

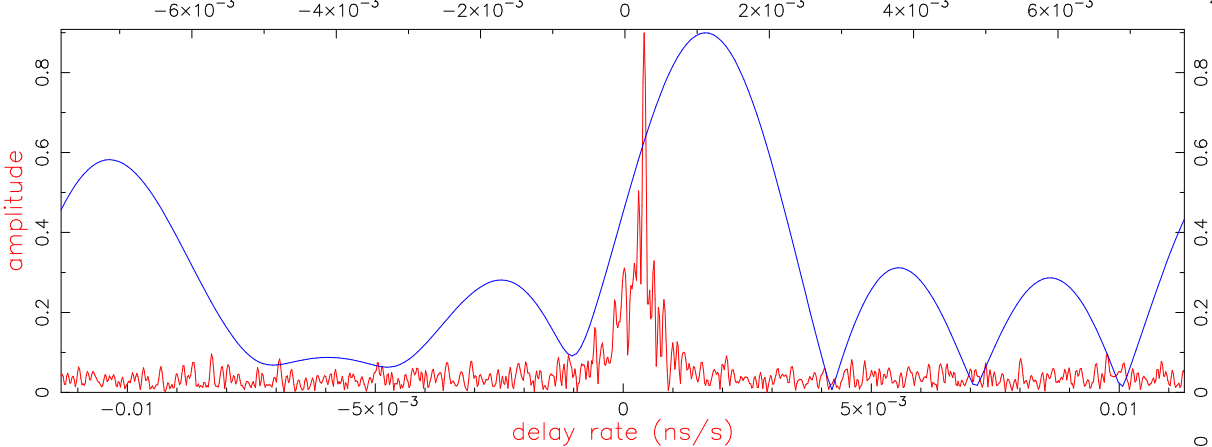
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, BP

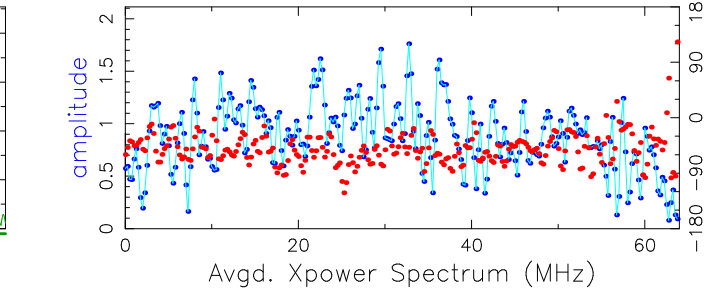
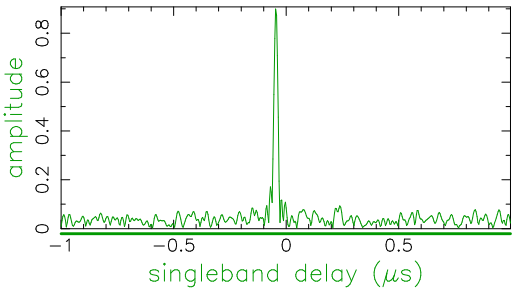
EFLSBERG - PICOVEL, fgroup W, pol LR

multiband delay (μ s)

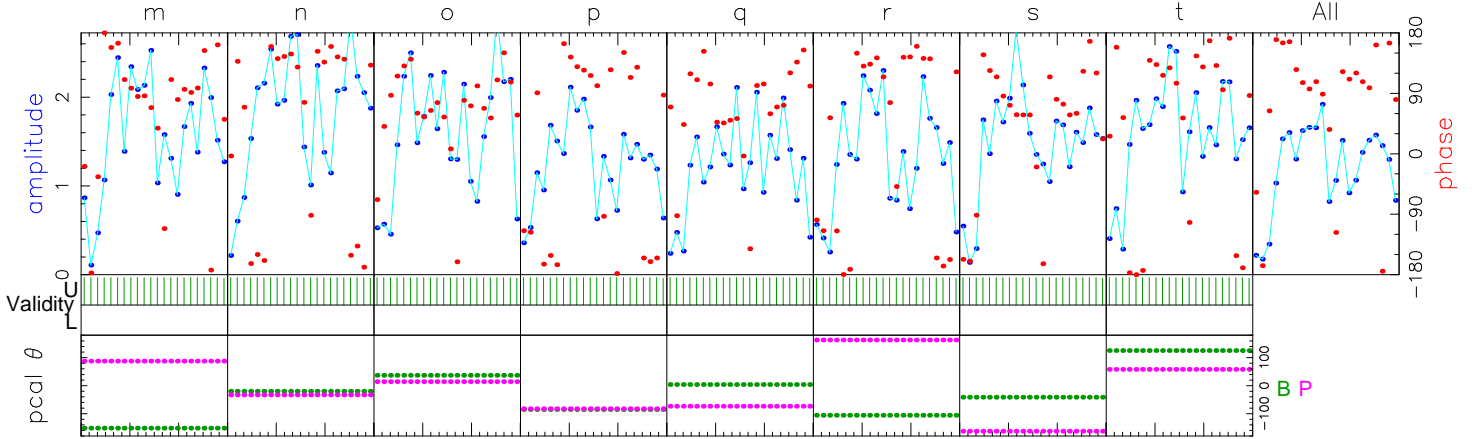


Fringe quality 4

SNR 33.3
 Int time 179.970
 Amp 0.908
 Phase 127.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.045606
 MBD 0.001134
 Fringe rate (Hz) 0.035556
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102638
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	114.7	162.8	89.3	157.7	87.8	157.6	89.3	143.9	Phase	127.2
	1.0	1.4	1.2	0.9	0.8	1.0	1.0	1.2	Ampl.	1.1
	244.4	246.0	246.2	246.5	247.2	246.3	246.6	244.9	Sbd box	245.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	-151:88	-20:-33	37:15	-85:-82	4:-74	-106:163	-41:-163	125:58	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.93354389327E+03	Apriori delay (usec)	3.93358963451E+03	Resid mbdelay (usec)	1.13376E-03	+/-	3.3E-05
Sband delay (usec)	3.93354402876E+03	Apriori clock (usec)	-3.4479527E+01	Resid sbdelay (usec)	-4.56057E-02	+/-	2.6E-04
Phase delay (usec)	3.93358963862E+03	Apriori clockrate (us/s)	-7.8777609E-07	Resid phdelay (usec)	4.10332E-06	+/-	1.1E-07
Delay rate (us/s)	-2.18808464696E-01	Apriori rate (us/s)	-2.18808877469E-01	Resid rate (us/s)	4.12773E-07	+/-	1.1E-09
Total phase (deg)	169.4	Apriori accel (us/s/s)	-9.55350436220E-06	Resid phase (deg)	127.2	+/-	3.4

ph/seg (deg)	59.8	RMS	8.1	Theor.	0.908 +/- 0.027	Search (1024X32)	0.875	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	61.9	Interp.	0.000	Bits/sample: 2x2	0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-1.000	1.000
ph/frq (deg)	36.5	Inc. seg. avg.	1.195	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 (%)	25.0	Inc. frq. avg.	1.052	Data rate (Mb/s): 2048			ion window (TEC)	0.00	0.00

B: az 72.0 el 35.1 pa -49.5 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 1569.563 611.609 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BP.W.13.3MP1EA

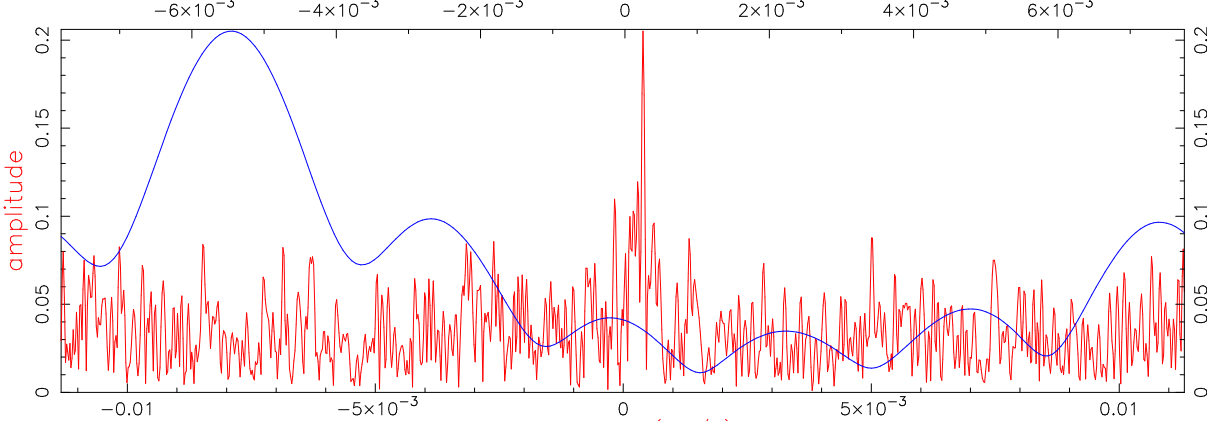
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, BP

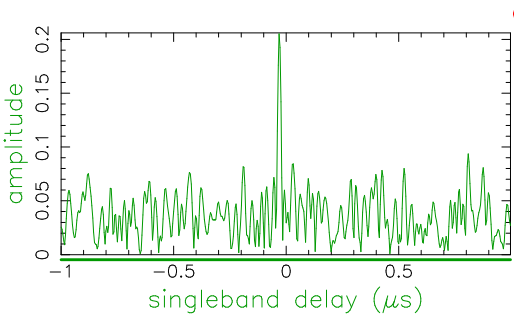
EFLSBERG - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

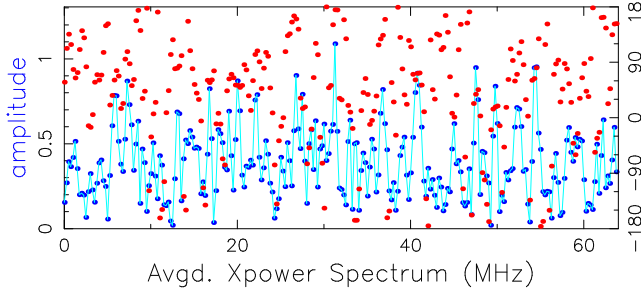


Fringe quality 9

SNR 7.6
 Int time 179.970
 Amp 0.206
 Phase 143.7
 PFD 6.7e-06
 Delays (us)
 SBD -0.030468
 MBD -0.005447
 Fringe rate (Hz)
 0.034309
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

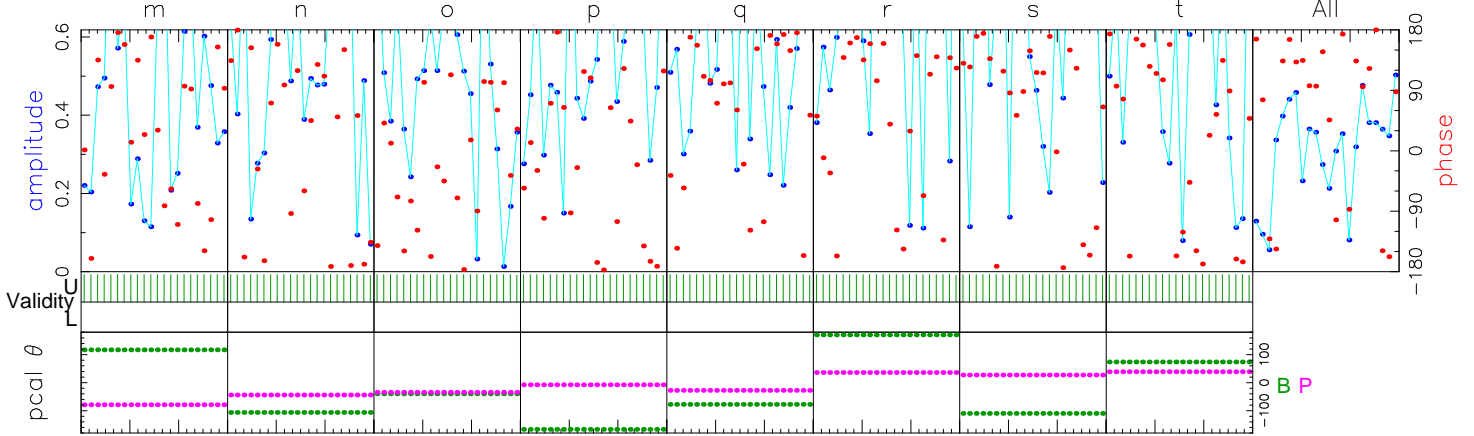


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102647
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	139.2	147.7	69.9	154.8	139.9	144.4	144.9	141.8	Phase	143.7
	0.1	0.3	0.0	0.0	0.2	0.4	0.4	0.3	Ampl.	0.2
	357.7	248.3	444.2	87.2	315.4	248.9	250.5	248.8	Sbd box	249.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	118:-79	-106:-44	-40:-34	-167:-8	-77:-28	171:36	-110:27	74:39	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.93355293772E+03	Apriori delay (usec)	3.93358963451E+03	Resid mbdelay (usec)	-5.44679E-03	+/-	1.4E-04
Sband delay (usec)	3.93355916701E+03	Apriori clock (usec)	-3.4479527E+01	Resid sbdelay (usec)	-3.04675E-02	+/-	1.1E-03
Phase delay (usec)	3.93358963915E+03	Apriori clockrate (us/s)	-7.8777609E-07	Resid phdelay (usec)	4.63326E-06	+/-	4.9E-07
Delay rate (us/s)	-2.18808479180E-01	Apriori rate (us/s)	-2.18808877469E-01	Resid rate (us/s)	3.98289E-07	+/-	4.7E-09
Total phase (deg)	185.8	Apriori accel (us/s/s)	-9.55350436220E-06	Resid phase (deg)	143.7	+/-	15.2

ph/seg (deg)	59.6	RMS	35.6	Theor.	0.206 +/- 0.027	Search (1024X32)	0.203	Amplitude	0.206 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	79.7	59.6	35.6	35.6	0.203	Search (1024X32)	0.203	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	30.6	79.7	62.1	62.1	0.000	Interp.	0.000	Inc. seg. avg.	0.262	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	64.5	30.6	21.4	21.4	0.262	Inc. seg. avg.	0.262	Inc. frq. avg.	0.193	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011		
		64.5	37.4	37.4	0.193	Inc. frq. avg.	0.193			Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

B: az 72.0 el 35.1 pa -49.5 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 1569.563 611.609 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BP.W.33.3MP1EA

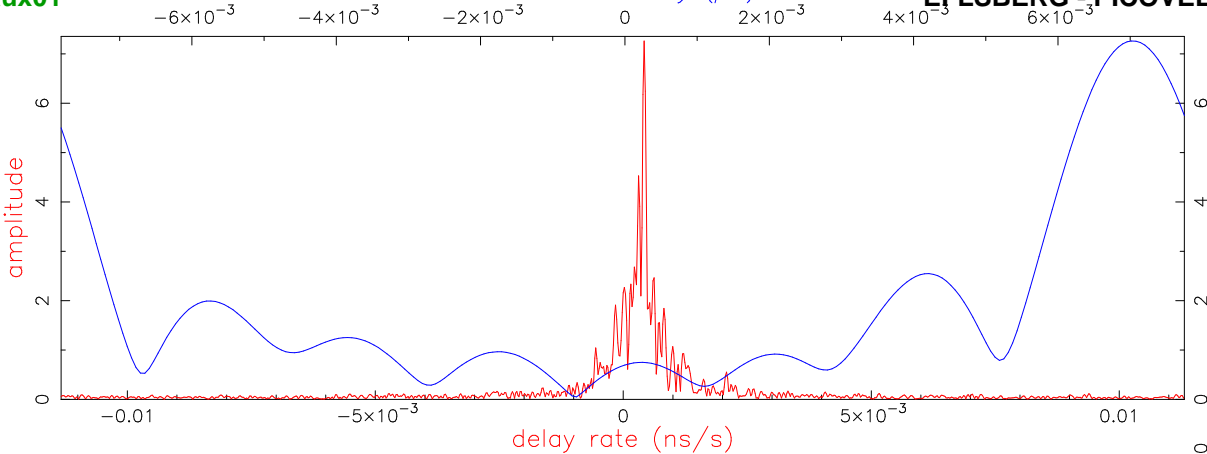
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, BP

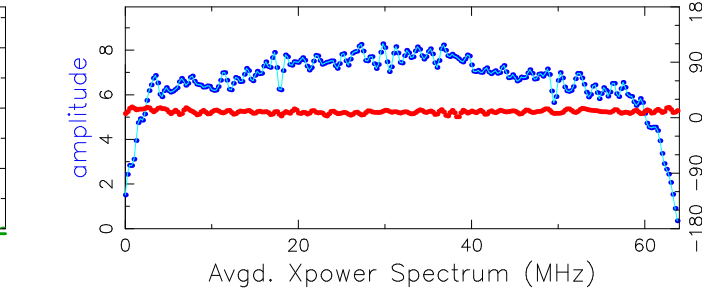
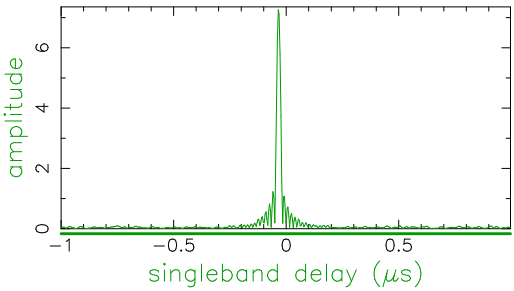
EFLSBERG - PICOVEL, fgroup W, pol LL

multiband delay (μ s)



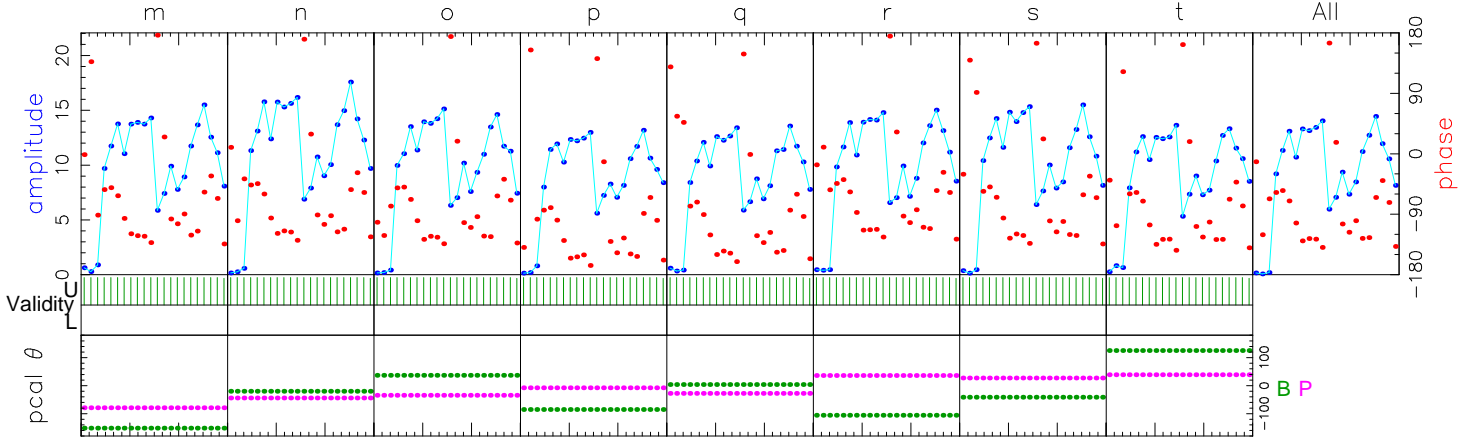
Fringe quality 4

SNR 269.7
 Int time 179.970
 Amp 7.356
 Phase -100.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.033676
 MBD 0.007075
 Fringe rate (Hz)
 0.035400
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102634
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-92.8	-88.9	-97.2	-126.3	-120.0	-86.1	-95.5	-103.2	Phase	-100.3
	7.6	8.6	7.6	6.8	6.8	7.7	7.7	6.9	Ampl.	7.5
	247.0	248.0	248.5	248.9	249.3	248.8	248.8	247.5	Sbd box	248.4
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	-151:-79	-20:-44	37:-34	-85:-8	4:-28	-106:36	-41:27	125:39	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 3.93354983480E+03 Apriori delay (usec) 3.93358963451E+03 Resid mbdelay (usec) 7.07529E-03 +/- 4.0E-06
 Sband delay (usec) 3.93355595826E+03 Apriori clock (usec) -3.4479527E+01 Resid sbdelay (usec) -3.36763E-02 +/- 3.2E-05
 Phase delay (usec) 3.93358963128E+03 Apriori clockrate (us/s) -7.8777609E-07 Resid phdelay (usec) -3.23496E-06 +/- 1.4E-08
 Delay rate (us/s) -2.18808466511E-01 Apriori rate (us/s) -2.18808877469E-01 Resid rate (us/s) 4.10958E-07 +/- 1.3E-10
 Total phase (deg) -58.2 Apriori accel (us/s/s) -9.55350436220E-06 Resid phase (deg) -100.3 +/- 0.4

