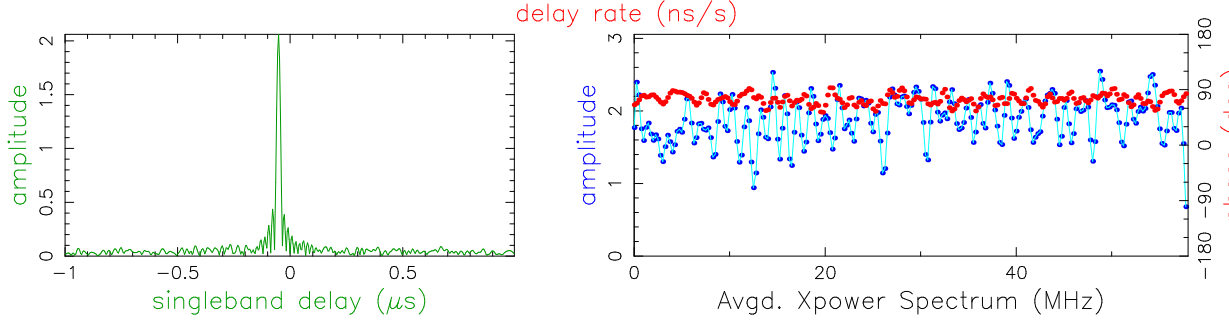
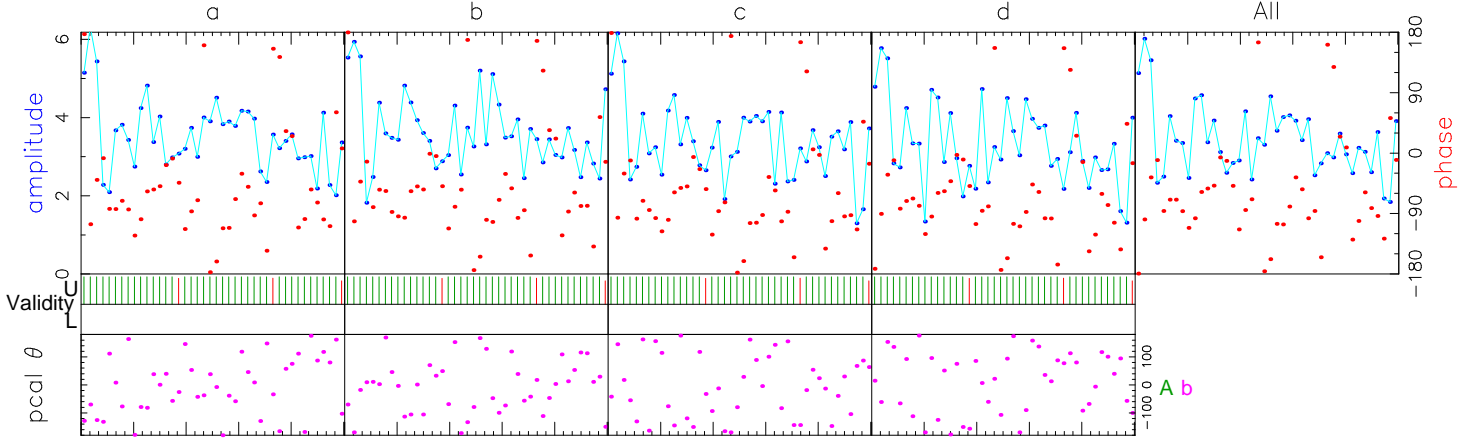


Fringe quality 5
 SNR 65.6
 Int time 298.958
 Amp 2.061
 Phase 122.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.052011
 MBD -0.002530
 Fringe rate (Hz) 0.030776
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134308
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



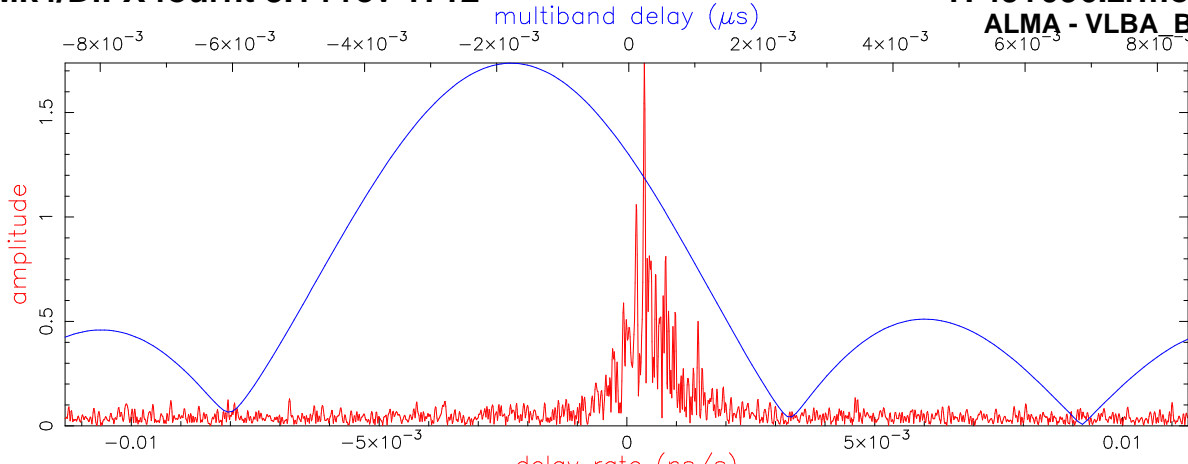
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-83.2	-80.3	-84.3	-81.8	Phase	-82.4
	2.0	2.1	2.1	2.0	Ampl.	2.1
	220.7	221.1	220.8	221.1	Sbd box	220.9
U/L	586/0	586/0	586/0	586/0	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	W00UL	W01UL	W02UL	W03UL	Chan ids	
b	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	8.86360657773E+03	Apriori delay (usec)	8.86366030748E+03	Resid mbdelay (usec)	-2.52975E-03	+/- 3.7E-05
Sband delay (usec)	8.86360829644E+03	Apriori clock (usec)	-2.1011909E+03	Resid sbdelay (usec)	-5.20110E-02	+/- 1.4E-04
Phase delay (usec)	8.86366030482E+03	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-2.65728E-06	+/- 5.6E-08
Delay rate (us/s)	-2.43488791907E-01	Apriori rate (us/s)	-2.43489149187E-01	Resid rate (us/s)	3.57280E-07	+/- 3.3E-10
Total phase (deg)	441.4	Apriori accel (us/s/s)	-7.97239788177E-05	Resid phase (deg)	122.4	+/- 1.7

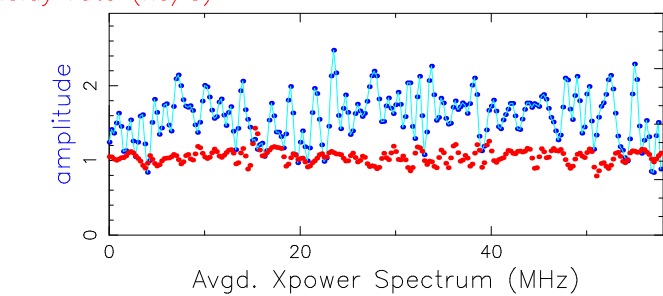
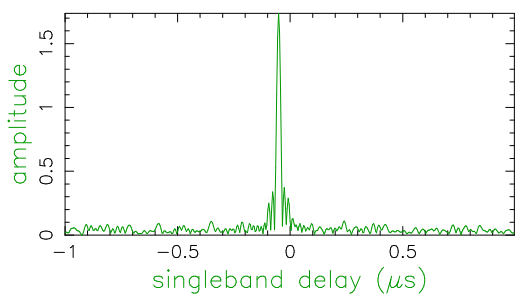
ph/seg (deg)	60.6	Theor.	5.7	Amplitude	2.061 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	79.7	Search (2048X16)	2.002	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	2.1	Interp.	0.000	Inc. seg. avg.	3.421	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	2.7	Inc. frq. avg.	2.060	Inc. frq. avg.	2.060	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



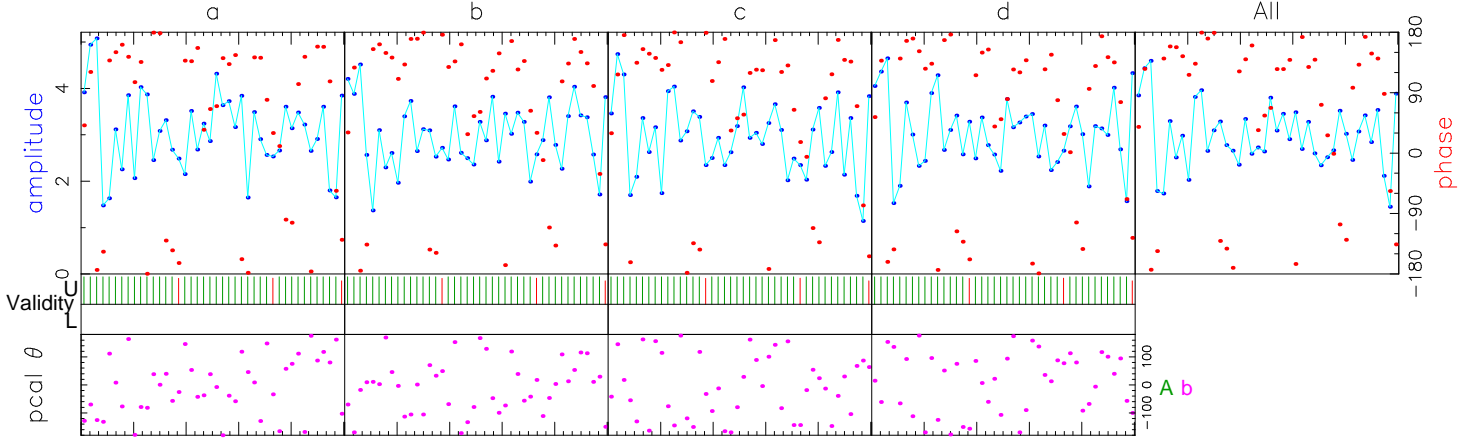
Fringe quality 7

SNR 55.3
 Int time 298.958
 Amp 1.738
 Phase 352.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.051478
 MBD -0.001781
 Fringe rate (Hz) 0.030738
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134310
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



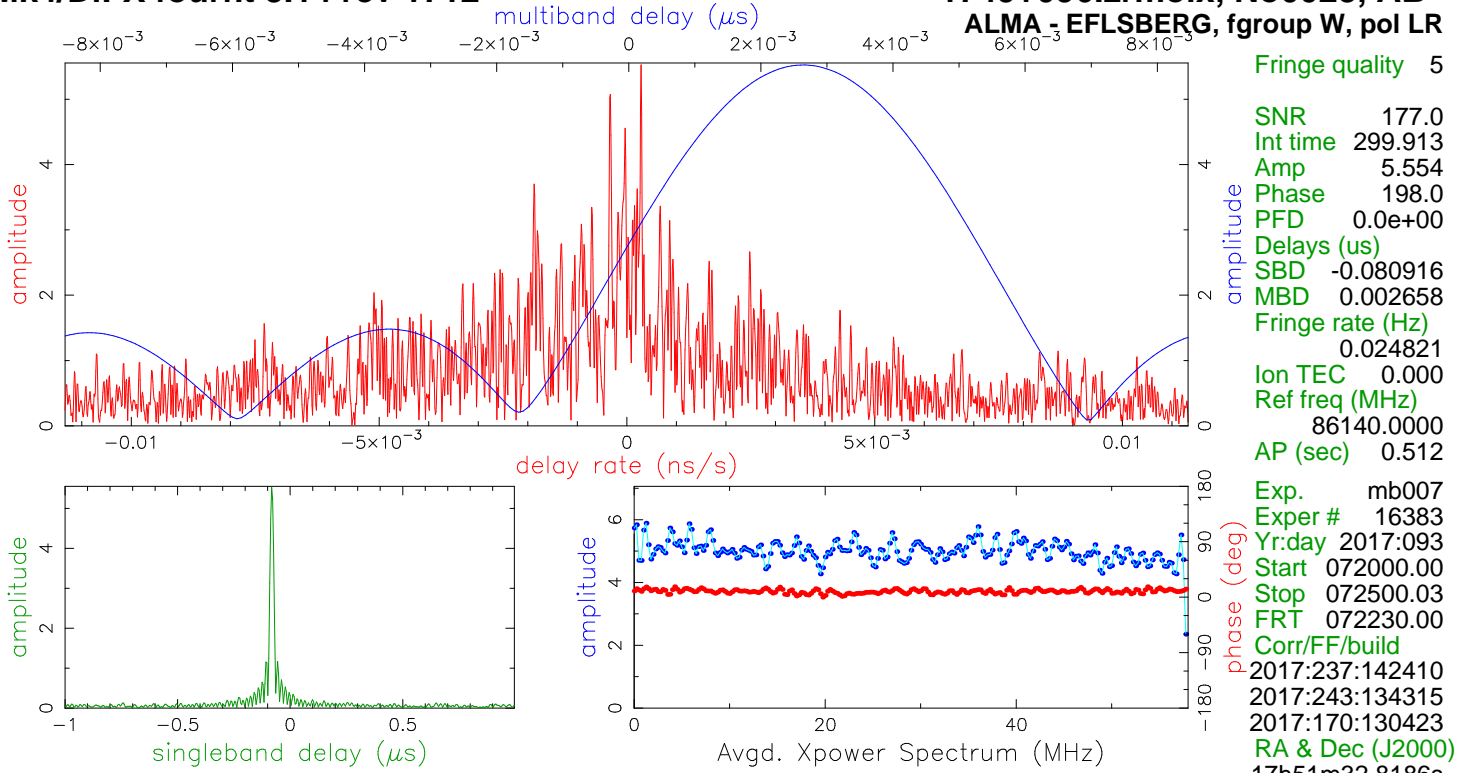
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



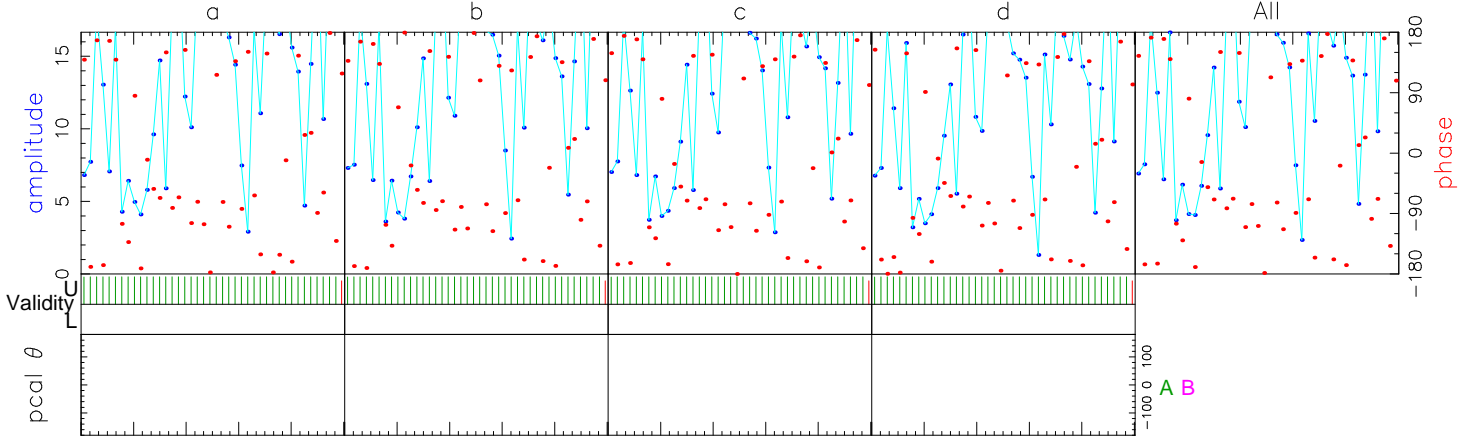
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	APs used	
b	3890	296	1703	3109	PC freqs	
A:b	0:0	0:0	0:0	0:0	PC phase	
A:b	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	8.86360732634E+03	Apriori delay (usec)	8.86366030748E+03	Resid mbdelay (usec)	-1.78114E-03	+/-	4.4E-05
Sband delay (usec)	8.86360882969E+03	Apriori clock (usec)	-2.1011909E+03	Resid sbdelay (usec)	-5.14778E-02	+/-	1.7E-04
Phase delay (usec)	8.86366031225E+03	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	4.77484E-06	+/-	6.7E-08
Delay rate (us/s)	-2.43488792352E-01	Apriori rate (us/s)	-2.43489149187E-01	Resid rate (us/s)	3.56835E-07	+/-	3.9E-10
Total phase (deg)	311.9	Apriori accel (us/s/s)	-7.97239788177E-05	Resid phase (deg)	352.8	+/-	2.1

ph/seg (deg)	62.9	Theor.	6.7	Amplitude	1.738 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.8	Search (2048X16)	1.707	Search	1.707	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	4.0	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	1.2	Inc. seg. avg.	2.962	Inc. seg. avg.	2.962	Sample rate (MSamp/s):	116	dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	1.738	Inc. frq. avg.	1.738	Data rate (Mb/s):	928	ion window (TEC)	0.00 0.00

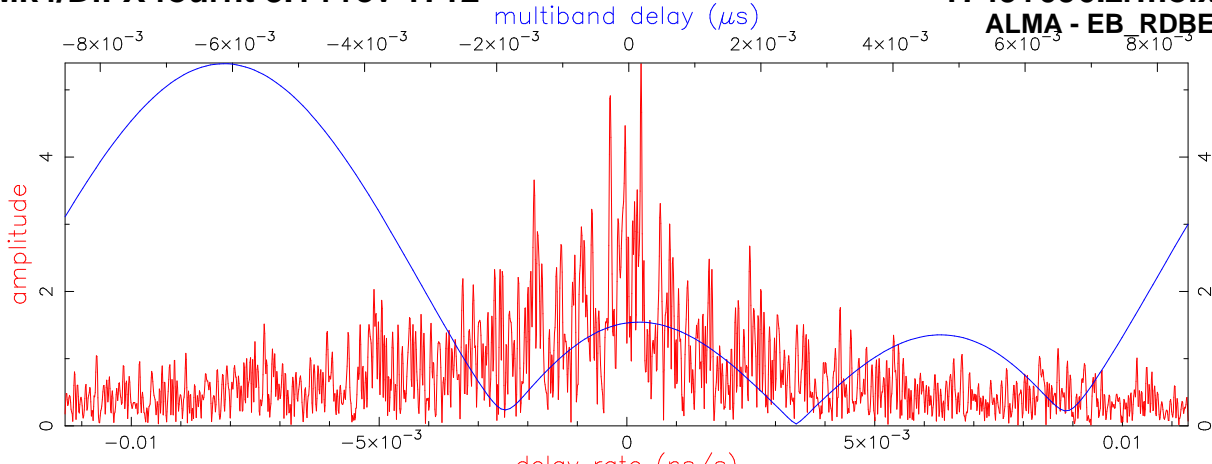


Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-140.5	-145.8	-145.0	-141.9	-143.3	Phase	-143.3
5.6	5.6	5.6	5.2	Ampl.	5.5	
214.0	214.2	214.1	214.6	Sbd box	214.2	
U/L 586/0	586/0	586/0	586/0	APs used		
A 0	0	0	0	PC freqs		
B 0	0	0	0	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 W00UL	W01UL	W02UL	W03UL	Chan ids		
B W00UR	W01UR	W02UR	W03UR	Tracks		
				Chan ids		
				Tracks		
Group delay (usec)(sbd)	-1.72922705600E+02	Apriori delay (usec)	-1.72840029847E+02	Resid mbdelay (usec)	2.65758E-03	+/- 1.4E-05
Sband delay (usec)	-1.72920945985E+02	Apriori clock (usec)	-2.1349082E+03	Resid sbdelay (usec)	-8.09161E-02	+/- 5.4E-05
Phase delay (usec)	-1.72840034469E+02	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-4.62162E-06	+/- 2.1E-08
Delay rate (us/s)	1.41816480294E+00	Apriori rate (us/s)	1.41816451479E+00	Resid rate (us/s)	2.88143E-07	+/- 1.2E-10
Total phase (deg)	136.4	Apriori accel (us/s/s)	-3.23728829425E-05	Resid phase (deg)	198.0	+/- 0.6

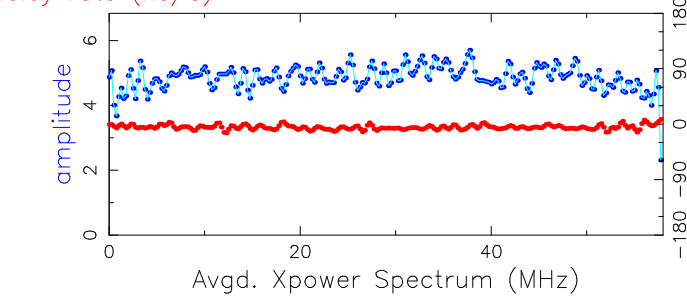
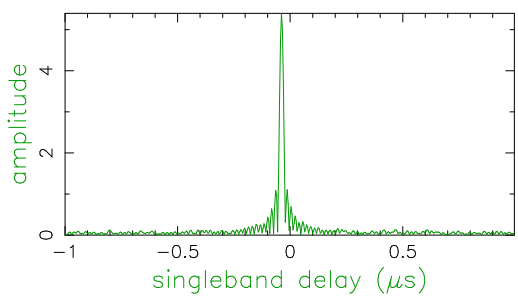
RMS Theor. Amplitude 5.554 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 74.8 2.1 Search (2048X16) 5.406 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 177.1 3.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 3.1 0.6 Inc. seg. avg. 13.309 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 3.0 1.1 Inc. frq. avg. 5.529 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 49.3 el 43.3 pa -134.9 B: az 233.7 el 37.2 pa 31.6 u,v (fr/asec) -8282.905 -10540.366 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AB..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AB.W.9.zrmlx



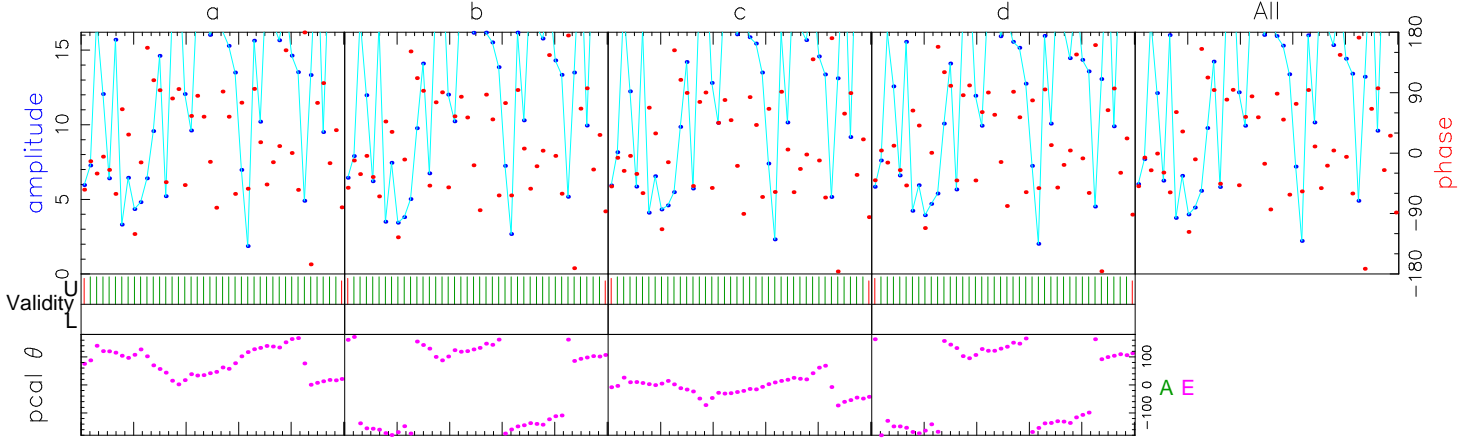
Fringe quality 5

SNR 172.0
Int time 299.528
Amp 5.401
Phase 156.5
PFD 0.0e+00
Delays (us)
SBD -0.038218
MBD -0.006125
Fringe rate (Hz) 0.024782
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134319
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"



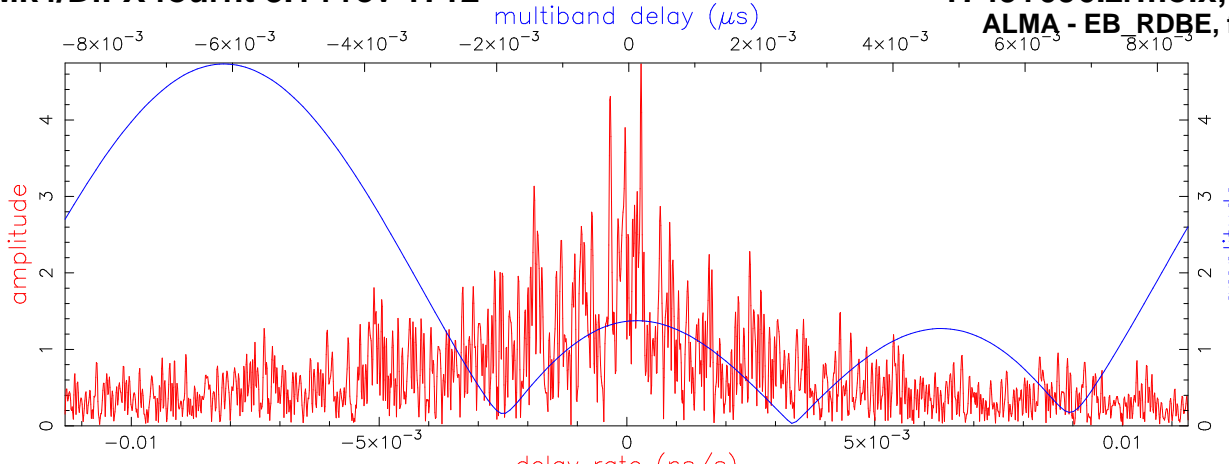
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	Phase	20.0
E	3890	296	1703	3109	Ampl.	5.4
A:E	0:0	0:0	0:0	0:0	Sbd box	224.1
A:E	0:0	0:0	0:0	0:0	APs used	
A	1000	1000	1000	1000	PC freqs	
E	1000	1000	1000	1000	PC freqs	
A	W00UL	W01UL	W02UL	W03UL	PC phase	
E	W00UL	W01UL	W02UL	W03UL	Mani PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-1.72380287901E+02	Apriori delay (usec)	-1.72340029847E+02	Resid mbdelay (usec)	-6.12472E-03	+/- 1.4E-05
Sband delay (usec)	-1.72378248054E+02	Apriori clock (usec)	-2.1344082E+03	Resid sbdelay (usec)	-3.82182E-02	+/- 5.5E-05
Phase delay (usec)	-1.72340029204E+02	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	6.43541E-07	+/- 2.1E-08
Delay rate (us/s)	1.41816480249E+00	Apriori rate (us/s)	1.41816451479E+00	Resid rate (us/s)	2.87700E-07	+/- 1.2E-10
Total phase (deg)		Apriori accel (us/s/s)	-3.23728829425E-05	Resid phase (deg)	156.5	+/- 0.7

RMS 74.9 Theor. 2.2 Amplitude 5.401 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 74.9 2.2 Search (2048X16) 5.347 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 176.5 3.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 5.2 0.7 Inc. seg. avg. 12.949 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 1.4 1.2 Inc. frq. avg. 5.402 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

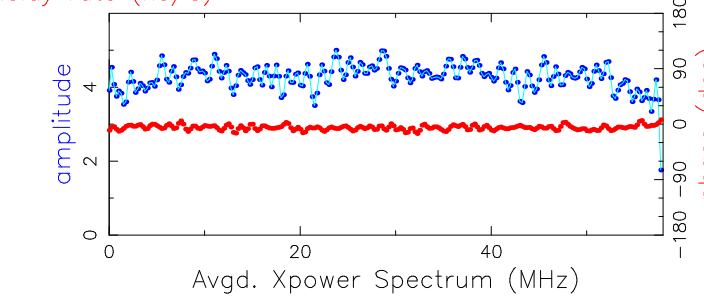
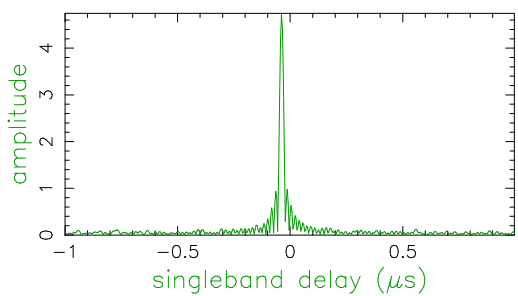
A: az 49.3 el 43.3 pa -134.9 E: az 233.7 el 37.2 pa 31.4 u,v (fr/asec) -8282.905 -10540.366 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AE..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AE.W.11.zrmlx



Fringe quality 5

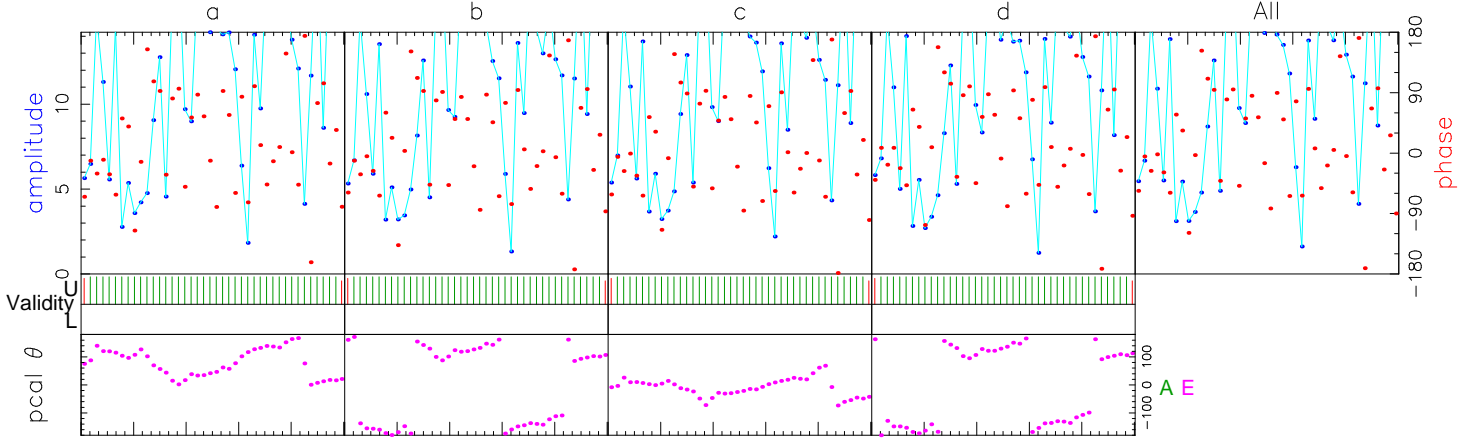
SNR 151.2
Int time 299.528
Amp 4.746
Phase 157.0
PFD 0.0e+00
Delays (us)
SBD -0.038110
MBD -0.006125
Fringe rate (Hz) 0.024766
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134323
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"



