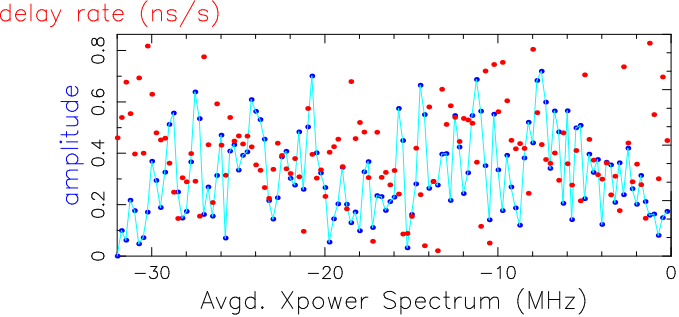
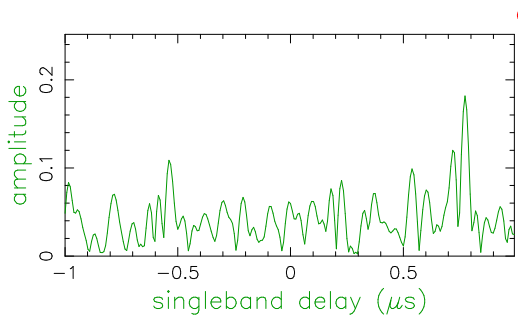


Fringe quality 0

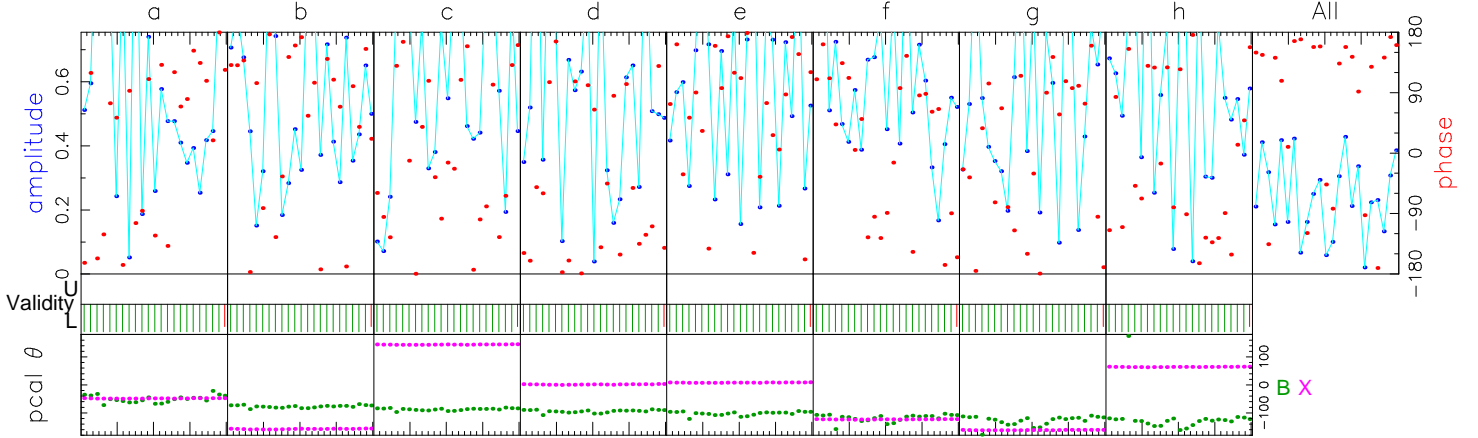
SNR 5.4  
Int time 239.353  
Amp 0.252  
Phase -4346.5  
PFD 9.6e-01  
Delays (us)  
SBD 0.773622  
MBD -0.008637  
Fringe rate (Hz)  
-0.861375  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.50  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013650  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



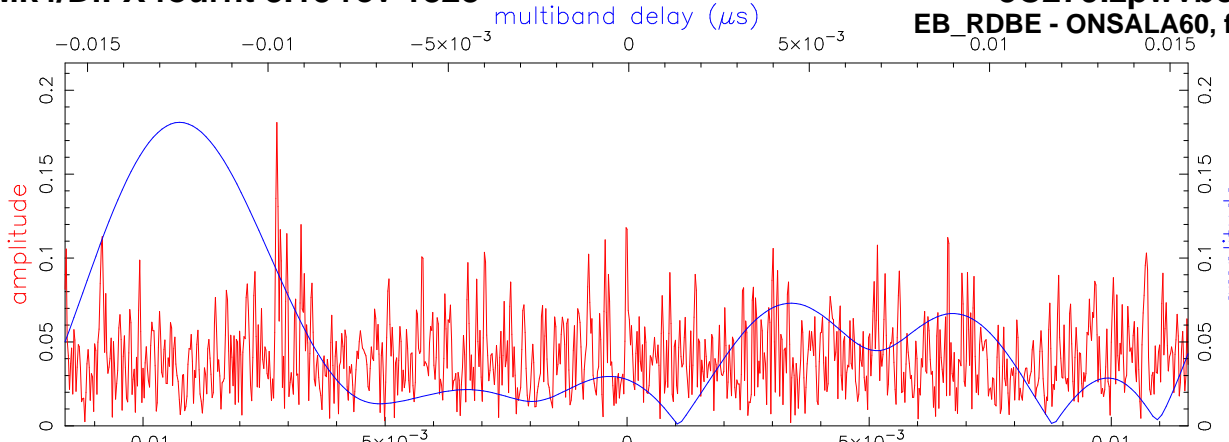
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

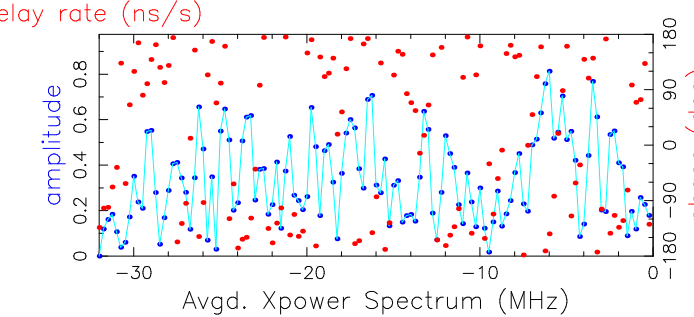
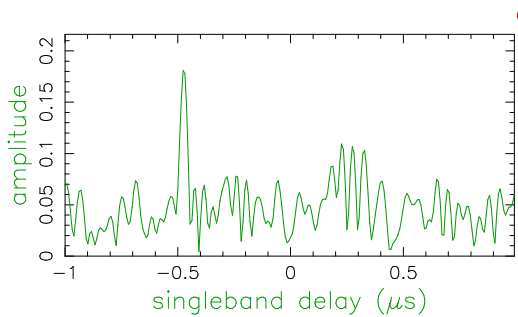


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
165.9	139.3	164.0	-162.3	118.1	137.7	130.5	-162.2	Phase	153.5
0.4	0.4	0.1	0.3	0.4	0.2	0.2	0.2	Ampl.	0.3
228.7	148.0	82.7	222.0	229.2	207.2	210.6	204.9	Sbd box	228.0
U/L 0/479	0/479	0/479	0/479	0/479	0/479	0/479	0/479	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.16863096252E+03	Apriori delay (usec)	2.16785834911E+03	Resid mbdelay (usec)	-8.63659E-03	+/-	4.0E-04		
Sband delay (usec)	2.16863197111E+03	Apriori clock (usec)	2.6403881E+01	Resid sbdelay (usec)	7.73622E-01	+/-	3.2E-03		
Phase delay (usec)	2.16785835406E+03	Apriori clockrate (us/s)	-3.3881001E-07	Resid phdelay (usec)	4.95077E-06	+/-	6.8E-07		
Delay rate (us/s)	-8.78196693967E-02	Apriori rate (us/s)	-8.78096696870E-02	Resid rate (us/s)	-9.99971E-06	+/-	4.9E-09		
Total phase (deg)	-4277.2	Apriori accel (us/s/s)	-1.05676927137E-05	Resid phase (deg)	-4346.5	+/-	21.1		

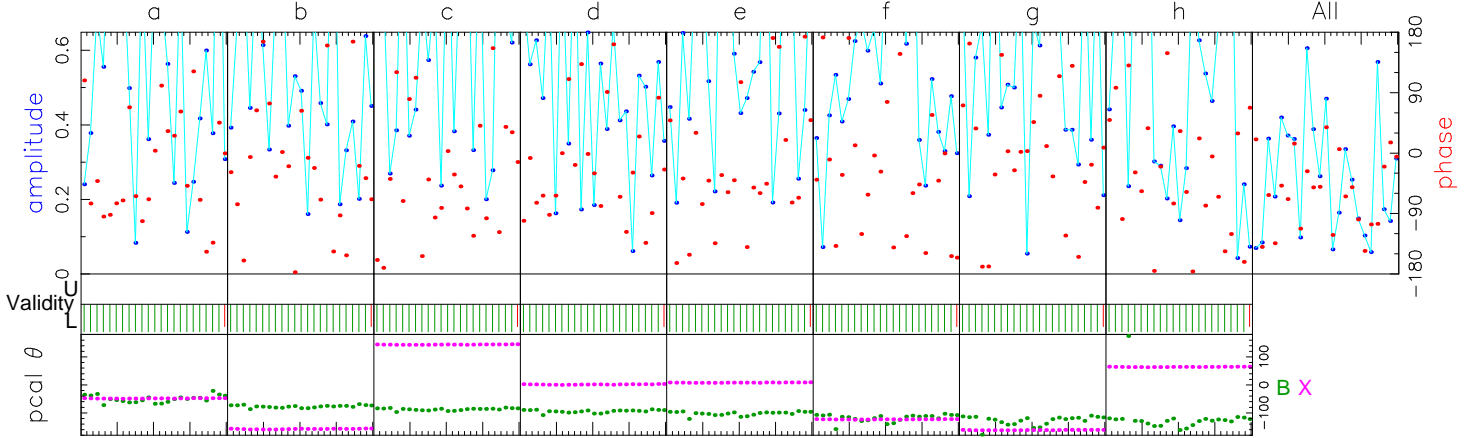
ph/seg (deg) 65.2 50.6 Search (1024X32) 0.176 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 75.0 88.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 32.7 29.8 Inc. seg. avg. 0.242 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 41.4 52.1 Inc. frq. avg. 0.251 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
B: az 239.3 el 15.8 pa 33.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 ion window (TEC) 0.00 0.00 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/BX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/BX.W.249.zpwwbc



Fringe quality 0  
SNR 5.5  
Int time 239.353  
Amp 0.216  
Phase 2652.5  
PFD 9.1e-01  
Delays (us)  
SBD -0.473369  
MBD -0.012502  
Fringe rate (Hz)  
-0.622935  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.50  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013652  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

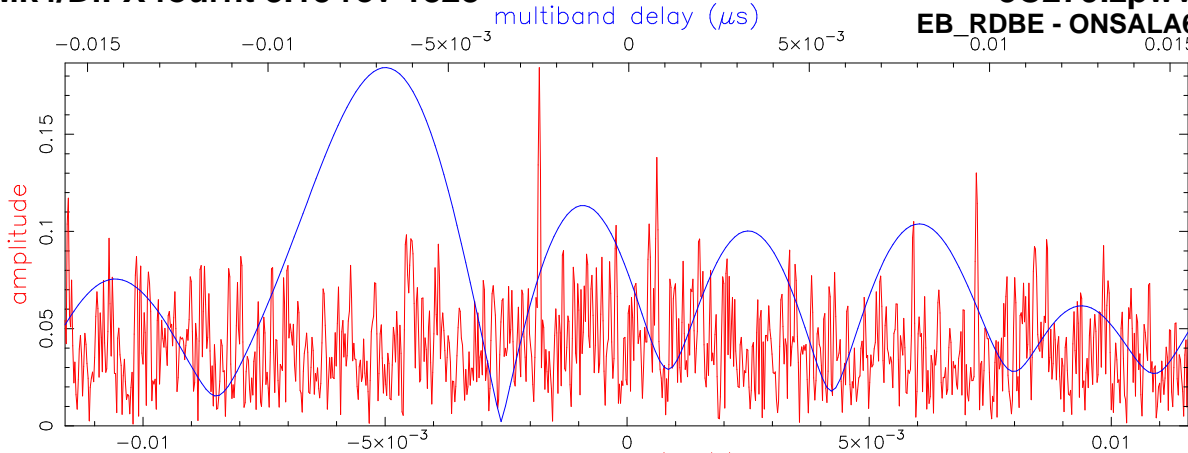


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

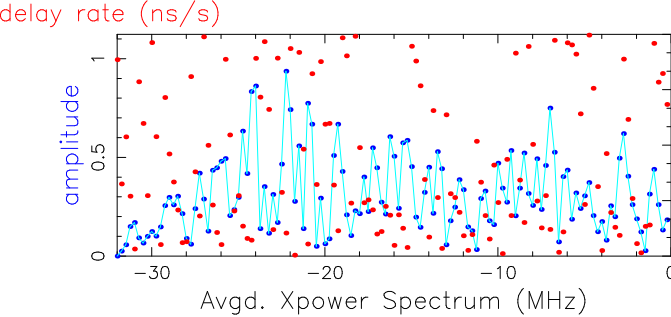
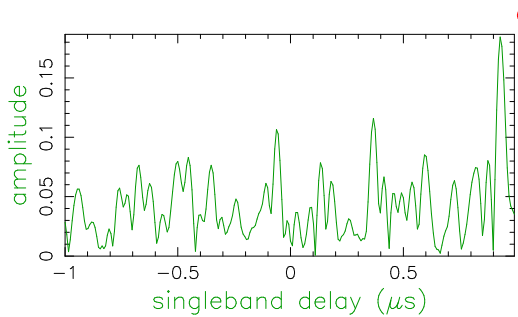


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-37.8	-62.9	-62.1	-46.9	-41.0	-72.8	0.7	-77.7		-47.5
	0.2	0.1	0.2	0.2	0.4	0.2	0.2	0.2	Ampl.	0.2
	33.9	173.3	247.6	219.1	68.6	1.4	170.8	128.6	Sbd box	68.4
U/L	0/479	0/479	0/479	0/479	0/479	0/479	0/479	0/479	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.16737709752E+03		Apriori delay (usec)		2.16785834911E+03		Resid mbdelay (usec)		-1.25016E-02	+/- 4.0E-04
Sband delay (usec)	2.16738498011E+03		Apriori clock (usec)		2.6403881E+01		Resid sbdelay (usec)		-4.73369E-01	+/- 3.1E-03
Phase delay (usec)	2.16785834758E+03		Apriori clockrate (us/s)		-3.3881001E-07		Resid phdelay (usec)		-1.53303E-06	+/- 6.7E-07
Delay rate (us/s)	-8.78169013462E-02		Apriori rate (us/s)		-8.78096696870E-02		Resid rate (us/s)		-7.23166E-06	+/- 4.9E-09
Total phase (deg)	2721.7		Apriori accel (us/s/s)		-1.05676927137E-05		Resid phase (deg)		2652.5	+/- 20.9

ph/seg (deg) 55.8 50.1 Search (1024X32) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 97.2 87.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 27.3 29.5 Inc. seg. avg. 0.223 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 31.6 51.6 Inc. frq. avg. 0.204 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
B: az 239.3 el 15.8 pa 33.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 ion window (TEC) 0.00 0.00  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/BX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/BX.W.250.zpwwbc simultaneous interpolator

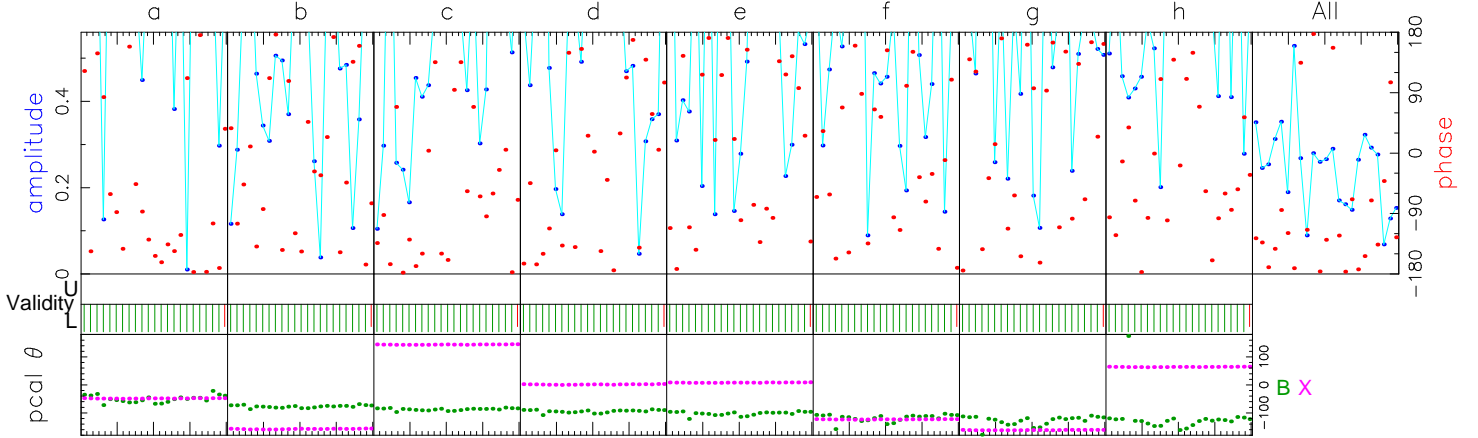


Fringe quality 0  
 SNR 5.5  
 Int time 239.353  
 Amp 0.187  
 Phase -5547.8  
 PFD 8.5e-01  
 Delays (us)  
 SBD 0.931186  
 MBD -0.006735  
 Fringe rate (Hz)  
 -0.156155  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

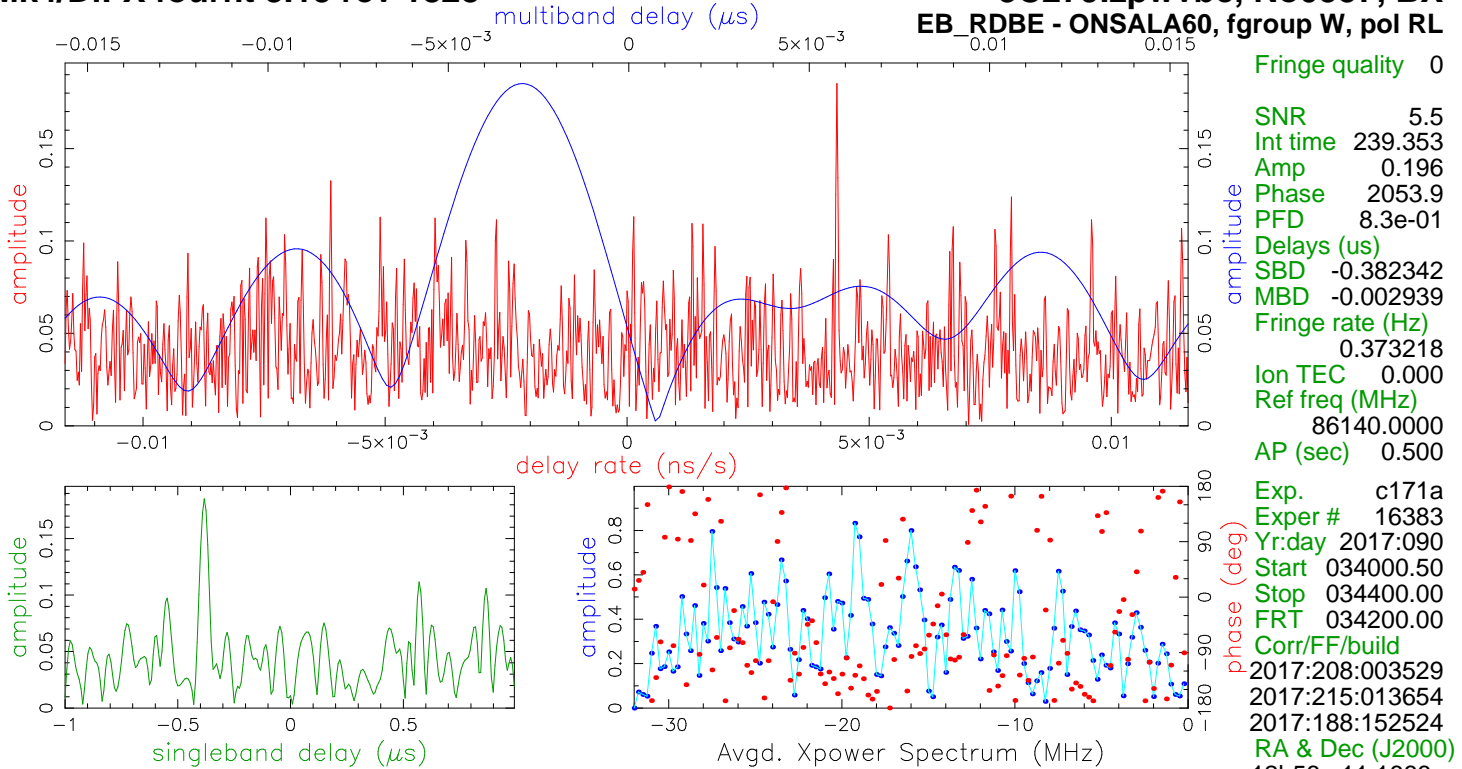


Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.50  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013653  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-147.0	-128.8	-126.0	-169.5	-157.1	177.0	-179.9	-70.4	Phase	-147.8
	0.5	0.2	0.1	0.1	0.3	0.1	0.3	0.2	Ampl.	0.2
	247.3	16.0	35.5	36.5	175.2	151.0	144.5	69.6	Sbd box	248.2
U/L	0/479	0/479	0/479	0/479	0/479	0/479	0/479	0/479	APs used	
B	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	2.16878911443E+03		Apriori delay (usec)		2.16785834911E+03		Resid mbdelay (usec)		-6.73468E-03	+/- 3.9E-04
Sband delay (usec)	2.16878953561E+03		Apriori clock (usec)		2.6403881E+01		Resid sbdelay (usec)		9.31186E-01	+/- 3.1E-03
Phase delay (usec)	2.16785834434E+03		Apriori clockrate (us/s)		-3.3881001E-07		Resid phdelay (usec)		-4.76769E-06	+/- 6.7E-07
Delay rate (us/s)	-8.78114824931E-02		Apriori rate (us/s)		-8.78096696870E-02		Resid rate (us/s)		-1.81281E-06	+/- 4.8E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.05676927137E-05		Resid phase (deg)		-5547.8	+/- 20.7
RMS	Theor.	Amplitude	0.187 +/- 0.034		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	49.9	49.7	Search (1024X32)	0.181	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000
amp/seg (%)	63.3	86.7	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016
ph/frq (deg)	40.1	29.3	Inc. seg. avg.	0.182	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.012	0.012
amp/frq (%)	62.8	51.2	Inc. frq. avg.	0.192	Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite		0.00	0.00
B: az 239.3 el 15.8 pa 33.4		X: az 242.4 el 9.8 pa 28.8		u,v (fr/asec) 498.046 -537.004						simultaneous interpolator



Fringe quality 0

SNR 5.5

Int time 239.353

Amp 0.196

Phase 2053.9

PFD 8.3e-01

Delays ( $\mu s$ )

SBD -0.382342

MBD -0.002939

Fringe rate (Hz) 0.373218

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.50

Stop 034400.00

FRT 034200.00

Corr/FF/build

2017:208:003529

2017:215:013654

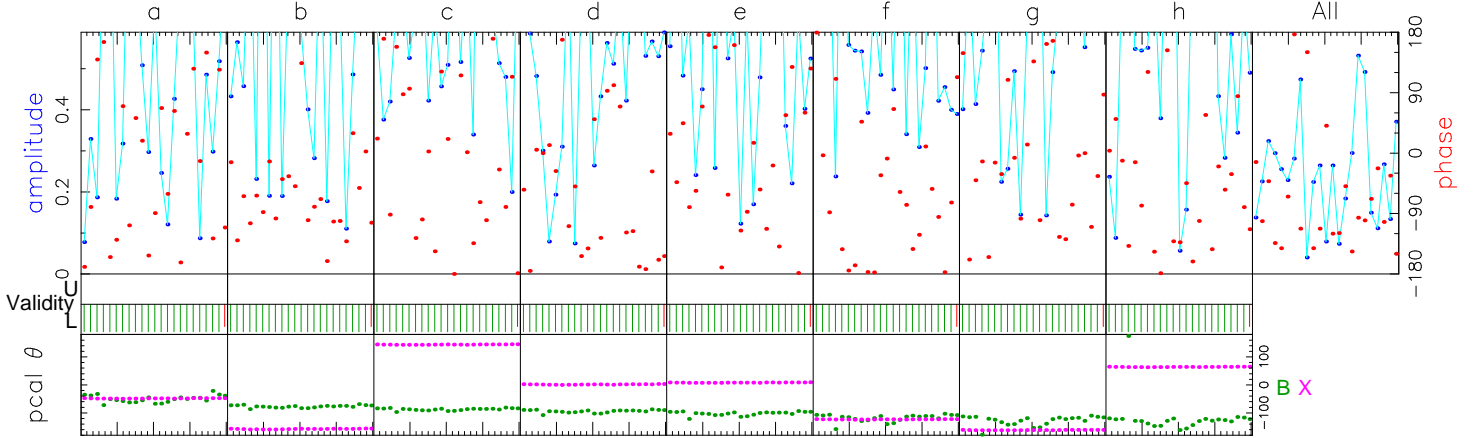
2017:188:152524

RA & Dec (J2000)

12h56m11.1666s

-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-173.1	-76.7	-130.1	-136.0	-123.1	-99.4	-76.2	-120.5	Phase	-106.1
0.1	0.5	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
203.1	78.8	107.1	107.2	248.8	158.8	68.3	102.0	Sbd box	80.1
U/L 0/479	0/479	0/479	0/479	0/479	0/479	0/479	0/479	APs used	
B -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
B W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.16748040980E+03	Apriori delay (usec)	2.16785834911E+03	Resid mbdelay (usec)	-2.93931E-03	+/-	3.9E-04		
Sband delay (usec)	2.16747600661E+03	Apriori clock (usec)	2.6403881E+01	Resid sbdelay (usec)	-3.82342E-01	+/-	3.1E-03		
Phase delay (usec)	2.16785834569E+03	Apriori clockrate (us/s)	-3.3881001E-07	Resid phdelay (usec)	-3.42265E-06	+/-	6.7E-07		
Delay rate (us/s)	-8.78053369945E-02	Apriori rate (us/s)	-8.78096696870E-02	Resid rate (us/s)	4.33269E-06	+/-	4.8E-09		
Total phase (deg)	2123.1	Apriori accel (us/s/s)	-1.05676927137E-05	Resid phase (deg)	2053.9	+/-	20.7		

ph/seg (deg) 58.0 Theor. 49.6 Amplitude 0.196 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

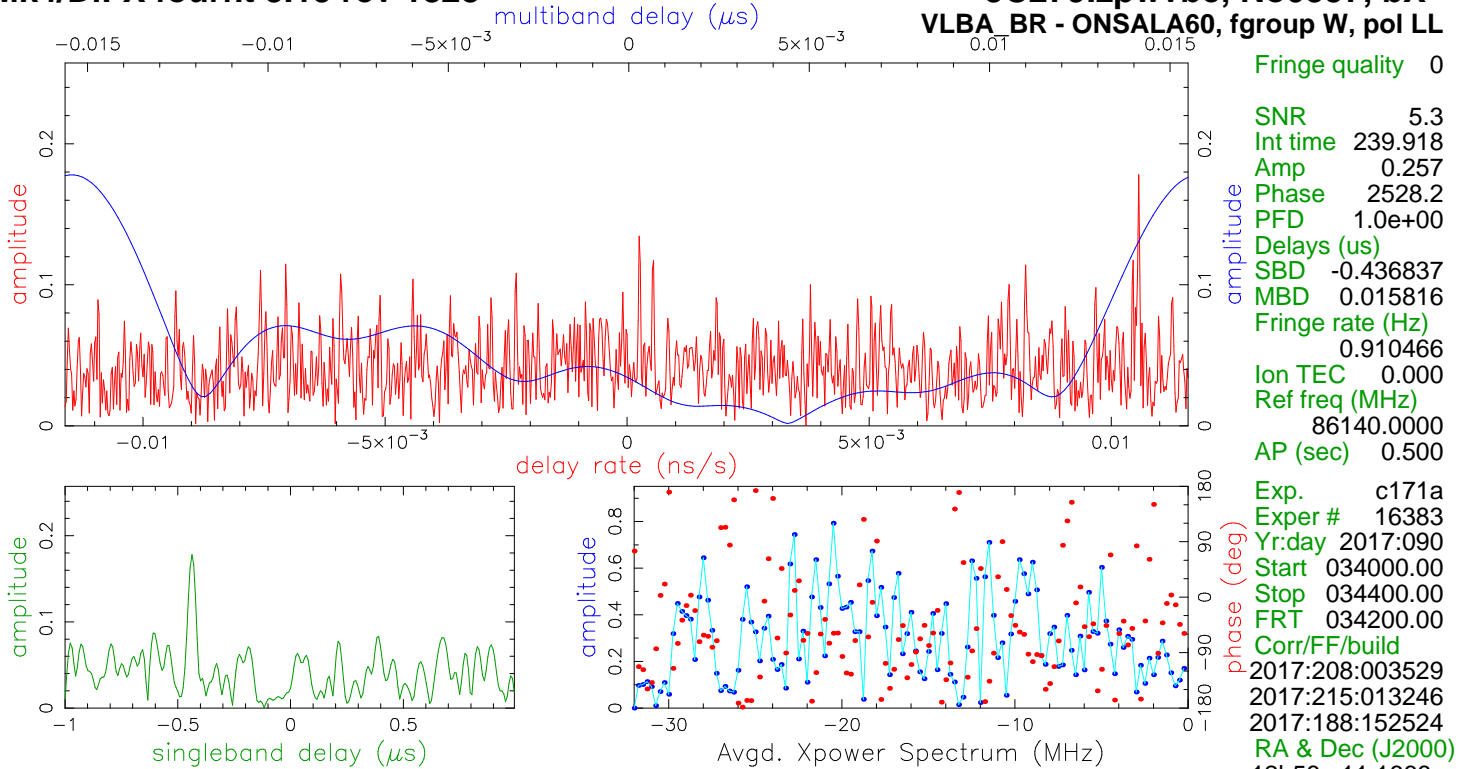
amp/seg (%) 76.9 86.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 37.1 29.2 Inc. seg. avg. 0.190 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 59.1 51.0 Inc. frq. avg. 0.198 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

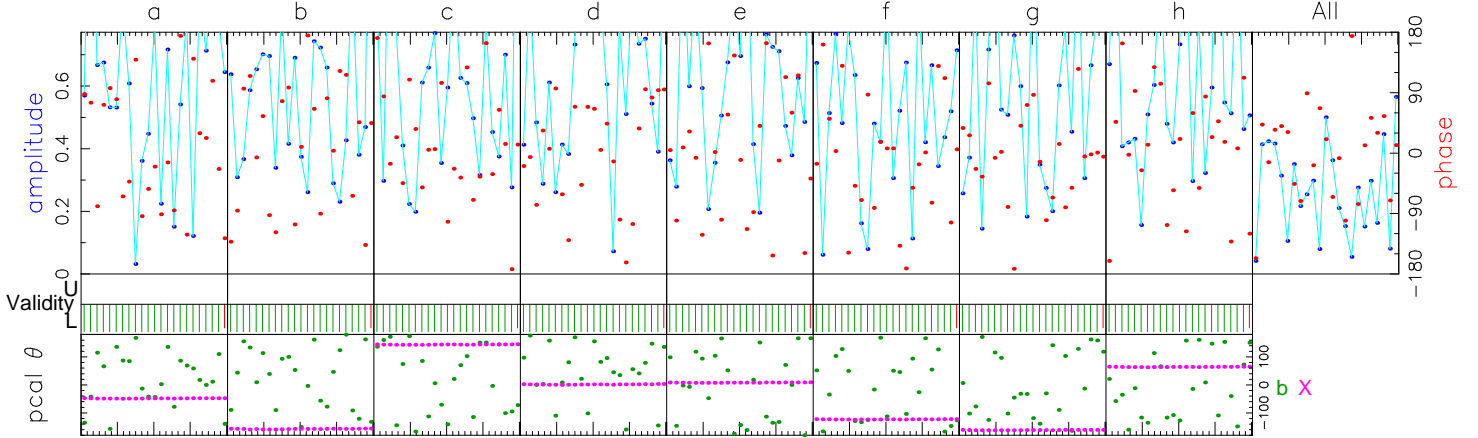
B: az 239.3 el 15.8 pa 33.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/BX.zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/BX.W.252.zpwvbc



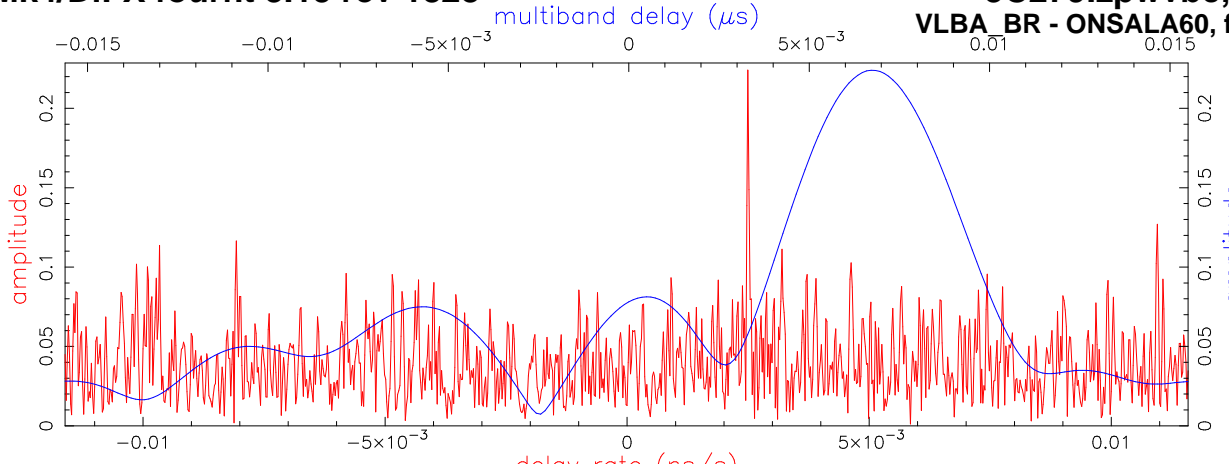
Fringe quality 0  
SNR 5.3  
Int time 239.918  
Amp 0.257  
Phase 2528.2  
PFD 1.0e+00  
Delays (us)  
SBD -0.436837  
MBD 0.015816  
Fringe rate (Hz) 0.910466  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013246  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

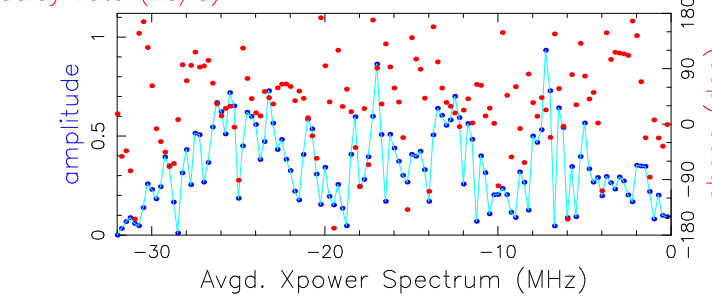
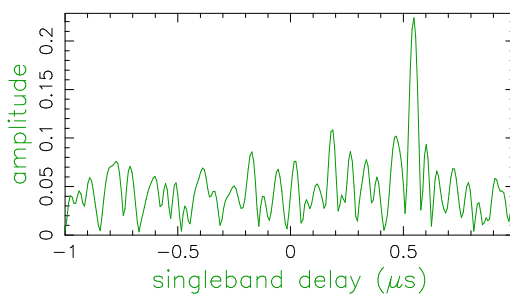


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-2.84753833495E+02		Apriori delay (usec)		-2.84332149307E+02		Resid mbdelay (usec)		1.58158E-02	+/- 4.1E-04
Sband delay (usec)	-2.84768986307E+02		Apriori clock (usec)		-6.8006210E+00		Resid sbdelay (usec)		-4.36837E-01	+/- 3.2E-03
Phase delay (usec)	-2.84332149043E+02		Apriori clockrate (us/s)		-3.0178312E-07		Resid phdelay (usec)		2.63760E-07	+/- 6.9E-07
Delay rate (us/s)	1.70321697949E+00		Apriori rate (us/s)		1.70320640988E+00		Resid rate (us/s)		1.05696E-05	+/- 5.0E-09
Total phase (deg)	2405.3		Apriori accel (us/s/s)		2.60497824793E-06		Resid phase (deg)		2528.2	+/- 21.5

ph/seg (deg) 70.6 51.5 Search (1024X32) 0.173 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 95.8 89.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 26.7 30.4 Inc. seg. avg. 0.275 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 34.7 53.0 Inc. frq. avg. 0.240 Data rate (Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 b: az 108.8 el 8.5 pa -39.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -9803.906 -888.752 Data rate (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/bX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/bX.W.25.zpwwbc simultaneous interpolator

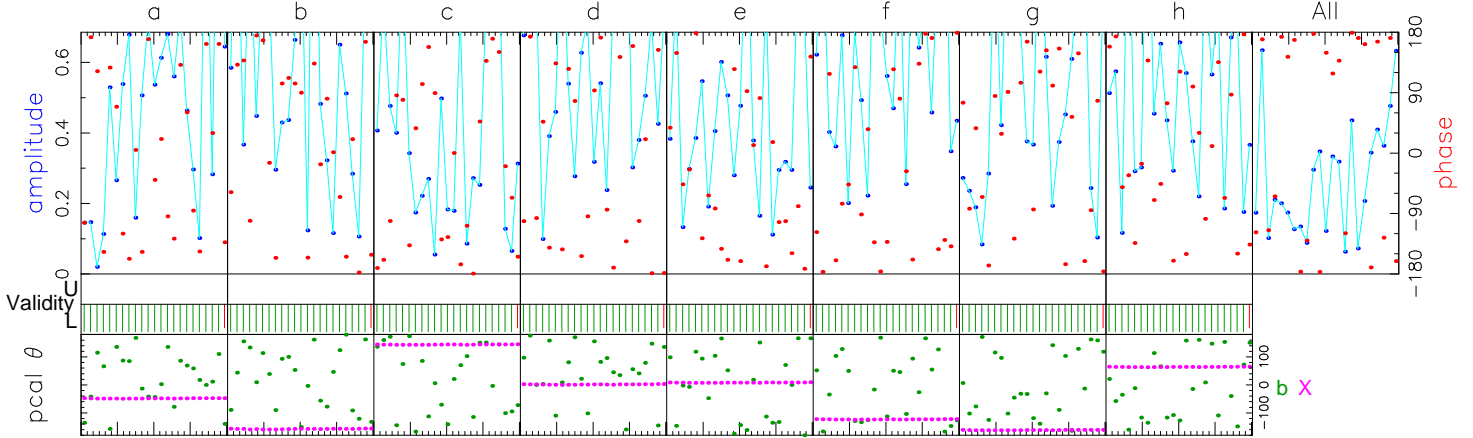


Fringe quality 0  
SNR 6.7  
Int time 239.918  
Amp 0.229  
Phase -3239.9  
PFD 1.3e-03  
Delays (us)  
SBD 0.545949  
MBD 0.006773  
Fringe rate (Hz)  
0.214626  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500



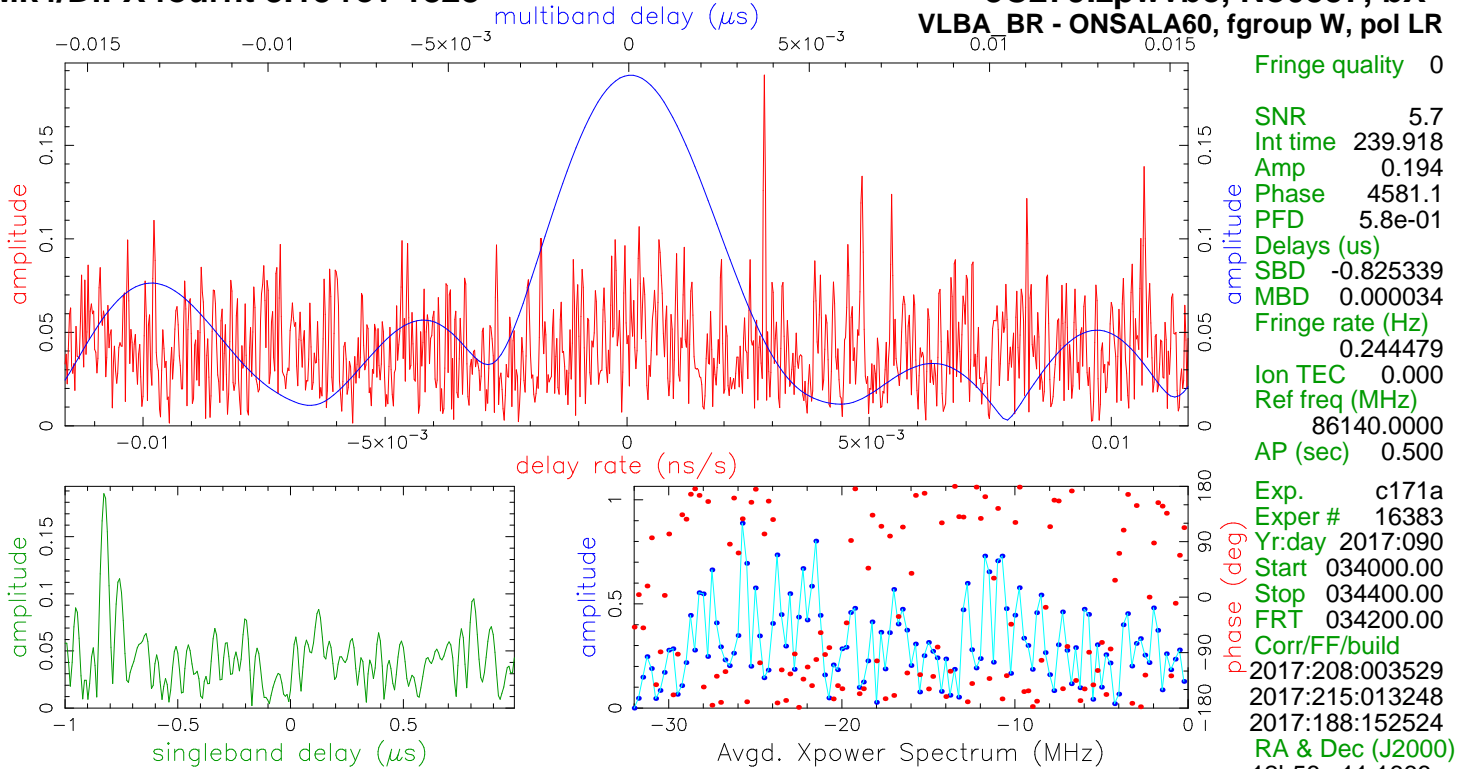
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013247  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

