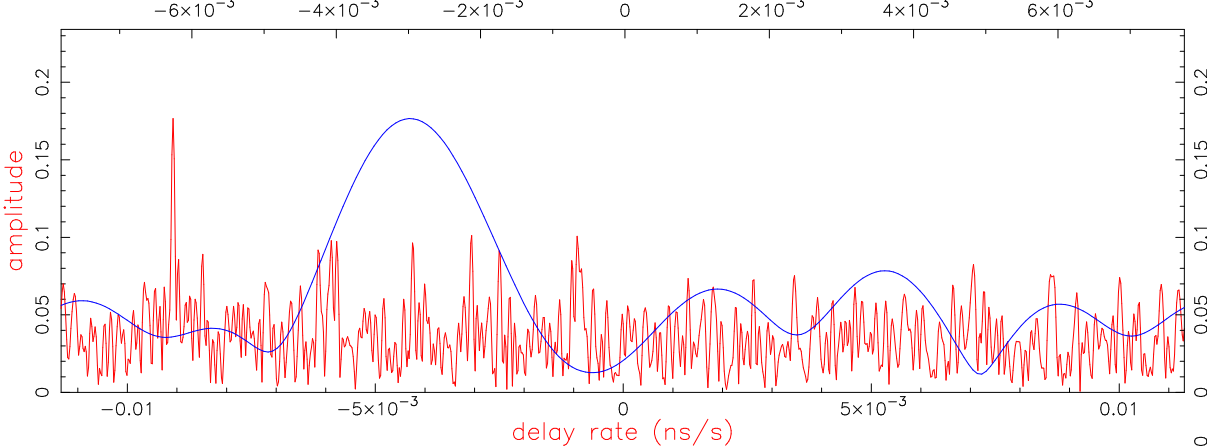
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gX

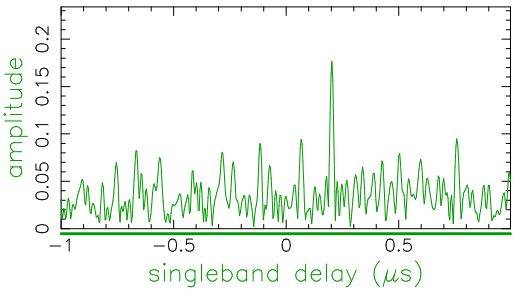
GLT - ONSALA60, fgroup W, pol LL

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

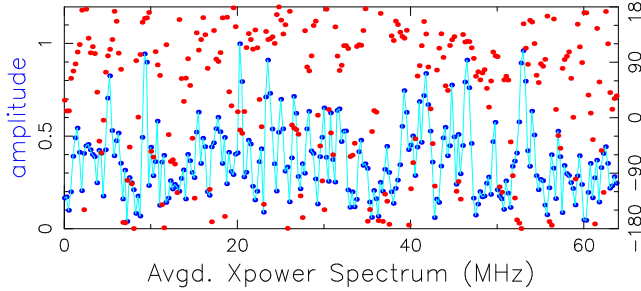


Fringe quality 0

SNR 5.9  
 Int time 149.838  
 Amp 0.234  
 Phase -28.0  
 PFD 3.4e-01  
 Delays (us)  
 SBD 0.202667  
 MBD -0.002985  
 Fringe rate (Hz)  
 -0.783953  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

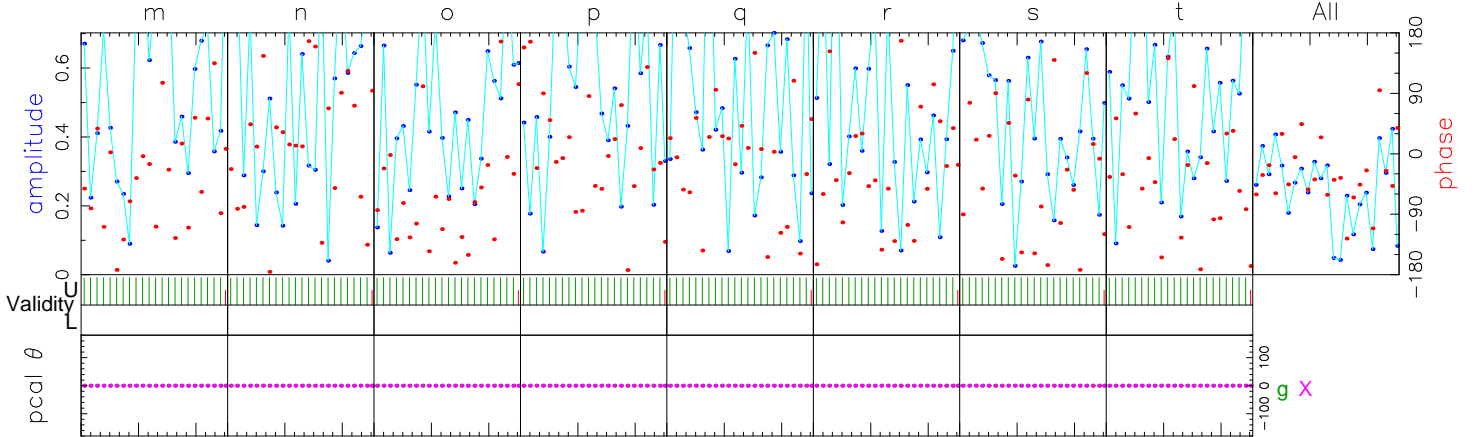


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105556  
 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
	-26.3	3.2	-82.3	-13.5	-8.3	-37.6	6.9	-37.9	Phase	-28.0
	0.3	0.1	0.2	0.3	0.4	0.3	0.1	0.3	Ampl.	0.2
	231.4	233.0	402.7	22.9	276.4	215.8	12.0	22.1	Sbd box	308.9
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.59512521800E+03	Apriori delay (usec)	5.59492507774E+03	Resid mbdelay (usec)	-2.98474E-03	+/-	1.8E-04
Sband delay (usec)	5.59512774474E+03	Apriori clock (usec)	-1.1219927E+02	Resid sbdelay (usec)	2.02667E-01	+/-	1.5E-03
Phase delay (usec)	5.59492507683E+03	Apriori clockrate (us/s)	-1.1366622E-06	Resid phdelay (usec)	-9.03935E-07	+/-	6.2E-07
Delay rate (us/s)	-1.90093194659E-01	Apriori rate (us/s)	-1.90084093740E-01	Resid rate (us/s)	-9.10092E-06	+/-	7.2E-09
Total phase (deg)	42.6	Apriori accel (us/s/s)	-1.65100734891E-05	Resid phase (deg)	-28.0	+/-	19.4

ph/seg (deg) 48.1 46.4 Search (1024X32) 0.174 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.2 81.0 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 27.4 Inc. seg. avg. 0.252 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.8 47.8 Inc. frq. avg. 0.229 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 3114.593 -3165.949 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gX.W.209.3MP15Q

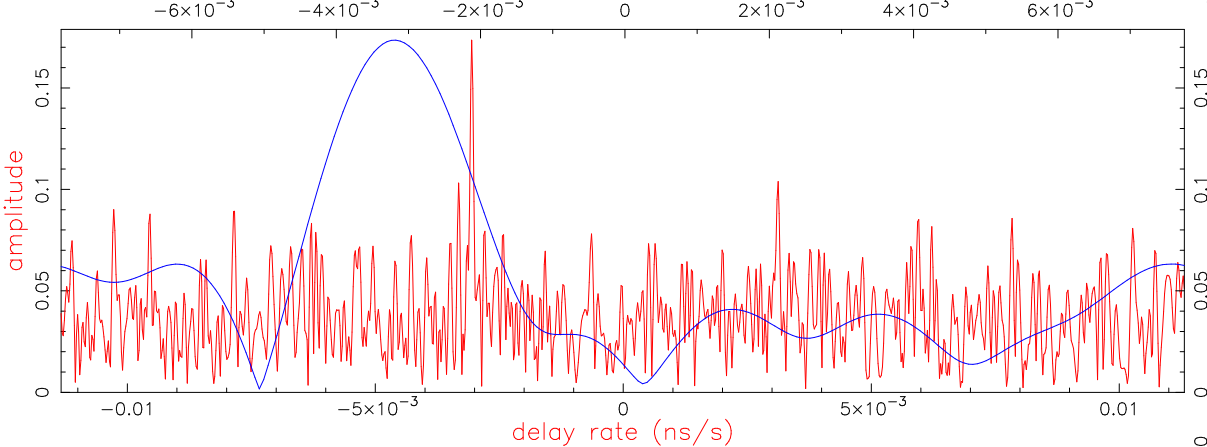
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gX

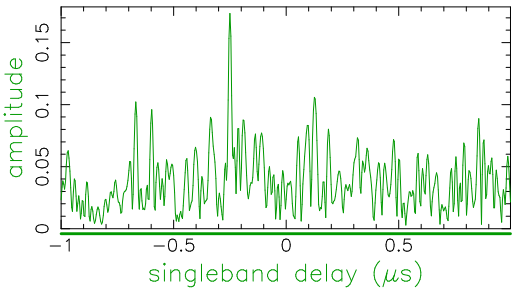
GLT - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

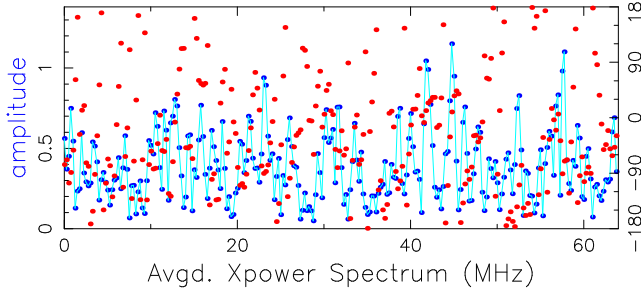


Fringe quality 0

SNR 5.8  
 Int time 149.838  
 Amp 0.179  
 Phase -14.6  
 PFD 5.5e-01  
 Delays (us)  
 SBD -0.249895  
 MBD -0.003189  
 Fringe rate (Hz)  
 -0.263183  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

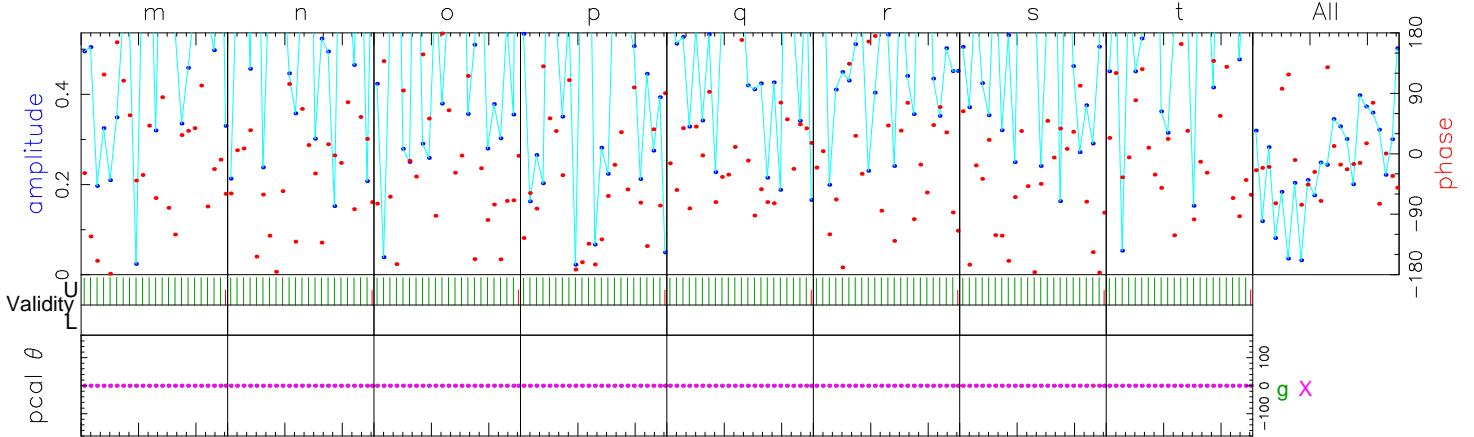


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105558  
 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
	13.0	-8.8	-49.5	-55.2	-2.7	-16.2	-25.5	-2.9	Phase	-14.6
	0.2	0.2	0.2	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	54.2	103.4	213.8	118.3	208.2	197.0	3.9	331.8	Sbd box	193.0
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.59467188847E+03	Apriori delay (usec)	5.59492507774E+03	Resid mbdelay (usec)	-3.18927E-03	+/-	1.9E-04
Sband delay (usec)	5.59467518249E+03	Apriori clock (usec)	-1.1219927E+02	Resid sbdelay (usec)	-2.49895E-01	+/-	1.5E-03
Phase delay (usec)	5.59492507727E+03	Apriori clockrate (us/s)	-1.1366622E-06	Resid phdelay (usec)	-4.70128E-07	+/-	6.4E-07
Delay rate (us/s)	-1.90087149033E-01	Apriori rate (us/s)	-1.90084093740E-01	Resid rate (us/s)	-3.05529E-06	+/-	7.3E-09
Total phase (deg)	56.1	Apriori accel (us/s/s)	-1.65100734891E-05	Resid phase (deg)	-14.6	+/-	19.7

ph/seg (deg) 58.4 47.3 Search (1024X32) 0.172 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 75.8 82.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.0 27.9 Inc. seg. avg. 0.189 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.5 48.7 Inc. frq. avg. 0.170 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 3114.593 -3165.949 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gX.W.219.3MP15Q simultaneous interpolator

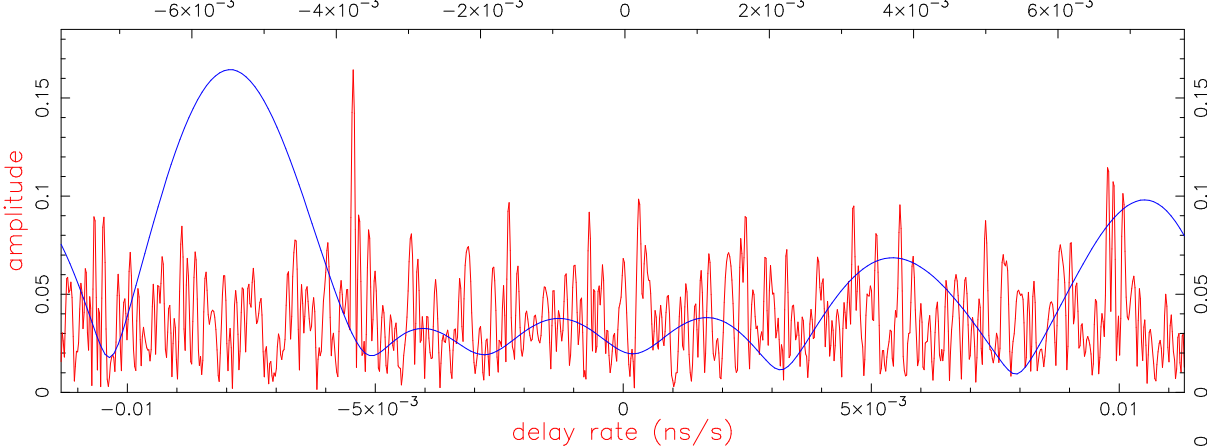
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gX

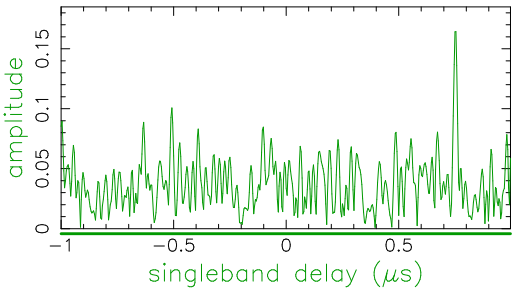
GLT - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

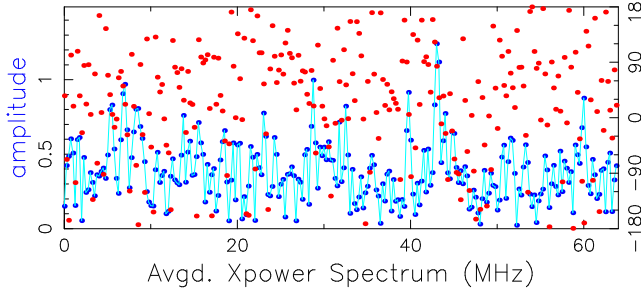


Fringe quality 0

SNR 5.6  
 Int time 149.838  
 Amp 0.185  
 Phase 144.1  
 PFD 9.0e-01  
 Delays (us)  
 SBD 0.751991  
 MBD -0.005518  
 Fringe rate (Hz)  
 -0.469126  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

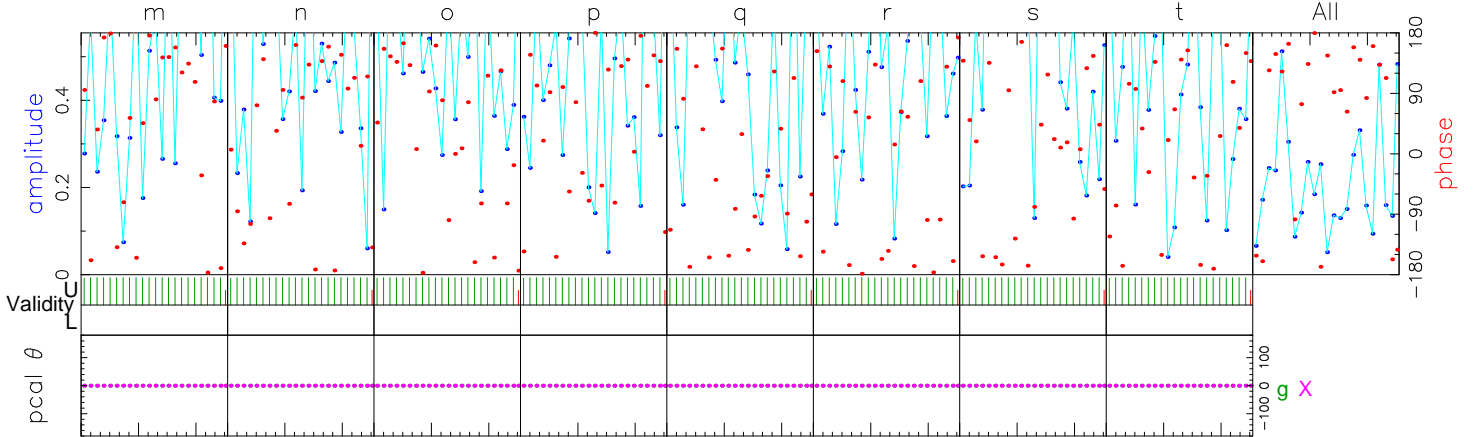


delay rate (ns/s)



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
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		
X	0	0	0	0	0	0	0	0		
g:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	5.5956695985E+03	Apriori delay (usec)	5.59492507774E+03	Resid mbdelay (usec)	-5.51788E-03	+/-	1.9E-04
Sband delay (usec)	5.59567706899E+03	Apriori clock (usec)	-1.1219927E+02	Resid sbdelay (usec)	7.51991E-01	+/-	1.5E-03
Phase delay (usec)	5.59492508238E+03	Apriori clockrate (us/s)	-1.1366622E-06	Resid phdelay (usec)	4.64717E-06	+/-	6.6E-07
Delay rate (us/s)	-1.90089539824E-01	Apriori rate (us/s)	-1.90084093740E-01	Resid rate (us/s)	-5.44608E-06	+/-	7.6E-09
Total phase (deg)	214.8	Apriori accel (us/s/s)	-1.65100734891E-05	Resid phase (deg)	144.1	+/-	20.4

ph/seg (deg) 49.2 48.9 Search (1024X32) 0.161 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.9 85.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 31.7 28.8 Inc. seg. avg. 0.173 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.2 50.3 Inc. frq. avg. 0.176 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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 3114.593 -3165.949 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gX.W.228.3MP15Q simultaneous interpolator

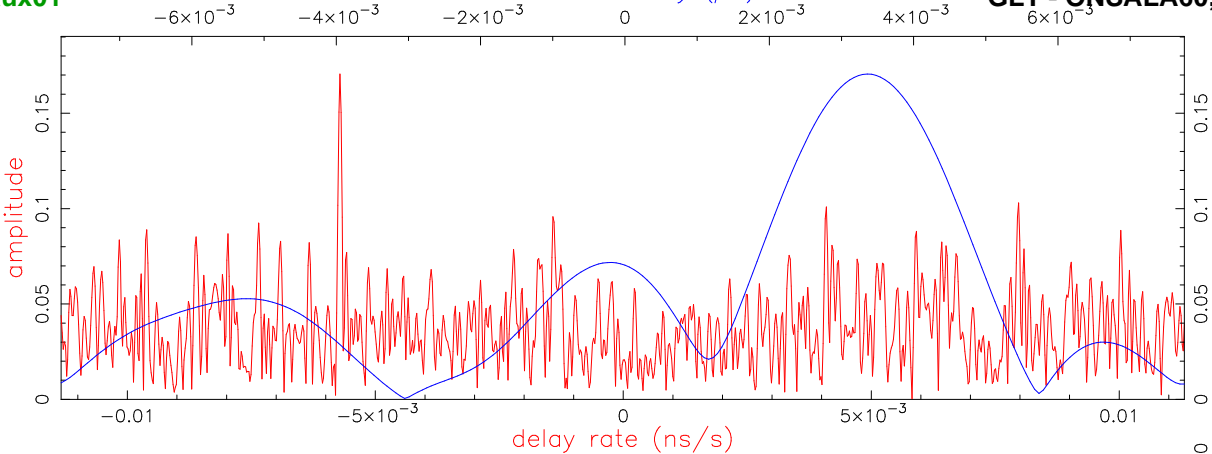
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, gX

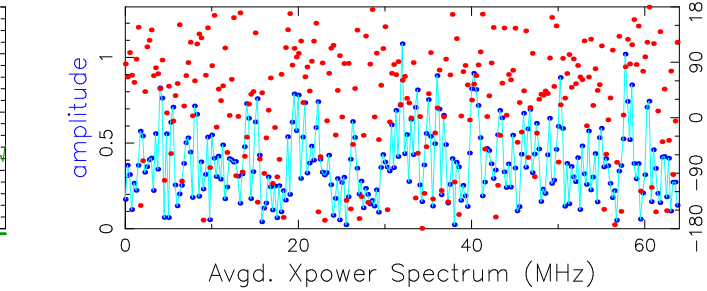
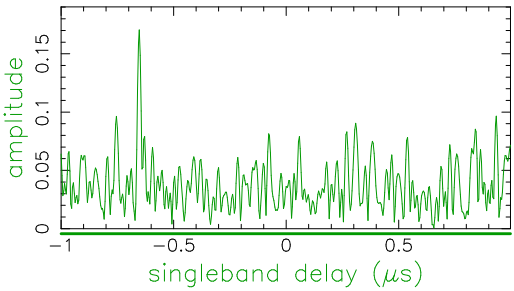
GLT - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)



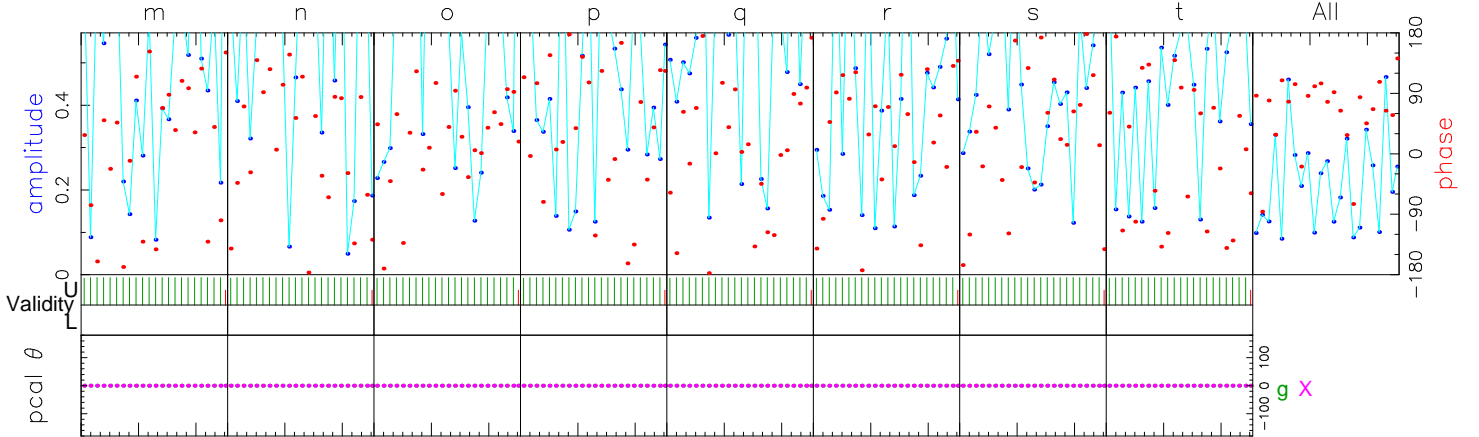
Fringe quality 0

SNR 5.7  
 Int time 149.838  
 Amp 0.190  
 Phase 68.0  
 PFD 7.3e-01  
 Delays (us)  
 SBD -0.652941  
 MBD 0.003390  
 Fringe rate (Hz)  
 -0.493447  
 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  
 2025:041:105602  
 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
	76.1	82.8	42.2	87.5	65.6	75.0	47.3	164.5	Phase	68.0
	0.2	0.3	0.4	0.2	0.2	0.3	0.1	0.0	Ampl.	0.2
	354.4	134.4	89.1	443.8	95.2	235.9	402.0	440.5	Sbd box	89.8
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	
X	0	0	0	0	0	0	0	0	PC freqs	
g:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
g:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
g	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.5942721749E+03	Apriori delay (usec)	5.59492507774E+03	Resid mbdelay (usec)	3.38976E-03	+/-	1.9E-04
Sband delay (usec)	5.59427213724E+03	Apriori clock (usec)	-1.1219927E+02	Resid sbdelay (usec)	-6.52941E-01	+/-	1.5E-03
Phase delay (usec)	5.59492507993E+03	Apriori clockrate (us/s)	-1.1366622E-06	Resid phdelay (usec)	2.19158E-06	+/-	6.5E-07
Delay rate (us/s)	-1.90089822175E-01	Apriori rate (us/s)	-1.90084093740E-01	Resid rate (us/s)	-5.72843E-06	+/-	7.5E-09
Total phase (deg)	138.6	Apriori accel (us/s/s)	-1.65100734891E-05	Resid phase (deg)	68.0	+/-	20.0

ph/seg (deg)	RMS 54.6	Theor. 48.0	Amplitude Search (1024X32)	0.190 +/- 0.033	0.167	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.9	83.8	Interp.	0.000	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.1	28.3	Inc. seg. avg.	0.179	0.179	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	51.1	49.4	Inc. frq. avg.	0.179	0.179	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 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 3114.593 -3165.949 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//gX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//gX.W.232.3MP15Q



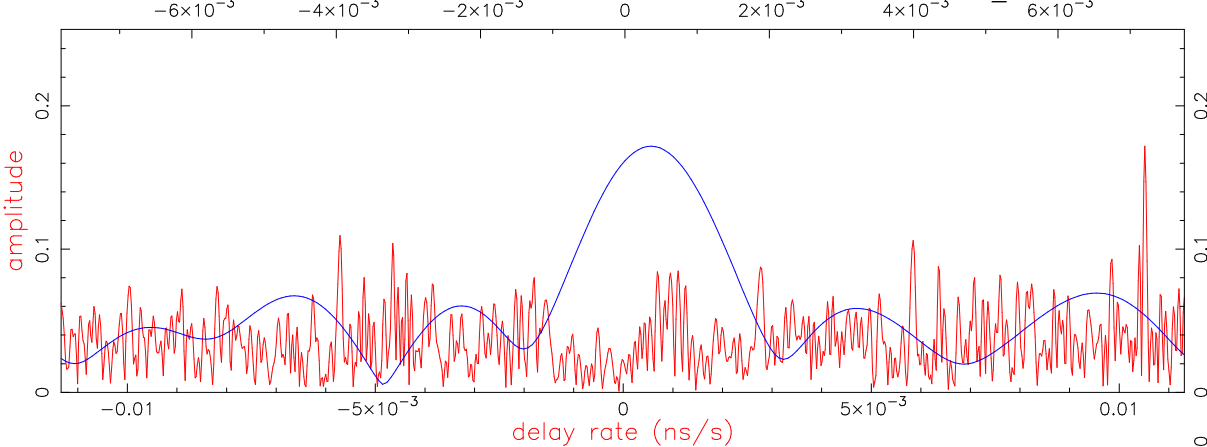
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, kX

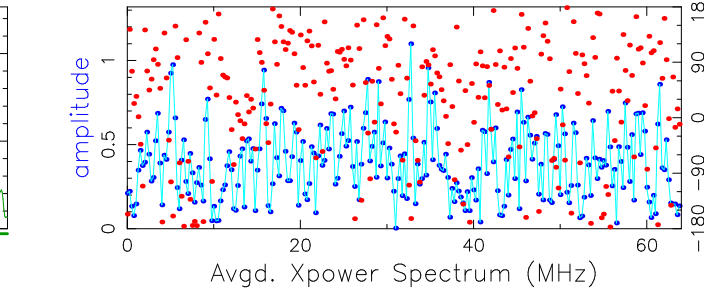
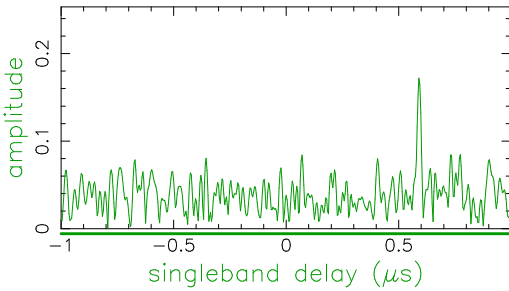
VLBA\_KP - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)



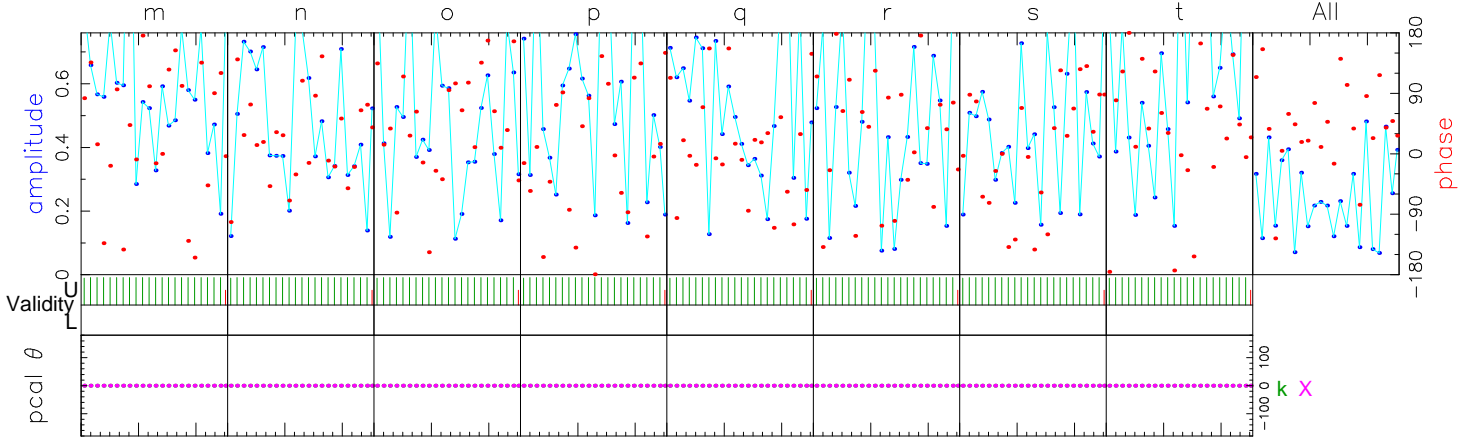
Fringe quality 0

SNR 5.8  
 Int time 149.838  
 Amp 0.253  
 Phase 50.1  
 PFD 6.2e-01  
 Delays (us)  
 SBD 0.590702  
 MBD 0.000381  
 Fringe rate (Hz) 0.907734  
 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  
 2025:041:105631  
 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
	89.7	29.7	60.5	67.1	2.3	66.0	49.0	62.8	Phase	50.1
	0.3	0.4	0.2	0.2	0.4	0.3	0.2	0.3	Ampl.	0.3
	226.7	382.7	360.4	134.0	454.7	301.4	449.5	205.8	Sbd box	408.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.82337170415E+02	Apriori delay (usec)	-5.82931301732E+02	Resid mbdelay (usec)	3.81318E-04	+/-	1.9E-04
Sband delay (usec)	-5.82340599732E+02	Apriori clock (usec)	-1.1251036E+02	Resid sbdelay (usec)	5.90702E-01	+/-	1.5E-03
Phase delay (usec)	-5.82931300118E+02	Apriori clockrate (us/s)	-1.0644170E-06	Resid phdelay (usec)	1.61417E-06	+/-	6.4E-07
Delay rate (us/s)	-5.08468065616E-01	Apriori rate (us/s)	-5.08478603506E-01	Resid rate (us/s)	1.05379E-05	+/-	7.4E-09
Total phase (deg)	-69.2	Apriori accel (us/s/s)	-3.06705391417E-05	Resid phase (deg)	50.1	+/-	19.8

ph/seg (deg)	RMS 63.5	Theor. 47.6	Amplitude Search (1024X32)	0.253 +/- 0.044	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	85.0	83.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	29.1	28.1	Inc. seg. avg.	0.264	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	31.5	49.0	Inc. frq. avg.	0.251	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 336.1 el 36.1 pa 95.2 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8353.728 -7611.001 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//kX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//kX.W.317.3MP15Q

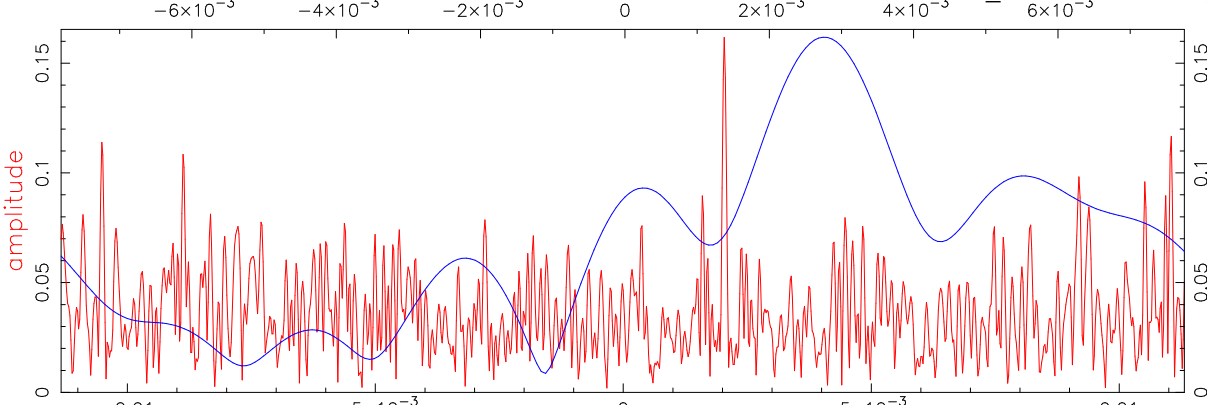
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, kX

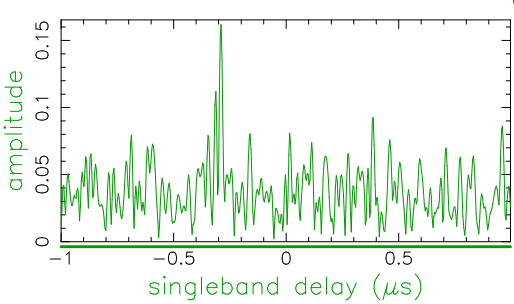
VLBA\_KP - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

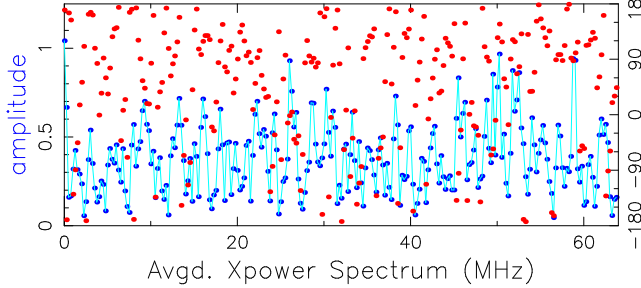


Fringe quality 0

SNR 5.5  
Int time 149.838  
Amp 0.165  
Phase -32.7  
PFD 1.0e+00  
Delays (us)  
SBD -0.290181  
MBD 0.002720  
Fringe rate (Hz)  
0.175920  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

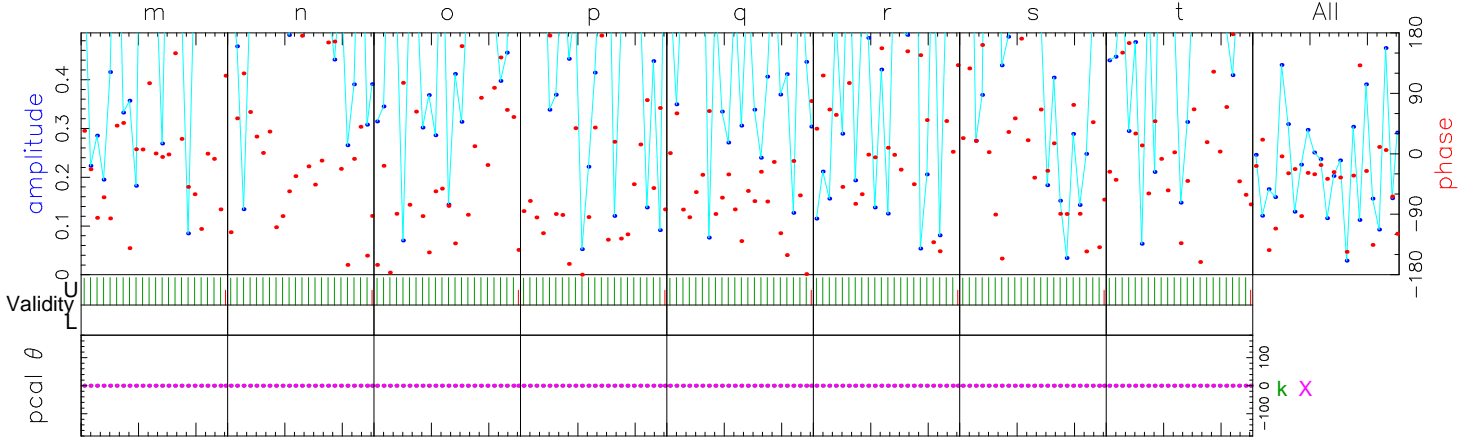


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105633  
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
	-2.0	-21.6	-55.3	-95.6	-63.4	2.3	10.2	-11.1	Phase	-32.7
	0.3	0.2	0.0	0.3	0.3	0.1	0.2	0.2	Ampl.	0.2
	177.7	156.9	36.1	146.4	183.1	262.0	469.2	278.5	Sbd box	182.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-5.83225456440E+02	Apriori delay (usec)	-5.82931301732E+02	Resid mbdelay (usec)	2.72029E-03	+/-	2.0E-04
Sband delay (usec)	-5.83221483232E+02	Apriori clock (usec)	-1.1251036E+02	Resid sbdelay (usec)	-2.90181E-01	+/-	1.6E-03
Phase delay (usec)	-5.82931302785E+02	Apriori clockrate (us/s)	-1.0644170E-06	Resid phdelay (usec)	-1.05307E-06	+/-	6.8E-07
Delay rate (us/s)	-5.08476561254E-01	Apriori rate (us/s)	-5.08478603506E-01	Resid rate (us/s)	2.04225E-06	+/-	7.8E-09
Total phase (deg)	-151.9	Apriori accel (us/s/s)	-3.06705391417E-05	Resid phase (deg)	-32.7	+/-	21.0

ph/seg (deg)	RMS 61.5	Theor. 50.3	Amplitude Search (1024X32)	0.158	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.6	87.8	Interp.	0.000	PCal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	40.8	29.7	Inc. seg. avg.	0.162	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	55.6	51.8	Inc. frq. avg.	0.180	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 336.1 el 36.1 pa 95.2 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8353.728 -7611.001 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//kX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//kX.W.326.3MP15Q

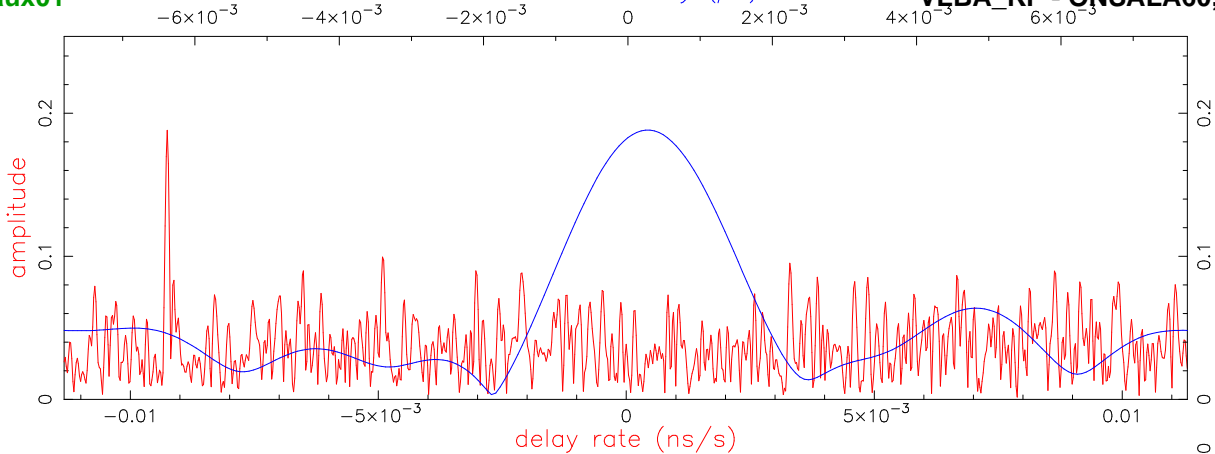
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, kX

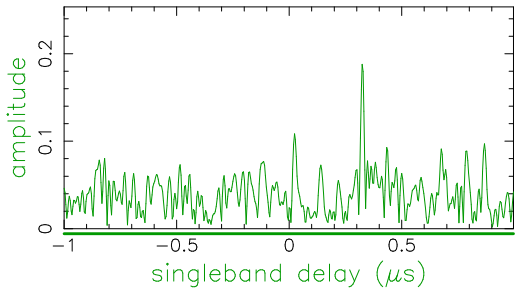
VLBA\_KP - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

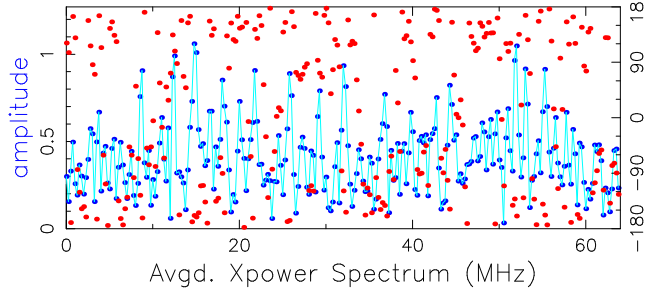


Fringe quality 0

SNR 6.3  
 Int time 149.838  
 Amp 0.254  
 Phase -40.2  
 PFD 2.9e-02  
 Delays (us)  
 SBD 0.325333  
 MBD 0.000334  
 Fringe rate (Hz)  
 -0.797713  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

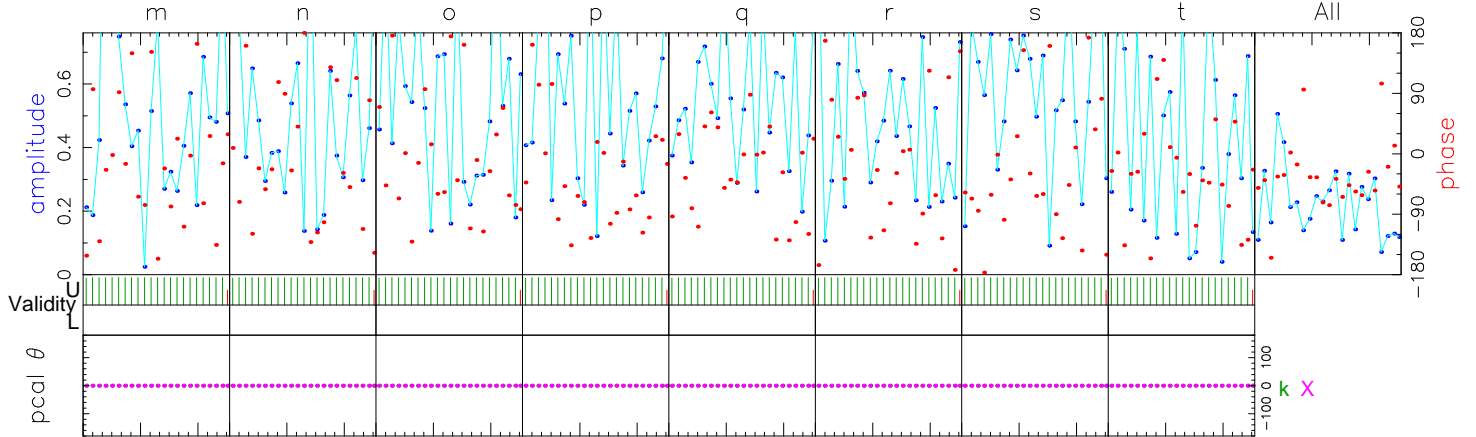


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105637  
 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
	-32.4	-51.7	-35.0	-53.4	-23.4	-33.3	-55.1	-41.7	Phase	-40.2
	0.3	0.1	0.4	0.4	0.3	0.1	0.3	0.2	Ampl.	0.2
	24.8	105.7	490.9	340.1	341.3	379.0	338.8	409.7	Sbd box	340.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
k	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-5.82602842372E+02		Apriori delay (usec)		-5.82931301732E+02		Resid mbdelay (usec)		3.34361E-04	+/- 1.7E-04
Sband delay (usec)	-5.82605968482E+02		Apriori clock (usec)		-1.1251036E+02		Resid sbdelay (usec)		3.25333E-01	+/- 1.4E-03
Phase delay (usec)	-5.82931303028E+02		Apriori clockrate (us/s)		-1.0644170E-06		Resid phdelay (usec)		-1.29544E-06	+/- 5.8E-07
Delay rate (us/s)	-5.08487864158E-01		Apriori rate (us/s)		-5.08478603506E-01		Resid rate (us/s)		-9.26065E-06	+/- 6.7E-09
Total phase (deg)			Apriori accel (us/s/s)		-3.06705391417E-05		Resid phase (deg)		-40.2	+/- 18.1

ph/seg (deg) 52.7 43.3 Search (1024X32) 0.186 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 59.3 75.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 12.5 25.5 Inc. seg. avg. 0.237 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.8 44.6 Inc. frq. avg. 0.233 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 k: az 336.1 el 36.1 pa 95.2 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8353.728 -7611.001 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//kX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//kX.W.330.3MP15Q

