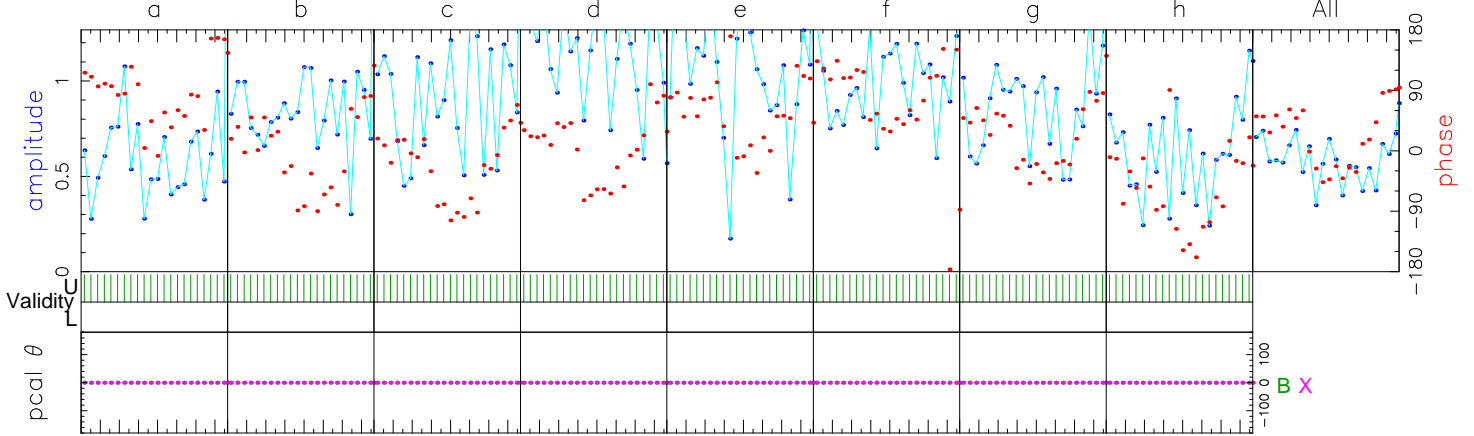


Fringe quality 5

SNR 24.2  
Int time 439.584  
Amp 0.423  
Phase 27.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.011688  
MBD 0.002469  
Fringe rate (Hz)  
-0.001336  
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  
2020:197:120752  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

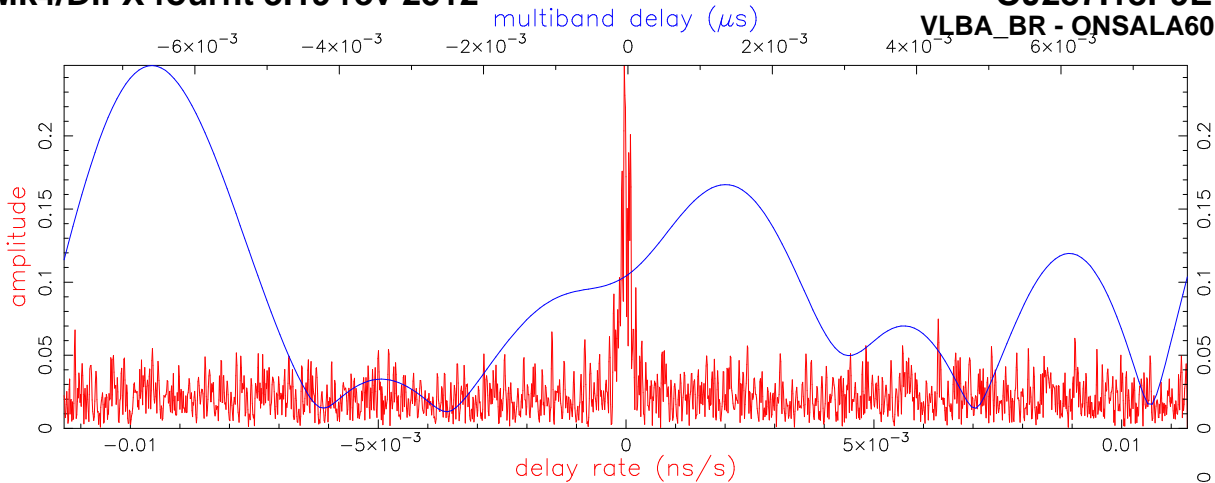
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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				
X	1000	1000	1000	1000	1000	1000	1000	1000				
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0				
B	1000	1000	1000	1000	1000	1000	1000	1000				
X	1000	1000	1000	1000	1000	1000	1000	1000				
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL				
Group delay (usec)(sbd)		1.06780379265E+03			1.06781694867E+03				2.46897E-03	+/- 4.5E-05		
Sband delay (usec)		1.06780526017E+03			-2.7648609E+01				-1.16885E-02	+/- 3.6E-04		
Phase delay (usec)		1.06781694955E+03			-7.2800002E-07				8.79396E-07	+/- 1.5E-07		
Delay rate (us/s)		-1.08886343789E-01			-1.08886328280E-01				-1.55089E-08	+/- 6.0E-10		
Total phase (deg)			12.4		-8.55554845006E-06				27.3	+/- 4.7		
ph/seg (deg)	44.8	11.3		Search (2048X32)	0.400				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	46.5	19.8		Interp.	0.000				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000		
ph/frq (deg)	58.0	6.7		Inc. seg. avg.	0.574				Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008	
amp/frq (%)	54.6	11.7		Inc. frq. avg.	0.599				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

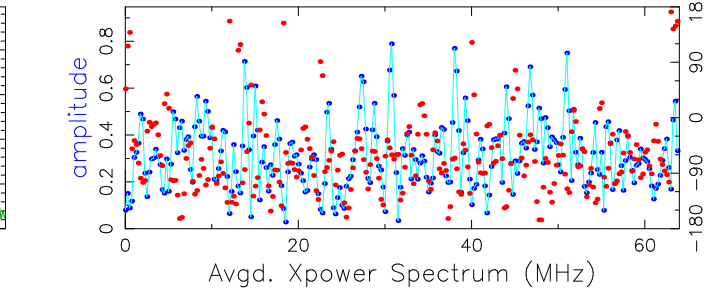
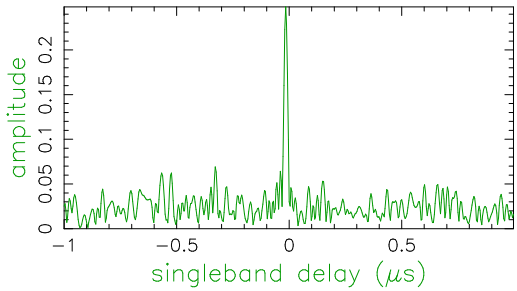
B: az 265.9 el 29.7 pa 42.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 650.353 -836.860 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BX.W.16.18P9EC



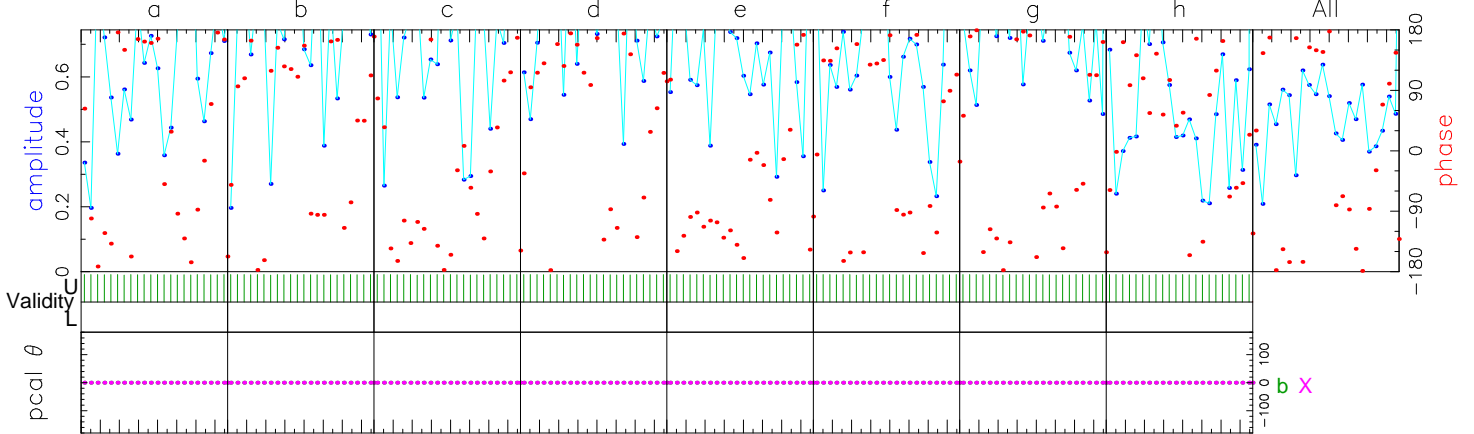
Fringe quality 8

SNR 14.2  
Int time 436.570  
Amp 0.248  
Phase -177.9  
PFD 6.8e-37  
Delays (us)  
SBD -0.015348  
MBD -0.006591  
Fringe rate (Hz)  
-0.002578  
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



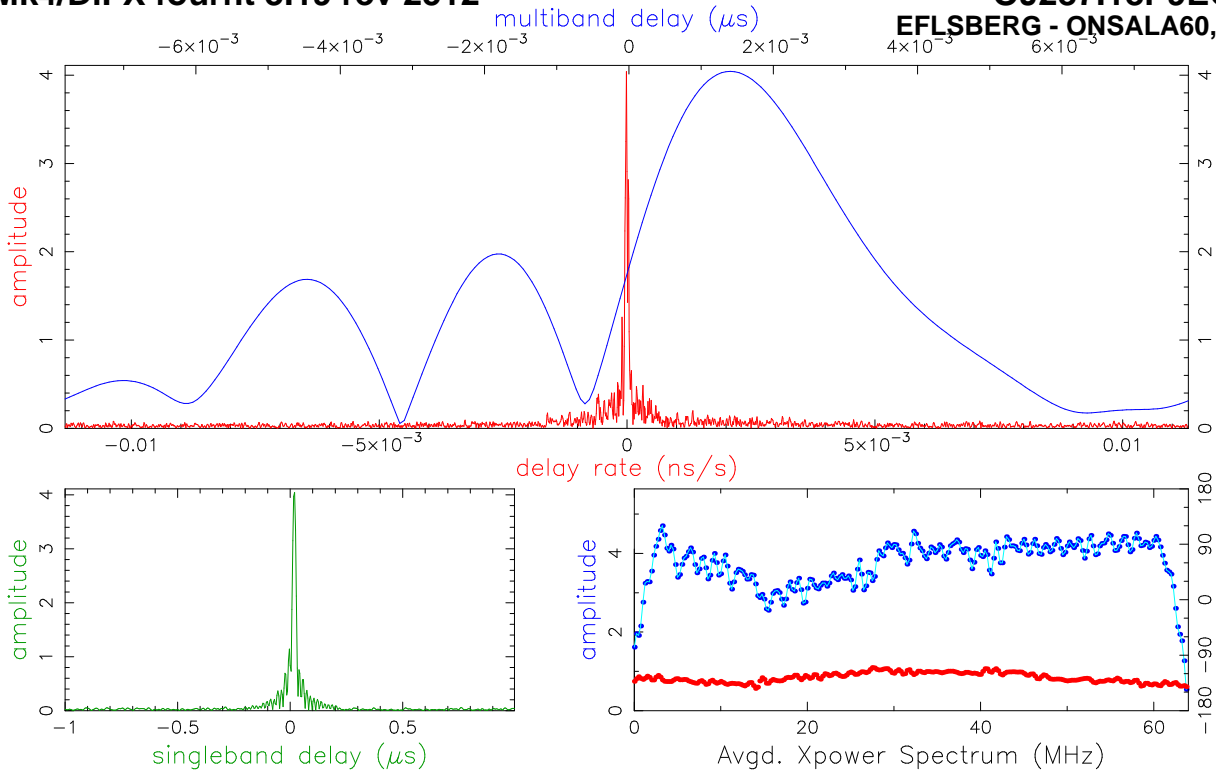
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-167.8	148.7	-154.0	152.4	-111.3	157.7	-152.4	101.5	Phase	-177.9
	0.4	0.3	0.2	0.4	0.3	0.3	0.4	0.2	Ampl.	0.3
	252.4	252.2	253.9	252.3	252.0	253.0	252.3	251.6	Sbd box	253.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	3.24875017822E+03	Apriori delay (usec)	3.24877239399E+03	Resid mbdelay (usec)	-6.59077E-03	+/-	7.7E-05
Sband delay (usec)	3.24875704549E+03	Apriori clock (usec)	-4.2108871E+01	Resid sbdelay (usec)	-1.53485E-02	+/-	6.1E-04
Phase delay (usec)	3.24877238825E+03	Apriori clockrate (us/s)	-5.6999999E-07	Resid phdelay (usec)	-5.73675E-06	+/-	2.6E-07
Delay rate (us/s)	1.58228107821E+00	Apriori rate (us/s)	1.58228110814E+00	Resid rate (us/s)	-2.99259E-08	+/-	1.0E-09
Total phase (deg)	-171.4	Apriori accel (us/s/s)	-2.12841881442E-05	Resid phase (deg)	-177.9	+/-	8.1

ph/seg (deg)	71.2	RMS	19.4	Theor.	19.4	Amplitude	0.248 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	102.3	Search (2048X32)	0.239	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	Inc. seg. avg.	0.453	Inc. frq. avg.	0.310	Bits/sample: 2x2		mb window (us)	-0.008 0.008
amp/frq (%)	39.8	Inc. frq. avg.	0.310	Sample rate (MSamp/s): 128		SampCntNorm: enabled		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

b: az 99.1 el 35.1 pa -44.6 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9678.335 -1371.890 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bX.W.19.18P9EC

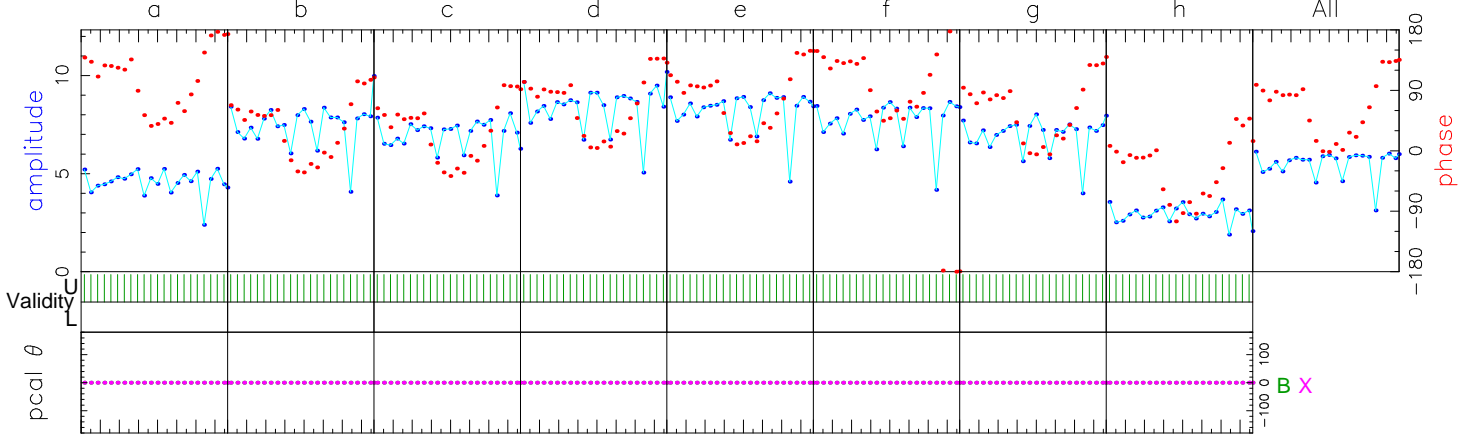


Fringe quality 3

SNR 235.7  
Int time 439.584  
Amp 4.112  
Phase 64.4  
PFD 0.0e+00  
Delays (us)  
SBD 0.017924  
MBD 0.001360  
Fringe rate (Hz)  
-0.001303  
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  
2020:197:120757  
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

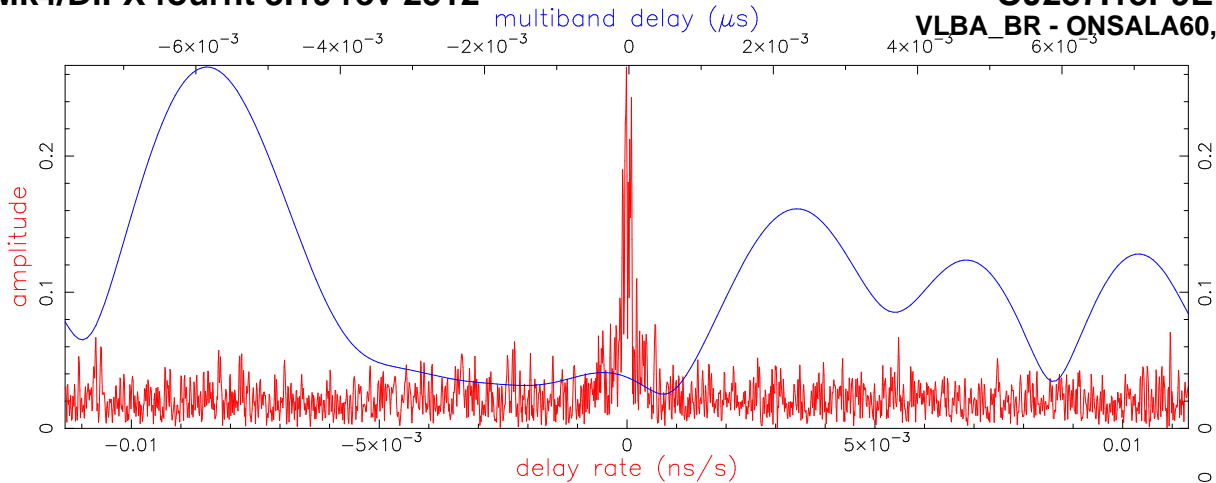


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	105.2	34.6	29.3	69.4	76.6	111.5	60.7	-27.9	Phase	64.4
	3.3	5.4	5.2	6.2	6.0	5.6	5.1	2.1	Ampl.	4.9
	258.1	260.6	262.0	261.5	261.6	261.7	260.4	255.5	Sbd box	261.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	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)	1.06783393346E+03		Apriori delay (usec)		1.06781694867E+03		Resid mbdelay (usec)		1.35979E-03	+/- 4.6E-06
Sband delay (usec)	1.06783487242E+03		Apriori clock (usec)		-2.7648609E+01		Resid sbdelay (usec)		1.79237E-02	+/- 3.7E-05
Phase delay (usec)	1.06781695075E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		2.07619E-06	+/- 1.6E-08
Delay rate (us/s)	-1.08886343404E-01		Apriori rate (us/s)		-1.08886328280E-01		Resid rate (us/s)		-1.51235E-08	+/- 6.2E-11
Total phase (deg)	49.5		Apriori accel (us/s/s)		-8.55554845006E-06		Resid phase (deg)		64.4	+/- 0.5

ph/seg (deg) 43.4 1.2 Search (2048X32) 3.883 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 37.7 2.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 49.5 0.7 Inc. seg. avg. 5.509 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 37.1 1.2 Inc. frq. avg. 4.871 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 650.353 -836.860 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BX.W.38.18P9EC

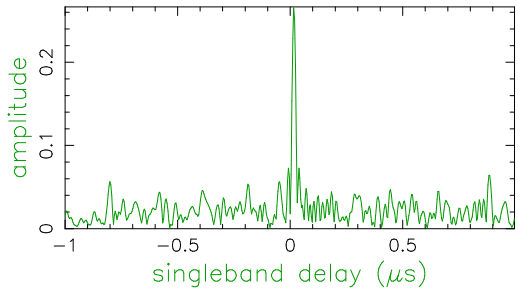
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, bX  
VLBA\_BR - ONSALA60, fgroup W, pol RR

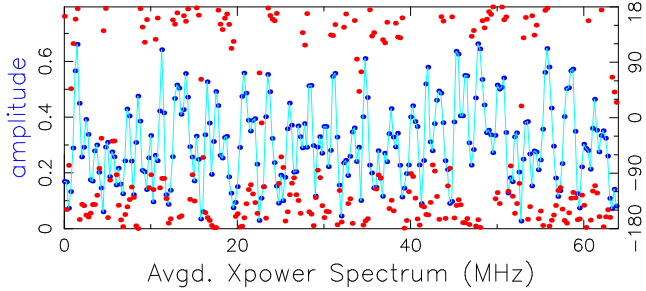


Fringe quality 8

SNR 15.2  
Int time 436.570  
Amp 0.267  
Phase 94.8  
PFD 1.3e-43  
Delays (us)  
SBD 0.016509  
MBD -0.005816  
Fringe rate (Hz)  
-0.000509  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

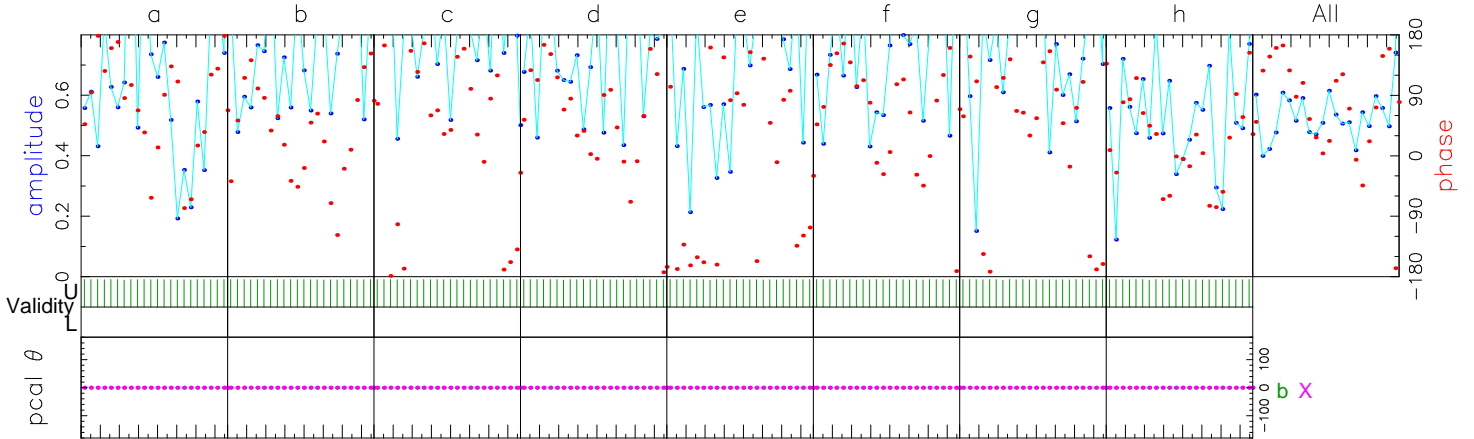


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120758  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

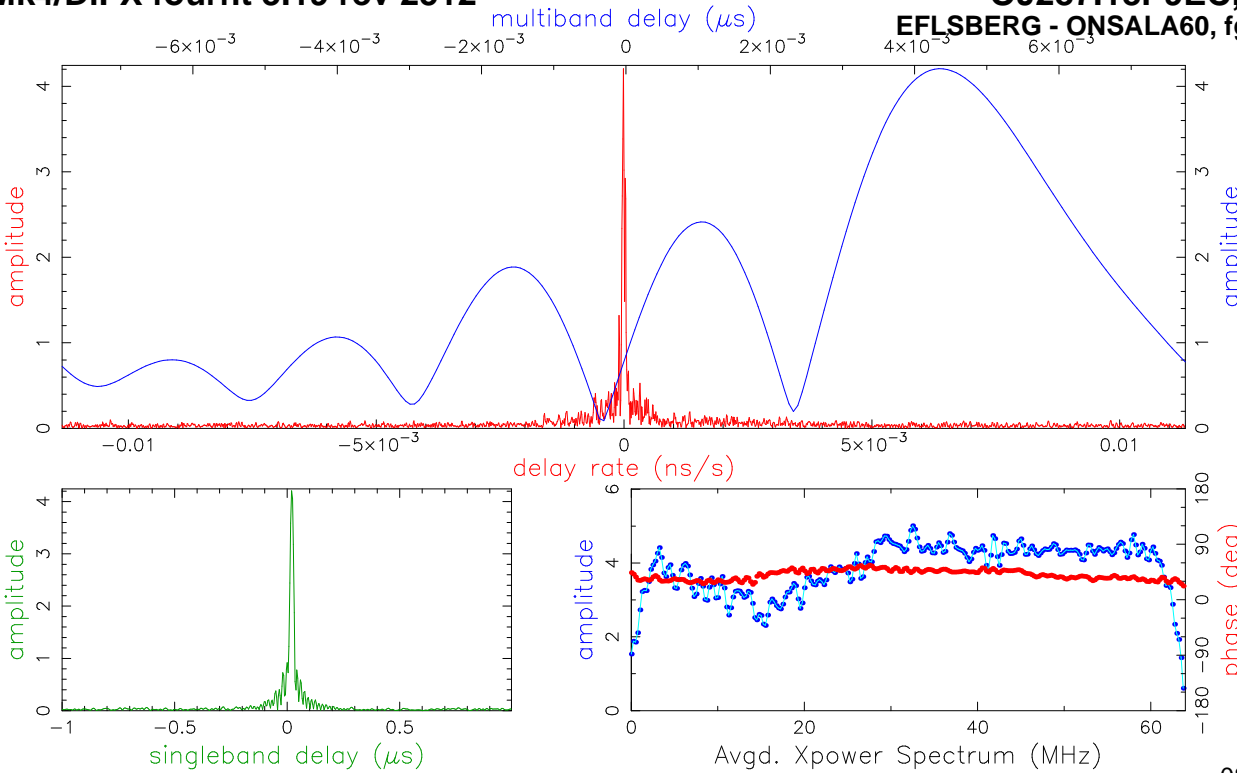
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	3.24878220331E+03		Apriori delay (usec)		3.24877239399E+03		Resid mbdelay (usec)		-5.81568E-03	+/- 7.1E-05
Sband delay (usec)	3.24878890349E+03		Apriori clock (usec)		-4.2108871E+01		Resid sbdelay (usec)		1.65095E-02	+/- 5.7E-04
Phase delay (usec)	3.24877239704E+03		Apriori clockrate (us/s)		-5.6999999E-07		Resid phdelay (usec)		3.05652E-06	+/- 2.4E-07
Delay rate (us/s)	1.58228110223E+00		Apriori rate (us/s)		1.58228110814E+00		Resid rate (us/s)		-5.91079E-09	+/- 9.6E-10
Total phase (deg)	101.3		Apriori accel (us/s/s)		-2.12841881442E-05		Resid phase (deg)		94.8	+/- 7.5

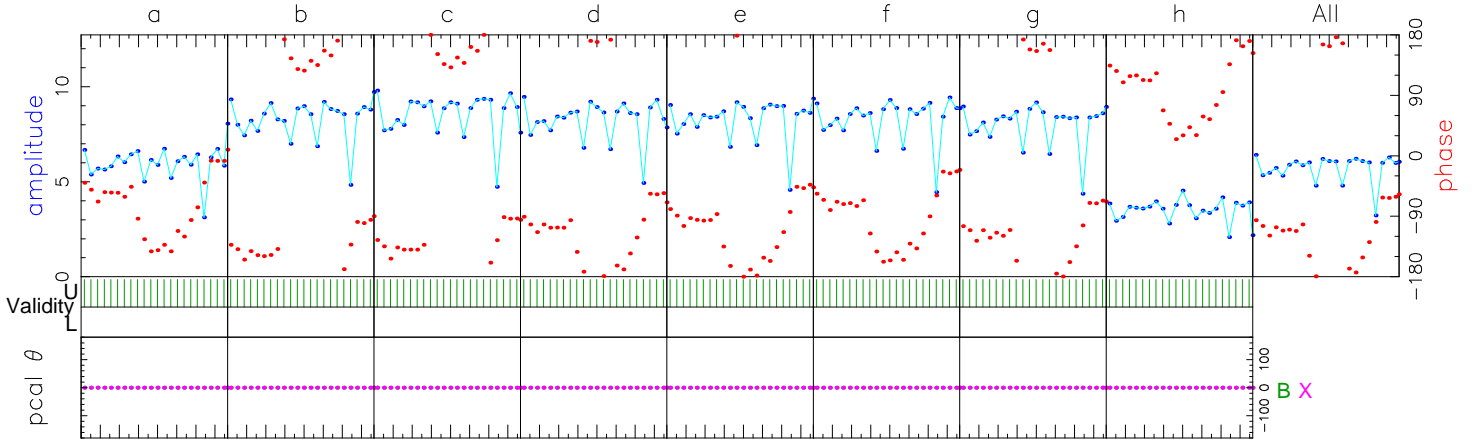
ph/seg (deg) 63.7 18.0 Theor. Amplitude 0.267 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 104.1 31.5 Search (2048X32) 0.256 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 47.4 10.6 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 31.1 18.6 Inc. seg. avg. 0.507 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
Inc. frq. avg. 0.331 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9678.335 -1371.890 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bX.W.40.18P9EC



Fringe quality 2  
 SNR 243.3  
 Int time 439.584  
 Amp 4.244  
 Phase -129.7  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.020744  
 MBD 0.004370  
 Fringe rate (Hz)  
 -0.001300  
 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  
 2020:197:120802  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-75.5	-166.1	-159.8	-124.6	-114.8	-91.9	-137.1	96.6	Phase	-129.7
	4.3	6.1	6.3	6.1	6.1	6.1	5.8	2.5	Ampl.	5.4
	259.3	261.3	262.7	262.4	262.2	262.3	261.1	256.1	Sbd box	262.3
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.06783694408E+03		Apriori delay (usec)		1.06781694867E+03		Resid mbdelay (usec)		4.37041E-03	+/- 4.5E-06
Sband delay (usec)	1.06783769242E+03		Apriori clock (usec)		-2.7648609E+01		Resid sbdelay (usec)		2.07438E-02	+/- 3.5E-05
Phase delay (usec)	1.06781694449E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-4.18389E-06	+/- 1.5E-08
Delay rate (us/s)	-1.08886343369E-01		Apriori rate (us/s)		-1.08886328280E-01		Resid rate (us/s)		-1.50887E-08	+/- 6.0E-11
Total phase (deg)	215.4		Apriori accel (us/s/s)		-8.55554845006E-06		Resid phase (deg)		-129.7	+/- 0.5

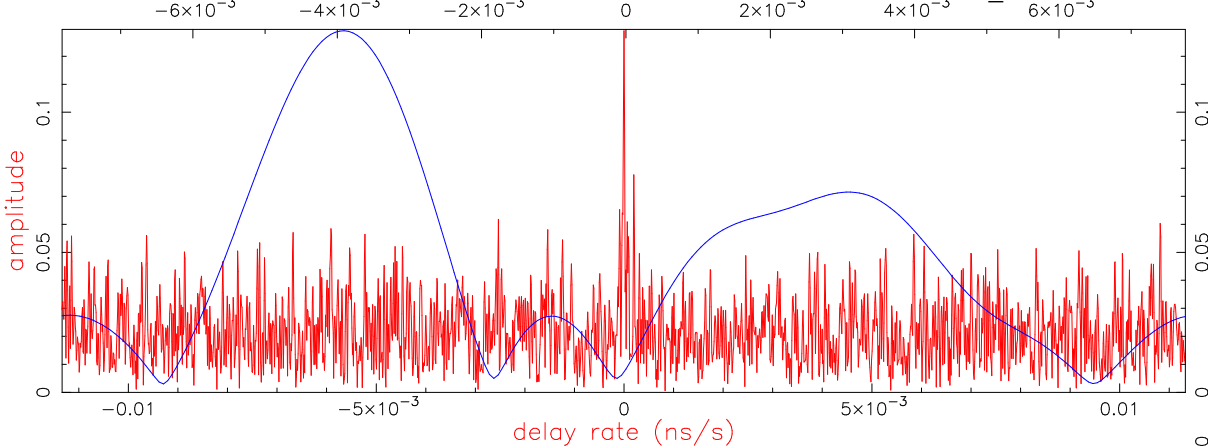
ph/seg (deg) 43.3 1.1 Search (2048X32) 4.039 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 38.6 2.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 64.2 0.7 Inc. seg. avg. 5.725 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 40.1 1.2 Inc. frq. avg. 5.409 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 650.353 -836.860 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BX.W.58.18P9EC



Mk4/DiFX fourfit 3.19 rev 2512

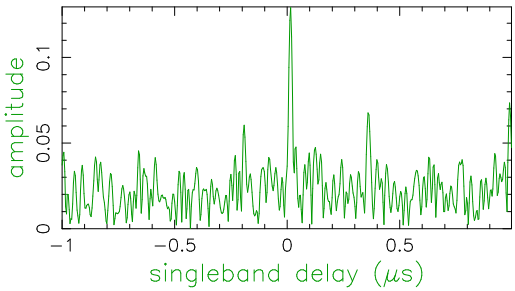
OJ287.18P9EC, No0027, bX  
VLBA\_BR - ONSALA60, fgroup W, pol LR

multiband delay ( $\mu$ s)

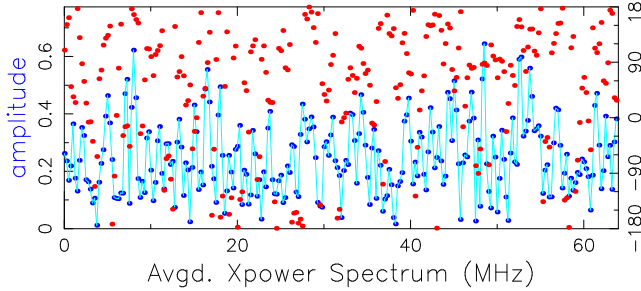


Fringe quality 9

SNR 7.4  
Int time 436.570  
Amp 0.130  
Phase -36.7  
PFD 4.2e-05  
Delays (us)  
SBD 0.014867  
MBD -0.003930  
Fringe rate (Hz)  
-0.000353  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

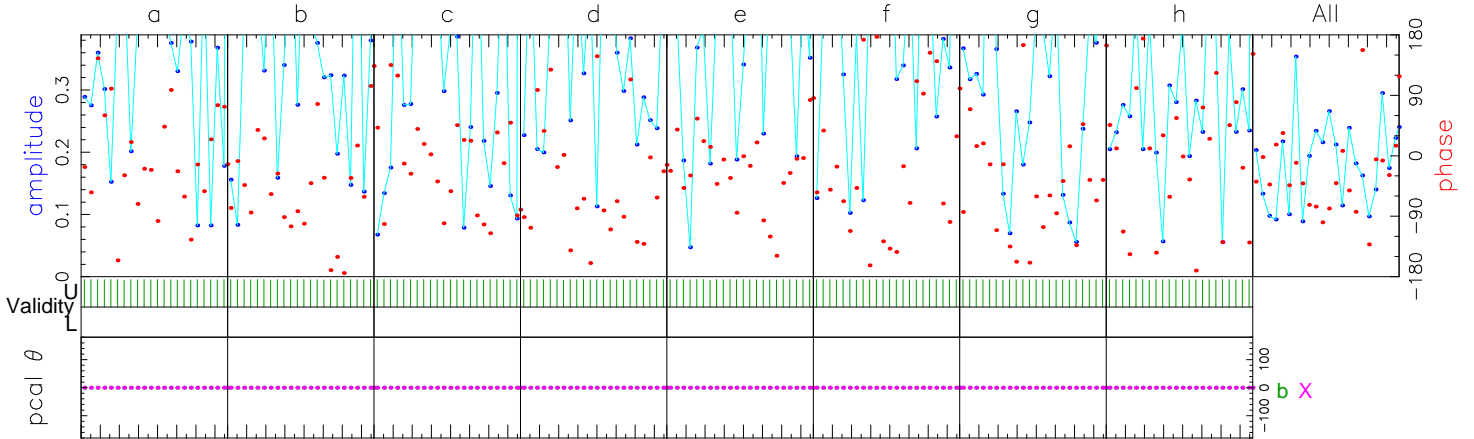


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120803  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