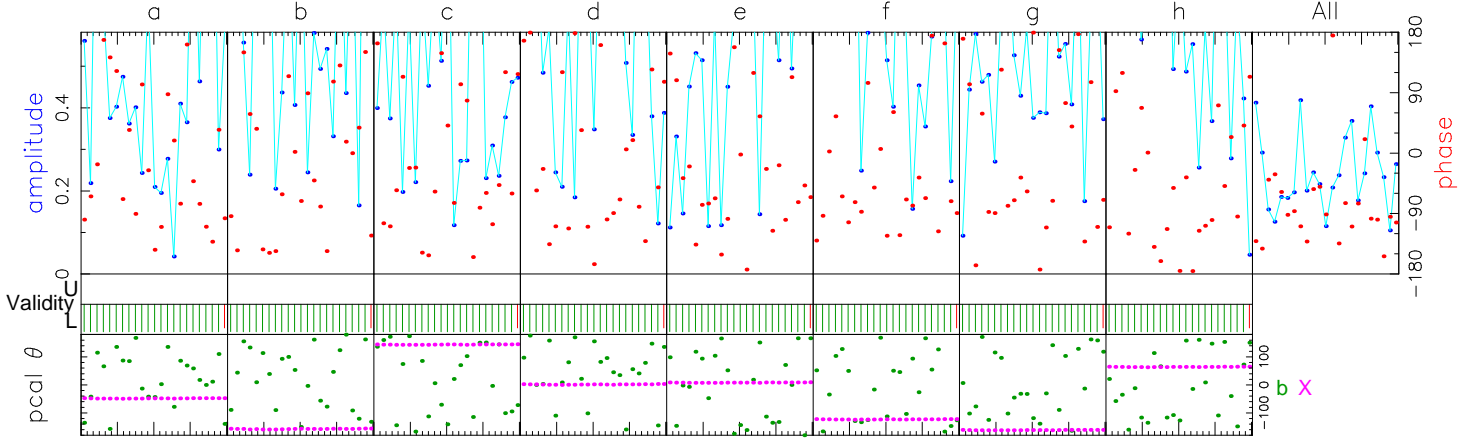


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-174.7	157.2	168.0	-162.2	-158.3	-163.2	139.5	-177.5		-179.9
	0.2	0.2	0.4	0.4	0.2	0.4	0.3	0.1		0.2
	188.0	38.3	14.2	200.4	170.9	199.2	130.3	177.3		198.9
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480		
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	-2.83794126136E+02		Apriori delay (usec)		-2.84332149307E+02		Resid mbdelay (usec)		6.77317E-03	+/- 3.2E-04
Sband delay (usec)	-2.83786200807E+02		Apriori clock (usec)		-6.8006210E+00		Resid sbdelay (usec)		5.45949E-01	+/- 2.6E-03
Phase delay (usec)	-2.84332155108E+02		Apriori clockrate (us/s)		-3.0178312E-07		Resid phdelay (usec)		-5.80072E-06	+/- 5.5E-07
Delay rate (us/s)	1.70320890148E+00		Apriori rate (us/s)		1.70320640988E+00		Resid rate (us/s)		2.49160E-06	+/- 4.0E-09
Total phase (deg)	-3362.8		Apriori accel (us/s/s)		2.60497824793E-06		Resid phase (deg)		-3239.9	+/- 17.1
	RMS	Theor.	Amplitude	0.229 +/- 0.034	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	41.8	40.9	Search (1024X32)	0.216	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000
amp/seg (%)	74.9	71.4	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016
ph/frq (deg)	23.9	24.1	Inc. seg. avg.	0.220	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.012	0.012
amp/frq (%)	39.4	42.1	Inc. frq. avg.	0.225	Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00
					nlags: 128 t_cohere infinite					

b: az 108.8 el 8.5 pa -39.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -9803.906 -888.752 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/bX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/bX.W.26.zpwwbc



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

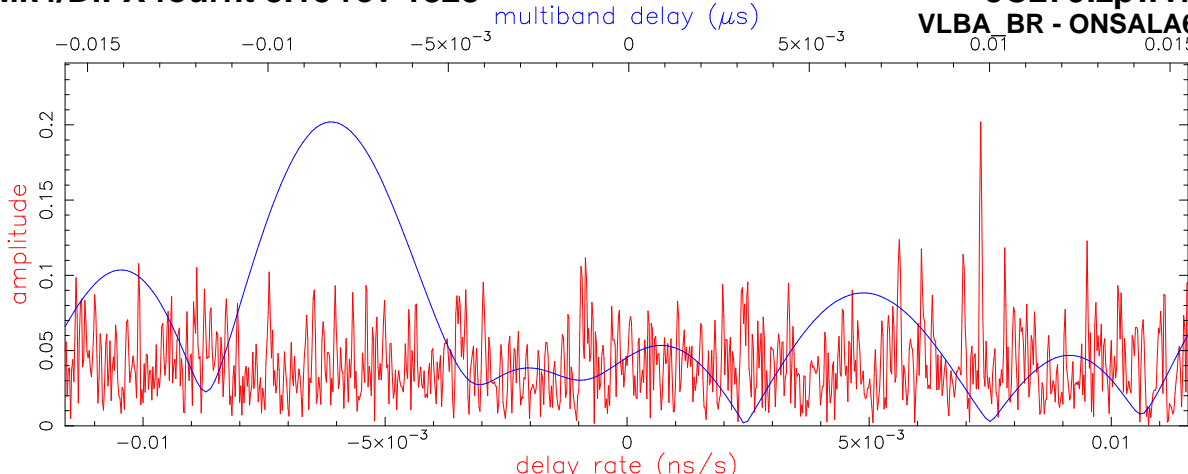


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-84.1	-149.0	-100.0	-107.0	-82.1	-85.3	-126.0	-102.2	Phase	-98.9
0.2	0.1	0.2	0.3	0.2	0.4	0.1	0.2	Ampl.	0.2
216.9	255.0	6.4	84.4	25.1	22.1	138.4	247.7	Sbd box	23.4
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
b -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
b:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
b 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
b W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-2.85144615658E+02	Apriori delay (usec)	-2.84332149307E+02	Resid mbdelay (usec)	3.36491E-05	+/-	3.8E-04		
Sband delay (usec)	-2.85157488807E+02	Apriori clock (usec)	-6.8006210E+00	Resid sbdelay (usec)	-8.25339E-01	+/-	3.0E-03		
Phase delay (usec)	-2.84332152495E+02	Apriori clockrate (us/s)	-3.0178312E-07	Resid phdelay (usec)	-3.18767E-06	+/-	6.5E-07		
Delay rate (us/s)	1.70320924804E+00	Apriori rate (us/s)	1.70320640988E+00	Resid rate (us/s)	2.83816E-06	+/-	4.7E-09		
Total phase (deg)		4458.3	Apriori accel (us/s/s)	2.60497824793E-06	Resid phase (deg)	4581.1	+/-	20.2	

ph/seg (deg)	44.8	Theor.	48.5	Amplitude	0.194 +/- 0.034	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	55.8		48.5	Search (1024X32)	0.181	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	25.8		28.6	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
amp/frq (%)	38.1		49.9	Inc. seg. avg.	0.184	Sample rate(MSamp/s):	64	ion window (TEC)	0.00	0.00	
				Inc. frq. avg.	0.180	Data rate(Mb/s):	1024	nlags: 128	t_cohere	infinite	

b: az 108.8 el 8.5 pa -39.4 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -9803.906 -888.752 simultaneous interpolator

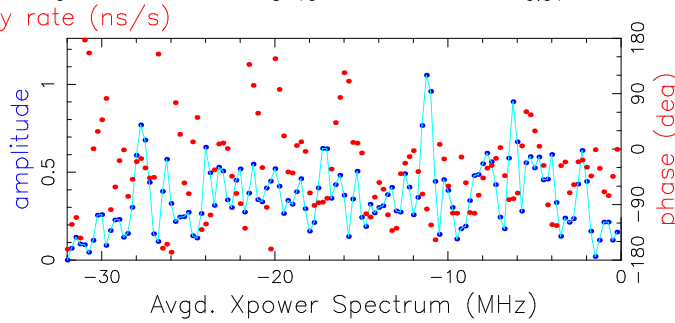
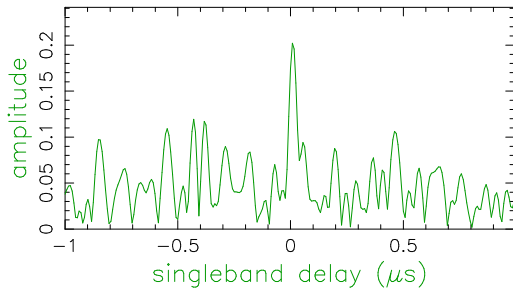
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/bX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/bX.W.27.zpwwbc



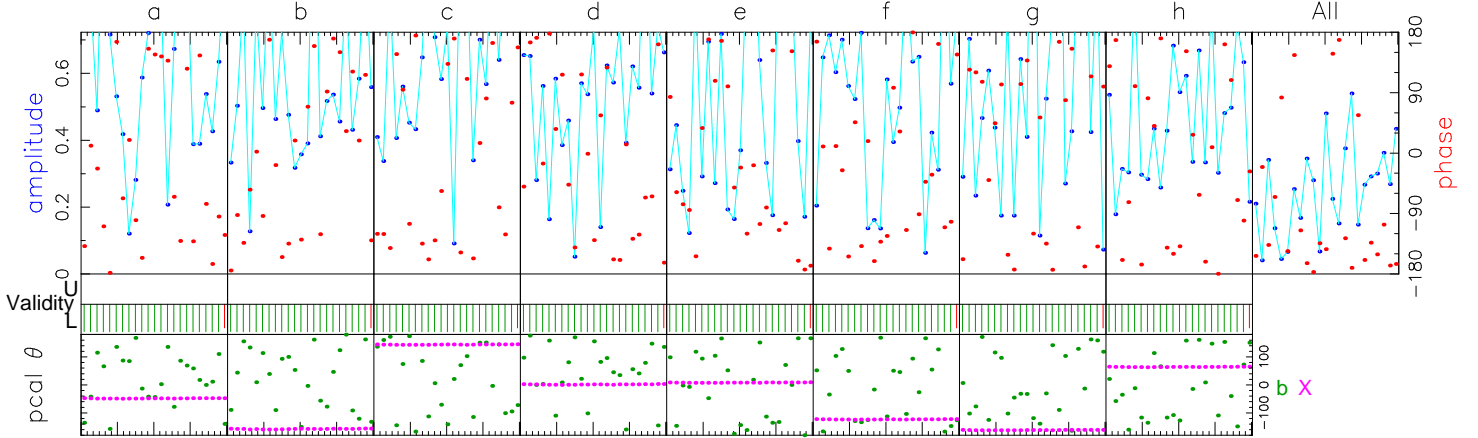
Fringe quality 0

SNR 6.1  
Int time 239.918  
Amp 0.241  
Phase -334.4  
PFD 6.6e-02  
Delays (us)  
SBD 0.010318  
MBD -0.008225  
Fringe rate (Hz) 0.629041  
Ion TEC 0.000  
Ref freq (MHz) 86140.000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013249  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

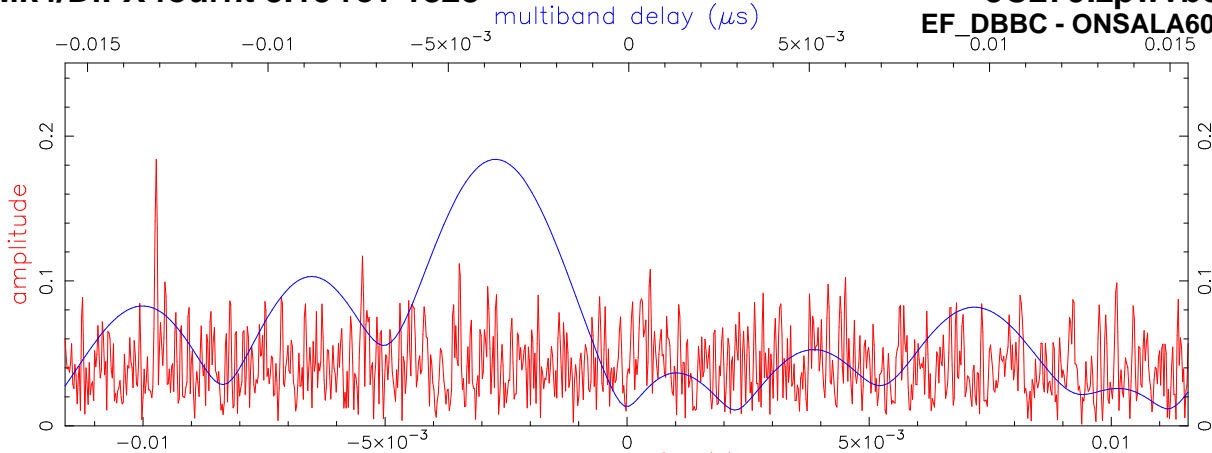


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

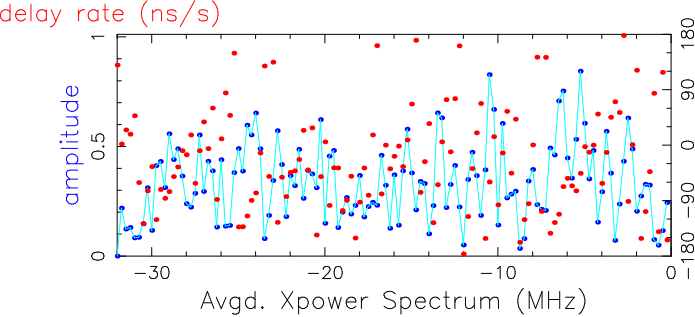
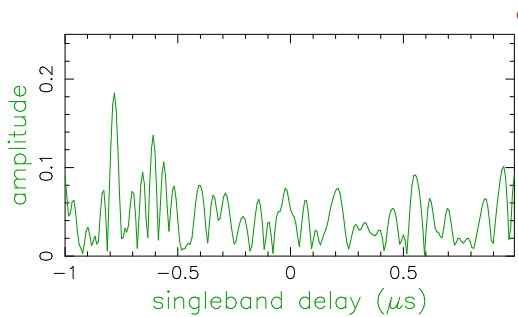


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480		
b	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		
Group delay (usec)(sbd)	-2.84309124640E+02	-2.84321830807E+02	-2.84332154287E+02	-2.843321371243E+00	-2.84332149307E+02	-6.8006210E+00	-3.0178312E-07	-2.84332149307E+02	-8.22533E-03	+/- 3.6E-04
Sband delay (usec)									1.03185E-02	+/- 2.8E-03
Phase delay (usec)									-4.98002E-06	+/- 6.1E-07
Delay rate (us/s)									7.30255E-06	+/- 4.4E-09
Total phase (deg)			-457.3						-334.4	+/- 18.8
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Search (1024X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.241 +/- 0.040										
0.196										
0.000										
0.227										
0.234										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
0.000										
2.8E-03										
6.1E-07										
4.4E-09										
18.8										
5, 5										
1.000 1.000										
0.016 0.016										
0.012 0.012										
0.00 0.00										
u,v (fr/asec) -9803.906 -888.752										
simultaneous interpolator										

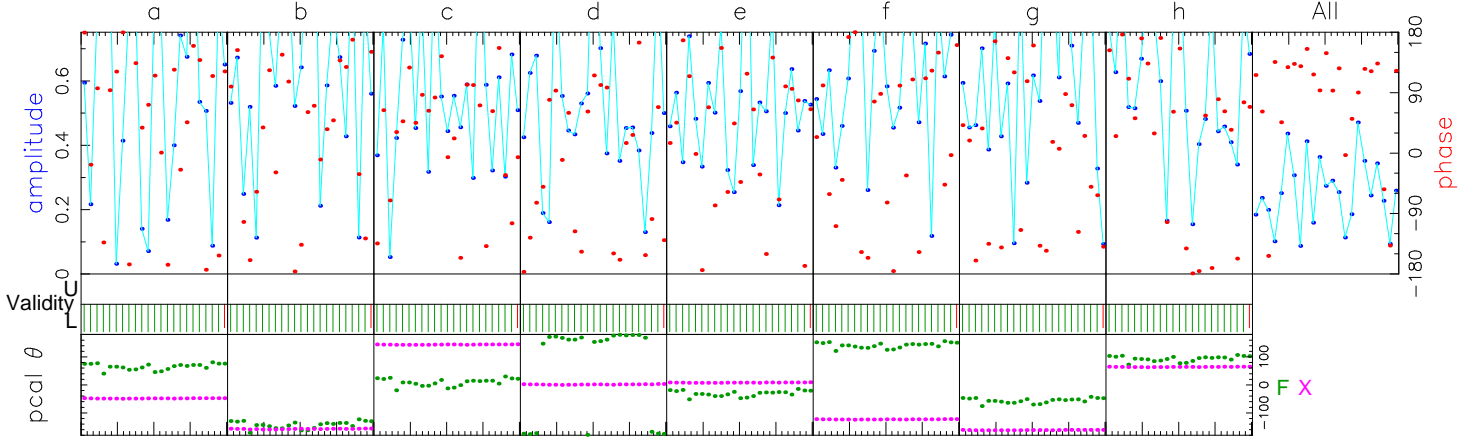




Fringe quality 0  
SNR 5.5  
Int time 239.891  
Amp 0.251  
Phase 4615.9  
PFD 8.7e-01  
Delays (us)  
SBD -0.782050  
MBD -0.003689  
Fringe rate (Hz)  
-0.837990  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013321  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

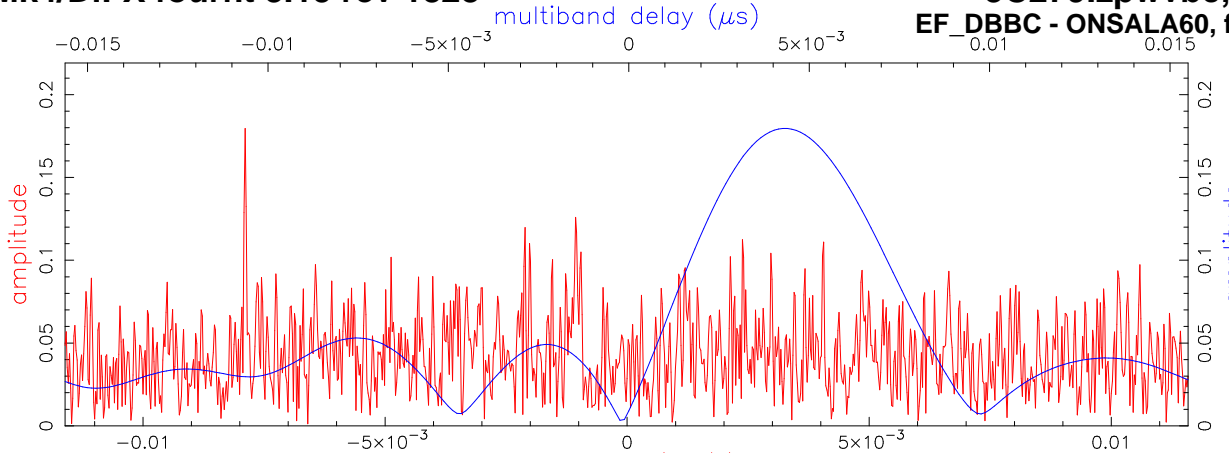


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

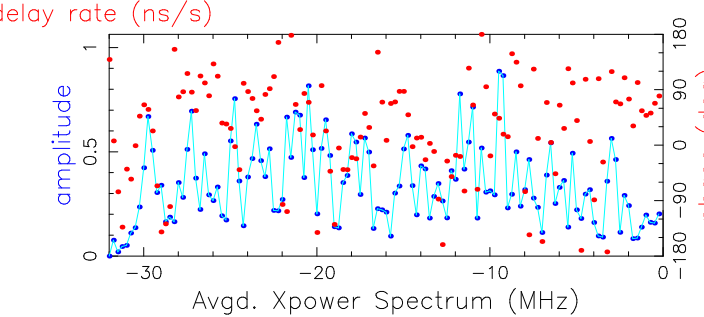
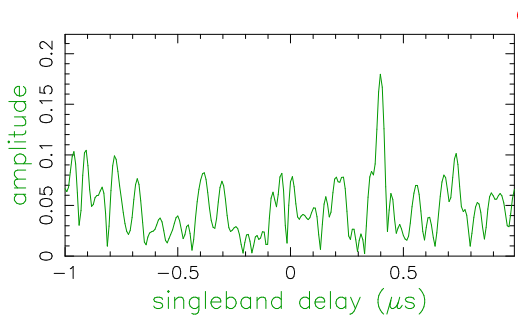


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
140.7	113.6	80.1	124.6	99.3	149.5	104.6	120.4	Phase	115.9
0.4	0.4	0.4	0.2	0.3	0.2	0.0	0.4	Ampl.	0.2
52.9	125.8	117.4	252.9	19.9	109.2	164.9	93.0	Sbd box	28.9
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
F -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
F:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
F:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
F 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
F W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.16663340985E+03	Apriori delay (usec)	2.16741834911E+03	Resid mbdelay (usec)	-3.68926E-03	+/-	3.9E-04		
Sband delay (usec)	2.16663629861E+03	Apriori clock (usec)	2.5963879E+01	Resid sbdelay (usec)	-7.82050E-01	+/-	3.1E-03		
Phase delay (usec)	2.16741835285E+03	Apriori clockrate (us/s)	-3.3881001E-07	Resid phdelay (usec)	3.73740E-06	+/-	6.7E-07		
Delay rate (us/s)	-8.78193979230E-02	Apriori rate (us/s)	-8.78096696870E-02	Resid rate (us/s)	-9.72824E-06	+/-	4.8E-09		
Total phase (deg)	4829.1	Apriori accel (us/s/s)	-1.05676927137E-05	Resid phase (deg)	4615.9	+/-	20.8		

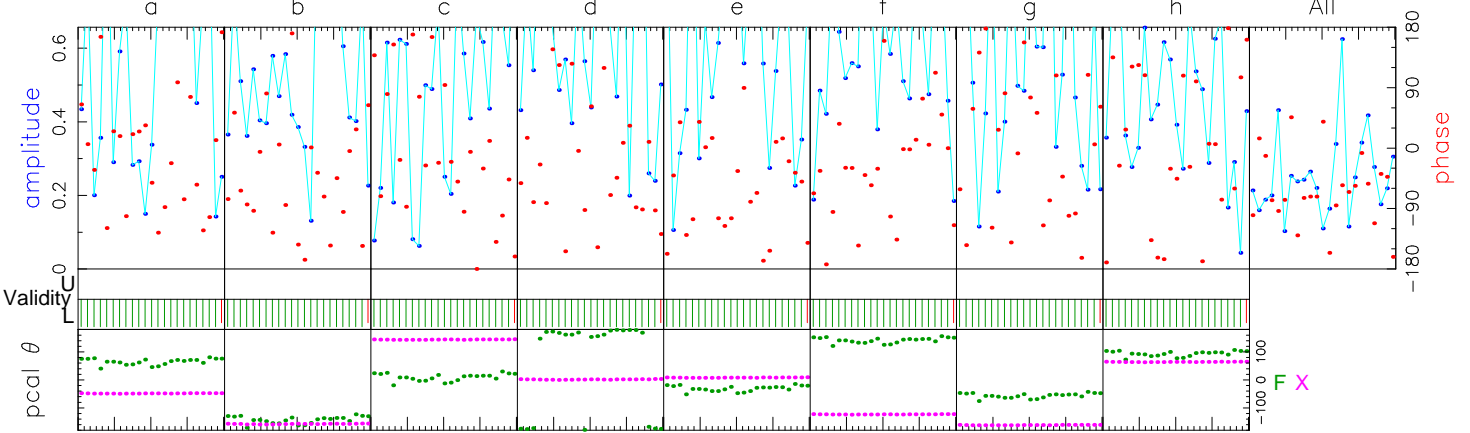
ph/seg (deg) 59.4 49.8 Search (1024X32) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 69.2 86.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 24.3 29.4 Inc. seg. avg. 0.251 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
amp/frq (%) 51.2 51.3 Inc. frq. avg. 0.237 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
F: az 239.3 el 15.8 pa 33.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/FX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/FX.W.57.zpwwbc



Fringe quality 0  
SNR 5.4  
Int time 239.891  
Amp 0.219  
Phase -2406.6  
PFD 9.9e-01  
Delays (us)  
SBD 0.399211  
MBD 0.004311  
Fringe rate (Hz)  
-0.680023  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 5.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013323  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

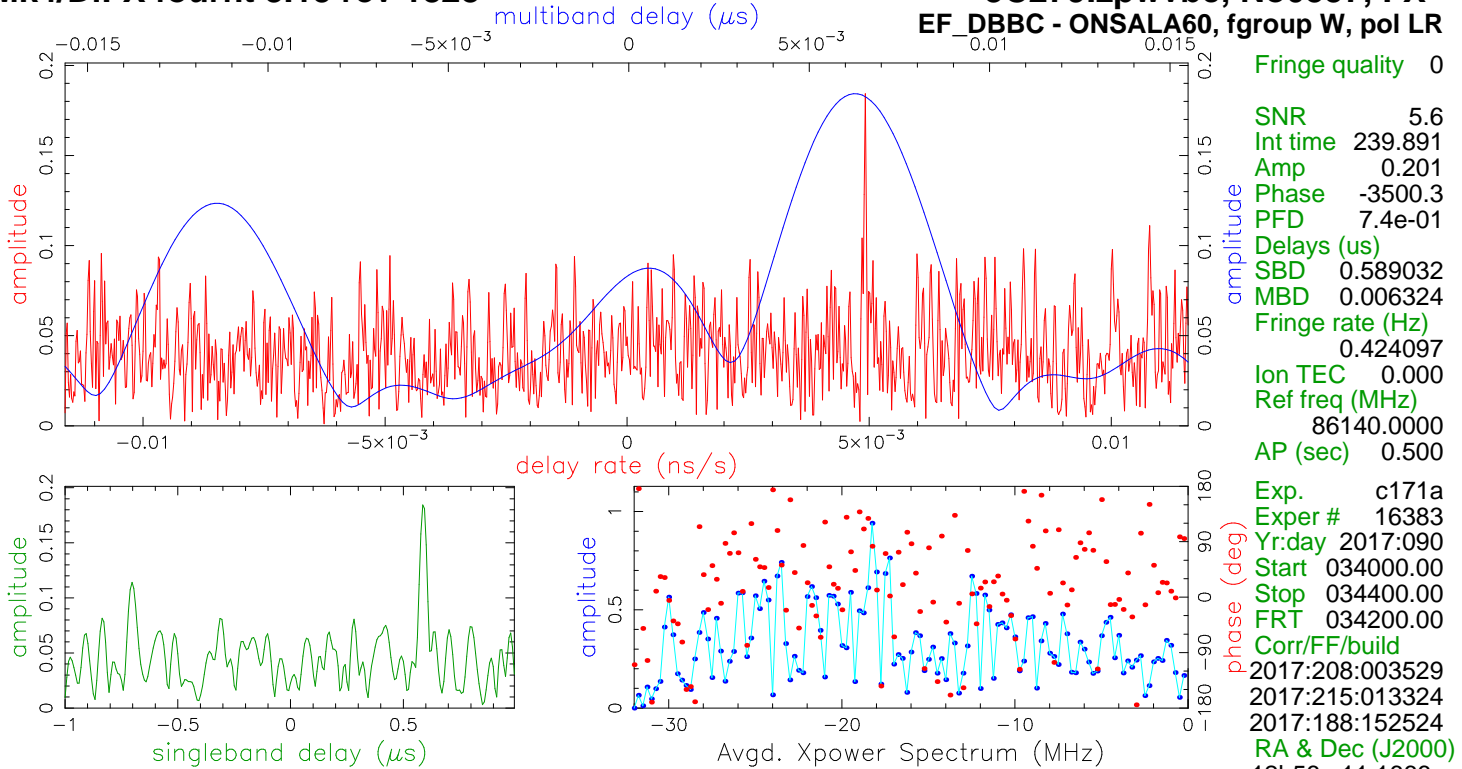


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

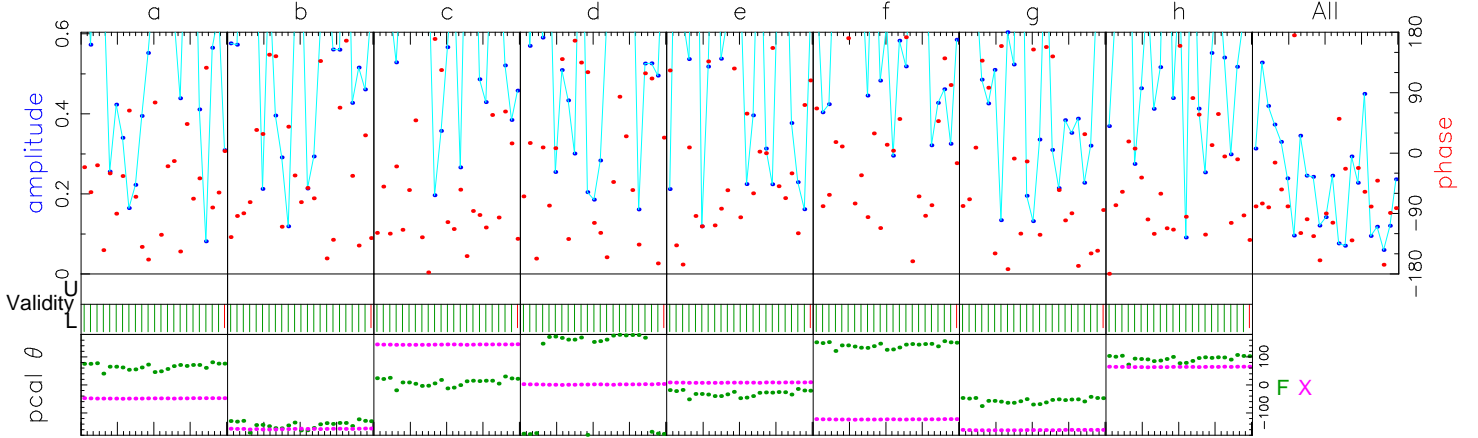


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480		
F	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
F:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
F:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
F	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
F	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)		2.16782890979E+03		Apriori delay (usec)	2.16741834911E+03	Resid mbdelay (usec)	4.31068E-03		+/-	4.0E-04
Sband delay (usec)		2.16781756011E+03		Apriori clock (usec)	2.5963879E+01	Resid sbdelay (usec)	3.99211E-01		+/-	3.2E-03
Phase delay (usec)		2.16741834696E+03		Apriori clockrate (us/s)	-3.3881001E-07	Resid phdelay (usec)	-2.14825E-06		+/-	6.9E-07
Delay rate (us/s)		-8.78175640856E-02		Apriori rate (us/s)	-8.78096696870E-02	Resid rate (us/s)	-7.89440E-06		+/-	5.0E-09
Total phase (deg)			-2193.4	Apriori accel (us/s/s)	-1.05676927137E-05	Resid phase (deg)	-2406.6		+/-	21.3
ph/seg (deg)	52.5	51.0		Search (1024X32)	0.173	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000 1.000
amp/seg (%)	77.1	89.1		Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.016 0.016
ph/frq (deg)	44.7	30.1		Inc. seg. avg.	0.222	Bits/sample: 2x2	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.012 0.012
amp/frq (%)	45.1	52.5		Inc. frq. avg.	0.205	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite		ion window (TEC)	0.00 0.00

F: az 239.3 el 15.8 pa 33.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/FX..zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/FX.W.58.zpwvbc

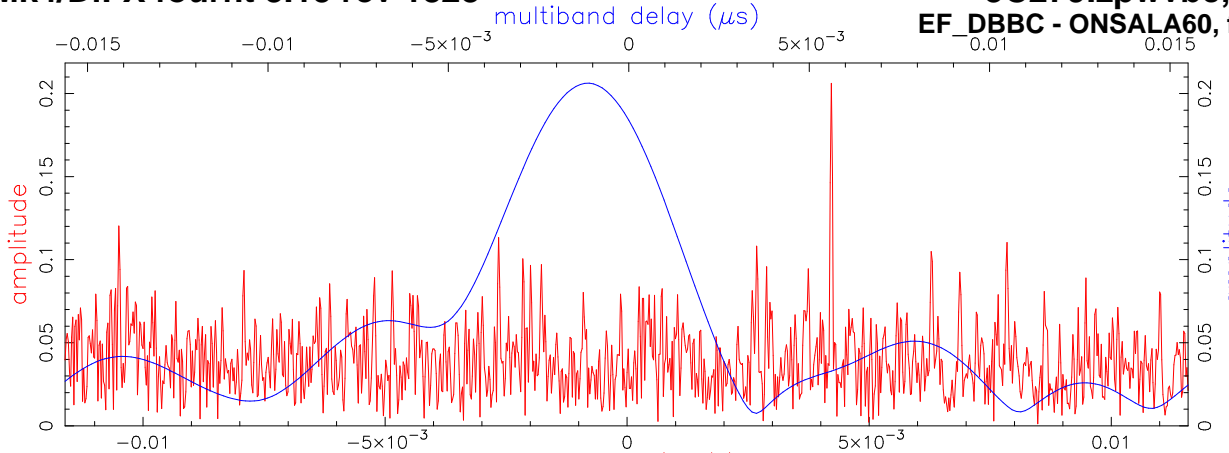


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

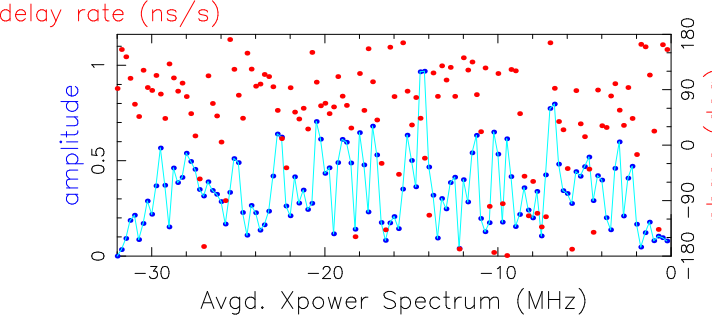
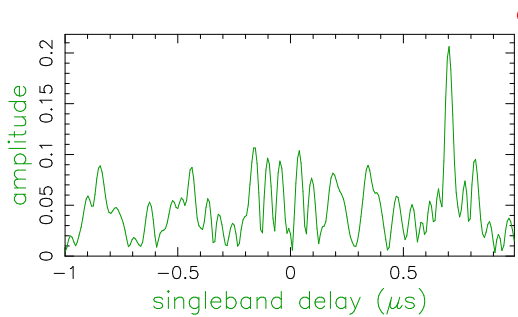


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-50.0	-109.6	-96.9	-63.7	-84.5	-28.5	-121.2	-61.4	Phase	-80.3
0.3	0.2	0.4	0.0	0.3	0.2	0.2	0.2	Ampl.	0.2
210.8	251.0	204.3	36.4	203.3	178.4	248.5	251.1	Sbd box	204.4
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
F -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
F:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
F:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
F 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
F W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	2.16801842293E+03	Apriori delay (usec)	2.16741834911E+03	Resid mbdelay (usec)	6.32382E-03	+/-	3.9E-04		
Sband delay (usec)	2.16800738111E+03	Apriori clock (usec)	2.5963879E+01	Resid sbdelay (usec)	5.89032E-01	+/-	3.1E-03		
Phase delay (usec)	2.16741834652E+03	Apriori clockrate (us/s)	-3.3881001E-07	Resid phdelay (usec)	-2.58801E-06	+/-	6.6E-07		
Delay rate (us/s)	-8.78047463383E-02	Apriori rate (us/s)	-8.78096696870E-02	Resid rate (us/s)	4.92335E-06	+/-	4.8E-09		
Total phase (deg)	-3287.0	Apriori accel (us/s/s)	-1.05676927137E-05	Resid phase (deg)	-3500.3	+/-	20.5		

ph/seg (deg) 52.3 49.1 Search (1024X32) 0.182 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.1 85.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.3 29.0 Inc. seg. avg. 0.185 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 46.0 50.6 Inc. frq. avg. 0.201 Data rate (Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 F: az 239.3 el 15.8 pa 33.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/FX..zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/FX.W.59.zpwvbc

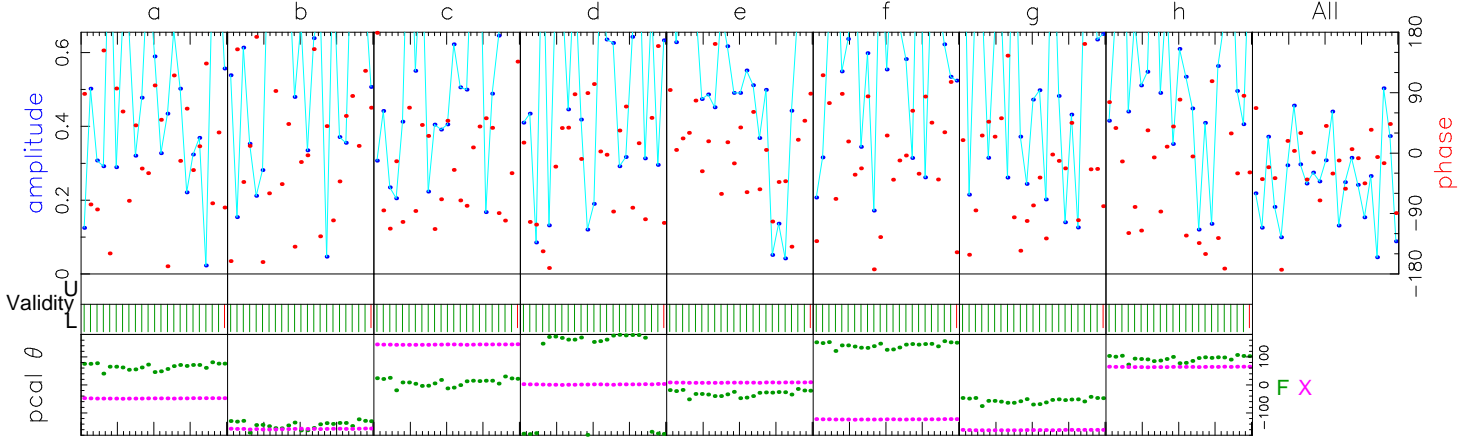


Fringe quality 0  
SNR 6.2  
Int time 239.891  
Amp 0.218  
Phase -3965.0  
PFD 3.9e-02  
Delays (us)  
SBD 0.701631  
MBD -0.001078  
Fringe rate (Hz)  
0.362464  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500



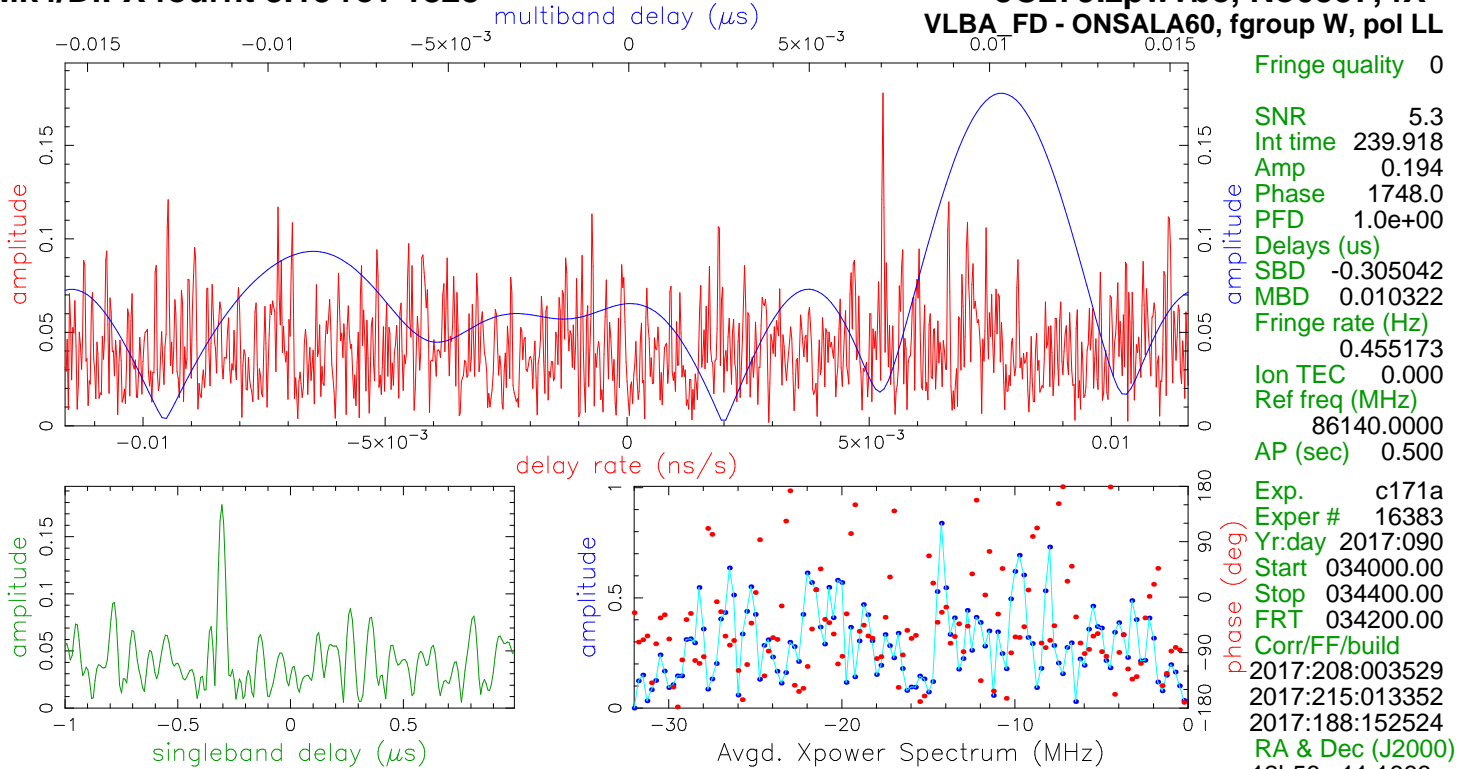
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013324  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-12.7	-1.0	-23.3	-1.5	24.1	-0.6	-22.9	-14.3		Phase
	0.1	0.1	0.2	0.2	0.4	0.3	0.2	0.2		Ampl.
	12.1	93.4	88.6	19.7	218.6	25.1	106.8	179.1		Sbd box
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480		218.8
F	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		APs used
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		PC freqs
F:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase
F:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		ManI PC
F	1000	1000	1000	1000	1000	1000	1000	1000		PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000		
F	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Chan ids
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	2.16810477064E+03		Apriori delay (usec)		2.16741834911E+03		Resid mbdelay (usec)		-1.07847E-03	+/- 3.5E-04
Sband delay (usec)	2.16811998061E+03		Apriori clock (usec)		2.5963879E+01		Resid sbdelay (usec)		7.01631E-01	+/- 2.8E-03
Phase delay (usec)	2.16741834895E+03		Apriori clockrate (us/s)		-3.3881001E-07		Resid phdelay (usec)		-1.62102E-07	+/- 6.0E-07
Delay rate (us/s)	-8.78054618378E-02		Apriori rate (us/s)		-8.78096696870E-02		Resid rate (us/s)		4.20785E-06	+/- 4.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.05676927137E-05		Resid phase (deg)		-3965.0	+/- 18.5

ph/seg (deg) 51.3 44.4 Search (1024X32) 0.190 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.1 77.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 16.8 26.2 Inc. seg. avg. 0.210 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 36.1 45.7 Inc. frq. avg. 0.206 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 F: az 239.3 el 15.8 pa 33.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 498.046 -537.004 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/FX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/FX.W.60.zpwwbc simultaneous interpolator



Fringe quality 0

SNR 5.3

Int time 239.918

Amp 0.194

Phase 1748.0

PFD 1.0e+00

Delays (us)