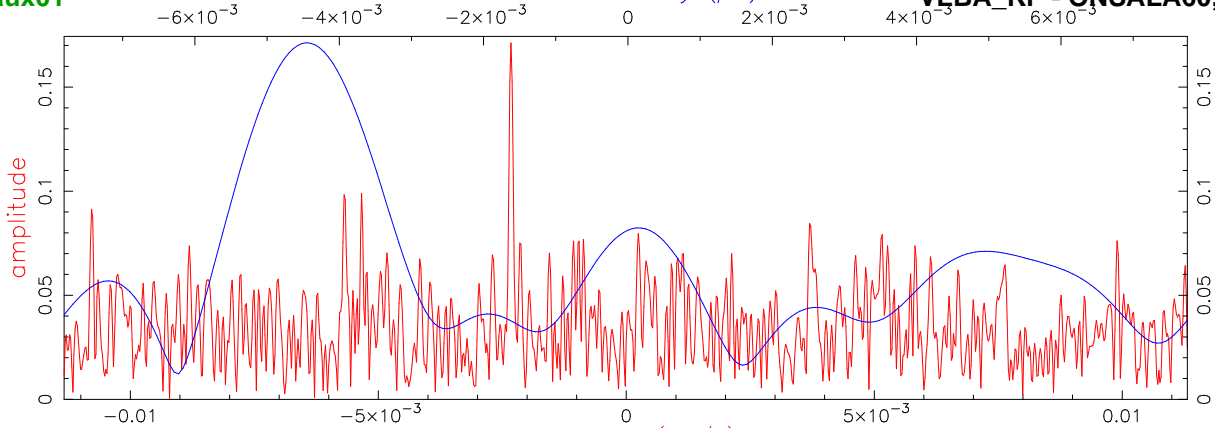
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, kX

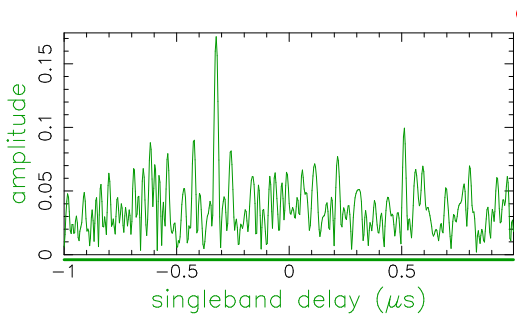
VLBA\_KP - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

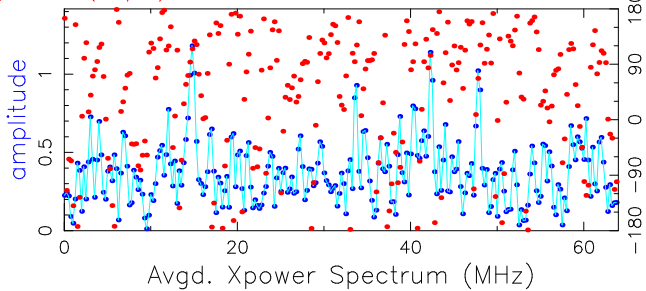


Fringe quality 0

SNR 5.7  
 Int time 149.838  
 Amp 0.174  
 Phase 19.6  
 PFD 7.0e-01  
 Delays (us)  
 SBD -0.324510  
 MBD -0.004462  
 Fringe rate (Hz)  
 -0.201050  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

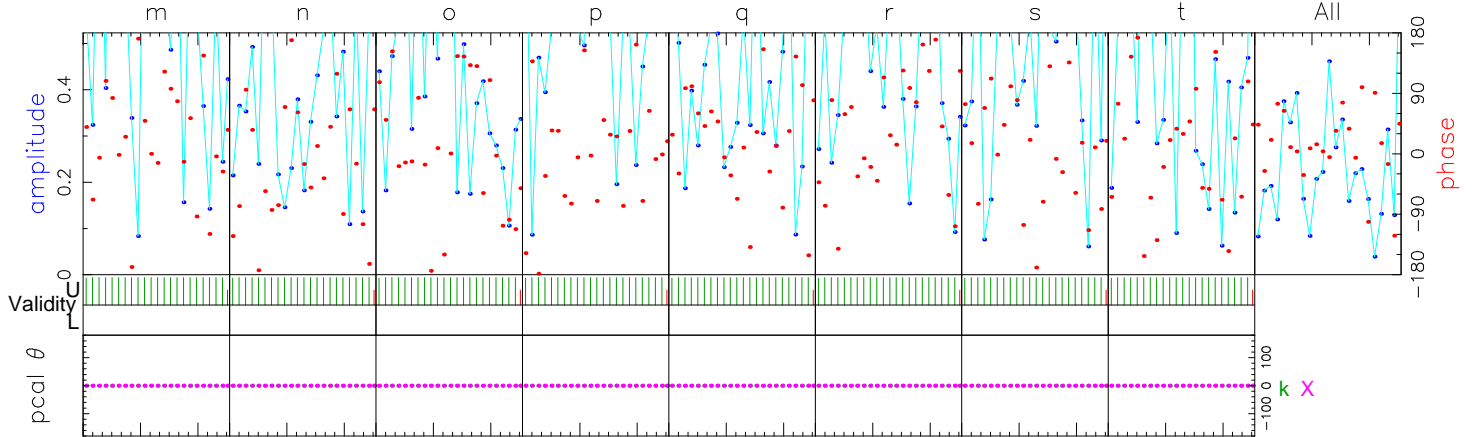


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105641  
 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		
k	0	0	0	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-5.83248263634E+02	Apriori delay (usec)	-5.82931301732E+02	Resid mbdelay (usec)	-4.46190E-03	+/-	1.9E-04
Sband delay (usec)	-5.83255811232E+02	Apriori clock (usec)	-1.1251036E+02	Resid sbdelay (usec)	-3.24510E-01	+/-	1.5E-03
Phase delay (usec)	-5.82931301101E+02	Apriori clockrate (us/s)	-1.0644170E-06	Resid phdelay (usec)	6.31167E-07	+/-	6.4E-07
Delay rate (us/s)	-5.08480937496E-01	Apriori rate (us/s)	-5.08478603506E-01	Resid rate (us/s)	-2.33399E-06	+/-	7.4E-09
Total phase (deg)	-99.7	Apriori accel (us/s/s)	-3.06705391417E-05	Resid phase (deg)	19.6	+/-	20.0

ph/seg (deg)	53.1	Theor.	47.9	Amplitude	0.174 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	82.6		83.6	Search (1024X32)	0.166	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	28.1		28.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	50.1		49.3	Inc. seg. avg.	0.173	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.	0.170	Data rate(Mb/s): 2048				

k: az 336.1 el 36.1 pa 95.2 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8353.728 -7611.001 simultaneous interpolator

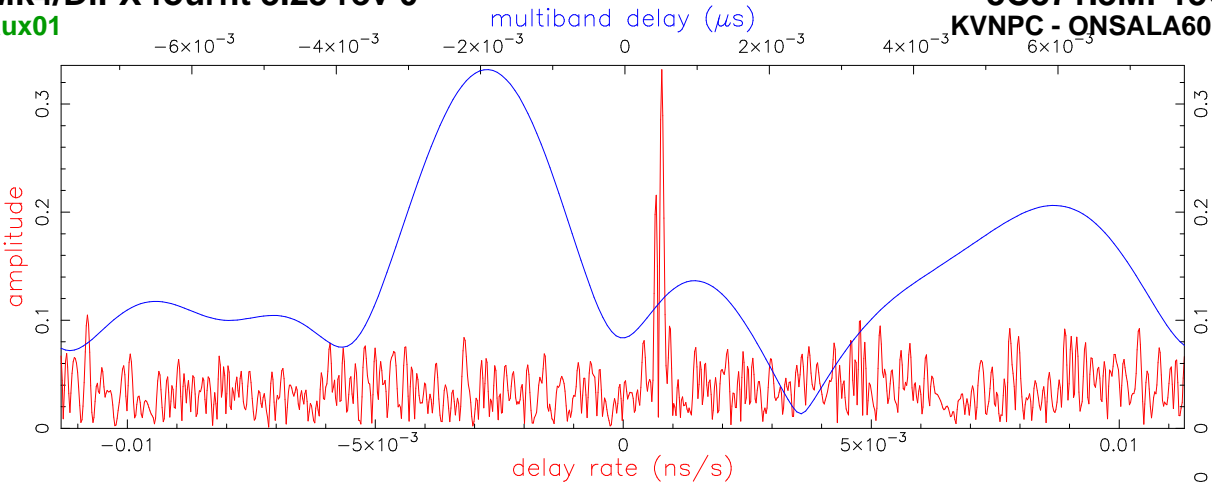
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//kX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//kX.W.338.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

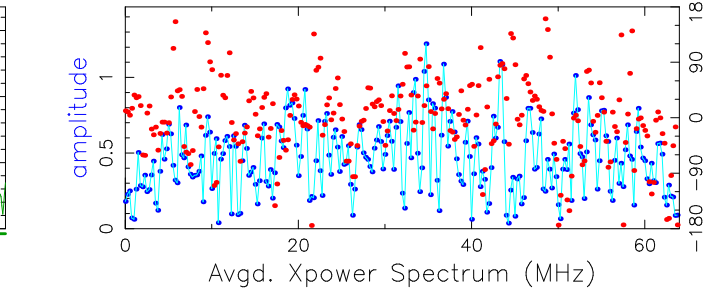
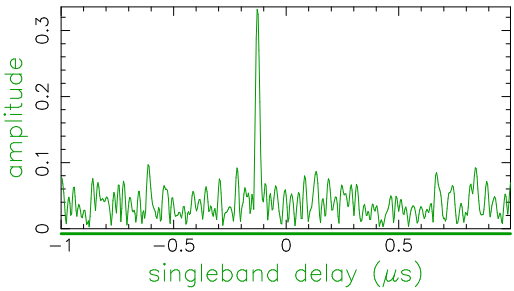
3C371.3MP15Q, No0901, LX

KVNPC - ONSALA60, fgroup W, pol LL



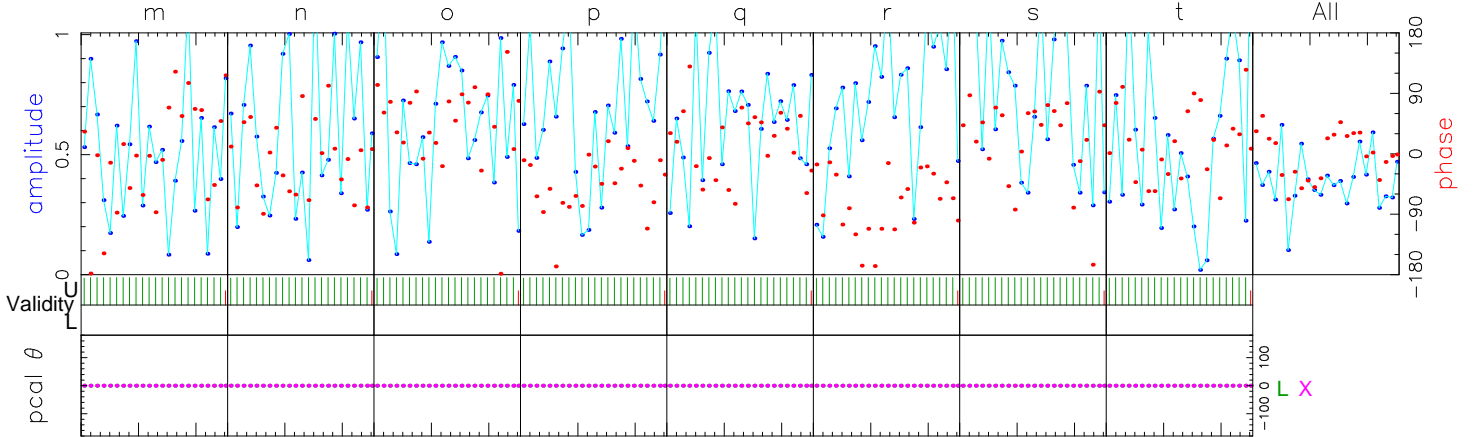
Fringe quality 9

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



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)	RMS 34.8	Theor. 24.5	Amplitude Search (1024X32)	0.336 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	38.0	42.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	44.6	14.5	Inc. seg. avg.	0.362	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	45.7	25.2	Inc. frq. avg.	0.422	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
					Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

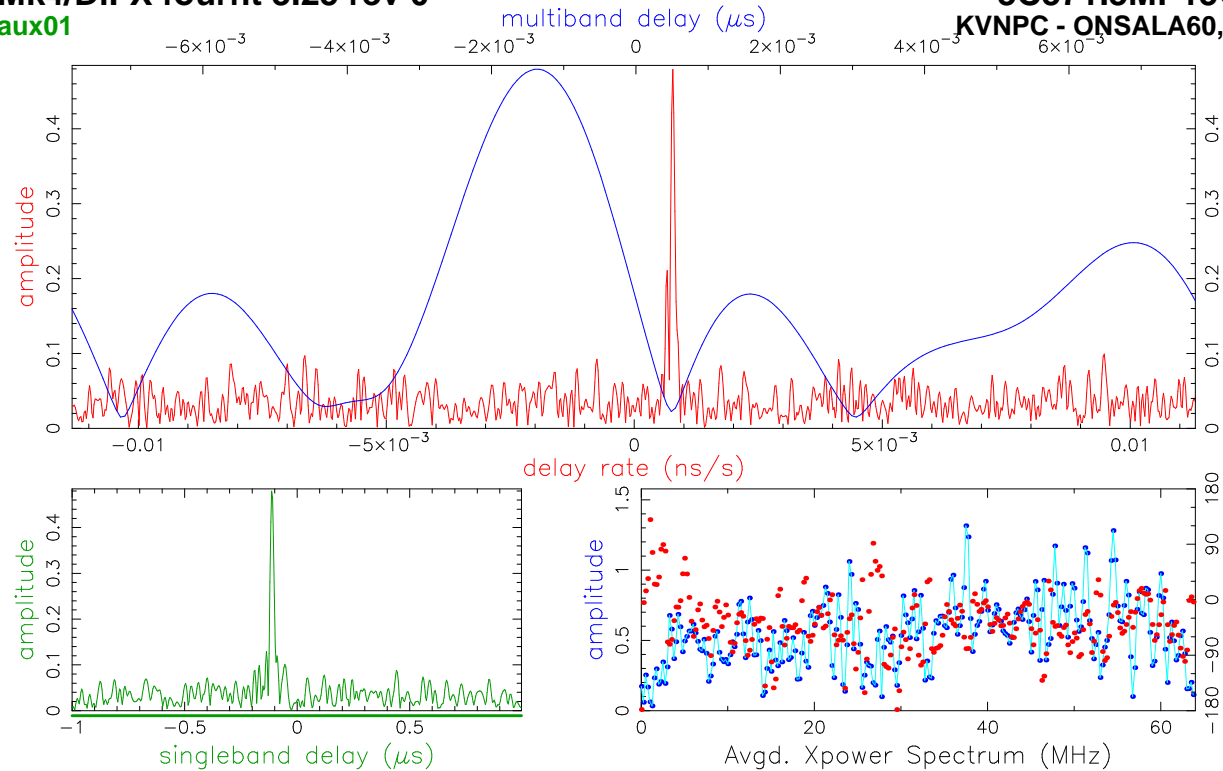
L: az 23.1 el 48.9 pa -116.3 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) -4094.972 -9430.046 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/LX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/LX.W.268.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

KVNPC - ONSALA60, fgroup W, pol RR

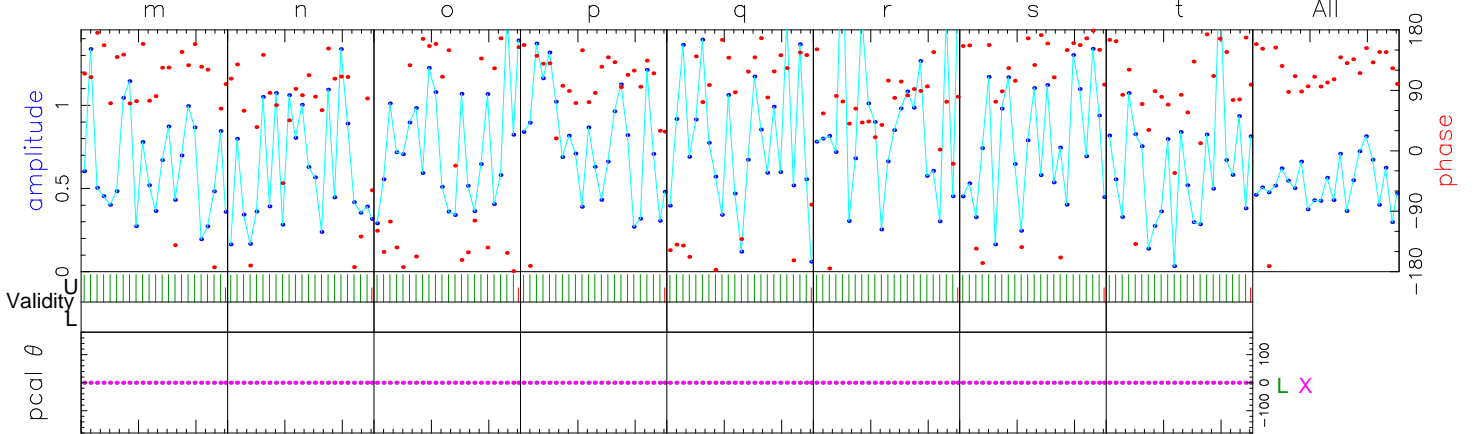


Fringe quality 8

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

ph/seg (deg)	RMS 25.8	Theor. 17.0	Amplitude Search (1024X32)	0.485 +/- 0.030	0.474	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	28.2	29.6	Interp.	0.000	0.000E+00	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	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	Data rate(Mb/s): 2048	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.3	17.5	Inc. frq. avg.	0.559			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

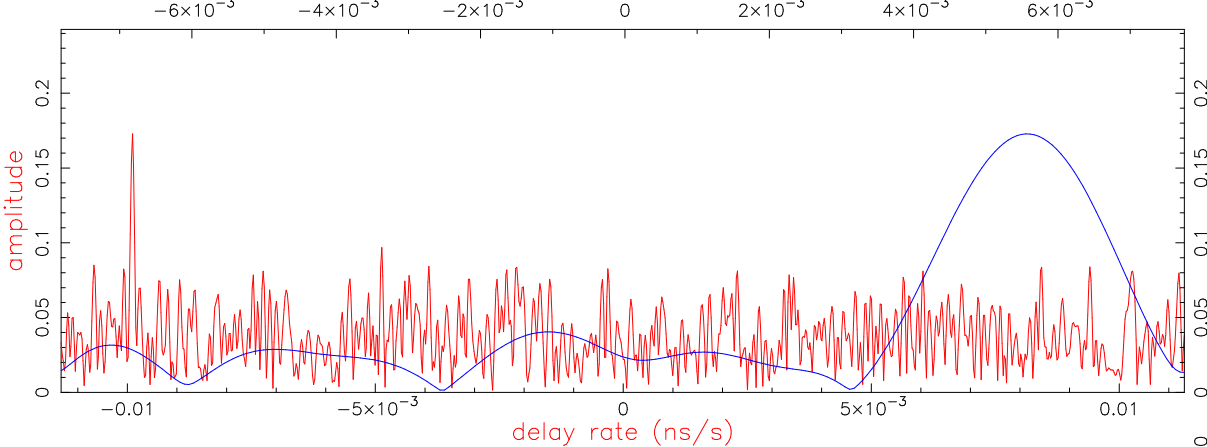
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

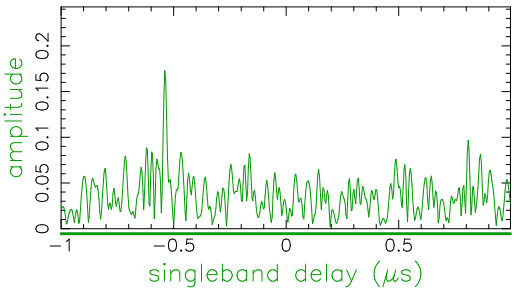
KVNPC - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

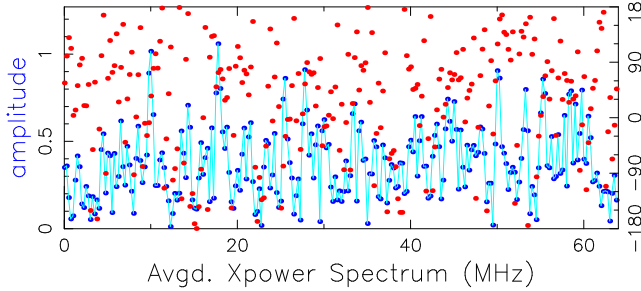


Fringe quality 0

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

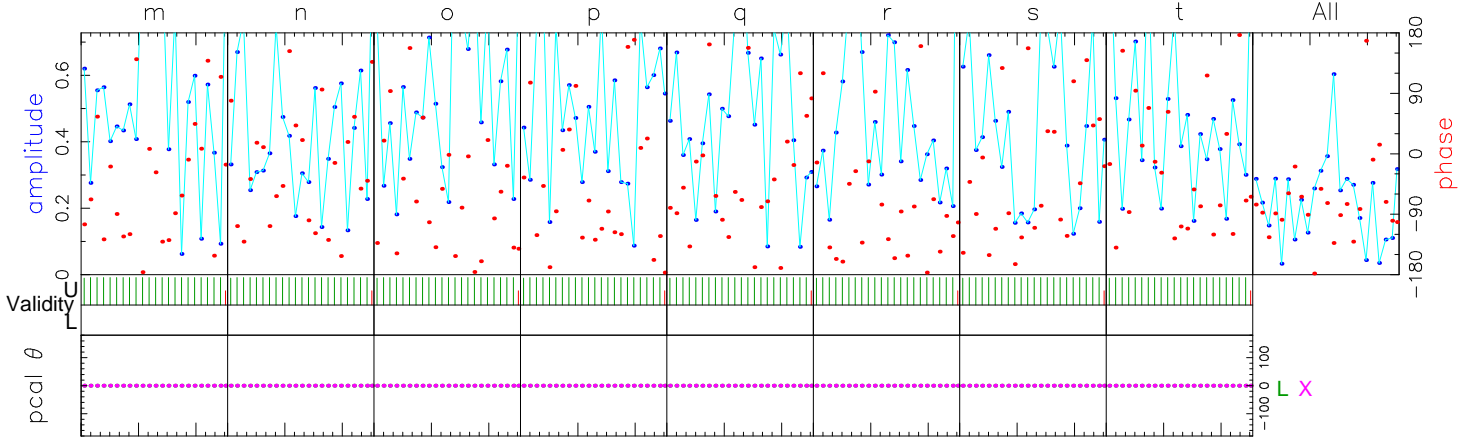


delay rate (ns/s)



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-06	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	Inc. seg. avg.	0.231	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	25.4		48.8	Inc. frq. avg.	0.222	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 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

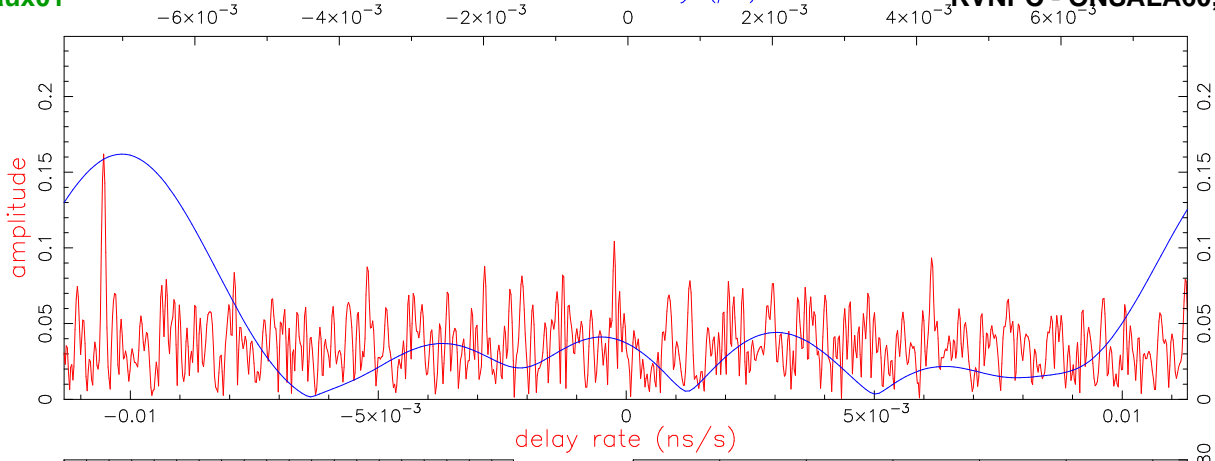
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, LX

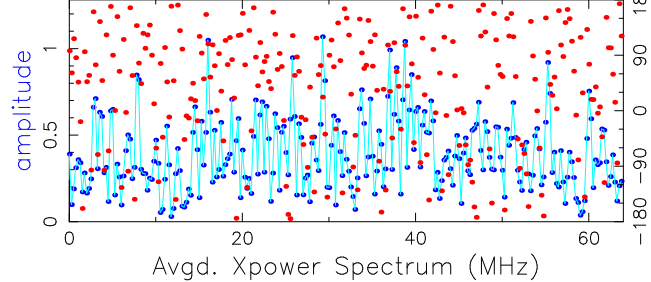
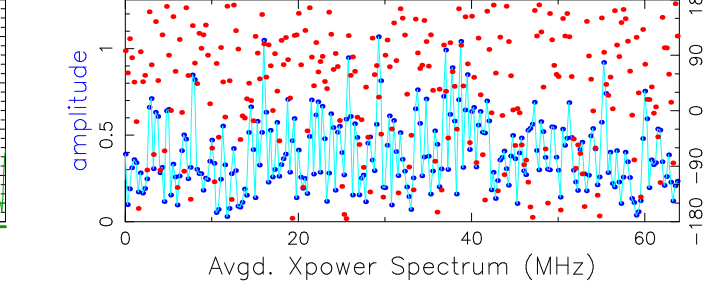
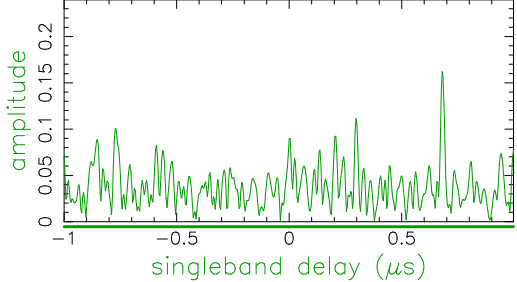
KVNPC - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)



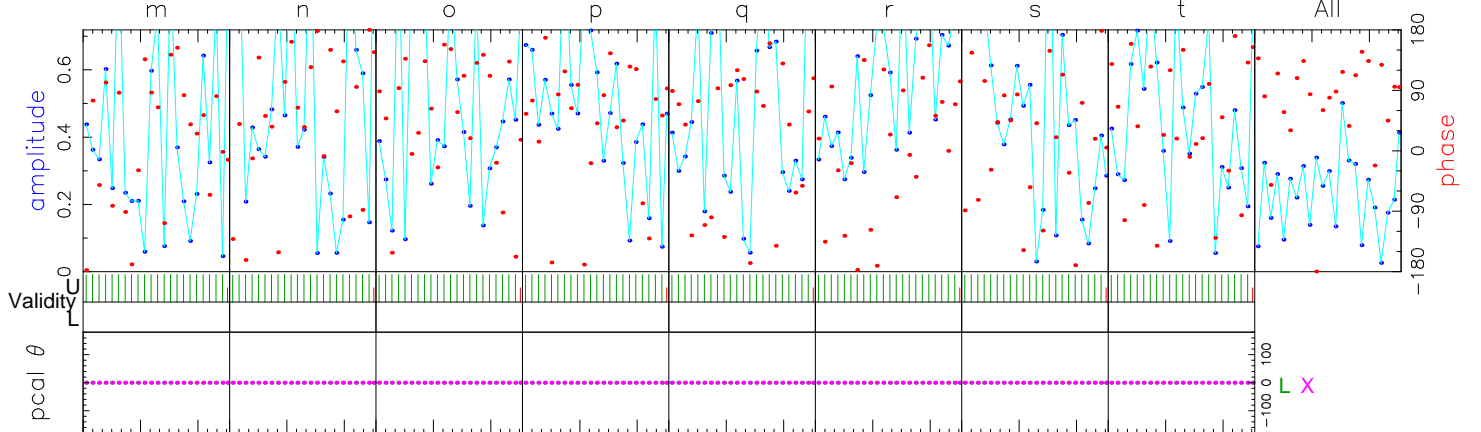
Fringe quality 0

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



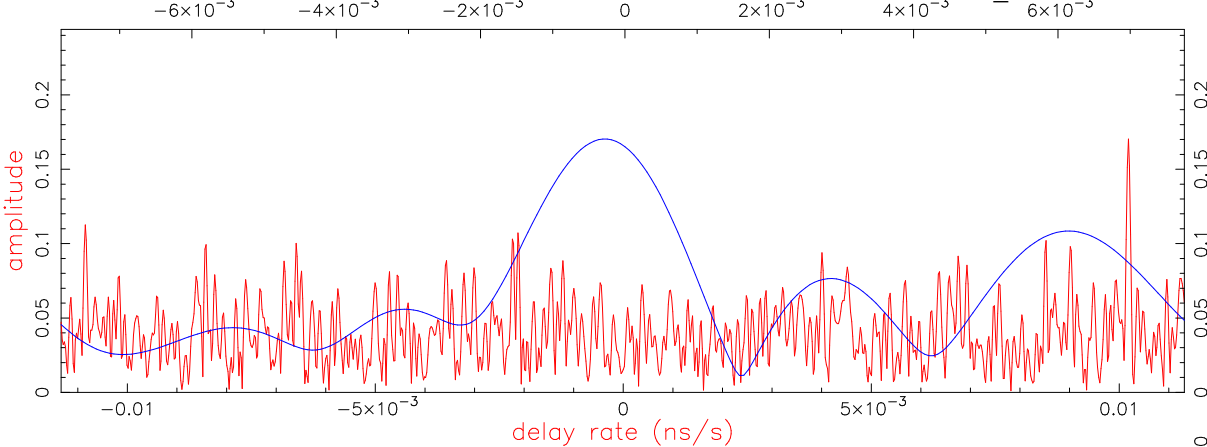
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, IX

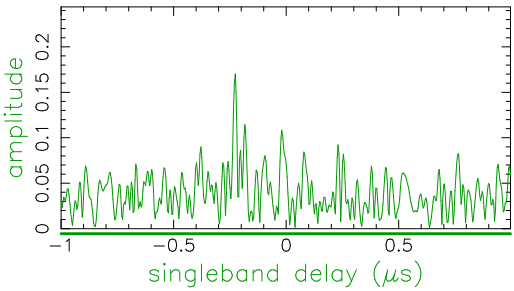
VLBA\_LA - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

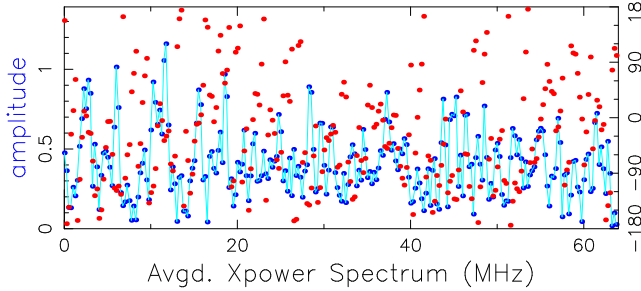


Fringe quality 0

SNR 5.7  
 Int time 149.838  
 Amp 0.244  
 Phase -140.0  
 PFD 7.5e-01  
 Delays (us)  
 SBD -0.227029  
 MBD -0.000303  
 Fringe rate (Hz)  
 0.878481  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

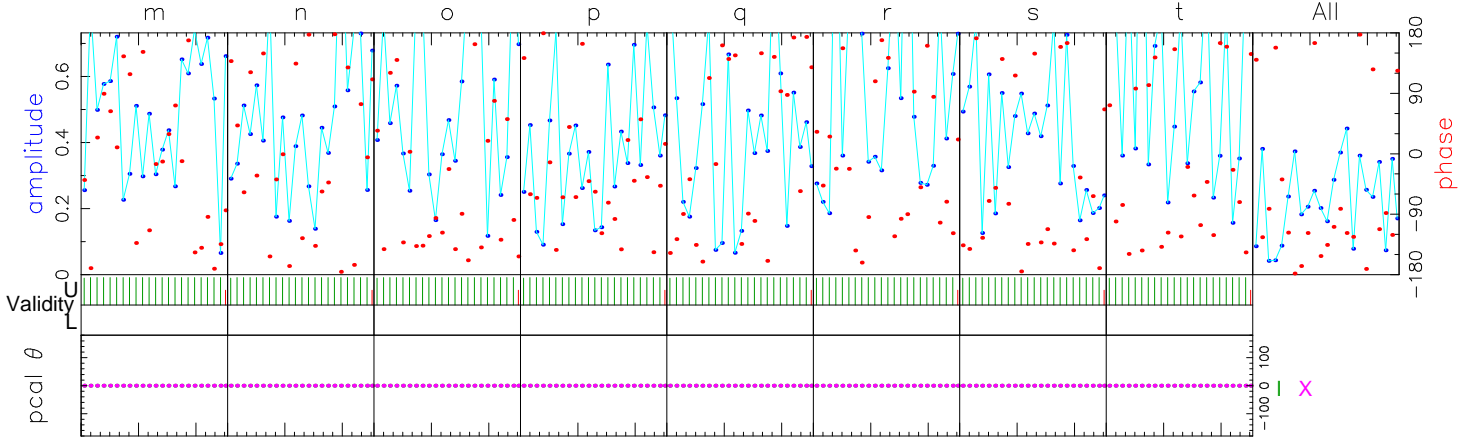


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105716  
 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
	-134.4	178.2	-143.7	-61.8	179.7	-100.1	-153.8	-141.9	Phase	-140.0
	0.1	0.2	0.4	0.3	0.3	0.3	0.4	0.4	Ampl.	0.3
	104.7	265.9	361.5	162.3	128.4	233.1	458.4	387.7	Sbd box	198.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.12967503657E+02	Apriori delay (usec)	-1.12732825493E+02	Resid mbdelay (usec)	-3.03164E-04	+/-	1.9E-04
Sband delay (usec)	-1.12959854243E+02	Apriori clock (usec)	-1.2097083E+02	Resid sbdelay (usec)	-2.27029E-01	+/-	1.5E-03
Phase delay (usec)	-1.12732830007E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-4.51408E-06	+/-	6.5E-07
Delay rate (us/s)	-5.00533435732E-01	Apriori rate (us/s)	-5.00543634025E-01	Resid rate (us/s)	1.01983E-05	+/-	7.5E-09
Total phase (deg)	-351.7	Apriori accel (us/s/s)	-2.73589246380E-05	Resid phase (deg)	-140.0	+/-	20.1

ph/seg (deg)	50.0	Theor.	48.1	Amplitude	0.244 +/- 0.043	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	78.1	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)	43.4	Inc. seg. avg.	0.242	Inc. frq. avg.	0.264	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.4	Inc. frq. avg.	0.264			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

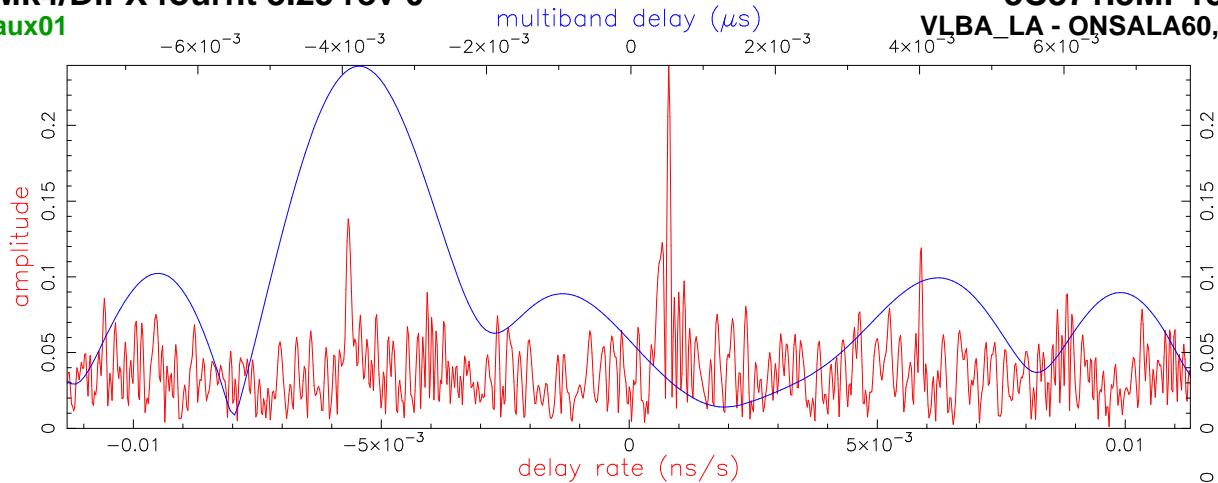
I: az 334.9 el 37.8 pa 88.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8231.880 -6732.779 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/IX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/IX.W.428.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

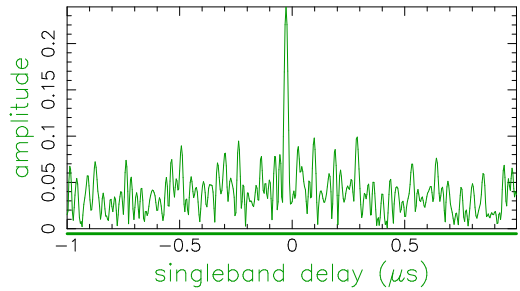
3C371.3MP15Q, No0901, IX

VLBA\_LA - ONSALA60, fgroup W, pol RR

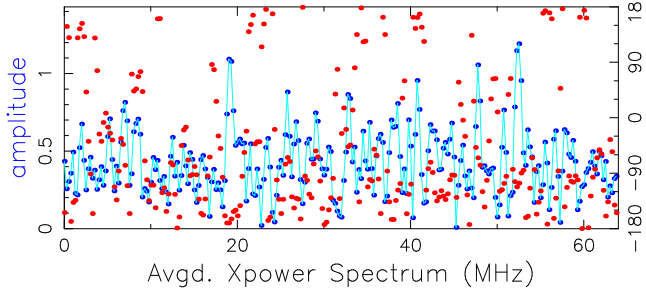


Fringe quality 9

SNR 8.0  
 Int time 149.838  
 Amp 0.240  
 Phase -29.5  
 PFD 2.1e-07  
 Delays (us)  
 SBD -0.027358  
 MBD -0.003767  
 Fringe rate (Hz)  
 0.068580  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

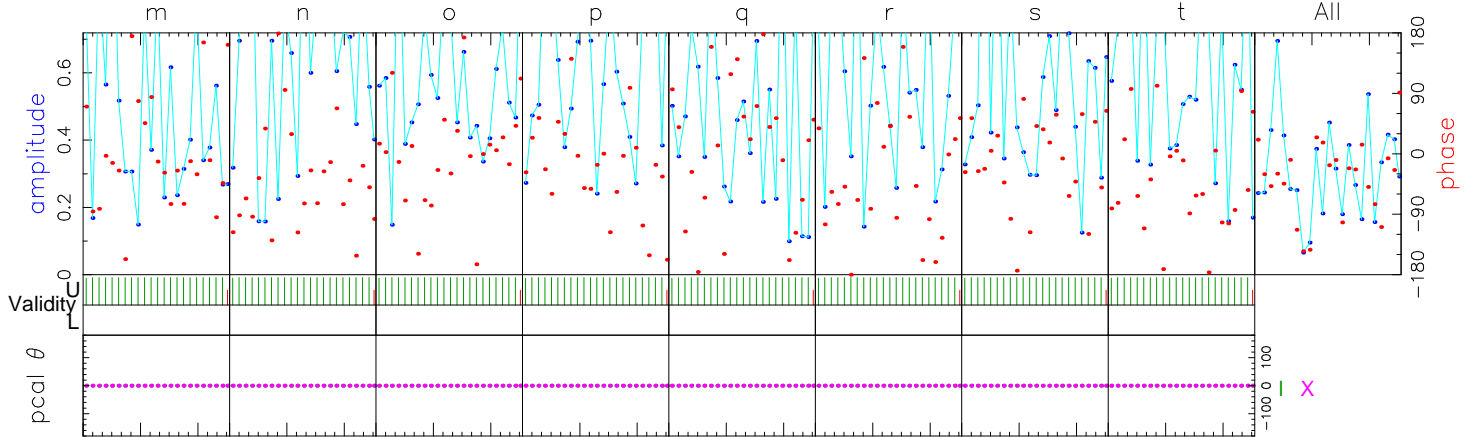


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105720  
 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				
	-23.7	-56.2	-3.3	-33.1	42.8	-40.2	-6.6	-66.3	Phase	-29.5				
	0.3	0.4	0.3	0.3	0.1	0.2	0.3	0.2	Ampl.	0.3				
	250.8	249.9	370.0	390.0	181.9	24.1	249.9	388.9	Sbd box	250.0				
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used					
I	0	0	0	0	0	0	0	0	PC freqs					
X	0	0	0	0	0	0	0	0	PC freqs					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase					
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC					
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp					
X	1000	1000	1000	1000	1000	1000	1000	1000						
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids					
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks					
									Tracks					
Group delay (usec) (SBD)	-1.12767842600E+02								Apriori delay (usec)	-1.12732825493E+02	Resid mbdelay (usec)	-3.76711E-03	+/-	1.4E-04
Sband delay (usec)	-1.12760183243E+02								Apriori clock (usec)	-1.2097083E+02	Resid sbdelay (usec)	-2.73577E-02	+/-	1.1E-03
Phase delay (usec)	-1.12732826444E+02								Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-9.51149E-07	+/-	4.6E-07
Delay rate (us/s)	-5.00542837876E-01								Apriori rate (us/s)	-5.00543634025E-01	Resid rate (us/s)	7.96149E-07	+/-	5.3E-09
Total phase (deg)			-241.2						Apriori accel (us/s/s)	-2.73589246380E-05	Resid phase (deg)	-29.5	+/-	14.3

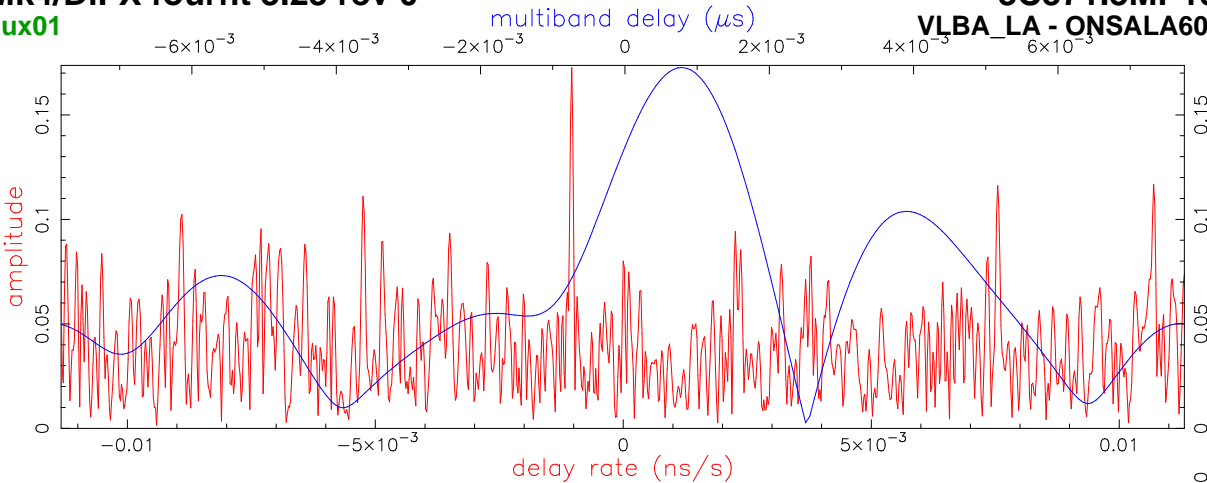
ph/seg (deg) 54.4 34.3 Amplitude 0.240 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.9 59.9 Search (1024X32) 0.237 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.0 20.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 39.0 35.3 Inc. seg. avg. 0.265 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.251 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 I: az 334.9 el 37.8 pa 88.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8231.880 -6732.779 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/IX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/IX.W.438.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

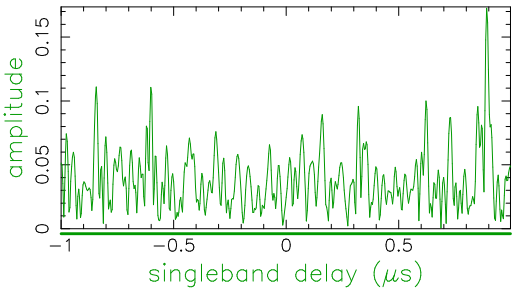
3C371.3MP15Q, No0901, IX

VLBA\_LA - ONSALA60, fgroup W, pol LR

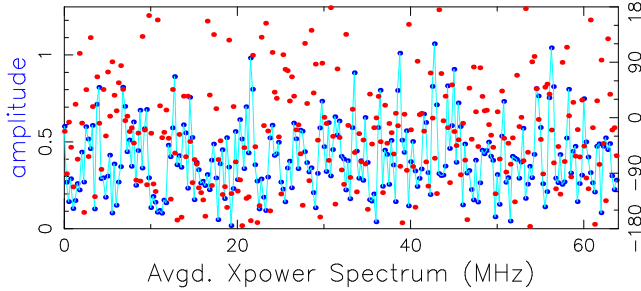


Fringe quality 0

SNR 5.8  
 Int time 149.838  
 Amp 0.174  
 Phase 146.5  
 PFD 5.8e-01  
 Delays (us)  
 SBD 0.891285  
 MBD 0.000823  
 Fringe rate (Hz)  
 -0.089201  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