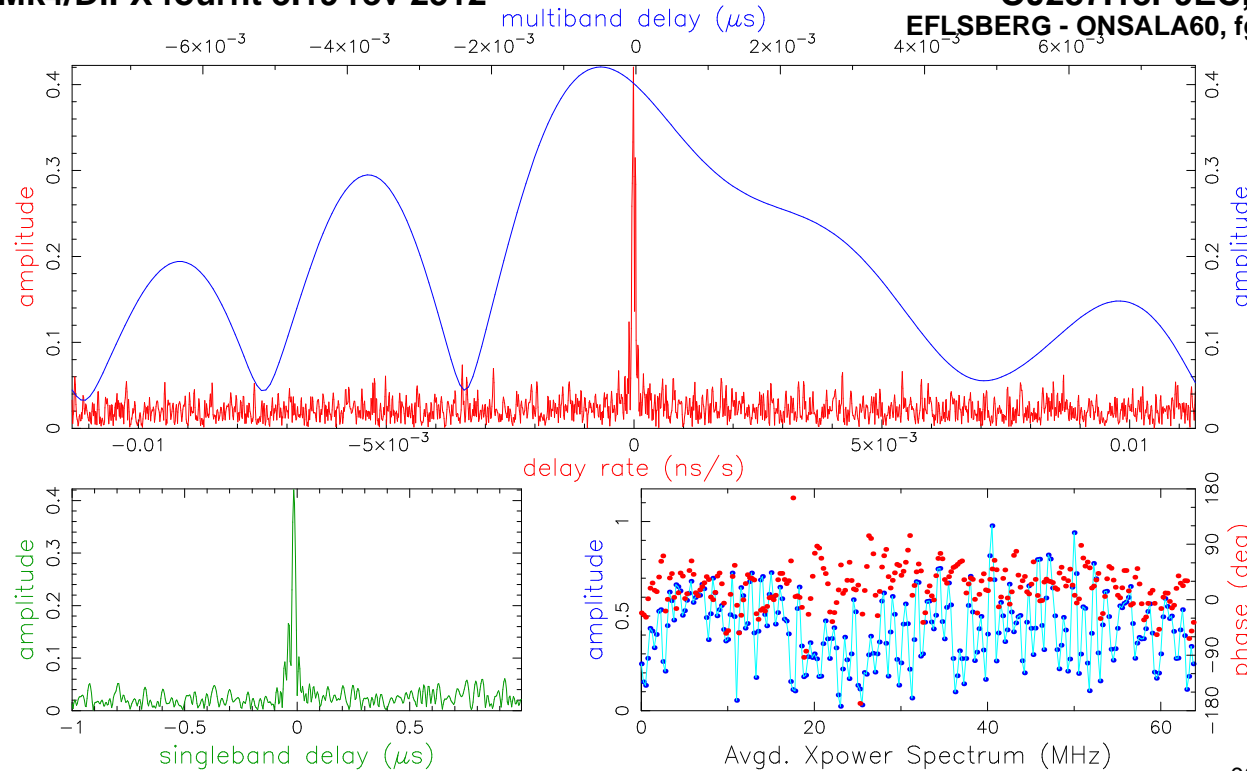
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.0	-53.3	-10.2	-79.3	-14.6	-96.7	-50.4	36.6	Phase	-36.7
	0.1	0.2	0.2	0.2	0.3	0.1	0.2	0.1	Ampl.	0.1
	511.5	261.4	288.4	260.9	260.4	301.4	314.1	495.1	Sbd box	260.8
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
b	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)	3.24878408914E+03		Apriori delay (usec)		3.24877239399E+03		Resid mbdelay (usec)		-3.92984E-03	+/- 1.5E-04
Sband delay (usec)	3.24878726074E+03		Apriori clock (usec)		-4.2108871E+01		Resid sbdelay (usec)		1.48667E-02	+/- 1.2E-03
Phase delay (usec)	3.24877239281E+03		Apriori clockrate (us/s)		-5.6999999E-07		Resid phdelay (usec)		-1.18269E-06	+/- 5.0E-07
Delay rate (us/s)	1.58228110404E+00		Apriori rate (us/s)		1.58228110814E+00		Resid rate (us/s)		-4.10326E-09	+/- 2.0E-09
Total phase (deg)			Apriori accel (us/s/s)		-2.12841881442E-05		Resid phase (deg)		-36.7	+/- 15.5

	RMS	Theor.	Amplitude	0.130 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	54.1	37.1	Search (2048X32)	0.124	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	68.1	64.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	45.8	21.9	Inc. seg. avg.	0.152	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	44.5	38.2	Inc. frq. avg.	0.143	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

b: az 99.1 el 35.1 pa -44.6 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9678.335 -1371.890 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bX.W.63.18P9EC

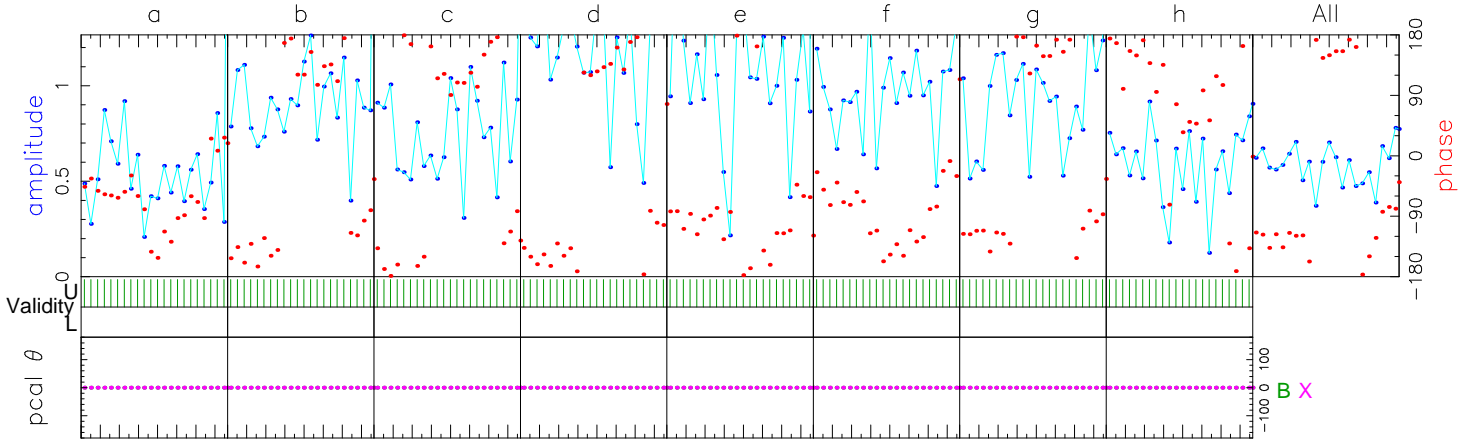


Fringe quality 5

SNR 24.2  
Int time 439.584  
Amp 0.422  
Phase -142.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.014817  
MBD -0.000461  
Fringe rate (Hz)  
-0.001309  
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  
2020:197:120806  
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

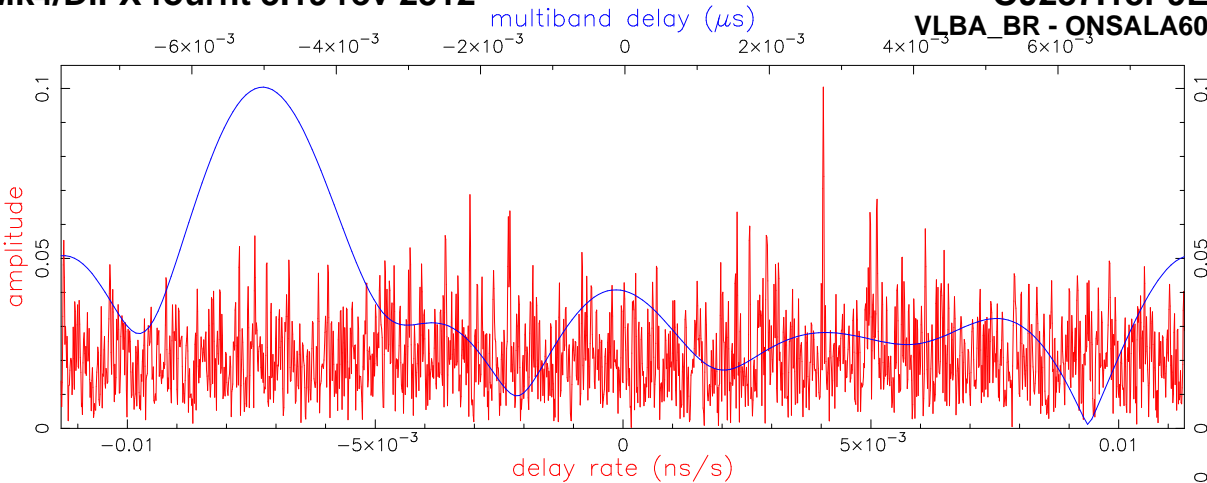


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-61.7	-173.8	169.5	-168.3	-111.7	-83.8	-144.0	133.1	Phase	-142.7
	0.4	0.6	0.5	0.8	0.8	0.7	0.6	0.4	Ampl.	0.6
	249.2	251.8	253.7	253.4	253.3	253.1	251.9	247.6	Sbd box	253.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.06780086246E+03		Apriori delay (usec)		1.06781694867E+03		Resid mbdelay (usec)		-4.61214E-04	+/- 4.5E-05
Sband delay (usec)	1.06780213117E+03		Apriori clock (usec)		-2.7648609E+01		Resid sbdelay (usec)		-1.48175E-02	+/- 3.6E-04
Phase delay (usec)	1.06781694407E+03		Apriori clockrate (us/s)		-7.2800002E-07		Resid phdelay (usec)		-4.60177E-06	+/- 1.5E-07
Delay rate (us/s)	-1.08886343473E-01		Apriori rate (us/s)		-1.08886328280E-01		Resid rate (us/s)		-1.51929E-08	+/- 6.0E-10
Total phase (deg)	202.4		Apriori accel (us/s/s)		-8.55554845006E-06		Resid phase (deg)		-142.7	+/- 4.7

	RMS	Theor.	Amplitude	0.422 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.0	11.3	Search (2048X32)	0.403	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	45.0	19.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	60.5	6.7	Inc. seg. avg.	0.573	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	56.8	11.7	Inc. frq. avg.	0.596	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

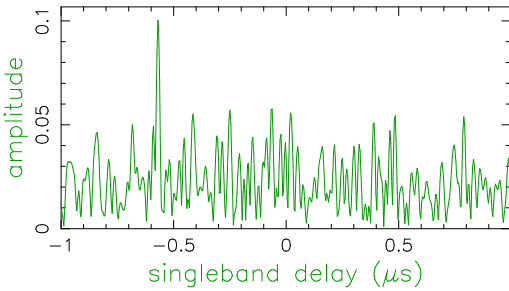
B: az 265.9 el 29.7 pa 42.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 650.353 -836.860 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/BX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/BX.W.75.18P9EC

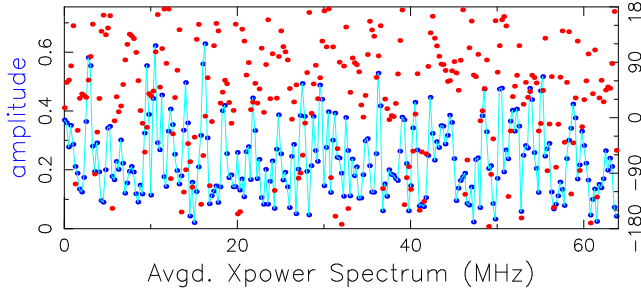


Fringe quality 0

SNR 5.8  
 Int time 436.570  
 Amp 0.107  
 Phase 49.1  
 PFD 8.3e-01  
 Delays (us)  
 SBD -0.569213  
 MBD -0.005012  
 Fringe rate (Hz)  
 0.348209  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

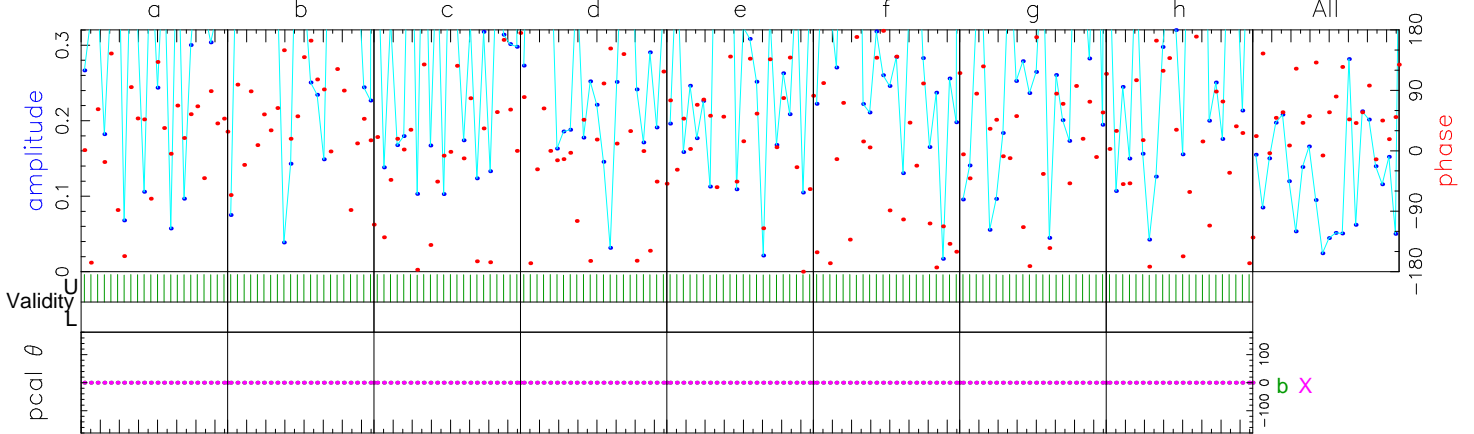


delay rate (ns/s)



Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224500.00  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120807  
 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



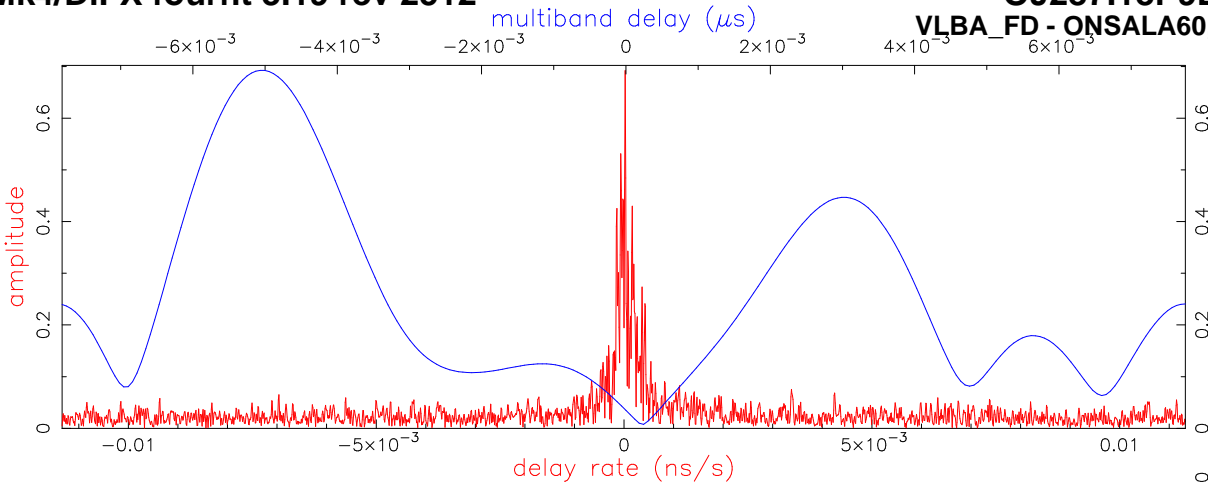
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	3.24820488182E+03	Apriori delay (usec)	3.24877239399E+03	Resid mbdelay (usec)	-5.01217E-03	+/-	1.9E-04
Sband delay (usec)	3.24820318124E+03	Apriori clock (usec)	-4.2108871E+01	Resid sbdelay (usec)	-5.69213E-01	+/-	1.5E-03
Phase delay (usec)	3.24877239557E+03	Apriori clockrate (us/s)	-5.6999999E-07	Resid phdelay (usec)	1.58364E-06	+/-	6.4E-07
Delay rate (us/s)	1.58228515051E+00	Apriori rate (us/s)	1.58228110814E+00	Resid rate (us/s)	4.04237E-06	+/-	2.5E-09
Total phase (deg)	55.6	Apriori accel (us/s/s)	-2.12841881442E-05	Resid phase (deg)	49.1	+/-	19.8

ph/seg (deg)	44.7	Theor.	47.5	Amplitude	0.107 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
amp/seg (%)	71.4	Search (2048X32)	0.099	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
ph/frq (deg)	45.9	Inc. seg. avg.	0.099	Inc. frq. avg.	0.107	Bits/sample: 2x2	SampCntNorm: enabled
amp/frq (%)	44.9	Inc. frq. avg.	0.107			Sample rate(MISamp/s): 128	mb window (us) -0.008 0.008
						Data rate(Mb/s): 2048	dr window (ns/s) -0.011 0.011
						nlags: 256	t_cohere infinite
							ion window (TEC) 0.00 0.00

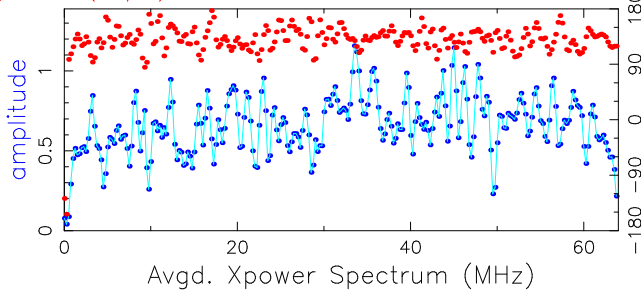
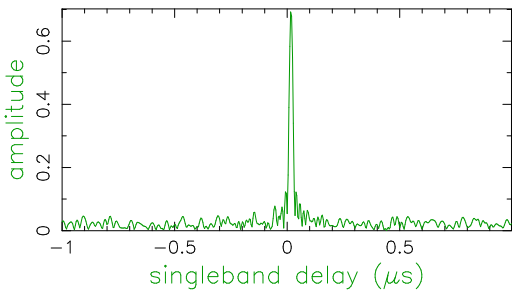
b: az 99.1 el 35.1 pa -44.6 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9678.335 -1371.890 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/bX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/bX.W.79.18P9EC





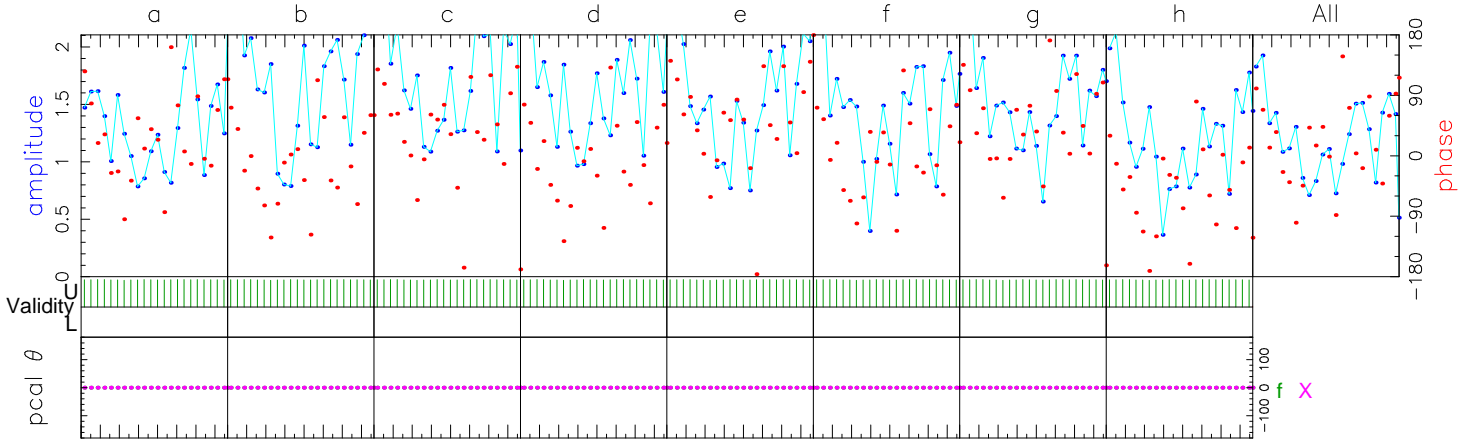
Fringe quality 4

SNR 40.1  
 Int time 435.282  
 Amp 0.702  
 Phase 27.2  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.017170  
 MBD -0.004998  
 Fringe rate (Hz)  
 0.001710  
 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



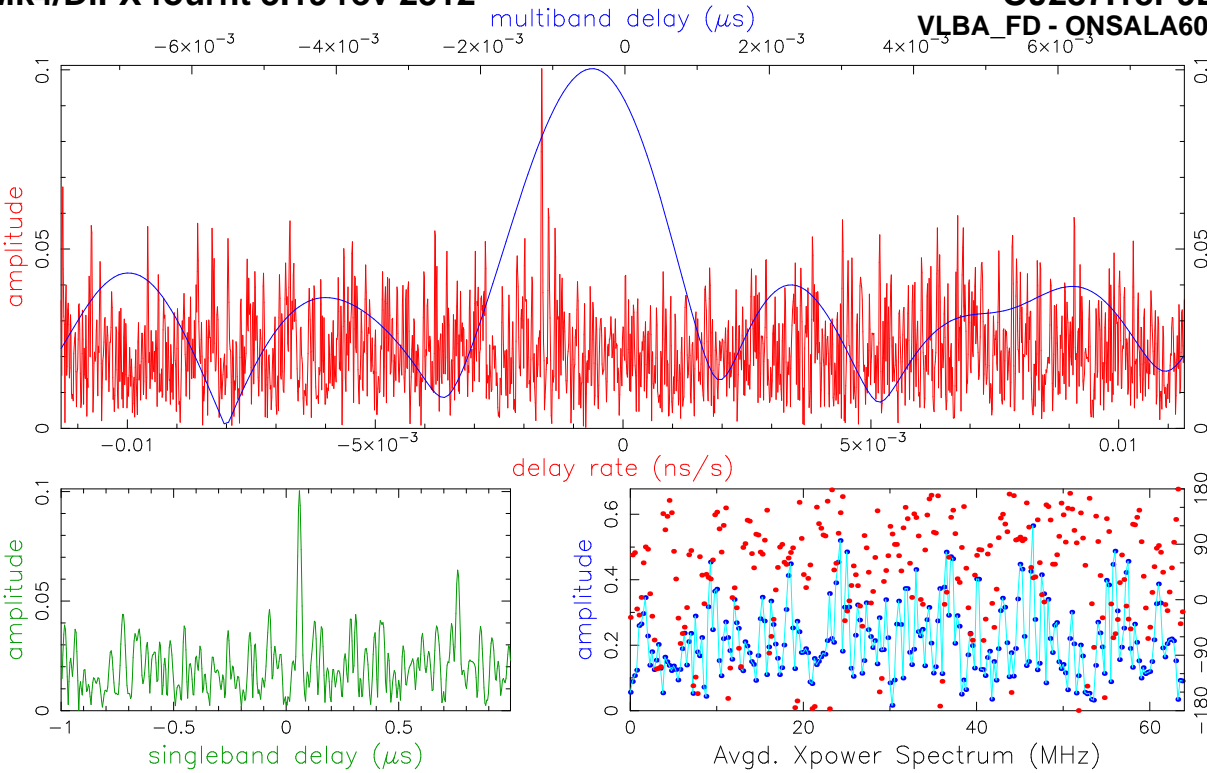
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	26.7	-3.6	63.7	-0.6	76.1	9.9	58.8	-41.1	Phase	27.2
	0.7	0.9	1.0	0.9	0.9	0.8	0.9	0.7	Ampl.	0.9
	261.1	261.2	261.3	260.9	260.6	261.4	260.7	260.4	Sbd box	261.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	7.20532903521E+03	Apriori delay (usec)	7.20531840822E+03	Resid mbdelay (usec)	-4.99801E-03	+/-	2.7E-05
Sband delay (usec)	7.20533557797E+03	Apriori clock (usec)	-3.6819256E+01	Resid sbdelay (usec)	1.71697E-02	+/-	2.2E-04
Phase delay (usec)	7.20531840909E+03	Apriori clockrate (us/s)	-4.1900001E-07	Resid phdelay (usec)	8.77665E-07	+/-	9.2E-08
Delay rate (us/s)	1.60072981476E+00	Apriori rate (us/s)	1.60072979491E+00	Resid rate (us/s)	1.98488E-08	+/-	3.6E-10
Total phase (deg)	273.3	Apriori accel (us/s/s)	-5.13770689756E-05	Resid phase (deg)	27.2	+/-	2.9

ph/seg (deg)	61.5	Theor.	6.9	Search (2048X32)	0.675	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	89.0		12.0	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	43.6		4.0	Inc. seg. avg.	1.224	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	26.9		7.1	Inc. frq. avg.	0.857	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

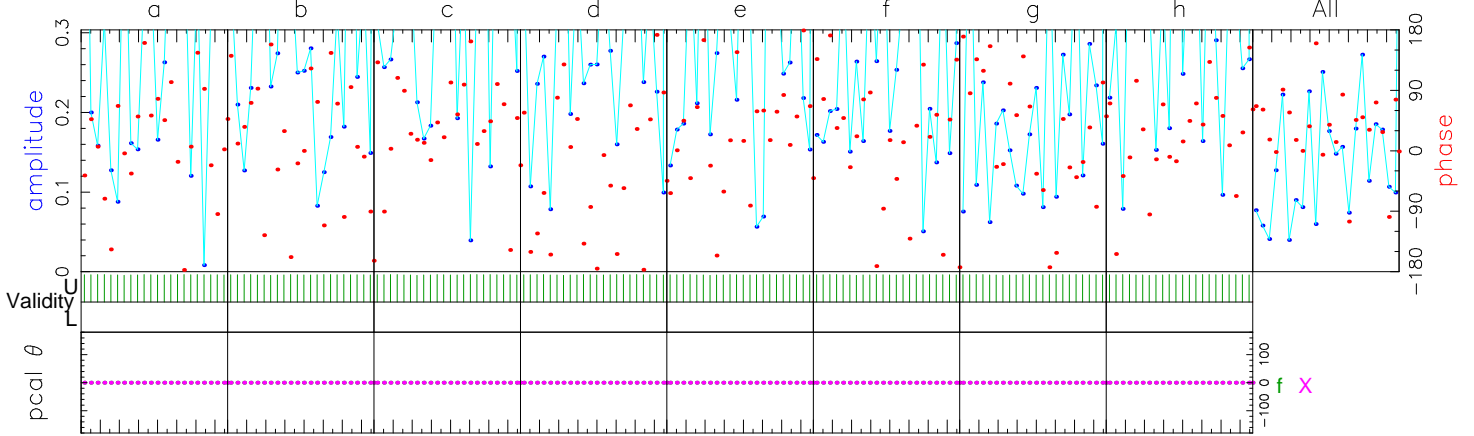
f: az 94.6 el 49.5 pa -66.0 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9837.811 -4189.595 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fX.W.103.18P9EC



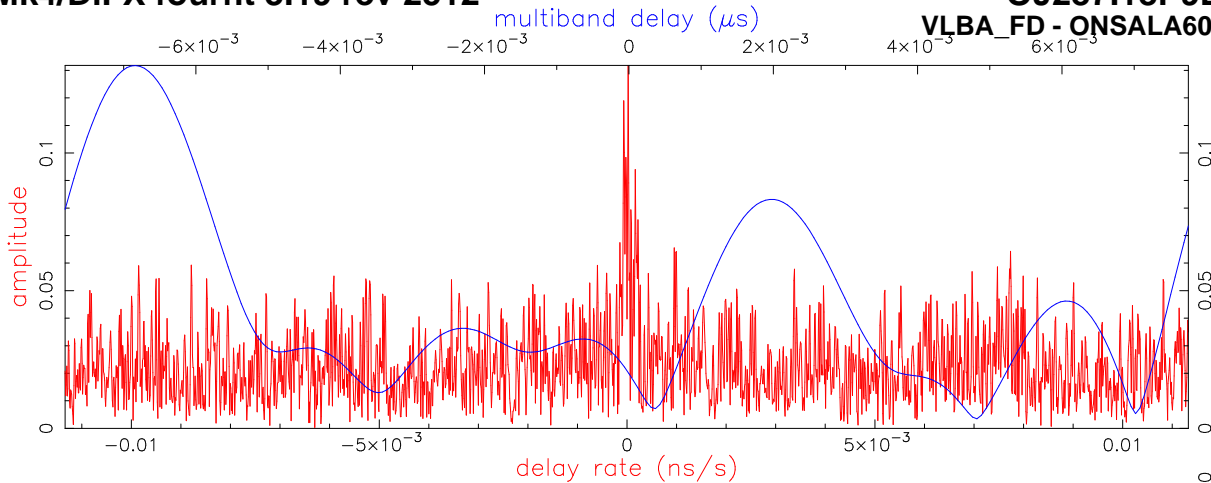
Fringe quality 0  
 SNR 5.7  
 Int time 435.282  
 Amp 0.101  
 Phase 39.8  
 PFD 9.2e-01  
 Delays (us)  
 SBD 0.058866  
 MBD -0.000442  
 Fringe rate (Hz)  
 -0.141326  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224500.00  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120818  
 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



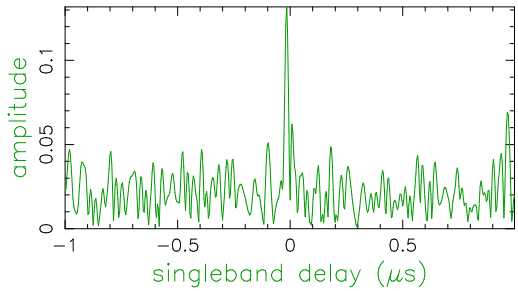
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0			
f	1000	1000	1000	1000	1000	1000	1000	1000	Ampl.	0.1	
X	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	272.1	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase		
f	1000	1000	1000	1000	1000	1000	1000	1000	Manl PC		
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks		
Group delay (usec)(sbd)	7.20538046622E+03		Apriori delay (usec)		7.20531840822E+03		Resid mbdelay (usec)		-4.41997E-04	+/- 1.9E-04	
Sband delay (usec)	7.20537727422E+03		Apriori clock (usec)		-3.6819256E+01		Resid sbdelay (usec)		5.88660E-02	+/- 1.5E-03	
Phase delay (usec)	7.20531840950E+03		Apriori clockrate (us/s)		-4.1900001E-07		Resid phdelay (usec)		1.28221E-06	+/- 6.5E-07	
Delay rate (us/s)	1.60072815425E+00		Apriori rate (us/s)		1.60072979491E+00		Resid rate (us/s)		-1.64065E-06	+/- 2.5E-09	
Total phase (deg)			285.9		Apriori accel (us/s/s)		-5.13770689756E-05		Resid phase (deg)	39.8	+/- 20.0

ph/seg (deg) 56.8 48.0 Search (2048X32) 0.098 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 77.5 83.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 22.3 28.3 Inc. seg. avg. 0.101 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 56.6 49.4 Inc. frq. avg. 0.095 Sample rate(MISamp/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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9837.811 -4189.595 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fX.W.117.18P9EC

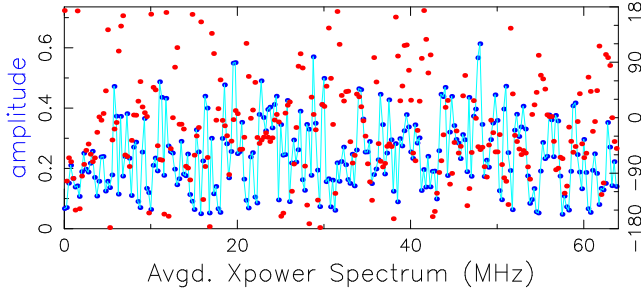


Fringe quality 9

SNR 7.5  
Int time 435.282  
Amp 0.132  
Phase -133.7  
PFD 1.8e-05  
Delays (us)  
SBD -0.015850  
MBD -0.006849  
Fringe rate (Hz)  
0.001646  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

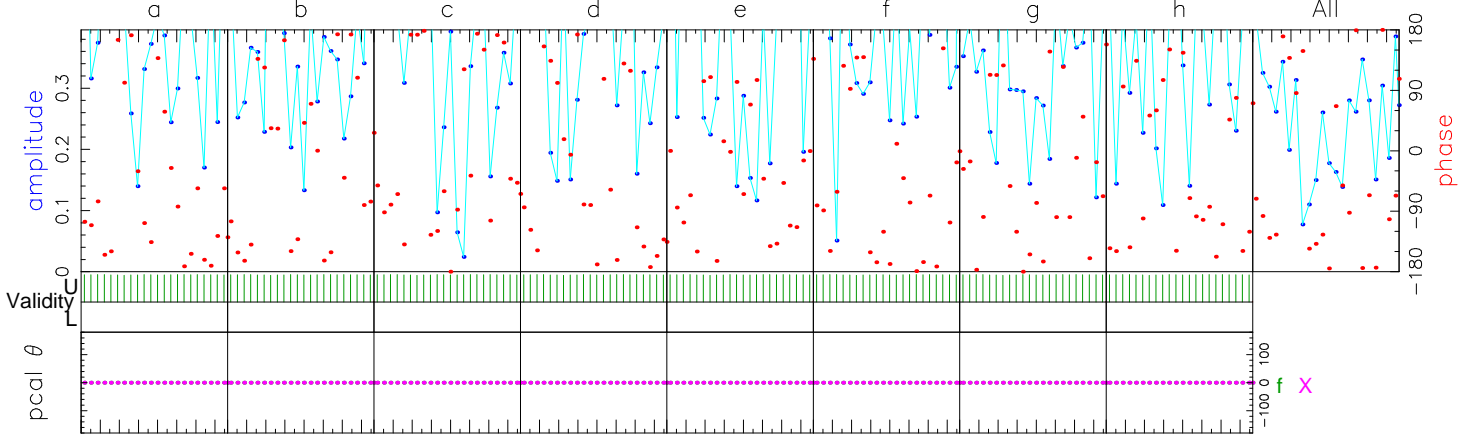


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120822  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

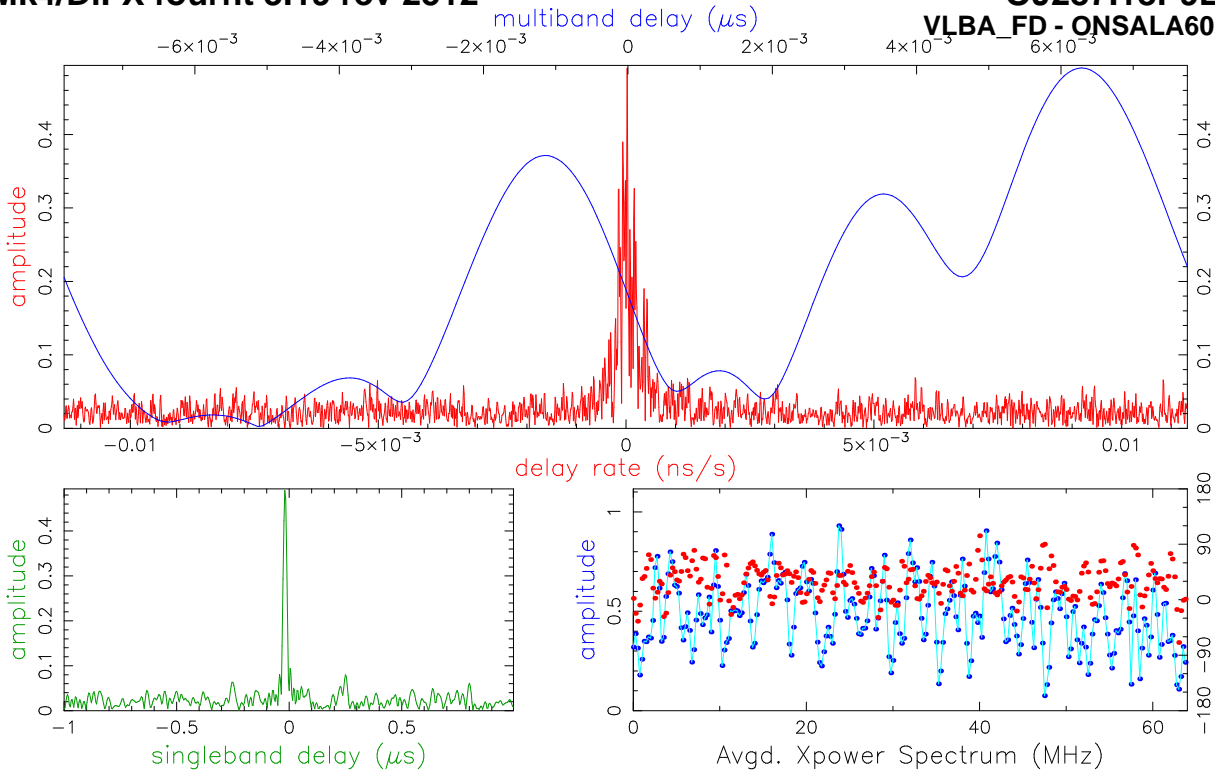
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-136.9	-162.7	-128.6	-153.8	-65.1	-144.4	-121.9	-154.2	Phase	-133.7
	0.2	0.1	0.2	0.2	0.2	0.2	0.1	0.1	Ampl.	0.1
	253.0	447.0	253.0	252.9	106.9	415.3	272.6	401.9	Sbd box	252.9
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	7.20529593389E+03		Apriori delay (usec)		7.20531840822E+03		Resid mbdelay (usec)		-6.84932E-03	+/- 1.4E-04
Sband delay (usec)	7.20530255872E+03		Apriori clock (usec)		-3.6819256E+01		Resid sbdelay (usec)		-1.58495E-02	+/- 1.1E-03
Phase delay (usec)	7.20531840390E+03		Apriori clockrate (us/s)		-4.1900001E-07		Resid phdelay (usec)		-4.31091E-06	+/- 4.9E-07
Delay rate (us/s)	1.60072981401E+00		Apriori rate (us/s)		1.60072979491E+00		Resid rate (us/s)		1.91027E-08	+/- 1.9E-09
Total phase (deg)	112.4		Apriori accel (us/s/s)		-5.13770689756E-05		Resid phase (deg)		-133.7	+/- 15.2