Avgd. Xpower Spectrum (MHz)

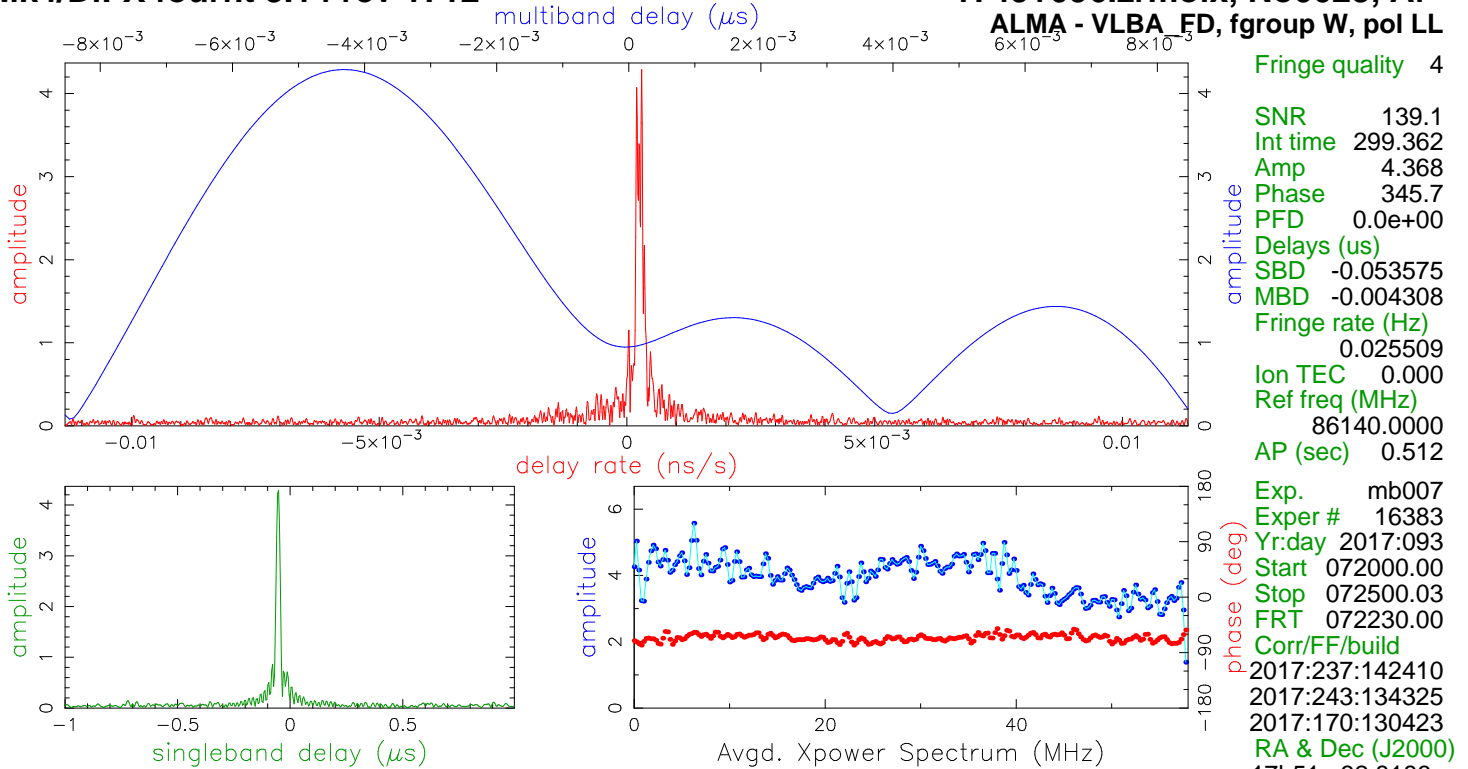
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



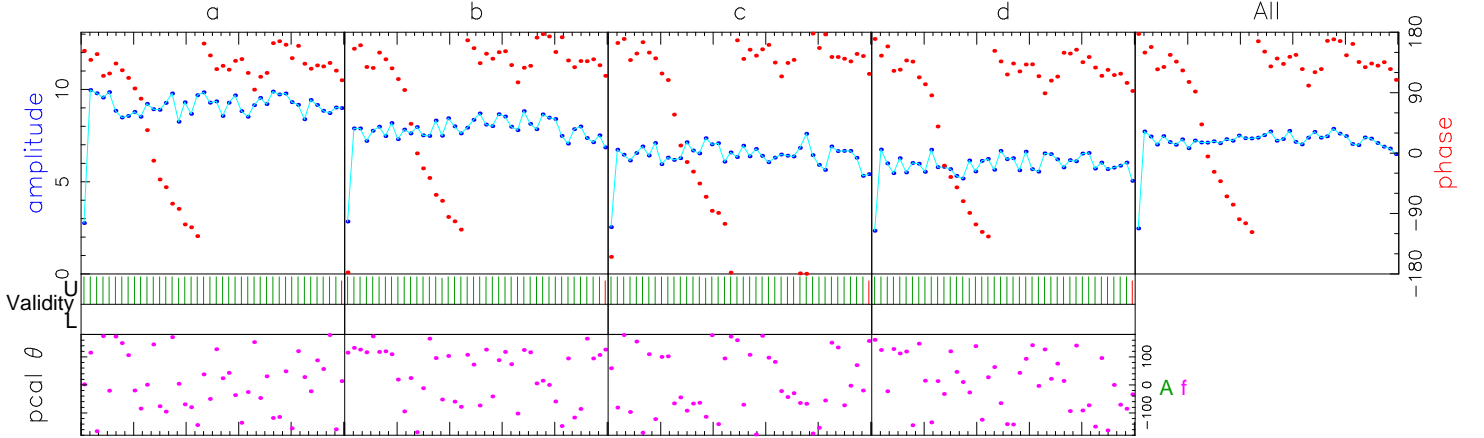
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	PC freqs	
E	3890	296	1703	3109	APs used	
A:E	0:0	0:0	0:0	0:0	PC freqs	
A:E	0:0	0:0	0:0	0:0	PC phase	
A	1000	1000	1000	1000	Mani PC	
E	1000	1000	1000	1000	PC amp	
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
E	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.72380288652E+02	Apriori delay (usec)	-1.72340029847E+02	Resid mbdelay (usec)	-6.12547E-03	+/-	1.6E-05
Sband delay (usec)	-1.72378139364E+02	Apriori clock (usec)	-2.1344082E+03	Resid sbdelay (usec)	-3.81095E-02	+/-	6.3E-05
Phase delay (usec)	-1.72340029187E+02	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	6.59894E-07	+/-	2.4E-08
Delay rate (us/s)	1.41816480230E+00	Apriori rate (us/s)	1.41816451479E+00	Resid rate (us/s)	2.87510E-07	+/-	1.4E-10
Total phase (deg)		Apriori accel (us/s/s)	-3.23728829425E-05	Resid phase (deg)	157.0	+/-	0.8

ph/seg (deg)	RMS 75.0	Theor. 2.5	Amplitude 4.746 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	175.9	4.3	Search (2048X16) 4.695	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	4.2	0.8	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	1.1	1.3	Inc. seg. avg. 11.316	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 4.741	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		



Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

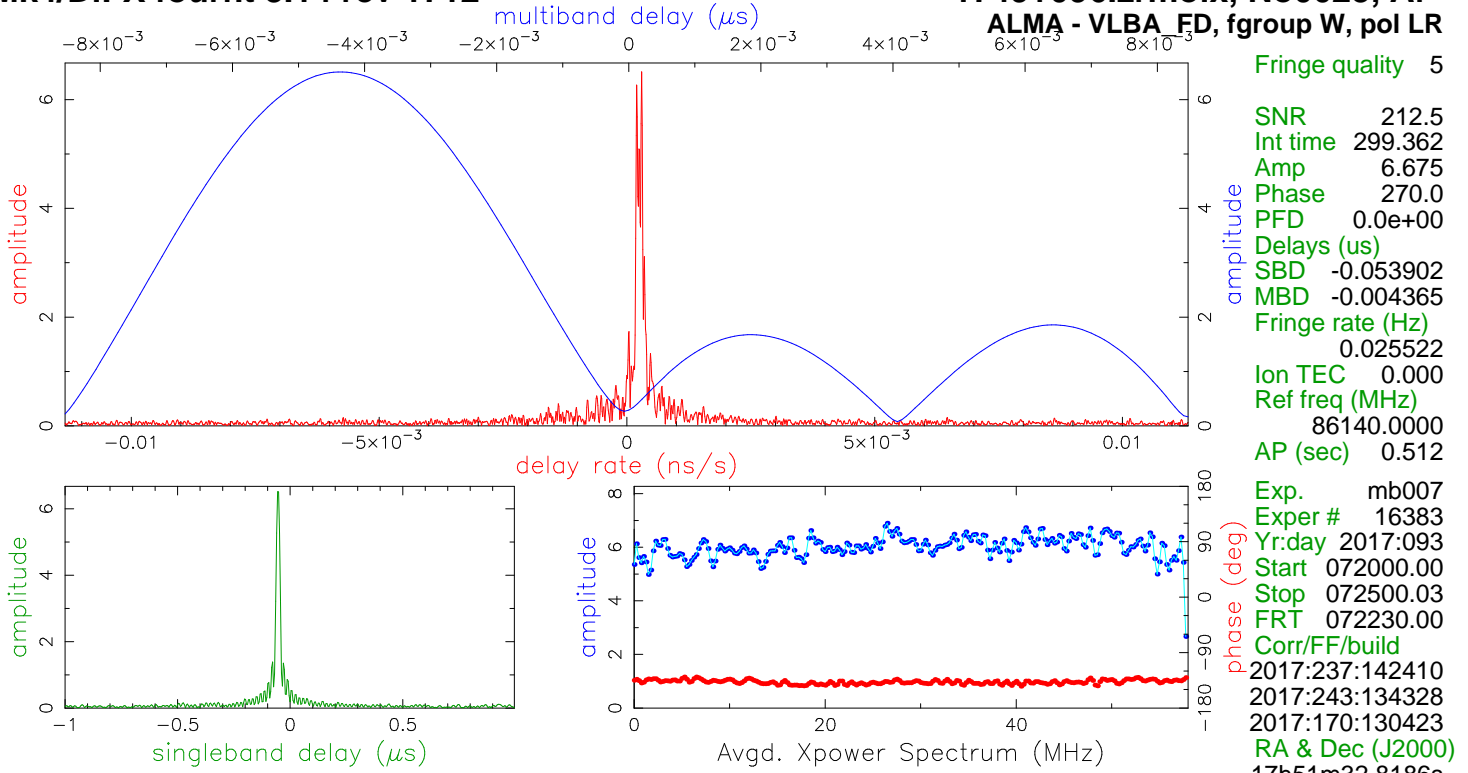


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
135.0	145.9	154.4	129.5	Phase	140.9
5.4	4.6	3.7	3.6	Ampl.	4.3
221.0	220.5	220.3	220.5	Sbd box	220.6
U/L 586/0	586/0	586/0	586/0	APs used	
A 0	0	0	0	PC freqs	
f 3890	296	1703	3109	PC freqs	
A:f 0:0	0:0	0:0	0:0	PC phase	
A:f 0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	Chan ids	
f W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	4.53704191141E+03	Apriori delay (usec)	4.53709741913E+03	Resid mbdelay (usec)	-4.30772E-03 +/- 1.7E-05
Sband delay (usec)	4.53704384368E+03	Apriori clock (usec)	-2.1048481E+03	Resid sbdelay (usec)	-5.35754E-02 +/- 6.8E-05
Phase delay (usec)	4.53709742367E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	4.54389E-06 +/- 2.7E-08
Delay rate (us/s)	-4.58902980537E-01	Apriori rate (us/s)	-4.58903276675E-01	Resid rate (us/s)	2.96138E-07 +/- 1.5E-10
Total phase (deg)	231.7	Apriori accel (us/s/s)	-5.22988436856E-05	Resid phase (deg)	345.7 +/- 0.8

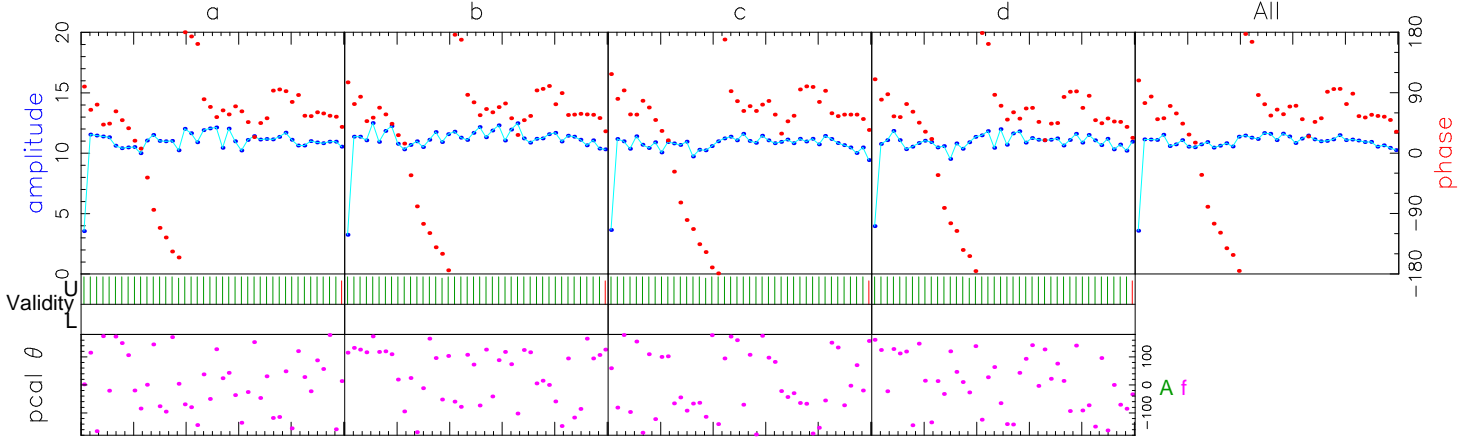
ph/seg (deg)	66.7	RMS	2.7	Theor.	2.7	Amplitude	4.368 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	66.6	Search (2048X16)	4.226	Interp.	0.000	Apriori clock (usec)	4.226	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	13.7	Inc. seg. avg.	7.162	Inc. frq. avg.	4.345	Apriori clockrate (us/s)	2.1828075E-06	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009	
amp/frq (%)	16.5	Inc. frq. avg.	4.345	u,v (fr/asec)	2605.737 -8553.510	Apriori rate (us/s)	-4.58903276675E-01	Sample rate(MSamp/s):	116	nlags: 232	t_cohere infinite	dr window (ns/s)	-0.011 0.011
						Apriori accel (us/s/s)	-5.22988436856E-05	Data rate(Mb/s):	928	ion window (TEC)	0.00 0.00		

A: az 49.3 el 43.3 pa -134.9 f: az 91.6 el 21.9 pa -60.7 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Af..zrmolx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Af.W.15.zrmolx



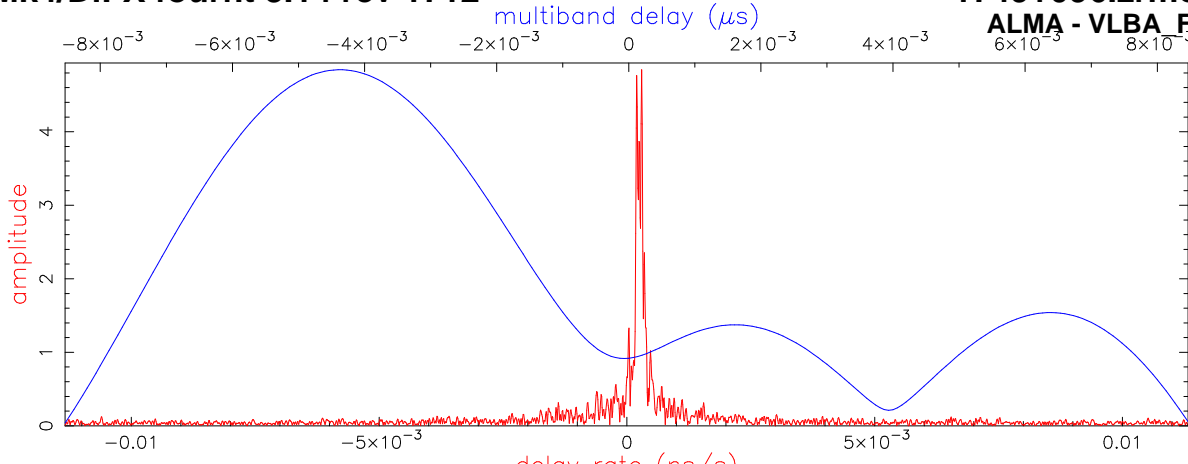
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



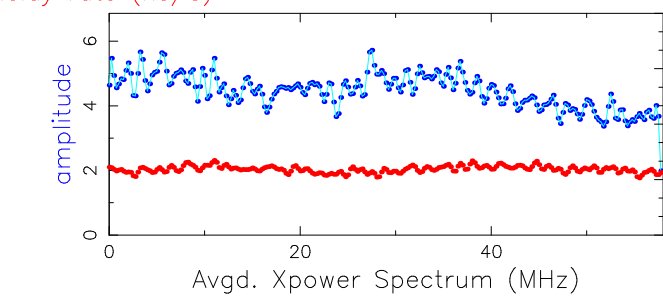
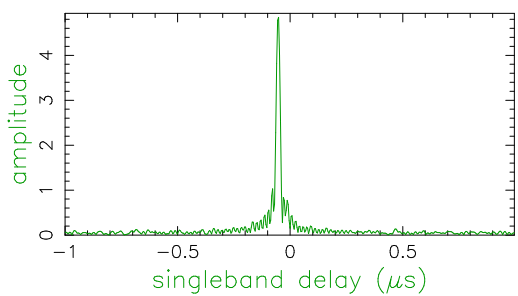
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
63.2	66.2	69.7	62.0	65.3	Phase	65.3
6.5	6.7	6.4	6.5	6.5	Ampl.	6.5
220.6	220.5	220.6	220.4	220.5	Sbd box	220.5
U/L 586/0	586/0	586/0	586/0	586/0	APs used	
A 0	0	0	0	0	PC freqs	
f 3890	296	1703	3109	3109	PC freqs	
A:f 0:0	0:0	0:0	0:0	0:0	PC phase	
A:f 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	W03UL	Chan ids	
f W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	4.53704185441E+03	Apriori delay (usec)	4.53709741913E+03	Resid mbdelay (usec)	-4.36472E-03	+/- 1.1E-05
Sband delay (usec)	4.53704351761E+03	Apriori clock (usec)	-2.1048481E+03	Resid sbdelay (usec)	-5.39015E-02	+/- 4.5E-05
Phase delay (usec)	4.53709742123E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	2.10509E-06	+/- 1.7E-08
Delay rate (us/s)	-4.58902980392E-01	Apriori rate (us/s)	-4.58903276675E-01	Resid rate (us/s)	2.96283E-07	+/- 1.0E-10
Total phase (deg)	516.1	Apriori accel (us/s/s)	-5.22988436856E-05	Resid phase (deg)	270.0	+/- 0.5

ph/seg (deg) 66.6 1.7 Theor. Amplitude 6.675 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 66.6 1.7 Search (2048X16) 6.412 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 4.2 0.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 2.7 0.9 Inc. seg. avg. 10.840 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

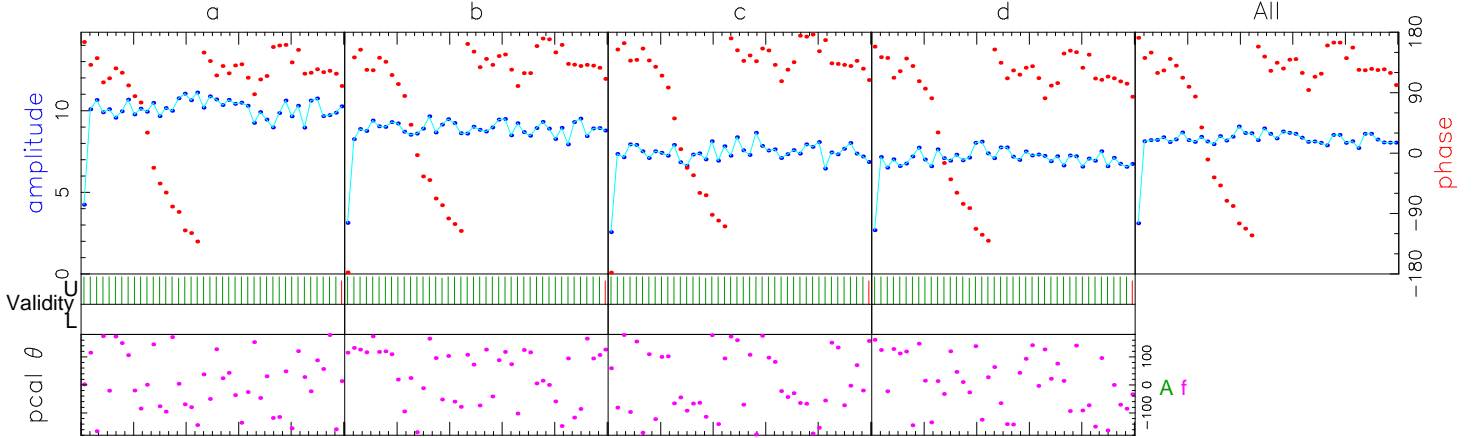
A: az 49.3 el 43.3 pa -134.9 f: az 91.6 el 21.9 pa -60.7 u,v (fr/asec) 2605.737 -8553.510 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Af...zrmolx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Af.W.17.zrmolx



Fringe quality 4
SNR 157.2
Int time 299.362
Amp 4.936
Phase 338.8
PFD 0.0e+00
Delays (us)
SBD -0.053590
MBD -0.004371
Fringe rate (Hz) 0.025524
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134329
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s +9°39' 0.728"

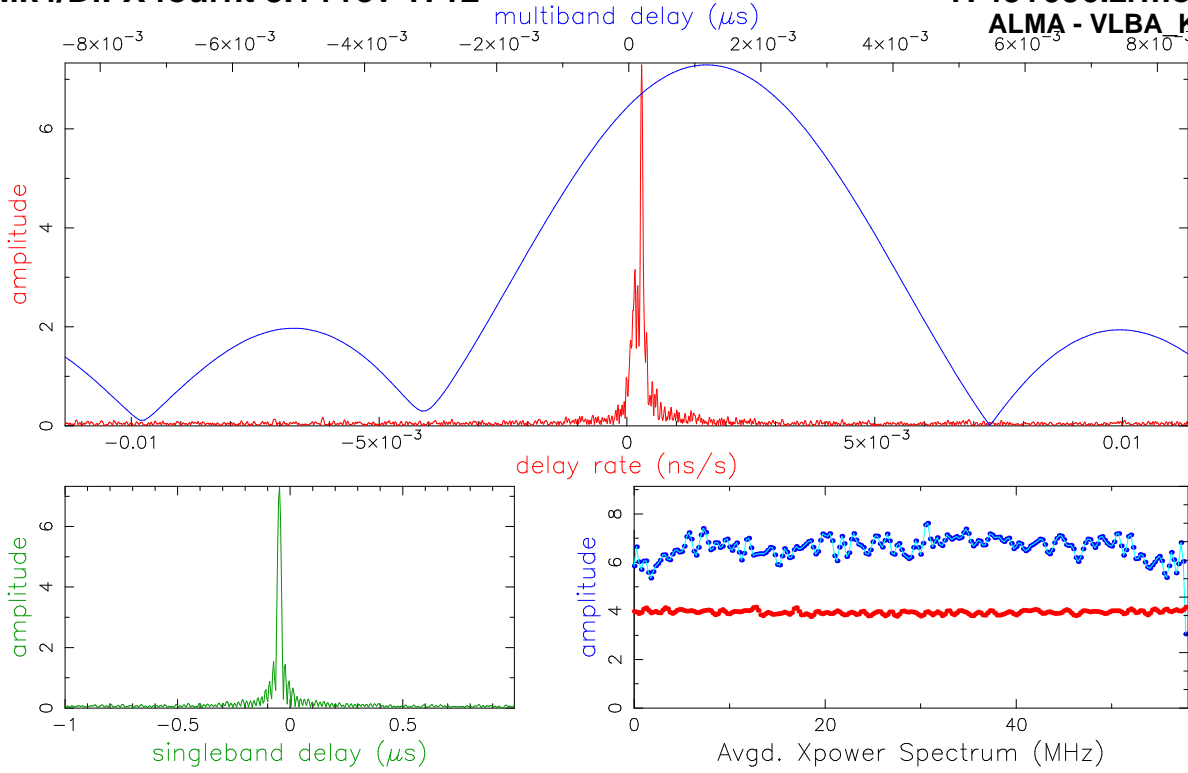


Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



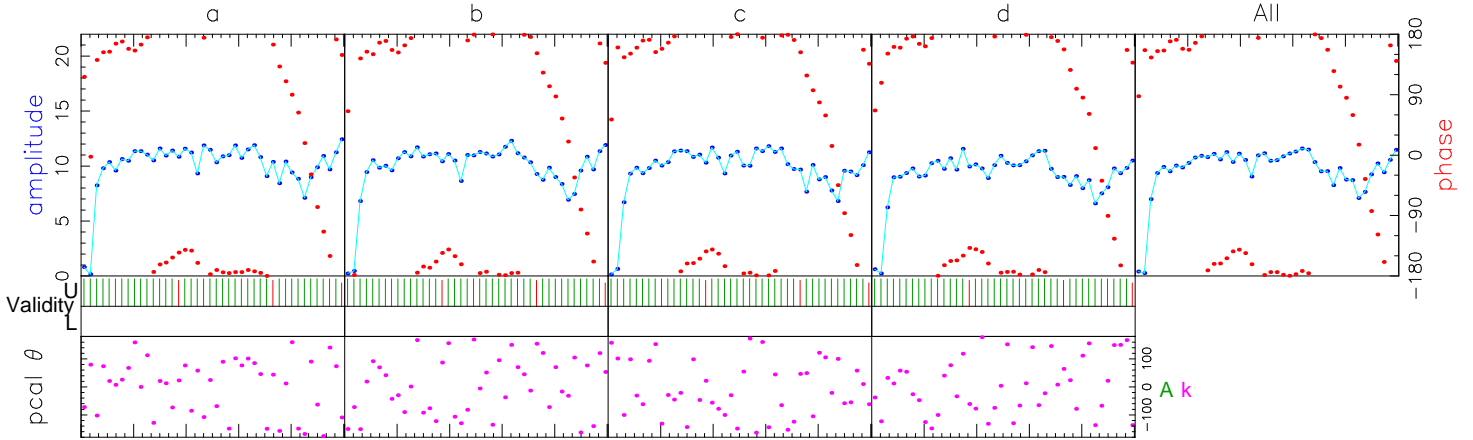
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0		
f	3890	296	1703	3109		
A:f	0:0	0:0	0:0	0:0		
A:f	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000		
f	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR		
f	W00UL	W01UL	W02UL	W03UL		
Group delay (usec)(sbd)	4.53704184792E+03	Apriori delay (usec)	4.53709741913E+03	Resid mbdelay (usec)	-4.37120E-03	+/- 1.5E-05
Sband delay (usec)	4.53704382961E+03	Apriori clock (usec)	-2.1048481E+03	Resid sbdelay (usec)	-5.35895E-02	+/- 6.0E-05
Phase delay (usec)	4.53709742345E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	4.32187E-06	+/- 2.4E-08
Delay rate (us/s)	-4.58902980364E-01	Apriori rate (us/s)	-4.58903276675E-01	Resid rate (us/s)	2.96312E-07	+/- 1.4E-10
Total phase (deg)		224.8	Apriori accel (us/s/s)	-5.22988436856E-05	Resid phase (deg)	338.8 +/- 0.7

ph/seg (deg) 67.0 2.4 Search (2048X16) 4.773 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.1 4.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.0 0.7 Inc. seg. avg. 8.184 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 13.8 1.3 Inc. frq. avg. 4.894 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 49.3 el 43.3 pa -134.9 f: az 91.6 el 21.9 pa -60.7 u,v (fr/asec) 2605.737 -8553.510 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gvma_58_merged_pc1/1234/No0023/Af...zrmolx Output file: /Exps/mb007/gvma_58_merged_pc1/1234/No0023/Af.W.18.zrmolx



Fringe quality 5
SNR 233.2
Int time 298.905
Amp 7.330
Phase 383.0
PFD 0.0e+00
Delays (us)
SBD -0.048379
MBD 0.001165
Fringe rate (Hz) 0.026117
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512
Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134331
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"

Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



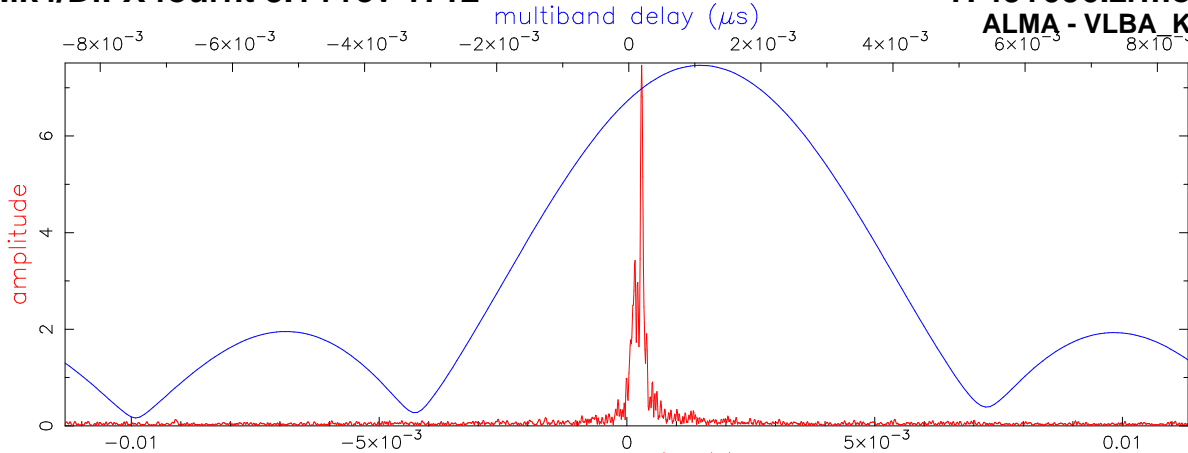
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	APs used	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	

Group delay (usec)(sbd)	6.83986593238E+03	Apriori delay (usec)	6.83991596696E+03	Resid mbdelay (usec)	1.16543E-03	+/- 1.0E-05
Sband delay (usec)	6.83986758820E+03	Apriori clock (usec)	-2.1026323E+03	Resid sbdelay (usec)	-4.83788E-02	+/- 4.1E-05
Phase delay (usec)	6.83991597270E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	5.74808E-06	+/- 1.6E-08
Delay rate (us/s)	-4.91422031556E-01	Apriori rate (us/s)	-4.91422334748E-01	Resid rate (us/s)	3.03193E-07	+/- 9.1E-11
Total phase (deg)	524.7	Apriori accel (us/s/s)	-6.49035357682E-05	Resid phase (deg)	383.0	+/- 0.5

ph/seg (deg)	52.3	Theor.	1.6	Amplitude	7.330 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	44.7	Search (2048X16)	7.172			Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	2.5	Interp.	0.000			Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	3.2	Inc. seg. avg.	9.600			Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
		Inc. frq. avg.	7.297			Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
								ion window (TEC)	0.00 0.00

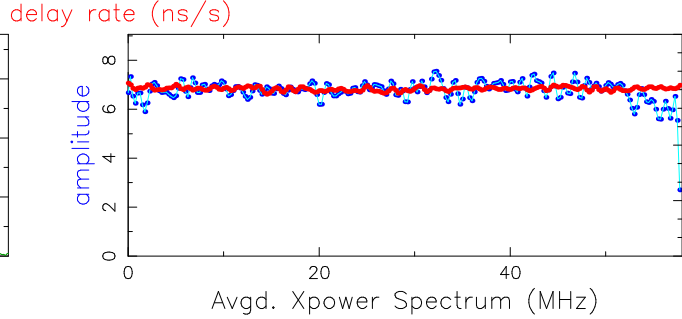
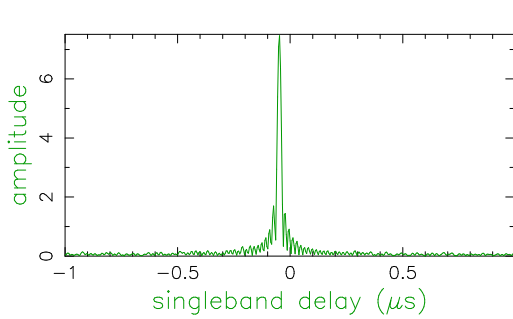
A: az 49.3 el 43.3 pa -134.9 k: az 88.1 el 15.3 pa -59.3 u,v (fr/asec) 2783.097 -8894.602 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak.W.19.zrmlx



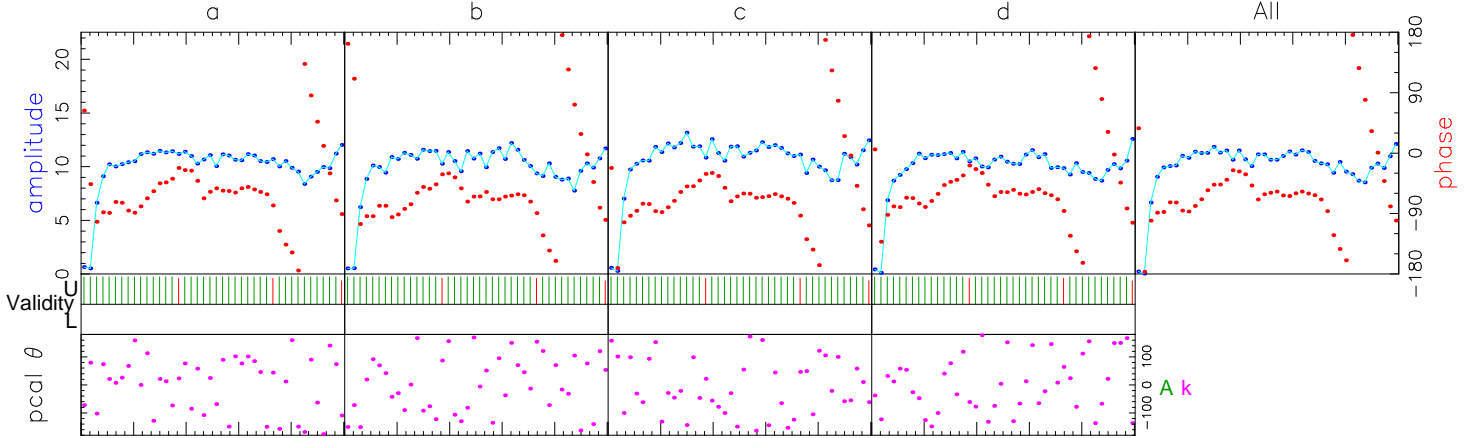
Fringe quality 5

SNR 239.0
Int time 298.905
Amp 7.513
Phase 139.0
PFD 0.0e+00
Delays (us)
SBD -0.048485
MBD 0.001076
Fringe rate (Hz) 0.026107
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134332
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"

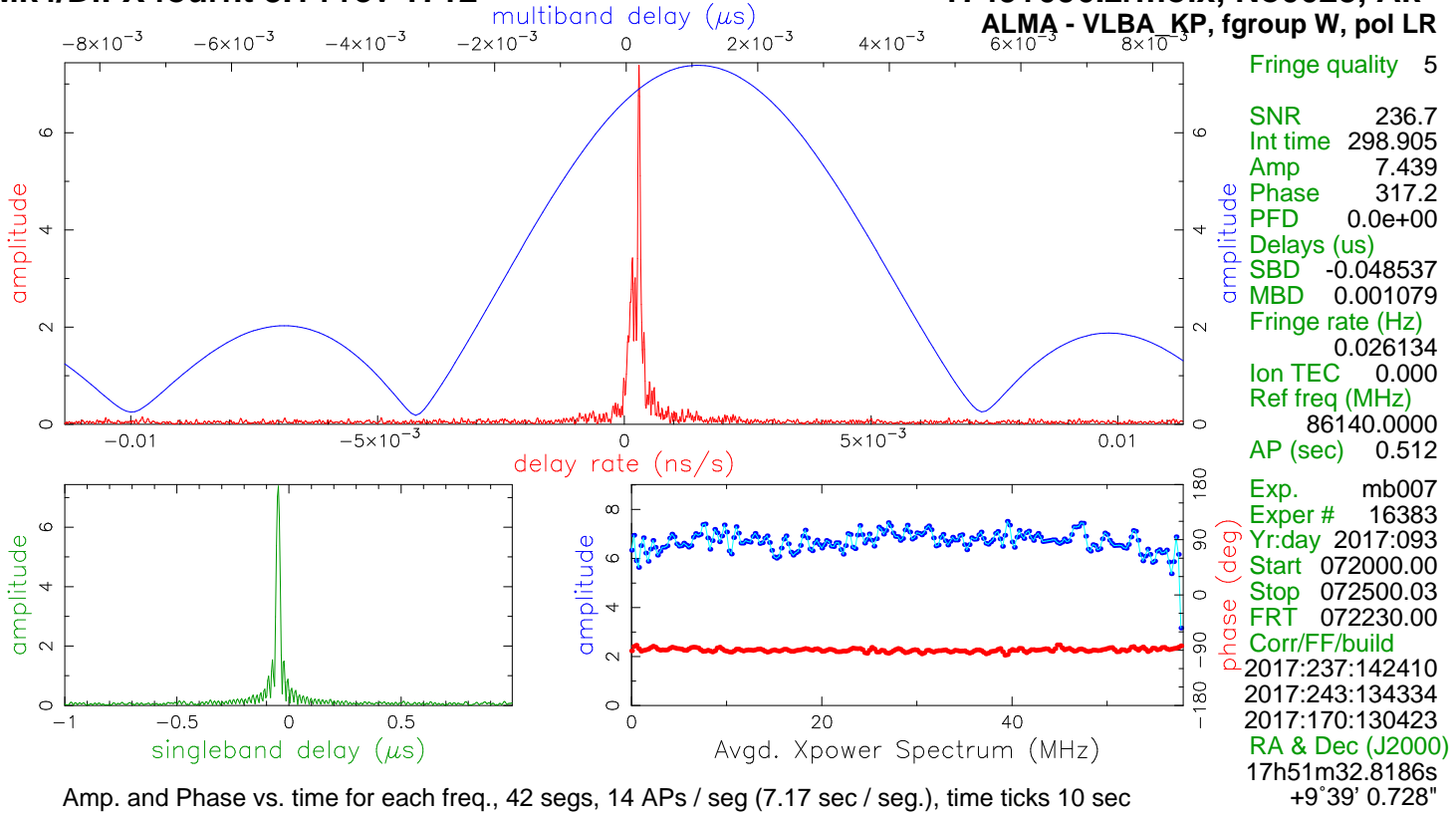
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



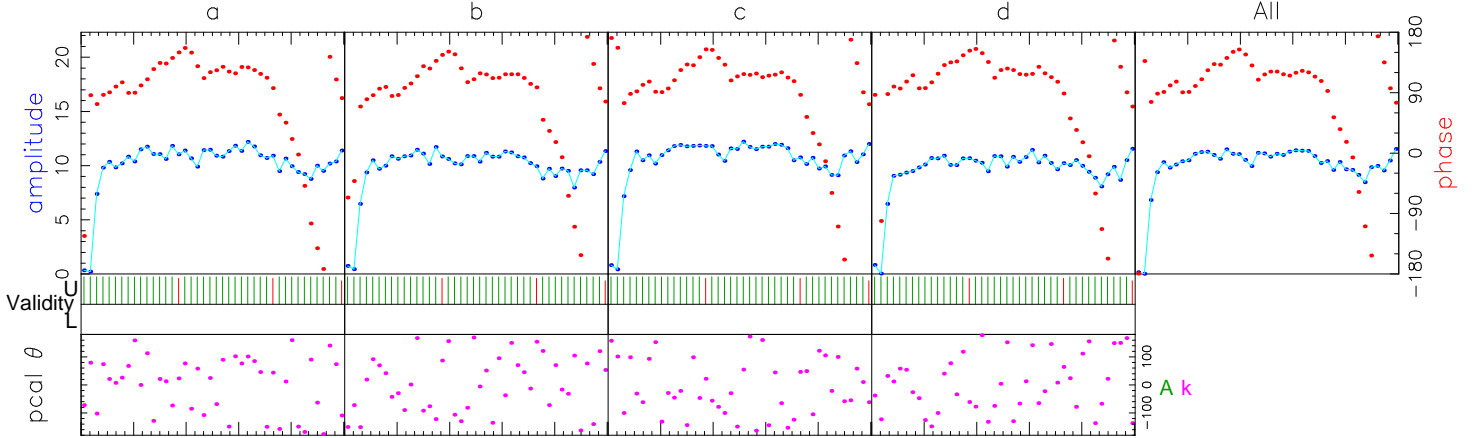
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-62.4	-69.9	-68.6	-62.1	Phase	-65.8
	7.4	7.4	7.9	7.2	Ampl.	7.5
	221.8	221.6	222.0	221.6	Sbd box	221.8
U/L	586/0	586/0	586/0	586/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
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)	6.83986584302E+03	Apriori delay (usec)	6.83991596696E+03	Resid mbdelay (usec)	1.07607E-03	+/-	1.0E-05
Sband delay (usec)	6.83986748199E+03	Apriori clock (usec)	-2.1026323E+03	Resid sbdelay (usec)	-4.84850E-02	+/-	4.0E-05
Phase delay (usec)	6.83991596483E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	-2.12243E-06	+/-	1.5E-08
Delay rate (us/s)	-4.91422031677E-01	Apriori rate (us/s)	-4.91422334748E-01	Resid rate (us/s)	3.03071E-07	+/-	8.9E-11
Total phase (deg)	280.6	Apriori accel (us/s/s)	-6.49035357682E-05	Resid phase (deg)	139.0	+/-	0.5

ph/seg (deg)	RMS 55.8	Theor. 1.6	Amplitude 7.513 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	46.2	2.7	Search (2048X16) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	5.0	0.5	Inc. seg. avg. 9.987	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.3	0.8	Inc. frq. avg. 7.480	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00



Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	114.9	108.4	111.6	114.7	Phase	112.4
	7.5	7.2	7.8	7.1	Ampl.	7.4
	221.8	221.5	222.0	221.6	Sbd box	221.7
U/L	586/0	586/0	586/0	586/0	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	Manl PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	6.83986584637E+03	Apriori delay (usec)	6.83991596696E+03	Resid mbdelay (usec)	1.07941E-03	+/- 1.0E-05
Sband delay (usec)	6.83986742958E+03	Apriori clock (usec)	-2.1026323E+03	Resid sbdelay (usec)	-4.85374E-02	+/- 4.0E-05
Phase delay (usec)	6.83991597058E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	3.62444E-06	+/- 1.6E-08
Delay rate (us/s)	-4.91422031354E-01	Apriori rate (us/s)	-4.91422334748E-01	Resid rate (us/s)	3.03394E-07	+/- 9.0E-11
Total phase (deg)	458.9	Apriori accel (us/s/s)	-6.49035357682E-05	Resid phase (deg)	317.2	+/- 0.5

RMS Theor. Amplitude 7.439 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 51.7 1.6 Search (2048X16) 7.261 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

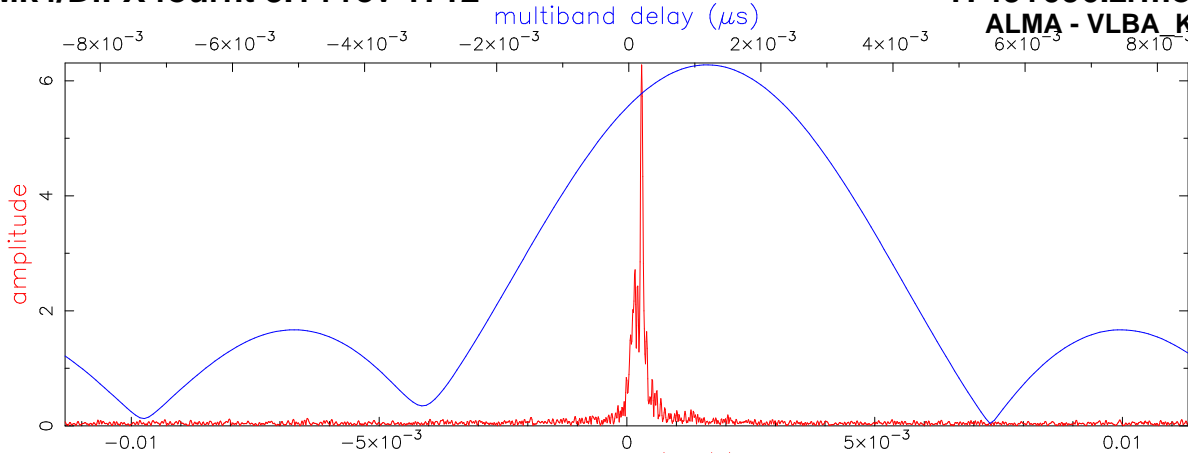
amp/seg (%) 46.4 2.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 3.7 0.5 Inc. seg. avg. 9.932 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

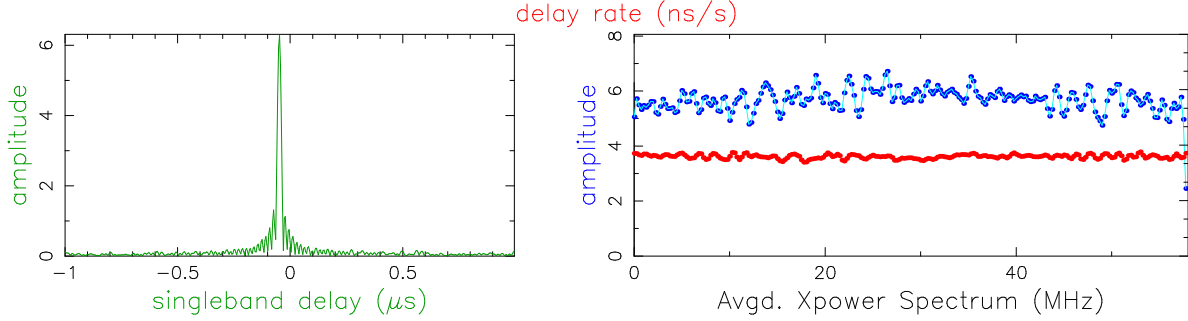
amp/frq (%) 3.6 0.8 Inc. frq. avg. 7.396 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 49.3 el 43.3 pa -134.9 k: az 88.1 el 15.3 pa -59.3 u,v (fr/asec) 2783.097 -8894.602 simultaneous interpolator

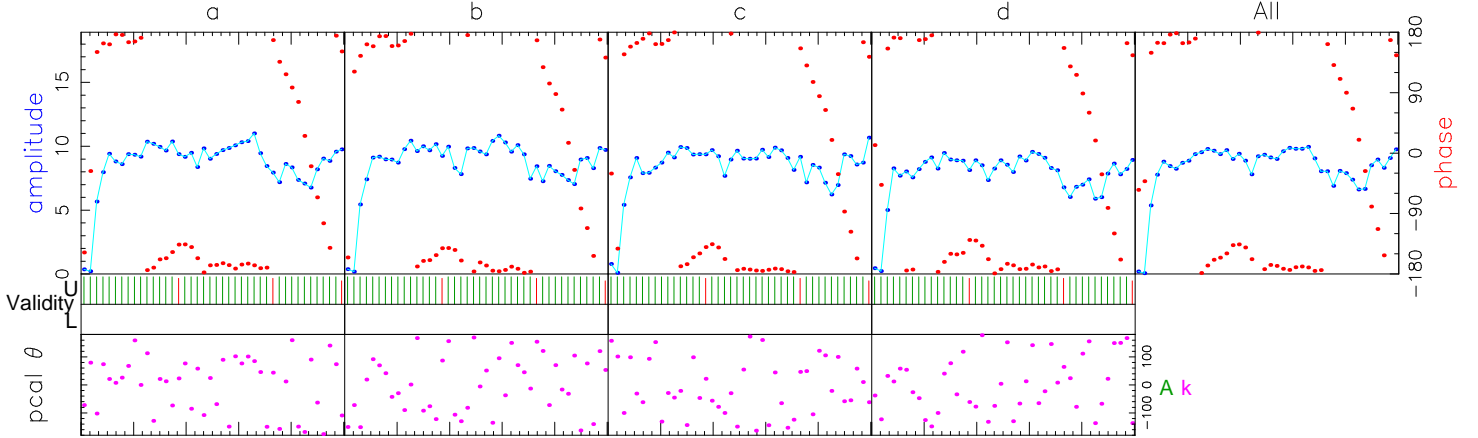
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak.W.21.zrmlx



Fringe quality 5
 SNR 200.8
 Int time 298.905
 Amp 6.311
 Phase 29.3
 PFD 0.0e+00
 Delays (us)
 SBD -0.048361
 MBD 0.001167
 Fringe rate (Hz) 0.026115
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134335
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"

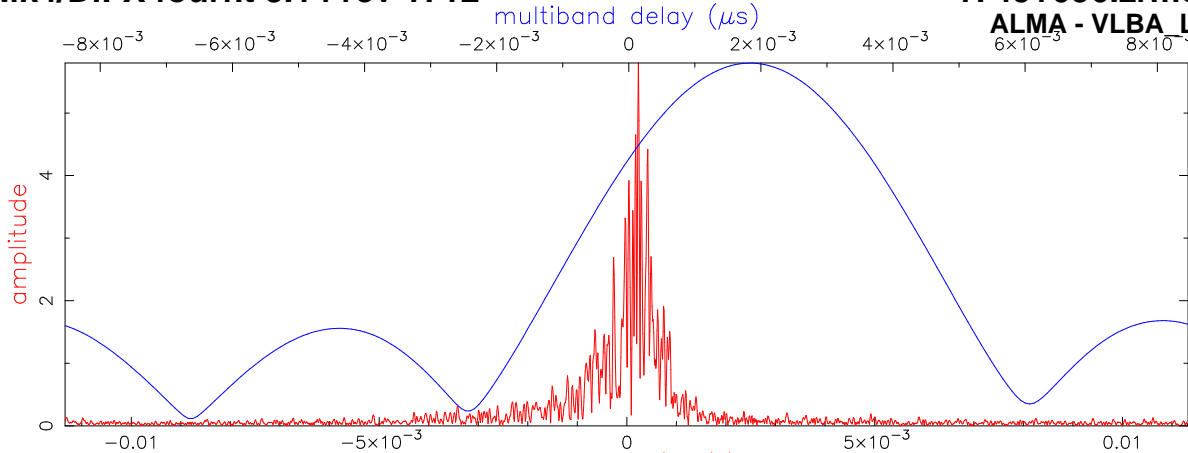


Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-173.5	-178.0	-177.8	-172.4	Phase	-175.5
	6.6	6.5	6.3	5.9	Ampl.	6.3
	221.8	221.7	222.0	221.7	Sbd box	221.8
U/L	586/0	586/0	586/0	586/0	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	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	6.83986593430E+03	Apriori delay (usec)	6.83991596696E+03	Resid mbdelay (usec)	1.16734E-03	+/- 1.2E-05
Sband delay (usec)	6.83986760585E+03	Apriori clock (usec)	-2.1026323E+03	Resid sbdelay (usec)	-4.83611E-02	+/- 4.7E-05
Phase delay (usec)	6.83991596130E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	-5.65823E-06	+/- 1.8E-08
Delay rate (us/s)	-4.91422031576E-01	Apriori rate (us/s)	-4.91422334748E-01	Resid rate (us/s)	3.03172E-07	+/- 1.1E-10
Total phase (deg)		Apriori accel (us/s/s)	-6.49035357682E-05	Resid phase (deg)	29.3	+/- 0.6

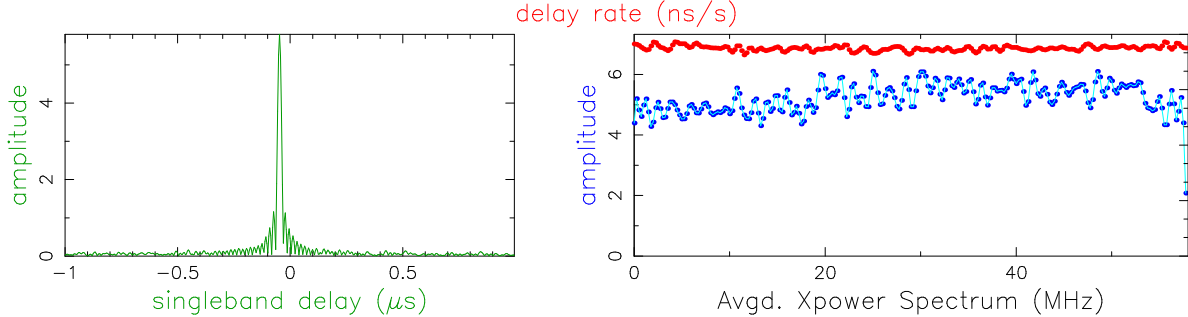
RMS Theor. Amplitude 6.311 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 57.5 1.8 Search (2048X16) 6.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 45.5 3.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 3.5 0.6 Inc. seg. avg. 8.280 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 4.2 1.0 Inc. frq. avg. 6.286 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00
 A: az 49.3 el 43.3 pa -134.9 k: az 88.1 el 15.3 pa -59.3 u,v (fr/asec) 2783.097 -8894.602 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ak.W.22.zrmlx



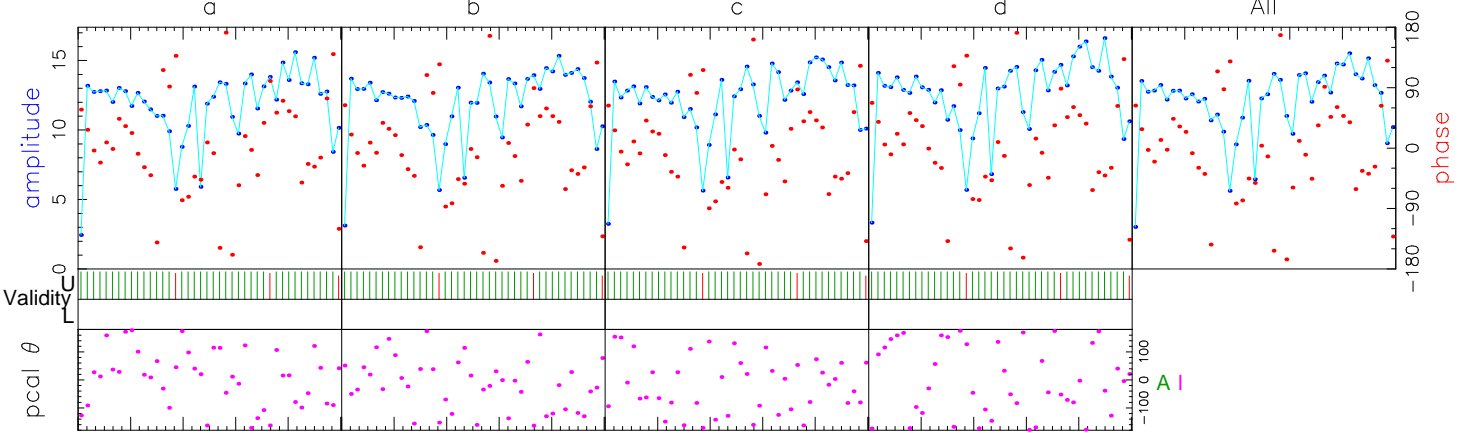
Fringe quality 5

SNR 184.6
Int time 298.907
Amp 5.800
Phase 207.1
PFD 0.0e+00
Delays (us)
SBD -0.047486
MBD 0.001836
Fringe rate (Hz) 0.020323
Ion TEC 0.000
Ref freq (MHz) 86140.000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134337
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s +9°39' 0.728"



Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



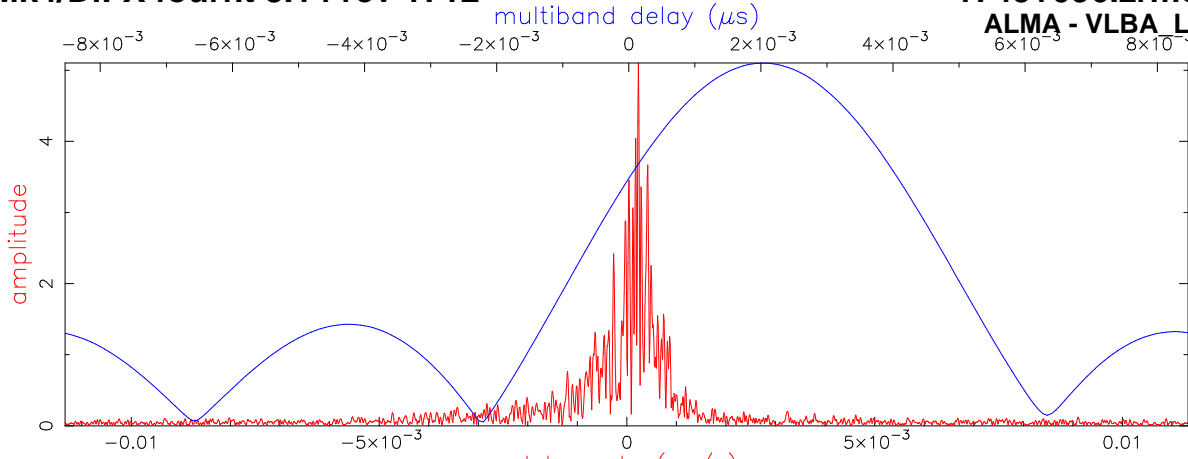
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	APs used	
I	3890	296	1703	3109	PC freqs	
A:I	0:0	0:0	0:0	0:0	PC phase	
A:I	0:0	0:0	0:0	0:0	ManI PC	
A	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	5.27750198121E+03	Apriori delay (usec)	5.27755134539E+03	Resid mbdelay (usec)	1.83583E-03	+/-	1.3E-05
Sband delay (usec)	5.27750385904E+03	Apriori clock (usec)	-2.1013499E+03	Resid sbdelay (usec)	-4.74863E-02	+/-	5.2E-05
Phase delay (usec)	5.27755134546E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	7.59686E-08	+/-	2.0E-08
Delay rate (us/s)	-4.05266967553E-01	Apriori rate (us/s)	-4.05267203488E-01	Resid rate (us/s)	2.35934E-07	+/-	1.2E-10
Total phase (deg)	528.1	Apriori accel (us/s/s)	-5.76356043139E-05	Resid phase (deg)	207.1	+/-	0.6

ph/seg (deg)	74.6	Theor.	2.0	Amplitude	5.800 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	116.2	Search (2048X16)	0.000	Search	5.640	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	5.9	Interp.	0.000	Inc. seg. avg.	12.053	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	2.3	Inc. frq. avg.	5.815	Inc. frq. avg.	5.815	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 49.3 el 43.3 pa -134.9 I: az 92.3 el 19.8 pa -55.3 u,v (fr/asec) 2288.352 -9278.898 simultaneous interpolator