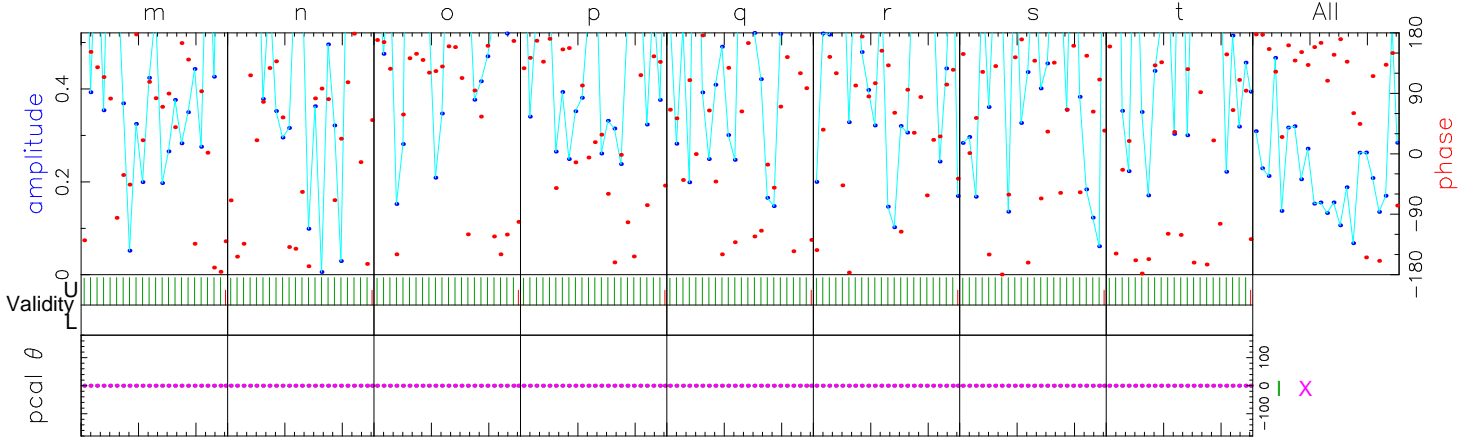


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105724  
 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
	147.8	152.5	160.4	145.9	113.0	94.9	139.8	177.7	Phase	146.5
	0.2	0.1	0.4	0.1	0.1	0.2	0.2	0.2	Ampl.	0.2
	475.2	245.7	485.5	186.2	507.7	191.2	5.5	472.0	Sbd box	485.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.11841377622E+02	Apriori delay (usec)	-1.12732825493E+02	Resid mbdelay (usec)	8.22871E-04	+/-	1.9E-04
Sband delay (usec)	-1.11841540743E+02	Apriori clock (usec)	-1.2097083E+02	Resid sbdelay (usec)	8.91285E-01	+/-	1.5E-03
Phase delay (usec)	-1.12732820769E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	4.72455E-06	+/-	6.4E-07
Delay rate (us/s)	-5.00544669565E-01	Apriori rate (us/s)	-5.00543634025E-01	Resid rate (us/s)	-1.03554E-06	+/-	7.4E-09
Total phase (deg)	-65.2	Apriori accel (us/s/s)	-2.73589246380E-05	Resid phase (deg)	146.5	+/-	19.8

ph/seg (deg) 49.8 47.4 Search (1024X32) 0.170 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 71.0 82.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.0 28.0 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 61.1 48.8 Inc. frq. avg. 0.171 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 I: az 334.9 el 37.8 pa 88.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8231.880 -6732.779 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/IX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/IX.W.447.3MP15Q

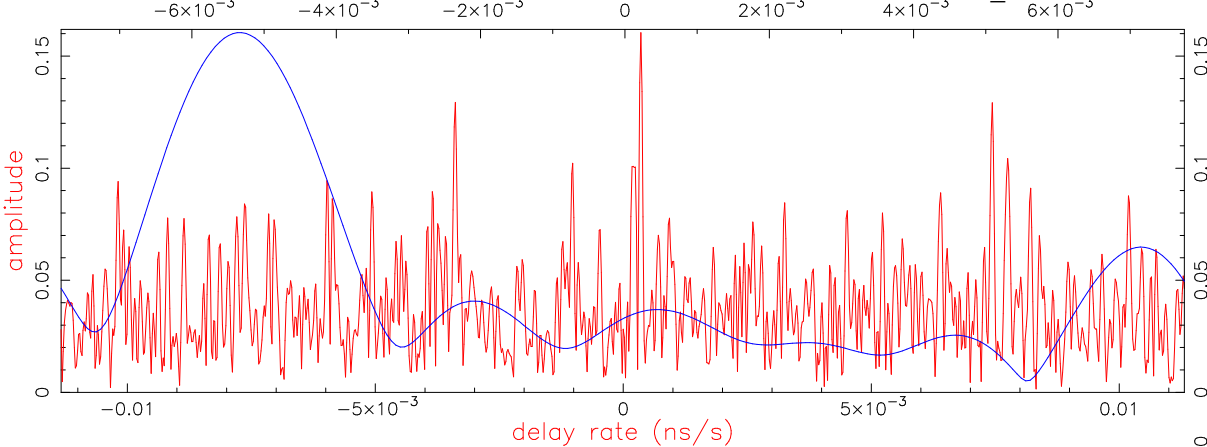
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, IX

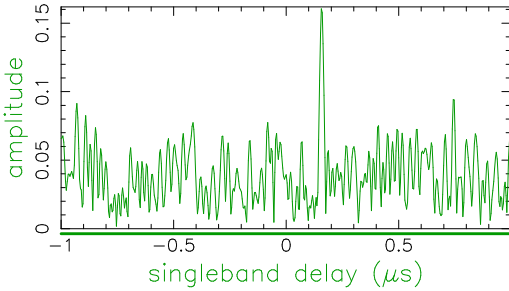
VLBA\_LA - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

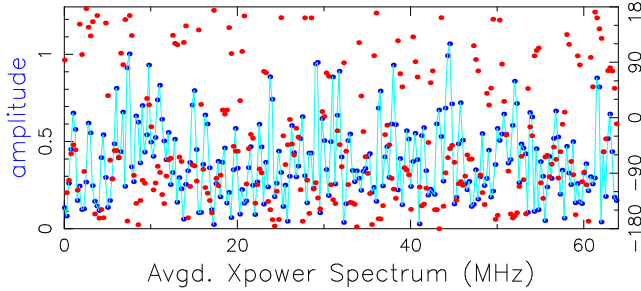


Fringe quality 0

SNR 5.4  
 Int time 149.838  
 Amp 0.162  
 Phase -34.5  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.157651  
 MBD -0.005346  
 Fringe rate (Hz)  
 0.030774  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

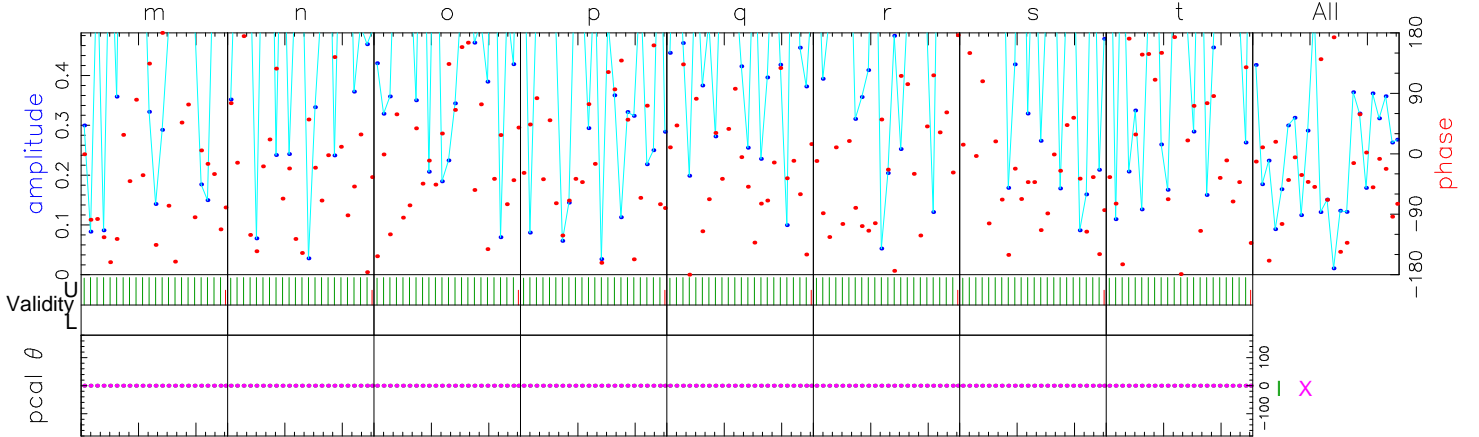


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105726  
 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
	-42.8	-44.1	-42.0	-17.5	-4.0	-39.7	-36.8	-121.7	Phase	-34.5
	0.1	0.2	0.2	0.2	0.2	0.3	0.3	0.0	Ampl.	0.1
	418.2	305.6	79.6	463.2	16.9	101.5	229.5	406.1	Sbd box	297.4
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
I	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.12581921763E+02	Apriori delay (usec)	-1.12732825493E+02	Resid mbdelay (usec)	-5.34627E-03	+/-	2.0E-04
Sband delay (usec)	-1.12575174993E+02	Apriori clock (usec)	-1.2097083E+02	Resid sbdelay (usec)	1.57651E-01	+/-	1.6E-03
Phase delay (usec)	-1.12732826605E+02	Apriori clockrate (us/s)	-1.4506241E-06	Resid phdelay (usec)	-1.11201E-06	+/-	6.8E-07
Delay rate (us/s)	-5.00543276772E-01	Apriori rate (us/s)	-5.00543634025E-01	Resid rate (us/s)	3.57253E-07	+/-	7.9E-09
Total phase (deg)	-246.2	Apriori accel (us/s/s)	-2.73589246380E-05	Resid phase (deg)	-34.5	+/-	21.2

ph/seg (deg)	RMS 72.9	Theor. 50.7	Amplitude Search (1024X32)	0.162 +/- 0.030	0.160	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	72.9	50.7	Interp.	0.000	0.160	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	91.2	88.5	Inc. seg. avg.	0.176	0.160	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.9	29.9	Inc. frq. avg.	0.150	0.160	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
	38.5	52.2				Data rate(Mb/s): 2048	t_cohere infinite			

I: az 334.9 el 37.8 pa 88.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 8231.880 -6732.779 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/IX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/IX.W.453.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

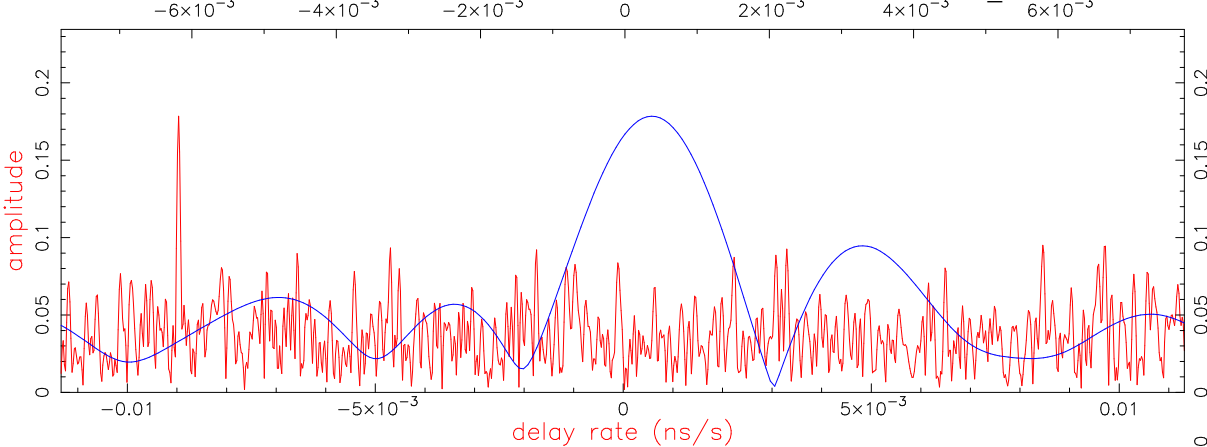
aux01

3C371.3MP15Q, No0901, mX

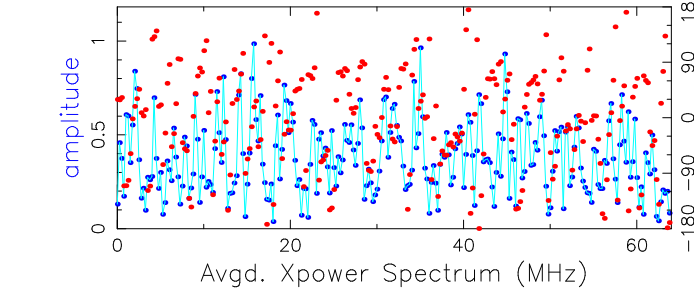
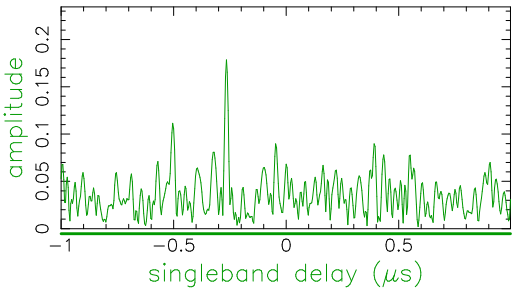
VLBA\_MK - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 0

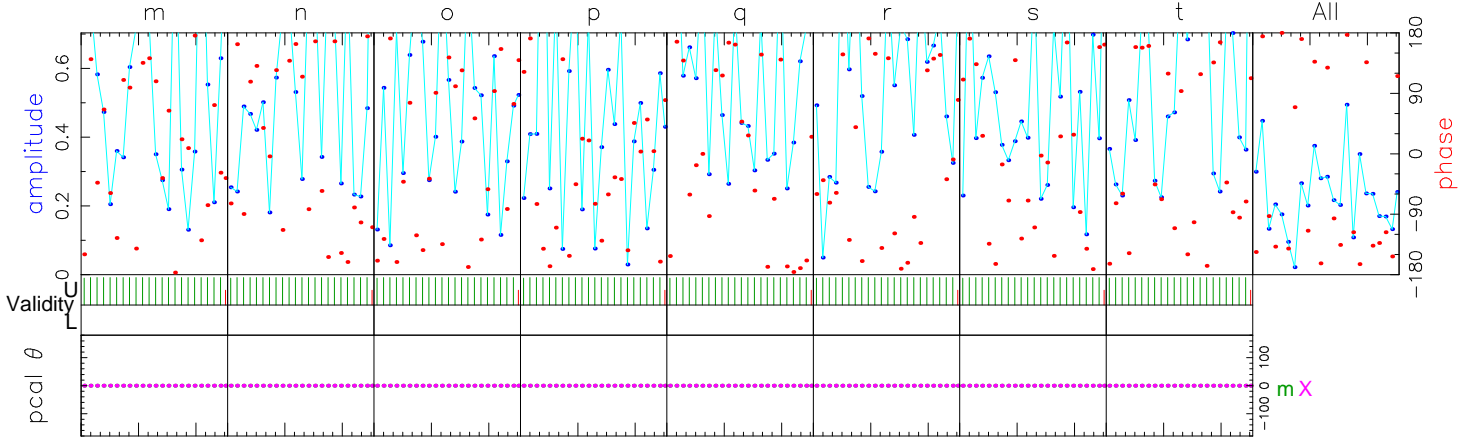


SNR 6.0  
 Int time 149.838  
 Amp 0.235  
 Phase -166.8  
 PFD 2.5e-01  
 Delays (us)  
 SBD -0.265287  
 MBD 0.000392  
 Fringe rate (Hz)  
 -0.773311  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105739  
 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
	-176.1	-164.0	-175.6	-81.8	163.8	-176.9	-159.8	-169.5	Phase	-166.8
	0.2	0.3	0.2	0.2	0.3	0.3	0.3	0.3	Ampl.	0.2
	357.2	332.4	424.2	158.9	398.6	16.8	122.0	446.9	Sbd box	189.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-2.09384487978E+02	Apriori delay (usec)	-2.09119254729E+02	Resid mbdelay (usec)	3.91751E-04	+/-	1.8E-04
Sband delay (usec)	-2.09384541729E+02	Apriori clock (usec)	-1.1212132E+02	Resid sbdelay (usec)	-2.65287E-01	+/-	1.4E-03
Phase delay (usec)	-2.09119260108E+02	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-5.37900E-06	+/-	6.2E-07
Delay rate (us/s)	-3.12985211697E-01	Apriori rate (us/s)	-3.12976234327E-01	Resid rate (us/s)	-8.97737E-06	+/-	7.1E-09
Total phase (deg)	-23.6	Apriori accel (us/s/s)	-5.27848017580E-05	Resid phase (deg)	-166.8	+/-	19.2

ph/seg (deg)	48.9	Theor.	46.0	Search (1024X32)	0.173	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	68.5		80.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	37.5		27.1	Inc. seg. avg.	0.231	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	22.5		47.3	Inc. frq. avg.	0.238	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

m: az 348.4 el 37.3 pa 146.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 5045.862 -12878.987 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//mX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//mX.W.491.3MP15Q

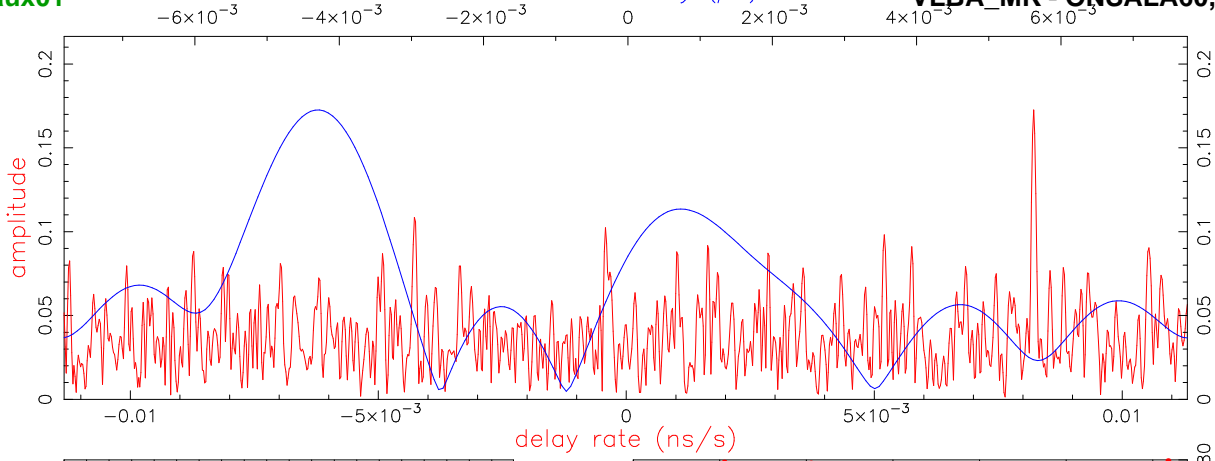
Mk4/DiFX fourfit 3.25 rev 0

aux01

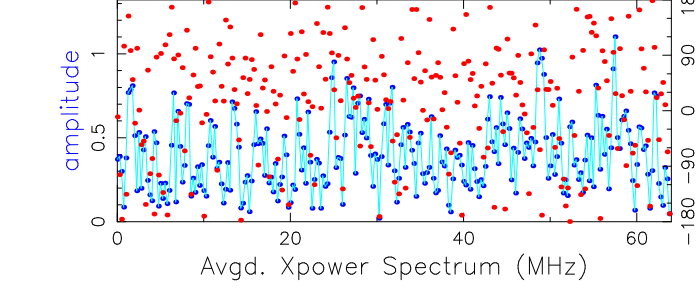
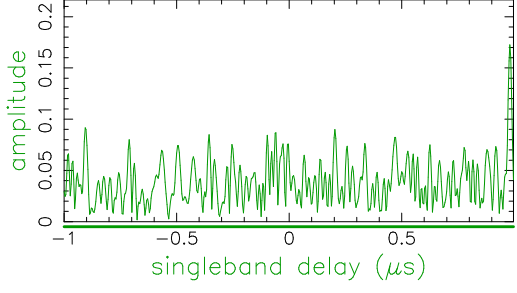
3C371.3MP15Q, No0901, mX

VLBA\_MK - ONSALA60, fgroup W, pol RR

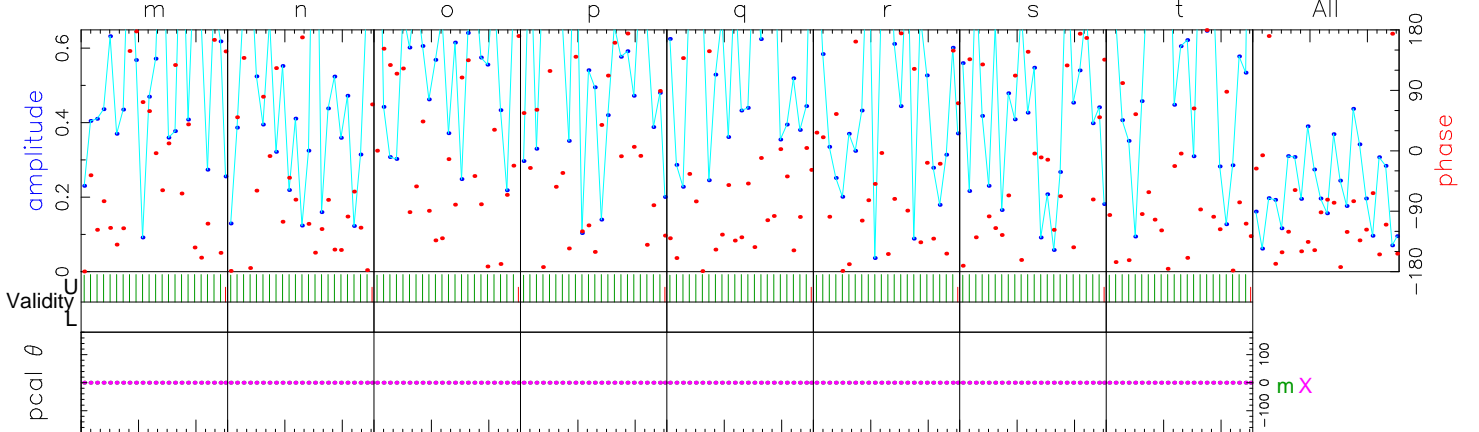
multiband delay ( $\mu$ s)



Fringe quality 0  
 SNR 5.8  
 Int time 149.838  
 Amp 0.216  
 Phase -118.0  
 PFD 6.1e-01  
 Delays (us)  
 SBD 0.980668  
 MBD -0.004290  
 Fringe rate (Hz)  
 0.707929  
 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  
 2025:041:105741  
 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
	-126.6	-139.6	-59.2	-166.4	-101.3	-97.0	-165.6	-117.0	Phase	-118.0
	0.2	0.2	0.1	0.0	0.4	0.2	0.2	0.4	Ampl.	0.2
	83.1	461.0	184.0	511.6	508.0	445.4	491.8	508.1	Sbd box	508.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -2.08139169938E+02 Apriori delay (usec) -2.09119254729E+02 Resid mbdelay (usec) -4.29021E-03 +/- 1.9E-04  
 Sband delay (usec) -2.08138586229E+02 Apriori clock (usec) -1.1212132E+02 Resid sbdelay (usec) 9.80668E-01 +/- 1.5E-03  
 Phase delay (usec) -2.09119258535E+02 Apriori clockrate (us/s) -1.2311231E-06 Resid phdelay (usec) -3.80638E-06 +/- 6.4E-07  
 Delay rate (us/s) -3.12968015973E-01 Apriori rate (us/s) -3.12976234327E-01 Resid rate (us/s) 8.21835E-06 +/- 7.4E-09  
 Total phase (deg) -334.9 Apriori accel (us/s/s) -5.27848017580E-05 Resid phase (deg) -118.0 +/- 19.8

ph/seg (deg) 49.1 47.6 Search (1024X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 67.5 83.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.4 28.0 Inc. seg. avg. 0.213 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 59.9 48.9 Inc. frq. avg. 0.216 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

m: az 348.4 el 37.3 pa 146.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 5045.862 -12878.987 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//mX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//mX.W.497.3MP15Q

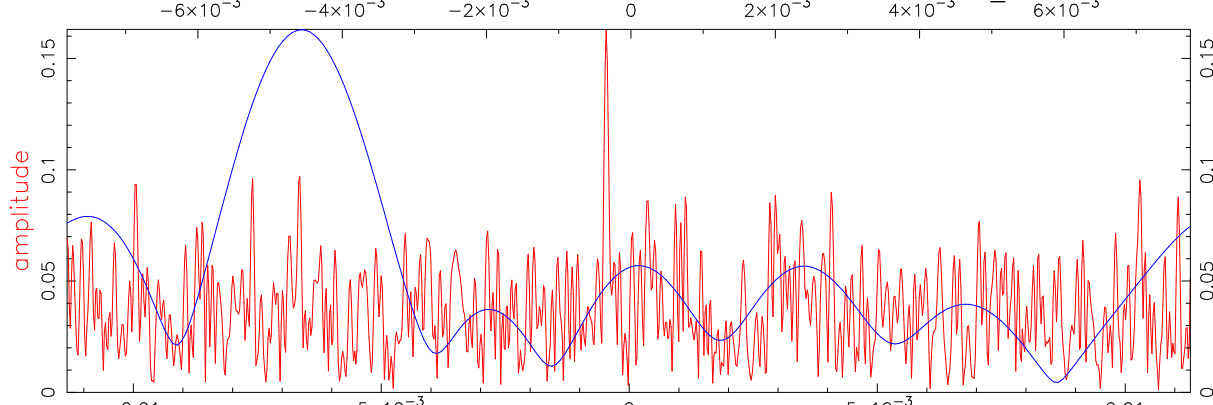
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, mX

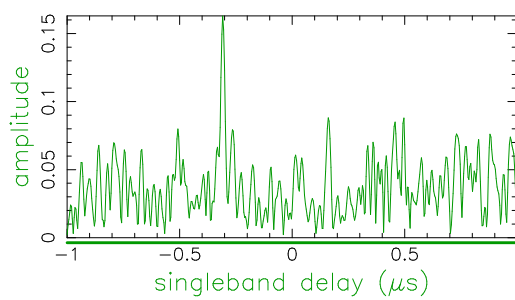
VLBA\_MK - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

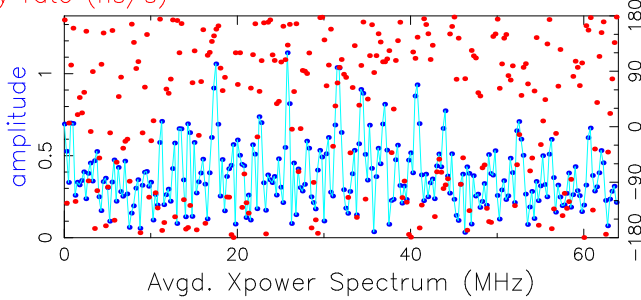


Fringe quality 0

SNR 5.5  
 Int time 149.838  
 Amp 0.163  
 Phase -117.4  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.308336  
 MBD -0.004550  
 Fringe rate (Hz)  
 -0.040030  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

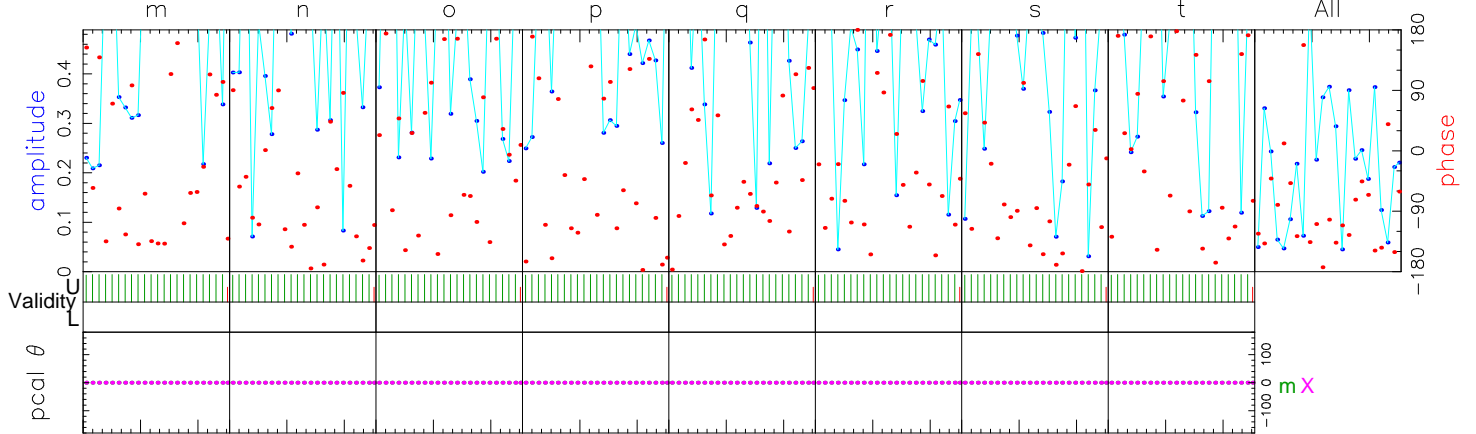


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105743  
 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
	-147.8	-91.2	-128.1	-144.2	-69.1	-99.2	-105.4	-142.6	Phase	-117.4
	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	156.4	118.0	460.1	70.1	159.0	363.7	74.0	20.3	Sbd box	178.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
m	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-2.09420679515E+02	Apriori delay (usec)	-2.09119254729E+02	Resid mbdelay (usec)	-4.54979E-03	+/-	2.0E-04
Sband delay (usec)	-2.09427590229E+02	Apriori clock (usec)	-1.1212132E+02	Resid sbdelay (usec)	-3.08336E-01	+/-	1.6E-03
Phase delay (usec)	-2.09119258514E+02	Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-3.78557E-06	+/-	6.8E-07
Delay rate (us/s)	-3.12976699040E-01	Apriori rate (us/s)	-3.12976234327E-01	Resid rate (us/s)	-4.64713E-07	+/-	7.8E-09
Total phase (deg)	-334.2	Apriori accel (us/s/s)	-5.27848017580E-05	Resid phase (deg)	-117.4	+/-	21.0

ph/seg (deg)	59.4	Theor.	50.4	Amplitude	0.163 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	88.5	Search (1024X32)	0.161	Search	0.161	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	31.3	Inc. seg. avg.	0.157	Inc. seg. avg.	0.157	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.0	Inc. frq. avg.	0.160	Inc. frq. avg.	0.160	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

m: az 348.4 el 37.3 pa 146.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 5045.862 -12878.987 simultaneous interpolator

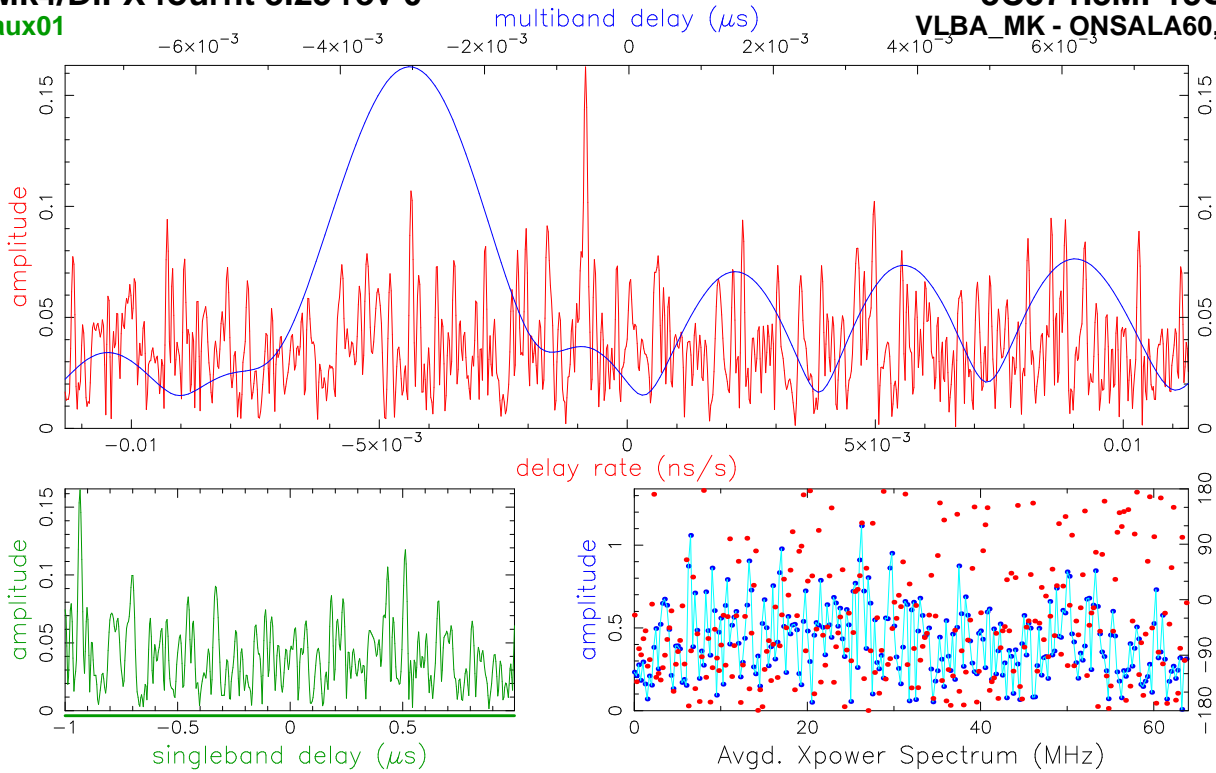
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//mX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//mX.W.502.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, mX

VLBA\_MK - ONSALA60, fgroup W, pol RL

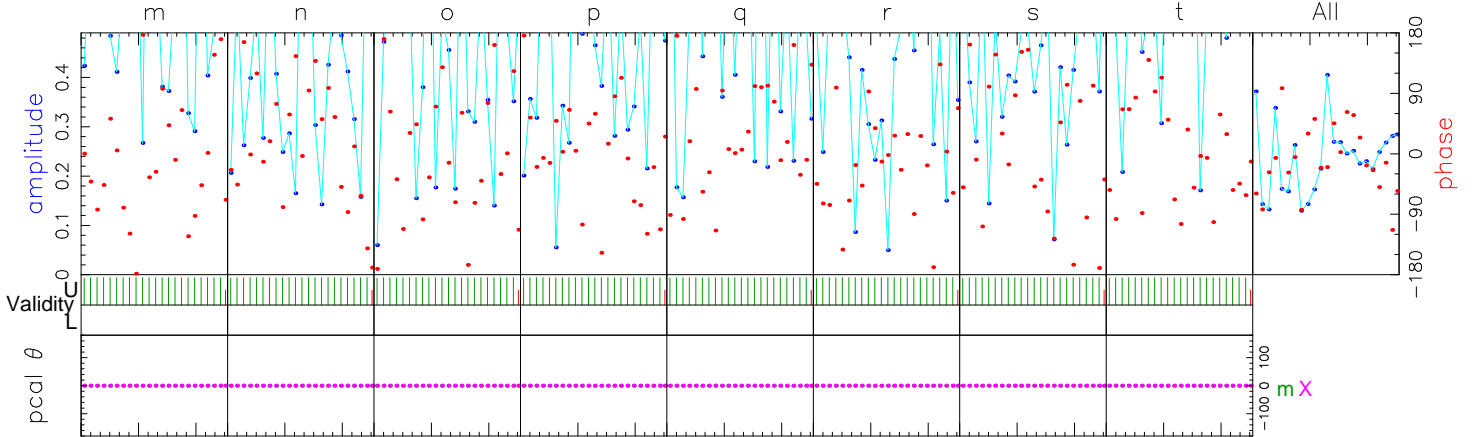


Fringe quality 0

SNR 5.5  
 Int time 149.838  
 Amp 0.164  
 Phase -10.7  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.934177  
 MBD -0.003063  
 Fringe rate (Hz)  
 -0.072769  
 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  
 2025:041:105746  
 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					
	-40.4	28.6	-18.3	-3.8	19.7	-18.4	-114.9	-20.0	Phase	-10.7					
	0.2	0.1	0.1	0.2	0.2	0.2	0.0	0.3	Ampl.	0.2					
	119.9	364.9	202.7	99.2	368.2	257.0	382.2	315.3	Sbd box	17.9					
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used						
m	0	0	0	0	0	0	0	0	PC freqs						
X	0	0	0	0	0	0	0	0	PC freqs						
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase						
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC						
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp						
X	1000	1000	1000	1000	1000	1000	1000	1000							
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids						
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks						
									Tracks						
Group delay (usec) (SBD)	-2.10059817307E+02								Apriori delay (usec)	-2.09119254729E+02	Resid mbdelay (usec)	-3.06258E-03	+/-	2.0E-04	
Sband delay (usec)	-2.10053431479E+02								Apriori clock (usec)	-1.1212132E+02	Resid sbdelay (usec)	-9.34177E-01	+/-	1.6E-03	
Phase delay (usec)	-2.09119255074E+02								Apriori clockrate (us/s)	-1.2311231E-06	Resid phdelay (usec)	-3.45159E-07	+/-	6.8E-07	
Delay rate (us/s)	-3.12977079108E-01								Apriori rate (us/s)	-3.12976234327E-01	Resid rate (us/s)	-8.44781E-07	+/-	7.8E-09	
Total phase (deg)			-227.5						Apriori accel (us/s/s)	-5.27848017580E-05	Resid phase (deg)	-10.7	+/-	21.0	
	RMS	Theor.	Amplitude	0.164 +/- 0.030					Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5			
ph/seg (deg)	51.1	50.3	Search (1024X32)	0.161					Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	62.7	87.8	Interp.	0.000					Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	49.1	29.7	Inc. seg. avg.	0.171					Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	47.0	51.8	Inc. frq. avg.	0.157					Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
m: az 348.4 el 37.3 pa 146.6			X: az 6.5 el 37.7 pa -10.4						u,v (fr/asec) 5045.862 -12878.987					simultaneous interpolator	
Control file: cf_1234_gmva			Input file: /Exps/c241a/v2/3mm/1234/No0901//mX...3MP15Q						Output file: /Exps/c241a/v2/3mm/1234/No0901//mX.W.510.3MP15Q						



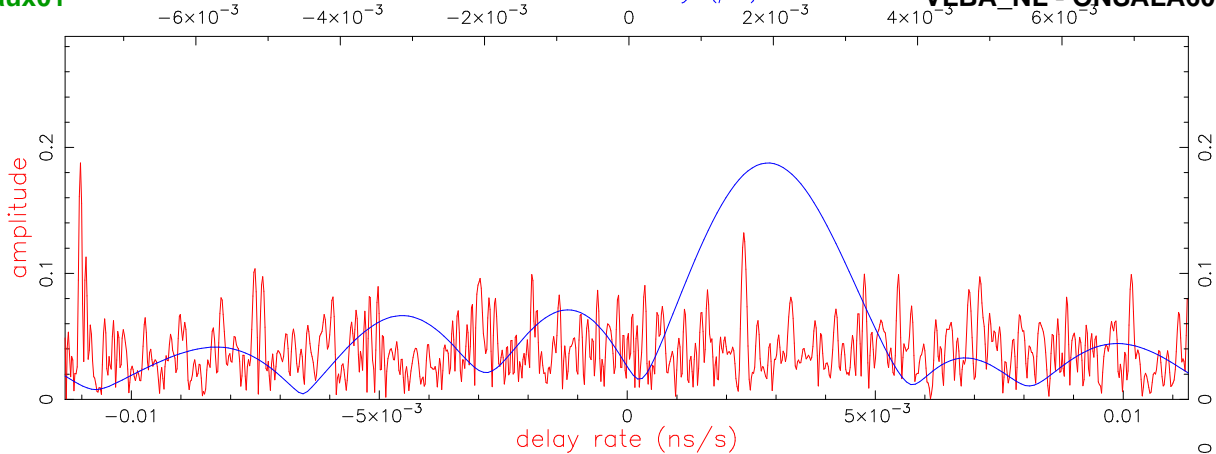
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, nX

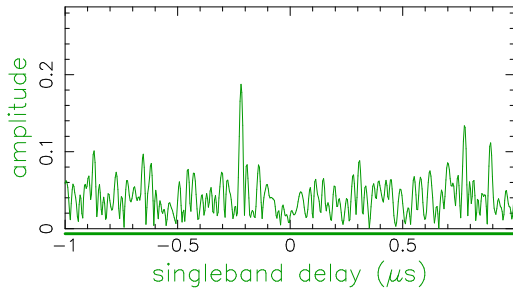
VLBA\_NL - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

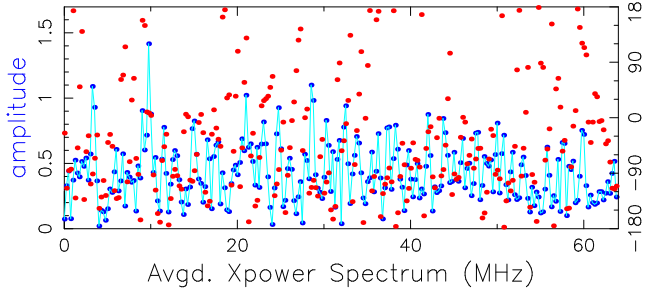


Fringe quality 0

SNR 6.3  
Int time 149.808  
Amp 0.288  
Phase -90.3  
PFD 4.0e-02  
Delays (us)  
SBD -0.218018  
MBD 0.001939  
Fringe rate (Hz)  
-0.950842  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

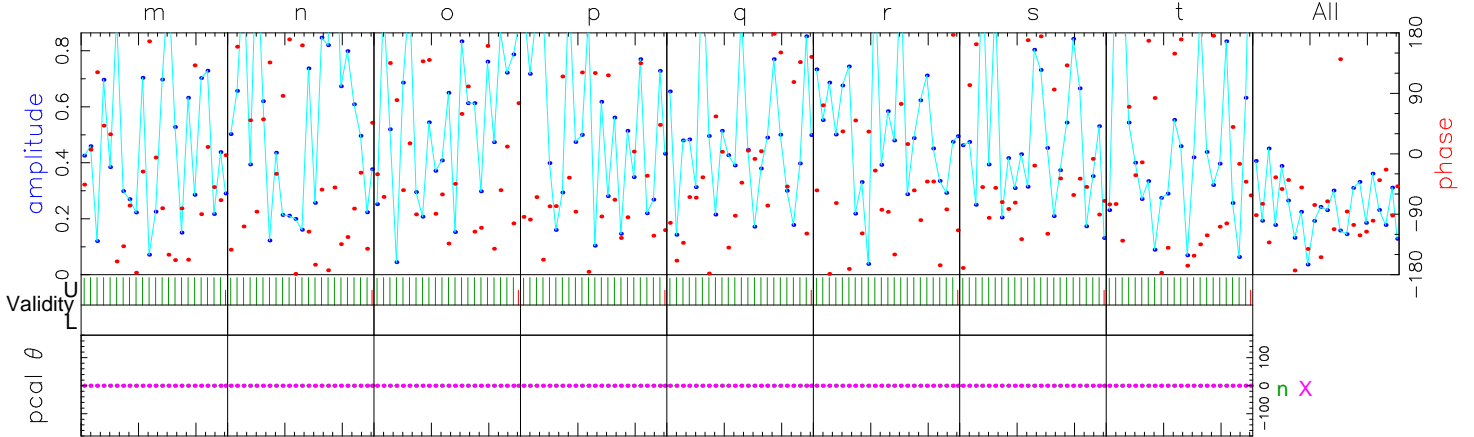


delay rate (ns/s)



Exp. c241a  
Exper # 1234  
Yr:day 2024:109  
Start 163000.00  
Stop 163230.02  
FRT 163115.00  
Corr/FF/build  
2025:007:141222  
2025:041:105755  
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
	-86.3	-102.3	-68.0	-99.7	-85.5	-68.3	-74.5	-114.2	Phase	-90.3
	0.2	0.4	0.2	0.3	0.3	0.2	0.3	0.4	Ampl.	0.3
	455.9	201.3	69.9	35.2	90.3	80.8	215.8	90.2	Sbd box	201.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.58321410580E+01	Apriori delay (usec)	1.60489520660E+01	Resid mbdelay (usec)	1.93899E-03	+/-	1.7E-04
Sband delay (usec)	1.58309343160E+01	Apriori clock (usec)	-1.1294357E+02	Resid sbdelay (usec)	-2.18018E-01	+/-	1.4E-03
Phase delay (usec)	1.60489491526E+01	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-2.91340E-06	+/-	5.9E-07
Delay rate (us/s)	-4.76094260703E-01	Apriori rate (us/s)	-4.76083222375E-01	Resid rate (us/s)	-1.10383E-05	+/-	6.8E-09
Total phase (deg)	172.8	Apriori accel (us/s/s)	-1.93816654084E-05	Resid phase (deg)	-90.3	+/-	18.2

ph/seg (deg)	48.0	Theor.	43.6	Amplitude	0.288 +/- 0.046	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	60.7	Search (1024X32)	0.178	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	18.6	Inc. seg. avg.	0.291	Inc. seg. avg.	0.291	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	26.2	Inc. frq. avg.	0.271	Inc. frq. avg.	0.271	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

n: az 334.0 el 38.2 pa 71.8 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 7848.572 -4774.609 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/nX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/nX.W.528.3MP15Q

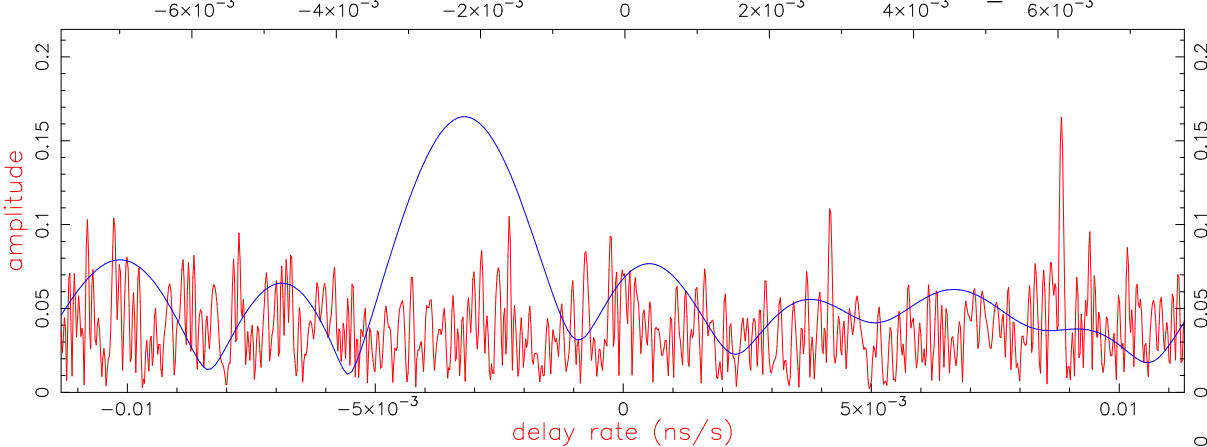
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, nX

