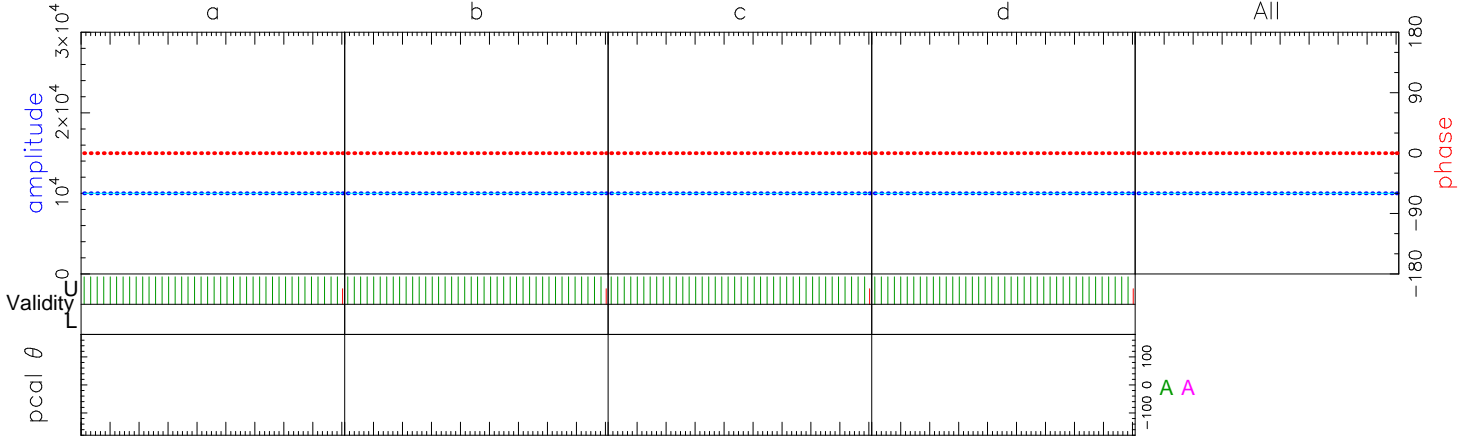


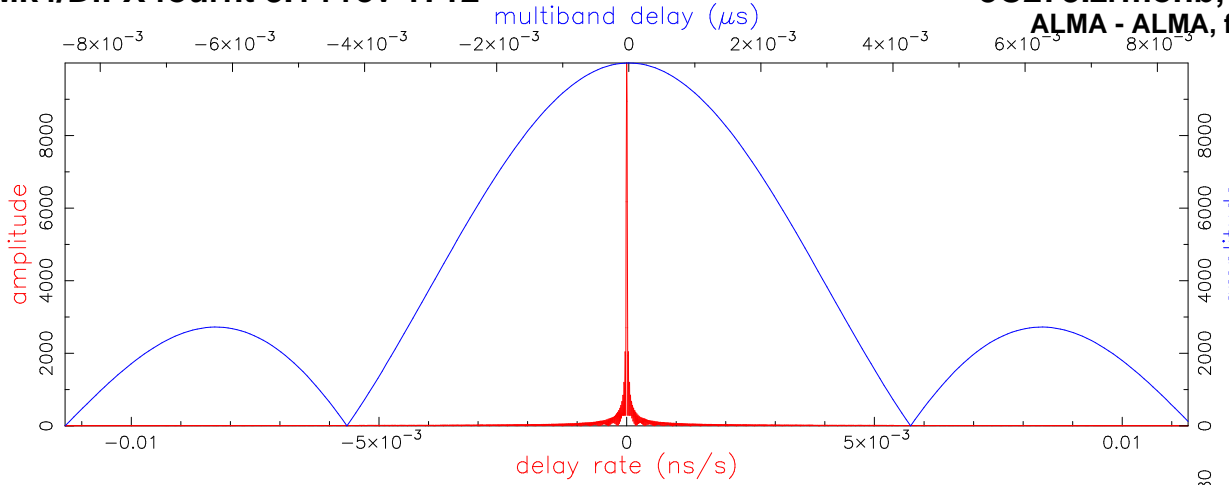
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



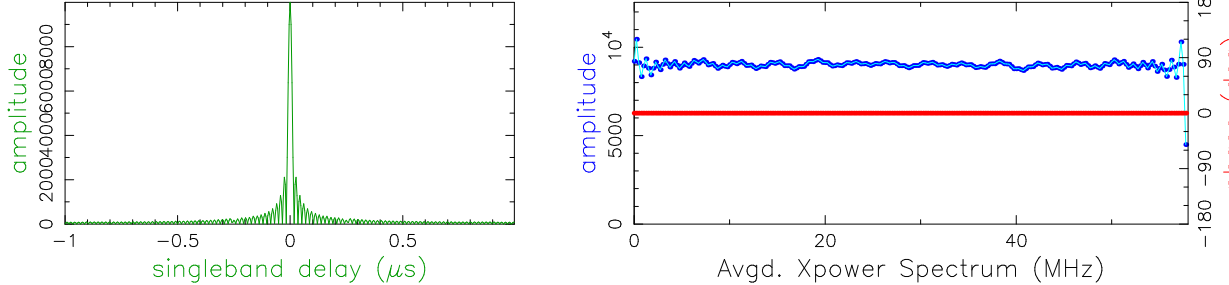
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
0.0	0.0	-0.0	-0.0	-0.0	Phase	-0.0
10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
233.0	233.0	233.0	233.0	233.0	Sbd box	233.0
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	0	PC freqs	
A 0	0	0	0	0	PC freqs	
A:A 0:0	0:0	0:0	0:0	0:0	PC phase	
A:A 0:0	0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	1000	PC amp	
A 1000	1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL		Chan ids	
A W00UL	W01UL	W02UL	W03UL		Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.7E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.2E-08
Phase delay (usec)	-2.54298246889E-18	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.54298E-18	+/-	8.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.8E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

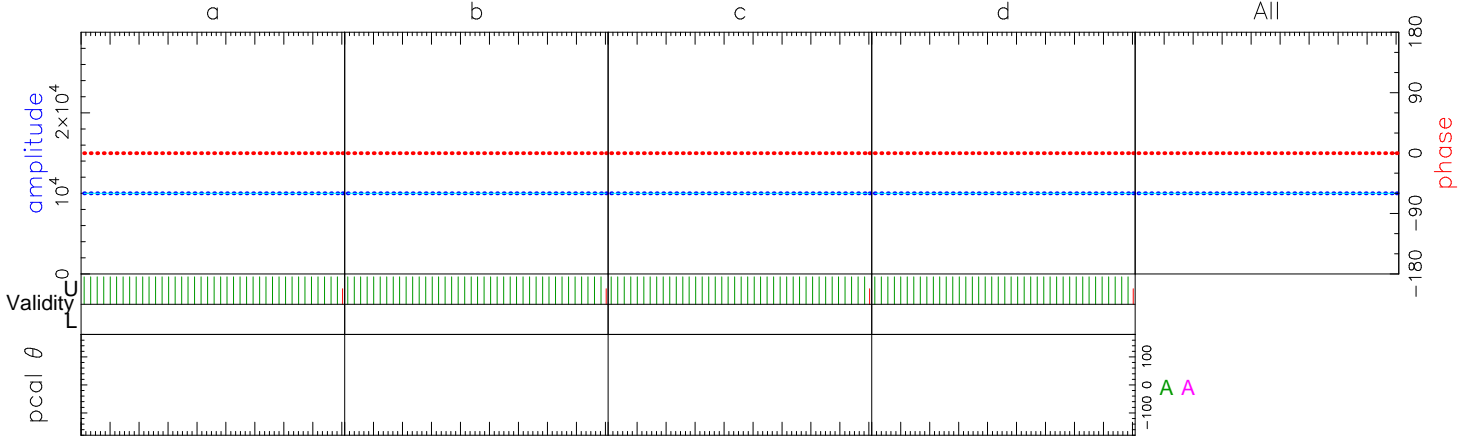
ph/seg (deg)	0.0	Theor.	0.0	Amplitude	10000.000 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0	0.0	0.0	Search (4096X16)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00



Fringe quality 9  
 SNR 427755.5  
 Int time 539.980  
 Amp 9999.999  
 Phase -0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz)  
 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142811  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"



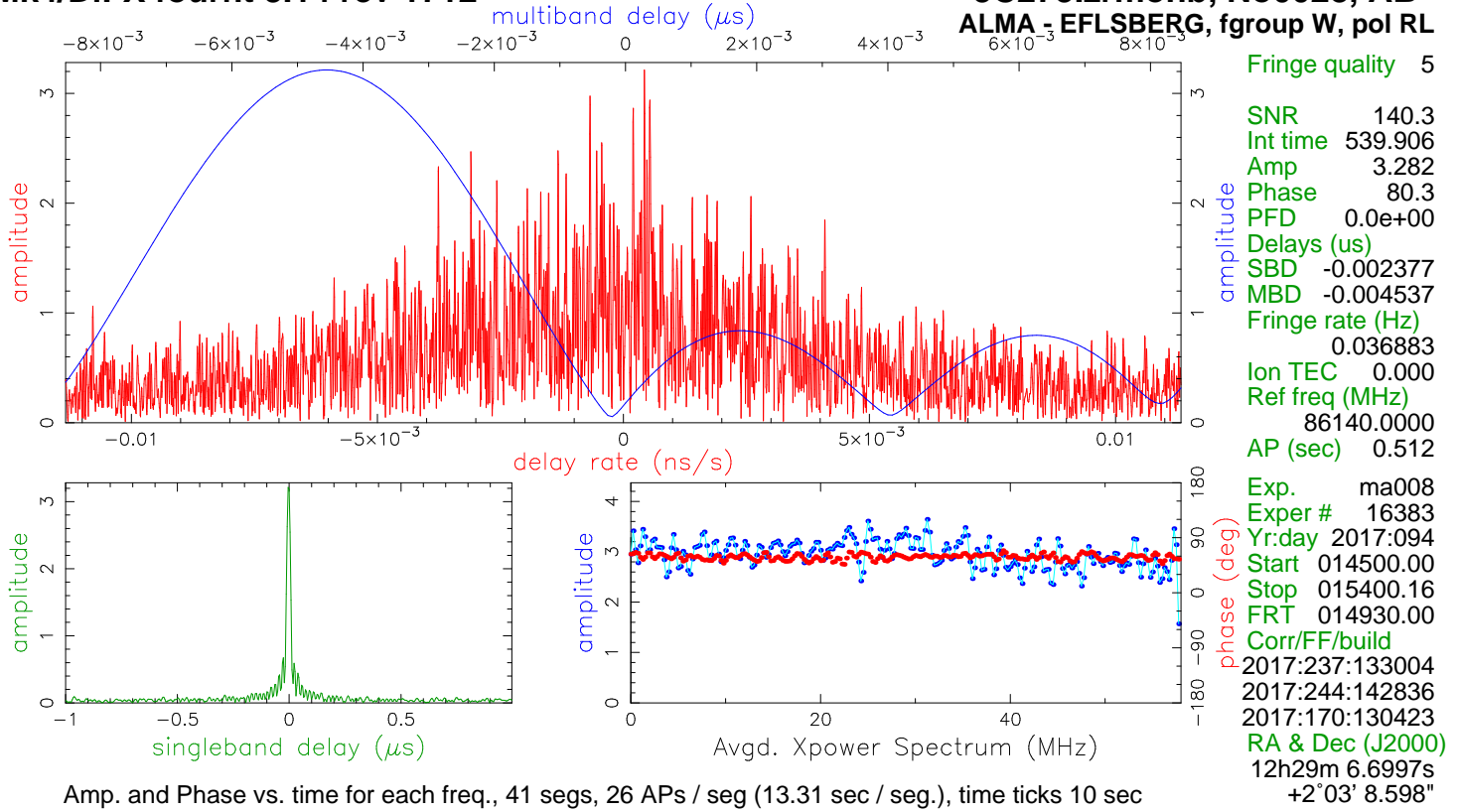
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



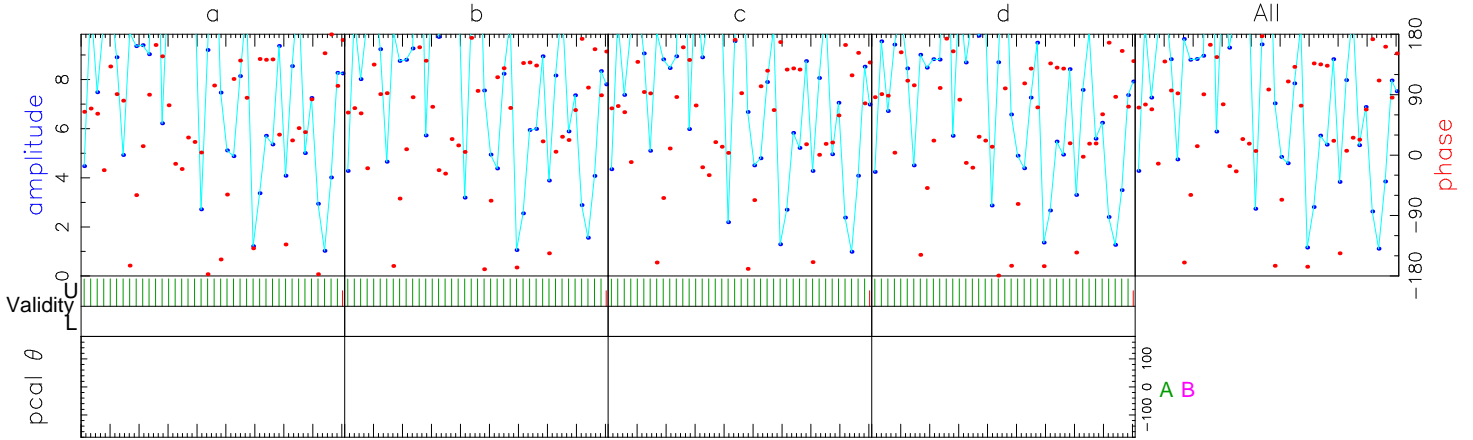
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-0.0	0.0	-0.0	-0.0	Phase	-0.0
	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	233.0	233.0	233.0	233.0	Sbd box	233.0
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
A	0	0	0	0	PC freqs	
A:A	0:0	0:0	0:0	0:0	PC phase	
A:A	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
A	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
A	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	5.7E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	2.2E-08
Phase delay (usec)	-2.05296238845E-17	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-2.05296E-17	+/-	8.6E-12
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	2.8E-14
Total phase (deg)	-0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	-0.0	+/-	0.0

ph/seg (deg)	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	0.0		0.0	Search (4096X16)	10000.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	0.0		0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	0.0		0.0	Inc. seg. avg.	10000.000	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
				Inc. frq. avg.	10000.000	Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	t_cohere	infinite
								ion window (TEC)	0.00 0.00

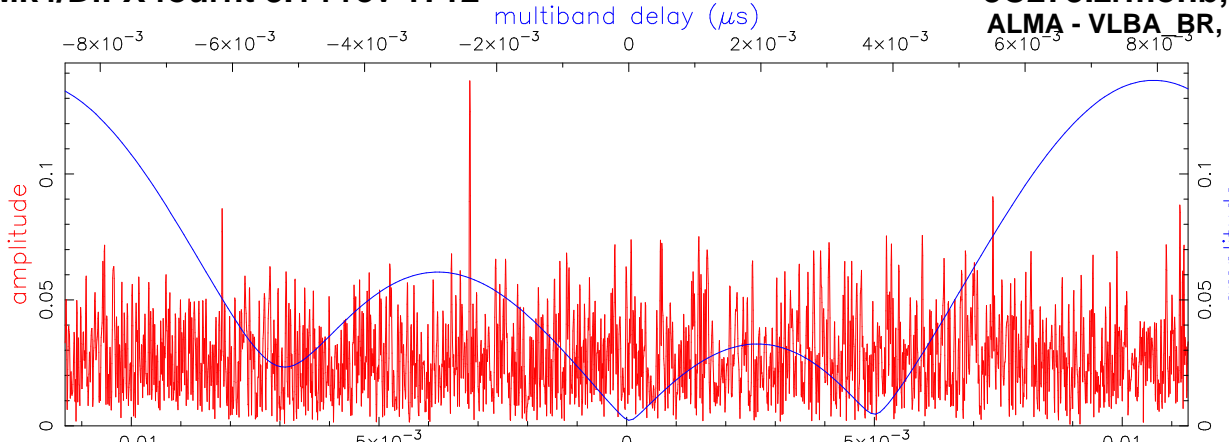


Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
83.4	78.4	76.7	83.1	Phase	80.3
3.3	3.3	3.3	3.0	Ampl.	3.2
232.7	232.0	232.6	232.5	Sbd box	232.4
U/L 1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	PC freqs	
B 0	0	0	0	PC phase	
A:B 0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	PC amp	
B 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
B W00UL	W01UL	W02UL	W03UL	Tracks	
Group delay (usec)(sbd)					
2.53817743718E+03	2.53817959713E+03	2.53818197369E+03	2.53818197369E+03	Resid mbdelay (usec)	-4.53651E-03 +/- 1.7E-05
Sband delay (usec)	2.53817959713E+03	Apriori clock (usec)	-2.1349812E+03	Resid sbdelay (usec)	-2.37655E-03 +/- 6.8E-05
Phase delay (usec)	2.53818197628E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	2.59071E-06 +/- 2.6E-08
Delay rate (us/s)	1.45181659821E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28174E-07 +/- 8.4E-11
Total phase (deg)	157.1	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	80.3 +/- 0.8

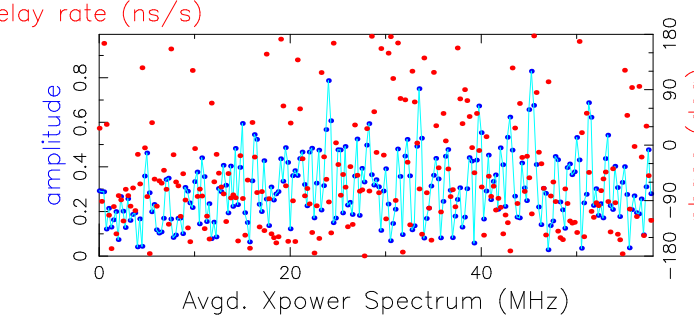
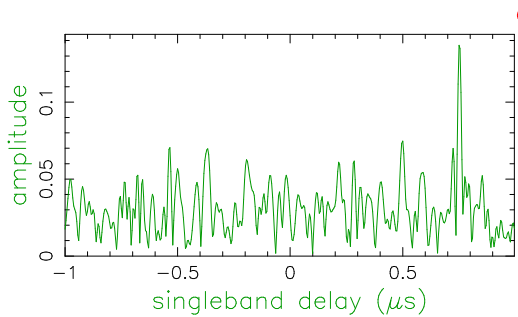
RMS 73.2 Theor. 2.6 Amplitude 3.282 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 73.2 2.6 Search (4096X16) 3.111 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 178.2 4.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 4.1 0.8 Inc. seg. avg. 7.753 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 4.9 1.4 Inc. frq. avg. 3.220 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00  
 A: az 60.0 el 46.4 pa -127.2 B: az 226.3 el 31.8 pa 28.0 u,v (fr/asec) -8374.954 -10347.402 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB.W.10.zrmonb



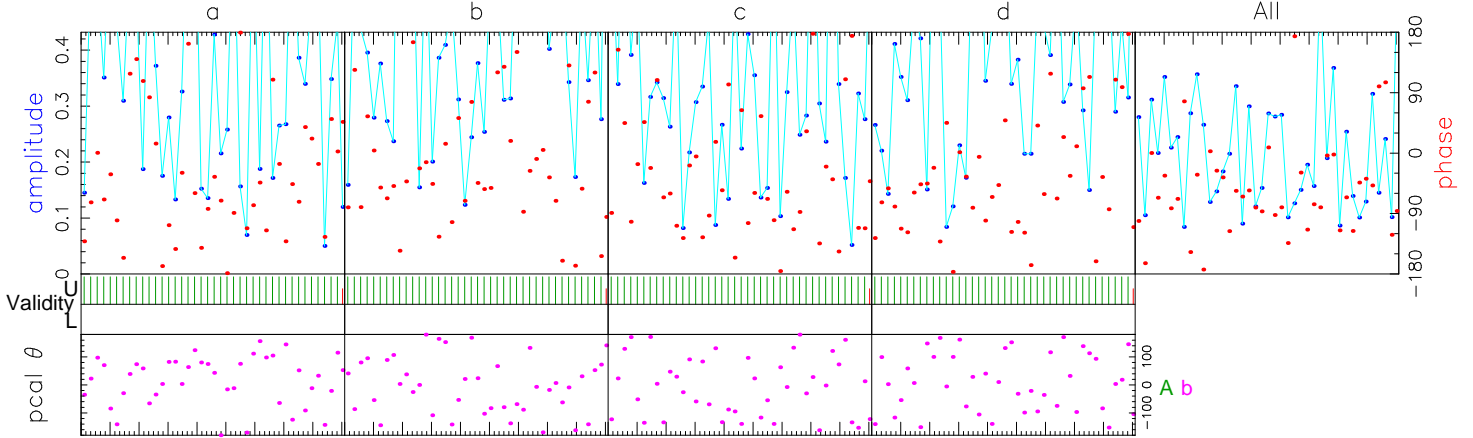
Fringe quality 0

SNR 6.0  
Int time 539.585  
Amp 0.144  
Phase -3136.4  
PFD 4.4e-01  
Delays (us)  
SBD 0.751810  
MBD -0.008998  
Fringe rate (Hz)  
-0.272613  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:142817  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.697s  
+2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



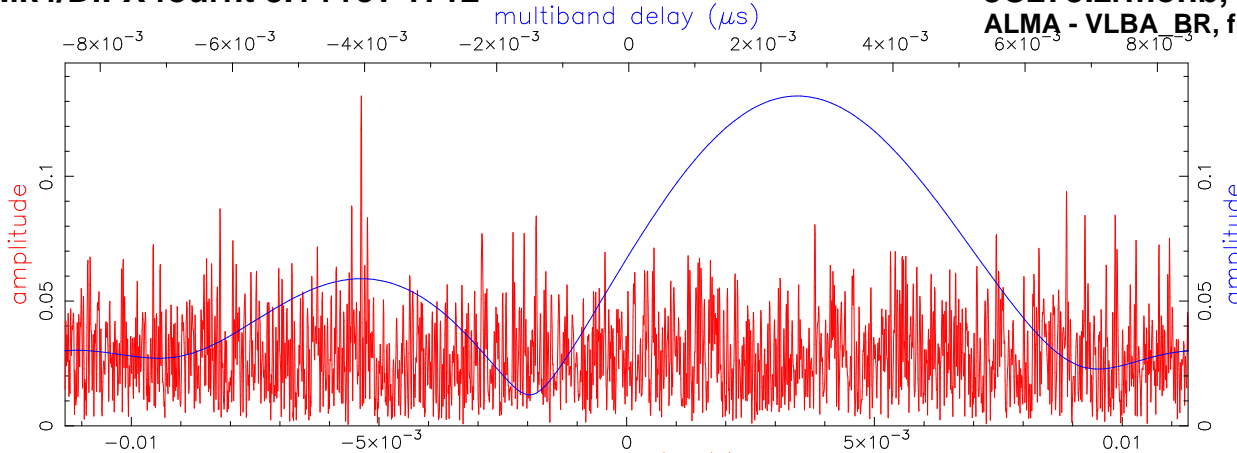
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-58.5	-55.8	-81.4	-60.9	Phase	-64.9
	0.1	0.1	0.2	0.2	Ampl.	0.1
	372.0	347.9	4.6	408.0	Sbd box	407.4
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
b	3890	296	1703	3109	PC freqs	
A:b	0:0	0:0	0:0	0:0	PC phase	
A:b	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
b	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
b	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	1.23827696578E+04	Apriori delay (usec)	1.23820106555E+04	Resid mbdelay (usec)	-8.99775E-03	+/-	4.1E-04
Sband delay (usec)	1.23827624655E+04	Apriori clock (usec)	-2.1012644E+03	Resid sbdelay (usec)	7.51810E-01	+/-	1.6E-03
Phase delay (usec)	1.23820106535E+04	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	-2.09188E-06	+/-	6.2E-07
Delay rate (us/s)	-2.09950284713E-01	Apriori rate (us/s)	-2.09947119948E-01	Resid rate (us/s)	-3.16476E-06	+/-	2.0E-09
Total phase (deg)	-2823.6	Apriori accel (us/s/s)	-8.13147686815E-05	Resid phase (deg)	-3136.4	+/-	19.2

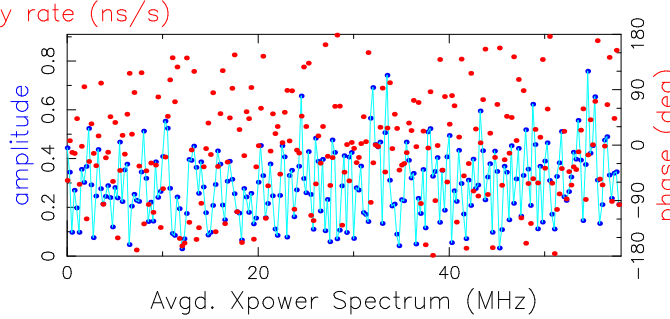
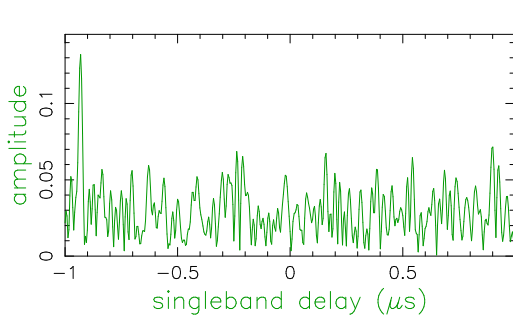
ph/seg (deg)	64.8	Theor.	61.5	Amplitude	0.144 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	94.0	Search (4096X16)	0.135	Search	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	14.3	Interp.	0.000	Inc. seg. avg.	0.144	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	16.9	Inc. frq. avg.	0.136	Inc. frq. avg.	0.136	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





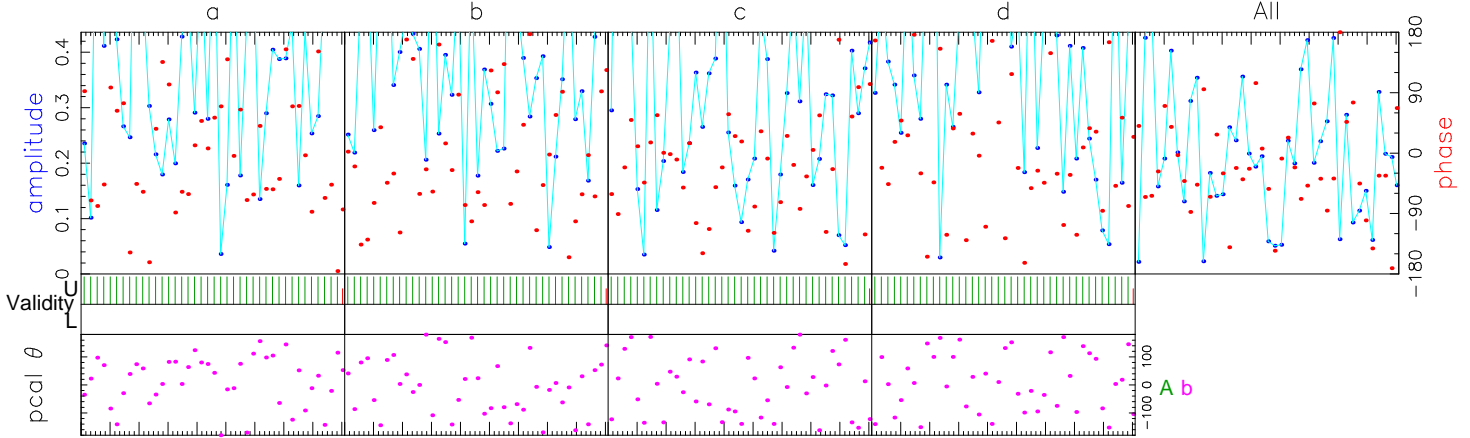


Fringe quality 0  
SNR 5.7  
Int time 539.586  
Amp 0.145  
Phase 3719.4  
PFD 9.6e-01  
Delays (us)  
SBD -0.931620  
MBD 0.002553  
Fringe rate (Hz)  
-0.461705  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:142822  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



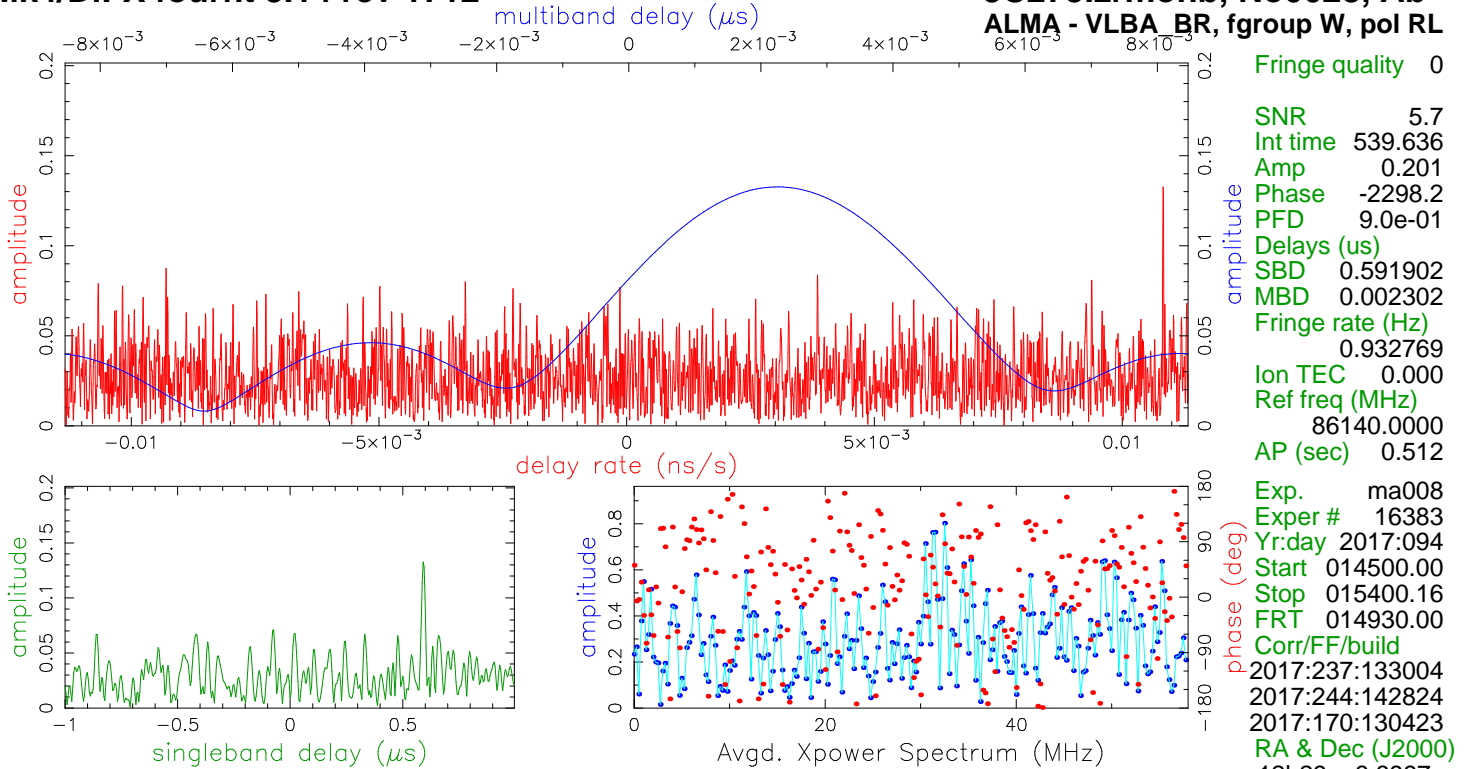
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



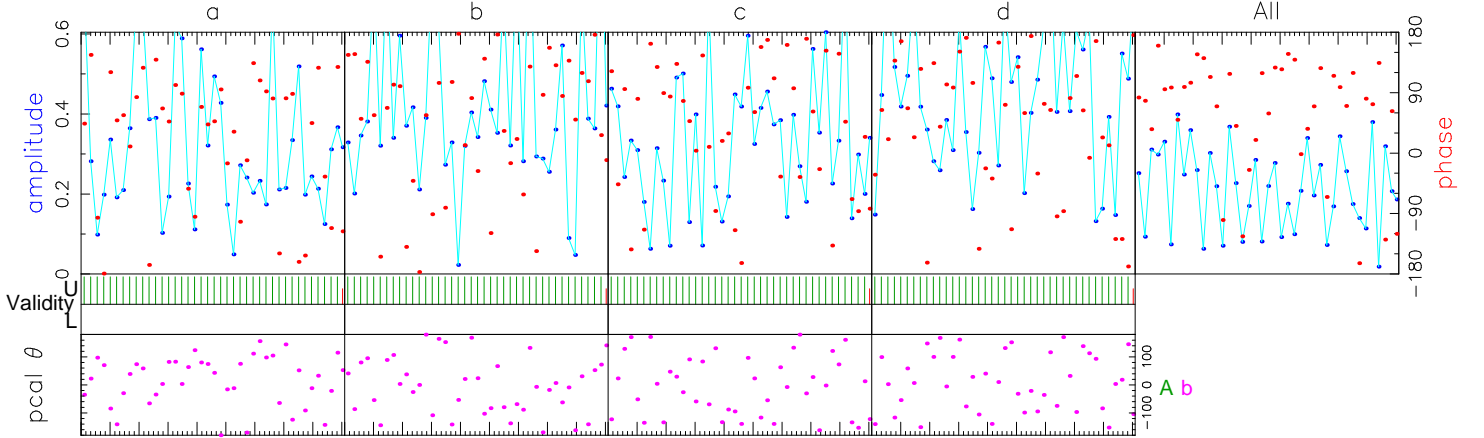
	86151.11	86209.70	86268.30	86326.89	All
Validity	0	0	0	0	0
pcal $\theta$					
86151.11	86209.70	86268.30	86326.89	86326.89	86326.89
Phase	-26.2	-63.2	-24.1	-38.0	-34.6
Ampl.	0.1	0.1	0.2	0.1	0.1
Sbd box	441.2	138.0	17.7	16.1	16.9
APs used	U/L 1055/0	1055/0	1055/0	1055/0	1055/0
PC freqs	A 0	0	0	0	0
PC freqs	b 3890	296	1703	3109	3109
PC phase	A:b 0:0	0:0	0:0	0:0	0:0
Mani PC	A:b 0:0	0:0	0:0	0:0	0:0
PC amp	A 1000	1000	1000	1000	1000
	b 1000	1000	1000	1000	1000
Chan ids	A W00UL	W01UL	W02UL	W03UL	W00UL
Tracks	b W00UR	W01UR	W02UR	W03UR	W00UR
Chan ids					
Tracks					
Group delay (usec)(sbd)	1.23810745418E+04	1.23810790360E+04	1.23820106555E+04	1.23820106555E+04	2.55296E-03 +/- 4.3E-04
Sband delay (usec)	1.23810790360E+04	1.23820106544E+04	1.23820106544E+04	1.23820106544E+04	-9.31620E-01 +/- 1.7E-03
Phase delay (usec)	1.23820106544E+04	1.23820106544E+04	1.23820106544E+04	1.23820106544E+04	-1.11727E-06 +/- 6.5E-07
Delay rate (us/s)	-2.09952479883E-01	-2.09952479883E-01	-2.09952479883E-01	-2.09952479883E-01	-5.35993E-06 +/- 2.1E-09
Total phase (deg)		4032.2	-8.13147686815E-05	-8.13147686815E-05	3719.4 +/- 20.2

RMS Theor. Amplitude 0.145 +/- 0.026  
ph/seg (deg) 69.3 64.8 Search (4096X16) 0.130  
amp/seg (%) 112.1 113.1 Interp. 0.000  
ph/frq (deg) 22.4 20.2 Inc. seg. avg. 0.146  
amp/frq (%) 24.7 35.3 Inc. frq. avg. 0.141  
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 sb window (us) -1.000 1.000  
Sample rate(MSamp/s): 116 dr window (ns/s) -0.009 0.009  
Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 0  
 SNR 5.7  
 Int time 539.636  
 Amp 0.201  
 Phase -2298.2  
 PFD 9.0e-01  
 Delays (us)  
 SBD 0.591902  
 MBD 0.002302  
 Fringe rate (Hz)  
 0.932769  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142824  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"

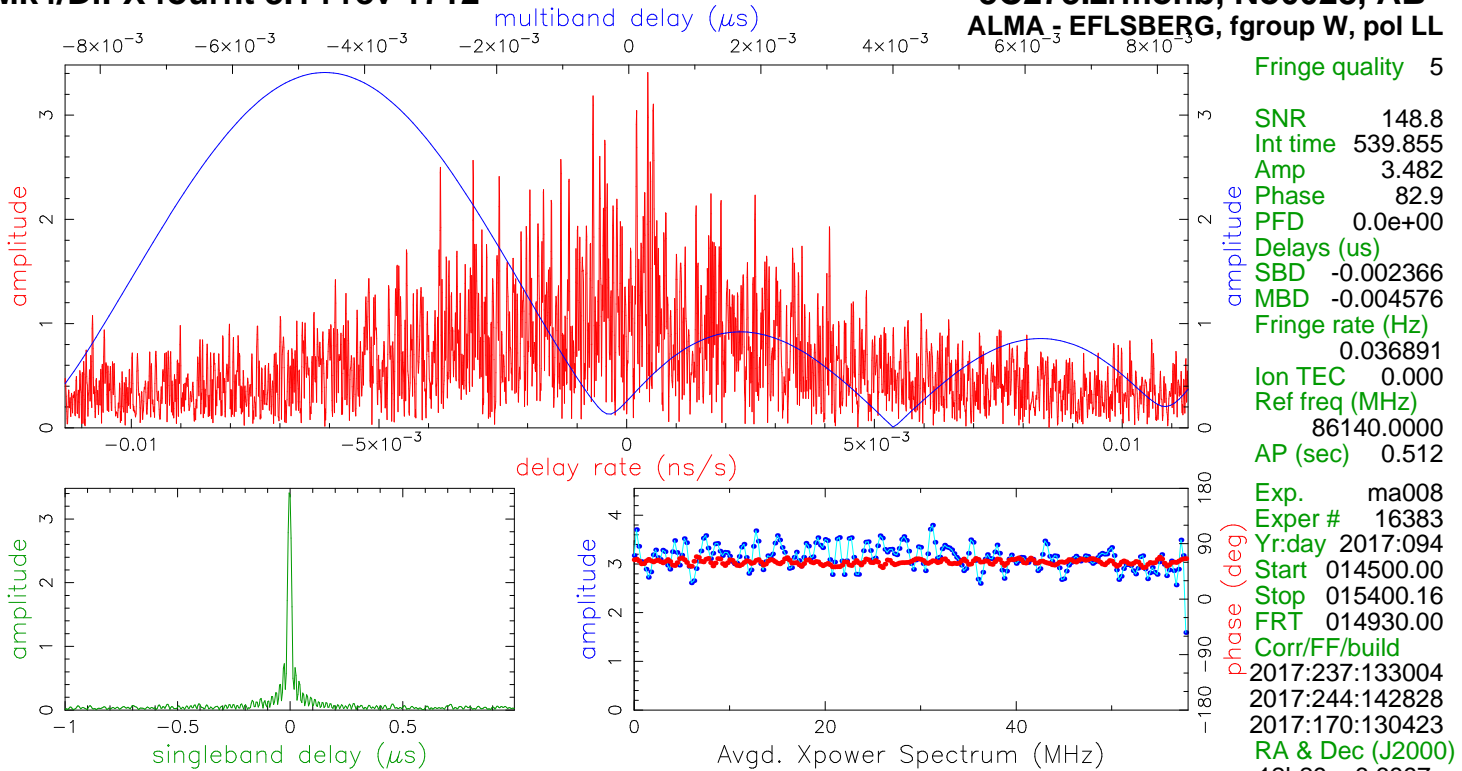
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



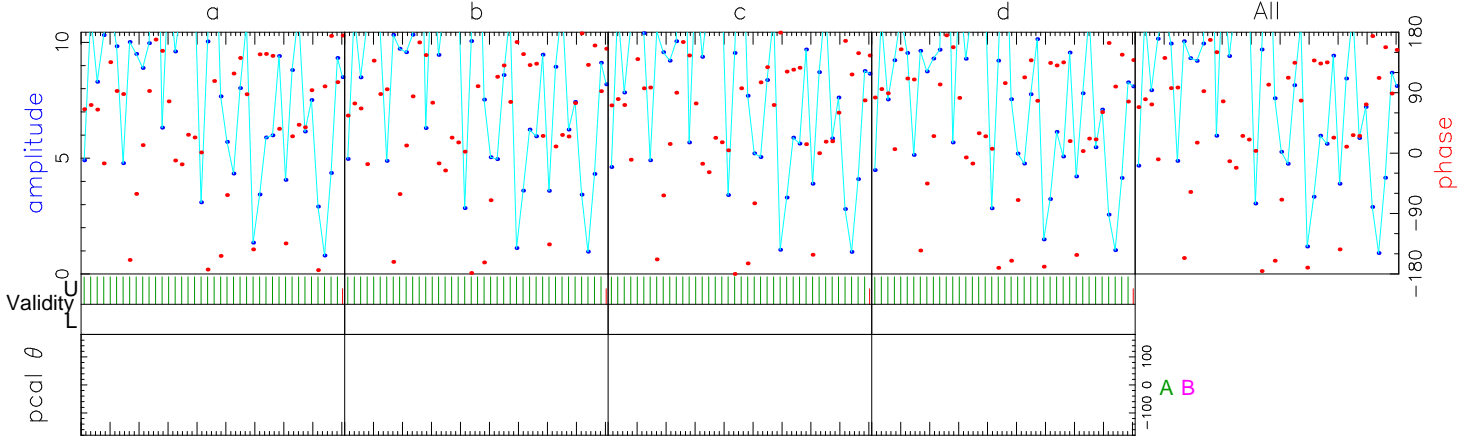
86151.11	86209.70	86268.30	86326.89	86375.49	All
93.2	88.6	93.2	88.5	90.7	90.7
0.2	0.2	0.1	0.2	0.2	0.2
371.3	370.7	121.9	124.6	370.3	370.3
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0
A 0	0	0	0	0	0
b 3890	296	1703	3109	3109	3109
A:b 0:0	0:0	0:0	0:0	0:0	0:0
A:b 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
b 1000	1000	1000	1000	1000	1000
A W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
b W00UL	W01UL	W02UL	W03UL	W04UL	W05UL

Group delay (usec)(sbd)	1.23826102909E+04	Apriori delay (usec)	1.23820106555E+04	Resid mbdelay (usec)	2.30206E-03	+/-	4.2E-04
Sband delay (usec)	1.23826025576E+04	Apriori clock (usec)	-2.1012644E+03	Resid sbdelay (usec)	5.91902E-01	+/-	1.7E-03
Phase delay (usec)	1.23820106585E+04	Apriori clockrate (us/s)	1.7493731E-06	Resid phdelay (usec)	2.92585E-06	+/-	6.5E-07
Delay rate (us/s)	-2.09936291427E-01	Apriori rate (us/s)	-2.09947119948E-01	Resid rate (us/s)	1.08285E-05	+/-	2.1E-09
Total phase (deg)	-2345.5	Apriori accel (us/s/s)	-8.13147686815E-05	Resid phase (deg)	-2298.2	+/-	20.0

ph/seg (deg)	RMS	Theor.	Amplitude	0.201 +/- 0.035	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	67.4	64.1	Search (4096X16)	0.130	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	97.3	111.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	3.3	20.0	Inc. seg. avg.	0.198	Sample rate (MSamp/s):	116	dr window (ns/s)	-0.011 0.011	
	22.5	34.9	Inc. frq. avg.	0.188	Data rate (Mb/s):	928	ion window (TEC)	0.00 0.00	



