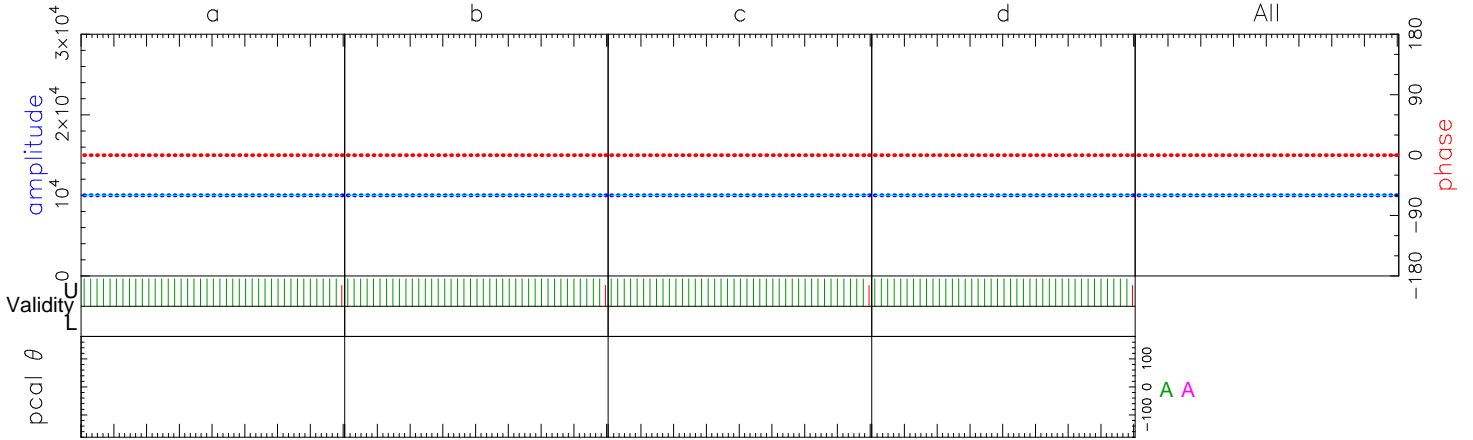


Fringe quality 9
 SNR 403293.5
 Int time 479.987
 Amp 10000.000
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build 2017:237:145731
 2017:244:080618
 2017:170:130423
 RA & Dec (J2000) 08h54m48.8749s
 +20°06'30.641"

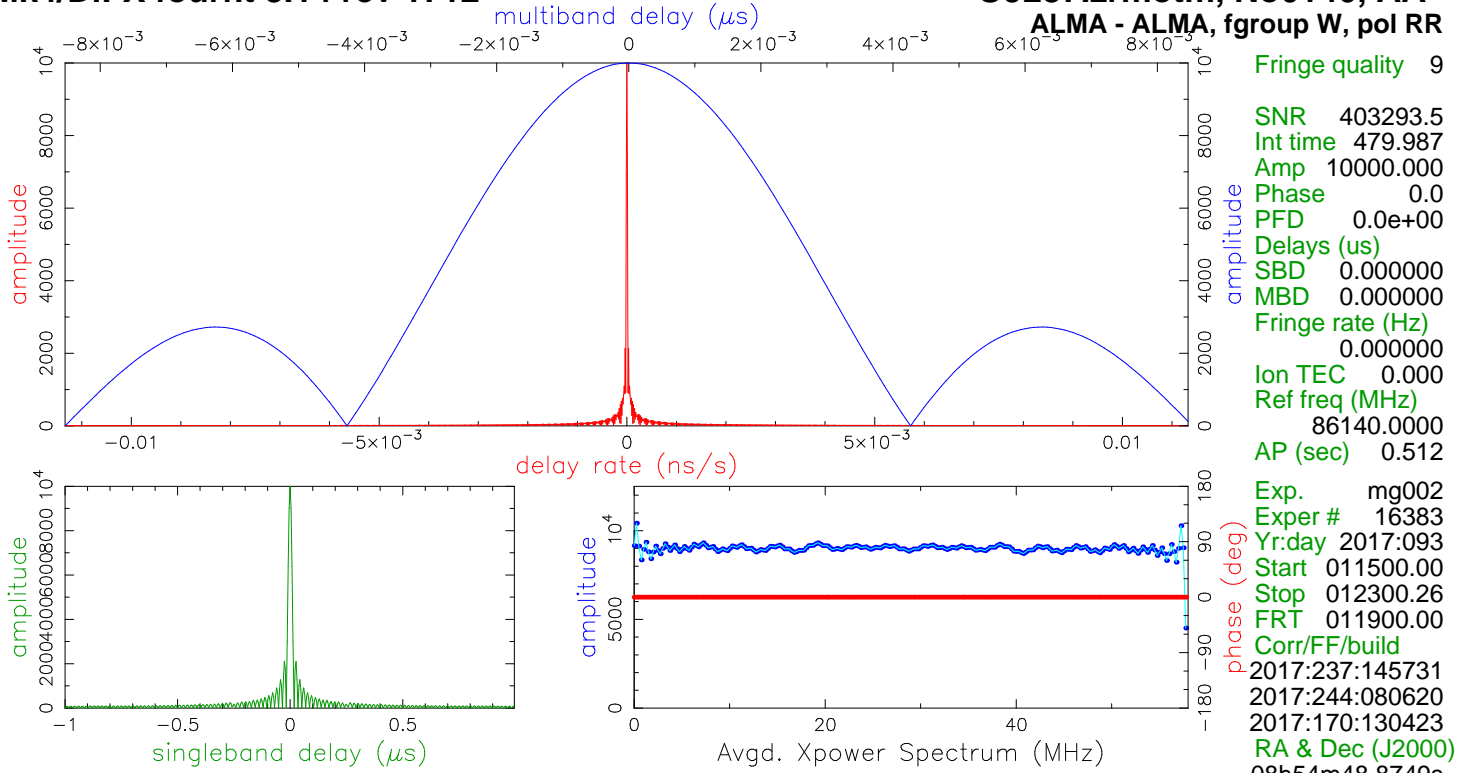
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



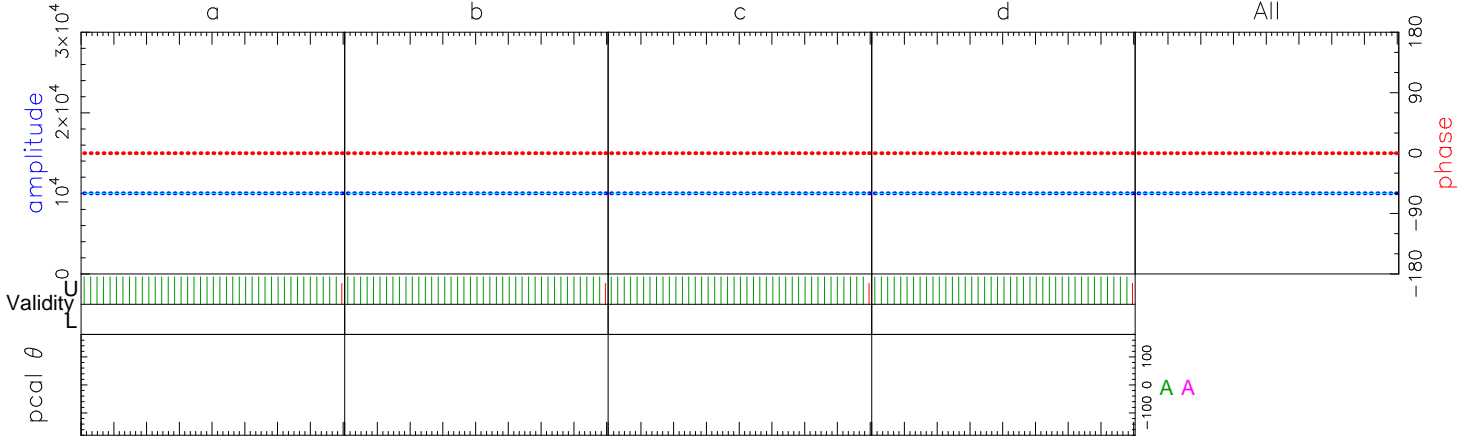
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-0.0	-0.0	0.0	0.0	Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	233.0	233.0	233.0	233.0	Sbd box	233.0
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
A	0	0	0	0	PC freqs	
A:A	0:0	0:0	0:0	0:0	PC phase	
A:A	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
A	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
A	W00UL	W01UL	W02UL	W03UL	Tracks	
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
A	W00UL	W01UL	W02UL	W03UL	Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	6.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.4E-08
Phase delay (usec)	-2.59005522303E-17	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.59006E-17	+/-	9.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.3E-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	10000.000 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	Search (2048X16)	10000.000	Search	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	Interp.	0.000	Inc. seg. avg.	10000.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	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		



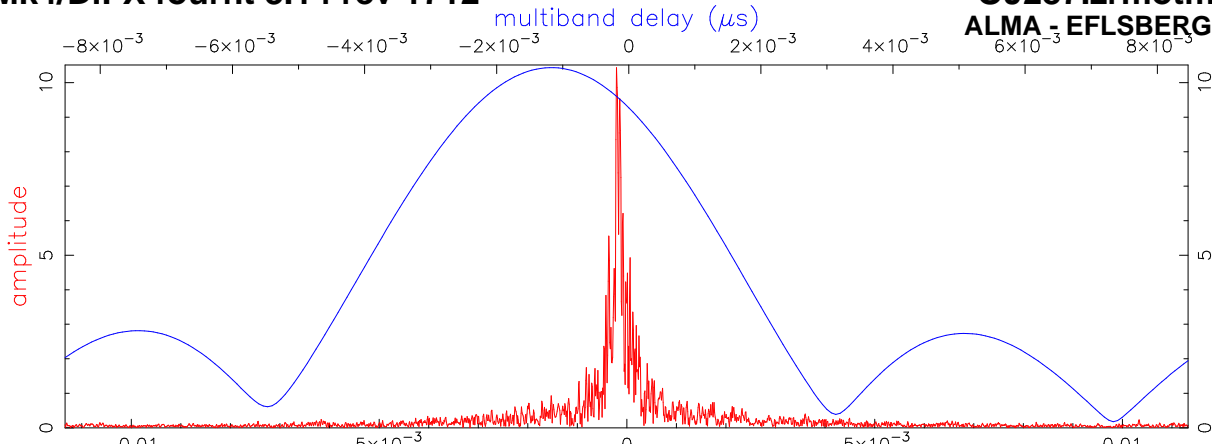
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
0.0	-0.0	-0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
233.0	233.0	233.0	233.0	233.0	Sbd box	233.0
U/L 938/0	938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	0	PC freqs	
A 0	0	0	0	0	PC freqs	
A:A 0:0	0:0	0:0	0:0	0:0	PC phase	
A:A 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
A 1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR		Chan ids	
A W00UR	W01UR	W02UR	W03UR		Tracks	
					Chan ids	
					Tracks	

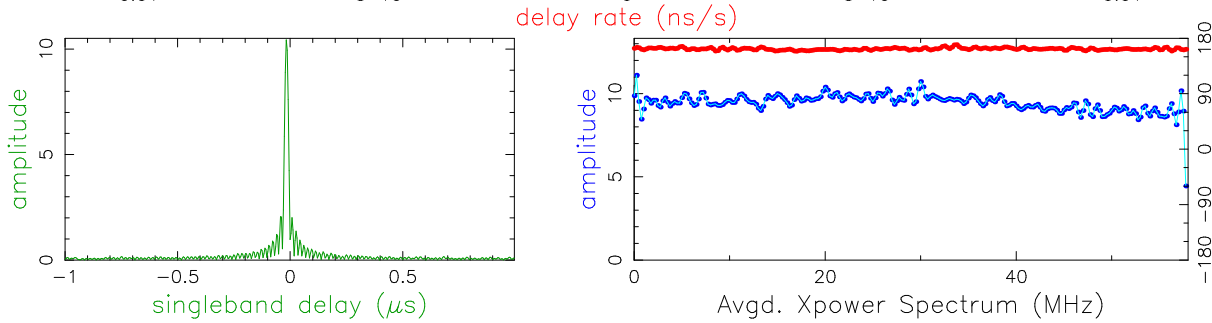
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	6.0E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.4E-08
Phase delay (usec)	2.08530773465E-17	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	2.08531E-17	+/-	9.2E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	3.3E-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	10000.000 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (2048X16)	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	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



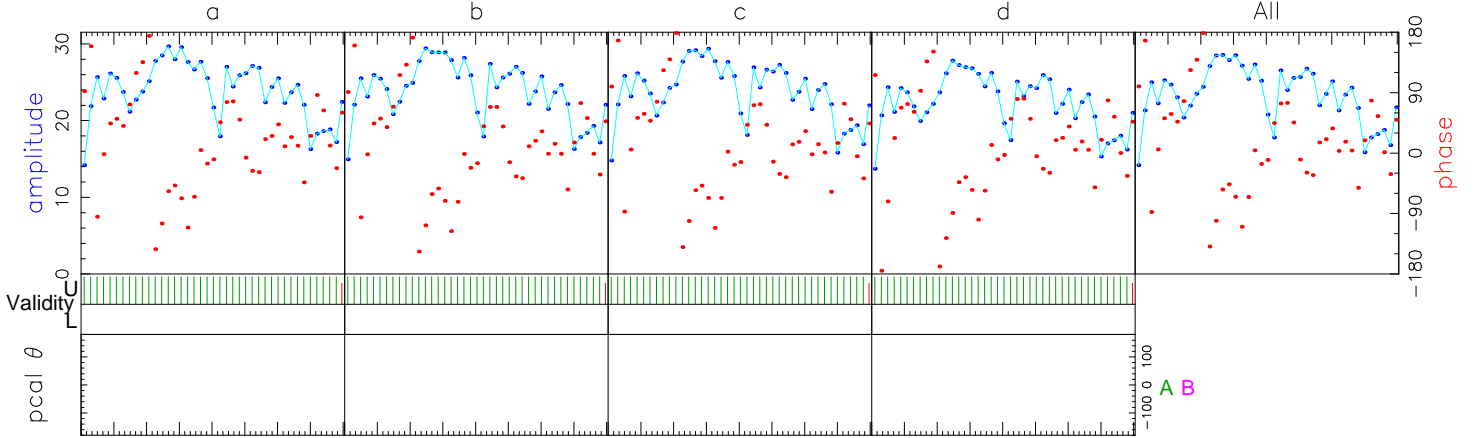
Fringe quality 5

SNR 423.9
 Int time 479.987
 Amp 10.512
 Phase 74.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.016115
 MBD -0.001162
 Fringe rate (Hz)
 -0.017793
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170336
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

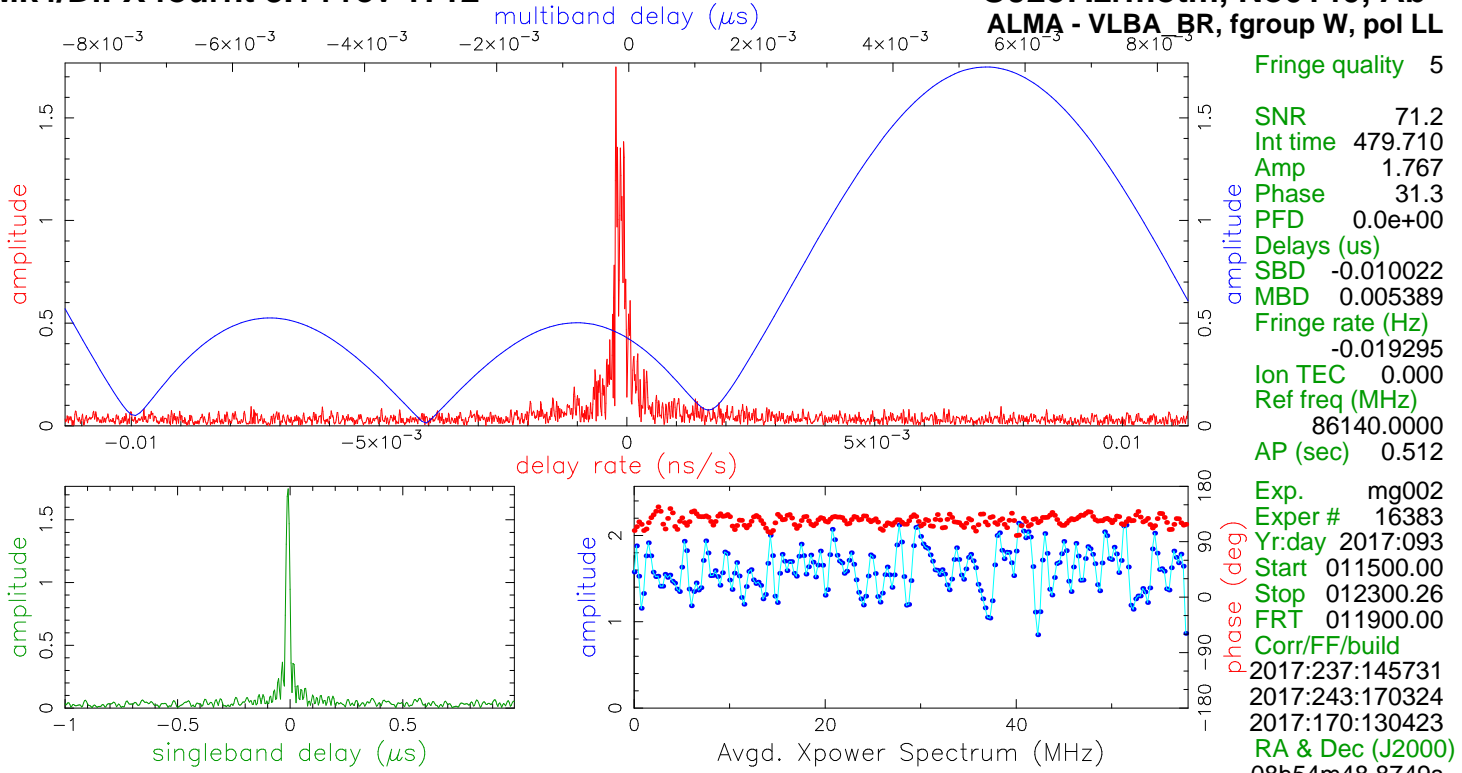


86151.11	86209.70	86268.30	86326.89	All
10.7	2.2	3.0	9.9	6.4
10.6	10.6	10.6	10.0	10.5
229.5	228.8	229.5	229.3	229.3
U/L 938/0	938/0	938/0	938/0	
A 0	0	0	0	
B 0	0	0	0	
A:B 0:0	0:0	0:0	0:0	
A:B 0:0	0:0	0:0	0:0	
A 1000	1000	1000	1000	
B 1000	1000	1000	1000	
A W00UR	W01UR	W02UR	W03UR	
B W00UL	W01UL	W02UL	W03UL	

Group delay (usec)(sbd)	6.3115989090E+03	Apriori delay (usec)	6.31157811959E+03	Resid mbdelay (usec)	-1.16202E-03	+/-	5.7E-06
Sband delay (usec)	6.31156200428E+03	Apriori clock (usec)	-2.1349465E+03	Resid sbdelay (usec)	-1.61153E-02	+/-	2.2E-05
Phase delay (usec)	6.31157811979E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	2.06135E-07	+/-	8.7E-09
Delay rate (us/s)	6.99466978400E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.06554E-07	+/-	3.1E-11
Total phase (deg)	154.3	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	74.6	+/-	0.3

ph/seg (deg)	71.8	Theor.	0.9	Amplitude	10.512 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	126.6	1.5	Interp.	0.000	10.123	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	5.5	0.3	Inc. seg. avg.	23.320	10.461	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	2.7	0.5	Inc. frq. avg.	10.461		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	
						nlags:	232	t_cohere	infinite	

A: az 348.6 el 46.2 pa 168.9 B: az 277.9 el 19.7 pa 42.0 u,v (fr/asec) -4411.735 -12207.211 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB.W.10.zrmotm



Fringe quality 5

SNR 71.2

Int time 479.710

Amp 1.767

Phase 31.3

PFD 0.0e+00

Delays (us)

SBD -0.010022

MBD 0.005389

Fringe rate (Hz)

-0.019295

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170324

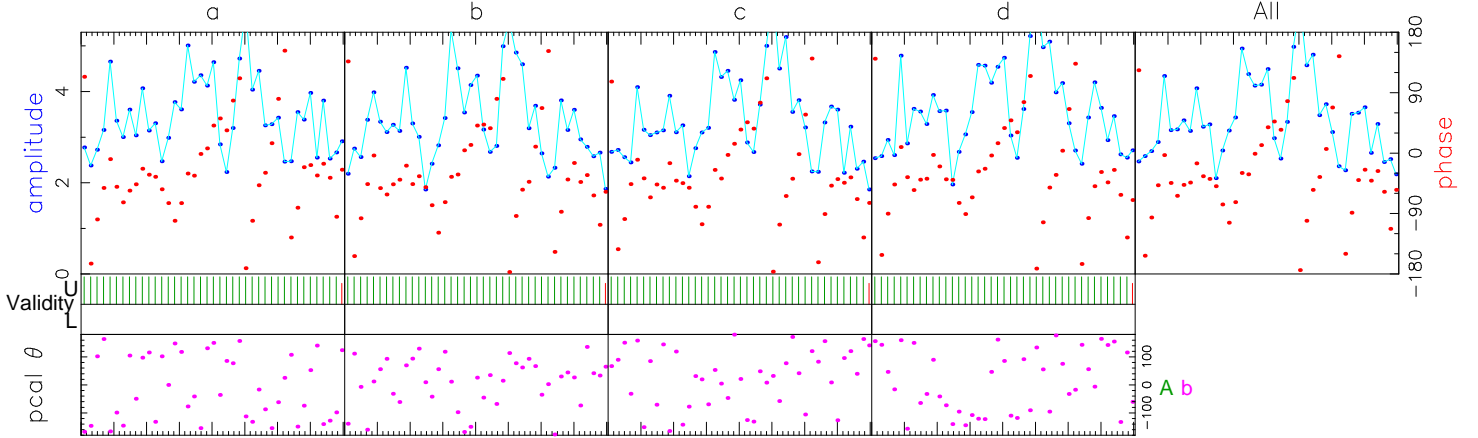
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86385.48	All
86151.11	-34.9	-39.3	-40.8	-33.3		Phase -37.0
U/L	938/0	938/0	938/0	938/0		Ampl. 1.7
A	0	0	0	0		Sbd box 230.7
b	3890	296	1703	3109		APs used
A:b	0:0	0:0	0:0	0:0		PC freqs
A:b	0:0	0:0	0:0	0:0		PC phase
A	1000	1000	1000	1000		Mani PC
b	1000	1000	1000	1000		PC amp
A	W00UL	W01UL	W02UL	W03UL		Chan ids
b	W00UL	W01UL	W02UL	W03UL		Tracks
						Chan ids
						Tracks
Group delay (usec)(sbd)	-2.06517717073E+03		Apriori delay (usec)	-2.06516549320E+03	Resid mbdelay (usec)	5.38913E-03 +/- 3.4E-05
Sband delay (usec)	-2.06517551471E+03		Apriori clock (usec)	-2.1012290E+03	Resid sbdelay (usec)	-1.00215E-02 +/- 1.3E-04
Phase delay (usec)	-2.06516549439E+03		Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-1.19256E-06 +/- 5.2E-08
Delay rate (us/s)	-8.80436915562E-01		Apriori rate (us/s)	-8.80436691570E-01	Resid rate (us/s)	-2.23992E-07 +/- 1.9E-10
Total phase (deg)		-178.9	Apriori accel (us/s/s)	-4.40073668553E-05	Resid phase (deg)	31.3 +/- 1.6

ph/seg (deg) 70.0 5.2 Theor. Amplitude 1.767 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

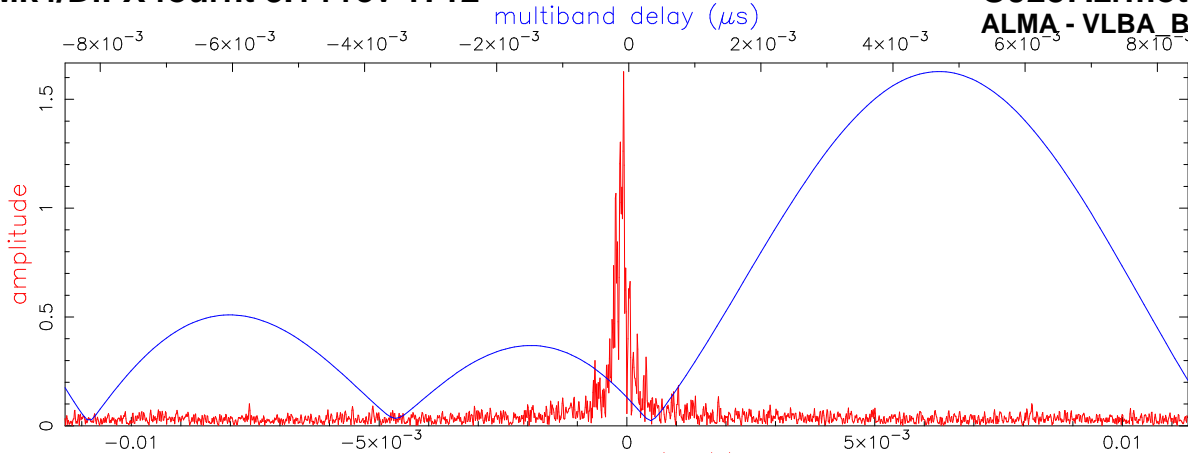
amp/seg (%) 105.6 9.0 Search (2048X16) 1.704 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 4.3 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

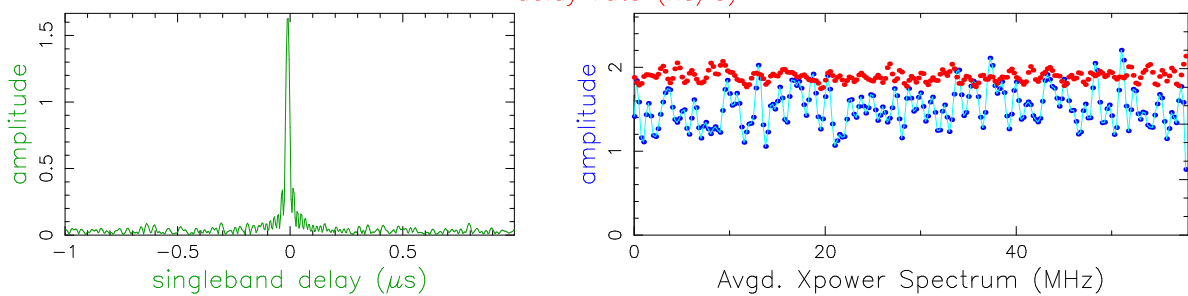
amp/frq (%) 3.2 2.8 Inc. seg. avg. 3.403 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 b: az 113.3 el 45.2 pa -41.1 u,v (fr/asec) 5299.709 -10728.499 simultaneous interpolator

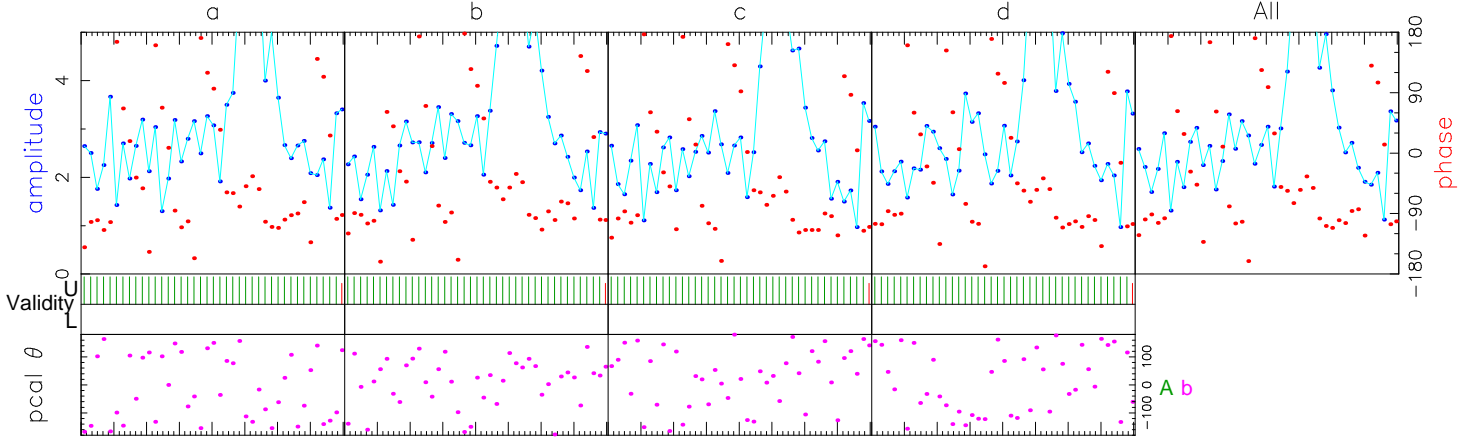
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab.W.3.zrmtm



Fringe quality 5
 SNR 67.2
 Int time 479.710
 Amp 1.667
 Phase -15.1
 PFD 0.0e+00
 Delays (us)
 SBD -0.010726
 MBD 0.004666
 Fringe rate (Hz)
 -0.005508
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170325
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

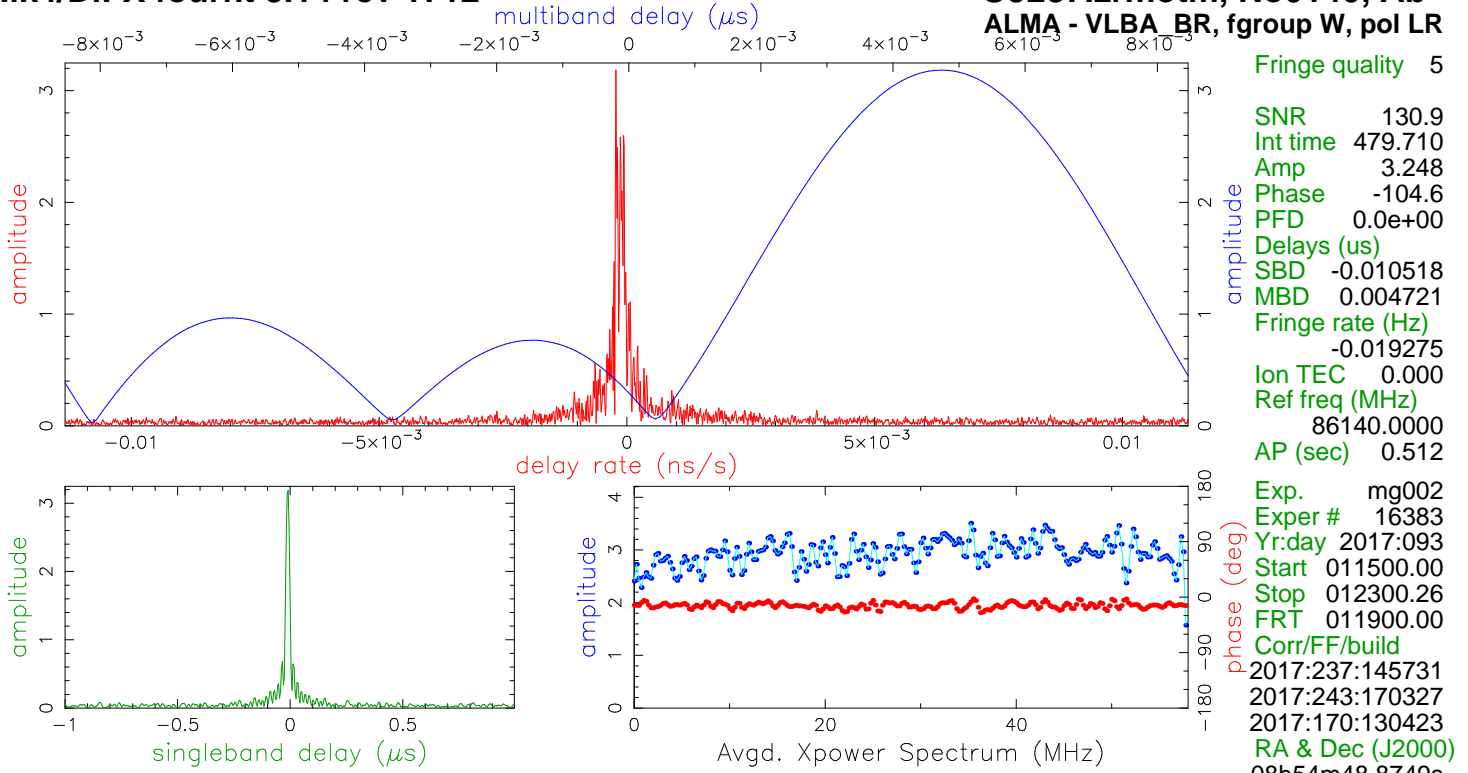


Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

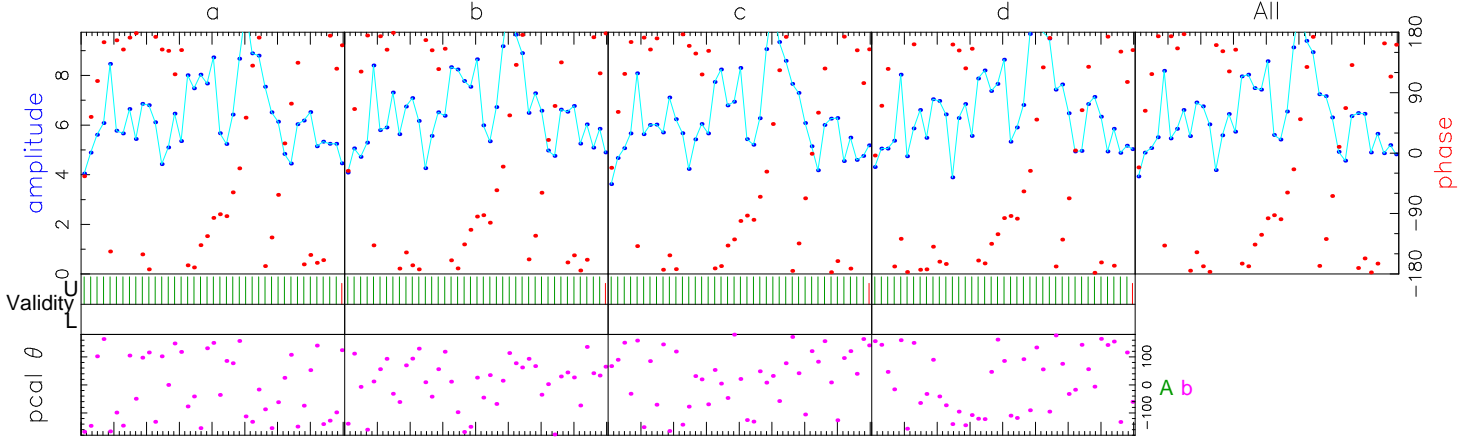


86151.11	86209.70	86268.30	86326.89	86151.11	86209.70	86268.30	86326.89	All
-87.1	-77.8	-86.7	-82.1	Phase	-83.3			
1.6	1.7	1.6	1.7	Ampl.	1.6			
230.4	230.6	230.4	230.7	Sbd box	230.5			
U/L 938/0	938/0	938/0	938/0	APs used				
A 0	0	0	0	PC freqs				
b 3890	296	1703	3109	PC freqs				
A:b 0:0	0:0	0:0	0:0	PC phase				
A:b 0:0	0:0	0:0	0:0	Manl PC				
A 1000	1000	1000	1000	PC amp				
b 1000	1000	1000	1000					
A W00UR	W01UR	W02UR	W03UR	Chan ids				
b W00UR	W01UR	W02UR	W03UR	Tracks				
				Chan ids				
				Tracks				
Group delay (usec)(sbd)	-2.06517789351E+03	Apriori delay (usec)	-2.06516549320E+03	Resid mbdelay (usec)	4.66635E-03	+/-	3.6E-05	
Sband delay (usec)	-2.06517621927E+03	Apriori clock (usec)	-2.1012290E+03	Resid sbdelay (usec)	-1.07261E-02	+/-	1.4E-04	
Phase delay (usec)	-2.06516549588E+03	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-2.68695E-06	+/-	5.5E-08	
Delay rate (us/s)	-8.80436755508E-01	Apriori rate (us/s)	-8.80436691570E-01	Resid rate (us/s)	-6.39381E-08	+/-	2.0E-10	
Total phase (deg)	-225.3	Apriori accel (us/s/s)	-4.40073668553E-05	Resid phase (deg)	-15.1	+/-	1.7	

ph/seg (deg) 78.7 5.5 Theor. Amplitude 1.667 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 113.7 9.5 Search (2048X16) 1.576 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.4 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 3.3 3.0 Inc. seg. avg. 2.985 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011
 Inc. frq. avg. 1.630 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 348.6 el 46.2 pa 168.9 b: az 113.3 el 45.2 pa -41.1 u,v (fr/asec) 5299.709 -10728.499 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab.W.4.zrmotm



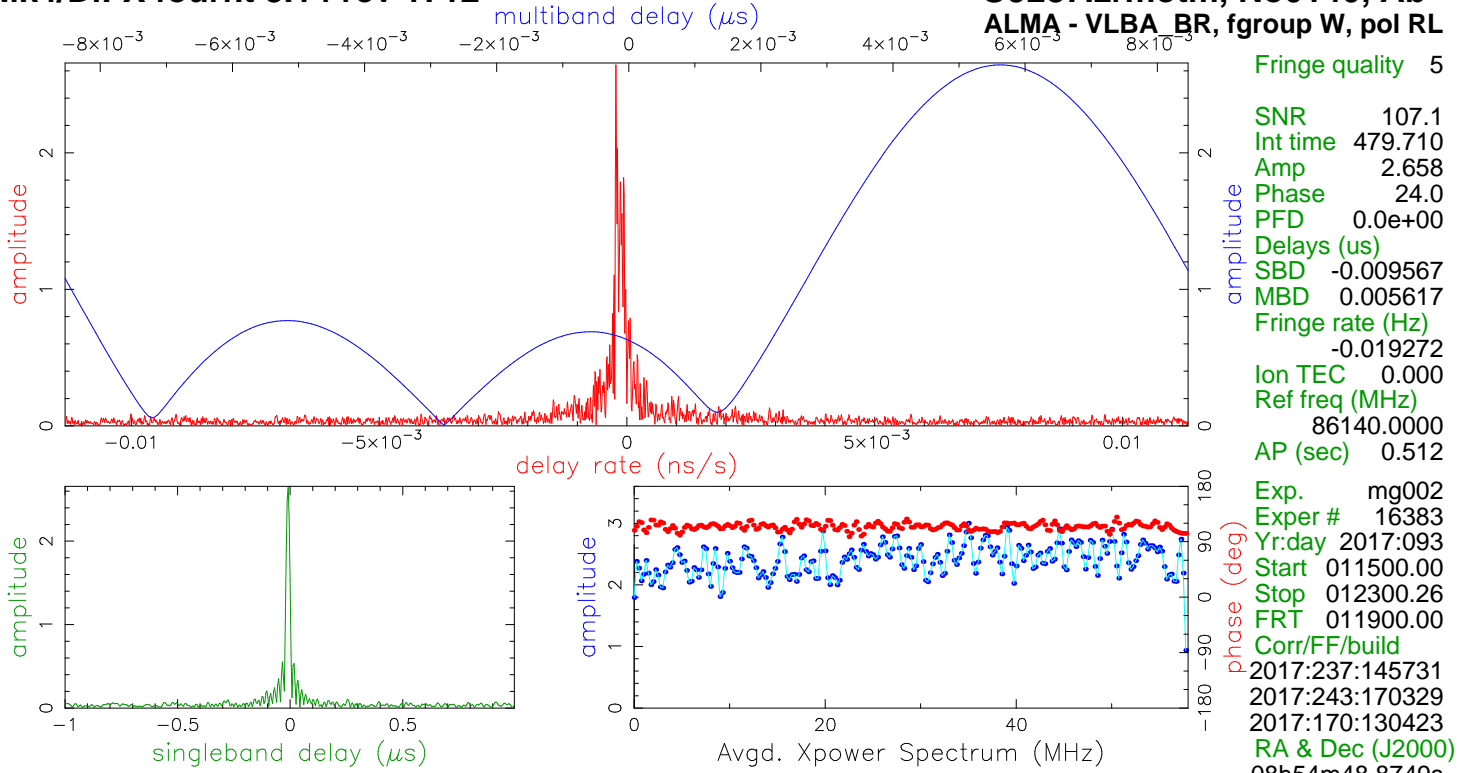
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



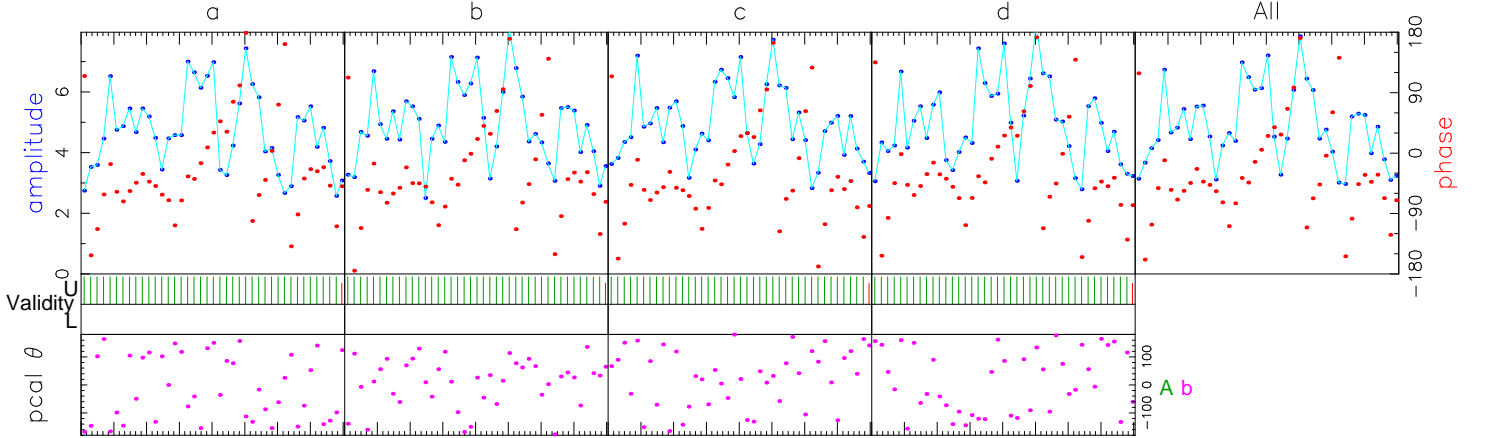
	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0
A	0	0	0	0	0	0
b	3890	296	1703	3109	3109	3109
A:b	0:0	0:0	0:0	0:0	0:0	0:0
A:b	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
b	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR

Group delay (usec)(sbd)	-2.06517783879E+03	Apriori delay (usec)	-2.06516549320E+03	Resid mbdelay (usec)	4.72108E-03	+/-	1.9E-05
Sband delay (usec)	-2.06517601154E+03	Apriori clock (usec)	-2.1012290E+03	Resid sbdelay (usec)	-1.05183E-02	+/-	7.3E-05
Phase delay (usec)	-2.06516549877E+03	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-5.57451E-06	+/-	2.8E-08
Delay rate (us/s)	-8.80436915331E-01	Apriori rate (us/s)	-8.80436691570E-01	Resid rate (us/s)	-2.23761E-07	+/-	1.0E-10
Total phase (deg)	45.2	Apriori accel (us/s/s)	-4.40073668553E-05	Resid phase (deg)	-104.6	+/-	0.9

ph/seg (deg)	RMS 70.6	Theor. 2.8	Amplitude 3.248 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	108.7	4.9	Search (2048X16) 3.046	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	3.9	0.9	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.0	1.5	Inc. seg. avg. 6.421	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 3.188	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-42.8	-45.0	-48.4	-41.0	-44.3	Phase	-44.3
2.7	2.7	2.6	2.6	2.6	Ampl.	2.6
230.6	230.8	230.8	231.0	230.8	Sbd box	230.8
U/L 938/0	938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	0	PC freqs	
b 3890	296	1703	3109		PC freqs	
A:b 0:0	0:0	0:0	0:0		PC phase	
A:b 0:0	0:0	0:0	0:0		Mani PC	
A 1000	1000	1000	1000		PC amp	
b 1000	1000	1000	1000			
A W00UR	W01UR	W02UR	W03UR		Chan ids	
b W00UL	W01UL	W02UL	W03UL		Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-2.06517694238E+03	Apriori delay (usec)	-2.06516549320E+03	Resid mbdelay (usec)	5.61749E-03	+/- 2.3E-05
Sband delay (usec)	-2.06517506064E+03	Apriori clock (usec)	-2.1012290E+03	Resid sbdelay (usec)	-9.56745E-03	+/- 8.9E-05
Phase delay (usec)	-2.06516549462E+03	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-1.42847E-06	+/- 3.4E-08
Delay rate (us/s)	-8.80436915301E-01	Apriori rate (us/s)	-8.80436691570E-01	Resid rate (us/s)	-2.23731E-07	+/- 1.2E-10
Total phase (deg)	-186.3	Apriori accel (us/s/s)	-4.40073668553E-05	Resid phase (deg)	24.0	+/- 1.1

Group delay (usec)(sbd) -2.06517694238E+03 Apriori delay (usec) -2.06516549320E+03 Resid mbdelay (usec) 5.61749E-03 +/- 2.3E-05

Sband delay (usec) -2.06517506064E+03 Apriori clock (usec) -2.1012290E+03 Resid sbdelay (usec) -9.56745E-03 +/- 8.9E-05

Phase delay (usec) -2.06516549462E+03 Apriori clockrate (us/s) 1.7493731E-06 Resid phdelay (usec) -1.42847E-06 +/- 3.4E-08

Delay rate (us/s) -8.80436915301E-01 Apriori rate (us/s) -8.80436691570E-01 Resid rate (us/s) -2.23731E-07 +/- 1.2E-10

Total phase (deg) -186.3 Apriori accel (us/s/s) -4.40073668553E-05 Resid phase (deg) 24.0 +/- 1.1

RMS Theor. Amplitude 2.658 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 69.2 3.4 Search (2048X16) 2.564 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

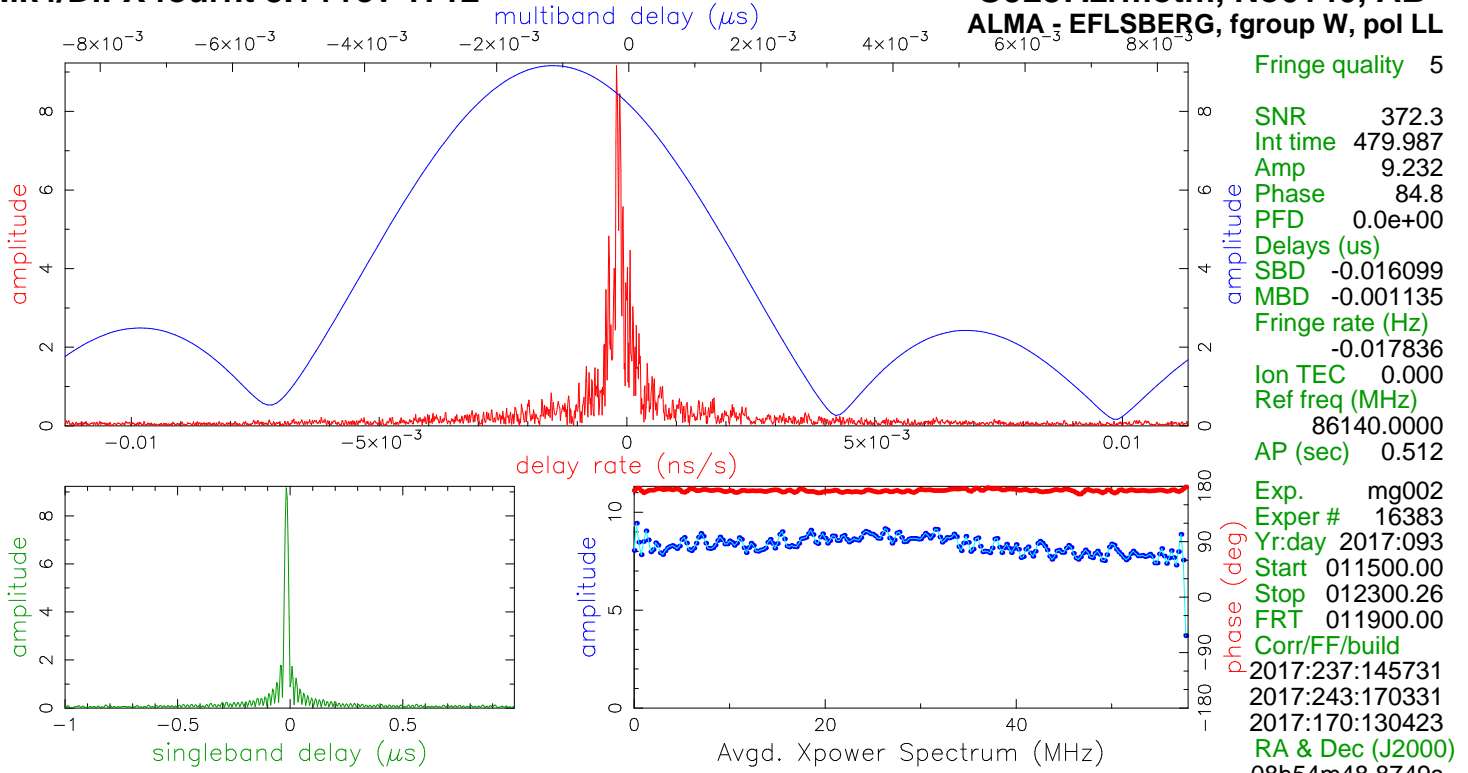
amp/seg (%) 95.1 6.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 3.9 1.1 Inc. seg. avg. 4.855 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011

