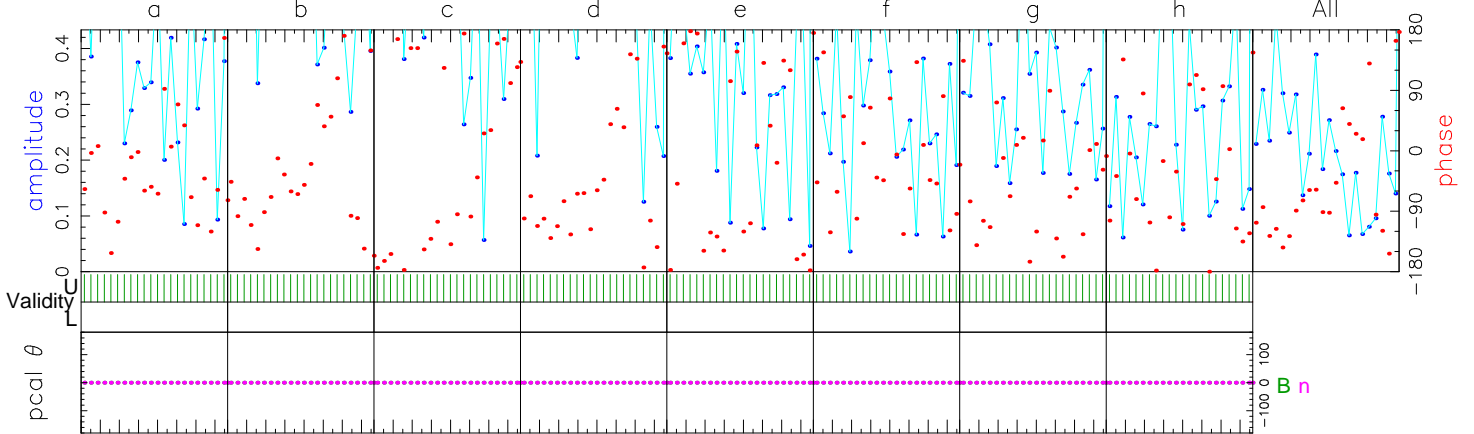


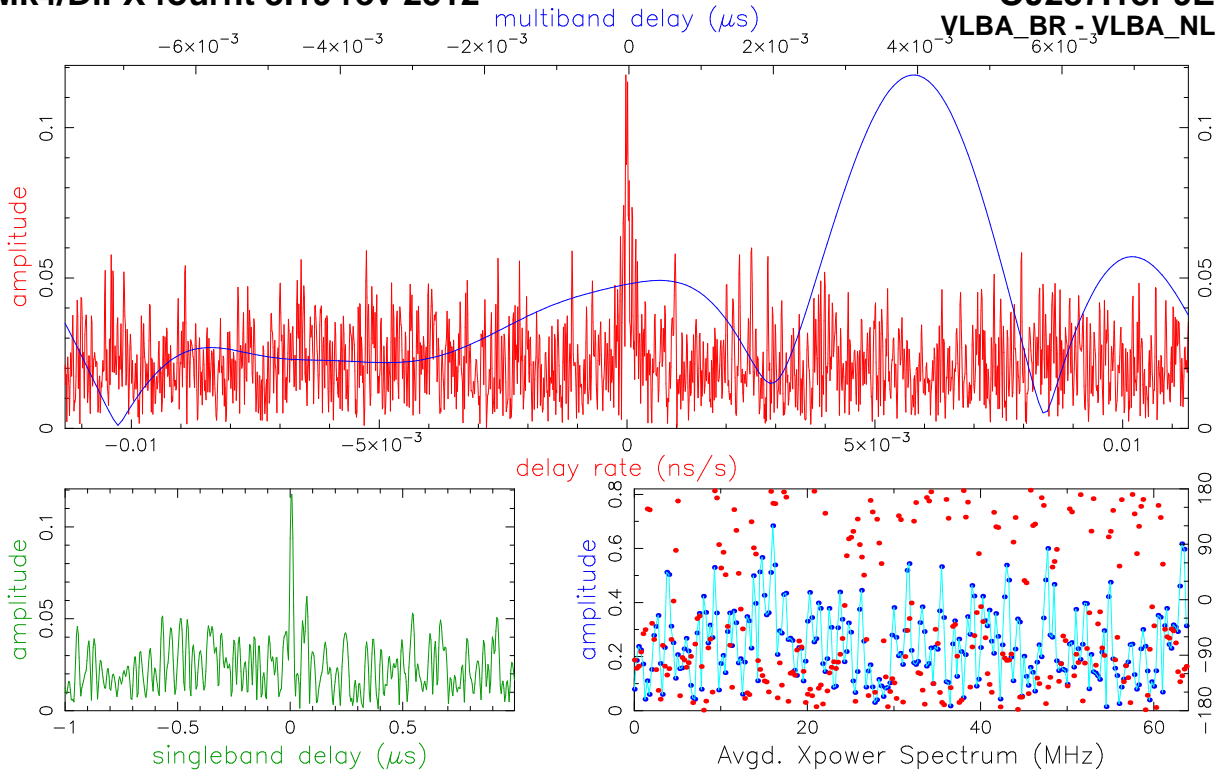
Fringe quality 9
SNR 8.3
Int time 439.212
Amp 0.145
Phase -98.1
PFD 4.3e-08
Delays (us)
SBD 0.008850
MBD -0.001972
Fringe rate (Hz)
-0.002538
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120751
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



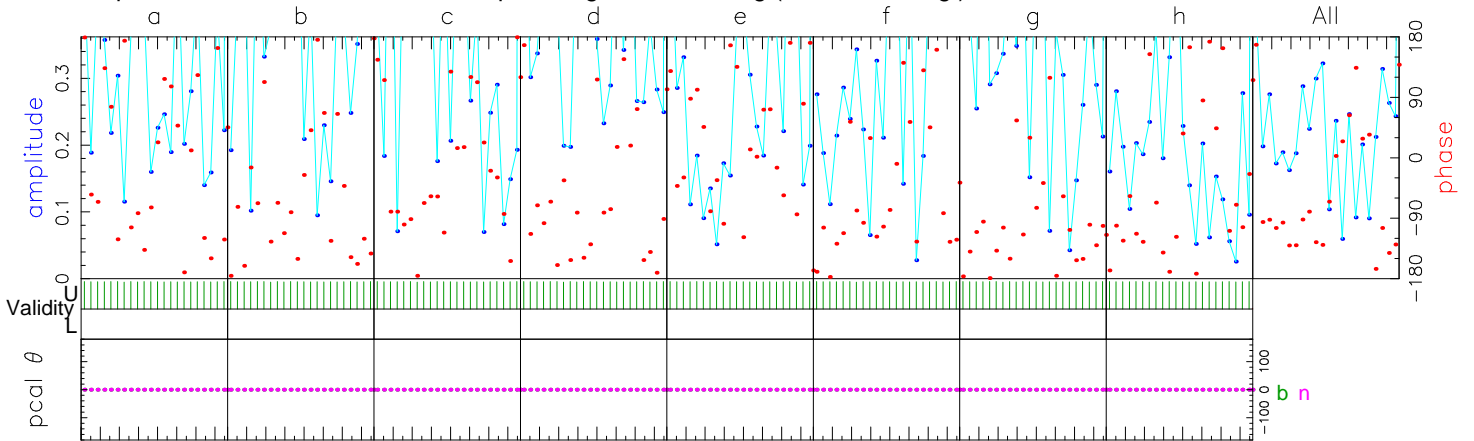
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-60.9	-70.0	-169.4	-93.9	-152.8	-42.8	-78.7	-61.2	Phase	-98.1
	0.2	0.3	0.4	0.3	0.2	0.1	0.1	0.1	Ampl.	0.2
	256.1	258.1	259.5	260.5	259.3	360.8	83.3	364.3	Sbd box	259.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	
									Tracks	
Group delay (usec)(sbd)	-7.51048555782E+03		Apriori delay (usec)		-7.51049921127E+03		Resid mbdelay (usec)		-1.97155E-03	+/- 1.3E-04
Sband delay (usec)	-7.51049036127E+03		Apriori clock (usec)		-1.9192249E+01		Resid sbdelay (usec)		8.85000E-03	+/- 1.0E-03
Phase delay (usec)	-7.51049921443E+03		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		-3.16279E-06	+/- 4.5E-07
Delay rate (us/s)	-1.40783370038E+00		Apriori rate (us/s)		-1.40783367092E+00		Resid rate (us/s)		-2.94625E-08	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		4.39269809188E-05		Resid phase (deg)		-98.1	+/- 13.8

ph/seg (deg) 72.4 33.2 Search (2048X32) 0.140 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 88.4 57.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 50.1 19.6 Inc. seg. avg. 0.188 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 79.0 34.2 Inc. frq. avg. 0.192 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 265.9 el 29.7 pa 42.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 8652.532 2092.353 ion window (TEC) 0.00 0.00
 simultaneous interpolator



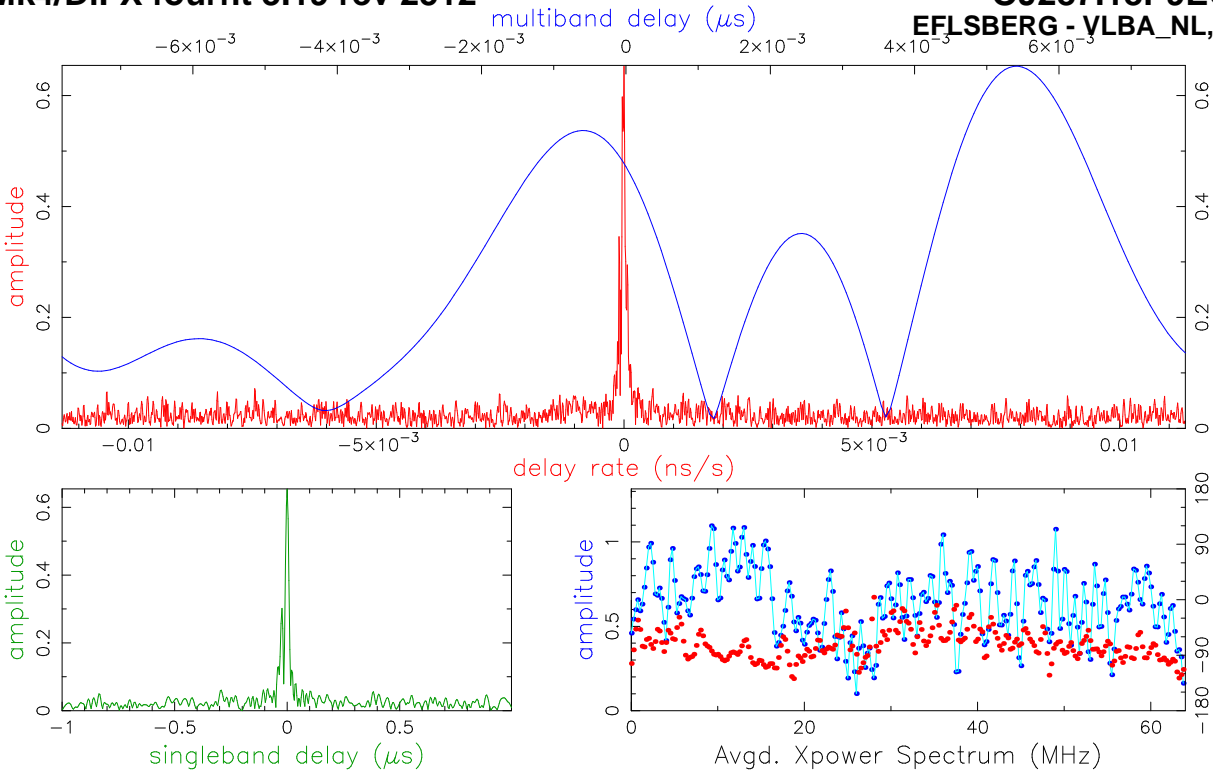
Fringe quality 0
SNR 6.9
Int time 436.227
Amp 0.121
Phase -115.4
PFD 1.6e-03
Delays (us)
SBD 0.005869
MBD 0.003949
Fringe rate (Hz)
-0.001993
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120751
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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-5.32953981676E+03	-5.32953789721E+03	-5.32954376968E+03	-5.32954376596E+03	-5.32954376596E+03	-3.3652512E+01	-3.7599999E-07	-3.71992E-06	3.94920E-03	+/- 1.6E-04
Sband delay (usec)	-160.7	-112.5	-85.7	-120.3	110.5	-99.6	-120.1	-127.7	5.86875E-03	+/- 1.2E-03
Phase delay (usec)	0.1	0.2	0.1	0.2	0.0	0.1	0.2	0.1	-3.71992E-06	+/- 5.4E-07
Delay rate (us/s)	293.8	258.4	161.3	258.4	165.8	319.0	259.0	102.7	-2.31379E-08	+/- 2.1E-09
Total phase (deg)									-115.4	+/- 16.6
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
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)									-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

ph/seg (deg) 78.7 39.9 Search (2048X32) 0.117 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 108.0 69.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 59.7 23.5 Inc. seg. avg. 0.176 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 53.3 41.0 Inc. frq. avg. 0.115 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 99.1 el 35.1 pa -44.6 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1676.156 1557.323 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/bn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bn.W.11.18P9EC

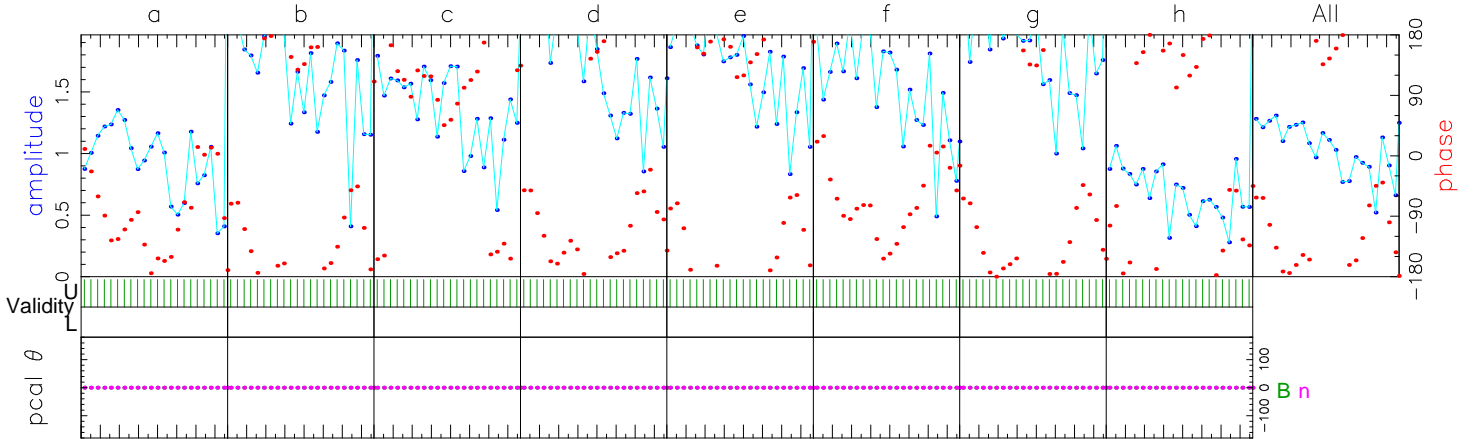


Fringe quality 3

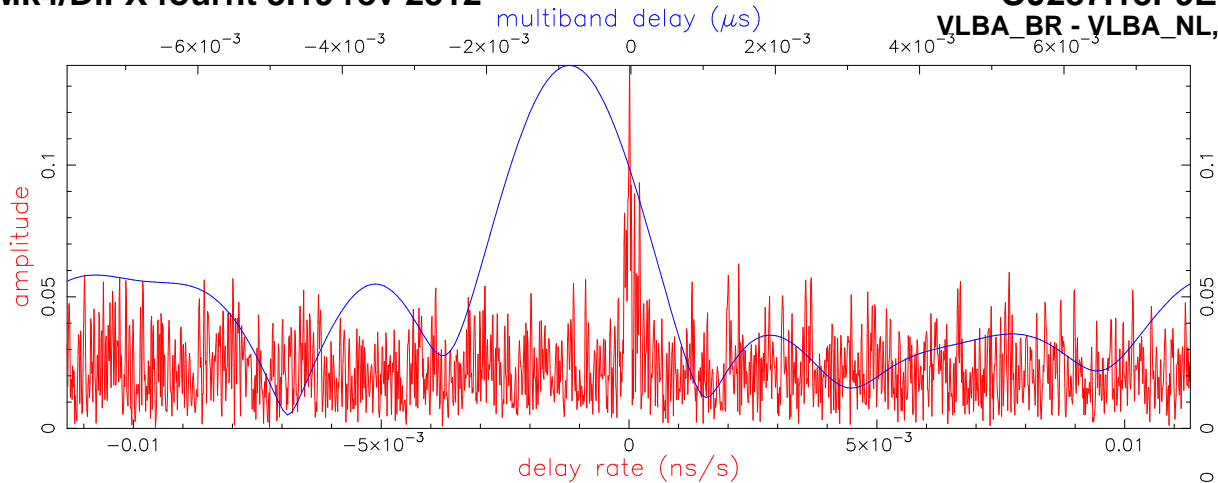
SNR 37.5
Int time 439.212
Amp 0.654
Phase -142.2
PFD 0.0e+00
Delays (us)
SBD -0.000624
MBD 0.005379
Fringe rate (Hz)
-0.000295
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120754
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

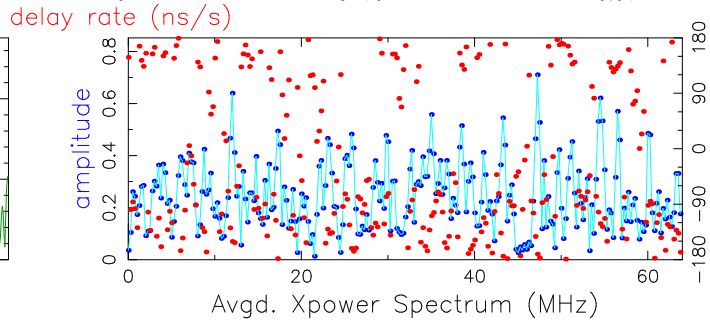
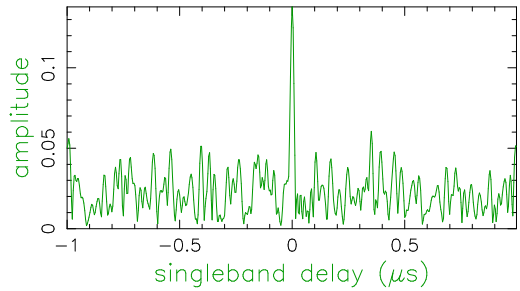


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-7.51049383233E+03									
Sband delay (usec)	-7.51049983502E+03									
Phase delay (usec)	-7.51049921586E+03									
Delay rate (us/s)	-1.40783367435E+00									
Total phase (deg)			-163.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
Amplitude										
0.654 +/- 0.017										
0.638										
0.000										
1.027										
0.885										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
lags: 256										
t_cohere infinite										
simultaneous interpolator										



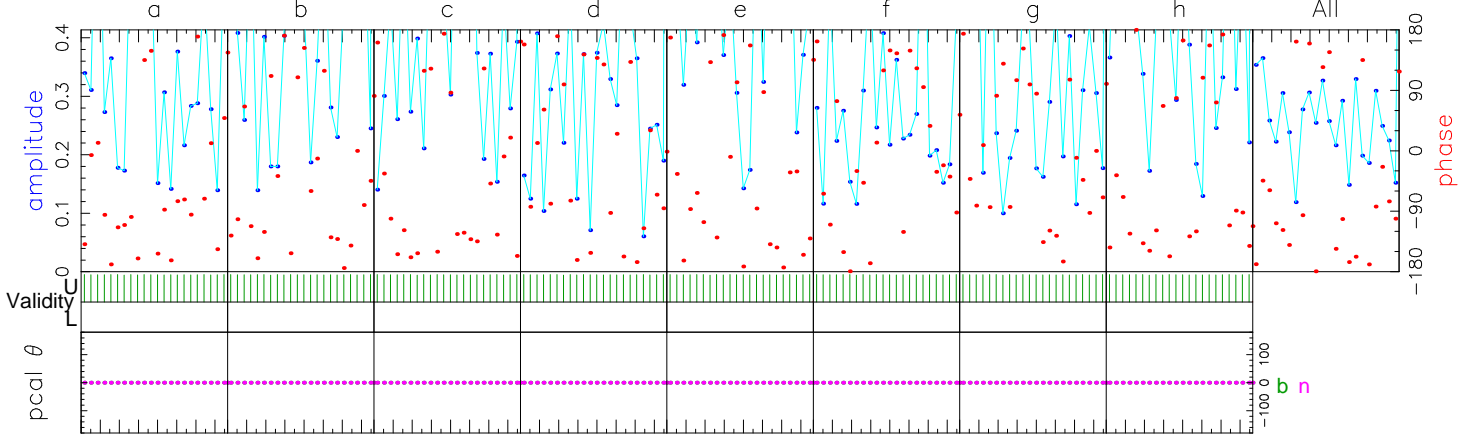
Fringe quality 9

SNR 7.9
Int time 436.227
Amp 0.138
Phase -135.2
PFD 1.1e-06
Delays (us)
SBD -0.000040
MBD -0.000857
Fringe rate (Hz) 0.000503
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512



Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120756
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

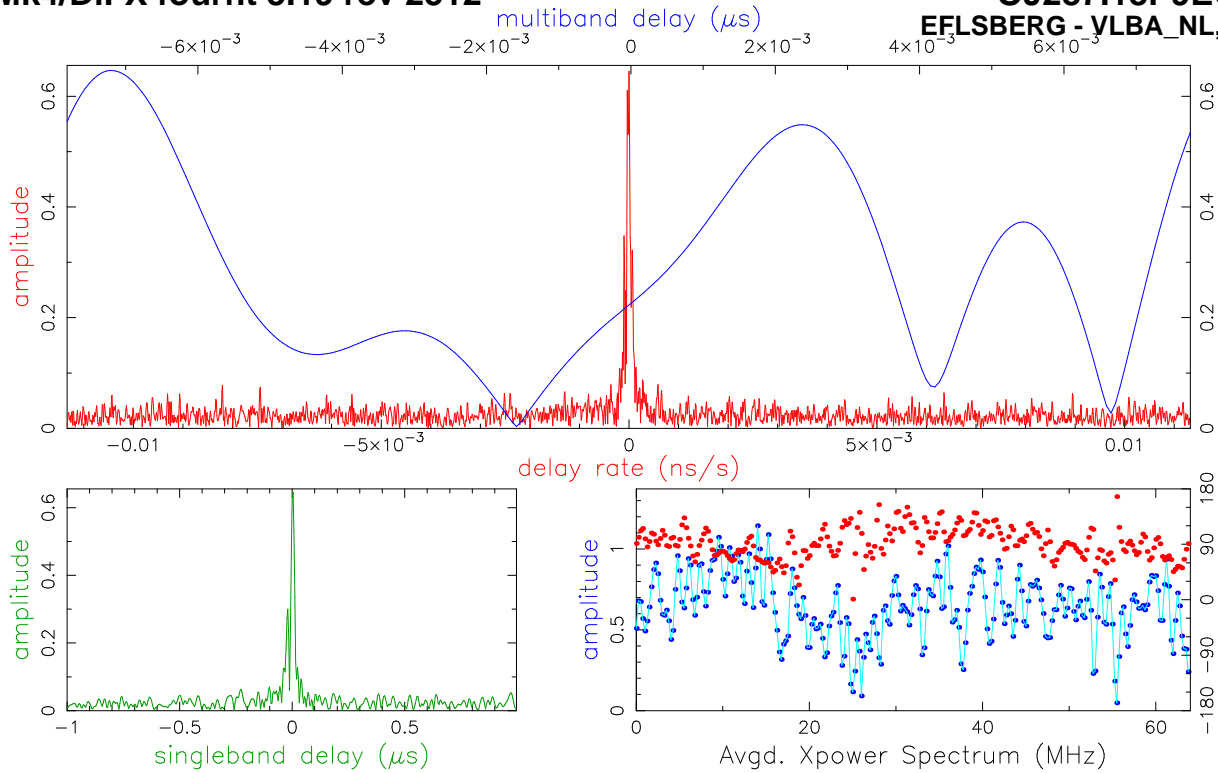


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.3	-138.2	-138.9	-172.1	-125.2	167.1	-104.8	-135.4	Phase	-135.2
	0.1	0.2	0.2	0.1	0.2	0.1	0.1	0.2	Ampl.	0.1
	159.1	255.8	256.6	112.5	256.6	216.6	128.7	257.0	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
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	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)	-5.32954462293E+03		Apriori delay (usec)		-5.32954376596E+03		Resid mbdelay (usec)		-8.56973E-04	+/- 1.4E-04
Sband delay (usec)	-5.32954380646E+03		Apriori clock (usec)		-3.3652512E+01		Resid sbdelay (usec)		-4.05000E-05	+/- 1.1E-03
Phase delay (usec)	-5.32954377032E+03		Apriori clockrate (us/s)		-3.7599999E-07		Resid phdelay (usec)		-4.36057E-06	+/- 4.7E-07
Delay rate (us/s)	2.83333771335E-01		Apriori rate (us/s)		2.83333765501E-01		Resid rate (us/s)		5.83426E-09	+/- 1.8E-09
Total phase (deg)			Apriori accel (us/s/s)		3.11983412247E-05		Resid phase (deg)		-135.2	+/- 14.5

	RMS	Theor.	Amplitude	0.138 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	58.7	34.9	Search (2048X32)	0.129	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	98.2	60.9	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	31.8	20.6	Inc. seg. avg.	0.215	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	49.6	35.9	Inc. frq. avg.	0.137	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

b: az 99.1 el 35.1 pa -44.6 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1676.156 1557.323 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/bn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bn.W.35.18P9EC

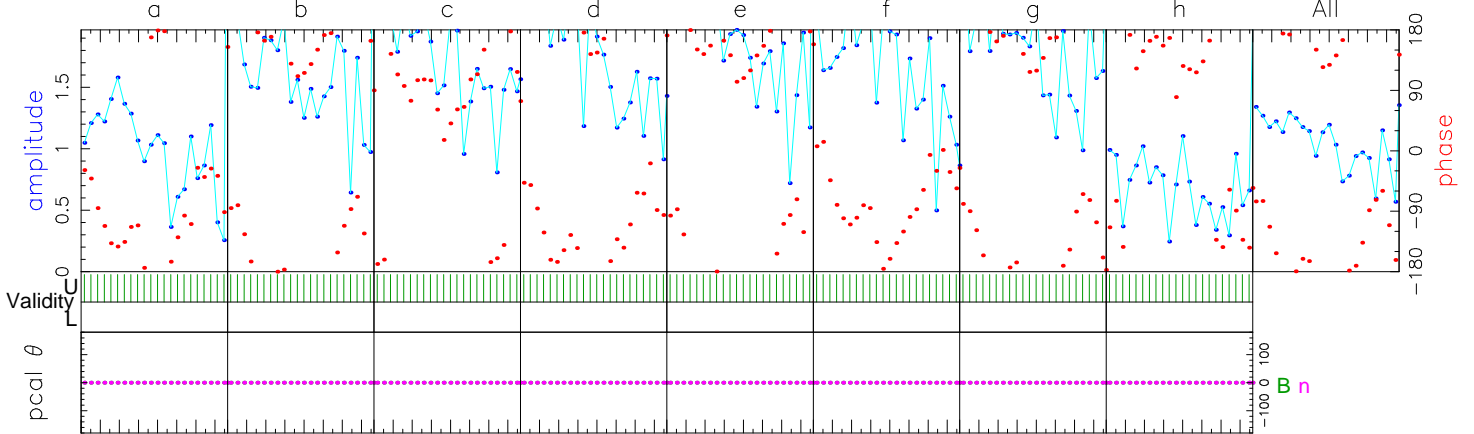


Fringe quality 3

SNR 37.6
Int time 439.212
Amp 0.656
Phase -156.0
PFD 0.0e+00
Delays (us)
SBD 0.002390
MBD -0.007268
Fringe rate (Hz)
-0.000269
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120759
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

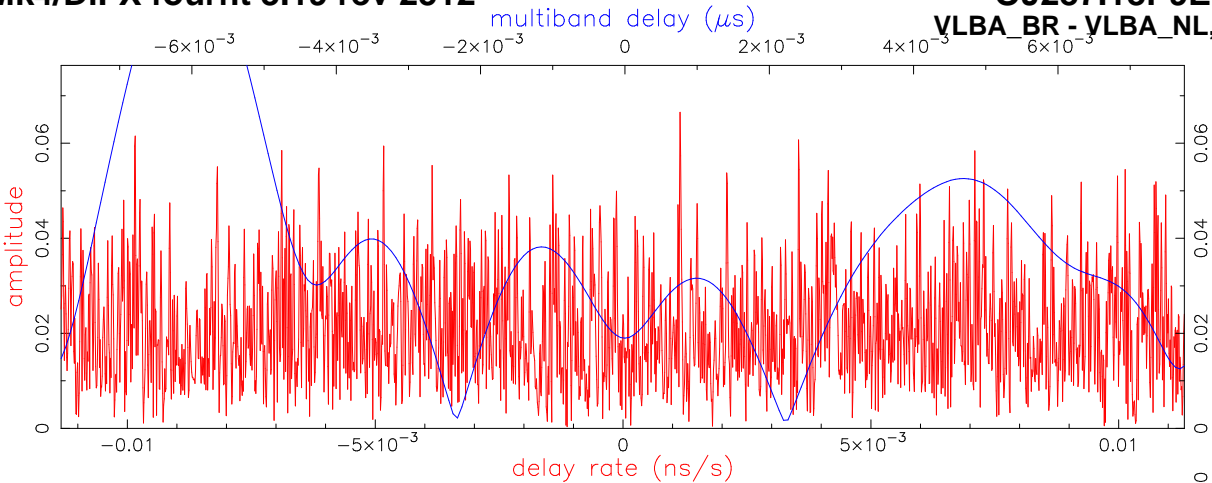


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.4	-167.3	117.7	-125.6	-179.2	-81.2	-161.2	175.9	Phase	-156.0
	0.6	1.0	1.1	1.1	1.1	1.0	1.1	0.4	Ampl.	0.9
	254.9	256.9	257.9	258.3	258.8	258.2	257.1	252.4	Sbd box	257.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
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	
									Tracks	
Group delay (usec)(sbd)	-7.51049085393E+03		Apriori delay (usec)		-7.51049921127E+03		Resid mbdelay (usec)		-7.26766E-03	+/- 2.9E-05
Sband delay (usec)	-7.51049682152E+03		Apriori clock (usec)		-1.9192249E+01		Resid sbdelay (usec)		2.38975E-03	+/- 2.3E-04
Phase delay (usec)	-7.51049921630E+03		Apriori clockrate (us/s)		-5.3399998E-07		Resid phdelay (usec)		-5.03137E-06	+/- 9.8E-08
Delay rate (us/s)	-1.40783367404E+00		Apriori rate (us/s)		-1.40783367092E+00		Resid rate (us/s)		-3.12474E-09	+/- 3.9E-10
Total phase (deg)			Apriori accel (us/s/s)		4.39269809188E-05		Resid phase (deg)		-156.0	+/- 3.0

	RMS	Theor.	Amplitude	0.656 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	53.0	7.3	Search (2048X32)	0.631	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	67.3	12.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	53.8	4.3	Inc. seg. avg.	1.032	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	56.3	7.5	Inc. frq. avg.	0.921	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

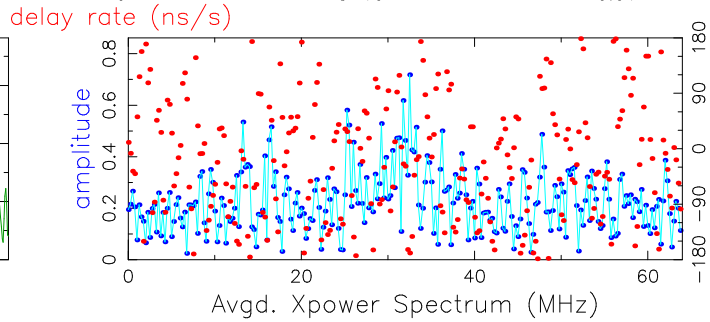
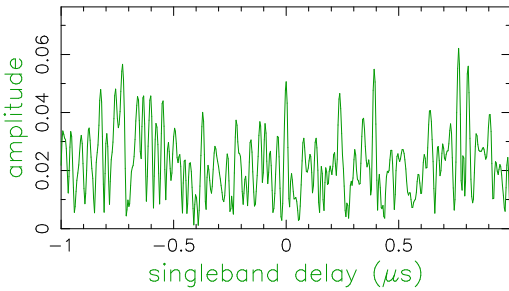
B: az 265.9 el 29.7 pa 42.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 8652.532 2092.353 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/Bn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Bn.W.43.18P9EC



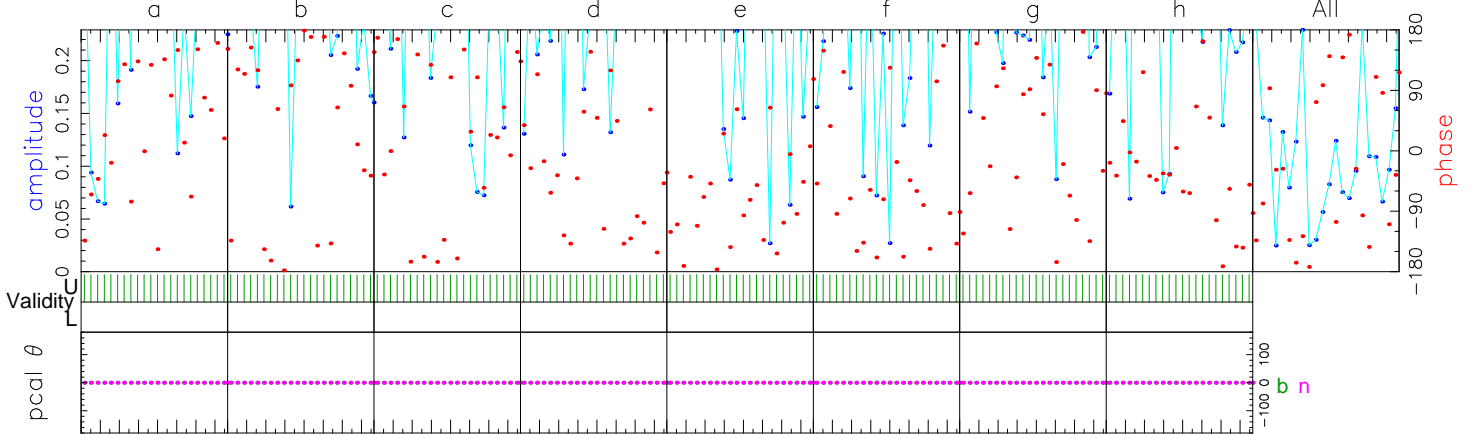
Fringe quality 0

SNR 2.9
Int time 436.227
Amp 0.076
Phase -123.7
PFD 1.0e+00
Delays (us)
SBD 0.000000
MBD 0.008301
Fringe rate (Hz)
0.936938
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