RMS Theor. Amplitude 7.356 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 47.3 1.0 Search (1024X32) 6.934 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 65.1 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 15.8 0.6 Inc. seg. avg. 9.372 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 7.8 1.0 Inc. frq. avg. 7.464 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

B: az 72.0 el 35.1 pa -49.5 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 1569.563 611.609 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BP.W.3.3MP1EA

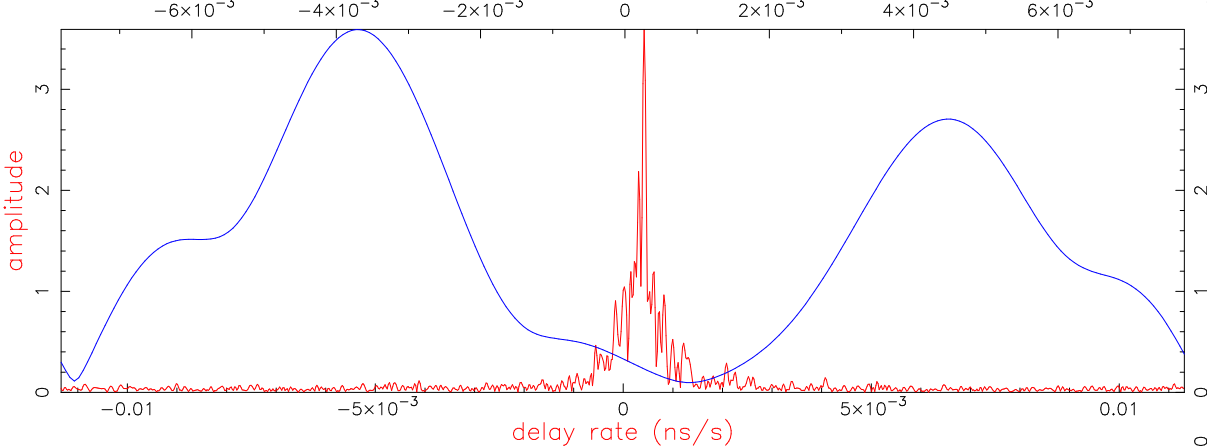
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, BP

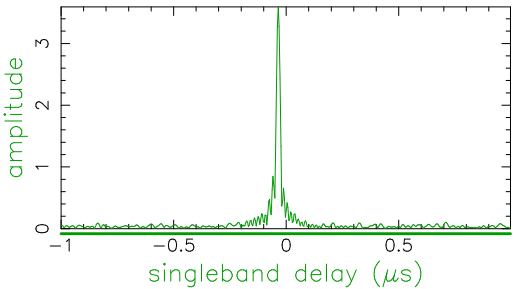
EFLSBERG - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

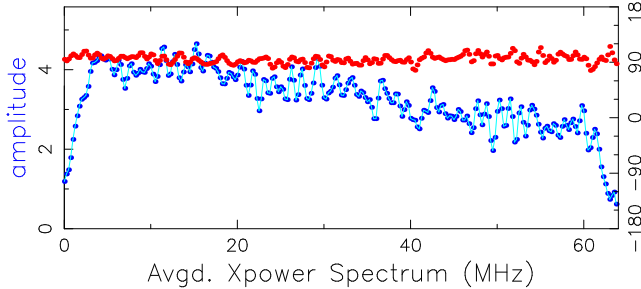


Fringe quality 1
 Error code G
 SNR 131.8
 Int time 179.970
 Amp 3.594
 Phase 92.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.035131
 MBD -0.003701
 Fringe rate (Hz)
 0.035372
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102636
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

delay rate (ns/s)

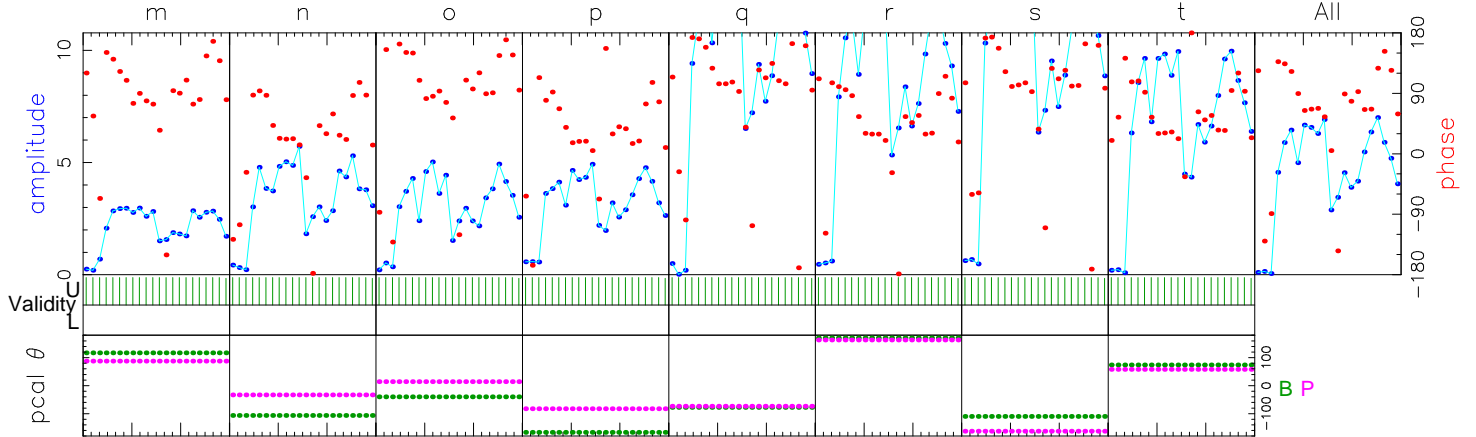


singleband delay (μ s)



Avgd. Xpower Spectrum (MHz)

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	106.8	48.6	117.2	42.9	130.1	56.3	128.7	60.0	Phase	92.9
	1.7	2.6	2.3	2.4	7.6	6.5	7.4	5.2	Ampl.	4.5
	245.2	246.8	247.2	247.4	247.9	247.3	247.7	246.0	Sbd box	248.0
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
B	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
B:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:P	118:88	-106:-33	-40:15	-167:-82	-77:-74	171:163	-110:-163	74:58	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.93355468389E+03	Apriori delay (usec)	3.93358963451E+03	Resid mbdelay (usec)	-3.70062E-03	+/-	8.2E-06
Sband delay (usec)	3.93355450351E+03	Apriori clock (usec)	-3.4479527E+01	Resid sbdelay (usec)	-3.51310E-02	+/-	6.5E-05
Phase delay (usec)	3.93358963751E+03	Apriori clockrate (us/s)	-7.8777609E-07	Resid phdelay (usec)	2.99493E-06	+/-	2.8E-08
Delay rate (us/s)	-2.18808466837E-01	Apriori rate (us/s)	-2.18808877469E-01	Resid rate (us/s)	4.10632E-07	+/-	2.7E-10
Total phase (deg)	135.0	Apriori accel (us/s/s)	-9.55350436220E-06	Resid phase (deg)	92.9	+/-	0.9

ph/seg (deg) 64.3 2.0 Search (1024X32) 3.426 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 65.7 3.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.5 1.2 Inc. seg. avg. 4.619 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 69.1 2.1 Inc. frq. avg. 4.455 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 B: az 72.0 el 35.1 pa -49.5 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 1569.563 611.609 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/BP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/BP.W.9.3MP1EA

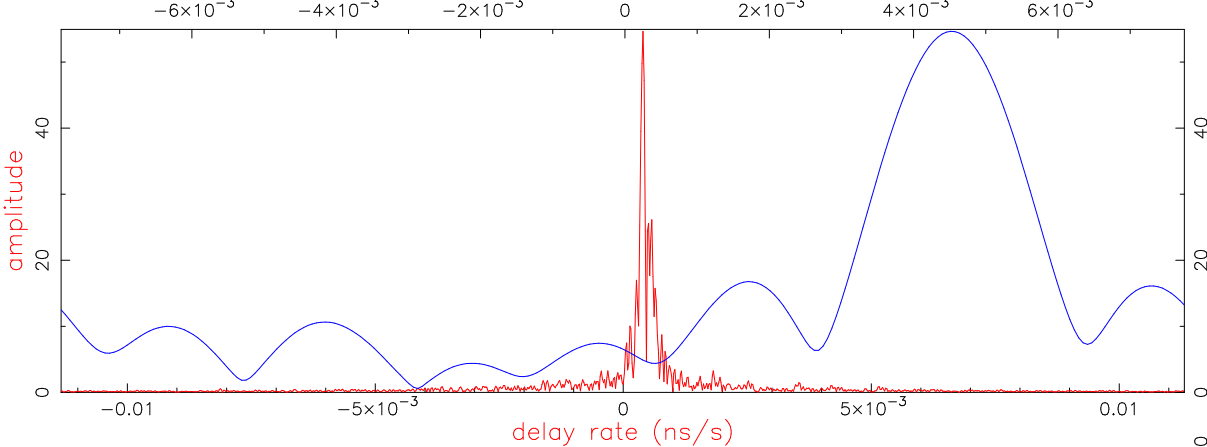
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, NP

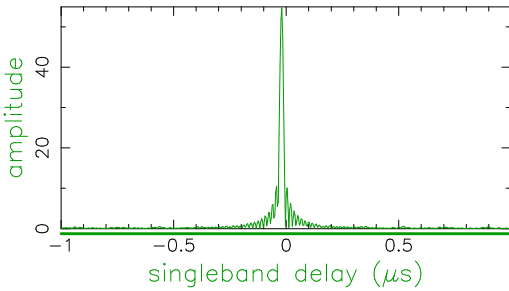
NOEMA - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

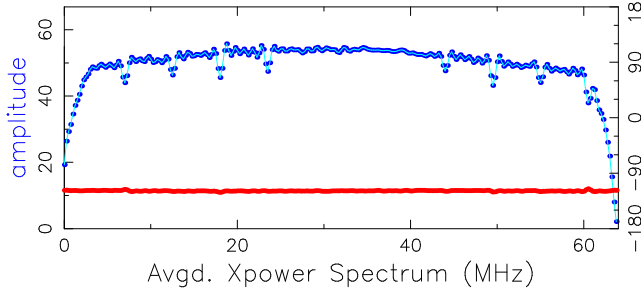


Fringe quality 5

SNR 2014.8
 Int time 179.989
 Amp 54.946
 Phase -45.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.020416
 MBD 0.004519
 Fringe rate (Hz) 0.034235
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

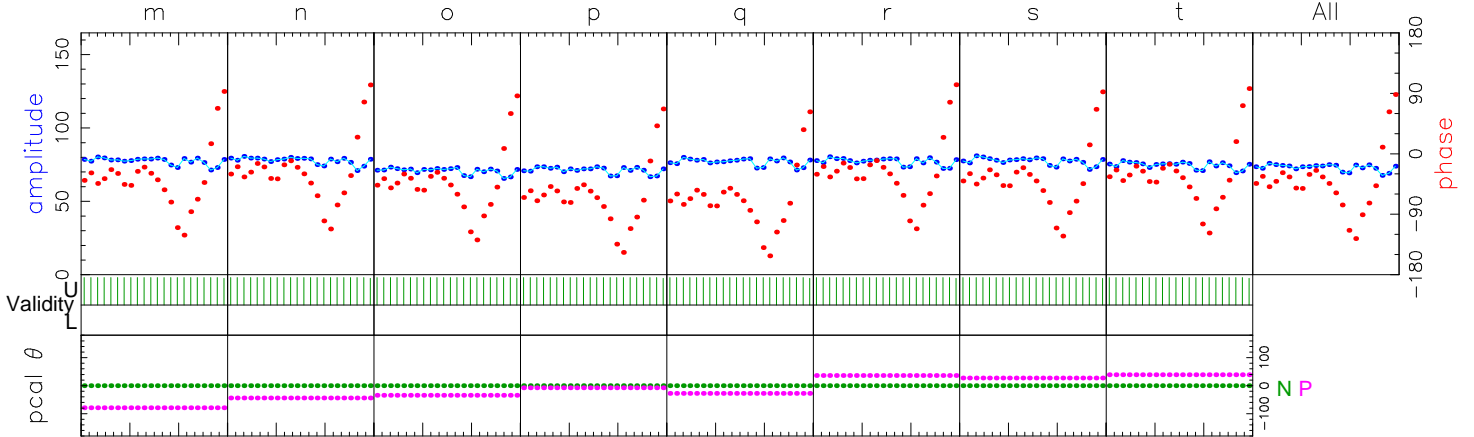


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2025:041:102642
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-40.8	-31.3	-48.0	-66.5	-71.8	-31.4	-42.0	-36.6	Phase	-45.7
	57.9	58.2	53.0	53.4	57.6	57.7	57.9	55.8	Ampl.	56.4
	251.8	251.8	251.5	251.7	251.9	251.8	252.1	251.9	Sbd box	251.8
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.15001332804E+03	Apriori delay (usec)	3.15004005881E+03	Resid mbdelay (usec)	4.51924E-03	+/-	5.4E-07
Sband delay (usec)	3.15001964306E+03	Apriori clock (usec)	-1.2440420E+01	Resid sbdelay (usec)	-2.04157E-02	+/-	4.3E-06
Phase delay (usec)	3.15004005733E+03	Apriori clockrate (us/s)	-5.8393806E-07	Resid phdelay (usec)	-1.47513E-06	+/-	1.8E-09
Delay rate (us/s)	-1.24061169557E-01	Apriori rate (us/s)	-1.24061566987E-01	Resid rate (us/s)	3.97430E-07	+/-	1.8E-11
Total phase (deg)	193.8	Apriori accel (us/s/s)	-9.99450169110E-06	Resid phase (deg)	-45.7	+/-	0.1

ph/seg (deg)	47.1	0.1	Search (1024X32)	54.260	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	33.4	0.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	16.6	0.1	Inc. seg. avg.	73.150	Bits/sample: 2x2	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011
amp/frq (%)	4.5	0.1	Inc. frq. avg.	56.441	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

N: az 67.7 el 32.5 pa -55.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 886.373 101.774 simultaneous interpolator

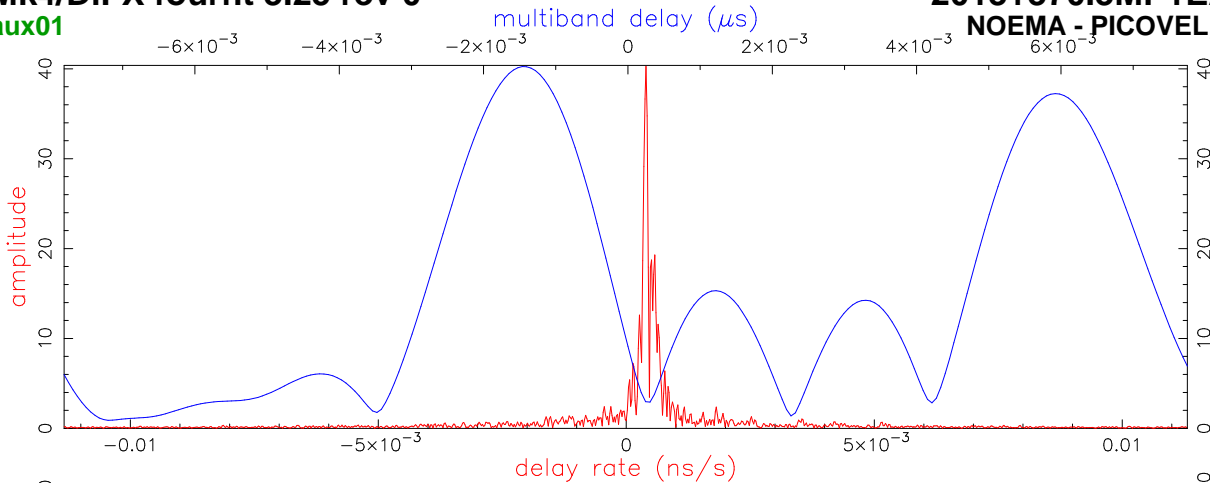
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NP.W.24.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

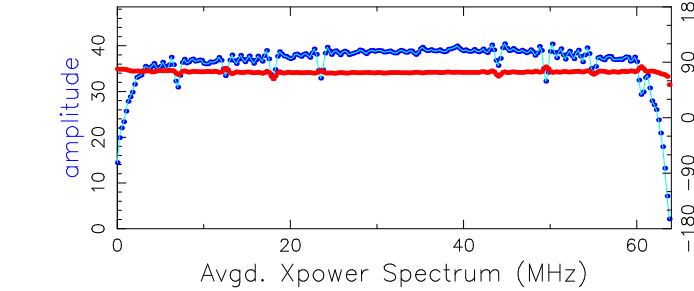
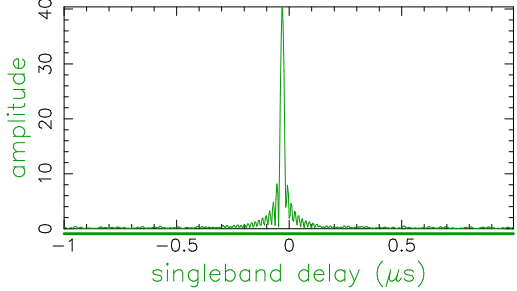
2013+370.3MP1EA, No0232, NP

NOEMA - PICOVEL, fgroup W, pol RR



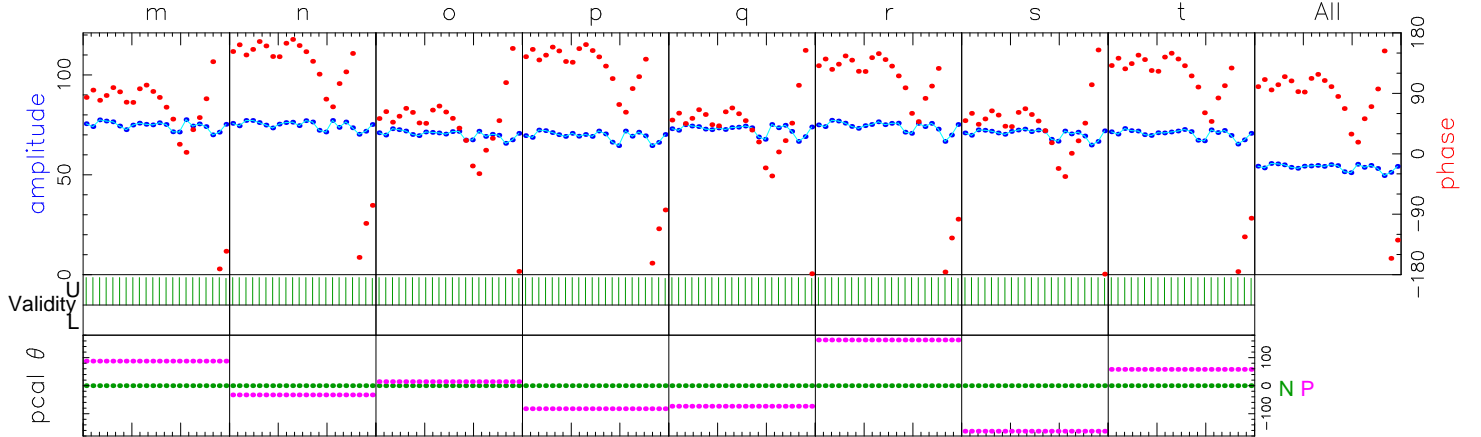
Fringe quality 3

SNR 1480.7
 Int time 179.988
 Amp 40.380
 Phase 97.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.030631
 MBD -0.001436
 Fringe rate (Hz)
 0.034230
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102645
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
N	0	0	0	0	0	0	0	0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	ManI PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.15000737242E+03	Apriori delay (usec)	3.15004005881E+03	Resid mbdelay (usec)	-1.43639E-03	+/-	7.3E-07
Sband delay (usec)	3.15000942781E+03	Apriori clock (usec)	-1.2440420E+01	Resid sbdelay (usec)	-3.06310E-02	+/-	5.8E-06
Phase delay (usec)	3.15004006196E+03	Apriori clockrate (us/s)	-5.8393806E-07	Resid phdelay (usec)	3.15262E-06	+/-	2.5E-09
Delay rate (us/s)	-1.24061169611E-01	Apriori rate (us/s)	-1.24061566987E-01	Resid rate (us/s)	3.97376E-07	+/-	2.4E-11
Total phase (deg)	337.3	Apriori accel (us/s/s)	-9.99450169110E-06	Resid phase (deg)	97.8	+/-	0.1

ph/seg (deg)	46.9	RMS	46.9	Theor.	0.2	Amplitude	40.380 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	33.6		33.6		0.3	Search (1024X32)	40.129	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	48.6		48.6		0.1	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	34.0		34.0		0.2	Inc. seg. avg.	53.843	Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Inc. frq. avg.	54.016	Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 67.7 el 32.5 pa -55.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 886.373 101.774 simultaneous interpolator