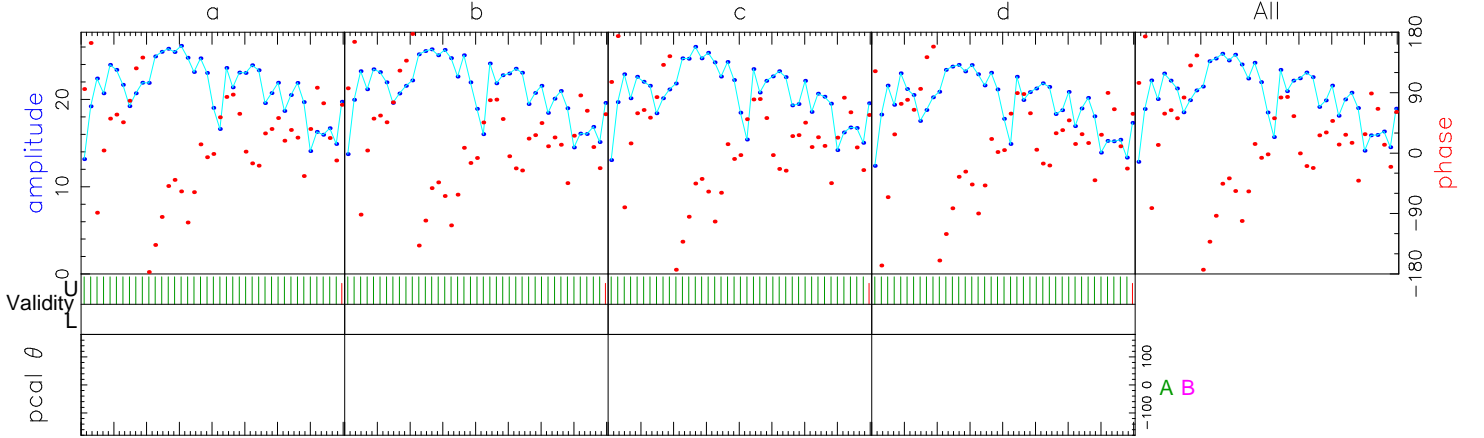
amp/frq (%) 1.1 1.9 Inc. frq. avg. 2.647 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 b: az 113.3 el 45.2 pa -41.1 u,v (fr/asec) 5299.709 -10728.499 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ab.W.6.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86385.48	All
86151.11	20.4	12.9	13.5	19.7	16.6	16.6
20.4	9.4	9.3	9.2	8.7	9.2	9.2
9.4	229.4	228.8	229.4	229.4	229.4	229.3
229.4	U/L 938/0	938/0	938/0	938/0	938/0	938/0
U/L 938/0	A 0	0	0	0	0	0
A 0	B 0	0	0	0	0	0
B 0	A:B 0:0	0:0	0:0	0:0	0:0	0:0
A:B 0:0	A 1000	1000	1000	1000	1000	1000
A 1000	B 1000	1000	1000	1000	1000	1000
B 1000	A W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
A W00UL	B W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
B W00UL	Group delay (usec)(sbd)	6.31155991746E+03	Apriori delay (usec)	6.31157811959E+03	Resid mbdelay (usec)	-1.13546E-03 +/- 6.5E-06
Group delay (usec)(sbd)	6.31156202055E+03	Apriori clock (usec)	-2.1349465E+03	Resid sbdelay (usec)	-1.60990E-02 +/- 2.6E-05	
Sband delay (usec)	6.31157812012E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	5.34924E-07 +/- 9.9E-09	
Phase delay (usec)	6.99466977892E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.07062E-07 +/- 3.6E-11	
Delay rate (us/s)	164.5	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	84.8 +/- 0.3	
Total phase (deg)						

ph/seg (deg) 71.2 1.0 Search (2048X16) 8.928 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

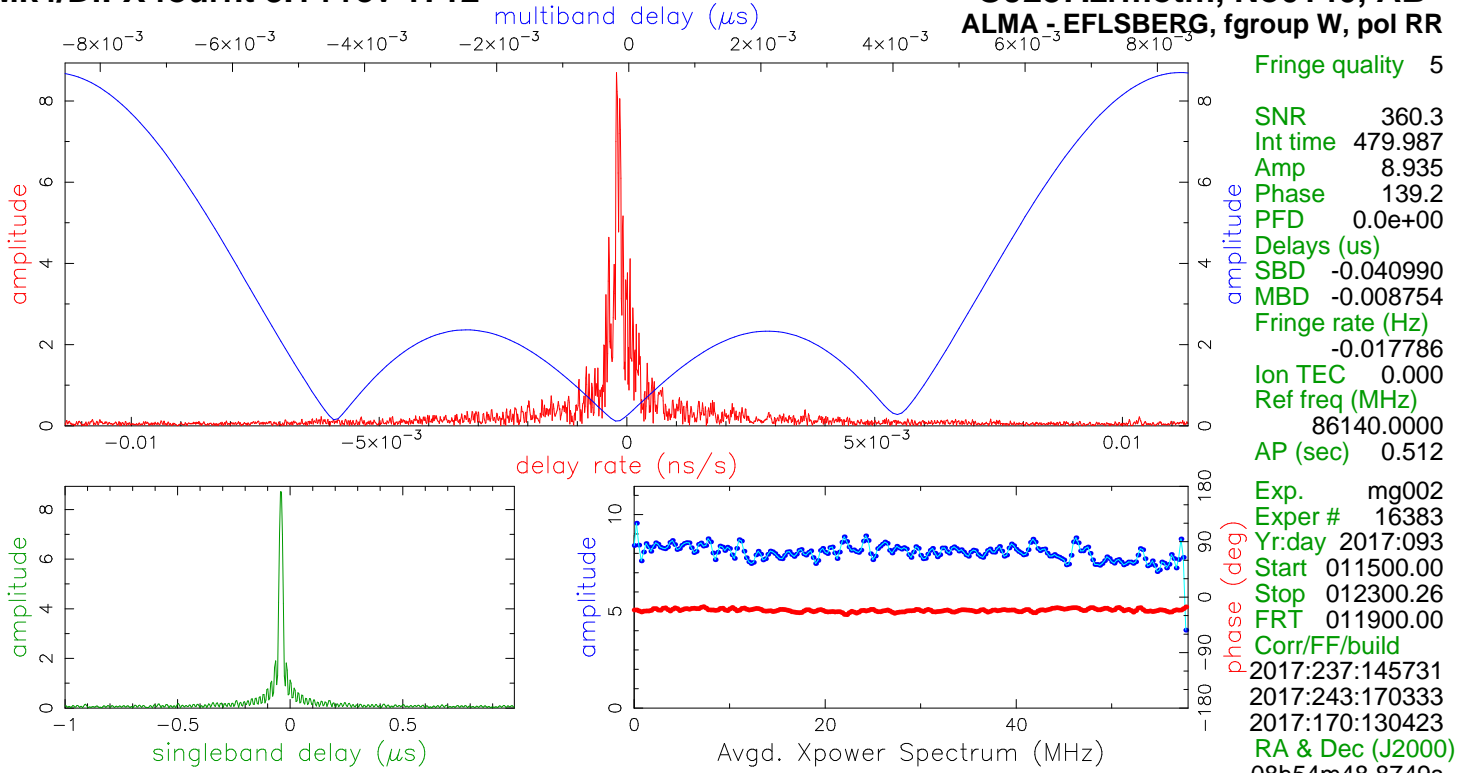
amp/seg (%) 126.8 1.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 4.9 0.3 Inc. seg. avg. 20.507 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

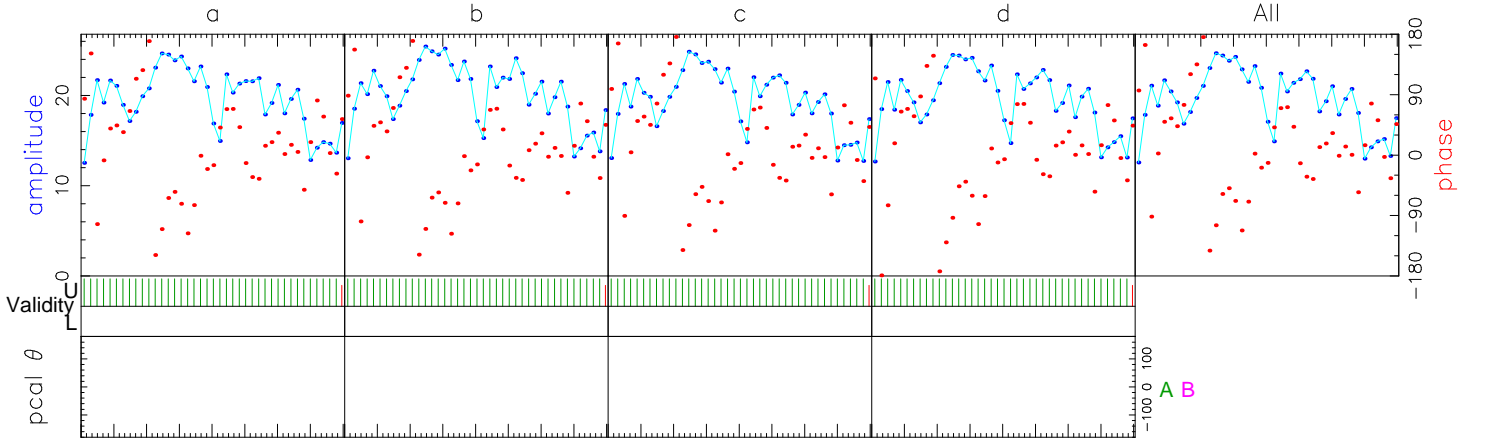
amp/frq (%) 2.9 0.5 Inc. frq. avg. 9.182 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 B: az 277.9 el 19.7 pa 42.0 u,v (fr/asec) -4411.735 -12207.211 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB.W.7.zrmotm

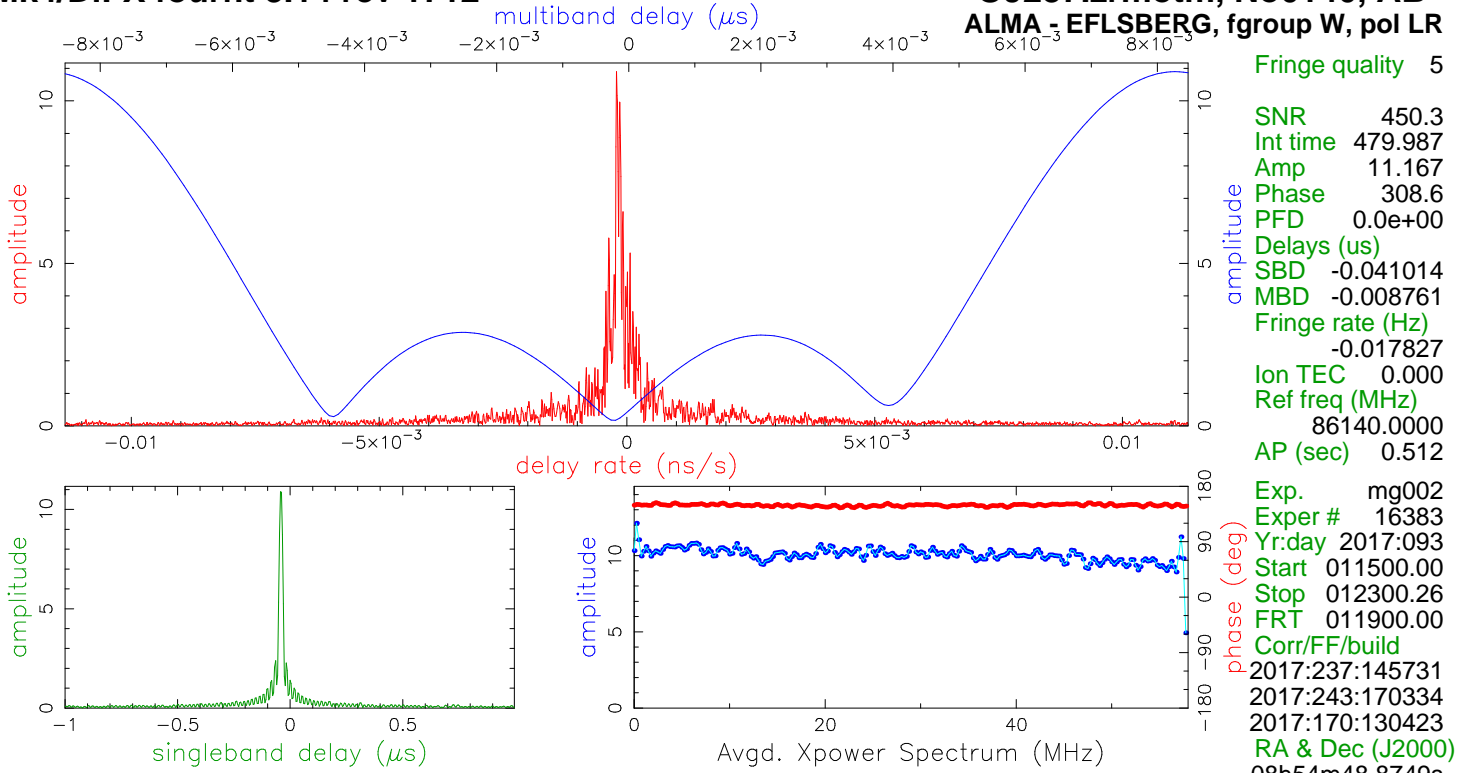


Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

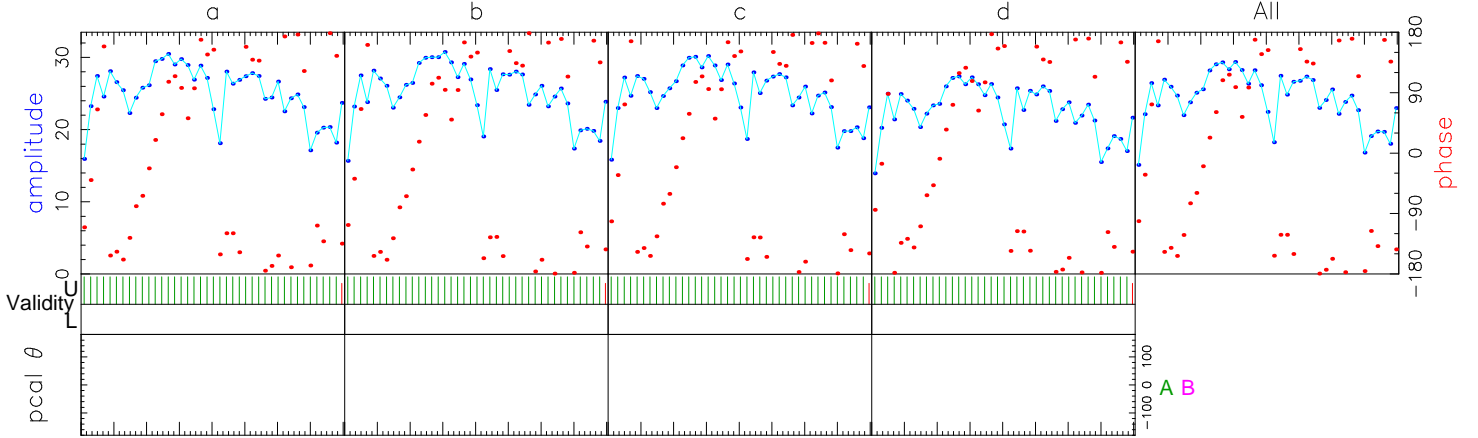


86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
3.5	0.7	0.8	5.8	5.8	Phase	2.7
8.6	8.9	8.6	8.7	8.7	Ampl.	8.7
223.3	223.5	223.4	223.9	223.9	Sbd box	223.5
U/L 938/0	938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	0	PC freqs	
B 0	0	0	0	0	PC freqs	
A:B 0:0	0:0	0:0	0:0	0:0	PC phase	
A:B 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
B 1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR	Chan ids	
B W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	6.31153523201E+03	Apriori delay (usec)	6.31157811959E+03	Resid mbdelay (usec)	-8.75424E-03	+/- 6.7E-06
Sband delay (usec)	6.31153712952E+03	Apriori clock (usec)	-2.1349465E+03	Resid sbdelay (usec)	-4.09901E-02	+/- 2.6E-05
Phase delay (usec)	6.31157811967E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	8.70585E-08	+/- 1.0E-08
Delay rate (us/s)	6.99466978476E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.06478E-07	+/- 3.7E-11
Total phase (deg)	218.9	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	139.2	+/- 0.3

RMS Theor. Amplitude 8.935 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 71.8 1.0 Search (2048X16) 8.435 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 124.6 1.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 3.0 0.3 Inc. seg. avg. 19.582 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 3.1 0.6 Inc. frq. avg. 8.705 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 348.6 el 46.2 pa 168.9 B: az 277.9 el 19.7 pa 42.0 u,v (fr/asec) -4411.735 -12207.211 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB.W.8.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0		
A	0	0	0	0	APs used	
B	0	0	0	0	PC freqs	
A:B	0:0	0:0	0:0	0:0	PC phase	
A	1000	1000	1000	1000	Mani PC	
B	1000	1000	1000	1000	PC amp	
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
B	W00UR	W01UR	W02UR	W03UR	Tracks	
Group delay (usec)(sbd)	6.31153522505E+03	Apriori delay (usec)	6.31157811959E+03	Resid mbdelay (usec)	-8.76121E-03	+/- 5.4E-06
Sband delay (usec)	6.31153710607E+03	Apriori clock (usec)	-2.1349465E+03	Resid sbdelay (usec)	-4.10135E-02	+/- 2.1E-05
Phase delay (usec)	6.31157812514E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	5.54816E-06	+/- 8.2E-09
Delay rate (us/s)	6.99466977995E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.06959E-07	+/- 3.0E-11
Total phase (deg)	388.2	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	308.6	+/- 0.3

ph/seg (deg) 71.1 0.8 RMS Theor. Amplitude 11.167 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

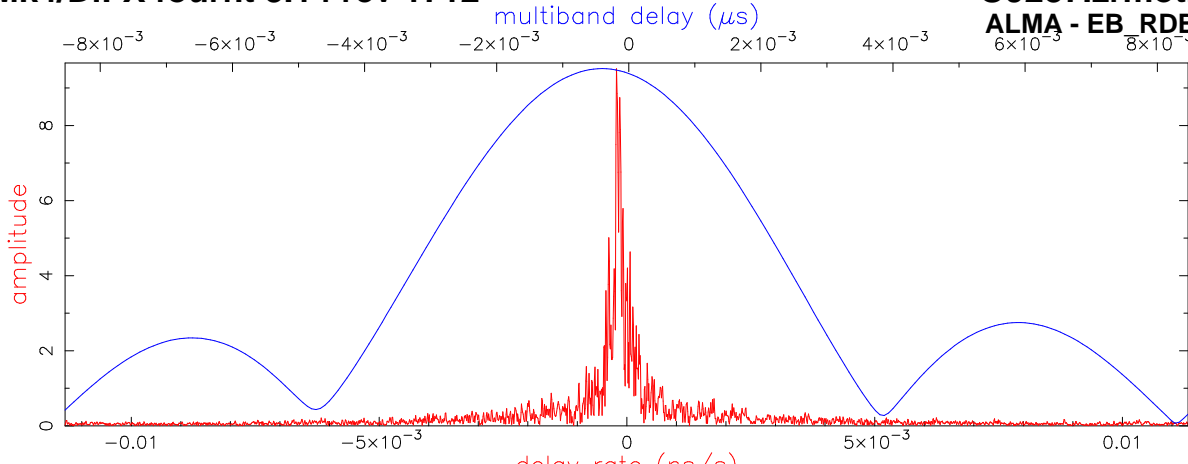
amp/seg (%) 122.1 1.4 Search (2048X16) 10.569 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 4.9 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

amp/frq (%) 4.1 0.4 Inc. seg. avg. 24.338 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 B: az 277.9 el 19.7 pa 42.0 u,v (fr/asec) -4411.735 -12207.211 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

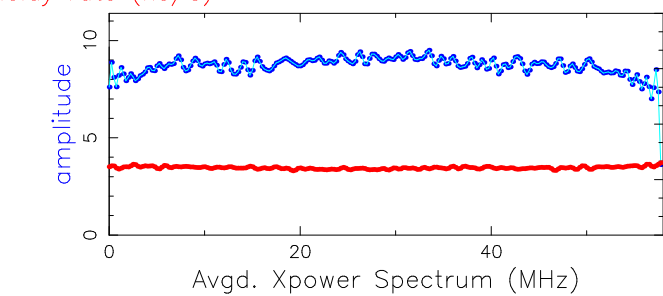
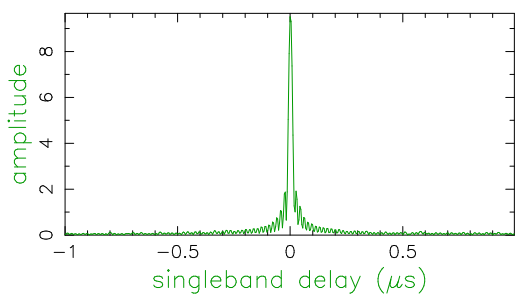
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AB.W.9.zrmotm simultaneous interpolator



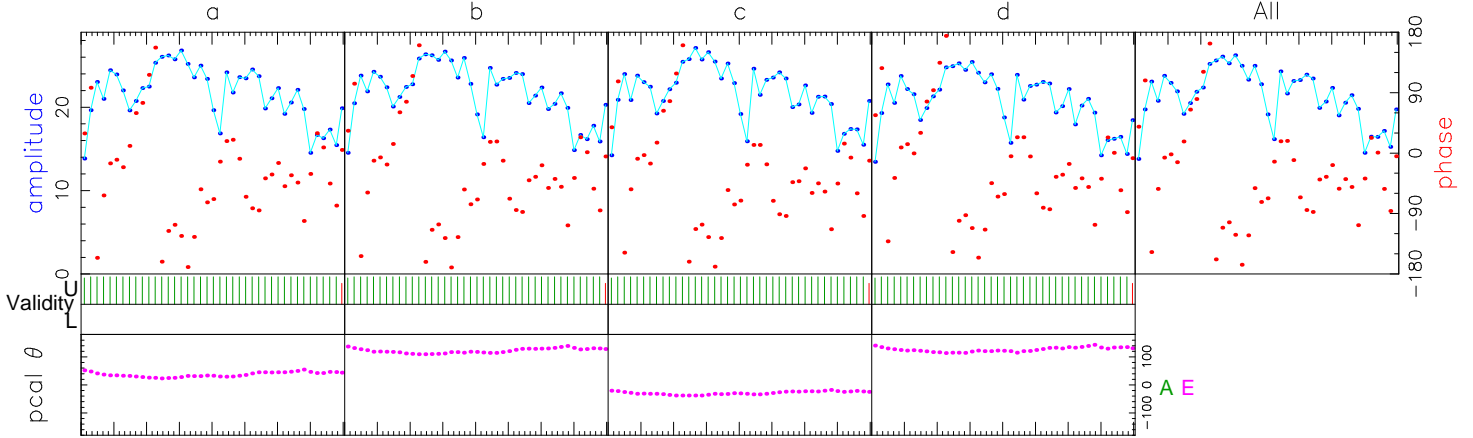
Fringe quality 5

SNR 389.6
Int time 479.431
Amp 9.667
Phase -49.2
PFD 0.0e+00
Delays (us)
SBD 0.001697
MBD -0.000393
Fringe rate (Hz)
-0.017836
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170338
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



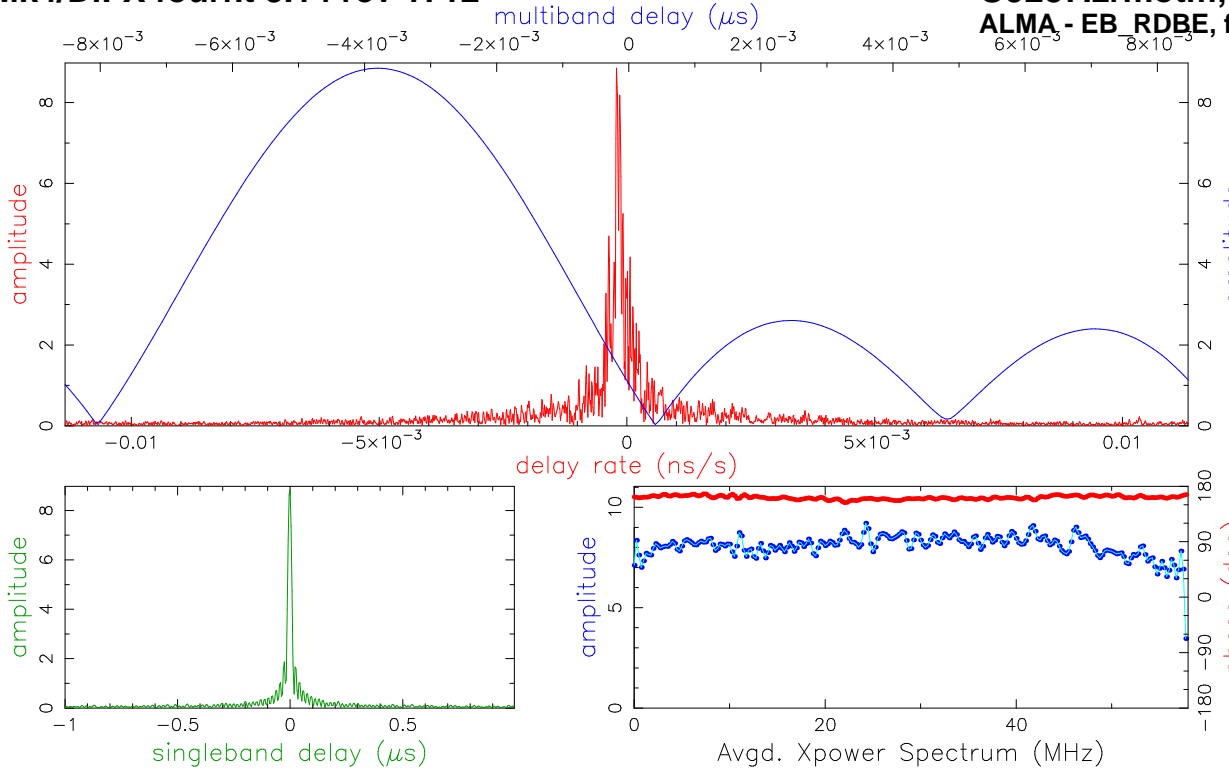
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-46.7	-49.7	-54.7	-45.7	Phase	-49.2
	9.6	9.6	9.6	9.2	Ampl.	9.5
	233.4	233.1	233.3	233.7	Sbd box	233.4
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
E	3890	296	1703	3109	PC freqs	
A:E	0:0	0:0	0:0	0:0	PC phase	
A:E	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
E	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
E	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	6.31207772659E+03	Apriori delay (usec)	6.31207811959E+03	Resid mbdelay (usec)	-3.92993E-04	+/-	6.2E-06
Sband delay (usec)	6.31207981642E+03	Apriori clock (usec)	-2.1344465E+03	Resid sbdelay (usec)	1.69683E-03	+/-	2.4E-05
Phase delay (usec)	6.31207811800E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-1.58724E-06	+/-	9.5E-09
Delay rate (us/s)	6.99466977892E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.07062E-07	+/-	3.4E-11
Total phase (deg)	30.4	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	-49.2	+/-	0.3

ph/seg (deg)	RMS 71.2	Theor. 0.9	Amplitude Search (2048X16)	9.667 +/- 0.025	9.180	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	124.9	1.6	Interp.	0.000	9.180	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	4.9	0.3	Inc. seg. avg.	21.299	9.180	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	2.2	0.5	Inc. frq. avg.	9.535	9.180	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
					9.180	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		

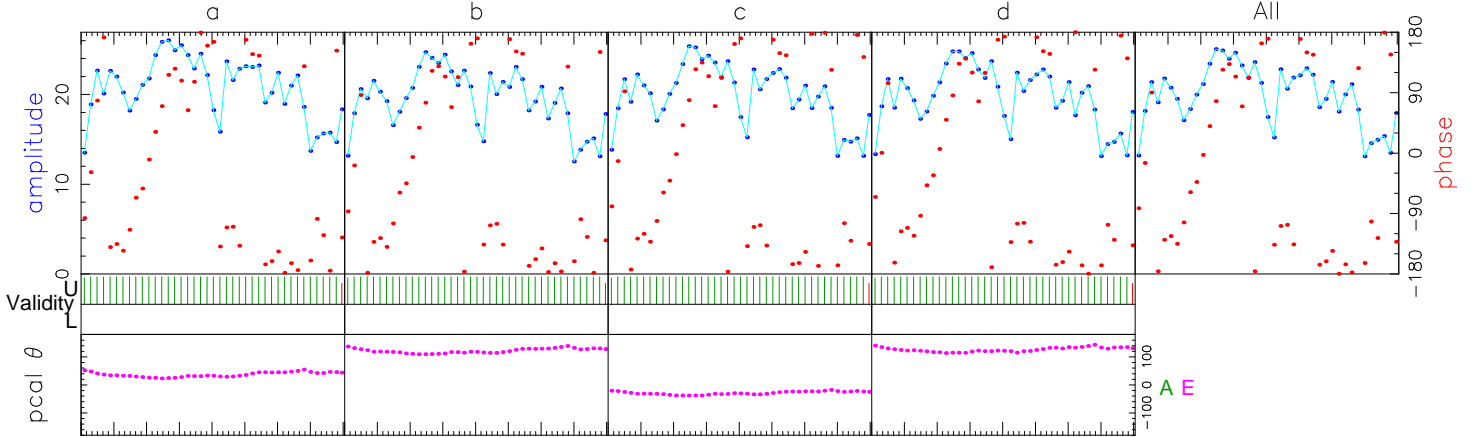


Fringe quality 5

SNR 361.9
Int time 479.441
Amp 8.980
Phase -175.5
PFD 0.0e+00
Delays (us)
SBD -0.001637
MBD -0.003798
Fringe rate (Hz)
-0.017787
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170339
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

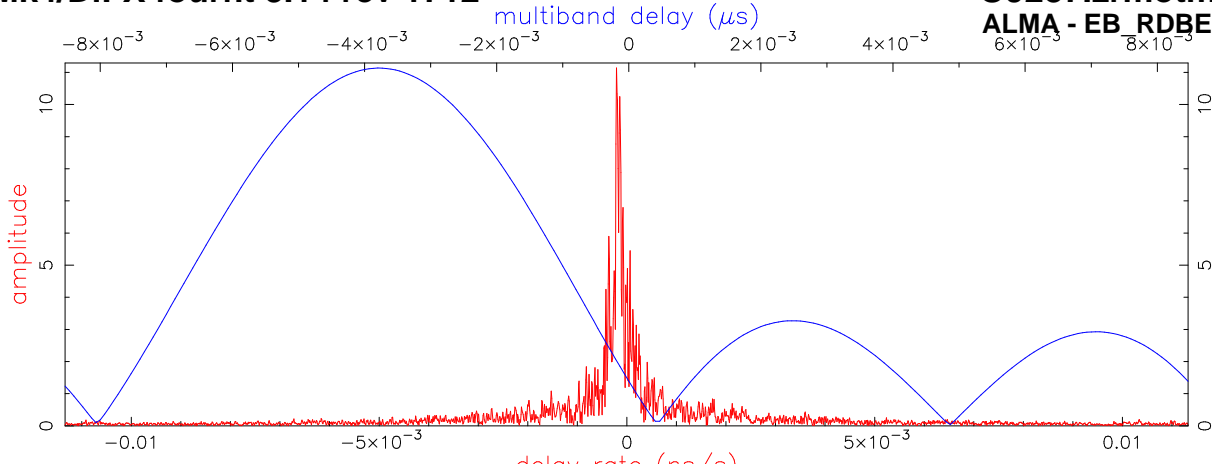


	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	938/0	938/0	938/0	938/0	938/0	
A	0	0	0	0	0	
E	3890	296	1703	3109	3109	
A:E	0:0	0:0	0:0	0:0	0:0	
A	1000	1000	1000	1000	1000	
E	1000	1000	1000	1000	1000	
A	W00UR	W01UR	W02UR	W03UR	W03UR	
E	W00UR	W01UR	W02UR	W03UR	W03UR	

Group delay (usec)(sbd)	6.31207432125E+03	Apriori delay (usec)	6.31207811959E+03	Resid mbdelay (usec)	-3.79834E-03	+/-	6.7E-06
Sband delay (usec)	6.31207648290E+03	Apriori clock (usec)	-2.1344465E+03	Resid sbdelay (usec)	-1.63669E-03	+/-	2.6E-05
Phase delay (usec)	6.31207811393E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-5.65889E-06	+/-	1.0E-08
Delay rate (us/s)	6.99466978468E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.06486E-07	+/-	3.7E-11
Total phase (deg)	-95.8	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	-175.5	+/-	0.3

ph/seg (deg)	71.7	Theor.	1.0	Amplitude	8.980 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	126.7	Search (2048X16)	8.383	Search	8.383	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	1.4	Interp.	0.000	Inc. seg. avg.	19.878	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	2.8	Inc. frq. avg.	8.852	Inc. frq. avg.	8.852	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

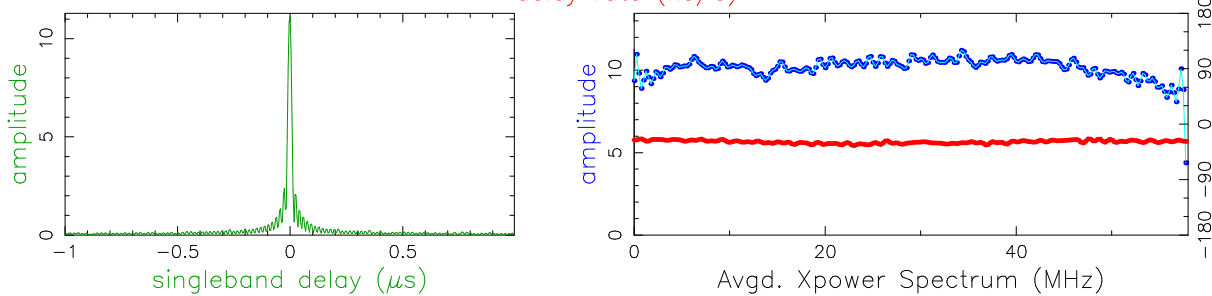
A: az 348.6 el 46.2 pa 168.9 E: az 277.9 el 19.7 pa 42.1 u,v (fr/asec) -4411.735 -12207.211 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AE..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AE.W.12.zrmotm



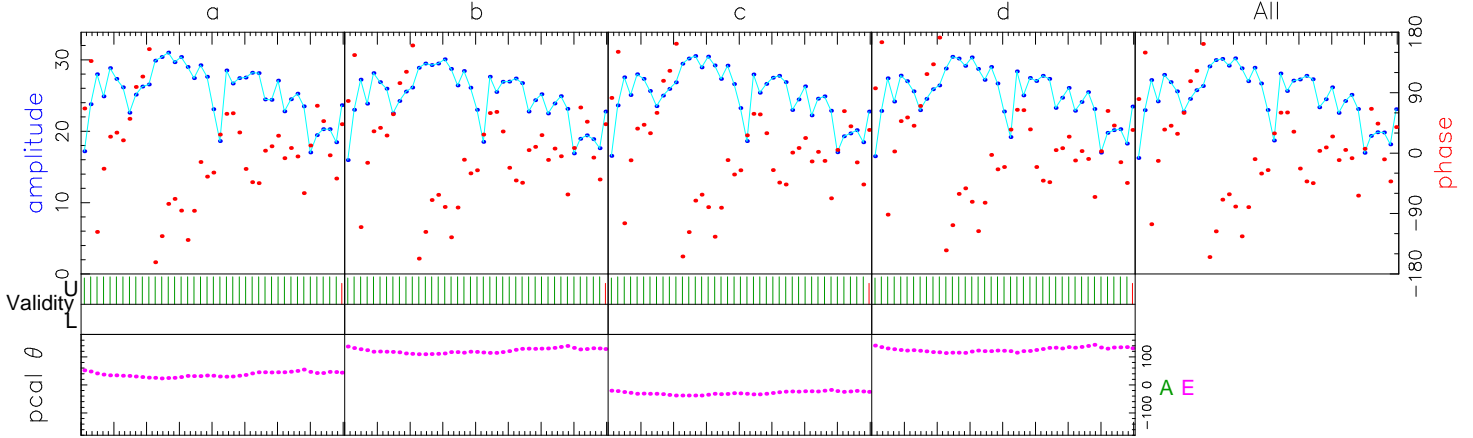
Fringe quality 5

SNR 455.1
 Int time 479.441
 Amp 11.292
 Phase -5.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.001606
 MBD -0.003785
 Fringe rate (Hz)
 -0.017832
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170341
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"



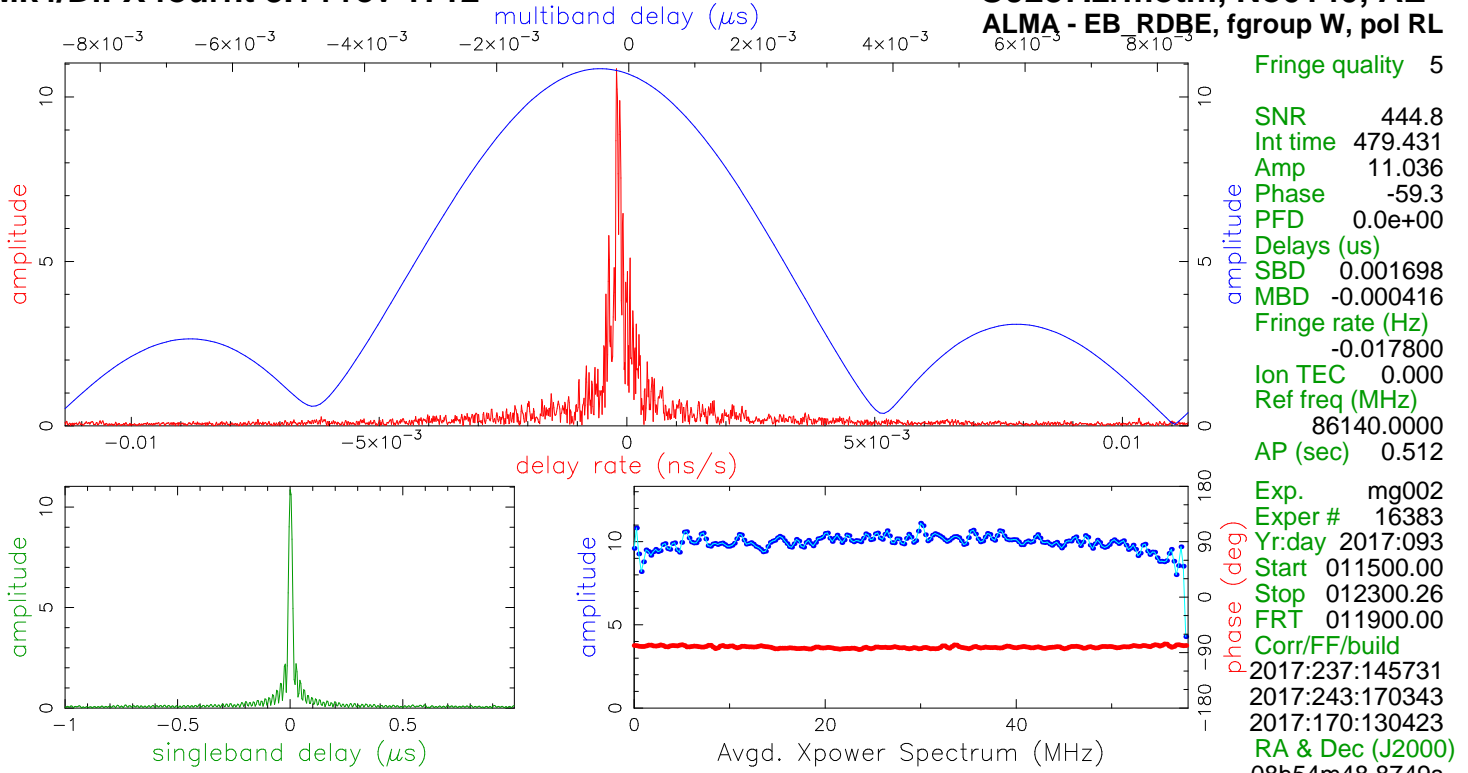
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0
A	0	0	0	0	0	0
E	3890	296	1703	3109	3890	3890
A:E	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
E	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
E	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR

Group delay (usec)(sbd)	6.31207433470E+03	Apriori delay (usec)	6.31207811959E+03	Resid mbdelay (usec)	-3.78489E-03	+/-	5.3E-06
Sband delay (usec)	6.31207651352E+03	Apriori clock (usec)	-2.1344465E+03	Resid sbdelay (usec)	-1.60607E-03	+/-	2.1E-05
Phase delay (usec)	6.31207811940E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-1.87486E-07	+/-	8.1E-09
Delay rate (us/s)	6.99466977937E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.07017E-07	+/-	2.9E-11
Total phase (deg)	73.9	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	-5.8	+/-	0.3

ph/seg (deg)	71.0	0.8	Search (2048X16)	10.597	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	125.0	1.4	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	2.1	0.3	Inc. seg. avg.	24.928	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	1.6	0.4	Inc. frq. avg.	11.139	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00



Fringe quality 5

SNR 444.8

Int time 479.431

Amp 11.036

Phase -59.3

PFD 0.0e+00

Delays (us)

SBD 0.001698

MBD -0.000416

Fringe rate (Hz)

-0.017800

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170343

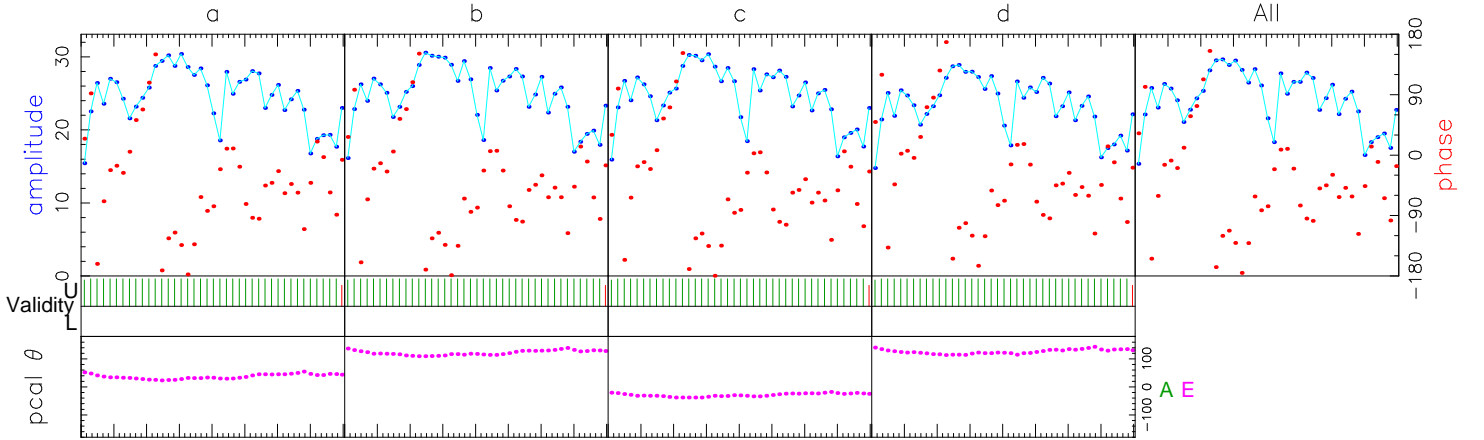
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-56.1	-60.3	-65.2	-55.2	Phase	-59.3
	10.9	11.1	11.0	10.5	Ampl.	10.9
	233.4	233.1	233.3	233.7	Sbd box	233.4
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
E	3890	296	1703	3109	PC freqs	
A:E	0:0	0:0	0:0	0:0	PC phase	
A:E	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
E	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
E	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	6.31207770332E+03	Apriori delay (usec)	6.31207811959E+03	Resid mbdelay (usec)	-4.16272E-04	+/- 5.5E-06
Sband delay (usec)	6.31207981724E+03	Apriori clock (usec)	-2.1344465E+03	Resid sbdelay (usec)	1.69766E-03	+/- 2.1E-05
Phase delay (usec)	6.31207811768E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-1.91120E-06	+/- 8.3E-09
Delay rate (us/s)	6.99466978309E-01	Apriori rate (us/s)	6.99467184954E-01	Resid rate (us/s)	-2.06645E-07	+/- 3.0E-11
Total phase (deg)	20.4	Apriori accel (us/s/s)	-8.97842762854E-05	Resid phase (deg)	-59.3	+/- 0.3

ph/seg (deg) 71.7 0.8 Theor. Amplitude 11.036 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

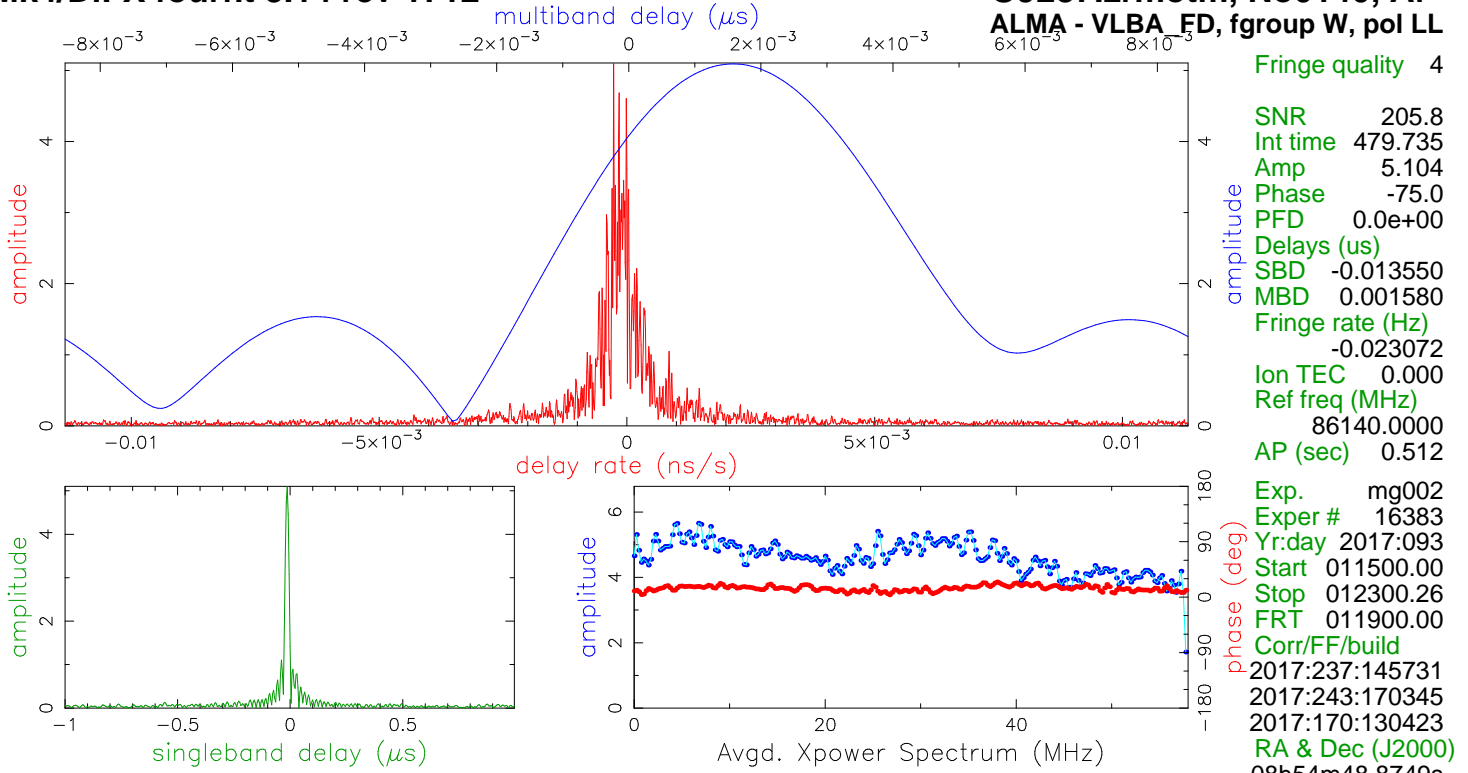
amp/seg (%) 124.1 1.4 Search (2048X16) 10.427 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 5.6 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