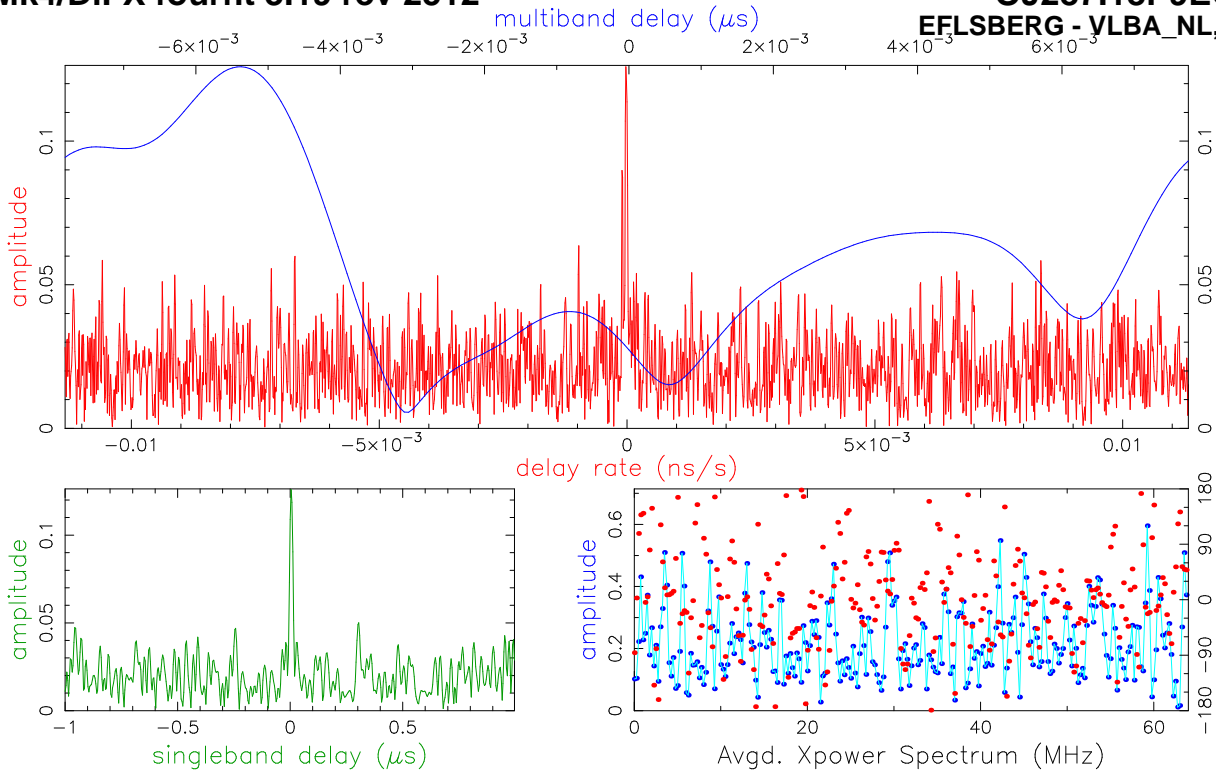


Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120801
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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

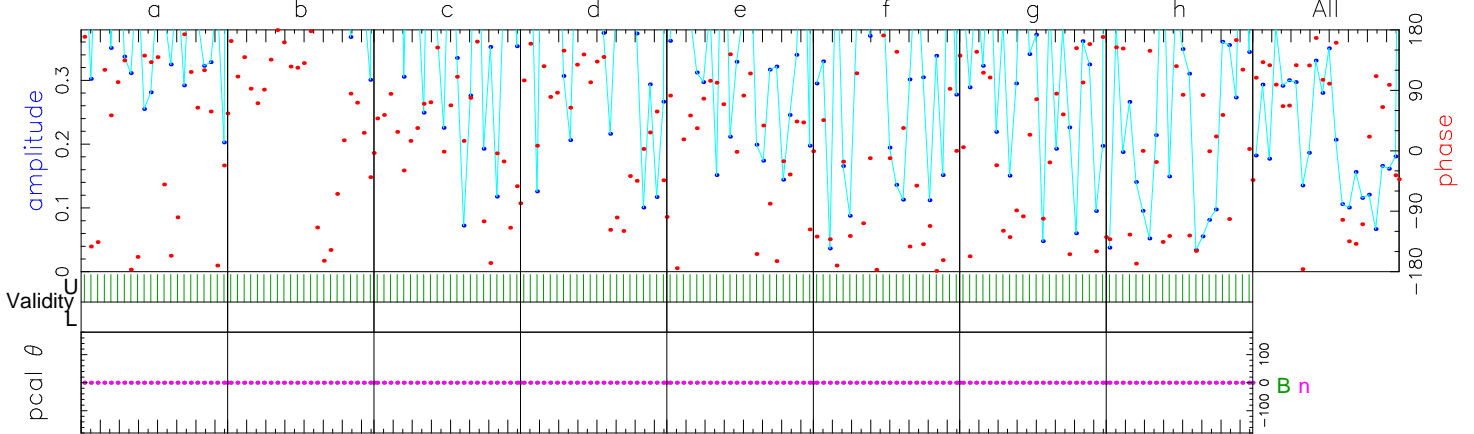


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-5.32955109018E+03								8.30078E-03	+/- 3.8E-04
Sband delay (usec)	-5.32954376596E+03								0.00000E+00	+/- 3.0E-03
Phase delay (usec)	-5.32954376995E+03								-3.99029E-06	+/- 1.3E-06
Delay rate (us/s)	2.83344642418E-01								1.08769E-05	+/- 5.0E-09
Total phase (deg)			-123.6						-123.7	+/- 39.7
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)									-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
PC period (AP's) 5, 5										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.076 +/- 0.026										
0.104										
0.000										
0.071										
0.122										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
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
simultaneous interpolator										



Fringe quality 0
SNR 7.2
Int time 439.212
Amp 0.126
Phase 116.1
PFD 1.4e-04
Delays (us)
SBD 0.004697
MBD -0.005370
Fringe rate (Hz)
-0.002215
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120803
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

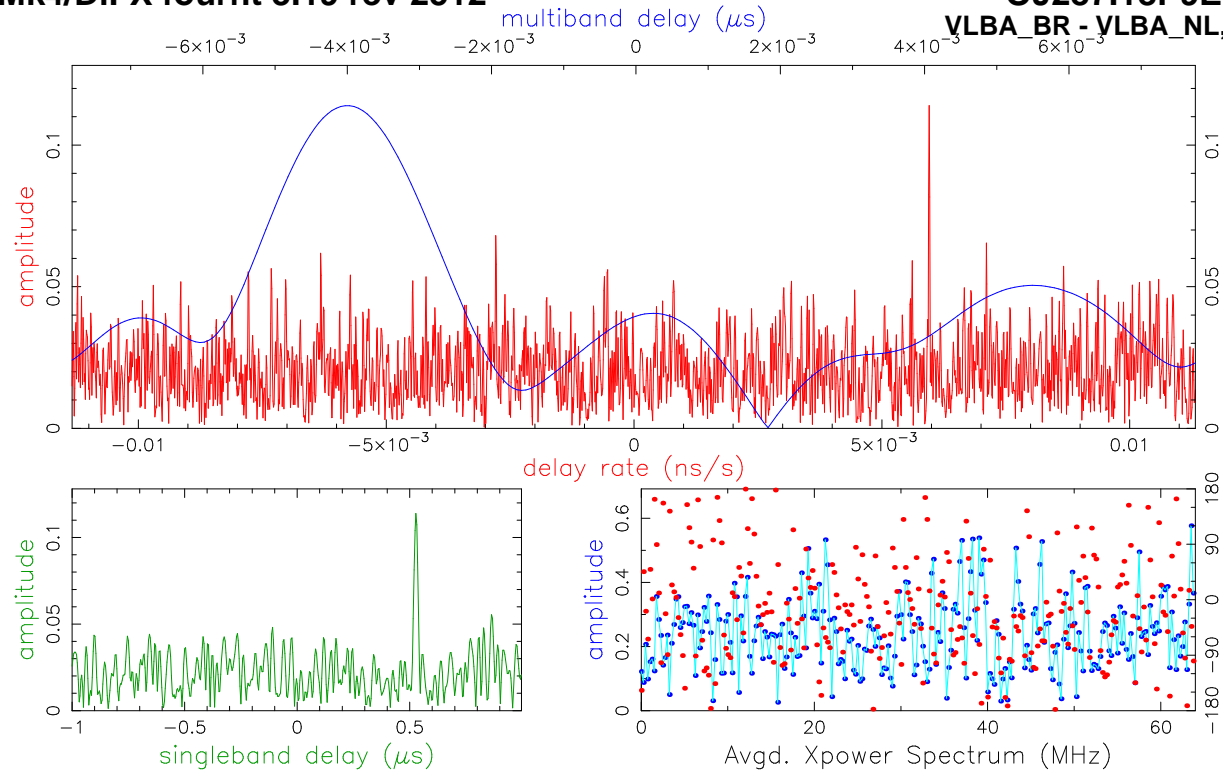


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-7.51048895654E+03									
Sband delay (usec)	-7.51049451402E+03									
Phase delay (usec)	-7.51049920753E+03									
Delay rate (us/s)	-1.40783369663E+00									
Total phase (deg)			94.8							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									116.1	+/- 15.8

ph/seg (deg) 71.5 37.9 Search (2048X32) 0.125 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 97.8 66.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 52.4 22.4 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 80.3 39.1 Inc. frq. avg. 0.155 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 265.9 el 29.7 pa 42.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 8652.532 2092.353 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/Bn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Bn.W.64.18P9EC simultaneous interpolator

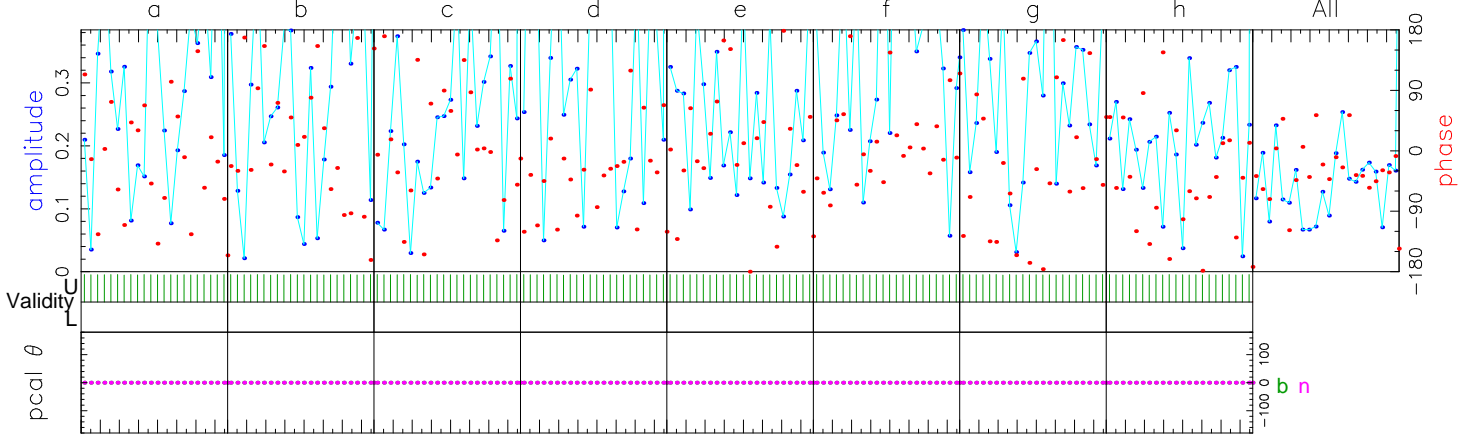
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, bn
VLBA_BR - VLBA_NL, fgroup W, pol RL



Fringe quality 0
SNR 6.5
Int time 436.227
Amp 0.128
Phase -26.2
PFD 2.1e-02
Delays (us)
SBD 0.527764
MBD -0.003996
Fringe rate (Hz)
0.513830
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120805
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

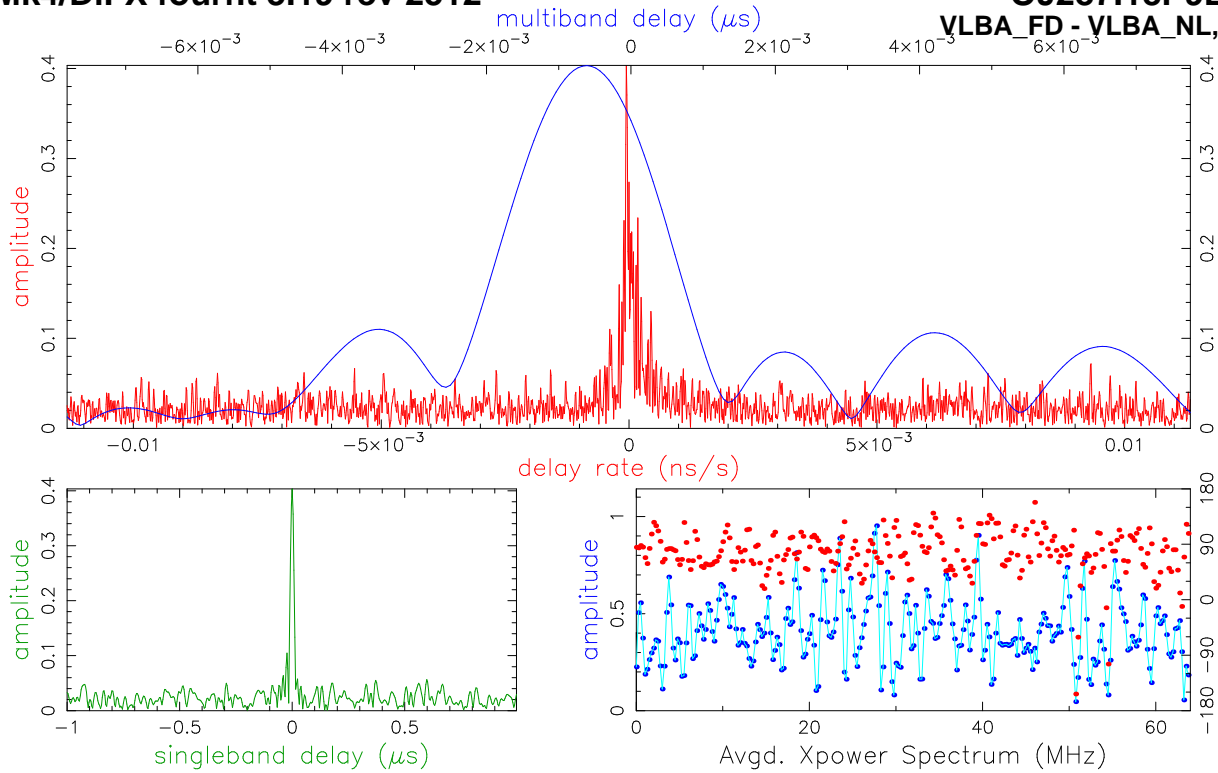


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.8	-28.7	12.9	-51.3	-1.8	-4.0	-57.2	-57.1	Phase	-26.2
	0.1	0.1	0.1	0.2	0.1	0.3	0.1	0.1	Ampl.	0.1
	394.7	196.2	174.9	392.0	424.6	391.8	249.8	111.9	Sbd box	392.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	PC amp	
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-5.32901651216E+03	Apriori delay (usec)	-5.32954376596E+03	Resid mbdelay (usec)	-3.99620E-03	+/-	1.7E-04
Sband delay (usec)	-5.32901600221E+03	Apriori clock (usec)	-3.3652512E+01	Resid sbdelay (usec)	5.27764E-01	+/-	1.3E-03
Phase delay (usec)	-5.32954376680E+03	Apriori clockrate (us/s)	-3.7599999E-07	Resid phdelay (usec)	-8.46067E-07	+/-	5.7E-07
Delay rate (us/s)	2.83339730560E-01	Apriori rate (us/s)	2.83333765501E-01	Resid rate (us/s)	5.96506E-06	+/-	2.2E-09
Total phase (deg)	-26.0	Apriori accel (us/s/s)	3.11983412247E-05	Resid phase (deg)	-26.2	+/-	17.6

ph/seg (deg)	39.7	RMS	39.7	Theor.	42.2	Amplitude	0.128 +/- 0.020	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000		
amp/seg (%)	53.2		53.2		73.6	Search (2048X32)	0.111	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	29.8		29.8		24.9	Inc. seg. avg.	0.123	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	57.7		57.7		43.4	Inc. frq. avg.	0.128	Data rate (Mb/s):	2048	nlags:	256	t_cohere	infinite	ion window (TEC)	0.00	0.00

b: az 99.1 el 35.1 pa -44.6 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1676.156 1557.323 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/bn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bn.W.72.18P9EC

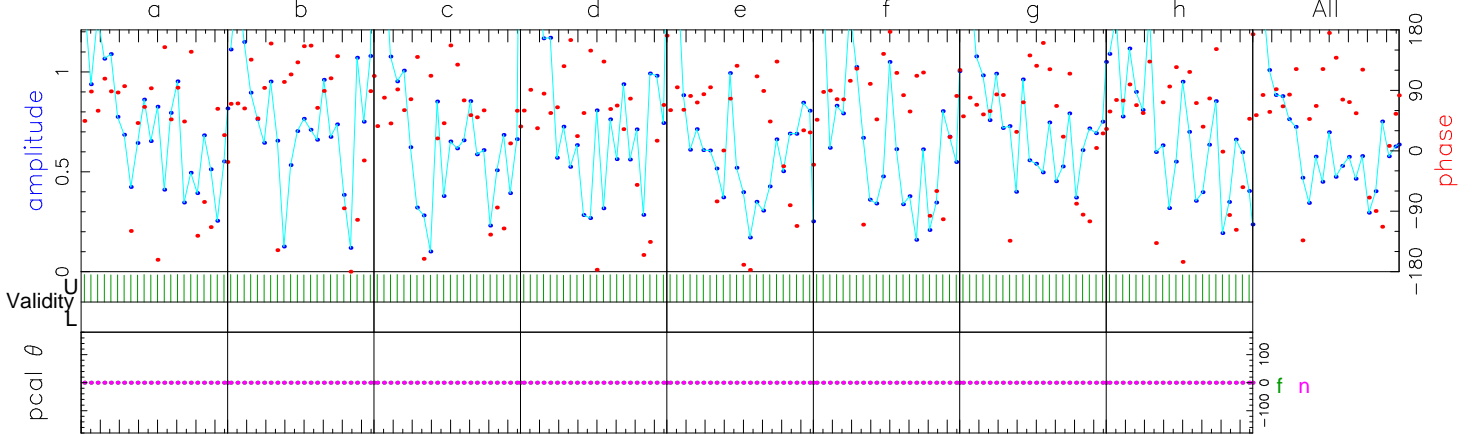


Fringe quality 9

SNR 23.0
Int time 434.901
Amp 0.403
Phase 80.6
PFD 0.0e+00
Delays (us)
SBD -0.000464
MBD -0.000626
Fringe rate (Hz)
-0.005125
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120815
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)	-1.37299837733E+03				-1.37299775173E+03				Resid mbdelay (usec)	-6.25602E-04	+/- 4.7E-05
Sband delay (usec)	-1.37299821598E+03				-2.8362896E+01				Resid sbdelay (usec)	-4.64250E-04	+/- 3.7E-04
Phase delay (usec)	-1.37299774913E+03				-2.2499998E-07				Resid phdelay (usec)	2.59942E-06	+/- 1.6E-07
Delay rate (us/s)	3.01782392774E-01				3.01782452267E-01				Resid rate (us/s)	-5.94933E-08	+/- 6.3E-10
Total phase (deg)			-39.6		1.10546039328E-06				Resid phase (deg)	80.6	+/- 5.0

ph/seg (deg) 76.1 11.9
amp/seg (%) 97.0 20.8
ph/frq (deg) 15.9 7.0
amp/frq (%) 8.3 12.3

RMS Theor. Amplitude 0.403 +/- 0.018
Search (2048X32) 0.395
Interp. 0.000
Inc. seg. avg. 0.660
Inc. frq. avg. 0.412

f: az 94.6 el 49.5 pa -66.0
n: az 120.0 el 55.9 pa -43.5
u,v (fr/asec) -1835.632 -1260.382

Group delay (usec)(sbd) -1.37299837733E+03 Apriori delay (usec) -1.37299775173E+03 Resid mbdelay (usec) -6.25602E-04 +/- 4.7E-05
Sband delay (usec) -1.37299821598E+03 Apriori clock (usec) -2.8362896E+01 Resid sbdelay (usec) -4.64250E-04 +/- 3.7E-04
Phase delay (usec) -1.37299774913E+03 Apriori clockrate (us/s) -2.2499998E-07 Resid phdelay (usec) 2.59942E-06 +/- 1.6E-07
Delay rate (us/s) 3.01782392774E-01 Apriori rate (us/s) 3.01782452267E-01 Resid rate (us/s) -5.94933E-08 +/- 6.3E-10
Total phase (deg) -39.6 Apriori accel (us/s/s) 1.10546039328E-06 Resid phase (deg) 80.6 +/- 5.0

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

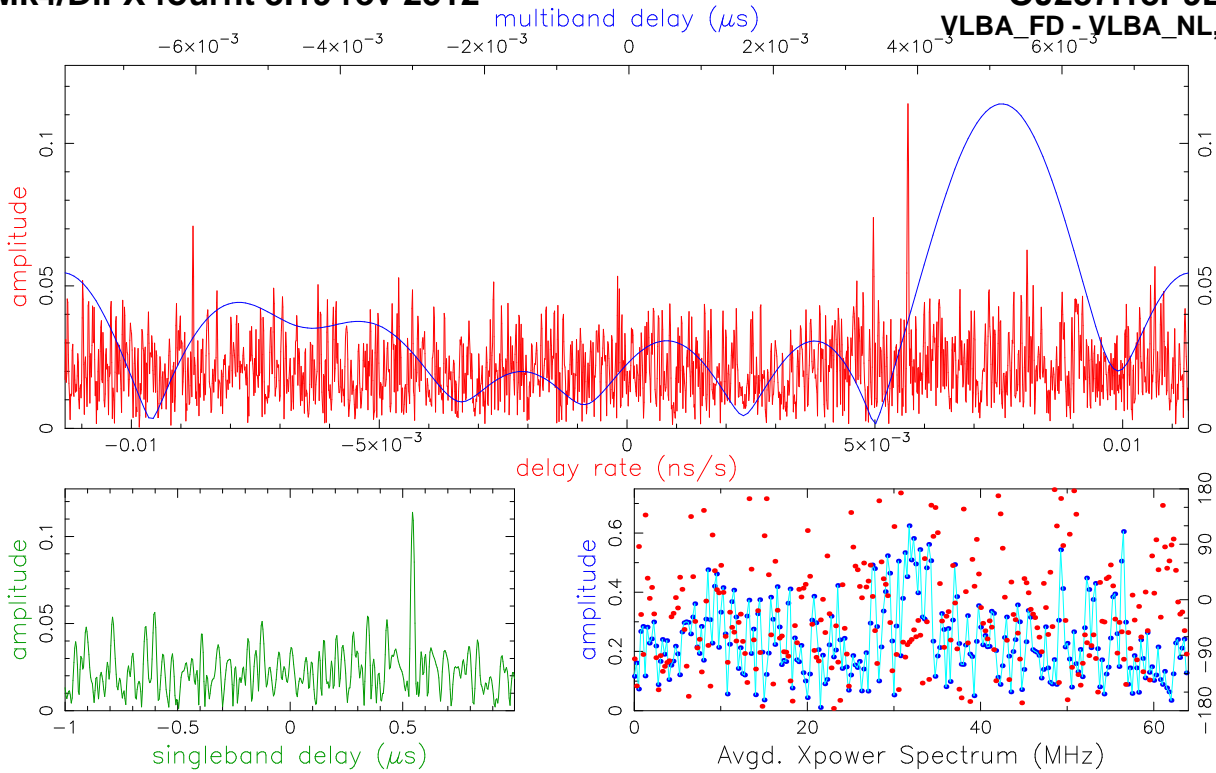
sb window (us) -1.000 1.000
mb window (us) -0.008 0.008
dr window (ns/s) -0.011 0.011
ion window (TEC) 0.00 0.00

simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/fn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fn.W.106.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, fn
VLBA_FD - VLBA_NL, fgroup W, pol LR

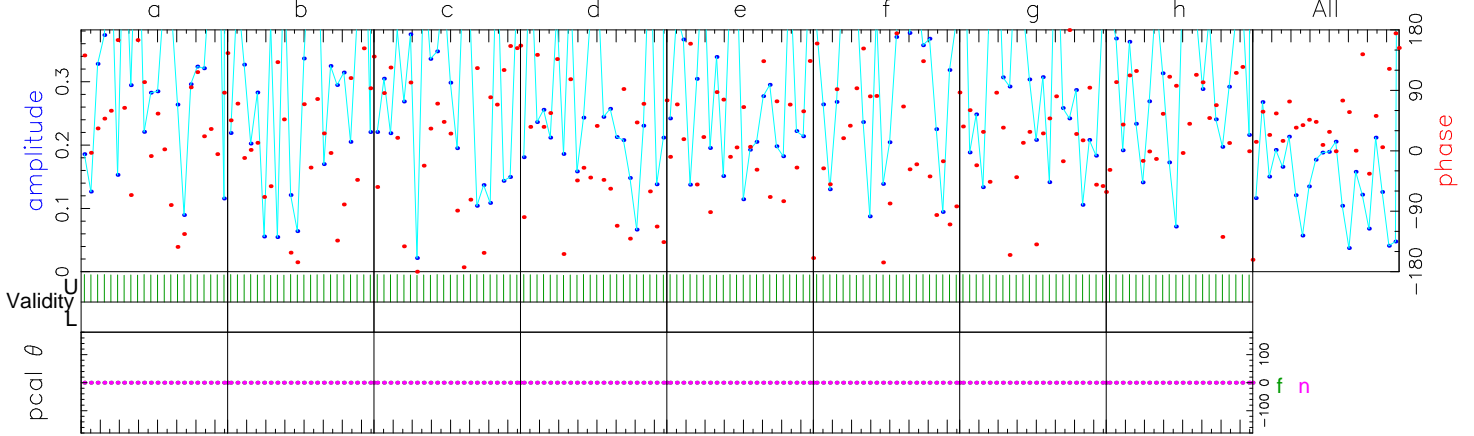


Fringe quality 0

SNR 6.5
Int time 434.901
Amp 0.127
Phase 38.3
PFD 1.8e-02
Delays (us)
SBD 0.544023
MBD 0.005175
Fringe rate (Hz)
0.489066
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120819
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

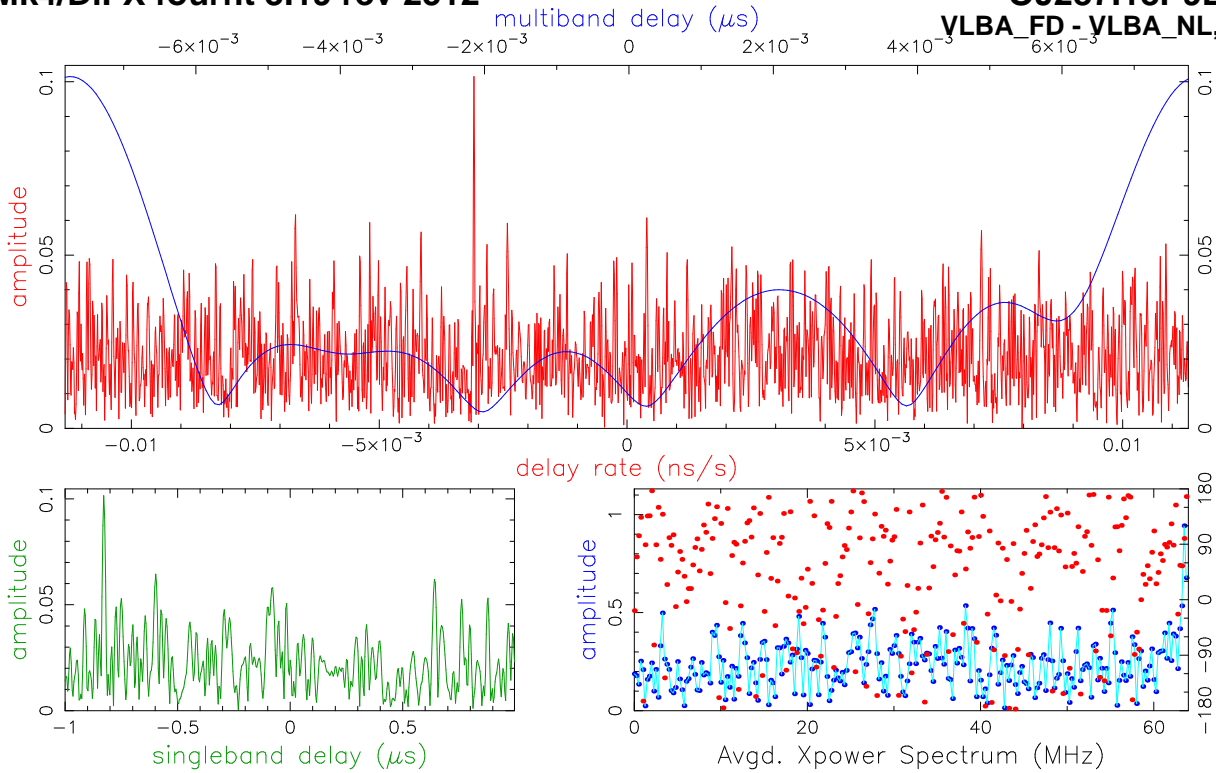
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	-1.37246132672E+03				-1.37299775173E+03				5.17501E-03	+/- 1.7E-04
Sband delay (usec)	-1.37245372873E+03				-2.8362896E+01				5.44023E-01	+/- 1.3E-03
Phase delay (usec)	-1.37299775049E+03				-2.2499998E-07				1.23623E-06	+/- 5.7E-07
Delay rate (us/s)	3.01788129842E-01				3.01782452267E-01				5.67758E-06	+/- 2.2E-09
Total phase (deg)			-81.9		1.10546039328E-06				38.3	+/- 17.5
	RMS	Theor.	Amplitude	0.127 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	48.9	42.0	Search (2048X32)	0.113	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	68.2	73.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	22.5	24.8	Inc. seg. avg.	0.124	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	37.4	43.3	Inc. frq. avg.	0.122	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

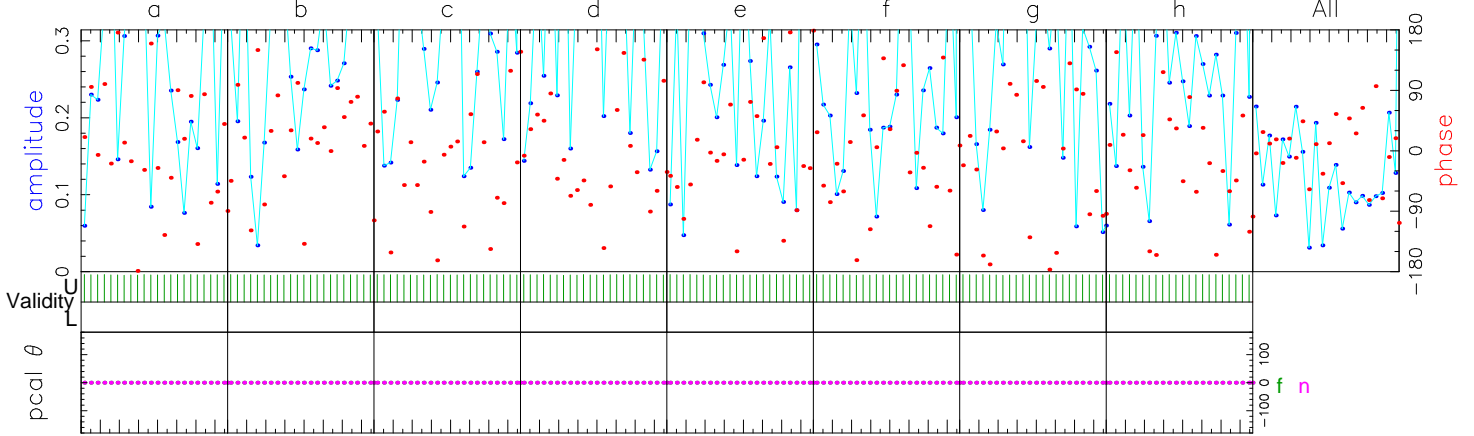
f: az 94.6 el 49.5 pa -66.0 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1835.632 -1260.382 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/fn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fn.W.121.18P9EC



Fringe quality 0
SNR 5.8
Int time 434.901
Amp 0.105
Phase 9.0
PFD 8.2e-01
Delays (us)
SBD -0.827840
MBD -0.007733
Fringe rate (Hz)
-0.266389
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120823
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
	-3.3	33.1	-6.0	6.3	-9.8	-12.4	61.9	-0.5	Phase	9.0
	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	96.6	45.6	23.7	100.7	217.6	441.0	399.8	421.1	Sbd box	45.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
f	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)	-1.37381798433E+03		Apriori delay (usec)		-1.37299775173E+03		Resid mbdelay (usec)		-7.73260E-03	+/- 1.9E-04
Sband delay (usec)	-1.37382559148E+03		Apriori clock (usec)		-2.8362896E+01		Resid sbdelay (usec)		-8.27840E-01	+/- 1.5E-03
Phase delay (usec)	-1.37299775144E+03		Apriori clockrate (us/s)		-2.2499998E-07		Resid phdelay (usec)		2.91566E-07	+/- 6.4E-07
Delay rate (us/s)	3.01779359750E-01		Apriori rate (us/s)		3.01782452267E-01		Resid rate (us/s)		-3.09252E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		1.10546039328E-06		Resid phase (deg)		9.0	+/- 19.8

ph/seg (deg) 43.1 47.4
amp/seg (%) 60.5 82.8
ph/frq (deg) 27.9 28.0
amp/frq (%) 38.0 48.8

RMS Theor. Amplitude 0.105 +/- 0.018
43.1 47.4 Search (2048X32) 0.097
60.5 82.8 Interp. 0.000
27.9 28.0 Inc. seg. avg. 0.096
38.0 48.8 Inc. frq. avg. 0.102

Group delay (usec)(sbd) -1.37381798433E+03
Sband delay (usec) -1.37382559148E+03
Phase delay (usec) -1.37299775144E+03
Delay rate (us/s) 3.01779359750E-01
Total phase (deg) -111.2

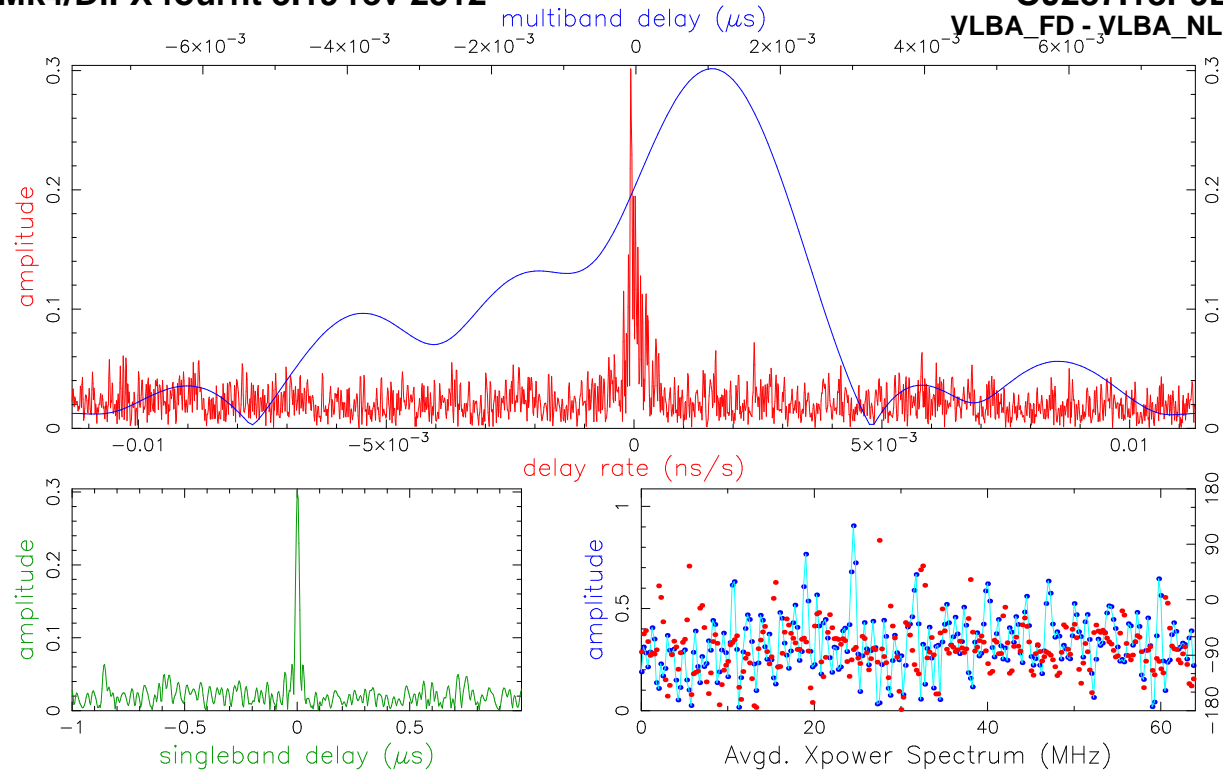
Apriori delay (usec) -1.37299775173E+03
Apriori clock (usec) -2.8362896E+01
Apriori clockrate (us/s) -2.2499998E-07
Apriori rate (us/s) 3.01782452267E-01
Apriori accel (us/s/s) 1.10546039328E-06

