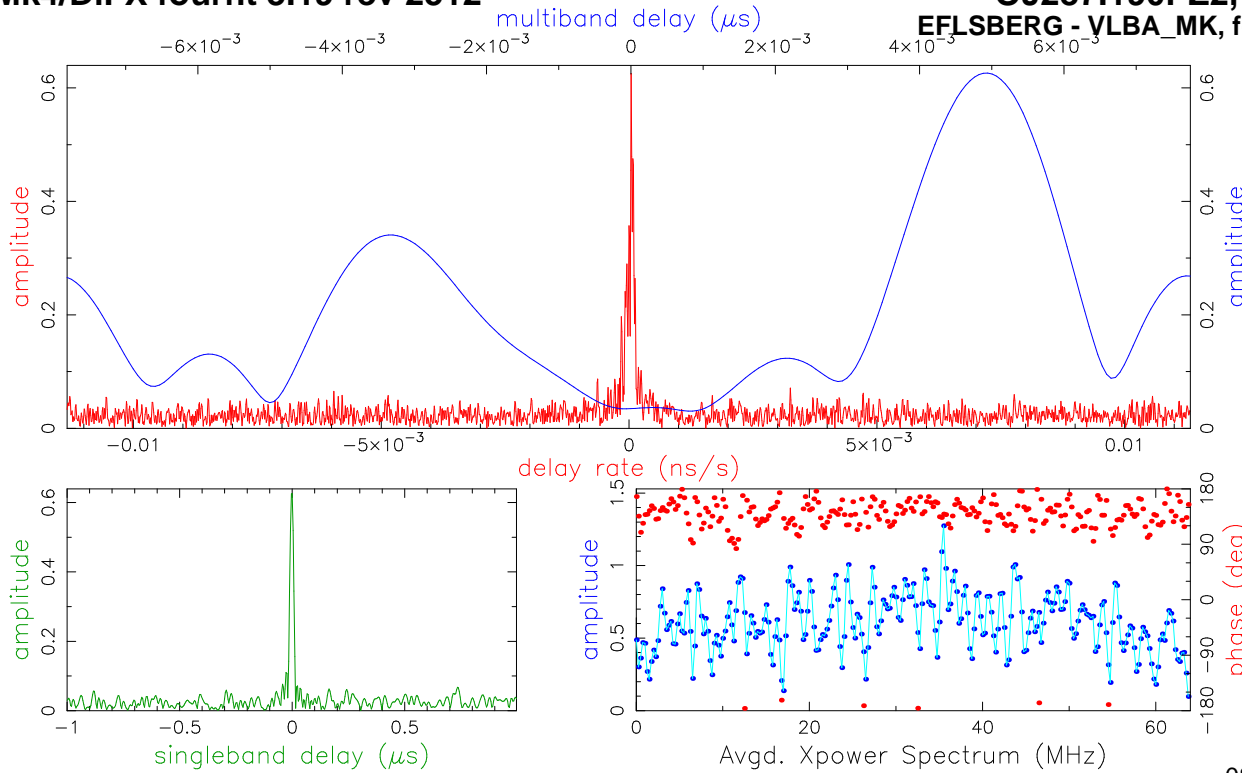


Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190P22, No0043, Bm
EFLSBERG - VLBA_MK, fgroup W, pol LL

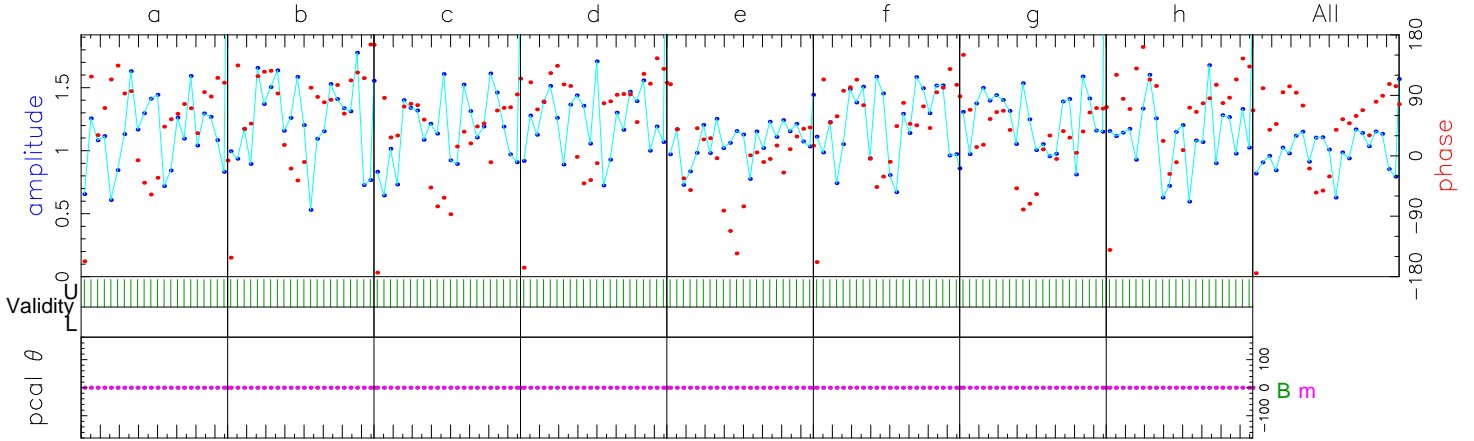


Fringe quality 5

SNR 36.7
Int time 439.542
Amp 0.640
Phase 60.9
PFD 0.0e+00
Delays (us)
SBD -0.001945
MBD 0.004978
Fringe rate (Hz) 0.003809
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

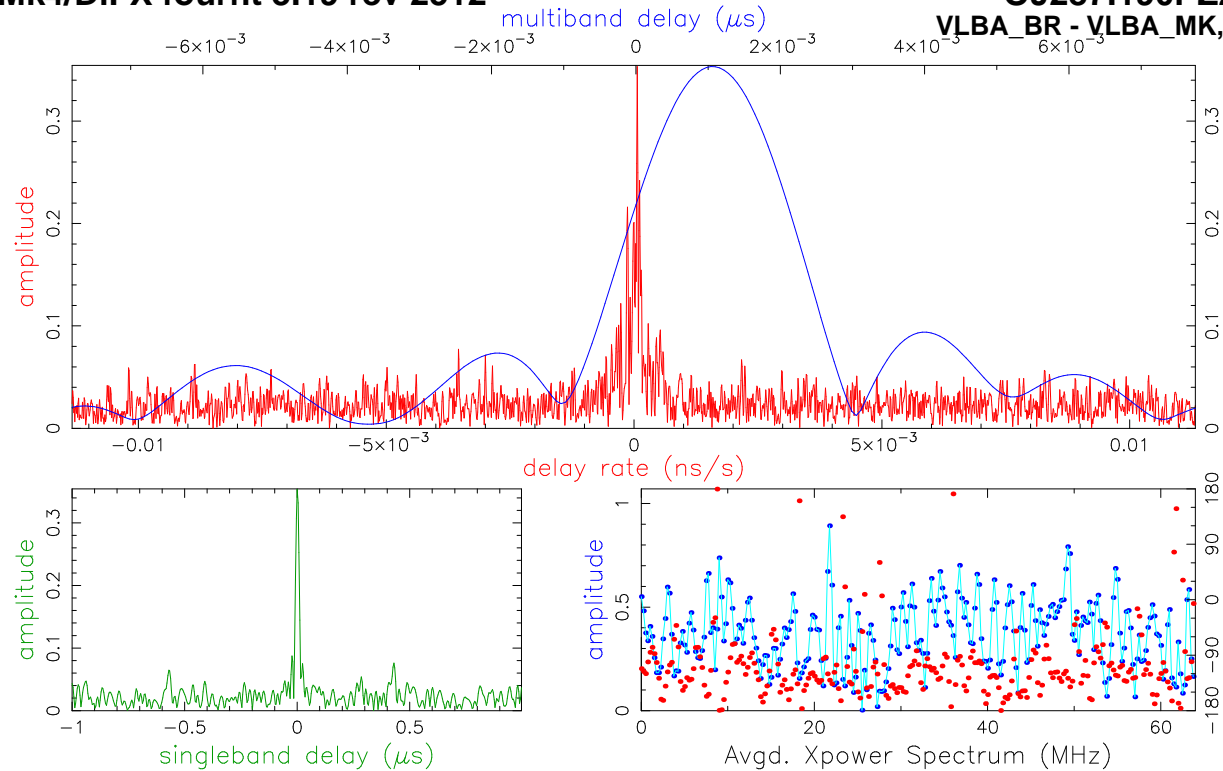
Exp. c201c
Yr:day 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211901
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.90941479695E+03		Apriori delay (usec)		1.90940981878E+03		Resid mbdelay (usec)		4.97817E-03	+/- 3.0E-05
Sband delay (usec)	1.90940787403E+03		Apriori clock (usec)		4.9037609E+00		Resid sbdelay (usec)		-1.94475E-03	+/- 2.3E-04
Phase delay (usec)	1.90940982074E+03		Apriori clockrate (us/s)		-6.9099999E-07		Resid phdelay (usec)		1.96358E-06	+/- 1.0E-07
Delay rate (us/s)	-2.27321051458E+00		Apriori rate (us/s)		-2.27321055879E+00		Resid rate (us/s)		4.42133E-08	+/- 4.0E-10
Total phase (deg)	345.1		Apriori accel (us/s/s)		6.59529327436E-06		Resid phase (deg)		60.9	+/- 3.1

ph/seg (deg) 56.2 7.5 Search (2048X32) 0.625 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 59.0 13.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 36.4 4.4 Inc. seg. avg. 0.982 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 16.0 7.7 Inc. frq. avg. 0.727 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 276.3 el 21.1 pa 42.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 13859.745 3735.491 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Bm..190P22 Output file: /Exps/c201c/v1/1234/No0043/Bm.W.11.190P22

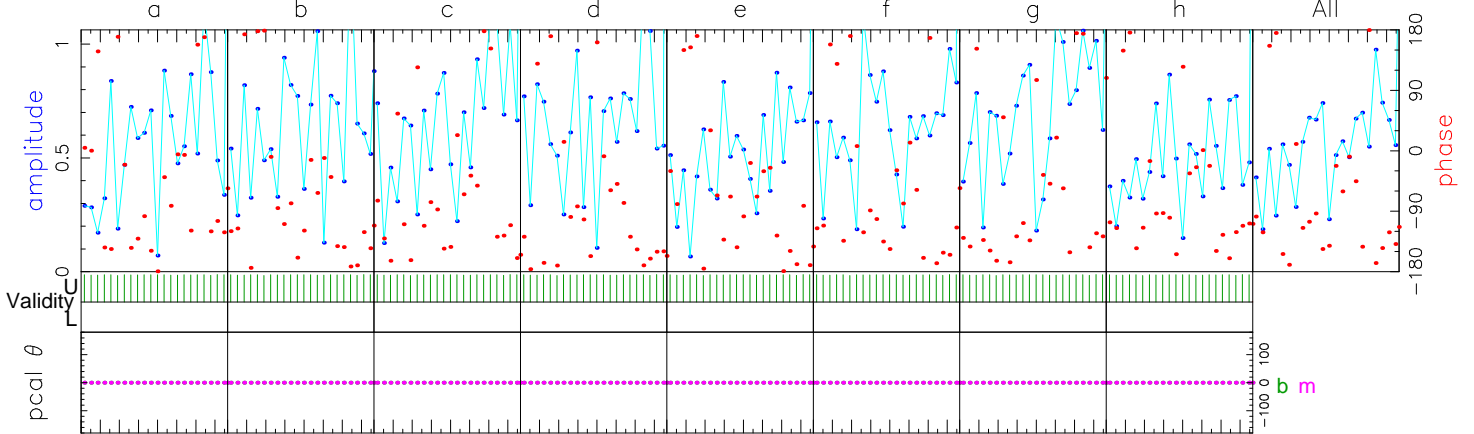


Fringe quality 9

SNR 20.2
Int time 433.403
Amp 0.354
Phase -125.8
PFD 0.0e+00
Delays (us)
SBD 0.000717
MBD 0.001073
Fringe rate (Hz) 0.005423
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

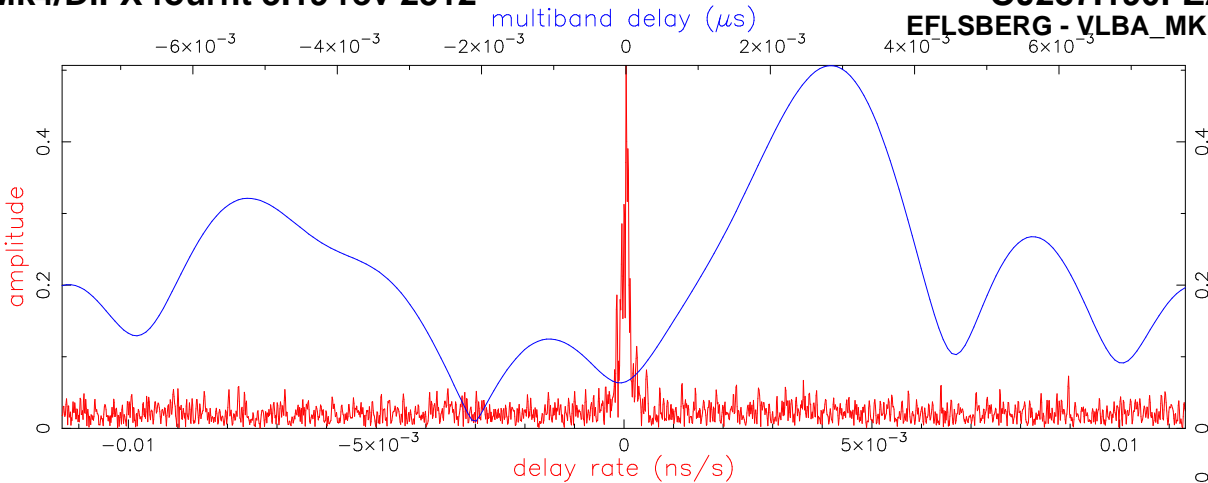
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211905
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



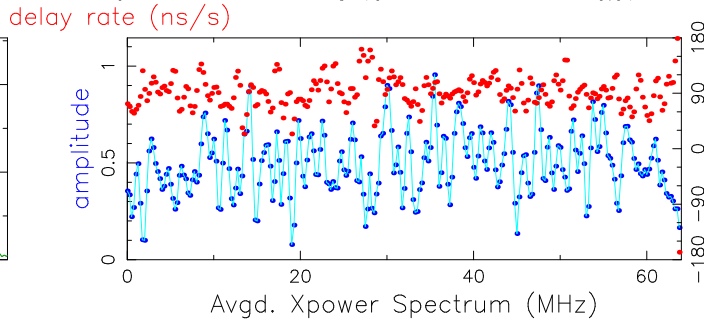
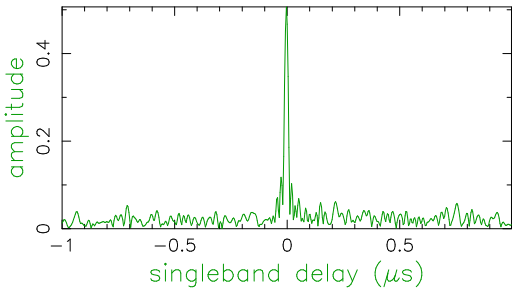
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-117.2	-126.3	-121.8	-135.2	-120.9	-132.5	-137.2	-106.4	Phase	-125.8
	0.3	0.4	0.4	0.4	0.3	0.4	0.4	0.3	Ampl.	0.4
	257.4	257.0	257.4	257.1	258.1	256.7	257.0	256.9	Sbd box	257.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.34305933577E+03		Apriori delay (usec)		9.34305826239E+03		Resid mbdelay (usec)		1.07338E-03	+/- 5.4E-05
Sband delay (usec)	9.34305897914E+03		Apriori clock (usec)		-9.5457735E+00		Resid sbdelay (usec)		7.16750E-04	+/- 4.3E-04
Phase delay (usec)	9.34305825833E+03		Apriori clockrate (us/s)		-5.3299997E-07		Resid phdelay (usec)		-4.05620E-06	+/- 1.8E-07
Delay rate (us/s)	-6.67091950475E-01		Apriori rate (us/s)		-6.67092013432E-01		Resid rate (us/s)		6.29575E-08	+/- 7.2E-10
Total phase (deg)	134.2		Apriori accel (us/s/s)		-3.40639834505E-05		Resid phase (deg)		-125.8	+/- 5.7

ph/seg (deg) 58.1 13.6 Search (2048X32) 0.340 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.5 23.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.2 8.0 Inc. seg. avg. 0.534 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 15.3 14.0 Inc. frq. avg. 0.355 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 111.1 el 43.8 pa -41.5 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4017.199 2382.996 ion window (TEC) 0.00 0.00 simultaneous interpolator



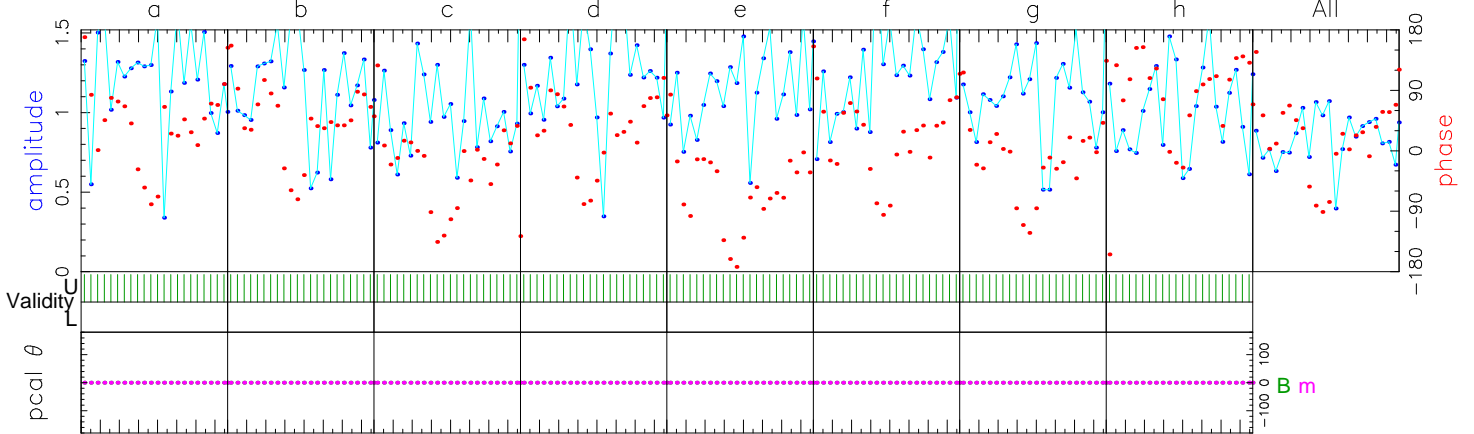
Fringe quality 4

SNR 29.0
Int time 439.543
Amp 0.507
Phase 18.8
PFD 0.0e+00
Delays (us)
SBD -0.003574
MBD 0.002850
Fringe rate (Hz)
0.003808
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512



Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211905
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

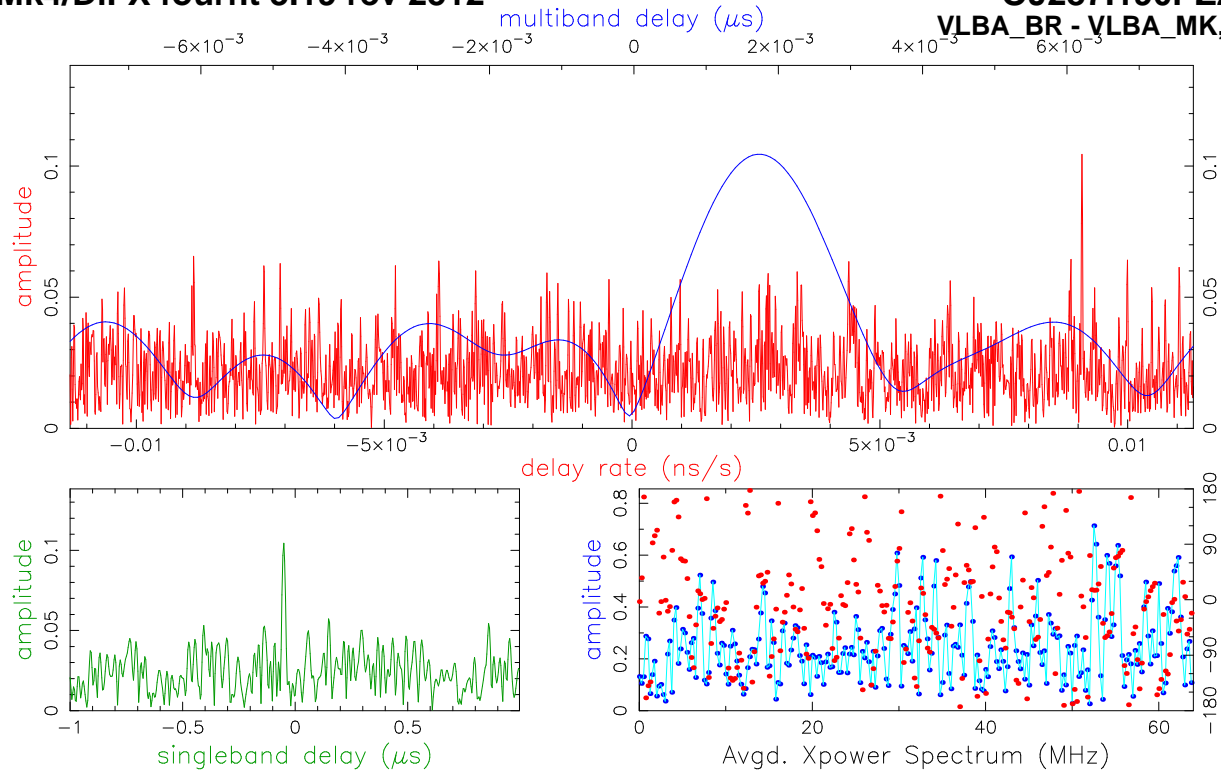


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
B	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

Group delay (usec)(sbd)	1.90941266845E+03	Apriori delay (usec)	1.90940981878E+03	Resid mbdelay (usec)	2.84967E-03	+/-	3.7E-05
Sband delay (usec)	1.90940624478E+03	Apriori clock (usec)	4.9037609E+00	Resid sbdelay (usec)	-3.57400E-03	+/-	3.0E-04
Phase delay (usec)	1.90940981938E+03	Apriori clockrate (us/s)	-6.9099999E-07	Resid phdelay (usec)	6.06793E-07	+/-	1.3E-07
Delay rate (us/s)	-2.27321051458E+00	Apriori rate (us/s)	-2.27321055879E+00	Resid rate (us/s)	4.42083E-08	+/-	5.0E-10
Total phase (deg)	303.0	Apriori accel (us/s/s)	6.59529327436E-06	Resid phase (deg)	18.8	+/-	3.9

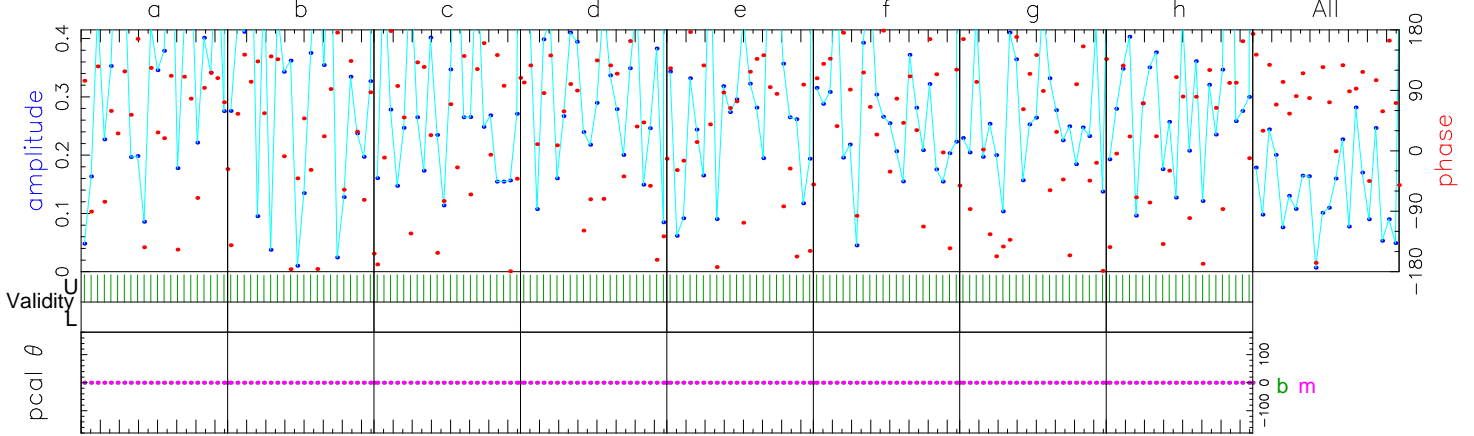
ph/seg (deg)	55.0	RMS	55.0	Theor.	9.5	Amplitude	0.507 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	71.5	Search (2048X32)	0.503	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	SampCntNorm:	enabled	mb window (us)	-0.008	0.008		
ph/frq (deg)	53.2	Inc. seg. avg.	0.823	Inc. frq. avg.	0.689	Bits/sample:	2x2	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011	0.011		
amp/frq (%)	38.2	Inc. frq. avg.	0.689	Data rate (Mb/s):	2048	nlags:	256	t_cohere:	infinite	ion window (TEC)	0.00	0.00		

B: az 276.3 el 21.1 pa 42.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 13859.745 3735.491 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Bm..190P22 Output file: /Exps/c201c/v1/1234/No0043/Bm.W.30.190P22



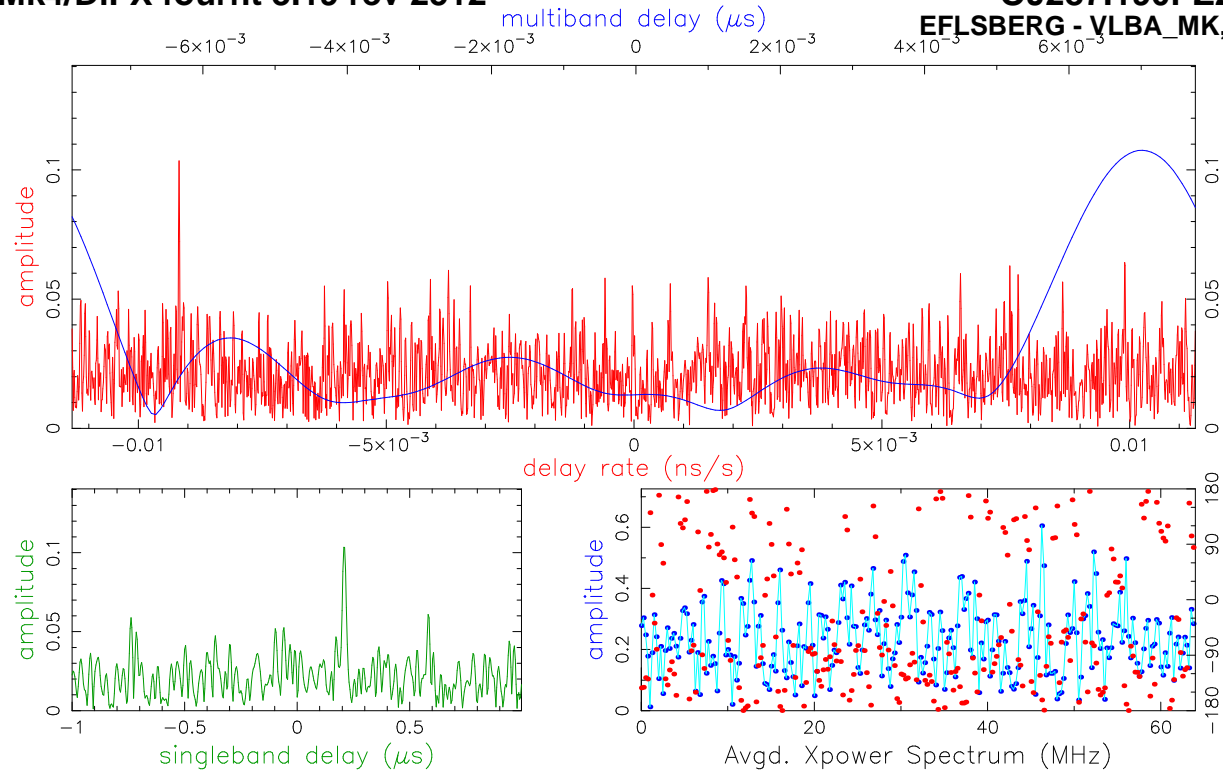
Fringe quality 0
SNR 6.0
Int time 433.402
Amp 0.138
Phase 95.8
PFD 4.9e-01
Delays (us)
SBD -0.051193
MBD 0.001709
Fringe rate (Hz) 0.782995
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211909
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



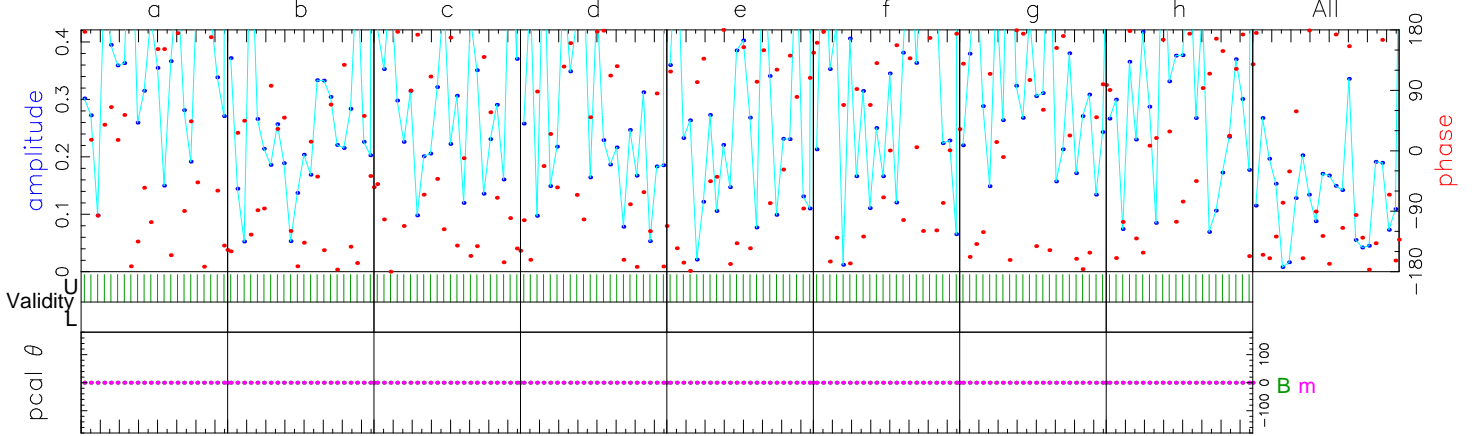
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	89.6	97.5	80.4	104.9	99.0	96.0	160.7	74.6	Phase	95.8
	0.3	0.2	0.0	0.1	0.1	0.2	0.1	0.1	Ampl.	0.1
	244.5	312.1	136.2	215.5	97.8	443.0	429.6	292.1	Sbd box	243.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
b	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
b:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	9.34301309621E+03		Apriori delay (usec)		9.34305826239E+03		Resid mbdelay (usec)		1.70882E-03	+/- 1.8E-04
Sband delay (usec)	9.34300706914E+03		Apriori clock (usec)		-9.5457735E+00		Resid sbdelay (usec)		-5.11932E-02	+/- 1.4E-03
Phase delay (usec)	9.34305826548E+03		Apriori clockrate (us/s)		-5.3299997E-07		Resid phdelay (usec)		3.08865E-06	+/- 6.2E-07
Delay rate (us/s)	-6.67082923641E-01		Apriori rate (us/s)		-6.67092013432E-01		Resid rate (us/s)		9.08979E-06	+/- 2.4E-09
Total phase (deg)	355.7		Apriori accel (us/s/s)		-3.40639834505E-05		Resid phase (deg)		95.8	+/- 19.2

ph/seg (deg) 52.1 46.2 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 75.4 80.6 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 29.0 27.2 Inc. seg. avg. 0.138 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 51.0 47.5 Inc. frq. avg. 0.129 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 111.1 el 43.8 pa -41.5 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4017.199 2382.996 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/bm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/bm.W.46.190PZ2



Fringe quality 0
SNR 6.0
Int time 439.543
Amp 0.140
Phase -160.1
PFD 3.2e-01
Delays (us)
SBD 0.208952
MBD -0.008301
Fringe rate (Hz)
-0.791750
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211909
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

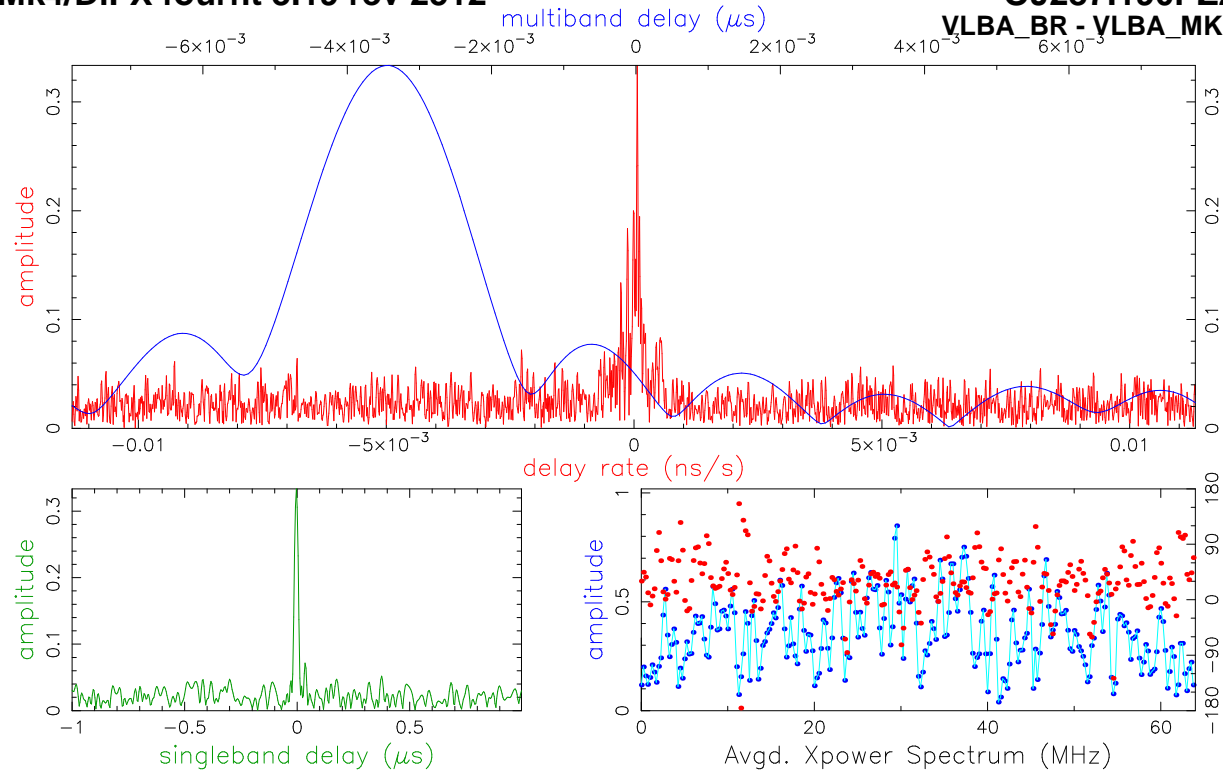


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-155.3	-134.0	-131.0	-141.4	175.3	-156.1	-179.4	172.8	Phase	-160.1
	0.1	0.1	0.2	0.1	0.2	0.2	0.1	0.1	Ampl.	0.1
	231.5	480.1	21.5	286.6	348.9	357.0	410.8	466.0	Sbd box	310.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	1.90962026800E+03	Apriori delay (usec)	1.90940981878E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	1.8E-04
Sband delay (usec)	1.90961877103E+03	Apriori clock (usec)	4.9037609E+00	Resid sbdelay (usec)	2.08952E-01	+/-	1.4E-03
Phase delay (usec)	1.90940981362E+03	Apriori clockrate (us/s)	-6.9099999E-07	Resid phdelay (usec)	-5.16150E-06	+/-	6.1E-07
Delay rate (us/s)	-2.27321975023E+00	Apriori rate (us/s)	-2.27321055879E+00	Resid rate (us/s)	-9.19143E-06	+/-	2.4E-09
Total phase (deg)	124.1	Apriori accel (us/s/s)	6.59529327436E-06	Resid phase (deg)	-160.1	+/-	19.0

ph/seg (deg)	57.4	RMS	45.5	Theor.	Amplitude	0.140 +/- 0.023	Pcal mode: MANUAL, MANUAL	PC period (AP's)	5, 5	
amp/seg (%)	81.1	57.4	45.5	Search (2048X32)	0.102	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000	1.000	
ph/frq (deg)	24.6	81.1	79.3	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	30.4	24.6	26.8	Inc. seg. avg.	0.138	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
		30.4	46.8	Inc. frq. avg.	0.133	Data rate(Mb/s): 2048	ion window (TEC)	0.00	0.00	

B: az 276.3 el 21.1 pa 42.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 13859.745 3735.491 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Bm..190P22 Output file: /Exps/c201c/v1/1234/No0043/Bm.W.48.190P22

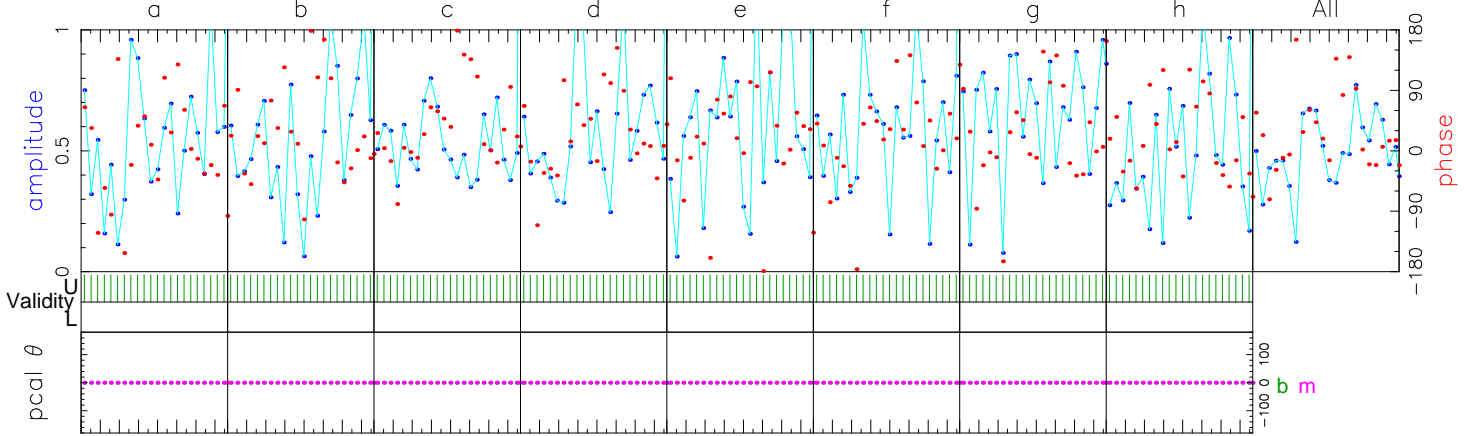


Fringe quality 9

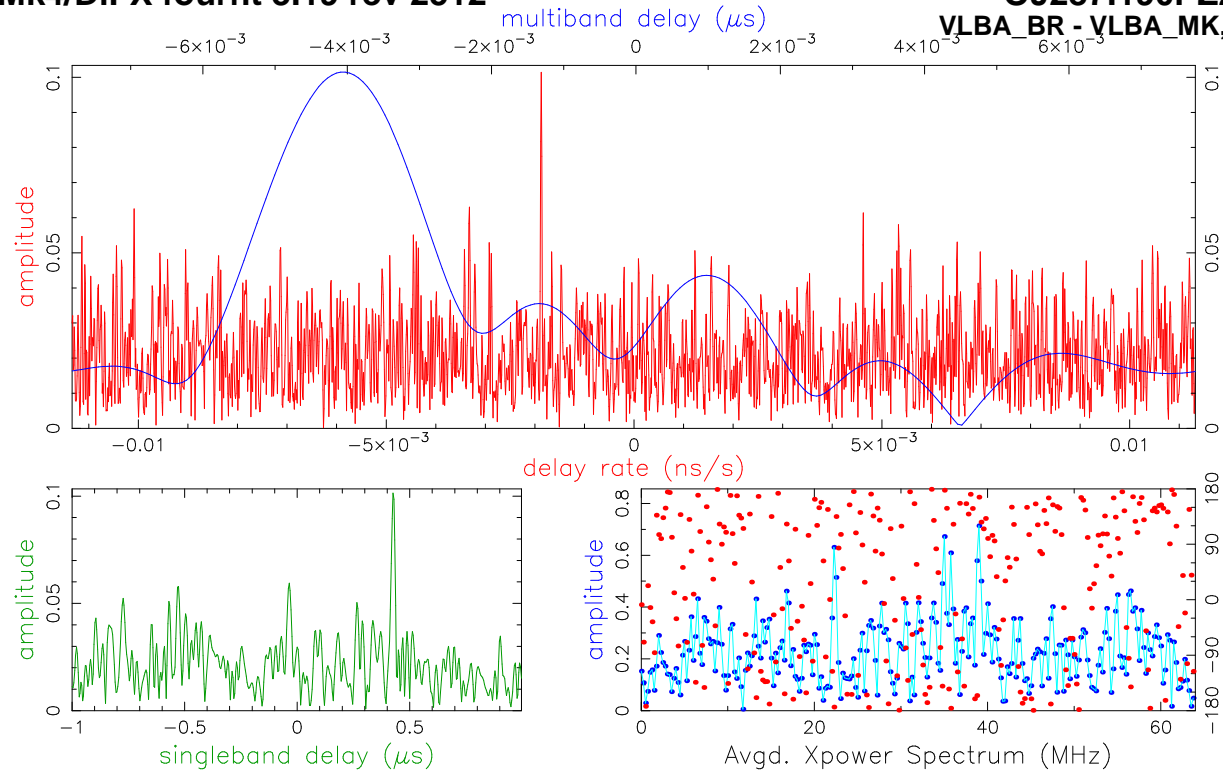
SNR 19.0
Int time 433.401
Amp 0.334
Phase 23.7
PFD 0.0e+00
Delays (us)
SBD -0.003916
MBD -0.003447
Fringe rate (Hz) 0.005376
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211901
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

