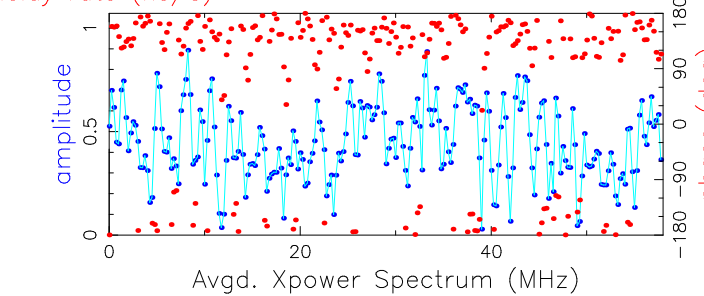
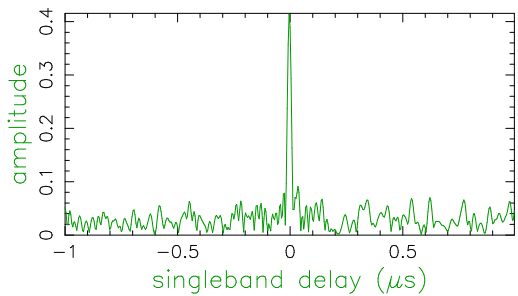
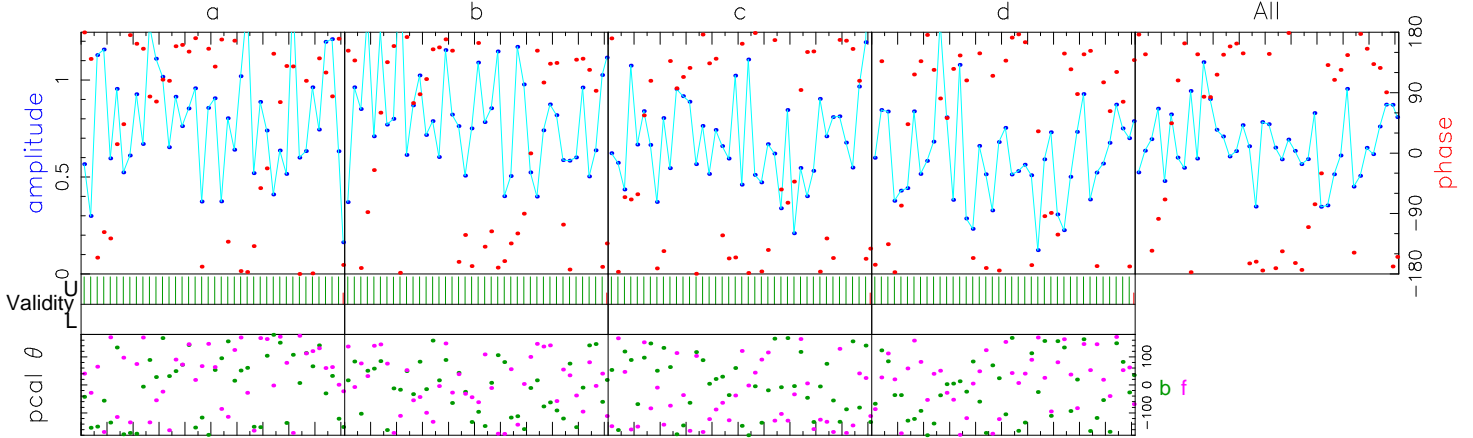


Fringe quality 9  
SNR 18.7  
Int time 598.812  
Amp 0.416  
Phase 160.9  
PFD 0.0e+00  
Delays (us)  
SBD -0.003449  
MBD -0.004131  
Fringe rate (Hz)  
-0.005814  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. mg002  
Exper # 16383  
Yr:day 2017:093  
Start 061500.00  
Stop 062500.06  
FRT 062000.00  
Corr/FF/build  
2017:215:224851  
2017:243:193510  
2017:170:130423  
RA & Dec (J2000)  
08h54m48.8749s  
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



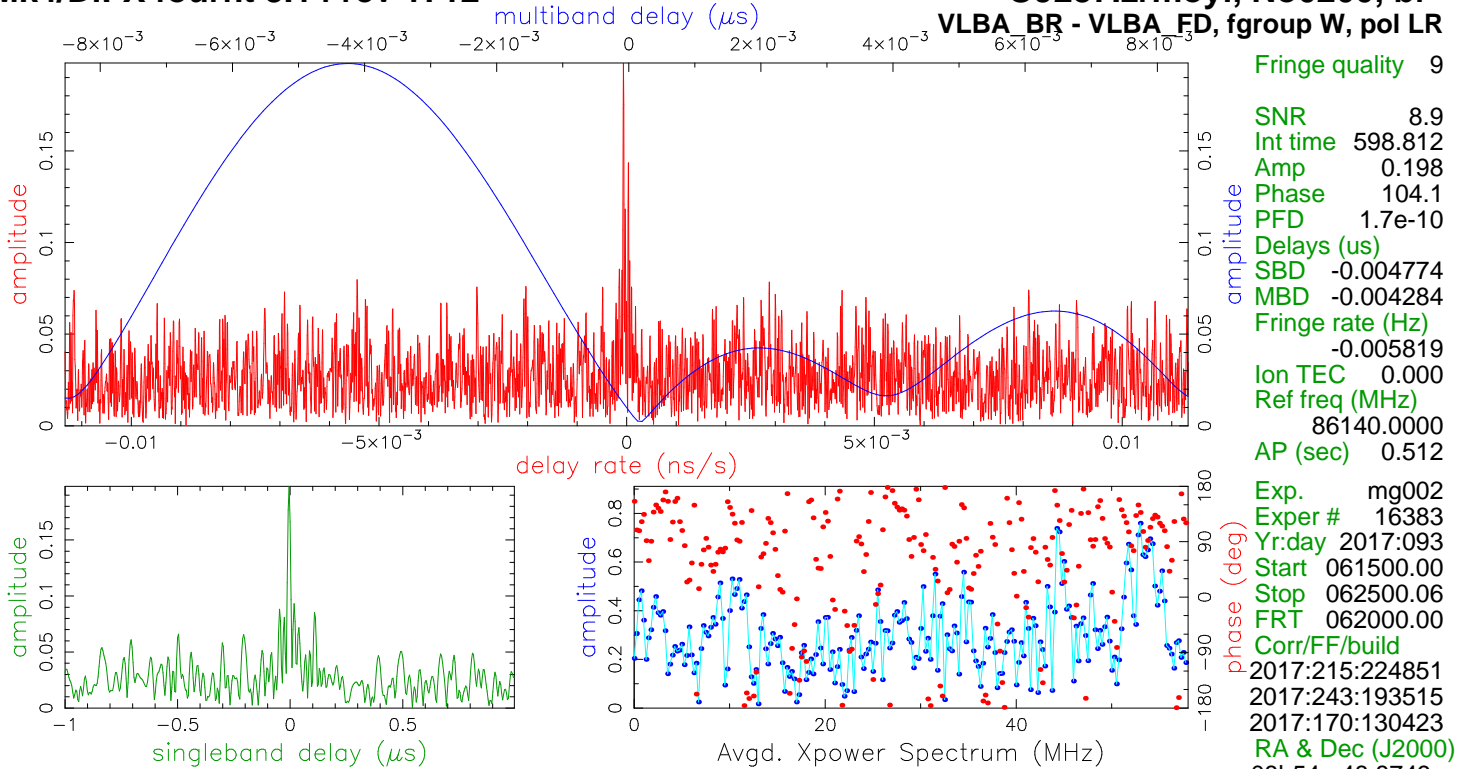
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
b	3890	296	1703	3109	APs used	
f	3890	296	1703	3109	PC freqs	
b:f	0:0	0:0	0:0	0:0	PC phase	
b	1000	1000	1000	1000	Manl PC	
f	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	Tracks	

Group delay (usec)(sbd)	1.57394050857E+03	Apriori delay (usec)	1.57394463977E+03	Resid mbdelay (usec)	-4.13120E-03	+/-	1.3E-04
Sband delay (usec)	1.57394119067E+03	Apriori clock (usec)	-3.6590748E+00	Resid sbdelay (usec)	-3.44910E-03	+/-	5.1E-04
Phase delay (usec)	1.57394464496E+03	Apriori clockrate (us/s)	4.3343438E-07	Resid phdelay (usec)	5.18970E-06	+/-	2.0E-07
Delay rate (us/s)	4.12958154152E-01	Apriori rate (us/s)	4.12958221650E-01	Resid rate (us/s)	-6.74976E-08	+/-	5.7E-10
Total phase (deg)	258.1	Apriori accel (us/s/s)	6.97403623443E-07	Resid phase (deg)	160.9	+/-	6.1

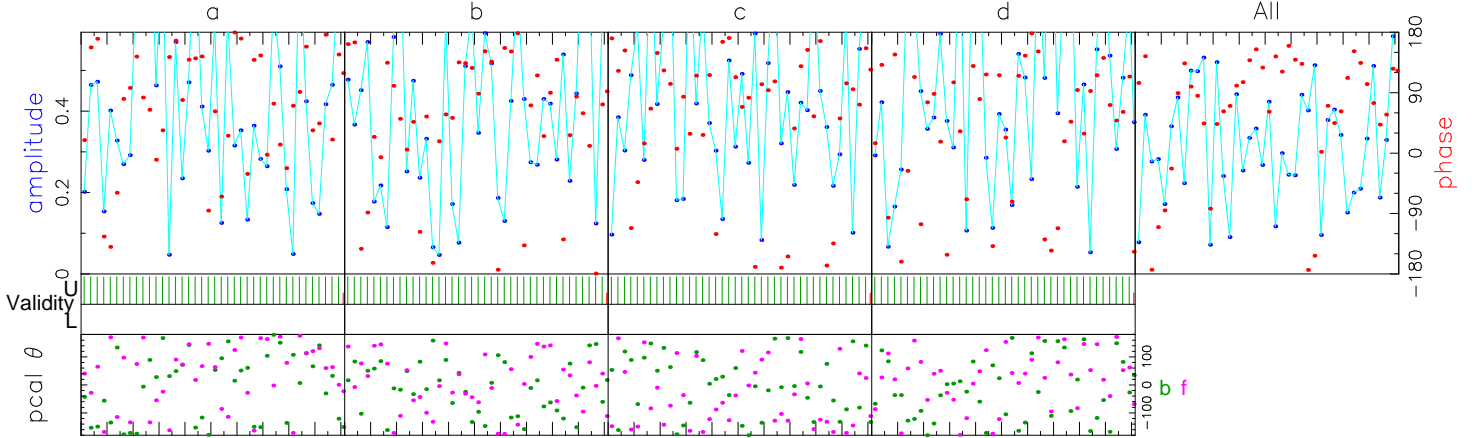
ph/seg (deg)	58.7	Theor.	19.6	Amplitude	0.416 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	73.5	Search (4096X16)	0.411	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	19.4	Interp.	0.000	Inc. seg. avg.	0.634	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	10.5	Inc. frq. avg.	0.423	Inc. frq. avg.	0.423	Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
						Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00

b: az 233.3 el 52.1 pa 34.8 f: az 267.6 el 46.2 pa 66.3 u,v (fr/asec) -2517.786 1995.851 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf.W.5.zrmoyi





Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



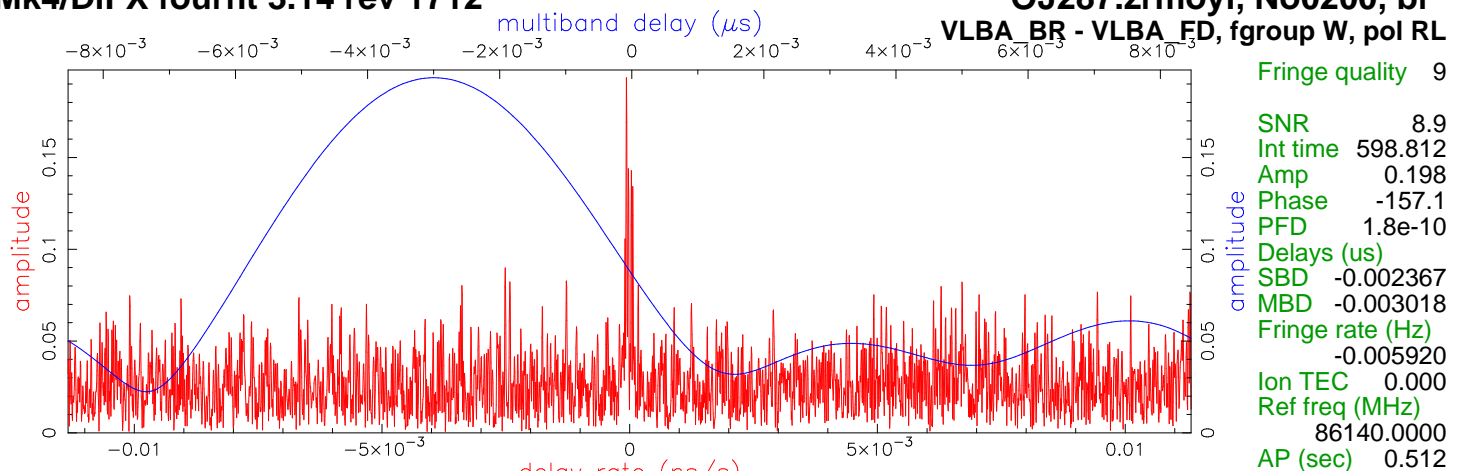
86151.11	86209.70	86268.30	86326.89	86371.11	86429.70
102.1	101.4	110.9	100.4	104.1	104.1
0.2	0.2	0.2	0.2	0.2	0.2
232.0	232.2	231.9	236.6	231.9	231.9
U/L 1172/0	1172/0	1172/0	1172/0	1172/0	1172/0
b 3890	296	1703	3109	3109	3109
f 3890	296	1703	3109	3109	3109
b:f 0:0	0:0	0:0	0:0	0:0	0:0
b:f 0:0	0:0	0:0	0:0	0:0	0:0
b 1000	1000	1000	1000	1000	1000
f 1000	1000	1000	1000	1000	1000
b W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
f W00UR	W01UR	W02UR	W03UR	W04UR	W05UR

Group delay (usec)(sbd)	1.57394035606E+03	Apriori delay (usec)	1.57394463977E+03	Resid mbdelay (usec)	-4.28371E-03	+/-	2.7E-04
Sband delay (usec)	1.57393986543E+03	Apriori clock (usec)	-3.6590748E+00	Resid sbdelay (usec)	-4.77434E-03	+/-	1.1E-03
Phase delay (usec)	1.57394464313E+03	Apriori clockrate (us/s)	4.3343438E-07	Resid phdelay (usec)	3.35807E-06	+/-	4.1E-07
Delay rate (us/s)	4.12958154096E-01	Apriori rate (us/s)	4.12958221650E-01	Resid rate (us/s)	-6.75535E-08	+/-	1.2E-09
Total phase (deg)	201.3	Apriori accel (us/s/s)	6.97403623443E-07	Resid phase (deg)	104.1	+/-	12.9

ph/seg (deg)	65.7	Theor.	41.1	Amplitude	0.198 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	95.4	Search (4096X16)	0.196	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	6.0	Interp.	0.000	Inc. seg. avg.	0.256	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	11.3	Inc. frq. avg.	0.193	Inc. frq. avg.	0.193	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
						Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00
						t_cohere	infinite		

b: az 233.3 el 52.1 pa 34.8 f: az 267.6 el 46.2 pa 66.3 u,v (fr/asec) -2517.786 1995.851 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf.W.7.zrmoyi



Fringe quality 9

SNR 8.9

Int time 598.812

Amp 0.198

Phase -157.1

PFD 1.8e-10

Delays (us)

SBD -0.002367

MBD -0.003018

Fringe rate (Hz)

-0.005920

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 061500.00

Stop 062500.06

FRT 062000.00

Corr/FF/build

2017:215:224851

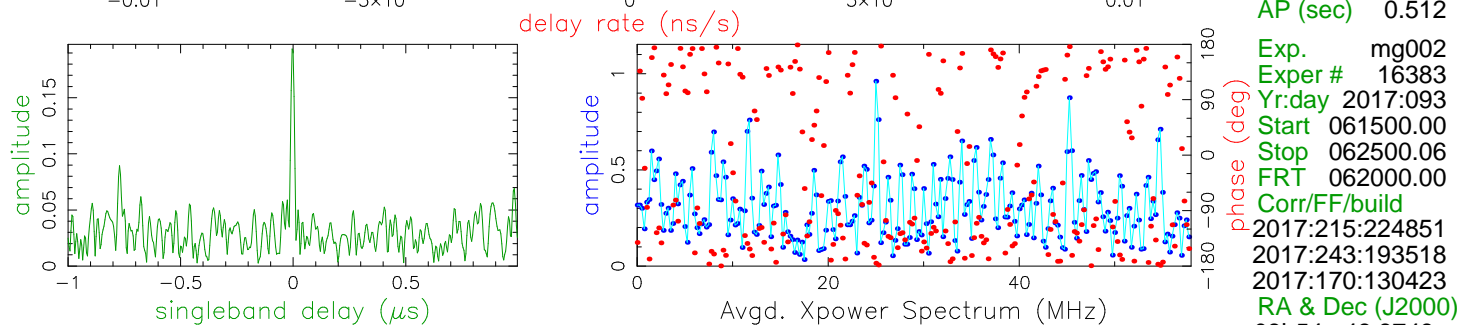
2017:243:193518

2017:170:130423

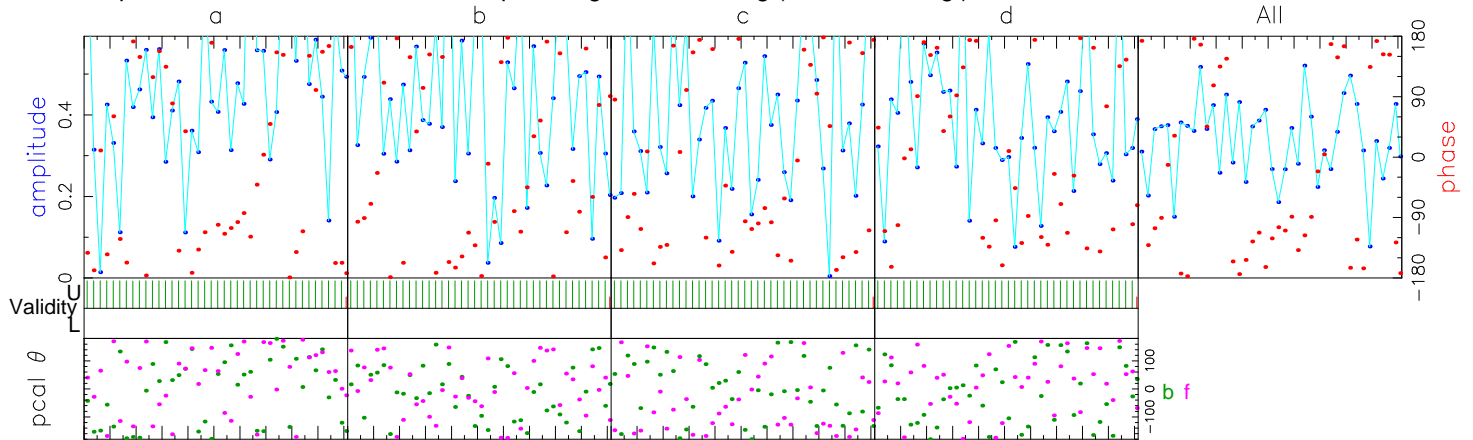
RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"



Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



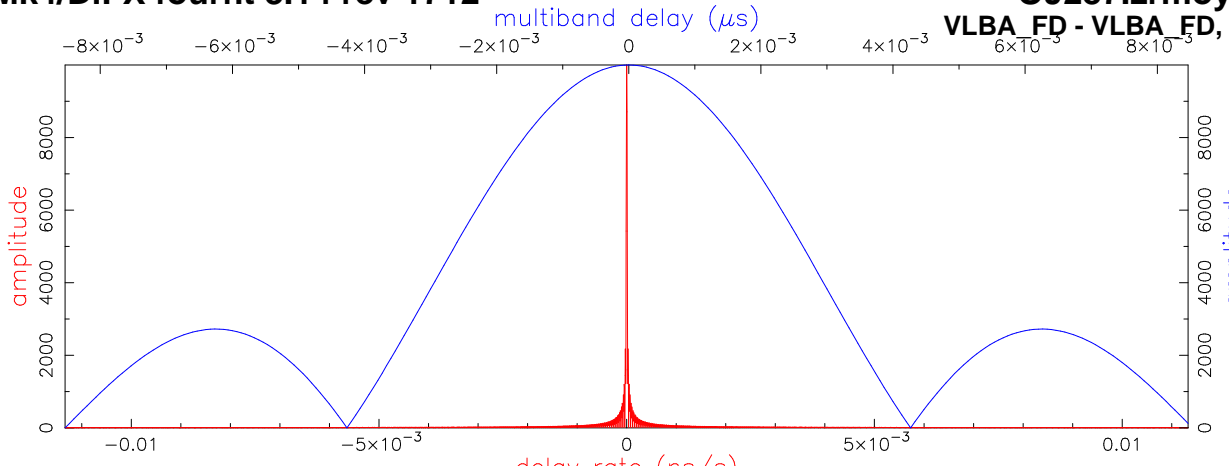
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-158.7	-157.5	-151.5	-161.8	Phase	-157.1
	0.3	0.2	0.2	0.1	Ampl.	0.2
	232.4	232.3	232.2	233.3	Sbd box	232.5
U/L	1172/0	1172/0	1172/0	1172/0	APs used	
b	3890	296	1703	3109	PC freqs	
f	3890	296	1703	3109	PC freqs	
b:f	0:0	0:0	0:0	0:0	PC phase	
b:f	0:0	0:0	0:0	0:0	Manl PC	
b	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	1.57394162179E+03	Apriori delay (usec)	1.57394463977E+03	Resid mbdelay (usec)	-3.01798E-03	+/- 2.7E-04
Sband delay (usec)	1.57394227315E+03	Apriori clock (usec)	-3.6590748E+00	Resid sbdelay (usec)	-2.36662E-03	+/- 1.1E-03
Phase delay (usec)	1.57394463471E+03	Apriori clockrate (us/s)	4.3343438E-07	Resid phdelay (usec)	-5.06585E-06	+/- 4.1E-07
Delay rate (us/s)	4.12958152924E-01	Apriori rate (us/s)	4.12958221650E-01	Resid rate (us/s)	-6.87251E-08	+/- 1.2E-09
Total phase (deg)		Apriori accel (us/s/s)	6.97403623443E-07	Resid phase (deg)	-157.1	+/- 12.9