Resid mbdelay (usec) -7.73260E-03
Resid sbdelay (usec) -8.27840E-01
Resid phdelay (usec) 2.91566E-07
Resid rate (us/s) -3.09252E-06
Resid phase (deg) 9.0

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

f: az 94.6 el 49.5 pa -66.0 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1835.632 -1260.382 simultaneous interpolator

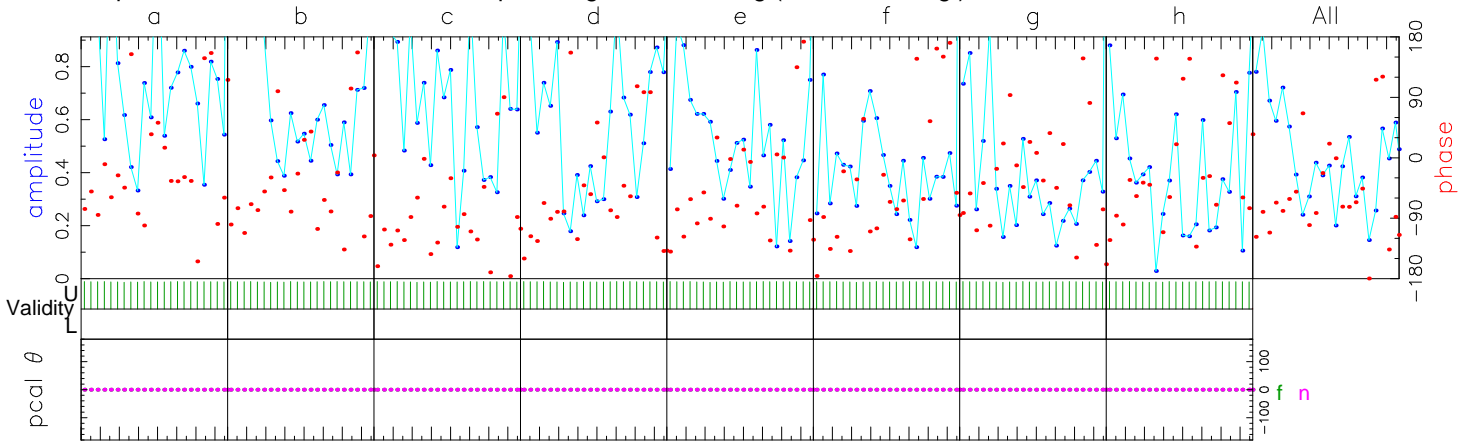


Fringe quality 7

SNR 17.4
Int time 434.901
Amp 0.304
Phase -78.6
PFD 0.0e+00
Delays (us)
SBD 0.001234
MBD 0.001079
Fringe rate (Hz)
-0.005426
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120810
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

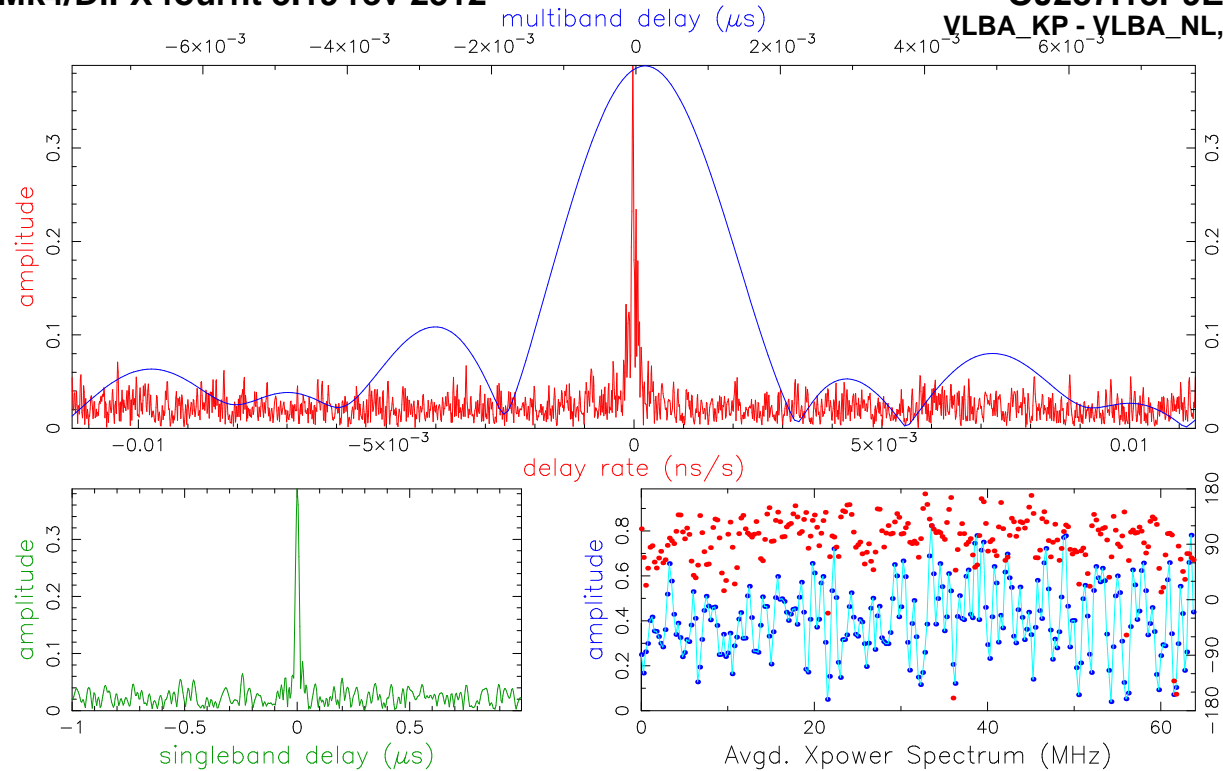


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-1.37299667223E+03				-1.37299775173E+03				1.07950E-03	+/- 6.3E-05
Sband delay (usec)	-1.37299651773E+03				-2.8362896E+01				1.23400E-03	+/- 5.0E-04
Phase delay (usec)	-1.37299775426E+03				-2.2499998E-07				-2.53569E-06	+/- 2.1E-07
Delay rate (us/s)	3.01782389280E-01				3.01782452267E-01				-6.29872E-08	+/- 8.4E-10
Total phase (deg)			-198.9		1.10546039328E-06				-78.6	+/- 6.6
pcal mode:	MANUAL, MANUAL				MANUAL, MANUAL				PC period (AP's) 5, 5	
pcal rate:	0.000E+00, 0.000E+00 (us/s)				0.000E+00, 0.000E+00 (us/s)				sb window (us) -1.000 1.000	
Bits/sample:	2x2				2x2				mb window (us) -0.008 0.008	
Sample rate (MSamp/s):	128				128				dr window (ns/s) -0.011 0.011	
Data rate (Mb/s):	2048				2048				ion window (TEC) 0.00 0.00	
nlags:	256				256				t_cohere infinite	

ph/seg (deg) 71.4 15.8 Search (2048X32) 0.292 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 84.0 27.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 23.4 9.3 Inc. seg. avg. 0.454 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.0 16.3 Inc. frq. avg. 0.317 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 f: az 94.6 el 49.5 pa -66.0 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1835.632 -1260.382 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/fn...18P9EC Output file: /Exps/c201a/v1/1234/No0027/fn.W.85.18P9EC simultaneous interpolator

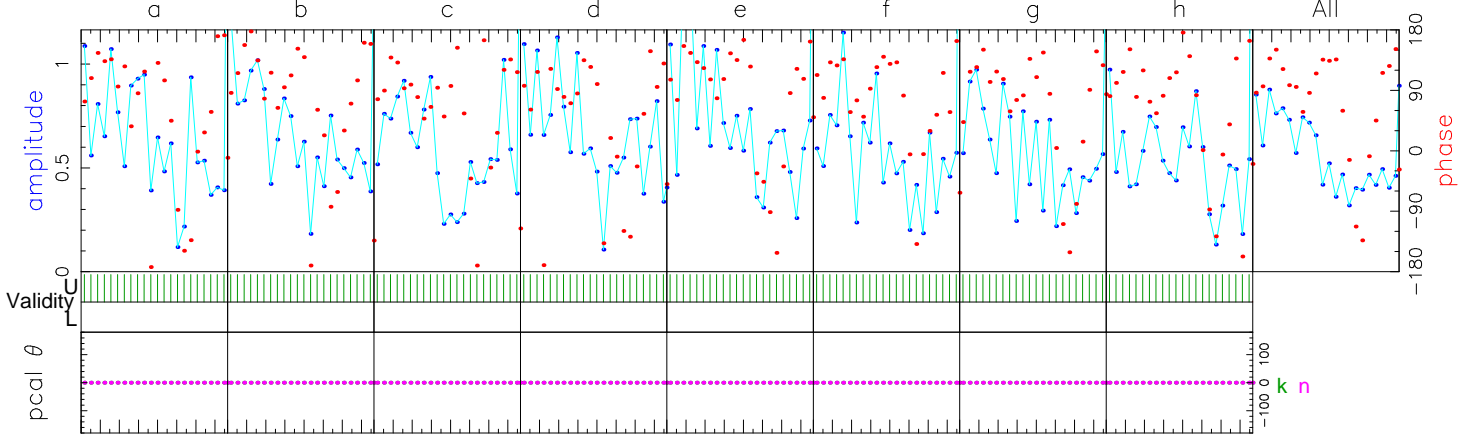
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, kn
VLBA_KP - VLBA_NL, fgroup W, pol RR



Fringe quality 9
SNR 22.3
Int time 439.269
Amp 0.388
Phase 107.6
PFD 0.0e+00
Delays (us)
SBD 0.000468
MBD 0.000136
Fringe rate (Hz)
-0.001862
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120816
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

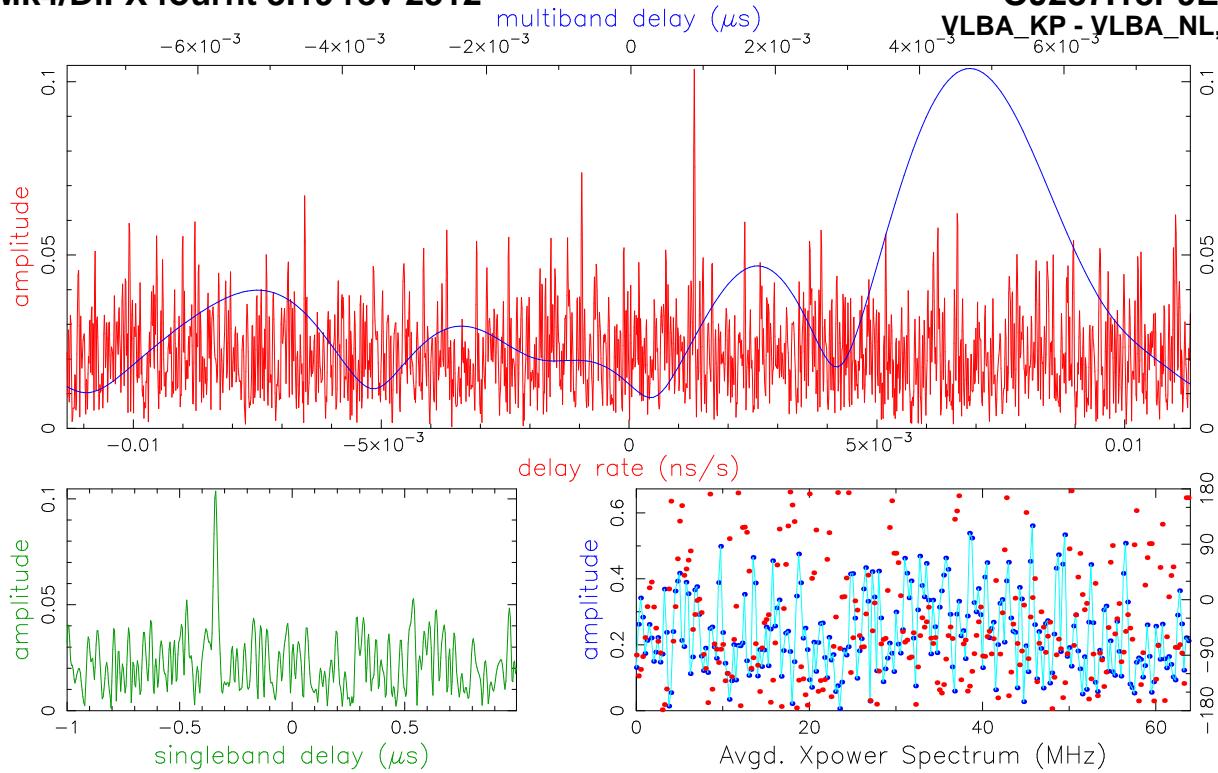


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.04812617205E+03									
Sband delay (usec)	-3.04812584025E+03									
Phase delay (usec)	-3.04812630503E+03									
Delay rate (us/s)	4.04738864071E-01									
Total phase (deg)			30.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
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 θ										
Chan ids										
Tracks										
Chan ids										
Tracks										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.388 +/- 0.017										
0.385										
-3.2594692E+01										
-3.2859999E-07										
4.04738885683E-01										
1.07520876197E-05										
1.36447E-04										
4.68250E-04										
3.46995E-06										
-2.16124E-08										
107.6										
+/- 4.9E-05										
+/- 3.9E-04										
+/- 1.7E-07										
+/- 6.5E-10										
+/- 5.1										
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										

k: az 91.6 el 42.9 pa -64.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -2447.400 -816.589 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/kn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kn.W.109.18P9EC

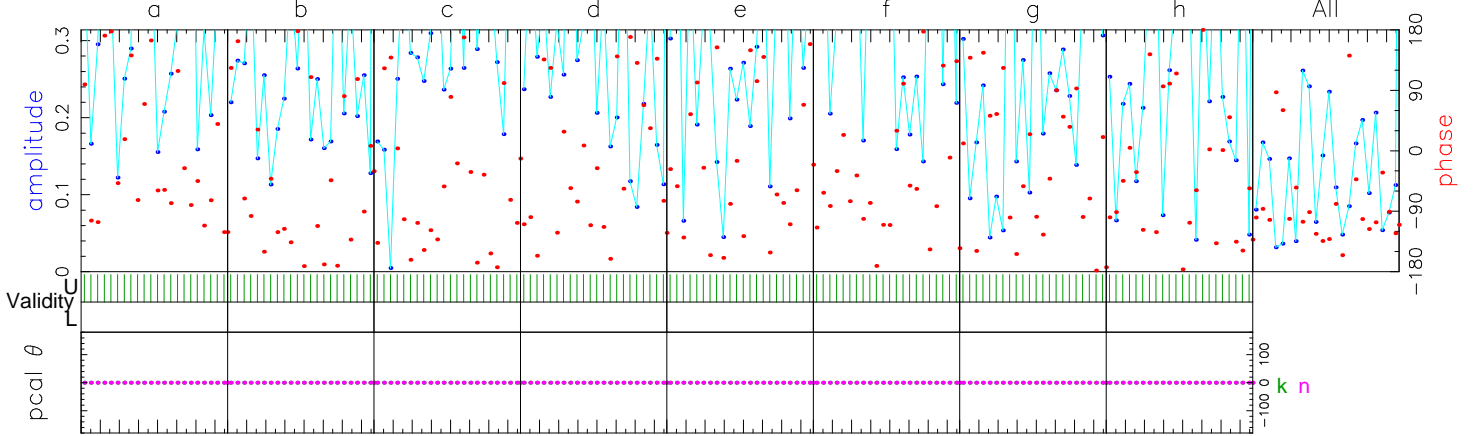
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, kn
VLBA_KP - VLBA_NL, fgroup W, pol LR



Fringe quality 0
SNR 6.0
Int time 439.269
Amp 0.105
Phase -103.3
PFD 4.6e-01
Delays (us)
SBD -0.340901
MBD 0.004620
Fringe rate (Hz) 0.113536
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120820
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

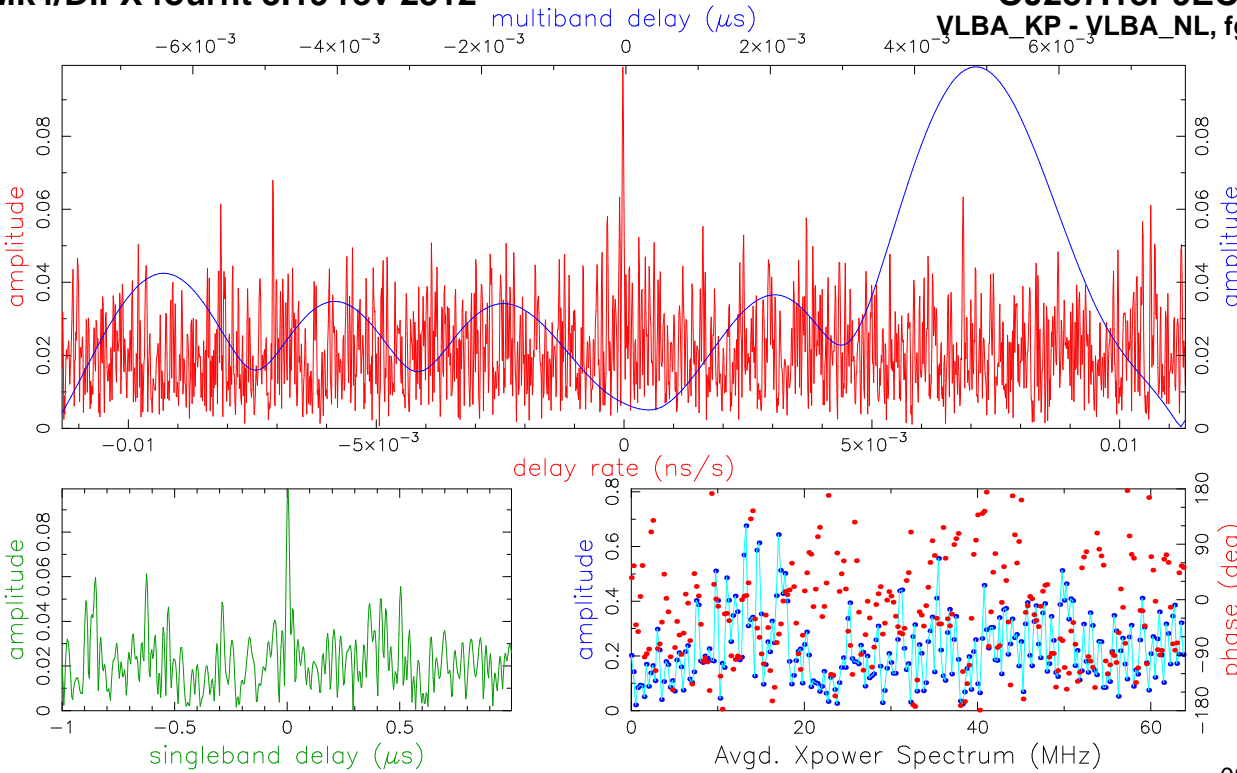


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-103.0	-145.0	-100.6	-86.2	-78.4	-80.9	-89.5	-146.8	Phase	-103.3
	0.1	0.1	0.2	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	33.7	290.2	171.3	290.2	449.3	170.1	392.2	414.8	Sbd box	169.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	
									Tracks	
Group delay (usec)(sbd)	-3.04846543855E+03		Apriori delay (usec)		-3.04812630850E+03		Resid mbdelay (usec)		4.61994E-03	+/- 1.8E-04
Sband delay (usec)	-3.04846720925E+03		Apriori clock (usec)		-3.2594692E+01		Resid sbdelay (usec)		-3.40901E-01	+/- 1.4E-03
Phase delay (usec)	-3.04812631183E+03		Apriori clockrate (us/s)		-3.2859999E-07		Resid phdelay (usec)		-3.33072E-06	+/- 6.2E-07
Delay rate (us/s)	4.04740203719E-01		Apriori rate (us/s)		4.04738885683E-01		Resid rate (us/s)		1.31804E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		1.07520876197E-05		Resid phase (deg)		-103.3	+/- 19.2

ph/seg (deg) 62.7 46.0 Search (2048X32) 0.103 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 72.7 80.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 29.6 27.2 Inc. seg. avg. 0.096 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 45.4 47.4 Inc. frq. avg. 0.104 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 91.6 el 42.9 pa -64.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -2447.400 -816.589 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/kn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kn.W.127.18P9EC

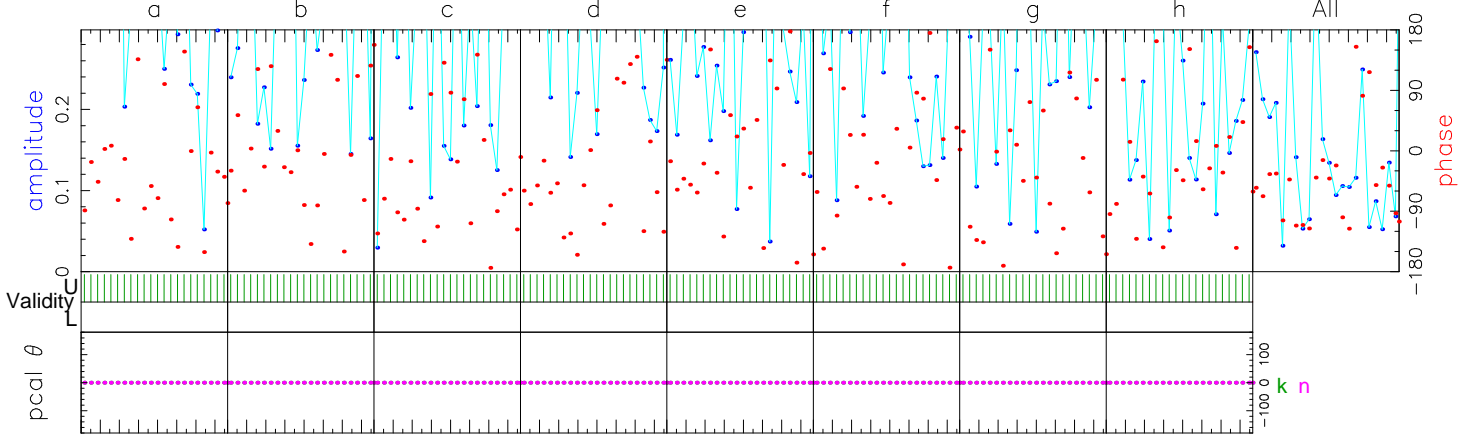
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, kn
VLBA_KP - VLBA_NL, fgroup W, pol RL



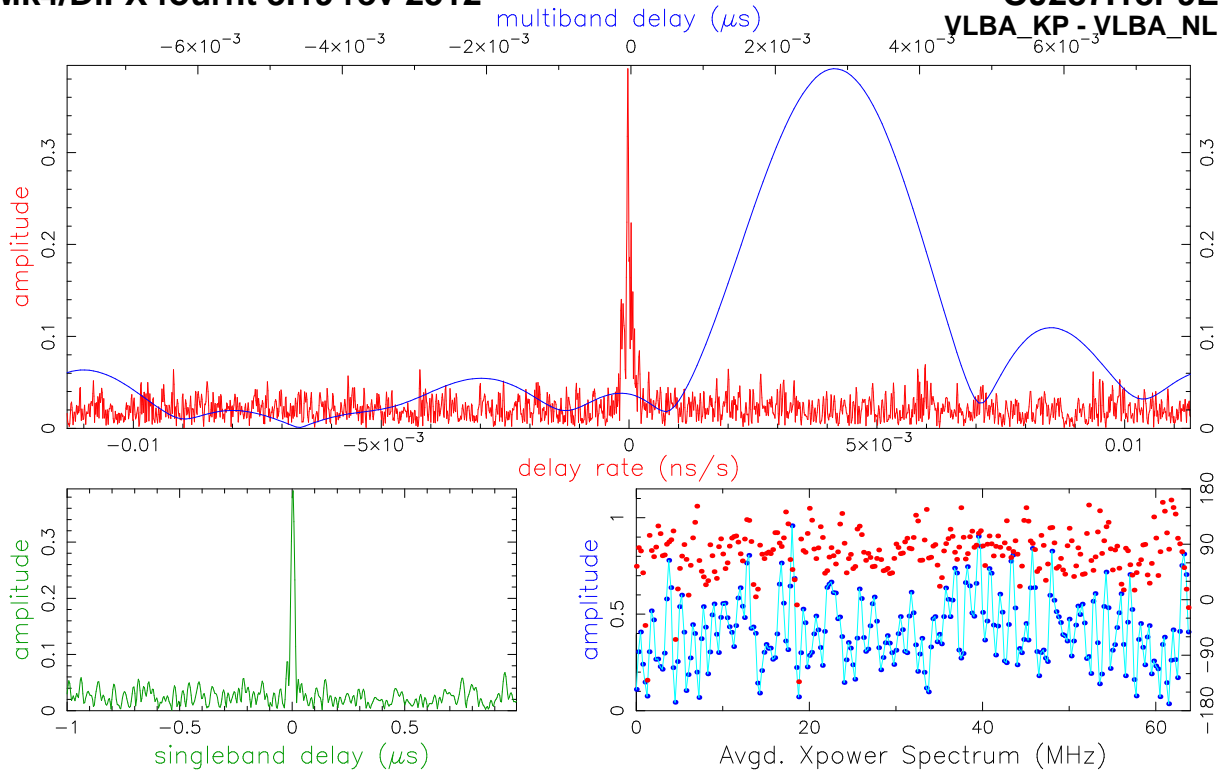
Fringe quality 0
SNR 5.7
Int time 439.269
Amp 0.099
Phase -50.7
PFD 9.5e-01
Delays (us)
SBD 0.003069
MBD 0.004803
Fringe rate (Hz)
-0.001727
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120824
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)	-3.04812150505E+03				-3.04812630850E+03				4.80345E-03	+/- 1.9E-04
Sband delay (usec)	-3.04812323950E+03				-3.2594692E+01				3.06900E-03	+/- 1.5E-03
Phase delay (usec)	-3.04812631013E+03				-3.2859999E-07				-1.63527E-06	+/- 6.5E-07
Delay rate (us/s)	4.04738865637E-01				4.04738885683E-01				-2.00465E-08	+/- 2.6E-09
Total phase (deg)			-127.8		1.07520876197E-05				-50.7	+/- 20.1
	RMS	Theor.	Amplitude	0.099 +/- 0.017	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	66.1	48.2	Search (2048X32)	0.098	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	107.7	84.2	Interp.	0.000	Bits/sample: 2x2				SampCntNorm: enabled	-0.008 0.008
ph/frq (deg)	27.6	28.4	Inc. seg. avg.	0.110	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	46.9	49.6	Inc. frq. avg.	0.096	Data rate(Mb/s): 2048				nlags: 256 t_cohere infinite	ion window (TEC) 0.00 0.00

k: az 91.6 el 42.9 pa -64.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -2447.400 -816.589 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/kn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kn.W.144.18P9EC

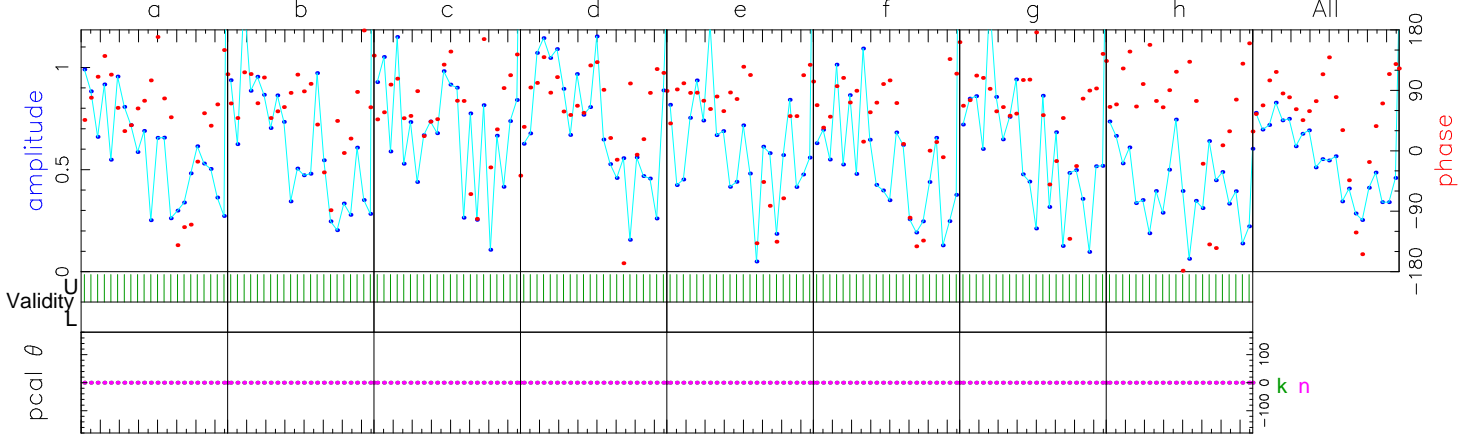


Fringe quality 9

SNR 22.6
Int time 439.269
Amp 0.395
Phase 78.4
PFD 0.0e+00
Delays (us)
SBD 0.002647
MBD 0.002808
Fringe rate (Hz)
-0.001860
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120812
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



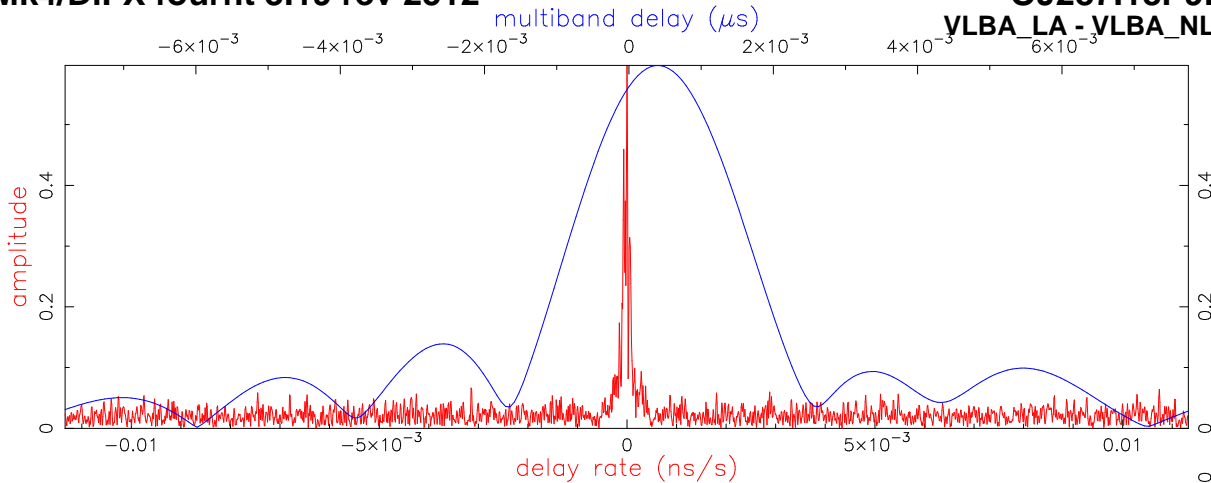
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-3.04812350015E+03	Apriori delay (usec)	-3.04812630850E+03	Resid mbdelay (usec)	2.80835E-03	+/-	4.8E-05
Sband delay (usec)	-3.04812366175E+03	Apriori clock (usec)	-3.2594692E+01	Resid sbdelay (usec)	2.64675E-03	+/-	3.8E-04
Phase delay (usec)	-3.04812630597E+03	Apriori clockrate (us/s)	-3.2859999E-07	Resid phdelay (usec)	2.52694E-06	+/-	1.6E-07
Delay rate (us/s)	4.04738864086E-01	Apriori rate (us/s)	4.04738885683E-01	Resid rate (us/s)	-2.15975E-08	+/-	6.4E-10
Total phase (deg)	1.3	Apriori accel (us/s/s)	1.07520876197E-05	Resid phase (deg)	78.4	+/-	5.1

ph/seg (deg)	61.6	Theor.	12.1	Amplitude	0.395 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	58.0	Search (2048X32)	0.389	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us)	-1.000	1.000	
ph/frq (deg)	11.9	Interp.	0.000	Bits/sample: 2x2		SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	20.9	Inc. seg. avg.	0.534	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
		Inc. frq. avg.	0.393	Data rate(Mb/s): 2048		ion window (TEC)	0.00	0.00	

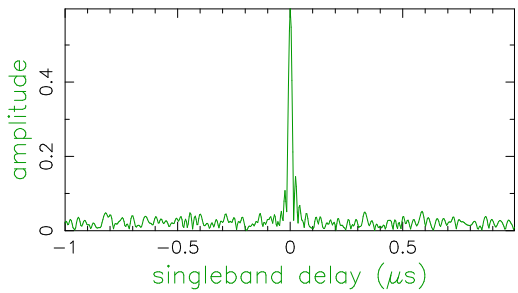
k: az 91.6 el 42.9 pa -64.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -2447.400 -816.589 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/kn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kn.W.93.18P9EC

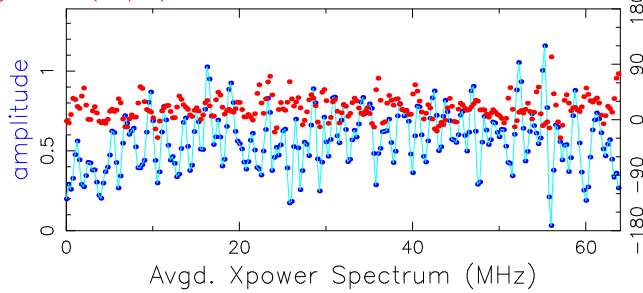


Fringe quality 6

SNR 34.2
 Int time 438.929
 Amp 0.597
 Phase 14.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.000208
 MBD 0.000404
 Fringe rate (Hz)
 -0.000217
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

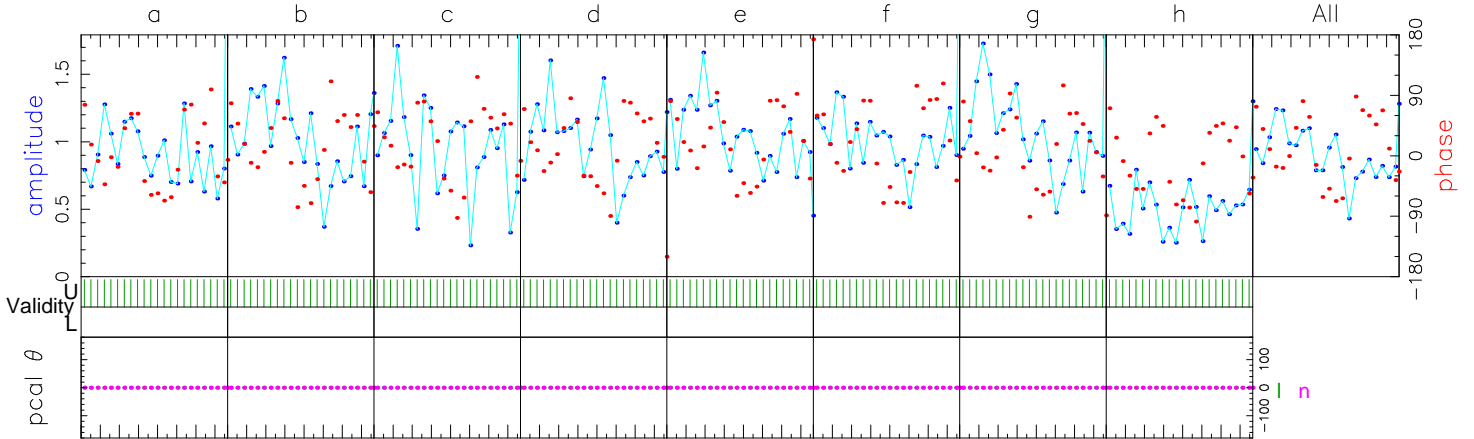


delay rate (ns/s)



Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120817
 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



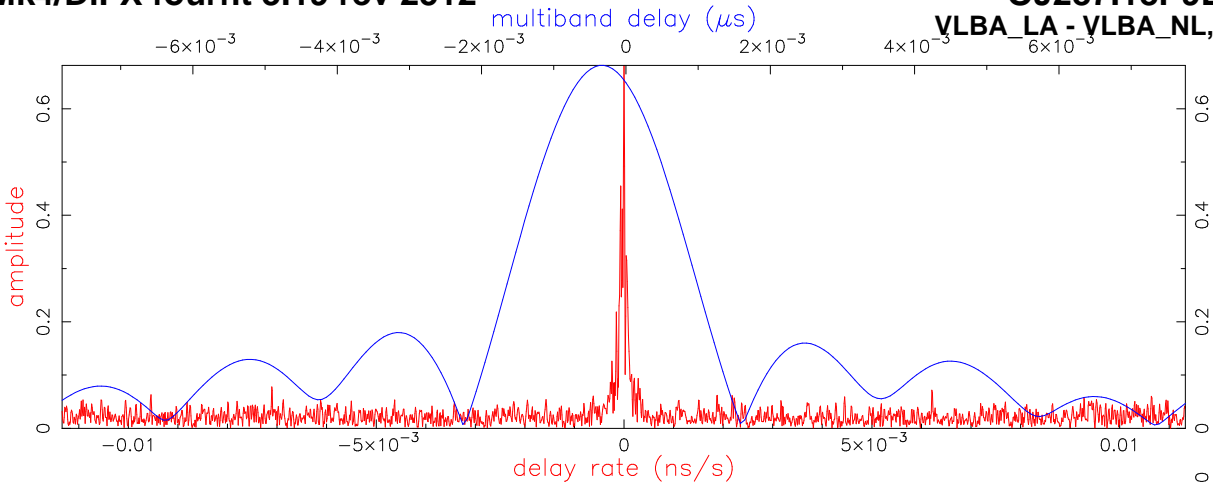
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	-2.00659621228E+03	Apriori delay (usec)	-2.00659661603E+03	Resid mbdelay (usec)	4.03750E-04	+/-	3.2E-05
Sband delay (usec)	-2.00659640778E+03	Apriori clock (usec)	-3.5937401E+01	Resid sbdelay (usec)	2.08250E-04	+/-	2.5E-04
Phase delay (usec)	-2.00659661555E+03	Apriori clockrate (us/s)	-4.8500001E-07	Resid phdelay (usec)	4.76944E-07	+/-	1.1E-07
Delay rate (us/s)	2.88260217911E-01	Apriori rate (us/s)	2.88260220428E-01	Resid rate (us/s)	-2.51680E-09	+/-	4.3E-10
Total phase (deg)	-167.0	Apriori accel (us/s/s)	7.33341805895E-06	Resid phase (deg)	14.8	+/-	3.3

ph/seg (deg)	49.4	RMS	8.0	Theor.	0.597 +/- 0.017	Search (2048X32)	0.586	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5			
amp/seg (%)	58.9	49.4	8.0	Amplitude	0.597 +/- 0.017	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	10.2	58.9	14.0	Search (2048X32)	0.586	Inc. seg. avg.	0.890	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	20.2	10.2	4.7	Inc. seg. avg.	0.890	Inc. frq. avg.	0.601	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011 0.011	
		20.2	8.3	Inc. frq. avg.	0.601			Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

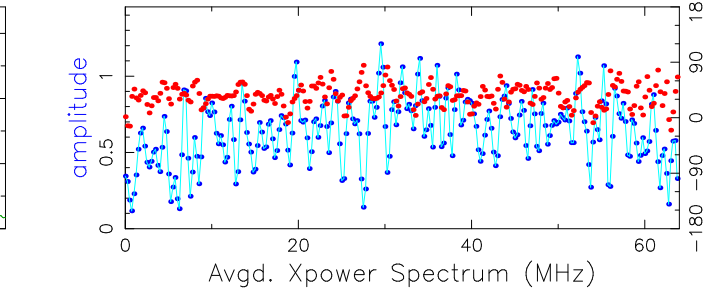
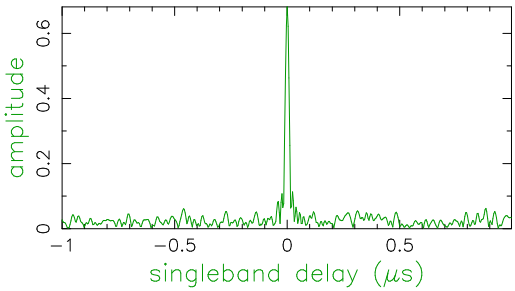
l: az 98.8 el 47.0 pa -58.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1743.808 -457.949 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/In..18P9EC Output file: /Exps/c201a/v1/1234/No0027/In.W.113.18P9EC



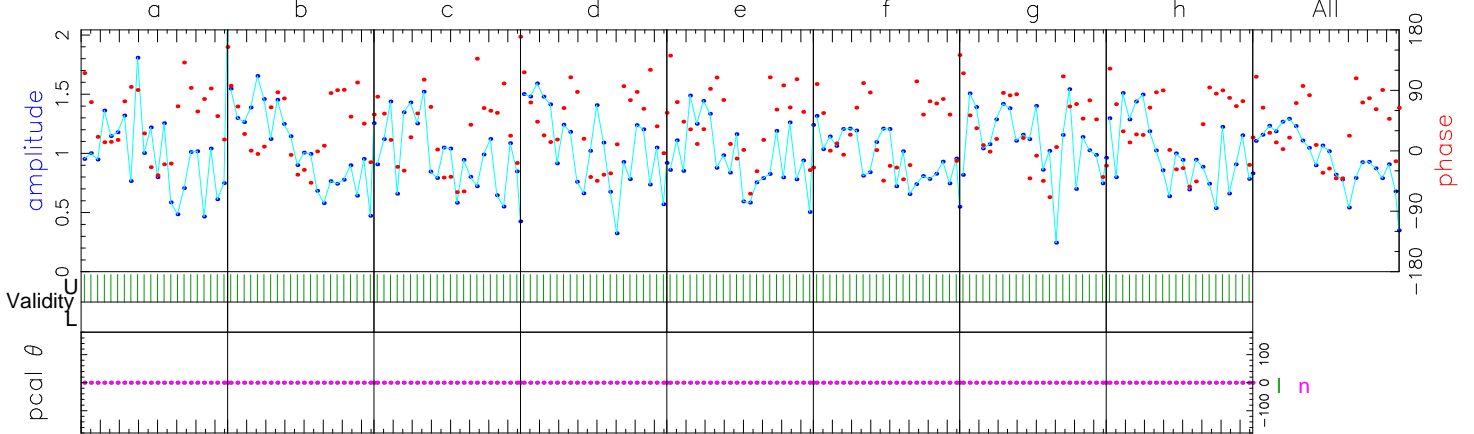
Fringe quality 7

SNR 39.0
 Int time 438.929
 Amp 0.681
 Phase 39.5
 PFD 0.0e+00
 Delays (us)
 SBD -0.000039
 MBD -0.000336
 Fringe rate (Hz)
 -0.000164
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

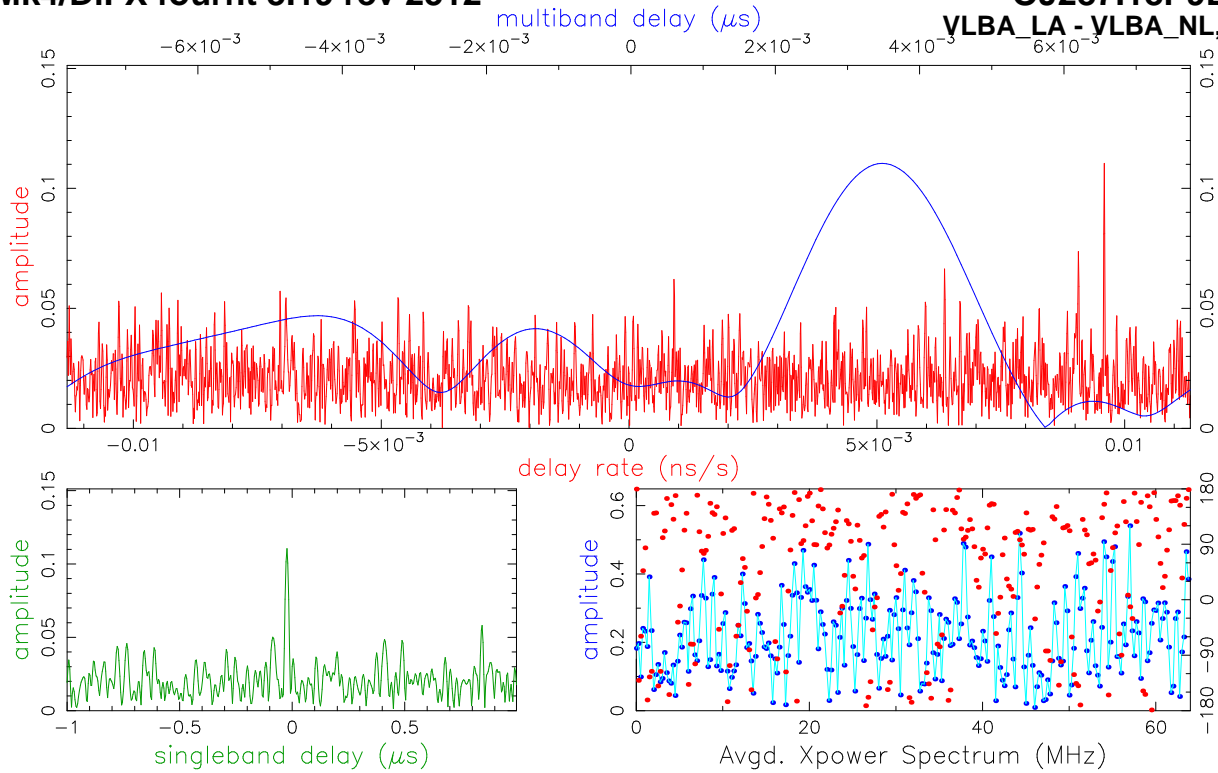


Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120821
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

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	
									Tracks	
Group delay (usec)(sbd)	-2.00659695187E+03				-2.00659661603E+03				Resid mbdelay (usec)	-3.35844E-04 +/- 2.8E-05
Sband delay (usec)	-2.00659665528E+03				-3.5937401E+01				Resid sbdelay (usec)	-3.92500E-05 +/- 2.2E-04
Phase delay (usec)	-2.00659661476E+03				-4.8500001E-07				Resid phdelay (usec)	1.27373E-06 +/- 9.5E-08
Delay rate (us/s)	2.88260218525E-01				2.88260220428E-01				Resid rate (us/s)	-1.90319E-09 +/- 3.7E-10
Total phase (deg)			-142.3		7.33341805895E-06				Resid phase (deg)	39.5 +/- 2.9
	RMS	Theor.	Amplitude	0.681 +/- 0.017					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	48.4	7.0	Search (2048X32)	0.669					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	53.2	12.3	Interp.	0.000					Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	8.7	4.2	Inc. seg. avg.	0.976					Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	5.1	7.2	Inc. frq. avg.	0.685					Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite
										ion window (TEC) 0.00 0.00

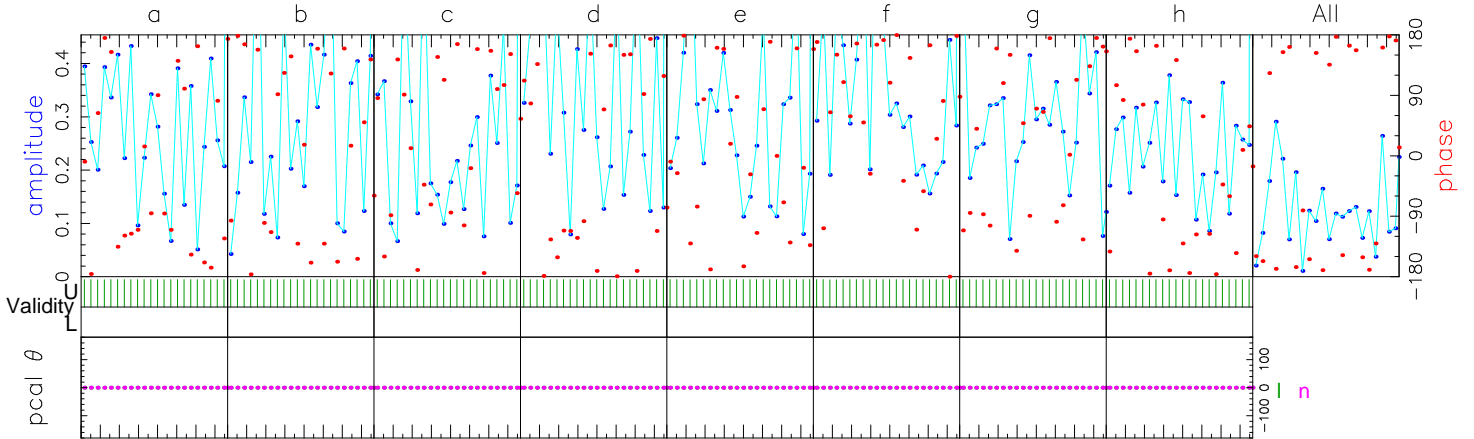


Fringe quality 0

SNR 6.3
 Int time 438.929
 Amp 0.151
 Phase 176.0
 PFD 6.6e-02
 Delays (us)
 SBD -0.023528
 MBD 0.003483
 Fringe rate (Hz) 0.826959
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120825
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

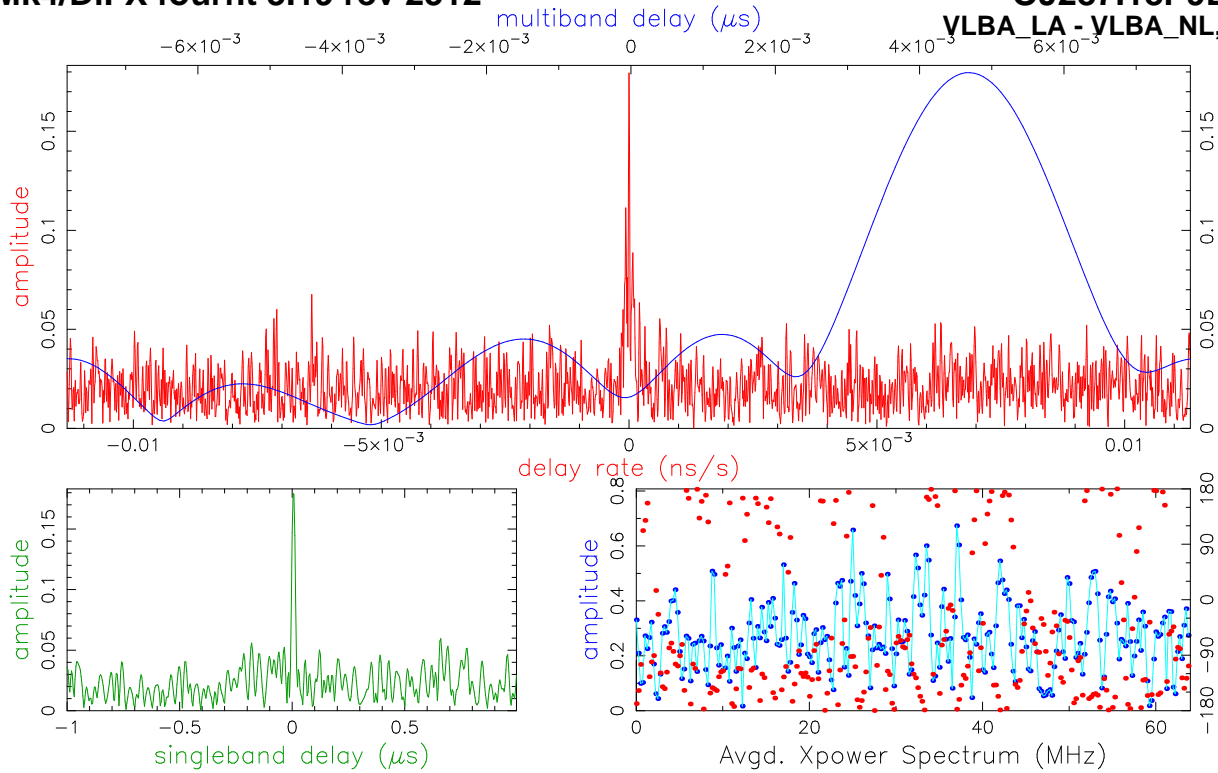
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	-2.00662438305E+03				-2.00659661603E+03				3.48298E-03	+/- 1.7E-04
Sband delay (usec)	-2.00662014403E+03				-3.5937401E+01				-2.35280E-02	+/- 1.4E-03
Phase delay (usec)	-2.00659661036E+03				-4.8500001E-07				5.67398E-06	+/- 5.8E-07
Delay rate (us/s)	2.88269820605E-01				2.88260220428E-01				9.60018E-06	+/- 2.3E-09
Total phase (deg)			-5.8		7.33341805895E-06				176.0	+/- 18.1
	RMS	Theor.	Amplitude	0.151 +/- 0.024	PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	34.9	43.4	Search (2048X32)	0.108	PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	65.3	75.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	31.3	25.6	Inc. seg. avg.	0.130	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	49.8	44.7	Inc. frq. avg.	0.148	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, In VLBA_LA - VLBA_NL, fgroup W, pol RL

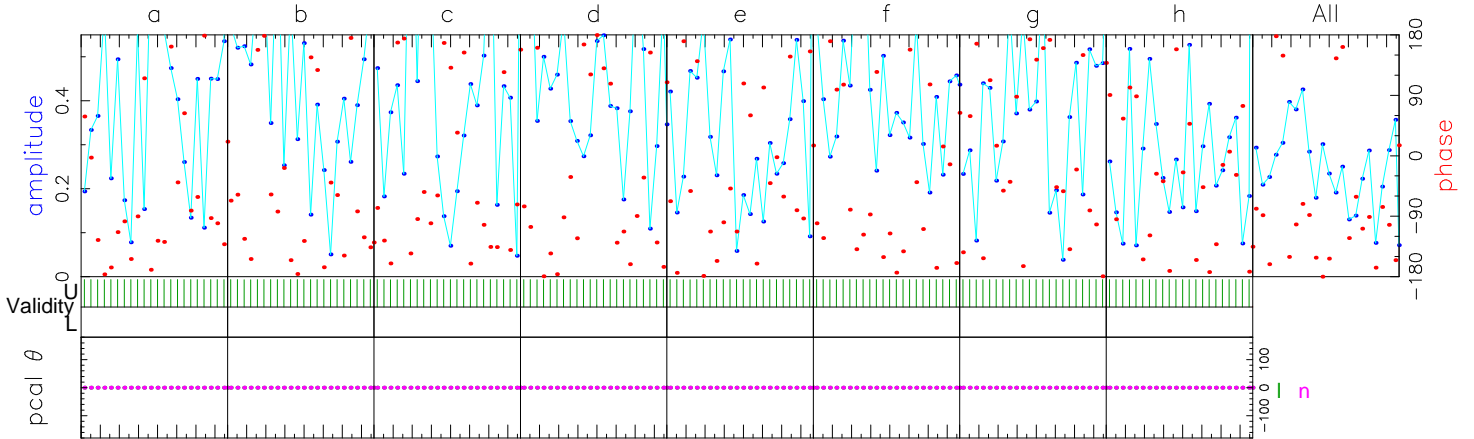


Fringe quality 9

SNR 10.5
 Int time 438.929
 Amp 0.183
 Phase -129.6
 PFD 3.9e-17
 Delays (us)
 SBD 0.005749
 MBD 0.004753
 Fringe rate (Hz) -0.000103
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

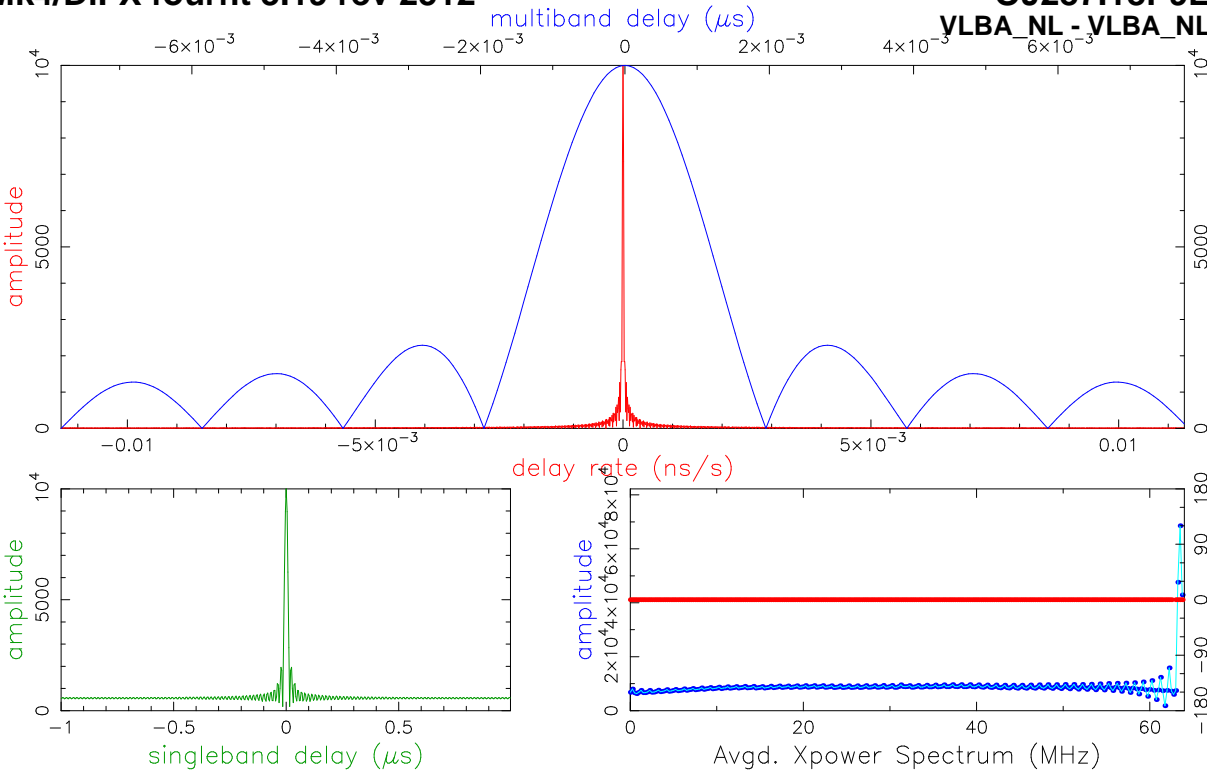
Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120829
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

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



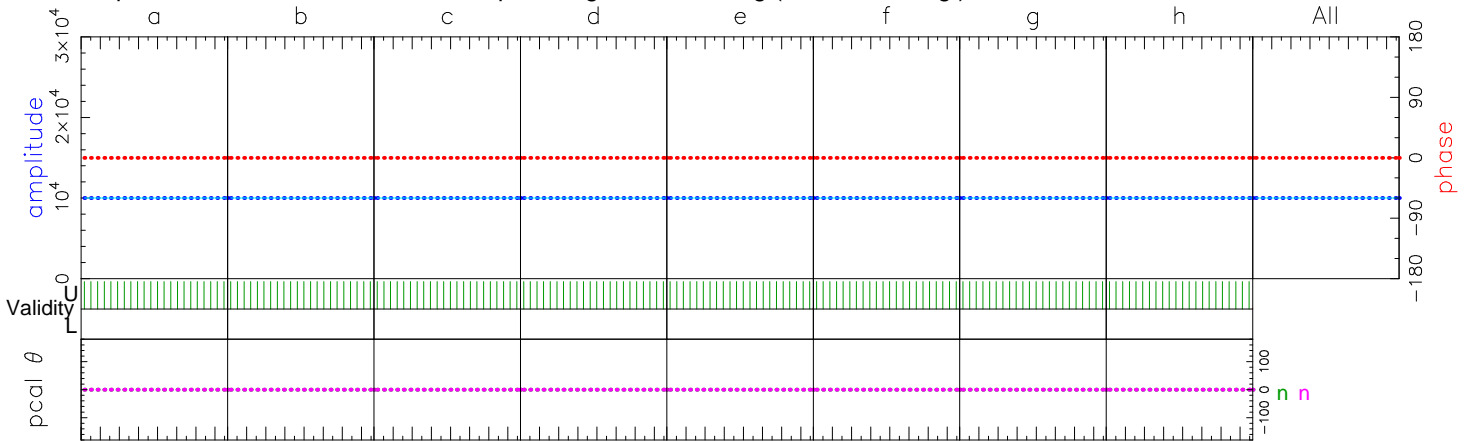
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-2.00659186284E+03	-2.00659086703E+03	-2.00659662021E+03	-2.00659661603E+03	-2.00659661603E+03	-2.00659661603E+03	-2.00659661603E+03	-2.00659661603E+03		
Sband delay (usec)	-123.1	-130.0	-125.0	-140.3	-109.4	-133.0	-156.1	-59.5		
Phase delay (usec)	0.2	0.3	0.3	0.2	0.1	0.2	0.1	0.0		
Delay rate (us/s)	257.6	258.7	258.8	256.7	189.5	258.2	261.8	118.9		
Total phase (deg)			-311.4							
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)										
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)										
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) 47.3 26.2 Search (2048X32) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.9 45.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 32.2 15.4 Inc. seg. avg. 0.233 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 46.3 26.9 Inc. frq. avg. 0.178 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 98.8 el 47.0 pa -58.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) -1743.808 -457.949 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/In..18P9EC Output file: /Exps/c201a/v1/1234/No0027/In.W.162.18P9EC



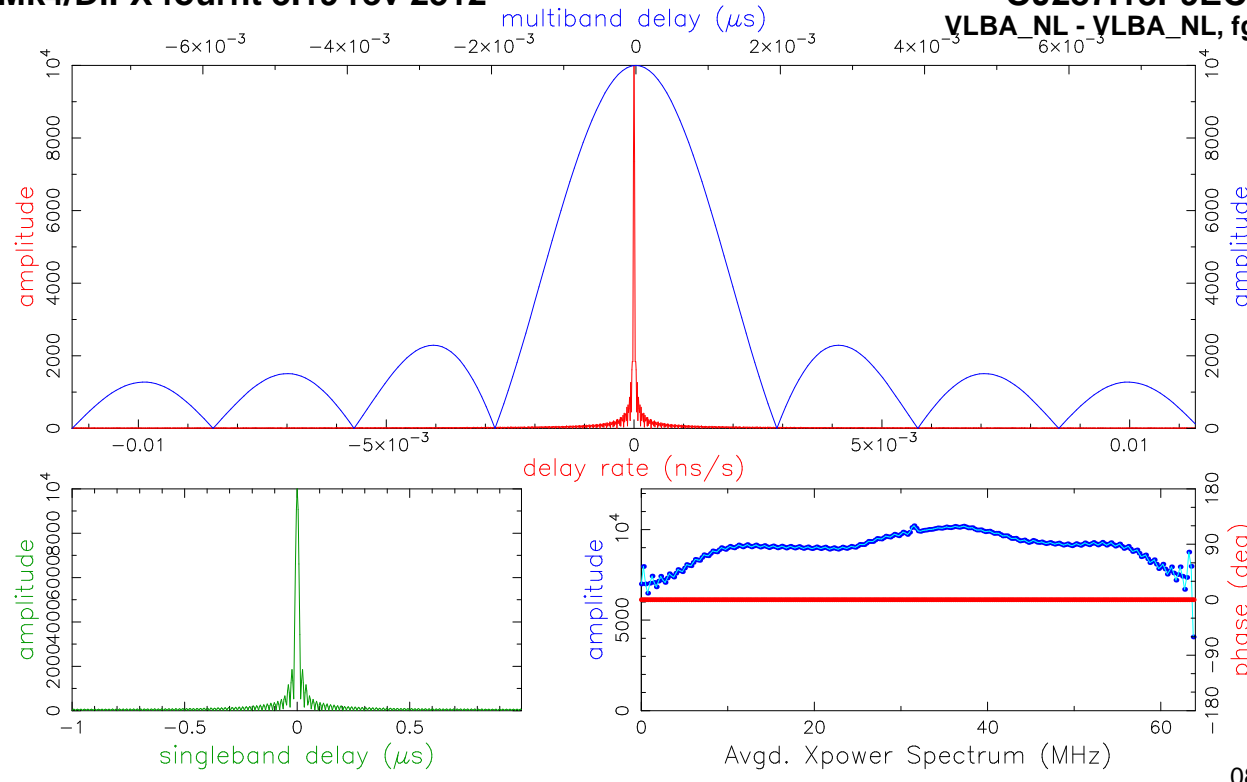
Fringe quality 9
SNR 573142.9
Int time 439.269
Amp 10000.004
Phase 0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120830
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	Ampl.	10000.0
n	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
n:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC phase	
n	1000	1000	1000	1000	1000	1000	1000	1000	Mani PC	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	PC amp	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
									Tracks	
									Tracks	
Group delay (usec)(sbd)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid mbdelay (usec)	0.00000E+00 +/- 1.9E-09
Sband delay (usec)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid sbdelay (usec)	0.00000E+00 +/- 1.5E-08
Phase delay (usec)	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	3.48972750060E-19	Resid phdelay (usec)	3.48973E-19 +/- 6.4E-12
Delay rate (us/s)	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	0.000000000000E+00	Resid rate (us/s)	0.00000E+00 +/- 2.5E-14
Total phase (deg)			0.0						Resid phase (deg)	0.0 +/- 0.0

RMS Theor. Amplitude 10000.004 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.003 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. 10000.004 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 n: az 120.0 el 55.9 pa -43.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nn.W.165.18P9EC

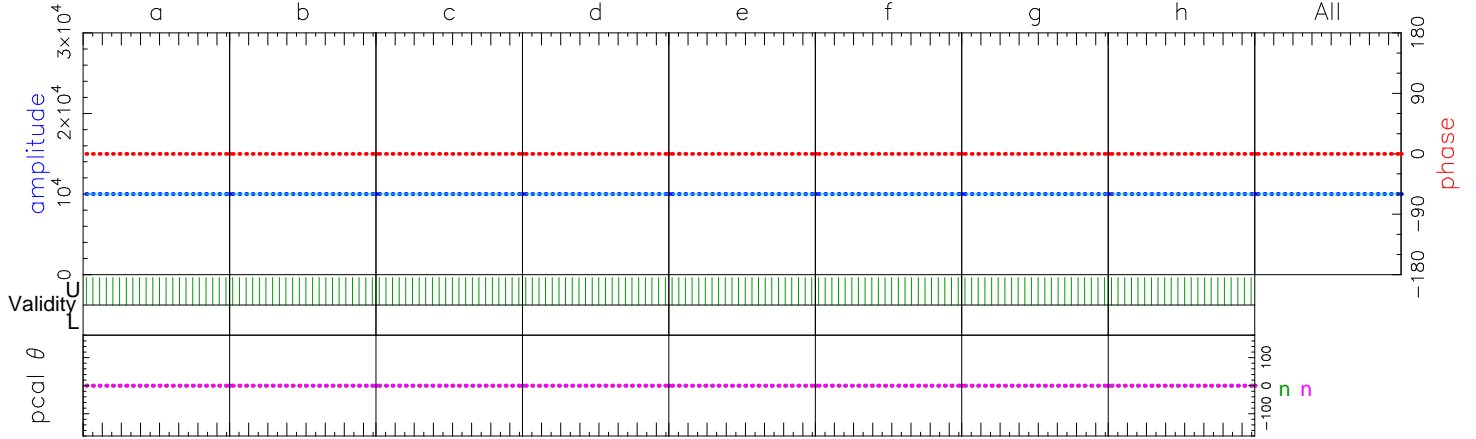


Fringe quality 9

SNR 573142.7
Int time 439.269
Amp 10000.000
Phase -0.0
PFD 0.0e+00
Delays (us)
SBD 0.000000
MBD 0.000000
Fringe rate (Hz)
0.000000
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120836
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

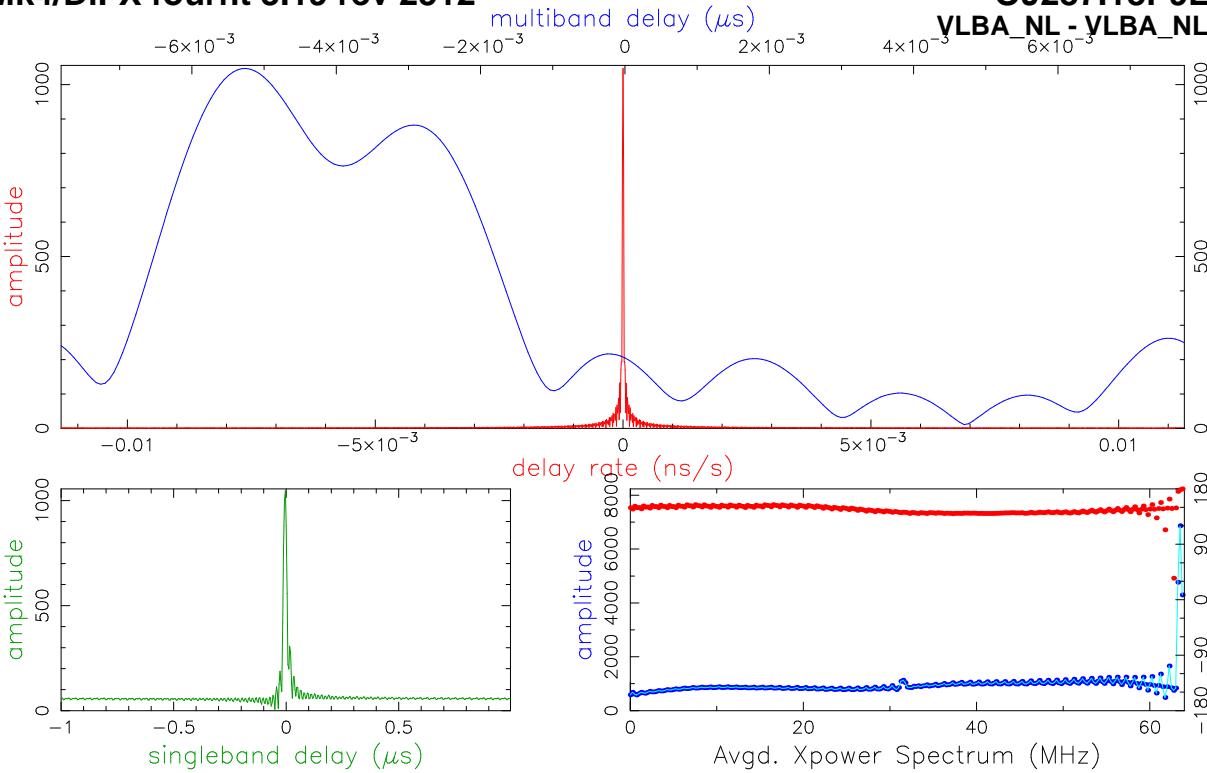
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-20	-5.30034612475E-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							
RMS										
Theor.										
Amplitude										
10000.000 +/- 0.017										
Search (2048X32)										
10000.000										
Interp.										
0.000										
Inc. seg. avg.										
10000.000										
Inc. frq. avg.										
10000.000										
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 120.0 el 55.9 pa -43.5										
n: az 120.0 el 55.9 pa -43.5										
u,v (fr/asec) 0.000 0.000										
Control file: cf_1234_gmva										
Input file: /Exps/c201a/v1/1234/No0027/nn..18P9EC										
Output file: /Exps/c201a/v1/1234/No0027/nn.W.183.18P9EC										