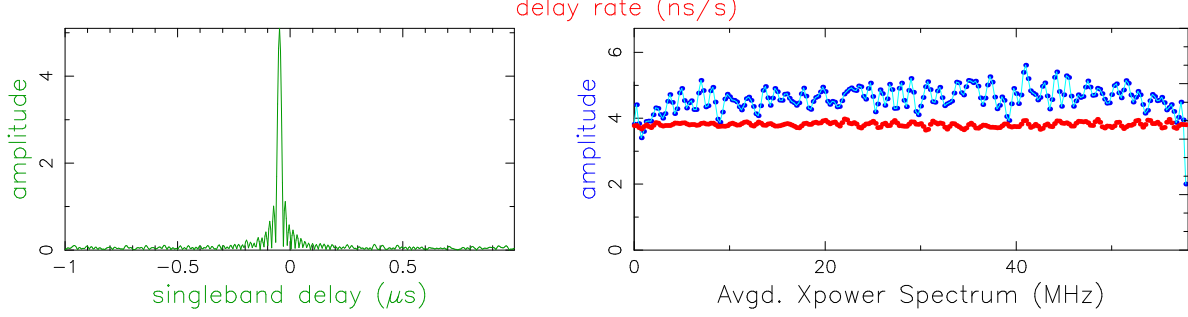
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI..zrmolx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI.W.23.zrmolx



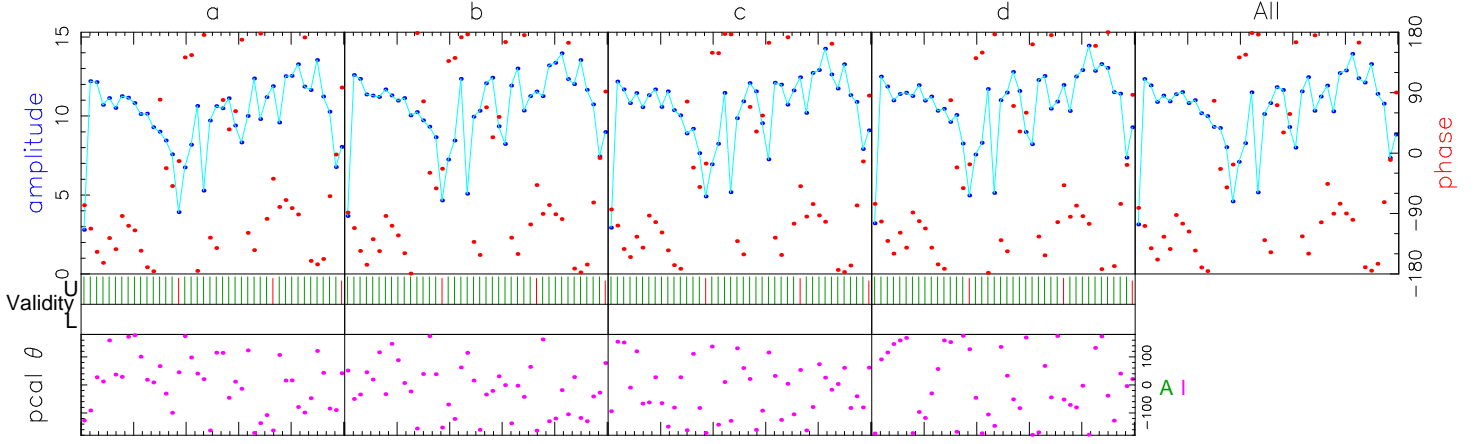
Fringe quality 5

SNR 162.4
Int time 298.907
Amp 5.102
Phase 70.6
PFD 0.0e+00
Delays (us)
SBD -0.047562
MBD 0.002035
Fringe rate (Hz)
0.020344
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134338
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"



Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	All
-132.2	-136.8	-134.6	-133.0	Phase	-134.2
4.9	5.1	5.1	5.2	Ampl.	5.1
221.8	222.1	221.9	222.1	Sbd box	222.0
U/L 586/0	586/0	586/0	586/0	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 W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd) 5.27750217994E+03 Apriori delay (usec) 5.27755134539E+03 Resid mbdelay (usec) 2.03455E-03 +/- 1.5E-05

Sband delay (usec) 5.27750378318E+03 Apriori clock (usec) -2.1013499E+03 Resid sbdelay (usec) -4.75622E-02 +/- 5.9E-05

Phase delay (usec) 5.27755134106E+03 Apriori clockrate (us/s) 1.8626131E-06 Resid phdelay (usec) -4.32623E-06 +/- 2.3E-08

Delay rate (us/s) -4.05266967313E-01 Apriori rate (us/s) -4.05267203488E-01 Resid rate (us/s) 2.36174E-07 +/- 1.3E-10

Total phase (deg) 391.6 Apriori accel (us/s/s) -5.76356043139E-05 Resid phase (deg) 70.6 +/- 0.7

RMS 73.8 Theor. 2.3 Amplitude 5.102 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 73.8 2.3 Search (2048X16) 4.987 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

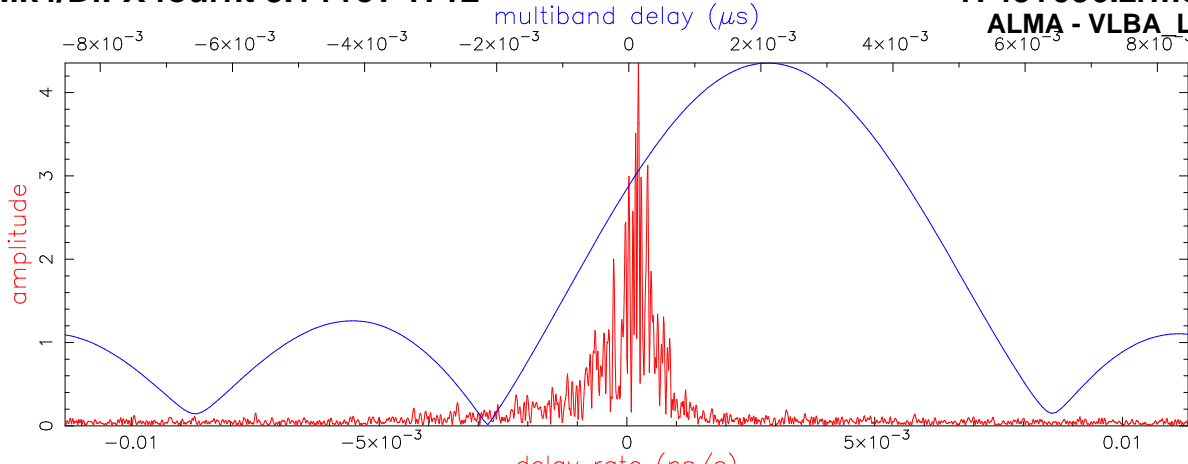
amp/seg (%) 112.0 4.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 2.5 0.7 Inc. seg. avg. 10.333 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 2.1 1.2 Inc. frq. avg. 5.104 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 49.3 el 43.3 pa -134.9 I: az 92.3 el 19.8 pa -55.3 u,v (fr/asec) 2288.352 -9278.898 simultaneous interpolator

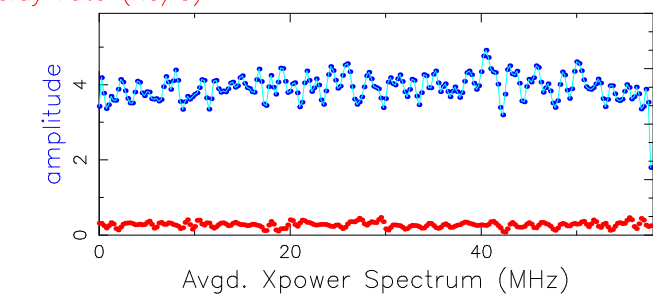
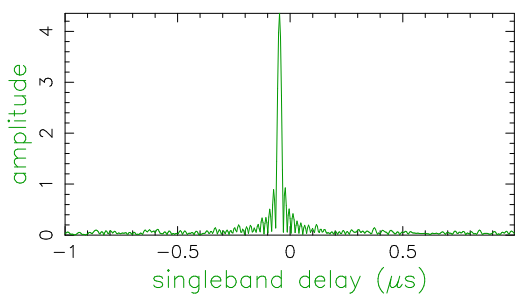
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI.zrmolx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI.W.24.zrmolx



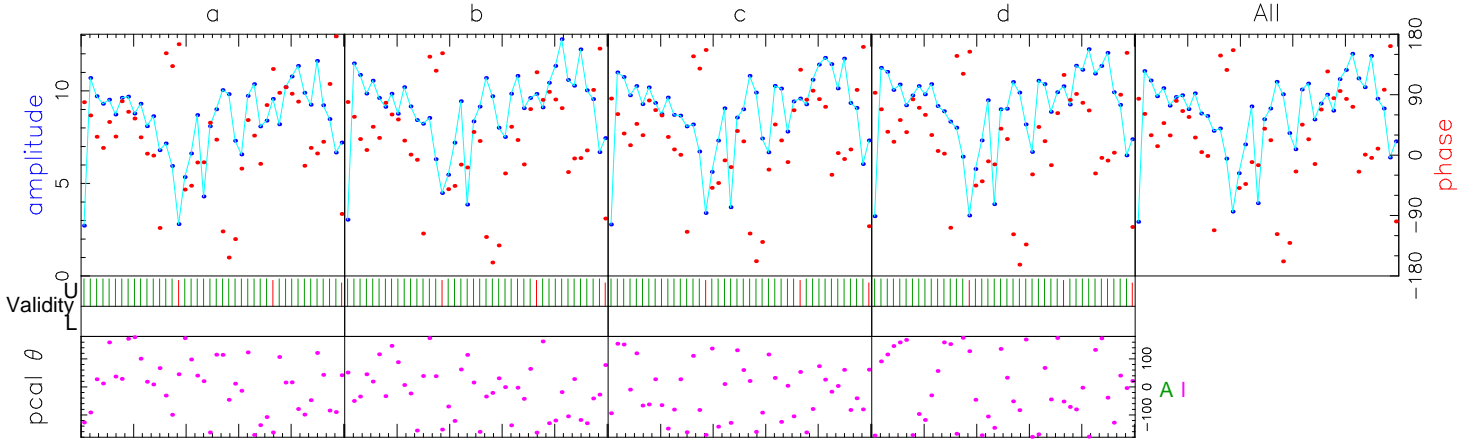
Fringe quality 5

SNR 138.6
Int time 298.907
Amp 4.356
Phase 242.2
PFD 0.0e+00
Delays (us)
SBD -0.047633
MBD 0.002101
Fringe rate (Hz) 0.020323
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134340
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s
+9°39' 0.728"



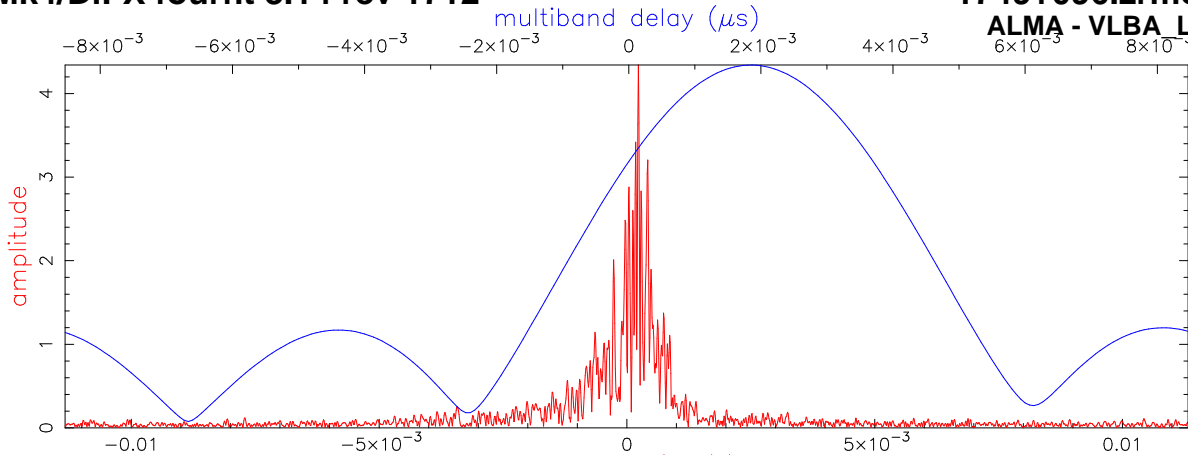
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	APs used	
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	

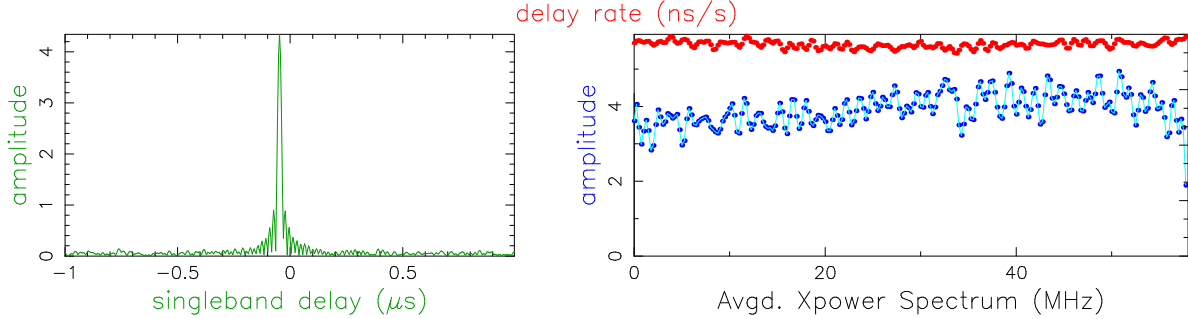
Group delay (usec)(sbd)	5.27750224650E+03	Apriori delay (usec)	5.27755134539E+03	Resid mbdelay (usec)	2.10111E-03	+/- 1.8E-05
Sband delay (usec)	5.27750371201E+03	Apriori clock (usec)	-2.1013499E+03	Resid sbdelay (usec)	-4.76334E-02	+/- 6.9E-05
Phase delay (usec)	5.27755134659E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	1.20711E-06	+/- 2.7E-08
Delay rate (us/s)	-4.05266967563E-01	Apriori rate (us/s)	-4.05267203488E-01	Resid rate (us/s)	2.35925E-07	+/- 1.5E-10
Total phase (deg)	563.2	Apriori accel (us/s/s)	-5.76356043139E-05	Resid phase (deg)	242.2	+/- 0.8

ph/seg (deg)	74.2	Theor.	2.7	Amplitude	4.356 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	112.4	Search (2048X16)	4.270	Search	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	2.8	Interp.	0.000	Inc. seg. avg.	8.789	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	4.3	Inc. frq. avg.	4.357	Inc. frq. avg.	4.357	Sample rate(MSamp/s): 116	ion window (TEC)	0.00 0.00	
						Data rate(Mb/s): 928	nlags: 232	t_cohere infinite	



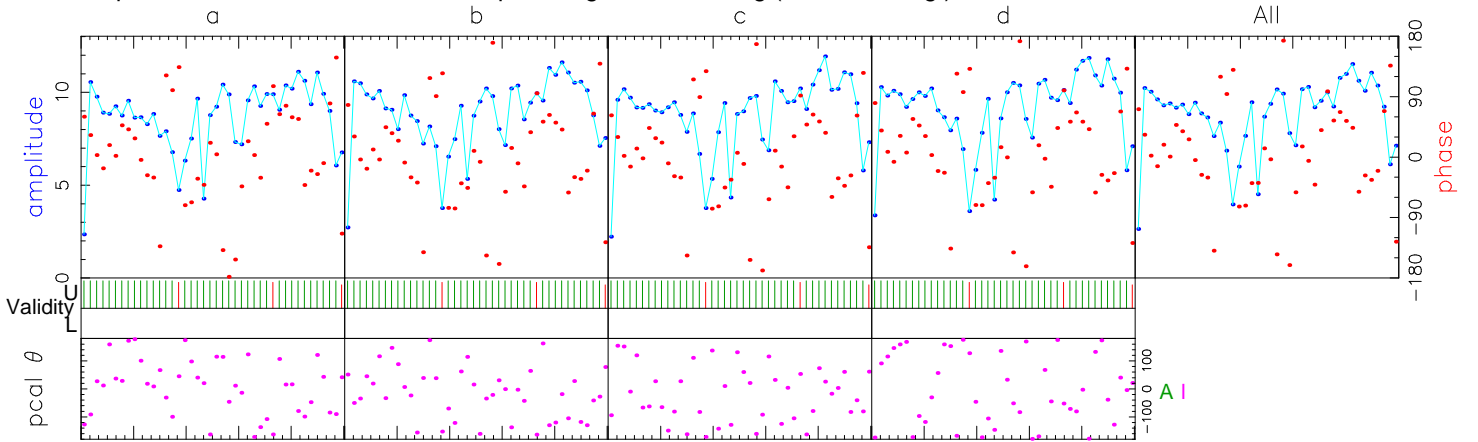
Fringe quality 5

SNR 138.2
Int time 298.907
Amp 4.343
Phase 213.1
PFD 0.0e+00
Delays (us)
SBD -0.047487
MBD 0.001848
Fringe rate (Hz)
0.020303
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



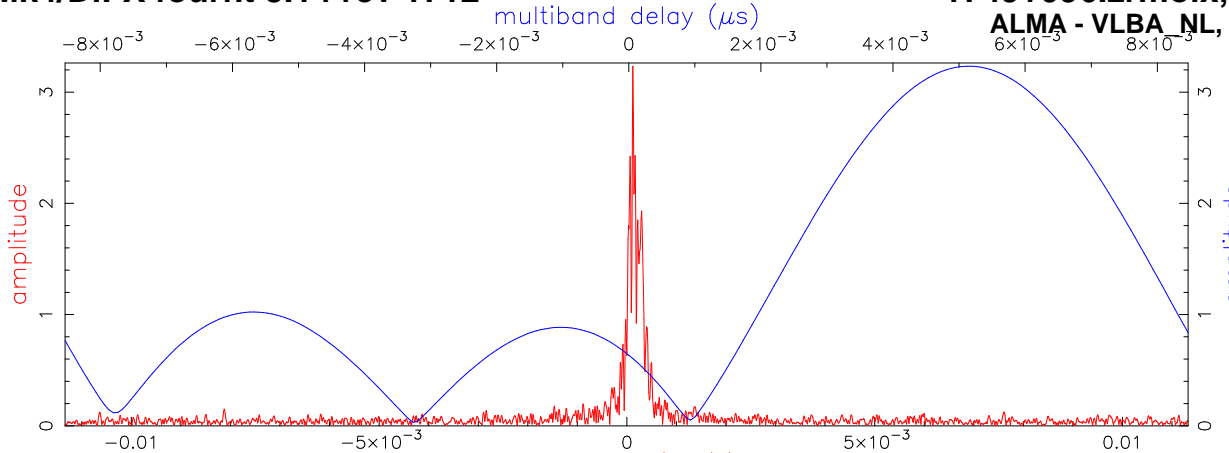
Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build
2017:237:142410
2017:243:134342
2017:170:130423
RA & Dec (J2000)
17h51m32.8186s
+9°39' 0.728"

Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

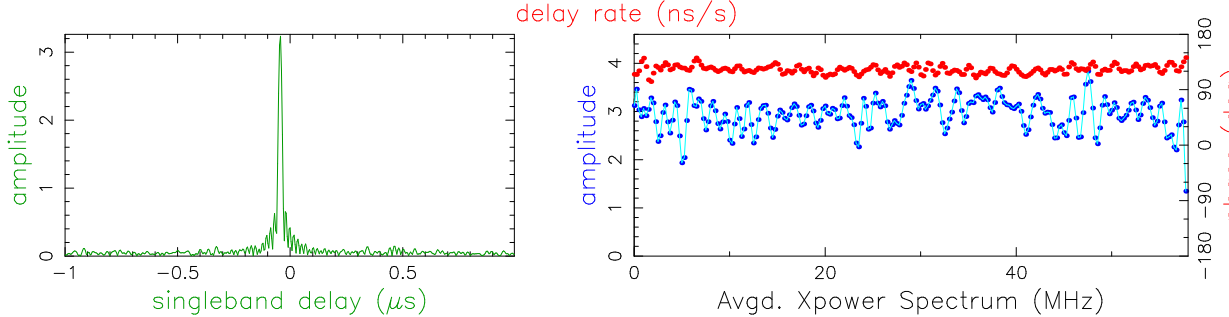


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
12.4	4.7	3.7	12.5	Phase	8.3
4.2	4.4	4.4	4.5	Ampl.	4.4
221.9	221.9	222.0	222.1	Sbd box	222.0
U/L 586/0	586/0	586/0	586/0	APs used	
A 0	0	0	0	PC freqs	
I 3890	296	1703	3109	PC freqs	
A:I 0:0	0:0	0:0	0:0	PC phase	
A:I 0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	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)	5.27750199377E+03	Apriori delay (usec)	5.27755134539E+03	Resid mbdelay (usec)	1.84839E-03 +/- 1.8E-05
Sband delay (usec)	5.27750385794E+03	Apriori clock (usec)	-2.1013499E+03	Resid sbdelay (usec)	-4.74874E-02 +/- 6.9E-05
Phase delay (usec)	5.27755134566E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	2.67965E-07 +/- 2.7E-08
Delay rate (us/s)	-4.05266967790E-01	Apriori rate (us/s)	-4.05267203488E-01	Resid rate (us/s)	2.35697E-07 +/- 1.5E-10
Total phase (deg)	534.1	Apriori accel (us/s/s)	-5.76356043139E-05	Resid phase (deg)	213.1 +/- 0.8

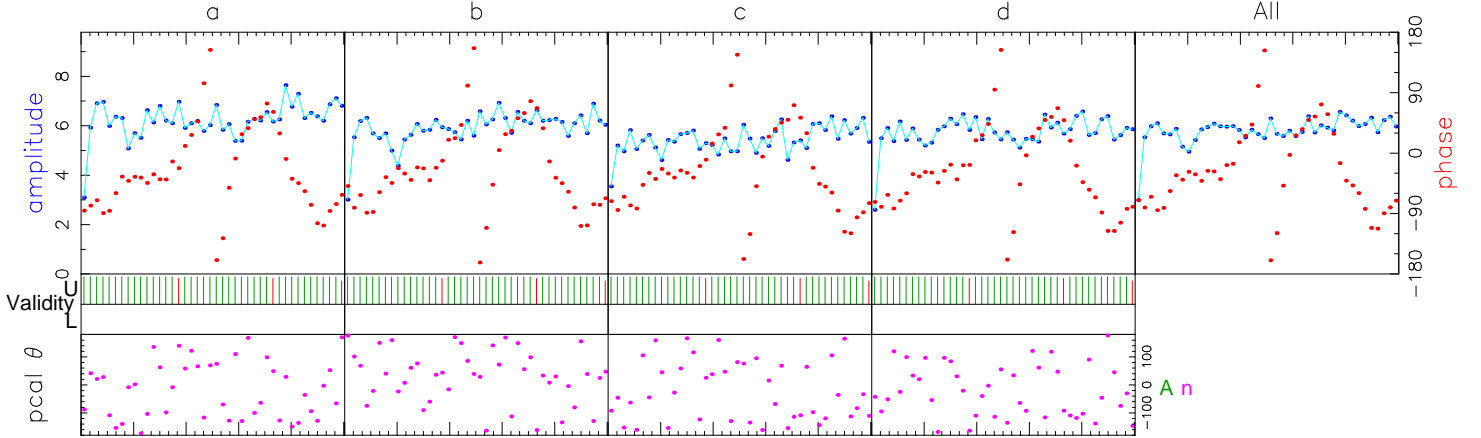
RMS Theor. Amplitude 4.343 +/- 0.031
ph/seg (deg) 74.2 2.7 Search (2048X16) 4.234
amp/seg (%) 111.8 4.7 Interp. 0.000
ph/frq (deg) 5.8 0.8 Inc. seg. avg. 8.802
amp/frq (%) 2.3 1.4 Inc. frq. avg. 4.354
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -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 49.3 el 43.3 pa -134.9 I: az 92.3 el 19.8 pa -55.3 u,v (fr/asec) 2288.352 -9278.898 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI.zrmolx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AI.W.26.zrmolx



Fringe quality 5
 SNR 103.8
 Int time 298.906
 Amp 3.262
 Phase 170.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.044383
 MBD 0.005123
 Fringe rate (Hz) 0.010652
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134344
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



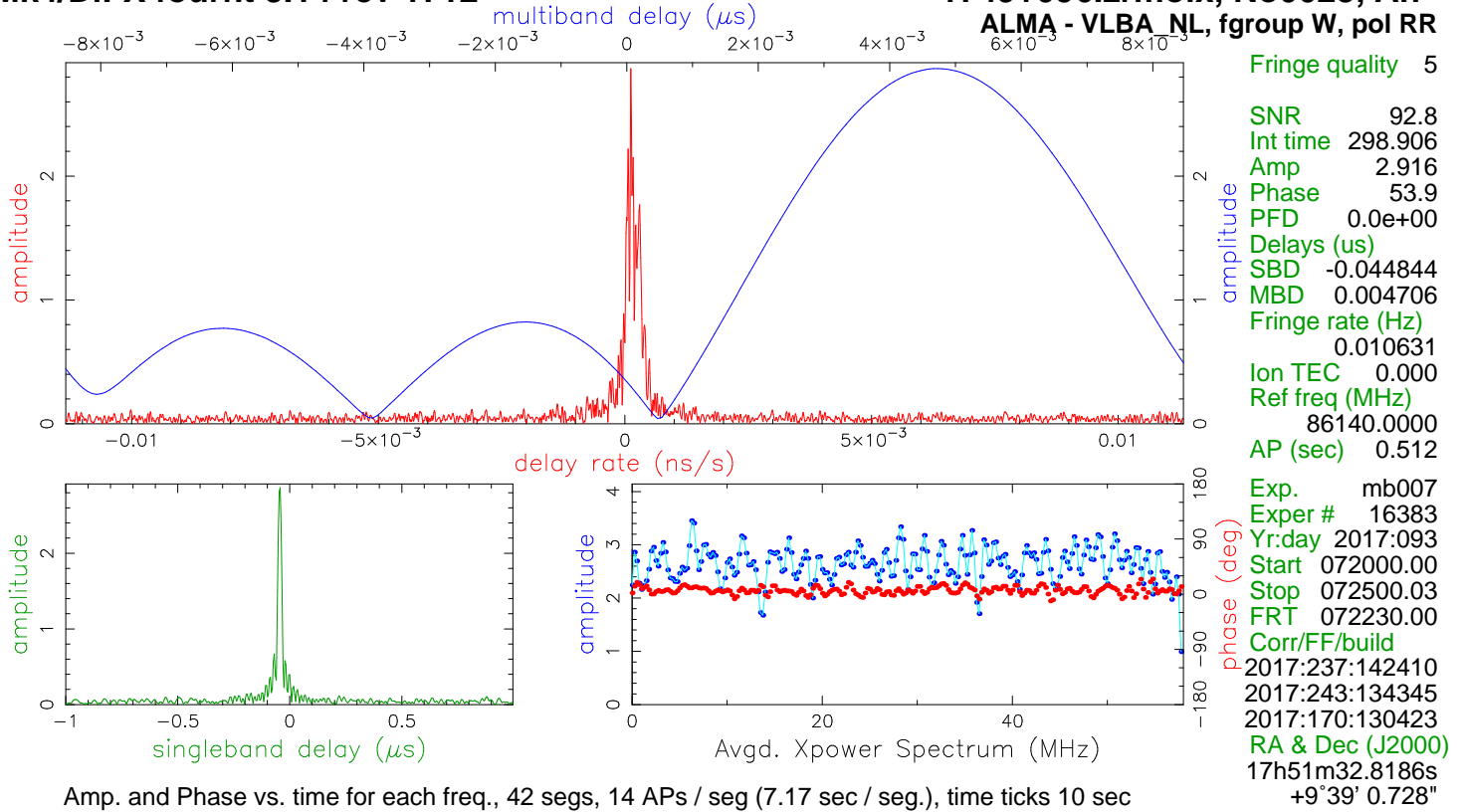
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