	RMS	Theor.	Amplitude	0.198 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	68.2	41.2	Search (4096X16)	0.188	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	86.5	71.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	5.3	12.9	Inc. seg. avg.	0.269	Sample rate(MSamp/s): 116		dr window (ns/s)	-0.011 0.011
amp/frq (%)	27.9	22.5	Inc. frq. avg.	0.189	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00

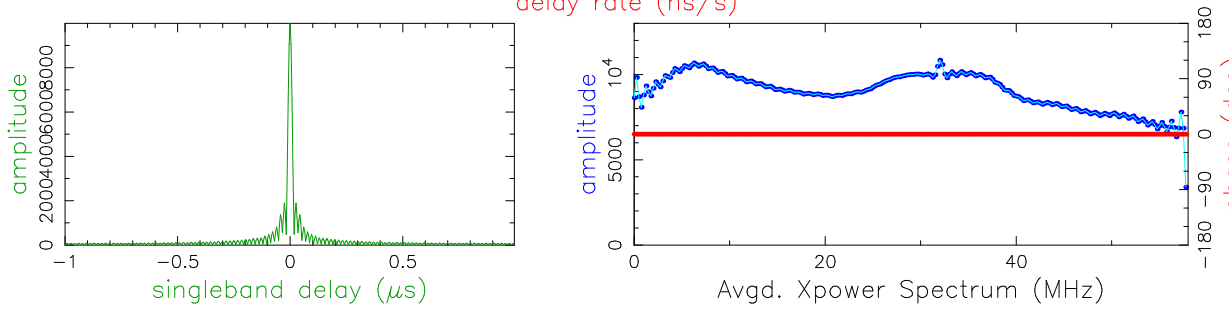
b: az 233.3 el 52.1 pa 34.8 f: az 267.6 el 46.2 pa 66.3 u,v (fr/asec) -2517.786 1995.851 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/bf.W.8.zrmoyi



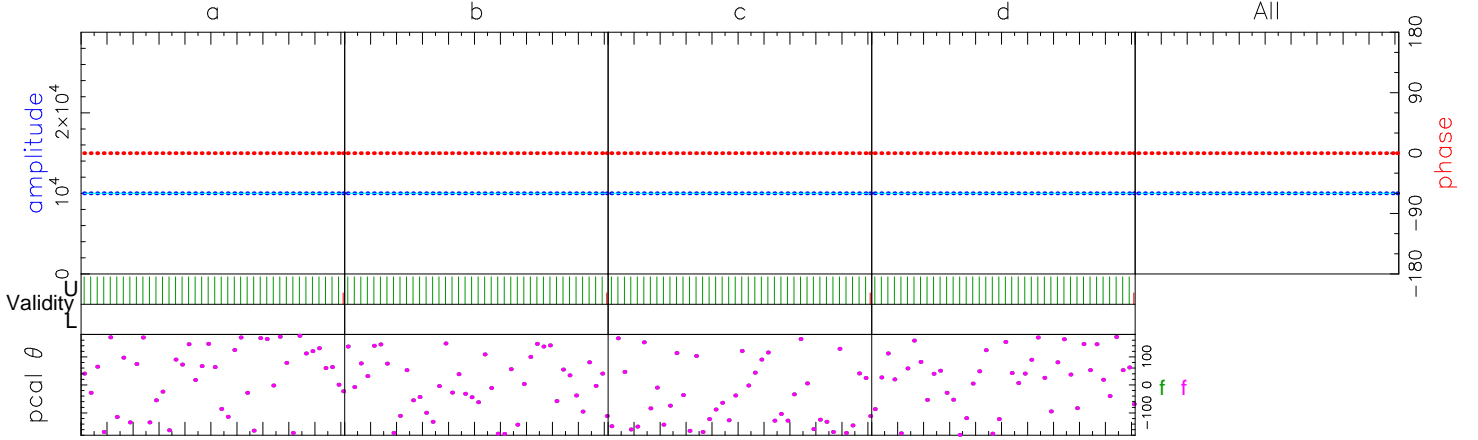
Fringe quality 9

SNR 450665.2  
 Int time 599.378  
 Amp 9999.933  
 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. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193635  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
f:f	0:0	0:0	0:0	0:0	PC freqs	
f:f	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	ManI PC	
f	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	Tracks	

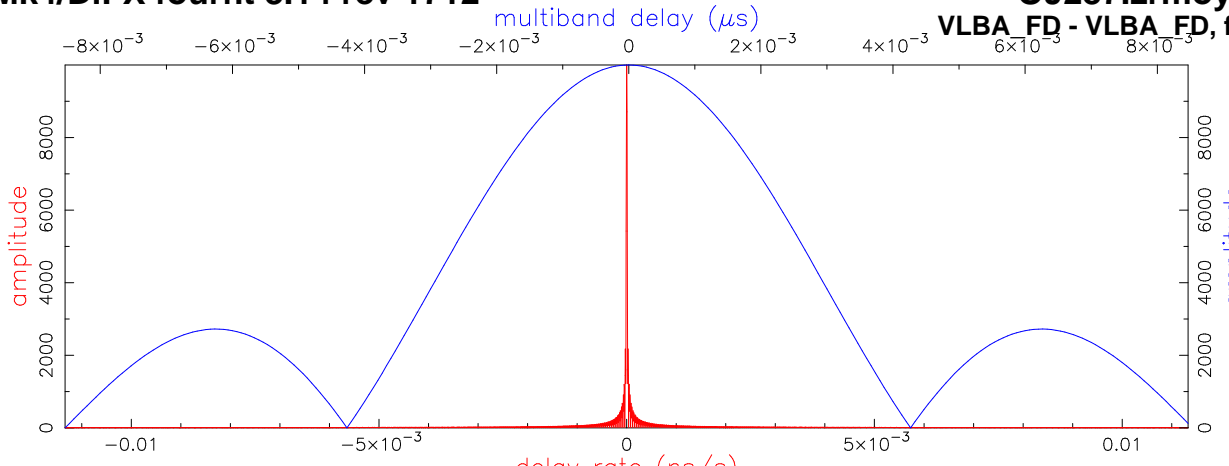
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.4E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	8.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.4E-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	Theor.	0.0	Amplitude	9999.933 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	Search (4096X16)	9999.933		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
amp/frq (%)	0.0	0.0	Inc. seg. avg.	10000.000		Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011
			Inc. frq. avg.	9999.933		Data rate(Mb/s):	928	ion window (TEC)	0.00 0.00

f: az 267.6 el 46.2 pa 66.3 f: az 267.6 el 46.2 pa 66.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/ff..zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/ff.W.33.zrmoyi

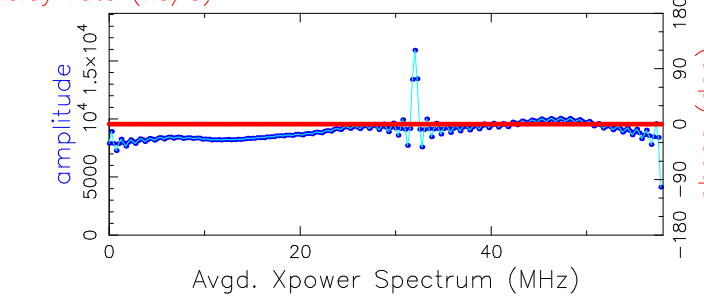
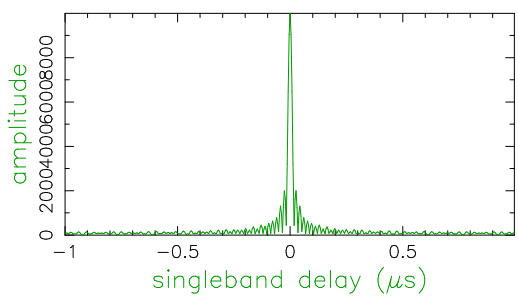




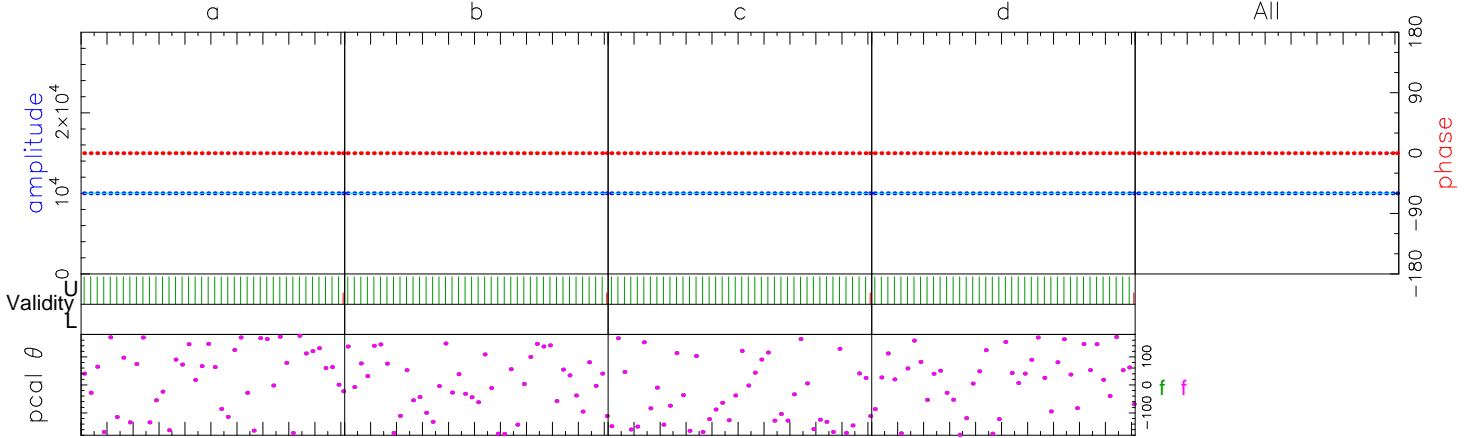
Fringe quality 9

SNR 450665.2  
 Int time 599.378  
 Amp 9999.932  
 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. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193637  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"



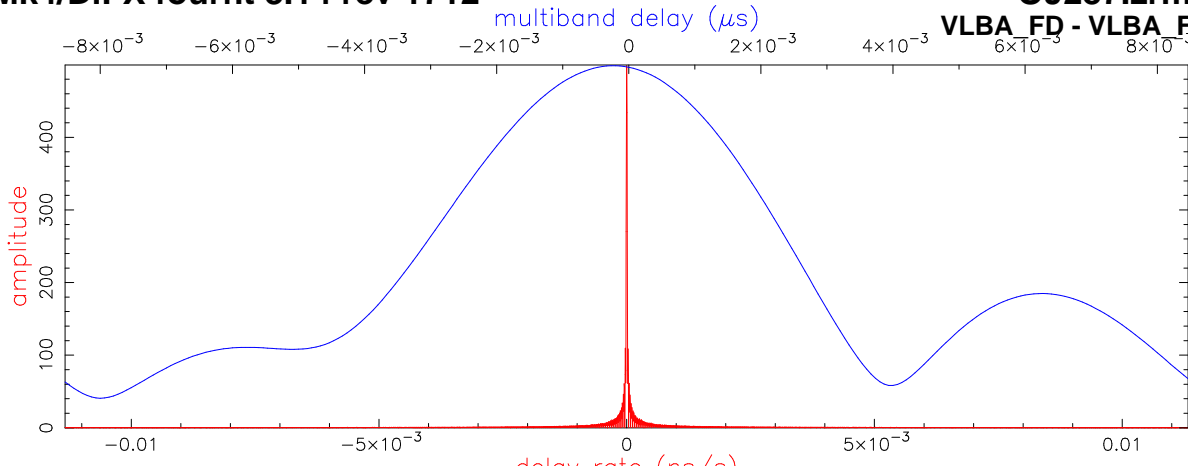
Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
f:f	0:0	0:0	0:0	0:0	PC freqs	
f:f	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	Mani PC	
f	1000	1000	1000	1000	PC amp	
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	Tracks	
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/- 5.4E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/- 2.1E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/- 8.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/- 2.4E-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 9999.932 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.0 0.0 Search (4096X16) 9999.932 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) -0.009 0.009  
 amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 9999.933 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

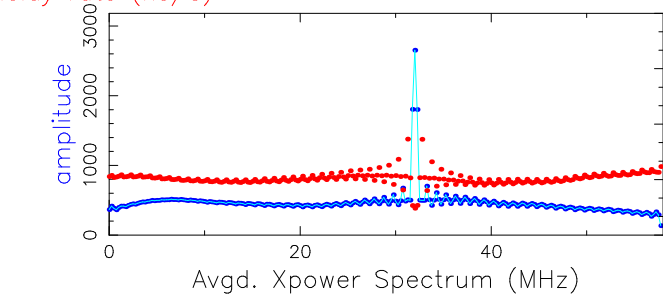
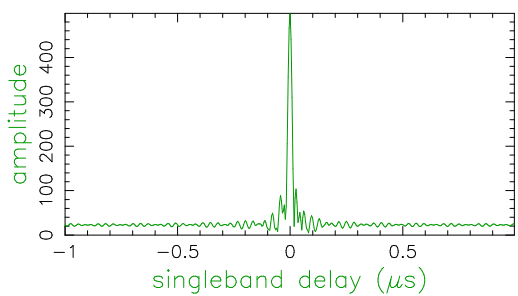
f: az 267.6 el 46.2 pa 66.3 f: az 267.6 el 46.2 pa 66.3 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/ff..zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/ff.W.34.zrmoyi



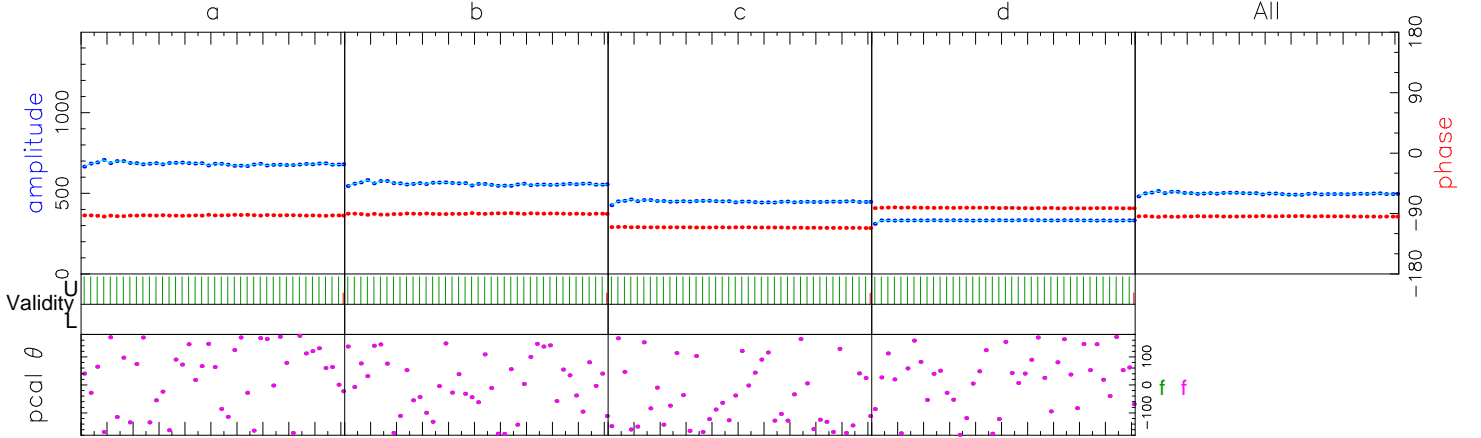
Fringe quality 7

SNR 22513.2  
 Int time 599.378  
 Amp 499.551  
 Phase -94.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.000622  
 MBD -0.000232  
 Fringe rate (Hz) 0.000001  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

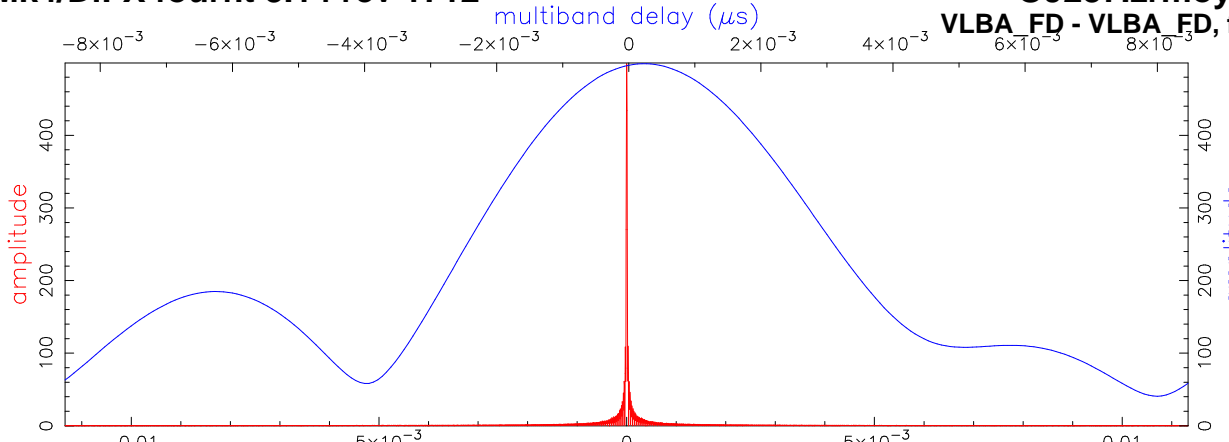
Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193639  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"



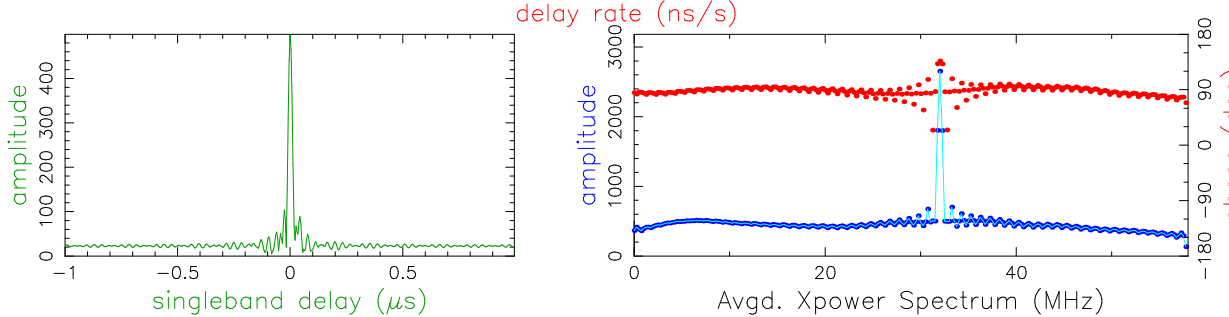
Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



