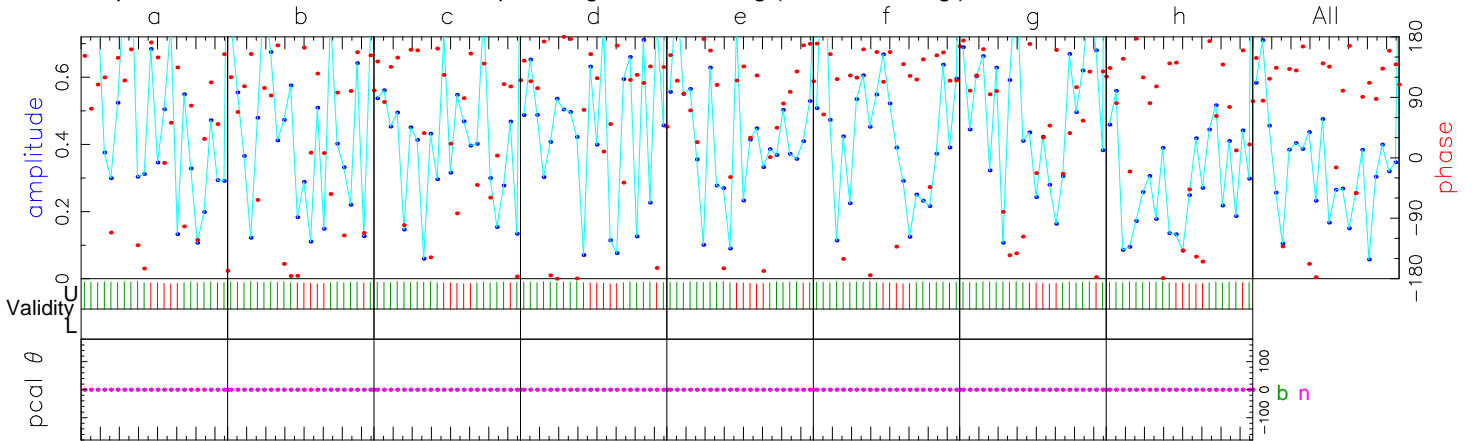


Fringe quality 9  
 SNR 13.5  
 Int time 423.446  
 Amp 0.240  
 Phase 132.5  
 PFD 7.3e-33  
 Delays (us)  
 SBD -0.000030  
 MBD 0.001012  
 Fringe rate (Hz) -0.009937  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211226  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

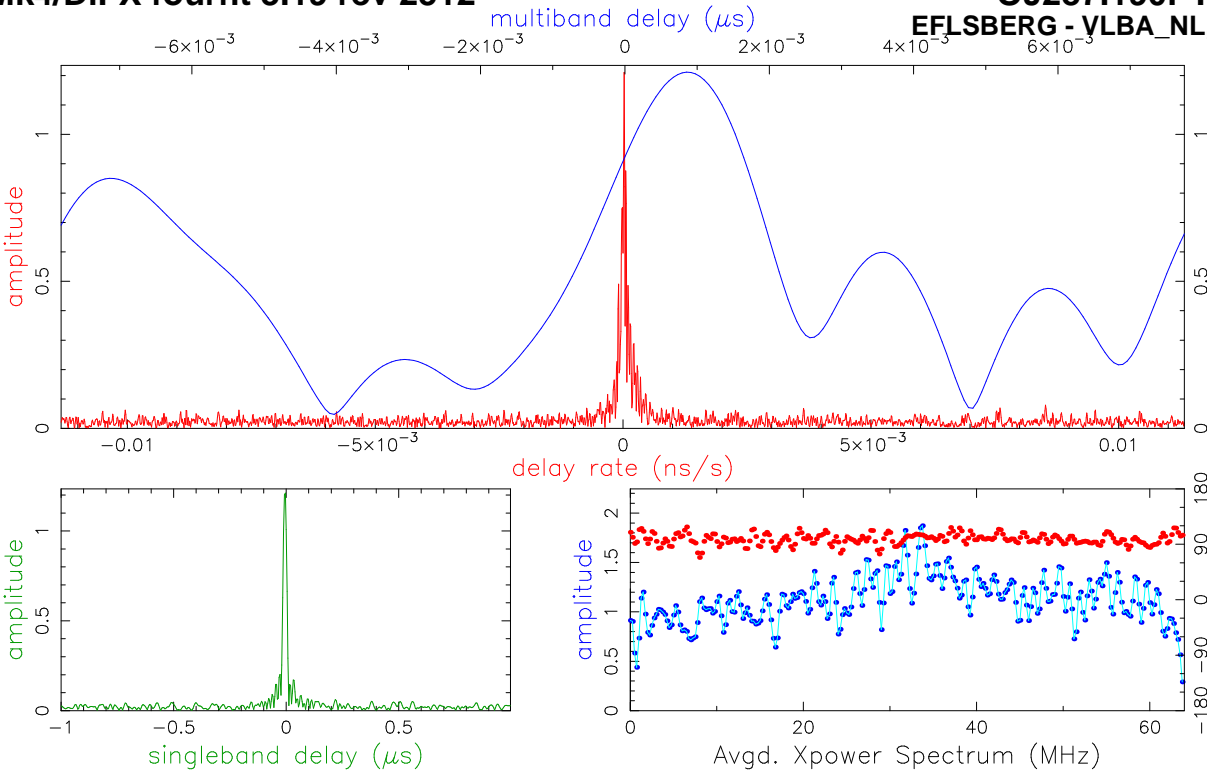
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	125.9	136.4	137.7	143.1	114.2	140.7	134.8	124.4	Phase	132.5
	0.3	0.2	0.2	0.3	0.3	0.3	0.2	0.1	Ampl.	0.2
	257.2	257.0	256.6	258.4	257.3	257.1	256.8	255.5	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.67783006055E+03		Apriori delay (usec)		-5.67783107216E+03		Resid mbdelay (usec)		1.01161E-03	+/- 8.0E-05
Sband delay (usec)	-5.67783110191E+03		Apriori clock (usec)		-3.3712811E+01		Resid sbdelay (usec)		-2.97500E-05	+/- 6.4E-04
Phase delay (usec)	-5.67783106789E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		4.27223E-06	+/- 2.7E-07
Delay rate (us/s)	2.40634495795E-01		Apriori rate (us/s)		2.40634611158E-01		Resid rate (us/s)		-1.15362E-07	+/- 1.1E-09
Total phase (deg)			Apriori accel (us/s/s)		3.30499770573E-05		Resid phase (deg)		132.5	+/- 8.5

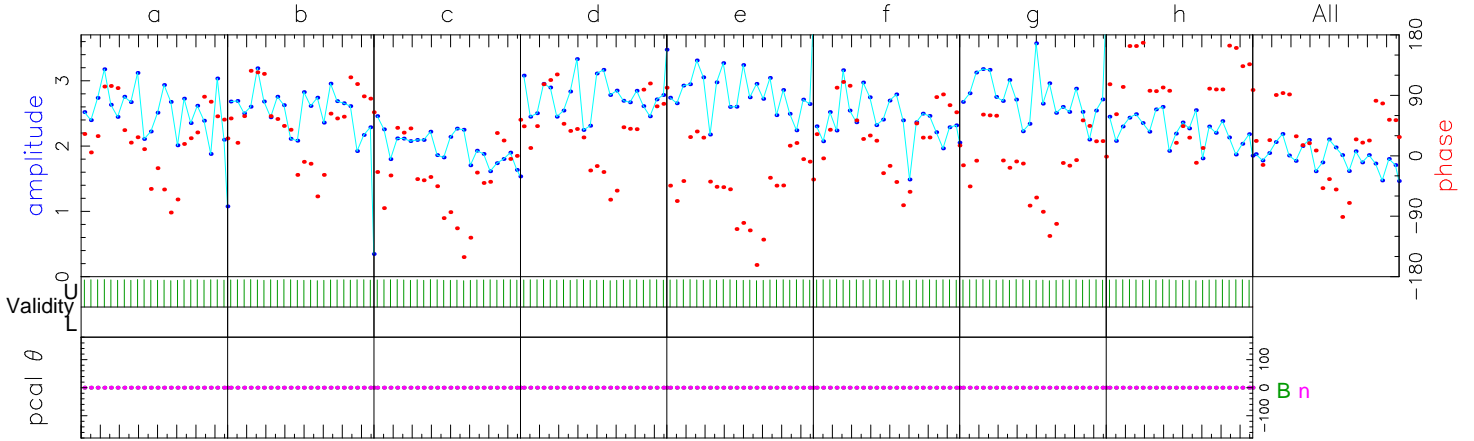
	RMS	Theor.	Amplitude	0.240 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	59.9	20.3	Search (2048X32)	0.223	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	74.6	35.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	10.6	12.0	Inc. seg. avg.	0.316	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	22.6	20.9	Inc. frq. avg.	0.238	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

b: az 94.7 el 31.5 pa -45.1 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1412.823 1608.920 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/bn.W.17.190PTT



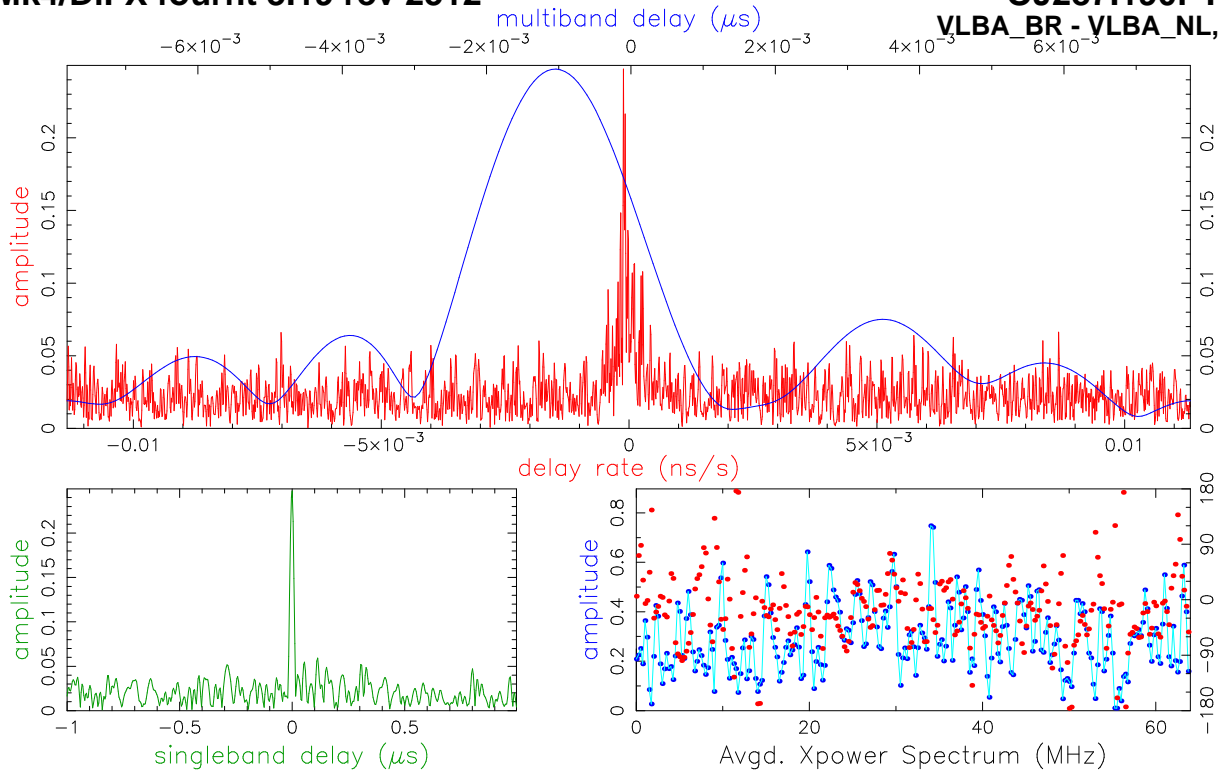
Fringe quality 2  
SNR 70.2  
Int time 431.958  
Amp 1.235  
Phase 22.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.005710  
MBD 0.000824  
Fringe rate (Hz) 0.002310  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211228  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0			
B	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
B:n	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			
n	1000	1000	1000	1000	1000	1000	1000	1000			
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-5.60496100307E+03				-5.60496182716E+03				8.24084E-04	+/- 1.5E-05	
Sband delay (usec)	-5.60496753691E+03				-1.9262564E+01				-5.70975E-03	+/- 1.2E-04	
Phase delay (usec)	-5.60496182643E+03				-5.3399998E-07				7.31502E-07	+/- 5.3E-08	
Delay rate (us/s)	-1.45948657218E+00				-1.45948659899E+00				2.68139E-08	+/- 2.1E-10	
Total phase (deg)			-262.2		3.37939981920E-05				22.7	+/- 1.6	
	RMS	Theor.	Amplitude	1.235 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	51.8	3.9	Search (2048X32)	1.137	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	51.8	6.8	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	51.5	2.3	Inc. seg. avg.	1.846	Sample rate(MISamp/s): 128					dr window (ns/s)	-0.011 0.011
amp/frq (%)	35.6	4.0	Inc. frq. avg.	1.637	Data rate(Mb/s): 2048					ion window (TEC)	0.00 0.00

B: az 261.4 el 33.2 pa 42.0 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8950.552 1800.427 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Bn.W.24.190PTT

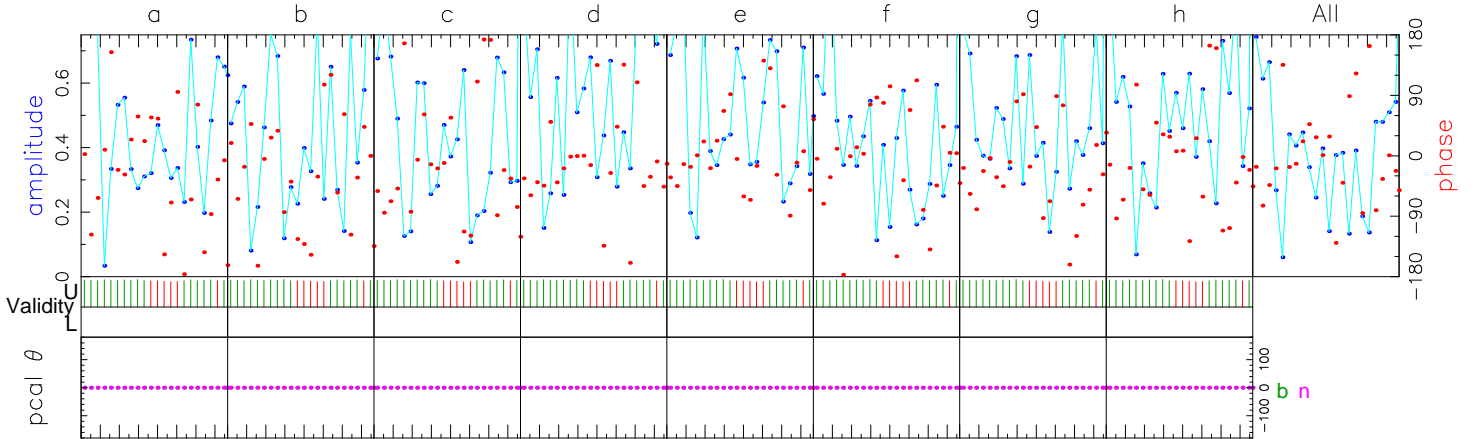


Fringe quality 9

SNR 14.1  
Int time 423.446  
Amp 0.250  
Phase -22.7  
PFD 3.9e-36  
Delays (us)  
SBD -0.001312  
MBD -0.001068  
Fringe rate (Hz)  
-0.009954  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

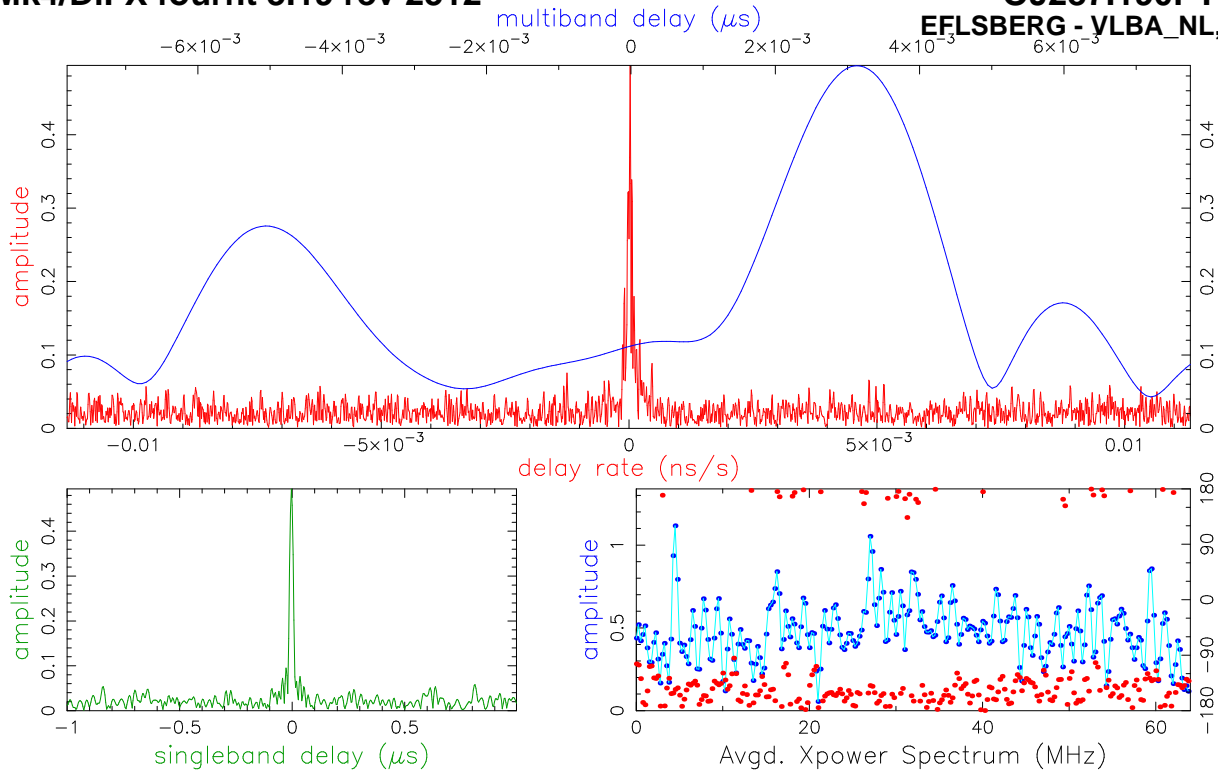
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211232  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-25.7	-12.8	-55.6	-23.0	-6.6	-6.5	-16.6	-37.7	Phase	-22.7
	0.2	0.2	0.2	0.4	0.3	0.2	0.3	0.3	Ampl.	0.3
	257.5	257.6	257.1	256.5	256.1	255.8	256.6	256.8	Sbd box	256.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.67783214036E+03		Apriori delay (usec)		-5.67783107216E+03		Resid mbdelay (usec)		-1.06820E-03	+/- 7.7E-05
Sband delay (usec)	-5.67783238416E+03		Apriori clock (usec)		-3.3712811E+01		Resid sbdelay (usec)		-1.31200E-03	+/- 6.1E-04
Phase delay (usec)	-5.67783107289E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		-7.30511E-07	+/- 2.6E-07
Delay rate (us/s)	2.40634495603E-01		Apriori rate (us/s)		2.40634611158E-01		Resid rate (us/s)		-1.15555E-07	+/- 1.0E-09
Total phase (deg)			Apriori accel (us/s/s)		3.30499770573E-05		Resid phase (deg)		-22.7	+/- 8.1

ph/seg (deg) 75.0 19.5 Search (2048X32) 0.227 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 88.6 34.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 18.1 11.5 Inc. seg. avg. 0.361 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.4 20.1 Inc. frq. avg. 0.251 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 b: az 94.7 el 31.5 pa -45.1 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1412.823 1608.920 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/bn.W.39.190PTT

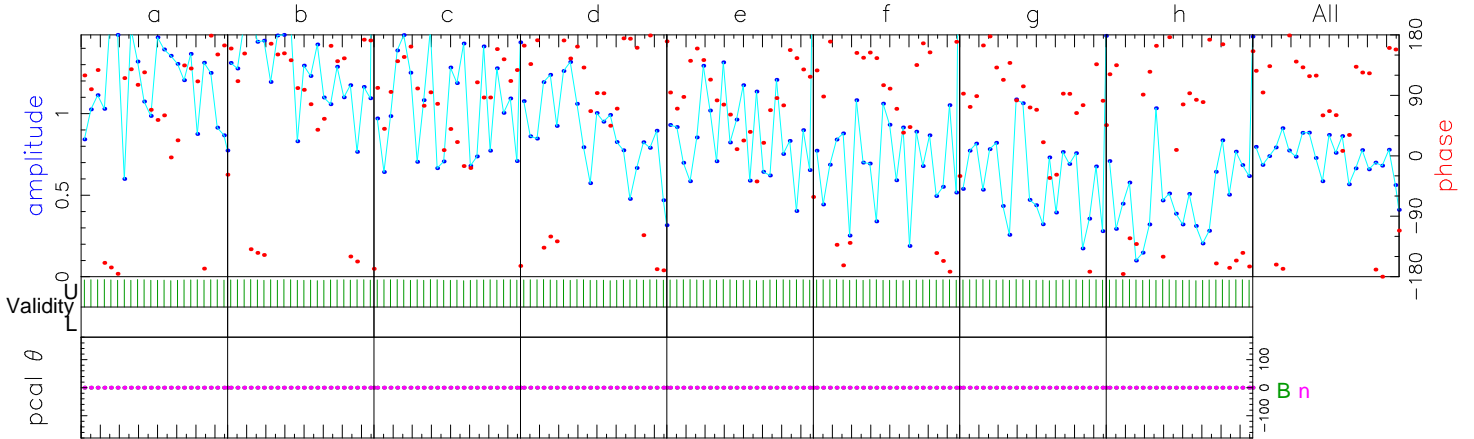


Fringe quality 6

SNR 28.1  
Int time 431.958  
Amp 0.494  
Phase 129.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.003545  
MBD 0.003145  
Fringe rate (Hz) 0.002360  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

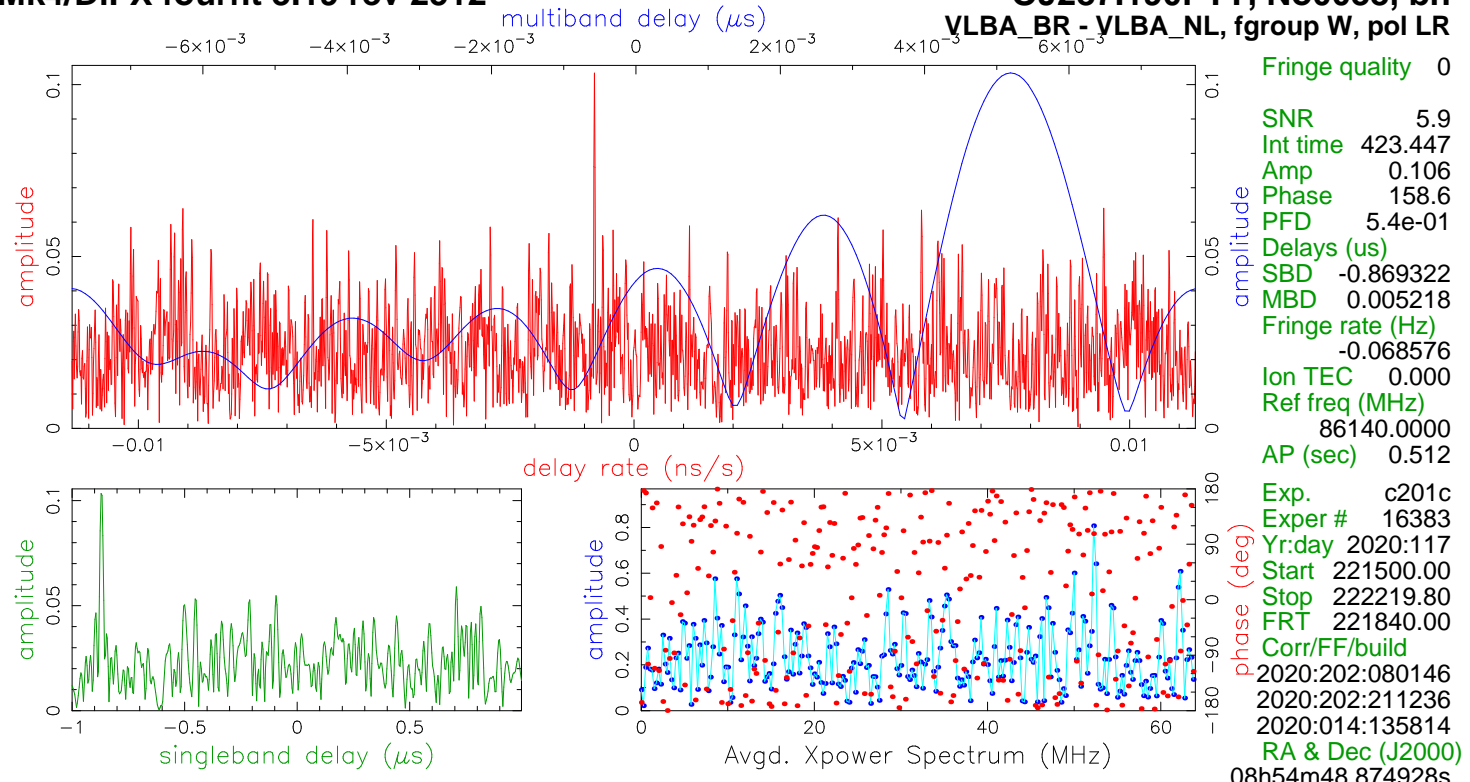
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211233  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

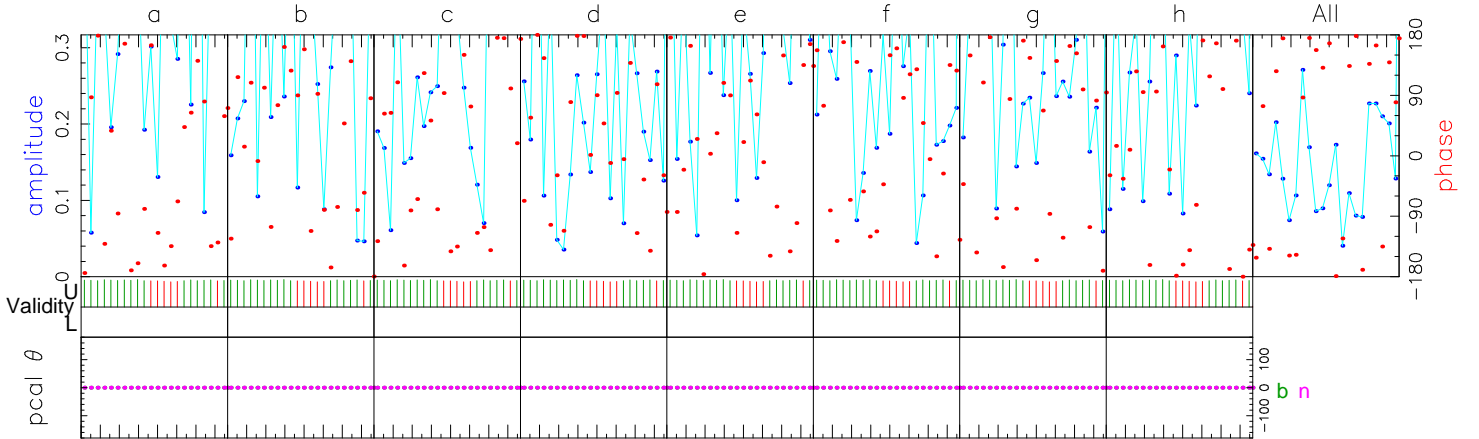


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	126.4	153.5	95.3	163.4	85.7	150.1	96.2	171.0	Phase	129.7
B	0.7	0.9	0.7	0.6	0.6	0.5	0.4	0.3	Ampl.	0.6
n	257.0	256.1	256.4	256.8	256.7	256.7	256.4	256.4	Sbd box	256.1
B	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.60495868248E+03		Apriori delay (usec)		-5.60496182716E+03		Resid mbdelay (usec)		3.14468E-03	+/- 3.9E-05
Sband delay (usec)	-5.60496537216E+03		Apriori clock (usec)		-1.9262564E+01		Resid sbdelay (usec)		-3.54500E-03	+/- 3.1E-04
Phase delay (usec)	-5.60496182298E+03		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		4.18336E-06	+/- 1.3E-07
Delay rate (us/s)	-1.45948657159E+00		Apriori rate (us/s)		-1.45948659899E+00		Resid rate (us/s)		2.74020E-08	+/- 5.2E-10
Total phase (deg)			Apriori accel (us/s/s)		3.37939981920E-05		Resid phase (deg)		129.7	+/- 4.1

ph/seg (deg) 51.7 9.8 Search (2048X32) 0.455 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.5 17.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 36.7 5.8 Inc. seg. avg. 0.734 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.4 10.1 Inc. frq. avg. 0.569 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 261.4 el 33.2 pa 42.0 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8950.552 1800.427 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Bn.W.46.190PTT



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

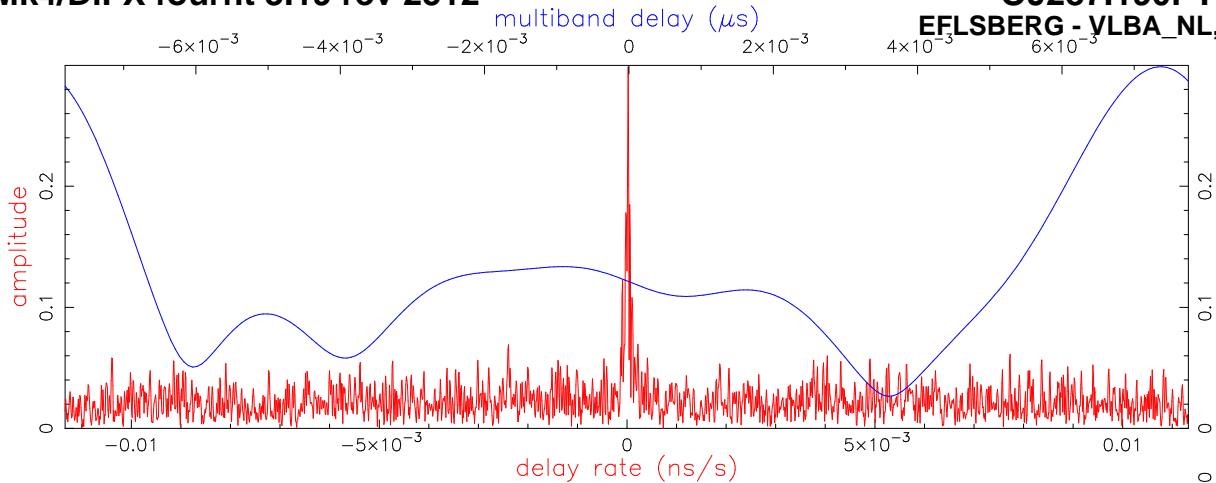


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-176.0	121.6	165.1	151.4	166.6	168.9	157.9	156.3	Phase	158.6
	0.2	0.1	0.1	0.0	0.1	0.0	0.1	0.2	Ampl.	0.1
	327.5	309.5	160.3	339.1	164.8	227.3	192.4	34.0	Sbd box	34.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.67870085376E+03		Apriori delay (usec)	-5.67783107216E+03	Resid mbdelay (usec)	5.21840E-03	+/-	1.8E-04		
Sband delay (usec)	-5.67870039466E+03		Apriori clock (usec)	-3.3712811E+01	Resid sbdelay (usec)	-8.69322E-01	+/-	1.5E-03		
Phase delay (usec)	-5.67783106705E+03		Apriori clockrate (us/s)	-3.7599999E-07	Resid phdelay (usec)	5.11324E-06	+/-	6.2E-07		
Delay rate (us/s)	2.40633815061E-01		Apriori rate (us/s)	2.40634611158E-01	Resid rate (us/s)	-7.96096E-07	+/-	2.5E-09		
Total phase (deg)		-41.5	Apriori accel (us/s/s)	3.30499770573E-05	Resid phase (deg)	158.6	+/-	19.3		

	RMS	Theor.	Amplitude	0.106 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	46.3	46.3	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	70.5	80.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	19.5	27.3	Inc. seg. avg.	0.110	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	48.4	47.7	Inc. frq. avg.	0.098	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

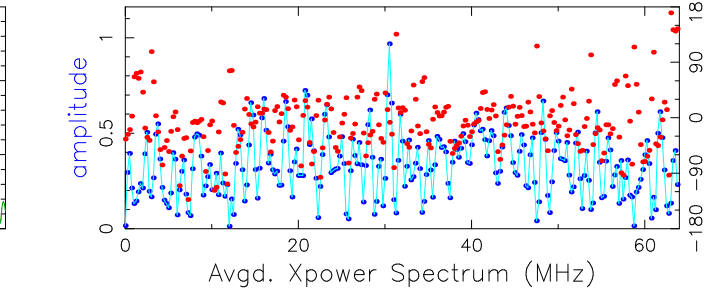
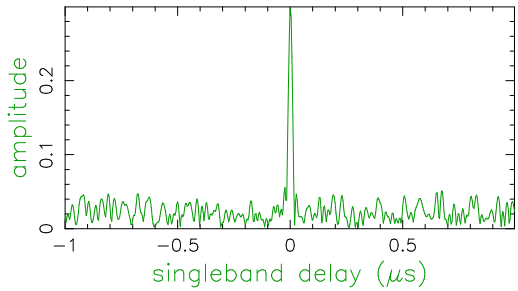
b: az 94.7 el 31.5 pa -45.1 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1412.823 1608.920 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/bn.W.58.190PTT



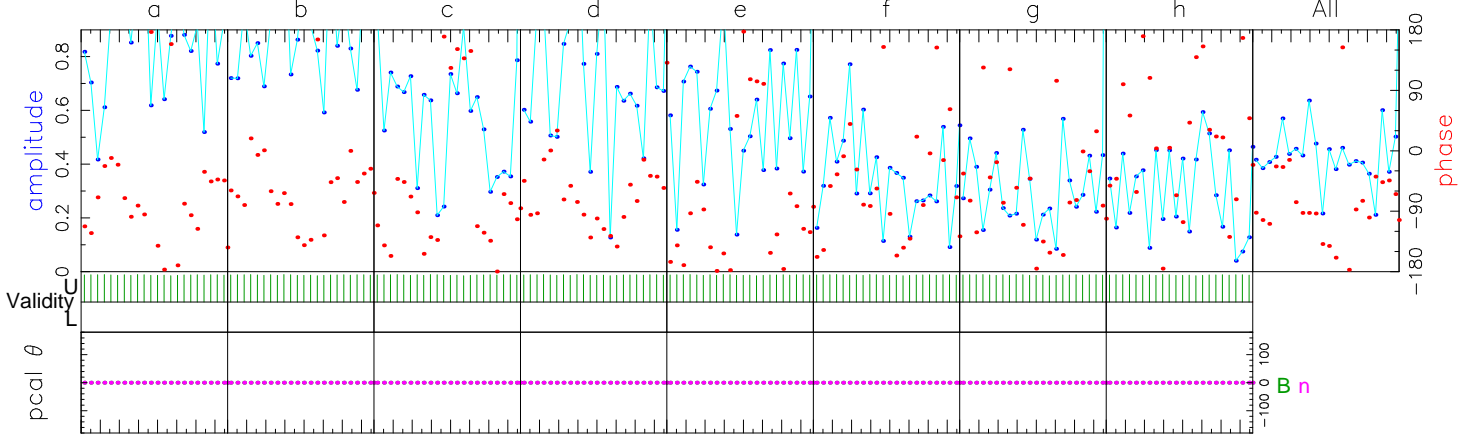
Fringe quality 7

SNR 17.0  
Int time 431.957  
Amp 0.300  
Phase -84.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.000902  
MBD 0.007406  
Fringe rate (Hz)  
0.002376  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512



Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211238  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

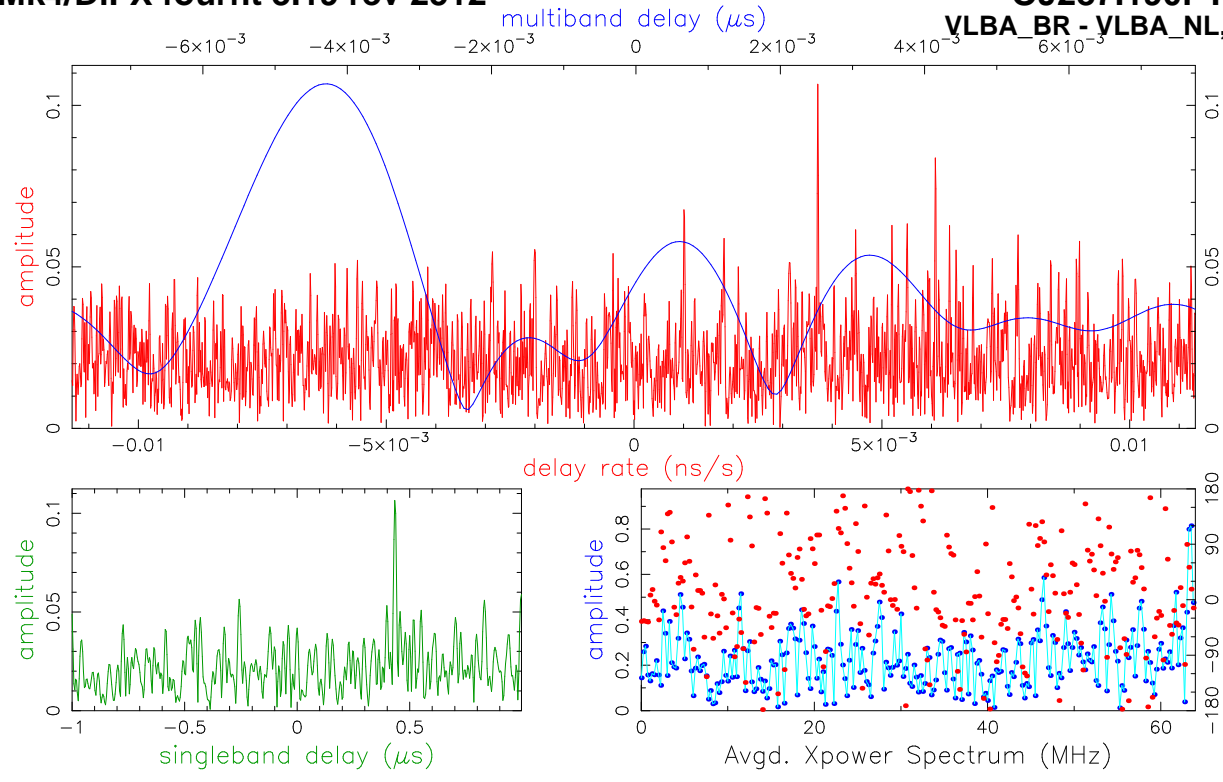


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.8	-62.7	-131.5	-68.9	-145.1	-54.8	-76.1	21.0	Phase	-84.7
	0.6	0.6	0.3	0.6	0.3	0.2	0.2	0.0	Ampl.	0.3
	256.6	257.1	257.6	257.4	257.3	258.7	258.3	174.2	Sbd box	257.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-5.60495442092E+03		Apriori delay (usec)		-5.60496182716E+03		Resid mbdelay (usec)		7.40624E-03	+/- 6.4E-05
Sband delay (usec)	-5.60496092491E+03		Apriori clock (usec)		-1.9262564E+01		Resid sbdelay (usec)		9.02250E-04	+/- 5.1E-04
Phase delay (usec)	-5.60496182989E+03		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		-2.73188E-06	+/- 2.2E-07
Delay rate (us/s)	-1.45948657141E+00		Apriori rate (us/s)		-1.45948659899E+00		Resid rate (us/s)		2.75799E-08	+/- 8.5E-10
Total phase (deg)			Apriori accel (us/s/s)		3.37939981920E-05		Resid phase (deg)		-84.7	+/- 6.7

ph/seg (deg) 49.6 16.1 Search (2048X32) 0.276 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 54.6 28.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 55.9 9.5 Inc. seg. avg. 0.413 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 70.1 16.6 Inc. frq. avg. 0.345 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 261.4 el 33.2 pa 42.0 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8950.552 1800.427 simultaneous interpolator

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, bn  
VLBA\_BR - VLBA\_NL, fgroup W, pol RL

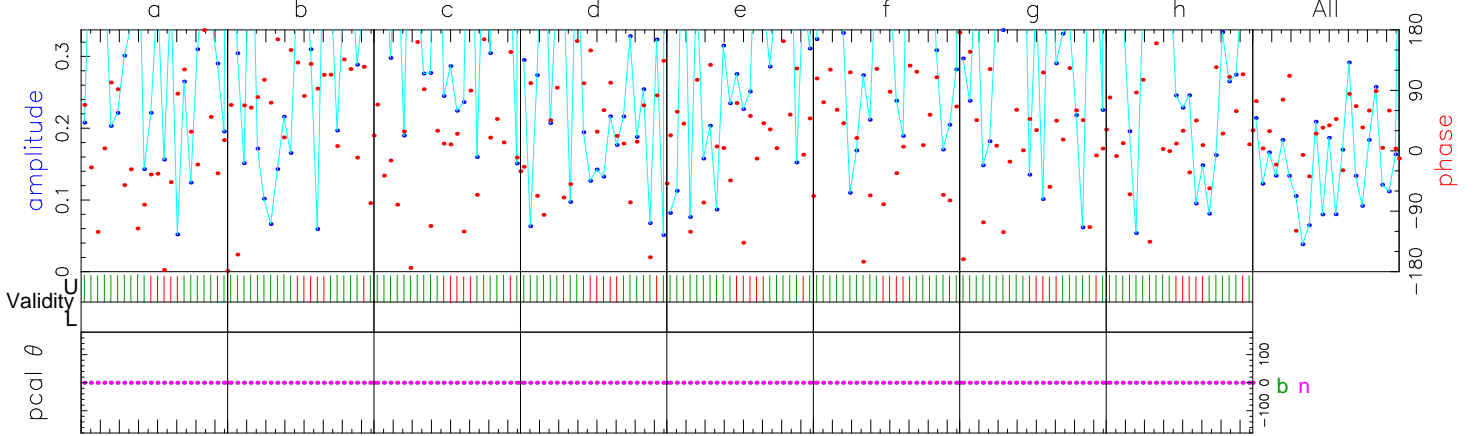


Fringe quality 0

SNR 6.0  
Int time 423.445  
Amp 0.112  
Phase 43.8  
PFD 3.2e-01  
Delays (us)  
SBD 0.434611  
MBD -0.004237  
Fringe rate (Hz)  
0.319806  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211240  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.67739780938E+03									
Sband delay (usec)	-5.67739646141E+03									
Phase delay (usec)	-5.67783107075E+03									
Delay rate (us/s)	2.40638323788E-01									
Total phase (deg)			-156.3							
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)									43.8	+/- 18.9
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										-1.000 1.000
SampCntNorm: enabled										
mb window (us)										-0.008 0.008
dr window (ns/s)										-0.011 0.011
nlags: 256 t_cohere infinite										
ion window (TEC)										0.00 0.00

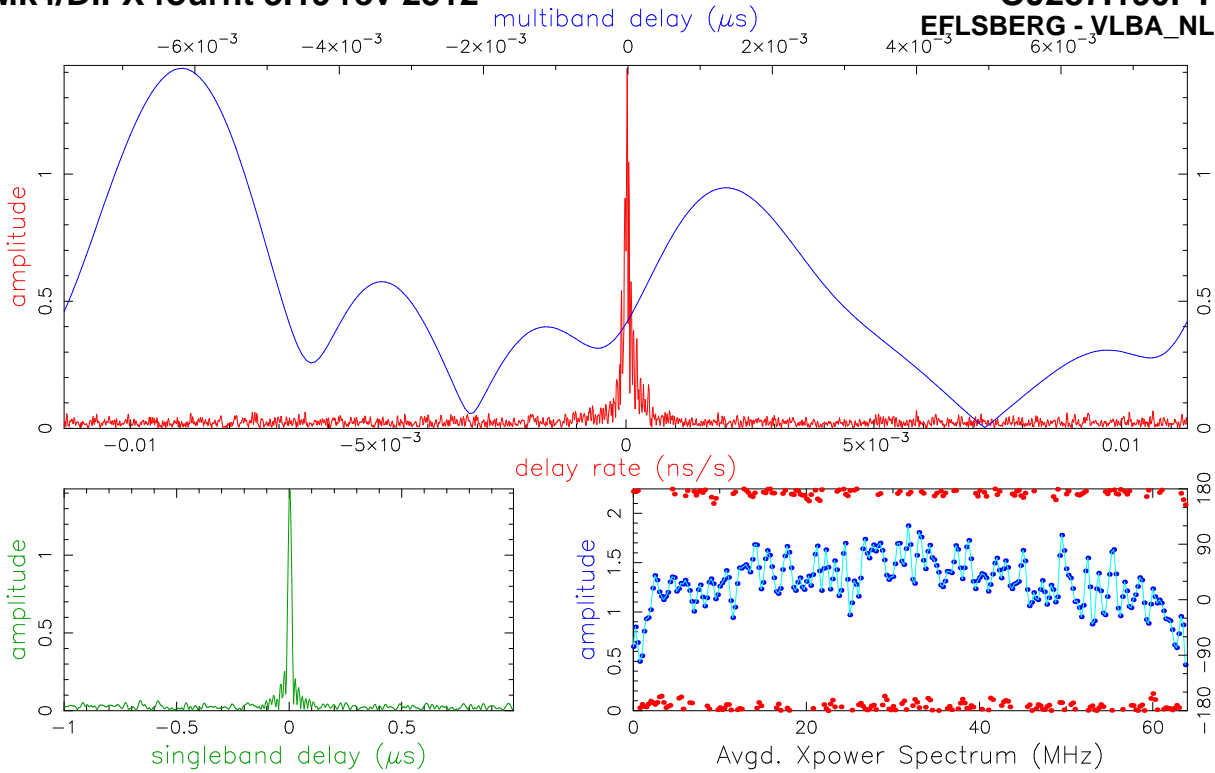
ph/seg (deg) 53.4 45.4  
amp/seg (%) 69.4 79.3  
ph/frq (deg) 42.2 26.8  
amp/frq (%) 44.5 46.8

RMS Theor. Amplitude 0.112 +/- 0.019  
Search (2048X32) 0.100  
Interp. 0.000  
Inc. seg. avg. 0.117  
Inc. frq. avg. 0.124

b: az 94.7 el 31.5 pa -45.1  
n: az 113.7 el 52.2 pa -46.7  
u,v (fr/asec) -1412.823 1608.920

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/bn.W.78.190PTT

simultaneous interpolator

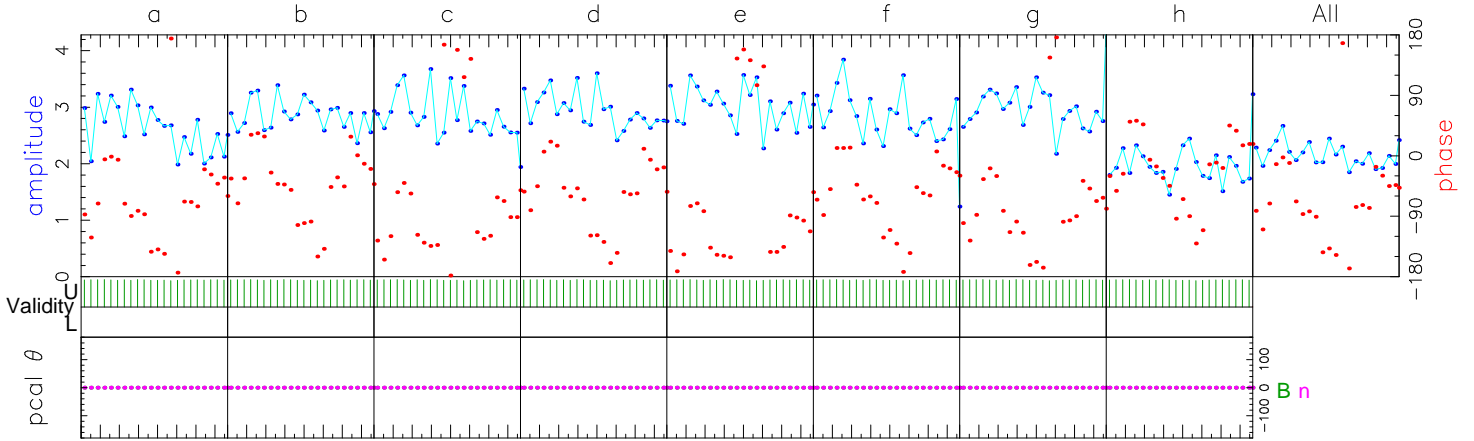


Fringe quality 2

SNR 81.1  
Int time 431.957  
Amp 1.427  
Phase -75.8  
PFD 0.0e+00  
Delays (us)  
SBD 0.002708  
MBD -0.006215  
Fringe rate (Hz) 0.002319  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211225  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

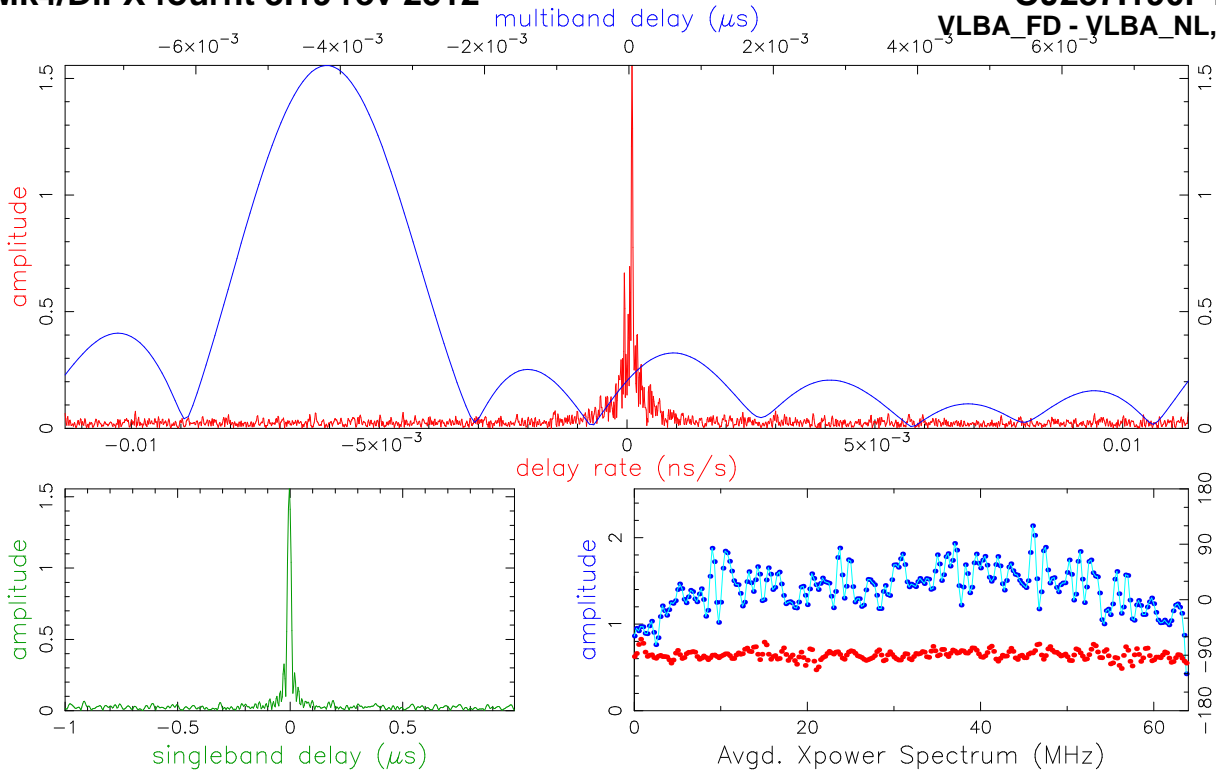
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.8	-38.5	-120.6	-51.6	-140.4	-53.5	-95.7	-18.2	Phase	-75.8
	1.7	1.9	1.8	2.0	2.0	1.9	1.9	1.2	Ampl.	1.8
	258.0	257.7	257.9	258.3	258.2	258.5	258.3	258.2	Sbd box	257.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-5.60495241695E+03		Apriori delay (usec)		-5.60496182716E+03		Resid mbdelay (usec)		-6.21479E-03	+/- 1.3E-05
Sband delay (usec)	-5.60495911966E+03		Apriori clock (usec)		-1.9262564E+01		Resid sbdelay (usec)		2.70750E-03	+/- 1.1E-04
Phase delay (usec)	-5.60496182960E+03		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		-2.44322E-06	+/- 4.6E-08
Delay rate (us/s)	-1.45948657207E+00		Apriori rate (us/s)		-1.45948659899E+00		Resid rate (us/s)		2.69188E-08	+/- 1.8E-10
Total phase (deg)			Apriori accel (us/s/s)		3.37939981920E-05		Resid phase (deg)		-75.8	+/- 1.4

ph/seg (deg) 51.4 3.4 Search (2048X32) 1.317 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 53.0 5.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 45.4 2.0 Inc. seg. avg. 2.153 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 30.4 3.5 Inc. frq. avg. 1.794 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 B: az 261.4 el 33.2 pa 42.0 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8950.552 1800.427 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Bn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Bn.W.8.190PTT



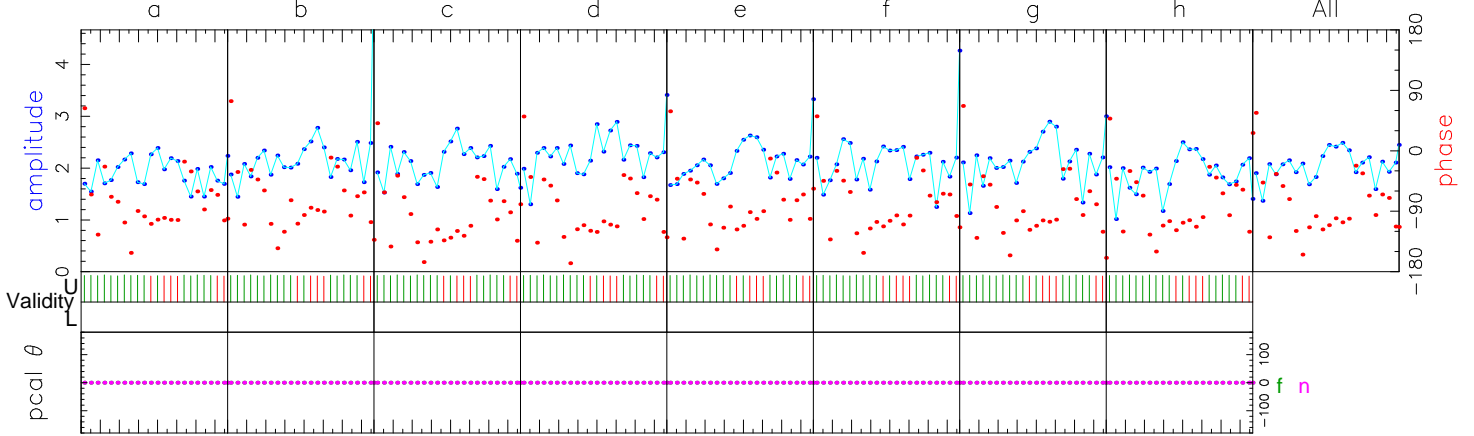


Fringe quality 6

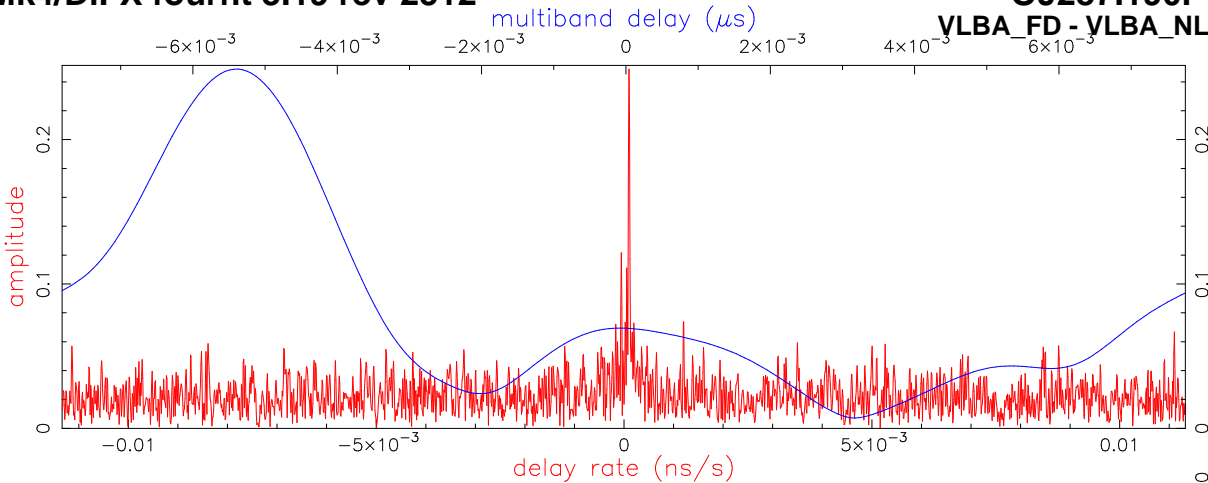
SNR 87.4  
Int time 422.451  
Amp 1.556  
Phase -86.6  
PFD 0.0e+00  
Delays (us)  
SBD -0.003952  
MBD -0.004189  
Fringe rate (Hz) 0.008952  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211251  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

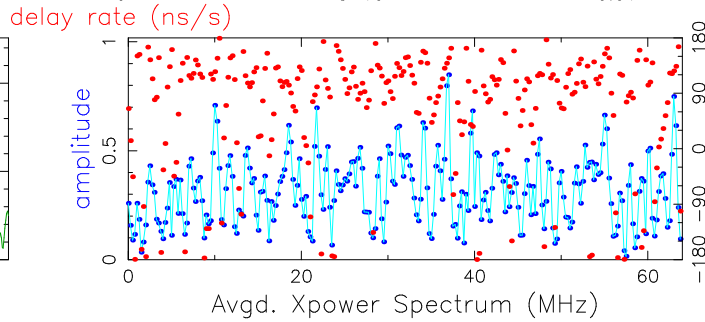
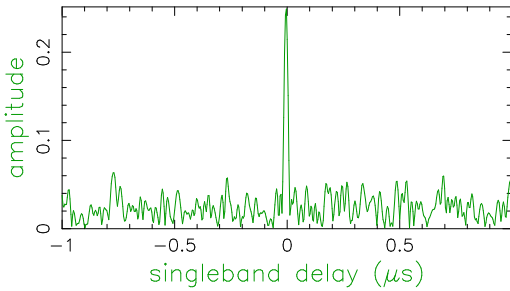


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.77224554632E+03				-1.77224135749E+03					
Sband delay (usec)	-1.77224530899E+03				-2.8393372E+01					
Phase delay (usec)	-1.77224136029E+03				-2.2499998E-07					
Delay rate (us/s)	2.98902381852E-01				2.98902277931E-01					
Total phase (deg)			-279.0		3.22825200386E-06					
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)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Amplitude	1.556 +/- 0.018									
Search (2048X32)	1.476									
Interp.	0.000									
Inc. seg. avg.	2.036									
Inc. frq. avg.	1.567									
sb window (us)	-1.000	1.000								
mb window (us)	-0.008	0.008								
dr window (ns/s)	-0.011	0.011								
ion window (TEC)	0.00	0.00								
f: az 91.5 el 44.8 pa -66.4										
n: az 113.7 el 52.2 pa -46.7										
u,v (fr/asec)	-1814.555	-1199.685								
Control file: cf_1234_gmva										
Input file: /Exps/c201c/v1/1234/No0038/fn..190PTT										
Output file: /Exps/c201c/v1/1234/No0038/fn.W.117.190PTT										



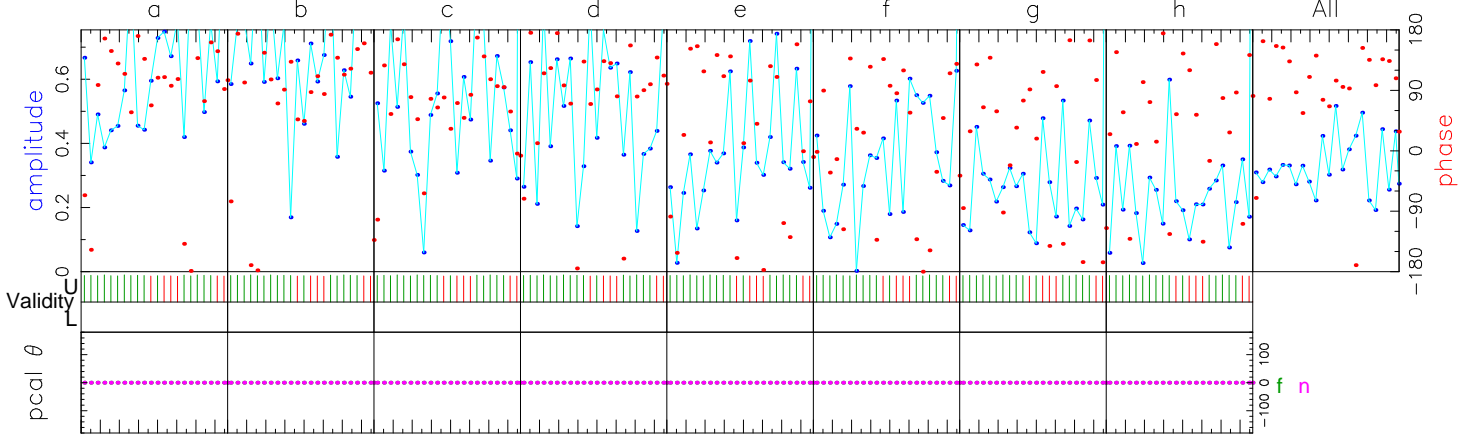
Fringe quality 9

SNR 14.1  
Int time 422.451  
Amp 0.251  
Phase 118.2  
PFD 1.5e-36  
Delays (us)  
SBD -0.005251  
MBD -0.005393  
Fringe rate (Hz) 0.009058  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512



Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build 2020:202:080146  
2020:202:211256  
2020:014:135814  
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



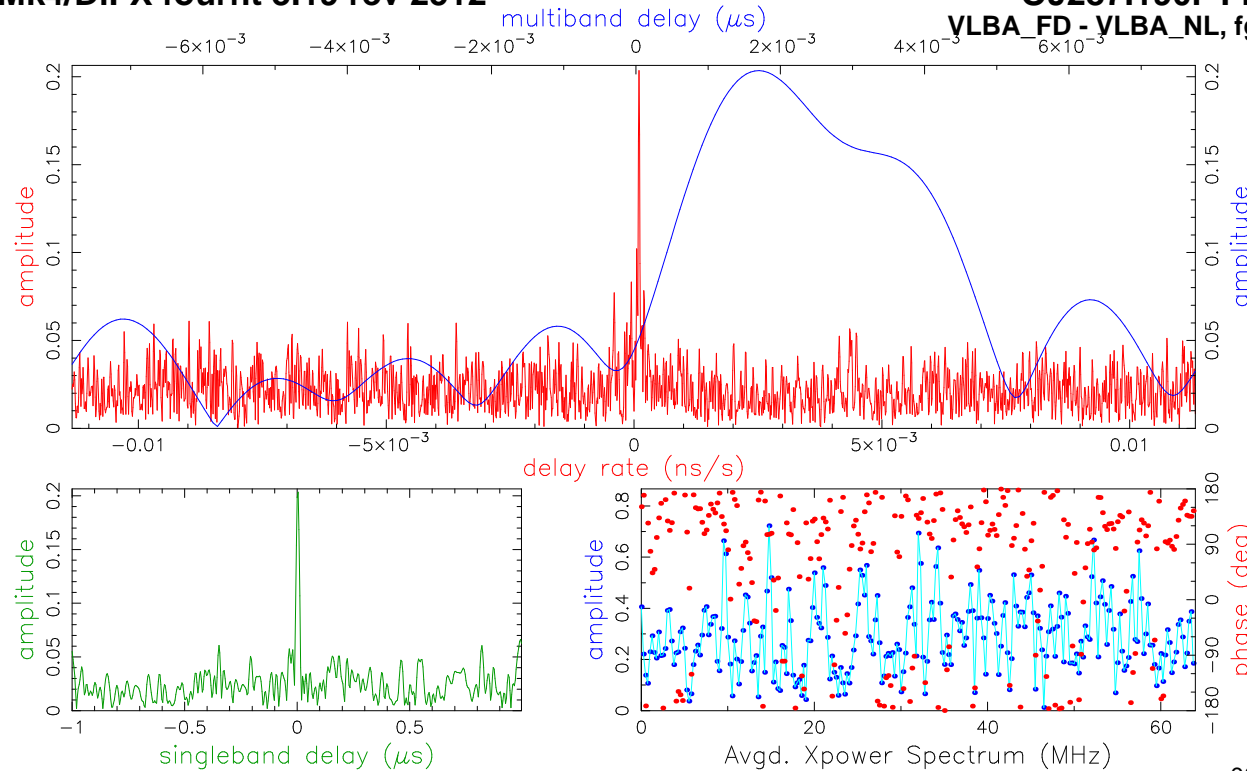
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-1.77224675066E+03	Apriori delay (usec)	-1.77224135749E+03	Resid mbdelay (usec)	-5.39317E-03	+/-	7.7E-05
Sband delay (usec)	-1.77224660799E+03	Apriori clock (usec)	-2.8393372E+01	Resid sbdelay (usec)	-5.25050E-03	+/-	6.1E-04
Phase delay (usec)	-1.77224135368E+03	Apriori clockrate (us/s)	-2.2499998E-07	Resid phdelay (usec)	3.81020E-06	+/-	2.6E-07
Delay rate (us/s)	2.98902383081E-01	Apriori rate (us/s)	2.98902277931E-01	Resid rate (us/s)	1.05149E-07	+/-	1.0E-09
Total phase (deg)	-74.2	Apriori accel (us/s/s)	3.22825200386E-06	Resid phase (deg)	118.2	+/-	8.1

ph/seg (deg)	50.2	Theor.	19.4	Amplitude	0.251 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	47.9		33.9	Search (2048X32)	0.238	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	13.6		11.5	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	63.4		20.0	Inc. seg. avg.	0.317	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.250	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

f: az 91.5 el 44.8 pa -66.4 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1814.555 -1199.685 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/fn..190PTT Output file: /Exps/c201c/v1/1234/No0038/fn.W.137.190PTT

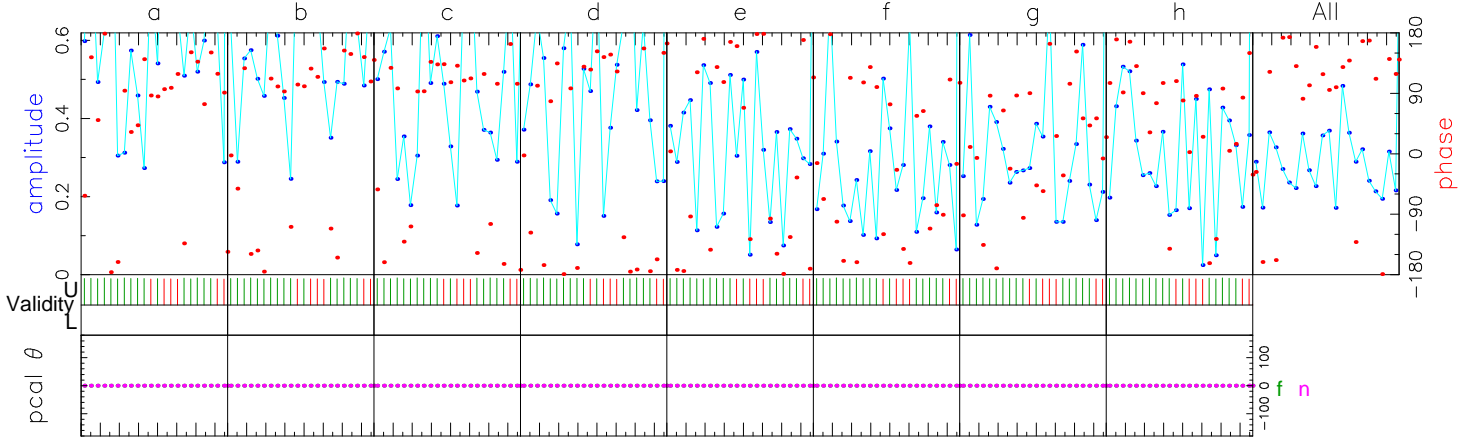


Fringe quality 9

SNR 11.6  
Int time 422.450  
Amp 0.206  
Phase 140.3  
PFD 1.9e-22  
Delays (us)  
SBD 0.002439  
MBD 0.001674  
Fringe rate (Hz) 0.008976  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211300  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



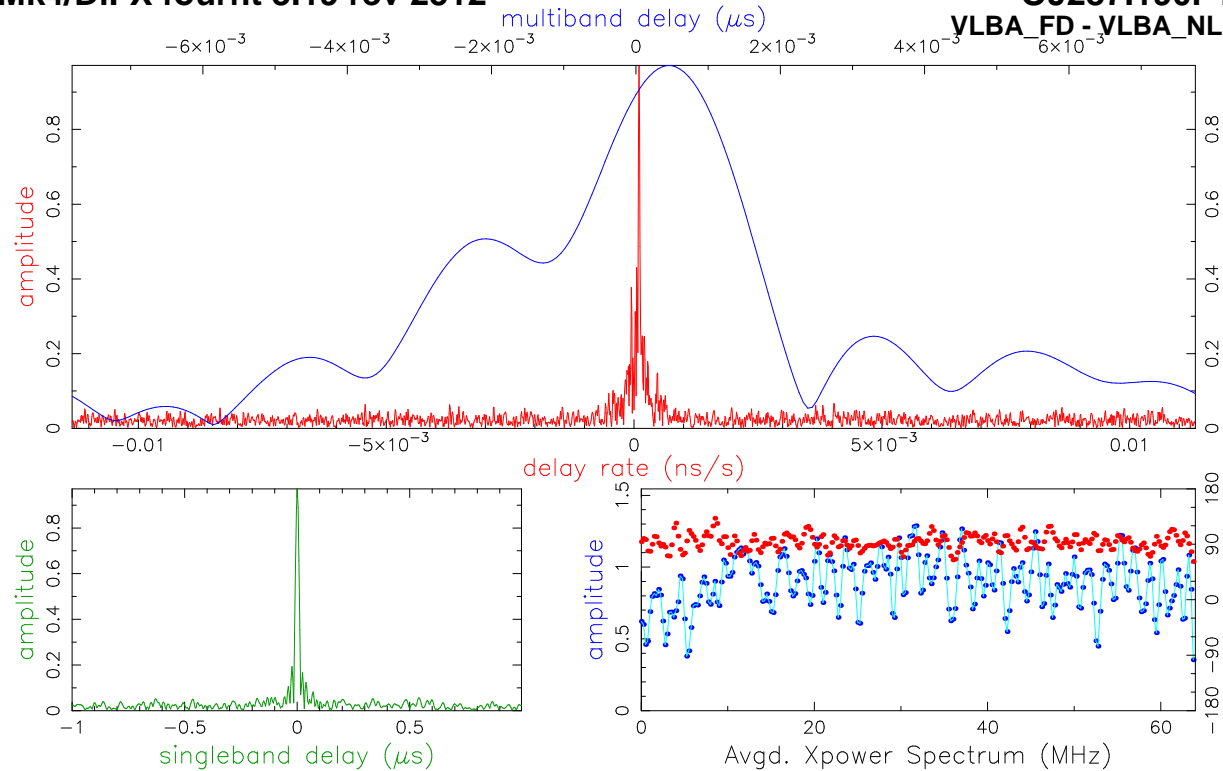
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-1.77223968357E+03	Apriori delay (usec)	-1.77224135749E+03	Resid mbdelay (usec)	1.67393E-03	+/-	9.4E-05
Sband delay (usec)	-1.77223891849E+03	Apriori clock (usec)	-2.8393372E+01	Resid sbdelay (usec)	2.43900E-03	+/-	7.4E-04
Phase delay (usec)	-1.77224135297E+03	Apriori clockrate (us/s)	-2.2499998E-07	Resid phdelay (usec)	4.52280E-06	+/-	3.2E-07
Delay rate (us/s)	2.98902382138E-01	Apriori rate (us/s)	2.98902277931E-01	Resid rate (us/s)	1.04207E-07	+/-	1.3E-09
Total phase (deg)	-52.1	Apriori accel (us/s/s)	3.22825200386E-06	Resid phase (deg)	140.3	+/-	9.9

ph/seg (deg)	52.2	Theor.	23.7	Amplitude	0.206 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	53.9	Search (2048X32)	0.195	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000	
ph/frq (deg)	53.3	Inc. seg. avg.	0.263	Inc. frq. avg.	0.230	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008
amp/frq (%)	55.9	Inc. frq. avg.	0.230			Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011	
						Data rate (Mb/s):	2048	ion window (TEC)	0.00 0.00	

f: az 91.5 el 44.8 pa -66.4 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1814.555 -1199.685 simultaneous interpolator