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



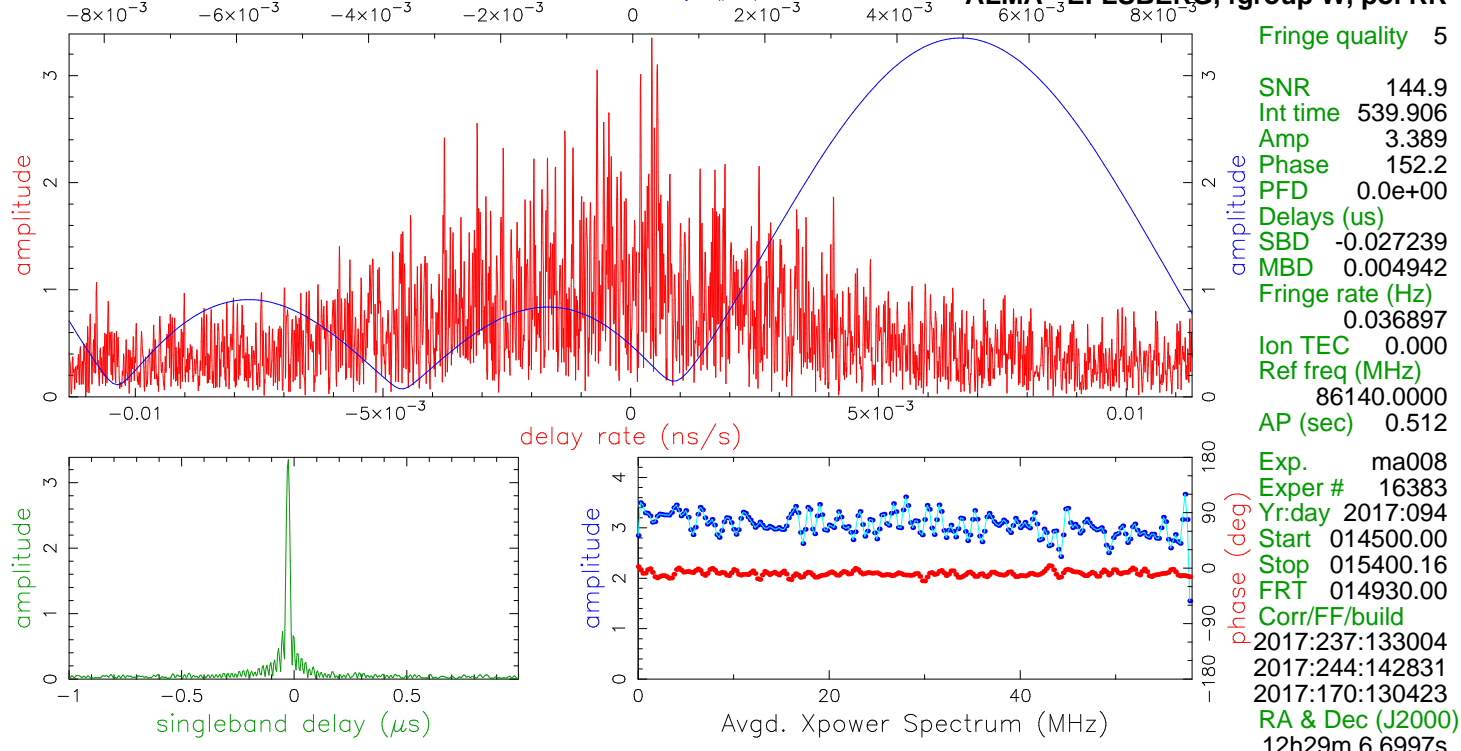
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	87.2	80.5	77.6	86.6	Phase	82.9
	3.4	3.5	3.5	3.3	Ampl.	3.4
	232.7	232.0	232.6	232.6	Sbd box	232.5
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
B	0	0	0	0	PC freqs	
A:B	0:0	0:0	0:0	0:0	PC phase	
A:B	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
B	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
B	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	2.53817739813E+03	Apriori delay (usec)	2.53818197369E+03	Resid mbdelay (usec)	-4.57556E-03	+/- 1.6E-05
Sband delay (usec)	2.53817960734E+03	Apriori clock (usec)	-2.1349812E+03	Resid sbdelay (usec)	-2.36634E-03	+/- 6.4E-05
Phase delay (usec)	2.53818197636E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	2.67347E-06	+/- 2.5E-08
Delay rate (us/s)	1.45181659830E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28264E-07	+/- 8.0E-11
Total phase (deg)	159.7	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	82.9	+/- 0.8

RMS Theor. Amplitude 3.482 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 73.5 2.5 Search (4096X16) 3.282 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 179.1 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 5.8 0.8 Inc. seg. avg. 8.243 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 3.2 1.3 Inc. frq. avg. 3.419 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 B: az 226.3 el 31.8 pa 28.0 u,v (fr/asec) -8374.954 -10347.402 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB.W.7.zrmonb

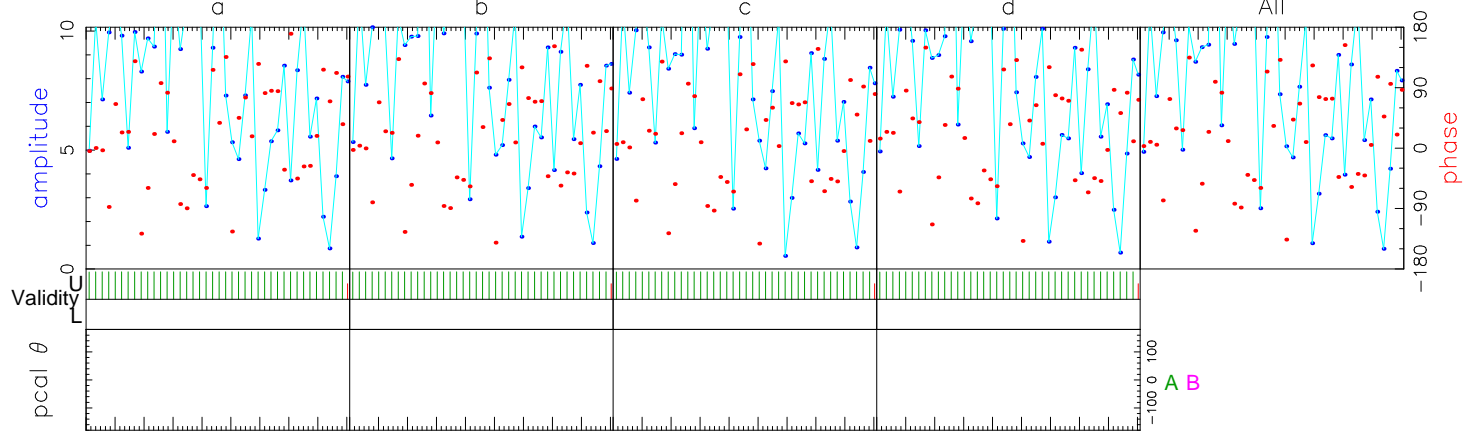


multiband delay ( $\mu\text{s}$ )

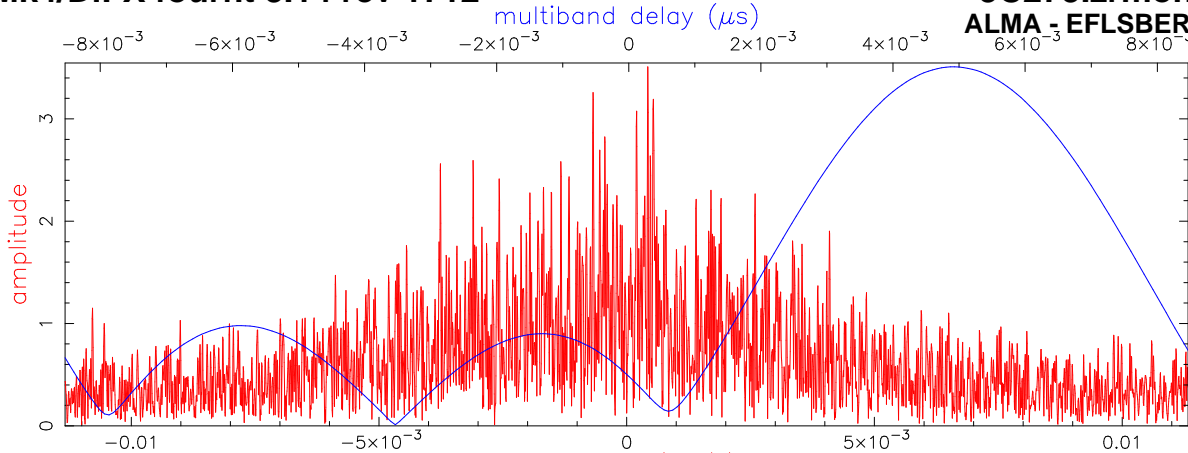


Fringe quality 5  
 SNR 144.9  
 Int time 539.906  
 Amp 3.389  
 Phase 152.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.027239  
 MBD 0.004942  
 Fringe rate (Hz)  
 0.036897  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142831  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.699s  
 +2°03' 8.598"

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



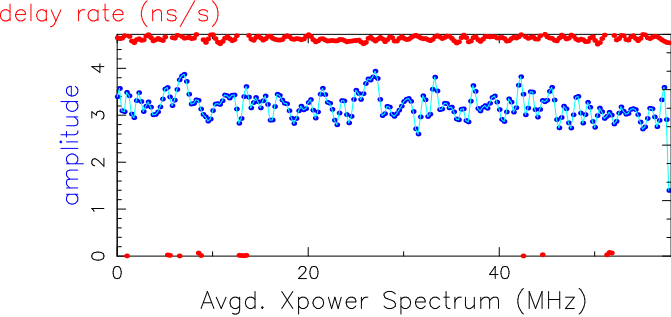
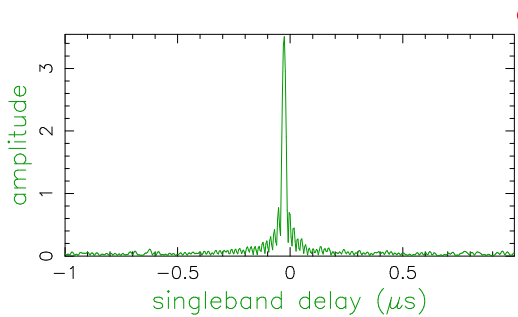
86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All	
17.7	13.8	11.4	19.9	19.9	Phase	15.7	
3.2	3.5	3.3	3.3	3.3	Ampl.	3.4	
226.5	226.7	226.5	227.0	227.0	Sbd box	226.7	
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	APs used		
A 0	0	0	0	0	PC freqs		
B 0	0	0	0	0	PC freqs		
A:B 0:0	0:0	0:0	0:0	0:0	PC phase		
A:B 0:0	0:0	0:0	0:0	0:0	Mani PC		
A 1000	1000	1000	1000	1000	PC amp		
B 1000	1000	1000	1000	1000			
A W00UR	W01UR	W02UR	W03UR	W03UR	Chan ids		
B W00UR	W01UR	W02UR	W03UR	W03UR	Tracks		
					Chan ids		
					Tracks		
Group delay (usec)(sbd)	2.53815278253E+03	Apriori delay (usec)	2.53818197369E+03	Resid mbdelay (usec)	4.94218E-03	+/- 1.7E-05	
Sband delay (usec)	2.53815473507E+03	Apriori clock (usec)	-2.1349812E+03	Resid sbdelay (usec)	-2.72386E-02	+/- 6.6E-05	
Phase delay (usec)	2.53818197419E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	5.04720E-07	+/- 2.6E-08	
Delay rate (us/s)	1.45181659838E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28340E-07	+/- 8.2E-11	
Total phase (deg)	229.0	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	152.2	+/- 0.8	
RMS	Theor.	Amplitude	3.389 +/- 0.023	PCal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	73.6	Search (4096X16)	3.215	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	181.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	4.7	Inc. seg. avg.	8.057	Sample rate(MSamp/s): 116		dr window (ns/s)	-0.011 0.011
amp/frq (%)	3.1	Inc. frq. avg.	3.359	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00 0.00
A: az 60.0 el 46.4 pa -127.2    B: az 226.3 el 31.8 pa 28.0    u,v (fr/asec) -8374.954 -10347.402    simultaneous interpolator							
Control file: cf_1234    Input file: /Exps/ma008/gmva_58_merged_pc1/1234/No0028/AB..zrmonb    Output file: /Exps/ma008/gmva_58_merged_pc1/1234/No0028/AB.W.8.zrmonb							



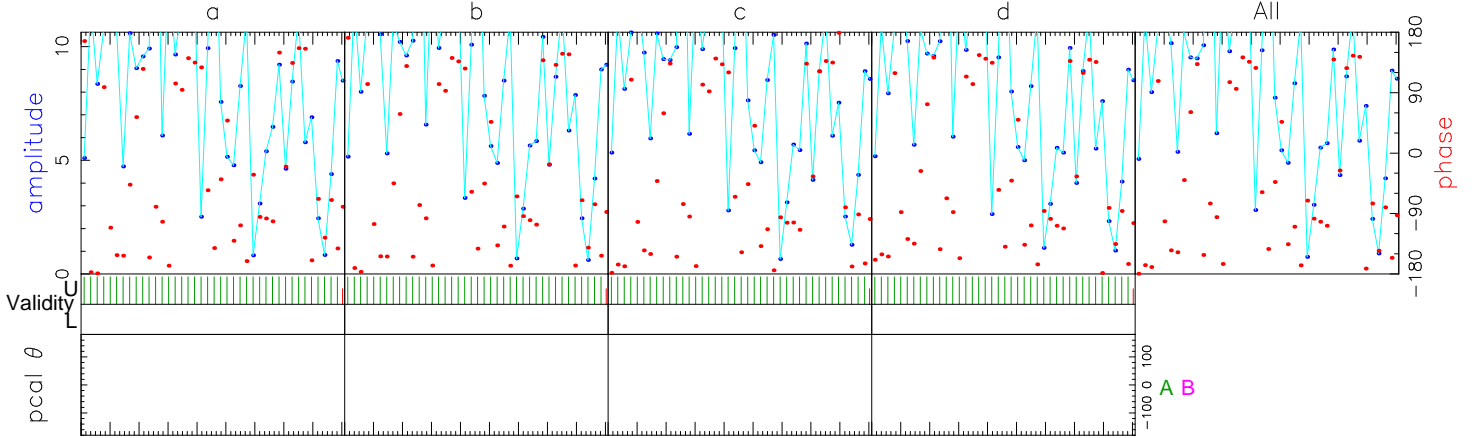
Fringe quality 5

SNR 151.6  
 Int time 539.855  
 Amp 3.546  
 Phase -24.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.027225  
 MBD 0.004892  
 Fringe rate (Hz) 0.036898  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build 2017:237:133004  
 2017:244:142833  
 2017:170:130423  
 RA & Dec (J2000) 12h29m 6.697s +2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



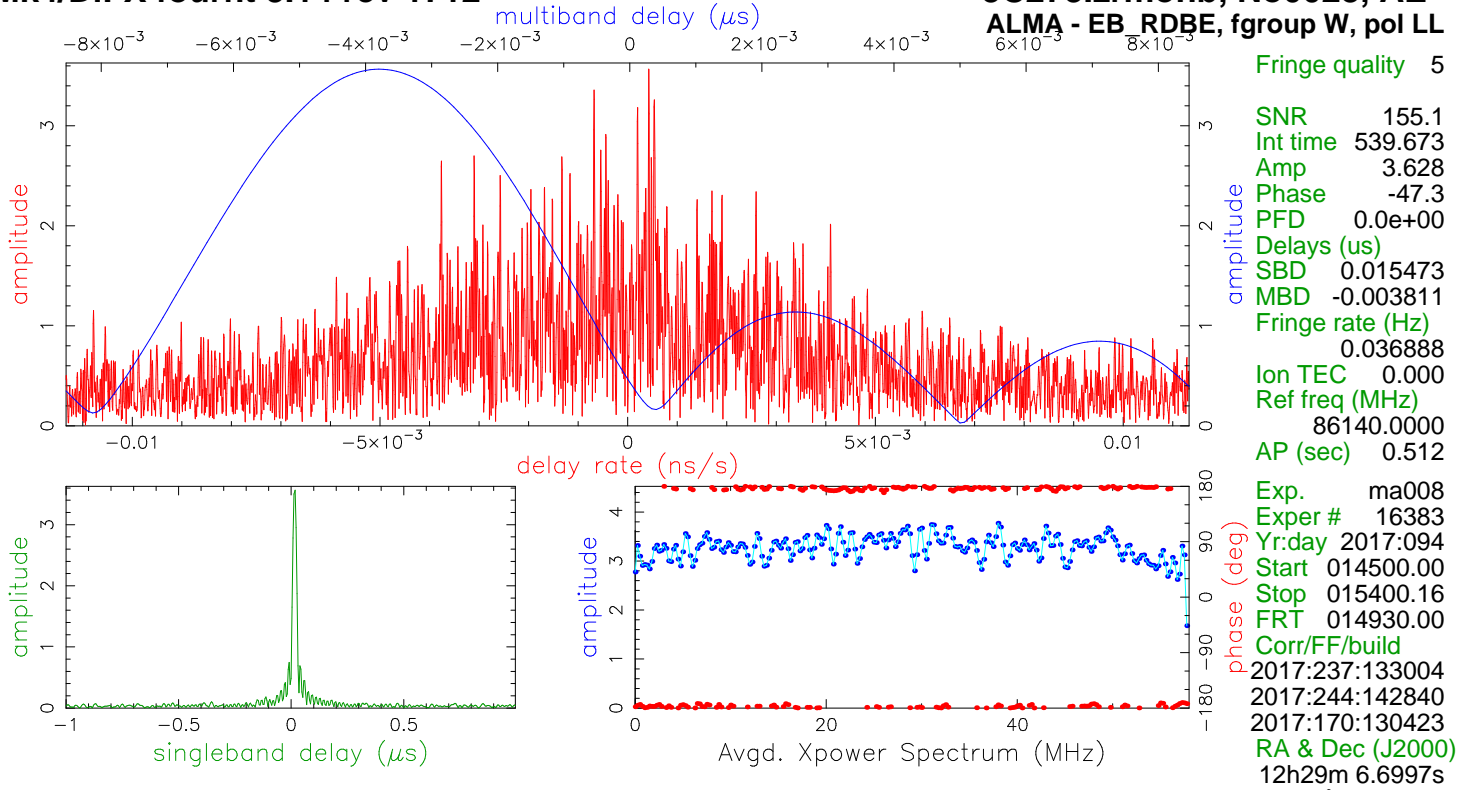
	86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	86326.89	86326.89	All
U/L	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0
A	0	0	0	0	0	0	0	0	0
B	0	0	0	0	0	0	0	0	0
A:B	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000	1000	1000	1000
B	1000	1000	1000	1000	1000	1000	1000	1000	1000
A	W00UL	W01UL	W02UL	W03UL	W03UL	W03UL	W03UL	W03UL	W03UL
B	W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	W03UR	W03UR	W03UR

Group delay (usec)(sbd)	2.53815273215E+03	Apriori delay (usec)	2.53818197369E+03	Resid mbdelay (usec)	4.89180E-03	+/-	1.6E-05
Sband delay (usec)	2.53815474858E+03	Apriori clock (usec)	-2.1349812E+03	Resid sbdelay (usec)	-2.72251E-02	+/-	6.3E-05
Phase delay (usec)	2.53818196848E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-5.20351E-06	+/-	2.4E-08
Delay rate (us/s)	1.45181659839E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28354E-07	+/-	7.8E-11
Total phase (deg)	52.0	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	-24.9	+/-	0.8

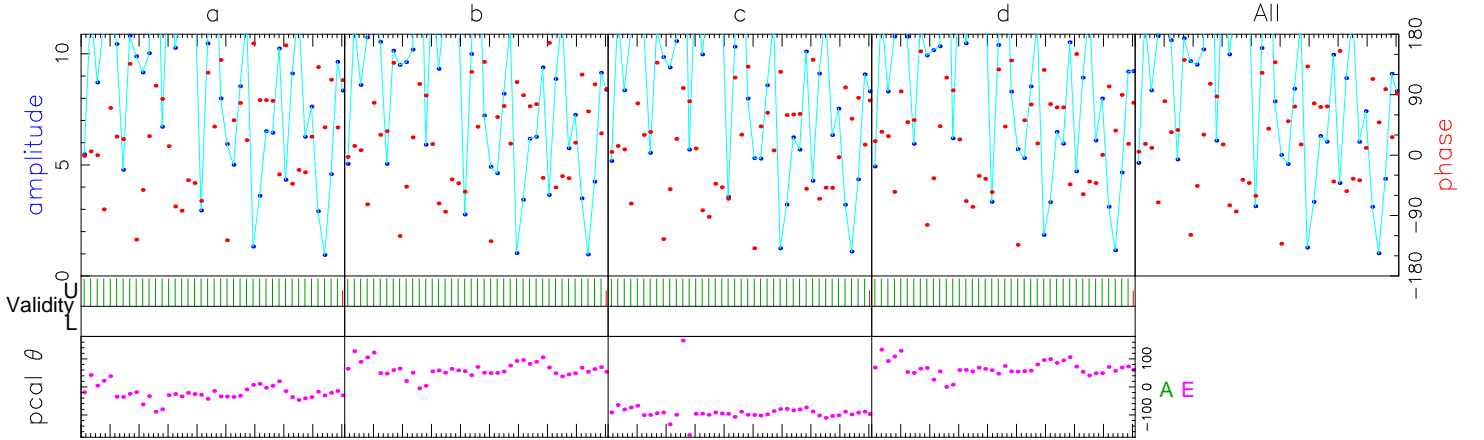
ph/seg (deg)	72.7	Theor.	2.4	Amplitude	3.546 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	182.4	Search (4096X16)	3.351	Search	3.351	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	4.4	Interp.	0.000	Inc. seg. avg.	8.451	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	1.4	Inc. frq. avg.	3.515	Inc. frq. avg.	3.515	Sample rate(MSamp/s):	116	mb window (us)	-0.009 0.009
						Data rate(Mb/s):	928	dr window (ns/s)	-0.011 0.011
						nlags:	232	ion window (TEC)	0.00 0.00
						t_cohere:	infinite		

A: az 60.0 el 46.4 pa -127.2      B: az 226.3 el 31.8 pa 28.0      u,v (fr/asec) -8374.954 -10347.402      simultaneous interpolator

Control file: cf\_1234    Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB..zrmonb    Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AB.W.9.zrmonb



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

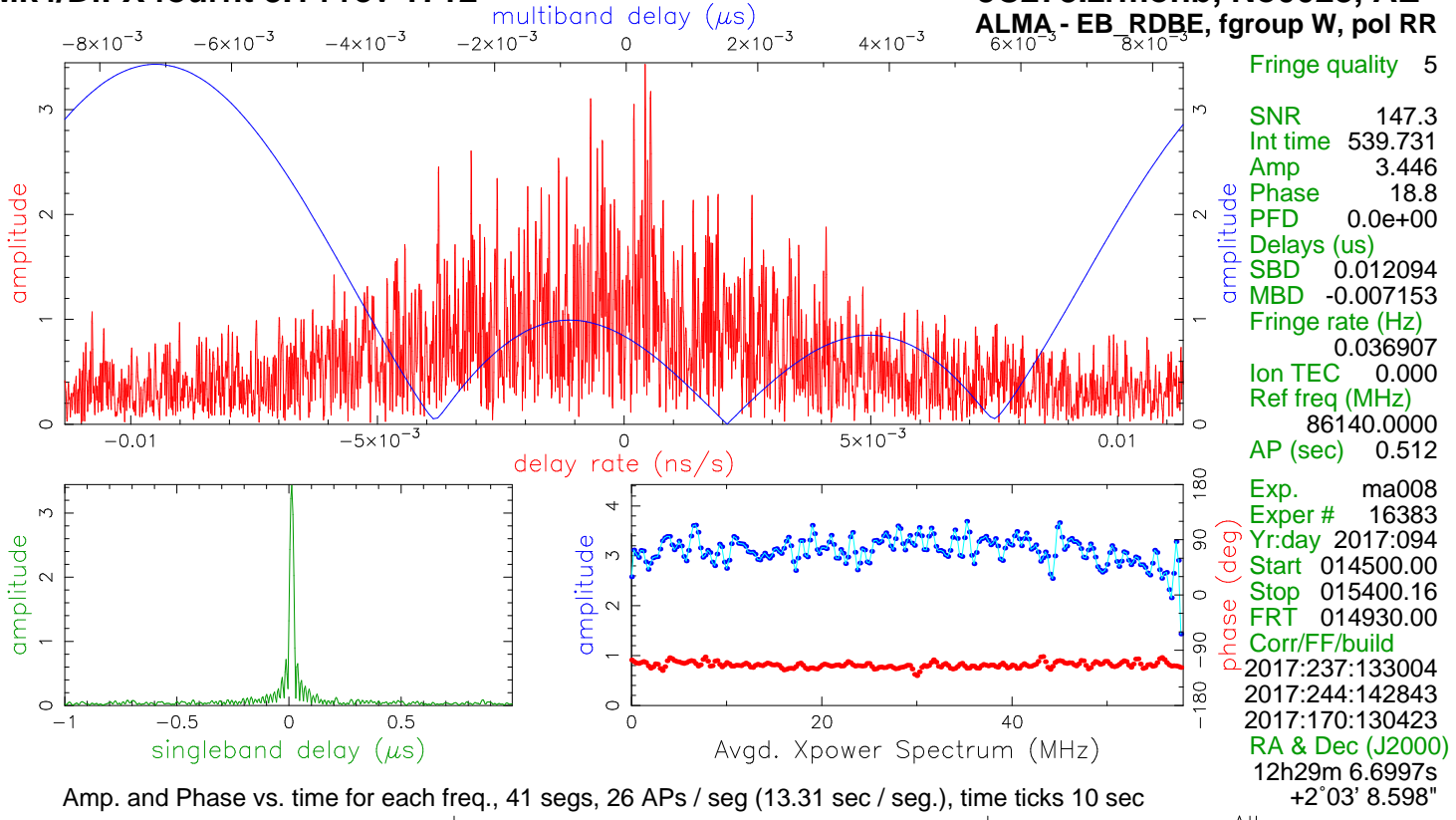


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	22.3	22.2	13.2	26.2	Phase	21.0
	3.6	3.5	3.6	3.6	Ampl.	3.6
	236.6	236.3	236.5	236.9	Sbd box	236.6
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
E	3890	296	1703	3109	PC freqs	
A:E	0:0	0:0	0:0	0:0	PC phase	
A:E	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
E	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
E	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

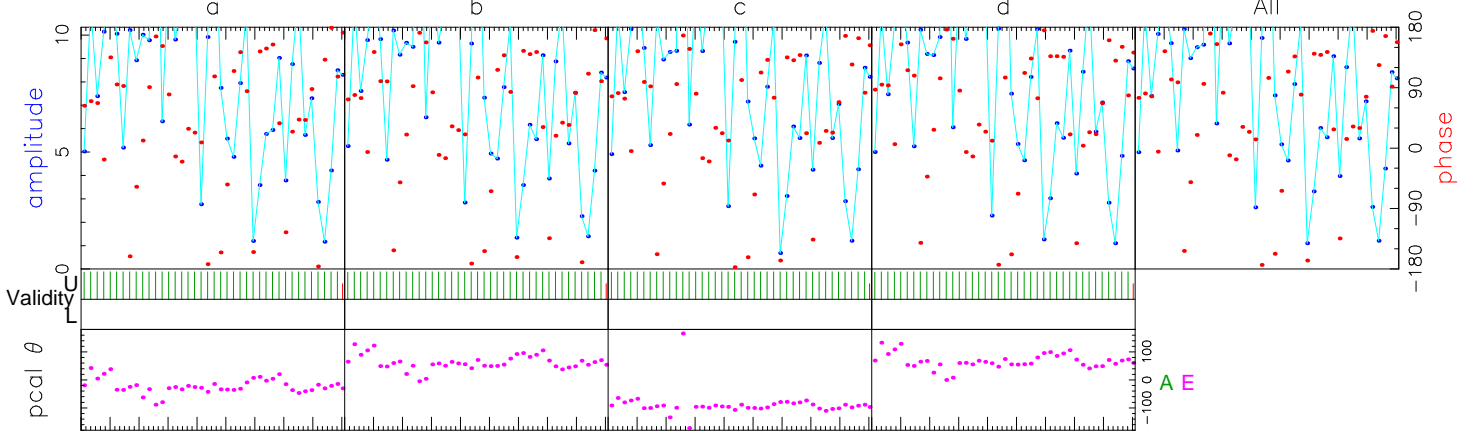
  

	2.53869522965E+03	Apriori delay (usec)	2.53868197369E+03	Resid mbdelay (usec)	-3.81070E-03	+/- 1.6E-05
Group delay (usec)(sbd)						
Sband delay (usec)	2.53869744624E+03	Apriori clock (usec)	-2.1344812E+03	Resid sbdelay (usec)	1.54726E-02	+/- 6.1E-05
Phase delay (usec)	2.53868197436E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	6.76491E-07	+/- 2.4E-08
Delay rate (us/s)	1.45181659828E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28238E-07	+/- 7.6E-11
Total phase (deg)	29.5	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	-47.3	+/- 0.7

ph/seg (deg) 73.8 2.4 Theor. Amplitude 3.628 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 181.1 4.1 Search (4096X16) 3.454 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 6.7 0.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 1.7 1.3 Inc. seg. avg. 8.653 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 60.0 el 46.4 pa -127.2 E: az 226.3 el 31.8 pa 27.6 u,v (fr/asec) -8374.954 -10347.402 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE.W.11.zrmonb



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	87.5	88.3	83.5	89.1	Phase	87.1
	3.4	3.5	3.5	3.4	Ampl.	3.4
	235.9	235.7	235.7	236.0	Sbd box	235.8
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
E	3890	296	1703	3109	PC freqs	
A:E	0:0	0:0	0:0	0:0	PC phase	
A:E	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
E	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
E	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

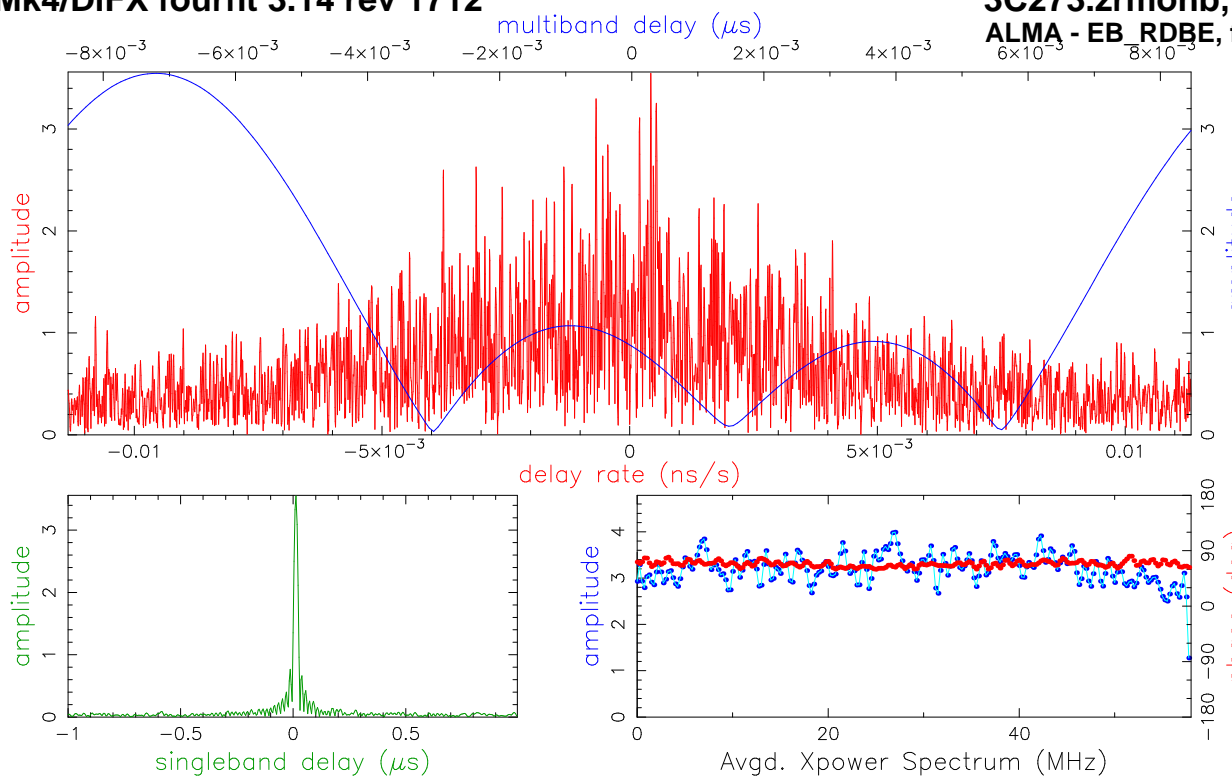
  

Group delay (usec)(sbd)	2.53869188759E+03	Apriori delay (usec)	2.53868197369E+03	Resid mbdelay (usec)	-7.15276E-03	+/-	1.6E-05
Sband delay (usec)	2.53869406748E+03	Apriori clock (usec)	-2.1344812E+03	Resid sbdelay (usec)	1.20938E-02	+/-	6.5E-05
Phase delay (usec)	2.53868197649E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	2.80803E-06	+/-	2.5E-08
Delay rate (us/s)	1.45181659849E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28451E-07	+/-	8.0E-11
Total phase (deg)	95.6	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	18.8	+/-	0.8

	RMS	Theor.	Amplitude	3.446 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	73.1	2.5	Search (4096X16)	3.337	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	180.0	4.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.009 0.009
ph/frq (deg)	3.0	0.8	Inc. seg. avg.	8.192	Sample rate(MSamp/s): 116	dr window (ns/s) -0.011 0.011
amp/frq (%)	0.7	1.4	Inc. frq. avg.	3.435	Data rate(Mb/s): 928	nlags: 232 t_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 E: az 226.3 el 31.8 pa 27.6 u,v (fr/asec) -8374.954 -10347.402 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE.W.12.zrmonb

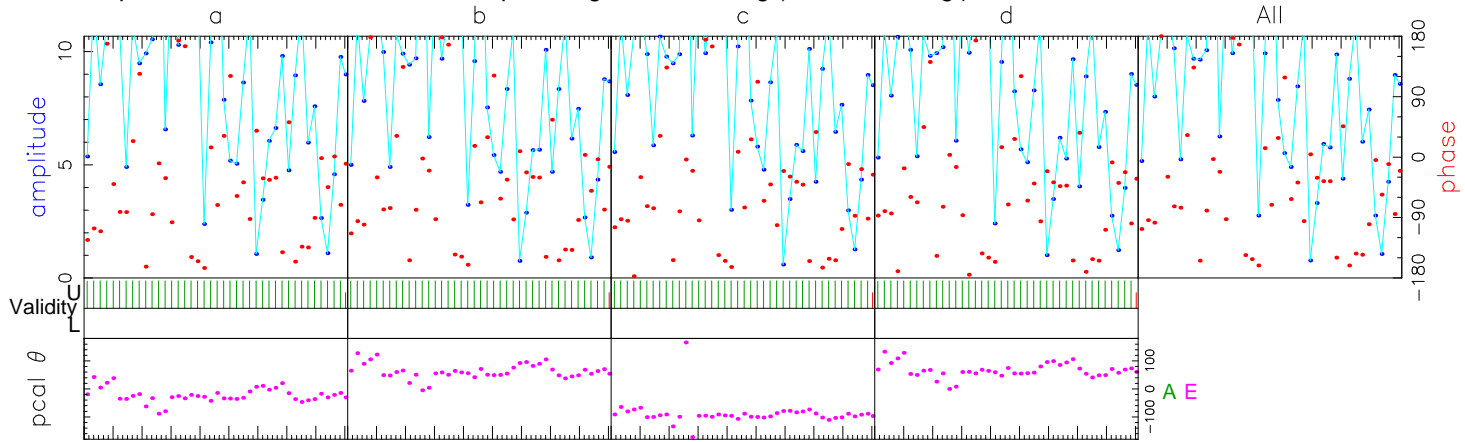


Fringe quality 5

SNR 152.1  
 Int time 539.680  
 Amp 3.560  
 Phase -157.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.012154  
 MBD -0.007208  
 Fringe rate (Hz)  
 0.036905  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142846  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

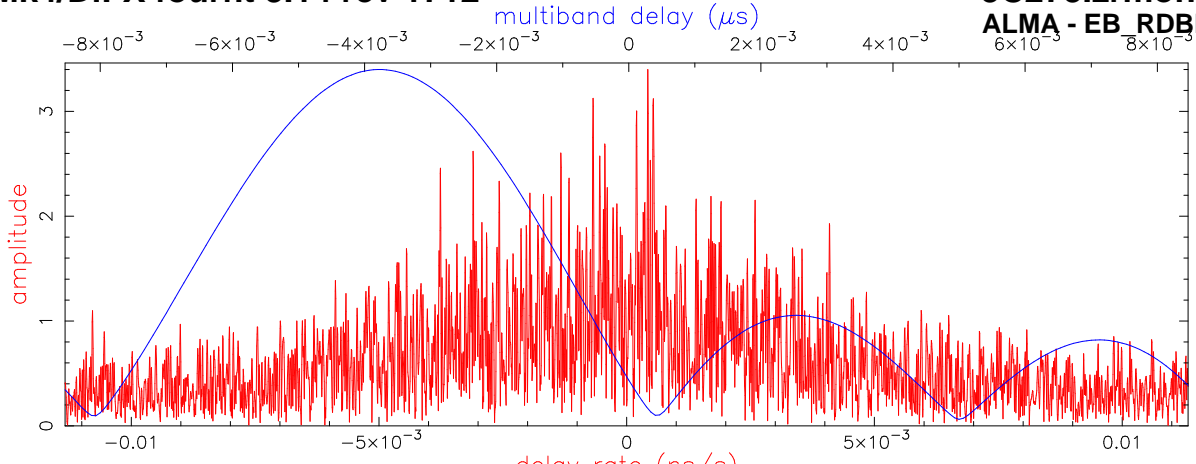


86151.11	86209.70	86268.30	86326.89	86385.48	86444.07	86502.66	86561.25	86619.84	86678.43	86737.02	86795.61	86854.20	86912.79	86971.38	87030.00	87088.61	87147.22	87205.83	87264.44	
-89.2	-87.8	-92.6	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5	-87.5
3.7	3.4	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5
235.9	235.6	235.8	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0	236.0
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0
A 0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
E 3890	296	1703	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109	3109
A:E 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
A:E 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
E 1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	W08UL	W09UL	W10UL	W11UL	W12UL	W13UL	W14UL	W15UL	W16UL	W17UL	W18UL	W19UL	W20UL
E W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	W08UR	W09UR	W10UR	W11UR	W12UR	W13UR	W14UR	W15UR	W16UR	W17UR	W18UR	W19UR	W20UR

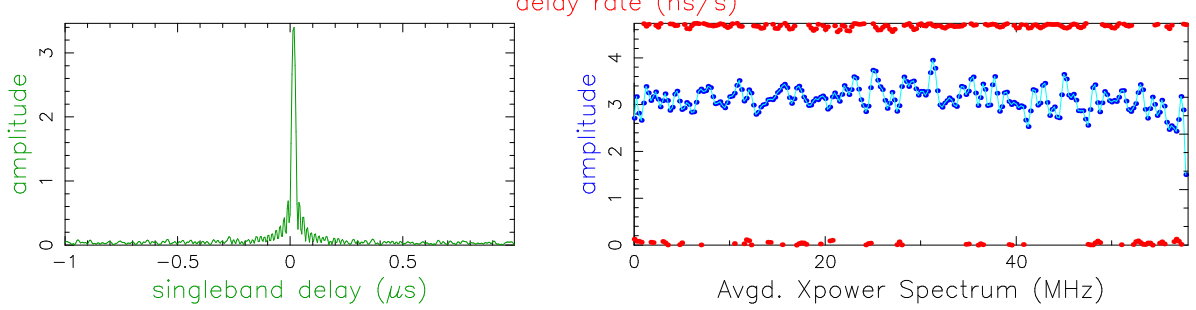
Group delay (usec)(sbd)	2.53869183202E+03	Apriori delay (usec)	2.53868197369E+03	Resid mbdelay (usec)	-7.20833E-03	+/ -	1.6E-05
Sband delay (usec)	2.53869412734E+03	Apriori clock (usec)	-2.1344812E+03	Resid sbdelay (usec)	1.21537E-02	+/ -	6.2E-05
Phase delay (usec)	2.53868197081E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	-2.87985E-06	+/ -	2.4E-08
Delay rate (us/s)	1.45181659847E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28426E-07	+/ -	7.8E-11
Total phase (deg)	-80.8	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	-157.6	+/ -	0.8

RMS	72.7	Theor.	2.4	Amplitude	3.560 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	182.9	Search (4096X16)	3.456	Search	3.456	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	4.2	Interp.	0.000	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	2.8	Inc. seg. avg.	8.530	Inc. seg. avg.	8.530	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011 0.011	
amp/frq (%)	2.7	Inc. frq. avg.	3.550	Inc. frq. avg.	3.550	Data rate(Mb/s): 928	ion window (TEC)	0.00 0.00	
				u,v (fr/asec)	-8374.954 -10347.402	nlags: 232	t_cohere	infinite	

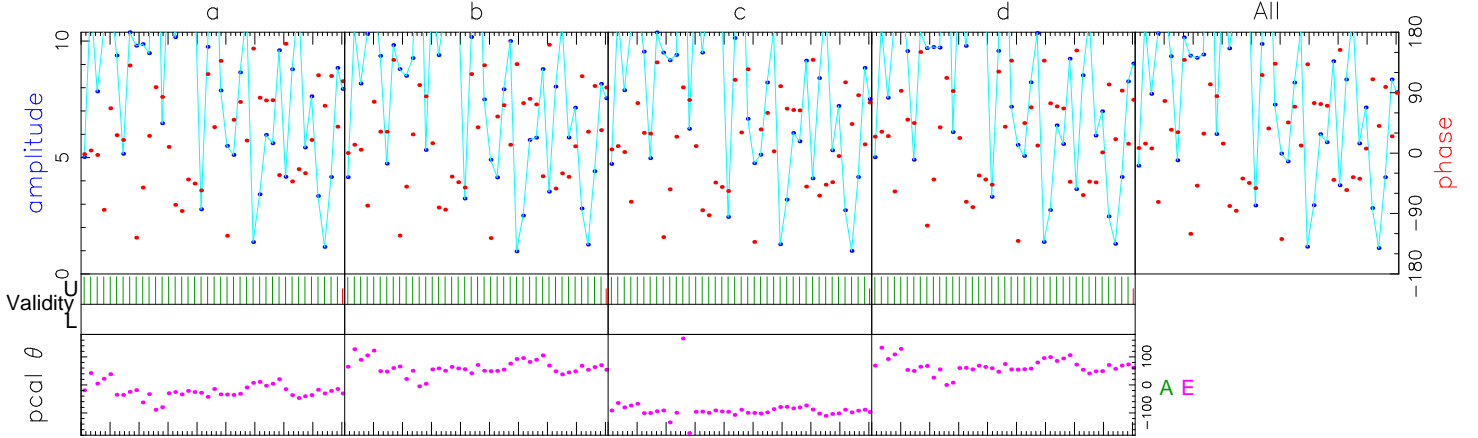




Fringe quality 5  
 SNR 148.0  
 Int time 539.724  
 Amp 3.462  
 Phase -49.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.015431  
 MBD -0.003780  
 Fringe rate (Hz) 0.036879  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142849  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.699s  
 +2°03' 8.598"