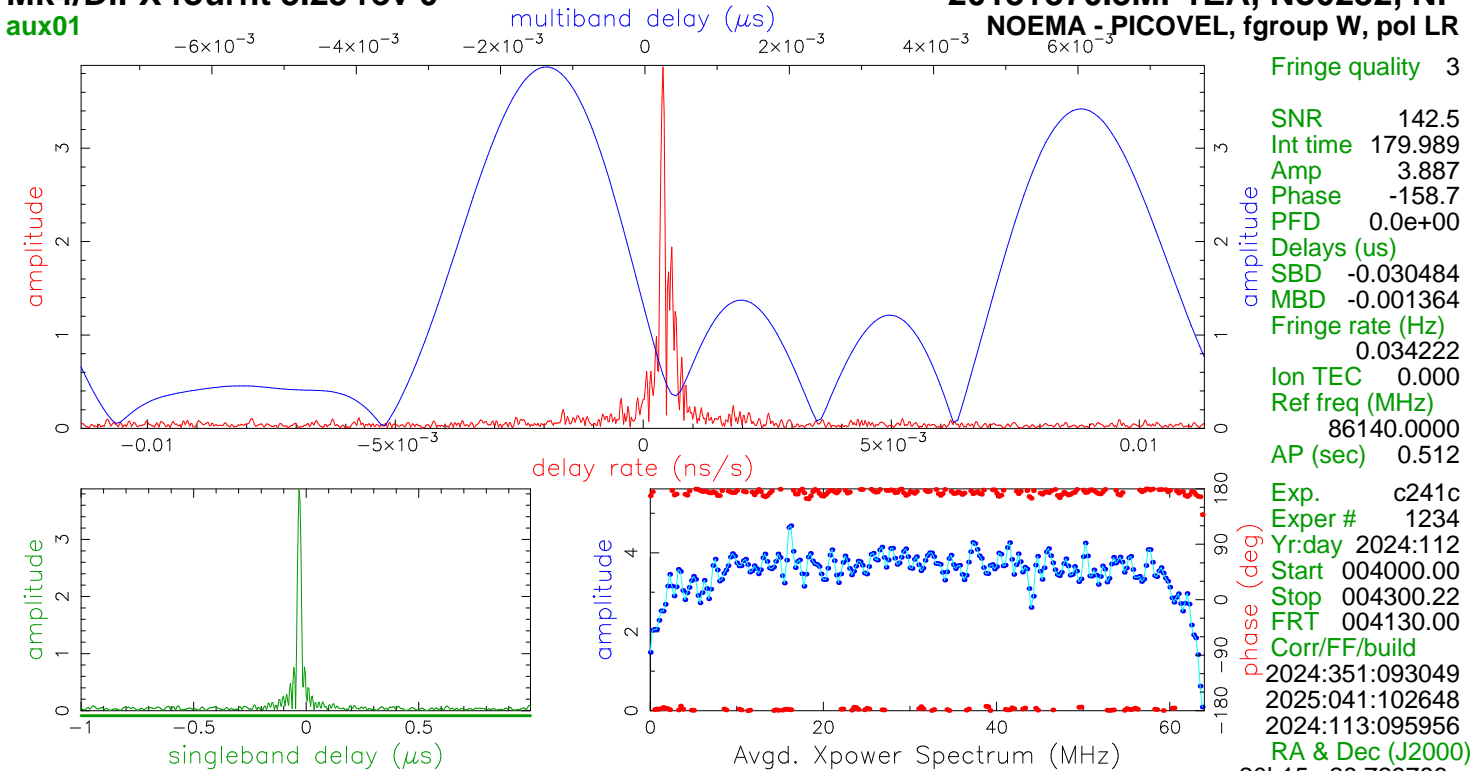
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NP.W.28.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, NP

NOEMA - PICOVEL, fgroup W, pol LR



Fringe quality 3

SNR 142.5

Int time 179.989

Ampl 3.887

Phase -158.7

PFD 0.0e+00

Delays (us)

SBD -0.030484

MBD -0.001364

Fringe rate (Hz) 0.034222

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. c241c

Exper # 1234

Yr:day 2024:112

Start 004000.00

Stop 004300.22

FRT 004130.00

Corr/FF/build

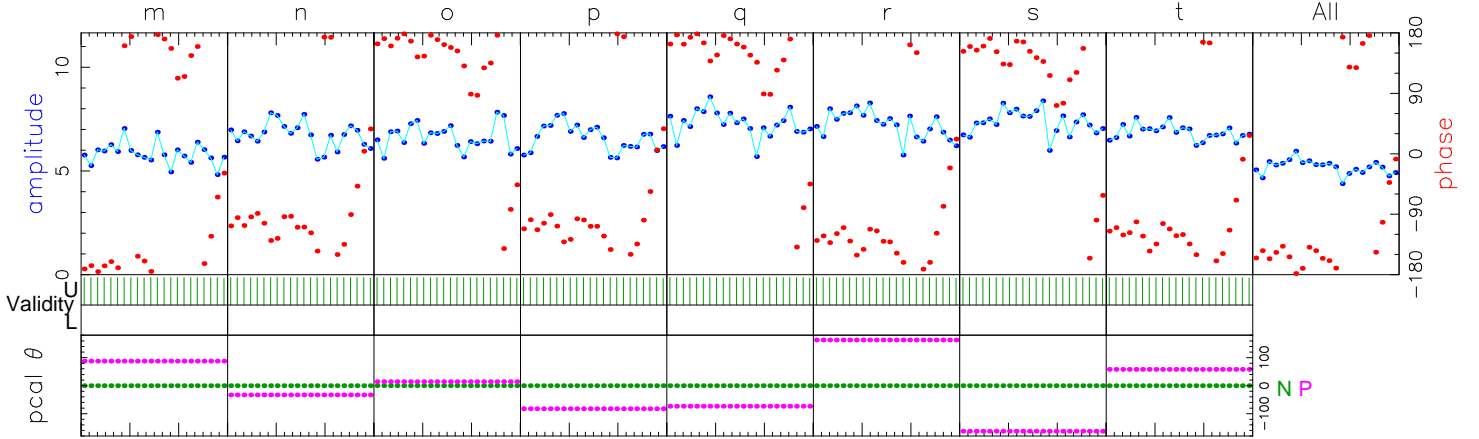
2024:351:093049

2025:041:102648

2024:113:095956

RA & Dec (J2000) 20h15m28.729786s +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-177.9	-109.0	160.2	-112.1	159.5	-132.9	147.6	-123.7	Phase	-158.7
	4.4	5.0	5.0	5.0	5.4	5.5	5.4	5.1	Ampl.	5.1
	249.3	249.8	249.3	249.4	249.9	249.3	249.8	249.7	Sbd box	249.2
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	3.15000744514E+03	Apriori delay (usec)	3.15004005881E+03	Resid mbdelay (usec)	-1.36367E-03	+/-	7.6E-06
Sband delay (usec)	3.15000957481E+03	Apriori clock (usec)	-1.2440420E+01	Resid sbdelay (usec)	-3.04840E-02	+/-	6.0E-05
Phase delay (usec)	3.15004005369E+03	Apriori clockrate (us/s)	-5.8393806E-07	Resid phdelay (usec)	-5.11739E-06	+/-	2.6E-08
Delay rate (us/s)	-1.24061169701E-01	Apriori rate (us/s)	-1.24061566987E-01	Resid rate (us/s)	3.97285E-07	+/-	2.5E-10
Total phase (deg)		Apriori accel (us/s/s)	-9.99450169110E-06	Resid phase (deg)	-158.7	+/-	0.8

ph/seg (deg)	49.8	1.9	Search (1024X32)	3.853	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	34.7	3.3	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)	46.9	1.1	Inc. seg. avg.	5.192	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 (%)	32.5	2.0	Inc. frq. avg.	5.106	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00

N: az 67.7 el 32.5 pa -55.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 886.373 101.774 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NP.W.41.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

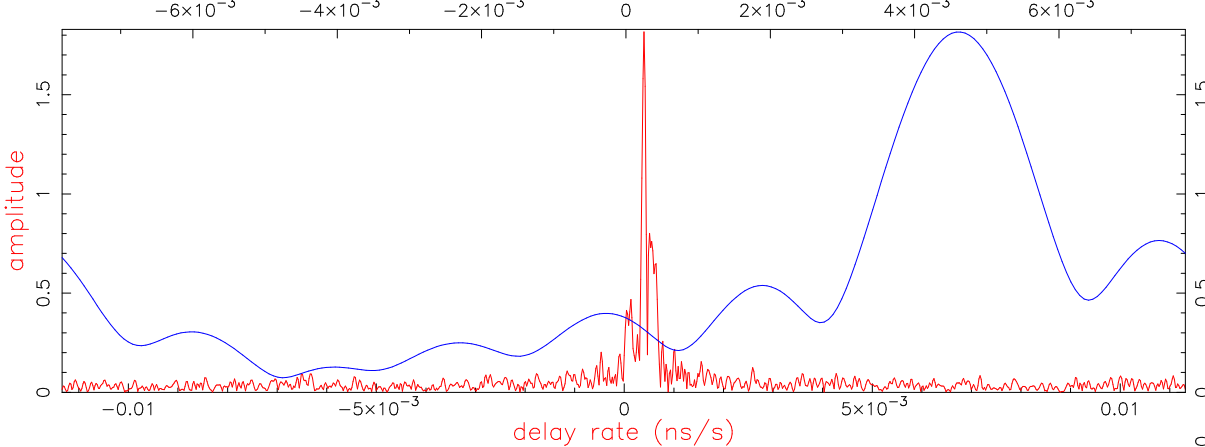
aux01

2013+370.3MP1EA, No0232, NP

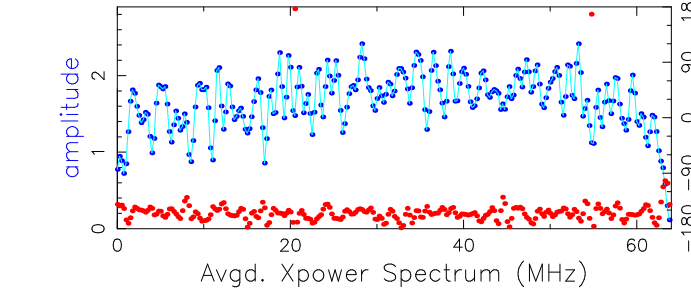
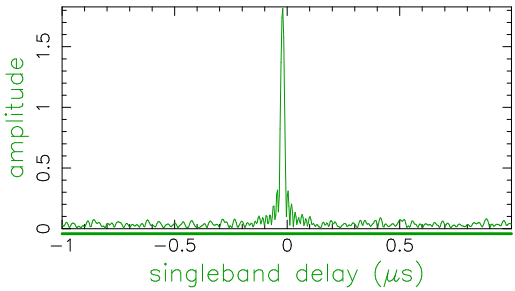
NOEMA - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 3

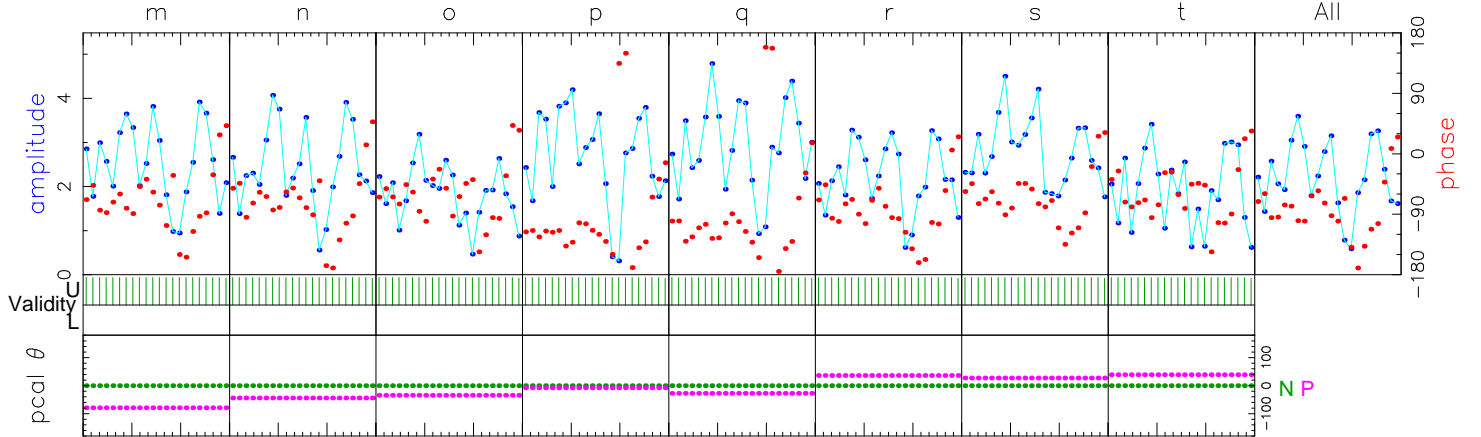


SNR 67.1
 Int time 179.988
 Amp 1.829
 Phase -85.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.020576
 MBD 0.004601
 Fringe rate (Hz)
 0.034287
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-72.8	-75.7	-66.2	-121.6	-117.1	-86.1	-69.2	-66.9	Phase	-85.8
	2.1	1.9	1.5	2.2	2.2	1.8	2.3	1.6	Ampl.	2.0
	251.6	251.5	251.1	252.0	252.3	251.7	252.5	251.1	Sbd box	251.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
N	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
N:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
N:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
N	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
N	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	3.15001340979E+03	Apriori delay (usec)	3.15004005881E+03	Resid mbdelay (usec)	4.60099E-03	+/-	1.6E-05
Sband delay (usec)	3.15001948231E+03	Apriori clock (usec)	-1.2440420E+01	Resid sbdelay (usec)	-2.05765E-02	+/-	1.3E-04
Phase delay (usec)	3.15004005604E+03	Apriori clockrate (us/s)	-5.8393806E-07	Resid phdelay (usec)	-2.76749E-06	+/-	5.5E-08
Delay rate (us/s)	-1.24061168953E-01	Apriori rate (us/s)	-1.24061566987E-01	Resid rate (us/s)	3.98034E-07	+/-	5.3E-10
Total phase (deg)	153.8	Apriori accel (us/s/s)	-9.99450169110E-06	Resid phase (deg)	-85.8	+/-	1.7

ph/seg (deg)	42.7	Theor.	4.0	Amplitude	1.829 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	47.6	Search (1024X32)	1.785	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	24.3	Inc. seg. avg.	2.220	Inc. frq. avg.	1.953	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	17.3	Inc. frq. avg.	1.953			Data rate(MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

N: az 67.7 el 32.5 pa -55.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 886.373 101.774 simultaneous interpolator

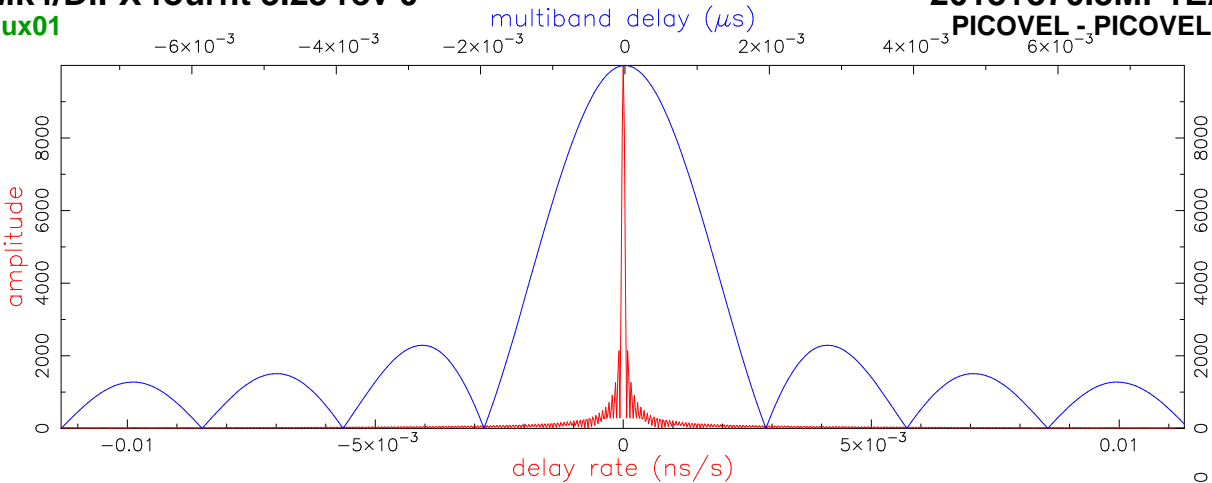
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/NP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/NP.W.50.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

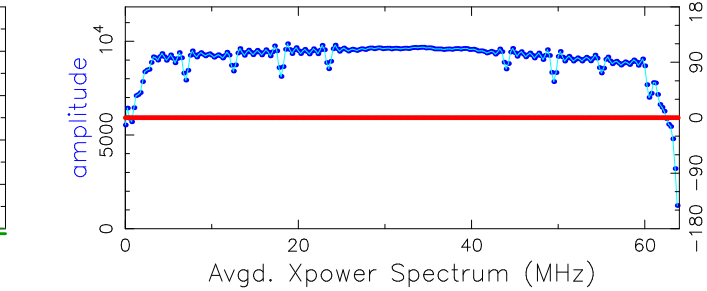
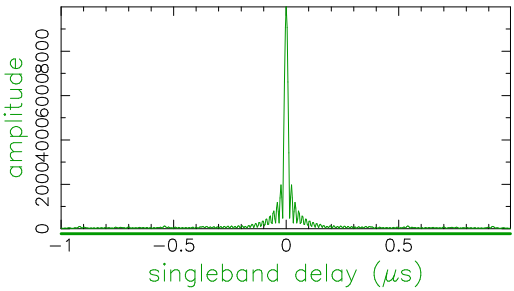
2013+370.3MP1EA, No0232, PP