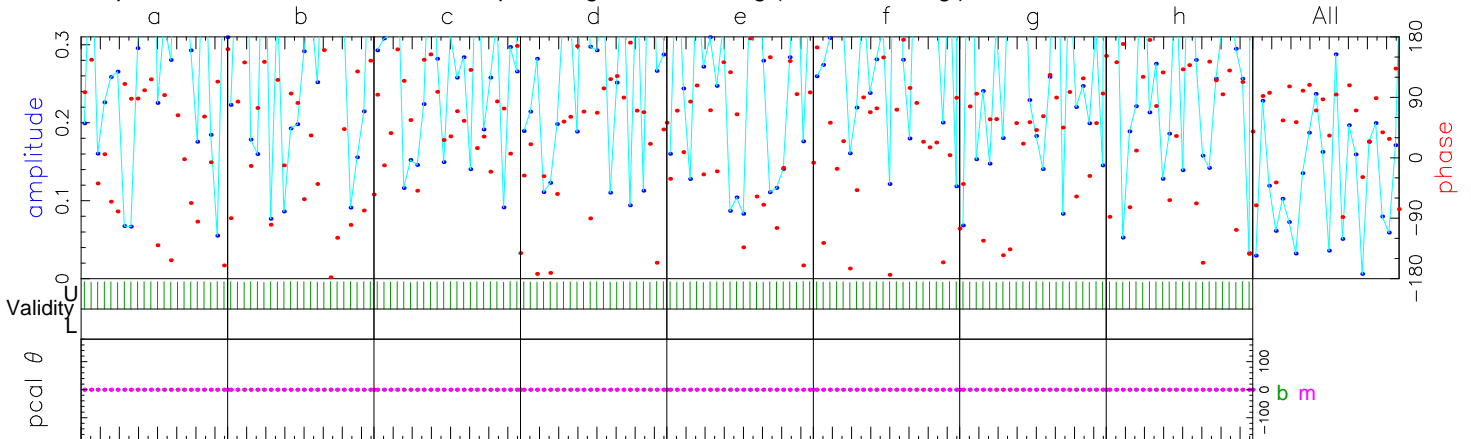


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
b	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	10.5	19.1	27.9	30.1	42.7	30.4	14.4	12.6		
Sband delay (usec)	0.3	0.3	0.3	0.4	0.3	0.4	0.4	0.3		
Phase delay (usec)	256.1	255.7	256.5	256.1	256.5	255.3	256.2	255.6		
Delay rate (us/s)										
Total phase (deg)			283.7							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal θ										
RMS	59.4	14.5								
Theor.										
Amplitude										
Search (2048X32)										
Interp.										
Inc. seg. avg.										
Inc. frq. avg.										
0.334 +/- 0.018										
0.319										
-5.3299997E-07										
-6.67092013432E-01										
-3.40639834505E-05										
0.000E+00, 0.000E+00 (us/s)										
SampCntNorm: enabled										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
-1.000 1.000										
-0.008 0.008										
-0.011 0.011										
0.00 0.00										
b: az 111.1 el 43.8 pa -41.5										
m: az 73.5 el 14.3 pa -73.7										
u,v (fr/asec) 4017.199 2382.996										
Control file: cf_1234_gmva										
Input file: /Exps/c201c/v1/1234/No0043/bm..190PZ2										
Output file: /Exps/c201c/v1/1234/No0043/bm.W.6.190PZ2										



Fringe quality 0
SNR 5.8
Int time 433.402
Amp 0.103
Phase 82.9
PFD 7.7e-01
Delays (us)
SBD 0.427052
MBD -0.004000
Fringe rate (Hz)
-0.161041
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211913
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

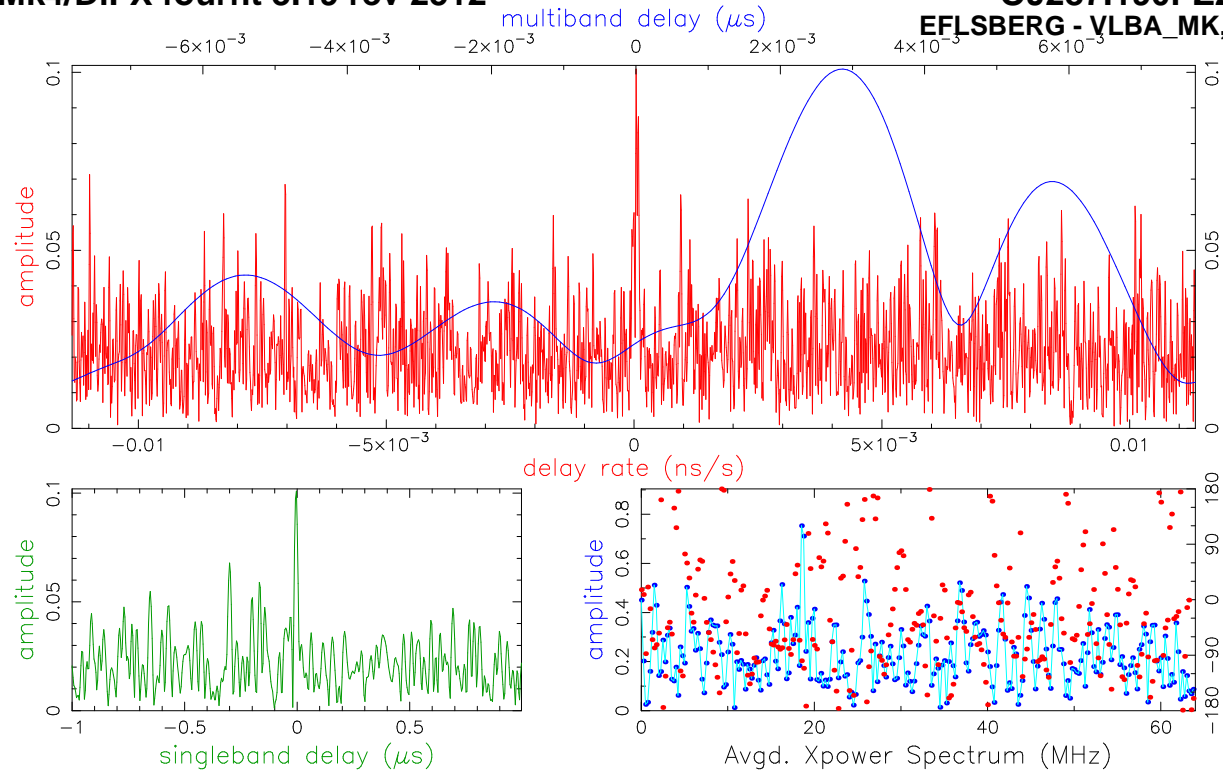
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b:m	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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
b	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		

Group delay (usec)(sbd)	9.34349176196E+03	Apriori delay (usec)	9.34305826239E+03	Resid mbdelay (usec)	-4.00043E-03	+/-	1.9E-04
Sband delay (usec)	9.34348531439E+03	Apriori clock (usec)	-9.5457735E+00	Resid sbdelay (usec)	4.27052E-01	+/-	1.5E-03
Phase delay (usec)	9.34305826506E+03	Apriori clockrate (us/s)	-5.3299997E-07	Resid phdelay (usec)	2.67179E-06	+/-	6.3E-07
Delay rate (us/s)	-6.67093882961E-01	Apriori rate (us/s)	-6.67092013432E-01	Resid rate (us/s)	-1.86953E-06	+/-	2.5E-09
Total phase (deg)	342.8	Apriori accel (us/s/s)	-3.40639834505E-05	Resid phase (deg)	82.9	+/-	19.7

ph/seg (deg)	66.7	RMS	47.2	Theor.	66.7	Amplitude	0.103 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5
amp/seg (%)	79.4	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)	31.8	Inc. seg. avg.	0.096	Inc. frq. avg.	0.102	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008	0.008
amp/frq (%)	31.2	Inc. frq. avg.	0.102	u,v (fr/asec)	4017.199 2382.996	Sample rate (MSamp/s):	128	nlags:	256	t_cohere	infinite

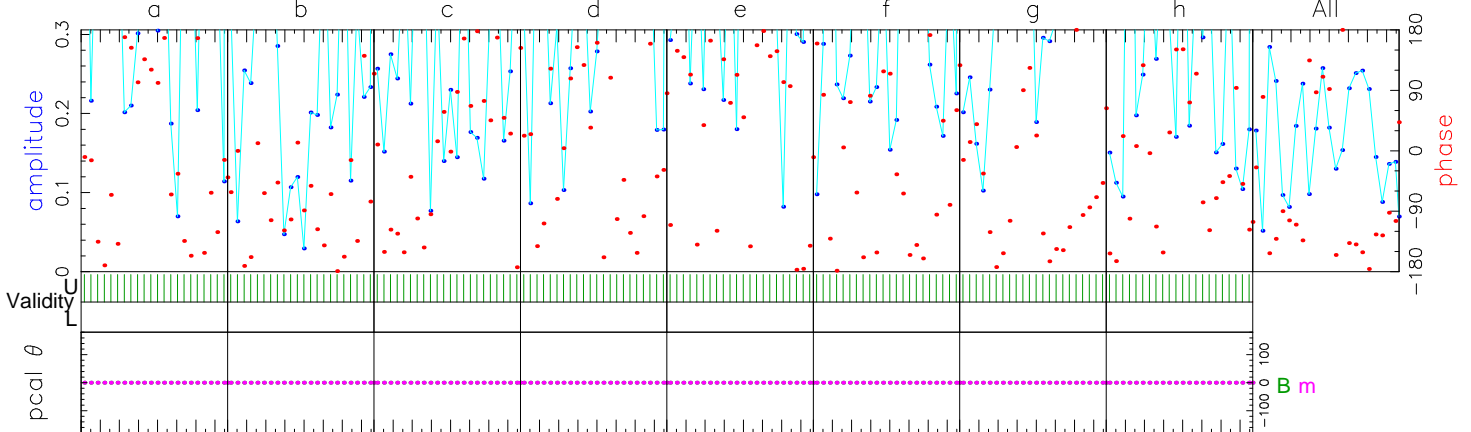


Fringe quality 0

SNR 5.8
Int time 439.542
Amp 0.102
Phase -148.5
PFD 7.2e-01
Delays (us)
SBD -0.005168
MBD 0.002864
Fringe rate (Hz)
0.003810
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

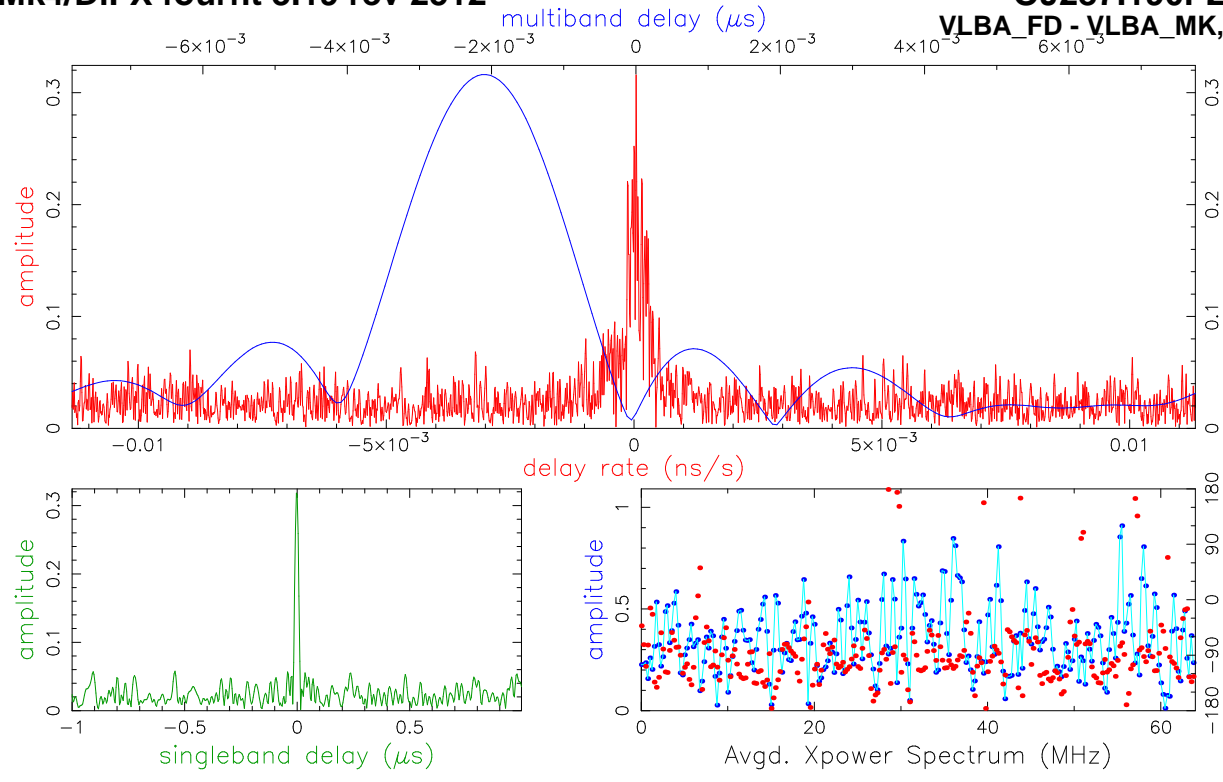
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211913
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



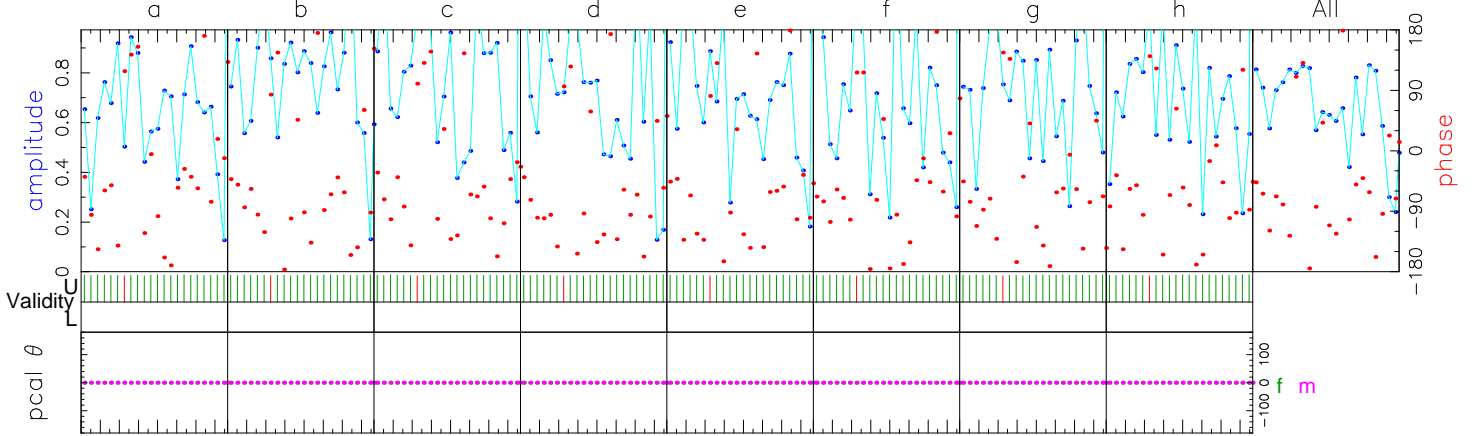
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-149.9	-104.2	-162.1	-147.5	153.3	-141.9	-125.2	-108.6	Phase	-148.5
	0.2	0.1	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
	489.6	95.4	148.0	179.9	256.3	457.7	204.9	199.6	Sbd box	255.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
B	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
B:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
B:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
B	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.90939705779E+03		Apriori delay (usec)		1.90940981878E+03		Resid mbdelay (usec)		2.86401E-03	+/- 1.9E-04
Sband delay (usec)	1.90940465028E+03		Apriori clock (usec)		4.9037609E+00		Resid sbdelay (usec)		-5.16850E-03	+/- 1.5E-03
Phase delay (usec)	1.90940981399E+03		Apriori clockrate (us/s)		-6.9099999E-07		Resid phdelay (usec)		-4.78823E-06	+/- 6.3E-07
Delay rate (us/s)	-2.27321051456E+00		Apriori rate (us/s)		-2.27321055879E+00		Resid rate (us/s)		4.42345E-08	+/- 2.5E-09
Total phase (deg)	135.7		Apriori accel (us/s/s)		6.59529327436E-06		Resid phase (deg)		-148.5	+/- 19.6

ph/seg (deg) 65.7 47.0 Search (2048X32) 0.100 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 95.9 82.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 35.9 27.7 Inc. seg. avg. 0.130 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.8 48.4 Inc. frq. avg. 0.110 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 276.3 el 21.1 pa 42.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 13859.745 3735.491 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Bm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/Bm.W.63.190PZ2



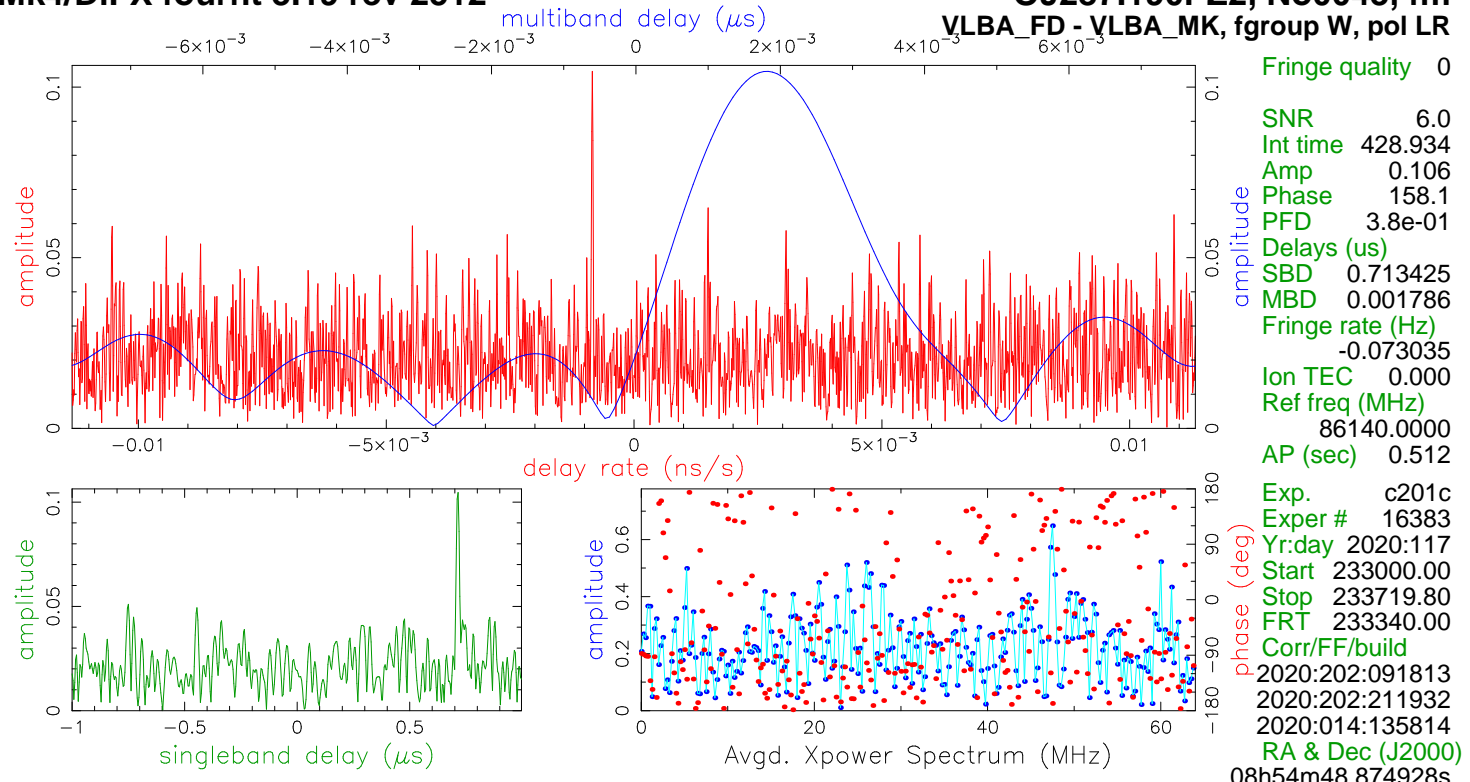
Fringe quality 9
 SNR 18.4
 Int time 428.934
 Amp 0.324
 Phase -97.9
 PFD 0.0e+00
 Delays (us)
 SBD -0.002117
 MBD -0.002163
 Fringe rate (Hz) 0.003508
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:211927
 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

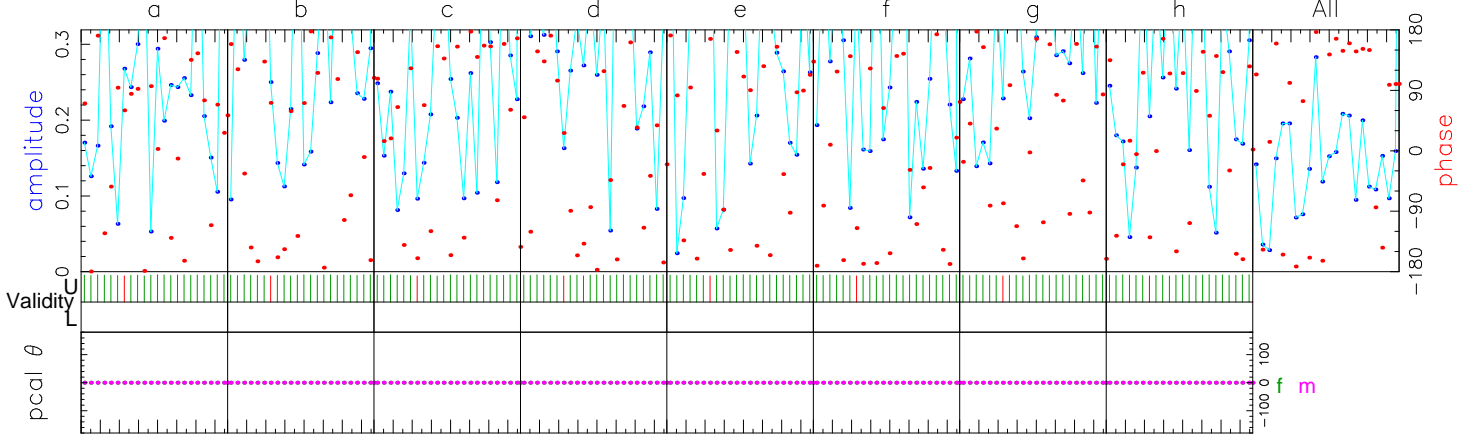


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-99.9	-98.4	-97.3	-105.8	-107.8	-86.5	-97.8	-85.9	Phase	-97.9
	0.2	0.4	0.3	0.4	0.3	0.3	0.4	0.3	Ampl.	0.3
	256.7	256.4	256.6	256.4	256.4	256.3	256.4	256.7	Sbd box	256.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.32069242302E+04		Apriori delay (usec)		1.32069263927E+04		Resid mbdelay (usec)		-2.16258E-03	+/- 5.9E-05
Sband delay (usec)	1.32069242752E+04		Apriori clock (usec)		-4.2256575E+00		Resid sbdelay (usec)		-2.11750E-03	+/- 4.7E-04
Phase delay (usec)	1.32069263896E+04		Apriori clockrate (us/s)		-3.8199999E-07		Resid phdelay (usec)		-3.15543E-06	+/- 2.0E-07
Delay rate (us/s)	-7.43735961134E-01		Apriori rate (us/s)		-7.43736001863E-01		Resid rate (us/s)		4.07293E-08	+/- 7.9E-10
Total phase (deg)	71.3		Apriori accel (us/s/s)		-6.36639696954E-05		Resid phase (deg)		-97.9	+/- 6.2

	RMS	Theor.	Amplitude	0.324 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	69.2	15.0	Search (2048X32)	0.301	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	115.1	26.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled
ph/frq (deg)	8.6	8.8	Inc. seg. avg.	0.637	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	16.3	15.4	Inc. frq. avg.	0.315	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

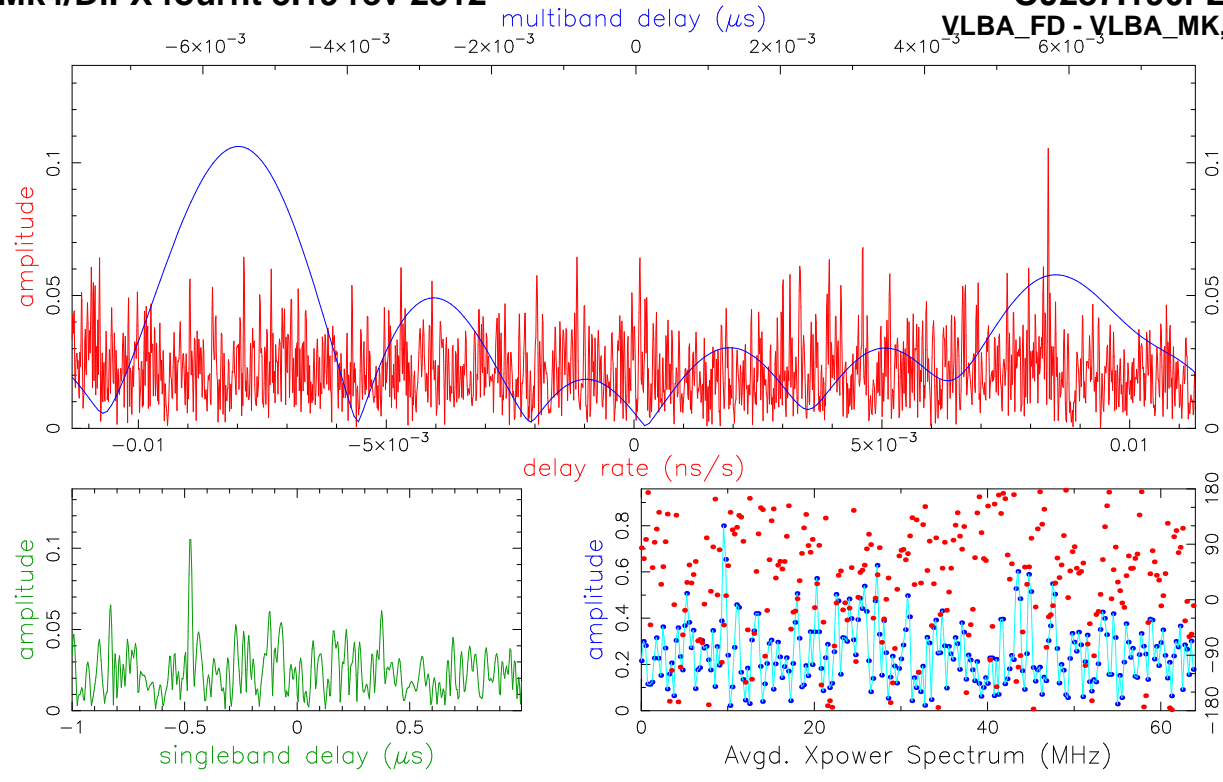


Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
116.1	168.7	150.1	171.9	155.8	-173.3	174.3	126.6	126.6	Phase	158.1
0.1	0.1	0.2	0.1	0.2	0.1	0.0	0.1	0.1	Ampl.	0.1
163.2	439.8	49.5	399.7	439.5	315.4	221.9	444.2	444.2	Sbd box	439.6
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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.32076469288E+04		Apriori delay (usec)	1.32069263927E+04	Resid mbdelay (usec)	1.78611E-03	+/-	1.8E-04		
Sband delay (usec)	1.32076398177E+04		Apriori clock (usec)	-4.2256575E+00	Resid sbdelay (usec)	7.13425E-01	+/-	1.4E-03		
Phase delay (usec)	1.32069263978E+04		Apriori clockrate (us/s)	-3.8199999E-07	Resid phdelay (usec)	5.09800E-06	+/-	6.1E-07		
Delay rate (us/s)	-7.43736849723E-01		Apriori rate (us/s)	-7.43736001863E-01	Resid rate (us/s)	-8.47860E-07	+/-	2.4E-09		
Total phase (deg)		327.3	Apriori accel (us/s/s)	-6.36639696954E-05	Resid phase (deg)	158.1	+/-	19.1		

	RMS	Theor.	Amplitude	0.106 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	55.7	45.7	Search (2048X32)	0.100	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	68.2	79.8	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	26.5	27.0	Inc. seg. avg.	0.107	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	36.1	47.1	Inc. frq. avg.	0.101	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

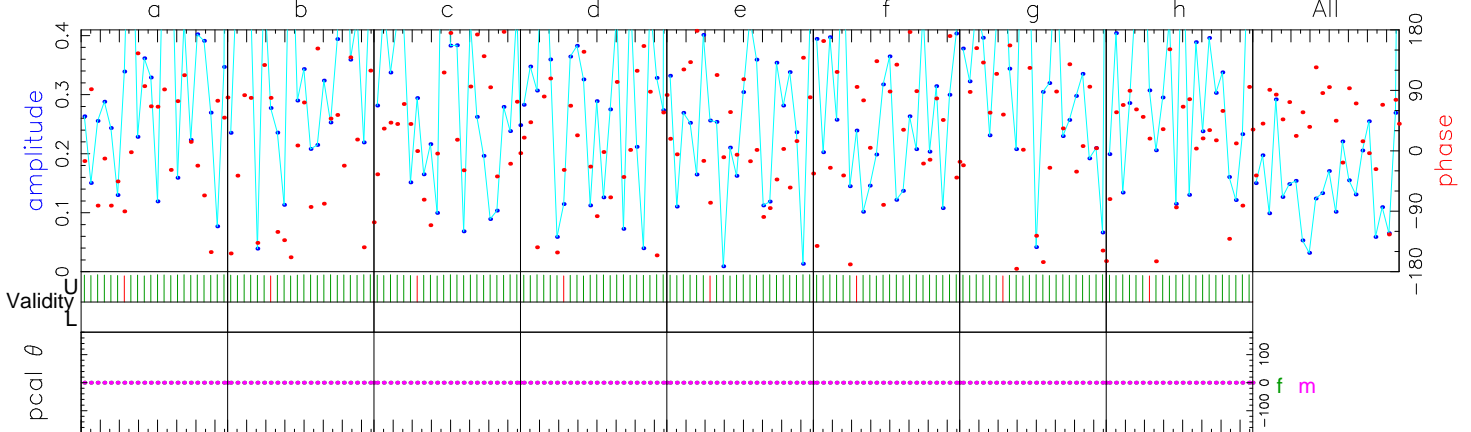


Fringe quality 0

SNR 6.1
Int time 428.933
Amp 0.137
Phase 51.0
PFD 2.2e-01
Delays (us)
SBD -0.474594
MBD -0.005628
Fringe rate (Hz) 0.721235
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211936
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

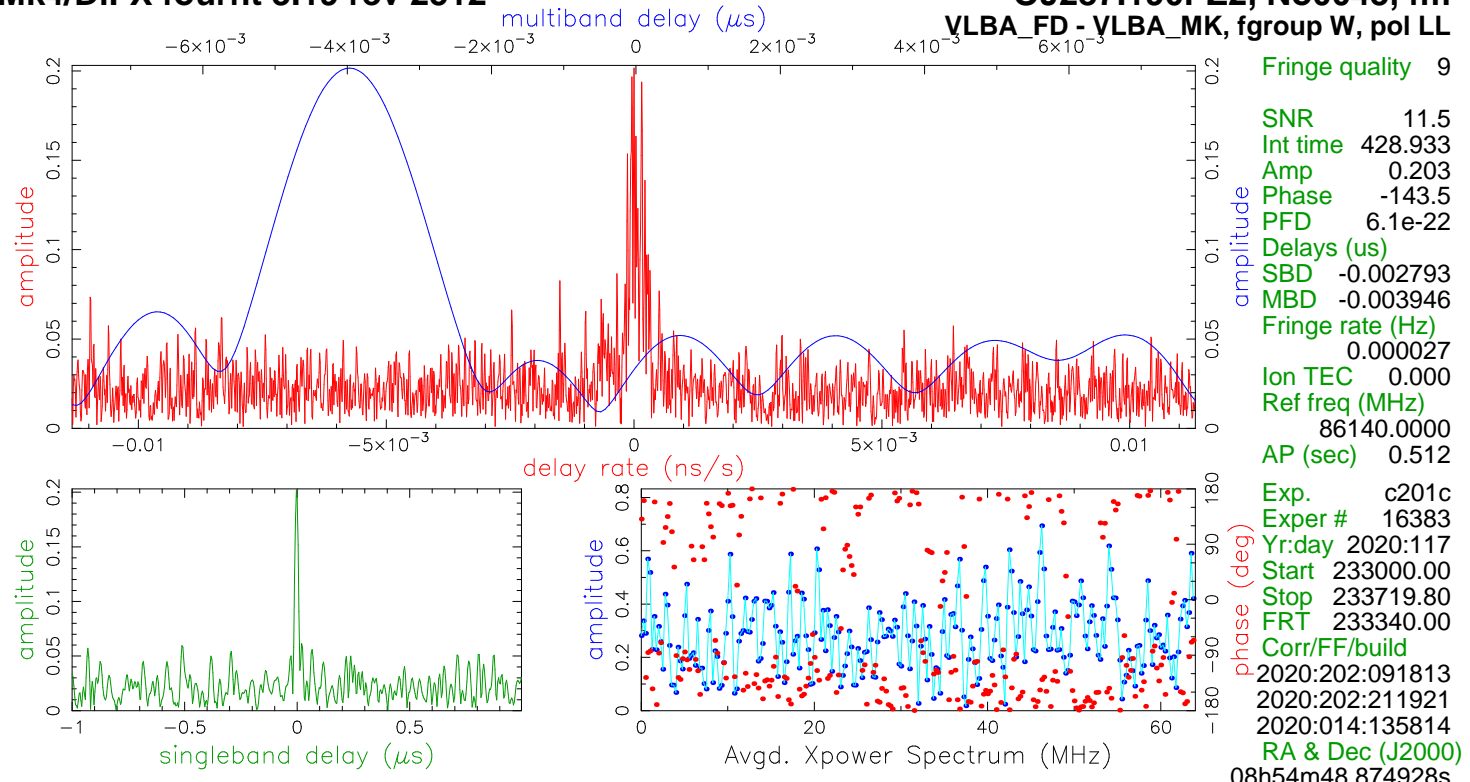


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
f	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

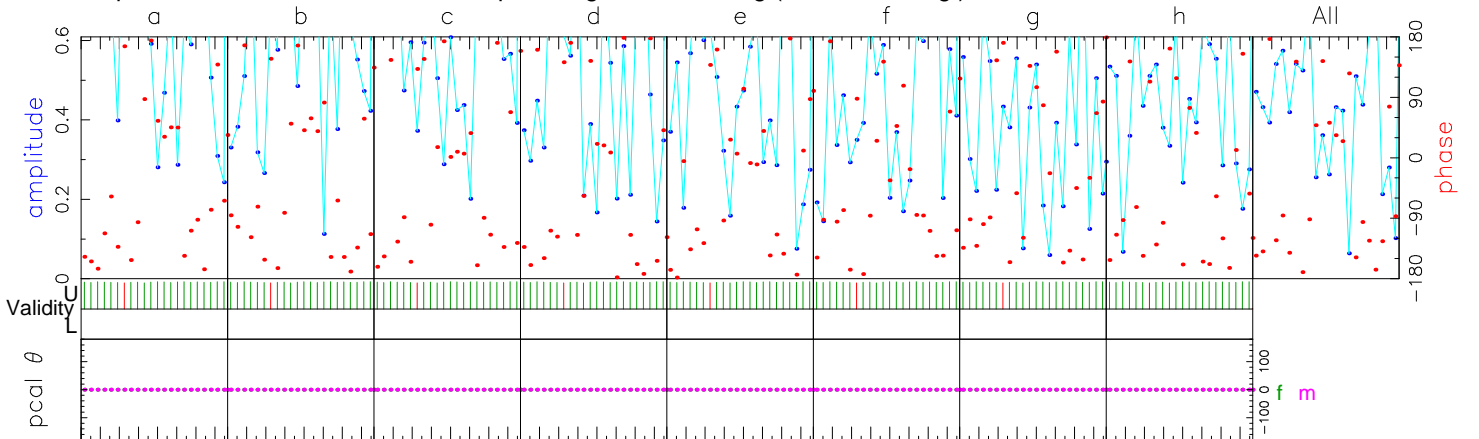
Group delay (usec)(sbd) 1.32064520150E+04 Apriori delay (usec) 1.32069263927E+04 Resid mbdelay (usec) -5.62772E-03 +/- 1.8E-04
 Sband delay (usec) 1.32064517987E+04 Apriori clock (usec) -4.2256575E+00 Resid sbdelay (usec) -4.74594E-01 +/- 1.4E-03
 Phase delay (usec) 1.32069263944E+04 Apriori clockrate (us/s) -3.8199999E-07 Resid phdelay (usec) 1.64404E-06 +/- 6.0E-07
 Delay rate (us/s) -7.43727629039E-01 Apriori rate (us/s) -7.43736001863E-01 Resid rate (us/s) 8.37282E-06 +/- 2.4E-09
 Total phase (deg) 220.2 Apriori accel (us/s/s) -6.36639696954E-05 Resid phase (deg) 51.0 +/- 18.7

RMS Theor. Amplitude 0.137 +/- 0.022 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.4 44.9 Search (2048X32) 0.104 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 76.9 78.4 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 29.0 26.5 Inc. seg. avg. 0.144 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 41.3 46.3 Inc. frq. avg. 0.132 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

f: az 104.3 el 61.0 pa -62.8 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4449.006 -423.135 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/fm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/fm.W.153.190PZ2



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

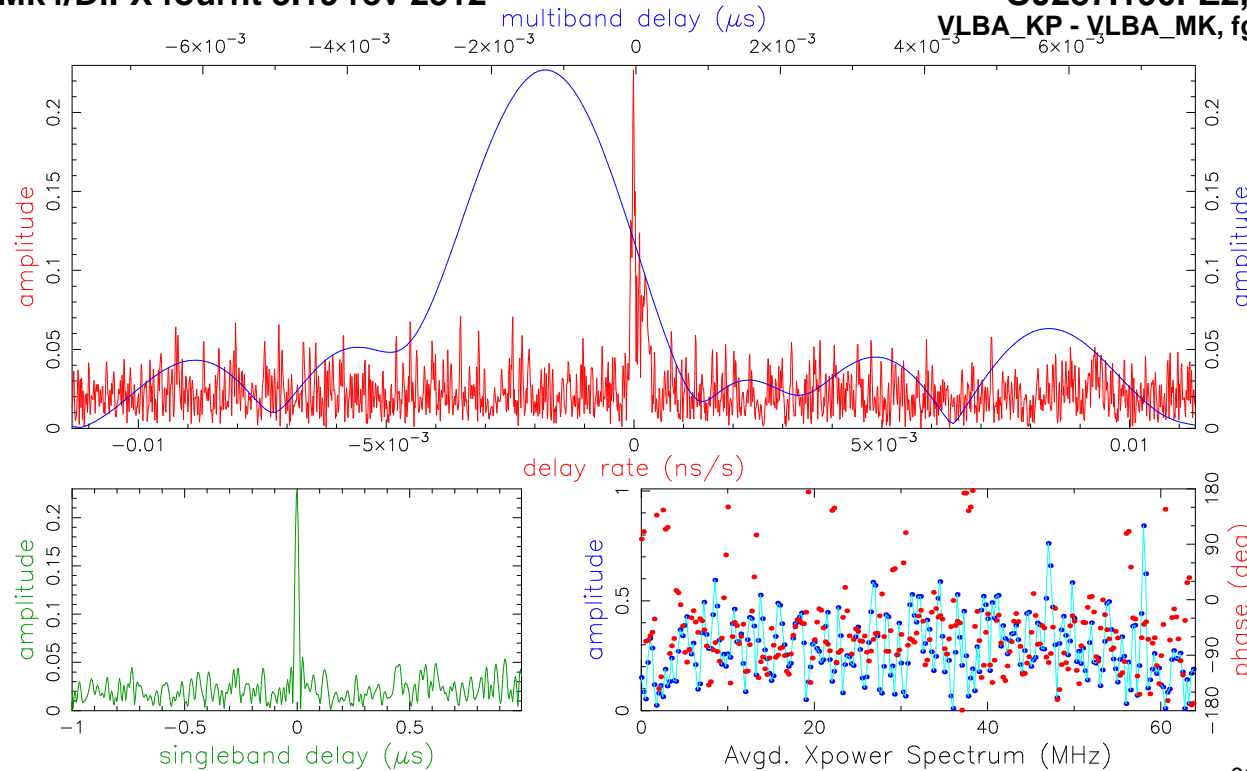


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-138.7	-142.3	-143.9	-155.1	-148.6	-121.3	-145.6	-149.8	Phase	-143.5
	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	Ampl.	0.2
	255.8	18.3	256.4	256.7	132.1	255.4	285.8	257.7	Sbd box	256.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
f	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
f:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
f:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
f	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	1.32069224472E+04		Apriori delay (usec)		1.32069263927E+04		Resid mbdelay (usec)		-3.94550E-03	+/- 9.4E-05
Sband delay (usec)	1.32069235995E+04		Apriori clock (usec)		-4.2256575E+00		Resid sbdelay (usec)		-2.79325E-03	+/- 7.5E-04
Phase delay (usec)	1.32069263881E+04		Apriori clockrate (us/s)		-3.8199999E-07		Resid phdelay (usec)		-4.62720E-06	+/- 3.2E-07
Delay rate (us/s)	-7.43736001552E-01		Apriori rate (us/s)		-7.43736001863E-01		Resid rate (us/s)		3.11057E-10	+/- 1.3E-09
Total phase (deg)	25.7		Apriori accel (us/s/s)		-6.36639696954E-05		Resid phase (deg)		-143.5	+/- 10.0

ph/seg (deg) 87.7 23.9 Search (2048X32) 0.201 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 141.7 41.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 11.0 14.1 Inc. seg. avg. 0.393 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 32.6 24.6 Inc. frq. avg. 0.198 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 104.3 el 61.0 pa -62.8 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4449.006 -423.135 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/fm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/fm.W.88.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, km
VLBA_KP - VLBA_MK, fgroup W, pol RR