RMS Theor. Amplitude 0.132 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 65.8 36.5 Search (2048X32) 0.128 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 111.4 63.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 33.3 21.6 Inc. seg. avg. 0.205 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 39.4 37.6 Inc. frq. avg. 0.139 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9837.811 -4189.595 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fX.W.137.18P9EC

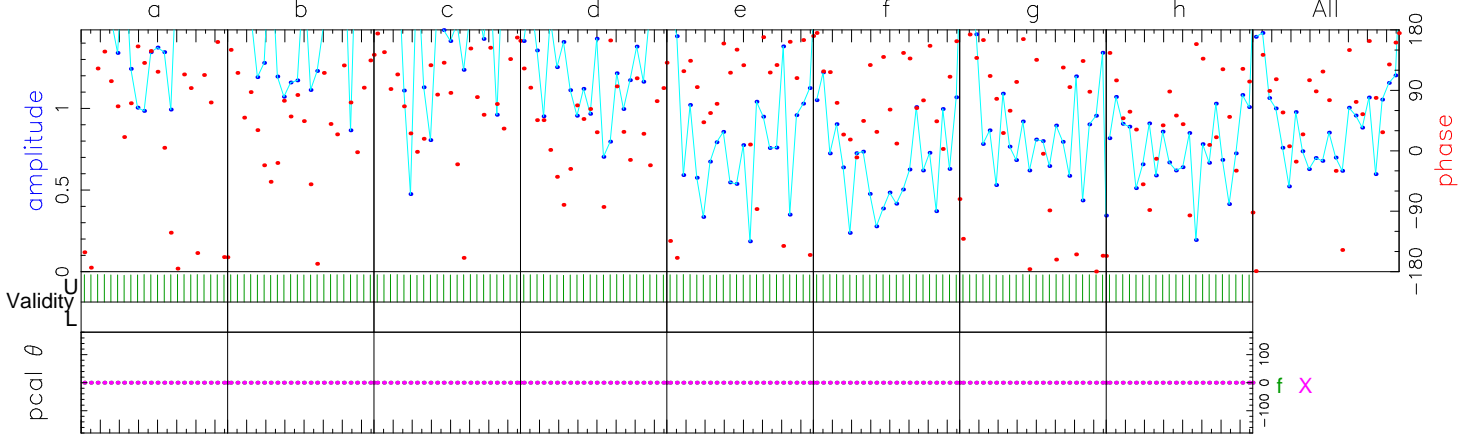


Fringe quality 5

SNR 28.2  
Int time 435.282  
Amp 0.494  
Phase 103.2  
PFD 0.0e+00  
Delays (us)  
SBD -0.018426  
MBD 0.006312  
Fringe rate (Hz) 0.001737  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

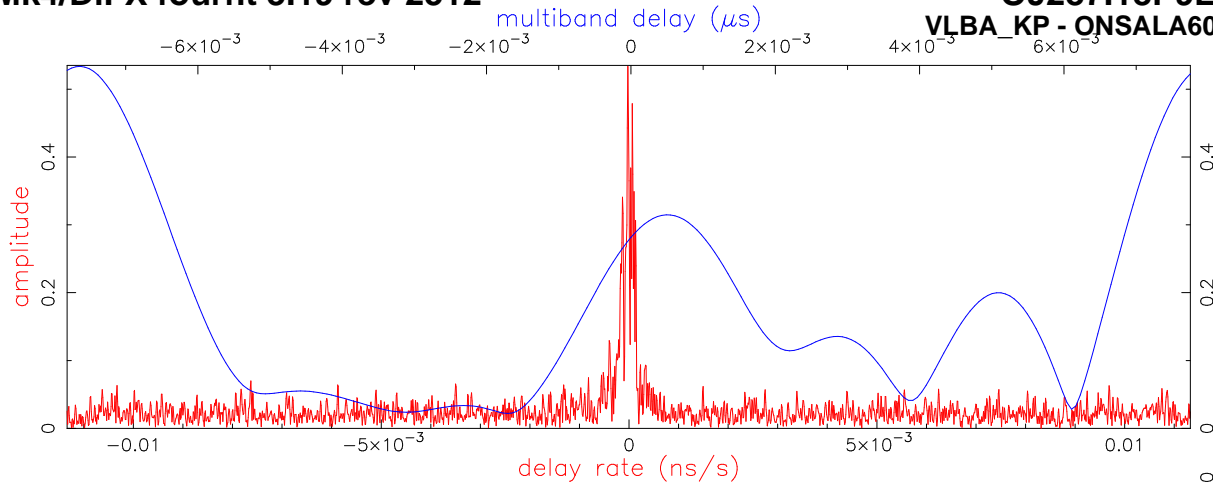
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120811  
2020:014:135814  
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

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

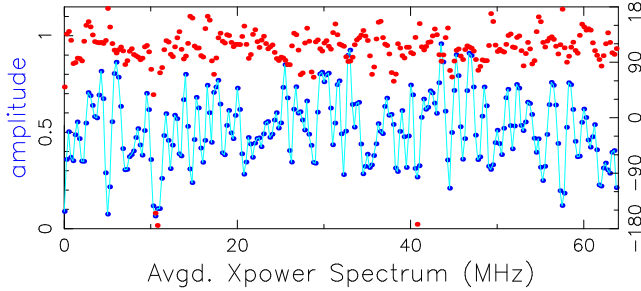
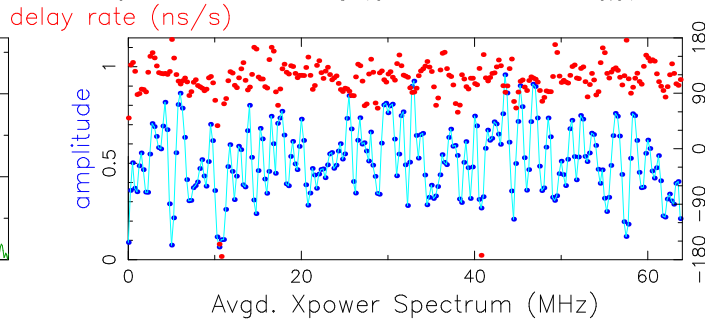
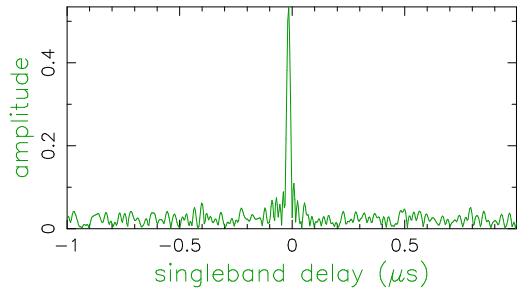


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	7.20529347033E+03		Apriori delay (usec)		7.20531840822E+03		Resid mbdelay (usec)		6.31212E-03	+/- 3.9E-05
Sband delay (usec)	7.20529998272E+03		Apriori clock (usec)		-3.6819256E+01		Resid sbdelay (usec)		-1.84255E-02	+/- 3.1E-04
Phase delay (usec)	7.20531841154E+03		Apriori clockrate (us/s)		-4.1900001E-07		Resid phdelay (usec)		3.32735E-06	+/- 1.3E-07
Delay rate (us/s)	1.60072981507E+00		Apriori rate (us/s)		1.60072979491E+00		Resid rate (us/s)		2.01648E-08	+/- 5.2E-10
Total phase (deg)	349.3		Apriori accel (us/s/s)		-5.13770689756E-05		Resid phase (deg)		103.2	+/- 4.1

ph/seg (deg) 63.8 9.7 Search (2048X32) 0.483 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 99.6 17.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 47.7 5.8 Inc. seg. avg. 0.900 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 53.7 10.0 Inc. frq. avg. 0.630 Sample rate(MISamp/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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9837.811 -4189.595 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/fX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/fX.W.88.18P9EC

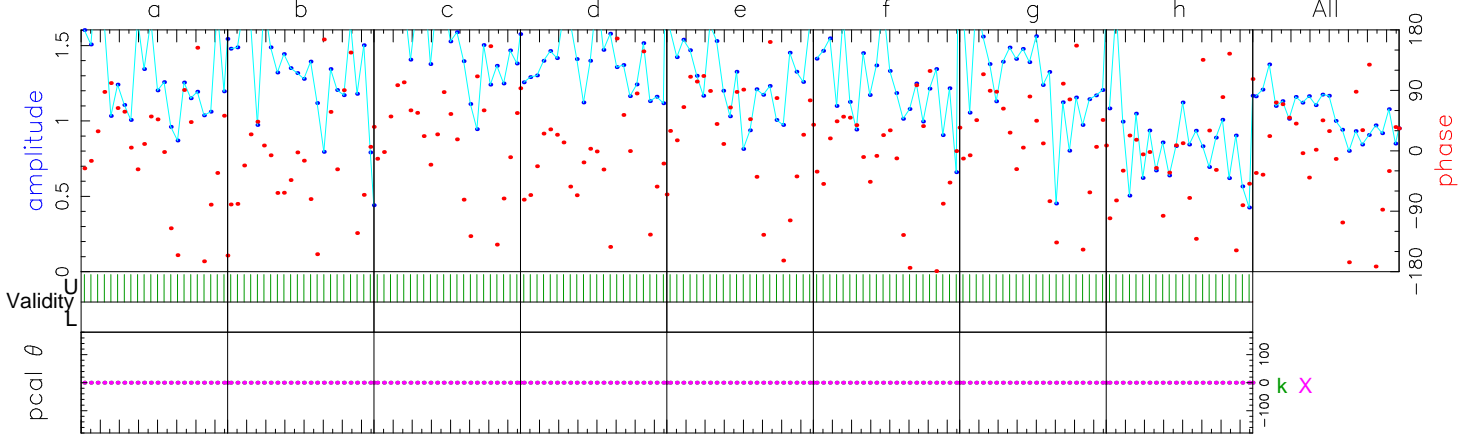


Fringe quality 4  
SNR 30.7  
Int time 439.638  
Amp 0.535  
Phase 15.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.016309  
MBD -0.007657  
Fringe rate (Hz)  
-0.002201  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512  
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120814  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"



Avgd. Xpower Spectrum (MHz)

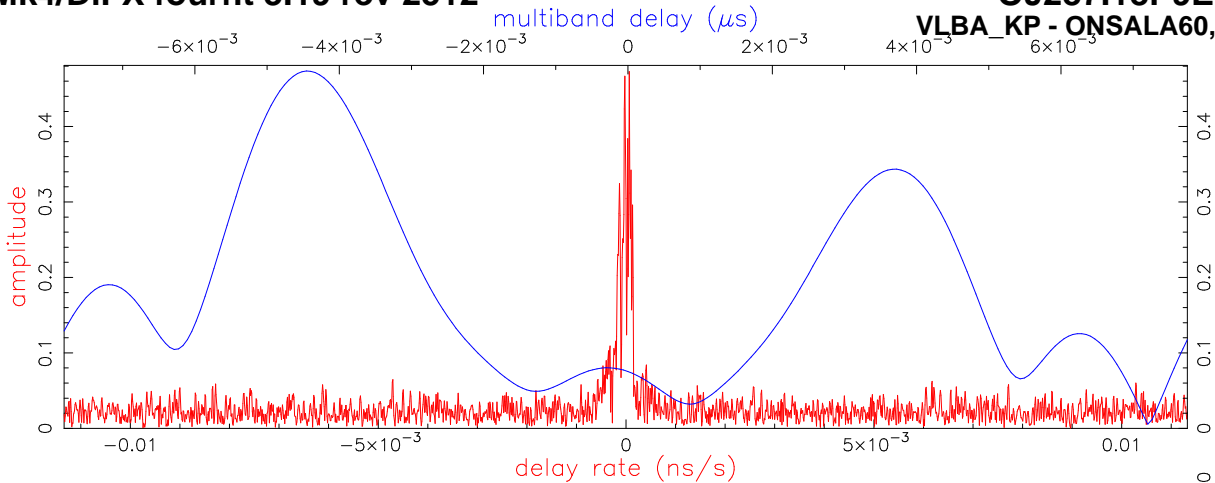
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	26.6	-30.2	39.4	-15.7	62.2	9.6	38.5	-35.7	Phase	15.4
	0.6	0.6	0.8	0.7	0.6	0.7	0.7	0.4	Ampl.	0.6
	252.5	252.3	252.8	252.2	252.0	252.4	252.3	251.2	Sbd box	252.8
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	5.53016656895E+03		Apriori delay (usec)		5.53018985145E+03		Resid mbdelay (usec)		-7.65750E-03	+/- 3.5E-05
Sband delay (usec)	5.53017354270E+03		Apriori clock (usec)		-4.1051052E+01		Resid sbdelay (usec)		-1.63087E-02	+/- 2.8E-04
Phase delay (usec)	5.53018985194E+03		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		4.95184E-07	+/- 1.2E-07
Delay rate (us/s)	1.70368620277E+00		Apriori rate (us/s)		1.70368622832E+00		Resid rate (us/s)		-2.55520E-08	+/- 4.7E-10
Total phase (deg)	304.6		Apriori accel (us/s/s)		-4.17304417492E-05		Resid phase (deg)		15.4	+/- 3.7

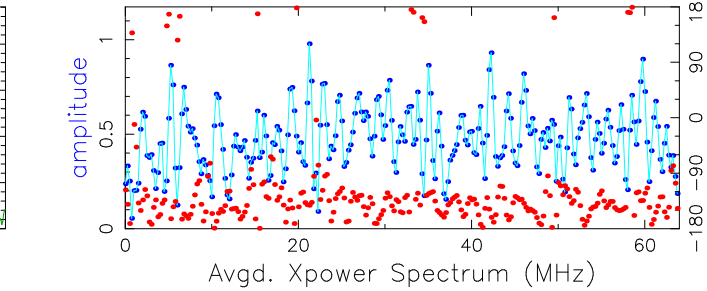
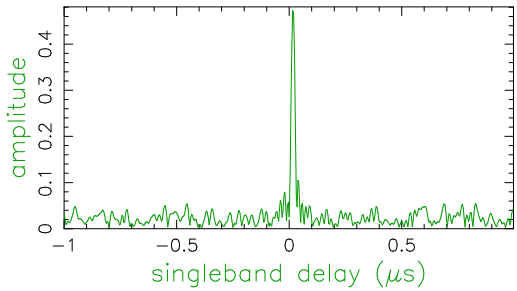
ph/seg (deg) 75.7 9.0 Search (2048X32) 0.518 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 100.1 15.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 39.0 5.3 Inc. seg. avg. 1.039 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 26.6 9.2 Inc. frq. avg. 0.627 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -10449.579 -3745.802 simultaneous interpolator





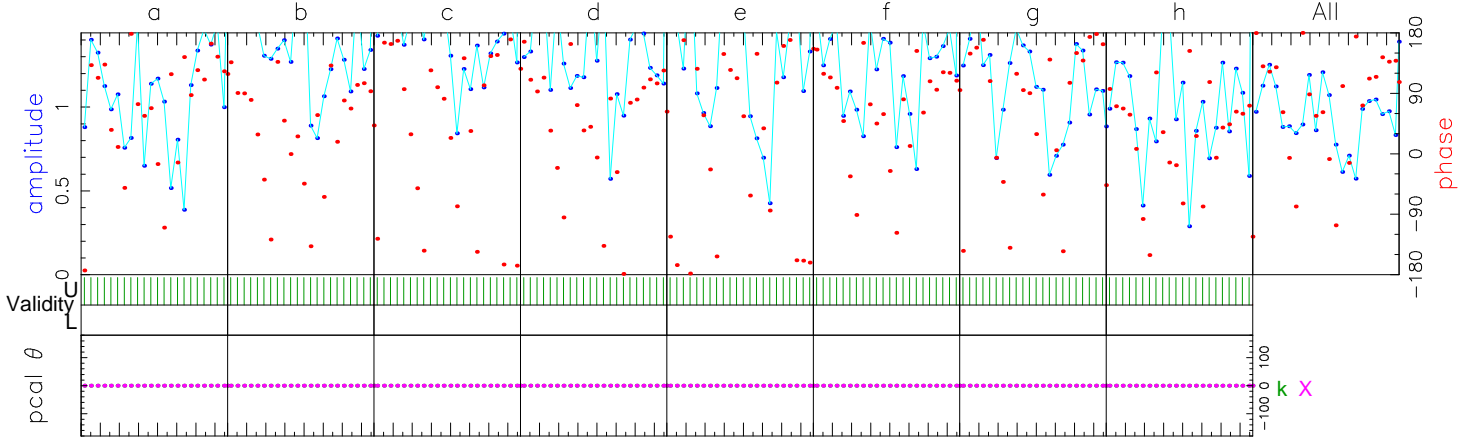
Fringe quality 6

SNR 27.6  
Int time 439.638  
Amp 0.481  
Phase 107.9  
PFD 0.0e+00  
Delays (us)  
SBD 0.017283  
MBD -0.004381  
Fringe rate (Hz)  
0.005658  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

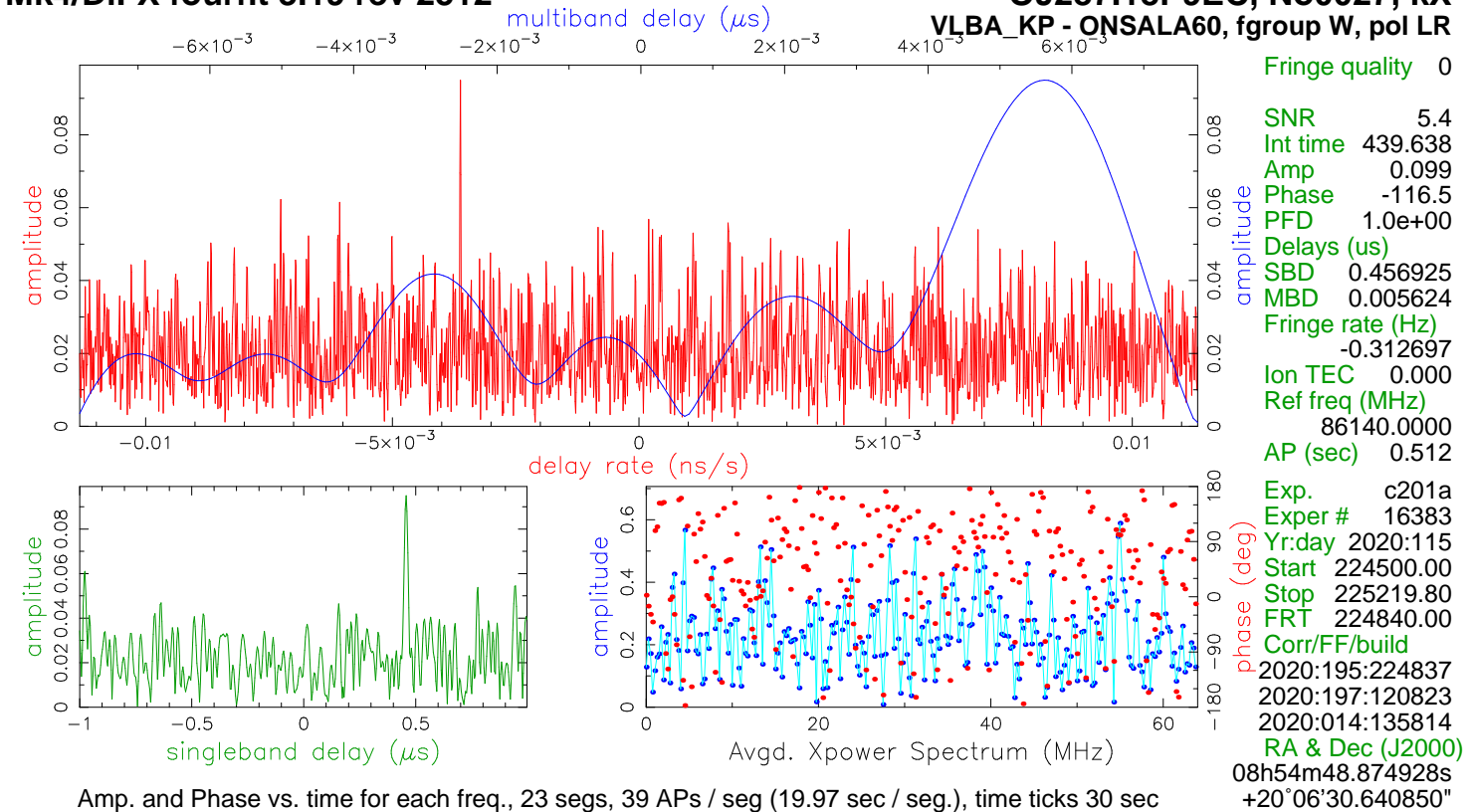


Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120819  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

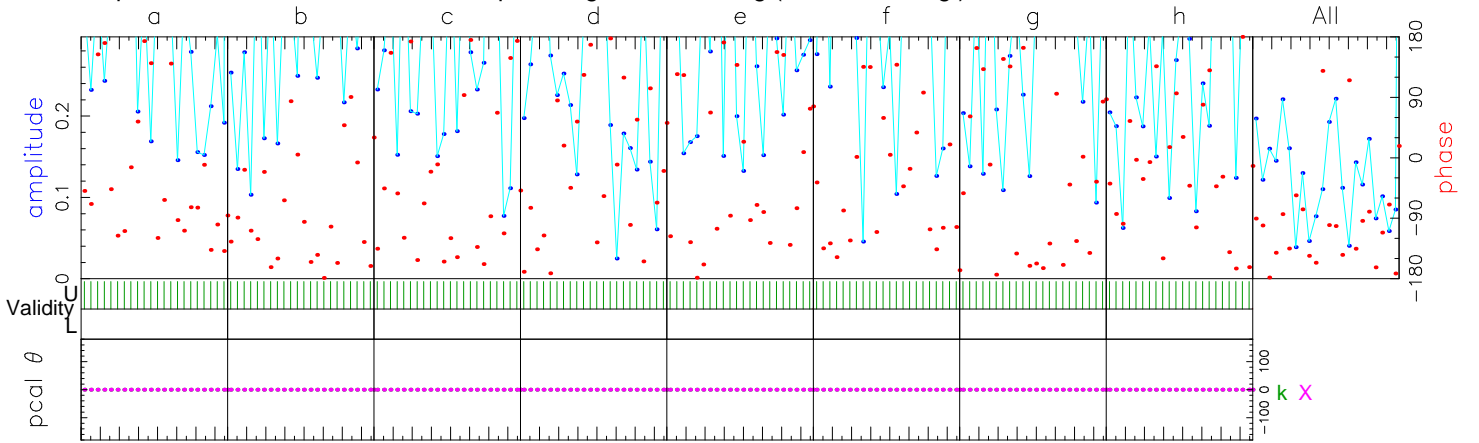
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	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		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		5.53020109529E+03			5.53018985145E+03				-4.38115E-03	+/- 3.9E-05
Sband delay (usec)		5.53020713470E+03			-4.1051052E+01				1.72832E-02	+/- 3.1E-04
Phase delay (usec)		5.53018985492E+03			-5.2260003E-07				3.47801E-06	+/- 1.3E-07
Delay rate (us/s)		1.70368629400E+00			1.70368622832E+00				6.56783E-08	+/- 5.3E-10
Total phase (deg)			37.1		-4.17304417492E-05				107.9	+/- 4.2
pcal mode:					MANUAL, MANUAL					
pcal rate:					0.000E+00, 0.000E+00 (us/s)					
Bits/sample:					2x2					
Sample rate (MSamp/s):					128					
Data rate (Mb/s):					2048					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
PC period (AP's)									5, 5	
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)	73.8	10.0		Search (2048X32)	0.471					
amp/seg (%)	103.8	17.4		Interp.	0.000					
ph/frq (deg)	46.9	5.9		Inc. seg. avg.	0.933					
amp/frq (%)	30.7	10.3		Inc. frq. avg.	0.612					
k: az 91.6 el 42.9 pa -64.5				X: az 266.5 el 26.2 pa 35.0						
				u,v (fr/asec) -10449.579 -3745.802						
Control file: cf_1234_gmva				Input file: /Exps/c201a/v1/1234/No0027/kX..18P9EC						
				Output file: /Exps/c201a/v1/1234/No0027/kX.W.120.18P9EC						



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
	-100.7	-120.0	-130.4	-128.5	-128.7	-81.7	-160.8	-38.8	Phase	-116.5
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	254.5	310.8	457.6	11.9	499.2	171.2	261.2	10.6	Sbd box	374.0
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	5.53064860057E+03		Apriori delay (usec)		5.53018985145E+03		Resid mbdelay (usec)		5.62412E-03	+/- 2.0E-04
Sband delay (usec)	5.53064677670E+03		Apriori clock (usec)		-4.1051052E+01		Resid sbdelay (usec)		4.56925E-01	+/- 1.6E-03
Phase delay (usec)	5.53018984769E+03		Apriori clockrate (us/s)		-5.2260003E-07		Resid phdelay (usec)		-3.75735E-06	+/- 6.8E-07
Delay rate (us/s)	1.70368259822E+00		Apriori rate (us/s)		1.70368622832E+00		Resid rate (us/s)		-3.63010E-06	+/- 2.7E-09
Total phase (deg)	172.7		Apriori accel (us/s/s)		-4.17304417492E-05		Resid phase (deg)		-116.5	+/- 21.0

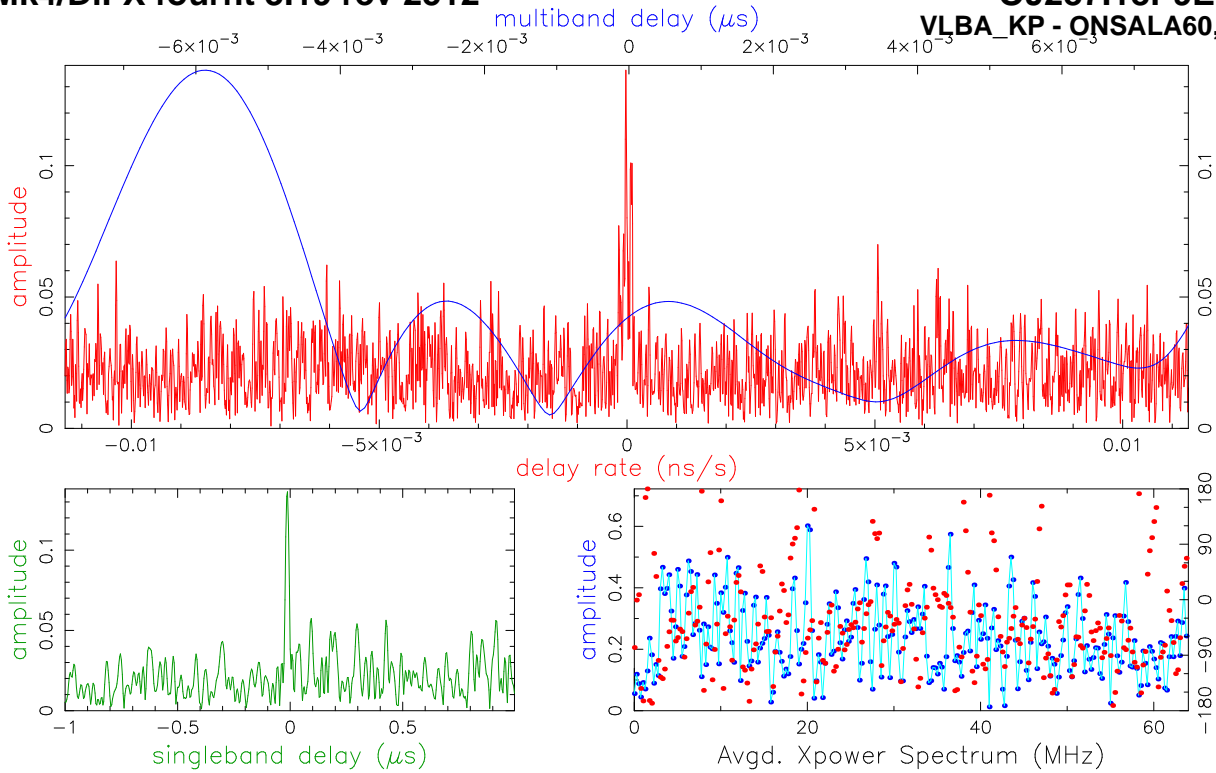
	RMS	Theor.	Amplitude	0.099 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	50.1	50.4	Search (2048X32)	0.094	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	69.5	88.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	40.8	29.7	Inc. seg. avg.	0.094	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	36.6	51.9	Inc. frq. avg.	0.099	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

k: az 91.6 el 42.9 pa -64.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -10449.579 -3745.802 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/kX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kX.W.140.18P9EC

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, kX  
VLBA\_KP - ONSALA60, fgroup W, pol RL

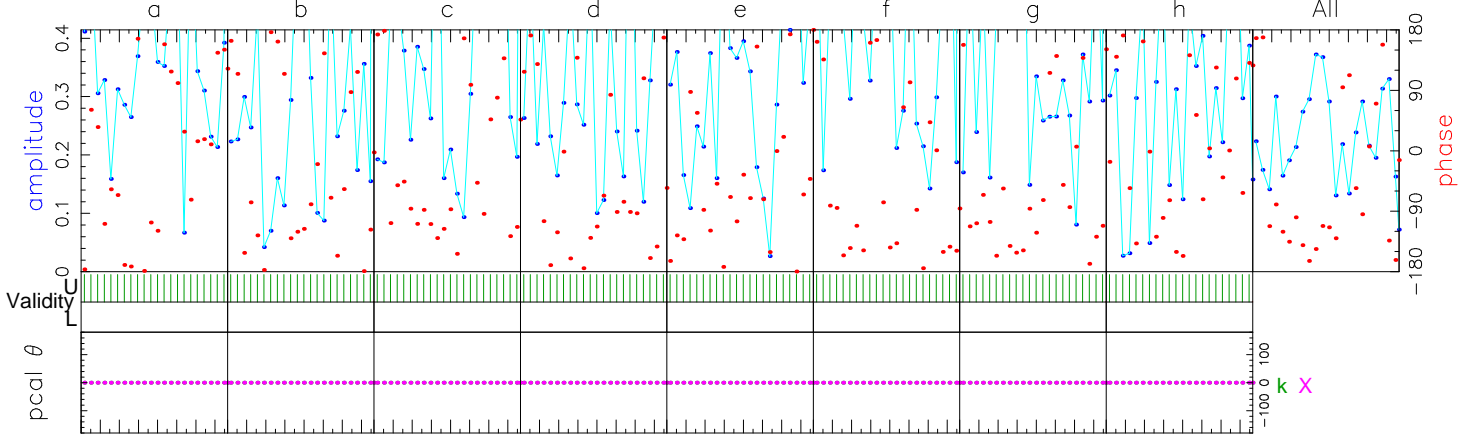


Fringe quality 9

SNR 7.9  
Int time 439.638  
Amp 0.138  
Phase -135.3  
PFD 7.9e-07  
Delays (us)  
SBD -0.013225  
MBD -0.005910  
Fringe rate (Hz)  
-0.002379  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

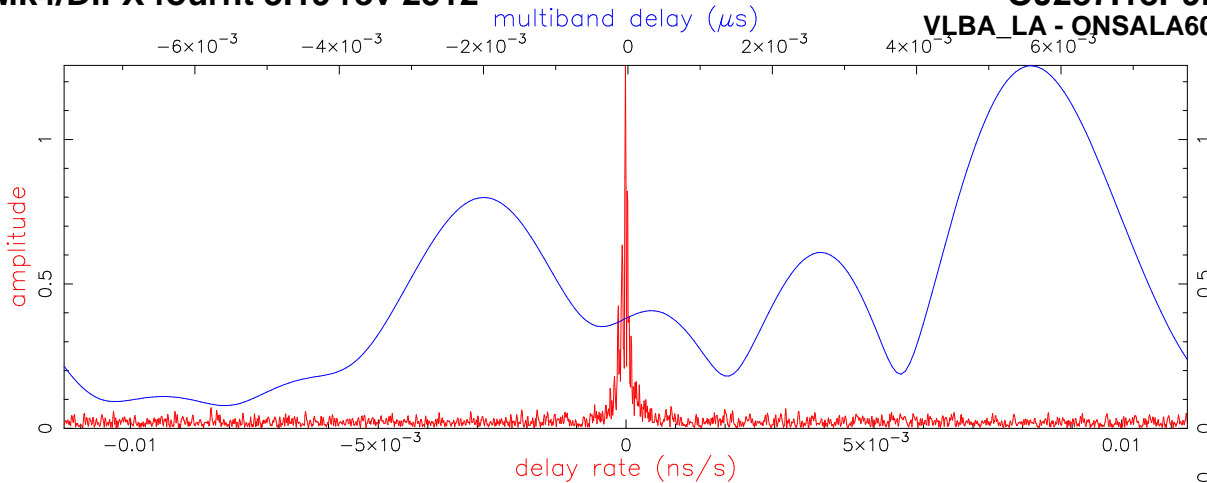
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120827  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

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



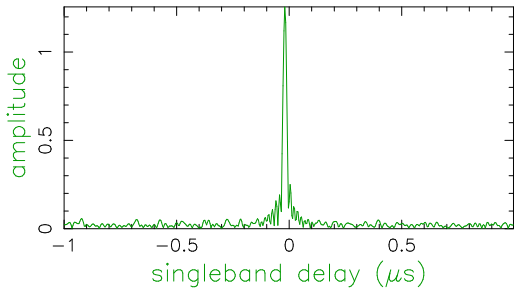
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)		5.53018394187E+03			5.53018985145E+03				Resid mbdelay (usec)	-5.90958E-03 +/- 1.4E-04
Sband delay (usec)		5.53017662620E+03			-4.1051052E+01				Resid sbdelay (usec)	-1.32252E-02 +/- 1.1E-03
Phase delay (usec)		5.53018984708E+03			-5.2260003E-07				Resid phdelay (usec)	-4.36166E-06 +/- 4.7E-07
Delay rate (us/s)		1.70368620070E+00			1.70368622832E+00				Resid rate (us/s)	-2.76210E-08 +/- 1.8E-09
Total phase (deg)			154.0		-4.17304417492E-05				Resid phase (deg)	-135.3 +/- 14.5

ph/seg (deg) 67.6 34.7 Amplitude 0.138 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 89.4 60.5 Search (2048X32) 0.130 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 33.6 20.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 46.8 35.7 Inc. seg. avg. 0.201 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 k: az 91.6 el 42.9 pa -64.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -10449.579 -3745.802 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/kX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/kX.W.156.18P9EC simultaneous interpolator