PICOVEL - PICOVEL, fgroup W, pol LL



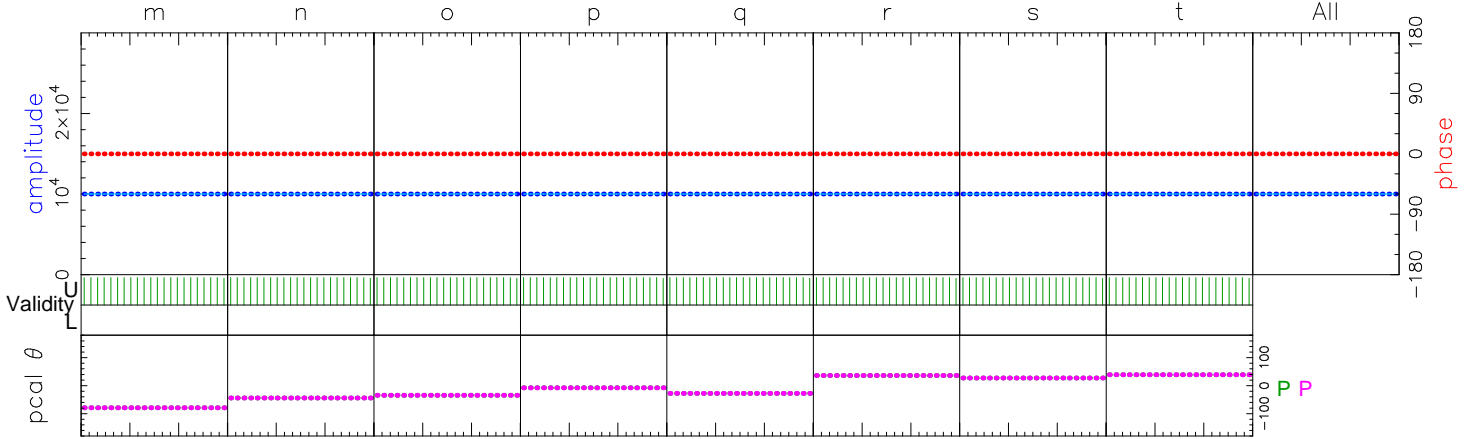
Fringe quality 9

SNR 366879.9
 Int time 179.992
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102640
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
P	0	0	0	0	0	0	0	0		
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
P:P	-79:-79	-44:-44	-34:-34	-8:-8	-28:-28	36:36	27:27	39:39		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	3.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.3E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.0E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	9.7E-14
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0

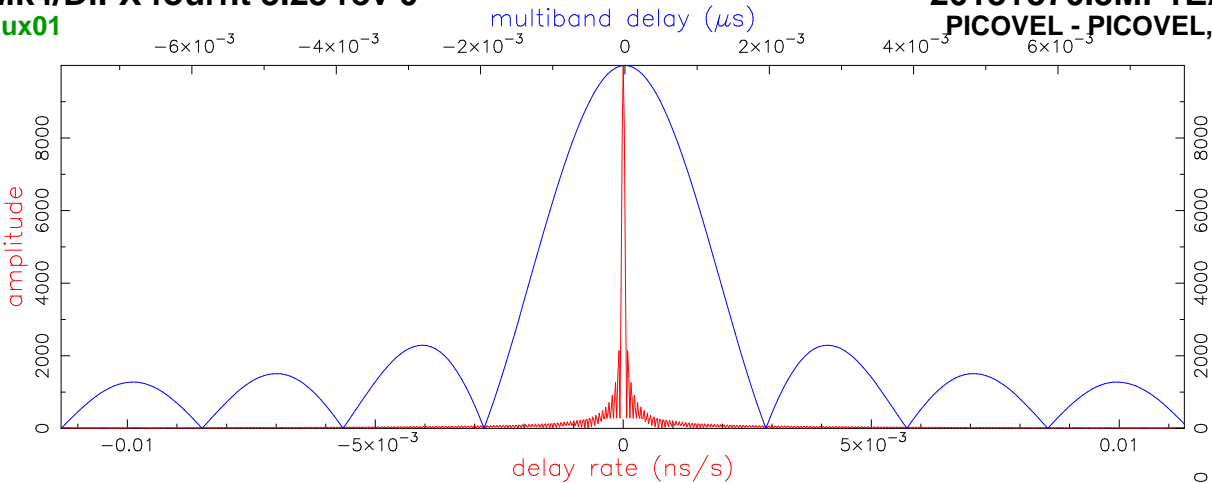
ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (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
 P: az 59.7 el 22.8 pa -60.1 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PP.W.18.3MP1EA simultaneous interpolator

Mk4/DiFX fourfit 3.25 rev 0

aux01

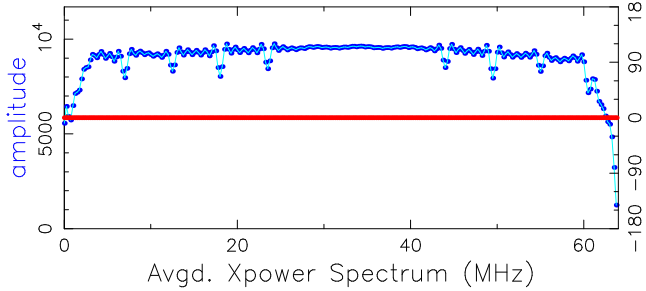
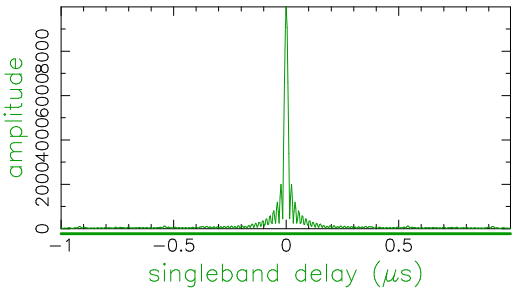
2013+370.3MP1EA, No0232, PP

PICOVEL - PICOVEL, fgroup W, pol RR



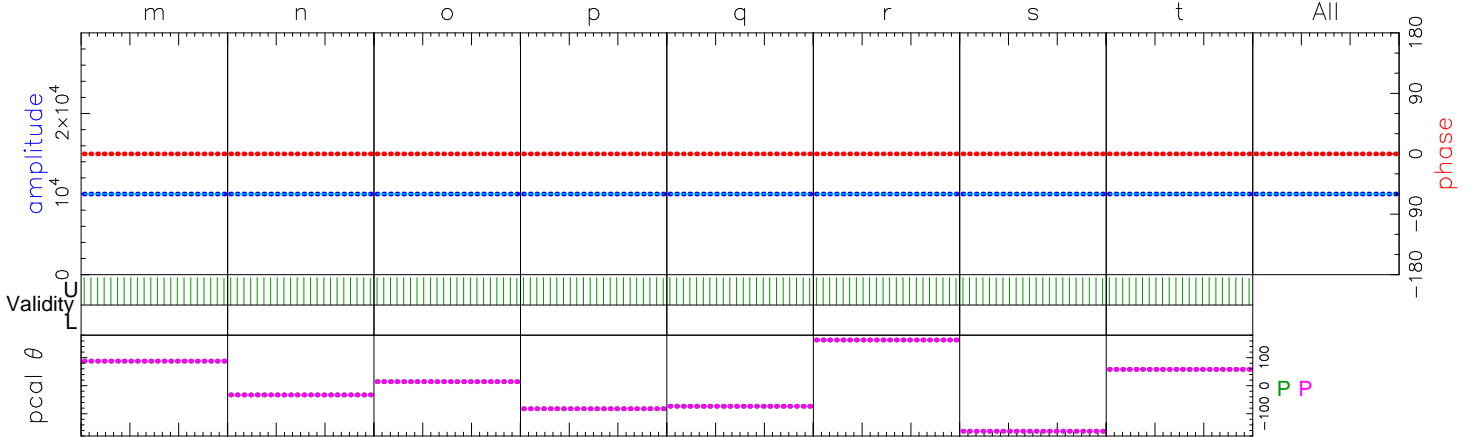
Fringe quality 9

SNR 366879.9
 Int time 179.992
 Amp 9999.999
 Phase 0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz)
 0.000000
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102642
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0		
P	0	0	0	0	0	0	0	0	Ampl.	10000.0
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Sbd box	257.0
P:P	88:88	-33:-33	15:15	-82:-82	-74:-74	163:163	-163:-163	58:58	APs used	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Mani PC	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	

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

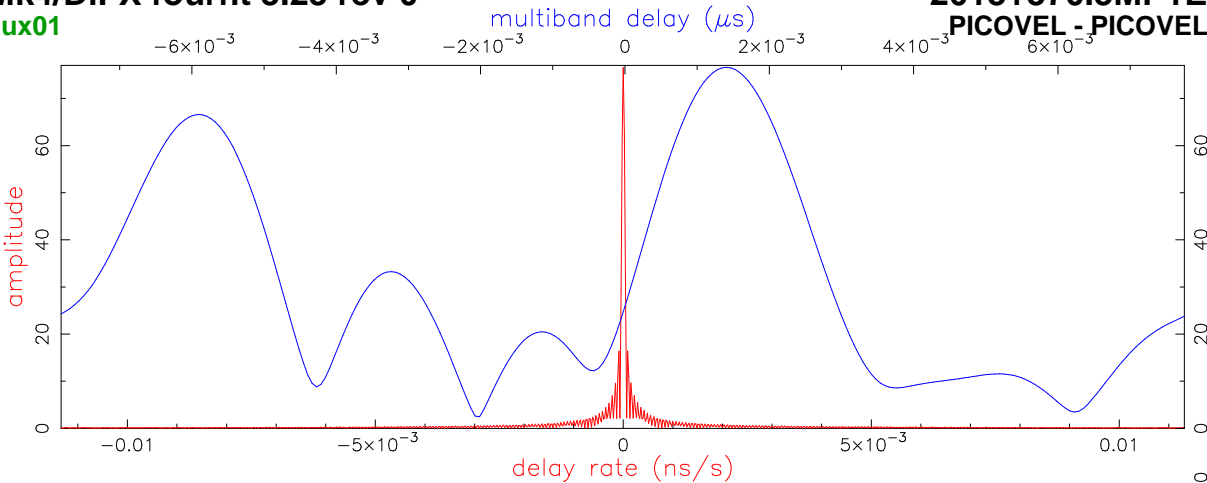
ph/seg (deg) 0.0 0.0 RMS Theor. Amplitude 9999.999 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb 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
 P: az 59.7 el 22.8 pa -60.1 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 0.000 0.000 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PP.W.25.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

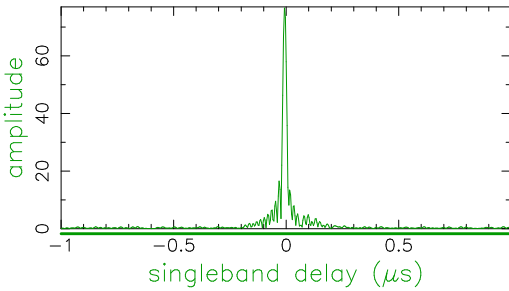
2013+370.3MP1EA, No0232, PP

PICOVEL - PICOVEL, fgroup W, pol LR

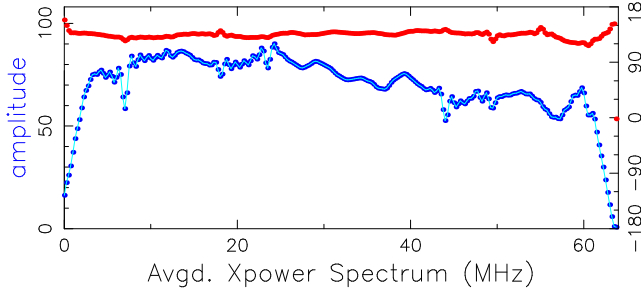


Fringe quality 5

SNR 2825.6
 Int time 179.992
 Amp 77.018
 Phase 38.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.006829
 MBD 0.001431
 Fringe rate (Hz) 0.000007
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

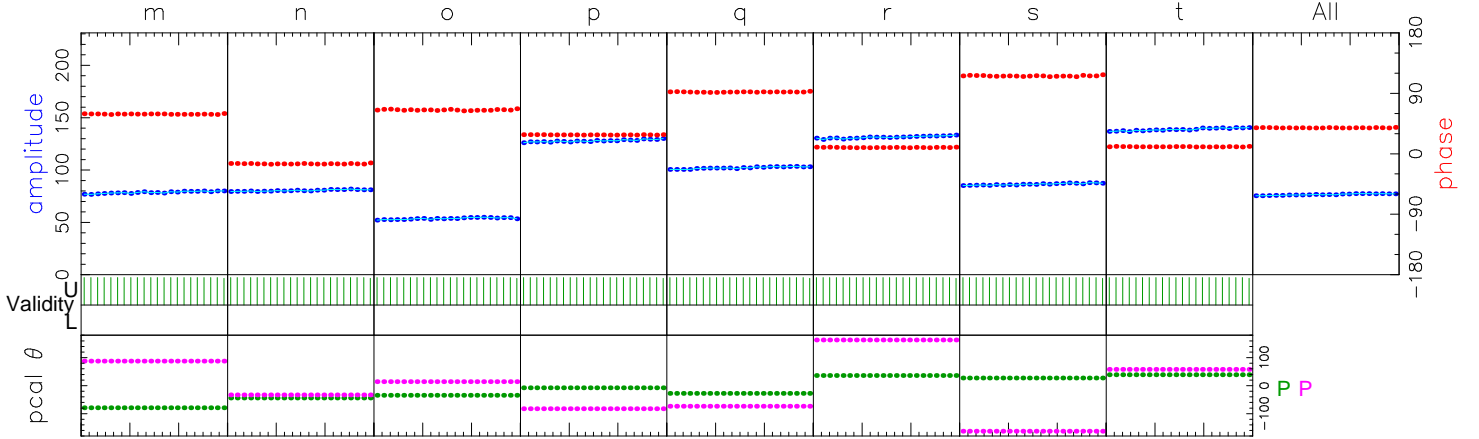


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102651
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	59.0	-14.9	65.2	28.2	91.9	9.4	115.8	10.5	Phase	38.6
	78.7	80.5	53.7	127.9	102.1	131.4	86.5	138.8	Ampl.	99.9
	254.9	255.3	254.8	254.8	254.1	253.9	254.5	255.3	Sbd box	255.3
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P	-79:88	-44:-33	-34:15	-8:-82	-28:-74	36:163	27:-163	39:58	Mani PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	-1.419381250000E-02	Apriori delay (usec)	0.000000000000E+00	Resid mbdelay (usec)	1.43119E-03	+/-	3.8E-07
Sband delay (usec)	-6.829250000000E-03	Apriori clock (usec)	0.000000000000E+00	Resid sbdelay (usec)	-6.82925E-03	+/-	3.0E-06
Phase delay (usec)	1.24628211948E-06	Apriori clockrate (us/s)	0.000000000000E+00	Resid phdelay (usec)	1.24628E-06	+/-	1.3E-09
Delay rate (us/s)	8.21926838718E-11	Apriori rate (us/s)	0.000000000000E+00	Resid rate (us/s)	8.21927E-11	+/-	1.3E-11
Total phase (deg)		Apriori accel (us/s/s)	0.000000000000E+00	Resid phase (deg)	38.6	+/-	0.0

ph/seg (deg)	0.2	Theor.	0.1	Amplitude	77.018 +/- 0.027	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	1.0		0.2	Search (1024X32)	76.492	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	49.2		0.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	47.3		0.1	Inc. seg. avg.	76.583	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s) -0.011 0.011
				Inc. frq. avg.	99.938	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
							ion window (TEC) 0.00 0.00

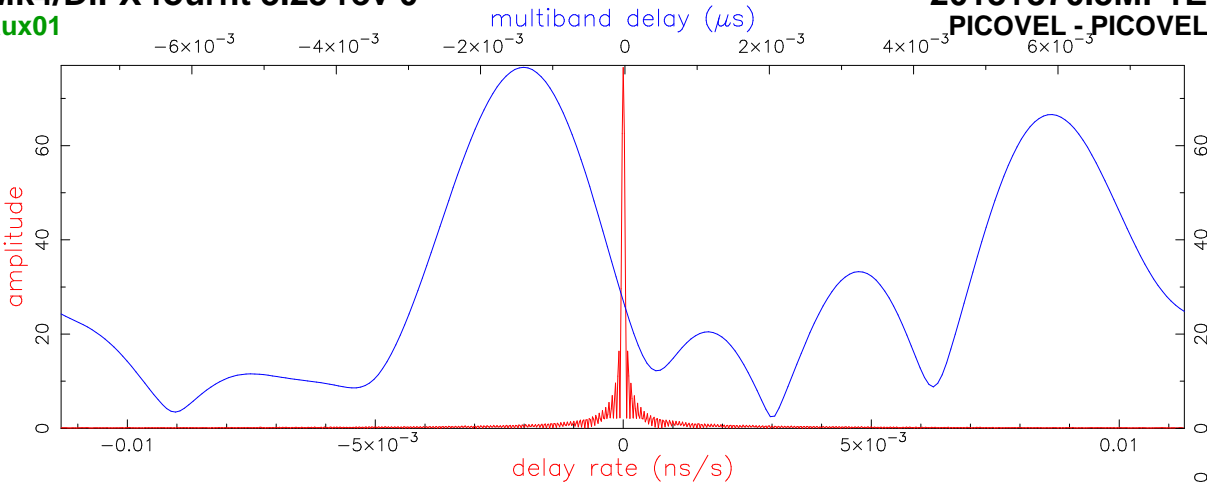
P: az 59.7 el 22.8 pa -60.1 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PP.W.43.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

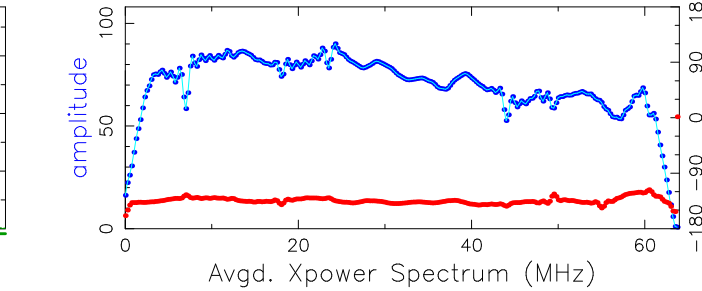
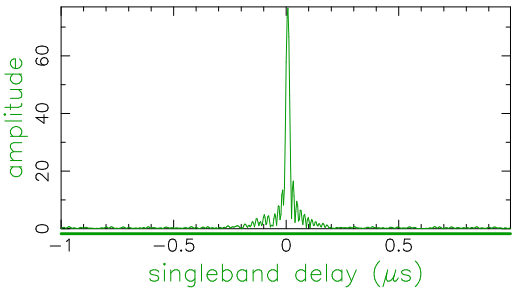
2013+370.3MP1EA, No0232, PP

PICOVEL - PICOVEL, fgroup W, pol RL



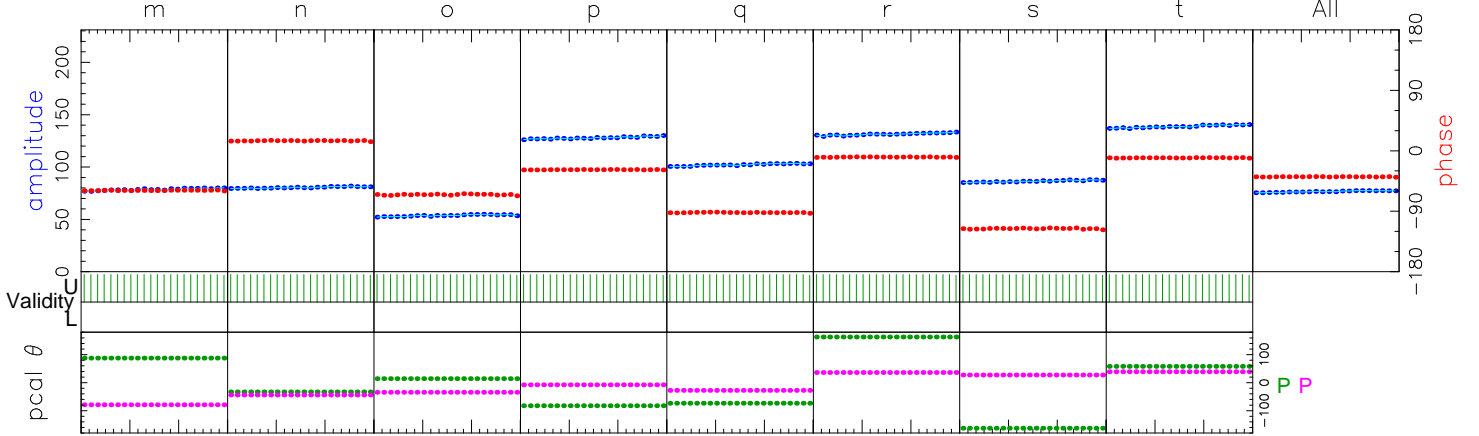
Fringe quality 5

SNR 2825.6
 Int time 179.992
 Amp 77.018
 Phase -38.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.006829
 MBD -0.001431
 Fringe rate (Hz)
 -0.000007
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102653
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-59.0	14.9	-65.2	-28.2	-91.9	-9.4	-115.8	-10.5	Phase	-38.6
	78.7	80.5	53.7	127.9	102.1	131.4	86.5	138.8	Ampl.	99.9
	259.1	258.7	259.2	259.2	259.9	260.1	259.5	258.7	Sbd box	258.7
U/L	352/0	352/0	352/0	352/0	352/0	352/0	352/0	352/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
P:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:P	88:-79	-33:-44	15:-34	-82:-8	-74:-28	163:36	-163:27	58:39	ManI PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD) 1.41938125000E-02 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -1.43119E-03 +/- 3.8E-07
 Sband delay (usec) 6.82925000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 6.82925E-03 +/- 3.0E-06
 Phase delay (usec) -1.24628211950E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) -1.24628E-06 +/- 1.3E-09
 Delay rate (us/s) -8.21926838718E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -8.21927E-11 +/- 1.3E-11
 Total phase (deg) -38.6 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) -38.6 +/- 0.0