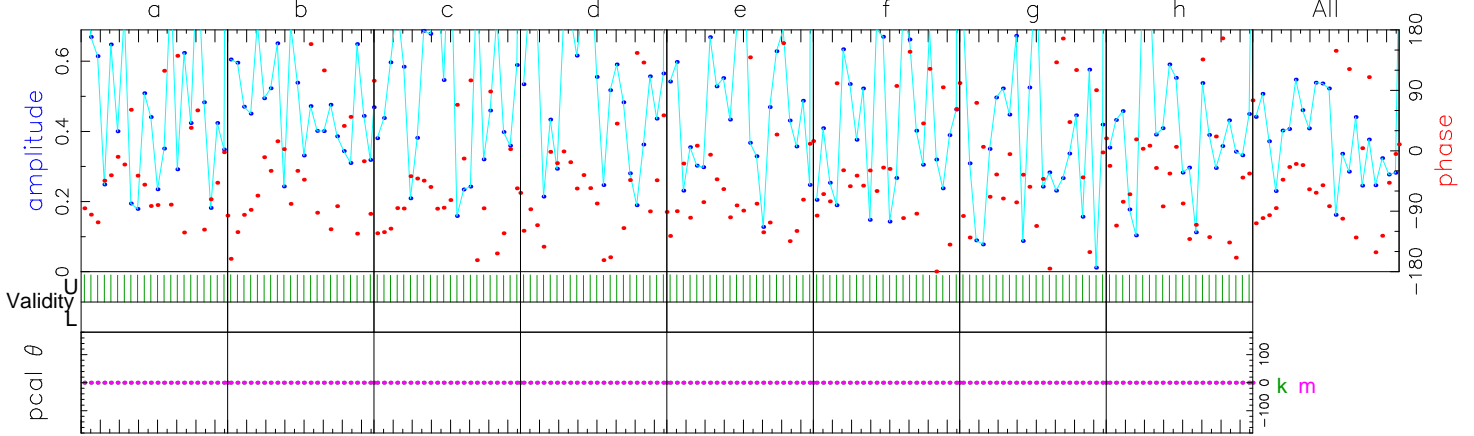


Fringe quality 9

SNR 13.0
Int time 429.612
Amp 0.230
Phase -68.7
PFD 4.8e-30
Delays (us)
SBD -0.001560
MBD -0.001304
Fringe rate (Hz)
-0.000948
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211928
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

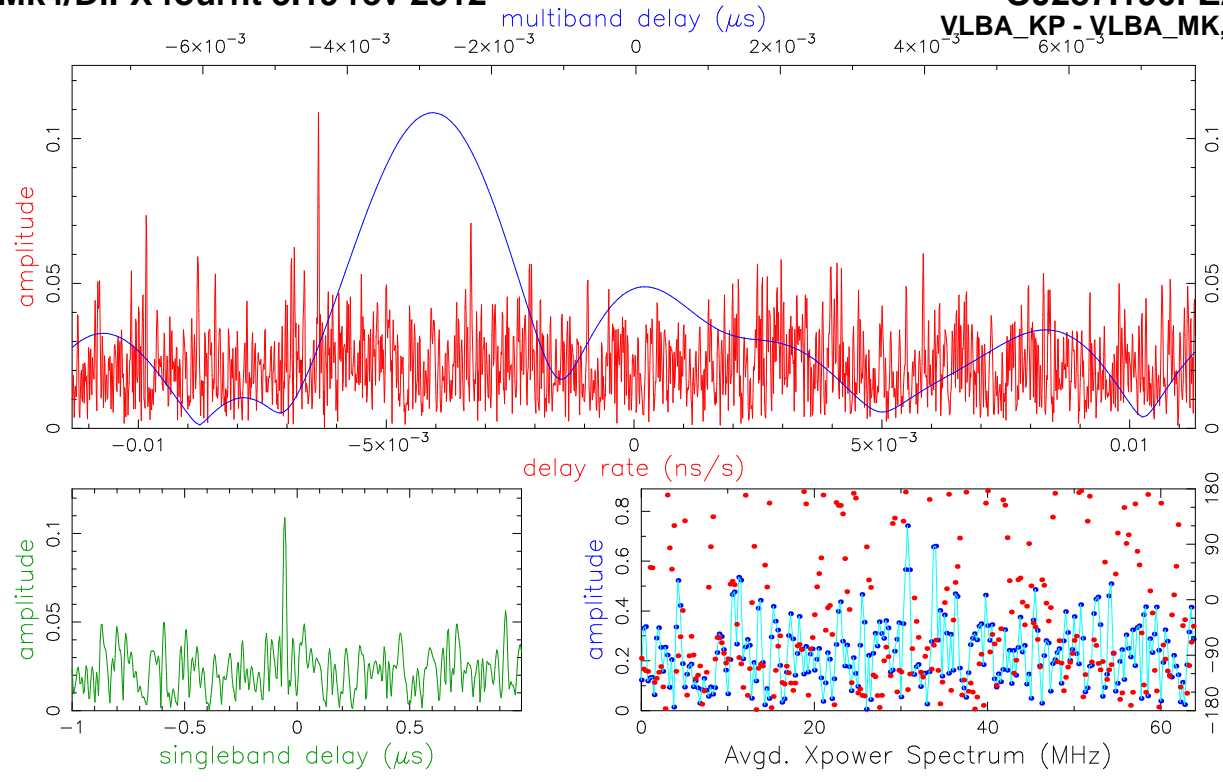


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-58.6	-70.3	-86.5	-59.8	-78.8	-55.0	-77.7	-47.8	Phase	-68.7
	0.3	0.2	0.3	0.3	0.3	0.1	0.2	0.2	Ampl.	0.2
	256.8	256.0	256.3	257.6	256.8	213.7	256.3	256.4	Sbd box	256.6
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.19037446978E+04					1.19037460021E+04			Resid mbdelay (usec)	-1.30431E-03 +/- 8.3E-05
Sband delay (usec)	1.19037444418E+04					-8.4776335E+00			Resid sbdelay (usec)	-1.56025E-03 +/- 6.6E-04
Phase delay (usec)	1.19037459999E+04					-4.8560000E-07			Resid phdelay (usec)	-2.21446E-06 +/- 2.8E-07
Delay rate (us/s)	-6.13195659574E-01					-6.13195648569E-01			Resid rate (us/s)	-1.10053E-08 +/- 1.1E-09
Total phase (deg)		154.5				-5.59952443343E-05			Resid phase (deg)	-68.7 +/- 8.8

ph/seg (deg) 72.8 21.1 Search (2048X32) 0.223 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 81.6 36.8 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.8 12.4 Inc. seg. avg. 0.356 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 27.5 21.7 Inc. frq. avg. 0.227 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
k: az 100.2 el 54.3 pa -62.6 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 3662.960 -36.237 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/km..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/km.W.120.190PZ2

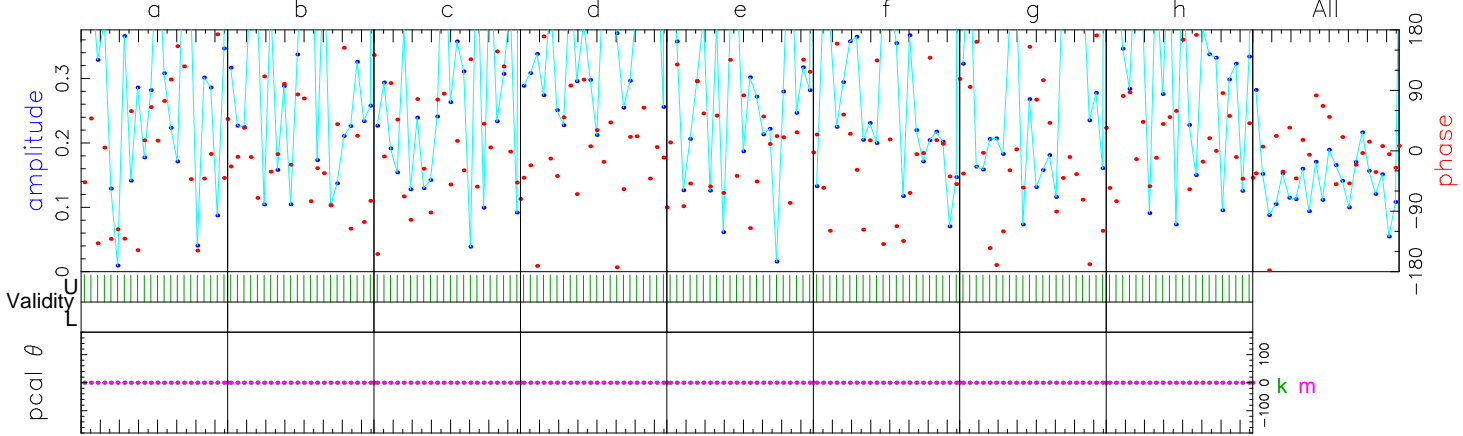
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, km
VLBA_KP - VLBA_MK, fgroup W, pol LR



Fringe quality 0
SNR 6.2
Int time 429.613
Amp 0.125
Phase -0.6
PFD 1.3e-01
Delays (us)
SBD -0.055621
MBD -0.002827
Fringe rate (Hz)
-0.549517
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211932
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

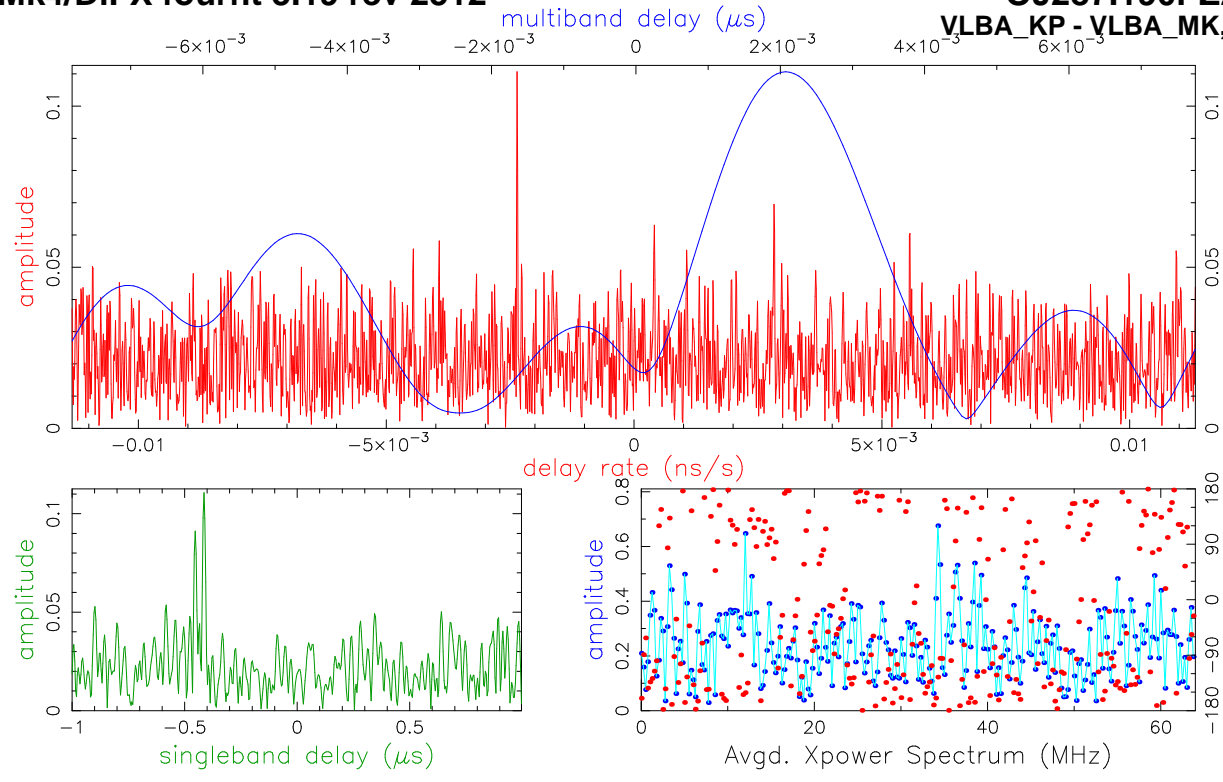


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
k	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0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

Group delay (usec)(sbd)	1.19036962998E+04	Apriori delay (usec)	1.19037460021E+04	Resid mbdelay (usec)	-2.82725E-03	+/-	1.7E-04
Sband delay (usec)	1.19036903808E+04	Apriori clock (usec)	-8.4776335E+00	Resid sbdelay (usec)	-5.56213E-02	+/-	1.4E-03
Phase delay (usec)	1.19037460021E+04	Apriori clockrate (us/s)	-4.8560000E-07	Resid phdelay (usec)	-2.02709E-08	+/-	6.0E-07
Delay rate (us/s)	-6.13202027912E-01	Apriori rate (us/s)	-6.13195648569E-01	Resid rate (us/s)	-6.37934E-06	+/-	2.3E-09
Total phase (deg)	222.5	Apriori accel (us/s/s)	-5.59952443343E-05	Resid phase (deg)	-0.6	+/-	18.5

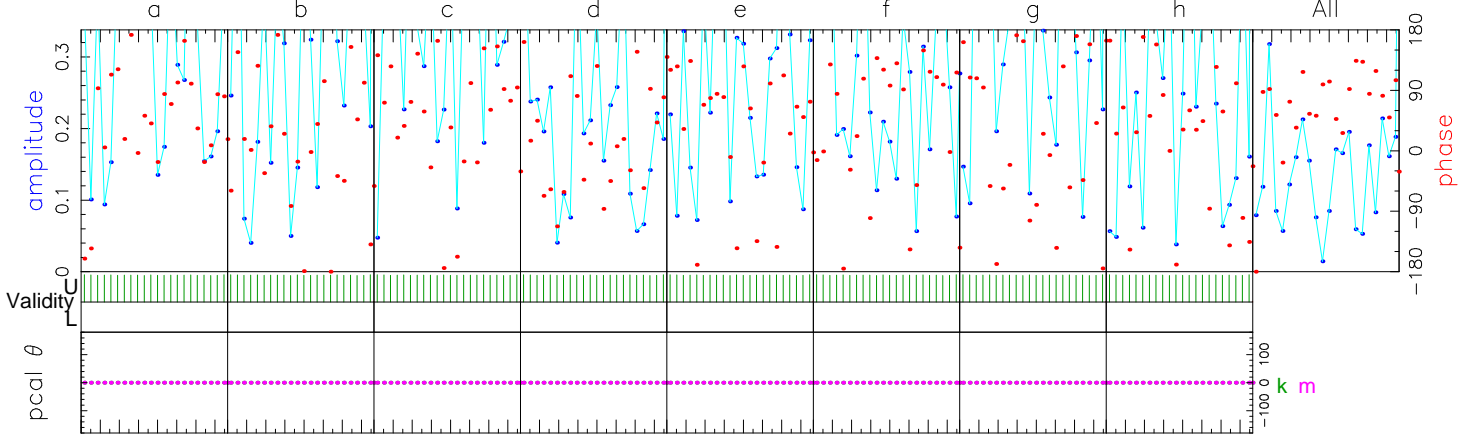
ph/seg (deg)	51.4	Theor.	44.3	Amplitude	0.125 +/- 0.020	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	54.0		77.2	Search (2048X32)	0.106	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008
ph/frq (deg)	25.7		26.1	Inc. seg. avg.	0.125	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011
amp/frq (%)	36.4		45.6	Inc. frq. avg.	0.120	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite	ion window (TEC)	0.00	0.00

k: az 100.2 el 54.3 pa -62.6 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 3662.960 -36.237 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/km..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/km.W.136.190PZ2



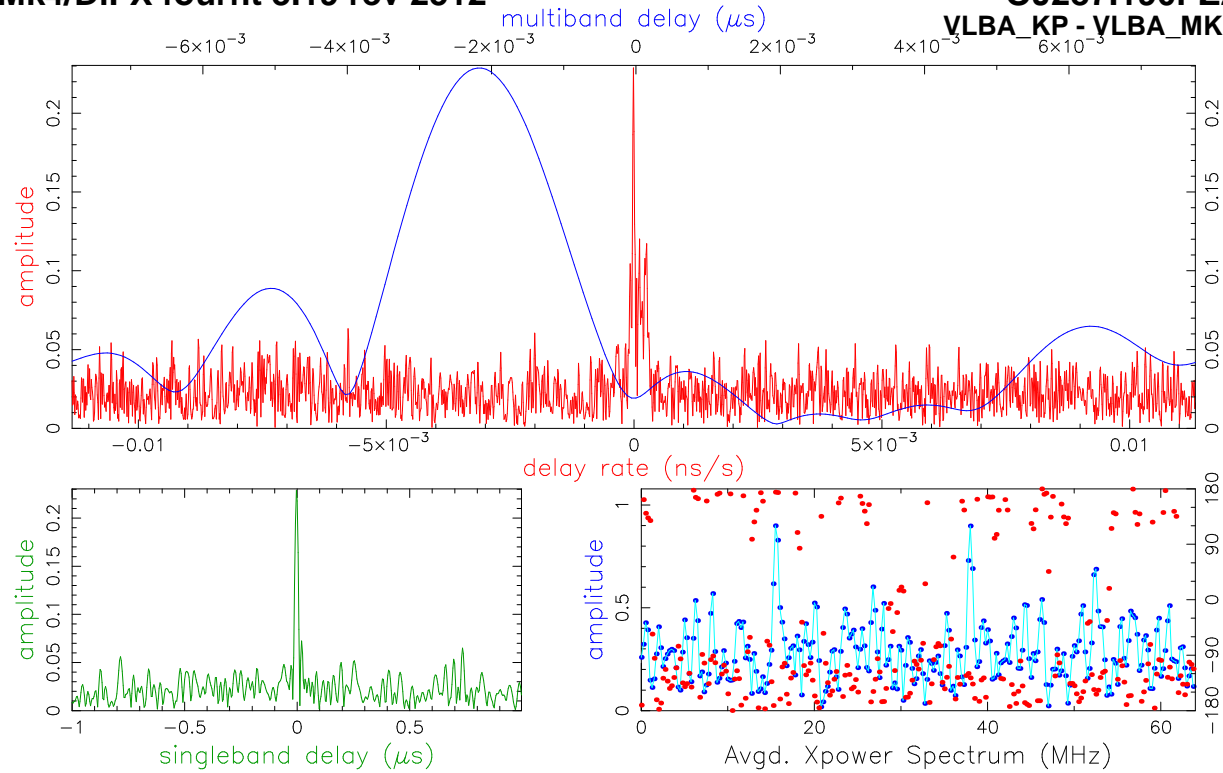
Fringe quality 0
 SNR 6.3
 Int time 429.611
 Amp 0.113
 Phase 79.1
 PFD 9.2e-02
 Delays (us)
 SBD -0.414135
 MBD 0.002072
 Fringe rate (Hz)
 -0.203211
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:211937
 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



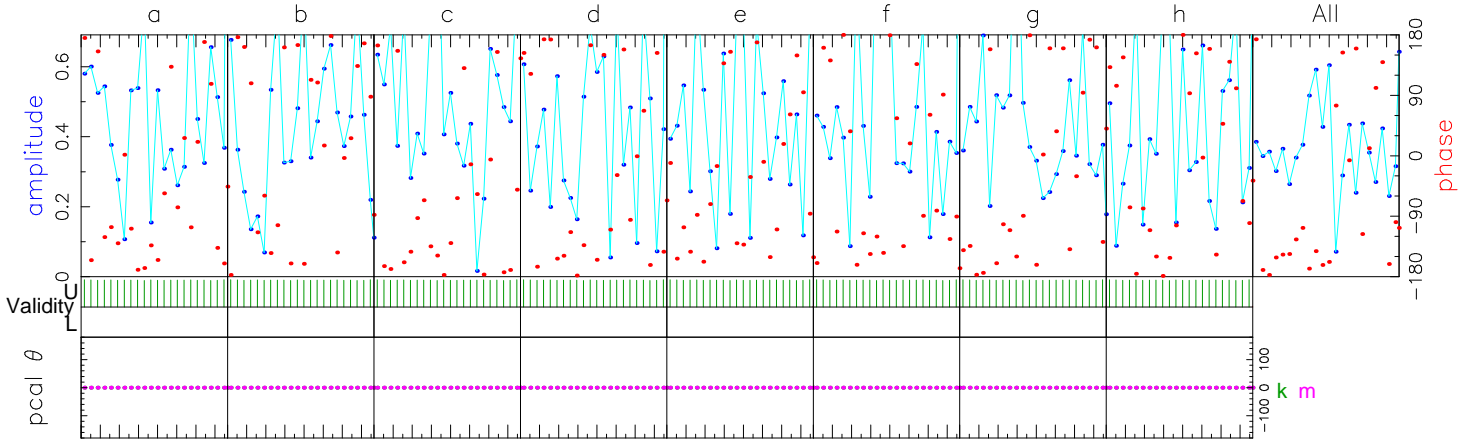
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	76.6	114.7	72.2	30.7	88.9	97.8	144.8	48.6	Phase	79.1
	0.2	0.1	0.2	0.1	0.2	0.1	0.0	0.1	Ampl.	0.1
	386.2	169.7	151.3	432.0	178.0	141.3	277.2	218.2	Sbd box	151.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
k	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.19033261986E+04		Apriori delay (usec)		1.19037460021E+04		Resid mbdelay (usec)		2.07153E-03	+/- 1.7E-04
Sband delay (usec)	1.19033318673E+04		Apriori clock (usec)		-8.4776335E+00		Resid sbdelay (usec)		-4.14135E-01	+/- 1.4E-03
Phase delay (usec)	1.19037460046E+04		Apriori clockrate (us/s)		-4.8560000E-07		Resid phdelay (usec)		2.55140E-06	+/- 5.9E-07
Delay rate (us/s)	-6.13198007641E-01		Apriori rate (us/s)		-6.13195648569E-01		Resid rate (us/s)		-2.35907E-06	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		-5.59952443343E-05		Resid phase (deg)		79.1	+/- 18.3

ph/seg (deg) 42.5 43.8 Search (2048X32) 0.108 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.5 76.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 39.5 25.8 Inc. seg. avg. 0.106 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 56.2 45.1 Inc. frq. avg. 0.112 Sample rate(MSamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 k: az 100.2 el 54.3 pa -62.6 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 3662.960 -36.237 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/km..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/km.W.155.190PZ2



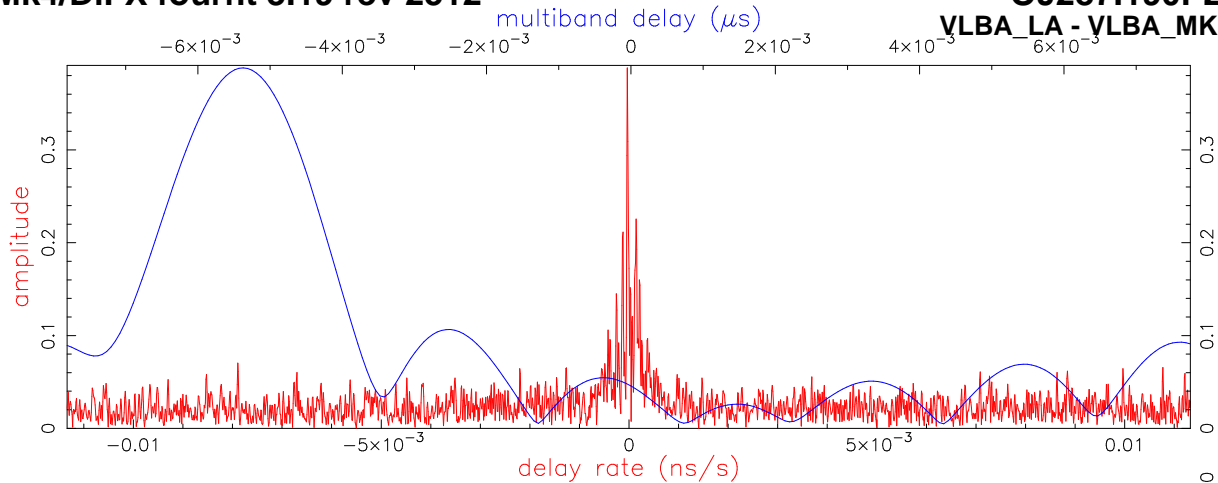
Fringe quality 9
SNR 13.1
Int time 429.612
Amp 0.230
Phase -157.1
PFD 3.2e-30
Delays (us)
SBD -0.002871
MBD -0.002161
Fringe rate (Hz)
-0.000613
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211923
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



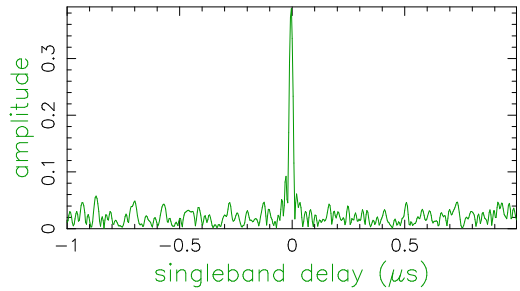
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-150.5	174.9	-146.8	-171.3	-125.8	-146.2	-155.4	174.6	Phase	-157.1
	0.3	0.2	0.3	0.2	0.2	0.3	0.3	0.2	Ampl.	0.2
	256.5	271.2	255.6	255.6	256.4	256.1	255.9	256.9	Sbd box	256.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
k	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
k:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
k:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
k	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	1.19037438413E+04					1.19037460021E+04			Resid mbdelay (usec)	-2.16081E-03 +/- 8.3E-05
Sband delay (usec)	1.19037431316E+04					-8.4776335E+00			Resid sbdelay (usec)	-2.87050E-03 +/- 6.6E-04
Phase delay (usec)	1.19037459970E+04					-4.8560000E-07			Resid phdelay (usec)	-5.06712E-06 +/- 2.8E-07
Delay rate (us/s)	-6.13195655681E-01					-6.13195648569E-01			Resid rate (us/s)	-7.11250E-09 +/- 1.1E-09
Total phase (deg)		66.0				-5.59952443343E-05			Resid phase (deg)	-157.1 +/- 8.8

ph/seg (deg) 66.2 21.0 Search (2048X32) 0.218 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.3 36.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 22.5 12.4 Inc. seg. avg. 0.339 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 17.4 21.7 Inc. frq. avg. 0.235 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 100.2 el 54.3 pa -62.6 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 3662.960 -36.237 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/km..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/km.W.98.190PZ2

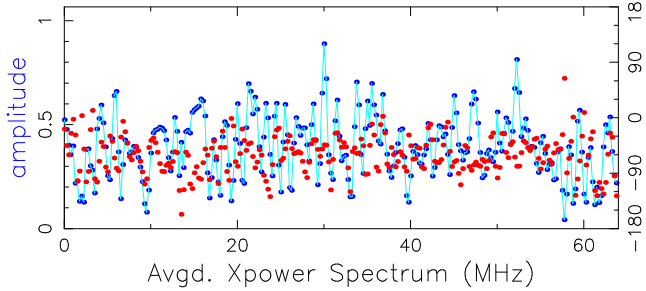


Fringe quality 9

SNR 22.3
Int time 433.570
Amp 0.391
Phase -55.5
PFD 0.0e+00
Delays (us)
SBD -0.004992
MBD -0.005403
Fringe rate (Hz)
-0.002591
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

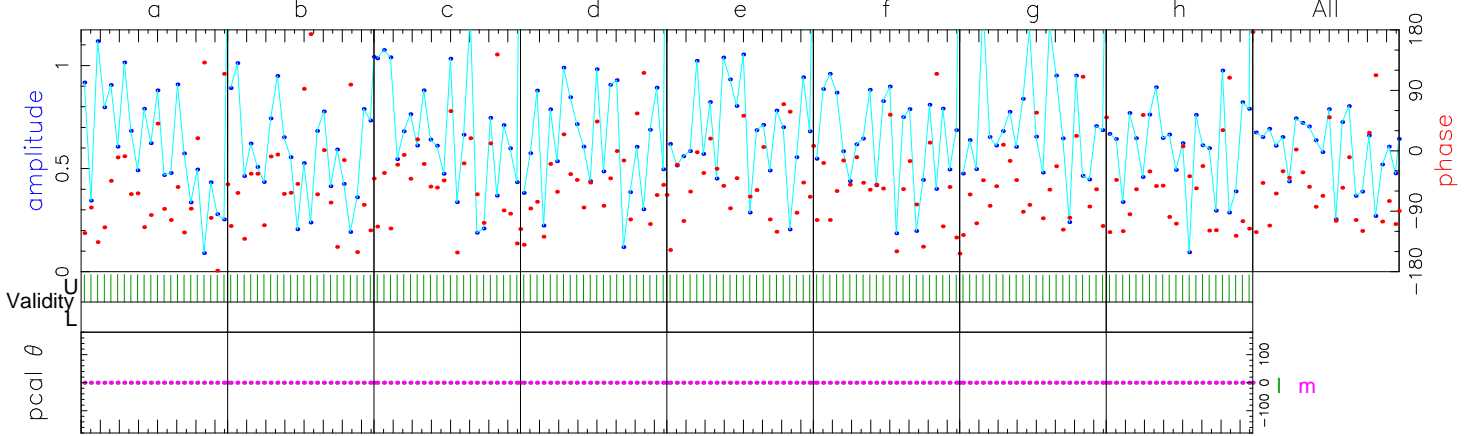


delay rate (ns/s)



Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211939
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

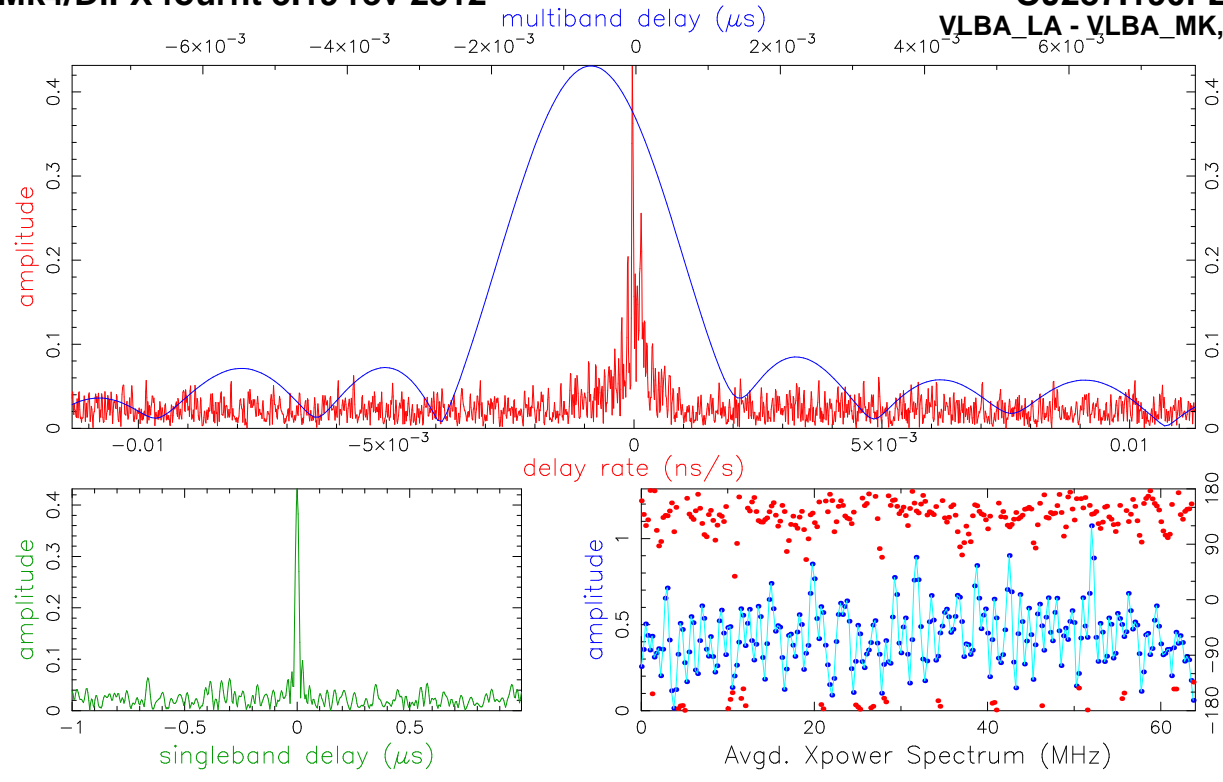


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-78.2	-64.5	-40.2	-43.1	-43.1	-52.8	-57.6	-68.5	Phase	-55.5
	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	Ampl.	0.4
	255.6	256.0	255.9	255.9	255.4	255.5	255.6	255.0	Sbd box	255.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) 1.25619516978E+04 Apriori delay (usec) 1.25619571010E+04 Resid mbdelay (usec) -5.40320E-03 +/- 4.9E-05
 Sband delay (usec) 1.25619521093E+04 Apriori clock (usec) -1.1851790E+01 Resid sbdelay (usec) -4.99175E-03 +/- 3.9E-04
 Phase delay (usec) 1.25619570992E+04 Apriori clockrate (us/s) -6.4200002E-07 Resid phdelay (usec) -1.79039E-06 +/- 1.7E-07
 Delay rate (us/s) -7.37319688443E-01 Apriori rate (us/s) -7.37319658368E-01 Resid rate (us/s) -3.00754E-08 +/- 6.5E-10
 Total phase (deg) 189.5 Apriori accel (us/s/s) -5.73758128678E-05 Resid phase (deg) -55.5 +/- 5.1

RMS Theor. Amplitude 0.391 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 58.5 12.3 Search (2048X32) 0.380 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 64.7 21.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 14.8 7.3 Inc. seg. avg. 0.577 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 10.0 12.7 Inc. frq. avg. 0.395 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

l: az 110.3 el 57.6 pa -53.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4417.099 381.643 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/lm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/lm.W.163.190PZ2

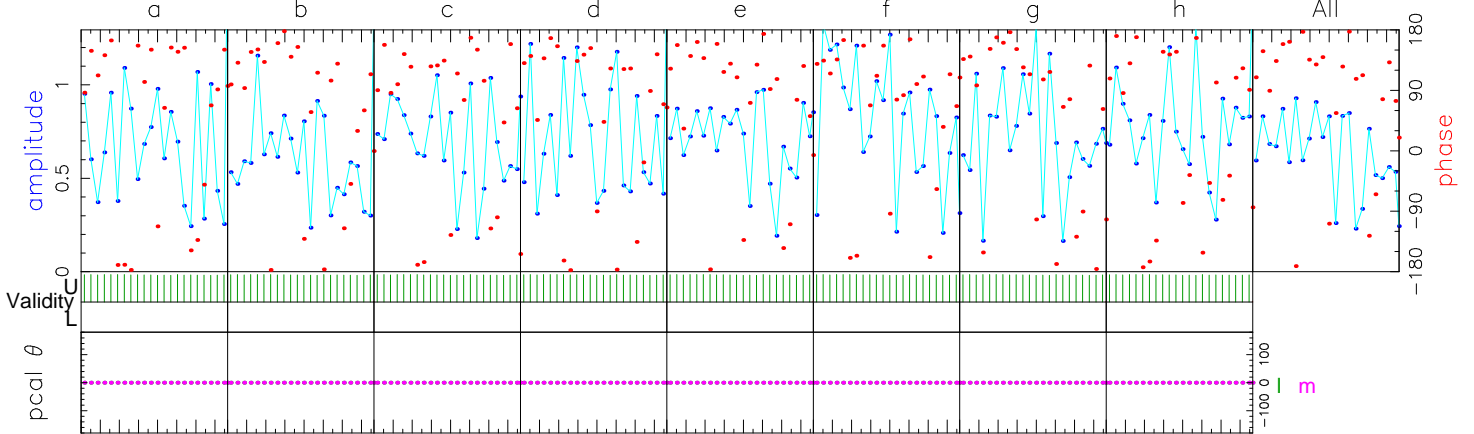


Fringe quality 7

SNR 24.6
Int time 433.570
Amp 0.432
Phase 146.2
PFD 0.0e+00
Delays (us)
SBD -0.000466
MBD -0.000639
Fringe rate (Hz)
-0.002584
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

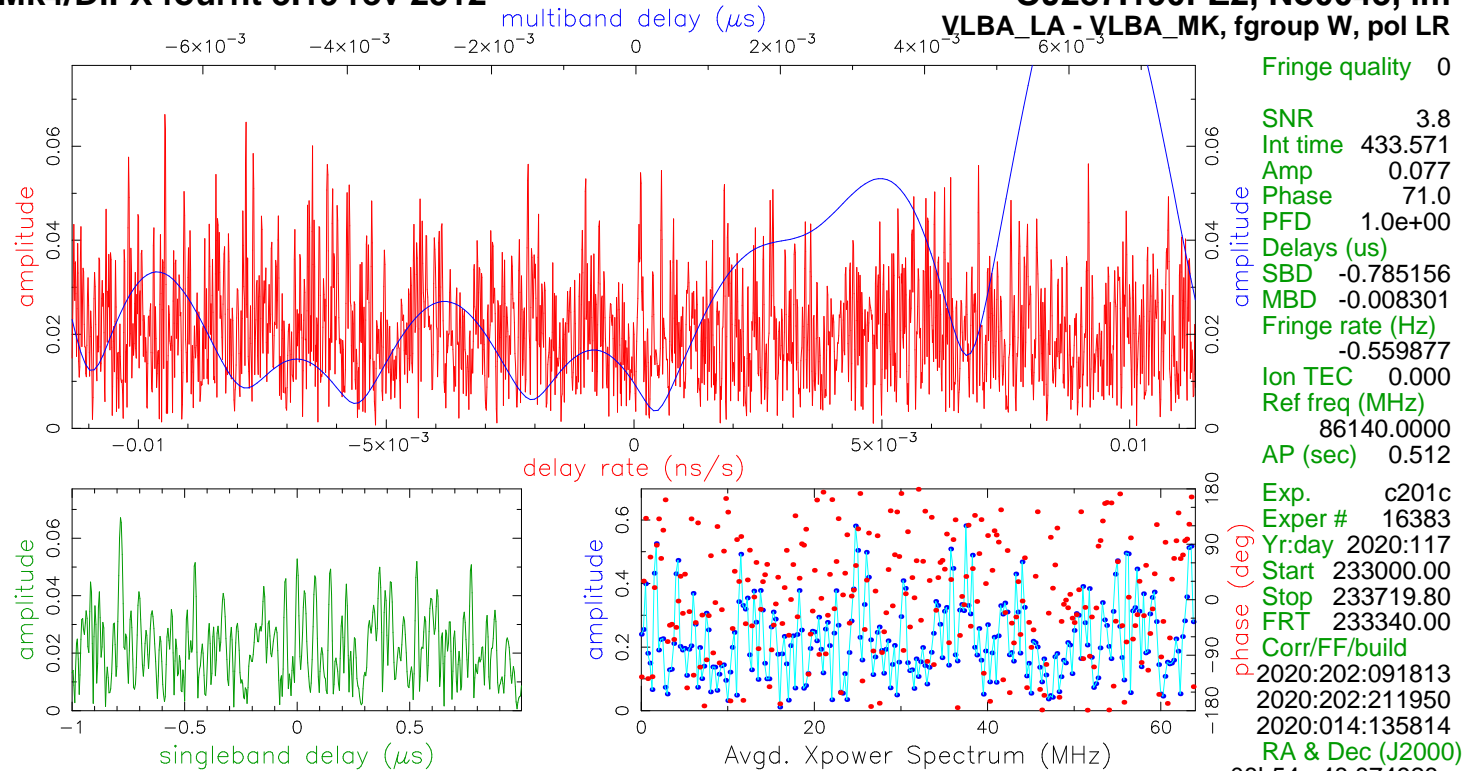
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211945
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000	APs used	1000
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	1000
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	0:0
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	0:0
l	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	1000
m	1000	1000	1000	1000	1000	1000	1000	1000		1000
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
Group delay (usec)(sbd)		1.25619564622E+04				1.25619571010E+04			Resid mbdelay (usec)	-6.38830E-04 +/- 4.4E-05
Sband delay (usec)		1.25619566350E+04				-1.1851790E+01			Resid sbdelay (usec)	-4.66000E-04 +/- 3.5E-04
Phase delay (usec)		1.25619571057E+04				-6.4200002E-07			Resid phdelay (usec)	4.71433E-06 +/- 1.5E-07
Delay rate (us/s)		-7.37319688364E-01				-7.37319658368E-01			Resid rate (us/s)	-2.99961E-08 +/- 5.9E-10
Total phase (deg)			31.2			-5.73758128678E-05			Resid phase (deg)	146.2 +/- 4.7

ph/seg (deg) 57.1 11.2 Search (2048X32) 0.420 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 68.4 19.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 6.5 6.6 Inc. seg. avg. 0.639 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 10.5 11.5 Inc. frq. avg. 0.430 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 110.3 el 57.6 pa -53.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4417.099 381.643 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/lm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/lm.W.181.190PZ2