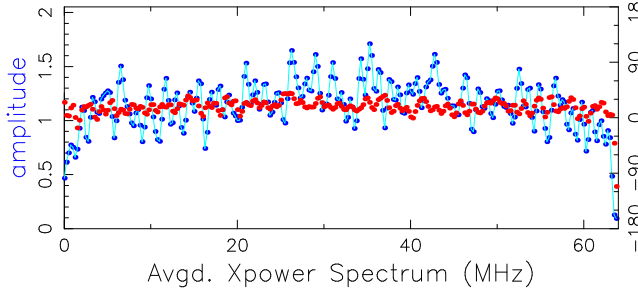


Fringe quality 3

SNR 72.0  
Int time 439.298  
Amp 1.256  
Phase 93.5  
PFD 0.0e+00  
Delays (us)  
SBD -0.019110  
MBD 0.005593  
Fringe rate (Hz)  
-0.001263  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

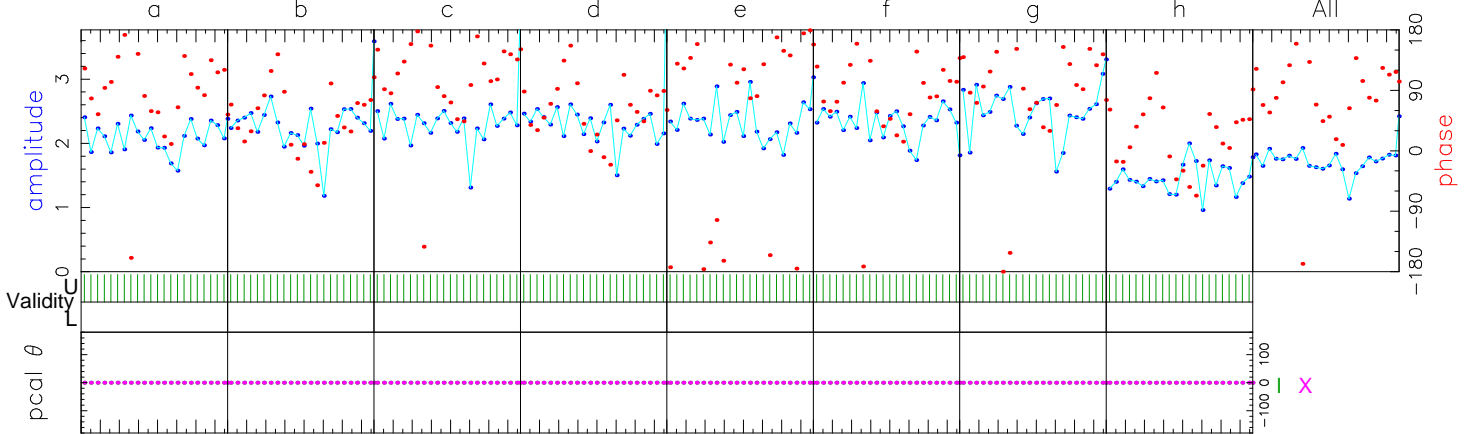


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120829  
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



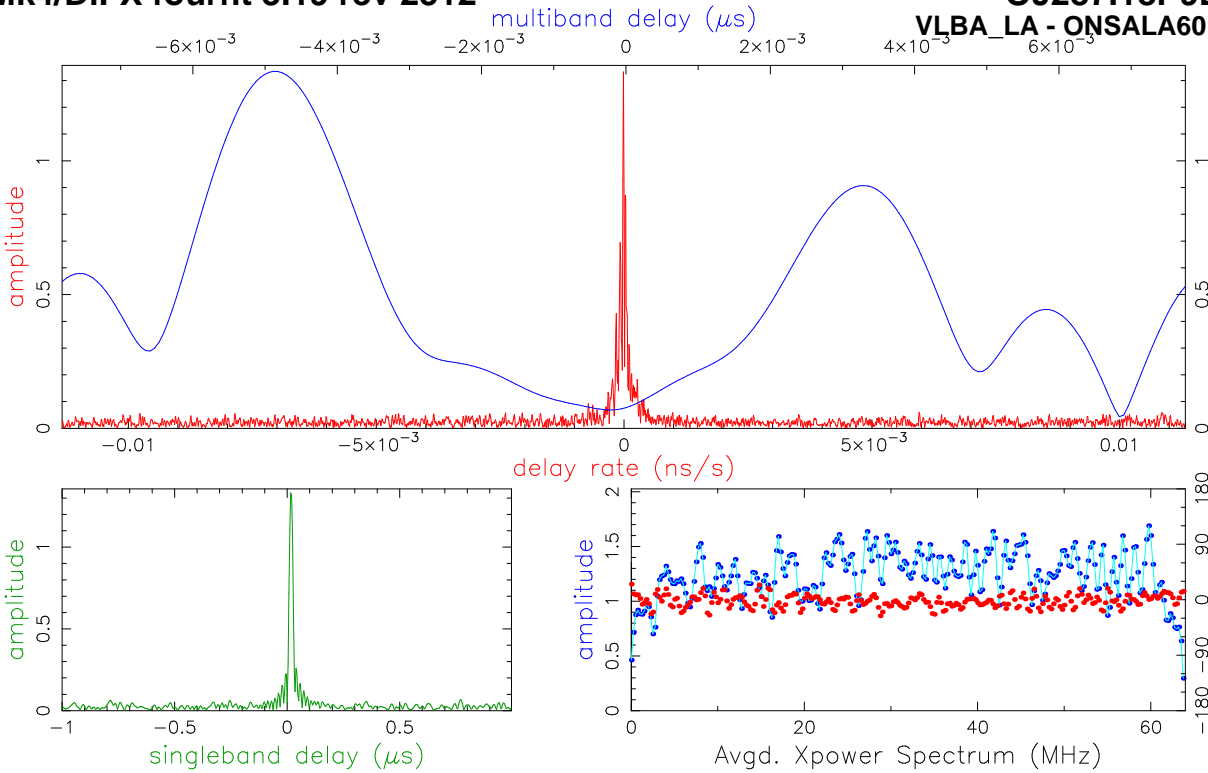
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	102.7	47.8	120.5	62.8	154.8	90.5	112.5	16.6	Phase	93.5
	1.5	1.6	1.7	1.7	1.7	1.7	1.8	1.0	Ampl.	1.6
	251.6	251.7	252.0	251.8	251.7	251.5	251.3	250.3	Sbd box	252.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	6.57169388695E+03	Apriori delay (usec)	6.57171954391E+03	Resid mbdelay (usec)	5.59304E-03	+/-	1.5E-05
Sband delay (usec)	6.57170043391E+03	Apriori clock (usec)	-4.4393761E+01	Resid sbdelay (usec)	-1.91100E-02	+/-	1.2E-04
Phase delay (usec)	6.57171954693E+03	Apriori clockrate (us/s)	-6.7900004E-07	Resid phdelay (usec)	3.01650E-06	+/-	5.1E-08
Delay rate (us/s)	1.58720754840E+00	Apriori rate (us/s)	1.58720756307E+00	Resid rate (us/s)	-1.46671E-08	+/-	2.0E-10
Total phase (deg)	278.1	Apriori accel (us/s/s)	-4.51491113099E-05	Resid phase (deg)	93.5	+/-	1.6

ph/seg (deg)	44.2	RMS	Theor.	Amplitude	1.256 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	38.3	44.2	3.8	Search (2048X32)	1.187	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	48.1	38.3	6.7	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	32.2	48.1	2.3	Inc. seg. avg.	1.706	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
		32.2	3.9	Inc. frq. avg.	1.591	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

I: az 98.8 el 47.0 pa -58.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9745.987 -3387.162 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/IX.W.163.18P9EC

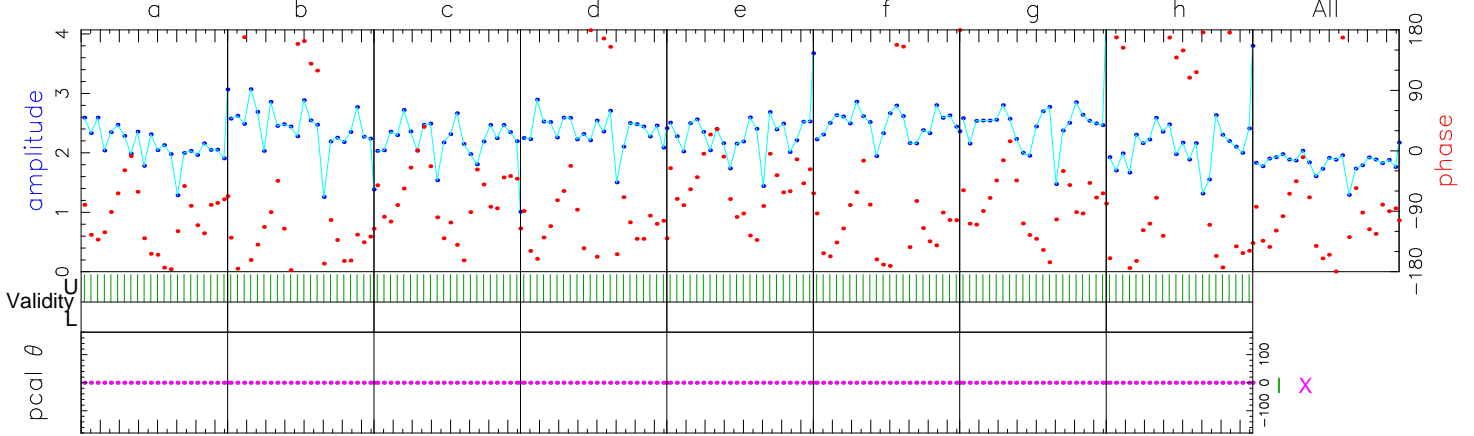


Fringe quality 3

SNR 77.8  
Int time 439.298  
Amp 1.357  
Phase -107.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.017342  
MBD -0.004800  
Fringe rate (Hz)  
-0.001246  
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  
2020:197:120833  
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



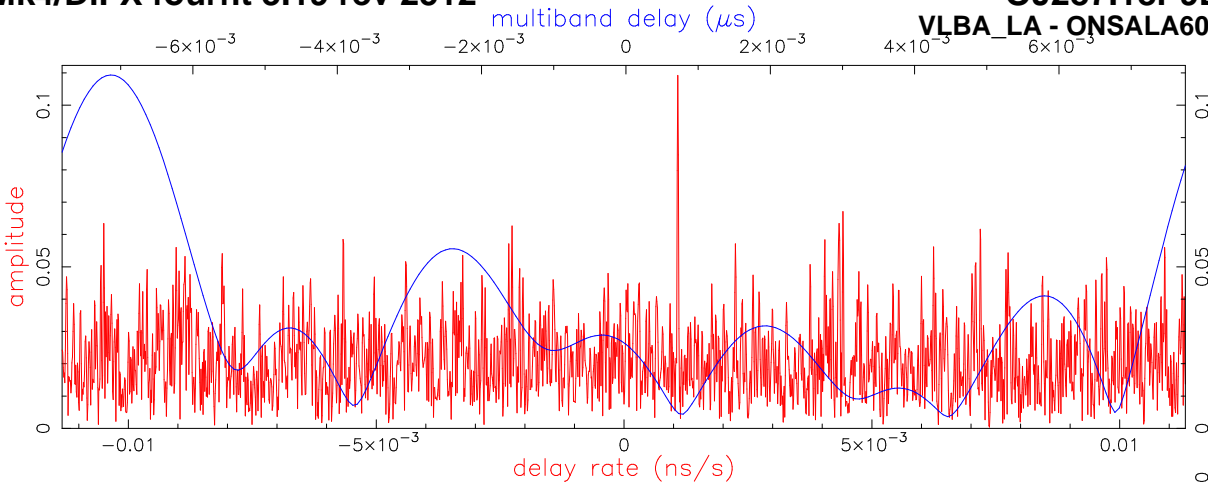
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-100.4	-151.7	-67.9	-121.9	-48.0	-124.0	-78.7	-166.4	Phase	-107.2
	1.6	1.8	1.6	1.7	1.7	1.8	1.8	1.5	Ampl.	1.7
	260.7	261.3	261.6	260.9	260.8	261.1	260.7	259.8	Sbd box	261.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	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)	6.57173036904E+03		Apriori delay (usec)		6.57171954391E+03		Resid mbdelay (usec)		-4.79987E-03	+/- 1.4E-05
Sband delay (usec)	6.57173688591E+03		Apriori clock (usec)		-4.4393761E+01		Resid sbdelay (usec)		1.73420E-02	+/- 1.1E-04
Phase delay (usec)	6.57171954046E+03		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		-3.45655E-06	+/- 4.8E-08
Delay rate (us/s)	1.58720754861E+00		Apriori rate (us/s)		1.58720756307E+00		Resid rate (us/s)		-1.44617E-08	+/- 1.9E-10
Total phase (deg)			Apriori accel (us/s/s)		-4.51491113099E-05		Resid phase (deg)		-107.2	+/- 1.5

	RMS	Theor.	Amplitude	1.357 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	44.3	3.5	Search (2048X32)	1.290	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	36.6	6.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	44.5	2.1	Inc. seg. avg.	1.827	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	25.1	3.6	Inc. frq. avg.	1.682	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

I: az 98.8 el 47.0 pa -58.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9745.987 -3387.162 simultaneous interpolator

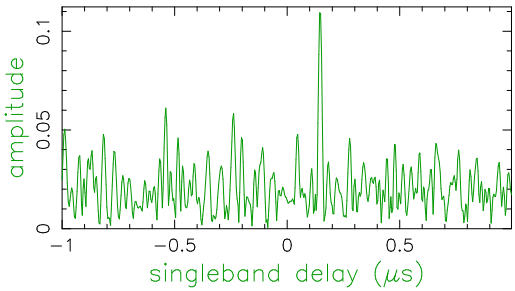
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/IX.W.177.18P9EC



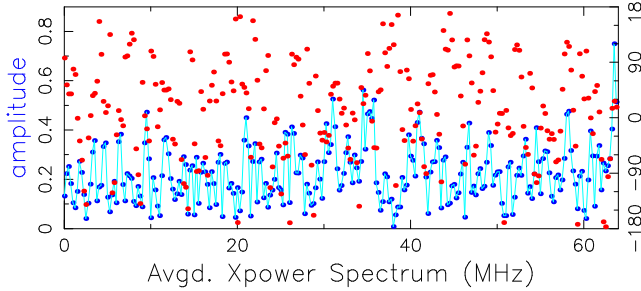


Fringe quality 0

SNR 6.4  
 Int time 439.298  
 Amp 0.112  
 Phase -8.5  
 PFD 3.8e-02  
 Delays (us)  
 SBD 0.146428  
 MBD -0.007087  
 Fringe rate (Hz)  
 0.093970  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

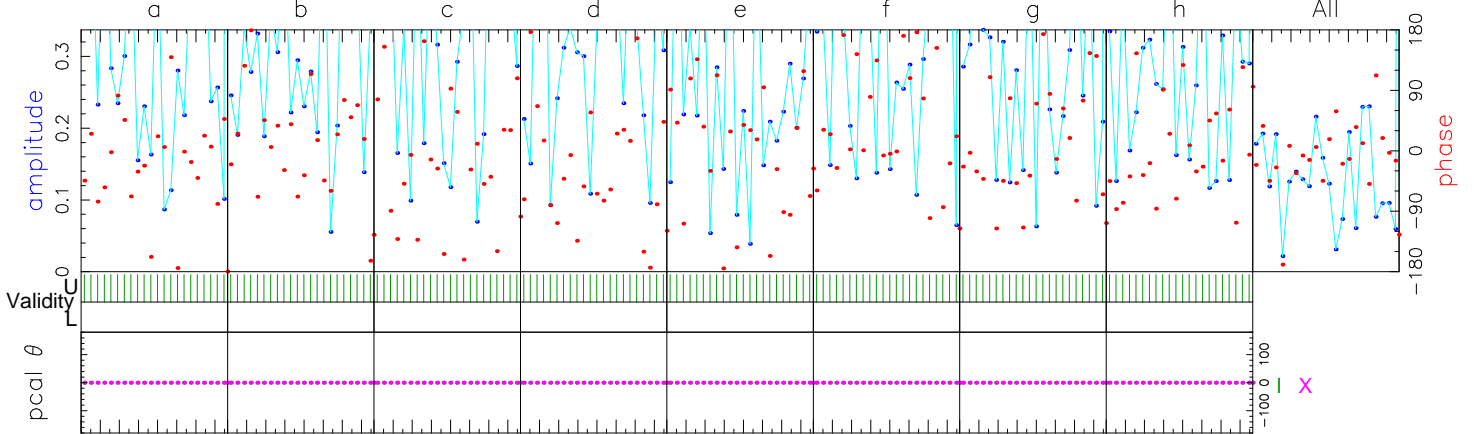


delay rate (ns/s)



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

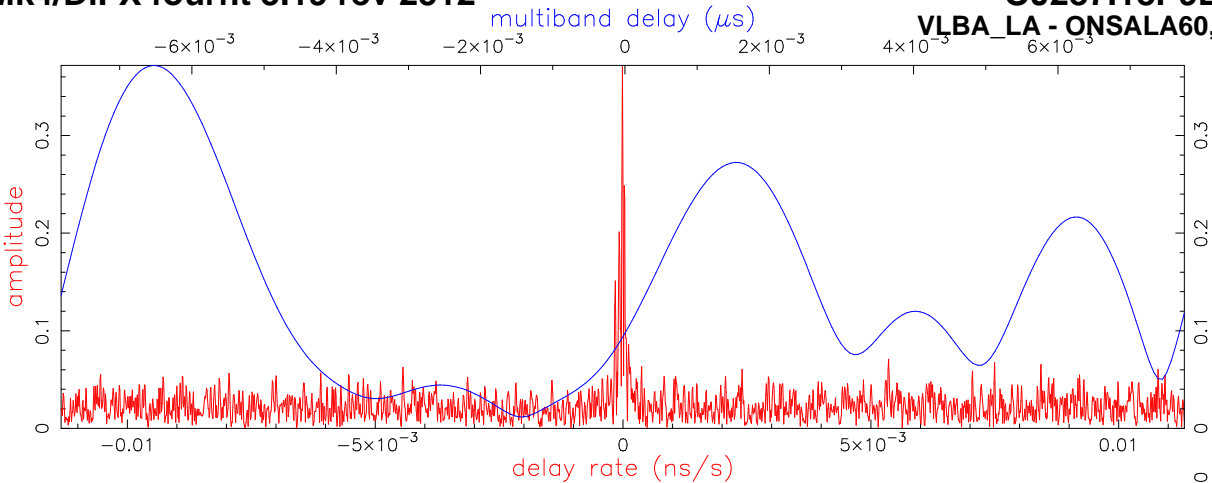


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-16.6	19.3	-21.1	-28.4	37.7	-0.8	-24.6	-19.9		-8.5
	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	293.7	23.9	429.9	451.9	457.7	328.2	74.9	294.8	Sbd box	294.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	ManI PC	
I	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	6.57186870664E+03	Apriori delay (usec)	6.57171954391E+03	Resid mbdelay (usec)	-7.08727E-03	+/-	1.7E-04
Sband delay (usec)	6.57186597241E+03	Apriori clock (usec)	-4.4393761E+01	Resid sbdelay (usec)	1.46428E-01	+/-	1.3E-03
Phase delay (usec)	6.57171954364E+03	Apriori clockrate (us/s)	-6.7900004E-07	Resid phdelay (usec)	-2.74596E-07	+/-	5.8E-07
Delay rate (us/s)	1.58720865396E+00	Apriori rate (us/s)	1.58720756307E+00	Resid rate (us/s)	1.09089E-06	+/-	2.3E-09
Total phase (deg)	176.1	Apriori accel (us/s/s)	-4.51491113099E-05	Resid phase (deg)	-8.5	+/-	17.9

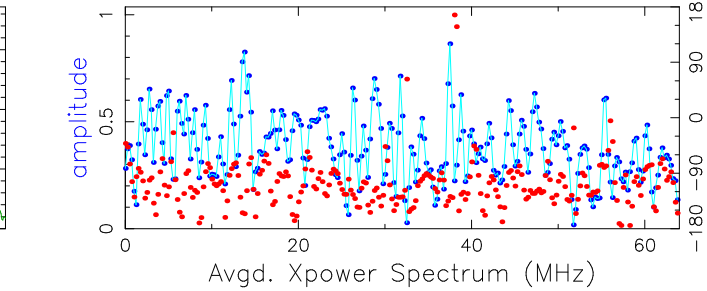
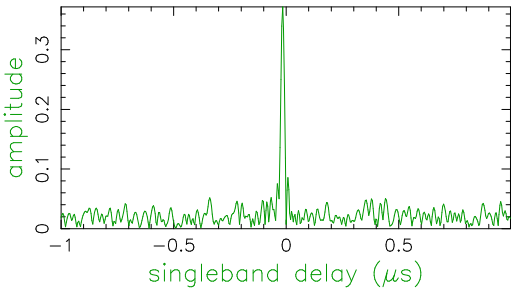
ph/seg (deg)	51.0	Theor.	42.8	Amplitude	0.112 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	70.2		74.8	Search (2048X32)	0.103	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	25.8		25.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.4		44.1	Inc. seg. avg.	0.103	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.107	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

I: az 98.8 el 47.0 pa -58.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9745.987 -3387.162 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IX...18P9EC Output file: /Exps/c201a/v1/1234/No0027/IX.W.193.18P9EC



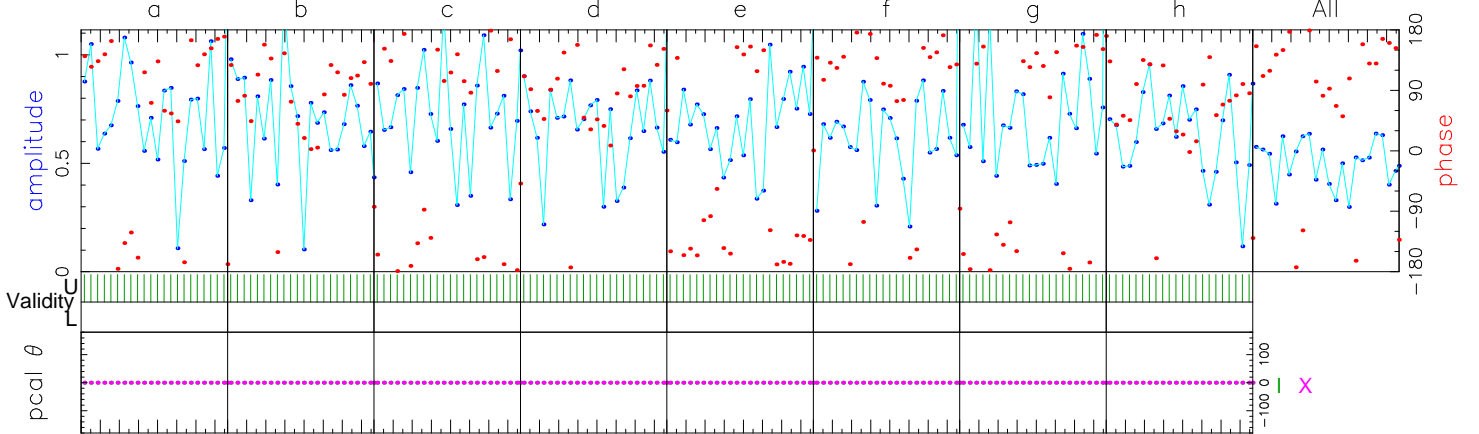
Fringe quality 8

SNR 21.3  
 Int time 439.298  
 Amp 0.372  
 Phase 143.0  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.015754  
 MBD -0.006530  
 Fringe rate (Hz)  
 -0.001289  
 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  
 2020:197:120842  
 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		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
I	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
I	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks
Group delay (usec)(sbd)	6.57169738936E+03		Apriori delay (usec)		6.57171954391E+03		Resid mbdelay (usec)		-6.52956E-03	+/- 5.1E-05
Sband delay (usec)	6.57170378966E+03		Apriori clock (usec)		-4.4393761E+01		Resid sbdelay (usec)		-1.57543E-02	+/- 4.0E-04
Phase delay (usec)	6.57171954852E+03		Apriori clockrate (us/s)		-6.7900004E-07		Resid phdelay (usec)		4.61060E-06	+/- 1.7E-07
Delay rate (us/s)	1.58720754810E+00		Apriori rate (us/s)		1.58720756307E+00		Resid rate (us/s)		-1.49654E-08	+/- 6.8E-10
Total phase (deg)	327.6		Apriori accel (us/s/s)		-4.51491113099E-05		Resid phase (deg)		143.0	+/- 5.4

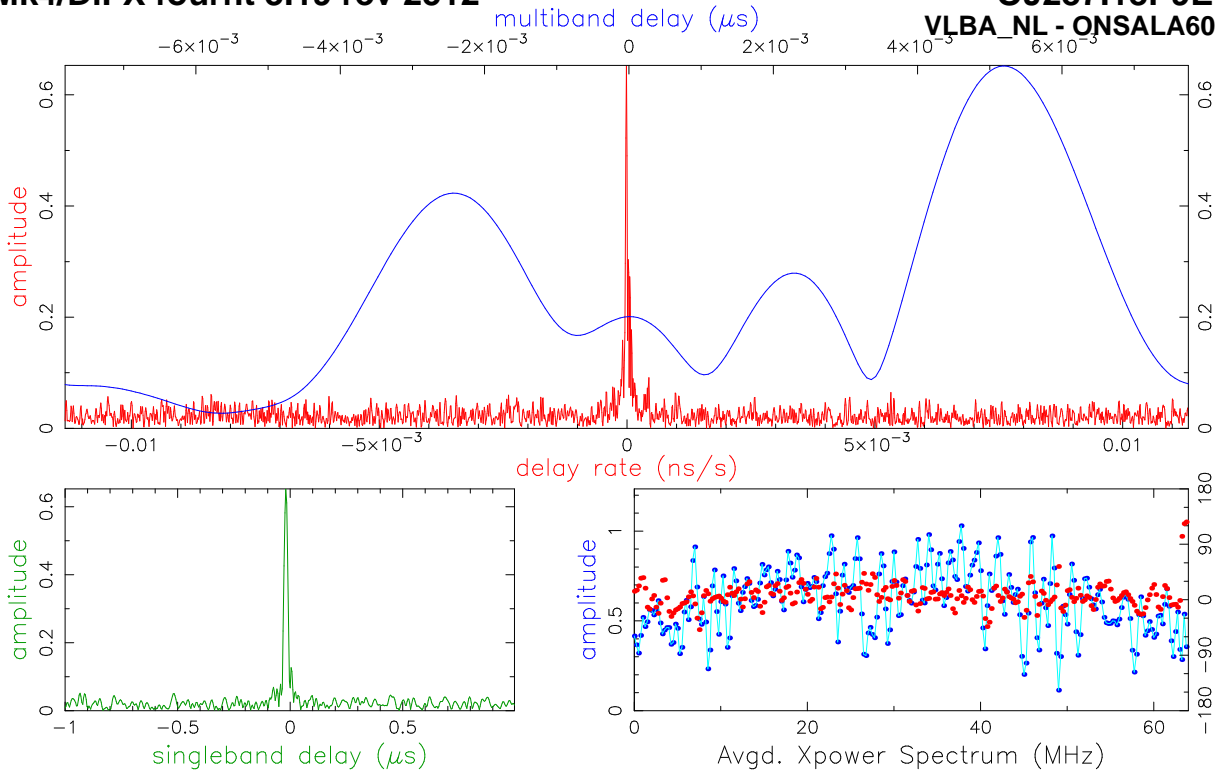
	RMS	Theor.	Amplitude	0.372 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	44.6	12.9	Search (2048X32)	0.350	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	45.4	22.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	48.4	7.6	Inc. seg. avg.	0.493	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	34.1	13.3	Inc. frq. avg.	0.486	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

I: az 98.8 el 47.0 pa -58.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -9745.987 -3387.162 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/IX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/IX.W.212.18P9EC

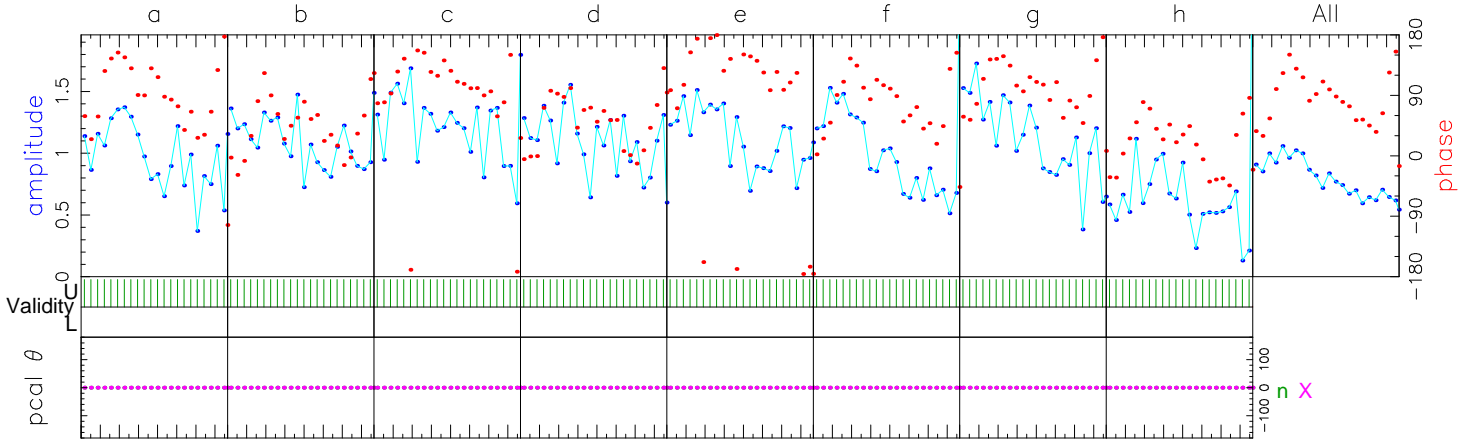
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, nX  
VLBA\_NL - ONSALA60, fgroup W, pol LL



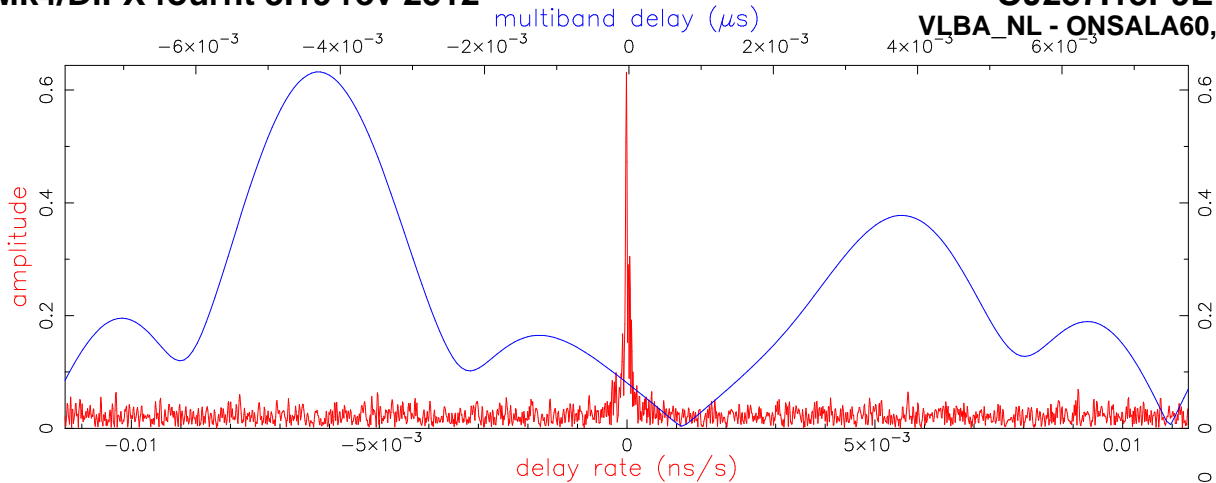
Fringe quality 5  
 SNR 37.4  
 Int time 439.116  
 Amp 0.653  
 Phase 87.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.018985  
 MBD 0.005206  
 Fringe rate (Hz)  
 -0.001121  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512  
 Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224500.00  
 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



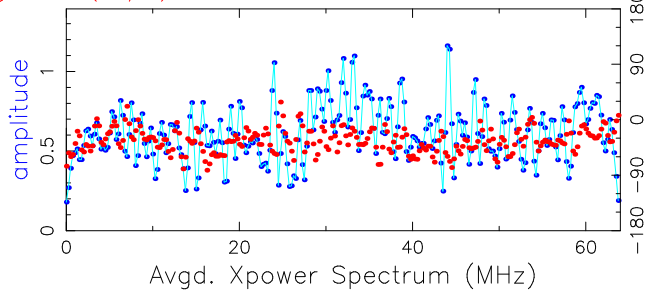
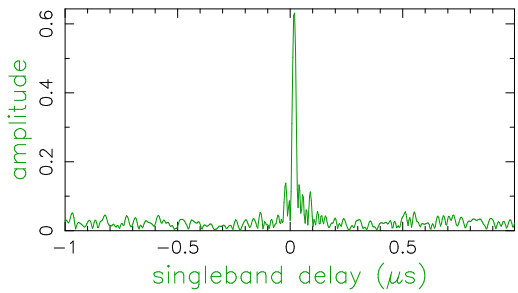
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
n	1000	1000	1000	1000	1000	1000	1000	1000		
X	1000	1000	1000	1000	1000	1000	1000	1000		
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
n	1000	1000	1000	1000	1000	1000	1000	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)	94.1		Apriori accel (us/s/s)		-5.24825293689E-05		Resid phase (deg)		87.8	+/- 3.1

ph/seg (deg) 36.6 7.3 Search (2048X32) 0.641 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 32.0 12.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 45.2 4.3 Inc. seg. avg. 0.797 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 33.6 7.6 Inc. frq. avg. 0.810 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.171.18P9EC



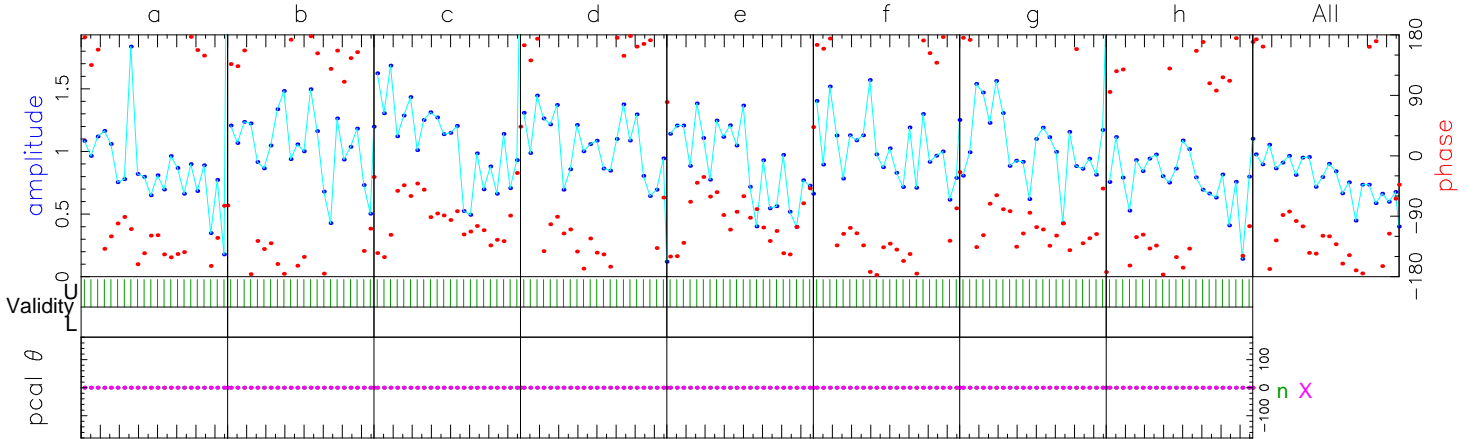
Fringe quality 5

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



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		-139.8
	0.7	0.9	0.9	0.8	0.7	0.8	0.8	0.5		0.8
	261.2	261.5	261.4	261.1	260.6	261.2	260.7	259.8		261.6
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		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