SBD -0.305042

MBD 0.010322

Fringe rate (Hz) 0.455173

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.00

Stop 034400.00

FRT 034200.00

Corr/FF/build

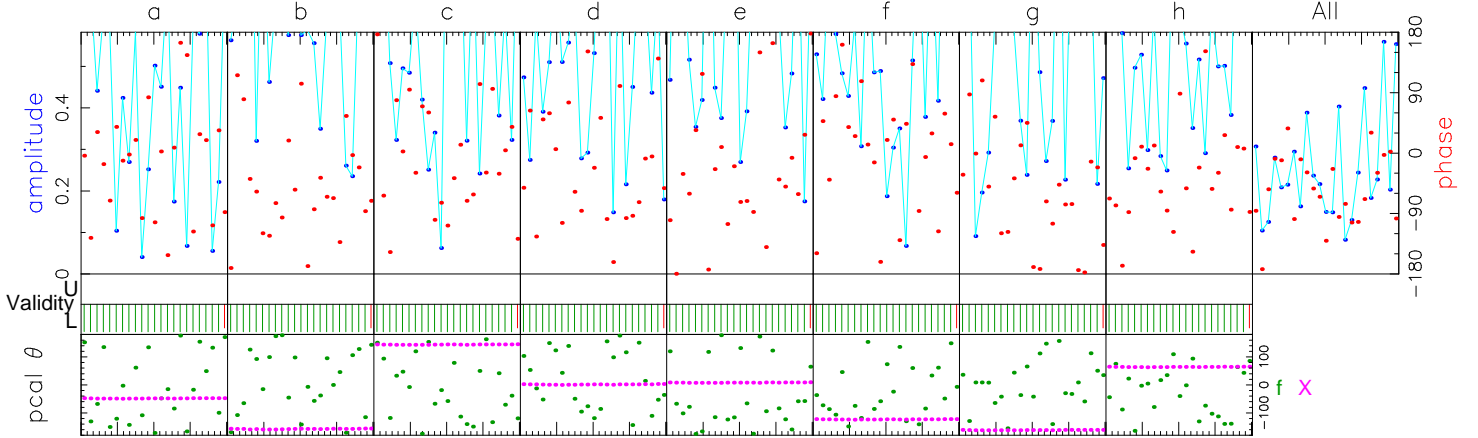
2017:208:003529

2017:215:013352

2017:188:152524

RA & Dec (J2000) 12h56m11.1666s -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-30.5	-73.2	-37.2	-25.8	-95.9	13.4	-90.8	-42.8	Phase	-52.0
0.2	0.4	0.2	0.2	0.2	0.2	0.2	0.3	Ampl.	0.2
202.4	90.2	191.9	224.7	65.1	48.5	46.1	90.0	Sbd box	90.0
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
f -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
f:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
f:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
f 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
f W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	6.04446869836E+03	Apriori delay (usec)	6.04477087672E+03	Resid mbdelay (usec)	1.03216E-02	+/-	4.1E-04		
Sband delay (usec)	6.04446583472E+03	Apriori clock (usec)	-3.0880914E+00	Resid sbdelay (usec)	-3.05042E-01	+/-	3.2E-03		
Phase delay (usec)	6.04477087504E+03	Apriori clockrate (us/s)	-7.3521750E-07	Resid phdelay (usec)	-1.67625E-06	+/-	6.9E-07		
Delay rate (us/s)	1.81059993566E+00	Apriori rate (us/s)	1.81059465155E+00	Resid rate (us/s)	5.28411E-06	+/-	5.0E-09		
Total phase (deg)	1863.5	Apriori accel (us/s/s)	-2.83054207522E-05	Resid phase (deg)	1748.0	+/-	21.5		

ph/seg (deg) 51.7 51.5 Search (1024X32) 0.174 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

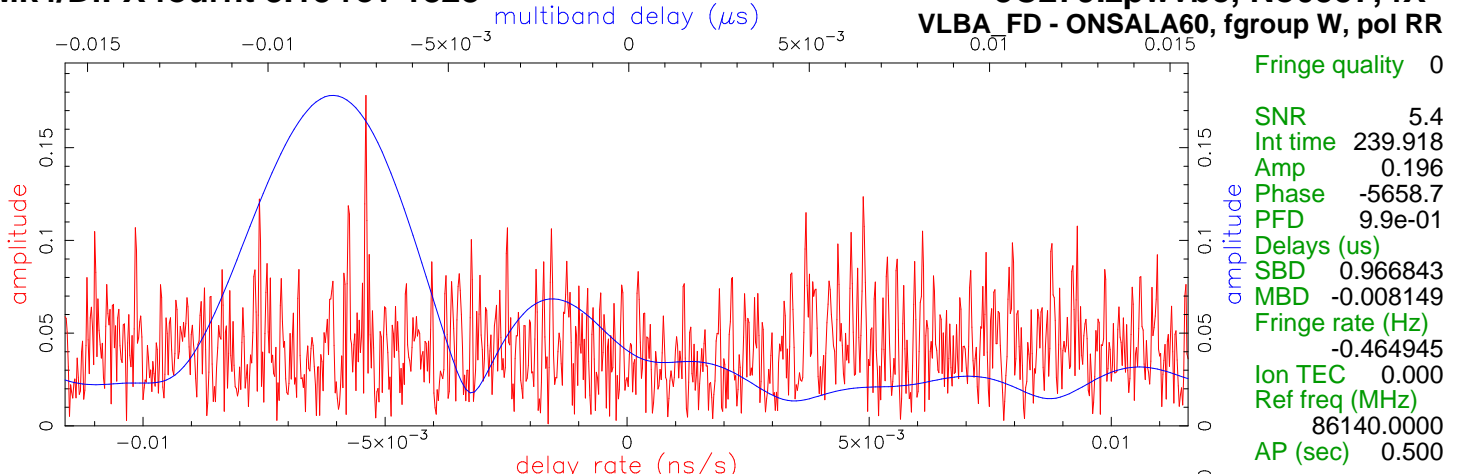
amp/seg (%) 84.0 90.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 40.0 30.4 Inc. seg. avg. 0.197 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 37.2 53.1 Inc. frq. avg. 0.202 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

f: az 115.3 el 26.4 pa -51.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10444.275 -2710.332 ion window (TEC) 0.00 0.00 simultaneous interpolator

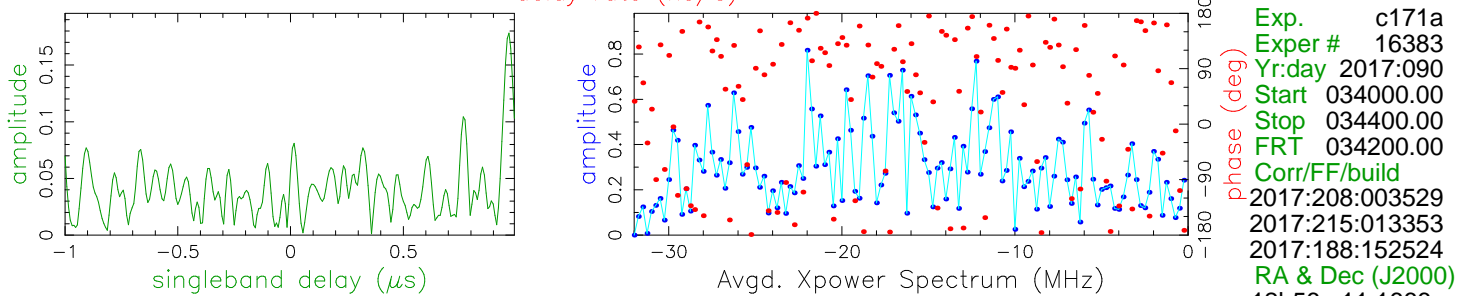
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/fX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/fX.W.85.zpwwbc



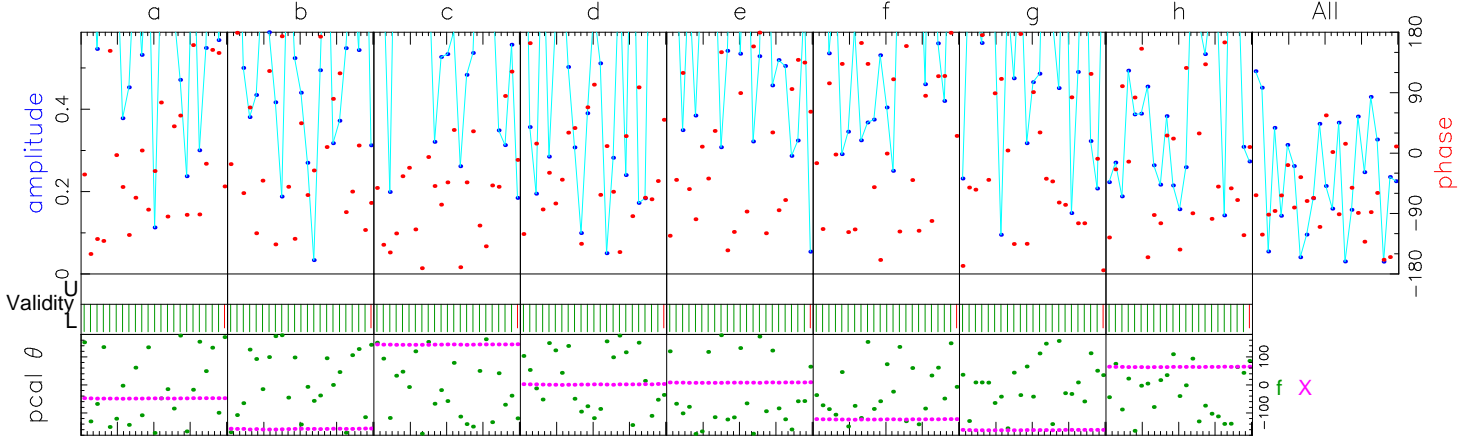
Fringe quality 0

SNR 5.4  
Int time 239.918  
Amp 0.196  
Phase -5658.7  
PFD 9.9e-01  
Delays (us)  
SBD 0.966843  
MBD -0.008149  
Fringe rate (Hz)  
-0.464945  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

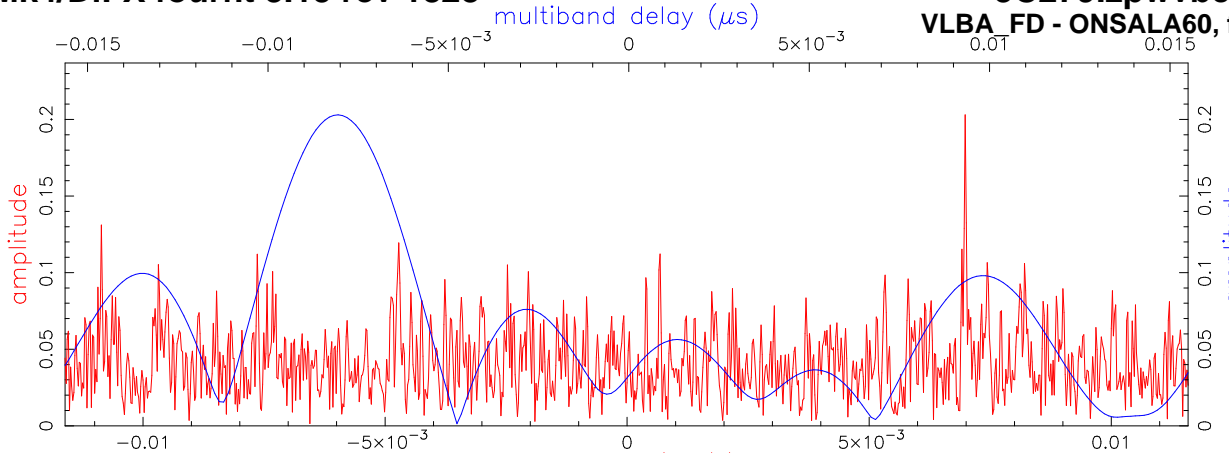
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013353  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



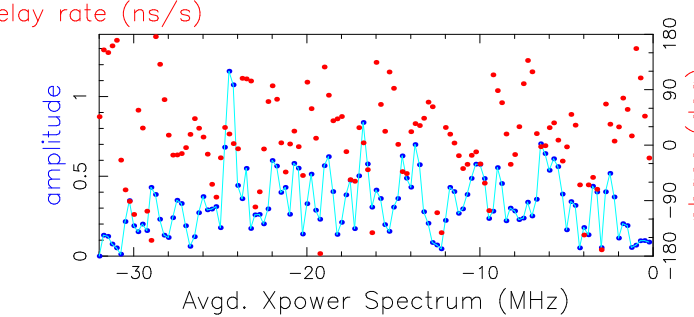
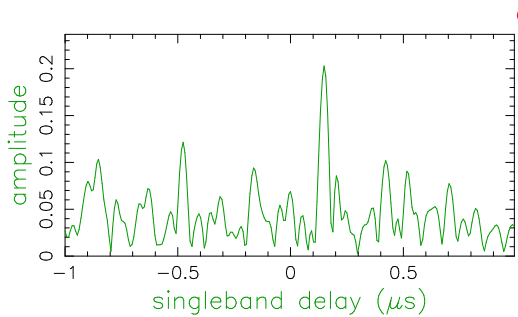
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



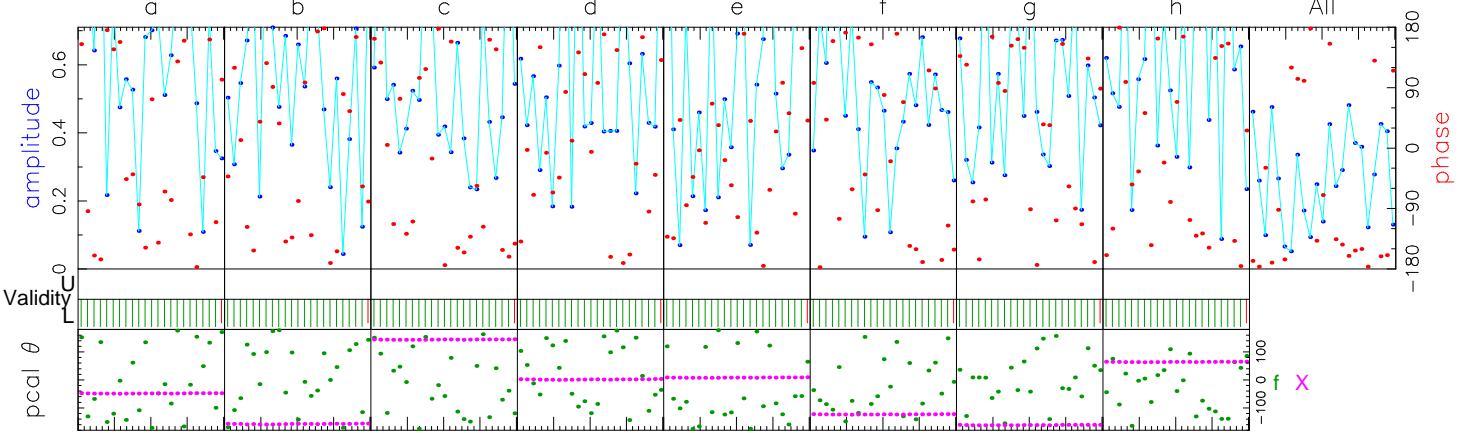
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
Validity	100	100	100	100	100	100	100	100	100	100
pcal θ	100	100	100	100	100	100	100	100	100	100
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	Freq (MHz)
	-91.3	-67.7	-74.8	-59.5	-90.8	-126.1	-74.9	-65.5	-78.7	Phase
	0.2	0.2	0.3	0.3	0.2	0.2	0.2	0.2	0.2	Ampl.
	102.4	92.9	53.1	253.0	101.7	240.2	141.8	162.7	252.8	Sbd box
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC
f	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Chan ids
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	6.04573147800E+03		Apriori delay (usec)		6.04477087672E+03		Resid mbdelay (usec)		-8.14872E-03	+/- 4.1E-04
Sband delay (usec)	6.04573771972E+03		Apriori clock (usec)		-3.0880914E+00		Resid sbdelay (usec)		9.66843E-01	+/- 3.2E-03
Phase delay (usec)	6.04477087418E+03		Apriori clockrate (us/s)		-7.3521750E-07		Resid phdelay (usec)		-2.53753E-06	+/- 6.9E-07
Delay rate (us/s)	1.81058925400E+00		Apriori rate (us/s)		1.81059465155E+00		Resid rate (us/s)		-5.39755E-06	+/- 5.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.83054207522E-05		Resid phase (deg)		-5658.7	+/- 21.4
	RMS	Theor.	Amplitude	0.196 +/- 0.037	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	53.6	51.3	Search (1024X32)	0.174	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000
amp/seg (%)	84.7	89.6	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016
ph/frq (deg)	23.2	30.3	Inc. seg. avg.	0.189	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.012	0.012
amp/frq (%)	27.1	52.8	Inc. frq. avg.	0.180	Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00
					nlags: 128 t_cohere infinite					
f: az 115.3 el 26.4 pa -51.5	X: az 242.4 el 9.8 pa 28.8		u,v (fr/asec)		-10444.275 -2710.332				simultaneous interpolator	
Control file: ../cf_1234	Input file: /Exps/c171a/gmva/1234/No0557/fX.zpwwbc		Output file: /Exps/c171a/gmva/1234/No0557/fX.W.86.zpwwbc							



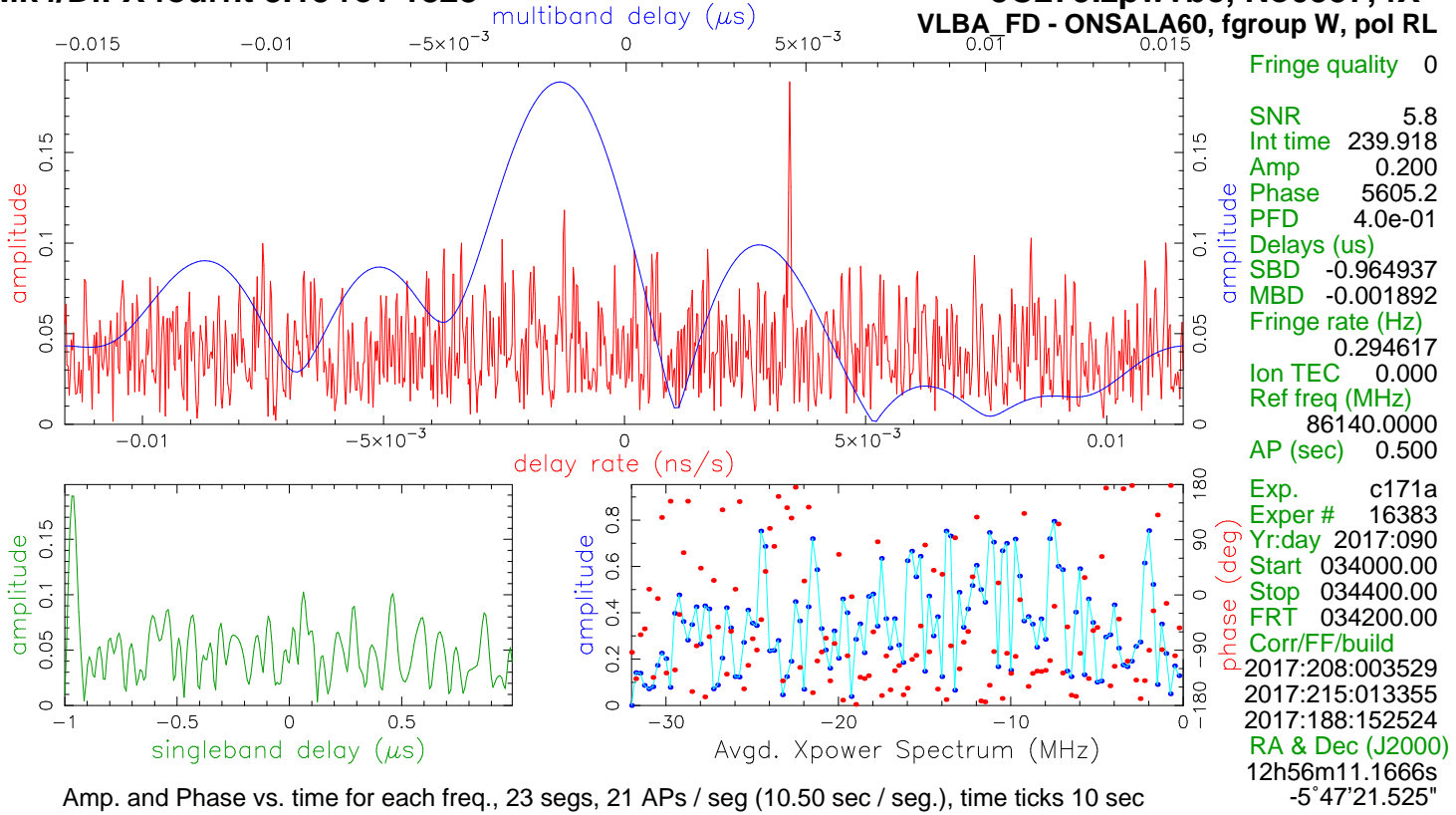
Fringe quality 0  
SNR 6.1  
Int time 239.918  
Amp 0.237  
Phase -1068.5  
PFD 7.5e-02  
Delays (us)  
SBD 0.148934  
MBD -0.008075  
Fringe rate (Hz) 0.602410  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013354  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



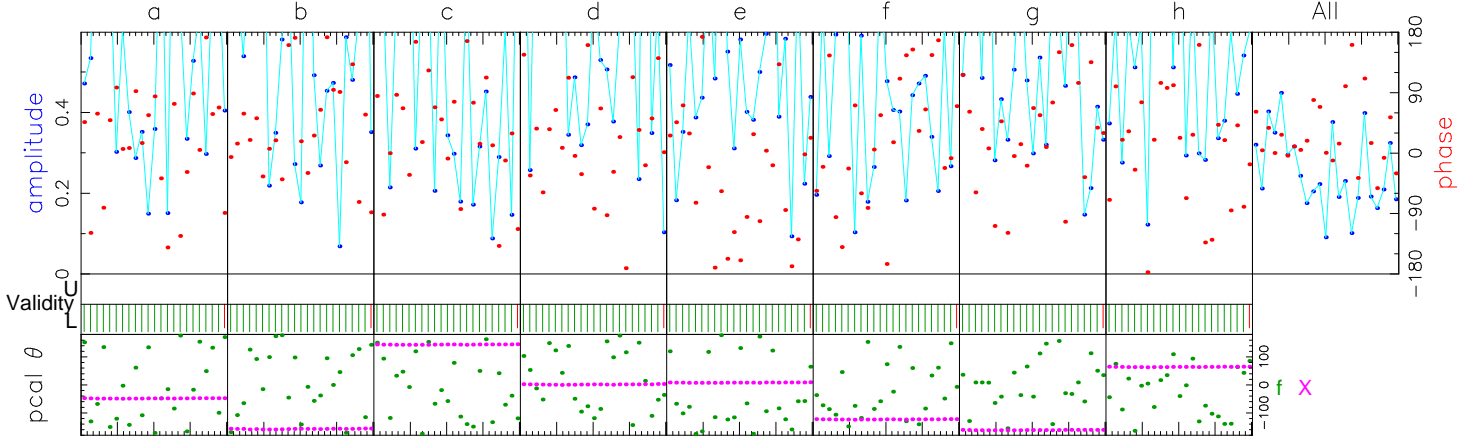
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-162.4	-166.8	-173.7	147.8	-99.8	178.4	-170.3	-163.5	Phase	-168.5	
	0.4	0.2	0.3	0.2	0.2	0.3	0.2	0.3	Ampl.	0.2	
	149.5	235.8	148.5	21.6	220.2	195.3	17.9	154.8	Sbd box	148.1	
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used		
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
f	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	6.04491905137E+03		Apriori delay (usec)		6.04477087672E+03		Resid mbdelay (usec)		-8.07535E-03	+/- 3.6E-04	
Sband delay (usec)	6.04491981122E+03		Apriori clock (usec)		-3.0880914E+00		Resid sbdelay (usec)		1.48934E-01	+/- 2.8E-03	
Phase delay (usec)	6.04477087129E+03		Apriori clockrate (us/s)		-7.3521750E-07		Resid phdelay (usec)		-5.43227E-06	+/- 6.1E-07	
Delay rate (us/s)	1.81060164493E+00		Apriori rate (us/s)		1.81059465155E+00		Resid rate (us/s)		6.99338E-06	+/- 4.4E-09	
Total phase (deg)			Apriori accel (us/s/s)		-2.83054207522E-05		Resid phase (deg)		-1068.5	+/- 18.8	
RMS	Theor.	Amplitude	0.237 +/- 0.039		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5				
ph/seg (deg)	55.4	45.2	Search (1024X32) 0.184		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000	
amp/seg (%)	75.2	78.9	Interp. 0.000		Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016	
ph/frq (deg)	33.9	26.6	Inc. seg. avg. 0.241		Sample rate(MSamp/s): 64		dr window (ns/s)		-0.012	0.012	
amp/frq (%)	31.1	46.5	Inc. frq. avg. 0.232		Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00	
f: az 115.3 el 26.4 pa -51.5		X: az 242.4 el 9.8 pa 28.8		u,v (fr/asec) -10444.275 -2710.332						simultaneous interpolator	



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



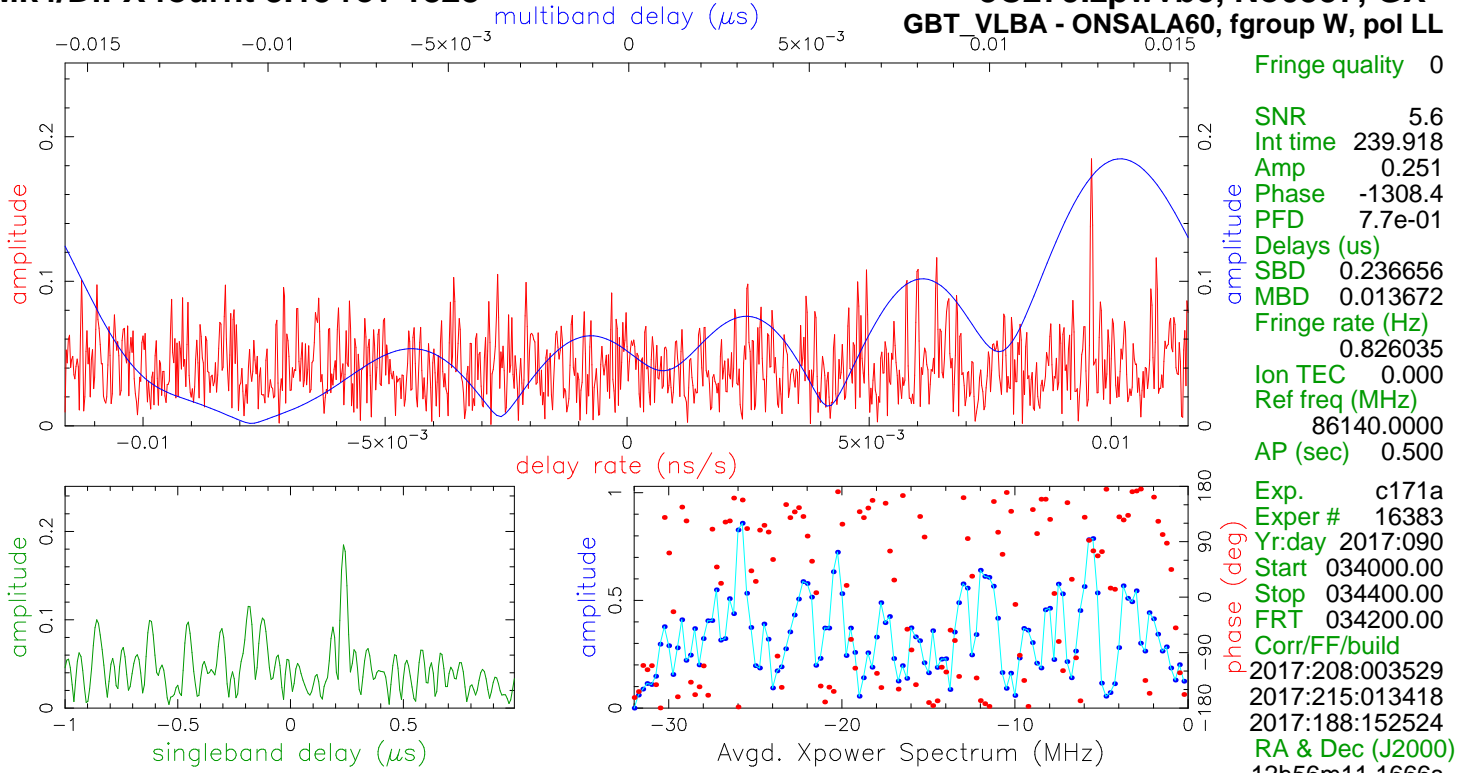
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	36.1	15.3	52.5	26.2	-50.4	11.7	41.9	38.2	Phase	25.2
	0.3	0.3	0.2	0.2	0.2	0.1	0.2	0.2	Ampl.	0.2
	107.6	4.4	157.9	247.2	199.8	135.7	141.1	254.2	Sbd box	5.5
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
f	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		6.04380023521E+03		Apriori delay (usec)		6.04477087672E+03		Resid mbdelay (usec)	-1.89151E-03	+/- 3.8E-04
Sband delay (usec)		6.04380593972E+03		Apriori clock (usec)		-3.0880914E+00		Resid sbdelay (usec)	-9.64937E-01	+/- 3.0E-03
Phase delay (usec)		6.04477087753E+03		Apriori clockrate (us/s)		-7.3521750E-07		Resid phdelay (usec)	8.11515E-07	+/- 6.4E-07
Delay rate (us/s)		1.81059807176E+00		Apriori rate (us/s)		1.81059465155E+00		Resid rate (us/s)	3.42021E-06	+/- 4.6E-09
Total phase (deg)			5720.6	Apriori accel (us/s/s)		-2.83054207522E-05		Resid phase (deg)	5605.2	+/- 19.9

	RMS	Theor.	Amplitude	0.200 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
ph/seg (deg)	49.8	47.7	Search (1024X32)	0.183	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
amp/seg (%)	59.0	83.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	34.9	28.1	Inc. seg. avg.	0.196	Sample rate(MSamp/s): 64		dr window (ns/s)	-0.012	0.012
amp/frq (%)	37.1	49.1	Inc. frq. avg.	0.195	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite	ion window (TEC)	0.00	0.00

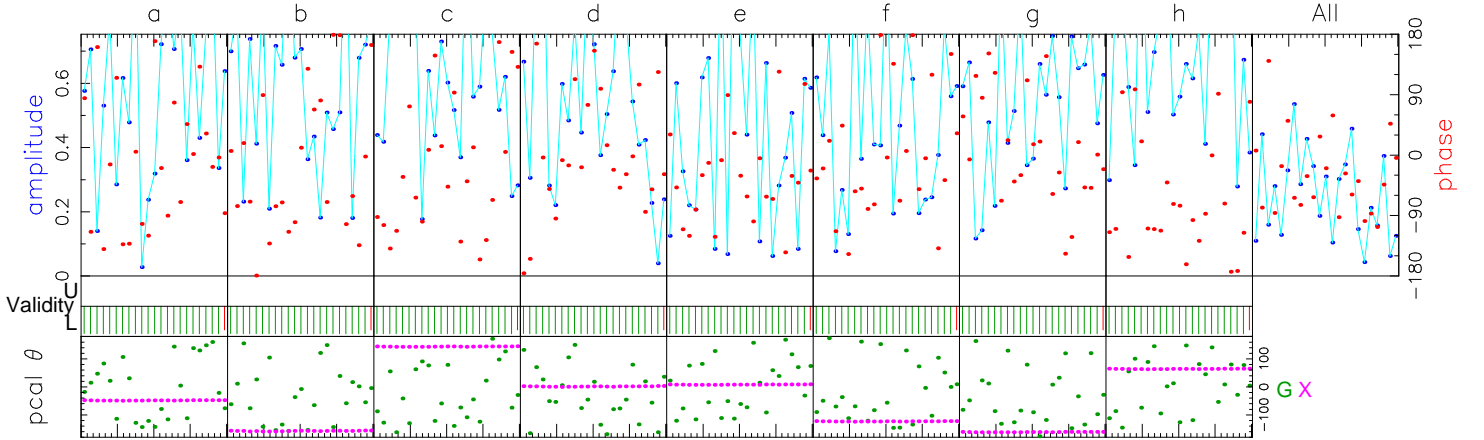
f: az 115.3 el 26.4 pa -51.5 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10444.275 -2710.332 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/fX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/fX.W.88.zpwwbc



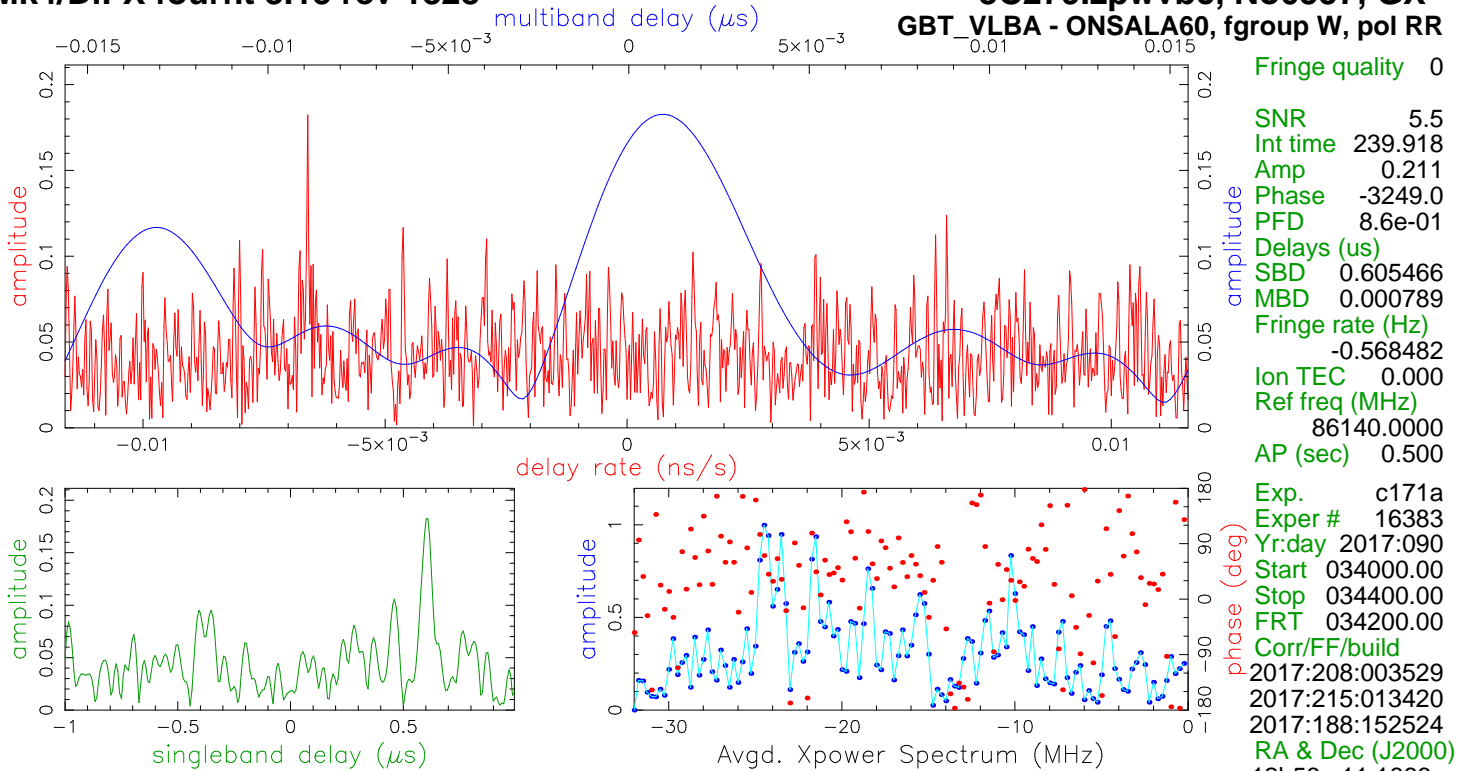


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

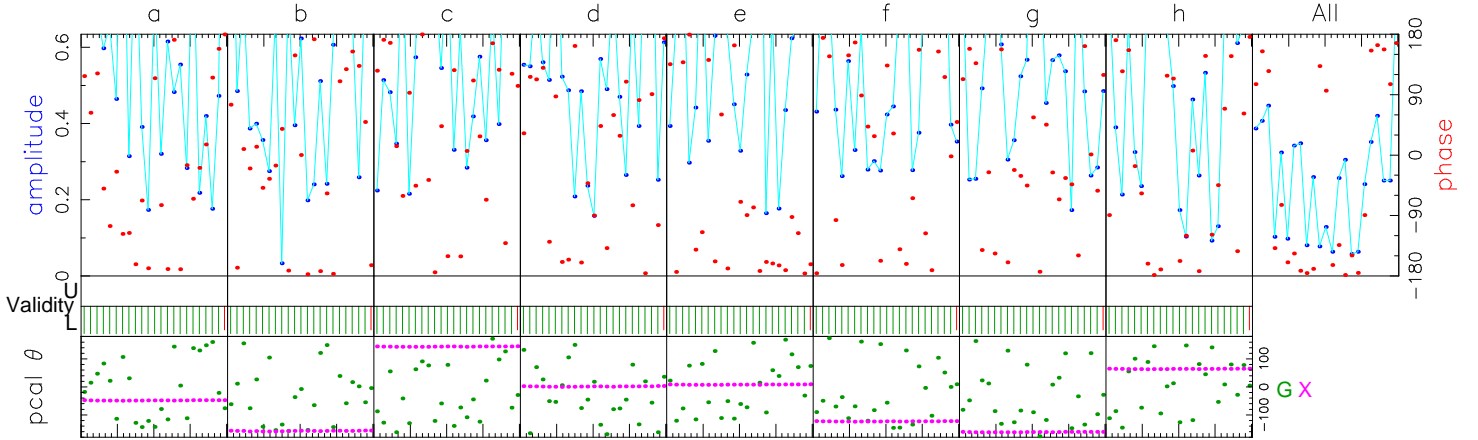


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-33.1	-90.9	-66.5	-0.1	-33.5	-35.1	-21.5	-101.4	Phase	-48.4
0.3	0.3	0.3	0.2	0.4	0.3	0.3	0.3	Ampl.	0.3
182.1	11.6	114.6	207.2	153.1	204.7	158.8	158.4	Sbd box	159.3
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
G -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
G W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	9.46898195231E+03	Apriori delay (usec)	9.46874953016E+03	Resid mbdelay (usec)	1.36722E-02	+/-	3.9E-04		
Sband delay (usec)	9.46898618566E+03	Apriori clock (usec)	-1.3600219E+01	Resid sbdelay (usec)	2.36656E-01	+/-	3.1E-03		
Phase delay (usec)	9.46874952860E+03	Apriori clockrate (us/s)	-8.2409909E-08	Resid phdelay (usec)	-1.56130E-06	+/-	6.6E-07		
Delay rate (us/s)	1.33854801444E+00	Apriori rate (us/s)	1.33853842500E+00	Resid rate (us/s)	9.58945E-06	+/-	4.8E-09		
Total phase (deg)		Apriori accel (us/s/s)	-4.78620620103E-05	Resid phase (deg)	-1308.4	+/-	20.5		

ph/seg (deg)	61.3	Theor.	49.2	Amplitude	0.251 +/- 0.045	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	81.8	Search (1024X32)	0.181	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	37.9	Inc. seg. avg.	0.252	Bits/sample:	2x2	SampCntNorm:	enabled	mb window (us)	-0.016	0.016	
amp/frq (%)	25.4	Inc. frq. avg.	0.260	Sample rate (MSamp/s):	64	Data rate (Mb/s):	1024	nlags:	128	t_cohere	infinite
				u,v (fr/asec)	-7739.547 -1564.655			ion window (TEC)	0.00	0.00	



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



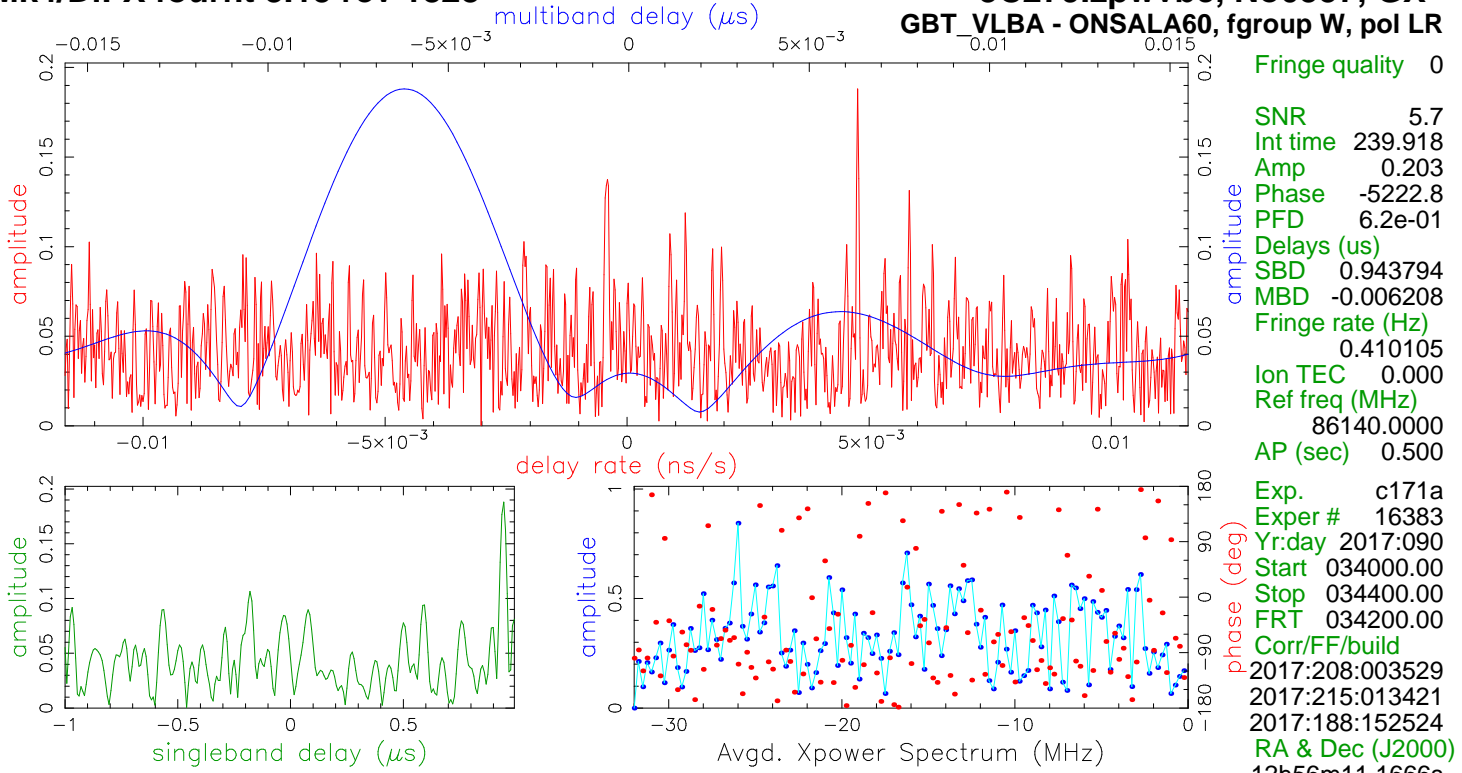
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-163.3	117.9	165.6	126.0	-160.0	165.7	-116.8	167.2	Phase	171.0
	0.2	0.2	0.2	0.2	0.5	0.3	0.1	0.3	Ampl.	0.2
	164.1	184.8	188.9	202.4	207.3	122.1	172.8	204.8	Sbd box	206.5
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	