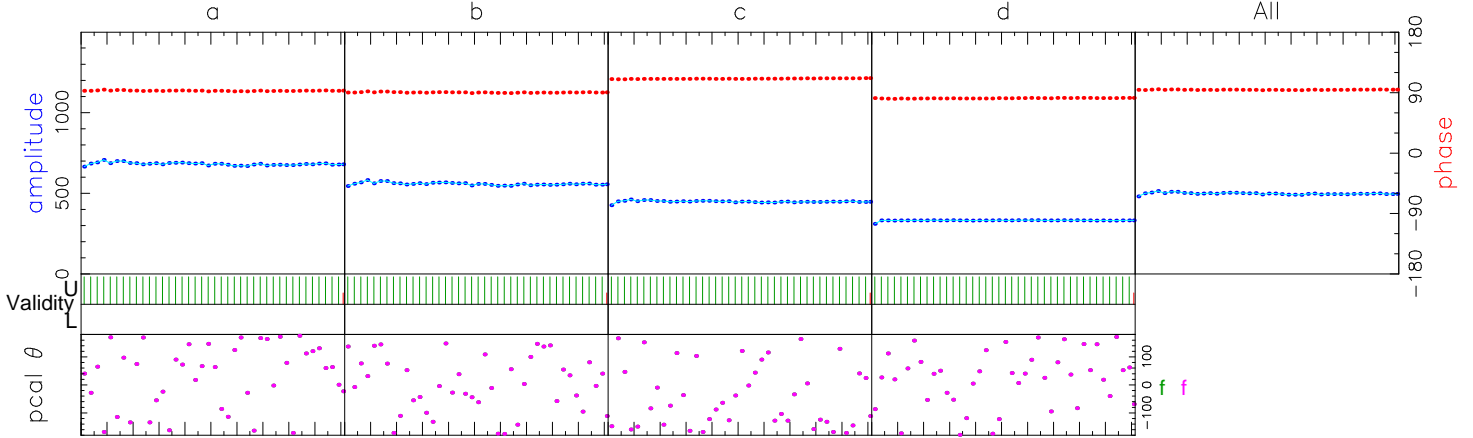
	86151.11	86209.70	86268.30	86326.89	86385.48	All		
86151.11	-92.8	-90.3	-110.7	-81.6	-94.2	-94.2		
682.5	558.8	449.1	332.0	505.6	505.6	505.6		
232.6	232.8	233.2	233.0	232.9	232.9	232.9		
U/L 1172/0	1172/0	1172/0	1172/0	1172/0				
f 3890	296	1703	3109					
f 3890	296	1703	3109					
f:f 0:0	0:0	0:0	0:0					
f:f 0:0	0:0	0:0	0:0					
f 1000	1000	1000	1000					
f 1000	1000	1000	1000					
f W00UL	W01UL	W02UL	W03UL					
f W00UR	W01UR	W02UR	W03UR					
Group delay (usec)(sbd)	-2.3210666667E-04	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	-2.32107E-04	+/- 1.1E-07		
Sband delay (usec)	-6.21517241379E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	-6.21517E-04	+/- 4.2E-07		
Phase delay (usec)	-3.03859674037E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-3.03860E-06	+/- 1.6E-10		
Delay rate (us/s)	1.20454795329E-11	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	1.20455E-11	+/- 4.7E-13		
Total phase (deg)	-94.2	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-94.2	+/- 0.0		
RMS	0.3	Theor.	0.0	Amplitude	499.551 +/- 0.022			
ph/seg (deg)	0.3	Search (4096X16)	496.460	Apriori mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	1.1	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	15.0	Inc. seg. avg.	498.595	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	26.0	Inc. frq. avg.	505.583	Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011	
f: az 267.6 el 46.2 pa 66.3	f: az 267.6 el 46.2 pa 66.3	u,v (fr/asec)	0.000 0.000	Data rate(Mb/s):	928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00
Control file: cf_1234	Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0200/ff.zrmoyi	Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0200/ff.W.35.zrmoyi						simultaneous interpolator



Fringe quality 7  
 SNR 22513.2  
 Int time 599.378  
 Amp 499.551  
 Phase 94.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000622  
 MBD 0.000232  
 Fringe rate (Hz)  
 -0.000001  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193642  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"



Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

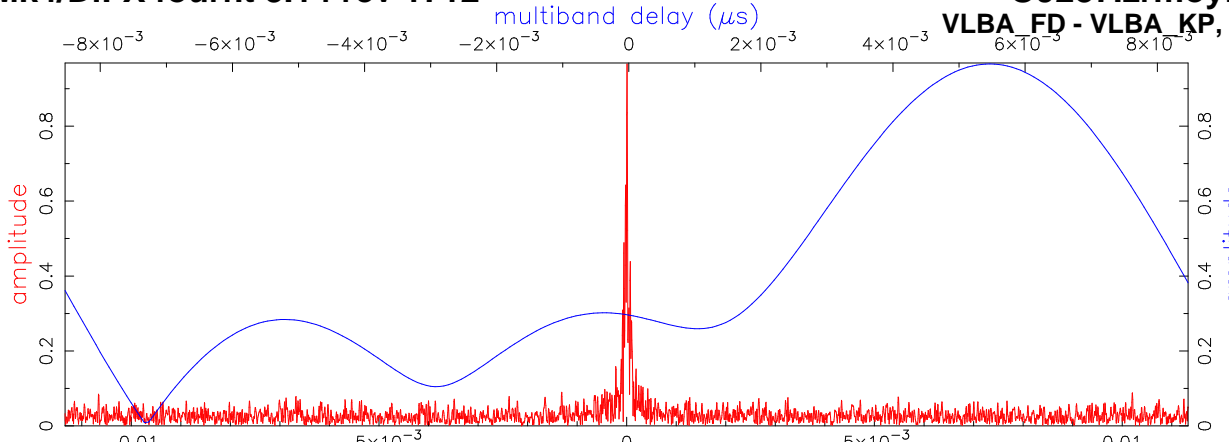


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	92.8	90.3	110.7	81.6	Phase	94.2
	682.5	558.8	449.1	332.0	Ampl.	505.6
	233.4	233.2	232.8	233.0	Sbd box	233.1
U/L	1172/0	1172/0	1172/0	1172/0	APs used	
f	3890	296	1703	3109	PC freqs	
f	3890	296	1703	3109	PC freqs	
f:f	0:0	0:0	0:0	0:0	PC phase	
f:f	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

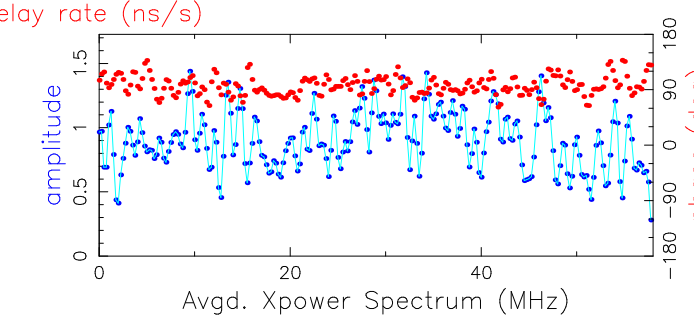
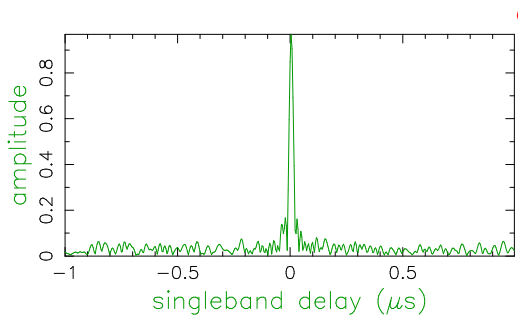
Group delay (usec)(sbd)	2.32106666667E-04	Apriori delay (usec)	0.00000000000E+00	Resid mbdelay (usec)	2.32107E-04	+/-	1.1E-07
Sband delay (usec)	6.21517241379E-04	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	6.21517E-04	+/-	4.2E-07
Phase delay (usec)	3.03859674036E-06	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	3.03860E-06	+/-	1.6E-10
Delay rate (us/s)	-1.20454795329E-11	Apriori rate (us/s)	0.00000000000E+00	Resid rate (us/s)	-1.20455E-11	+/-	4.7E-13
Total phase (deg)	94.2	Apriori accel (us/s/s)	0.00000000000E+00	Resid phase (deg)	94.2	+/-	0.0

ph/seg (deg)	0.3	0.0	Search (4096X16)	496.460	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
amp/seg (%)	1.1	0.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
ph/frq (deg)	15.0	0.0	Inc. seg. avg.	498.595	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009	
amp/frq (%)	26.0	0.0	Inc. frq. avg.	505.583	Sample rate(MSamp/s): 116		dr window (ns/s)	-0.011	0.011	
					Data rate(Mb/s): 928	nlags: 232	t_cohere infinite	ion window (TEC)	0.00	0.00



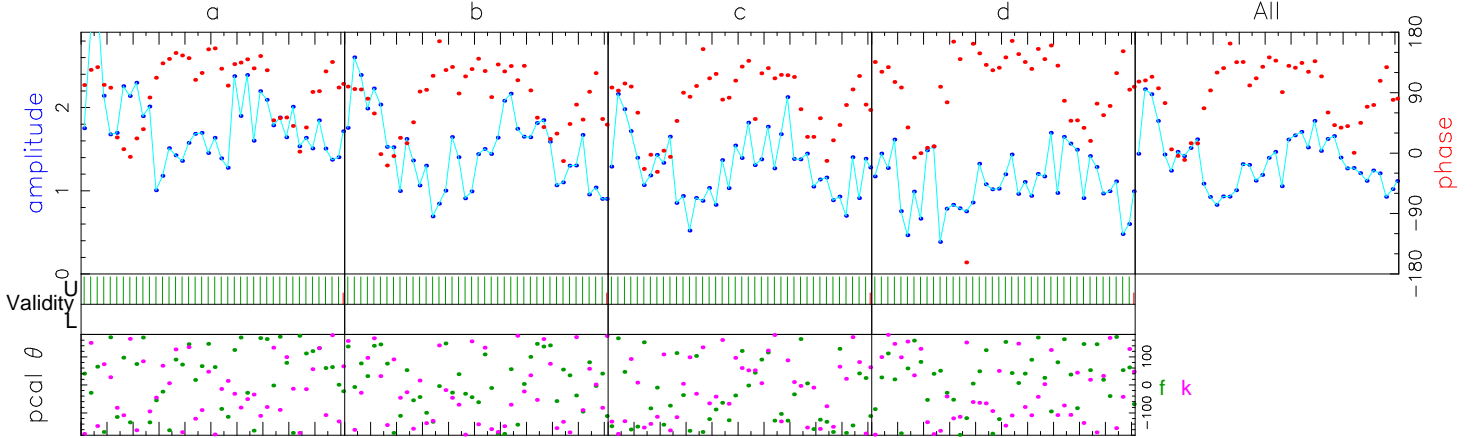


Fringe quality 5  
SNR 43.6  
Int time 598.815  
Amp 0.969  
Phase 91.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.005041  
MBD 0.005467  
Fringe rate (Hz)  
0.000641  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. mg002  
Exper # 16383  
Yr:day 2017:093  
Start 061500.00  
Stop 062500.06  
FRT 062000.00  
Corr/FF/build  
2017:215:224851  
2017:243:193646  
2017:170:130423  
RA & Dec (J2000)  
08h54m48.8749s  
+20°06'30.641"

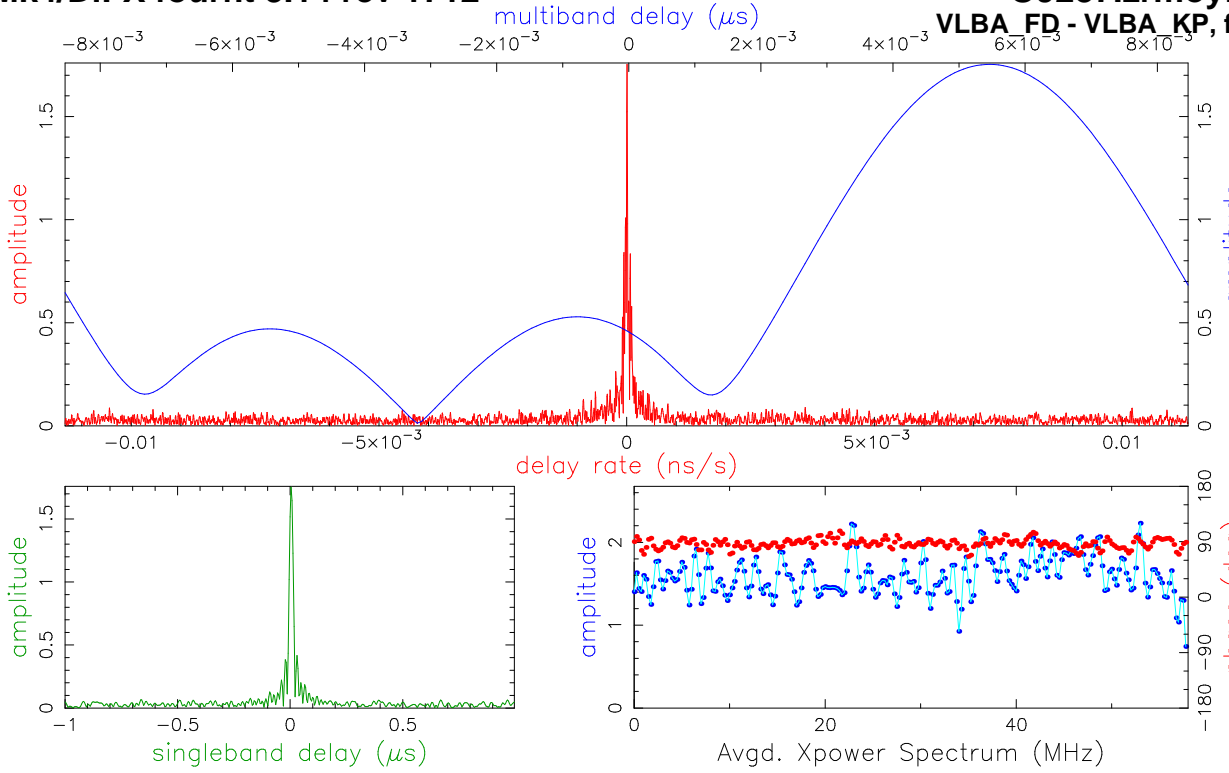
Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
k	3890	296	1703	3109	PC freqs	234.2
f:k	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	

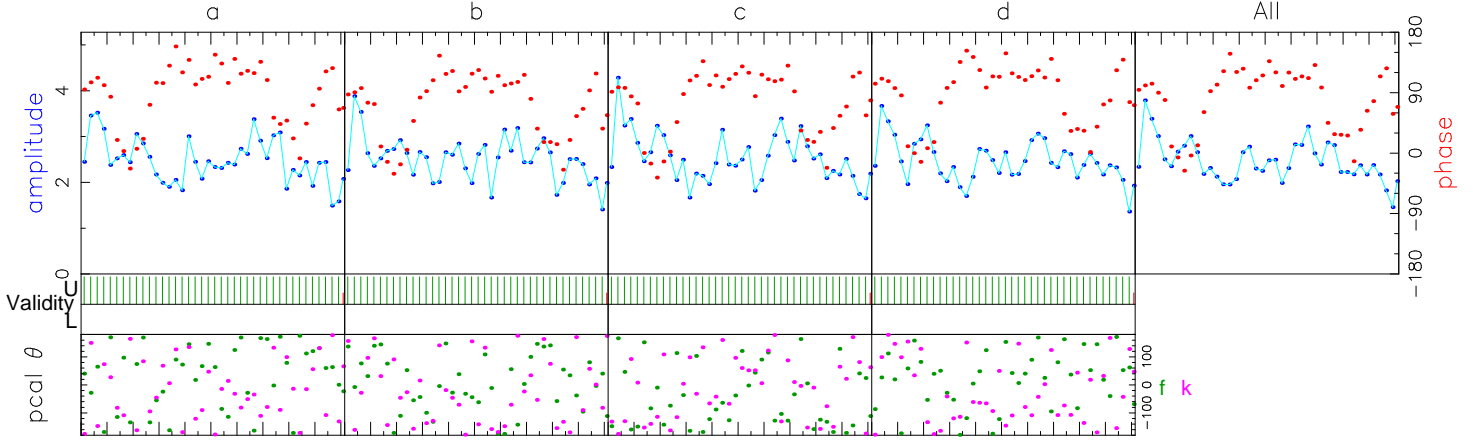
Group delay (usec)(sbd)	-1.59160787028E+03	Apriori delay (usec)	-1.59161333689E+03	Resid mbdelay (usec)	5.46661E-03	+/-	5.6E-05
Sband delay (usec)	-1.59160829551E+03	Apriori clock (usec)	2.2175534E+00	Resid sbdelay (usec)	5.04138E-03	+/-	2.2E-04
Phase delay (usec)	-1.59161333394E+03	Apriori clockrate (us/s)	-4.1878843E-07	Resid phdelay (usec)	2.94982E-06	+/-	8.5E-08
Delay rate (us/s)	-1.30035935335E-01	Apriori rate (us/s)	-1.30035942774E-01	Resid rate (us/s)	7.43950E-09	+/-	2.4E-10
Total phase (deg)	-210.8	Apriori accel (us/s/s)	7.71313045657E-06	Resid phase (deg)	91.5	+/-	2.6

ph/seg (deg)	46.7	Theor.	8.4	Amplitude	0.969 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	52.6	Search (4096X16)	0.948	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	mb window (us)	-0.009	0.009				
ph/frq (deg)	16.3	Inc. seg. avg.	1.351	Inc. frq. avg.	0.983	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	21.8	u, v (fr/asec)	809.336	50.759		Data rate (Mb/s):	928	nlags:	232	t_cohere	infinite	ion window (TEC)	0.00	0.00



Fringe quality 5  
 SNR 79.3  
 Int time 598.815  
 Amp 1.759  
 Phase 83.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.005134  
 MBD 0.005470  
 Fringe rate (Hz) 0.000684  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193648  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



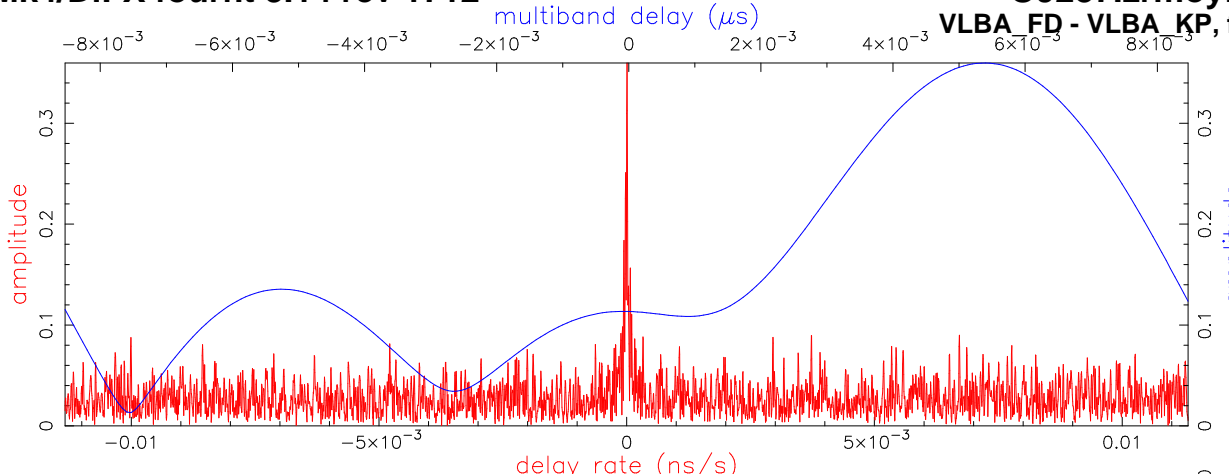
	86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
	91.1	74.3	78.2	89.3	89.3	Phase	83.2
	1.8	1.8	1.8	1.8	1.8	Ampl.	1.8
	234.2	234.0	234.4	234.1	234.1	Sbd box	234.2
U/L	1172/0	1172/0	1172/0	1172/0	1172/0	APs used	
f	3890	296	1703	3109	3109	PC freqs	
k	3890	296	1703	3109	3109	PC freqs	
f:k	0:0	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W03UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
						Chan ids	
						Tracks	

Group delay (usec)(sbd)	-1.59160786645E+03	Apriori delay (usec)	-1.59161333689E+03	Resid mbdelay (usec)	5.47043E-03	+/-	3.1E-05
Sband delay (usec)	-1.59160820282E+03	Apriori clock (usec)	2.2175534E+00	Resid sbdelay (usec)	5.13407E-03	+/-	1.2E-04
Phase delay (usec)	-1.59161333420E+03	Apriori clockrate (us/s)	-4.1878843E-07	Resid phdelay (usec)	2.68372E-06	+/-	4.7E-08
Delay rate (us/s)	-1.30035934830E-01	Apriori rate (us/s)	-1.30035942774E-01	Resid rate (us/s)	7.94364E-09	+/-	1.3E-10
Total phase (deg)	-219.0	Apriori accel (us/s/s)	7.71313045657E-06	Resid phase (deg)	83.2	+/-	1.4

ph/seg (deg)	RMS 46.6	Theor. 4.6	Amplitude 1.759 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	47.5	8.1	Search (4096X16) 1.705	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	10.1	1.4	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	0.5	2.5	Inc. seg. avg. 2.462	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 1.766	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		

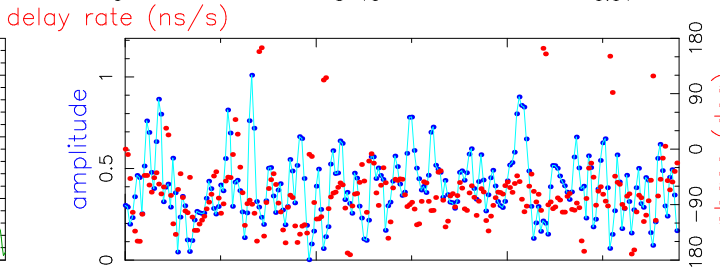
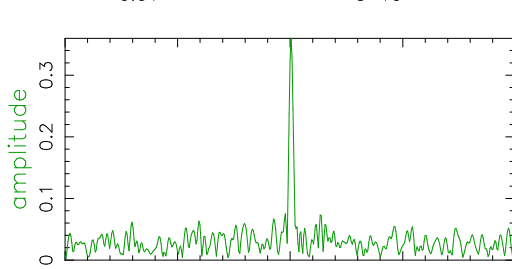
f: az 267.6 el 46.2 pa 66.3 k: az 261.3 el 52.6 pa 63.5 u,v (fr/asec) 809.336 50.759 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk.W.38.zrmoyi