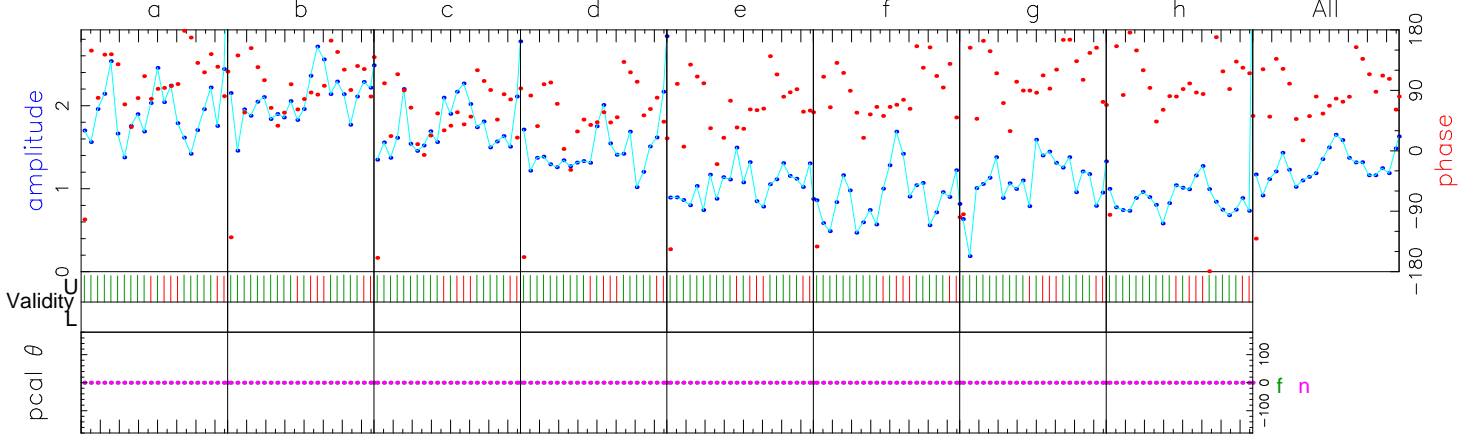
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/fn..190PTT Output file: /Exps/c201c/v1/1234/No0038/fn.W.156.190PTT



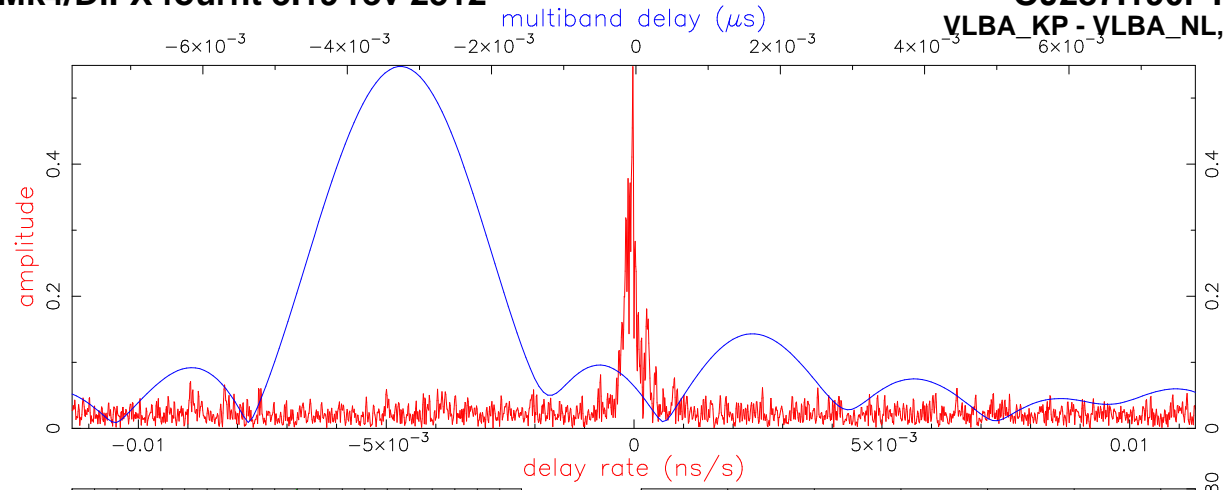
Fringe quality 3

SNR 54.6  
Int time 422.450  
Amp 0.971  
Phase 90.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.000196  
MBD 0.000461  
Fringe rate (Hz) 0.008888  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211246  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



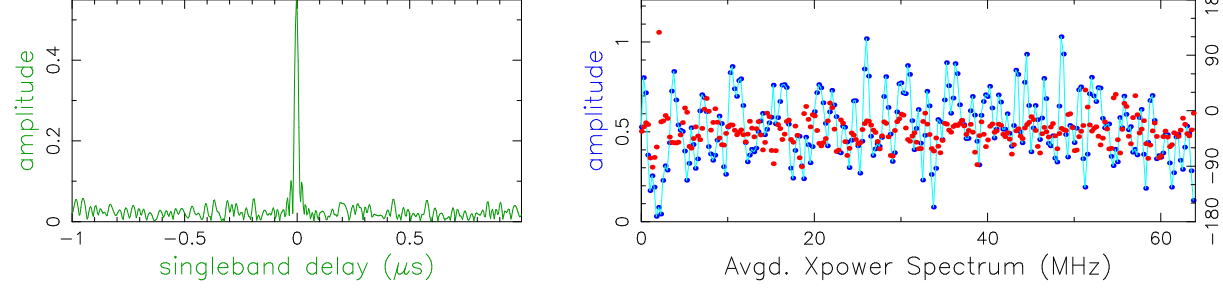
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.77224089666E+03								4.60833E-04	+/- 2.0E-05
Sband delay (usec)	-1.77224116124E+03								1.96250E-04	+/- 1.6E-04
Phase delay (usec)	-1.77224135459E+03								2.90722E-06	+/- 6.8E-08
Delay rate (us/s)	2.98902381114E-01								1.03183E-07	+/- 2.7E-10
Total phase (deg)			-102.2						90.2	+/- 2.1
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)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
ph/seg (deg)	45.2	5.0								
amp/seg (%)	35.4	8.8								
ph/frq (deg)	25.0	3.0								
amp/frq (%)	36.8	5.2								
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.971 +/- 0.018										
0.944										
0.000										
1.261										
1.046										
PCal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
f: az 91.5 el 44.8 pa -66.4										
n: az 113.7 el 52.2 pa -46.7										
u,v (fr/asec) -1814.555 -1199.685										
simultaneous interpolator										



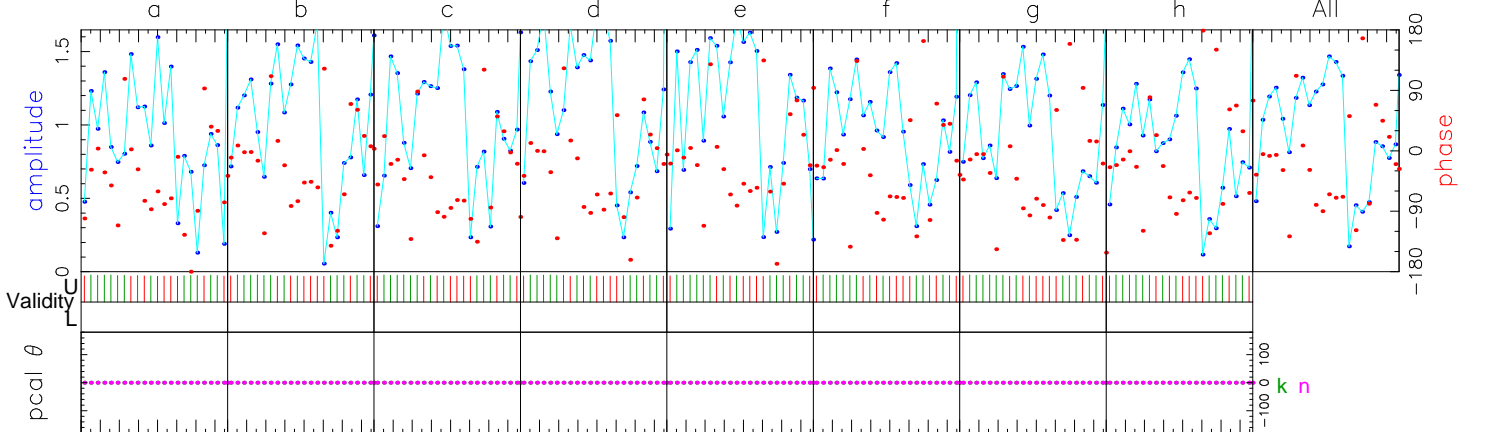
Fringe quality 7

SNR 30.8  
Int time 421.114  
Amp 0.549  
Phase -33.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.003197  
MBD -0.003246  
Fringe rate (Hz)  
-0.001985  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211249  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

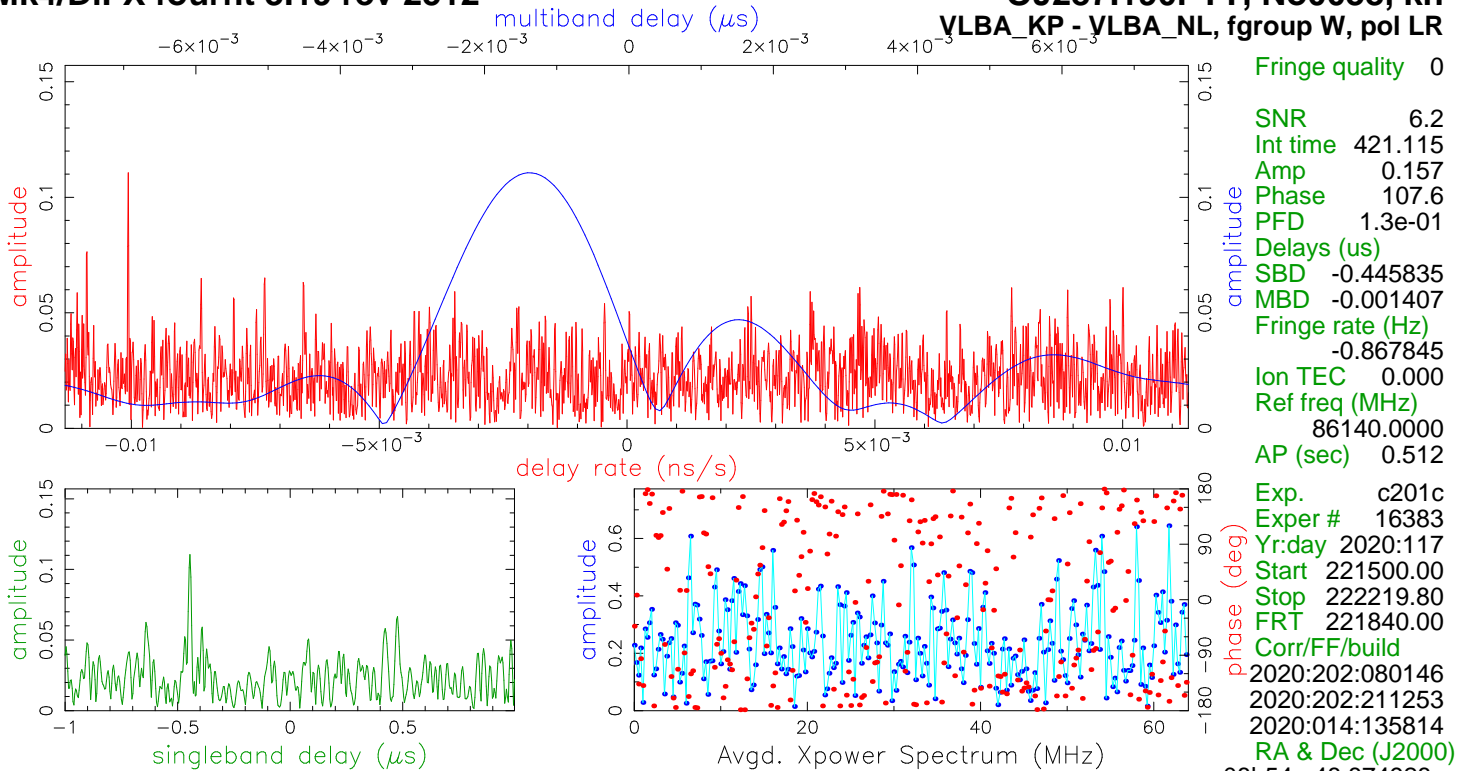


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-43.3	-19.9	-42.9	-31.1	-24.0	-33.4	-43.4	-35.0	Phase	-33.3
	0.5	0.6	0.6	0.7	0.7	0.4	0.5	0.5	Ampl.	0.6
	256.1	256.4	255.8	256.5	256.3	256.7	256.0	256.1	Sbd box	256.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.57541937489E+03			Apriori delay (usec)	-3.57541612930E+03			Resid mbdelay (usec)	-3.24558E-03	+/- 3.5E-05
Sband delay (usec)	-3.57541932605E+03			Apriori clock (usec)	-3.2644882E+01			Resid sbdelay (usec)	-3.19675E-03	+/- 2.8E-04
Phase delay (usec)	-3.57541613038E+03			Apriori clockrate (us/s)	-3.2859999E-07			Resid phdelay (usec)	-1.07457E-06	+/- 1.2E-07
Delay rate (us/s)	3.88584043704E-01			Apriori rate (us/s)	3.88584066745E-01			Resid rate (us/s)	-2.30416E-08	+/- 4.7E-10
Total phase (deg)		-169.4		Apriori accel (us/s/s)	1.35556363412E-05			Resid phase (deg)	-33.3	+/- 3.7

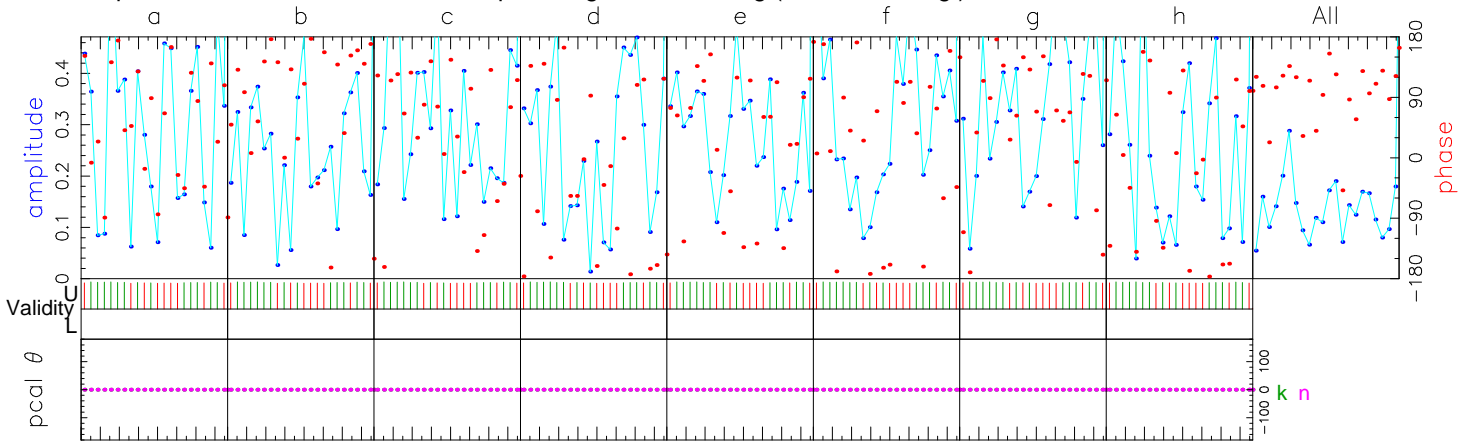
ph/seg (deg) 68.9 8.9 Search (2048X32) 0.541 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 99.2 15.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 9.7 5.3 Inc. seg. avg. 0.947 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 15.1 9.2 Inc. frq. avg. 0.552 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
k: az 88.7 el 38.2 pa -64.6 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -2344.282 -736.841 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/kn..190PTT Output file: /Exps/c201c/v1/1234/No0038/kn.W.105.190PTT

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, kn  
VLBA\_KP - VLBA\_NL, fgroup W, pol LR



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

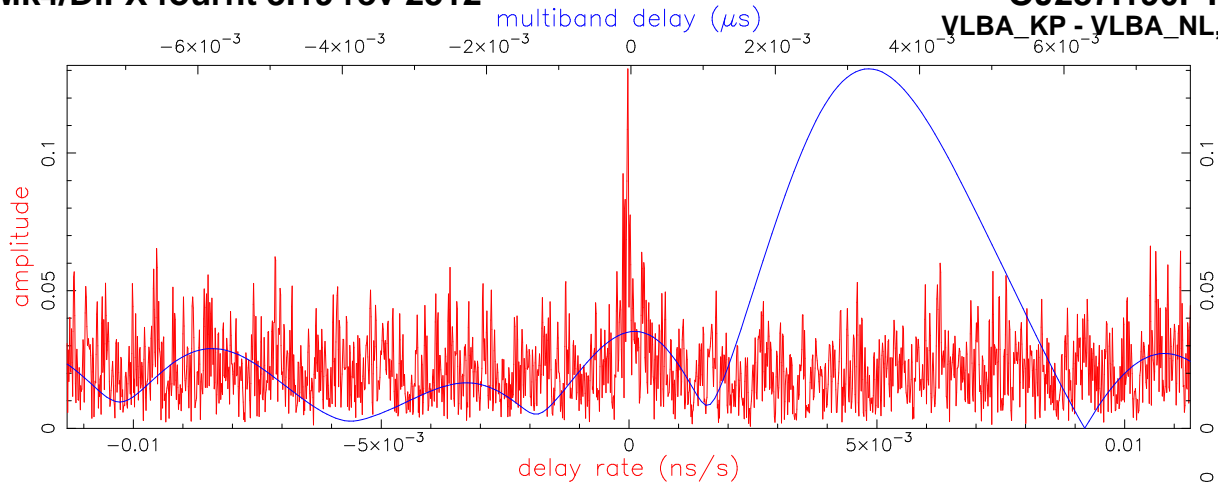


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
94.5	114.4	102.3	157.8	104.1	92.4	98.3	124.9	124.9	Phase	107.6
0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
281.7	94.6	333.5	498.7	377.6	187.3	410.1	453.3	453.3	Sbd box	142.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.57585503621E+03		Apriori delay (usec)	-3.57541612930E+03	Resid mbdelay (usec)	-1.40691E-03	+/-	1.7E-04		
Sband delay (usec)	-3.57586196430E+03		Apriori clock (usec)	-3.2644882E+01	Resid sbdelay (usec)	-4.45835E-01	+/-	1.4E-03		
Phase delay (usec)	-3.57541612583E+03		Apriori clockrate (us/s)	-3.2859999E-07	Resid phdelay (usec)	3.46846E-06	+/-	5.9E-07		
Delay rate (us/s)	3.88573991925E-01		Apriori rate (us/s)	3.88584066745E-01	Resid rate (us/s)	-1.00748E-05	+/-	2.3E-09		
Total phase (deg)		-28.5	Apriori accel (us/s/s)	1.35556363412E-05	Resid phase (deg)	107.6	+/-	18.4		

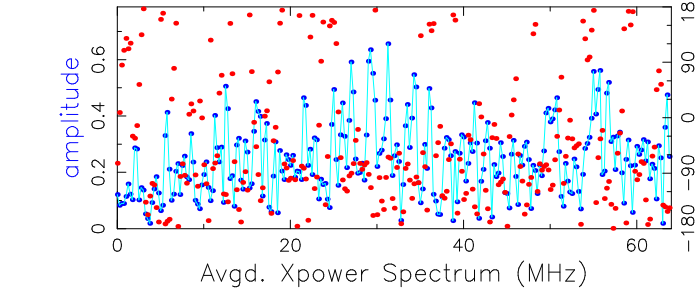
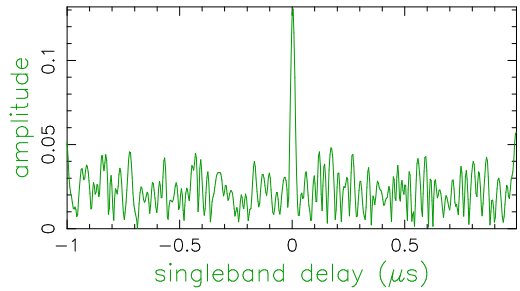
ph/seg (deg) 47.7 44.2 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 55.7 77.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 23.8 26.1 Inc. seg. avg. 0.149 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.6 45.5 Inc. frq. avg. 0.149 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 k: az 88.7 el 38.2 pa -64.6 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -2344.282 -736.841 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/kn..190PTT Output file: /Exps/c201c/v1/1234/No0038/kn.W.124.190PTT

Mk4/DiFX fourfit 3.19 rev 2512

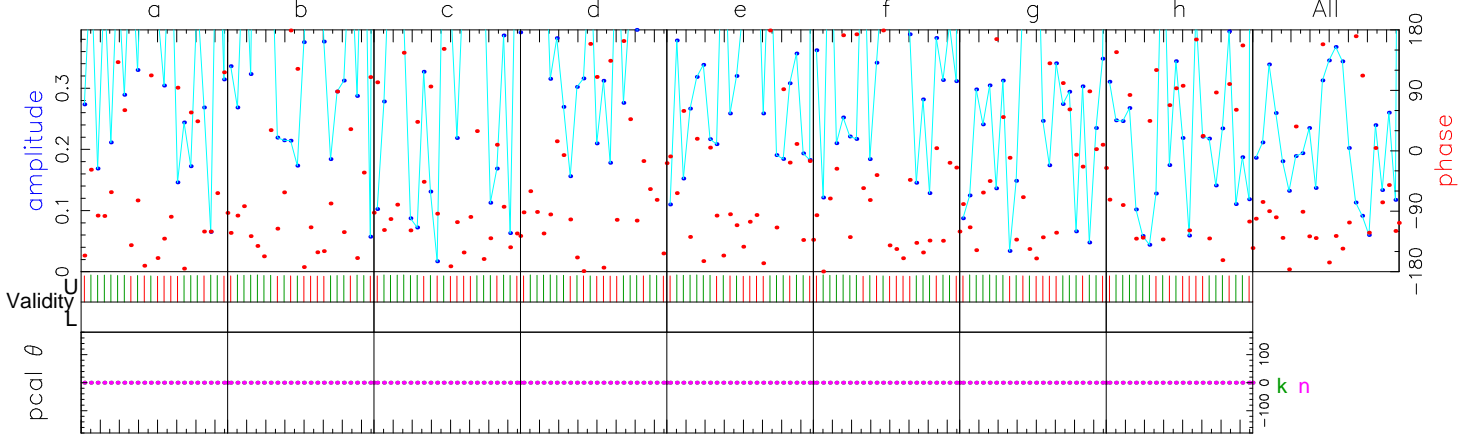
OJ287.190PTT, No0038, kn  
VLBA\_KP - VLBA\_NL, fgroup W, pol RL



Fringe quality 9  
SNR 7.4  
Int time 421.114  
Amp 0.132  
Phase -117.5  
PFD 4.4e-05  
Delays (us)  
SBD 0.002420  
MBD 0.003270  
Fringe rate (Hz)  
-0.001985  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211258  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

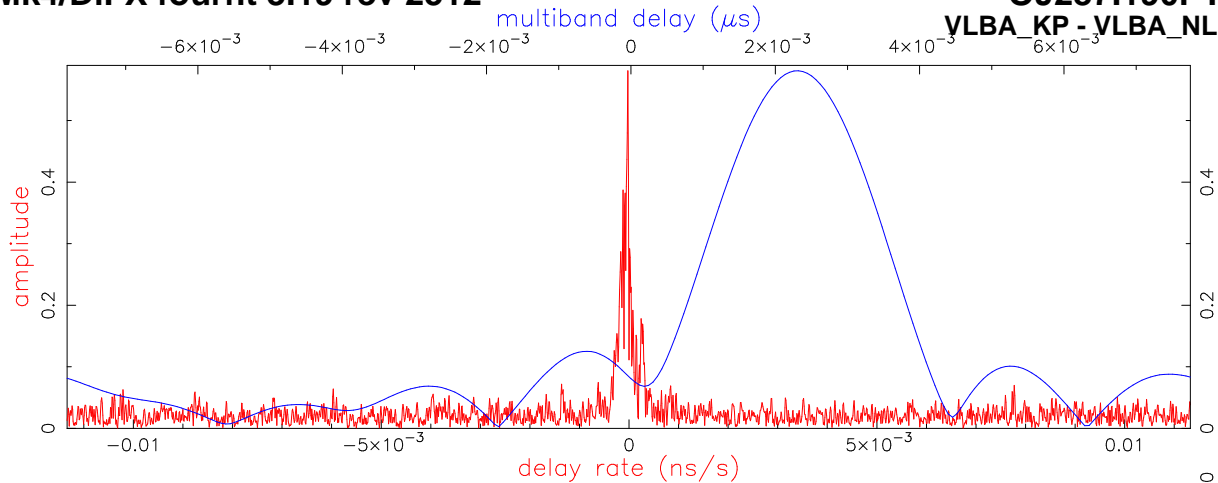


Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



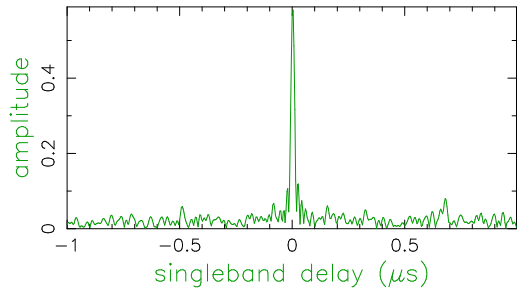
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
k	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	-3.57541285951E+03				-3.57541612930E+03				3.26979E-03	+/- 1.5E-04	
Sband delay (usec)	-3.57541370905E+03				-3.2644882E+01				2.42025E-03	+/- 1.2E-03	
Phase delay (usec)	-3.57541613309E+03				-3.2859999E-07				-3.79009E-06	+/- 5.0E-07	
Delay rate (us/s)	3.88584043701E-01				3.88584066745E-01				-2.30444E-08	+/- 2.0E-09	
Total phase (deg)			-253.6		1.35556363412E-05				-117.5	+/- 15.5	
	RMS	Theor.	Amplitude	0.132 +/- 0.018	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5		
ph/seg (deg)	62.2	37.1	Search (2048X32)	0.130	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000	
amp/seg (%)	93.7	64.8	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	mb window (us)	-0.008 0.008
ph/frq (deg)	37.1	21.9	Inc. seg. avg.	0.175	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011	
amp/frq (%)	38.3	38.2	Inc. frq. avg.	0.132	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC)	0.00 0.00

k: az 88.7 el 38.2 pa -64.6 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -2344.282 -736.841 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/kn..190PTT Output file: /Exps/c201c/v1/1234/No0038/kn.W.139.190PTT

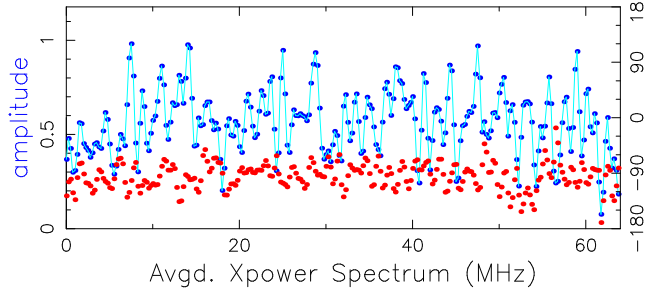


Fringe quality 7

SNR 33.1  
Int time 421.114  
Amp 0.590  
Phase -94.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.002341  
MBD 0.002273  
Fringe rate (Hz)  
-0.001984  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

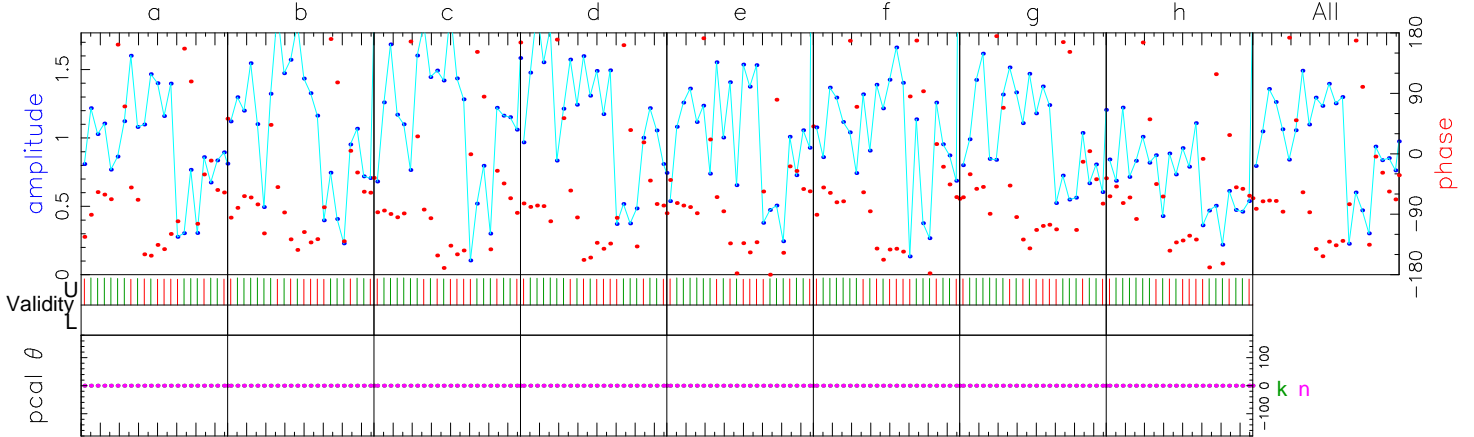


delay rate (ns/s)



Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211245  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



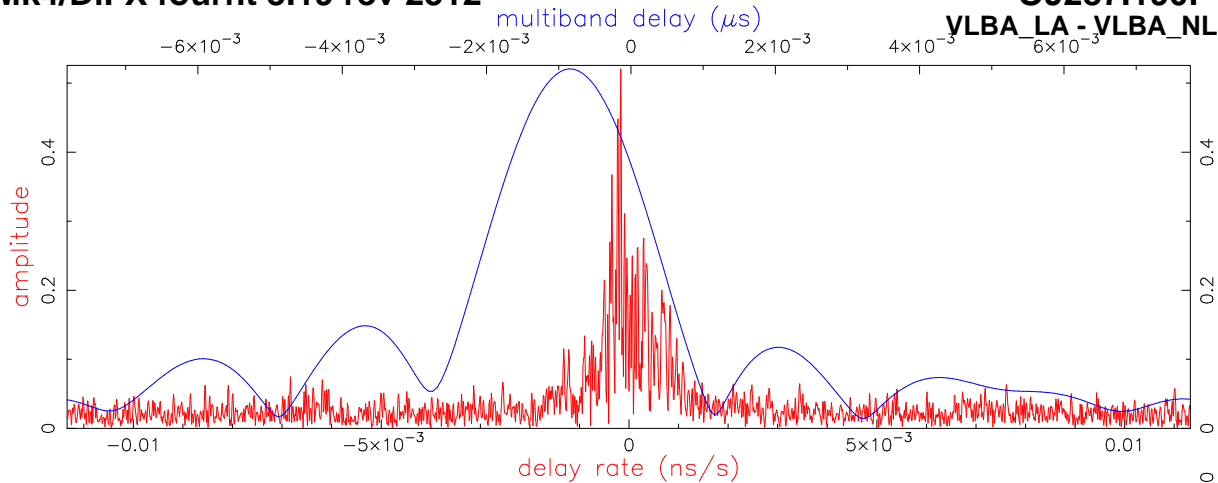
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-95.6	-86.8	-103.5	-97.4	-93.4	-100.1	-82.5	-91.9	Phase	-94.0
	0.5	0.7	0.7	0.7	0.6	0.5	0.6	0.4	Ampl.	0.6
	257.6	257.6	257.4	257.9	257.1	258.3	257.6	257.4	Sbd box	257.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.57541385642E+03		Apriori delay (usec)		-3.57541612930E+03		Resid mbdelay (usec)		2.27288E-03	+/- 3.3E-05
Sband delay (usec)	-3.57541378805E+03		Apriori clock (usec)		-3.2644882E+01		Resid sbdelay (usec)		2.34125E-03	+/- 2.6E-04
Phase delay (usec)	-3.57541613233E+03		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-3.03028E-06	+/- 1.1E-07
Delay rate (us/s)	3.88584043718E-01		Apriori rate (us/s)		3.88584066745E-01		Resid rate (us/s)		-2.30274E-08	+/- 4.4E-10
Total phase (deg)			Apriori accel (us/s/s)		1.35556363412E-05		Resid phase (deg)		-94.0	+/- 3.5

	RMS	Theor.	Amplitude	0.590 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	66.4	8.3	Search (2048X32)	0.576	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	87.6	14.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	7.4	4.9	Inc. seg. avg.	0.966	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	19.4	8.5	Inc. frq. avg.	0.583	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

k: az 88.7 el 38.2 pa -64.6 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -2344.282 -736.841 simultaneous interpolator

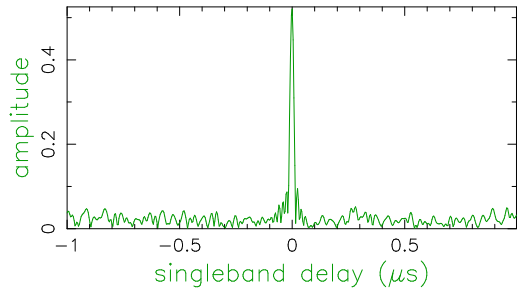
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/kn..190PTT Output file: /Exps/c201c/v1/1234/No0038/kn.W.88.190PTT