Group delay (usec)(sbd)	9.46934406917E+03	Apriori delay (usec)	9.46874953016E+03	Resid mbdelay (usec)	7.89004E-04	+/-	3.9E-04
Sband delay (usec)	9.46935499616E+03	Apriori clock (usec)	-1.3600219E+01	Resid sbdelay (usec)	6.05466E-01	+/-	3.1E-03
Phase delay (usec)	9.46874953568E+03	Apriori clockrate (us/s)	-8.2409909E-08	Resid phdelay (usec)	5.51566E-06	+/-	6.7E-07
Delay rate (us/s)	1.33853182548E+00	Apriori rate (us/s)	1.33853842500E+00	Resid rate (us/s)	-6.59951E-06	+/-	4.8E-09
Total phase (deg)	-3418.8	Apriori accel (us/s/s)	-4.78620620103E-05	Resid phase (deg)	-3249.0	+/-	20.7

ph/seg (deg)	48.3	Theor.	49.7	Amplitude	0.211 +/- 0.038	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	93.7	Search (1024X32)	0.179	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	44.0	Inc. seg. avg.	0.214	Inc. seg. avg.	0.214	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	53.6	Inc. frq. avg.	0.212	Inc. frq. avg.	0.212	Sample rate (MSamp/s):	64	mb window (us)	-0.016 0.016
						Data rate (Mb/s):	1024	dr window (ns/s)	-0.012 0.012
						nlags:	128	ion window (TEC)	0.00 0.00
						t_cohere:	infinite		

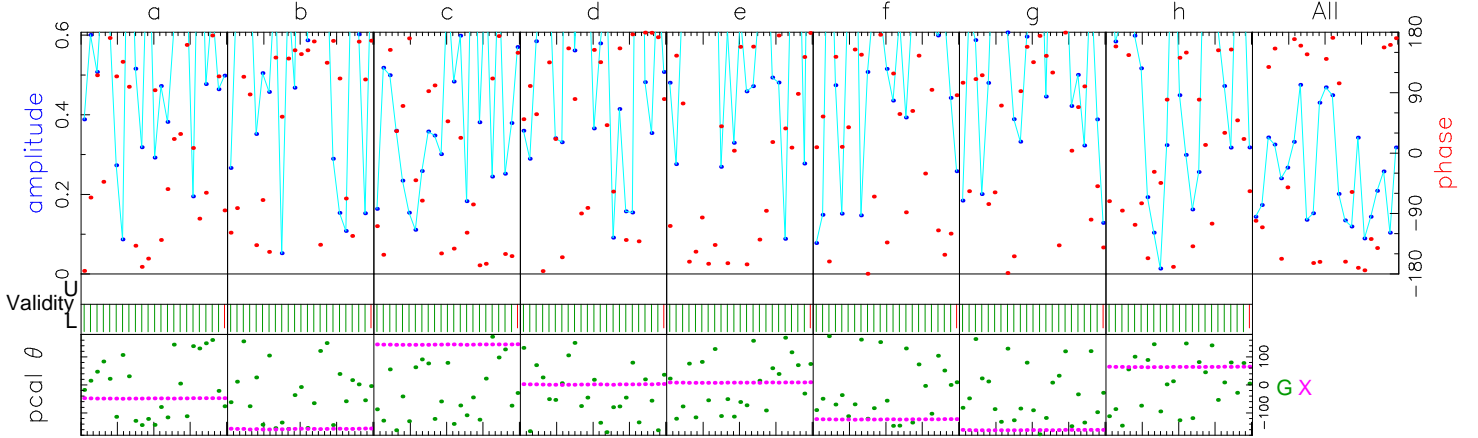
G: az 140.6 el 37.5 pa -29.7 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -7739.547 -1564.655 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/GX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/GX.W.110.zpwwbc



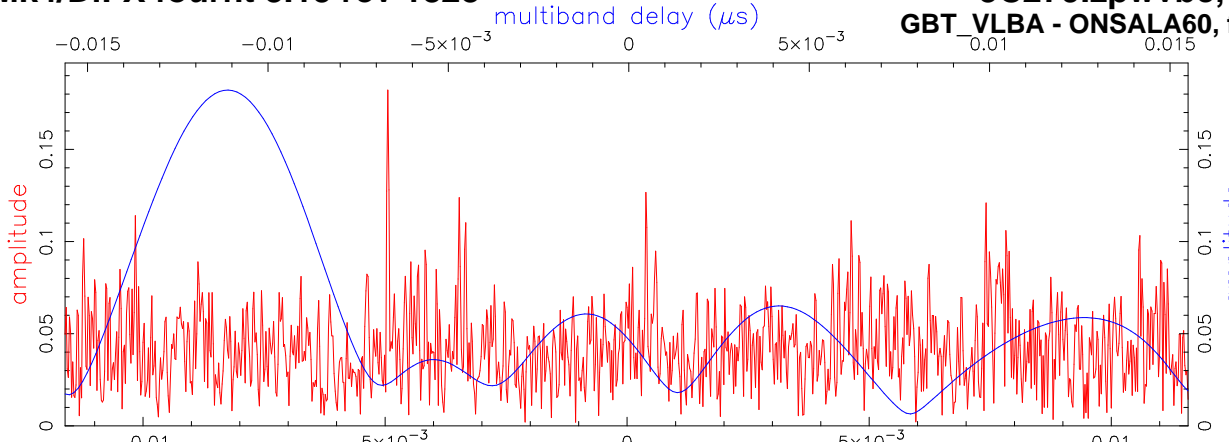
Fringe quality 0  
SNR 5.7  
Int time 239.918  
Amp 0.203  
Phase -5222.8  
PFD 6.2e-01  
Delays (us)  
SBD 0.943794  
MBD -0.006208  
Fringe rate (Hz)  
0.410105  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013421  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
Validity	0	0	0	0	0	0	0	0	0	0
pcal θ	0	0	0	0	0	0	0	0	0	0
Group delay (usec)(sbd)	-159.8	167.5	-174.6	167.3	-165.5	165.5	165.5	-152.5	-152.5	177.2
Sband delay (usec)	0.1	0.4	0.1	0.3	0.3	0.2	0.2	0.1	0.1	0.2
Phase delay (usec)	4.1	249.6	80.9	106.7	137.6	163.2	142.7	24.4	24.4	249.8
Delay rate (us/s)	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0
Total phase (deg)			-5392.6							
Apriori delay (usec)					9.46874953016E+03				-6.20812E-03	+/- 3.8E-04
Apriori clock (usec)					-1.3600219E+01				9.43794E-01	+/- 3.0E-03
Apriori clockrate (us/s)					-8.2409909E-08				5.71416E-06	+/- 6.5E-07
Apriori rate (us/s)					1.33853842500E+00				4.76092E-06	+/- 4.7E-09
Apriori accel (us/s/s)					-4.78620620103E-05				-5222.8	+/- 20.3
RMS	52.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6	48.6
Theor. Amplitude					0.203 +/- 0.036					
Search (1024X32)					0.185					
Interp.					0.000					
Inc. seg. avg.					0.201					
Inc. frq. avg.					0.185					
PCal mode:					MANUAL, MANUAL					
PCal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					64					
Data rate (Mb/s):					1024					
nlags:					128					
t_cohere:					infinite					
sb window (us)					-1.000					1.000
mb window (us)					-0.016					0.016
dr window (ns/s)					-0.012					0.012
ion window (TEC)					0.00					0.00

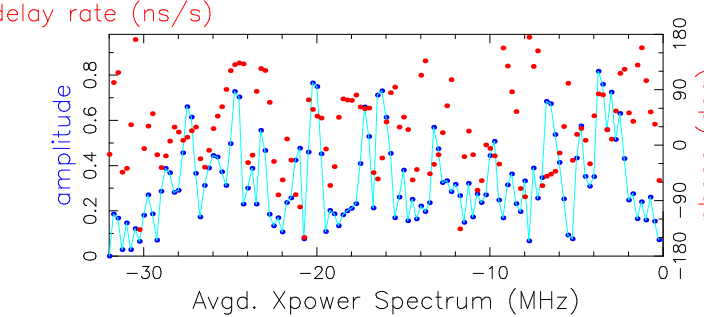
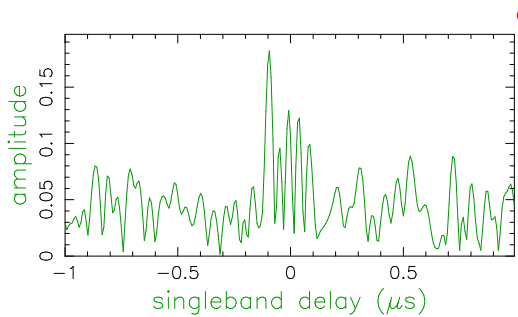
G: az 140.6 el 37.5 pa -29.7 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -7739.547 -1564.655 simultaneous interpolator  
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/GX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/GX.W.111.zpwwbc



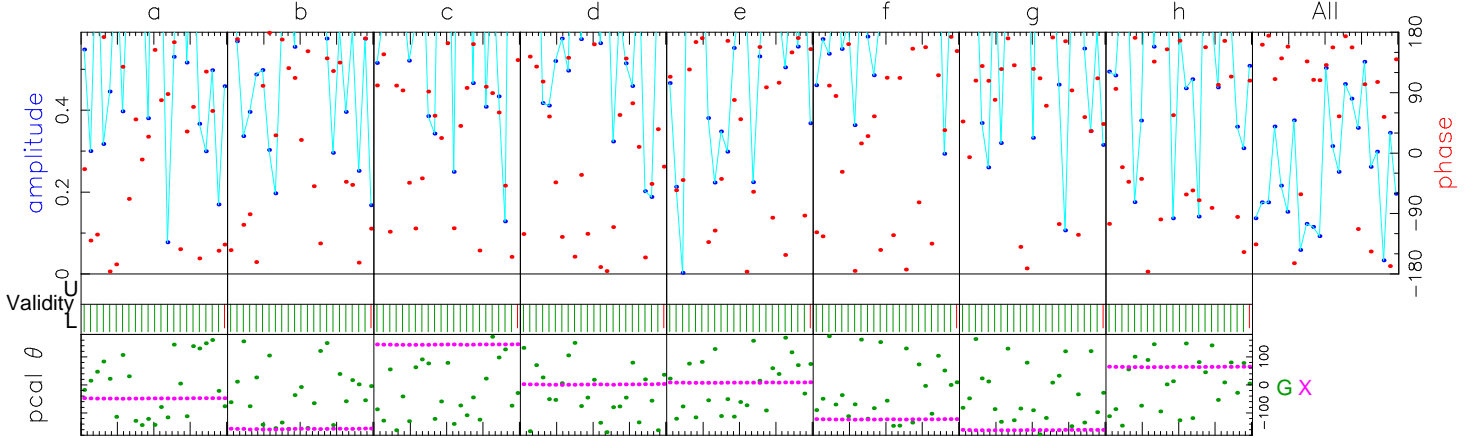
Fringe quality 0

SNR 5.5  
Int time 239.918  
Amp 0.197  
Phase 692.3  
PFD 9.4e-01  
Delays (us)  
SBD -0.094762  
MBD -0.011115  
Fringe rate (Hz)  
-0.426052  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013422  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



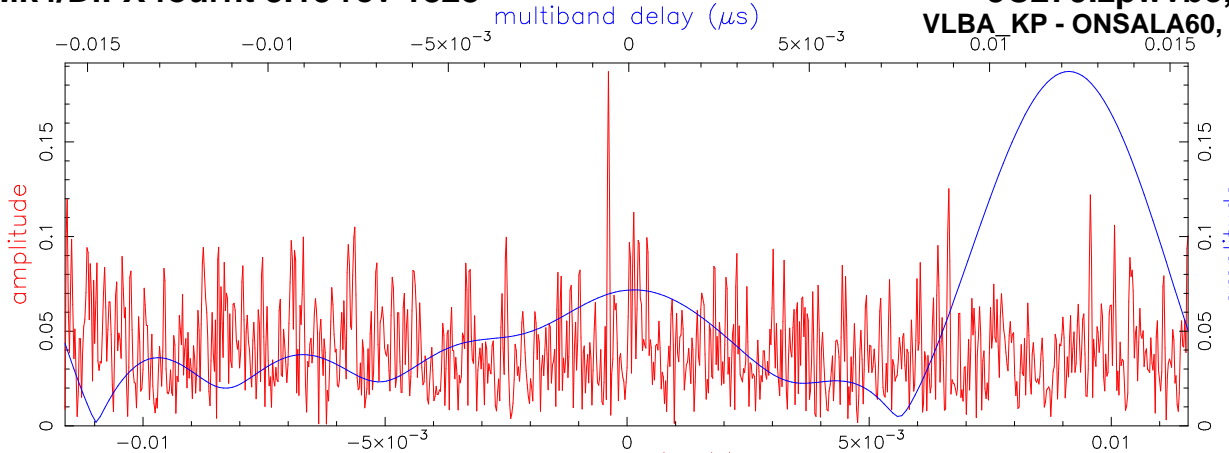
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	149.1	179.4	118.3	163.1	162.6	158.0	119.8	-165.7	Phase	152.3
	0.1	0.2	0.2	0.2	0.3	0.2	0.3	0.2	Ampl.	0.2
	9.8	123.1	166.3	38.7	102.1	135.0	116.9	165.8	Sbd box	116.9
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
G	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
G:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
G	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
G	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	

Group delay (usec)(sbd)	9.46864466481E+03	Apriori delay (usec)	9.46874953016E+03	Resid mbdelay (usec)	-1.11153E-02	+/-	4.0E-04
Sband delay (usec)	9.46865476766E+03	Apriori clock (usec)	-1.3600219E+01	Resid sbdelay (usec)	-9.47625E-02	+/-	3.2E-03
Phase delay (usec)	9.46874953507E+03	Apriori clockrate (us/s)	-8.2409909E-08	Resid phdelay (usec)	4.91021E-06	+/-	6.8E-07
Delay rate (us/s)	1.33853347895E+00	Apriori rate (us/s)	1.33853842500E+00	Resid rate (us/s)	-4.94604E-06	+/-	4.9E-09
Total phase (deg)	882.4	Apriori accel (us/s/s)	-4.78620620103E-05	Resid phase (deg)	692.3	+/-	21.0

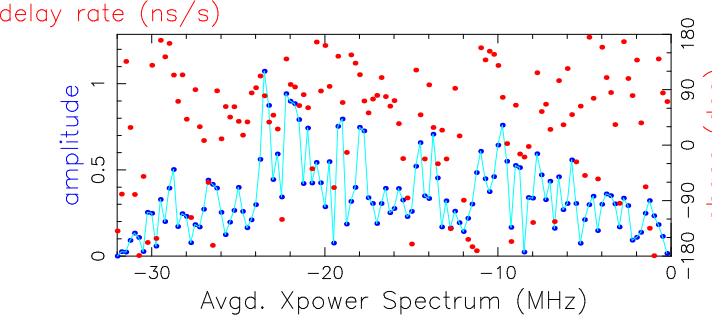
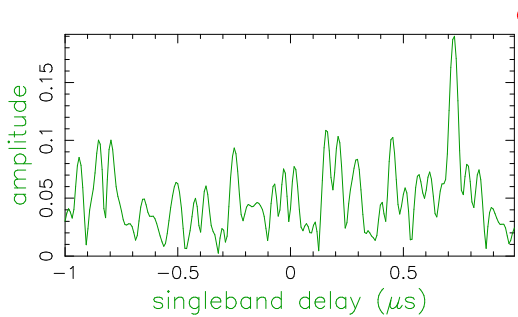
ph/seg (deg)	57.0	Theor.	50.3	Search (1024X32)	0.177	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	87.3	RMS	57.0	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000
ph/frq (deg)	28.8	57.0	50.3	Inc. seg. avg.	0.202	Bits/sample:	2x2	SampCntNorm:	enabled
amp/frq (%)	34.0	87.3	87.8	Inc. frq. avg.	0.192	Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016
		28.8	29.7			Data rate(Mb/s):	1024	dr window (ns/s)	-0.012 0.012
		34.0	51.8			nlags:	128	ion window (TEC)	0.00 0.00

G: az 140.6 el 37.5 pa -29.7 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -7739.547 -1564.655 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/GX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/GX.W.112.zpwwbc

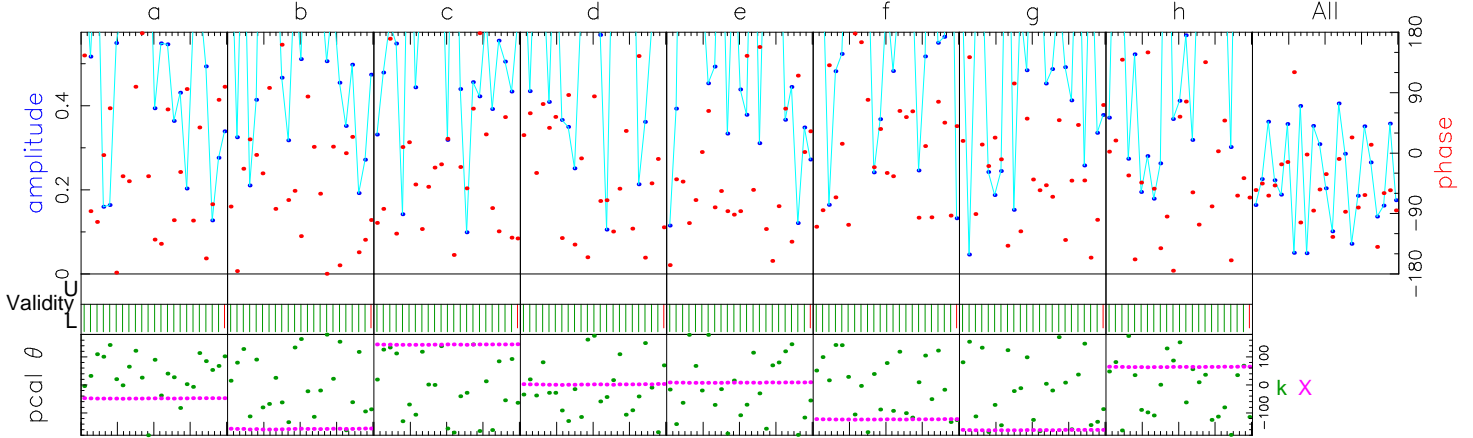


Fringe quality 0  
 SNR 5.7  
 Int time 239.918  
 Amp 0.192  
 Phase -4194.6  
 PFD 4.4e-01  
 Delays (us)  
 SBD 0.723654  
 MBD 0.012117  
 Fringe rate (Hz)  
 -0.032558  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



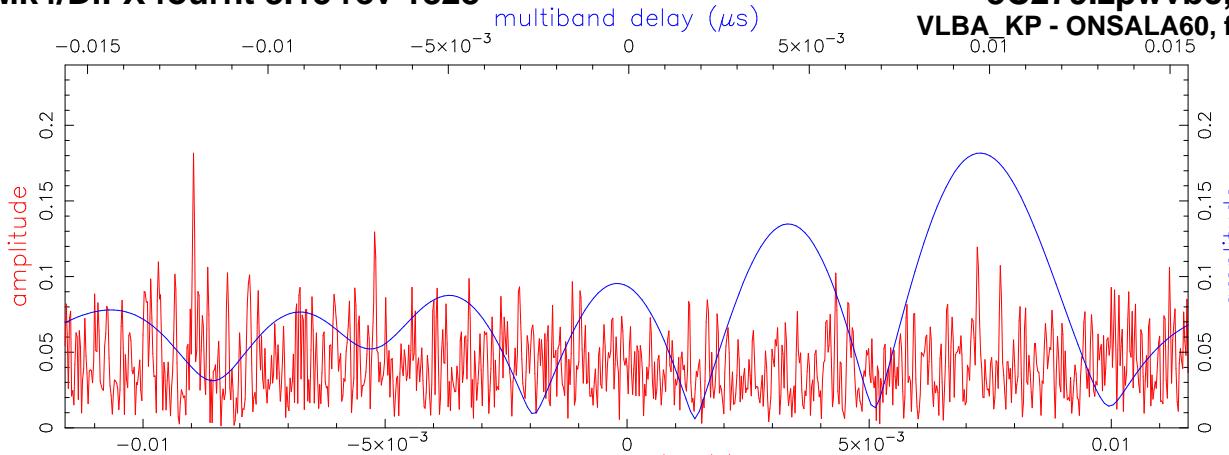
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013440  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-95.1	-38.0	-65.5	-22.3	-72.8	-42.7	-42.5	-58.6	Phase	-54.6
	0.1	0.2	0.2	0.2	0.4	0.2	0.2	0.2	Ampl.	0.2
	14.2	188.9	131.0	236.9	220.8	97.6	200.5	150.1	Sbd box	221.6
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.81715016946E+03		Apriori delay (usec)		3.81641930250E+03		Resid mbdelay (usec)		1.21170E-02	+/- 3.8E-04
Sband delay (usec)	3.81714295650E+03		Apriori clock (usec)		-5.4011650E+00		Resid sbdelay (usec)		7.23654E-01	+/- 3.0E-03
Phase delay (usec)	3.81641930073E+03		Apriori clockrate (us/s)		-3.1642907E-07		Resid phdelay (usec)		-1.76195E-06	+/- 6.4E-07
Delay rate (us/s)	1.88906117106E+00		Apriori rate (us/s)		1.88906154903E+00		Resid rate (us/s)		-3.77972E-07	+/- 4.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.66969601262E-05		Resid phase (deg)		-4194.6	+/- 20.0

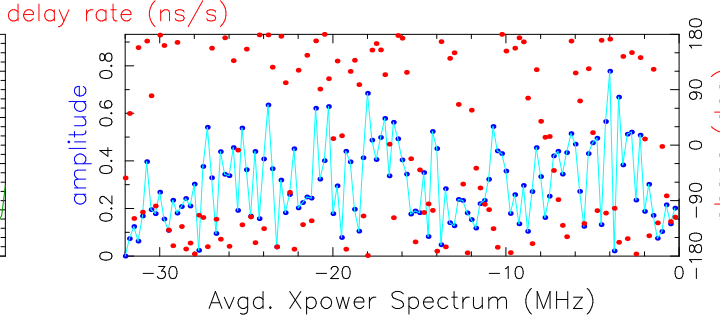
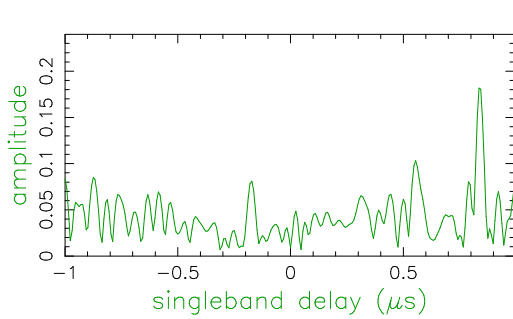
ph/seg (deg) 54.6 47.9 Search (1024X32) 0.181 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 62.0 83.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 24.9 28.2 Inc. seg. avg. 0.174 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 40.3 49.3 Inc. frq. avg. 0.177 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 k: az 110.7 el 19.9 pa -52.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10887.993 -2630.717 ion window (TEC) 0.00 0.00



Fringe quality 0

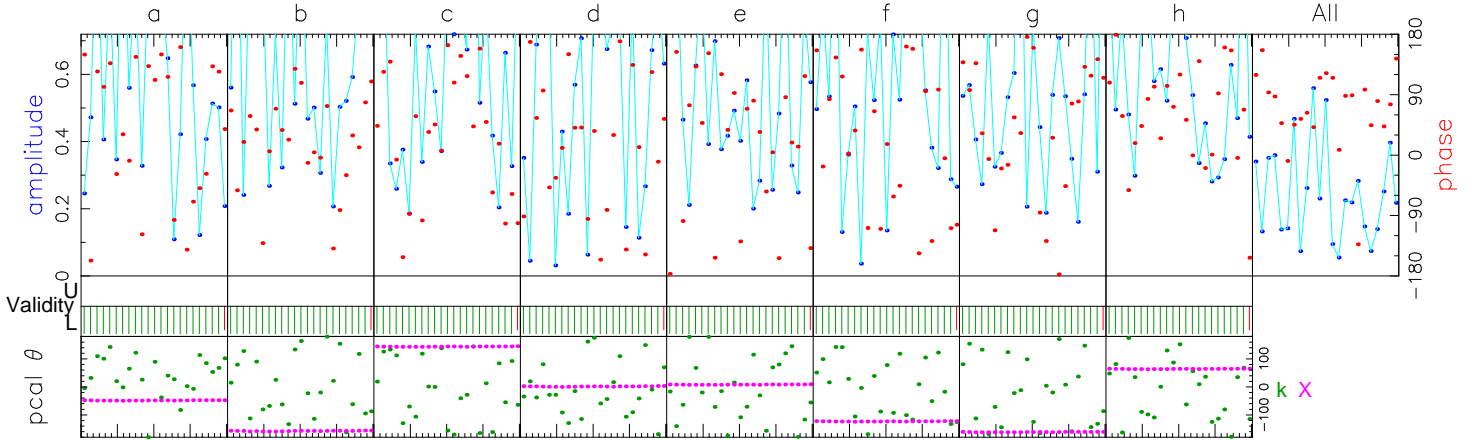
SNR 5.6  
Int time 239.918  
Amp 0.240  
Phase -4777.0  
PFD 8.2e-01  
Delays (us)  
SBD 0.839544  
MBD 0.009754  
Fringe rate (Hz)  
-0.771526  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013442  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



Avgd. Xpower Spectrum (MHz)

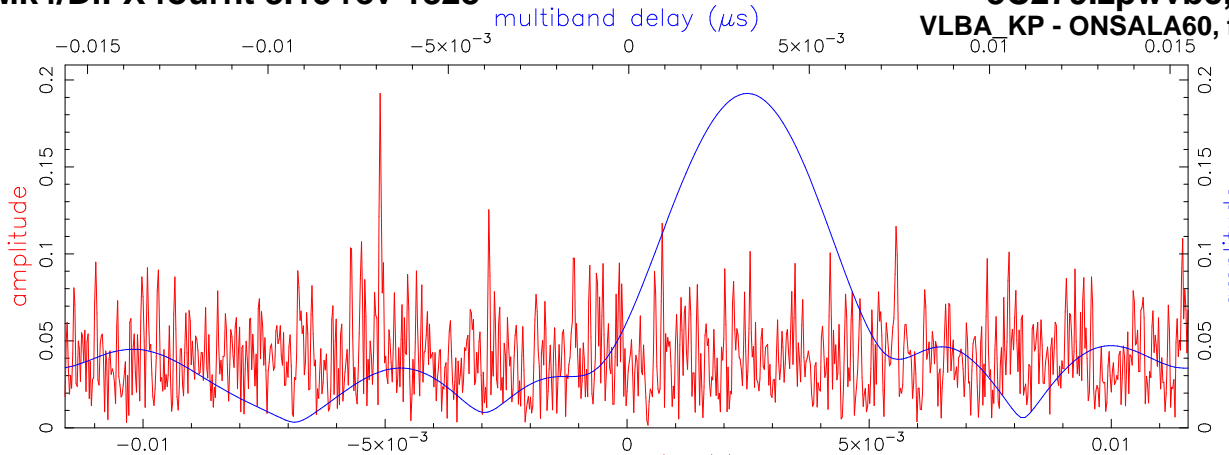
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	83.0	83.0
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Ampl.	0.3
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	Sbd box	236.5
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	ManI PC	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	PC amp	
									Chan ids	
									Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.81727280624E+03		Apriori delay (usec)	3.81641930250E+03	Resid mbdelay (usec)	9.75375E-03	+/-	3.9E-04		
Sband delay (usec)	3.81725884600E+03		Apriori clock (usec)	-5.4011650E+00	Resid sbdelay (usec)	8.39544E-01	+/-	3.1E-03		
Phase delay (usec)	3.81641930517E+03		Apriori clockrate (us/s)	-3.1642907E-07	Resid phdelay (usec)	2.67698E-06	+/-	6.7E-07		
Delay rate (us/s)	1.88905259237E+00		Apriori rate (us/s)	1.88906154903E+00	Resid rate (us/s)	-8.95666E-06	+/-	4.8E-09		
Total phase (deg)		-4518.9	Apriori accel (us/s/s)	-1.66969601262E-05	Resid phase (deg)	-4777.0	+/-	20.6		

ph/seg (deg) 50.1 49.5 Search (1024X32) 0.179 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.4 86.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 54.5 29.2 Inc. seg. avg. 0.233 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 56.1 50.9 Inc. frq. avg. 0.253 Data rate (Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 k: az 110.7 el 19.9 pa -52.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10887.993 -2630.717 ion window (TEC) 0.00 0.00

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/kX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/kX.W.130.zpwwbc simultaneous interpolator



Fringe quality 0

SNR 5.8

Int time 239.918

Amp 0.209

Phase -2211.5

PFD 4.0e-01

Delays (us)

SBD 0.415085

MBD 0.003291

Fringe rate (Hz)

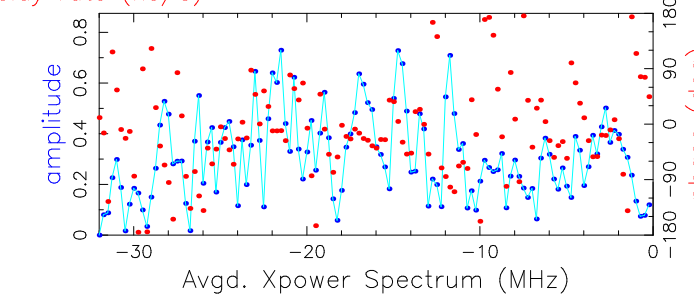
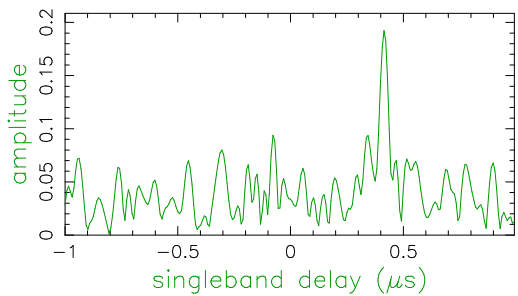
-0.438935

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.500



Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.00

Stop 034400.00

FRT 034200.00

Corr/FF/build

2017:208:003529

2017:215:013443

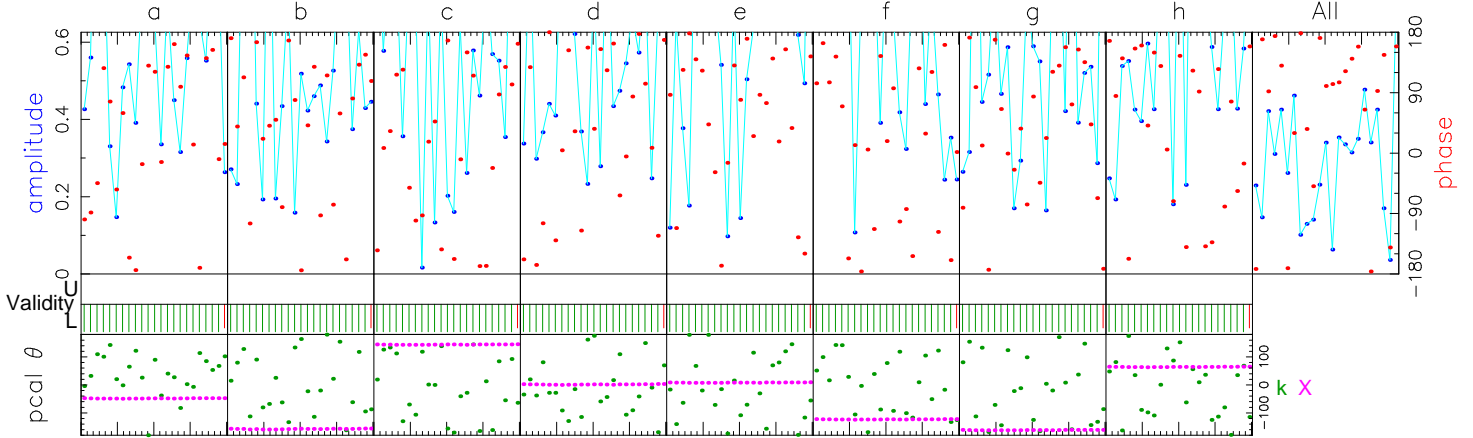
2017:188:152524

RA & Dec (J2000)

12h56m11.1666s

-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



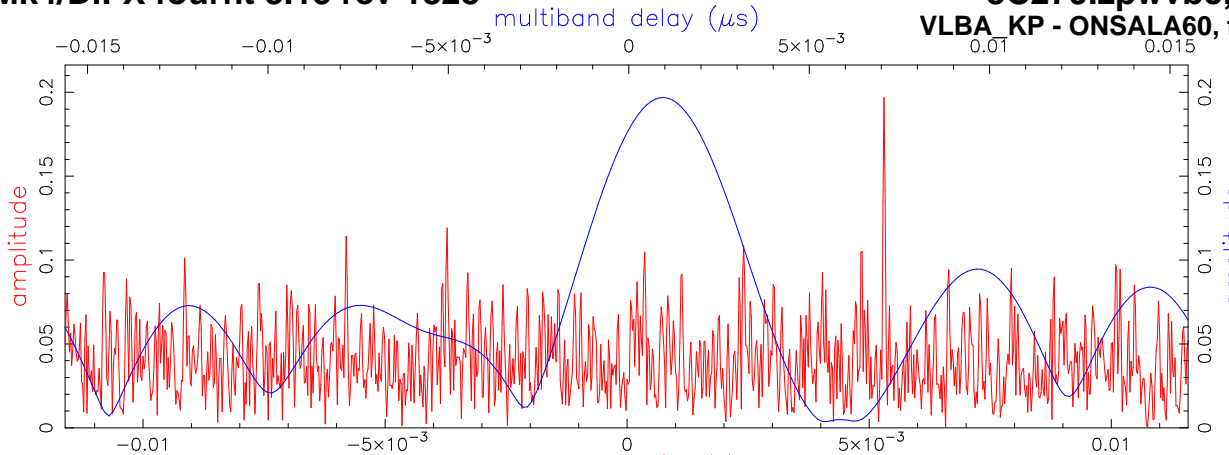
86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
123.7	133.7	130.8	141.0	116.5	137.5	111.5	138.6	Phase	128.5
0.1	0.2	0.1	0.2	0.3	0.3	0.2	0.3	Ampl.	0.2
114.3	188.4	216.9	109.9	244.4	193.7	72.8	125.9	Sbd box	182.1
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
k -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
k W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd)	3.81682884358E+03	Apriori delay (usec)	3.81641930250E+03	Resid mbdelay (usec)	3.29108E-03	+/-	3.8E-04
Sband delay (usec)	3.81683438800E+03	Apriori clock (usec)	-5.4011650E+00	Resid sbdelay (usec)	4.15085E-01	+/-	3.0E-03
Phase delay (usec)	3.81641930664E+03	Apriori clockrate (us/s)	-3.1642907E-07	Resid phdelay (usec)	4.14263E-06	+/-	6.4E-07
Delay rate (us/s)	1.88905645343E+00	Apriori rate (us/s)	1.88906154903E+00	Resid rate (us/s)	-5.09560E-06	+/-	4.6E-09
Total phase (deg)	-2313.4	Apriori accel (us/s/s)	-1.66969601262E-05	Resid phase (deg)	-2211.5	+/-	19.9

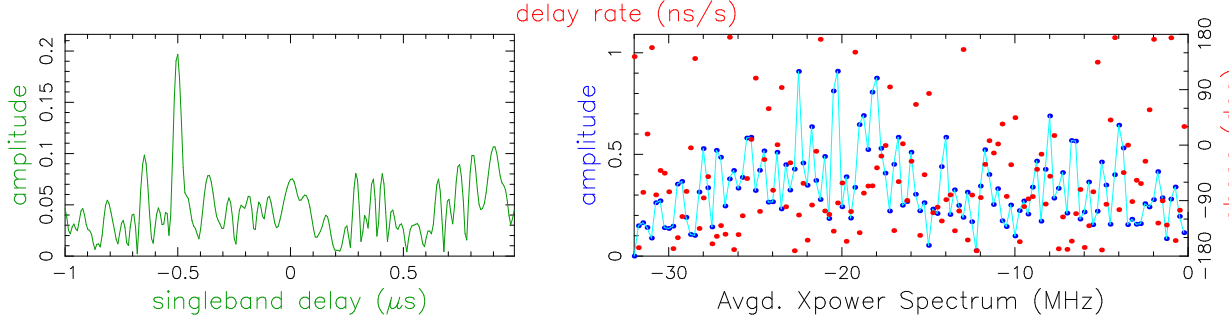
ph/seg (deg)	61.8	Theor.	47.7	Search (1024X32)	0.183	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	92.6		83.2	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
ph/frq (deg)	11.7		28.1	Inc. seg. avg.	0.234	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
amp/frq (%)	36.3		49.1	Inc. frq. avg.	0.189	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00

k: az 110.7 el 19.9 pa -52.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10887.993 -2630.717 simultaneous interpolator

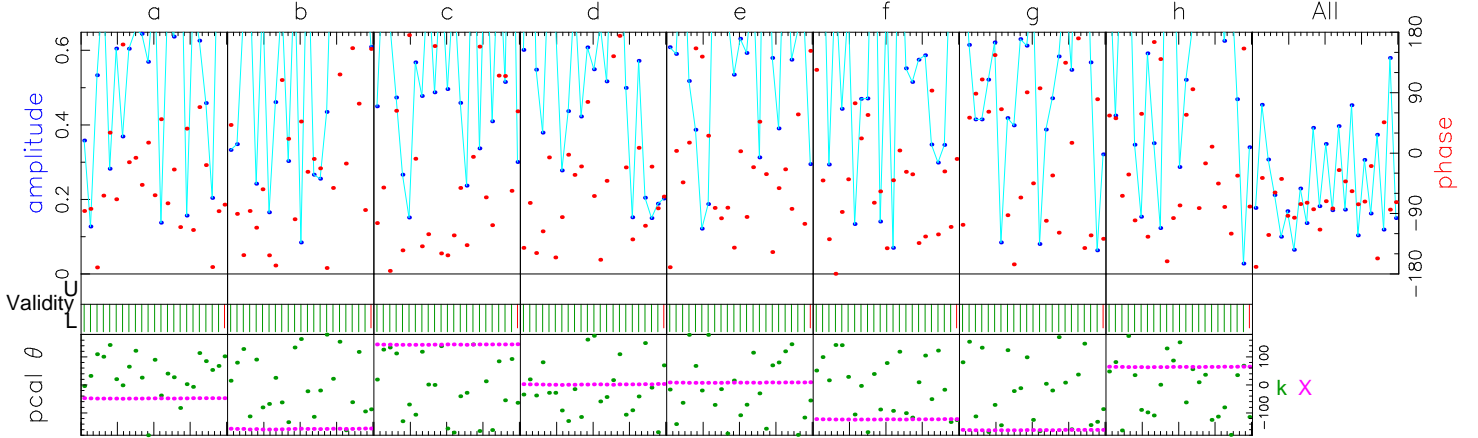
Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/kX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/kX.W.131.zpwwbc



Fringe quality 0  
SNR 5.9  
Int time 239.918  
Amp 0.216  
Phase 2806.0  
PFD 1.7e-01  
Delays (us)  
SBD -0.502328  
MBD 0.000885  
Fringe rate (Hz) 0.456580  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013444  
2017:188:152524  
RA & Dec (J2000) 12h56m11.1666s -5°47'21.525"



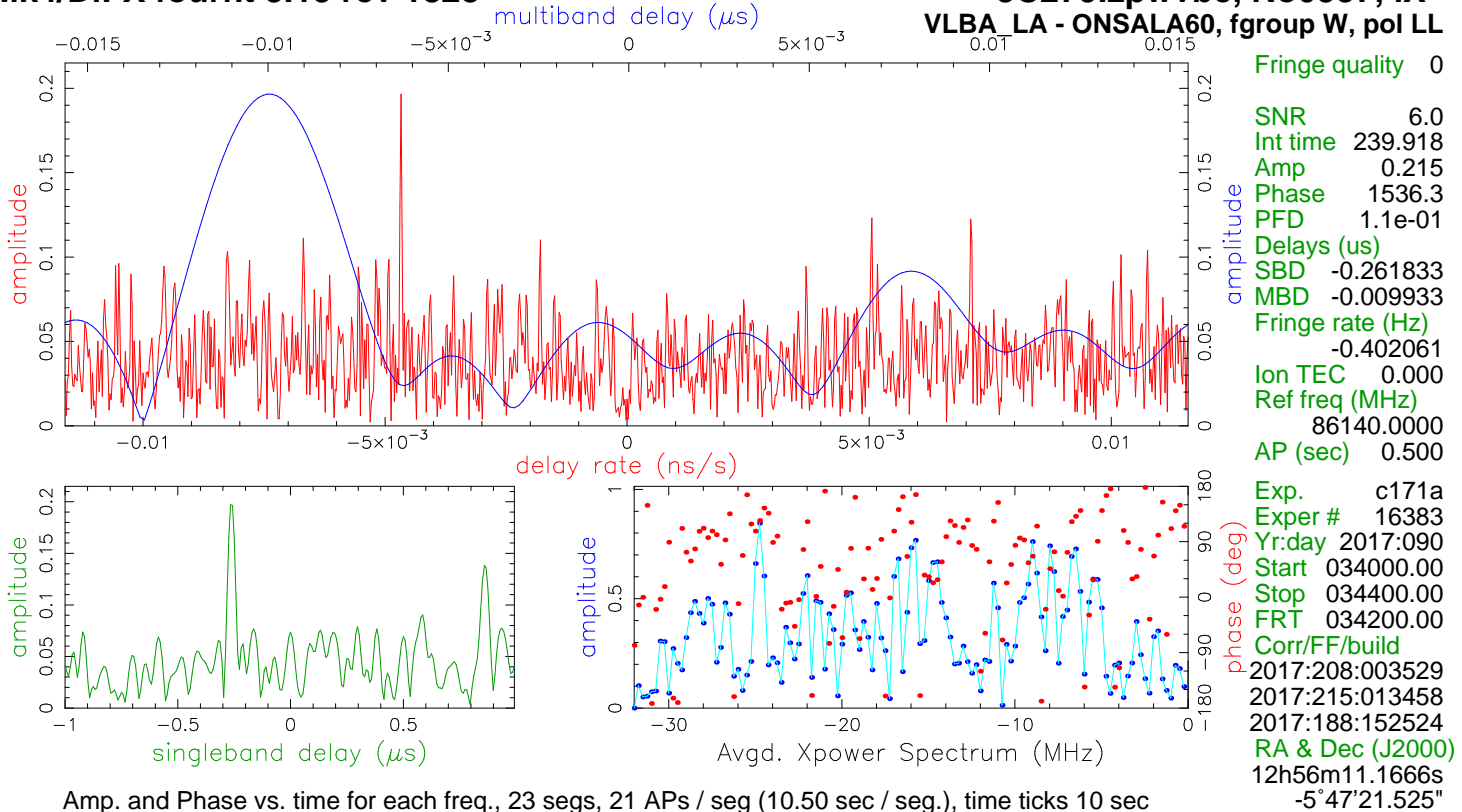
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