Fringe quality 0

SNR 3.8

Int time 433.571

Amp 0.077

Phase 71.0

PF 1.0e+00

Delays (us)

SBD -0.785156

MBD -0.008301

Fringe rate (Hz)

-0.559877

Ion TEC 0.000

Ref freq (MHz)

86140.0000

AP (sec) 0.512

Exp. c201c

Exper # 16383

Yr:day 2020:117

Start 233000.00

Stop 233719.80

FRT 233340.00

Corr/FF/build

2020:202:091813

2020:202:211950

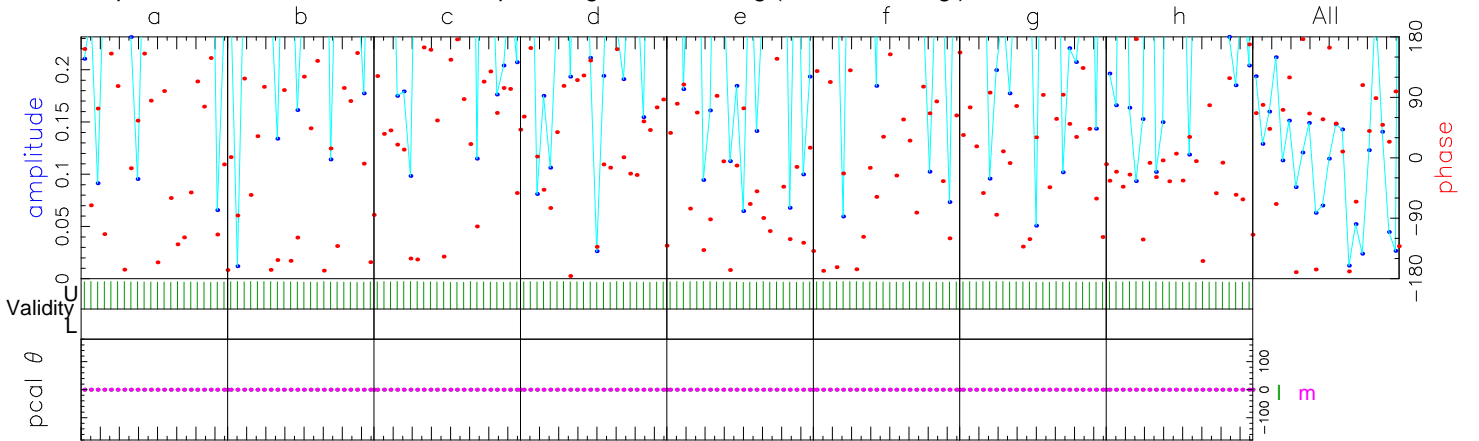
2020:014:135814

RA & Dec (J2000)

08h54m48.874928s

+20°06'30.640850"

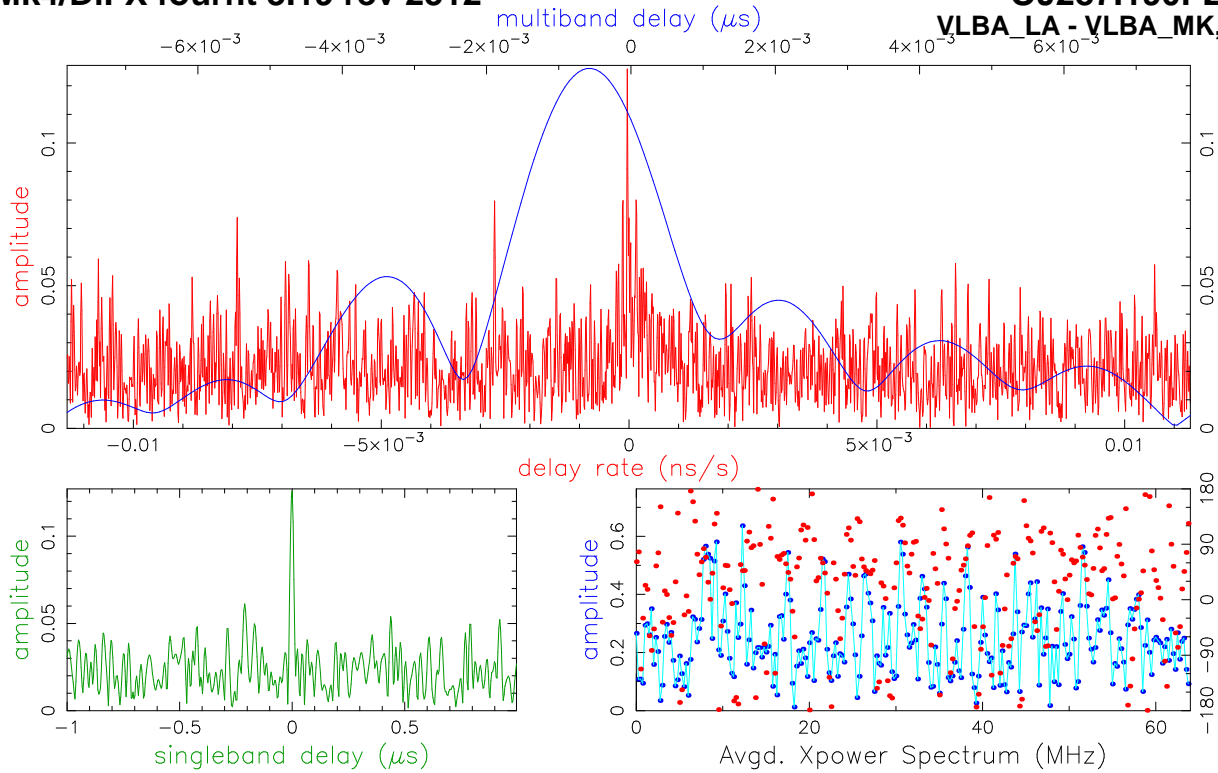
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)		1.25611675502E+04				1.25619571010E+04			Resid mbdelay (usec)	-8.30078E-03 +/- 2.8E-04
Sband delay (usec)		1.25611719448E+04				-1.1851790E+01			Resid sbdelay (usec)	-7.85156E-01 +/- 2.3E-03
Phase delay (usec)		1.25619571033E+04				-6.4200002E-07			Resid phdelay (usec)	2.28892E-06 +/- 9.7E-07
Delay rate (us/s)		-7.37326157986E-01				-7.37319658368E-01			Resid rate (us/s)	-6.49962E-06 +/- 3.8E-09
Total phase (deg)			316.0			-5.73758128678E-05			Resid phase (deg)	71.0 +/- 30.0
	RMS	Theor.	Amplitude		0.077 +/- 0.020				PCal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	72.6	71.8	Search (2048X32)		0.105				PCal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	119.4	125.4	Interp.		0.000				Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	66.8	42.4	Inc. seg. avg.		0.075				Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	91.0	74.0	Inc. frq. avg.		0.102				Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

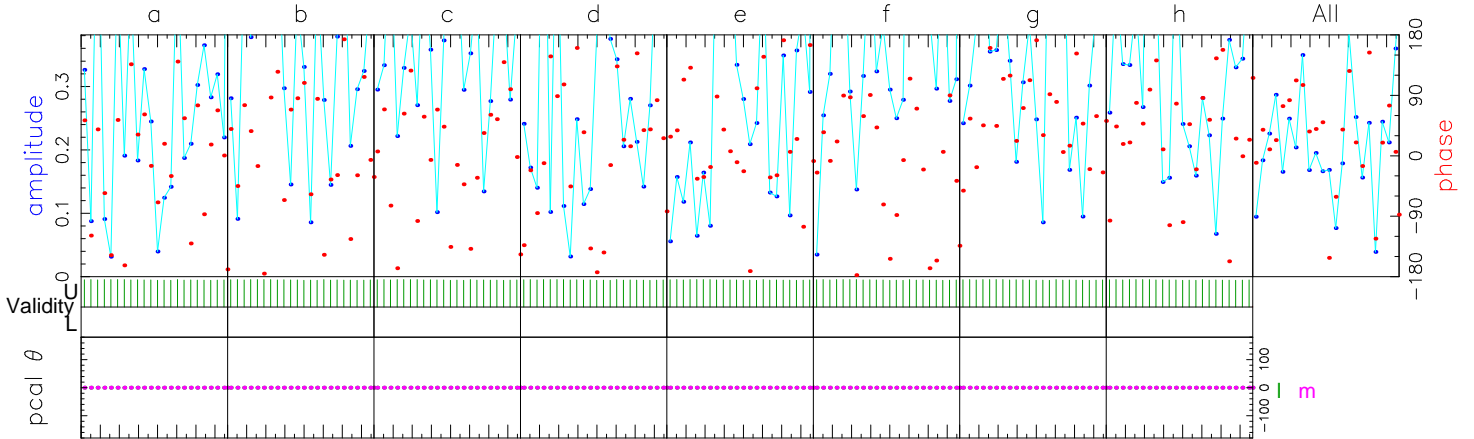
l: az 110.3 el 57.6 pa -53.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4417.099 381.643 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/lm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/lm.W.202.190PZ2



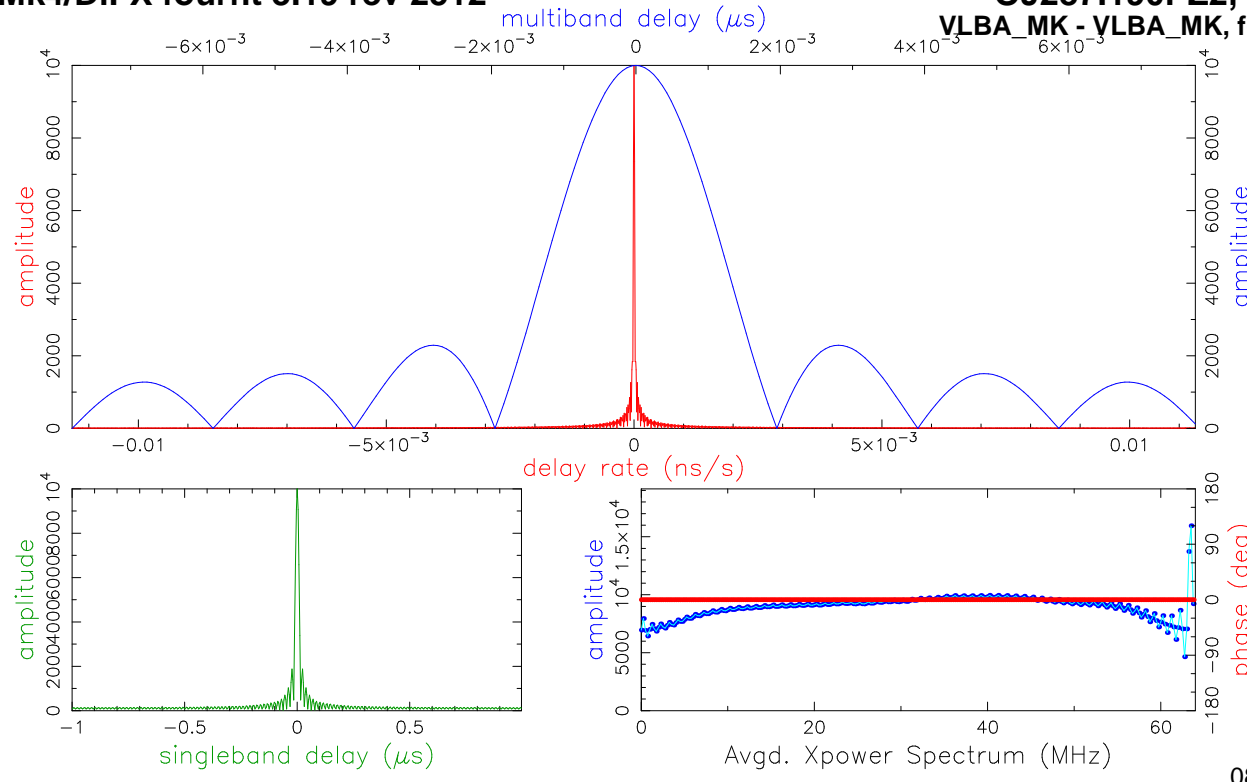
Fringe quality 0
SNR 7.2
Int time 433.569
Amp 0.127
Phase 54.4
PFD 1.4e-04
Delays (us)
SBD -0.001359
MBD -0.000645
Fringe rate (Hz)
-0.002613
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211954
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
l	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
l	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	1.25619564560E+04		Apriori delay (usec)		1.25619571010E+04		Resid mbdelay (usec)		-6.45017E-04	+/- 1.5E-04
Sband delay (usec)	1.25619557423E+04		Apriori clock (usec)		-1.1851790E+01		Resid sbdelay (usec)		-1.35875E-03	+/- 1.2E-03
Phase delay (usec)	1.25619571028E+04		Apriori clockrate (us/s)		-6.4200002E-07		Resid phdelay (usec)		1.75405E-06	+/- 5.1E-07
Delay rate (us/s)	-7.37319688700E-01		Apriori rate (us/s)		-7.37319658368E-01		Resid rate (us/s)		-3.03326E-08	+/- 2.0E-09
Total phase (deg)	299.4		Apriori accel (us/s/s)		-5.73758128678E-05		Resid phase (deg)		54.4	+/- 15.8

ph/seg (deg) 70.2 38.0 Amplitude 0.127 +/- 0.018 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 93.2 66.2 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 14.7 22.4 Inc. seg. avg. 0.172 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 34.3 39.1 Inc. frq. avg. 0.119 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 l: az 110.3 el 57.6 pa -53.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 4417.099 381.643 ion window (TEC) 0.00 0.00
 simultaneous interpolator

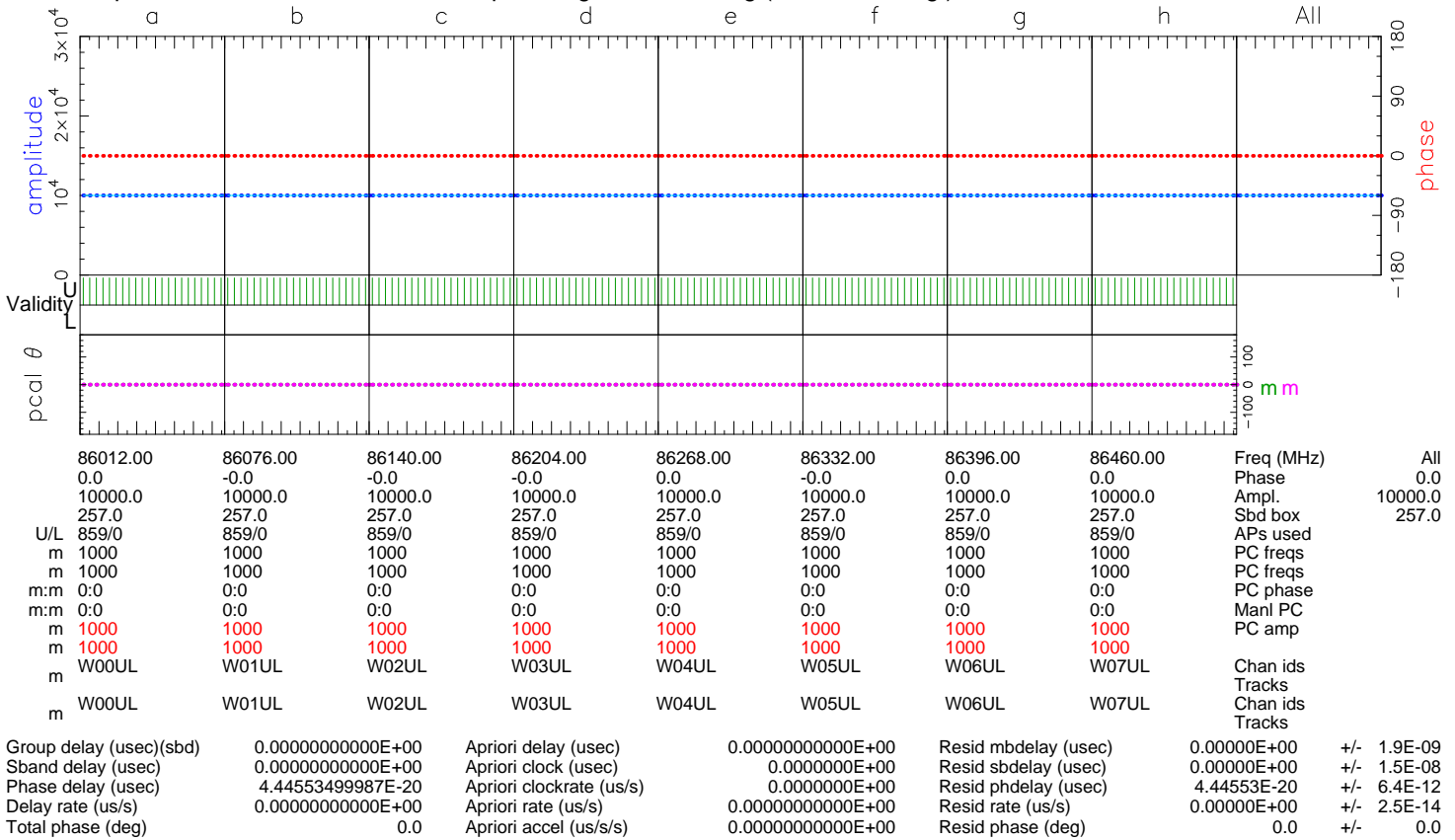


Fringe quality 9

SNR 573363.6
Int time 439.607
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

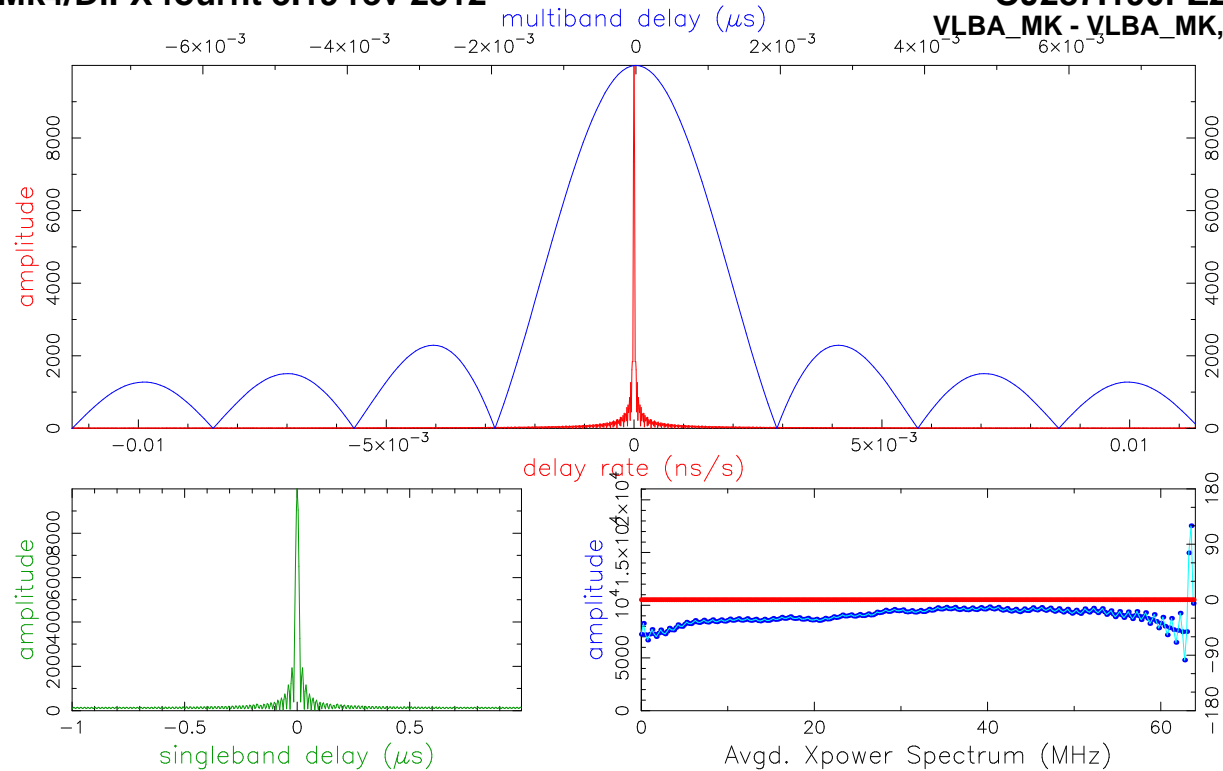
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211944
2020:014:135814
RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

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



m: az 73.5 el 14.3 pa -73.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mm.W.179.190PZ2

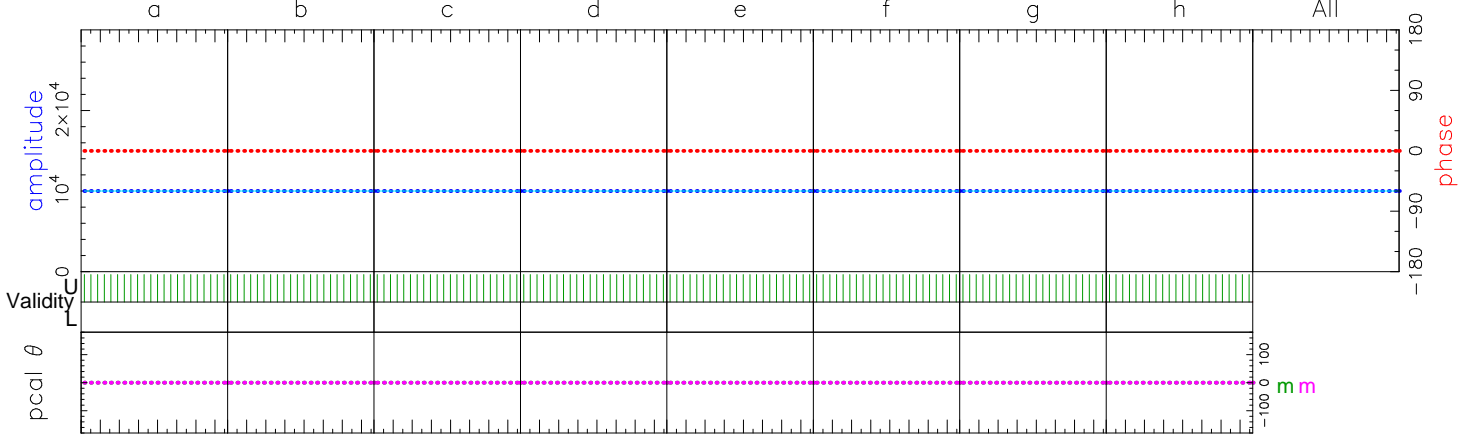


Fringe quality 9

SNR 573364.3
 Int time 439.609
 Amp 9999.998
 Phase -0.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.000000
 MBD 0.000000
 Fringe rate (Hz) 0.000000
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201c
 Yr:day 16383
 Start 2020:117
 Stop 2020:119
 FRT 2020:119
 Corr/FF/build
 2020:202:091813
 2020:202:211949
 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



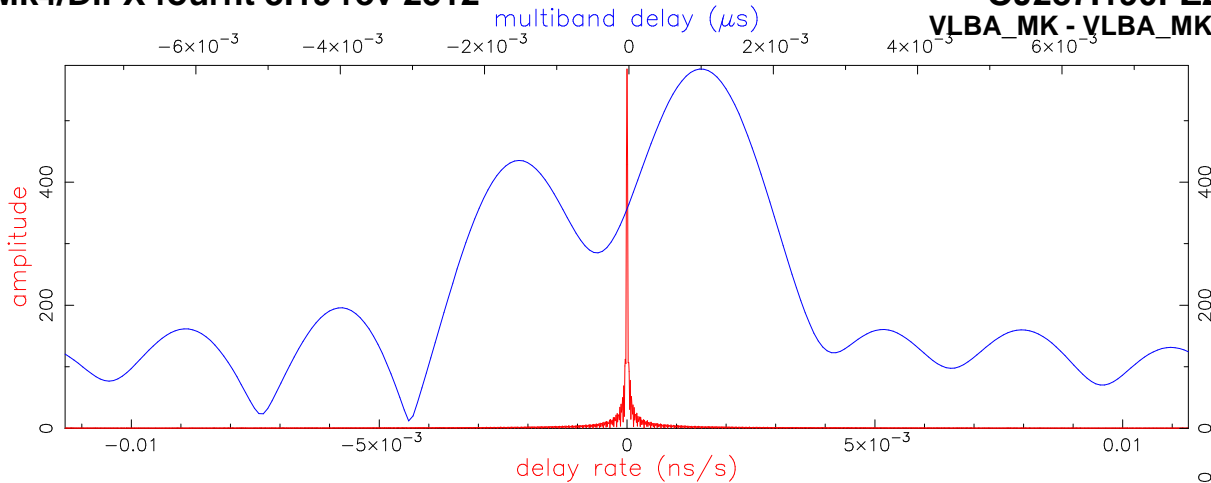
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		

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)	-1.51513124160E-20	Apriori clockrate (us/s)	0.0000000E+00	Resid phdelay (usec)	-1.51513E-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

ph/seg (deg)	0.0	RMS	Theor.	Amplitude	9999.998 +/- 0.017	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	0.0	0.0	0.0	Search (2048X32)	9999.998	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	0.0	0.0	0.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	0.0	0.0	0.0	Inc. seg. avg.	10000.000	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	9999.998	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

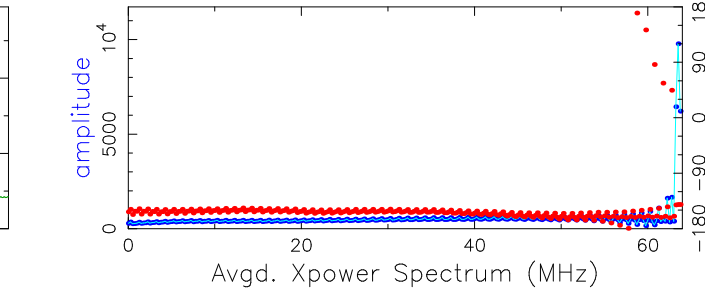
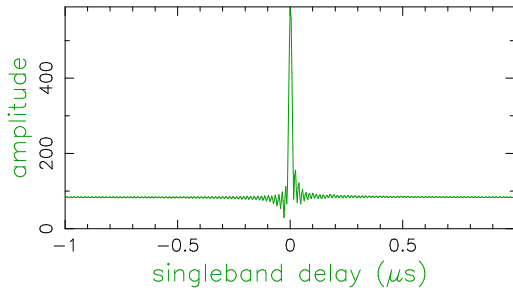
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190P22, No0043, mm VLBA_MK - VLBA_MK, fgroup W, pol LR



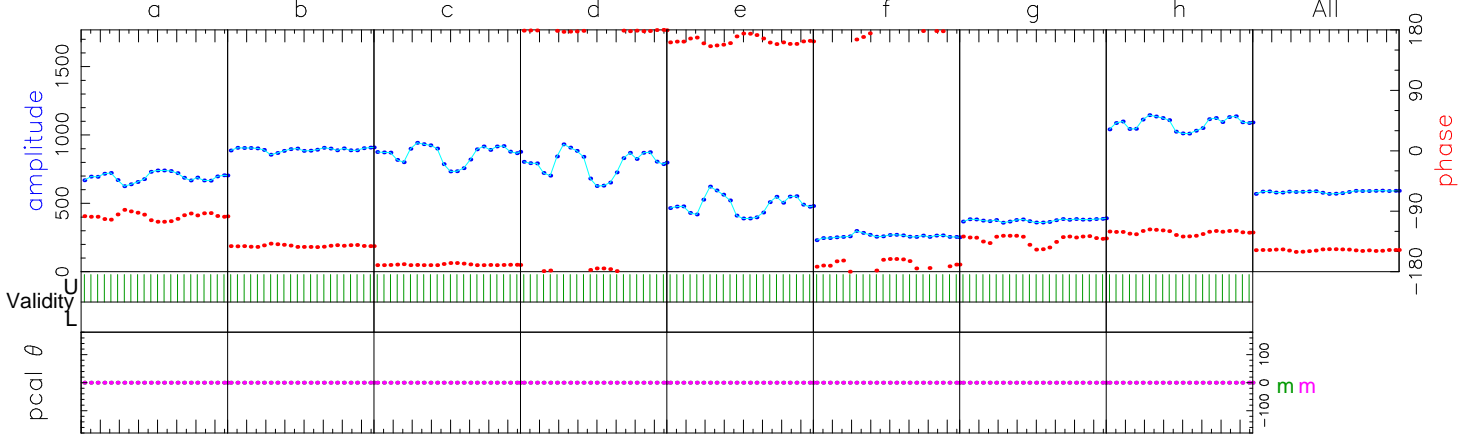
Fringe quality 5

SNR 33815.8
 Int time 439.607
 Amp 589.779
 Phase -148.0
 PFD 0.0e+00
 Delays (us)
 SBD 0.001166
 MBD 0.000985
 Fringe rate (Hz) 0.000005
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512



Exp. c201c
 Yr:day 16383
 Start 2020:117
 Stop 2020:117
 FRT 233340.00
 Corr/FF/build 2020:202:091813
 2020:202:211953
 2020:014:135814
 RA & Dec (J2000) 08h54m48.874928s +20°06'30.640850"

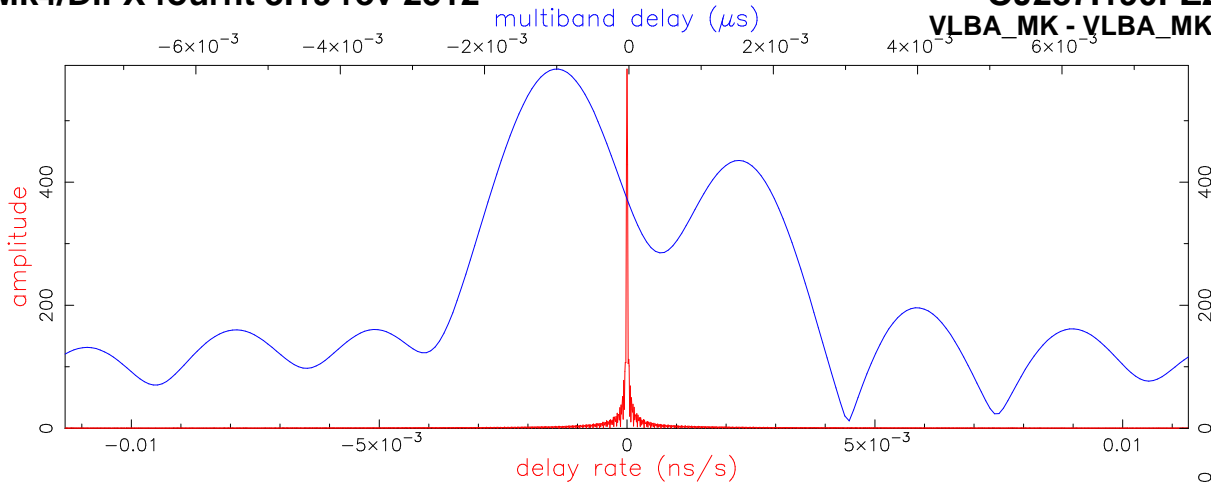
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-97.6	-141.5	-169.5	179.6	162.7	-173.7	-132.0	-121.4	Phase	-148.0
	689.3	893.1	861.7	790.4	486.6	256.8	373.2	1082.8	Ampl.	679.2
	256.6	256.5	257.1	257.2	257.1	257.7	257.5	257.0	Sbd box	257.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	9.84593750000E-04		Apriori delay (usec)		0.00000000000E+00		Resid mbdelay (usec)		9.84594E-04	+/- 3.2E-08
Sband delay (usec)	1.16550000000E-03		Apriori clock (usec)		0.0000000E+00		Resid sbdelay (usec)		1.16550E-03	+/- 2.5E-07
Phase delay (usec)	-4.77243939505E-06		Apriori clockrate (us/s)		0.0000000E+00		Resid phdelay (usec)		-4.77244E-06	+/- 1.1E-10
Delay rate (us/s)	6.09359552842E-11		Apriori rate (us/s)		0.00000000000E+00		Resid rate (us/s)		6.09360E-11	+/- 4.3E-13
Total phase (deg)			Apriori accel (us/s/s)		0.00000000000E+00		Resid phase (deg)		-148.0	+/- 0.0

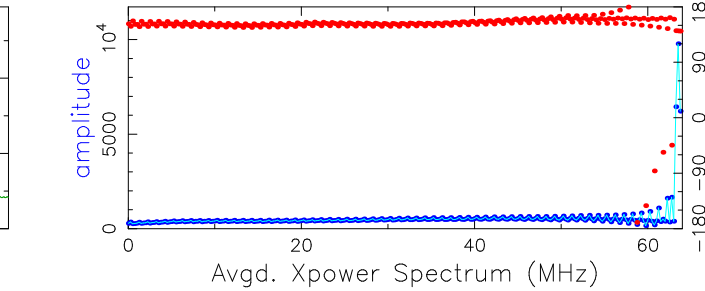
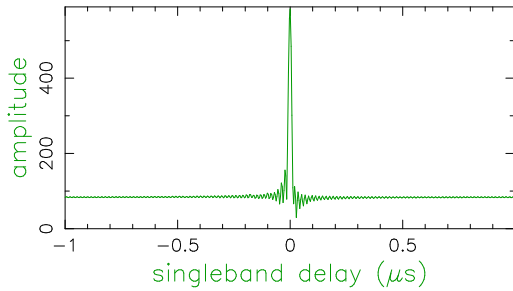
ph/seg (deg) 1.1 0.0 Search (2048X32) 583.847 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 1.6 0.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 36.9 0.0 Inc. seg. avg. 584.047 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 47.5 0.0 Inc. frq. avg. 679.224 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 73.5 el 14.3 pa -73.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 0.000 0.000 ion window (TEC) 0.00 0.00
 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mm..190P22 Output file: /Exps/c201c/v1/1234/No0043/mm.W.218.190P22



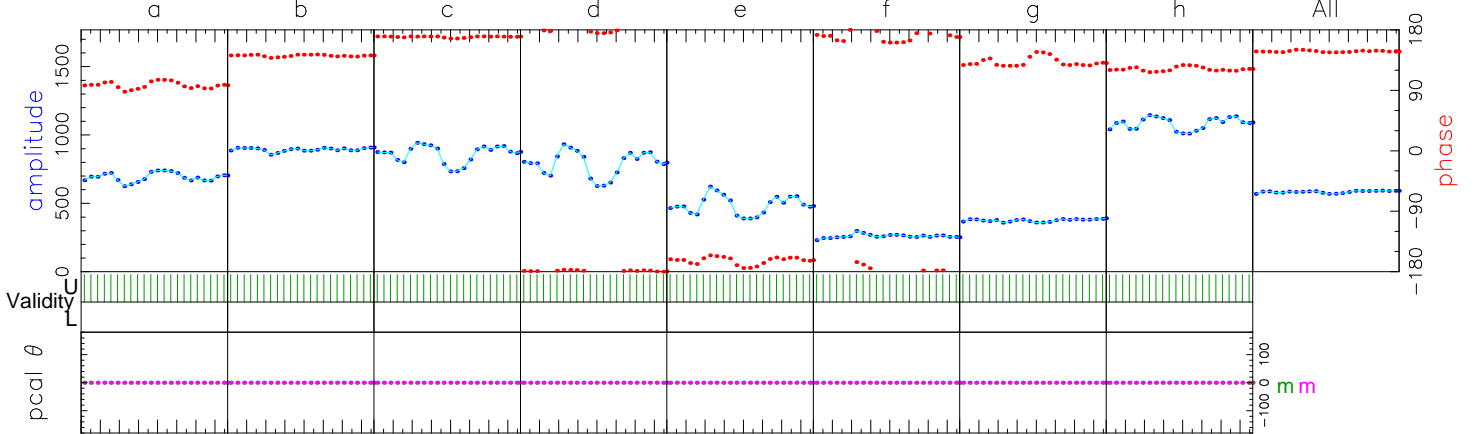
Fringe quality 5

SNR 33815.8
 Int time 439.609
 Amp 589.778
 Phase 148.0
 PFD 0.0e+00
 Delays (us)
 SBD -0.001166
 MBD -0.000985
 Fringe rate (Hz)
 -0.000005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512



Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:211957
 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

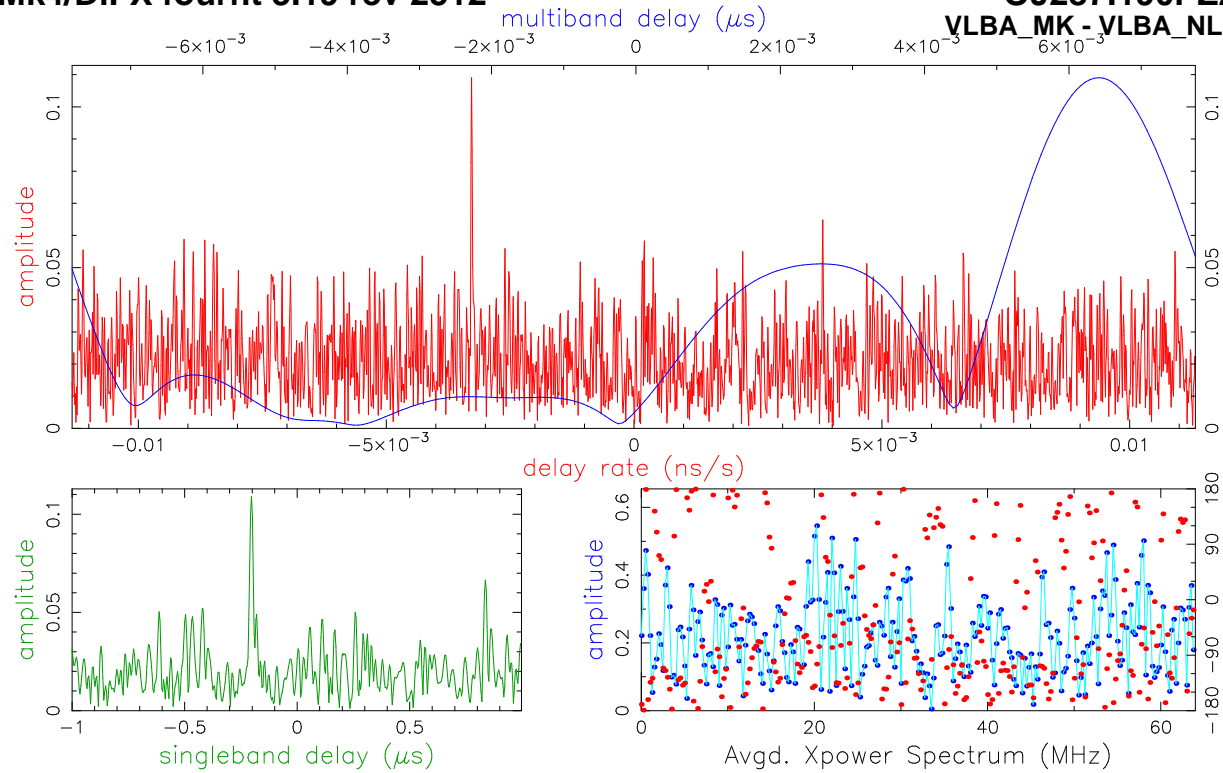


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	97.6	141.5	169.5	-179.6	-162.7	173.7	132.0	121.4	Phase	148.0
	689.3	893.1	861.7	790.4	486.6	256.8	373.2	1082.8	Ampl.	679.2
	257.4	257.5	256.9	256.8	256.9	256.3	256.5	257.0	Sbd box	256.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd) -9.84593750000E-04 Apriori delay (usec) 0.00000000000E+00 Resid mbdelay (usec) -9.84594E-04 +/- 3.2E-08
 Sband delay (usec) -1.16550000000E-03 Apriori clock (usec) 0.0000000E+00 Resid sbdelay (usec) -1.16550E-03 +/- 2.5E-07
 Phase delay (usec) 4.77243939504E-06 Apriori clockrate (us/s) 0.0000000E+00 Resid phdelay (usec) 4.77244E-06 +/- 1.1E-10
 Delay rate (us/s) -6.09359552842E-11 Apriori rate (us/s) 0.00000000000E+00 Resid rate (us/s) -6.09360E-11 +/- 4.3E-13
 Total phase (deg) 148.0 Apriori accel (us/s/s) 0.00000000000E+00 Resid phase (deg) 148.0 +/- 0.0

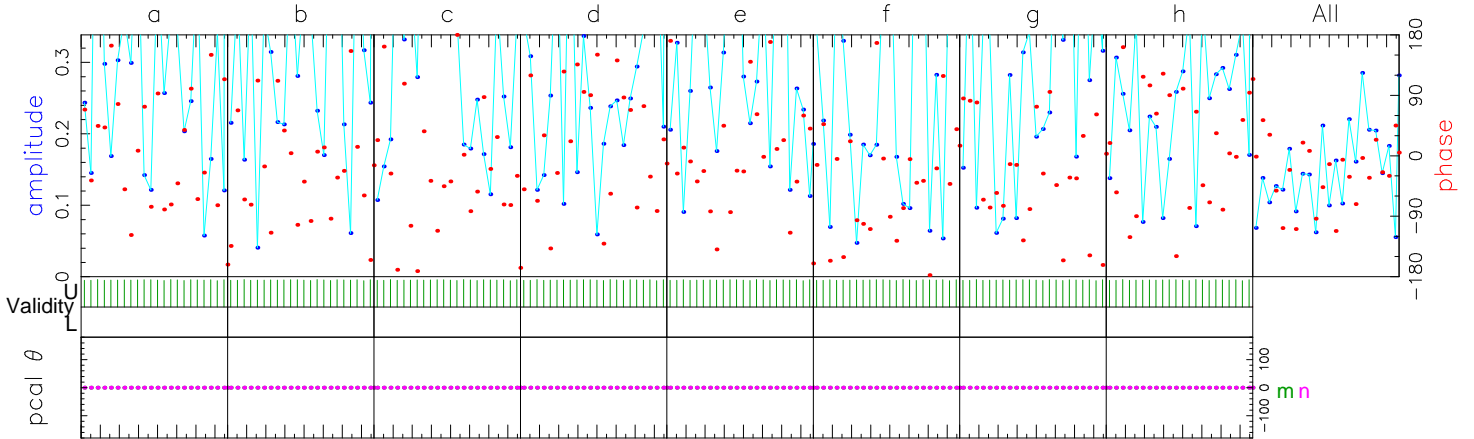
RMS Theor. Amplitude 589.778 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 1.1 0.0 Search (2048X32) 583.845 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 1.6 0.0 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 36.9 0.0 Inc. seg. avg. 584.046 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 47.5 0.0 Inc. frq. avg. 679.222 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

m: az 73.5 el 14.3 pa -73.7 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 0.000 0.000 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mm.W.232.190PZ2