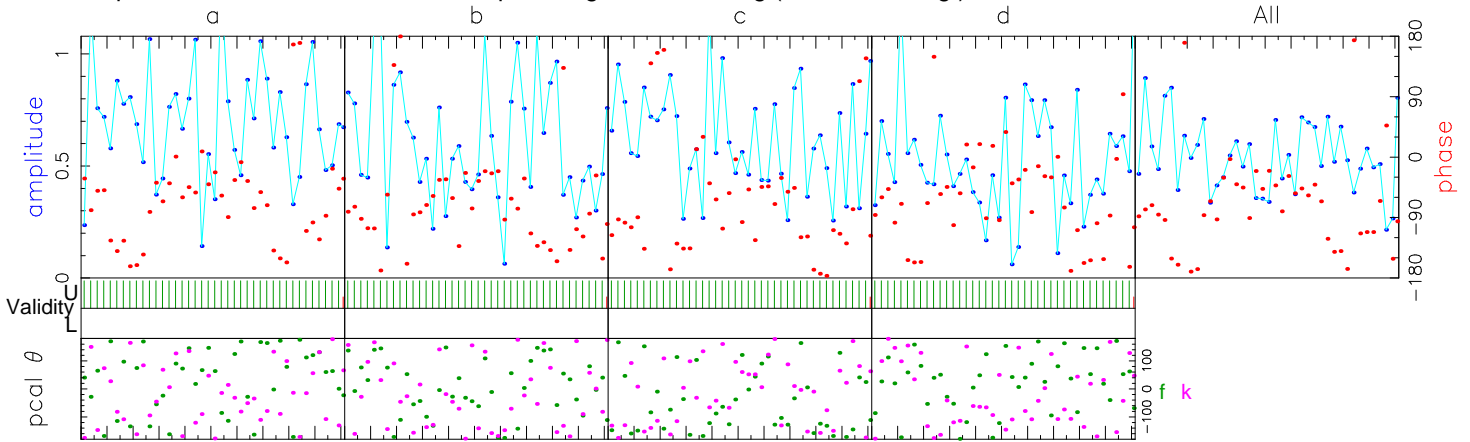
Fringe quality 9

SNR 16.2  
Int time 598.815  
Amp 0.360  
Phase -87.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.004432  
MBD 0.005385  
Fringe rate (Hz)  
0.000685  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. mg002  
Exper # 16383  
Yr:day 2017:093  
Start 061500.00  
Stop 062500.06  
FRT 062000.00  
Corr/FF/build  
2017:215:224851  
2017:243:193651  
2017:170:130423  
RA & Dec (J2000)  
08h54m48.8749s  
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

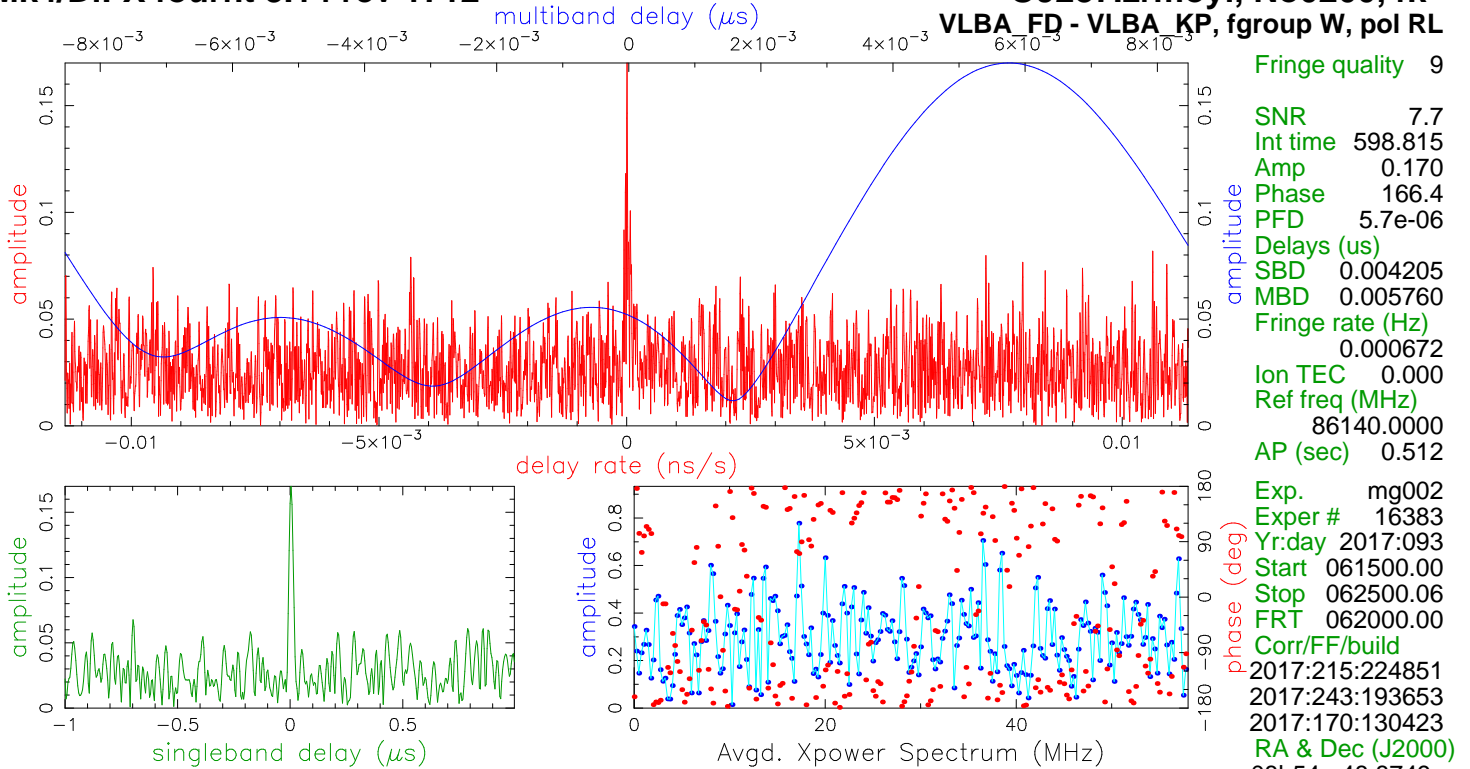


86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
-78.3	-97.8	-106.7	-66.8	-66.8	Phase	-87.9
0.5	0.4	0.4	0.3	0.3	Ampl.	0.4
234.0	233.9	234.4	234.2	234.2	Sbd box	234.0
U/L 1172/0	1172/0	1172/0	1172/0	1172/0	APs used	
f 3890	296	1703	3109	3109	PC freqs	
k 3890	296	1703	3109	3109	PC freqs	
f:k 0:0	0:0	0:0	0:0	0:0	PC phase	
f:k 0:0	0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	1000	PC amp	
k 1000	1000	1000	1000	1000		
f W00UL	W01UL	W02UL	W03UL	W03UL	Chan ids	
k W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.59160795220E+03	Apriori delay (usec)	-1.59161333689E+03	Resid mbdelay (usec)	5.38469E-03	+/- 1.5E-04
Sband delay (usec)	-1.59160890461E+03	Apriori clock (usec)	2.2175534E+00	Resid sbdelay (usec)	4.43228E-03	+/- 5.9E-04
Phase delay (usec)	-1.59161333972E+03	Apriori clockrate (us/s)	-4.1878843E-07	Resid phdelay (usec)	-2.83484E-06	+/- 2.3E-07
Delay rate (us/s)	-1.30035934820E-01	Apriori rate (us/s)	-1.30035942774E-01	Resid rate (us/s)	7.95427E-09	+/- 6.6E-10
Total phase (deg)	-30.2	Apriori accel (us/s/s)	7.71313045657E-06	Resid phase (deg)	-87.9	+/- 7.1

RMS	54.0	Theor.	22.6	Amplitude	0.360 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	66.3	Search (4096X16)	0.000	Search	0.350	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	21.6	Interp.	0.501	Inc. seg. avg.	0.501	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	21.6	Inc. frq. avg.	0.369	Inc. frq. avg.	0.369	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011 0.011	
amp/frq (%)	21.6					Data rate(Mb/s): 928	ion window (TEC)	0.00 0.00	
						nlags: 232	t_cohere infinite		

f: az 267.6 el 46.2 pa 66.3 k: az 261.3 el 52.6 pa 63.5 u,v (fr/asec) 809.336 50.759 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk.W.39.zrmoyi

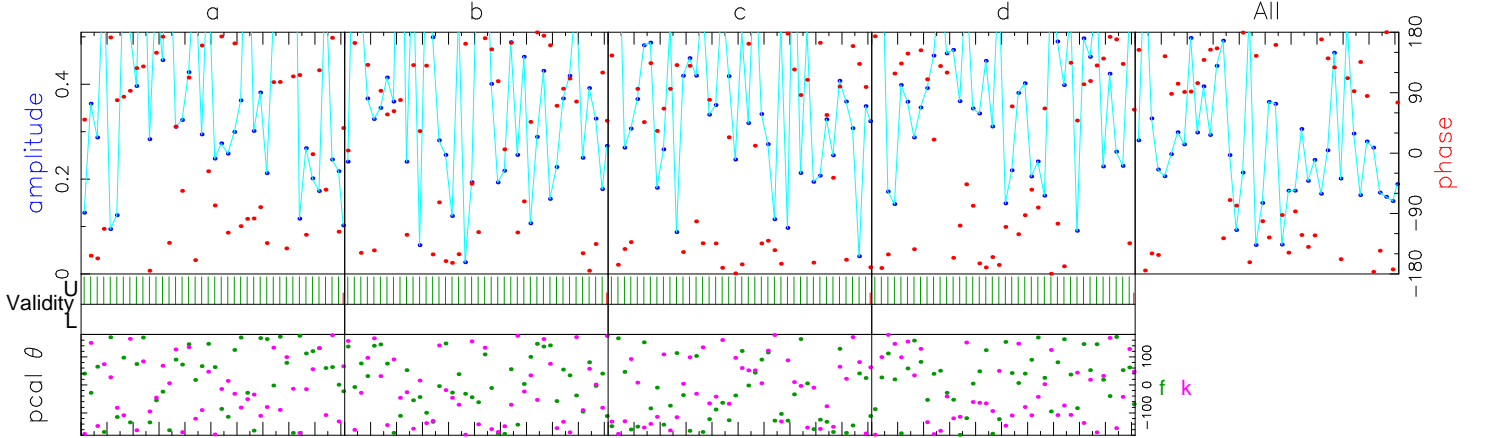


Fringe quality 9

SNR 7.7  
 Int time 598.815  
 Amp 0.170  
 Phase 166.4  
 PFD 5.7e-06  
 Delays (us)  
 SBD 0.004205  
 MBD 0.005760  
 Fringe rate (Hz) 0.000672  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build 2017:215:224851  
 2017:243:193653  
 2017:170:130423  
 RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



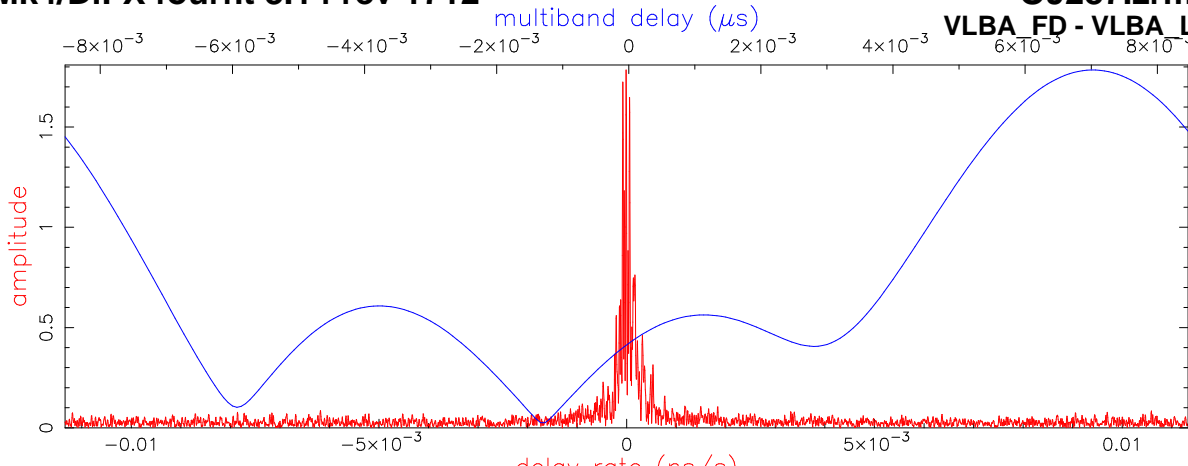
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
k	3890	296	1703	3109	PC freqs	
f:k	0:0	0:0	0:0	0:0	PC phase	
f:k	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	

Group delay (usec)(sbd)	-1.59160757666E+03	Apriori delay (usec)	-1.59161333689E+03	Resid mbdelay (usec)	5.76023E-03	+/- 3.2E-04
Sband delay (usec)	-1.59160913192E+03	Apriori clock (usec)	2.2175534E+00	Resid sbdelay (usec)	4.20497E-03	+/- 1.2E-03
Phase delay (usec)	-1.59161333152E+03	Apriori clockrate (us/s)	-4.1878843E-07	Resid phdelay (usec)	5.36722E-06	+/- 4.8E-07
Delay rate (us/s)	-1.30035934967E-01	Apriori rate (us/s)	-1.30035942774E-01	Resid rate (us/s)	7.80653E-09	+/- 1.4E-09
Total phase (deg)	-135.8	Apriori accel (us/s/s)	7.71313045657E-06	Resid phase (deg)	166.4	+/- 15.0

ph/seg (deg)	59.3	Theor.	47.9	Search (4096X16)	0.163	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	103.6		83.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	15.3		15.0	Inc. seg. avg.	0.208	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	14.1		26.1	Inc. frq. avg.	0.167	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		

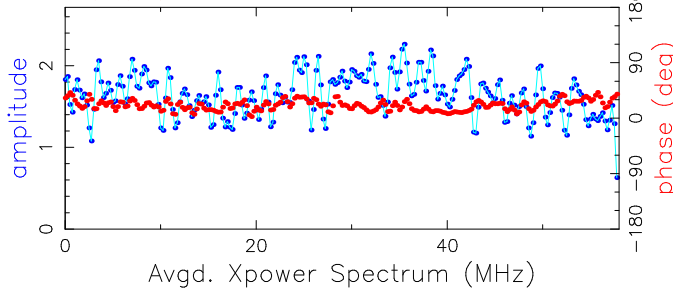
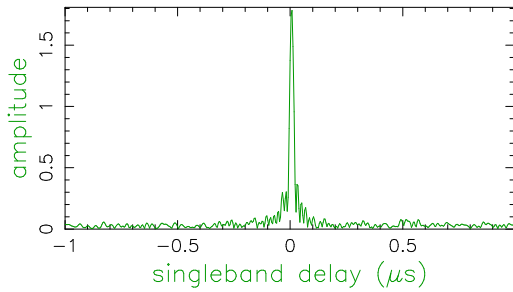
f: az 267.6 el 46.2 pa 66.3 k: az 261.3 el 52.6 pa 63.5 u,v (fr/asec) 809.336 50.759 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk..zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fk.W.40.zrmoyi



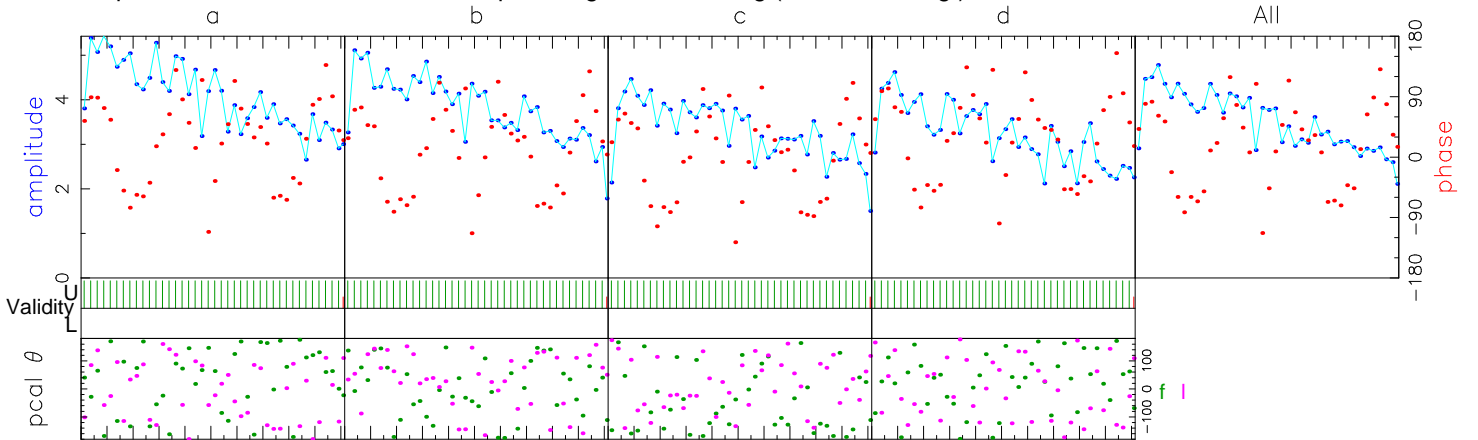
Fringe quality 4

SNR 81.5  
 Int time 599.134  
 Amp 1.809  
 Phase 21.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.007010  
 MBD 0.007018  
 Fringe rate (Hz)  
 -0.000975  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193657  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
30.0	13.8	3.6	35.5	Phase	21.1
2.1	2.0	1.6	1.7	Ampl.	1.8
234.2	234.4	235.0	234.9	Sbd box	234.6
U/L 1172/0	1172/0	1172/0	1172/0	APs used	
f 3890	296	1703	3109	PC freqs	
l 3890	296	1703	3109	PC freqs	
f:l 0:0	0:0	0:0	0:0	PC phase	
f:l 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
l 1000	1000	1000	1000		
f W00UL	W01UL	W02UL	W03UL	Chan ids	
l W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	

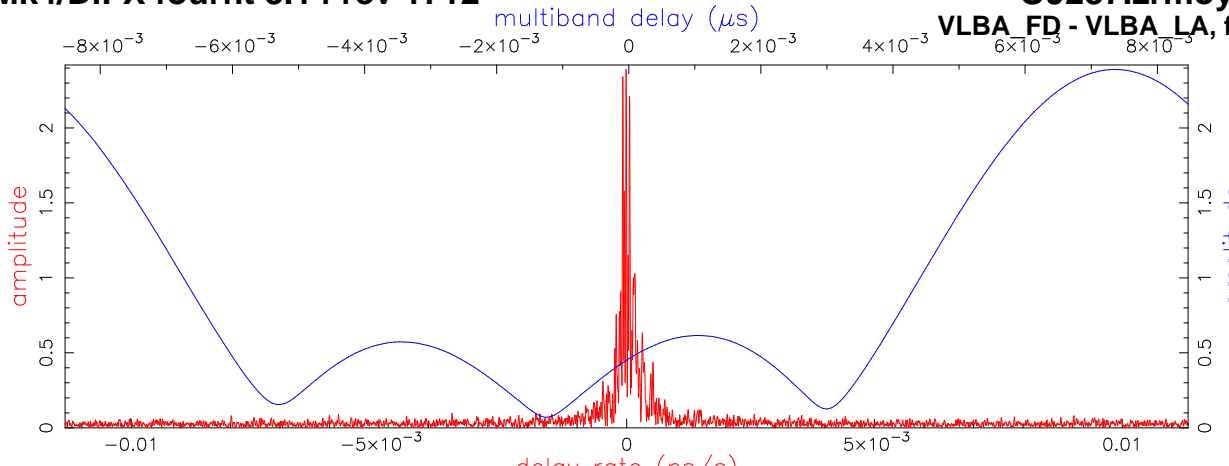
Group delay (usec)(sbd)	-3.81754096461E+02	Apriori delay (usec)	-3.81761114915E+02	Resid mbdelay (usec)	7.01845E-03	+/-	3.0E-05
Sband delay (usec)	-3.81754104708E+02	Apriori clock (usec)	3.4996314E+00	Resid sbdelay (usec)	7.01021E-03	+/-	1.2E-04
Phase delay (usec)	-3.81761114234E+02	Apriori clockrate (us/s)	-3.2019450E-07	Resid phdelay (usec)	6.80698E-07	+/-	4.5E-08
Delay rate (us/s)	-8.56738858591E-02	Apriori rate (us/s)	-8.56738745350E-02	Resid rate (us/s)	-1.13242E-08	+/-	1.3E-10
Total phase (deg)	-136.8	Apriori accel (us/s/s)	-8.51757430151E-07	Resid phase (deg)	21.1	+/-	1.4

ph/seg (deg)	63.0	RMS	4.5	Theor.	1.754	Amplitude	1.809 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	101.3	Search (4096X16)	0.000	Interp.	3.524	Inc. seg. avg.	1.826	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.009	0.009		
ph/frq (deg)	18.0	Inc. seg. avg.	3.524	Inc. frq. avg.	1.826	Sample rate(MSamp/s):	116	Data rate(Mb/s):	928	nlags:	232	t_cohere	infinite	ion window (TEC)	0.00	0.00
amp/frq (%)	10.6	Inc. frq. avg.	1.826	u,v (fr/asec)	521.101	-652.931										

f: az 267.6 el 46.2 pa 66.3 l: az 260.6 el 47.6 pa 58.7 u,v (fr/asec) 521.101 -652.931 simultaneous interpolator