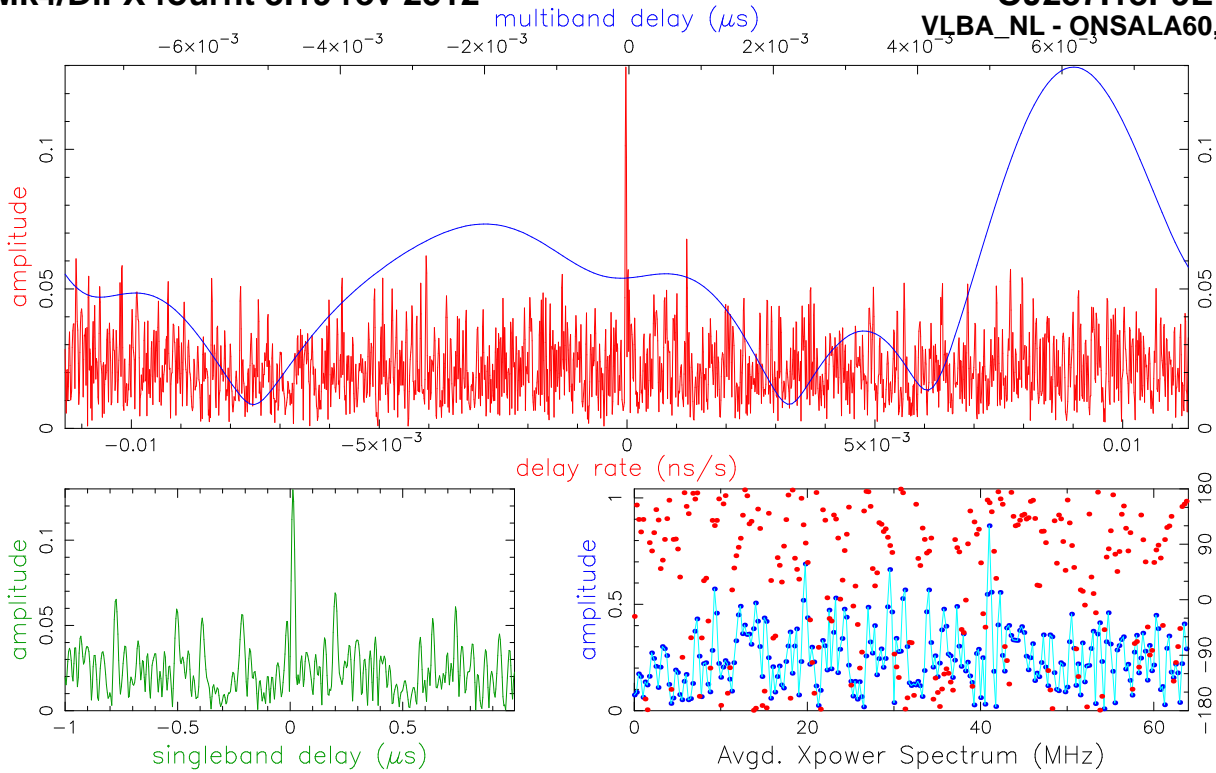
	RMS	Theor.	Amplitude	0.644 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	38.2	7.4	Search (2048X32)	0.624	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	33.1	13.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr 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

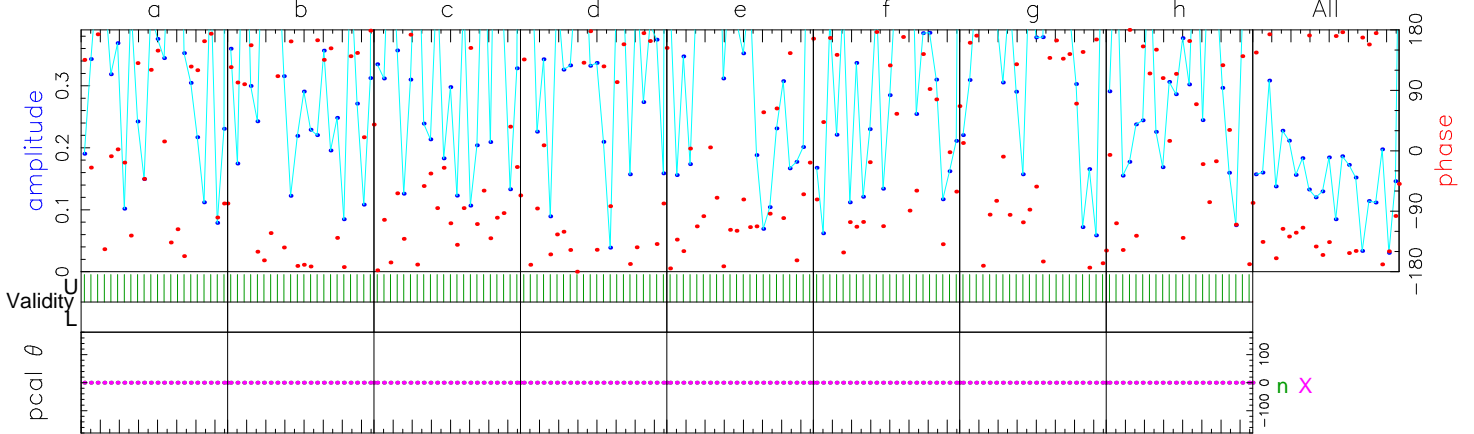
Mk4/DiFX fourfit 3.19 rev 2512

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

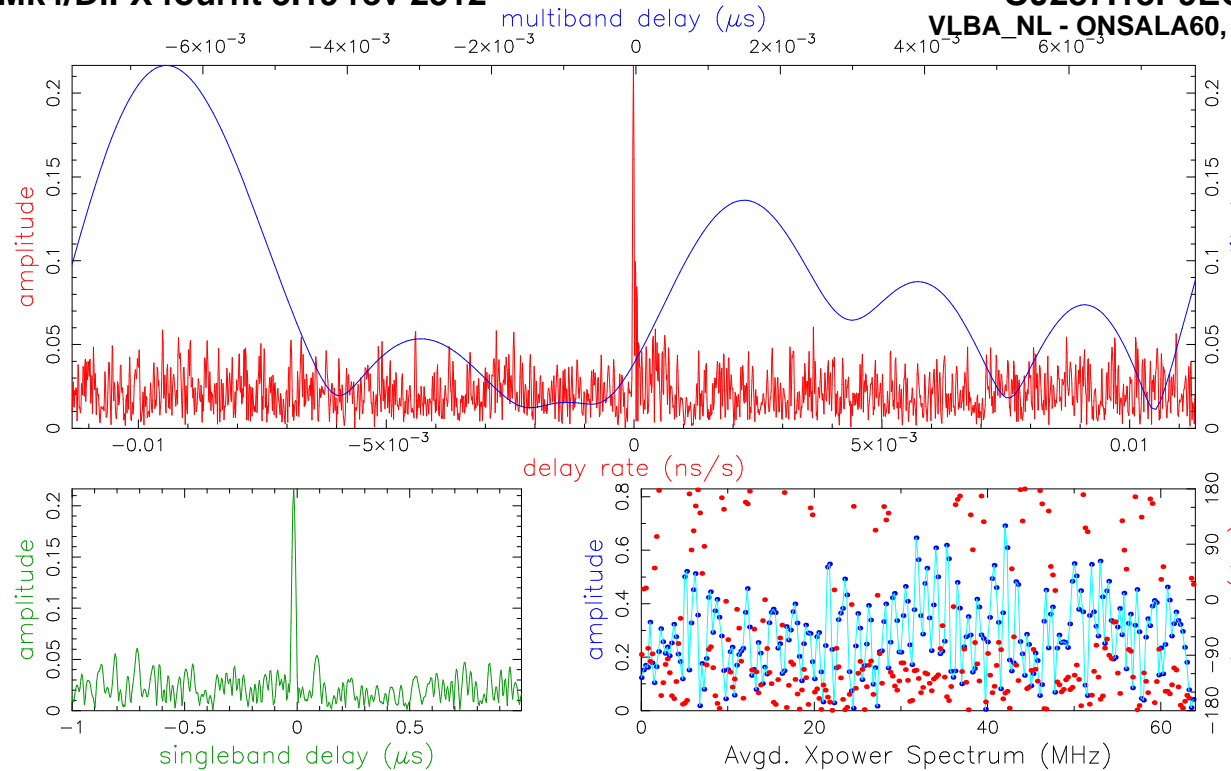
	RMS	Theor.	Amplitude	0.130 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	31.5	36.9	Search (2048X32)	0.121	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	50.3	64.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	41.3	21.7	Inc. seg. avg.	0.126	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	56.3	37.9	Inc. frq. avg.	0.152	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.217.18P9EC



Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, nX  
VLBA\_NL - ONSALA60, fgroup W, pol RL

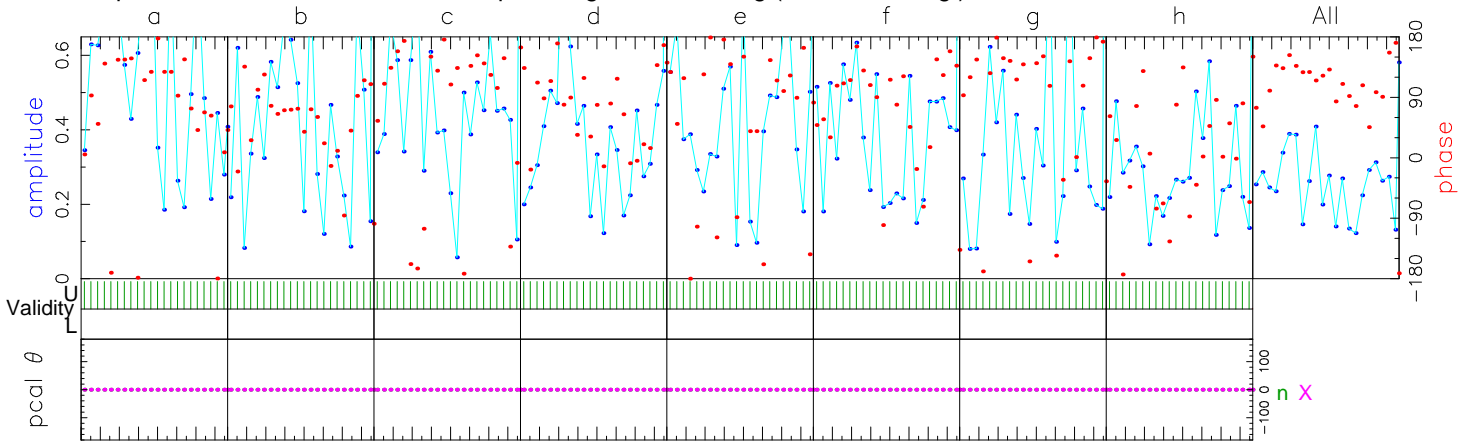


Fringe quality 9

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

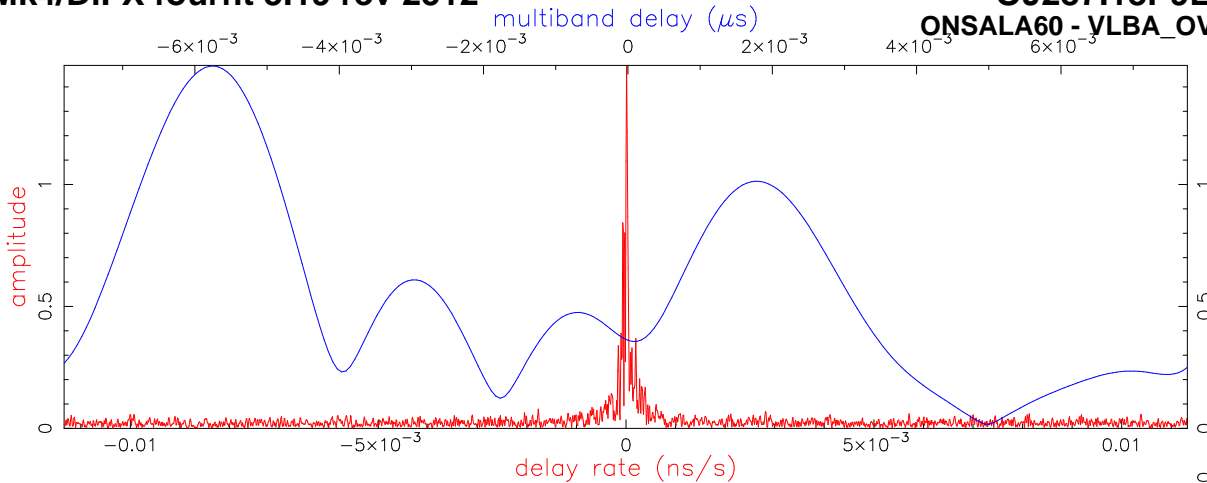


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	118.8	65.5	154.2	87.9	141.2	101.9	137.3	20.4	Phase	113.2
	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.1	Ampl.	0.3
	252.3	252.7	253.5	252.5	252.3	252.7	251.7	100.1	Sbd box	253.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
n:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	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		

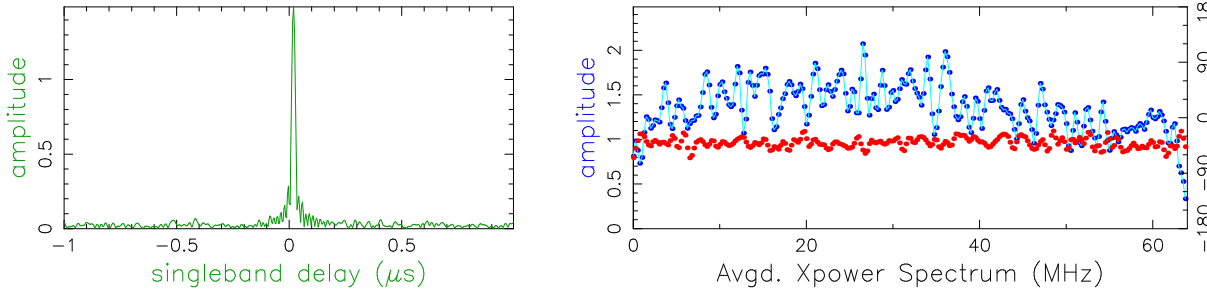
n: az 120.0 el 55.9 pa -43.5 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -8002.179 -2929.213 simultaneous interpolator

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



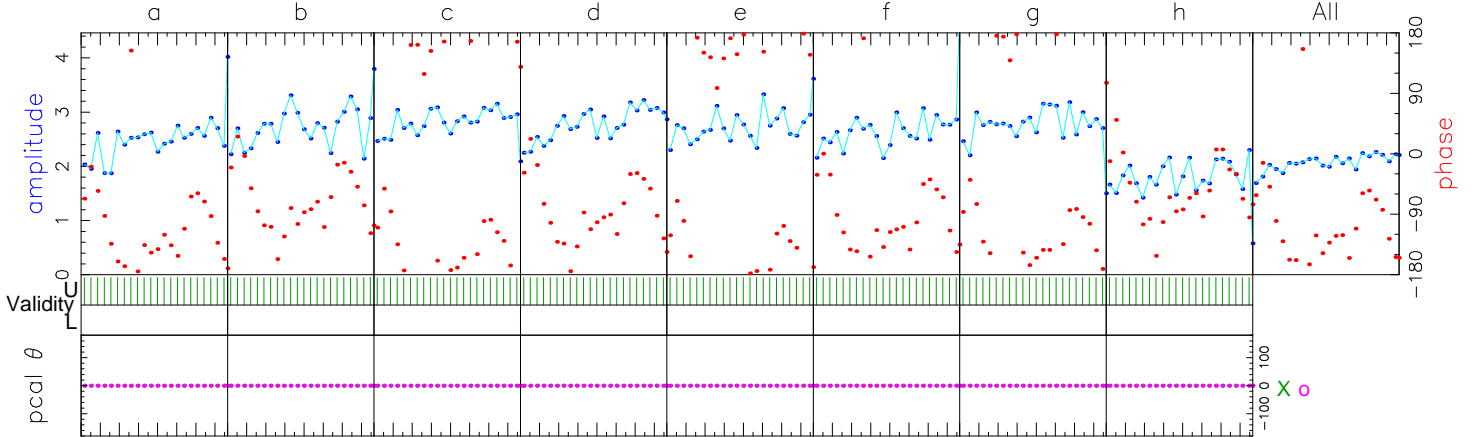
Fringe quality 3

SNR 85.3  
Int time 439.618  
Amp 1.488  
Phase -115.7  
PFD 0.0e+00  
Delays (us)  
SBD 0.018960  
MBD -0.005771  
Fringe rate (Hz) 0.000837  
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  
2020:197:120834  
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



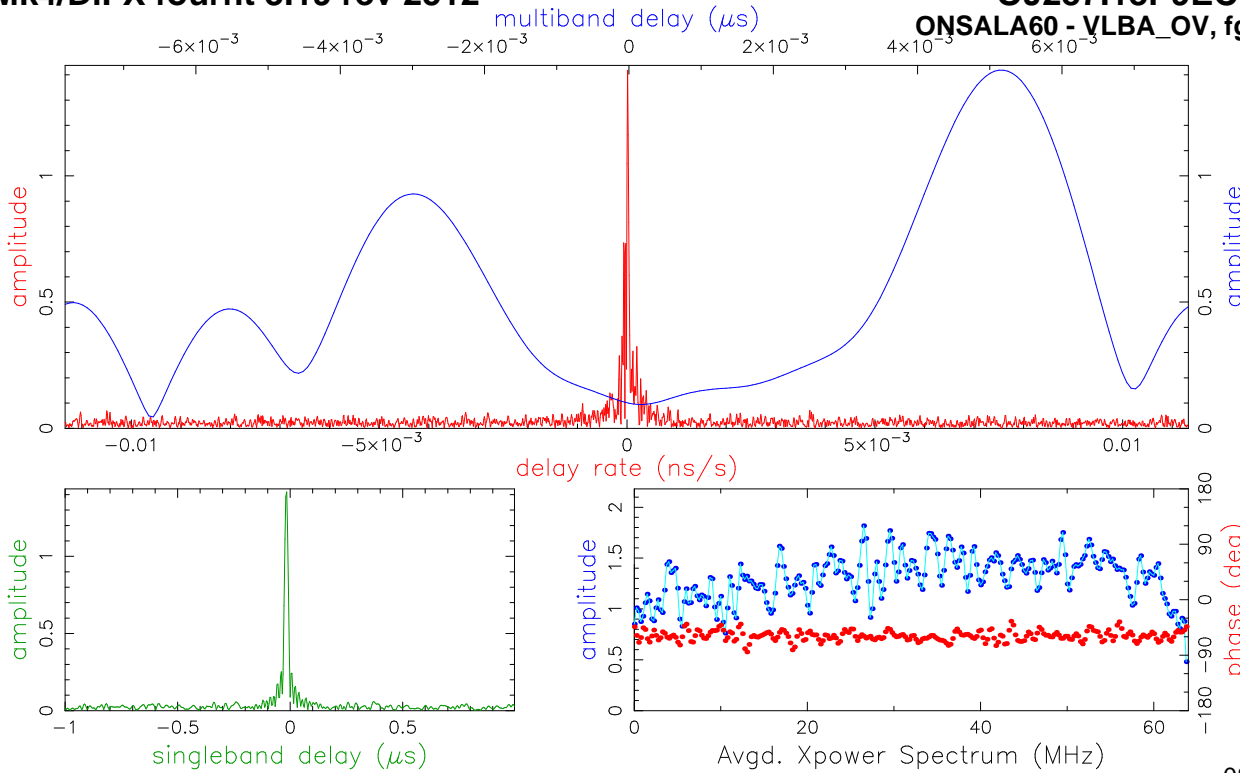
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	-3.94387877749E+03	Apriori delay (usec)	-3.94390425614E+03	Resid mbdelay (usec)	-5.77135E-03	+/-	1.3E-05
Sband delay (usec)	-3.94388529589E+03	Apriori clock (usec)	2.0640663E+01	Resid sbdelay (usec)	1.89603E-02	+/-	1.0E-04
Phase delay (usec)	-3.94390425987E+03	Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	-3.73186E-06	+/-	4.3E-08
Delay rate (us/s)	-1.72605598760E+00	Apriori rate (us/s)	-1.72605599732E+00	Resid rate (us/s)	9.71433E-09	+/-	1.7E-10
Total phase (deg)	-340.3	Apriori accel (us/s/s)	3.02627619714E-05	Resid phase (deg)	-115.7	+/-	1.3

ph/seg (deg)	46.1	RMS	46.1	Theor.	3.2	Amplitude	1.488 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	39.8		39.8		5.6	Search (2048X32)	1.473	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	44.7		44.7		1.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	29.9		29.9		3.3	Inc. seg. avg.	2.059	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	1.869	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 266.5 el 26.2 pa 35.0 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 10567.831 2786.709 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/Xo..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Xo.W.180.18P9EC

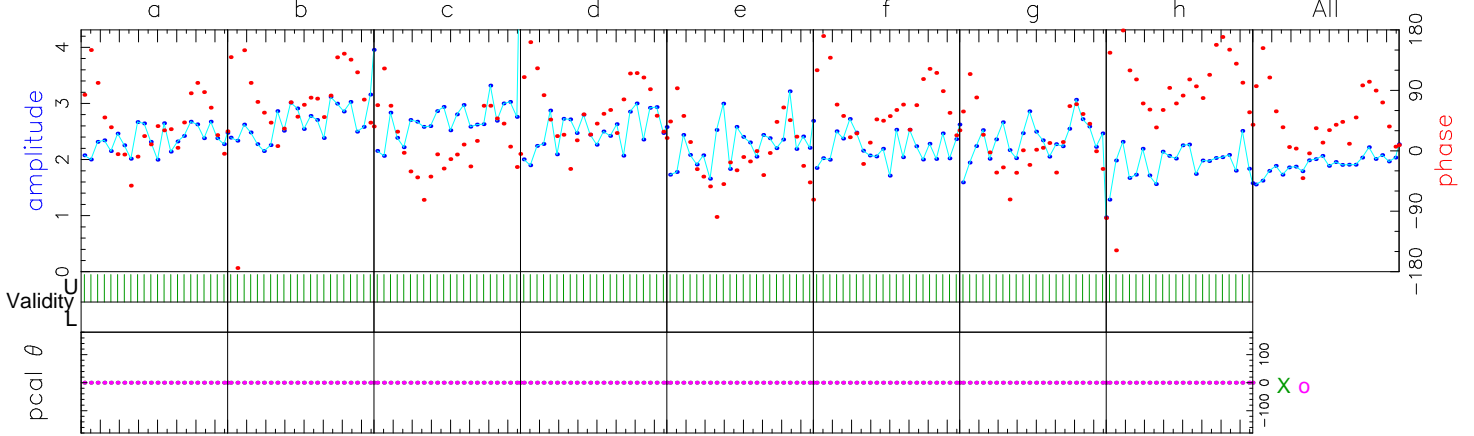


Fringe quality 3

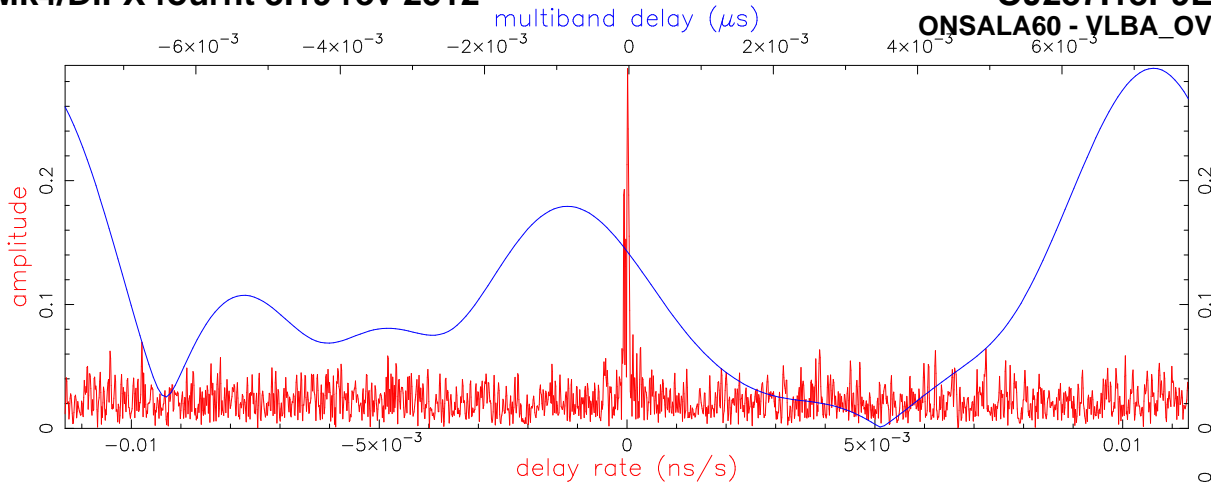
SNR 82.4  
Int time 439.618  
Amp 1.438  
Phase 44.7  
PFD 0.0e+00  
Delays (us)  
SBD -0.017135  
MBD 0.005105  
Fringe rate (Hz) 0.000848  
Ion TEC 0.000  
Ref freq (MHz) 86140.0000  
AP (sec) 0.512

Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120839  
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

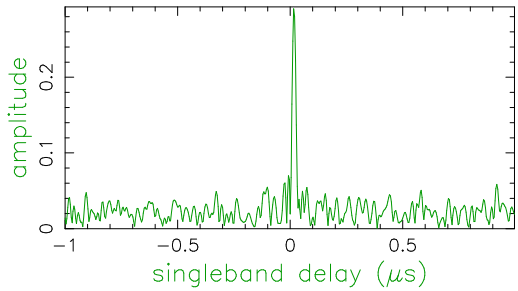


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.94391477640E+03				-3.94390425614E+03				5.10475E-03	+/- 1.3E-05
Sband delay (usec)	-3.94392139139E+03				2.0640663E+01				-1.71352E-02	+/- 1.0E-04
Phase delay (usec)	-3.94390425470E+03				3.2700001E-07				1.44186E-06	+/- 4.5E-08
Delay rate (us/s)	-1.72605598747E+00				-1.72605599732E+00				9.84824E-09	+/- 1.8E-10
Total phase (deg)			-179.9		3.02627619714E-05				44.7	+/- 1.4
	RMS	Theor.	Amplitude	1.438 +/- 0.017	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	45.1	3.3	Search (2048X32)	1.389	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	34.7	5.8	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	42.8	2.0	Inc. seg. avg.	1.910	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	24.5	3.4	Inc. frq. avg.	1.748	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00
X: az 266.5 el 26.2 pa 35.0			o: az 92.1 el 37.2 pa -57.9		u,v (fr/asec) 10567.831 2786.709					simultaneous interpolator

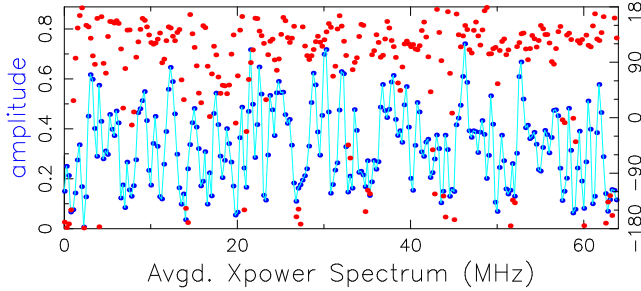


Fringe quality 7

SNR 16.8  
Int time 439.618  
Amp 0.293  
Phase -123.6  
PFD 0.0e+00  
Delays (us)  
SBD 0.016820  
MBD 0.007306  
Fringe rate (Hz)  
0.000680  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

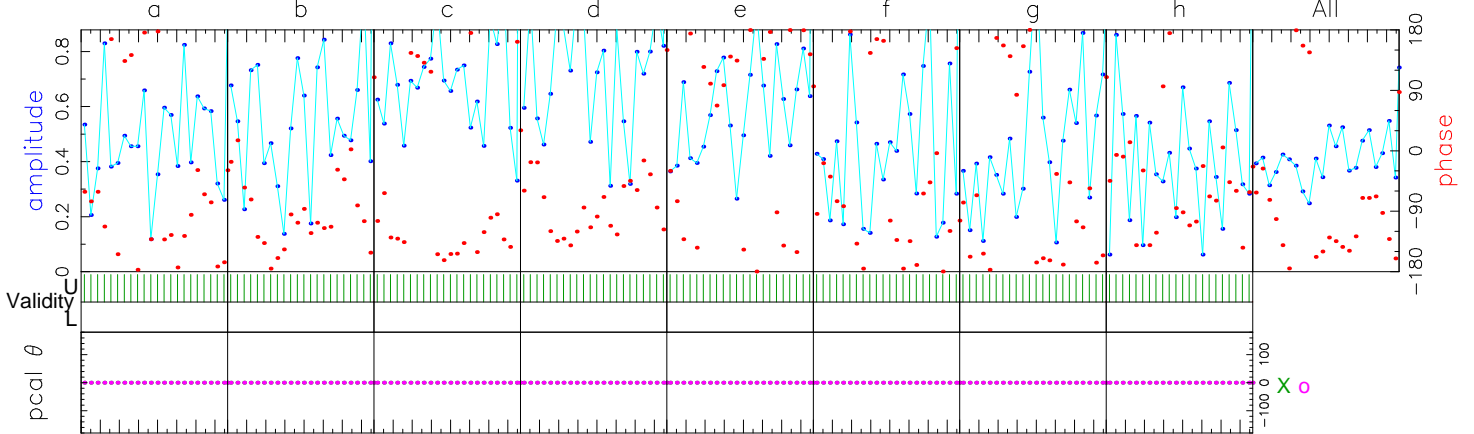


delay rate (ns/s)



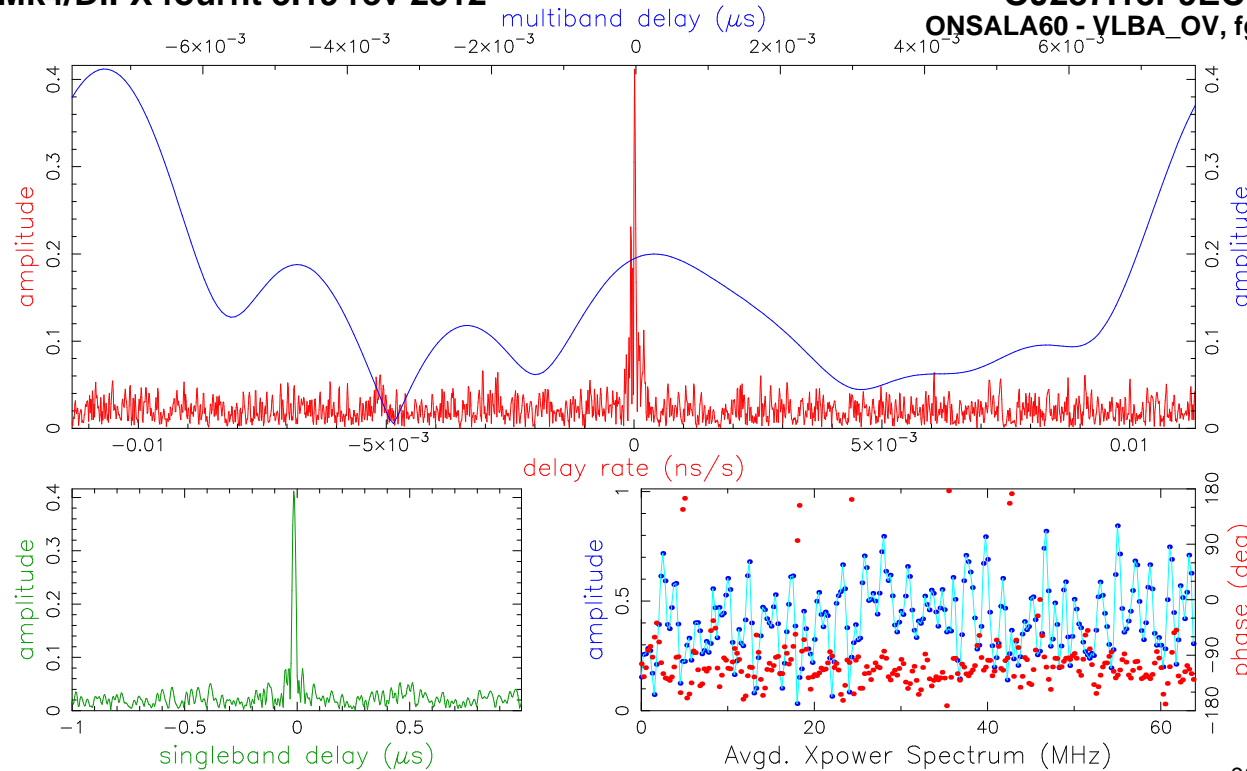
Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120844  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

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
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.94388132533E+03				-3.94390425614E+03				7.30581E-03	+/- 6.5E-05
Sband delay (usec)	-3.94388743589E+03				2.0640663E+01				1.68203E-02	+/- 5.1E-04
Phase delay (usec)	-3.94390426012E+03				3.2700001E-07				-3.98437E-06	+/- 2.2E-07
Delay rate (us/s)	-1.72605598942E+00				-1.72605599732E+00				7.89546E-09	+/- 8.7E-10
Total phase (deg)			-348.2		3.02627619714E-05				-123.6	+/- 6.8
	RMS	Theor.	Amplitude	0.293 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5				
ph/seg (deg)	48.5	16.4	Search (2048X32)	0.285	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000		
amp/seg (%)	47.1	28.5	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
ph/frq (deg)	40.6	9.6	Inc. seg. avg.	0.391	Sample rate(MISamp/s): 128		dr window (ns/s)	-0.011	0.011	
amp/frq (%)	42.5	16.8	Inc. frq. avg.	0.349	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00	0.00

X: az 266.5 el 26.2 pa 35.0 o: az 92.1 el 37.2 pa -57.9 u,v (fr/asec) 10567.831 2786.709 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/Xo..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Xo.W.222.18P9EC

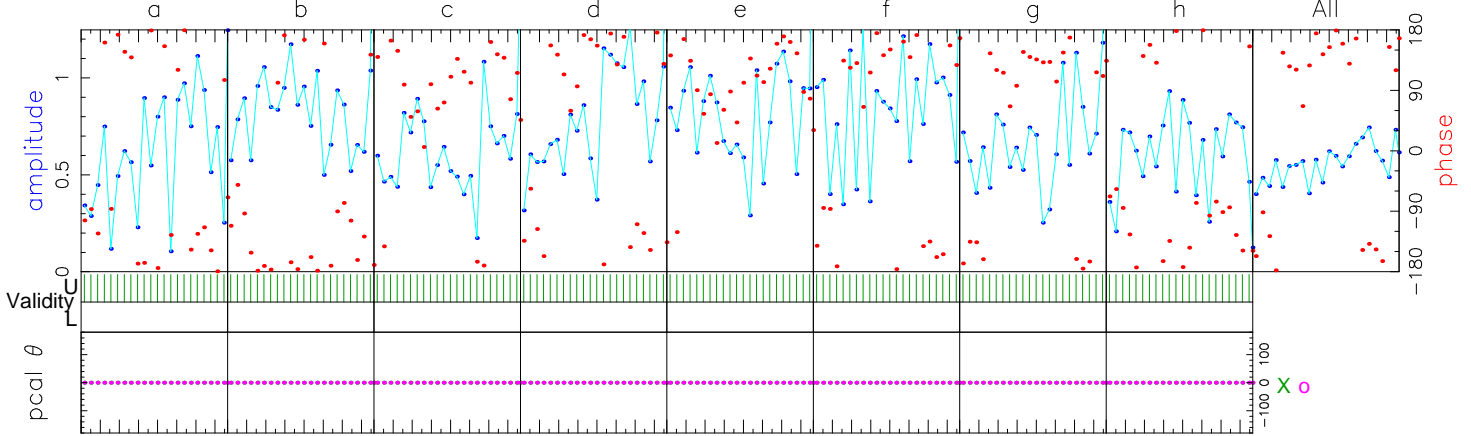


Fringe quality 8

SNR 23.9  
Int time 439.618  
Amp 0.416  
Phase 168.0  
PFD 0.0e+00  
Delays (us)  
SBD -0.014328  
MBD -0.007315  
Fringe rate (Hz) 0.000853  
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

