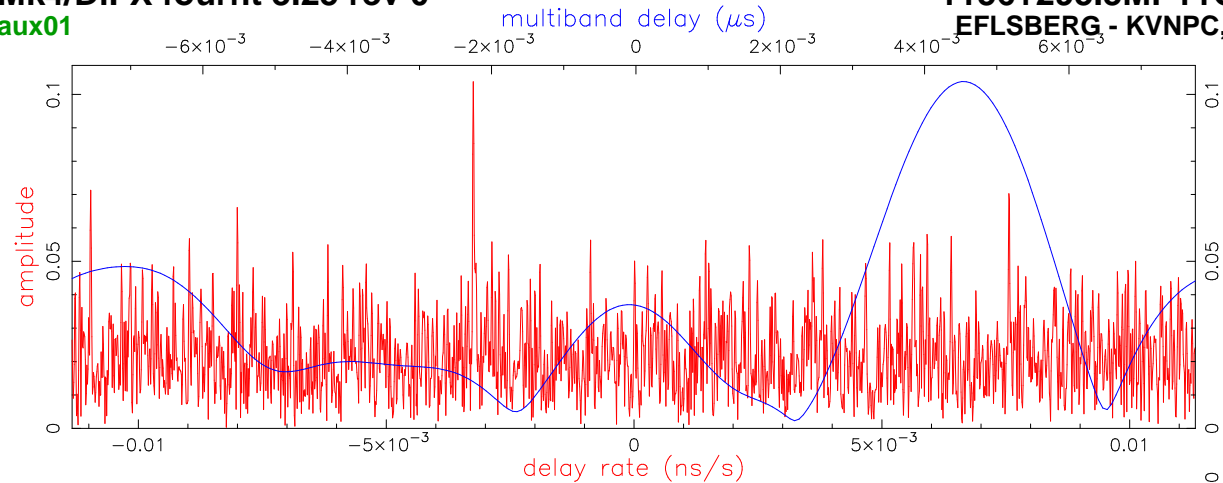


Mk4/DiFX fourfit 3.25 rev 0

aux01

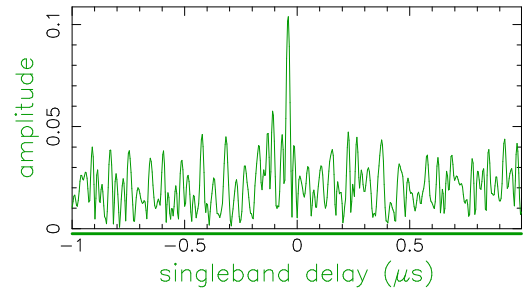
1156+295.3MP11G, No0446, BC

EFLSBERG - KVNPC, fgroup W, pol LR

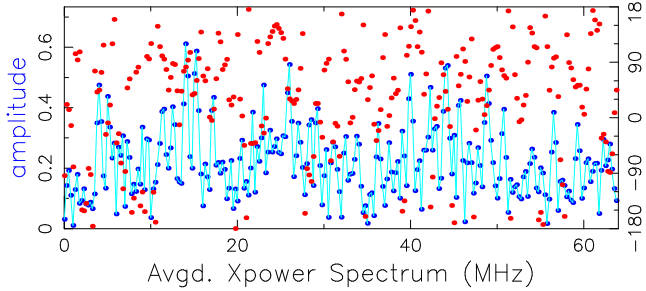


Fringe quality 0

SNR 5.9  
Int time 419.787  
Amp 0.109  
Phase -94.0  
PFD 6.4e-01  
Delays (us)  
SBD -0.040546  
MBD 0.004509  
Fringe rate (Hz)  
-0.279529  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

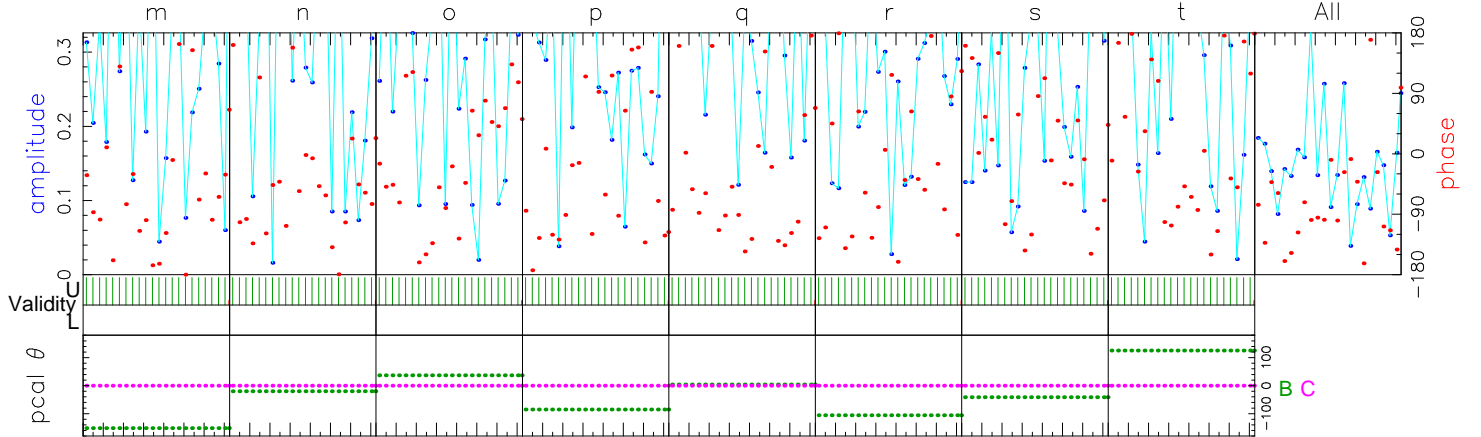


delay rate (ns/s)



Exp. c241b  
Exper # 1234  
Yr:day 2024:110  
Start 170000.00  
Stop 170659.84  
FRT 170330.00  
Corr/FF/build  
2024:358:161459  
2025:041:163040  
2024:113:095956  
RA & Dec (J2000)  
11h59m31.833914s  
+29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.7	-88.8	-3.9	-109.9	-103.6	-98.7	-50.3	-96.5	Phase	-94.0
	0.1	0.2	0.0	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	321.1	245.9	204.7	23.9	247.0	416.4	116.7	176.1	Sbd box	246.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
C	0	0	60000	0	0	0	4000	0	PC freqs	
B:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:C	-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	
C	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-3.11796658777E+03	Apriori delay (usec)	-3.11792422208E+03	Resid mbdelay (usec)	4.50931E-03	+/-	1.8E-04
Sband delay (usec)	-3.11796476758E+03	Apriori clock (usec)	-9.2914772E+00	Resid sbdelay (usec)	-4.05455E-02	+/-	1.5E-03
Phase delay (usec)	-3.11792422511E+03	Apriori clockrate (us/s)	7.1256178E-06	Resid phdelay (usec)	-3.03238E-06	+/-	6.3E-07
Delay rate (us/s)	1.65984337230E+00	Apriori rate (us/s)	1.65984661736E+00	Resid rate (us/s)	-3.24506E-06	+/-	2.6E-09
Total phase (deg)	-270.4	Apriori accel (us/s/s)	2.54664863077E-05	Resid phase (deg)	-94.0	+/-	19.5

ph/seg (deg)	52.8	Theor.	46.7	Amplitude	0.109 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	76.6	Search (2048X32)	0.101	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	41.9	Inc. seg. avg.	0.116	Inc. frq. avg.	0.105	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	45.7	Inc. frq. avg.	0.105			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 84.5 el 34.4 pa -46.5 C: az 274.6 el 46.7 pa 64.9 u,v (fr/asec) -10844.894 2454.196 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/BC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/BC.W.16.3MP11G

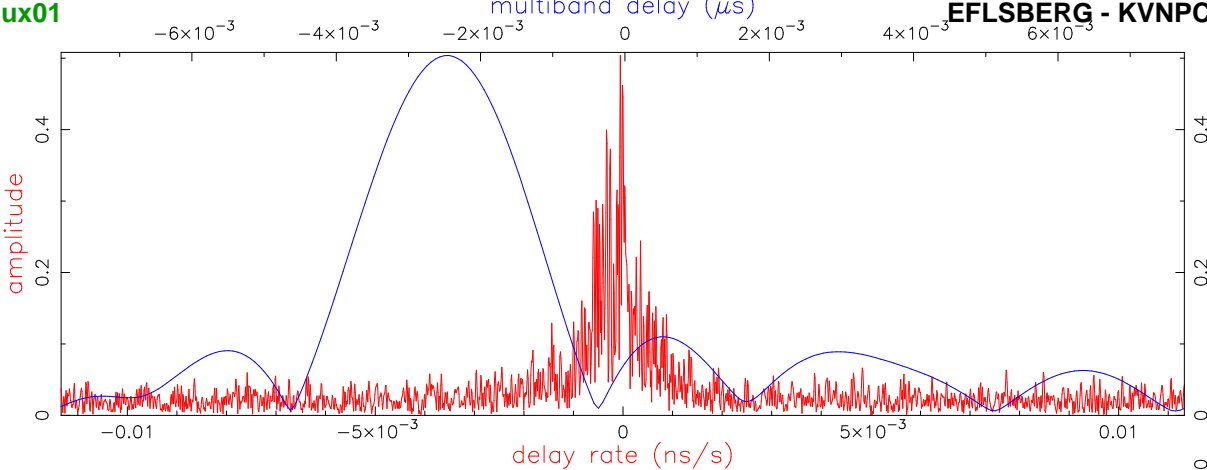
Mk4/DiFX fourfit 3.25 rev 0

aux01

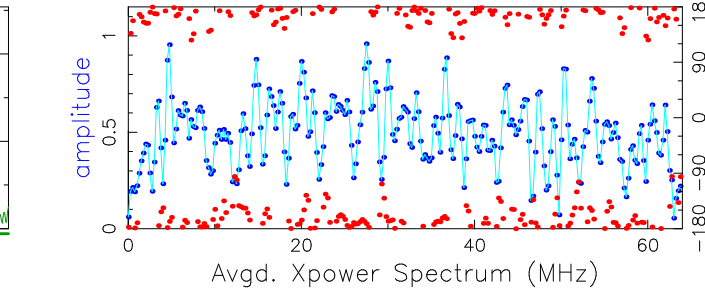
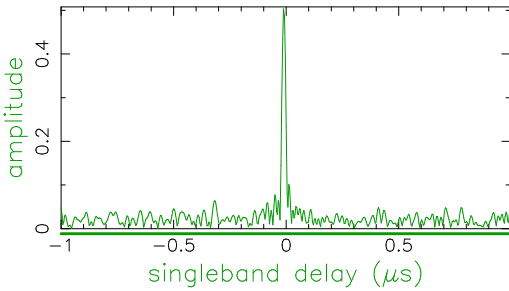
1156+295.3MP11G, No0446, BC

EFLSBERG - KVNPC, fgroup W, pol LL

Fringe quality 7

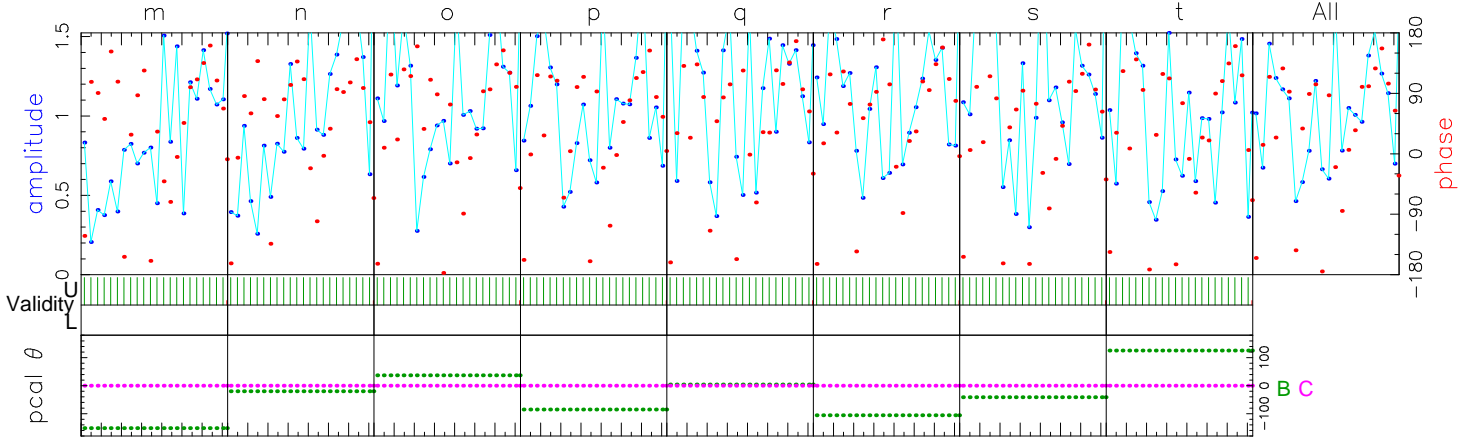


SNR 28.5  
 Int time 419.787  
 Amp 0.508  
 Phase 90.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.010499  
 MBD -0.002437  
 Fringe rate (Hz)  
 -0.004925  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163031  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
B	0	0	0	0	0	0	0	0		
C	0	0	60000	0	0	0	4000	0		
B:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	-151:0	-20:0	37:0	-85:0	4:0	-106:0	-41:0	125:0		
C	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	-3.11794228447E+03	Apriori delay (usec)	-3.11792422208E+03	Resid mbdelay (usec)	-2.43739E-03	+/-	3.8E-05
Sband delay (usec)	-3.11793472158E+03	Apriori clock (usec)	-9.2914772E+00	Resid sbdelay (usec)	-1.04995E-02	+/-	3.0E-04
Phase delay (usec)	-3.11792421917E+03	Apriori clockrate (us/s)	7.1256178E-06	Resid phdelay (usec)	2.90479E-06	+/-	1.3E-07
Delay rate (us/s)	1.65984656018E+00	Apriori rate (us/s)	1.65984661736E+00	Resid rate (us/s)	-5.71721E-08	+/-	5.4E-10
Total phase (deg)		Apriori accel (us/s/s)	2.54664863077E-05	Resid phase (deg)	90.1	+/-	4.0

ph/seg (deg)	72.2	Theor.	9.7	Amplitude	0.508 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	121.2	Search (2048X32)	0.499	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	10.6	Inc. seg. avg.	1.013	Inc. frq. avg.	0.508	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	18.3	Inc. frq. avg.	0.508			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 84.5 el 34.4 pa -46.5      C: az 274.6 el 46.7 pa 64.9      u,v (fr/asec) -10844.894 2454.196      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/BC..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/BC.W.2.3MP11G

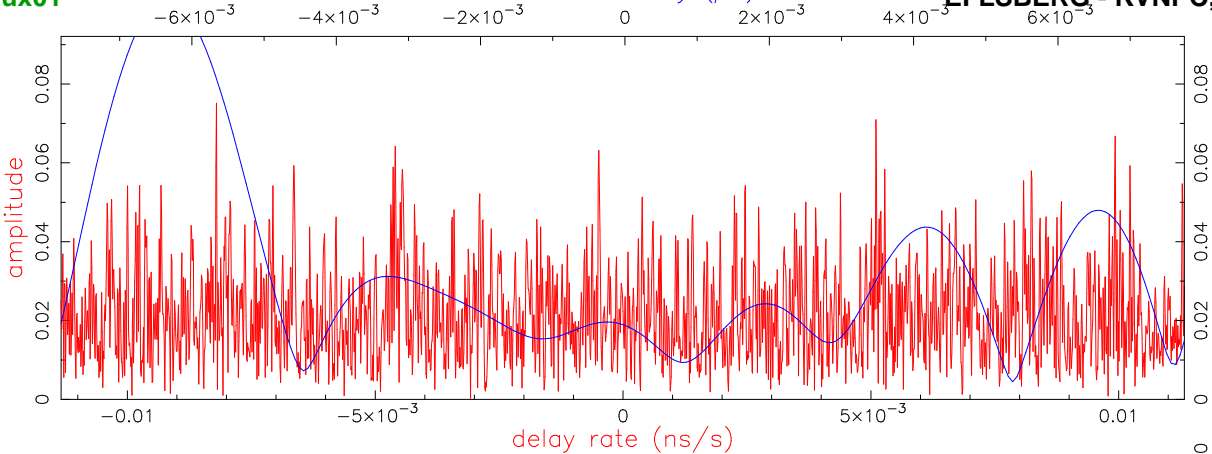
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, BC

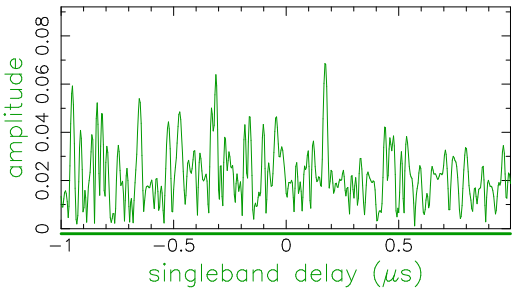
EFLSBERG - KVNPC, fgroup W, pol RL

multiband delay ( $\mu$ s)

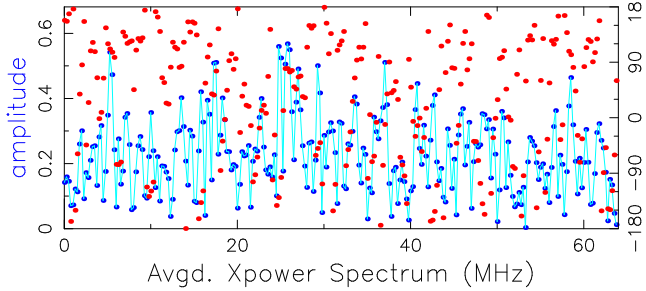


Fringe quality 0

SNR 3.6  
 Int time 419.787  
 Amp 0.092  
 Phase 10.6  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.311792  
 MBD 0.008301  
 Fringe rate (Hz) 0.882698  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

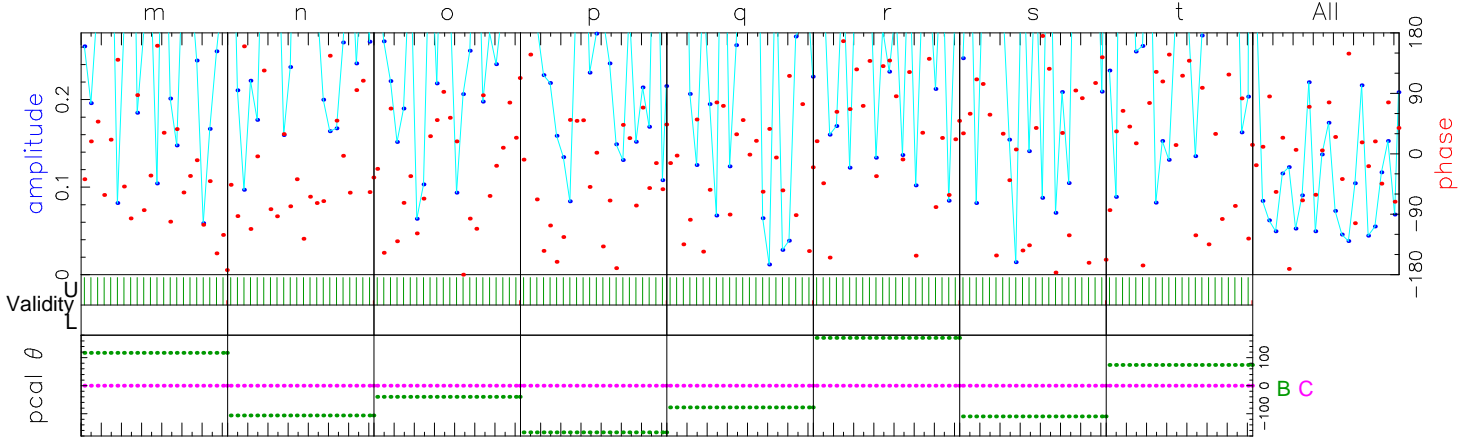


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163045  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-42.7	-61.6	5.8	-20.6	-2.3	78.6	101.1	73.7	Phase	10.6
	0.2	0.2	0.1	0.1	0.2	0.2	0.2	0.1	Ampl.	0.1
	14.7	209.6	459.9	136.7	508.2	484.2	351.9	252.5	Sbd box	177.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
C	0	0	60000	0	0	0	4000	0	PC freqs	
B:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:C	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.11822842130E+03	Apriori delay (usec)	-3.11792422208E+03	Resid mbdelay (usec)	8.30078E-03	+/-	3.0E-04
Sband delay (usec)	-3.11823601433E+03	Apriori clock (usec)	-9.2914772E+00	Resid sbdelay (usec)	-3.11792E-01	+/-	2.4E-03
Phase delay (usec)	-3.11792422174E+03	Apriori clockrate (us/s)	7.1256178E-06	Resid phdelay (usec)	3.42188E-07	+/-	1.0E-06
Delay rate (us/s)	1.65985686460E+00	Apriori rate (us/s)	1.65984661736E+00	Resid rate (us/s)	1.02472E-05	+/-	4.2E-09
Total phase (deg)	-165.8	Apriori accel (us/s/s)	2.54664863077E-05	Resid phase (deg)	10.6	+/-	31.9

ph/seg (deg)	RMS 71.1	Theor. 76.5	Amplitude Search (2048X32)	0.102	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	132.6	133.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	65.8	45.1	Inc. seg. avg.	0.084	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	84.0	78.7	Inc. frq. avg.	0.123	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011

B: az 84.5 el 34.4 pa -46.5 C: az 274.6 el 46.7 pa 64.9 u,v (fr/asec) -10844.894 2454.196 simultaneous interpolator

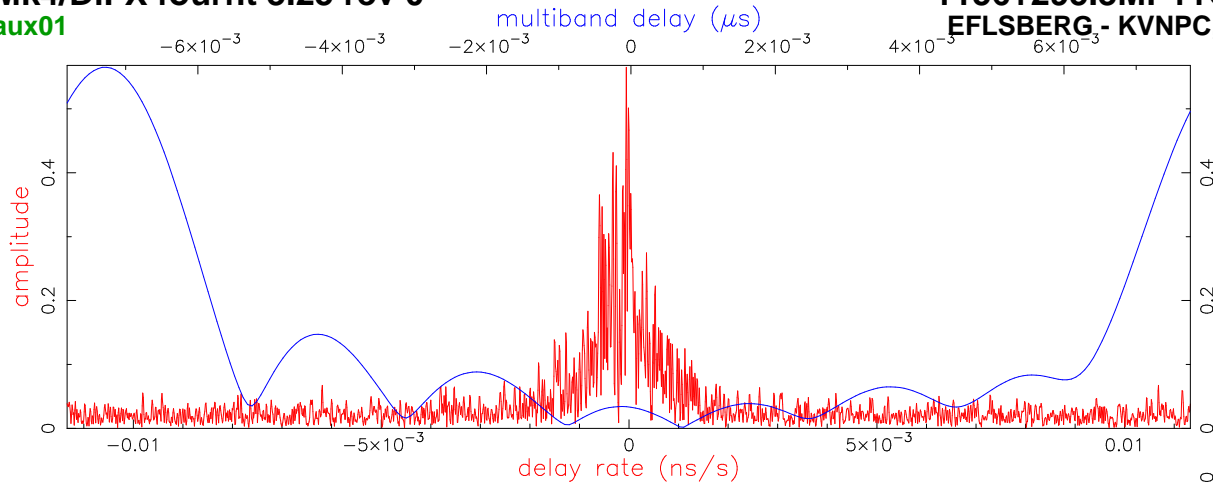
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/BC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/BC.W.28.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

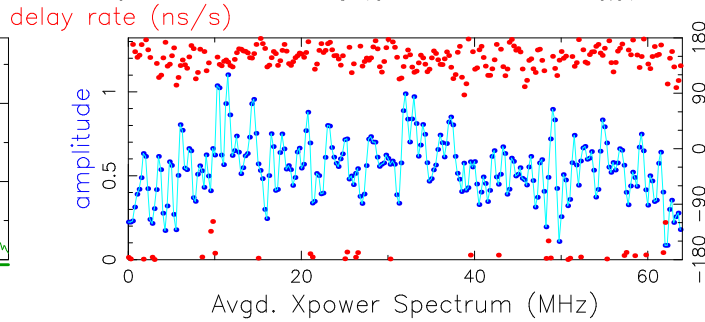
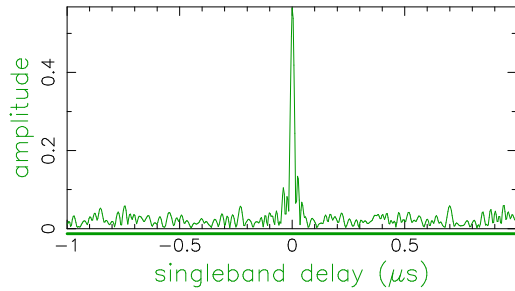
1156+295.3MP11G, No0446, BC

EFLSBERG<sub>3</sub>- KVNPC, fgroup W, pol RR



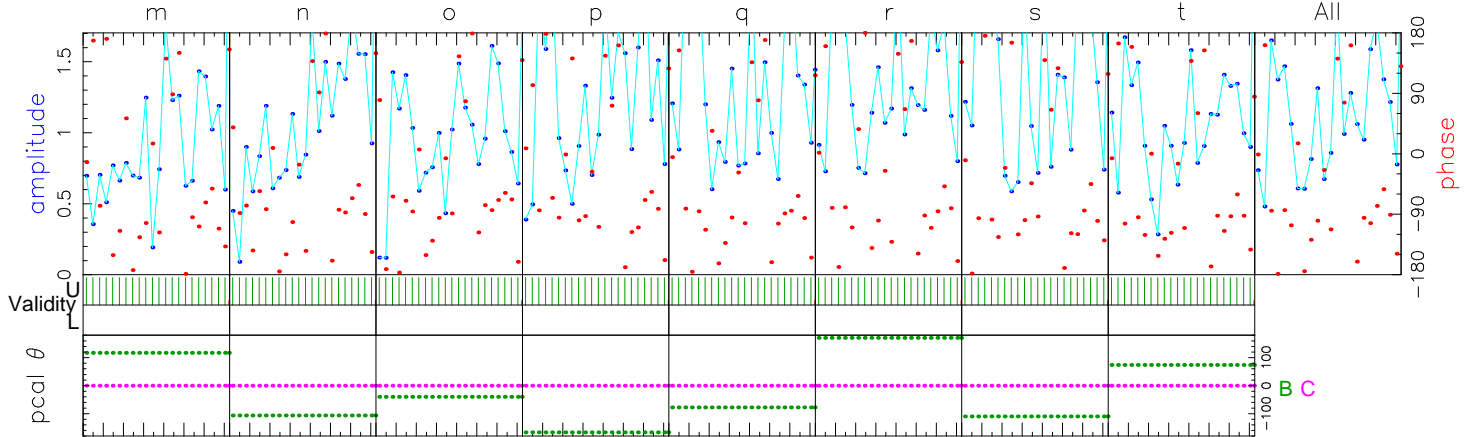
Fringe quality 7

SNR 31.8  
 Int time 419.787  
 Amp 0.568  
 Phase -114.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000933  
 MBD -0.007258  
 Fringe rate (Hz)  
 -0.004892  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163036  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-134.1	-106.7	-98.7	-110.3	-114.3	-117.0	-117.2	-118.4	Phase	-114.2
	0.4	0.5	0.5	0.6	0.7	0.7	0.7	0.5	Ampl.	0.6
	255.3	257.2	257.3	257.5	257.8	257.6	257.2	256.3	Sbd box	257.2
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
C	0	0	60000	0	0	0	4000	0	PC freqs	
B:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:C	118:0	-106:0	-40:0	-167:0	-77:0	171:0	-110:0	74:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-3.11791585550E+03	Apriori delay (usec)	-3.11792422208E+03	Resid mbdelay (usec)	-7.25842E-03	+/-	3.4E-05
Sband delay (usec)	-3.11792328933E+03	Apriori clock (usec)	-9.2914772E+00	Resid sbdelay (usec)	9.32750E-04	+/-	2.7E-04
Phase delay (usec)	-3.11792422576E+03	Apriori clockrate (us/s)	7.1256178E-06	Resid phdelay (usec)	-3.68395E-06	+/-	1.2E-07
Delay rate (us/s)	1.65984656057E+00	Apriori rate (us/s)	1.65984661736E+00	Resid rate (us/s)	-5.67902E-08	+/-	4.8E-10
Total phase (deg)	-290.6	Apriori accel (us/s/s)	2.54664863077E-05	Resid phase (deg)	-114.2	+/-	3.6

ph/seg (deg)	RMS 71.5	Theor. 8.6	Amplitude Search (2048X32)	0.560	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	121.4	15.1	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)	11.1	5.1	Inc. seg. avg.	1.112	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 (%)	19.5	8.9	Inc. frq. avg.	0.569	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