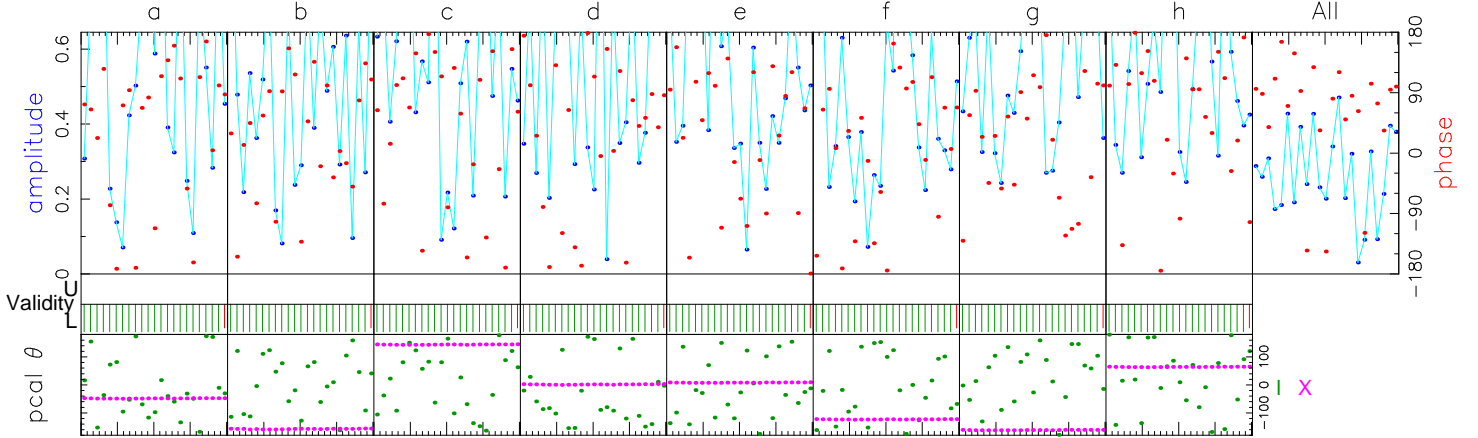
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-61.7	-91.3	-104.9	-84.7	-56.3	-62.3	-152.7	-55.7	Phase	-74.0
	0.4	0.1	0.2	0.2	0.4	0.2	0.1	0.3	Ampl.	0.2
	64.5	198.1	196.6	176.0	64.8	237.1	49.1	63.8	Sbd box	64.7
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
k	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
									Tracks	
Group delay (usec)(sbd)	3.81592018716E+03		Apriori delay (usec)		3.81641930250E+03		Resid mbdelay (usec)		8.84668E-04	+/- 3.7E-04
Sband delay (usec)	3.81591697450E+03		Apriori clock (usec)		-5.4011650E+00		Resid sbdelay (usec)		-5.02328E-01	+/- 2.9E-03
Phase delay (usec)	3.81641930011E+03		Apriori clockrate (us/s)		-3.1642907E-07		Resid phdelay (usec)		-2.38608E-06	+/- 6.2E-07
Delay rate (us/s)	1.88906684947E+00		Apriori rate (us/s)		1.88906154903E+00		Resid rate (us/s)		5.30045E-06	+/- 4.5E-09
Total phase (deg)	3064.1		Apriori accel (us/s/s)		-1.66969601262E-05		Resid phase (deg)		2806.0	+/- 19.3

ph/seg (deg) 44.3 46.3 Theor. Amplitude 0.216 +/- 0.036 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 73.4 80.8 Search (1024X32) 0.190 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.7 27.3 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 40.4 47.6 Inc. seg. avg. 0.207 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 k: az 110.7 el 19.9 pa -52.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10887.993 -2630.717 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/kX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/kX.W.132.zpwwbc simultaneous interpolator

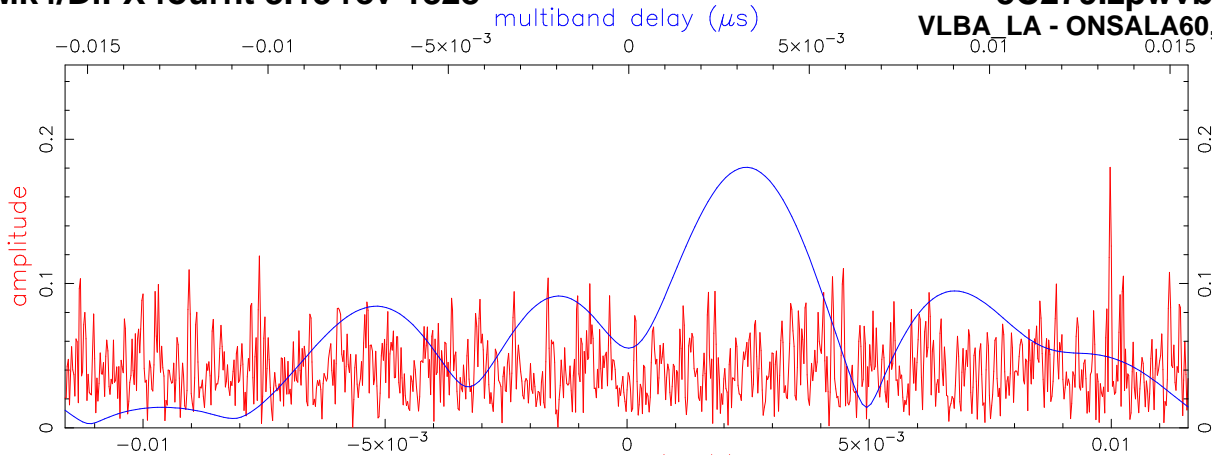




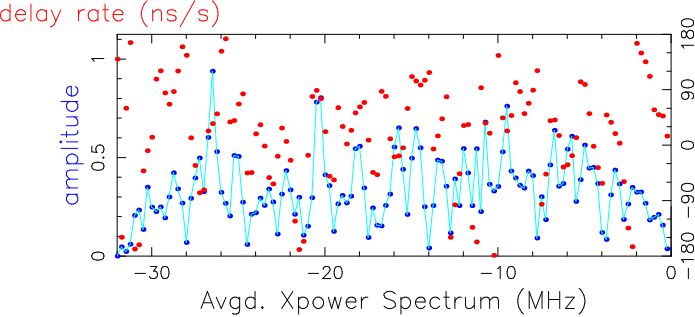
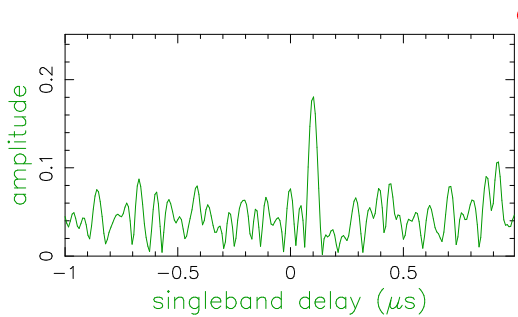
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	4.70300608818E+03		Apriori delay (usec)	4.70326602088E+03		Resid mbdelay (usec)	-9.93271E-03	+/-	3.6E-04	
Sband delay (usec)	4.70300418738E+03		Apriori clock (usec)	-6.6087532E+00		Resid sbdelay (usec)	-2.61833E-01	+/-	2.9E-03	
Phase delay (usec)	4.70326602399E+03		Apriori clockrate (us/s)	-4.1502300E-07		Resid phdelay (usec)	3.10692E-06	+/-	6.1E-07	
Delay rate (us/s)	1.77830096113E+00		Apriori rate (us/s)	1.77830562866E+00		Resid rate (us/s)	-4.66753E-06	+/-	4.4E-09	
Total phase (deg)		1550.3	Apriori accel (us/s/s)	-2.20583863775E-05		Resid phase (deg)	1536.3	+/-	19.0	
RMS	57.0	45.6	Amplitude	0.215 +/- 0.036		Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
ph/seg (deg)	66.3	79.7	Search (1024X32)	0.190		Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
amp/seg (%)	28.2	26.9	Interp.	0.000		Bits/sample:	2x2	SampCntNorm:	enabled	
ph/frq (deg)	31.3	47.0	Inc. seg. avg.	0.218		Sample rate(MSamp/s):	64	mb window (us)	-0.016 0.016	
amp/frq (%)			Inc. frq. avg.	0.204		Data rate(Mb/s):	1024	dr window (ns/s)	-0.012 0.012	
								ion window (TEC)	0.00 0.00	
								nlags:	128 t_cohere	infinite

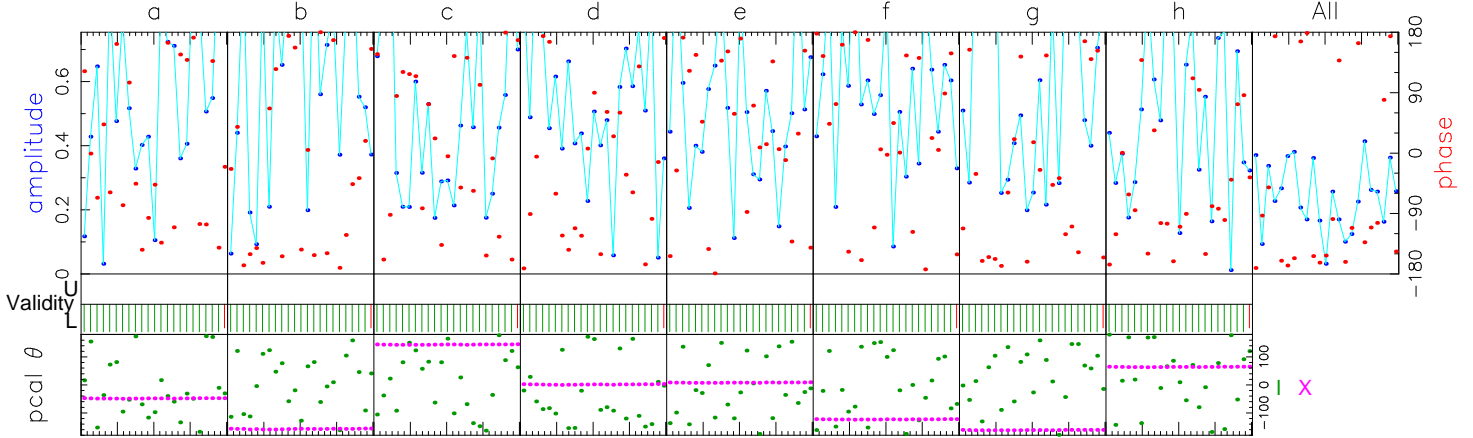


Fringe quality 0  
 SNR 5.4  
 Int time 239.918  
 Amp 0.251  
 Phase -693.7  
 PFD 9.5e-01  
 Delays (us)  
 SBD 0.099136  
 MBD 0.003217  
 Fringe rate (Hz)  
 0.859613  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



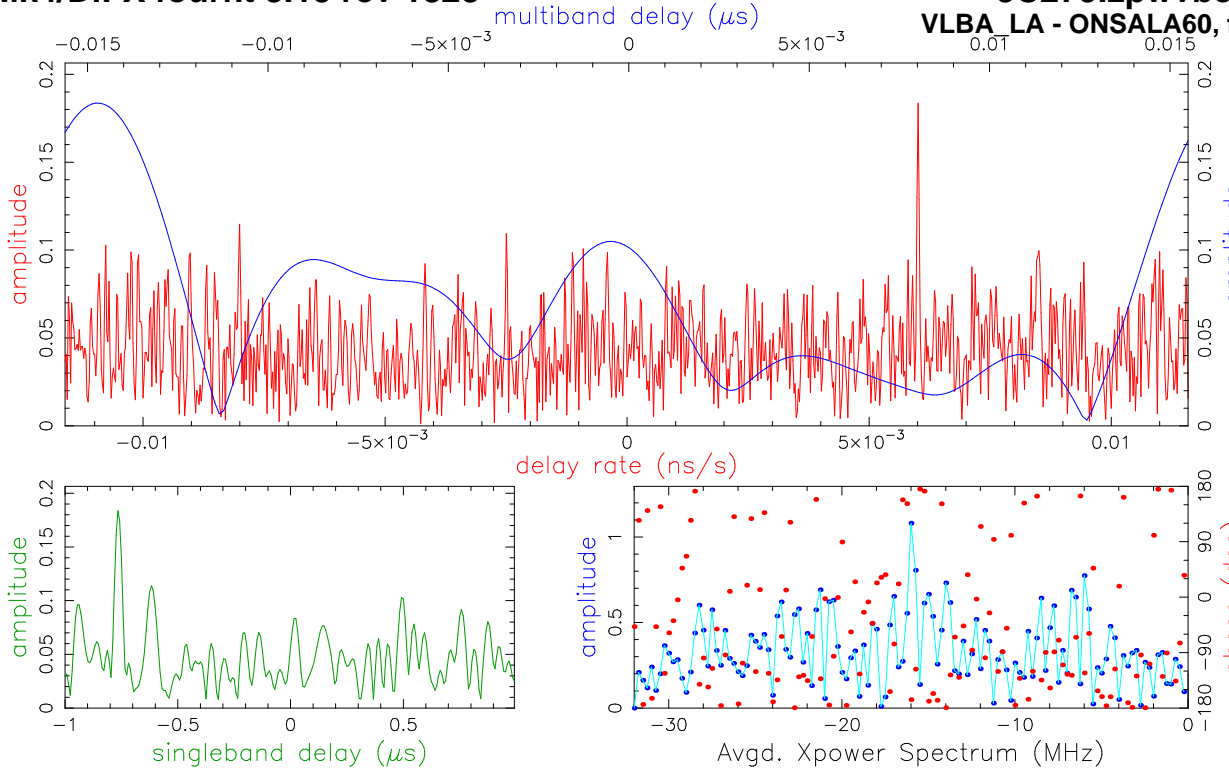
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013459  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



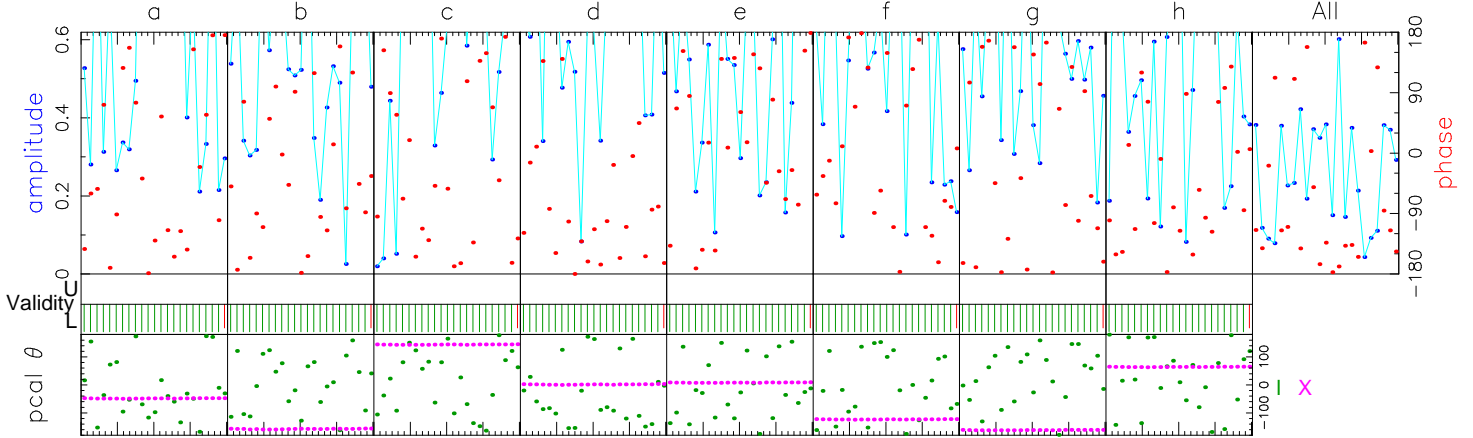
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-124.2	-164.0	-178.8	-127.6	155.0	155.5	-135.5	-127.0	Phase	-153.7
	0.3	0.5	0.3	0.2	0.2	0.2	0.4	0.2	Ampl.	0.3
	141.4	148.7	240.2	254.8	64.5	235.5	141.2	19.5	Sbd box	141.7
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	4.70336298775E+03		Apriori delay (usec)		4.70326602088E+03		Resid mbdelay (usec)		3.21687E-03	+/- 4.0E-04
Sband delay (usec)	4.70336515688E+03		Apriori clock (usec)		-6.6087532E+00		Resid sbdelay (usec)		9.91360E-02	+/- 3.2E-03
Phase delay (usec)	4.70326601593E+03		Apriori clockrate (us/s)		-4.1502300E-07		Resid phdelay (usec)		-4.95492E-06	+/- 6.8E-07
Delay rate (us/s)	1.77831560791E+00		Apriori rate (us/s)		1.77830562866E+00		Resid rate (us/s)		9.97925E-06	+/- 4.9E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.20583863775E-05		Resid phase (deg)		-693.7	+/- 21.1
	RMS	Theor.	Amplitude	0.251 +/- 0.046	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	47.6	50.5	Search (1024X32)	0.176	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000	1.000
amp/seg (%)	66.1	88.1	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled		-0.016	0.016
ph/frq (deg)	37.7	29.8	Inc. seg. avg.	0.242	Sample rate(MSamp/s): 64		dr window (ns/s)		-0.012	0.012
amp/frq (%)	43.8	52.0	Inc. frq. avg.	0.251	Data rate(Mb/s): 1024		ion window (TEC)		0.00	0.00
					nlags: 128 t_cohere infinite					

I: az 115.7 el 22.5 pa -47.1 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10253.815 -2099.588 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/IX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/IX.W.146.zpwwbc



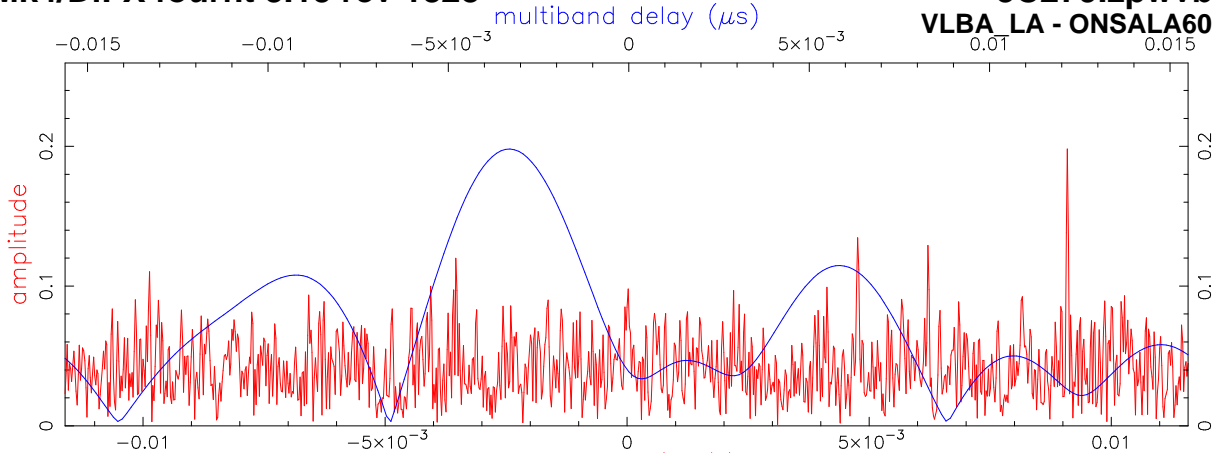
Fringe quality 0  
 SNR 5.5  
 Int time 239.918  
 Amp 0.206  
 Phase 4183.3  
 PFD 8.6e-01  
 Delays (us)  
 SBD -0.763883  
 MBD -0.014710  
 Fringe rate (Hz)  
 0.517415  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013500  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All	
	-141.3	-115.2	-151.3	-101.3	126.5	-131.0	-168.6	-111.3		-136.7	
	0.2	0.1	0.4	0.3	0.1	0.2	0.3	0.3	Ampl.	0.2	
	190.3	206.3	31.7	174.0	128.8	9.7	41.3	193.1	Sbd box	31.2	
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used		
I	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC		
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
X	1000	1000	1000	1000	1000	1000	1000	1000			
I	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks		
									Chan ids		
									Tracks		
Group delay (usec)(sbd)	4.70250131134E+03		Apriori delay (usec)		4.70326602088E+03		Resid mbdelay (usec)		-1.47095E-02	+/- 3.9E-04	
Sband delay (usec)	4.70250213788E+03		Apriori clock (usec)		-6.6087532E+00		Resid sbdelay (usec)		-7.63883E-01	+/- 3.1E-03	
Phase delay (usec)	4.70326601647E+03		Apriori clockrate (us/s)		-4.1502300E-07		Resid phdelay (usec)		-4.40878E-06	+/- 6.7E-07	
Delay rate (us/s)	1.77831163534E+00		Apriori rate (us/s)		1.77830562866E+00		Resid rate (us/s)		6.00668E-06	+/- 4.8E-09	
Total phase (deg)	4197.2		Apriori accel (us/s/s)		-2.20583863775E-05		Resid phase (deg)		4183.3	+/- 20.7	
RMS	63.3	49.7	Amplitude	0.206 +/- 0.037		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5			
ph/seg (deg)	87.3	86.8	Search (1024X32)	0.180		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
amp/seg (%)	46.6	29.3	Interp.	0.000		Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.016	0.016
ph/frq (deg)	50.3	51.2	Inc. seg. avg.	0.212		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.012	0.012	
amp/frq (%)			Inc. frq. avg.	0.207		Data rate(Mb/s): 1024		ion window (TEC)	0.00	0.00	
						nlags: 128 t_cohere infinite					

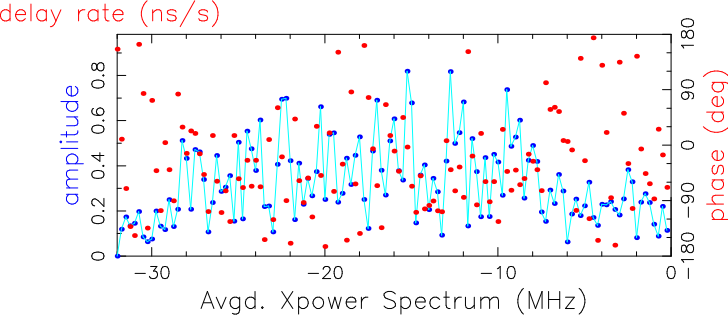
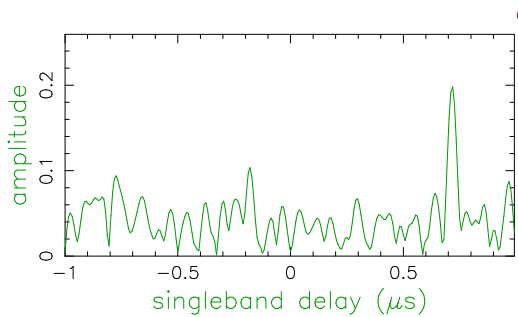
I: az 115.7 el 22.5 pa -47.1 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10253.815 -2099.588 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/IX..zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/IX.W.147.zpwwbc



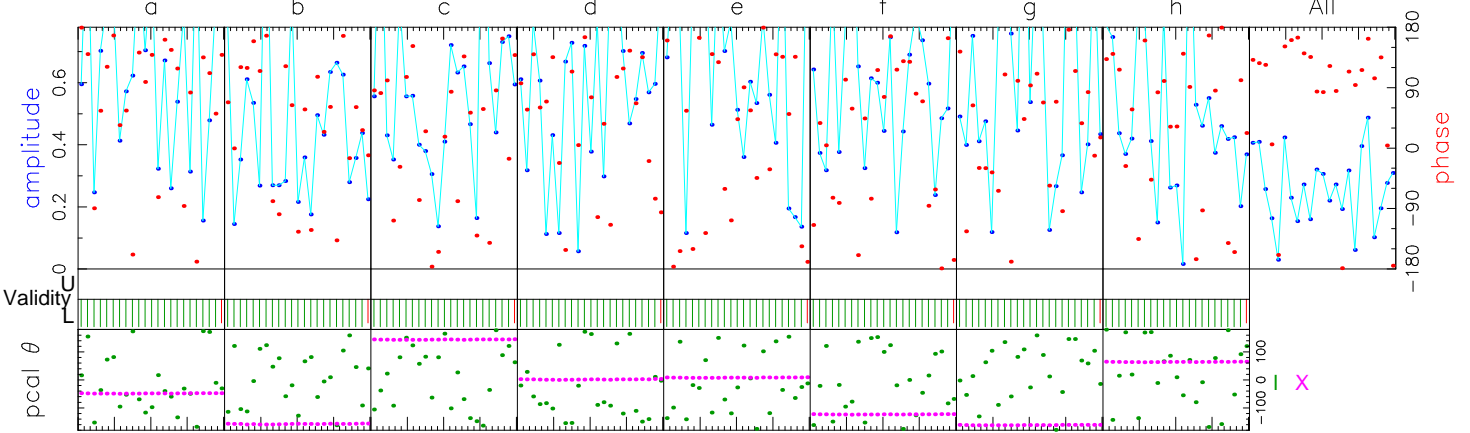
Fringe quality 0

SNR 6.0  
Int time 239.918  
Amp 0.260  
Phase -4013.1  
PFD 1.5e-01  
Delays (us)  
SBD 0.716655  
MBD -0.003306  
Fringe rate (Hz) 0.782382  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013501  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

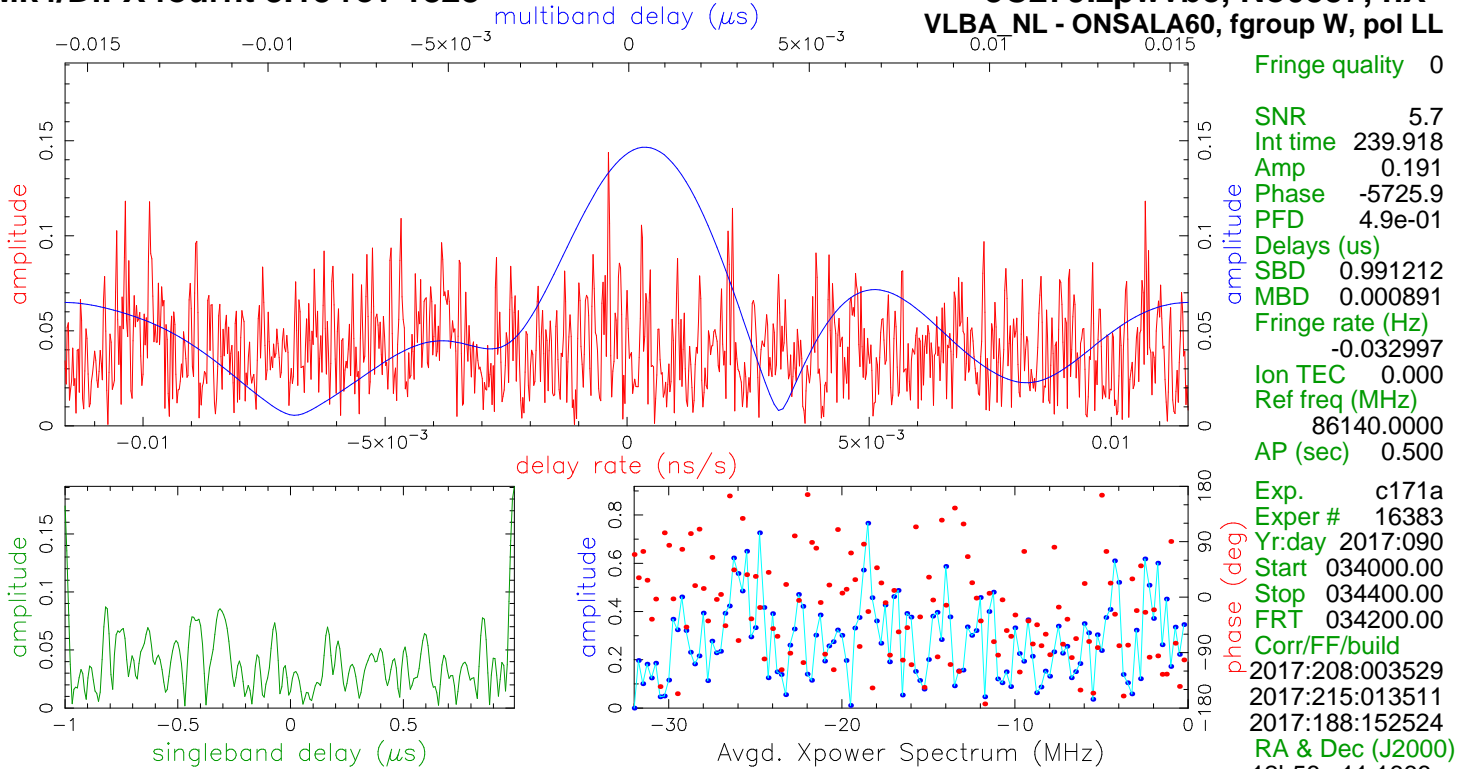


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

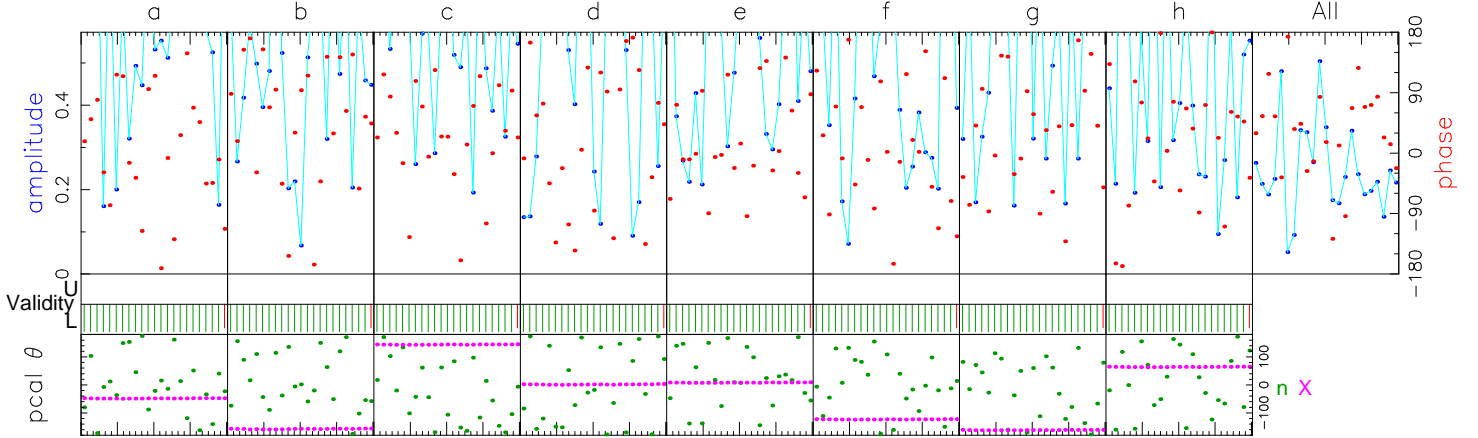


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
136.4	106.9	84.7	132.5	177.8	129.4	81.6	137.1	Phase	126.9
0.5	0.2	0.3	0.2	0.4	0.2	0.3	0.3	Ampl.	0.3
168.2	134.8	228.0	152.9	220.0	238.3	95.3	23.2	Sbd box	220.7
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
I -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
I:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
I W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	4.70398146524E+03		Apriori delay (usec)	4.70326602088E+03		Resid mbdelay (usec)	-3.30565E-03	+/-	3.6E-04
Sband delay (usec)	4.70398267588E+03		Apriori clock (usec)	-6.6087532E+00		Resid sbdelay (usec)	7.16655E-01	+/-	2.9E-03
Phase delay (usec)	4.70326602497E+03		Apriori clockrate (us/s)	-4.1502300E-07		Resid phdelay (usec)	4.09338E-06	+/-	6.2E-07
Delay rate (us/s)	1.77831471134E+00		Apriori rate (us/s)	1.77830562866E+00		Resid rate (us/s)	9.08268E-06	+/-	4.5E-09
Total phase (deg)		-3999.1	Apriori accel (us/s/s)	-2.20583863775E-05		Resid phase (deg)	-4013.1	+/-	19.2

ph/seg (deg) 48.4 46.1 Search (1024X32) 0.180 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 65.9 80.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 34.3 27.2 Inc. seg. avg. 0.255 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 40.2 47.4 Inc. frq. avg. 0.270 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 I: az 115.7 el 22.5 pa -47.1 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -10253.815 -2099.588 ion window (TEC) 0.00 0.00



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

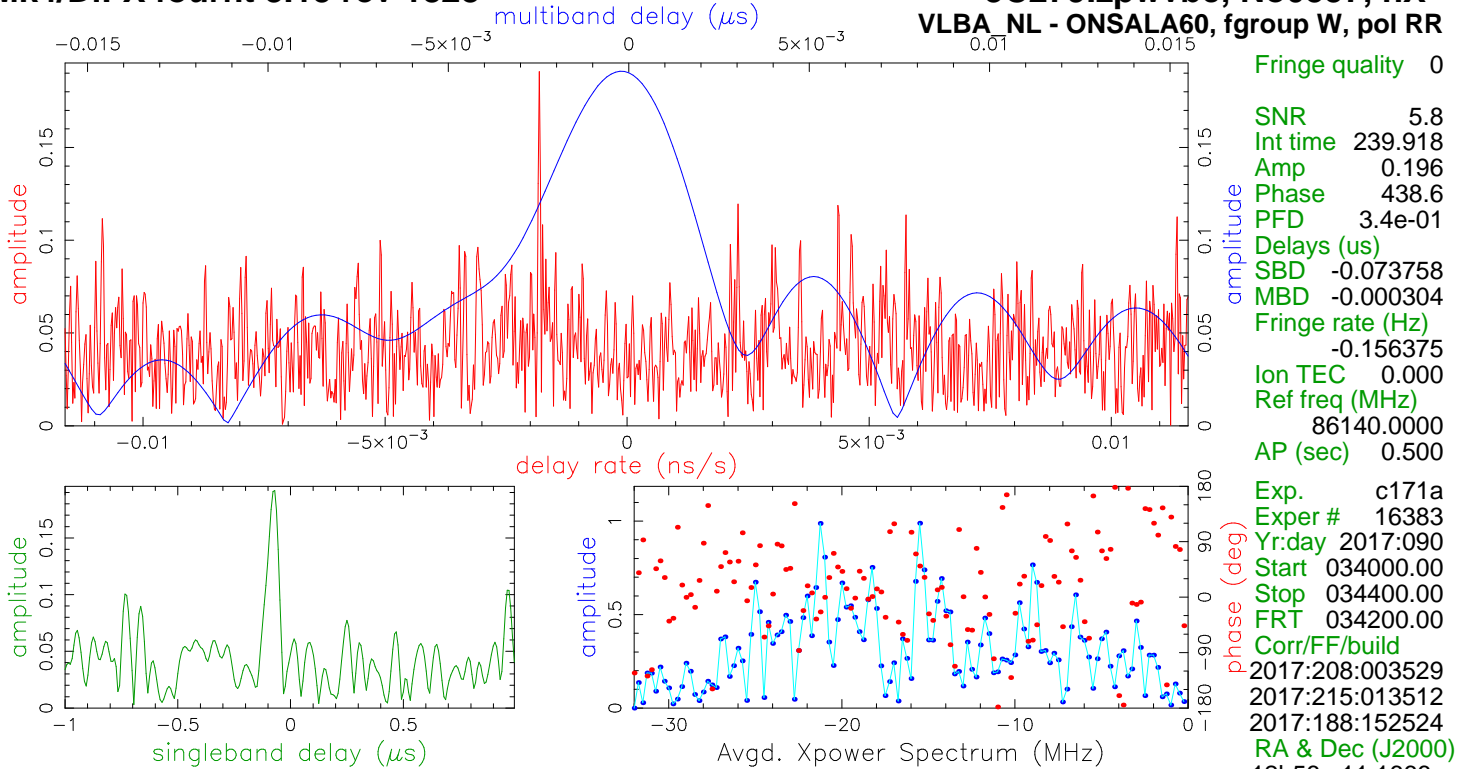


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
39.0	79.4	40.5	-48.1	-9.0	31.8	38.3	32.6	32.6	Phase	34.1
0.2	0.2	0.3	0.0	0.3	0.1	0.2	0.1	0.1	Ampl.	0.1
19.3	29.2	236.3	77.7	66.1	46.4	49.0	203.8	203.8	Sbd box	255.9
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	6.81251346253E+03		Apriori delay (usec)	6.81151257194E+03		Resid mbdelay (usec)	8.90592E-04	+/-	3.8E-04	
Sband delay (usec)	6.81250378444E+03		Apriori clock (usec)	3.0355878E+00		Resid sbdelay (usec)	9.91212E-01	+/-	3.0E-03	
Phase delay (usec)	6.81151257304E+03		Apriori clockrate (us/s)	-1.7463407E-08		Resid phdelay (usec)	1.10031E-06	+/-	6.5E-07	
Delay rate (us/s)	1.50090216909E+00		Apriori rate (us/s)	1.50090255215E+00		Resid rate (us/s)	-3.83061E-07	+/-	4.7E-09	
Total phase (deg)		-5745.0	Apriori accel (us/s/s)	-3.41586214044E-05		Resid phase (deg)	-5725.9	+/-	20.0	

	RMS	Theor.	Amplitude	0.191 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	66.8	48.1	Search (1024X32)	0.189	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	62.5	83.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
ph/frq (deg)	42.3	28.3	Inc. seg. avg.	0.182	Sample rate(MSamp/s): 64		ion window (TEC)	0.00	0.00
amp/frq (%)	48.4	49.5	Inc. frq. avg.	0.143	Data rate(Mb/s): 1024	nlags: 128 t_cohere infinite			

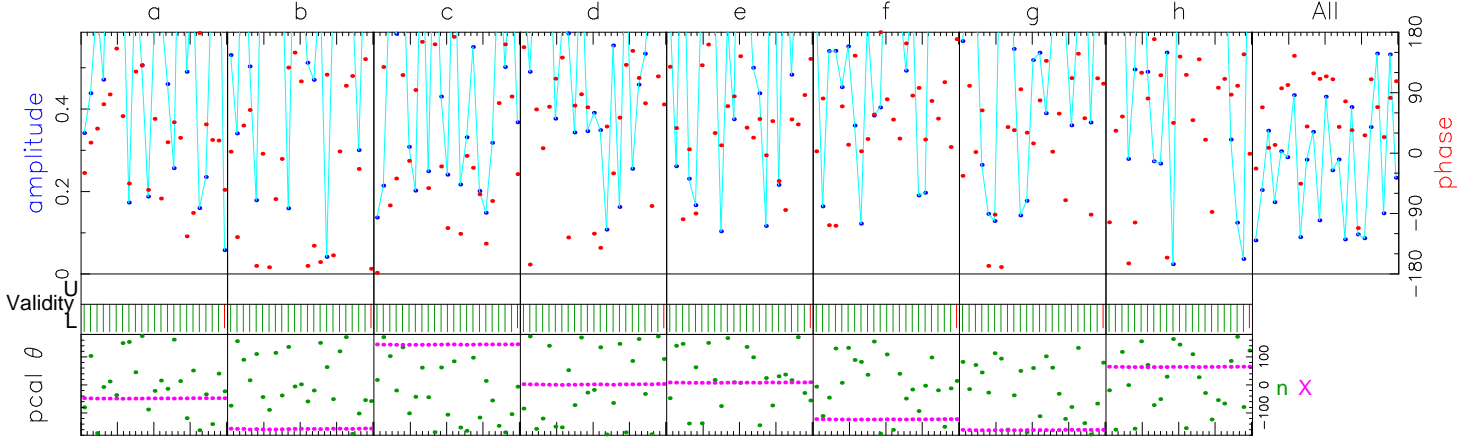
n: az 130.4 el 28.8 pa -34.6 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -8664.740 -1283.599 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/nX.zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/nX.W.157.zpwvbc

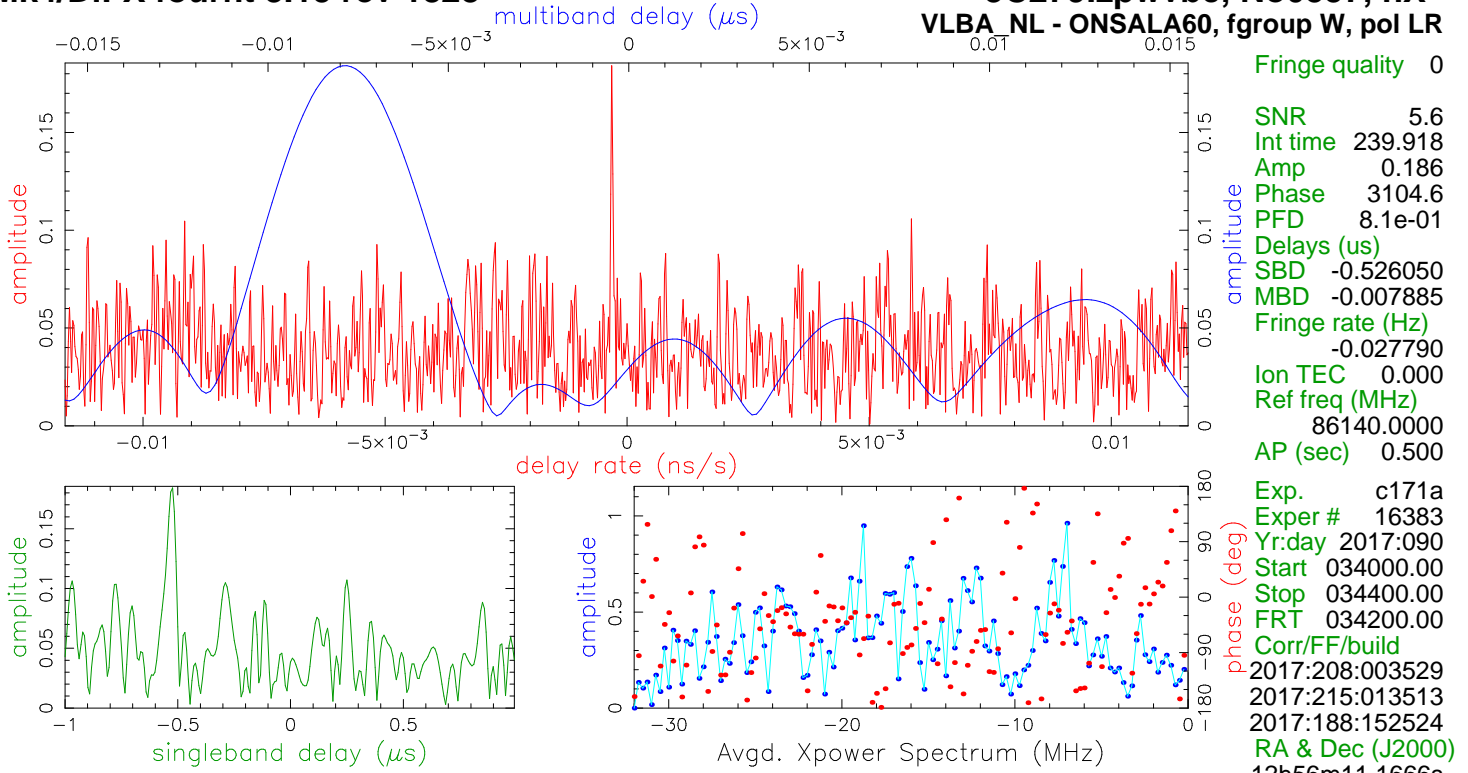


Fringe quality 0  
 SNR 5.8  
 Int time 239.918  
 Amp 0.196  
 Phase 438.6  
 PFD 3.4e-01  
 Delays (us)  
 SBD -0.073758  
 MBD -0.000304  
 Fringe rate (Hz)  
 -0.156375  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013512  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480		
n	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		
Group delay (usec)(sbd)	6.81144976823E+03		Apriori delay (usec)		6.81151257194E+03		Resid mbdelay (usec)		-3.03715E-04	+/- 3.7E-04
Sband delay (usec)	6.81143881394E+03		Apriori clock (usec)		3.0355878E+00		Resid sbdelay (usec)		-7.37580E-02	+/- 3.0E-03
Phase delay (usec)	6.81151257448E+03		Apriori clockrate (us/s)		-1.7463407E-08		Resid phdelay (usec)		2.53397E-06	+/- 6.4E-07
Delay rate (us/s)	1.50090073678E+00		Apriori rate (us/s)		1.50090255215E+00		Resid rate (us/s)		-1.81536E-06	+/- 4.6E-09
Total phase (deg)	419.5		Apriori accel (us/s/s)		-3.41586214044E-05		Resid phase (deg)		438.6	+/- 19.8
ph/seg (deg)	RMS 61.6	Theor. 47.4	Amplitude 0.196 +/- 0.034	Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	81.1	82.7	Search (1024X32) 0.187	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		SampCntNorm: enabled		mb window (us)	-0.016	0.016
ph/frq (deg)	40.2	28.0	Interp. 0.000	Bits/sample: 2x2		Sample rate(MSamp/s): 64		dr window (ns/s)	-0.012	0.012
amp/frq (%)	42.3	48.8	Inc. seg. avg. 0.200	Data rate(Mb/s): 1024		nlags: 128 t_cohere infinite		ion window (TEC)	0.00	0.00
amp/frq (%)	42.3	48.8	Inc. frq. avg. 0.190	u,v (fr/asec) -8664.740 -1283.599				simultaneous interpolator		