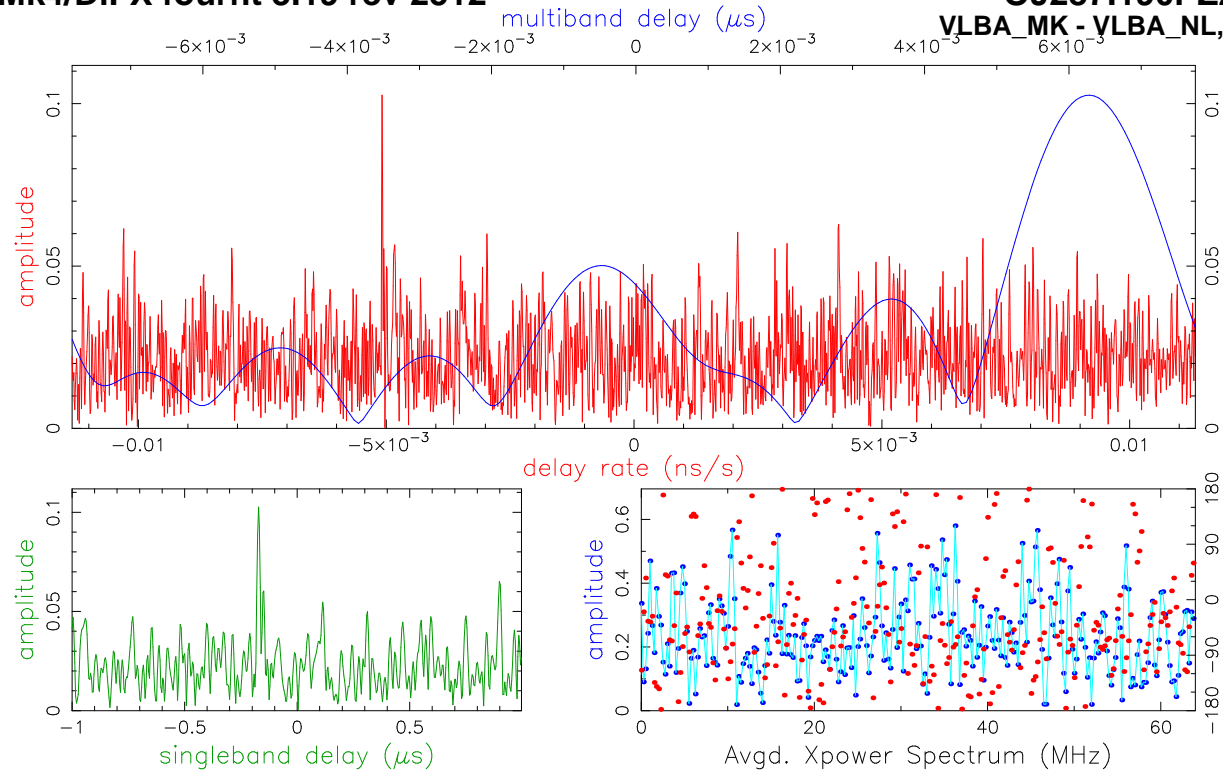
Fringe quality 0
SNR 6.2
Int time 431.440
Amp 0.113
Phase -23.5
PFD 1.4e-01
Delays (us)
SBD -0.203175
MBD 0.006410
Fringe rate (Hz)
-0.282237
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211944
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



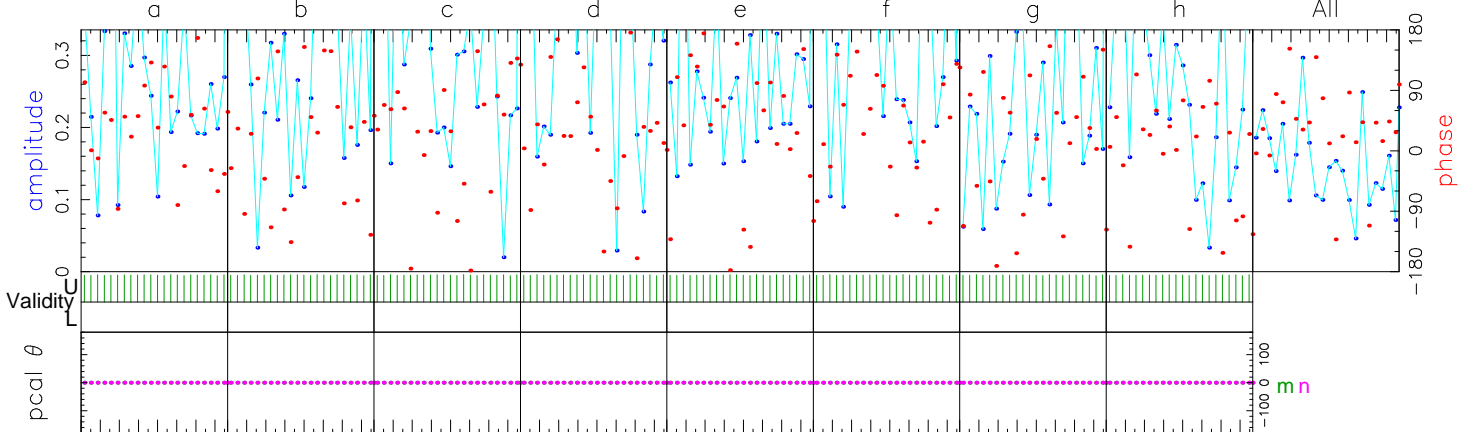
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All	
	6.4	-40.6	-55.5	9.6	-11.5	-37.0	-24.7	-10.8		Phase	-23.5
	0.1	0.2	0.1	0.1	0.2	0.2	0.1	0.1		Ampl.	0.1
	257.5	204.6	233.2	113.1	204.6	206.6	209.9	470.8		Sbd box	205.0
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000		PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000		PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000			
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Chan ids	
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		Tracks	
										Tracks	
Group delay (usec)(sbd)		-1.36259197922E+04		Apriori delay (usec)	-1.36257230776E+04		Resid mbdelay (usec)	6.41044E-03	+/-	1.8E-04	
Sband delay (usec)		-1.36259262529E+04		Apriori clock (usec)	-2.4168728E+01		Resid sbdelay (usec)	-2.03175E-01	+/-	1.4E-03	
Phase delay (usec)		-1.36257230784E+04		Apriori clockrate (us/s)	1.5700001E-07		Resid phdelay (usec)	-7.57109E-07	+/-	6.0E-07	
Delay rate (us/s)		1.04095402093E+00		Apriori rate (us/s)	1.04095729742E+00		Resid rate (us/s)	-3.27650E-06	+/-	2.3E-09	
Total phase (deg)		-349.5		Apriori accel (us/s/s)	5.96953156771E-05		Resid phase (deg)	-23.5	+/-	18.5	

ph/seg (deg) 48.0 44.4 Search (2048X32) 0.106 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 62.4 77.4 Interp. 0.006 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 25.1 26.2 Inc. seg. avg. 0.117 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 41.2 45.7 Inc. frq. avg. 0.109 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 73.5 el 14.3 pa -73.7 n: az 140.1 el 63.6 pa -29.9 u,v (fr/asec) -6263.949 -985.432 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mn..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mn.W.177.190PZ2

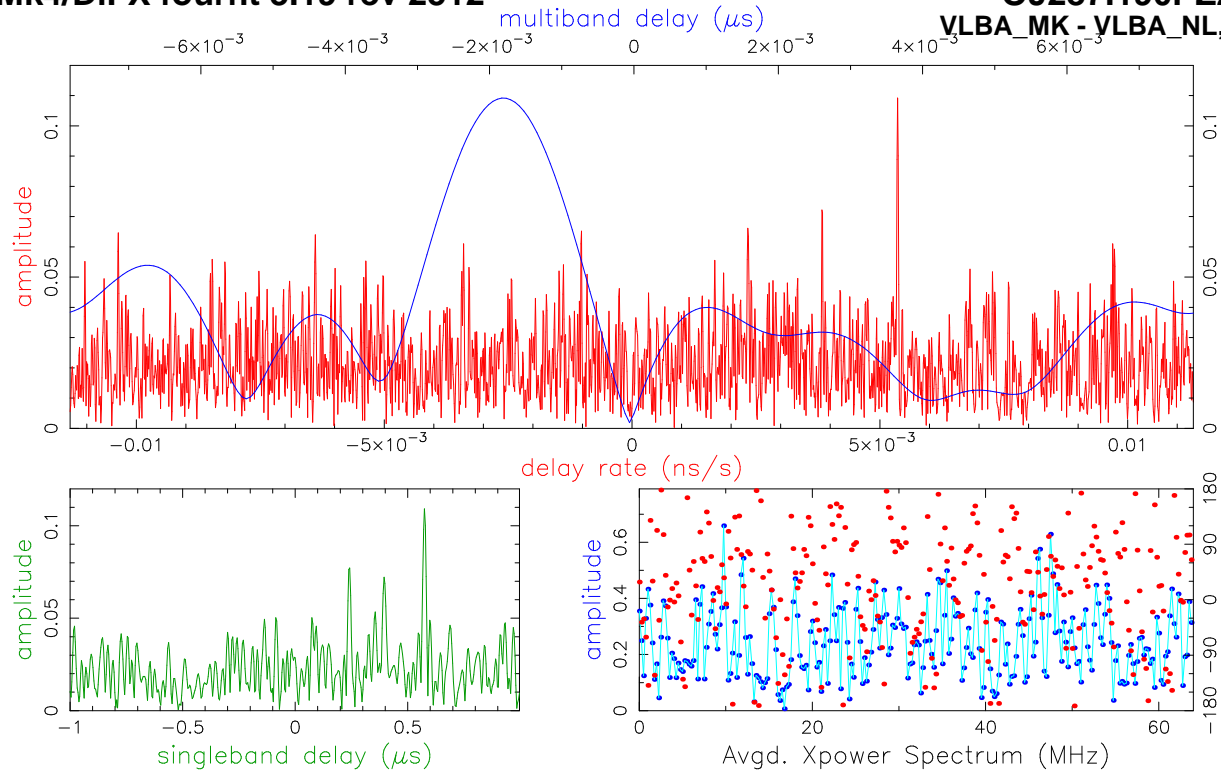


Fringe quality 0
SNR 5.8
Int time 431.441
Amp 0.112
Phase 39.7
PFD 7.4e-01
Delays (us)
SBD -0.171472
MBD 0.006297
Fringe rate (Hz)
-0.438774
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211949
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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-1.36258886557E+04					-1.36257230776E+04			6.29693E-03	+/- 1.9E-04
Sband delay (usec)	-1.36258945499E+04					-2.4168728E+01			-1.71472E-01	+/- 1.5E-03
Phase delay (usec)	-1.36257230763E+04					1.5700001E-07			1.28101E-06	+/- 6.3E-07
Delay rate (us/s)	1.04095220370E+00					1.04095729742E+00			-5.09373E-06	+/- 2.5E-09
Total phase (deg)			-286.3			5.96953156771E-05			39.7	+/- 19.6
	RMS	Theor.	Amplitude	0.112 +/- 0.019		PCal mode: MANUAL, MANUAL			PC period (AP's) 5, 5	
ph/seg (deg)	63.3	47.1	Search (2048X32)	0.101		PCal rate: 0.000E+00, 0.000E+00 (us/s)			sb window (us)	-1.000 1.000
amp/seg (%)	72.7	82.2	Interp.	0.000		Bits/sample: 2x2			mb window (us)	-0.008 0.008
ph/frq (deg)	28.5	27.8	Inc. seg. avg.	0.121		Sample rate(MISamp/s): 128			dr window (ns/s)	-0.011 0.011
amp/frq (%)	26.7	48.5	Inc. frq. avg.	0.108		Data rate(Mb/s): 2048			ion window (TEC)	0.00 0.00
m: az 73.5 el 14.3 pa -73.7			n: az 140.1 el 63.6 pa -29.9			u,v (fr/asec) -6263.949 -985.432				simultaneous interpolator

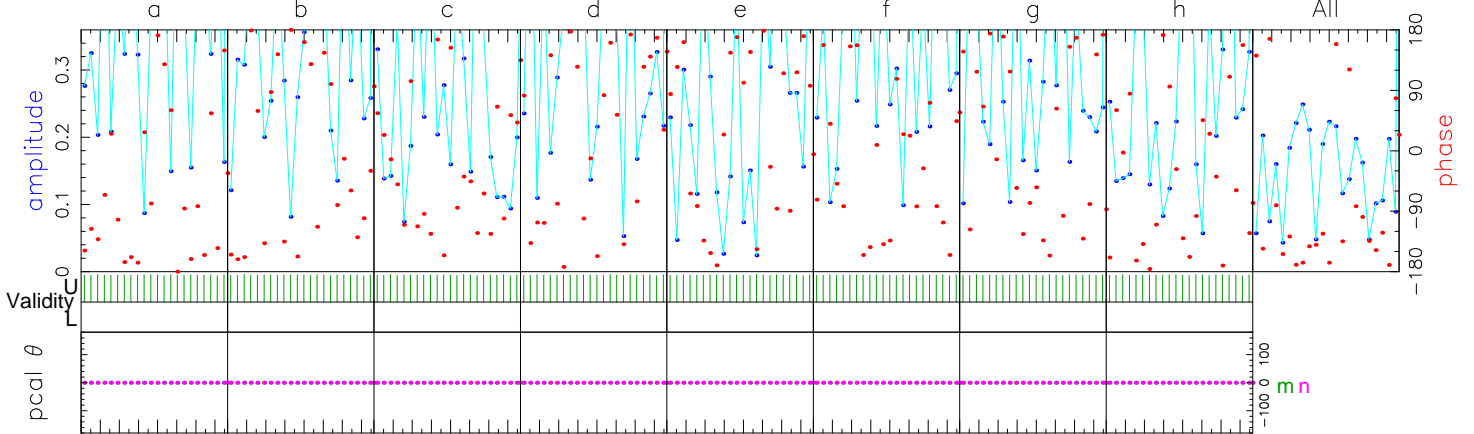


Fringe quality 0

SNR 6.2
Int time 431.440
Amp 0.120
Phase -149.6
PFD 1.4e-01
Delays (us)
SBD 0.574459
MBD -0.001800
Fringe rate (Hz) 0.462406
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build 2020:202:091813
2020:202:211954
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



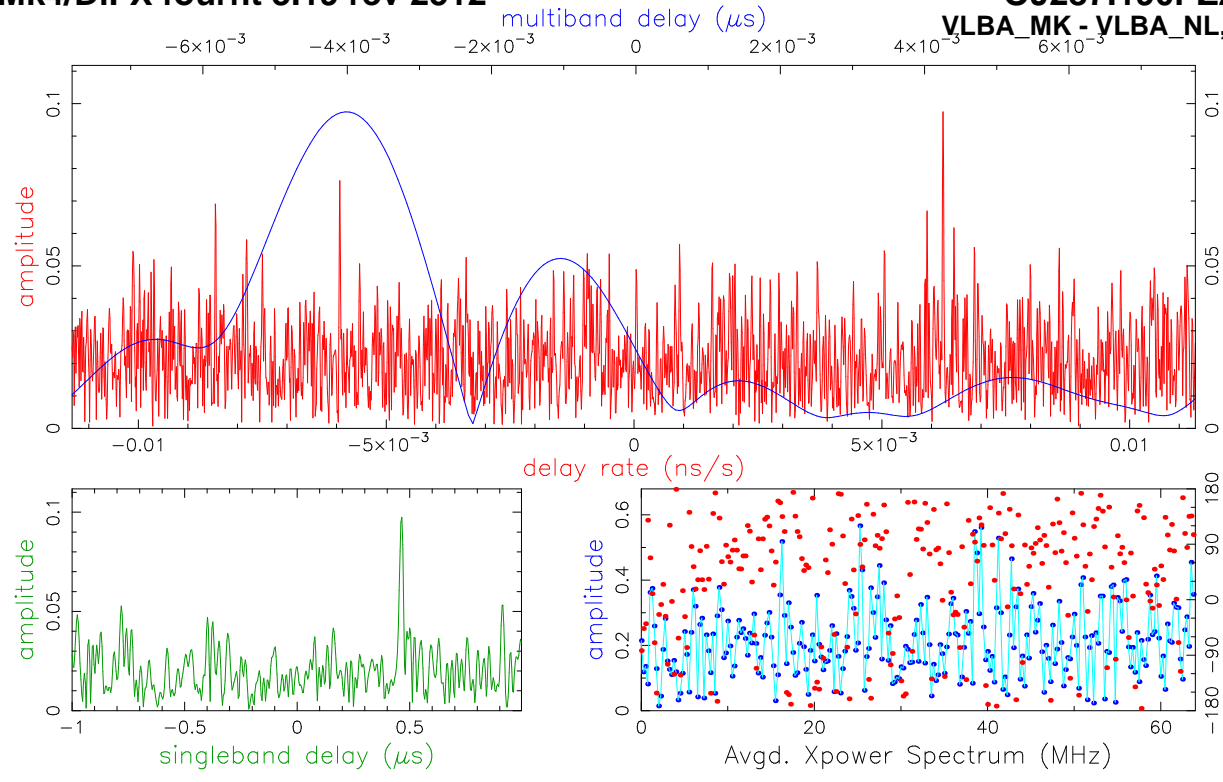
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-142.0	-170.8	-93.0	174.0	179.2	-124.9	-133.5	-156.7	Phase	-149.6
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	403.2	140.7	454.4	343.6	133.6	251.2	340.3	253.1	Sbd box	404.1
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
n	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
n	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

Group delay (usec)(sbd)	-1.36251467529E+04	Apriori delay (usec)	-1.36257230776E+04	Resid mbdelay (usec)	-1.80033E-03	+/-	1.7E-04
Sband delay (usec)	-1.36251486184E+04	Apriori clock (usec)	-2.4168728E+01	Resid sbdelay (usec)	5.74459E-01	+/-	1.4E-03
Phase delay (usec)	-1.36257230824E+04	Apriori clockrate (us/s)	1.5700001E-07	Resid phdelay (usec)	-4.82461E-06	+/-	6.0E-07
Delay rate (us/s)	1.04096266550E+00	Apriori rate (us/s)	1.04095729742E+00	Resid rate (us/s)	5.36807E-06	+/-	2.3E-09
Total phase (deg)	-115.6	Apriori accel (us/s/s)	5.96953156771E-05	Resid phase (deg)	-149.6	+/-	18.5

ph/seg (deg)	48.3	Theor.	44.3	Amplitude	0.120 +/- 0.019	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	73.0		77.3	Search (2048X32)	0.108	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	34.0		26.1	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	32.2		45.6	Inc. seg. avg.	0.125	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.123	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

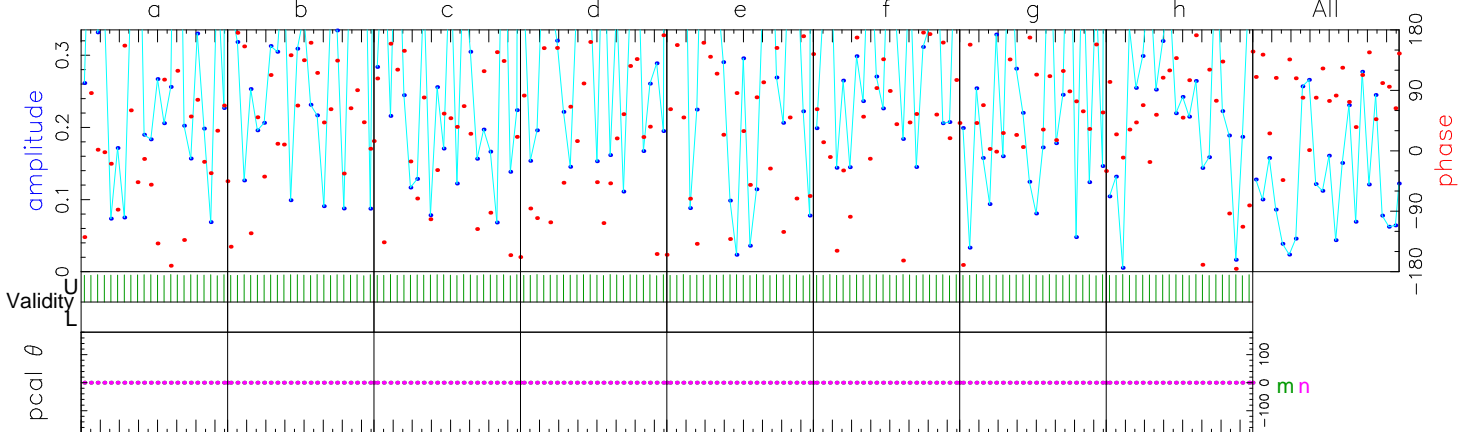
m: az 73.5 el 14.3 pa -73.7 n: az 140.1 el 63.6 pa -29.9 u,v (fr/asec) -6263.949 -985.432 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mn..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mn.W.222.190PZ2



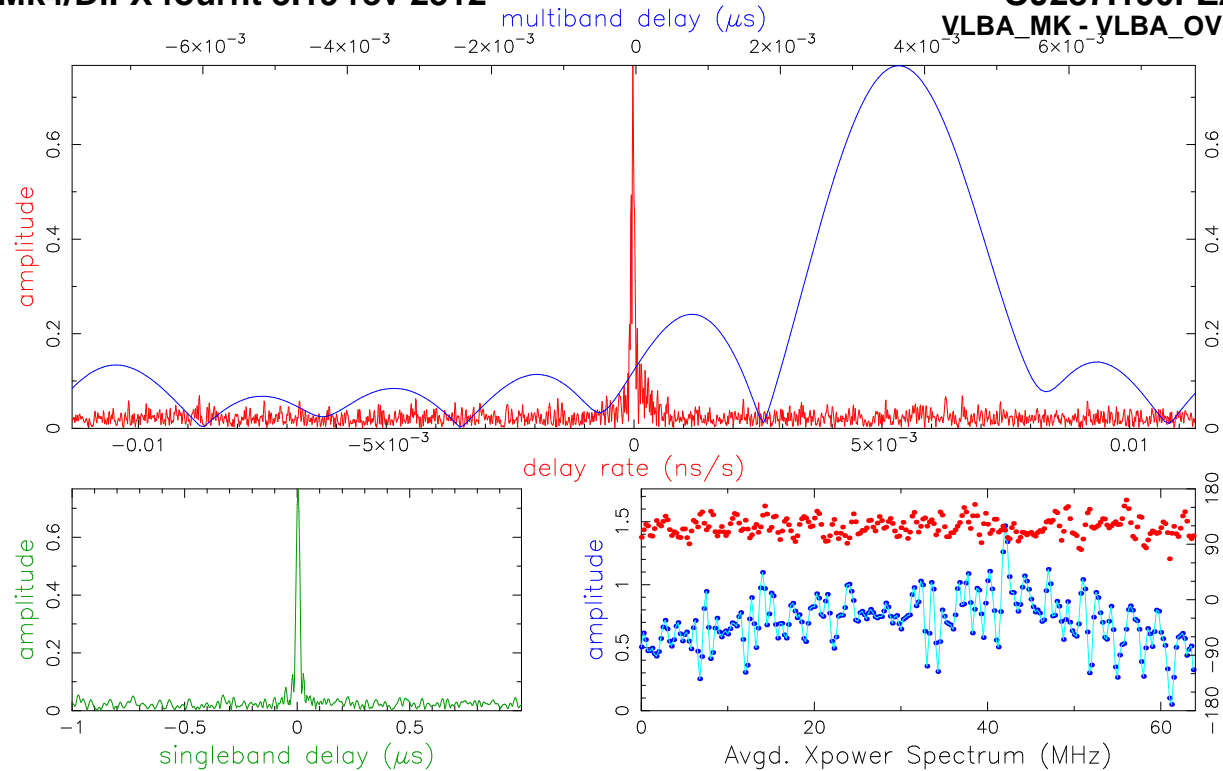
Fringe quality 0
SNR 5.6
Int time 431.441
Amp 0.112
Phase 81.4
PFD 1.0e+00
Delays (us)
SBD 0.463535
MBD -0.004035
Fringe rate (Hz) 0.537625
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211958
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		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:n	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
n	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
n	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.36252583629E+04									
Sband delay (usec)	-1.36252595431E+04									
Phase delay (usec)	-1.36257230750E+04									
Delay rate (us/s)	1.04096353872E+00									
Total phase (deg)			-244.6							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)									81.4	+/- 20.5
PCal mode: MANUAL, MANUAL										
PCal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
nlags: 256										
t_cohere infinite										
sb window (us)									-1.000	1.000
mb window (us)									-0.008	0.008
dr window (ns/s)									-0.011	0.011
ion window (TEC)									0.00	0.00

m: az 73.5 el 14.3 pa -73.7 n: az 140.1 el 63.6 pa -29.9 u,v (fr/asec) -6263.949 -985.432 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mn..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mn.W.237.190PZ2

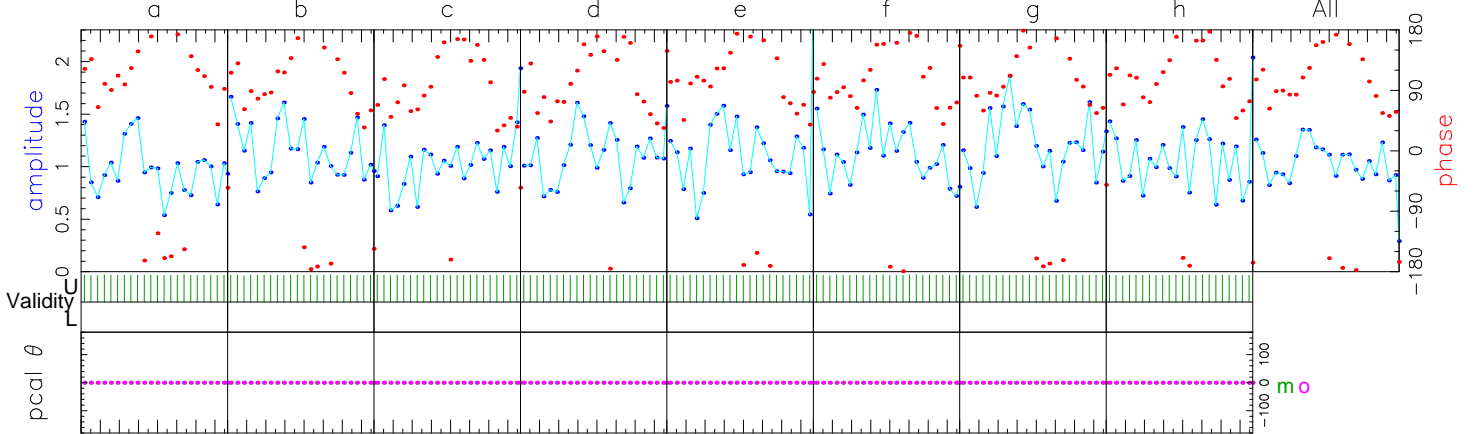


Fringe quality 7

SNR 43.5
Int time 429.293
Amp 0.767
Phase 117.5
PFD 0.0e+00
Delays (us)
SBD 0.003550
MBD 0.003630
Fringe rate (Hz)
-0.001594
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211943
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

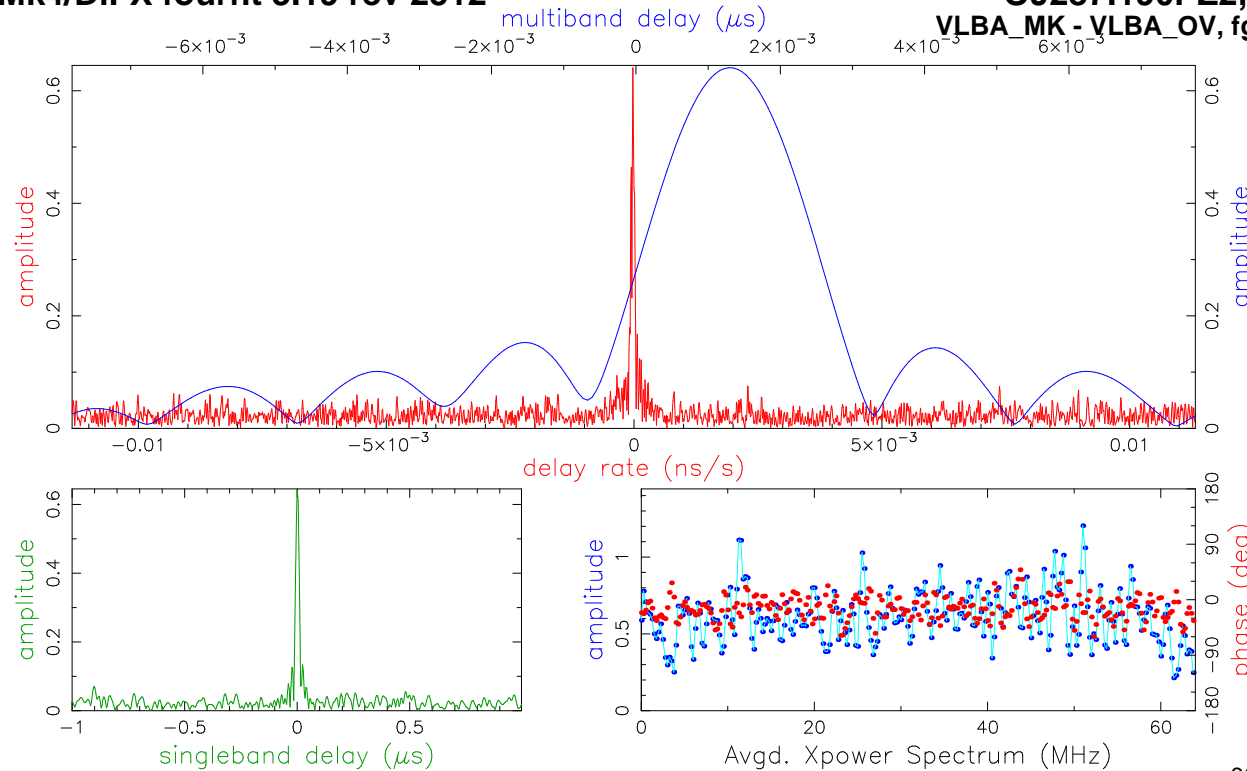


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL		
Group delay (usec)(sbd)	-1.04452387278E+04									
Sband delay (usec)	-1.04452388077E+04									
Phase delay (usec)	-1.04452423536E+04									
Delay rate (us/s)	5.55371187476E-01									
Total phase (deg)			-123.5							
Apriori delay (usec)										
Apriori clock (usec)										
Apriori clockrate (us/s)										
Apriori rate (us/s)										
Apriori accel (us/s/s)										
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
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)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
pcal mode: MANUAL, MANUAL										
PC period (AP's) 5, 5										
sb window (us)										
mb window (us)										
dr window (ns/s)										
ion window (TEC)										
simultaneous interpolator										

ph/seg (deg) 45.0 6.3 Search (2048X32) 0.726 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 42.7 11.0 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 10.2 3.7 Inc. seg. avg. 1.047 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 7.7 6.5 Inc. frq. avg. 0.774 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 73.5 el 14.3 pa -73.7 o: az 101.5 el 47.9 pa -56.2 u,v (fr/asec) -3323.507 -904.083 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mo..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mo.W.172.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mo
VLBA_MK - VLBA_OV, fgroup W, pol RR

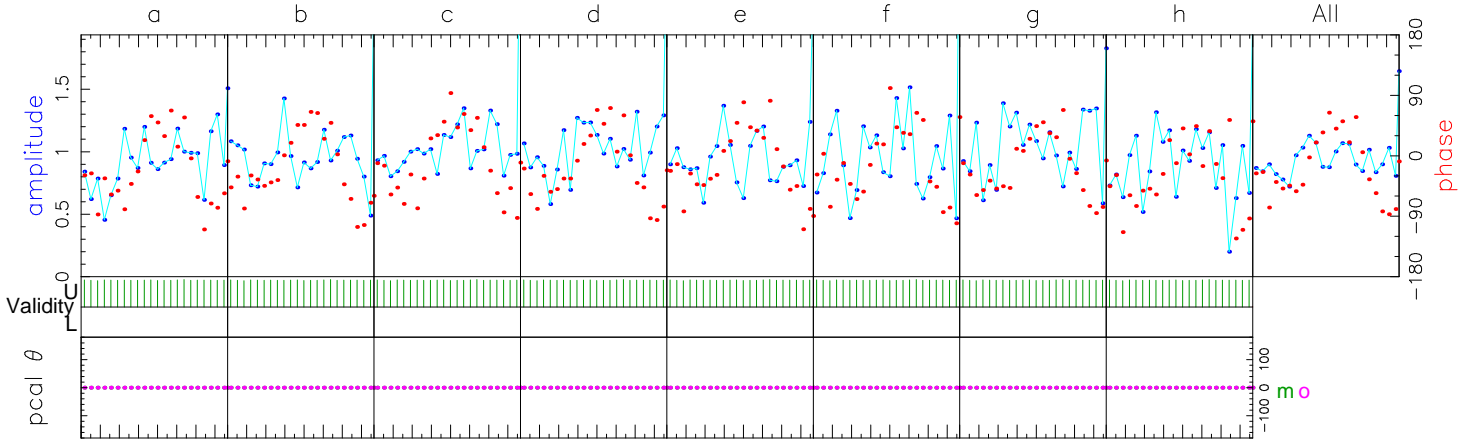


Fringe quality 7

SNR 36.6
Int time 429.296
Amp 0.645
Phase -18.0
PFD 0.0e+00
Delays (us)
SBD 0.001002
MBD 0.001327
Fringe rate (Hz)
-0.001568
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

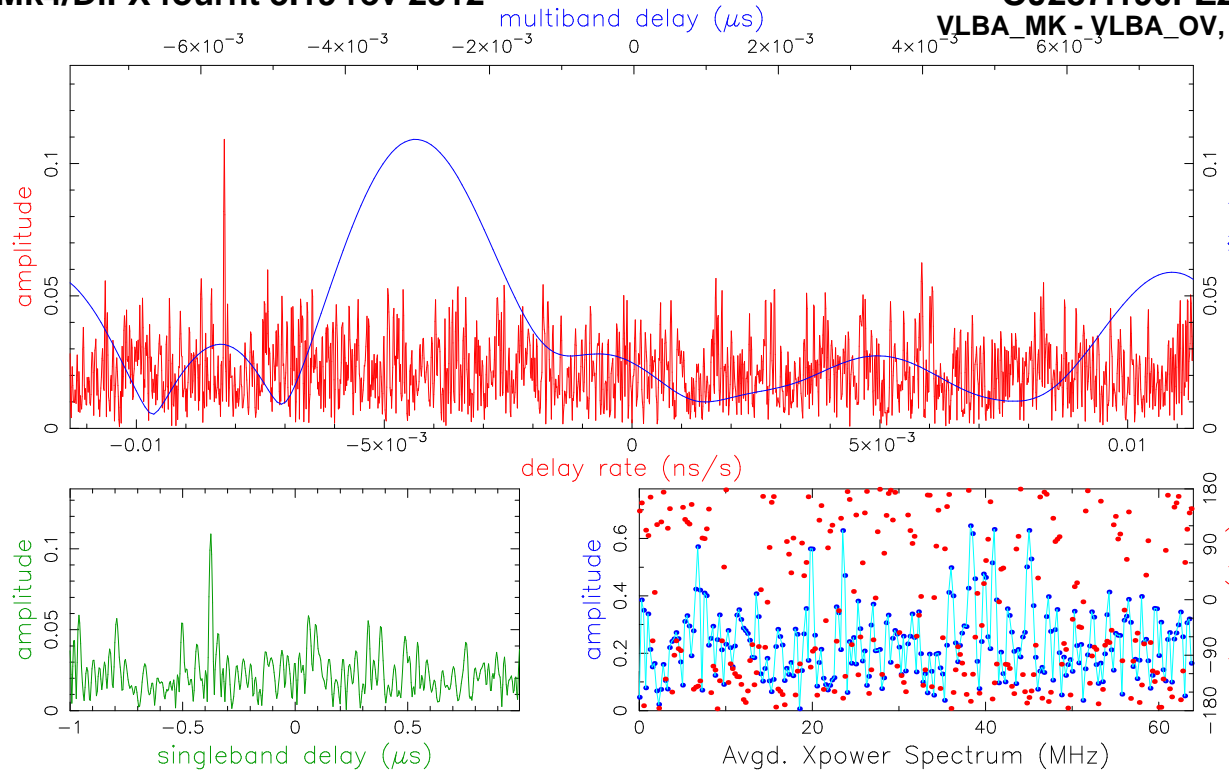
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211948
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



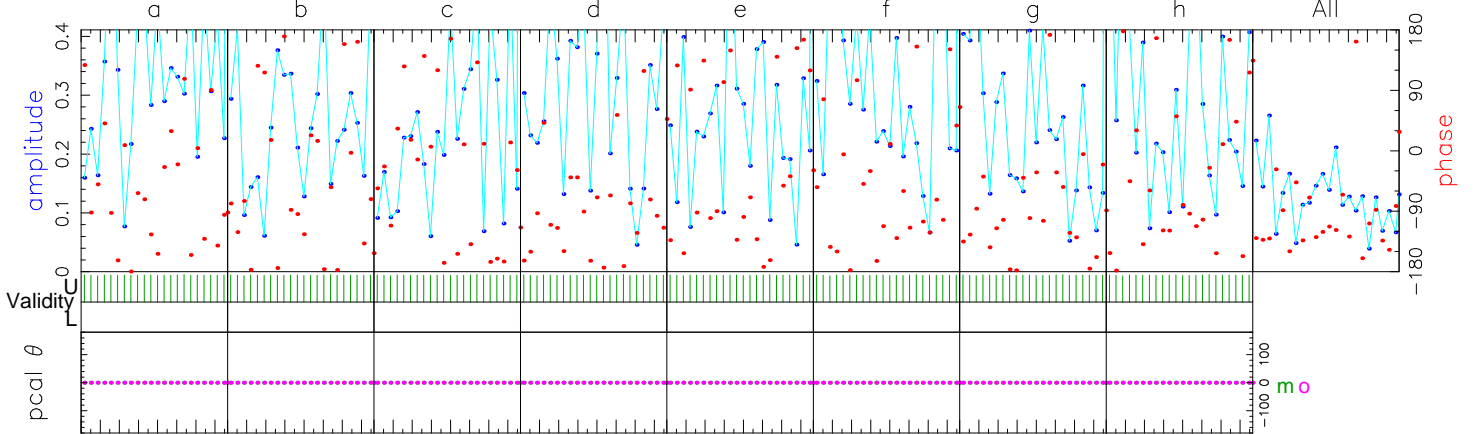
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-24.3	-18.7	-9.0	-19.3	-11.0	-13.9	-19.5	-29.5	Phase	-18.0
	0.6	0.6	0.6	0.7	0.7	0.6	0.8	0.6	Ampl.	0.6
	257.3	257.3	257.4	257.4	257.4	257.1	257.1	257.0	Sbd box	257.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.04452410309E+04		Apriori delay (usec)		-1.04452423574E+04		Resid mbdelay (usec)		1.32651E-03	+/- 3.0E-05
Sband delay (usec)	-1.04452413554E+04		Apriori clock (usec)		-1.1963081E+01		Resid sbdelay (usec)		1.00200E-03	+/- 2.4E-04
Phase delay (usec)	-1.04452423580E+04		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-5.80827E-07	+/- 1.0E-07
Delay rate (us/s)	5.5537118774E-01		Apriori rate (us/s)		5.55371205979E-01		Resid rate (us/s)		-1.82050E-08	+/- 4.0E-10
Total phase (deg)			Apriori accel (us/s/s)		4.52068355045E-05		Resid phase (deg)		-18.0	+/- 3.1

ph/seg (deg) 47.2 7.5 Search (2048X32) 0.609 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 46.8 13.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 7.3 4.4 Inc. seg. avg. 0.918 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 7.9 7.7 Inc. frq. avg. 0.643 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 73.5 el 14.3 pa -73.7 o: az 101.5 el 47.9 pa -56.2 u,v (fr/asec) -3323.507 -904.083 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mo..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mo.W.197.190PZ2