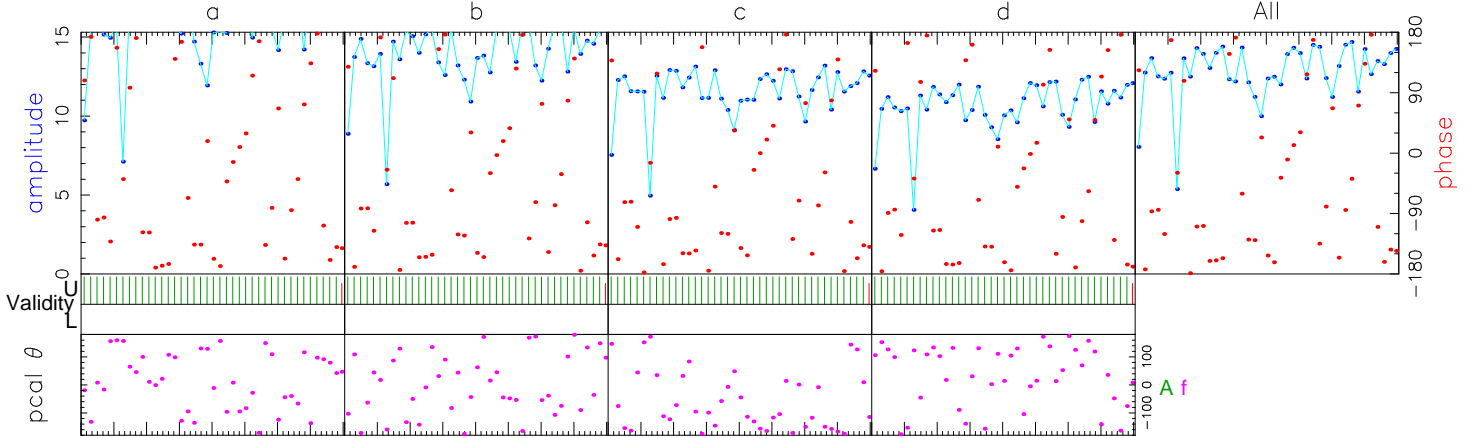
amp/frq (%) 2.6 0.4 Inc. seg. avg. 24.225 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 E: az 277.9 el 19.7 pa 42.1 u,v (fr/asec) -4411.735 -12207.211 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/No0140/AE..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AE.W.14.zrmotm simultaneous interpolator



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86435.00	86500.00
-149.3	-137.2	-133.4	-153.3	-143.3	-143.3
6.2	5.5	4.6	4.2	5.1	5.1
230.2	229.9	229.6	229.7	229.9	229.9
U/L 938/0	938/0	938/0	938/0	938/0	938/0
A 0	0	0	0	0	0
f 3890	296	1703	3109	3109	3109
A:f 0:0	0:0	0:0	0:0	0:0	0:0
A:f 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
f 1000	1000	1000	1000	1000	1000
A W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
f W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
Group delay (usec)(sbd)	-5.87463578112E+03	Apriori delay (usec)	-5.87462029488E+03	Resid mbdelay (usec)	1.58043E-03 +/- 1.2E-05
Sband delay (usec)	-5.87463384523E+03	Apriori clock (usec)	-2.1048960E+03	Resid sbdelay (usec)	-1.35503E-02 +/- 4.6E-05
Phase delay (usec)	-5.87462029950E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-4.62087E-06 +/- 1.8E-08
Delay rate (us/s)	-7.85988973613E-01	Apriori rate (us/s)	-7.85988705766E-01	Resid rate (us/s)	-2.67848E-07 +/- 6.5E-11
Total phase (deg)	-147.5	Apriori accel (us/s/s)	-1.46840205071E-05	Resid phase (deg)	-75.0 +/- 0.6

RMS Theor. Amplitude 5.104 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 79.7 1.8 Search (2048X16) 4.882 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

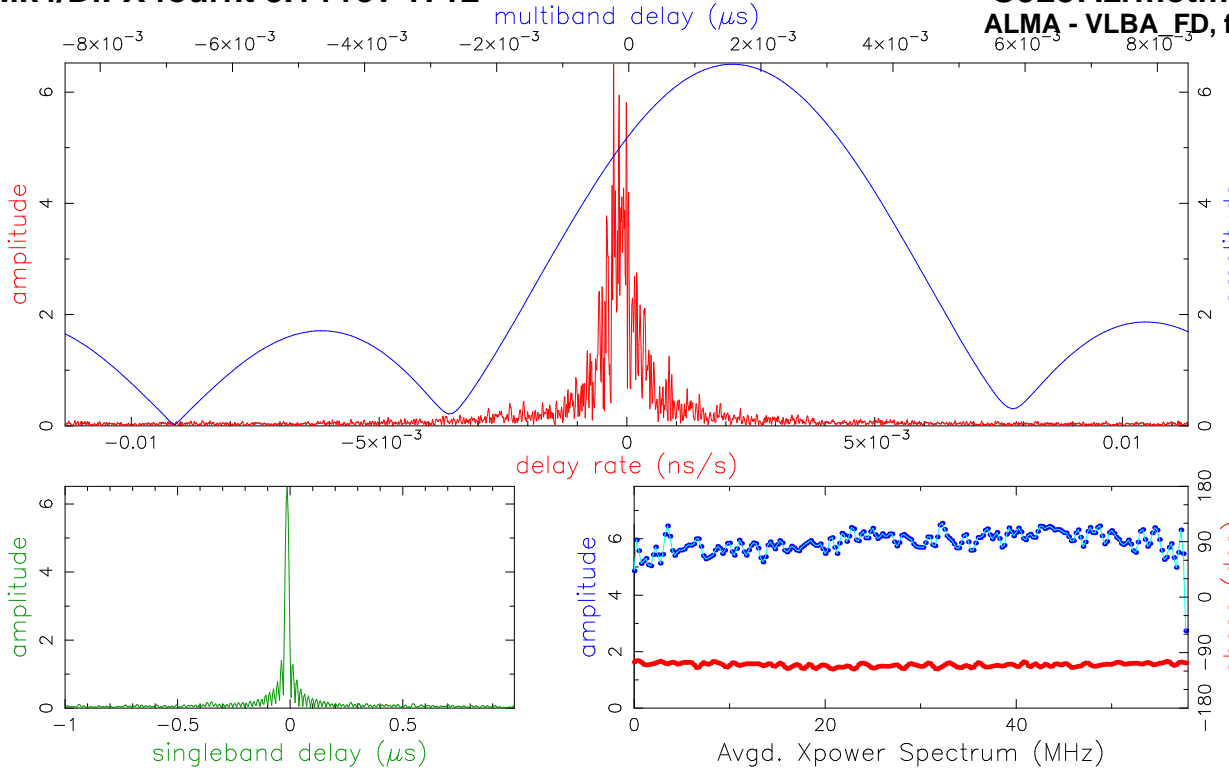
amp/seg (%) 154.9 3.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 11.7 0.6 Inc. seg. avg. 12.801 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 15.6 1.0 Inc. frq. avg. 5.142 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

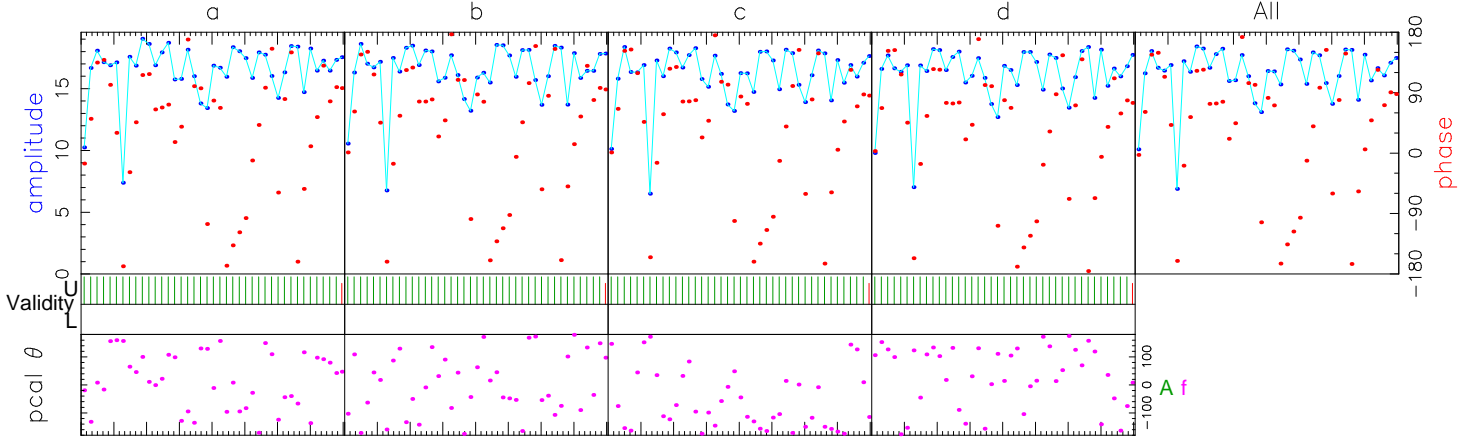
A: az 348.6 el 46.2 pa 168.9 f: az 106.3 el 62.8 pa -61.8 u,v (fr/asec) 4773.994 -7928.390 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af.W.15.zrmtm



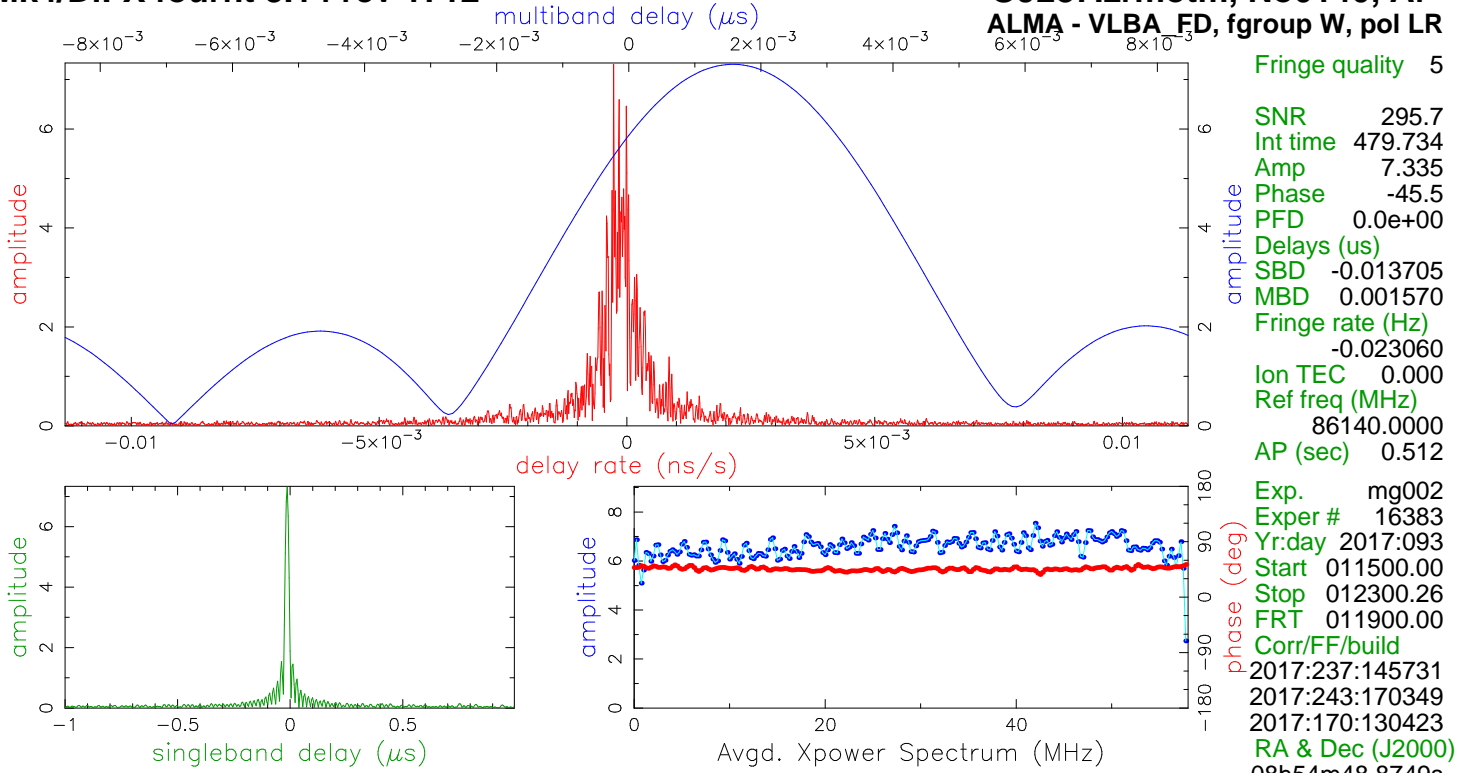
Fringe quality 5
 SNR 263.0
 Int time 479.734
 Amp 6.523
 Phase 158.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.013703
 MBD 0.001568
 Fringe rate (Hz)
 -0.023049
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170347
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	86.8	94.9	92.5	87.8	Phase	90.5
	6.6	6.6	6.4	6.5	Ampl.	6.5
	229.9	229.8	229.9	229.8	Sbd box	229.8
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
f	3890	296	1703	3109	PC freqs	
A:f	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-5.87463579306E+03	Apriori delay (usec)	-5.87462029488E+03	Resid mbdelay (usec)	1.56849E-03	+/- 9.2E-06
Sband delay (usec)	-5.87463399778E+03	Apriori clock (usec)	-2.1048960E+03	Resid sbdelay (usec)	-1.37029E-02	+/- 3.6E-05
Phase delay (usec)	-5.87462029196E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	2.91813E-06	+/- 1.4E-08
Delay rate (us/s)	-7.85988973347E-01	Apriori rate (us/s)	-7.85988705766E-01	Resid rate (us/s)	-2.67581E-07	+/- 5.1E-11
Total phase (deg)		86.3	Apriori accel (us/s/s)	-1.46840205071E-05	Resid phase (deg)	158.7 +/- 0.4

RMS Theor. Amplitude 6.523 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 79.5 1.4 Search (2048X16) 6.244 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 152.6 2.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 4.7 0.4 Inc. seg. avg. 16.219 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 1.2 0.8 Inc. frq. avg. 6.512 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 5

SNR 295.7

Int time 479.734

Amp 7.335

Phase -45.5

PFD 0.0e+00

Delays (us)

SBD -0.013705

MBD 0.001570

Fringe rate (Hz)

-0.023060

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170349

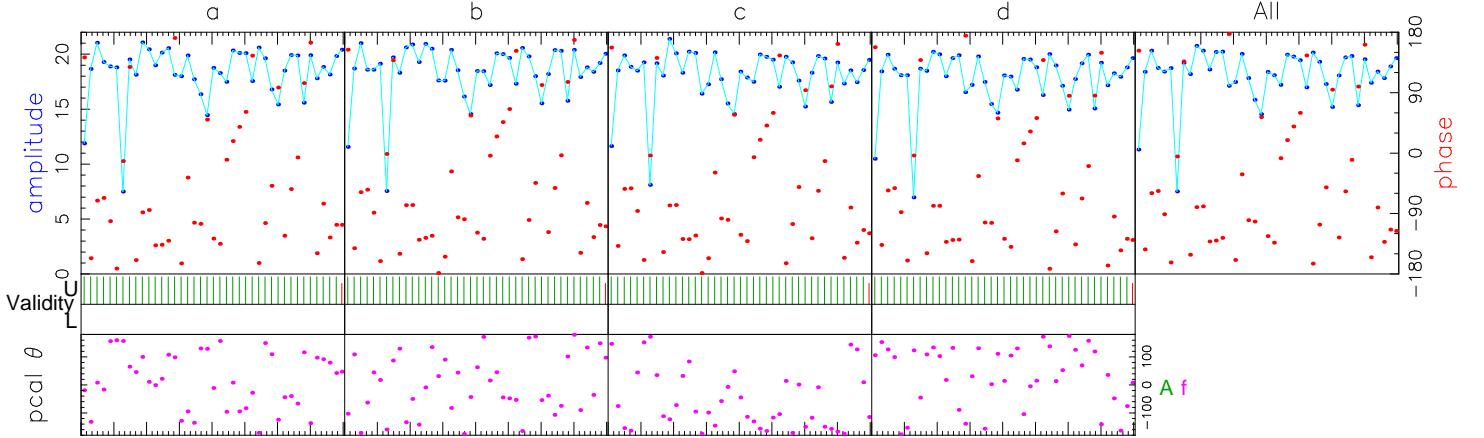
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-117.4	-109.8	-111.1	-116.8	Phase	-113.7
	7.4	7.5	7.3	7.1	Ampl.	7.3
	229.9	229.8	229.9	229.8	Sbd box	229.8
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
f	3890	296	1703	3109	PC freqs	
A:f	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000	Chan ids	
A	W00UL	W01UL	W02UL	W03UL	Tracks	
f	W00UR	W01UR	W02UR	W03UR	Chan ids	
					Tracks	
Group delay (usec)(sbd)	-5.87463579108E+03		Apriori delay (usec)	-5.87462029488E+03	Resid mbdelay (usec)	1.57047E-03 +/- 8.2E-06
Sband delay (usec)	-5.87463399999E+03		Apriori clock (usec)	-2.1048960E+03	Resid sbdelay (usec)	-1.37051E-02 +/- 3.2E-05
Phase delay (usec)	-5.87462029855E+03		Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-3.66805E-06 +/- 1.2E-08
Delay rate (us/s)	-7.85988973466E-01		Apriori rate (us/s)	-7.85988705766E-01	Resid rate (us/s)	-2.67700E-07 +/- 4.5E-11
Total phase (deg)		-117.9	Apriori accel (us/s/s)	-1.46840205071E-05	Resid phase (deg)	-45.5 +/- 0.4

RMS 79.5 Theor. 1.2 Amplitude 7.335 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 79.5 1.2 Search (2048X16) 7.014 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

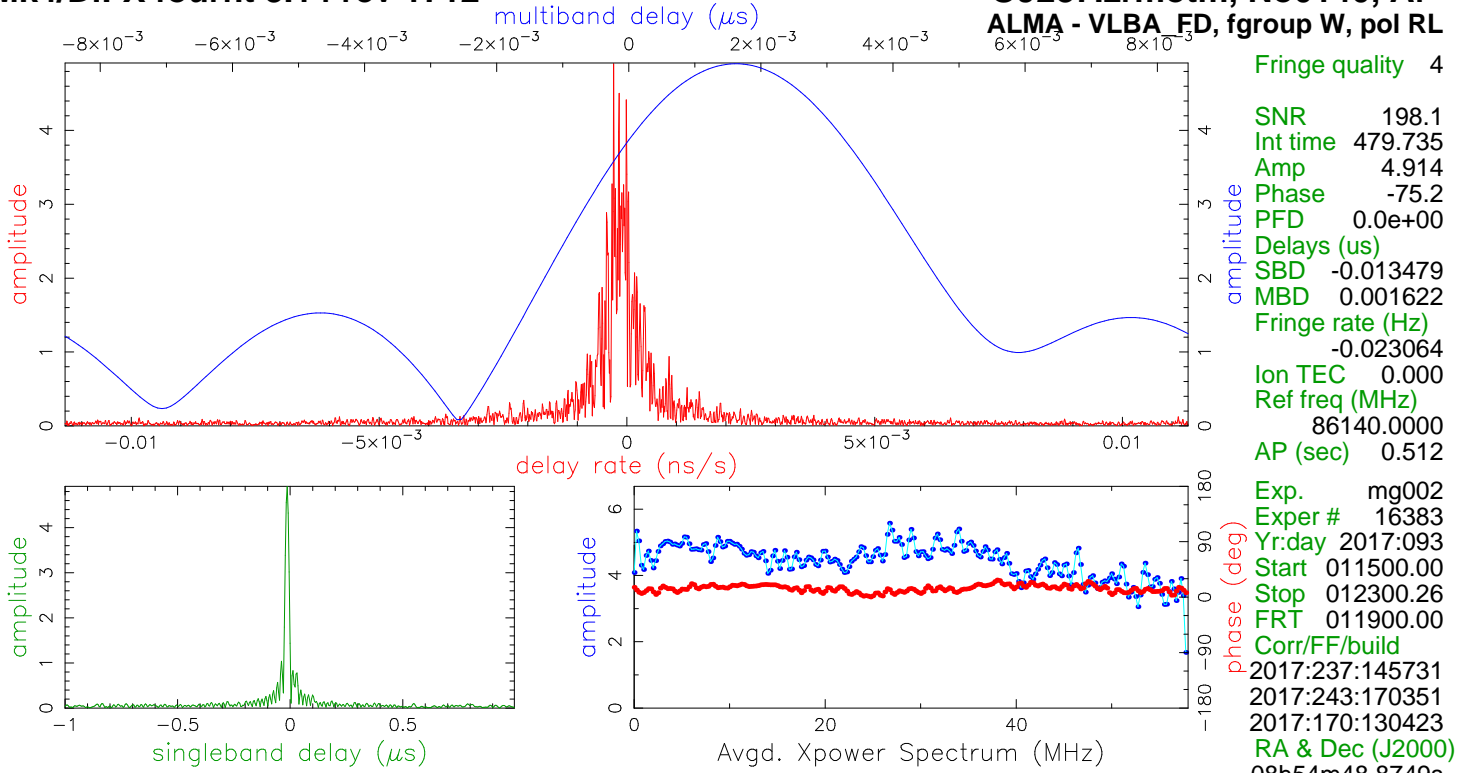
amp/seg (%) 150.0 2.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 4.8 0.4 Inc. seg. avg. 18.047 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 1.8 0.7 Inc. frq. avg. 7.323 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 f: az 106.3 el 62.8 pa -61.8 u,v (fr/asec) 4773.994 -7928.390 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af.W.17.zrmtm

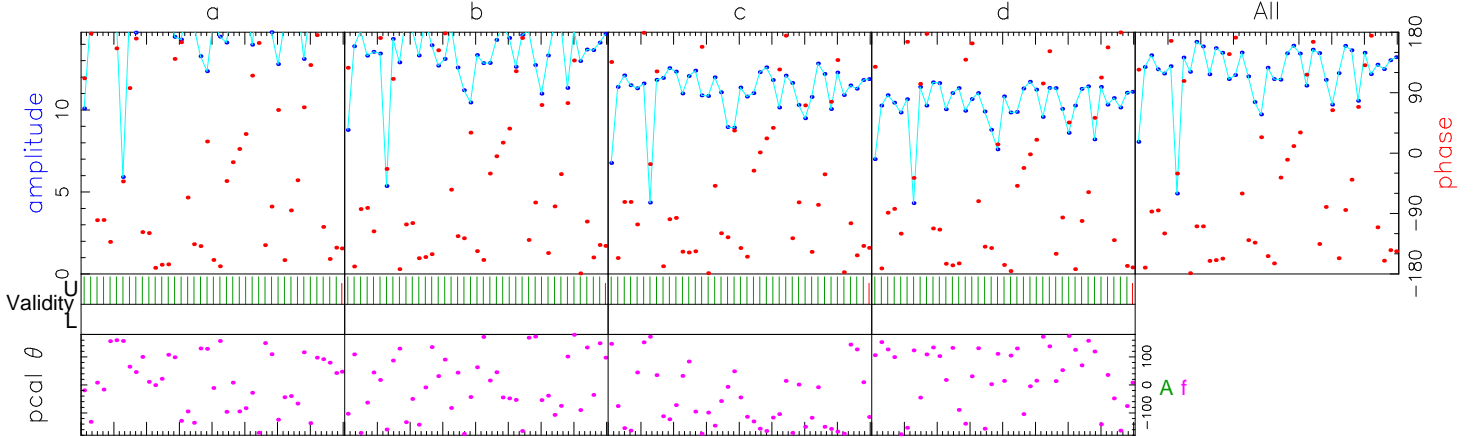


Fringe quality 4

SNR 198.1
Int time 479.735
Amp 4.914
Phase -75.2
PFD 0.0e+00
Delays (us)
SBD -0.013479
MBD 0.001622
Fringe rate (Hz)
-0.023064
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

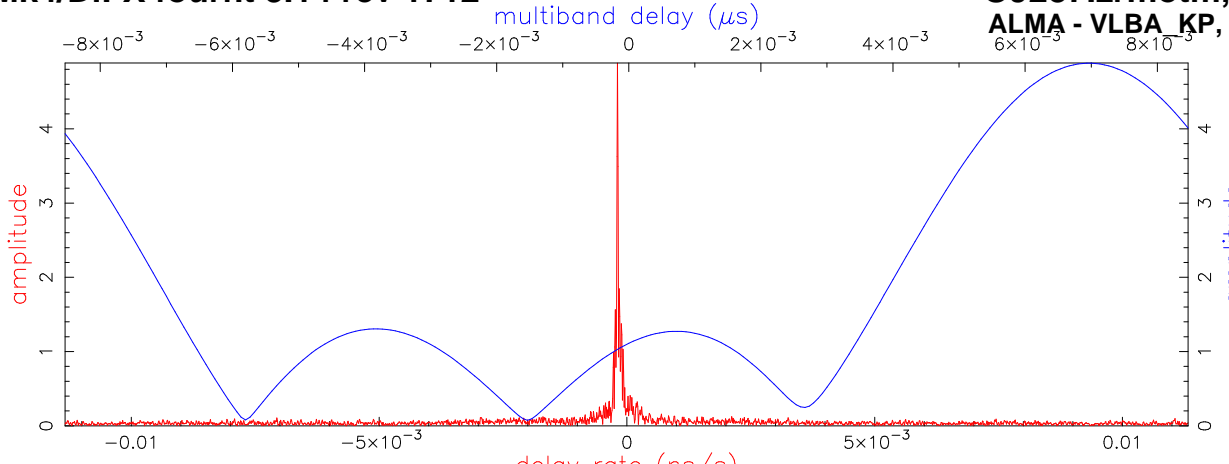
Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170351
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-149.3	-137.6	-133.1	-153.4	Phase	-143.4
	6.1	5.3	4.4	4.1	Ampl.	5.0
	230.2	229.9	229.6	229.8	Sbd box	229.9
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
f	3890	296	1703	3109	PC freqs	
A:f	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
f	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-5.87463573947E+03	Apriori delay (usec)	-5.87462029488E+03	Resid mbdelay (usec)	1.62207E-03	+/- 1.2E-05
Sband delay (usec)	-5.87463377405E+03	Apriori clock (usec)	-2.1048960E+03	Resid sbdelay (usec)	-1.34792E-02	+/- 4.8E-05
Phase delay (usec)	-5.87462029951E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-4.62570E-06	+/- 1.9E-08
Delay rate (us/s)	-7.85988973514E-01	Apriori rate (us/s)	-7.85988705766E-01	Resid rate (us/s)	-2.67748E-07	+/- 6.7E-11
Total phase (deg)	-147.6	Apriori accel (us/s/s)	-1.46840205071E-05	Resid phase (deg)	-75.2	+/- 0.6

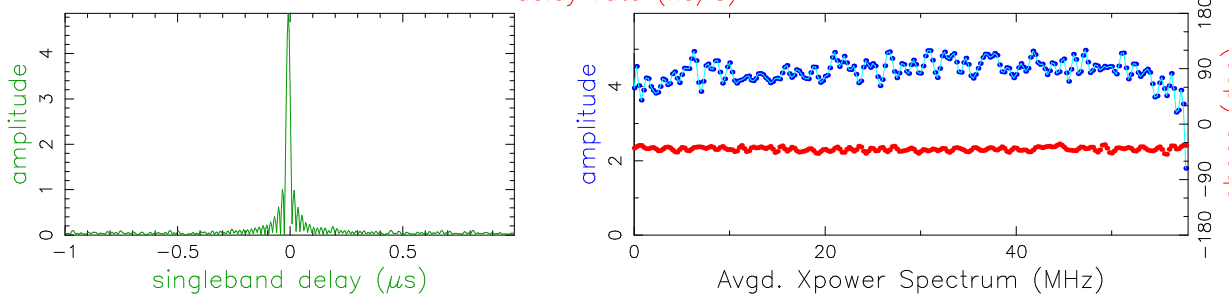
ph/seg (deg) 79.9 1.9 Search (2048X16) 4.724 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 154.3 3.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 11.7 0.6 Inc. seg. avg. 12.294 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 15.8 1.0 Inc. frq. avg. 4.953 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011
 A: az 348.6 el 46.2 pa 168.9 f: az 106.3 el 62.8 pa -61.8 u,v (fr/asec) 4773.994 -7928.390 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Af.W.18.zrmtm



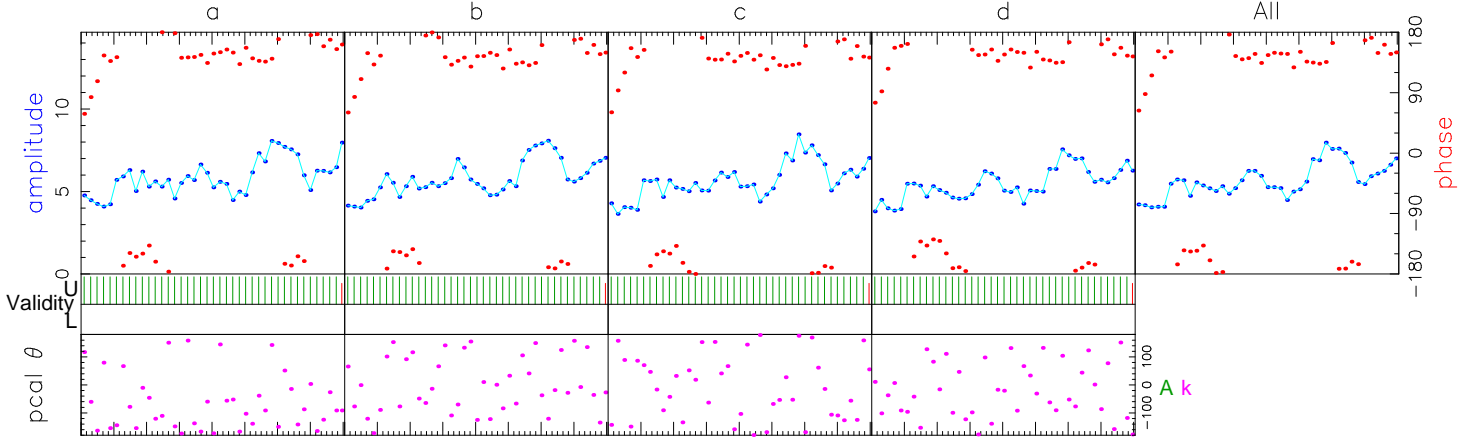
Fringe quality 6

SNR 197.0
Int time 479.756
Amp 4.887
Phase 228.5
PFD 0.0e+00
Delays (us)
SBD -0.008291
MBD 0.006971
Fringe rate (Hz)
-0.016071
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170353
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



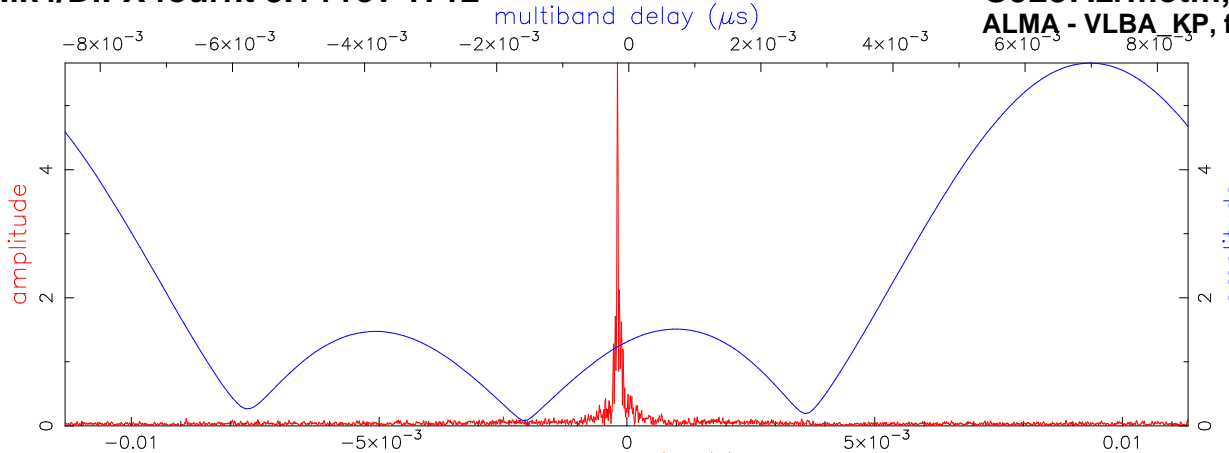
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	162.8	158.0	157.1	163.1	Phase	160.2
	5.0	5.0	4.9	4.6	Ampl.	4.9
	231.1	231.0	231.2	231.0	Sbd box	231.1
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

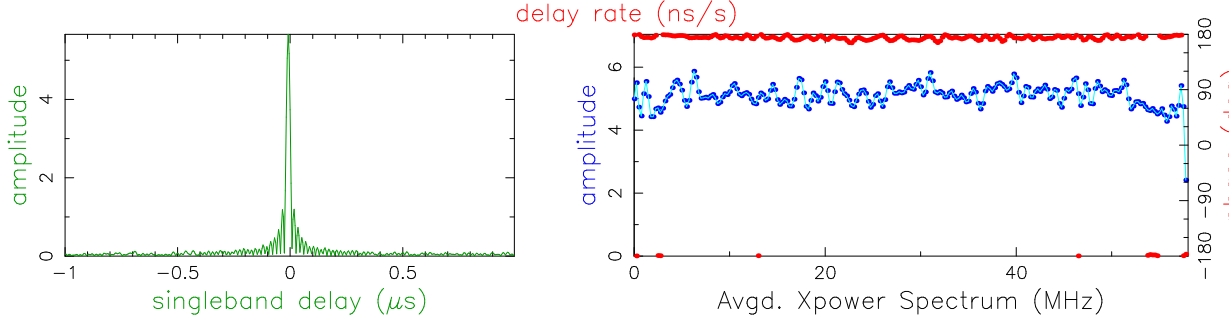
Group delay (usec)(sbd)	-4.65388474547E+03	Apriori delay (usec)	-4.65387464944E+03	Resid mbdelay (usec)	6.97064E-03	+/-	1.2E-05
Sband delay (usec)	-4.65388294020E+03	Apriori clock (usec)	-2.1026707E+03	Resid sbdelay (usec)	-8.29076E-03	+/-	4.8E-05
Phase delay (usec)	-4.65387464428E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	5.16643E-06	+/-	1.9E-08
Delay rate (us/s)	-9.21028491329E-01	Apriori rate (us/s)	-9.21028304756E-01	Resid rate (us/s)	-1.86572E-07	+/-	6.8E-11
Total phase (deg)	119.4	Apriori accel (us/s/s)	-2.19255107825E-05	Resid phase (deg)	228.5	+/-	0.6

ph/seg (deg)	33.2	RMS	1.9	Theor.	4.887 +/- 0.025	Search (2048X16)	4.735	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	26.1	33.2	1.9	33.2	4.887 +/- 0.025	Search (2048X16)	4.735	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	3.8	26.1	3.3	26.1	4.735	Search (2048X16)	4.735	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	3.3	3.8	0.6	3.3	4.735	Search (2048X16)	4.735	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
		3.3	1.0	3.3	4.890	Search (2048X16)	4.890	Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						Search (2048X16)		nlags:	232	ion window (TEC)	0.00 0.00



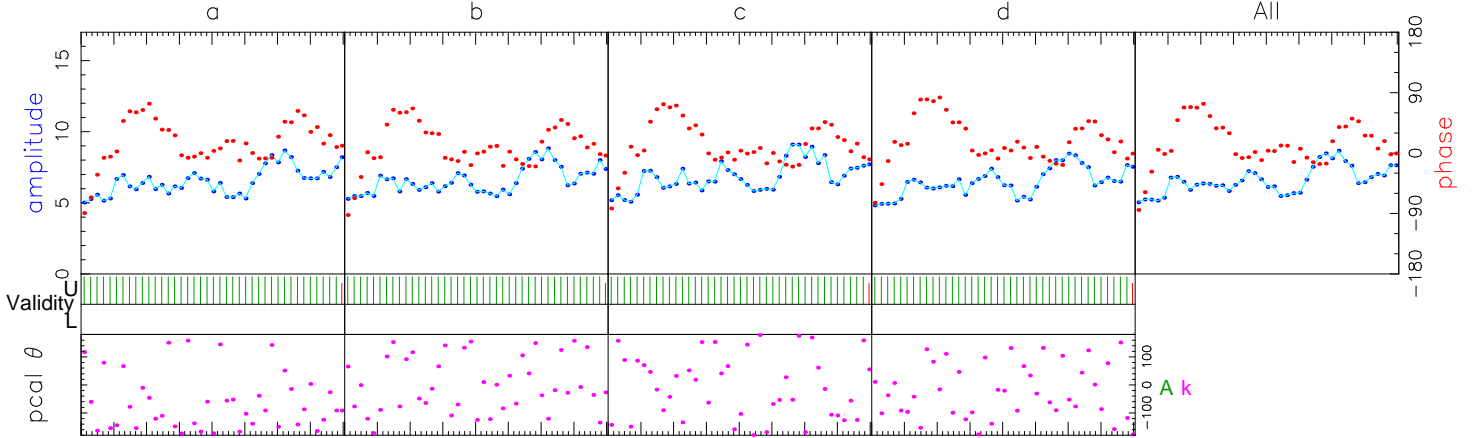
Fringe quality 6

SNR 228.4
 Int time 479.758
 Amp 5.665
 Phase 82.7
 PFD 0.0e+00
 Delays (us)
 SBD -0.008396
 MBD 0.006984
 Fringe rate (Hz)
 -0.016054
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170355
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

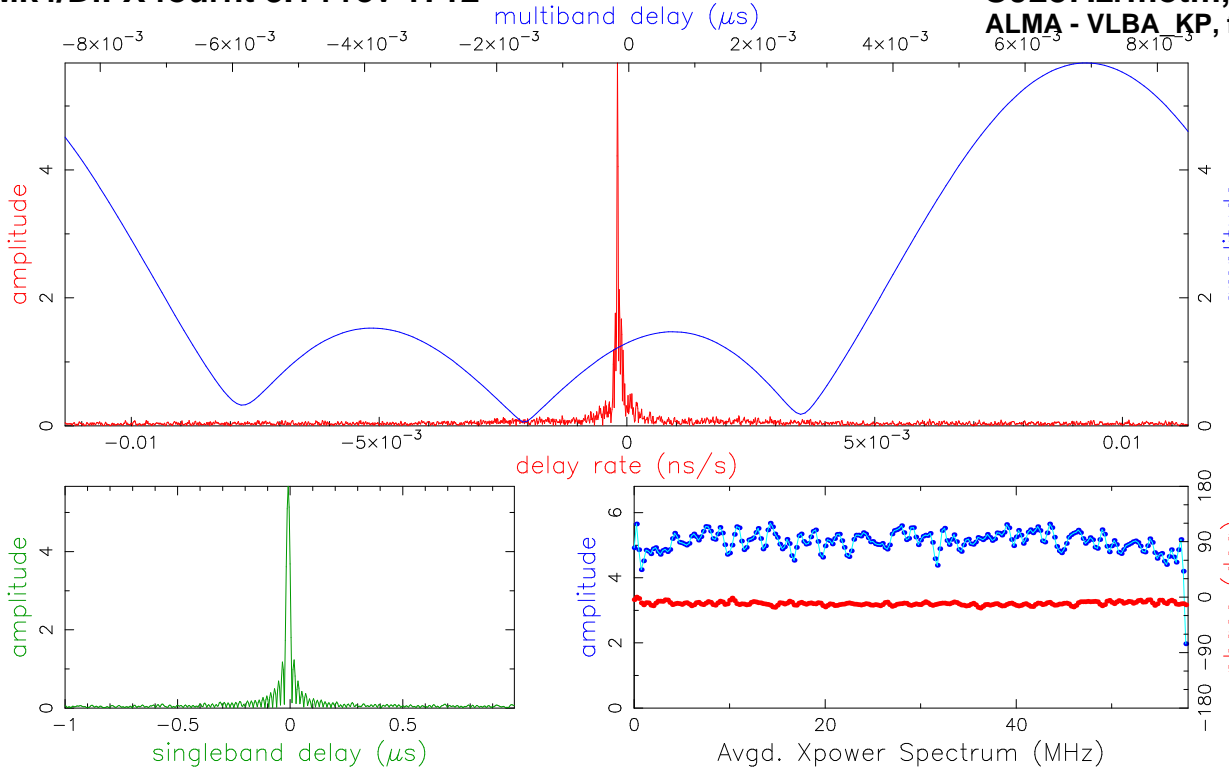
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	17.9	10.6	11.8	17.4	Phase	14.4
	5.6	5.7	5.9	5.5	Ampl.	5.7
	231.1	230.8	231.3	230.9	Sbd box	231.1
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

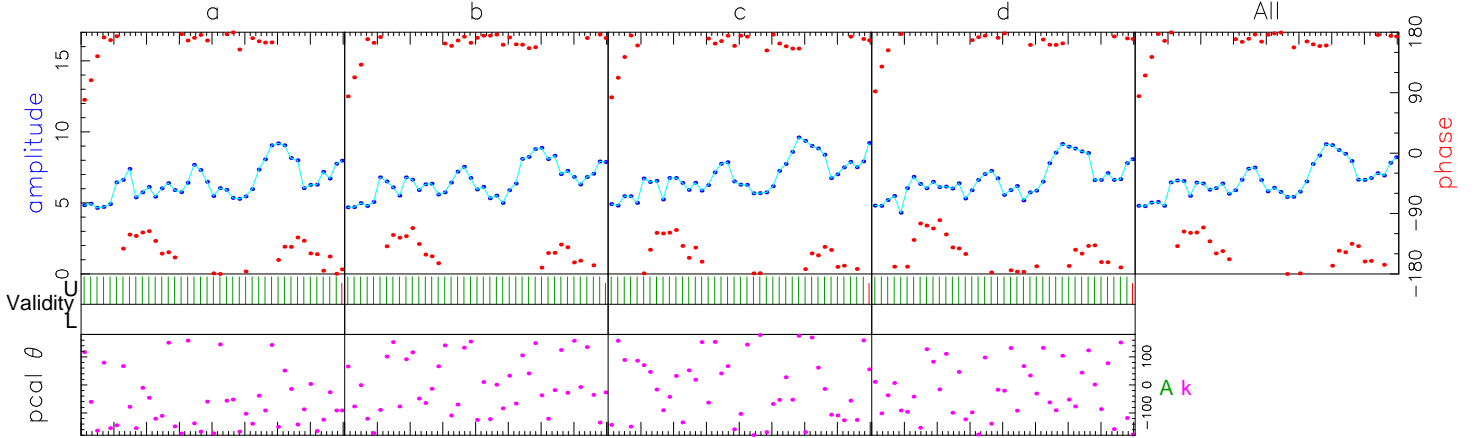
Group delay (usec)(sbd)	-4.65388473243E+03	Apriori delay (usec)	-4.65387464944E+03	Resid mbdelay (usec)	6.98368E-03	+/-	1.1E-05
Sband delay (usec)	-4.65388304558E+03	Apriori clock (usec)	-2.1026707E+03	Resid sbdelay (usec)	-8.39614E-03	+/-	4.2E-05
Phase delay (usec)	-4.65387464898E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	4.64213E-07	+/-	1.6E-08
Delay rate (us/s)	-9.21028491126E-01	Apriori rate (us/s)	-9.21028304756E-01	Resid rate (us/s)	-1.86370E-07	+/-	5.8E-11
Total phase (deg)	-26.4	Apriori accel (us/s/s)	-2.19255107825E-05	Resid phase (deg)	82.7	+/-	0.5

ph/seg (deg)	32.8	1.6	Theor. Amplitude	5.665 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	23.0	2.8	Search (2048X16)	5.488	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	4.6	0.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	2.3	0.9	Inc. seg. avg.	6.575	Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	5.674	Data rate(Mb/s):	928	ion window (TEC)	0.00 0.00	



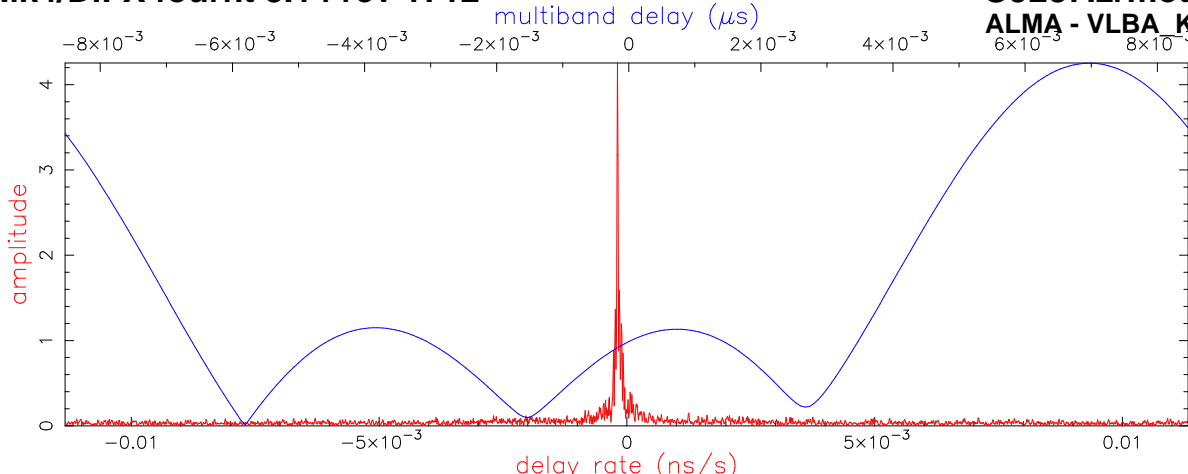
Fringe quality 6
 SNR 228.6
 Int time 479.758
 Amp 5.671
 Phase -103.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.008532
 MBD 0.006922
 Fringe rate (Hz)
 -0.016025
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170356
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

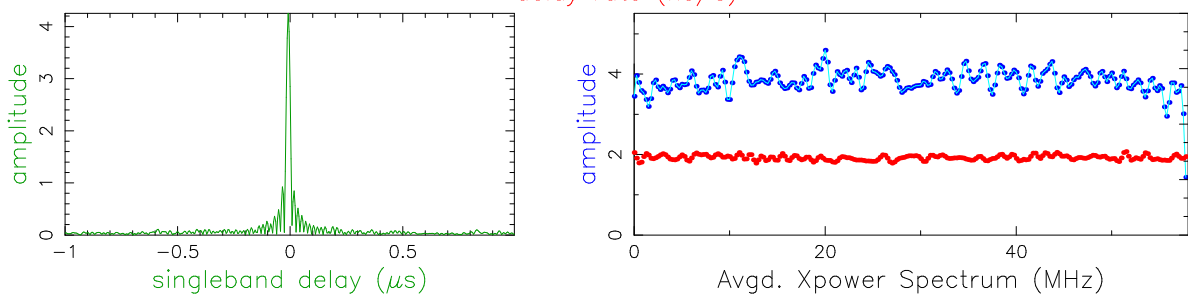


	86151.11	86209.70	86268.30	86326.89	86385.48	All
Phase	-168.2	-174.9	-175.5	-168.0	-171.7	-171.7
Ampl.	5.5	5.6	5.9	5.6	5.7	5.7
Sbd box	231.1	230.8	231.3	230.9	231.0	231.0
APs used	U/L 938/0	938/0	938/0	938/0	938/0	938/0
PC freqs	A 0	0	0	0	0	0
PC freqs	k 3890	296	1703	3109	3109	3109
PC phase	A:k 0:0	0:0	0:0	0:0	0:0	0:0
Mani PC	A:k 0:0	0:0	0:0	0:0	0:0	0:0
PC amp	A 1000	1000	1000	1000	1000	1000
	k 1000	1000	1000	1000	1000	1000
Chan ids	A W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
Tracks	k W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
Chan ids						
Tracks						
Group delay (usec)(sbd)	-4.65388479448E+03	-4.65388318103E+03	-4.65387464944E+03	-4.65387464944E+03	6.92163E-03	+/- 1.1E-05
Sband delay (usec)	-4.65388318103E+03	-4.65387465498E+03	-4.65387465498E+03	-4.65387465498E+03	-8.53159E-03	+/- 4.2E-05
Phase delay (usec)	-4.65387465498E+03	-4.65387465498E+03	-4.65387465498E+03	-4.65387465498E+03	-5.53735E-06	+/- 1.6E-08
Delay rate (us/s)	-9.21028490792E-01	-9.21028490792E-01	-9.21028304756E-01	-9.21028304756E-01	-1.86035E-07	+/- 5.8E-11
Total phase (deg)		-212.5			-103.5	+/- 0.5
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
Pcal mode: MANUAL, MANUAL						
Pcal rate: 0.000E+00, 0.000E+00 (us/s)						
PC period (AP's) 5, 5						
sb window (us)						-1.000 1.000
mb window (us)						-0.009 0.009
dr window (ns/s)						-0.011 0.011
ion window (TEC)						0.00 0.00
nlags: 232						t_cohere infinite
simultaneous interpolator						