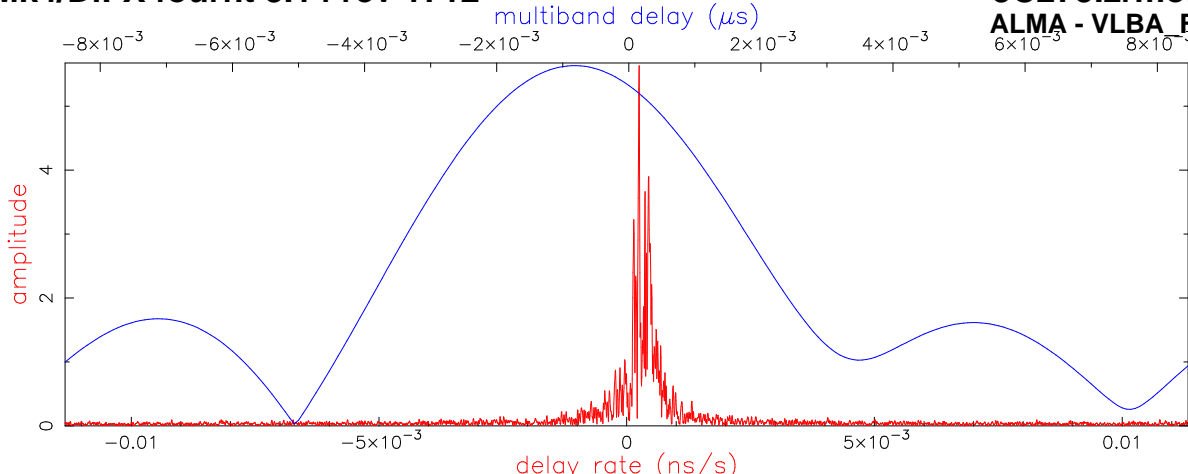


Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

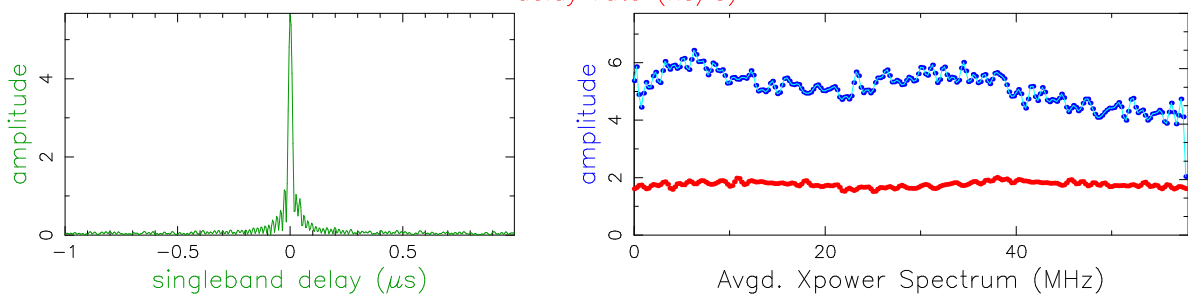


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
19.3	20.0	12.7	22.4	Phase	18.5
3.5	3.3	3.5	3.3	Ampl.	3.4
236.7	236.3	236.5	236.8	Sbd box	236.6
U/L 1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	PC freqs	
E 3890	296	1703	3109	PC freqs	
A:E 0:0	0:0	0:0	0:0	PC phase	
A:E 0:0	0:0	0:0	0:0	Manl PC	
A 1000	1000	1000	1000	PC amp	
E 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
E W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	2.53869526085E+03	Apriori delay (usec)	2.53868197369E+03	Resid mbdelay (usec)	-3.77950E-03 +/- 1.6E-05
Sband delay (usec)	2.53869740431E+03	Apriori clock (usec)	-2.1344812E+03	Resid sbdelay (usec)	1.54306E-02 +/- 6.4E-05
Phase delay (usec)	2.53868197428E+03	Apriori clockrate (us/s)	1.7578703E-06	Resid phdelay (usec)	5.97091E-07 +/- 2.5E-08
Delay rate (us/s)	1.45181659817E+00	Apriori rate (us/s)	1.45181617004E+00	Resid rate (us/s)	4.28132E-07 +/- 8.0E-11
Total phase (deg)	27.1	Apriori accel (us/s/s)	-2.93186848506E-05	Resid phase (deg)	-49.7 +/- 0.8

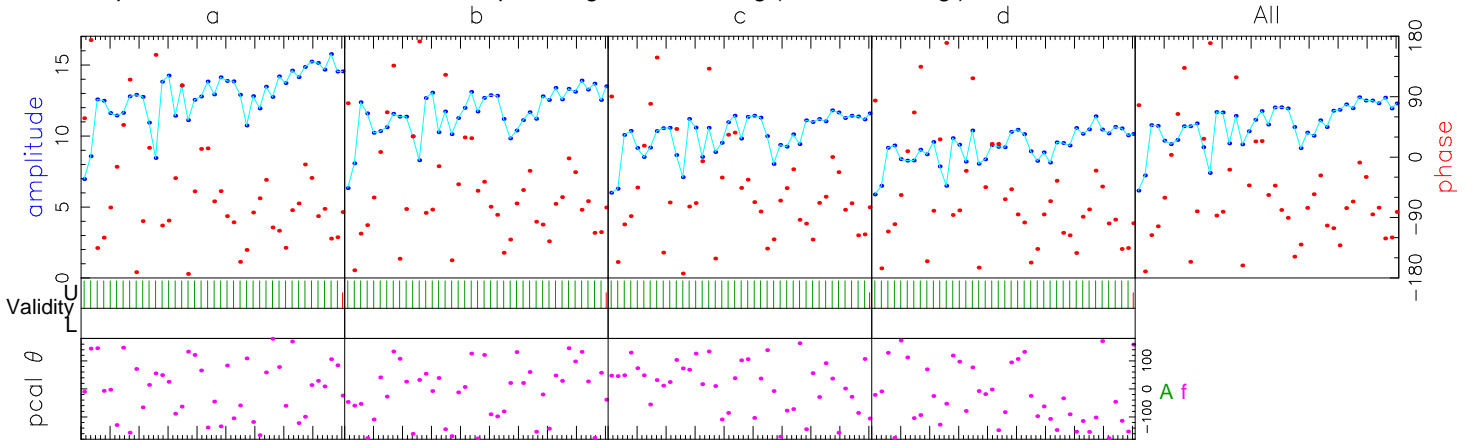
RMS Theor. Amplitude 3.462 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 72.9 2.5 Search (4096X16) 3.294 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 177.7 4.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 5.1 0.8 Inc. seg. avg. 8.151 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 2.7 1.4 Inc. frq. avg. 3.408 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00  
 A: az 60.0 el 46.4 pa -127.2 E: az 226.3 el 31.8 pa 27.6 u,v (fr/asec) -8374.954 -10347.402 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AE.W.14.zrmonb



Fringe quality 5  
SNR 242.7  
Int time 539.623  
Amp 5.677  
Phase -77.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.001152  
MBD -0.000822  
Fringe rate (Hz) 0.021676  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:142853  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"



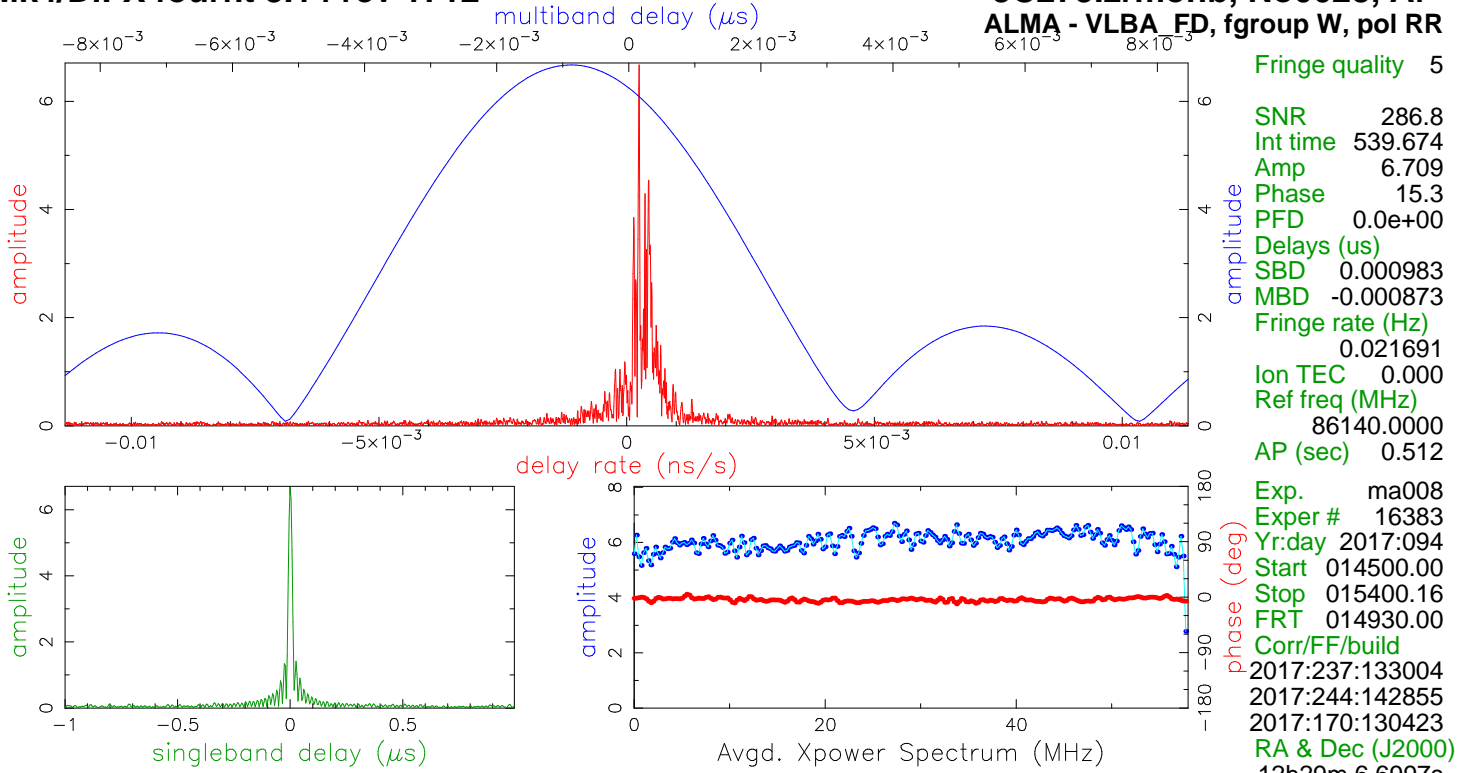
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-83.8	-72.2	-68.8	-87.1	Phase	-77.9
	6.7	6.1	5.2	4.7	Ampl.	5.7
	233.6	233.3	233.0	233.2	Sbd box	233.3
U/L	1055/0	1055/0	1055/0	1055/0	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)	7.42152628106E+03	Apriori delay (usec)	7.42152710311E+03	Resid mbdelay (usec)	-8.22048E-04	+/-	1.0E-05
Sband delay (usec)	7.42152825484E+03	Apriori clock (usec)	-2.1048931E+03	Resid sbdelay (usec)	1.15172E-03	+/-	3.9E-05
Phase delay (usec)	7.42152710060E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-2.51307E-06	+/-	1.5E-08
Delay rate (us/s)	-4.40815151505E-01	Apriori rate (us/s)	-4.40815403141E-01	Resid rate (us/s)	2.51635E-07	+/-	4.9E-11
Total phase (deg)	160.4	Apriori accel (us/s/s)	-5.41141456877E-05	Resid phase (deg)	-77.9	+/-	0.5

ph/seg (deg)	RMS 70.4	Theor. 1.5	Amplitude 5.677 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	93.8	2.6	Search (4096X16) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	10.8	0.5	Inc. seg. avg. 10.782	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	13.7	0.8	Inc. frq. avg. 5.685	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 286.8

Int time 539.674

Amp 6.709

Phase 15.3

PFD 0.0e+00

Delays (us)

SBD 0.000983

MBD -0.000873

Fringe rate (Hz) 0.021691

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. ma008

Exper # 16383

Yr:day 2017:094

Start 014500.00

Stop 015400.16

FRT 014930.00

Corr/FF/build

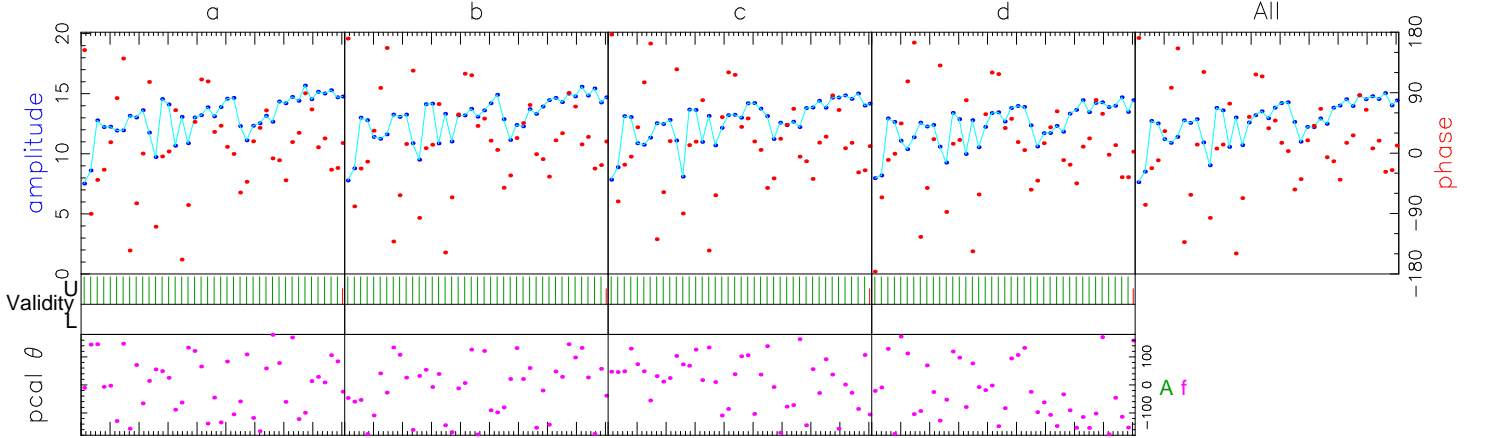
2017:237:133004

2017:244:142855

2017:170:130423

RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
13.0	18.6	16.4	13.3	Phase	15.3
6.8	6.8	6.7	6.4	Ampl.	6.7
233.3	233.2	233.3	233.2	Sbd box	233.2
U/L 1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	PC freqs	
f 3890	296	1703	3109	PC freqs	
A:f 0:0	0:0	0:0	0:0	PC phase	
A:f 0:0	0:0	0:0	0:0	Mani PC	
A 1000	1000	1000	1000	PC amp	
f 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
f W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	7.42152623021E+03	Apriori delay (usec)	7.42152710311E+03	Resid mbdelay (usec)	-8.72906E-04 +/- 8.5E-06
Sband delay (usec)	7.42152808629E+03	Apriori clock (usec)	-2.1048931E+03	Resid sbdelay (usec)	9.83172E-04 +/- 3.3E-05
Phase delay (usec)	7.42152710361E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	4.94893E-07 +/- 1.3E-08
Delay rate (us/s)	-4.40815151332E-01	Apriori rate (us/s)	-4.40815403141E-01	Resid rate (us/s)	2.51809E-07 +/- 4.1E-11
Total phase (deg)	253.7	Apriori accel (us/s/s)	-5.41141456877E-05	Resid phase (deg)	15.3 +/- 0.4

RMS Theor. Amplitude 6.709 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 70.2 1.3 Search (4096X16) 6.514 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

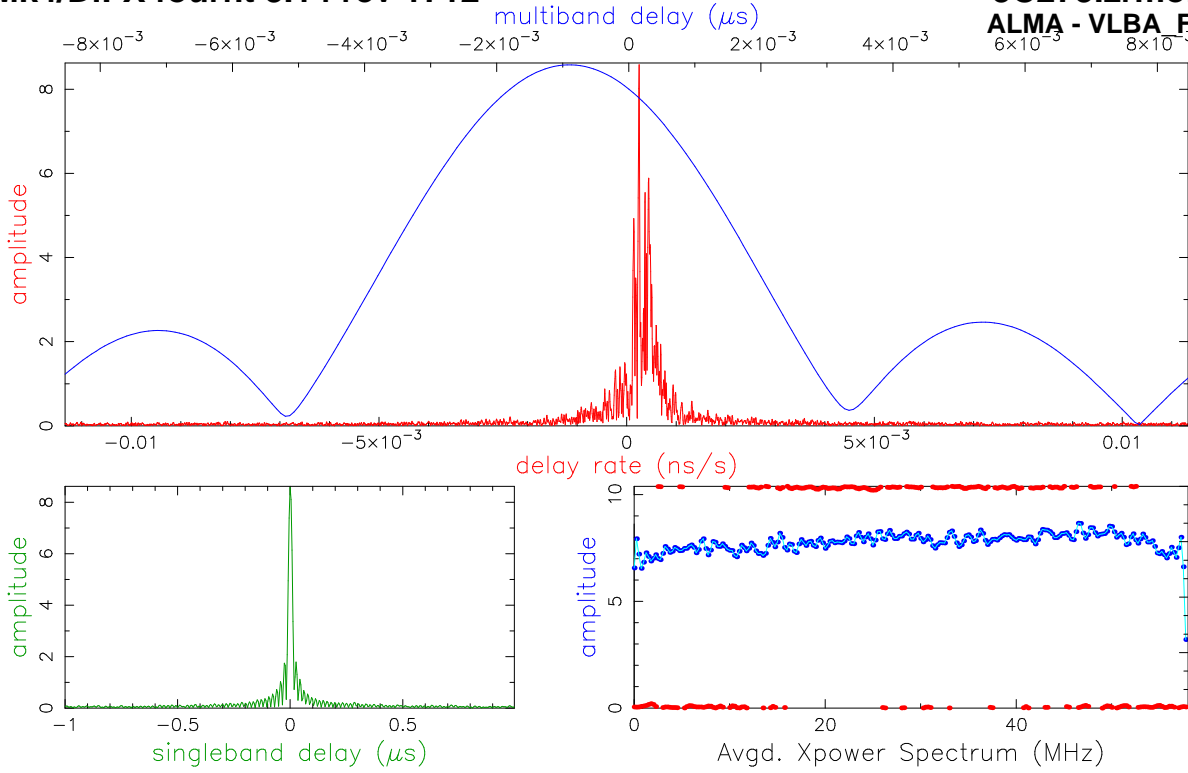
amp/seg (%) 93.2 2.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 3.2 0.4 Inc. seg. avg. 12.712 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 2.6 0.7 Inc. frq. avg. 6.679 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 f: az 97.2 el 15.7 pa -58.7 u,v (fr/asec) 2421.193 -8102.704 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af.W.16.zrmonb

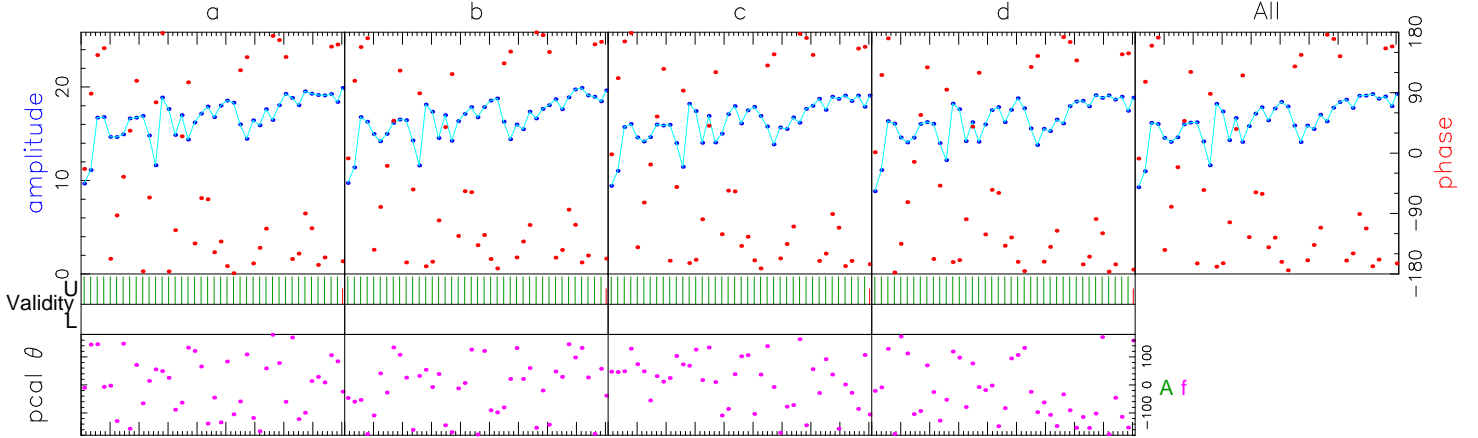


Fringe quality 5

SNR 368.7  
 Int time 539.623  
 Amp 8.624  
 Phase -161.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000949  
 MBD -0.000895  
 Fringe rate (Hz) 0.021673  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build 2017:237:133004  
 2017:244:142858  
 2017:170:130423  
 RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"

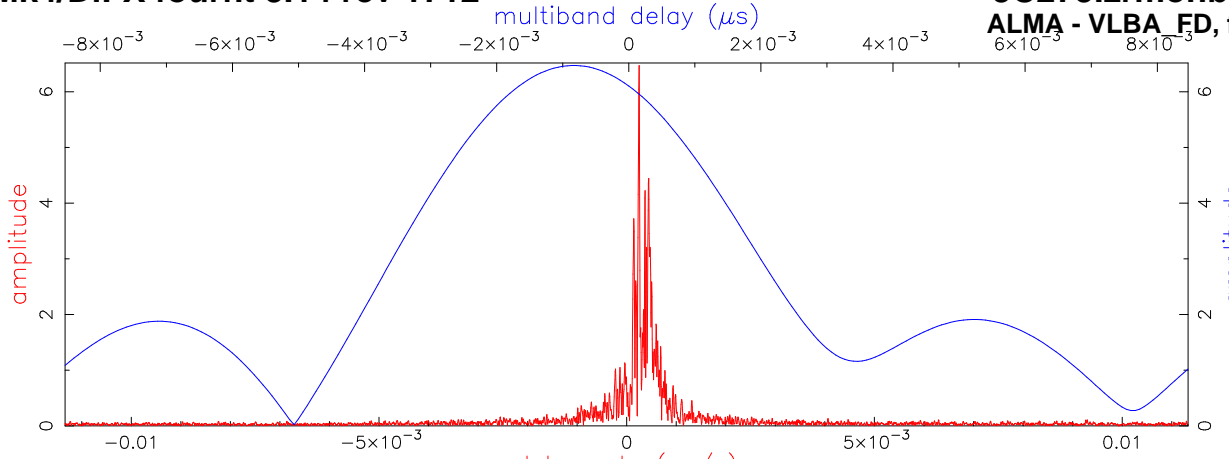
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



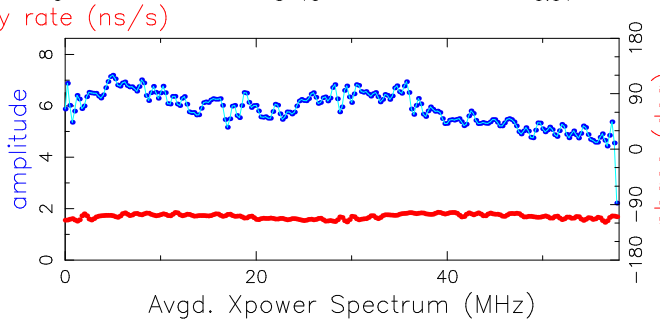
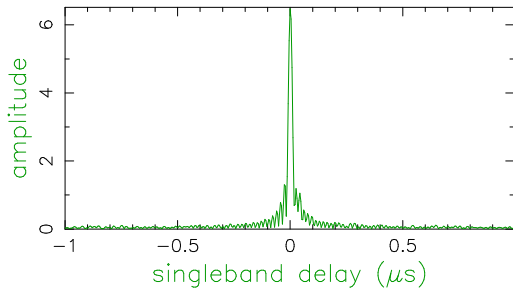
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-164.1	-157.0	-159.5	-163.5	Phase	-161.0
	8.7	8.7	8.5	8.5	Ampl.	8.6
	233.3	233.2	233.3	233.1	Sbd box	233.2
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
f	3890	296	1703	3109	PC freqs	
A:f	0:0	0:0	0:0	0:0	PC phase	
A:f	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
f	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
f	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	7.42152620809E+03	Apriori delay (usec)	7.42152710311E+03	Resid mbdelay (usec)	-8.95025E-04	+/- 6.6E-06
Sband delay (usec)	7.42152805208E+03	Apriori clock (usec)	-2.1048931E+03	Resid sbdelay (usec)	9.48965E-04	+/- 2.6E-05
Phase delay (usec)	7.42152709792E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-5.19277E-06	+/- 1.0E-08
Delay rate (us/s)	-4.40815151533E-01	Apriori rate (us/s)	-4.40815403141E-01	Resid rate (us/s)	2.51607E-07	+/- 3.2E-11
Total phase (deg)	77.3	Apriori accel (us/s/s)	-5.41141456877E-05	Resid phase (deg)	-161.0	+/- 0.3

RMS Theor. Amplitude 8.624 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 70.2 1.0 Search (4096X16) 8.398 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 93.4 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 4.1 0.3 Inc. seg. avg. 16.354 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 1.4 0.5 Inc. frq. avg. 8.593 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

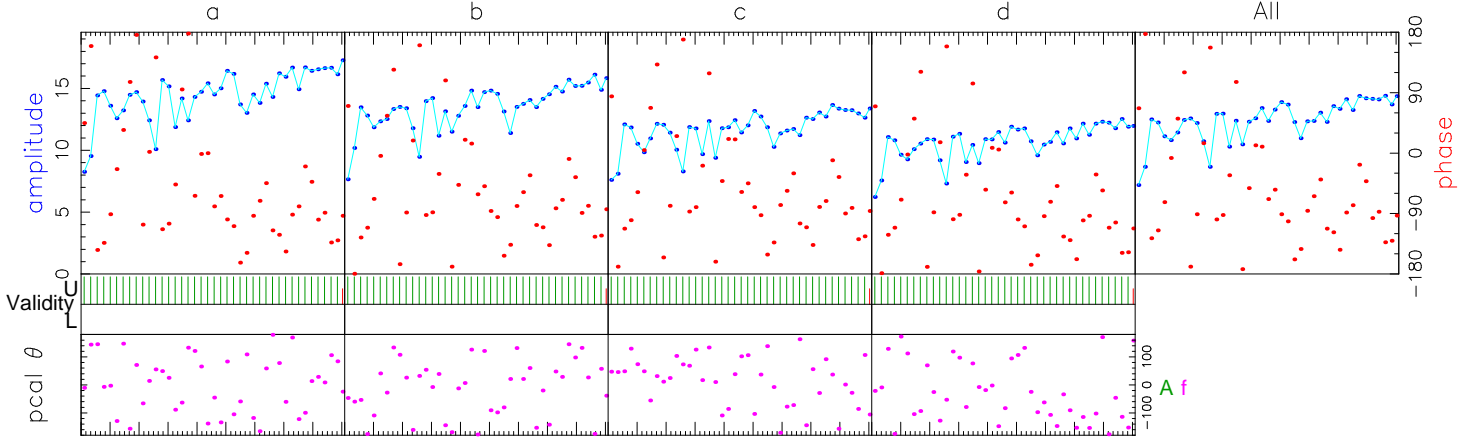
A: az 60.0 el 46.4 pa -127.2 f: az 97.2 el 15.7 pa -58.7 u,v (fr/asec) 2421.193 -8102.704 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af.W.17.zrmonb



Fringe quality 5  
SNR 278.6  
Int time 539.674  
Amp 6.517  
Phase -89.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.001124  
MBD -0.000834  
Fringe rate (Hz) 0.021667  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:142901  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

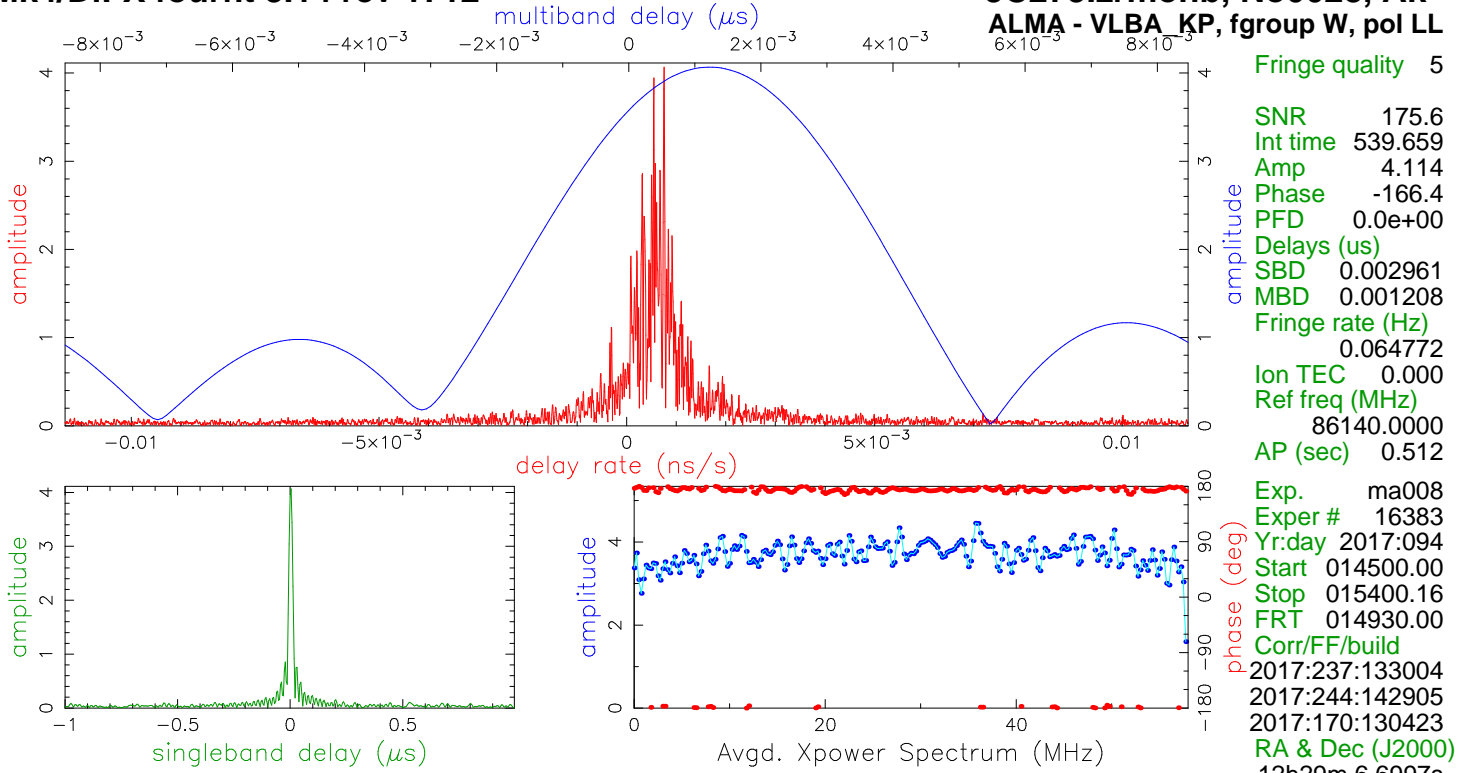


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1055/0	1055/0	1055/0	1055/0		
A	0	0	0	0		
f	3890	296	1703	3109		
A:f	0:0	0:0	0:0	0:0		
A:f	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000		
f	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR		
f	W00UL	W01UL	W02UL	W03UL		
Group delay (usec)(sbd)	7.42152626946E+03	Apriori delay (usec)	7.42152710311E+03	Resid mbdelay (usec)	-8.33653E-04	+/- 8.7E-06
Sband delay (usec)	7.42152822725E+03	Apriori clock (usec)	-2.1048931E+03	Resid sbdelay (usec)	1.12414E-03	+/- 3.4E-05
Phase delay (usec)	7.42152710023E+03	Apriori clockrate (us/s)	2.1828075E-06	Resid phdelay (usec)	-2.88150E-06	+/- 1.3E-08
Delay rate (us/s)	-4.40815151605E-01	Apriori rate (us/s)	-4.40815403141E-01	Resid rate (us/s)	2.51536E-07	+/- 4.3E-11
Total phase (deg)	149.0	Apriori accel (us/s/s)	-5.41141456877E-05	Resid phase (deg)	-89.4	+/- 0.4

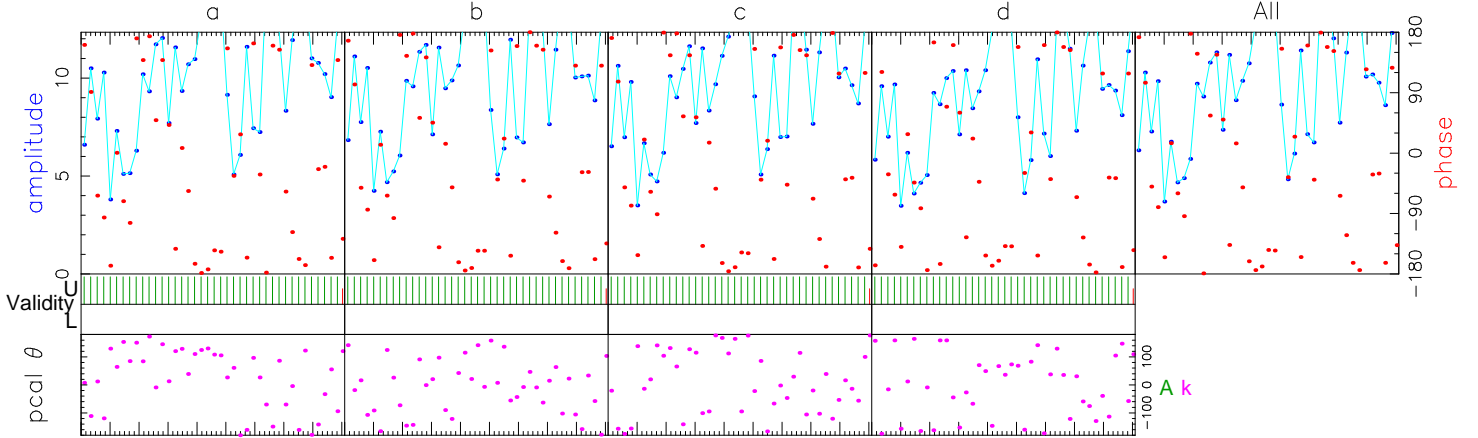
ph/seg (deg) 70.5 1.3 Theor. Amplitude 6.517 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 93.3 2.3 Search (4096X16) 6.334 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 10.7 0.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
amp/frq (%) 12.9 0.7 Inc. seg. avg. 12.374 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 60.0 el 46.4 pa -127.2 f: az 97.2 el 15.7 pa -58.7 u,v (fr/asec) 2421.193 -8102.704 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Af.W.18.zrmonb





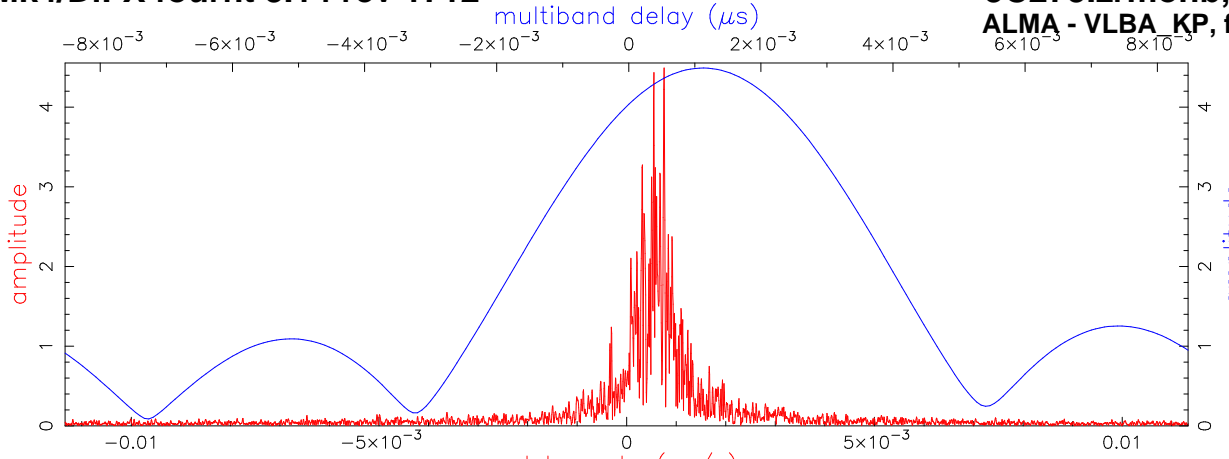
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-165.8	-165.8	-170.7	-162.9	Phase	-166.4
	4.2	4.2	4.1	3.8	Ampl.	4.1
	233.7	233.6	233.8	233.6	Sbd box	233.7
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	9.82640109964E+03	Apriori delay (usec)	9.82639989161E+03	Resid mbdelay (usec)	1.20803E-03	+/-	1.4E-05
Sband delay (usec)	9.82640285216E+03	Apriori clock (usec)	-2.1027048E+03	Resid sbdelay (usec)	2.96055E-03	+/-	5.4E-05
Phase delay (usec)	9.82639988624E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	-5.36502E-06	+/-	2.1E-08
Delay rate (us/s)	-4.67947679418E-01	Apriori rate (us/s)	-4.67948431362E-01	Resid rate (us/s)	7.51944E-07	+/-	6.7E-11
Total phase (deg)	72.4	Apriori accel (us/s/s)	-6.69610696236E-05	Resid phase (deg)	-166.4	+/-	0.7

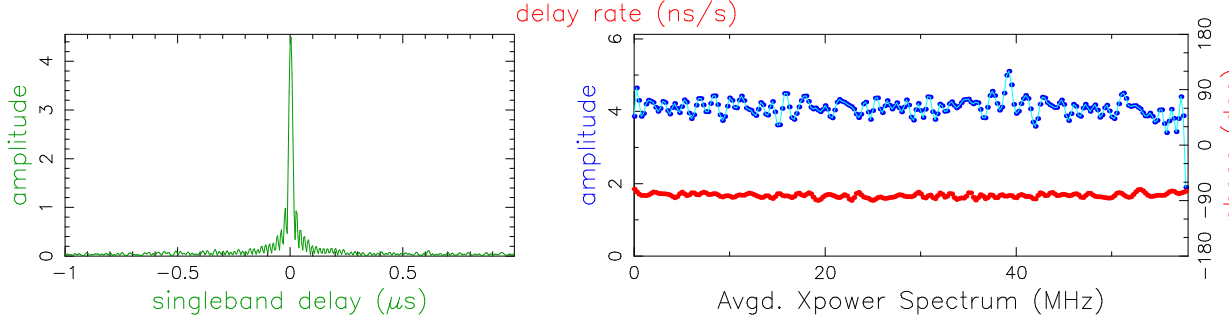
ph/seg (deg)	RMS 85.5	Theor. 2.1	Amplitude 4.114 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	155.8	3.6	Search (4096X16) 4.038	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	3.9	0.7	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.8	1.1	Inc. seg. avg. 9.748	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 4.079	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		



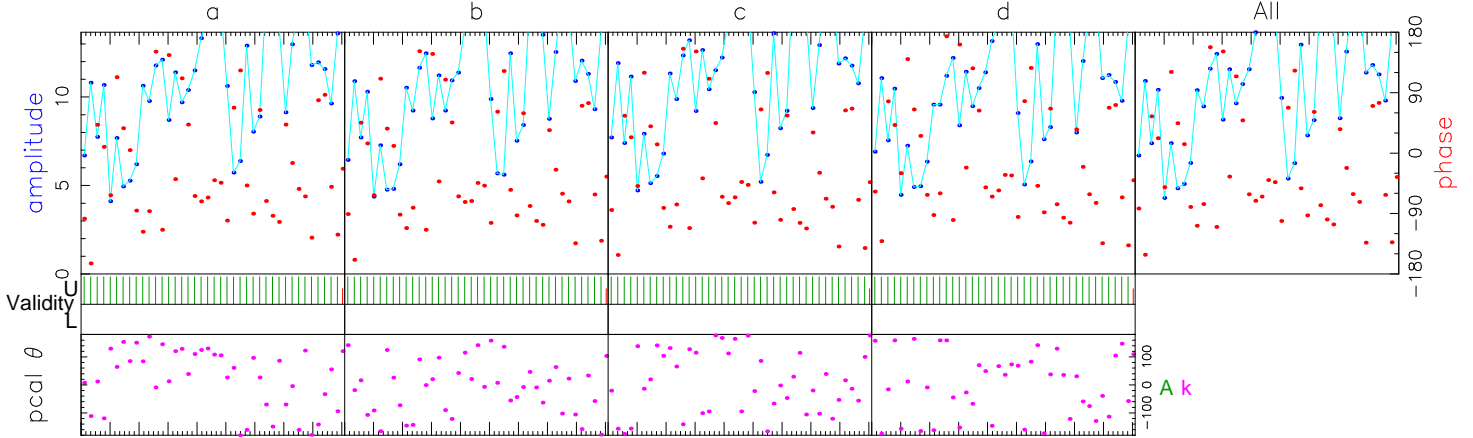
Fringe quality 5

SNR 194.4  
Int time 539.711  
Amp 4.555  
Phase -63.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.002814  
MBD 0.001110  
Fringe rate (Hz) 0.064789  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:142907  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.697s  
+2°03' 8.598"



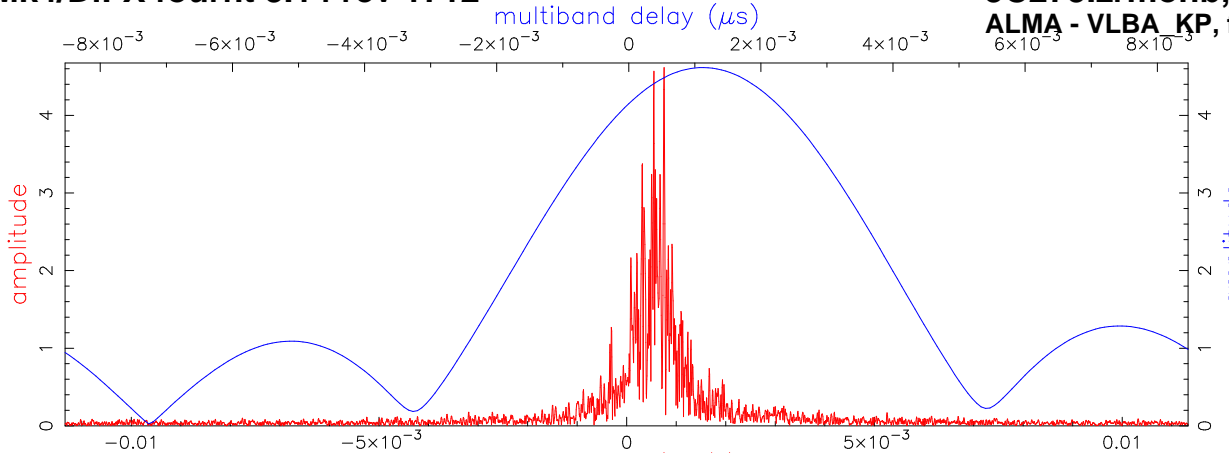
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



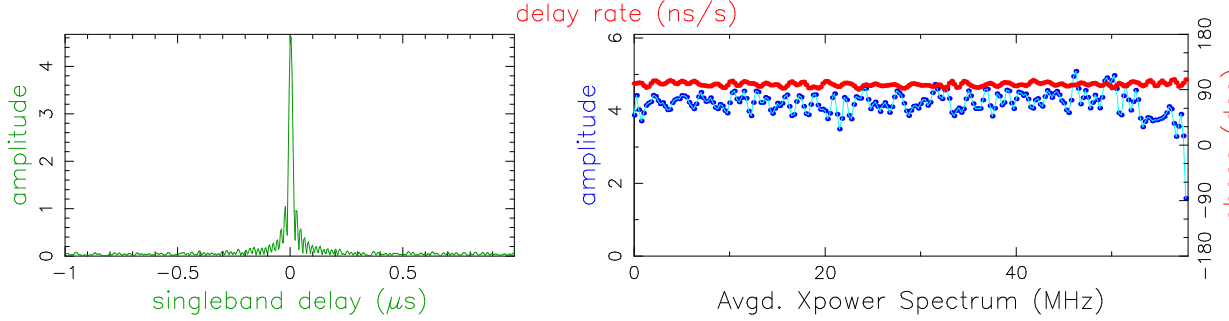
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-61.0	-65.7	-68.6	-59.0	Phase	-63.7
	4.4	4.4	4.8	4.4	Ampl.	4.5
	233.7	233.5	233.9	233.5	Sbd box	233.7
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	9.82640100113E+03	Apriori delay (usec)	9.82639989161E+03	Resid mbdelay (usec)	1.10952E-03	+/- 1.2E-05
Sband delay (usec)	9.82640270540E+03	Apriori clock (usec)	-2.1027048E+03	Resid sbdelay (usec)	2.81379E-03	+/- 4.9E-05
Phase delay (usec)	9.82639988956E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	-2.05256E-06	+/- 1.9E-08
Delay rate (us/s)	-4.67947679226E-01	Apriori rate (us/s)	-4.67948431362E-01	Resid rate (us/s)	7.52136E-07	+/- 6.1E-11
Total phase (deg)		Apriori accel (us/s/s)	-6.69610696236E-05	Resid phase (deg)	-63.7	+/- 0.6