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, nn
VLBA_NL - VLBA_NL, fgroup W, pol LR

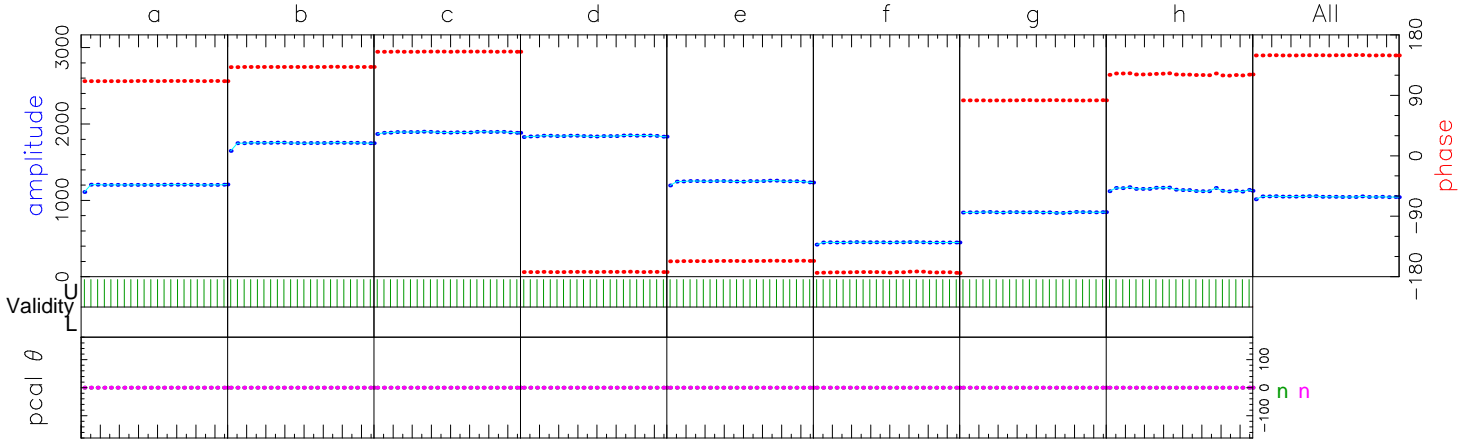


Fringe quality 5

SNR 60519.9
Int time 439.269
Amp 1055.931
Phase 149.5
PFD 0.0e+00
Delays (us)
SBD -0.005016
MBD -0.005275
Fringe rate (Hz)
-0.000004
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120841
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)		-5.27543750000E-03				0.00000000000E+00			Resid mbdelay (usec)	-5.27544E-03 +/- 1.8E-08
Sband delay (usec)		-5.01625000000E-03				0.0000000E+00			Resid sbdelay (usec)	-5.01625E-03 +/- 1.4E-07
Phase delay (usec)		4.82079228574E-06				0.0000000E+00			Resid phdelay (usec)	4.82079E-06 +/- 6.1E-11
Delay rate (us/s)		-4.18048995555E-11				0.00000000000E+00			Resid rate (us/s)	-4.18049E-11 +/- 2.4E-13
Total phase (deg)			149.5			0.00000000000E+00			Resid phase (deg)	149.5 +/- 0.0

ph/seg (deg) 0.2 0.0
amp/seg (%) 1.1 0.0
ph/frq (deg) 46.2 0.0
amp/frq (%) 50.5 0.0

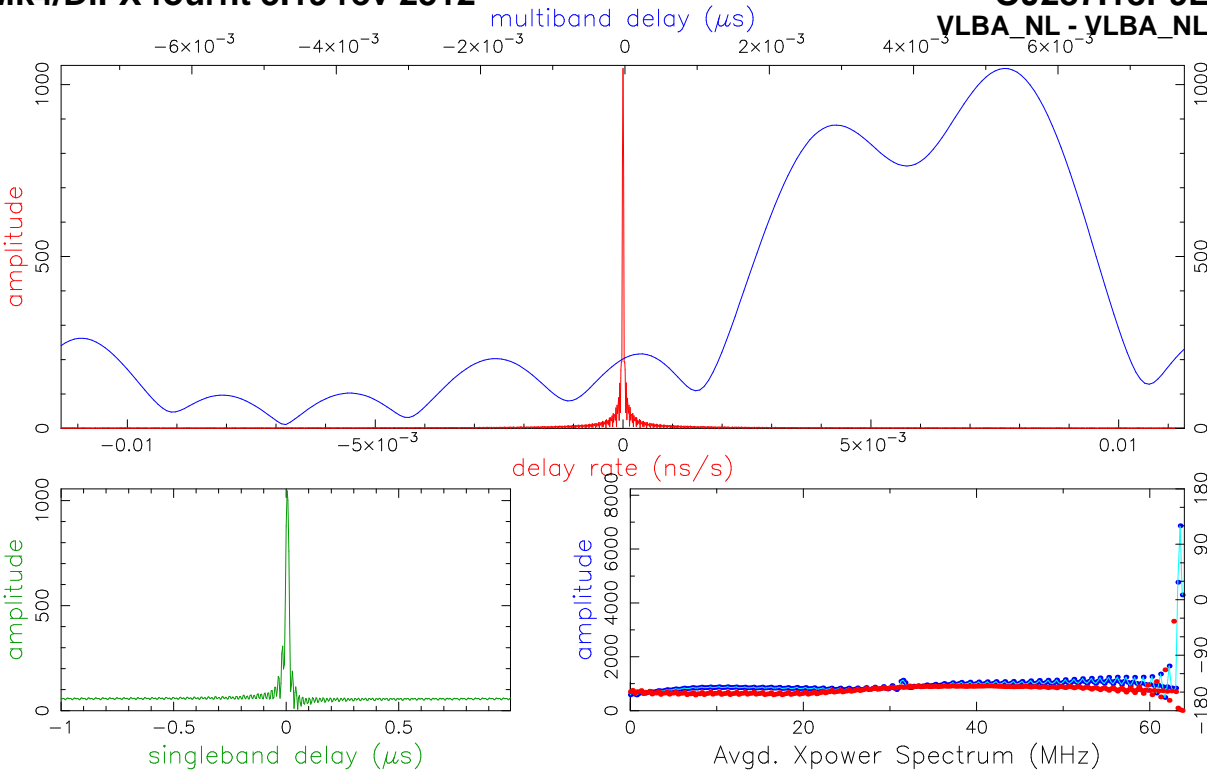
RMS Theor. Amplitude 1055.931 +/- 0.017
Search (2048X32) 1042.685
Interp. 0.000
Inc. seg. avg. 1046.929
Inc. frq. avg. 1295.474

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

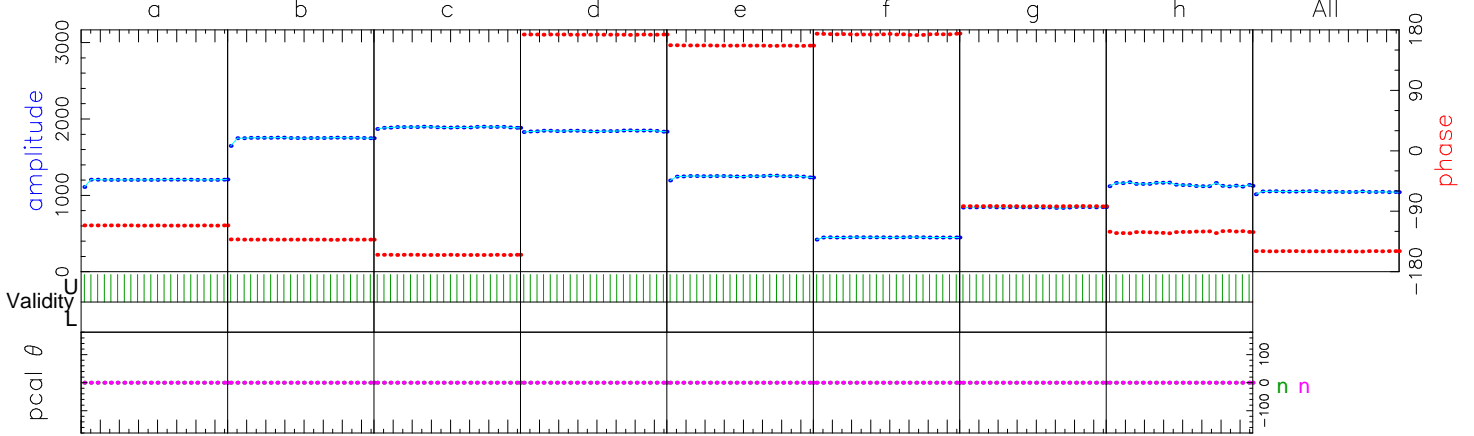
n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 0.000 0.000
n: az 120.0 el 55.9 pa -43.5 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nn.W.206.18P9EC



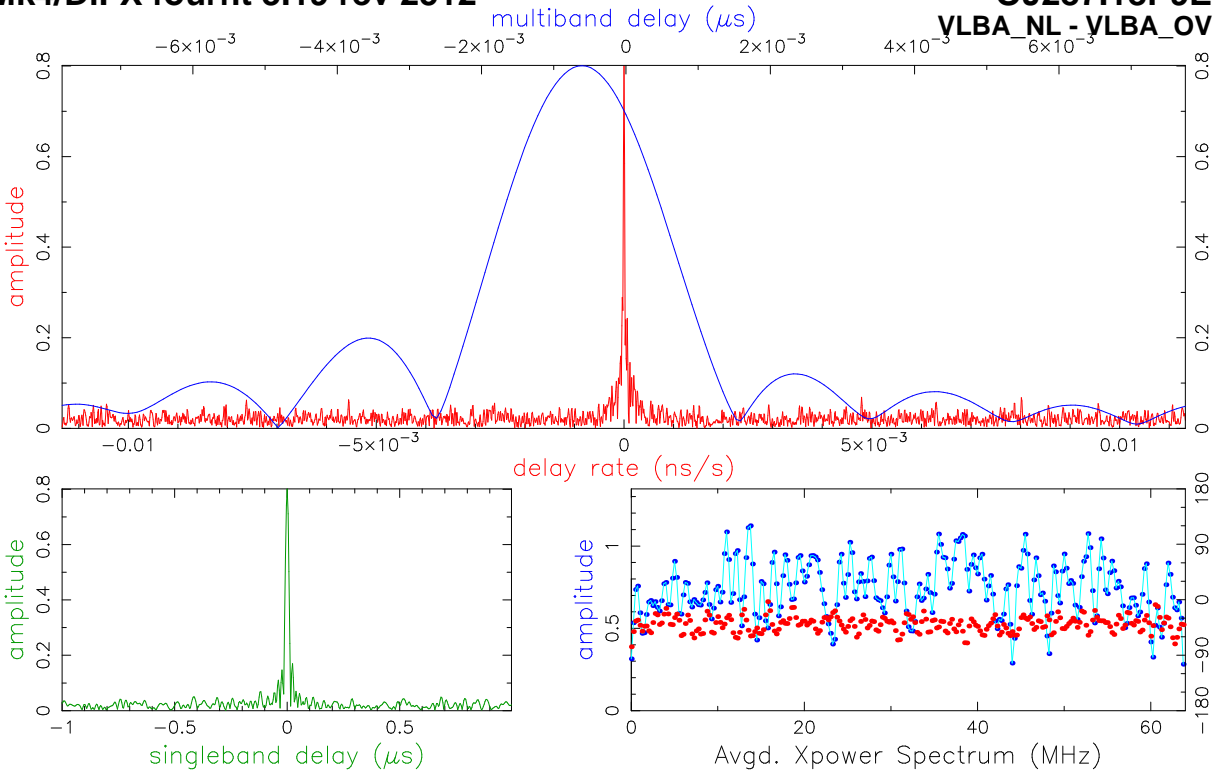
Fringe quality 5
SNR 60519.9
Int time 439.269
Amp 1055.931
Phase -149.5
PFD 0.0e+00
Delays (us)
SBD 0.005016
MBD 0.005275
Fringe rate (Hz)
0.000004
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120845
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
	-111.2	-132.1	-154.9	172.8	156.6	173.3	-82.5	-121.1	Phase	-149.5
	1199.6	1747.4	1891.3	1843.0	1247.9	449.0	843.5	1142.1	Ampl.	1295.5
	257.7	258.1	258.2	258.2	258.0	259.4	258.3	257.2	Sbd box	258.3
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	
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)	5.27543750000E-03		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		5.27544E-03	+/- 1.8E-08
Sband delay (usec)	5.01625000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		5.01625E-03	+/- 1.4E-07
Phase delay (usec)	-4.82079228566E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.82079E-06	+/- 6.1E-11
Delay rate (us/s)	4.18048995555E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		4.18049E-11	+/- 2.4E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-149.5	+/- 0.0

ph/seg (deg) 0.2 0.0 Theor. Amplitude 1055.931 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.1 0.0 Search (2048X32) 1042.685 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.2 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 50.5 0.0 Inc. seg. avg. 1046.929 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 n: az 120.0 el 55.9 pa -43.5 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 0.000 0.000 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

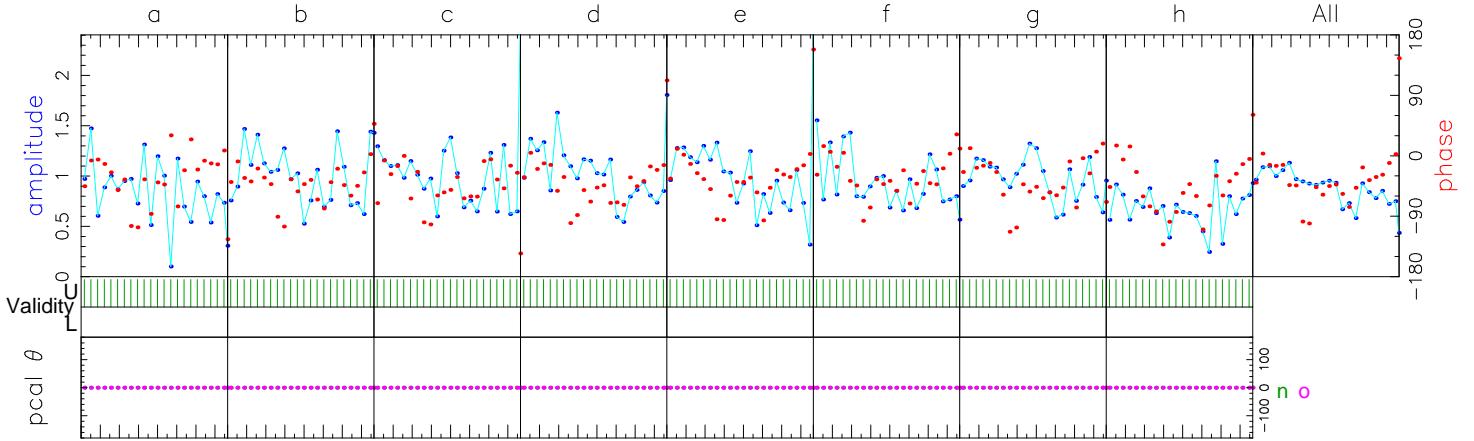


Fringe quality 8

SNR 45.9
 Int time 439.248
 Amp 0.801
 Phase -37.6
 PFD 0.0e+00
 Delays (us)
 SBD -0.000393
 MBD -0.000619
 Fringe rate (Hz)
 -0.000332
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

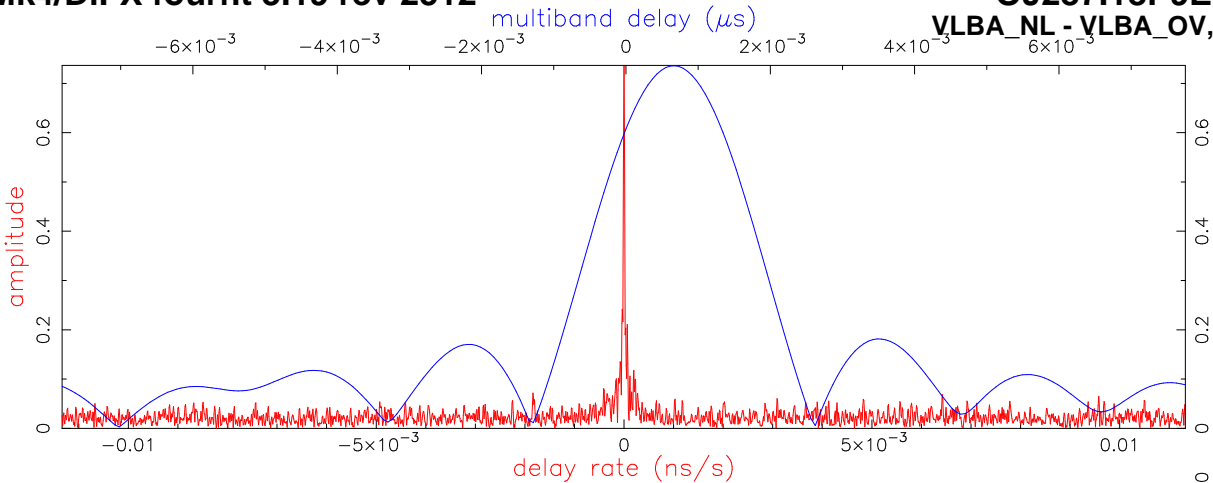
Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120831
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

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



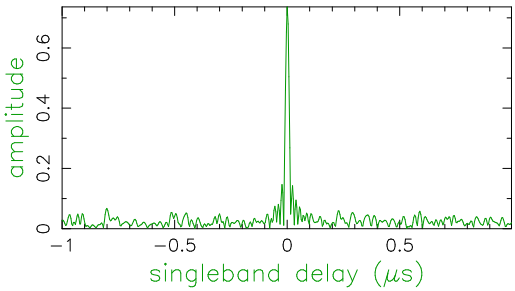
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	4.63441128455E+03		Apriori delay (usec)		4.63441190380E+03		Resid mbdelay (usec)		-6.19250E-04	+/- 2.4E-05
Sband delay (usec)	4.63441151055E+03		Apriori clock (usec)		1.2184303E+01		Resid sbdelay (usec)		-3.93250E-04	+/- 1.9E-04
Phase delay (usec)	4.63441190259E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-1.21374E-06	+/- 8.0E-08
Delay rate (us/s)	-4.27108658538E-01		Apriori rate (us/s)		-4.27108654680E-01		Resid rate (us/s)		-3.85810E-09	+/- 3.2E-10
Total phase (deg)	104.1		Apriori accel (us/s/s)		-2.22197673975E-05		Resid phase (deg)		-37.6	+/- 2.5

ph/seg (deg) 28.0 6.0 Search (2048X32) 0.767 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 21.5 10.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 5.2 3.5 Inc. seg. avg. 0.894 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 14.2 6.2 Inc. frq. avg. 0.801 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 120.0 el 55.9 pa -43.5 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 2565.652 -142.504 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/no..18P9EC Output file: /Exps/c201a/v1/1234/No0027/no.W.167.18P9EC

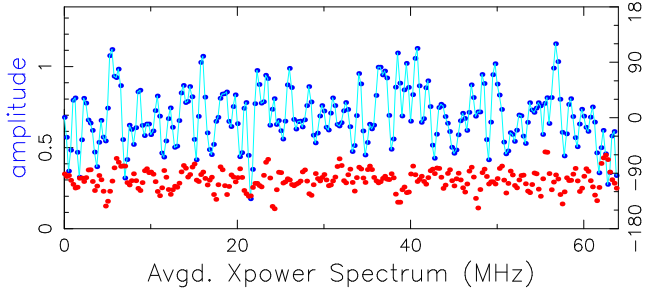


Fringe quality 8

SNR 42.2
 Int time 439.248
 Amp 0.737
 Phase -104.2
 PFD 0.0e+00
 Delays (us)
 SBD 0.000385
 MBD 0.000672
 Fringe rate (Hz)
 -0.000417
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

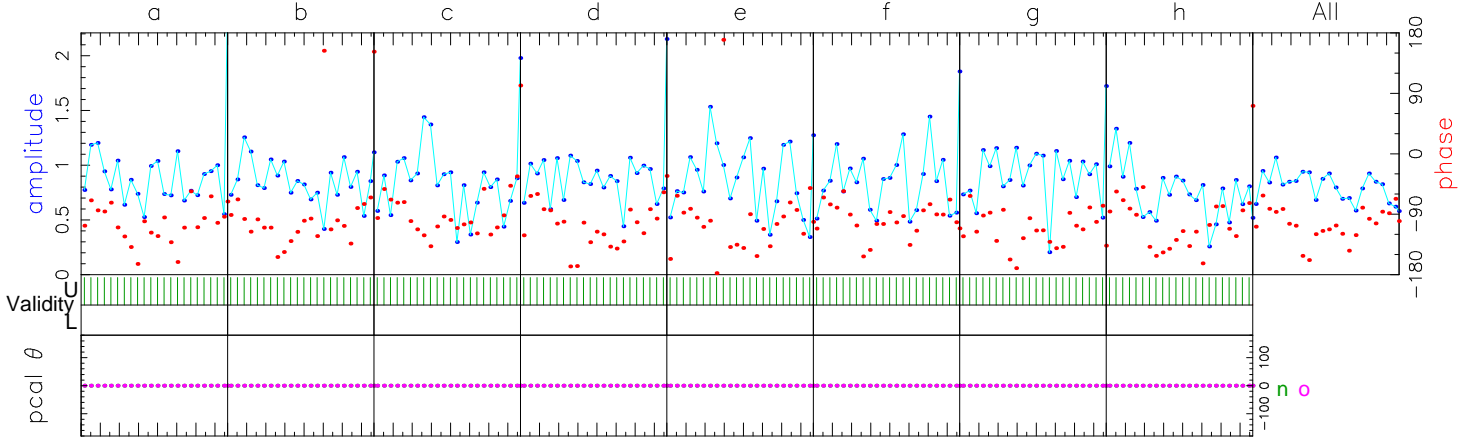


delay rate (ns/s)



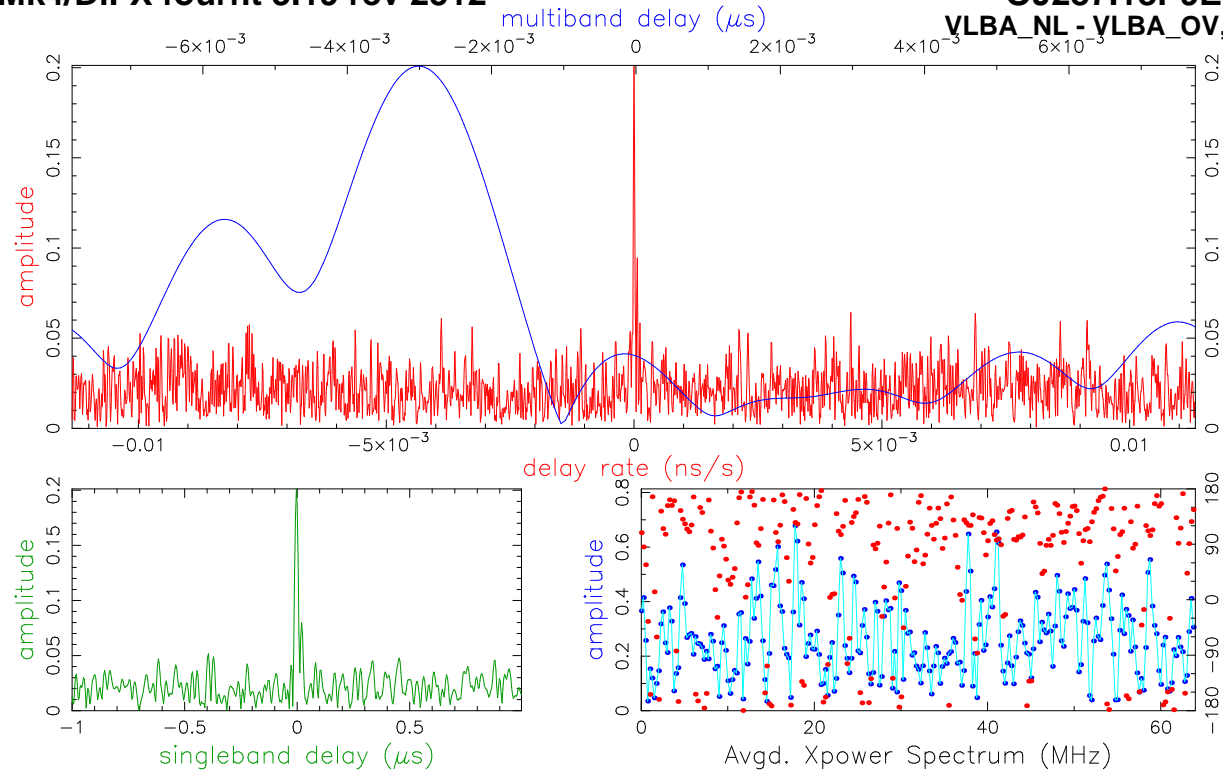
Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120835
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	4.63441257580E+03		Apriori delay (usec)		4.63441190380E+03		Resid mbdelay (usec)		6.72000E-04	+/- 2.6E-05
Sband delay (usec)	4.63441228905E+03		Apriori clock (usec)		1.2184303E+01		Resid sbdelay (usec)		3.85250E-04	+/- 2.0E-04
Phase delay (usec)	4.63441190044E+03		Apriori clockrate (us/s)		1.329997E-07		Resid phdelay (usec)		-3.36126E-06	+/- 8.8E-08
Delay rate (us/s)	-4.27108659518E-01		Apriori rate (us/s)		-4.27108654680E-01		Resid rate (us/s)		-4.83874E-09	+/- 3.4E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.22197673975E-05		Resid phase (deg)		-104.2	+/- 2.7

ph/seg (deg) 24.6 6.5 Amplitude 0.737 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 19.6 11.4 Search (2048X32) 0.689 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 7.5 3.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 6.3 6.7 Inc. seg. avg. 0.805 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 n: az 120.0 el 55.9 pa -43.5 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 2565.652 -142.504 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
 simultaneous interpolator

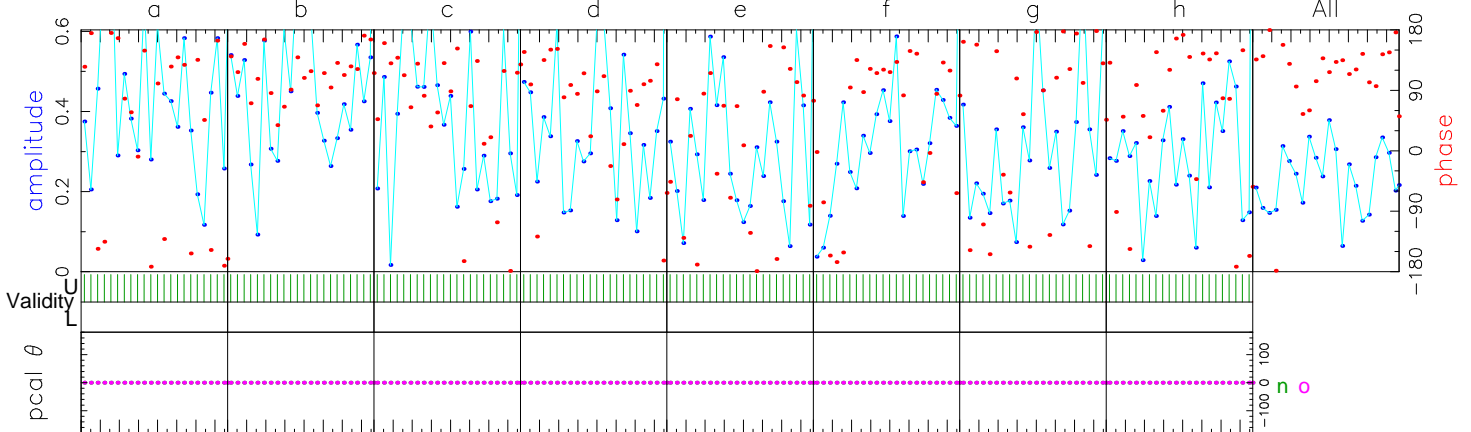


Fringe quality 9

SNR 11.5
 Int time 439.248
 Amp 0.201
 Phase 125.4
 PFD 4.2e-22
 Delays (us)
 SBD -0.003361
 MBD -0.003001
 Fringe rate (Hz)
 -0.000362
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120840
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

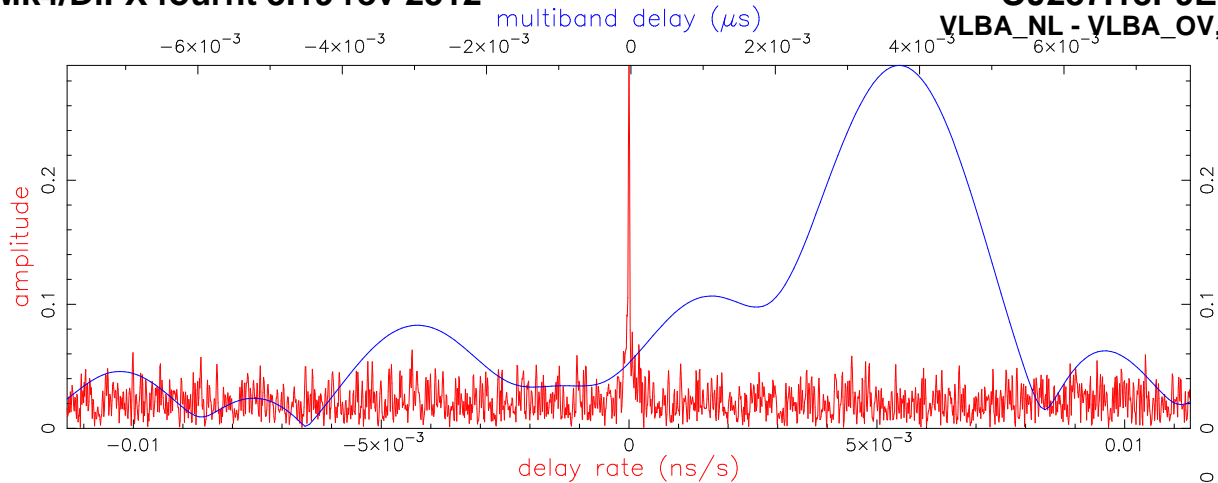
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



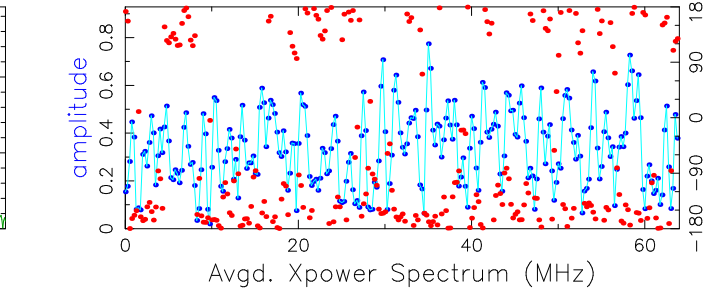
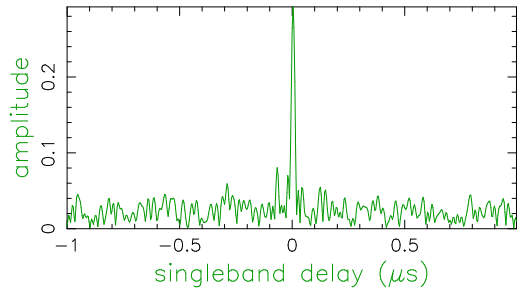
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0				
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used			
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs			
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase			
n:o	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			
o	1000	1000	1000	1000	1000	1000	1000	1000				
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids			
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks			
									Chan ids			
									Tracks			
Group delay (usec)(sbd)	4.63440890315E+03				4.63441190380E+03				Resid mbdelay (usec)	-3.00066E-03 +/- 9.4E-05		
Sband delay (usec)	4.63440854255E+03				1.2184303E+01				Resid sbdelay (usec)	-3.36125E-03 +/- 7.5E-04		
Phase delay (usec)	4.63441190785E+03				1.3299997E-07				Resid phdelay (usec)	4.04438E-06 +/- 3.2E-07		
Delay rate (us/s)	-4.27108658888E-01				-4.27108654680E-01				Resid rate (us/s)	-4.20812E-09 +/- 1.3E-09		
Total phase (deg)			267.1		-2.22197673975E-05				Resid phase (deg)	125.4 +/- 9.9		
	RMS	Theor.	Amplitude	0.201 +/- 0.017					PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
ph/seg (deg)	32.9	23.8	Search (2048X32)	0.192					PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
amp/seg (%)	42.8	41.6	Interp.	0.000					Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
ph/frq (deg)	24.7	14.0	Inc. seg. avg.	0.216					Sample rate(MISamp/s): 128		dr window (ns/s) -0.011 0.011	
amp/frq (%)	39.3	24.5	Inc. frq. avg.	0.209					Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC) 0.00 0.00

n: az 120.0 el 55.9 pa -43.5 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 2565.652 -142.504 simultaneous interpolator

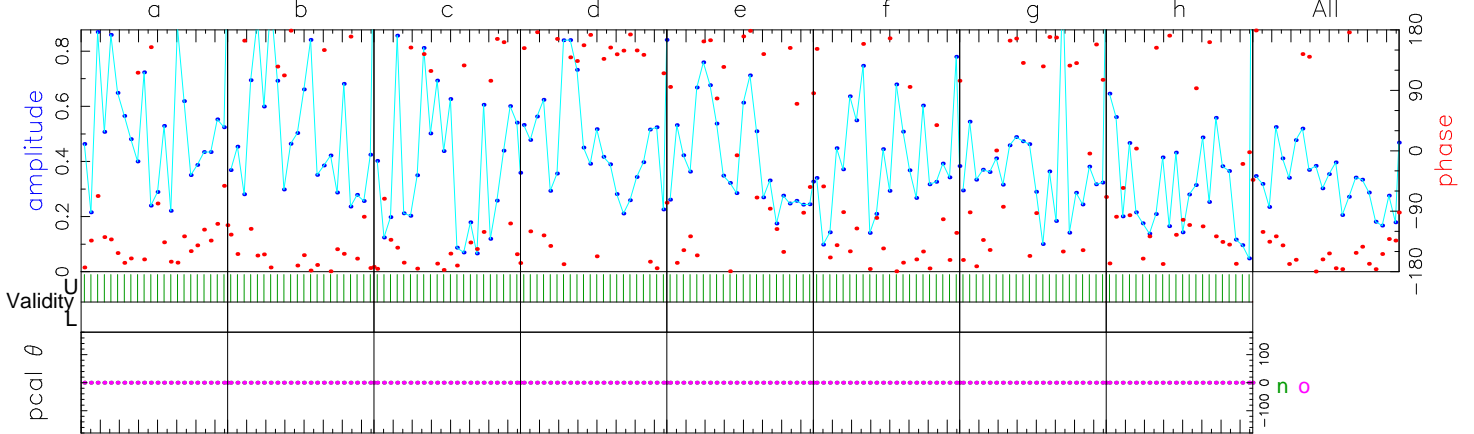
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/no..18P9EC Output file: /Exps/c201a/v1/1234/No0027/no.W.202.18P9EC



Fringe quality 9
 SNR 16.8
 Int time 439.248
 Amp 0.292
 Phase -162.6
 PFD 0.0e+00
 Delays (us)
 SBD 0.003954
 MBD 0.003718
 Fringe rate (Hz) -0.000457
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120844
 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