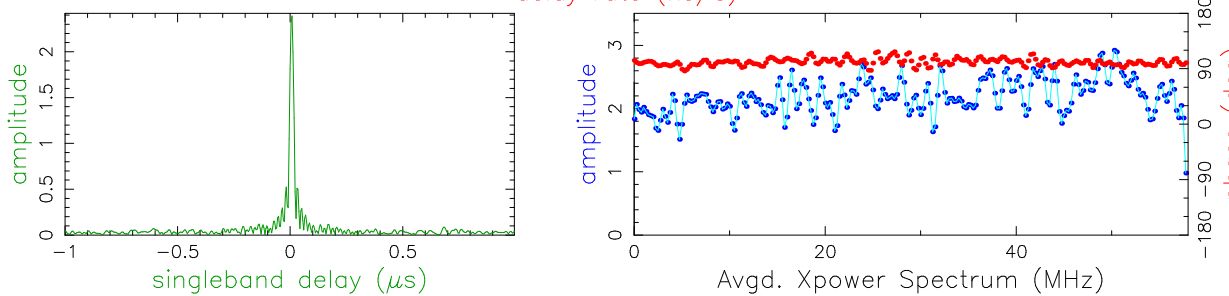
Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fl.zrmoi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fl.W.41.zrmoi





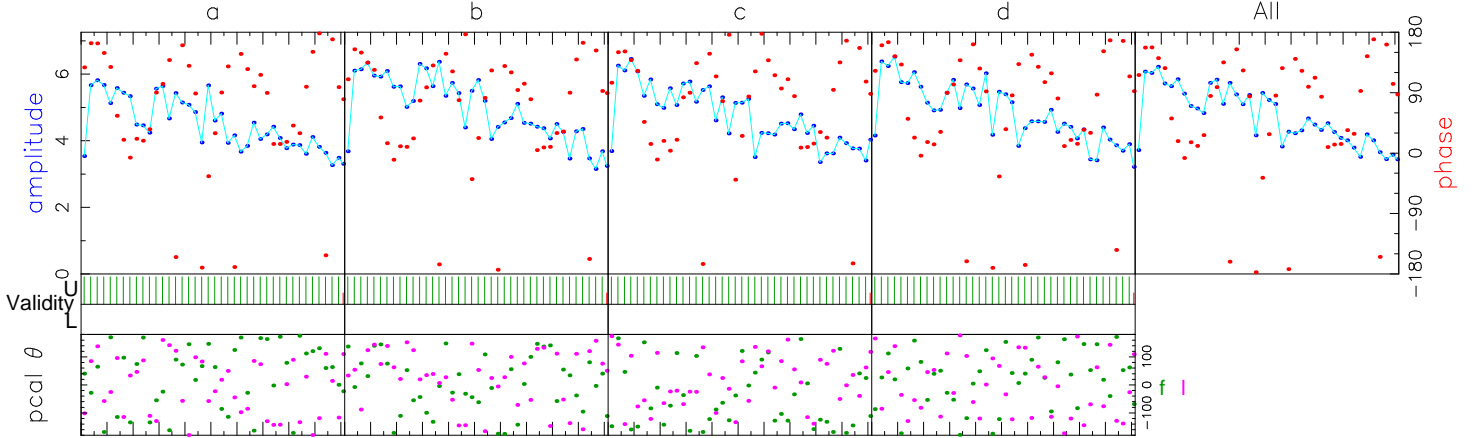
Fringe quality 5

SNR 109.0  
 Int time 599.134  
 Amp 2.420  
 Phase 98.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.007101  
 MBD 0.007343  
 Fringe rate (Hz)  
 -0.000978  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193700  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

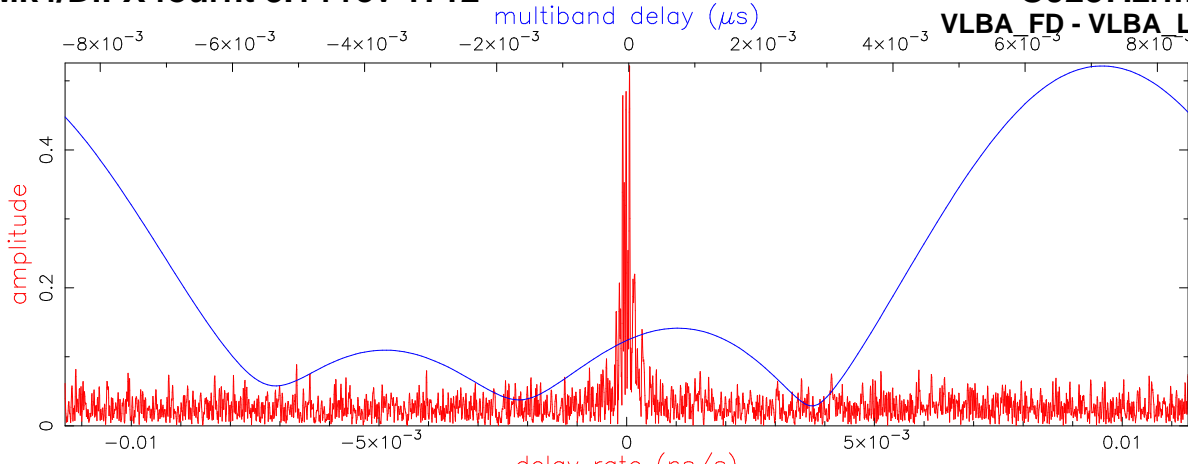


	86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	86326.89	86326.89	86326.89	All
Validity	100	100	100	100	100	100	100	100	100	100
pcal θ	100	100	100	100	100	100	100	100	100	100
86151.11	102.7	92.9	94.2	103.0	103.0	103.0	103.0	103.0	103.0	98.0
Phase	2.2	2.6	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.4
Ampl.	234.4	234.8	234.6	234.9	234.9	234.9	234.9	234.9	234.9	234.6
Sbd box	U/L 1172/0	1172/0	1172/0	1172/0	1172/0	1172/0	1172/0	1172/0	1172/0	1172/0
APs used	f 3890	296	1703	3109	3109	3109	3109	3109	3109	3109
PC freqs	l 3890	296	1703	3109	3109	3109	3109	3109	3109	3109
PC freqs	f:l 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
PC phase	f:l 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Mani PC	f 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
PC amp	l 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Chan ids	f W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR	W03UR	W03UR	W03UR
Tracks	l W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR	W03UR	W03UR	W03UR
Chan ids										
Tracks										
Group delay (usec)(sbd)	-3.81753771921E+02	Apriori delay (usec)	-3.81761114915E+02	Resid mbdelay (usec)	7.34299E-03	+/-	2.2E-05			
Sband delay (usec)	-3.81754014225E+02	Apriori clock (usec)	3.4996314E+00	Resid sbdelay (usec)	7.10069E-03	+/-	8.7E-05			
Phase delay (usec)	-3.81761111755E+02	Apriori clockrate (us/s)	-3.2019450E-07	Resid phdelay (usec)	3.16020E-06	+/-	3.4E-08			
Delay rate (us/s)	-8.56738858892E-02	Apriori rate (us/s)	-8.56738745350E-02	Resid rate (us/s)	-1.13543E-08	+/-	9.8E-11			
Total phase (deg)	-60.0	Apriori accel (us/s/s)	-8.51757430151E-07	Resid phase (deg)	98.0	+/-	1.1			

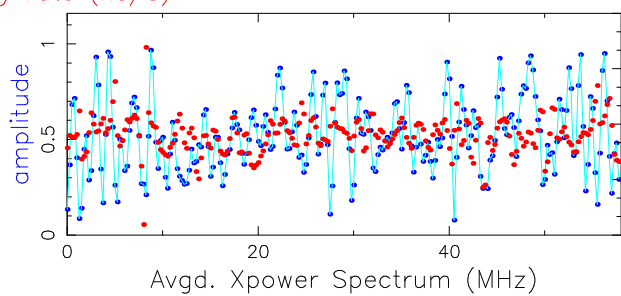
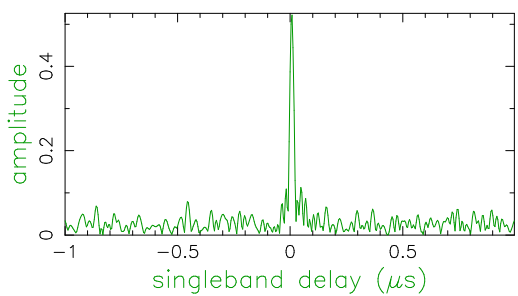
ph/seg (deg) 63.1 3.4 Search (4096X16) 2.386 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 102.4 5.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 6.6 1.1 Inc. seg. avg. 4.751 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 5.5 1.8 Inc. frq. avg. 2.398 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 267.6 el 46.2 pa 66.3 l: az 260.6 el 47.6 pa 58.7 u,v (fr/asec) 521.101 -652.931 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fl..zrmoi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fl.W.42.zrmoi



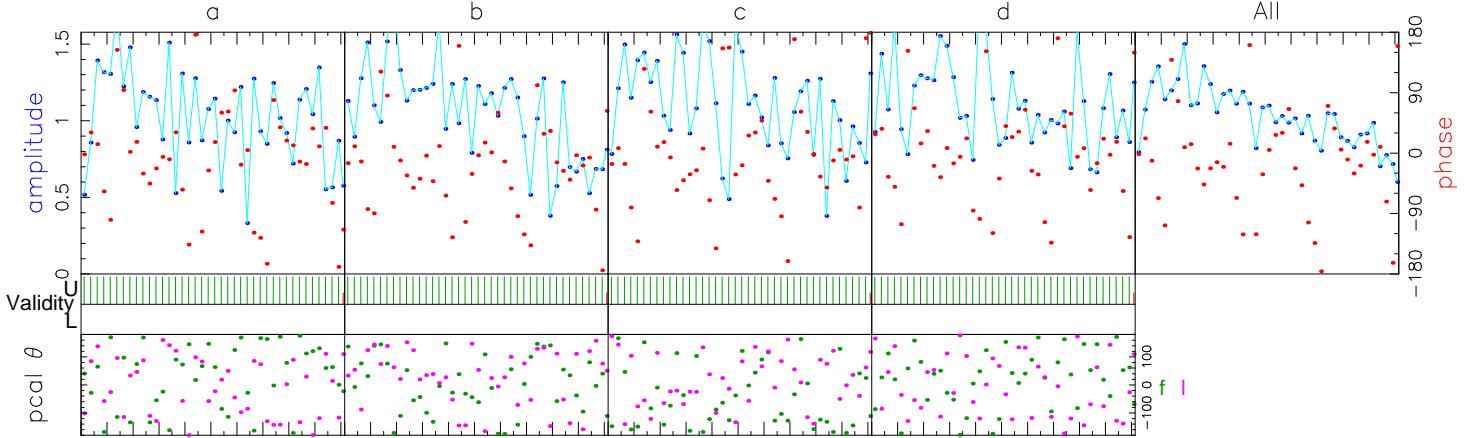




Fringe quality 9  
 SNR 23.7  
 Int time 599.134  
 Amp 0.526  
 Phase -14.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.007373  
 MBD 0.007143  
 Fringe rate (Hz) 0.004934  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build 2017:215:224851  
 2017:243:193705  
 2017:170:130423  
 RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"



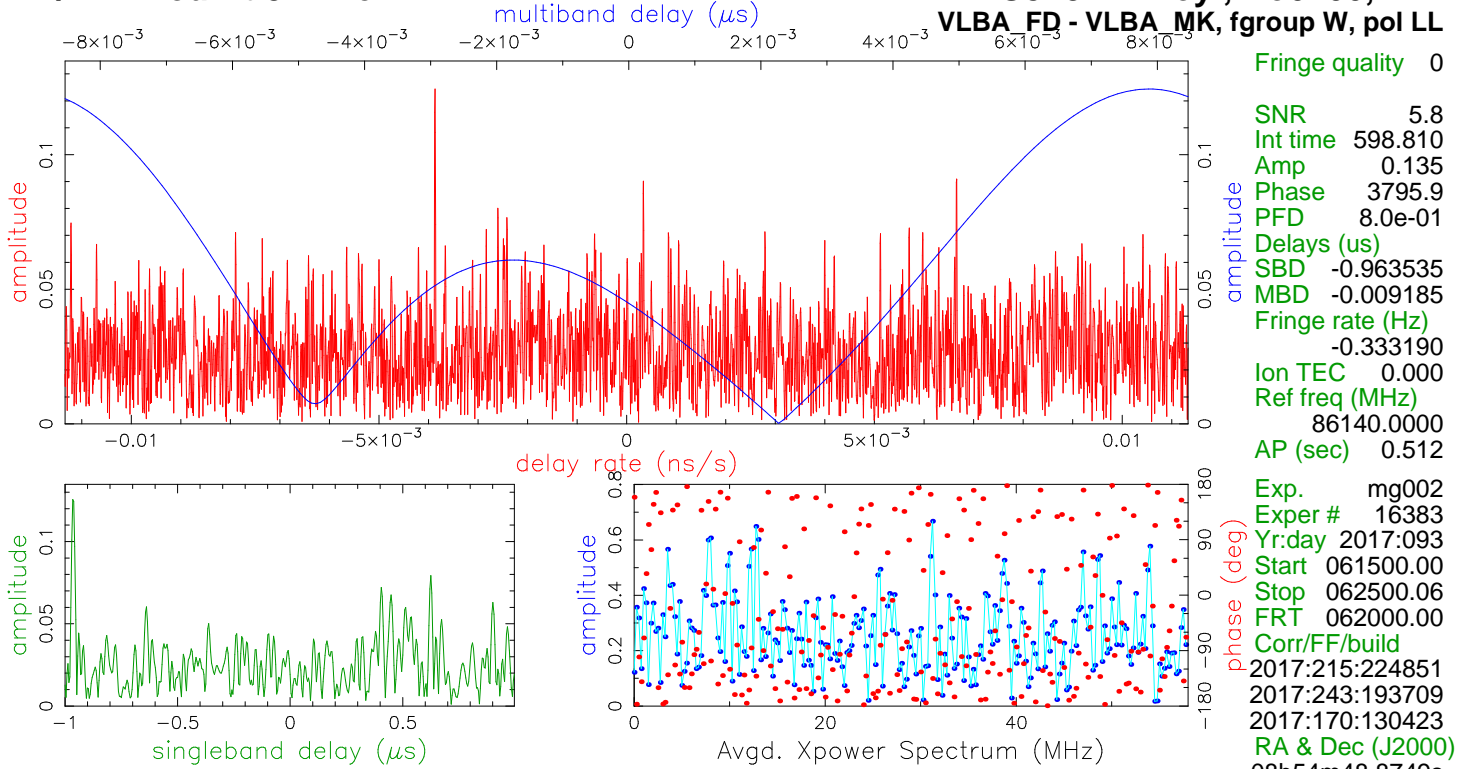
Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



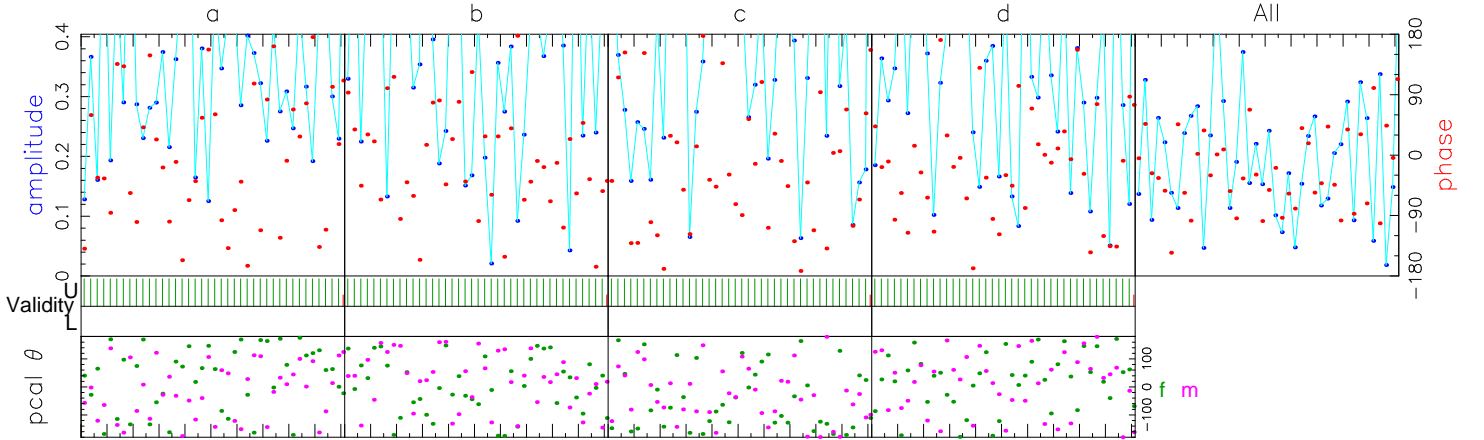
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
l	3890	296	1703	3109	PC freqs	234.7
f:l	0:0	0:0	0:0	0:0	PC phase	
f:l	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
l	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
l	W00UL	W01UL	W02UL	W03UL	Tracks	

Group delay (usec)(sbd)	-3.81753971487E+02	Apriori delay (usec)	-3.81761114915E+02	Resid mbdelay (usec)	7.14343E-03	+/- 1.0E-04
Sband delay (usec)	-3.81753741673E+02	Apriori clock (usec)	3.4996314E+00	Resid sbdelay (usec)	7.37324E-03	+/- 4.0E-04
Phase delay (usec)	-3.81761115393E+02	Apriori clockrate (us/s)	-3.2019450E-07	Resid phdelay (usec)	-4.77904E-07	+/- 1.6E-07
Delay rate (us/s)	-8.56738172520E-02	Apriori rate (us/s)	-8.56738745350E-02	Resid rate (us/s)	5.72830E-08	+/- 4.5E-10
Total phase (deg)	-172.8	Apriori accel (us/s/s)	-8.51757430151E-07	Resid phase (deg)	-14.8	+/- 4.8

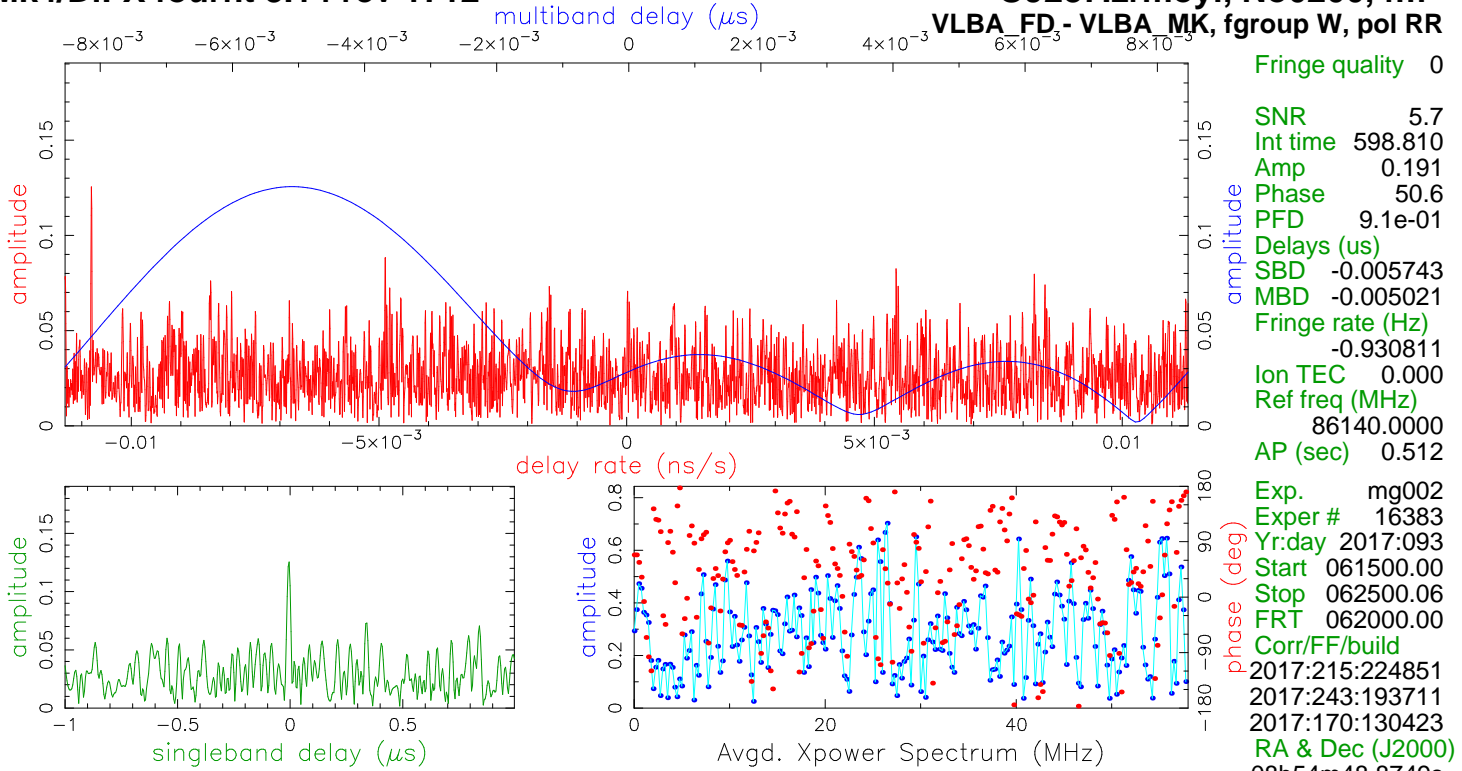
ph/seg (deg)	72.8	Theor.	15.5	Amplitude	0.526 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	103.0	Search (4096X16)	0.000	Search	0.508	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	9.8	Interp.	0.000	Inc. seg. avg.	0.998	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	11.5	Inc. frq. avg.	0.524	Inc. frq. avg.	0.524	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011 0.011	
						Data rate(Mb/s): 928	ion window (TEC)	0.00 0.00	