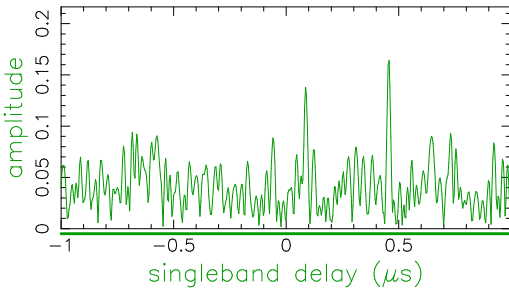
VLBA\_NL - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

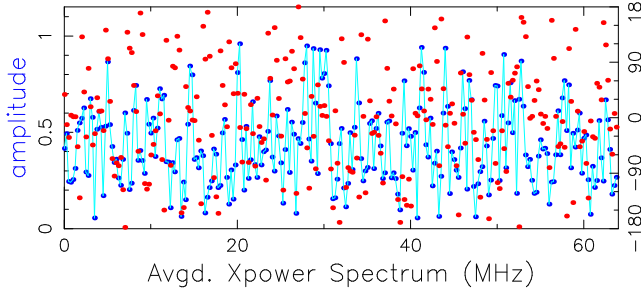


Fringe quality 0

SNR 5.6  
 Int time 149.808  
 Amp 0.216  
 Phase -122.7  
 PFD 9.6e-01  
 Delays (us)  
 SBD 0.455624  
 MBD -0.002283  
 Fringe rate (Hz)  
 0.761768  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

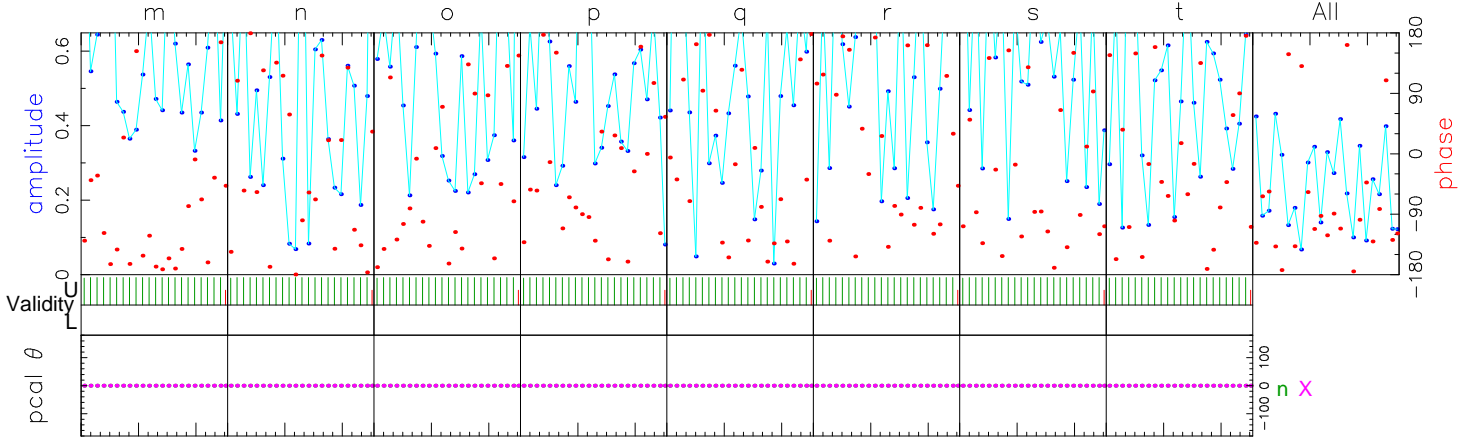


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105803  
 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
	-127.2	-147.7	-130.3	-85.9	-138.8	-138.2	-119.0	-121.2	Phase	-122.7
	0.5	0.1	0.2	0.3	0.1	0.1	0.3	0.2	Ampl.	0.2
	374.9	96.5	83.6	23.8	14.5	279.3	294.1	503.4	Sbd box	373.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.64997939476E+01	Apriori delay (usec)	1.60489520660E+01	Resid mbdelay (usec)	-2.28312E-03	+/-	2.0E-04
Sband delay (usec)	1.65045763160E+01	Apriori clock (usec)	-1.1294357E+02	Resid sbdelay (usec)	4.55624E-01	+/-	1.5E-03
Phase delay (usec)	1.60489481084E+01	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-3.95758E-06	+/-	6.6E-07
Delay rate (us/s)	-4.76074378999E-01	Apriori rate (us/s)	-4.76083222375E-01	Resid rate (us/s)	8.84338E-06	+/-	7.7E-09
Total phase (deg)	140.4	Apriori accel (us/s/s)	-1.93816654084E-05	Resid phase (deg)	-122.7	+/-	20.6

ph/seg (deg)	RMS 56.0	Theor. 49.4	Amplitude Search (1024X32)	0.216 +/- 0.039	0.162	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	83.6	86.2	Interp.	0.000	0.162	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	20.7	29.1	Inc. seg. avg.	0.232	0.162	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	54.5	50.9	Inc. frq. avg.	0.198	0.162	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

n: az 334.0 el 38.2 pa 71.8 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 7848.572 -4774.609 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//nX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//nX.W.539.3MP15Q

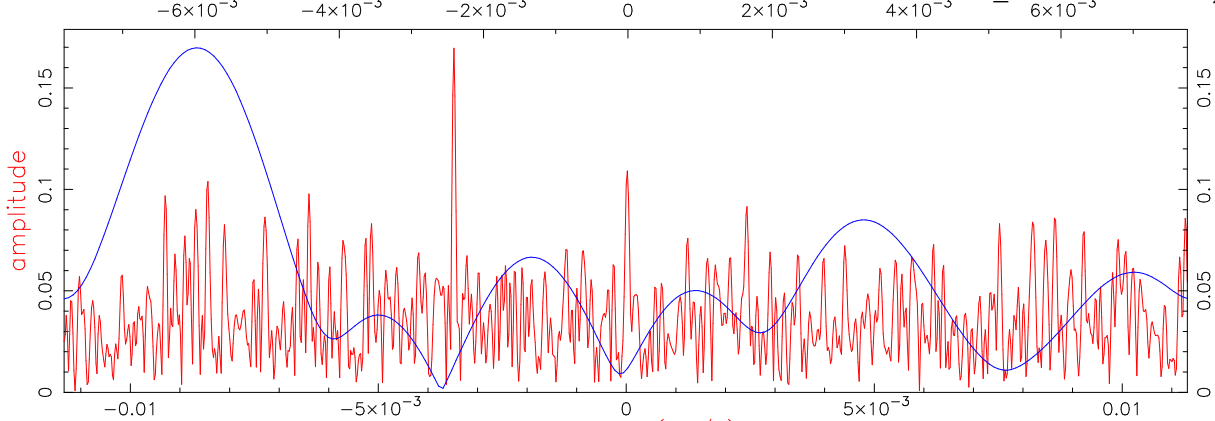
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, nX

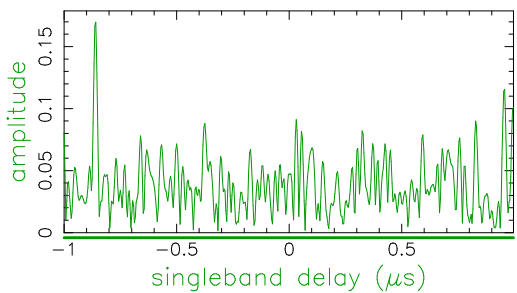
VLBA\_NL - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

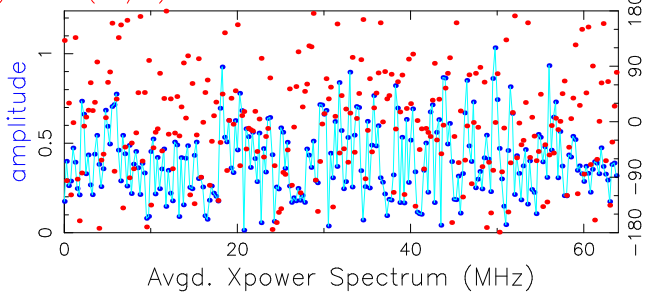


Fringe quality 0

SNR 5.8  
 Int time 149.808  
 Amp 0.179  
 Phase -130.9  
 PFD 6.5e-01  
 Delays (us)  
 SBD -0.860942  
 MBD -0.006023  
 Fringe rate (Hz)  
 -0.299129  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

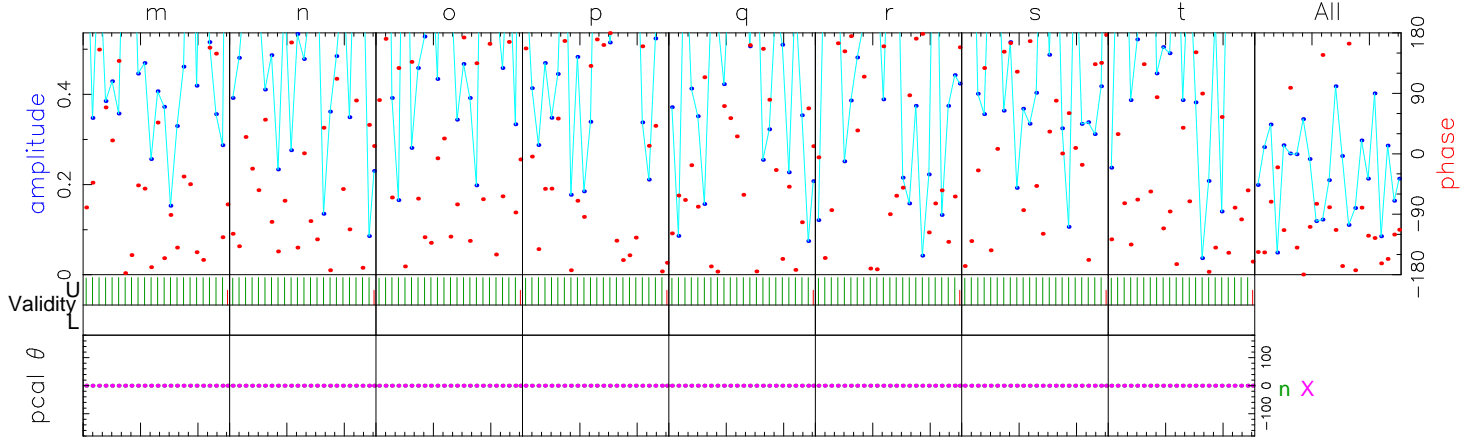


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105806  
 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
	-126.7	-89.3	-137.7	-165.4	-121.2	-131.8	-161.4	-103.5	Phase	-130.9
	0.2	0.1	0.2	0.3	0.1	0.2	0.1	0.3	Ampl.	0.2
	186.2	181.2	3.4	37.2	48.4	161.5	363.7	88.2	Sbd box	36.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.51835537288E+01	Apriori delay (usec)	1.60489520660E+01	Resid mbdelay (usec)	-6.02334E-03	+/-	1.9E-04
Sband delay (usec)	1.51880103160E+01	Apriori clock (usec)	-1.1294357E+02	Resid sbdelay (usec)	-8.60942E-01	+/-	1.5E-03
Phase delay (usec)	1.60489478437E+01	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-4.22221E-06	+/-	6.4E-07
Delay rate (us/s)	-4.76086694962E-01	Apriori rate (us/s)	-4.76083222375E-01	Resid rate (us/s)	-3.47259E-06	+/-	7.4E-09
Total phase (deg)	132.2	Apriori accel (us/s/s)	-1.93816654084E-05	Resid phase (deg)	-130.9	+/-	19.9

ph/seg (deg)	52.3	Theor.	47.7	Amplitude	0.179 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.5	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)	28.2	Inc. seg. avg.	0.180	Inc. frq. avg.	0.172	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	43.6	Inc. frq. avg.	0.172			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

n: az 334.0 el 38.2 pa 71.8 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 7848.572 -4774.609 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//nX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//nX.W.547.3MP15Q

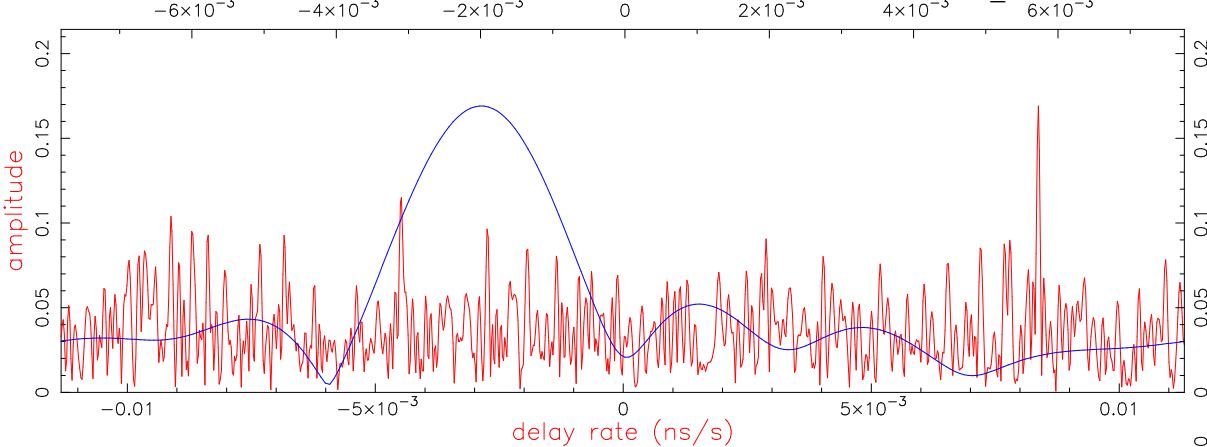
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, nX

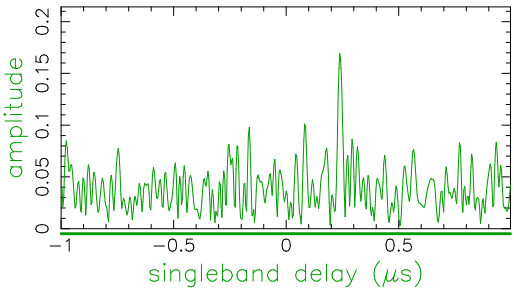
VLBA\_NL - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

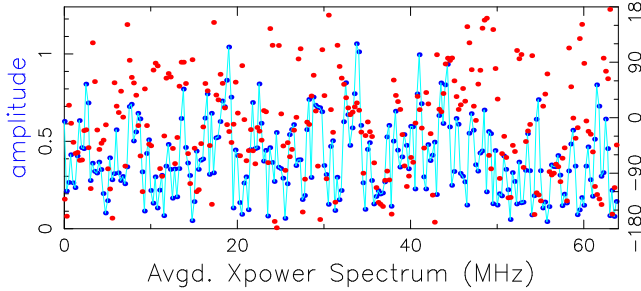


Fringe quality 0

SNR 5.7  
 Int time 149.808  
 Amp 0.214  
 Phase -110.6  
 PFD 8.3e-01  
 Delays (us)  
 SBD 0.238912  
 MBD -0.001992  
 Fringe rate (Hz)  
 0.721121  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

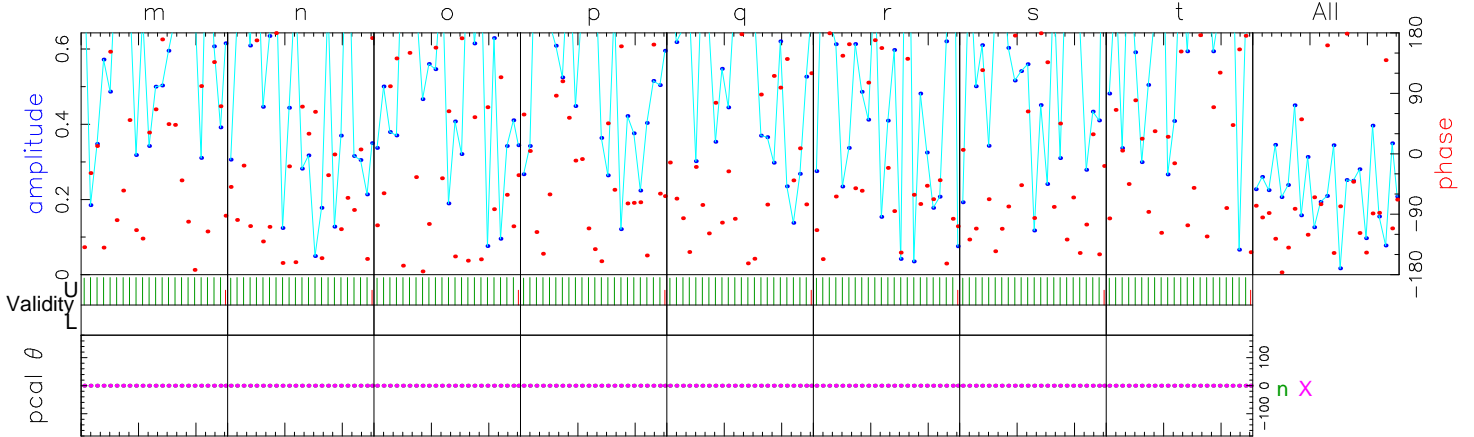


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105807  
 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
	-105.4	-98.5	-140.2	-85.2	-110.6	-130.8	-108.6	-84.7	Phase	-110.6
	0.2	0.3	0.2	0.2	0.2	0.3	0.3	0.1	Ampl.	0.2
	321.8	322.8	197.7	67.8	479.5	453.5	414.6	390.6	Sbd box	318.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
n	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	1.62813353173E+01	Apriori delay (usec)	1.60489520660E+01	Resid mbdelay (usec)	-1.99175E-03	+/-	1.9E-04
Sband delay (usec)	1.62878643160E+01	Apriori clock (usec)	-1.1294357E+02	Resid sbdelay (usec)	2.38912E-01	+/-	1.5E-03
Phase delay (usec)	1.60489484998E+01	Apriori clockrate (us/s)	-9.1936311E-07	Resid phdelay (usec)	-3.56616E-06	+/-	6.5E-07
Delay rate (us/s)	-4.76074850874E-01	Apriori rate (us/s)	-4.76083222375E-01	Resid rate (us/s)	8.37150E-06	+/-	7.5E-09
Total phase (deg)	152.6	Apriori accel (us/s/s)	-1.93816654084E-05	Resid phase (deg)	-110.6	+/-	20.2

ph/seg (deg)	57.0	Theor.	48.5	Amplitude	0.214 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	71.8	Search (1024X32)	0.166	Search	0.166	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	21.5	Inc. seg. avg.	0.218	Inc. seg. avg.	0.218	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	29.3	Inc. frq. avg.	0.200	Inc. frq. avg.	0.200	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

n: az 334.0 el 38.2 pa 71.8 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 7848.572 -4774.609 simultaneous interpolator

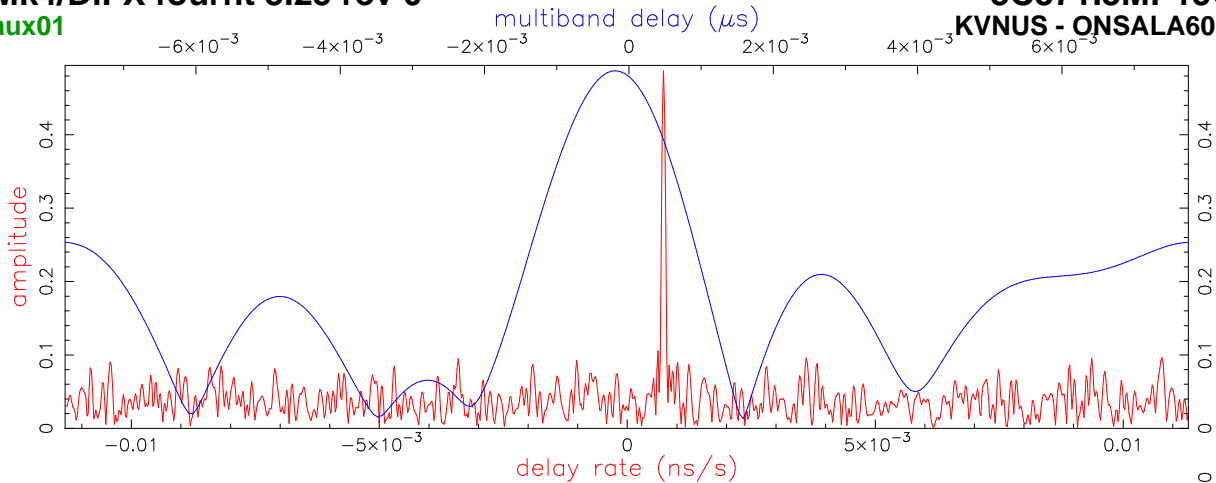
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//nX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//nX.W.551.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

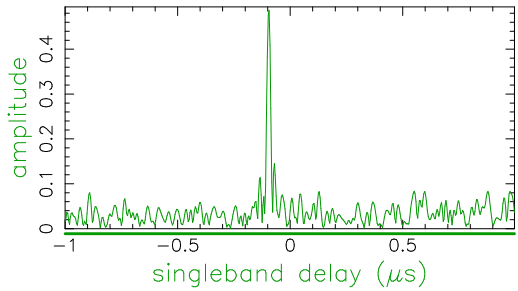
3C371.3MP15Q, No0901, uX

KVNUS - ONSALA60, fgroup W, pol LL

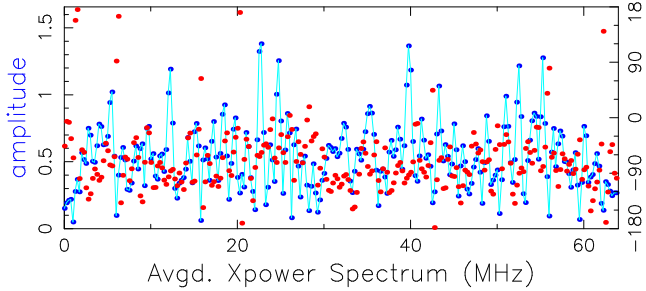


Fringe quality 8

SNR 16.5  
 Int time 149.700  
 Amp 0.494  
 Phase -91.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.095253  
 MBD -0.000225  
 Fringe rate (Hz)  
 0.062586  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

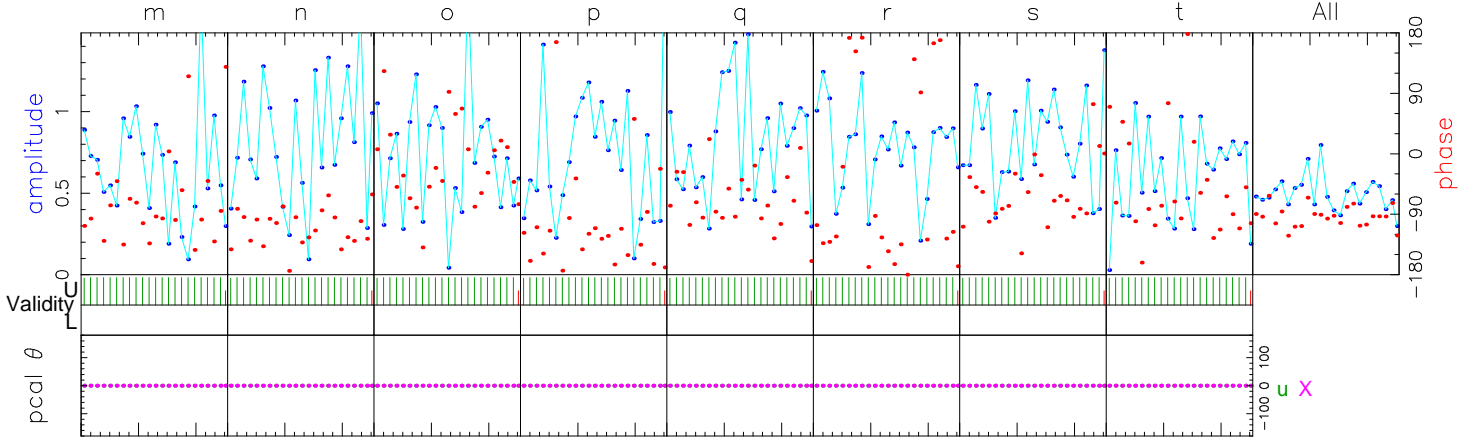


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105652  
 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
	-94.1	-106.6	-25.4	-129.1	-70.8	-153.4	-64.8	-83.6	Phase	-91.8
	0.6	0.7	0.5	0.6	0.7	0.6	0.7	0.4	Ampl.	0.6
	233.6	232.4	231.7	231.8	231.9	231.7	232.3	233.2	Sbd box	232.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
u	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.55876586948E+03 Apriori delay (usec) 2.55885984437E+03 Resid mbdelay (usec) -2.24885E-04 +/- 6.6E-05  
 Sband delay (usec) 2.55876459137E+03 Apriori clock (usec) -1.1132524E+02 Resid sbdelay (usec) -9.52530E-02 +/- 5.2E-04  
 Phase delay (usec) 2.55885984141E+03 Apriori clockrate (us/s) -1.0538621E-02 Resid phdelay (usec) -2.96164E-06 +/- 2.2E-07  
 Delay rate (us/s) 2.43937029473E-01 Apriori rate (us/s) 2.43936302908E-01 Resid rate (us/s) 7.26565E-07 +/- 2.6E-09  
 Total phase (deg) 266.0 Apriori accel (us/s/s) -4.18760946244E-05 Resid phase (deg) -91.8 +/- 6.9

RMS Theor. Amplitude 0.494 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 14.9 16.6 Search (1024X32) 0.470 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 20.6 29.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 42.9 9.8 Inc. seg. avg. 0.484 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 28.0 17.1 Inc. frq. avg. 0.591 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

u: az 22.1 el 47.3 pa -118.3 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4165.625 -9699.125 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//uX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//uX.W.363.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

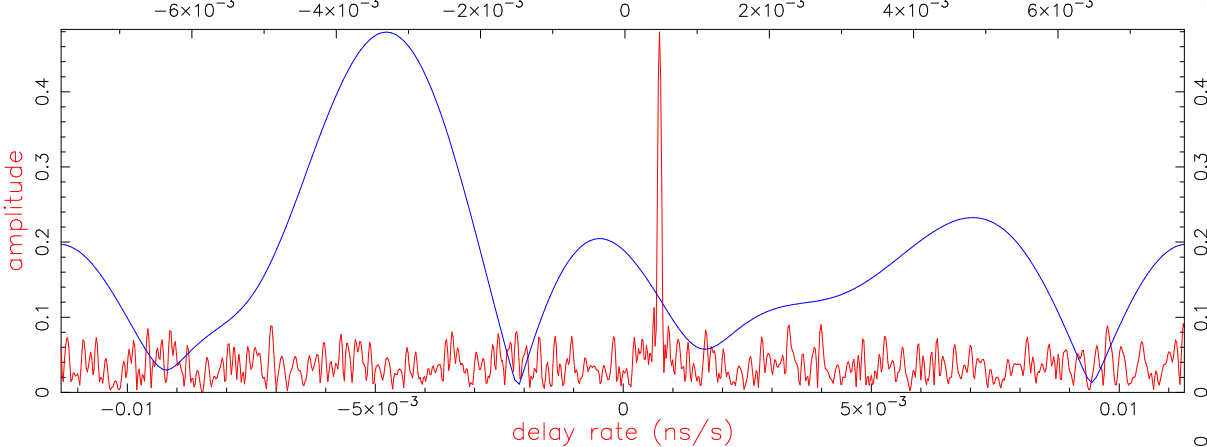
aux01

3C371.3MP15Q, No0901, uX

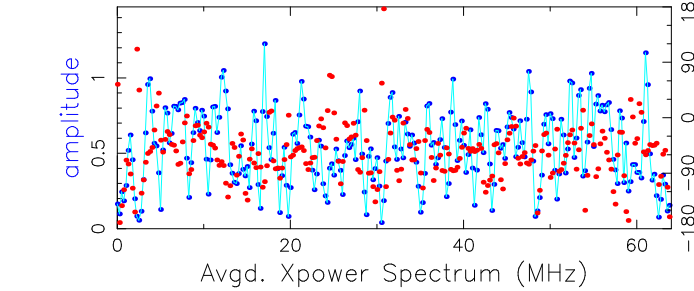
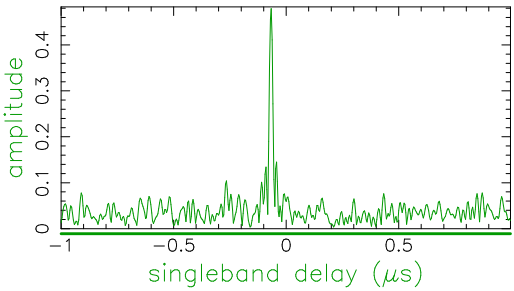
KVNUS - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 8

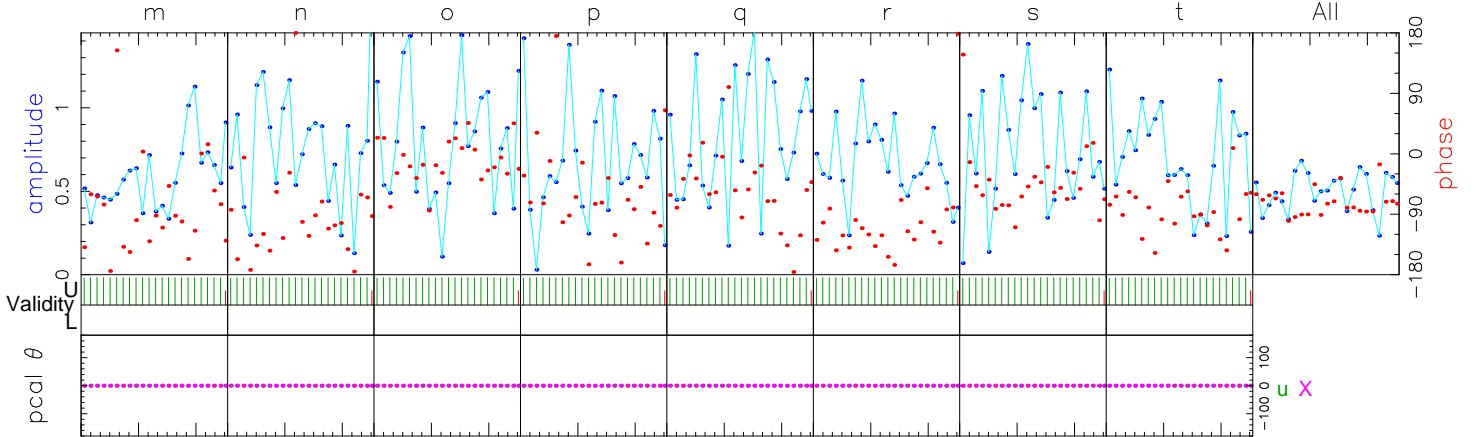


SNR 16.1  
 Int time 149.700  
 Amp 0.483  
 Phase -73.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.067362  
 MBD -0.003329  
 Fringe rate (Hz)  
 0.062602  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105654  
 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
	-102.4	-105.4	-7.8	-81.3	-58.0	-117.5	-50.6	-84.7	Phase	-73.9
	0.4	0.6	0.7	0.5	0.6	0.6	0.6	0.6	Ampl.	0.6
	240.7	239.7	238.9	238.9	238.9	239.2	239.8	240.5	Sbd box	239.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
u	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.55879401495E+03	Apriori delay (usec)	2.55885984437E+03	Resid mbdelay (usec)	-3.32942E-03	+/-	6.7E-05
Sband delay (usec)	2.55879248237E+03	Apriori clock (usec)	-1.1132524E+02	Resid sbdelay (usec)	-6.73620E-02	+/-	5.3E-04
Phase delay (usec)	2.55885984198E+03	Apriori clockrate (us/s)	-1.0538621E-06	Resid phdelay (usec)	-2.38431E-06	+/-	2.3E-07
Delay rate (us/s)	2.43937029653E-01	Apriori rate (us/s)	2.43936302908E-01	Resid rate (us/s)	7.26745E-07	+/-	2.6E-09
Total phase (deg)	283.9	Apriori accel (us/s/s)	-4.18760946244E-05	Resid phase (deg)	-73.9	+/-	7.1

ph/seg (deg)	19.6	Theor.	17.0	Amplitude	0.483 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	24.0	Search (1024X32)	0.474	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	38.8	Inc. seg. avg.	0.482	Inc. seg. avg.	0.482	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	27.8	Inc. frq. avg.	0.572	Inc. frq. avg.	0.572	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
u:	az 22.1 el 47.3 pa -118.3	X:	az 6.5 el 37.7 pa -10.4	u, v (fr/asec)	-4165.625 -9699.125	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//uX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//uX.W.371.3MP15Q

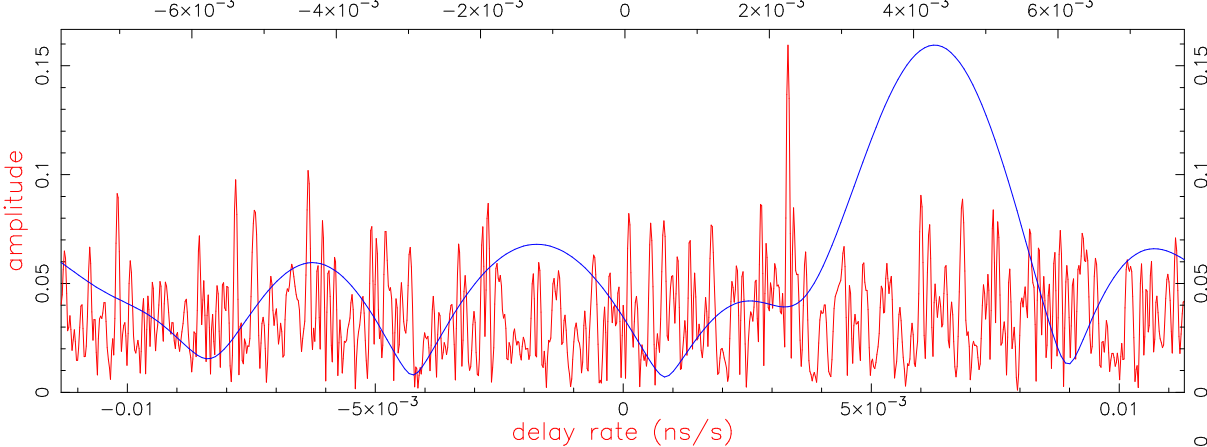
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, uX

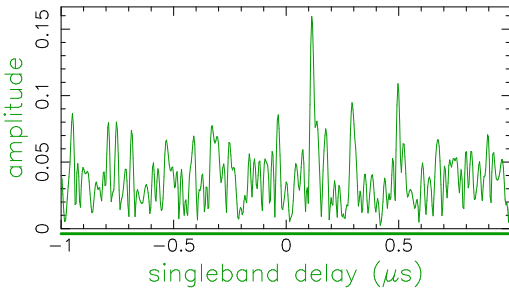
KVNUS - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

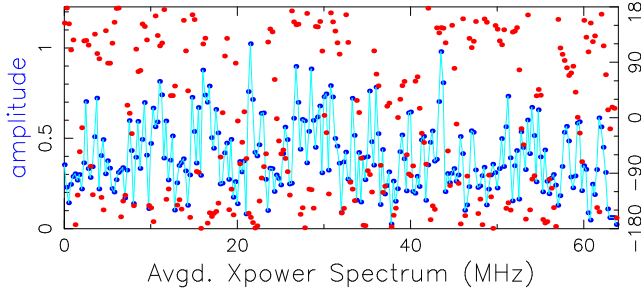


Fringe quality 0

SNR 5.4  
 Int time 149.700  
 Amp 0.167  
 Phase 2.9  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.114520  
 MBD 0.004313  
 Fringe rate (Hz)  
 0.286406  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

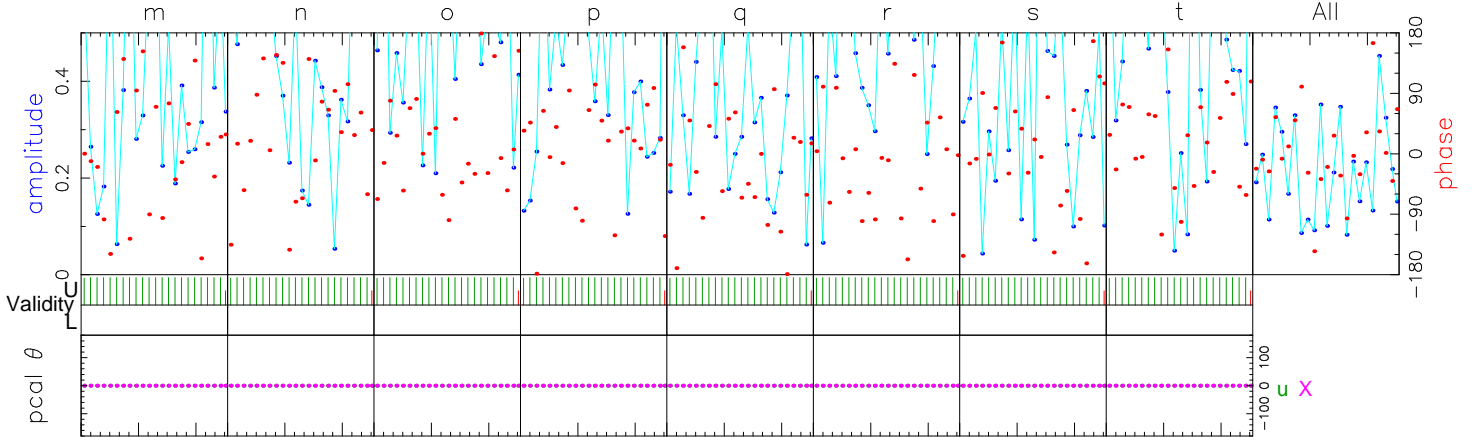


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105658  
 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		
u	0	0	60000	0	0	0	0	0		
X	0	0	0	0	0	0	0	0		
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
u	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD) 2.55897353262E+03 Apriori delay (usec) 2.55885984437E+03 Resid mbdelay (usec) 4.31325E-03 +/- 2.0E-04  
 Sband delay (usec) 2.55897436487E+03 Apriori clock (usec) -1.1132524E+02 Resid sbdelay (usec) 1.14520E-01 +/- 1.6E-03  
 Phase delay (usec) 2.55885984446E+03 Apriori clockrate (us/s) -1.0538621E-06 Resid phdelay (usec) 9.29183E-08 +/- 6.9E-07  
 Delay rate (us/s) 2.43939627793E-01 Apriori rate (us/s) 2.43936302908E-01 Resid rate (us/s) 3.32489E-06 +/- 7.9E-09  
 Total phase (deg) 0.7 Apriori accel (us/s/s) -4.18760946244E-05 Resid phase (deg) 2.9 +/- 21.3

ph/seg (deg) 61.7 51.0 Search (1024X32) 0.158 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.4 89.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.9 30.1 Inc. seg. avg. 0.162 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 45.7 52.5 Inc. frq. avg. 0.160 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

u: az 22.1 el 47.3 pa -118.3 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4165.625 -9699.125 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//uX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//uX.W.379.3MP15Q

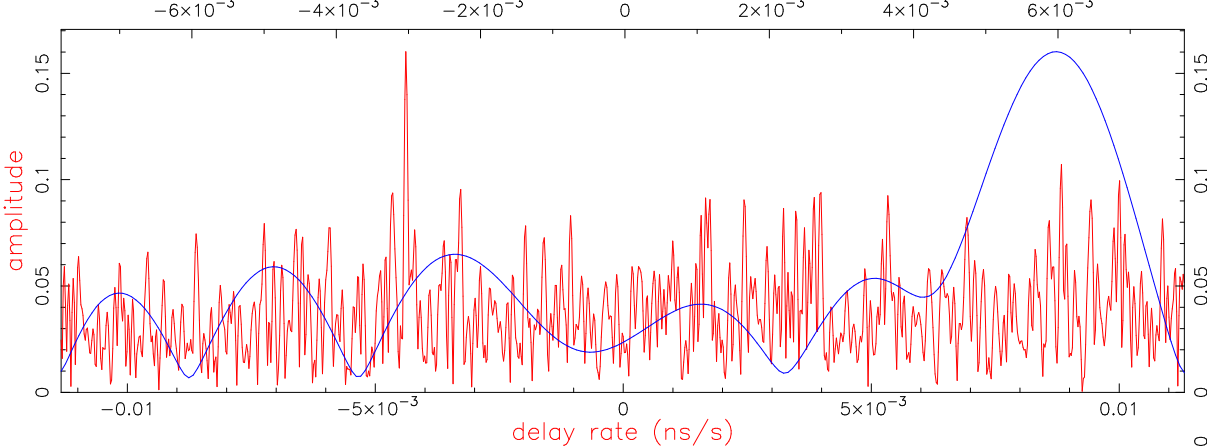
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, uX

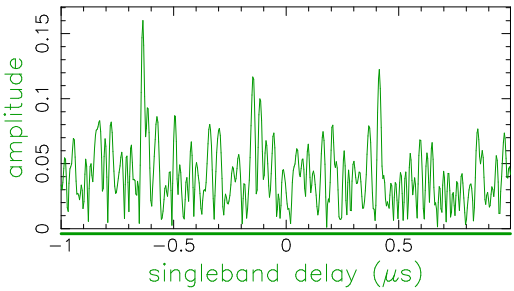
KVNUS - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

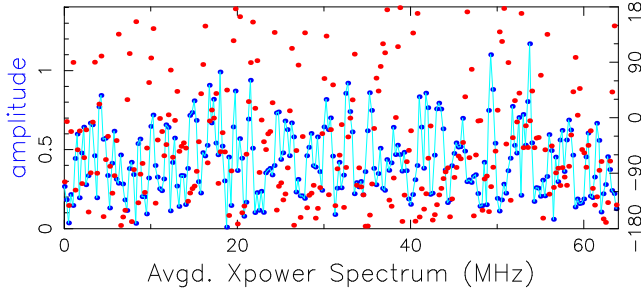


Fringe quality 0

SNR 5.4  
 Int time 149.700  
 Amp 0.171  
 Phase 62.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.637120  
 MBD 0.005974  
 Fringe rate (Hz)  
 -0.377711  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

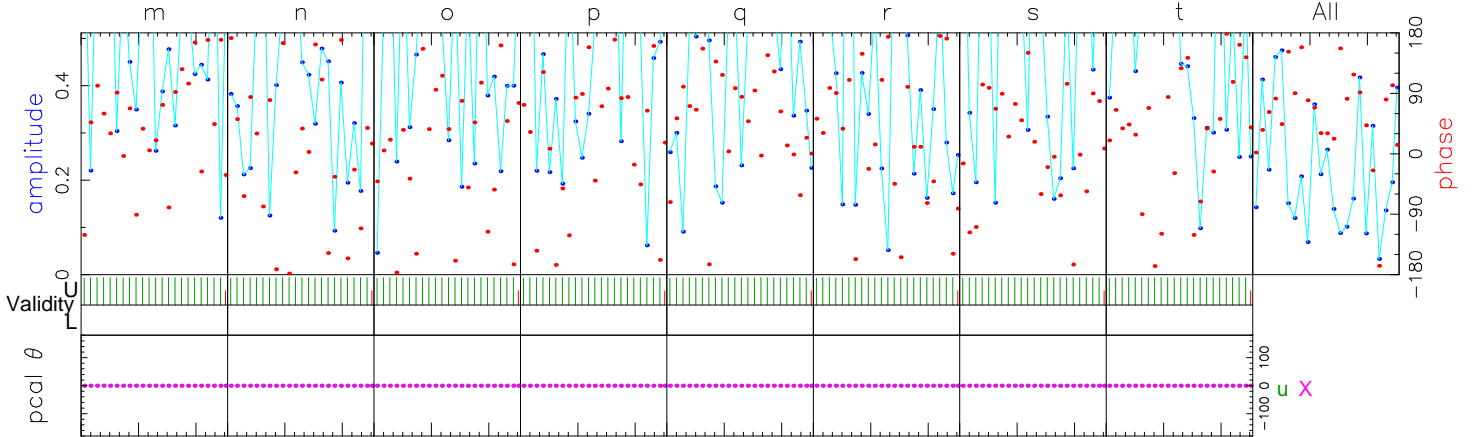


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105659  
 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
	49.9	77.1	70.6	79.9	67.4	81.8	40.5	68.6	Phase	62.1
	0.3	0.0	0.1	0.1	0.2	0.1	0.3	0.2	Ampl.	0.2
	504.3	350.5	80.9	219.0	505.8	249.1	130.8	181.2	Sbd box	93.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
u	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
u:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.55822519374E+03	Apriori delay (usec)	2.55885984437E+03	Resid mbdelay (usec)	5.97437E-03	+/-	2.0E-04
Sband delay (usec)	2.55822272412E+03	Apriori clock (usec)	-1.1132524E+02	Resid sbdelay (usec)	-6.37120E-01	+/-	1.6E-03
Phase delay (usec)	2.55885984637E+03	Apriori clockrate (us/s)	-1.0538621E-06	Resid phdelay (usec)	2.00160E-06	+/-	6.9E-07
Delay rate (us/s)	2.43931918061E-01	Apriori rate (us/s)	2.43936302908E-01	Resid rate (us/s)	-4.38485E-06	+/-	8.0E-09
Total phase (deg)	59.9	Apriori accel (us/s/s)	-4.18760946244E-05	Resid phase (deg)	62.1	+/-	21.4

ph/seg (deg)	RMS 55.2	Theor. 51.2	Amplitude Search (1024X32)	0.171 +/- 0.032	0.159	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	90.5	89.4	Interp.	0.000	0.159	PCal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	16.8	30.2	Inc. seg. avg.	0.168	0.155	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	45.1	52.7	Inc. frq. avg.	0.155	0.155	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00

u: az 22.1 el 47.3 pa -118.3 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4165.625 -9699.125 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//uX...3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//uX.W.385.3MP15Q