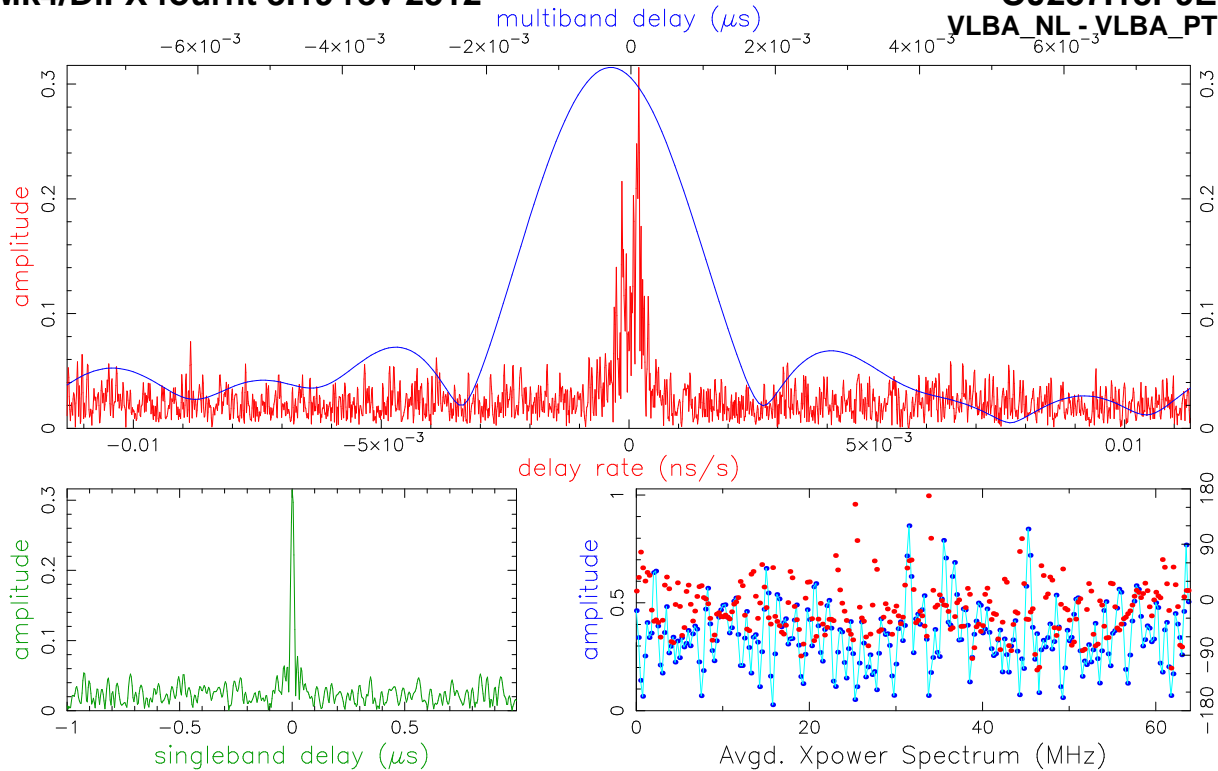
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.0	-167.9	-167.4	170.7	-175.7	-155.5	-165.9	-133.1	Phase	-162.6
	0.4	0.4	0.3	0.4	0.2	0.3	0.2	0.2	Ampl.	0.3
	257.6	258.0	258.2	257.9	258.1	257.9	258.1	257.5	Sbd box	258.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:o	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	
o	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	4.63441562162E+03		Apriori delay (usec)		4.63441190380E+03		Resid mbdelay (usec)		3.71781E-03	+/- 6.5E-05
Sband delay (usec)	4.63441585830E+03		Apriori clock (usec)		1.2184303E+01		Resid sbdelay (usec)		3.95450E-03	+/- 5.1E-04
Phase delay (usec)	4.63441189856E+03		Apriori clockrate (us/s)		1.3299997E-07		Resid phdelay (usec)		-5.24269E-06	+/- 2.2E-07
Delay rate (us/s)	-4.27108659987E-01		Apriori rate (us/s)		-4.27108654680E-01		Resid rate (us/s)		-5.30781E-09	+/- 8.7E-10
Total phase (deg)			Apriori accel (us/s/s)		-2.22197673975E-05		Resid phase (deg)		-162.6	+/- 6.8

	RMS	Theor.	Amplitude	0.292 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	25.8	16.4	Search (2048X32)	0.272	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	36.1	28.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	20.3	9.7	Inc. seg. avg.	0.316	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	30.2	16.9	Inc. frq. avg.	0.303	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 120.0 el 55.9 pa -43.5 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 2565.652 -142.504 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/no..18P9EC Output file: /Exps/c201a/v1/1234/No0027/no.W.223.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, np
VLBA_NL - VLBA_PT, fgroup W, pol LL

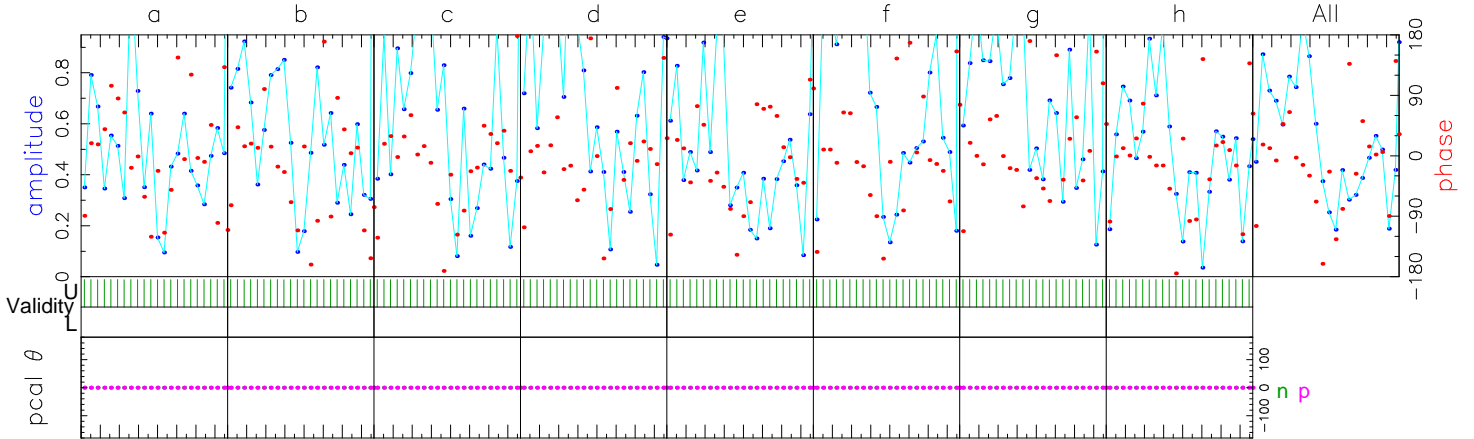


Fringe quality 9

SNR 18.1
Int time 438.238
Amp 0.316
Phase -3.2
PFD 0.0e+00
Delays (us)
SBD 0.000894
MBD -0.000258
Fringe rate (Hz) 0.016917
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

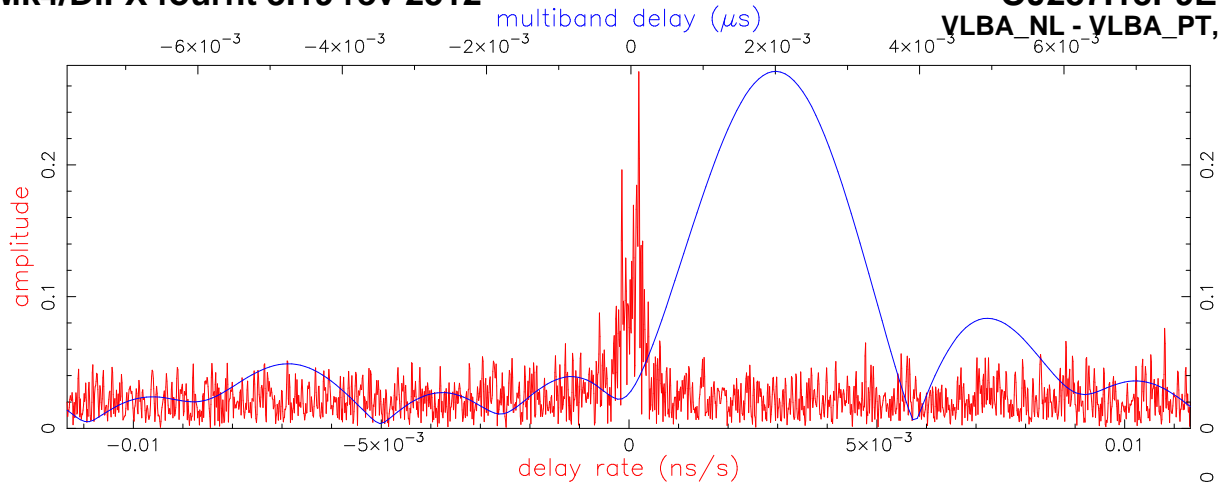
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120831
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



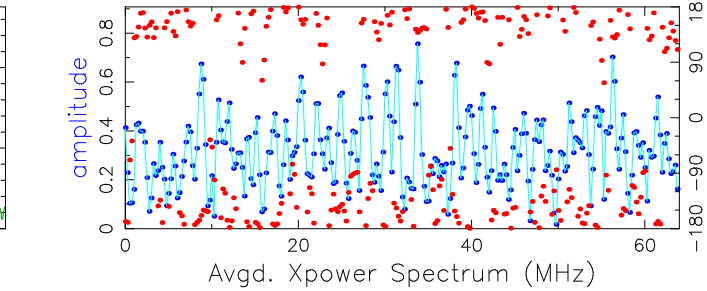
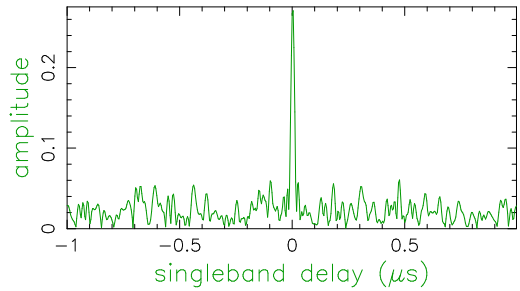
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)	2.31454220318E+03		Apriori delay (usec)		2.31454246135E+03		Resid mbdelay (usec)		-2.58178E-04	+/- 6.0E-05
Sband delay (usec)	2.31454335560E+03		Apriori clock (usec)		1.4992254E+01		Resid sbdelay (usec)		8.94250E-04	+/- 4.8E-04
Phase delay (usec)	2.31454246125E+03		Apriori clockrate (us/s)		1.3011340E-07		Resid phdelay (usec)		-1.01902E-07	+/- 2.0E-07
Delay rate (us/s)	-3.30989634239E-01		Apriori rate (us/s)		-3.30989830633E-01		Resid rate (us/s)		1.96394E-07	+/- 8.0E-10
Total phase (deg)	220.4		Apriori accel (us/s/s)		-8.26989987725E-06		Resid phase (deg)		-3.2	+/- 6.3

ph/seg (deg) 74.0 15.2 Search (2048X32) 0.306 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 99.4 26.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.0 9.0 Inc. seg. avg. 0.515 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 23.9 15.6 Inc. frq. avg. 0.312 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 120.0 el 55.9 pa -43.5 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 2002.434 604.707 ion window (TEC) 0.00 0.00 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/np..18P9EC Output file: /Exps/c201a/v1/1234/No0027/np.W.168.18P9EC



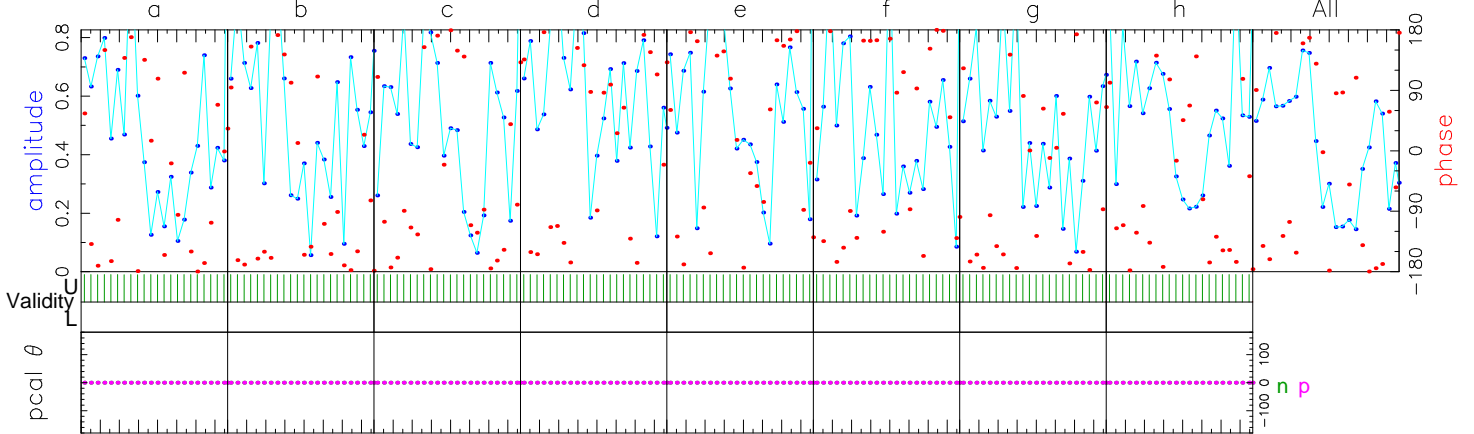
Fringe quality 9

SNR 15.8
Int time 438.239
Amp 0.276
Phase -172.4
PFD 0.0e+00
Delays (us)
SBD 0.002237
MBD 0.001950
Fringe rate (Hz)
0.017045
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120836
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

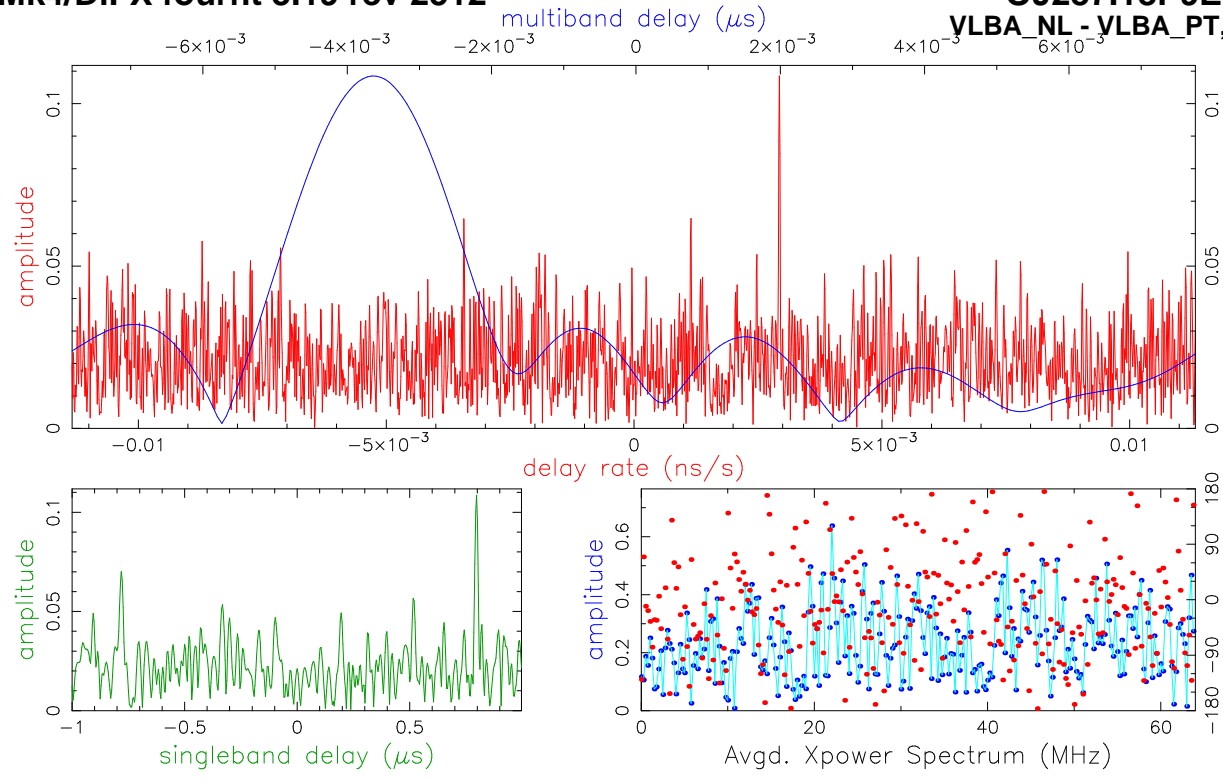
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	175.3	-172.2	-155.3	178.6	177.7	-177.9	-165.5	-160.9		
Sband delay (usec)	0.2	0.3	0.3	0.3	0.3	0.3	0.2	0.2		
Phase delay (usec)	255.8	257.4	257.9	258.0	257.3	257.3	257.6	258.0		
Delay rate (us/s)		-3.30989632759E-01				-3.30989830633E-01				
Total phase (deg)			51.1							
Apriori delay (usec)					2.31454246135E+03					
Apriori clock (usec)					1.4992254E+01					
Apriori clockrate (us/s)					1.3011340E-07					
Apriori rate (us/s)					-3.30989830633E-01					
Apriori accel (us/s/s)					-8.26989987725E-06					
Resid mbdelay (usec)							1.94976E-03			+/- 6.9E-05
Resid sbdelay (usec)							2.23675E-03			+/- 5.5E-04
Resid phdelay (usec)							-5.56031E-06			+/- 2.3E-07
Resid rate (us/s)							1.97874E-07			+/- 9.2E-10
Resid phase (deg)							-172.4			+/- 7.3
PCal mode:	MANUAL, MANUAL		PC period (AP's) 5, 5							
PCal rate:	0.000E+00, 0.000E+00 (us/s)		sb window (us)		-1.000		1.000			
Bits/sample:	2x2		SampCntNorm: enabled		mb window (us)		-0.008		0.008	
Sample rate (MSamp/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	
n:	az 120.0	el 55.9	pa -43.5	p:	az 96.0	el 45.7	pa -60.9	u,v (fr/asec)	2002.434	604.707
Control file:	cf_1234_gmva		Input file:		/Exps/c201a/v1/1234/No0027/np..18P9EC		Output file:		/Exps/c201a/v1/1234/No0027/np.W.185.18P9EC	

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, np
VLBA_NL - VLBA_PT, fgroup W, pol LR

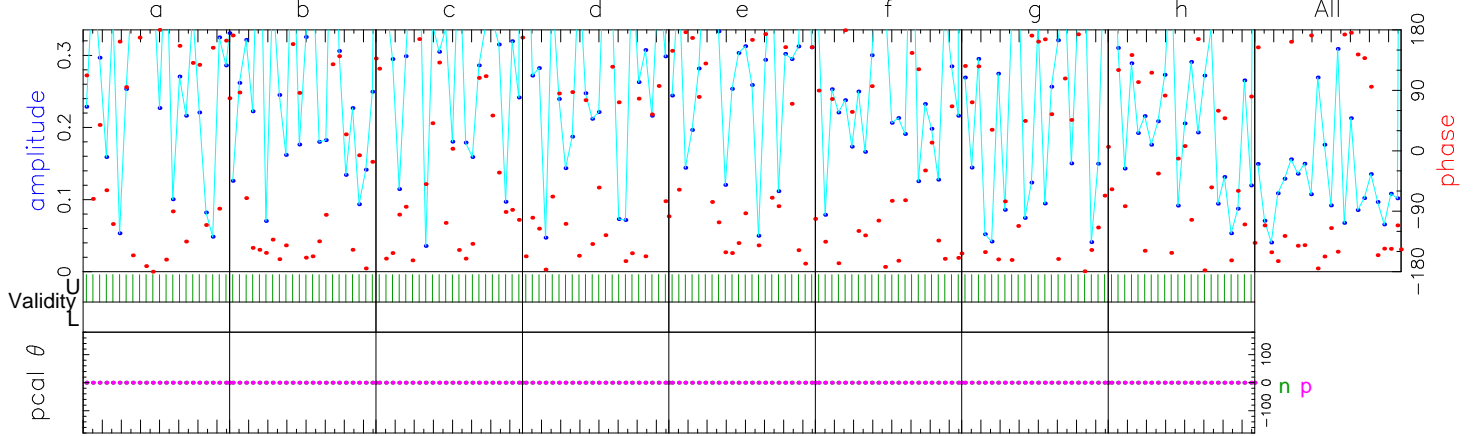


Fringe quality 0

SNR 6.2
Int time 438.239
Amp 0.112
Phase -166.2
PFD 1.2e-01
Delays (us)
SBD 0.796369
MBD -0.003648
Fringe rate (Hz)
0.253411
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

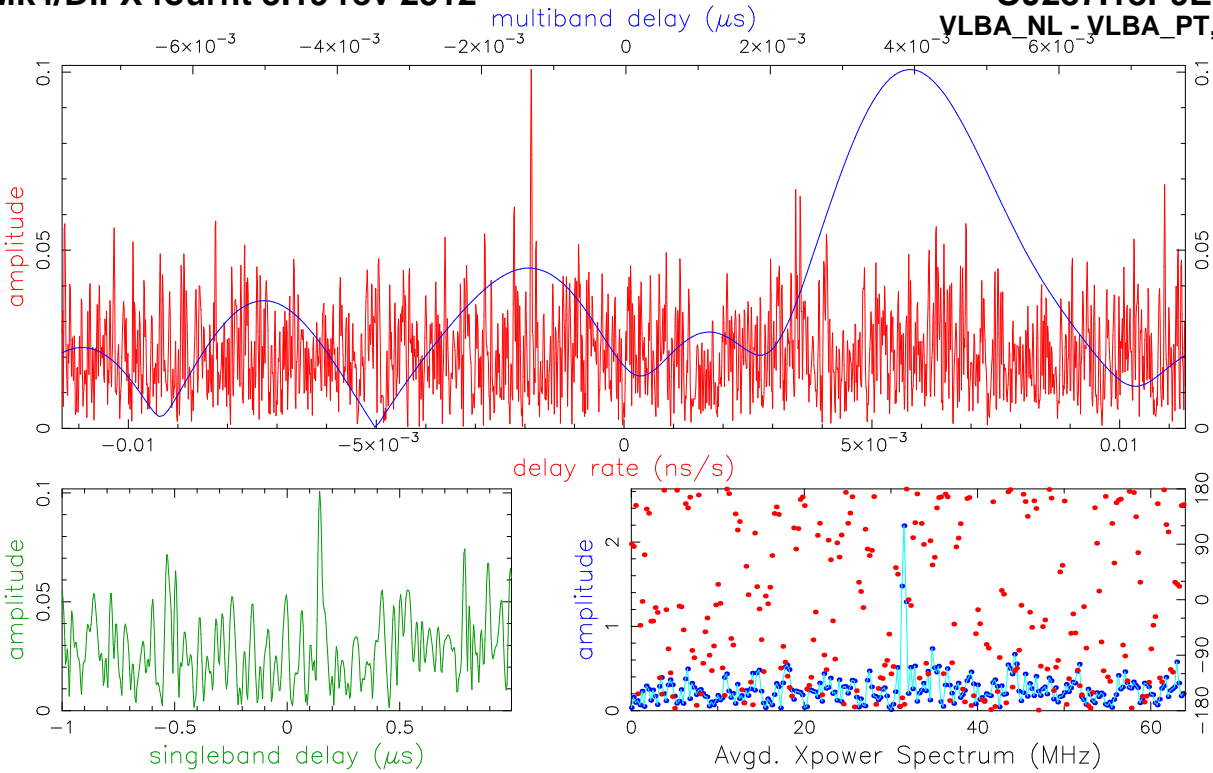
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120841
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



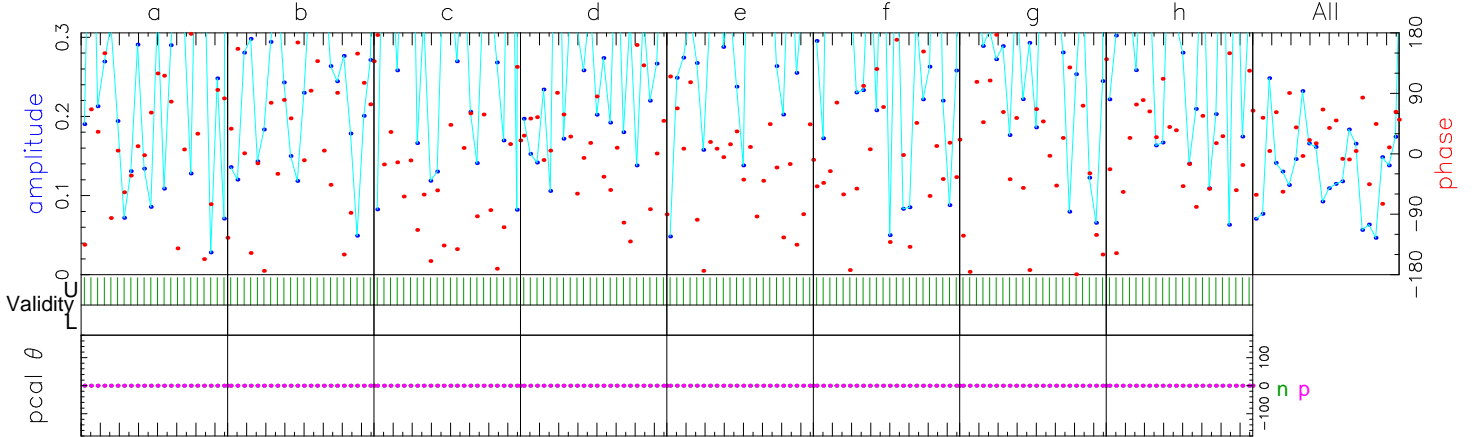
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)		2.31533568852E+03			2.31454246135E+03				Resid mbdelay (usec)	-3.64784E-03 +/- 1.7E-04
Sband delay (usec)		2.31533883035E+03			1.4992254E+01				Resid sbdelay (usec)	7.96369E-01 +/- 1.4E-03
Phase delay (usec)		2.31454245599E+03			1.3011340E-07				Resid phdelay (usec)	-5.36023E-06 +/- 5.9E-07
Delay rate (us/s)		-3.30986888782E-01			-3.30989830633E-01				Resid rate (us/s)	2.94185E-06 +/- 2.3E-09
Total phase (deg)			57.3		-8.26989987725E-06				Resid phase (deg)	-166.2 +/- 18.4

ph/seg (deg) 38.4 44.1 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.8 77.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 17.8 26.0 Inc. seg. avg. 0.104 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 35.0 45.4 Inc. frq. avg. 0.103 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 120.0 el 55.9 pa -43.5 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 2002.434 604.707 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/np..18P9EC Output file: /Exps/c201a/v1/1234/No0027/np.W.207.18P9EC



Fringe quality 0
SNR 5.8
Int time 438.238
Amp 0.102
Phase 16.3
PFD 8.7e-01
Delays (us)
SBD 0.144729
MBD 0.003949
Fringe rate (Hz)
-0.161218
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120845
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

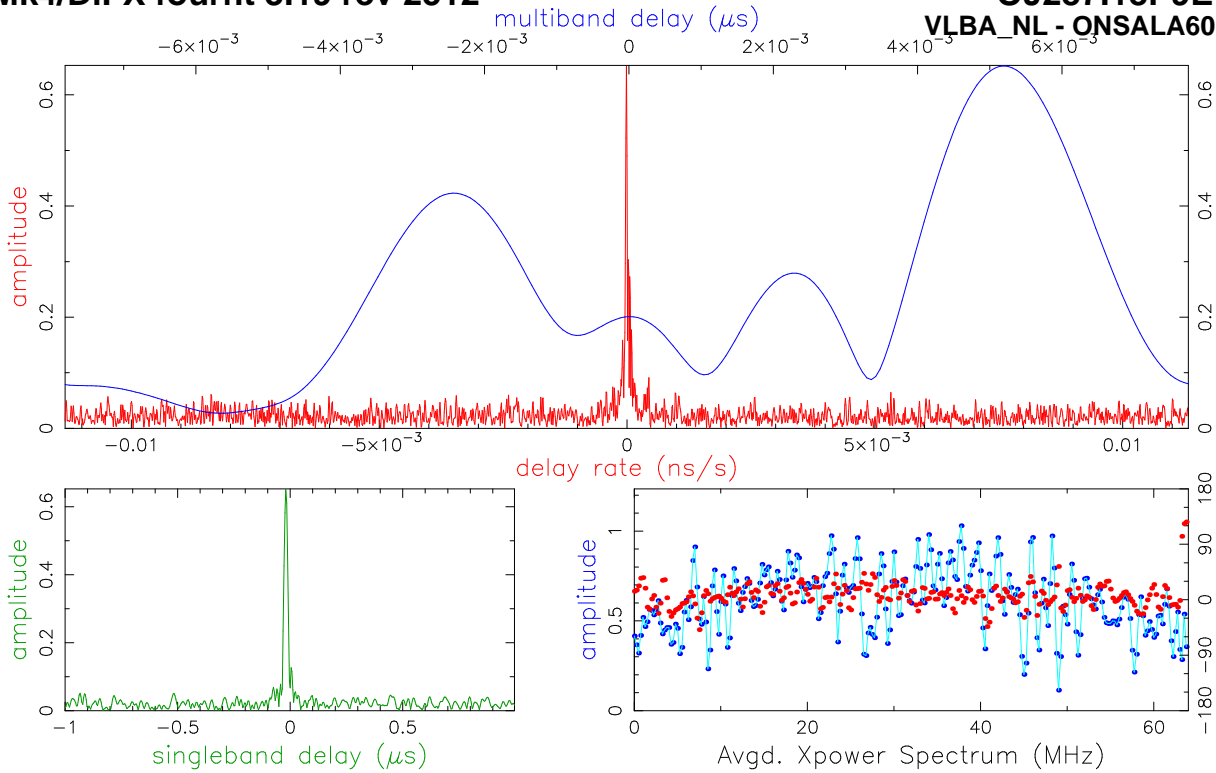


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
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)		2.31468703558E+03				2.31454246135E+03			3.94923E-03	+/- 1.9E-04
Sband delay (usec)		2.31468719085E+03				1.4992254E+01			1.44729E-01	+/- 1.5E-03
Phase delay (usec)		2.31454246188E+03				1.3011340E-07			5.24526E-07	+/- 6.4E-07
Delay rate (us/s)		-3.30991702215E-01				-3.30989830633E-01			-1.87158E-06	+/- 2.5E-09
Total phase (deg)			239.8			-8.26989987725E-06			16.3	+/- 19.9
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)									-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

ph/seg (deg) 45.8 47.7 Search (2048X32) 0.102 +/- 0.018 PCal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 60.5 83.2 Interp. 0.000 PCal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.3 28.1 Inc. seg. avg. 0.099 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 46.4 49.0 Inc. frq. avg. 0.103 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 120.0 el 55.9 pa -43.5 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 2002.434 604.707 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/np..18P9EC Output file: /Exps/c201a/v1/1234/No0027/np.W.227.18P9EC

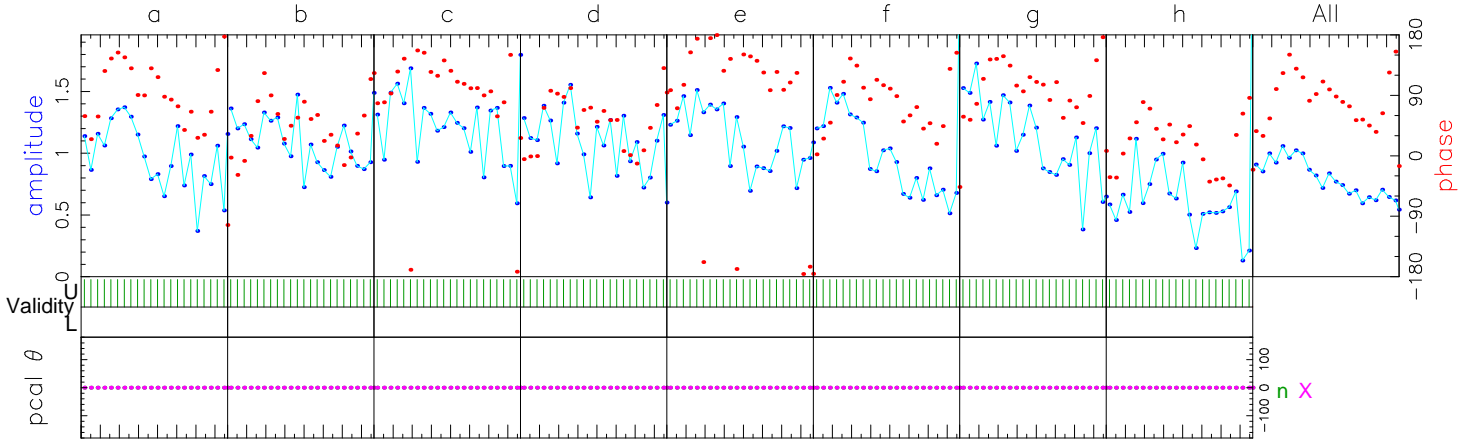
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, nX
VLBA_NL - ONSALA60, fgroup W, pol LL



Fringe quality 5
 SNR 37.4
 Int time 439.116
 Amp 0.653
 Phase 87.8
 PFD 0.0e+00
 Delays (us)
 SBD -0.018985
 MBD 0.005206
 Fringe rate (Hz)
 -0.001121
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120832
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

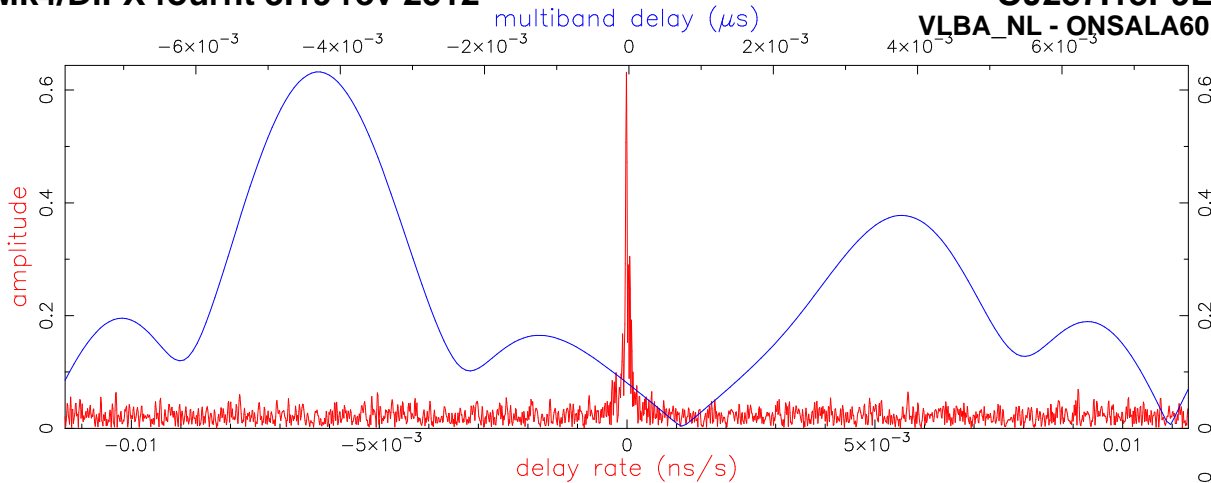
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	8.57829011589E+03		Apriori delay (usec)		8.57831615994E+03		Resid mbdelay (usec)		5.20594E-03	+/- 2.9E-05
Sband delay (usec)	8.57829717494E+03		Apriori clock (usec)		-8.4563599E+00		Resid sbdelay (usec)		-1.89850E-02	+/- 2.3E-04
Phase delay (usec)	8.57831616277E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		2.82978E-06	+/- 9.9E-08
Delay rate (us/s)	1.29894732962E+00		Apriori rate (us/s)		1.29894734264E+00		Resid rate (us/s)		-1.30183E-08	+/- 3.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-5.24825293689E-05		Resid phase (deg)		87.8	+/- 3.1