B: az 84.5 el 34.4 pa -46.5      C: az 274.6 el 46.7 pa 64.9      u,v (fr/asec) -10844.894 2454.196      simultaneous interpolator

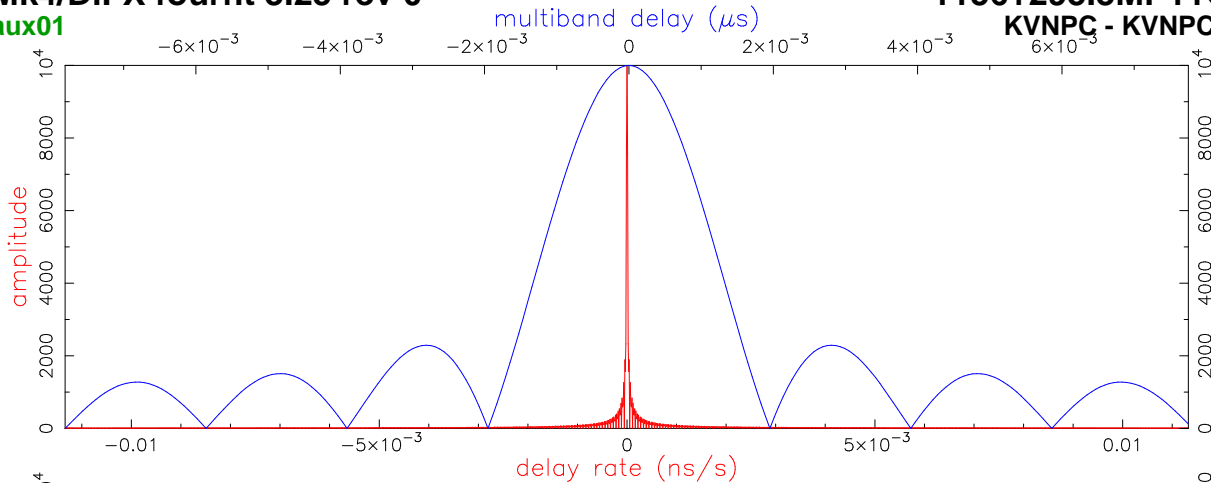
Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/BC..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/BC.W.8.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

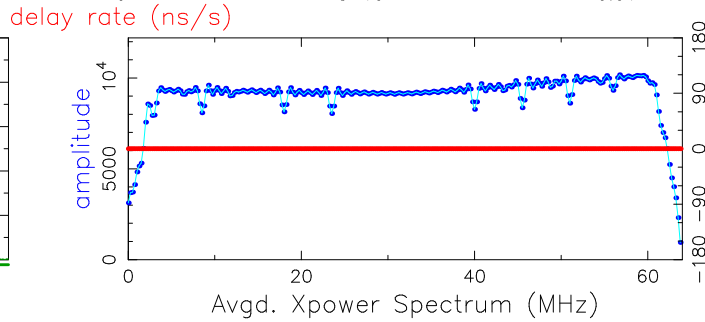
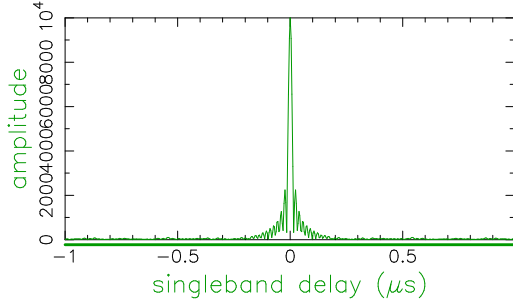
1156+295.3MP11G, No0446, CC

KVNPC - KVNPC, fgroup W, pol LL



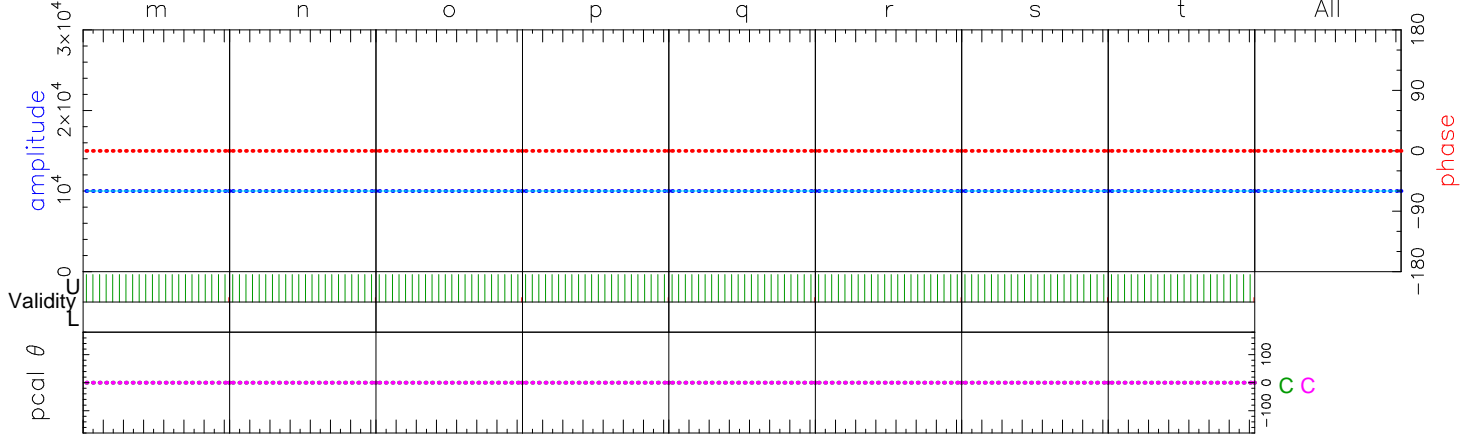
Fringe quality 9

SNR 560308.4  
 Int time 419.816  
 Amp 10000.000  
 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. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163040  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
C	0	0	60000	0	0	0	4000	0	Ampl.	257.0
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Mani PC	
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

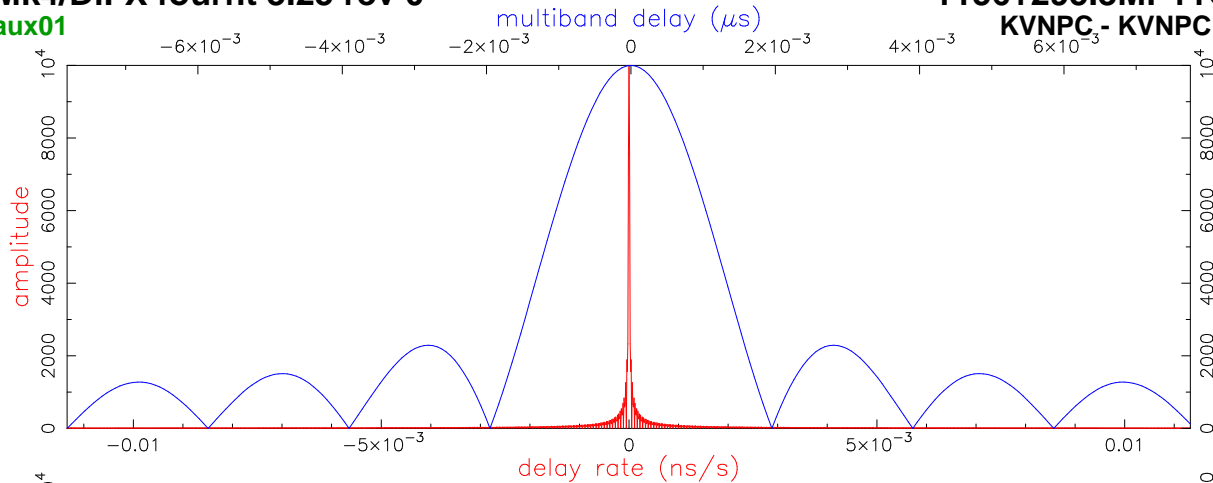
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled 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  
 C: az 274.6 el 46.7 pa 64.9 C: az 274.6 el 46.7 pa 64.9 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/c241b/v2/3mm/1234/No0446/CC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CC.W.15.3MP11G simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

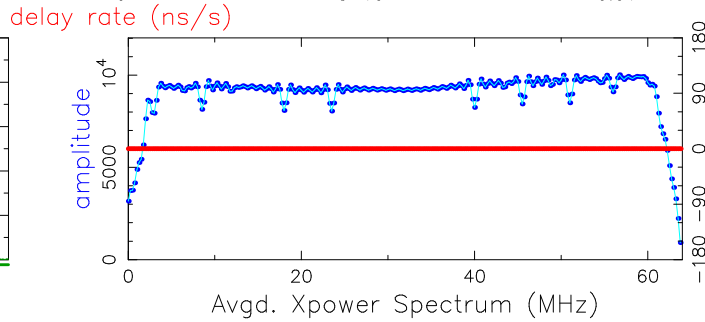
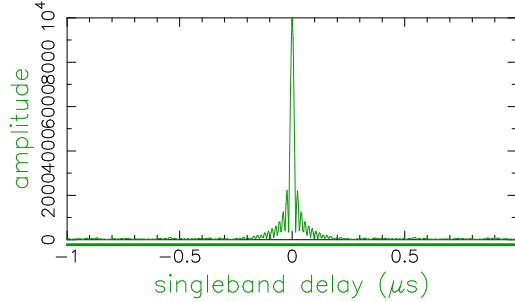
1156+295.3MP11G, No0446, CC

KVNPC- KVNPC, fgroup W, pol RR



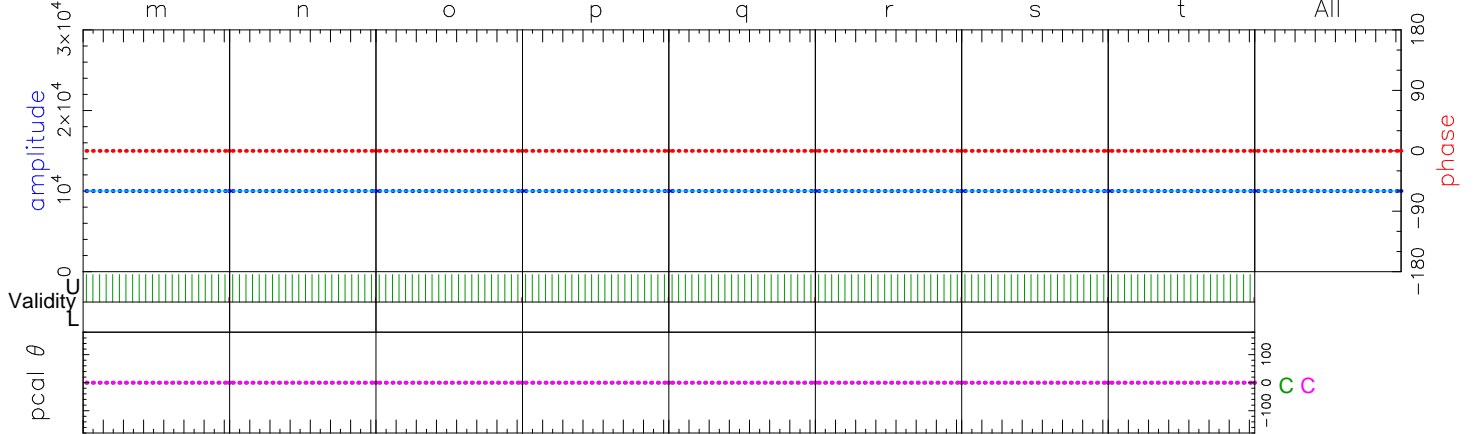
Fringe quality 9

SNR 560308.4  
 Int time 419.816  
 Amp 10000.000  
 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. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163046  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	10000.0	10000.0
C	0	0	60000	0	0	0	4000	0	Ampl.	257.0
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	

Group delay (usec) (SBD)	0.000000000000E+00	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	0.000000E+00	+/-	1.9E-09
Sband delay (usec)	0.000000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.000000E+00	+/-	1.5E-08
Phase delay (usec)	0.000000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.000000E+00	+/-	6.6E-12
Delay rate (us/s)	0.000000000000E+00	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	0.000000E+00	+/-	2.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	0.0	+/-	0.0

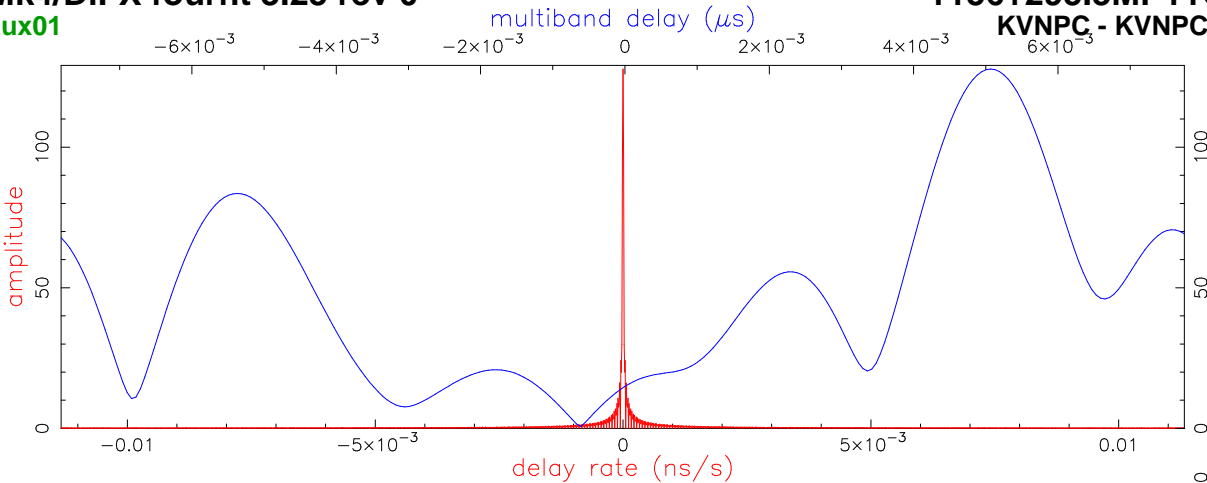
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 10000.000 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (2048X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled 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  
 C: az 274.6 el 46.7 pa 64.9 C: az 274.6 el 46.7 pa 64.9 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/c241b/v2/3mm/1234/No0446/CC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CC.W.31.3MP11G simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

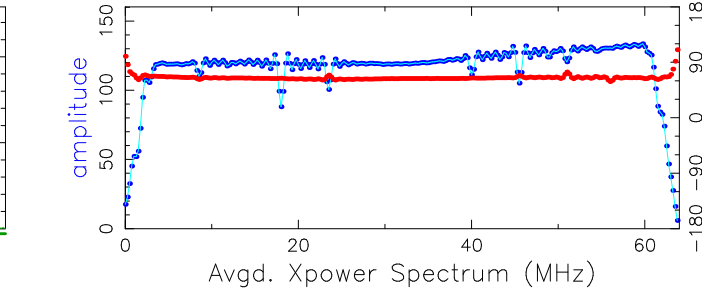
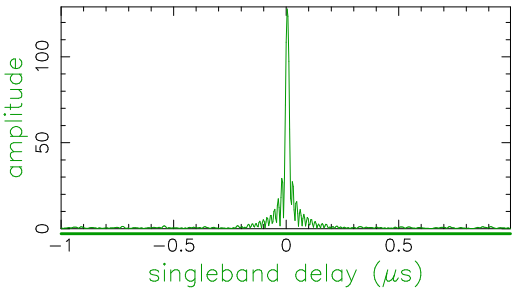
aux01

1156+295.3MP11G, No0446, CC

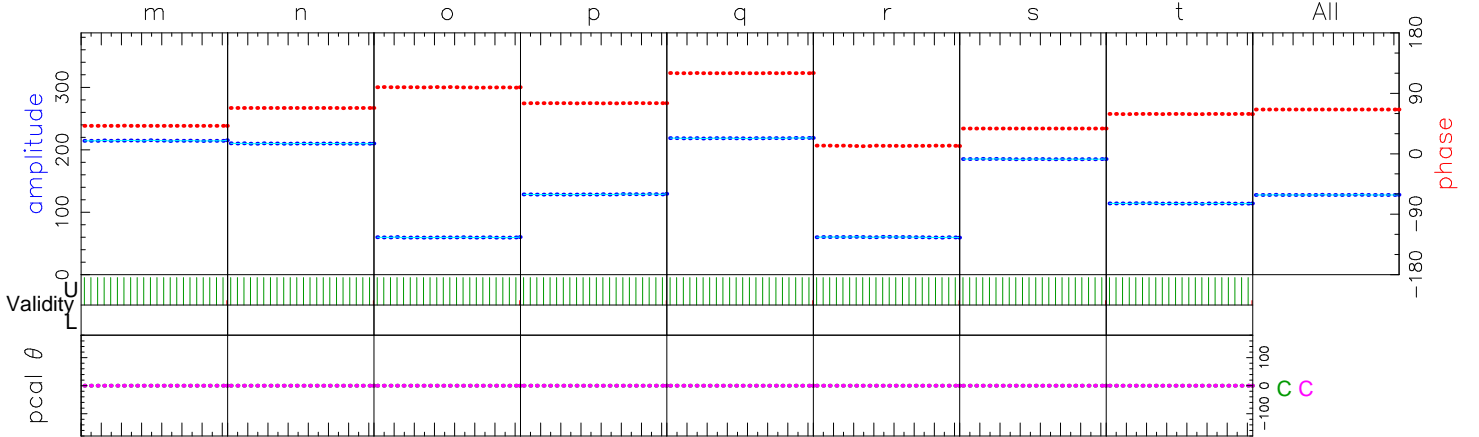
KVNPC - KVNPC, fgroup W, pol LR



Fringe quality 5  
 Error code G  
 SNR 7233.3  
 Int time 419.816  
 Amp 129.095  
 Phase 65.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.005178  
 MBD 0.005077  
 Fringe rate (Hz)  
 -0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163049  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	41.6	68.1	98.8	75.2	120.0	11.9	37.6	59.2	Phase	65.9
	214.6	210.0	59.7	128.6	218.6	60.2	185.1	114.1	Ampl.	148.9
	258.6	258.8	258.3	258.6	259.1	261.0	258.9	258.1	Sbd box	258.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
C	0	0	60000	0	0	0	4000	0	PC freqs	
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 5.07653125000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) 5.07653E-03 +/- 1.5E-07  
 Sband delay (usec) 5.17850000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 5.17850E-03 +/- 1.2E-06  
 Phase delay (usec) 2.12608518156E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.12609E-06 +/- 5.1E-10  
 Delay rate (us/s) -2.83423047834E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -2.83423E-12 +/- 2.1E-12  
 Total phase (deg) 65.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 65.9 +/- 0.0

RMS Theor. Amplitude 129.095 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 125.667 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.0 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 37.5 0.0 Inc. seg. avg. 127.802 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 51.1 0.0 Inc. frq. avg. 148.864 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 C: az 274.6 el 46.7 pa 64.9 C: az 274.6 el 46.7 pa 64.9 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CC.W.42.3MP11G

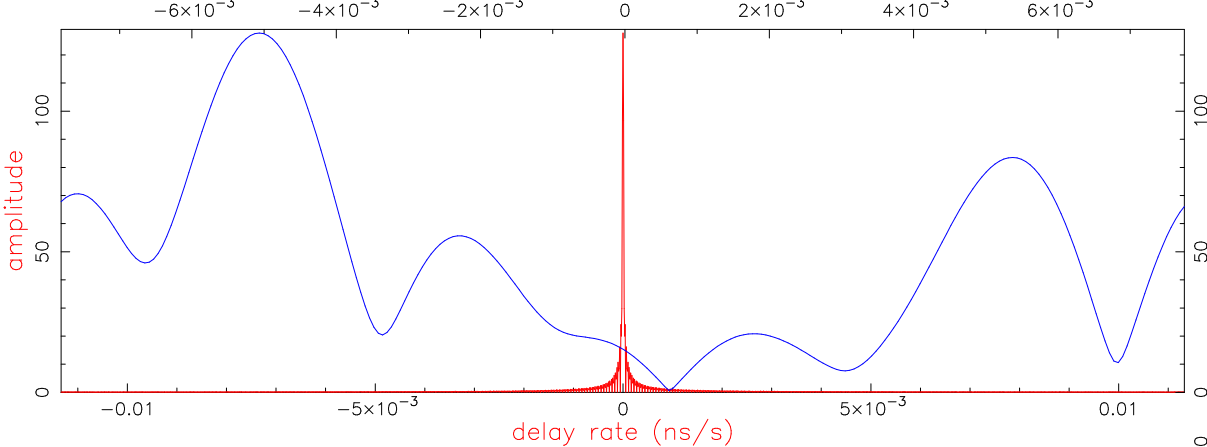
Mk4/DiFX fourfit 3.25 rev 0

aux01

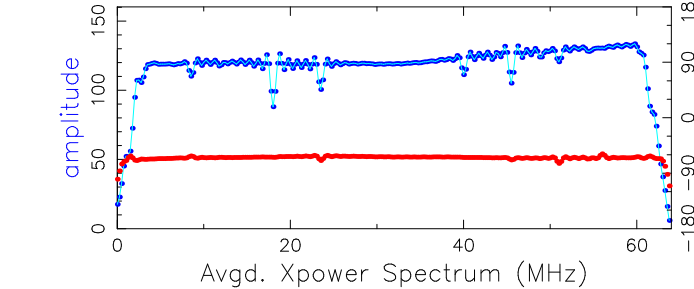
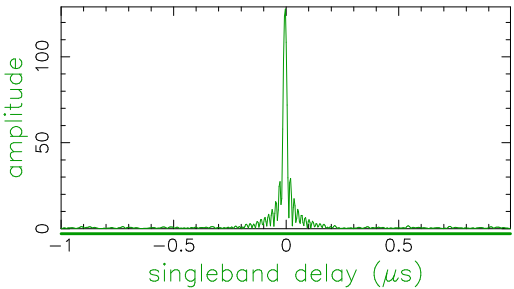
1156+295.3MP11G, No0446, CC

KVNPC - KVNPC, fgroup W, pol RL

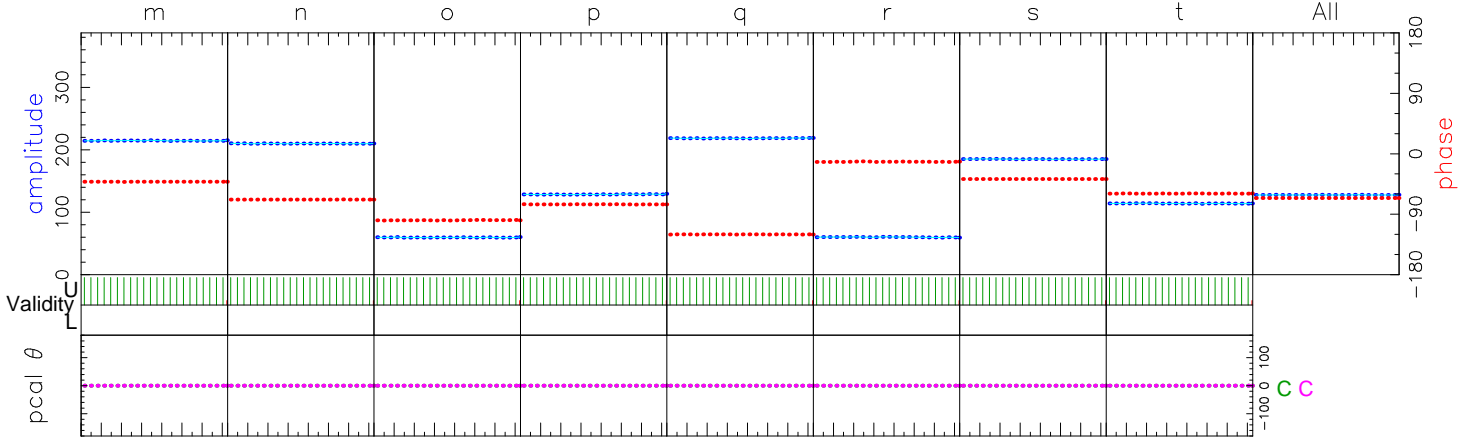
multiband delay ( $\mu$ s)



Fringe quality 5  
 Error code G  
 SNR 7233.3  
 Int time 419.816  
 Amp 129.095  
 Phase -65.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.005178  
 MBD -0.005077  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163053  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-41.6	-68.1	-98.8	-75.2	-120.0	-11.9	-37.6	-59.2	Phase	-65.9
	214.6	210.0	59.7	128.6	218.6	60.2	185.1	114.1	Ampl.	148.9
	255.4	255.2	255.7	255.4	254.9	253.0	255.1	255.9	Sbd box	255.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
C	0	0	60000	0	0	0	4000	0	PC freqs	
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:C	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -5.07653125000E-03 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -5.07653E-03 +/- 1.5E-07  
 Sband delay (usec) -5.17850000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -5.17850E-03 +/- 1.2E-06  
 Phase delay (usec) -2.12608518155E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -2.12609E-06 +/- 5.1E-10  
 Delay rate (us/s) 2.83423047834E-12 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) 2.83423E-12 +/- 2.1E-12  
 Total phase (deg) -65.9 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -65.9 +/- 0.0

RMS Theor. Amplitude 129.095 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 125.667 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.0 0.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 37.5 0.0 Inc. seg. avg. 127.802 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 51.1 0.0 Inc. frq. avg. 148.864 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

C: az 274.6 el 46.7 pa 64.9 C: az 274.6 el 46.7 pa 64.9 u, v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CC..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CC.W.56.3MP11G



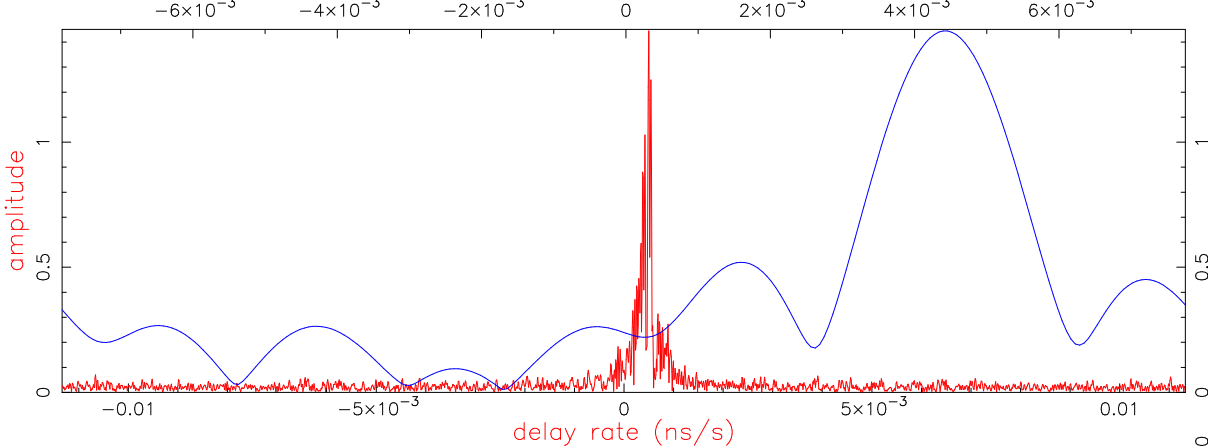
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CP

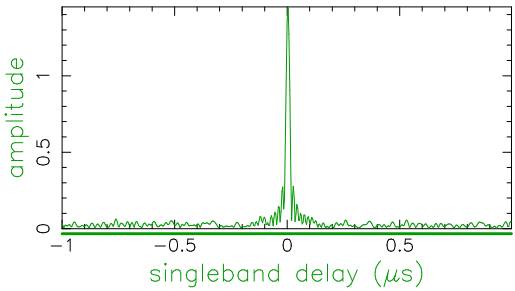
KVNPC - PICOVEL, fgroup W, pol LL

multiband delay ( $\mu$ s)