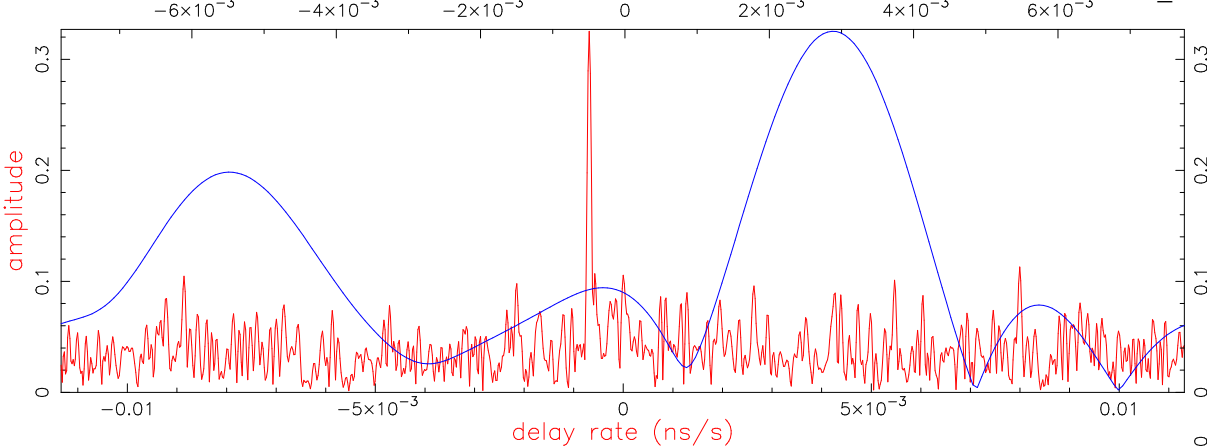
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xo

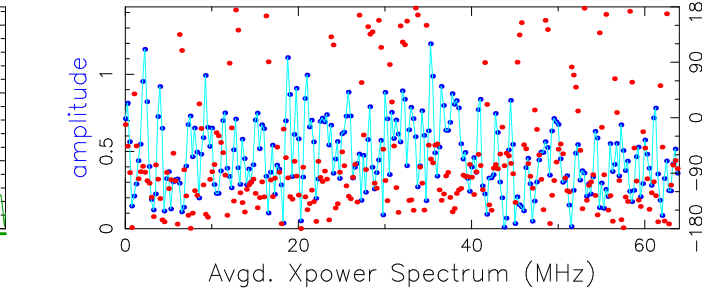
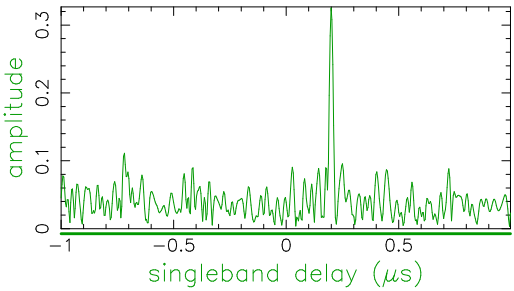
ONSALA60 - VLBA\_OV, fgroup W, pol LL

multiband delay ( $\mu$ s)



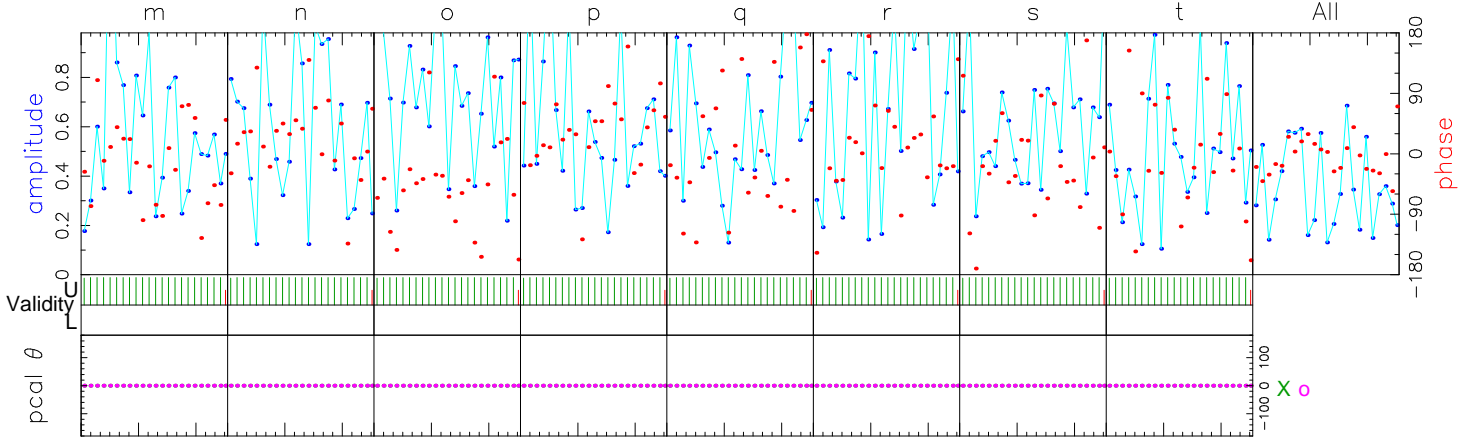
Fringe quality 9

SNR 10.9  
 Int time 149.838  
 Amp 0.327  
 Phase -4.0  
 PFD 2.0e-19  
 Delays (us)  
 SBD 0.200001  
 MBD 0.002902  
 Fringe rate (Hz)  
 -0.059273  
 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  
 2025:041:105804  
 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
	-7.2	24.8	-54.1	31.3	-46.1	7.0	-32.5	15.9		Phase
	0.4	0.5	0.5	0.5	0.3	0.5	0.3	0.2		Ampl.
	307.7	309.1	307.8	308.9	308.8	308.4	493.8	270.5		Sbd box
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0		308.2
X	0	0	0	0	0	0	0	0		APs used
o	0	0	0	0	0	0	0	0		PC freqs
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Manl PC
X	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec) (SBD)	-1.46201533198E+03	Apriori delay (usec)	-1.46222135917E+03	Resid mbdelay (usec)	2.90219E-03	+/-	9.9E-05
Sband delay (usec)	-1.46202135817E+03	Apriori clock (usec)	8.7598068E+01	Resid sbdelay (usec)	2.00001E-01	+/-	7.9E-04
Phase delay (usec)	-1.46222135930E+03	Apriori clockrate (us/s)	7.3535102E-07	Resid phdelay (usec)	-1.28901E-07	+/-	3.4E-07
Delay rate (us/s)	4.63754586199E-01	Apriori rate (us/s)	4.63755274302E-01	Resid rate (us/s)	-6.88103E-07	+/-	3.9E-09
Total phase (deg)	-320.5	Apriori accel (us/s/s)	3.34004126214E-05	Resid phase (deg)	-4.0	+/-	10.5

ph/seg (deg)	RMS 26.3	Theor. 25.1	Amplitude Search (1024X32)	0.327 +/- 0.030	0.324	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	53.3	43.9	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	35.8	14.8	Inc. seg. avg.	0.326	0.326	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.7	25.9	Inc. frq. avg.	0.368	0.368	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 62.5 el 37.7 pa -10.4 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -7605.619 7954.313 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/Xo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/Xo.W.541.3MP15Q

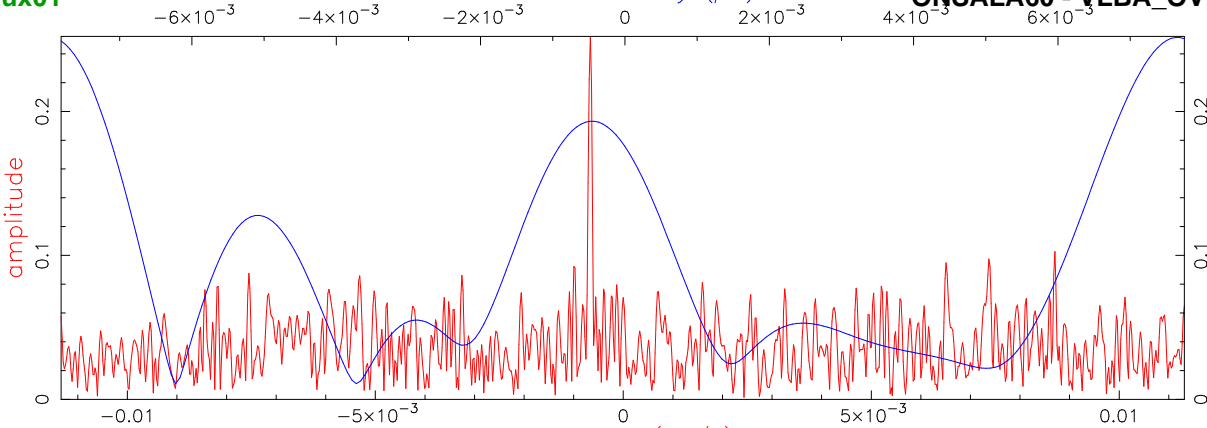
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xo

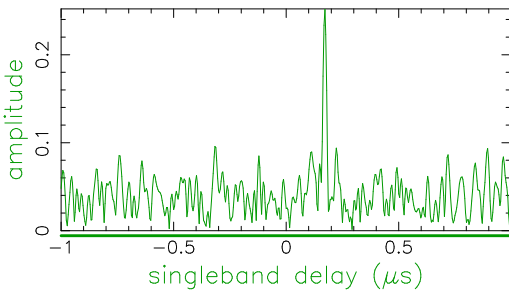
ONSALA60 - VLBA\_OV, fgroup W, pol RR

multiband delay ( $\mu$ s)

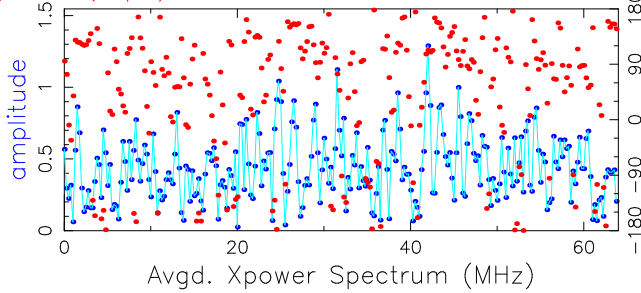


Fringe quality 9

SNR 8.4  
 Int time 149.838  
 Amp 0.252  
 Phase 12.2  
 PFD 6.3e-09  
 Delays (us)  
 SBD 0.171417  
 MBD -0.007980  
 Fringe rate (Hz)  
 -0.058150  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

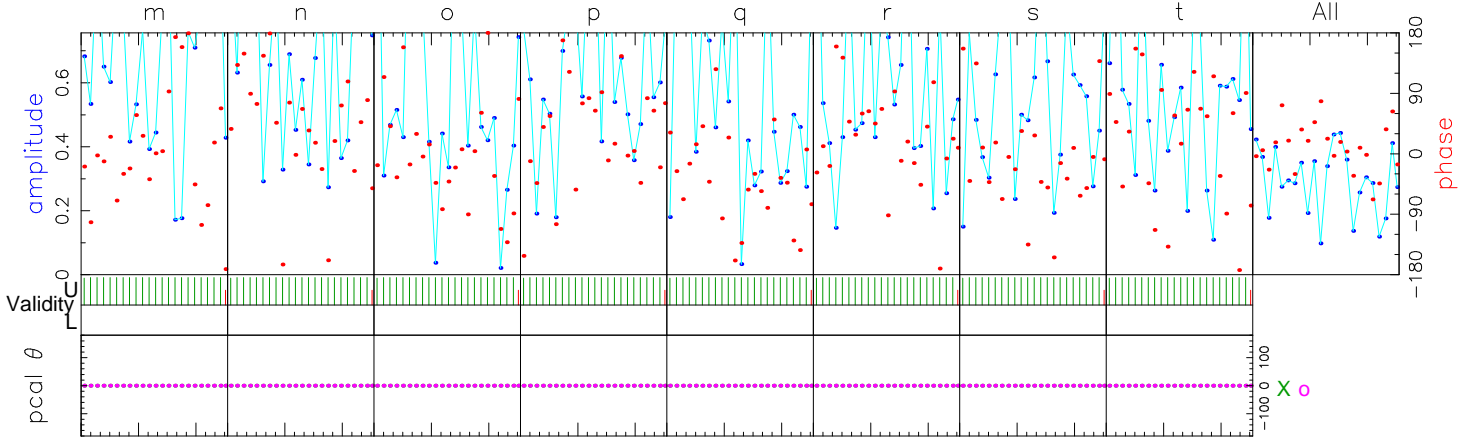


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105808  
 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
	-10.7	60.1	-8.3	49.3	-49.8	26.1	-25.4	72.8	Phase	12.2
	0.3	0.4	0.4	0.3	0.3	0.4	0.4	0.2	Ampl.	0.3
	301.3	301.2	301.3	399.8	302.0	300.8	301.9	302.6	Sbd box	300.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.46205746458E+03	Apriori delay (usec)	-1.46222135917E+03	Resid mbdelay (usec)	-7.98041E-03	+/-	1.3E-04
Sband delay (usec)	-1.46204994192E+03	Apriori clock (usec)	8.7598068E+01	Resid sbdelay (usec)	1.71417E-01	+/-	1.0E-03
Phase delay (usec)	-1.46222135878E+03	Apriori clockrate (us/s)	7.3535102E-07	Resid phdelay (usec)	3.93807E-07	+/-	4.4E-07
Delay rate (us/s)	4.63754599233E-01	Apriori rate (us/s)	4.63755274302E-01	Resid rate (us/s)	-6.75068E-07	+/-	5.1E-09
Total phase (deg)	-304.3	Apriori accel (us/s/s)	3.34004126214E-05	Resid phase (deg)	12.2	+/-	13.6

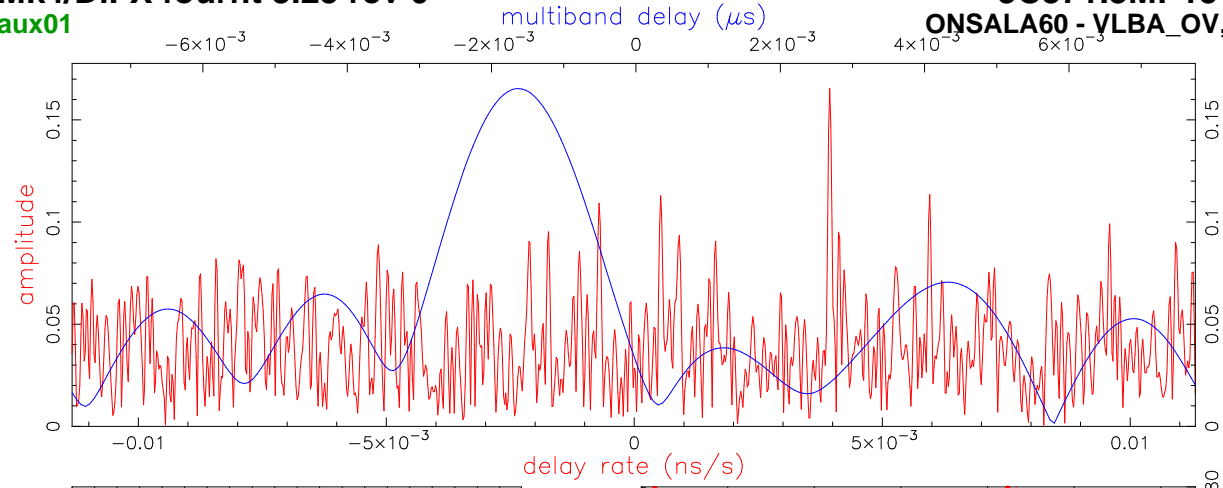
ph/seg (deg) 35.9 32.6 Amplitude 0.252 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 44.1 56.9 Search (1024X32) 0.241 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 47.9 19.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 34.6 33.6 Inc. seg. avg. 0.254 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.309 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 6.5 el 37.7 pa -10.4 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -7605.619 7954.313 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/Xo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/Xo.W.553.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xo

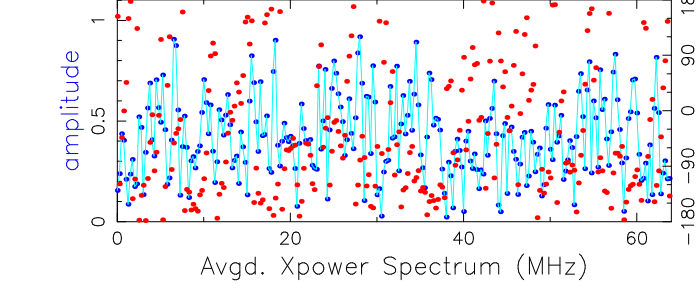
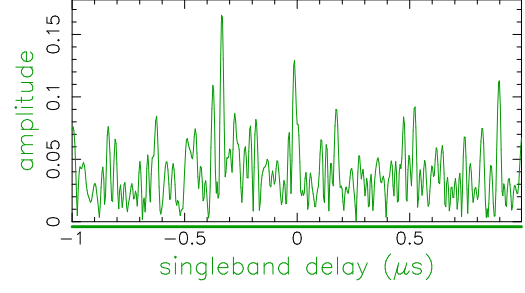
ONSALA60 - VLBA\_OV, fgroup W, pol LR



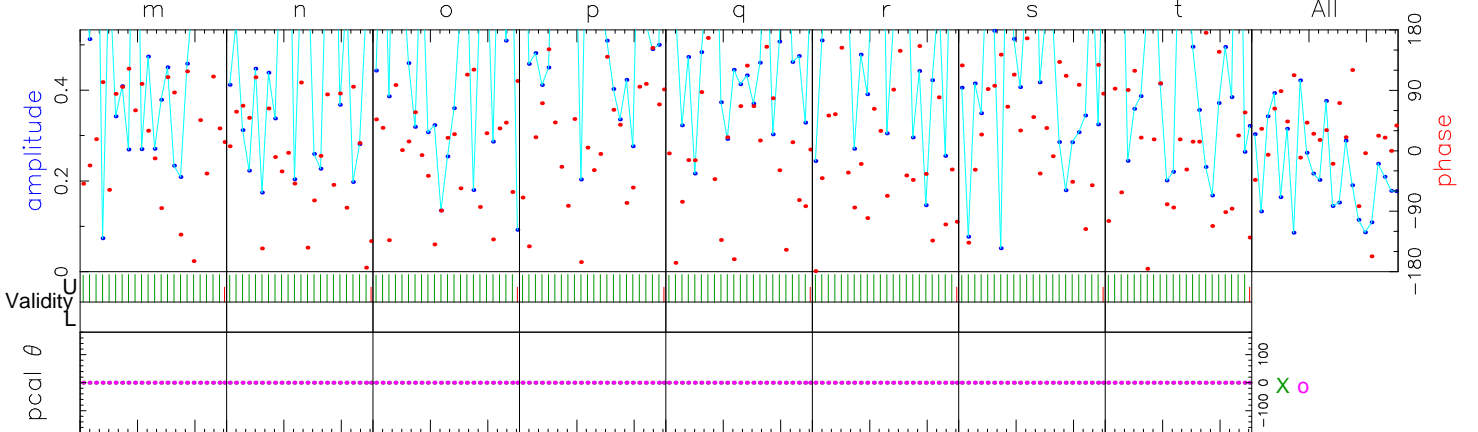
Fringe quality 0

SNR 5.7  
 Int time 149.838  
 Amp 0.178  
 Phase 23.8  
 PFD 8.5e-01  
 Delays (us)  
 SBD -0.334174  
 MBD -0.001609  
 Fringe rate (Hz) 0.340507  
 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  
 2025:041:105809  
 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
	34.7	10.9	18.1	30.0	-26.8	12.3	62.1	-4.1	Phase	23.8
	0.3	0.1	0.3	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	28.6	461.5	253.2	204.8	85.3	197.4	168.4	299.8	Sbd box	171.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -1.46255109318E+03 Apriori delay (usec) -1.46222135917E+03 Resid mbdelay (usec) -1.60900E-03 +/- 1.9E-04  
 Sband delay (usec) -1.46255553292E+03 Apriori clock (usec) 8.7598068E+01 Resid sbdelay (usec) -3.34174E-01 +/- 1.5E-03  
 Phase delay (usec) -1.46222135840E+03 Apriori clockrate (us/s) 7.3535102E-07 Resid phdelay (usec) 7.68651E-07 +/- 6.5E-07  
 Delay rate (us/s) 4.63759227250E-01 Apriori rate (us/s) 4.63755274302E-01 Resid rate (us/s) 3.95295E-06 +/- 7.5E-09  
 Total phase (deg) -292.6 Apriori accel (us/s/s) 3.34004126214E-05 Resid phase (deg) 23.8 +/- 20.3

ph/seg (deg) RMS Theor. Amplitude 0.178 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 66.3 48.6 Search (1024X32) 0.161 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.7 28.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.2 50.0 Inc. seg. avg. 0.172 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 X: az 6.5 el 37.7 pa -10.4 o: az 334.6 el 43.2 pa 98.8 u,v (fr/asec) -7605.619 7954.313 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//Xo..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//Xo.W.558.3MP15Q simultaneous interpolator

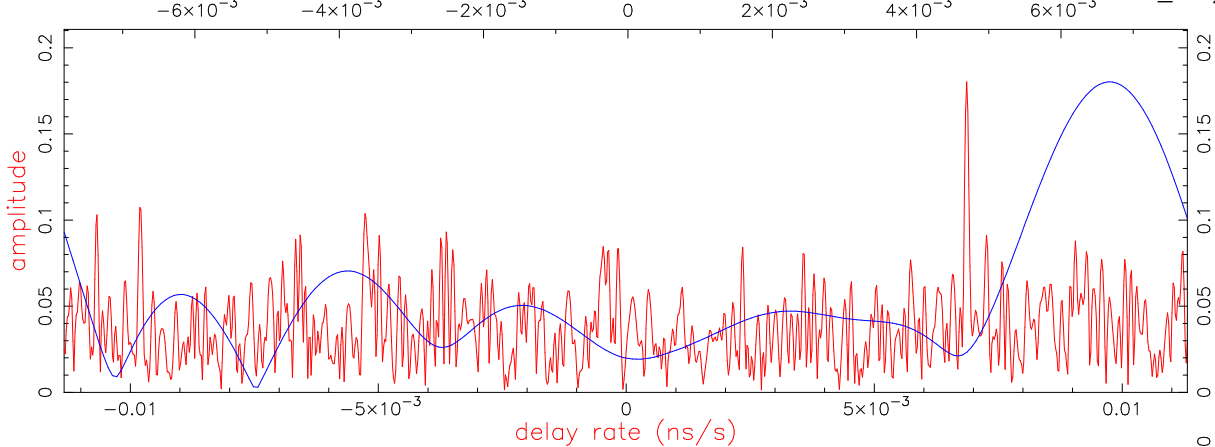
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xo

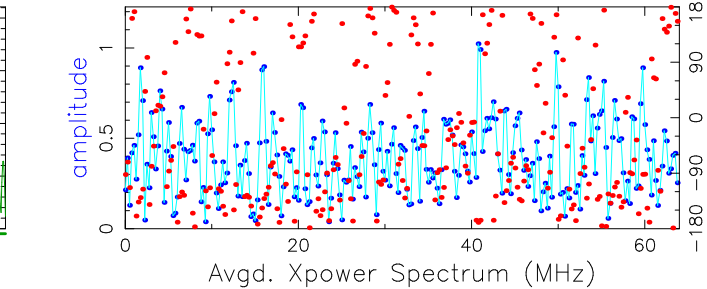
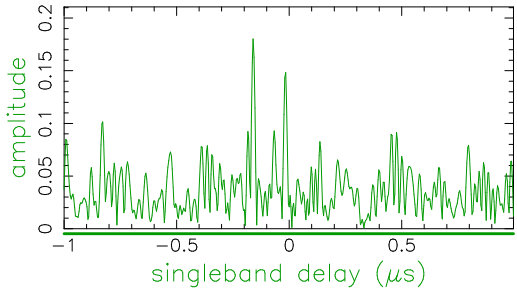
ONSALA60 - VLBA\_OV, fgroup W, pol RL

multiband delay ( $\mu$ s)



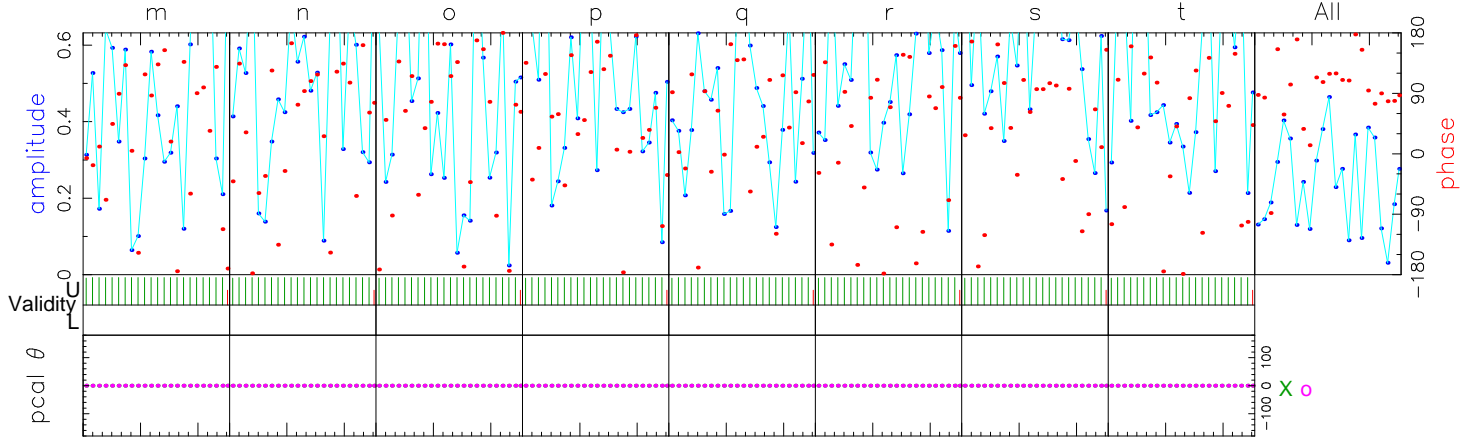
Fringe quality 0

SNR 6.0  
 Int time 149.838  
 Amp 0.211  
 Phase 103.6  
 PFD 1.9e-01  
 Delays (us)  
 SBD -0.159964  
 MBD 0.006683  
 Fringe rate (Hz)  
 0.591876  
 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  
 2025:041:105812  
 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
	82.0	123.4	123.4	97.3	75.7	156.1	79.0	118.7	Phase	103.6
	0.2	0.2	0.2	0.3	0.2	0.1	0.3	0.2	Ampl.	0.2
	241.1	288.9	384.7	252.2	292.0	190.9	15.9	251.8	Sbd box	216.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
o	0	0	0	0	0	0	0	0	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-1.46238655090E+03	Apriori delay (usec)	-1.46222135917E+03	Resid mbdelay (usec)	6.68327E-03	+/-	1.8E-04
Sband delay (usec)	-1.46238132292E+03	Apriori clock (usec)	8.7598068E+01	Resid sbdelay (usec)	-1.59964E-01	+/-	1.4E-03
Phase delay (usec)	-1.46222135583E+03	Apriori clockrate (us/s)	7.3535102E-07	Resid phdelay (usec)	3.33996E-06	+/-	6.1E-07
Delay rate (us/s)	4.63762145399E-01	Apriori rate (us/s)	4.63755274302E-01	Resid rate (us/s)	6.87110E-06	+/-	7.1E-09
Total phase (deg)	-212.9	Apriori accel (us/s/s)	3.34004126214E-05	Resid phase (deg)	103.6	+/-	19.0

ph/seg (deg)	52.6	Theor.	45.5	Amplitude	0.211 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	74.7	Search (1024X32)	0.174	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	30.7	Inc. seg. avg.	0.215	Inc. frq. avg.	0.208	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	23.1	Inc. frq. avg.	0.208	u,v (fr/asec)	-7605.619 7954.313	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
X: az 6.5 el 37.7 pa -10.4		o: az 334.6 el 43.2 pa 98.8				Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241a/v2/3mm/1234/No0901//Xo...3MP15Q					ion window (TEC) 0.00 0.00

Output file: /Exps/c241a/v2/3mm/1234/No0901//Xo.W.563.3MP15Q simultaneous interpolator

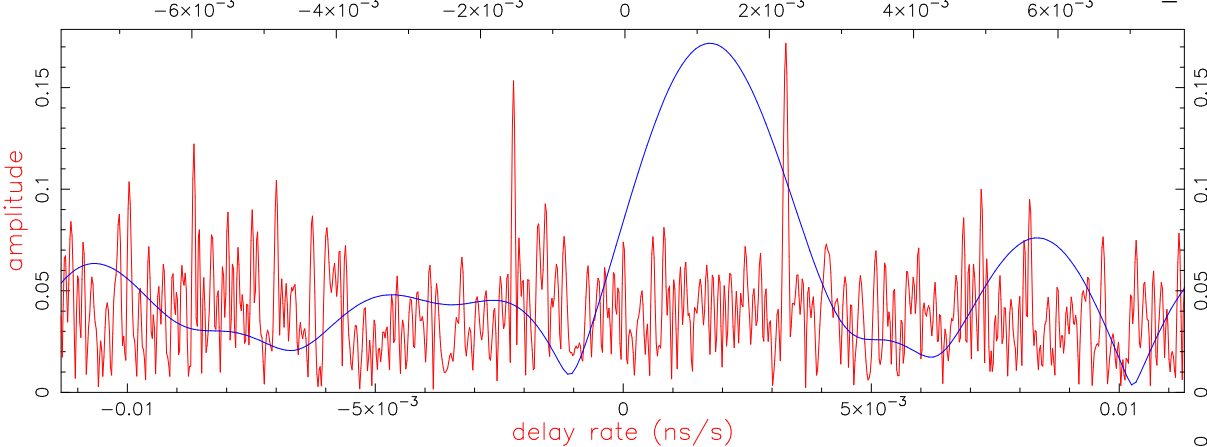
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xp

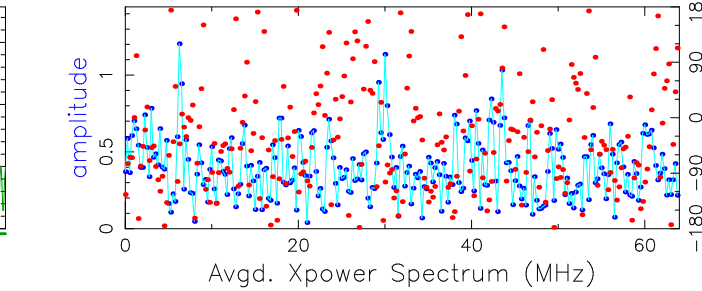
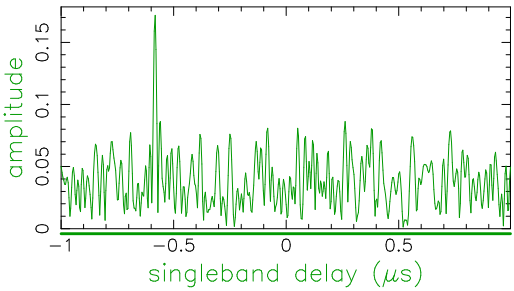
ONSALA60 - VLBA\_PT, fgroup W, pol LL

multiband delay ( $\mu$ s)



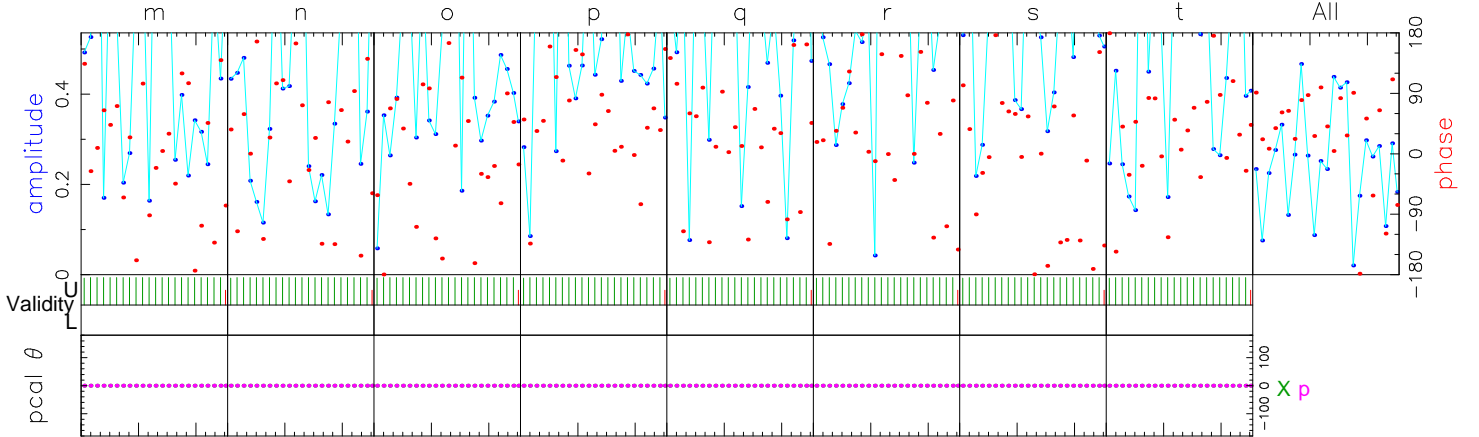
Fringe quality 0

SNR 5.8  
 Int time 149.831  
 Amp 0.179  
 Phase 54.1  
 PFD 6.2e-01  
 Delays (us)  
 SBD -0.582751  
 MBD 0.001157  
 Fringe rate (Hz)  
 0.283564  
 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  
 2025:041:105806  
 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
	27.3	72.0	47.3	45.1	63.8	85.4	88.4	35.6	Phase	54.1
	0.1	0.2	0.1	0.3	0.2	0.2	0.1	0.3	Ampl.	0.2
	225.2	458.4	331.8	107.4	95.0	156.0	435.3	441.1	Sbd box	107.8
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	2.99884428167E+02	Apriori delay (usec)	3.00461396289E+02	Resid mbdelay (usec)	1.15688E-03	+/-	1.9E-04
Sband delay (usec)	2.99878645039E+02	Apriori clock (usec)	1.0695343E+02	Resid sbdelay (usec)	-5.82751E-01	+/-	1.5E-03
Phase delay (usec)	3.00461398033E+02	Apriori clockrate (us/s)	8.3792608E-07	Resid phdelay (usec)	1.74395E-06	+/-	6.4E-07
Delay rate (us/s)	5.04816079981E-01	Apriori rate (us/s)	5.04812788086E-01	Resid rate (us/s)	3.29189E-06	+/-	7.4E-09
Total phase (deg)	297.5	Apriori accel (us/s/s)	2.85122445402E-05	Resid phase (deg)	54.1	+/-	19.8

ph/seg (deg)	62.5	Theor.	47.6	Amplitude	0.179 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.6	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)	25.1	Inc. seg. avg.	0.193	Inc. frq. avg.	0.169	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.0	Inc. frq. avg.	0.169			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

X: az 6.5 el 37.7 pa -10.4 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -8299.283 7044.307 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//Xp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//Xp.W.548.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

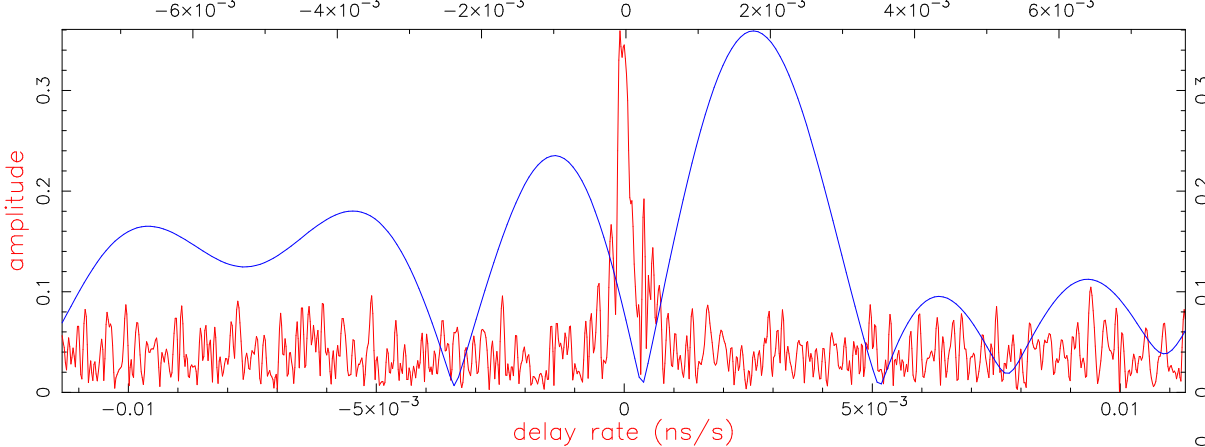
aux01

3C371.3MP15Q, No0901, XP

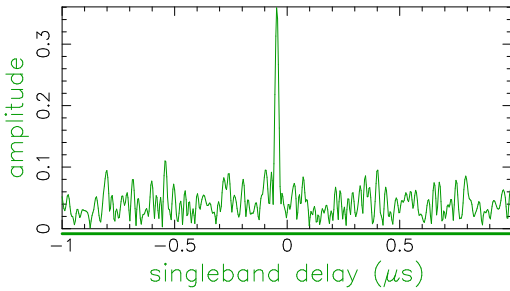
ONSALA60 - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

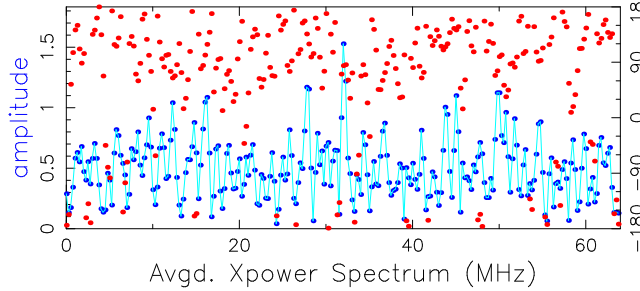
Fringe quality 9



SNR 12.1  
 Int time 149.838  
 Amp 0.361  
 Phase -80.2  
 PFD 3.8e-25  
 Delays (us)  
 SBD -0.046016  
 MBD 0.001781  
 Fringe rate (Hz)  
 -0.008294  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

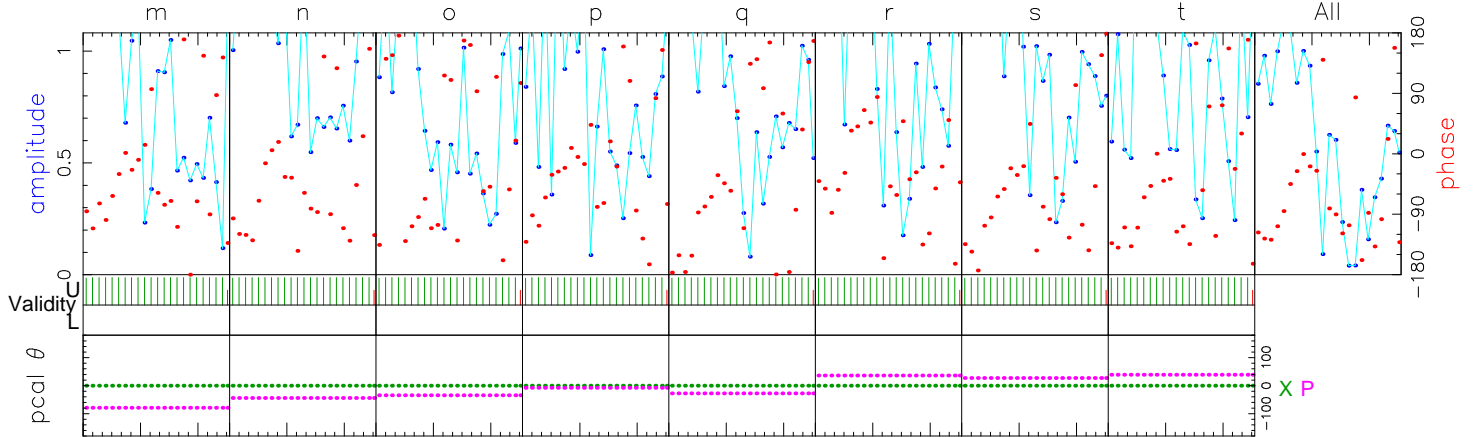


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105807  
 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
	-72.3	-75.8	-151.9	-48.8	-130.0	-21.7	-94.7	-93.1	Phase	-80.2
	0.6	0.5	0.3	0.4	0.3	0.5	0.6	0.4	Ampl.	0.4
	244.8	245.3	244.7	246.6	246.9	245.9	245.4	245.0	Sbd box	245.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.93115115898E+03	Apriori delay (usec)	6.93119625313E+03	Resid mbdelay (usec)	1.78085E-03	+/-	9.0E-05
Sband delay (usec)	6.93115023738E+03	Apriori clock (usec)	1.1367192E+02	Resid sbdelay (usec)	-4.60158E-02	+/-	7.1E-04
Phase delay (usec)	6.93119625054E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	-2.58774E-06	+/-	3.1E-07
Delay rate (us/s)	7.62693638448E-02	Apriori rate (us/s)	7.62694601279E-02	Resid rate (us/s)	-9.62831E-08	+/-	3.5E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.08662492608E-05	Resid phase (deg)	-80.2	+/-	9.5

ph/seg (deg)	69.6	RMS	22.8	Theor.	Amplitude	0.361 +/- 0.030	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	117.3		39.7		Search (1024X32)	0.350	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	45.6		13.4		Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	38.7		23.4		Inc. seg. avg.	0.565	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		ion window (TEC)	0.00	0.00
					Inc. frq. avg.	0.430	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

X: az 62.5 el 37.7 pa -10.4 P: az 359.9 el 16.9 pa -0.0 u,v (fr/asec) -1289.948 -1574.347 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//XP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//XP.W.550.3MP15Q

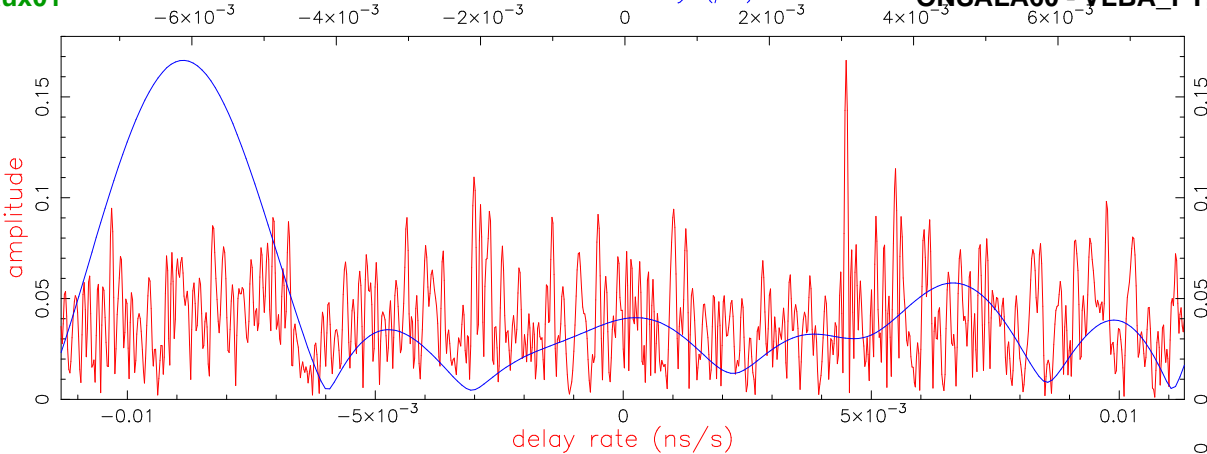
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, Xp

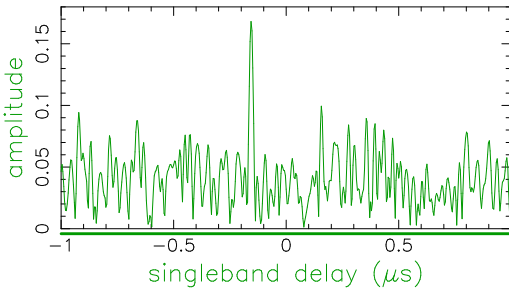
ONSALA60 - VLBA\_PT, fgroup W, pol RR

multiband delay ( $\mu$ s)

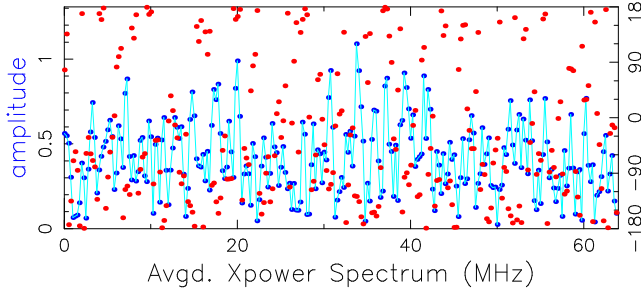


Fringe quality 0

SNR 5.6  
 Int time 149.831  
 Amp 0.180  
 Phase -54.2  
 PFD 8.7e-01  
 Delays (us)  
 SBD -0.155520  
 MBD -0.006105  
 Fringe rate (Hz)  
 0.387631  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