RMS Theor. Amplitude 4.555 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 85.5 1.9 Search (4096X16) 4.455 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 155.7 3.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 5.4 0.6 Inc. seg. avg. 10.767 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 3.6 1.0 Inc. frq. avg. 4.509 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

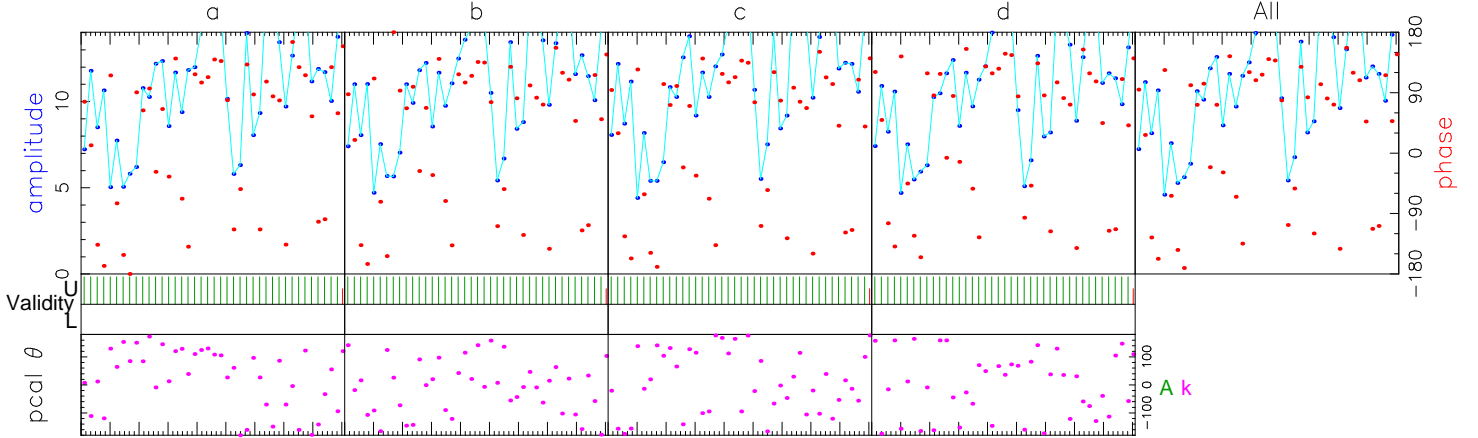
A: az 60.0 el 46.4 pa -127.2 k: az 93.4 el 9.1 pa -57.9 u,v (fr/asec) 2552.289 -8311.917 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ak..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ak.W.20.zrmonb



Fringe quality 5  
 SNR 199.6  
 Int time 539.660  
 Amp 4.676  
 Phase 117.5  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.002903  
 MBD 0.001108  
 Fringe rate (Hz) 0.064779  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142910  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"



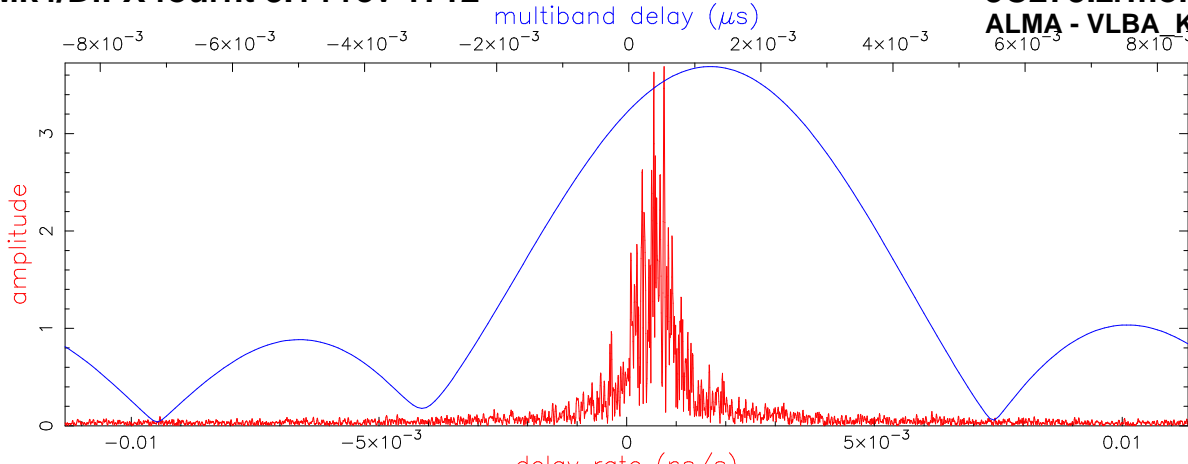
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	119.9	116.1	112.0	122.3	Phase	117.5
	4.5	4.7	4.8	4.5	Ampl.	4.6
	233.7	233.5	234.0	233.5	Sbd box	233.7
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
k	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	9.82640099976E+03	Apriori delay (usec)	9.82639989161E+03	Resid mbdelay (usec)	1.10815E-03	+/-	1.2E-05
Sband delay (usec)	9.82640279451E+03	Apriori clock (usec)	-2.1027048E+03	Resid sbdelay (usec)	2.90290E-03	+/-	4.8E-05
Phase delay (usec)	9.82639989540E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	3.78747E-06	+/-	1.9E-08
Delay rate (us/s)	-4.67947679339E-01	Apriori rate (us/s)	-4.67948431362E-01	Resid rate (us/s)	7.52024E-07	+/-	5.9E-11
Total phase (deg)	356.2	Apriori accel (us/s/s)	-6.69610696236E-05	Resid phase (deg)	117.5	+/-	0.6

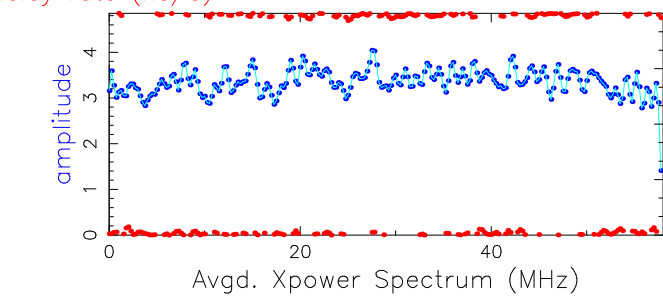
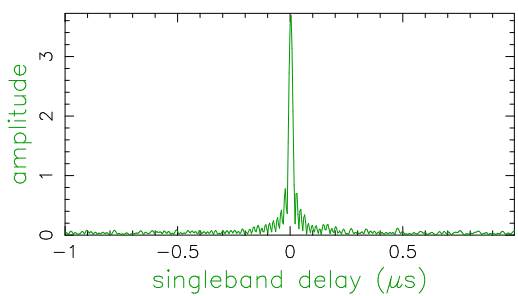
ph/seg (deg)	RMS 84.9	Theor. 1.8	Amplitude 4.676 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	154.2	3.2	Search (4096X16) 4.577	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	5.5	0.6	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.1	1.0	Inc. seg. avg. 11.053	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 4.636	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite		



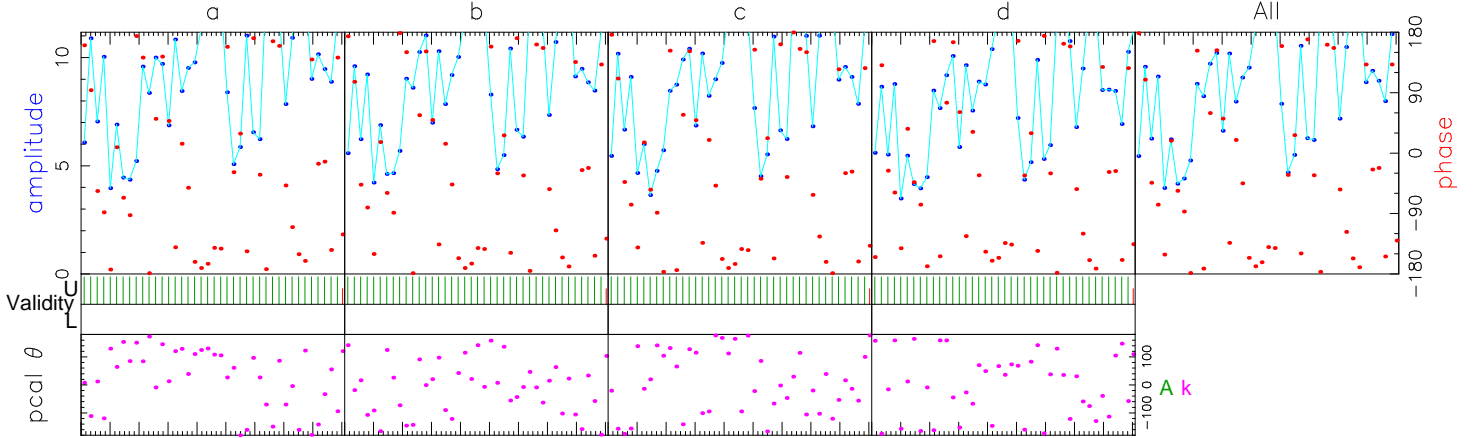
Fringe quality 5

SNR 159.0  
Int time 539.711  
Amp 3.725  
Phase -160.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.003077  
MBD 0.001219  
Fringe rate (Hz) 0.064748  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:142912  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



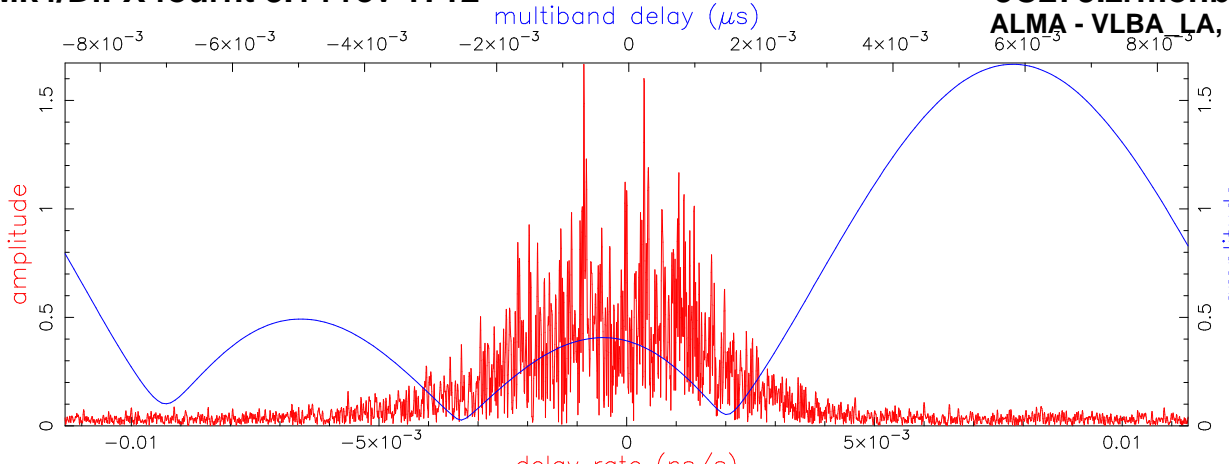
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



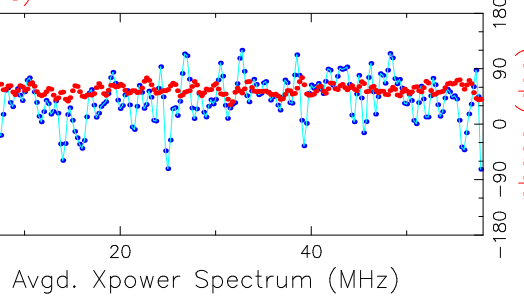
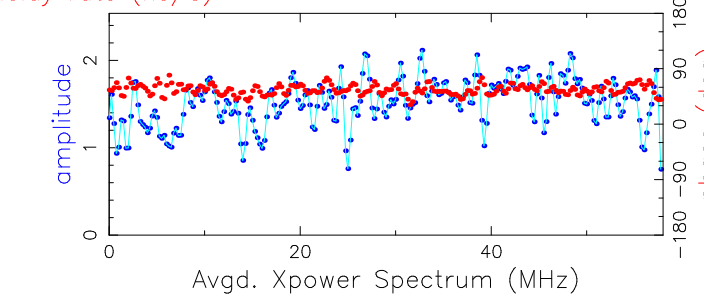
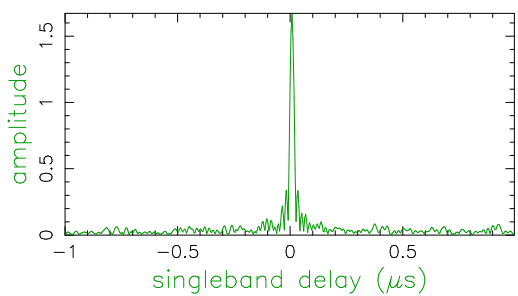
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-159.3	-161.0	-165.3	-156.6	Phase	-160.6
	3.8	3.8	3.7	3.5	Ampl.	3.7
	233.7	233.6	233.8	233.7	Sbd box	233.7
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
k	3890	296	1703	3109	PC freqs	
A:k	0:0	0:0	0:0	0:0	PC phase	
A:k	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
k	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
k	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	9.82640111104E+03	Apriori delay (usec)	9.82639989161E+03	Resid mbdelay (usec)	1.21943E-03	+/-	1.5E-05
Sband delay (usec)	9.82640296830E+03	Apriori clock (usec)	-2.1027048E+03	Resid sbdelay (usec)	3.07669E-03	+/-	6.0E-05
Phase delay (usec)	9.82639988643E+03	Apriori clockrate (us/s)	1.7640192E-06	Resid phdelay (usec)	-5.17972E-06	+/-	2.3E-08
Delay rate (us/s)	-4.67947679704E-01	Apriori rate (us/s)	-4.67948431362E-01	Resid rate (us/s)	7.51658E-07	+/-	7.5E-11
Total phase (deg)	78.1	Apriori accel (us/s/s)	-6.69610696236E-05	Resid phase (deg)	-160.6	+/-	0.7

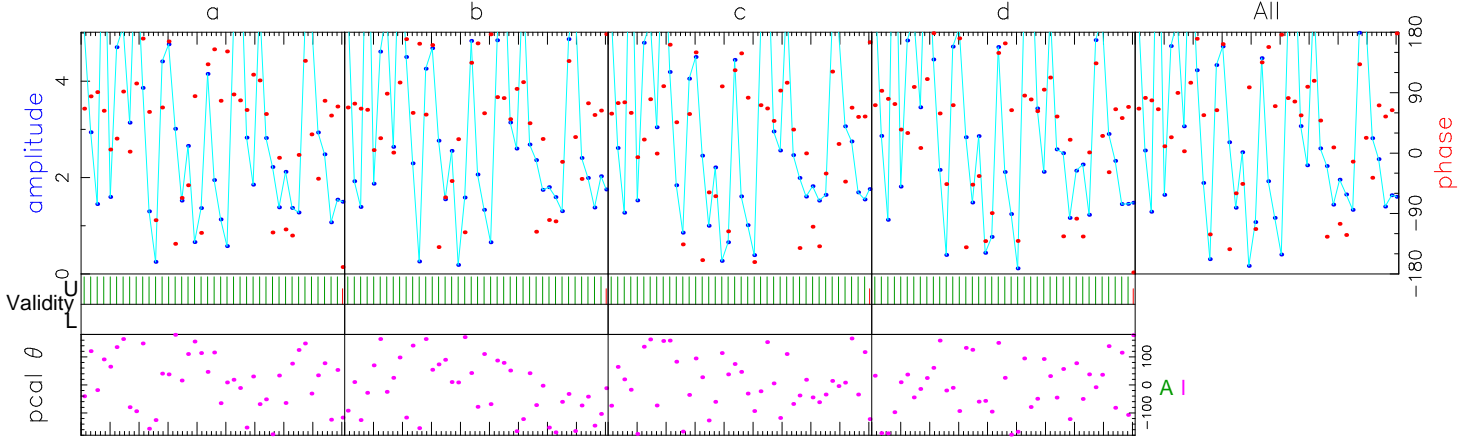
ph/seg (deg)	RMS 86.1	Theor. 2.3	Amplitude 3.725 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	157.8	4.0	Search (4096X16) 0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	4.5	0.7	Inc. seg. avg. 8.892	Bits/sample: 2x2	Sample rate(MSamp/s): 116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	3.4	1.3	Inc. frq. avg. 3.700	Data rate(Mb/s): 928	nlags: 232	ion window (TEC)	0.00	0.00



Fringe quality 5  
 SNR 71.4  
 Int time 539.642  
 Amp 1.673  
 Phase 80.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.008153  
 MBD 0.005817  
 Fringe rate (Hz) -0.074380  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142917  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"



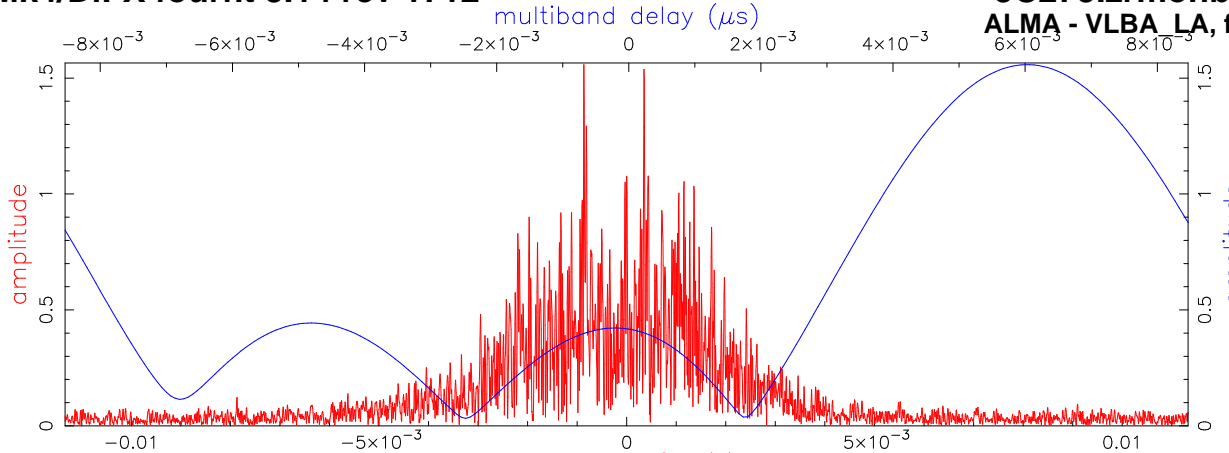
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



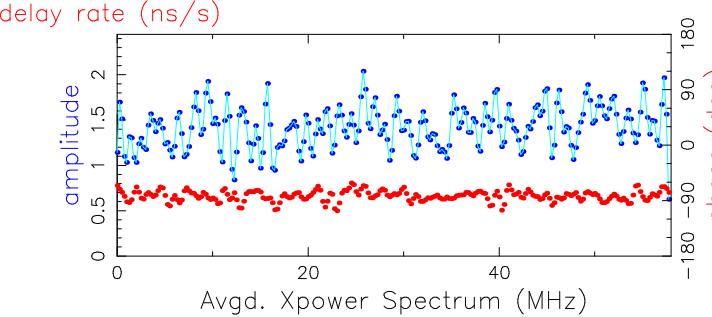
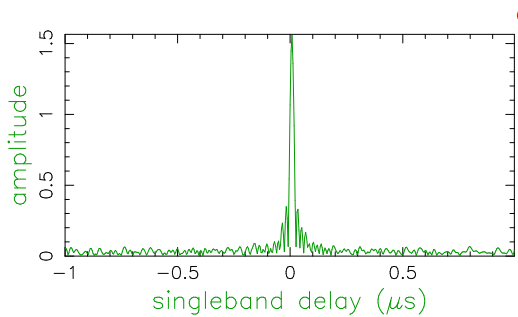
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	82.8	79.3	73.5	84.5	Phase	80.0
	1.6	1.7	1.7	1.7	Ampl.	1.7
	234.9	234.8	234.9	235.0	Sbd box	234.9
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
I	3890	296	1703	3109	PC freqs	
A:I	0:0	0:0	0:0	0:0	PC phase	
A:I	0:0	0:0	0:0	0:0	ManI PC	
A	1000	1000	1000	1000	PC amp	
I	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
I	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	8.36280930549E+03	Apriori delay (usec)	8.36280348816E+03	Resid mbdelay (usec)	5.81733E-03	+/- 3.4E-05
Sband delay (usec)	8.36281164099E+03	Apriori clock (usec)	-2.1014160E+03	Resid sbdelay (usec)	8.15283E-03	+/- 1.3E-04
Phase delay (usec)	8.36280349074E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	2.58045E-06	+/- 5.2E-08
Delay rate (us/s)	-3.84009872919E-01	Apriori rate (us/s)	-3.84009009438E-01	Resid rate (us/s)	-8.63481E-07	+/- 1.7E-10
Total phase (deg)	249.3	Apriori accel (us/s/s)	-5.93890684684E-05	Resid phase (deg)	80.0	+/- 1.6

ph/seg (deg) 83.0 5.1 Theor. Amplitude 1.673 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 149.6 9.0 Search (4096X16) 1.645 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 6.0 1.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 2.8 2.8 Inc. seg. avg. 3.095 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 60.0 el 46.4 pa -127.2 I: az 97.2 el 13.1 pa -53.5 u,v (fr/asec) 2085.633 -8780.838 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI.W.23.zrmonb

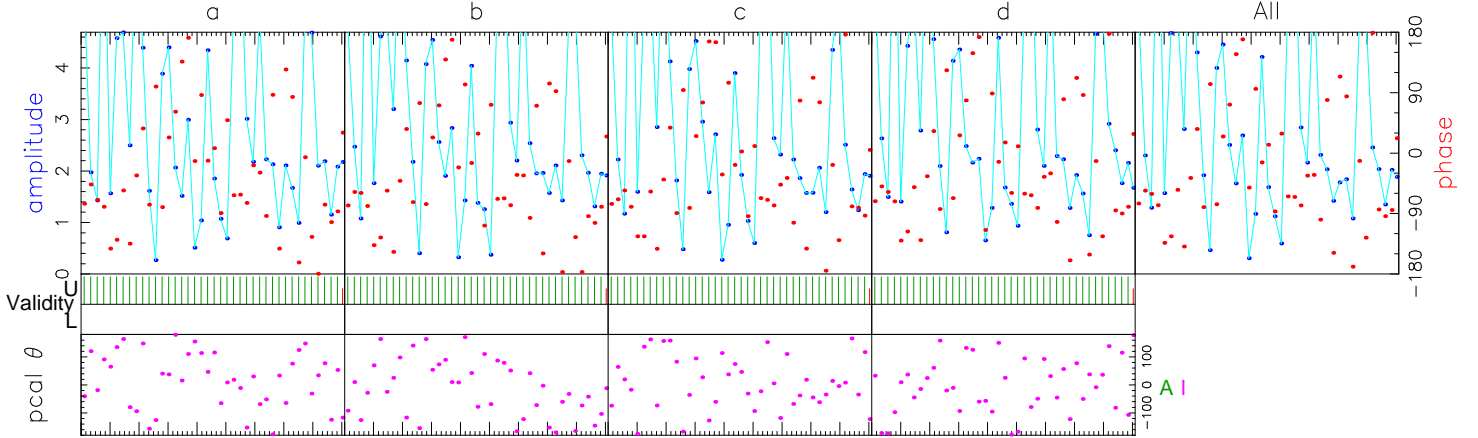




Fringe quality 5  
 SNR 66.8  
 Int time 539.693  
 Amp 1.565  
 Phase -61.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.007989  
 MBD 0.006027  
 Fringe rate (Hz)  
 -0.074329  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142919  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.697s  
 +2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-58.0	-65.0	-66.4	-57.8	-57.8	Phase	-61.8
1.5	1.5	1.6	1.7	1.7	Ampl.	1.6
234.7	235.0	234.8	235.0	235.0	Sbd box	234.9
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	0	PC freqs	
I 3890	296	1703	3109	3109	PC freqs	
A:I 0:0	0:0	0:0	0:0	0:0	PC phase	
A:I 0:0	0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	1000	1000	1000	PC amp	
I 1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR	Chan ids	
I W00UR	W01UR	W02UR	W03UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	8.36280951541E+03	Apriori delay (usec)	8.36280348816E+03	Resid mbdelay (usec)	6.02725E-03	+/- 3.6E-05
Sband delay (usec)	8.36281147685E+03	Apriori clock (usec)	-2.1014160E+03	Resid sbdelay (usec)	7.98869E-03	+/- 1.4E-04
Phase delay (usec)	8.36280348617E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	-1.99302E-06	+/- 5.5E-08
Delay rate (us/s)	-3.84009872327E-01	Apriori rate (us/s)	-3.84009009438E-01	Resid rate (us/s)	-8.62889E-07	+/- 1.8E-10
Total phase (deg)	107.5	Apriori accel (us/s/s)	-5.93890684684E-05	Resid phase (deg)	-61.8	+/- 1.7

ph/seg (deg) 83.2 5.5  
 amp/seg (%) 156.9 9.6  
 ph/frq (deg) 5.5 1.7  
 amp/frq (%) 4.1 3.0

RMS Theor. Amplitude 1.565 +/- 0.023  
 Search (4096X16) 1.548  
 Interp. 0.000  
 Inc. seg. avg. 3.010  
 Inc. frq. avg. 1.565

Group delay (usec)(sbd) 8.36280951541E+03  
 Sband delay (usec) 8.36281147685E+03  
 Phase delay (usec) 8.36280348617E+03  
 Delay rate (us/s) -3.84009872327E-01  
 Total phase (deg) 107.5

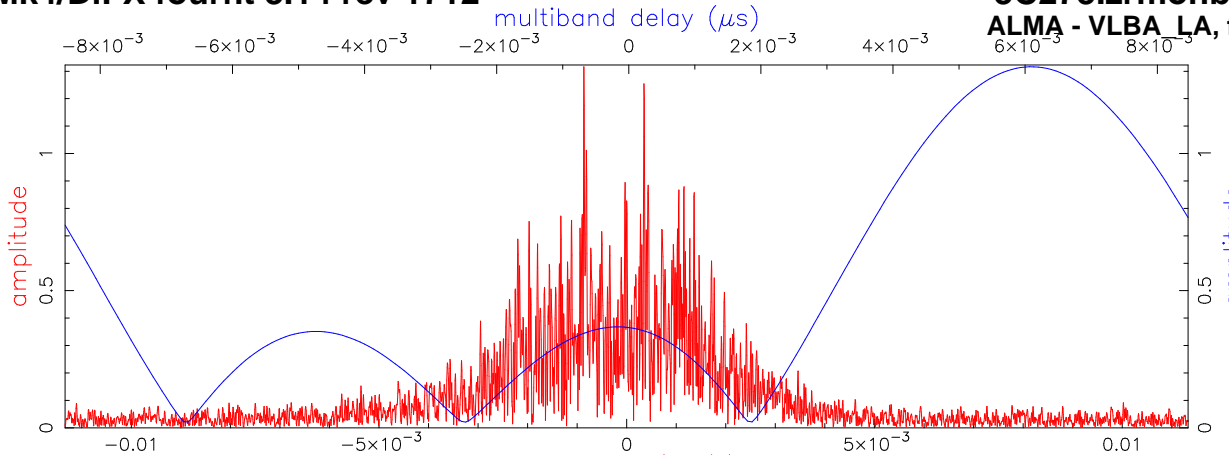
Apriori delay (usec) 8.36280348816E+03  
 Apriori clock (usec) -2.1014160E+03  
 Apriori clockrate (us/s) 1.8626131E-06  
 Apriori rate (us/s) -3.84009009438E-01  
 Apriori accel (us/s/s) -5.93890684684E-05

Resid mbdelay (usec) 6.02725E-03  
 Resid sbdelay (usec) 7.98869E-03  
 Resid phdelay (usec) -1.99302E-06  
 Resid rate (us/s) -8.62889E-07  
 Resid phase (deg) -61.8

PCal mode: MANUAL, MANUAL  
 PCal rate: 0.000E+00, 0.000E+00 (us/s)  
 Bits/sample: 2x2  
 Sample rate(MSamp/s): 116  
 Data rate(Mb/s): 928

PC period (AP's) 5, 5  
 sb window (us) -1.000 1.000  
 SampCntNorm: enabled  
 mb window (us) -0.009 0.009  
 dr window (ns/s) -0.011 0.011  
 ion window (TEC) 0.00 0.00  
 nlags: 232 t\_cohere infinite

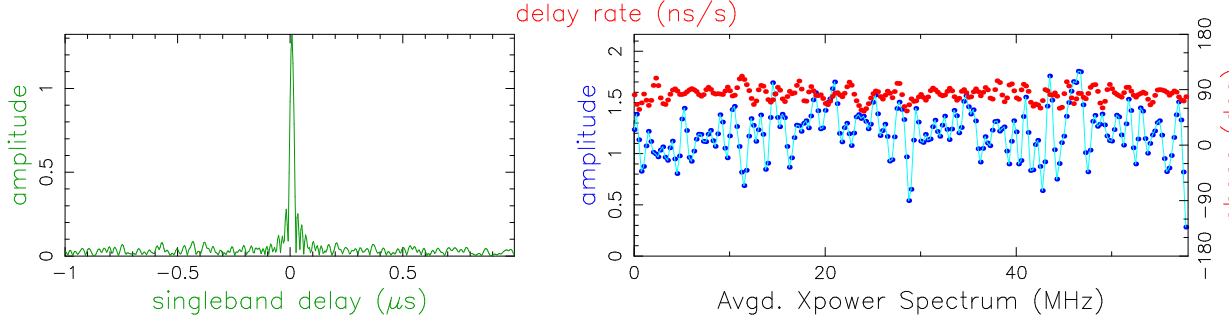
A: az 60.0 el 46.4 pa -127.2 I: az 97.2 el 13.1 pa -53.5 u,v (fr/asec) 2085.633 -8780.838 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI.W.24.zrmonb



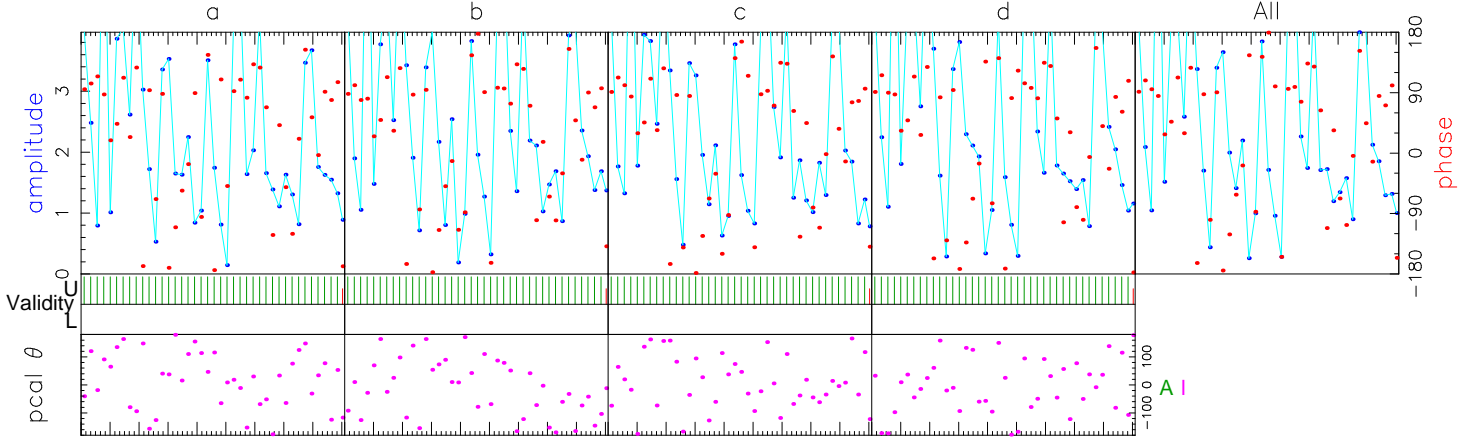
Fringe quality 7

SNR 56.4  
Int time 539.642  
Amp 1.323  
Phase 101.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.007924  
MBD 0.006088  
Fringe rate (Hz) -0.074317  
Ion TEC 0.000  
Ref freq (MHz) 86140.000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:142922  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1055/0	1055/0	1055/0	1055/0		
A	0	0	0	0		
I	3890	296	1703	3109		
A:I	0:0	0:0	0:0	0:0		
A:I	0:0	0:0	0:0	0:0		
A	1000	1000	1000	1000		
I	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL		
I	W00UR	W01UR	W02UR	W03UR		
Group delay (usec)(sbd)	8.36280957665E+03	Apriori delay (usec)	8.36280348816E+03	Resid mbdelay (usec)	6.08849E-03	+/- 4.3E-05
Sband delay (usec)	8.36281141175E+03	Apriori clock (usec)	-2.1014160E+03	Resid sbdelay (usec)	7.92359E-03	+/- 1.7E-04
Phase delay (usec)	8.36280349144E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	3.27774E-06	+/- 6.5E-08
Delay rate (us/s)	-3.84009872183E-01	Apriori rate (us/s)	-3.84009009438E-01	Resid rate (us/s)	-8.62745E-07	+/- 2.1E-10
Total phase (deg)	270.9	Apriori accel (us/s/s)	-5.93890684684E-05	Resid phase (deg)	101.6	+/- 2.0

ph/seg (deg) 83.8 6.5  
amp/seg (%) 148.8 11.3  
ph/frq (deg) 1.8 2.0  
amp/frq (%) 1.6 3.5

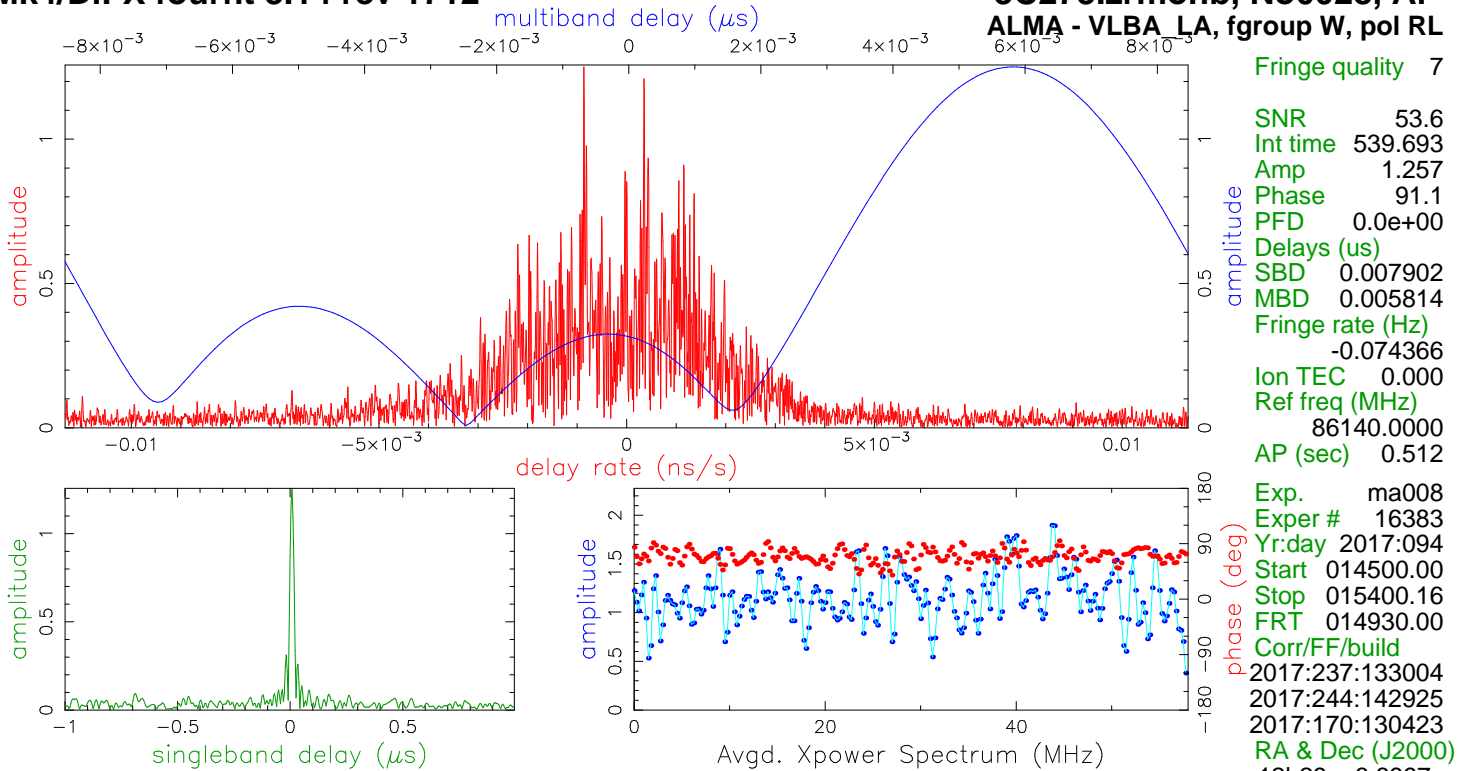
RMS Theor. Amplitude 1.323 +/- 0.023  
Search (4096X16) 1.308  
Interp. 0.000  
Inc. seg. avg. 2.464  
Inc. frq. avg. 1.319

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

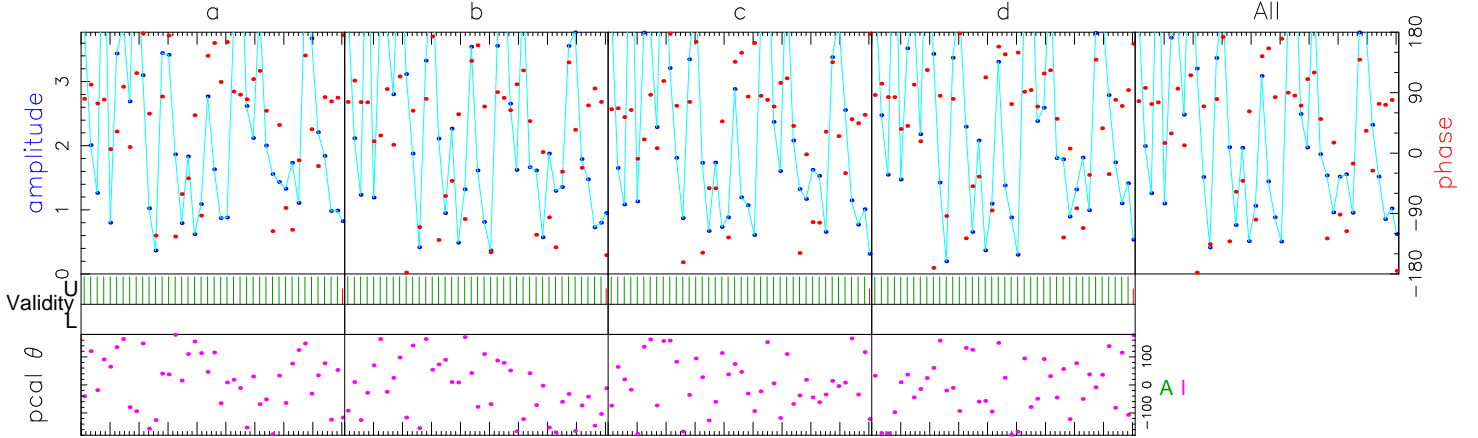
sb window (us) -1.000 1.000  
mb window (us) -0.009 0.009  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 I: az 97.2 el 13.1 pa -53.5 u,v (fr/asec) 2085.633 -8780.838 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI.W.25.zrmonb



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	All
94.3	90.5	81.9	97.4	97.4	97.4	91.1
1.3	1.2	1.3	1.3	1.3	1.3	1.3
234.9	234.6	234.7	235.1	235.1	235.1	234.8
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	
A 0	0	0	0	0	0	
I 3890	296	1703	3109	3109	3109	
A:I 0:0	0:0	0:0	0:0	0:0	0:0	
A:I 0:0	0:0	0:0	0:0	0:0	0:0	
A 1000	1000	1000	1000	1000	1000	
I 1000	1000	1000	1000	1000	1000	
A W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	
I W00UL	W01UL	W02UL	W03UL	W03UL	W03UL	
Group delay (usec)(sbd)	8.36280930222E+03	Apriori delay (usec)	8.36280348816E+03	Resid mbdelay (usec)	5.81405E-03	+/- 4.5E-05
Sband delay (usec)	8.36281139023E+03	Apriori clock (usec)	-2.1014160E+03	Resid sbdelay (usec)	7.90207E-03	+/- 1.8E-04
Phase delay (usec)	8.36280349110E+03	Apriori clockrate (us/s)	1.8626131E-06	Resid phdelay (usec)	2.93904E-06	+/- 6.9E-08
Delay rate (us/s)	-3.84009872752E-01	Apriori rate (us/s)	-3.84009009438E-01	Resid rate (us/s)	-8.63314E-07	+/- 2.2E-10
Total phase (deg)	260.4	Apriori accel (us/s/s)	-5.93890684684E-05	Resid phase (deg)	91.1	+/- 2.1

ph/seg (deg) 82.0 6.8 Theor. Amplitude 1.257 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 150.8 11.9 Search (4096X16) 1.234 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

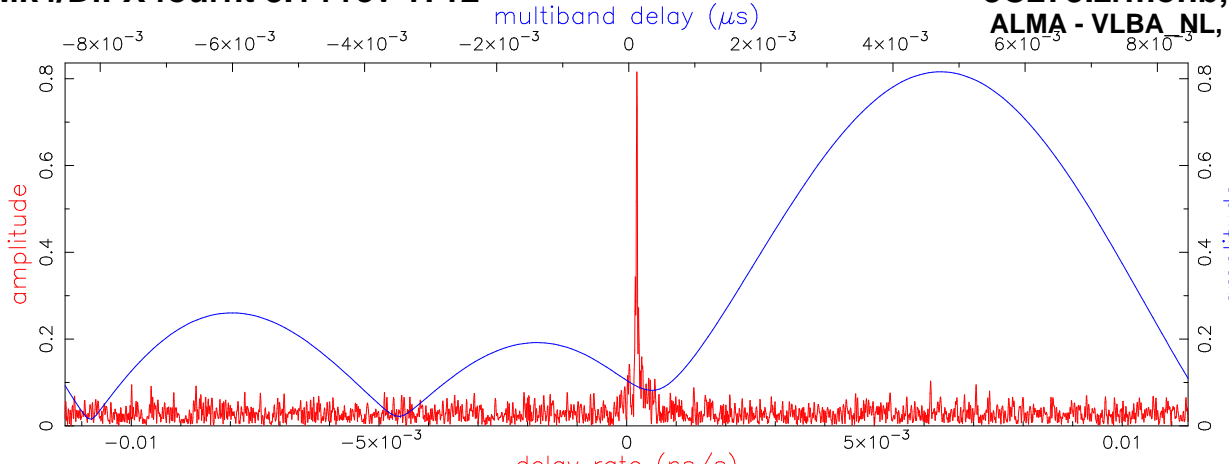
ph/frq (deg) 8.2 2.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

amp/frq (%) 3.5 3.7 Inc. seg. avg. 2.354 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

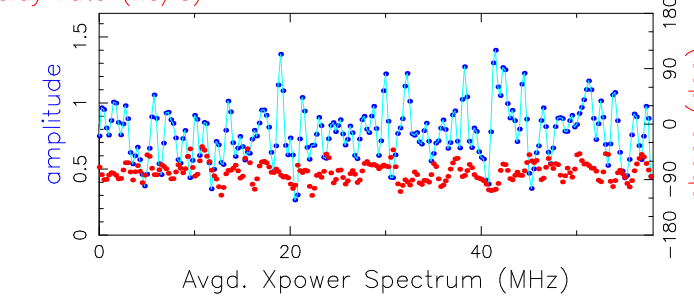
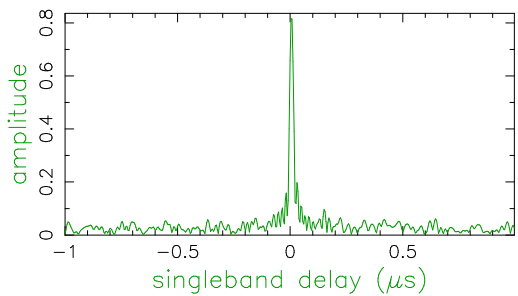
amp/frq (%) 3.5 3.7 Inc. frq. avg. 1.259 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 I: az 97.2 el 13.1 pa -53.5 u,v (fr/asec) 2085.633 -8780.838 simultaneous interpolator