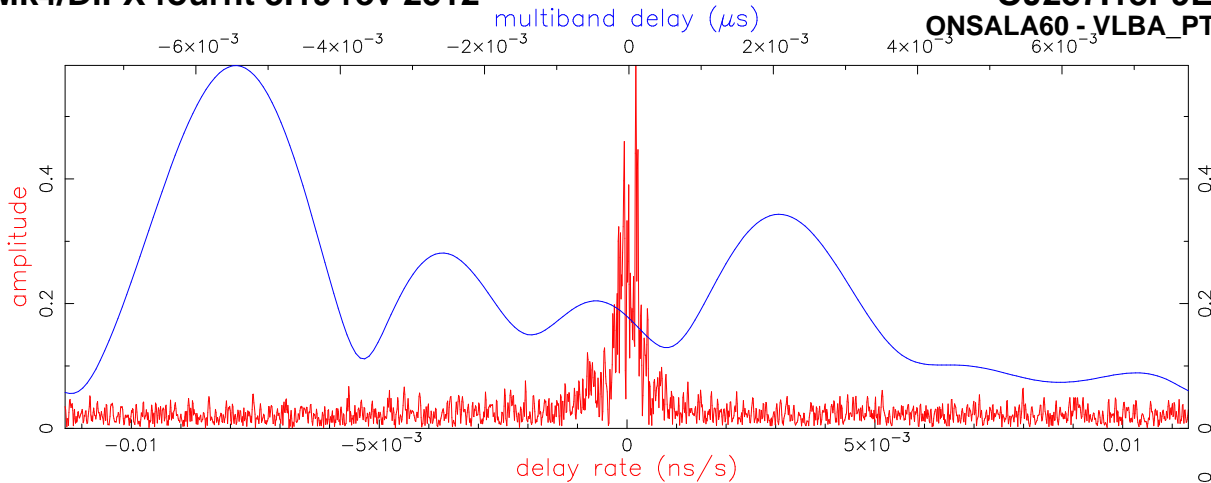


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-170.9	-160.1	114.8	177.2	113.6	173.2	148.8	-140.9	Phase	168.0
	0.5	0.6	0.4	0.5	0.5	0.6	0.5	0.4	Ampl.	0.5
	253.0	253.5	254.0	254.2	254.5	253.4	253.9	255.2	Sbd box	253.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-3.94391157068E+03	Apriori delay (usec)	-3.94390425614E+03	Resid mbdelay (usec)	-7.31454E-03	+/-	4.5E-05
Sband delay (usec)	-3.94391858414E+03	Apriori clock (usec)	2.0640663E+01	Resid sbdelay (usec)	-1.43280E-02	+/-	3.6E-04
Phase delay (usec)	-3.94390425072E+03	Apriori clockrate (us/s)	3.2700001E-07	Resid phdelay (usec)	5.41679E-06	+/-	1.5E-07
Delay rate (us/s)	-1.72605598742E+00	Apriori rate (us/s)	-1.72605599732E+00	Resid rate (us/s)	9.90209E-09	+/-	6.1E-10
Total phase (deg)	-56.6	Apriori accel (us/s/s)	3.02627619714E-05	Resid phase (deg)	168.0	+/-	4.8

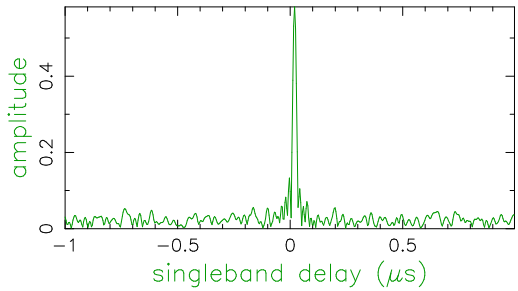
ph/seg (deg)	45.2	RMS	11.5	Theor.	11.5	Amplitude	0.416 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	41.7	Search (2048X32)	0.410	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	41.5	Inc. seg. avg.	0.549	Inc. frq. avg.	0.496	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	24.5	Inc. frq. avg.	0.496	Sample rate (MSamp/s):	128	Data rate (Mb/s):	2048	nlags:	256	t_coherence	infinite
X:	az 266.5	el 26.2	pa 35.0	o:	az 92.1	el 37.2	pa -57.9	u,v (fr/asec)	10567.831	2786.709	simultaneous interpolator



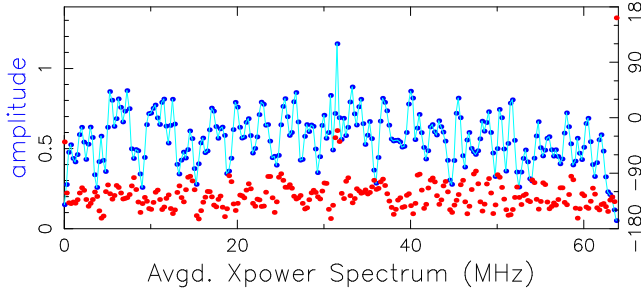


Fringe quality 4

SNR 33.3  
Int time 438.607  
Amp 0.582  
Phase 159.2  
PFD 0.0e+00  
Delays (us)  
SBD 0.019388  
MBD -0.005451  
Fringe rate (Hz)  
0.015040  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

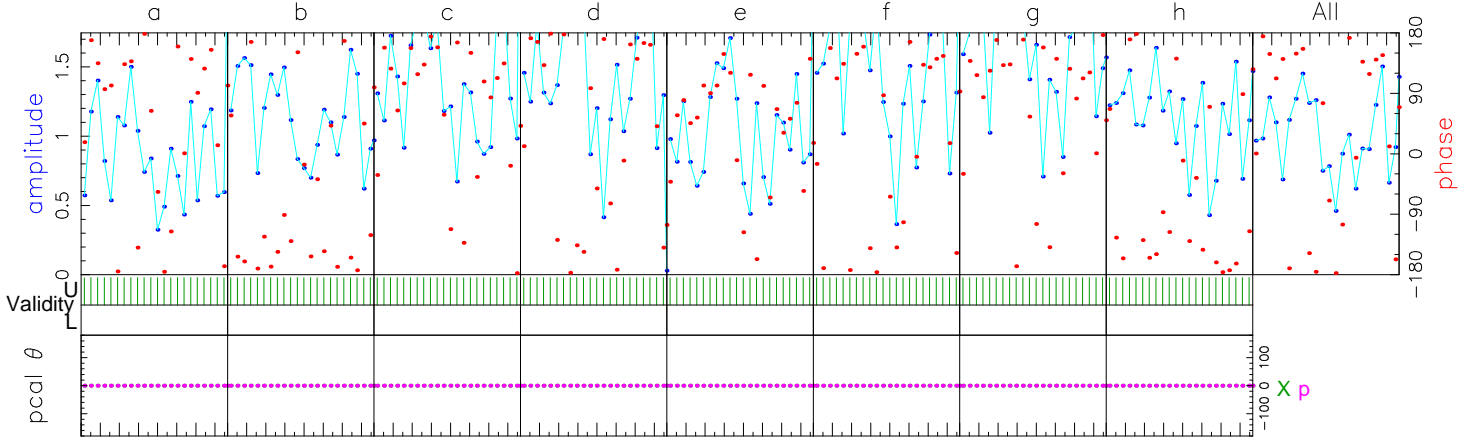


delay rate (ns/s)



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
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

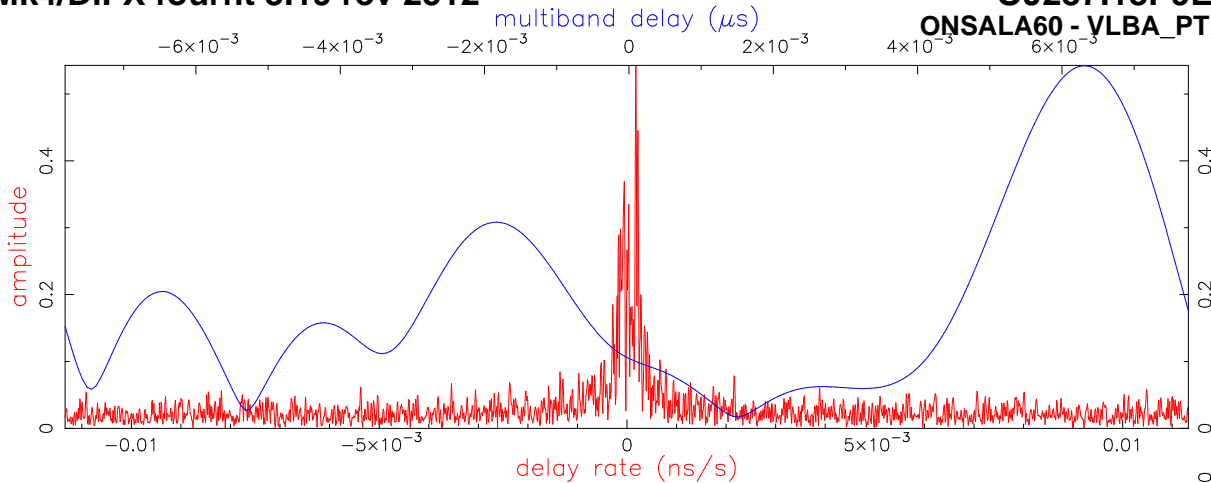
Group delay (usec)(sbd)	-6.26374789932E+03	Apriori delay (usec)	-6.26377369859E+03	Resid mbdelay (usec)	-5.45073E-03	+/-	3.3E-05
Sband delay (usec)	-6.26375431059E+03	Apriori clock (usec)	2.3448614E+01	Resid sbdelay (usec)	1.93880E-02	+/-	2.6E-04
Phase delay (usec)	-6.26377369346E+03	Apriori clockrate (us/s)	3.2411343E-07	Resid phdelay (usec)	5.13509E-06	+/-	1.1E-07
Delay rate (us/s)	-1.62993699867E+00	Apriori rate (us/s)	-1.62993717327E+00	Resid rate (us/s)	1.74603E-07	+/-	4.4E-10
Total phase (deg)	16.5	Apriori accel (us/s/s)	4.42126294916E-05	Resid phase (deg)	159.2	+/-	3.4

ph/seg (deg)	74.0	RMS	74.0	Theor.	8.2	Amplitude	0.582 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	85.5		85.5		14.4	Search (2048X32)	0.567	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	45.7		45.7		4.9	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	34.3		34.3		8.5	Inc. seg. avg.	0.990	Sample rate(MISamp/s):	128	dr window (ns/s)	-0.011 0.011		
						Inc. frq. avg.	0.712	Data rate(Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 266.5 el 26.2 pa 35.0 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 10004.613 3533.920 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/Xp..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Xp.W.197.18P9EC

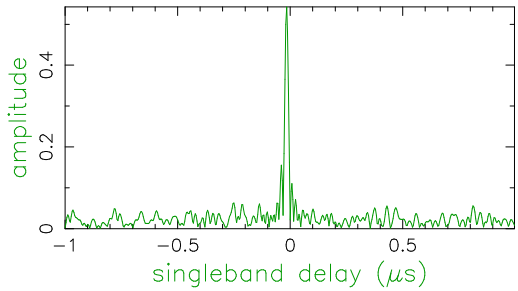
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, Xp  
ONSALA60 - VLBA\_PT, fgroup W, pol RR

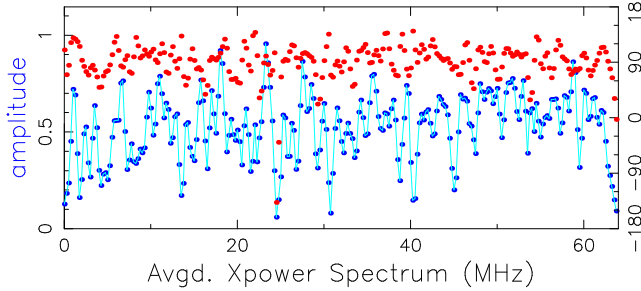


Fringe quality 4

SNR 31.1  
Int time 438.608  
Amp 0.543  
Phase -163.4  
PFD 0.0e+00  
Delays (us)  
SBD -0.015990  
MBD 0.006300  
Fringe rate (Hz)  
0.015005  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

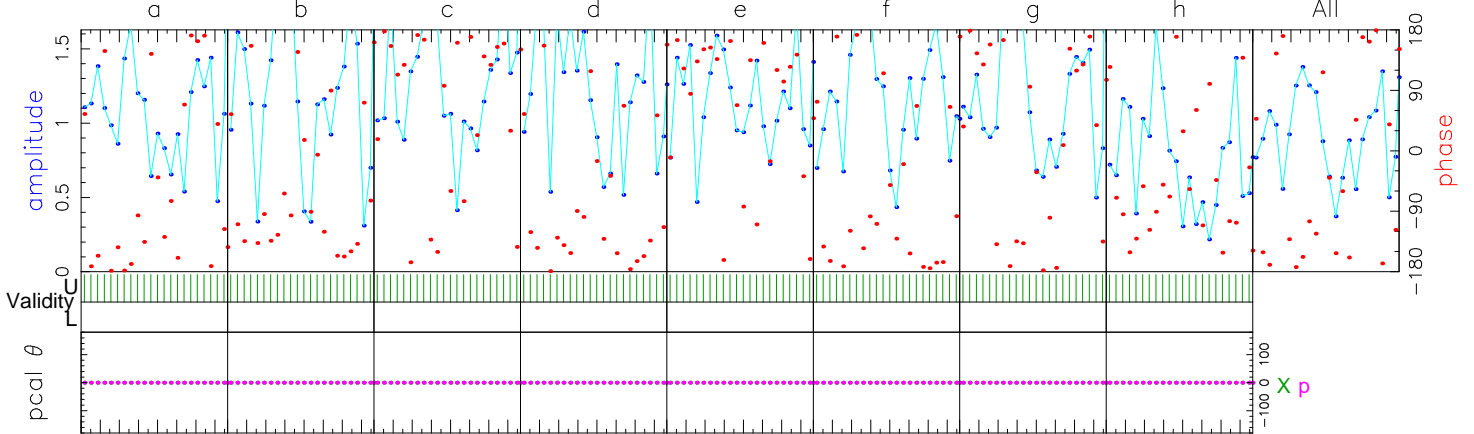


delay rate (ns/s)

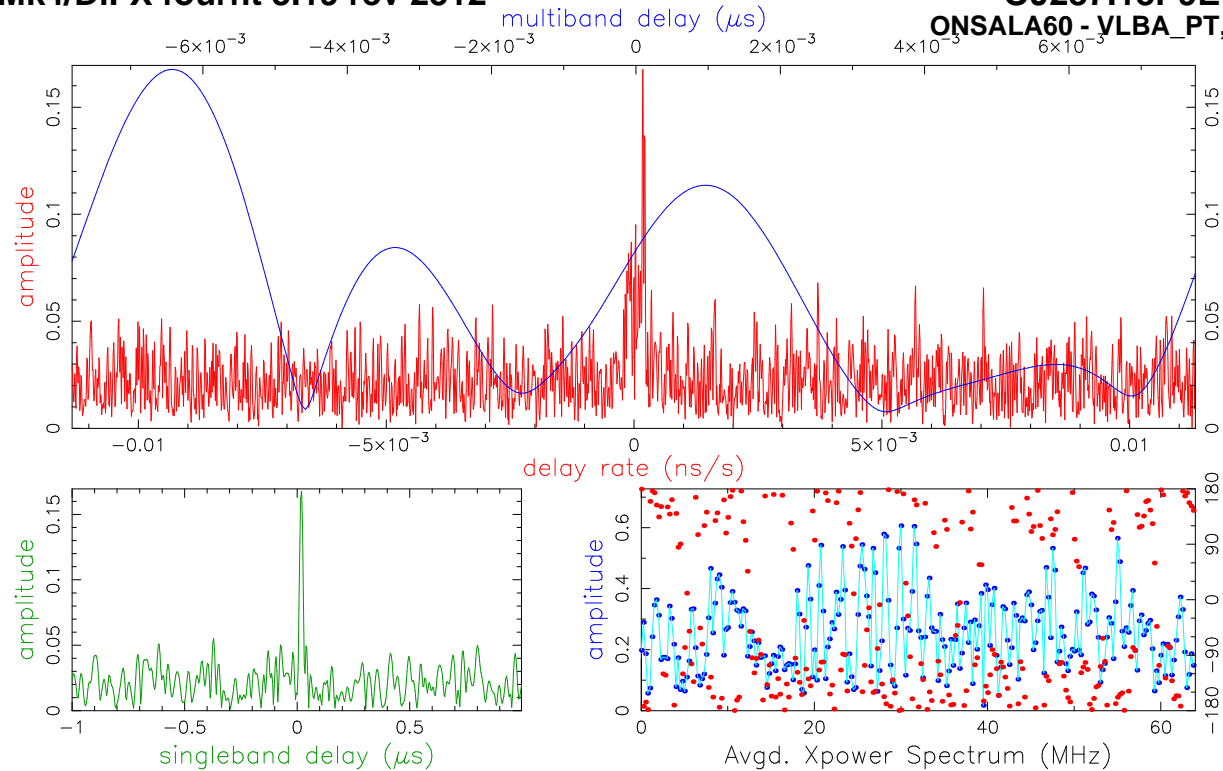


Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 224500.00  
Stop 225219.80  
FRT 224840.00  
Corr/FF/build  
2020:195:224837  
2020:197:120843  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

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
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-6.26378302392E+03									
Sband delay (usec)	-6.26378968834E+03									
Phase delay (usec)	-6.26377370386E+03									
Delay rate (us/s)	-1.62993699908E+00									
Total phase (deg)			-306.2							
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										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	72.6	8.8								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.543 +/- 0.017										
0.529										
3.2411343E-07										
-1.62993717327E+00										
4.42126294916E-05										
6.29968E-03										
-1.59898E-02										
-5.27062E-06										
1.74190E-07										
-163.4										
+/- 3.5E-05										
+/- 2.8E-04										
+/- 1.2E-07										
+/- 4.7E-10										
+/- 3.7										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

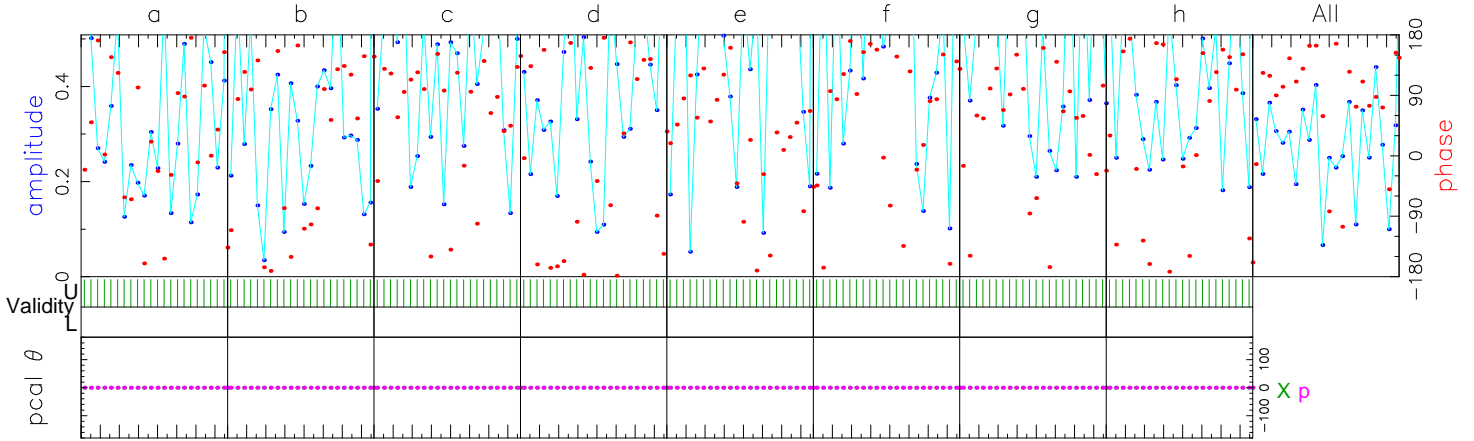


Fringe quality 9

SNR 9.7  
Int time 438.608  
Amp 0.170  
Phase 119.7  
PFD 1.1e-13  
Delays (us)  
SBD 0.018217  
MBD -0.006460  
Fringe rate (Hz)  
0.015363  
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

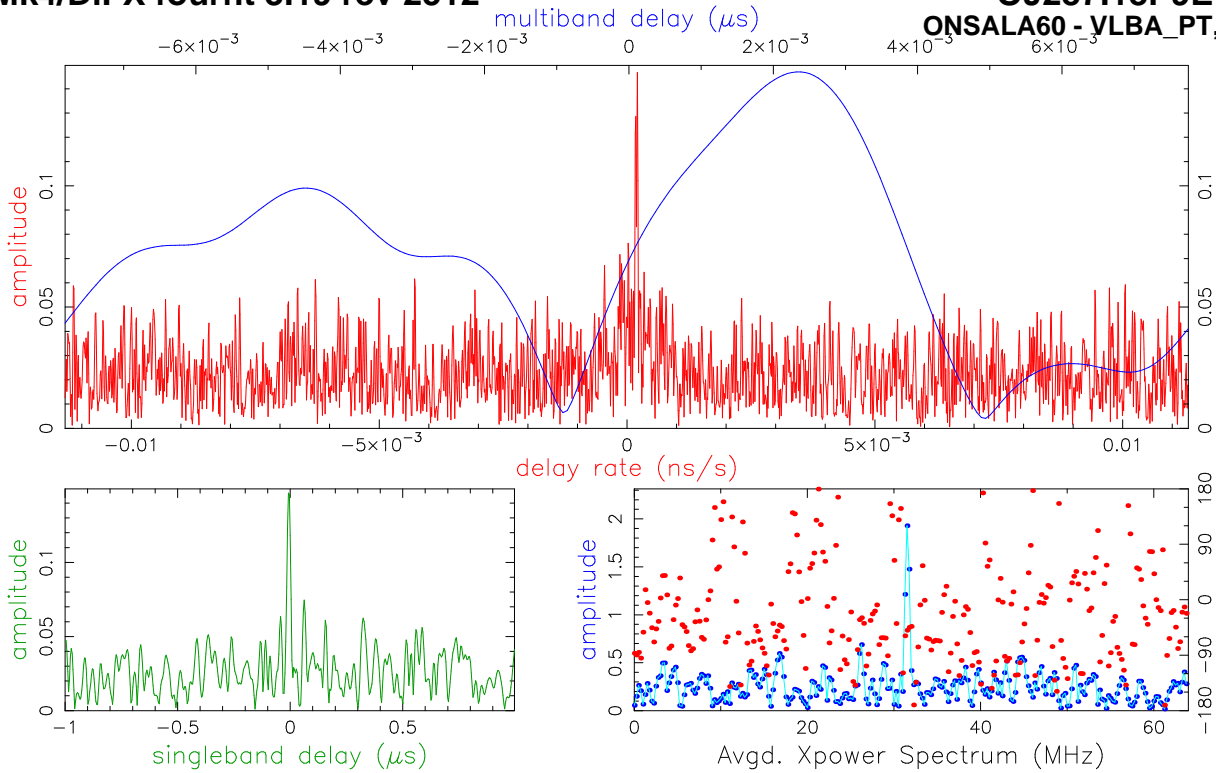


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	76.6	136.8	109.2	-177.2	62.6	141.8	85.7	147.4	Phase	119.7
	0.1	0.2	0.3	0.2	0.2	0.3	0.2	0.2	Ampl.	0.2
	363.2	262.5	261.9	261.7	261.7	262.2	262.0	261.8	Sbd box	261.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.26374890813E+03		Apriori delay (usec)		-6.26377369859E+03		Resid mbdelay (usec)		-6.45954E-03	+/- 1.1E-04
Sband delay (usec)	-6.26375548159E+03		Apriori clock (usec)		2.3448614E+01		Resid sbdelay (usec)		1.82170E-02	+/- 8.9E-04
Phase delay (usec)	-6.26377369473E+03		Apriori clockrate (us/s)		3.2411343E-07		Resid phdelay (usec)		3.85880E-06	+/- 3.8E-07
Delay rate (us/s)	-1.62993699493E+00		Apriori rate (us/s)		-1.62993717327E+00		Resid rate (us/s)		1.78347E-07	+/- 1.5E-09
Total phase (deg)			Apriori accel (us/s/s)		4.42126294916E-05		Resid phase (deg)		119.7	+/- 11.8

ph/seg (deg) RMS Theor. Amplitude 0.170 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 70.6 28.3 Search (2048X32) 0.165 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 83.9 49.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 44.6 16.7 Inc. seg. avg. 0.246 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 42.6 29.1 Inc. frq. avg. 0.201 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

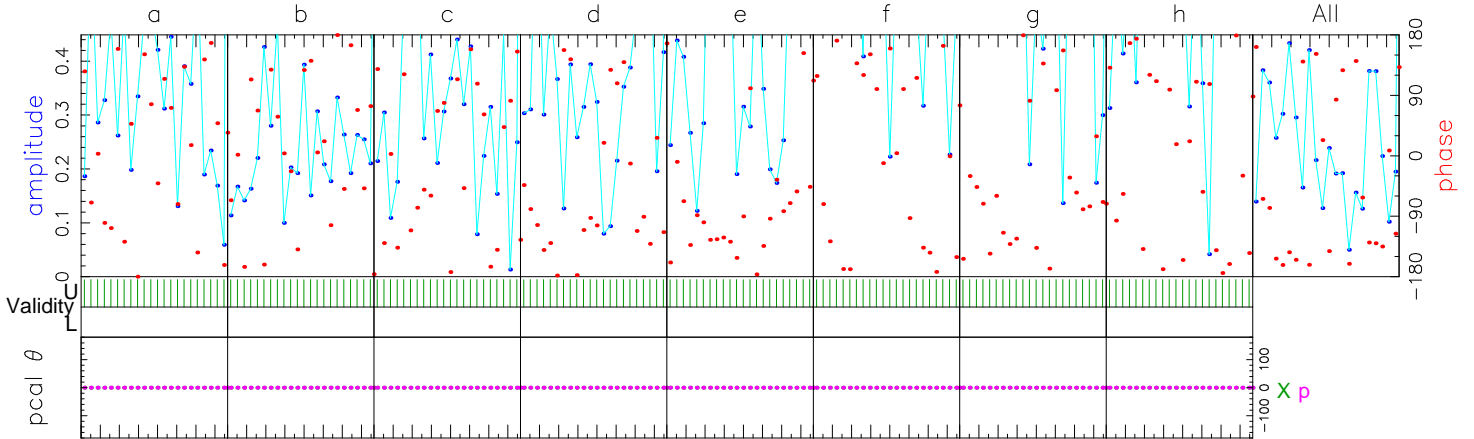
X: az 266.5 el 26.2 pa 35.0 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 10004.613 3533.920 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/Xp..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Xp.W.232.18P9EC



Fringe quality 9  
SNR 8.6  
Int time 438.607  
Amp 0.150  
Phase -145.3  
PFD 3.8e-09  
Delays (us)  
SBD -0.006037  
MBD 0.002439  
Fringe rate (Hz) 0.018323  
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  
2020:197:120850  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

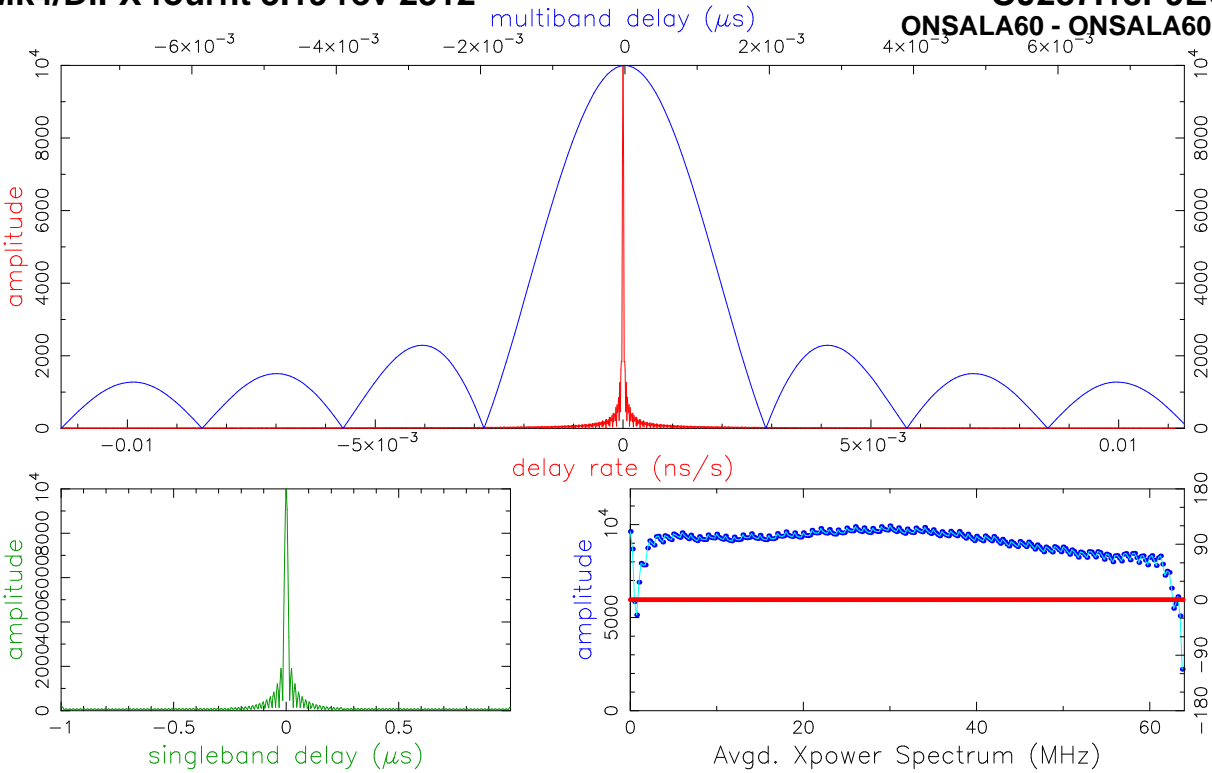
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	179.4	91.8	-172.3	-121.0	-108.2	177.0	-95.8	-179.2	Phase	-145.3
	0.1	0.0	0.1	0.2	0.3	0.3	0.3	0.3	Ampl.	0.2
	298.1	506.6	357.0	254.1	255.1	254.0	254.7	254.8	Sbd box	255.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-6.26378688471E+03		Apriori delay (usec)		-6.26377369859E+03		Resid mbdelay (usec)		2.43888E-03	+/- 1.3E-04
Sband delay (usec)	-6.26377973534E+03		Apriori clock (usec)		2.3448614E+01		Resid sbdelay (usec)		-6.03675E-03	+/- 1.0E-03
Phase delay (usec)	-6.26377370328E+03		Apriori clockrate (us/s)		3.2411343E-07		Resid phdelay (usec)		-4.68573E-06	+/- 4.3E-07
Delay rate (us/s)	-1.62993696056E+00		Apriori rate (us/s)		-1.62993717327E+00		Resid rate (us/s)		2.12708E-07	+/- 1.7E-09
Total phase (deg)			Apriori accel (us/s/s)		4.42126294916E-05		Resid phase (deg)		-145.3	+/- 13.4

	RMS	Theor.	Amplitude	0.150 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	72.4	32.1	Search (2048X32)	0.144	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	97.4	56.0	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	63.3	18.9	Inc. seg. avg.	0.211	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	83.0	33.0	Inc. frq. avg.	0.184	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

X: az 266.5 el 26.2 pa 35.0 p: az 96.0 el 45.7 pa -60.9 u,v (fr/asec) 10004.613 3533.920 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/Xp..18P9EC Output file: /Exps/c201a/v1/1234/No0027/Xp.W.245.18P9EC

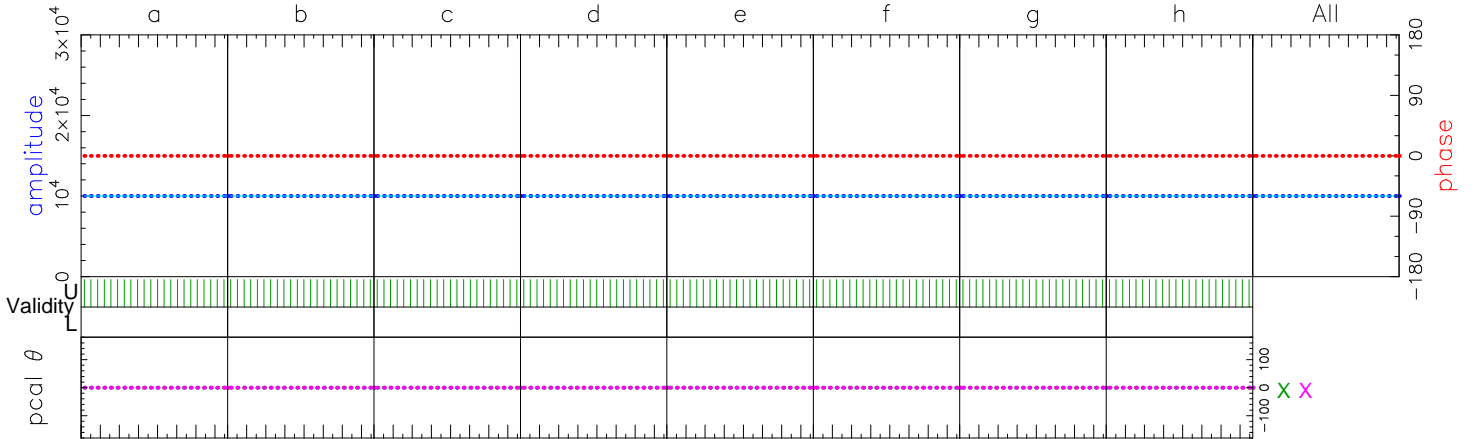


Fringe quality 9

SNR 573383.4  
 Int time 439.638  
 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  
 Yr:day 16383  
 Start 2020:115  
 Stop 2020:115  
 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, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec

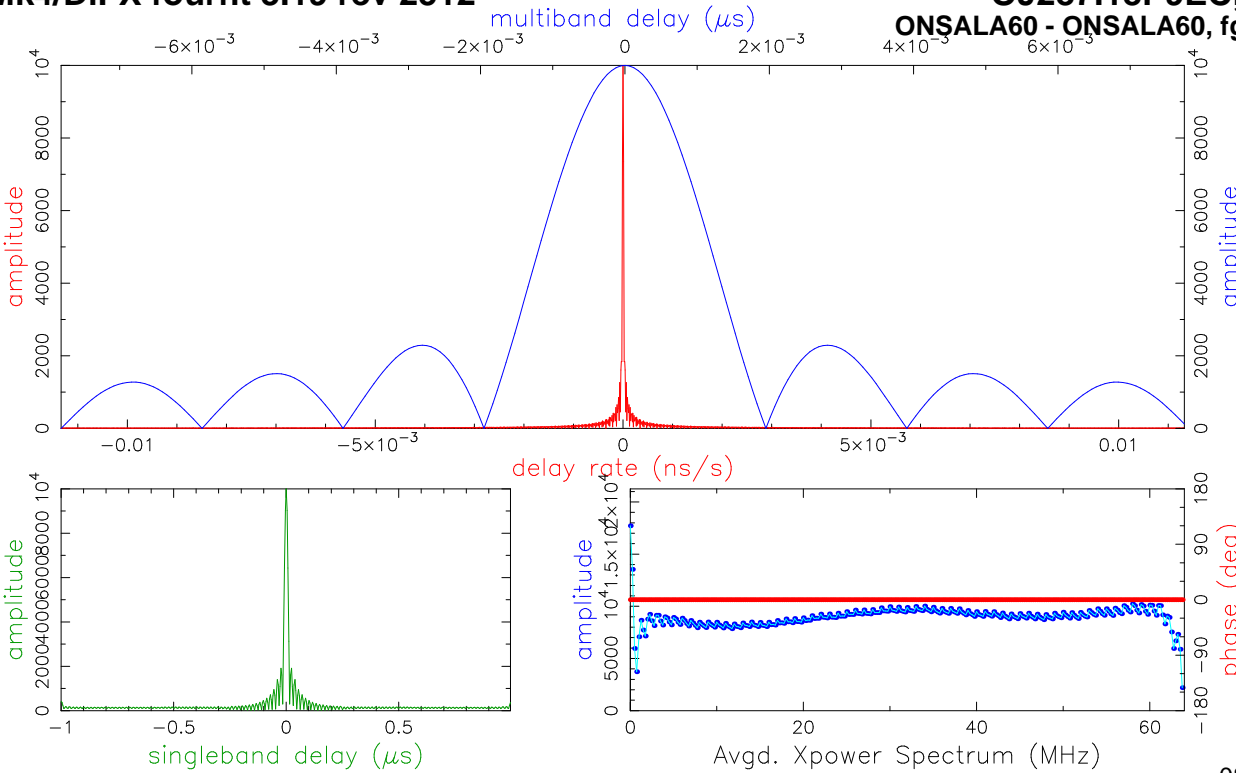


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	Ampl.	10000.0
X	1000	1000	1000	1000	1000	1000	1000	1000	Sbd box	257.0
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	APs used	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC freqs	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

Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08  
 Phase delay (usec) 2.02018082786E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 2.02018E-20 +/- 6.4E-12  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.5E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00



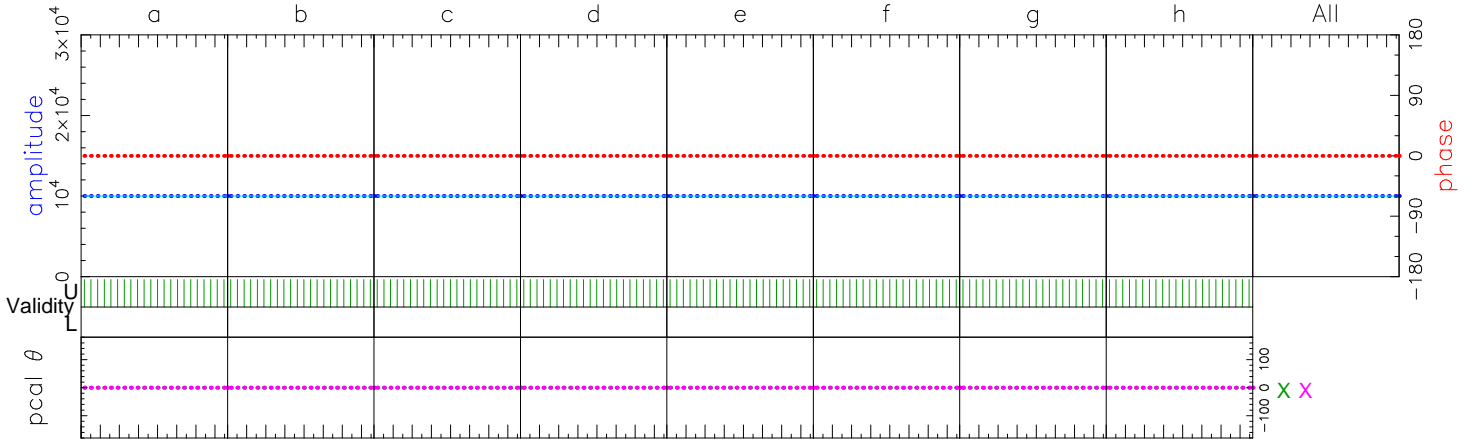


Fringe quality 9

SNR 573383.4  
 Int time 439.638  
 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  
 2020:197:120840  
 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
	-0.0	0.0	0.0	0.0	-0.0	0.0	0.0	0.0	Phase	0.0
	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	10000.0	Ampl.	10000.0
	257.0	257.0	257.0	257.0	257.0	257.0	257.0	257.0	Sbd box	257.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

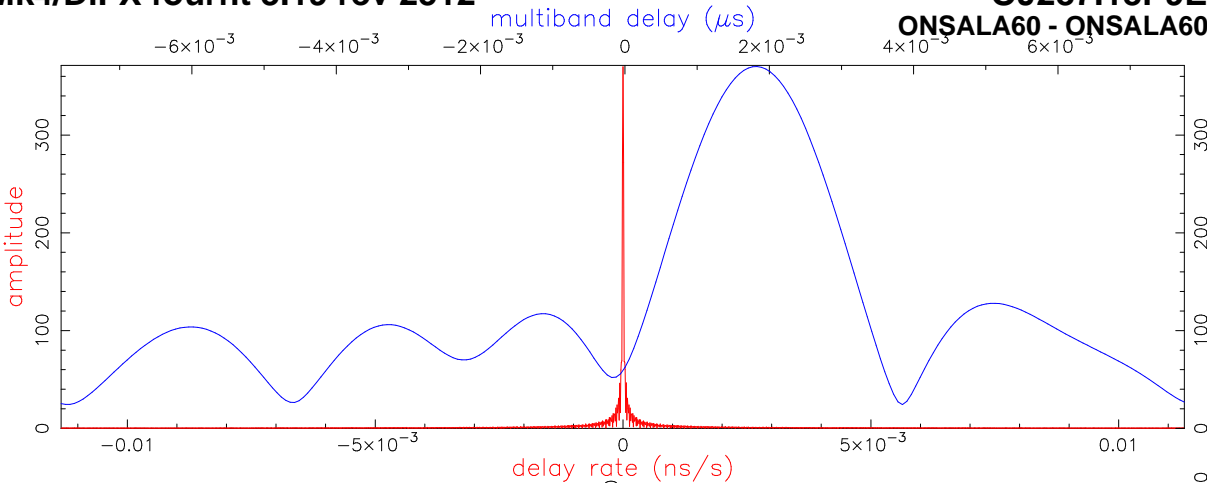
Group delay (usec)(sbd) 0.0000000000E+00 Apriori delay (usec) 0.0000000000E+00 Resid mbdelay (usec) 0.00000E+00 +/- 1.9E-09  
 Sband delay (usec) 0.0000000000E+00 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) 0.00000E+00 +/- 1.5E-08  
 Phase delay (usec) 7.31003668991E-20 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 7.310004E-20 +/- 6.4E-12  
 Delay rate (us/s) 0.0000000000E+00 Apriori rate (us/s) 0.0000000000E+00 Resid rate (us/s) 0.00000E+00 +/- 2.5E-14  
 Total phase (deg) 0.0 Apriori accel (us/s/s) 0.0000000000E+00 Resid phase (deg) 0.0 +/- 0.0

RMS Theor. Amplitude 10000.000 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.0 0.0 Search (2048X32) 10000.000 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. 10000.000 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 266.5 el 26.2 pa 35.0 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XX.W.205.18P9EC

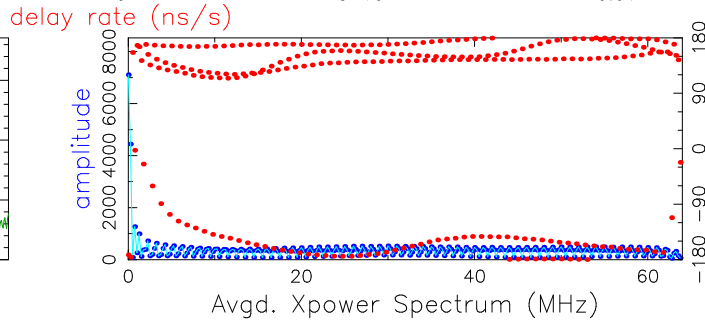
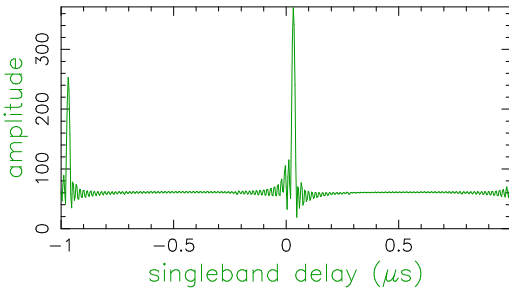
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.18P9EC, No0027, XX  
 ONŞALA60 - ONŞALA60, fgroup W, pol LR



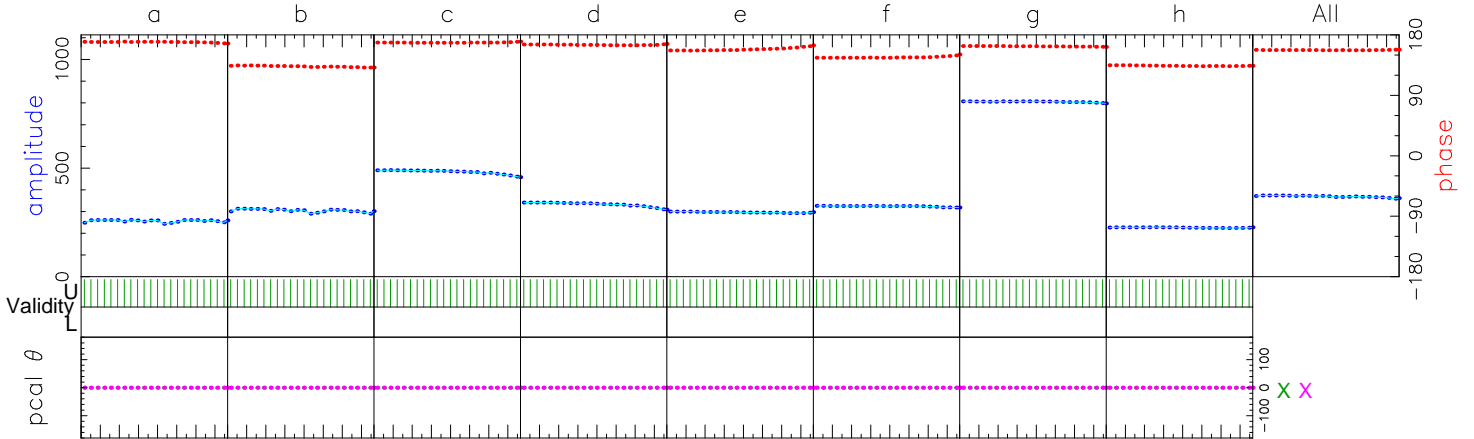
Fringe quality 6

SNR 21286.5  
 Int time 439.638  
 Amp 371.245  
 Phase 157.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.031940  
 MBD 0.001859  
 Fringe rate (Hz)  
 -0.000001  
 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

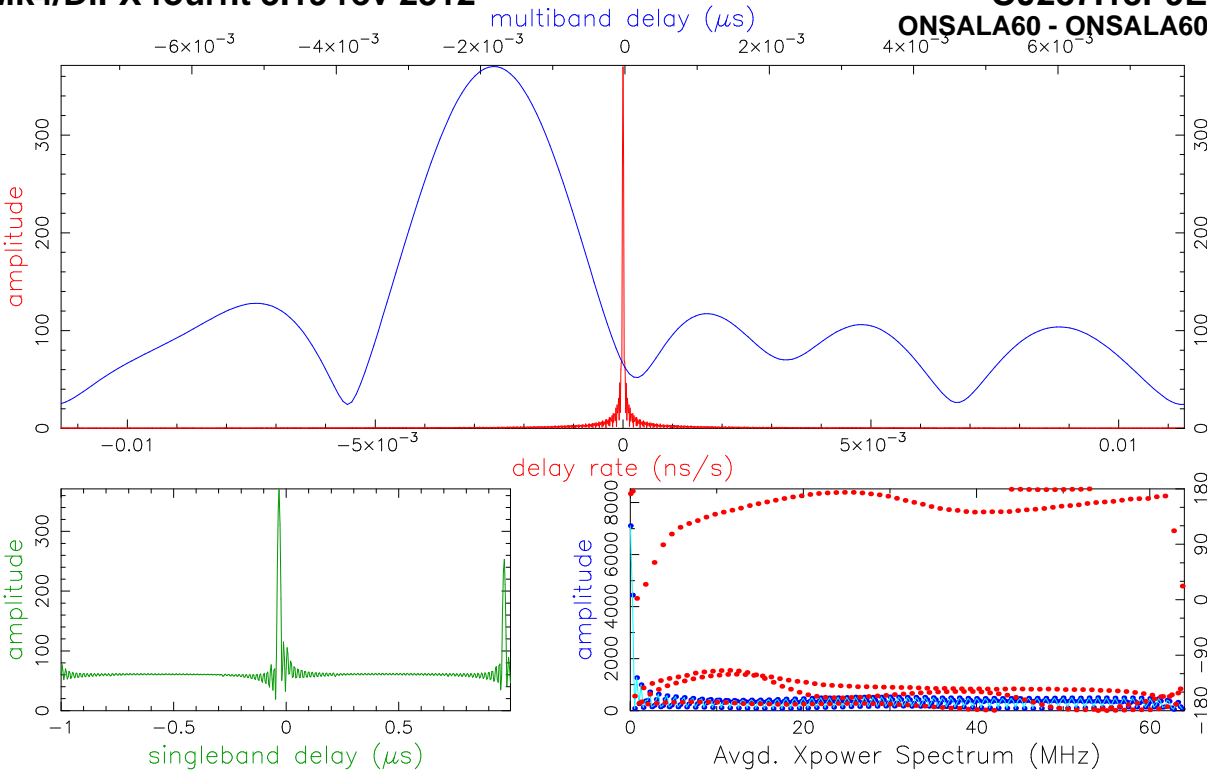


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	169.2	133.0	168.4	165.1	158.4	146.5	162.9	133.9	Phase	157.3
	257.0	304.7	482.9	333.6	296.7	324.5	805.6	226.4	Ampl.	378.9
	263.9	266.3	265.2	265.4	265.8	265.2	264.9	264.8	Sbd box	265.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	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)	3.31085937500E-02		Apriori delay (usec)		0.0000000000E+00		Resid mbdelay (usec)		1.85859E-03	+/- 5.1E-08
Sband delay (usec)	3.19402500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		3.19403E-02	+/- 4.0E-07
Phase delay (usec)	5.07191029518E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		5.07191E-06	+/- 1.7E-10
Delay rate (us/s)	-1.34625947721E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		-1.34626E-11	+/- 6.8E-13
Total phase (deg)	157.3		Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		157.3	+/- 0.0

	RMS	Theor.	Amplitude	371.245 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000 1.000
ph/seg (deg)	0.2	0.0	Search (2048X32)	367.431	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008 0.008
amp/seg (%)	1.1	0.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011 0.011
ph/frq (deg)	16.4	0.0	Inc. seg. avg.	369.840	Sample rate(MISamp/s): 128		ion window (TEC)	0.00 0.00
amp/frq (%)	47.5	0.0	Inc. frq. avg.	378.925	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite		

X: az 266.5 el 26.2 pa 35.0 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XX.W.226.18P9EC

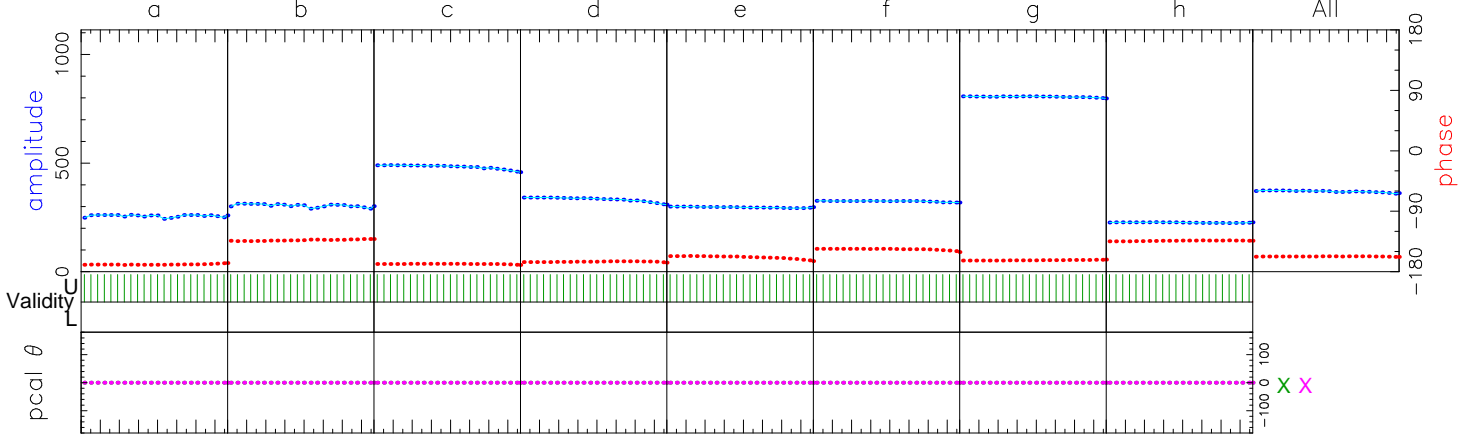


Fringe quality 6

SNR 21286.5  
 Int time 439.638  
 Amp 371.245  
 Phase -157.3  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.031940  
 MBD -0.001859  
 Fringe rate (Hz) 0.000001  
 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"

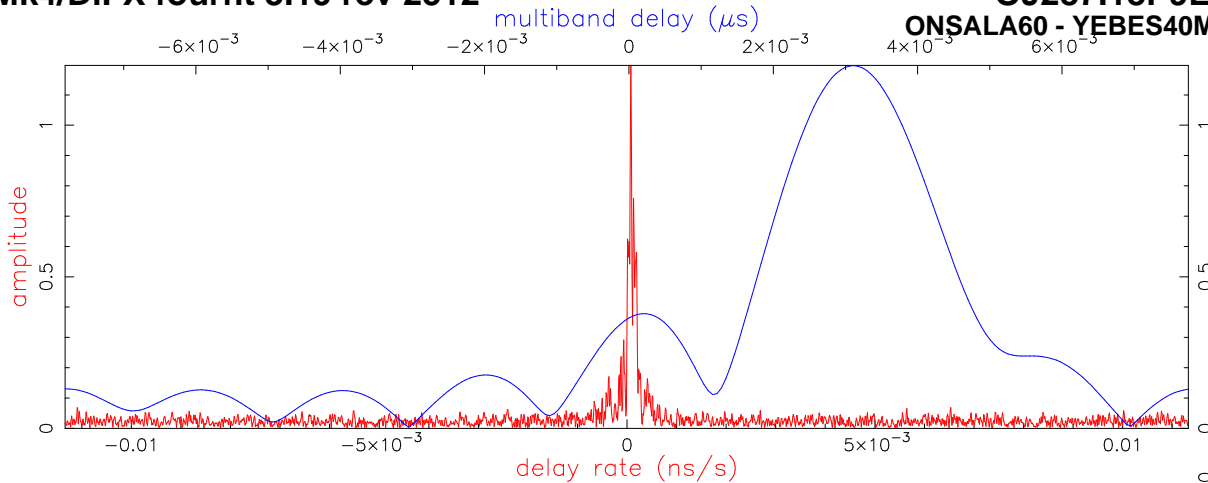
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-169.2	-133.0	-168.4	-165.1	-158.4	-146.5	-162.9	-133.9	Phase	-157.3
	257.0	304.7	482.9	333.6	296.7	324.5	805.6	226.4	Ampl.	378.9
	250.1	247.7	248.8	248.6	248.2	248.8	249.1	249.2	Sbd box	248.8
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.31085937500E-02		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		-1.85859E-03	+/- 5.1E-08
Sband delay (usec)	-3.19402500000E-02		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		-3.19403E-02	+/- 4.0E-07
Phase delay (usec)	-5.07191029514E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-5.07191E-06	+/- 1.7E-10
Delay rate (us/s)	1.34625947721E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		1.34626E-11	+/- 6.8E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-157.3	+/- 0.0

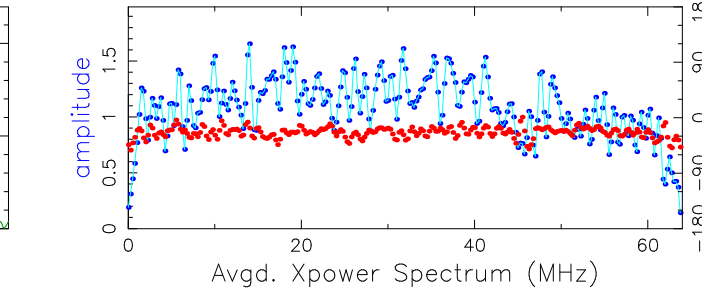
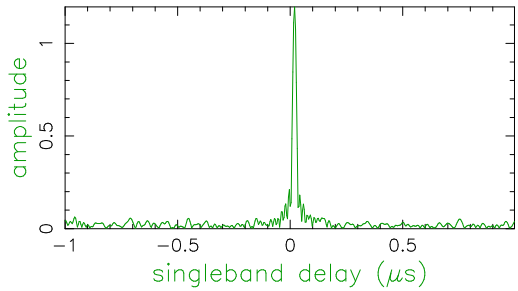
RMS Theor. Amplitude 371.245 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 0.2 0.0 Search (2048X32) 367.431 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 1.1 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 16.4 0.0 Inc. seg. avg. 369.840 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 47.5 0.0 Inc. frq. avg. 378.925 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

X: az 266.5 el 26.2 pa 35.0 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) 0.000 0.000 simultaneous interpolator



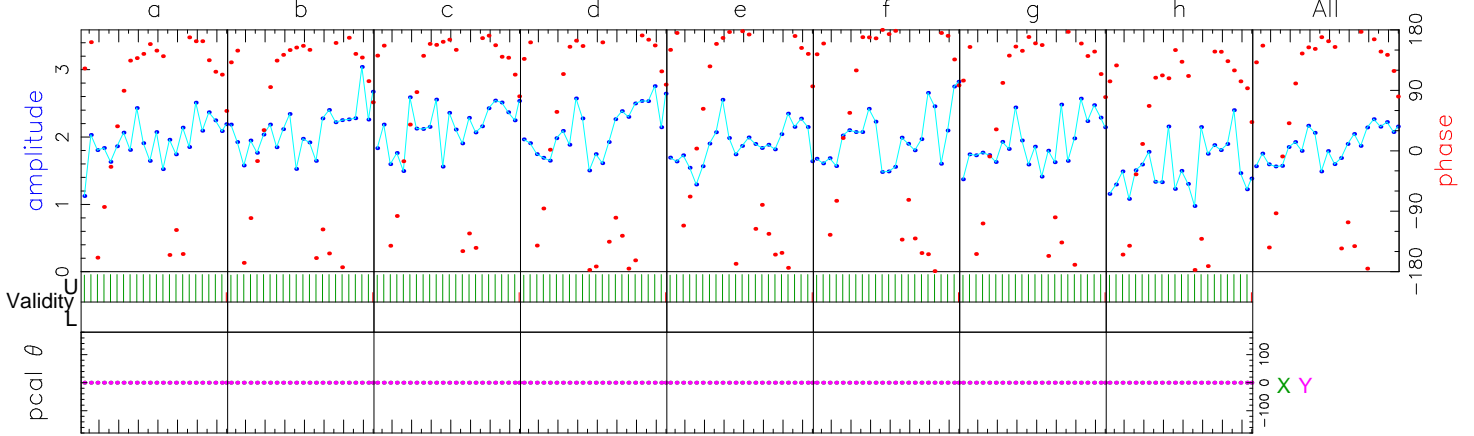
Fringe quality 4

SNR 68.2  
Int time 434.089  
Amp 1.197  
Phase 162.1  
PFD 0.0e+00  
Delays (us)  
SBD 0.019181  
MBD 0.003097  
Fringe rate (Hz) 0.006908  
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

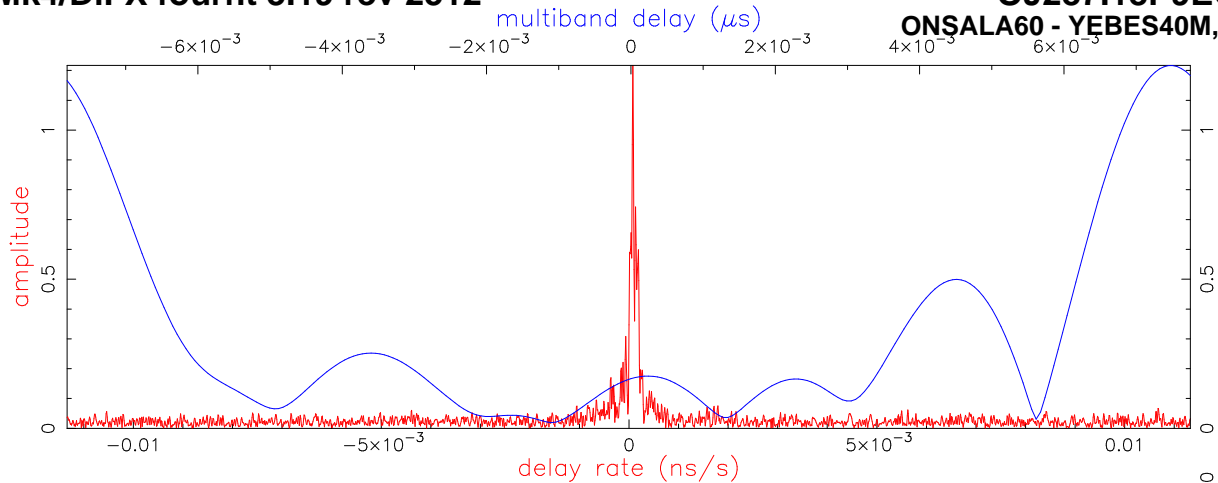


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	-3.45646127509E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	3.09651E-03	+/-	1.6E-05
Sband delay (usec)	-3.45646081585E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	1.91808E-02	+/-	1.3E-04
Phase delay (usec)	-3.45647999137E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	5.22887E-06	+/-	5.4E-08
Delay rate (us/s)	1.91302594008E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	8.01896E-08	+/-	2.2E-10
Total phase (deg)	-164.3	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	162.1	+/-	1.7

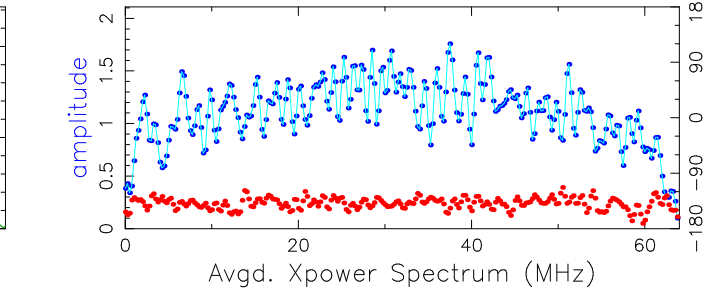
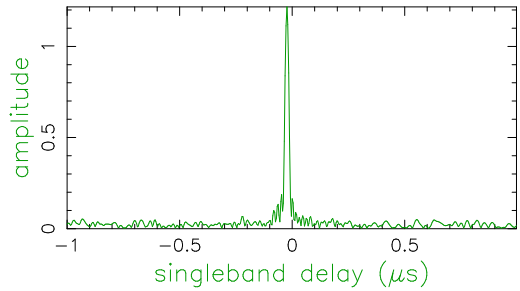
ph/seg (deg)	60.9	RMS	4.0	Theor.	1.162	1.197 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5		
amp/seg (%)	59.9	Search (2048X32)	1.162	Amplitude	1.162	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	18.2	Interp.	0.000	Inc. seg. avg.	1.868	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	11.7	Inc. frq. avg.	1.236	Inc. frq. avg.	1.236	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

X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.188.18P9EC



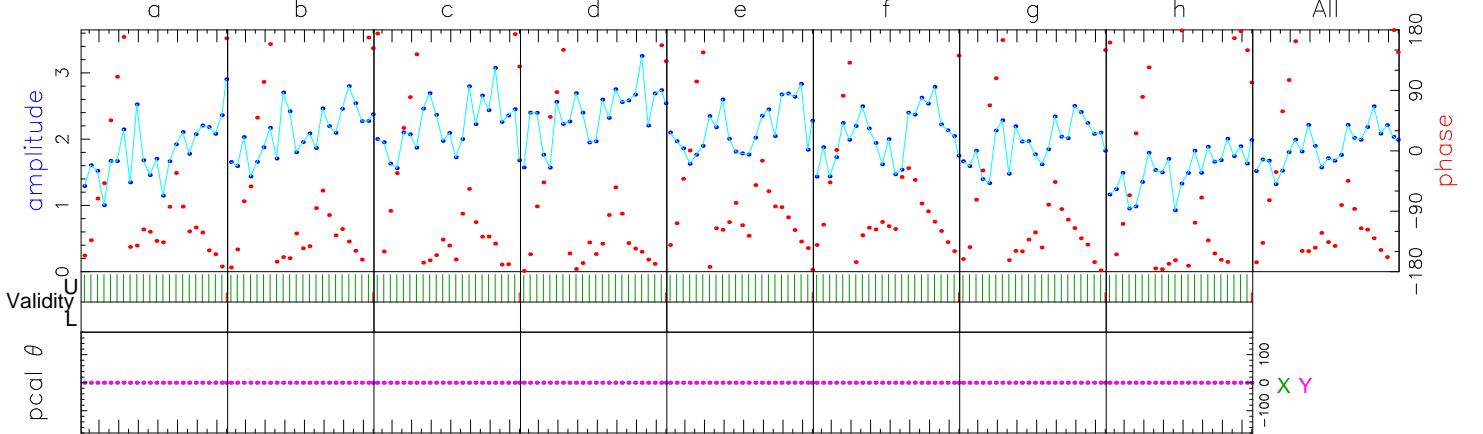
Fringe quality 3

SNR 69.3  
Int time 434.089  
Amp 1.217  
Phase -134.3  
PFD 0.0e+00  
Delays (us)  
SBD -0.023368  
MBD 0.007481  
Fringe rate (Hz)  
0.006923  
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  
2020:197:120841  
2020:014:135814  
RA & Dec (J2000)  
08h54m48.874928s  
+20°06'30.640850"

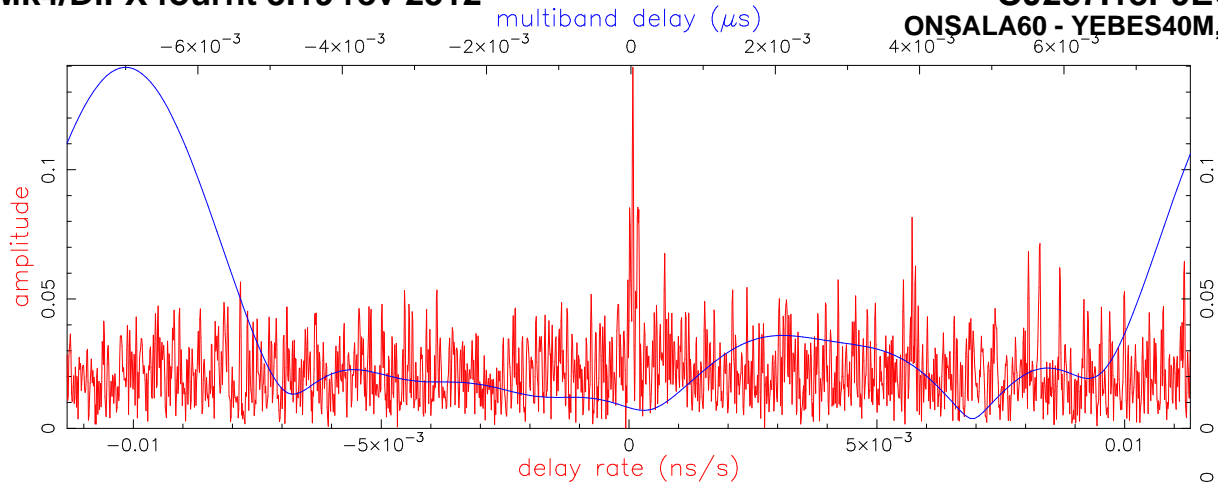
Amp. and Phase vs. time for each freq., 23 segs, 38 APs / seg (19.46 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-130.1	-140.5	-145.6	-149.1	-105.1	-105.2	-134.1	-168.1	Phase	-134.3
	1.2	1.4	1.4	1.5	1.4	1.2	1.2	1.0	Ampl.	1.3
	251.1	250.6	250.9	251.2	251.4	250.4	250.5	250.3	Sbd box	251.0
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.45650376512E+03		Apriori delay (usec)		-3.45647999660E+03		Resid mbdelay (usec)		7.48148E-03	+/- 1.6E-05
Sband delay (usec)	-3.45650336485E+03		Apriori clock (usec)		2.8750336E+01		Resid sbdelay (usec)		-2.33683E-02	+/- 1.2E-04
Phase delay (usec)	-3.45648000093E+03		Apriori clockrate (us/s)		3.0800002E-07		Resid phdelay (usec)		-4.32964E-06	+/- 5.3E-08
Delay rate (us/s)	1.91302594184E-01		Apriori rate (us/s)		1.91302513818E-01		Resid rate (us/s)		8.03660E-08	+/- 2.1E-10
Total phase (deg)			Apriori accel (us/s/s)		2.59859706280E-05		Resid phase (deg)		-134.3	+/- 1.7

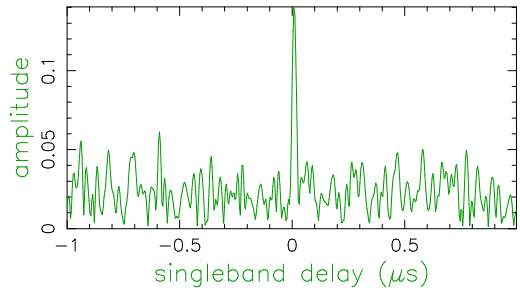
ph/seg (deg) 60.3 4.0 Search (2048X32) 1.184 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
amp/seg (%) 59.5 6.9 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
ph/frq (deg) 23.3 2.3 Inc. seg. avg. 1.881 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
amp/frq (%) 13.4 4.1 Inc. frq. avg. 1.290 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite dr window (ns/s) -0.011 0.011  
X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.209.18P9EC



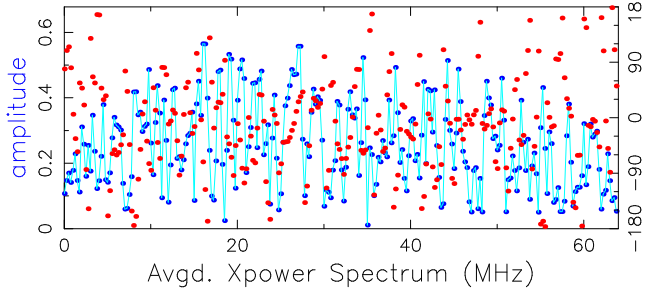


Fringe quality 9

SNR 8.0  
Int time 434.089  
Amp 0.140  
Phase 164.9  
PFD 4.4e-07  
Delays (us)  
SBD 0.008917  
MBD -0.006983  
Fringe rate (Hz)  
0.006938  
Ion TEC 0.000  
Ref freq (MHz)  
86140.0000  
AP (sec) 0.512

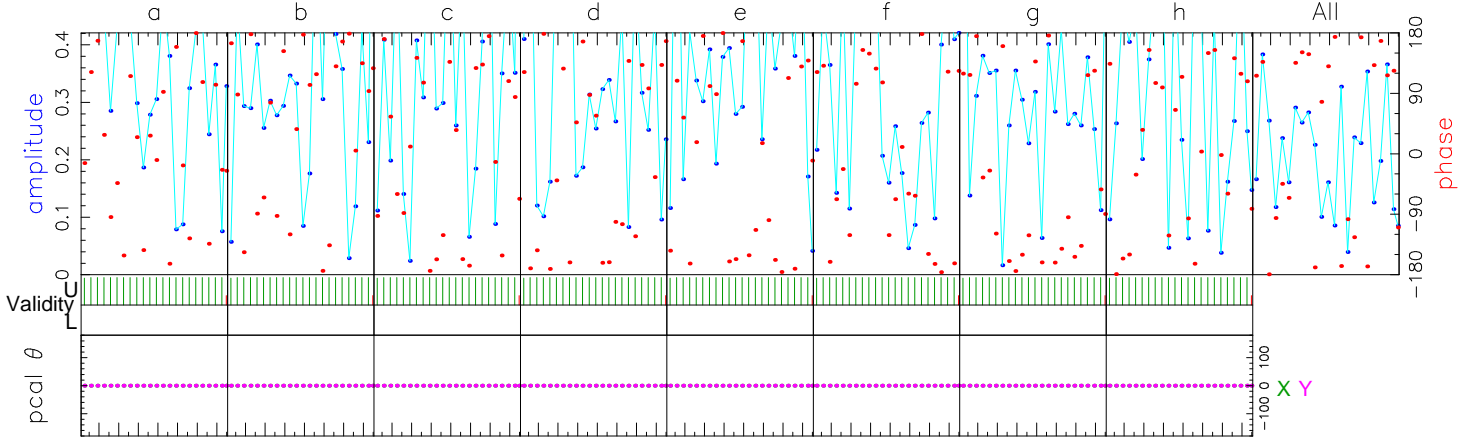


delay rate (ns/s)



Exp. c201a  
Exper # 16383  
Yr:day 2020:115  
Start 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