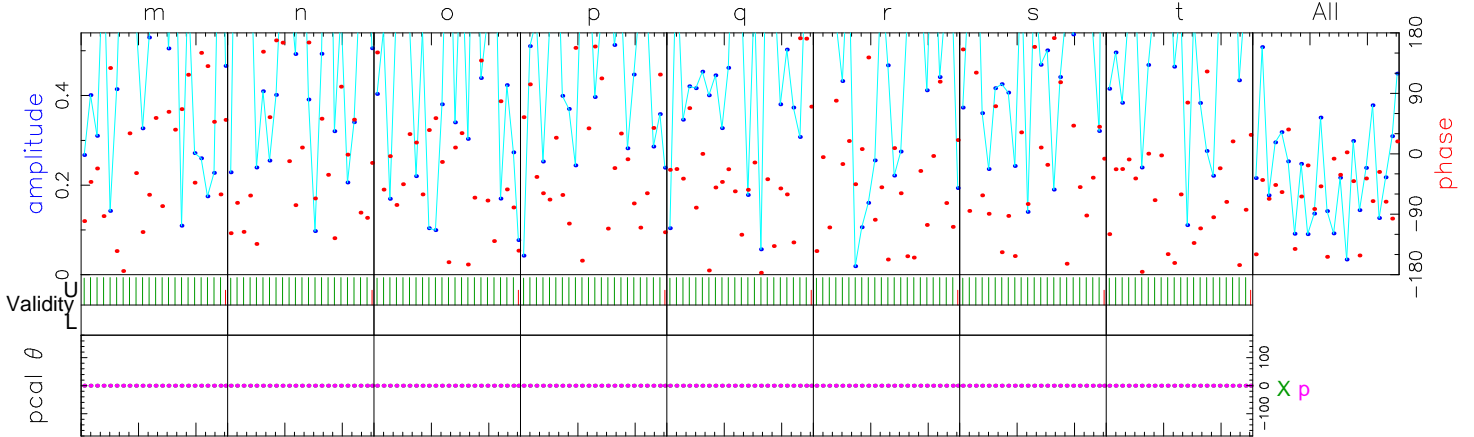


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105808  
 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
	-33.9	-62.8	-61.2	-40.3	-57.2	-62.9	-42.3	-53.6	Phase	-54.2
	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.3	Ampl.	0.2
	207.1	85.9	8.6	35.1	474.8	298.6	462.4	215.6	Sbd box	217.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	3.00299041225E+02	Apriori delay (usec)	3.00461396289E+02	Resid mbdelay (usec)	-6.10506E-03	+/-	1.9E-04
Sband delay (usec)	3.00305876039E+02	Apriori clock (usec)	1.0695343E+02	Resid sbdelay (usec)	-1.55520E-01	+/-	1.5E-03
Phase delay (usec)	3.00461394542E+02	Apriori clockrate (us/s)	8.3792608E-07	Resid phdelay (usec)	-1.74681E-06	+/-	6.5E-07
Delay rate (us/s)	5.04817288094E-01	Apriori rate (us/s)	5.04812788086E-01	Resid rate (us/s)	4.50001E-06	+/-	7.6E-09
Total phase (deg)	189.3	Apriori accel (us/s/s)	2.85122445402E-05	Resid phase (deg)	-54.2	+/-	20.3

ph/seg (deg)	51.2	Theor.	48.7	Amplitude	0.180 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	76.5		85.0	Search (1024X32)	0.165	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	12.6		28.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	30.9		50.1	Inc. seg. avg.	0.178	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.	0.162	Data rate(Mb/s): 2048				

X: az 6.5 el 37.7 pa -10.4 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -8299.283 7044.307 simultaneous interpolator

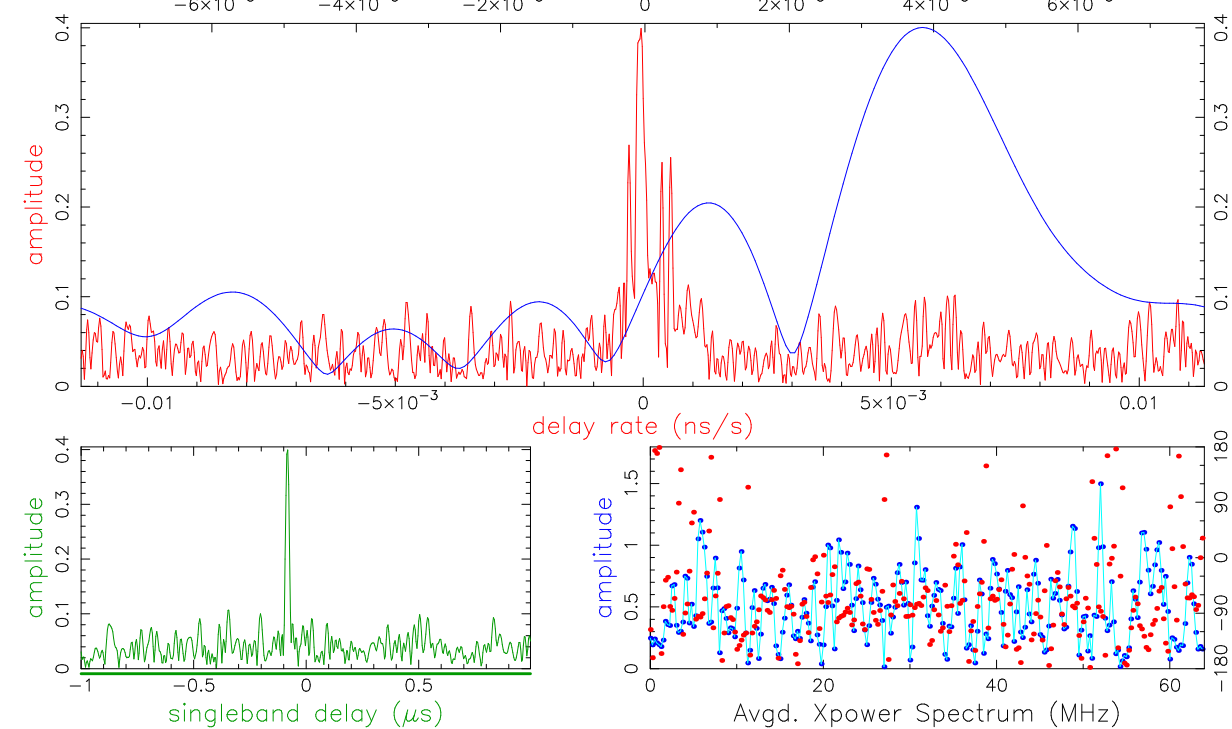
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//Xp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//Xp.W.554.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

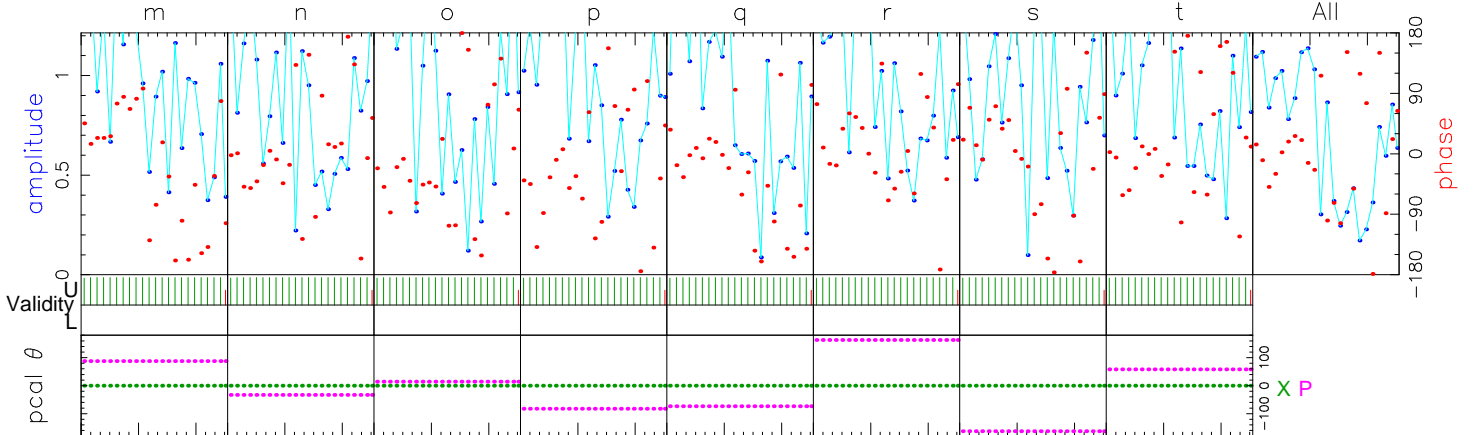
3C371.3MP15Q, No0901, XP

ONSALA60 - PICOVEL, fgroup W, pol RR



Fringe quality 9  
 SNR 13.6  
 Int time 149.838  
 Amp 0.405  
 Phase -8.2  
 PFD 2.2e-33  
 Delays (us)  
 SBD -0.083568  
 MBD 0.003760  
 Fringe rate (Hz)  
 -0.003460  
 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  
 2025:041:105809  
 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	
	44.2	-18.1	-45.2	-48.0	-13.6	22.9	26.9	-15.7	Phase	-8.2	
	0.4	0.4	0.5	0.4	0.6	0.6	0.3	0.5	Ampl.	0.5	
	234.3	235.2	235.9	235.8	236.5	236.2	235.8	234.7	Sbd box	235.6	
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used		
X	0	0	0	0	0	0	0	0	PC freqs		
P	0	0	0	0	0	0	0	0	PC freqs		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
P	1000	1000	1000	1000	1000	1000	1000	1000			
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
									Tracks		
Group delay (usec) (SBD)	6.93110626360E+03		Apriori delay (usec)		6.93119625313E+03		Resid mbdelay (usec)		3.76047E-03	+/- 8.0E-05	
Sband delay (usec)	6.93111268538E+03		Apriori clock (usec)		1.1367192E+02		Resid sbdelay (usec)		-8.35678E-02	+/- 6.4E-04	
Phase delay (usec)	6.93119625287E+03		Apriori clockrate (us/s)		6.1838598E-07		Resid phdelay (usec)		-2.64800E-07	+/- 2.7E-07	
Delay rate (us/s)	7.62694199584E-02		Apriori rate (us/s)		7.62694601279E-02		Resid rate (us/s)		-4.01695E-08	+/- 3.1E-09	
Total phase (deg)			Apriori accel (us/s/s)		-1.08662492608E-05		Resid phase (deg)		-8.2	+/- 8.5	
	RMS	Theor.	Amplitude	0.405 +/- 0.030		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	83.6	20.3	Search (1024X32)	0.399		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	109.4	35.4	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	36.7	12.0	Inc. seg. avg.	0.661		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	25.9	20.9	Inc. frq. avg.	0.453		Data rate(Mb/s): 2048		nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
X: az 6.5 el 37.7 pa -10.4	P: az 359.9 el 16.9 pa -0.0		u, v (fr/asec) -1289.948 -1574.347						simultaneous interpolator		
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//XP..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//XP.W.557.3MP15Q								



Mk4/DiFX fourfit 3.25 rev 0

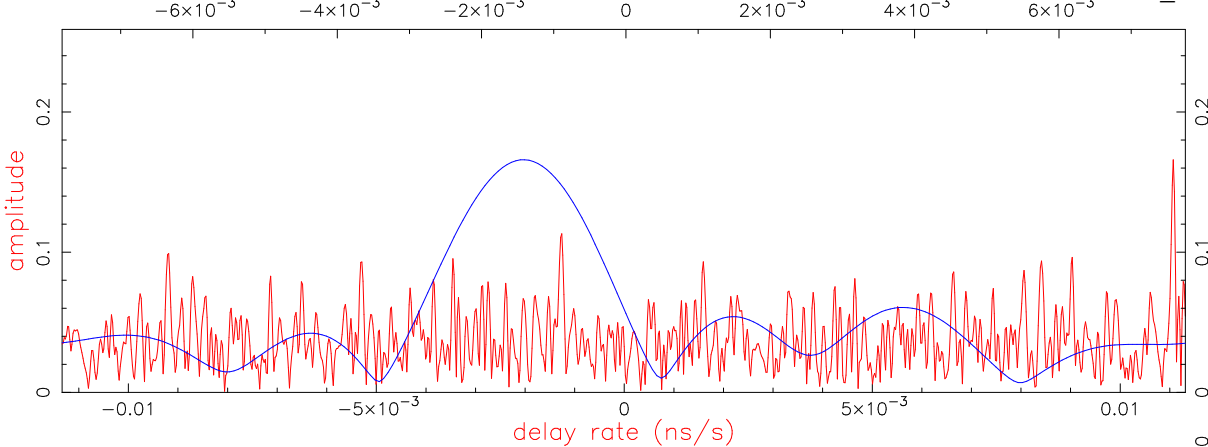
aux01

3C371.3MP15Q, No0901, Xp

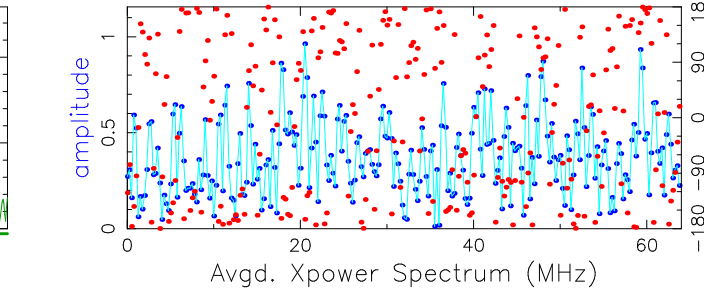
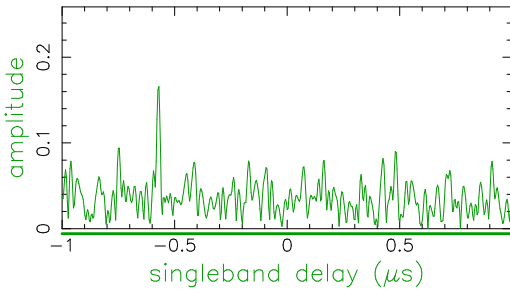
ONSALA60 - VLBA\_PT, fgroup W, pol LR

multiband delay ( $\mu$ s)

Fringe quality 0

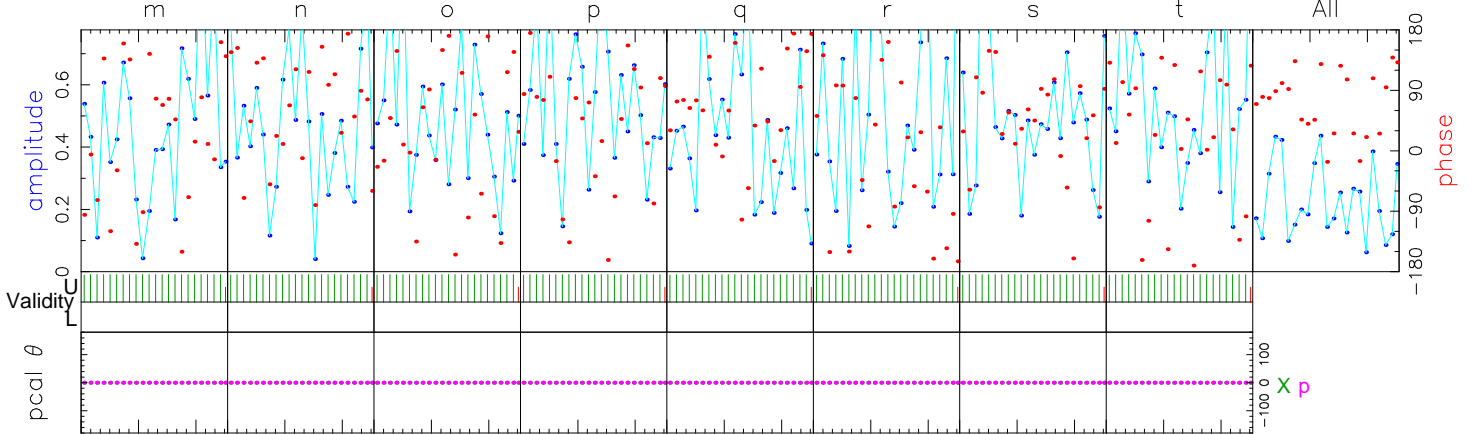


SNR 5.6  
 Int time 149.831  
 Amp 0.259  
 Phase 79.2  
 PFD 8.8e-01  
 Delays (us)  
 SBD -0.571816  
 MBD -0.001454  
 Fringe rate (Hz)  
 0.955214  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105810  
 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		
X	0	0	0	0	0	0	0	0		
p	0	0	0	0	0	0	0	0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	2.99881817669E+02	Apriori delay (usec)	3.00461396289E+02	Resid mbdelay (usec)	-1.45362E-03	+/-	1.9E-04
Sband delay (usec)	2.99889580039E+02	Apriori clock (usec)	1.0695343E+02	Resid sbdelay (usec)	-5.71816E-01	+/-	1.5E-03
Phase delay (usec)	3.00461398843E+02	Apriori clockrate (us/s)	8.3792608E-07	Resid phdelay (usec)	2.55466E-06	+/-	6.6E-07
Delay rate (us/s)	5.04823877174E-01	Apriori rate (us/s)	5.04812788086E-01	Resid rate (us/s)	1.10891E-05	+/-	7.6E-09
Total phase (deg)	322.7	Apriori accel (us/s/s)	2.85122445402E-05	Resid phase (deg)	79.2	+/-	20.3

ph/seg (deg)	RMS 46.7	Theor. 48.8	Amplitude Search (1024X32)	0.259 +/- 0.046	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	77.5	85.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	12.1	28.8	Inc. seg. avg.	0.257	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	42.7	50.2	Inc. frq. avg.	0.230	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011

X: az 6.5 el 37.7 pa -10.4 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -8299.283 7044.307 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//Xp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//Xp.W.560.3MP15Q

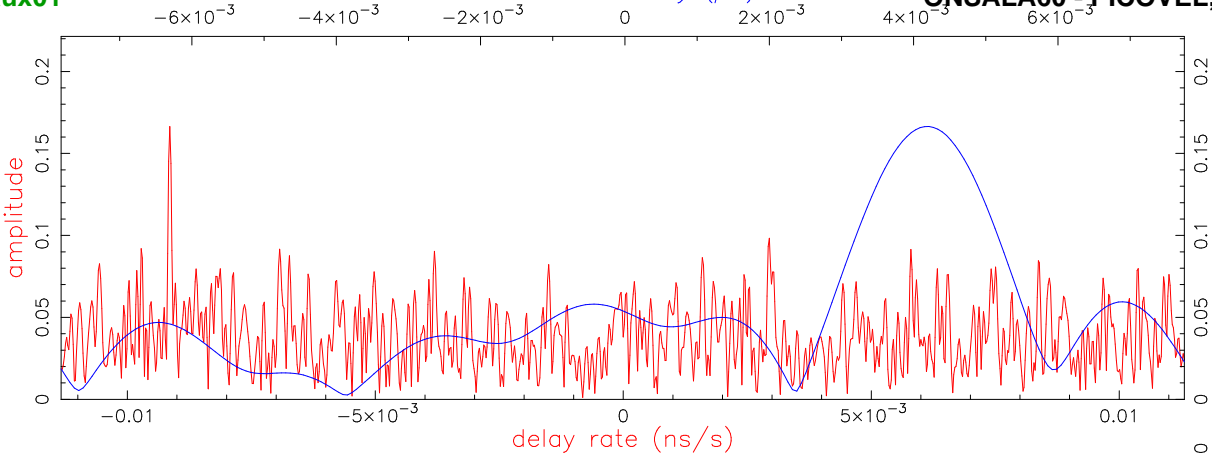
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, XP

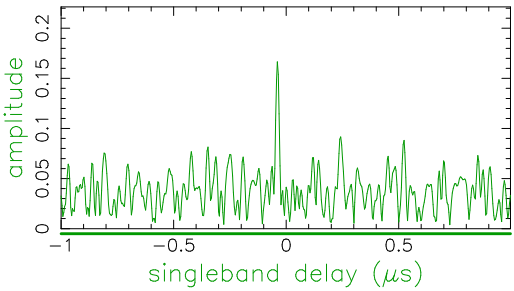
ONSALA60 - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

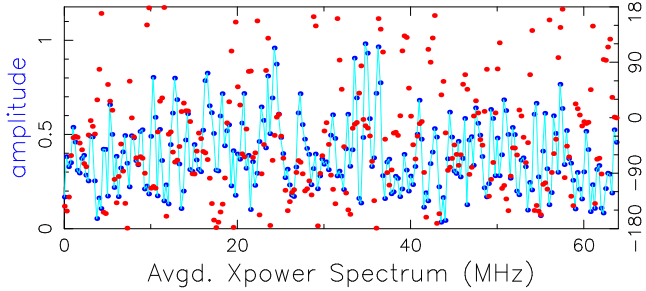


Fringe quality 0

SNR 5.6  
 Int time 149.838  
 Amp 0.221  
 Phase 159.3  
 PFD 9.5e-01  
 Delays (us)  
 SBD -0.038727  
 MBD 0.004190  
 Fringe rate (Hz)  
 -0.788959  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

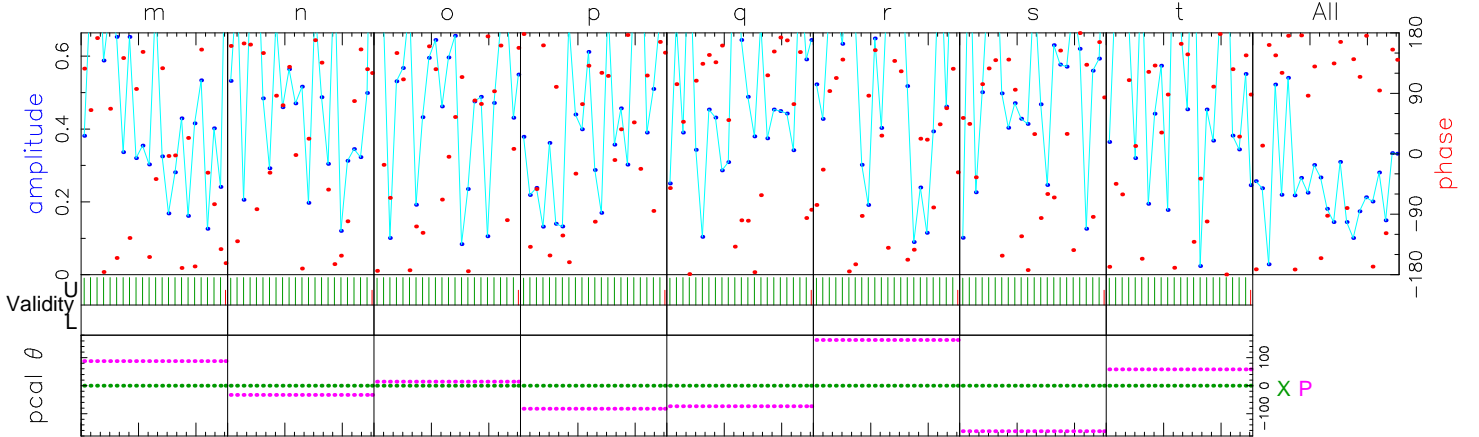


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105811  
 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		
X	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	6.93115356824E+03	Apriori delay (usec)	6.93119625313E+03	Resid mbdelay (usec)	4.19011E-03	+/-	1.9E-04
Sband delay (usec)	6.93115752563E+03	Apriori clock (usec)	1.1367192E+02	Resid sbdelay (usec)	-3.87275E-02	+/-	1.5E-03
Phase delay (usec)	6.93119625827E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	5.13620E-06	+/-	6.6E-07
Delay rate (us/s)	7.62603010925E-02	Apriori rate (us/s)	7.62694601279E-02	Resid rate (us/s)	-9.15904E-06	+/-	7.7E-09
Total phase (deg)	247.3	Apriori accel (us/s/s)	-1.08662492608E-05	Resid phase (deg)	159.3	+/-	20.5

ph/seg (deg)	58.0	RMS	58.0	Theor.	49.3	Amplitude	0.221 +/- 0.040	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	83.0	Search (1024X32)	0.163	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		Interp.	0.000	SampCntNorm: enabled	mb window (us)	-1.000 1.000
ph/frq (deg)	20.2	Inc. seg. avg.	0.237	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		Inc. frq. avg.	0.205	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011 0.011
amp/frq (%)	30.8	Inc. frq. avg.	0.205	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00	

X: az 6.5 el 37.7 pa -10.4 P: az 359.9 el 16.9 pa -0.0 u,v (fr/asec) -1289.948 -1574.347 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//XP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//XP.W.562.3MP15Q

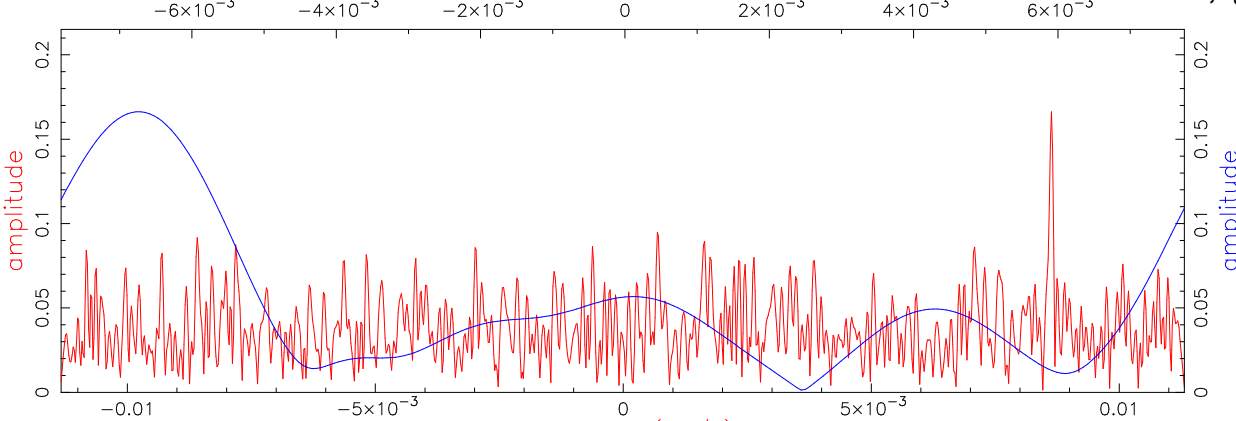
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, XP

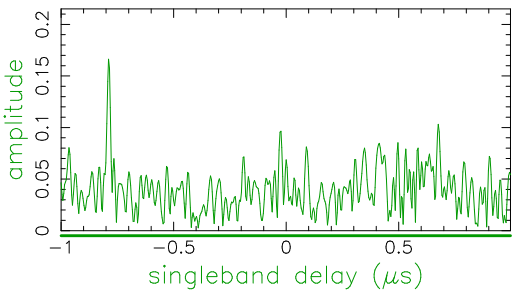
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay ( $\mu$ s)

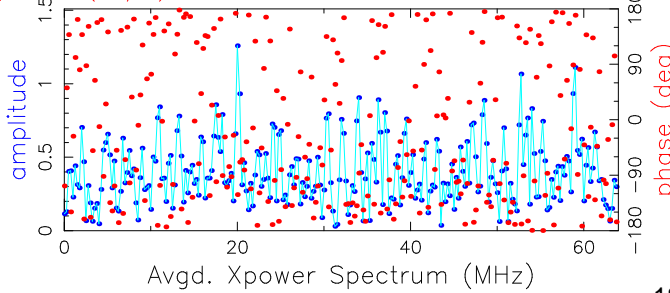


Fringe quality 0

SNR 5.6  
 Int time 149.838  
 Amp 0.215  
 Phase -159.4  
 PFD 9.3e-01  
 Delays (us)  
 SBD -0.788194  
 MBD -0.006738  
 Fringe rate (Hz)  
 0.745693  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

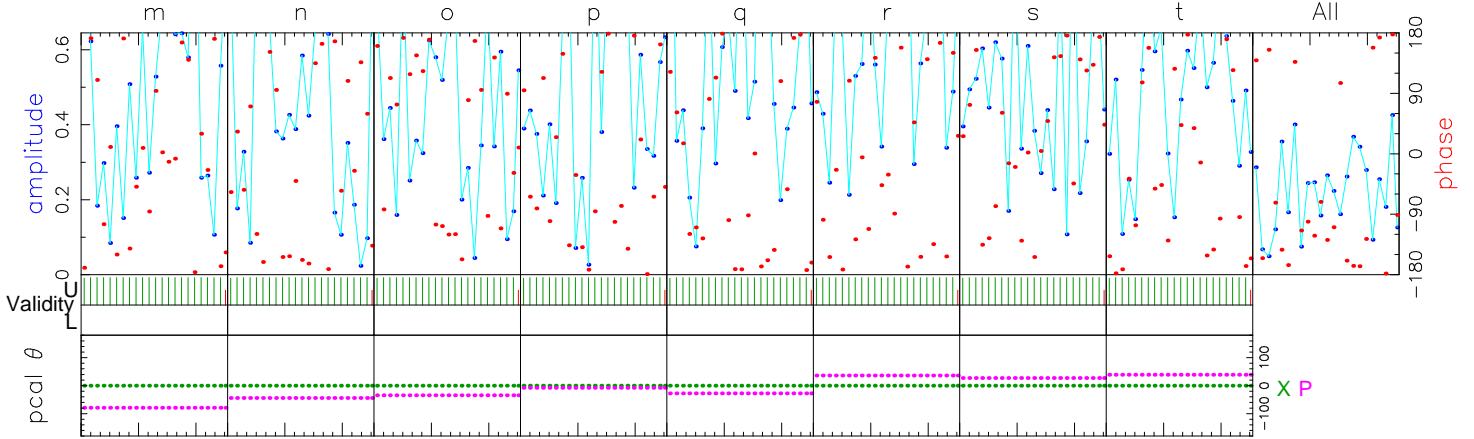


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105814  
 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
	-165.5	-162.4	-160.9	-127.3	-178.3	-153.1	109.7	-151.6	Phase	-159.4
	0.1	0.3	0.2	0.3	0.4	0.3	0.0	0.2	Ampl.	0.2
	276.6	52.7	276.3	428.2	297.9	45.7	298.5	255.3	Sbd box	55.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.93040826549E+03	Apriori delay (usec)	6.93119625313E+03	Resid mbdelay (usec)	-6.73764E-03	+/-	1.9E-04
Sband delay (usec)	6.93040805938E+03	Apriori clock (usec)	1.1367192E+02	Resid sbdelay (usec)	-7.88194E-01	+/-	1.5E-03
Phase delay (usec)	6.93119624799E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	-5.13973E-06	+/-	6.6E-07
Delay rate (us/s)	7.62781168895E-02	Apriori rate (us/s)	7.62694601279E-02	Resid rate (us/s)	8.65676E-06	+/-	7.6E-09
Total phase (deg)	-71.3	Apriori accel (us/s/s)	-1.08662492608E-05	Resid phase (deg)	-159.4	+/-	20.5

ph/seg (deg)	48.1	RMS	49.1	Theor.	48.1	Amplitude	0.215 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	73.2		73.2		73.2	Search (1024X32)	0.165	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.4		40.4		40.4	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	46.4		46.4		46.4	Inc. seg. avg.	0.213	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	0.202	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 6.5 el 37.7 pa -10.4 P: az 359.9 el 16.9 pa -0.0 u,v (fr/asec) -1289.948 -1574.347 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//XP..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//XP.W.565.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

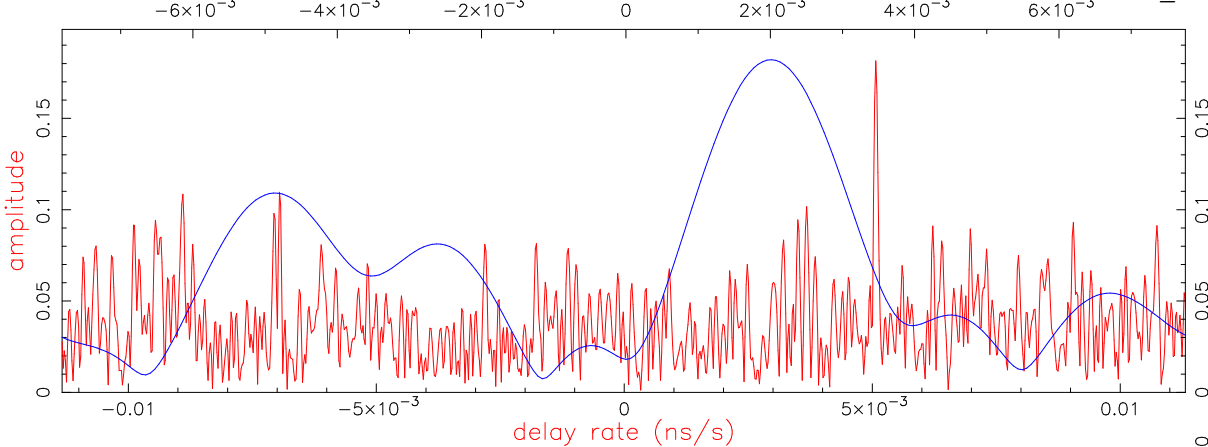
aux01

3C371.3MP15Q, No0901, Xp

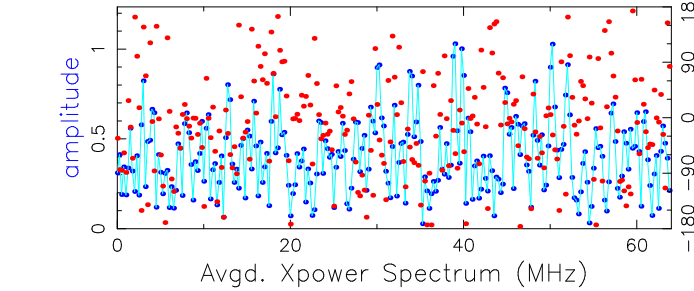
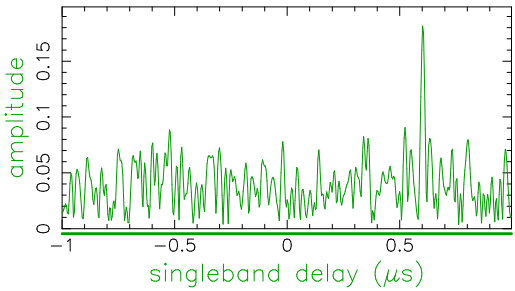
ONSALA60 - VLBA\_PT, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

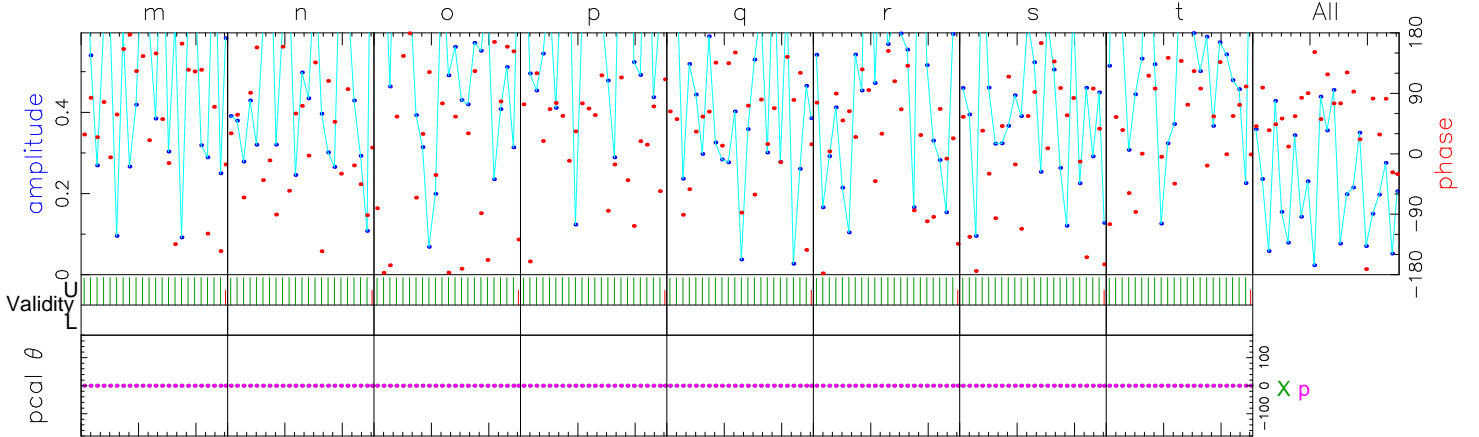


SNR 6.1  
 Int time 149.831  
 Amp 0.199  
 Phase 65.2  
 PFD 1.2e-01  
 Delays (us)  
 SBD 0.602752  
 MBD 0.002101  
 Fringe rate (Hz)  
 0.436652  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105815  
 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
	88.0	14.8	152.8	44.4	64.2	63.8	56.9	65.0	Phase	65.2
	0.3	0.2	0.2	0.3	0.2	0.2	0.2	0.3	Ampl.	0.2
	172.3	337.9	108.9	411.0	85.6	372.5	374.0	82.1	Sbd box	411.3
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
p	0	0	0	0	0	0	0	0	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.01057247630E+02	Apriori delay (usec)	3.00461396289E+02	Resid mbdelay (usec)	2.10134E-03	+/-	1.8E-04
Sband delay (usec)	3.01064148039E+02	Apriori clock (usec)	1.0695343E+02	Resid sbdelay (usec)	6.02752E-01	+/-	1.4E-03
Phase delay (usec)	3.00461398392E+02	Apriori clockrate (us/s)	8.3792608E-07	Resid phdelay (usec)	2.10375E-06	+/-	6.0E-07
Delay rate (us/s)	5.04817857178E-01	Apriori rate (us/s)	5.04812788086E-01	Resid rate (us/s)	5.06909E-06	+/-	7.0E-09
Total phase (deg)	308.7	Apriori accel (us/s/s)	2.85122445402E-05	Resid phase (deg)	65.2	+/-	18.7

ph/seg (deg)	RMS 49.0	Theor. 44.9	Amplitude Search (1024X32)	0.179	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.2	78.4	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)	43.3	26.5	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 (%)	34.1	46.2	Inc. frq. avg.	0.211	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 6.5 el 37.7 pa -10.4 p: az 335.3 el 37.1 pa 90.7 u,v (fr/asec) -8299.283 7044.307 simultaneous interpolator

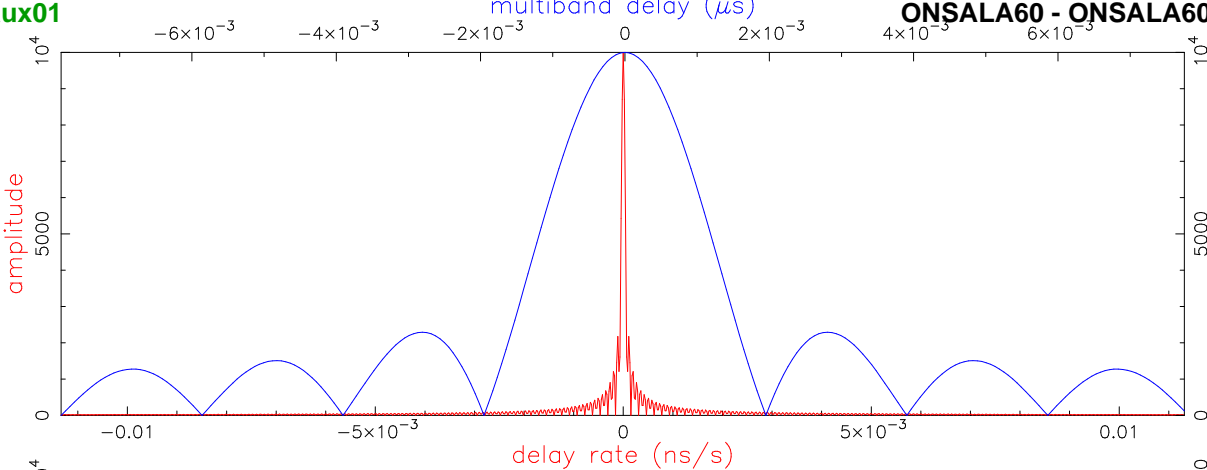
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//Xp..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//Xp.W.567.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

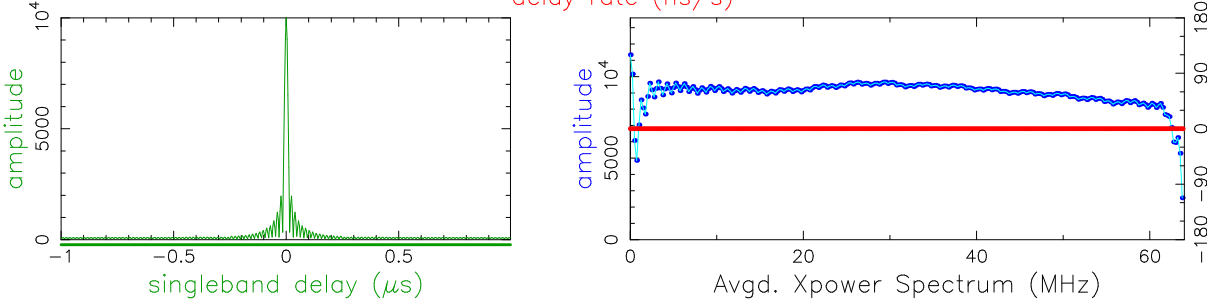
3C371.3MP15Q, No0901, XX

ONSALA60 - ONSALA60, fgroup W, pol LL



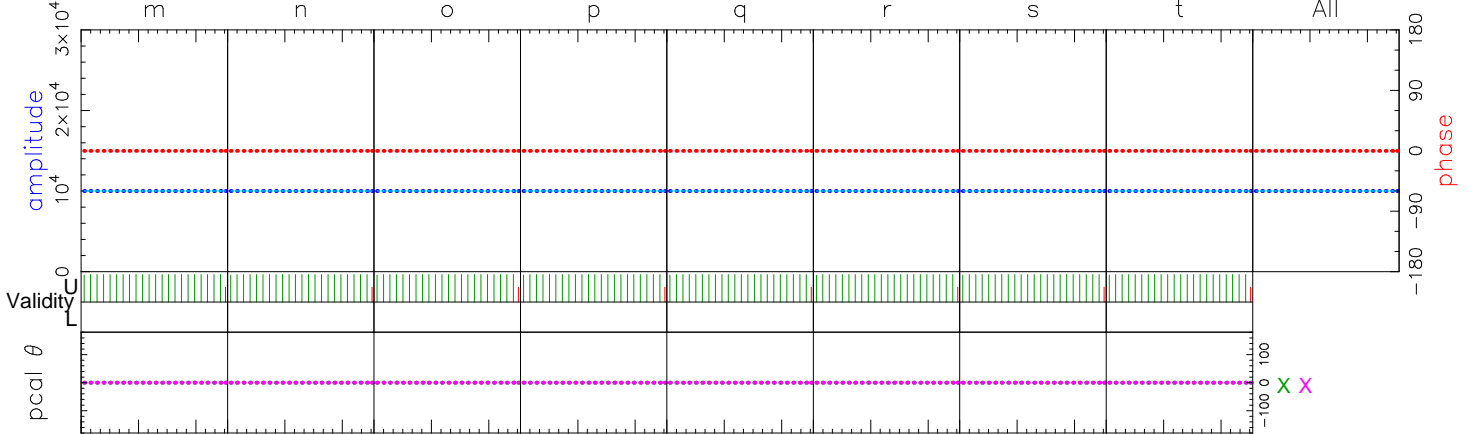
Fringe quality 9

SNR 334740.8  
 Int time 149.838  
 Amp 10000.001  
 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  
 2025:041:105802  
 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
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	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

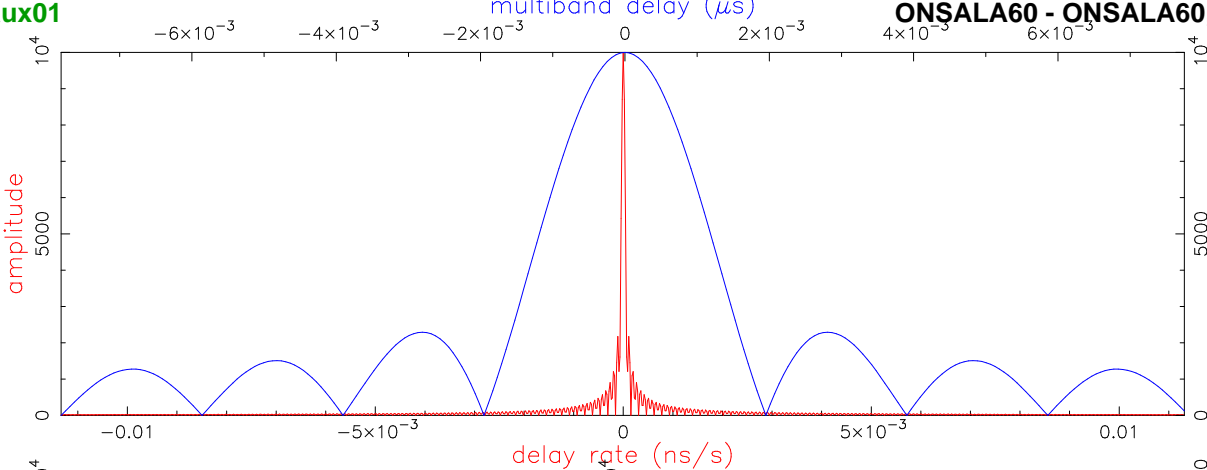
ph/seg (deg) 0.0 0.0 Theor. Amplitude 10000.001 +/- 0.030 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.001 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 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  
 X: az 6.5 el 37.7 pa -10.4 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//XX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//XX.W.535.3MP15Q simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

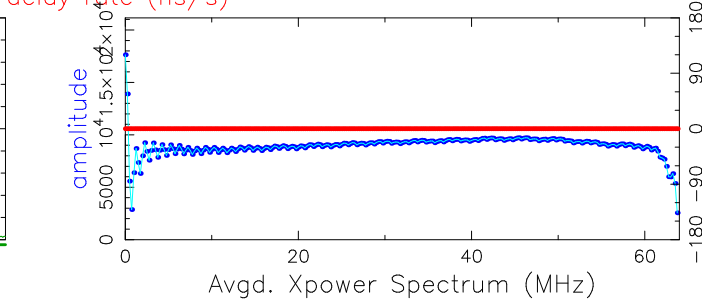
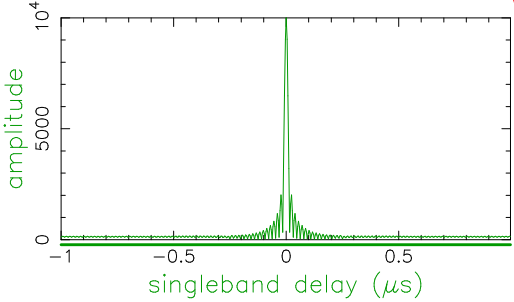
3C371.3MP15Q, No0901, XX