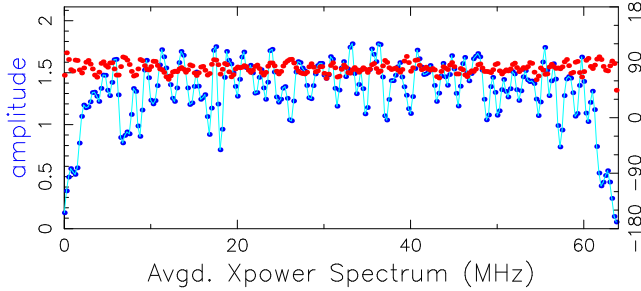


Fringe quality 4

SNR 81.2  
 Int time 419.807  
 Amp 1.451  
 Phase 65.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.003156  
 MBD 0.004417  
 Fringe rate (Hz) 0.043298  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

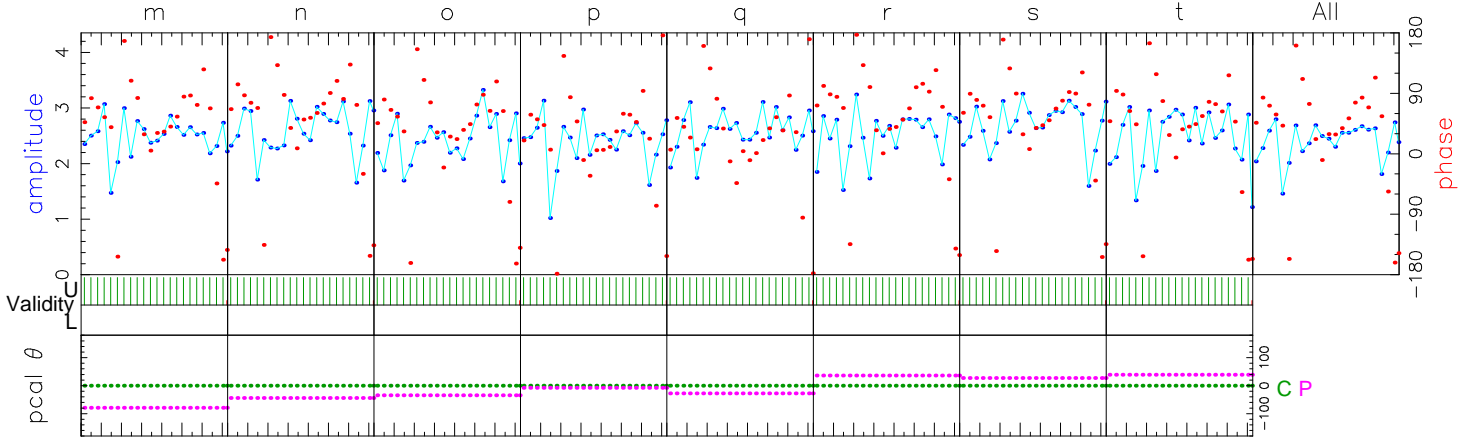


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163046  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
C	0	0	60000	0	0	0	4000	0		
P	0	0	0	0	0	0	0	0		
C:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
C	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	6.31721486109E+03	Apriori delay (usec)	6.31721044432E+03	Resid mbdelay (usec)	4.41678E-03	+/-	1.3E-05
Sband delay (usec)	6.31721360057E+03	Apriori clock (usec)	-2.5187956E+01	Resid sbdelay (usec)	3.15625E-03	+/-	1.1E-04
Phase delay (usec)	6.31721044643E+03	Apriori clockrate (us/s)	-7.9133939E-06	Resid phdelay (usec)	2.11147E-06	+/-	4.5E-08
Delay rate (us/s)	-1.91787071257E+00	Apriori rate (us/s)	-1.91787121522E+00	Resid rate (us/s)	5.02647E-07	+/-	1.9E-10
Total phase (deg)	307.9	Apriori accel (us/s/s)	-3.33819137524E-05	Resid phase (deg)	65.5	+/-	1.4

ph/seg (deg)	60.6	RMS	7.3	Theor.	3.5	Amplitude	1.451 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	69.2	Search (2048X32)	1.391	Search	2048X32	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	20.0	Inc. seg. avg.	2.396	Inc. seg. avg.	2.396	Inc. frq. avg.	1.513	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	7.3	Inc. frq. avg.	1.513	Inc. frq. avg.	1.513	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
C:	az 274.6 el 46.7 pa 64.9	P:	az 70.8 el 24.2 pa -59.8	u, v (fr/asec)	12525.191 -1503.925					simultaneous interpolator		

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CP..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CP.W.33.3MP11G

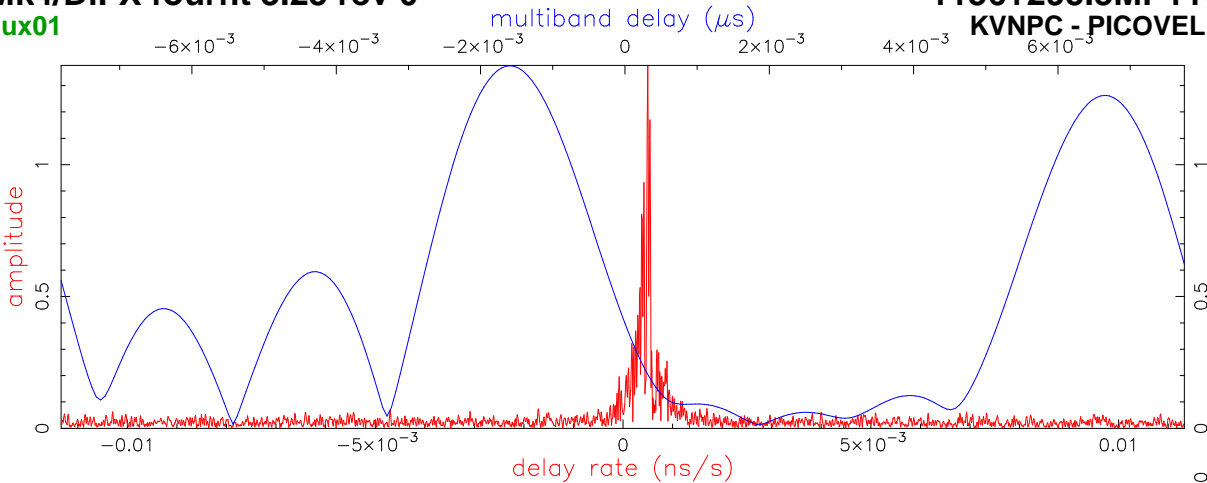
Mk4/DiFX fourfit 3.25 rev 0

aux01

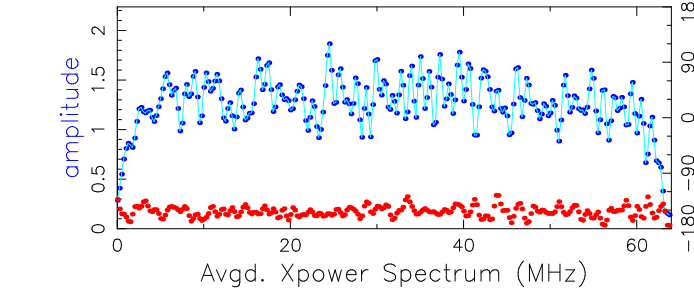
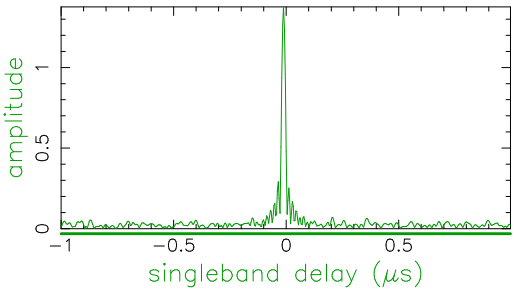
1156+295.3MP11G, No0446, CP

KVNPC - PICOVEL, fgroup W, pol RR

Fringe quality 2

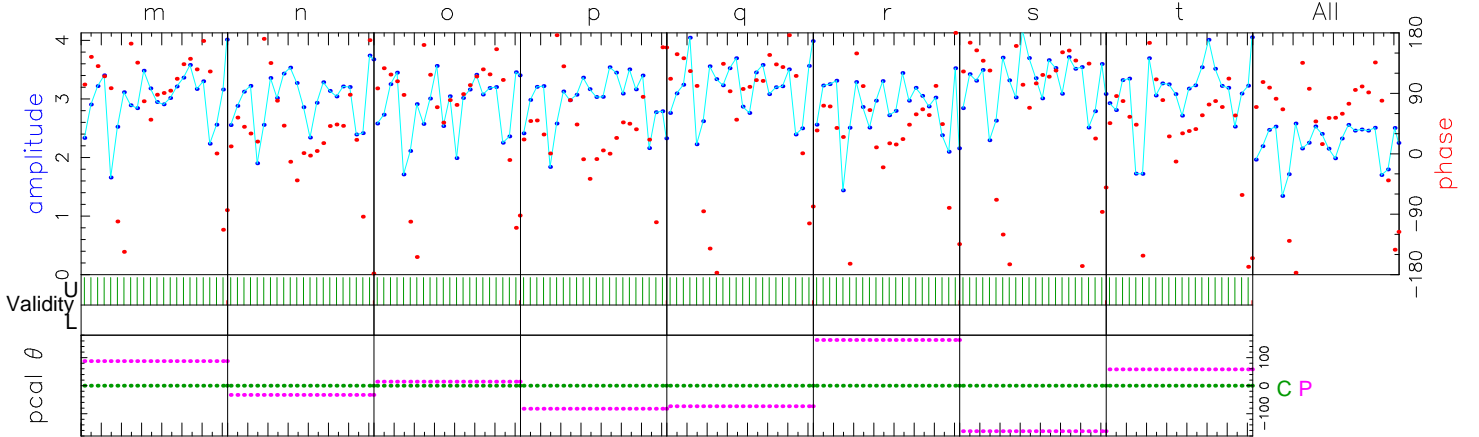


SNR 77.1  
Int time 419.807  
Amp 1.377  
Phase 89.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.011889  
MBD -0.001597  
Fringe rate (Hz) 0.043297  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c241b  
Exper # 1234  
Yr:day 2024:110  
Start 170000.00  
Stop 170659.84  
FRT 170330.00  
Corr/FF/build  
2024:358:161459  
2025:041:163050  
2024:113:095956  
RA & Dec (J2000)  
11h59m31.833914s  
+29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
C	0	0	60000	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
C:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
C	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	6.31719322262E+03	Apriori delay (usec)	6.31721044432E+03	Resid mbdelay (usec)	-1.59669E-03	+/-	1.4E-05
Sband delay (usec)	6.3171985582E+03	Apriori clock (usec)	-2.5187956E+01	Resid sbdelay (usec)	-1.18885E-02	+/-	1.1E-04
Phase delay (usec)	6.31721044719E+03	Apriori clockrate (us/s)	-7.9133939E-06	Resid phdelay (usec)	2.87122E-06	+/-	4.8E-08
Delay rate (us/s)	-1.91787071258E+00	Apriori rate (us/s)	-1.91787121522E+00	Resid rate (us/s)	5.02634E-07	+/-	2.0E-10
Total phase (deg)	331.5	Apriori accel (us/s/s)	-3.33819137524E-05	Resid phase (deg)	89.0	+/-	1.5

ph/seg (deg)	61.0	Theor.	3.6	Amplitude	1.377 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	66.8		6.2	Search (2048X32)	1.297	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.4		2.1	Inc. seg. avg.	2.229	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.3		3.7	Inc. frq. avg.	1.840	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

C: az 274.6 el 46.7 pa 64.9 P: az 70.8 el 24.2 pa -59.8 u,v (fr/asec) 12525.191 -1503.925 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CP..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CP.W.46.3MP11G

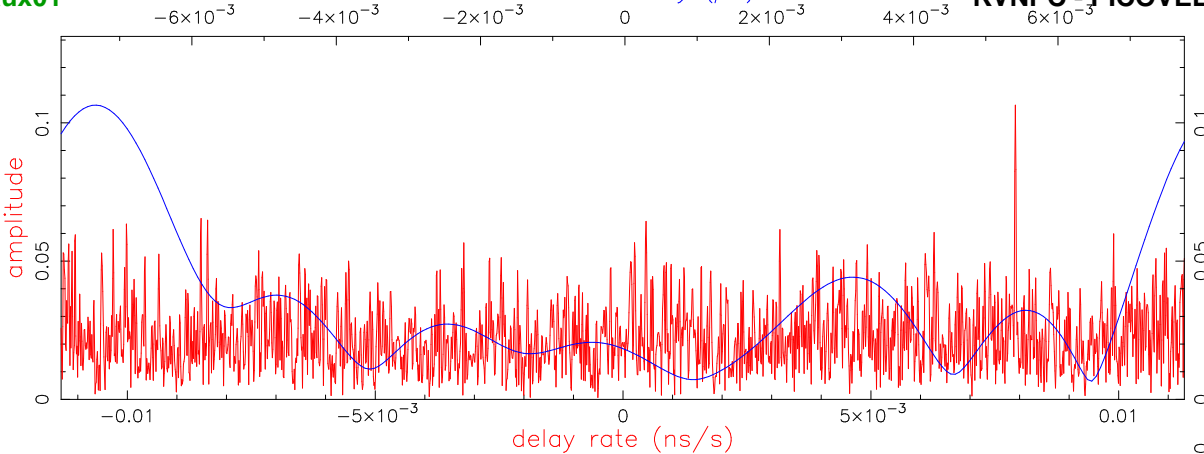
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CP

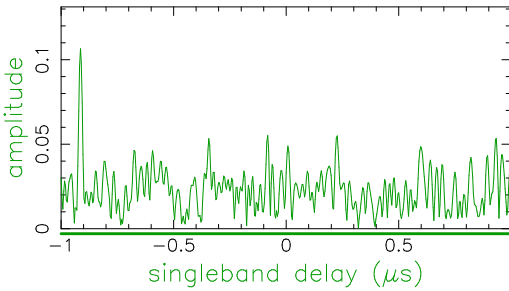
KVNPC - PICOVEL, fgroup W, pol LR

multiband delay ( $\mu$ s)

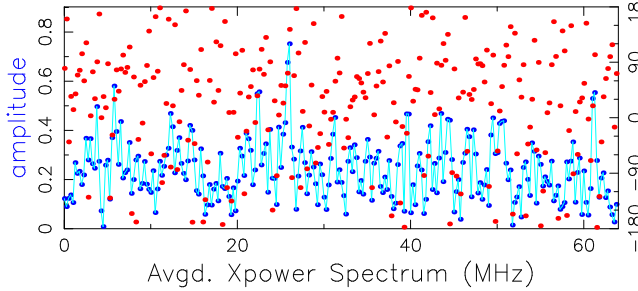


Fringe quality 0

SNR 6.0  
 Int time 419.807  
 Amp 0.131  
 Phase -124.0  
 PFD 4.7e-01  
 Delays (us)  
 SBD -0.913815  
 MBD 0.008288  
 Fringe rate (Hz)  
 0.682540  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

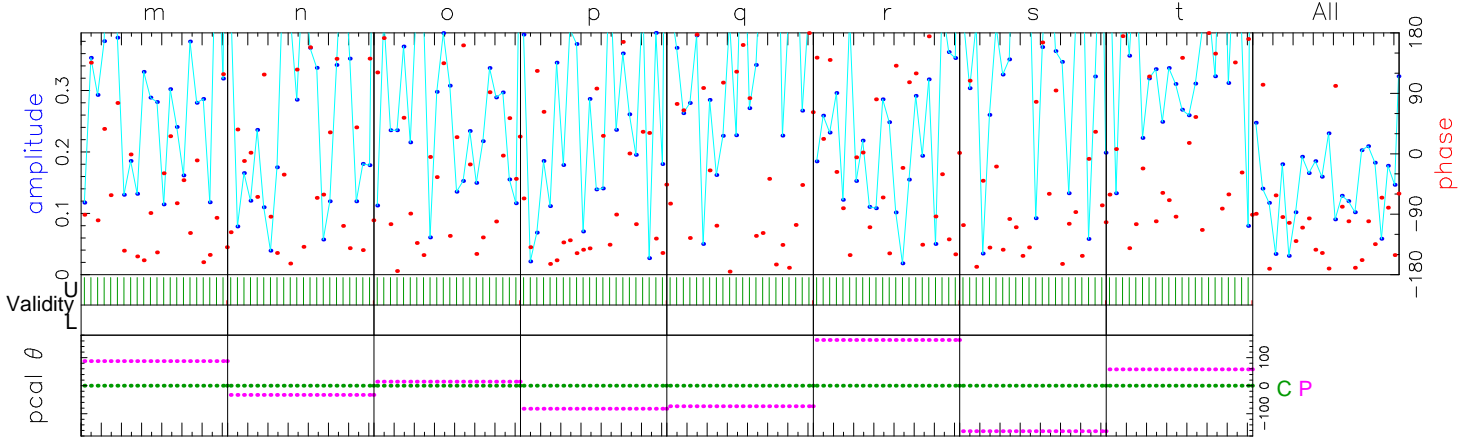


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163055  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-94.1	-128.2	-138.7	-127.6	-152.4	-126.0	-121.1	-105.3	Phase	-124.0
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	4.9	162.5	98.3	418.4	23.0	217.2	22.3	485.9	Sbd box	23.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
C:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Mani PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	6.31629685686E+03	Apriori delay (usec)	6.31721044432E+03	Resid mbdelay (usec)	8.28755E-03	+/-	1.8E-04
Sband delay (usec)	6.31629662882E+03	Apriori clock (usec)	-2.5187956E+01	Resid sbdelay (usec)	-9.13815E-01	+/-	1.4E-03
Phase delay (usec)	6.31721044032E+03	Apriori clockrate (us/s)	-7.9133939E-06	Resid phdelay (usec)	-3.99816E-06	+/-	6.2E-07
Delay rate (us/s)	-1.91786329160E+00	Apriori rate (us/s)	-1.91787121522E+00	Resid rate (us/s)	7.92362E-06	+/-	2.6E-09
Total phase (deg)	118.5	Apriori accel (us/s/s)	-3.33819137524E-05	Resid phase (deg)	-124.0	+/-	19.2

ph/seg (deg)	52.9	Theor.	46.1	Amplitude	0.131 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.9	Search (2048X32)	0.101	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	19.6	Inc. seg. avg.	0.137	Inc. frq. avg.	0.124	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	42.1	Inc. frq. avg.	0.124	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
C:	az 274.6 el 46.7 pa 64.9	P:	az 70.8 el 24.2 pa -59.8	u, v (fr/asec)	12525.191 -1503.925	ion window (TEC)	0.00 0.00	simultaneous interpolator		

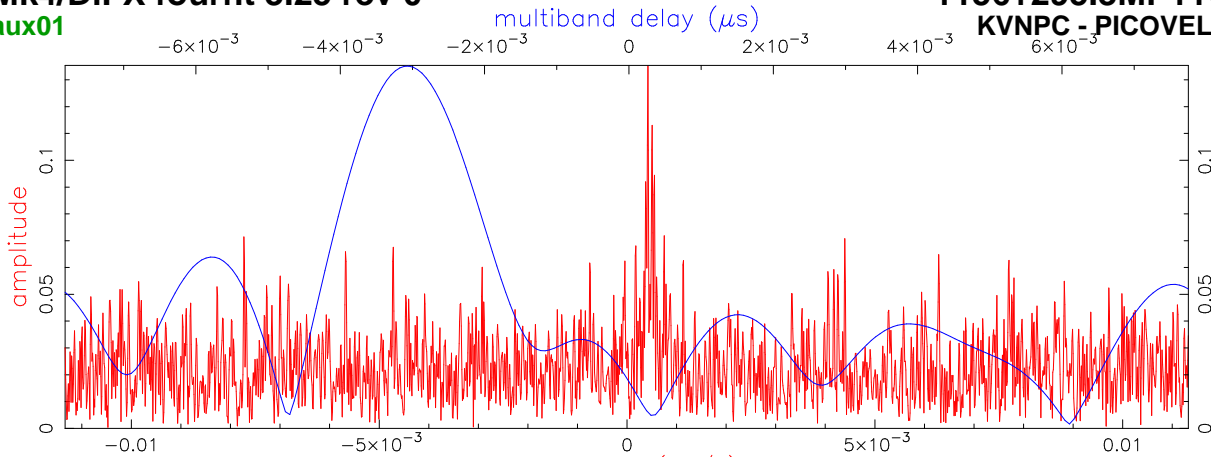
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CP..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CP.W.61.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

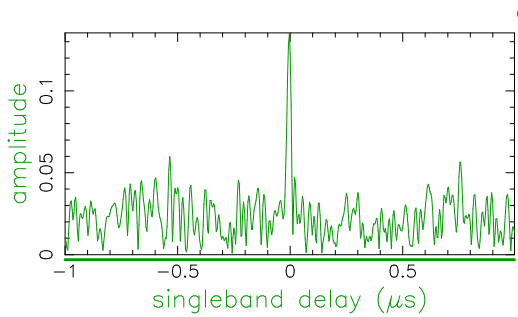
1156+295.3MP11G, No0446, CP

KVNPC - PICOVEL, fgroup W, pol RL

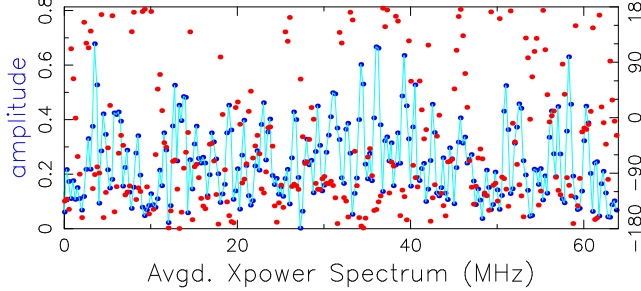


Fringe quality 9

SNR 7.6  
 Int time 419.807  
 Amp 0.135  
 Phase -129.8  
 PFD 1.1e-05  
 Delays (us)  
 SBD -0.004391  
 MBD -0.003077  
 Fringe rate (Hz)  
 0.036481  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

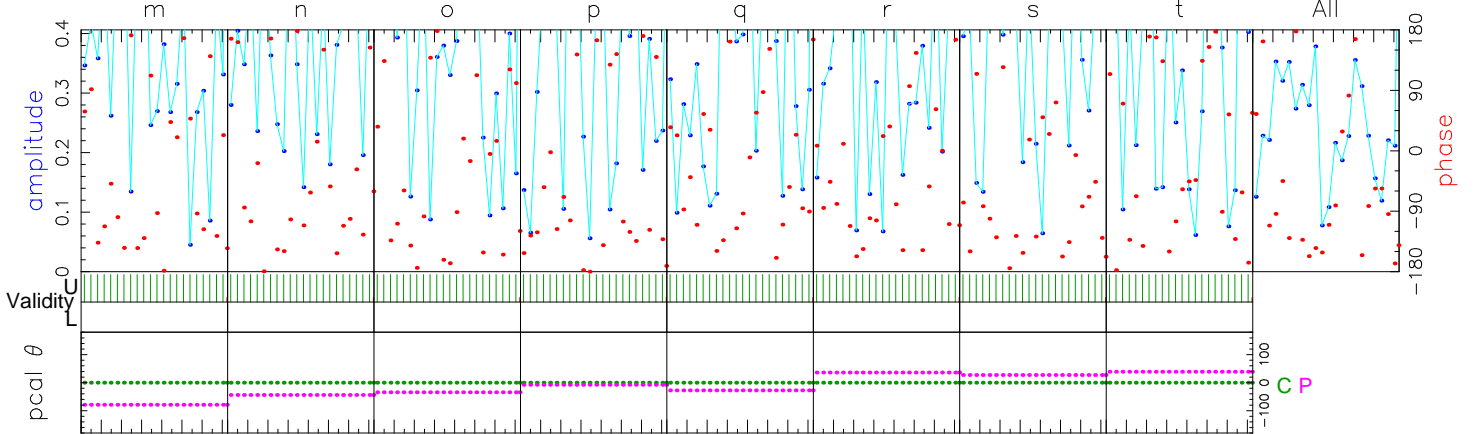


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163100  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-136.0	-132.5	-146.7	-130.8	-104.1	-91.1	-109.1	-157.8	Phase	-129.8
	0.2	0.2	0.1	0.2	0.1	0.1	0.1	0.2	Ampl.	0.1
	254.4	256.6	325.2	255.0	468.4	186.3	103.4	255.8	Sbd box	255.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
C:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	6.31720736753E+03	Apriori delay (usec)	6.31721044432E+03	Resid mbdelay (usec)	-3.07679E-03	+/-	1.4E-04
Sband delay (usec)	6.31720605307E+03	Apriori clock (usec)	-2.5187956E+01	Resid sbdelay (usec)	-4.39125E-03	+/-	1.1E-03
Phase delay (usec)	6.31721044013E+03	Apriori clockrate (us/s)	-7.9133939E-06	Resid phdelay (usec)	-4.18654E-06	+/-	4.9E-07
Delay rate (us/s)	-1.91787079171E+00	Apriori rate (us/s)	-1.91787121522E+00	Resid rate (us/s)	4.23506E-07	+/-	2.0E-09
Total phase (deg)	112.6	Apriori accel (us/s/s)	-3.33819137524E-05	Resid phase (deg)	-129.8	+/-	15.1

ph/seg (deg)	RMS 73.2	Theor. 36.2	Amplitude Search (2048X32)	0.129	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	103.6	63.3	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	24.9	21.4	Inc. seg. avg.	0.202	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 (%)	38.4	37.3	Inc. frq. avg.	0.134	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

C: az 274.6 el 46.7 pa 64.9 P: az 70.8 el 24.2 pa -59.8 u,v (fr/asec) 12525.191 -1503.925 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CP..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CP.W.77.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

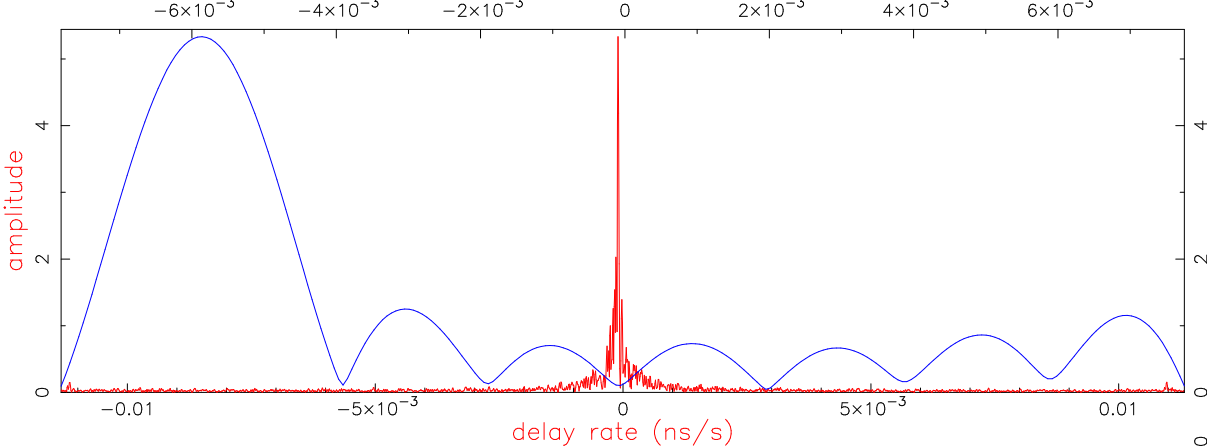
aux01

1156+295.3MP11G, No0446, Cu

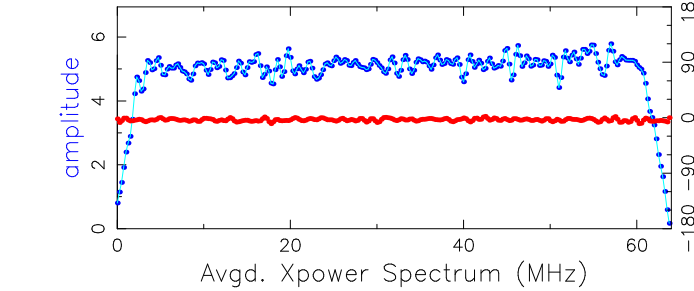
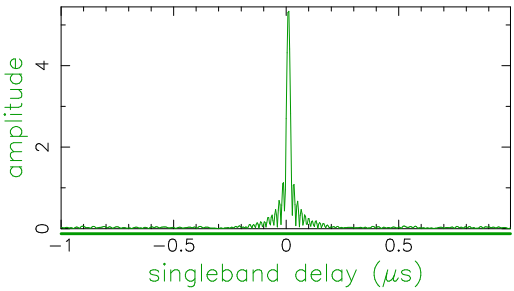
KVNPC - KVNU, fgroup W, pol LL

multiband delay ( $\mu$ s)