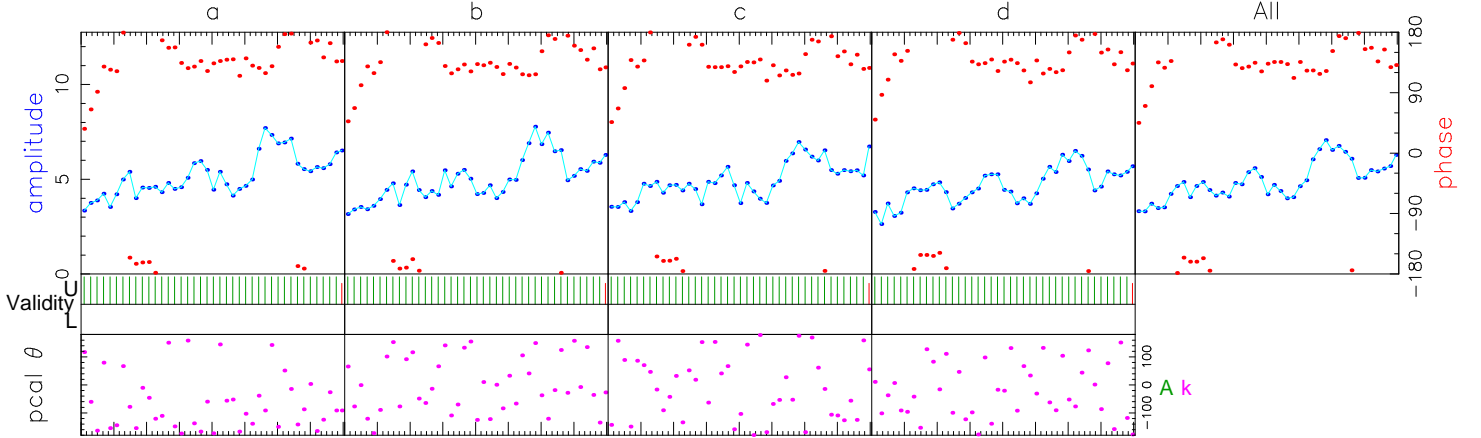
ph/seg (deg) 33.5 1.6 Search (2048X16) 5.452 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 26.2 2.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.0 0.5 Inc. seg. avg. 6.591 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 2.7 0.9 Inc. frq. avg. 5.683 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011
 A: az 348.6 el 46.2 pa 168.9 k: az 101.8 el 56.1 pa -61.9 u,v (fr/asec) 5584.348 -8305.064 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ak.zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ak.W.21.zrmotm



Fringe quality 6
 SNR 171.5
 Int time 479.756
 Amp 4.254
 Phase 214.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.008298
 MBD 0.006976
 Fringe rate (Hz)
 -0.016070
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170358
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"



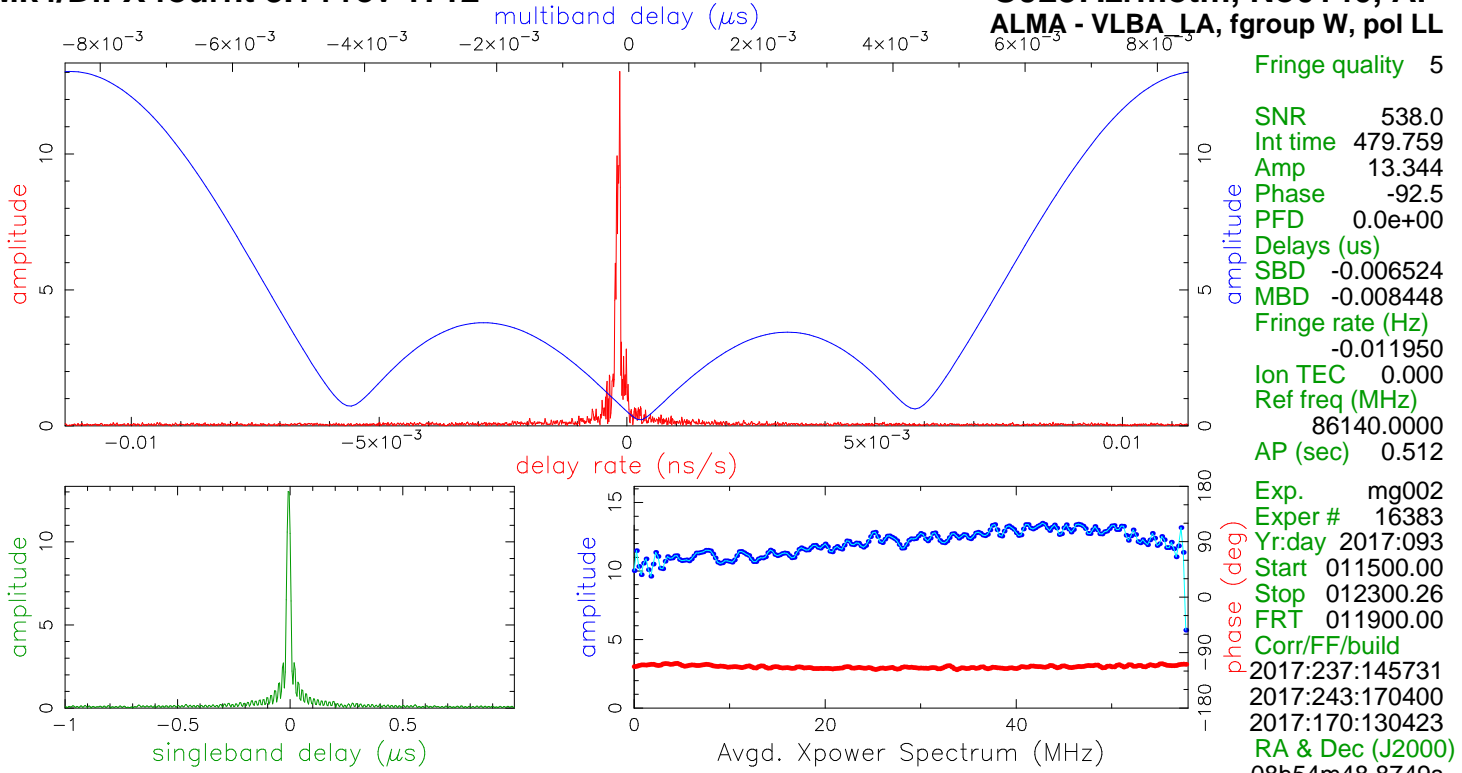
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



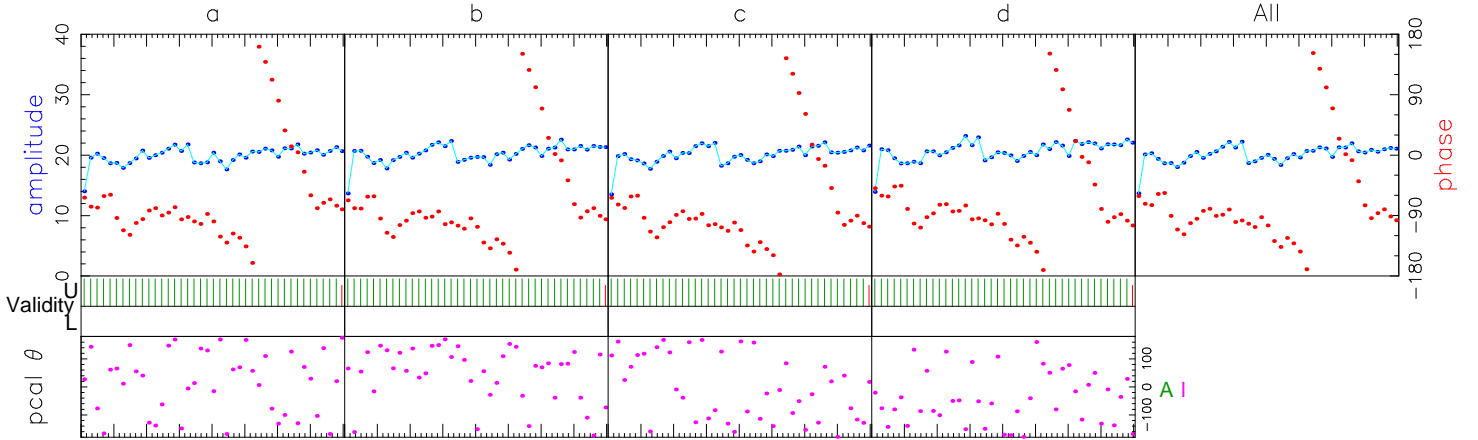
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0		
A	0	0	0	0	APs used	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-4.65388474041E+03	Apriori delay (usec)	-4.65387464944E+03	Resid mbdelay (usec)	6.97569E-03	+/-	1.4E-05
Sband delay (usec)	-4.65388294792E+03	Apriori clock (usec)	-2.1026707E+03	Resid sbdelay (usec)	-8.29848E-03	+/-	5.5E-05
Phase delay (usec)	-4.65387464473E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	4.71325E-06	+/-	2.2E-08
Delay rate (us/s)	-9.21028491308E-01	Apriori rate (us/s)	-9.21028304756E-01	Resid rate (us/s)	-1.86552E-07	+/-	7.8E-11
Total phase (deg)	105.4	Apriori accel (us/s/s)	-2.19255107825E-05	Resid phase (deg)	214.4	+/-	0.7

ph/seg (deg)	33.5	2.1	Amplitude	4.254 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	27.8	3.7	Search (2048X16)	4.123	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	3.0	0.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009	
amp/frq (%)	4.4	1.2	Inc. seg. avg.	4.923	Sample rate(MSamp/s): 116	nlags: 232	t_cohere infinite	dr window (ns/s)	-0.011 0.011
			Inc. frq. avg.	4.255	Data rate(Mb/s): 928		ion window (TEC)	0.00 0.00	



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



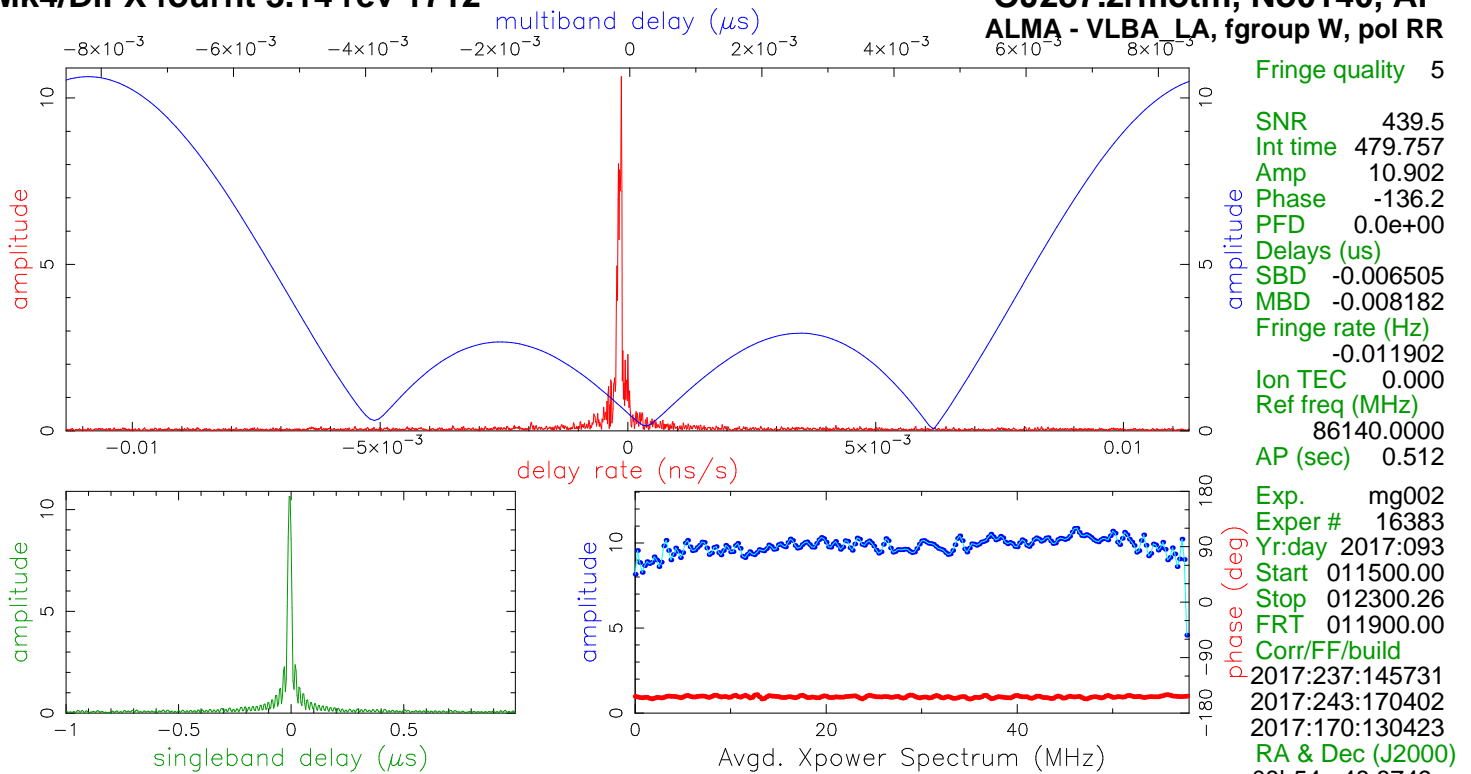
86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-88.6	-94.9	-98.4	-88.1	Phase	-92.5
12.8	13.1	13.0	13.3	Ampl.	13.1
231.5	231.3	231.5	231.7	Sbd box	231.5
U/L 938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	PC freqs	
I 3890	296	1703	3109	PC freqs	
A:I 0:0	0:0	0:0	0:0	PC phase	
A:I 0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	Chan ids	
I W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-5.23910620254E+03	Apriori delay (usec)	-5.23909775488E+03	Resid mbdelay (usec)	-8.44766E-03 +/- 4.5E-06
Sband delay (usec)	-5.23910427902E+03	Apriori clock (usec)	-2.1013904E+03	Resid sbdelay (usec)	-6.52414E-03 +/- 1.8E-05
Phase delay (usec)	-5.23909775786E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	-2.98297E-06 +/- 6.9E-09
Delay rate (us/s)	-7.96198019062E-01	Apriori rate (us/s)	-7.96197880331E-01	Resid rate (us/s)	-1.38731E-07 +/- 2.5E-11
Total phase (deg)	-310.4	Apriori accel (us/s/s)	-2.09451002288E-05	Resid phase (deg)	-92.5 +/- 0.2

RMS Theor. Amplitude 13.344 +/- 0.025
 ph/seg (deg) 58.7 0.7 Search (2048X16) 12.017
 amp/seg (%) 51.7 1.2 Interp. 0.000
 ph/frq (deg) 6.1 0.2 Inc. seg. avg. 20.090
 amp/frq (%) 2.5 0.4 Inc. frq. avg. 13.070

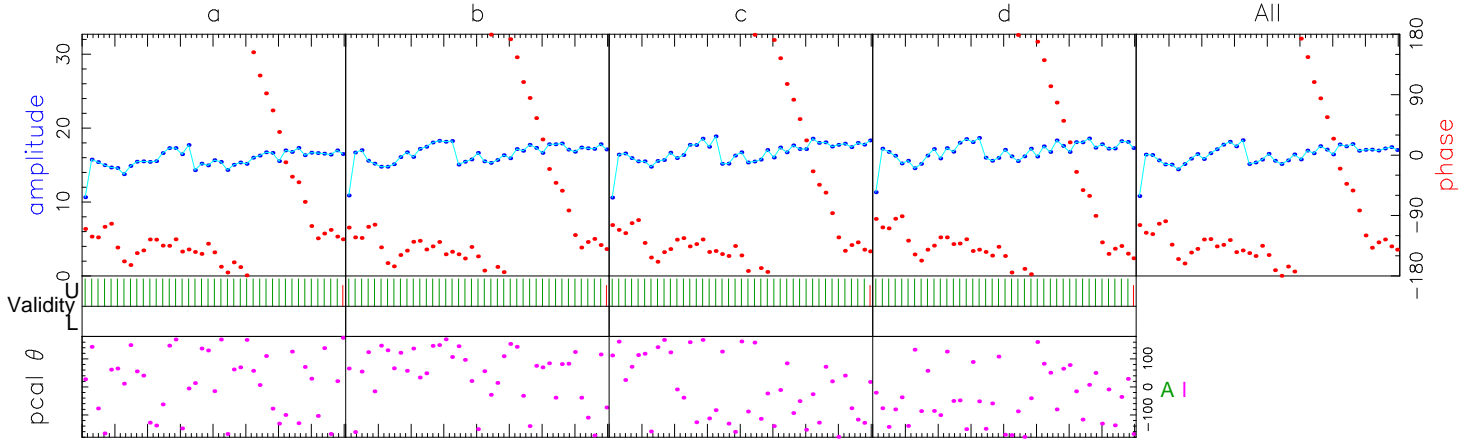
Group delay (usec)(sbd) -5.23910620254E+03 Apriori delay (usec) -5.23909775488E+03 Resid mbdelay (usec) -8.44766E-03 +/- 4.5E-06
 Sband delay (usec) -5.23910427902E+03 Apriori clock (usec) -2.1013904E+03 Resid sbdelay (usec) -6.52414E-03 +/- 1.8E-05
 Phase delay (usec) -5.23909775786E+03 Apriori clockrate (us/s) 1.8626131E-06 Resid phdelay (usec) -2.98297E-06 +/- 6.9E-09
 Delay rate (us/s) -7.96198019062E-01 Apriori rate (us/s) -7.96197880331E-01 Resid rate (us/s) -1.38731E-07 +/- 2.5E-11
 Total phase (deg) -310.4 Apriori accel (us/s/s) -2.09451002288E-05 Resid phase (deg) -92.5 +/- 0.2

PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 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

A: az 348.6 el 46.2 pa 168.9 I: az 112.7 el 59.3 pa -52.3 u,v (fr/asec) 4825.812 -8732.649 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI.W.23.zrmtm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

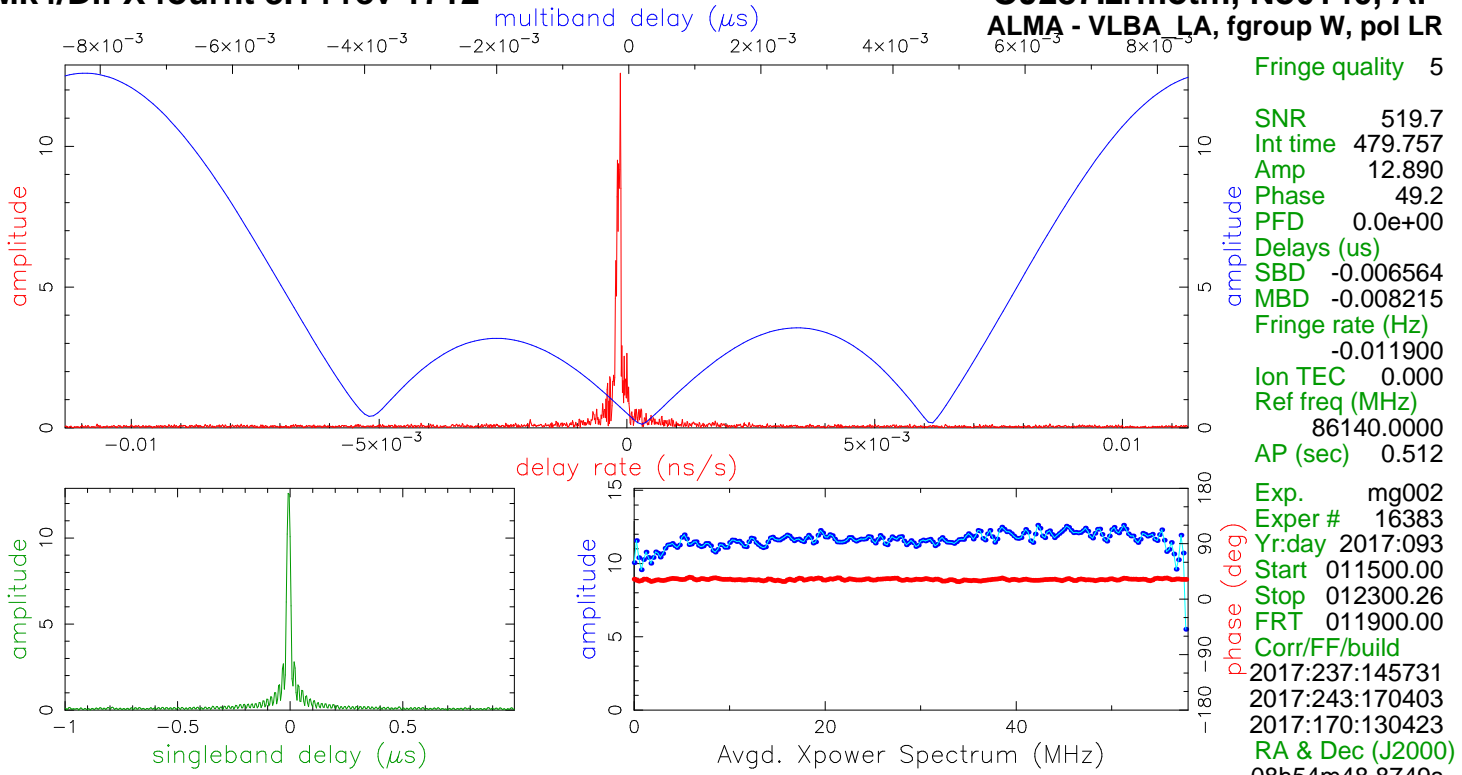


	86151.11	86209.70	86268.30	86326.89	All
	-133.8	-138.7	-136.3	-135.8	-136.2
	10.2	10.8	10.8	10.8	10.6
	231.3	231.6	231.4	231.6	231.5
U/L	938/0	938/0	938/0	938/0	
A	0	0	0	0	
I	3890	296	1703	3109	
A:I	0:0	0:0	0:0	0:0	
A:I	0:0	0:0	0:0	0:0	
A	1000	1000	1000	1000	
I	1000	1000	1000	1000	
A	W00UR	W01UR	W02UR	W03UR	
I	W00UR	W01UR	W02UR	W03UR	

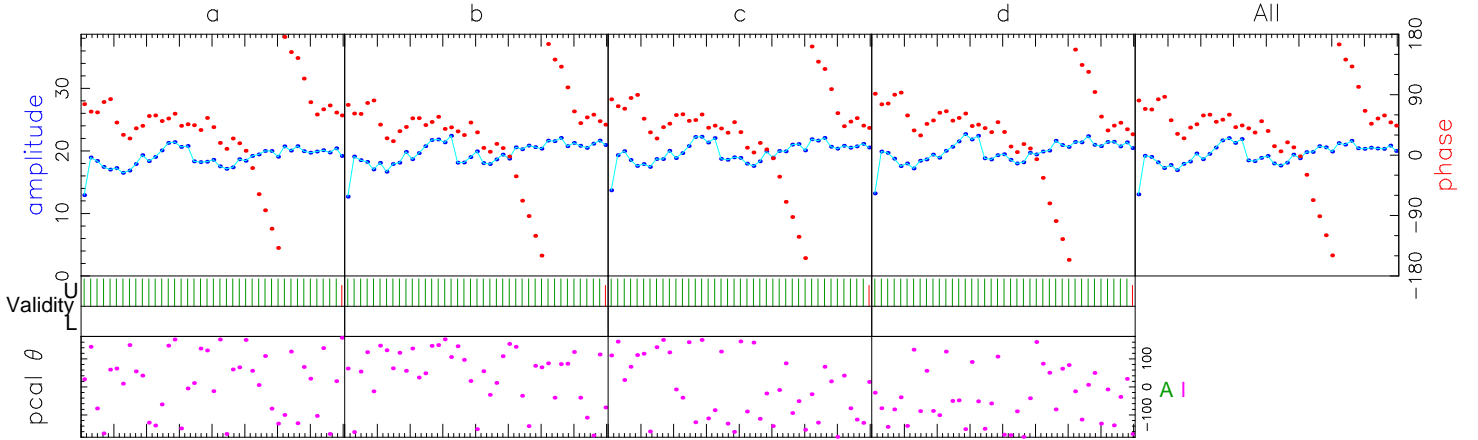
	86151.11	86209.70	86268.30	86326.89	All
Group delay (usec)(sbd)	-5.23910593657E+03		-5.23909775488E+03		-8.18169E-03 +/- 5.5E-06
Sband delay (usec)	-5.23910425943E+03		-2.1013904E+03		-6.50455E-03 +/- 2.2E-05
Phase delay (usec)	-5.23909775927E+03		1.8626131E-06		-4.39146E-06 +/- 8.4E-09
Delay rate (us/s)	-7.96198018505E-01		-7.96197880331E-01		-1.38174E-07 +/- 3.0E-11
Total phase (deg)	-354.1		-2.09451002288E-05		-136.2 +/- 0.3

	86151.11	86209.70	86268.30	86326.89	All
ph/seg (deg)	58.5	0.8	9.648		-1.000 1.000
amp/seg (%)	51.7	1.5	0.000		-0.009 0.009
ph/frq (deg)	2.5	0.3	16.378		-0.011 0.011
amp/frq (%)	3.5	0.5	10.646		0.00 0.00

A: az 348.6 el 46.2 pa 168.9 I: az 112.7 el 59.3 pa -52.3 u,v (fr/asec) 4825.812 -8732.649 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI.W.24.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

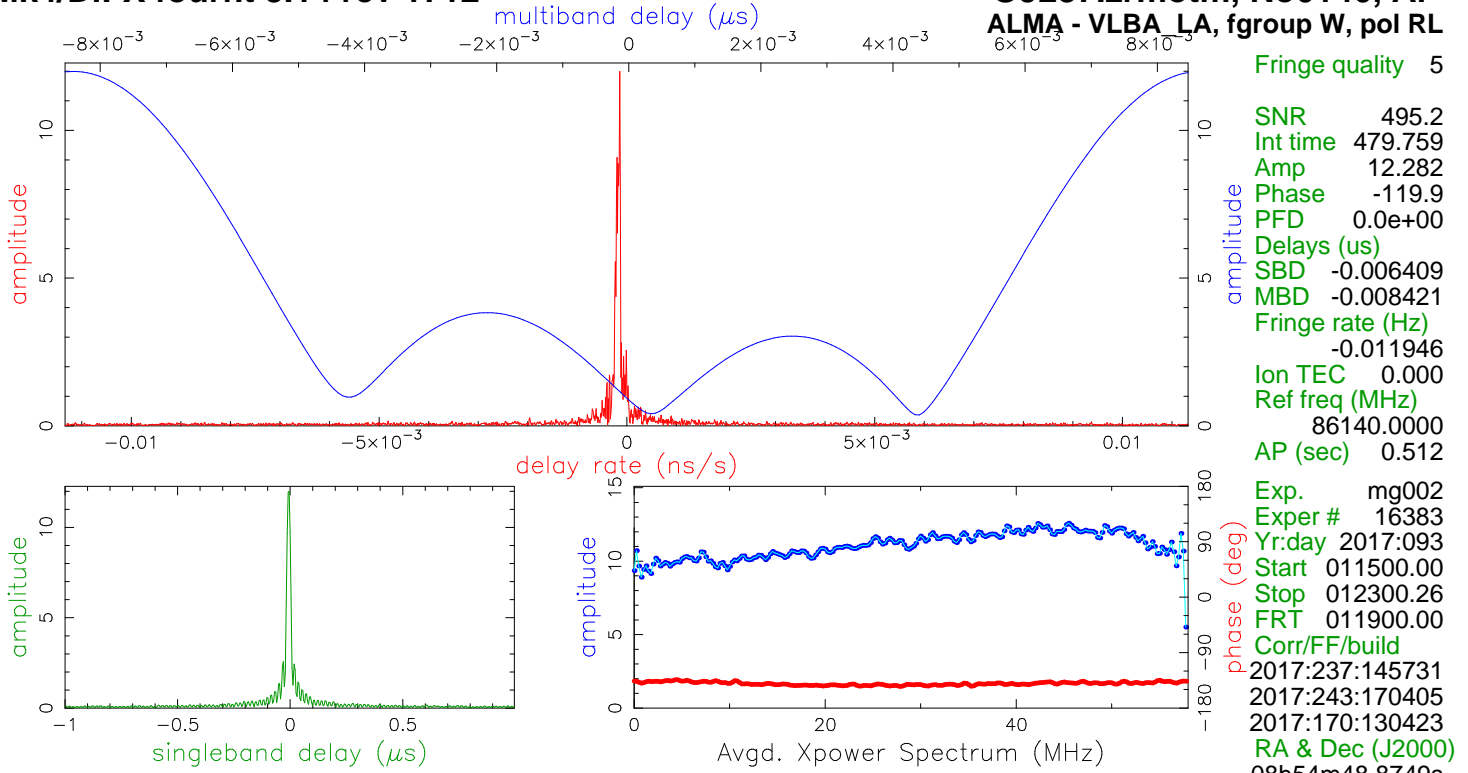


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
52.1	45.9	48.9	49.9	Phase	49.2
12.2	12.7	12.7	12.8	Ampl.	12.6
231.3	231.6	231.4	231.6	Sbd box	231.5
U/L 938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	PC freqs	
I 3890	296	1703	3109	PC freqs	
A:I 0:0	0:0	0:0	0:0	PC phase	
A:I 0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	Chan ids	
I W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-5.23910597009E+03	Apriori delay (usec)	-5.23909775488E+03	Resid mbdelay (usec)	-8.21521E-03 +/- 4.7E-06
Sband delay (usec)	-5.23910431847E+03	Apriori clock (usec)	-2.1013904E+03	Resid sbdelay (usec)	-6.56359E-03 +/- 1.8E-05
Phase delay (usec)	-5.23909775329E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	1.58608E-06 +/- 7.1E-09
Delay rate (us/s)	-7.96198018476E-01	Apriori rate (us/s)	-7.96197880331E-01	Resid rate (us/s)	-1.38145E-07 +/- 2.6E-11
Total phase (deg)	-168.7	Apriori accel (us/s/s)	-2.09451002288E-05	Resid phase (deg)	49.2 +/- 0.2

ph/seg (deg)	58.6	0.7	Search (2048X16)	11.449	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	52.5	1.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009	
ph/frq (deg)	3.1	0.2	Inc. seg. avg.	19.449	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	2.9	0.4	Inc. frq. avg.	12.607	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite	ion window (TEC)	0.00	0.00

A: az 348.6 el 46.2 pa 168.9 I: az 112.7 el 59.3 pa -52.3 u,v (fr/asec) 4825.812 -8732.649 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI.W.25.zrmotm



Fringe quality 5

SNR 495.2

Int time 479.759

Amp 12.282

Phase -119.9

PFD 0.0e+00

Delays (us)

SBD -0.006409

MBD -0.008421

Fringe rate (Hz)

-0.011946

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170405

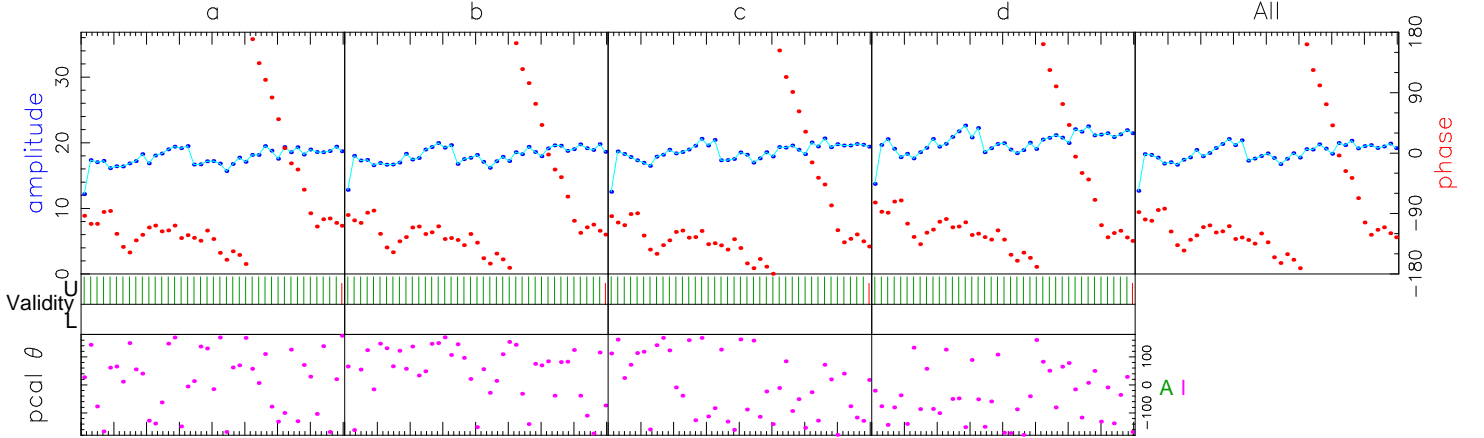
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-116.9	-120.5	-128.1	-114.2	Phase	-119.9
11.4	11.7	12.1	13.0	Ampl.	12.0
231.5	231.4	231.5	231.7	Sbd box	231.5
U/L 938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	PC freqs	
I 3890	296	1703	3109	PC freqs	
A:I 0:0	0:0	0:0	0:0	PC phase	
A:I 0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
I W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	-5.23910617564E+03	Apriori delay (usec)	-5.23909775488E+03	Resid mbdelay (usec)	-8.42076E-03 +/- 4.9E-06
Sband delay (usec)	-5.23910416398E+03	Apriori clock (usec)	-2.1013904E+03	Resid sbdelay (usec)	-6.40910E-03 +/- 1.9E-05
Phase delay (usec)	-5.23909775874E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	-3.86509E-06 +/- 7.5E-09
Delay rate (us/s)	-7.96198019007E-01	Apriori rate (us/s)	-7.96197880331E-01	Resid rate (us/s)	-1.38676E-07 +/- 2.7E-11
Total phase (deg)	-337.8	Apriori accel (us/s/s)	-2.09451002288E-05	Resid phase (deg)	-119.9 +/- 0.2

RMS 58.6 Theor. 0.7 Amplitude 12.282 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 58.6 0.7 Search (2048X16) 11.037 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

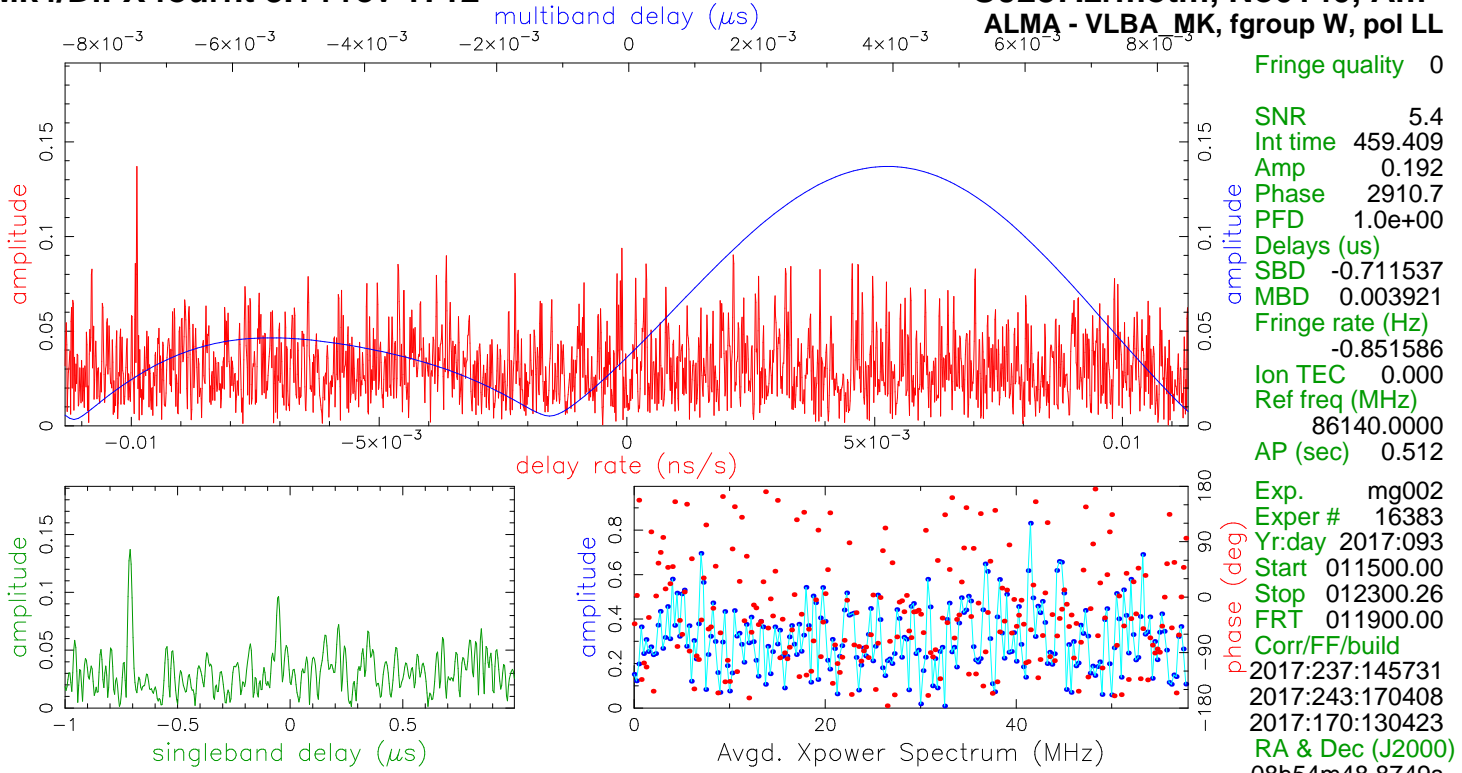
amp/seg (%) 51.7 1.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 7.4 0.2 Inc. seg. avg. 18.478 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 5.1 0.4 Inc. frq. avg. 12.047 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

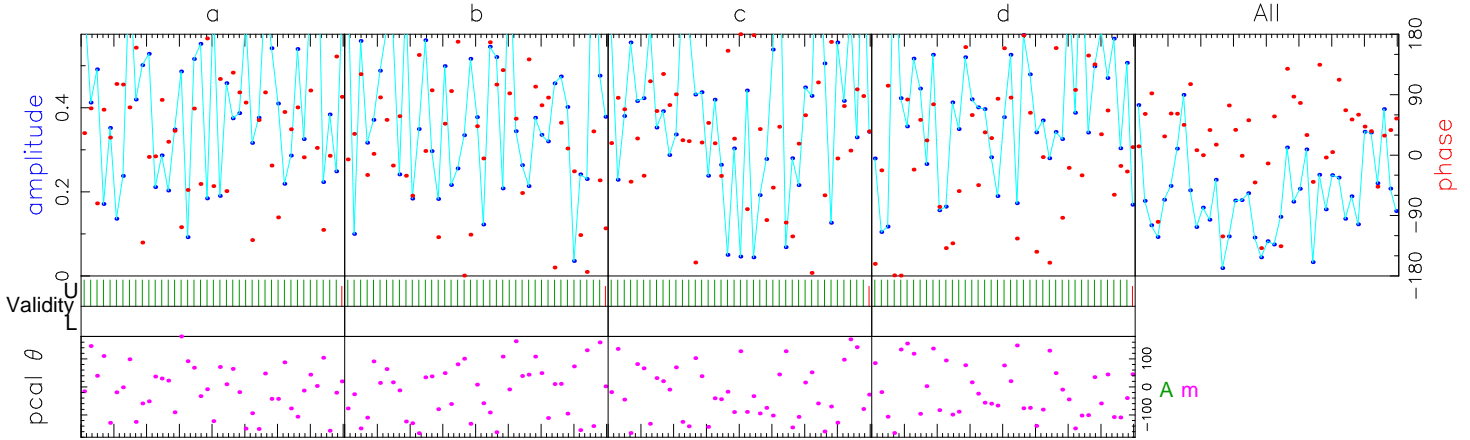
A: az 348.6 el 46.2 pa 168.9 I: az 112.7 el 59.3 pa -52.3 u,v (fr/asec) 4825.812 -8732.649 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AI.W.26.zrmotm



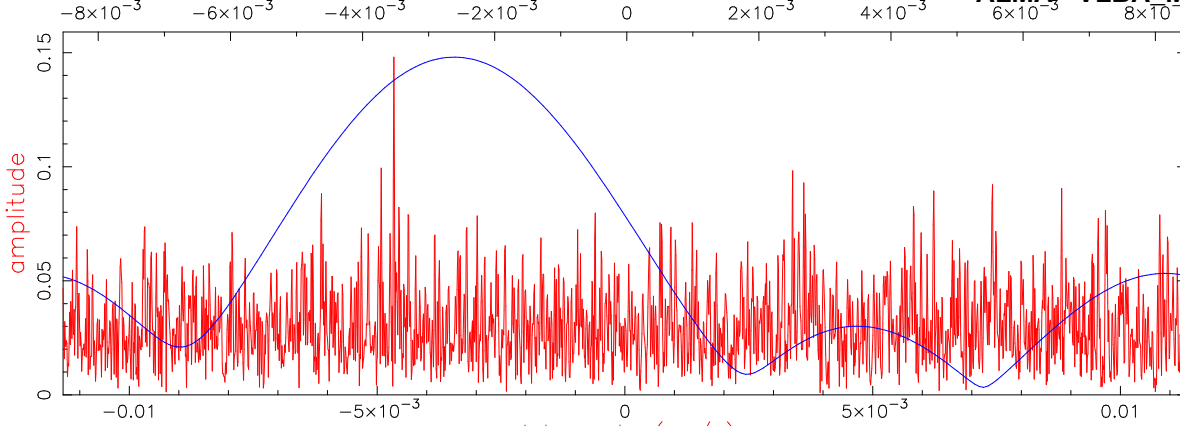
Fringe quality 0
 SNR 5.4
 Int time 459.409
 Amp 0.192
 Phase 2910.7
 PFD 1.0e+00
 Delays (us)
 SBD -0.711537
 MBD 0.003921
 Fringe rate (Hz)
 -0.851586
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170408
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



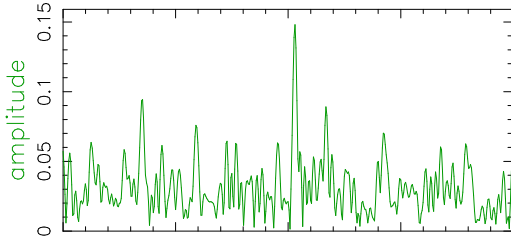
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All	
U/L	938/0	938/0	938/0	938/0			
A	0	0	0	0	APs used		
m	3890	296	1703	3109	PC freqs		
A:m	0:0	0:0	0:0	0:0	PC phase		
A:m	0:0	0:0	0:0	0:0	Manl PC		
A	1000	1000	1000	1000	PC amp		
m	1000	1000	1000	1000			
A	W00UL	W01UL	W02UL	W03UL	Chan ids		
m	W00UL	W01UL	W02UL	W03UL	Tracks		
					Chan ids		
					Tracks		
Group delay (usec)(sbd)	6.87491649142E+03	Apriori delay (usec)	6.87562936994E+03	Resid mbdelay (usec)	3.92148E-03	+/- 4.5E-04	
Sband delay (usec)	6.87491783284E+03	Apriori clock (usec)	-2.1047068E+03	Resid sbdelay (usec)	-7.11537E-01	+/- 1.8E-03	
Phase delay (usec)	6.87562937136E+03	Apriori clockrate (us/s)	1.8247400E-06	Resid phdelay (usec)	1.41583E-06	+/- 6.8E-07	
Delay rate (us/s)	-1.56743171667E+00	Apriori rate (us/s)	-1.56742183060E+00	Resid rate (us/s)	-9.88607E-06	+/- 2.5E-09	
Total phase (deg)	2884.4	Apriori accel (us/s/s)	-7.58940440370E-05	Resid phase (deg)	2910.7	+/- 21.2	
RMS	66.6	Theor.	67.8	Amplitude	0.192 +/- 0.035		
ph/seg (deg)	66.6	Search (2048X16)	0.134	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	82.5	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	9.0	Inc. seg. avg.	0.158	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	37.9	Inc. frq. avg.	0.180	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
A: az 348.6 el 46.2 pa 168.9	m: az 74.1 el 16.2 pa -74.7	u,v (fr/asec)	9425.744 -8293.521	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	simultaneous interpolator	

multiband delay (μs)

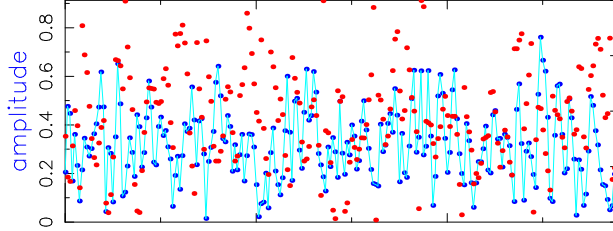


Fringe quality 0

SNR 5.8
Int time 459.400
Amp 0.159
Phase -170.8
PFD 4.3e-01
Delays (us)
SBD 0.029564
MBD -0.002645
Fringe rate (Hz)
-0.401117
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



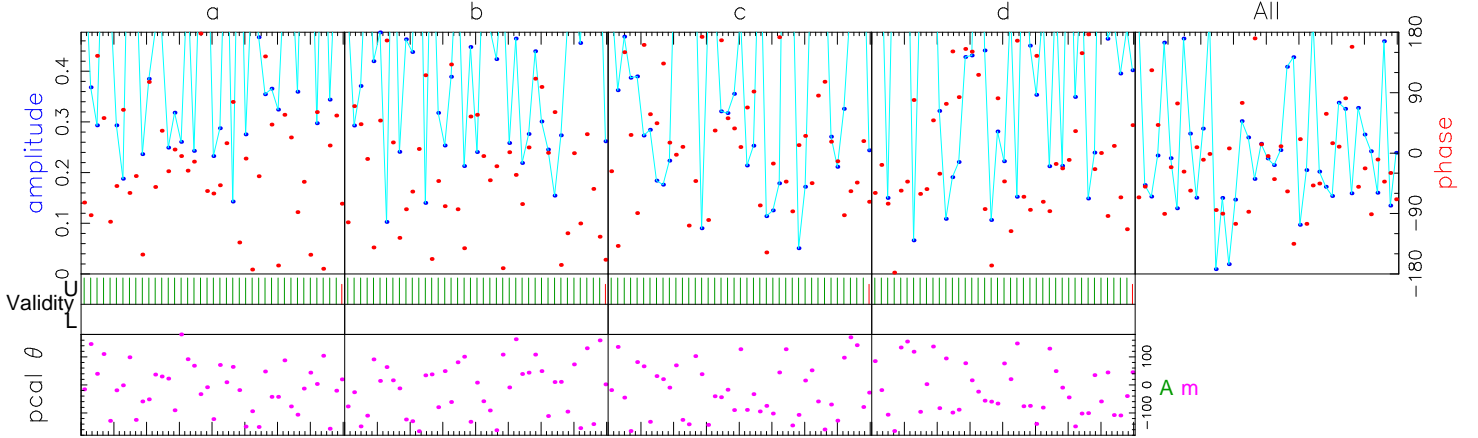
delay rate (ns/s)



Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170409
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"

Avgd. Xpower Spectrum (MHz)