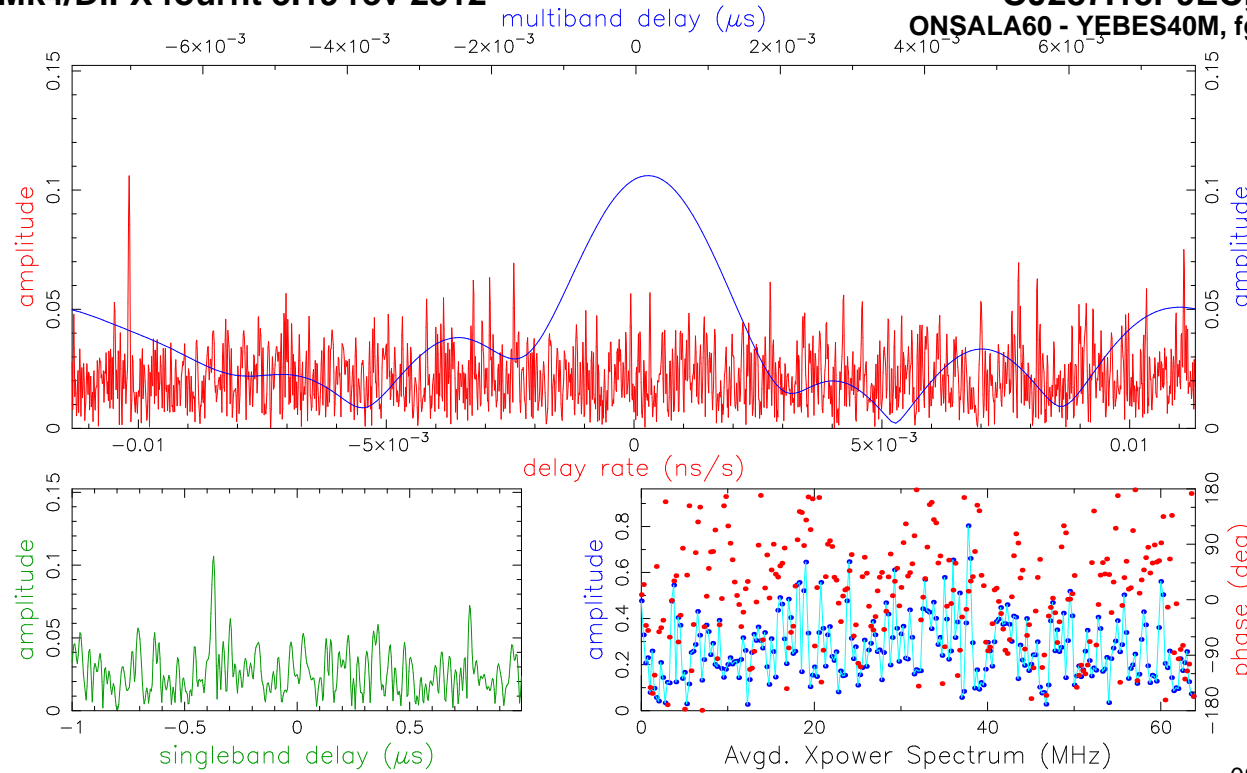


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	-3.45647135415E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	-6.98255E-03	+/-	1.4E-04
Sband delay (usec)	-3.45647107985E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	8.91675E-03	+/-	1.1E-03
Phase delay (usec)	-3.45647999128E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	5.31709E-06	+/-	4.6E-07
Delay rate (us/s)	1.91302594359E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	8.05403E-08	+/-	1.8E-09
Total phase (deg)	-161.6	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	164.9	+/-	14.3

ph/seg (deg)	62.6	Theor.	34.4	Amplitude	0.140 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5			
amp/seg (%)	85.5		60.0	Search (2048X32)	0.134	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000			
ph/frq (deg)	21.7		20.3	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008		
amp/frq (%)	26.3		35.4	Inc. seg. avg.	0.181	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011			
				Inc. frq. avg.	0.138	Data rate (Mb/s):	2048	nlags:	256	t_cohere infinite	ion window (TEC)	0.00 0.00

X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator  
Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.228.18P9EC

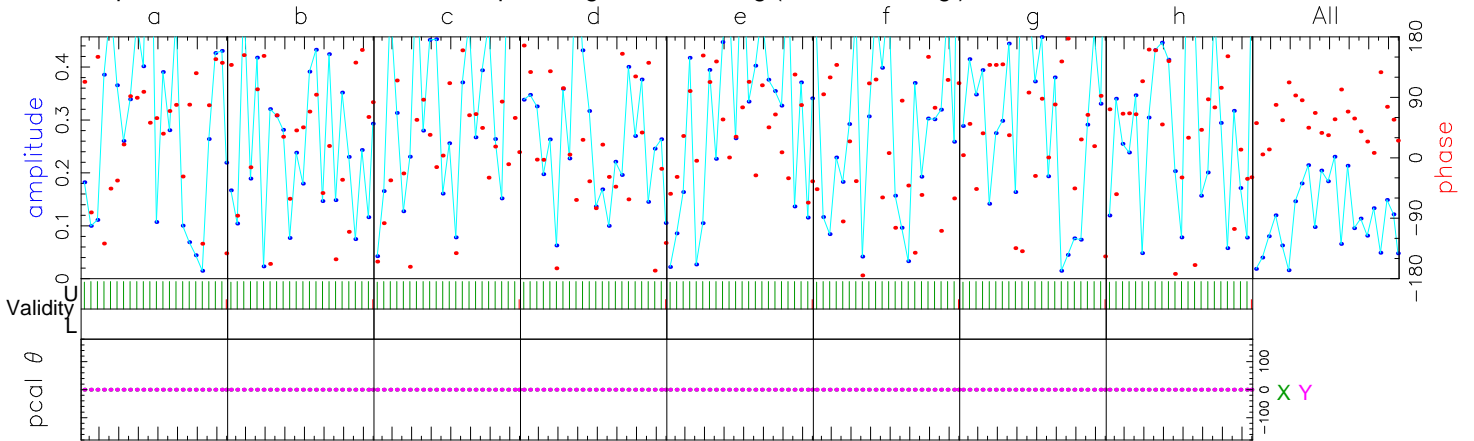


Fringe quality 0

SNR 6.1  
Int time 434.089  
Amp 0.152  
Phase 56.1  
PFD 2.9e-01  
Delays (us)  
SBD -0.372021  
MBD 0.000126  
Fringe rate (Hz)  
-0.878521  
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  
2020:197:120849  
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



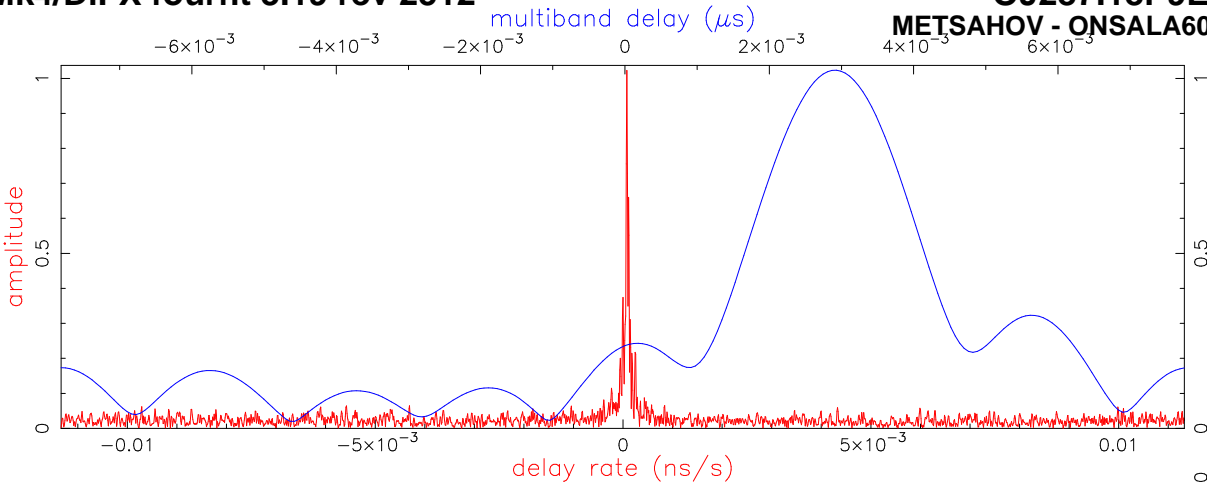
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	73.1	77.6	34.3	7.9	54.8	35.7	59.9	83.6		56.1
	0.2	0.1	0.3	0.1	0.3	0.0	0.2	0.1		0.1
	400.7	453.1	160.3	315.0	266.9	308.1	339.2	95.6		161.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
X	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		Chan ids
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks

Group delay (usec)(sbd)	-3.45685487012E+03	Apriori delay (usec)	-3.45647999660E+03	Resid mbdelay (usec)	1.26474E-04	+/-	1.8E-04
Sband delay (usec)	-3.45685201735E+03	Apriori clock (usec)	2.8750336E+01	Resid sbdelay (usec)	-3.72021E-01	+/-	1.4E-03
Phase delay (usec)	-3.45647999479E+03	Apriori clockrate (us/s)	3.0800002E-07	Resid phdelay (usec)	1.80979E-06	+/-	6.1E-07
Delay rate (us/s)	1.91292315066E-01	Apriori rate (us/s)	1.91302513818E-01	Resid rate (us/s)	-1.01988E-05	+/-	2.4E-09
Total phase (deg)	-270.3	Apriori accel (us/s/s)	2.59859706280E-05	Resid phase (deg)	56.1	+/-	18.9

	RMS	Theor.	Amplitude	0.152 +/- 0.025	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	32.2	45.3	Search (2048X32)	0.104	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	60.9	79.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	28.1	26.7	Inc. seg. avg.	0.129	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	51.3	46.6	Inc. frq. avg.	0.146	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

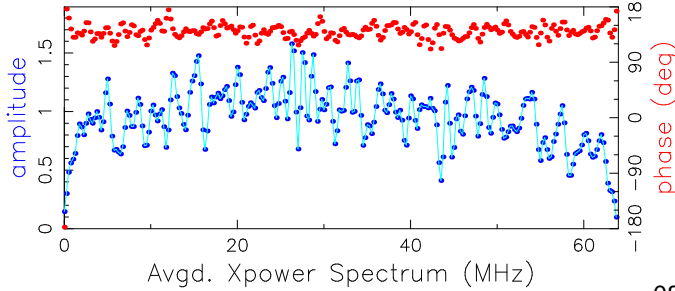
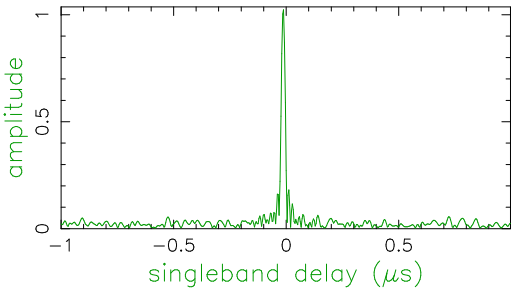
X: az 266.5 el 26.2 pa 35.0 Y: az 265.0 el 37.4 pa 53.7 u,v (fr/asec) -1125.286 2356.221 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/XY..18P9EC Output file: /Exps/c201a/v1/1234/No0027/XY.W.242.18P9EC



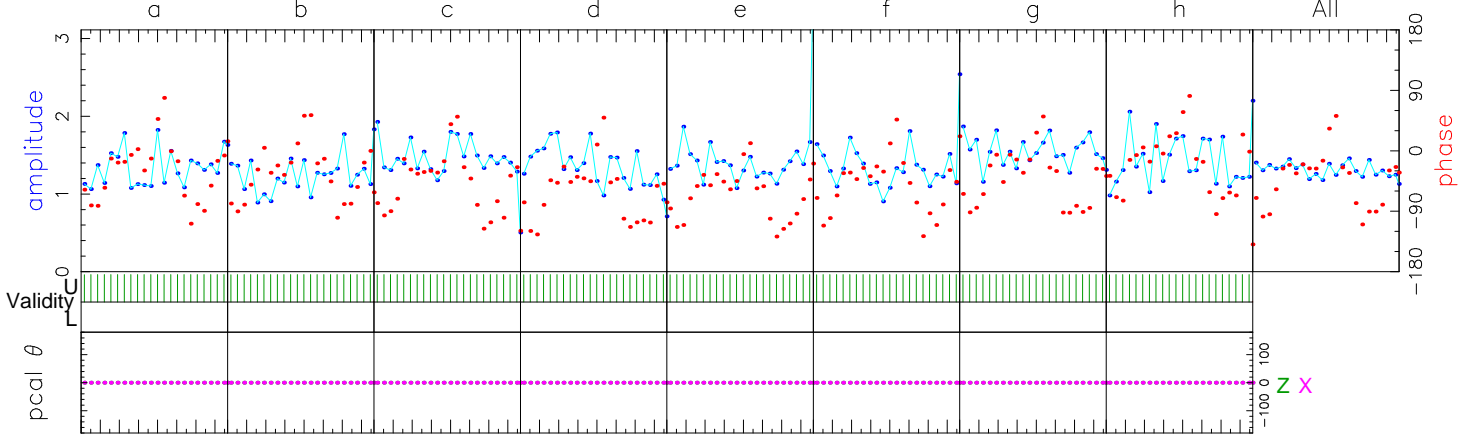
Fringe quality 5

SNR 59.4  
 Int time 439.128  
 Amp 1.037  
 Phase -45.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.013245  
 MBD 0.002881  
 Fringe rate (Hz)  
 0.006308  
 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  
 2020:197:120849  
 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



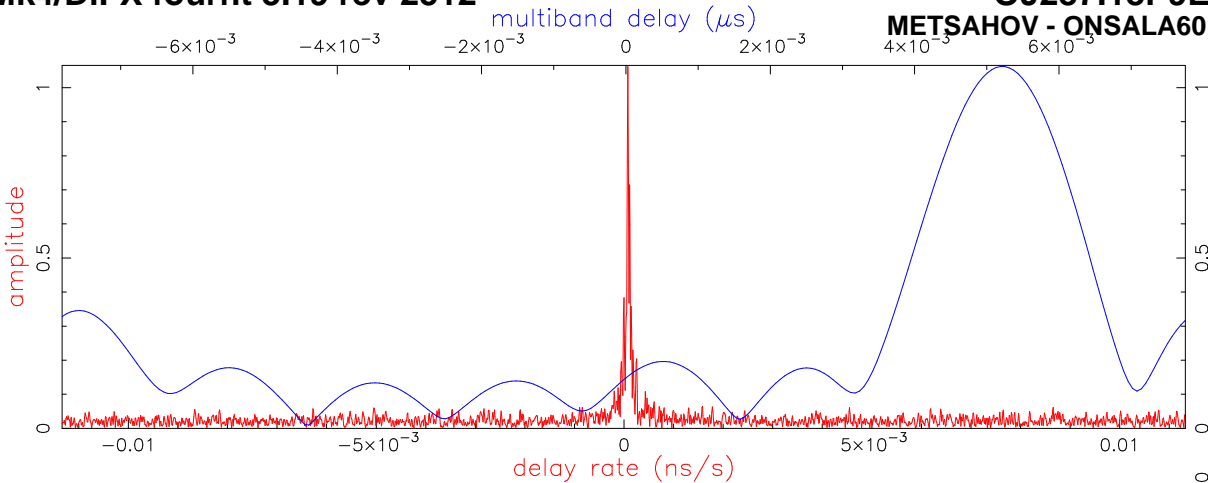
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-30.3	-36.4	-47.5	-63.4	-67.0	-52.8	-42.9	-15.7		-45.1
	1.0	0.9	1.1	1.1	1.1	1.0	1.2	1.0	Ampl.	1.1
	253.6	253.3	253.7	253.3	253.8	253.6	254.0	254.0	Sbd box	253.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-2.22082677579E+03	Apriori delay (usec)	-2.22081403163E+03	Resid mbdelay (usec)	2.88084E-03	+/-	1.8E-05
Sband delay (usec)	-2.22082727638E+03	Apriori clock (usec)	-4.0825867E+01	Resid sbdelay (usec)	-1.32447E-02	+/-	1.4E-04
Phase delay (usec)	-2.22081403309E+03	Apriori clockrate (us/s)	-5.1200000E-07	Resid phdelay (usec)	-1.45332E-06	+/-	6.2E-08
Delay rate (us/s)	3.08802355374E-02	Apriori rate (us/s)	3.08801623065E-02	Resid rate (us/s)	7.32308E-08	+/-	2.4E-10
Total phase (deg)	-291.7	Apriori accel (us/s/s)	1.25810312604E-05	Resid phase (deg)	-45.1	+/-	1.9

ph/seg (deg)	40.8	Theor.	4.6	Amplitude	1.037 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	28.2		8.1	Search (2048X32)	0.974	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	18.5		2.7	Inc. seg. avg.	1.313	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	8.1		4.8	Inc. frq. avg.	1.063	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
						Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

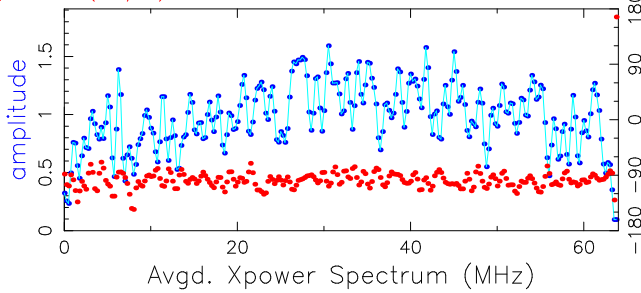
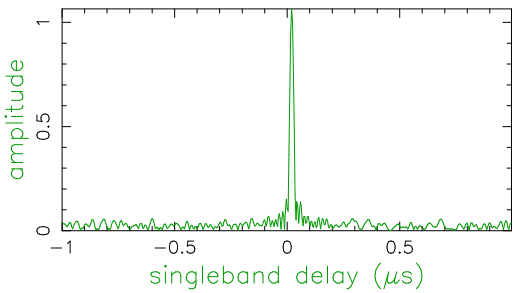
Z: az 275.9 el 19.8 pa 31.7 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -167.665 574.422 simultaneous interpolator

Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZX.W.241.18P9EC



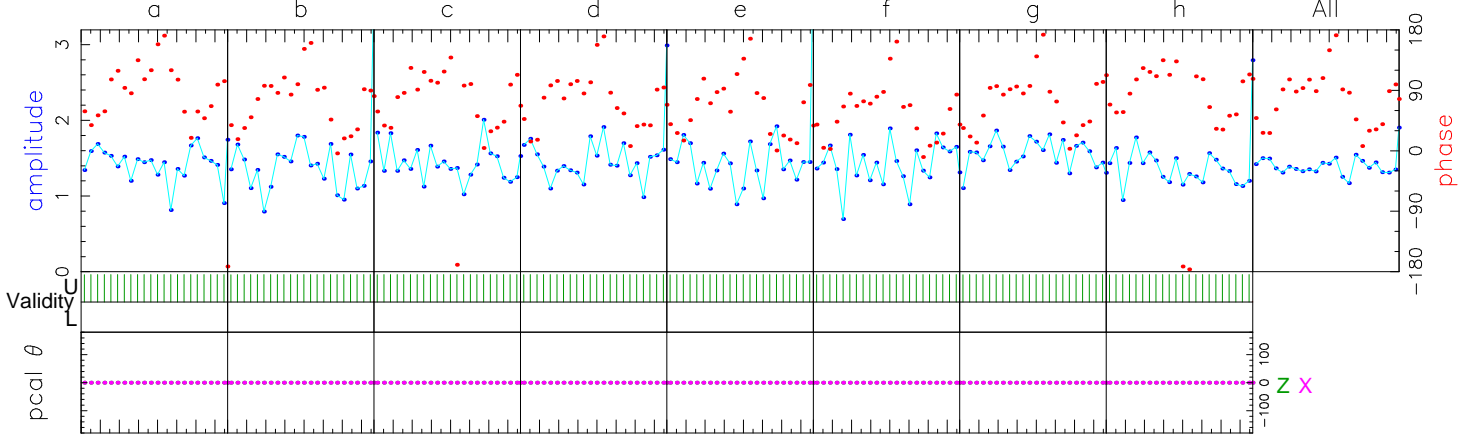
Fringe quality 5

SNR 61.0  
 Int time 439.128  
 Amp 1.065  
 Phase 74.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.020234  
 MBD 0.005235  
 Fringe rate (Hz)  
 0.006305  
 Ion TEC 0.000  
 Ref freq (MHz)  
 86140.0000  
 AP (sec) 0.512

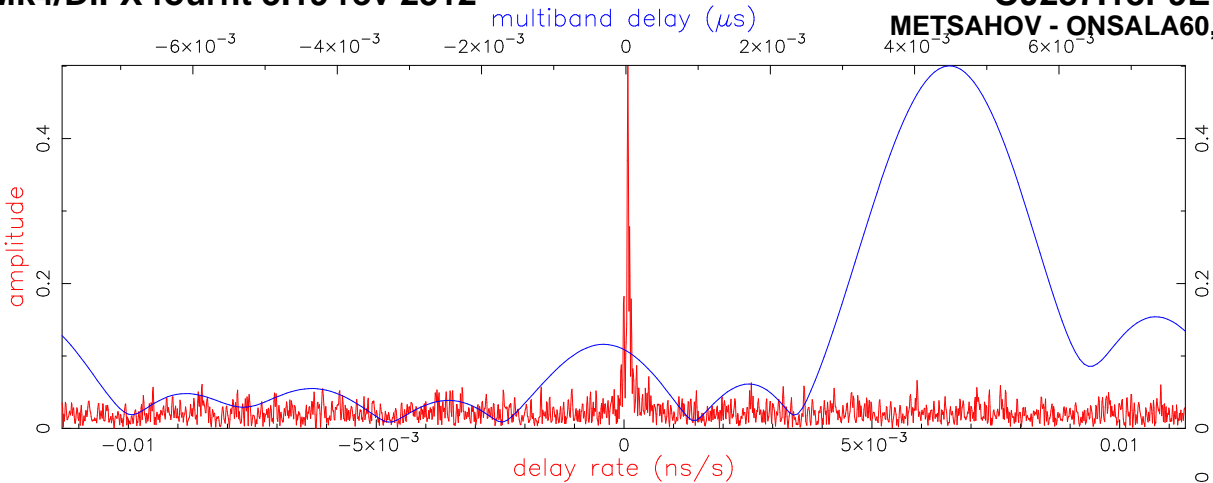


Exp. c201a  
 Exper # 16383  
 Yr:day 2020:115  
 Start 224500.00  
 Stop 225219.80  
 FRT 224840.00  
 Corr/FF/build  
 2020:195:224837  
 2020:197:120852  
 2020:014:135814  
 RA & Dec (J2000)  
 08h54m48.874928s  
 +20°06'30.640850"

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

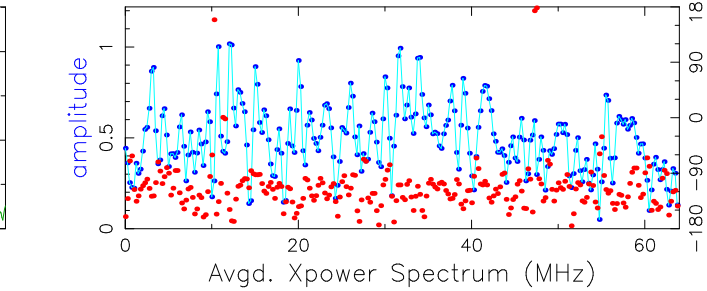
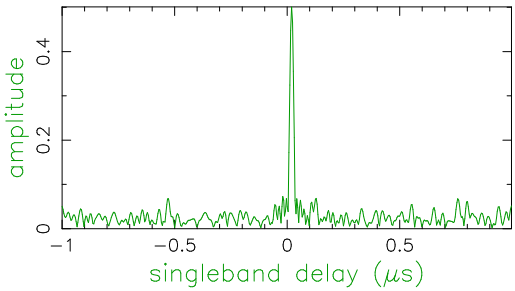


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)	-2.22079317179E+03				-2.22081403163E+03				5.23484E-03	+/- 1.8E-05
Sband delay (usec)	-2.22079379763E+03				-4.0825867E+01				2.02340E-02	+/- 1.4E-04
Phase delay (usec)	-2.22081402922E+03				-5.1200000E-07				2.41146E-06	+/- 6.1E-08
Delay rate (us/s)	3.08802355034E-02				3.08801623065E-02				7.31968E-08	+/- 2.4E-10
Total phase (deg)			-171.8		1.25810312604E-05				74.8	+/- 1.9
	RMS	Theor.	Amplitude	1.065 +/- 0.017	Pcal mode: MANUAL, MANUAL				PC period (AP's) 5, 5	
ph/seg (deg)	40.5	4.5	Search (2048X32)	0.996	Pcal rate: 0.000E+00, 0.000E+00 (us/s)				sb window (us)	-1.000 1.000
amp/seg (%)	31.1	7.9	Interp.	0.000	Bits/sample: 2x2				mb window (us)	-0.008 0.008
ph/frq (deg)	14.1	2.7	Inc. seg. avg.	1.380	Sample rate(MISamp/s): 128				dr window (ns/s)	-0.011 0.011
amp/frq (%)	5.3	4.6	Inc. frq. avg.	1.085	Data rate(Mb/s): 2048				ion window (TEC)	0.00 0.00



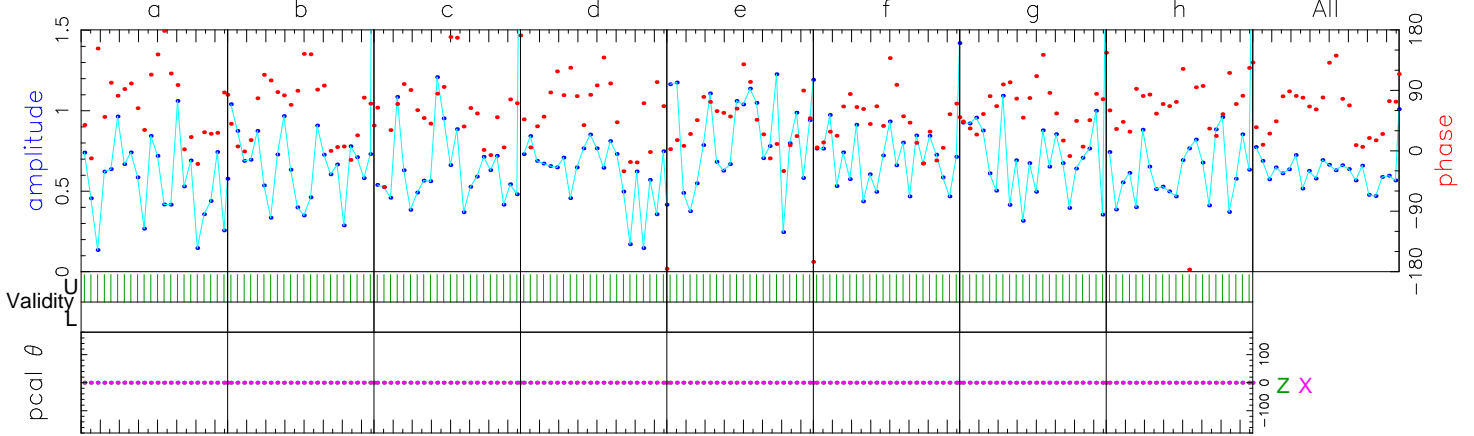
Fringe quality 7

SNR 28.7  
 Int time 439.128  
 Amp 0.501  
 Phase 58.8  
 PFD 0.0e+00  
 Delays (us)  
 SBD 0.019955  
 MBD 0.004494  
 Fringe rate (Hz)  
 0.006350  
 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  
 2020:197:120856  
 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



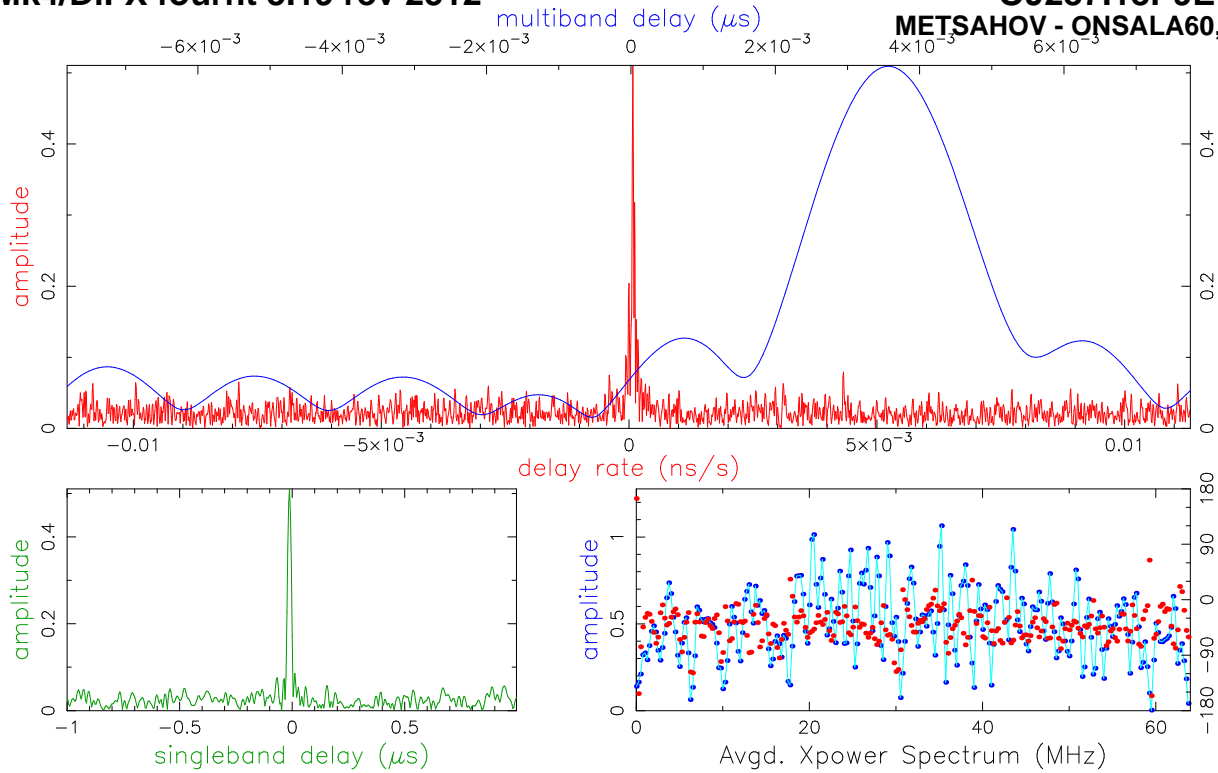
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	72.1	56.3	65.0	63.2	43.7	41.7	62.5	75.3	Phase	58.8
	0.4	0.5	0.4	0.5	0.7	0.6	0.6	0.5	Ampl.	0.5
	262.3	262.0	261.9	261.7	262.0	262.3	262.5	262.8	Sbd box	262.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	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	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd) -2.22079391289E+03 Apriori delay (usec) -2.22081403163E+03 Resid mbdelay (usec) 4.49375E-03 +/- 3.8E-05  
 Sband delay (usec) -2.22079407638E+03 Apriori clock (usec) -4.0825867E+01 Resid sbdelay (usec) 1.99552E-02 +/- 3.0E-04  
 Phase delay (usec) -2.22081402974E+03 Apriori clockrate (us/s) -5.1200000E-07 Resid phdelay (usec) 1.89620E-06 +/- 1.3E-07  
 Delay rate (us/s) 3.08802360234E-02 Apriori rate (us/s) 3.08801623065E-02 Resid rate (us/s) 7.37169E-08 +/- 5.1E-10  
 Total phase (deg) -187.8 Apriori accel (us/s/s) 1.25810312604E-05 Resid phase (deg) 58.8 +/- 4.0

RMS Theor. Amplitude 0.501 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 ph/seg (deg) 36.9 9.6 Search (2048X32) 0.481 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 amp/seg (%) 27.7 16.7 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 ph/frq (deg) 13.2 5.6 Inc. seg. avg. 0.610 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011  
 amp/frq (%) 16.1 9.8 Inc. frq. avg. 0.509 Data rate(Mb/s): 2048 nlags: 256 t\_cohere infinite ion window (TEC) 0.00 0.00

Z: az 275.9 el 19.8 pa 31.7 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -167.665 574.422 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZX.W.256.18P9EC



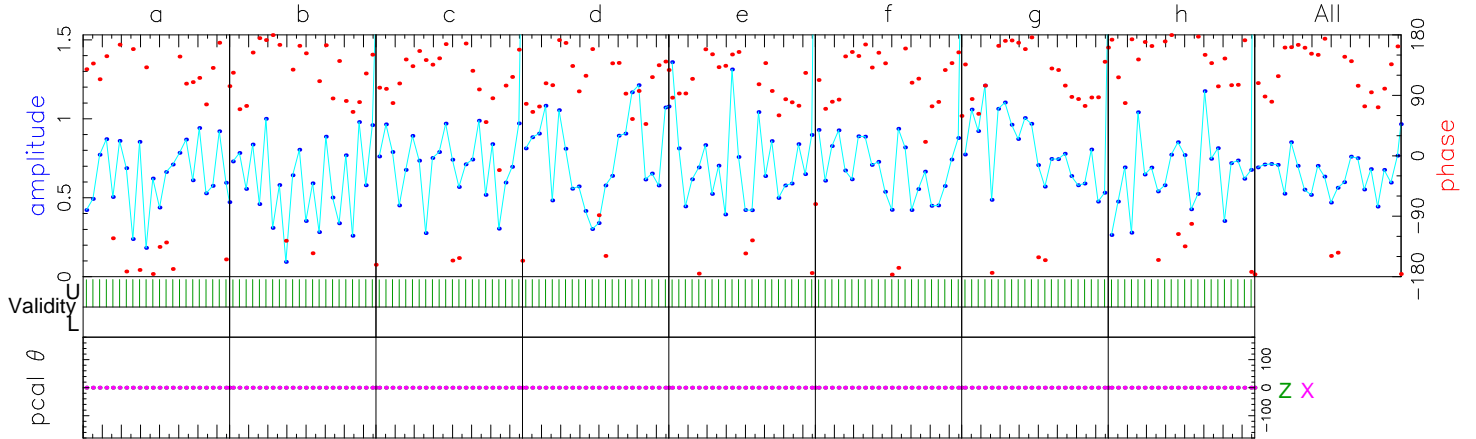


Fringe quality 7

SNR 29.3  
 Int time 439.128  
 Amp 0.511  
 Phase 134.1  
 PFD 0.0e+00  
 Delays (us)  
 SBD -0.012328  
 MBD 0.003556  
 Fringe rate (Hz)  
 0.006404  
 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
	157.3	134.4	129.0	112.4	124.3	129.2	133.6	159.2	Phase	134.1
	0.5	0.5	0.6	0.6	0.5	0.5	0.6	0.5	Ampl.	0.5
	253.6	253.2	254.0	253.8	253.9	253.8	254.2	253.9	Sbd box	253.8
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	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
X	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-2.22082610054E+03		Apriori delay (usec)		-2.22081403163E+03		Resid mbdelay (usec)		3.55609E-03	+/- 3.7E-05
Sband delay (usec)	-2.22082636013E+03		Apriori clock (usec)		-4.0825867E+01		Resid sbdelay (usec)		-1.23285E-02	+/- 2.9E-04
Phase delay (usec)	-2.22081402731E+03		Apriori clockrate (us/s)		-5.1200000E-07		Resid phdelay (usec)		4.32434E-06	+/- 1.3E-07
Delay rate (us/s)	3.08802366484E-02		Apriori rate (us/s)		3.08801623065E-02		Resid rate (us/s)		7.43419E-08	+/- 5.0E-10
Total phase (deg)			Apriori accel (us/s/s)		1.25810312604E-05		Resid phase (deg)		134.1	+/- 3.9

ph/seg (deg) 40.5 9.4 Search (2048X32) 0.491 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5  
 amp/seg (%) 33.2 16.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000  
 ph/frq (deg) 17.3 5.5 Inc. seg. avg. 0.636 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008  
 amp/frq (%) 9.0 9.7 Inc. frq. avg. 0.524 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 X: az 266.5 el 26.2 pa 35.0 u,v (fr/asec) -167.665 574.422 simultaneous interpolator  
 Control file: cf\_1234\_gmva Input file: /Exps/c201a/v1/1234/No0027/ZX..18P9EC Output file: /Exps/c201a/v1/1234/No0027/ZX.W.263.18P9EC