Fringe quality 7

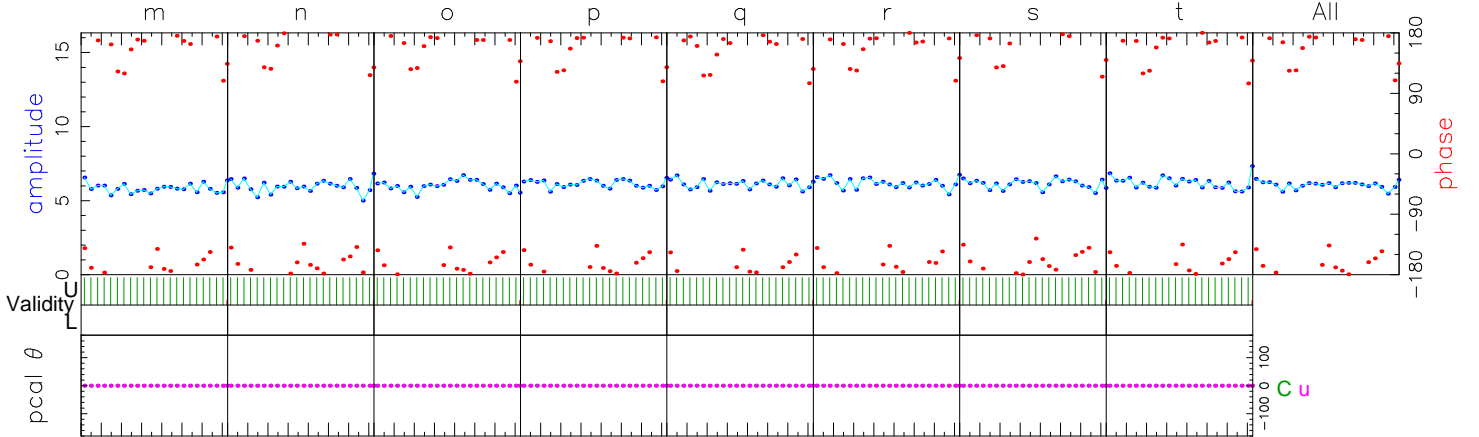


SNR 305.0  
 Int time 419.816  
 Amp 5.444  
 Phase 178.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.009895  
 MBD -0.005872  
 Fringe rate (Hz)  
 -0.008787  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163039  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	175.7	-177.2	178.4	178.1	172.8	176.8	-174.7	176.6	Phase	178.3
	5.1	5.3	5.4	5.4	5.4	5.4	5.4	5.4	Ampl.	5.3
	259.6	259.5	259.5	259.5	259.4	259.8	259.4	259.5	Sbd box	259.5
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
u	0	0	60000	0	0	0	4000	0	PC freqs	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.96309917481E+02 Apriori delay (usec) 1.96300164849E+02 Resid mbdelay (usec) -5.87237E-03 +/- 3.6E-06  
 Sband delay (usec) 1.96310060349E+02 Apriori clock (usec) -2.7442989E+01 Resid sbdelay (usec) 9.89550E-03 +/- 2.8E-05  
 Phase delay (usec) 1.96300170598E+02 Apriori clockrate (us/s) -7.3949380E-06 Resid phdelay (usec) 5.74942E-06 +/- 1.2E-08  
 Delay rate (us/s) 3.13859044561E-02 Apriori rate (us/s) 3.13860064629E-02 Resid rate (us/s) -1.02007E-07 +/- 5.0E-11  
 Total phase (deg) 250.3 Apriori accel (us/s/s) 3.41589044885E-07 Resid phase (deg) 178.3 +/- 0.4

RMS Theor. Amplitude 5.444 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 29.0 0.9 Search (2048X32) 5.256 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 12.0 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 4.3 0.5 Inc. seg. avg. 6.056 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 2.6 0.9 Inc. frq. avg. 5.345 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

C: az 274.6 el 46.7 pa 64.9 u: az 277.0 el 45.8 pa 67.7 u, v (fr/asec) -205.324 232.439 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/Cu..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/Cu.W.13.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

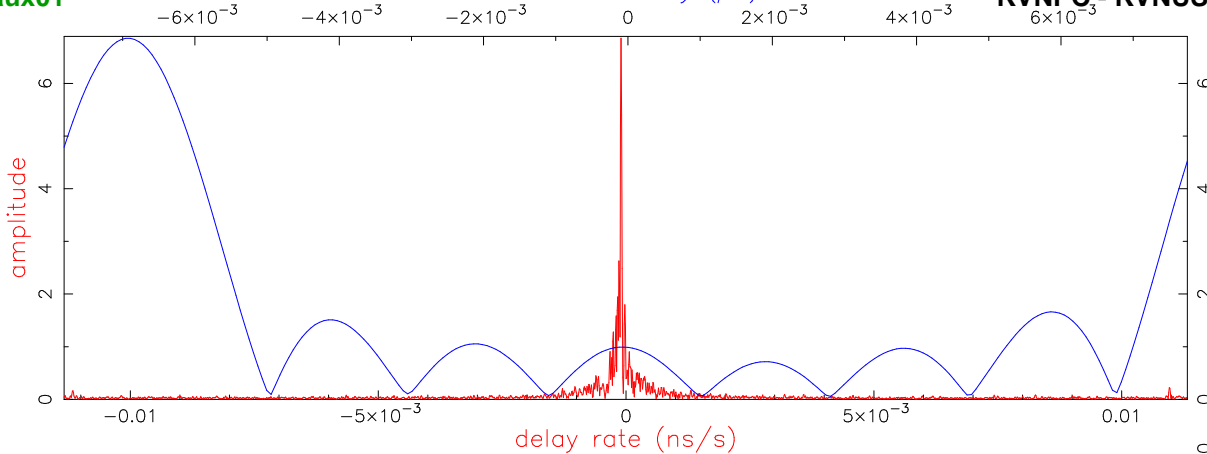
aux01

1156+295.3MP11G, No0446, Cu

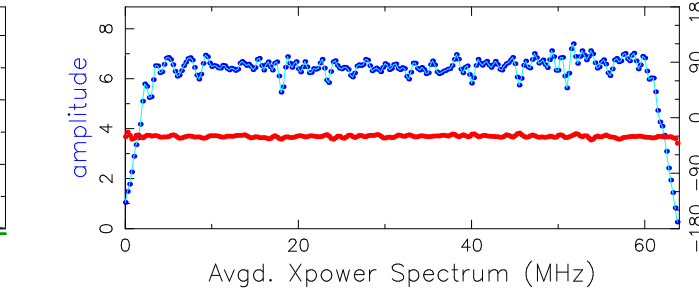
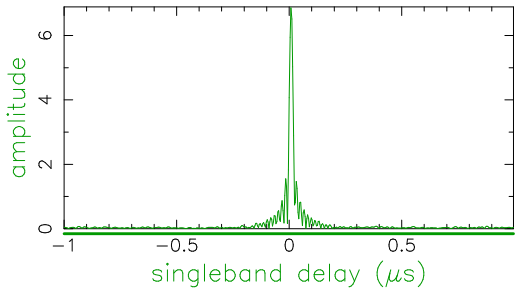
KVNPC- KVNUS, fgroup W, pol RR

multiband delay ( $\mu$ s)

Fringe quality 7

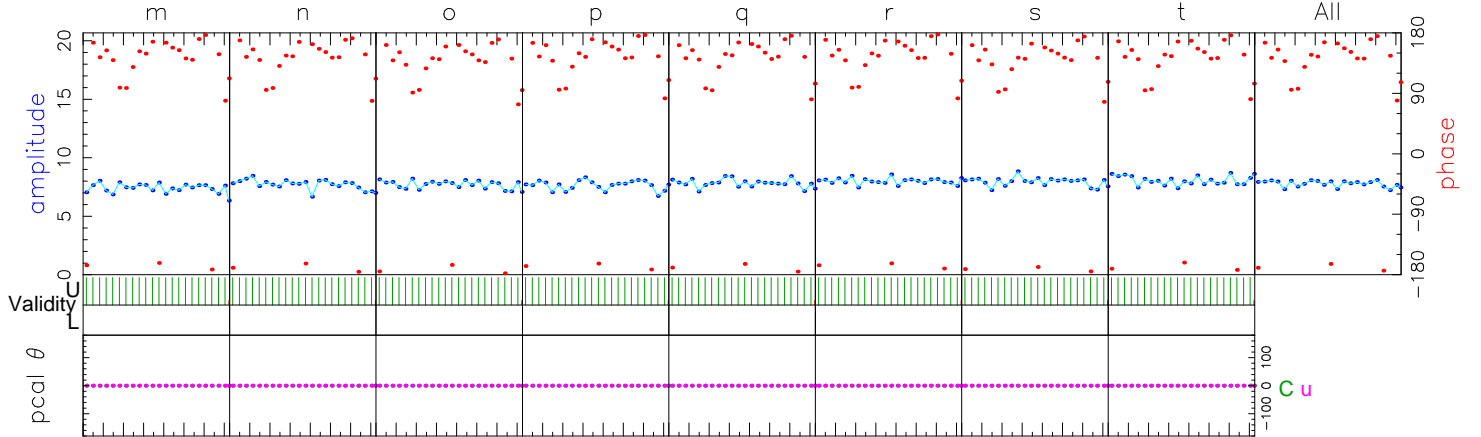


SNR 386.2  
Int time 419.816  
Amp 6.893  
Phase 149.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.008714  
MBD -0.006927  
Fringe rate (Hz)  
-0.008783  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c241b  
Exper # 1234  
Yr:day 2024:110  
Start 170000.00  
Stop 170659.84  
FRT 170330.00  
Corr/FF/build  
2024:358:161459  
2025:041:163046  
2024:113:095956  
RA & Dec (J2000)  
11h59m31.833914s  
+29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	150.9	150.3	145.6	151.9	150.0	152.4	147.1	150.4	Phase	149.8
C	6.5	6.8	6.8	6.7	6.9	7.0	7.0	7.1	Ampl.	6.9
u	259.2	259.2	259.3	259.3	259.3	259.1	259.3	259.2	Sbd box	259.2
C	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
u	0	0	60000	0	0	0	4000	0	PC freqs	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC	
u	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.96308863169E+02	Apriori delay (usec)	1.96300164849E+02	Resid mbdelay (usec)	-6.92668E-03	+/-	2.8E-06
Sband delay (usec)	1.96308879349E+02	Apriori clock (usec)	-2.7442989E+01	Resid sbdelay (usec)	8.71450E-03	+/-	2.2E-05
Phase delay (usec)	1.96300169680E+02	Apriori clockrate (us/s)	-7.3949380E-06	Resid phdelay (usec)	4.83138E-06	+/-	9.6E-09
Delay rate (us/s)	3.13859045043E-02	Apriori rate (us/s)	3.13860064629E-02	Resid rate (us/s)	-1.01959E-07	+/-	3.9E-11
Total phase (deg)	221.9	Apriori accel (us/s/s)	3.41589044885E-07	Resid phase (deg)	149.8	+/-	0.3

ph/seg (deg)	29.1	RMS	29.1	Theor.	0.7	Amplitude	6.893 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	13.6	Search (2048X32)	6.748	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
ph/frq (deg)	2.5	Inc. seg. avg.	7.797	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00
amp/frq (%)	2.5	Inc. frq. avg.	6.864	u,v (fr/asec)	-205.324 232.439	simultaneous interpolator							

C: az 274.6 el 46.7 pa 64.9      u: az 277.0 el 45.8 pa 67.7      u,v (fr/asec) -205.324 232.439      simultaneous interpolator

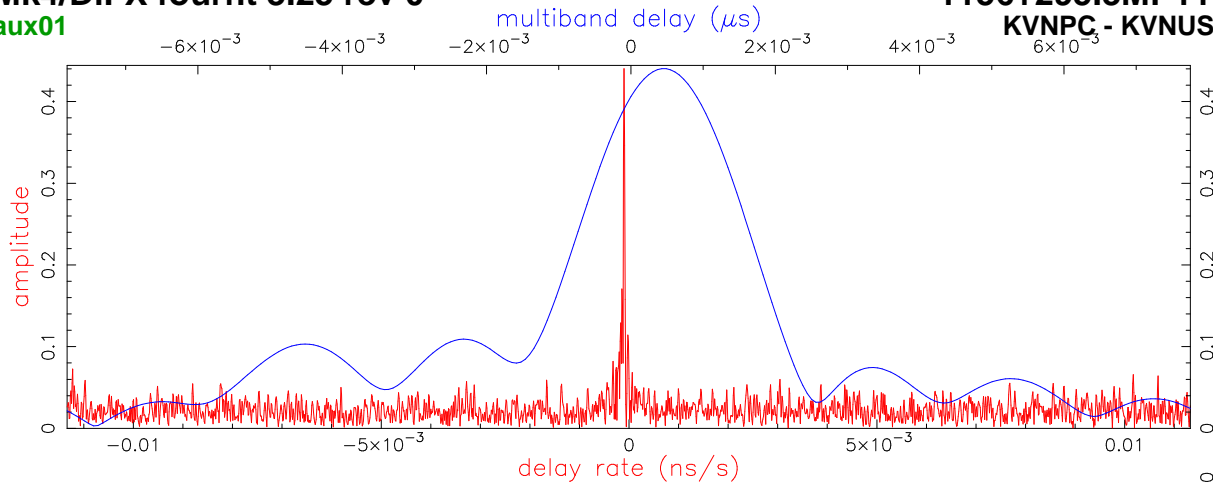
Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/Cu..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/Cu.W.32.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

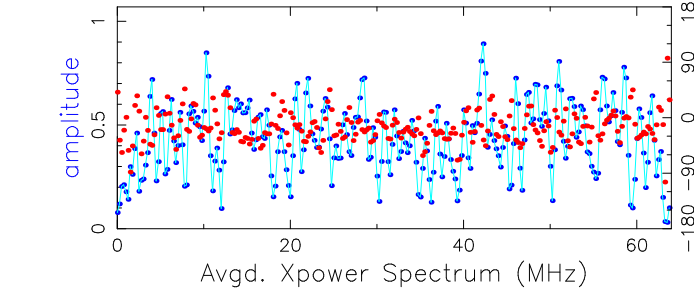
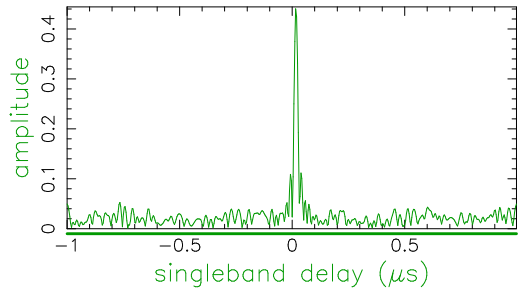
1156+295.3MP11G, No0446, Cu

KVNPC - KVNUS, fgroup W, pol LR



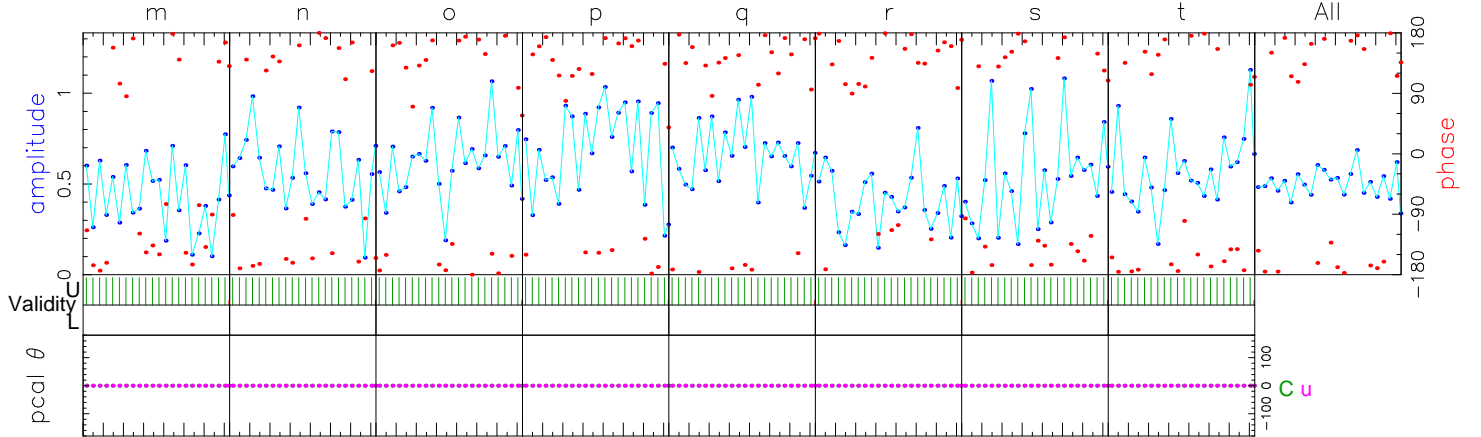
Fringe quality 8

SNR 24.9  
 Int time 419.816  
 Amp 0.444  
 Phase 172.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.016825  
 MBD 0.000470  
 Fringe rate (Hz)  
 -0.008762  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163050  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-169.1	178.3	167.7	167.9	157.7	155.0	-174.5	-179.4	Phase	172.3
	0.3	0.4	0.5	0.6	0.6	0.3	0.4	0.5	Ampl.	0.4
	261.6	261.0	261.3	261.1	260.9	261.8	261.4	261.4	Sbd box	261.3
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
u	0	0	60000	0	0	0	4000	0	PC freqs	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
u	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
u	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	1.96316259700E+02	Apriori delay (usec)	1.96300164849E+02	Resid mbdelay (usec)	4.69851E-04	+/-	4.4E-05
Sband delay (usec)	1.96316989599E+02	Apriori clock (usec)	-2.7442989E+01	Resid sbdelay (usec)	1.68248E-02	+/-	3.5E-04
Phase delay (usec)	1.96300170405E+02	Apriori clockrate (us/s)	-7.3949380E-06	Resid phdelay (usec)	5.55583E-06	+/-	1.5E-07
Delay rate (us/s)	3.13859047403E-02	Apriori rate (us/s)	3.13860064629E-02	Resid rate (us/s)	-1.01723E-07	+/-	6.1E-10
Total phase (deg)	244.3	Apriori accel (us/s/s)	3.41589044885E-07	Resid phase (deg)	172.3	+/-	4.6

ph/seg (deg)	RMS 31.0	Theor. 11.0	Amplitude	0.444 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	21.9	19.3	Search (2048X32)	0.435	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	14.0	6.5	Inc. seg. avg.	0.502	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	dr window (ns/s)	-0.011	0.011
amp/frq (%)	20.5	11.4	Inc. frq. avg.	0.446	Data rate(Mb/s): 2048	t_cohere infinite	ion window (TEC)	0.00	0.00

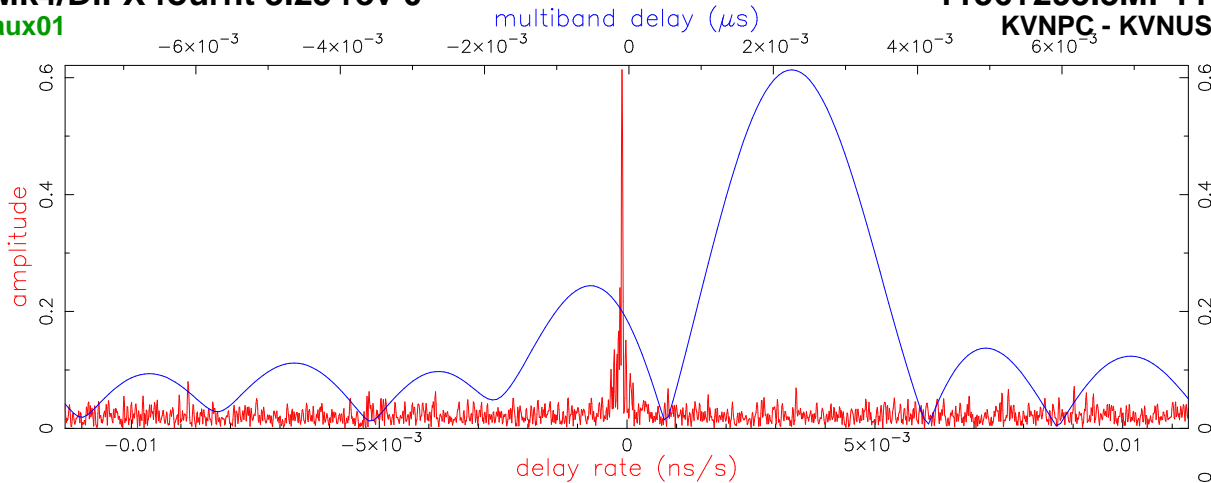
C: az 274.6 el 46.7 pa 64.9      u: az 277.0 el 45.8 pa 67.7      u,v (fr/asec) -205.324 232.439      simultaneous interpolator  
 Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/Cu..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/Cu.W.44.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

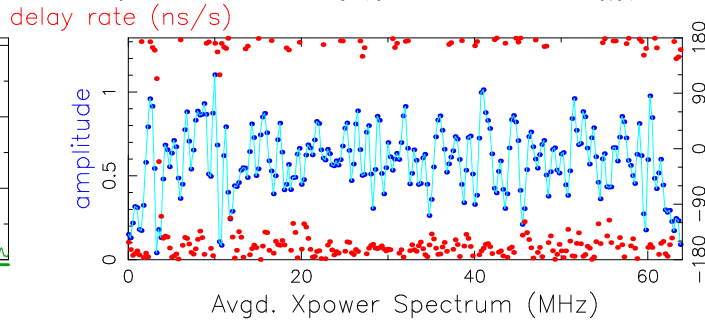
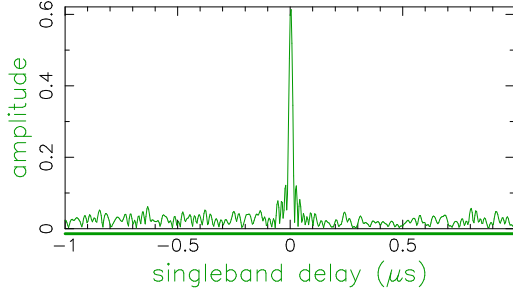
1156+295.3MP11G, No0446, Cu

KVNPC - KVNU, fgroup W, pol RL



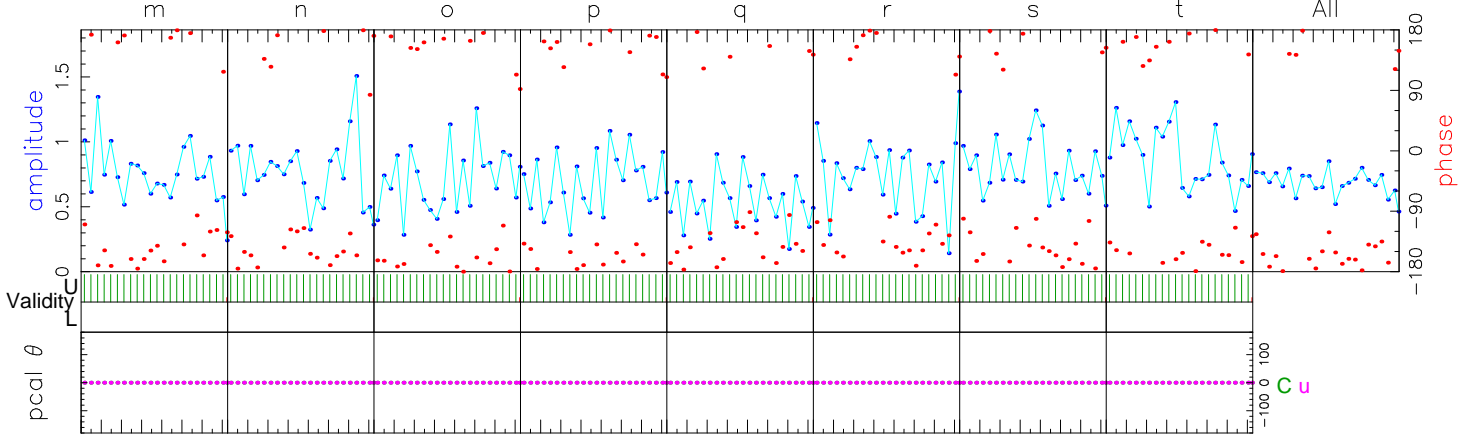
Fringe quality 8

SNR 34.8  
 Int time 419.816  
 Amp 0.621  
 Phase -164.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002488  
 MBD 0.002260  
 Fringe rate (Hz)  
 -0.008750  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Yr:day 1234  
 Start 2024:110  
 Stop 2024:110  
 FRT 170330.00  
 Corr/FF/build  
 2025:041:163053  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
C	0	0	60000	0	0	0	4000	0		
u	0	0	60000	0	0	0	4000	0		
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C:u	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C	1000	1000	1000	1000	1000	1000	1000	1000		
u	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
u	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 1.96302425200E+02 Apriori delay (usec) 1.96300164849E+02 Resid mbdelay (usec) 2.26035E-03 +/- 3.1E-05  
 Sband delay (usec) 1.96302652849E+02 Apriori clock (usec) -2.7442989E+01 Resid sbdelay (usec) 2.48800E-03 +/- 2.5E-04  
 Phase delay (usec) 1.96300159557E+02 Apriori clockrate (us/s) -7.3949380E-06 Resid phdelay (usec) -5.29152E-06 +/- 1.1E-07  
 Delay rate (us/s) 3.13859048891E-02 Apriori rate (us/s) 3.13860064629E-02 Resid rate (us/s) -1.01574E-07 +/- 4.4E-10  
 Total phase (deg) -92.1 Apriori accel (us/s/s) 3.41589044885E-07 Resid phase (deg) -164.1 +/- 3.3

ph/seg (deg) 28.7 7.9 Search (2048X32) 0.599 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 17.8 13.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 10.2 4.7 Inc. seg. avg. 0.687 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 14.2 8.1 Inc. frq. avg. 0.619 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

C: az 274.6 el 46.7 pa 64.9 u: az 277.0 el 45.8 pa 67.7 u,v (fr/asec) -205.324 232.439 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/Cu..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/Cu.W.58.3MP11G



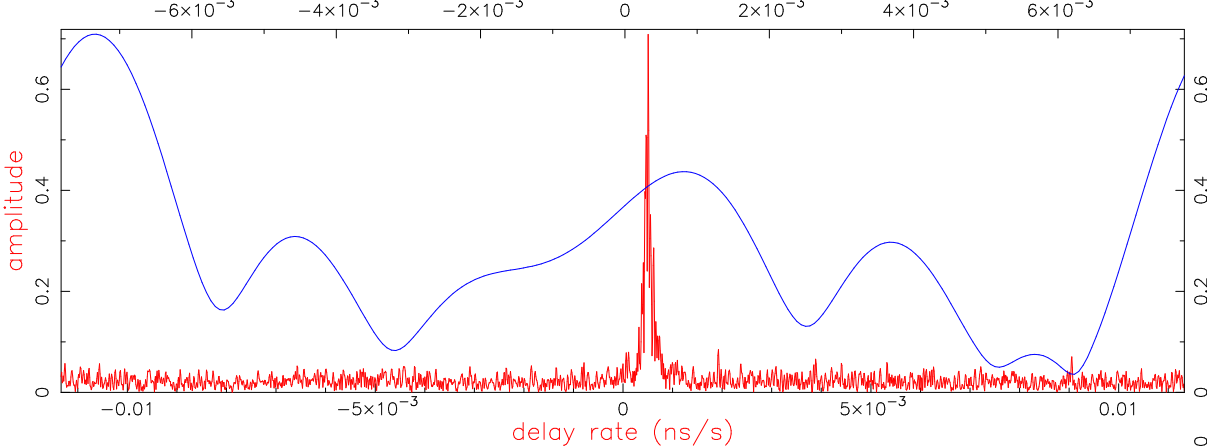
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CX