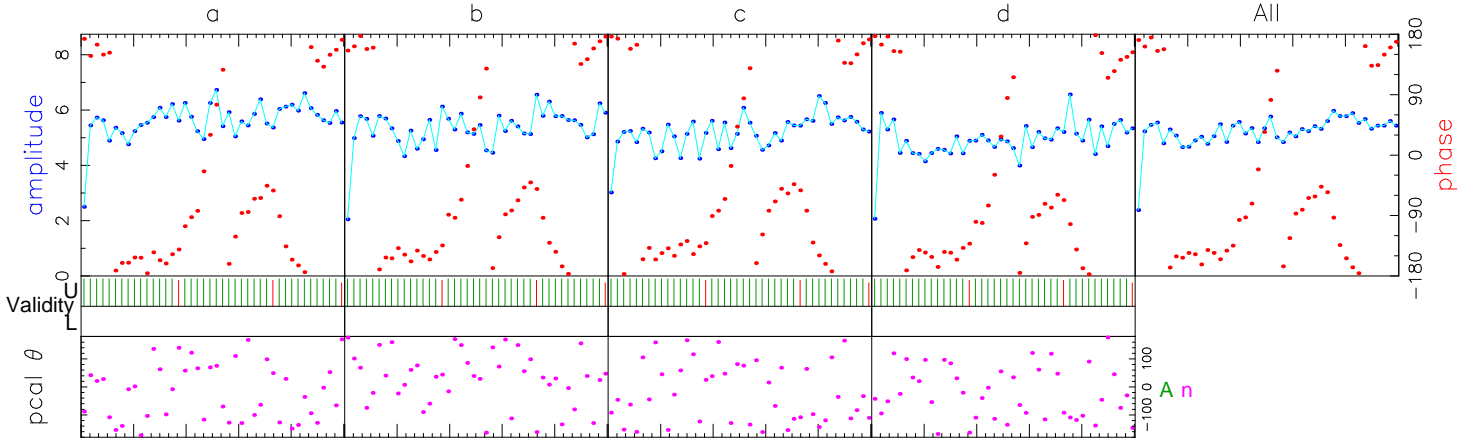
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-36.1	-30.9	-35.4	-33.1	Phase	-33.9
	3.5	3.2	3.0	3.2	Ampl.	3.2
	222.7	222.7	222.5	223.0	Sbd box	222.7
U/L	586/0	586/0	586/0	586/0	APs used	
A	0	0	0	0	PC freqs	
n	3890	296	1703	3109	PC freqs	
A:n	0:0	0:0	0:0	0:0	PC phase	
A:n	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	1.79305294767E+03	Apriori delay (usec)	1.79309902424E+03	Resid mbdelay (usec)	5.12342E-03	+/-	2.3E-05
Sband delay (usec)	1.79305464162E+03	Apriori clock (usec)	-2.1111025E+03	Resid sbdelay (usec)	-4.43826E-02	+/-	9.2E-05
Phase delay (usec)	1.79309902315E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-1.09360E-06	+/-	3.6E-08
Delay rate (us/s)	-1.84630496875E-01	Apriori rate (us/s)	-1.84630620539E-01	Resid rate (us/s)	1.23665E-07	+/-	2.1E-10
Total phase (deg)	512.2	Apriori accel (us/s/s)	-4.06983301920E-05	Resid phase (deg)	170.9	+/-	1.1

ph/seg (deg)	62.6	RMS	62.6	Theor.	3.6	Amplitude	3.262 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	79.8		6.2	Search (2048X16)	3.201	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)	2.9		1.1	Inc. seg. avg.	5.796	Inc. seg. avg.	5.796	Bits/sample:	2x2	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	5.0		1.9	Inc. frq. avg.	3.235	Inc. frq. avg.	3.235	Sample rate(MSamp/s):	116	ion window (TEC)	0.00	0.00		



Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

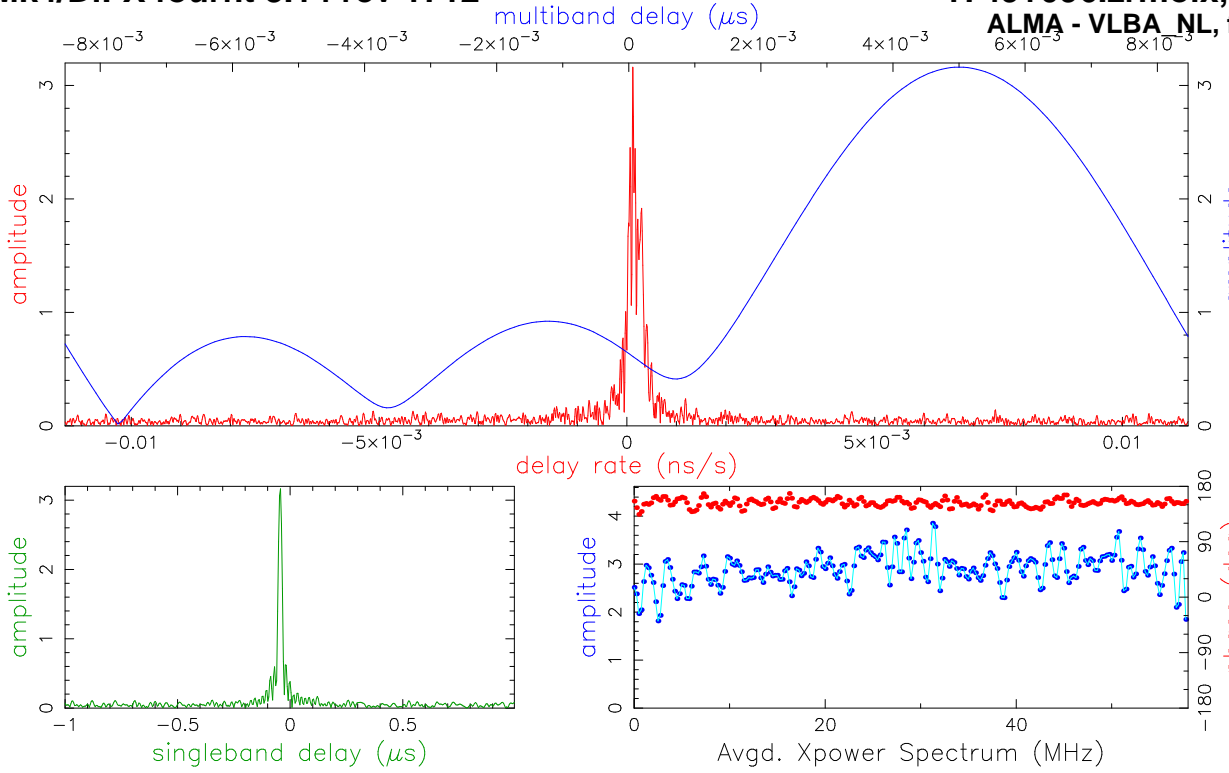


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-154.8	-148.3	-145.4	-154.7	Phase	-150.9
	3.1	3.0	2.8	2.7	Ampl.	2.9
	222.6	222.5	222.8	222.7	Sbd box	222.6
U/L	586/0	586/0	586/0	586/0	APs used	
A	0	0	0	0	PC freqs	
n	3890	296	1703	3109	PC freqs	
A:n	0:0	0:0	0:0	0:0	PC phase	
A:n	0:0	0:0	0:0	0:0	Mani 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)	1.79305252980E+03	Apriori delay (usec)	1.79309902424E+03	Resid mbdelay (usec)	4.70556E-03	+/- 2.6E-05
Sband delay (usec)	1.79305418038E+03	Apriori clock (usec)	-2.1111025E+03	Resid sbdelay (usec)	-4.48439E-02	+/- 1.0E-04
Phase delay (usec)	1.79309901938E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-4.86518E-06	+/- 4.0E-08
Delay rate (us/s)	-1.84630497122E-01	Apriori rate (us/s)	-1.84630620539E-01	Resid rate (us/s)	1.23417E-07	+/- 2.3E-10
Total phase (deg)		Apriori accel (us/s/s)	-4.06983301920E-05	Resid phase (deg)	53.9	+/- 1.2

	RMS	Theor.	Amplitude	2.916 +/- 0.031	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	62.8	4.0	Search (2048X16)	2.807	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	81.5	7.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
ph/frq (deg)	5.8	1.2	Inc. seg. avg.	5.216	Sample rate(MSamp/s): 116	dr window (ns/s) -0.011 0.011
amp/frq (%)	5.2	2.2	Inc. frq. avg.	2.875	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 49.3 el 43.3 pa -134.9 n: az 105.1 el 30.2 pa -46.8 u,v (fr/asec) 1020.714 -9759.239 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/An..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/An.W.28.zrmlx

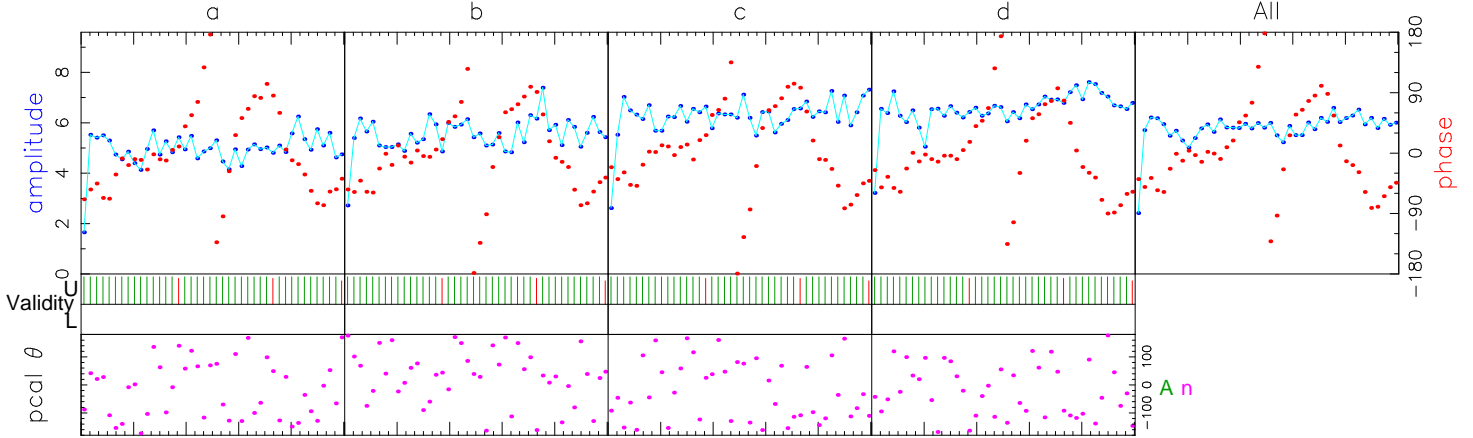


Fringe quality 5

SNR 101.8
Int time 298.906
Amp 3.199
Phase 200.5
PFD 0.0e+00
Delays (us)
SBD -0.044576
MBD 0.004979
Fringe rate (Hz) 0.010665
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134347
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s +9°39' 0.728"

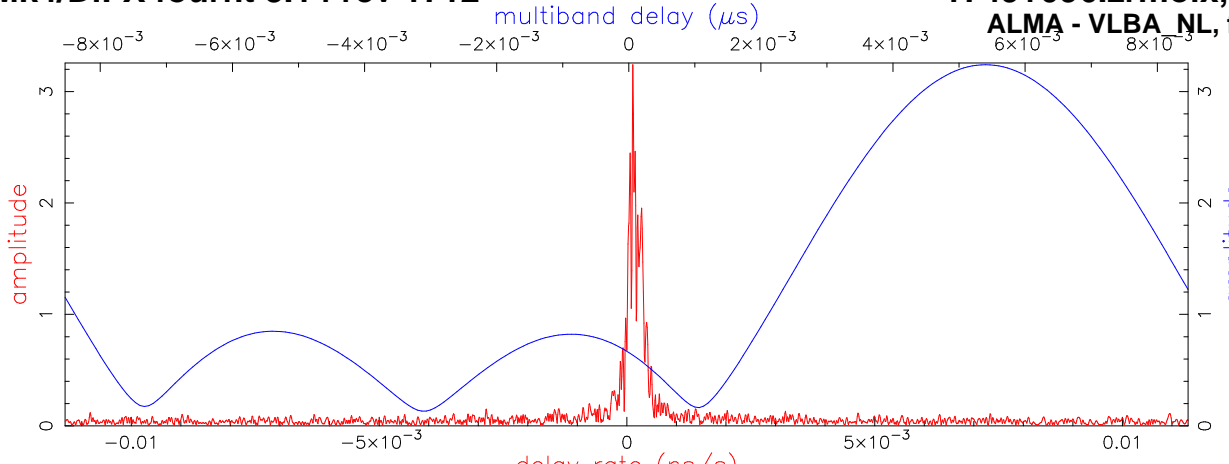
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



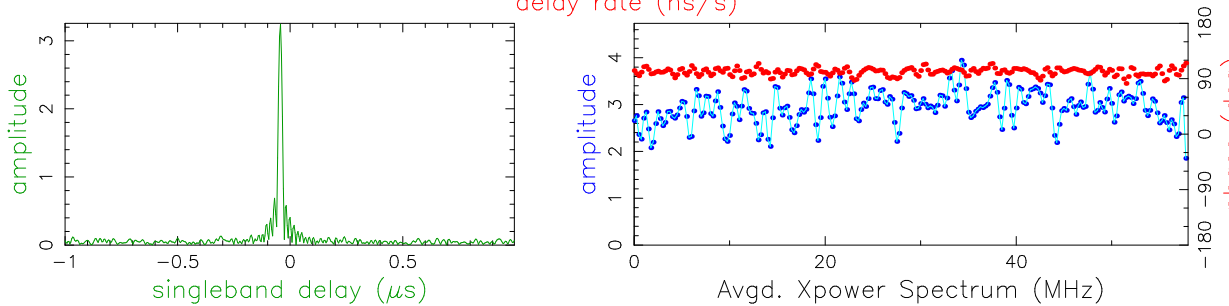
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	APs used	
n	3890	296	1703	3109	PC freqs	
A:n	0:0	0:0	0:0	0:0	PC phase	
A:n	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	1.79305280362E+03	Apriori delay (usec)	1.79309902424E+03	Resid mbdelay (usec)	4.97938E-03	+/-	2.4E-05
Sband delay (usec)	1.79305444852E+03	Apriori clock (usec)	-2.1111025E+03	Resid sbdelay (usec)	-4.45757E-02	+/-	9.3E-05
Phase delay (usec)	1.79309902411E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-1.36456E-07	+/-	3.6E-08
Delay rate (us/s)	-1.84630496733E-01	Apriori rate (us/s)	-1.84630620539E-01	Resid rate (us/s)	1.23806E-07	+/-	2.1E-10
Total phase (deg)	541.9	Apriori accel (us/s/s)	-4.06983301920E-05	Resid phase (deg)	200.5	+/-	1.1

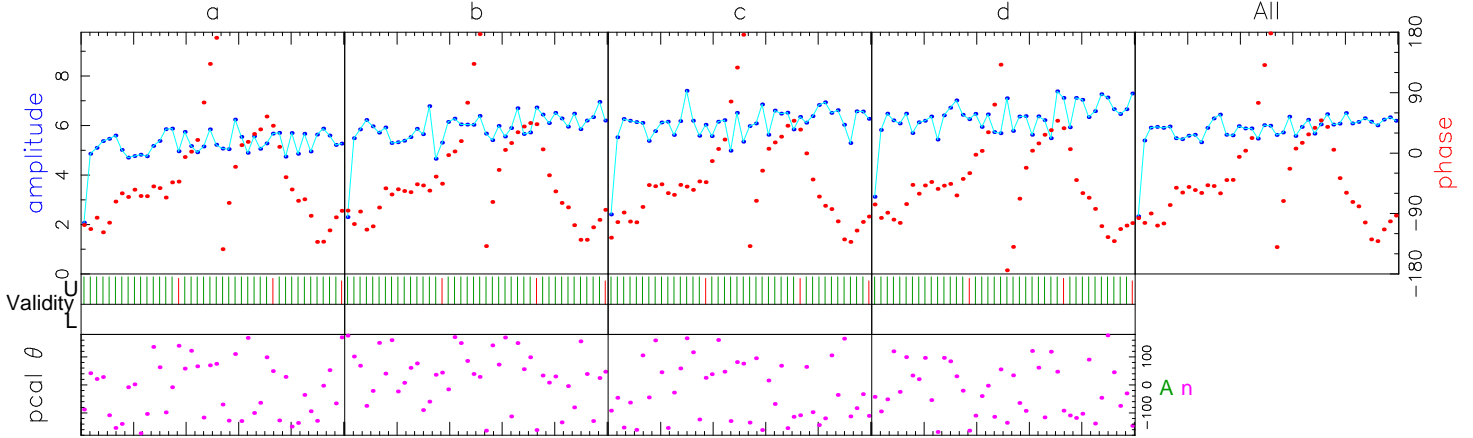
ph/seg (deg)	63.2	Theor.	3.6	Amplitude	3.199 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	83.1	Search (2048X16)	3.106	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	7.4	Interp.	0.000	Inc. seg. avg.	5.774	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	10.9	Inc. frq. avg.	3.175	Inc. frq. avg.	3.175	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



Fringe quality 5
 SNR 103.6
 Int time 298.906
 Amp 3.257
 Phase 149.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.044055
 MBD 0.005384
 Fringe rate (Hz) 0.010597
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134348
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



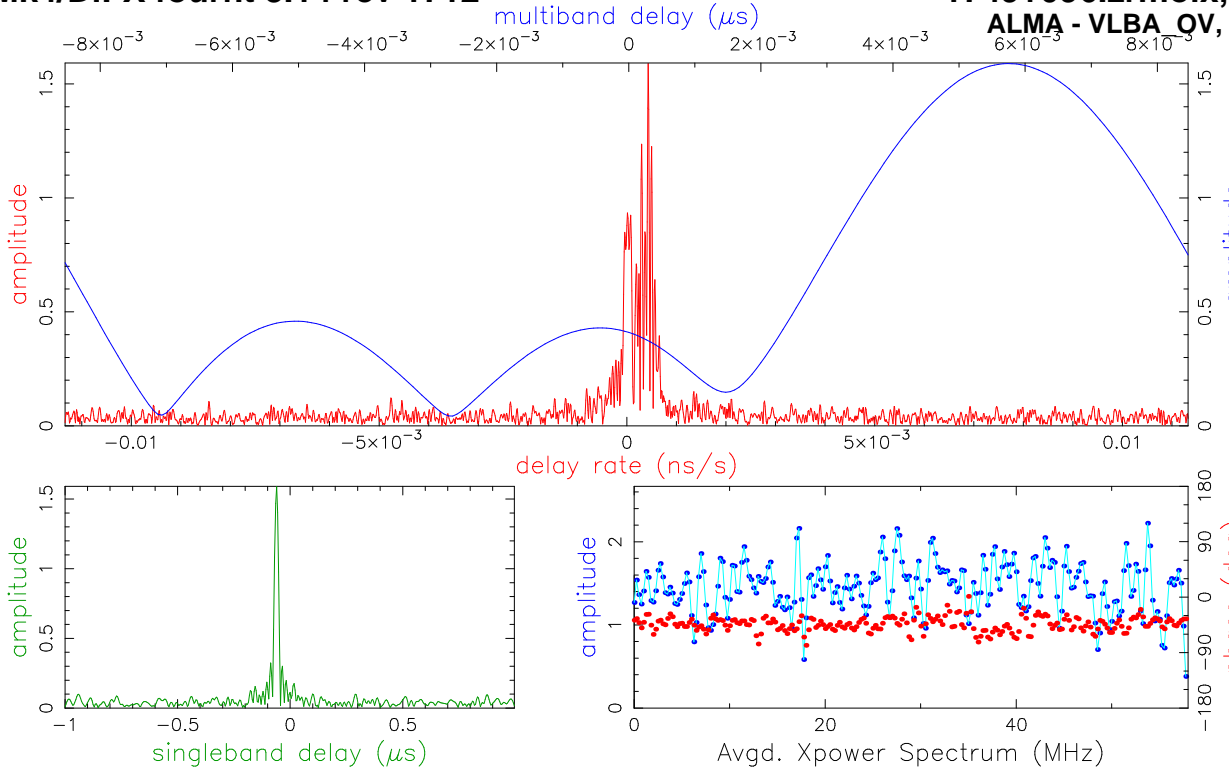
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-55.5	-54.7	-55.2	-54.1	Phase	-54.9
	2.8	3.2	3.4	3.5	Ampl.	3.2
	222.7	222.8	222.6	223.0	Sbd box	222.8
U/L	586/0	586/0	586/0	586/0	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	Manl PC	
A	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

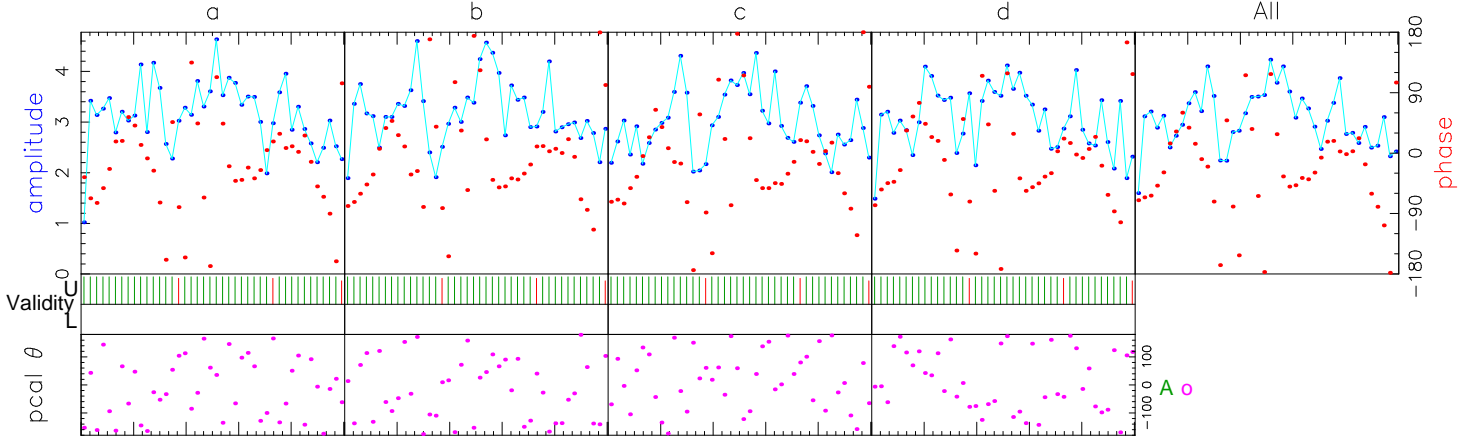
Group delay (usec)(sbd)	1.79305320783E+03	Apriori delay (usec)	1.79309902424E+03	Resid mbdelay (usec)	5.38359E-03	+/-	2.3E-05
Sband delay (usec)	1.79305496962E+03	Apriori clock (usec)	-2.1111025E+03	Resid sbdelay (usec)	-4.40546E-02	+/-	9.2E-05
Phase delay (usec)	1.79309902247E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-1.76920E-06	+/-	3.6E-08
Delay rate (us/s)	-1.84630497523E-01	Apriori rate (us/s)	-1.84630620539E-01	Resid rate (us/s)	1.23016E-07	+/-	2.1E-10
Total phase (deg)	491.3	Apriori accel (us/s/s)	-4.06983301920E-05	Resid phase (deg)	149.9	+/-	1.1

ph/seg (deg)	62.6	RMS	3.6	Theor.	3.257 +/- 0.031	Search (2048X16)	3.229	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	81.9	62.6	3.6	62.6	3.6	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.8	81.9	6.3	0.8	6.3	Inc. seg. avg.	5.836	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	8.8	0.8	1.1	8.8	1.1	Inc. frq. avg.	3.241	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
		8.8	1.9					Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
								nlags:	232	ion window (TEC)	0.00 0.00



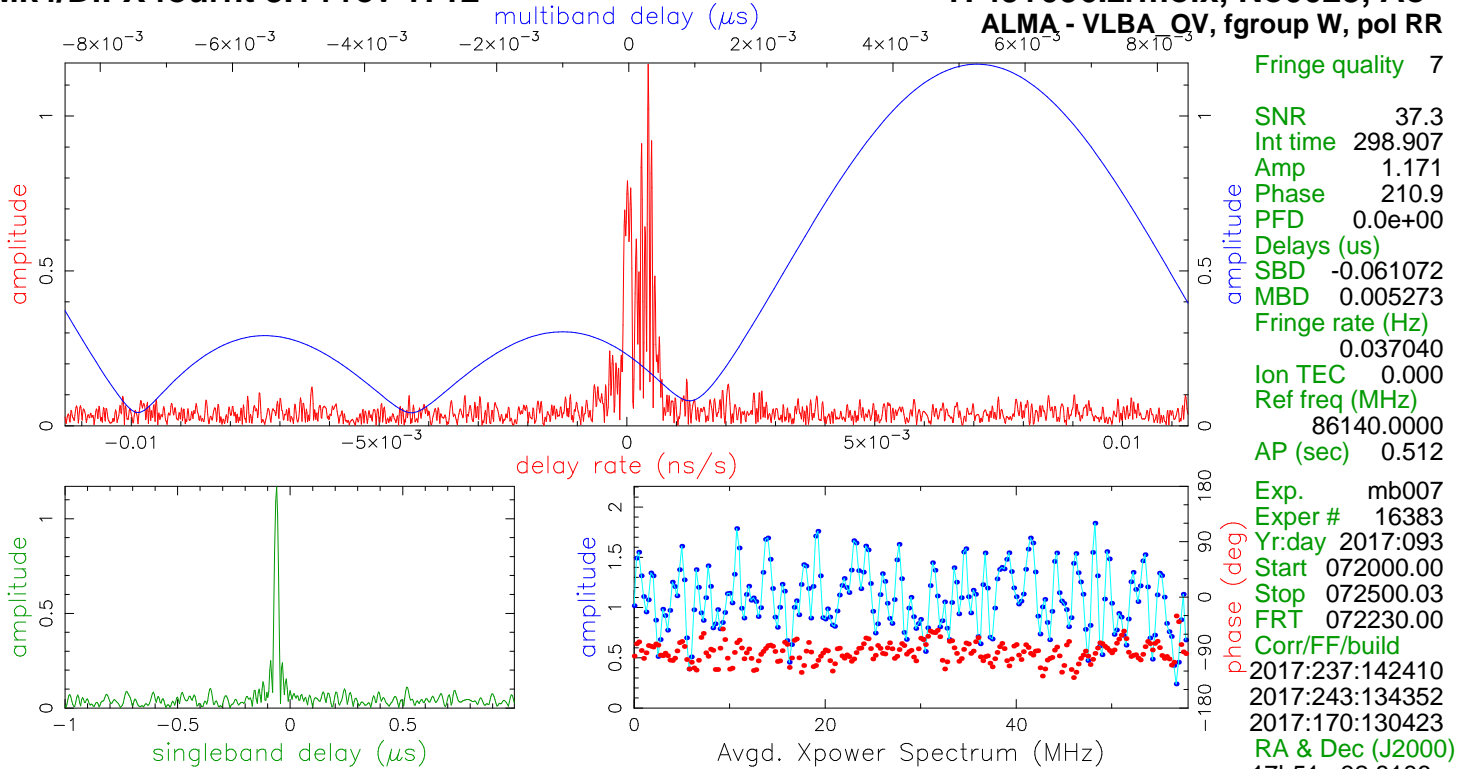
Fringe quality 7
SNR 50.6
Int time 298.907
Amp 1.592
Phase 254.6
PFD 0.0e+00
Delays (us)
SBD -0.060817
MBD 0.005739
Fringe rate (Hz) 0.036946
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134351
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s
+9°39' 0.728"

Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-14.4	-21.5	-25.4	-12.4	Phase	-18.4
	1.6	1.7	1.5	1.6	Ampl.	1.6
	218.7	218.8	218.9	219.2	Sbd box	218.9
U/L	586/0	586/0	586/0	586/0	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	W00UL	W01UL	W02UL	W03UL	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	8.72497763702E+03	Apriori delay (usec)	8.72504016456E+03	Resid mbdelay (usec)	5.73912E-03	+/- 4.8E-05
Sband delay (usec)	8.72497934774E+03	Apriori clock (usec)	-2.1079048E+03	Resid sbdelay (usec)	-6.08168E-02	+/- 1.9E-04
Phase delay (usec)	8.72504016397E+03	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-5.93286E-07	+/- 7.3E-08
Delay rate (us/s)	-4.36764407641E-01	Apriori rate (us/s)	-4.36764836544E-01	Resid rate (us/s)	4.28903E-07	+/- 4.2E-10
Total phase (deg)	533.8	Apriori accel (us/s/s)	-7.63820698805E-05	Resid phase (deg)	254.6	+/- 2.3

ph/seg (deg) 69.6 7.3 Search (2048X16) 1.553 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 99.3 12.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.4 2.3 Inc. seg. avg. 3.047 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
amp/frq (%) 4.8 4.0 Inc. frq. avg. 1.595 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 49.3 el 43.3 pa -134.9 o: az 85.5 el 10.1 pa -53.7 u,v (fr/asec) 2454.271 -9707.673 simultaneous interpolator
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ao..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ao.W.31.zrmlx



Fringe quality 7

SNR 37.3

Int time 298.907

Amp 1.171

Phase 210.9

PFD 0.0e+00

Delays (us)

SBD -0.061072

MBD 0.005273

Fringe rate (Hz) 0.037040

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. mb007

Exper # 16383

Yr:day 2017:093

Start 072000.00

Stop 072500.03

FRT 072230.00

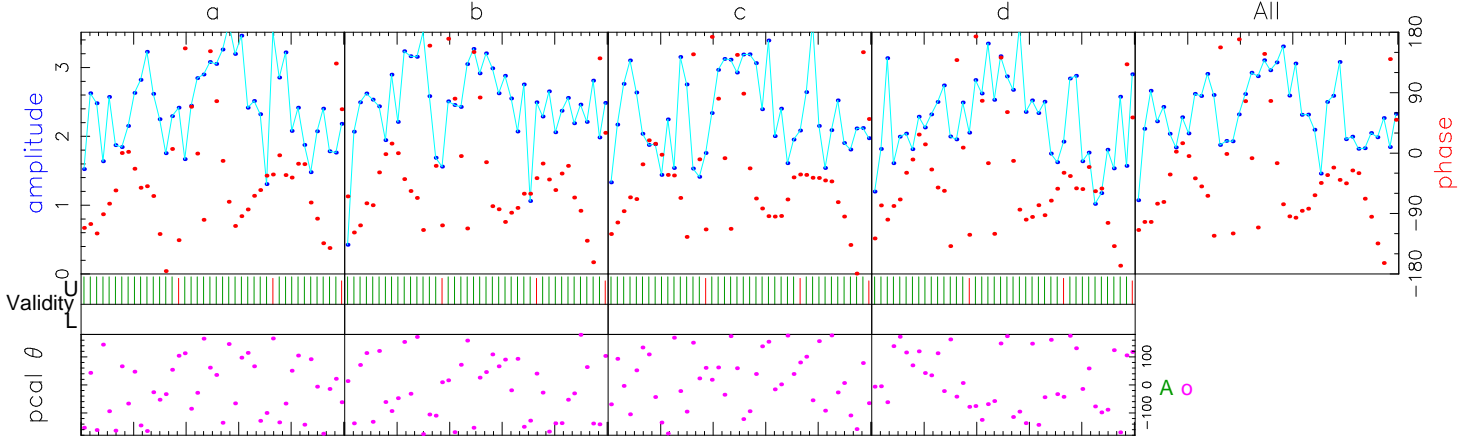
Corr/FF/build 2017:237:142410

2017:243:134352

2017:170:130423

RA & Dec (J2000) 17h51m32.8186s +9°39' 0.728"

Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	All
U/L	586/0	586/0	586/0	586/0	586/0	586/0	586/0
A	0	0	0	0	0	0	0
o	3890	296	1703	3109	3109	3109	3109
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0
A:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000	1000
o	1000	1000	1000	1000	1000	1000	1000
A	W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR
o	W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR
Group delay (usec)(sbd)	8.72497717110E+03	8.72497909229E+03	8.72504016256E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03
Sband delay (usec)	8.72497909229E+03	8.72497909229E+03	8.72504016256E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03
Phase delay (usec)	8.72504016256E+03	8.72504016256E+03	8.72504016256E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03	8.72504016456E+03
Delay rate (us/s)	-4.36764406550E-01	-4.36764406550E-01	-4.36764406550E-01	-4.36764836544E-01	-4.36764836544E-01	-4.36764836544E-01	-4.36764836544E-01
Total phase (deg)		490.1					
Apriori delay (usec)			1.158	1.158	1.158	1.158	1.158
Apriori clock (usec)			1.5021560E-06	1.5021560E-06	1.5021560E-06	1.5021560E-06	1.5021560E-06
Apriori clockrate (us/s)			-4.36764836544E-01	-4.36764836544E-01	-4.36764836544E-01	-4.36764836544E-01	-4.36764836544E-01
Apriori rate (us/s)			-7.63820698805E-05	-7.63820698805E-05	-7.63820698805E-05	-7.63820698805E-05	-7.63820698805E-05
Apriori accel (us/s/s)							
Resid mbdelay (usec)			5.27320E-03	5.27320E-03	5.27320E-03	5.27320E-03	5.27320E-03
Resid sbdelay (usec)			-6.10723E-02	-6.10723E-02	-6.10723E-02	-6.10723E-02	-6.10723E-02
Resid phdelay (usec)			-2.00256E-06	-2.00256E-06	-2.00256E-06	-2.00256E-06	-2.00256E-06
Resid rate (us/s)			4.29994E-07	4.29994E-07	4.29994E-07	4.29994E-07	4.29994E-07
Resid phase (deg)			210.9	210.9	210.9	210.9	210.9
PCal mode:	MANUAL	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	0.000E+00
PCal period (AP's)	5	5	5	5	5	5	5
sb window (us)	-1.000	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	-0.009
dr window (ns/s)	-0.011	0.011	-0.011	0.011	-0.011	0.011	-0.011
ion window (TEC)	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ph/seg (deg) 69.0 10.0 Search (2048X16) 1.158 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5

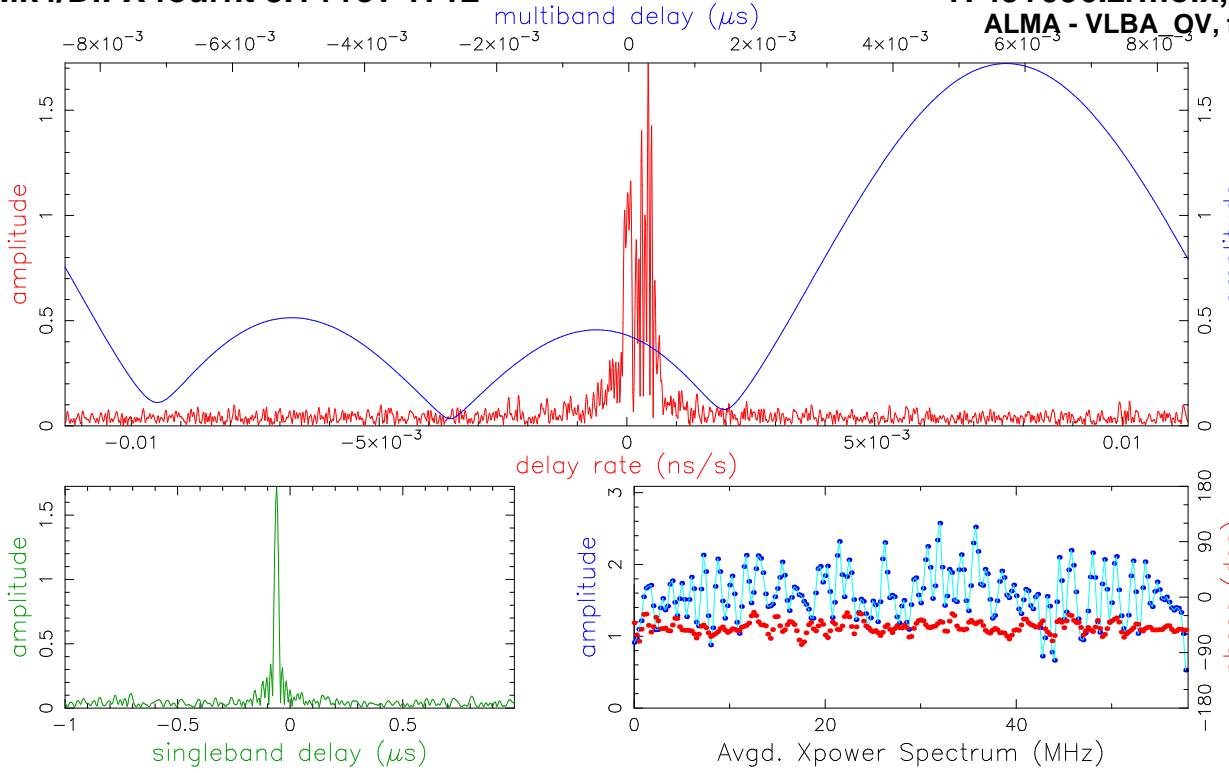
amp/seg (%) 108.3 17.4 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 1.9 3.1 Inc. seg. avg. 2.310 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

amp/frq (%) 8.9 5.4 Inc. frq. avg. 1.167 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 49.3 el 43.3 pa -134.9 o: az 85.5 el 10.1 pa -53.7 u,v (fr/asec) 2454.271 -9707.673 simultaneous interpolator

Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ao..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ao.W.32.zrmlx

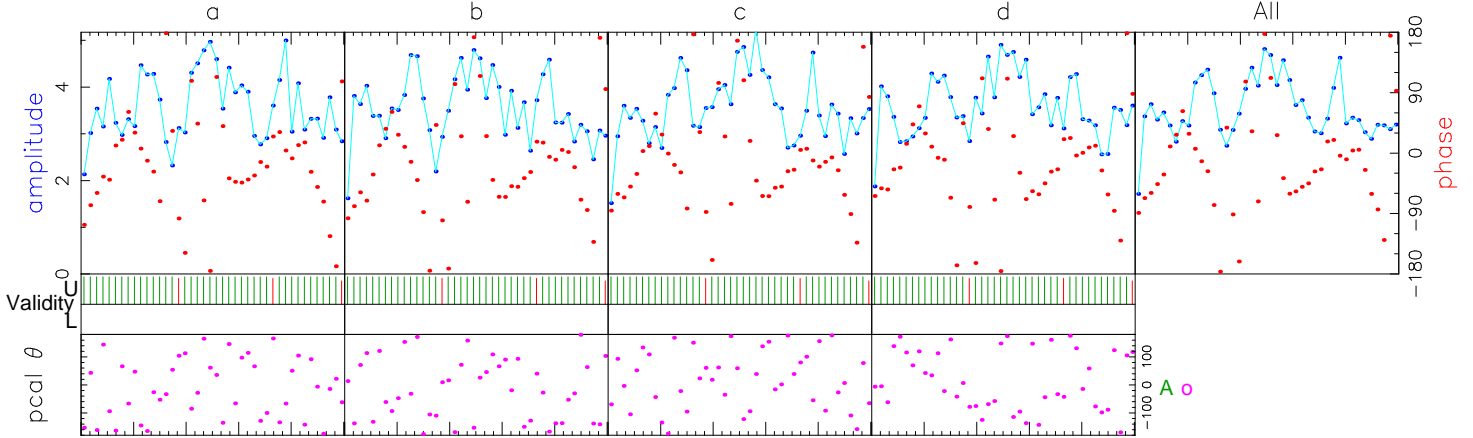


Fringe quality 7

SNR 54.9
 Int time 298.907
 Amp 1.725
 Phase 250.4
 PFD 0.0e+00
 Delays (us)
 SBD -0.060781
 MBD 0.005713
 Fringe rate (Hz) 0.036996
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512

Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134355
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"

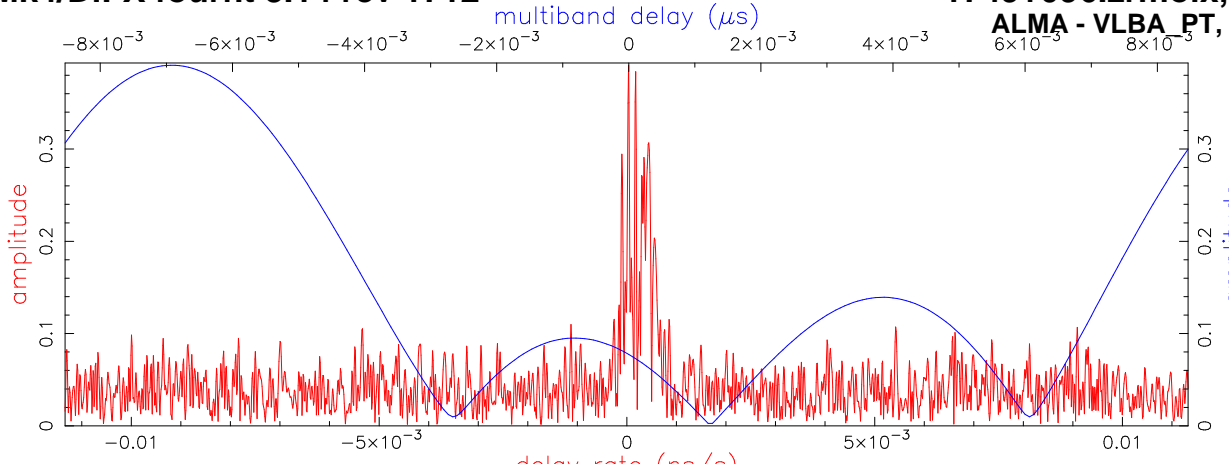
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



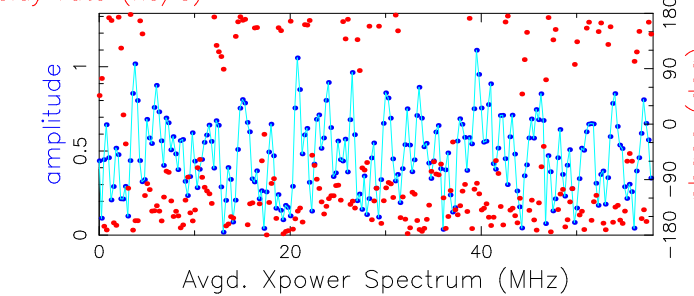
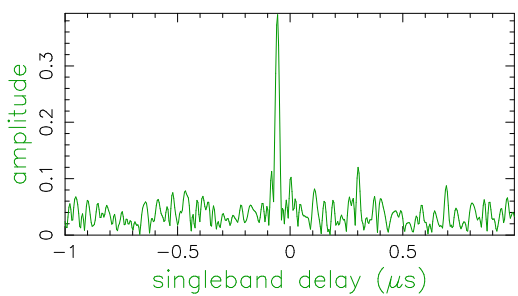
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-18.8	-25.6	-28.4	-17.6	Phase	-22.6
	1.8	1.7	1.8	1.7	Ampl.	1.7
	218.8	218.9	218.9	219.0	Sbd box	218.9
U/L	586/0	586/0	586/0	586/0	APs used	
A	0	0	0	0	PC freqs	
o	3890	296	1703	3109	PC freqs	
A:o	0:0	0:0	0:0	0:0	PC phase	
A:o	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	8.72497761066E+03	Apriori delay (usec)	8.72504016456E+03	Resid mbdelay (usec)	5.71277E-03	+/-	4.4E-05
Sband delay (usec)	8.72497938387E+03	Apriori clock (usec)	-2.1079048E+03	Resid sbdelay (usec)	-6.07807E-02	+/-	1.7E-04
Phase delay (usec)	8.72504016384E+03	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-7.29298E-07	+/-	6.7E-08
Delay rate (us/s)	-4.36764407053E-01	Apriori rate (us/s)	-4.36764836544E-01	Resid rate (us/s)	4.29491E-07	+/-	3.9E-10
Total phase (deg)	529.6	Apriori accel (us/s/s)	-7.63820698805E-05	Resid phase (deg)	250.4	+/-	2.1

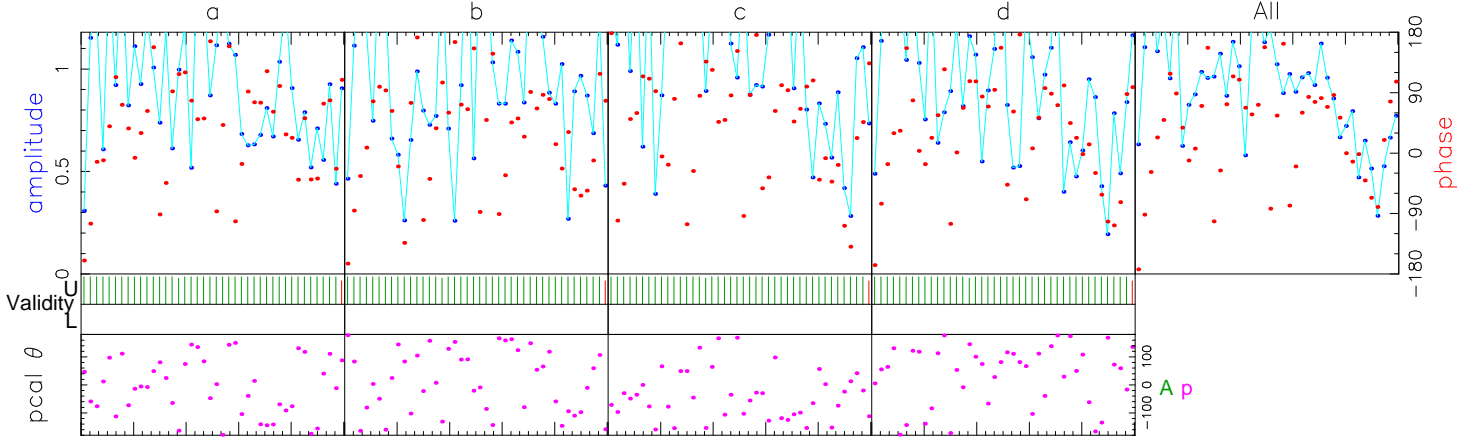
ph/seg (deg)	RMS 70.7	Theor. 6.8	Amplitude Search (2048X16)	1.691	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	111.5	11.8	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	6.4	2.1	Inc. seg. avg.	3.519	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	2.8	3.6	Inc. frq. avg.	1.728	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
					Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		



Fringe quality 9
 SNR 12.5
 Int time 299.357
 Amp 0.393
 Phase 256.8
 PFD 1.3e-27
 Delays (us)
 SBD -0.057124
 MBD -0.006926
 Fringe rate (Hz) 0.002723
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134358
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



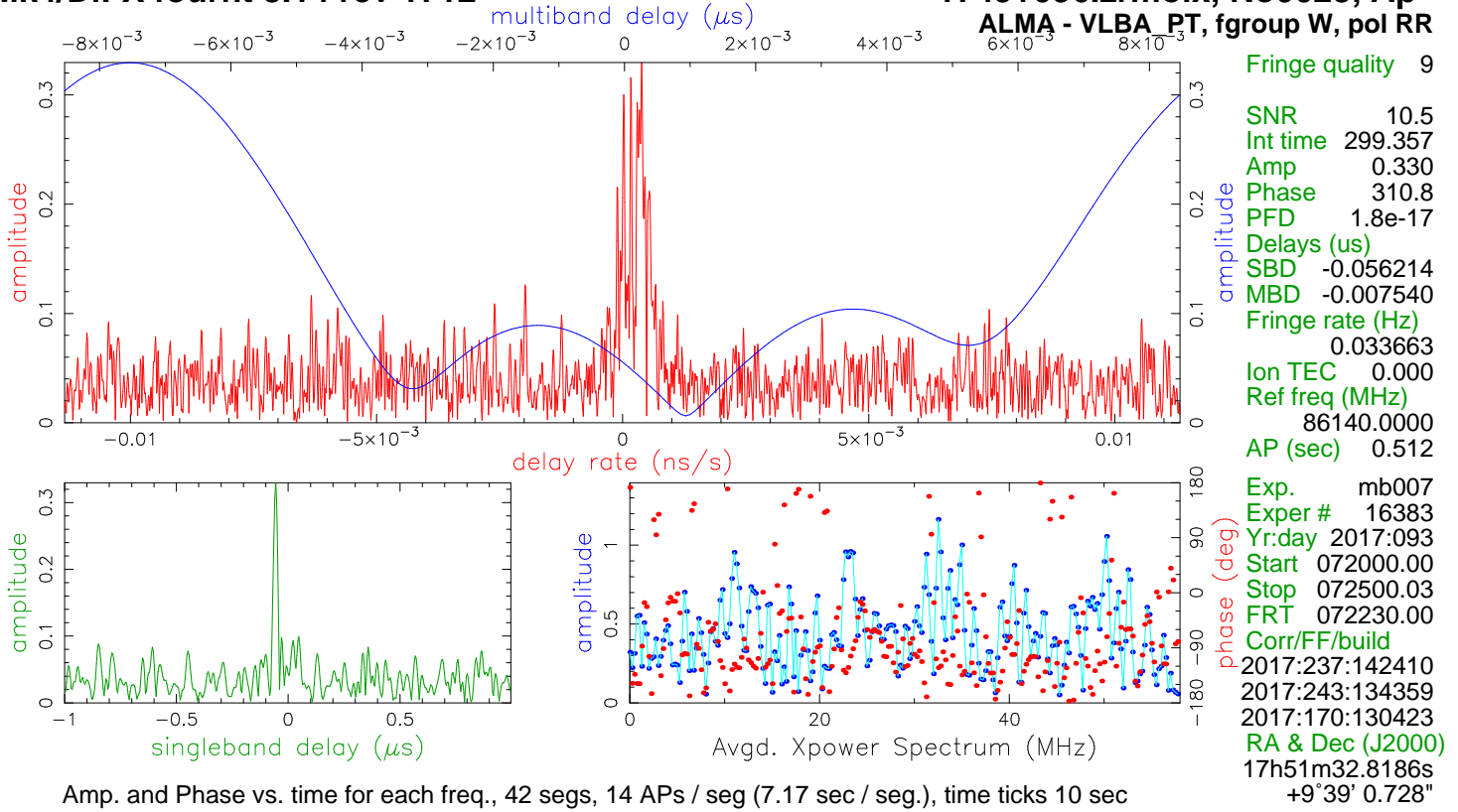
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0		
p	3890	296	1703	3109		
A:p	0:0	0:0	0:0	0:0		
A:p	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000		
p	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL		
p	W00UL	W01UL	W02UL	W03UL		

Group delay (usec)(sbd)	5.79123803904E+03	Apriori delay (usec)	5.79129616539E+03	Resid mbdelay (usec)	-6.92635E-03	+/-	1.9E-04
Sband delay (usec)	5.79123904097E+03	Apriori clock (usec)	-2.1080889E+03	Resid sbdelay (usec)	-5.71244E-02	+/-	7.6E-04
Phase delay (usec)	5.79129616706E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	1.67701E-06	+/-	3.0E-07
Delay rate (us/s)	-4.38964652872E-01	Apriori rate (us/s)	-4.38964684479E-01	Resid rate (us/s)	3.16073E-08	+/-	1.7E-09
Total phase (deg)	503.9	Apriori accel (us/s/s)	-6.00056557088E-05	Resid phase (deg)	256.8	+/-	9.1

ph/seg (deg)	74.0	Theor.	29.6	Amplitude	0.393 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	148.0	Search (2048X16)	0.381	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	7.5	Interp.	0.000	Inc. seg. avg.	0.806	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	3.6	Inc. frq. avg.	0.388	Inc. frq. avg.	0.388	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



Fringe quality 9

SNR 10.5

Int time 299.357

Amp 0.330

Phase 310.8

PFD 1.8e-17

Delays (us)

SBD -0.056214

MBD -0.007540

Fringe rate (Hz) 0.033663

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. mb007

Exper # 16383

Yr:day 2017:093

Start 072000.00

Stop 072500.03

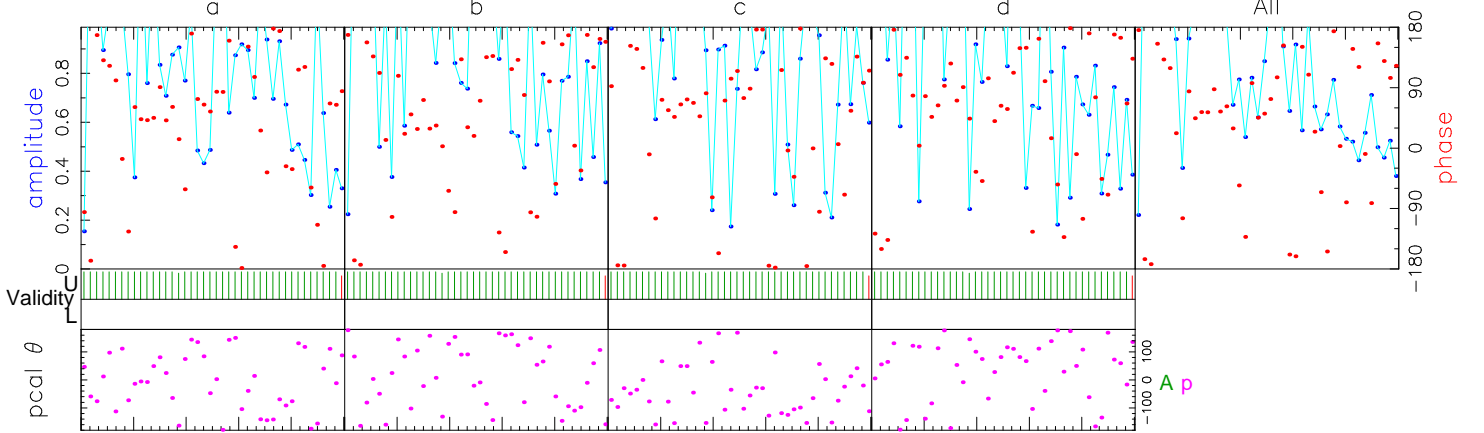
FRT 072230.00

Corr/FF/build 2017:237:142410

2017:243:134359

2017:170:130423

RA & Dec (J2000) 17h51m32.8186s +9°39' 0.728"



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	100.3	111.6	110.5	101.8	Phase	106.0
	0.3	0.3	0.4	0.4	Ampl.	0.3
	219.6	219.9	220.2	219.9	Sbd box	220.0
U/L	586/0	586/0	586/0	586/0	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	Manl 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)	5.79123742513E+03	Apriori delay (usec)	5.79129616539E+03	Resid mbdelay (usec)	-7.54026E-03	+/- 2.3E-04
Sband delay (usec)	5.79123995187E+03	Apriori clock (usec)	-2.1080889E+03	Resid sbdelay (usec)	-5.62135E-02	+/- 9.1E-04
Phase delay (usec)	5.79129616881E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	3.41926E-06	+/- 3.5E-07
Delay rate (us/s)	-4.38964293682E-01	Apriori rate (us/s)	-4.38964684479E-01	Resid rate (us/s)	3.90797E-07	+/- 2.0E-09
Total phase (deg)	557.9	Apriori accel (us/s/s)	-6.00056557088E-05	Resid phase (deg)	310.8	+/- 10.9

RMS Theor. Amplitude 0.330 +/- 0.031

ph/seg (deg) 82.2 35.4 Search (2048X16) 0.326

amp/seg (%) 175.4 61.8 Interp. 0.000

ph/frq (deg) 7.1 10.9 Inc. seg. avg. 0.686

amp/frq (%) 22.0 19.1 Inc. frq. avg. 0.325

Group delay (usec)(sbd) 5.79123742513E+03 Apriori delay (usec) 5.79129616539E+03 Resid mbdelay (usec) -7.54026E-03 +/- 2.3E-04

Sband delay (usec) 5.79123995187E+03 Apriori clock (usec) -2.1080889E+03 Resid sbdelay (usec) -5.62135E-02 +/- 9.1E-04

Phase delay (usec) 5.79129616881E+03 Apriori clockrate (us/s) 1.4954652E-06 Resid phdelay (usec) 3.41926E-06 +/- 3.5E-07

Delay rate (us/s) -4.38964293682E-01 Apriori rate (us/s) -4.38964684479E-01 Resid rate (us/s) 3.90797E-07 +/- 2.0E-09

Total phase (deg) 557.9 Apriori accel (us/s/s) -6.00056557088E-05 Resid phase (deg) 310.8 +/- 10.9

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

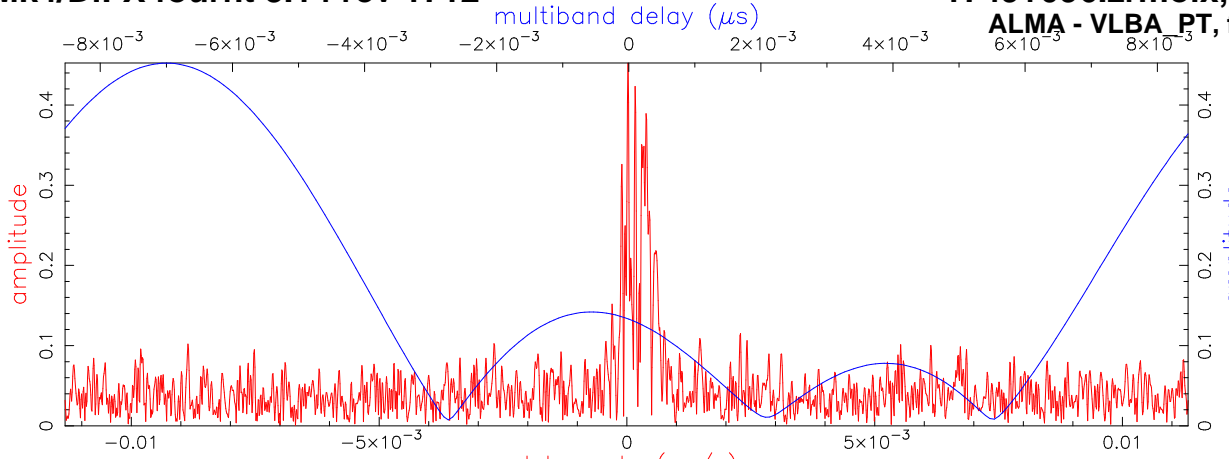
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

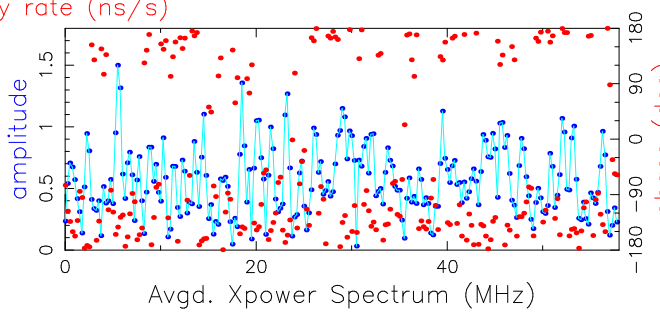
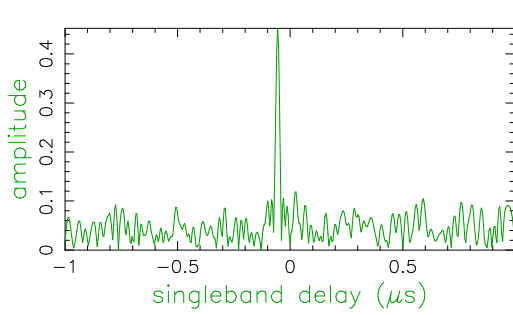
Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 49.3 el 43.3 pa -134.9 p: az 90.7 el 18.3 pa -56.9 u,v (fr/asec) 2482.272 -9127.611 simultaneous interpolator

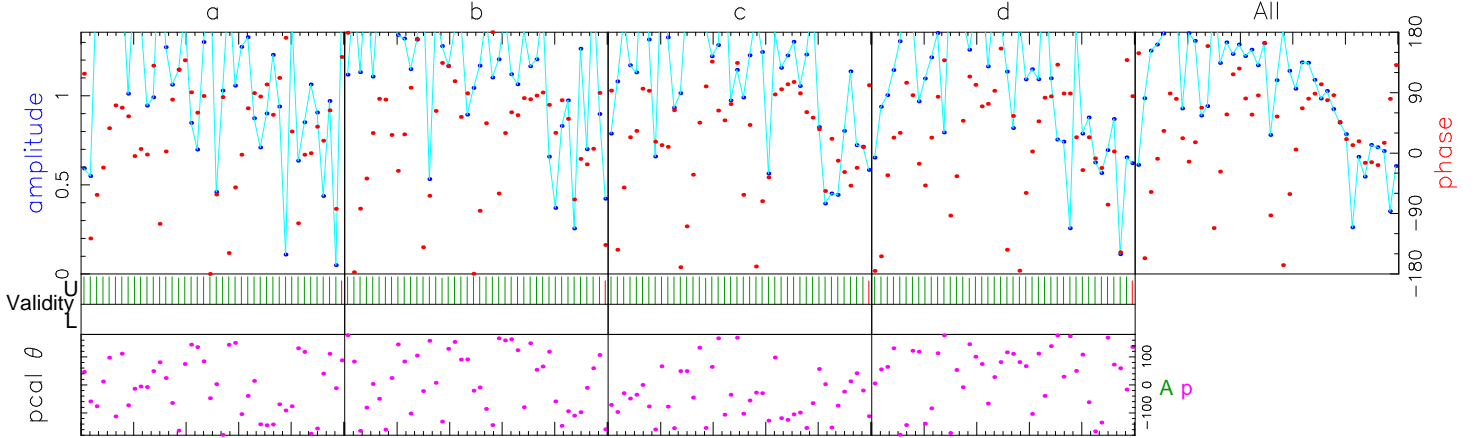
Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ap..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ap.W.36.zrmlx