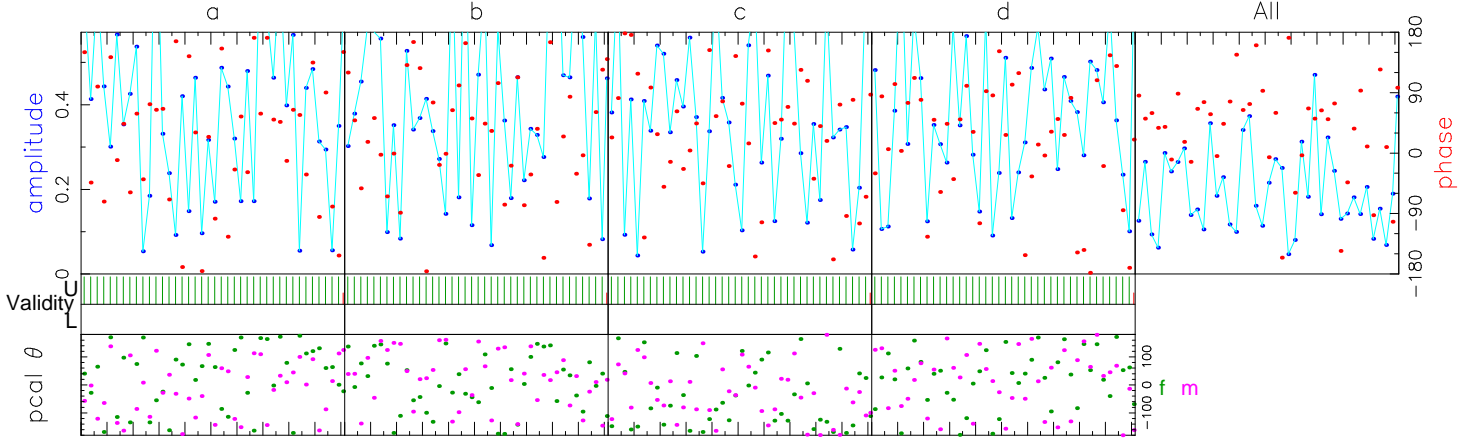
Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-63.7	-11.6	-32.4	-29.6	Phase	-26.5
	0.0	0.2	0.1	0.2	Ampl.	0.1
	228.3	9.2	257.4	9.5	Sbd box	9.5
U/L	1172/0	1172/0	1172/0	1172/0	APs used	
f	3890	296	1703	3109	PC freqs	
m	3890	296	1703	3109	PC freqs	
f:m	0:0	0:0	0:0	0:0	PC phase	
f:m	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-6.24401532246E+03	Apriori delay (usec)	-6.24305040446E+03	Resid mbdelay (usec)	-9.18467E-03	+/- 4.2E-04
Sband delay (usec)	-6.24401393908E+03	Apriori clock (usec)	1.8270612E-01	Resid sbdelay (usec)	-9.63535E-01	+/- 1.6E-03
Phase delay (usec)	-6.24305040531E+03	Apriori clockrate (us/s)	-3.5806747E-07	Resid phdelay (usec)	-8.53261E-07	+/- 6.4E-07
Delay rate (us/s)	-1.00876265007E+00	Apriori rate (us/s)	-1.00875878207E+00	Resid rate (us/s)	-3.86800E-06	+/- 1.8E-09
Total phase (deg)		Apriori accel (us/s/s)	3.97849672253E-05	Resid phase (deg)	3795.9	+/- 19.8
RMS	57.3	Theor.	63.4	Amplitude	0.135 +/- 0.023	
ph/seg (deg)	57.3	Search (4096X16)	0.122	Pcal mode:	MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	97.1	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	28.8	Inc. seg. avg.	0.130	Bits/sample:	2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
amp/frq (%)	42.8	Inc. frq. avg.	0.127	Sample rate(MSamp/s):	116	dr window (ns/s) -0.011 0.011
				Data rate(Mb/s):	928	nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00



Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

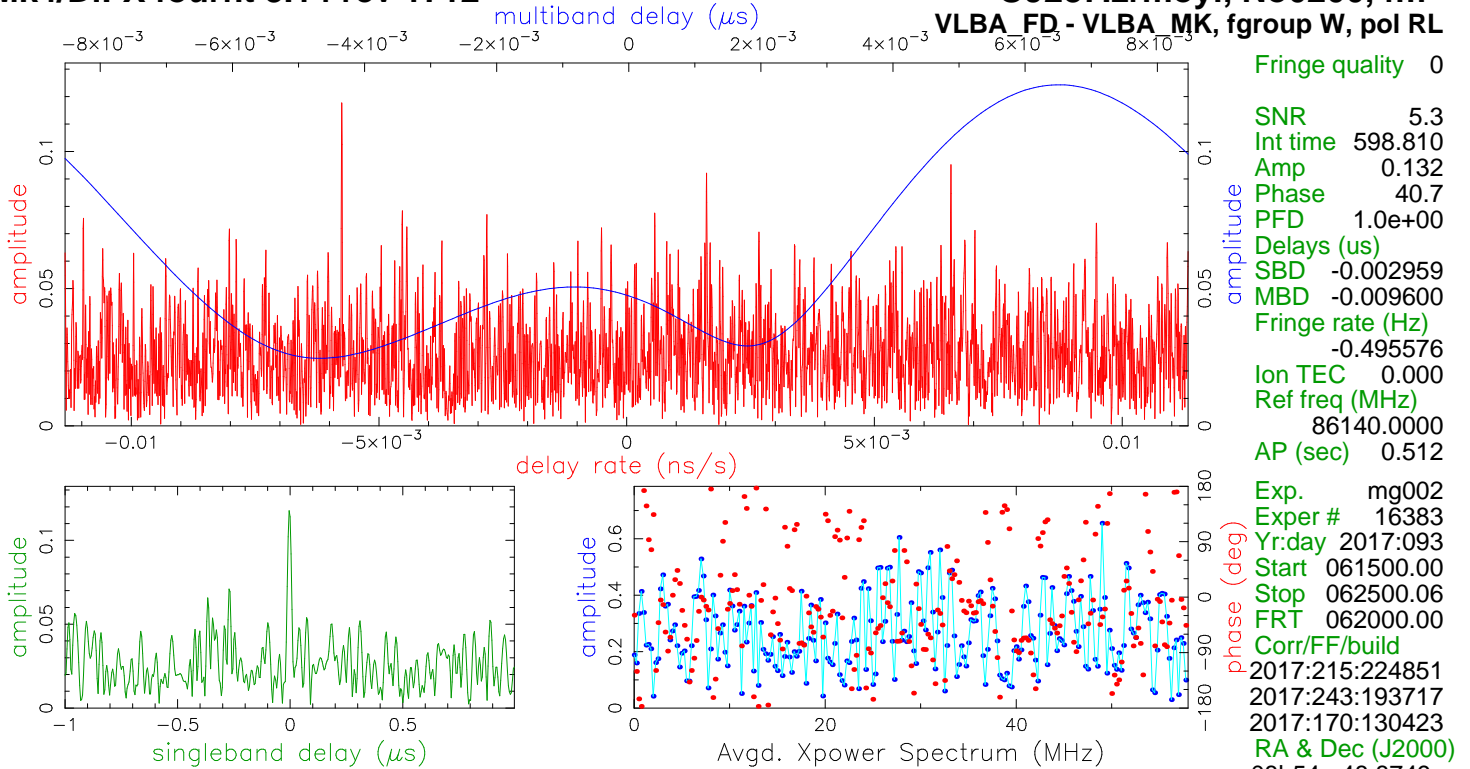


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
59.9	46.6	42.4	54.5	Phase	50.6
0.2	0.2	0.2	0.2	Ampl.	0.2
193.2	266.4	276.3	231.0	Sbd box	231.7
U/L 1172/0	1172/0	1172/0	1172/0	APs used	
f 3890	296	1703	3109	PC freqs	
m 3890	296	1703	3109	PC freqs	
f:m 0:0	0:0	0:0	0:0	PC phase	
f:m 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000		
f W00UR	W01UR	W02UR	W03UR	Chan ids	
m W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-6.24305542511E+03	Apriori delay (usec)	-6.24305040446E+03	Resid mbdelay (usec)	-5.02064E-03 +/- 4.3E-04
Sband delay (usec)	-6.24305614708E+03	Apriori clock (usec)	1.8270612E-01	Resid sbdelay (usec)	-5.74262E-03 +/- 1.7E-03
Phase delay (usec)	-6.24305040283E+03	Apriori clockrate (us/s)	-3.5806747E-07	Resid phdelay (usec)	1.63299E-06 +/- 6.5E-07
Delay rate (us/s)	-1.00876958786E+00	Apriori rate (us/s)	-1.00875878207E+00	Resid rate (us/s)	-1.08058E-05 +/- 1.9E-09
Total phase (deg)	-251.8	Apriori accel (us/s/s)	3.97849672253E-05	Resid phase (deg)	50.6 +/- 20.0

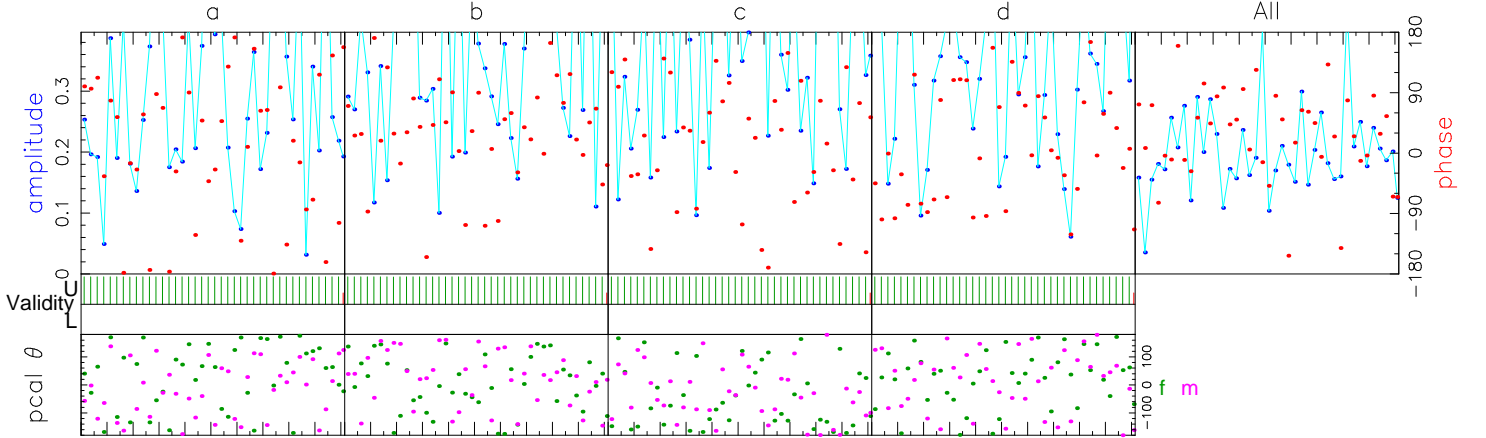
ph/seg (deg) 68.4 64.2 Search (4096X16) 0.124 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 96.2 112.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 9.6 20.0 Inc. seg. avg. 0.183 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 10.2 35.0 Inc. frq. avg. 0.179 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 267.6 el 46.2 pa 66.3 m: az 85.8 el 86.1 pa -92.7 u,v (fr/asec) 6231.889 2510.459 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fm..zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fm.W.46.zrmoyi







Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

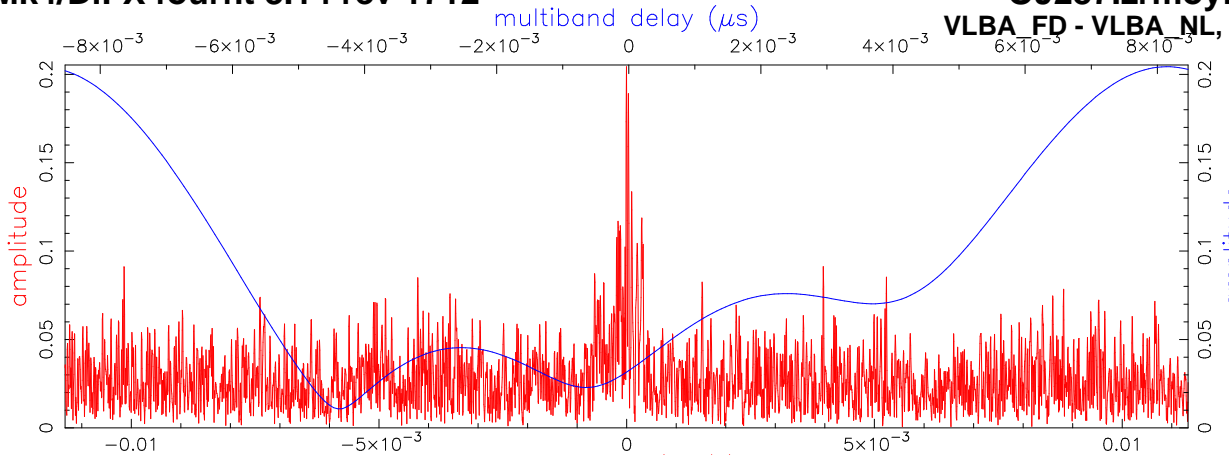


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
94.7	35.9	44.8	10.1		Phase	40.7
0.1	0.3	0.1	0.1		Ampl.	0.1
205.2	232.3	78.0	275.2		Sbd box	232.3
U/L 1172/0	1172/0	1172/0	1172/0		APs used	
f 3890	296	1703	3109		PC freqs	
m 3890	296	1703	3109		PC freqs	
f:m 0:0	0:0	0:0	0:0		PC phase	
f:m 0:0	0:0	0:0	0:0		Mani PC	
f 1000	1000	1000	1000		PC amp	
m 1000	1000	1000	1000			
f W00UR	W01UR	W02UR	W03UR		Chan ids	
m W00UL	W01UL	W02UL	W03UL		Tracks	
					Chan ids	
					Tracks	

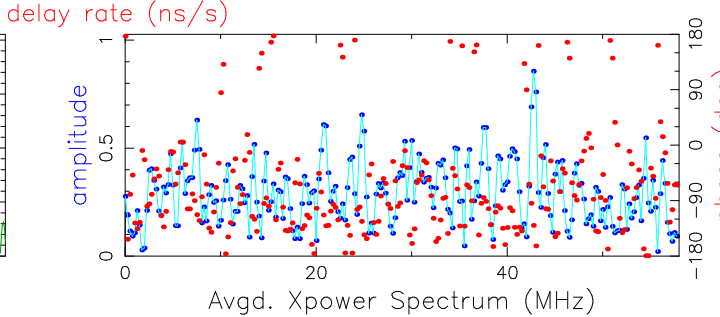
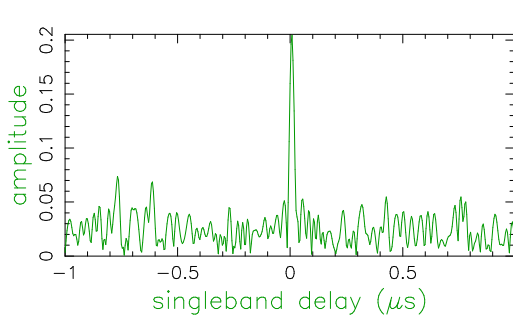
Group delay (usec)(sbd)	-6.24306000446E+03	Apriori delay (usec)	-6.24305040446E+03	Resid mbdelay (usec)	-9.60000E-03	+/-	4.5E-04
Sband delay (usec)	-6.24305336308E+03	Apriori clock (usec)	1.8270612E-01	Resid sbdelay (usec)	-2.95862E-03	+/-	1.8E-03
Phase delay (usec)	-6.24305040315E+03	Apriori clockrate (us/s)	-3.5806747E-07	Resid phdelay (usec)	1.31173E-06	+/-	6.9E-07
Delay rate (us/s)	-1.00876453522E+00	Apriori rate (us/s)	-1.00875878207E+00	Resid rate (us/s)	-5.75315E-06	+/-	2.0E-09
Total phase (deg)	-261.8	Apriori accel (us/s/s)	3.97849672253E-05	Resid phase (deg)	40.7	+/-	21.4

ph/seg (deg)	RMS 65.2	Theor. 68.6	Amplitude 68.6	Search (4096X16) 0.123	0.132 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	93.6	119.8	Interp. 0.000	0.000	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	44.1	21.4	Inc. seg. avg. 0.131	0.131	0.131	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	52.2	37.4	Inc. frq. avg. 0.134	0.134	0.134	Sample rate(MSamp/s): 116	mb window (us) -0.009 0.009
						Data rate(Mb/s): 928	dr window (ns/s) -0.011 0.011
						nlags: 232	t_cohere infinite
							ion window (TEC) 0.00 0.00



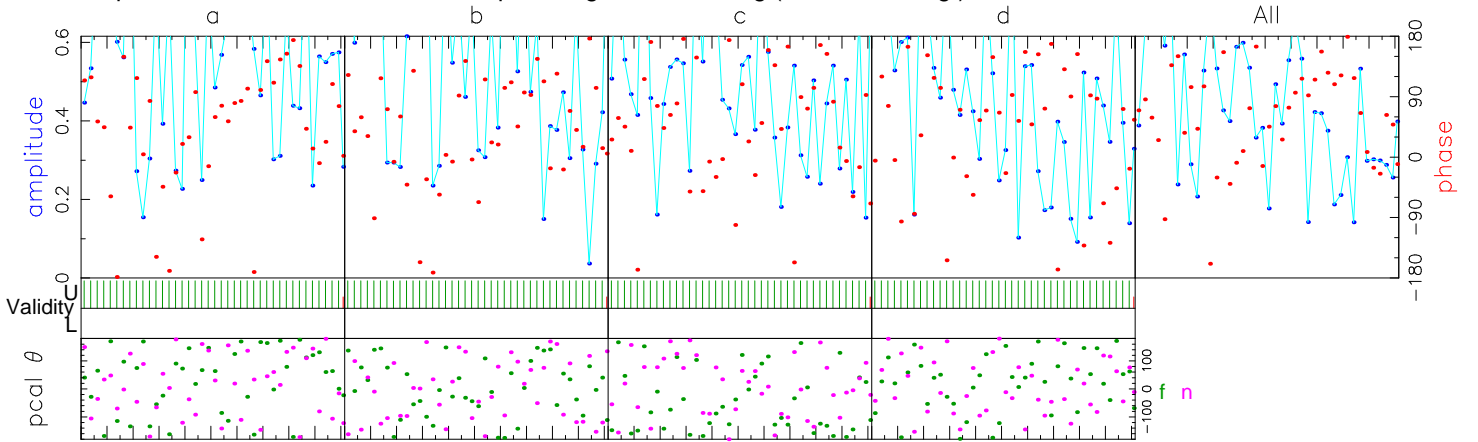


Fringe quality 9  
 SNR 9.2  
 Int time 598.824  
 Amp 0.205  
 Phase 3.4  
 PFD 8.0e-12  
 Delays (us)  
 SBD 0.007574  
 MBD -0.008908  
 Fringe rate (Hz)  
 -0.000619  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build  
 2017:215:224851  
 2017:243:193720  
 2017:170:130423  
 RA & Dec (J2000)  
 08h54m48.8749s  
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