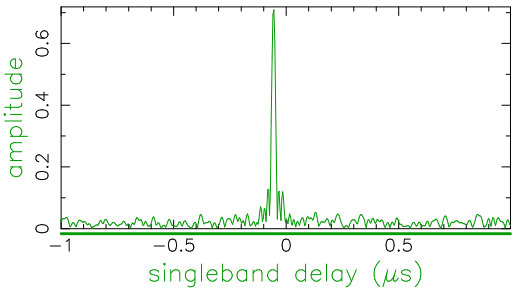
KVNPC - ONSALA60, fgroup W, pol LL

multiband delay ( $\mu$ s)

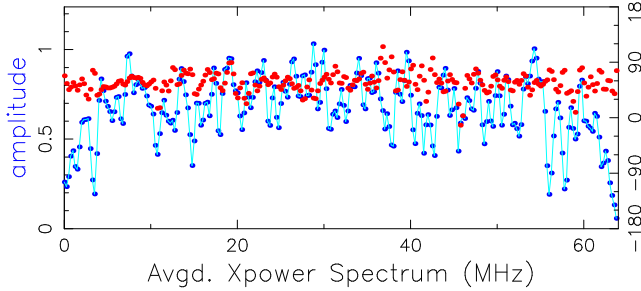


Fringe quality 4

SNR 40.2  
 Int time 419.664  
 Amp 0.719  
 Phase -144.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.056155  
 MBD -0.007377  
 Fringe rate (Hz)  
 0.043873  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

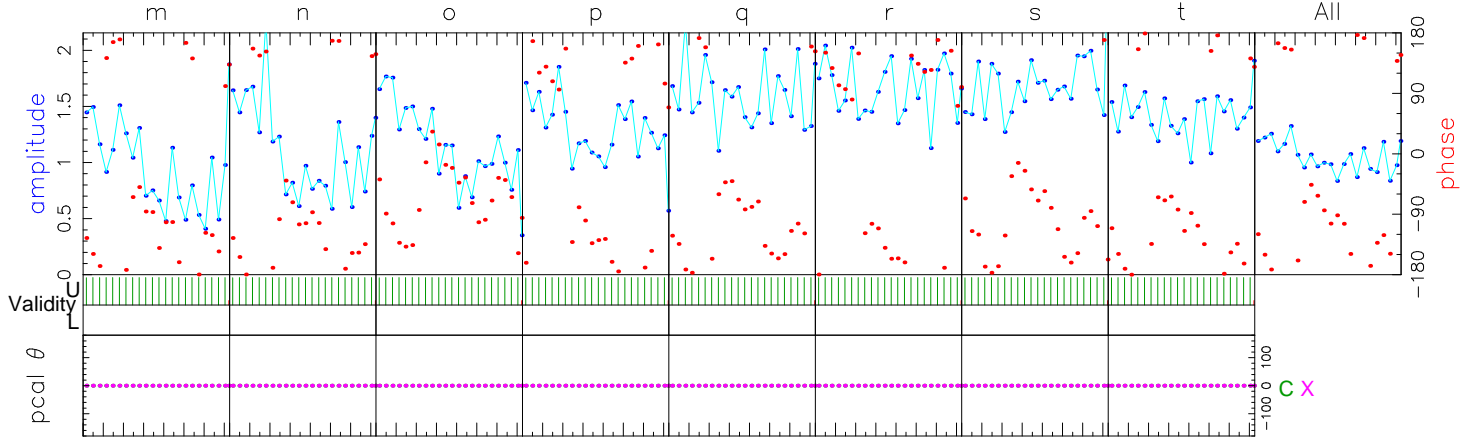


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163045  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-149.0	-159.0	-69.3	171.1	-128.4	160.7	-106.6	-143.9	Phase	-144.5
	0.6	0.8	0.8	0.9	1.1	1.1	1.1	1.0	Ampl.	0.9
	244.4	242.4	242.2	241.8	242.1	242.4	242.4	242.7	Sbd box	242.6
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.07081874589E+03 Apriori delay (usec) 2.07087299770E+03 Resid mbdelay (usec) -7.37681E-03 +/- 2.7E-05  
 Sband delay (usec) 2.07081684270E+03 Apriori clock (usec) -1.3881889E+02 Resid sbdelay (usec) -5.61550E-02 +/- 2.1E-04  
 Phase delay (usec) 2.07087299303E+03 Apriori clockrate (us/s) -8.5317794E-02 Resid phdelay (usec) -4.66076E-06 +/- 9.2E-08  
 Delay rate (us/s) -1.51150974136E+00 Apriori rate (us/s) -1.51151025067E+00 Resid rate (us/s) 5.09317E-07 +/- 3.8E-10  
 Total phase (deg) -136.8 Apriori accel (us/s/s) -2.45643187604E-05 Resid phase (deg) -144.5 +/- 2.8

RMS Theor. Amplitude 0.719 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 49.4 6.8 Search (2048X32) 0.695 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 49.8 11.9 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 45.7 4.0 Inc. seg. avg. 1.043 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 35.8 7.0 Inc. frq. avg. 0.904 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

C: az 274.6 el 46.7 pa 64.9 X: az 93.5 el 37.5 pa -38.0 u,v (fr/asec) 9873.883 -2954.550 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CX..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CX.W.26.3MP11G

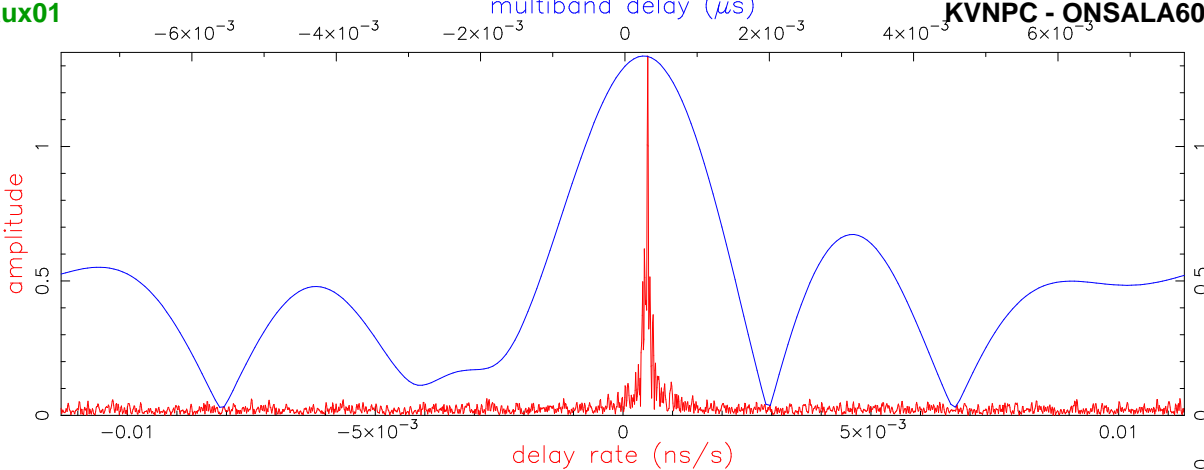
Mk4/DiFX fourfit 3.25 rev 0

aux01

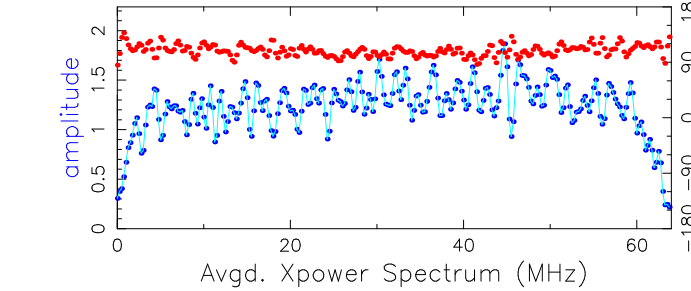
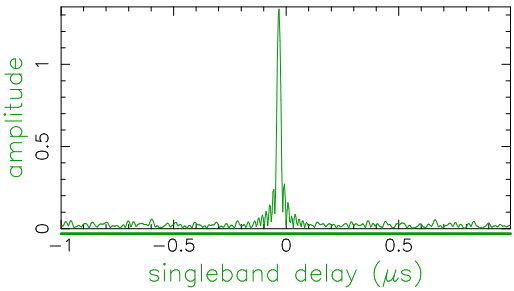
1156+295.3MP11G, No0446, CX

KVNPC - ONSALA60, fgroup W, pol RR

Fringe quality 3

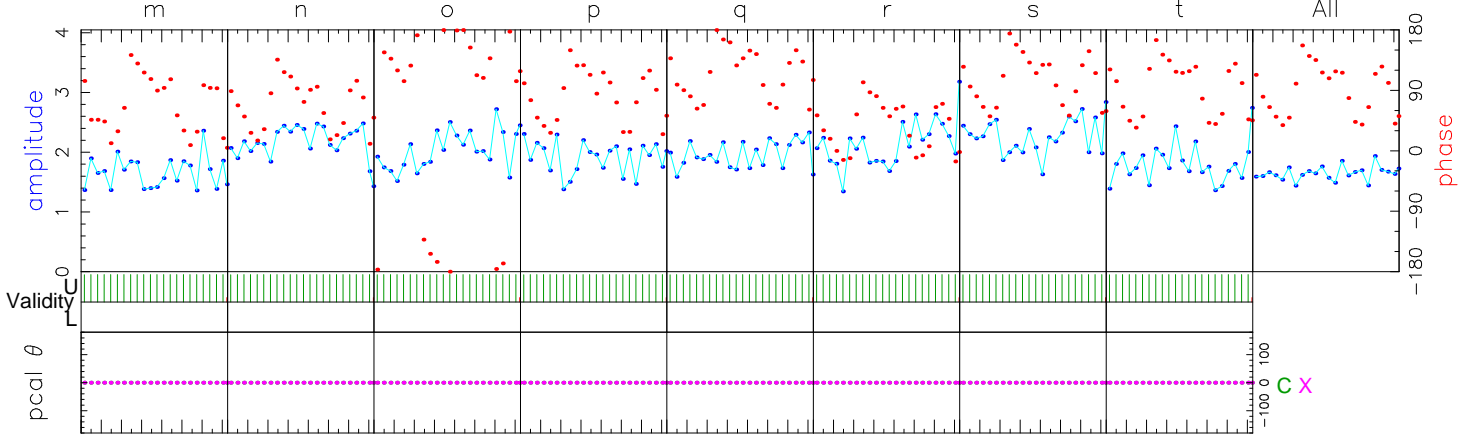


SNR 75.6  
 Int time 419.664  
 Amp 1.350  
 Phase 90.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.032512  
 MBD 0.000230  
 Fringe rate (Hz)  
 0.043157  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163049  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.7	70.5	160.5	81.4	114.4	37.7	103.7	95.7	Phase	90.9
	1.3	1.8	1.7	1.5	1.6	1.7	1.8	1.4	Ampl.	1.6
	249.8	248.7	248.3	248.0	247.9	248.0	248.4	249.3	Sbd box	248.7
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	2.07084197728E+03	Apriori delay (usec)	2.07087299770E+03	Resid mbdelay (usec)	2.29589E-04	+/-	1.4E-05
Sband delay (usec)	2.07084048570E+03	Apriori clock (usec)	-1.3881889E+02	Resid sbdelay (usec)	-3.25120E-02	+/-	1.1E-04
Phase delay (usec)	2.07087300063E+03	Apriori clockrate (us/s)	-8.5317794E-06	Resid phdelay (usec)	2.93269E-06	+/-	4.9E-08
Delay rate (us/s)	-1.51150974966E+00	Apriori rate (us/s)	-1.51151025067E+00	Resid rate (us/s)	5.01013E-07	+/-	2.0E-10
Total phase (deg)	98.7	Apriori accel (us/s/s)	-2.45643187604E-05	Resid phase (deg)	90.9	+/-	1.5

ph/seg (deg)	RMS 36.2	Theor. 3.6	Amplitude 1.350 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	23.7	6.3	Search (2048X32) 1.284	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	39.5	2.1	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	23.5	3.7	Inc. seg. avg. 1.645	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011	
			Inc. frq. avg. 1.609	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

C: az 274.6 el 46.7 pa 64.9 X: az 93.5 el 37.5 pa -38.0 u,v (fr/asec) 9873.883 -2954.550 simultaneous interpolator

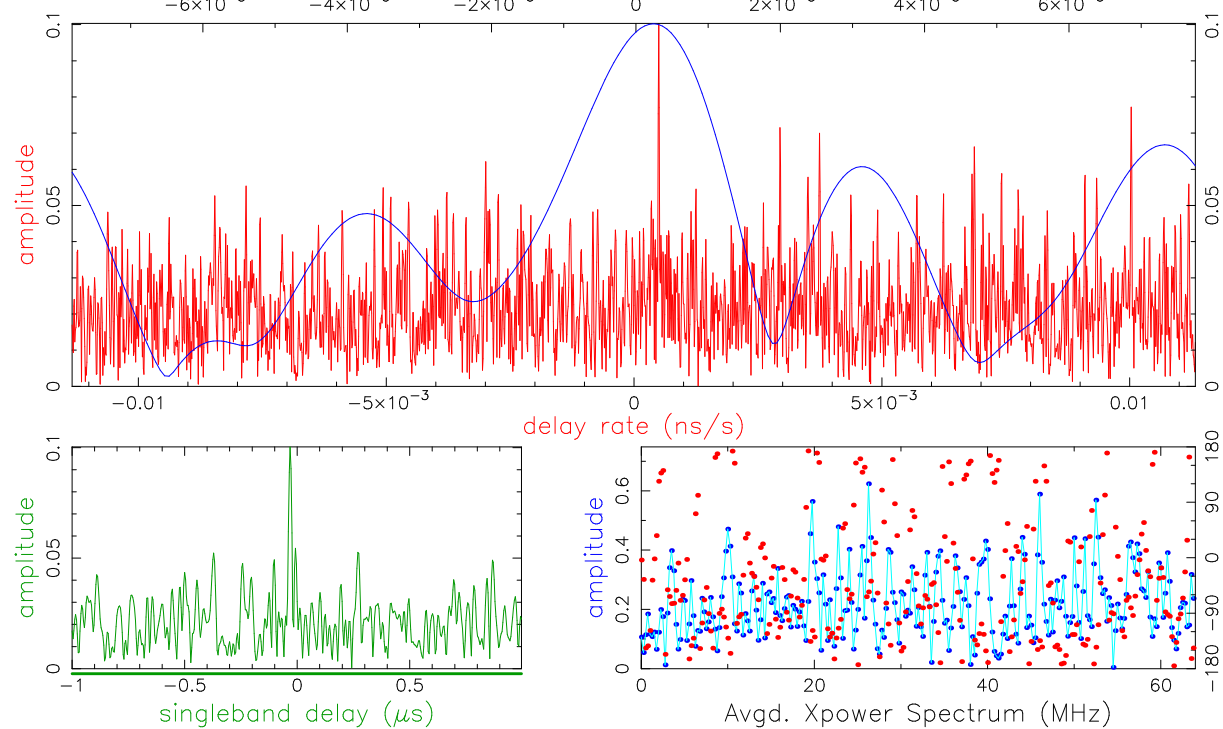
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CX..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CX.W.39.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

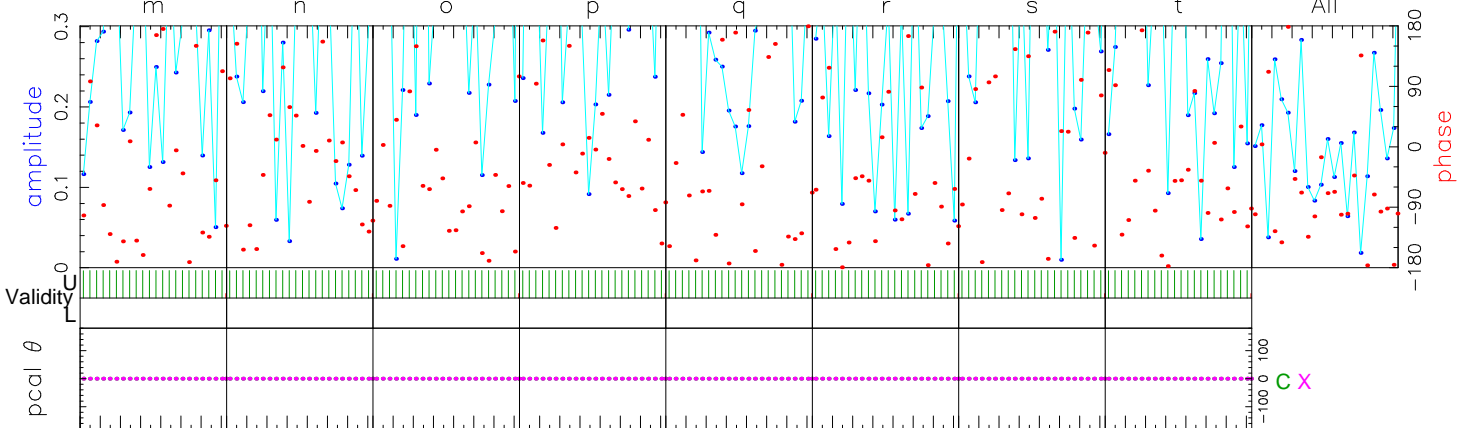
1156+295.3MP11G, No0446, CX

KVNPC - ONSALA60, fgroup W, pol LR



Fringe quality 0  
 SNR 5.6  
 Int time 419.664  
 Amp 0.100  
 Phase -96.2  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.031053  
 MBD 0.000247  
 Fringe rate (Hz)  
 0.043060  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163053  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-145.3	-61.7	-71.3	-47.0	-150.3	-88.9	-137.0	-84.5	Phase	-96.2
	0.1	0.0	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.1
	130.8	162.2	249.7	250.9	247.0	418.1	255.7	466.7	Sbd box	249.1
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) 2.07084199428E+03 Apriori delay (usec) 2.07087299770E+03 Resid mbdelay (usec) 2.46589E-04 +/- 1.9E-04  
 Sband delay (usec) 2.07084194445E+03 Apriori clock (usec) -1.3881889E+02 Resid sbdelay (usec) -3.10533E-02 +/- 1.5E-03  
 Phase delay (usec) 2.07087299459E+03 Apriori clockrate (us/s) -8.5317794E-06 Resid phdelay (usec) -3.10292E-06 +/- 6.6E-07  
 Delay rate (us/s) -1.51150975079E+00 Apriori rate (us/s) -1.51151025067E+00 Resid rate (us/s) 4.99887E-07 +/- 2.7E-09  
 Total phase (deg) -88.5 Apriori accel (us/s/s) -2.45643187604E-05 Resid phase (deg) -96.2 +/- 20.4

ph/seg (deg) RMS Theor. Amplitude 0.100 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 63.3 48.9 Search (2048X32) 0.098 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 87.4 85.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 43.6 28.9 Inc. seg. avg. 0.111 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 54.5 50.4 Inc. frq. avg. 0.113 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

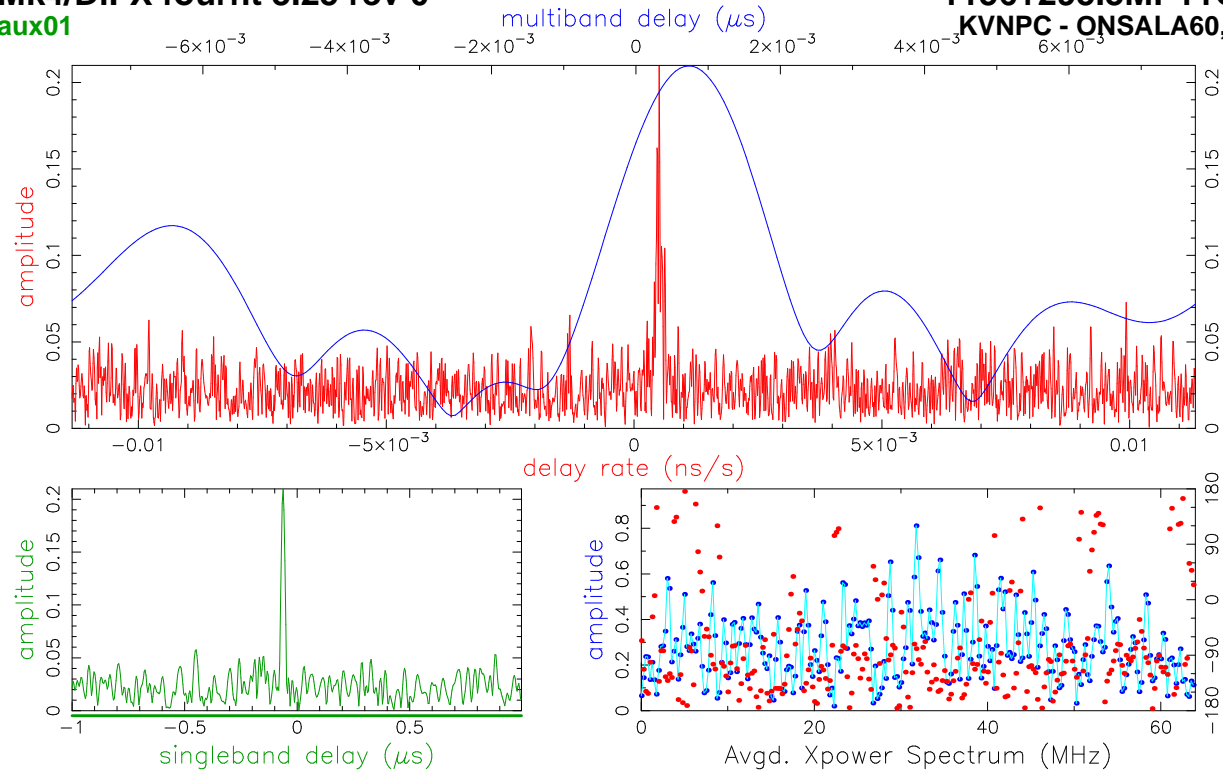
C: az 274.6 el 46.7 pa 64.9 X: az 93.5 el 37.5 pa -38.0 u,v (fr/asec) 9873.883 -2954.550 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CX..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CX.W.54.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CX

KVNPC - ONSALA60, fgroup W, pol RL

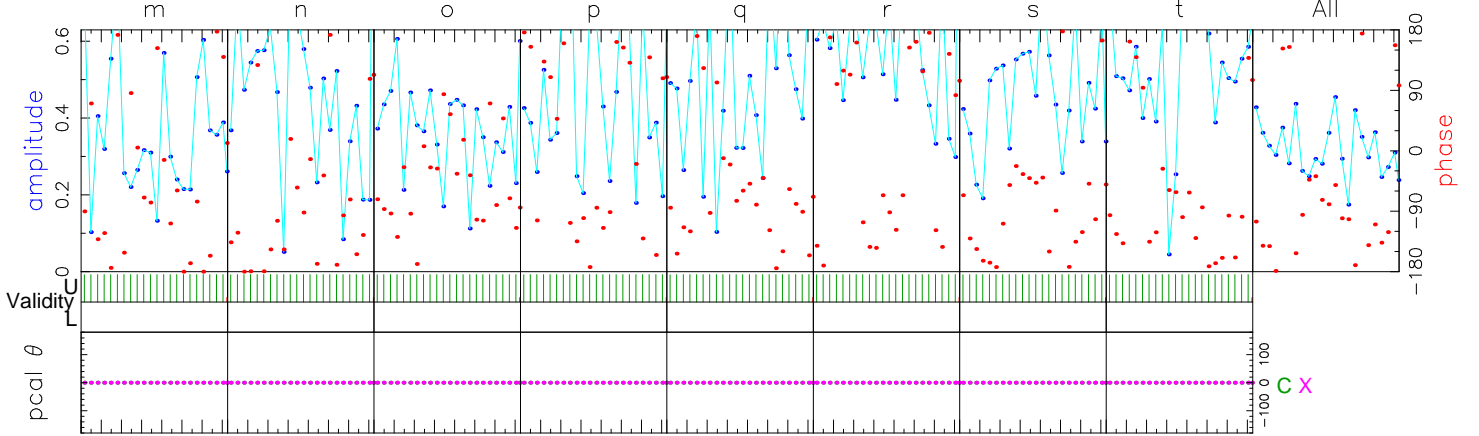


Fringe quality 9

SNR 11.7  
 Int time 419.664  
 Amp 0.210  
 Phase -129.0  
 PFD 3.6e-23  
 Delays (us)  
 SBD -0.062862  
 MBD 0.000726  
 Fringe rate (Hz)  
 0.043687  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163057  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-137.8	-134.0	-61.8	-172.8	-102.0	-172.0	-103.0	-127.2	Phase	-129.0
	0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.3	Ampl.	0.2
	243.0	240.2	239.9	240.2	240.4	240.3	240.2	240.9	Sbd box	240.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
X	0	0	0	0	0	0	0	0	PC freqs	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 2.07081122345E+03 Apriori delay (usec) 2.07087299770E+03 Resid mbdelay (usec) 7.25755E-04 +/- 9.2E-05  
 Sband delay (usec) 2.07081013570E+03 Apriori clock (usec) 0.204 Resid sbdelay (usec) -6.28620E-02 +/- 7.3E-04  
 Phase delay (usec) 2.07087299354E+03 Apriori clockrate (us/s) -8.5317794E-02 Resid phdelay (usec) -4.15915E-06 +/- 3.1E-07  
 Delay rate (us/s) -1.51150974351E+00 Apriori rate (us/s) -1.51151025067E+00 Resid rate (us/s) 5.07163E-07 +/- 1.3E-09  
 Total phase (deg) -121.2 Apriori accel (us/s/s) -2.45643187604E-05 Resid phase (deg) -129.0 +/- 9.8

RMS Theor. Amplitude 0.210 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 52.0 23.4 Search (2048X32) 0.204 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 63.8 40.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 40.4 13.8 Inc. seg. avg. 0.300 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 33.0 24.1 Inc. frq. avg. 0.245 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

C: az 274.6 el 46.7 pa 64.9 X: az 93.5 el 37.5 pa -38.0 u, v (fr/asec) 9873.883 -2954.550 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CX..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CX.W.68.3MP11G

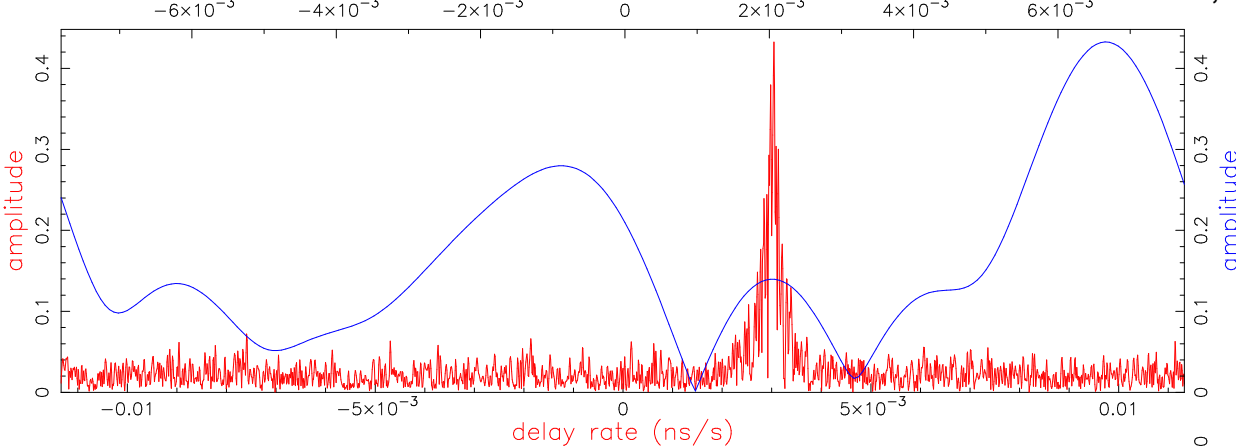
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CY