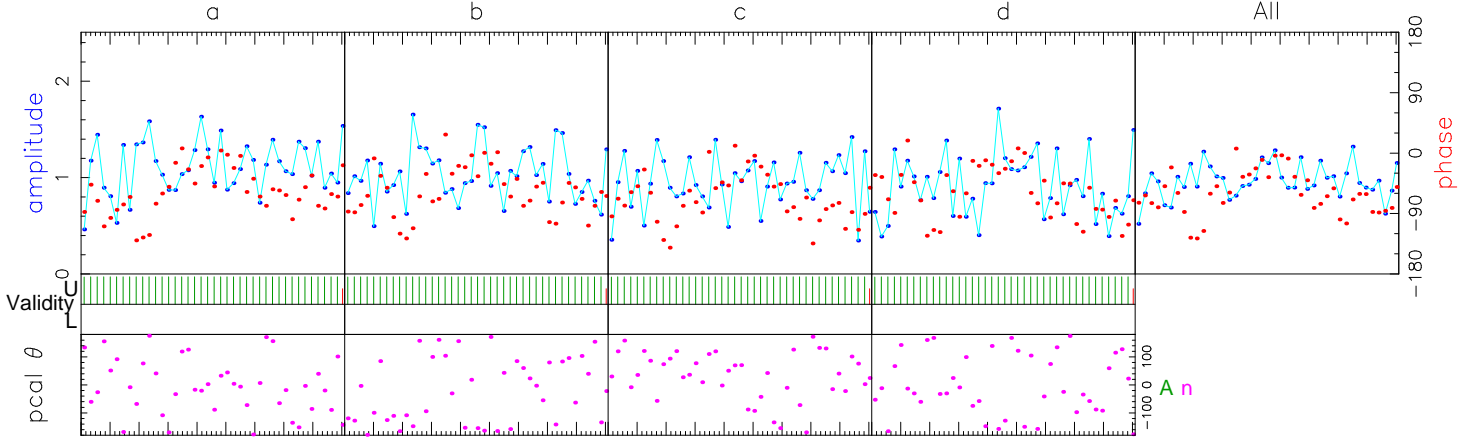
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI.zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AI.W.26.zrmonb



Fringe quality 8  
 SNR 35.8  
 Int time 539.503  
 Amp 0.836  
 Phase -60.4  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.006436  
 MBD 0.004782  
 Fringe rate (Hz) 0.017555  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build 2017:237:133004  
 2017:244:142929  
 2017:170:130423  
 RA & Dec (J2000) 12h29m 6.699s +2°03' 8.598"



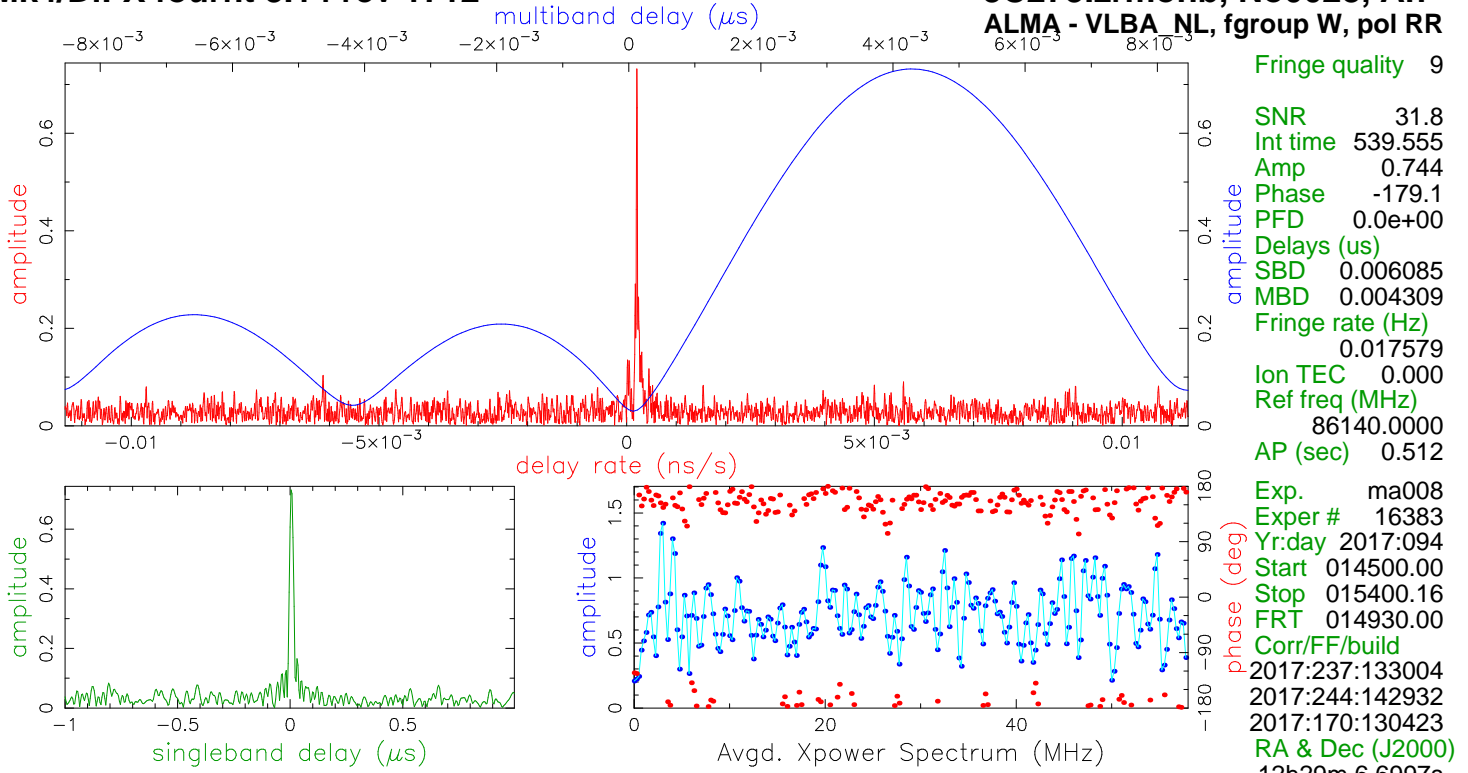
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



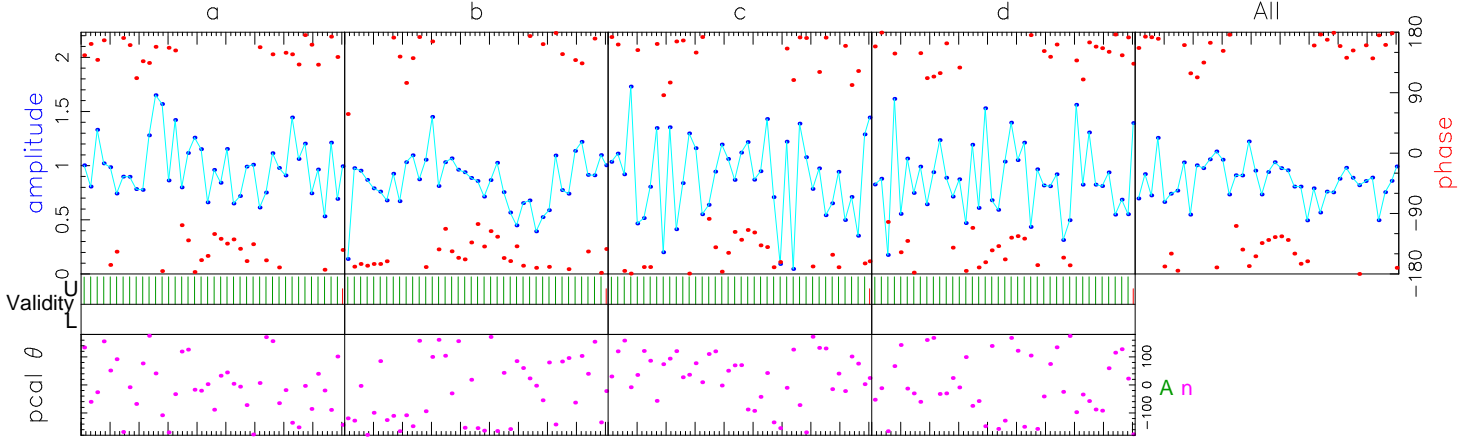
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-56.8	-58.4	-69.9	-56.8	Phase	-60.4
	0.9	0.9	0.8	0.7	Ampl.	0.8
	234.6	234.3	234.2	235.0	Sbd box	234.5
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
n	3890	296	1703	3109	PC freqs	
A:n	0:0	0:0	0:0	0:0	PC phase	
A:n	0:0	0:0	0:0	0:0	Mani 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)	4.96487559303E+03	Apriori delay (usec)	4.96487081086E+03	Resid mbdelay (usec)	4.78217E-03	+/-	6.8E-05
Sband delay (usec)	4.96487724645E+03	Apriori clock (usec)	-2.1111951E+03	Resid sbdelay (usec)	6.43559E-03	+/-	2.7E-04
Phase delay (usec)	4.96487080892E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-1.94657E-06	+/-	1.0E-07
Delay rate (us/s)	-1.68278916654E-01	Apriori rate (us/s)	-1.68279120449E-01	Resid rate (us/s)	2.03795E-07	+/-	3.3E-10
Total phase (deg)	172.8	Apriori accel (us/s/s)	-4.16880878866E-05	Resid phase (deg)	-60.4	+/-	3.2

ph/seg (deg)	32.5	Theor.	10.3	Search (4096X16)	0.799	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	25.9	RMS	32.5	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	7.8	Interp.	0.000	Inc. seg. avg.	0.951	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	8.7	Inc. seg. avg.	0.951	Inc. frq. avg.	0.818	Sample rate(MSamp/s): 116	mb window (us) -0.009 0.009
		Inc. frq. avg.	0.818			Data rate(Mb/s): 928	dr window (ns/s) -0.011 0.011
						nlags: 232	ion window (TEC) 0.00 0.00



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	86209.70	86268.30	86326.89	86151.11
176.0	-170.8	-175.7	174.6	176.0	-170.8	-175.7	174.6	176.0
0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.8
234.4	234.3	234.5	234.6	234.4	234.3	234.5	234.6	234.4
U/L 1055/0	1055/0	1055/0	1055/0	U/L 1055/0	1055/0	1055/0	1055/0	U/L 1055/0
A 0	0	0	0	A 0	0	0	0	A 0
n 3890	296	1703	3109	n 3890	296	1703	3109	n 3890
A:n 0:0	0:0	0:0	0:0	A:n 0:0	0:0	0:0	0:0	A:n 0:0
A:n 0:0	0:0	0:0	0:0	A:n 0:0	0:0	0:0	0:0	A:n 0:0
A 1000	1000	1000	1000	A 1000	1000	1000	1000	A 1000
n 1000	1000	1000	1000	n 1000	1000	1000	1000	n 1000
A W00UR	W01UR	W02UR	W03UR	A W00UR	W01UR	W02UR	W03UR	A W00UR
n W00UR	W01UR	W02UR	W03UR	n W00UR	W01UR	W02UR	W03UR	n W00UR
Group delay (usec)(sbd)	4.96487511988E+03	Apriori delay (usec)	4.96487081086E+03	Resid mbdelay (usec)	4.30901E-03	+/-	7.6E-05	Group delay (usec)(sbd)
Sband delay (usec)	4.96487689555E+03	Apriori clock (usec)	-2.1111951E+03	Resid sbdelay (usec)	6.08469E-03	+/-	3.0E-04	Sband delay (usec)
Phase delay (usec)	4.96487080509E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-5.77582E-06	+/-	1.2E-07	Phase delay (usec)
Delay rate (us/s)	-1.68278916379E-01	Apriori rate (us/s)	-1.68279120449E-01	Resid rate (us/s)	2.04070E-07	+/-	3.7E-10	Delay rate (us/s)
Total phase (deg)	54.1	Apriori accel (us/s/s)	-4.16880878866E-05	Resid phase (deg)	-179.1	+/-	3.6	Total phase (deg)

ph/seg (deg) 31.9 11.5 Theor. Amplitude 0.744 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 28.2 20.1 Search (4096X16) 0.728 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 8.5 3.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

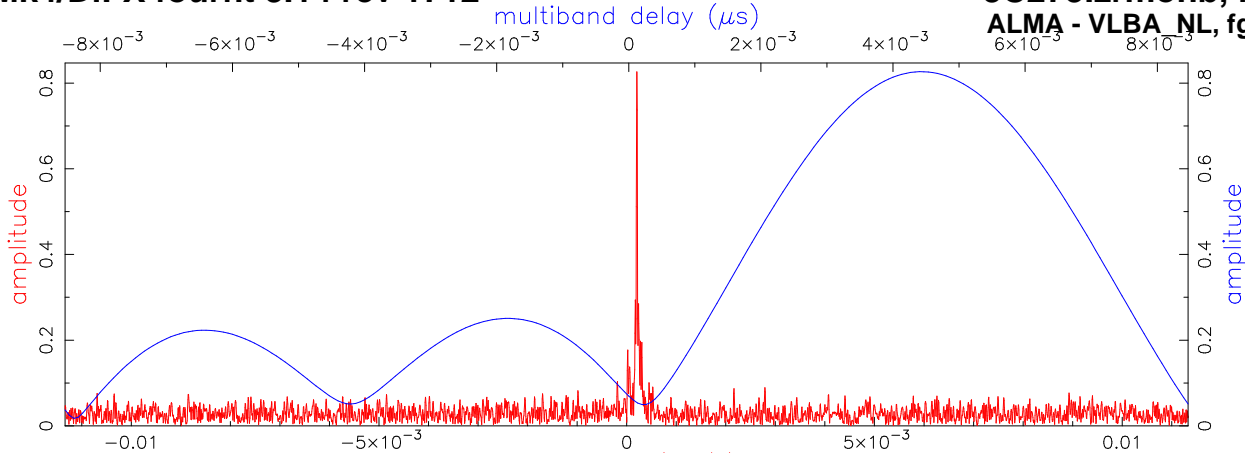
amp/frq (%) 7.1 6.3 Inc. seg. avg. 0.844 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 7.1 6.3 Inc. frq. avg. 0.734 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

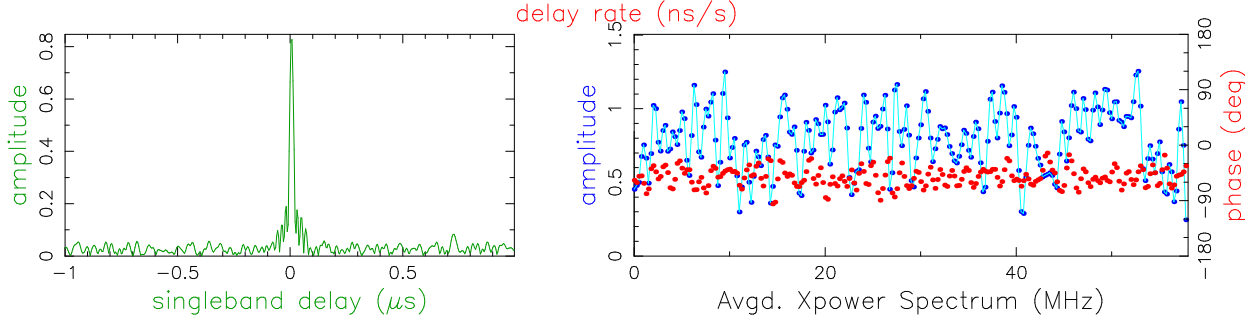
A: az 60.0 el 46.4 pa -127.2 n: az 109.2 el 22.9 pa -44.5 u,v (fr/asec) 883.025 -9452.774 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An.W.28.zrmonb

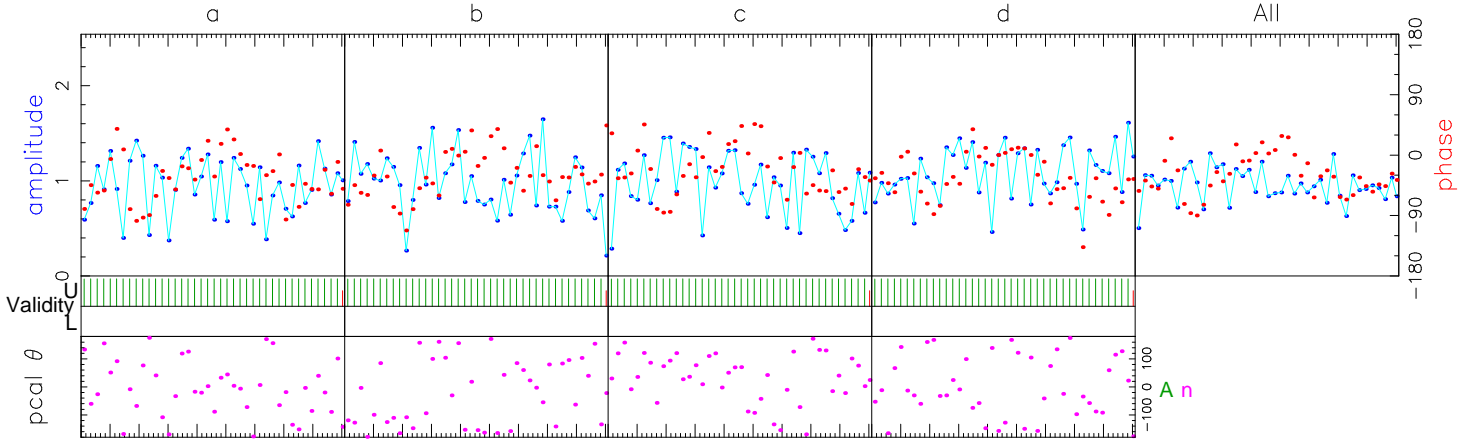




Fringe quality 8  
SNR 36.2  
Int time 539.503  
Amp 0.847  
Phase -29.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.006505  
MBD 0.004390  
Fringe rate (Hz)  
0.017573  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:142934  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.697s  
+2°03' 8.598"

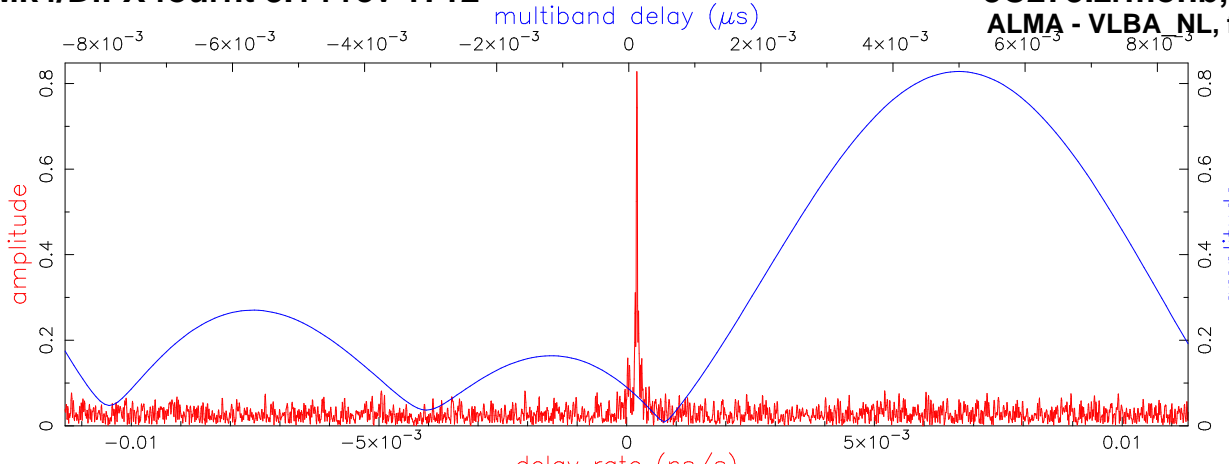


Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	All
-33.7	-29.4	-23.7	-32.3	Phase	-29.8
0.8	0.8	0.8	0.9	Ampl.	0.8
234.5	234.3	234.6	234.7	Sbd box	234.5
U/L 1055/0	1055/0	1055/0	1055/0	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 W00UR	W01UR	W02UR	W03UR	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	4.96487520057E+03	Apriori delay (usec)	4.96487081086E+03	Resid mbdelay (usec)	4.38970E-03 +/- 6.7E-05
Sband delay (usec)	4.96487731624E+03	Apriori clock (usec)	-2.1111951E+03	Resid sbdelay (usec)	6.50538E-03 +/- 2.6E-04
Phase delay (usec)	4.96487080990E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-9.62360E-07 +/- 1.0E-07
Delay rate (us/s)	-1.68278916446E-01	Apriori rate (us/s)	-1.68279120449E-01	Resid rate (us/s)	2.04003E-07 +/- 3.3E-10
Total phase (deg)	203.4	Apriori accel (us/s/s)	-4.16880878866E-05	Resid phase (deg)	-29.8 +/- 3.2

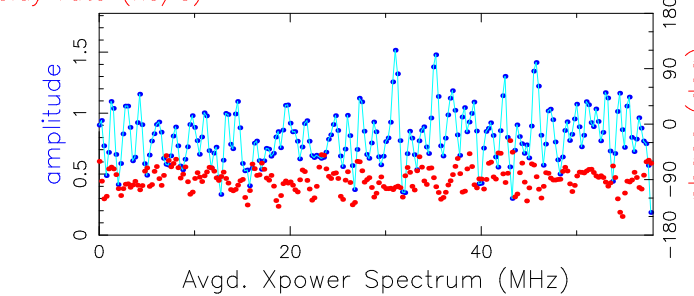
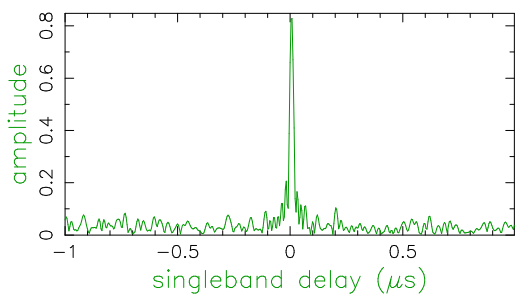
RMS Theor. Amplitude 0.847 +/- 0.023  
ph/seg (deg) 30.7 10.1 Search (4096X16) 0.821  
amp/seg (%) 24.2 17.7 Interp. 0.000  
ph/frq (deg) 5.4 3.2 Inc. seg. avg. 0.945  
amp/frq (%) 6.8 5.5 Inc. frq. avg. 0.827  
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
Bits/sample: 2x2 SampCntNorm: enabled sb window (us) -1.000 1.000  
Sample rate(MSamp/s): 116 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite mb window (us) -0.009 0.009  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00  
A: az 60.0 el 46.4 pa -127.2 n: az 109.2 el 22.9 pa -44.5 u,v (fr/asec) 883.025 -9452.774 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An.W.29.zrmonb



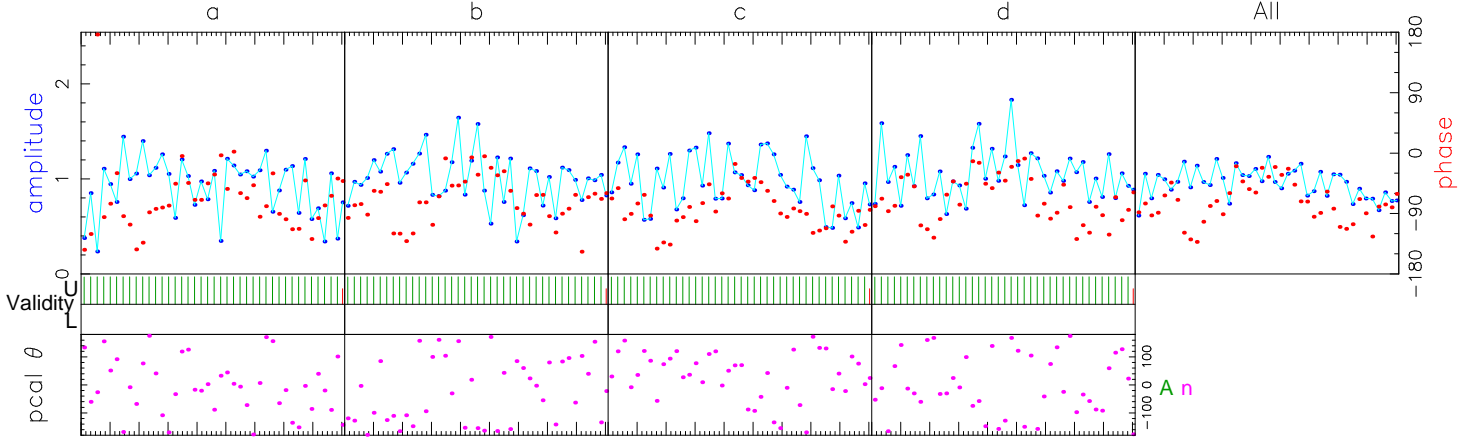
Fringe quality 8

SNR 36.3  
Int time 539.554  
Amp 0.848  
Phase -73.3  
PFD 0.0e+00  
Delays (us)  
SBD 0.006546  
MBD 0.004945  
Fringe rate (Hz) 0.017595  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:142937  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.697s +2°03' 8.598"



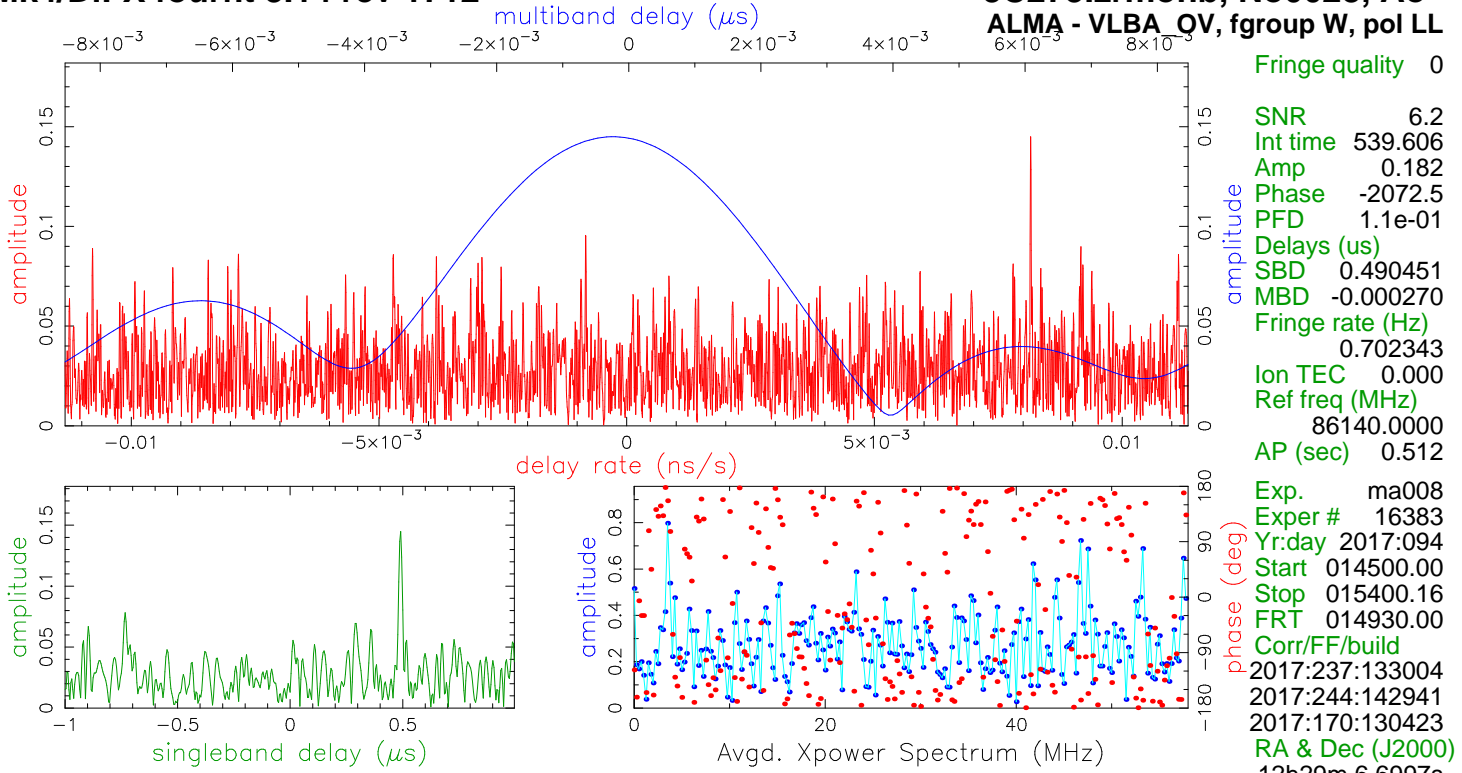
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



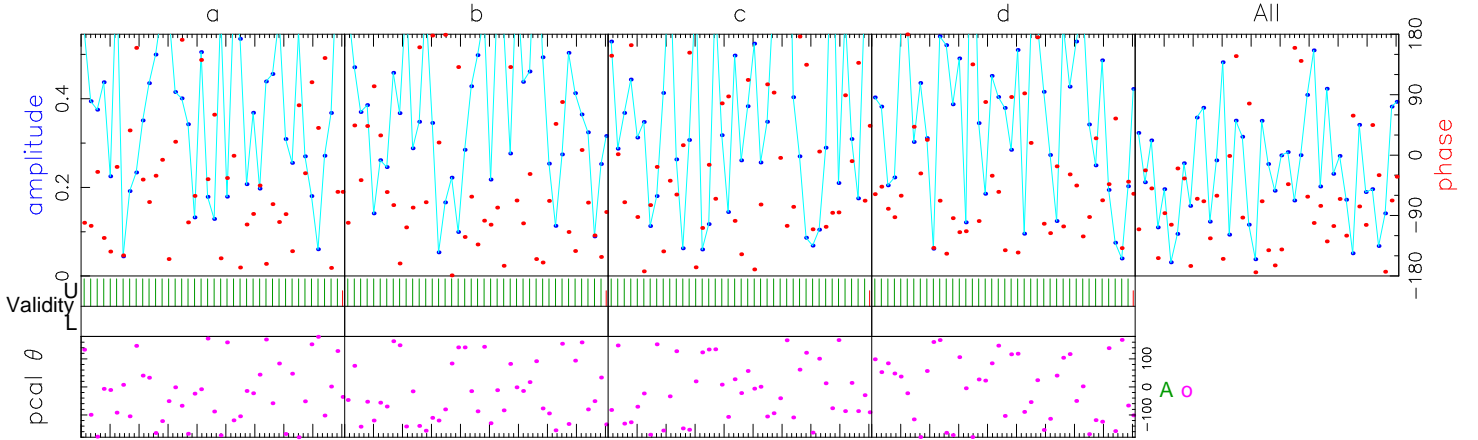
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-74.8	-69.1	-82.6	-67.0	Phase	-73.3
	0.8	0.8	0.9	0.9	Ampl.	0.8
	234.5	234.6	234.2	234.8	Sbd box	234.5
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
n	3890	296	1703	3109	PC freqs	
A:n	0:0	0:0	0:0	0:0	PC phase	
A:n	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	4.96487575592E+03	Apriori delay (usec)	4.96487081086E+03	Resid mbdelay (usec)	4.94505E-03	+/- 6.7E-05
Sband delay (usec)	4.96487735735E+03	Apriori clock (usec)	-2.1111951E+03	Resid sbdelay (usec)	6.54648E-03	+/- 2.6E-04
Phase delay (usec)	4.96487080850E+03	Apriori clockrate (us/s)	1.4650534E-06	Resid phdelay (usec)	-2.36432E-06	+/- 1.0E-07
Delay rate (us/s)	-1.68278916185E-01	Apriori rate (us/s)	-1.68279120449E-01	Resid rate (us/s)	2.04264E-07	+/- 3.3E-10
Total phase (deg)	159.9	Apriori accel (us/s/s)	-4.16880878866E-05	Resid phase (deg)	-73.3	+/- 3.2

ph/seg (deg) 29.8 10.1 Theor. Amplitude 0.848 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 21.8 17.7 Search (4096X16) 0.814 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 8.5 3.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 amp/frq (%) 6.0 5.5 Inc. seg. avg. 0.942 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 60.0 el 46.4 pa -127.2 n: az 109.2 el 22.9 pa -44.5 u,v (fr/asec) 883.025 -9452.774 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/An.W.30.zrmonb



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	86209.70	86268.30	86326.89	86151.11
-82.8	-104.1	-102.6	-84.0	-82.8	-104.1	-102.6	-84.0	-82.8
0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2
346.1	346.8	300.3	346.4	346.1	346.8	300.3	346.4	346.1
U/L 1055/0	1055/0	1055/0	1055/0	U/L 1055/0	1055/0	1055/0	1055/0	U/L 1055/0
A 0	0	0	0	A 0	0	0	0	A 0
o 3890	296	1703	3109	o 3890	296	1703	3109	o 3890
A:o 0:0	0:0	0:0	0:0	A:o 0:0	0:0	0:0	0:0	A:o 0:0
A:o 0:0	0:0	0:0	0:0	A:o 0:0	0:0	0:0	0:0	A:o 0:0
A 1000	1000	1000	1000	A 1000	1000	1000	1000	A 1000
o 1000	1000	1000	1000	o 1000	1000	1000	1000	o 1000
A W00UL	W01UL	W02UL	W03UL	A W00UL	W01UL	W02UL	W03UL	A W00UL
o W00UL	W01UL	W02UL	W03UL	o W00UL	W01UL	W02UL	W03UL	o W00UL
Group delay (usec)(sbd)	1.19294796443E+04	Apriori delay (usec)	1.19289849813E+04	Resid mbdelay (usec)	-2.70409E-04	+/-	3.9E-04	Group delay (usec)(sbd)
Sband delay (usec)	1.19294754324E+04	Apriori clock (usec)	-2.1079949E+03	Resid sbdelay (usec)	4.90451E-01	+/-	1.5E-03	Sband delay (usec)
Phase delay (usec)	1.19289849783E+04	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-3.0002E-06	+/-	5.9E-07	Phase delay (usec)
Delay rate (us/s)	-4.07288017492E-01	Apriori rate (us/s)	-4.07296170995E-01	Resid rate (us/s)	8.15350E-06	+/-	1.9E-09	Delay rate (us/s)
Total phase (deg)	-1967.5	Apriori accel (us/s/s)	-7.84221497296E-05	Resid phase (deg)	-2072.5	+/-	18.4	Total phase (deg)

RMS Theor. Amplitude 0.182 +/- 0.029 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

ph/seg (deg) 68.5 58.9 Search (4096X16) 0.143 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

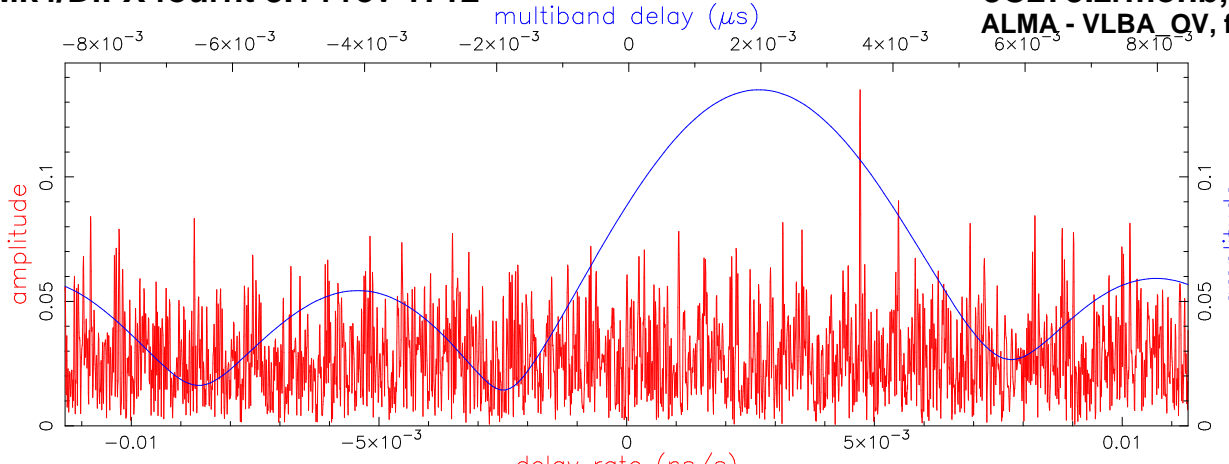
amp/seg (%) 105.9 102.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009

ph/frq (deg) 14.1 18.4 Inc. seg. avg. 0.197 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011

amp/frq (%) 23.3 32.1 Inc. frq. avg. 0.175 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 o: az 90.1 el 3.4 pa -52.8 u,v (fr/asec) 2182.766 -9012.487 simultaneous interpolator

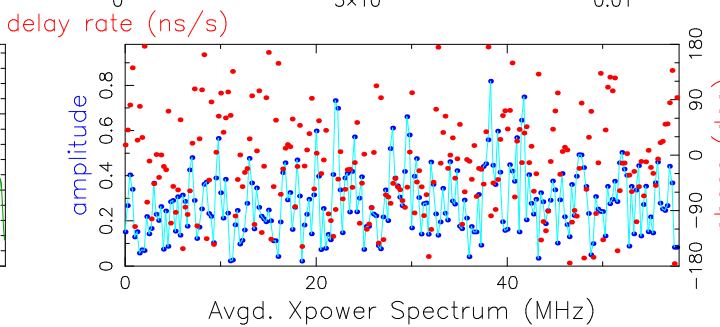
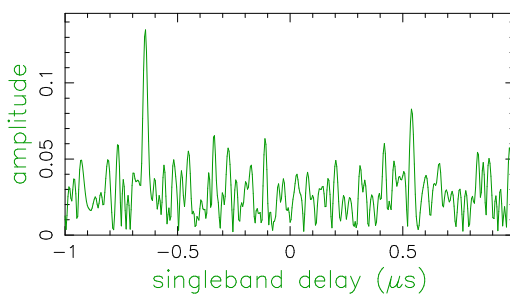
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao.W.31.zrmonb



Fringe quality 0

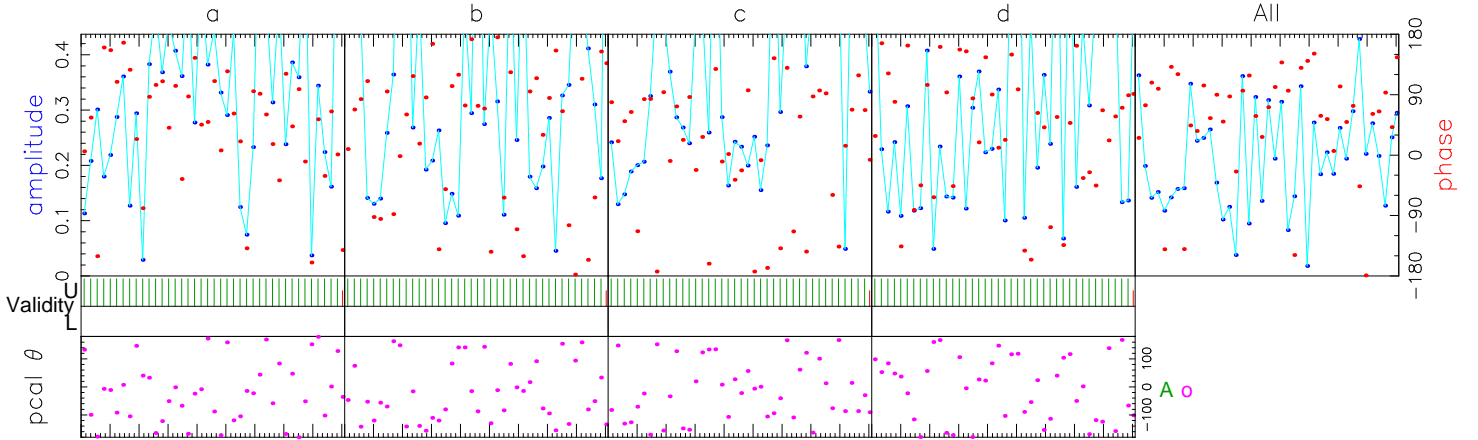
SNR 5.8  
 Int time 539.657  
 Amp 0.146  
 Phase 2674.0  
 PFD 7.8e-01  
 Delays (us)  
 SBD -0.643387  
 MBD 0.001893  
 Fringe rate (Hz)  
 0.405886  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142944  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.697s  
 +2°03' 8.598"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

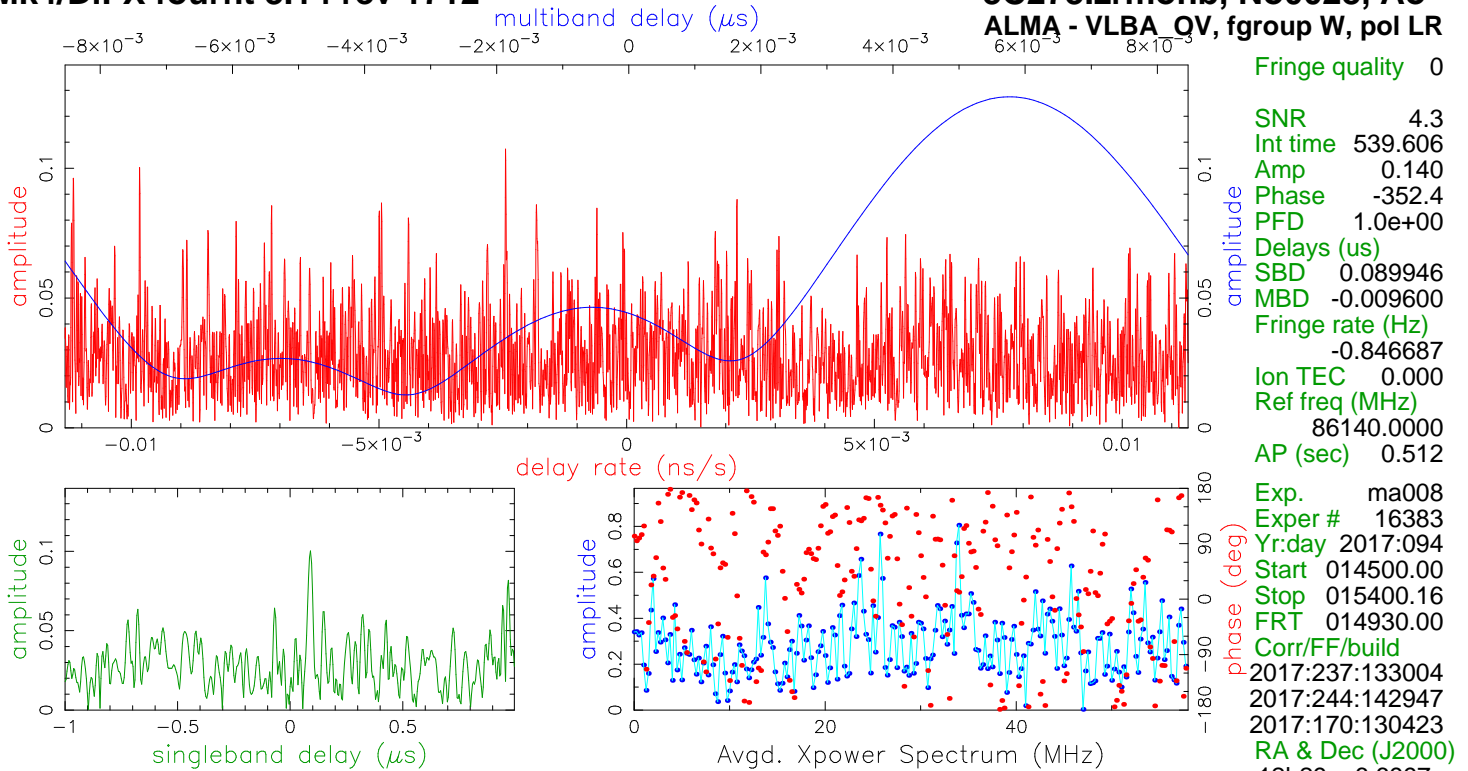


86151.11	86209.70	86268.30	86326.89	86326.89	86326.89	86326.89	All
66.9	101.4	90.9	71.1	71.1	71.1	71.1	80.3
0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1
84.6	296.4	154.8	56.1	56.1	56.1	56.1	83.7
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	
A 0	0	0	0	0	0	0	
o 3890	296	1703	3109	3109	3109	3109	
A:o 0:0	0:0	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)	1.19283383412E+04	Apriori delay (usec)	1.19289849813E+04	Resid mbdelay (usec)	1.89317E-03	+/-	4.2E-04
Sband delay (usec)	1.19283415943E+04	Apriori clock (usec)	-2.1079949E+03	Resid sbdelay (usec)	-6.43387E-01	+/-	1.6E-03
Phase delay (usec)	1.19289849839E+04	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	2.58814E-06	+/-	6.4E-07
Delay rate (us/s)	-4.07291459065E-01	Apriori rate (us/s)	-4.07296170995E-01	Resid rate (us/s)	4.71193E-06	+/-	2.0E-09
Total phase (deg)	2778.9	Apriori accel (us/s/s)	-7.84221497296E-05	Resid phase (deg)	2674.0	+/-	19.8