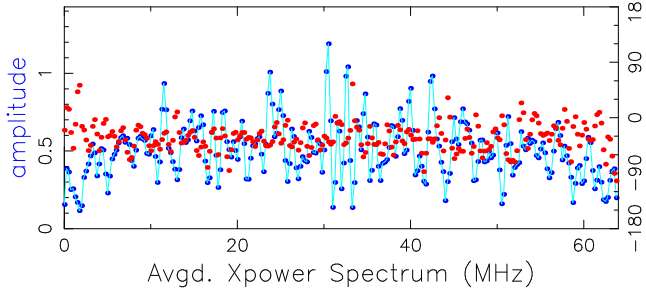


Fringe quality 7

SNR 29.7  
 Int time 426.866  
 Amp 0.526  
 Phase -38.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001329  
 MBD -0.000873  
 Fringe rate (Hz)  
 -0.014693  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

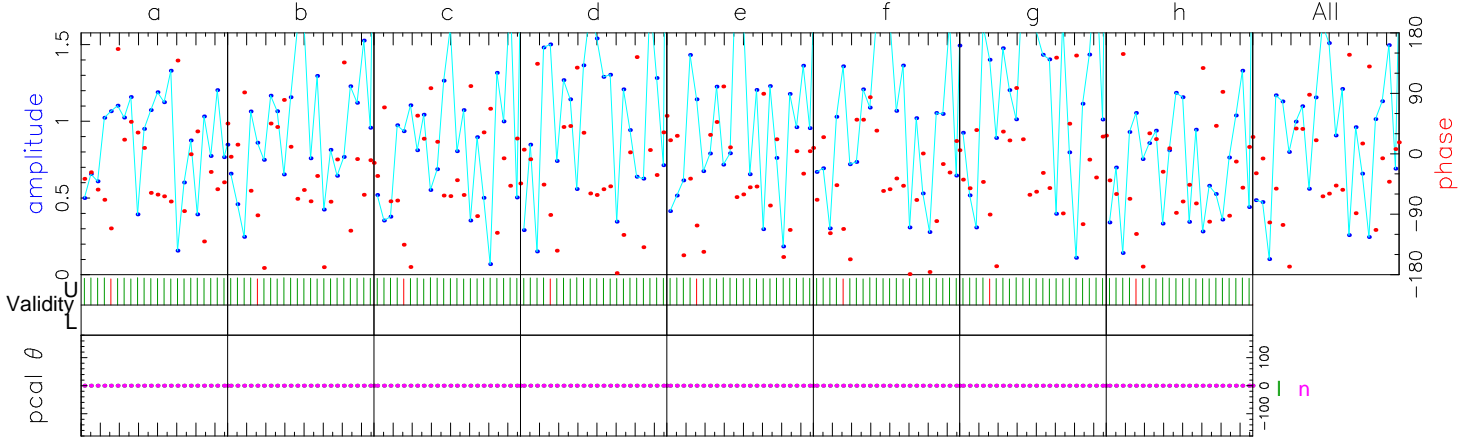


delay rate (ns/s)



Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211249  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



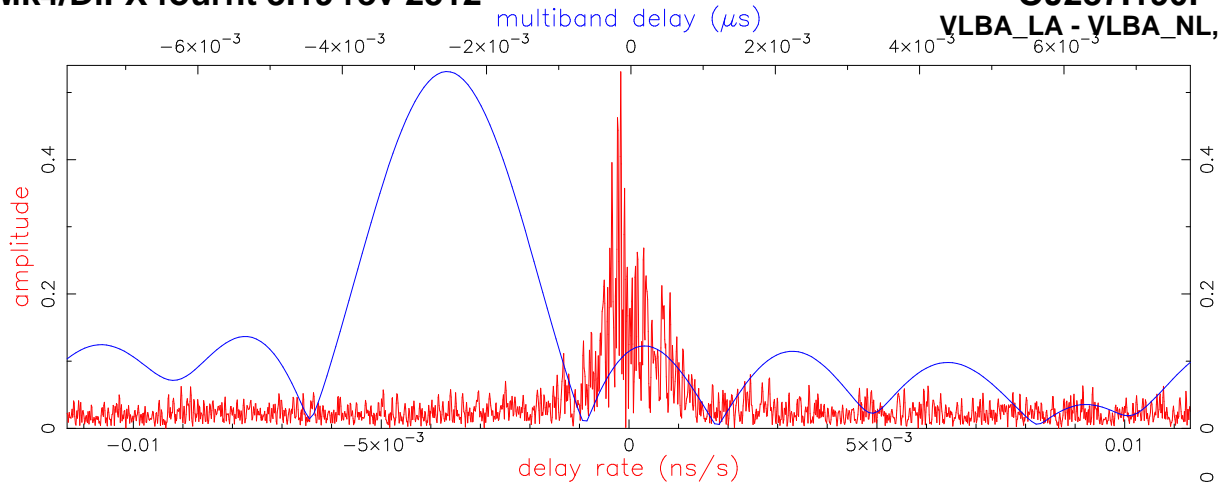
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-2.38247137093E+03	Apriori delay (usec)	-2.38247049781E+03	Resid mbdelay (usec)	-8.73117E-04	+/-	3.7E-05
Sband delay (usec)	-2.38247182681E+03	Apriori clock (usec)	-3.6018337E+01	Resid sbdelay (usec)	-1.32900E-03	+/-	2.9E-04
Phase delay (usec)	-2.38247049904E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	-1.23344E-06	+/-	1.2E-07
Delay rate (us/s)	2.77184498516E-01	Apriori rate (us/s)	2.77184669086E-01	Resid rate (us/s)	-1.70570E-07	+/-	4.9E-10
Total phase (deg)	-283.5	Apriori accel (us/s/s)	9.33167205864E-06	Resid phase (deg)	-38.2	+/-	3.9

ph/seg (deg)	RMS 77.3	Theor. 9.3	Amplitude 0.526 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	105.3	16.2	Search (2048X32) 0.487	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	8.4	5.5	Interp. 0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	17.4	9.5	Inc. seg. avg. 0.883	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
			Inc. frq. avg. 0.522	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

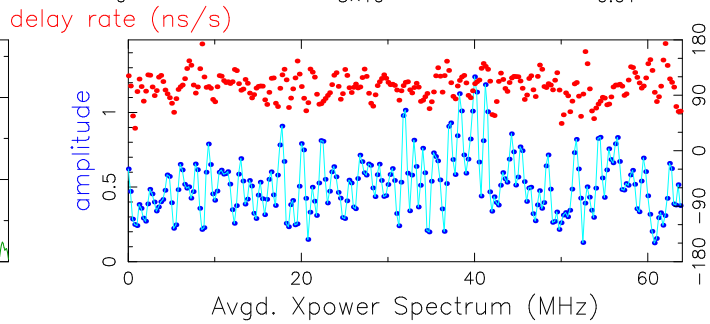
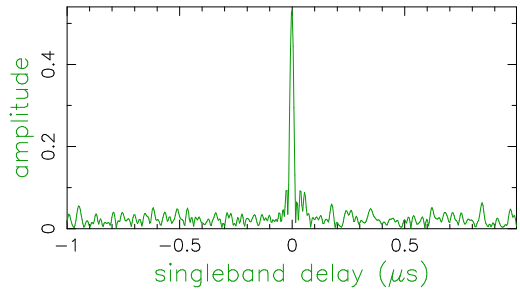
l: az 95.1 el 42.5 pa -59.3 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1672.985 -401.094 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/ln..190PTT Output file: /Exps/c201c/v1/1234/No0038/ln.W.106.190PTT



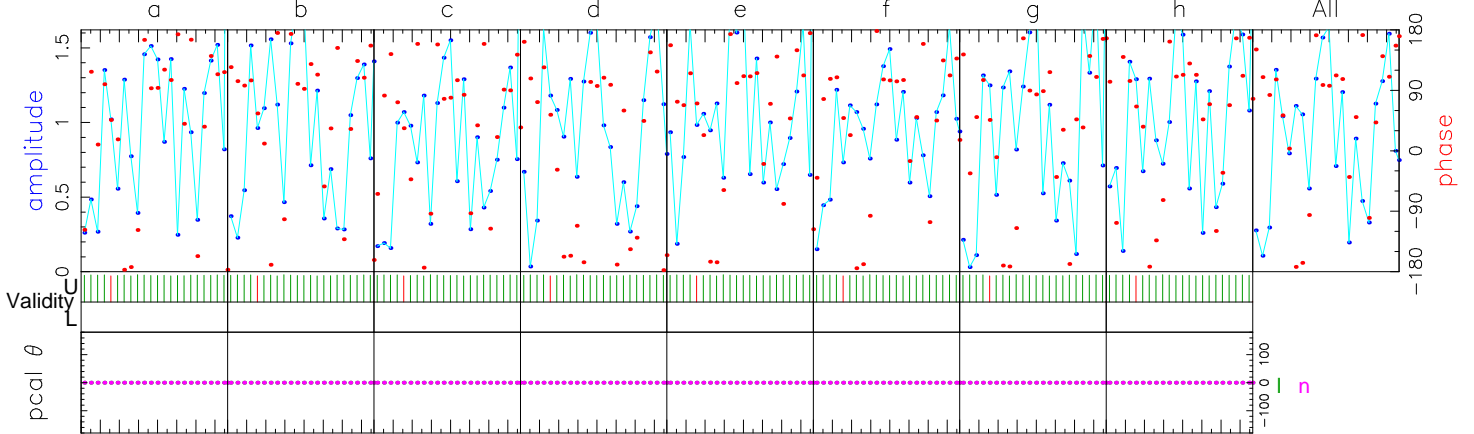
Fringe quality 6

SNR 30.5  
 Int time 426.867  
 Amp 0.540  
 Phase 115.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.001700  
 MBD -0.002581  
 Fringe rate (Hz)  
 -0.014616  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



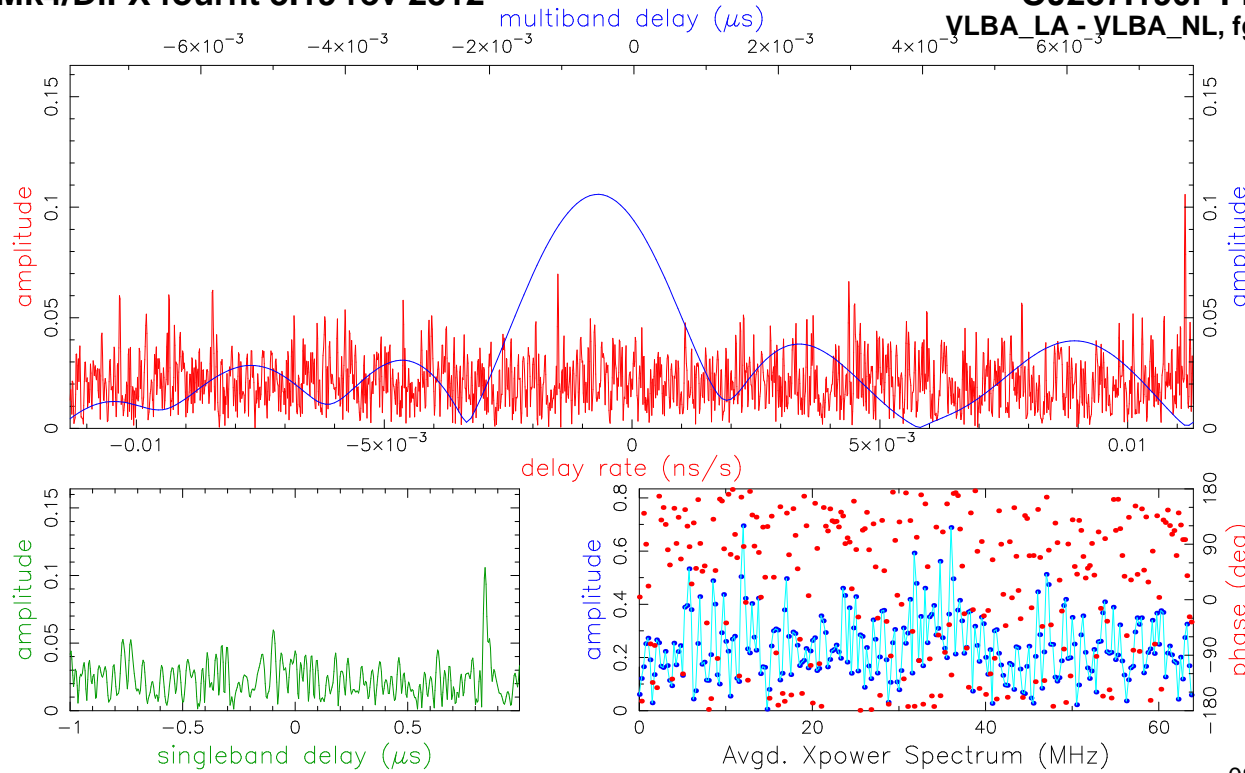
Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211254  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.38247307858E+03								Resid mbdelay (usec)	-2.58077E-03 +/- 3.6E-05
Sband delay (usec)	-2.38247219806E+03								Resid sbdelay (usec)	-1.70025E-03 +/- 2.8E-04
Phase delay (usec)	-2.38247049410E+03								Resid phdelay (usec)	3.71388E-06 +/- 1.2E-07
Delay rate (us/s)	2.77184499412E-01								Resid rate (us/s)	-1.69674E-07 +/- 4.8E-10
Total phase (deg)			-130.1						Resid phase (deg)	115.2 +/- 3.8
RMS	72.8	9.0							PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	72.8	9.0							PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	108.4	15.7							Bits/sample: 2x2	SampCntNorm: enabled mb window (us) -0.008 0.008
ph/frq (deg)	11.9	5.3							Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	10.5	9.3							Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 95.1 el 42.5 pa -59.3 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) -1672.985 -401.094 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/In..190PTT Output file: /Exps/c201c/v1/1234/No0038/In.W.126.190PTT

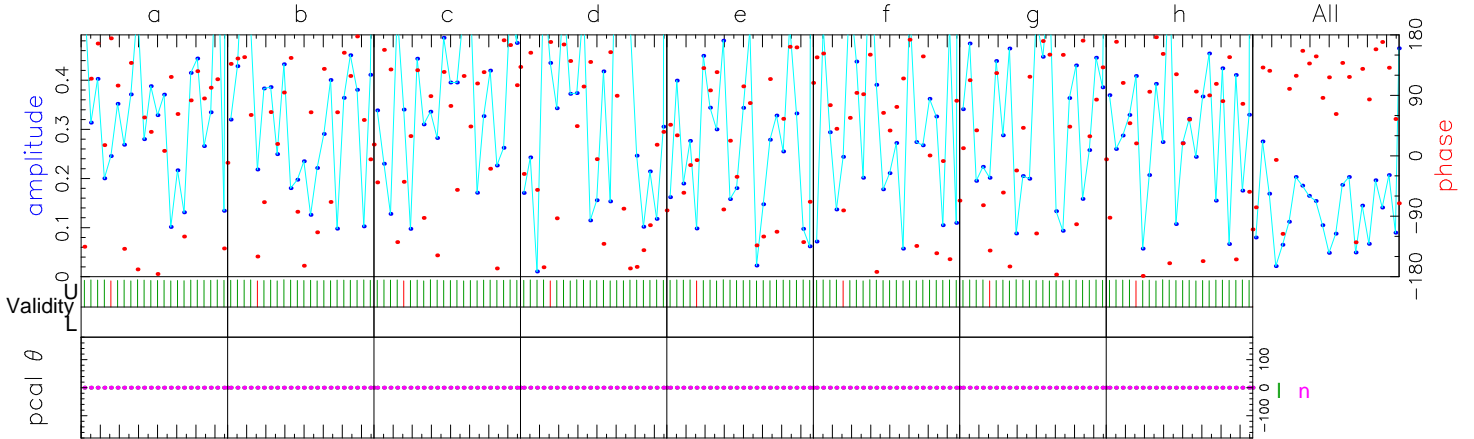


Fringe quality 0

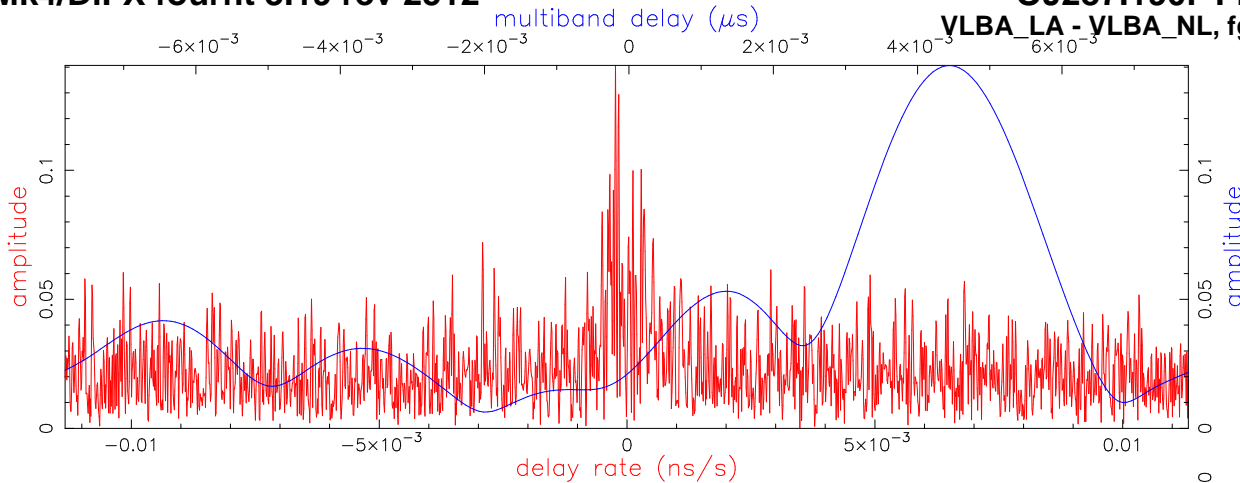
SNR 6.0  
 Int time 426.867  
 Amp 0.164  
 Phase 131.2  
 PFD 4.2e-01  
 Delays (us)  
 SBD 0.843212  
 MBD -0.000525  
 Fringe rate (Hz) 0.962442  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211258  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



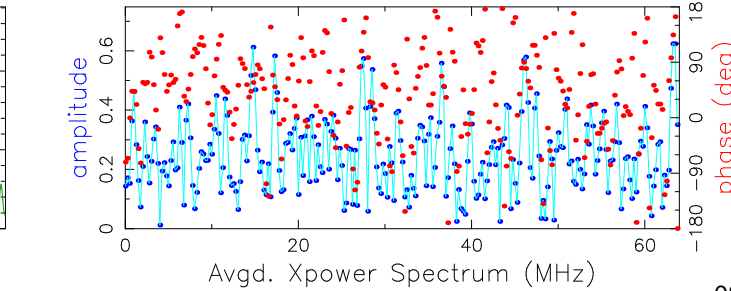
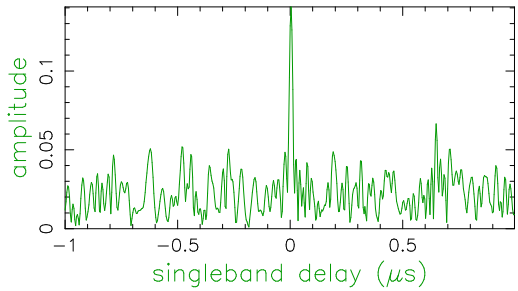
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0			
l	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
l	1000	1000	1000	1000	1000	1000	1000	1000			
n	1000	1000	1000	1000	1000	1000	1000	1000			
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR			
Group delay (usec)(sbd)	-2.38162727274E+03					-2.38247049781E+03			Resid mbdelay (usec)	-5.24928E-04	+/- 1.8E-04
Sband delay (usec)	-2.38162728581E+03					-3.6018337E+01			Resid sbdelay (usec)	8.43212E-01	+/- 1.4E-03
Phase delay (usec)	-2.38247049358E+03					-4.8500001E-07			Resid phdelay (usec)	4.23086E-06	+/- 6.2E-07
Delay rate (us/s)	2.77195842080E-01					2.77184669086E-01			Resid rate (us/s)	1.11730E-05	+/- 2.4E-09
Total phase (deg)			-114.1			9.33167205864E-06			Resid phase (deg)	131.2	+/- 19.1
RMS	62.0	45.9							PCal mode: MANUAL, MANUAL		
ph/seg (deg)	62.0	45.9							PCal rate: 0.000E+00, 0.000E+00 (us/s)		
amp/seg (%)	67.6	80.1							Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -1.000 1.000
ph/frq (deg)	20.8	27.1							Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	26.4	47.2							Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite
l: az 95.1 el 42.5 pa -59.3											ion window (TEC) 0.00 0.00
n: az 113.7 el 52.2 pa -46.7											simultaneous interpolator
u,v (fr/asec) -1672.985 -401.094											



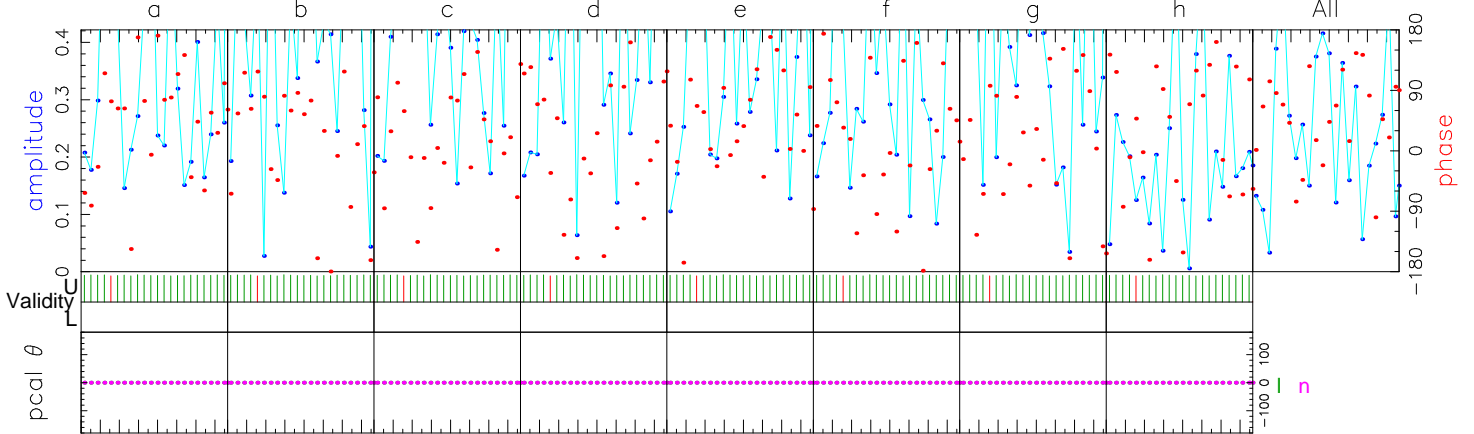
Fringe quality 9

SNR 7.9  
 Int time 426.866  
 Amp 0.141  
 Phase 47.2  
 PFD 6.6e-07  
 Delays (us)  
 SBD 0.003754  
 MBD 0.004432  
 Fringe rate (Hz) -0.020035  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512

Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build 2020:202:080146  
 2020:202:211302  
 2020:014:135814  
 RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



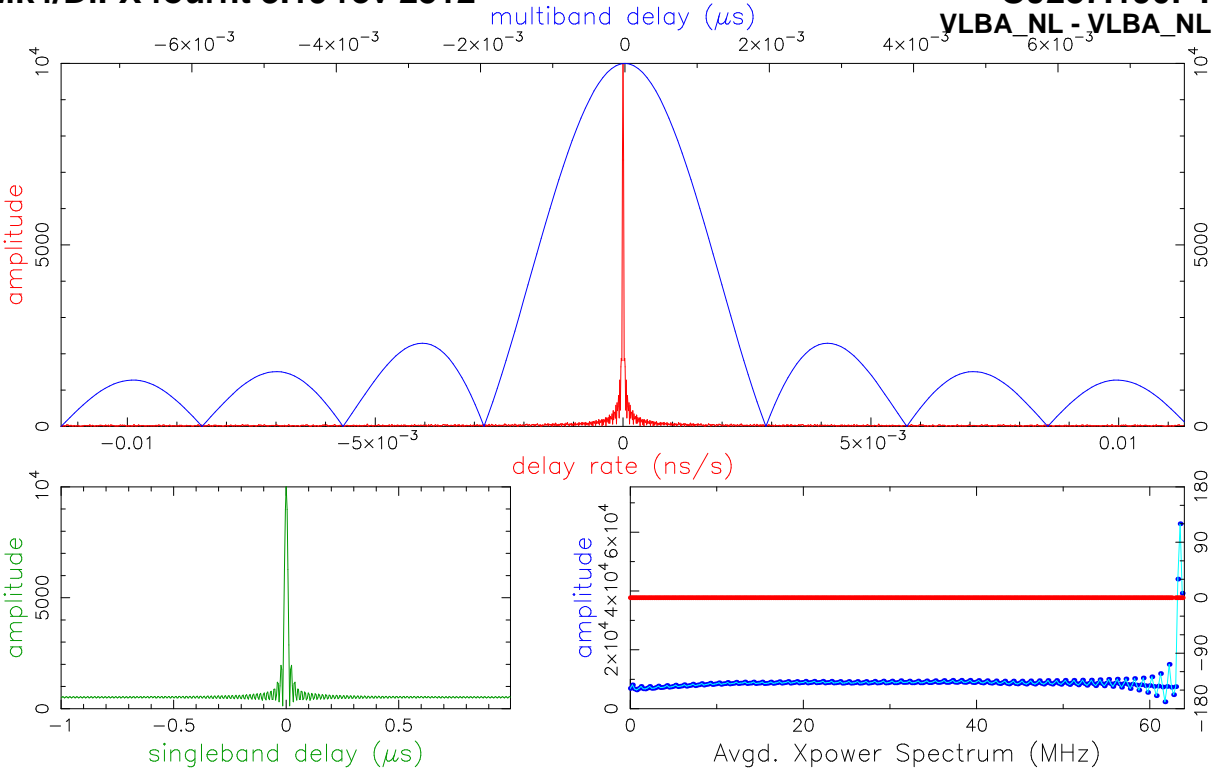
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.38246606559E+03	Apriori delay (usec)	-2.38247049781E+03	Resid mbdelay (usec)	4.43222E-03	+/-	1.4E-04
Sband delay (usec)	-2.38246674381E+03	Apriori clock (usec)	-3.6018337E+01	Resid sbdelay (usec)	3.75400E-03	+/-	1.1E-03
Phase delay (usec)	-2.38247049629E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	1.52053E-06	+/-	4.7E-07
Delay rate (us/s)	2.77184436504E-01	Apriori rate (us/s)	2.77184669086E-01	Resid rate (us/s)	-2.32582E-07	+/-	1.8E-09
Total phase (deg)	-198.1	Apriori accel (us/s/s)	9.33167205864E-06	Resid phase (deg)	47.2	+/-	14.4

ph/seg (deg)	65.4	Theor.	34.6	Amplitude	0.141 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	126.2	Search (2048X32)	0.139	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000 1.000
ph/frq (deg)	23.9	Interp.	0.000	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	40.0	Inc. seg. avg.	0.213	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011
		Inc. frq. avg.	0.141	Data rate(Mb/s): 2048		ion window (TEC)	0.00 0.00

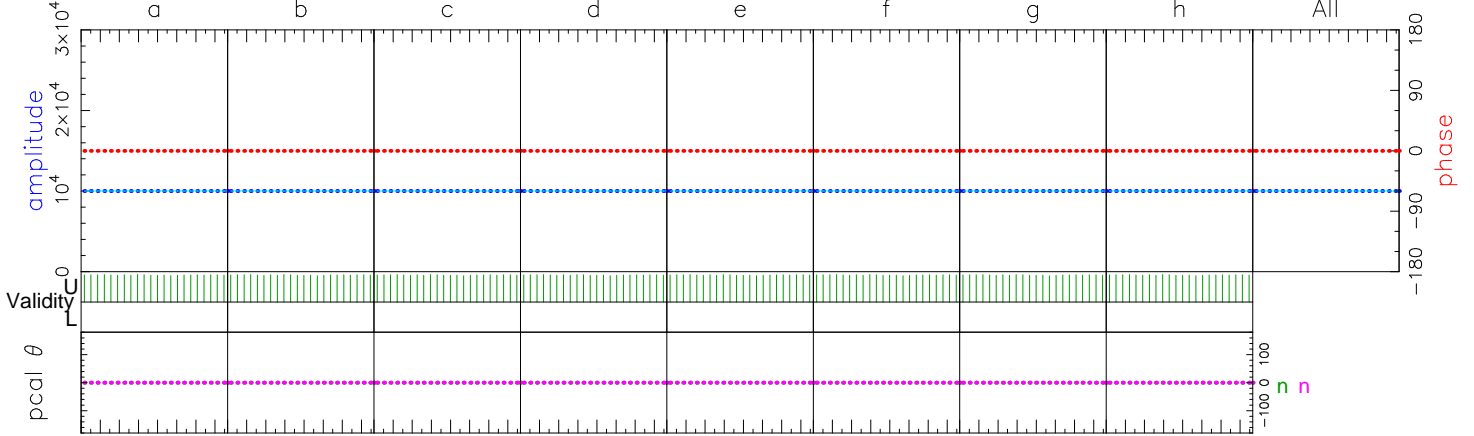
l: az 95.1 el 42.5 pa -59.3      n: az 113.7 el 52.2 pa -46.7      u,v (fr/asec) -1672.985 -401.094      simultaneous interpolator

Control file: cf\_1234\_gmva      Input file: /Exps/c201c/v1/1234/No0038/In..190PTT      Output file: /Exps/c201c/v1/1234/No0038/In.W.160.190PTT



Fringe quality 9  
 SNR 568394.4  
 Int time 432.020  
 Amp 10000.006  
 Phase 0.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.000000  
 MBD 0.000000  
 Fringe rate (Hz) 0.000000  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211305  
 2020:014:135814  
 RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

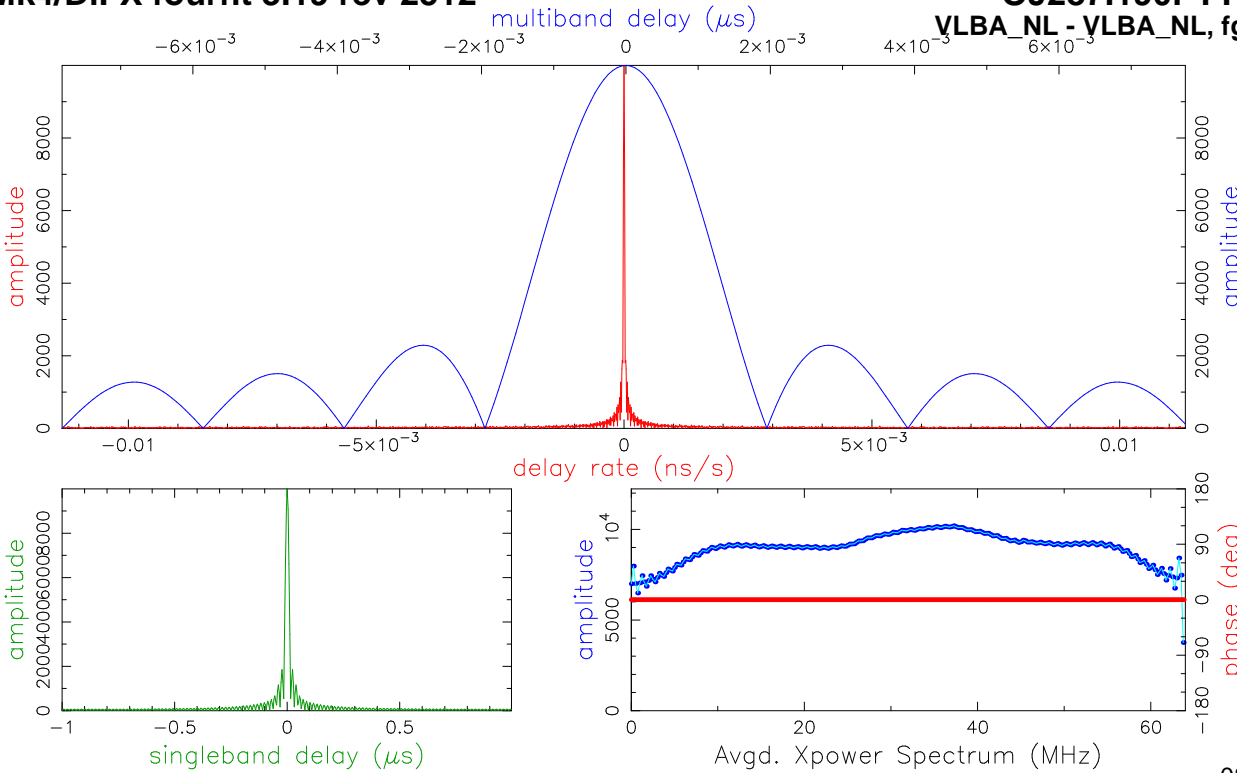


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-0.0	0.0	0.0	-0.0	0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08  
 Phase delay (usec) 3.53667092646E-19 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 3.53667E-19 +/- 6.5E-12  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.6E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.006 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.006 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 0.0 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 0.0 0.0 Inc. seg. avg. 10000.000 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 0.0 0.0 Inc. frq. avg. 10000.006 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nn..190PTT Output file: /Exps/c201c/v1/1234/No0038/nn.W.164.190PTT

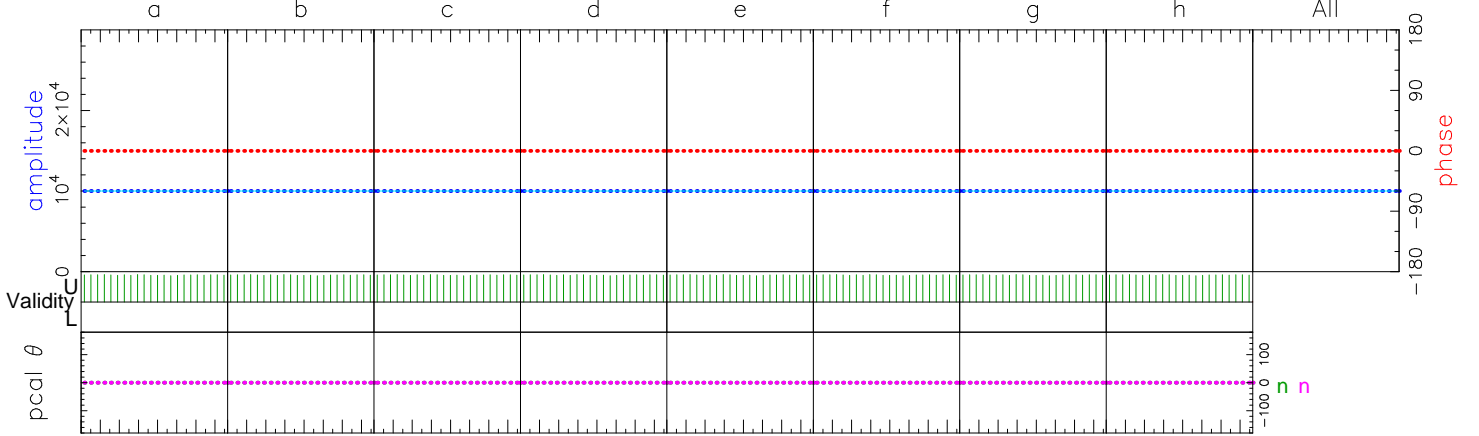


Fringe quality 9

SNR 568394.4  
Int time 432.021  
Amp 9999.996  
Phase -0.0  
PFD 0.0e+00  
Delays (us)  
SBD 0.000000  
MBD 0.000000  
Fringe rate (Hz) 0.000000  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211311  
2020:014:135814  
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