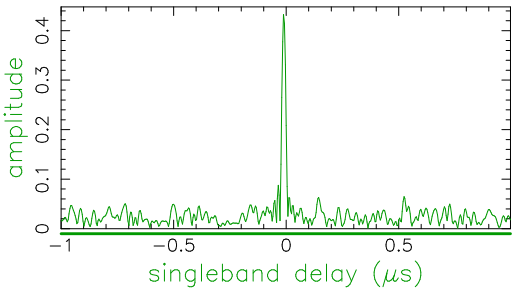
KVNPC - YEBES40M, fgroup W, pol LL

multiband delay ( $\mu$ s)

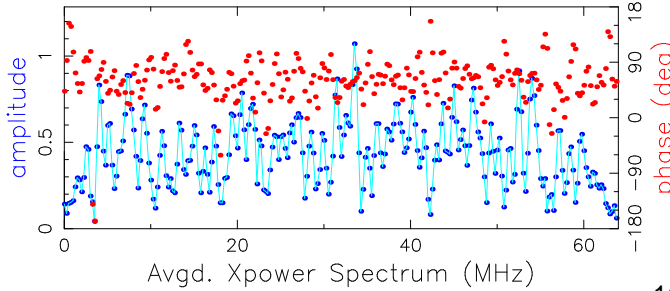


Fringe quality 8

SNR 23.8  
 Int time 401.969  
 Amp 0.448  
 Phase -138.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.010713  
 MBD 0.006695  
 Fringe rate (Hz)  
 0.262713  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

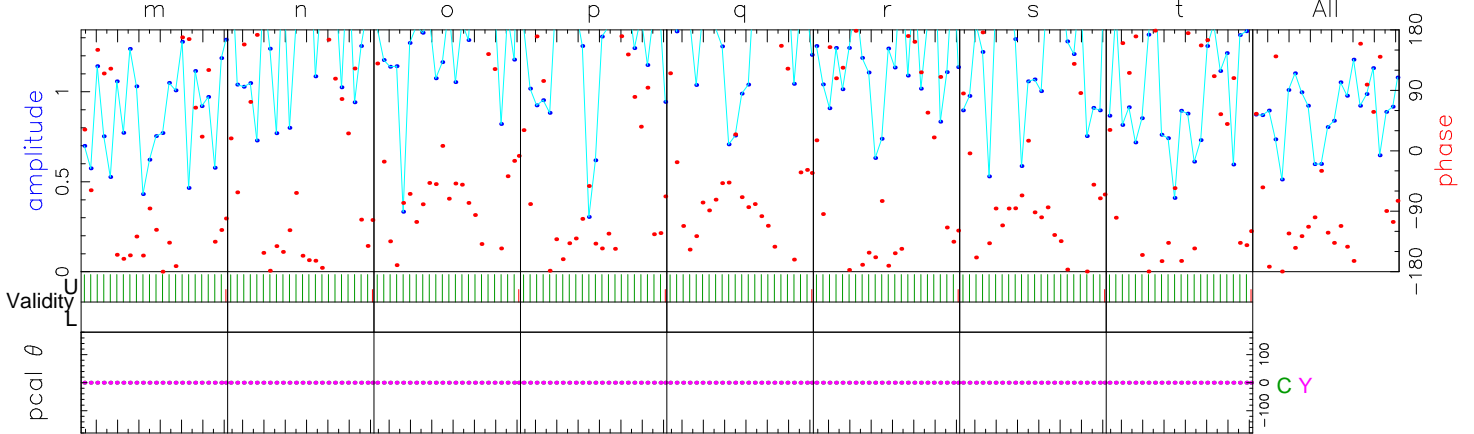


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170017.41  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163108  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-166.1	-166.9	-76.9	-152.8	-92.3	-179.2	-109.7	179.2	Phase	-138.8
	0.4	0.6	0.6	0.6	0.7	0.6	0.6	0.5	Ampl.	0.6
	256.0	254.5	254.0	253.8	253.7	253.4	253.8	253.9	Sbd box	254.3
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
C	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.99857201549E+03	Apriori delay (usec)	5.99858094519E+03	Resid mbdelay (usec)	6.69530E-03	+/-	4.6E-05
Sband delay (usec)	5.99857023244E+03	Apriori clock (usec)	8.4660271E+01	Resid sbdelay (usec)	-1.07128E-02	+/-	3.6E-04
Phase delay (usec)	5.99858094071E+03	Apriori clockrate (us/s)	-9.0842429E-06	Resid phdelay (usec)	-4.47644E-06	+/-	1.5E-07
Delay rate (us/s)	-1.86626949315E+00	Apriori rate (us/s)	-1.86627254299E+00	Resid rate (us/s)	3.04984E-06	+/-	6.7E-10
Total phase (deg)	83.8	Apriori accel (us/s/s)	-3.36755683947E-05	Resid phase (deg)	-138.8	+/-	4.8

ph/seg (deg)	RMS 72.4	Theor. 11.5	Amplitude	0.448 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	111.7	20.1	Search (2048X32)	0.412	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	44.7	6.8	Inc. seg. avg.	0.897	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.1	11.9	Inc. frq. avg.	0.569	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011		
C:	az 274.6 el 46.7 pa 64.9	Y:	az 72.5 el 25.6 pa -56.2	u,v (fr/asec)	12186.605 -1877.064	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

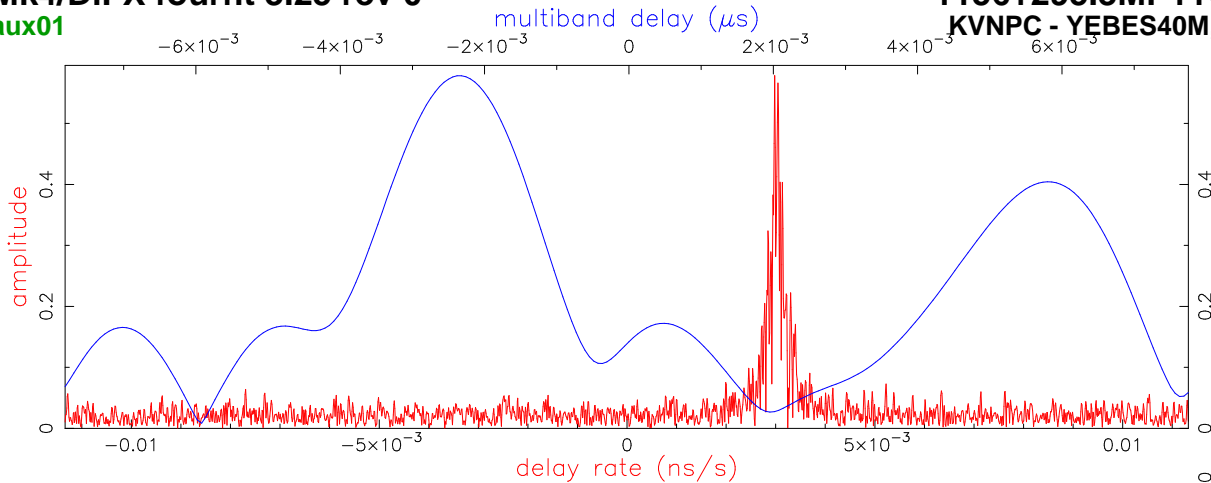
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CY..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CY.W.100.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

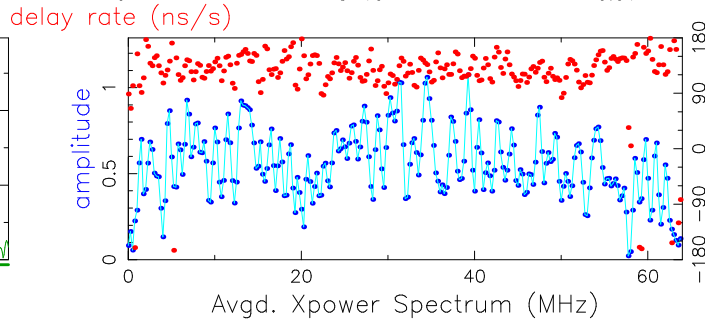
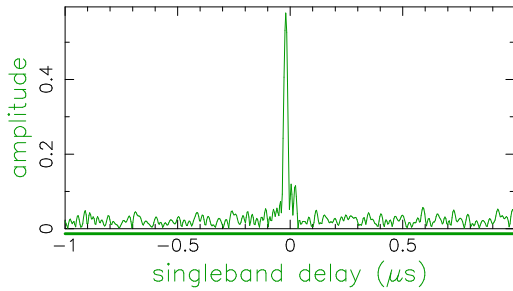
1156+295.3MP11G, No0446, CY

KVNPC - YEBES40M, fgroup W, pol RR



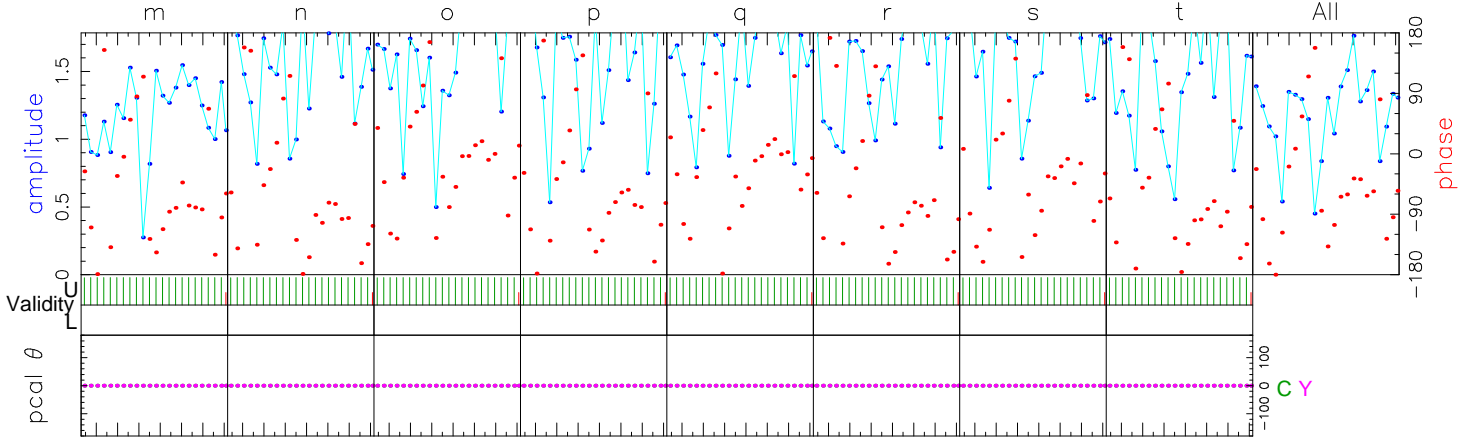
Fringe quality 4

SNR 31.7  
 Int time 401.969  
 Amp 0.595  
 Phase -67.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.019620  
 MBD -0.002348  
 Fringe rate (Hz)  
 0.256834  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170017.41  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163112  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.2	-108.5	-12.6	-87.3	-12.3	-99.2	-40.8	-101.3	Phase	-67.3
	0.5	0.7	0.8	0.8	0.9	0.8	0.8	0.7	Ampl.	0.8
	253.7	251.4	252.1	251.5	251.5	251.1	251.5	251.4	Sbd box	252.0
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.99856297193E+03	Apriori delay (usec)	5.99858094519E+03	Resid mbdelay (usec)	-2.34826E-03	+/-	3.4E-05
Sband delay (usec)	5.99856132569E+03	Apriori clock (usec)	8.4660271E+01	Resid sbdelay (usec)	-1.96195E-02	+/-	2.7E-04
Phase delay (usec)	5.99858094302E+03	Apriori clockrate (us/s)	-9.0842429E-06	Resid phdelay (usec)	-2.16966E-06	+/-	1.2E-07
Delay rate (us/s)	-1.86626956140E+00	Apriori rate (us/s)	-1.86627254299E+00	Resid rate (us/s)	2.98159E-06	+/-	5.0E-10
Total phase (deg)	155.3	Apriori accel (us/s/s)	-3.36755683947E-05	Resid phase (deg)	-67.3	+/-	3.6

ph/seg (deg)	RMS 77.6	Theor. 8.7	Amplitude Search (2048X32)	0.595 +/- 0.019	0.558	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	117.8	15.1	Interp.	0.000	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	43.4	5.1	Inc. seg. avg.	1.210	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256 t_cohere infinite	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	32.6	8.9	Inc. frq. avg.	0.756	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00	

C: az 274.6 el 46.7 pa 64.9 Y: az 72.5 el 25.6 pa -56.2 u,v (fr/asec) 12186.605 -1877.064 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CY..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CY.W.116.3MP11G

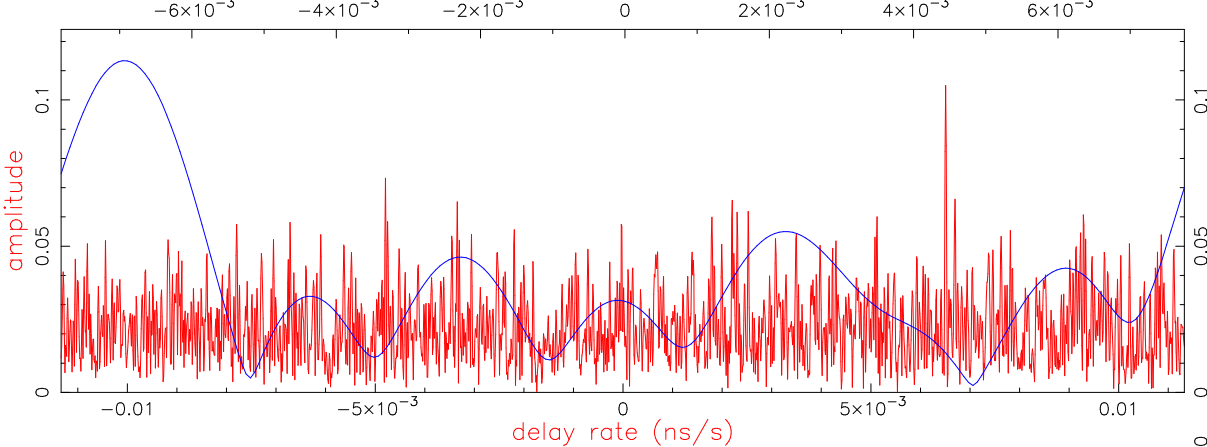
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CY

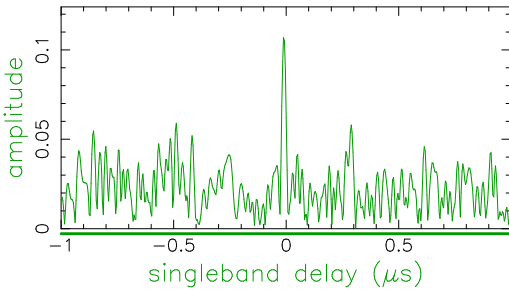
KVNPC - YEYES40M, fgroup W, pol LR

multiband delay ( $\mu$ s)

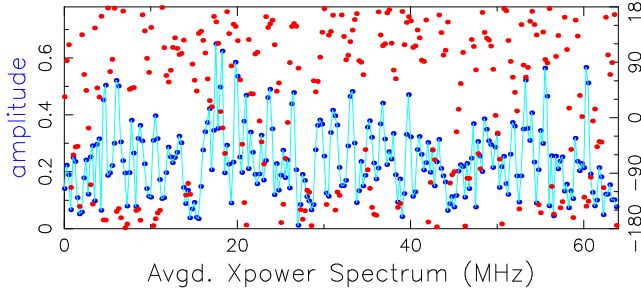


Fringe quality 0

SNR 5.9  
 Int time 401.969  
 Amp 0.124  
 Phase -70.1  
 PFD 5.6e-01  
 Delays (us)  
 SBD -0.010227  
 MBD 0.008301  
 Fringe rate (Hz)  
 0.561202  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

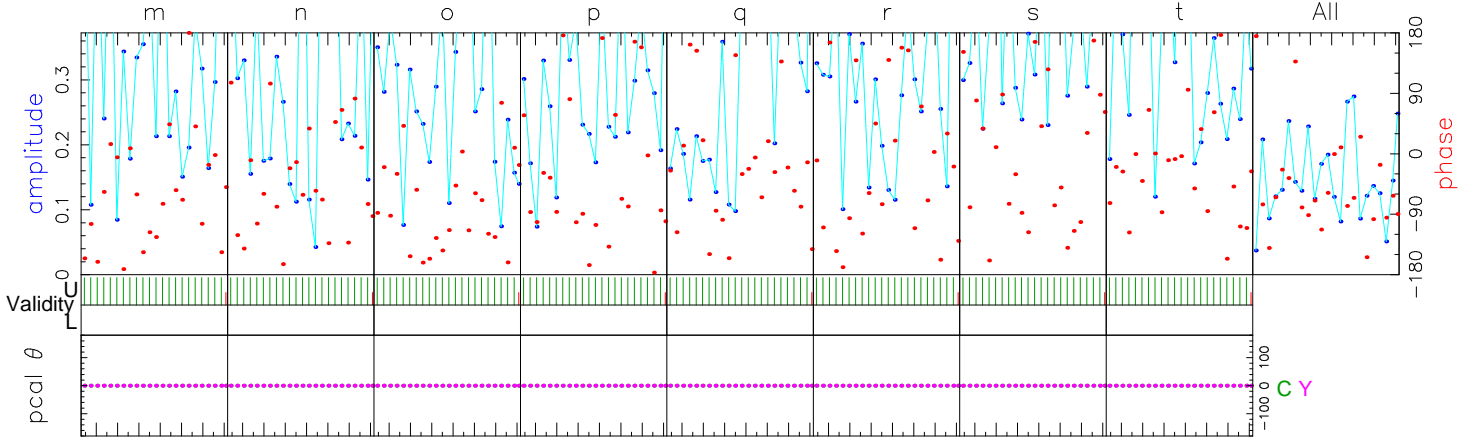


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170017.41  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163116  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0		
C	0	0	60000	0	0	0	4000	0		
Y	0	0	0	0	0	0	0	0		
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	5.99857362097E+03	Apriori delay (usec)	5.99858094519E+03	Resid mbdelay (usec)	8.30078E-03	+/-	1.8E-04
Sband delay (usec)	5.99857071869E+03	Apriori clock (usec)	8.4660271E+01	Resid sbdelay (usec)	-1.02265E-02	+/-	1.5E-03
Phase delay (usec)	5.99858094293E+03	Apriori clockrate (us/s)	-9.0842429E-06	Resid phdelay (usec)	-2.25996E-06	+/-	6.2E-07
Delay rate (us/s)	-1.86626602799E+00	Apriori rate (us/s)	-1.86627254299E+00	Resid rate (us/s)	6.51499E-06	+/-	2.7E-09
Total phase (deg)	152.5	Apriori accel (us/s/s)	-3.36755683947E-05	Resid phase (deg)	-70.1	+/-	19.4

ph/seg (deg)	59.3	RMS	46.4	Theor.	46.4	Amplitude	0.124 +/- 0.021	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	69.9	Search (2048X32)	0.106	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000			
ph/frq (deg)	34.8	Inc. seg. avg.	0.128	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008		
amp/frq (%)	44.5	Inc. frq. avg.	0.127	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		

C: az 274.6 el 46.7 pa 64.9 Y: az 72.5 el 25.6 pa -56.2 u,v (fr/asec) 12186.605 -1877.064 simultaneous interpolator

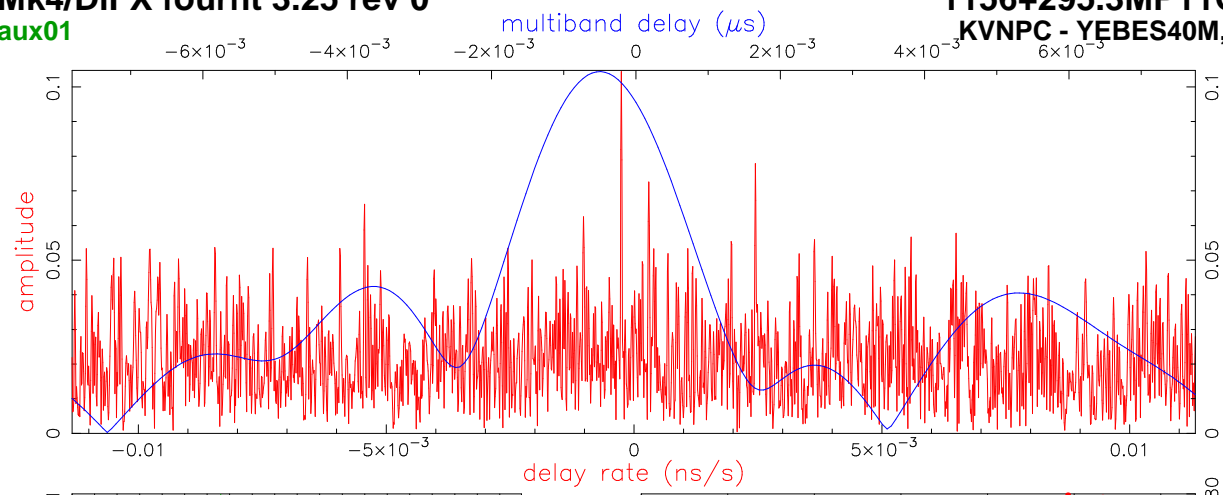
Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CY..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CY.W.130.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CY

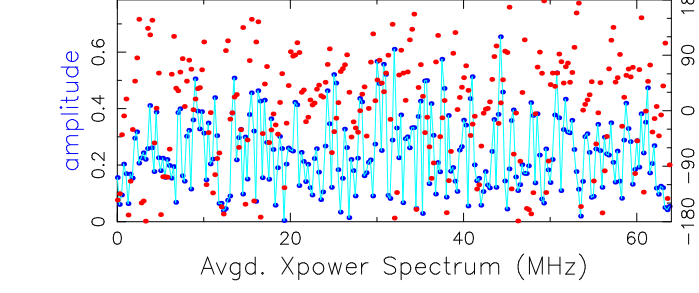
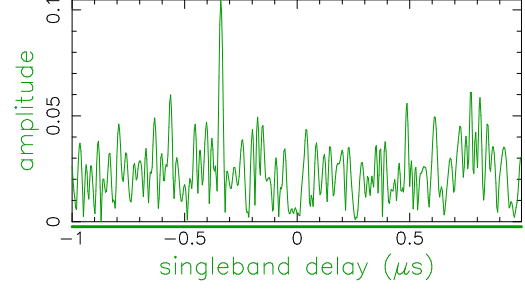
KVNPC - YEYES40M, fgroup W, pol RL



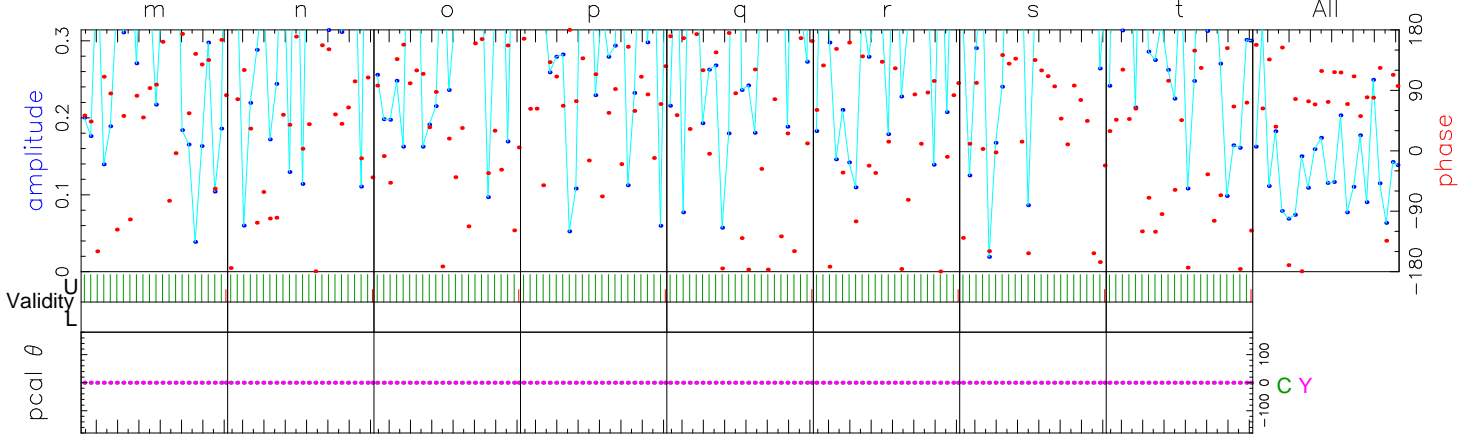
Fringe quality 0

SNR 5.7  
 Int time 401.969  
 Amp 0.105  
 Phase 97.8  
 PFD 9.0e-01  
 Delays (us)  
 SBD -0.339071  
 MBD -0.000513  
 Fringe rate (Hz)  
 -0.022091  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170017.41  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163120  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"



Amp. and Phase vs. time for each freq., 23 segs, 35 APs / seg (17.92 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	93.6	100.8	100.2	71.8	132.9	103.1	98.4	55.0	Phase	97.8
	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.0	Ampl.	0.1
	34.1	421.0	454.9	169.0	161.6	459.4	170.7	465.2	Sbd box	170.2
U/L	786/0	786/0	786/0	786/0	786/0	786/0	786/0	786/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.99823668243E+03	Apriori delay (usec)	5.99858094519E+03	Resid mbdelay (usec)	-5.12757E-04	+/-	1.9E-04
Sband delay (usec)	5.99824187444E+03	Apriori clock (usec)	8.4660271E+01	Resid sbdelay (usec)	-3.39071E-01	+/-	1.5E-03
Phase delay (usec)	5.99858094834E+03	Apriori clockrate (us/s)	-9.0842429E-06	Resid phdelay (usec)	3.15539E-06	+/-	6.4E-07
Delay rate (us/s)	-1.86627279944E+00	Apriori rate (us/s)	-1.86627254299E+00	Resid rate (us/s)	-2.56454E-07	+/-	2.8E-09
Total phase (deg)	320.4	Apriori accel (us/s/s)	-3.36755683947E-05	Resid phase (deg)	97.8	+/-	20.0

ph/seg (deg)	48.7	Theor.	47.8	Amplitude	0.105 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.0	Search (2048X32)	0.103	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	25.2	Inc. seg. avg.	0.103	Inc. frq. avg.	0.098	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	50.8	Inc. frq. avg.	0.098			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

C: az 274.6 el 46.7 pa 64.9 Y: az 72.5 el 25.6 pa -56.2 u,v (fr/asec) 12186.605 -1877.064 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CY..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CY.W.139.3MP11G



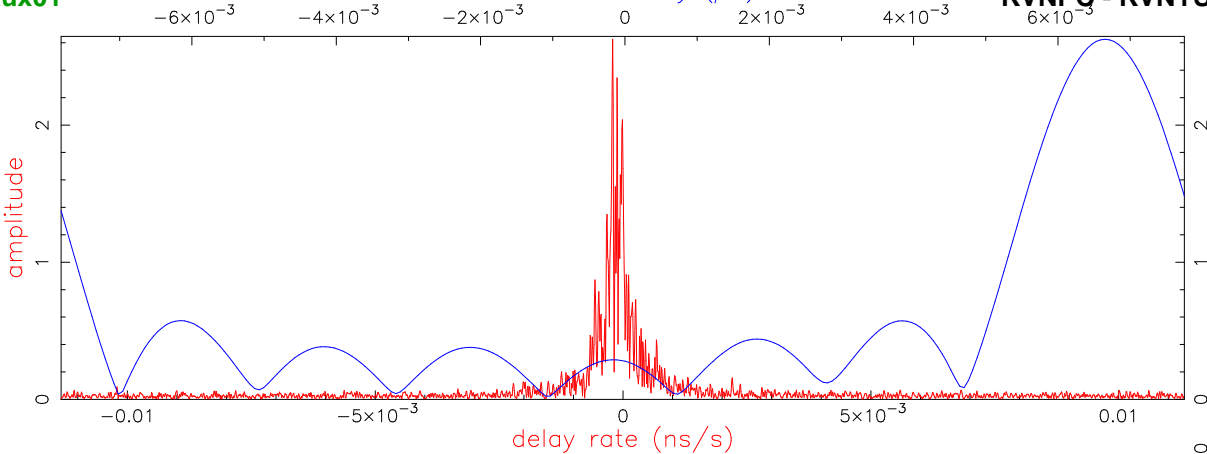
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, Cy