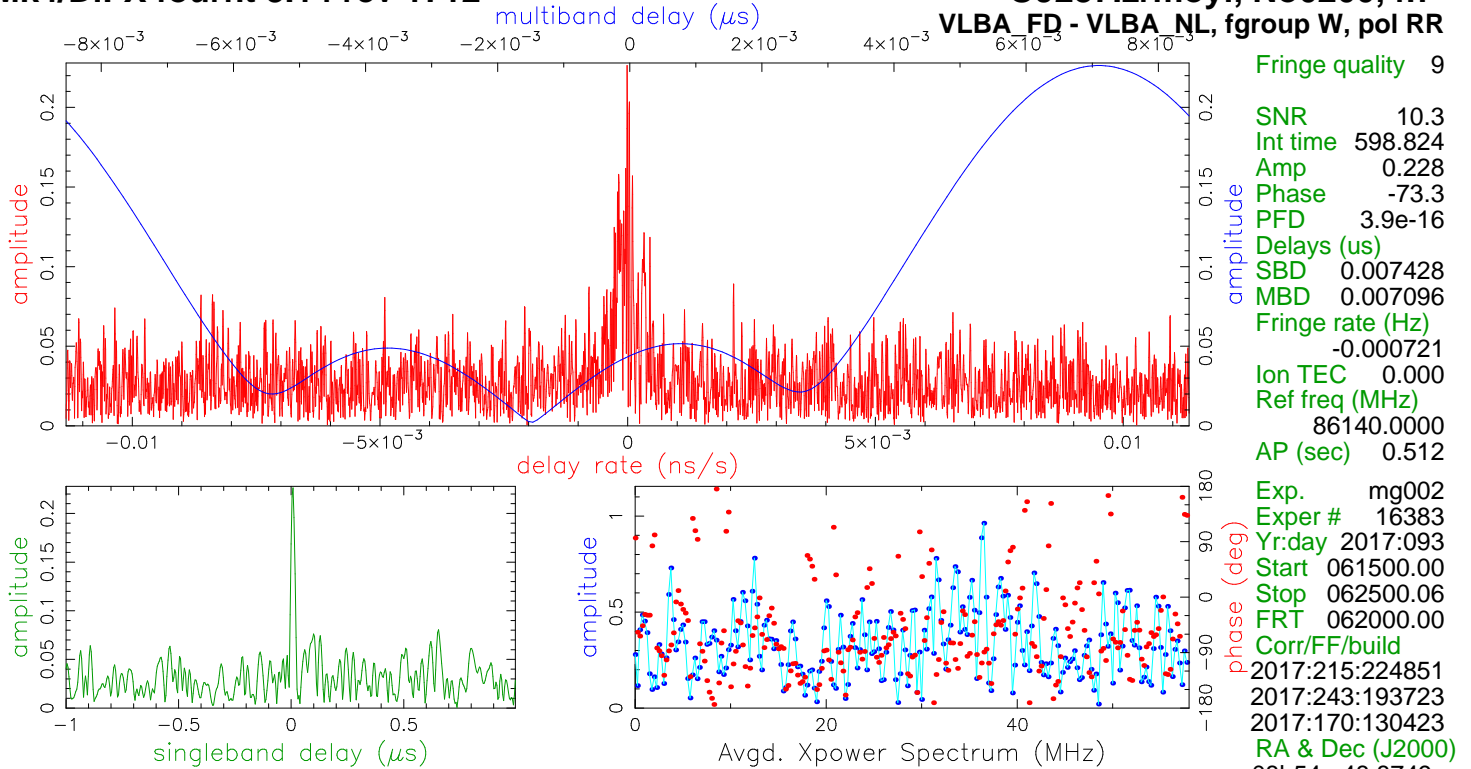
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
n	3890	296	1703	3109	PC freqs	234.8
f:n	0:0	0:0	0:0	0:0	PC phase	
f	1000	1000	1000	1000	Main PC	
n	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	2.99829240634E+03	Apriori delay (usec)	2.99828424786E+03	Resid mbdelay (usec)	-8.90819E-03	+/- 2.6E-04
Sband delay (usec)	2.99829182165E+03	Apriori clock (usec)	-6.2515249E+00	Resid sbdelay (usec)	7.57379E-03	+/- 1.0E-03
Phase delay (usec)	2.99828425017E+03	Apriori clockrate (us/s)	-7.1775409E-07	Resid phdelay (usec)	2.30985E-06	+/- 4.0E-07
Delay rate (us/s)	8.66010735701E-03	Apriori rate (us/s)	8.66011454851E-03	Resid rate (us/s)	-7.19151E-09	+/- 1.2E-09
Total phase (deg)	43.1	Apriori accel (us/s/s)	-2.20237905358E-05	Resid phase (deg)	3.4	+/- 12.4

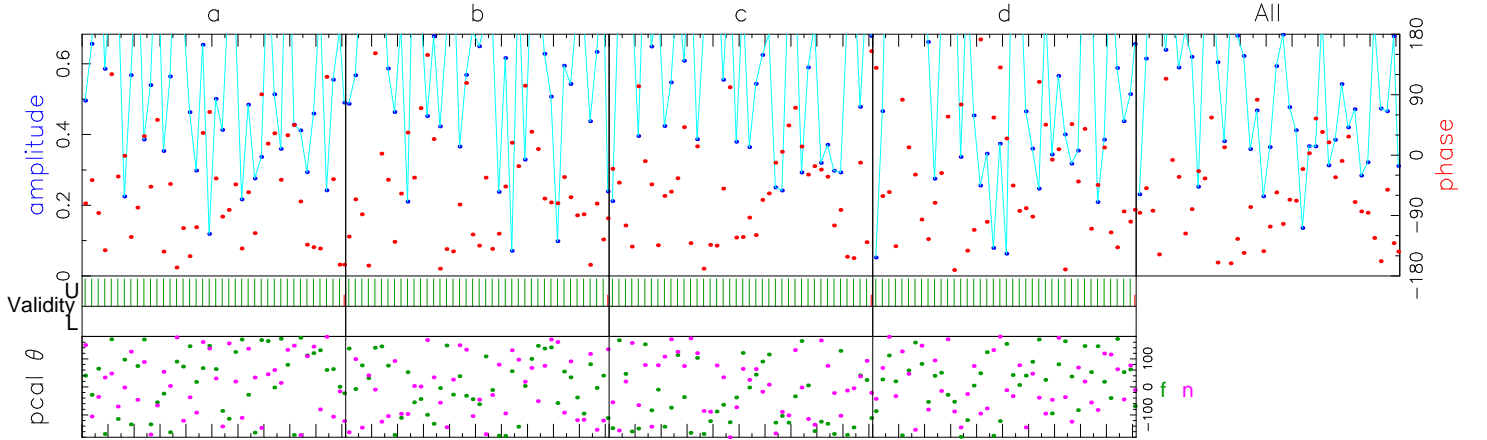
ph/seg (deg)	RMS 66.2	Theor. 39.7	Amplitude Search (4096X16)	0.205 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	138.6	69.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	16.3	12.4	Inc. seg. avg.	0.347	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	31.4	21.6	Inc. frq. avg.	0.204	Sample rate(MSamp/s): 116	mb window (us) -0.009 0.009
					Data rate(Mb/s): 928	dr window (ns/s) -0.011 0.011
					nlags: 232	t_cohere infinite
						ion window (TEC) 0.00 0.00

f: az 267.6 el 46.2 pa 66.3 n: az 265.8 el 35.5 pa 51.0 u,v (fr/asec) -98.573 -1932.595 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fn.zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fn.W.49.zrmoyi



Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-65.4	-79.9	-79.4	-65.7	Phase	-73.3
	0.2	0.3	0.2	0.2	Ampl.	0.2
	235.2	234.2	234.8	235.0	Sbd box	234.7
U/L	1172/0	1172/0	1172/0	1172/0	APs used	
f	3890	296	1703	3109	PC freqs	
n	3890	296	1703	3109	PC freqs	
f:n	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

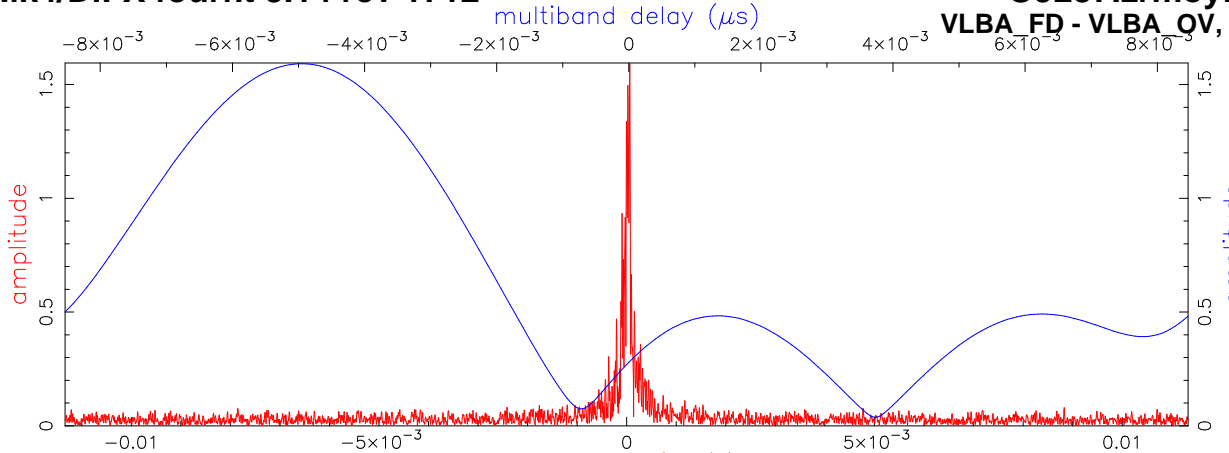
Group delay (usec)(sbd)	2.99829134366E+03	Apriori delay (usec)	2.99828424786E+03	Resid mbdelay (usec)	7.09580E-03	+/-	2.4E-04	
Sband delay (usec)	2.99829167627E+03	Apriori clock (usec)	-6.2515249E+00	Resid sbdelay (usec)	7.42841E-03	+/-	9.3E-04	
Phase delay (usec)	2.99828424549E+03	Apriori clockrate (us/s)	-7.1775409E-07	Resid phdelay (usec)	-2.36382E-06	+/-	3.6E-07	
Delay rate (us/s)	8.66010617407E-03	Apriori rate (us/s)	8.66011454851E-03	Resid rate (us/s)	-8.37444E-09	+/-	1.0E-09	
Total phase (deg)	-33.6	Apriori accel (us/s/s)	-2.20237905358E-05	Resid phase (deg)	-73.3	+/-	11.2	
	RMS	Theor.	Amplitude	0.228 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	71.0	35.7	Search (4096X16)	0.215	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	161.1	62.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	10.1	11.2	Inc. seg. avg.	0.445	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011 0.011	
amp/frq (%)	9.8	19.5	Inc. frq. avg.	0.224	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 267.6 el 46.2 pa 66.3 n: az 265.8 el 35.5 pa 51.0 u,v (fr/asec) -98.573 -1932.595 simultaneous interpolator

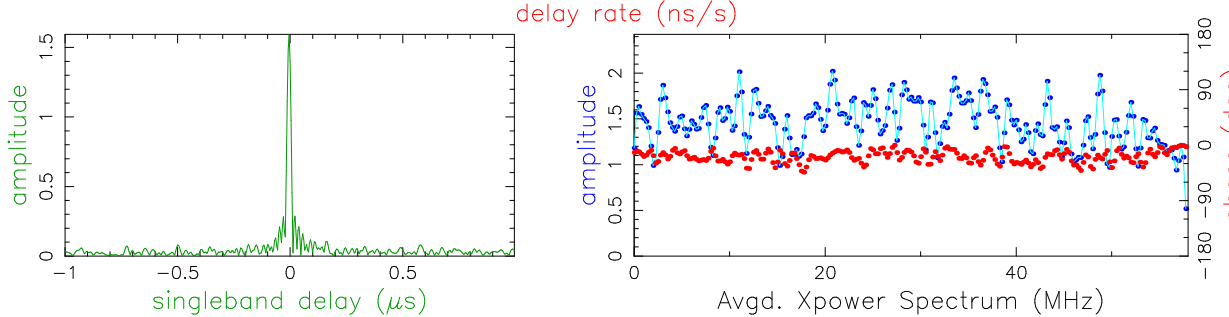
Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fn.zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fn.W.50.zrmoyi





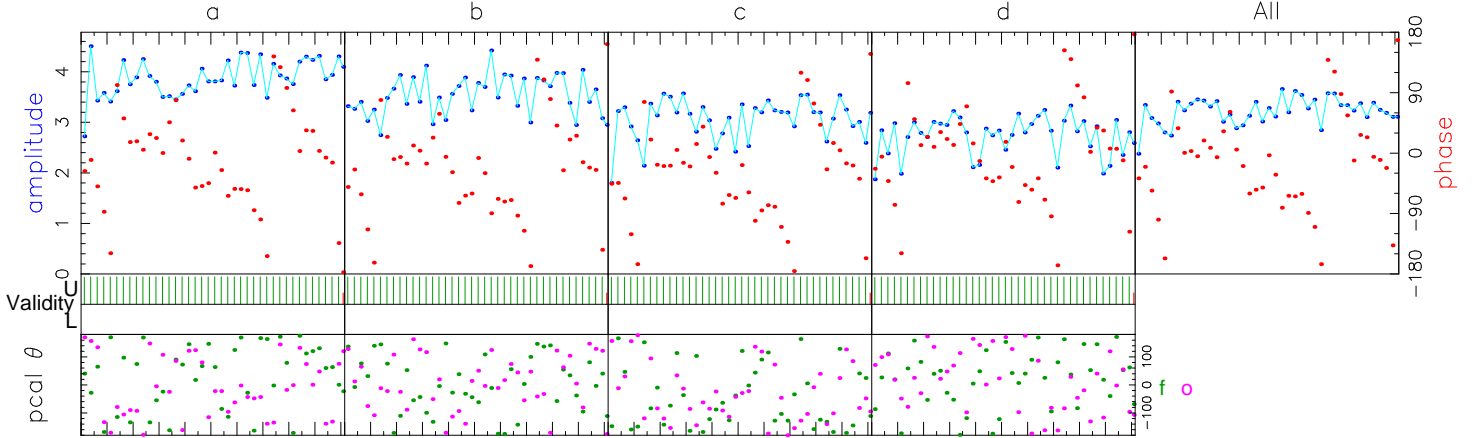


Fringe quality 4  
SNR 71.8  
Int time 598.602  
Amp 1.595  
Phase -17.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.004912  
MBD -0.004960  
Fringe rate (Hz) 0.005363  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. mg002  
Exper # 16383  
Yr:day 2017:093  
Start 061500.00  
Stop 062500.06  
FRT 062000.00  
Corr/FF/build 2017:215:224851  
2017:243:193732  
2017:170:130423  
RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

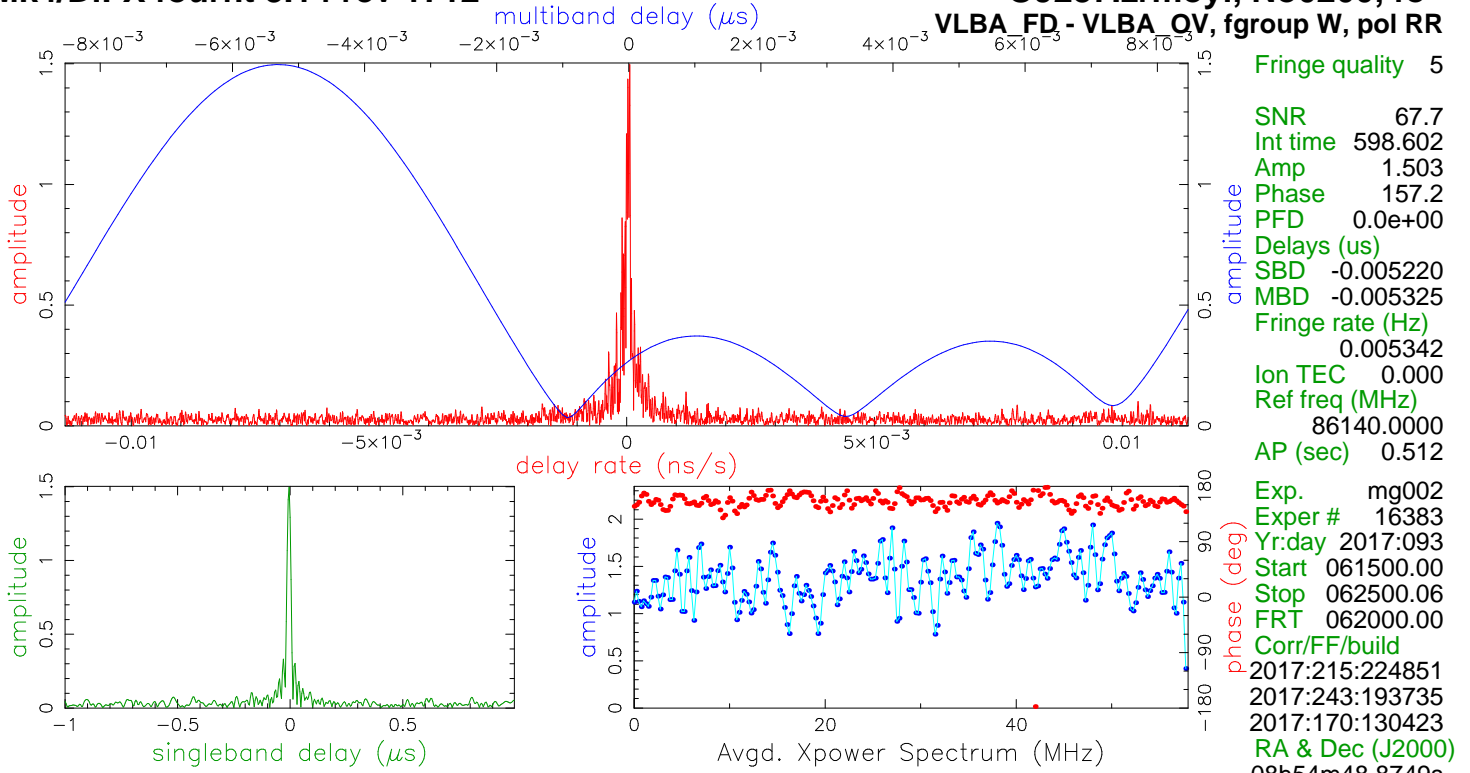


86151.11	86209.70	86268.30	86326.89	86151.11	All
-8.3	-27.0	-32.3	-2.7	Phase	-17.8
1.9	1.8	1.5	1.3	Ampl.	1.6
231.4	231.8	232.2	232.2	Sbd box	231.9
U/L 1172/0	1172/0	1172/0	1172/0	APs used	
f 3890	296	1703	3109	PC freqs	
o 3890	296	1703	3109	PC freqs	
f:0 0:0	0:0	0:0	0:0	PC phase	
f:0 0:0	0:0	0:0	0:0	Manl PC	
f 1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	Chan ids	
f W00UL	W01UL	W02UL	W03UL	Tracks	
o W00UL	W01UL	W02UL	W03UL	Chan ids	
				Tracks	

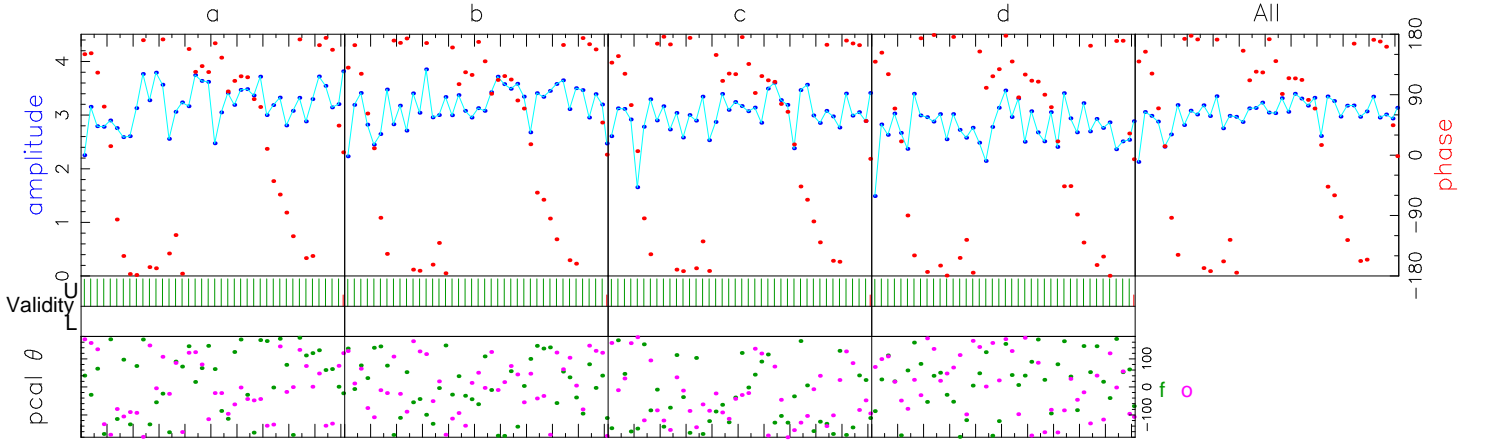
Group delay (usec)(sbd)	-2.50012816366E+03	Apriori delay (usec)	-2.50012320357E+03	Resid mbdelay (usec)	-4.96009E-03	+/- 3.4E-05
Sband delay (usec)	-2.50012811584E+03	Apriori clock (usec)	-3.0540454E+00	Resid sbdelay (usec)	-4.91228E-03	+/- 1.3E-04
Phase delay (usec)	-2.50012320414E+03	Apriori clockrate (us/s)	-6.8065150E-07	Resid phdelay (usec)	-5.73624E-07	+/- 5.1E-08
Delay rate (us/s)	-2.86772092073E-01	Apriori rate (us/s)	-2.86772154337E-01	Resid rate (us/s)	6.22641E-08	+/- 1.5E-10
Total phase (deg)	-289.7	Apriori accel (us/s/s)	9.59062533265E-06	Resid phase (deg)	-17.8	+/- 1.6

ph/seg (deg)	RMS 69.7	Theor. 5.1	Amplitude 1.595 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	103.4	8.9	Search (4096X16) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	17.5	1.6	Inc. seg. avg. 3.211	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	14.0	2.8	Inc. frq. avg. 1.627	Sample rate(MSamp/s): 116	mb window (us) -0.009 0.009
				Data rate(Mb/s): 928	dr window (ns/s) -0.011 0.011
				nlags: 232	ion window (TEC) 0.00 0.00





Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

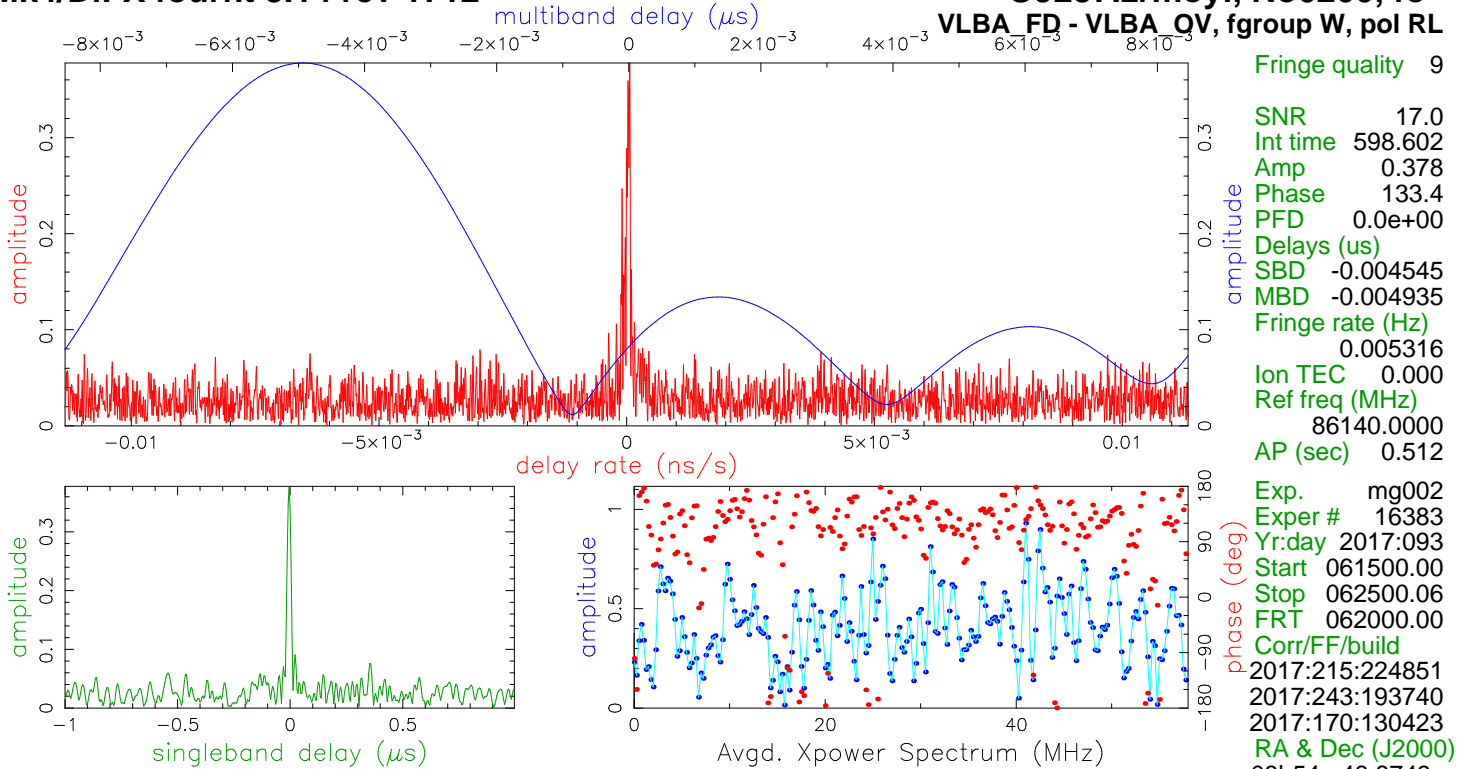


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1172/0	1172/0	1172/0	1172/0		
f	3890	296	1703	3109	APs used	
o	3890	296	1703	3109	PC freqs	
f:0	0:0	0:0	0:0	0:0	PC phase	
f:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-2.50012852875E+03	Apriori delay (usec)	-2.50012320357E+03	Resid mbdelay (usec)	-5.32518E-03	+/- 3.6E-05
Sband delay (usec)	-2.50012842398E+03	Apriori clock (usec)	-3.0540454E+00	Resid sbdelay (usec)	-5.22041E-03	+/- 1.4E-04
Phase delay (usec)	-2.50012319850E+03	Apriori clockrate (us/s)	-6.8065150E-07	Resid phdelay (usec)	5.06918E-06	+/- 5.5E-08
Delay rate (us/s)	-2.86772092318E-01	Apriori rate (us/s)	-2.86772154337E-01	Resid rate (us/s)	6.20193E-08	+/- 1.6E-10
Total phase (deg)	-114.7	Apriori accel (us/s/s)	9.59062533265E-06	Resid phase (deg)	157.2	+/- 1.7

ph/seg (deg) 69.7 5.4 Theor. Amplitude 1.503 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 103.3 9.5 Search (4096X16) 1.488 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 2.2 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 7.8 3.0 Inc. seg. avg. 3.020 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 f: az 267.6 el 46.2 pa 66.3 o: az 248.3 el 56.5 pa 52.6 u,v (fr/asec) 1769.420 -532.738 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fo...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fo.W.54.zrmoyi

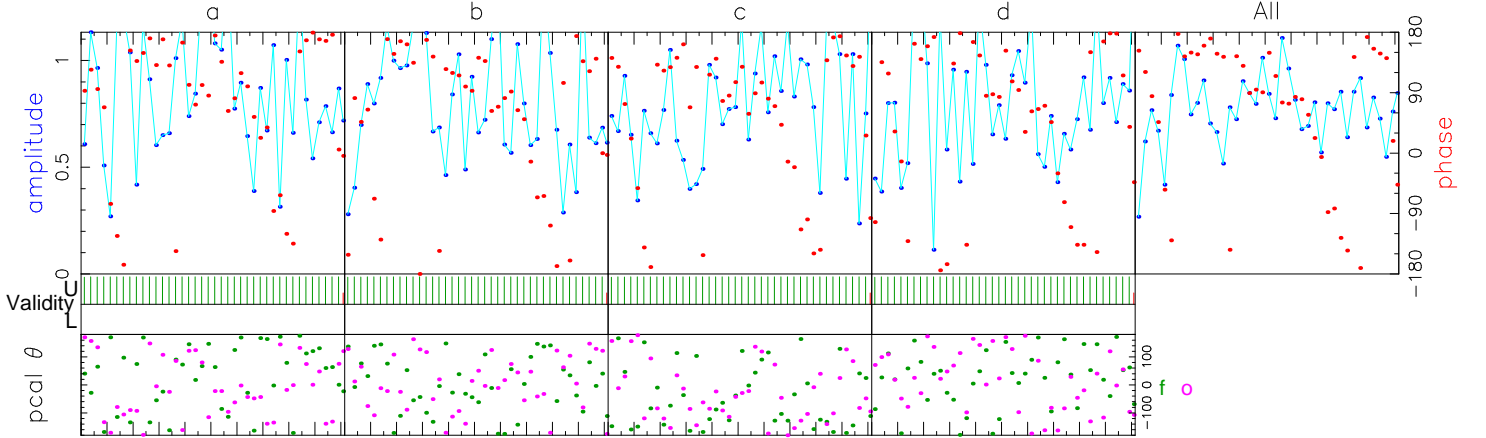






Fringe quality 9  
SNR 17.0  
Int time 598.602  
Amp 0.378  
Phase 133.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.004545  
MBD -0.004935  
Fringe rate (Hz) 0.005316  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. mg002  
Exper # 16383  
Yr:day 2017:093  
Start 061500.00  
Stop 062500.06  
FRT 062000.00  
Corr/FF/build 2017:215:224851  
2017:243:193740  
2017:170:130423  
RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec

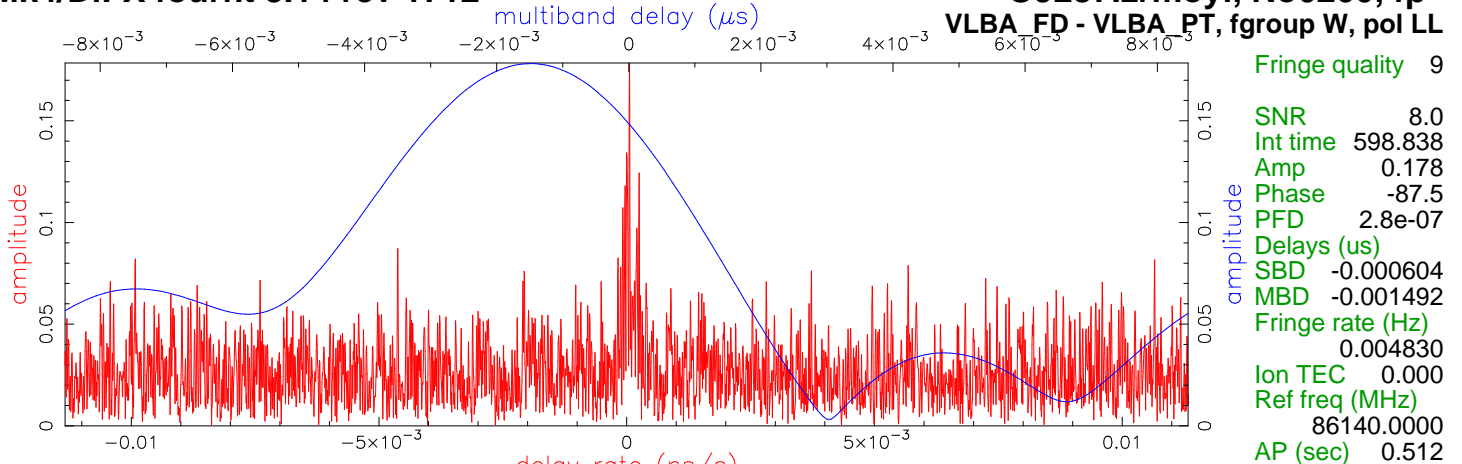


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	137.4	131.3	122.9	141.6	Phase	133.4
	0.4	0.4	0.4	0.4	Ampl.	0.4
	231.7	232.2	232.0	232.0	Sbd box	231.9
U/L	1172/0	1172/0	1172/0	1172/0	APs used	
f	3890	296	1703	3109	PC freqs	
o	3890	296	1703	3109	PC freqs	
f:o	0:0	0:0	0:0	0:0	PC phase	
f:o	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-2.50012813813E+03	Apriori delay (usec)	-2.50012320357E+03	Resid mbdelay (usec)	-4.93456E-03	+/-	1.4E-04
Sband delay (usec)	-2.50012774867E+03	Apriori clock (usec)	-3.0540454E+00	Resid sbdelay (usec)	-4.54510E-03	+/-	5.6E-04
Phase delay (usec)	-2.50012319927E+03	Apriori clockrate (us/s)	-6.8065150E-07	Resid phdelay (usec)	4.30233E-06	+/-	2.2E-07
Delay rate (us/s)	-2.86772092622E-01	Apriori rate (us/s)	-2.86772154337E-01	Resid rate (us/s)	6.17150E-08	+/-	6.3E-10
Total phase (deg)	-138.5	Apriori accel (us/s/s)	9.59062533265E-06	Resid phase (deg)	133.4	+/-	6.7

ph/seg (deg)	RMS 71.4	Theor. 21.6	Amplitude 0.378 +/- 0.022	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	111.9	37.6	Search (4096X16) 0.372	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	10.0	6.7	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	9.9	11.8	Inc. seg. avg. 0.717	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.378	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		

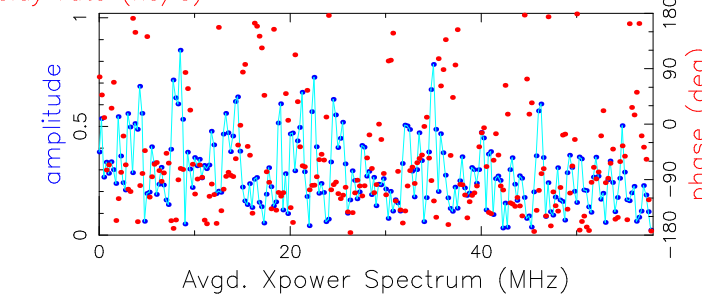
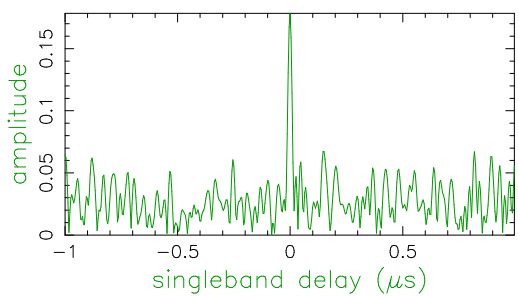
f: az 267.6 el 46.2 pa 66.3 o: az 248.3 el 56.5 pa 52.6 u,v (fr/asec) 1769.420 -532.738 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fo...zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fo.W.56.zrmoyi



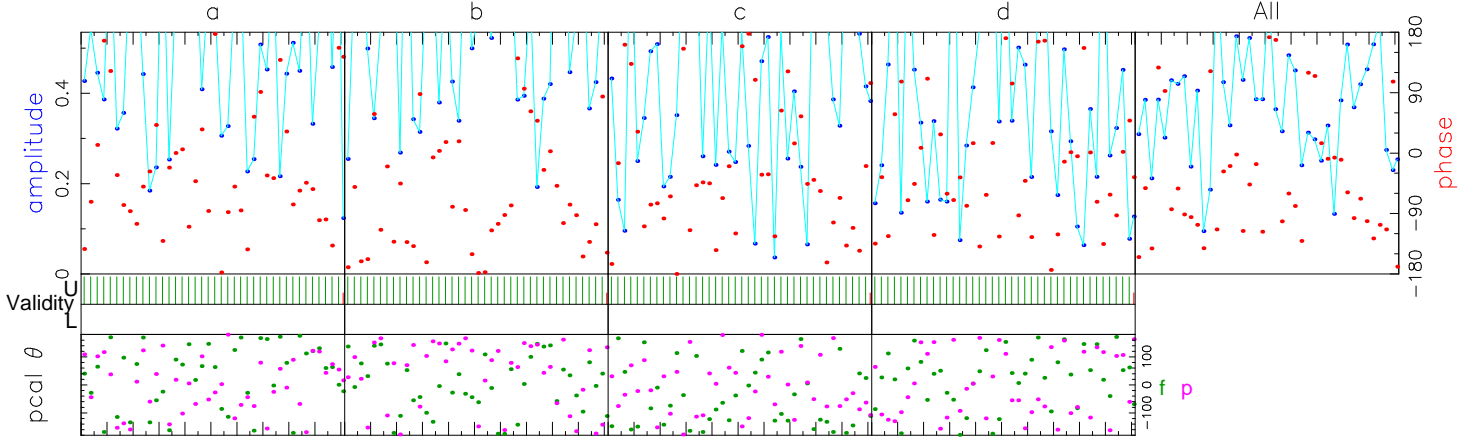
Fringe quality 9

SNR 8.0  
 Int time 598.838  
 Amp 0.178  
 Phase -87.5  
 PFD 2.8e-07  
 Delays (us)  
 SBD -0.000604  
 MBD -0.001492  
 Fringe rate (Hz) 0.004830  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. mg002  
 Exper # 16383  
 Yr:day 2017:093  
 Start 061500.00  
 Stop 062500.06  
 FRT 062000.00  
 Corr/FF/build 2017:215:224851  
 2017:243:193744  
 2017:170:130423  
 RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"



Amp. and Phase vs. time for each freq., 41 segs, 29 APs / seg (14.85 sec / seg.), time ticks 30 sec



86151.11	86209.70	86268.30	86326.89	86385.38	86443.87	86502.36	86560.85	86619.34	86677.83	86736.32	86794.81	86853.30	86911.79	86970.28	87028.77	87087.26	87145.75	87204.24	87262.73	87321.22	87379.71	87438.20	87496.69	87555.18	87613.67	87672.16	87730.65	87789.14	87847.63	87906.12	87964.61	88023.10	88081.59	88140.08	88198.57	88257.06	88315.55	88374.04	88432.53	88491.02	88549.51	88608.00	88666.49	88724.98	88783.47	88841.96	88900.45	88958.94	89017.43	89075.92	89134.41	89192.90	89251.39	89309.88	89368.37	89426.86	89485.35	89543.84	89602.33	89660.82	89719.31	89777.80	89836.29	89894.78	89953.27	90011.76	90070.25	90128.74	90187.23	90245.72	90304.21	90362.70	90421.19	90479.68	90538.17	90596.66	90655.15	90713.64	90772.13	90830.62	90889.11	90947.60	91006.09	91064.58	91123.07	91181.56	91240.05	91298.54	91357.03	91415.52	91474.01	91532.50	91591.00	91649.49	91707.98	91766.47	91824.96	91883.45	91941.94	91999.93	92058.42	92116.91	92175.40	92233.89	92292.38	92350.87	92409.36	92467.85	92526.34	92584.83	92643.32	92701.81	92760.30	92818.79	92877.28	92935.77	92994.26	93052.75	93111.24	93169.73	93228.22	93286.71	93345.20	93403.69	93462.18	93520.67	93579.16	93637.65	93696.14	93754.63	93813.12	93871.61	93930.10	93988.59	94047.08	94105.57	94164.06	94222.55	94281.04	94339.53	94398.02	94456.51	94515.00	94573.49	94631.98	94690.47	94748.96	94807.45	94865.94	94924.43	94982.92	95041.41	95100.00	95158.49	95216.98	95275.47	95333.96	95392.45	95450.94	95509.43	95567.92	95626.41	95684.90	95743.39	95801.88	95860.37	95918.86	95977.35	96035.84	96094.33	96152.82	96211.31	96269.80	96328.29	96386.78	96445.27	96503.76	96562.25	96620.74	96679.23	96737.72	96796.21	96854.70	96913.19	96971.68	97030.17	97088.66	97147.15	97205.64	97264.13	97322.62	97381.11	97439.60	97498.09	97556.58	97615.07	97673.56	97732.05	97790.54	97849.03	97907.52	97966.01	98024.50	98083.00	98141.49	98200.00	98258.49	98316.98	98375.47	98433.96	98492.45	98550.94	98609.43	98667.92	98726.41	98784.90	98843.39	98901.88	98960.37	99018.86	99077.35	99135.84	99194.33	99252.82	99311.31	99369.80	99428.29	99486.78	99545.27	99603.76	99662.25	99720.74	99779.23	99837.72	99896.21	99954.70	100013.19	100071.68	100130.17	100188.66	100247.15	100305.64	100364.13	100422.62	100481.11	100539.60	100598.09	100656.58	100715.07	100773.56	100832.05	100890.54	100949.03	101007.52	101066.01	101124.50	101183.00	101241.49	101300.00	101358.49	101416.98	101475.47	101533.96	101592.45	101650.94	101709.43	101767.92	101826.41	101884.90	101943.39	102001.88	102060.37	102118.86	102177.35	102235.84	102294.33	102352.82	102411.31	102469.80	102528.29	102586.78	102645.27	102703.76	102762.25	102820.74	102879.23	102937.72	103000.00	103058.49	103116.98	103175.47	103233.96	103292.45	103350.94	103409.43	103467.92	103526.41	103584.90	103643.39	103701.88	103760.37	103818.86	103877.35	103935.84	104000.00	104058.49	104116.98	104175.47	104233.96	104292.45	104350.94	104409.43	104467.92	104526.41	104584.90	104643.39	104701.88	104760.37	104818.86	104877.35	104935.84	105000.00	105058.49	105116.98	105175.47	105233.96	105292.45	105350.94	105409.43	105467.92	105526.41	105584.90	105643.39	105701.88	105760.37	105818.86	105877.35	105935.84	106000.00	106058.49	106116.98	106175.47	106233.96	106292.45	106350.94	106409.43	106467.92	106526.41	106584.90	106643.39	106701.88	106760.37	106818.86	106877.35	106935.84	107000.00	107058.49	107116.98	107175.47	107233.96	107292.45	107350.94	107409.43	107467.92	107526.41	107584.90	107643.39	107701.88	107760.37	107818.86	107877.35	107935.84	108000.00	108058.49	108116.98	108175.47	108233.96	108292.45	108350.94	108409.43	108467.92	108526.41	108584.90	108643.39	108701.88	108760.37	108818.86	108877.35	108935.84	109000.00	109058.49	109116.98	109175.47	109233.96	109292.45	109350.94	109409.43	109467.92	109526.41	109584.90	109643.39	109701.88	109760.37	109818.86	109877.35	109935.84	110000.00
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Group delay (usec)(sbd)	-8.25245476074E+02	Apriori delay (usec)	-8.25243984178E+02	Resid mbdelay (usec)	-1.49190E-03	+/-	3.0E-04
Sband delay (usec)	-8.25244588316E+02	Apriori clock (usec)	-3.2379191E+00	Resid sbdelay (usec)	-6.04138E-04	+/-	1.2E-03
Phase delay (usec)	-8.25243987000E+02	Apriori clockrate (us/s)	-6.8734227E-07	Resid phdelay (usec)	-2.82164E-06	+/-	4.6E-07
Delay rate (us/s)	-9.75933902137E-02	Apriori rate (us/s)	-9.75934462893E-02	Resid rate (us/s)	5.60756E-08	+/-	1.3E-09
Total phase (deg)	-14.5	Apriori accel (us/s/s)	2.28336914124E-06	Resid phase (deg)	-87.5	+/-	14.3

ph/seg (deg)	78.6	Theor.	45.6	Amplitude	0.178 +/- 0.022	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	129.8	Search (4096X16)	0.175	Search	0.175	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	17.7	Interp.	0.000	Inc. seg. avg.	0.284	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	23.7	Inc. frq. avg.	0.177	Inc. frq. avg.	0.177	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
						Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00

f: az 267.6 el 46.2 pa 66.3 p: az 260.9 el 49.4 pa 60.6 u,v (fr/asec) 600.275 -388.681 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/fp.zrmoyi Output file: /Exps/mg002/gmva\_58\_merged\_pc1/1234/No0200/tp.W.57.zrmoyi