RMS Theor. Amplitude 77.018 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.2 0.1 Search (1024X32) 76.492 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.0 0.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 49.2 0.1 Inc. seg. avg. 76.583 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.3 0.1 Inc. frq. avg. 99.938 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 59.7 el 22.8 pa -60.1 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PP.W.57.3MP1EA

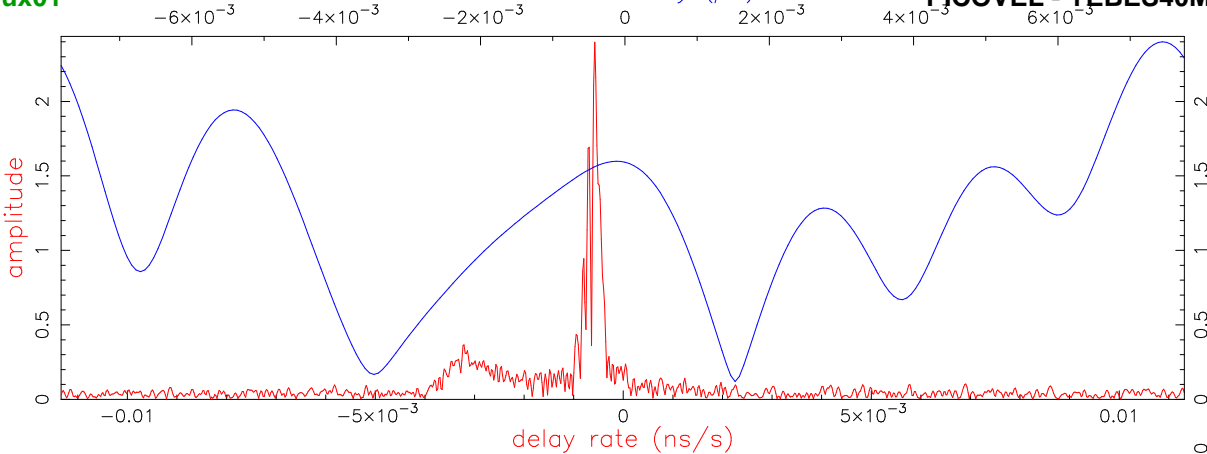
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, PY

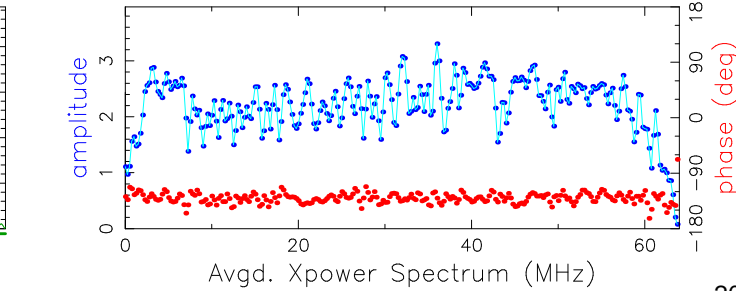
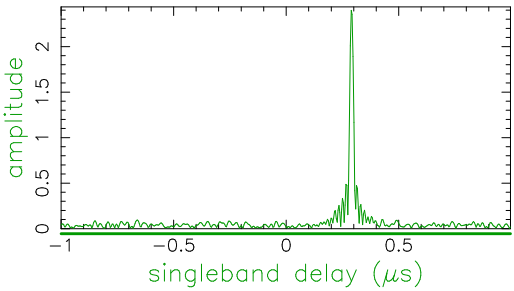
PICOVEL - YEBES40M, fgroup W, pol LL

multiband delay (μ s)



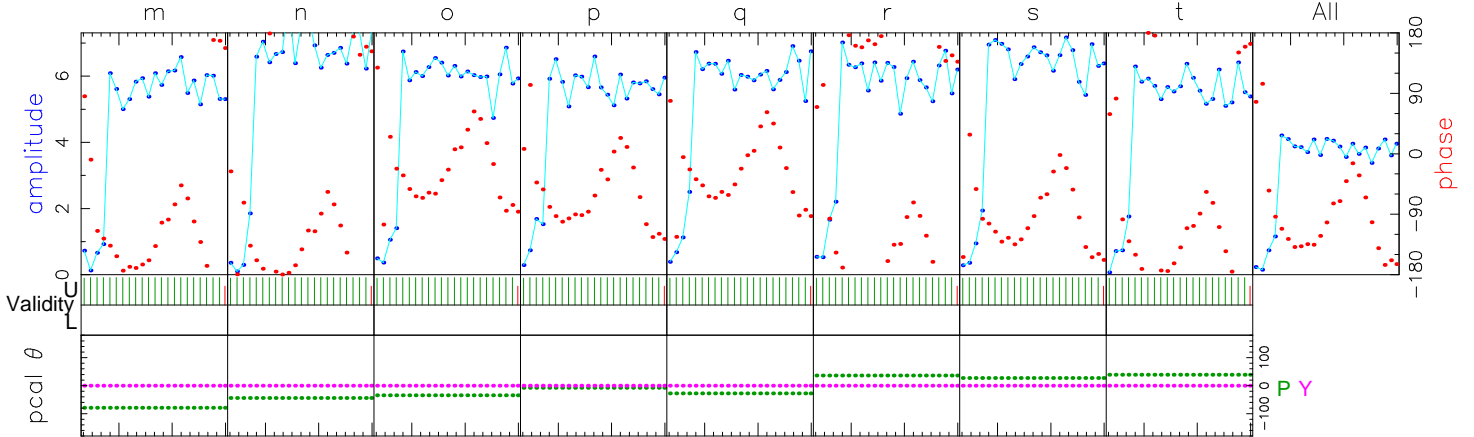
Fringe quality 1

SNR 84.8
 Int time 162.292
 Amp 2.437
 Phase -108.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.290628
 MBD 0.007504
 Fringe rate (Hz)
 -0.049499
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102646
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.6	-152.4	-30.6	-69.4	-33.5	-168.6	-99.4	-149.5	Phase	-108.8
	3.5	4.3	3.7	3.6	3.9	3.8	4.0	3.6	Ampl.	3.8
	332.5	331.2	331.0	330.6	330.0	330.1	330.6	330.3	Sbd box	331.4
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	-79:0	-44:0	-34:0	-8:0	-28:0	36:0	27:0	39:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.32834449883E+02	Apriori delay (usec)	-5.33123203864E+02	Resid mbdelay (usec)	7.50398E-03	+/-	1.3E-05
Sband delay (usec)	-5.32832575614E+02	Apriori clock (usec)	1.0969232E+02	Resid sbdelay (usec)	2.90628E-01	+/-	1.0E-04
Phase delay (usec)	-5.33123207373E+02	Apriori clockrate (us/s)	2.0540061E-06	Resid phdelay (usec)	-3.50926E-06	+/-	4.4E-08
Delay rate (us/s)	4.70607321930E-02	Apriori rate (us/s)	4.70613068318E-02	Resid rate (us/s)	-5.74639E-07	+/-	4.6E-10
Total phase (deg)	-29.9	Apriori accel (us/s/s)	2.17839354851E-07	Resid phase (deg)	-108.8	+/-	1.4

ph/seg (deg)	63.3	Theor.	3.2	Amplitude	2.437 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	63.0		5.7	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	59.8		1.9	Inc. seg. avg.	3.279	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	56.3		3.3	Inc. frq. avg.	3.784	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

P: az 59.7 el 22.8 pa -60.1 Y: az 61.1 el 24.8 pa -56.9 u, v (fr/asec) -339.203 -315.284 simultaneous interpolator

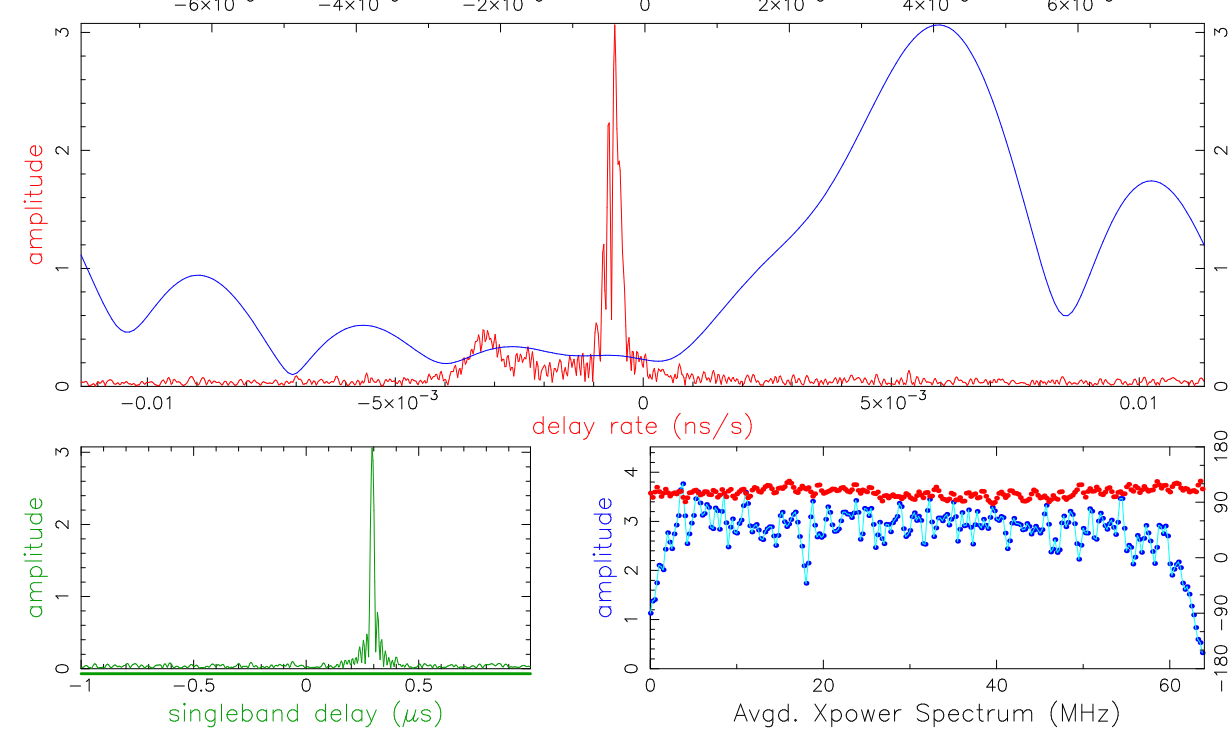
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.32.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

aux01

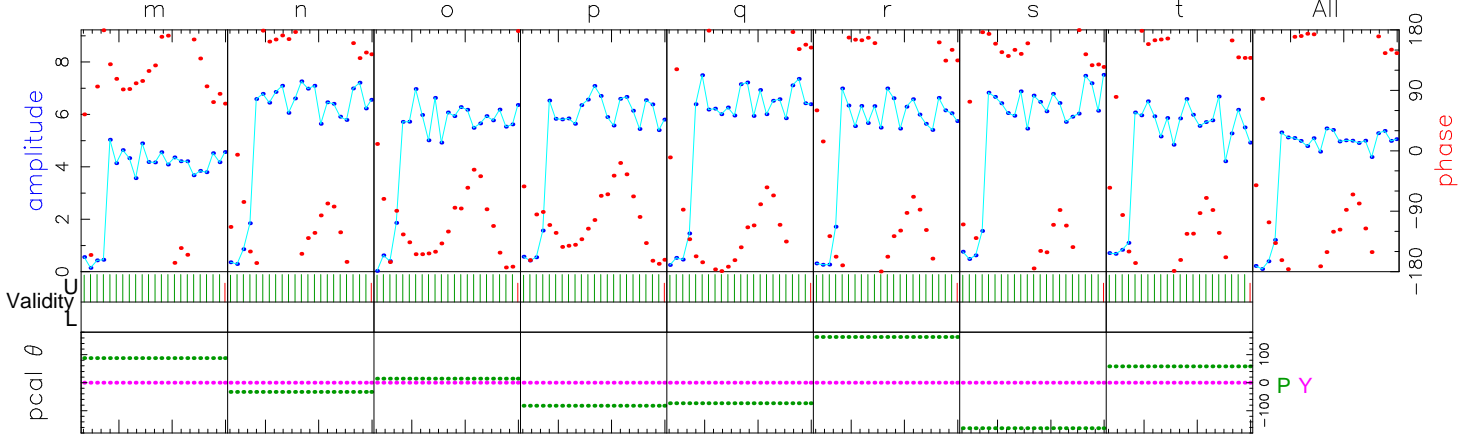
2013+370.3MP1EA, No0232, PY

PICOVEL - YEBES40M, fgroup W, pol RR



Fringe quality 2
 SNR 107.1
 Int time 162.292
 Amp 3.077
 Phase -158.5
 PFD 0.0e+00
 Delays (us)
 SBD 0.293690
 MBD 0.004085
 Fringe rate (Hz)
 -0.049490
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	126.4	-165.5	-122.7	-106.8	-150.2	-166.2	174.1	-164.3	Phase	-158.5
	2.6	4.1	3.7	3.8	4.0	3.6	4.0	3.4	Ampl.	3.6
	334.5	332.4	333.0	332.4	331.9	332.1	332.2	332.3	Sbd box	332.2
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD) -5.32822244226E+02 Apriori delay (usec) -5.33123203864E+02 Resid mbdelay (usec) 4.08464E-03 +/- 1.0E-05
 Sband delay (usec) -5.32829513864E+02 Apriori clock (usec) 1.0969232E+02 Resid sbdelay (usec) 2.93690E-01 +/- 8.0E-05
 Phase delay (usec) -5.33123208976E+02 Apriori clockrate (us/s) 2.0540061E-06 Resid phdelay (usec) -5.11254E-06 +/- 3.5E-08
 Delay rate (us/s) 4.70607323049E-02 Apriori rate (us/s) 4.70613068318E-02 Resid rate (us/s) -5.74527E-07 +/- 3.7E-10
 Total phase (deg) -79.6 Apriori accel (us/s/s) 2.17839354851E-07 Resid phase (deg) -158.5 +/- 1.1

RMS Theor. Amplitude 3.077 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 54.8 2.6 Search (1024X32) 3.004 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 68.8 4.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 41.9 1.5 Inc. seg. avg. 4.246 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 amp/frq (%) 23.5 2.6 Inc. frq. avg. 3.649 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

P: az 59.7 el 22.8 pa -60.1 Y: az 61.1 el 24.8 pa -56.9 u,v (fr/asec) -339.203 -315.284 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.49.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

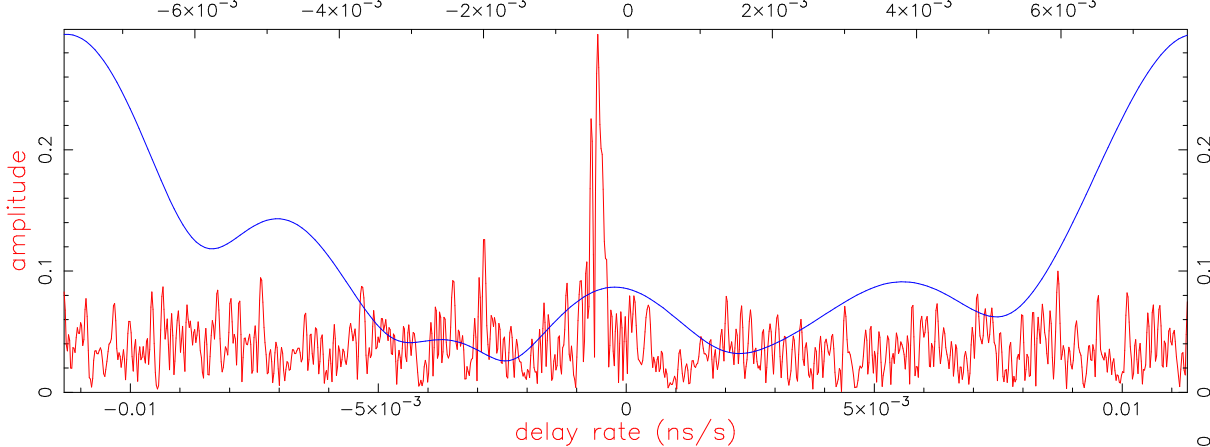
aux01

2013+370.3MP1EA, No0232, PY

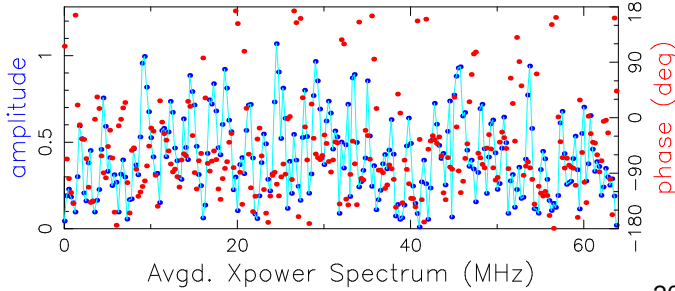
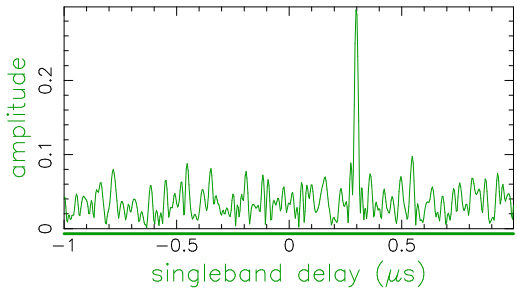
PICOVEL - YEBES40M, fgroup W, pol RL

multiband delay (μ s)

Fringe quality 9

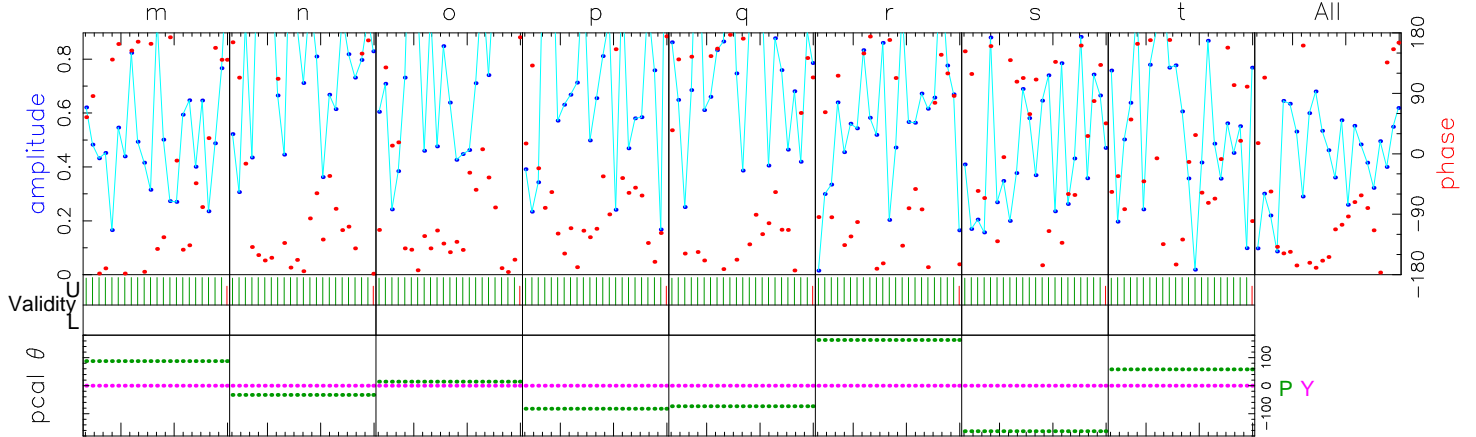


SNR 10.4
 Int time 162.292
 Amp 0.299
 Phase -147.5
 PFD 4.7e-17
 Delays (us)
 SBD 0.298346
 MBD -0.007737
 Fringe rate (Hz)
 -0.049178
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004017.41
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102656
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 23 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