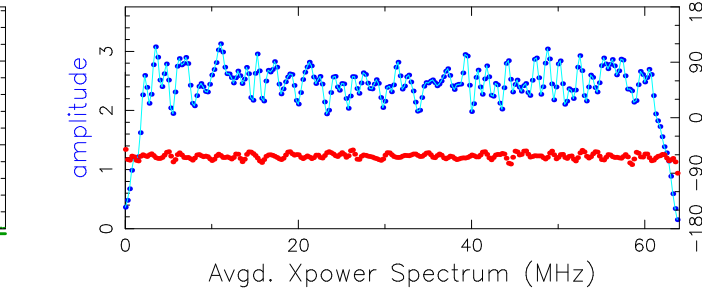
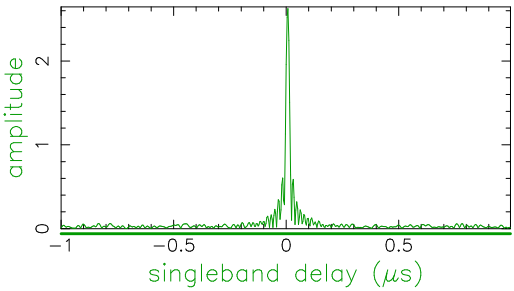
KVNPC - KVNYS, fgroup W, pol LL

multiband delay ( $\mu$ s)



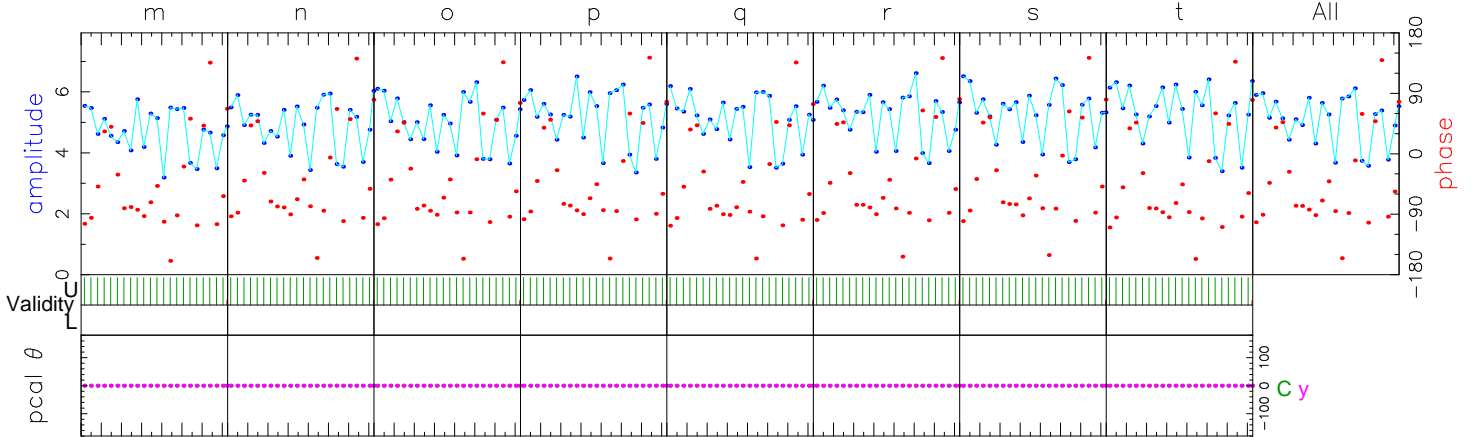
Fringe quality 5

SNR 148.3  
Int time 419.816  
Amp 2.647  
Phase -61.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.006704  
MBD 0.006650  
Fringe rate (Hz)  
-0.018045  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c241b  
Exper # 1234  
Yr:day 2024:110  
Start 170000.00  
Stop 170659.84  
FRT 170330.00  
Corr/FF/build  
2024:358:161459  
2025:041:163040  
2024:113:095956  
RA & Dec (J2000)  
11h59m31.833914s  
+29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
C	0	0	60000	0	0	0	4000	0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) -3.36609947014E+02 Apriori delay (usec) -3.36616596800E+02 Resid mbdelay (usec) 6.64979E-03 +/- 7.3E-06  
 Sband delay (usec) -3.36609892550E+02 Apriori clock (usec) -3.2491089E+01 Resid sbdelay (usec) 6.70425E-03 +/- 5.8E-05  
 Phase delay (usec) -3.36616598792E+02 Apriori clockrate (us/s) -7.3743381E-06 Resid phdelay (usec) -1.99249E-06 +/- 2.5E-08  
 Delay rate (us/s) -1.79878747183E-02 Apriori rate (us/s) -1.79876652339E-02 Resid rate (us/s) -2.09484E-07 +/- 1.0E-10  
 Total phase (deg) -295.2 Apriori accel (us/s/s) 1.59532261433E-06 Resid phase (deg) -61.8 +/- 0.8

RMS Theor. Amplitude 2.647 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 66.8 1.9 Search (2048X32) 2.591 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 96.1 3.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 4.2 1.1 Inc. seg. avg. 5.063 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 3.8 1.9 Inc. frq. avg. 2.631 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

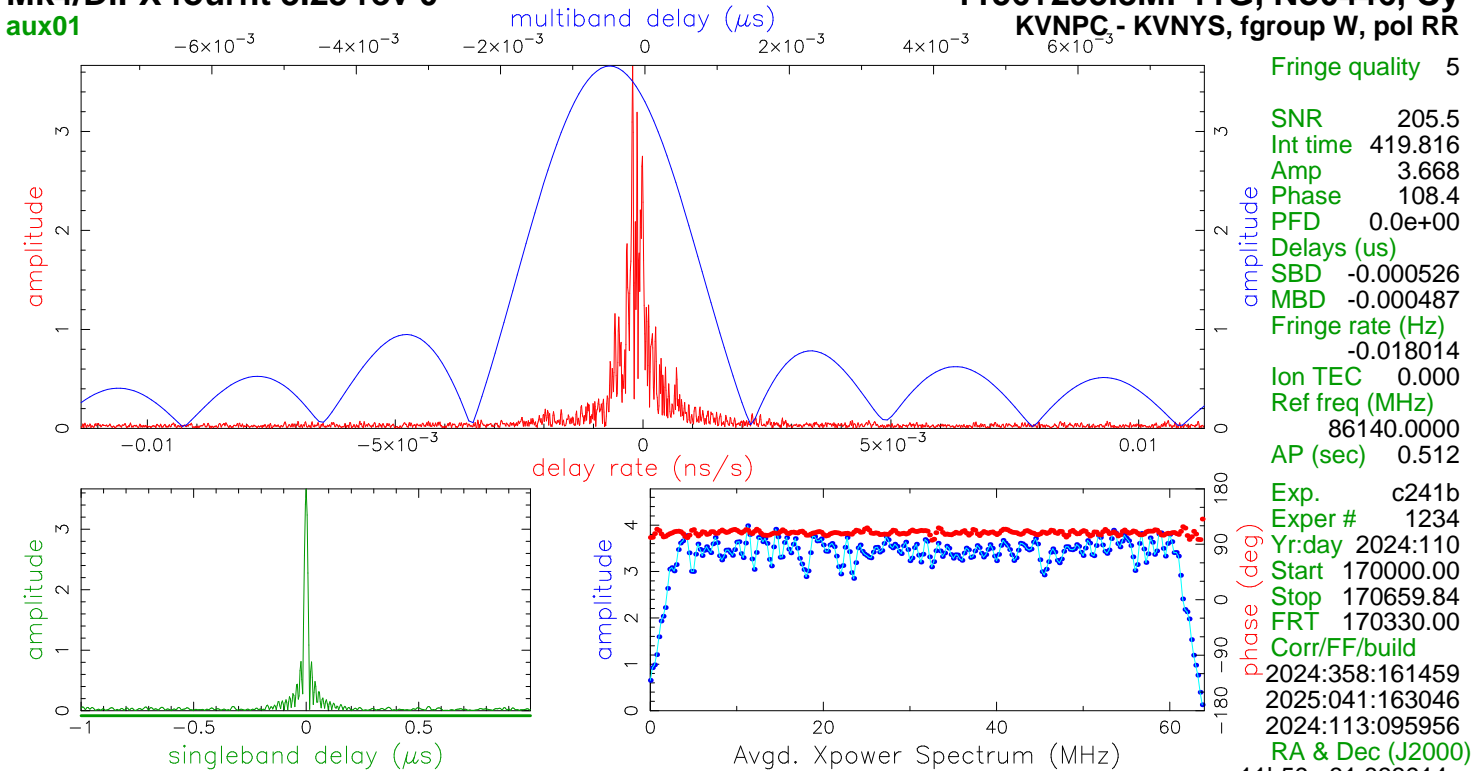
C: az 274.6 el 46.7 pa 64.9 y: az 273.7 el 47.9 pa 65.0 u,v (fr/asec) 120.036 65.817 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446//Cy..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446//Cy.W.18.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, Cy

KVNPC - KVNYs, fgroup W, pol RR



Fringe quality 5

SNR 205.5

Int time 419.816

Amp 3.668

Phase 108.4

PFD 0.0e+00

Delays (us)

SBD -0.000526

MBD -0.000487

Fringe rate (Hz)

-0.018014

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c241b

Exper # 1234

Yr:day 2024:110

Start 170000.00

Stop 170659.84

FRT 170330.00

Corr/FF/build

2024:358:161459

2025:041:163046

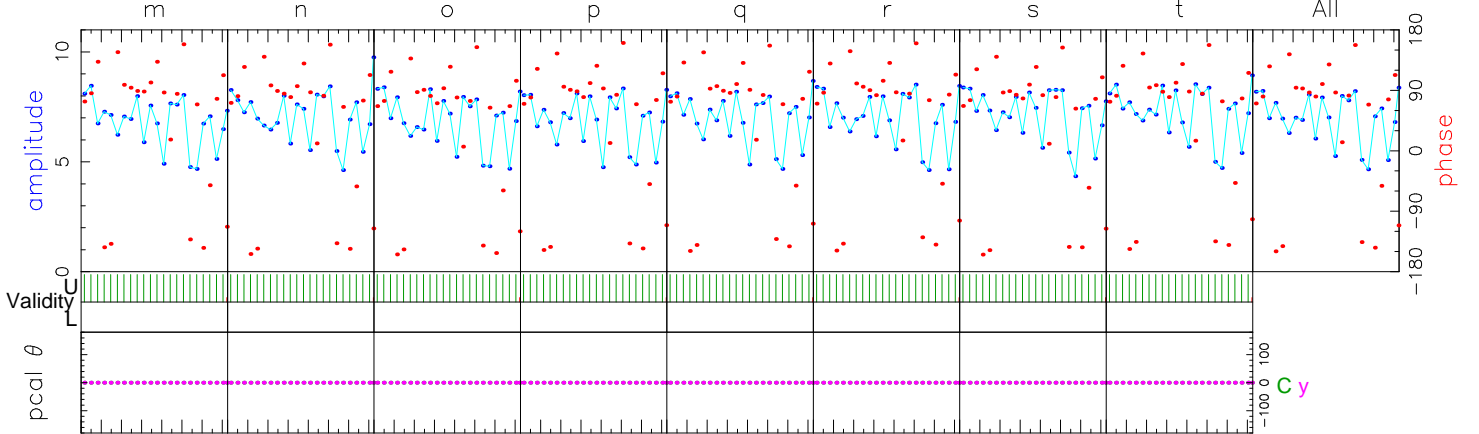
2024:113:095956

RA & Dec (J2000)

11h59m31.833914s

+29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	111.0	108.7	102.2	108.6	110.8	111.3	105.3	109.1	Phase	108.4
	3.6	3.7	3.6	3.6	3.6	3.7	3.8	3.8	Ampl.	3.7
	256.8	256.9	256.9	257.1	256.9	256.8	256.9	256.7	Sbd box	256.9
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	-3.36617084076E+02		Apriori delay (usec)	-3.36616596800E+02	Resid mbdelay (usec)	-4.87277E-04	+/-	5.3E-06		
Sband delay (usec)	-3.36617122800E+02		Apriori clock (usec)	-3.2491089E+01	Resid sbdelay (usec)	-5.26000E-04	+/-	4.2E-05		
Phase delay (usec)	-3.36616593304E+02		Apriori clockrate (us/s)	-7.3743381E-06	Resid phdelay (usec)	3.49575E-06	+/-	1.8E-08		
Delay rate (us/s)	-1.79878743583E-02		Apriori rate (us/s)	-1.79876652339E-02	Resid rate (us/s)	-2.09124E-07	+/-	7.4E-11		
Total phase (deg)		-125.0	Apriori accel (us/s/s)	1.59532261433E-06	Resid phase (deg)	108.4	+/-	0.6		

ph/seg (deg) 66.3 1.3 Search (2048X32) 3.635 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 94.3 2.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 3.4 0.8 Inc. seg. avg. 6.952 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008

amp/frq (%) 1.9 1.4 Inc. frq. avg. 3.667 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011

C: az 274.6 el 46.7 pa 64.9 y: az 273.7 el 47.9 pa 65.0 u,v (fr/asec) 120.036 65.817 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/c241b/v2/3mm/1234/No0446//Cy..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446//Cy.W.34.3MP11G simultaneous interpolator

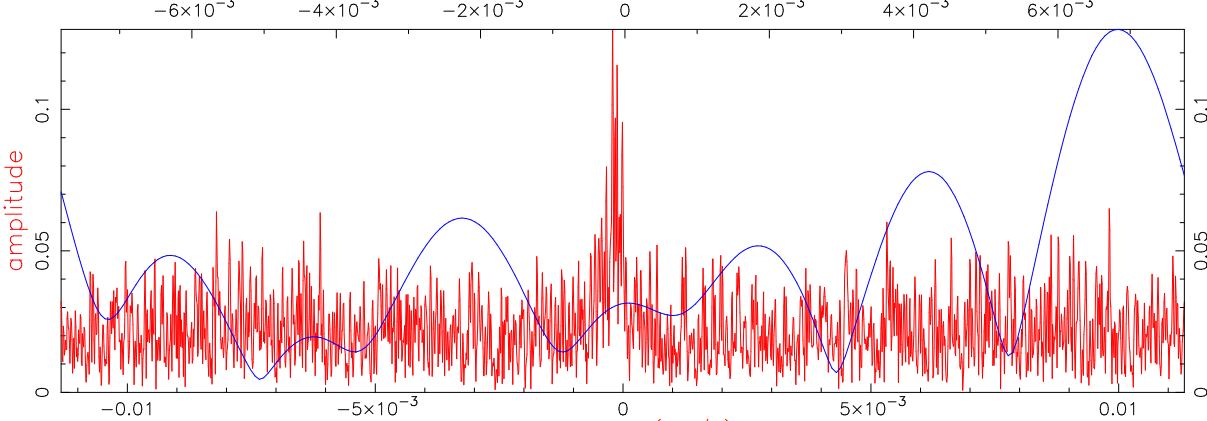
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, Cy

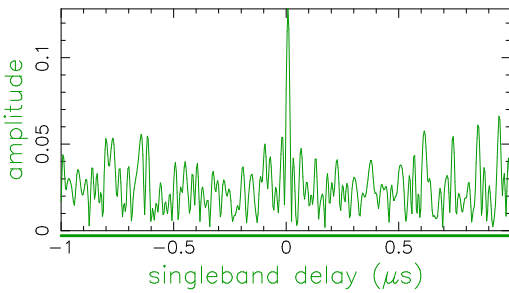
KVNPC - KVNYS, fgroup W, pol LR

multiband delay ( $\mu$ s)

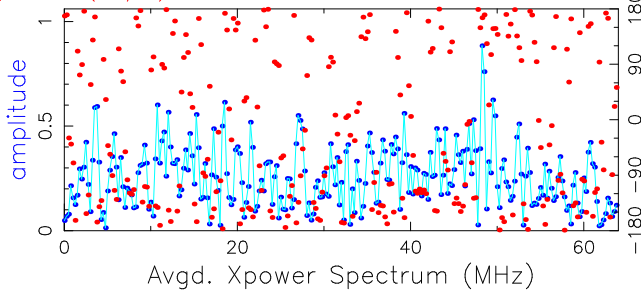


Fringe quality 0

SNR 7.2  
 Int time 419.816  
 Amp 0.128  
 Phase -151.3  
 PFD 2.1e-04  
 Delays (us)  
 SBD 0.007924  
 MBD 0.006827  
 Fringe rate (Hz) -0.018050  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

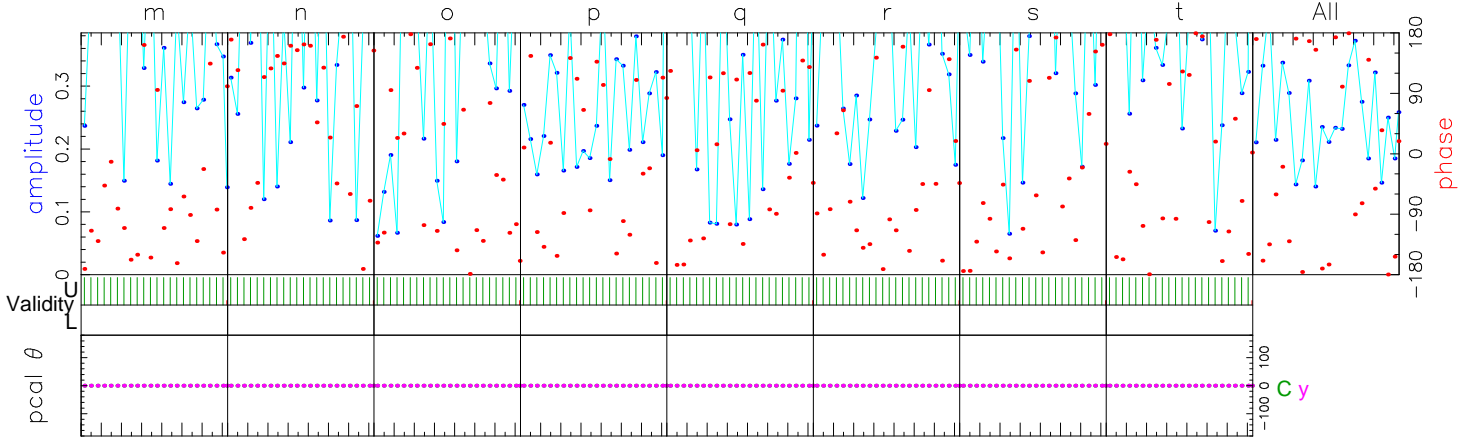


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163050  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.2	175.4	-156.0	159.9	170.6	-114.3	-151.4	-144.6	Phase	-151.3
	0.2	0.1	0.1	0.0	0.1	0.1	0.2	0.2	Ampl.	0.1
	259.0	278.3	164.3	217.7	377.5	304.4	257.6	259.4	Sbd box	259.0
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
y	0	0	60000	0	0	0	4000	0	PC freqs	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -3.36609769639E+02 Apriori delay (usec) -3.36616596800E+02 Resid mbdelay (usec) 6.82716E-03 +/- 1.5E-04  
 Sband delay (usec) -3.36608672300E+02 Apriori clock (usec) -3.2491089E+01 Resid sbdelay (usec) 7.92450E-03 +/- 1.2E-03  
 Phase delay (usec) -3.36616601679E+02 Apriori clockrate (us/s) -7.3743381E-06 Resid phdelay (usec) -4.87968E-06 +/- 5.1E-07  
 Delay rate (us/s) -1.79878747820E-02 Apriori rate (us/s) -1.79876652339E-02 Resid rate (us/s) -2.09548E-07 +/- 2.1E-09  
 Total phase (deg) -24.7 Apriori accel (us/s/s) 1.59532261433E-06 Resid phase (deg) -151.3 +/- 15.9

RMS Theor. Amplitude 0.128 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 70.1 38.2 Search (2048X32) 0.127 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 114.2 66.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 34.6 22.6 Inc. seg. avg. 0.207 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011  
 amp/frq (%) 42.4 39.4 Inc. frq. avg. 0.134 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

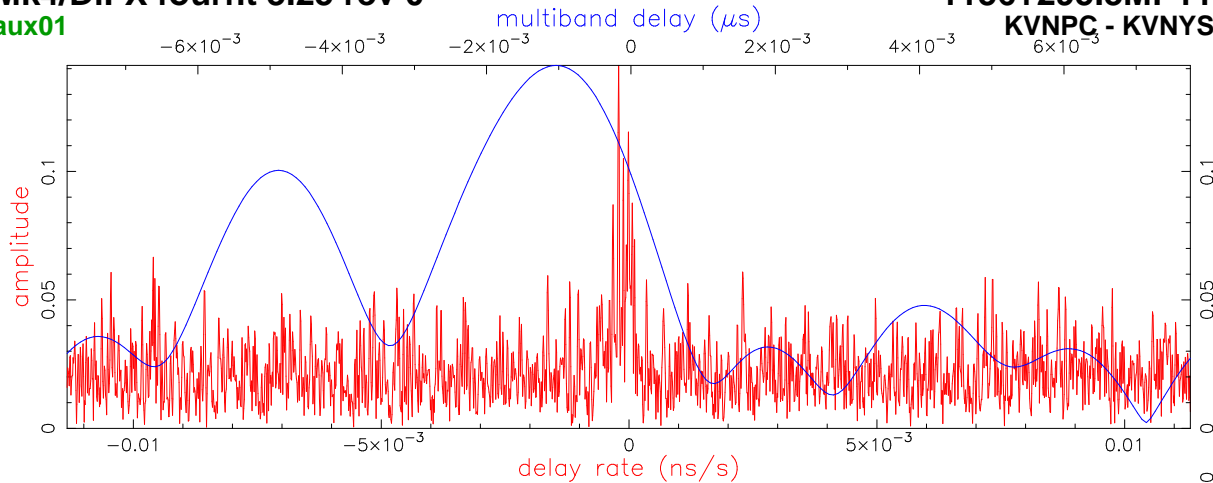
C: az 274.6 el 46.7 pa 64.9 y: az 273.7 el 47.9 pa 65.0 u,v (fr/asec) 120.036 65.817 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446//Cy..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446//Cy.W.47.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

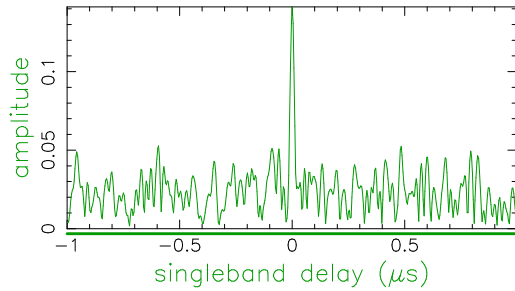
1156+295.3MP11G, No0446, Cy

KVNPC - KVNY, fgroup W, pol RL

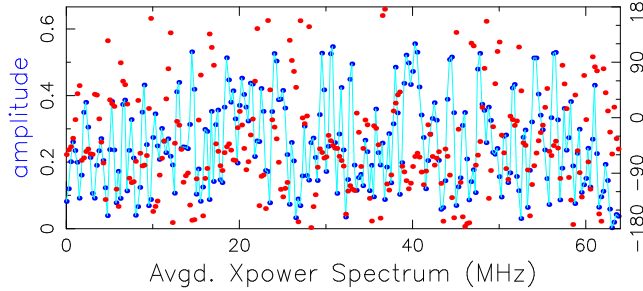


Fringe quality 9

SNR 7.9  
 Int time 419.816  
 Amp 0.141  
 Phase -48.5  
 PFD 8.4e-07  
 Delays (us)  
 SBD 0.000026  
 MBD -0.001036  
 Fringe rate (Hz)  
 -0.018442  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

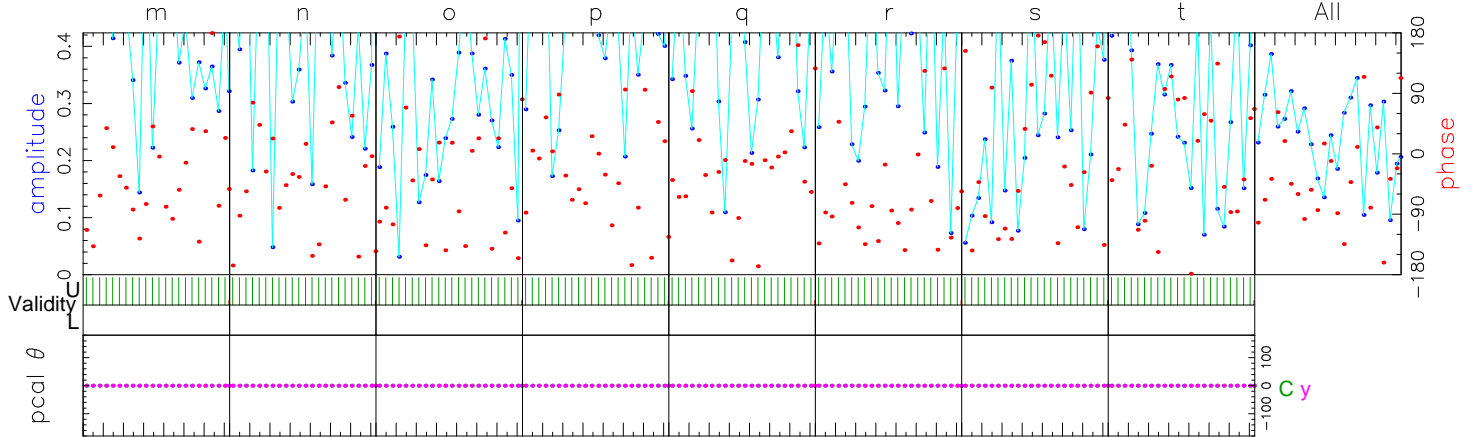


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163055  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	820/0	820/0	820/0	820/0	820/0	820/0	820/0	820/0		
C	0	0	60000	0	0	0	4000	0	APs used	
y	0	0	60000	0	0	0	4000	0	PC freqs	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
y	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-3.36617632920E+02	Apriori delay (usec)	-3.36616596800E+02	Resid mbdelay (usec)	-1.03612E-03	+/-	1.4E-04
Sband delay (usec)	-3.36616570800E+02	Apriori clock (usec)	-3.2491089E+01	Resid sbdelay (usec)	2.60000E-05	+/-	1.1E-03
Phase delay (usec)	-3.36616598363E+02	Apriori clockrate (us/s)	-7.3743381E-06	Resid phdelay (usec)	-1.56357E-06	+/-	4.7E-07
Delay rate (us/s)	-1.79878793239E-02	Apriori rate (us/s)	-1.79876652339E-02	Resid rate (us/s)	-2.14090E-07	+/-	1.9E-09
Total phase (deg)	-281.9	Apriori accel (us/s/s)	1.59532261433E-06	Resid phase (deg)	-48.5	+/-	14.5

ph/seg (deg)	65.5	Theor.	34.7	Amplitude	0.141 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	91.1		60.6	Search (2048X32)	0.137	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	58.0		20.5	Inc. seg. avg.	0.207	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	52.5		35.7	Inc. frq. avg.	0.165	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

C: az 274.6 el 46.7 pa 64.9 y: az 273.7 el 47.9 pa 65.0 u,v (fr/asec) 120.036 65.817 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446//Cy..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446//Cy.W.59.3MP11G

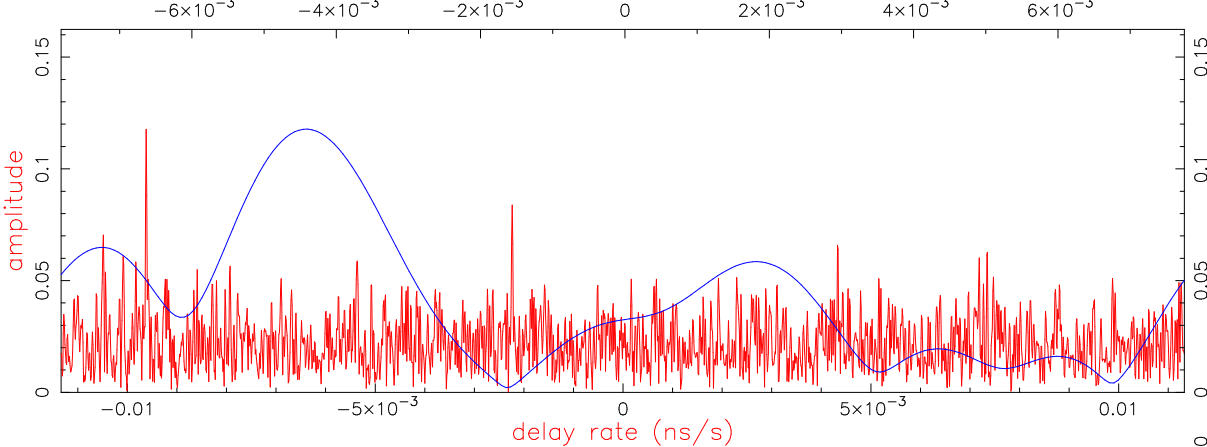
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CZ