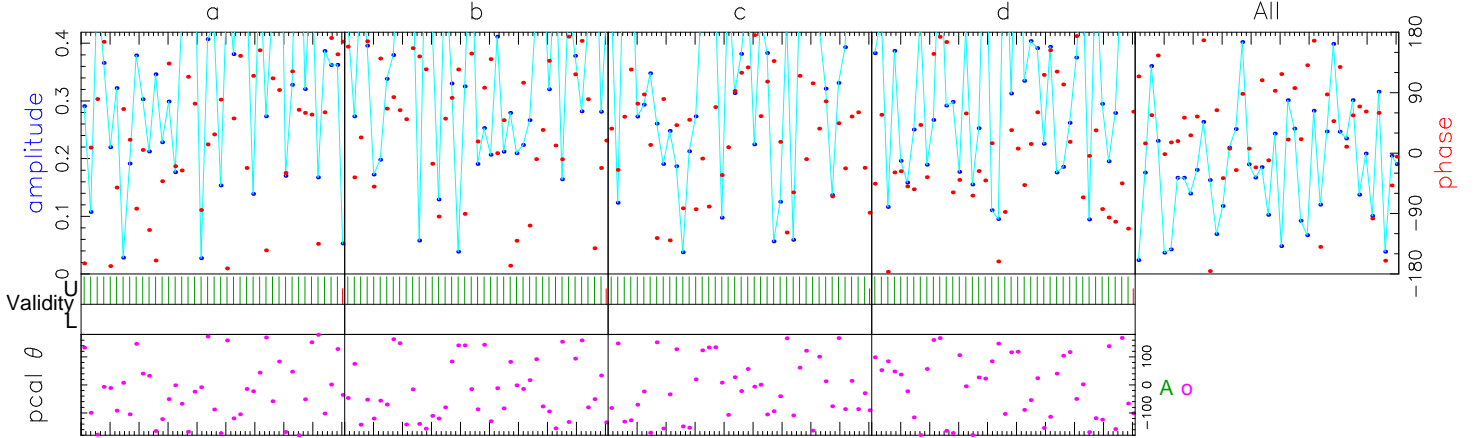
ph/seg (deg)	58.8	Theor.	63.3	Amplitude	0.146 +/- 0.025	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	90.0	110.4	Search (4096X16)	0.132	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	20.3	19.8	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009
amp/frq (%)	19.2	34.5	Inc. seg. avg.	0.143	Sample rate(MSamp/s):	116	ion window (TEC)	0.00	0.00	
			Inc. frq. avg.	0.141	Data rate(Mb/s):	928	nlags:	232	t_cohere infinite	

A: az 60.0 el 46.4 pa -127.2 o: az 90.1 el 3.4 pa -52.8 u,v (fr/asec) 2182.766 -9012.487 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao.W.32.zrmonb



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



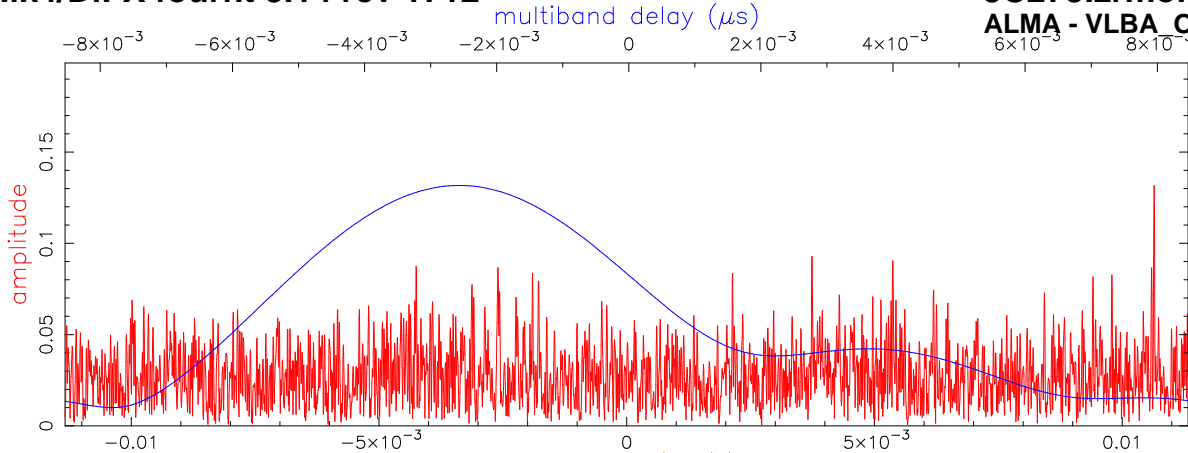
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	94.2	82.7	48.4	-19.1	Phase	57.1
	0.2	0.2	0.2	0.2	Ampl.	0.2
	404.2	451.2	252.3	406.5	Sbd box	253.9
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
o	3890	296	1703	3109	PC freqs	
A:o	0:0	0:0	0:0	0:0	PC phase	
A:o	0:0	0:0	0:0	0:0	Manl PC	
A	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	1.19290777813E+04	Apriori delay (usec)	1.19289849813E+04	Resid mbdelay (usec)	-9.60000E-03	+/- 5.7E-04
Sband delay (usec)	1.19290749270E+04	Apriori clock (usec)	-2.1079949E+03	Resid sbdelay (usec)	8.99457E-02	+/- 2.2E-03
Phase delay (usec)	1.19289849832E+04	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	1.84143E-06	+/- 8.6E-07
Delay rate (us/s)	-4.07306000192E-01	Apriori rate (us/s)	-4.07296170995E-01	Resid rate (us/s)	-9.82920E-06	+/- 2.8E-09
Total phase (deg)	-247.5	Apriori accel (us/s/s)	-7.84221497296E-05	Resid phase (deg)	-352.4	+/- 26.7

	RMS	Theor.	Amplitude	0.140 +/- 0.033	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	70.8	85.5	Search (4096X16)	0.127	Pcal rate:	0.000E+00, 0.000E+00	(us/s)	sb window (us)	-1.000 1.000
amp/seg (%)	130.0	149.2	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
ph/frq (deg)	62.9	26.7	Inc. seg. avg.	0.124	Sample rate(MSamp/s):	116		dr window (ns/s)	-0.011 0.011
amp/frq (%)	37.1	46.6	Inc. frq. avg.	0.165	Data rate(Mb/s):	928	nlags: 232 t_cohere infinite	ion window (TEC)	0.00 0.00

A: az 60.0 el 46.4 pa -127.2 o: az 90.1 el 3.4 pa -52.8 u,v (fr/asec) 2182.766 -9012.487 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ao.W.33.zrmonb

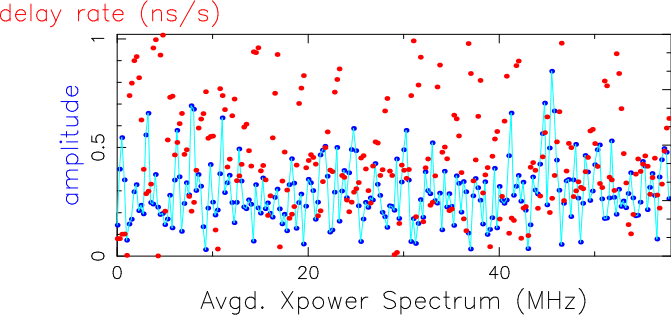
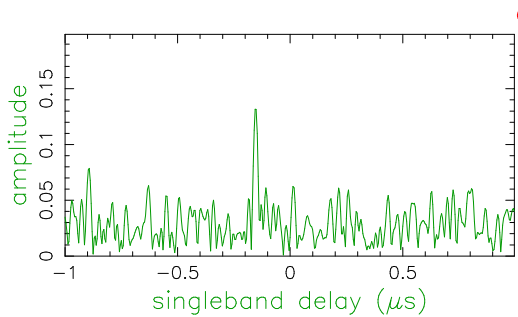




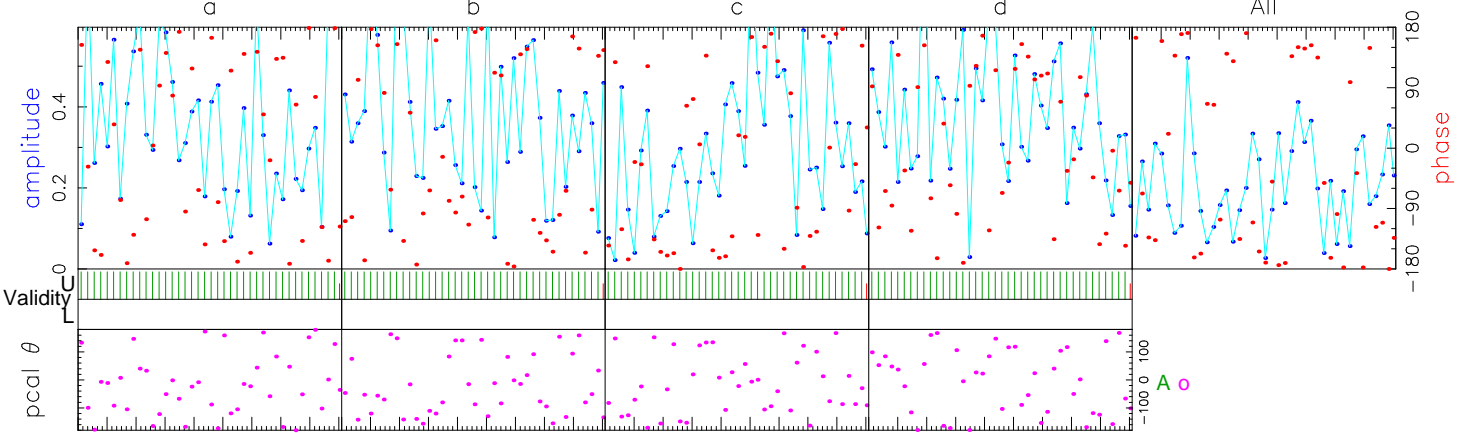
Fringe quality 0

SNR 5.7  
Int time 539.658  
Amp 0.199  
Phase 441.6  
PFD 8.8e-01  
Delays (us)  
SBD -0.153057  
MBD -0.002535  
Fringe rate (Hz) 0.917001  
Ion TEC 0.000  
Ref freq (MHz) 86140.000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:142949  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"



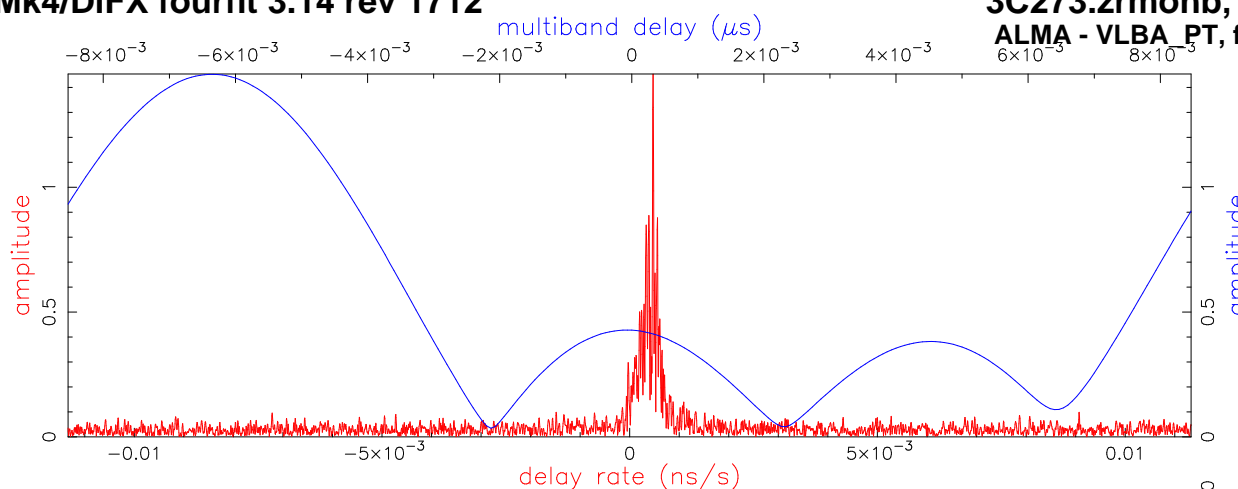
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1055/0	1055/0	1055/0	1055/0		
A	0	0	0	0	Phase	-172.7
o	3890	296	1703	3109	Ampl.	0.2
A:o	0:0	0:0	0:0	0:0	Sbd box	197.5
A:o	0:0	0:0	0:0	0:0	APs used	
A	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	PC freqs	
A	W00UR	W01UR	W02UR	W03UR	PC phase	
o	W00UL	W01UL	W02UL	W03UL	Mani PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	

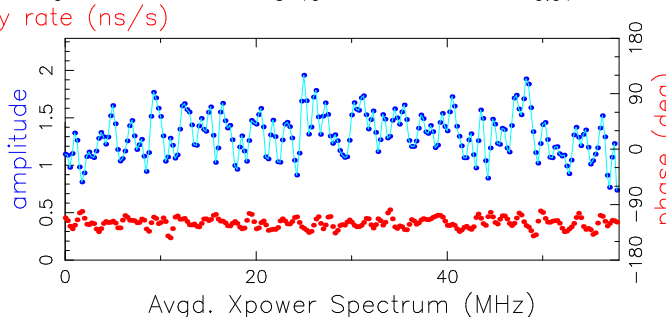
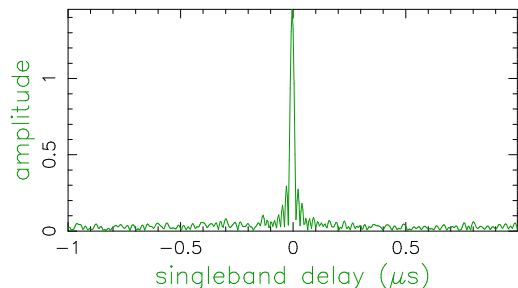
Group delay (usec)(sbd)	1.19288288460E+04	Apriori delay (usec)	1.19289849813E+04	Resid mbdelay (usec)	-2.53530E-03	+/- 4.2E-04
Sband delay (usec)	1.19288319242E+04	Apriori clock (usec)	-2.1079949E+03	Resid sbdelay (usec)	-1.53057E-01	+/- 1.7E-03
Phase delay (usec)	1.19289849758E+04	Apriori clockrate (us/s)	1.5021560E-06	Resid phdelay (usec)	-5.56796E-06	+/- 6.4E-07
Delay rate (us/s)	-4.07285525528E-01	Apriori rate (us/s)	-4.07296170995E-01	Resid rate (us/s)	1.06455E-05	+/- 2.1E-09
Total phase (deg)	546.6	Apriori accel (us/s/s)	-7.84221497296E-05	Resid phase (deg)	441.6	+/- 20.0

ph/seg (deg)	65.1	Theor.	63.9	Search (4096X16)	0.131	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	100.0	111.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009	
ph/frq (deg)	19.8	20.0	Inc. seg. avg.	0.190	Sample rate(MSamp/s): 116	Data rate(Mb/s): 928	dr window (ns/s)	-0.011	0.011	
amp/frq (%)	30.2	34.9	Inc. frq. avg.	0.190	nlags: 232	t_cohere infinite	ion window (TEC)	0.00	0.00	

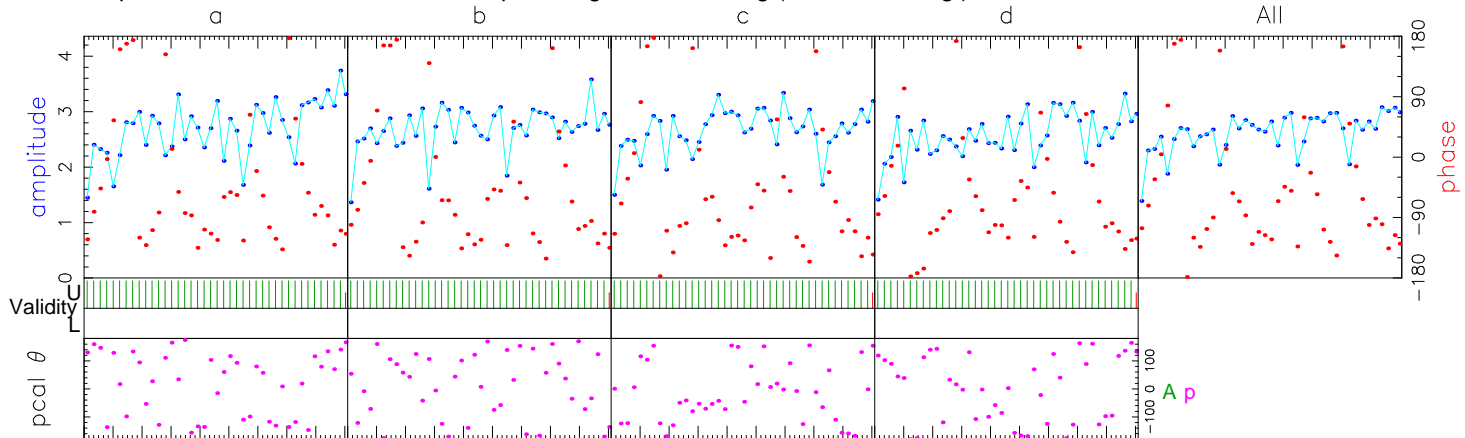


Fringe quality 7

SNR 62.1  
 Int time 539.642  
 Amp 1.454  
 Phase -97.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004182  
 MBD -0.006352  
 Fringe rate (Hz) 0.040581  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142953  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.697s  
 +2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



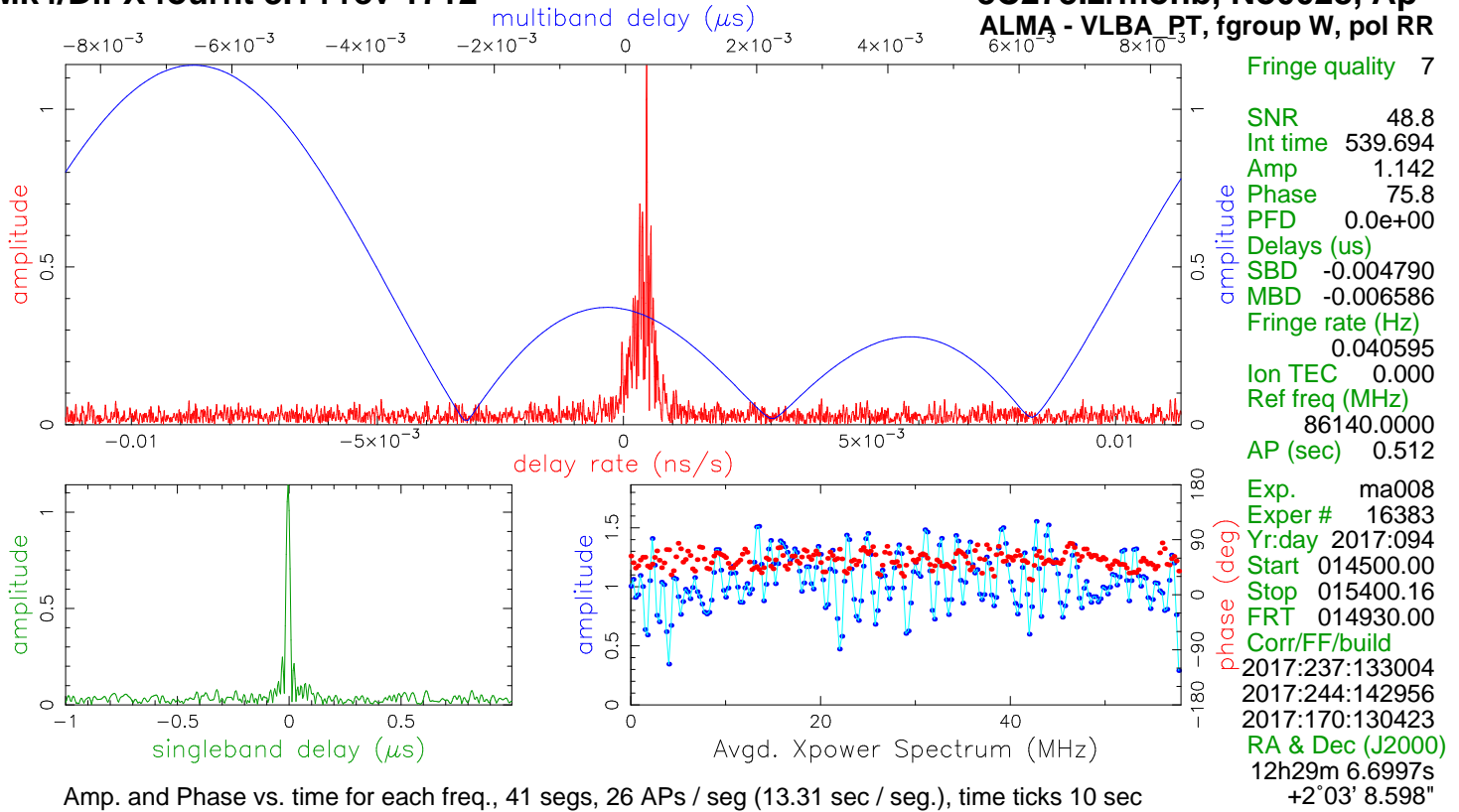
86151.11	86209.70	86268.30	86326.89	86375.48	86433.97	86492.46
-93.7	-99.3	-102.7	-92.2	-97.0	-91.9	-97.0
1.6	1.5	1.4	1.4	1.4	1.4	1.5
231.9	231.9	232.2	232.1	232.0	231.9	232.0
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0
A 0	0	0	0	0	0	0
p 3890	296	1703	3109	3109	3109	3109
A:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0
A:p 0:0	0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000	1000
p 1000	1000	1000	1000	1000	1000	1000
A W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL
p W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL

Group delay (usec)(sbd)	8.83844406262E+03	Apriori delay (usec)	8.83845041421E+03	Resid mbdelay (usec)	-6.35159E-03	+-	3.9E-05
Sband delay (usec)	8.83844623241E+03	Apriori clock (usec)	-2.1081792E+03	Resid sbdelay (usec)	-4.18179E-03	+-	1.5E-04
Phase delay (usec)	8.83845041108E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-3.12788E-06	+-	5.9E-08
Delay rate (us/s)	-4.17056929393E-01	Apriori rate (us/s)	-4.17057400496E-01	Resid rate (us/s)	4.71103E-07	+-	1.9E-10
Total phase (deg)	147.7	Apriori accel (us/s/s)	-6.18725549629E-05	Resid phase (deg)	-97.0	+-	1.8

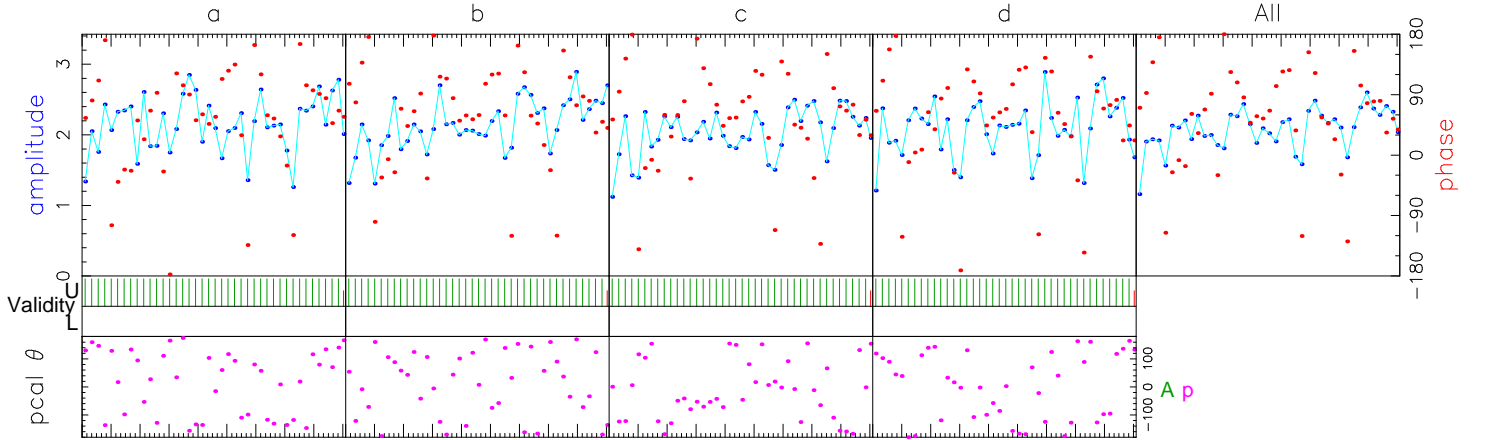
ph/seg (deg)	67.1	Theor.	5.9	Amplitude	1.454 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	83.9		10.3	Search (4096X16)	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)			mb window (us)	-0.009	0.009	
ph/frq (deg)	6.0		1.8	Interp.	0.000	Bits/sample: 2x2			SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	4.7		3.2	Inc. seg. avg.	2.608	Sample rate(MSamp/s): 116			ion window (TEC)	0.00	0.00	

A: az 60.0 el 46.4 pa -127.2 p: az 95.7 el 11.8 pa -55.2 u,v (fr/asec) 2270.308 -8601.554 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ap..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ap.W.35.zrmonb

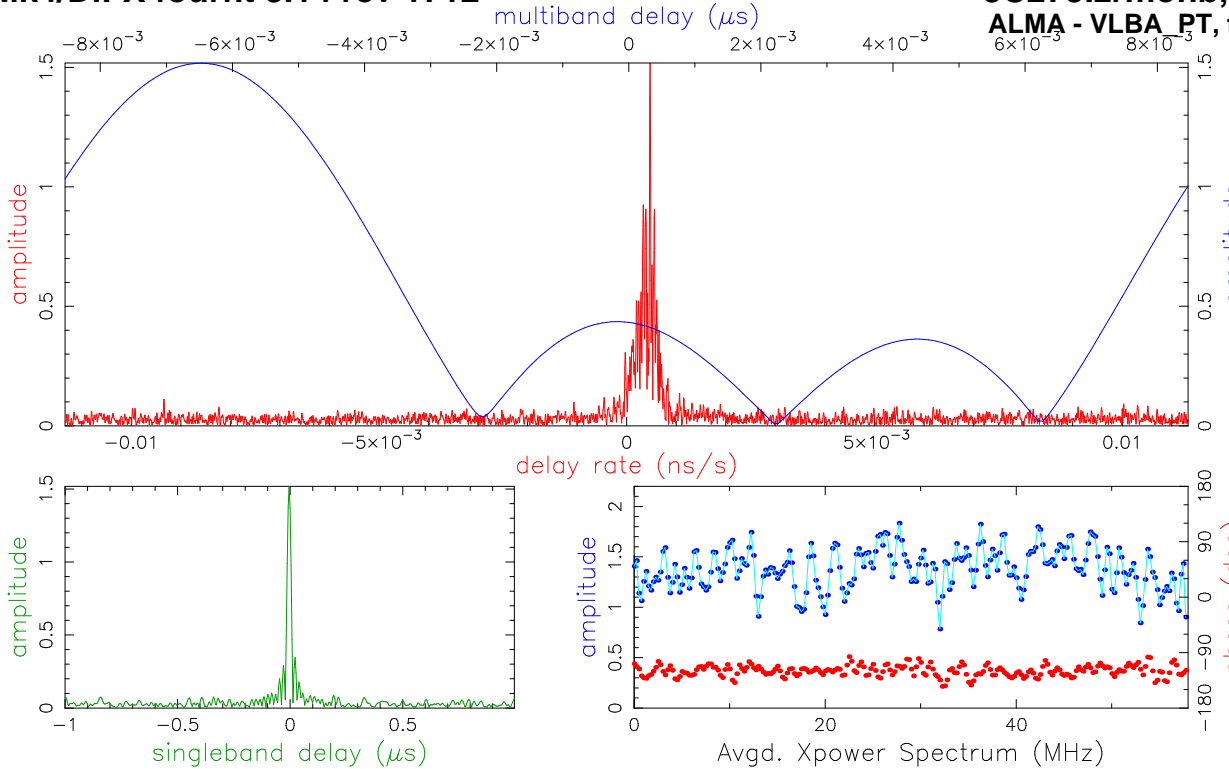


Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



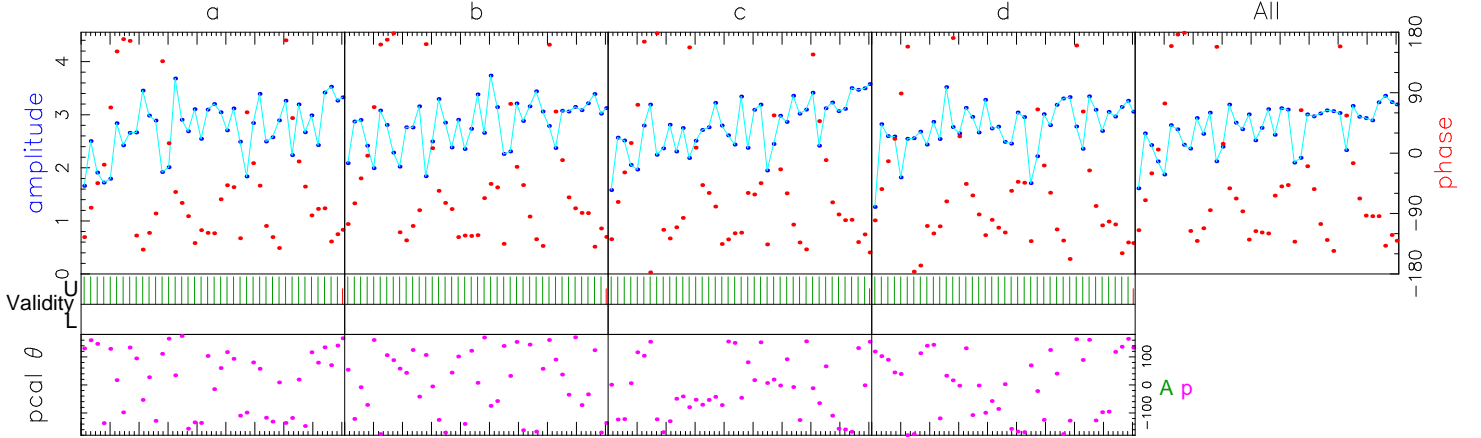
	86151.11	86209.70	86268.30	86326.89	86326.89	Freq (MHz)	All
75.3	79.3	69.7	78.6	78.6	78.6	Phase	75.8
1.2	1.1	1.1	1.1	1.2	1.2	Ampl.	1.1
231.8	231.9	231.9	231.9	231.9	231.9	Sbd box	231.9
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	0	0	PC freqs	
p 3890	296	1703	3109	3109	3109	PC freqs	
A:p 0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
A:p 0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
A 1000	1000	1000	1000	1000	1000	PC amp	
p 1000	1000	1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	Chan ids	
p W00UR	W01UR	W02UR	W03UR	W03UR	W03UR	Tracks	
						Chan ids	
						Tracks	
Group delay (usec)(sbd)	8.83844382833E+03	Apriori delay (usec)	8.83845041421E+03	Resid mbdelay (usec)	-6.58588E-03	+/-	5.0E-05
Sband delay (usec)	8.83844562414E+03	Apriori clock (usec)	-2.1081792E+03	Resid sbdelay (usec)	-4.79007E-03	+/-	1.9E-04
Phase delay (usec)	8.83845041665E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	2.44440E-06	+/-	7.6E-08
Delay rate (us/s)	-4.17056929228E-01	Apriori rate (us/s)	-4.17057400496E-01	Resid rate (us/s)	4.71268E-07	+/-	2.4E-10
Total phase (deg)		Apriori accel (us/s/s)	-6.18725549629E-05	Resid phase (deg)	75.8	+/-	2.3

RMS Theor. Amplitude 1.142 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 68.3 7.5 Search (4096X16) 1.122 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 86.0 13.1 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 5.3 2.3 Inc. seg. avg. 2.065 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 2.3 4.1 Inc. frq. avg. 1.142 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00  
 A: az 60.0 el 46.4 pa -127.2 p: az 95.7 el 11.8 pa -55.2 u,v (fr/asec) 2270.308 -8601.554 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ap..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/Ap.W.36.zrmonb



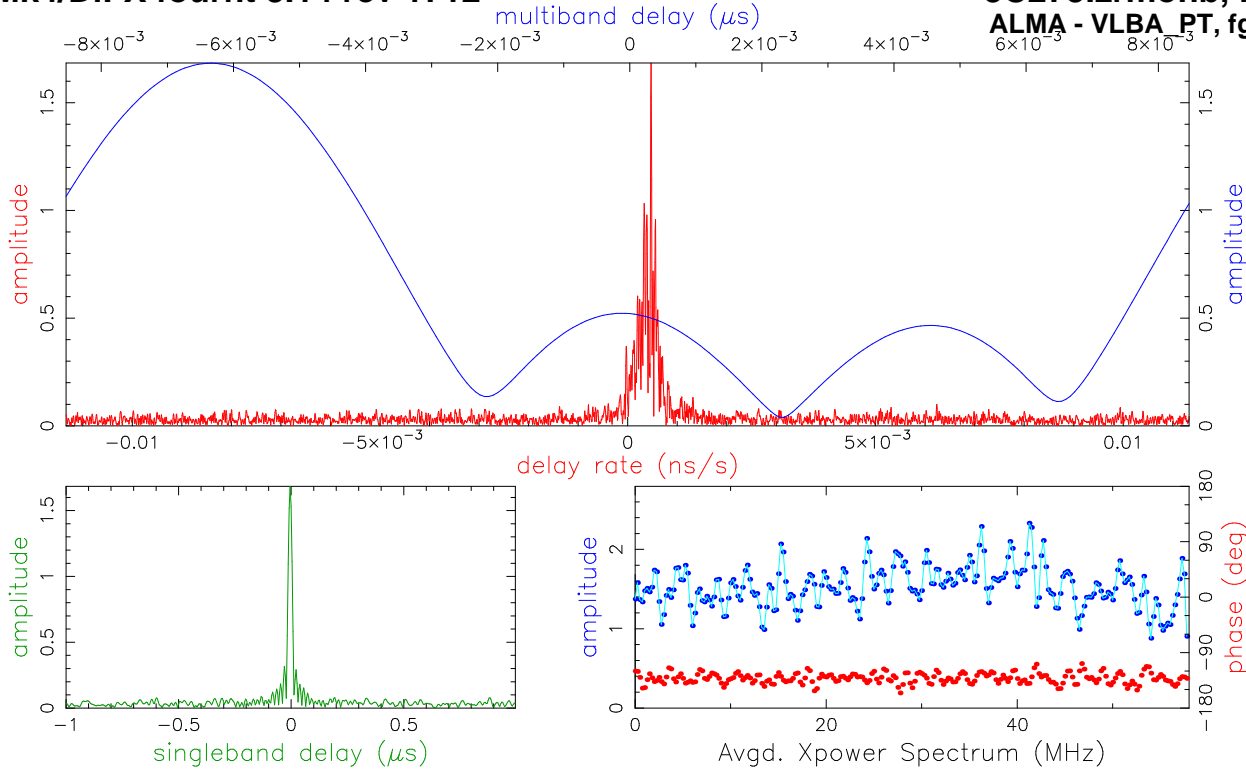
Fringe quality 5  
 SNR 64.9  
 Int time 539.643  
 Amp 1.518  
 Phase -97.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.004364  
 MBD -0.006478  
 Fringe rate (Hz) 0.040605  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. ma008  
 Exper # 16383  
 Yr:day 2017:094  
 Start 014500.00  
 Stop 015400.16  
 FRT 014930.00  
 Corr/FF/build  
 2017:237:133004  
 2017:244:142958  
 2017:170:130423  
 RA & Dec (J2000)  
 12h29m 6.6997s  
 +2°03' 8.598"

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-98.8	-94.2	-99.5	-97.0	Phase	-97.3
	1.5	1.6	1.5	1.5	Ampl.	1.5
	231.9	232.0	232.0	232.1	Sbd box	232.0
U/L	1055/0	1055/0	1055/0	1055/0	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	W00UL	W01UL	W02UL	W03UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	8.83844393653E+03	Apriori delay (usec)	8.83845041421E+03	Resid mbdelay (usec)	-6.47767E-03	+/- 3.7E-05
Sband delay (usec)	8.83844604979E+03	Apriori clock (usec)	-2.1081792E+03	Resid sbdelay (usec)	-4.36441E-03	+/- 1.5E-04
Phase delay (usec)	8.83845041107E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-3.13875E-06	+/- 5.7E-08
Delay rate (us/s)	-4.17056929109E-01	Apriori rate (us/s)	-4.17057400496E-01	Resid rate (us/s)	4.71387E-07	+/- 1.8E-10
Total phase (deg)		147.4	Apriori accel (us/s/s)	-6.18725549629E-05	Resid phase (deg)	-97.3 +/- 1.8

RMS Theor. Amplitude 1.518 +/- 0.023  
 ph/seg (deg) 68.5 5.7 Search (4096X16) 1.500  
 amp/seg (%) 85.6 9.9 Interp. 0.000  
 ph/frq (deg) 2.9 1.8 Inc. seg. avg. 2.738  
 amp/frq (%) 2.9 3.1 Inc. frq. avg. 1.519  
 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



Fringe quality 5

SNR 72.0

Int time 539.693

Amp 1.685

Phase -109.4

PFD 0.0e+00

Delays (us)

SBD -0.004236

MBD -0.006340

Fringe rate (Hz) 0.040539

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.512

Exp. ma008

Exper # 16383

Yr:day 2017:094

Start 014500.00

Stop 015400.16

FRT 014930.00

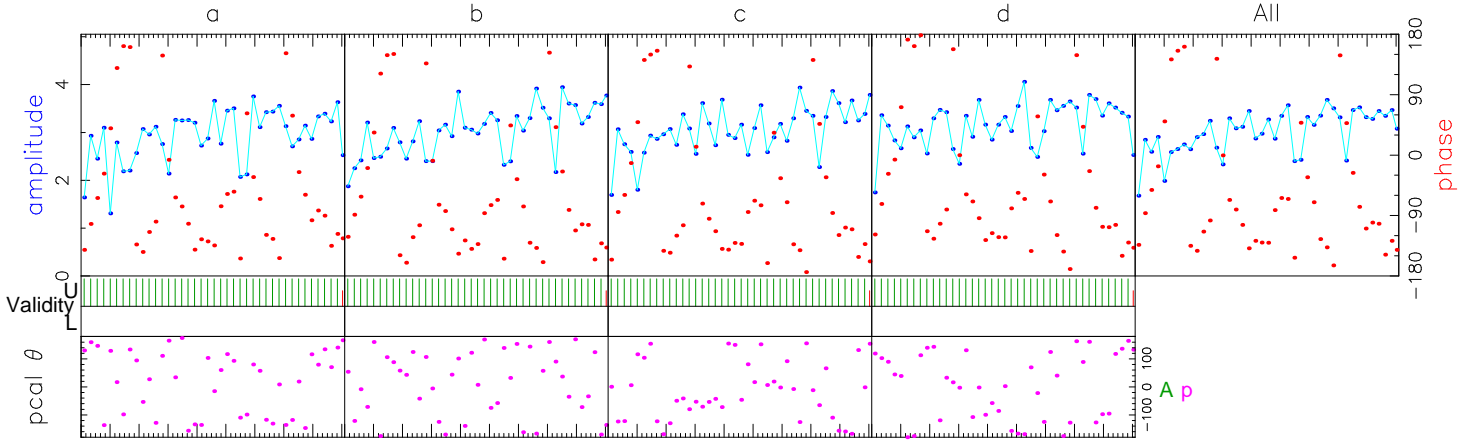
Corr/FF/build 2017:237:133004

2017:244:143001

2017:170:130423

RA & Dec (J2000) 12h29m 6.6997s +2°03' 8.598"

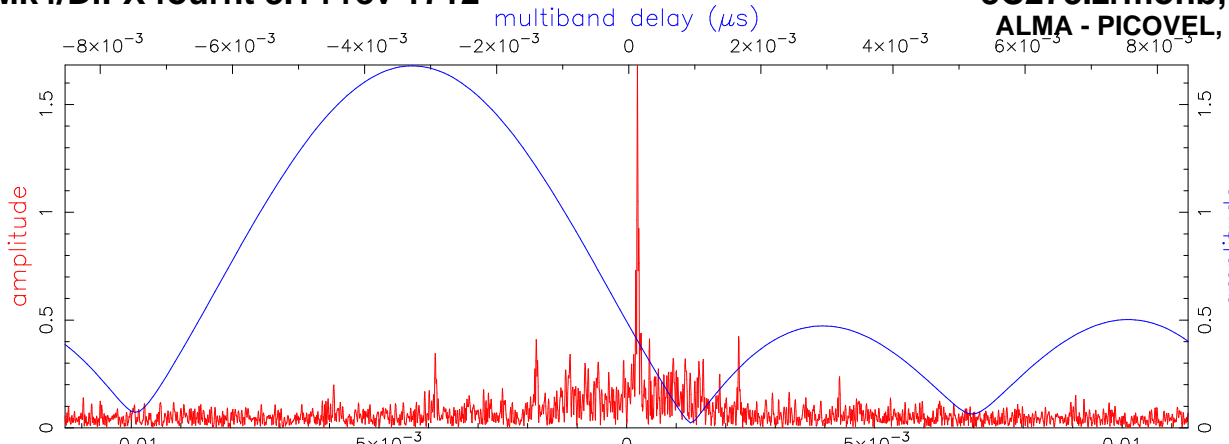
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



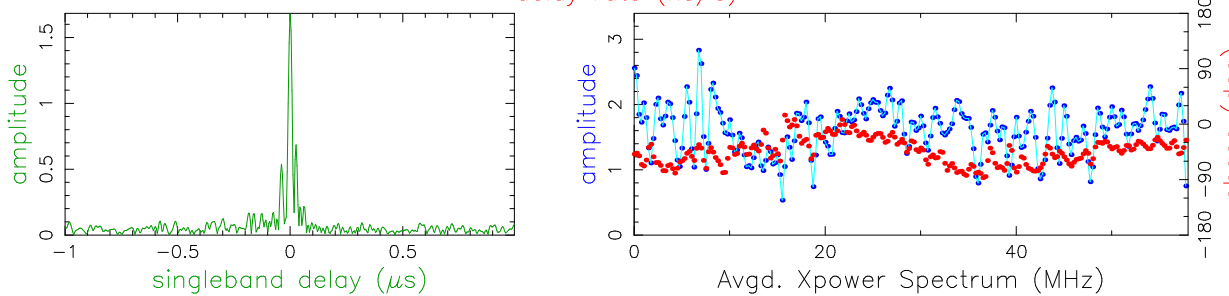
86151.11	86209.70	86268.30	86326.89	All		
-104.1	-113.2	-117.8	-103.0	-109.4		
1.7	1.7	1.7	1.8	1.7		
231.9	232.1	232.2	232.0	232.0		
U/L 1055/0	U/L 1055/0	U/L 1055/0	U/L 1055/0			
A 0	0	0	0			
p 3890	296	1703	3109			
A:p 0:0	0:0	0:0	0:0			
A:p 0:0	0:0	0:0	0:0			
A 1000	1000	1000	1000			
p 1000	1000	1000	1000			
A W00UR	W01UR	W02UR	W03UR			
p W00UL	W01UL	W02UL	W03UL			
Group delay (usec)(sbd)	8.83844407389E+03	Apriori delay (usec)	8.83845041421E+03	Resid mbdelay (usec)	-6.34032E-03	+/- 3.4E-05
Sband delay (usec)	8.83844617862E+03	Apriori clock (usec)	-2.1081792E+03	Resid sbdelay (usec)	-4.23559E-03	+/- 1.3E-04
Phase delay (usec)	8.83845041068E+03	Apriori clockrate (us/s)	1.4954652E-06	Resid phdelay (usec)	-3.52769E-06	+/- 5.1E-08
Delay rate (us/s)	-4.17056929878E-01	Apriori rate (us/s)	-4.17057400496E-01	Resid rate (us/s)	4.70618E-07	+/- 1.6E-10
Total phase (deg)	135.3	Apriori accel (us/s/s)	-6.18725549629E-05	Resid phase (deg)	-109.4	+/- 1.6

ph/seg (deg)	RMS	Theor.	Amplitude	1.685 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	67.7	5.1	Search (4096X16)	1.673	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.009	0.009
ph/frq (deg)	82.8	8.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	8.8	1.6	Inc. seg. avg.	2.993	Sample rate(MSamp/s): 116		ion window (TEC)	0.00	0.00
	2.8	2.8	Inc. frq. avg.	1.694	Data rate(Mb/s): 928	nlags: 232	t_cohere	infinite	