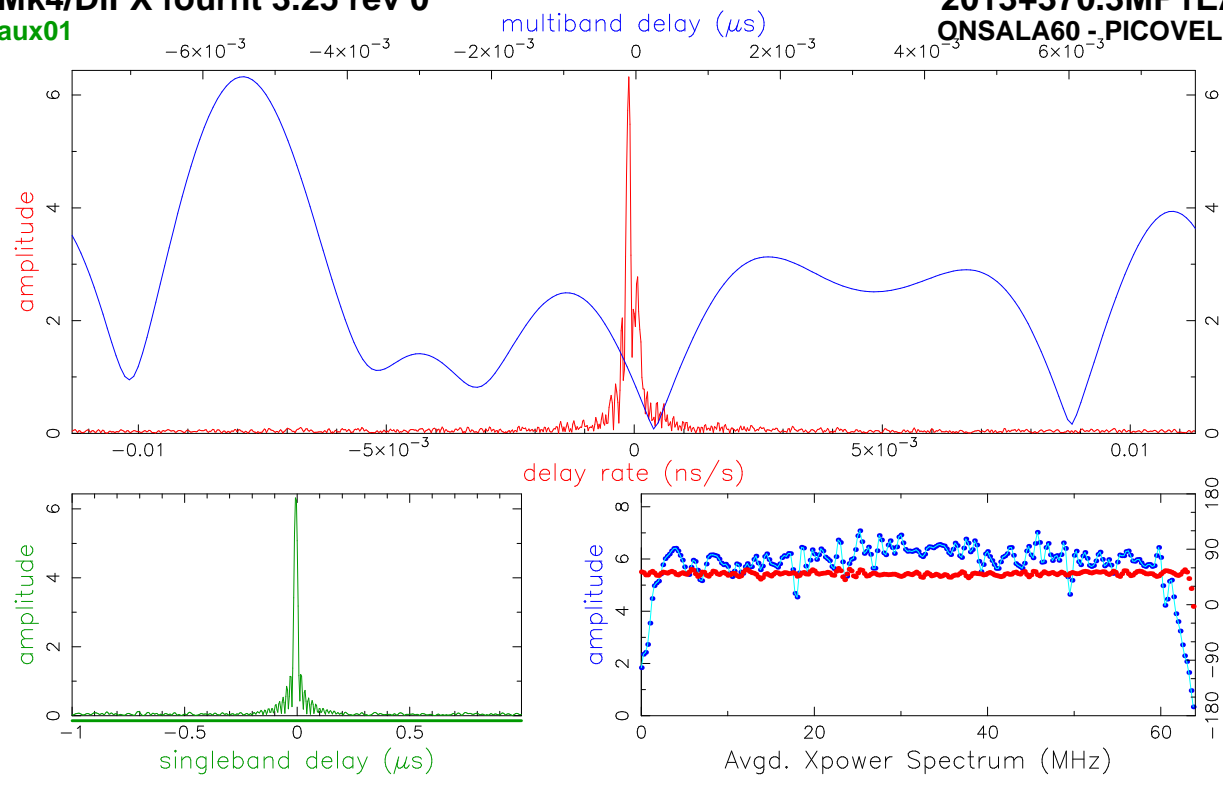


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	178.2	-145.2	-136.0	-98.3	-162.4	-179.0	146.5	-108.7	Phase	-147.5
	0.3	0.5	0.5	0.5	0.5	0.3	0.2	0.1	Ampl.	0.3
	335.2	334.0	334.0	333.7	332.4	118.6	344.6	495.1	Sbd box	333.4
U/L	318/0	318/0	318/0	318/0	318/0	318/0	318/0	318/0	APs used	
P	0	0	0	0	0	0	0	0	PC freqs	
Y	0	0	0	0	0	0	0	0	PC freqs	
P:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
P:Y	88:0	-33:0	15:0	-82:0	-74:0	163:0	-163:0	58:0	Manl PC	
P	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec) (SBD)	-5.32818441207E+02	Apriori delay (usec)	-5.33123203864E+02	Resid mbdelay (usec)	-7.73734E-03	+/-	1.0E-04
Sband delay (usec)	-5.32824858364E+02	Apriori clock (usec)	1.0969232E+02	Resid sbdelay (usec)	2.98346E-01	+/-	8.3E-04
Phase delay (usec)	-5.33123208621E+02	Apriori clockrate (us/s)	2.0540061E-06	Resid phdelay (usec)	-4.75760E-06	+/-	3.5E-07
Delay rate (us/s)	4.70607359285E-02	Apriori rate (us/s)	4.70613068318E-02	Resid rate (us/s)	-5.70903E-07	+/-	3.8E-09
Total phase (deg)	-68.6	Apriori accel (us/s/s)	2.17839354851E-07	Resid phase (deg)	-147.5	+/-	11.0

ph/seg (deg)	61.1	Theor.	26.4	Amplitude	0.299 +/- 0.029	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	72.7		46.0	Search (1024X32)	0.293	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	42.4		15.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	48.6		27.2	Inc. seg. avg.	0.396	Data rate (MSamp/s):	128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011 0.011	
				Inc. frq. avg.	0.334	Data rate (Mb/s):	2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00
P:	az 59.7 el 22.8 pa -60.1	Y:	az 61.1 el 24.8 pa -56.9	u, v (fr/asec)	-339.203 -315.284				simultaneous interpolator	

Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232/PY..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232/PY.W.74.3MP1EA

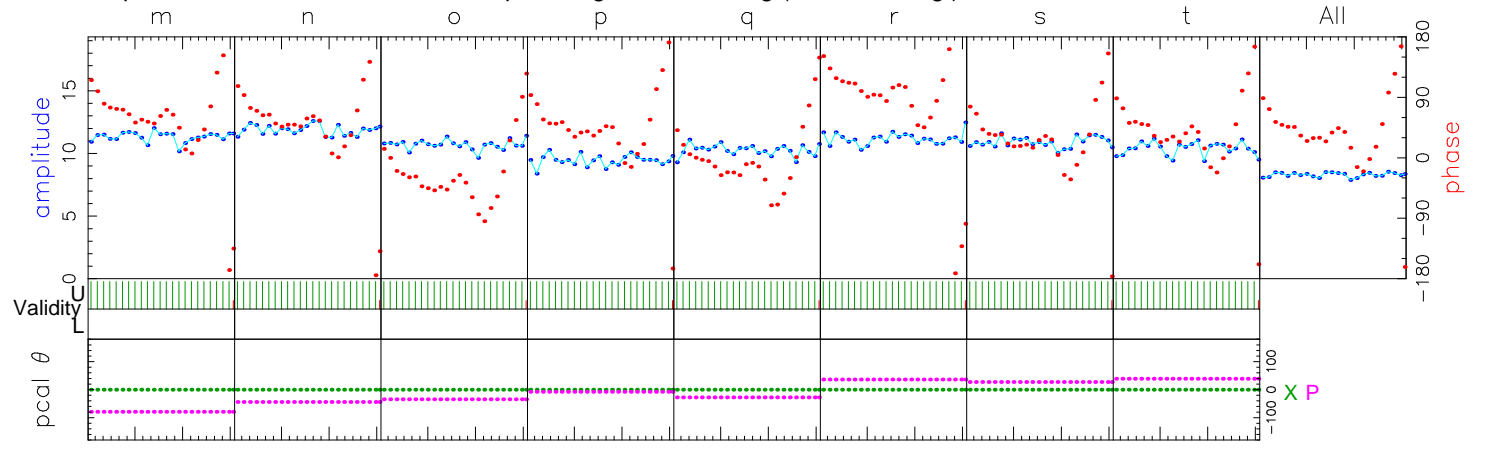


Fringe quality 3

SNR 235.5
Int time 178.950
Amp 6.438
Phase 42.2
PFD 0.0e+00
Delays (us)
SBD -0.006087
MBD -0.005406
Fringe rate (Hz)
-0.009676
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 004001.02
Stop 004300.22
FRT 004130.00
Corr/FF/build
2024:351:093049
2025:041:102648
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	69.2	61.5	-30.6	47.6	-8.1	106.8	31.6	42.4	Phase	42.2
	8.6	9.1	8.1	7.2	7.8	8.5	8.4	7.9	Ampl.	8.2
	254.5	255.9	255.9	256.4	256.6	256.3	256.3	255.7	Sbd box	255.4
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec) (SBD)	5.40325425841E+03		Apriori delay (usec)		5.40325966449E+03		Resid mbdelay (usec)		-5.40607E-03	+/- 4.6E-06
Sband delay (usec)	5.40325357774E+03		Apriori clock (usec)		1.1377654E+02		Resid sbdelay (usec)		-6.08675E-03	+/- 3.7E-05
Phase delay (usec)	5.40325966585E+03		Apriori clockrate (us/s)		6.1838598E-07		Resid phdelay (usec)		1.36160E-06	+/- 1.6E-08
Delay rate (us/s)	-3.51019272763E-01		Apriori rate (us/s)		-3.51019160431E-01		Resid rate (us/s)		-1.12332E-07	+/- 1.5E-10
Total phase (deg)	221.8		Apriori accel (us/s/s)		-1.17550173465E-05		Resid phase (deg)		42.2	+/- 0.5
ph/seg (deg)	RMS 45.1	Theor. 1.2	Amplitude 6.438 +/- 0.027	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)		-1.000 1.000
amp/seg (%)	29.1	2.1	Search (1024X32) 6.302	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)		-0.008 0.008
ph/frq (deg)	47.0	0.7	Inc. seg. avg. 8.298	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 (%)	28.5	1.2	Inc. frq. avg. 8.197	Data rate(Mb/s): 2048		ion window (TEC)		0.00 0.00		
X: az 80.6 el 39.7 pa -41.9	P: az 59.7 el 22.8 pa -60.1		u, v (fr/asec) 2520.219 972.249		simultaneous interpolator					
Control file: cf_1234_gmva	Input file: /Exps/c241c/v2/3mm/1234/No0232//XP..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232//XP.W.38.3MP1EA							

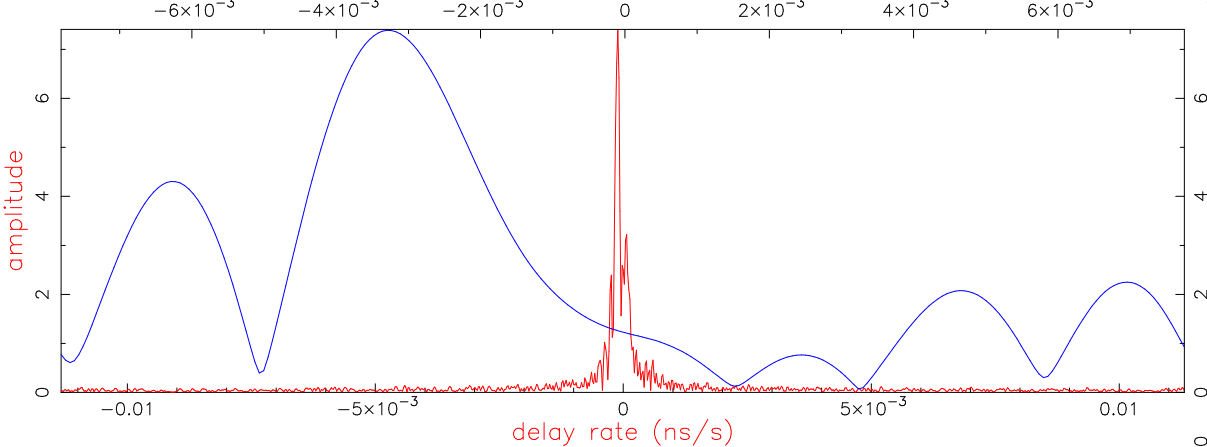
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, XP

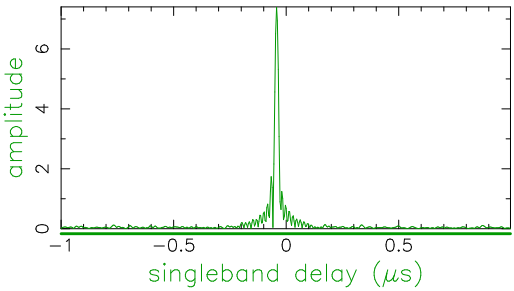
ONSALA60 - PICOVEL, fgroup W, pol RR

multiband delay (μ s)

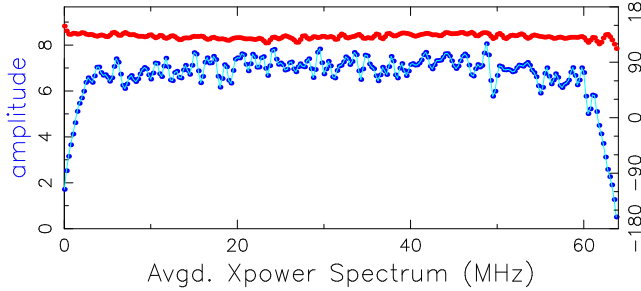


Fringe quality 3

SNR 271.0
 Int time 178.950
 Amp 7.409
 Phase 41.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.042340
 MBD -0.003261
 Fringe rate (Hz)
 -0.009730
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

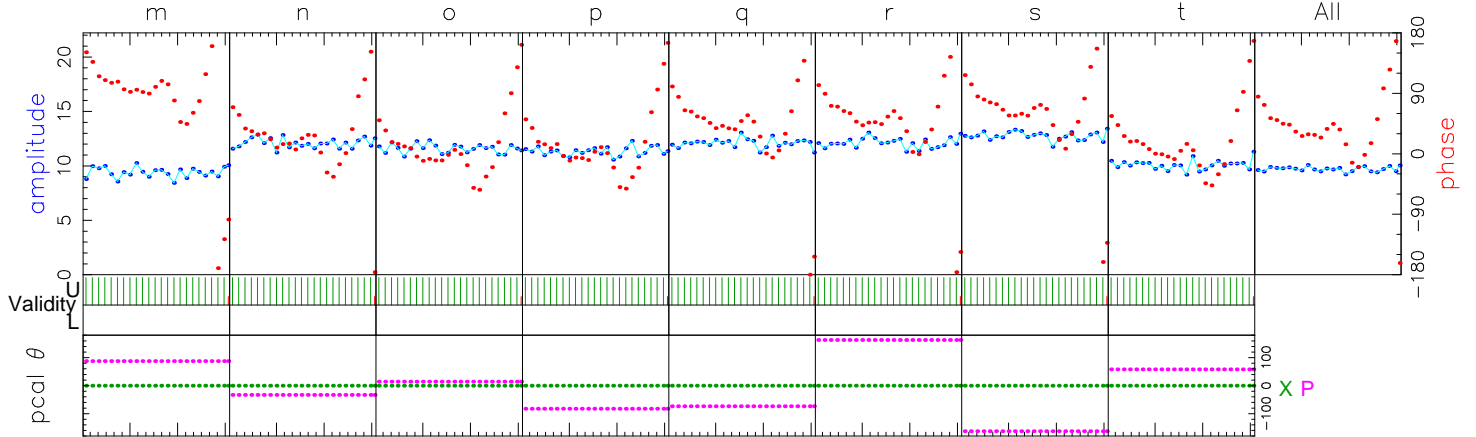


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004001.02
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0		
X	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Tracks

Group delay (usec) (SBD)	5.40320952844E+03	Apriori delay (usec)		5.40325966449E+03	Resid mbdelay (usec)	-3.26104E-03	+/-	4.0E-06	
Sband delay (usec)	5.40321732449E+03	Apriori clock (usec)		1.1377654E+02	Resid sbdelay (usec)	-4.23400E-02	+/-	3.2E-05	
Phase delay (usec)	5.40325966583E+03	Apriori clockrate (us/s)		6.1838598E-07	Resid phdelay (usec)	1.34358E-06	+/-	1.4E-08	
Delay rate (us/s)	-3.51019273387E-01	Apriori rate (us/s)		-3.51019160431E-01	Resid rate (us/s)	-1.12955E-07	+/-	1.3E-10	
Total phase (deg)		221.2	Apriori accel (us/s/s)		-1.17550173465E-05	Resid phase (deg)	41.7	+/-	0.4

ph/seg (deg) 45.2 1.0 Theor. Amplitude 7.409 +/- 0.027 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 31.1 1.8 Search (1024X32) 7.314 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 38.9 0.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 20.7 1.0 Inc. seg. avg. 9.701 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 X: az 80.6 el 39.7 pa -41.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 2520.219 972.249 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XP.W.53.3MP1EA simultaneous interpolator

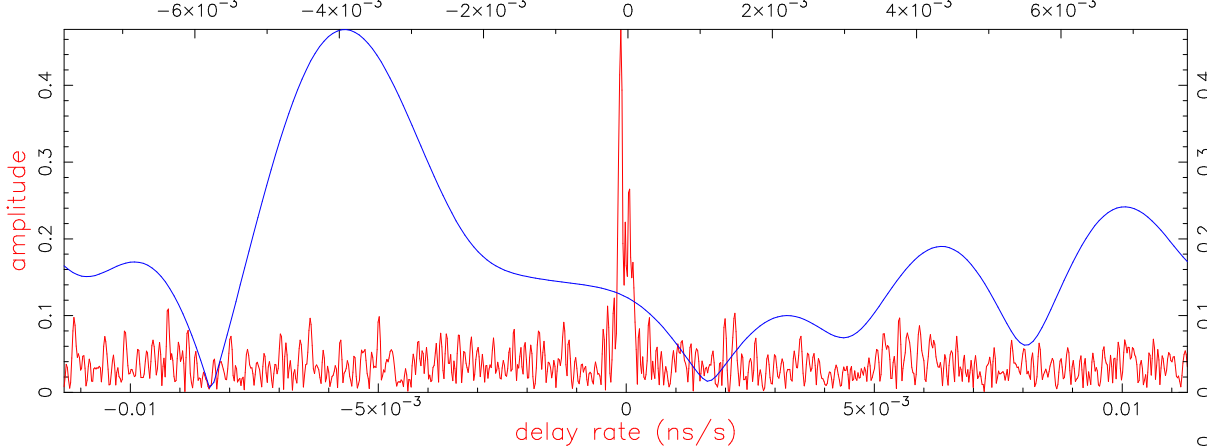
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, XP

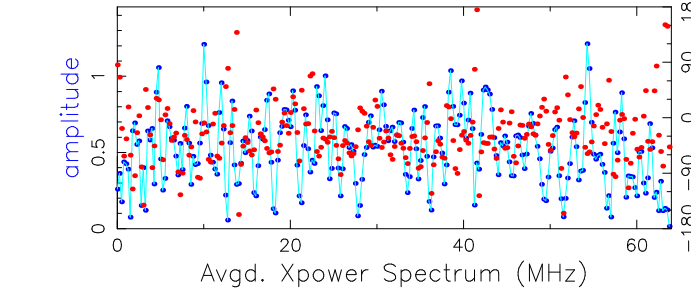
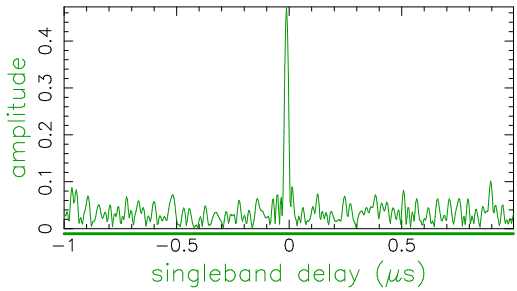
ONSALA60 - PICOVEL, fgroup W, pol LR

multiband delay (μ s)