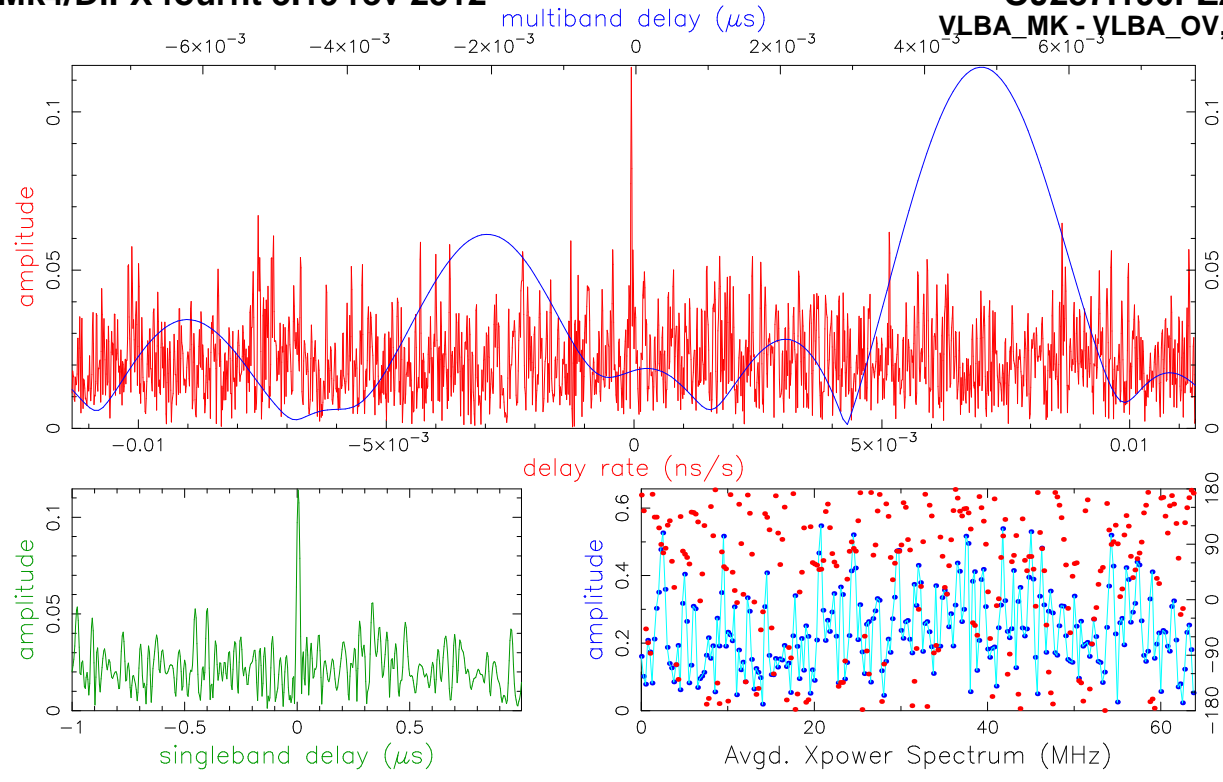
Fringe quality 0
SNR 6.2
Int time 429.294
Amp 0.137
Phase -120.2
PFD 1.5e-01
Delays (us)
SBD -0.375233
MBD -0.003033
Fringe rate (Hz)
-0.709699
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211953
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



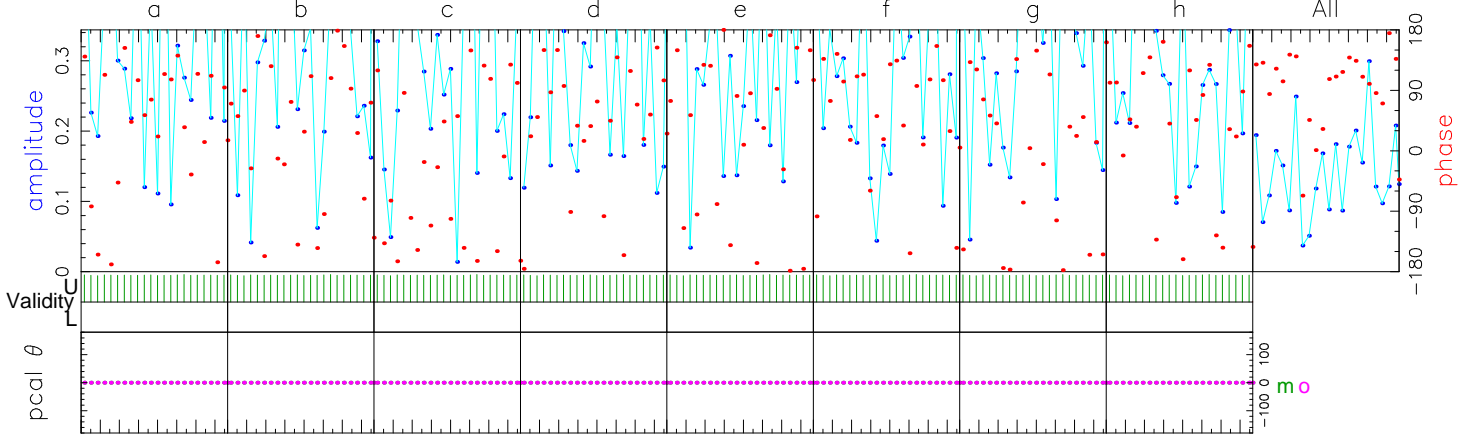
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.9	-128.2	162.1	-110.0	-155.3	-105.3	-97.9	-137.1	Phase	-120.2
	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.1	Ampl.	0.1
	282.6	128.5	488.2	76.4	456.0	11.8	161.4	354.6	Sbd box	160.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
o	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.04456203900E+04		Apriori delay (usec)		-1.04452423574E+04		Resid mbdelay (usec)		-3.03256E-03	+/- 1.8E-04
Sband delay (usec)	-1.04456175902E+04		Apriori clock (usec)		-1.1963081E+01		Resid sbdelay (usec)		-3.75233E-01	+/- 1.4E-03
Phase delay (usec)	-1.04452423613E+04		Apriori clockrate (us/s)		2.8999998E-07		Resid phdelay (usec)		-3.87484E-06	+/- 6.0E-07
Delay rate (us/s)	5.55362967077E-01		Apriori rate (us/s)		5.55371205979E-01		Resid rate (us/s)		-8.23890E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		4.52068355045E-05		Resid phase (deg)		-120.2	+/- 18.5

ph/seg (deg) 39.2 44.4 Search (2048X32) 0.105 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 52.9 77.5 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 38.2 26.2 Inc. seg. avg. 0.124 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 37.7 45.7 Inc. frq. avg. 0.136 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 73.5 el 14.3 pa -73.7 o: az 101.5 el 47.9 pa -56.2 u,v (fr/asec) -3323.507 -904.083 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mo..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mo.W.216.190PZ2



Fringe quality 0
SNR 6.5
Int time 429.294
Amp 0.115
Phase 112.8
PFD 2.2e-02
Delays (us)
SBD 0.004791
MBD 0.004821
Fringe rate (Hz)
-0.004644
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Yr:day 16383
Start 2020:202:091813
Stop 2020:202:211957
FRT 2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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

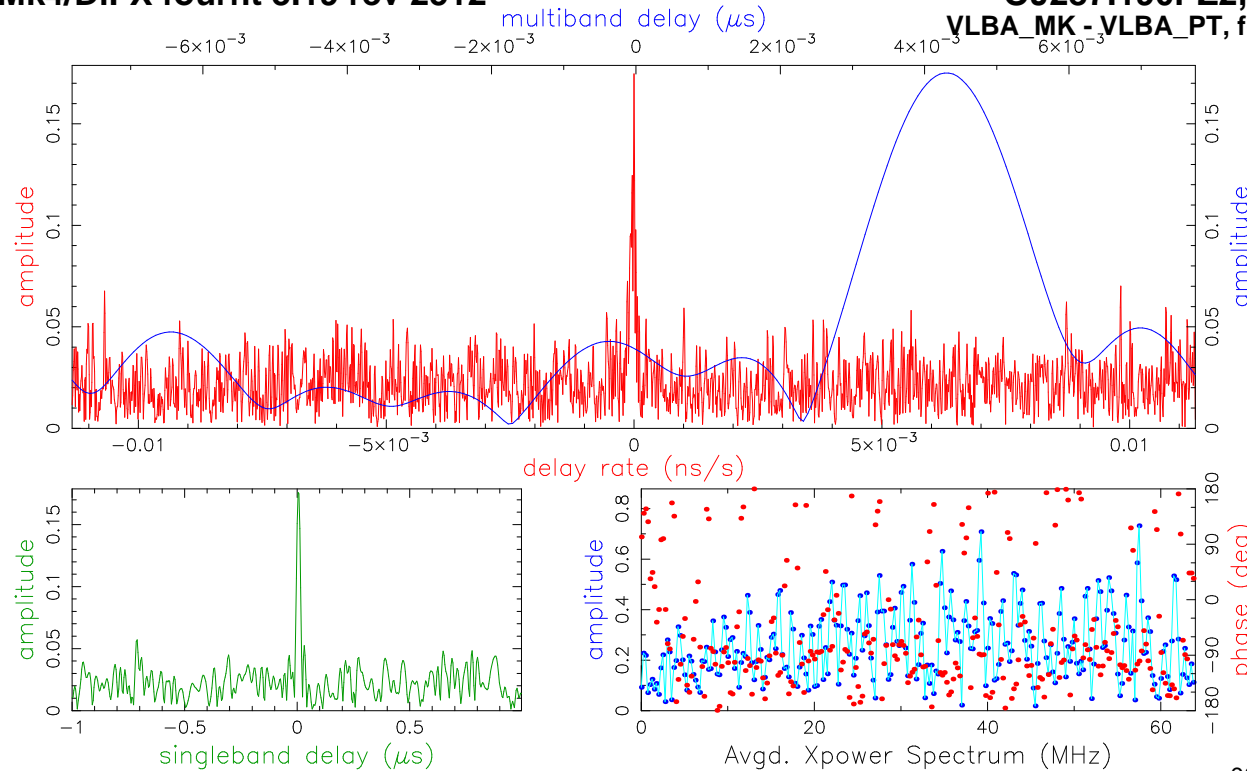


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	117.2	93.8	147.1	84.6	151.3	108.2	107.8	103.6	Phase	112.8
	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	Ampl.	0.1
	93.0	229.0	330.0	256.9	141.0	3.7	29.2	26.8	Sbd box	258.2
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
o	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:o	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
o	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
o	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.04452375366E+04	Apriori delay (usec)	-1.04452423574E+04	Resid mbdelay (usec)	4.82084E-03	+/-	1.7E-04
Sband delay (usec)	-1.04452375662E+04	Apriori clock (usec)	-1.1963081E+01	Resid sbdelay (usec)	4.79125E-03	+/-	1.3E-03
Phase delay (usec)	-1.04452423538E+04	Apriori clockrate (us/s)	2.8999998E-07	Resid phdelay (usec)	3.63720E-06	+/-	5.7E-07
Delay rate (us/s)	5.55371152064E-01	Apriori rate (us/s)	5.55371205979E-01	Resid rate (us/s)	-5.39149E-08	+/-	2.2E-09
Total phase (deg)	-128.1	Apriori accel (us/s/s)	4.52068355045E-05	Resid phase (deg)	112.8	+/-	17.6

ph/seg (deg)	55.3	Theor.	42.3	Amplitude	0.115 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	60.8	Search (2048X32)	0.112	Interp.	0.000	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	25.7	Inc. seg. avg.	0.113	Inc. frq. avg.	0.113	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	29.6	Inc. frq. avg.	0.113			Sample rate (MSamp/s):	128	nlags: 256	t_cohere infinite	dr window (ns/s)	-0.011 0.011

m: az 73.5 el 14.3 pa -73.7 o: az 101.5 el 47.9 pa -56.2 u,v (fr/asec) -3323.507 -904.083 simultaneous interpolator
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mo..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mo.W.233.190PZ2

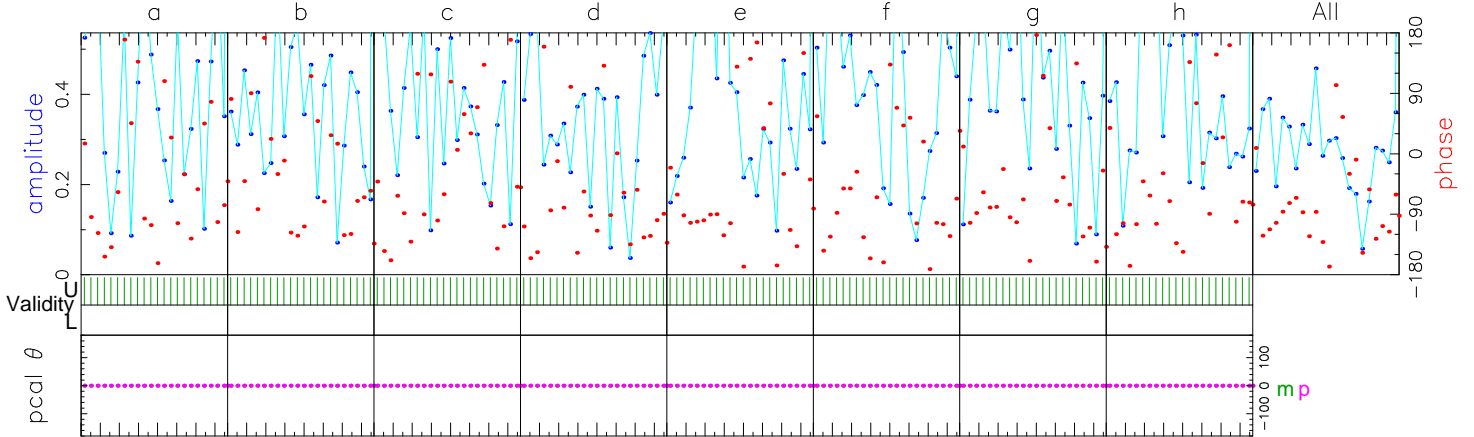


Fringe quality 9

SNR 10.2
Int time 438.693
Amp 0.179
Phase -93.3
PFD 5.7e-16
Delays (us)
SBD 0.005692
MBD 0.004224
Fringe rate (Hz) 0.000133
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

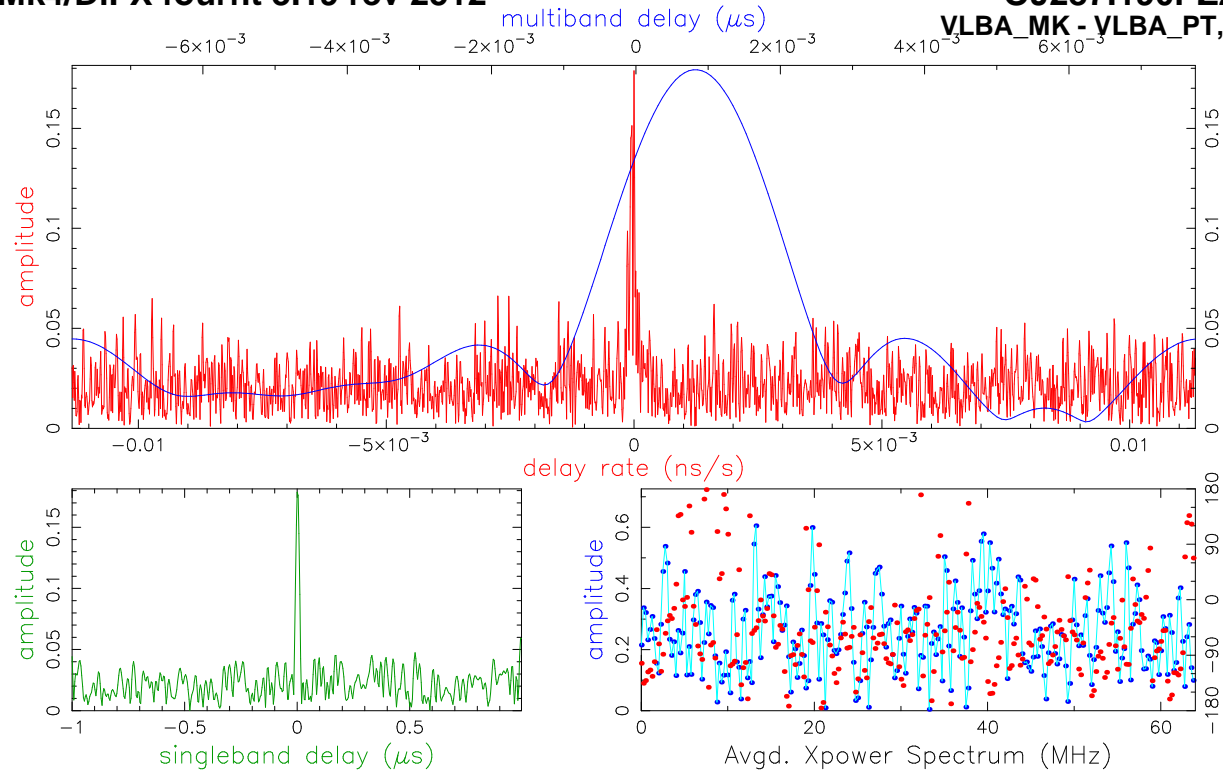
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211943
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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
	-105.6	-70.6	-92.1	-109.5	-106.7	-87.0	-81.6	-86.1	Phase	-93.3
	0.2	0.1	0.1	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	258.4	46.8	180.4	258.2	258.1	259.0	259.1	259.6	Sbd box	258.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-1.23930836240E+04		Apriori delay (usec)		-1.23930878477E+04		Resid mbdelay (usec)		4.22378E-03	+/- 1.1E-04
Sband delay (usec)	-1.23930821560E+04		Apriori clock (usec)		-9.1546612E+00		Resid sbdelay (usec)		5.69175E-03	+/- 8.4E-04
Phase delay (usec)	-1.23930878507E+04		Apriori clockrate (us/s)		2.8700000E-07		Resid phdelay (usec)		-3.01026E-06	+/- 3.6E-07
Delay rate (us/s)	6.92783939075E-01		Apriori rate (us/s)		6.92783937531E-01		Resid rate (us/s)		1.54324E-09	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.71785389335E-05		Resid phase (deg)		-93.3	+/- 11.2

ph/seg (deg) 63.4 26.8 Amplitude 0.179 +/- 0.017 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 76.0 46.8 Search (2048X32) 0.172 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 14.9 15.8 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 21.3 27.6 Inc. seg. avg. 0.249 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
m: az 73.5 el 14.3 pa -73.7 p: az 106.4 el 56.6 pa -57.2 u,v (fr/asec) -4146.144 -213.371 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mp..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mp.W.171.190PZ2 simultaneous interpolator

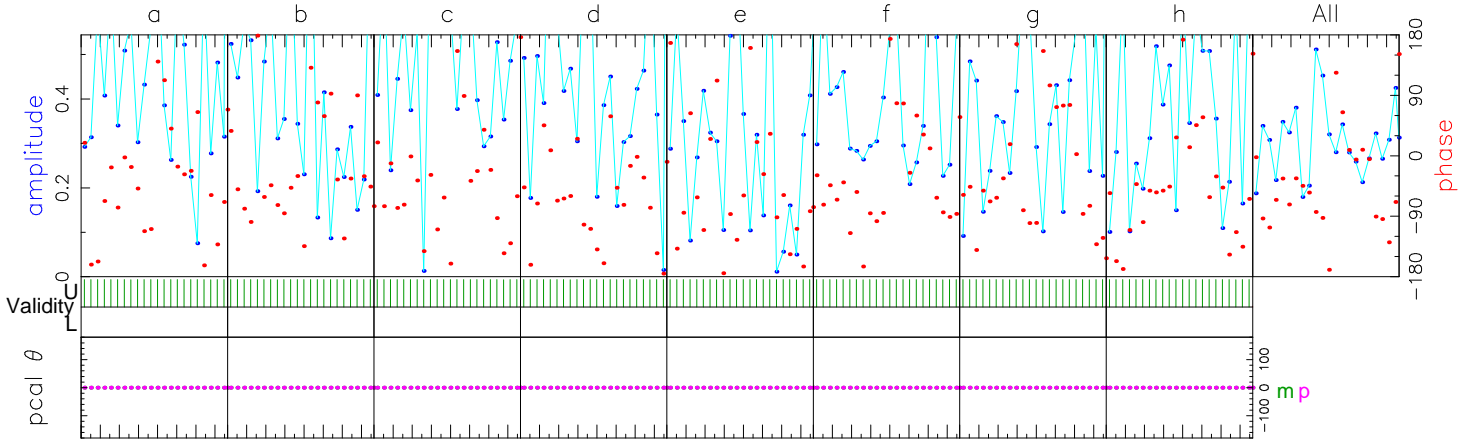


Fringe quality 9

SNR 10.4
Int time 438.694
Amp 0.181
Phase -63.2
PFD 1.2e-16
Delays (us)
SBD 0.001612
MBD 0.000912
Fringe rate (Hz) 0.000060
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211946
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

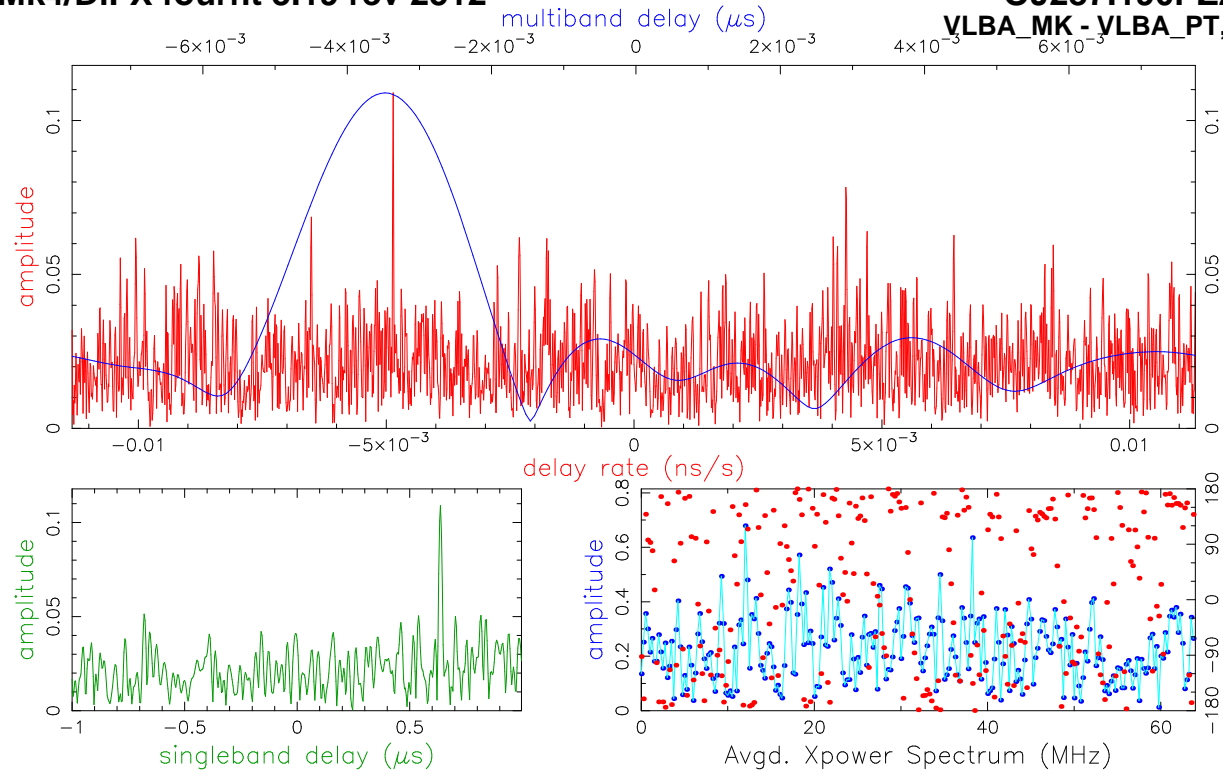


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-65.9	-50.5	-60.8	-57.2	-92.7	-53.5	-77.5	-69.2	Phase	-63.2
	0.1	0.2	0.3	0.3	0.1	0.2	0.1	0.2	Ampl.	0.2
	322.7	256.5	257.6	257.8	444.3	257.8	343.6	259.5	Sbd box	257.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-1.23930869353E+04		Apriori delay (usec)		-1.23930878477E+04		Resid mbdelay (usec)		9.12438E-04	+/- 1.0E-04
Sband delay (usec)	-1.23930862360E+04		Apriori clock (usec)		-9.1546612E+00		Resid sbdelay (usec)		1.61175E-03	+/- 8.3E-04
Phase delay (usec)	-1.23930878498E+04		Apriori clockrate (us/s)		2.8700000E-07		Resid phdelay (usec)		-2.03875E-06	+/- 3.6E-07
Delay rate (us/s)	6.92783938231E-01		Apriori rate (us/s)		6.92783937531E-01		Resid rate (us/s)		6.99346E-10	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		5.71785389335E-05		Resid phase (deg)		-63.2	+/- 11.0

ph/seg (deg) 64.4 26.4 Search (2048X32) 0.178 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 82.6 46.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 15.4 15.6 Inc. seg. avg. 0.277 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 27.5 27.2 Inc. frq. avg. 0.176 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 73.5 el 14.3 pa -73.7 p: az 106.4 el 56.6 pa -57.2 u,v (fr/asec) -4146.144 -213.371 ion window (TEC) 0.00 0.00
 simultaneous interpolator

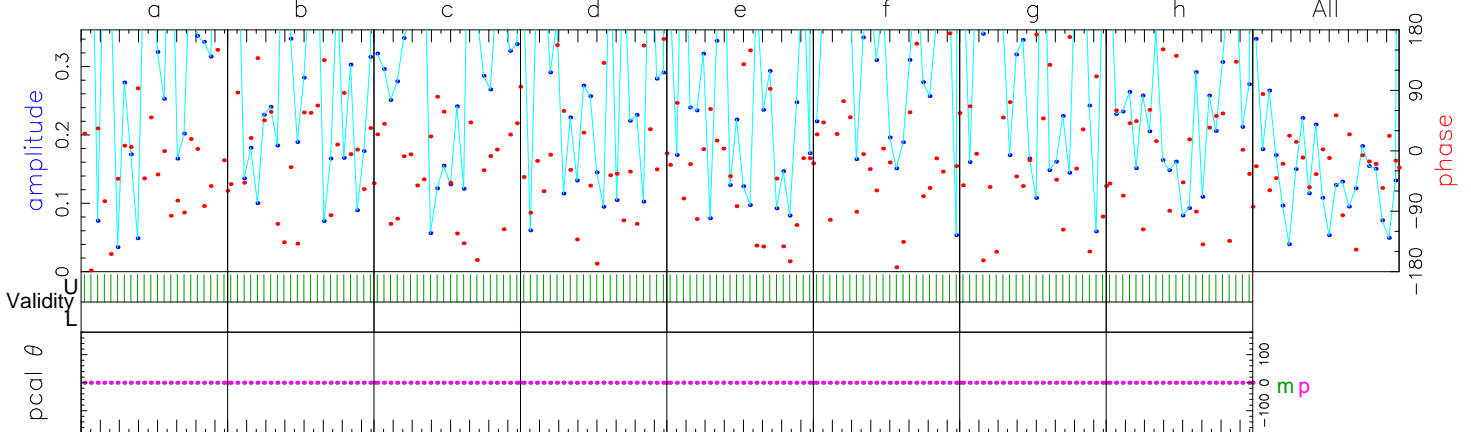
Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mp
VLBA_MK - VLBA_PT, fgroup W, pol LR



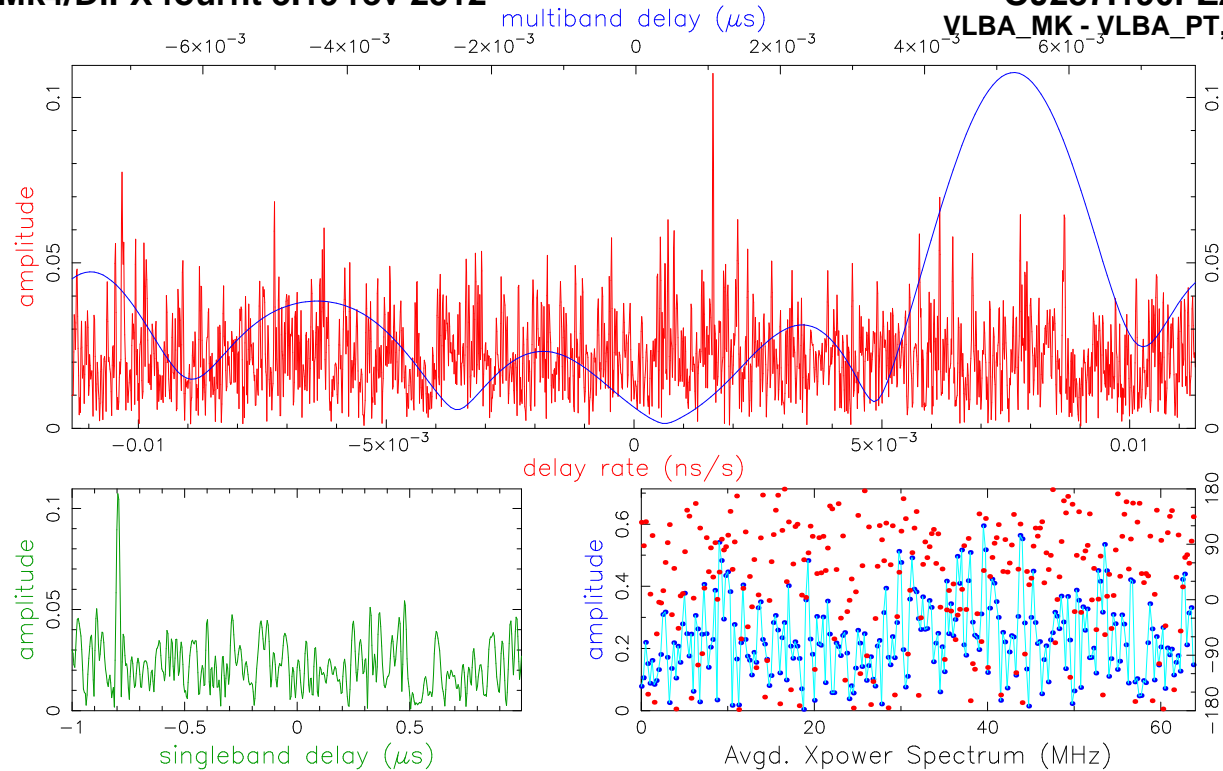
Fringe quality 0
SNR 6.3
Int time 438.693
Amp 0.118
Phase -19.4
PFD 1.0e-01
Delays (us)
SBD 0.636166
MBD -0.003484
Fringe rate (Hz)
-0.418826
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211950
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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



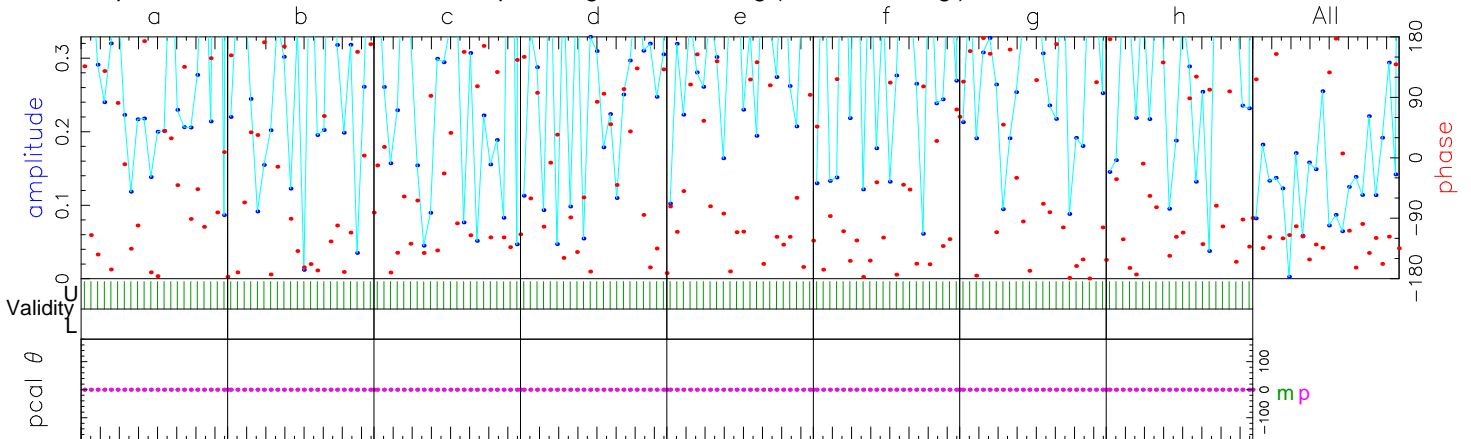
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-38.9	22.7	-14.2	-37.9	-37.1	-4.5	-29.3	-2.7	Phase	-19.4
	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	Ampl.	0.1
	508.8	334.2	511.2	465.1	257.8	363.7	495.2	449.7	Sbd box	419.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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)	-1.23924507068E+04		Apriori delay (usec)		-1.23930878477E+04		Resid mbdelay (usec)		-3.48411E-03	+/- 1.7E-04
Sband delay (usec)	-1.23924516817E+04		Apriori clock (usec)		-9.1546612E+00		Resid sbdelay (usec)		6.36166E-01	+/- 1.4E-03
Phase delay (usec)	-1.23930878484E+04		Apriori clockrate (us/s)		2.8700000E-07		Resid phdelay (usec)		-6.25773E-07	+/- 5.9E-07
Delay rate (us/s)	6.92779075380E-01		Apriori rate (us/s)		6.92783937531E-01		Resid rate (us/s)		-4.86215E-06	+/- 2.3E-09
Total phase (deg)			Apriori accel (us/s/s)		5.71785389335E-05		Resid phase (deg)		-19.4	+/- 18.3

ph/seg (deg) 47.7 43.9 Search (2048X32) 0.107 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
amp/seg (%) 79.5 76.7 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
ph/frq (deg) 23.9 25.9 Inc. seg. avg. 0.122 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
amp/frq (%) 24.6 45.2 Inc. frq. avg. 0.114 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
m: az 73.5 el 14.3 pa -73.7 p: az 106.4 el 56.6 pa -57.2 u,v (fr/asec) -4146.144 -213.371 ion window (TEC) 0.00 0.00
Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mp..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mp.W.205.190PZ2 simultaneous interpolator



Fringe quality 0
SNR 6.2
Int time 438.695
Amp 0.110
Phase -140.0
PFD 1.2e-01
Delays (us)
SBD -0.795406
MBD 0.005313
Fringe rate (Hz) 0.137669
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211955
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



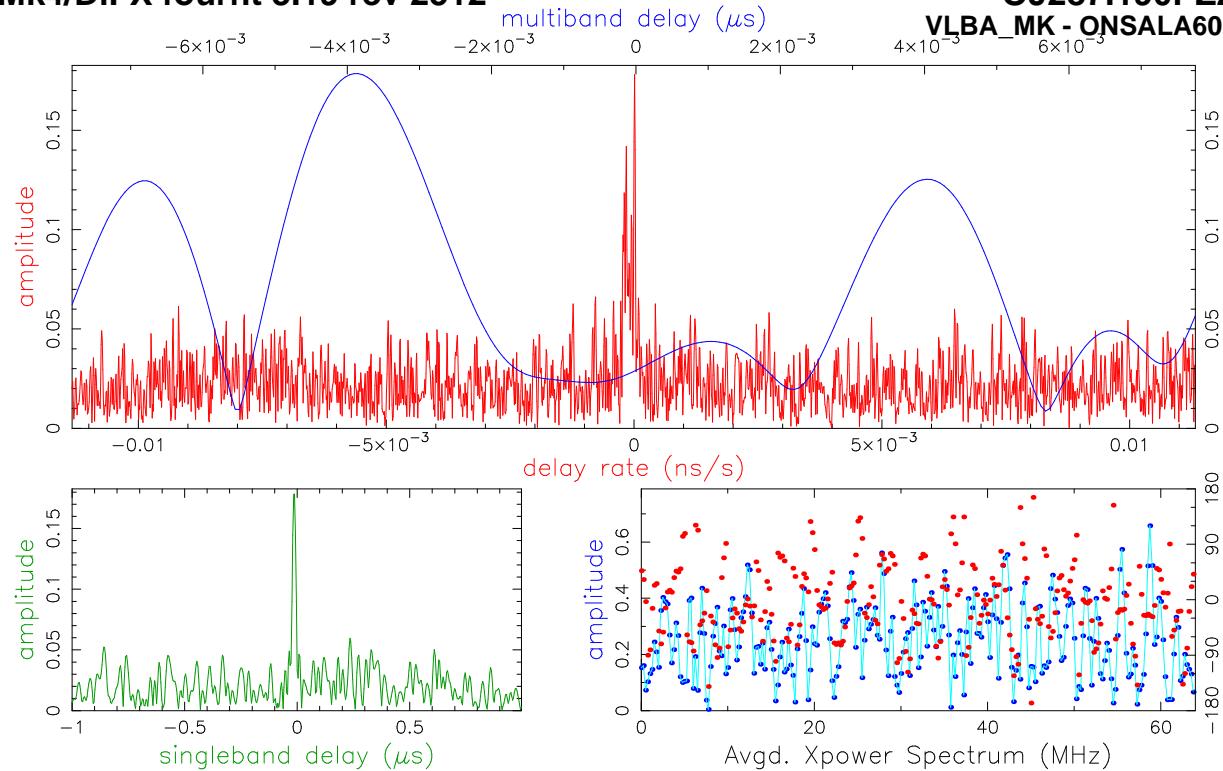
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-121.0	-145.1	-104.0	168.8	-158.8	-128.5	-165.4	-122.4	Phase	-140.0
	0.1	0.1	0.1	0.0	0.1	0.2	0.2	0.1	Ampl.	0.1
	336.7	6.7	341.0	398.2	411.5	53.9	388.1	312.2	Sbd box	53.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
p	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:p	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
p	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
p	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-1.23938794097E+04	Apriori delay (usec)	-1.23930878477E+04	Resid mbdelay (usec)	5.31305E-03	+/-	1.7E-04
Sband delay (usec)	-1.23938832537E+04	Apriori clock (usec)	-9.1546612E+00	Resid sbdelay (usec)	-7.95406E-01	+/-	1.4E-03
Phase delay (usec)	-1.23930878523E+04	Apriori clockrate (us/s)	2.8700000E-07	Resid phdelay (usec)	-4.51390E-06	+/-	5.9E-07
Delay rate (us/s)	6.92785535735E-01	Apriori rate (us/s)	6.92783937531E-01	Resid rate (us/s)	1.59820E-06	+/-	2.3E-09
Total phase (deg)	-213.5	Apriori accel (us/s/s)	5.71785389335E-05	Resid phase (deg)	-140.0	+/-	18.4

ph/seg (deg)	52.9	Theor.	44.1	Amplitude	0.110 +/- 0.018	Pcal mode:	MANUAL, MANUAL	PC period (AP's)	5, 5		
amp/seg (%)	72.6		77.0	Search (2048X32)	0.102	Pcal rate:	0.000E+00, 0.000E+00 (us/s)	sb window (us)	-1.000 1.000		
ph/frq (deg)	31.0		26.0	Interp.	0.000	Bits/sample:	2x2	SampCntNorm: enabled	mb window (us)	-0.008 0.008	
amp/frq (%)	33.7		45.4	Inc. seg. avg.	0.108	Sample rate (MSamp/s):	128	dr window (ns/s)	-0.011 0.011		
				Inc. frq. avg.	0.106	Data rate (Mb/s):	2048	nlags: 256	t_cohere infinite	ion window (TEC)	0.00 0.00

m: az 73.5 el 14.3 pa -73.7 p: az 106.4 el 56.6 pa -57.2 u,v (fr/asec) -4146.144 -213.371 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mp..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mp.W.224.190PZ2

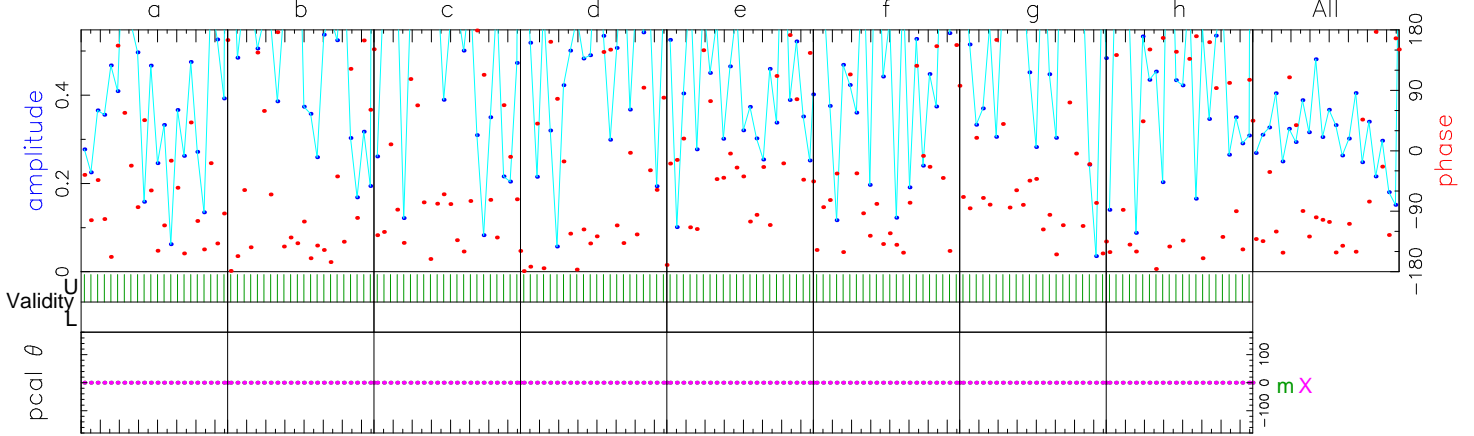


Fringe quality 9

SNR 10.5
Int time 439.583
Amp 0.183
Phase -116.5
PFD 5.1e-17
Delays (us)
SBD -0.013633
MBD -0.003793
Fringe rate (Hz) 0.001148
Ion TEC 0.000
Ref freq (MHz) 86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211945
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
	-73.1	-144.9	-100.8	-152.6	-37.4	-114.3	-79.6	-176.6	Phase	-116.5
	0.1	0.3	0.2	0.2	0.1	0.2	0.3	0.3	Ampl.	0.2
	28.4	253.7	253.1	253.8	301.6	253.7	253.2	252.2	Sbd box	253.5
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	-1.22686136608E+03		Apriori delay (usec)		-1.22684194845E+03		Resid mbdelay (usec)		-3.79263E-03	+/- 1.0E-04
Sband delay (usec)	-1.22685558145E+03		Apriori clock (usec)		-3.2658134E+01		Resid sbdelay (usec)		-1.36330E-02	+/- 8.2E-04
Phase delay (usec)	-1.22684195220E+03		Apriori clockrate (us/s)		-3.7000025E-08		Resid phdelay (usec)		-3.75597E-06	+/- 3.5E-07
Delay rate (us/s)	2.14032824968E+00		Apriori rate (us/s)		2.14032823635E+00		Resid rate (us/s)		1.33308E-08	+/- 1.4E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.31028536918E-05		Resid phase (deg)		-116.5	+/- 10.9