Fringe quality 0

SNR 5.6

Int time 239.918

Amp 0.186

Phase 3104.6

PFD 8.1e-01

Delays (us)

SBD -0.526050

MBD -0.007885

Fringe rate (Hz)

-0.027790

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.00

Stop 034400.00

FRT 034200.00

Corr/FF/build

2017:208:003529

2017:215:013513

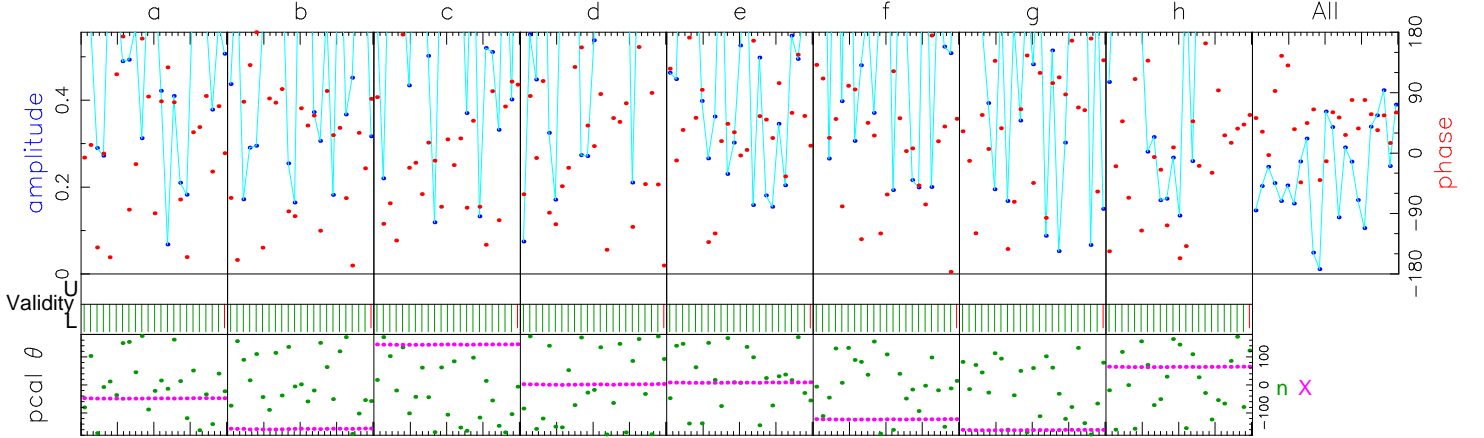
2017:188:152524

RA & Dec (J2000)

12h56m11.1666s

-5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
35.4	63.0	-2.8	67.6	44.5	49.2	61.6	33.1	Phase	44.6
0.1	0.2	0.2	0.2	0.3	0.2	0.2	0.2	Ampl.	0.2
199.2	63.5	28.0	107.1	60.0	2.8	57.7	114.7	Sbd box	61.7
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC phase	
n:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC amp	
n 1000	1000	1000	1000	1000	1000	1000	1000	Chan ids	
X 1000	1000	1000	1000	1000	1000	1000	1000	Tracks	
n W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	6.81097343743E+03	Apriori delay (usec)	6.81151257194E+03	Resid mbdelay (usec)	-7.88451E-03	+/-	3.9E-04		
Sband delay (usec)	6.81098652194E+03	Apriori clock (usec)	3.0355878E+00	Resid sbdelay (usec)	-5.26050E-01	+/-	3.1E-03		
Phase delay (usec)	6.81151257338E+03	Apriori clockrate (us/s)	-1.7463407E-08	Resid phdelay (usec)	1.43863E-06	+/-	6.7E-07		
Delay rate (us/s)	1.50090222953E+00	Apriori rate (us/s)	1.50090255215E+00	Resid rate (us/s)	-3.22613E-07	+/-	4.8E-09		
Total phase (deg)	3085.5	Apriori accel (us/s/s)	-3.41586214044E-05	Resid phase (deg)	3104.6	+/-	20.6		

ph/seg (deg) 44.6 49.5 Search (1024X32) 0.180 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

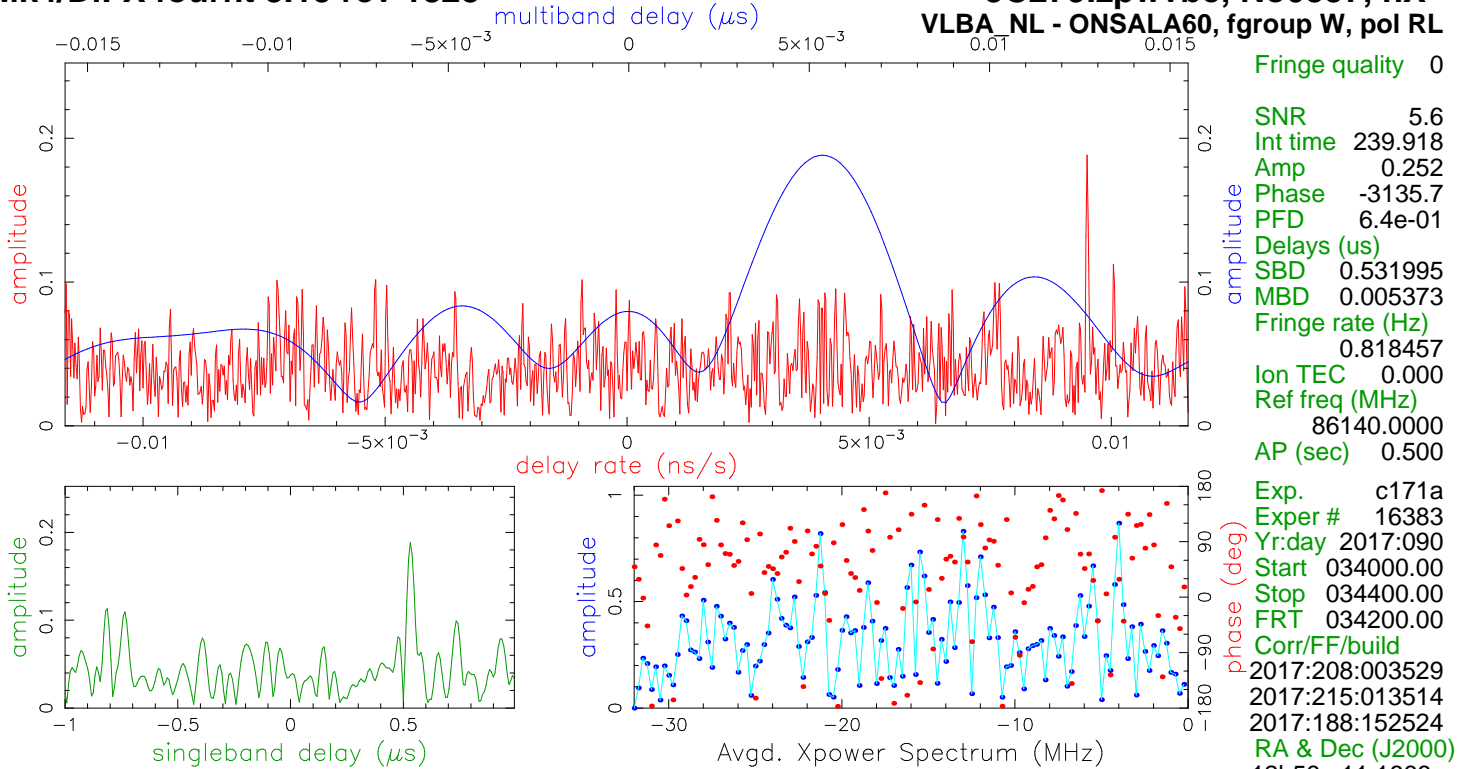
amp/seg (%) 63.2 86.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 24.6 29.2 Inc. seg. avg. 0.171 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 22.6 50.9 Inc. frq. avg. 0.173 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

n: az 130.4 el 28.8 pa -34.6 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -8664.740 -1283.599 ion window (TEC) 0.00 0.00

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/nX.zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/nX.W.159.zpwvbc simultaneous interpolator



Fringe quality 0

SNR 5.6

Int time 239.918

Amp 0.252

Phase -3135.7

PFD 6.4e-01

Delays (us)

SBD 0.531995

MBD 0.005373

Fringe rate (Hz) 0.818457

Ion TEC 0.000

Ref freq (MHz) 86140.0000

AP (sec) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.00

Stop 034400.00

FRT 034200.00

Corr/FF/build

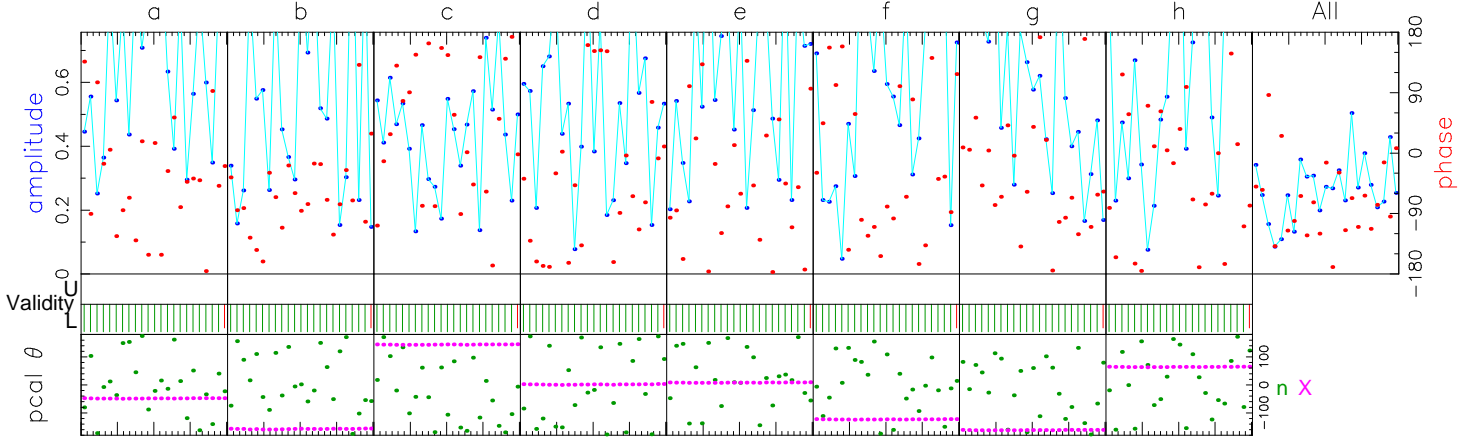
2017:208:003529

2017:215:013514

2017:188:152524

RA & Dec (J2000) 12h56m11.1666s -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-60.9	-80.1	34.4	-113.7	-79.0	-107.6	-45.0	-74.6	Phase	-75.7
0.4	0.5	0.1	0.2	0.3	0.4	0.2	0.2	Ampl.	0.3
196.7	197.0	59.1	148.1	2.4	107.4	196.9	205.5	Sbd box	197.1
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
n -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
n:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
n 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
n W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	6.81204919517E+03	Apriori delay (usec)	6.81151257194E+03	Resid mbdelay (usec)	5.37323E-03	+/-	3.8E-04		
Sband delay (usec)	6.81204456744E+03	Apriori clock (usec)	3.0355878E+00	Resid sbdelay (usec)	5.31995E-01	+/-	3.1E-03		
Phase delay (usec)	6.81151256950E+03	Apriori clockrate (us/s)	-1.7463407E-08	Resid phdelay (usec)	-2.44119E-06	+/-	6.5E-07		
Delay rate (us/s)	1.50091205362E+00	Apriori rate (us/s)	1.50090255215E+00	Resid rate (us/s)	9.50147E-06	+/-	4.7E-09		
Total phase (deg)	-2794.8	Apriori accel (us/s/s)	-3.41586214044E-05	Resid phase (deg)	-3135.7	+/-	20.3		

ph/seg (deg) 58.1 48.7 Search (1024X32) 0.183 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

amp/seg (%) 66.3 85.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

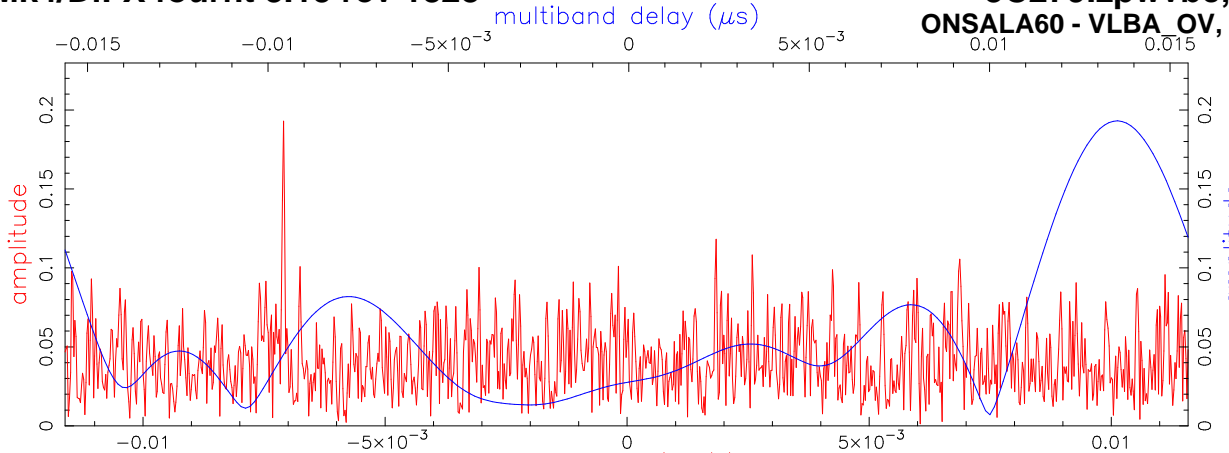
ph/frq (deg) 51.3 28.7 Inc. seg. avg. 0.263 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 55.2 50.1 Inc. frq. avg. 0.252 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

n: az 130.4 el 28.8 pa -34.6 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) -8664.740 -1283.599 ion window (TEC) 0.00 0.00 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/nX.zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/nX.W.160.zpwvbc

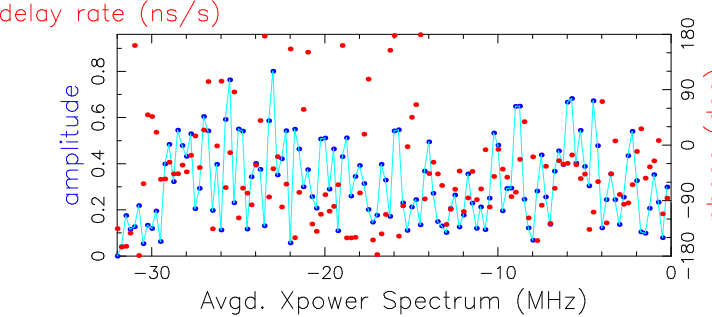
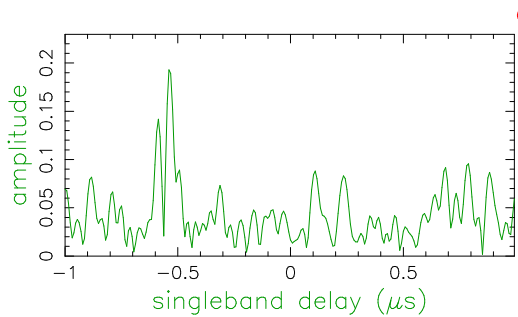




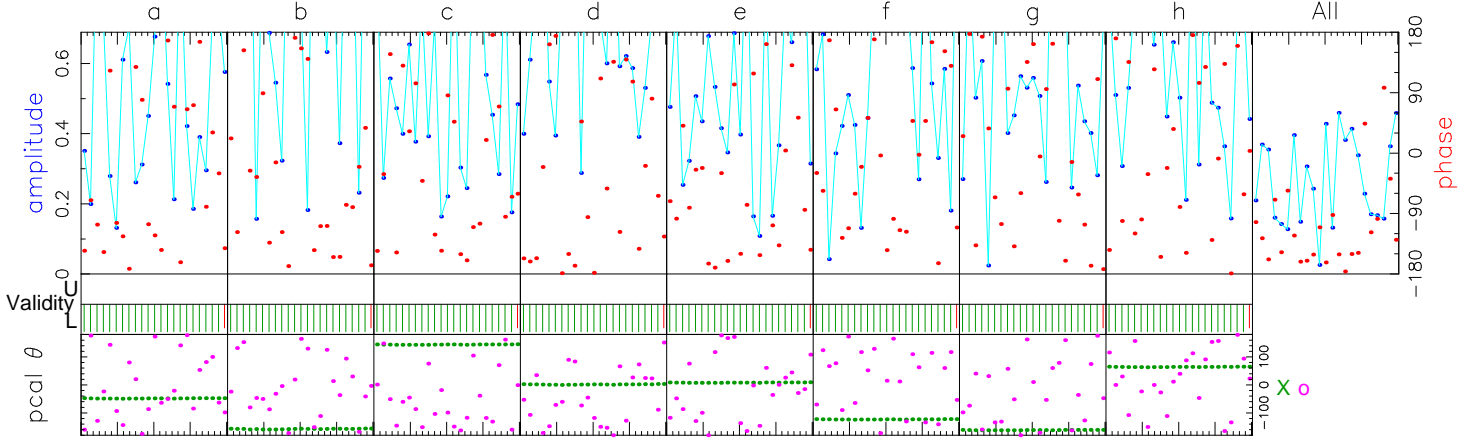
Fringe quality 0

SNR 5.9  
Int time 239.918  
Amp 0.230  
Phase 3103.2  
PFD 2.4e-01  
Delays (us)  
SBD -0.535968  
MBD 0.013625  
Fringe rate (Hz)  
-0.611173  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500

Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013524  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-142.9	-127.6	-116.4	-162.4	-105.9	-100.0	-149.1	-151.7	Phase	-136.8
0.3	0.3	0.2	0.3	0.2	0.3	0.3	0.2	Ampl.	0.2
89.5	28.3	39.8	61.2	2.8	34.4	12.0	255.6	Sbd box	60.4
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
X W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.35572750480E+03	Apriori delay (usec)	-1.35517862951E+03	Resid mbdelay (usec)	1.36247E-02	+/-	3.7E-04		
Sband delay (usec)	-1.35571459801E+03	Apriori clock (usec)	1.5892339E-01	Resid sbdelay (usec)	-5.35968E-01	+/-	2.9E-03		
Phase delay (usec)	-1.35517863392E+03	Apriori clockrate (us/s)	5.4566012E-08	Resid phdelay (usec)	-4.41286E-06	+/-	6.3E-07		
Delay rate (us/s)	-1.87863124102E+00	Apriori rate (us/s)	-1.87862414591E+00	Resid rate (us/s)	-7.09512E-06	+/-	4.5E-09		
Total phase (deg)	3050.7	Apriori accel (us/s/s)	4.45868842173E-06	Resid phase (deg)	3103.2	+/-	19.5		

ph/seg (deg) 59.0 46.8  
amp/seg (%) 73.2 81.7  
ph/frq (deg) 25.4 27.6  
amp/frq (%) 31.0 48.2

RMS Theor. Amplitude 0.230 +/- 0.039  
Search (1024X32) 0.189  
Interp. 0.000  
Inc. seg. avg. 0.235  
Inc. frq. avg. 0.216

Group delay (usec)(sbd) -1.35572750480E+03  
Sband delay (usec) -1.35571459801E+03  
Phase delay (usec) -1.35517863392E+03  
Delay rate (us/s) -1.87863124102E+00  
Total phase (deg) 3050.7

Apriori delay (usec) -1.35517862951E+03  
Apriori clock (usec) 1.5892339E-01  
Apriori clockrate (us/s) 5.4566012E-08  
Apriori rate (us/s) -1.87862414591E+00  
Apriori accel (us/s/s) 4.45868842173E-06

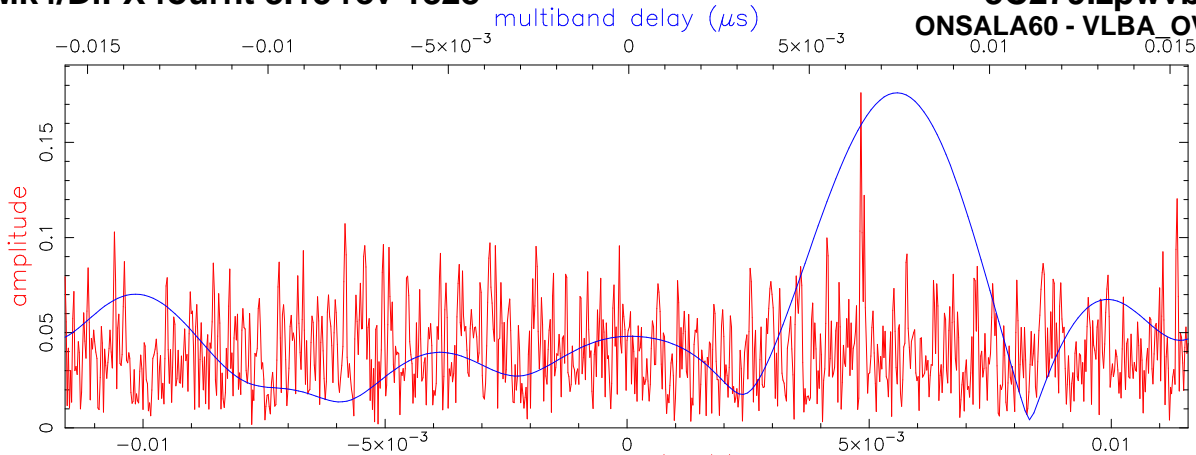
Resid mbdelay (usec) 1.36247E-02 +/- 3.7E-04  
Resid sbdelay (usec) -5.35968E-01 +/- 2.9E-03  
Resid phdelay (usec) -4.41286E-06 +/- 6.3E-07  
Resid rate (us/s) -7.09512E-06 +/- 4.5E-09  
Resid phase (deg) 3103.2 +/- 19.5

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): 64  
Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite

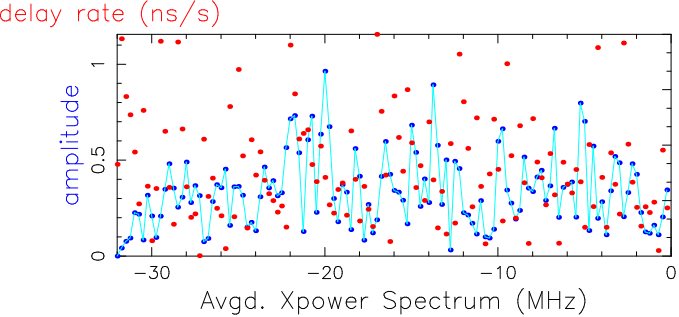
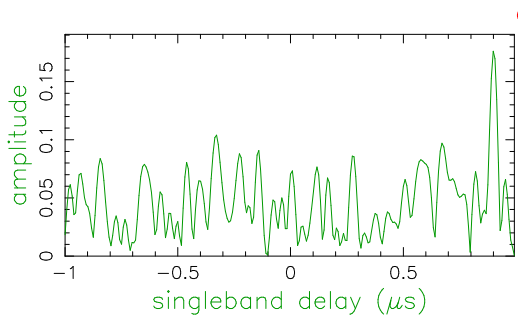
sb window (us) -1.000 1.000  
mb window (us) -0.016 0.016  
dr window (ns/s) -0.012 0.012  
ion window (TEC) 0.00 0.00

X: az 242.4 el 9.8 pa 28.8 o: az 107.9 el 12.9 pa -49.6 u,v (fr/asec) 10819.216 2062.786 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/Xo.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/Xo.W.169.zpwwbc

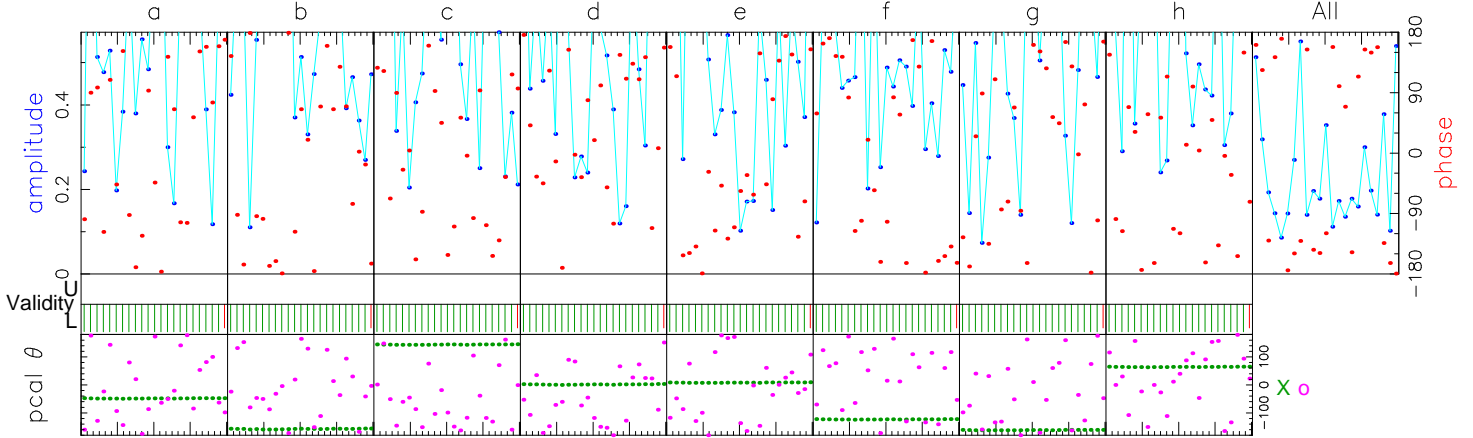


Fringe quality 0  
 SNR 5.3  
 Int time 239.918  
 Amp 0.191  
 Phase -5396.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD 0.900741  
 MBD 0.007382  
 Fringe rate (Hz) 0.415892  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500



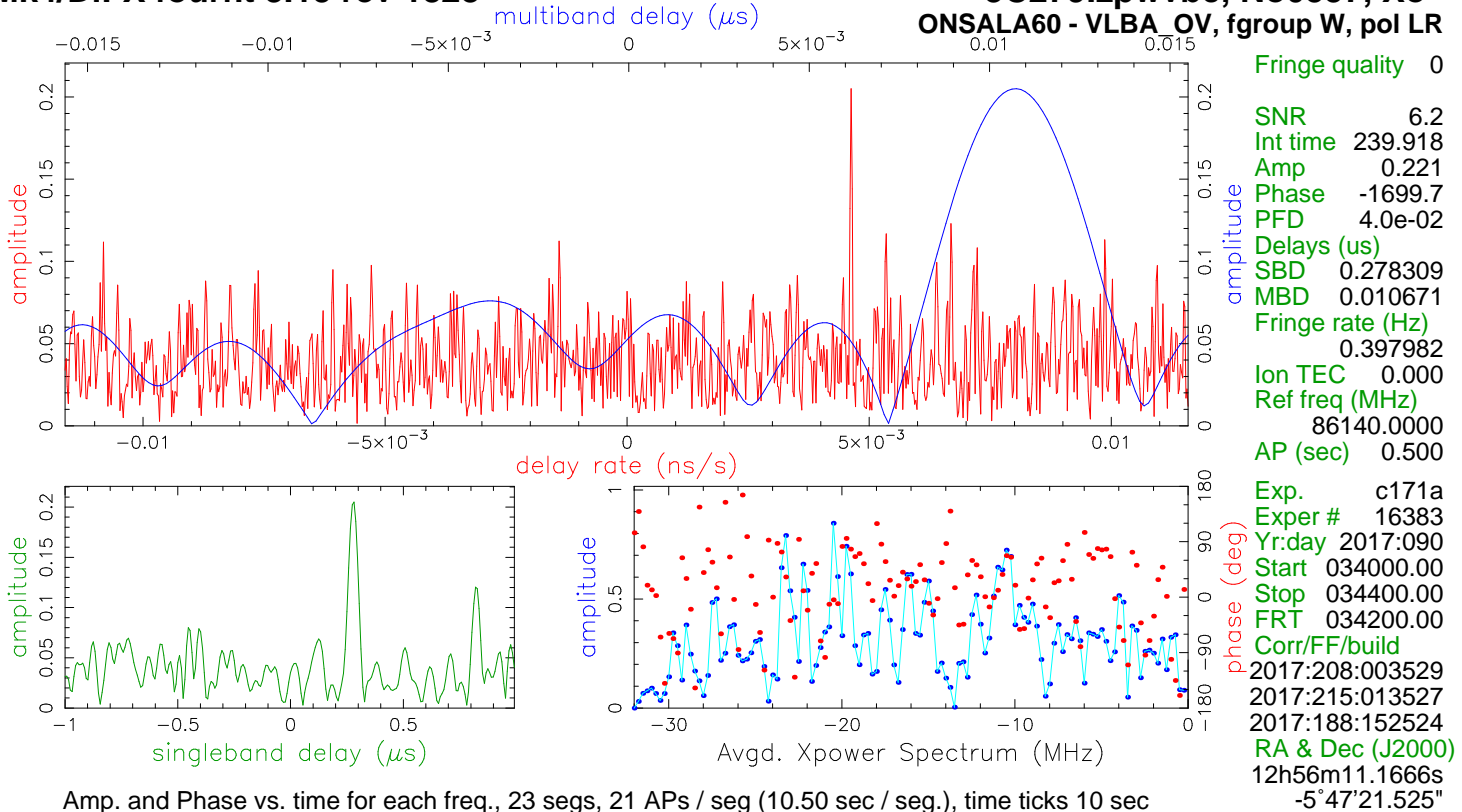
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013526  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

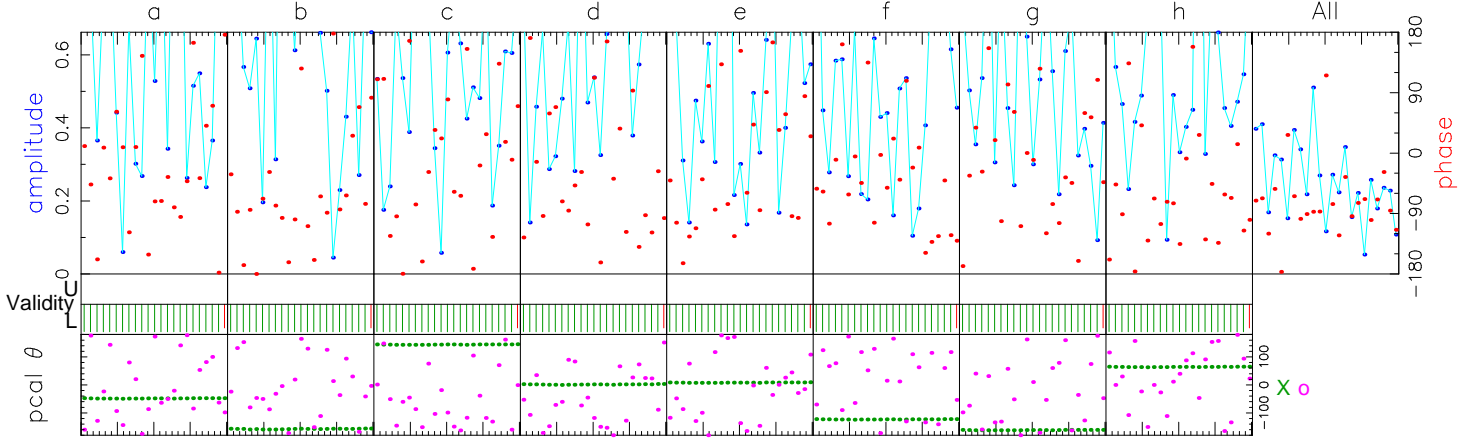


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	166.7	-173.3	-141.0	151.1	-170.2	-176.3	140.7	-148.0	Phase	-176.1
	0.2	0.3	0.2	0.1	0.3	0.2	0.2	0.2	Ampl.	0.2
	106.4	86.5	206.4	28.1	255.6	52.6	25.9	47.5	Sbd box	244.3
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.35426499723E+03		Apriori delay (usec)		-1.35517862951E+03		Resid mbdelay (usec)		7.38227E-03	+/- 4.1E-04
Sband delay (usec)	-1.35427788851E+03		Apriori clock (usec)		1.5892339E-01		Resid sbdelay (usec)		9.00741E-01	+/- 3.2E-03
Phase delay (usec)	-1.35517863519E+03		Apriori clockrate (us/s)		5.4566012E-08		Resid phdelay (usec)		-5.67931E-06	+/- 7.0E-07
Delay rate (us/s)	-1.87861931781E+00		Apriori rate (us/s)		-1.87862414591E+00		Resid rate (us/s)		4.82810E-06	+/- 5.0E-09
Total phase (deg)			Apriori accel (us/s/s)		4.45868842173E-06		Resid phase (deg)		-5396.1	+/- 21.6

ph/seg (deg) 46.0 51.7 Search (1024X32) 0.173 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.6 90.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 29.7 30.5 Inc. seg. avg. 0.181 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 36.6 53.2 Inc. frq. avg. 0.179 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 X: az 242.4 el 9.8 pa 28.8 o: az 107.9 el 12.9 pa -49.6 u,v (fr/asec) 10819.216 2062.786 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

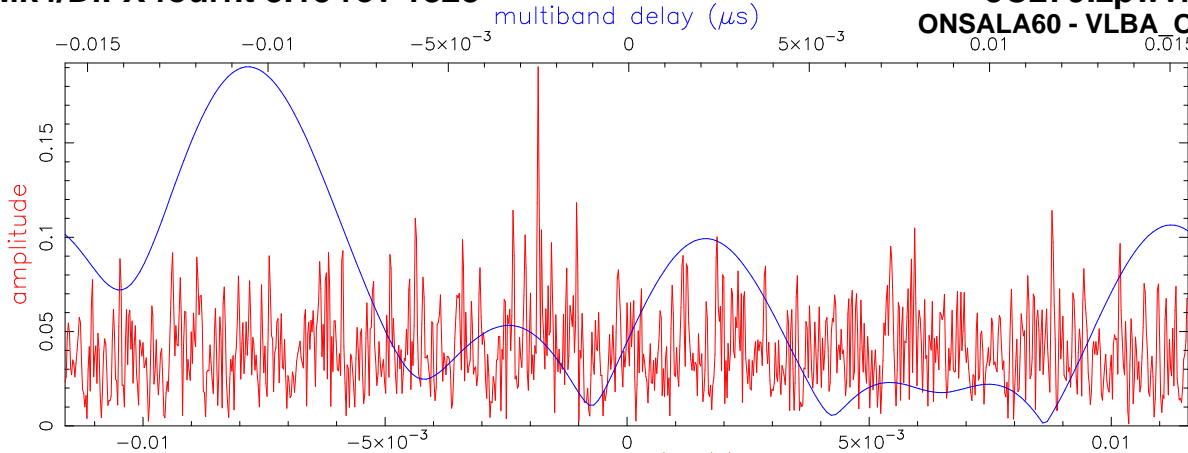


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

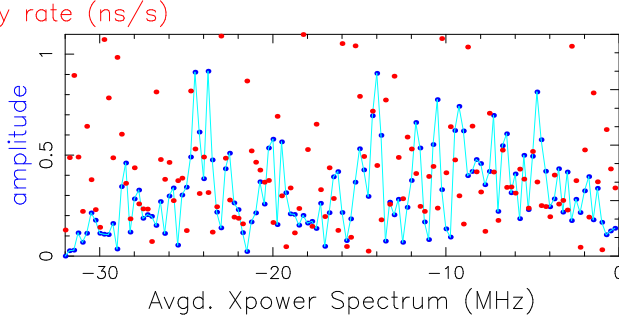
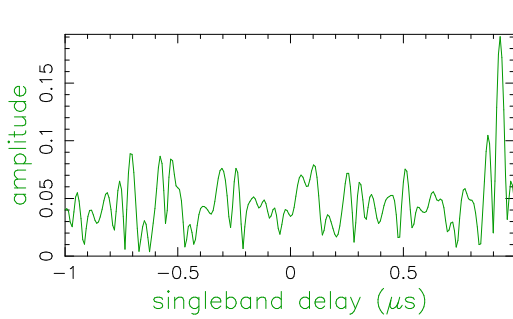


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-80.1	-91.0	-32.8	-79.7	-90.4	-72.4	-73.7	-83.0	-83.0	Phase	-79.7
0.3	0.3	0.1	0.3	0.1	0.3	0.1	0.3	0.3	Ampl.	0.2
164.6	164.3	254.2	206.4	48.0	234.1	131.0	252.7	252.7	Sbd box	164.6
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
o	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.35488670873E+03		Apriori delay (usec)	-1.35517862951E+03	Resid mbdelay (usec)	1.06708E-02	+/-	3.5E-04		
Sband delay (usec)	-1.35490032051E+03		Apriori clock (usec)	1.5892339E-01	Resid sbdelay (usec)	2.78309E-01	+/-	2.8E-03		
Phase delay (usec)	-1.35517863208E+03		Apriori clockrate (us/s)	5.4566012E-08	Resid phdelay (usec)	-2.56954E-06	+/-	6.0E-07		
Delay rate (us/s)	-1.87861952573E+00		Apriori rate (us/s)	-1.87862414591E+00	Resid rate (us/s)	4.62017E-06	+/-	4.3E-09		
Total phase (deg)		-1752.1	Apriori accel (us/s/s)	4.45868842173E-06	Resid phase (deg)	-1699.7	+/-	18.5		

ph/seg (deg) 51.1 44.4 Search (1024X32) 0.198 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 58.1 77.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 20.6 26.2 Inc. seg. avg. 0.212 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 39.5 45.7 Inc. frq. avg. 0.203 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 X: az 242.4 el 9.8 pa 28.8 o: az 107.9 el 12.9 pa -49.6 u,v (fr/asec) 10819.216 2062.786 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/Xo.zpwvbc Output file: /Exps/c171a/gmva/1234/No0557/Xo.W.171.zpwvbc simultaneous interpolator

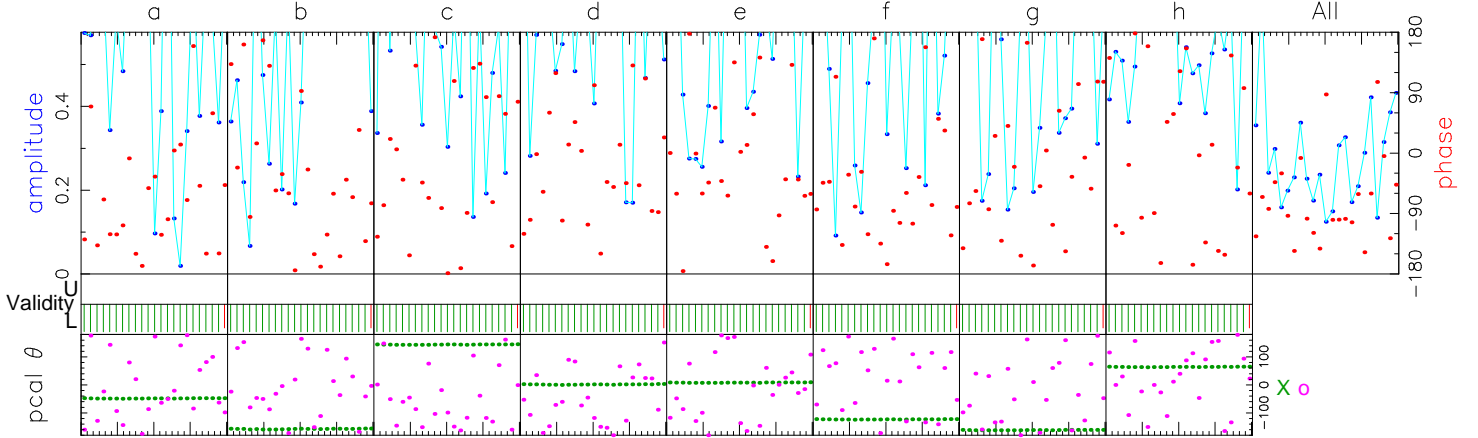


Fringe quality 0  
 SNR 5.7  
 Int time 239.918  
 Amp 0.192  
 Phase -5482.9  
 PFD 5.2e-01  
 Delays (us)  
 SBD 0.929316  
 MBD -0.010564  
 Fringe rate (Hz)  
 -0.158789  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500



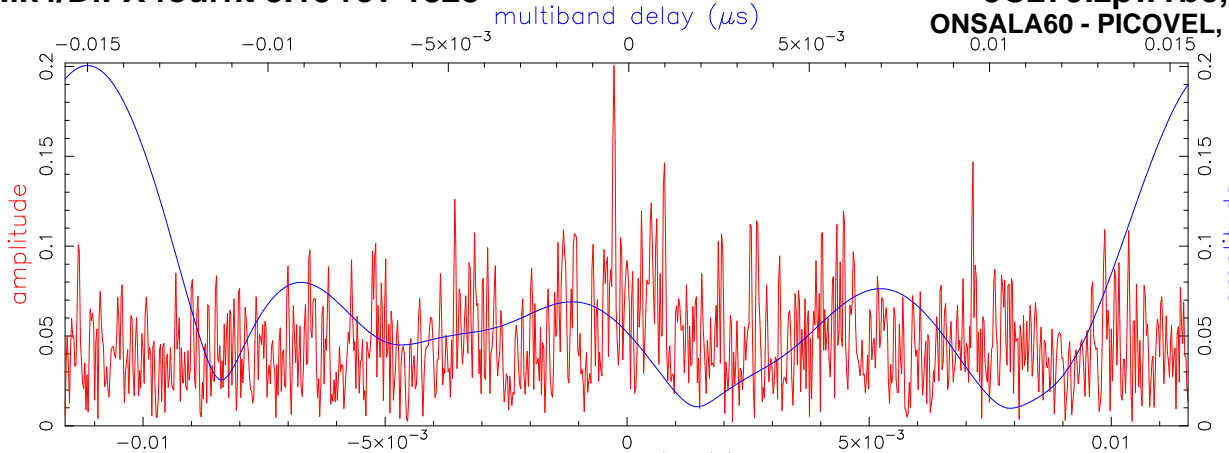
Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013528  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

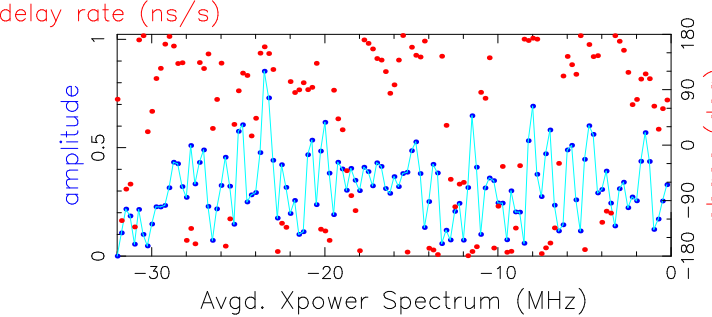
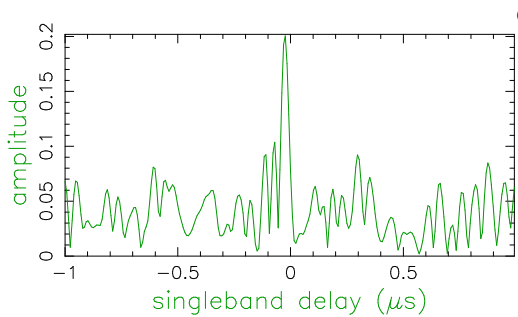