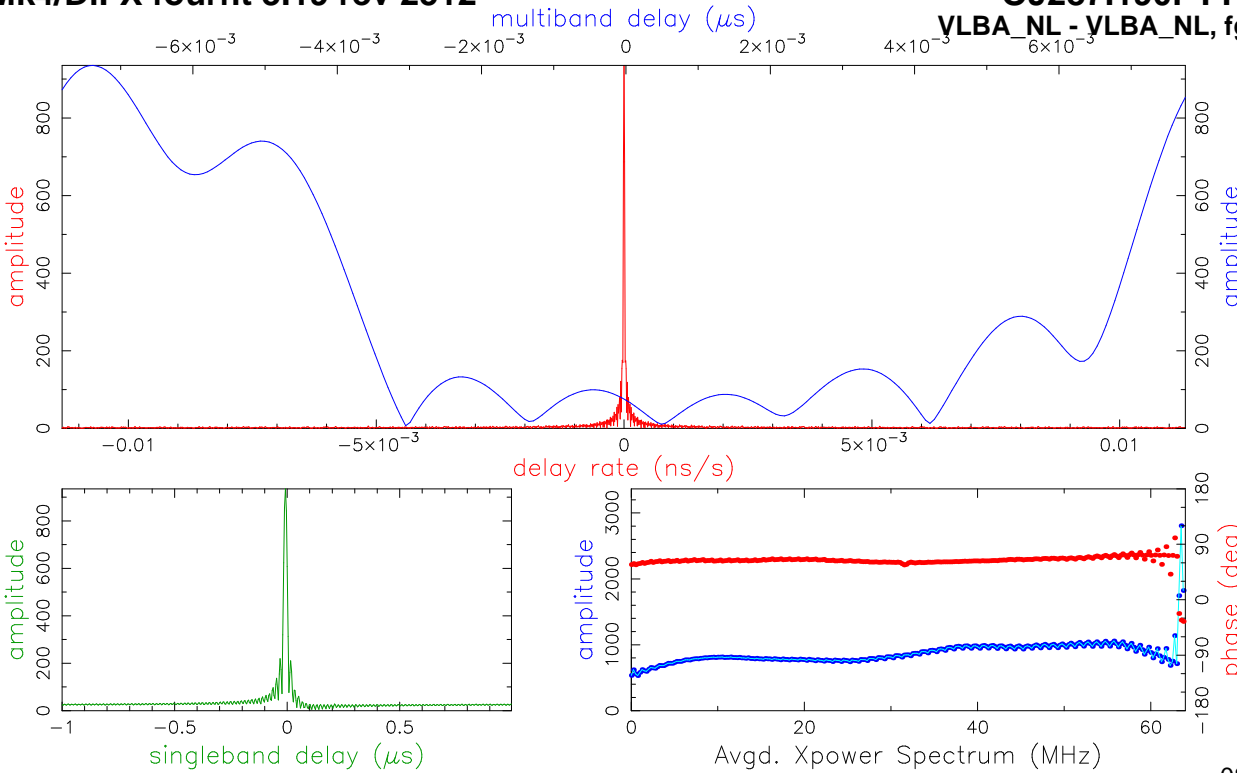


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Sband delay (usec)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Phase delay (usec)	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20	-3.21556332428E-20		
Delay rate (us/s)	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00	0.0000000000E+00		
Total phase (deg)			-0.0							
ph/seg (deg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
amp/seg (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
ph/frq (deg)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
amp/frq (%)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		

RMS Theor. Amplitude 9999.996 +/- 0.018  
Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
Pcal rate: 0.000E+00, 0.000E+00 (us/s)  
Sb window (us) -1.000 1.000  
Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

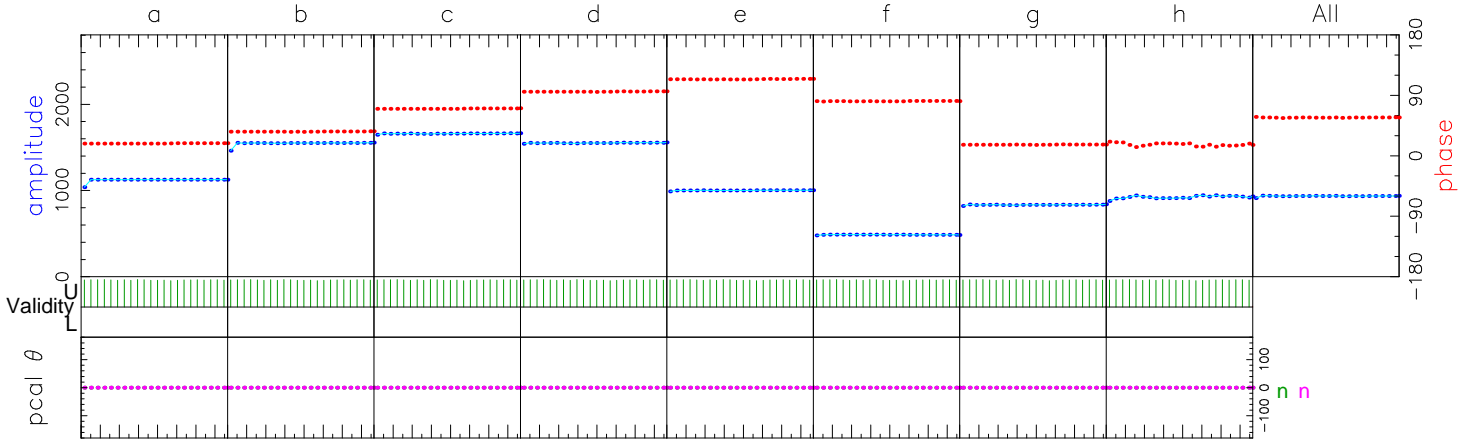
n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nn..190PTT Output file: /Exps/c201c/v1/1234/No0038/nn.W.191.190PTT



Fringe quality 5  
 SNR 53168.3  
 Int time 432.020  
 Amp 935.413  
 Phase 56.9  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.007962  
 MBD -0.007398  
 Fringe rate (Hz)  
 -0.000004  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211316  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:n	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		
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		-7.39840625000E-03				0.00000000000E+00			Resid mbdelay (usec)	-7.39841E-03 +/- 2.0E-08
Sband delay (usec)		-7.96175000000E-03				0.0000000E+00			Resid sbdelay (usec)	-7.96175E-03 +/- 1.6E-07
Phase delay (usec)		1.83515405026E-06				0.0000000E+00			Resid phdelay (usec)	1.83515E-06 +/- 7.0E-11
Delay rate (us/s)		-4.95990333709E-11				0.00000000000E+00			Resid rate (us/s)	-4.95990E-11 +/- 2.7E-13
Total phase (deg)			56.9			0.00000000000E+00			Resid phase (deg)	56.9 +/- 0.0

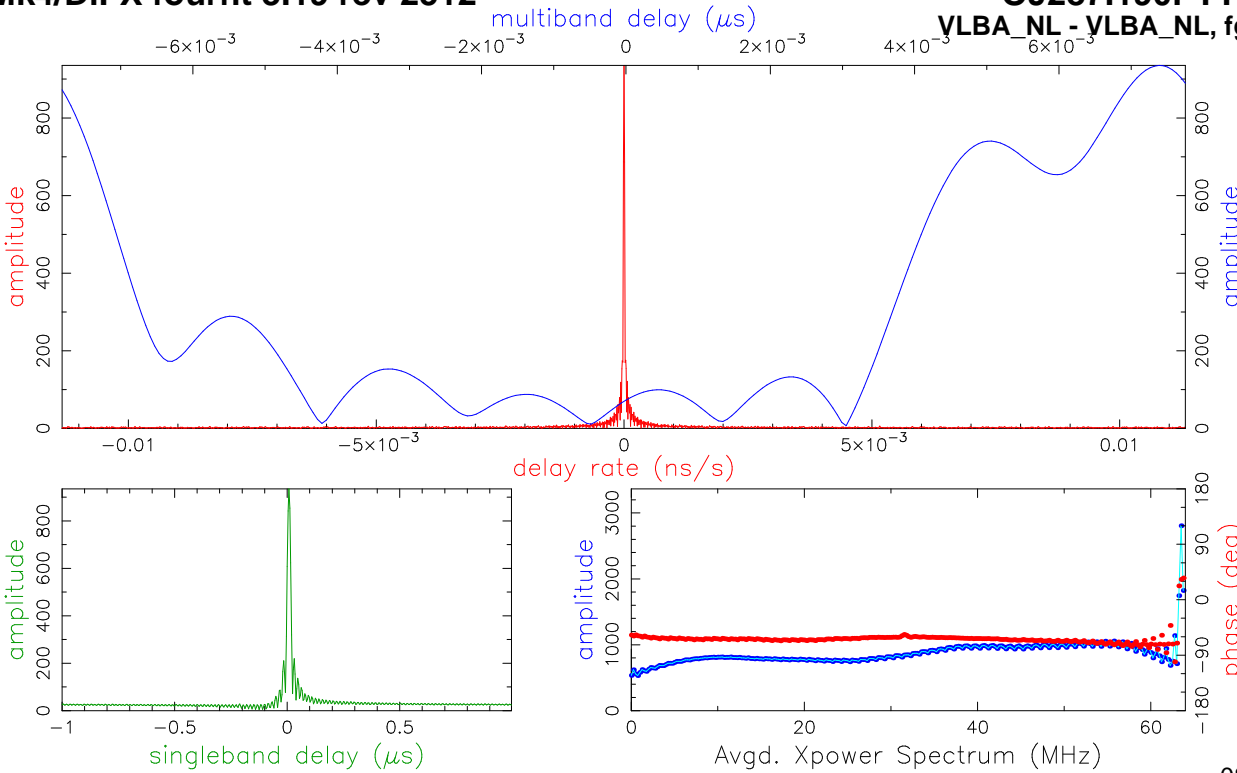
ph/seg (deg) 0.3 0.0  
 amp/seg (%) 0.5 0.0  
 ph/frq (deg) 42.2 0.0  
 amp/frq (%) 46.8 0.0

RMS Theor. Amplitude 935.413 +/- 0.018  
 Search (2048X32) 933.631  
 Interp. 0.000  
 Inc. seg. avg. 935.293  
 Inc. frq. avg. 1140.756

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(MISamp/s): 128  
 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

sb window (us) -1.000 1.000  
 mb window (us) -0.008 0.008  
 dr window (ns/s) -0.011 0.011  
 ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 0.000 0.000  
 simultaneous interpolator

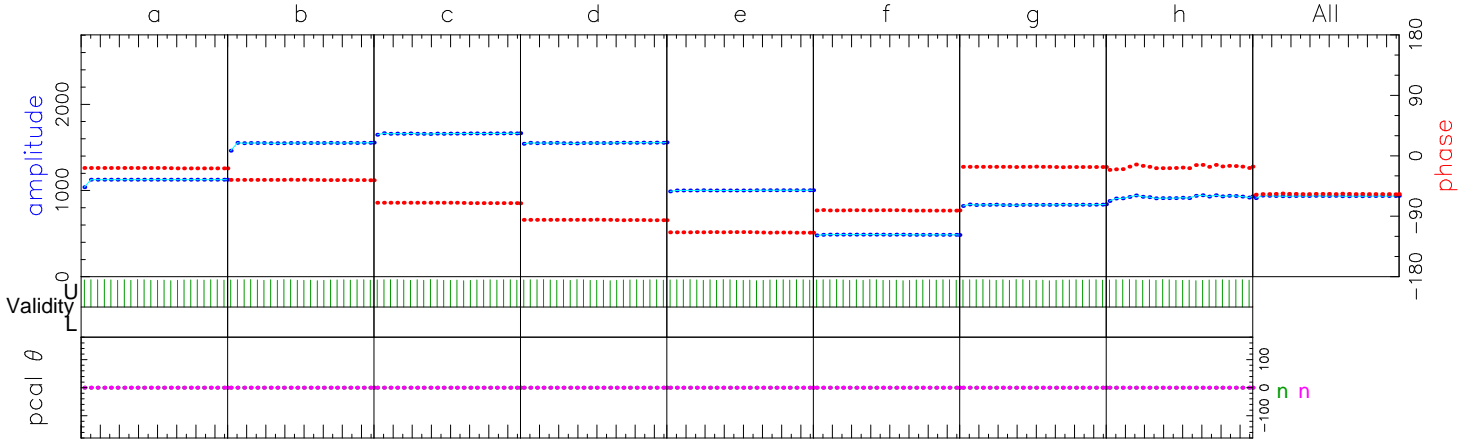


Fringe quality 5

SNR 53168.3  
Int time 432.021  
Amp 935.411  
Phase -56.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.007962  
MBD 0.007398  
Fringe rate (Hz) 0.000004  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211321  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

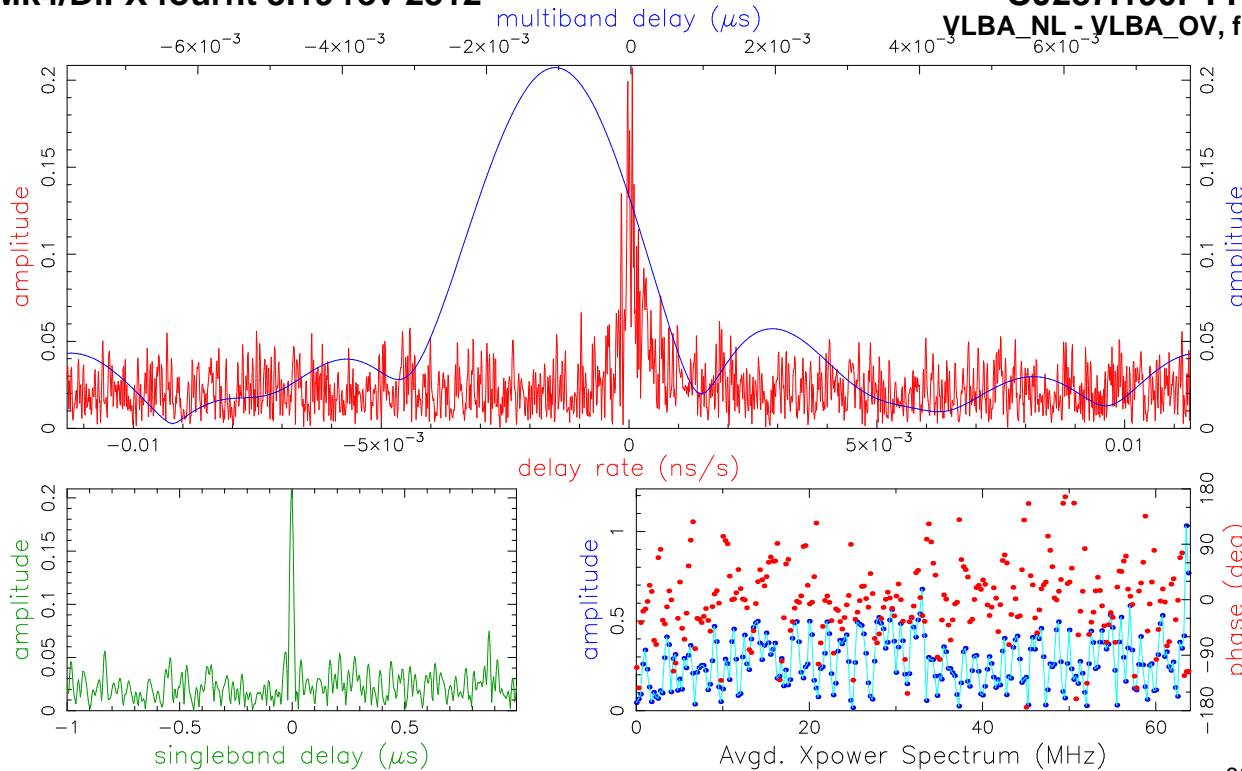
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-18.4	-35.9	-70.1	-95.4	-113.9	-81.3	-16.6	-16.7	Phase	-56.9
	1122.3	1547.3	1660.1	1551.5	1001.8	487.2	833.6	922.3	Ampl.	1140.8
	258.2	258.6	258.8	258.7	258.5	260.0	258.8	259.6	Sbd box	259.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:n	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	
n	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.39840625000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		7.39841E-03	+/- 2.0E-08
Sband delay (usec)	7.96175000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		7.96175E-03	+/- 1.6E-07
Phase delay (usec)	-1.83515405022E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-1.83515E-06	+/- 7.0E-11
Delay rate (us/s)	4.95990333709E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		4.95990E-11	+/- 2.7E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-56.9	+/- 0.0

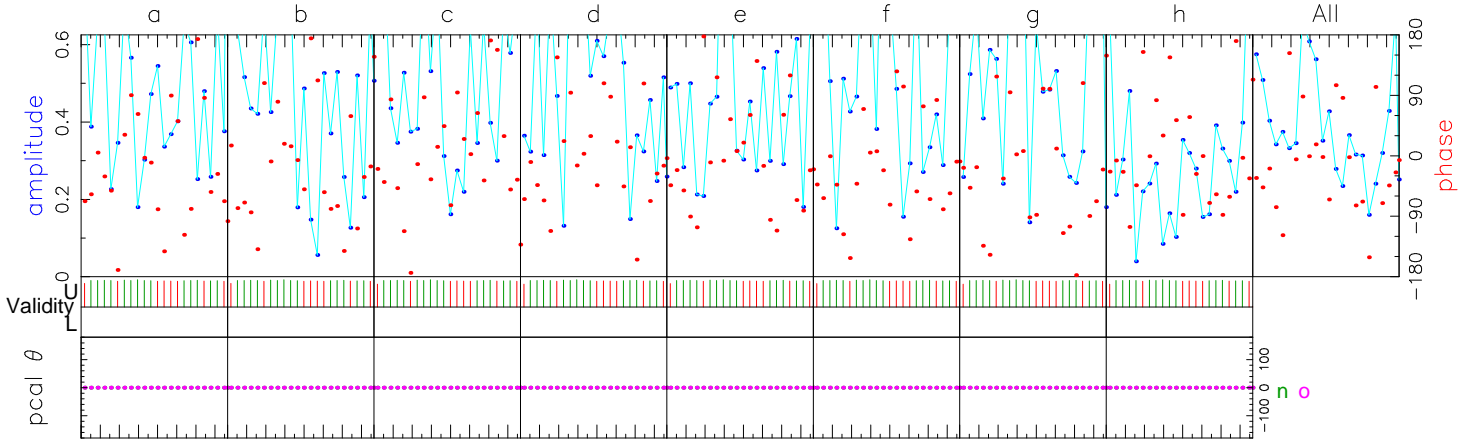
ph/seg (deg) 0.3 0.0 Search (2048X32) 935.629 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 0.5 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 42.2 0.0 Inc. seg. avg. 935.292 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 46.8 0.0 Inc. frq. avg. 1140.754 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 n: az 113.7 el 52.2 pa -46.7





Fringe quality 9  
 SNR 11.7  
 Int time 418.634  
 Amp 0.208  
 Phase -22.5  
 PFD 9.4e-23  
 Delays (us)  
 SBD -0.002742  
 MBD -0.000987  
 Fringe rate (Hz) 0.005757  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211306  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

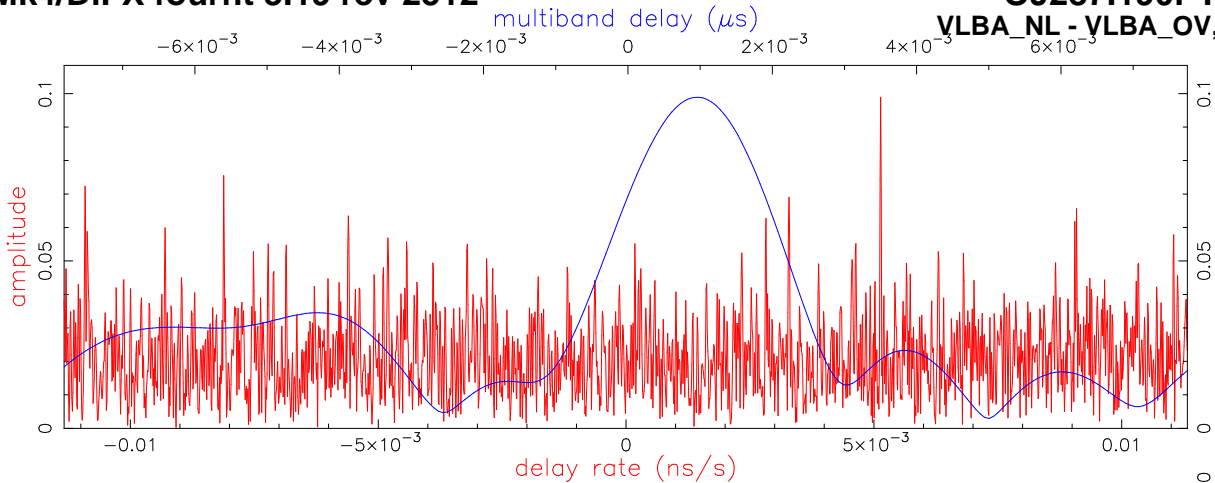


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.18122822392E+03		Apriori delay (usec)		5.18122921101E+03		Resid mbdelay (usec)		-9.87091E-04	+/- 9.3E-05
Sband delay (usec)	5.18122646926E+03		Apriori clock (usec)		1.2205048E+01		Resid sbdelay (usec)		-2.74175E-03	+/- 7.4E-04
Phase delay (usec)	5.18122921029E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-7.27059E-07	+/- 3.2E-07
Delay rate (us/s)	-3.95641932742E-01		Apriori rate (us/s)		-3.95641999576E-01		Resid rate (us/s)		6.68340E-08	+/- 1.2E-09
Total phase (deg)	62.7		Apriori accel (us/s/s)		-2.51272807909E-05		Resid phase (deg)		-22.5	+/- 9.8

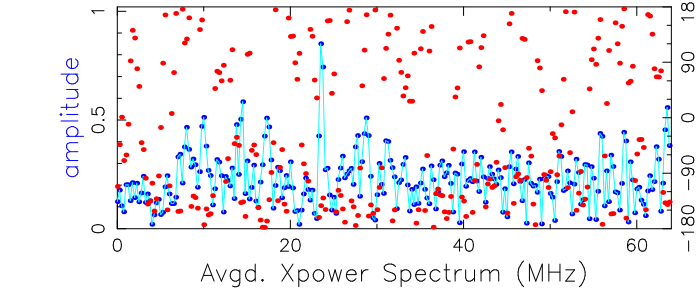
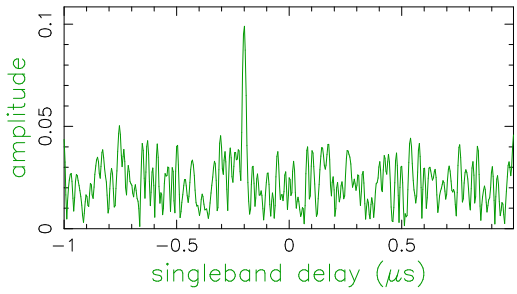
	RMS	Theor.	Amplitude	0.208 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	76.3	23.6	Search (2048X32)	0.206	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	113.7	41.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	13.7	13.9	Inc. seg. avg.	0.370	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	23.6	24.2	Inc. frq. avg.	0.206	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

n: az 113.7 el 52.2 pa -46.7 o: az 88.8 el 32.8 pa -58.0 u,v (fr/asec) 2369.031 -224.717 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/no..190PTT Output file: /Exps/c201c/v1/1234/No0038/no.W.166.190PTT

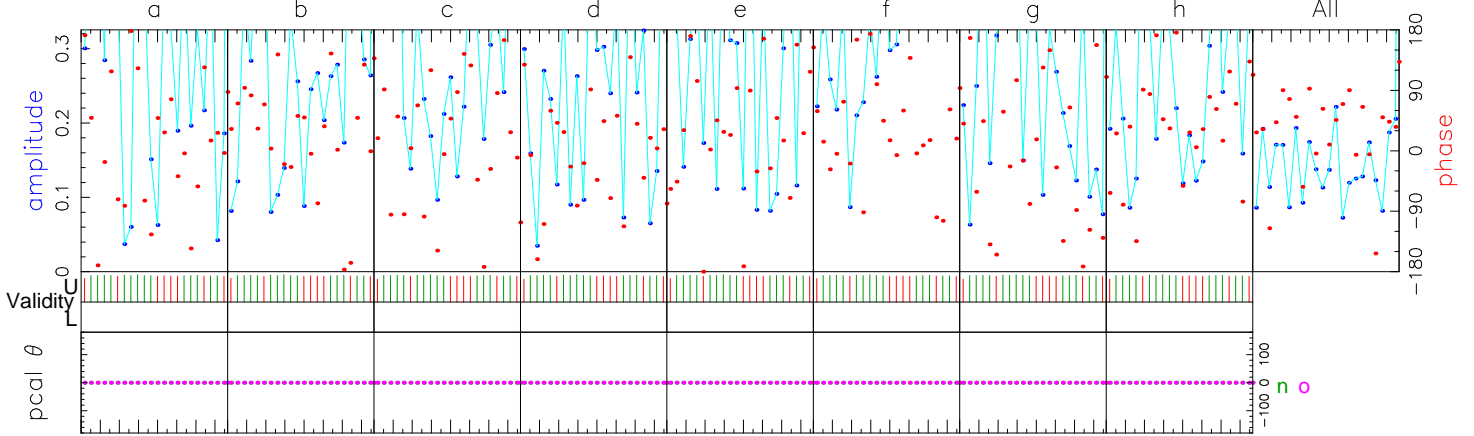




Fringe quality 0  
 SNR 5.6  
 Int time 418.633  
 Amp 0.108  
 Phase 43.1  
 PFD 1.0e+00  
 Delays (us)  
 SBD -0.200244  
 MBD 0.000935  
 Fringe rate (Hz) 0.443262  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211314  
 2020:014:135814  
 RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

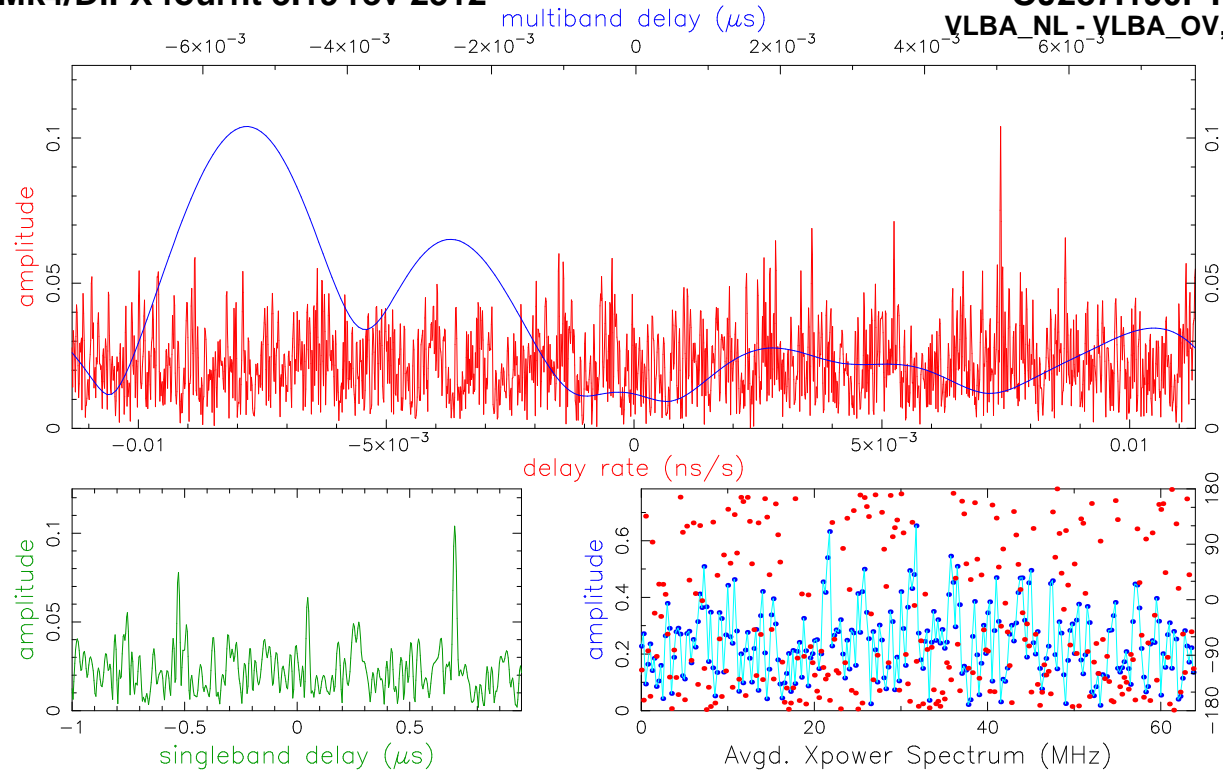


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd) 5.18102702078E+03 Apriori delay (usec) 5.18122921101E+03 Resid mbdelay (usec) 9.34767E-04 +/- 2.0E-04  
 Sband delay (usec) 5.18102896676E+03 Apriori clock (usec) 1.2205048E+01 Resid sbdelay (usec) -2.00244E-01 +/- 1.5E-03  
 Phase delay (usec) 5.18122921240E+03 Apriori clockrate (us/s) 1.3299997E-07 Resid phdelay (usec) 1.38844E-06 +/- 6.6E-07  
 Delay rate (us/s) -3.95636853742E-01 Apriori rate (us/s) -3.95641999576E-01 Resid rate (us/s) 5.14583E-06 +/- 2.6E-09  
 Total phase (deg) 128.3 Apriori accel (us/s/s) -2.51272807909E-05 Resid phase (deg) 43.1 +/- 20.6

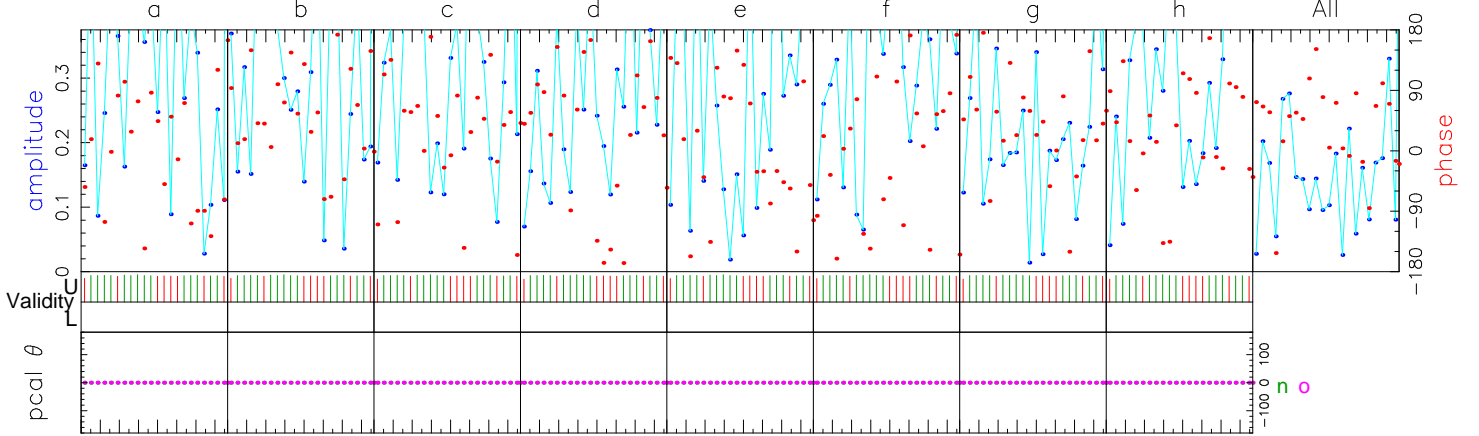
RMS Theor. Amplitude 0.108 +/- 0.019 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 60.3 49.4 Search (2048X32) 0.096 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 69.9 86.2 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 18.4 29.1 Inc. seg. avg. 0.114 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 44.2 50.8 Inc. frq. avg. 0.099 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 o: az 88.8 el 32.8 pa -58.0 u,v (fr/asec) 2369.031 -224.717 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/no..190PTT Output file: /Exps/c201c/v1/1234/No0038/no.W.205.190PTT



Fringe quality 0  
 SNR 5.8  
 Int time 418.635  
 Amp 0.125  
 Phase 51.8  
 PFD 7.5e-01  
 Delays (us)  
 SBD 0.699866  
 MBD -0.005370  
 Fringe rate (Hz) 0.638073  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211319  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

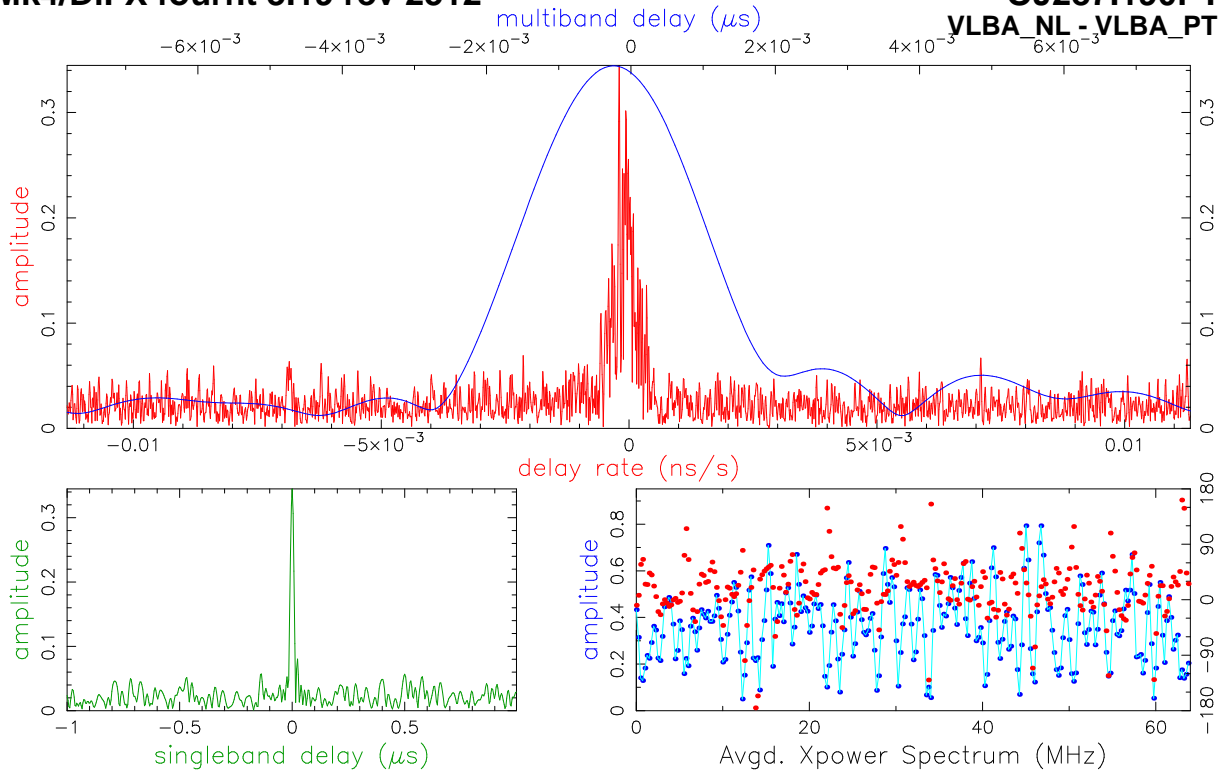


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	5.18192696620E+03		Apriori delay (usec)		5.18122921101E+03		Resid mbdelay (usec)		-5.36981E-03	+/- 1.9E-04
Sband delay (usec)	5.18192907726E+03		Apriori clock (usec)		1.2205048E+01		Resid sbdelay (usec)		6.99866E-01	+/- 1.5E-03
Phase delay (usec)	5.18122921269E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		1.67142E-06	+/- 6.3E-07
Delay rate (us/s)	-3.95634592181E-01		Apriori rate (us/s)		-3.95641999576E-01		Resid rate (us/s)		7.40739E-06	+/- 2.5E-09
Total phase (deg)			137.1		Apriori accel (us/s/s)		-2.51272807909E-05		51.8	+/- 19.7

ph/seg (deg) 60.9 47.1 Search (2048X32) 0.125 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 87.3 82.3 Interp. 0.102 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.1 27.8 Inc. seg. avg. 0.132 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.0 48.5 Inc. frq. avg. 0.123 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 113.7 el 52.2 pa -46.7 o: az 88.8 el 32.8 pa -58.0 u,v (fr/asec) 2369.031 -224.717 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