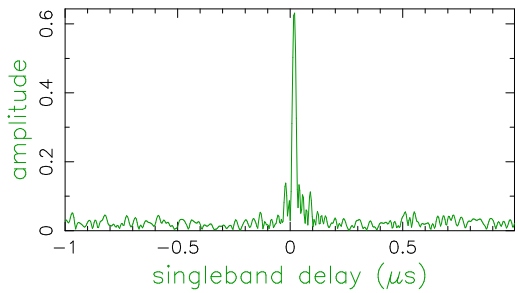
	RMS	Theor.	Amplitude	0.653 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	36.6	7.3	Search (2048X32)	0.641	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	32.0	12.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	45.2	4.3	Inc. seg. avg.	0.797	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	33.6	7.6	Inc. frq. avg.	0.810	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

n: az 120.0 el 55.9 pa -43.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -8002.179 -2929.213 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nX.W.171.18P9EC

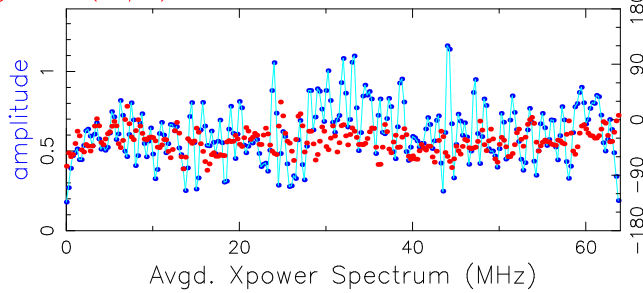


Fringe quality 5

SNR 36.9
 Int time 439.116
 Amp 0.644
 Phase -139.8
 PFD 0.0e+00
 Delays (us)
 SBD 0.017804
 MBD -0.004361
 Fringe rate (Hz)
 -0.001142
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

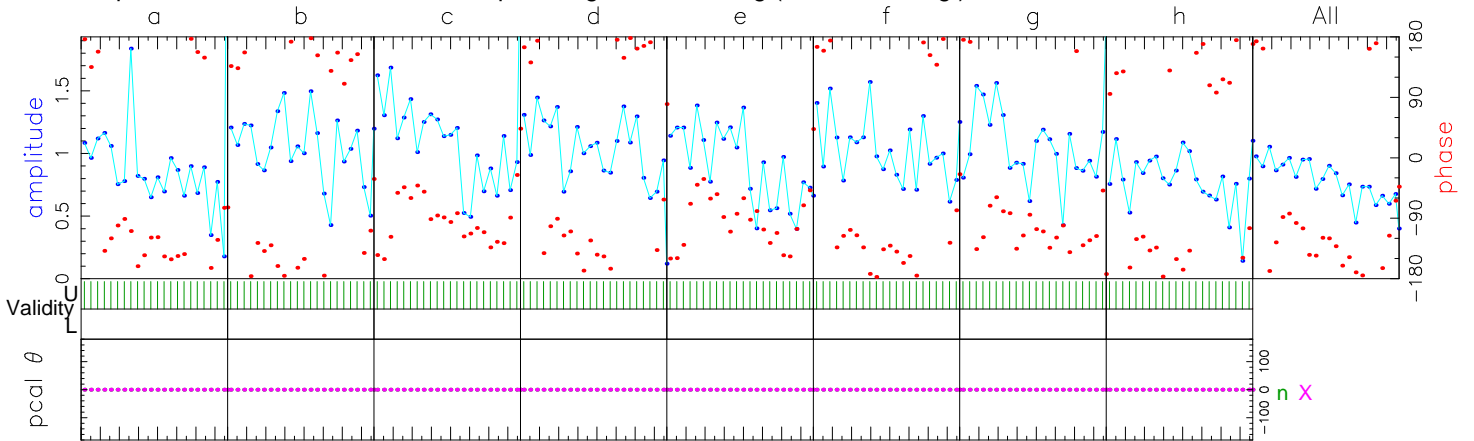


delay rate (ns/s)



Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120838
 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



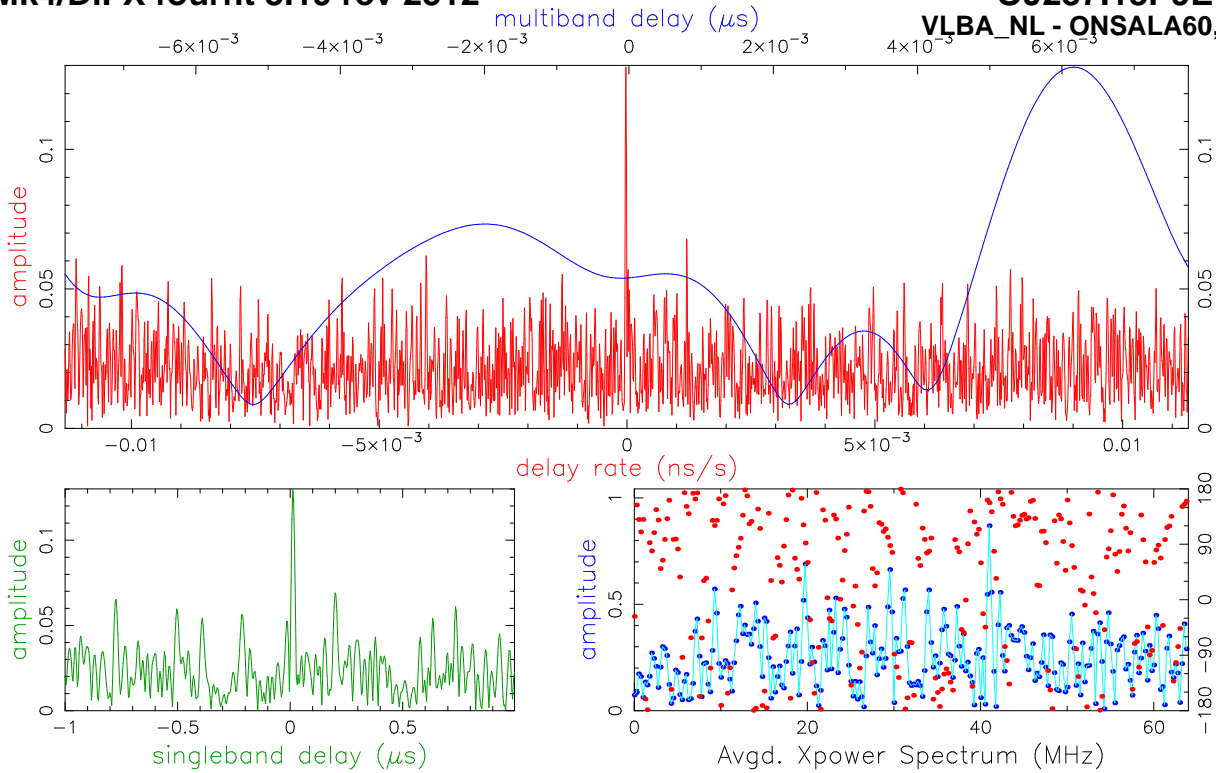
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-148.6	176.7	-92.6	-157.9	-91.0	-158.6	-114.2	177.7	Phase	-139.8
	0.7	0.9	0.9	0.8	0.7	0.8	0.8	0.5	Ampl.	0.8
	261.2	261.5	261.4	261.1	260.6	261.2	260.7	259.8	Sbd box	261.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	8.57832742348E+03		Apriori delay (usec)		8.57831615994E+03		Resid mbdelay (usec)		-4.36146E-03	+/- 2.9E-05
Sband delay (usec)	8.57833396419E+03		Apriori clock (usec)		-8.4563599E+00		Resid sbdelay (usec)		1.78043E-02	+/- 2.3E-04
Phase delay (usec)	8.57831615543E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-4.50967E-06	+/- 1.0E-07
Delay rate (us/s)	1.29894732939E+00		Apriori rate (us/s)		1.29894734264E+00		Resid rate (us/s)		-1.32522E-08	+/- 3.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-5.24825293689E-05		Resid phase (deg)		-139.8	+/- 3.1

	RMS	Theor.	Amplitude	0.644 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	38.2	7.4	Search (2048X32)	0.624	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	33.1	13.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	40.3	4.4	Inc. seg. avg.	0.789	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	26.4	7.7	Inc. frq. avg.	0.764	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

n: az 120.0 el 55.9 pa -43.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -8002.179 -2929.213 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nX.W.194.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, nX
VLBA_NL - ONSALA60, fgroup W, pol LR

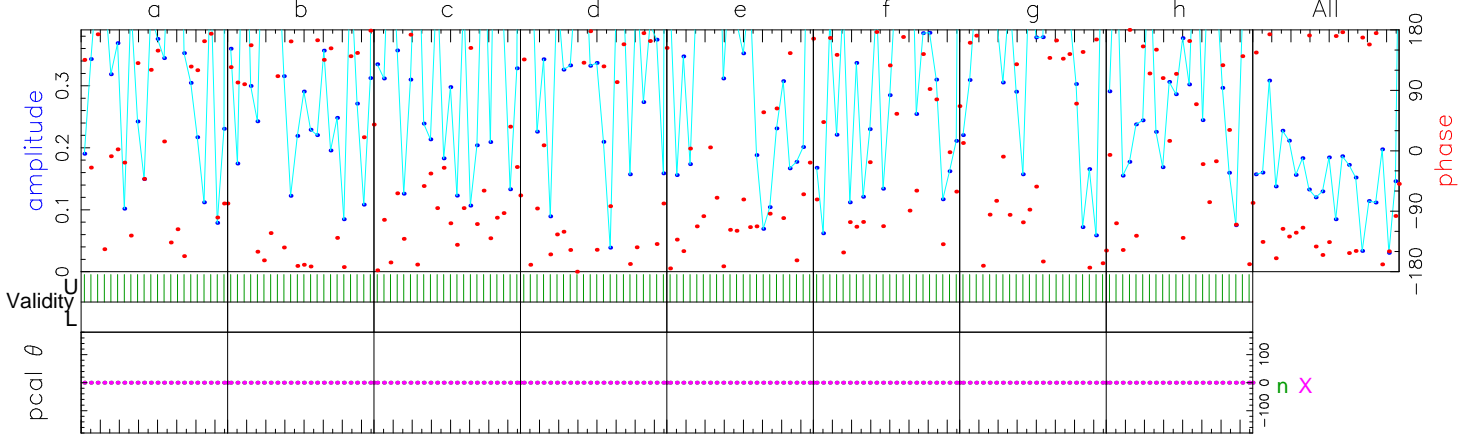


Fringe quality 9

SNR 7.5
Int time 439.116
Amp 0.130
Phase -154.4
PFD 2.9e-05
Delays (us)
SBD 0.012583
MBD 0.006177
Fringe rate (Hz)
-0.001436
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

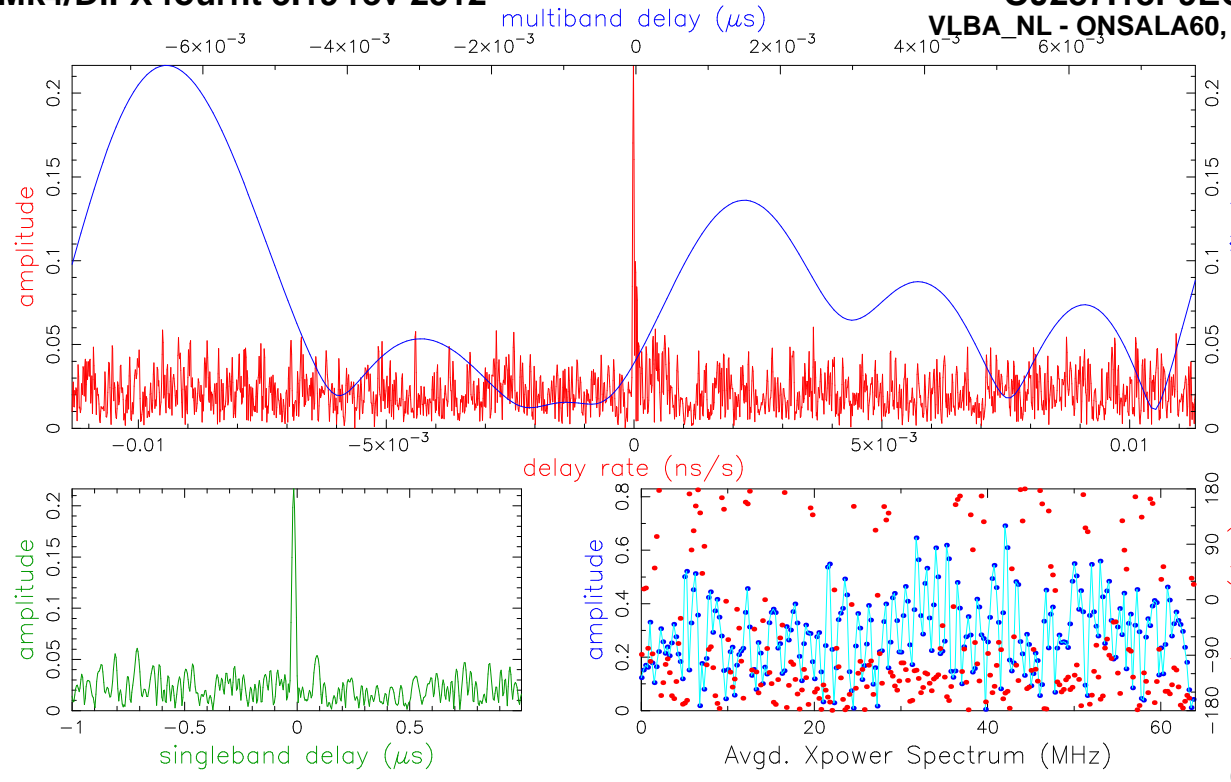
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120843
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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
	-154.9	166.4	-103.7	-177.4	-94.7	-166.6	-169.1	164.6	Phase	-154.4
	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.1	Ampl.	0.2
	85.7	259.7	260.2	259.4	260.3	129.4	259.1	285.3	Sbd box	260.2
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)	8.57832233707E+03		Apriori delay (usec)		8.57831615994E+03		Resid mbdelay (usec)		6.17713E-03	+/- 1.5E-04
Sband delay (usec)	8.57832874244E+03		Apriori clock (usec)		-8.4563599E+00		Resid sbdelay (usec)		1.25825E-02	+/- 1.2E-03
Phase delay (usec)	8.57831615496E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		-4.98052E-06	+/- 5.0E-07
Delay rate (us/s)	1.29894732597E+00		Apriori rate (us/s)		1.29894734264E+00		Resid rate (us/s)		-1.66738E-08	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.24825293689E-05		Resid phase (deg)		-154.4	+/- 15.4

ph/seg (deg) 31.5 36.9 Search (2048X32) 0.121 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 50.3 64.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 41.3 21.7 Inc. seg. avg. 0.126 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.3 37.9 Inc. frq. avg. 0.152 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 120.0 el 55.9 pa -43.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -8002.179 -2929.213 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nX.W.217.18P9EC

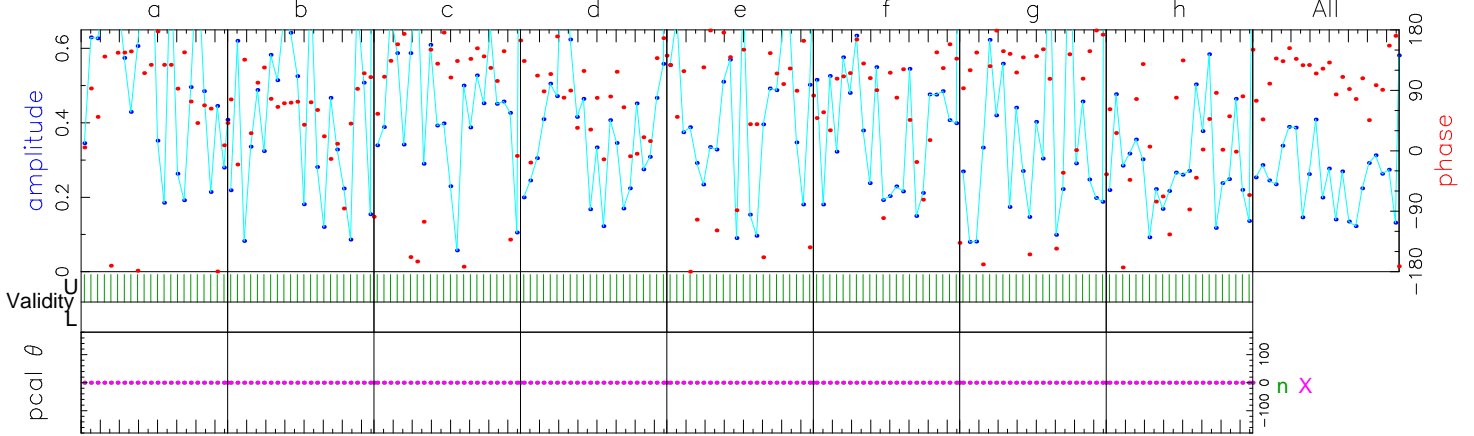


Fringe quality 9

SNR 12.4
Int time 439.116
Amp 0.217
Phase 113.2
PFD 1.2e-26
Delays (us)
SBD -0.015593
MBD -0.006506
Fringe rate (Hz)
-0.001417
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224500.00
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120847
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

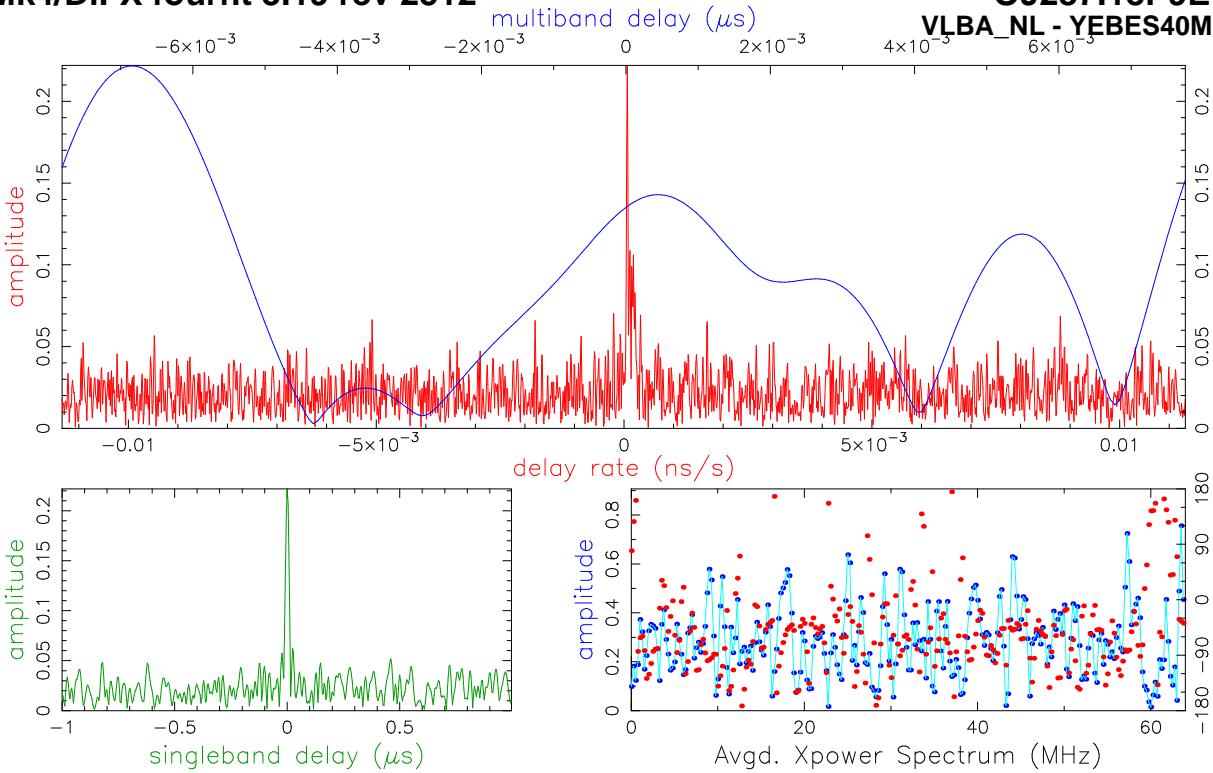


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All		
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0				
n	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
n:X	0:0	0:0	0:0	0:0	0:0	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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)	8.57829402926E+03		Apriori delay (usec)		8.57831615994E+03		Resid mbdelay (usec)		-6.50568E-03	+/- 8.7E-05		
Sband delay (usec)	8.57830056669E+03		Apriori clock (usec)		-8.4563599E+00		Resid sbdelay (usec)		-1.55933E-02	+/- 6.9E-04		
Phase delay (usec)	8.57831616359E+03		Apriori clockrate (us/s)		-1.9400004E-07		Resid phdelay (usec)		3.64998E-06	+/- 3.0E-07		
Delay rate (us/s)	1.29894732618E+00		Apriori rate (us/s)		1.29894734264E+00		Resid rate (us/s)		-1.64555E-08	+/- 1.2E-09		
Total phase (deg)			119.5		Apriori accel (us/s/s)		-5.24825293689E-05		Resid phase (deg)		113.2	+/- 9.2

	RMS	Theor.	Amplitude	0.217 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	32.6	22.1	Search (2048X32)	0.201	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	42.2	38.6	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	49.5	13.1	Inc. seg. avg.	0.237	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	38.9	22.8	Inc. frq. avg.	0.258	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

n: az 120.0 el 55.9 pa -43.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -8002.179 -2929.213 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nX.W.233.18P9EC

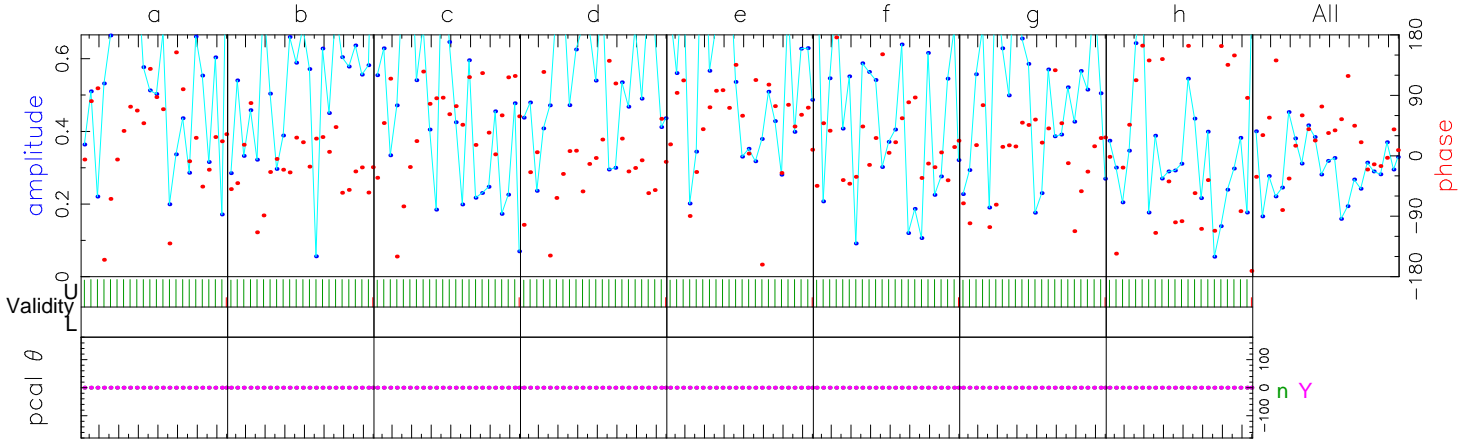


Fringe quality 9

SNR 12.6
Int time 433.686
Amp 0.222
Phase 20.0
PFD 6.8e-28
Delays (us)
SBD 0.000496
MBD -0.006844
Fringe rate (Hz)
0.005889
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

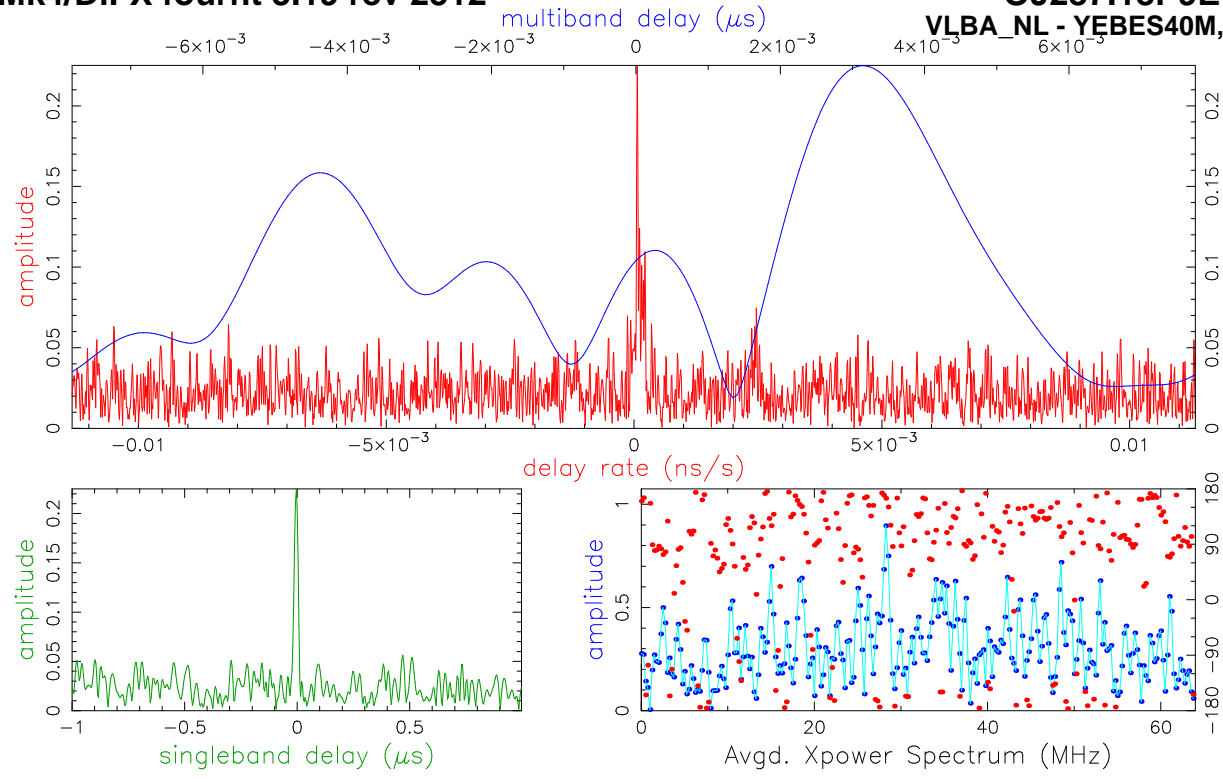
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224505.12
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120832
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



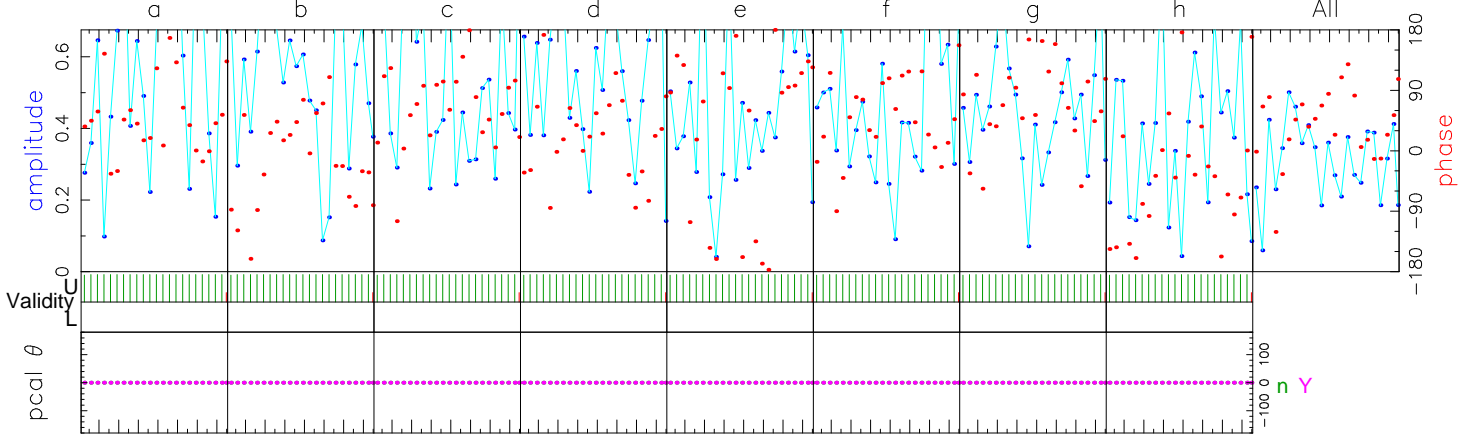
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.12182931945E+03			5.12183616335E+03				-6.84390E-03	+/- 8.6E-05
Sband delay (usec)		5.12183665960E+03			2.0293976E+01				4.96250E-04	+/- 6.8E-04
Phase delay (usec)		5.12183616399E+03			1.1399998E-07				6.44800E-07	+/- 2.9E-07
Delay rate (us/s)		1.49024992482E+00			1.49024985646E+00				6.83673E-08	+/- 1.2E-09
Total phase (deg)			59.9		-2.64965587409E-05				20.0	+/- 9.1
pcal mode:					MANUAL, MANUAL					PC period (AP's) 5, 5
pcal rate:					0.000E+00, 0.000E+00 (us/s)					sb window (us) -1.000 1.000
Bits/sample:					2x2					mb window (us) -0.008 0.008
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) 49.1 21.7 Search (2048X32) 0.219 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 49.4 37.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 81.7 12.8 Inc. seg. avg. 0.280 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 53.9 22.4 Inc. frq. avg. 0.283 Sample rate (MSamp/s): 128 Data rate (Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.172.18P9EC



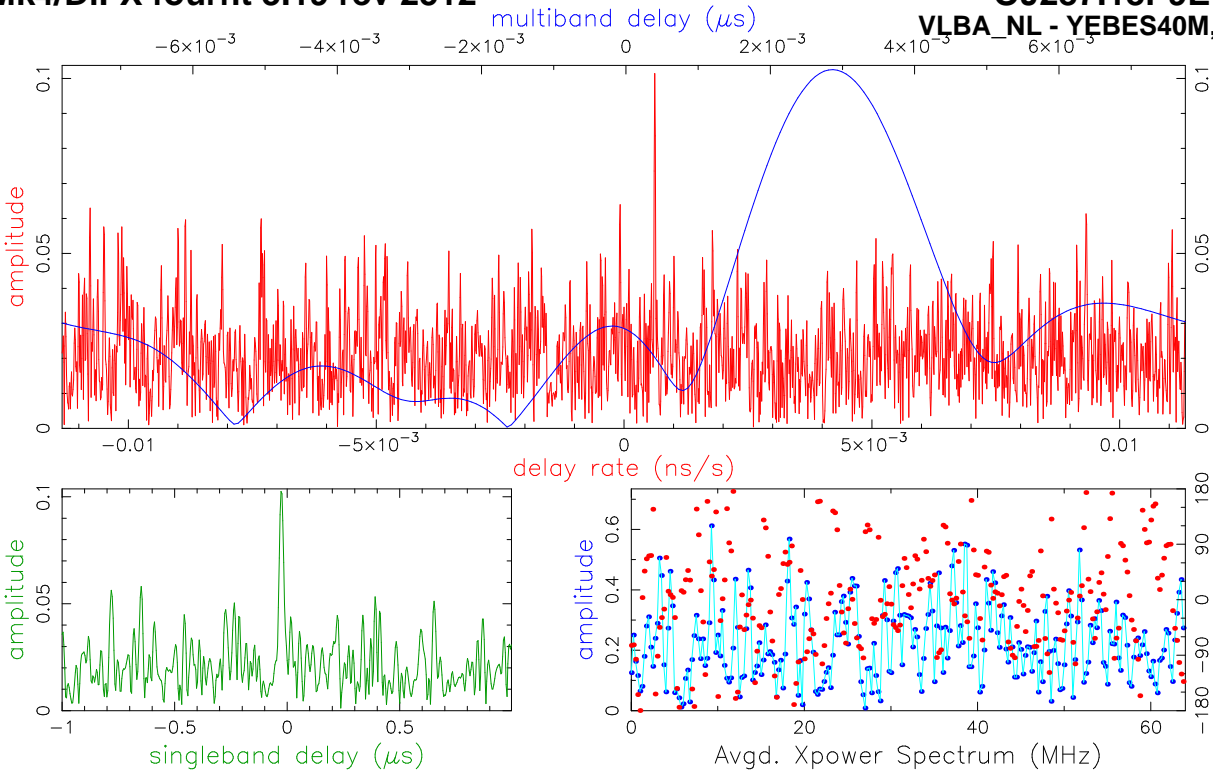
Fringe quality 9
SNR 12.8
Int time 433.686
Amp 0.225
Phase 41.3
PFD 7.1e-29
Delays (us)
SBD -0.004301
MBD 0.003131
Fringe rate (Hz) 0.006117
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224505.12
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120837
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



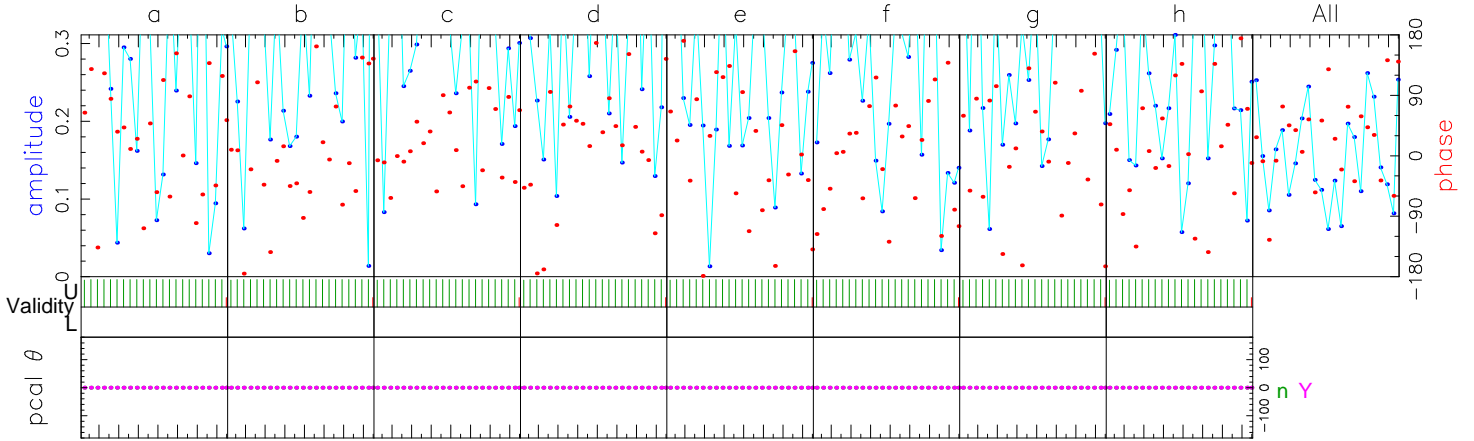
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
n	1000	1000	1000	1000	1000	1000	1000	1000	APs used	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:Y	0:0	0:0	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	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)		5.12183929420E+03			5.12183616335E+03				Resid mbdelay (usec)	3.13085E-03 +/- 8.5E-05
Sband delay (usec)		5.12183186260E+03			2.0293976E+01				Resid sbdelay (usec)	-4.30075E-03 +/- 6.7E-04
Phase delay (usec)		5.12183616468E+03			1.1399998E-07				Resid phdelay (usec)	1.33199E-06 +/- 2.9E-07
Delay rate (us/s)		1.49024992747E+00			1.49024985646E+00				Resid rate (us/s)	7.10145E-08 +/- 1.1E-09
Total phase (deg)			81.2		-2.64965587409E-05				Resid phase (deg)	41.3 +/- 8.9

ph/seg (deg) 53.4 21.4 Search (2048X32) 0.211 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 61.4 37.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 55.7 12.6 Inc. seg. avg. 0.295 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.7 22.1 Inc. frq. avg. 0.300 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 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.189.18P9EC