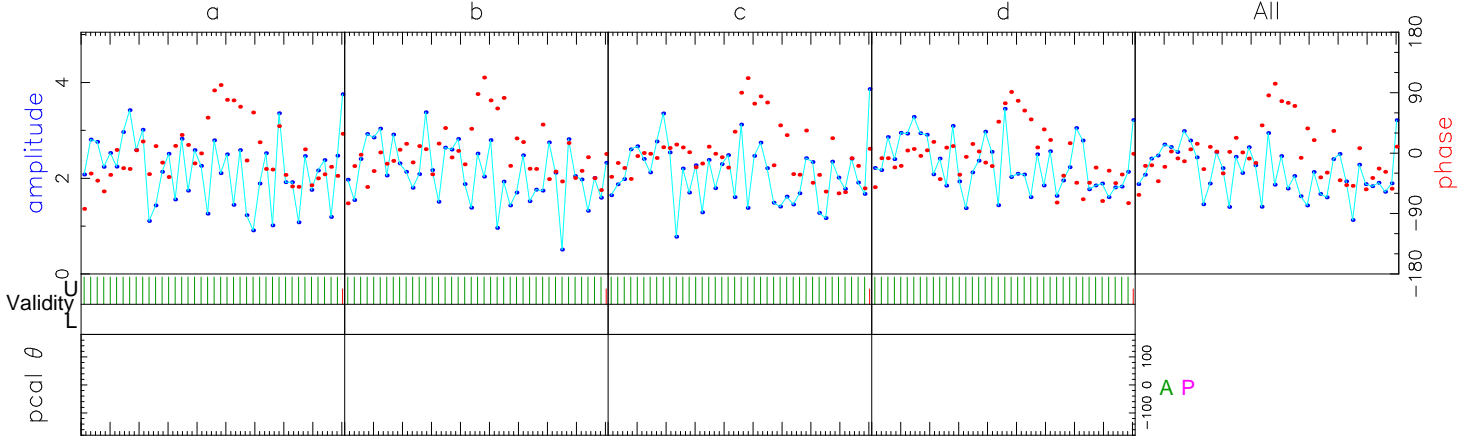




Fringe quality 6  
SNR 71.6  
Int time 534.189  
Amp 1.684  
Phase -2.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000635  
MBD -0.003254  
Fringe rate (Hz) 0.018484  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143005  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

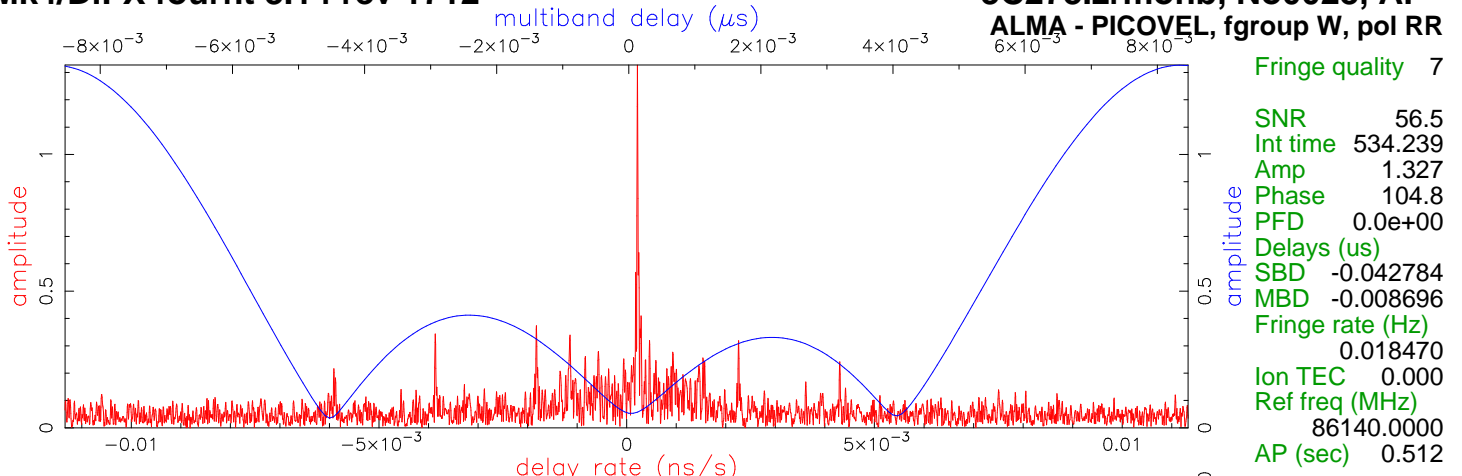


86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
-4.0	-1.4	0.6	-5.9	Phase	-2.7
1.6	1.7	1.6	1.8	Ampl.	1.7
233.0	233.1	233.5	232.9	Sbd box	233.1
U/L 1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	PC freqs	
P 0	0	0	0	PC freqs	
A:P 0:0	0:0	0:0	0:0	PC phase	
A:P 0:0	0:0	0:0	0:0	ManI PC	
A 1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000		
A W00UL	W01UL	W02UL	W03UL	Chan ids	
P W00UL	W01UL	W02UL	W03UL	Tracks	

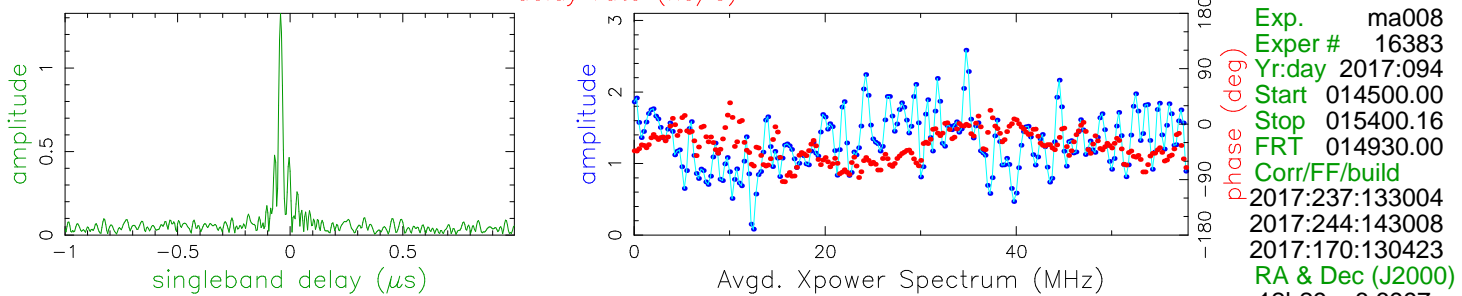
Group delay (usec)(sbd)	-1.68974488387E+03	Apriori delay (usec)	-1.68974162988E+03	Resid mbdelay (usec)	-3.25400E-03	+/-	3.4E-05
Sband delay (usec)	-1.68974099484E+03	Apriori clock (usec)	-2.1066504E+03	Resid sbdelay (usec)	6.35034E-04	+/-	1.3E-04
Phase delay (usec)	-1.68974162997E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-8.85510E-08	+/-	5.2E-08
Delay rate (us/s)	1.42764738139E+00	Apriori rate (us/s)	1.42764716681E+00	Resid rate (us/s)	2.14583E-07	+/-	1.7E-10
Total phase (deg)	-1.9	Apriori accel (us/s/s)	-6.03504649464E-06	Resid phase (deg)	-2.7	+/-	1.6

ph/seg (deg)	40.2	Theor.	5.1	Amplitude	1.684 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	38.3	Search (4096X16)	1.661	Search	1.661	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	3.5	Interp.	0.000	Inc. seg. avg.	2.117	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.009 0.009
amp/frq (%)	4.8	Inc. frq. avg.	1.681	Inc. frq. avg.	1.681	Sample rate(MSamp/s):	116	dr window (ns/s)	-0.011 0.011		

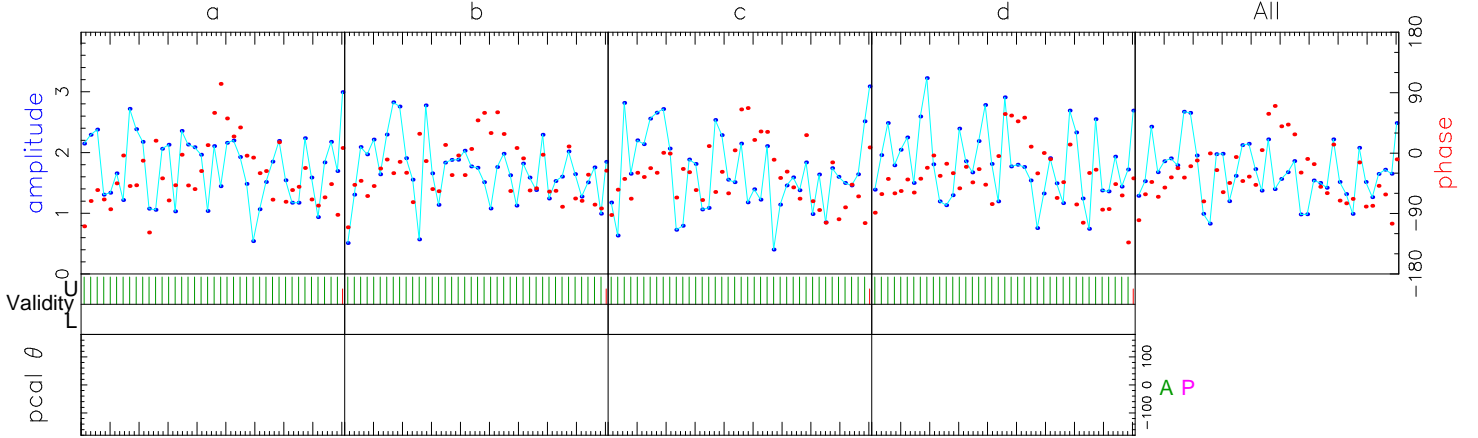
A: az 60.0 el 46.4 pa -127.2 P: az 222.5 el 46.6 pa 32.6 u,v (fr/asec) -8192.182 -8787.801 simultaneous interpolator  
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AP..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AP.W.39.zrmonb



Fringe quality 7  
SNR 56.5  
Int time 534.239  
Amp 1.327  
Phase 104.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.042784  
MBD -0.008696  
Fringe rate (Hz) 0.018470  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:143008  
2017:170:130423  
RA & Dec (J2000) 12h29m 6.697s +2°03' 8.598"

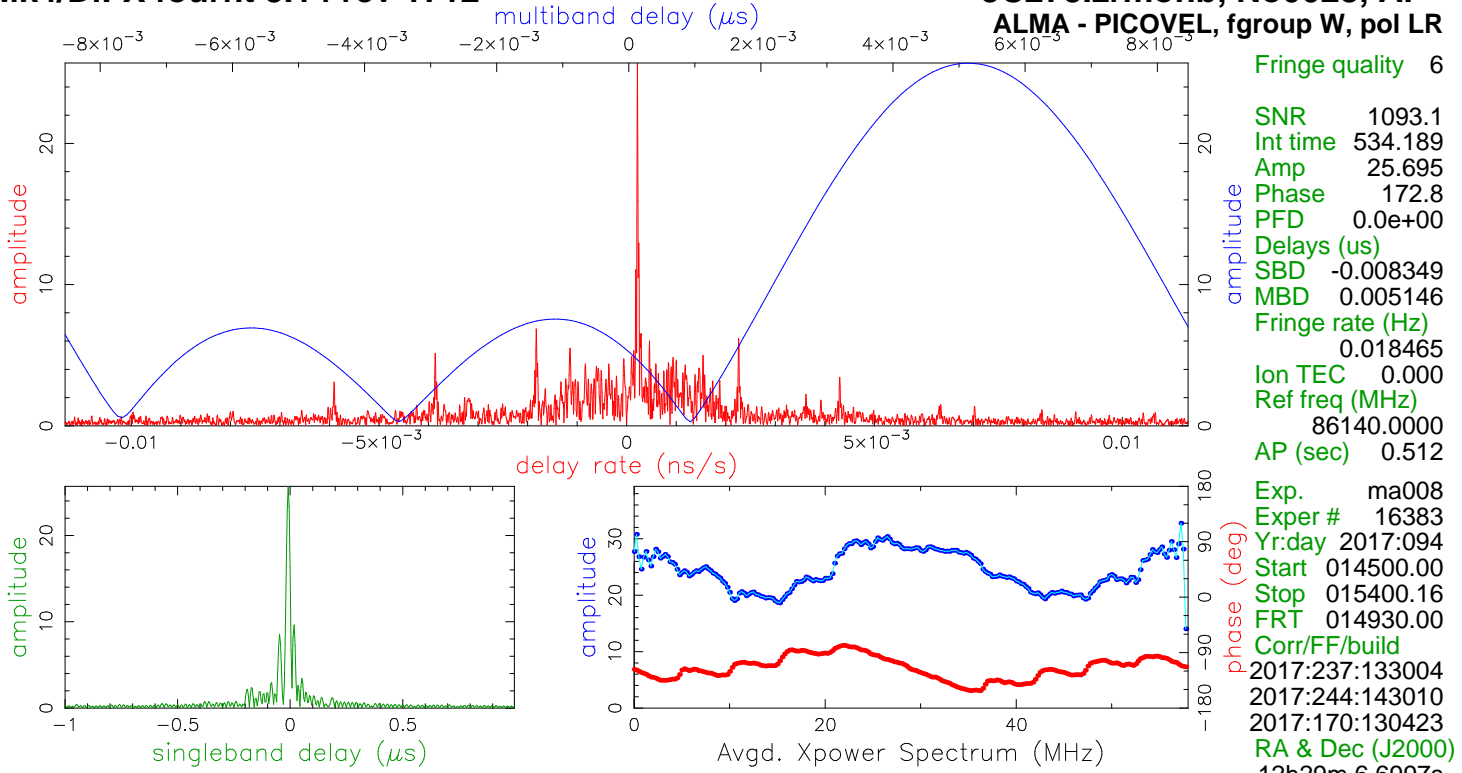


Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

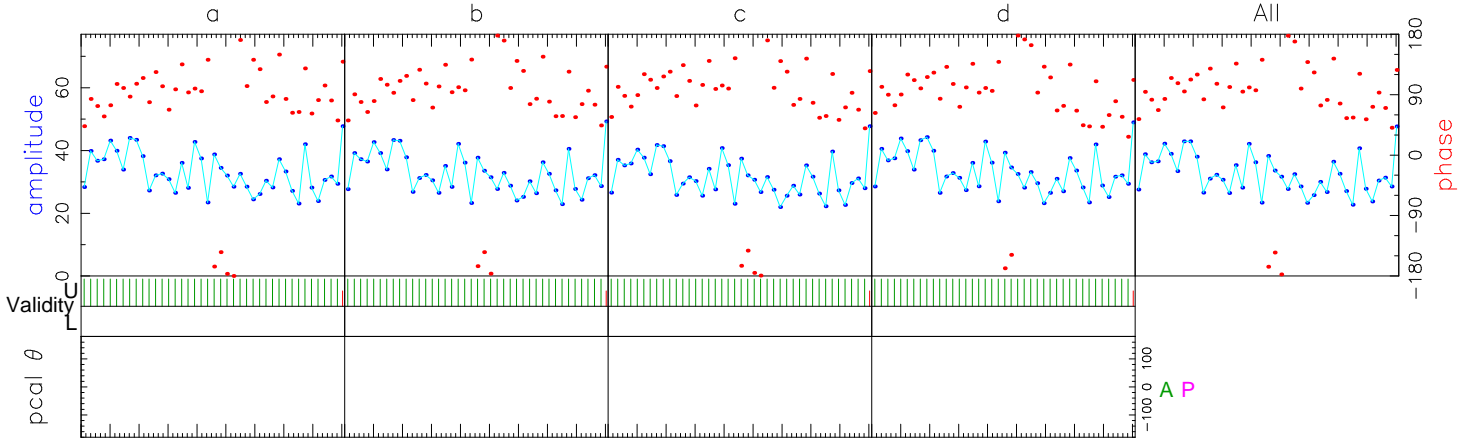


86151.11	86209.70	86268.30	86326.89	86385.39	All
-34.9	-26.1	-32.7	-33.6	-34.5	-31.8
1.3	1.4	1.3	1.4	1.3	1.3
223.7	222.9	231.1	230.7	223.1	223.1
U/L 1055/0	1055/0	1055/0	1055/0	1055/0	
A 0	0	0	0	0	
P 0	0	0	0	0	
A:P 0:0	0:0	0:0	0:0	0:0	
A:P 0:0	0:0	0:0	0:0	0:0	
A 1000	1000	1000	1000	1000	
P 1000	1000	1000	1000	1000	
A W00UR	W01UR	W02UR	W03UR	W04UR	
P W00UR	W01UR	W02UR	W03UR	W04UR	
Group delay (usec)(sbd)	-1.68978445902E+03	Apriori delay (usec)	-1.68974162988E+03	Resid mbdelay (usec)	-8.69580E-03 +/- 4.3E-05
Sband delay (usec)	-1.68978441415E+03	Apriori clock (usec)	-2.1066504E+03	Resid sbdelay (usec)	-4.27843E-02 +/- 1.7E-04
Phase delay (usec)	-1.68974163090E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-1.02395E-06 +/- 6.5E-08
Delay rate (us/s)	1.42764738123E+00	Apriori rate (us/s)	1.42764716681E+00	Resid rate (us/s)	2.14424E-07 +/- 2.1E-10
Total phase (deg)	105.6	Apriori accel (us/s/s)	-6.03504649464E-06	Resid phase (deg)	104.8 +/- 2.0

RMS 40.5 Theor. 6.5 Amplitude 1.327 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 40.5 6.5 Search (4096X16) 1.306 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 42.9 11.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 4.8 2.0 Inc. seg. avg. 1.670 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 4.5 3.5 Inc. frq. avg. 1.328 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00  
 A: az 60.0 el 46.4 pa -127.2 P: az 222.5 el 46.6 pa 32.6 u,v (fr/asec) -8192.182 -8787.801 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AP..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AP.W.40.zrmonb



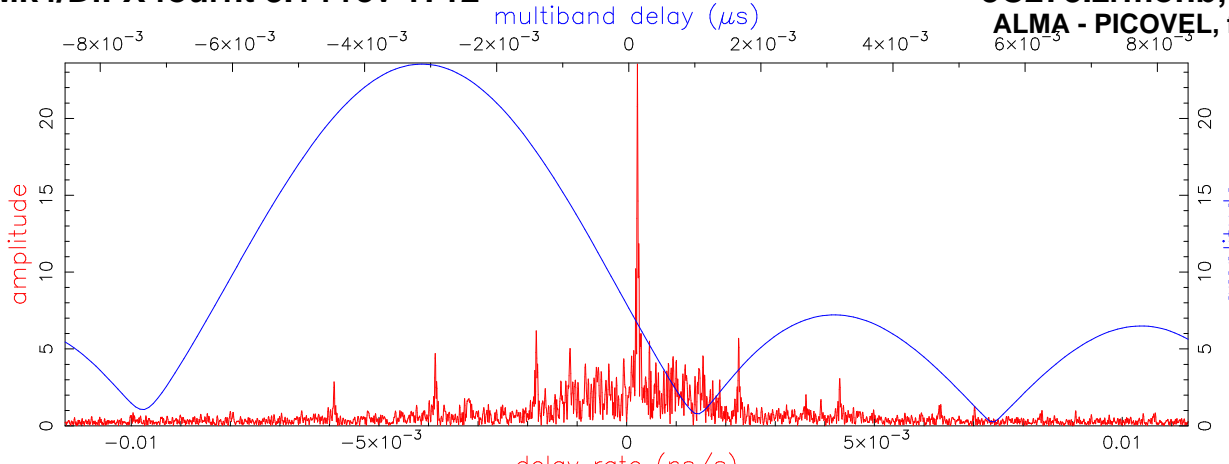
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1055/0	1055/0	1055/0	1055/0		
A	0	0	0	0	APs used	
P	0	0	0	0	PC freqs	
A:P	0:0	0:0	0:0	0:0	PC phase	
A:P	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
P	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	-1.68975355012E+03	Apriori delay (usec)	-1.68974162988E+03	Resid mbdelay (usec)	5.14642E-03	+/-	2.2E-06
Sband delay (usec)	-1.68974997884E+03	Apriori clock (usec)	-2.1066504E+03	Resid sbdelay (usec)	-8.34897E-03	+/-	8.7E-06
Phase delay (usec)	-1.68974162651E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	3.37171E-06	+/-	3.4E-09
Delay rate (us/s)	1.42764738117E+00	Apriori rate (us/s)	1.42764716681E+00	Resid rate (us/s)	2.14359E-07	+/-	1.1E-11
Total phase (deg)	-186.4	Apriori accel (us/s/s)	-6.03504649464E-06	Resid phase (deg)	172.8	+/-	0.1

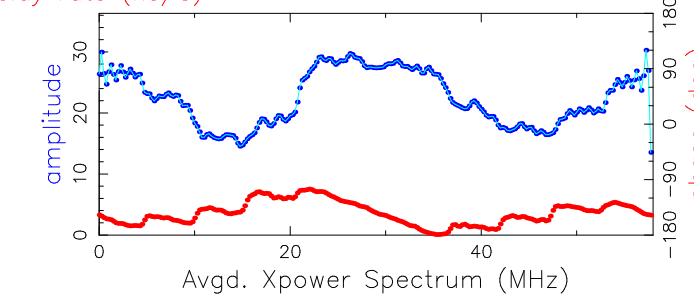
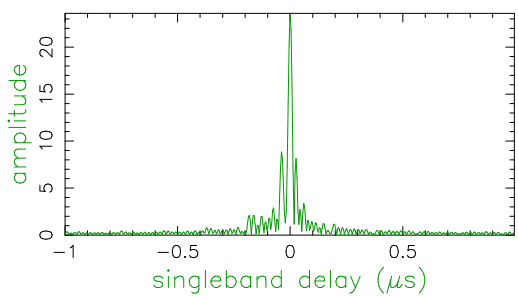
ph/seg (deg)	40.3	0.3	Search (4096X16)	25.246	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	35.2	0.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	2.5	0.1	Inc. seg. avg.	32.455	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	1.9	0.2	Inc. frq. avg.	25.696	Sample rate(MSamp/s): 116	Data rate(Mb/s): 928	nlags: 232	t_cohere infinite
							ion window (TEC)	0.00 0.00



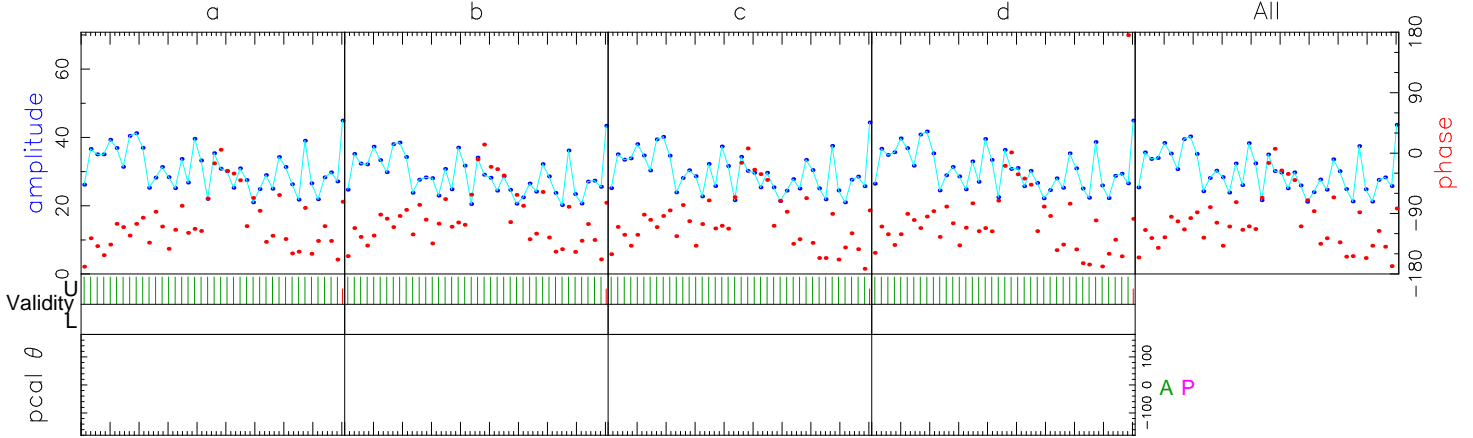
Fringe quality 6

SNR 1004.2  
Int time 534.239  
Amp 23.606  
Phase -104.5  
PFD 0.0e+00  
Delays (us)  
SBD 0.000734  
MBD -0.003110  
Fringe rate (Hz) 0.018511  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build 2017:237:133004  
2017:244:143013  
2017:170:130423  
RA & Dec (J2000) 12h 29m 6.6997s +2° 03' 8.598"



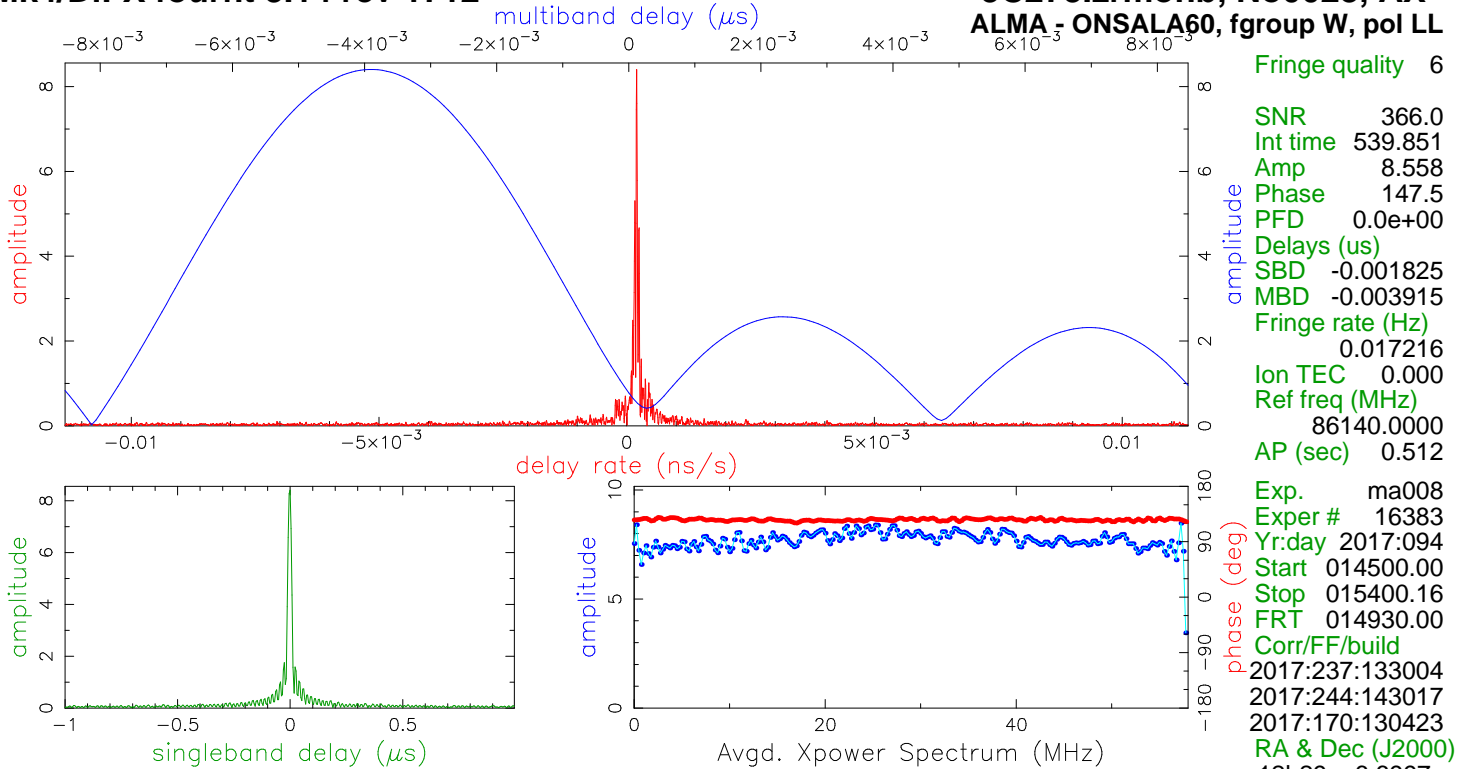
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



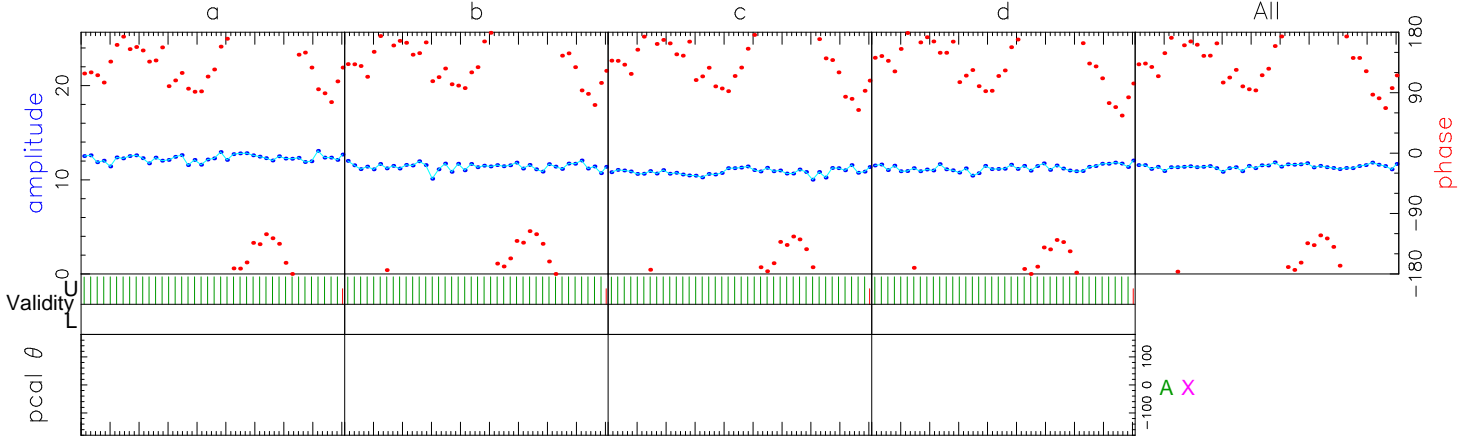
	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	1055/0	1055/0	1055/0	1055/0	1055/0	
A	0	0	0	0	0	
P	0	0	0	0	0	
A:P	0:0	0:0	0:0	0:0	0:0	
A:P	0:0	0:0	0:0	0:0	0:0	
A	1000	1000	1000	1000	1000	
P	1000	1000	1000	1000	1000	
A	W00UR	W01UR	W02UR	W03UR	W04UR	
P	W00UL	W01UL	W02UL	W03UL	W04UL	

Group delay (usec)(sbd)	-1.68974473956E+03	Apriori delay (usec)	-1.68974162988E+03	Resid mbdelay (usec)	-3.10968E-03	+/-	2.4E-06
Sband delay (usec)	-1.68974089553E+03	Apriori clock (usec)	-2.1066504E+03	Resid sbdelay (usec)	7.34345E-04	+/-	9.5E-06
Phase delay (usec)	-1.68974163325E+03	Apriori clockrate (us/s)	1.2400000E-06	Resid phdelay (usec)	-3.36879E-06	+/-	3.7E-09
Delay rate (us/s)	1.42764738170E+00	Apriori rate (us/s)	1.42764716681E+00	Resid rate (us/s)	2.14891E-07	+/-	1.2E-11
Total phase (deg)	-103.6	Apriori accel (us/s/s)	-6.03504649464E-06	Resid phase (deg)	-104.5	+/-	0.1

ph/seg (deg)	40.4	0.4	Search (4096X16)	23.370	0.000	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
amp/seg (%)	35.1	0.6	Interp.	0.000	29.740	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009	0.009	
ph/frq (deg)	5.0	0.1	Inc. seg. avg.	29.740	23.578	Sample rate(MSamp/s): 116		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	2.6	0.2	Inc. frq. avg.	23.578		Data rate(Mb/s): 928	nlags: 232	t_cohere infinite	ion window (TEC)	0.00	0.00



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec

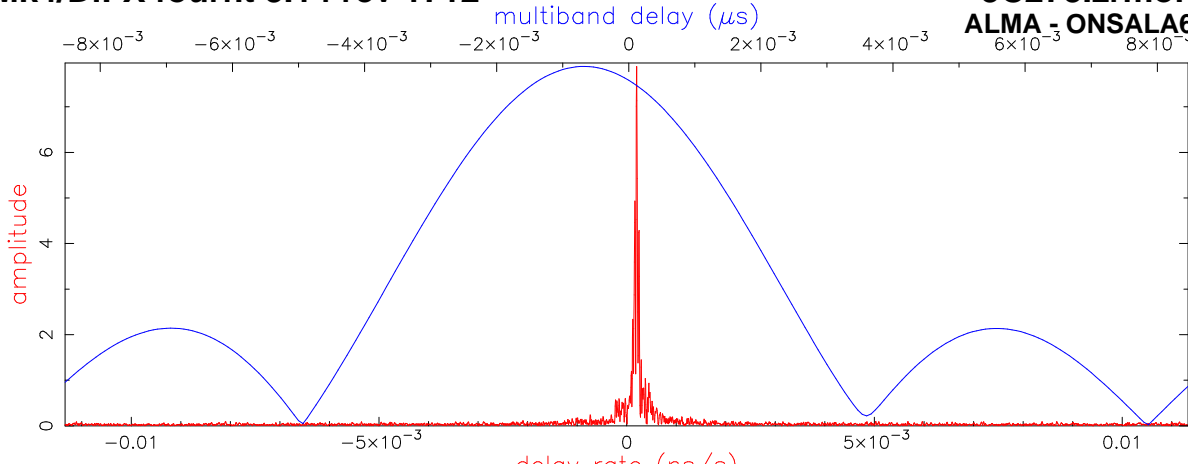


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1055/0	1055/0	1055/0	1055/0		
A	0	0	0	0	Phase	147.5
X	0	0	0	0	Ampl.	8.4
A:X	0:0	0:0	0:0	0:0	Sbd box	232.6
A:X	0:0	0:0	0:0	0:0	APs used	
A	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	PC freqs	
A	W00UL	W01UL	W02UL	W03UL	PC phase	
X	W00UL	W01UL	W02UL	W03UL	Mani PC	
					PC amp	
					Chan ids	
					Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	4.78123570111E+03	Apriori delay (usec)	4.78123961610E+03	Resid mbdelay (usec)	-3.91500E-03	+/- 6.6E-06
Sband delay (usec)	4.78123779073E+03	Apriori clock (usec)	-2.1091787E+03	Resid sbdelay (usec)	-1.82538E-03	+/- 2.6E-05
Phase delay (usec)	4.78123962086E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	4.75727E-06	+/- 1.0E-08
Delay rate (us/s)	1.41143021493E+00	Apriori rate (us/s)	1.41143001507E+00	Resid rate (us/s)	1.99864E-07	+/- 3.2E-11
Total phase (deg)	338.8	Apriori accel (us/s/s)	-4.13809353789E-05	Resid phase (deg)	147.5	+/- 0.3

RMS Theor. Amplitude 8.558 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 43.9 1.0 Search (4096X16) 8.302 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 33.3 1.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 3.2 0.3 Inc. seg. avg. 11.394 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 4.9 0.5 Inc. frq. avg. 8.413 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 X: az 228.8 el 25.0 pa 24.1 u,v (fr/asec) -8166.515 -11005.706 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX.W.43.zrmonb

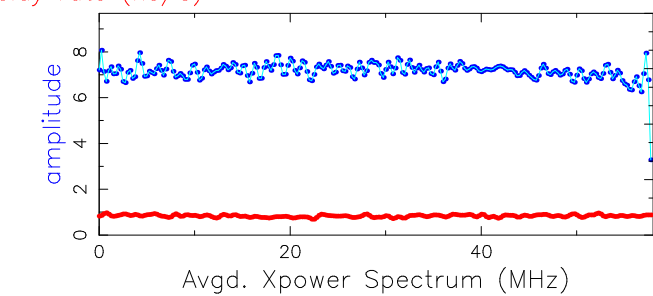
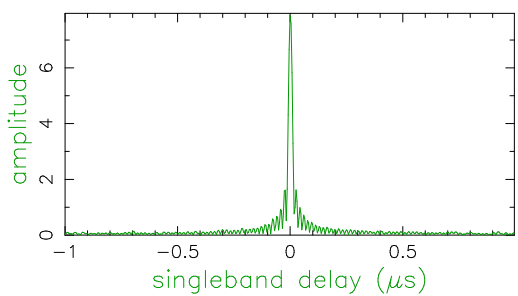




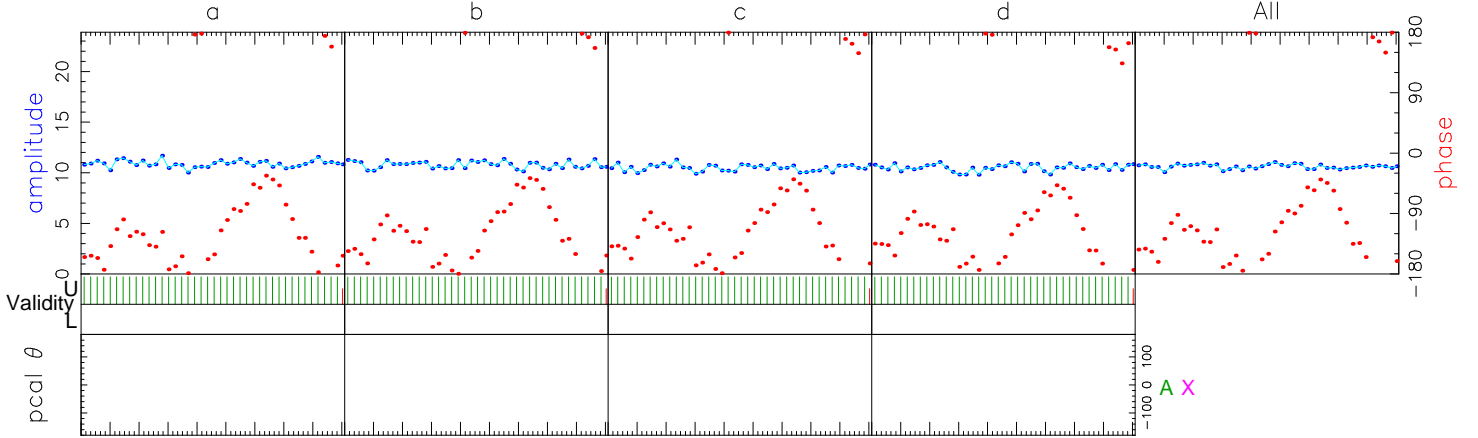
Fringe quality 6

SNR 340.5  
Int time 539.902  
Amp 7.962  
Phase -128.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.001316  
MBD -0.000675  
Fringe rate (Hz) 0.017243  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143019  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



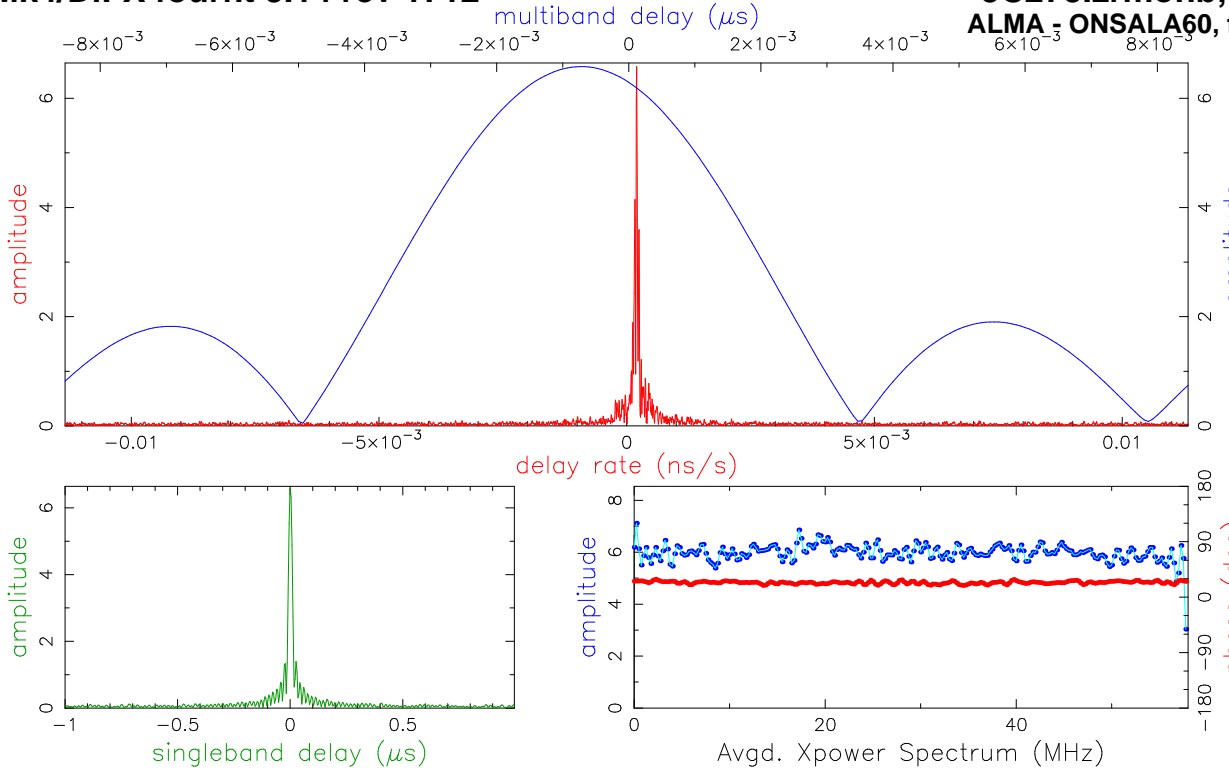
	86151.11	86209.70	86268.30	86326.89	86385.48	All
U/L	1055/0	1055/0	1055/0	1055/0	1055/0	1055/0
A	0	0	0	0	0	0
X	0	0	0	0	0	0
A:X	0:0	0:0	0:0	0:0	0:0	0:0
A:X	0:0	0:0	0:0	0:0	0:0	0:0
A	1000	1000	1000	1000	1000	1000
X	1000	1000	1000	1000	1000	1000
A	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR
Group delay (usec)(sbd)	4.78123894077E+03	4.78123894077E+03	4.78123894077E+03	4.78123894077E+03	4.78123894077E+03	4.78123894077E+03
Sband delay (usec)	4.78124093197E+03	4.78124093197E+03	4.78124093197E+03	4.78124093197E+03	4.78124093197E+03	4.78124093197E+03
Phase delay (usec)	4.78123961196E+03	4.78123961196E+03	4.78123961196E+03	4.78123961196E+03	4.78123961196E+03	4.78123961196E+03
Delay rate (us/s)	1.41143021524E+00	1.41143021524E+00	1.41143021524E+00	1.41143021524E+00	1.41143021524E+00	1.41143021524E+00
Total phase (deg)		62.9				
Apriori delay (usec)						
Apriori clock (usec)						
Apriori clockrate (us/s)						
Apriori rate (us/s)						
Apriori accel (us/s/s)						
Resid mbdelay (usec)						
Resid sbdelay (usec)						
Resid phdelay (usec)						
Resid rate (us/s)						
Resid phase (deg)						

RMS Theor. Amplitude 7.962 +/- 0.023  
 ph/seg (deg) 43.6 1.1 Search (4096X16) 7.769  
 amp/seg (%) 33.5 1.9 Interp. 0.000  
 ph/frq (deg) 1.9 0.3 Inc. seg. avg. 10.621  
 amp/frq (%) 1.9 0.6 Inc. frq. avg. 7.889