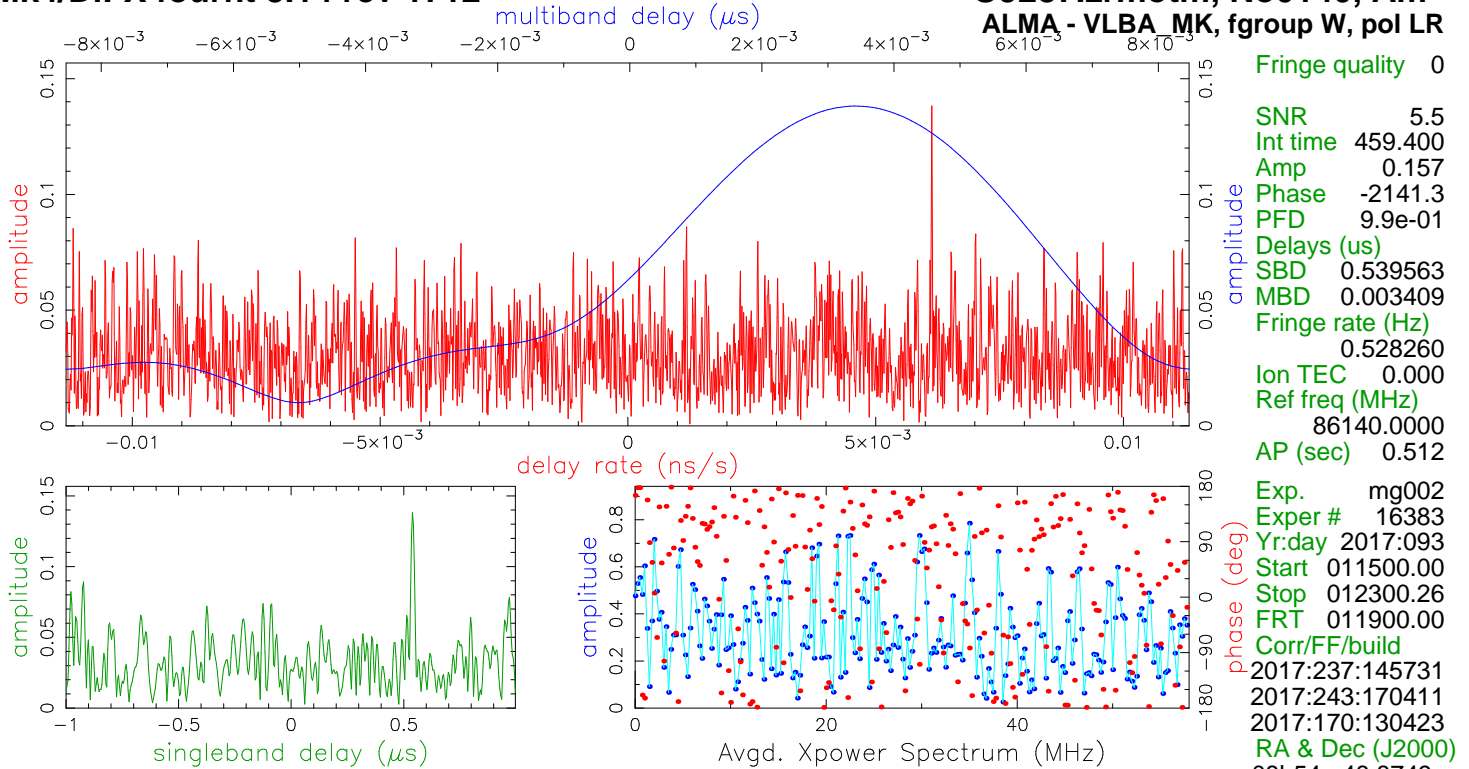
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
-41.2	-33.9	-20.2	-43.8	-43.8	Phase	-34.2
0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
81.0	271.8	239.0	331.2	331.2	Sbd box	239.9
U/L 938/0	938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	0	PC freqs	
m 3890	296	1703	3109	3109	PC freqs	
A:m 0:0	0:0	0:0	0:0	0:0	PC phase	
A:m 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
m 1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR	Chan ids	
m W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	6.87566085850E+03	Apriori delay (usec)	6.87562936994E+03	Resid mbdelay (usec)	-2.64477E-03	+/-	4.2E-04
Sband delay (usec)	6.87565893436E+03	Apriori clock (usec)	-2.1047068E+03	Resid sbdelay (usec)	2.95644E-02	+/-	1.6E-03
Phase delay (usec)	6.87562936884E+03	Apriori clockrate (us/s)	1.8247400E-06	Resid phdelay (usec)	-1.10426E-06	+/-	6.3E-07
Delay rate (us/s)	-1.56742648717E+00	Apriori rate (us/s)	-1.56742183060E+00	Resid rate (us/s)	-4.65657E-06	+/-	2.3E-09
Total phase (deg)	162.9	Apriori accel (us/s/s)	-7.58940440370E-05	Resid phase (deg)	-170.8	+/-	19.6

ph/seg (deg)	67.6	Theor.	62.7	Amplitude	0.159 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	112.4	Search (2048X16)	0.135	Search	0.135	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	13.0	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	9.2	Inc. seg. avg.	0.171	Inc. seg. avg.	0.171	Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
		Inc. frq. avg.	0.152	Inc. frq. avg.	0.152	Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



Fringe quality 0

SNR 5.5

Int time 459.400

Amp 0.157

Phase -2141.3

PFD 9.9e-01

Delays (us)

SBD 0.539563

MBD 0.003409

Fringe rate (Hz) 0.528260

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

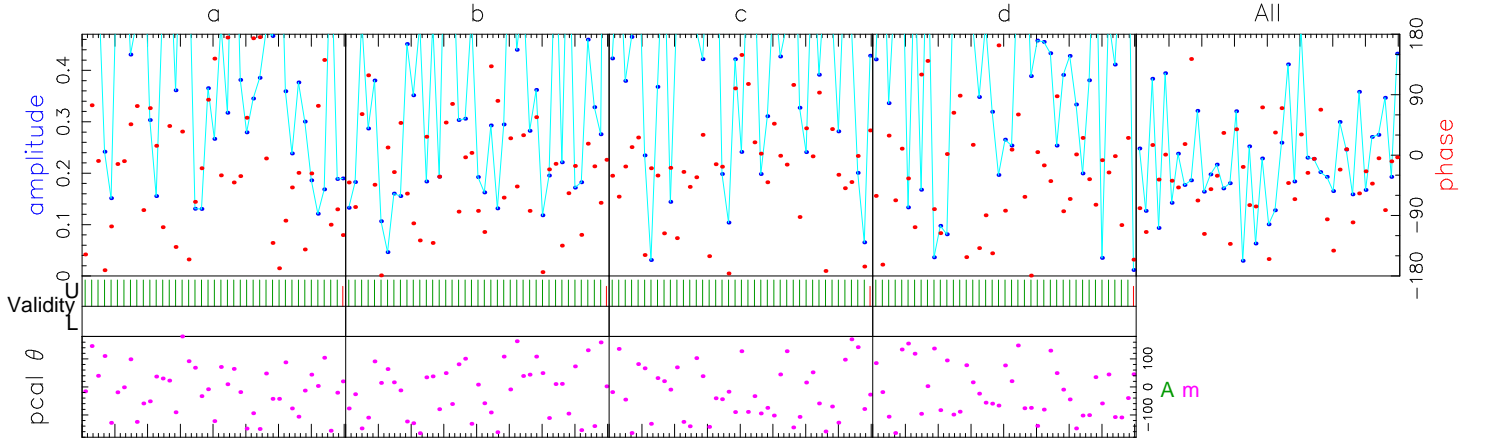
Corr/FF/build 2017:237:145731

2017:243:170411

2017:170:130423

RA & Dec (J2000) 08h54m48.8749s +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86385.49	All
-49.8	-15.8	-10.3	-43.8	-25.3	-25.3
0.1	0.2	0.2	0.1	0.2	0.2
77.4	203.8	358.5	307.4	358.2	358.2
U/L 938/0	938/0	938/0	938/0		
A 0	0	0	0		
m 3890	296	1703	3109		
A:m 0:0	0:0	0:0	0:0		
A:m 0:0	0:0	0:0	0:0		
A 1000	1000	1000	1000		
m 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL		
m W00UR	W01UR	W02UR	W03UR		

Group delay (usec)(sbd)	6.87616184605E+03	Apriori delay (usec)	6.87562936994E+03	Resid mbdelay (usec)	3.40944E-03	+/-	4.4E-04
Sband delay (usec)	6.87616893325E+03	Apriori clock (usec)	-2.1047068E+03	Resid sbdelay (usec)	5.39563E-01	+/-	1.7E-03
Phase delay (usec)	6.87562936913E+03	Apriori clockrate (us/s)	1.8247400E-06	Resid phdelay (usec)	-8.16391E-07	+/-	6.8E-07
Delay rate (us/s)	-1.56741569803E+00	Apriori rate (us/s)	-1.56742183060E+00	Resid rate (us/s)	6.13257E-06	+/-	2.4E-09
Total phase (deg)	-1807.6	Apriori accel (us/s/s)	-7.58940440370E-05	Resid phase (deg)	-2141.3	+/-	21.0

ph/seg (deg) 63.1 67.1 Search (2048X16) 0.135 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

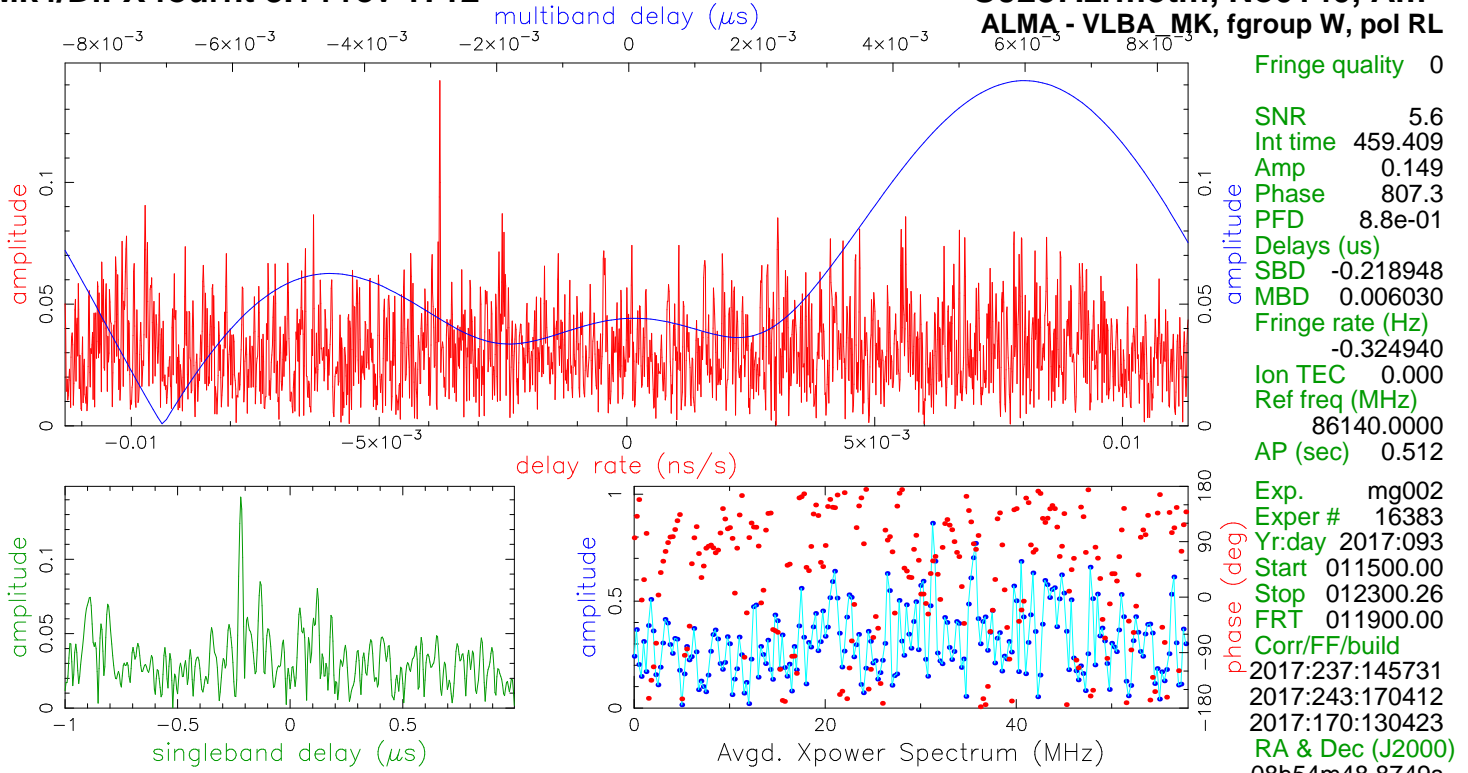
amp/seg (%) 97.3 117.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 25.1 21.0 Inc. seg. avg. 0.154 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

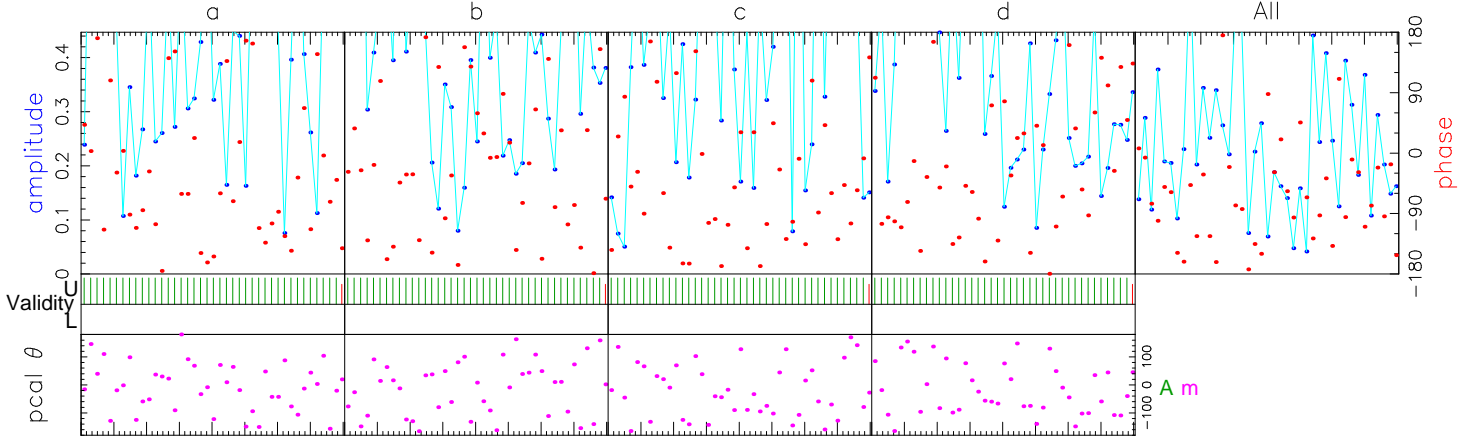
amp/frq (%) 28.8 36.6 Inc. frq. avg. 0.153 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 m: az 74.1 el 16.2 pa -74.7 u,v (fr/asec) 9425.744 -8293.521 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Am..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Am.W.29.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



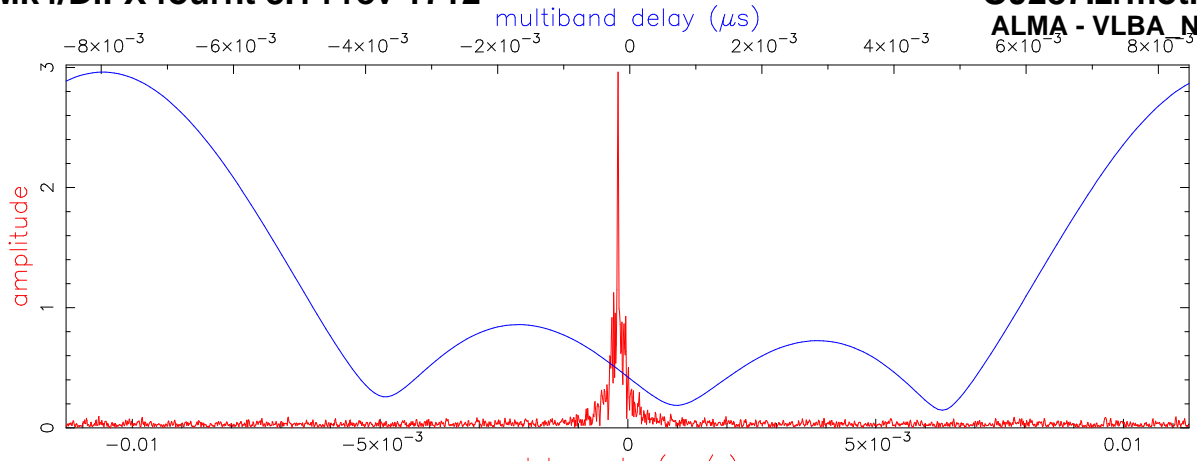
86151.11	86209.70	86268.30	86326.89	86385.38	86443.87
-93.8	-42.4	-86.1	-85.1	-84.1	-83.1
0.2	0.1	0.2	0.1	0.1	0.1
275.5	137.6	181.9	379.1	577.3	775.5
U/L 938/0	938/0	938/0	938/0	938/0	938/0
A 0	0	0	0	0	0
m 3890	296	1703	3109	4515	5921
A:m 0:0	0:0	0:0	0:0	0:0	0:0
A:m 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
m 1000	1000	1000	1000	1000	1000
A W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
m W00UL	W01UL	W02UL	W03UL	W04UL	W05UL

Group delay (usec)(sbd)	6.87541353345E+03	Apriori delay (usec)	6.87562936994E+03	Resid mbdelay (usec)	6.03018E-03	+/-	4.3E-04
Sband delay (usec)	6.87541042208E+03	Apriori clock (usec)	-2.1047068E+03	Resid sbdelay (usec)	-2.18948E-01	+/-	1.7E-03
Phase delay (usec)	6.87562936736E+03	Apriori clockrate (us/s)	1.8247400E-06	Resid phdelay (usec)	-2.58054E-06	+/-	6.6E-07
Delay rate (us/s)	-1.56742560283E+00	Apriori rate (us/s)	-1.56742183060E+00	Resid rate (us/s)	-3.77223E-06	+/-	2.4E-09
Total phase (deg)	1141.0	Apriori accel (us/s/s)	-7.58940440370E-05	Resid phase (deg)	807.3	+/-	20.4

ph/seg (deg)	67.4	Theor.	65.3	Amplitude	0.149 +/- 0.027	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	111.9	Search (2048X16)	0.136	Search	0.136	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	28.9	Interp.	0.000	Inc. seg. avg.	0.153	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	20.9	Inc. frq. avg.	0.147	Inc. frq. avg.	0.147	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

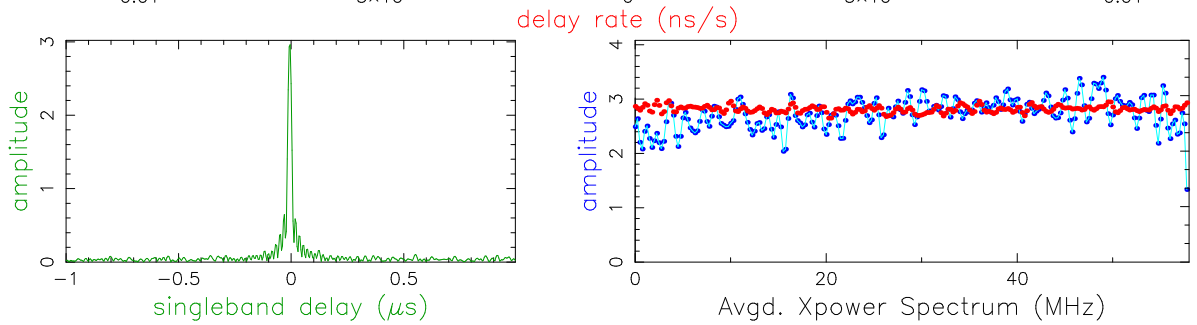
A: az 348.6 el 46.2 pa 168.9 m: az 74.1 el 16.2 pa -74.7 u,v (fr/asec) 9425.744 -8293.521 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Am..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Am.W.30.zrmotm



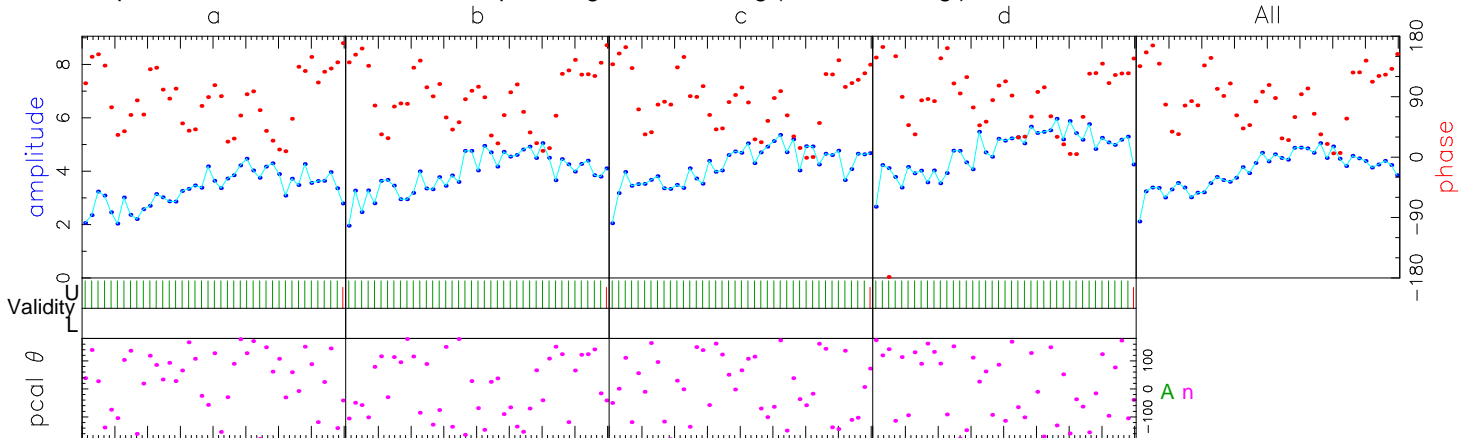
Fringe quality 6

SNR 121.8
 Int time 479.732
 Amp 3.021
 Phase 86.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.006241
 MBD -0.008024
 Fringe rate (Hz)
 -0.016927
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170415
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



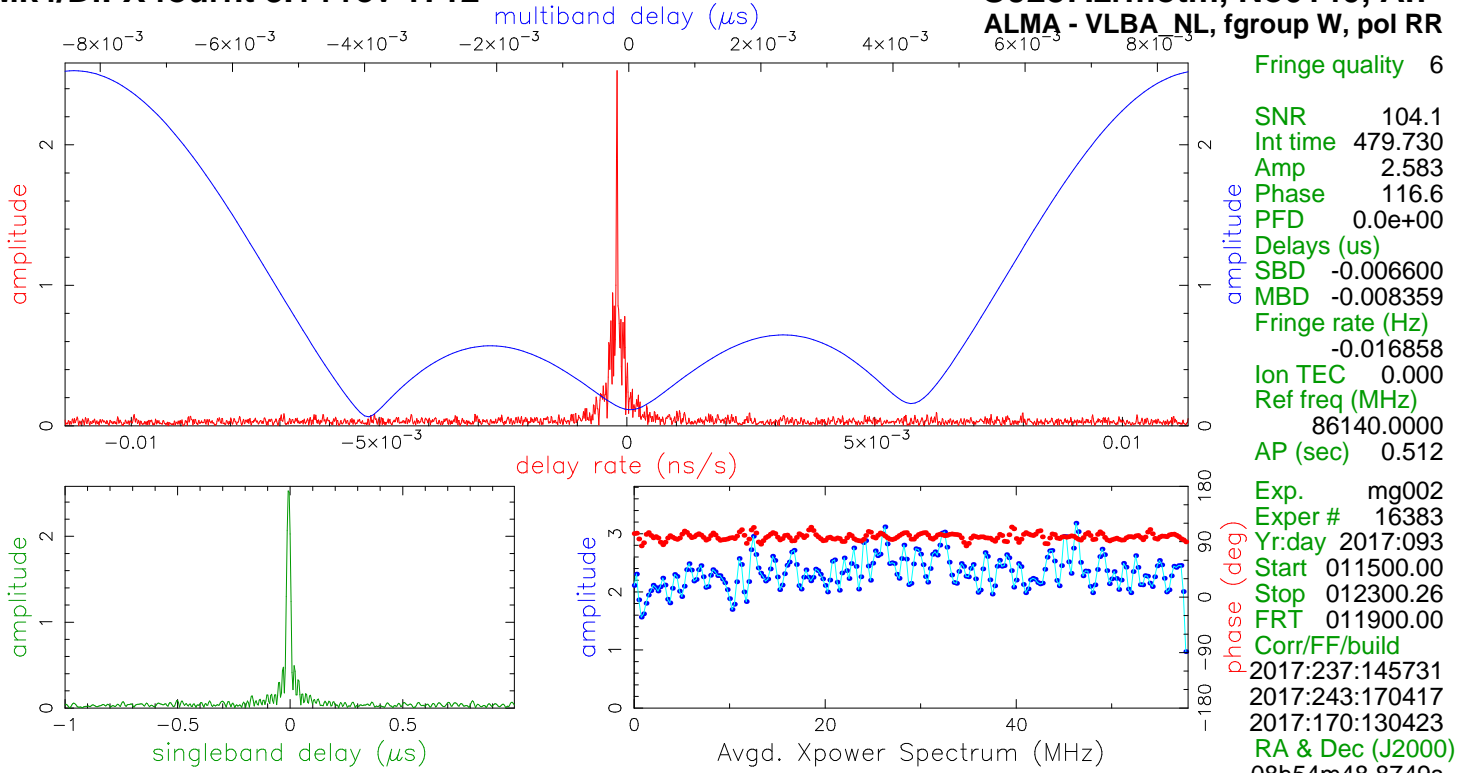
86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
85.5	87.0	83.0	89.8	89.8	Phase	86.4
2.5	2.9	3.1	3.4	3.4	Ampl.	3.0
231.4	231.5	231.4	231.9	231.9	Sbd box	231.6
U/L 938/0	938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	0	PC freqs	
n 3890	296	1703	3109	3109	PC freqs	
A:n 0:0	0:0	0:0	0:0	0:0	PC phase	
A:n 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
n 1000	1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	W03UL	Chan ids	
n W00UL	W01UL	W02UL	W03UL	W03UL	Tracks	
n W00UL	W01UL	W02UL	W03UL	W03UL	Chan ids	
n W00UL	W01UL	W02UL	W03UL	W03UL	Tracks	

Group delay (usec)(sbd)	-6.09296416125E+03	Apriori delay (usec)	-6.09295613692E+03	Resid mbdelay (usec)	-8.02433E-03	+/- 2.0E-05
Sband delay (usec)	-6.09296237830E+03	Apriori clock (usec)	-2.1111345E+03	Resid sbdelay (usec)	-6.24138E-03	+/- 7.8E-05
Phase delay (usec)	-6.09295613413E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	2.78749E-06	+/- 3.0E-08
Delay rate (us/s)	-4.91471158235E-01	Apriori rate (us/s)	-4.91470961730E-01	Resid rate (us/s)	-1.96506E-07	+/- 1.1E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.96034024487E-05	Resid phase (deg)	86.4	+/- 0.9

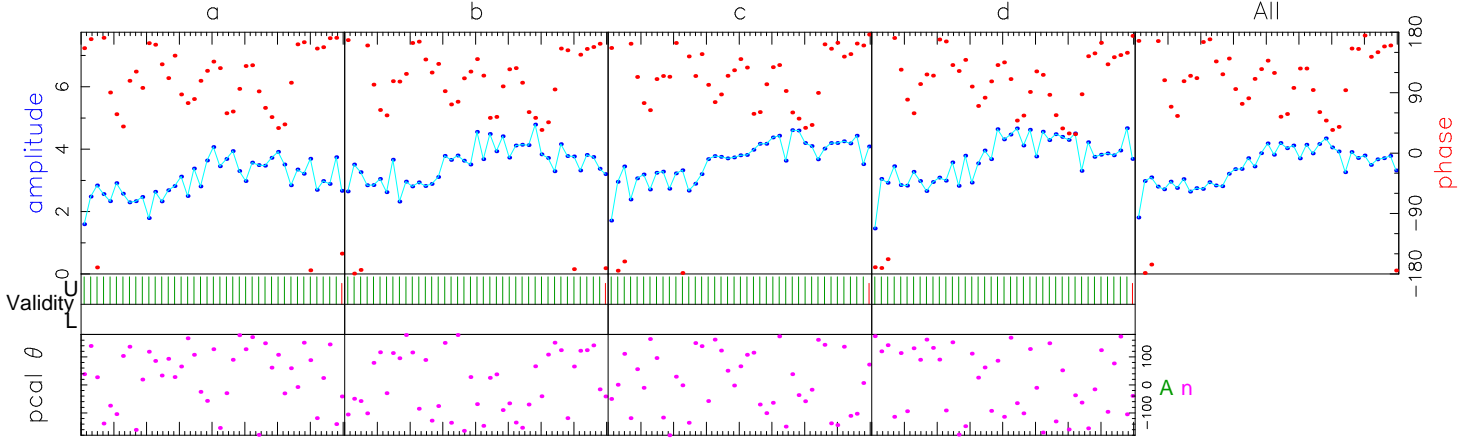
ph/seg (deg)	43.7	Theor.	3.0	Amplitude	3.021 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	39.8		5.3	Search (2048X16)	2.843	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	3.5		0.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	11.6		1.6	Inc. seg. avg.	4.022	Sample rate(MSamp/s): 116	mb window (us) -0.009 0.009
				Inc. frq. avg.	2.964	Data rate(Mb/s): 928	dr window (ns/s) -0.011 0.011
						nlags: 232	ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 n: az 144.2 el 64.6 pa -26.9 u,v (fr/asec) 2971.682 -9360.213 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An.W.31.zrmtm



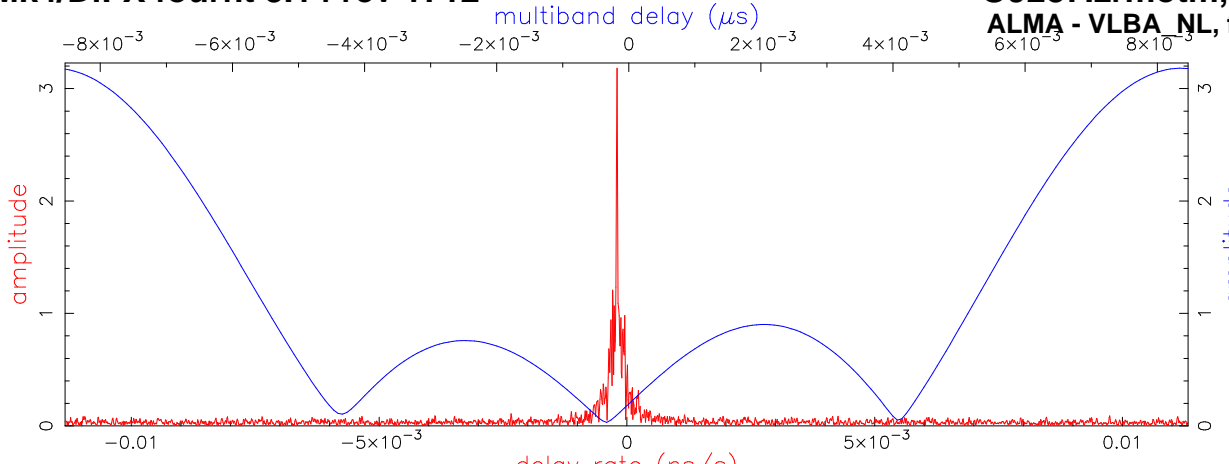
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



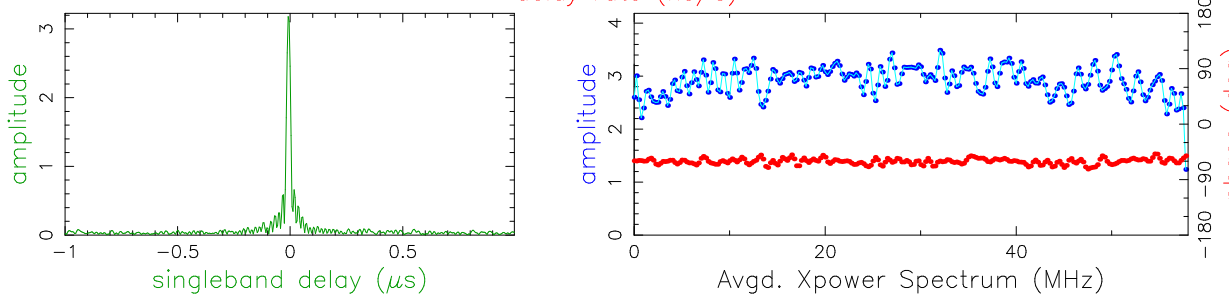
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
116.9	116.8	119.3	113.6	116.6	Phase	116.6
2.1	2.6	2.7	2.7	2.5	Ampl.	2.5
231.4	231.2	231.7	231.6	231.5	Sbd box	231.5
U/L 938/0	938/0	938/0	938/0		APs used	
A 0	0	0	0		PC freqs	
n 3890	296	1703	3109		PC freqs	
A:n 0:0	0:0	0:0	0:0		PC phase	
A:n 0:0	0:0	0:0	0:0		Mani PC	
A 1000	1000	1000	1000		PC amp	
n 1000	1000	1000	1000			
A W00UR	W01UR	W02UR	W03UR		Chan ids	
n W00UR	W01UR	W02UR	W03UR		Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-6.09296449542E+03	Apriori delay (usec)	-6.09295613692E+03	Resid mbdelay (usec)	-8.35850E-03	+/- 2.3E-05
Sband delay (usec)	-6.09296273692E+03	Apriori clock (usec)	-2.1111345E+03	Resid sbdelay (usec)	-6.60000E-03	+/- 9.1E-05
Phase delay (usec)	-6.09295613316E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	3.76073E-06	+/- 3.5E-08
Delay rate (us/s)	-4.91471157439E-01	Apriori rate (us/s)	-4.91470961730E-01	Resid rate (us/s)	-1.95709E-07	+/- 1.3E-10
Total phase (deg)	-111.7	Apriori accel (us/s/s)	-1.96034024487E-05	Resid phase (deg)	116.6	+/- 1.1

RMS Theor. Amplitude 2.583 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 43.4 3.5 Search (2048X16) 2.429 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 39.9 6.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 2.9 1.1 Inc. seg. avg. 3.436 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 9.4 1.9 Inc. frq. avg. 2.529 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

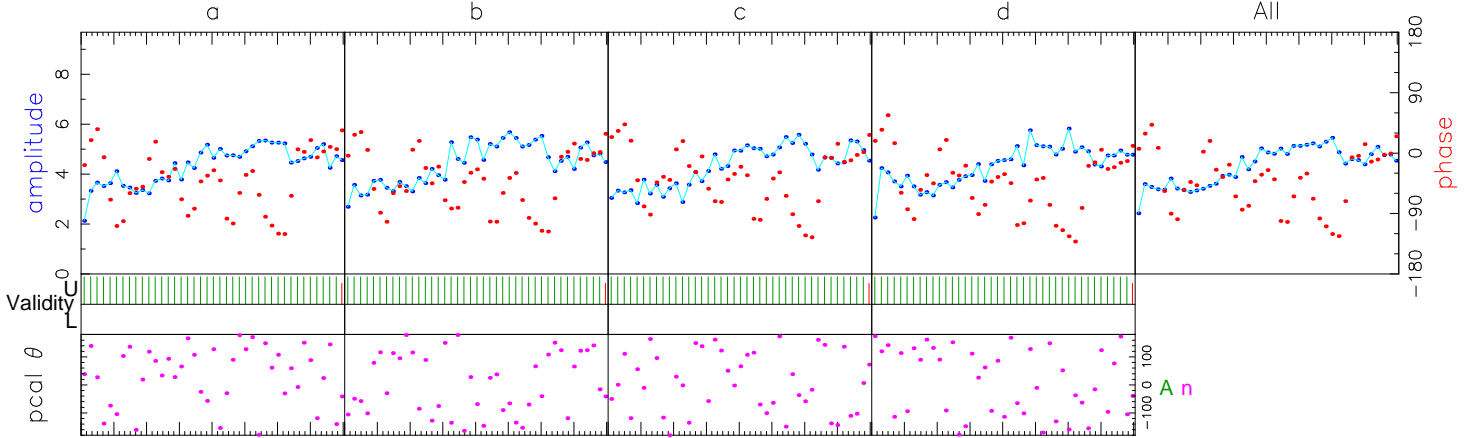
A: az 348.6 el 46.2 pa 168.9 n: az 144.2 el 64.6 pa -26.9 u,v (fr/asec) 2971.682 -9360.213 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An.W.32.zrmtm



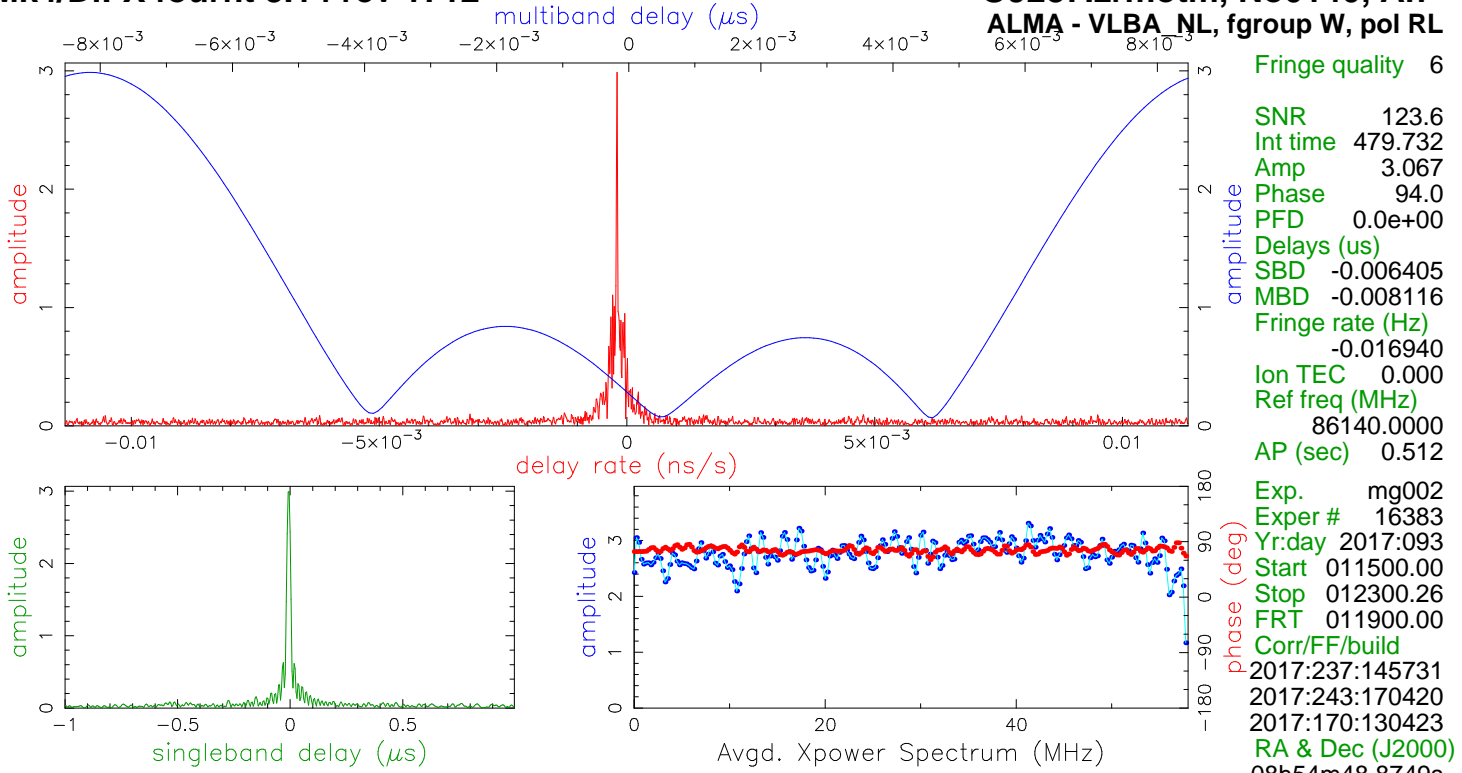
Fringe quality 5
SNR 130.1
Int time 479.730
Amp 3.228
Phase -42.7
PFD 0.0e+00
Delays (us)
SBD -0.006960
MBD -0.008681
Fringe rate (Hz)
-0.016869
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170418
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



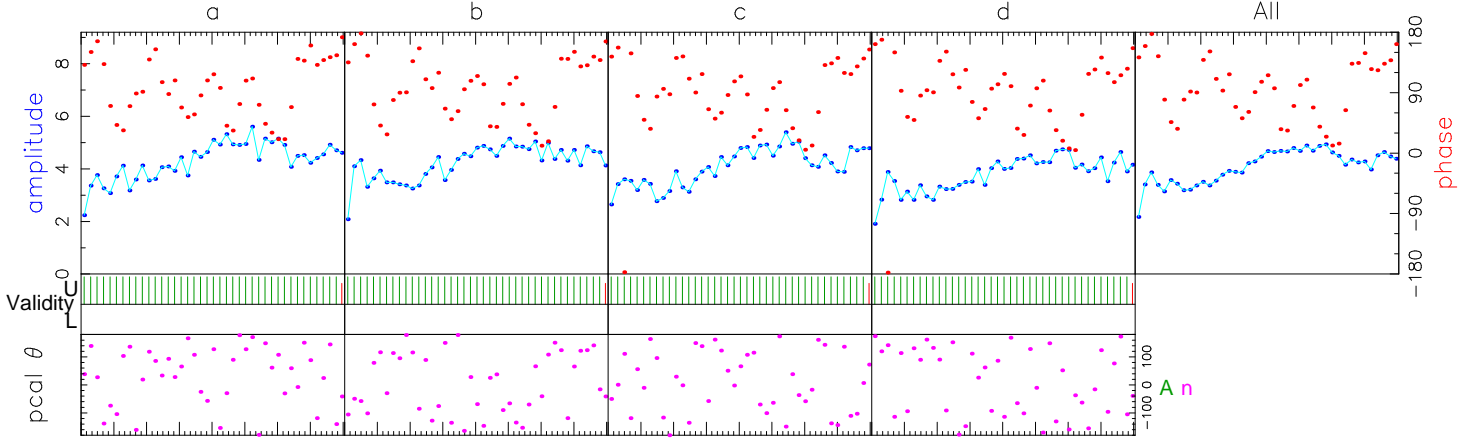
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	938/0	938/0	938/0	938/0	938/0	938/0
A	0	0	0	0	0	0
n	3890	296	1703	3109	3890	3890
A:n	0:0	0:0	0:0	0:0	0:0	0:0
A:n	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
n	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
Group delay (usec)(sbd)	-6.09296481771E+03	-6.09296309692E+03	-6.09295613692E+03	-6.09295613692E+03	-6.09295613692E+03	-6.09295613692E+03
Sband delay (usec)	-6.09296309692E+03	-6.09296309692E+03	-6.09296309692E+03	-6.09296309692E+03	-6.09296309692E+03	-6.09296309692E+03
Phase delay (usec)	-6.09295613829E+03	-6.09295613829E+03	-6.09295613829E+03	-6.09295613829E+03	-6.09295613829E+03	-6.09295613829E+03
Delay rate (us/s)	-4.91471157561E-01	-4.91471157561E-01	-4.91471157561E-01	-4.91471157561E-01	-4.91471157561E-01	-4.91471157561E-01
Total phase (deg)		-271.0				
Apriori delay (usec)						
Apriori clock (usec)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
Pcal mode:	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL
Pcal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00
Bits/sample:	2x2	2x2	2x2	2x2	2x2	2x2
Sample rate(MSamp/s):	116	116	116	116	116	116
Data rate(Mb/s):	928	928	928	928	928	928
lags:	232	232	232	232	232	232
t_cohere	infinite	infinite	infinite	infinite	infinite	infinite
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00
sb window (us)	-1.000	1.000	-1.000	1.000	-1.000	1.000
mb window (us)	-0.009	0.009	-0.009	0.009	-0.009	0.009
dr window (ns/s)	-0.011	0.011	-0.011	0.011	-0.011	0.011
simultaneous interpolator						



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86326.89	94.0	All
94.3	96.7	92.2	92.8	92.8	94.0	94.0
3.2	3.1	3.0	2.8	2.8	3.0	3.0
231.4	231.4	231.3	231.9	231.9	231.5	231.5
U/L 938/0	938/0	938/0	938/0	938/0		
A 0	0	0	0	0		
n 3890	296	1703	3109	3109		
A:n 0:0	0:0	0:0	0:0	0:0		
A:n 0:0	0:0	0:0	0:0	0:0		
A 1000	1000	1000	1000	1000		
n 1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR		
n W00UL	W01UL	W02UL	W03UL	W03UL		
Group delay (usec)(sbd)	-6.09296425253E+03	Apriori delay (usec)	-6.09295613692E+03	Resid mbdelay (usec)	-8.11561E-03	+/- 2.0E-05
Sband delay (usec)	-6.09296254161E+03	Apriori clock (usec)	-2.1111345E+03	Resid sbdelay (usec)	-6.40469E-03	+/- 7.7E-05
Phase delay (usec)	-6.09295613389E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	3.03282E-06	+/- 3.0E-08
Delay rate (us/s)	-4.91471158384E-01	Apriori rate (us/s)	-4.91470961730E-01	Resid rate (us/s)	-1.96654E-07	+/- 1.1E-10
Total phase (deg)	-134.2	Apriori accel (us/s/s)	-1.96034024487E-05	Resid phase (deg)	94.0	+/- 0.9

RMS Theor. Amplitude 3.067 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 43.7 3.0 Search (2048X16) 2.874 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

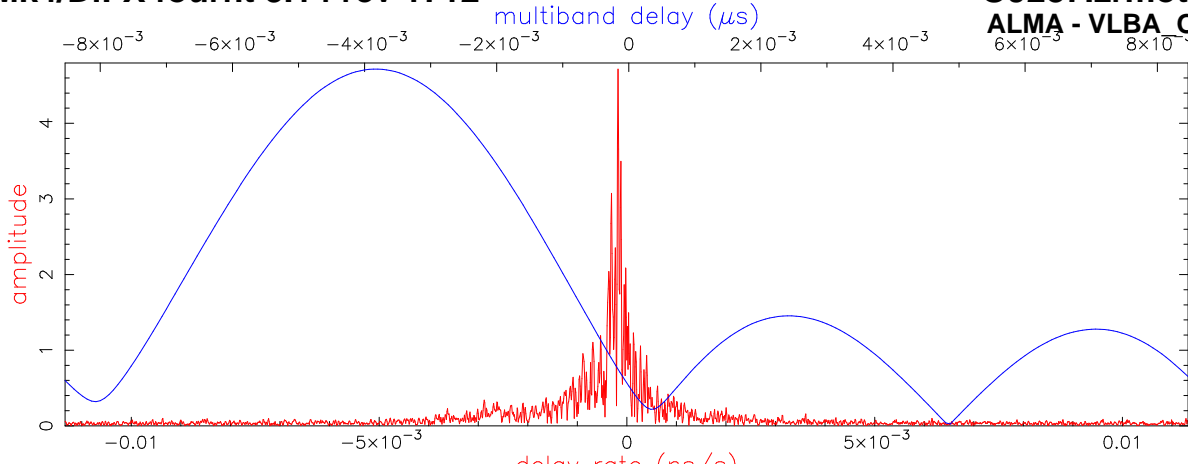
amp/seg (%) 38.7 5.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 2.4 0.9 Inc. seg. avg. 4.074 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 5.4 1.6 Inc. frq. avg. 2.989 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 n: az 144.2 el 64.6 pa -26.9 u,v (fr/asec) 2971.682 -9360.213 simultaneous interpolator

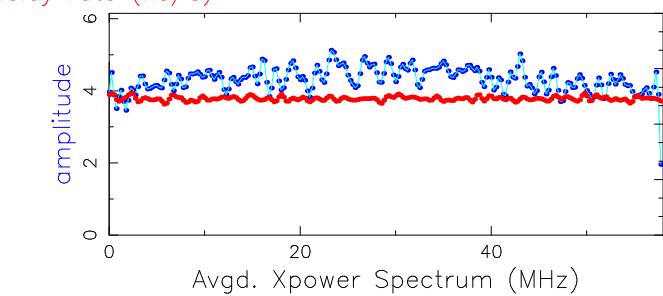
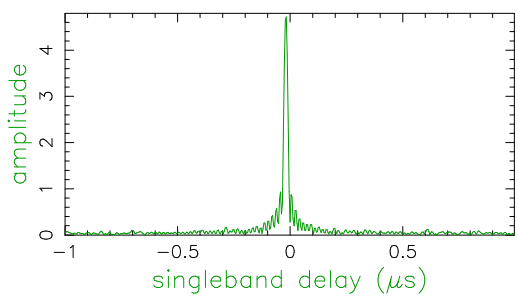
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/An.W.34.zrmtm