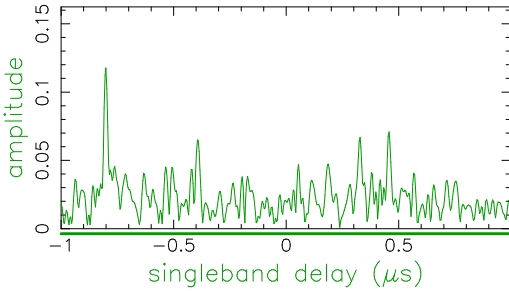
KVNPC - METSAHOV, fgroup W, pol LL

multiband delay ( $\mu$ s)

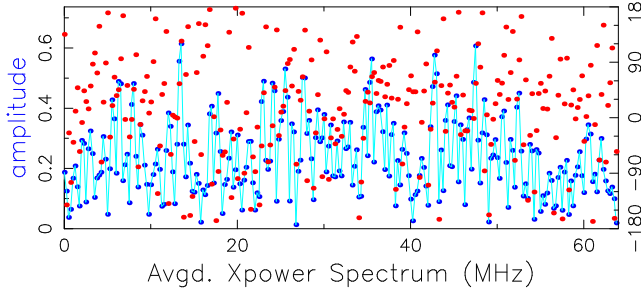


Fringe quality 0

SNR 6.3  
 Int time 384.637  
 Amp 0.162  
 Phase -147.2  
 PFD 5.9e-02  
 Delays (us)  
 SBD -0.801724  
 MBD -0.004460  
 Fringe rate (Hz)  
 -0.829628  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

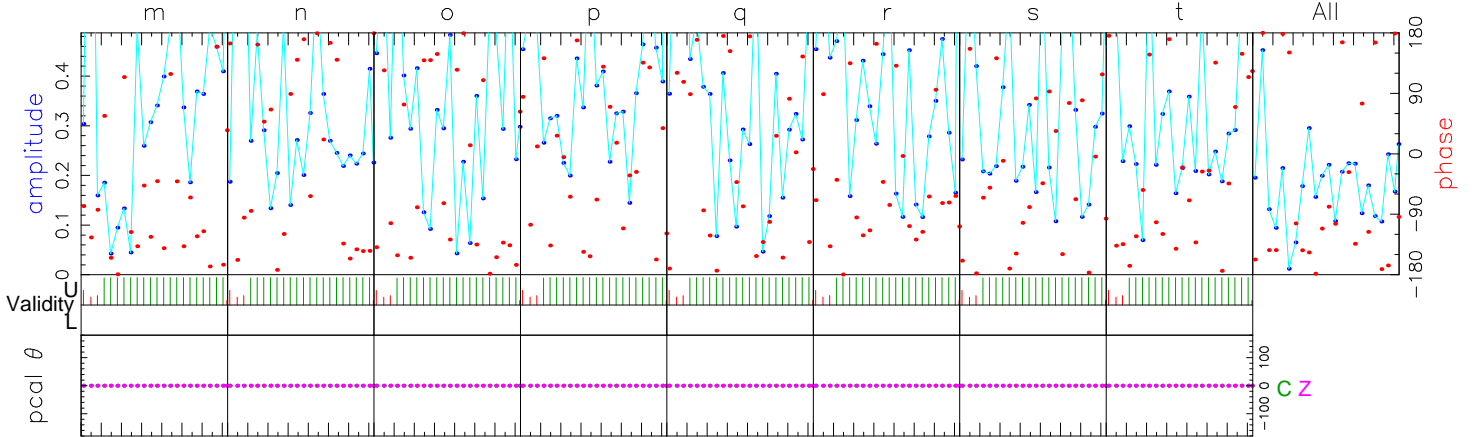


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163043  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-130.8	-162.8	-154.4	180.0	-174.4	-97.3	-114.7	-171.1	Phase	-147.2
	0.2	0.2	0.3	0.1	0.2	0.2	0.0	0.1	Ampl.	0.2
	205.3	16.1	52.0	58.9	47.4	51.1	120.5	32.3	Sbd box	51.8
U/L	782/0	782/0	782/0	782/0	782/0	782/0	782/0	782/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	5.58189903380E+02	Apriori delay (usec)	5.58991237906E+02	Resid mbdelay (usec)	-4.45953E-03	+/-	1.7E-04
Sband delay (usec)	5.58189513656E+02	Apriori clock (usec)	-2.6310207E+01	Resid sbdelay (usec)	-8.01724E-01	+/-	1.4E-03
Phase delay (usec)	5.58991233157E+02	Apriori clockrate (us/s)	-7.9250165E-06	Resid phdelay (usec)	-4.74823E-06	+/-	5.8E-07
Delay rate (us/s)	-1.38217797341E+00	Apriori rate (us/s)	-1.38216834225E+00	Resid rate (us/s)	-9.63116E-06	+/-	2.5E-09
Total phase (deg)	-63.3	Apriori accel (us/s/s)	-1.73315570215E-05	Resid phase (deg)	-147.2	+/-	18.1

ph/seg (deg)	53.3	Theor.	42.3	Amplitude	0.162 +/- 0.026	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.0		73.8	Search (2048X32)	0.117	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	32.9		25.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	50.8		44.6	Inc. seg. avg.	0.182	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	nlags: 256	ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.165	Data rate(Mb/s): 2048	t_cohere infinite			

C: az 274.6 el 46.7 pa 64.9      Z: az 107.6 el 43.3 pa -32.8      u,v (fr/asec) 9036.011 -2830.154      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/CZ..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/CZ.W.23.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

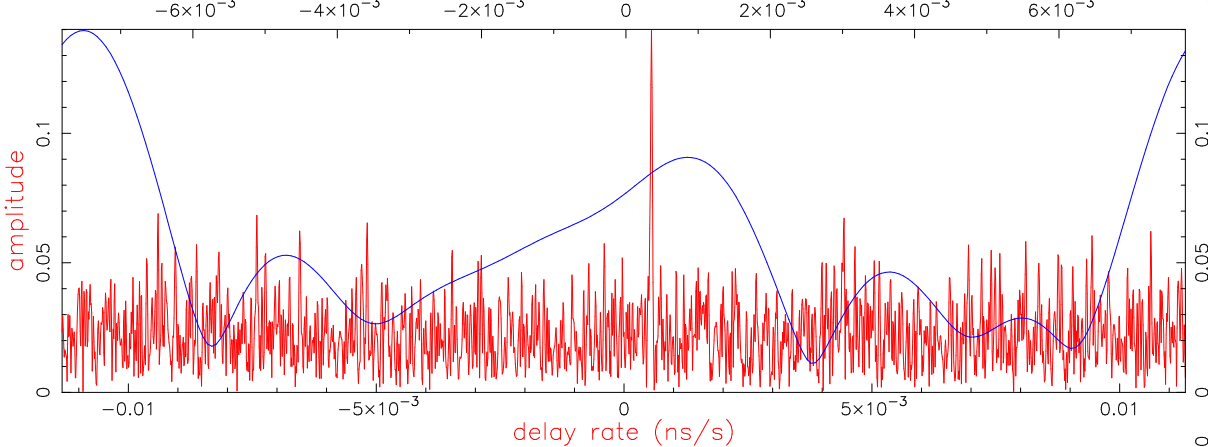
aux01

1156+295.3MP11G, No0446, CZ

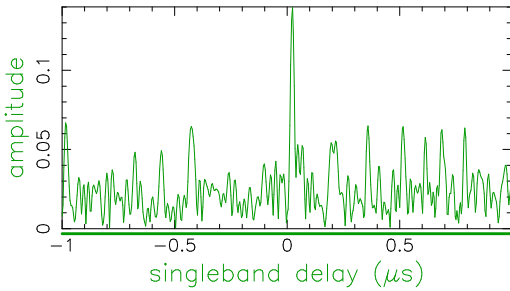
KVNPC - METSAHOV, fgroup W, pol RR

multiband delay ( $\mu$ s)

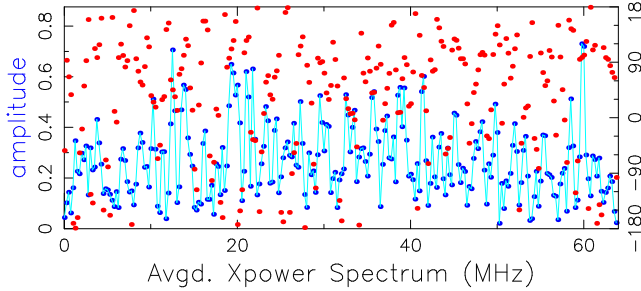
Fringe quality 9



SNR 7.5  
 Int time 384.637  
 Amp 0.140  
 Phase 73.3  
 PFD 2.0e-05  
 Delays (us)  
 SBD 0.022807  
 MBD -0.007521  
 Fringe rate (Hz)  
 0.047854  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

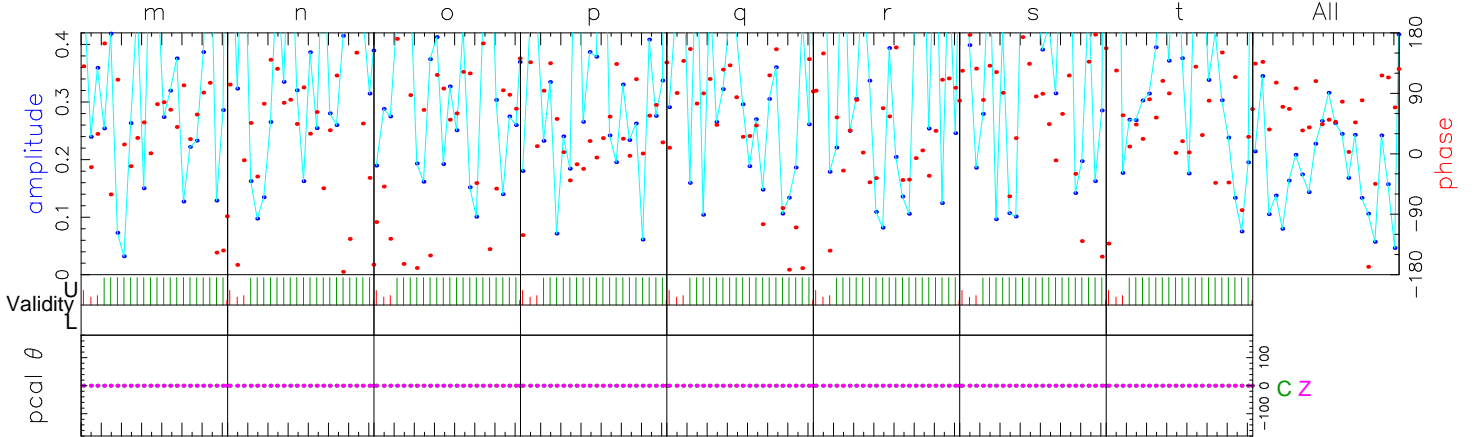


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163048  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	782/0	782/0	782/0	782/0	782/0	782/0	782/0	782/0		
C	0	0	60000	0	0	0	4000	0		
Z	0	0	0	0	0	0	0	0		
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
C	1000	1000	1000	1000	1000	1000	1000	1000		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec) (SBD)	5.59014967105E+02	Apriori delay (usec)	5.58991237906E+02	Resid mbdelay (usec)	-7.52080E-03	+/-	1.4E-04
Sband delay (usec)	5.59014044656E+02	Apriori clock (usec)	-2.6310207E+01	Resid sbdelay (usec)	2.28068E-02	+/-	1.1E-03
Phase delay (usec)	5.58991240270E+02	Apriori clockrate (us/s)	-7.9250165E-06	Resid phdelay (usec)	2.36410E-06	+/-	4.9E-07
Delay rate (us/s)	-1.38216778671E+00	Apriori rate (us/s)	-1.38216834225E+00	Resid rate (us/s)	5.55542E-07	+/-	2.1E-09
Total phase (deg)	157.3	Apriori accel (us/s/s)	-1.73315570215E-05	Resid phase (deg)	73.3	+/-	15.3

ph/seg (deg)	49.0	Theor.	35.7	Amplitude	0.140 +/- 0.019	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.0	Search (2048X32)	0.136	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	44.9	Inc. seg. avg.	0.151	Inc. frq. avg.	0.166	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	36.7	Inc. frq. avg.	0.166			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

C: az 274.6 el 46.7 pa 64.9 Z: az 107.6 el 43.3 pa -32.8 u, v (fr/asec) 9036.011 -2830.154 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CZ..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CZ.W.35.3MP11G

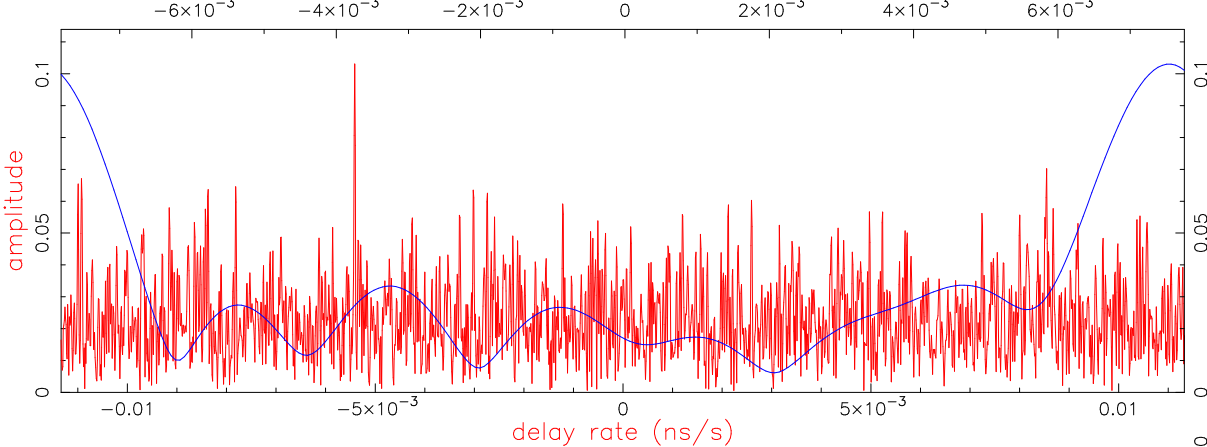
Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CZ

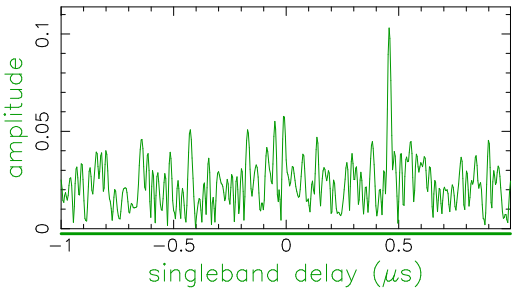
KVNPC - METSAHOV, fgroup W, pol LR

multiband delay ( $\mu$ s)

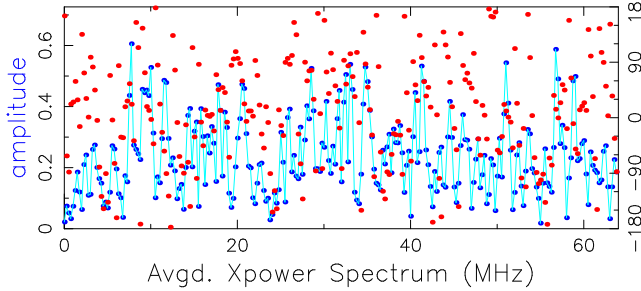


Fringe quality 0

SNR 5.6  
 Int time 384.637  
 Amp 0.114  
 Phase -4.9  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.457871  
 MBD -0.008086  
 Fringe rate (Hz)  
 -0.467372  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

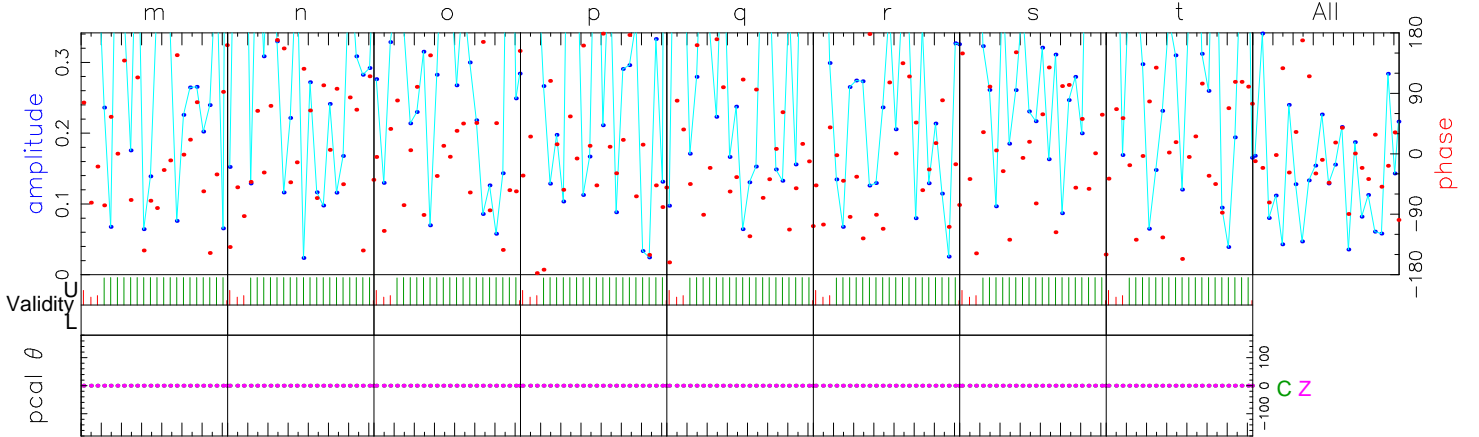


delay rate (ns/s)



Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163052  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-8.2	41.2	-13.2	-10.5	-30.0	-39.3	0.1	14.3		Phase -4.9
	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1		Ampl. 0.1
	332.5	369.0	387.9	376.3	192.1	186.3	7.8	168.4		Sbd box 374.2
U/L	782/0	782/0	782/0	782/0	782/0	782/0	782/0	782/0		APs used
C	0	0	60000	0	0	0	4000	0		PC freqs
Z	0	0	0	0	0	0	0	0		PC freqs
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC
C	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
Z	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	5.59451902343E+02	Apriori delay (usec)	5.58991237906E+02	Resid mbdelay (usec)	-8.08556E-03	+/-	2.0E-04
Sband delay (usec)	5.59449108656E+02	Apriori clock (usec)	-2.6310207E+01	Resid sbdelay (usec)	4.57871E-01	+/-	1.6E-03
Phase delay (usec)	5.58991237748E+02	Apriori clockrate (us/s)	-7.9250165E-06	Resid phdelay (usec)	-1.57306E-07	+/-	6.7E-07
Delay rate (us/s)	-1.38217376797E+00	Apriori rate (us/s)	-1.38216834225E+00	Resid rate (us/s)	-5.42572E-06	+/-	2.9E-09
Total phase (deg)	79.1	Apriori accel (us/s/s)	-1.73315570215E-05	Resid phase (deg)	-4.9	+/-	20.6

ph/seg (deg)	64.5	Theor.	48.3	Amplitude	0.114 +/- 0.021	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	77.3		84.4	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	27.2		29.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	28.5		51.0	Inc. seg. avg.	0.110	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.	0.107	Data rate(Mb/s): 2048				

C: az 274.6 el 46.7 pa 64.9      Z: az 107.6 el 43.3 pa -32.8      u,v (fr/asec) 9036.011 -2830.154      simultaneous interpolator

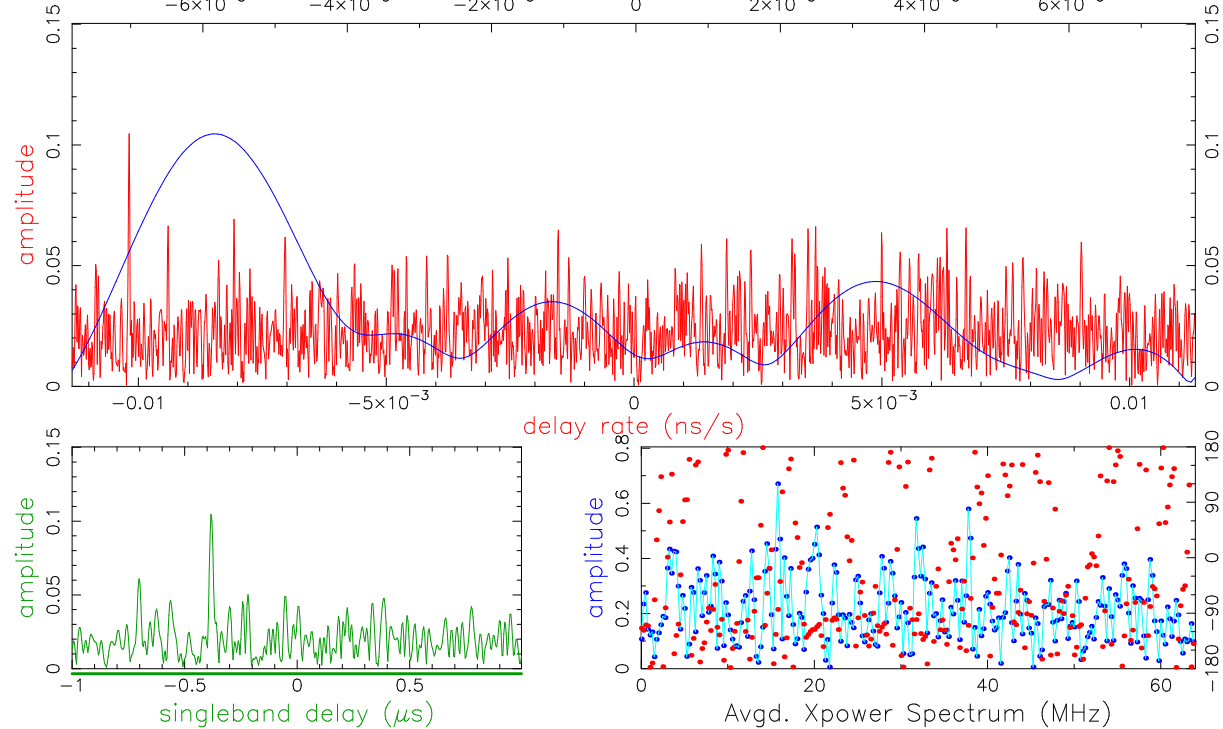
Control file: cf\_1234\_gmva      Input file: /Exps/c241b/v2/3mm/1234/No0446/CZ..3MP11G      Output file: /Exps/c241b/v2/3mm/1234/No0446/CZ.W.48.3MP11G

Mk4/DiFX fourfit 3.25 rev 0

aux01

1156+295.3MP11G, No0446, CZ

KVNPC - METSAHOV, fgroup W, pol RL

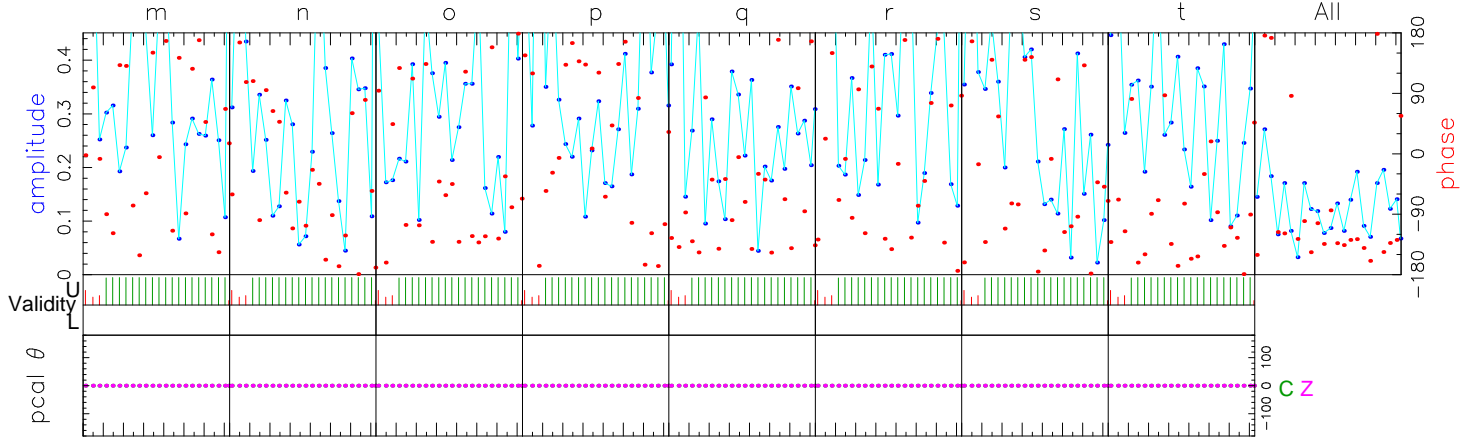


Fringe quality 0

SNR 5.6  
 Int time 384.637  
 Amp 0.150  
 Phase -135.9  
 PFD 9.9e-01  
 Delays (us)  
 SBD -0.381869  
 MBD -0.005845  
 Fringe rate (Hz)  
 -0.878308  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c241b  
 Exper # 1234  
 Yr:day 2024:110  
 Start 170000.00  
 Stop 170659.84  
 FRT 170330.00  
 Corr/FF/build  
 2024:358:161459  
 2025:041:163055  
 2024:113:095956  
 RA & Dec (J2000)  
 11h59m31.833914s  
 +29°14'43.826824"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-129.7	-100.1	-136.5	-170.2	-117.5	-158.2	-146.8	-118.6	Phase	-135.9
	0.1	0.1	0.2	0.2	0.2	0.2	0.1	0.2	Ampl.	0.1
	52.4	268.7	313.9	163.9	160.6	100.1	243.5	352.8	Sbd box	159.2
U/L	782/0	782/0	782/0	782/0	782/0	782/0	782/0	782/0	APs used	
C	0	0	60000	0	0	0	4000	0	PC freqs	
Z	0	0	0	0	0	0	0	0	PC freqs	
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
C:Z	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
C	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Z	1000	1000	1000	1000	1000	1000	1000	1000		
C	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 5.58610392951E+02 Apriori delay (usec) 5.58991237906E+02 Resid mbdelay (usec) -5.84495E-03 +/- 1.9E-04  
 Sband delay (usec) 5.58609369406E+02 Apriori clock (usec) -2.6310207E+01 Resid sbdelay (usec) -3.81869E-01 +/- 1.5E-03  
 Phase delay (usec) 5.58991233522E+02 Apriori clockrate (us/s) -7.9250165E-06 Resid phdelay (usec) -4.38313E-06 +/- 6.6E-07  
 Delay rate (us/s) -1.38217853853E+00 Apriori rate (us/s) -1.38216834225E+00 Resid rate (us/s) -1.01963E-05 +/- 2.8E-09  
 Total phase (deg) -52.0 Apriori accel (us/s/s) -1.73315570215E-05 Resid phase (deg) -135.9 +/- 20.3

ph/seg (deg) 41.0 47.6 Search (2048X32) 0.102 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 48.9 83.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 25.0 28.7 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.5 50.2 Inc. frq. avg. 0.141 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

C: az 274.6 el 46.7 pa 64.9 Z: az 107.6 el 43.3 pa -32.8 u,v (fr/asec) 9036.011 -2830.154 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c241b/v2/3mm/1234/No0446/CZ..3MP11G Output file: /Exps/c241b/v2/3mm/1234/No0446/CZ.W.62.3MP11G