Fringe quality 0
 SNR 5.9
 Int time 433.686
 Amp 0.104
 Phase 28.4
 PFD 6.0e-01
 Delays (us)
 SBD -0.025764
 MBD 0.002683
 Fringe rate (Hz)
 0.053206
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224505.12
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120842
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

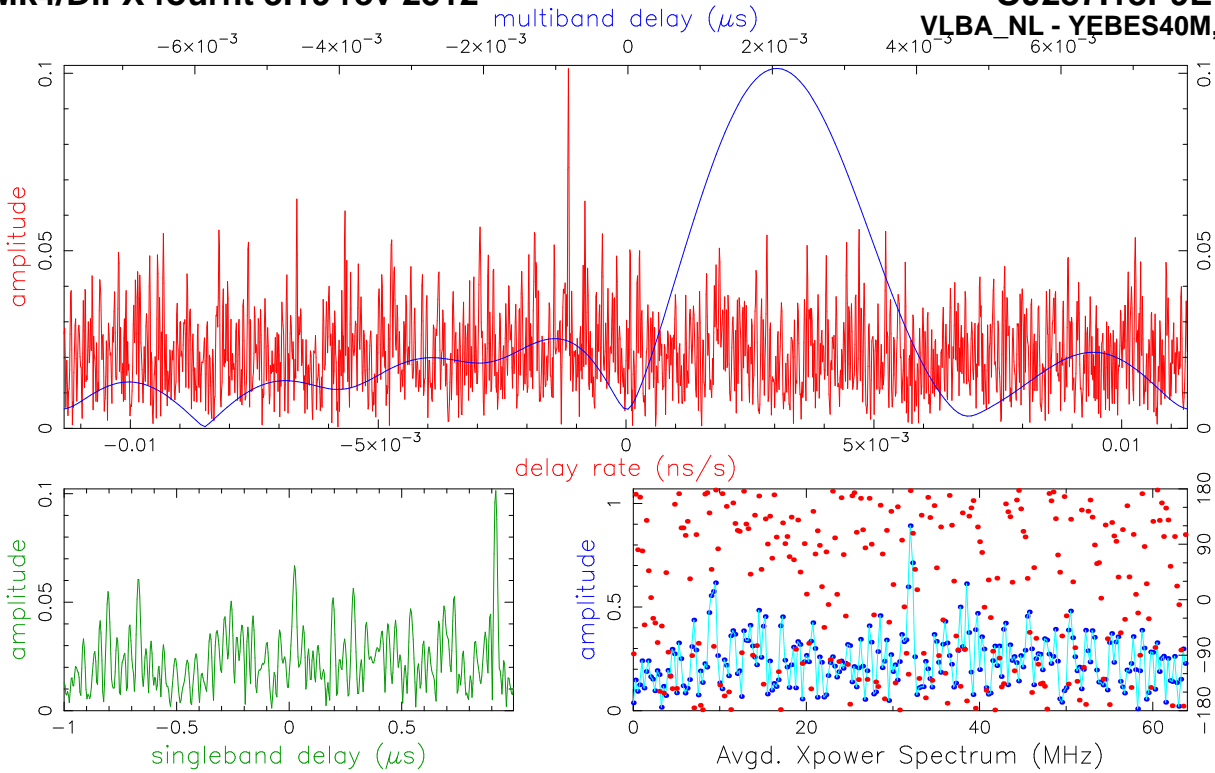
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	46.0	-4.7	12.7	43.0	45.4	21.9	55.6	30.7	Phase	28.4
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	186.3	262.4	248.8	315.2	91.8	10.8	141.7	244.4	Sbd box	250.4
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	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)	5.12180759616E+03		Apriori delay (usec)		5.12183616335E+03		Resid mbdelay (usec)		2.68281E-03	+/- 1.8E-04
Sband delay (usec)	5.12181039910E+03		Apriori clock (usec)		2.0293976E+01		Resid sbdelay (usec)		-2.57642E-02	+/- 1.5E-03
Phase delay (usec)	5.12183616426E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		9.14684E-07	+/- 6.3E-07
Delay rate (us/s)	1.49025047412E+00		Apriori rate (us/s)		1.49024985646E+00		Resid rate (us/s)		6.17666E-07	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.64965587409E-05		Resid phase (deg)		28.4	+/- 19.4

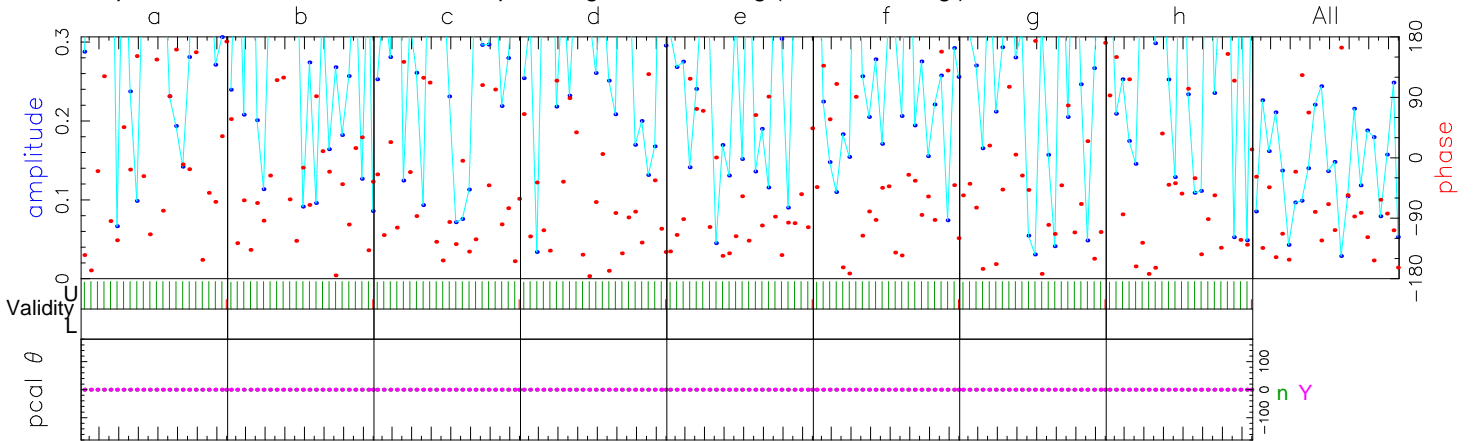
	RMS	Theor.	Amplitude	0.104 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	62.2	46.6	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	75.7	81.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	22.2	27.5	Inc. seg. avg.	0.116	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	44.5	47.9	Inc. frq. avg.	0.096	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

n: az 120.0 el 55.9 pa -43.5 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -9127.465 -572.992 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/nY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/nY.W.215.18P9EC

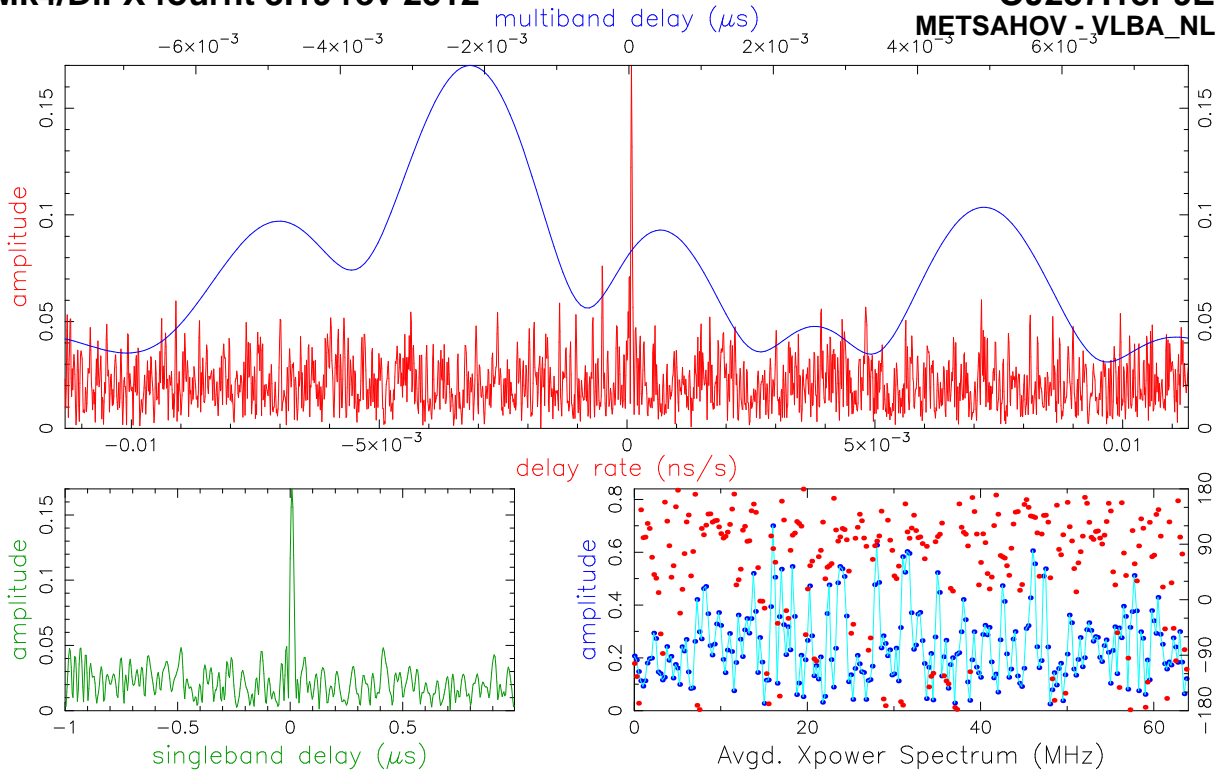


Fringe quality 0
SNR 5.8
Int time 433.686
Amp 0.102
Phase -101.9
PFD 8.2e-01
Delays (us)
SBD 0.917103
MBD 0.002019
Fringe rate (Hz)
-0.100291
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201a
Exper # 16383
Yr:day 2020:115
Start 224505.12
Stop 225219.80
FRT 224840.00
Corr/FF/build
2020:195:224837
2020:197:120846
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

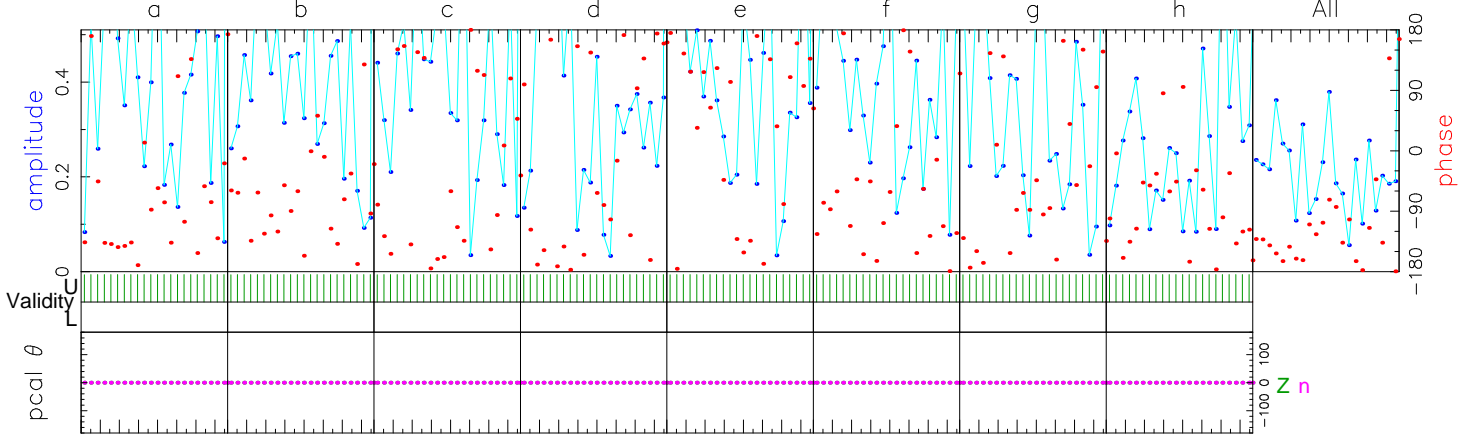


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-112.6	-87.3	-111.5	-113.4	-105.3	-76.0	-76.3	-127.4	Phase	-101.9
	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	331.8	217.4	345.8	50.3	91.7	85.4	165.0	482.8	Sbd box	491.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	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	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.12276005742E+03		Apriori delay (usec)		5.12183616335E+03		Resid mbdelay (usec)		2.01907E-03 +/- 1.9E-04	
Sband delay (usec)	5.12275326660E+03		Apriori clock (usec)		2.0293976E+01		Resid sbdelay (usec)		9.17103E-01 +/- 1.5E-03	
Phase delay (usec)	5.12183616006E+03		Apriori clockrate (us/s)		1.1399998E-07		Resid phdelay (usec)		-3.28651E-06 +/- 6.4E-07	
Delay rate (us/s)	1.49024869218E+00		Apriori rate (us/s)		1.49024985646E+00		Resid rate (us/s)		-1.16428E-06 +/- 2.5E-09	
Total phase (deg)			Apriori accel (us/s/s)		-2.64965587409E-05		Resid phase (deg)		-101.9 +/- 19.8	
RMS	62.7	47.4	Amplitude		0.102 +/- 0.018		Pcal mode: MANUAL, MANUAL		PC period (AP's) 5, 5	
ph/seg (deg)	62.7	47.4	Search (2048X32)		0.098		Pcal rate: 0.000E+00, 0.000E+00 (us/s)		sb window (us) -1.000 1.000	
amp/seg (%)	75.9	82.7	Interp.		0.000		Bits/sample: 2x2		SampCntNorm: enabled	
ph/frq (deg)	20.6	28.0	Inc. seg. avg.		0.110		Sample rate(MISamp/s): 128		mb window (us) -0.008 0.008	
amp/frq (%)	21.4	48.8	Inc. frq. avg.		0.095		Data rate(Mb/s): 2048		dr window (ns/s) -0.011 0.011	
n: az 120.0 el 55.9 pa -43.5	Y: az 265.0 el 37.4 pa 53.7		u,v (fr/asec)		-9127.465 -572.992		nlags: 256 t_cohere infinite		ion window (TEC) 0.00 0.00	



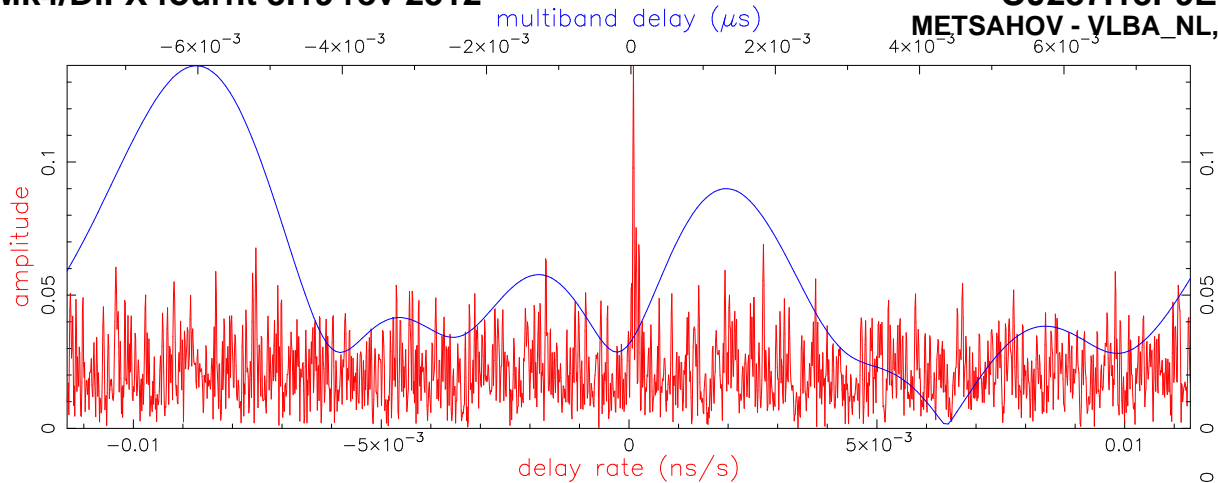
Fringe quality 9
 SNR 9.7
 Int time 438.725
 Amp 0.170
 Phase -136.0
 PFD 8.5e-14
 Delays (us)
 SBD 0.007823
 MBD -0.002201
 Fringe rate (Hz) 0.007683
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120848
 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



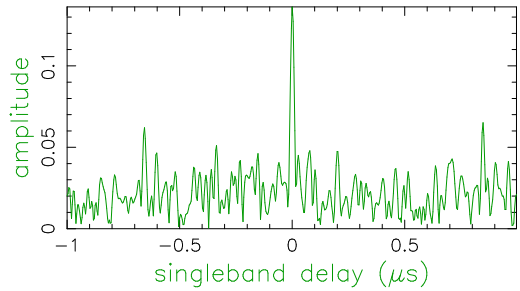
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-123.1	-77.0	-168.4	-169.5	143.9	-105.0	-139.8	-96.2	Phase	-136.0
	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	257.8	259.1	258.3	259.3	260.1	259.5	260.7	259.9	Sbd box	259.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	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	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)	-1.07991167680E+04		Apriori delay (usec)		-1.07991301916E+04		Resid mbdelay (usec)		-2.20138E-03	+/- 1.1E-04
Sband delay (usec)	-1.07991223686E+04		Apriori clock (usec)		-3.2369507E+01		Resid sbdelay (usec)		7.82300E-03	+/- 8.8E-04
Phase delay (usec)	-1.07991301960E+04		Apriori clockrate (us/s)		-3.1799997E-07		Resid phdelay (usec)		-4.38632E-06	+/- 3.8E-07
Delay rate (us/s)	-1.26806709114E+00		Apriori rate (us/s)		-1.26806718033E+00		Resid rate (us/s)		8.91932E-08	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		6.50635606293E-05		Resid phase (deg)		-136.0	+/- 11.8

ph/seg (deg) 38.9 28.2 Search (2048X32) 0.166 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 53.5 49.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 49.7 16.6 Inc. seg. avg. 0.187 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 40.8 29.0 Inc. frq. avg. 0.222 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 275.9 el 19.8 pa 31.7 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 7834.514 3503.635 ion window (TEC) 0.00 0.00
 simultaneous interpolator

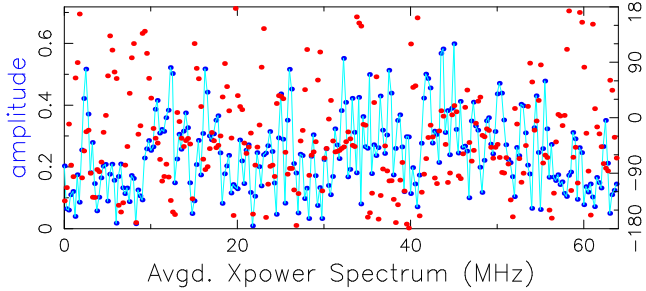


Fringe quality 9

SNR 7.8
 Int time 438.725
 Amp 0.136
 Phase 19.1
 PFD 2.0e-06
 Delays (us)
 SBD 0.000419
 MBD -0.006008
 Fringe rate (Hz)
 0.007474
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

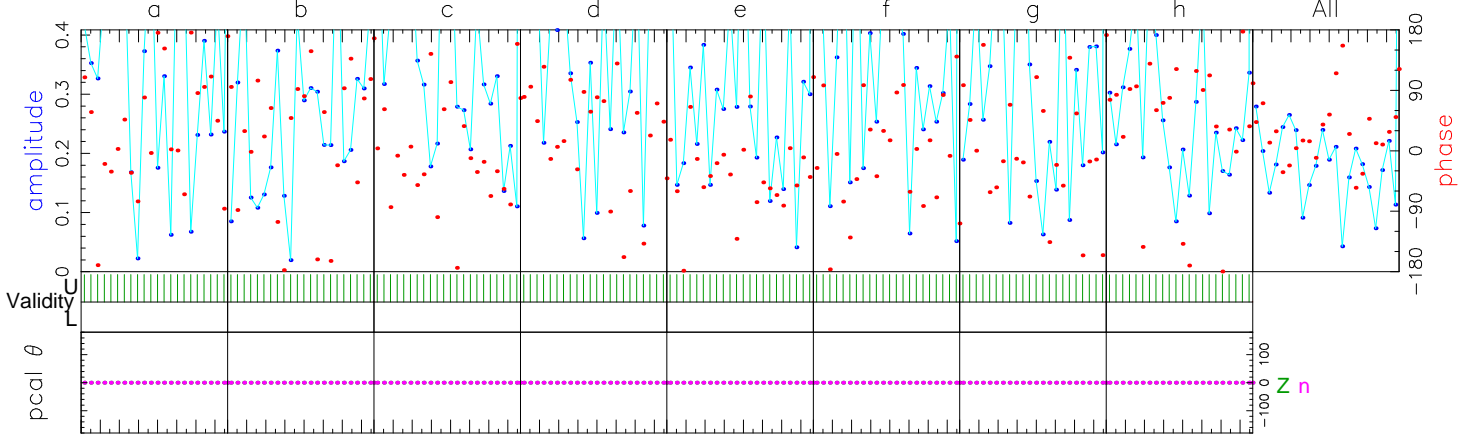


delay rate (ns/s)



Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120852
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

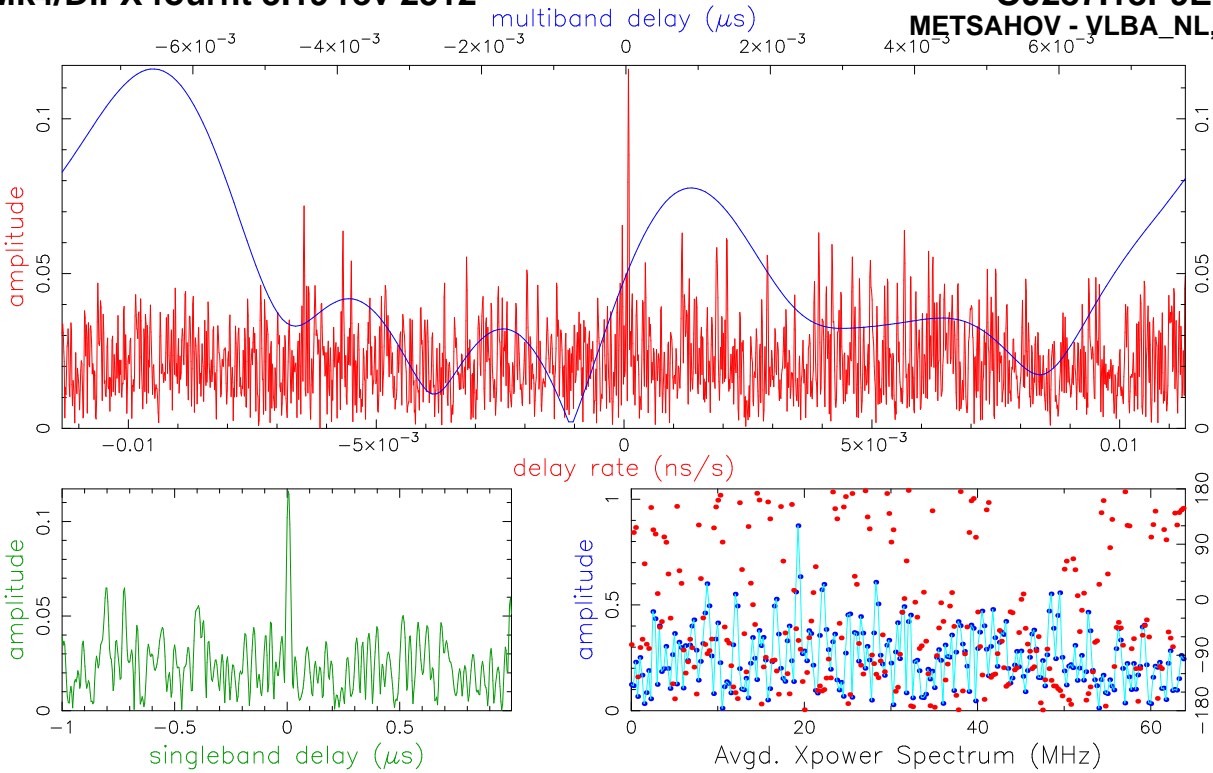
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	-1.07991361995E+04				-1.07991301916E+04						
Sband delay (usec)	-1.07991297723E+04				-3.2369507E+01						
Phase delay (usec)	-1.07991301910E+04				-3.1799997E-07						
Delay rate (us/s)	-1.26806709357E+00				-1.26806718033E+00						
Total phase (deg)			-233.8		6.50635606293E-05						
				Apriori delay (usec)					Resid mbdelay (usec)	-6.00791E-03	+/- 1.4E-04
				Apriori clock (usec)	0.133				Resid sbdelay (usec)	4.19250E-04	+/- 1.1E-03
				Apriori clockrate (us/s)	0.000				Resid phdelay (usec)	6.16355E-07	+/- 4.7E-07
				Apriori rate (us/s)	0.151				Resid rate (us/s)	8.67664E-08	+/- 1.9E-09
				Apriori accel (us/s/s)	0.164				Resid phase (deg)	19.1	+/- 14.7
ph/seg (deg)	47.3	35.2		Search (2048X32)	0.133				PCal mode: MANUAL, MANUAL		
amp/seg (%)	59.1	61.4		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)		
ph/frq (deg)	47.1	20.8		Inc. seg. avg.	0.151				SampCntNorm: enabled		
amp/frq (%)	44.8	36.2		Inc. frq. avg.	0.164				Sample rate(MISamp/s): 128		
									Data rate(Mb/s): 2048		
									nlags: 256		
									t_cohere infinite		
Z: az 275.9 el 19.8 pa 31.7				n: az 120.0 el 55.9 pa -43.5					ion window (TEC)	0.00	0.00
				u,v (fr/asec) 7834.514 3503.635							
Control file: cf_1234_gmva				Input file: /Exps/c201a/v1/1234/No0027/Zn..18P9EC							
				Output file: /Exps/c201a/v1/1234/No0027/Zn.W.248.18P9EC							

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, Zn
 METSAHOV - VLBA_NL, fgroup W, pol LR

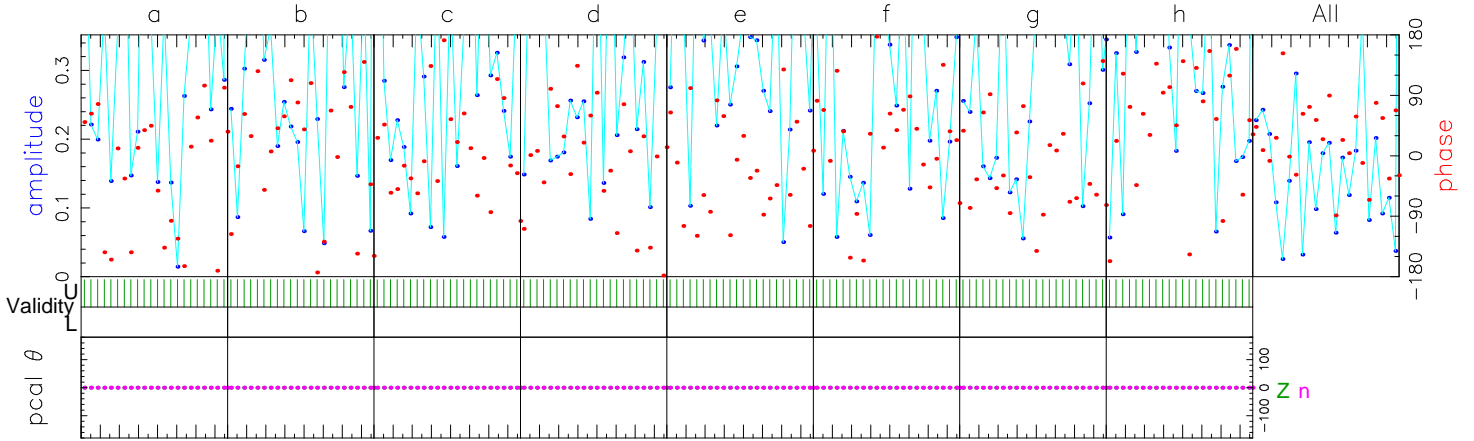


Fringe quality 0

SNR 6.7
 Int time 438.725
 Amp 0.117
 Phase 20.6
 PFD 5.4e-03
 Delays (us)
 SBD 0.005467
 MBD -0.006487
 Fringe rate (Hz)
 0.007400
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120855
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.874928s
 +20°06'30.640850"

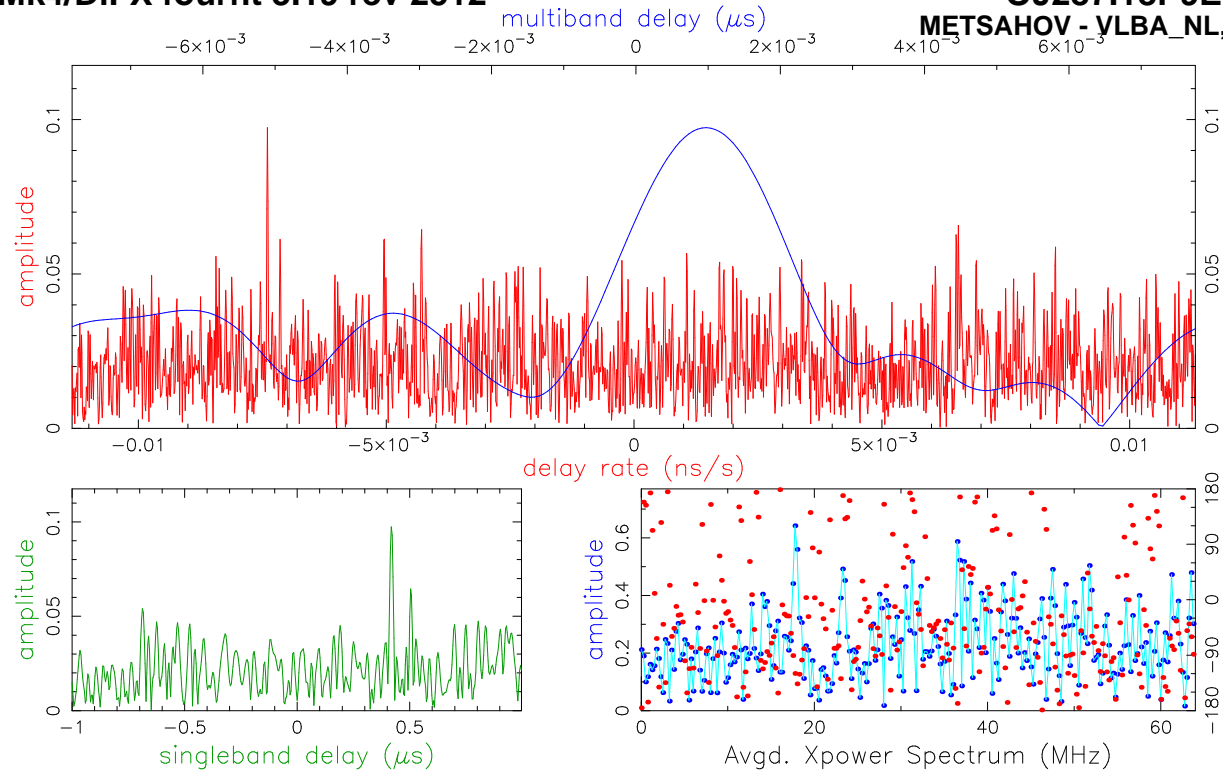
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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)	-1.07991210533E+04				-1.07991301916E+04				-6.48676E-03	+/- 1.6E-04
Sband delay (usec)	-1.07991247243E+04				-3.2369507E+01				5.46725E-03	+/- 1.3E-03
Phase delay (usec)	-1.07991301909E+04				-3.1799997E-07				6.65207E-07	+/- 5.5E-07
Delay rate (us/s)	-1.26806709443E+00				-1.26806718033E+00				8.59020E-08	+/- 2.2E-09
Total phase (deg)		-232.3			6.50635606293E-05				20.6	+/- 17.1
	RMS	Theor.	Amplitude	0.117 +/- 0.017						
ph/seg (deg)	53.9	40.9	Search (2048X32)	0.113						
amp/seg (%)	84.7	71.4	Interp.	0.000						
ph/frq (deg)	50.5	24.1	Inc. seg. avg.	0.124						
amp/frq (%)	41.6	42.1	Inc. frq. avg.	0.145						

Z: az 275.9 el 19.8 pa 31.7 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 7834.514 3503.635 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/Zn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Zn.W.254.18P9EC

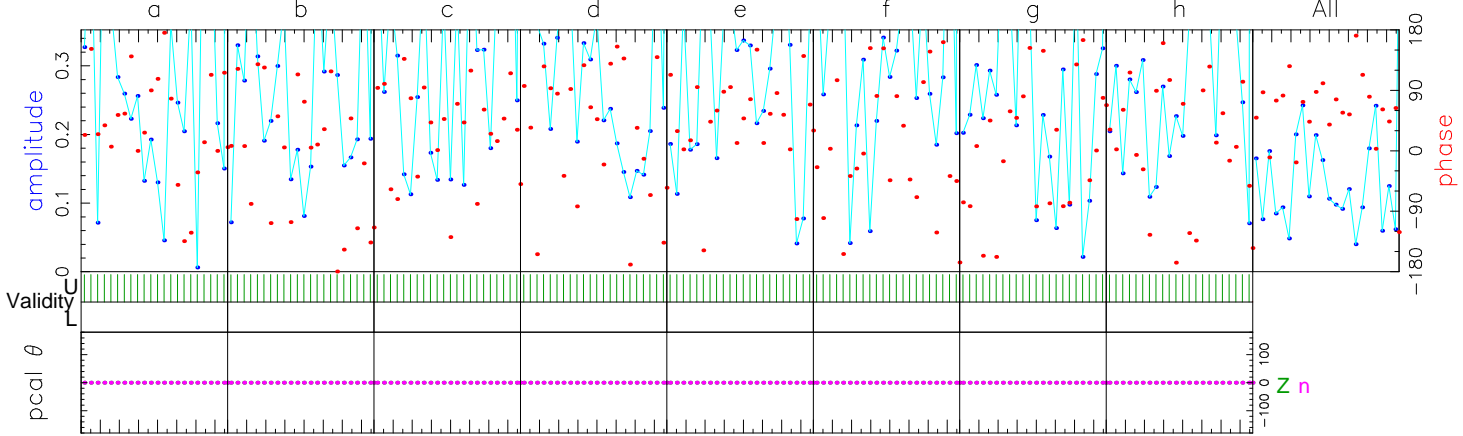


Fringe quality 0

SNR 5.6
 Int time 438.725
 Amp 0.118
 Phase 56.8
 PFD 9.9e-01
 Delays (us)
 SBD 0.418959
 MBD 0.000992
 Fringe rate (Hz)
 -0.638090
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512

Exp. c201a
 Exper # 16383
 Yr:day 2020:115
 Start 224500.00
 Stop 225219.80
 FRT 224840.00
 Corr/FF/build
 2020:195:224837
 2020:197:120859
 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	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.07987073246E+04								9.91935E-04	+/- 1.9E-04
Sband delay (usec)	-1.07987112326E+04								4.18959E-01	+/- 1.5E-03
Phase delay (usec)	-1.07991301897E+04								1.83097E-06	+/- 6.6E-07
Delay rate (us/s)	-1.26807458793E+00								-7.40760E-06	+/- 2.6E-09
Total phase (deg)			-196.2						56.8	+/- 20.4
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)									-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

ph/seg (deg) 43.4 49.0 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 85.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 31.1 28.9 Inc. seg. avg. 0.111 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 49.6 50.4 Inc. frq. avg. 0.112 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 275.9 el 19.8 pa 31.7 n: az 120.0 el 55.9 pa -43.5 u,v (fr/asec) 7834.514 3503.635 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201a/v1/1234/No0027/Zn..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Zn.W.260.18P9EC