Group delay (usec)(sbd) 4.78123894077E+03 Apriori delay (usec) 4.7812396110E+03 Resid mbdelay (usec) -6.75333E-04 +/- 7.1E-06  
 Sband delay (usec) 4.78124093197E+03 Apriori clock (usec) -2.1091787E+03 Resid sbdelay (usec) 1.31586E-03 +/- 2.8E-05  
 Phase delay (usec) 4.78123961196E+03 Apriori clockrate (us/s) 1.4451113E-06 Resid phdelay (usec) -4.13951E-06 +/- 1.1E-08  
 Delay rate (us/s) 1.41143021524E+00 Apriori rate (us/s) 1.41143001507E+00 Resid rate (us/s) 2.00169E-07 +/- 3.5E-11  
 Total phase (deg) 62.9 Apriori accel (us/s/s) -4.13809353789E-05 Resid phase (deg) -128.4 +/- 0.3

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 60.0 el 46.4 pa -127.2 X: az 228.8 el 25.0 pa 24.1 u,v (fr/asec) -8166.515 -11005.706 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX.W.44.zrmonb

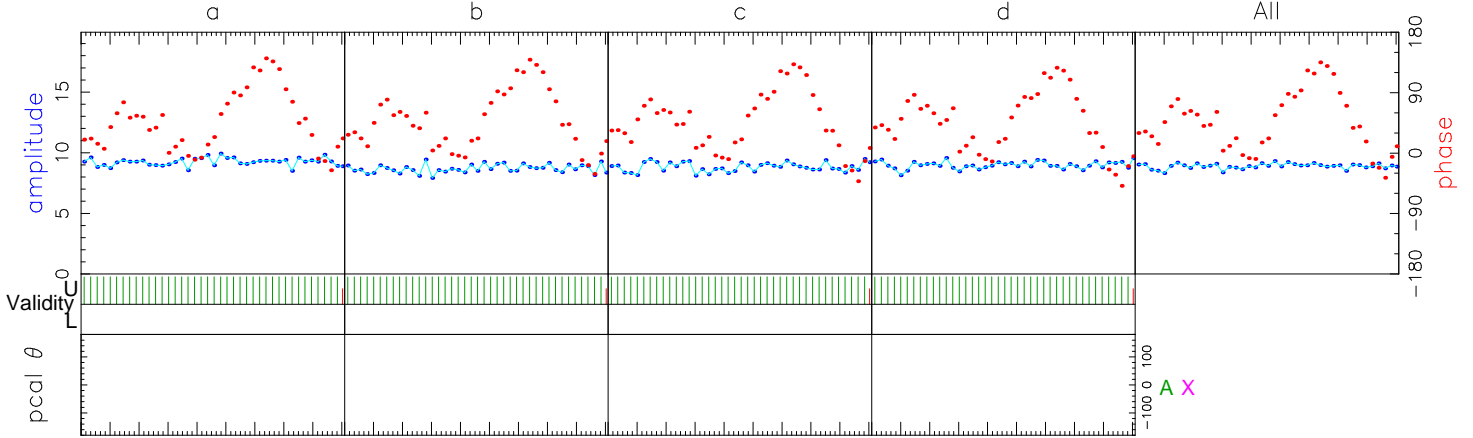


Fringe quality 6

SNR 284.3  
Int time 539.851  
Amp 6.648  
Phase 45.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.001348  
MBD -0.000720  
Fringe rate (Hz) 0.017246  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014500.00  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143022  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"

Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



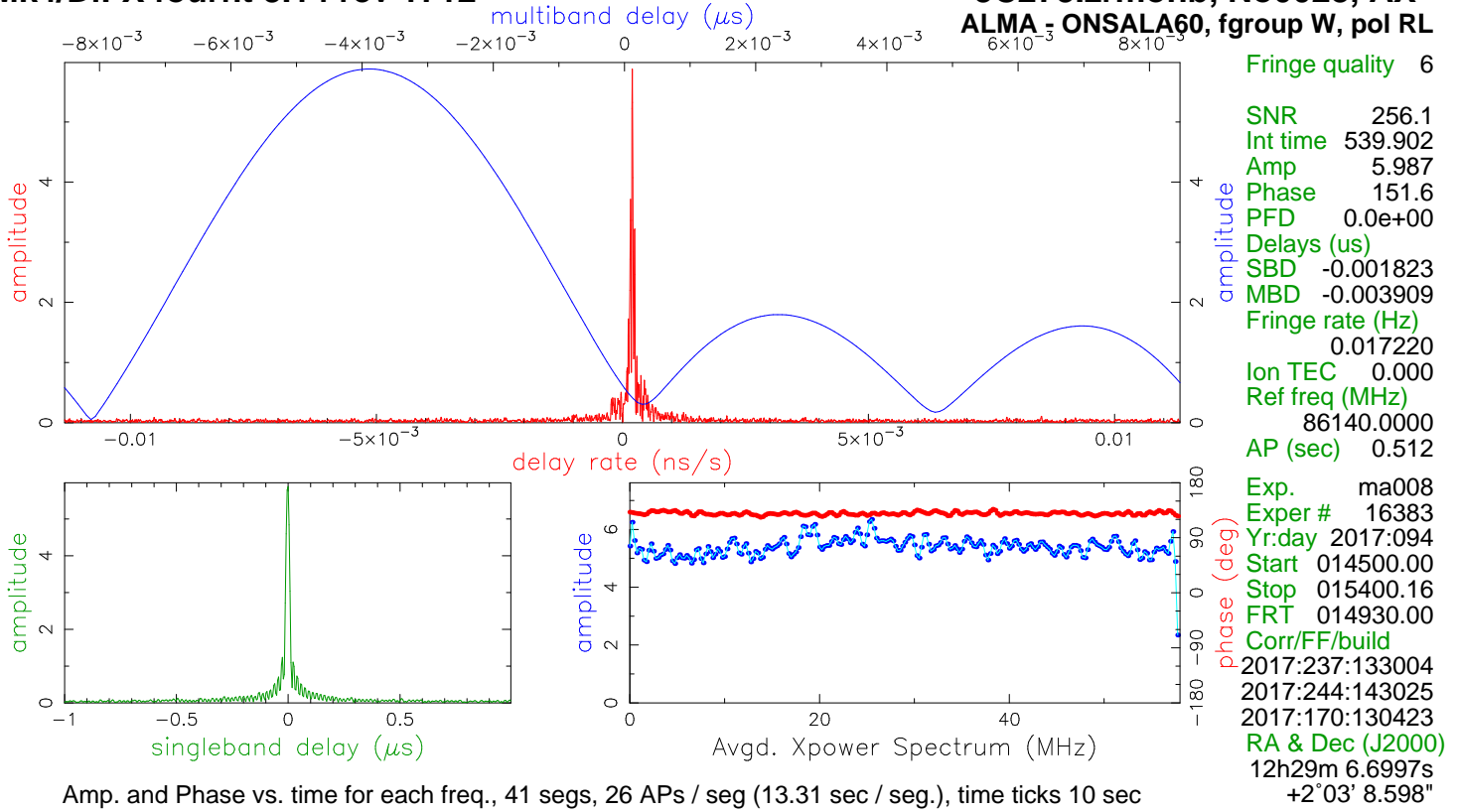
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	44.3	46.5	45.1	44.9	Phase	45.2
	6.8	6.4	6.5	6.6	Ampl.	6.6
	233.5	233.2	233.1	233.4	Sbd box	233.3
U/L	1055/0	1055/0	1055/0	1055/0	APs used	
A	0	0	0	0	PC freqs	
X	0	0	0	0	PC freqs	
A:X	0:0	0:0	0:0	0:0	PC phase	
A:X	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	

Group delay (usec)(sbd)	4.78123889572E+03	Apriori delay (usec)	4.78123961610E+03	Resid mbdelay (usec)	-7.20389E-04	+/-	8.5E-06
Sband delay (usec)	4.78124096397E+03	Apriori clock (usec)	-2.1091787E+03	Resid sbdelay (usec)	1.34786E-03	+/-	3.3E-05
Phase delay (usec)	4.78123961756E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	1.45692E-06	+/-	1.3E-08
Delay rate (us/s)	1.41143021528E+00	Apriori rate (us/s)	1.41143001507E+00	Resid rate (us/s)	2.00213E-07	+/-	4.2E-11
Total phase (deg)	236.4	Apriori accel (us/s/s)	-4.13809353789E-05	Resid phase (deg)	45.2	+/-	0.4

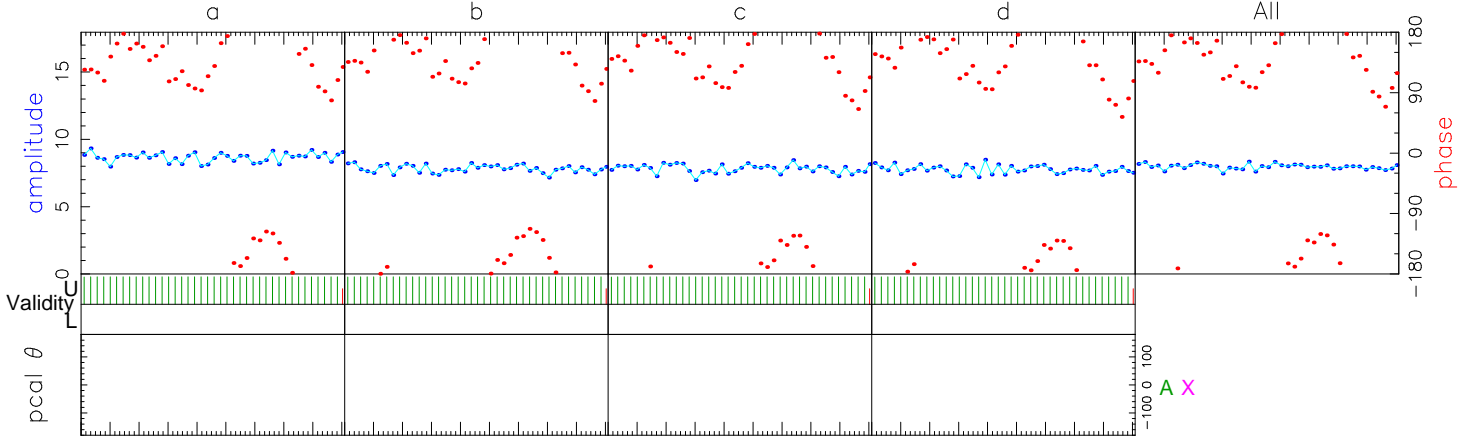
ph/seg (deg)	43.7	RMS	43.7	Theor.	1.3	Amplitude	6.648 +/- 0.023	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	34.0	Search (4096X16)	6.496	Interp.	0.000	Apriori clock (usec)	-2.1091787E+03	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	1.1	Inc. seg. avg.	8.899	Inc. frq. avg.	6.583	Apriori clockrate (us/s)	1.4451113E-06	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	2.2	Inc. frq. avg.	6.583	Inc. frq. avg.	6.583	Apriori rate (us/s)	1.41143001507E+00	Sample rate (MSamp/s):	116	mb window (us)	-0.009 0.009
						Apriori accel (us/s/s)	-4.13809353789E-05	Data rate (Mb/s):	928	dr window (ns/s)	-0.011 0.011
								nlags:	232	ion window (TEC)	0.00 0.00

A: az 60.0 el 46.4 pa -127.2 X: az 228.8 el 25.0 pa 24.1 u,v (fr/asec) -8166.515 -11005.706 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX.W.45.zrmonb



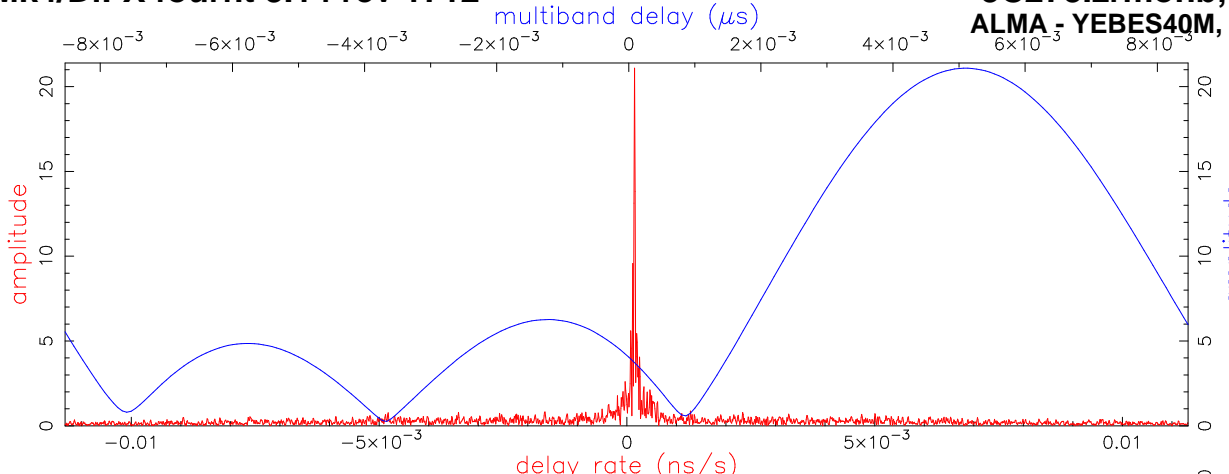
Amp. and Phase vs. time for each freq., 41 segs, 26 APs / seg (13.31 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
148.3	156.0	152.4	150.3	Phase	151.6
6.4	5.8	5.7	5.7	Ampl.	5.9
232.9	232.4	232.5	232.5	Sbd box	232.6
U/L 1055/0	1055/0	1055/0	1055/0	APs used	
A 0	0	0	0	PC freqs	
X 0	0	0	0	PC freqs	
A:X 0:0	0:0	0:0	0:0	PC phase	
A:X 0:0	0:0	0:0	0:0	Manl PC	
A 1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000		
A W00UR	W01UR	W02UR	W03UR	Chan ids	
X W00UL	W01UL	W02UL	W03UL	Tracks	
				Chan ids	
				Tracks	
Group delay (usec)(sbd)	4.78123570759E+03	Apriori delay (usec)	4.78123961610E+03	Resid mbdelay (usec)	-3.90851E-03 +/- 9.5E-06
Sband delay (usec)	4.78123779321E+03	Apriori clock (usec)	-2.1091787E+03	Resid sbdelay (usec)	-1.82290E-03 +/- 3.7E-05
Phase delay (usec)	4.78123962099E+03	Apriori clockrate (us/s)	1.4451113E-06	Resid phdelay (usec)	4.89011E-06 +/- 1.4E-08
Delay rate (us/s)	1.41143021497E+00	Apriori rate (us/s)	1.41143001507E+00	Resid rate (us/s)	1.99904E-07 +/- 4.6E-11
Total phase (deg)	342.9	Apriori accel (us/s/s)	-4.13809353789E-05	Resid phase (deg)	151.6 +/- 0.4

RMS Theor. Amplitude 5.987 +/- 0.023 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 44.1 1.4 Search (4096X16) 5.805 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 33.4 2.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 4.0 0.4 Inc. seg. avg. 7.975 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 4.9 0.8 Inc. frq. avg. 5.888 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

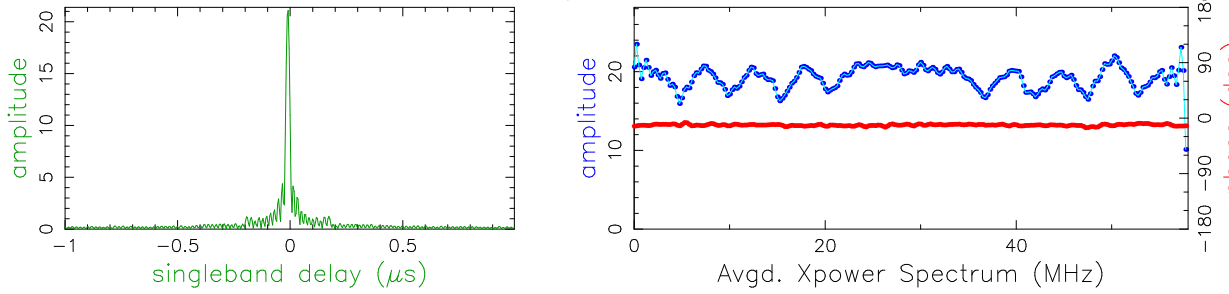
A: az 60.0 el 46.4 pa -127.2 X: az 228.8 el 25.0 pa 24.1 u,v (fr/asec) -8166.515 -11005.706 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AX.W.46.zrmonb



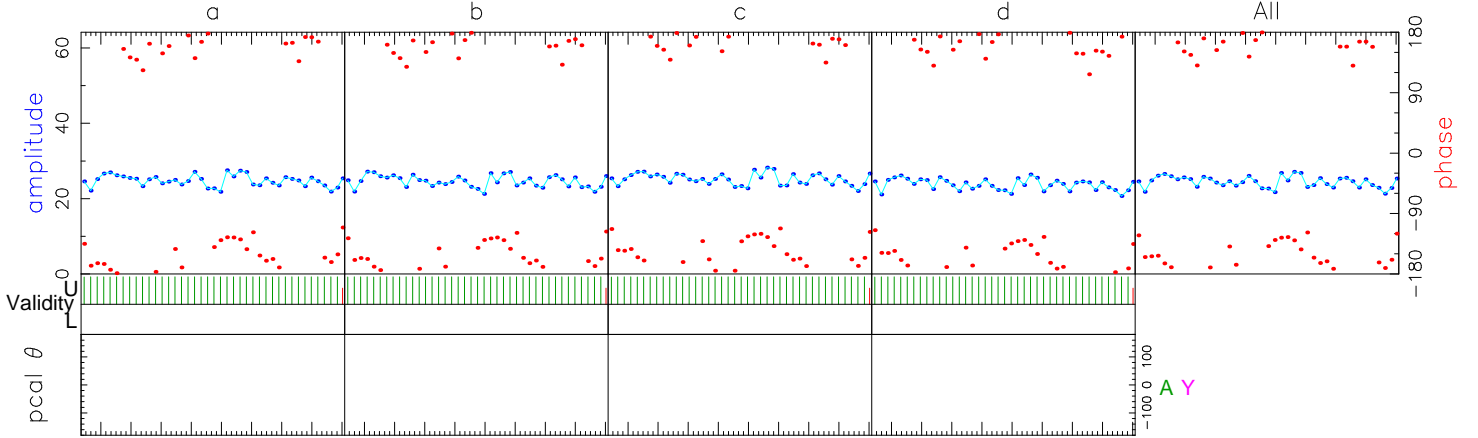
Fringe quality 7

SNR 896.5  
Int time 518.194  
Amp 21.395  
Phase -103.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.010253  
MBD 0.005090  
Fringe rate (Hz) 0.013136  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014520.48  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143028  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



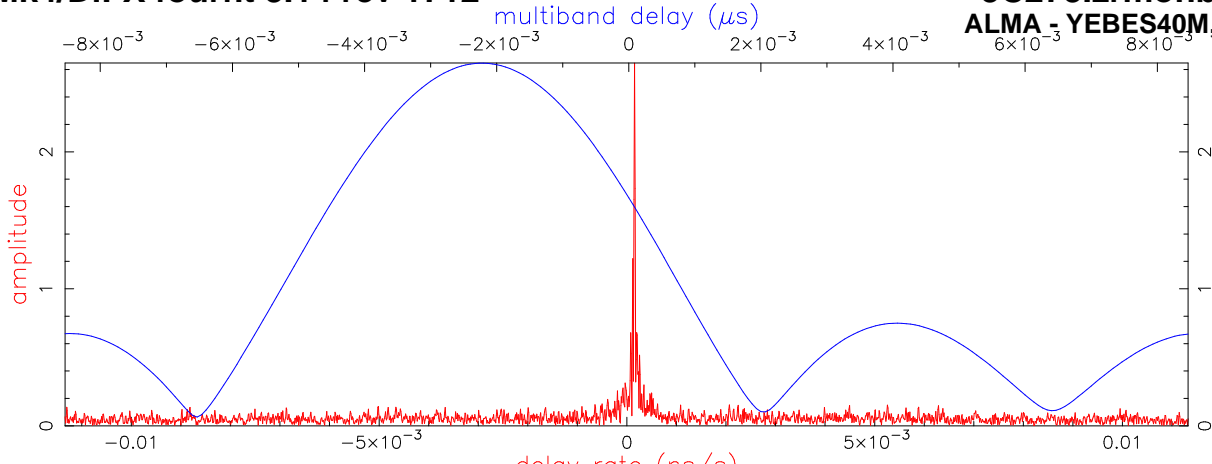
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-172.9	-172.3	-165.0	-175.0	Phase	-171.2
	21.3	21.2	21.7	20.3	Ampl.	21.1
	230.8	230.6	230.8	230.4	Sbd box	230.6
U/L	1015/0	1015/0	1015/0	1015/0	APs used	
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Main 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)	-9.79570248295E+02	Apriori delay (usec)	-9.79558271929E+02	Resid mbdelay (usec)	5.09030E-03	+/-	2.7E-06
Sband delay (usec)	-9.79568525170E+02	Apriori clock (usec)	-2.1101624E+03	Resid sbdelay (usec)	-1.02532E-02	+/-	1.1E-05
Phase delay (usec)	-9.79558277450E+02	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-5.52159E-06	+/-	4.1E-09
Delay rate (us/s)	1.40456051762E+00	Apriori rate (us/s)	1.40456036513E+00	Resid rate (us/s)	1.52491E-07	+/-	1.4E-11
Total phase (deg)	61.2	Apriori accel (us/s/s)	-1.00106024737E-05	Resid phase (deg)	-103.0	+/-	0.1

ph/seg (deg)	30.7	0.4	Search (2048X16)	20.426	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	15.8	0.7	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	5.4	0.1	Inc. seg. avg.	24.442	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.009 0.009
amp/frq (%)	2.7	0.2	Inc. frq. avg.	21.134	Sample rate(MSamp/s): 116	ion window (TEC)	-0.011 0.011	
					Data rate(Mb/s): 928	nlags: 232	t_cohere infinite	

A: az 60.0 el 46.4 pa -127.2 Y: az 220.6 el 43.9 pa 30.6 u,v (fr/asec) -8067.529 -9213.602 simultaneous interpolator

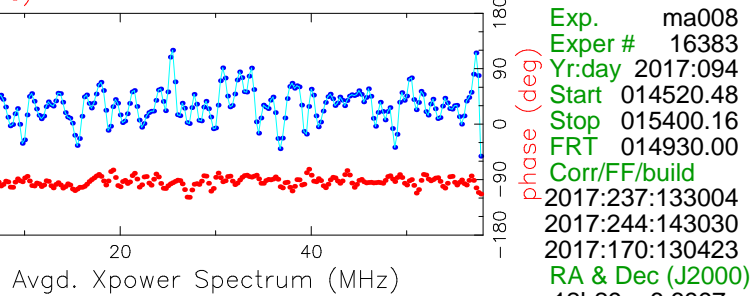
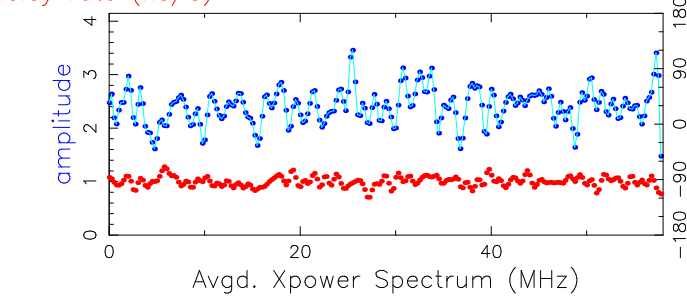
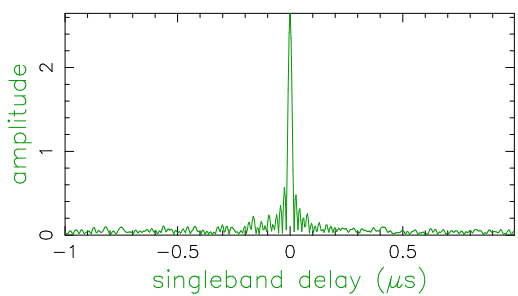
Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY.W.47.zrmonb



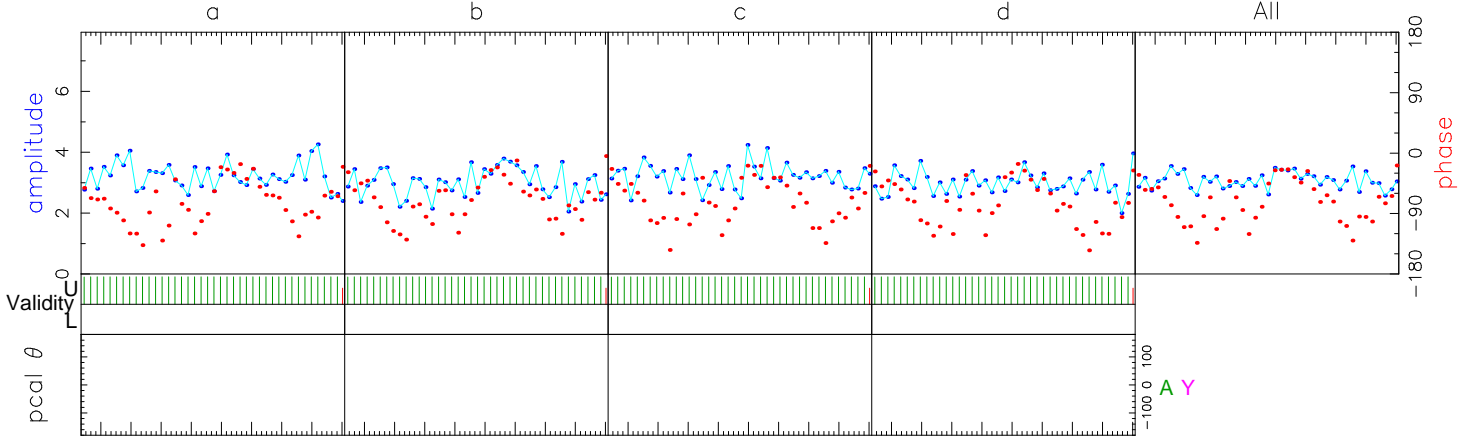
Fringe quality 7

SNR 111.0  
Int time 518.245  
Amp 2.648  
Phase -72.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.000293  
MBD -0.002225  
Fringe rate (Hz) 0.013167  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014520.48  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143030  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"



Amp. and Phase vs. time for each freq., 41 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec

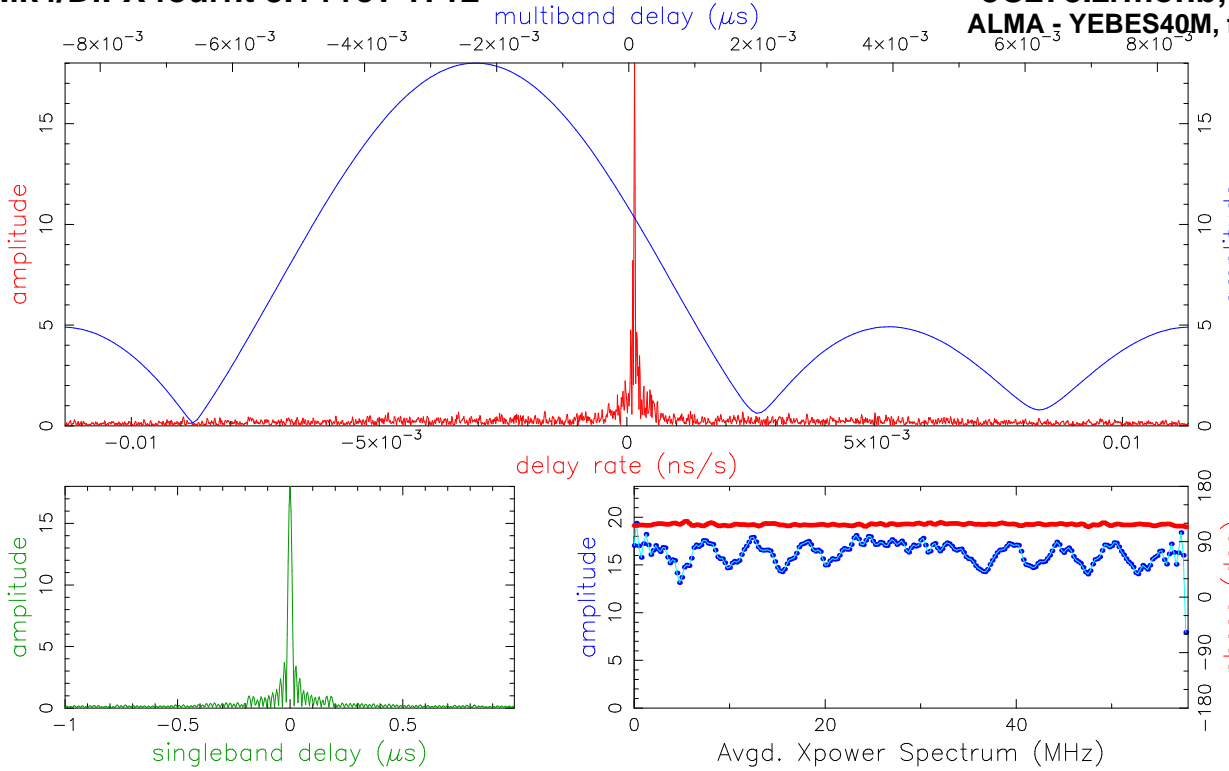


	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
	-75.9	-68.4	-72.3	-74.7	Phase	-72.8
	2.8	2.6	2.7	2.5	Ampl.	2.7
	233.3	232.7	233.0	232.7	Sbd box	232.9
U/L	1015/0	1015/0	1015/0	1015/0	APs used	
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000		
A	W00UR	W01UR	W02UR	W03UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	Tracks	
					Chan ids	
					Tracks	
Group delay (usec)(sbd)	-9.79560497289E+02	Apriori delay (usec)	-9.79558271929E+02	Resid mbdelay (usec)	-2.22536E-03	+/- 2.2E-05
Sband delay (usec)	-9.79558565170E+02	Apriori clock (usec)	-2.1101624E+03	Resid sbdelay (usec)	-2.93241E-04	+/- 8.6E-05
Phase delay (usec)	-9.79558274277E+02	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-2.34870E-06	+/- 3.3E-08
Delay rate (us/s)	1.40456051799E+00	Apriori rate (us/s)	1.40456036513E+00	Resid rate (us/s)	1.52855E-07	+/- 1.1E-10
Total phase (deg)		Apriori accel (us/s/s)	-1.00106024737E-05	Resid phase (deg)	-72.8	+/- 1.0

RMS Theor. Amplitude 2.648 +/- 0.024 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 30.6 3.3 Search (2048X16) 2.591 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 18.9 5.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.009 0.009  
 ph/frq (deg) 4.0 1.0 Inc. seg. avg. 3.069 Sample rate(MSamp/s): 116 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 4.2 1.8 Inc. frq. avg. 2.650 Data rate(Mb/s): 928 nlags: 232 t\_cohere infinite ion window (TEC) 0.00 0.00

A: az 60.0 el 46.4 pa -127.2 Y: az 220.6 el 43.9 pa 30.6 u,v (fr/asec) -8067.529 -9213.602 simultaneous interpolator  
 Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY.W.48.zrmonb



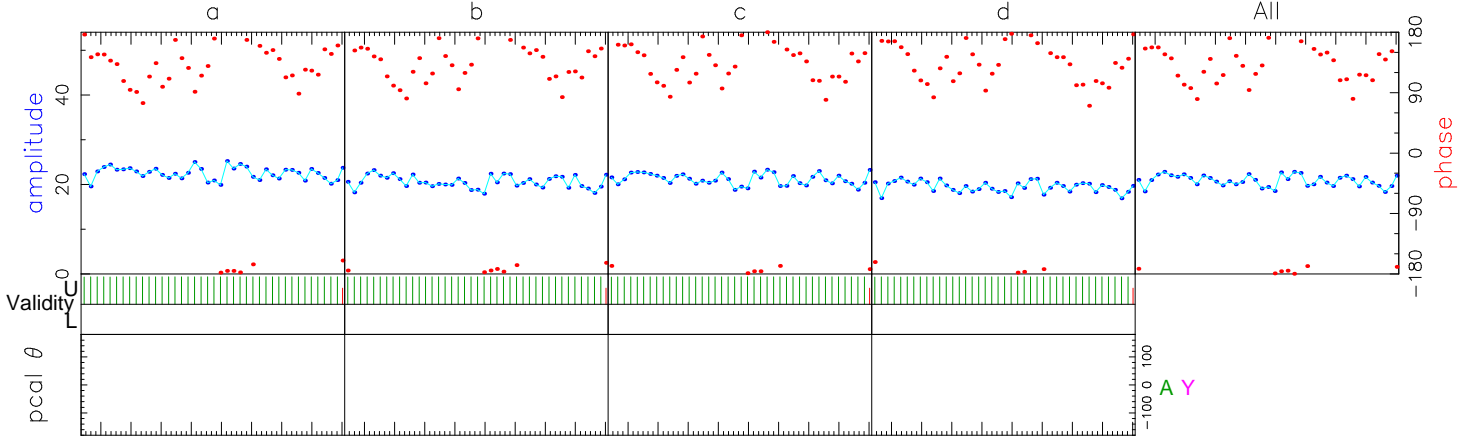


Fringe quality 7

SNR 754.9  
Int time 518.194  
Amp 18.016  
Phase 139.1  
PFD 0.0e+00  
Delays (us)  
SBD -0.000308  
MBD -0.002319  
Fringe rate (Hz) 0.013139  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. ma008  
Exper # 16383  
Yr:day 2017:094  
Start 014520.48  
Stop 015400.16  
FRT 014930.00  
Corr/FF/build  
2017:237:133004  
2017:244:143031  
2017:170:130423  
RA & Dec (J2000)  
12h29m 6.6997s  
+2°03' 8.598"

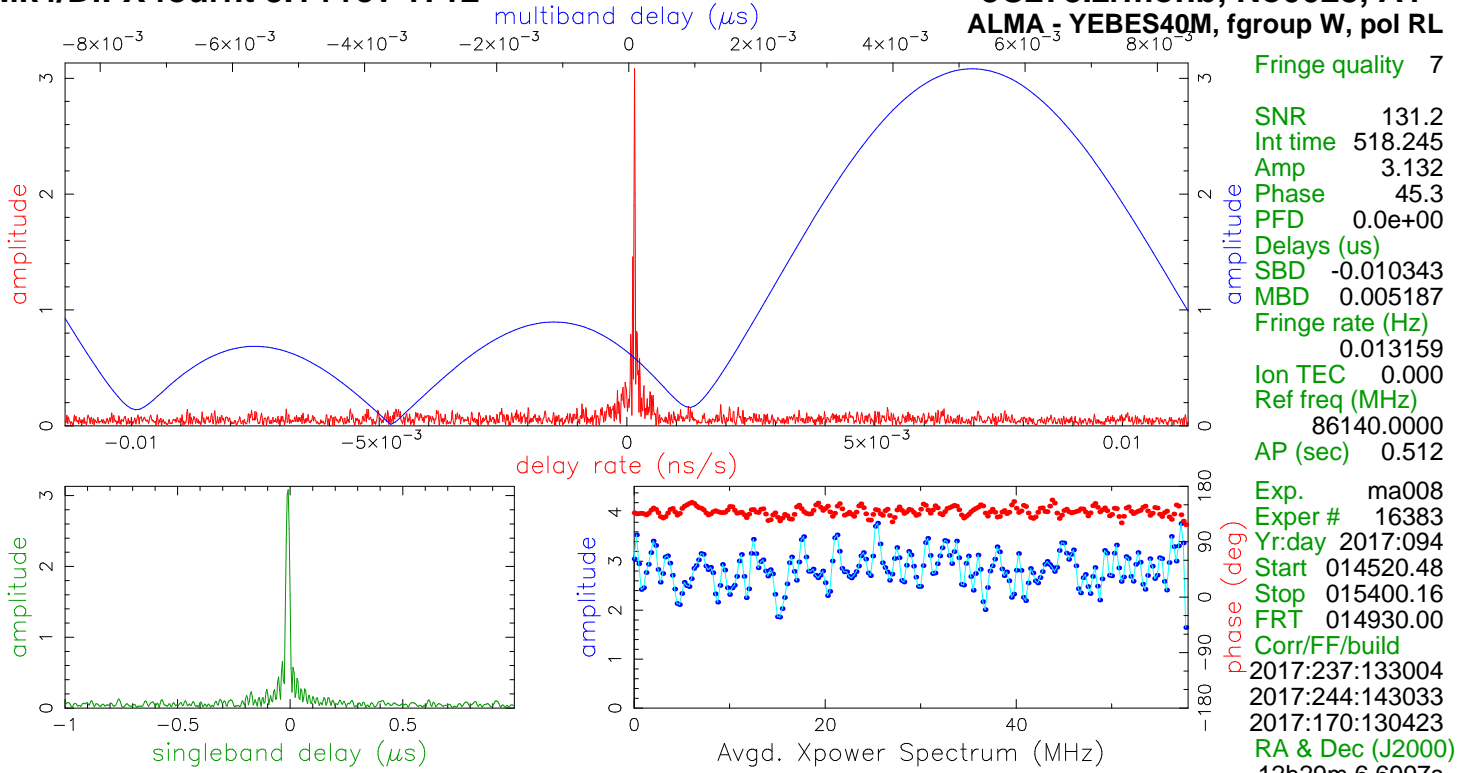
Amp. and Phase vs. time for each freq., 41 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



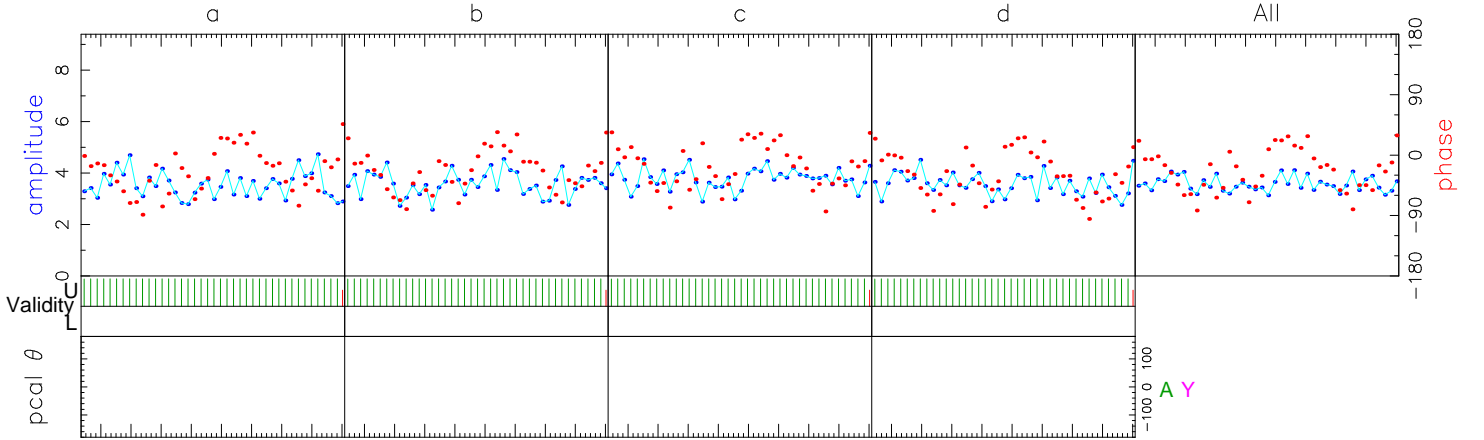
	86151.11	86209.70	86268.30	86326.89	Freq (MHz)	All
U/L	1015/0	1015/0	1015/0	1015/0		
A	0	0	0	0	PC freqs	
Y	0	0	0	0	PC freqs	
A:Y	0:0	0:0	0:0	0:0	PC phase	
A:Y	0:0	0:0	0:0	0:0	Mani PC	
A	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000		
A	W00UL	W01UL	W02UL	W03UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	Tracks	

Group delay (usec)(sbd)	-9.79560590610E+02	Apriori delay (usec)	-9.79558271929E+02	Resid mbdelay (usec)	-2.31868E-03	+/-	3.2E-06
Sband delay (usec)	-9.79558579515E+02	Apriori clock (usec)	-2.1101624E+03	Resid sbdelay (usec)	-3.07586E-04	+/-	1.3E-05
Phase delay (usec)	-9.79558267444E+02	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	4.48429E-06	+/-	4.9E-09
Delay rate (us/s)	1.40456051766E+00	Apriori rate (us/s)	1.40456036513E+00	Resid rate (us/s)	1.52531E-07	+/-	1.6E-11
Total phase (deg)	-56.8	Apriori accel (us/s/s)	-1.00106024737E-05	Resid phase (deg)	139.1	+/-	0.2

ph/seg (deg)	30.6	RMS	30.6	Theor.	0.5	Amplitude	18.016 +/- 0.024	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	17.3	Search (2048X16)	17.488	Interp.	0.000	Inc. seg. avg.	20.867	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.009	0.009
ph/frq (deg)	1.5	Inc. frq. avg.	18.013	Inc. seg. avg.	20.867	Inc. frq. avg.	18.013	Bits/sample:	2x2	Sample rate (MSamp/s):	116	dr window (ns/s)	-0.011	0.011
amp/frq (%)	5.3	u,v (fr/asec)	-8067.529 -9213.602	simultaneous interpolator				Data rate (Mb/s):	928	nlags:	232	ion window (TEC)	0.00	0.00



Amp. and Phase vs. time for each freq., 41 segs, 25 APs / seg (12.80 sec / seg.), time ticks 10 sec



86151.11	86209.70	86268.30	86326.89	86151.11	All
-26.0	-22.9	-15.6	-27.8	-26.0	-22.9
3.0	3.1	3.2	3.0	3.0	3.1
230.8	230.5	230.8	230.3	230.8	230.6
U/L 1015/0	1015/0	1015/0	1015/0	1015/0	1015/0
A 0	0	0	0	0	0
Y 0	0	0	0	0	0
A:Y 0:0	0:0	0:0	0:0	0:0	0:0
A:Y 0:0	0:0	0:0	0:0	0:0	0:0
A 1000	1000	1000	1000	1000	1000
Y 1000	1000	1000	1000	1000	1000
A W00UR	W01UR	W02UR	W03UR	W00UR	W01UR
Y W00UL	W01UL	W02UL	W03UL	W00UL	W01UL
Group delay (usec)(sbd)	-9.79570151834E+02	Apriori delay (usec)	-9.79558271929E+02	Resid mbdelay (usec)	5.18676E-03 +/- 1.9E-05
Sband delay (usec)	-9.79568614825E+02	Apriori clock (usec)	-2.1101624E+03	Resid sbdelay (usec)	-1.03429E-02 +/- 7.2E-05
Phase delay (usec)	-9.79558272669E+02	Apriori clockrate (us/s)	1.2999999E-06	Resid phdelay (usec)	-7.39902E-07 +/- 2.8E-08
Delay rate (us/s)	1.40456051789E+00	Apriori rate (us/s)	1.40456036513E+00	Resid rate (us/s)	1.52759E-07 +/- 9.4E-11
Total phase (deg)	-150.5	Apriori accel (us/s/s)	-1.00106024737E-05	Resid phase (deg)	45.3 +/- 0.9

RMS Theor. Amplitude 3.132 +/- 0.024

ph/seg (deg) 30.8 2.8 Search (2048X16) 3.008

amp/seg (%) 17.0 4.9 Interp. 0.000

ph/frq (deg) 6.6 0.9 Inc. seg. avg. 3.580

amp/frq (%) 3.5 1.5 Inc. frq. avg. 3.092

Group delay (usec)(sbd) -9.79570151834E+02 Apriori delay (usec) -9.79558271929E+02 Resid mbdelay (usec) 5.18676E-03 +/- 1.9E-05

Sband delay (usec) -9.79568614825E+02 Apriori clock (usec) -2.1101624E+03 Resid sbdelay (usec) -1.03429E-02 +/- 7.2E-05

Phase delay (usec) -9.79558272669E+02 Apriori clockrate (us/s) 1.2999999E-06 Resid phdelay (usec) -7.39902E-07 +/- 2.8E-08

Delay rate (us/s) 1.40456051789E+00 Apriori rate (us/s) 1.40456036513E+00 Resid rate (us/s) 1.52759E-07 +/- 9.4E-11

Total phase (deg) -150.5 Apriori accel (us/s/s) -1.00106024737E-05 Resid phase (deg) 45.3 +/- 0.9

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 60.0 el 46.4 pa -127.2 Y: az 220.6 el 43.9 pa 30.6 u,v (fr/asec) -8067.529 -9213.602 simultaneous interpolator

Control file: cf\_1234 Input file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY..zrmonb Output file: /Exps/ma008/gmva\_58\_merged\_pc1/1234/No0028/AY.W.50.zrmonb