ON\$ALA60 - ON\$ALA60, fgroup W, pol RR



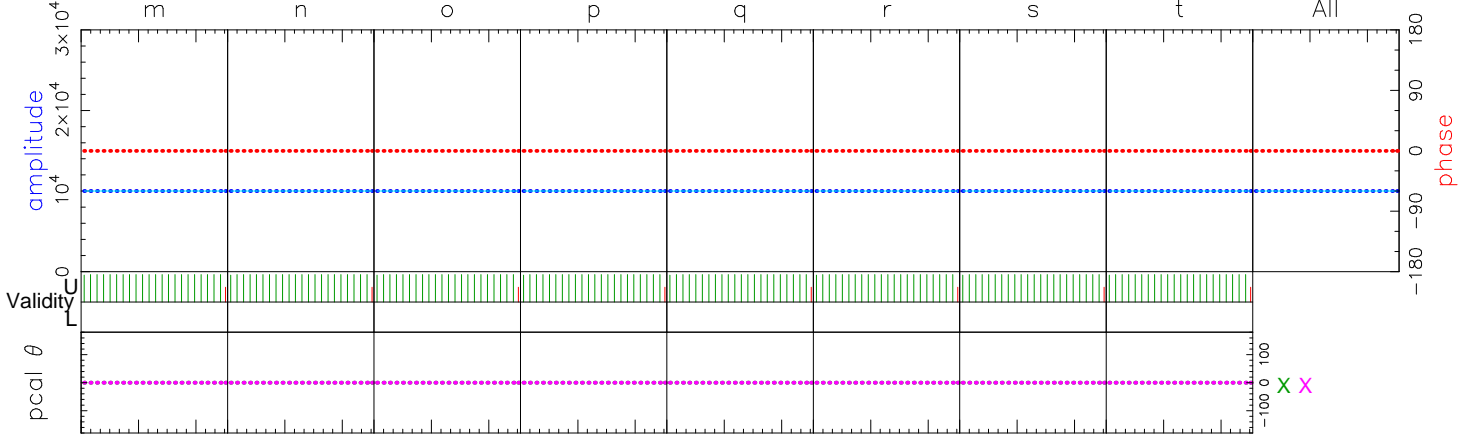
Fringe quality 9

SNR 334740.8  
 Int time 149.838  
 Amp 10000.001  
 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  
 2025:041:105805  
 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
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	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

ph/seg (deg) 0.0 0.0 Search (1024X32) 10000.001 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.001 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 X: az 6.5 el 37.7 pa -10.4 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 simultaneous interpolator

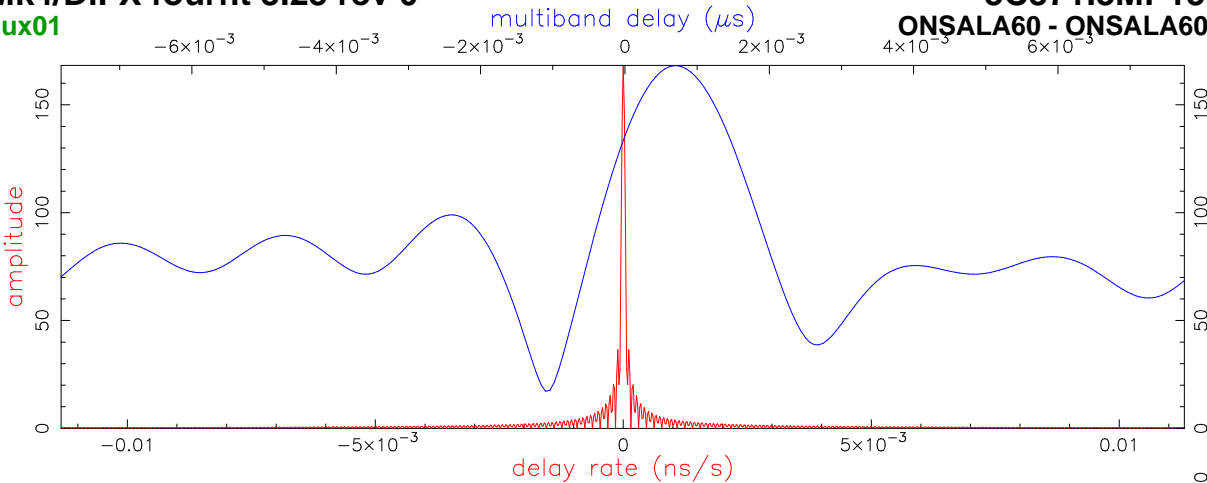
Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/XX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/XX.W.546.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

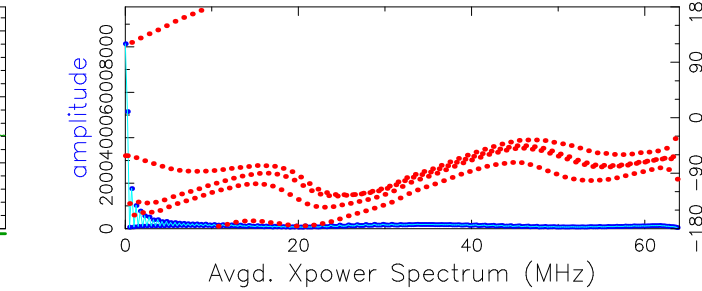
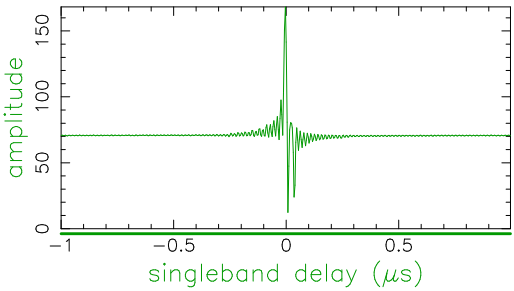
aux01

3C371.3MP15Q, No0901, XX

ONSALA60 - ONSALA60, fgroup W, pol LR

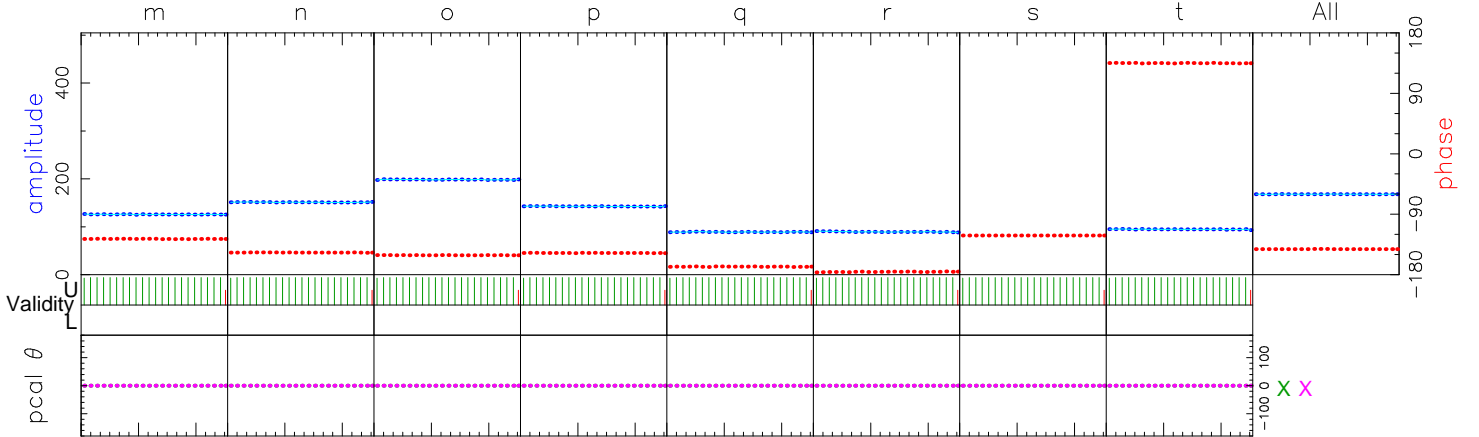


Fringe quality 5  
 Error code G  
 SNR 5633.5  
 Int time 149.838  
 Amp 168.294  
 Phase -141.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004270  
 MBD 0.000675  
 Fringe rate (Hz)  
 0.000004  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105808  
 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
	-126.7	-147.0	-150.9	-147.6	-168.0	-175.7	-121.6	134.8	Phase	-141.8
	126.0	151.3	198.5	142.8	89.2	89.7	606.4	94.9	Ampl.	187.3
	256.3	266.4	266.1	256.9	265.3	265.7	261.4	262.3	Sbd box	255.9
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.75031250000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	6.75031E-04	+/-	1.9E-07
Sband delay (usec)	-4.27000000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-4.27000E-03	+/-	1.5E-06
Phase delay (usec)	-4.57287888959E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-4.57288E-06	+/-	6.6E-10
Delay rate (us/s)	4.67648028926E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	4.67648E-11	+/-	7.6E-12
Total phase (deg)	-141.8	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	-141.8	+/-	0.0

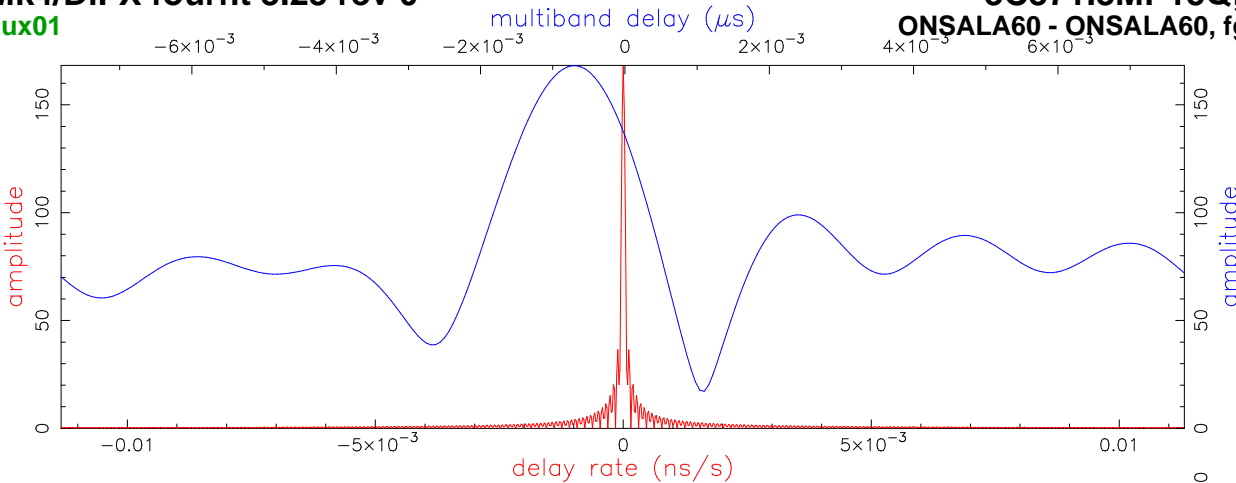
ph/seg (deg) 0.1 0.0 Search (1024X32) 165.056 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.2 0.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.9 0.0 Inc. seg. avg. 168.095 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 97.1 0.1 Inc. frq. avg. 187.335 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 X: az 6.5 el 37.7 pa -10.4 X: az 6.5 el 37.7 pa -10.4 u, vr (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/XX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/XX.W.552.3MP15Q simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

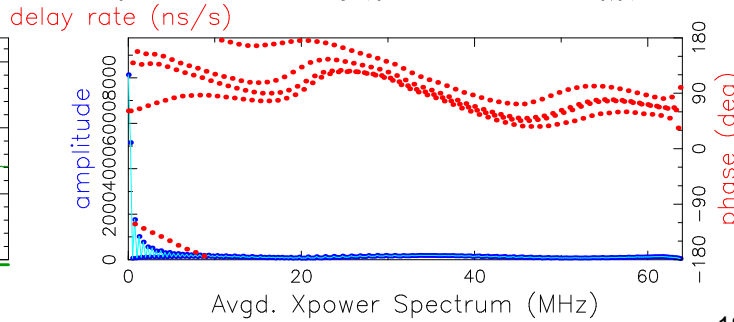
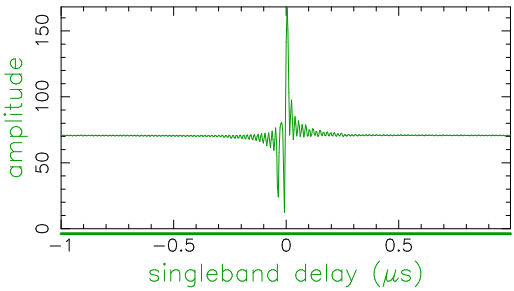
aux01

3C371.3MP15Q, No0901, XX

ONSALA60 - ONSALA60, fgroup W, pol RL

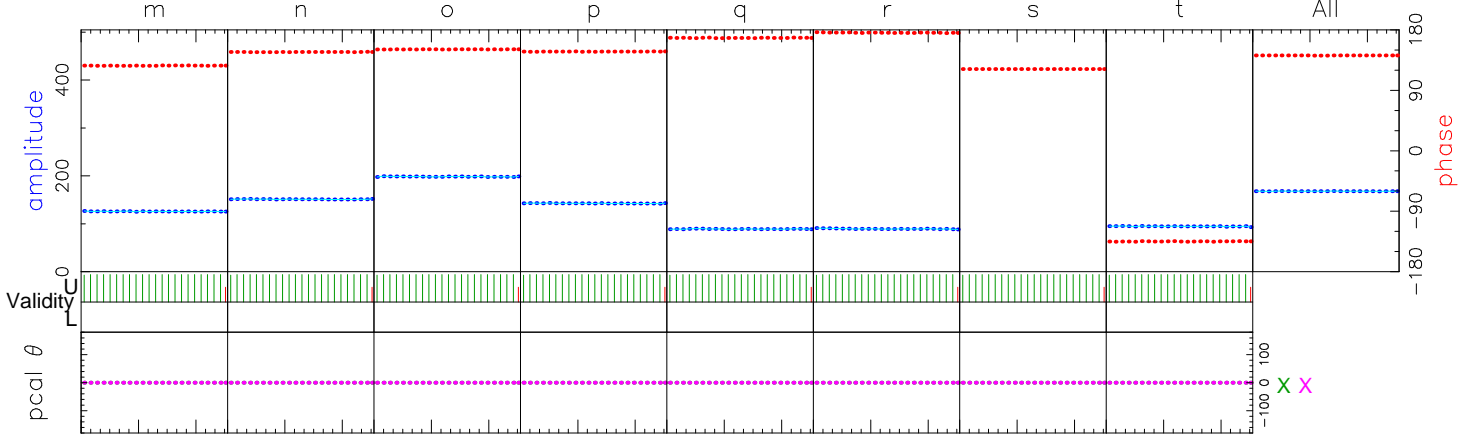


Fringe quality 5  
 Error code G  
 SNR 5633.5  
 Int time 149.838  
 Amp 168.294  
 Phase 141.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.004270  
 MBD -0.000675  
 Fringe rate (Hz)  
 -0.000004  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105809  
 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
	126.7	147.0	150.9	147.6	168.0	175.7	121.6	-134.8	Ampl.	141.8
	126.0	151.3	198.5	142.8	89.2	89.7	606.4	94.9	Ampl.	187.3
	257.7	247.6	247.9	257.1	248.7	248.3	252.6	251.7	Sbd box	258.1
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-6.75031250000E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	-6.75031E-04	+/-	1.9E-07
Sband delay (usec)	4.27000000000E-03	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	4.27000E-03	+/-	1.5E-06
Phase delay (usec)	4.57287888959E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	4.57288E-06	+/-	6.6E-10
Delay rate (us/s)	-4.67648028926E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-4.67648E-11	+/-	7.6E-12
Total phase (deg)	141.8	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	141.8	+/-	0.0

ph/seg (deg) 0.1 0.0 Search (1024X32) 165.056 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.2 0.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 39.9 0.0 Inc. seg. avg. 168.095 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 97.1 0.1 Inc. frq. avg. 187.335 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 X: az 6.5 el 37.7 pa -10.4 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901/XX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901/XX.W.556.3MP15Q simultaneous interpolator



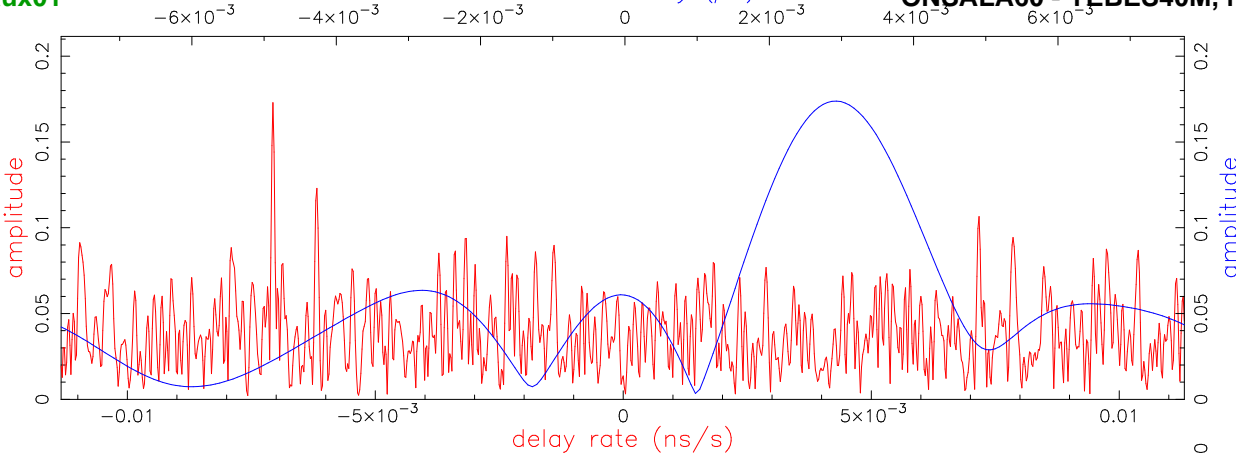
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, XY

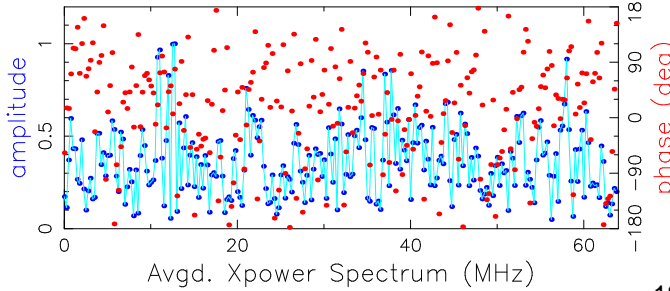
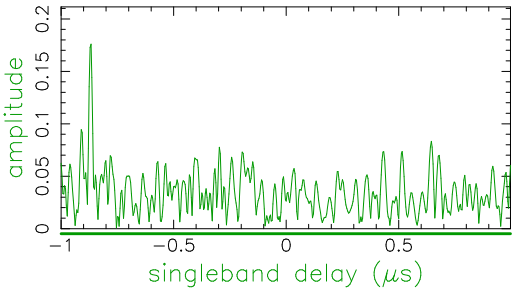
ONŞALA60 - YEBES40M, fgroup W, pol LL

multiband delay ( $\mu$ s)



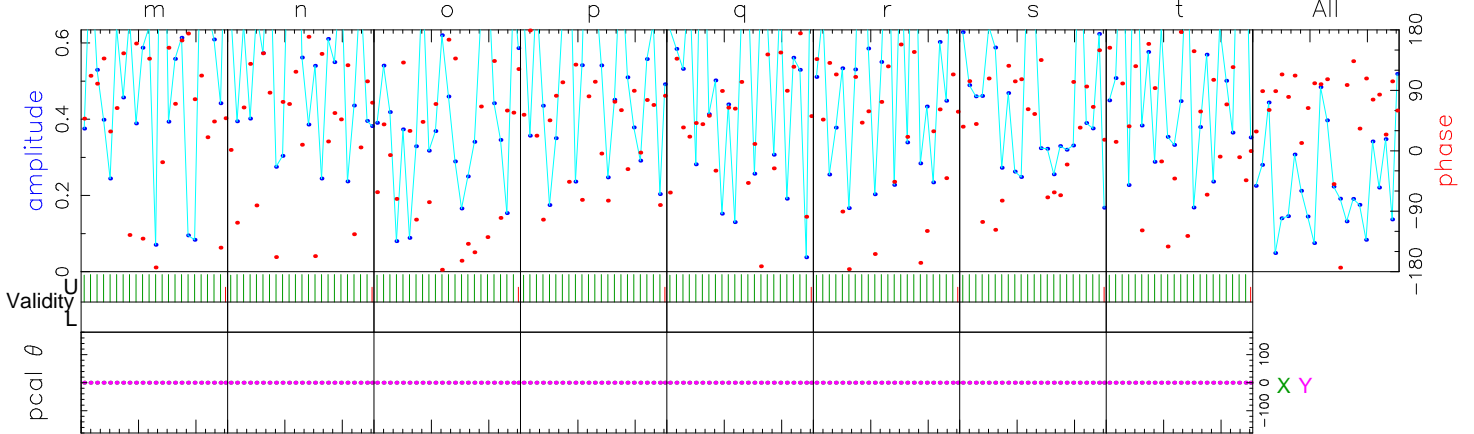
Fringe quality 0

SNR 6.0  
 Int time 149.687  
 Amp 0.212  
 Phase 78.1  
 PFD 2.3e-01  
 Delays (us)  
 SBD -0.868815  
 MBD 0.003043  
 Fringe rate (Hz)  
 -0.610190  
 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  
 2025:041:105809  
 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
	100.1	77.2	115.9	50.7	67.8	100.9	70.1	45.4	Phase	78.1
	0.2	0.3	0.1	0.3	0.2	0.3	0.2	0.1	Ampl.	0.2
	154.7	432.4	388.0	80.0	176.7	27.9	73.4	388.4	Sbd box	34.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.82795548114E+03	Apriori delay (usec)	5.82882743822E+03	Resid mbdelay (usec)	3.04293E-03	+/-	1.8E-04
Sband delay (usec)	5.82795862322E+03	Apriori clock (usec)	2.2320831E+02	Resid sbdelay (usec)	-8.68815E-01	+/-	1.4E-03
Phase delay (usec)	5.82882744073E+03	Apriori clockrate (us/s)	2.4302921E-02	Resid phdelay (usec)	2.51827E-06	+/-	6.2E-07
Delay rate (us/s)	7.41033396868E-02	Apriori rate (us/s)	7.41104233853E-02	Resid rate (us/s)	-7.08370E-06	+/-	7.1E-09
Total phase (deg)	268.1	Apriori accel (us/s/s)	-9.38443084700E-06	Resid phase (deg)	78.1	+/-	19.1

ph/seg (deg)	47.0	Theor.	45.8	Amplitude	0.212 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	75.0		80.0	Search (1024X32)	0.173	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.2		27.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.3		47.2	Inc. seg. avg.	0.208	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.196	Data rate(Mb/s): 2048	t_cohere infinite			
X: az 6.5 el 37.7 pa -10.4		Y: az 0.0 el 20.3 pa -0.2				u, v (fr/asec) -1251.119 -1401.343				simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//XY..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//XY.W.557.3MP15Q

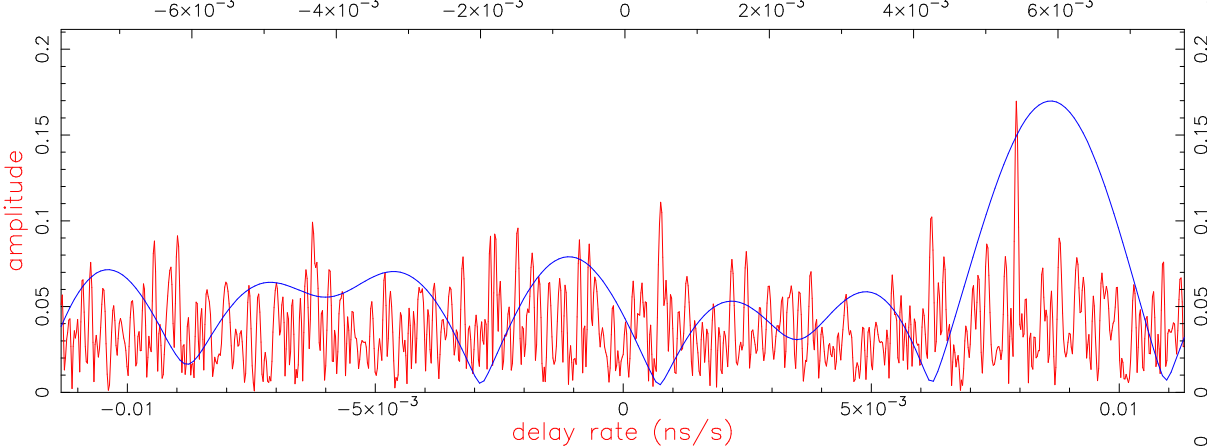
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, XY

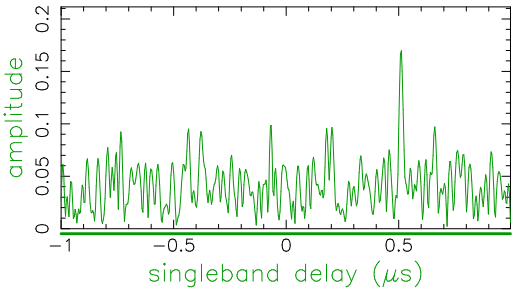
ONŞALA60 - YEŞES40M, fgroup W, pol RR

multiband delay ( $\mu$ s)

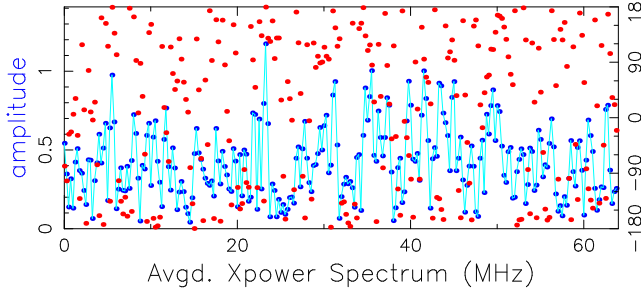


Fringe quality 0

SNR 5.7  
 Int time 149.687  
 Amp 0.212  
 Phase -158.6  
 PFD 7.1e-01  
 Delays (us)  
 SBD 0.510304  
 MBD 0.005853  
 Fringe rate (Hz)  
 0.684740  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

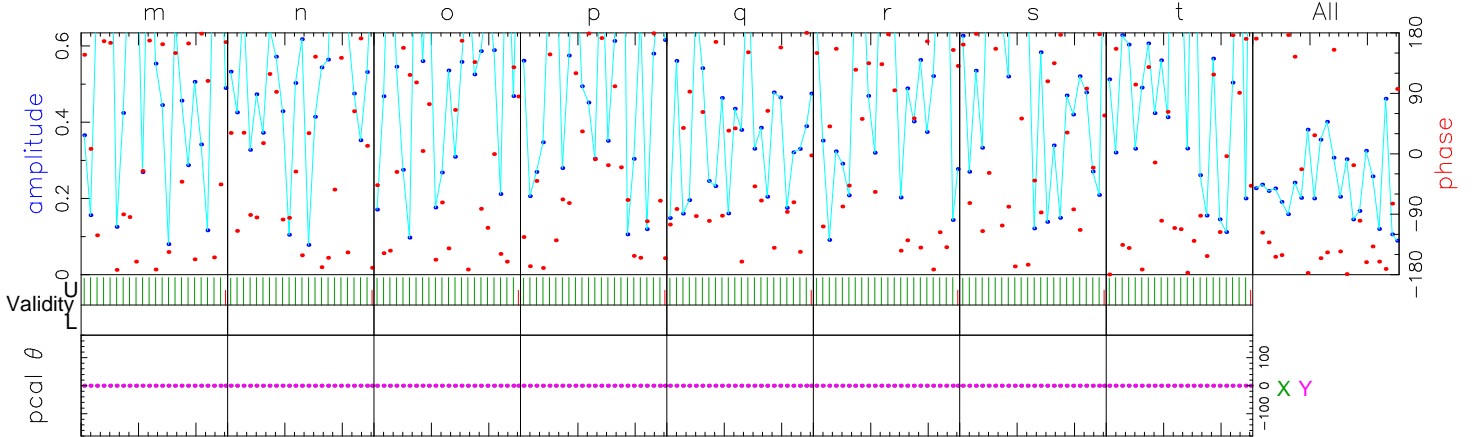


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105814  
 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
	-161.0	-156.4	179.8	-136.2	-121.8	174.2	-149.4	-149.0	Phase	-158.6
	0.4	0.1	0.2	0.2	0.1	0.3	0.2	0.3	Ampl.	0.2
	388.7	203.7	41.4	69.4	93.2	175.9	473.8	149.5	Sbd box	387.6
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.82933329108E+03	Apriori delay (usec)	5.82882743822E+03	Resid mbdelay (usec)	5.85287E-03	+/-	1.9E-04
Sband delay (usec)	5.82933774222E+03	Apriori clock (usec)	2.2320831E+02	Resid sbdelay (usec)	5.10304E-01	+/-	1.5E-03
Phase delay (usec)	5.82882743310E+03	Apriori clockrate (us/s)	2.4302921E-02	Resid phdelay (usec)	-5.11286E-06	+/-	6.4E-07
Delay rate (us/s)	7.41183725416E-02	Apriori rate (us/s)	7.41104233853E-02	Resid rate (us/s)	7.94916E-06	+/-	7.4E-09
Total phase (deg)	31.5	Apriori accel (us/s/s)	-9.38443084700E-06	Resid phase (deg)	-158.6	+/-	20.0

ph/seg (deg)	65.4	Theor.	47.9	Amplitude	0.212 +/- 0.037	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	68.9	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)	23.3	Inc. seg. avg.	0.223	Inc. frq. avg.	0.197	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	49.7	Inc. frq. avg.	0.197			Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
X: az 6.5 el 37.7 pa -10.4		Y: az 0.0 el 20.3 pa -0.2		u, v (fr/asec)	-1251.119 -1401.343	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
Control file: cf_1234_gmva		Input file: /Exps/c241a/v2/3mm/1234/No0901//XY..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//XY.W.566.3MP15Q			ion window (TEC) 0.00 0.00

simultaneous interpolator



Mk4/DiFX fourfit 3.25 rev 0

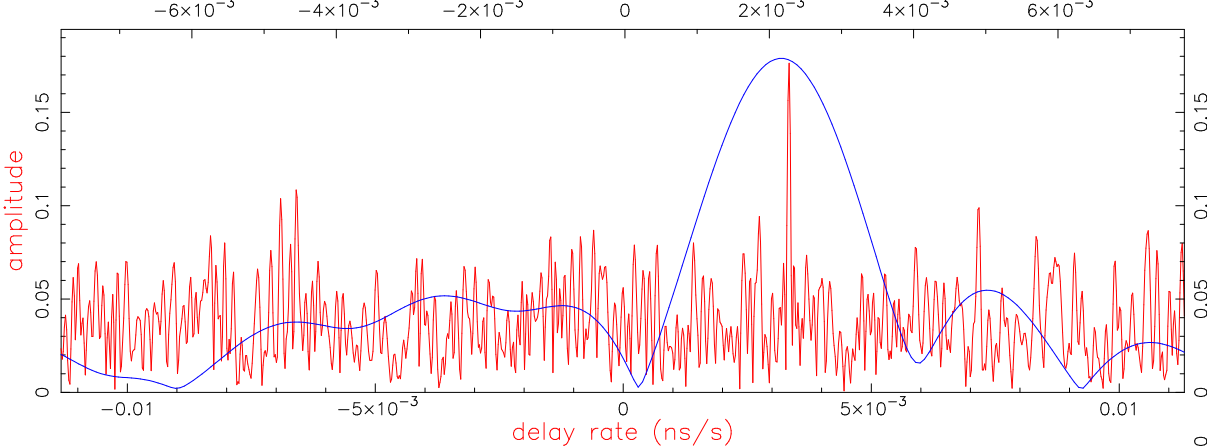
aux01

3C371.3MP15Q, No0901, XY

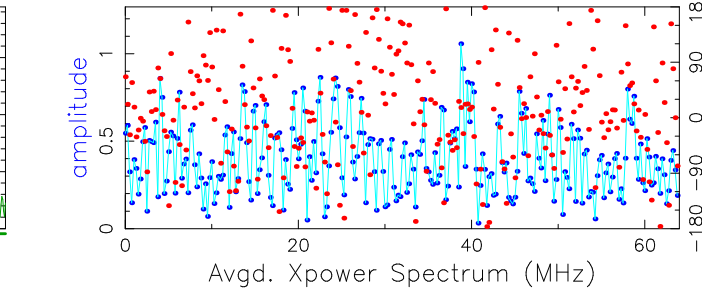
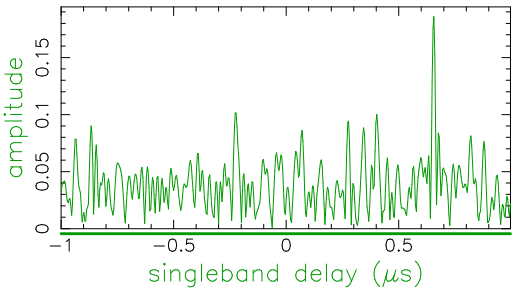
ONŞALA60 - YEŞES40M, fgroup W, pol RL

multiband delay ( $\mu$ s)

Fringe quality 0

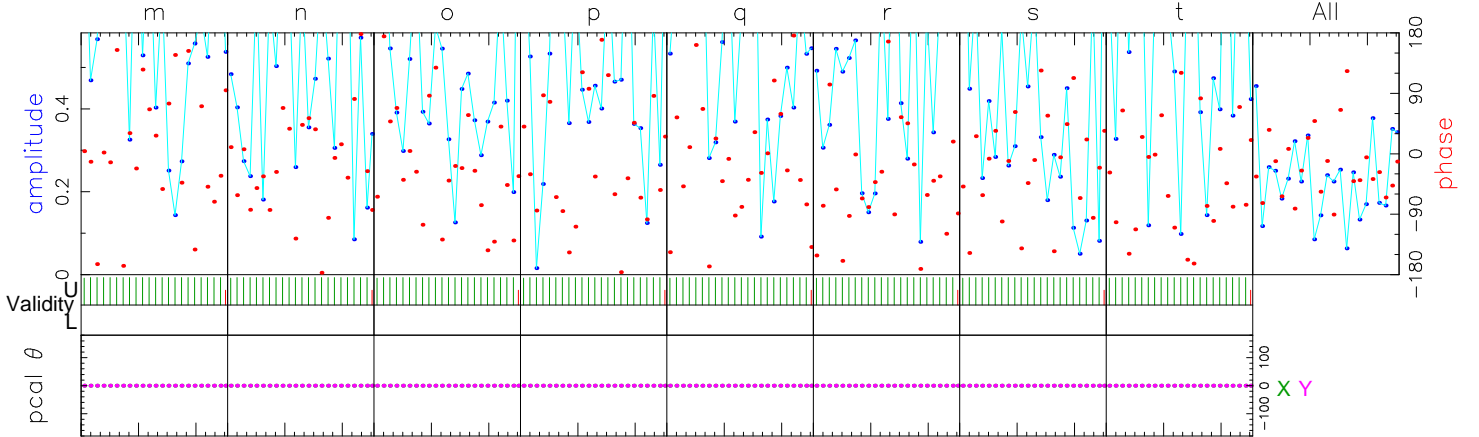


SNR 6.3  
 Int time 149.687  
 Amp 0.194  
 Phase -25.8  
 PFD 4.6e-02  
 Delays (us)  
 SBD 0.655166  
 MBD 0.002352  
 Fringe rate (Hz)  
 0.288561  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105822  
 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
	-5.5	-11.8	-33.5	-22.6	-13.0	-57.3	-28.0	-30.1		-25.8
	0.2	0.2	0.2	0.1	0.2	0.3	0.2	0.2	Ampl.	0.2
	15.2	165.4	170.5	34.9	358.2	411.2	199.6	323.0	Sbd box	424.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.82948603997E+03	Apriori delay (usec)	5.82882743822E+03	Resid mbdelay (usec)	2.35175E-03	+/-	1.7E-04
Sband delay (usec)	5.82948260397E+03	Apriori clock (usec)	2.2320831E+02	Resid sbdelay (usec)	6.55166E-01	+/-	1.4E-03
Phase delay (usec)	5.82882743738E+03	Apriori clockrate (us/s)	2.4302921E-06	Resid phdelay (usec)	-8.32192E-07	+/-	5.9E-07
Delay rate (us/s)	7.41137732884E-02	Apriori rate (us/s)	7.41104233853E-02	Resid rate (us/s)	3.34990E-06	+/-	6.8E-09
Total phase (deg)	164.2	Apriori accel (us/s/s)	-9.38443084700E-06	Resid phase (deg)	-25.8	+/-	18.3

ph/seg (deg)	51.1	Theor.	43.8	Amplitude	0.194 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	55.9	Search (1024X32)	0.178	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	17.6	Inc. seg. avg.	0.185	Inc. frq. avg.	0.173	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	25.5	Inc. frq. avg.	0.173			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
X: az 6.5 el 37.7 pa -10.4		Y: az 0.0 el 20.3 pa -0.2		u, v (fr/asec)	-1251.119 -1401.343	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234_gmva		Input file: /Exps/c241a/v2/3mm/1234/No0901//XY..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//XY.W.581.3MP15Q					simultaneous interpolator	

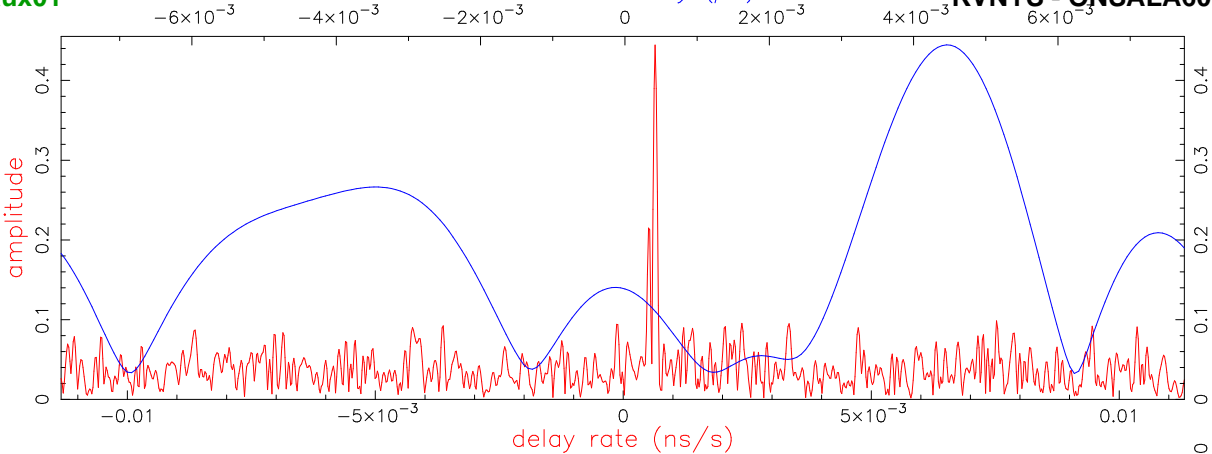
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yX

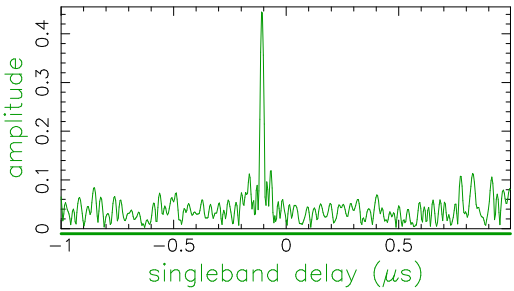
KVNYS - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

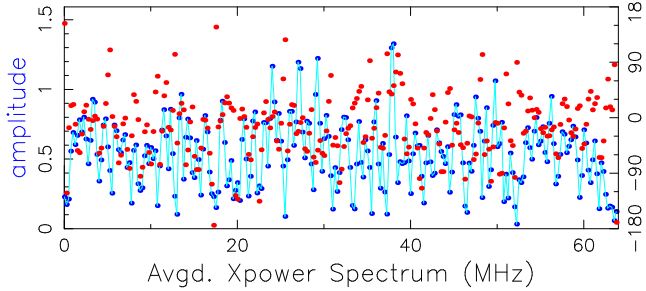


Fringe quality 8

SNR 15.2  
 Int time 149.703  
 Amp 0.455  
 Phase 135.6  
 PFD 9.2e-44  
 Delays (us)  
 SBD -0.107509  
 MBD 0.004496  
 Fringe rate (Hz)  
 0.055899  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

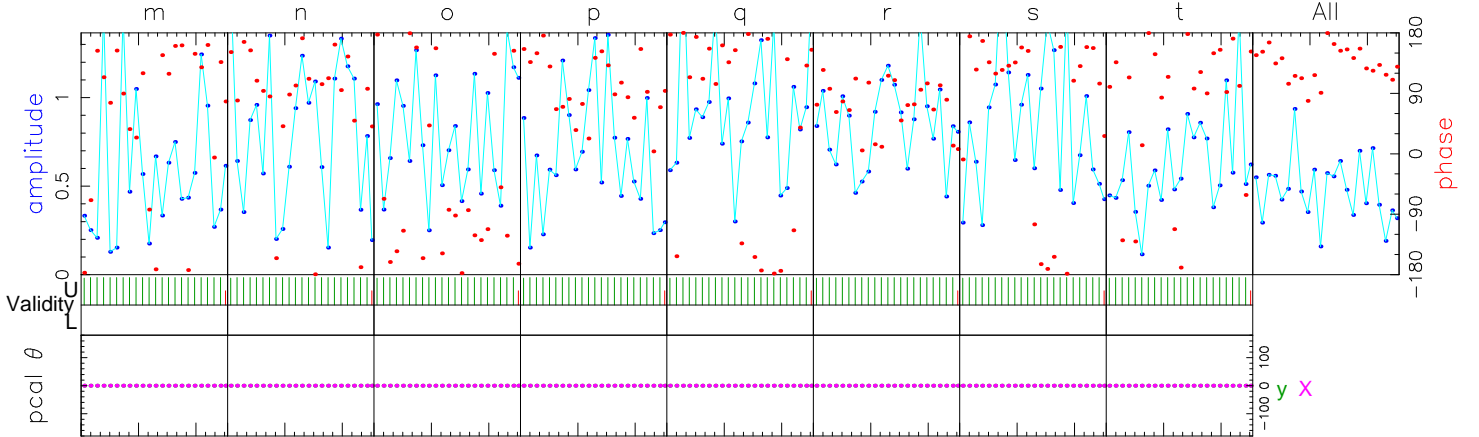


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105706  
 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		
y	0	0	60000	0	0	0	4000	0		
X	0	0	0	0	0	0	0	0		
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
y	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	2.84754506434E+03	Apriori delay (usec)	2.84764994372E+03	Resid mbdelay (usec)	4.49562E-03	+/-	7.1E-05
Sband delay (usec)	2.84754243447E+03	Apriori clock (usec)	-1.0623351E+02	Resid sbdelay (usec)	-1.07509E-01	+/-	5.7E-04
Phase delay (usec)	2.84764994809E+03	Apriori clockrate (us/s)	-1.2170620E-06	Resid phdelay (usec)	4.37123E-06	+/-	2.4E-07
Delay rate (us/s)	2.47047284373E-01	Apriori rate (us/s)	2.47046635446E-01	Resid rate (us/s)	6.48927E-07	+/-	2.8E-09
Total phase (deg)	190.4	Apriori accel (us/s/s)	-4.03880230922E-05	Resid phase (deg)	135.6	+/-	7.5

ph/seg (deg)	24.9	RMS	18.1	Theor.	18.1	Amplitude	0.455 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	38.9	Search (1024X32)	0.438	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	45.3	Inc. seg. avg.	0.462	Inc. frq. avg.	0.564	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	37.3	Inc. frq. avg.	0.564	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
									ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4212.750 -9294.056 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.403.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

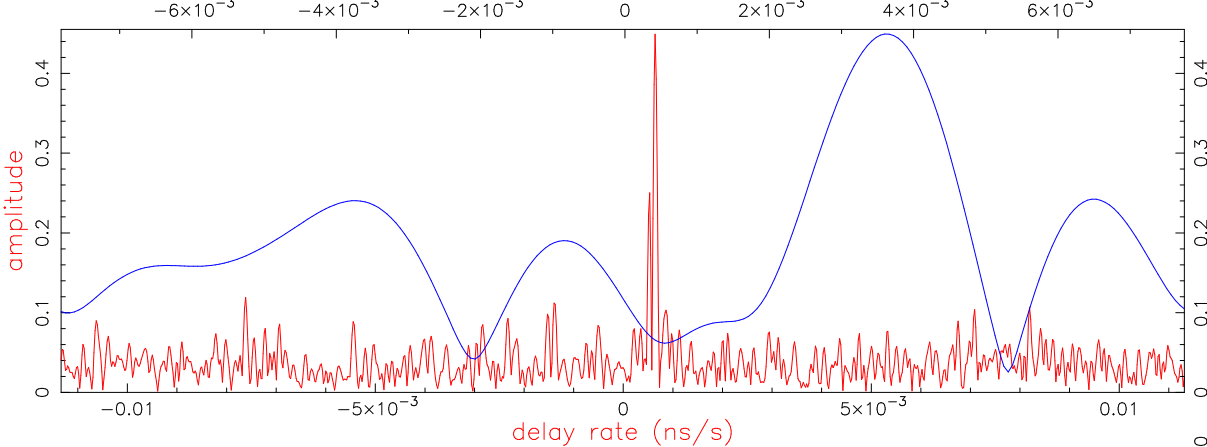
aux01

3C371.3MP15Q, No0901, yX

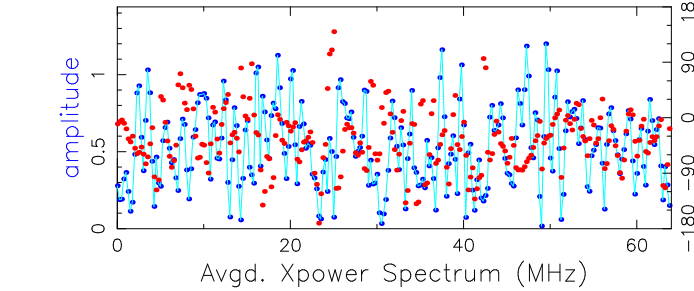
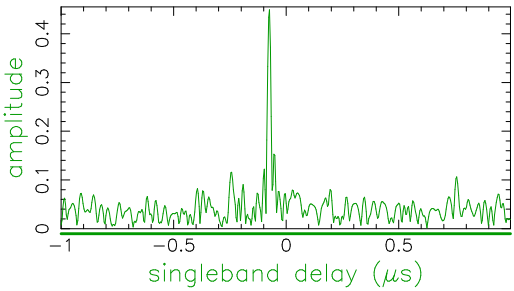
KVNYS - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 8