86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-108.6	-79.9	-97.4	-46.2	-47.6	-84.5	-74.2	-166.2	Phase	-82.9
0.3	0.2	0.1	0.3	0.2	0.4	0.2	0.1	Ampl.	0.2
247.7	133.6	193.0	179.1	34.9	248.3	11.5	183.0	Sbd box	248.0
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
o -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o 1000	1000	1000	1000	1000	1000	1000	1000		
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
o W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-1.35425169394E+03		Apriori delay (usec)	-1.35517862951E+03		Resid mbdelay (usec)	-1.05644E-02	+/-	3.8E-04
Sband delay (usec)	-1.35424931401E+03		Apriori clock (usec)	1.5892339E-01		Resid sbdelay (usec)	9.29316E-01	+/-	3.0E-03
Phase delay (usec)	-1.35517863218E+03		Apriori clockrate (us/s)	5.4566012E-08		Resid phdelay (usec)	-2.67263E-06	+/-	6.5E-07
Delay rate (us/s)	-1.87862598929E+00		Apriori rate (us/s)	-1.87862414591E+00		Resid rate (us/s)	-1.84339E-06	+/-	4.7E-09
Total phase (deg)		-5535.3	Apriori accel (us/s/s)	4.45868842173E-06		Resid phase (deg)	-5482.9	+/-	20.1

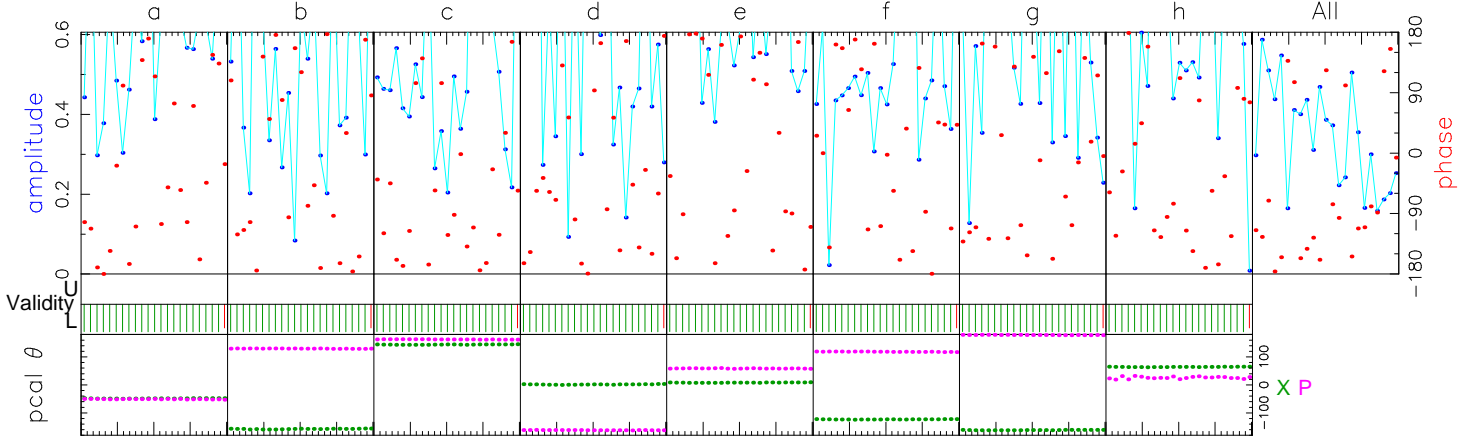
ph/seg (deg) 64.4 48.2 Search (1024X32) 0.176 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 78.5 84.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 41.8 28.4 Inc. seg. avg. 0.208 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 51.9 49.6 Inc. frq. avg. 0.198 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 X: az 242.4 el 9.8 pa 28.8 o: az 107.9 el 12.9 pa -49.6 u,v (fr/asec) 10819.216 2062.786 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00



Fringe quality 0  
SNR 6.0  
Int time 239.523  
Amp 0.202  
Phase -142.4  
PFD 9.4e-02  
Delays (us)  
SBD -0.025664  
MBD -0.014950  
Fringe rate (Hz)  
-0.022654  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.500  
Exp. c171a  
Exper # 16383  
Yr:day 2017:090  
Start 034000.00  
Stop 034400.00  
FRT 034200.00  
Corr/FF/build  
2017:208:003529  
2017:215:013529  
2017:188:152524  
RA & Dec (J2000)  
12h56m11.1666s  
-5°47'21.525"

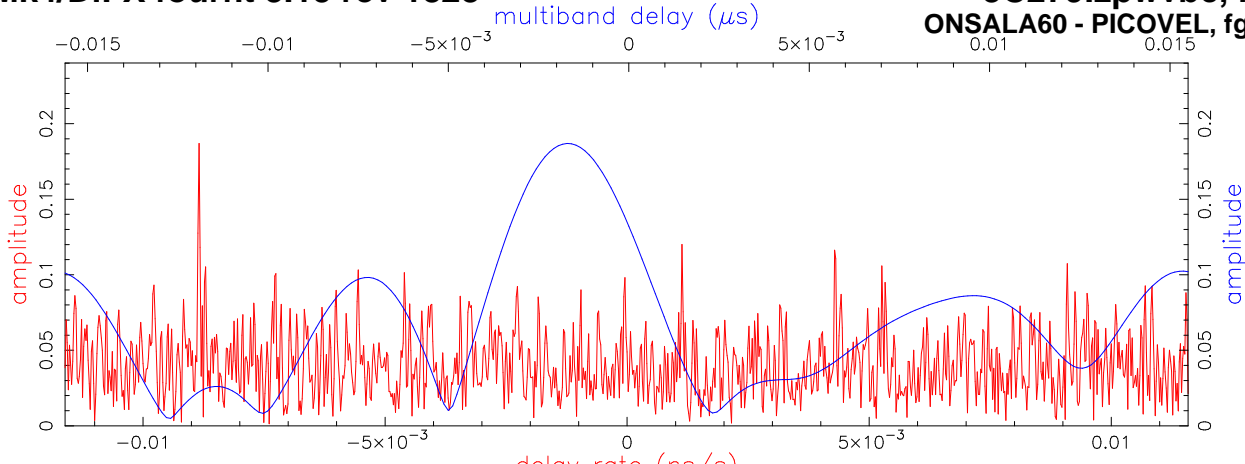


Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

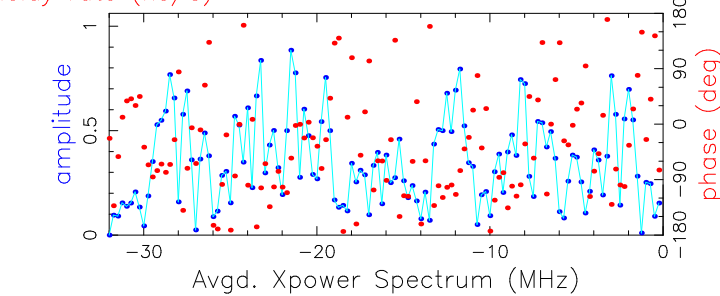
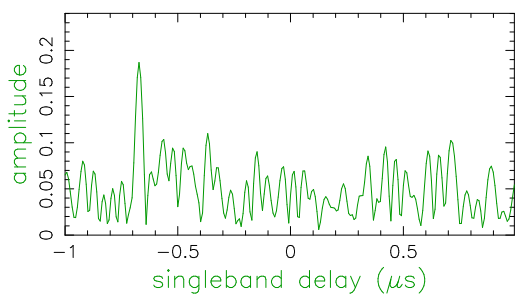


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-133.6	-166.9	-121.5	-120.0	-154.6	127.6	-172.2	-115.7	Phase	-142.4
	0.2	0.2	0.2	0.3	0.3	0.0	0.3	0.2	Ampl.	0.2
	62.6	134.5	46.0	32.6	125.9	218.6	242.1	216.3	Sbd box	125.7
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.76312368281E+03		Apriori delay (usec)		-6.76310873297E+03		Resid mbdelay (usec)		-1.49498E-02	+/- 3.6E-04
Sband delay (usec)	-6.76313439647E+03		Apriori clock (usec)		1.9205734E+00		Resid sbdelay (usec)		-2.56635E-02	+/- 2.9E-03
Phase delay (usec)	-6.76310873757E+03		Apriori clockrate (us/s)		-2.0759008E-07		Resid phdelay (usec)		-4.59280E-06	+/- 6.1E-07
Delay rate (us/s)	1.60364114932E-01		Apriori rate (us/s)		1.60364377919E-01		Resid rate (us/s)		-2.62988E-07	+/- 4.4E-09
Total phase (deg)	-235.5		Apriori accel (us/s/s)		3.31972906510E-05		Resid phase (deg)		-142.4	+/- 19.0

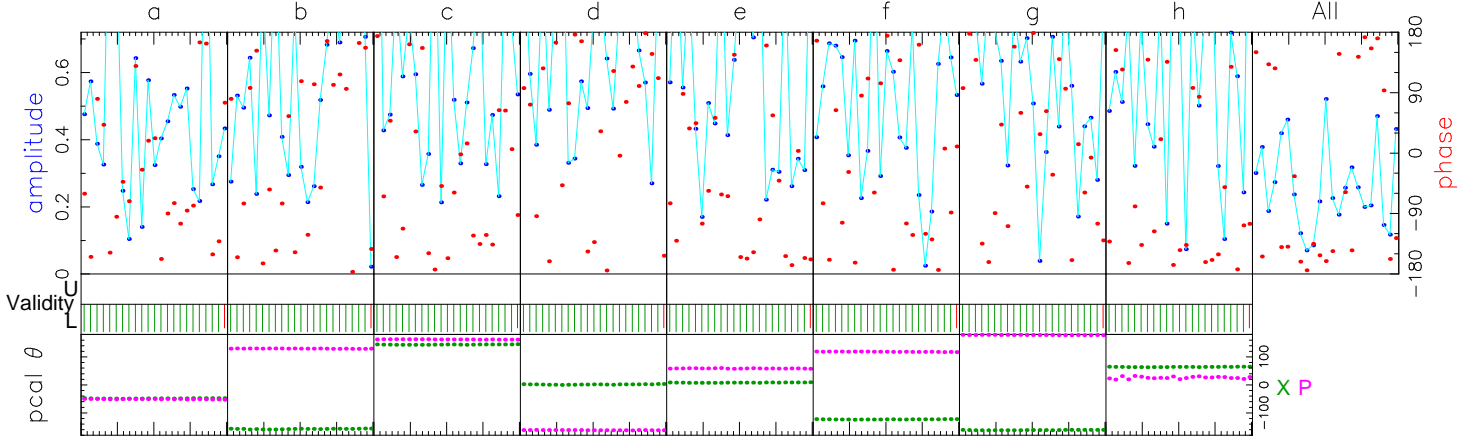
RMS Theor. Amplitude 0.202 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 64.2 45.5 Search (1024X32) 0.190 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 95.2 79.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 43.7 26.8 Inc. seg. avg. 0.262 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 39.7 46.8 Inc. frq. avg. 0.199 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 242.4 el 9.8 pa 28.8 P: az 235.2 el 29.3 pa 41.2 u,v (fr/asec) -899.630 1843.956 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XP.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XP.W.173.zpwwbc



Fringe quality 0  
 SNR 5.6  
 Int time 239.523  
 Amp 0.240  
 Phase 3614.0  
 PFD 7.4e-01  
 Delays (us)  
 SBD -0.671766  
 MBD -0.001691  
 Fringe rate (Hz)  
 -0.761555  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013530  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"



Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

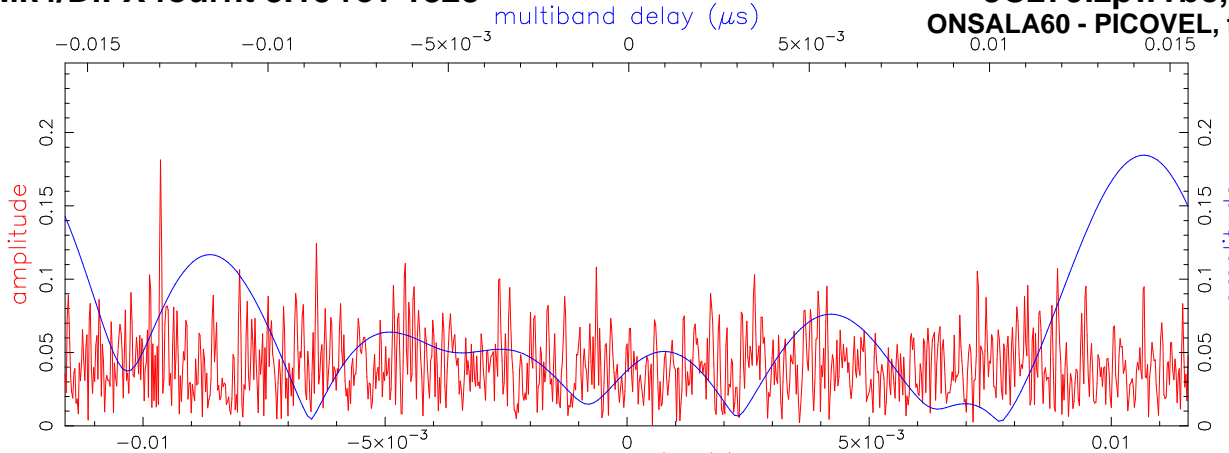


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-126.7	165.9	-148.3	136.5	-128.2	-134.0	174.0	-167.9	Phase	-166.0
	0.2	0.4	0.3	0.3	0.3	0.2	0.2	0.4	Ampl.	0.3
	125.6	86.8	56.9	76.1	33.1	69.9	249.1	42.1	Sbd box	43.0
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
									Tracks	

Group delay (usec)(sbd) -6.76376667415E+03 Apriori delay (usec) -6.76310873297E+03 Resid mbdelay (usec) -1.69118E-03 +/- 3.9E-04  
 Sband delay (usec) -6.76378049847E+03 Apriori clock (usec) 1.9205734E+00 Resid sbdelay (usec) -6.71766E-01 +/- 3.1E-03  
 Phase delay (usec) -6.76310873833E+03 Apriori clockrate (us/s) -2.0759008E-07 Resid phdelay (usec) -5.35312E-06 +/- 6.6E-07  
 Delay rate (us/s) 1.60355537019E-01 Apriori rate (us/s) 1.60364377919E-01 Resid rate (us/s) -8.84090E-06 +/- 4.8E-09  
 Total phase (deg) 3521.0 Apriori accel (us/s/s) 3.31972906510E-05 Resid phase (deg) 3614.0 +/- 20.5

RMS Theor. Amplitude 0.240 +/- 0.043 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 52.0 49.1 Search (1024X32) 0.181 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 78.9 85.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 38.3 29.0 Inc. seg. avg. 0.247 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 39.5 50.6 Inc. frq. avg. 0.254 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

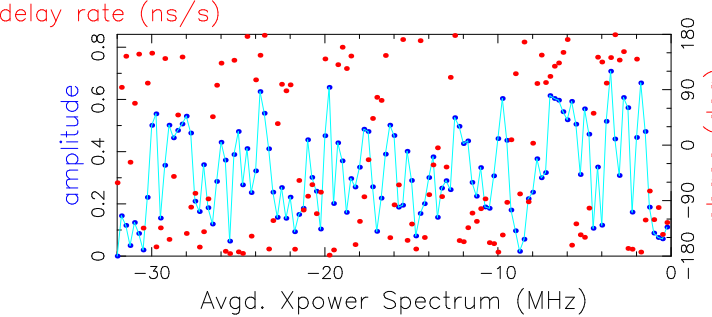
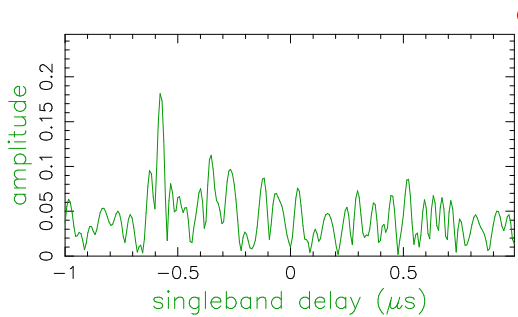
X: az 242.4 el 9.8 pa 28.8 P: az 235.2 el 29.3 pa 41.2 u,v (fr/asec) -899.630 1843.956 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XP.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XP.W.174.zpwwbc



Fringe quality 0

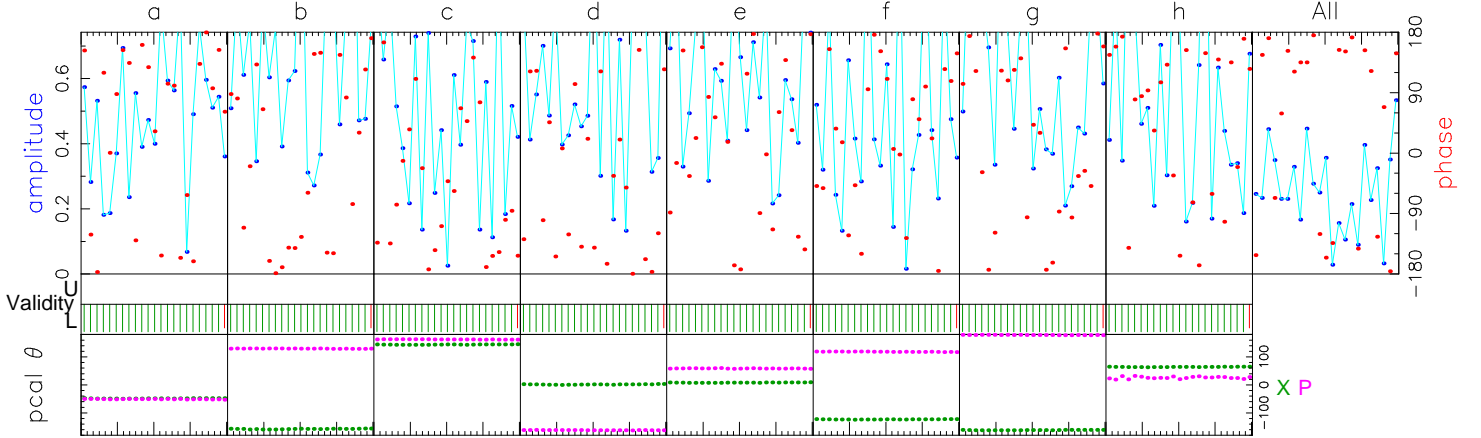
SNR 5.5  
 Int time 239.523  
 Amp 0.247  
 Phase 3407.9  
 PFD 9.2e-01  
 Delays (us)  
 SBD -0.575777  
 MBD -0.016602  
 Fringe rate (Hz)  
 -0.830201  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013531  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"



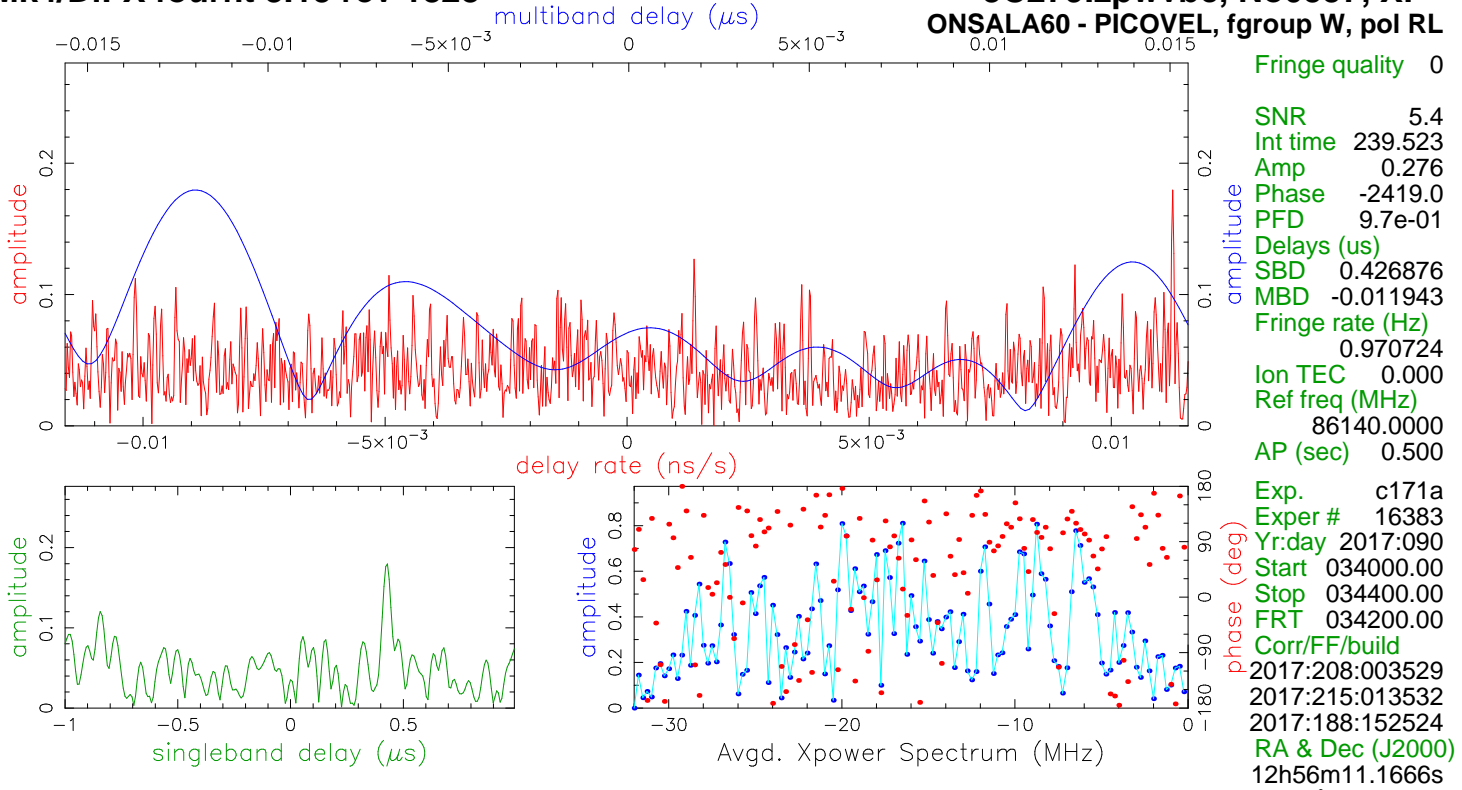
Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

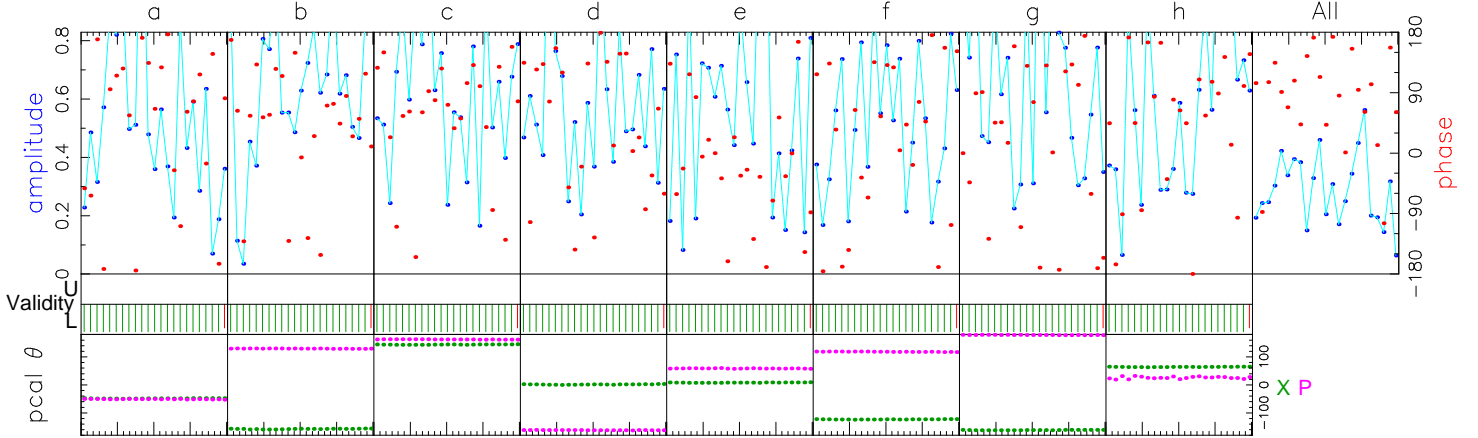


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
P	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.76368783454E+03		Apriori delay (usec)		-6.76310873297E+03		Resid mbdelay (usec)		-1.66016E-02	+/- 4.0E-04
Sband delay (usec)	-6.76368450997E+03		Apriori clock (usec)		1.9205734E+00		Resid sbdelay (usec)		-5.75777E-01	+/- 3.1E-03
Phase delay (usec)	-6.76310872756E+03		Apriori clockrate (us/s)		-2.0759008E-07		Resid phdelay (usec)		5.41446E-06	+/- 6.7E-07
Delay rate (us/s)	1.60354740113E-01		Apriori rate (us/s)		1.60364377919E-01		Resid rate (us/s)		-9.63781E-06	+/- 4.9E-09
Total phase (deg)	3314.9		Apriori accel (us/s/s)		3.31972906510E-05		Resid phase (deg)		3407.9	+/- 20.9

ph/seg (deg) 53.1 50.2 Search (1024X32) 0.180 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 81.3 87.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 36.6 29.6 Inc. seg. avg. 0.254 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 37.3 51.6 Inc. frq. avg. 0.249 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 X: az 242.4 el 9.8 pa 28.8 P: az 235.2 el 29.3 pa 41.2 u,v (fr/asec) -899.630 1843.956 ion window (TEC) 0.00 0.00  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XP.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XP.W.175.zpwwbc simultaneous interpolator



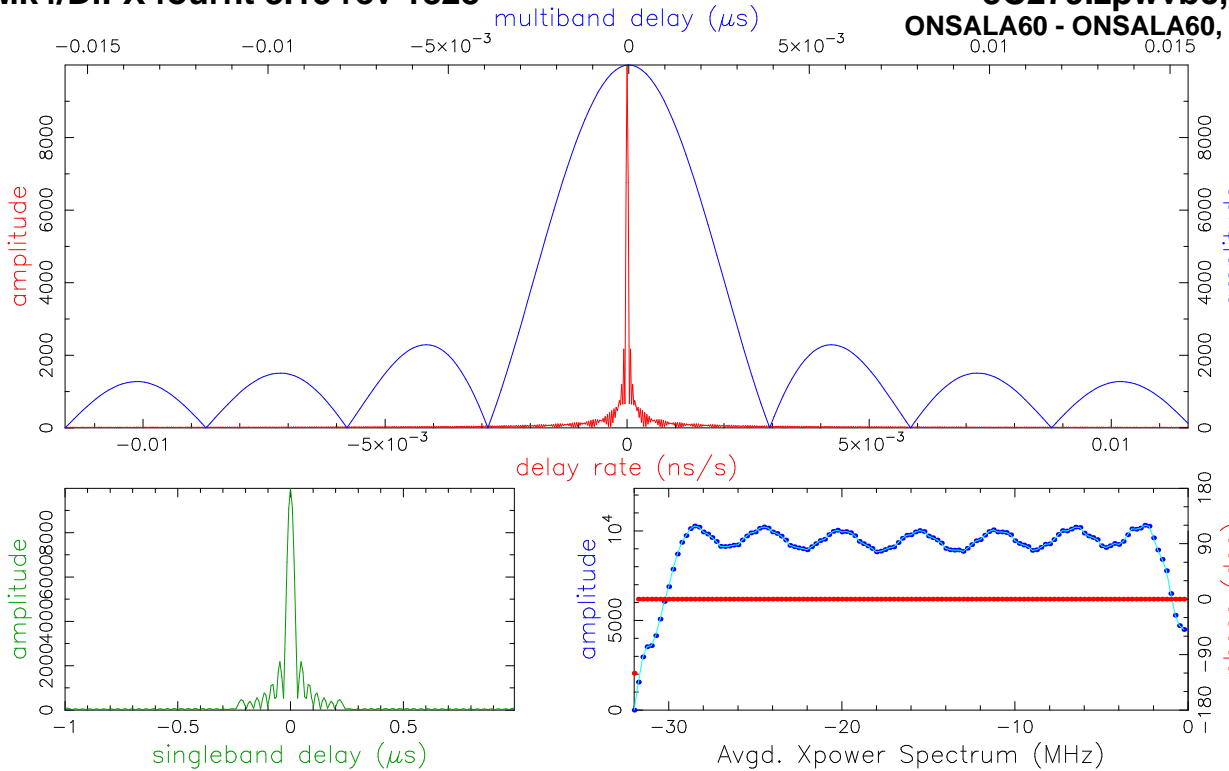
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
132.5	80.9	97.0	132.3	-37.4	105.2	106.9	102.8	Phase	101.0
0.4	0.5	0.5	0.3	0.3	0.2	0.3	0.5	Ampl.	0.3
94.7	183.2	183.6	254.5	238.3	244.0	229.4	184.2	Sbd box	183.6
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
P -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:P 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
P 1000	1000	1000	1000	1000	1000	1000	1000		
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
P W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Tracks	
Group delay (usec)(sbd)	-6.76268317621E+03		Apriori delay (usec)	-6.76310873297E+03		Resid mbdelay (usec)	-1.19432E-02	+/-	4.0E-04
Sband delay (usec)	-6.76268185697E+03		Apriori clock (usec)	1.9205734E+00		Resid sbdelay (usec)	4.26876E-01	+/-	3.2E-03
Phase delay (usec)	-6.76310872972E+03		Apriori clockrate (us/s)	-2.0759008E-07		Resid phdelay (usec)	3.25774E-06	+/-	6.8E-07
Delay rate (us/s)	1.60375647068E-01		Apriori rate (us/s)	1.60364377919E-01		Resid rate (us/s)	1.12691E-05	+/-	4.9E-09
Total phase (deg)	-2512.0		Apriori accel (us/s/s)	3.31972906510E-05		Resid phase (deg)	-2419.0	+/-	21.1

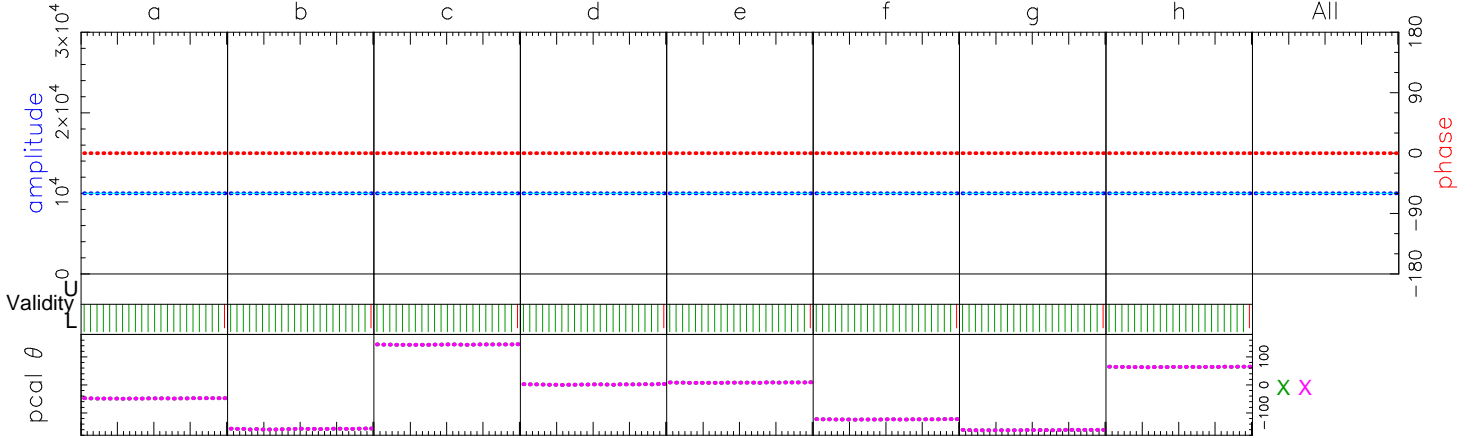
RMS Theor. Amplitude 0.276 +/- 0.051 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 66.8 50.7 Search (1024X32) 0.176 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 88.8 88.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 60.0 29.9 Inc. seg. avg. 0.320 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 45.7 52.2 Inc. frq. avg. 0.305 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 242.4 el 9.8 pa 28.8 P: az 235.2 el 29.3 pa 41.2 u,v (fr/asec) -899.630 1843.956 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XP.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XP.W.176.zpwwbc





Fringe quality 9  
 SNR 299511.9  
 Int time 239.918  
 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) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013607  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

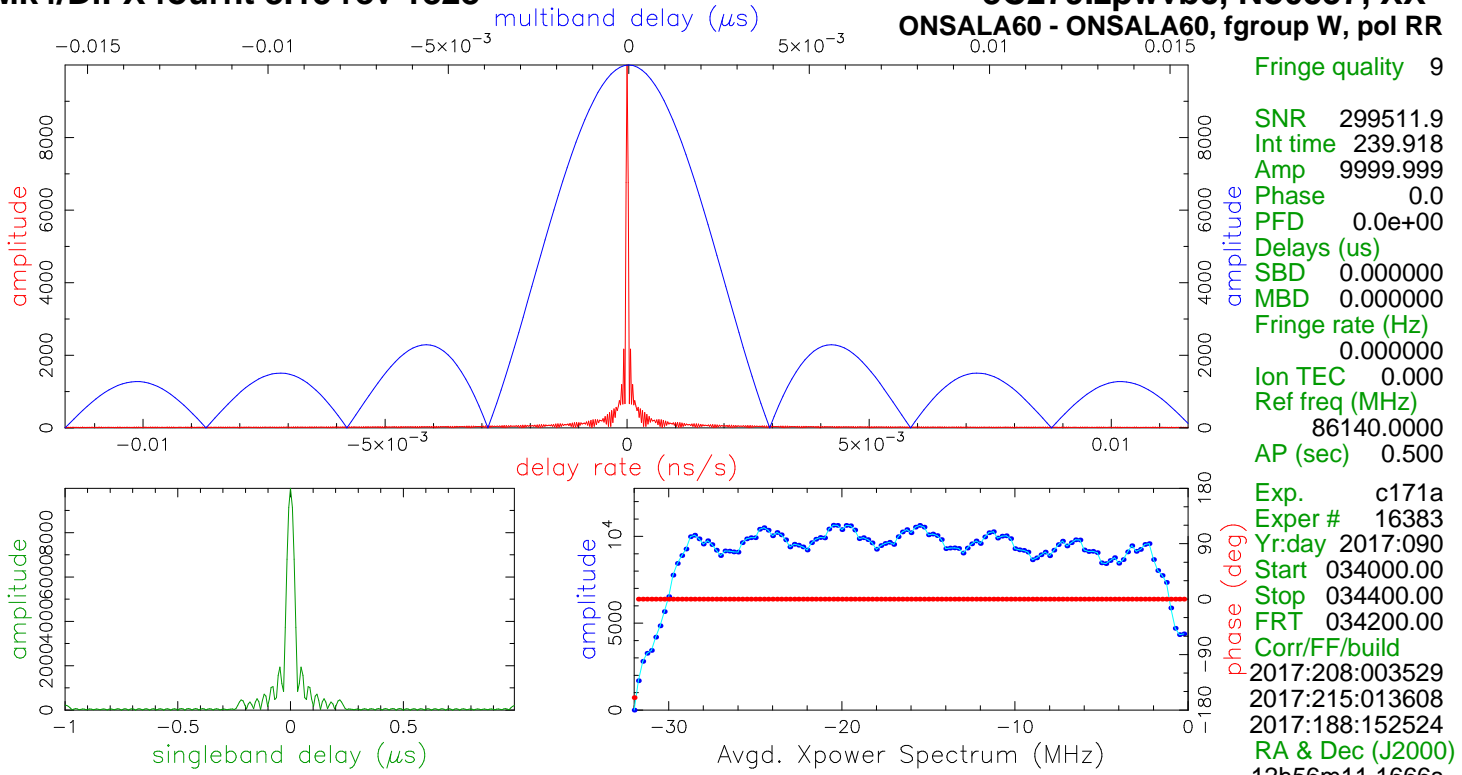
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	

Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	7.2E-09
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	5.8E-08
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.2E-11
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	8.9E-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	RMS	0.0	Theor.	0.0	Amplitude	9999.999 +/- 0.033	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	0.0	Search (1024X32)	10000.000	Interp.	0.000	Apriori clock (usec)	10000.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	0.0	Inc. seg. avg.	10000.000	Inc. frq. avg.	10000.000	Apriori clockrate (us/s)	0.0000000E+00	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.016 0.016
amp/frq (%)	0.0	Inc. frq. avg.	10000.000	Inc. frq. avg.	10000.000	Apriori rate (us/s)	0.0000000000E+00	Sample rate(MSamp/s): 64	ion window (TEC)	0.00 0.00	



Fringe quality 9

SNR 299511.9

Int time 239.918

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) 0.500

Exp. c171a

Exper # 16383

Yr:day 2017:090

Start 034000.00

Stop 034400.00

FRT 034200.00

Corr/FF/build

2017:208:003529

2017:215:013608

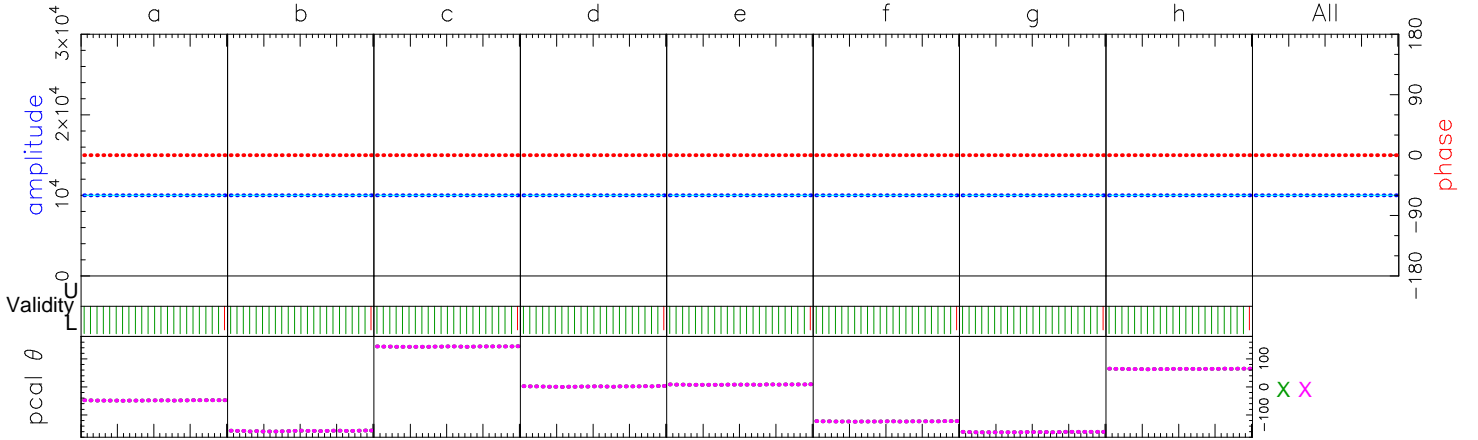
2017:188:152524

RA & Dec (J2000)

12h56m11.1666s

-5° 47' 21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Phase	0.0
10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
129.0	129.0	129.0	129.0	129.0	129.0	129.0	129.0	Sbd box	129.0
U/L 0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X 1000	1000	1000	1000	1000	1000	1000	1000		
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
Group delay (usec)(sbd)	0.0000000000E+00	Apriori delay (usec)	0.0000000000E+00	Resid mbdelay (usec)	0.00000E+00	+/-	7.2E-09		
Sband delay (usec)	0.0000000000E+00	Apriori clock (usec)	0.0000000E+00	Resid sbdelay (usec)	0.00000E+00	+/-	5.8E-08		
Phase delay (usec)	0.0000000000E+00	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	0.00000E+00	+/-	1.2E-11		
Delay rate (us/s)	0.0000000000E+00	Apriori rate (us/s)	0.0000000000E+00	Resid rate (us/s)	0.00000E+00	+/-	8.9E-14		
Total phase (deg)	0.0	Apriori accel (us/s/s)	0.0000000000E+00	Resid phase (deg)	0.0	+/-	0.0		

ph/seg (deg) 0.0 0.0 Theor. Amplitude 9999.999 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5

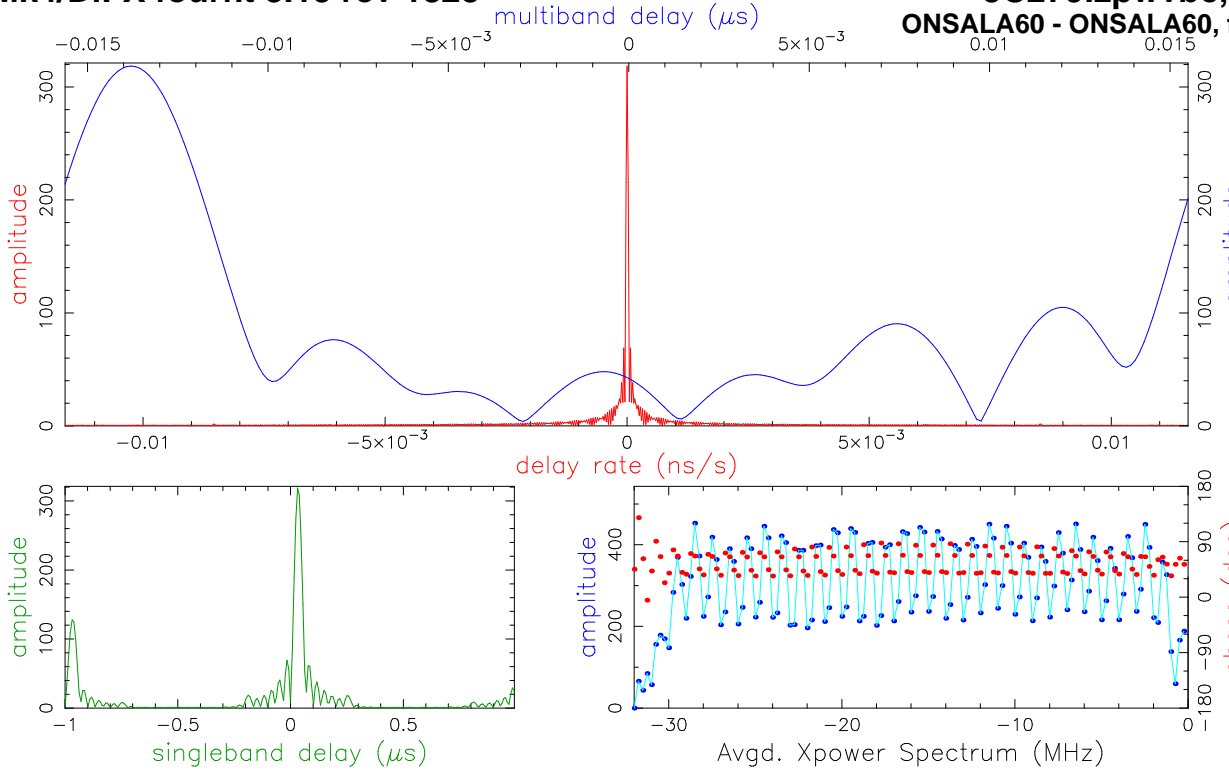
amp/seg (%) 0.0 0.0 Search (1024X32) 10000.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000

ph/frq (deg) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016

amp/frq (%) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012

X: az 242.4 el 9.8 pa 28.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XX.W.210.zpwwbc