Fringe quality 5

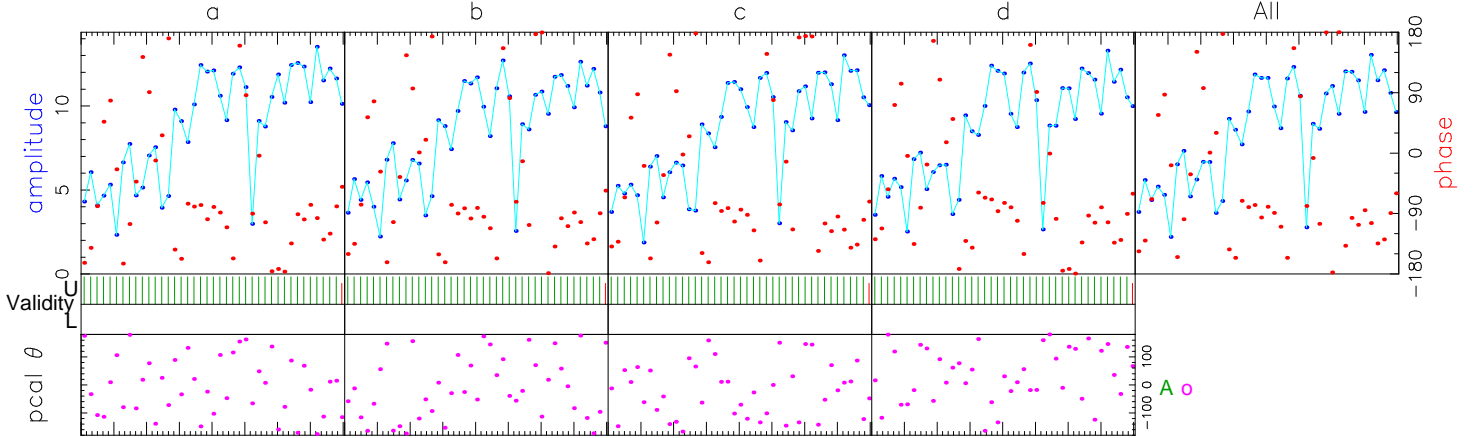
SNR 193.4
Int time 479.760
Amp 4.798
Phase -48.4
PFD 0.0e+00
Delays (us)
SBD -0.019022
MBD -0.003852
Fringe rate (Hz)
-0.015623
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170423
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



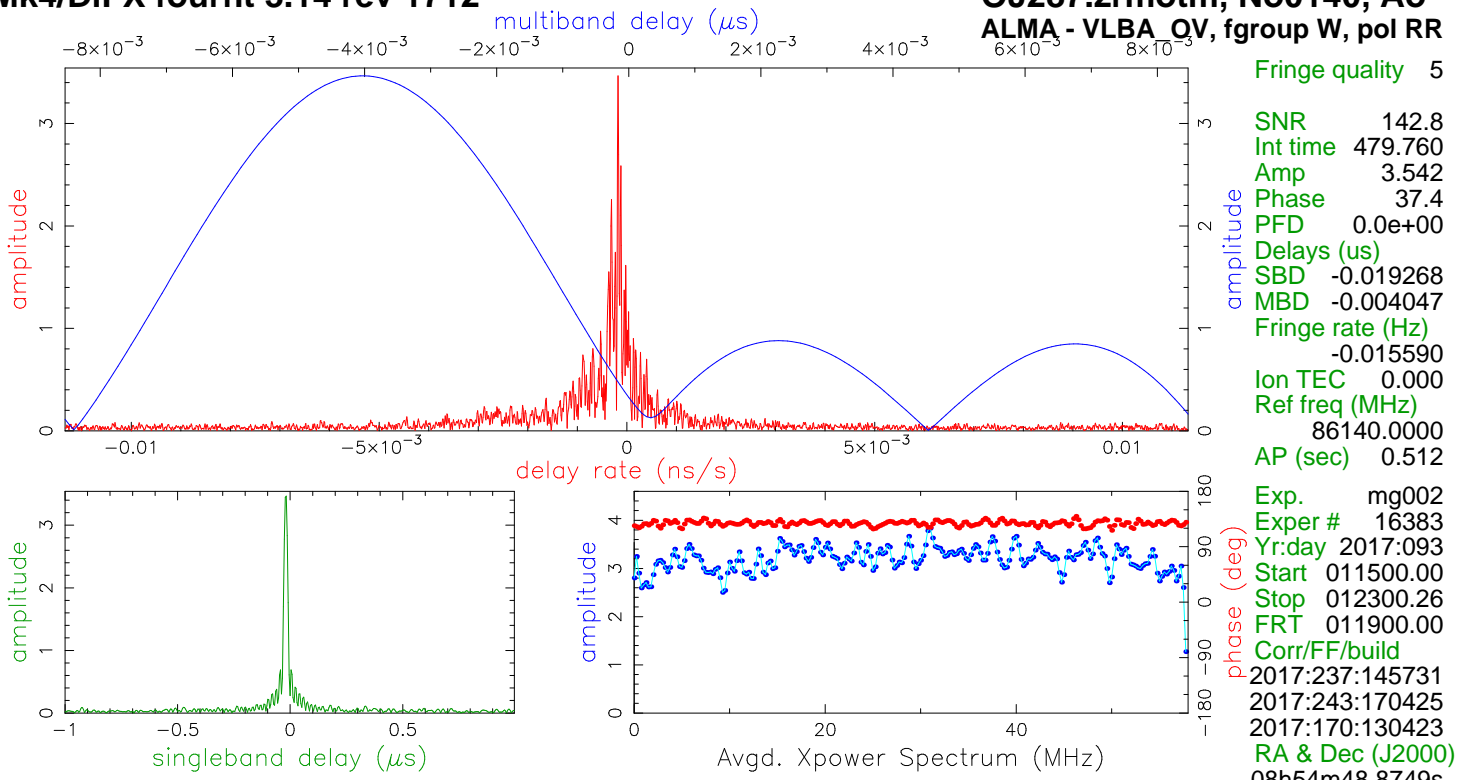
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

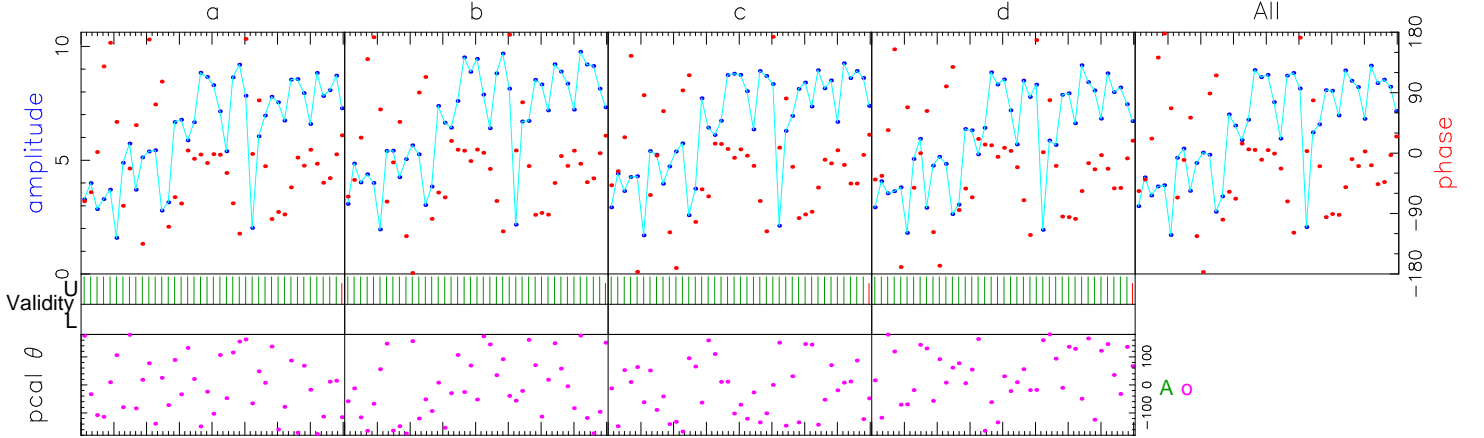


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-113.6	-119.4	-123.4	-110.6	Phase	-116.7
	4.9	4.7	4.6	4.7	Ampl.	4.7
	228.6	228.5	228.6	228.7	Sbd box	228.6
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
o	3890	296	1703	3109	PC freqs	
A:o	0:0	0:0	0:0	0:0	PC phase	
A:o	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-3.21747362698E+03	Apriori delay (usec)	-3.21745270877E+03	Resid mbdelay (usec)	-3.85154E-03	+/- 1.3E-05
Sband delay (usec)	-3.21747173084E+03	Apriori clock (usec)	-2.1079377E+03	Resid sbdelay (usec)	-1.90221E-02	+/- 4.9E-05
Phase delay (usec)	-3.21745271254E+03	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-3.76332E-06	+/- 1.9E-08
Delay rate (us/s)	-9.85311142782E-01	Apriori rate (us/s)	-9.85310961410E-01	Resid rate (us/s)	-1.81372E-07	+/- 6.9E-11
Total phase (deg)		-168.6	Apriori accel (us/s/s)	-3.25170749806E-05	Resid phase (deg)	-48.4 +/- 0.6

	RMS	Theor.	Amplitude	4.798 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	73.7	1.9	Search (2048X16)	4.425	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	100.4	3.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
ph/frq (deg)	7.0	0.6	Inc. seg. avg.	8.504	Sample rate(MSamp/s): 116	dr window (ns/s) -0.011 0.011
amp/frq (%)	2.5	1.0	Inc. frq. avg.	4.735	Data rate(Mb/s): 928	ion window (TEC) 0.00 0.00



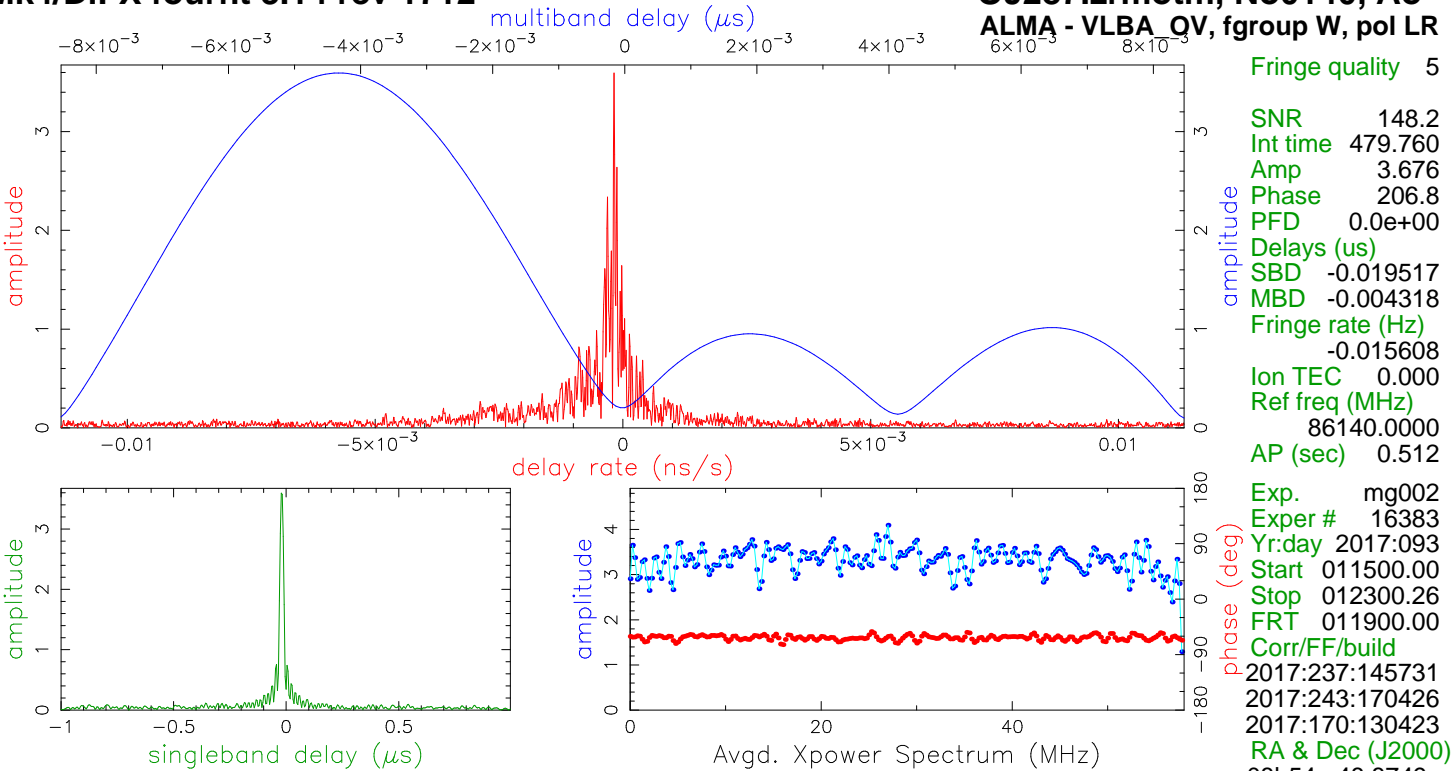
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



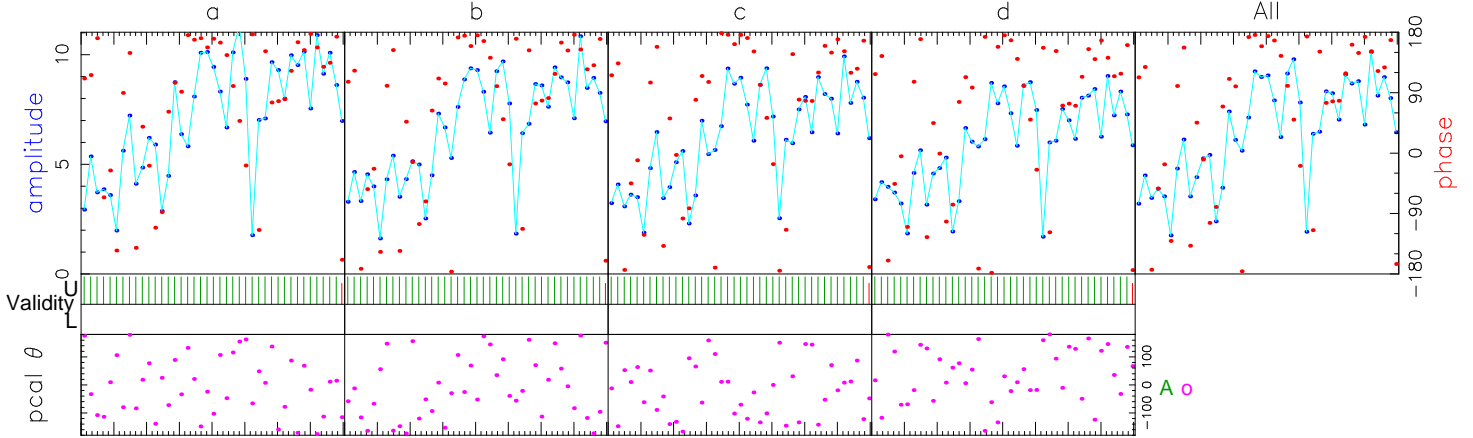
86151.11	86209.70	86268.30	86326.89	All
-33.2	-29.1	-29.5	-31.7	Phase
3.4	3.7	3.5	3.3	Ampl.
228.4	228.6	228.5	228.6	Sbd box
U/L 938/0	938/0	938/0	938/0	APs used
A 0	0	0	0	PC freqs
o 3890	296	1703	3109	PC freqs
A:o 0:0	0:0	0:0	0:0	PC phase
A:o 0:0	0:0	0:0	0:0	Mani PC
A 1000	1000	1000	1000	PC amp
o 1000	1000	1000	1000	
A W00UR	W01UR	W02UR	W03UR	Chan ids
o W00UR	W01UR	W02UR	W03UR	Tracks
				Chan ids
				Tracks

Group delay (usec)(sbd)	-3.21747382291E+03	Apriori delay (usec)	-3.21745270877E+03	Resid mbdelay (usec)	-4.04747E-03	+/-	1.7E-05
Sband delay (usec)	-3.21747197664E+03	Apriori clock (usec)	-2.1079377E+03	Resid sbdelay (usec)	-1.92679E-02	+/-	6.7E-05
Phase delay (usec)	-3.21745270977E+03	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-9.94743E-07	+/-	2.6E-08
Delay rate (us/s)	-9.85311142394E-01	Apriori rate (us/s)	-9.85310961410E-01	Resid rate (us/s)	-1.80984E-07	+/-	9.3E-11
Total phase (deg)	-82.8	Apriori accel (us/s/s)	-3.25170749806E-05	Resid phase (deg)	37.4	+/-	0.8

RMS 73.3 Theor. 2.6 Amplitude 3.542 +/- 0.025
 ph/seg (deg) 73.3 2.6 Search (2048X16) 3.316 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 99.5 4.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 2.4 0.8 Inc. seg. avg. 6.323 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 4.7 1.4 Inc. frq. avg. 3.467 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011
 A: az 348.6 el 46.2 pa 168.9 o: az 103.3 el 49.6 pa -55.7 u,v (fr/asec) 5958.020 -9240.848 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao.W.36.zrmtm



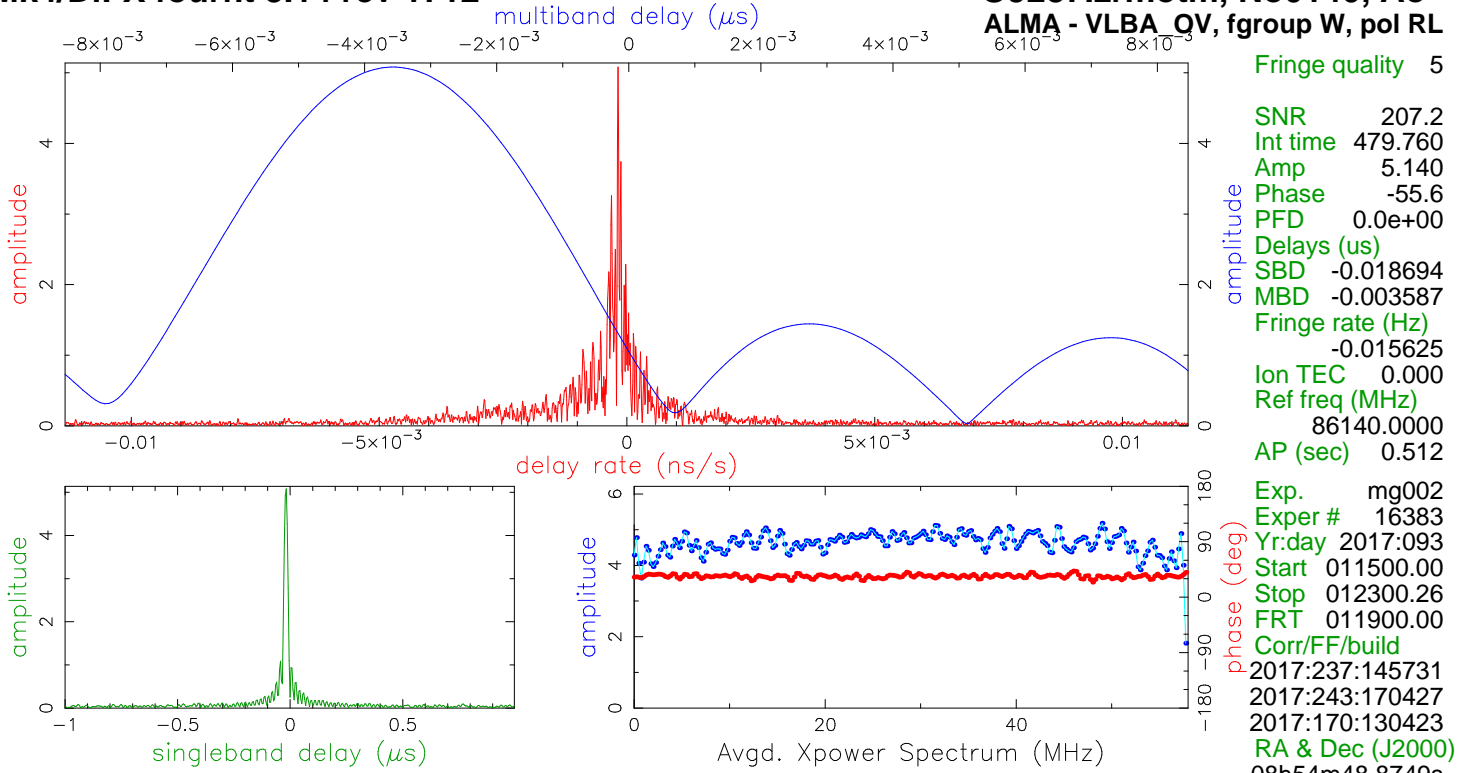
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	86209.70	86268.30	86326.89
138.1	138.8	140.6	136.5	138.5	138.8	140.6	136.5
4.0	3.7	3.5	3.3	4.0	3.7	3.5	3.3
228.4	228.5	228.4	228.5	228.4	228.5	228.4	228.5
U/L 938/0	938/0	938/0	938/0	U/L 938/0	938/0	938/0	938/0
A 0	0	0	0	A 0	0	0	0
o 3890	296	1703	3109	o 3890	296	1703	3109
A:o 0:0	0:0	0:0	0:0	A:o 0:0	0:0	0:0	0:0
A:o 0:0	0:0	0:0	0:0	A:o 0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	A 1000	1000	1000	1000
o 1000	1000	1000	1000	o 1000	1000	1000	1000
A W00UL	W01UL	W02UL	W03UL	A W00UL	W01UL	W02UL	W03UL
o W00UR	W01UR	W02UR	W03UR	o W00UR	W01UR	W02UR	W03UR
Group delay (usec)(sbd)	-3.21747409318E+03	Apriori delay (usec)	-3.21745270877E+03	Resid mbdelay (usec)	-4.31774E-03	+/-	1.6E-05
Sband delay (usec)	-3.21747222574E+03	Apriori clock (usec)	-2.1079377E+03	Resid sbdelay (usec)	-1.95170E-02	+/-	6.4E-05
Phase delay (usec)	-3.21745270431E+03	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	4.46690E-06	+/-	2.5E-08
Delay rate (us/s)	-9.85311142599E-01	Apriori rate (us/s)	-9.85310961410E-01	Resid rate (us/s)	-1.81188E-07	+/-	9.0E-11
Total phase (deg)	86.6	Apriori accel (us/s/s)	-3.25170749806E-05	Resid phase (deg)	206.8	+/-	0.8

ph/seg (deg)	RMS 72.8	Theor. 2.5	Amplitude Search (2048X16)	3.443	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	98.1	4.3	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00	(us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	2.1	0.8	Inc. seg. avg.	6.440	Bits/sample:	2x2	SampCntNorm:	enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	7.2	1.3	Inc. frq. avg.	3.596	Sample rate(MSamp/s):	116	Data rate(Mb/s):	928	ion window (TEC)	0.00	0.00

A: az 348.6 el 46.2 pa 168.9 o: az 103.3 el 49.6 pa -55.7 u,v (fr/asec) 5958.020 -9240.848 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao.W.37.zrmotm



Fringe quality 5

SNR 207.2

Int time 479.760

Amp 5.140

Phase -55.6

PFD 0.0e+00

Delays (us)

SBD -0.018694

MBD -0.003587

Fringe rate (Hz)

-0.015625

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170427

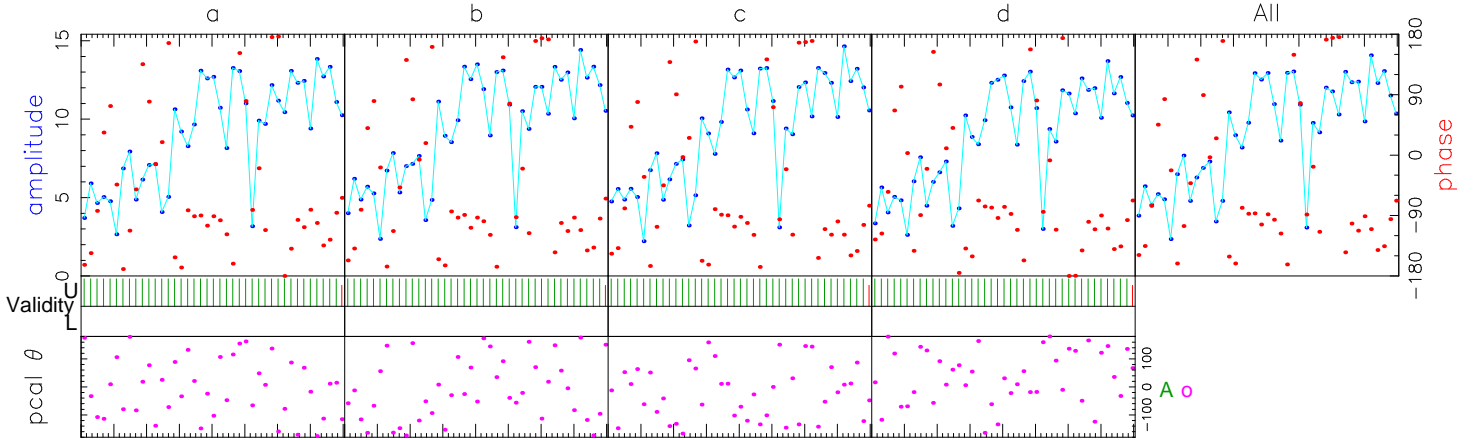
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86385.48	All
86151.11	-121.3	-125.7	-129.7	-118.4	-113.8	-123.8
Phase	5.1	5.2	5.1	4.9	4.9	5.1
Ampl.	228.6	228.6	228.7	228.8	228.8	228.7
Sbd box	U/L 938/0	938/0	938/0	938/0	938/0	
APs used	A 0	0	0	0	0	
PC freqs	o 3890	296	1703	3109	3109	
PC freqs	A:o 0:0	0:0	0:0	0:0	0:0	
PC phase	A:o 0:0	0:0	0:0	0:0	0:0	
Mani PC	A 1000	1000	1000	1000	1000	
PC amp	o 1000	1000	1000	1000	1000	
Chan ids	A W00UR	W01UR	W02UR	W03UR	W03UR	
Tracks	o W00UL	W01UL	W02UL	W03UL	W03UL	
Chan ids						
Tracks						
Group delay (usec)(sbd)	-3.21747336238E+03		-3.21745270877E+03		-3.58694E-03	+/- 1.2E-05
Sband delay (usec)	-3.21747140284E+03		-2.1079377E+03		-1.86941E-02	+/- 4.6E-05
Phase delay (usec)	-3.21745271277E+03		1.5021560E-06		-3.99305E-06	+/- 1.8E-08
Delay rate (us/s)	-9.85311142801E-01		-9.85310961410E-01		-1.81391E-07	+/- 6.4E-11
Total phase (deg)		-175.7			-55.6	+/- 0.6
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						
Pcal mode:	MANUAL	MANUAL	MANUAL	MANUAL	MANUAL	PC period (AP's) 5, 5
Pcal rate:	0.000E+00	0.000E+00	0.000E+00	0.000E+00	0.000E+00	us/s
Bits/sample:	2x2		2x2		2x2	SampCntNorm: enabled
Sample rate(MSamp/s):	116		116		116	mb window (us)
Data rate(Mb/s):	928		928		928	dr window (ns/s)
						ion window (TEC)
						sb window (us)
						mb window (us)
						dr window (ns/s)
						ion window (TEC)
						simultaneous interpolator

ph/seg (deg) 73.3 1.8 Search (2048X16) 4.811 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

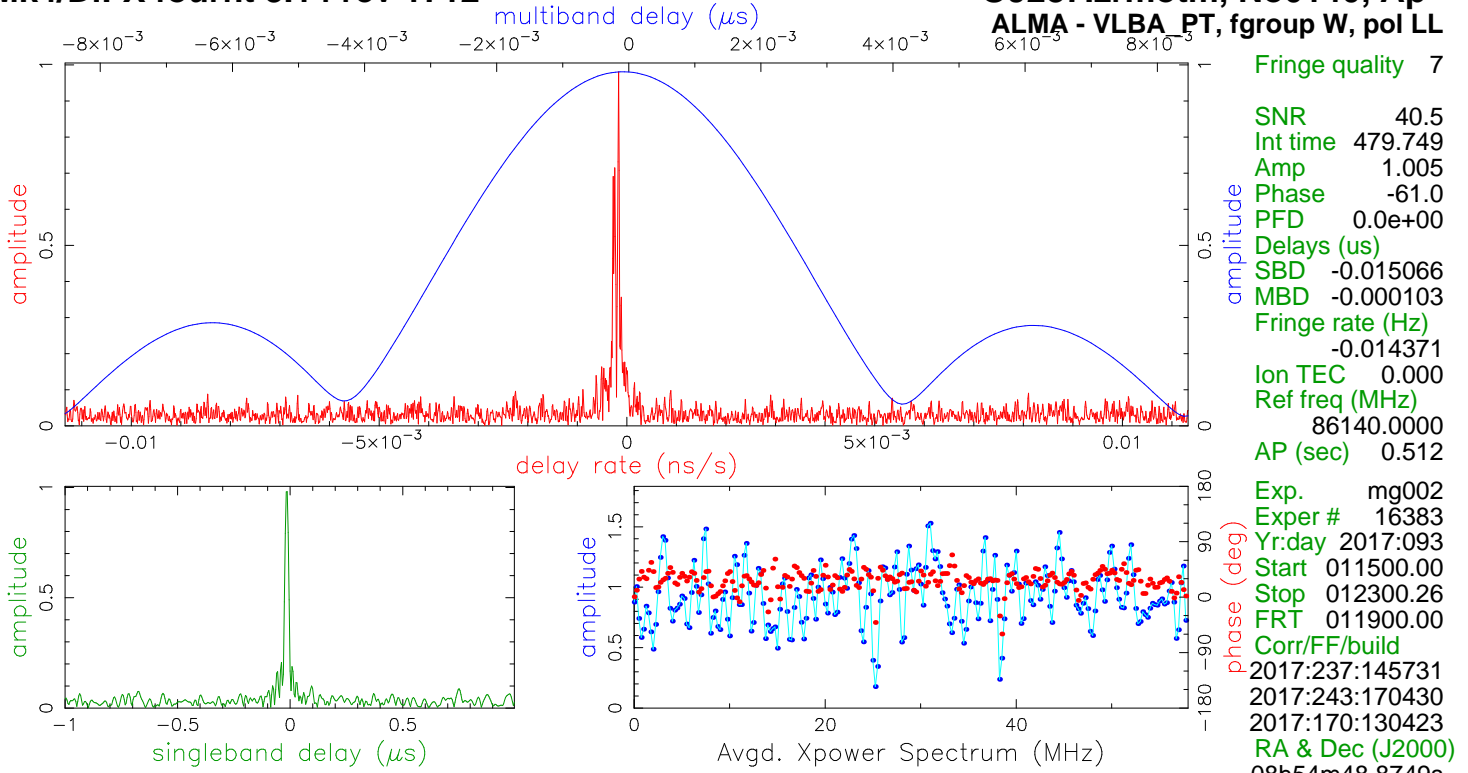
amp/seg (%) 100.5 3.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 6.1 0.6 Inc. seg. avg. 9.052 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

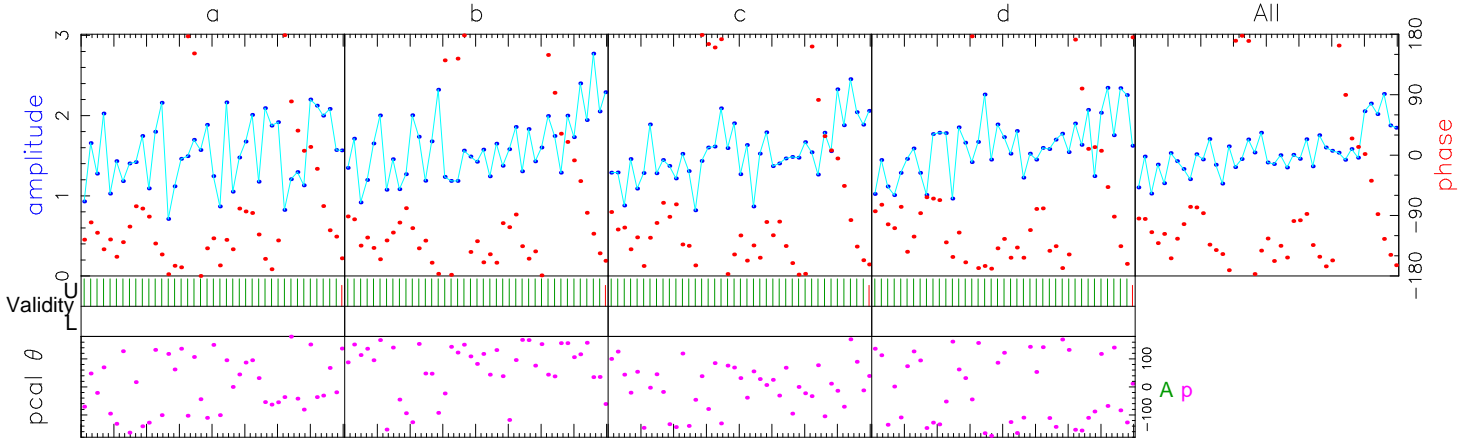
amp/frq (%) 2.6 1.0 Inc. frq. avg. 5.097 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011

A: az 348.6 el 46.2 pa 168.9 o: az 103.3 el 49.6 pa -55.7 u,v (fr/asec) 5958.020 -9240.848 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ao.W.38.zrmtm

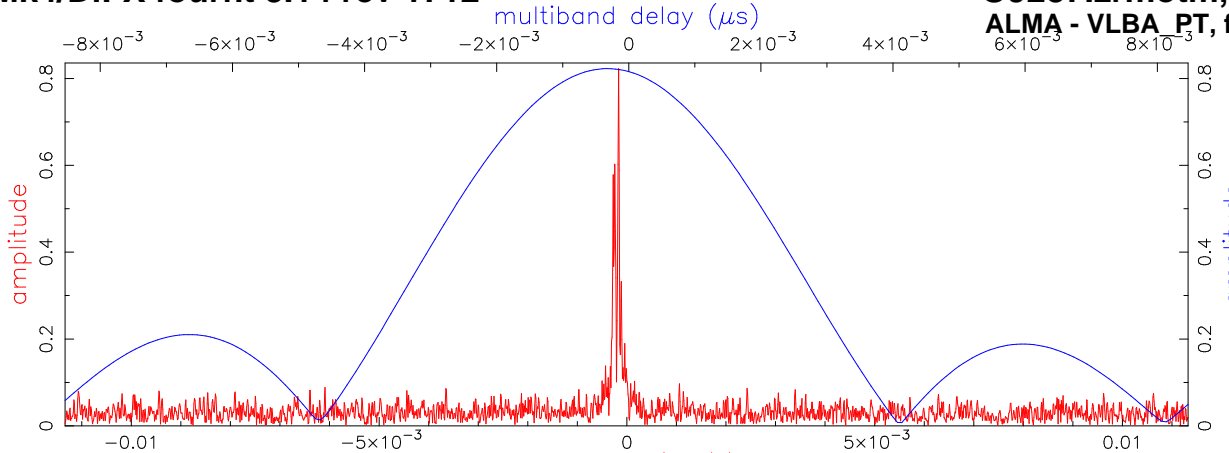


Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

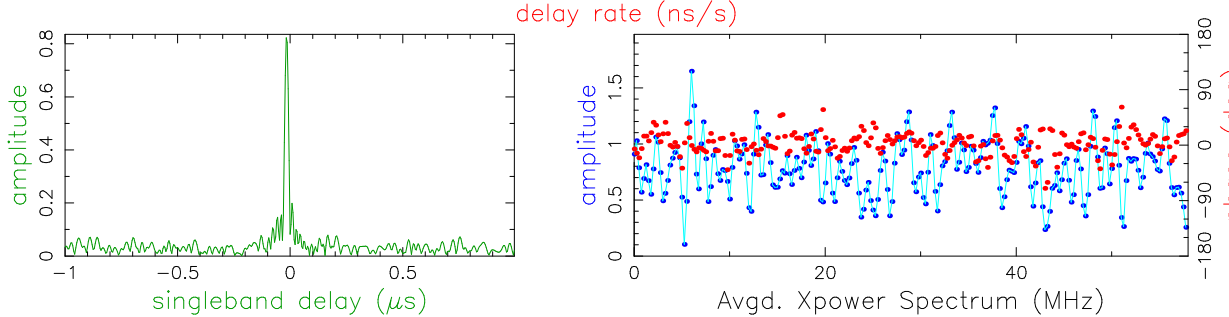


86151.11	86209.70	86268.30	86326.89	86151.11	86209.70	86268.30	86326.89	86151.11
-124.4	-134.6	-134.7	-123.6	-124.4	-134.6	-134.7	-123.6	-124.4
1.0	1.0	0.9	1.0	1.0	1.0	0.9	1.0	1.0
229.4	229.5	229.4	229.7	229.4	229.5	229.4	229.7	229.4
U/L 938/0	938/0	938/0	938/0	U/L 938/0	938/0	938/0	938/0	U/L 938/0
A 0	0	0	0	A 0	0	0	0	A 0
p 3890	296	1703	3109	p 3890	296	1703	3109	p 3890
A:p 0:0	0:0	0:0	0:0	A:p 0:0	0:0	0:0	0:0	A:p 0:0
A:p 0:0	0:0	0:0	0:0	A:p 0:0	0:0	0:0	0:0	A:p 0:0
A 1000	1000	1000	1000	A 1000	1000	1000	1000	A 1000
p 1000	1000	1000	1000	p 1000	1000	1000	1000	p 1000
A W00UL	W01UL	W02UL	W03UL	A W00UL	W01UL	W02UL	W03UL	A W00UL
p W00UL	W01UL	W02UL	W03UL	p W00UL	W01UL	W02UL	W03UL	p W00UL
Group delay (usec)(sbd)	-5.08284820010E+03	Apriori delay (usec)	-5.08283103068E+03	Resid mbdelay (usec)	-1.02756E-04	+/-	6.0E-05	Group delay (usec)(sbd)
Sband delay (usec)	-5.08284609688E+03	Apriori clock (usec)	-2.1081213E+03	Resid sbdelay (usec)	-1.50662E-02	+/-	2.3E-04	Sband delay (usec)
Phase delay (usec)	-5.08283103485E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-4.16794E-06	+/-	9.1E-08	Phase delay (usec)
Delay rate (us/s)	-8.40807184568E-01	Apriori rate (us/s)	-8.40807017740E-01	Resid rate (us/s)	-1.66828E-07	+/-	3.3E-10	Delay rate (us/s)
Total phase (deg)	-54.7	Apriori accel (us/s/s)	-2.09991048494E-05	Resid phase (deg)	-61.0	+/-	2.8	Total phase (deg)

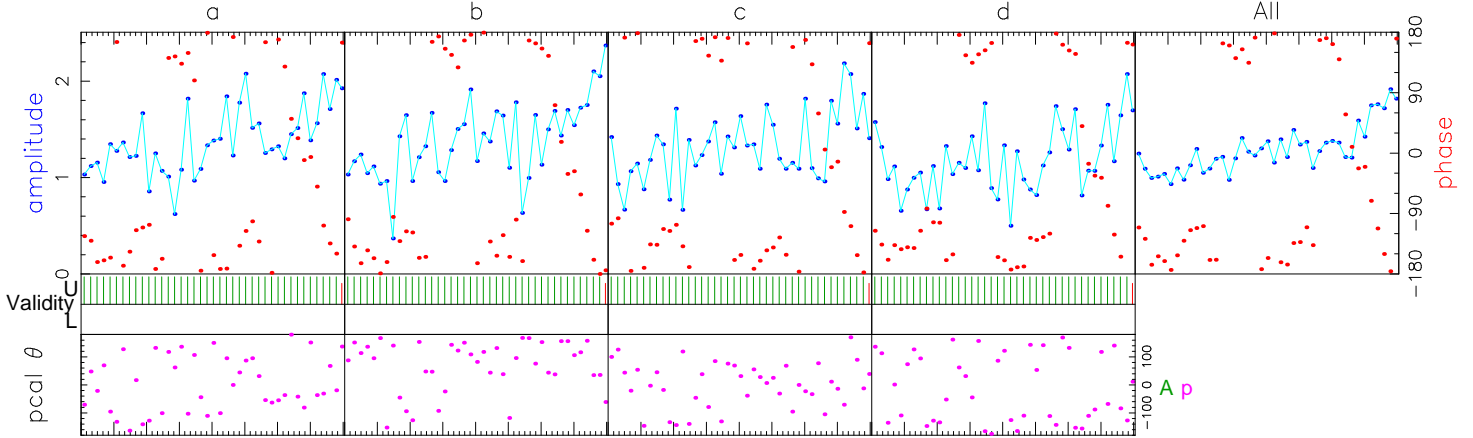
ph/seg (deg)	56.6	RMS	9.1	Theor.	9.1	Amplitude	1.005 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	59.6	Search (2048X16)	0.975	Interp.	0.000	Inc. seg. avg.	1.522	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	7.6	Inc. seg. avg.	1.522	Inc. frq. avg.	0.984	u,v (fr/asec)	5097.396 -8560.894	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.009 0.009
amp/frq (%)	3.5	Inc. frq. avg.	0.984	simultaneous interpolator		Control file:	cf_1234	Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011		
A: az 348.6 el 46.2 pa 168.9 p: az 108.4 el 58.3 pa -56.1 u,v (fr/asec) 5097.396 -8560.894 simultaneous interpolator													
Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap.W.39.zrmtm													



Fringe quality 7
SNR 33.7
Int time 479.750
Amp 0.836
Phase -88.9
PFD 0.0e+00
Delays (us)
SBD -0.015557
MBD -0.000330
Fringe rate (Hz)
-0.014355
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170431
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



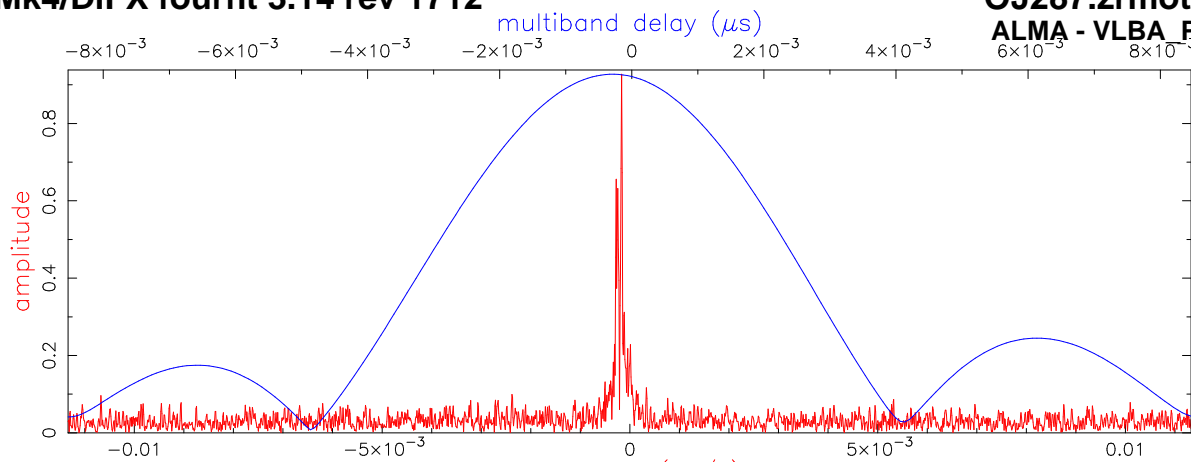
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-156.6	-159.1	-156.1	-157.0	Phase	-157.2
	0.8	0.9	0.9	0.8	Ampl.	0.8
	229.4	229.4	229.3	229.4	Sbd box	229.4
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
p	3890	296	1703	3109	PC freqs	
A:p	0:0	0:0	0:0	0:0	PC phase	
A:p	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-5.08284842756E+03	Apriori delay (usec)	-5.08283103068E+03	Resid mbdelay (usec)	-3.30220E-04	+/-	7.2E-05
Sband delay (usec)	-5.08284658764E+03	Apriori clock (usec)	-2.1081213E+03	Resid sbdelay (usec)	-1.55570E-02	+/-	2.8E-04
Phase delay (usec)	-5.08283103575E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-5.06937E-06	+/-	1.1E-07
Delay rate (us/s)	-8.40807184389E-01	Apriori rate (us/s)	-8.40807017740E-01	Resid rate (us/s)	-1.66649E-07	+/-	4.0E-10
Total phase (deg)	-82.7	Apriori accel (us/s/s)	-2.09991048494E-05	Resid phase (deg)	-88.9	+/-	3.4

ph/seg (deg)	57.4	10.9	Search (2048X16)	0.813	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	61.2	19.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	1.6	3.4	Inc. seg. avg.	1.266	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	5.0	5.9	Inc. frq. avg.	0.822	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00



Fringe quality 7

SNR 37.8

Int time 479.750

Amp 0.938

Phase 67.9

PFD 0.0e+00

Delays (us)

SBD -0.015770

MBD -0.000294

Fringe rate (Hz)

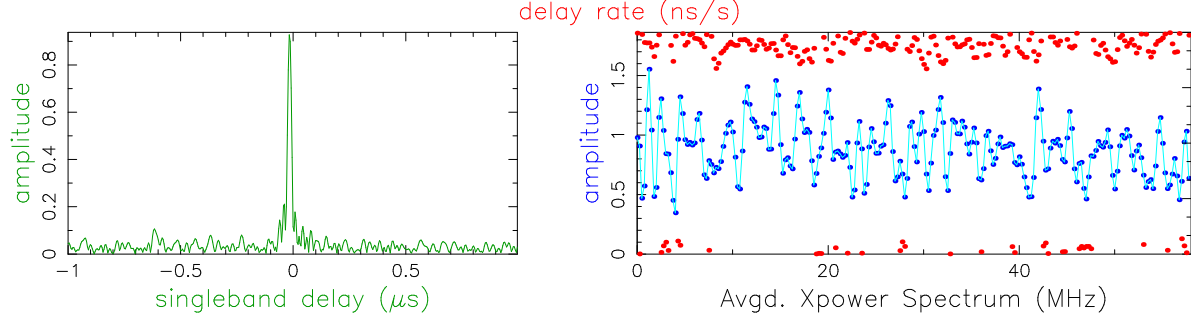
-0.014320

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512



Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011500.00

Stop 012300.26

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170433

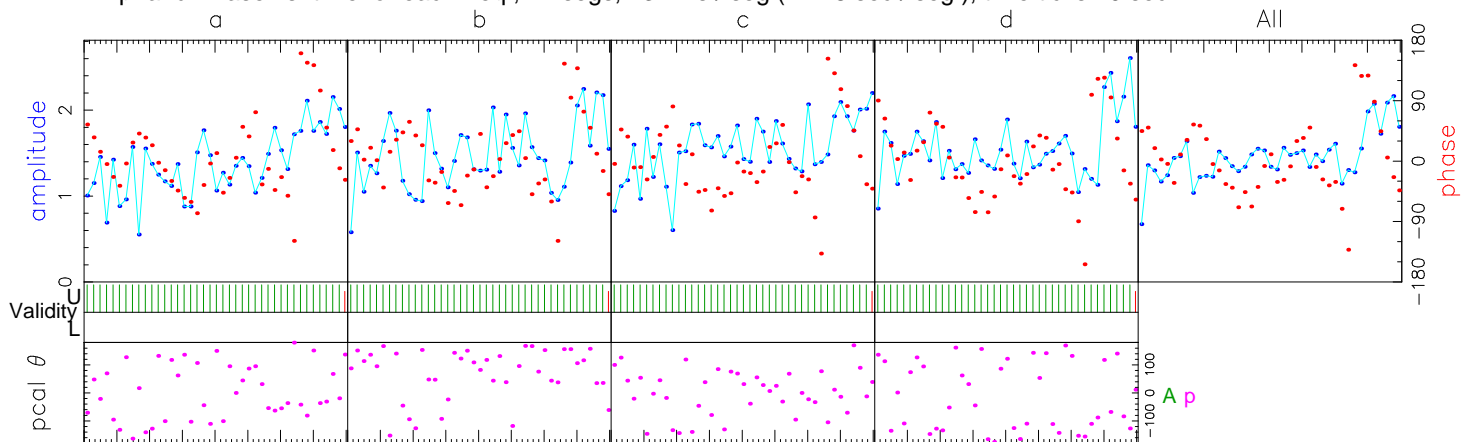
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