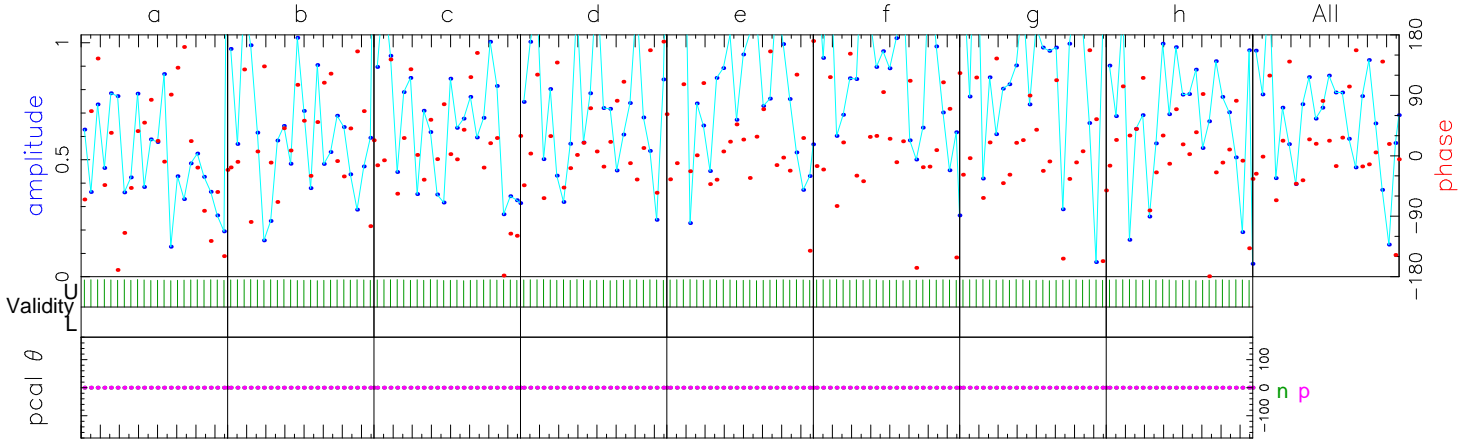
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, np  
VLBA\_NL - VLBA\_PT, fgroup W, pol LL



Fringe quality 9  
SNR 19.6  
Int time 431.282  
Amp 0.345  
Phase 17.8  
PFD 0.0e+00  
Delays (us)  
SBD -0.000396  
MBD -0.000244  
Fringe rate (Hz) -0.017019  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211307  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0			
n	1000	1000	1000	1000	1000	1000	1000	1000			
p	1000	1000	1000	1000	1000	1000	1000	1000			
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0			
n:p	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			
p	1000	1000	1000	1000	1000	1000	1000	1000			
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL			
Group delay (usec)(sbd)	2.74619339331E+03					2.74619363757E+03			Resid mbdelay (usec)	-2.44260E-04	+/- 5.5E-05
Sband delay (usec)	2.74619324132E+03					1.5013483E+01			Resid sbdelay (usec)	-3.96250E-04	+/- 4.4E-04
Phase delay (usec)	2.74619363814E+03					1.2999999E-07			Resid phdelay (usec)	5.72949E-07	+/- 1.9E-07
Delay rate (us/s)	-3.18472387682E-01					-3.18472190105E-01			Resid rate (us/s)	-1.97576E-07	+/- 7.4E-10
Total phase (deg)			356.3			-1.05650621848E-05			Resid phase (deg)	17.8	+/- 5.9

ph/seg (deg) 73.0 14.0  
amp/seg (%) 119.5 24.5  
ph/frq (deg) 7.3 8.3  
amp/frq (%) 32.4 14.4

RMS Theor. Amplitude 0.345 +/- 0.018  
Search (2048X32) 0.337  
Interp. 0.000  
Inc. seg. avg. 0.663  
Inc. frq. avg. 0.343

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(MISamp/s): 128  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

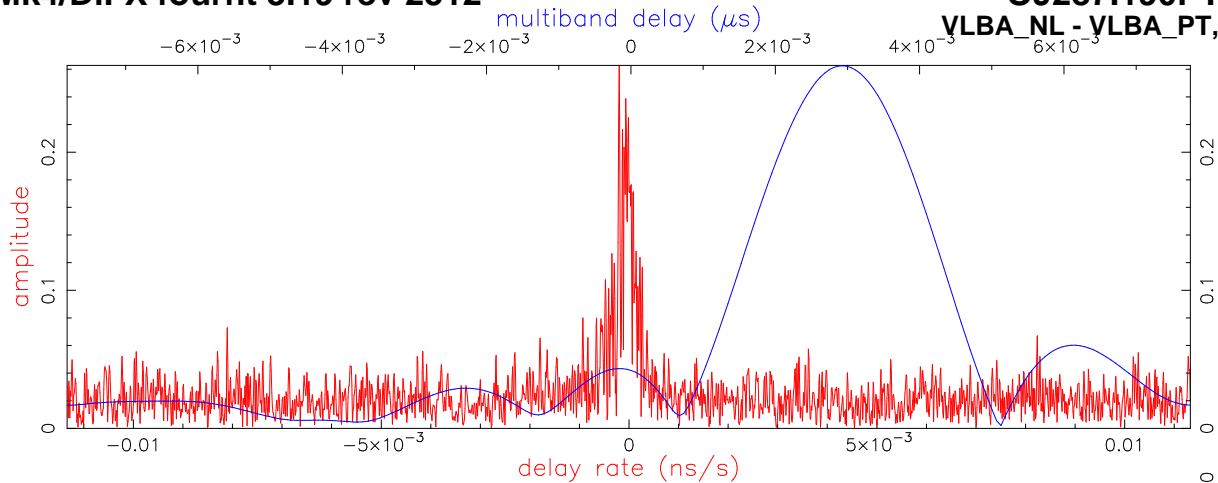
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 p: az 92.6 el 41.1 pa -61.5 u,v (fr/asec) 1922.329 539.397 simultaneous interpolator

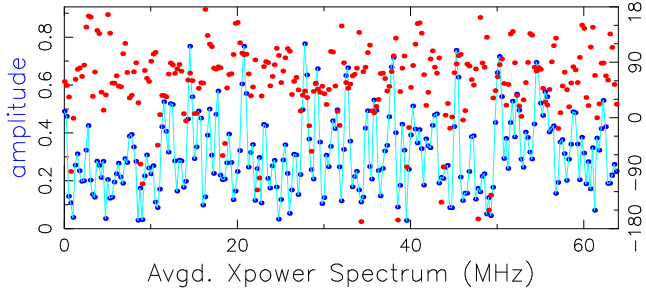
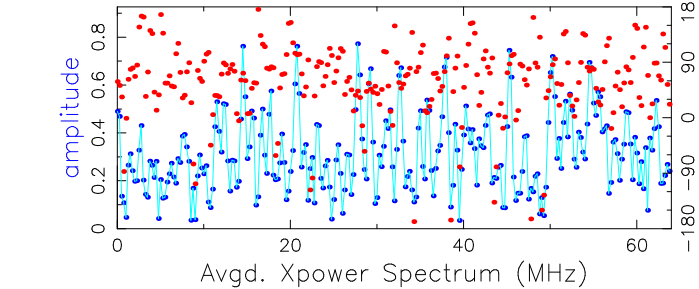
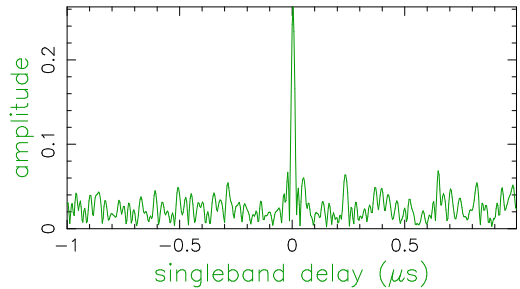
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/np..190PTT Output file: /Exps/c201c/v1/1234/No0038/np.W.172.190PTT

Mk4/DiFX fourfit 3.19 rev 2512

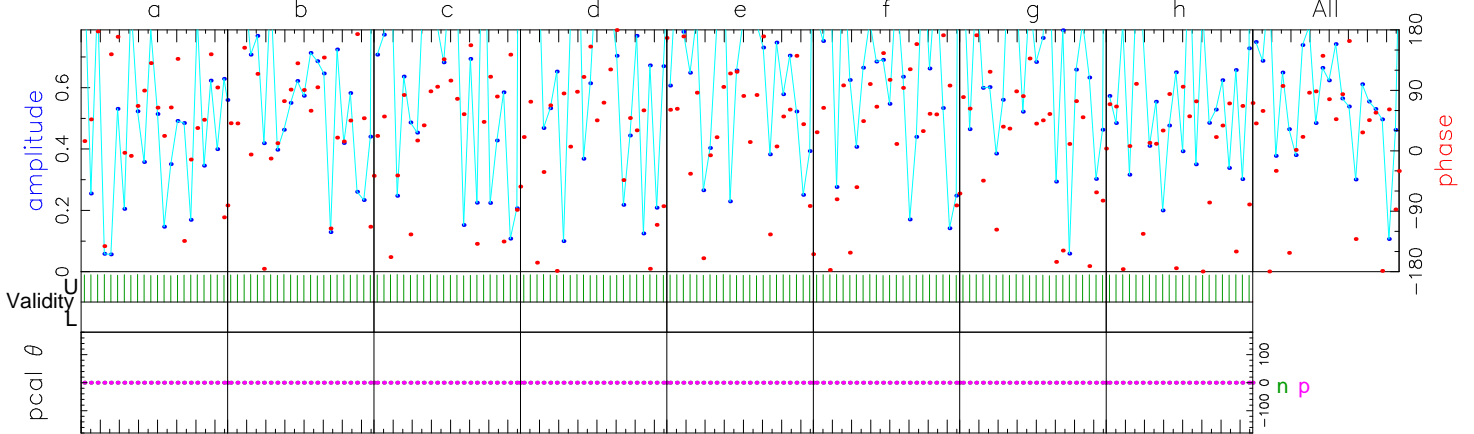
OJ287.190PTT, No0038, np  
VLBA\_NL - VLBA\_PT, fgroup W, pol RR



Fringe quality 9  
SNR 14.9  
Int time 431.283  
Amp 0.263  
Phase 77.4  
PFD 1.4e-41  
Delays (us)  
SBD 0.003566  
MBD 0.002920  
Fringe rate (Hz)  
-0.016931  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211313  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	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		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.74619655740E+03		Apriori delay (usec)		2.74619363757E+03		Resid mbdelay (usec)		2.91983E-03	+/- 7.3E-05
Sband delay (usec)	2.74619720332E+03		Apriori clock (usec)		1.5013483E+01		Resid sbdelay (usec)		3.56575E-03	+/- 5.8E-04
Phase delay (usec)	2.74619364007E+03		Apriori clockrate (us/s)		1.2999999E-07		Resid phdelay (usec)		2.49627E-06	+/- 2.5E-07
Delay rate (us/s)	-3.18472386657E-01		Apriori rate (us/s)		-3.18472190105E-01		Resid rate (us/s)		-1.96552E-07	+/- 9.8E-10
Total phase (deg)			55.9		Apriori accel (us/s/s)		-1.05650621848E-05		77.4	+/- 7.7

ph/seg (deg) 76.2 18.4  
amp/seg (%) 134.6 32.1  
ph/frq (deg) 6.8 10.9  
amp/frq (%) 25.3 19.0

RMS Theor. Amplitude 0.263 +/- 0.018  
Search (2048X32) 0.259  
Interp. 0.000  
Inc. seg. avg. 0.539  
Inc. frq. avg. 0.260

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(MISamp/s): 128  
Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite

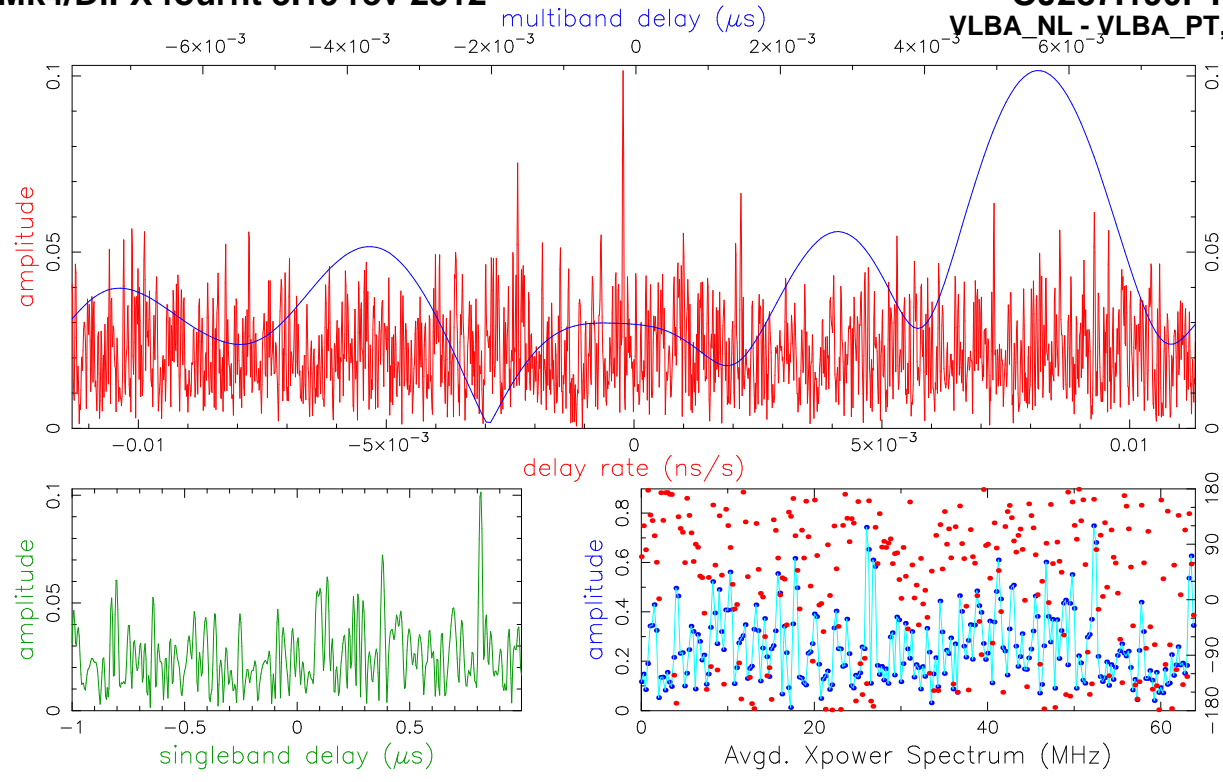
sb window (us) -1.000 1.000  
mb window (us) -0.008 0.008  
dr window (ns/s) -0.011 0.011  
ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 p: az 92.6 el 41.1 pa -61.5 u,v (fr/asec) 1922.329 539.397 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/np..190PTT Output file: /Exps/c201c/v1/1234/No0038/np.W.199.190PTT

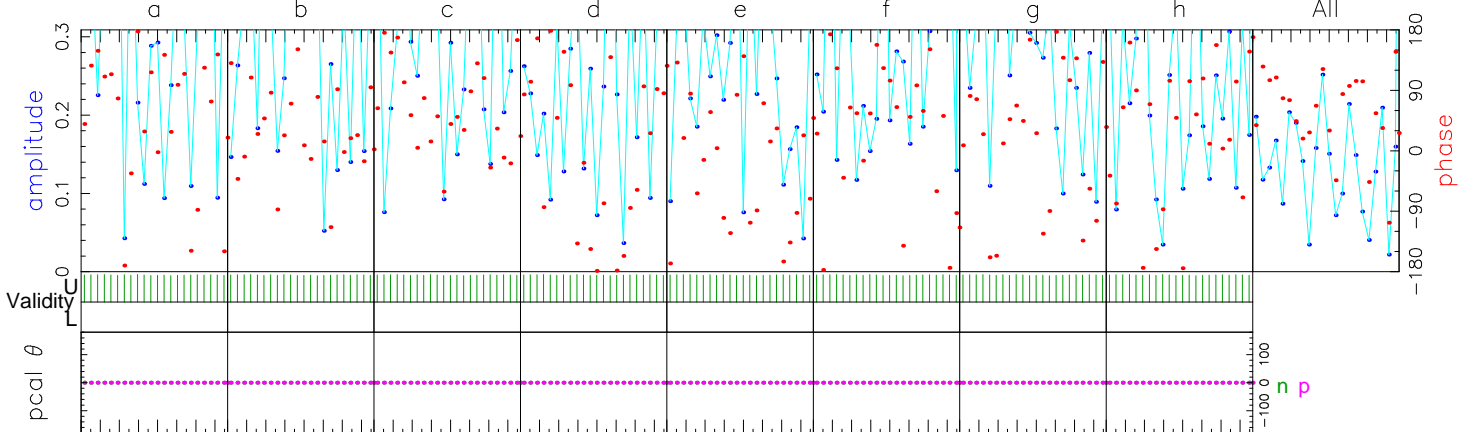
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, np  
VLBA\_NL - VLBA\_PT, fgroup W, pol LR



Fringe quality 0  
SNR 5.8  
Int time 431.282  
Amp 0.103  
Phase 75.3  
PFD 7.2e-01  
Delays (us)  
SBD 0.814881  
MBD 0.005538  
Fringe rate (Hz)  
-0.018983  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211318  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

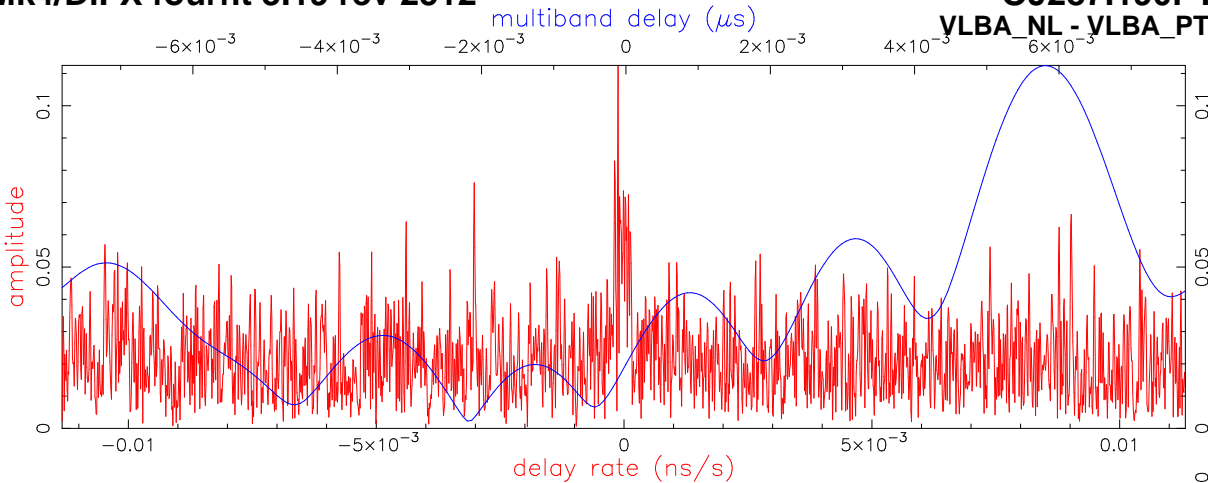


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	2.74701167535E+03		Apriori delay (usec)		2.74619363757E+03		Resid mbdelay (usec)		5.53778E-03	+/- 1.9E-04
Sband delay (usec)	2.74700851882E+03		Apriori clock (usec)		1.5013483E+01		Resid sbdelay (usec)		8.14881E-01	+/- 1.5E-03
Phase delay (usec)	2.74619364000E+03		Apriori clockrate (us/s)		1.2999999E-07		Resid phdelay (usec)		2.42815E-06	+/- 6.3E-07
Delay rate (us/s)	-3.18472410475E-01		Apriori rate (us/s)		-3.18472190105E-01		Resid rate (us/s)		-2.20370E-07	+/- 2.5E-09
Total phase (deg)			53.8		Apriori accel (us/s/s)		-1.05650621848E-05		Resid phase (deg)	75.3 +/- 19.6

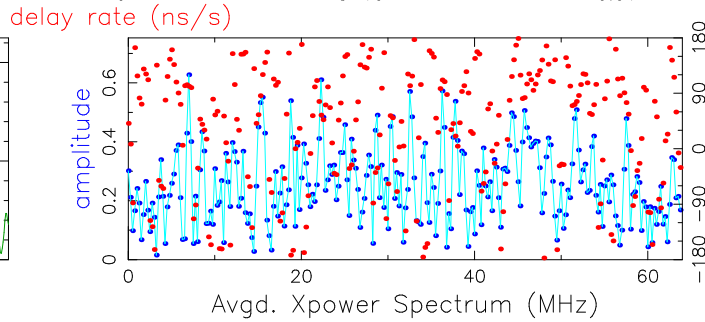
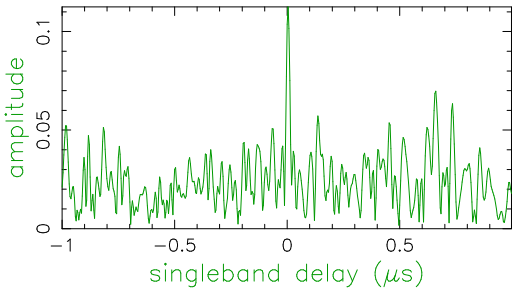
ph/seg (deg) 62.8 47.0 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 72.1 82.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 43.0 27.7 Inc. seg. avg. 0.103 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 50.7 48.4 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
n: az 113.7 el 52.2 pa -46.7 p: az 92.6 el 41.1 pa -61.5 u,v (fr/asec) 1922.329 539.397 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/np..190PTT Output file: /Exps/c201c/v1/1234/No0038/np.W.221.190PTT

Mk4/DiFX fourfit 3.19 rev 2512

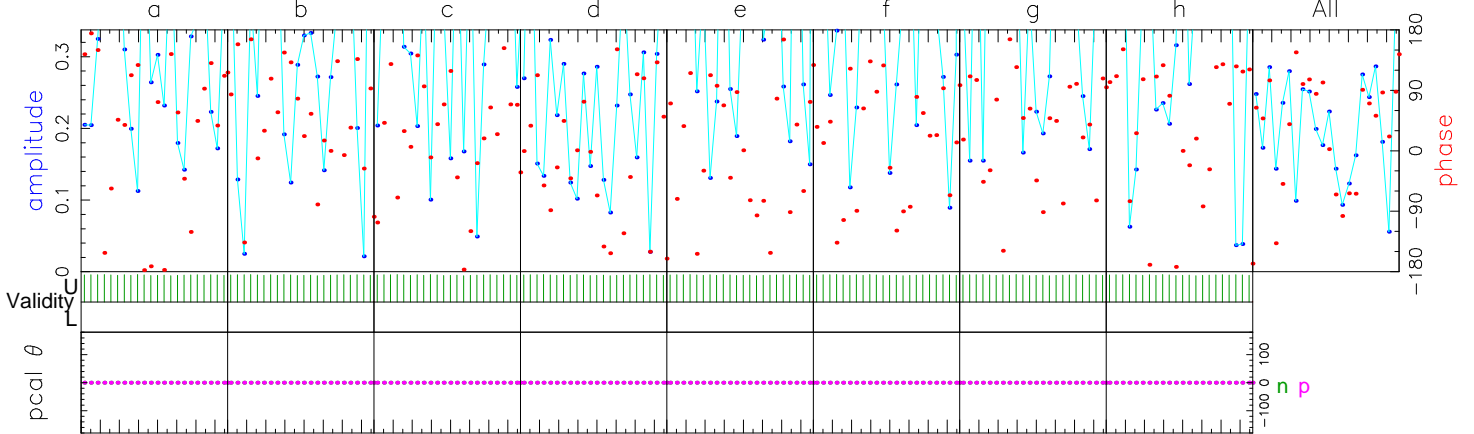
OJ287.190PTT, No0038, np  
VLBA\_NL - VLBA\_PT, fgroup W, pol RL



Fringe quality 0  
SNR 6.4  
Int time 431.283  
Amp 0.113  
Phase 68.4  
PFD 4.5e-02  
Delays (us)  
SBD 0.003667  
MBD 0.005807  
Fringe rate (Hz)  
-0.010860  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211322  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



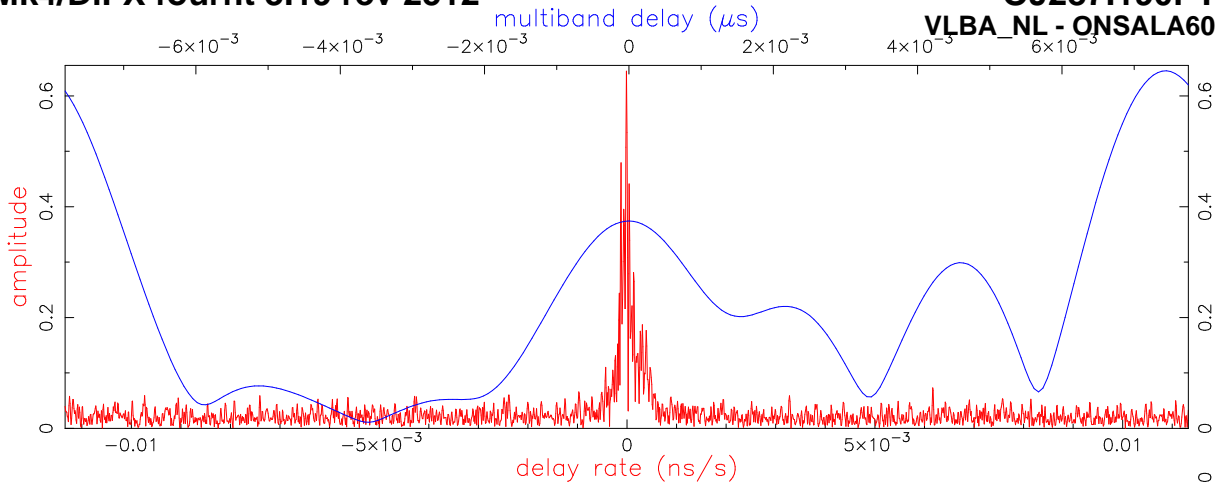
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	2.74619944456E+03	Apriori delay (usec)		2.74619363757E+03	Resid mbdelay (usec)		5.80699E-03	+/- 1.7E-04	
Sband delay (usec)	2.74619730432E+03	Apriori clock (usec)		1.5013483E+01	Resid sbdelay (usec)		3.66675E-03	+/- 1.3E-03	
Phase delay (usec)	2.74619363978E+03	Apriori clockrate (us/s)		1.2999999E-07	Resid phdelay (usec)		2.20655E-06	+/- 5.8E-07	
Delay rate (us/s)	-3.18472316182E-01	Apriori rate (us/s)		-3.18472190105E-01	Resid rate (us/s)		-1.26076E-07	+/- 2.3E-09	
Total phase (deg)	46.9		Apriori accel (us/s/s)		-1.05650621848E-05	Resid phase (deg)		68.4 +/- 17.9	

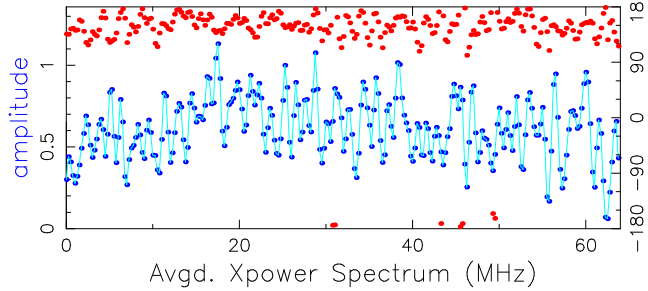
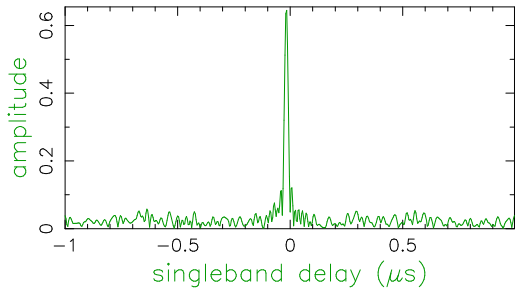
ph/seg (deg)	RMS 79.1	Theor. 43.0	Amplitude Search (2048X32)	0.113 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		sb window (us)	-1.000	1.000
amp/seg (%)	108.1	75.1	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled		mb window (us)	-0.008	0.008
ph/frq (deg)	37.8	25.4	Inc. seg. avg.	0.161	Bits/sample: 2x2	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011
amp/frq (%)	35.2	44.3	Inc. frq. avg.	0.119	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		ion window (TEC)	0.00	0.00

n: az 113.7 el 52.2 pa -46.7 p: az 92.6 el 41.1 pa -61.5 u,v (fr/asec) 1922.329 539.397 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/np..190PTT Output file: /Exps/c201c/v1/1234/No0038/np.W.241.190PTT

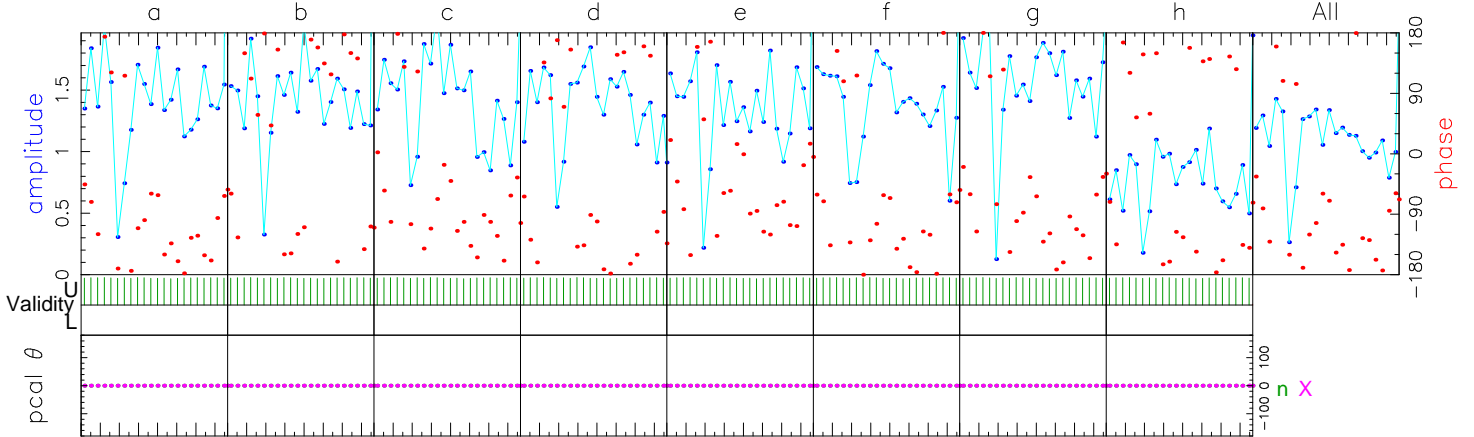




Fringe quality 4  
SNR 37.2  
Int time 431.984  
Amp 0.655  
Phase -132.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.017233  
MBD 0.007397  
Fringe rate (Hz)  
-0.000751  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211307  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



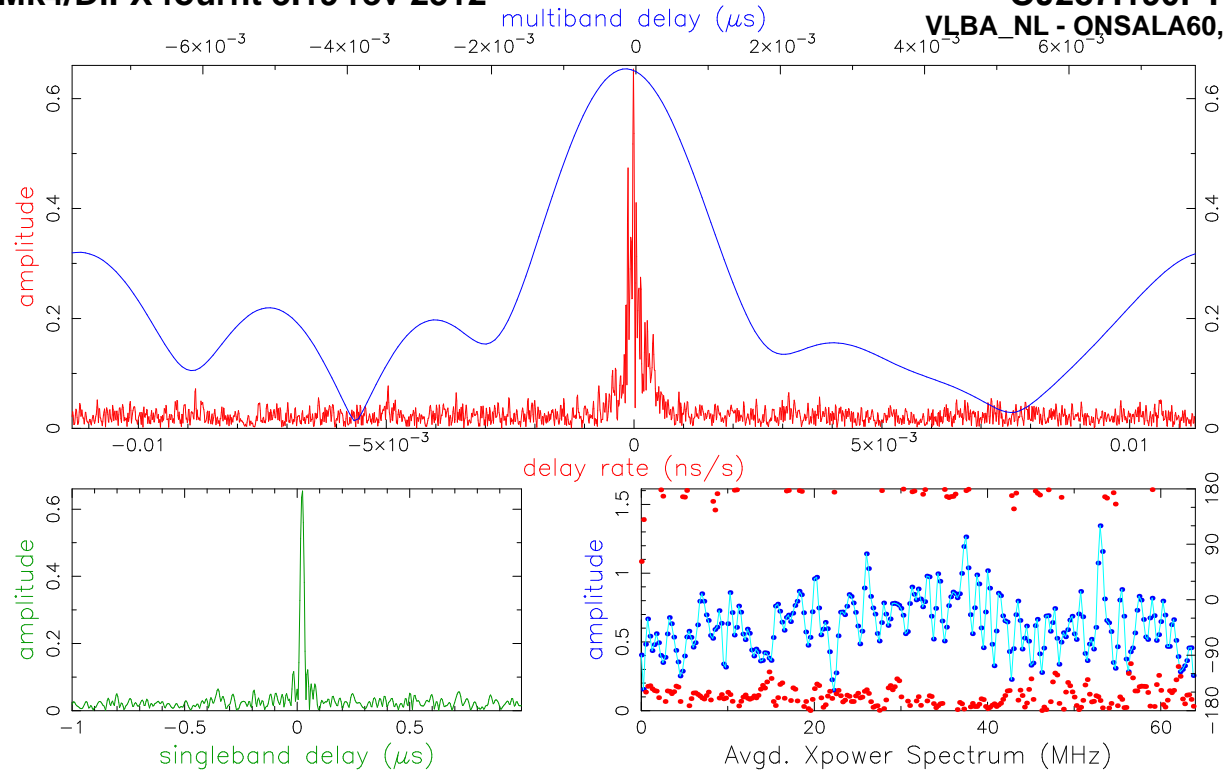
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-124.9	-179.6	-100.8	-166.7	-77.7	-129.1	-113.6	178.5	Phase	-132.0
	0.9	0.8	0.8	0.8	0.7	0.8	0.9	0.5	Ampl.	0.8
	252.3	252.1	252.7	252.0	252.0	251.9	252.1	251.6	Sbd box	252.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.80950264304E+03		Apriori delay (usec)		6.80952649641E+03		Resid mbdelay (usec)		7.39663E-03	+/- 2.9E-05
Sband delay (usec)	6.80950926366E+03		Apriori clock (usec)		-8.4885330E+00		Resid sbdelay (usec)		-1.72327E-02	+/- 2.3E-04
Phase delay (usec)	6.80952649215E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-4.25633E-06	+/- 9.9E-08
Delay rate (us/s)	1.36245585444E+00		Apriori rate (us/s)		1.36245586316E+00		Resid rate (us/s)		-8.71951E-09	+/- 3.9E-10
Total phase (deg)	12.3		Apriori accel (us/s/s)		-4.30772513538E-05		Resid phase (deg)		-132.0	+/- 3.1

	RMS	Theor.	Amplitude	0.655 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	57.6	7.4	Search (2048X32)	0.635	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	77.2	12.9	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	41.3	4.4	Inc. seg. avg.	1.083	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	26.1	7.6	Inc. frq. avg.	0.772	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