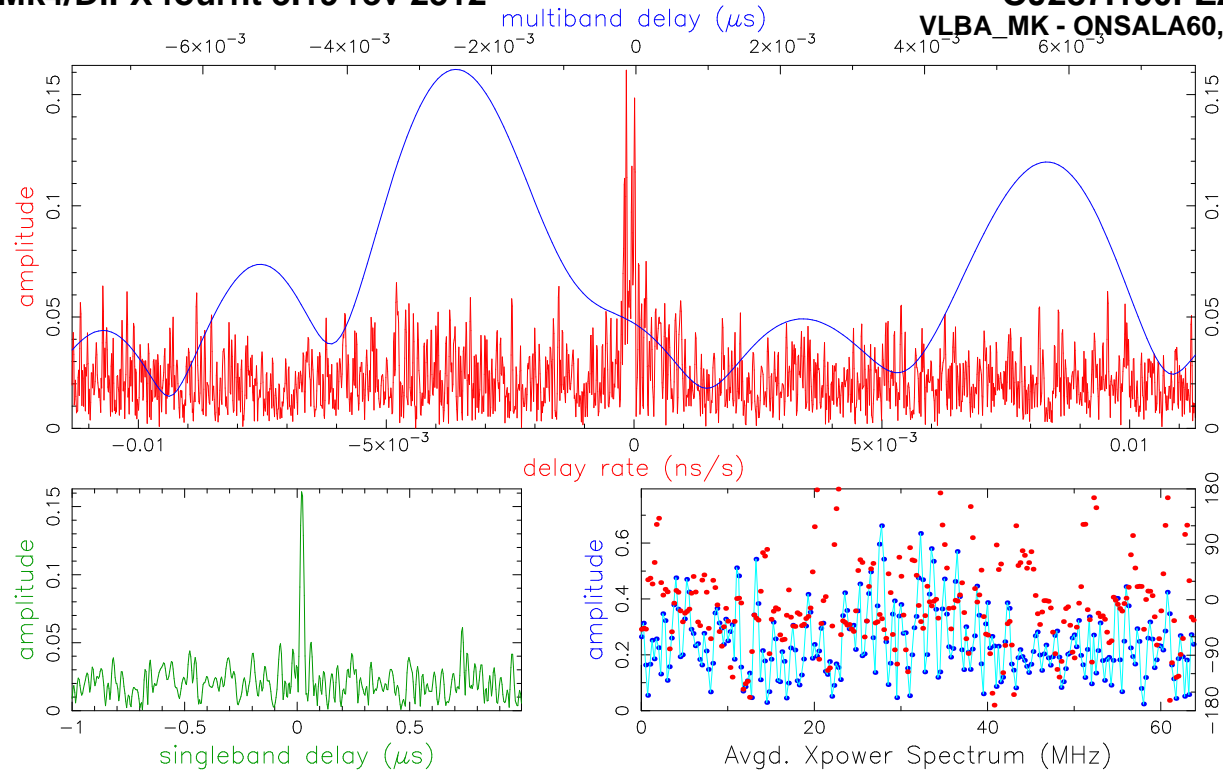
	RMS	Theor.	Amplitude	0.183 +/- 0.017	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5
ph/seg (deg)	68.3	26.2	Search (2048X32)	0.178	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000
amp/seg (%)	80.5	45.8	Interp.	0.000	Bits/sample: 2x2	mb window (us) -0.008 0.008
ph/frq (deg)	50.8	15.5	Inc. seg. avg.	0.279	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011
amp/frq (%)	42.0	27.0	Inc. frq. avg.	0.224	Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00

m: az 73.5 el 14.3 pa -73.7 X: az 277.7 el 19.0 pa 34.5 u,v (fr/asec) -13057.291 -4513.304 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mX..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mX.W.184.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mX
VLBA_MK - ONSALA60, fgroup W, pol RR

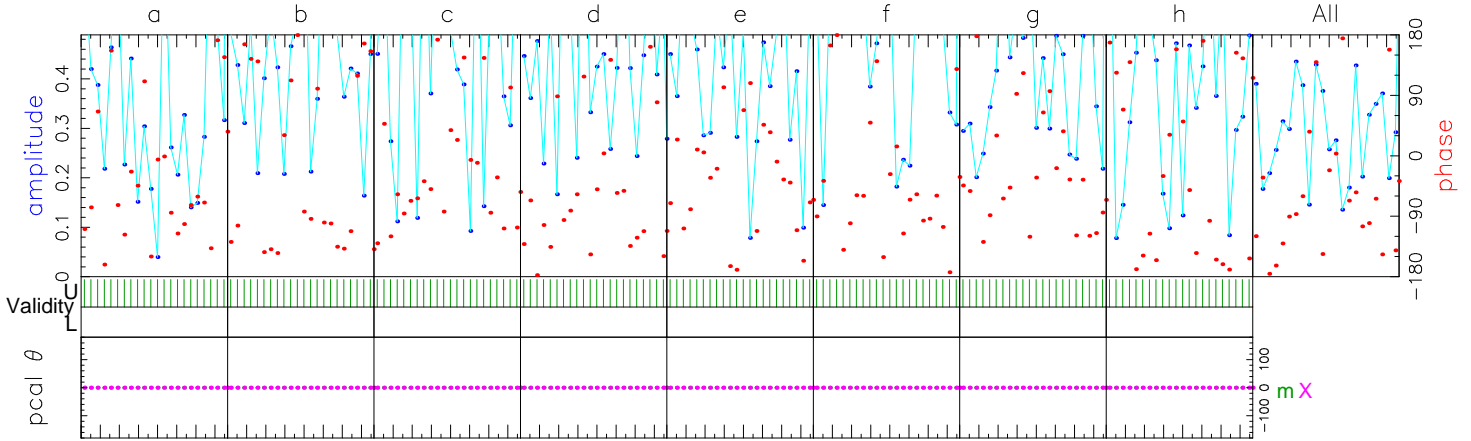


Fringe quality 9

SNR 9.4
Int time 439.583
Amp 0.163
Phase -105.8
PFD 3.5e-12
Delays (us)
SBD 0.021051
MBD -0.002414
Fringe rate (Hz)
-0.013401
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211951
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

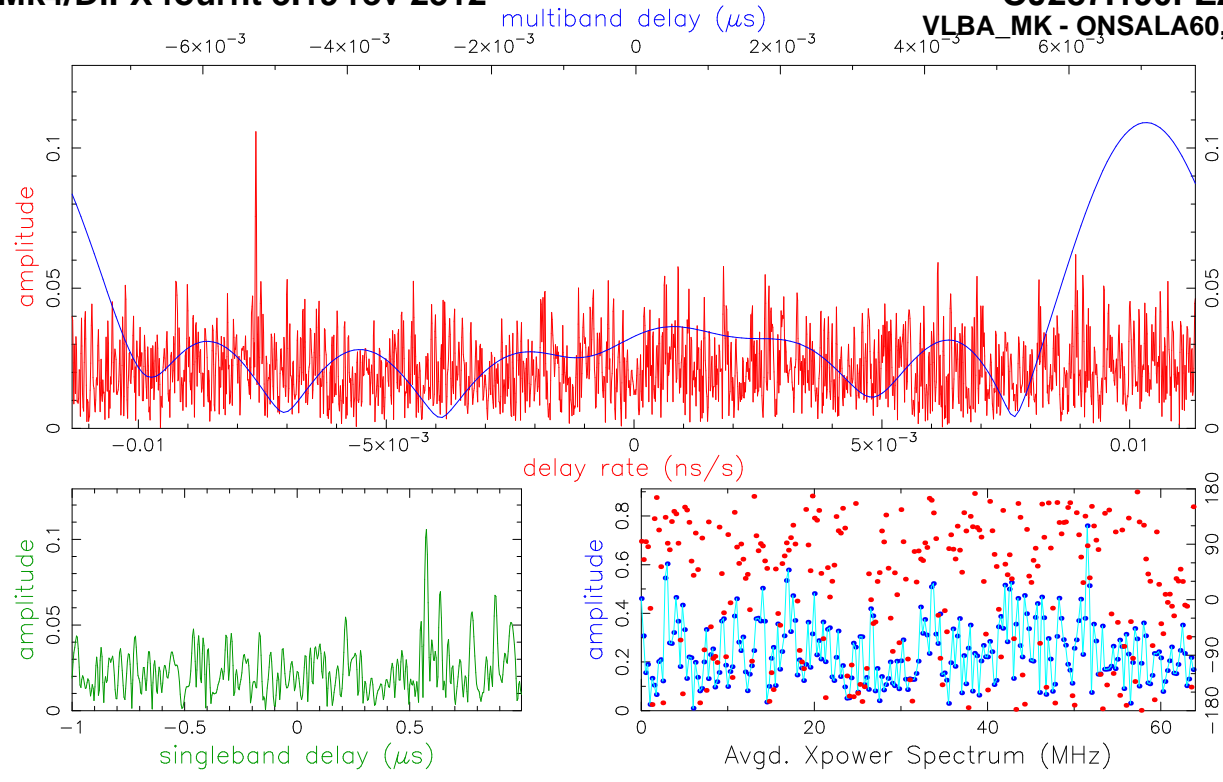


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-102.7	-143.9	-62.9	-119.1	-37.8	-106.4	-55.6	-161.6	Phase	-105.8
	0.1	0.3	0.2	0.2	0.2	0.3	0.1	0.3	Ampl.	0.2
	260.2	262.1	262.5	261.9	262.0	262.8	260.8	260.3	Sbd box	262.4
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Manl PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	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)	-1.22681311216E+03		Apriori delay (usec)		-1.22684194845E+03		Resid mbdelay (usec)		-2.41372E-03	+/- 1.2E-04
Sband delay (usec)	-1.22682089770E+03		Apriori clock (usec)		-3.2658134E+01		Resid sbdelay (usec)		2.10507E-02	+/- 9.2E-04
Phase delay (usec)	-1.22684195186E+03		Apriori clockrate (us/s)		-3.7000025E-08		Resid phdelay (usec)		-3.41272E-06	+/- 4.0E-07
Delay rate (us/s)	2.14032808077E+00		Apriori rate (us/s)		2.14032823635E+00		Resid rate (us/s)		-1.55573E-07	+/- 1.6E-09
Total phase (deg)			Apriori accel (us/s/s)		-1.31028536918E-05		Resid phase (deg)		-105.8	+/- 12.3

ph/seg (deg) 65.9 29.4 Search (2048X32) 0.160 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 98.5 51.3 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 47.8 17.3 Inc. seg. avg. 0.259 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 42.7 30.3 Inc. frq. avg. 0.200 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 73.5 el 14.3 pa -73.7 X: az 277.7 el 19.0 pa 34.5 u,v (fr/asec) -13057.291 -4513.304 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mX..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mX.W.208.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mX
VLBA_MK - ONSALA60, fgroup W, pol LR

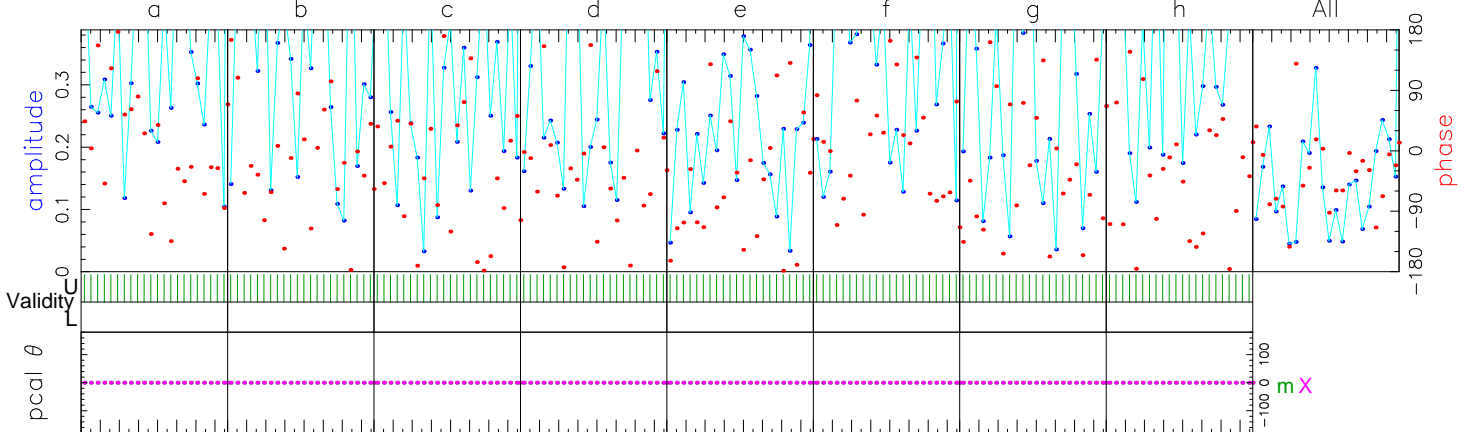


Fringe quality 0

SNR 6.1
Int time 439.583
Amp 0.129
Phase -35.7
PFD 2.3e-01
Delays (us)
SBD 0.573134
MBD -0.008301
Fringe rate (Hz)
-0.657943
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233000.00
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211956
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
	-4.8	-16.7	-17.5	-42.6	-83.6	-23.2	-59.2	-44.5	Phase	-35.7
	0.2	0.1	0.1	0.2	0.1	0.2	0.2	0.2	Ampl.	0.1
	502.3	225.8	277.0	74.2	323.1	150.4	325.2	312.8	Sbd box	403.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
X	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	

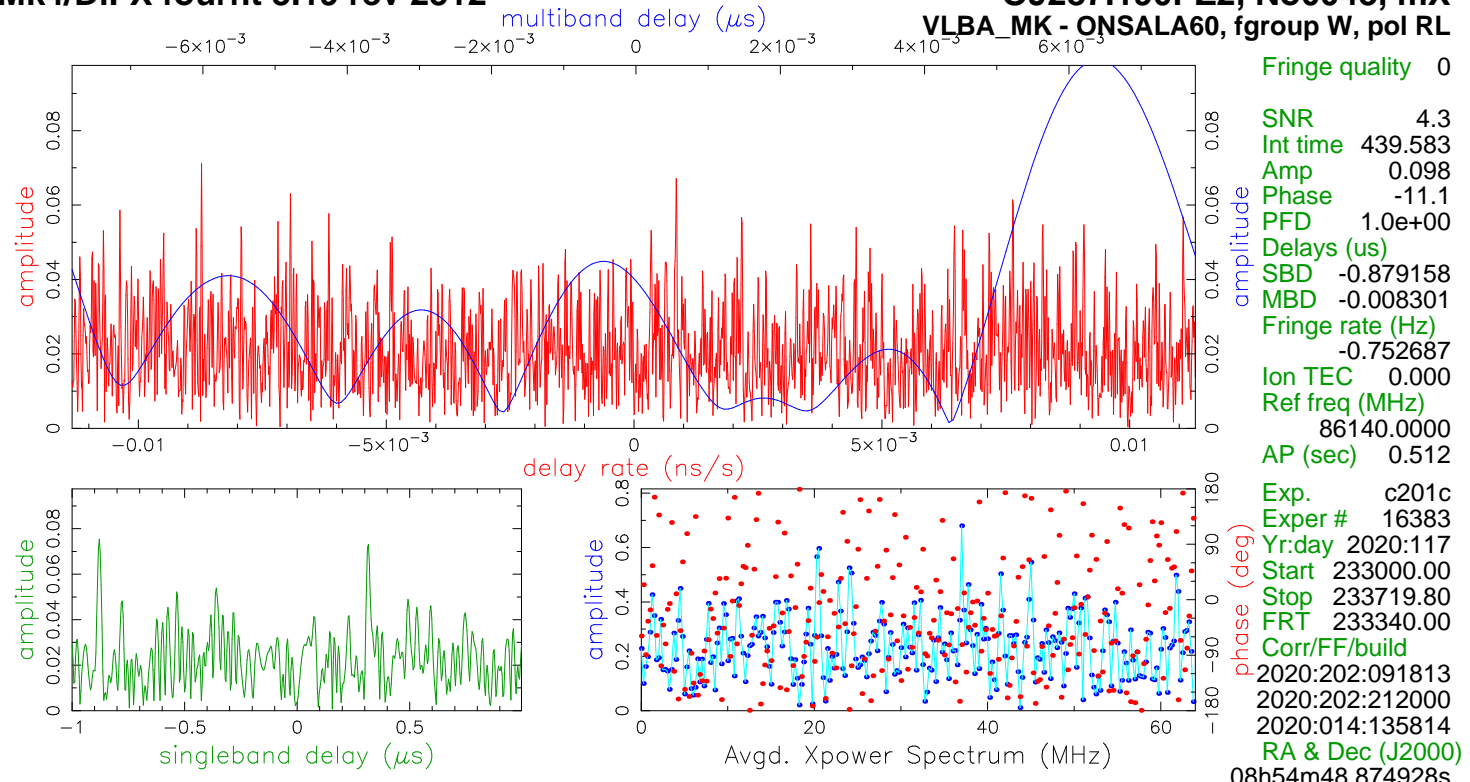
Group delay (usec)(sbd) -1.22627212423E+03 Apriori delay (usec) -1.22684194845E+03 Resid mbdelay (usec) -8.30078E-03 +/- 1.8E-04
 Sband delay (usec) -1.22626881495E+03 Apriori clock (usec) -3.2658134E+01 Resid sbdelay (usec) 5.73134E-01 +/- 1.4E-03
 Phase delay (usec) -1.22684194960E+03 Apriori clockrate (us/s) -3.7000025E-08 Resid phdelay (usec) -1.14993E-06 +/- 6.0E-07
 Delay rate (us/s) 2.14032059828E+00 Apriori rate (us/s) 2.14032823635E+00 Resid rate (us/s) -7.63806E-06 +/- 2.4E-09
 Total phase (deg) -193.8 Apriori accel (us/s/s) -1.31028536918E-05 Resid phase (deg) -35.7 +/- 18.7

RMS Theor. Amplitude 0.129 +/- 0.021 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 ph/seg (deg) 56.0 44.9 Search (2048X32) 0.107 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 amp/seg (%) 78.9 78.5 Interp. 0.000 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 ph/frq (deg) 28.2 26.5 Inc. seg. avg. 0.133 Sample rate(MISamp/s): 128 dr window (ns/s) -0.011 0.011
 amp/frq (%) 34.8 46.3 Inc. frq. avg. 0.125 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite ion window (TEC) 0.00 0.00

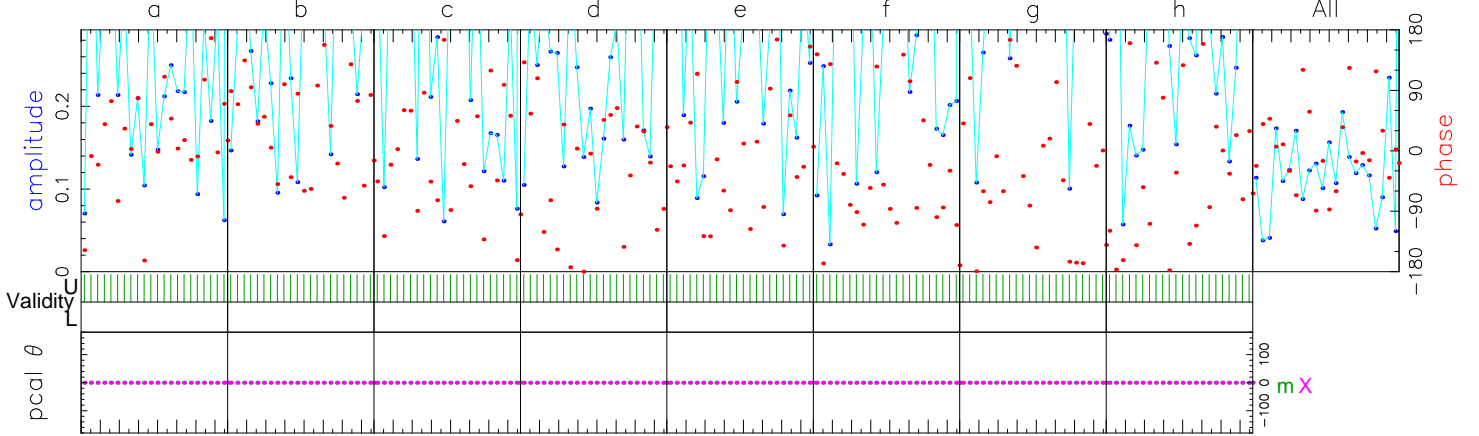
m: az 73.5 el 14.3 pa -73.7 X: az 277.7 el 19.0 pa 34.5 u,v (fr/asec) -13057.291 -4513.304 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mX..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mX.W.227.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mX
VLBA_MK - ONSALA60, fgroup W, pol RL



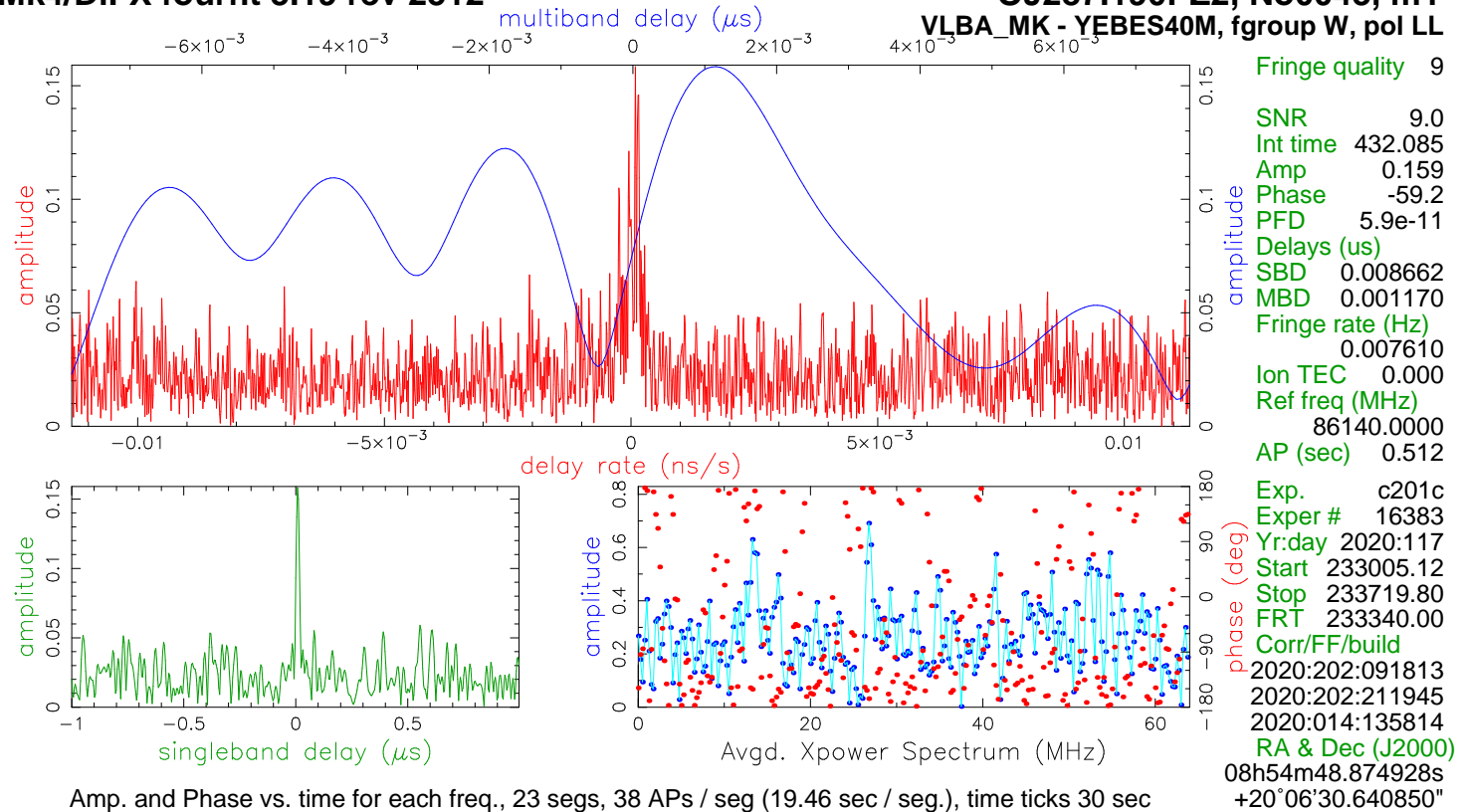
Amp. and Phase vs. time for each freq., 23 segs, 39 APs / seg (19.97 sec / seg.), time ticks 30 sec



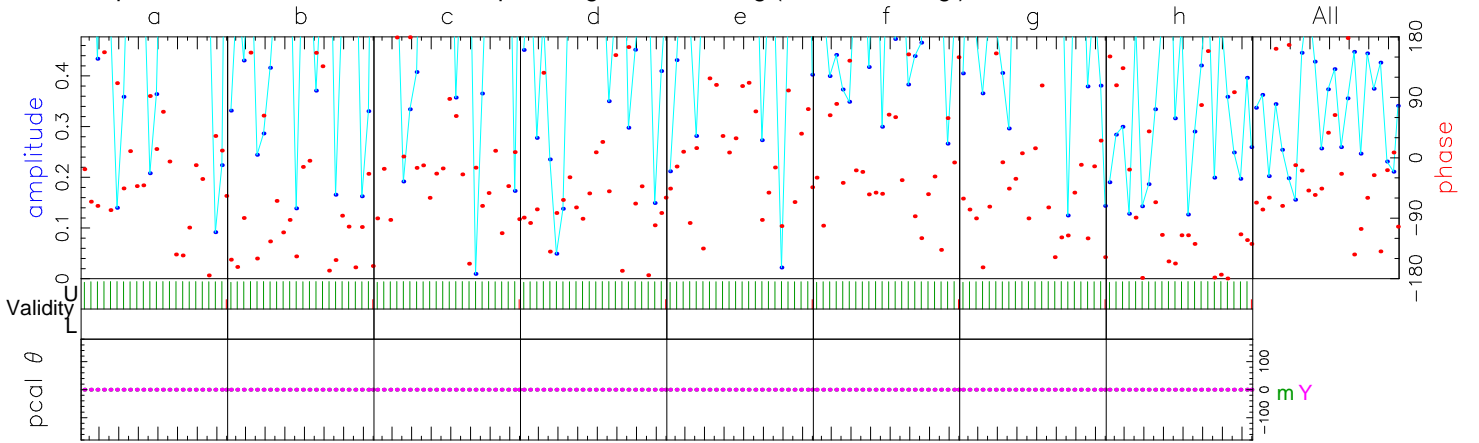
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
27.5	49.5	11.7	-24.5	-35.5	-68.3	-34.4	-159.9	-159.9	Phase	-11.1
0.2	0.1	0.2	0.1	0.1	0.2	0.1	0.1	0.1	Ampl.	0.1
32.1	87.4	187.3	335.7	275.9	203.3	498.9	384.6	384.6	Sbd box	31.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:X	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
X	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	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)	-1.22772524923E+03		Apriori delay (usec)	-1.22684194845E+03	Resid mbdelay (usec)	-8.30078E-03	+/-	2.5E-04		
Sband delay (usec)	-1.22772110607E+03		Apriori clock (usec)	-3.2658134E+01	Resid sbdelay (usec)	-8.79158E-01	+/-	2.0E-03		
Phase delay (usec)	-1.22684194880E+03		Apriori clockrate (us/s)	-3.7000025E-08	Resid phdelay (usec)	-3.58081E-07	+/-	8.5E-07		
Delay rate (us/s)	2.14031949840E+00		Apriori rate (us/s)	2.14032823635E+00	Resid rate (us/s)	-8.73795E-06	+/-	3.4E-09		
Total phase (deg)		-169.2	Apriori accel (us/s/s)	-1.31028536918E-05	Resid phase (deg)	-11.1	+/-	26.5		
RMS	62.6	63.6	Search (2048X32)	0.099	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000	
ph/seg (deg)	62.6	63.6	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	SampCntNorm: enabled	mb window (us)	-0.008	0.008	
amp/seg (%)	91.2	110.9	Inc. seg. avg.	0.095	Bits/sample: 2x2	Sample rate(MISamp/s): 128	dr window (ns/s)	-0.011	0.011	
ph/frq (deg)	73.5	37.5	Inc. frq. avg.	0.116	Data rate(Mb/s): 2048	nlags: 256	ion window (TEC)	0.00	0.00	
amp/frq (%)	67.4	65.4								

m: az 73.5 el 14.3 pa -73.7 X: az 277.7 el 19.0 pa 34.5 u,v (fr/asec) -13057.291 -4513.304 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mX..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mX.W.246.190PZ2



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
	-45.9	-127.5	-44.9	-80.4	37.8	-33.0	-55.8	-156.5	Phase	-59.2
	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2	Ampl.	0.2
	258.3	258.1	258.9	258.9	258.8	259.0	258.9	256.4	Sbd box	259.2
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-3.95173437662E+03		Apriori delay (usec)	-3.95173554625E+03	Resid mbdelay (usec)	1.16963E-03	+/-	1.2E-04		
Sband delay (usec)	-3.95172688400E+03		Apriori clock (usec)	-3.8437462E+00	Resid sbdelay (usec)	8.66225E-03	+/-	9.5E-04		
Phase delay (usec)	-3.95173554816E+03		Apriori clockrate (us/s)	2.7099999E-07	Resid phdelay (usec)	-1.90985E-06	+/-	4.1E-07		
Delay rate (us/s)	2.40822692211E+00		Apriori rate (us/s)	2.40822683376E+00	Resid rate (us/s)	8.83415E-08	+/-	1.6E-09		
Total phase (deg)		-42.7	Apriori accel (us/s/s)	8.99309902825E-06	Resid phase (deg)	-59.2	+/-	12.7		

	RMS	Theor.	Amplitude	0.159 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	68.9	30.4	Search (2048X32)	0.157	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	126.7	53.0	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	64.6	17.9	Inc. seg. avg.	0.292	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	57.1	31.3	Inc. frq. avg.	0.233	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

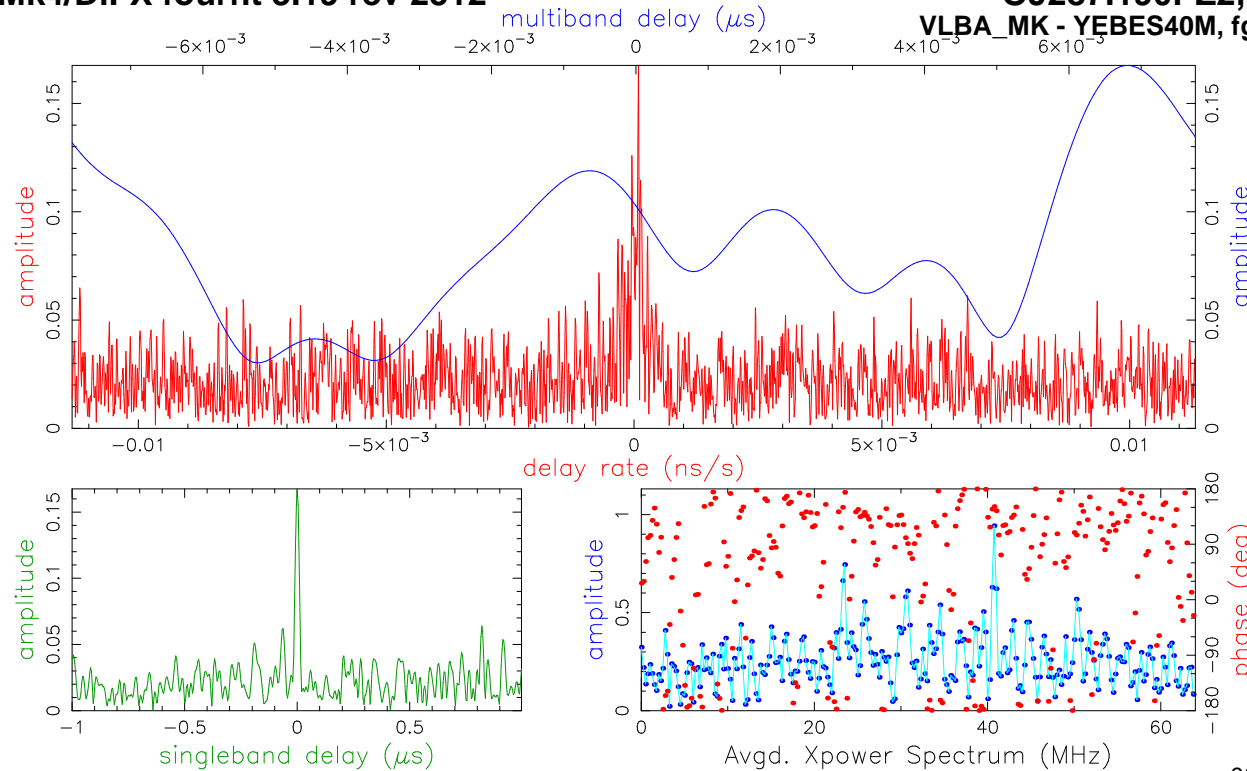
m: az 73.5 el 14.3 pa -73.7 Y: az 273.9 el 27.2 pa 53.9 u,v (fr/asec) -14664.106 -2268.318 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mY..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mY.W.183.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190PZ2, No0043, mY

VLBA_MK - YEBES40M, fgroup W, pol RR

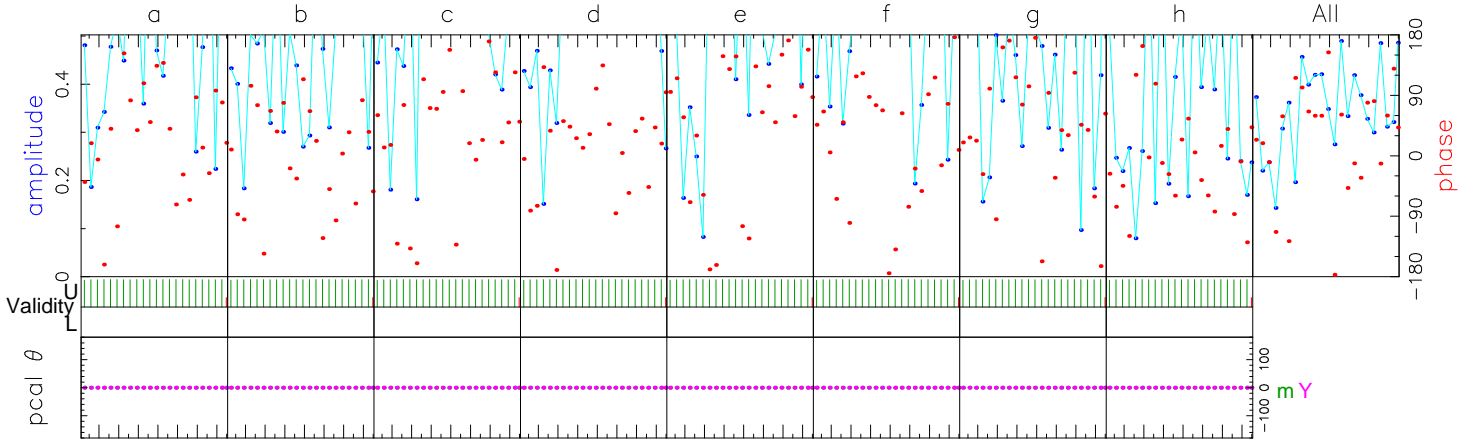


Fringe quality 9

SNR 9.5
 Int time 432.085
 Amp 0.168
 Phase 51.4
 PFD 6.8e-13
 Delays (us)
 SBD -0.000003
 MBD 0.006810
 Fringe rate (Hz) 0.007333
 Ion TEC 0.000
 Ref freq (MHz) 86140.0000
 AP (sec) 0.512

Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233005.12
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:211950
 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



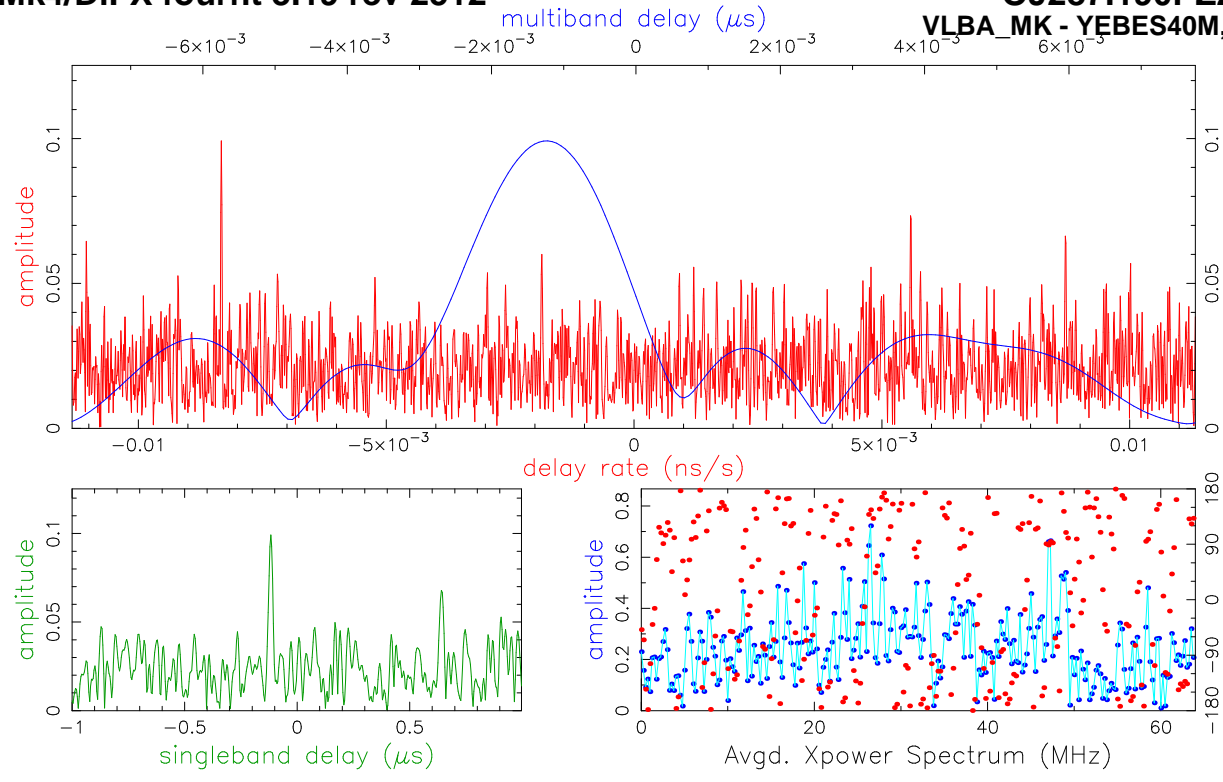
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0		
m	1000	1000	1000	1000	1000	1000	1000	1000		
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR		
Group delay (usec)(sbd)	-3.95172873655E+03								6.80970E-03	+/- 1.1E-04
Sband delay (usec)	-3.95173554900E+03								-2.75000E-06	+/- 9.0E-04
Phase delay (usec)	-3.95173554459E+03								1.65651E-06	+/- 3.9E-07
Delay rate (us/s)	2.40822691889E+00								8.51254E-08	+/- 1.5E-09
Total phase (deg)			-292.1						51.4	+/- 12.0
Apriori delay (usec)					-3.95173554625E+03					
Apriori clock (usec)					-3.8437462E+00					
Apriori clockrate (us/s)					2.7099999E-07					
Apriori rate (us/s)					2.40822683376E+00					
Apriori accel (us/s/s)					8.99309902825E-06					
Resid mbdelay (usec)										
Resid sbdelay (usec)										
Resid phdelay (usec)										
Resid rate (us/s)										
Resid phase (deg)										
Pcal mode: MANUAL, MANUAL										
Pcal rate: 0.000E+00, 0.000E+00 (us/s)										
Bits/sample: 2x2										
Sample rate(MISamp/s): 128										
Data rate(Mb/s): 2048										
PC period (AP's) 5, 5										
sb window (us)									-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

m: az 73.5 el 14.3 pa -73.7 Y: az 273.9 el 27.2 pa 53.9 u,v (fr/asec) -14664.106 -2268.318 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mY..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mY.W.203.190PZ2