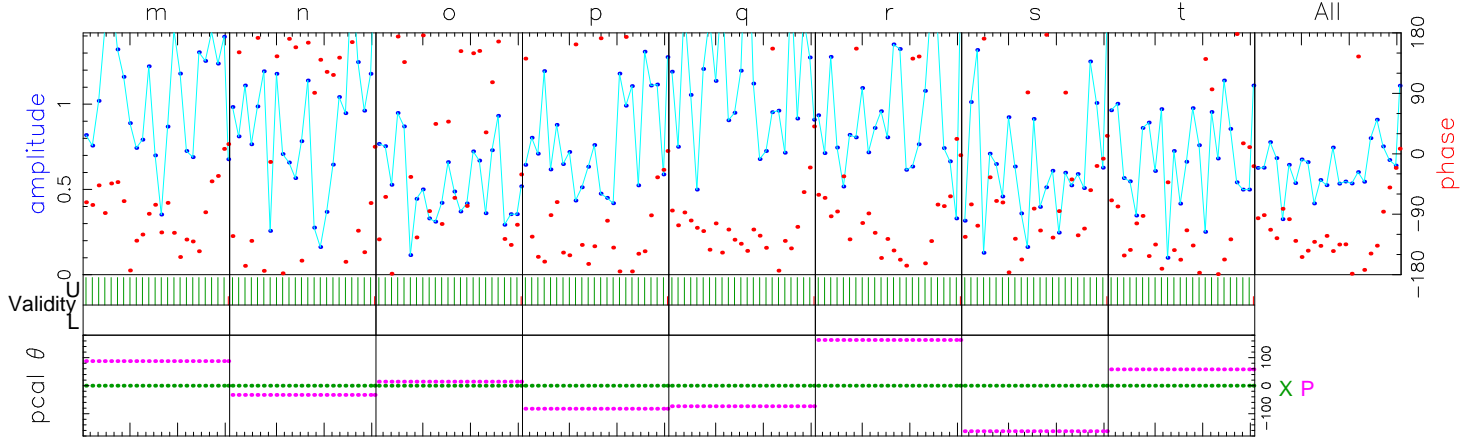
Fringe quality 7

SNR 17.3
Int time 178.950
Amp 0.473
Phase -123.8
PFD 0.0e+00
Delays (us)
SBD -0.011990
MBD -0.003933
Fringe rate (Hz)
-0.009492
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 004001.02
Stop 004300.22
FRT 004130.00
Corr/FF/build
2024:351:093049
2025:041:102655
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-82.3	-175.7	-169.8	-140.4	-119.1	-117.7	-85.7	-137.4	Phase	-123.8
	0.8	0.6	0.2	0.5	0.9	0.6	0.4	0.4	Ampl.	0.5
	252.5	253.3	250.7	254.0	254.1	253.1	254.5	254.1	Sbd box	253.9
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0	APs used	
X	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec) (SBD)	5.40324010663E+03	Apriori delay (usec)	5.40325966449E+03	Resid mbdelay (usec)	-3.93285E-03	+/-	6.3E-05
Sband delay (usec)	5.40324767449E+03	Apriori clock (usec)	1.1377654E+02	Resid sbdelay (usec)	-1.19900E-02	+/-	5.0E-04
Phase delay (usec)	5.40325966049E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	-3.99302E-06	+/-	2.1E-07
Delay rate (us/s)	-3.51019270626E-01	Apriori rate (us/s)	-3.51019160431E-01	Resid rate (us/s)	-1.10195E-07	+/-	2.1E-09
Total phase (deg)		Apriori accel (us/s/s)	-1.17550173465E-05	Resid phase (deg)	-123.8	+/-	6.6

ph/seg (deg) 43.4 16.2 Search (1024X32) 0.472 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 43.9 28.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 37.6 9.4 Inc. seg. avg. 0.606 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 47.1 16.4 Inc. frq. avg. 0.541 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
X: az 80.6 el 39.7 pa -41.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 2520.219 972.249 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XP.W.70.3MP1EA

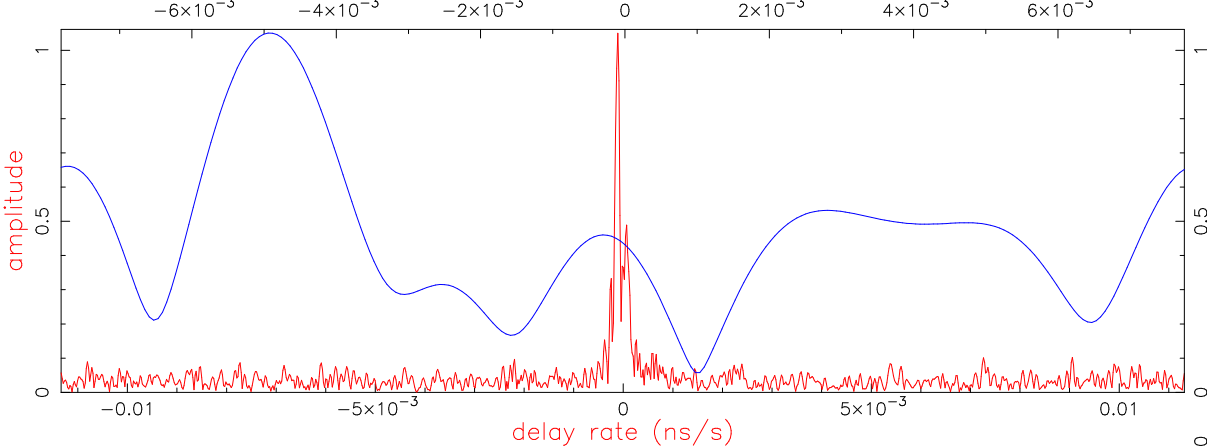
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, XP

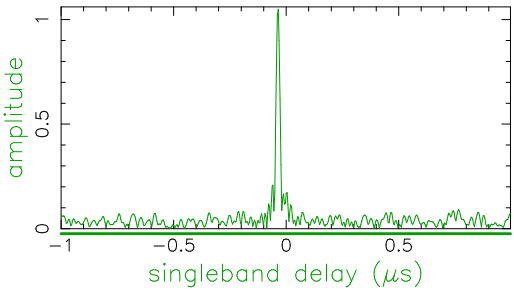
ONSALA60 - PICOVEL, fgroup W, pol RL

multiband delay (μ s)

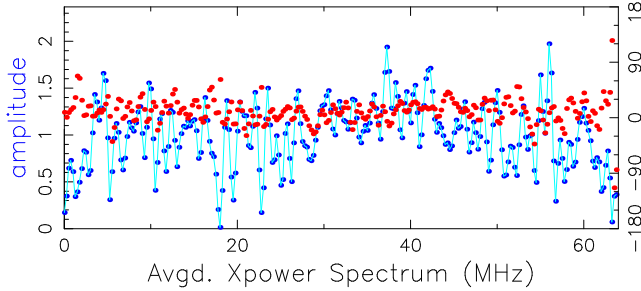


Fringe quality 5

SNR 38.8
 Int time 178.950
 Amp 1.061
 Phase 6.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.036499
 MBD -0.004959
 Fringe rate (Hz)
 -0.009596
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

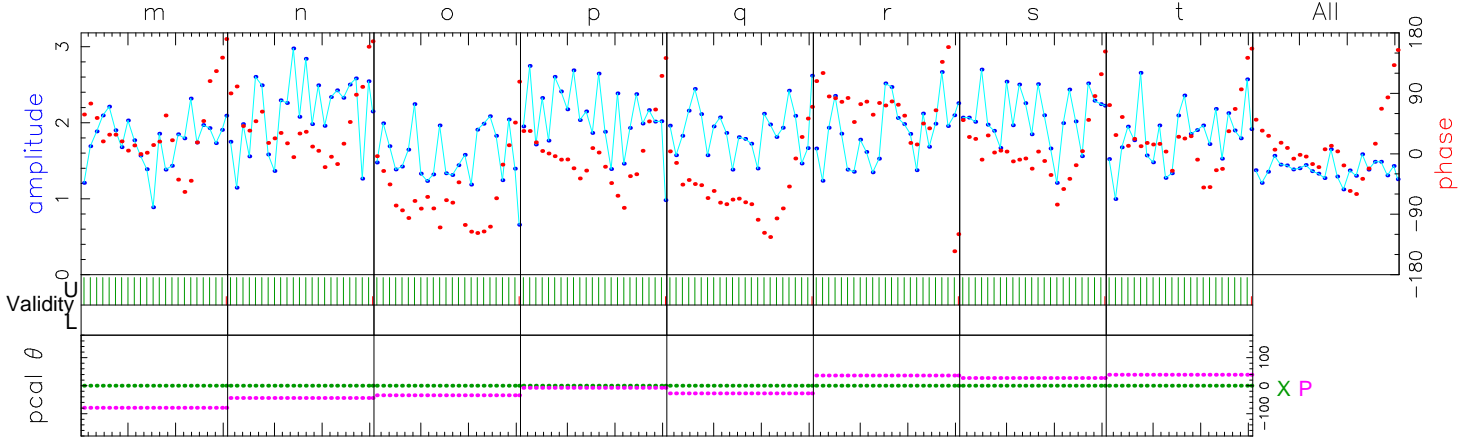


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004001.02
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102702
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

Amp. and Phase vs. time for each freq., 24 segs, 15 APs / seg (7.68 sec / seg.), time ticks 10 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	350/0	350/0	350/0	350/0	350/0	350/0	350/0	350/0		
X	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
X	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	5.40322345551E+03	Apriori delay (usec)	5.40325966449E+03	Resid mbdelay (usec)	-4.95898E-03	+/-	2.8E-05
Sband delay (usec)	5.40322316574E+03	Apriori clock (usec)	1.1377654E+02	Resid sbdelay (usec)	-3.64988E-02	+/-	2.2E-04
Phase delay (usec)	5.40325966470E+03	Apriori clockrate (us/s)	6.1838598E-07	Resid phdelay (usec)	2.11874E-07	+/-	9.5E-08
Delay rate (us/s)	-3.51019271828E-01	Apriori rate (us/s)	-3.51019160431E-01	Resid rate (us/s)	-1.11397E-07	+/-	9.2E-10
Total phase (deg)	186.1	Apriori accel (us/s/s)	-1.17550173465E-05	Resid phase (deg)	6.6	+/-	3.0

ph/seg (deg) 45.6 7.2 Search (1024X32) 1.049 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 32.9 12.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.2 4.2 Inc. seg. avg. 1.379 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 37.2 7.3 Inc. frq. avg. 1.412 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 X: az 80.6 el 39.7 pa -41.9 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 2520.219 972.249 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//XP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//XP.W.82.3MP1EA

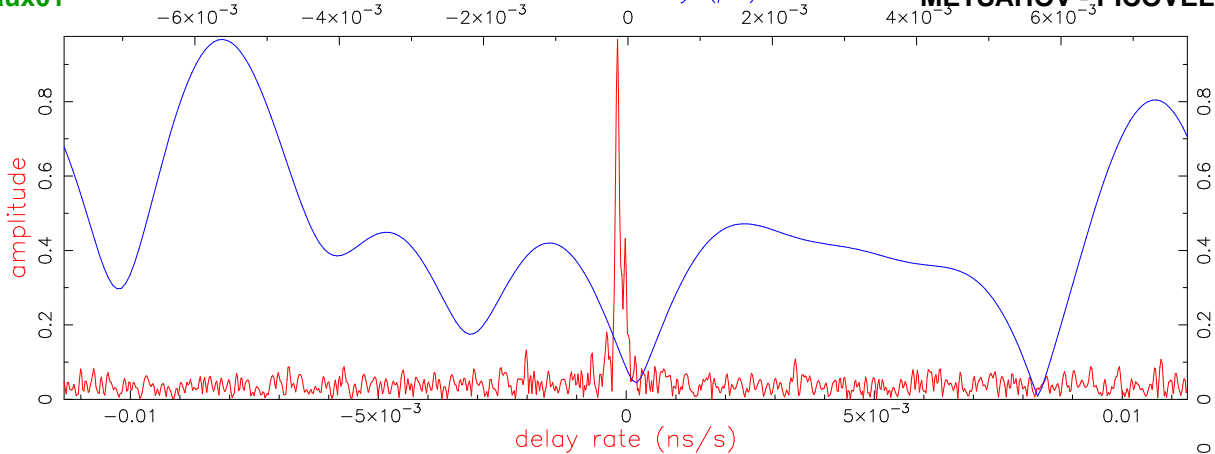
Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, ZP

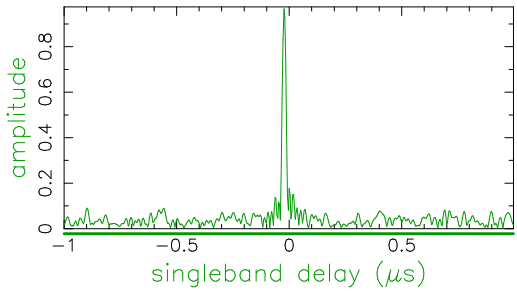
MEṬSAHOV - PICOVEL, fgroup W, pol LL

multiband delay (μ s)

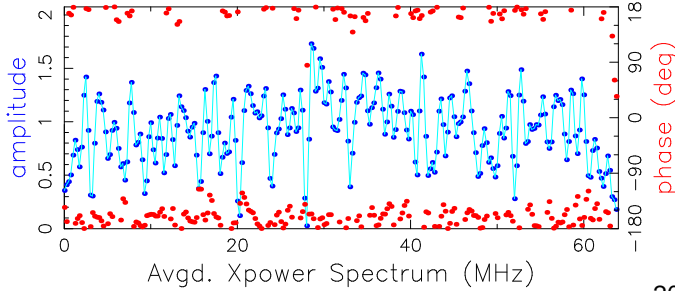


Fringe quality 4

SNR 33.4
 Int time 157.041
 Amp 0.975
 Phase -1.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.022234
 MBD -0.005596
 Fringe rate (Hz)
 -0.015264
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

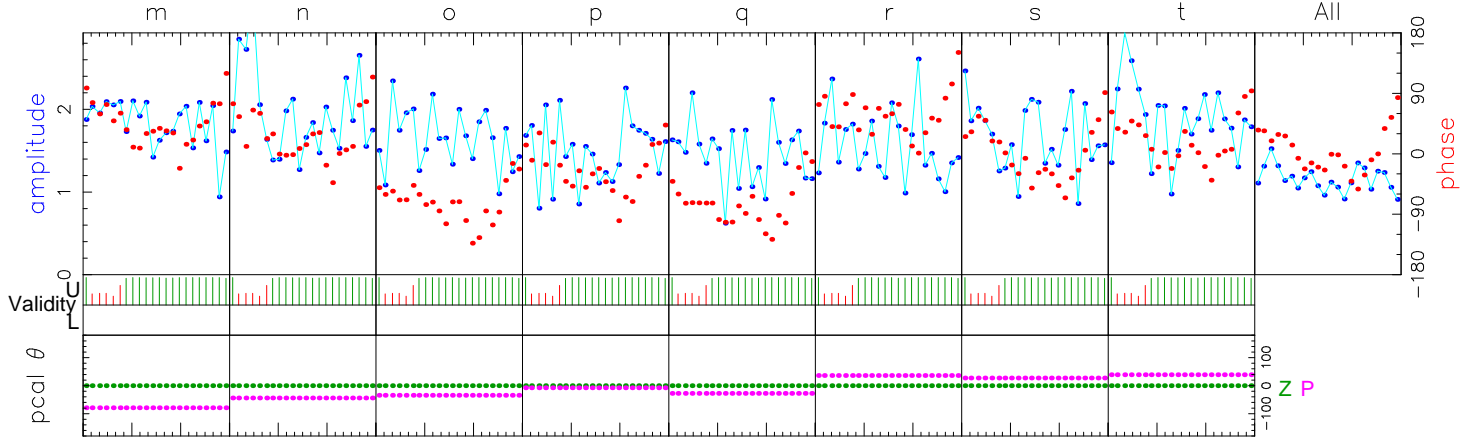


delay rate (ns/s)



Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102644
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	328/0	328/0	328/0	328/0	328/0	328/0	328/0	328/0		
Z	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD)	7.07375175555E+03	Apriori delay (usec)		7.07377297679E+03	Resid mbdelay (usec)	-5.59624E-03	+/-	3.2E-05	
Sband delay (usec)	7.07375074304E+03	Apriori clock (usec)		1.1226921E+00	Resid sbdelay (usec)	-2.22338E-02	+/-	2.6E-04	
Phase delay (usec)	7.07377297675E+03	Apriori clockrate (us/s)		1.1622864E-08	Resid phdelay (usec)	-3.16263E-08	+/-	1.1E-07	
Delay rate (us/s)	-4.54959012808E-01	Apriori rate (us/s)		-4.54958835611E-01	Resid rate (us/s)	-1.77198E-07	+/-	1.1E-09	
Total phase (deg)		78.3	Apriori accel (us/s/s)		-1.94889397974E-05	Resid phase (deg)	-1.0	+/-	3.4

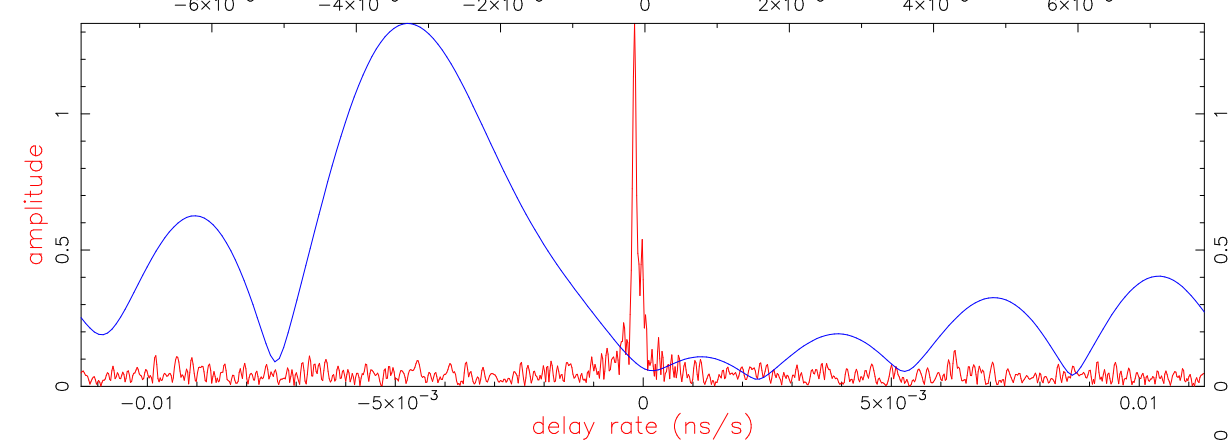
ph/seg (deg)	33.3	7.8	Search (1024X32)	0.936	Pcal mode: MANUAL, MANUAL		PC period (AP's)	5, 5		
amp/seg (%)	21.8	13.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	54.5	4.8	Inc. seg. avg.	1.126	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/frq (%)	42.7	8.5	Inc. frq. avg.	1.369	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us	dr window (ns/s)	-0.011	0.011		
Z: az 93.6 el 46.2 pa -38.5	P: az 59.7 el 22.8 pa -60.1		u,v (fr/asec) 3262.320 686.046		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/c241c/v2/3mm/1234/No0232//ZP..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232//ZP.W.27.3MP1EA		simultaneous interpolator					

Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MP1EA, No0232, ZP

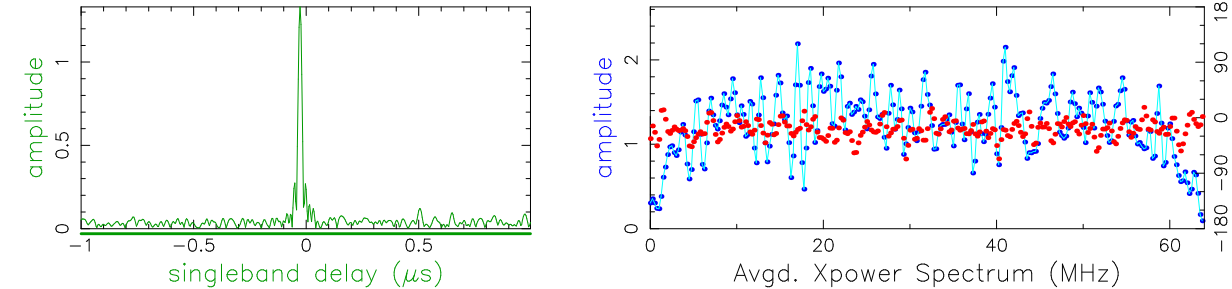
MEṬSAHOV - PICOVEL, fgroup W, pol RR



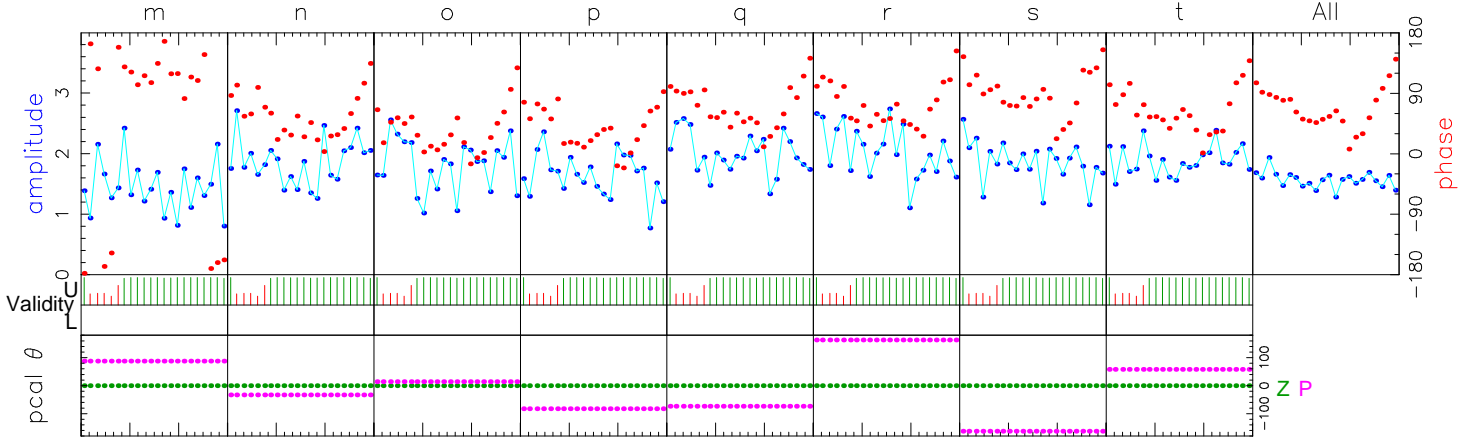
Fringe quality 5

SNR 45.6
 Int time 157.041
 Amp 1.332
 Phase 65.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.027188
 MBD -0.003283
 Fringe rate (Hz)
 -0.015154
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102652
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	138.7	53.8	33.0	30.9	67.3	70.6	88.7	62.8	Phase	65.4
	1.2	1.5	1.5	1.4	1.7	1.8	1.5	1.6	Ampl.	1.5
	248.2	249.3	249.8	250.2	250.4	249.7	250.3	249.4	Sbd box	250.0
U/L	328/0	328/0	328/0	328/0	328/0	328/0	328/0	328/0	APs used	
Z	0	0	0	0	0	0	0	0	PC freqs	
P	0	0	0	0	0	0	0	0	PC freqs	
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:P	0:88	0:33	0:15	0:82	0:74	0:163	0:163	0:58	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec) (SBD)	7.07373844376E+03		Apriori delay (usec)		7.07377297679E+03		Resid mbdelay (usec)		-3.28302E-03	+/- 2.4E-05
Sband delay (usec)	7.07374578879E+03		Apriori clock (usec)		1.1226921E+00		Resid sbdelay (usec)		-2.71880E-02	+/- 1.9E-04
Phase delay (usec)	7.07377297890E+03		Apriori clockrate (us/s)		1.1622864E-08		Resid phdelay (usec)		2.11039E-06	+/- 8.1E-08
Delay rate (us/s)	-4.54959011532E-01		Apriori rate (us/s)		-4.54958835611E-01		Resid rate (us/s)		-1.75921E-07	+/- 8.4E-10
Total phase (deg)	144.8		Apriori accel (us/s/s)		-1.94889397974E-05		Resid phase (deg)		65.4	+/- 2.5

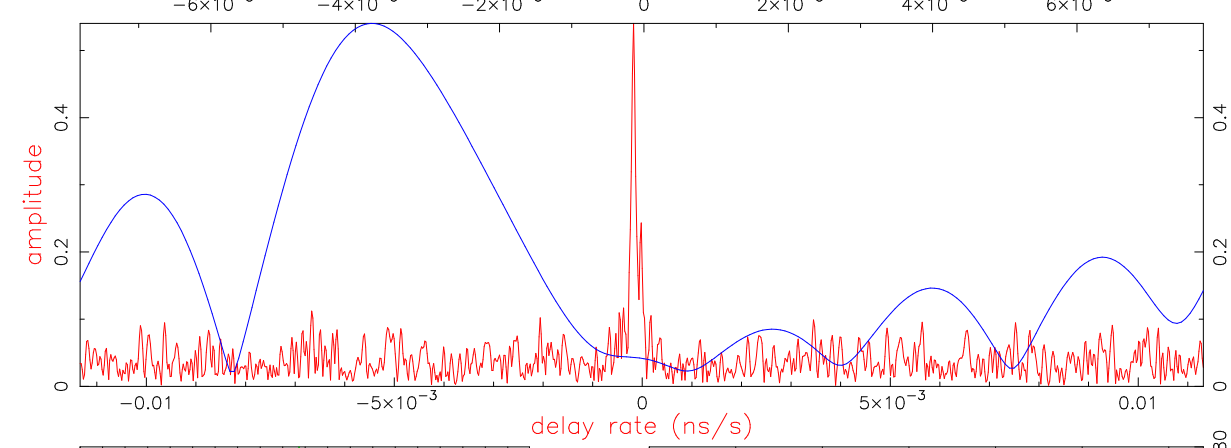
ph/seg (deg) 32.1 5.7 Search (1024X32) 1.317 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.1 9.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 37.3 3.6 Inc. seg. avg. 1.548 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 18.8 6.2 Inc. frq. avg. 1.513 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 93.6 el 46.2 pa -38.5 P: az 59.7 el 22.8 pa -60.1 u,v (fr/asec) 3262.320 686.046 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//ZP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//ZP.W.52.3MP1EA

Mk4/DiFX fourfit 3.25 rev 0

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2013+370.3MP1EA, No0232, ZP

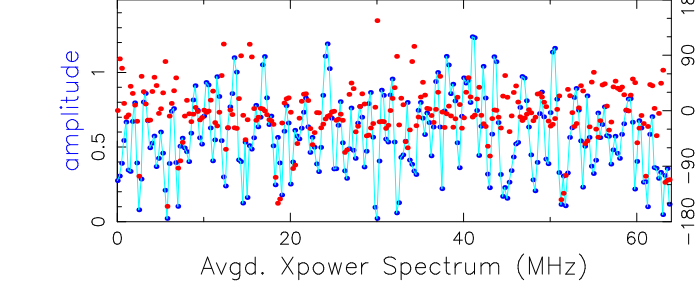
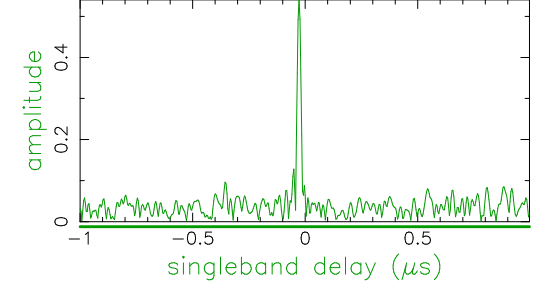
MEṬSAHOV - PICOVEL, fgroup W, pol LR



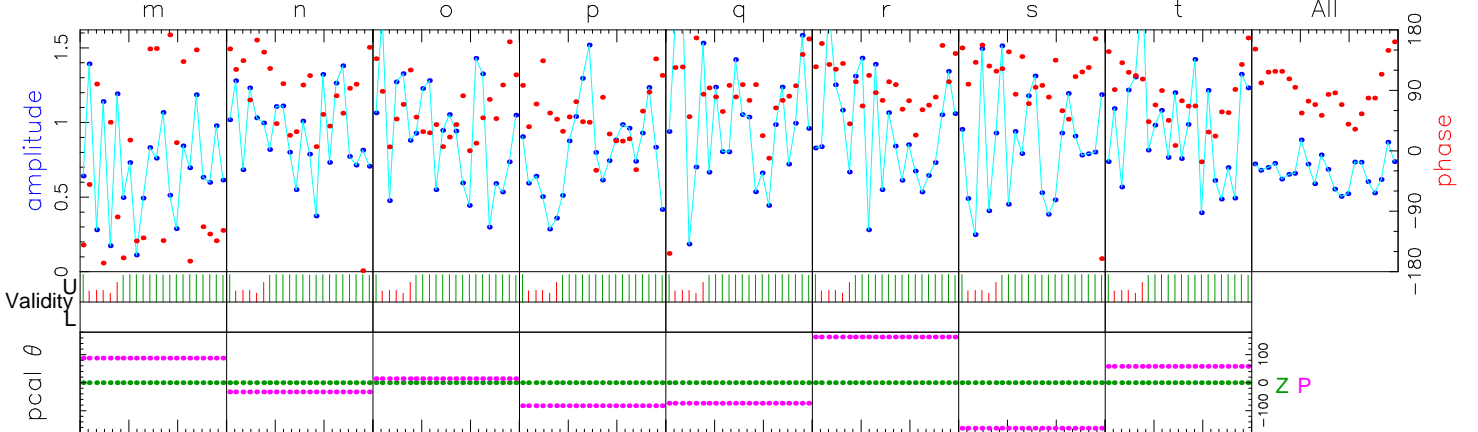
Fringe quality 8

SNR 18.5
Int time 157.041
Amp 0.540
Phase 87.7
PFD 0.0e+00
Delays (us)
SBD -0.027311
MBD -0.003769
Fringe rate (Hz) -0.014904
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c241c
Exper # 1234
Yr:day 2024:112
Start 004000.00
Stop 004300.22
FRT 004130.00
Corr/FF/build
2024:351:093049
2025:041:102655
2024:113:095956
RA & Dec (J2000)
20h15m28.729786s
+37°10'59.514736"



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



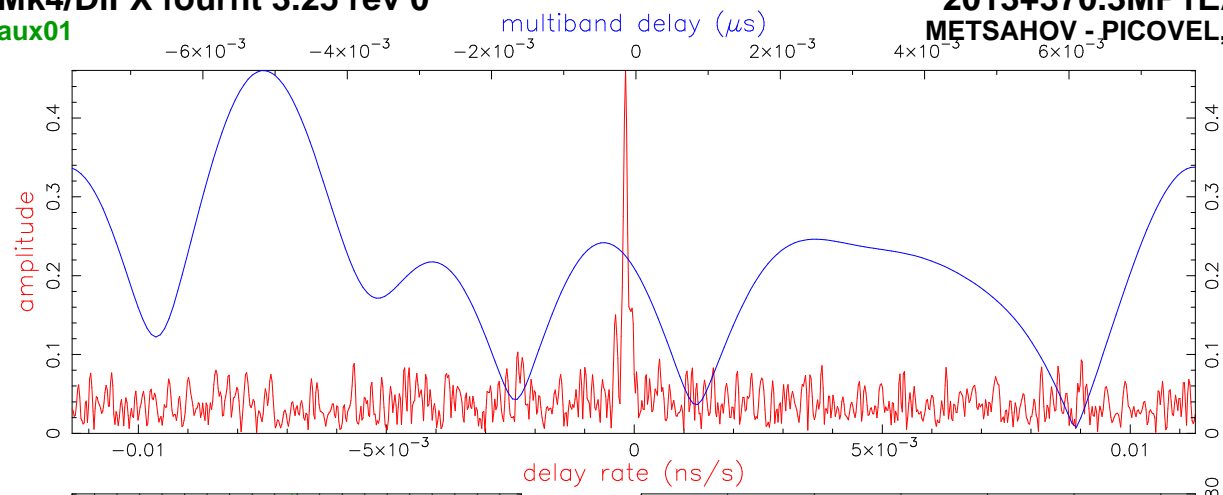
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
	-155.1	90.2	53.6	48.9	95.4	96.6	114.2	77.2	Phase	87.7		
	0.4	0.7	0.7	0.7	0.8	0.8	0.7	0.7	Ampl.	0.7		
	247.7	249.3	249.7	250.1	250.4	249.7	250.0	249.5	Sbd box	250.0		
U/L	328/0	328/0	328/0	328/0	328/0	328/0	328/0	328/0	APs used			
Z	0	0	0	0	0	0	0	0	PC freqs			
P	0	0	0	0	0	0	0	0	PC freqs			
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
Z:P	0:88	0:33	0:15	0:-82	0:-74	0:163	0:-163	0:58	Manl PC			
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp			
P	1000	1000	1000	1000	1000	1000	1000	1000				
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Tracks			
Group delay (usec) (SBD)	7.07373795733E+03			Apriori delay (usec)	7.07377297679E+03			Resid mbdelay (usec)	-3.76946E-03	+/- 5.9E-05		
Sband delay (usec)	7.07374566604E+03			Apriori clock (usec)	1.1226921E+00			Resid sbdelay (usec)	-2.73107E-02	+/- 4.7E-04		
Phase delay (usec)	7.07377297961E+03			Apriori clockrate (us/s)	1.1622864E-08			Resid phdelay (usec)	2.82867E-06	+/- 2.0E-07		
Delay rate (us/s)	-4.54959008627E-01			Apriori rate (us/s)	-4.54958835611E-01			Resid rate (us/s)	-1.73016E-07	+/- 2.1E-09		
Total phase (deg)		167.0		Apriori accel (us/s/s)	-1.94889397974E-05			Resid phase (deg)	87.7	+/- 6.2		
	RMS	Theor.	Amplitude	0.540 +/- 0.029	Pcal mode: MANUAL, MANUAL			PC period (AP's)	5, 5			
ph/seg (deg)	36.2	14.0	Search (1024X32)	0.533	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000	1.000		
amp/seg (%)	31.5	24.5	Interp.	0.000	Bits/sample: 2x2			SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	53.8	8.8	Inc. seg. avg.	0.653	Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us			dr window (ns/s)	-0.011	0.011		
amp/frq (%)	29.3	15.3	Inc. frq. avg.	0.651	Data rate(Mb/s): 2048			nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00
Z: az 93.6 el 46.2 pa -38.5			P: az 59.7 el 22.8 pa -60.1		u, v (fr/asec) 3262.320 686.046					simultaneous interpolator		
Control file: cf_1234_gmva			Input file: /Exps/c241c/v2/3mm/1234/No0232//ZP..3MP1EA		Output file: /Exps/c241c/v2/3mm/1234/No0232//ZP.W.69.3MP1EA							

Mk4/DiFX fourfit 3.25 rev 0

aux01

2013+370.3MP1EA, No0232, ZP

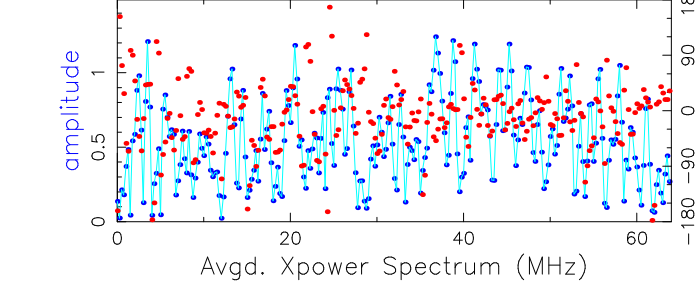
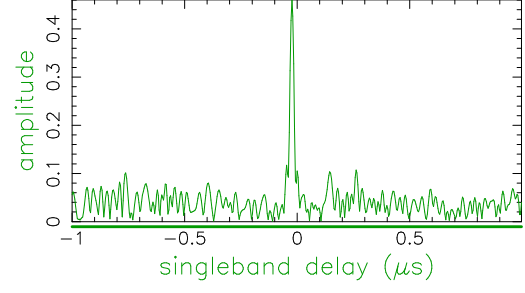
METSAHOV - PICOVEL, fgroup W, pol RL



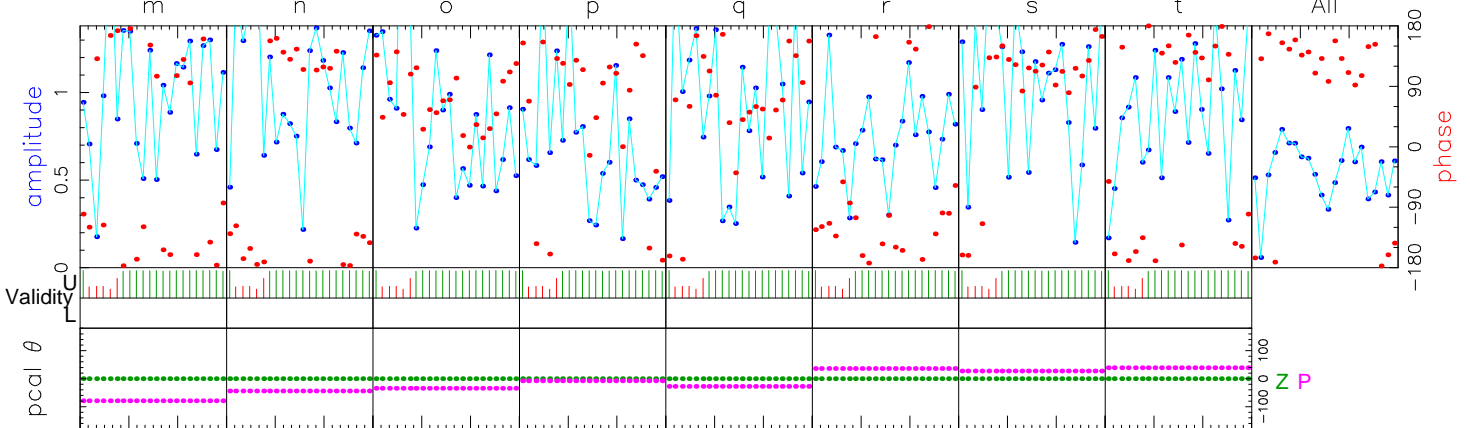
Fringe quality 7

SNR 15.8
 Int time 157.041
 Amp 0.460
 Phase 145.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.023191
 MBD -0.005156
 Fringe rate (Hz)
 -0.014883
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c241c
 Exper # 1234
 Yr:day 2024:112
 Start 004000.00
 Stop 004300.22
 FRT 004130.00
 Corr/FF/build
 2024:351:093049
 2025:041:102701
 2024:113:095956
 RA & Dec (J2000)
 20h15m28.729786s
 +37°10'59.514736"



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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	328/0	328/0	328/0	328/0	328/0	328/0	328/0	328/0		
Z	0	0	0	0	0	0	0	0		
P	0	0	0	0	0	0	0	0		
Z:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:P	0:-79	0:-44	0:-34	0:-8	0:-28	0:36	0:27	0:39		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
P	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec) (SBD) 7.07375219598E+03 Apriori delay (usec) 7.07377297679E+03 Resid mbdelay (usec) -5.15580E-03 +/- 6.9E-05
 Sband delay (usec) 7.07374978629E+03 Apriori clock (usec) 1.1226921E+00 Resid sbdelay (usec) -2.31905E-02 +/- 5.5E-04
 Phase delay (usec) 7.07377298147E+03 Apriori clockrate (us/s) 1.1622864E-08 Resid phdelay (usec) 4.68262E-06 +/- 2.3E-07
 Delay rate (us/s) -4.54959008387E-01 Apriori rate (us/s) -4.54958835611E-01 Resid rate (us/s) -1.72776E-07 +/- 2.4E-09
 Total phase (deg) 224.5 Apriori accel (us/s/s) -1.94889397974E-05 Resid phase (deg) 145.2 +/- 7.3

ph/seg (deg) 34.6 16.4 Search (1024X32) 0.444 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 37.4 28.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.0 10.3 Inc. seg. avg. 0.531 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.0 17.9 Inc. frq. avg. 0.637 Data rate(MSamp/s): 128 MBpts 32 Amb 0.016 us dr window (ns/s) -0.011 0.011
 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

Z: az 93.6 el 46.2 pa -38.5 P: az 59.7 el 22.8 pa -60.1 u, v (fr/asec) 3262.320 686.046 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c241c/v2/3mm/1234/No0232//ZP..3MP1EA Output file: /Exps/c241c/v2/3mm/1234/No0232//ZP.W.77.3MP1EA