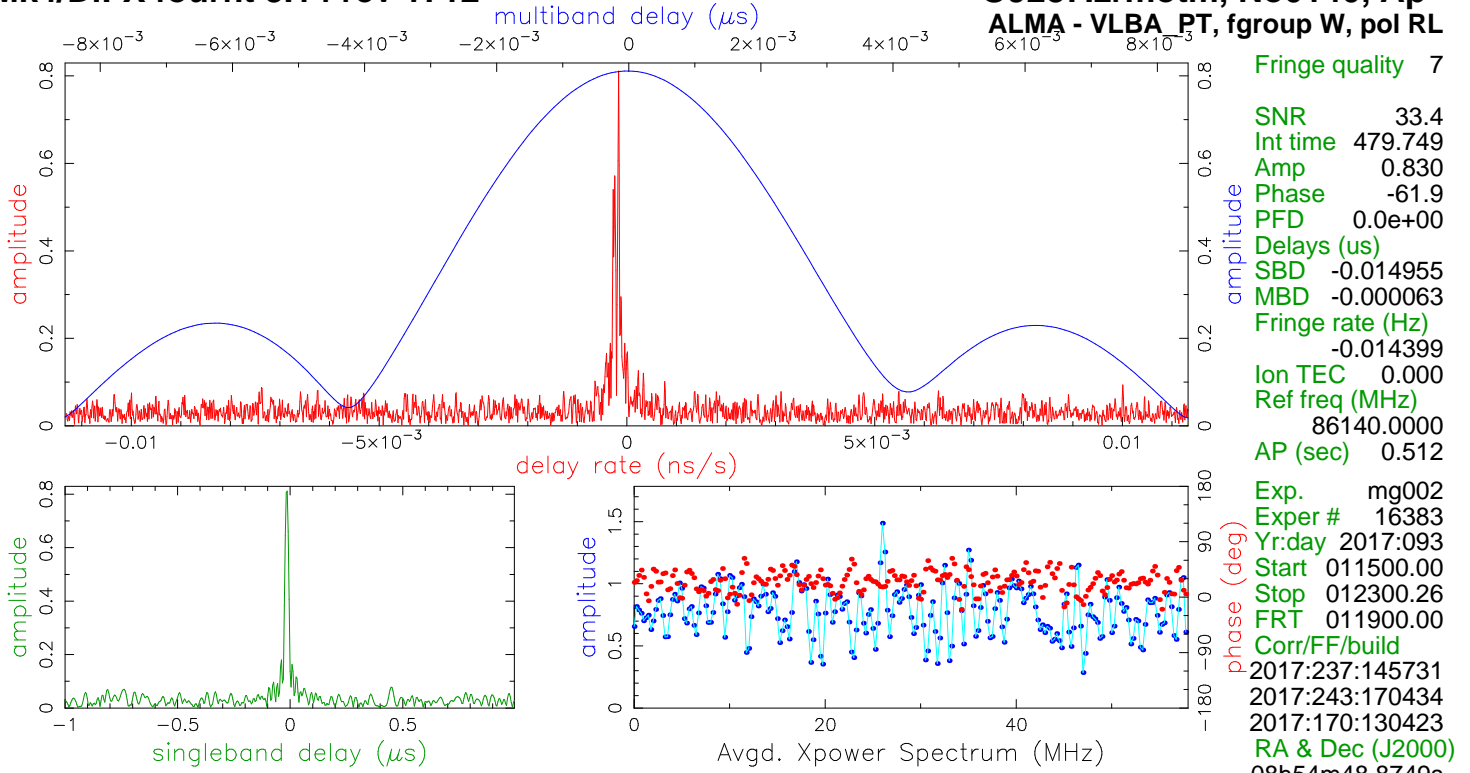
86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-1.3	2.8	-5.1	1.9	Phase	-0.4
0.8	1.0	1.0	0.9	Ampl.	0.9
229.2	229.2	229.6	229.4	Sbd box	229.3
U/L 938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	PC freqs	
p 3890	296	1703	3109	PC freqs	
A:p 0:0	0:0	0:0	0:0	PC phase	
A:p 0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	Chan ids	
				Tracks	
p W00UR	W01UR	W02UR	W03UR	Chan ids	
				Tracks	

Group delay (usec)(sbd)	-5.08284839111E+03	Apriori delay (usec)	-5.08283103068E+03	Resid mbdelay (usec)	-2.93766E-04	+/- 6.4E-05
Sband delay (usec)	-5.08284680088E+03	Apriori clock (usec)	-2.1081213E+03	Resid sbdelay (usec)	-1.57702E-02	+/- 2.5E-04
Phase delay (usec)	-5.08283103069E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-1.26440E-08	+/- 9.8E-08
Delay rate (us/s)	-8.40807183986E-01	Apriori rate (us/s)	-8.40807017740E-01	Resid rate (us/s)	-1.66246E-07	+/- 3.5E-10
Total phase (deg)	-285.9	Apriori accel (us/s/s)	-2.09991048494E-05	Resid phase (deg)	67.9	+/- 3.0

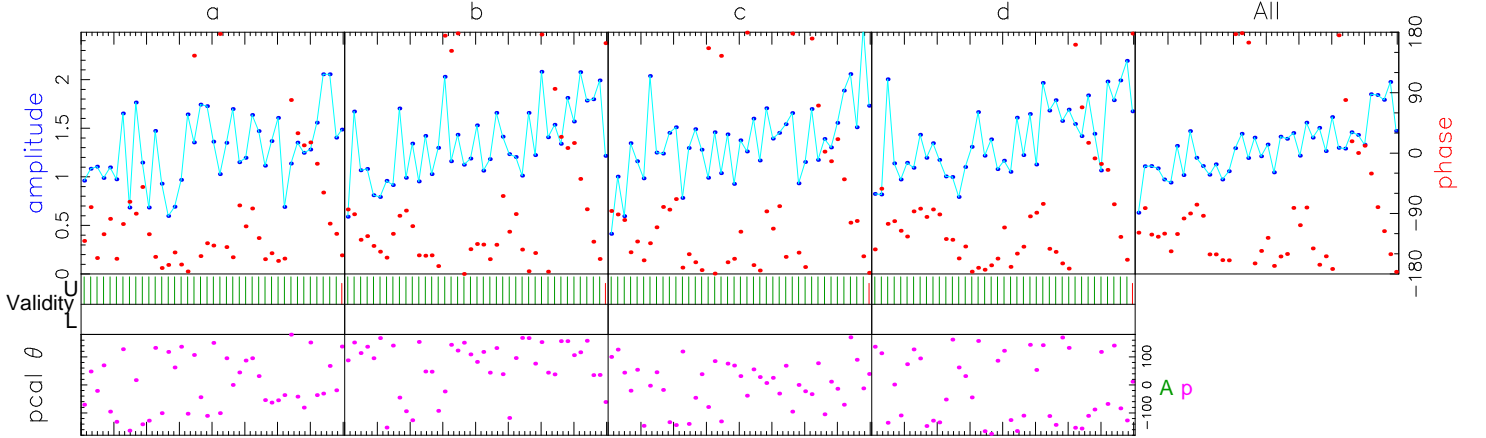
ph/seg (deg)	RMS 55.7	Theor. 9.7	Amplitude Search (2048X16)	0.938 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	62.7	16.9	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	4.4	3.0	Inc. seg. avg.	1.435	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	8.9	5.3	Inc. frq. avg.	0.928	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00	0.00

A: az 348.6 el 46.2 pa 168.9 p: az 108.4 el 58.3 pa -56.1 u,v (fr/asec) 5097.396 -8560.894 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap.zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap.W.41.zrmotm



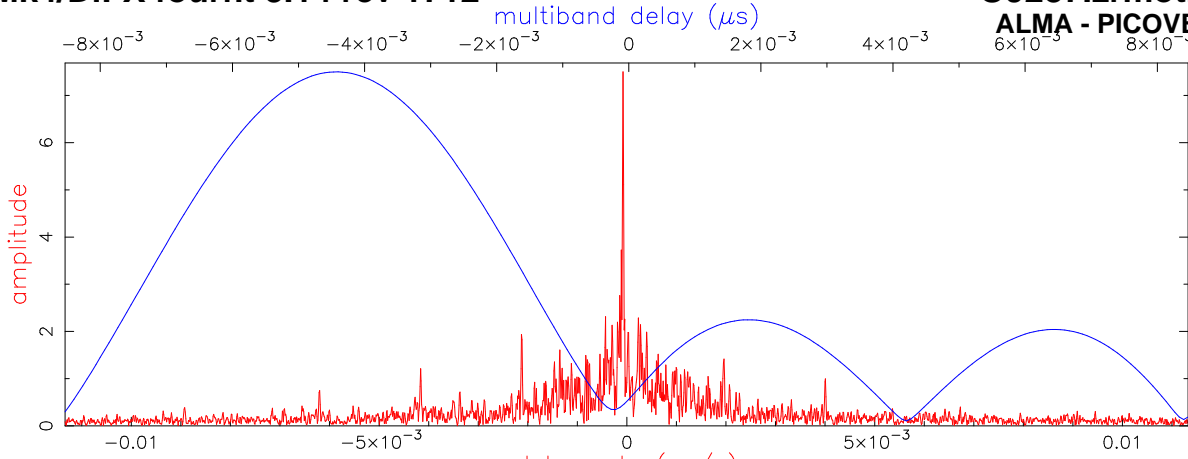
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86140.00	All
-125.3	-137.0	-135.4	-123.3	-130.2	Phase
0.8	0.8	0.8	0.9	0.8	Ampl.
229.2	229.6	229.8	229.6	229.5	Sbd box
U/L 938/0	938/0	938/0	938/0	938/0	APs used
A 0	0	0	0	0	PC freqs
p 3890	296	1703	3109	3109	PC freqs
A:p 0:0	0:0	0:0	0:0	0:0	PC phase
A:p 0:0	0:0	0:0	0:0	0:0	Mani PC
A 1000	1000	1000	1000	1000	PC amp
p 1000	1000	1000	1000	1000	
A W00UR	W01UR	W02UR	W03UR		Chan ids
					Tracks
p W00UL	W01UL	W02UL	W03UL		Chan ids
					Tracks

Group delay (usec)(sbd)	-5.08284816078E+03	Apriori delay (usec)	-5.08283103068E+03	Resid mbdelay (usec)	-6.34341E-05	+/-	7.3E-05
Sband delay (usec)	-5.08284598599E+03	Apriori clock (usec)	-2.1081213E+03	Resid sbdelay (usec)	-1.49553E-02	+/-	2.8E-04
Phase delay (usec)	-5.08283103488E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-4.19811E-06	+/-	1.1E-07
Delay rate (us/s)	-8.40807184899E-01	Apriori rate (us/s)	-8.40807017740E-01	Resid rate (us/s)	-1.67159E-07	+/-	4.0E-10
Total phase (deg)	-55.7	Apriori accel (us/s/s)	-2.09991048494E-05	Resid phase (deg)	-61.9	+/-	3.4

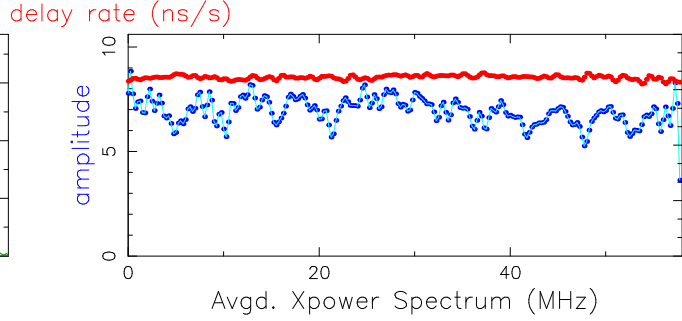
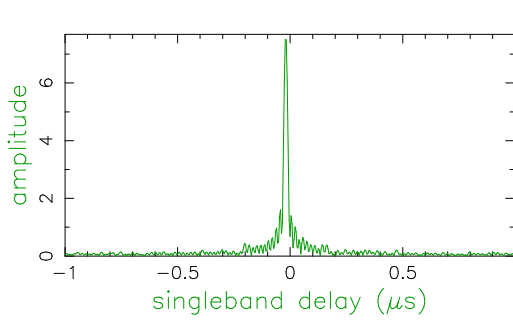
ph/seg (deg) 57.4 11.0 Search (2048X16) 0.806 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.1 19.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 8.5 3.4 Inc. seg. avg. 1.284 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 4.1 6.0 Inc. frq. avg. 0.814 Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite dr window (ns/s) -0.011 0.011
 A: az 348.6 el 46.2 pa 168.9 p: az 108.4 el 58.3 pa -56.1 u,v (fr/asec) 5097.396 -8560.894 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/Ap.W.42.zrmotm



Fringe quality 5

SNR 308.5
Int time 474.950
Amp 7.689
Phase 21.0
PFD 0.0e+00
Delays (us)
SBD -0.019416
MBD -0.004418
Fringe rate (Hz)
-0.006872
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

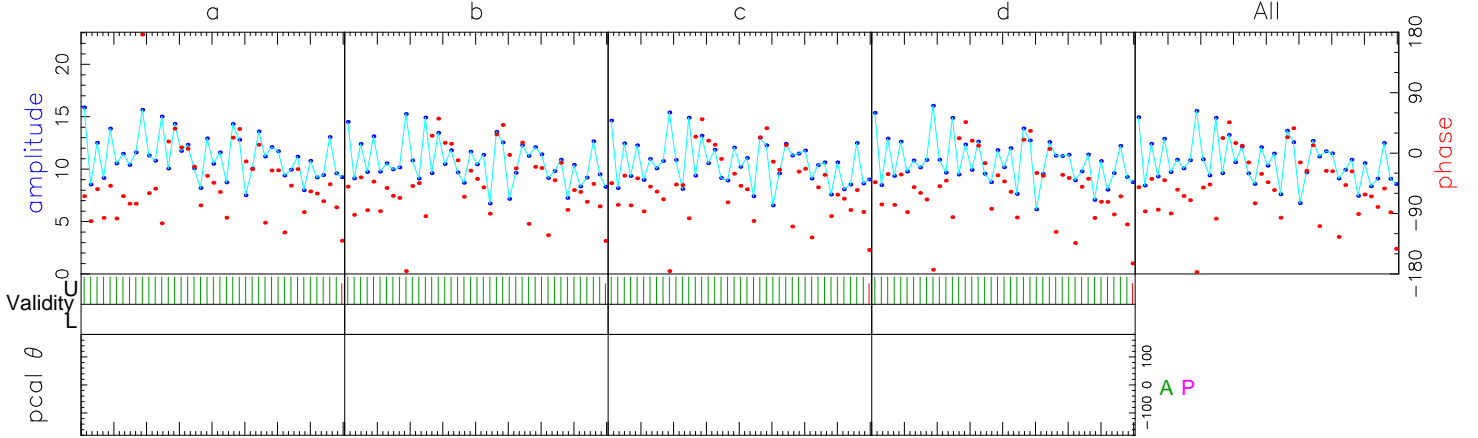
Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170437
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"



amplitude

phase (deg)

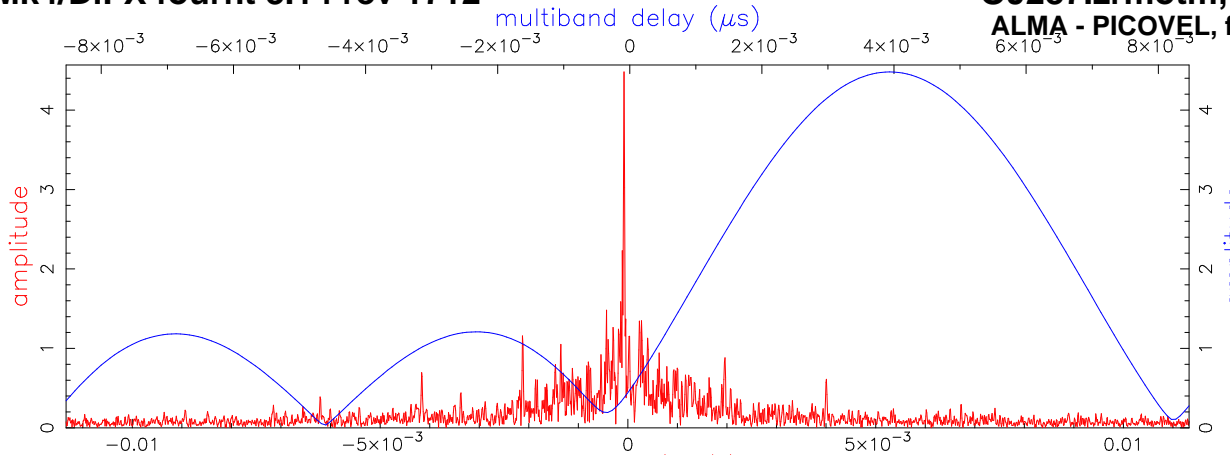
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



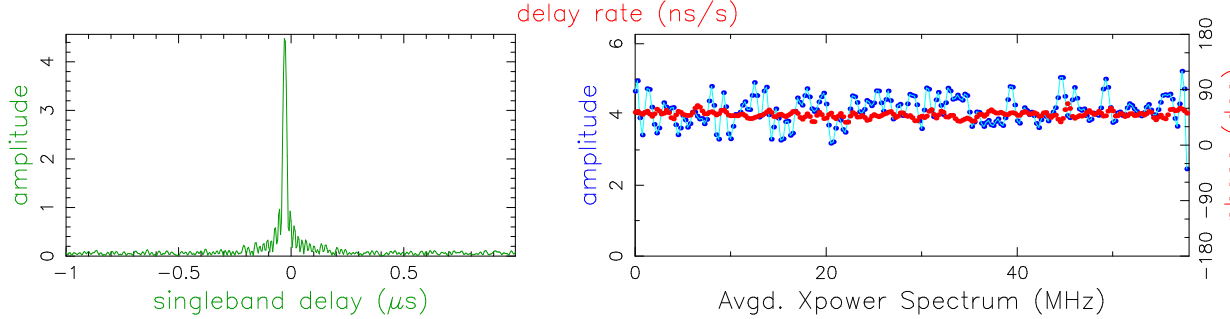
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-49.9	-43.0	-46.3	-49.5	Phase	-47.2
	7.9	7.4	7.3	7.4	Ampl.	7.5
	228.5	228.4	228.5	228.6	Sbd box	228.5
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
P	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	PC phase	
A:P	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
P	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.43469753781E+03	Apriori delay (usec)	4.43471902209E+03	Resid mbdelay (usec)	-4.41762E-03	+/-	7.9E-06
Sband delay (usec)	4.43469960637E+03	Apriori clock (usec)	-2.1066199E+03	Resid sbdelay (usec)	-1.94157E-02	+/-	3.1E-05
Phase delay (usec)	4.43471902057E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-1.52227E-06	+/-	1.2E-08
Delay rate (us/s)	8.95315284389E-01	Apriori rate (us/s)	8.95315364166E-01	Resid rate (us/s)	-7.97765E-08	+/-	4.3E-11
Total phase (deg)	223.7	Apriori accel (us/s/s)	-7.31170889670E-05	Resid phase (deg)	21.0	+/-	0.4

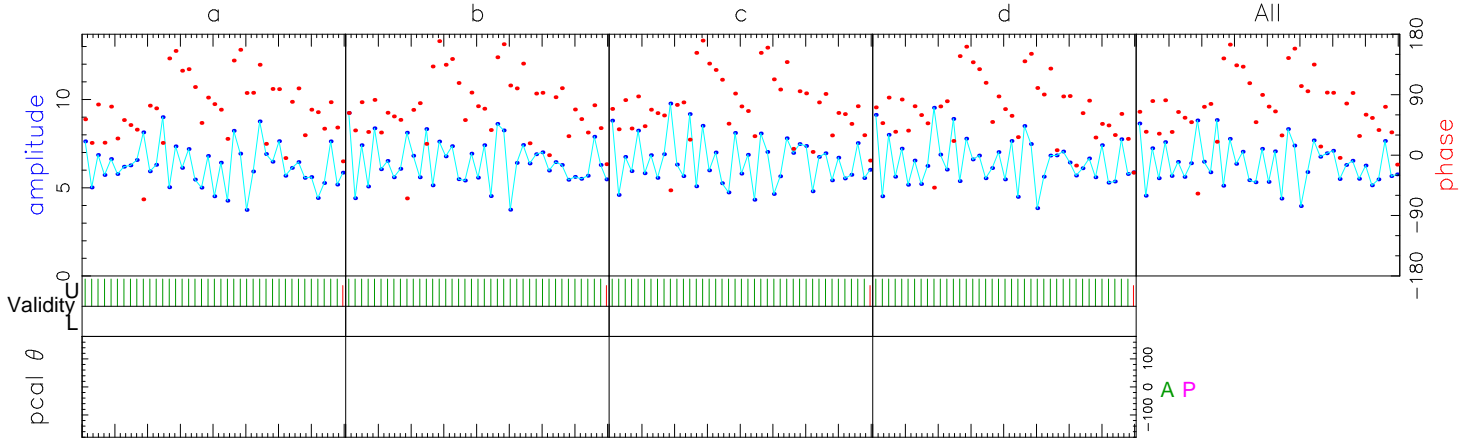
ph/seg (deg)	47.2	1.2	Amplitude	7.689 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	48.1	2.1	Search (2048X16)	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	4.0	0.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	3.7	0.6	Inc. seg. avg.	10.772	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011 0.011	
			Inc. frq. avg.	7.510	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00



Fringe quality 5
 SNR 183.2
 Int time 474.950
 Amp 4.568
 Phase 209.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.028301
 MBD 0.003951
 Fringe rate (Hz)
 -0.006904
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170438
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

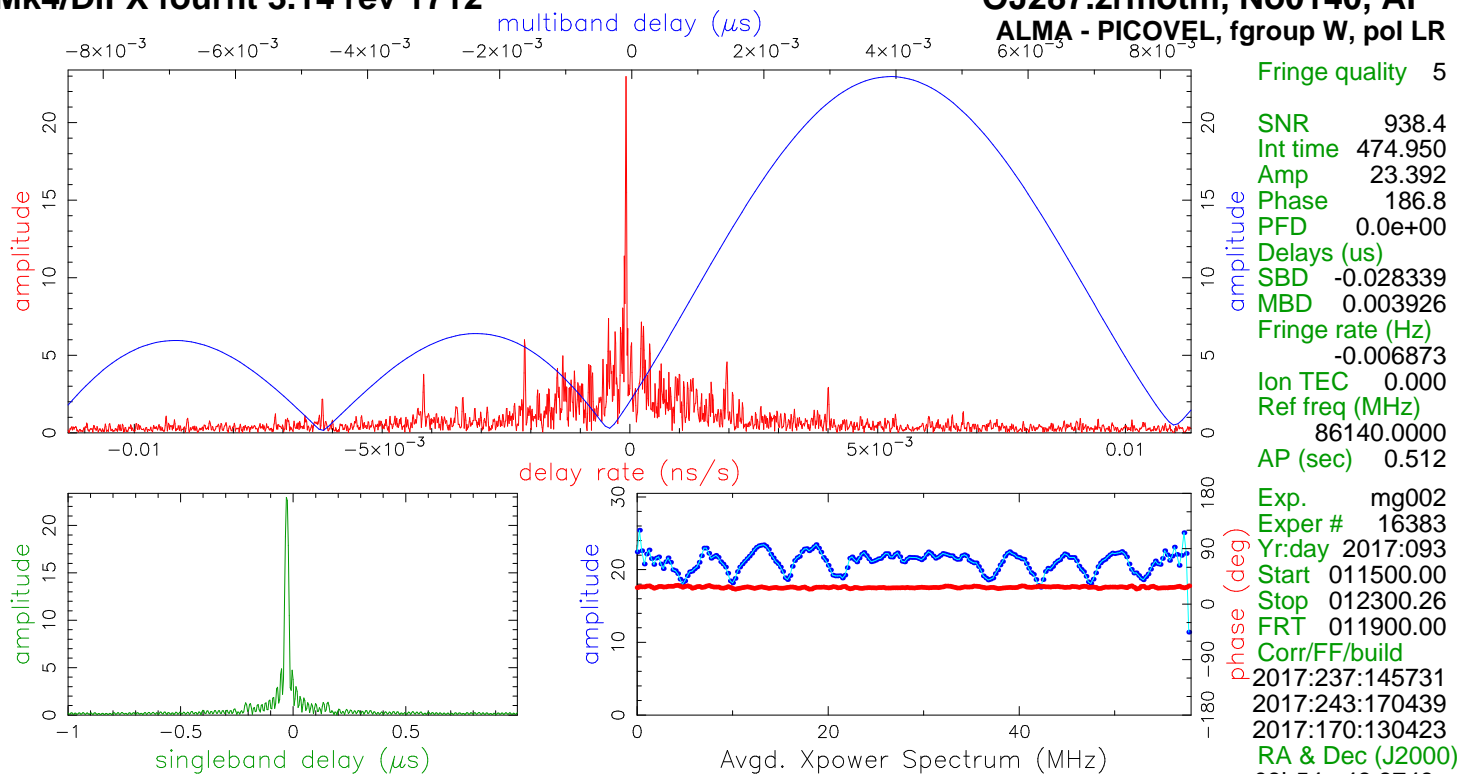


Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

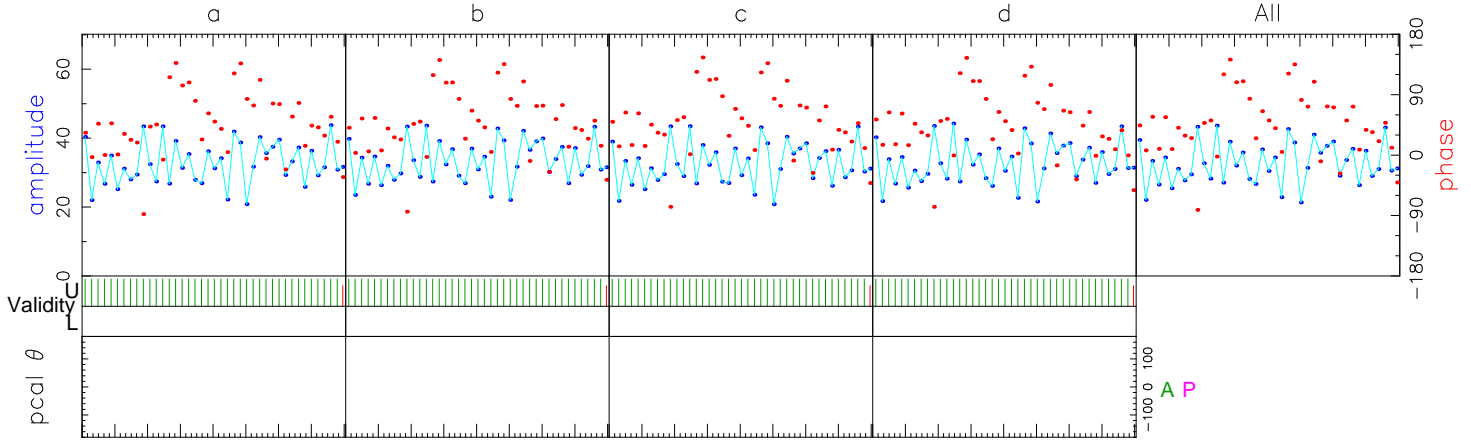


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
70.7	75.2	75.4	69.5	Phase	72.7
4.3	4.5	4.6	4.5	Ampl.	4.5
226.6	226.3	226.4	226.5	Sbd box	226.4
U/L 938/0	938/0	938/0	938/0	APs used	
A 0	0	0	0	PC freqs	
P 0	0	0	0	PC freqs	
A:P 0:0	0:0	0:0	0:0	PC phase	
A:P 0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
P W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	4.43468883975E+03	Apriori delay (usec)	4.43471902209E+03	Resid mbdelay (usec)	3.95099E-03 +/- 1.3E-05
Sband delay (usec)	4.43469072085E+03	Apriori clock (usec)	-2.1066199E+03	Resid sbdelay (usec)	-2.83012E-02 +/- 5.2E-05
Phase delay (usec)	4.43471902444E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	2.34520E-06 +/- 2.0E-08
Delay rate (us/s)	8.95315284015E-01	Apriori rate (us/s)	8.95315364166E-01	Resid rate (us/s)	-8.01506E-08 +/- 7.3E-11
Total phase (deg)	411.9	Apriori accel (us/s/s)	-7.31170889670E-05	Resid phase (deg)	209.2 +/- 0.6

RMS Theor. Amplitude 4.568 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 46.8 2.0 Search (2048X16) 4.339 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 47.9 3.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 3.8 0.6 Inc. seg. avg. 6.404 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 2.6 1.1 Inc. frq. avg. 4.485 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 348.6 el 46.2 pa 168.9 P: az 276.7 el 25.4 pa 57.6 u,v (fr/asec) -5577.462 -10314.773 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP.W.44.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



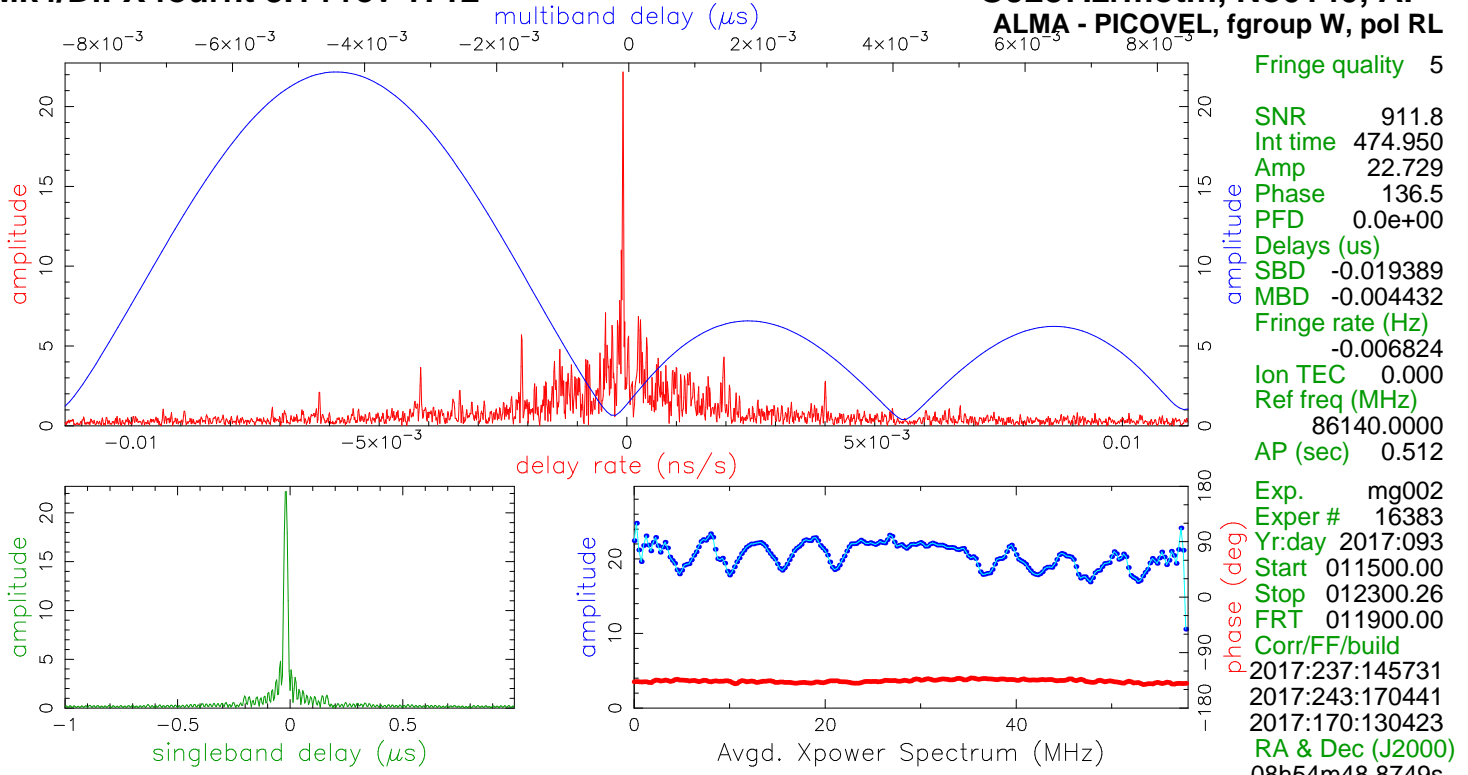
	86151.11	86209.70	86268.30	86326.89	86385.48	All
86151.11	86209.70	86268.30	86326.89	86385.48		
49.5	50.6	52.7	48.3	48.3	50.3	50.3
22.9	23.4	22.8	22.8	22.8	23.0	23.0
226.5	226.3	226.5	226.4	226.4	226.4	226.4
U/L	938/0	938/0	938/0	938/0	938/0	938/0
A	0	0	0	0	0	0
P	0	0	0	0	0	0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
P	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL		
P	W00UR	W01UR	W02UR	W03UR		

	86151.11	86209.70	86268.30	86326.89	86385.48	All
Group delay (usec)(sbd)	4.43468881428E+03	4.43468881428E+03	4.43471902209E+03	4.43471902209E+03	3.92553E-03	+/- 2.6E-06
Sband delay (usec)	4.43469068278E+03	4.43469068278E+03	-2.1066199E+03	-2.1066199E+03	-2.83393E-02	+/- 1.0E-05
Phase delay (usec)	4.43471902371E+03	4.43471902371E+03	1.2400000E-06	1.2400000E-06	1.62179E-06	+/- 3.9E-09
Delay rate (us/s)	8.95315284382E-01	8.95315284382E-01	8.95315364166E-01	8.95315364166E-01	-7.97836E-08	+/- 1.4E-11
Total phase (deg)		389.4	-7.31170889670E-05	-7.31170889670E-05	186.8	+/- 0.1

	RMS	Theor.	Amplitude	23.392 +/- 0.025	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	47.0	0.4	Search (2048X16)	22.344	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	47.6	0.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
ph/frq (deg)	2.3	0.1	Inc. seg. avg.	32.837	Sample rate(MSamp/s): 116	dr window (ns/s) -0.011 0.011
amp/frq (%)	2.0	0.2	Inc. frq. avg.	22.975	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 P: az 276.7 el 25.4 pa 57.6 u,v (fr/asec) -5577.462 -10314.773 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP.W.45.zrmotm

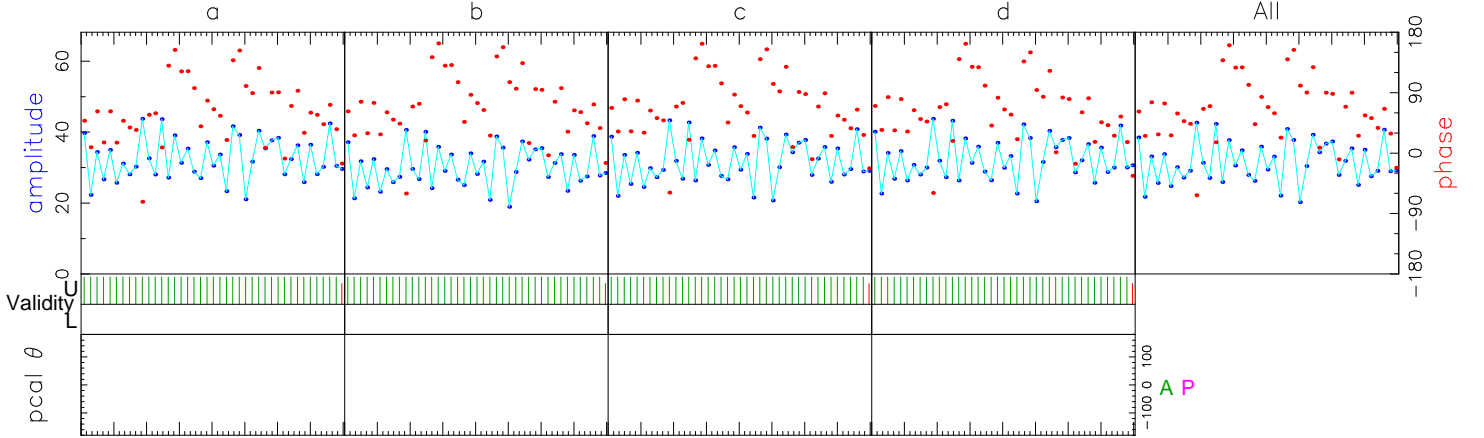


Fringe quality 5

SNR 911.8
Int time 474.950
Amp 22.729
Phase 136.5
PFD 0.0e+00
Delays (us)
SBD -0.019389
MBD -0.004432
Fringe rate (Hz)
-0.006824
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170441
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

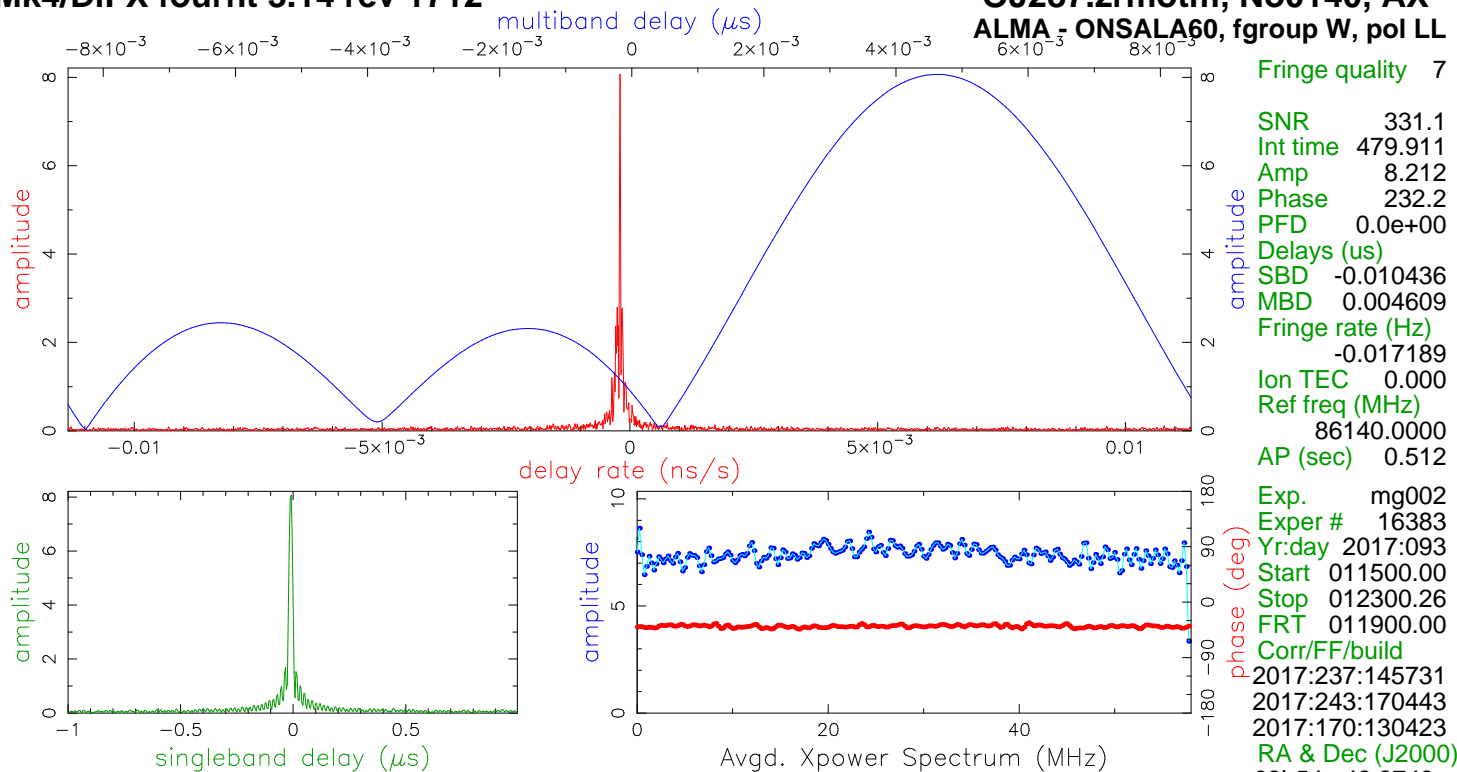


86151.11	86209.70	86268.30	86326.89	86385.48	All
64.8	72.5	70.2	65.8	68.2	68.2
22.7	21.2	22.3	22.6	22.2	22.2
228.6	228.3	228.5	228.6	228.5	228.5
U/L 938/0	938/0	938/0	938/0	938/0	938/0
A 0	0	0	0	0	0
P 0	0	0	0	0	0
A:P 0:0	0:0	0:0	0:0	0:0	0:0
A:P 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
P 1000	1000	1000	1000	1000	1000
A W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
P W00UL	W01UL	W02UL	W03UL	W04UL	W05UL

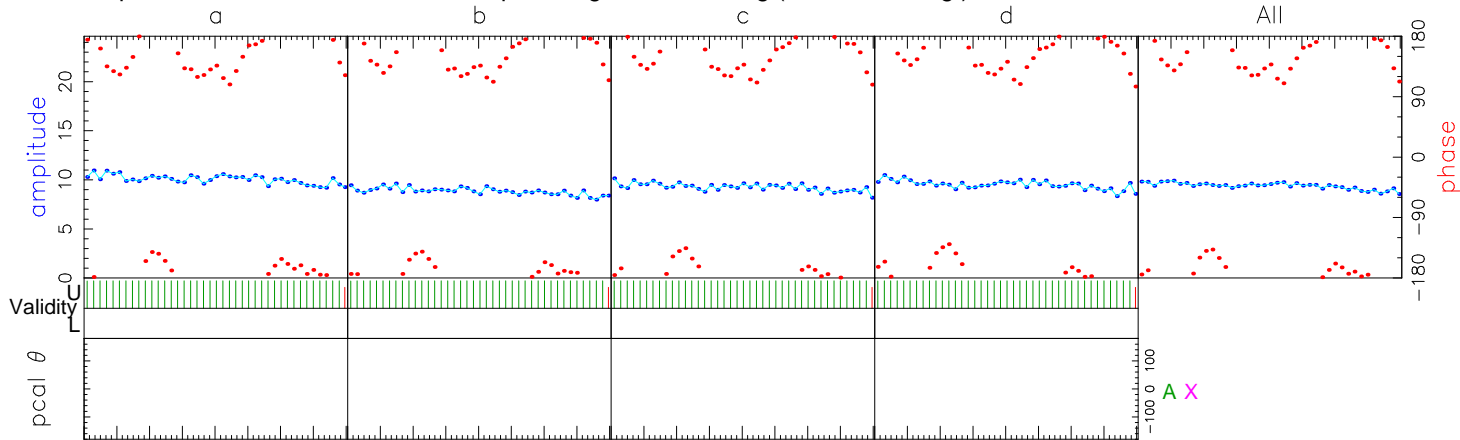
Group delay (usec)(sbd)	4.43469752299E+03	Apriori delay (usec)	4.43471902209E+03	Resid mbdelay (usec)	-4.43243E-03	+/-	2.7E-06
Sband delay (usec)	4.43469963285E+03	Apriori clock (usec)	-2.1066199E+03	Resid sbdelay (usec)	-1.93892E-02	+/-	1.0E-05
Phase delay (usec)	4.43471902429E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	2.20033E-06	+/-	4.1E-09
Delay rate (us/s)	8.95315284946E-01	Apriori rate (us/s)	8.95315364166E-01	Resid rate (us/s)	-7.92196E-08	+/-	1.5E-11
Total phase (deg)	339.1	Apriori accel (us/s/s)	-7.31170889670E-05	Resid phase (deg)	136.5	+/-	0.1

pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
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

A: az 348.6 el 46.2 pa 168.9 P: az 276.7 el 25.4 pa 57.6 u,v (fr/asec) -5577.462 -10314.773 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AP.W.46.zrmotm



Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	All
163.6	164.3	162.8	165.0	163.9
8.6	7.6	8.0	8.1	8.1
230.9	230.4	230.5	230.5	230.6
U/L 938/0	938/0	938/0	938/0	APs used
A 0	0	0	0	PC freqs
X 0	0	0	0	PC freqs
A:X 0:0	0:0	0:0	0:0	PC phase
A:X 0:0	0:0	0:0	0:0	Main PC
A 1000	1000	1000	1000	PC amp
X 1000	1000	1000	1000	
A W00UL	W01UL	W02UL	W03UL	Chan ids
X W00UL	W01UL	W02UL	W03UL	Tracks
				Chan ids
				Tracks

Group delay (usec)(sbd)	6.96596113912E+03	Apriori delay (usec)	6.96597359689E+03	Resid mbdelay (usec)	4.60890E-03	+/-	7.3E-06
Sband delay (usec)	6.96596316103E+03	Apriori clock (usec)	-2.1091165E+03	Resid sbdelay (usec)	-1.04359E-02	+/-	2.9E-05
Phase delay (usec)	6.96597360218E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	5.28632E-06	+/-	1.1E-08
Delay rate (us/s)	5.62790268710E-01	Apriori rate (us/s)	5.62790468262E-01	Resid rate (us/s)	-1.99553E-07	+/-	4.0E-11
Total phase (deg)	101.2	Apriori accel (us/s/s)	-9.58582816382E-05	Resid phase (deg)	232.2	+/-	0.3

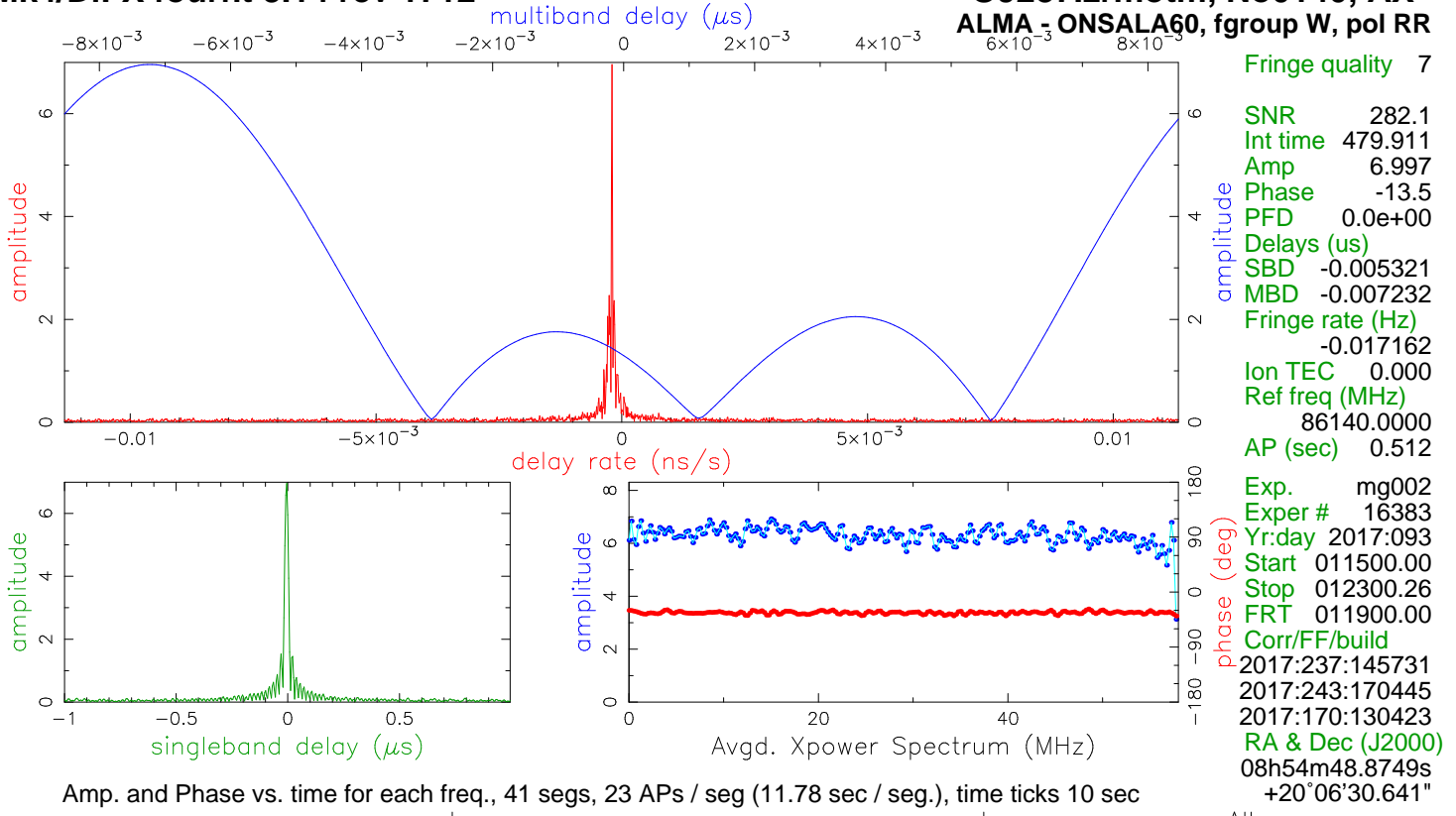
ph/seg (deg)	31.0	Theor.	1.1	Amplitude	8.212 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	14.9	Search (2048X16)	7.902			Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	1.2	Interp.	0.000			Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009
amp/frq (%)	4.4	Inc. seg. avg.	9.389			Sample rate(MSamp/s): 116	ion window (TEC)	0.00	0.00	
		Inc. frq. avg.	8.068			Data rate(Mb/s): 928	nlags: 232	t_cohere	infinite	