Mk4/DiFX fourfit 3.19 rev 2512

OJ287.190P22, No0043, mY
VLBA_MK - YEYES40M, fgroup W, pol LR

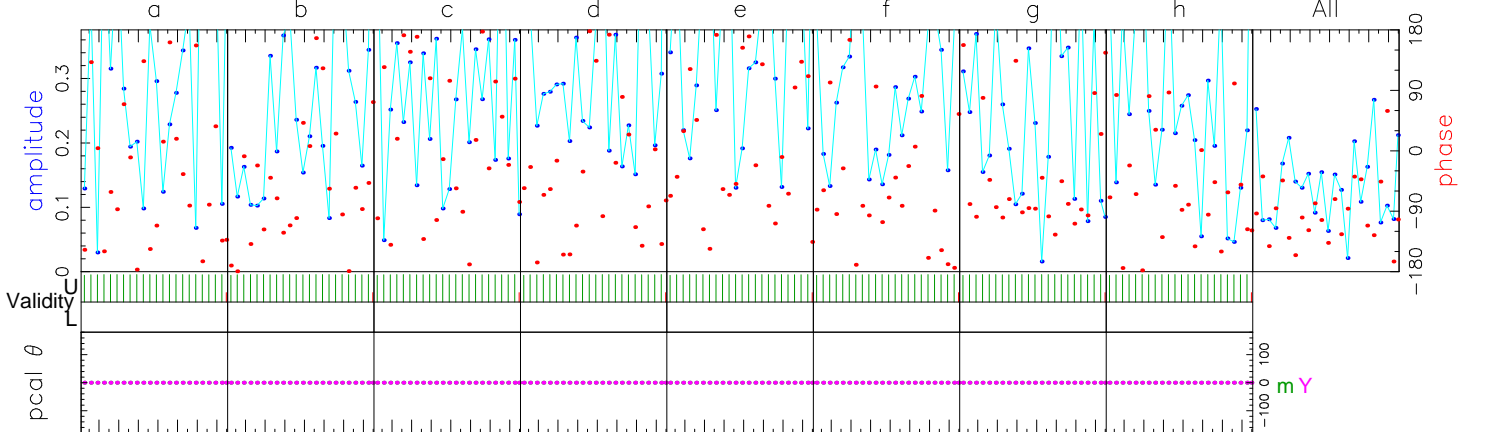


Fringe quality 0

SNR 5.6
Int time 432.085
Amp 0.125
Phase -97.6
PFD 9.8e-01
Delays (us)
SBD -0.117070
MBD -0.001239
Fringe rate (Hz)
-0.717882
Ion TEC 0.000
Ref freq (MHz)
86140.0000
AP (sec) 0.512

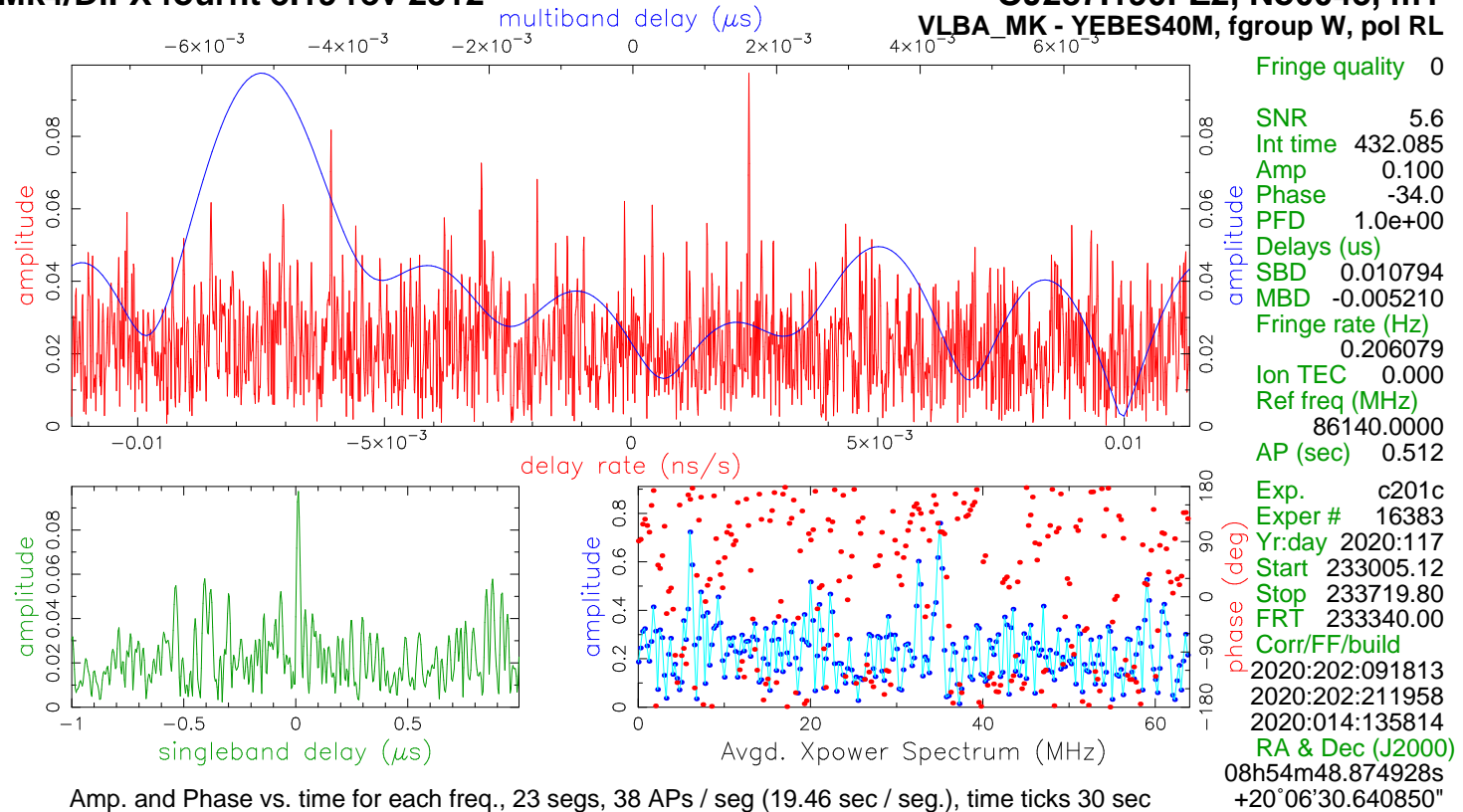
Exp. c201c
Exper # 16383
Yr:day 2020:117
Start 233005.12
Stop 233719.80
FRT 233340.00
Corr/FF/build
2020:202:091813
2020:202:211954
2020:014:135814
RA & Dec (J2000)
08h54m48.874928s
+20°06'30.640850"

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

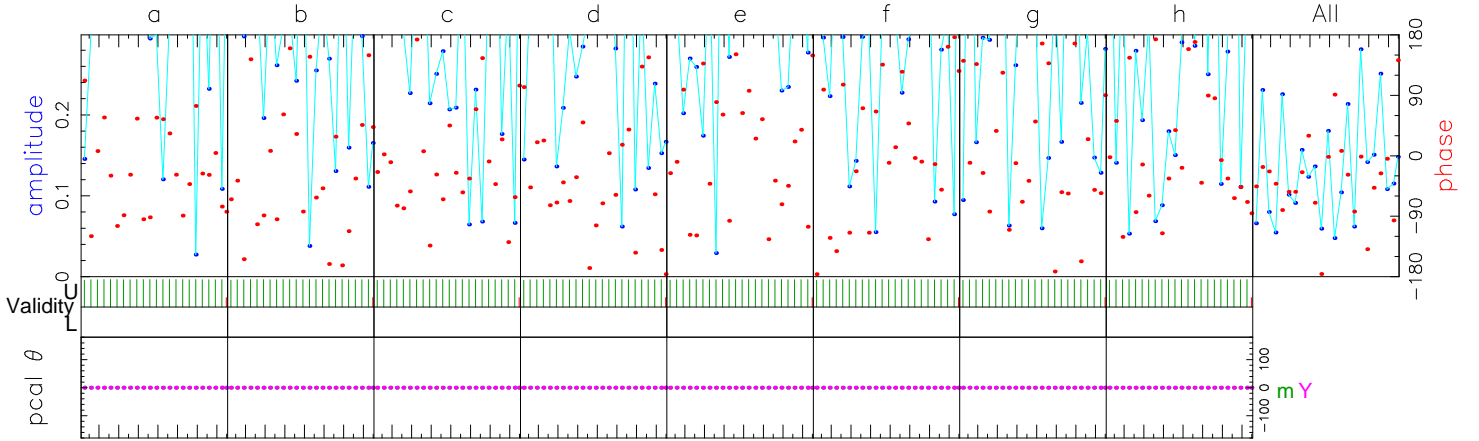


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-114.9	-80.7	-107.1	-89.7	-97.3	-106.0	-91.0	-106.9	Phase	-97.6
	0.1	0.1	0.0	0.2	0.1	0.1	0.2	0.1	Ampl.	0.1
	500.9	23.8	217.5	228.2	123.4	329.1	48.4	509.8	Sbd box	227.0
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
Y	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.95184615996E+03		Apriori delay (usec)		-3.95173554625E+03		Resid mbdelay (usec)		-1.23871E-03	+/- 1.9E-04
Sband delay (usec)	-3.95185261650E+03		Apriori clock (usec)		-3.8437462E+00		Resid sbdelay (usec)		-1.17070E-01	+/- 1.5E-03
Phase delay (usec)	-3.95173554940E+03		Apriori clockrate (us/s)		2.7099999E-07		Resid phdelay (usec)		-3.14736E-06	+/- 6.6E-07
Delay rate (us/s)	2.40821849987E+00		Apriori rate (us/s)		2.40822683376E+00		Resid rate (us/s)		-8.33390E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		8.99309902825E-06		Resid phase (deg)		-97.6	+/- 20.3

ph/seg (deg) 50.1 48.7 Search (2048X32) 0.096 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 70.4 85.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 12.5 28.7 Inc. seg. avg. 0.123 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 41.7 50.2 Inc. frq. avg. 0.113 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 m: az 73.5 el 14.3 pa -73.7 Y: az 273.9 el 27.2 pa 53.9 u,v (fr/asec) -14664.106 -2268.318 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mY..190P22 Output file: /Exps/c201c/v1/1234/No0043/mY.W.221.190P22



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

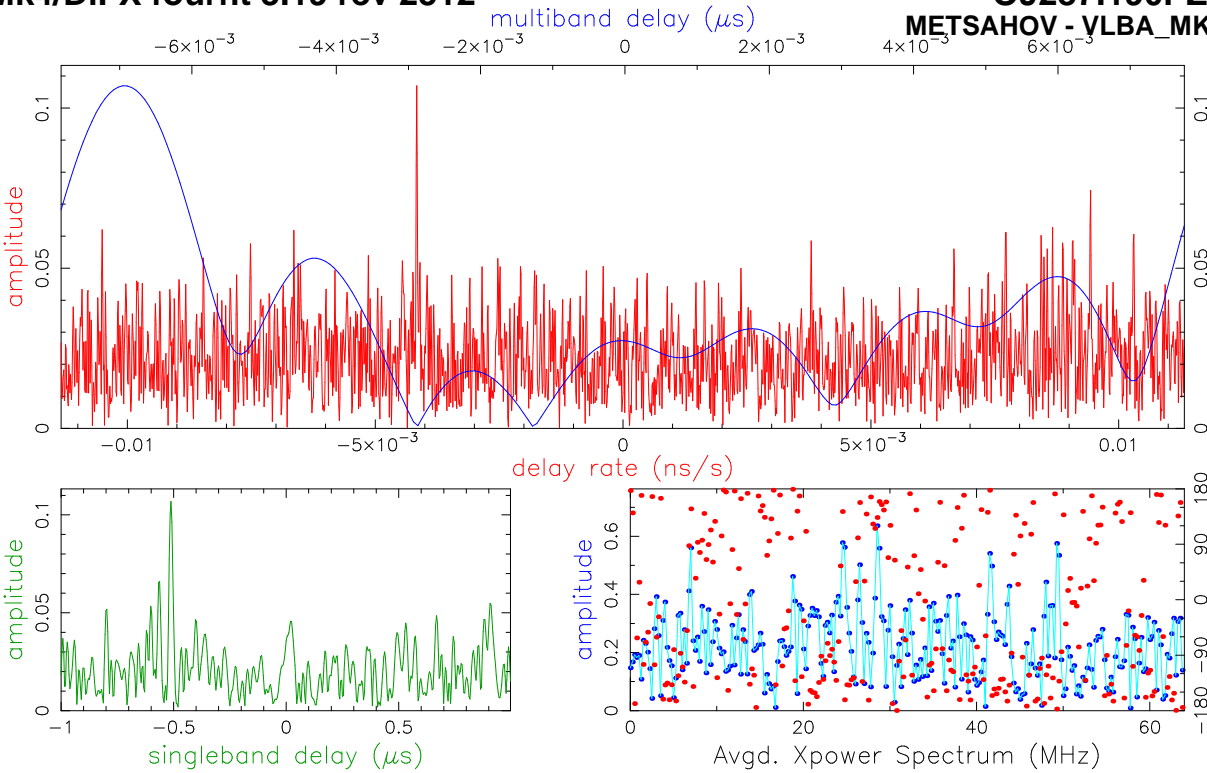


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-29.5	-77.1	-35.1	-30.5	18.2	162.3	-23.6	-43.5	Phase	-34.0
	0.2	0.1	0.2	0.1	0.1	0.0	0.1	0.1	Ampl.	0.1
	257.8	289.4	261.0	452.8	154.8	222.9	276.4	118.0	Sbd box	259.8
U/L	849/0	849/0	849/0	849/0	849/0	849/0	849/0	849/0	APs used	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Y	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
m:Y	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
Y	1000	1000	1000	1000	1000	1000	1000	1000		
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
Y	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	
									Tracks	
Group delay (usec)(sbd)	-3.95172513100E+03		Apriori delay (usec)		-3.95173554625E+03		Resid mbdelay (usec)		-5.20975E-03	+/- 2.0E-04
Sband delay (usec)	-3.95172475175E+03		Apriori clock (usec)		-3.8437462E+00		Resid sbdelay (usec)		1.07945E-02	+/- 1.5E-03
Phase delay (usec)	-3.95173554735E+03		Apriori clockrate (us/s)		2.7099999E-07		Resid phdelay (usec)		-1.09500E-06	+/- 6.6E-07
Delay rate (us/s)	2.40822922614E+00		Apriori rate (us/s)		2.40822683376E+00		Resid rate (us/s)		2.39238E-06	+/- 2.6E-09
Total phase (deg)			Apriori accel (us/s/s)		8.99309902825E-06		Resid phase (deg)		-34.0	+/- 20.6

	RMS	Theor.	Amplitude	0.100 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
ph/seg (deg)	59.0	49.4	Search (2048X32)	0.094	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
amp/seg (%)	78.3	86.2	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
ph/frq (deg)	72.6	29.1	Inc. seg. avg.	0.101	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
amp/frq (%)	61.6	50.9	Inc. frq. avg.	0.098	Data rate(Mb/s): 2048	nlags: 256 t_cohere infinite			

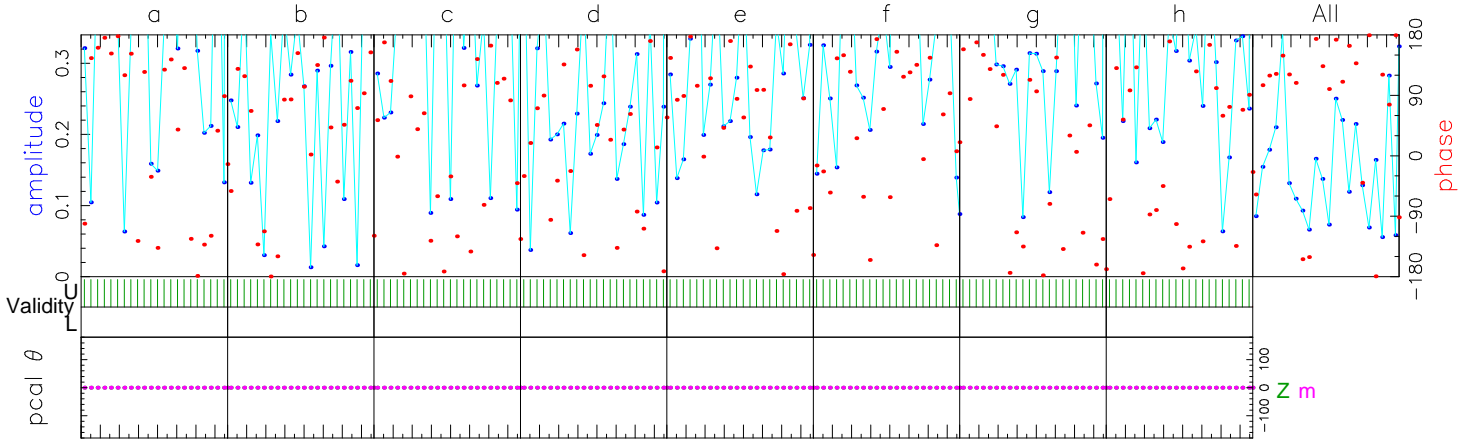
m: az 73.5 el 14.3 pa -73.7 Y: az 273.9 el 27.2 pa 53.9 u,v (fr/asec) -14664.106 -2268.318 simultaneous interpolator

Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/mY..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/mY.W.236.190PZ2



Fringe quality 0
 SNR 6.1
 Int time 439.381
 Amp 0.113
 Phase 138.1
 PFD 2.0e-01
 Delays (us)
 SBD -0.512254
 MBD -0.006949
 Fringe rate (Hz)
 -0.359188
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:212005
 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

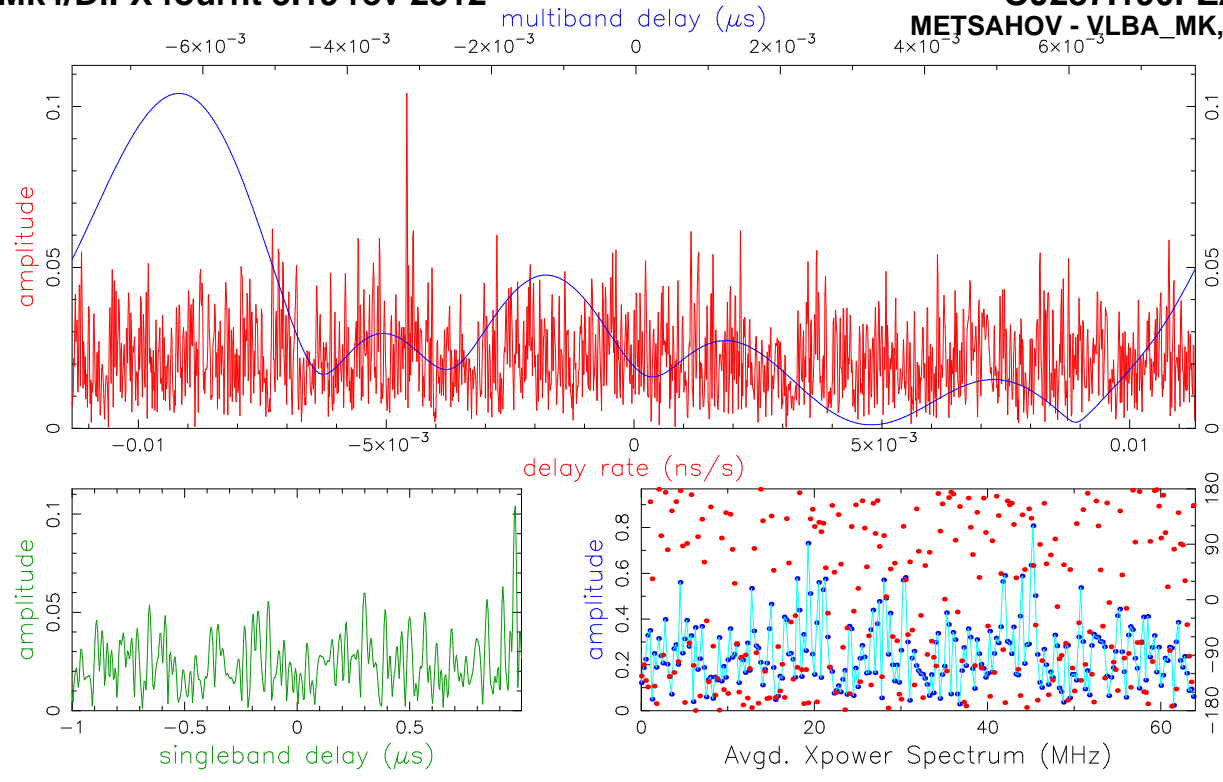


	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	159.6	117.4	129.7	76.4	131.1	122.1	143.4	163.8	Phase	138.1
	0.2	0.1	0.1	0.0	0.1	0.1	0.1	0.1	Ampl.	0.1
	126.2	450.1	101.2	481.9	162.6	386.1	389.3	369.8	Sbd box	125.9
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	Mani PC	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC amp	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.34481594421E+02	Apriori delay (usec)	-8.33974645087E+02	Resid mbdelay (usec)	-6.94933E-03	+/-	1.8E-04
Sband delay (usec)	-8.34486899087E+02	Apriori clock (usec)	-8.2525892E+00	Resid sbdelay (usec)	-5.12254E-01	+/-	1.4E-03
Phase delay (usec)	-8.33974640633E+02	Apriori clockrate (us/s)	-4.7499998E-07	Resid phdelay (usec)	4.45403E-06	+/-	6.0E-07
Delay rate (us/s)	-2.07072496320E+00	Apriori rate (us/s)	-2.07072079339E+00	Resid rate (us/s)	-4.16981E-06	+/-	2.4E-09
Total phase (deg)	-195.9	Apriori accel (us/s/s)	2.48321146110E-05	Resid phase (deg)	138.1	+/-	18.7

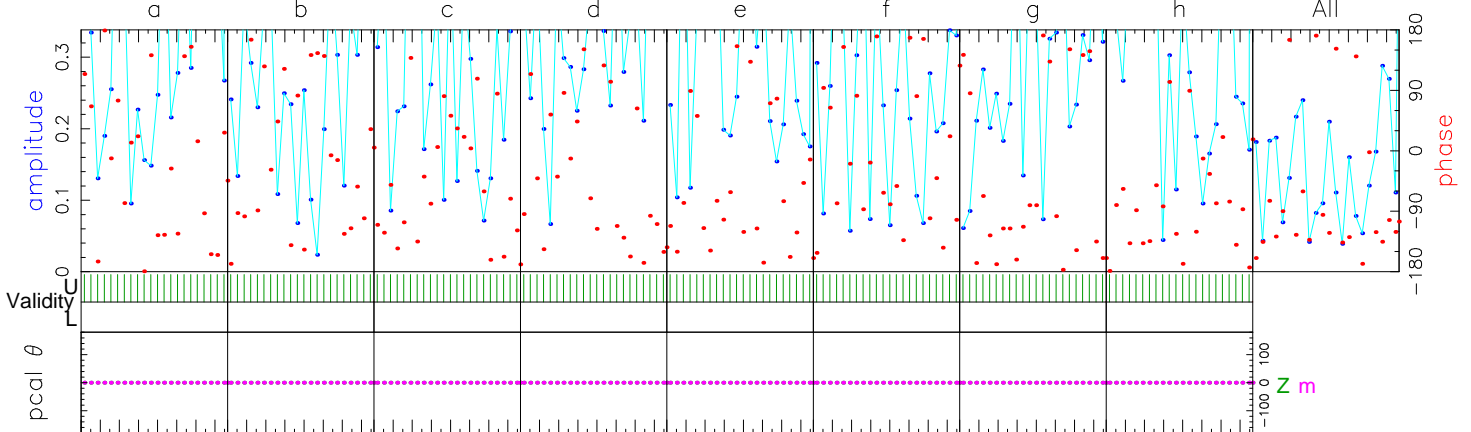
ph/seg (deg)	62.7	Theor.	44.8	Amplitude	0.113 +/- 0.018	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	sb window (us)	-1.000	1.000
amp/seg (%)	82.0		78.1	Search (2048X32)	0.101	Pcal rate: 0.000E+00, 0.000E+00 (us/s)		mb window (us)	-0.008	0.008
ph/frq (deg)	31.0		26.4	Interp.	0.000	Bits/sample: 2x2	SampCntNorm: enabled	dr window (ns/s)	-0.011	0.011
amp/frq (%)	41.5		46.1	Inc. seg. avg.	0.122	Sample rate(MISamp/s): 128		ion window (TEC)	0.00	0.00
				Inc. frq. avg.	0.109	Data rate(Mb/s): 2048	nlags: 256	t_cohere infinite		

Z: az 287.2 el 13.3 pa 30.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 12647.835 5064.032 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Zm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/Zm.W.259.190PZ2



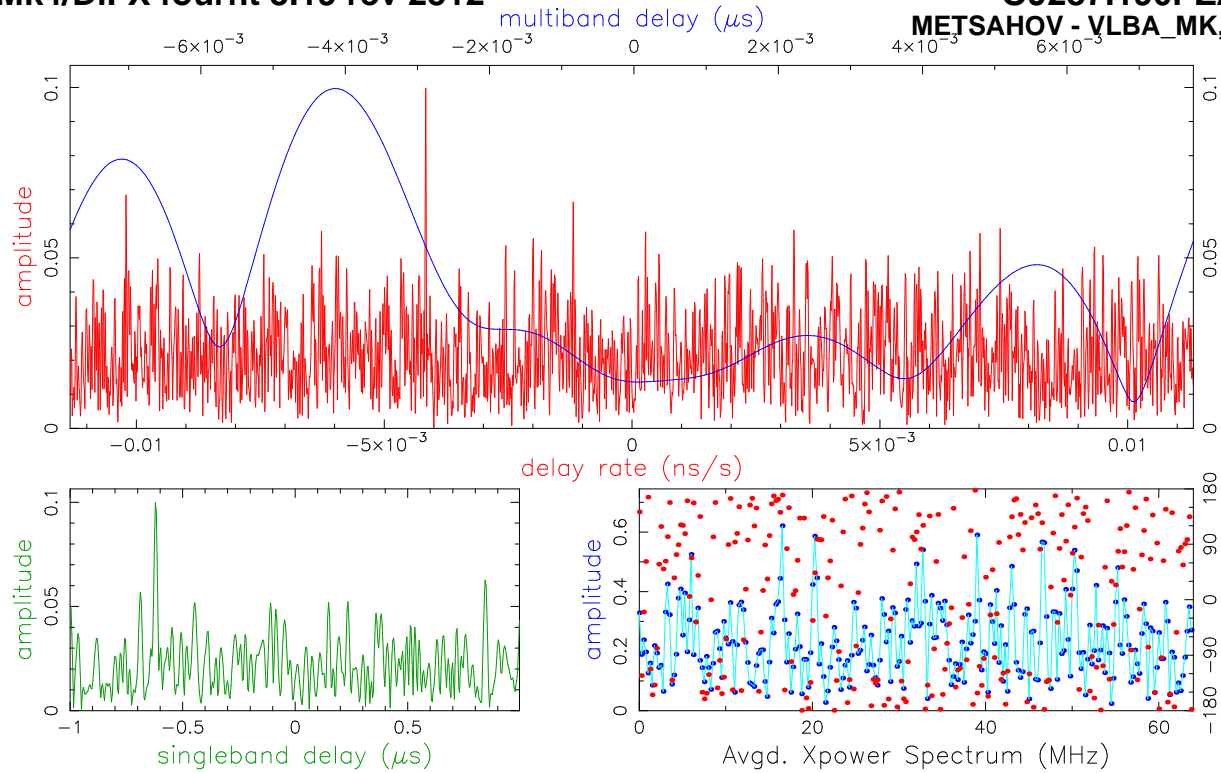
Fringe quality 0
 SNR 6.0
 Int time 439.381
 Amp 0.113
 Phase -123.3
 PFD 3.3e-01
 Delays (us)
 SBD 0.967459
 MBD -0.006356
 Fringe rate (Hz)
 -0.395005
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:212009
 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



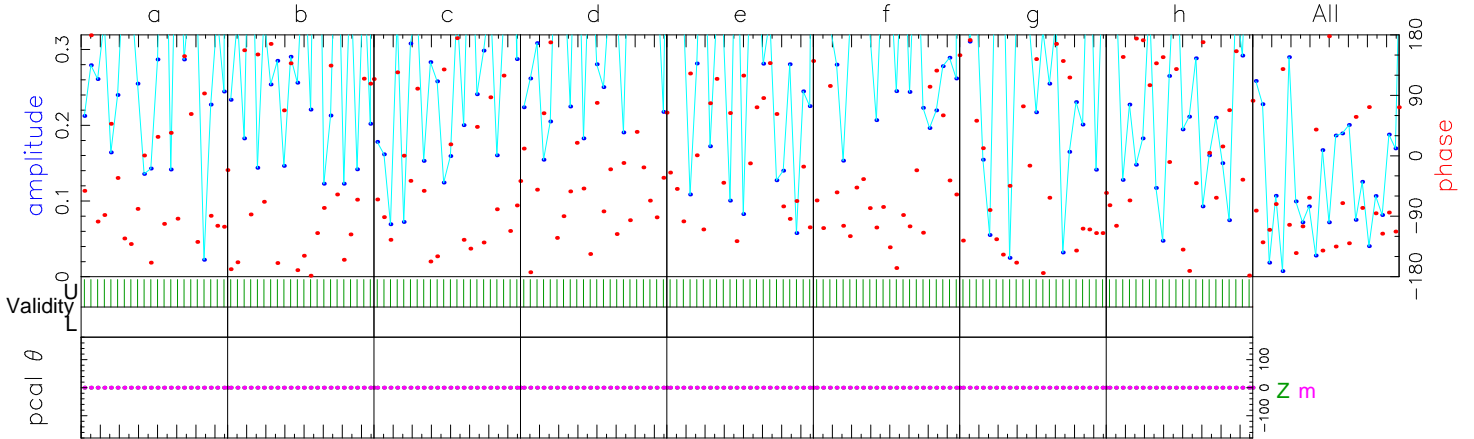
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-169.2	-96.9	-107.7	-117.0	-122.1	-111.4	-148.4	-106.1	Phase	-123.3
	0.1	0.1	0.1	0.1	0.2	0.1	0.2	0.2	Ampl.	0.1
	8.3	382.5	159.0	166.1	12.9	339.6	504.6	88.9	Sbd box	504.7
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Chan ids	
									Tracks	
Group delay (usec)(sbd)	-8.33012251092E+02		Apriori delay (usec)		-8.33974645087E+02		Resid mbdelay (usec)		-6.35601E-03	+/- 1.8E-04
Sband delay (usec)	-8.33007185837E+02		Apriori clock (usec)		-8.2525892E+00		Resid sbdelay (usec)		9.67459E-01	+/- 1.4E-03
Phase delay (usec)	-8.33974649064E+02		Apriori clockrate (us/s)		-4.7499998E-07		Resid phdelay (usec)		-3.97695E-06	+/- 6.1E-07
Delay rate (us/s)	-2.07072537900E+00		Apriori rate (us/s)		-2.07072079339E+00		Resid rate (us/s)		-4.58561E-06	+/- 2.4E-09
Total phase (deg)			Apriori accel (us/s/s)		2.48321146110E-05		Resid phase (deg)		-123.3	+/- 19.0

ph/seg (deg) 49.1 45.5 Search (2048X32) 0.101 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 78.5 79.4 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 26.3 26.8 Inc. seg. avg. 0.114 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 45.7 46.8 Inc. frq. avg. 0.107 Sample rate(MISamp/s): 128 Data rate(Mb/s): 2048 nlags: 256 t_cohere infinite dr window (ns/s) -0.011 0.011
 Z: az 287.2 el 13.3 pa 30.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 12647.835 5064.032 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Zm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/Zm.W.278.190PZ2



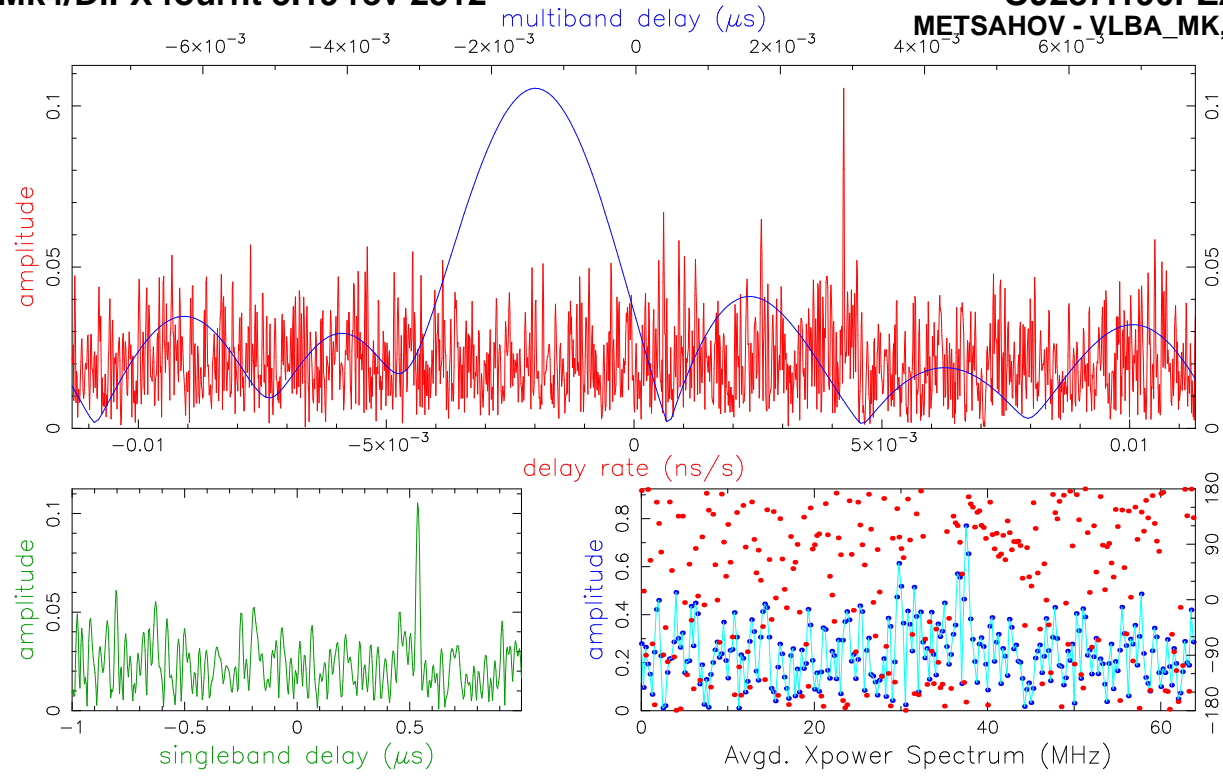
Fringe quality 0
 SNR 5.8
 Int time 439.381
 Amp 0.106
 Phase -105.1
 PFD 8.6e-01
 Delays (us)
 SBD -0.619902
 MBD -0.004145
 Fringe rate (Hz)
 -0.359485
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:212013
 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



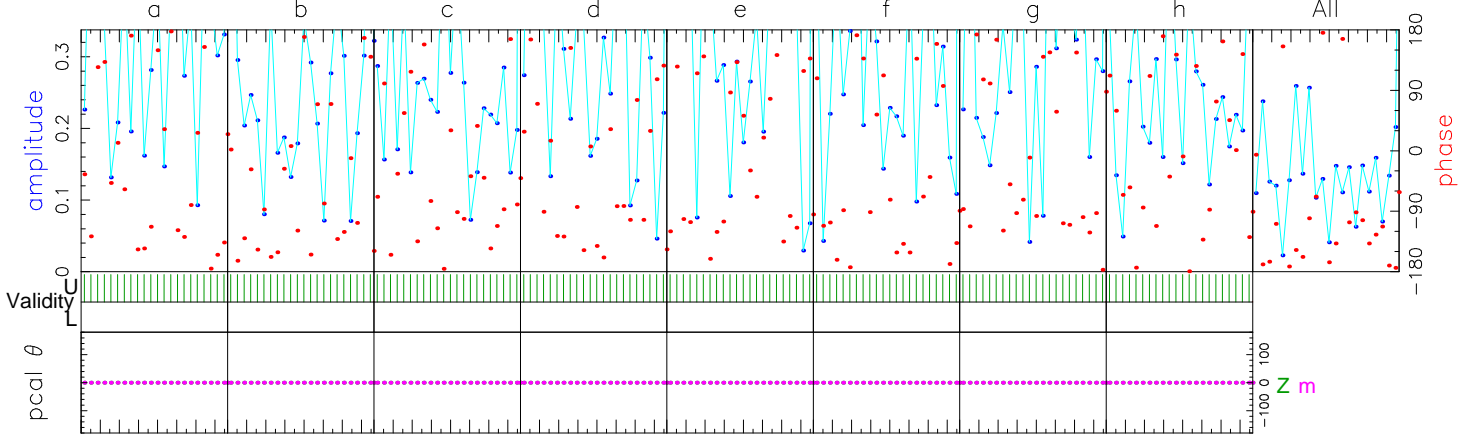
	86012.00	86076.00	86140.00	86204.00	86268.00	86332.00	86396.00	86460.00	Freq (MHz)	All
	-98.3	-145.4	-140.6	-59.1	-46.4	-78.8	-138.2	-155.5	Phase	-105.1
	0.2	0.2	0.1	0.2	0.1	0.2	0.2	0.1	Ampl.	0.1
	97.2	97.5	174.6	99.4	354.8	98.5	387.5	5.6	Sbd box	98.3
U/L	859/0	859/0	859/0	859/0	859/0	859/0	859/0	859/0	APs used	
Z	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Chan ids	
m	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Tracks	
									Tracks	
Group delay (usec)(sbd)	-8.34588164984E+02		Apriori delay (usec)		-8.33974645087E+02		Resid mbdelay (usec)		-4.14490E-03	+/- 1.9E-04
Sband delay (usec)	-8.34594546837E+02		Apriori clock (usec)		-8.2525892E+00		Resid sbdelay (usec)		-6.19902E-01	+/- 1.5E-03
Phase delay (usec)	-8.33974648477E+02		Apriori clockrate (us/s)		-4.7499998E-07		Resid phdelay (usec)		-3.39018E-06	+/- 6.4E-07
Delay rate (us/s)	-2.07072496665E+00		Apriori rate (us/s)		-2.07072079339E+00		Resid rate (us/s)		-4.17326E-06	+/- 2.5E-09
Total phase (deg)			Apriori accel (us/s/s)		2.48321146110E-05		Resid phase (deg)		-105.1	+/- 19.9

ph/seg (deg) 71.6 47.6 Search (2048X32) 0.097 Pcal mode: MANUAL, MANUAL PC period (AP's) 5, 5
 amp/seg (%) 81.6 83.1 Interp. 0.000 Pcal rate: 0.000E+00, 0.000E+00 (us/s) sb window (us) -1.000 1.000
 ph/frq (deg) 46.2 28.1 Inc. seg. avg. 0.100 Bits/sample: 2x2 SampCntNorm: enabled mb window (us) -0.008 0.008
 amp/frq (%) 52.3 49.0 Inc. frq. avg. 0.117 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 287.2 el 13.3 pa 30.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 12647.835 5064.032 ion window (TEC) 0.00 0.00
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Zm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/Zm.W.297.190PZ2 simultaneous interpolator



Fringe quality 0
 SNR 6.1
 Int time 439.381
 Amp 0.113
 Phase -139.9
 PFD 2.6e-01
 Delays (us)
 SBD 0.536285
 MBD -0.001394
 Fringe rate (Hz)
 0.364912
 Ion TEC 0.000
 Ref freq (MHz)
 86140.0000
 AP (sec) 0.512
 Exp. c201c
 Exper # 16383
 Yr:day 2020:117
 Start 233000.00
 Stop 233719.80
 FRT 233340.00
 Corr/FF/build
 2020:202:091813
 2020:202:212016
 2020:014:135814
 RA & Dec (J2000)
 08h54m48.8749285"
 +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	
m	1000	1000	1000	1000	1000	1000	1000	1000	PC freqs	
Z:m	0:0	0:0	0:0	0:0	0:0	0:0	0:0	0:0	PC phase	
Z:m	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	
m	1000	1000	1000	1000	1000	1000	1000	1000		
Z	W00UR	W01UR	W02UR	W03UR	W04UR	W05UR	W06UR	W07UR	Chan ids	
m	W00UL	W01UL	W02UL	W03UL	W04UL	W05UL	W06UL	W07UL	Tracks	

Group delay (usec)(sbd)	-8.33444789469E+02	Apriori delay (usec)	-8.33974645087E+02	Resid mbdelay (usec)	-1.39438E-03	+/-	1.8E-04
Sband delay (usec)	-8.33438360337E+02	Apriori clock (usec)	-8.2525892E+00	Resid sbdelay (usec)	5.36285E-01	+/-	1.4E-03
Phase delay (usec)	-8.33974649598E+02	Apriori clockrate (us/s)	-4.7499998E-07	Resid phdelay (usec)	-4.51090E-06	+/-	6.1E-07
Delay rate (us/s)	-2.07071655712E+00	Apriori rate (us/s)	-2.07072079339E+00	Resid rate (us/s)	4.23627E-06	+/-	2.4E-09
Total phase (deg)	-113.9	Apriori accel (us/s/s)	2.48321146110E-05	Resid phase (deg)	-139.9	+/-	18.8

ph/seg (deg)	45.8	Theor.	45.1	Search (2048X32)	0.100	Pcal mode: MANUAL, MANUAL	PC period (AP's) 5, 5	
amp/seg (%)	64.8	Amplitude	0.113 +/- 0.018	Interp.	0.000	Pcal rate: 0.000E+00, 0.000E+00 (us/s)	sb window (us) -1.000 1.000	
ph/frq (deg)	20.8	Search	0.109	Inc. seg. avg.	0.109	Bits/sample: 2x2	SampCntNorm: enabled	mb window (us) -0.008 0.008
amp/frq (%)	32.9	Inc. frq. avg.	0.105	Inc. frq. avg.	0.105	Sample rate(MISamp/s): 128	dr window (ns/s) -0.011 0.011	
						Data rate(Mb/s): 2048	ion window (TEC) 0.00 0.00	
						nlags: 256	t_cohere infinite	

Z: az 287.2 el 13.3 pa 30.3 m: az 73.5 el 14.3 pa -73.7 u,v (fr/asec) 12647.835 5064.032 simultaneous interpolator
 Control file: cf_1234_gmva Input file: /Exps/c201c/v1/1234/No0043/Zm..190PZ2 Output file: /Exps/c201c/v1/1234/No0043/Zm.W.308.190PZ2