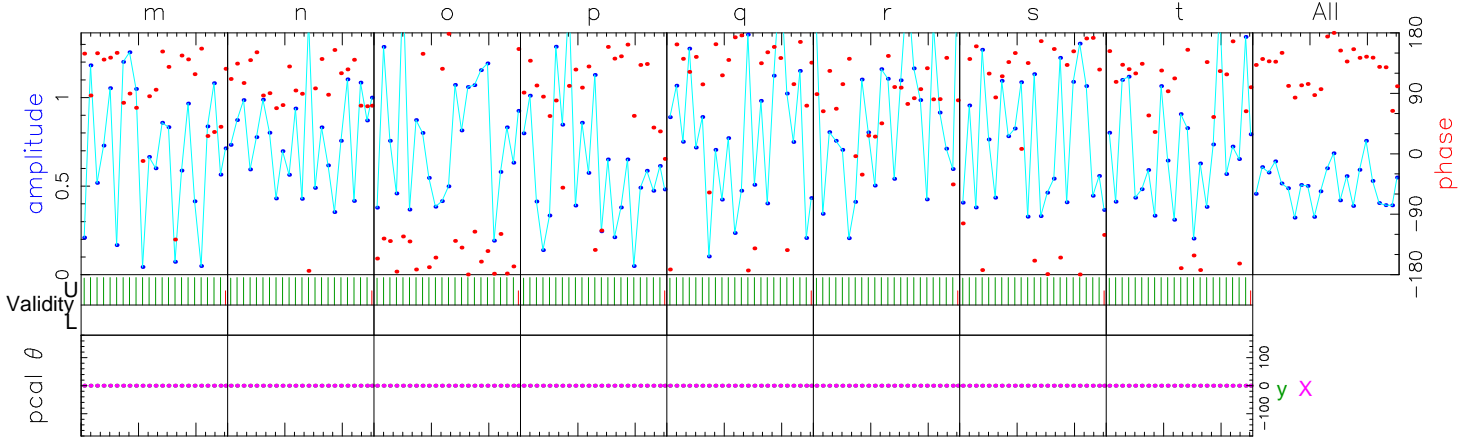


SNR 15.2  
 Int time 149.703  
 Amp 0.455  
 Phase 131.9  
 PFD 9.5e-44  
 Delays (us)  
 SBD -0.075544  
 MBD 0.003585  
 Fringe rate (Hz)  
 0.055679  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105707  
 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
	101.5	111.3	-152.8	113.4	153.5	80.0	159.8	125.5	Phase	131.9
	0.5	0.6	0.7	0.4	0.7	0.6	0.5	0.5	Ampl.	0.6
	239.0	237.9	237.2	236.8	236.5	236.9	237.1	238.4	Sbd box	237.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.84757540422E+03	Apriori delay (usec)	2.84764994372E+03	Resid mbdelay (usec)	3.58550E-03	+/-	7.1E-05
Sband delay (usec)	2.84757439947E+03	Apriori clock (usec)	-1.0623351E+02	Resid sbdelay (usec)	-7.55443E-02	+/-	5.7E-04
Phase delay (usec)	2.84764994798E+03	Apriori clockrate (us/s)	-1.2170620E-06	Resid phdelay (usec)	4.25246E-06	+/-	2.4E-07
Delay rate (us/s)	2.47047281828E-01	Apriori rate (us/s)	2.47046635446E-01	Resid rate (us/s)	6.46382E-07	+/-	2.8E-09
Total phase (deg)	186.7	Apriori accel (us/s/s)	-4.03880230922E-05	Resid phase (deg)	131.9	+/-	7.5

ph/seg (deg)	29.4	RMS	18.1	Theor.	18.1	Amplitude	0.455 +/- 0.030	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	27.0	Search (1024X32)	0.439	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	43.5	Inc. seg. avg.	0.484	Inc. frq. avg.	0.565	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	34.4	Inc. frq. avg.	0.565	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u, v (fr/asec) -4212.750 -9294.056 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.409.3MP15Q

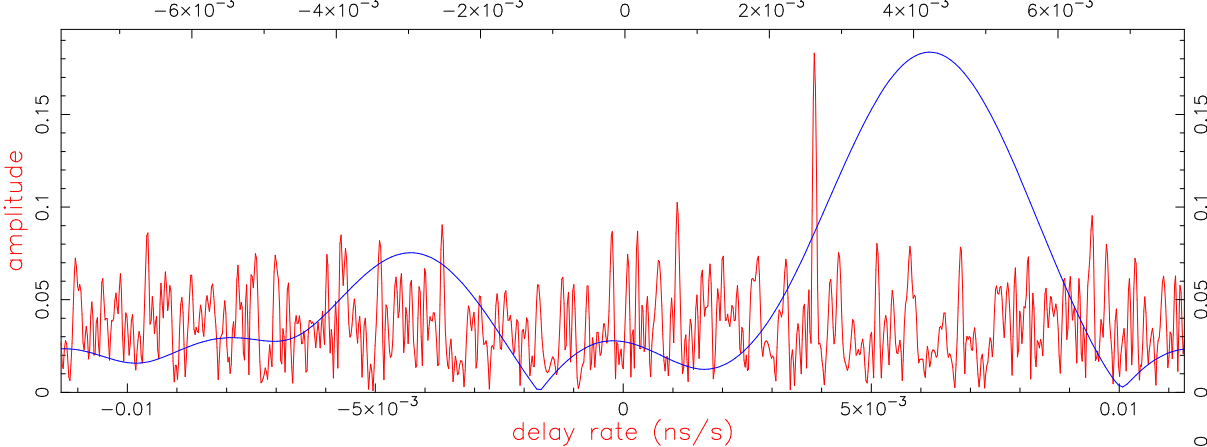
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, yX

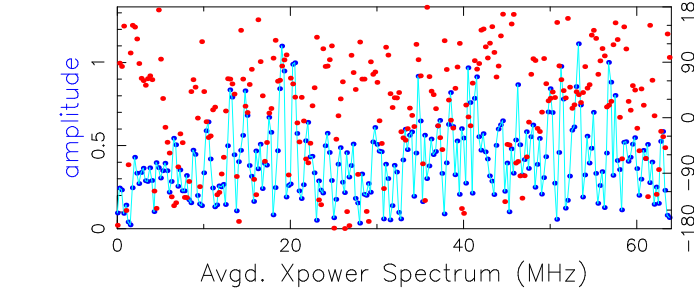
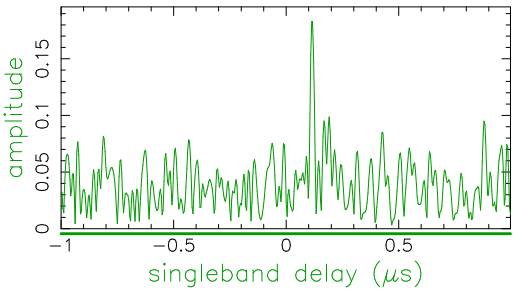
KVNYS - ONSALA60, fgroup W, pol LR

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



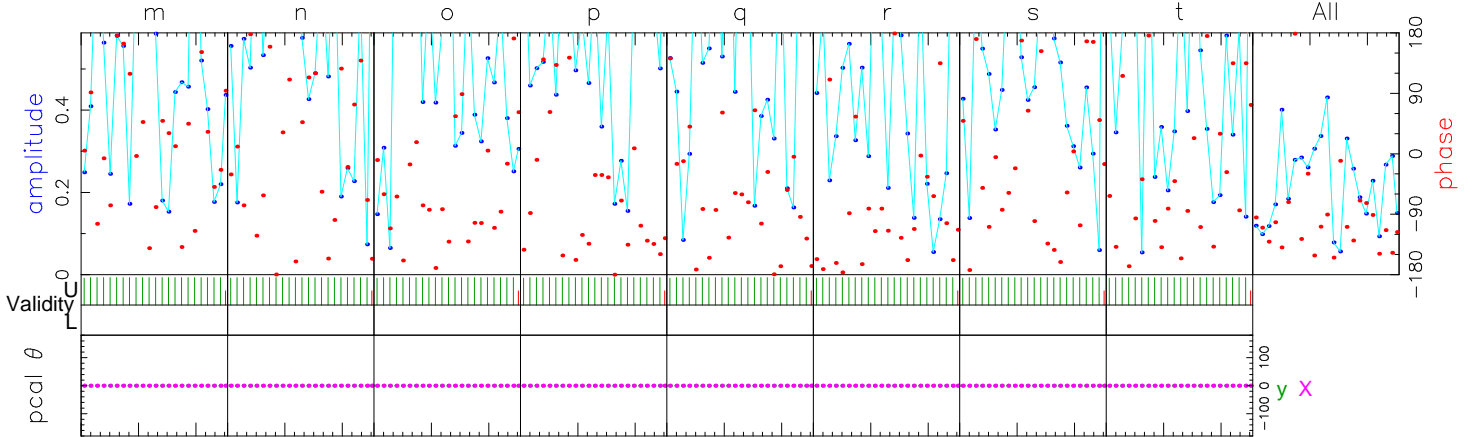
Fringe quality 0

SNR 6.2  
 Int time 149.703  
 Amp 0.196  
 Phase -113.6  
 PFD 5.4e-02  
 Delays (us)  
 SBD 0.115218  
 MBD 0.004331  
 Fringe rate (Hz) 0.331588  
 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  
 2025:041:105710  
 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
	-73.6	-163.8	-80.8	-122.3	-104.3	-133.6	-102.0	-123.8	Phase	-113.6
	0.1	0.2	0.3	0.3	0.3	0.3	0.2	0.2	Ampl.	0.2
	401.6	275.8	303.6	37.2	286.9	284.9	406.0	414.9	Sbd box	286.5
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.84776364957E+03 Apriori delay (usec) 2.84764994372E+03 Resid mbdelay (usec) 4.33085E-03 +/- 1.7E-04  
 Sband delay (usec) 2.84776516147E+03 Apriori clock (usec) -1.0623351E+02 Resid sbdelay (usec) 1.15218E-01 +/- 1.4E-03  
 Phase delay (usec) 2.84764994006E+03 Apriori clockrate (us/s) -1.2170620E-02 Resid phdelay (usec) -3.66273E-06 +/- 5.9E-07  
 Delay rate (us/s) 2.47050484852E-01 Apriori rate (us/s) 2.47046635446E-01 Resid rate (us/s) 3.84941E-06 +/- 6.8E-09  
 Total phase (deg) -58.8 Apriori accel (us/s/s) -4.03880230922E-05 Resid phase (deg) -113.6 +/- 18.3

RMS Theor. Amplitude 0.196 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 40.0 44.0 Search (1024X32) 0.182 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 58.3 76.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 31.6 25.9 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 (%) 42.0 45.3 Inc. frq. avg. 0.191 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

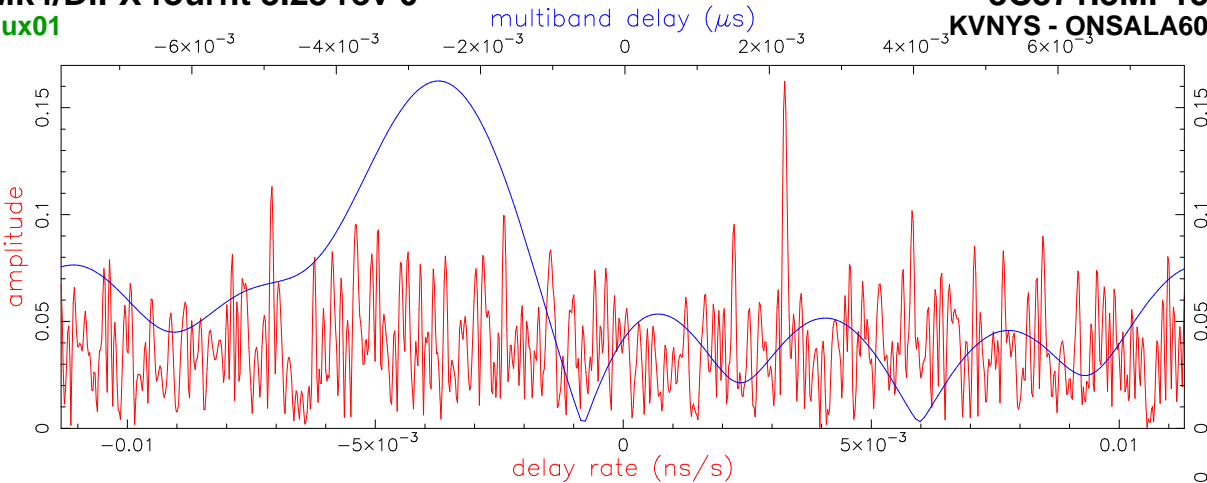
y: az 23.5 el 48.4 pa -114.6 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -4212.750 -9294.056 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No09011/yX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No09011/yX.W.418.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

aux01

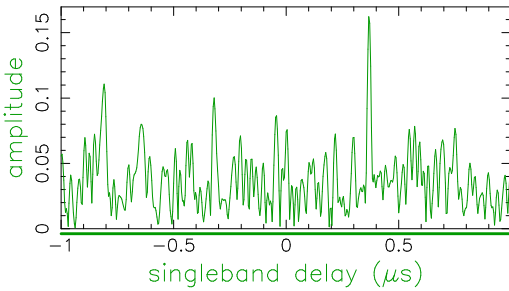
3C371.3MP15Q, No0901, yX

KVNYS - ONSALA60, fgroup W, pol RL

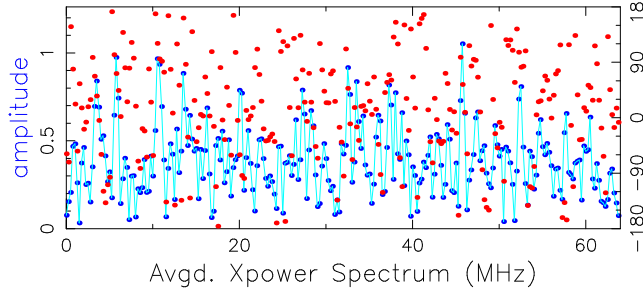


Fringe quality 0

SNR 5.5  
 Int time 149.703  
 Amp 0.170  
 Phase -5.7  
 PFD 9.9e-01  
 Delays (us)  
 SBD 0.368507  
 MBD -0.002644  
 Fringe rate (Hz)  
 0.280101  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

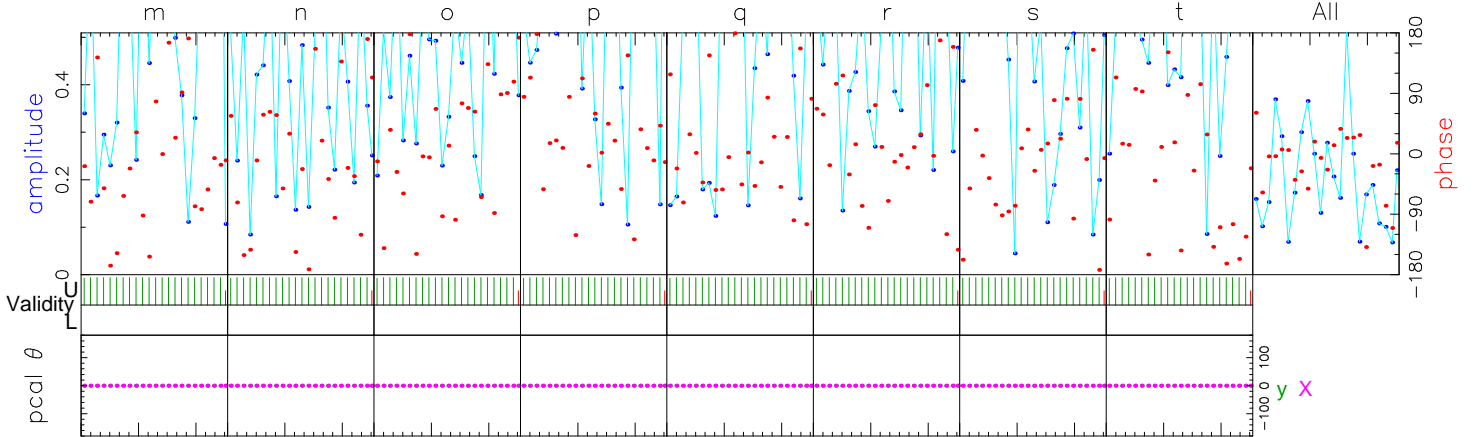


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105712  
 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		
	-41.0	3.4	62.9	13.3	-19.8	1.1	-15.1	13.9	Phase	-5.7		
	0.2	0.1	0.1	0.3	0.3	0.2	0.3	0.0	Ampl.	0.2		
	449.1	247.8	389.5	352.0	350.9	48.2	452.3	447.7	Sbd box	351.3		
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used			
y	0	0	60000	0	0	0	4000	0	PC freqs			
X	0	0	0	0	0	0	0	0	PC freqs			
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
y:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC			
y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
X	1000	1000	1000	1000	1000	1000	1000	1000				
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids			
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks			
									Tracks			
Group delay (usec) (SBD)	2.84802229985E+03		Apriori delay (usec)		2.84764994372E+03		Resid mbdelay (usec)		-2.64387E-03	+/- 2.0E-04		
Sband delay (usec)	2.84801845047E+03		Apriori clock (usec)		-1.0623351E+02		Resid sbdelay (usec)		3.68507E-01	+/- 1.6E-03		
Phase delay (usec)	2.84764994354E+03		Apriori clockrate (us/s)		-1.2170620E-06		Resid phdelay (usec)		-1.82687E-07	+/- 6.7E-07		
Delay rate (us/s)	2.47049887137E-01		Apriori rate (us/s)		2.47046635446E-01		Resid rate (us/s)		3.25169E-06	+/- 7.8E-09		
Total phase (deg)	49.1		Apriori accel (us/s/s)		-4.03880230922E-05		Resid phase (deg)		-5.7	+/- 20.9		
	RMS	Theor.	Amplitude	0.170 +/- 0.031		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	47.7	50.0	Search (1024X32)	0.161		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000		
amp/seg (%)	72.6	87.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	34.4	29.5	Inc. seg. avg.	0.153		Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us		dr window (ns/s)	-0.011	0.011		
amp/frq (%)	57.7	51.5	Inc. frq. avg.	0.166		Data rate(Mb/s): 2048		nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
y: az 23.5 el 48.4 pa -114.6	X: az 6.5 el 37.7 pa -10.4		u, v (fr/asec) -4212.750 -9294.056						simultaneous interpolator			
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901/yX..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901/yX.W.421.3MP15Q									



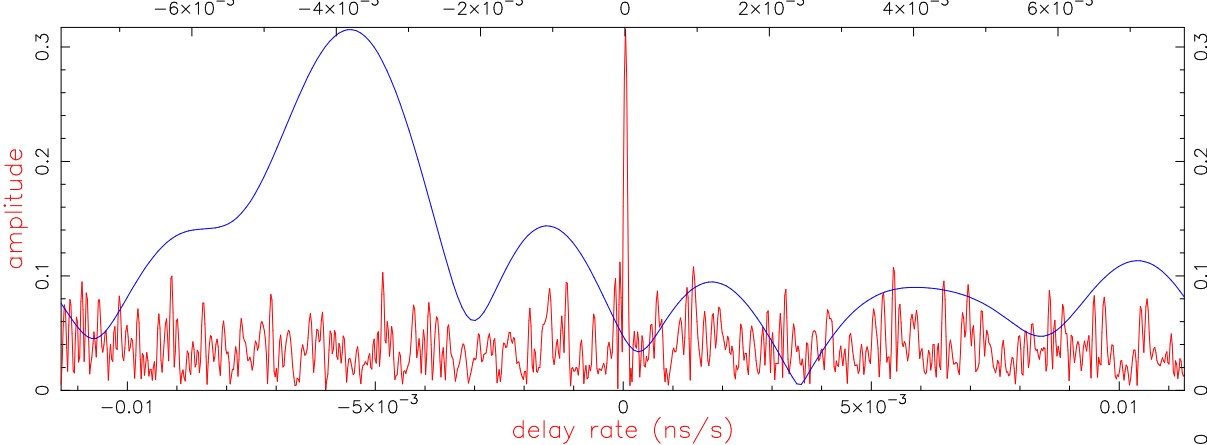
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ZX

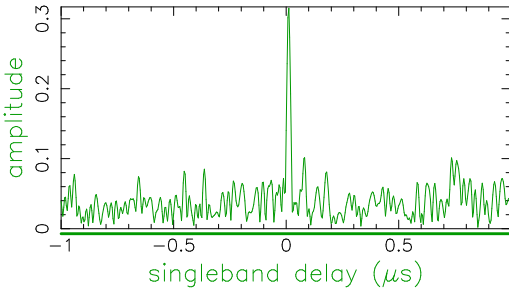
METSAHOV - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

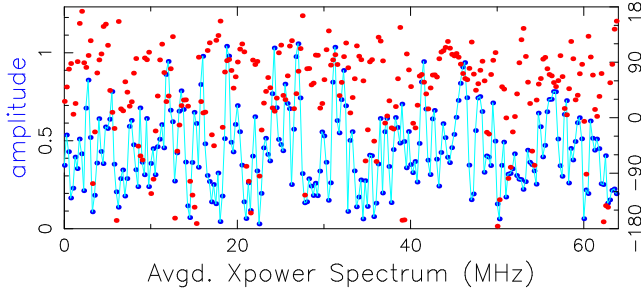


Fringe quality 9

SNR 10.6  
 Int time 149.838  
 Amp 0.317  
 Phase -126.7  
 PFD 5.9e-18  
 Delays (us)  
 SBD 0.010711  
 MBD -0.003817  
 Fringe rate (Hz)  
 0.003819  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

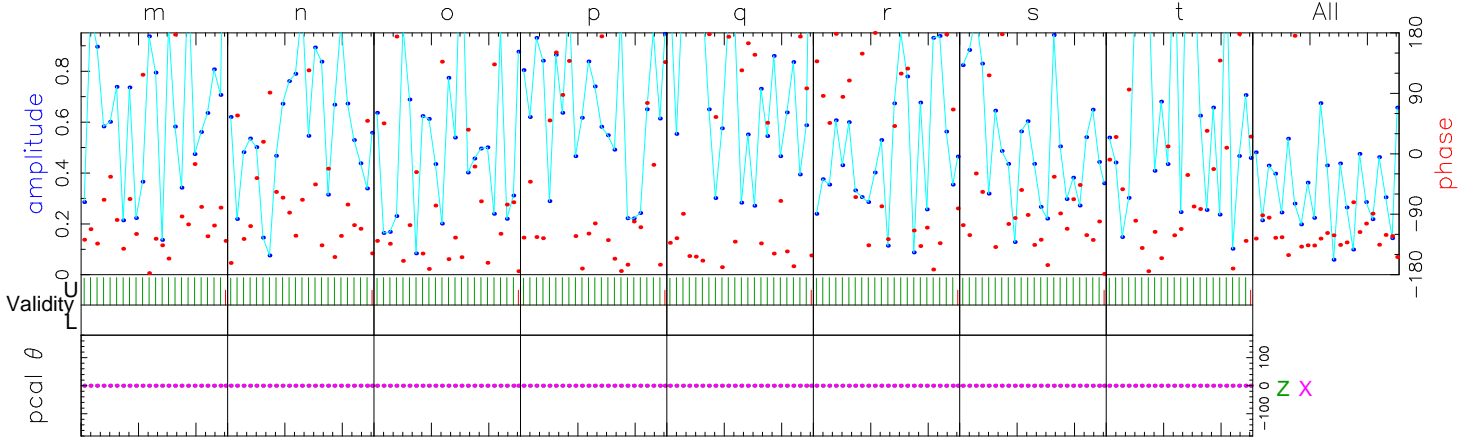


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105730  
 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
	-114.3	-98.0	-136.5	-154.3	-154.8	163.9	-96.1	-89.9	Phase	-126.7
	0.5	0.4	0.3	0.3	0.5	0.2	0.4	0.3	Ampl.	0.4
	259.6	259.7	259.7	260.1	260.5	482.3	260.4	258.3	Sbd box	259.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.87543035341E+02	Apriori delay (usec)	9.87531227343E+02	Resid mbdelay (usec)	-3.81700E-03	+/-	1.0E-04
Sband delay (usec)	9.87541938343E+02	Apriori clock (usec)	-1.1254890E+02	Resid sbdelay (usec)	1.07110E-02	+/-	8.1E-04
Phase delay (usec)	9.87531223258E+02	Apriori clockrate (us/s)	-6.0676312E-02	Resid phdelay (usec)	-4.08583E-06	+/-	3.5E-07
Delay rate (us/s)	4.78366177304E-02	Apriori rate (us/s)	4.78365733974E-02	Resid rate (us/s)	4.43330E-08	+/-	4.0E-09
Total phase (deg)	205.7	Apriori accel (us/s/s)	-3.13915907351E-06	Resid phase (deg)	-126.7	+/-	10.8

ph/seg (deg)	23.3	Theor.	25.9	Amplitude	0.317 +/- 0.030	Pcdl mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	49.5	Search (1024X32)	0.314	Interp.	0.000	Pcdl rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	40.3	Inc. seg. avg.	0.305	Inc. seg. avg.	0.305	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	35.6	Inc. frq. avg.	0.353	Inc. frq. avg.	0.353	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

Z: az 12.3 el 41.5 pa -18.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -801.916 -583.172 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//ZX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//ZX.W.463.3MP15Q

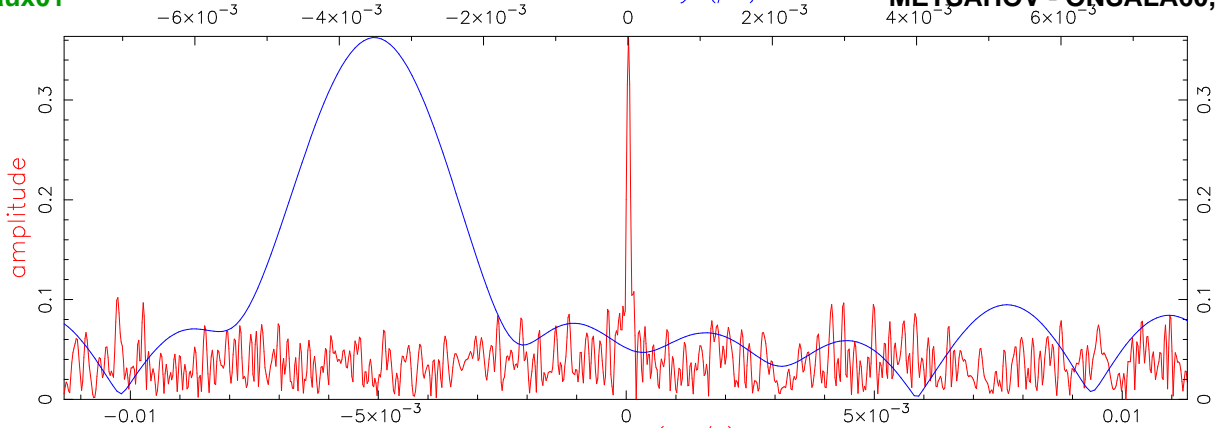
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ZX

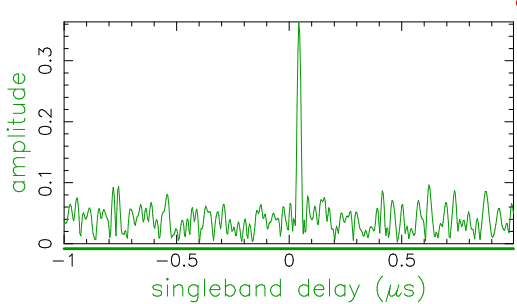
METSAHOV - ONSALA60, fgroup W, pol RR

multiband delay ( $\mu$ s)

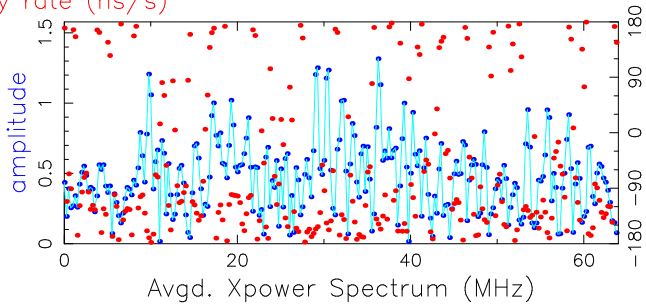


Fringe quality 9

SNR 12.2  
 Int time 149.838  
 Amp 0.364  
 Phase 43.9  
 PFD 1.1e-25  
 Delays (us)  
 SBD 0.043717  
 MBD -0.003492  
 Fringe rate (Hz) 0.003407  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

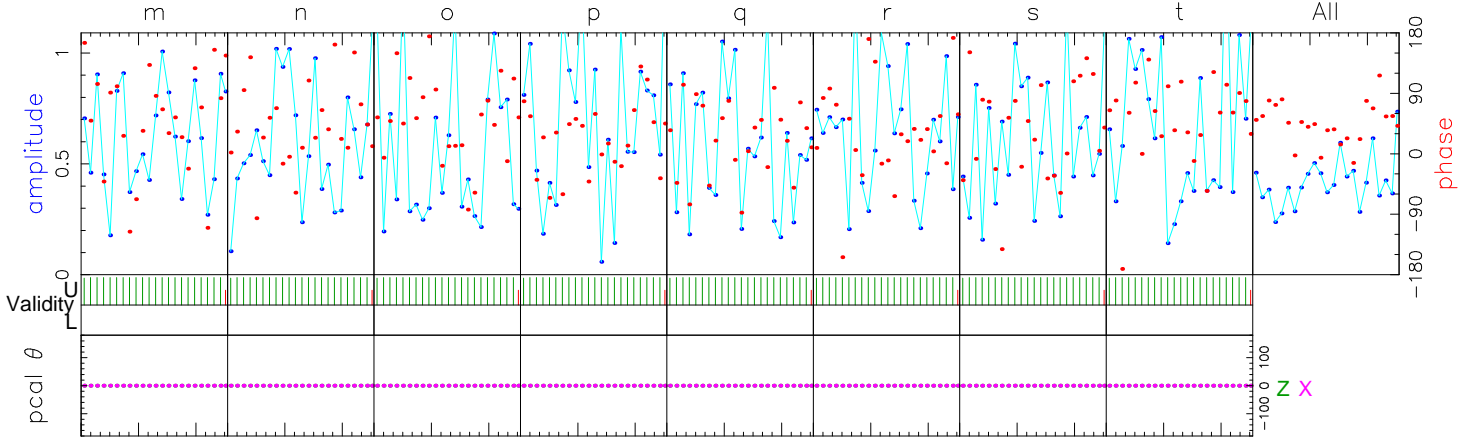


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105731  
 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
	74.9	34.0	47.7	32.5	35.3	22.0	36.4	67.9	Phase	43.9
	0.3	0.3	0.4	0.5	0.4	0.4	0.3	0.5	Ampl.	0.4
	268.2	357.2	267.9	268.8	267.8	268.1	268.7	267.7	Sbd box	268.2
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.87574610341E+02	Apriori delay (usec)	9.87531227343E+02	Resid mbdelay (usec)	-3.49200E-03	+/-	8.9E-05
Sband delay (usec)	9.87574944093E+02	Apriori clock (usec)	-1.1254890E+02	Resid sbdelay (usec)	4.37168E-02	+/-	7.1E-04
Phase delay (usec)	9.87531228758E+02	Apriori clockrate (us/s)	-6.0676312E-02	Resid phdelay (usec)	1.41420E-06	+/-	3.0E-07
Delay rate (us/s)	4.78366129490E-02	Apriori rate (us/s)	4.78365733974E-02	Resid rate (us/s)	3.95517E-08	+/-	3.5E-09
Total phase (deg)	16.3	Apriori accel (us/s/s)	-3.13915907351E-06	Resid phase (deg)	43.9	+/-	9.4

ph/seg (deg)	RMS 30.5	Theor. 22.6	Amplitude Search (1024X32)	0.364 +/- 0.030	0.359	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	31.8	39.4	Interp.	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	20.0	13.3	Inc. seg. avg.	0.385	0.370	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	16.6	23.2	Inc. frq. avg.	0.370	0.370	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

Z: az 12.3 el 41.5 pa -18.1 X: az 6.5 el 37.7 pa -10.4 u,v (fr/asec) -801.916 -583.172 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//ZX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//ZX.W.471.3MP15Q

Mk4/DiFX fourfit 3.25 rev 0

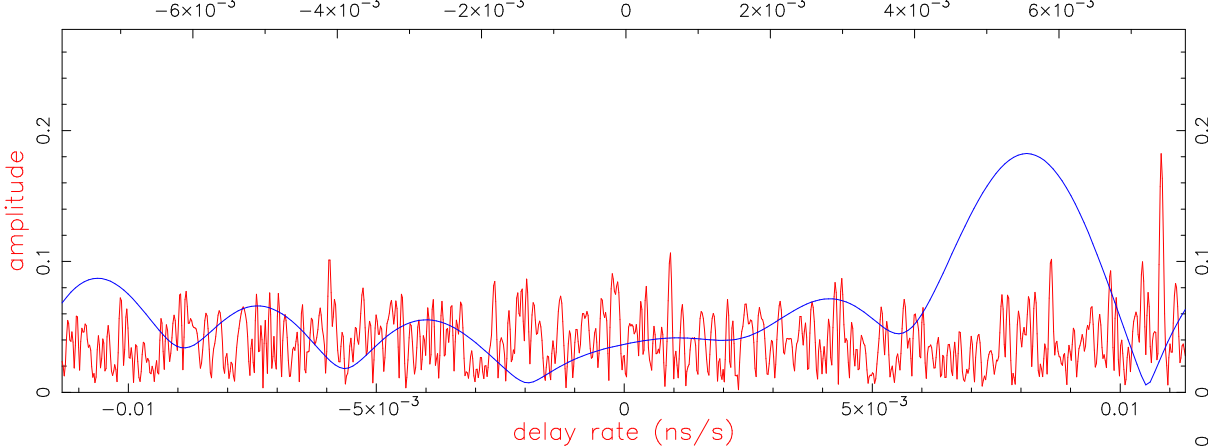
aux01

3C371.3MP15Q, No0901, ZX

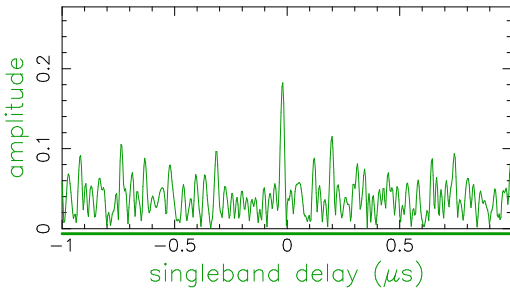
METSAHOV - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

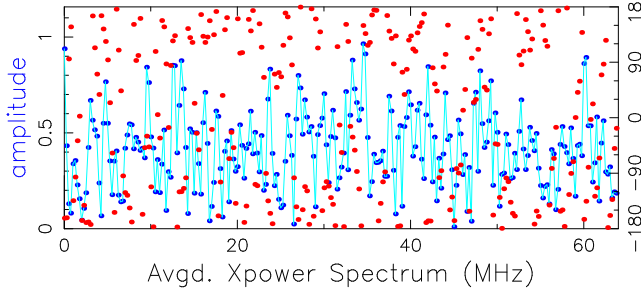
Fringe quality 0



SNR 6.2  
 Int time 149.838  
 Amp 0.277  
 Phase -125.4  
 PFD 9.3e-02  
 Delays (us)  
 SBD -0.020814  
 MBD 0.005514  
 Fringe rate (Hz) 0.934867  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

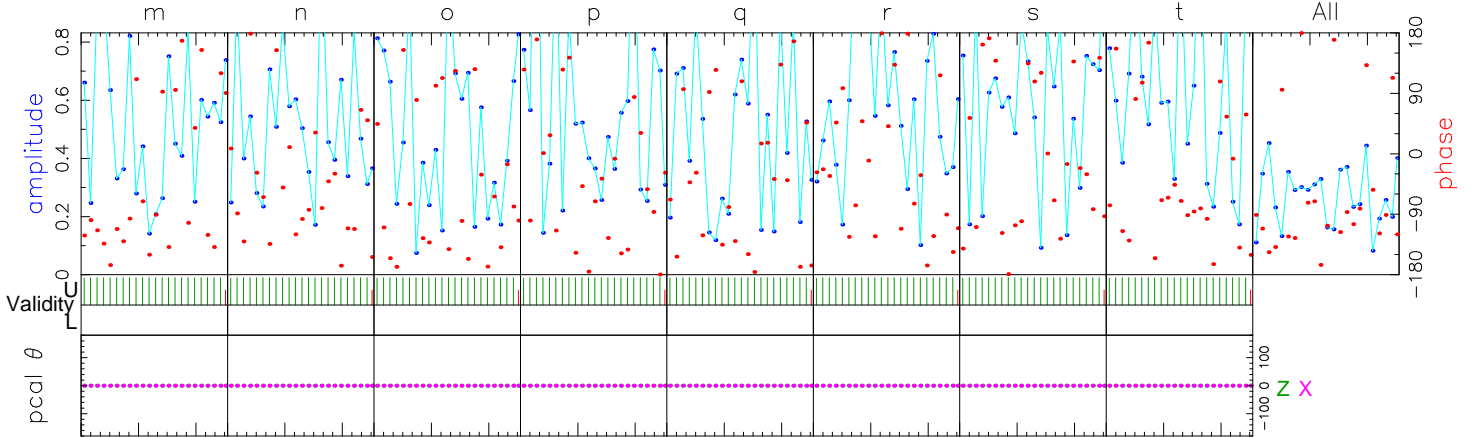


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105735  
 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
	-138.8	-91.7	-123.4	-158.0	-174.7	-97.7	-130.8	-101.9	Phase	-125.4
	0.5	0.4	0.3	0.3	0.2	0.2	0.3	0.2	Ampl.	0.3
	252.5	397.5	460.2	95.9	474.7	321.0	438.8	118.7	Sbd box	251.7
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	9.87505491237E+02	Apriori delay (usec)	9.87531227343E+02	Resid mbdelay (usec)	5.51389E-03	+/-	1.8E-04
Sband delay (usec)	9.87510413593E+02	Apriori clock (usec)	-1.1254890E+02	Resid sbdelay (usec)	-2.08138E-02	+/-	1.4E-03
Phase delay (usec)	9.87531223298E+02	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	-4.04502E-06	+/-	6.0E-07
Delay rate (us/s)	4.78474262752E-02	Apriori rate (us/s)	4.78365733974E-02	Resid rate (us/s)	1.08529E-05	+/-	6.9E-09
Total phase (deg)	207.0	Apriori accel (us/s/s)	-3.13915907351E-06	Resid phase (deg)	-125.4	+/-	18.6

ph/seg (deg)	RMS 56.5	Theor. 44.6	Amplitude Search (1024X32)	0.277 +/- 0.045	0.179	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.9	77.9	Interp.	0.000	0.312	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	32.1	26.3	Inc. seg. avg.	0.312	0.275	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.9	45.9	Inc. frq. avg.	0.275		Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 12.3 el 41.5 pa -18.1	X: az 6.5 el 37.7 pa -10.4		u,v (fr/asec) -801.916 -583.172		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241a/v2/3mm/1234/No0901//ZX..3MP15Q		Output file: /Exps/c241a/v2/3mm/1234/No0901//ZX.W.479.3MP15Q							

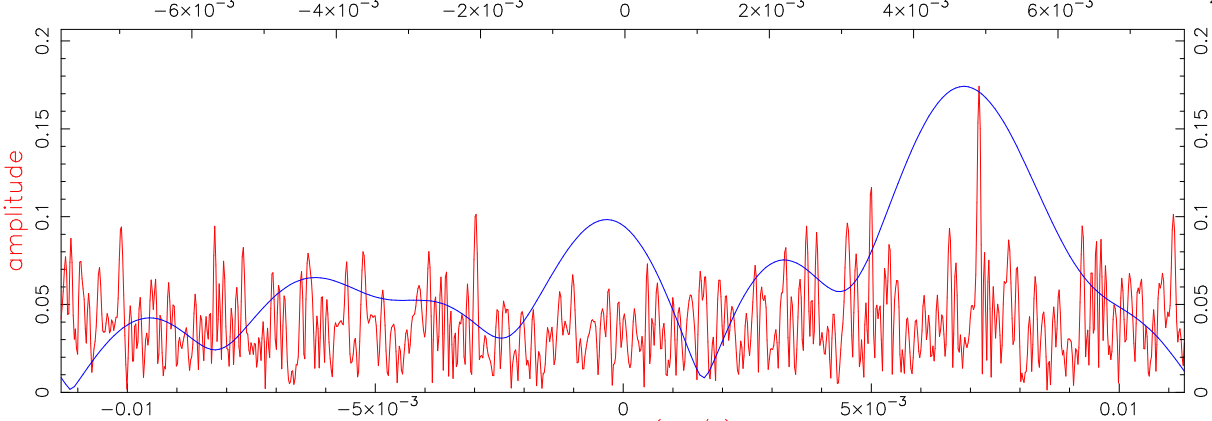
Mk4/DiFX fourfit 3.25 rev 0

aux01

3C371.3MP15Q, No0901, ZX

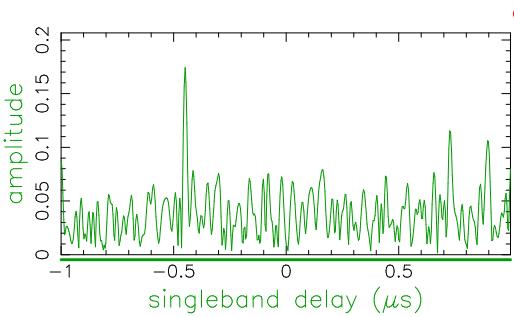
METSAHOV - ONSALA60, fgroup W, pol RL

multiband delay ( $\mu$ s)

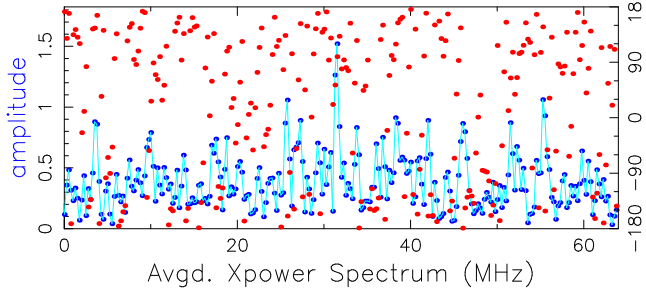


Fringe quality 0

SNR 5.8  
 Int time 149.838  
 Amp 0.207  
 Phase -45.1  
 PFD 5.0e-01  
 Delays (us)  
 SBD -0.449087  
 MBD 0.004701  
 Fringe rate (Hz) 0.618074  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

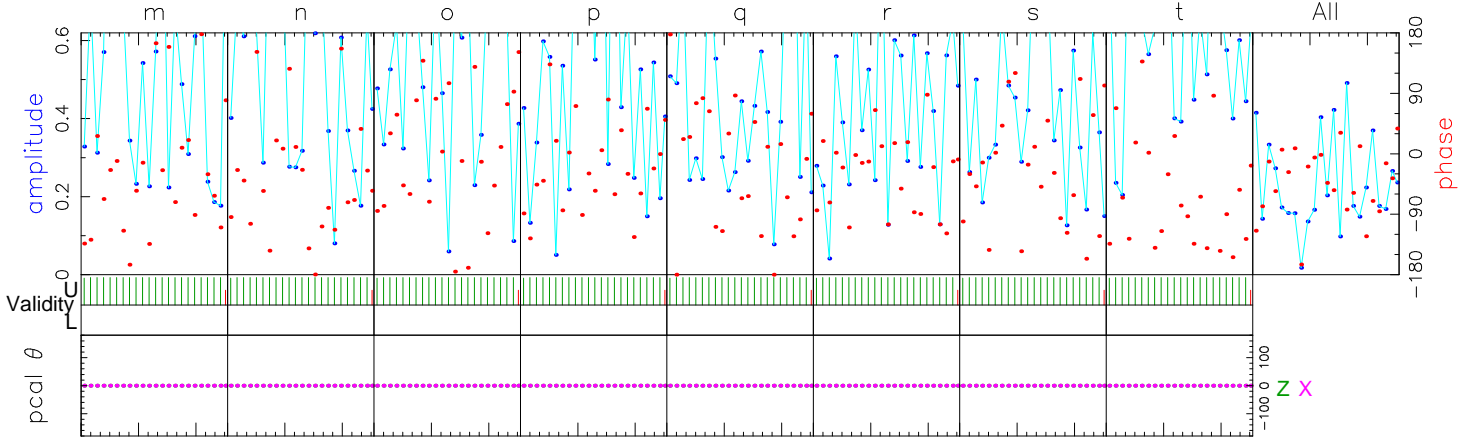


delay rate (ns/s)



Exp. c241a  
 Exper # 1234  
 Yr:day 2024:109  
 Start 163000.00  
 Stop 163230.02  
 FRT 163115.00  
 Corr/FF/build  
 2025:007:141222  
 2025:041:105737  
 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
	-61.2	-81.8	1.7	-29.5	-36.0	-18.0	-15.2	-96.9	Phase	-45.1
	0.3	0.2	0.1	0.4	0.1	0.3	0.2	0.3	Ampl.	0.2
	345.8	191.5	273.5	141.4	81.8	142.8	371.2	140.6	Sbd box	142.0
U/L	293/0	293/0	293/0	293/0	293/0	293/0	293/0	293/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	9.87082803380E+02	Apriori delay (usec)	9.87531227343E+02	Resid mbdelay (usec)	4.70104E-03	+/-	1.9E-04
Sband delay (usec)	9.87082140343E+02	Apriori clock (usec)	-1.1254890E+02	Resid sbdelay (usec)	-4.49087E-01	+/-	1.5E-03
Phase delay (usec)	9.87531225888E+02	Apriori clockrate (us/s)	-6.0676312E-07	Resid phdelay (usec)	-1.45519E-06	+/-	6.3E-07
Delay rate (us/s)	4.78437486259E-02	Apriori rate (us/s)	4.78365733974E-02	Resid rate (us/s)	7.17523E-06	+/-	7.3E-09
Total phase (deg)	287.3	Apriori accel (us/s/s)	-3.13915907351E-06	Resid phase (deg)	-45.1	+/-	19.6

ph/seg (deg)	49.4	Theor.	47.1	Amplitude	0.207 +/- 0.035	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	75.8	Search (1024X32)	0.170	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	37.5	Inc. seg. avg.	0.206	Inc. frq. avg.	0.218	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.3	Inc. frq. avg.	0.218			Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
Z: az 12.3 el 41.5 pa -18.1		X: az 6.5 el 37.7 pa -10.4		u, v (fr/asec)	-801.916 -583.172	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

Control file: cf\_1234\_gmva Input file: /Exps/c241a/v2/3mm/1234/No0901//ZX..3MP15Q Output file: /Exps/c241a/v2/3mm/1234/No0901//ZX.W.484.3MP15Q