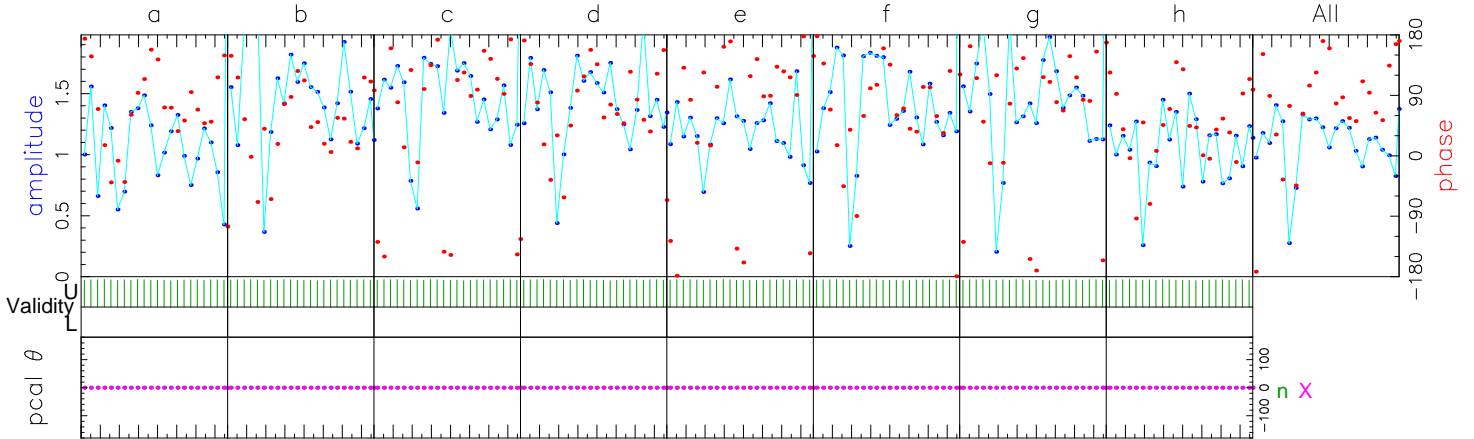
n: az 113.7 el 52.2 pa -46.7 X: az 261.6 el 29.2 pa 34.6 u,v (fr/asec) -8373.670 -2657.730 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nX..190PTT Output file: /Exps/c201c/v1/1234/No0038/nX.W.173.190PTT



Fringe quality 4

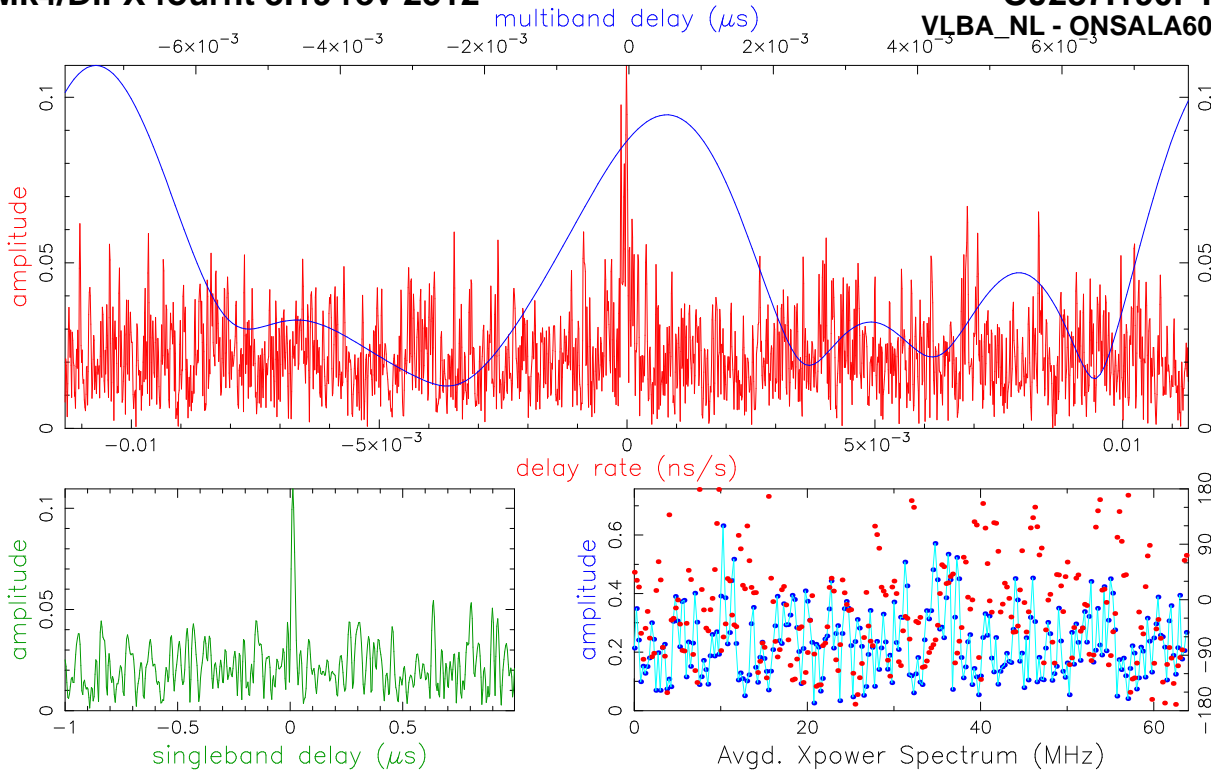
SNR 37.5  
 Int time 431.985  
 Amp 0.660  
 Phase 93.6  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.022118  
 MBD -0.000179  
 Fringe rate (Hz)  
 -0.000726  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211312  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



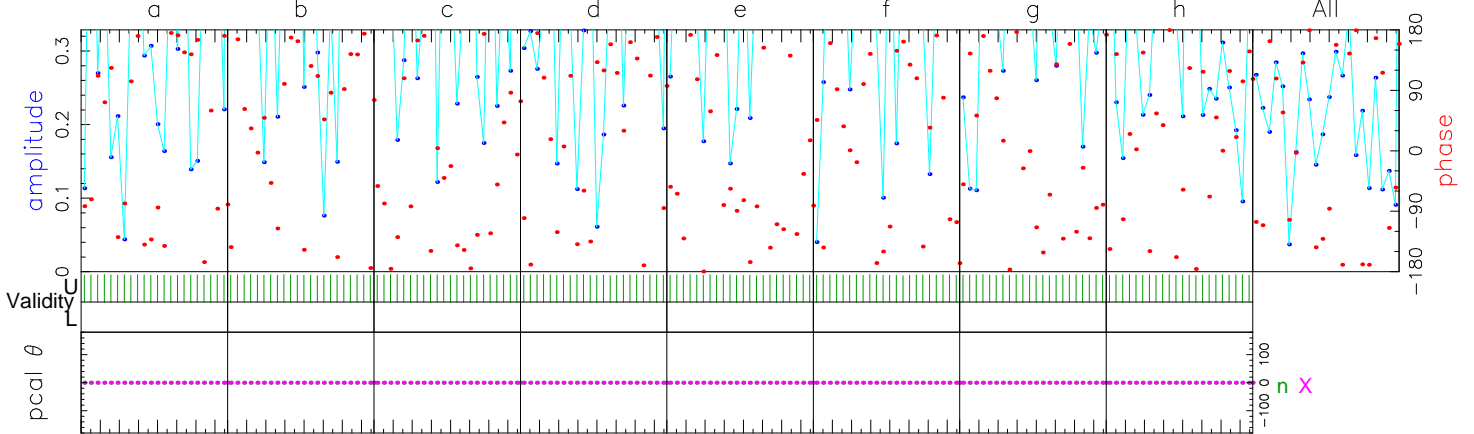
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	78.2	54.5	140.9	85.8	134.2	84.1	116.0	47.7		
Sband delay (usec)	0.6	0.9	0.9	0.9	0.7	0.8	0.8	0.6		
Phase delay (usec)	261.9	262.4	262.9	262.0	261.7	262.2	262.0	261.3		
Delay rate (us/s)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
Total phase (deg)			237.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
nlags: 256										
t_cohere infinite										
simultaneous interpolator										

ph/seg (deg) 59.5 7.3 Search (2048X32) 0.640 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 74.3 12.8 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 37.4 4.3 Inc. seg. avg. 1.078 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 22.5 7.5 Inc. frq. avg. 0.768 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 113.7 el 52.2 pa -46.7 X: az 261.6 el 29.2 pa 34.6 u,v (fr/asec) -8373.670 -2657.730 ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nX..190PTT Output file: /Exps/c201c/v1/1234/No0038/nX.W.194.190PTT



Fringe quality 0  
SNR 6.2  
Int time 431.984  
Amp 0.110  
Phase -179.3  
PFD 1.2e-01  
Delays (us)  
SBD 0.011721  
MBD -0.007387  
Fringe rate (Hz)  
-0.000992  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211316  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

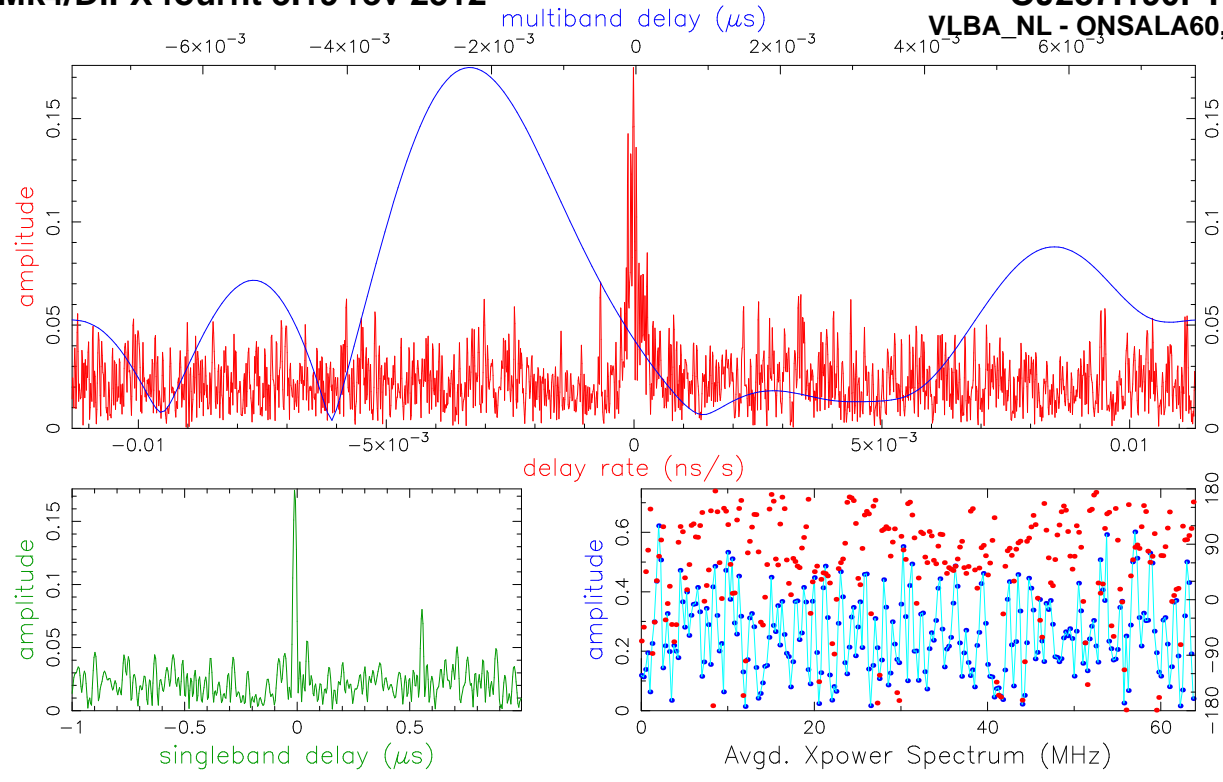
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-177.0	143.0	-111.4	151.6	-119.0	144.3	-148.1	128.1	Phase	-179.3
	0.1	0.2	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	418.9	260.0	262.0	325.0	347.8	259.6	471.8	182.3	Sbd box	260.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.80953473482E+03		Apriori delay (usec)		6.80952649641E+03		Resid mbdelay (usec)		-7.38659E-03	+/- 1.7E-04
Sband delay (usec)	6.80953821766E+03		Apriori clock (usec)		-8.4885330E+00		Resid sbdelay (usec)		1.17212E-02	+/- 1.4E-03
Phase delay (usec)	6.80952649063E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-5.78250E-06	+/- 5.9E-07
Delay rate (us/s)	1.36245585164E+00		Apriori rate (us/s)		1.36245586316E+00		Resid rate (us/s)		-1.15204E-08	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-4.30772513538E-05		Resid phase (deg)		-179.3	+/- 18.4

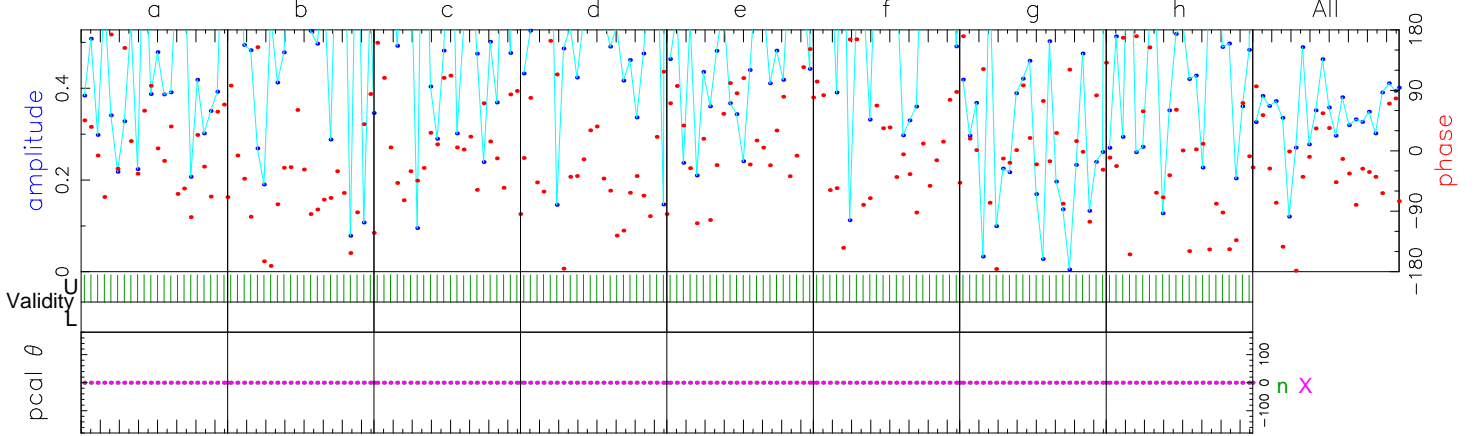
	RMS	Theor.	Amplitude	0.110 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	70.4	44.1	Search (2048X32)	0.109	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	113.8	77.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	51.0	26.0	Inc. seg. avg.	0.159	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	52.8	45.4	Inc. frq. avg.	0.138	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 X: az 261.6 el 29.2 pa 34.6 u,v (fr/asec) -8373.670 -2657.730 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nX..190PTT Output file: /Exps/c201c/v1/1234/No0038/nX.W.213.190PTT



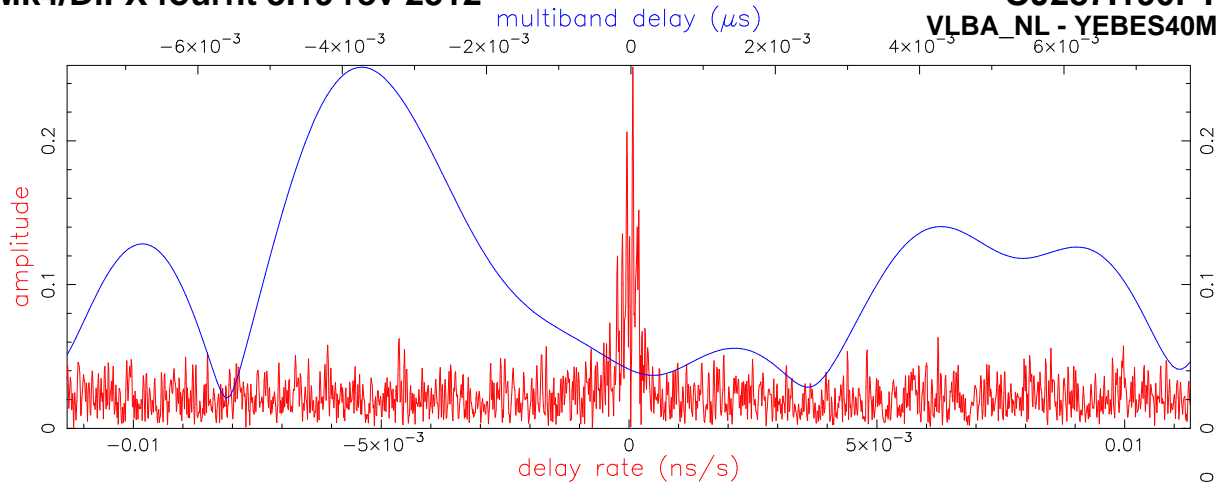
Fringe quality 9  
SNR 10.0  
Int time 431.985  
Amp 0.176  
Phase -8.8  
PFD 7.0e-15  
Delays (us)  
SBD -0.010739  
MBD -0.002280  
Fringe rate (Hz)  
-0.000728  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221500.00  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211320  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



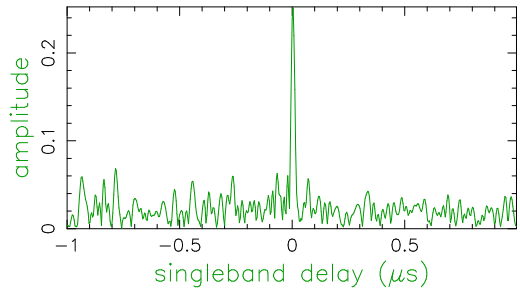
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	7.7	-51.9	13.5	-38.4	29.3	8.2	-2.2	-81.2	Phase	-8.8
	0.2	0.2	0.3	0.2	0.2	0.2	0.1	0.1	Ampl.	0.2
	253.7	254.2	254.1	253.6	254.2	253.0	40.4	397.1	Sbd box	254.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs 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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	6.80950859148E+03		Apriori delay (usec)		6.80952649641E+03		Resid mbdelay (usec)		-2.27993E-03	+/- 1.1E-04
Sband delay (usec)	6.80951575766E+03		Apriori clock (usec)		-8.4885330E+00		Resid sbdelay (usec)		-1.07387E-02	+/- 8.6E-04
Phase delay (usec)	6.80952649613E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-2.84715E-07	+/- 3.7E-07
Delay rate (us/s)	1.36245585471E+00		Apriori rate (us/s)		1.36245586316E+00		Resid rate (us/s)		-8.44813E-09	+/- 1.5E-09
Total phase (deg)	135.5		Apriori accel (us/s/s)		-4.30772513538E-05		Resid phase (deg)		-8.8	+/- 11.5

ph/seg (deg) 67.8 27.5 Search (2048X32) 0.171 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 105.1 48.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 41.9 16.2 Inc. seg. avg. 0.310 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 33.7 28.3 Inc. frq. avg. 0.200 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
n: az 113.7 el 52.2 pa -46.7 X: az 261.6 el 29.2 pa 34.6 u,v (fr/asec) -8373.670 -2657.730 simultaneous interpolator

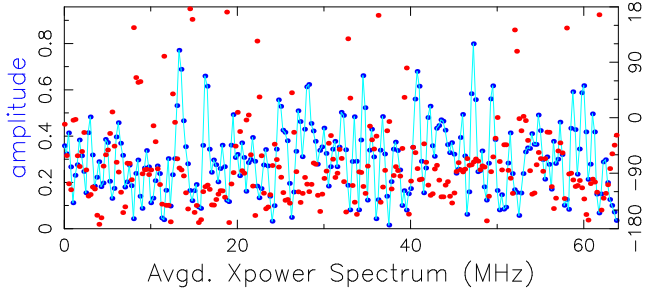


Fringe quality 7

SNR 14.3  
Int time 425.918  
Amp 0.253  
Phase -17.8  
PFD 2.7e-37  
Delays (us)  
SBD 0.002996  
MBD -0.003753  
Fringe rate (Hz)  
0.007163  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

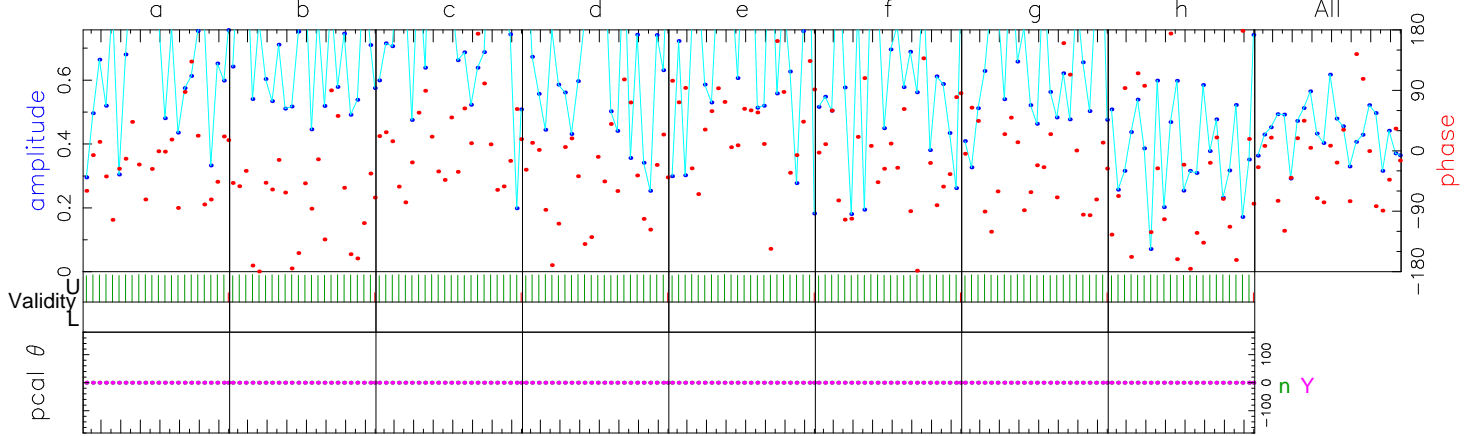


delay rate (ns/s)



Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221505.12  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211307  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

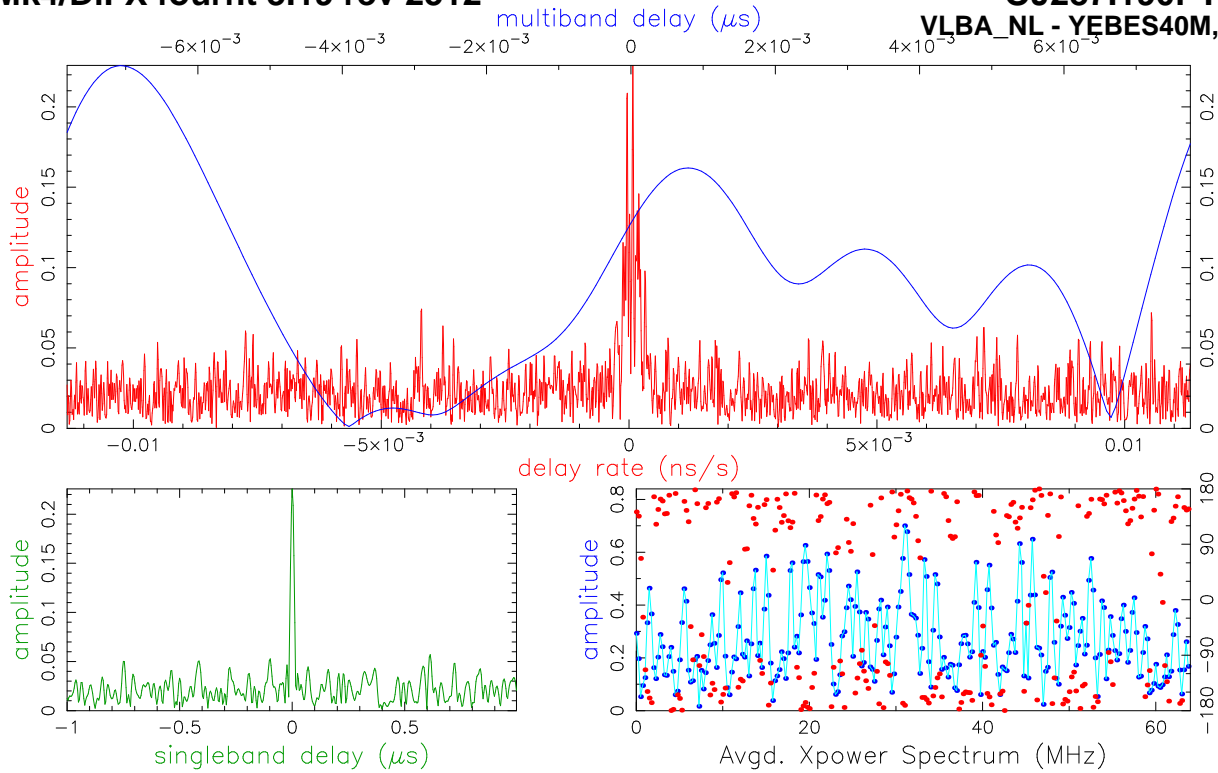


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-17.0	-70.3	1.9	-36.6	55.0	-20.7	-29.2	-132.0	Phase	-17.8
	0.4	0.3	0.5	0.3	0.4	0.3	0.3	0.1	Ampl.	0.3
	258.2	257.5	257.6	257.1	257.8	256.2	256.7	254.8	Sbd box	257.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.12232662882E+03	Apriori delay (usec)	3.12233038150E+03	Resid mbdelay (usec)	-3.75268E-03	+/-	7.6E-05
Sband delay (usec)	3.12233337750E+03	Apriori clock (usec)	2.0324469E+01	Resid sbdelay (usec)	2.99600E-03	+/-	6.0E-04
Phase delay (usec)	3.12233038092E+03	Apriori clockrate (us/s)	1.139998E-07	Resid phdelay (usec)	-5.75409E-07	+/-	2.6E-07
Delay rate (us/s)	1.51840254649E+00	Apriori rate (us/s)	1.51840246334E+00	Resid rate (us/s)	8.31499E-08	+/-	1.0E-09
Total phase (deg)	4.5	Apriori accel (us/s/s)	-1.58640865479E-05	Resid phase (deg)	-17.8	+/-	8.0

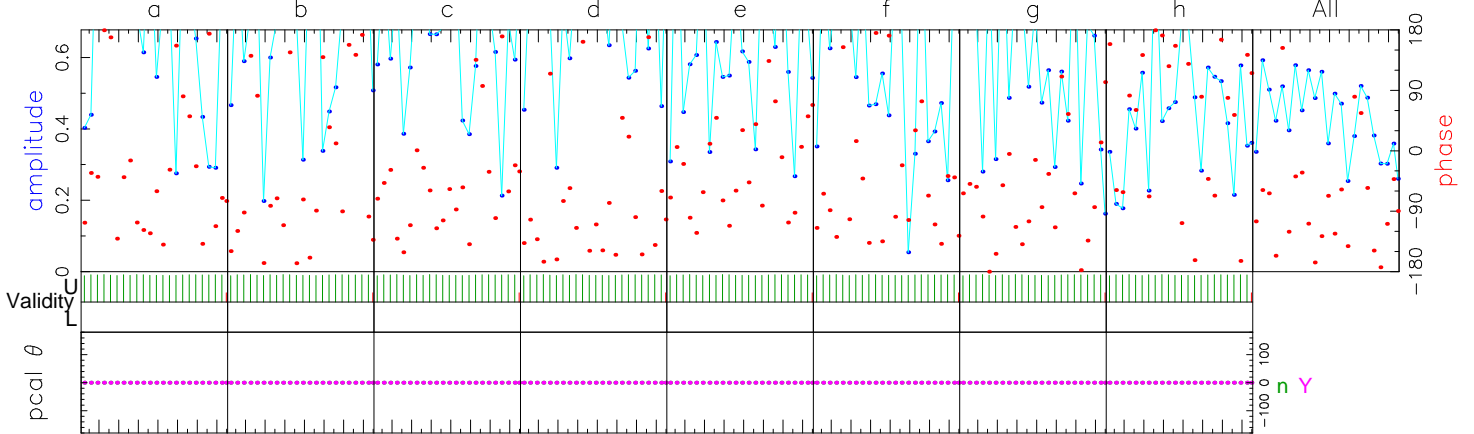
ph/seg (deg)	63.2	RMS	Theor.	Amplitude	0.253 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	81.6	63.2	19.3	Search (2048X32)	0.231	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	60.5	81.6	33.7	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	49.9	60.5	11.4	Inc. seg. avg.	0.420	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
		49.9	19.8	Inc. frq. avg.	0.320	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 113.7 el 52.2 pa -46.7 Y: az 261.0 el 41.6 pa 53.0 u,v (fr/asec) -9281.416 -267.550 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nY..190PTT Output file: /Exps/c201c/v1/1234/No0038/nY.W.175.190PTT



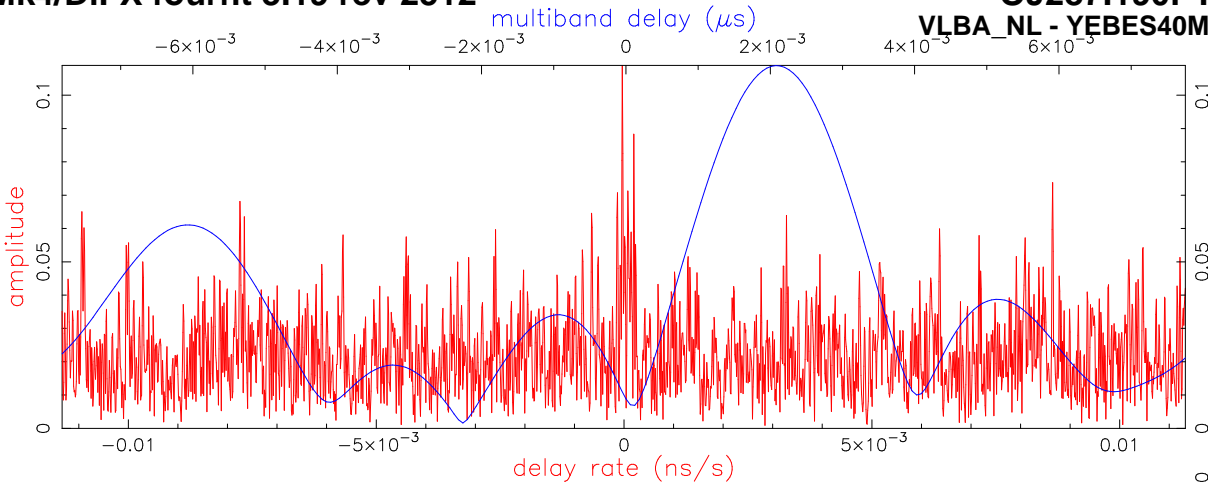
Fringe quality 9  
 SNR 12.7  
 Int time 425.919  
 Amp 0.226  
 Phase -97.4  
 PFD 1.8e-28  
 Delays (us)  
 SBD 0.000339  
 MBD -0.007063  
 Fringe rate (Hz)  
 0.006987  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221505.12  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211313  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec

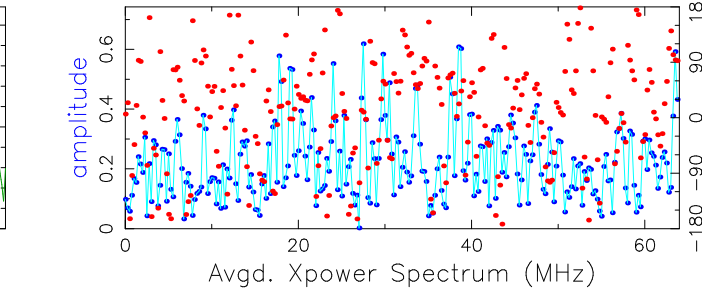
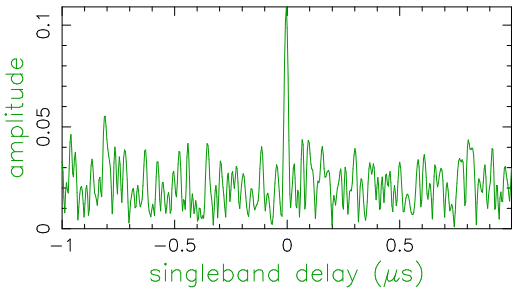


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-85.2	-142.6	-67.0	-133.4	-28.8	-92.5	-78.4	160.6	Phase	-97.4
	0.3	0.3	0.4	0.4	0.3	0.3	0.3	0.2	Ampl.	0.3
	256.4	255.9	257.0	256.5	256.1	256.4	255.8	254.5	Sbd box	257.1
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.12232331875E+03		Apriori delay (usec)		3.12233038150E+03		Resid mbdelay (usec)		-7.06274E-03	+/- 8.5E-05
Sband delay (usec)	3.12233072100E+03		Apriori clock (usec)		2.0324469E+01		Resid sbdelay (usec)		3.39500E-04	+/- 6.8E-04
Phase delay (usec)	3.12233037835E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-3.14118E-06	+/- 2.9E-07
Delay rate (us/s)	1.51840254445E+00		Apriori rate (us/s)		1.51840246334E+00		Resid rate (us/s)		8.11135E-08	+/- 1.2E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.58640865479E-05		Resid phase (deg)		-97.4	+/- 9.0

ph/seg (deg) 69.0 21.6 Search (2048X32) 0.216 Pcdl mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 104.4 37.6 Interp. 0.000 Pcdl rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 57.6 12.7 Inc. seg. avg. 0.411 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 48.9 22.2 Inc. frq. avg. 0.302 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 n: az 113.7 el 52.2 pa -46.7 Y: az 261.0 el 41.6 pa 53.0 u,v (fr/asec) -9281.416 -267.550 ion window (TEC) 0.00 0.00  
 simultaneous interpolator

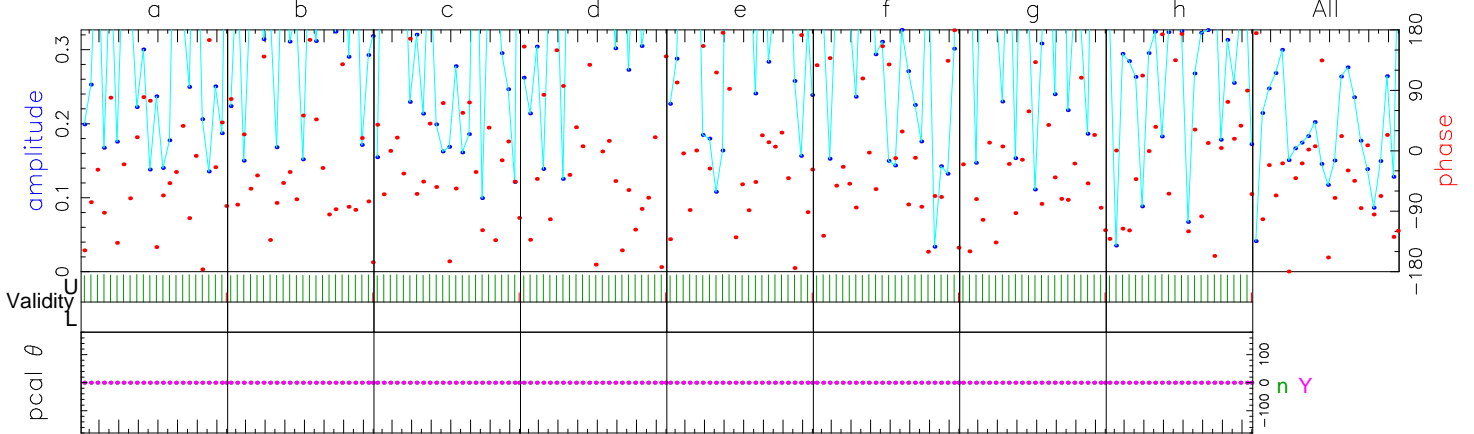


Fringe quality 0  
SNR 6.1  
Int time 425.918  
Amp 0.109  
Phase -40.2  
PFD 1.9e-01  
Delays (us)  
SBD -0.004274  
MBD 0.002089  
Fringe rate (Hz)  
-0.002737  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201c  
Exper # 16383  
Yr:day 2020:117  
Start 221505.12  
Stop 222219.80  
FRT 221840.00  
Corr/FF/build  
2020:202:080146  
2020:202:211317  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Avgd. Xpower Spectrum (MHz)

Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.5	-67.4	-21.7	-78.8	-21.7	-74.1	-42.8	-8.6	Phase	-40.2
	0.1	0.1	0.2	0.1	0.1	0.1	0.2	0.0	Ampl.	0.1
	254.7	183.9	255.0	141.4	493.8	50.1	353.3	482.6	Sbd box	255.9
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	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	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	3.12233247074E+03		Apriori delay (usec)		3.12233038150E+03		Resid mbdelay (usec)		2.08925E-03	+/- 1.8E-04
Sband delay (usec)	3.12232610775E+03		Apriori clock (usec)		2.0324469E+01		Resid sbdelay (usec)		-4.27375E-03	+/- 1.4E-03
Phase delay (usec)	3.12233038020E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-1.29547E-06	+/- 6.0E-07
Delay rate (us/s)	1.51840243156E+00		Apriori rate (us/s)		1.51840246334E+00		Resid rate (us/s)		-3.17739E-08	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.58640865479E-05		Resid phase (deg)		-40.2	+/- 18.6

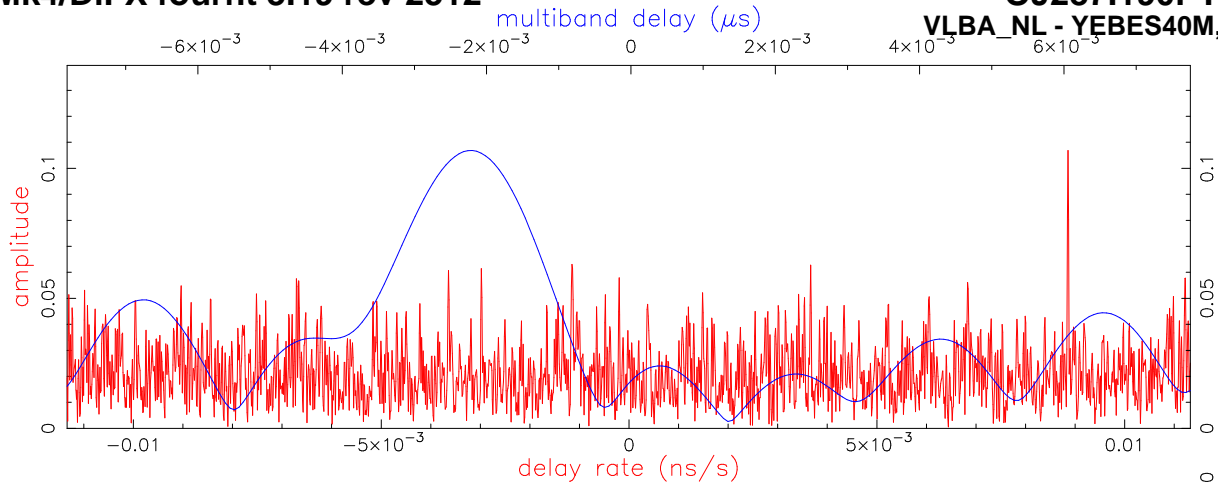
	RMS	Theor.	Amplitude	0.109 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
ph/seg (deg)	73.4	44.7	Search (2048X32)	0.107	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
amp/seg (%)	98.5	78.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
ph/frq (deg)	29.4	26.4	Inc. seg. avg.	0.145	Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011
amp/frq (%)	54.7	46.0	Inc. frq. avg.	0.105	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

n: az 113.7 el 52.2 pa -46.7 Y: az 261.0 el 41.6 pa 53.0 u,v (fr/asec) -9281.416 -267.550 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nY..190PTT Output file: /Exps/c201c/v1/1234/No0038/nY.W.217.190PTT

Mk4/DiFX fourfit 3.19 rev 2512

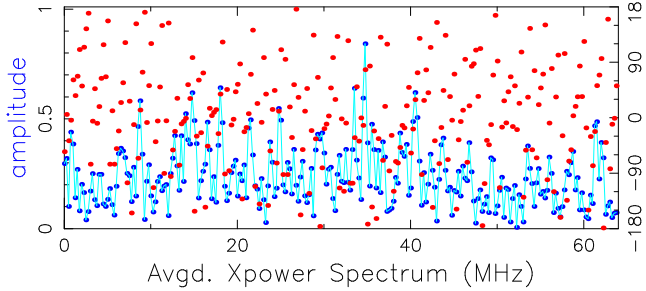
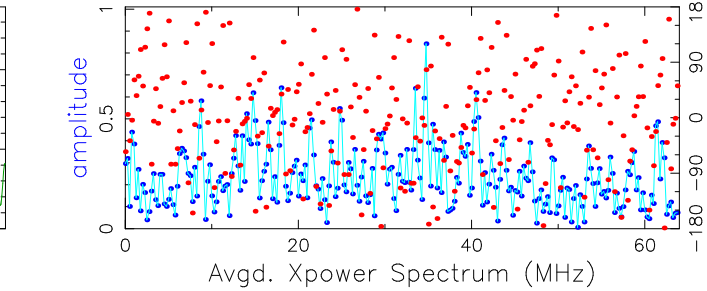
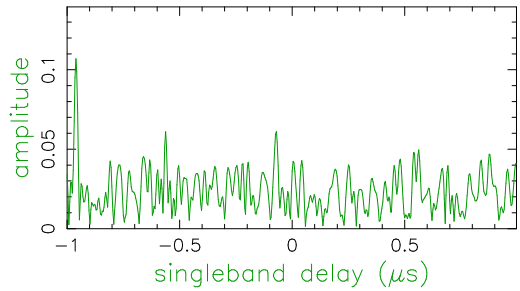
OJ287.190PTT, No0038, nY

VLBA\_NL - YEYES40M, fgroup W, pol RL



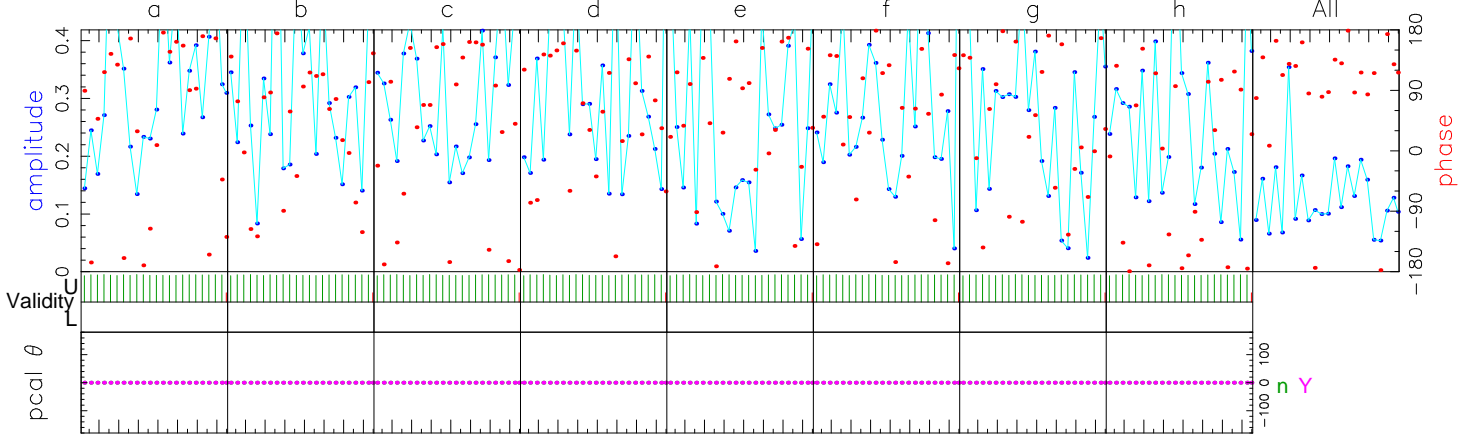
Fringe quality 0

SNR 6.0  
 Int time 425.919  
 Amp 0.140  
 Phase 128.4  
 PFD 3.4e-01  
 Delays (us)  
 SBD -0.960544  
 MBD -0.002202  
 Fringe rate (Hz)  
 0.764545  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512



Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221505.12  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211321  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

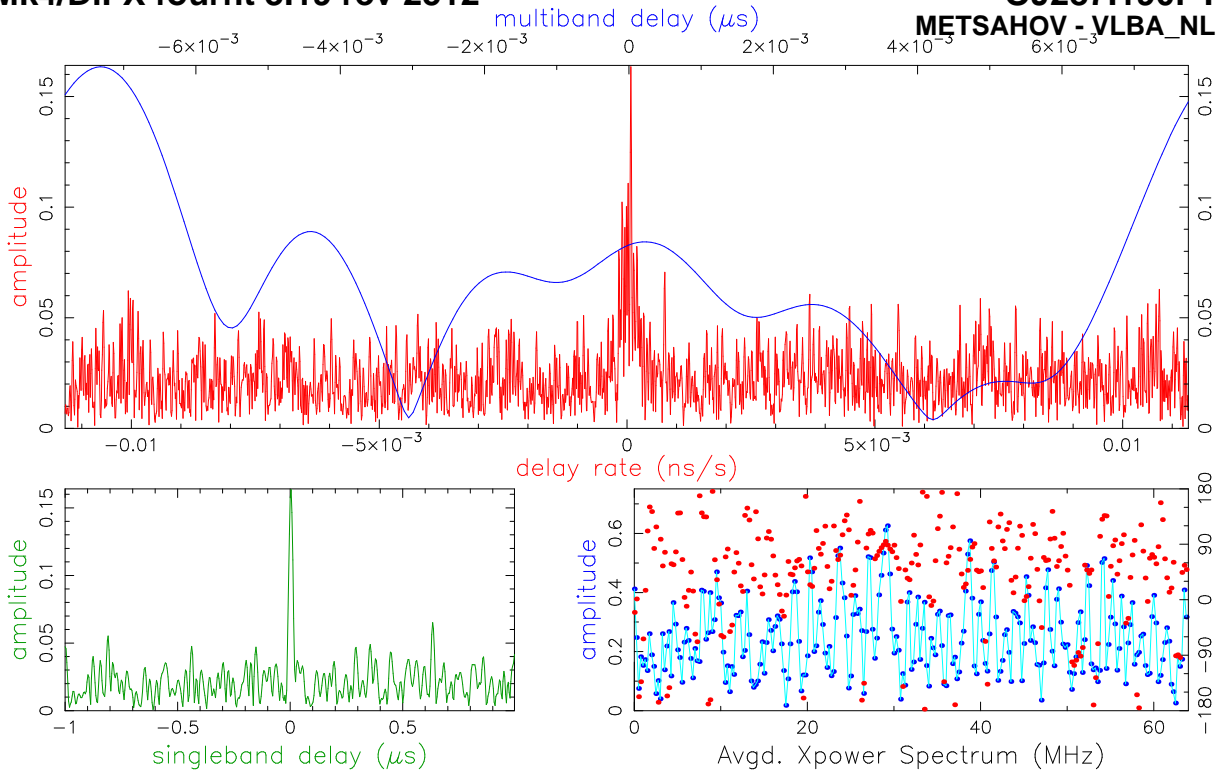
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0				
n	1000	1000	1000	1000	1000	1000	1000	1000				
Y	1000	1000	1000	1000	1000	1000	1000	1000				
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
n:Y	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				
Y	1000	1000	1000	1000	1000	1000	1000	1000				
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR				
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)		3.12137505401E+03				3.12233038150E+03			Resid mbdelay (usec)	-2.20249E-03 +/- 1.8E-04		
Sband delay (usec)		3.12136983725E+03				2.0324469E+01			Resid sbdelay (usec)	-9.60544E-01 +/- 1.4E-03		
Phase delay (usec)		3.12233038564E+03				1.1399998E-07			Resid phdelay (usec)	4.14091E-06 +/- 6.1E-07		
Delay rate (us/s)		1.51841133894E+00				1.51840246334E+00			Resid rate (us/s)	8.87560E-06 +/- 2.4E-09		
Total phase (deg)			150.7			-1.58640865479E-05			Resid phase (deg)	128.4 +/- 19.0		
	RMS	Theor.	Amplitude	0.140 +/- 0.023					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	42.7	45.5	Search (2048X32)	0.102					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	64.6	79.4	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	26.3	26.8	Inc. seg. avg.	0.130					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	38.9	46.9	Inc. frq. avg.	0.136					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

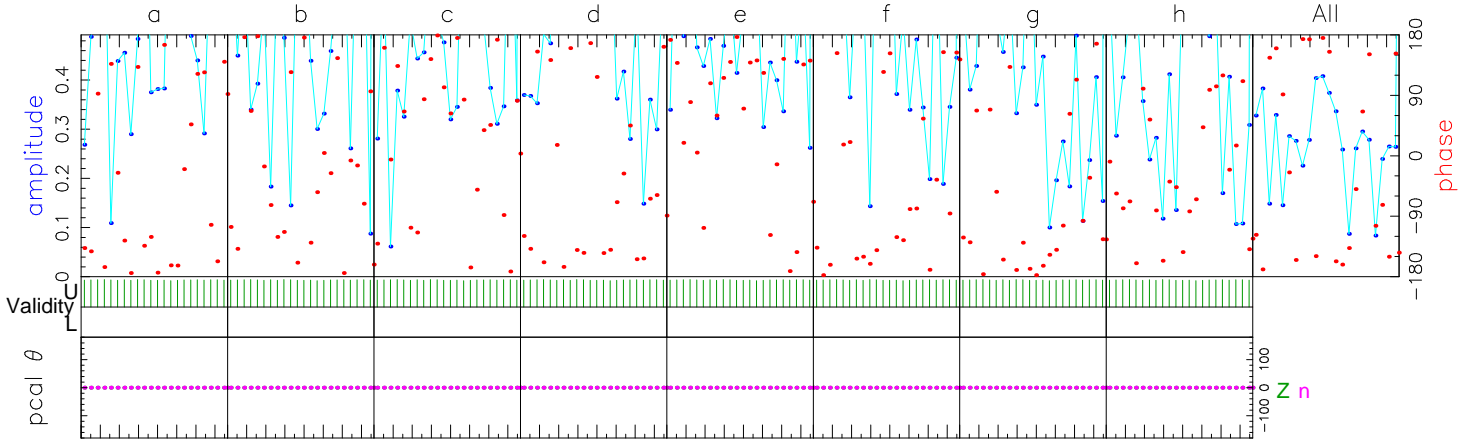
n: az 113.7 el 52.2 pa -46.7 Y: az 261.0 el 41.6 pa 53.0 u,v (fr/asec) -9281.416 -267.550 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/nY..190PTT Output file: /Exps/c201c/v1/1234/No0038/nY.W.236.190PTT





Fringe quality 9  
 SNR 9.3  
 Int time 431.111  
 Amp 0.164  
 Phase -170.4  
 PFD 4.9e-12  
 Delays (us)  
 SBD 0.002971  
 MBD -0.007325  
 Fringe rate (Hz) 0.006420  
 Ion TEC 0.000  
 Ref freq (MHz) 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211319  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

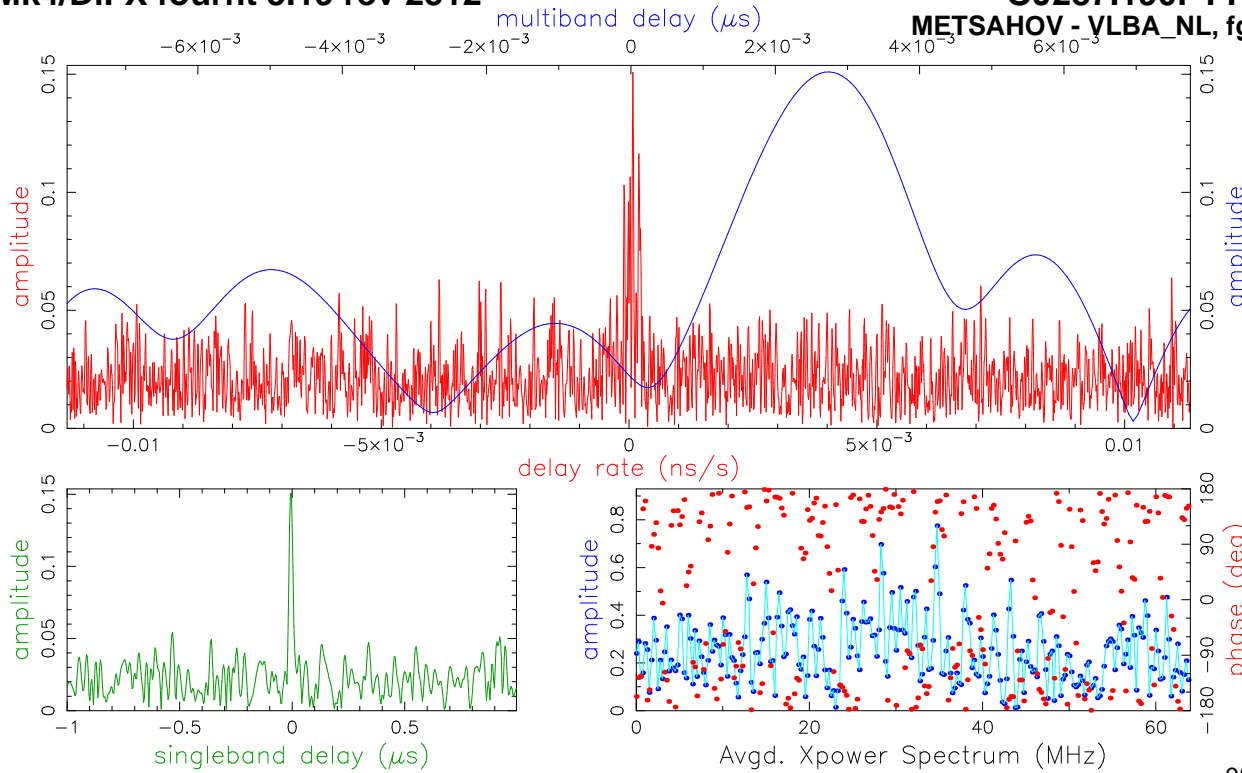
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-9.06027694648E+03				-9.06028524685E+03					
Sband delay (usec)	-9.06028227535E+03				-3.2419888E+01					
Phase delay (usec)	-9.06028525234E+03				-3.1799997E-07					
Delay rate (us/s)	-1.34840380759E+00				-1.34840388212E+00					
Total phase (deg)			-229.3		5.58171540775E-05					
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										

	RMS	Theor.	Amplitude	0.164 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	63.1	29.5	Search (2048X32)	0.160	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	85.5	51.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	58.2	17.4	Inc. seg. avg.	0.240	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	44.8	30.4	Inc. frq. avg.	0.200	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

Z: az 271.1 el 22.6 pa 31.9 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8308.841 3236.136 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Zn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Zn.W.225.190PTT

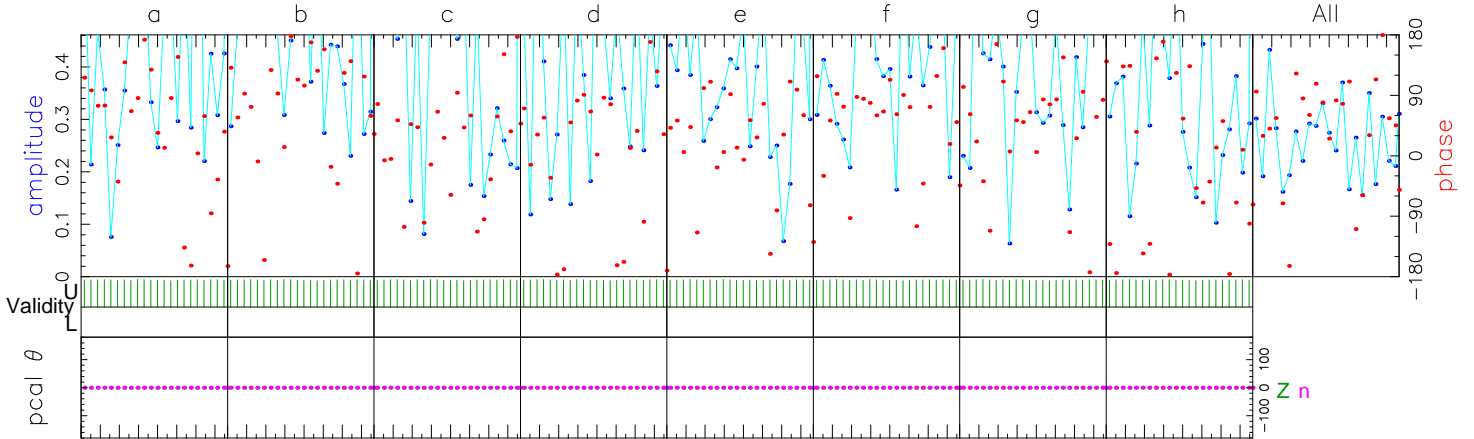


Fringe quality 9

SNR 8.7  
 Int time 431.113  
 Amp 0.154  
 Phase 72.8  
 PFD  $9.5 \times 10^{-10}$   
 Delays (us)  
 SBD -0.005799  
 MBD 0.002674  
 Fringe rate (Hz)  
 0.006471  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211323  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-9.06029819816E+03									
Sband delay (usec)	-9.06029104535E+03									
Phase delay (usec)	-9.06028524450E+03									
Delay rate (us/s)	-1.34840380699E+00									
Total phase (deg)			13.9							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal $\theta$										
Z n										

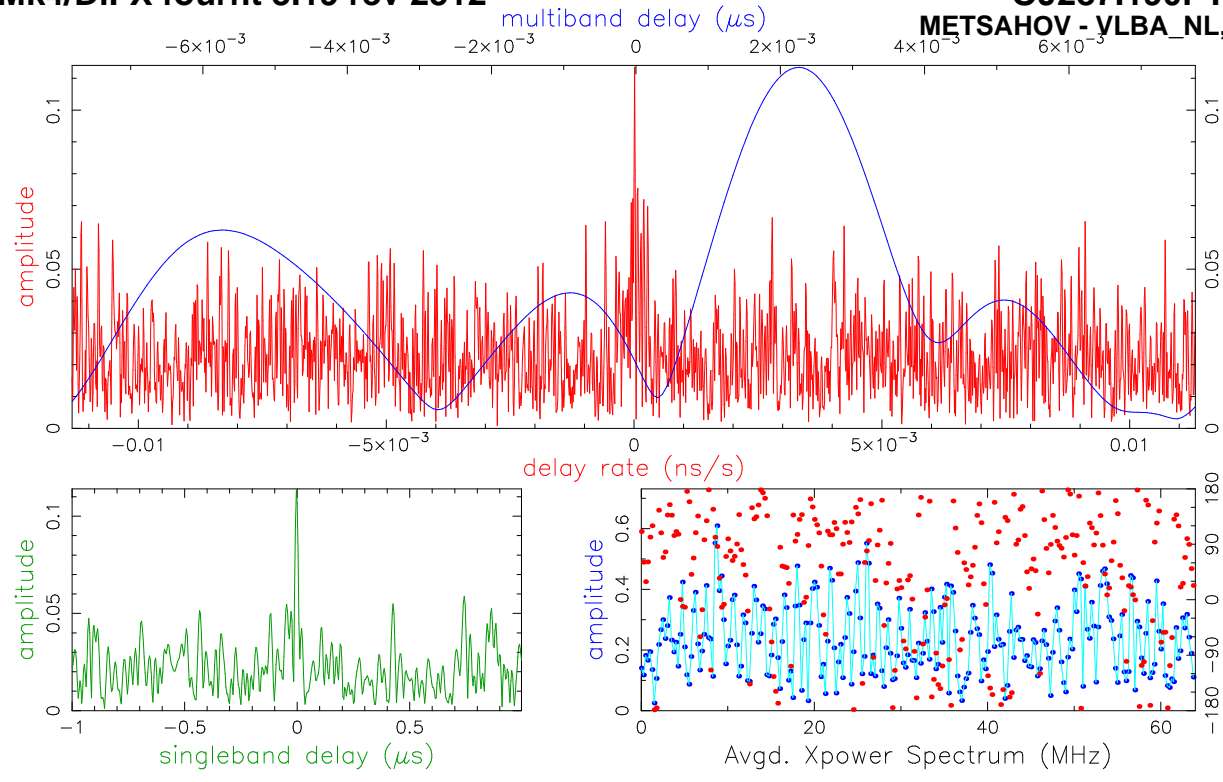
ph/seg (deg) 71.5 31.5 Amplitude 0.154 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 83.1 54.9 Search (2048X32) 0.148 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 55.2 18.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 36.0 32.4 Inc. seg. avg. 0.226 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 Inc. frq. avg. 0.179 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 271.1 el 22.6 pa 31.9 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8308.841 3236.136 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Zn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Zn.W.242.190PTT

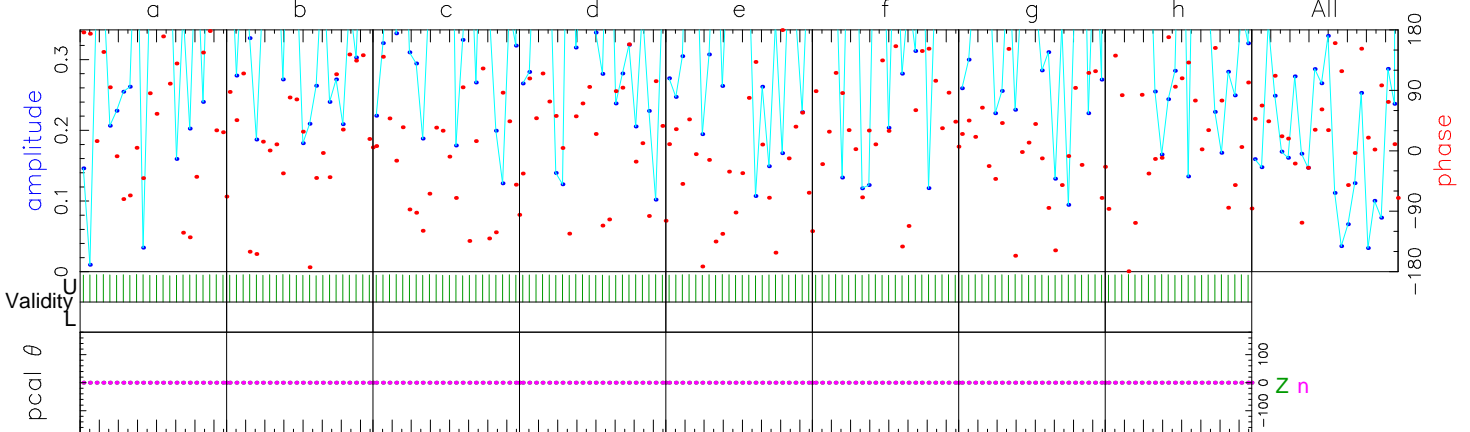
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, Zn  
 METSAHOV - VLBA\_NL, fgroup W, pol LR



Fringe quality 0  
 SNR 6.5  
 Int time 431.113  
 Amp 0.114  
 Phase 39.9  
 PFD 2.6e-02  
 Delays (us)  
 SBD -0.003044  
 MBD 0.002273  
 Fringe rate (Hz)  
 0.001247  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211326  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

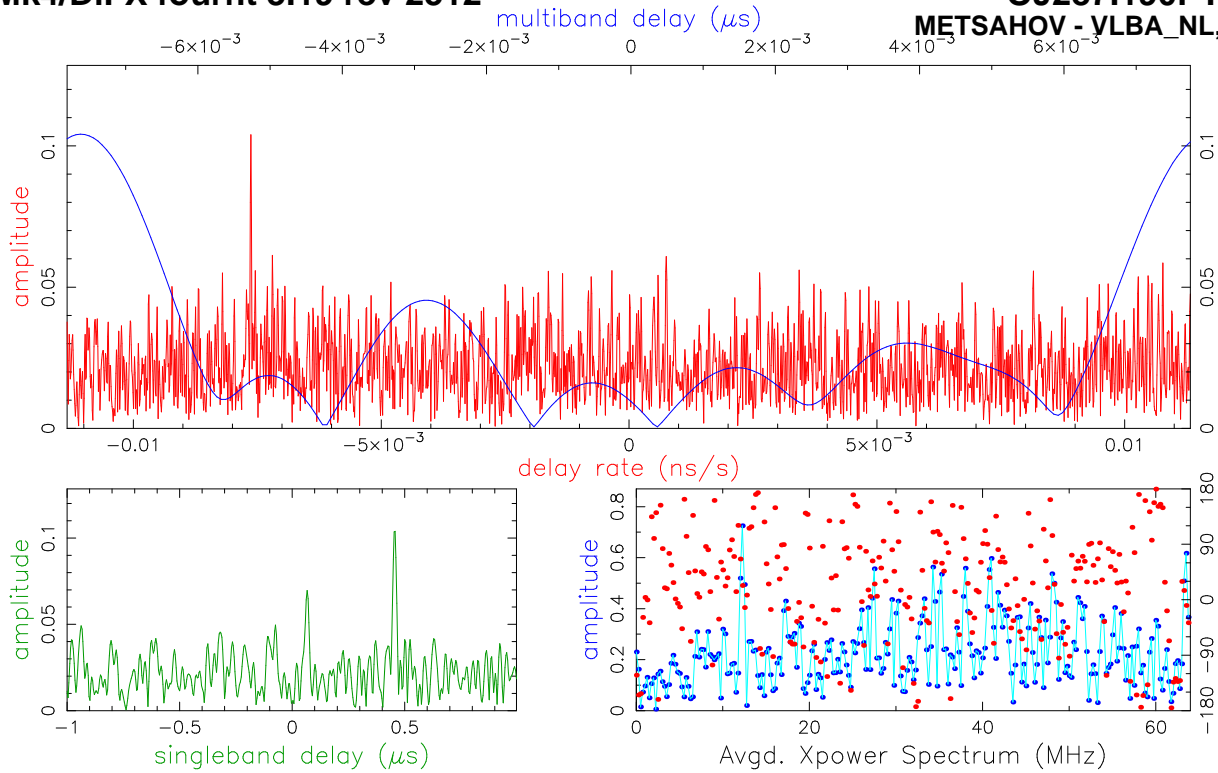


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
Z	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-9.06028297420E+03				-9.06028524685E+03				2.27265E-03	+/- 1.7E-04
Sband delay (usec)	-9.06028829085E+03				-3.2419888E+01				-3.04400E-03	+/- 1.3E-03
Phase delay (usec)	-9.06028524556E+03				-3.1799997E-07				1.28660E-06	+/- 5.7E-07
Delay rate (us/s)	-1.34840386765E+00				-1.34840388212E+00				1.44709E-08	+/- 2.2E-09
Total phase (deg)			-19.0		5.58171540775E-05				39.9	+/- 17.7
pcal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
pcal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000							
Bits/sample:	2x2		SampCntNorm: enabled							
Sample rate (MSamp/s):	128		dr window (ns/s) -0.011 0.011							
Data rate (Mb/s):	2048		ion window (TEC) 0.00 0.00							
nlags:	256		t_cohere infinite							

ph/seg (deg) 62.8 42.4 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 110.6 74.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 38.8 25.0 Inc. seg. avg. 0.145 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 38.6 43.7 Inc. frq. avg. 0.124 Sample rate (MSamp/s): 128 dr window (ns/s) -0.011 0.011  
 Z: az 271.1 el 22.6 pa 31.9 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8308.841 3236.136 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Zn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Zn.W.248.190PTT simultaneous interpolator

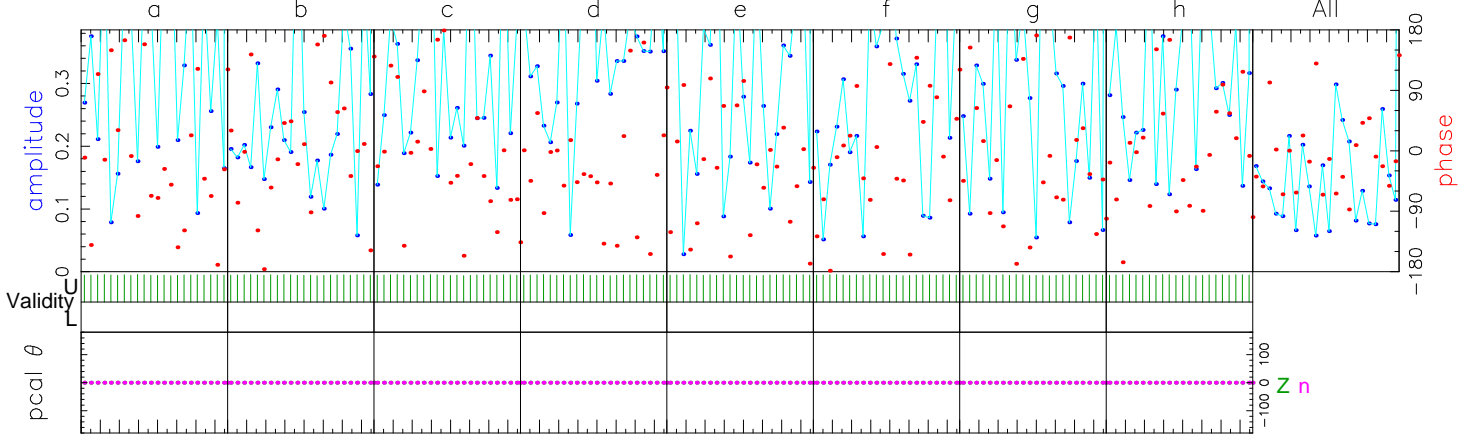
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PTT, No0038, Zn  
 METSAHOV - VLBA\_NL, fgroup W, pol RL



Fringe quality 0  
 SNR 6.0  
 Int time 431.111  
 Amp 0.129  
 Phase -26.6  
 PFD 3.9e-01  
 Delays (us)  
 SBD 0.455163  
 MBD -0.007691  
 Fringe rate (Hz)  
 -0.658522  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201c  
 Exper # 16383  
 Yr:day 2020:117  
 Start 221500.00  
 Stop 222219.80  
 FRT 221840.00  
 Corr/FF/build  
 2020:202:080146  
 2020:202:211330  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-57.9	0.1	-11.4	-45.7	-21.2	5.0	-32.3	-25.9	Phase	-26.6
	0.1	0.1	0.1	0.2	0.1	0.1	0.2	0.2	Ampl.	0.1
	407.9	335.8	199.9	27.8	315.8	2.7	478.3	372.9	Sbd box	373.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-9.05982418766E+03		Apriori delay (usec)		-9.06028524685E+03		Resid mbdelay (usec)		-7.69081E-03	+/- 1.8E-04
Sband delay (usec)	-9.05983008385E+03		Apriori clock (usec)		-3.2419888E+01		Resid sbdelay (usec)		4.55163E-01	+/- 1.4E-03
Phase delay (usec)	-9.06028524771E+03		Apriori clockrate (us/s)		-3.1799997E-07		Resid phdelay (usec)		-8.58042E-07	+/- 6.2E-07
Delay rate (us/s)	-1.34841152690E+00		Apriori rate (us/s)		-1.34840388212E+00		Resid rate (us/s)		-7.64478E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.58171540775E-05		Resid phase (deg)		-26.6	+/- 19.1

ph/seg (deg) 55.8 45.7 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 79.5 79.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 23.6 27.0 Inc. seg. avg. 0.133 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 26.4 47.1 Inc. frq. avg. 0.120 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
 Z: az 271.1 el 22.6 pa 31.9 n: az 113.7 el 52.2 pa -46.7 u,v (fr/asec) 8308.841 3236.136 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201c/v1/1234/No0038/Zn..190PTT Output file: /Exps/c201c/v1/1234/No0038/Zn.W.254.190PTT