Fringe quality 9
 SNR 14.4
 Int time 299.357
 Amp 0.452
 Phase 261.2
 PFD 1.3e-38
 Delays (us)
 SBD -0.055756
 MBD -0.007006
 Fringe rate (Hz) 0.002188
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134400
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"

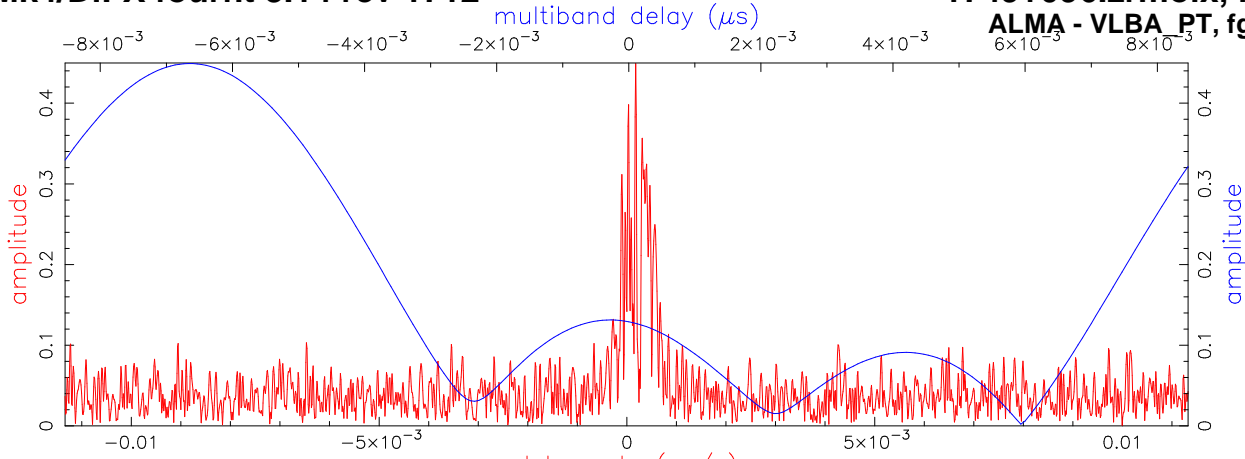


Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec

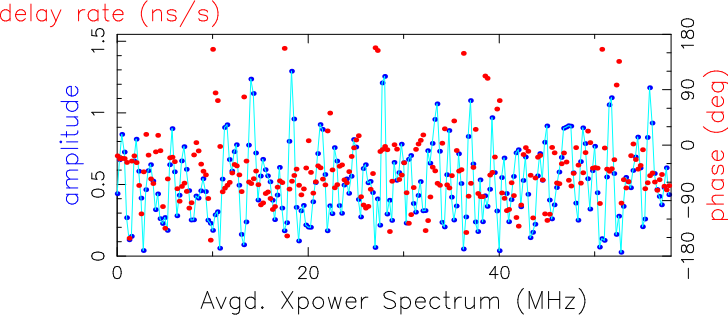
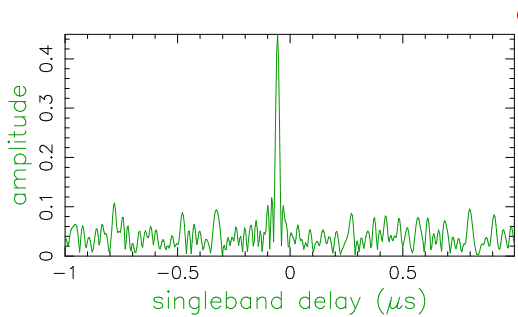


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0	Phase	56.4
p	3890	296	1703	3109	Ampl.	0.5
A:p	0:0	0:0	0:0	0:0	Sbd box	220.1
A:p	0:0	0:0	0:0	0:0	APs used	
A	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	PC freqs	
A	W00UL	W01UL	W02UL	W03UL	PC phase	
p	W00UR	W01UR	W02UR	W03UR	Mani PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	5.79123795976E+03	Apriori delay (usec)	5.79129616539E+03	Resid mbdelay (usec)	-7.00562E-03	+/- 1.7E-04
Sband delay (usec)	5.79124040980E+03	Apriori clock (usec)	-2.1080889E+03	Resid sbdelay (usec)	-5.57556E-02	+/- 6.6E-04
Phase delay (usec)	5.79129616720E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	1.81846E-06	+/- 2.6E-07
Delay rate (us/s)	-4.38964659074E-01	Apriori rate (us/s)	-4.38964684479E-01	Resid rate (us/s)	2.54046E-08	+/- 1.5E-09
Total phase (deg)	508.3	Apriori accel (us/s/s)	-6.00056557088E-05	Resid phase (deg)	261.2	+/- 8.0

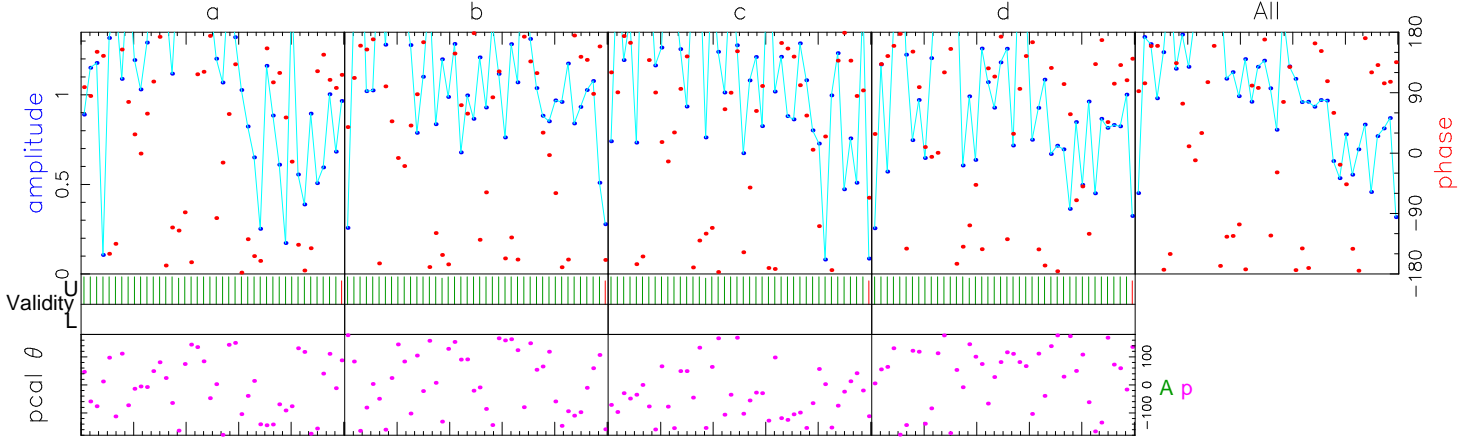
RMS 71.6 Theor. 25.8 Amplitude 0.452 +/- 0.031 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 71.6 Search (2048X16) 0.441 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 147.9 45.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 ph/frq (deg) 8.3 8.0 Inc. seg. avg. 0.945 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011
 amp/frq (%) 5.4 13.9 Inc. frq. avg. 0.450 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 9
 SNR 14.3
 Int time 299.357
 Amp 0.450
 Phase 354.6
 PFD 4.1e-38
 Delays (us)
 SBD -0.056539
 MBD -0.006659
 Fringe rate (Hz) 0.014953
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134402
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"

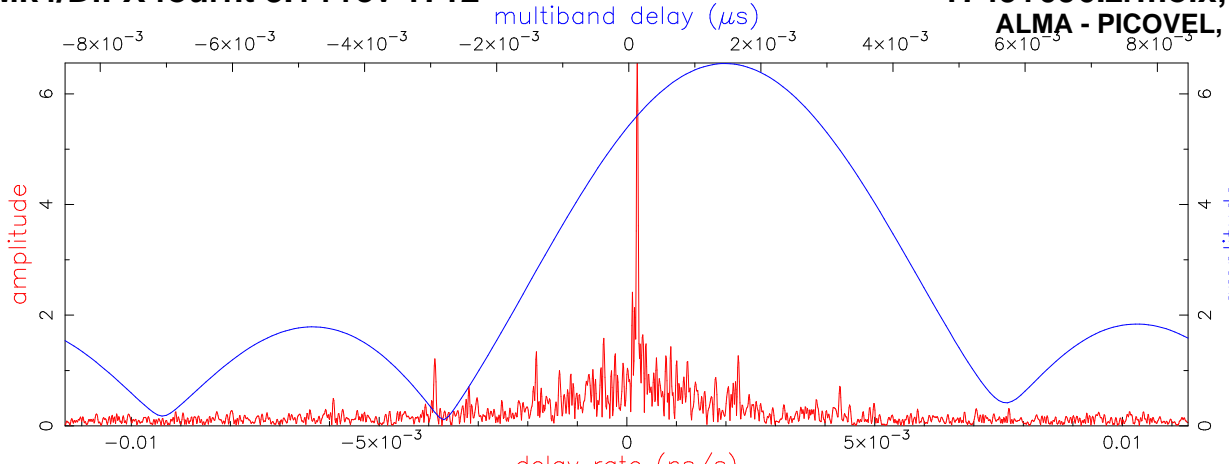


Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	586/0	586/0	586/0	586/0		
A	0	0	0	0		
p	3890	296	1703	3109		
A:p	0:0	0:0	0:0	0:0		
A:p	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000		
p	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR		
p	W00UL	W01UL	W02UL	W03UL		
Group delay (usec)(sbd)	5.79123830676E+03	Apriori delay (usec)	5.79129616539E+03	Resid mbdelay (usec)	-6.65862E-03	+/- 1.7E-04
Sband delay (usec)	5.79123962663E+03	Apriori clock (usec)	-2.1080889E+03	Resid sbdelay (usec)	-5.65388E-02	+/- 6.6E-04
Phase delay (usec)	5.79129617022E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	4.83034E-06	+/- 2.6E-07
Delay rate (us/s)	-4.38964510886E-01	Apriori rate (us/s)	-4.38964684479E-01	Resid rate (us/s)	1.73593E-07	+/- 1.5E-09
Total phase (deg)	241.6	Apriori accel (us/s/s)	-6.00056557088E-05	Resid phase (deg)	354.6	+/- 8.0

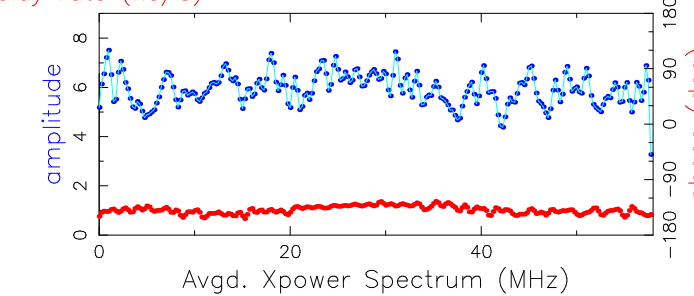
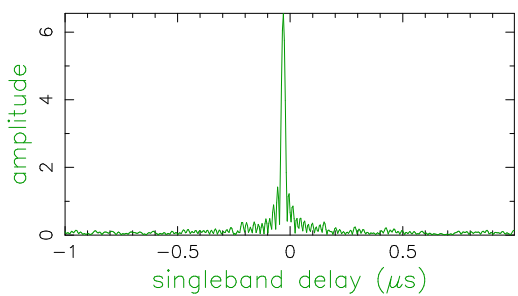
ph/seg (deg) 76.1 25.9 Search (2048X16) 0.439 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 146.3 45.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.3 8.0 Inc. seg. avg. 0.934 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009
 amp/frq (%) 7.1 14.0 Inc. frq. avg. 0.446 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 49.3 el 43.3 pa -134.9 p: az 90.7 el 18.3 pa -56.9 u,v (fr/asec) 2482.272 -9127.611 simultaneous interpolator
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ap..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/Ap.W.38.zrmlx



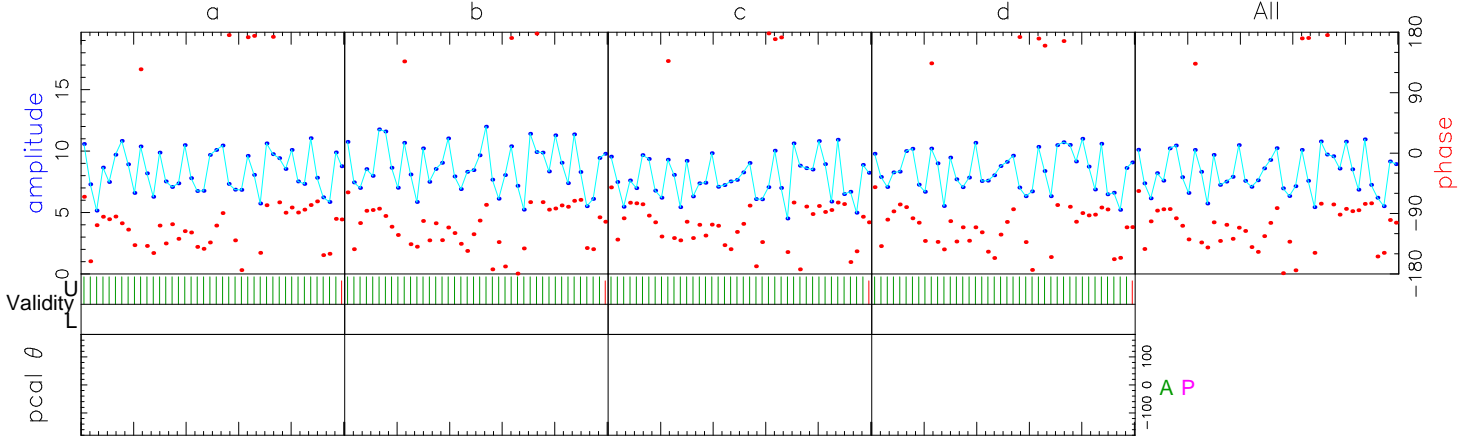
Fringe quality 6

SNR 209.1
Int time 299.983
Amp 6.558
Phase 21.9
PFD 0.0e+00
Delays (us)
SBD -0.030692
MBD 0.001455
Fringe rate (Hz) 0.017782
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072000.00
Stop 072500.03
FRT 072230.00
Corr/FF/build 2017:237:142410
2017:243:134404
2017:170:130423
RA & Dec (J2000) 17h51m32.8186s
+9°39' 0.728"



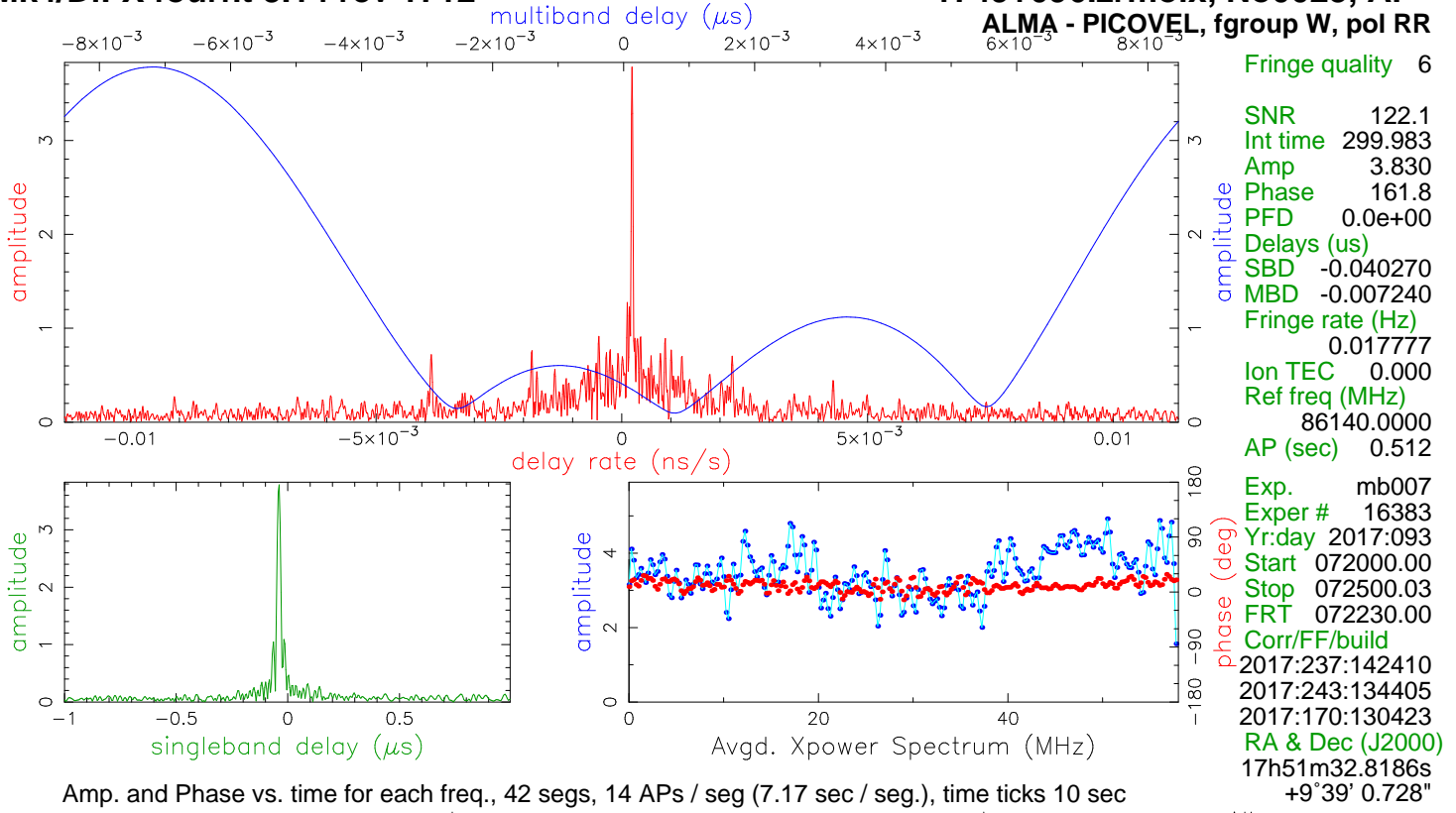
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



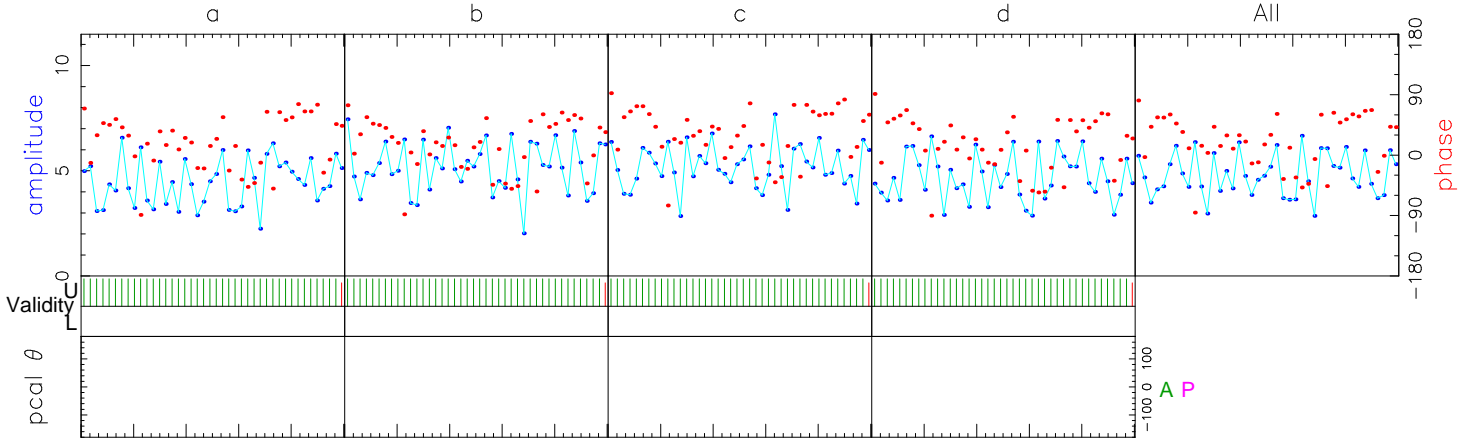
	86151.11	86209.70	86268.30	86326.89	86385.48	All
UL	586/0	586/0	586/0	586/0	586/0	586/0
A	0	0	0	0	0	0
P	0	0	0	0	0	0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
P	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
P	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL

Group delay (usec)(sbd)	-3.87127354975E+03	Apriori delay (usec)	-3.87124087114E+03	Resid mbdelay (usec)	1.45472E-03	+/-	1.2E-05
Sband delay (usec)	-3.87127156328E+03	Apriori clock (usec)	-2.1065928E+03	Resid sbdelay (usec)	-3.06921E-02	+/-	4.5E-05
Phase delay (usec)	-3.87124087484E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-3.69497E-06	+/-	1.8E-08
Delay rate (us/s)	1.40479569753E+00	Apriori rate (us/s)	1.40479549110E+00	Resid rate (us/s)	2.06429E-07	+/-	1.0E-10
Total phase (deg)	-208.6	Apriori accel (us/s/s)	-9.35995540181E-06	Resid phase (deg)	21.9	+/-	0.5

ph/seg (deg)	38.6	Theor.	1.8	Amplitude	6.558 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	35.8	Search (2048X16)	6.350	Search	6.350	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	4.6	Interp.	0.000	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	4.3	Inc. seg. avg.	8.292	Inc. seg. avg.	8.292	Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
		Inc. frq. avg.	6.559	Inc. frq. avg.	6.559	Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



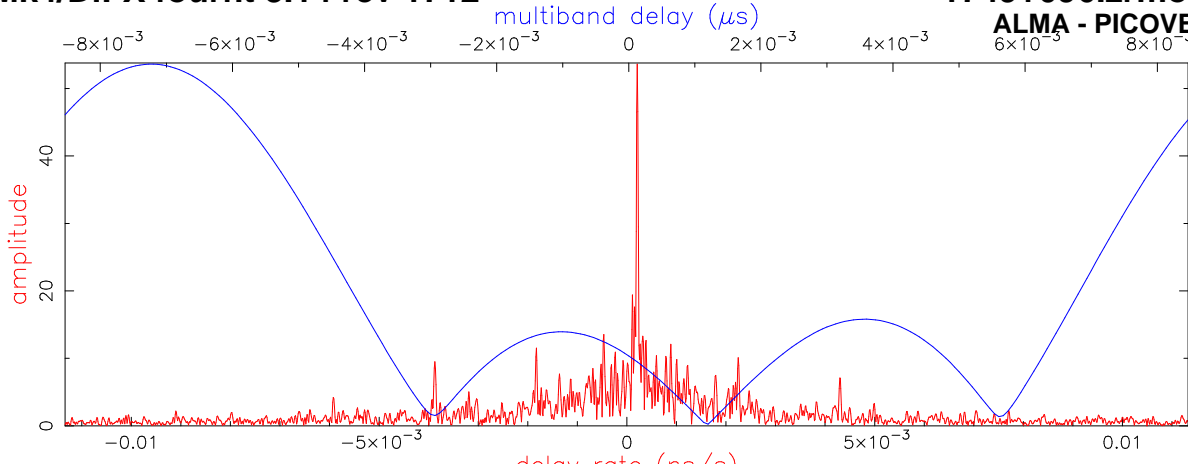
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



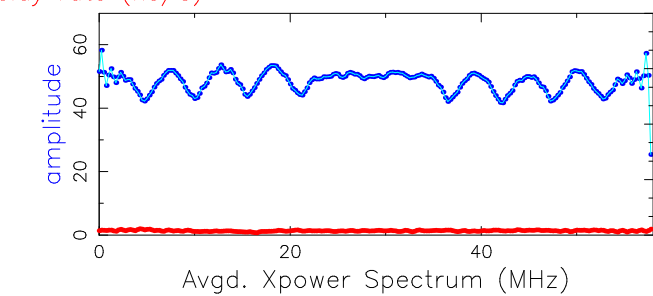
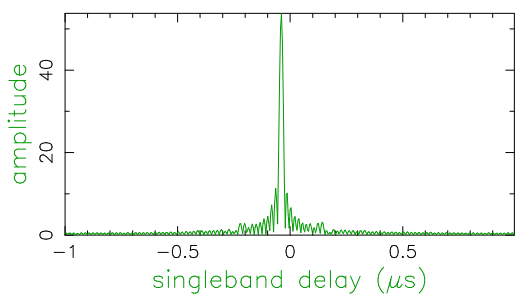
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	23.1	20.4	36.0	20.9	Phase	25.3
	3.4	4.1	4.1	3.6	Ampl.	3.8
	223.8	223.6	223.5	223.9	Sbd box	223.7
U/L	586/0	586/0	586/0	586/0	APs used	
A	0	0	0	0	PC freqs	
P	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	PC phase	
A:P	0:0	0:0	0:0	0:0	ManI PC	
A	1000	1000	1000	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)	-3.87128224461E+03	Apriori delay (usec)	-3.87124087114E+03	Resid mbdelay (usec)	-7.24013E-03	+/- 2.0E-05
Sband delay (usec)	-3.87128114149E+03	Apriori clock (usec)	-2.1065928E+03	Resid sbdelay (usec)	-4.02703E-02	+/- 7.8E-05
Phase delay (usec)	-3.87124087033E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	8.16569E-07	+/- 3.0E-08
Delay rate (us/s)	1.40479569748E+00	Apriori rate (us/s)	1.40479549110E+00	Resid rate (us/s)	2.06377E-07	+/- 1.7E-10
Total phase (deg)		Apriori accel (us/s/s)	-9.35995540181E-06	Resid phase (deg)	161.8	+/- 0.9

RMS Theor. Amplitude 3.830 +/- 0.031
 ph/seg (deg) 38.7 3.0 Search (2048X16) 3.688
 amp/seg (%) 36.9 5.3 Interp. 0.000
 ph/frq (deg) 9.0 0.9 Inc. seg. avg. 4.823
 amp/frq (%) 7.8 1.6 Inc. frq. avg. 3.806
 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 Pcal rate: 0.000E+00, 0.000E+00 (us/s)
 Bits/sample: 2x2 SampCntNorm: enabled
 Sample rate(MSamp/s): 116
 Data rate(Mb/s): 928 nlags: 232 t_cohere infinite
 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
 simultaneous interpolator

A: az 49.3 el 43.3 pa -134.9 P: az 232.7 el 51.3 pa 39.9 u,v (fr/asec) -8182.306 -8756.669
 Control file: cf_1234 Input file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AP..zrmlx Output file: /Exps/mb007/gmva_58_merged_pc1/1234/No0023/AP.W.40.zrmlx

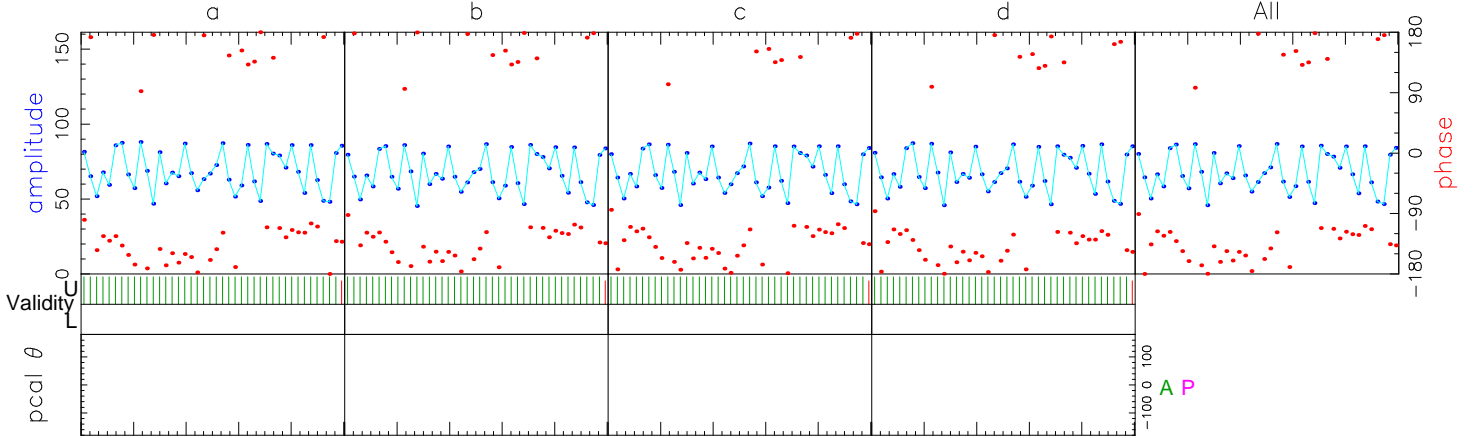


Fringe quality 6
 SNR 1714.4
 Int time 299.983
 Amp 53.779
 Phase -13.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.039548
 MBD -0.007229
 Fringe rate (Hz) 0.017751
 Ion TEC 0.000
 Ref freq (MHz) 86140.000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072000.00
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build 2017:237:142410
 2017:243:134407
 2017:170:130423
 RA & Dec (J2000) 17h51m32.8186s
 +9°39' 0.728"



Avgd. Xpower Spectrum (MHz)