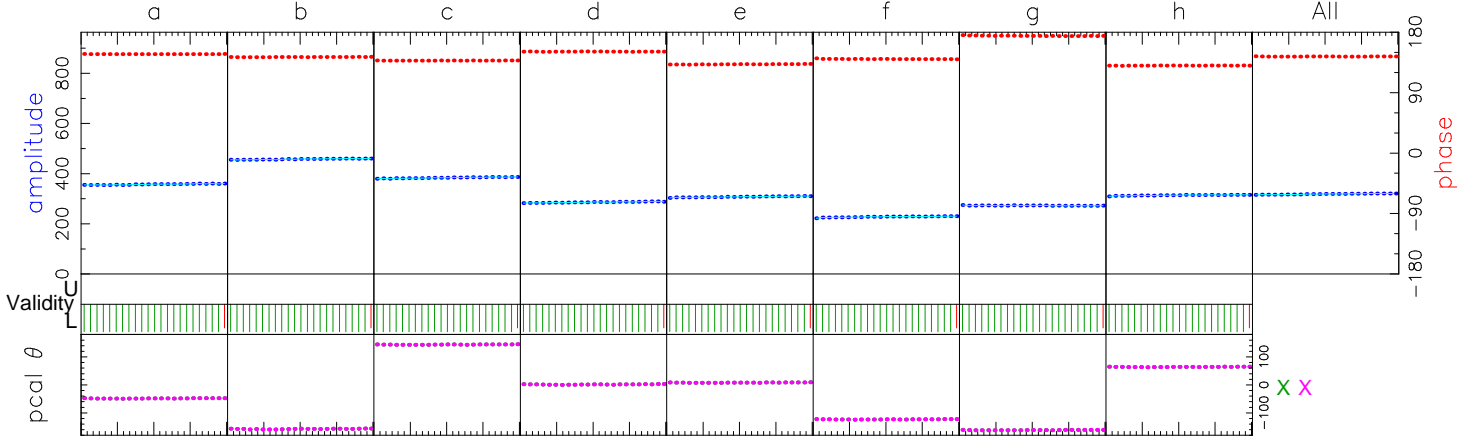


Fringe quality 7

SNR 9623.5  
 Int time 239.918  
 Amp 321.306  
 Phase -216.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.033652  
 MBD -0.013802  
 Fringe rate (Hz)  
 -0.000013  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013609  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5° 47' 21.525"

Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec

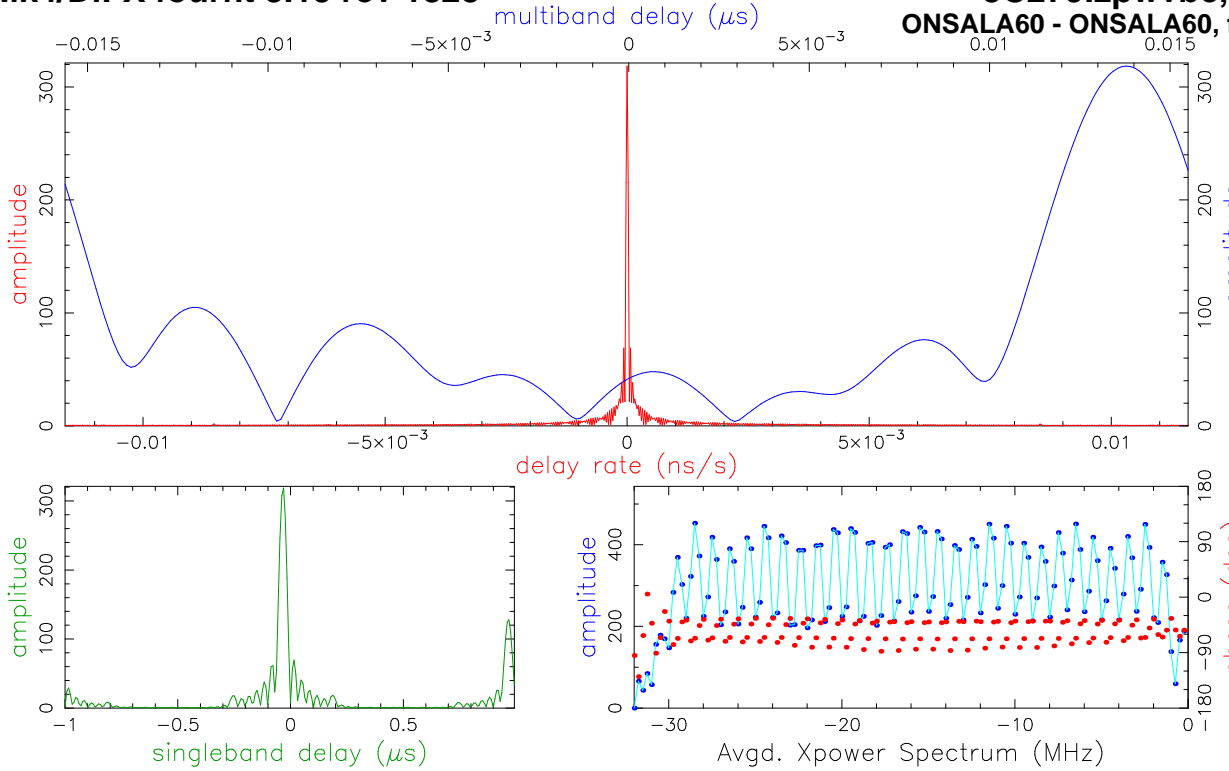


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	147.3	142.9	137.7	151.0	132.2	140.0	174.5	130.2	Phase	143.8
	357.5	457.8	383.8	286.2	307.7	228.1	273.0	313.9	Ampl.	326.0
	133.7	133.3	133.3	132.9	132.8	133.3	132.3	133.6	Sbd box	133.3
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	

Group delay (usec)(sbd) 4.869806250000E-02 Apriori delay (usec) 0.000000000000E+00 Resid mbdelay (usec) -1.38019E-02 +/- 2.3E-07  
 Sband delay (usec) 3.365250000000E-02 Apriori clock (usec) 0.000000000000E+00 Resid sbdelay (usec) 3.36525E-02 +/- 1.8E-06  
 Phase delay (usec) 4.63609225027E-06 Apriori clockrate (us/s) 0.000000000000E+00 Resid phdelay (usec) 4.63609E-06 +/- 3.8E-10  
 Delay rate (us/s) -1.55270489900E-10 Apriori rate (us/s) 0.000000000000E+00 Resid rate (us/s) -1.55270E-10 +/- 2.8E-12  
 Total phase (deg) -216.2 Apriori accel (us/s/s) 0.000000000000E+00 Resid phase (deg) -216.2 +/- 0.0

RMS Theor. Amplitude 321.306 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.1 0.0 Search (1024X32) 318.088 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 15.2 0.0 Inc. seg. avg. 318.606 Sample rate(MSamp/s): 64 dr window (ns/s) -0.012 0.012  
 amp/frq (%) 21.0 0.0 Inc. frq. avg. 325.993 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 242.4 el 9.8 pa 28.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XX.W.211.zpwwbc

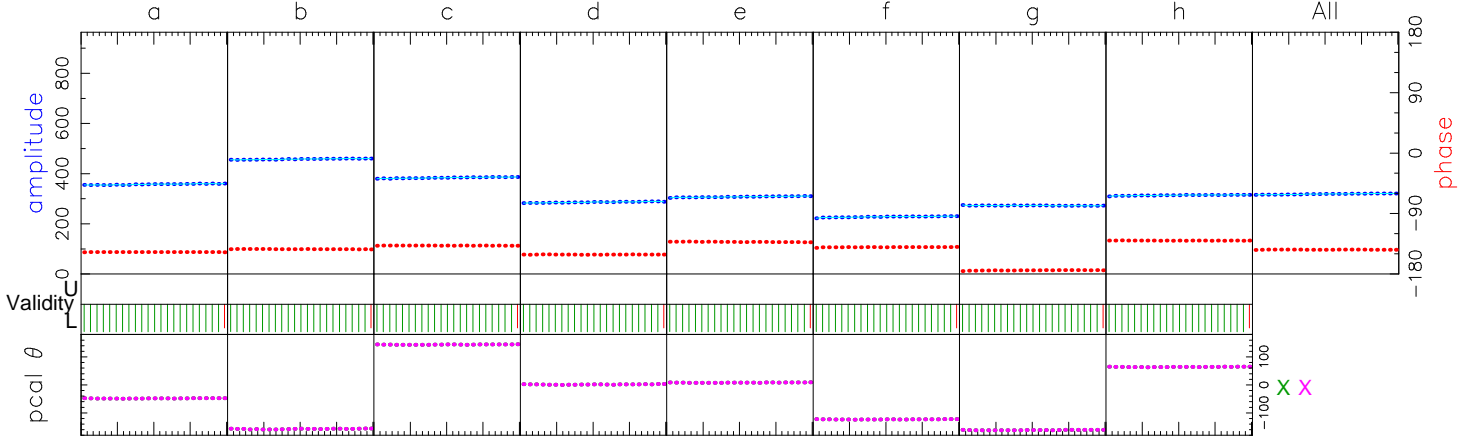


Fringe quality 7

SNR 9623.5  
 Int time 239.918  
 Amp 321.306  
 Phase 216.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.033652  
 MBD 0.013802  
 Fringe rate (Hz) 0.000013  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500

Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034000.00  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013610  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

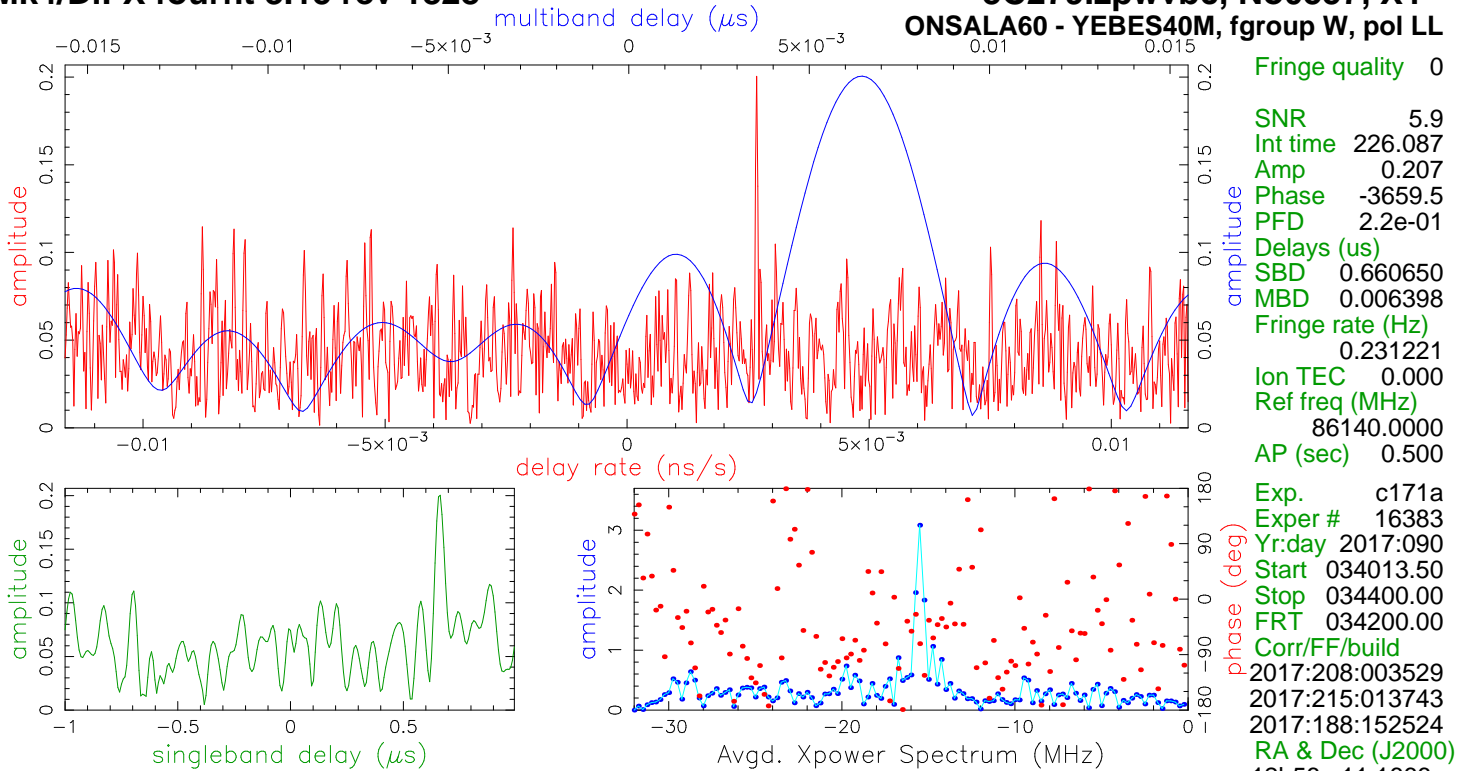
Amp. and Phase vs. time for each freq., 23 segs, 21 APs / seg (10.50 sec / seg.), time ticks 10 sec



	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-147.3	-142.9	-137.7	-151.0	-132.2	-140.0	-174.5	-130.2	Phase	-143.8
	357.5	457.8	383.8	286.2	307.7	228.1	273.0	313.9	Ampl.	326.0
	124.3	124.7	124.7	125.1	125.2	124.7	125.7	124.4	Sbd box	124.7
U/L	0/480	0/480	0/480	0/480	0/480	0/480	0/480	0/480	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)		-4.869806250000E-02		Apriori delay (usec)		0.000000000000E+00		Resid mbdelay (usec)	1.38019E-02	+/- 2.3E-07
Sband delay (usec)		-3.365250000000E-02		Apriori clock (usec)		0.000000000000E+00		Resid sbdelay (usec)	-3.36525E-02	+/- 1.8E-06
Phase delay (usec)		-4.636092250300E-06		Apriori clockrate (us/s)		0.000000000000E+00		Resid phdelay (usec)	-4.63609E-06	+/- 3.8E-10
Delay rate (us/s)		1.55270489900E-10		Apriori rate (us/s)		0.000000000000E+00		Resid rate (us/s)	1.55270E-10	+/- 2.8E-12
Total phase (deg)			216.2	Apriori accel (us/s/s)		0.000000000000E+00		Resid phase (deg)	216.2	+/- 0.0

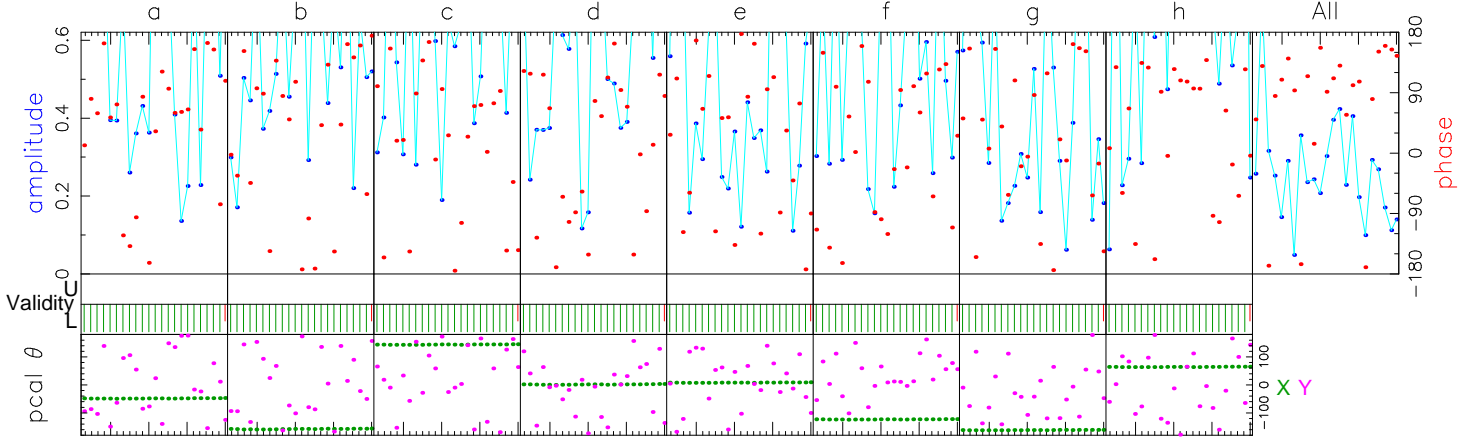
ph/seg (deg) 0.1 0.0 Theor. Amplitude 321.306 +/- 0.033 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 1.0 0.0 Search (1024X32) 318.088 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 15.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 amp/frq (%) 21.0 0.0 Inc. seg. avg. 318.606 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 Inc. frq. avg. 325.993 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 242.4 el 9.8 pa 28.8 X: az 242.4 el 9.8 pa 28.8 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XX.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XX.W.212.zpwwbc



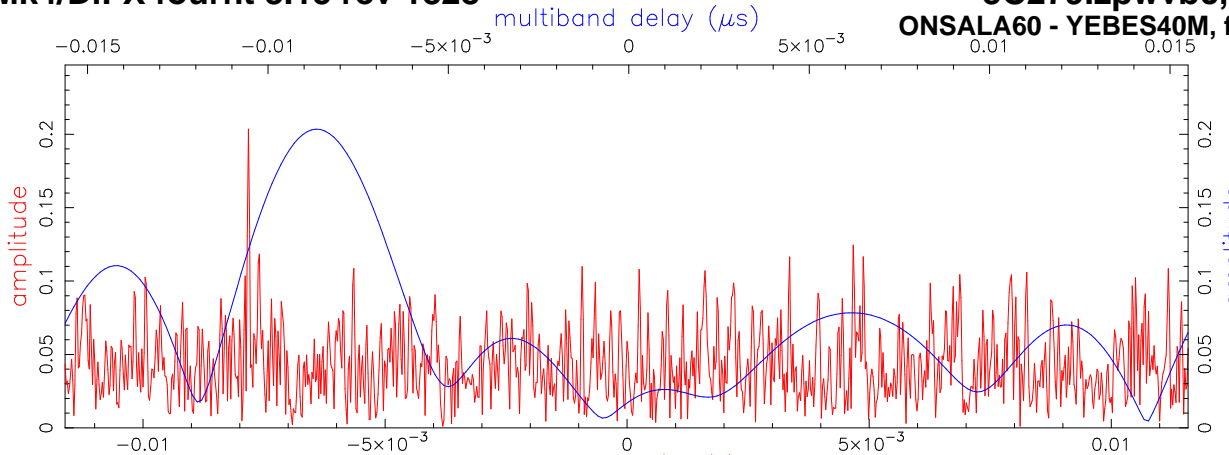
Fringe quality 0  
 SNR 5.9  
 Int time 226.087  
 Amp 0.207  
 Phase -3659.5  
 PFD 2.2e-01  
 Delays (us)  
 SBD 0.660650  
 MBD 0.006398  
 Fringe rate (Hz) 0.231221  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034013.50  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013743  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"

Amp. and Phase vs. time for each freq., 23 segs, 20 APs / seg (10.00 sec / seg.), time ticks 10 sec

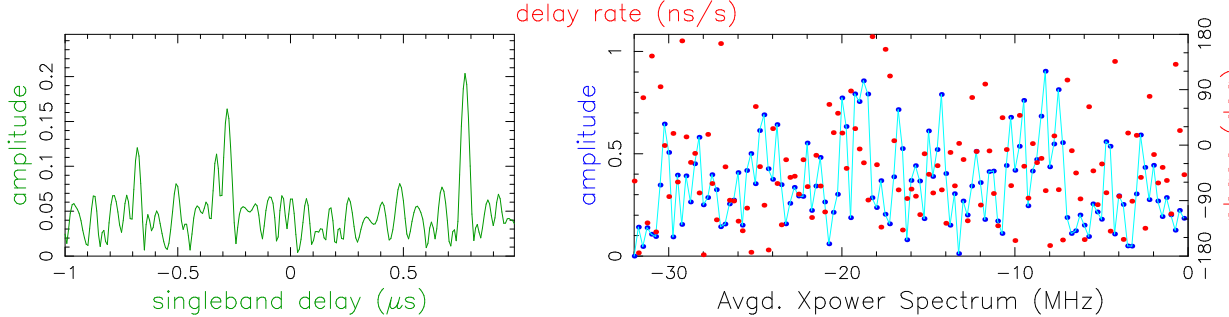


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
U/L	0/453	0/453	0/453	0/453	0/453	0/453	0/453	0/453		
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X	1000	1000	1000	1000	1000	1000	1000	1000	ManI PC	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
Group delay (usec)(sbd)	-6.04883773587E+03		Apriori delay (usec)		-6.04950038376E+03		Resid mbdelay (usec)		6.39790E-03	+/- 3.7E-04
Sband delay (usec)	-6.04883973326E+03		Apriori clock (usec)		-1.4273316E+00		Resid sbdelay (usec)		6.60650E-01	+/- 2.9E-03
Phase delay (usec)	-6.04950037988E+03		Apriori clockrate (us/s)		-1.4759008E-07		Resid phdelay (usec)		3.88599E-06	+/- 6.3E-07
Delay rate (us/s)	1.22144582340E-01		Apriori rate (us/s)		1.22141898095E-01		Resid rate (us/s)		2.68425E-06	+/- 4.8E-09
Total phase (deg)	-3680.2		Apriori accel (us/s/s)		2.99268771241E-05		Resid phase (deg)		-3659.5	+/- 19.5

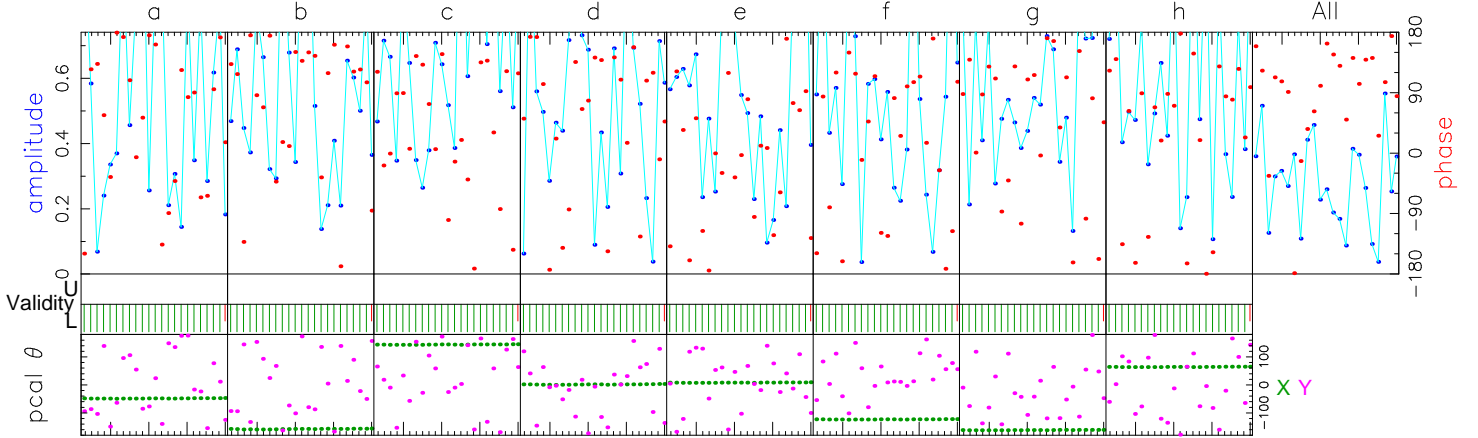
RMS Theor. Amplitude 0.207 +/- 0.035 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 45.6 46.7 Search (1024X32) 0.189 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 74.9 81.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 17.0 27.5 Inc. seg. avg. 0.206 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 45.5 48.1 Inc. frq. avg. 0.189 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00  
 X: az 242.4 el 9.8 pa 28.8 Y: az 233.9 el 27.1 pa 38.4 u,v (fr/asec) -682.001 1457.474 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XY.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XY.W.297.zpwwbc



Fringe quality 0  
 SNR 5.9  
 Int time 226.087  
 Amp 0.247  
 Phase -4385.1  
 PFD 1.9e-01  
 Delays (us)  
 SBD 0.774104  
 MBD -0.008629  
 Fringe rate (Hz)  
 -0.673516  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.500  
 Exp. c171a  
 Exper # 16383  
 Yr:day 2017:090  
 Start 034013.50  
 Stop 034400.00  
 FRT 034200.00  
 Corr/FF/build  
 2017:208:003529  
 2017:215:013744  
 2017:188:152524  
 RA & Dec (J2000)  
 12h56m11.1666s  
 -5°47'21.525"



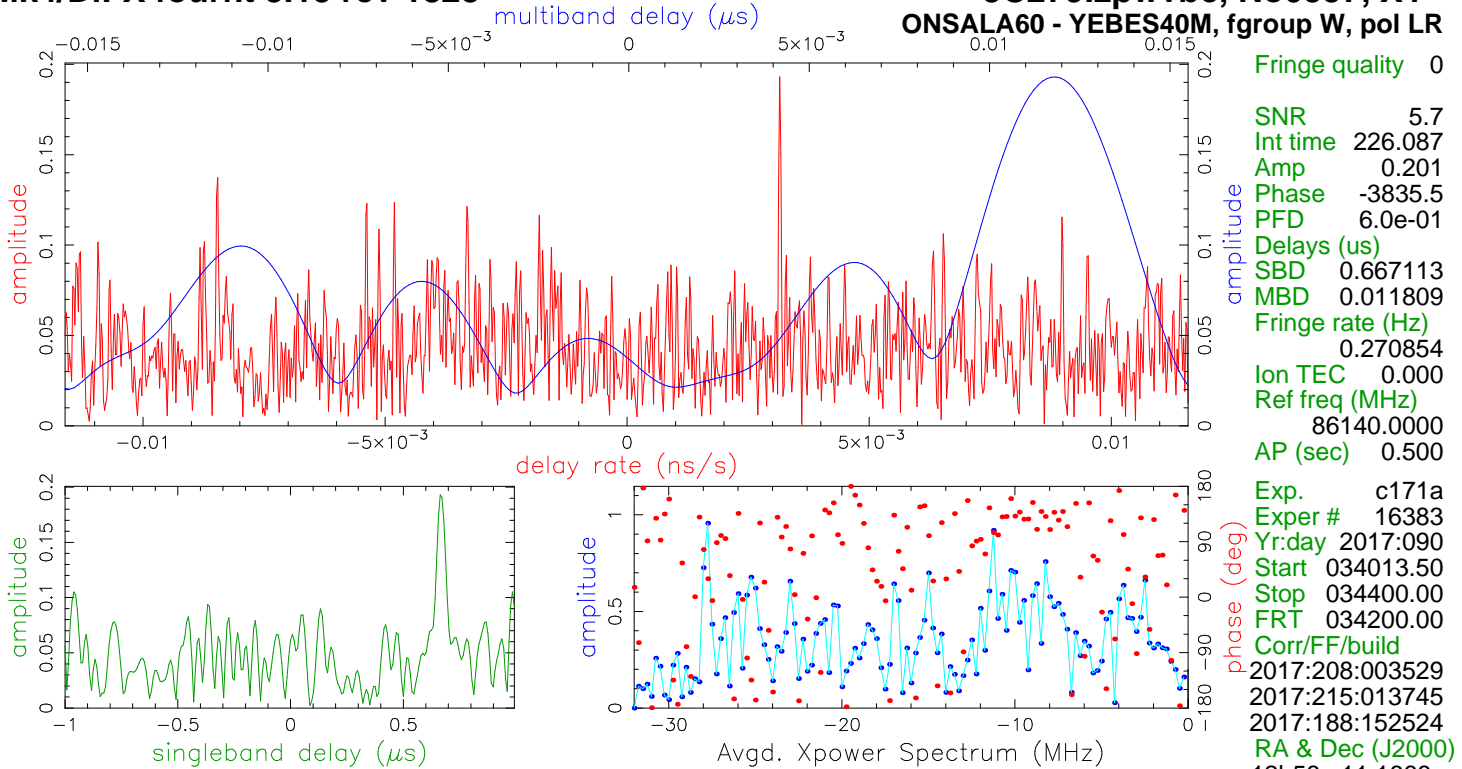
Amp. and Phase vs. time for each freq., 23 segs, 20 APs / seg (10.00 sec / seg.), time ticks 10 sec



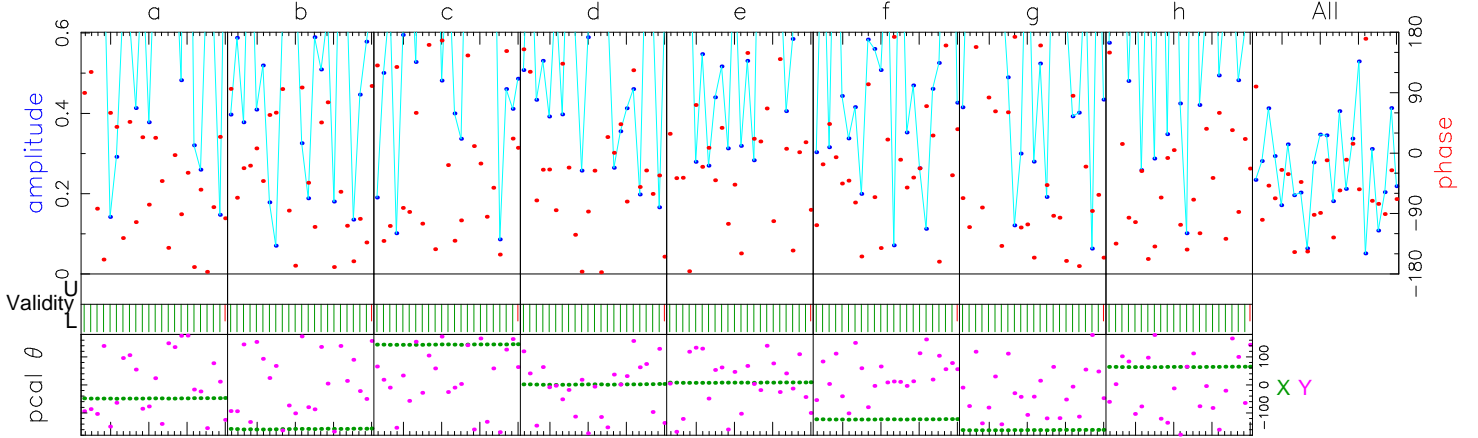
	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	86412.00	All
Validity	145.0	122.7	75.9	125.1	58.8	134.5	124.6	116.0	114.9	114.9
pcal θ	0.2	0.4	0.2	0.2	0.2	0.3	0.2	0.4	0.2	0.2
U/L	179.6	227.7	87.7	3.1	86.4	91.2	110.9	229.6	228.1	228.1
X	0/453	0/453	0/453	0/453	0/453	0/453	0/453	0/453	0/453	APs used
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC
X	1000	1000	1000	1000	1000	1000	1000	1000	1000	PC amp
Y	1000	1000	1000	1000	1000	1000	1000	1000	1000	
X	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Chan ids
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR		Tracks
										Chan ids
										Tracks
Group delay (usec)(sbd)	-6.04872776284E+03		Apriori delay (usec)		-6.04950038376E+03		Resid mbdelay (usec)		-8.62908E-03 +/- 3.7E-04	
Sband delay (usec)	-6.04872628026E+03		Apriori clock (usec)		-1.4273316E+00		Resid sbdelay (usec)		7.74104E-01 +/- 2.9E-03	
Phase delay (usec)	-6.04950038006E+03		Apriori clockrate (us/s)		-1.4759008E-07		Resid phdelay (usec)		3.70408E-06 +/- 6.2E-07	
Delay rate (us/s)	1.22134079241E-01		Apriori rate (us/s)		1.22141898095E-01		Resid rate (us/s)		-7.81885E-06 +/- 4.8E-09	
Total phase (deg)	-4405.8		Apriori accel (us/s/s)		2.99268771241E-05		Resid phase (deg)		-4385.1 +/- 19.4	

RMS 58.2 Theor. 46.4 Amplitude 0.247 +/- 0.042 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 58.2 Search (1024X32) 0.198 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 77.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.016 0.016  
 ph/frq (deg) 32.2 Inc. seg. avg. 0.256 Sample rate(MSamp/s): 64 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite dr window (ns/s) -0.012 0.012  
 amp/frq (%) 36.4 Inc. frq. avg. 0.243 Data rate(Mb/s): 1024 nlags: 128 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 242.4 el 9.8 pa 28.8 Y: az 233.9 el 27.1 pa 38.4 u,v (fr/asec) -682.001 1457.474 simultaneous interpolator  
 Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XY.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XY.W.298.zpwwbc



Amp. and Phase vs. time for each freq., 23 segs, 20 APs / seg (10.00 sec / seg.), time ticks 10 sec

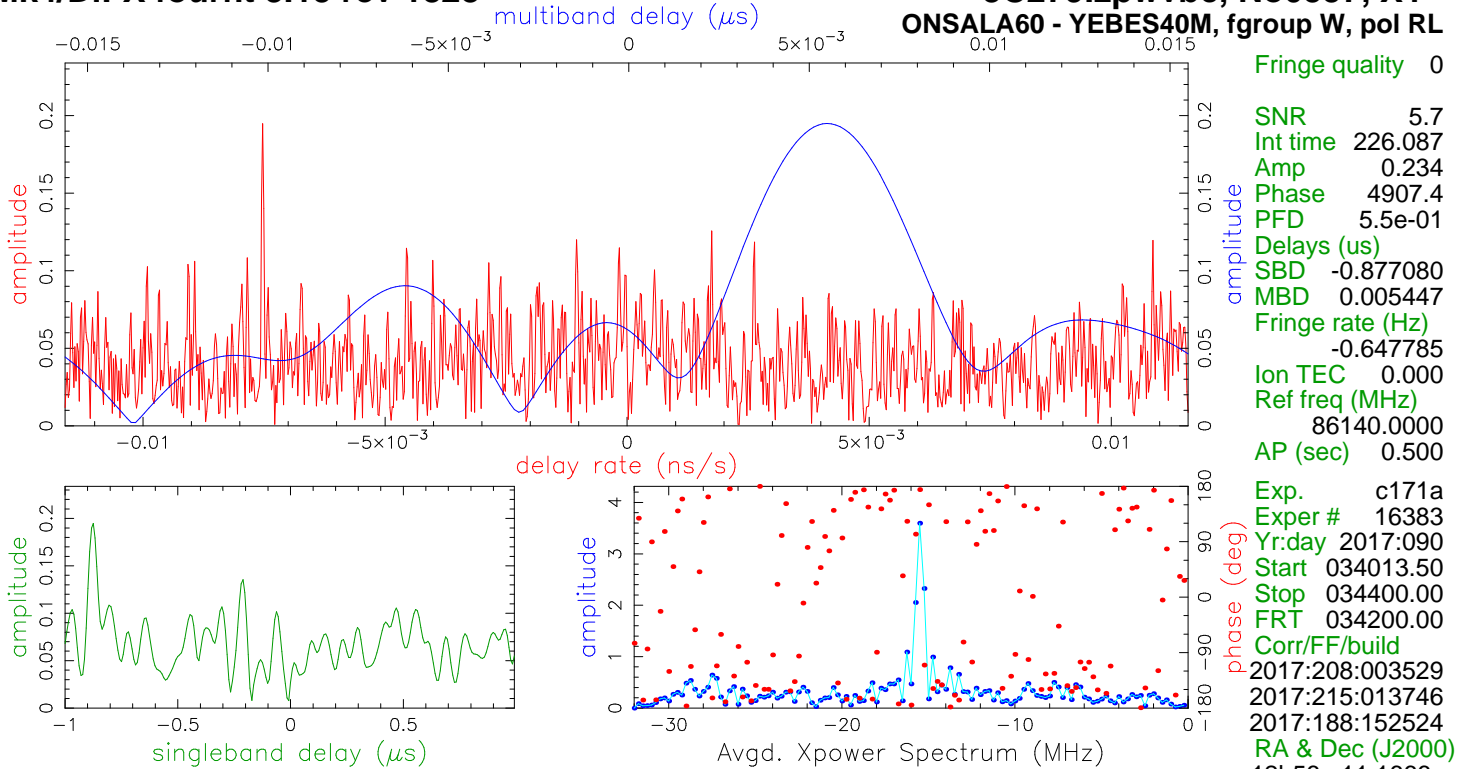


	86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
	-51.2	-56.1	-95.8	-52.2	-16.4	-23.8	-111.8	-58.7	Phase	-55.5
	0.2	0.1	0.2	0.2	0.3	0.2	0.2	0.3	Ampl.	0.2
	47.0	98.7	125.4	6.8	212.8	27.5	131.5	214.5	Sbd box	214.4
U/L	0/453	0/453	0/453	0/453	0/453	0/453	0/453	0/453	APs used	
X	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y	-1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Chan ids	
Y	W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-6.04883232459E+03		Apriori delay (usec)	-6.04950038376E+03		Resid mbdelay (usec)	1.18092E-02	+/-	3.8E-04	
Sband delay (usec)	-6.04883327026E+03		Apriori clock (usec)	-1.4273316E+00		Resid sbdelay (usec)	6.67113E-01	+/-	3.0E-03	
Phase delay (usec)	-6.04950038555E+03		Apriori clockrate (us/s)	-1.4759008E-07		Resid phdelay (usec)	-1.78824E-06	+/-	6.5E-07	
Delay rate (us/s)	1.22145042448E-01		Apriori rate (us/s)	1.22141898095E-01		Resid rate (us/s)	3.14435E-06	+/-	5.0E-09	
Total phase (deg)		-3856.2	Apriori accel (us/s/s)	2.99268771241E-05		Resid phase (deg)	-3835.5	+/-	20.2	

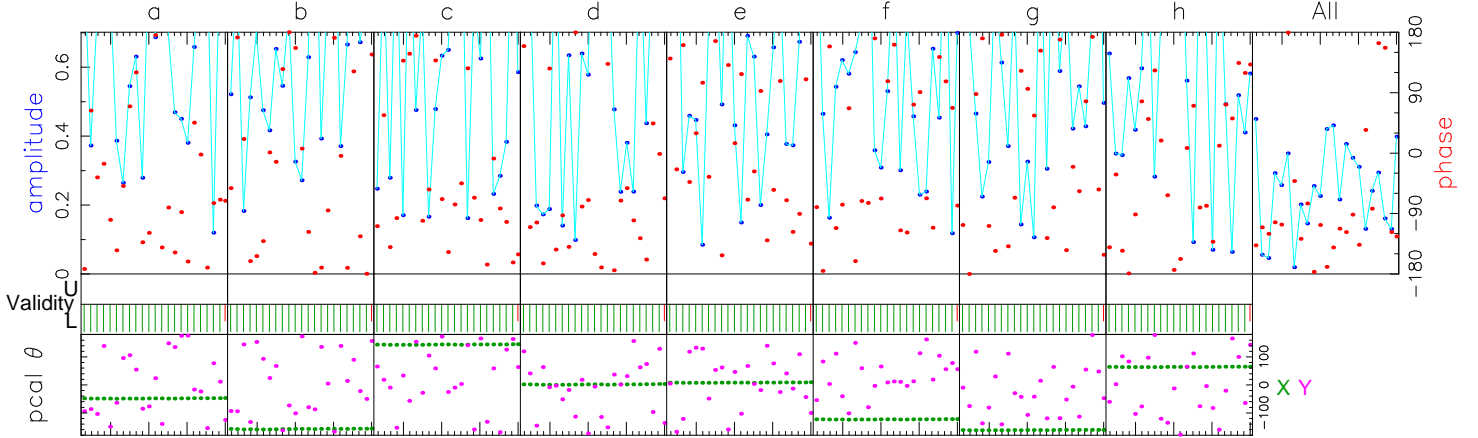
	RMS	Theor.	Amplitude	0.201 +/- 0.035	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	60.0	48.5	Search (1024X32)	0.187	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.016	0.016
amp/seg (%)	70.0	84.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.012	0.012
ph/frq (deg)	35.0	28.6	Inc. seg. avg.	0.203	Sample rate(MSamp/s): 64	Data rate(Mb/s): 1024	ion window (TEC)	0.00	0.00
amp/frq (%)	33.1	50.0	Inc. frq. avg.	0.205	nlags: 128 t_cohere infinite				

X: az 242.4 el 9.8 pa 28.8 Y: az 233.9 el 27.1 pa 38.4 u,v (fr/asec) -682.001 1457.474 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XY.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XY.W.299.zpwwbc



Amp. and Phase vs. time for each freq., 23 segs, 20 APs / seg (10.00 sec / seg.), time ticks 10 sec



86156.00	86188.00	86220.00	86252.00	86284.00	86316.00	86348.00	86380.00	Freq (MHz)	All
-107.0	-169.3	-118.9	-131.8	-111.3	-129.1	-135.5	-82.5	Phase	-132.6
0.3	0.4	0.4	0.3	0.0	0.2	0.3	0.0	Ampl.	0.2
16.3	209.9	90.1	17.6	196.8	100.2	218.3	217.2	Sbd box	16.7
U/L 0/453	0/453	0/453	0/453	0/453	0/453	0/453	0/453	APs used	
X -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
Y -1000	-1000	-1000	-1000	-1000	-1000	-1000	-1000	PC freqs	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y 0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
X 1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y 1000	1000	1000	1000	1000	1000	1000	1000		
X W00LR	W01LR	W02LR	W03LR	W04LR	W05LR	W06LR	W07LR	Chan ids	
Y W00LL	W01LL	W02LL	W03LL	W04LL	W05LL	W06LL	W07LL	Tracks	
								Chan ids	
								Tracks	
Group delay (usec)(sbd)	-6.05036993702E+03		Apriori delay (usec)	-6.04950038376E+03		Resid mbdelay (usec)	5.44674E-03	+/-	3.8E-04
Sband delay (usec)	-6.05037746376E+03		Apriori clock (usec)	-1.4273316E+00		Resid sbdelay (usec)	-8.77080E-01	+/-	3.0E-03
Phase delay (usec)	-6.04950038804E+03		Apriori clockrate (us/s)	-1.4759008E-07		Resid phdelay (usec)	-4.27513E-06	+/-	6.5E-07
Delay rate (us/s)	1.22134377952E-01		Apriori rate (us/s)	1.22141898095E-01		Resid rate (us/s)	-7.52014E-06	+/-	5.0E-09
Total phase (deg)		4886.7	Apriori accel (us/s/s)	2.99268771241E-05		Resid phase (deg)	4907.4	+/-	20.2

ph/seg (deg)	52.4	Theor. 48.3	Amplitude 0.234 +/- 0.041	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	68.1	84.3	Search (1024X32) 0.187	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	29.3	28.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	58.5	49.7	Inc. seg. avg. 0.218	Sample rate(MSamp/s): 64	mb window (us) -0.016 0.016
			Inc. frq. avg. 0.222	Data rate(Mb/s): 1024	dr window (ns/s) -0.012 0.012
				nlags: 128 t_cohere infinite	ion window (TEC) 0.00 0.00

X: az 242.4 el 9.8 pa 28.8 Y: az 233.9 el 27.1 pa 38.4 u,v (fr/asec) -682.001 1457.474 simultaneous interpolator

Control file: ../cf\_1234 Input file: /Exps/c171a/gmva/1234/No0557/XY.zpwwbc Output file: /Exps/c171a/gmva/1234/No0557/XY.W.300.zpwwbc