A: az 348.6 el 46.2 pa 168.9 X: az 279.5 el 17.8 pa 34.3 u,v (fr/asec) -3588.776 -12974.583 simultaneous interpolator

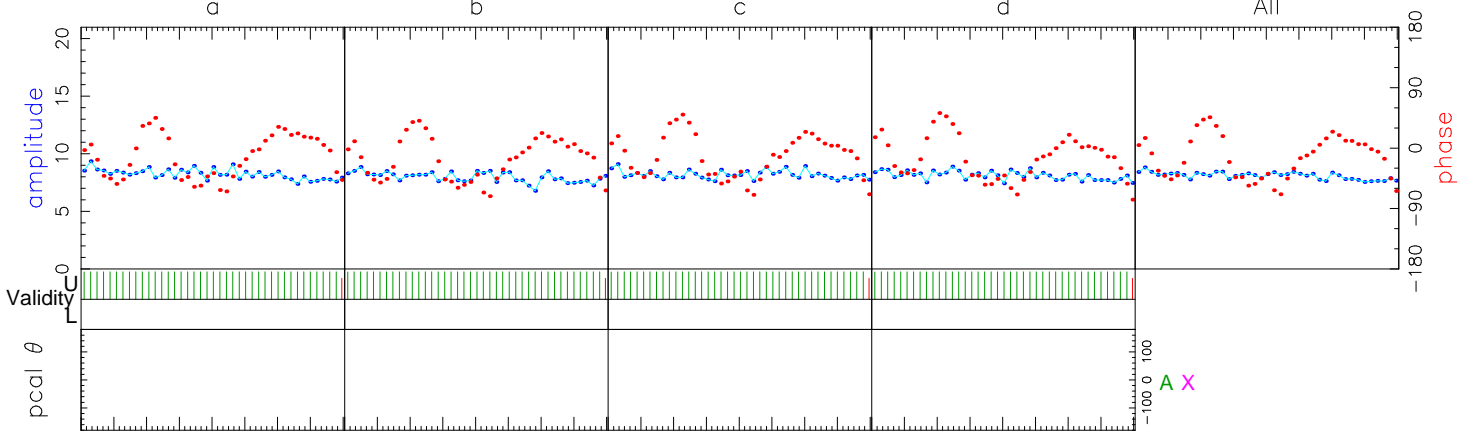
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX..zrmtm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX.W.47.zrmtm

Mk4/DiFX fourfit 3.14 rev 1712

OJ287.zrmotm, No0140, AX
ALMA - ONSALA60, fgroup W, pol RR



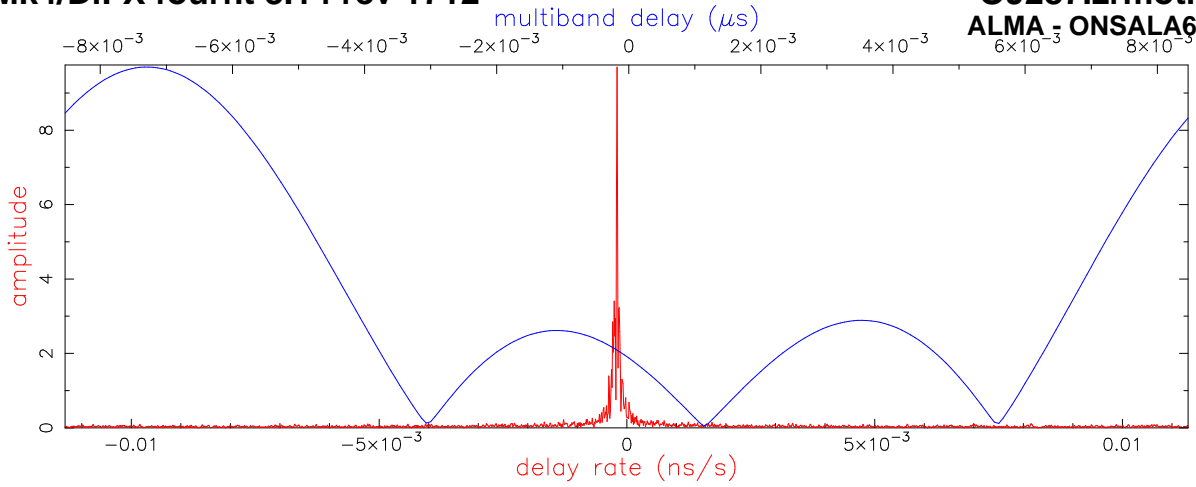
Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



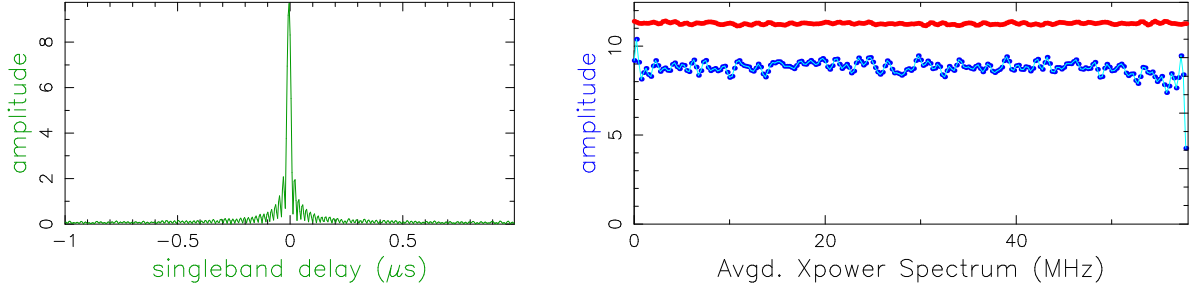
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	938/0	938/0	938/0	938/0	APs used	231.8
A	0	0	0	0	PC freqs	
X	0	0	0	0	PC phase	
A:X	0:0	0:0	0:0	0:0	Mani PC	
A:X	0:0	0:0	0:0	0:0	PC amp	
A	1000	1000	1000	1000	Chan ids	
X	1000	1000	1000	1000	Tracks	
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	Tracks	
Group delay (usec)(sbd)	6.96596636514E+03	Apriori delay (usec)	6.96597359689E+03	Resid mbdelay (usec)	-7.23175E-03	+/- 8.6E-06
Sband delay (usec)	6.96596827634E+03	Apriori clock (usec)	-2.1091165E+03	Resid sbdelay (usec)	-5.32055E-03	+/- 3.4E-05
Phase delay (usec)	6.96597359646E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	-4.36312E-07	+/- 1.3E-08
Delay rate (us/s)	5.62790269033E-01	Apriori rate (us/s)	5.62790468262E-01	Resid rate (us/s)	-1.99229E-07	+/- 4.7E-11
Total phase (deg)	215.5	Apriori accel (us/s/s)	-9.58582816382E-05	Resid phase (deg)	-13.5	+/- 0.4

	RMS	Theor.	Amplitude	6.997 +/- 0.025	PCal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	31.0	1.3	Search (2048X16)	6.867	PCal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	16.4	2.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	2.6	0.4	Inc. seg. avg.	8.099	Sample rate (MSamp/s):	116	dr window (ns/s)	-0.011 0.011	
amp/frq (%)	1.2	0.7	Inc. frq. avg.	6.961	Data rate (Mb/s):	928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00

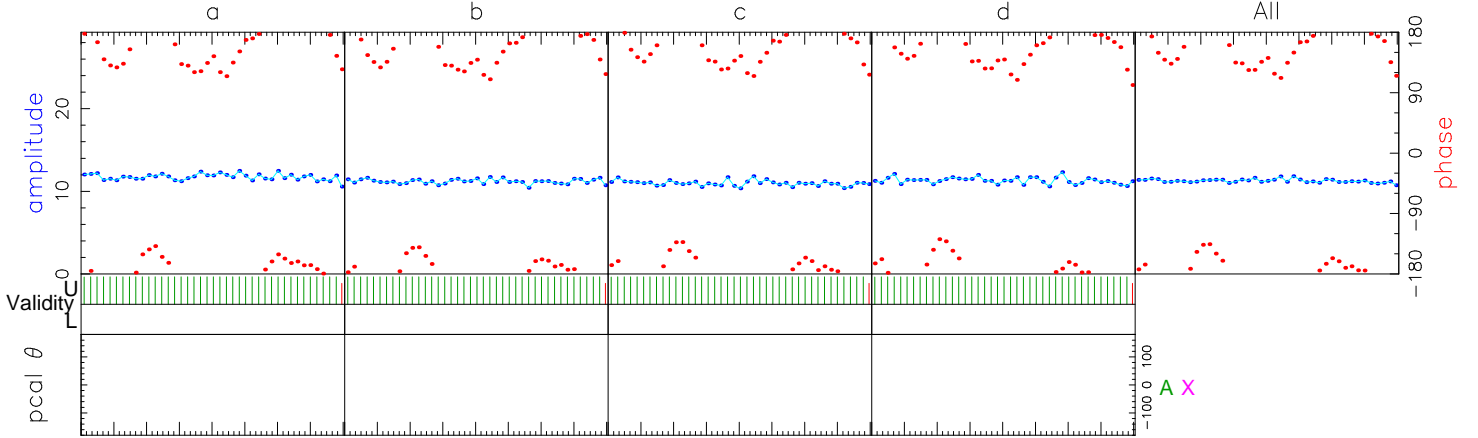
A: az 348.6 el 46.2 pa 168.9 X: az 279.5 el 17.8 pa 34.3 u,v (fr/asec) -3588.776 -12974.583 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX.W.48.zrmotm



Fringe quality 7
SNR 393.2
Int time 479.911
Amp 9.753
Phase 166.3
PFD 0.0e+00
Delays (us)
SBD -0.005315
MBD -0.007293
Fringe rate (Hz)
-0.017168
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. mg002
Exper # 16383
Yr:day 2017:093
Start 011500.00
Stop 012300.26
FRT 011900.00
Corr/FF/build
2017:237:145731
2017:243:170447
2017:170:130423
RA & Dec (J2000)
08h54m48.8749s
+20°06'30.641"

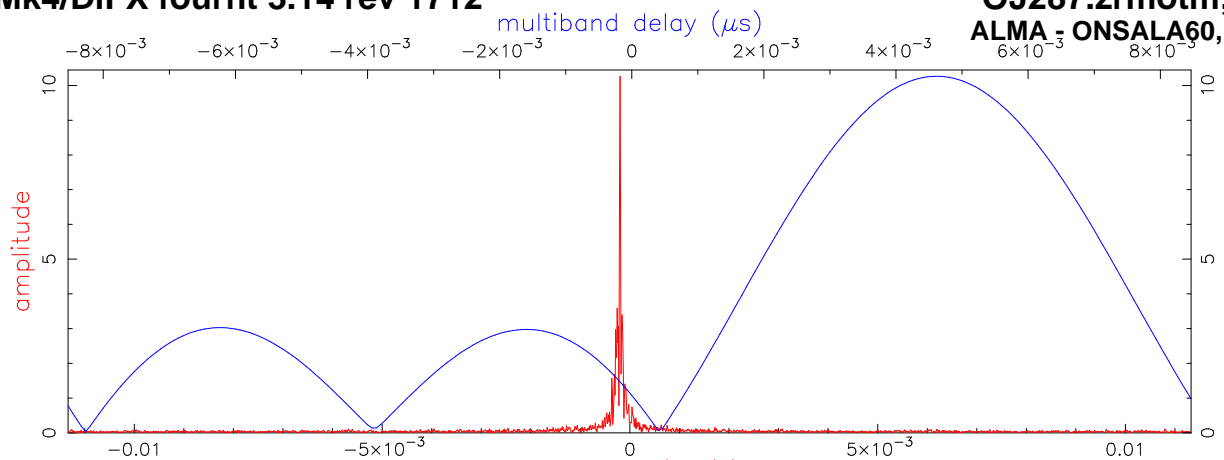


Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec



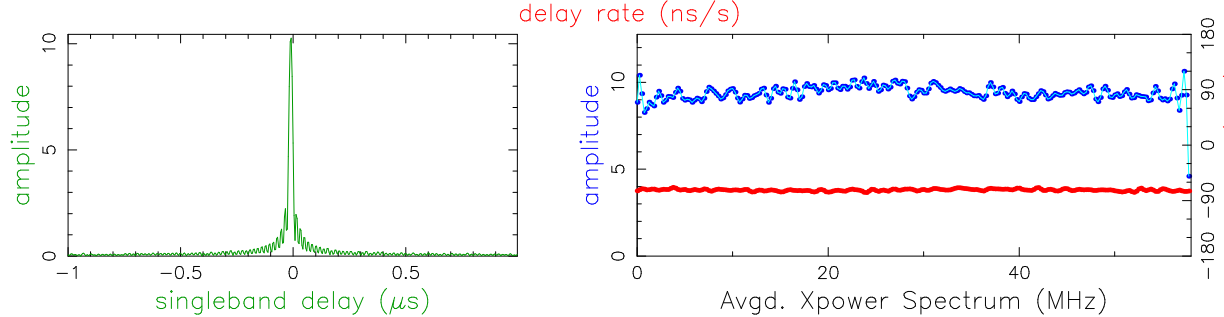
86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	All
166.8	164.8	168.1	165.8	165.8	165.8	166.3
10.1	9.6	9.4	9.7	9.7	9.7	9.7
231.9	231.8	231.6	231.8	231.8	231.8	231.8
U/L 938/0	938/0	938/0	938/0	938/0	938/0	938/0
A 0	0	0	0	0	0	0
X 0	0	0	0	0	0	0
A:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0
A:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000	1000
X 1000	1000	1000	1000	1000	1000	1000
A W00UL	W01UL	W02UL	W03UL	W03UL	W03UL	W03UL
X W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR
Group delay (usec)(sbd)	6.96596630411E+03	Apriori delay (usec)	6.96597359689E+03	Resid mbdelay (usec)	-7.29278E-03	+/- 6.2E-06
Sband delay (usec)	6.96596828186E+03	Apriori clock (usec)	-2.1091165E+03	Resid sbdelay (usec)	-5.31503E-03	+/- 2.4E-05
Phase delay (usec)	6.96597360226E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	5.36414E-06	+/- 9.4E-09
Delay rate (us/s)	5.62790268954E-01	Apriori rate (us/s)	5.62790468262E-01	Resid rate (us/s)	-1.99308E-07	+/- 3.4E-11
Total phase (deg)	35.4	Apriori accel (us/s/s)	-9.58582816382E-05	Resid phase (deg)	166.3	+/- 0.3

ph/seg (deg) 31.0 0.9 RMS Theor. Amplitude 9.753 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 15.8 1.6 Search (2048X16) 9.596 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 1.7 0.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
amp/frq (%) 2.4 0.5 Inc. seg. avg. 11.277 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
A: az 348.6 el 46.2 pa 168.9 X: az 279.5 el 17.8 pa 34.3 u,v (fr/asec) -3588.776 -12974.583 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/No0140/AX..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX.W.49.zrmotm simultaneous interpolator



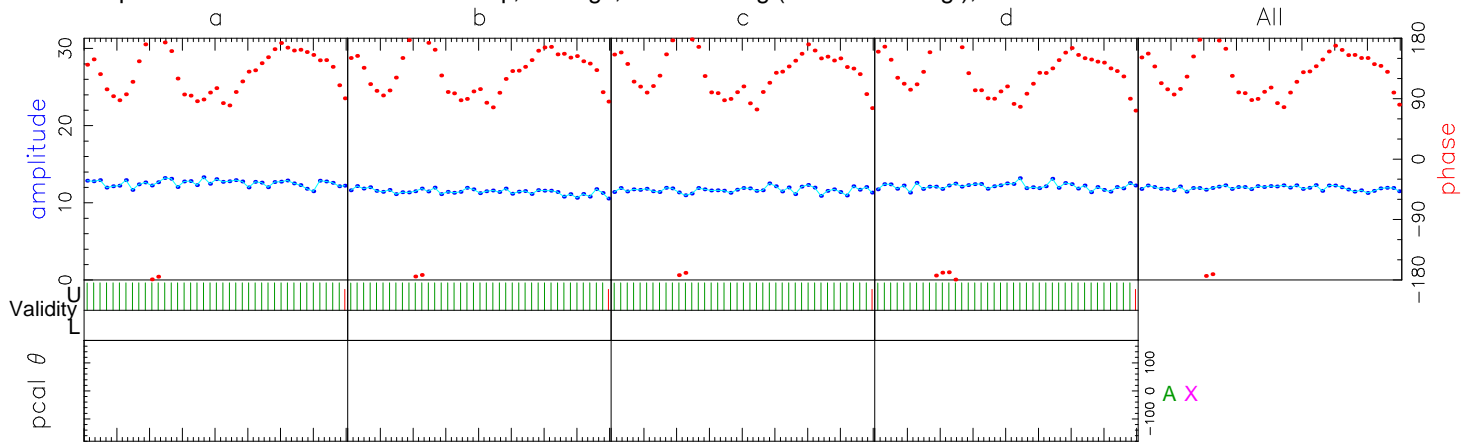
Fringe quality 7

SNR 421.2
 Int time 479.911
 Amp 10.447
 Phase 198.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.010406
 MBD 0.004602
 Fringe rate (Hz)
 -0.017192
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011500.00
 Stop 012300.26
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170448
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 23 APs / seg (11.78 sec / seg.), time ticks 10 sec

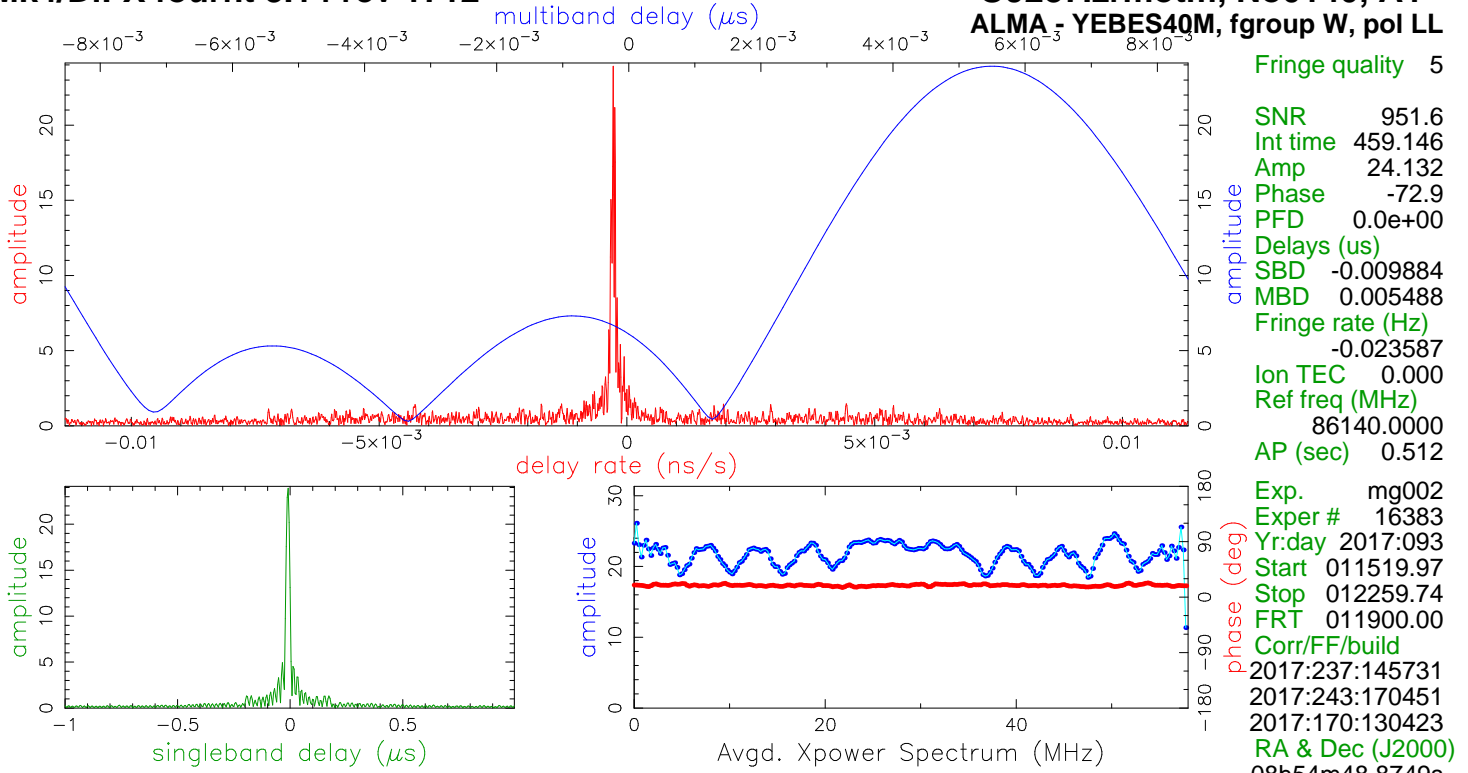


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	130.2	130.9	130.5	131.1	Phase	130.7
	10.7	9.9	10.0	10.4	Ampl.	10.3
	230.9	230.4	230.5	230.5	Sbd box	230.6
U/L	938/0	938/0	938/0	938/0	APs used	
A	0	0	0	0	PC freqs	
X	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

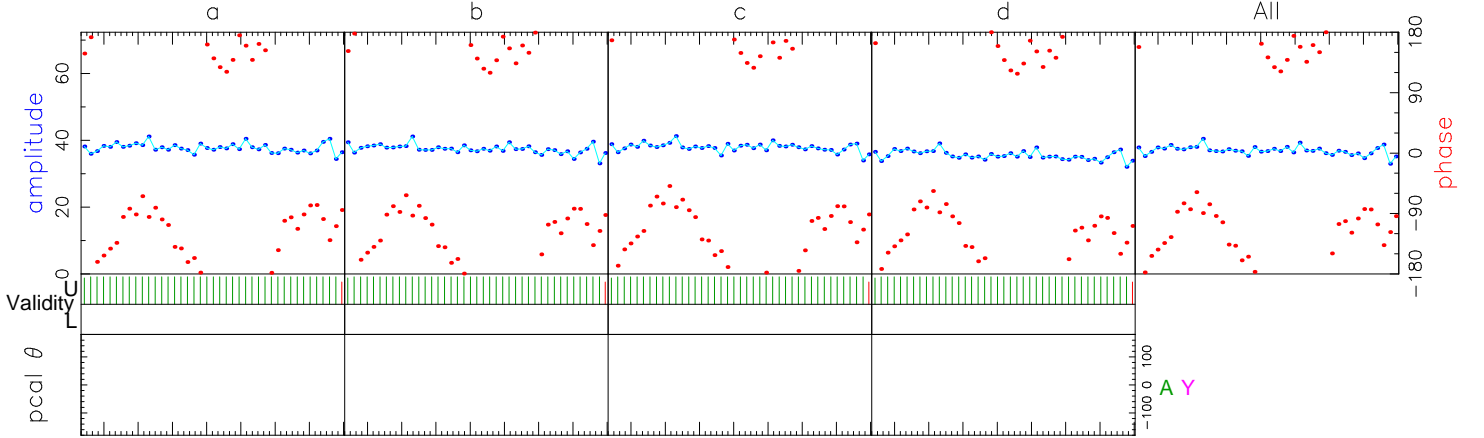
Group delay (usec)(sbd) 6.96596113250E+03 Apriori delay (usec) 6.96597359689E+03 Resid mbdelay (usec) 4.60228E-03 +/- 5.8E-06
 Sband delay (usec) 6.96596319082E+03 Apriori clock (usec) -2.1091165E+03 Resid sbdelay (usec) -1.04061E-02 +/- 2.3E-05
 Phase delay (usec) 6.96597360111E+03 Apriori clockrate (us/s) 1.4451113E-06 Resid phdelay (usec) 4.21362E-06 +/- 8.8E-09
 Delay rate (us/s) 5.62790268684E-01 Apriori rate (us/s) 5.62790468262E-01 Resid rate (us/s) -1.99578E-07 +/- 3.2E-11
 Total phase (deg) 428.0 Apriori accel (us/s/s) -9.58582816382E-05 Resid phase (deg) 198.9 +/- 0.3

RMS Theor. Amplitude 10.447 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 30.8 0.9 Search (2048X16) 10.062 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 14.3 1.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 0.5 0.3 Inc. seg. avg. 11.919 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 3.6 0.5 Inc. frq. avg. 10.268 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 X: az 279.5 el 17.8 pa 34.3 u,v (fr/asec) -3588.776 -12974.583 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AX.W.50.zrmotm



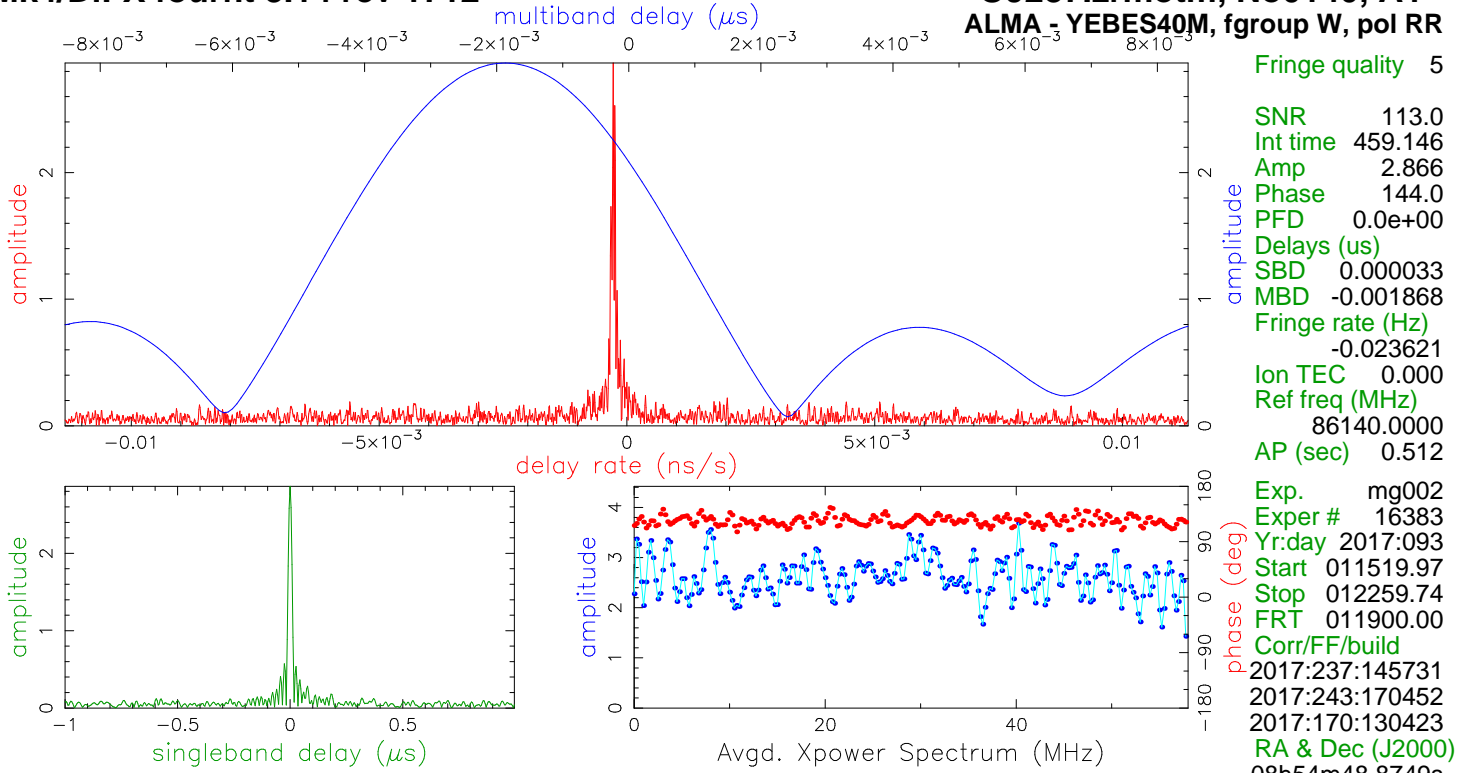
Amp. and Phase vs. time for each freq., 41 segs, 22 APs / seg (11.26 sec / seg.), time ticks 10 sec



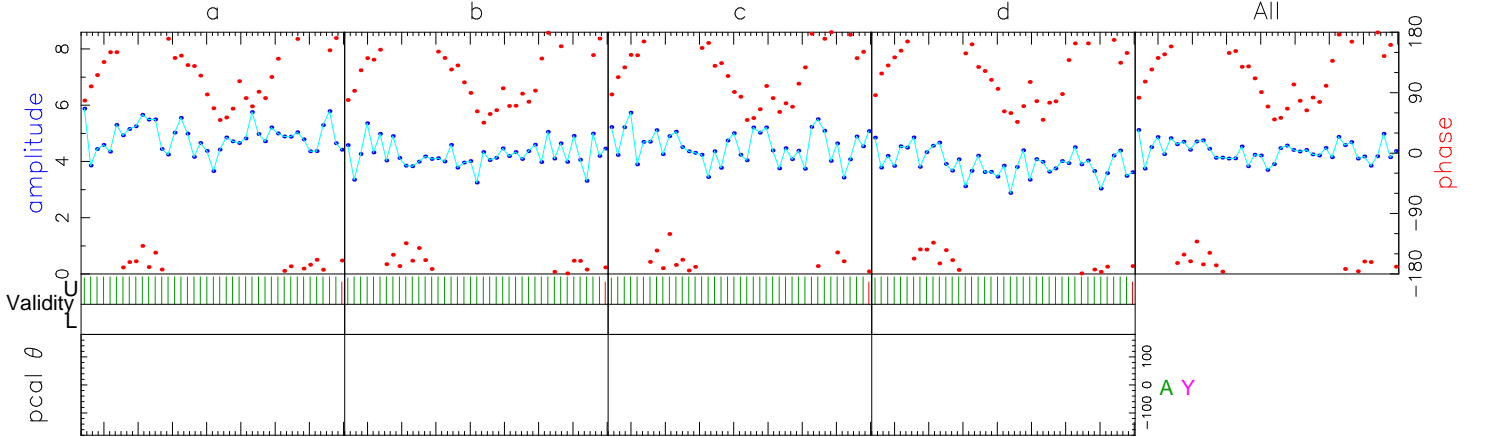
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-142.1	-143.5	-134.3	-144.9	Phase	-141.1
	24.3	24.2	24.5	22.9	Ampl.	24.0
	230.9	230.6	230.9	230.4	Sbd box	230.7
U/L	898/0	898/0	898/0	898/0	APs used	
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	4.37799345387E+03	Apriori delay (usec)	4.37800503238E+03	Resid mbdelay (usec)	5.48816E-03	+/- 2.6E-06
Sband delay (usec)	4.37799514852E+03	Apriori clock (usec)	-2.1100974E+03	Resid sbdelay (usec)	-9.88386E-03	+/- 1.0E-05
Phase delay (usec)	4.37800502783E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-4.55073E-06	+/- 3.9E-09
Delay rate (us/s)	8.43761736770E-01	Apriori rate (us/s)	8.43762010590E-01	Resid rate (us/s)	-2.73820E-07	+/- 1.5E-11
Total phase (deg)	103.2	Apriori accel (us/s/s)	-7.46457172252E-05	Resid phase (deg)	-72.9	+/- 0.1

RMS Theor. Amplitude 24.132 +/- 0.025 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 51.1 0.4 Search (2048X16) 23.068 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 53.5 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 5.8 0.1 Inc. seg. avg. 36.979 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 2.8 0.2 Inc. frq. avg. 23.986 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 348.6 el 46.2 pa 168.9 Y: az 275.2 el 25.5 pa 53.6 u,v (fr/asec) -5265.470 -10750.638 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AY..zrmotm Output file: /Exps/mg002/gmva_58_merged_pc1/1234/No0140/AY.W.51.zrmotm



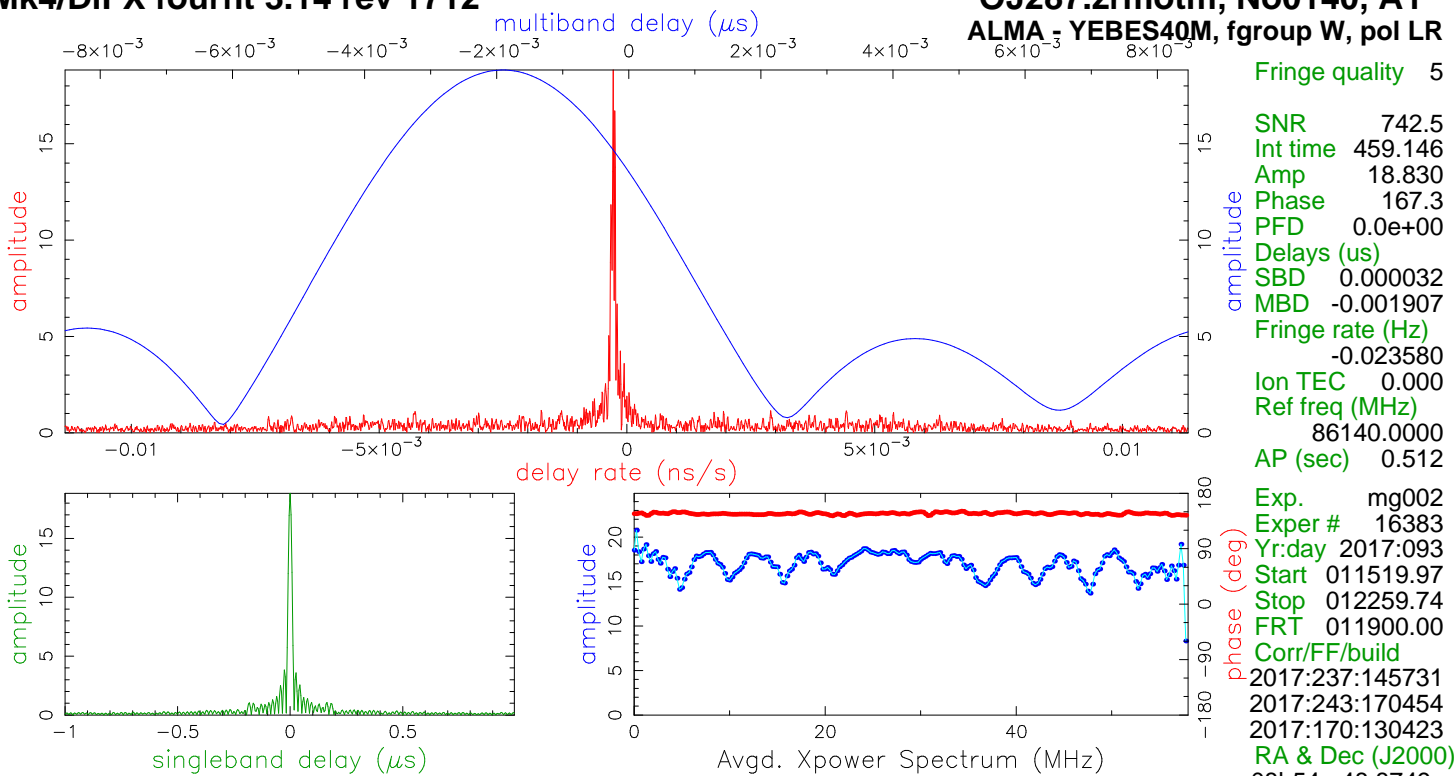
Amp. and Phase vs. time for each freq., 41 segs, 22 APs / seg (11.26 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	144.7	142.5	144.5	144.1	Phase	144.0
	3.2	2.7	3.0	2.5	Ampl.	2.9
	233.3	232.8	233.1	232.8	Sbd box	233.0
U/L	898/0	898/0	898/0	898/0	APs used	
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.37800316419E+03	Apriori delay (usec)	4.37800503238E+03	Resid mbdelay (usec)	-1.86819E-03	+/-	2.1E-05
Sband delay (usec)	4.37800506493E+03	Apriori clock (usec)	-2.1100974E+03	Resid sbdelay (usec)	3.25517E-05	+/-	8.4E-05
Phase delay (usec)	4.37800503702E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	4.64317E-06	+/-	3.3E-08
Delay rate (us/s)	8.43761736377E-01	Apriori rate (us/s)	8.43762010590E-01	Resid rate (us/s)	-2.74213E-07	+/-	1.2E-10
Total phase (deg)	320.0	Apriori accel (us/s/s)	-7.46457172252E-05	Resid phase (deg)	144.0	+/-	1.0

ph/seg (deg)	RMS	Theor.	Amplitude	2.866 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	50.6	3.2	Search (2048X16)	2.768	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	53.8	5.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009	
amp/frq (%)	1.2	1.0	Inc. seg. avg.	4.364	Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011		
	9.3	1.8	Inc. frq. avg.	2.866	Data rate(Mb/s):	928	nlags: 232	t_cohere infinite	ion window (TEC)	0.00 0.00



Fringe quality 5

SNR 742.5

Int time 459.146

Amp 18.830

Phase 167.3

PFD 0.0e+00

Delays (us)

SBD 0.000032

MBD -0.001907

Fringe rate (Hz)

-0.023580

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. mg002

Exper # 16383

Yr:day 2017:093

Start 011519.97

Stop 012259.74

FRT 011900.00

Corr/FF/build

2017:237:145731

2017:243:170454

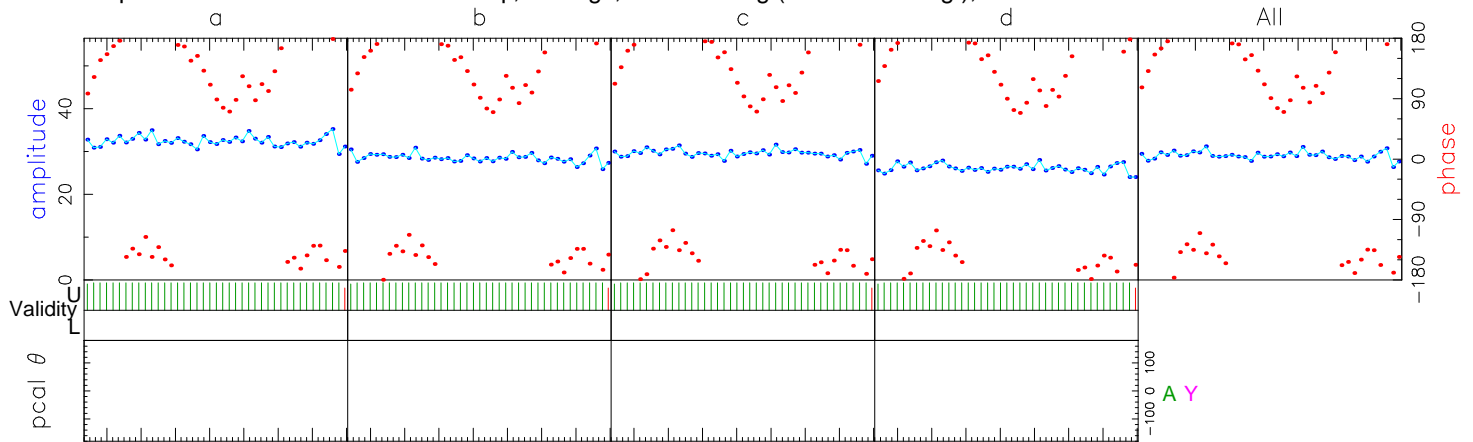
2017:170:130423

RA & Dec (J2000)

08h54m48.8749s

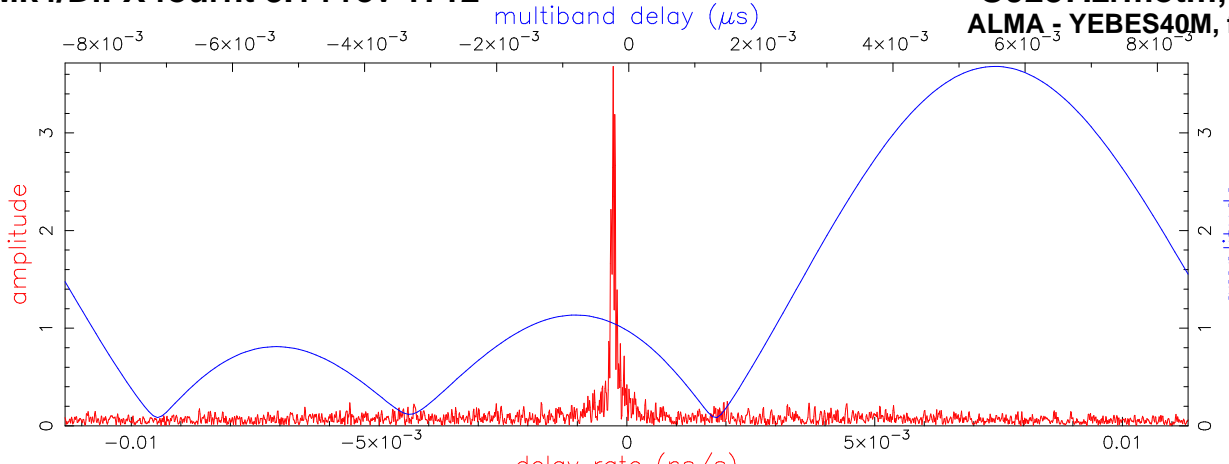
+20°06'30.641"

Amp. and Phase vs. time for each freq., 41 segs, 22 APs / seg (11.26 sec / seg.), time ticks 10 sec

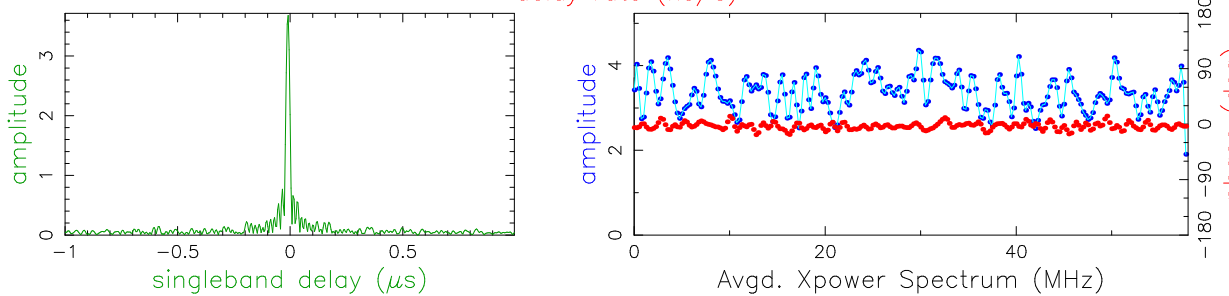


86151.11	86209.70	86268.30	86326.89	86385.48	Freq (MHz)	All
167.0	166.6	169.6	165.8	167.3	Phase	167.3
20.9	18.5	19.1	16.8	18.8	Ampl.	18.8
233.3	232.8	233.1	232.8	233.0	Sbd box	233.0
U/L 898/0	898/0	898/0	898/0	898/0	APs used	
A 0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	PC freqs	
A:Y 0:0	0:0	0:0	0:0	0:0	PC phase	
A:Y 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL		Chan ids	
Y W00UR	W01UR	W02UR	W03UR		Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	4.37800312582E+03	Apriori delay (usec)	4.37800503238E+03	Resid mbdelay (usec)	-1.90656E-03	+/- 3.3E-06
Sband delay (usec)	4.37800506410E+03	Apriori clock (usec)	-2.1100974E+03	Resid sbdelay (usec)	3.17241E-05	+/- 1.3E-05
Phase delay (usec)	4.37800503777E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	5.39504E-06	+/- 5.0E-09
Delay rate (us/s)	8.43761736851E-01	Apriori rate (us/s)	8.43762010590E-01	Resid rate (us/s)	-2.73739E-07	+/- 1.9E-11
Total phase (deg)	343.4	Apriori accel (us/s/s)	-7.46457172252E-05	Resid phase (deg)	167.3	+/- 0.2

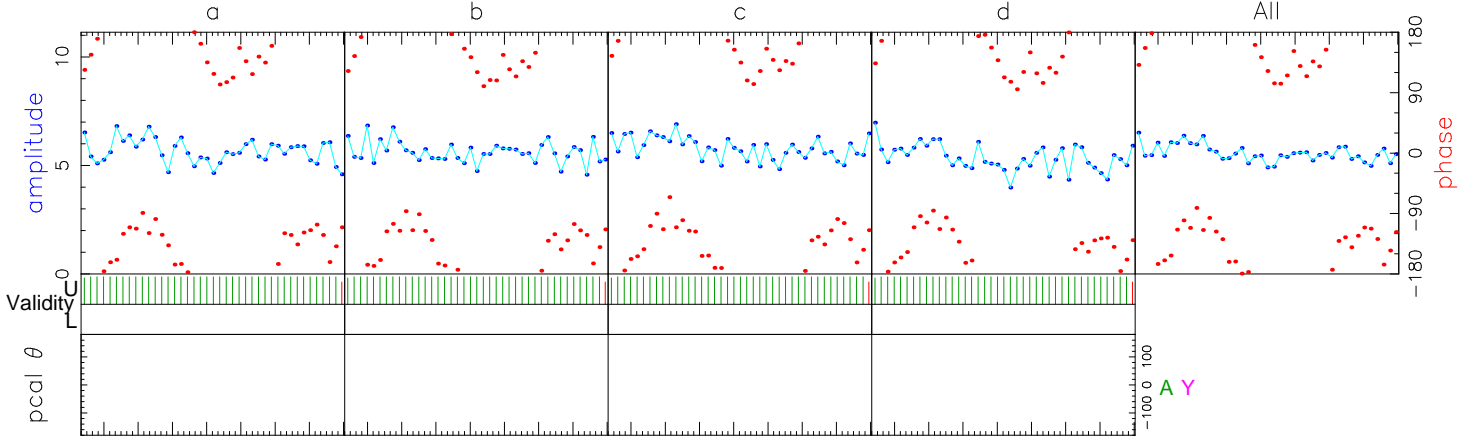
ph/seg (deg)	51.0	RMS	51.0	Theor.	0.5	Amplitude	18.830 +/- 0.025	Search (2048X16)	18.079	Apriori mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	54.7		0.9	Interp.	0.000	Inc. seg. avg.	29.093	Inc. frq. avg.	18.838	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	2.0		0.2			Sample rate(MSamp/s):	116	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.009 0.009
amp/frq (%)	7.7		0.3			Data rate(Mb/s):	928	nlags:	232	t_cohere	infinite	dr window (ns/s)	-0.011 0.011



Fringe quality 5
 SNR 146.6
 Int time 459.146
 Amp 3.717
 Phase -96.2
 PFD 0.0e+00
 Delays (us)
 SBD -0.009929
 MBD 0.005534
 Fringe rate (Hz)
 -0.023628
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mg002
 Exper # 16383
 Yr:day 2017:093
 Start 011519.97
 Stop 012259.74
 FRT 011900.00
 Corr/FF/build
 2017:237:145731
 2017:243:170455
 2017:170:130423
 RA & Dec (J2000)
 08h54m48.8749s
 +20°06'30.641"



Amp. and Phase vs. time for each freq., 41 segs, 22 APs / seg (11.26 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86376.48	All
-165.0	-167.4	-158.0	-167.8	-164.4	-164.4
3.8	3.6	3.9	3.5	3.7	3.7
230.9	230.6	230.9	230.4	230.7	230.7
U/L 898/0	898/0	898/0	898/0	898/0	898/0
A 0	0	0	0	0	0
Y 0	0	0	0	0	0
A:Y 0:0	0:0	0:0	0:0	0:0	0:0
A:Y 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
Y 1000	1000	1000	1000	1000	1000
A W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
Y W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
Chan ids	Chan ids	Chan ids	Chan ids	Chan ids	Chan ids
Tracks	Tracks	Tracks	Tracks	Tracks	Tracks
Chan ids	Chan ids	Chan ids	Chan ids	Chan ids	Chan ids
Tracks	Tracks	Tracks	Tracks	Tracks	Tracks

Group delay (usec)(sbd)	4.37799349947E+03	Apriori delay (usec)	4.37800503238E+03	Resid mbdelay (usec)	5.53376E-03	+/- 1.7E-05
Sband delay (usec)	4.37799510300E+03	Apriori clock (usec)	-2.1100974E+03	Resid sbdelay (usec)	-9.92938E-03	+/- 6.5E-05
Phase delay (usec)	4.37800502708E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-5.30205E-06	+/- 2.5E-08
Delay rate (us/s)	8.43761736293E-01	Apriori rate (us/s)	8.43762010590E-01	Resid rate (us/s)	-2.74297E-07	+/- 9.5E-11
Total phase (deg)	79.9	Apriori accel (us/s/s)	-7.46457172252E-05	Resid phase (deg)	-96.2	+/- 0.8

ph/seg (deg)	50.2	Theor.	2.5	Amplitude	3.717 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	51.2	Search (2048X16)	3.571	Search	3.571	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	5.6	Interp.	0.000	Inc. seg. avg.	5.578	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	4.1	Inc. frq. avg.	3.691	Inc. frq. avg.	3.691	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	