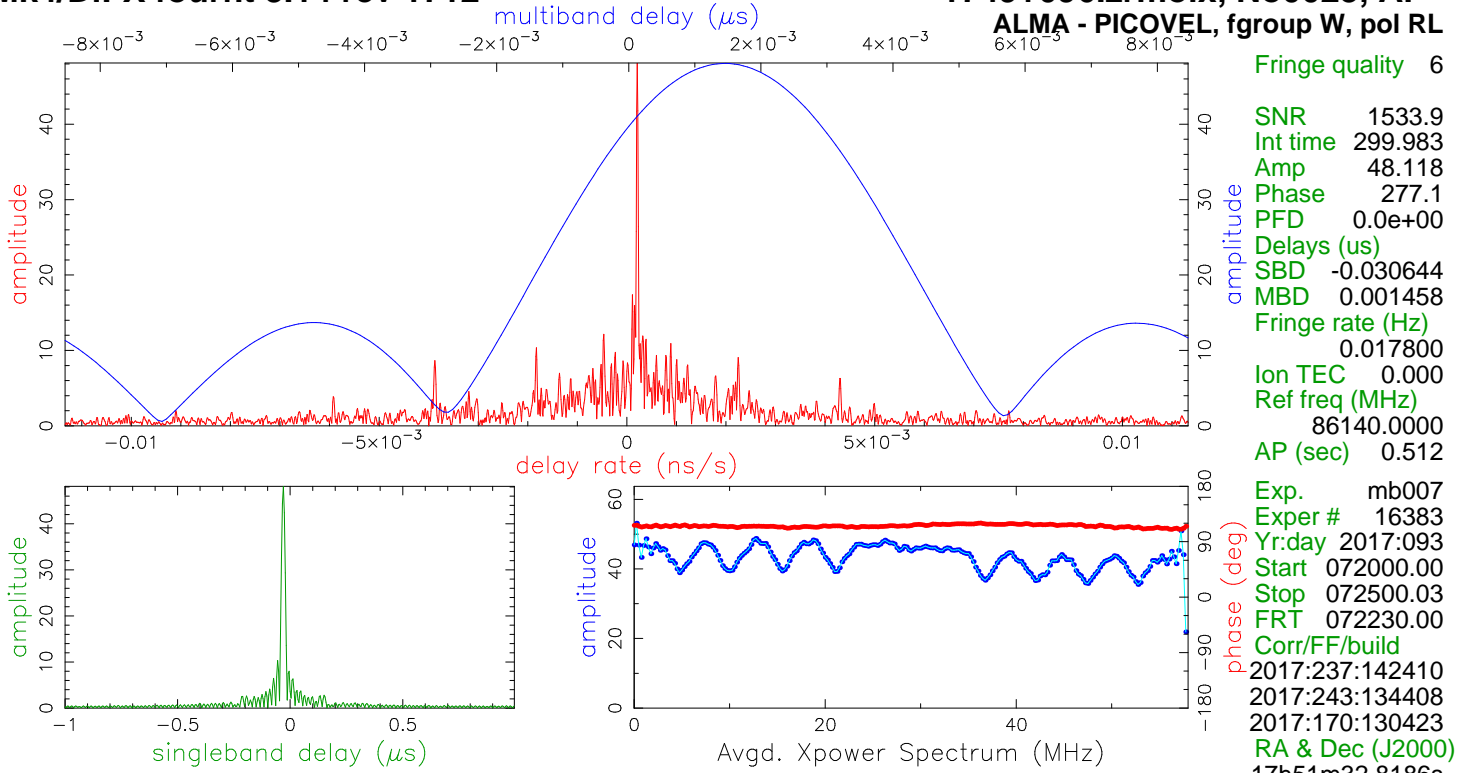
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



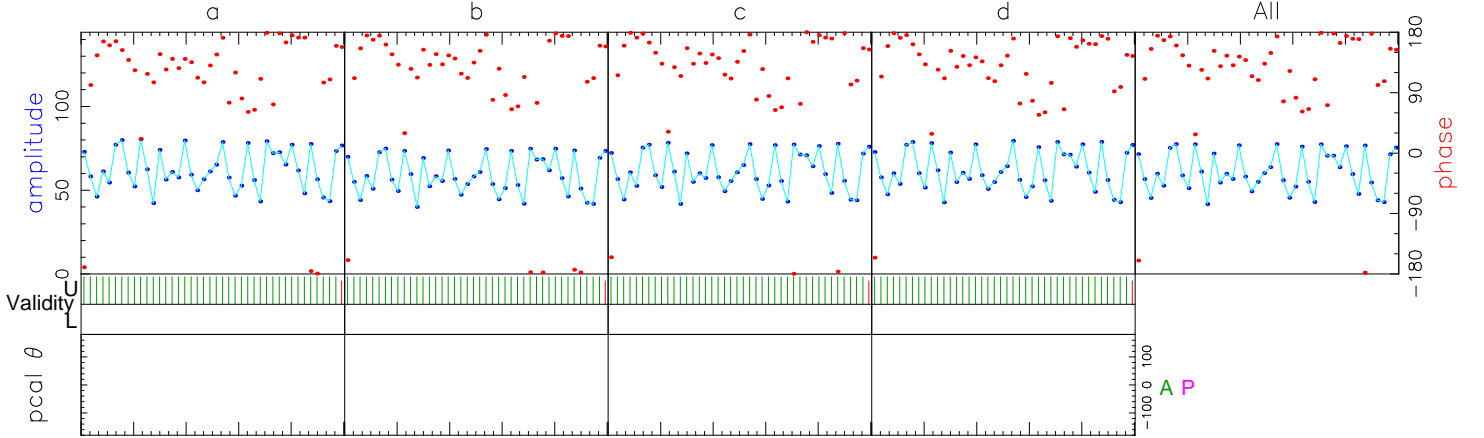
	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	586/0	586/0	586/0	586/0	586/0	586/0
A	0	0	0	0	0	0
P	0	0	0	0	0	0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A:P	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
P	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL
P	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR

Group delay (usec)(sbd)	-3.87128223396E+03	Apriori delay (usec)	-3.87124087114E+03	Resid mbdelay (usec)	-7.22948E-03	+/- 1.4E-06
Sband delay (usec)	-3.87128041873E+03	Apriori clock (usec)	-2.1065928E+03	Resid sbdelay (usec)	-3.95476E-02	+/- 5.5E-06
Phase delay (usec)	-3.87124087599E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-4.84890E-06	+/- 2.2E-09
Delay rate (us/s)	1.40479569717E+00	Apriori rate (us/s)	1.40479549110E+00	Resid rate (us/s)	2.06070E-07	+/- 1.2E-11
Total phase (deg)	115.6	Apriori accel (us/s/s)	-9.35995540181E-06	Resid phase (deg)	-13.9	+/- 0.1

ph/seg (deg)	38.8	Theor.	0.2	Amplitude	53.779 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	36.1	Search (2048X16)	52.187	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	3.7	Inc. seg. avg.	68.268	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.8	Inc. frq. avg.	53.668	Inc. seg. avg.	68.268	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
				Inc. frq. avg.	53.668	Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



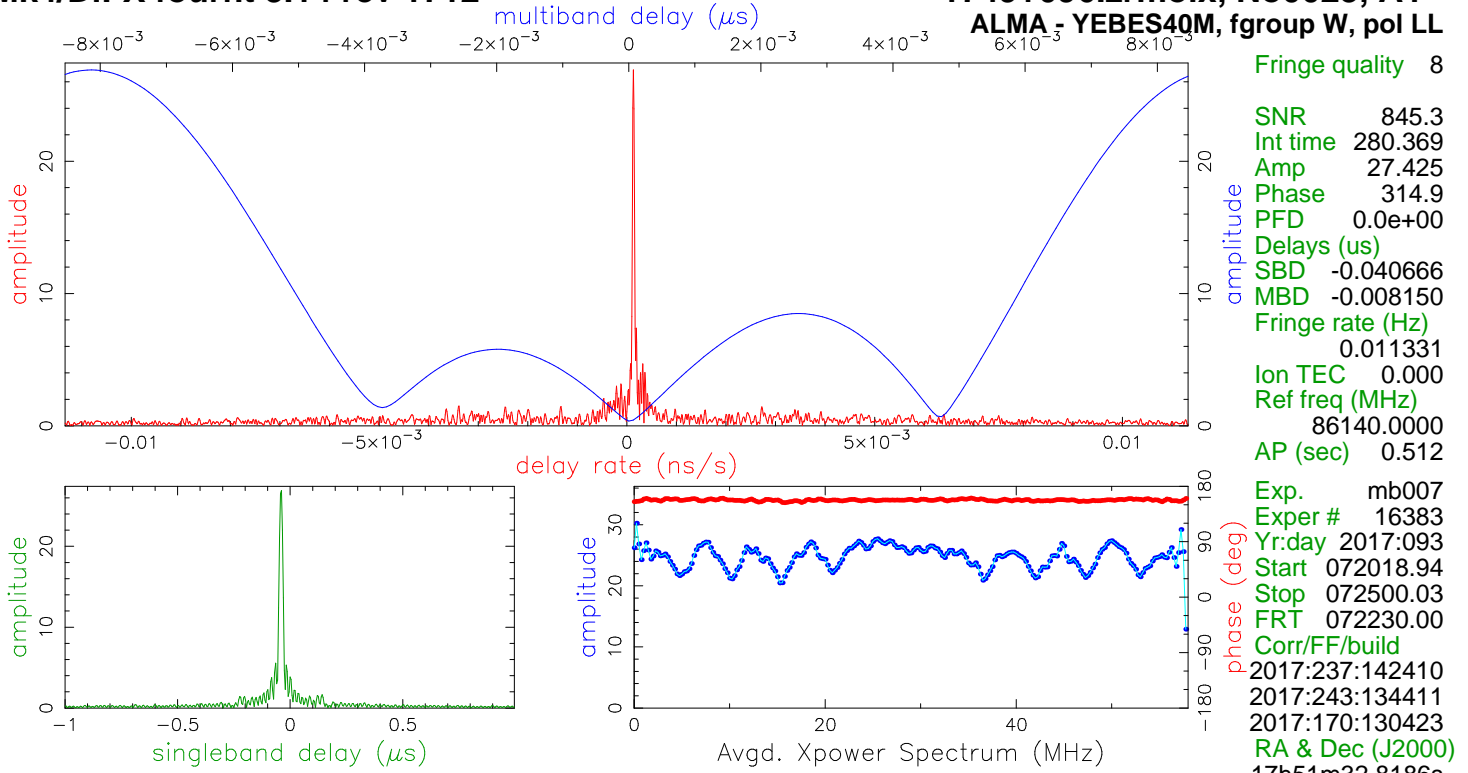
Amp. and Phase vs. time for each freq., 42 segs, 14 APs / seg (7.17 sec / seg.), time ticks 10 sec



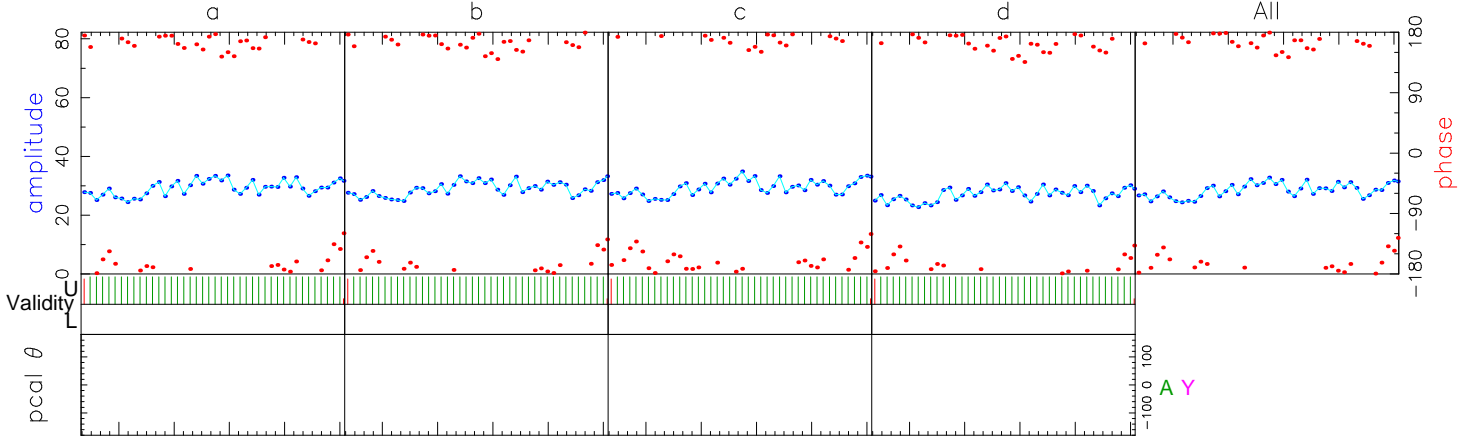
86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
138.0	143.3	143.2	138.0	Phase	140.6
49.1	46.5	48.3	48.6	Ampl.	48.1
225.9	225.8	225.9	226.0	Sbd box	225.9
U/L 586/0	586/0	586/0	586/0	APs used	
A 0	0	0	0	PC freqs	
P 0	0	0	0	PC freqs	
A:P 0:0	0:0	0:0	0:0	PC phase	
A:P 0:0	0:0	0:0	0:0	Manl PC	
A 1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
P W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	

Group delay (usec)(sbd)	-3.87127354641E+03	Apriori delay (usec)	-3.87124087114E+03	Resid mbdelay (usec)	1.45807E-03	+/-	1.6E-06
Sband delay (usec)	-3.87127151528E+03	Apriori clock (usec)	-2.1065928E+03	Resid sbdelay (usec)	-3.06441E-02	+/-	6.2E-06
Phase delay (usec)	-3.87124086661E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	4.53345E-06	+/-	2.4E-09
Delay rate (us/s)	1.40479569775E+00	Apriori rate (us/s)	1.40479549110E+00	Resid rate (us/s)	2.06645E-07	+/-	1.4E-11
Total phase (deg)	46.6	Apriori accel (us/s/s)	-9.35995540181E-06	Resid phase (deg)	277.1	+/-	0.1

ph/seg (deg)	38.8	Theor.	0.2	Amplitude	48.118 +/- 0.031	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	36.2	Search (2048X16)	46.676	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	3.7	Interp.	0.000	Inc. seg. avg.	61.205	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	2.0	Inc. frq. avg.	48.111	Inc. frq. avg.	48.111	Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
						Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



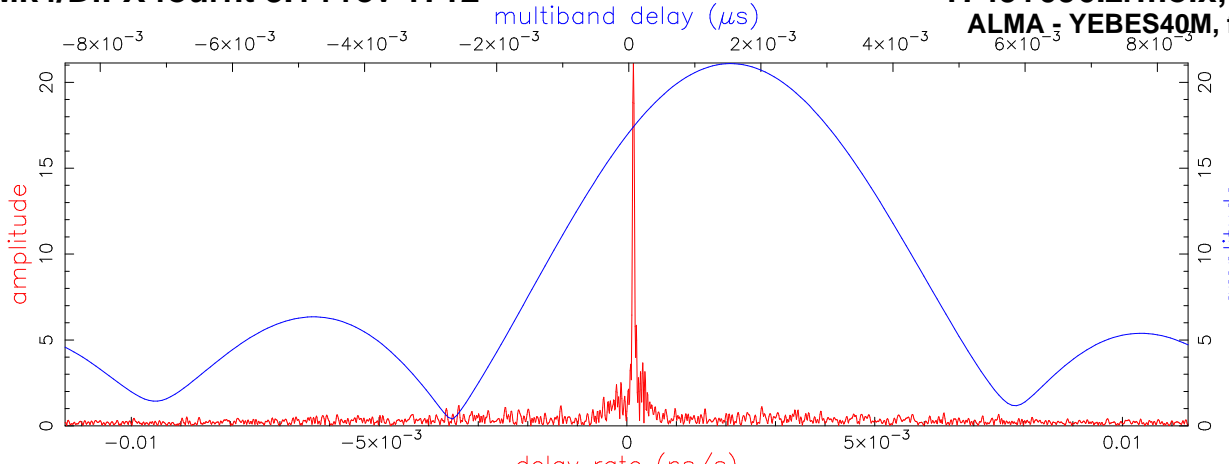
Amp. and Phase vs. time for each freq., 43 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



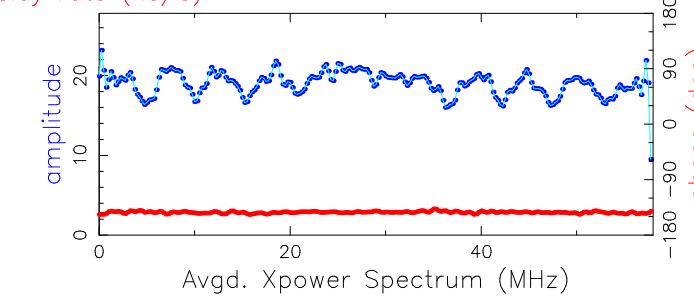
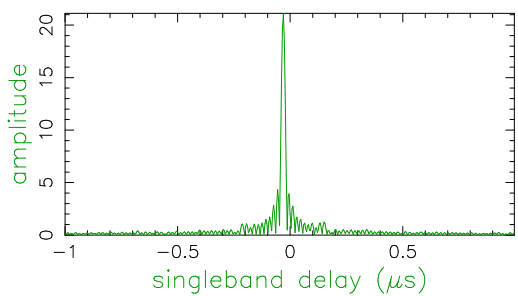
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	176.8	175.8	-173.1	173.4	Phase	178.3
	27.6	27.3	27.7	25.5	Ampl.	27.0
	223.7	223.5	223.8	223.3	Sbd box	223.6
U/L	549/0	549/0	549/0	549/0	APs used	
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Mani PC	
A	1000	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)	-3.31465037893E+03	Apriori delay (usec)	-3.31460809528E+03	Resid mbdelay (usec)	-8.15032E-03	+/-	2.9E-06
Sband delay (usec)	-3.31464876121E+03	Apriori clock (usec)	-2.1100789E+03	Resid sbdelay (usec)	-4.06659E-02	+/-	1.1E-05
Phase delay (usec)	-3.31460808952E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	5.75093E-06	+/-	4.4E-09
Delay rate (us/s)	1.38024866025E+00	Apriori rate (us/s)	1.38024852871E+00	Resid rate (us/s)	1.31545E-07	+/-	2.7E-11
Total phase (deg)	197.1	Apriori accel (us/s/s)	-1.32242855186E-05	Resid phase (deg)	314.9	+/-	0.1

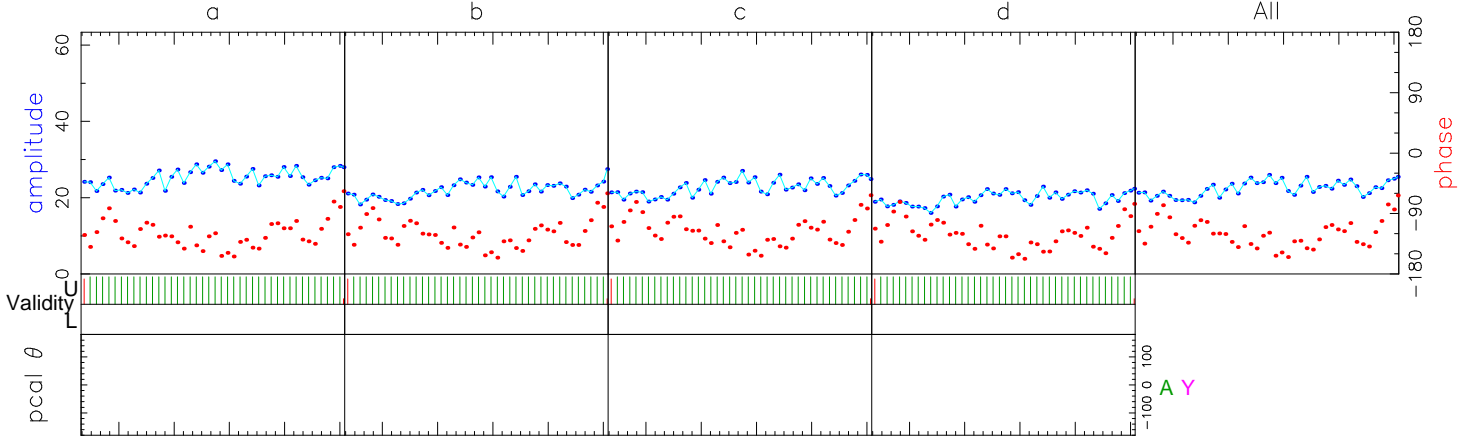
ph/seg (deg)	RMS 19.4	Theor. 0.4	Amplitude 27.425 +/- 0.032	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	9.5	0.8	Search (2048X16) 26.505	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	7.3	0.1	Interp. 0.000	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.5	0.2	Inc. seg. avg. 28.535	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00
			Inc. frq. avg. 27.012					



Fringe quality 8
 SNR 651.2
 Int time 280.369
 Amp 21.127
 Phase 16.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.030738
 MBD 0.001539
 Fringe rate (Hz)
 0.011344
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. mb007
 Exper # 16383
 Yr:day 2017:093
 Start 072018.94
 Stop 072500.03
 FRT 072230.00
 Corr/FF/build
 2017:237:142410
 2017:243:134414
 2017:170:130423
 RA & Dec (J2000)
 17h51m32.8186s
 +9°39' 0.728"



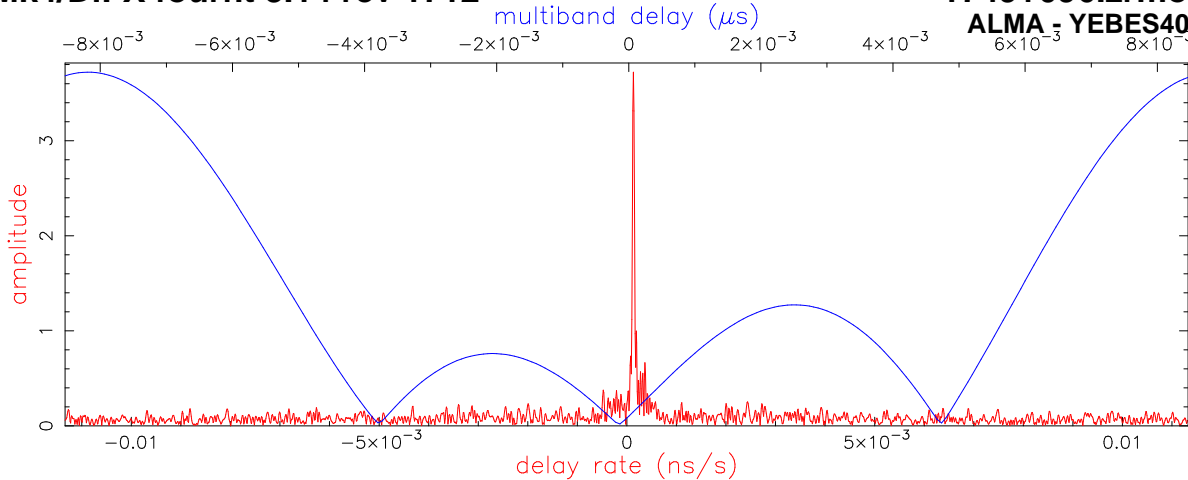
Amp. and Phase vs. time for each freq., 43 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



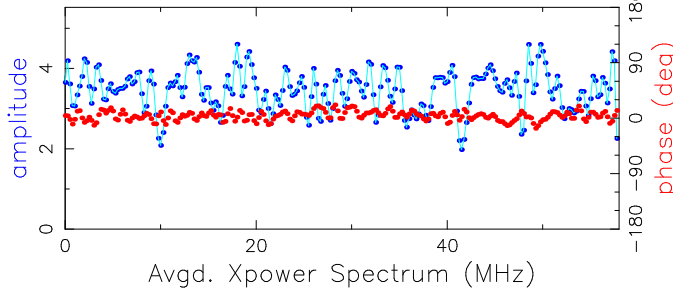
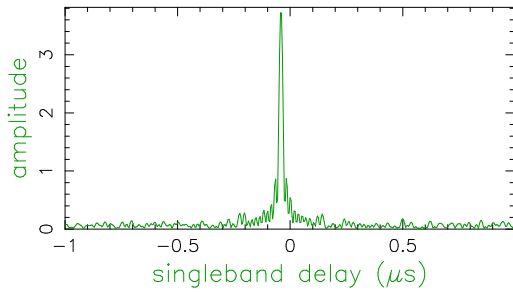
	86151.11	86209.70	86268.30	86326.89	86326.89	All
U/L	549/0	549/0	549/0	549/0	549/0	
A	0	0	0	0	0	
Y	0	0	0	0	0	
A:Y	0:0	0:0	0:0	0:0	0:0	
A:Y	0:0	0:0	0:0	0:0	0:0	
A	1000	1000	1000	1000	1000	
Y	1000	1000	1000	1000	1000	
A	W00UL	W01UL	W02UL	W03UL	W03UL	
Y	W00UR	W01UR	W02UR	W03UR	W03UR	

Group delay (usec)(sbd)	-3.31464068950E+03	Apriori delay (usec)	-3.31460809528E+03	Resid mbdelay (usec)	1.53911E-03	+/-	3.7E-06
Sband delay (usec)	-3.31463883321E+03	Apriori clock (usec)	-2.1100789E+03	Resid sbdelay (usec)	-3.07379E-02	+/-	1.5E-05
Phase delay (usec)	-3.31460809914E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-3.86920E-06	+/-	5.7E-09
Delay rate (us/s)	1.38024866040E+00	Apriori rate (us/s)	1.38024852871E+00	Resid rate (us/s)	1.31690E-07	+/-	3.5E-11
Total phase (deg)	-101.2	Apriori accel (us/s/s)	-1.32242855186E-05	Resid phase (deg)	16.5	+/-	0.2

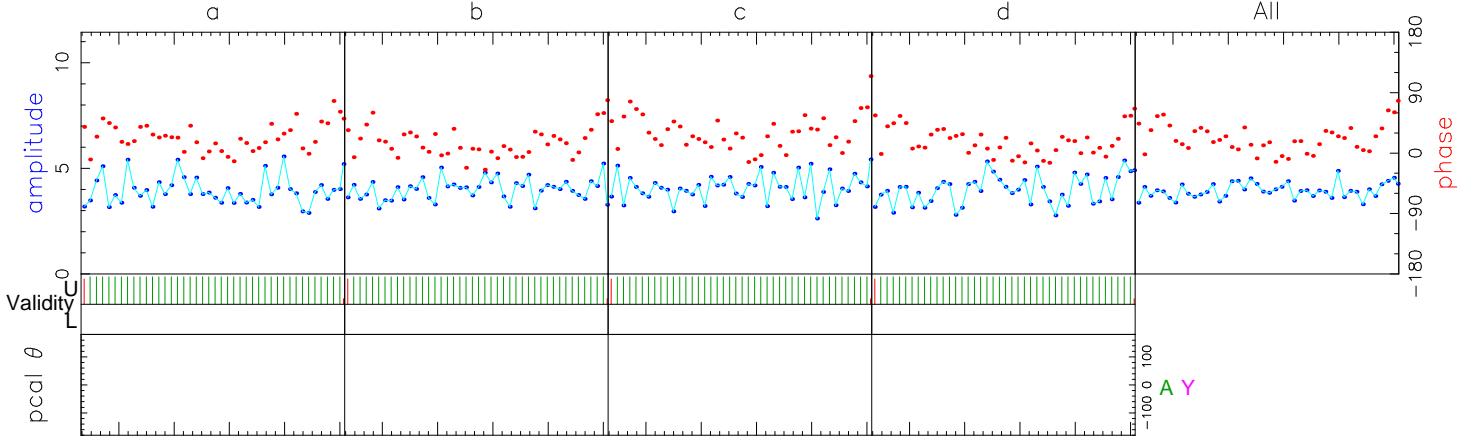
ph/seg (deg)	19.5	0.6	Search (2048X16)	20.665	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	10.9	1.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	3.4	0.2	Inc. seg. avg.	22.381	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	8.7	0.3	Inc. frq. avg.	21.109	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00



Fringe quality 8
SNR 117.7
Int time 280.369
Amp 3.817
Phase 157.6
PFD 0.0e+00
Delays (us)
SBD -0.040959
MBD -0.008151
Fringe rate (Hz)
 0.011349
Ion TEC 0.000
Ref freq (MHz)
 86140.0000
AP (sec) 0.512
Exp. mb007
Exper # 16383
Yr:day 2017:093
Start 072018.94
Stop 072500.03
FRT 072230.00
Corr/FF/build
 2017:237:142410
 2017:243:134415
 2017:170:130423
RA & Dec (J2000)
 17h51m32.8186s
 +9°39' 0.728"



Amp. and Phase vs. time for each freq., 43 segs, 13 APs / seg (6.66 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	86326.89	86326.89	Freq (MHz)	All
24.2	14.3	29.1	16.8	16.8	16.8	16.8	16.8	Phase	21.1
3.7	3.8	3.8	3.7	3.7	3.7	3.7	3.7	Ampl.	3.7
223.6	223.4	223.7	223.4	223.4	223.4	223.4	223.4	Sbd box	223.5
U/L 549/0	549/0	549/0	549/0	549/0	549/0	549/0	549/0	APs used	
A 0	0	0	0	0	0	0	0	PC freqs	
Y 0	0	0	0	0	0	0	0	PC freqs	
A:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR	W03UR	Chan ids	
Y W00UL	W01UL	W02UL	W03UL	W03UL	W03UL	W03UL	W03UL	Tracks	
								Chan ids	
								Tracks	

Group delay (usec)(sbd)	-3.31465038009E+03	Apriori delay (usec)	-3.31460809528E+03	Resid mbdelay (usec)	-8.15148E-03	+/-	2.1E-05	
Sband delay (usec)	-3.31464905390E+03	Apriori clock (usec)	-2.1100789E+03	Resid sbdelay (usec)	-4.09586E-02	+/-	8.1E-05	
Phase delay (usec)	-3.31460809460E+03	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	6.79483E-07	+/-	3.1E-08	
Delay rate (us/s)	1.38024866045E+00	Apriori rate (us/s)	1.38024852871E+00	Resid rate (us/s)	1.31746E-07	+/-	1.9E-10	
Total phase (deg)	39.9	Apriori accel (us/s/s)	-1.32242855186E-05	Resid phase (deg)	157.6	+/-	1.0	
RMS	19.5	Theor.	3.2	Amplitude	3.817 +/- 0.032			
ph/seg (deg)	19.5	Search (2048X16)	3.678	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	9.8	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	8.3	Inc. seg. avg.	3.945	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	2.1	Inc. frq. avg.	3.739	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	